

COLUMBUS METROPOLITAN LIBRARY

Request for Proposal (RFP)

Technology Cabling– Phase 7
(Reynoldsburg Branch)

Issue Date: **November 22, 2022**

RFP Number CML # 22-047

Issued by:

Procurement Department
96 S. Grant Ave.
Columbus, OH 43215

Deadline for Submittal:
December 22, 2022

Qualifies for E-Rate Funding
Prevailing Wage Rates Apply



REQUEST FOR PROPOSAL COVER SHEET

The Columbus Metropolitan Library ("CML" or "Library") is issuing this Request for Proposal ("RFP") *Technology Cabling – Phase 7 (Reynoldsburg Branch)*. The Proposal Identification Number is CML **22-047**

Proposals must be received at the Columbus Metropolitan Library, 96 South Grant Avenue, Columbus, Ohio 43215 **no later than 12:00 Noon on December 22, 2022**. Any Proposal ("Proposal") arriving after 12:00 Noon will be marked late and will receive no consideration for selection to provide the specified services.

The Offeror ("Offeror") declares to have read and understood and affirms, by its signature below, to be bound by all the instructions, terms, conditions and specifications of this RFP and agrees to fulfill the requirements of any contract ("Contract") for which it is selected to provide the specified services at the prices proposed.

The Offeror certifies, by signature affixed to this Request for Proposal Cover Sheet, that the information provided by in response to the RFP, including certified statements, is accurate and complete.

Federal Taxpayer Identification Number (TIN)		
Name of person signing bid (Please print or type)		Title
Offeror Name		
Mailing address		
City	State	ZIP
Telephone		Toll Free Telephone
Contact Person		Fax Number
E Mail address		
Authorized Signature (Original signature only) Please use Blue Ink.		

THIS FORM MUST BE SIGNED AND SUBMITTED WITH THE PROPOSAL.

DOCUMENT 00 01 08
LIST OF CONSULTANTS

OWNER

Columbus Metropolitan Library
96 South Grant Street
Columbus, Ohio 43215

CONSTRUCTION MANAGER

Turner Construction
262 Hanover Street
Columbus, Ohio 43215

DESIGN CONSULTANTS

Architect

Jonathan Barnes
Architecture & Design
243 N 5th Street, Suite 200
Columbus, OH 43215

Architect

Gund Partnership
47 Thorndike Street,
Cambridge, MA 02142

MEP

Advanced Engineering Consultants
1405 Dublin Road, Suite 200
Columbus, OH 43215

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DRAWINGS AND SPECIFICATIONS

1. Drawings: JBAD/GUND 100% Construction Documents dated 6/10/2022 with Bulletins 1-5
2. Specifications:
 - (a) Section 270001 General Requirements For Communications
 - (b) Section 270502 Basic Materials And Methods For Communications
 - (c) Section 270526 Grounding And Bonding For Communications
 - (d) Section 270528 Pathways For Communications
 - (e) Section 270553 Identification For Communications
 - (f) Section 271116 Communication Cabinets, Racks, Frames And Enclosures
 - (g) Section 271123 Communications Cable Management And Ladder Rack
 - (h) Section 271126 Communications Rack Mounted Power Protection And Power Strips
 - (i) Section 271323 Communications Fiber Optic Backbone Cabling
 - (j) Section 271513 Communications Copper Horizontal Cabling
 - (k) Section 273300 Public Address System

DOCUMENT 002113 - INSTRUCTIONS TO BIDDERS

The Columbus Metropolitan Library is currently accepting bids on Contracts for The Columbus Metropolitan Library **Technology Cabling Phase 7 (Reynoldsburg Branch)**. The Work includes the following package:

271000 Structured Cabling

Provide technology cabling work for the **Reynoldsburg Branch**.

Proposals shall be in accordance with Turner's "Scope of Work" and other submission requirements as further described in the project manual.

All proposals shall be in accordance with the plans, specifications, and subsequent addenda as prepared by **JBAD/GUND** and any subsequent Information Letters prepared by Turner Construction Company. Proposals shall acknowledge receipt of all such Addenda and Information Letters.

The Owner is: Columbus Metropolitan Library Board of Trustees
96 South Grant Avenue; Columbus, OH 43215
Owner's Representative: Karl Jendretzky, IT Manager of Infrastructure Services
Email: kjendretzky@columbuslibrary.org

Supplier selection for the project will be based on prequalified bidders offering the best value (subject to Turner's rights under O.R.C. 153.502) and whose bids, in Turner's discretion, and in consultation with the Owner, allow for the Project's overall diversity and inclusion goals to be met when considered in combination with other subcontract bids.

PROPOSAL DUE DATE	December 22, 2022 at 12:00 pm EST
PRE BID MEETING:	Wednesday, November 30, 2022 from 12:30pm – 1:00pm at Main Library.
BID DOCUMENTS:	The Bid Documents are available on the CML Website - http://www.columbuslibrary.org/about/doing-business
SUBSTITUTIONS:	All bids are to be based on specified material. See Specification for substitution requirements.
TERMS AND DEFINITIONS:	<p>The phrases 'Invitation to Bid' (ITB) and 'Request for Proposal' (RFP) are to be used interchangeably.</p> <p>The terms 'Bid' and 'Proposal' are to be used interchangeably.</p>

Columbus Metropolitan Library – Reynoldsburg Branch
Technology Cabling Phase 7 CML RFP #22-047
November 21, 2022

PREPARATION OF BIDS:

Proposals must be received by the Procurement staff at the Columbus Metropolitan Library via email to procurement@columbuslibrary.org no later than 12:00 PM on **12/22/2022**.

Each Proposer must submit a Technical Proposal and a Cost Proposal as part of its Proposal package. Proposals must be submitted as two (2) separate components – Technical Proposal and Cost Proposal.

Each Technical Proposal package must be clearly marked “**CML #22-047 – E-Rate Structured Cabling - Technical Proposal**” along with the Contractors Name in the filename of the Technical Proposal File.

Each Cost Proposal package must be clearly marked “**CML #22-047 – E-Rate Structured Cabling - Cost Proposal**” along with the Contractors Name in the filename of the Technical Proposal File.

Each bidder is required to have an E-Rate Service Provider Identification Number (a SPIN number)

Note that the Owner reserves the right to award a portion or all of to one or multiple bidders.

BONDS AND GUARANTEES:

Bid Guaranty: Furnish a Bid Guaranty, as prescribed in Sections 153.54, 153.57, and 153.571 of the Ohio Revised Code, in the form of either: (1) a bond for the full amount of the bid in the form of the Bid Guaranty and Contract Bond included in the Contract Documents; or (2) a certified check, cashier's check, or irrevocable letter of credit in a form satisfactory to the Owner in an amount equal to 10% of the bid. The Bid amount must be the total of all sums bid, including all add alternates with no deduction for any deduct alternates. **NOTE: AIA Bid Bond forms are not acceptable.**

Contract Bond: The successful Bidder, who, as a Bid Guaranty, submits a certified check, cashier's check, or irrevocable letter of credit in an amount equal to 10% of the bid (including all alternates), must furnish a Contract Bond using the Contract Bond form included in the Contract Documents in an amount equal to 100% of the Contract Sum. **NOTE: AIA Bond forms are not acceptable.**

The bond must be issued by a surety company ("Surety") authorized by the Ohio Department of Insurance to transact business in the State of Ohio and acceptable to the Owner. The bond must be issued by a Surety capable of demonstrating a record of competent underwriting, efficient management, adequate reserves, and sound investments. These criteria will be deemed to be met if the Surety currently has an A.M. Best Company Policyholders Rating of "A-" or better and has or exceeds the Best Financial Size Category of Class VI. Other Sureties may be acceptable to the Owner, in its sole discretion.

All bonds must be signed by an authorized agent of an acceptable Surety and by the Bidder.

Surety bonds must be supported by credentials showing the Power of Attorney of the agent, a certificate showing the legal right of the Surety to do business in the State of Ohio (in the form of either a Certificate of Authority or Certificate of Compliance issued by the Ohio Department of Insurance), and a financial statement of the Surety (if the Surety provides a Certificate of Compliance, a separate financial statement is not required).

The Bid Guaranty, as applicable, must be in the name of or payable to the order of the Owner.

Include the name, address, and telephone and fax numbers of the Surety and the Surety's Agent, typed or printed, on each bond in the areas provided.

SCHEDULE:

Installation will likely occur late qtr 4 2023 / early qtr 2 2024

QUESTIONS:

Any requests for additional information shall be directed to **Mona Mawalkar**. Bidders requiring clarification or interpretation of the documents shall make a written request by emailing Mona Mawalkar at mmawalkar@columbuslibrary.org AND Litany Zenz at lzenz@tcco.com. All questions must be submitted by **close of business, Monday, December 12, 2022**. Any changes will be issued by Information Letter.

TAXES:

This project is exempt from State of Ohio Sales Tax.

WAGES:

Prevailing Wage Requirements do apply to this project.

INSURANCE:

Provide insurance requirements as defined in section 00 73 16. A bid Guarantee and Payment and performance bond is required.

ADDENDA:

The Owner reserves the right to issue Addenda changing, altering, or supplementing the Contract Documents prior to the time set for receiving bids. The Construction Manager working with the Design Professional will issue Addenda to change, alter, or supplement the Contract Documents. The Construction Manager and Design Professional may issue a clarification about the bid process or Contract Documents that does not make a modification to the plans or specifications or estimates of cost for the project for which bids are solicited and such clarification will not be considered an addendum subject to the restrictions described in N(3) below. A clarification could include a replacement Bid Form, for example, if an error was discovered on the Bid Form within the 72-hour period, or it could reschedule the date, time and place for the bid opening if something occurred within the 72-hour period before the scheduled bid opening that required the change.

Any correction or modification of the Contract Documents will be issued in writing in the form of an Addendum, which will be the only means considered binding; corrections or modifications made by any other means shall NOT be legally binding. All Addenda shall become a part of the Contract Documents.

Bidders must submit written questions to the Design Professional, through the Construction Manager, in sufficient time in advance of the bid opening to allow sufficient time for the Design Professional to respond. All Addenda will be issued, except as hereafter provided, and mailed or otherwise furnished to persons who have obtained Contract Documents for the Project, at least seventy-two (72) hours prior to the published time for the opening of bids, excluding Saturdays, Sundays, and legal holidays. If any Addendum is issued within such seventy-two (72) hour period, then the time for opening of bids will be extended one (1) week with no further advertising of bids required.

Receipt of Addenda shall be indicated by Bidders in the space provided on the Bid Form. Bidders are responsible for acquiring issued Addenda in time to incorporate them into their bid. Bidders should contact the Design Professional, through the Construction Manager, prior to the bid opening to verify the number of Addenda issued.

Each Bidder shall carefully read and review the Contract Documents and immediately bring to the attention of the Design Professional, through the Construction Manager, any error, omission, inconsistency, or ambiguity therein.

If a Bidder fails to indicate receipt of all Addenda through the last Addendum issued on its Bid Form, the bid of such Bidder will be deemed to be responsive only if: The bid received clearly indicates that the Bidder received the Addendum, such as where the Addendum added another item to be bid upon and the Bidder submitted a bid on that item; or The Addendum involves only a matter of form or is one which has either no effect or has merely a trivial or negligible effect on price, quantity, quality, or delivery of the item bid upon.

CONTRACT:

The successful Bidder will be required to enter into an Agreement with the Columbus Metropolitan Library.

PREQUALIFICATION:

All bidders must be able to comply with E-rate requirements.

AWARD CRITERIA

Contracts will be awarded to subcontractors based on the best overall value, which will be based on the following:

- Bid Amount
- Diversity and Inclusion Participation
- Subcontractors Understanding of the Contract Scope
- Subcontractors Understanding of the Contract Schedule.
- Innovative Project Approaches

DIVERSITY and INCLUSION
PARTICIPATION:

The Diversity & Inclusion Participation Goal for this Project is 20%. Regardless of other bidder evaluation criteria, the Bidder must demonstrate that (1) it has achieved this Diversity & Inclusion Participation Goal by completing the Bidder's Diversity & Inclusion Participation Form attached hereto; or (2) it has made good faith efforts to achieve the Goal by documenting its good faith efforts as set forth in these Instructions to Bidders. A completed Bidder's Diversity & Inclusion Participation Form or documentation of such good faith efforts, must accompany the completed Form of Proposal or Bid Form.

Diversity & Inclusion Participation will be measured by either the Bidder or its subcontractors or suppliers being certified as participants in one or more of the following programs: **MBE/WBE**, by any of the following entities: Federal Government, State of Ohio, Franklin County, City of Columbus.

Level of Diversity & Inclusion Participation means percentage of participation as measured by the contract value, either self-performed by a Bidder certified as a participant in one or more of the following programs: **MBE/WBE**, or by one or more of the Bidder's subcontractors or suppliers certified as a participant in one or more of the following programs: **MBE/WBE**. Bidders must affirmatively certify with their bids the level of Diversity & Inclusion Participation included in their bids.

All participation declarations will be subject to verification with each pay draw and certified payroll statement. Failure to cooperate with such demand or failure to verify the stated level of Diversity & Inclusion Participation is a material breach and may result in cancellation of the contract and/ or prosecution.

If the Bidder does not indicate that it has achieved the Diversity & Inclusion Participation Goal set forth above, the Bidder must include documentation with its bid demonstrating and certifying that good faith efforts were actively and aggressively undertaken to reach the participation goal. Demonstration of good faith efforts include:

- Documenting attempts to obtain DBE participation sufficient to meet the participation goal.
- Conducting outreach and recruiting activities.
- Dividing scopes of work into economically feasible portions to permit maximum participation by DBEs; selecting portions of the work to be performed by DBEs.
- Providing interested DBEs with adequate information about the work.
- Negotiating in good faith with interested DBEs; evidence of such negotiation includes the name and address of the DBEs that were considered, a description of the information provided, and

evidence as to why an agreement could not be reached for the DBEs to perform the work.

- = Documented efforts to subcontract with a consortium of DBEs.
- = Using the services and assistance of the Small Business Administration and Minority Development Agency of the U.S. Department of Commerce.

Turner and the Owner will be the evaluators of whether any particular Bidders' efforts sufficiently demonstrate good faith efforts.

If any Bidder directly challenges, or indirectly challenges through contribution of money or other resources to a third party, the discretion of Turner and/or the Owner in determining any Bidder's compliance with the Diversity & Inclusion Participation Goal stated in these Instructions to Bidders, or good faith efforts pertaining to same, that Bidder agrees to indemnify Turner and/or the Owner for all claims, costs, losses and damages, including attorney and consultant fees, arising out of such challenge, should there be an adjudication by a court of competent jurisdiction that Turner and/or the Owner did not abuse its discretion.

BIDS SHALL BE DELIVERED TO:

Enclose the bid submittal and deliver it in a sealed opaque envelope with the Bidder's name and the title of the Project printed in the upper left hand corner, addressed as follows: Mona Mawalkar – Procurement Division, Columbus Metropolitan Library, 96 S. Grant Avenue, Columbus, Ohio 43215. The Bidder is responsible for mailing its Bid to this office and address for the bid opening or hand delivering to the first floor Security Desk, Columbus Metropolitan Library, 96 S Grant Ave, Columbus OH 43215, no later than 12:00 pm (local time) on December 22, 2022.

All proposals shall be valid for acceptance for a period of ninety (90) calendar days. We reserve the right to reject any or all bids, waive any irregularities, or award the work to other than the low bidder.

UNIVERSAL SERVICE (E-RATE) REQUIREMENTS

To warrant consideration for an award of contract resulting from this Request for Proposal, vendors must agree to participation in the Universal Service Support Mechanism for Schools and Libraries (commonly known as "E-rate") as provided for and authorized under the federal Telecommunications Act of 1996 (Reference 47 U.S.C. § 254, "Universal Service"). Vendors acknowledge that any contractual relationship resulting from this solicitation of proposals may be partially or entirely dependent upon the successful receipt of Universal Service Fund ("USF") subsidies. To ensure compliance with all applicable USF regulations, program mandates and auditing requirements, vendors must comply with the following:

- **USF Knowledge** - Vendor shall have, at a minimum, a working knowledge of the federal Universal Service Support Mechanism for Schools and Libraries (commonly known as "E-rate").
- **USF Registration** - Vendor shall submit with its proposal a valid Service Provider Identification Number ("SPIN") and a valid Federal Communications Commission Registration Number ("FCCRN").
- **USF Participation** - Vendor shall agree to participate in the E-rate Program and to cooperate fully and in all respects with the Columbus Metropolitan Library, the Universal Service Administrative Company ("USAC"), and any agency or organization administering the E-rate Program to ensure that the Columbus Metropolitan Library ("CML" or "Library") receives all of the E-rate funding for which it has applied and to which it is entitled in connection with Vendor's services and/or products.
- **USF Documentation** - Vendor shall provide to CML staff and/or the CML's E-rate consultant within a commercially reasonable period of time, all of the information and documentation that the Vendor has or that Vendor reasonably can acquire that the CML may need to prepare its E-rate applications and/or to document transactions eligible for E-rate support.
- **Invoicing Procedures** - Vendor shall itemize, price, and invoice separately any materials or services that are ineligible for E-rate funding. Vendor must include the following information on all invoices to CML for E-rate eligible equipment and/or services:
 - Date of invoice
 - Date(s) of service
 - Funding Request Number ("FRN")
 - Vendor's signature on invoice attesting to the accuracy and completeness of all charges
 - Detailed description of services performed and materials supplied that matches CML's contract specifications, Form 470 and Form 471 descriptions of same
 - Clear, concise breakdown of amount(s) to be billed to USAC (discounted portion of eligible charges) and amount(s) to be billed to the CML (non-discounted amount of eligible charges)
 - Invoice on Vendor's letterhead or on a Vendor-generated form
 - CML's Billed Entity Number
 - CML's Federal Communications Commission Registration Number
 - Proper E-rate discount percentage as set forth by the applicable FRN and USAC funding commitment decision letter ("FCDL")
- **USF Discounted Invoicing and Reimbursement Processes** - Vendor shall, at the CML's request, either (a) invoice CML only for the non-discounted amounts due on E-rate-approved transactions and simultaneously invoice the Universal Service Administrative Company ("USAC") for the balance [Discounted Invoice Process] or (b) remit to CML within twenty days of receipt the reimbursement payments it receives from USAC or any other third-party payor for the discounted portions of E-rate-approved transactions involving CML [Reimbursement or "BEAR" Process].

o **Discounted Invoice Process**

— Invoicing: Within fourteen (14) days from the date that Vendor delivers to CML, E-rate approved materials or services, when delivery of such services triggers a payment obligation under Vendor's contract with CML, Vendor must invoice CML for its share of the pre-discount cost of those materials or services.

— Timely Filing: Vendor shall be solely responsible for timely filing invoices with USAC. Accordingly, Vendor understands and agrees that CML will NOT be liable to Vendor and Vendor shall have no recourse against CML for any discounted amount that Vendor submits late to USAC for payment, if USAC refuses to pay the invoice due to late filing.

— Invoice Rejection: Vendor understands and agrees that CML shall not be liable to Vendor and Vendor shall have no recourse against CML for any discounted amount that Vendor submits to USAC for payment if Vendor is at fault for USAC's refusal to pay; if CML is at fault, CML shall not be liable to Vendor and Vendor shall have no recourse against CML for the amount at issue until both the CML and the Vendor have exhausted their administrative remedies of appeal to USAC and/or the FCC.

— CML Approval: Vendor shall submit to CML for its review and approval before submitting it to USAC for payment a copy of every invoice that Vendor intends to submit for services that it has provided or, in appropriate circumstances, will be providing to CML. CML shall not unreasonably delay or withhold approval of Vendor's USAC invoices. As Vendor is solely responsible for timely filing invoices with USAC, it understands that it must submit invoices to CML sufficiently in advance of any USAC filing deadline to ensure that there will be adequate time remaining for it to meet the USAC filing deadline after CML has had a reasonable opportunity to review and approve them.

o **Reimbursement Process**

— Twenty Days: Vendor understands that E-rate Program rules require it to remit a reimbursement payment to CML within twenty (20) days of receiving it from USAC.

— Liquidated Damages: Vendor further understands that it may not withhold a reimbursement payment from or refuse to remit such a payment to CML for any reason. Moreover, Vendor understands and agrees that its failure to make a reimbursement payment to CML in a timely manner will adversely affect CML's operations, but that the resulting damages will be impossible to ascertain with any degree of certainty. Vendor therefore agrees that if it fails to remit to CML a reimbursement payment within forty-five (45) days after receiving it from USAC, Vendor will pay to CML as liquidated damages a total of \$500 per day for each day that lapses without payment after the 45th day.

o **Delayed USF Funding Commitment** - Vendor understands that, due to circumstances beyond CML's control, CML may not receive an E-rate funding commitment by the beginning of the E-rate funding year, July 1, for the services it intends to purchase from Vendor during that funding year.

— Retroactive Invoicing: When E-rate funding is approved, Vendor shall invoice USAC for the discounted amount CML is owed retroactive to July 1st of the funding year or to whenever approved service to CML began, whichever date is later.

o **USF Audit and Document Retention Requirement** - Vendor shall maintain all bids, quotes, records, correspondence, receipts, vouchers, delivery information, memoranda and other data relating to

Vendor's services to CML. All such records shall be retained for ten (10) years following completion of services and shall be subject to inspection and audit by CML. Vendor shall include in all subcontractor agreements for services, provisions requiring subcontractors to maintain the same records and allowing CML the same right to inspect and audit those records as set forth herein. In addition to the foregoing, Vendor will create, implement and enforce an internal E-rate audit process that ensures that Vendor complies with all E-rate program rules and regulations. This process must include the following:

- Separating ineligible project management and other professional services costs, if any, from other charges.
- Where labor is involved, maintaining detailed, signed individual timesheets.
- Ensuring that ineligible charges are not submitted to USAC.
- Invoicing to USAC that is consistent with the contract and CML's 470 and 471.
- Ensuring that services or products are not provided to CML without CML's express written permission or official purchase authorization.
- Ensuring that CML -approved substitute services or products are prominently noted on invoices submitted to USAC and CML.
- Where applicable, non-recurring services provided prior to September 30th and recurring services provided prior to June 30.
- Supporting documentation sufficient to evidence that what was approved per the FCDL and provided to CML, was actually provided to CML and when.
- If E-rate eligible services and/or installation or equipment costs are included as part of a larger contract or service/equipment billing, support for the allocation of E-rate eligible amounts and reconciliation of that total to the total amount billed.
- If E-rate eligible services or equipment are allocated to multiple sites, support for the allocation consistent with the amount and locations identified in the Form 471.
- Documenting that E-rate-funded services were provided within the allowable contract period and program year.
- Charging proper FRN(s).
- Ensuring that invoices and USAC forms are submitted to CML in a timely manner.
- Ensuring that USAC forms are filled out completely, accurately and on time.
- Ensuring that Forms 472 are signed/dated by vendor's representative in a timely manner.
- Maintaining fixed asset list of E-rate-supported equipment provided to CML with detailed information for each item (model number, serial number, product description) and made available to CML in electronic format.

o **Contract Term Modification** - CML will reserve the right to extend or abbreviate the contract period if such extension or abbreviation is necessary to make the Contract term coincide with an E-rate "program year" or an extended service end date for an E-rate program year pursuant to a "service delivery deadline extension," as those terms are defined by the Federal Communications Commission ("FCC") and/or the Universal Service Administrative Company ("USAC").

DOCUMENT 271000 - SCOPE OF WORK – TECHNOLOGY CABLING

A. GENERAL:

1. The following scope of work is intended to be general in nature. The purpose of this summary of work is not to identify or list every scope of work item already shown on the Contract Documents and described in the specifications. The purpose is to coordinate, clarify, modify, and/or expand the scope of the work as shown and described. The intention is to have the successful Bidder perform all the related work shown on the Contract Documents other than those items specifically indicated below to be excluded. Attention is called to the **Instruction to Bidders, General Conditions, Special Conditions and the Site Specific Safety Program** for additional information. The Summary of Work takes precedence over the drawings and specifications in the event of a conflict in trade assignment or responsibility. The base work of this Contract includes the listed scope of work plus allowances. The requirements herein shall not be limited to the scope of work shown on the drawings and described in the specifications. The Bidder shall include all costs necessary to provide all work to meet the supplemental requirements of this scope of work.

B. DOCUMENTS:

1. The Bid Manual prepared by Turner Construction dated 11/21/2022.
2. Construction Documents prepared by:
 - a. JBAD/GUND 100% Construction Documents dated 6/10/2022 with Bulletins 1-5
3. The following listed specification sections are the responsibility of the Bidder in defining its area of work on this project:
 - a. Section 270001 General Requirements For Communications
 - b. Section 270502 Basic Materials And Methods For Communications
 - c. Section 270526 Grounding And Bonding For Communications
 - d. Section 270528 Pathways For Communications
 - e. Section 270553 Identification For Communications
 - f. Section 271116 Communication Cabinets, Racks, Frames And Enclosures
 - g. Section 271123 Communications Cable Management And Ladder Rack
 - h. Section 271126 Communications Rack Mounted Power Protection And Power Strips
 - i. Section 271323 Communications Fiber Optic Backbone Cabling
 - j. Section 271513 Communications Copper Horizontal Cabling
 - k. Section 273300 Public Address System
4. The Contractor is also responsible for trade specifications not specifically listed above but required by reference in the listed specifications or as required to perform the scope of work described herein, as well as the Bidding Requirements, Contracting Requirements, and the use of the Construction Documents as a whole.
5. The phrases 'Invitation to Bid' (ITB) and 'Request for Proposal' (RFP) are to be used interchangeably. The terms 'Bid' and 'Proposal' are to be used interchangeably.
6. **Each bidder is required to have an E-Rate Service Provider Identification Number (a SPIN number)**

C. SCOPE OF WORK SPECIFICALLY INCLUDES:

1. This Contractor shall provide all necessary supervision, engineering, coordination, submittals, quality control, freight, labor, labor premium and overtime, materials, accessories, tools and equipment necessary to perform the **TECHNOLOGY CABLING** work and all related work as shown or inferable from the Contract Documents. The following items are not intended to be an all-inclusive listing of the work required, but shall merely highlight and/or clarify specific items of this scope. The work shall include, but not be limited to, the following items:

D. General & Miscellaneous

1. Assume site lay-down space is limited during construction. Plan for restricted onsite storage of tools and material. Material should be brought to the site 'just-in-time', not in advance with the intent of storing it on the property.
2. The successful Bidder will be contracted directly with Columbus Metropolitan Library, not with Turner Construction. However, while performing work onsite, the successful Bidder will be required to adhere to all site policies and procedures.
3. This bid is for only one branch and falls within the eRate 2023 cycle.
4. Scope reviews will occur on 1/5/23. If this date doesn't work, another date will be determined after bids are received.
5. The scope of work for this proposal is as noted below and outlined on the 004116 Bid Proposal Form.

Library	Bid Structure	Estimated Construction Start	Estimated Construction Completion	Size of Building (sf)
CML Reynoldsburg Branch	Lump Sum based on CD Docs	Quarter 4 2023	Quarter 1 2024	40,760

E. 271000 Structured Cabling

This Contractor is responsible for all material and labor required for the installation of a complete tele/data system as defined by the documents. The following pertains to all work performed, regardless of project or bid structure.

1. Provide all non-continuous or non-rigid pathways (i.e., J-hooks, inner-duct, hangers, etc.) required to support the cabling.
2. Provide the equipment racks within the telecommunication and the patch panels.
3. Provide all tele/data outlets, cover plates, tele/data cabling, punch down blocks, cable management, patch cords, and fire stopping.
 - a. Include cabling to data drops as shown and with all devices shown on the T-sheets which may include but is not limited to, security cameras (CCTV), wireless access points, TVs, projectors, people counters, and card access controllers.
 - b. All cover plates as specified.
 - c. Provide fiber optic cabling for all site cameras, regardless of length. Provide media convertors for each camera.
4. Test and label the entire installation as specified and required by the codes and standards.
5. Provide plywood backboard in Telecommunications Room (TR). Contractor shall provide, as a minimum, each TR with at least two (2) walls covered by 3/4 inch x 4 feet x 8 feet fire retardant plywood, painted industrial gray with two (2) coats of fire retardant paint. Plywood shall be AC grade or better and void-free with Grade A surface exposed. To reduce warping, plywood shall be kiln-dried to a maximum moisture content of 15%.
 - a. Fire retardant plywood shall be securely fastened to wall such that it can and will support equipment to be mounted. Additionally, it shall be mounted such that the 8 feet is vertical. Unless otherwise noted, bottom of plywood shall be mounted 8 inches AFF.
 - b. Contractor shall cover with masking tape the "Fire Retardant" stamp on the plywood, before painting, and remove tape after painting so that the Inspector can still see the original "Fire Retardant" stamp on the plywood.
6. Backbone Cabling
 - a. Provide as specified.

7. Bidding Structure

- a. Provide a lump sum price for Reynoldsburg.

F. SPECIAL INSTRUCTIONS:

1. The below topics and other special instructions appear in more detail in the 007300 Special Conditions document. The below is intended only to call special attention to these topics and is not intended to replace information found in 007300 Special Conditions.
 - a. Retainage Conditions shall be in accordance with section 9.6.1.2 of the General Conditions and per the Ohio Revised Code Sections 153.12, .13, and .14.
 - b. OSHA 30 Hour Certification: Reference the document 007319 Safety Program for additional information. An OSHA 30 hour certified person must be on site 100% of the time. The OSHA 30hr certification must be within the past three years of the award of the contract.
 - c. Required Paperwork: Reference the document 007319 Safety Program for additional information. Various paperwork is required ranging from daily (ex: STAs and DCRs) to situational (ex: JHAs and other checklists). It is this Contractor's sole responsibility to complete all paperwork accurately and by the time required.
 - d. Ladders Last Policy: Reference the document 007319 Safety Program for additional information. Turner's Ladders Last Policy will be a requirement of the project. Contractor will be required to utilize other, safer means of accessing elevated work, and shall utilize ladders only as a last resort.
 - e. Builders Risk Insurance: The owner will carry Builder's Risk insurance and the Contractor will be covered as noted in the contract Turner has with the Owner. Reference Article 11 of the agreement. Deductible to be covered by the Contractor as noted in Article 11.

G. THE SCOPE OF WORK SPECIFICALLY EXCLUDES:

- a. This SOW specifically excludes continuous pathways (i.e., conduit, cable tray, raceway, under-floor duct).
- b. This SOW specifically excludes switches
- c. This SOW specifically excludes cameras, TVs, WAPs and other security and A/V equipment.

H. ALTERNATES:

1. None

I. ALLOWANCES:

1. The Contract Sum shall be the addition of a base bid amount plus allowances. The value of the allowance shall be determined by multiplying the allowance quantity times a unit price. The unit price quoted on the Form of Proposal will be used to adjust the allowance and contract value up or down based on the authorized net actual quantity. The Contractor's cost for all overhead and profit shall be included in the base bid amount and not in the allowance portion of the Contract Sum. There will be no modifications to the unit price for overhead and profit for adjustments to the allowance quantity, up or down. It is expressly understood and agreed that all additional work will be completed within the original schedule. The Contractor shall be responsible to bring additional equipment to the project as necessary to meet the original schedule. The unit cost shall include all labor, material and equipment costs associated with overtime, second shift work, weekend work, etc. as required to maintain the original schedule.

Number	Description:	Unit:	\$/Unit:
1	This allowance will be used to fund as needed scope and Owner directed changes or design errors. Unspent allowance will be reconciled at the end of the project with a deduct change order. The value should not be included in the Bidder's lump sum price but will be included in the total price as listed on the bid form.	Lump Sum	\$3,000

J. UNIT PRICES:

- The following "Unit Prices" may be used by Turner Construction Company to calculate the value of changes in scope and/or to adjust allowances. Inasmuch as these Unit Prices were anticipated from the inception of the project and were priced accordingly, all overhead, profit and escalation has been included within the lump sum amount and the price shall remain firm throughout the duration of the project, unless specifically noted herein.

Number	Description:	Unit:	\$/Unit:
1	n/a for this project		

- Reference Sample Category 2 Bill of Materials included in the Bid Manual. The successful Bidder will be required to submit this within 4 business days.

K. LABOR RATES & EQUIPMENT RATES:

- The following "Labor Rates" & "Equipment Rates" may be used by Turner Construction Company to calculate the value of changes in scope and/or to adjust allowances. Inasmuch as these Labor or Equipment Rates were anticipated from the inception of the project and were priced accordingly, all escalation has been included within the rate and the rate shall remain firm throughout the duration of the project, unless specifically noted herein. The labor rates include all wages, fringes, taxes, and insurance. Overhead and profit will be added to the labor components of any changes according to the formula for changes.
- See separate labor rate matrix 004343 Wage Rates Form; Bidder should plan to have the labor rates form completed by the scope review meeting (after bids are received and before the contract is awarded).
- Bidder will need to provide an equipment rates sheet on Bidder's own form to be completed by the scope review meeting (after bids are received and before the contract is awarded).

L. PAYMENT AND PERFORMANCE BOND:

- If a Payment and Performance Bond is required by this contract, Bidder and its surety hereby agree to execute and deliver to the Owner, in connection with the issuance of Change Orders under this contract, Rider "A" amendments increasing the amount (penal sum) of the performance and payment bonds when Bidder is requested by the Owner to do so. The reasonable premiums or other charges paid by Bidder for the procurement of the Rider "A" amendment requested by the Owner will be paid as a part of the Change Order.
- A Payment and Performance Bond will be required for this Contractor.**

M. SCHEDULE

- The Summary Schedule is listed above in section A as a means of conveying timeline of the project. Through submission of a bid, this Bidder acknowledges and accepts the Summary Schedule as included in this bid package, and assumes responsibility for accomplishing the work within the time frames required per the Project Schedule, which will be developed per project at a later date.
- All dates listed in the table above or noted elsewhere are estimated dates. The Bidder should assume that construction will be completed +/- 1 month from the date above.

END

DOCUMENT 004116 - BID PROPOSAL FORM -GENERAL

PROPOSAL DUE DATE December 22, 2022 by 12:00pm

PROPOSALS ARE TO BE SUBMITTED TO:

Columbus Metropolitan Library
Attention: Mona Mawalkar
96 S. Grant St.
Columbus, OH 43215
Email: mmawalkar@columbuslibrary.org

Submitted By:	_____	(Company Name)
	_____	(Street Address)
	_____	(City, State, Zip)
	_____	(Contact)
	_____	(Area Code/Phone No.)
	_____	(Area Code/Cell No.)
	_____	e-mail address
	_____	ERate SPIN Number

Having carefully examined the Bid Documents and the following addenda and information letters:

Information Letter No.:	_____	Dated:	_____
Information Letter No.:	_____	Dated:	_____
Information Letter No.:	_____	Dated:	_____
Information Letter No.:	_____	Dated:	_____

as well as having inspected the site, and being familiar with all conditions affecting the Work, including the availability of materials and labor, the undersigned Bidder proposes to perform all Work for the applicable Contract in accordance with the proposed Contract Documents, for the following sum(s):

The Contractor should only fill out the page(s) for the packages on which they are proposing. The remaining sheets may be left blank. The Contractor must bid all Alternates. If a requested Alternate does not change the Base Bid, enter "No Change". Any requested Alternate left blank or marked with any notation other than a price change or "No Change" may be cause for rejection of the Bid.

Contract 271000 – Technology Cabling

A. Lump Sum

(These prices to include a \$3,000 lump sum allowance for each branch)

1. Reynoldsburg Branch \$ _____

B. Troubleshooting & Support

1. Price per 2-hr onsite troubleshooting/support session
(If needed, this will be billed from the allowance included in the contract)

\$ _____

The Proposal Shall Contain The Following Documents:

- | | |
|---|--------------|
| 1. Executed Bid Proposal Form. | Y_____N_____ |
| 2. Wage Rates | Y_____N_____ |
| 3. PW Wage Rates included | Y_____N_____ |
| 4. MWBE Participation Statement of Intent Form | Y_____N_____ |
| 5. Insurance Limits meet the requirements in the Documents. | Y_____N_____ |
| 6. All guarantees, certifications, and/or warranties are included as required by the Documents | Y_____N_____ |
| 7. Sales Tax and Use Taxes are excluded where applicable. | Y_____N_____ |
| 8. Agree to sign the Contract agreement unmodified. | Y_____N_____ |
| 9. Each bidder is required to have an E-Rate Service Provider Identification Number (a SPIN number) | Y_____N_____ |

This proposal is submitted by:

Name of Contractor: _____

Name of Authorized Representative (Print): _____

By: _____
Signature of Authorized Representative Date

Title: _____

Instructions for Signing:

1. The person signing for a sole proprietorship must be the sole proprietor.
2. The person signing for a partnership must be a partner.
3. The person signing for a corporation must be the president or vice president; or he must show his authority, by affidavit, to bind the corporation.
4. The person signing for some other legal entity must show his authority, by affidavit, to bind the legal entity.

004117 SUPPLEMENT TO AIA DOCUMENT A305

AIA Document A305 is modified as follows:

Paragraph 3.5: Modify Paragraph 3.5 as follows:

3.5 Provide the following information for each contract your organization has had during the last five (5) years, including current contracts, where the Contract Sum is fifty per cent (50%) or more of the bid amount for this Project, including add alternates. If there are more than five (5) of these contracts only provide information on the most recent five (5) contracts, including current contracts.

PROJECT AND WORK	CONTRACT SUM	OWNER'S REP. & TEL. NO.	ARCHITECT'S REP. & TEL. NO.

3.5.1 Provide the following information for each project your organization has had during the last five (5) years, which your organization believes is of comparable or greater size and complexity than the Owner's project. If there are more than five (5) of these projects, only provide information on the most recent five (5) projects, including current projects.

PROJECT AND WORK	CONTRACT SUM	OWNER'S REP. & TEL. NO.	ARCHITECT'S REP. & TEL. NO.

3.5.2 State average amount of construction work your organization has performed during the last five years.

3.5.3 If any of the following members of your organization's management--president, chairman of the board, or any director--operates or has operated another construction company during the last five (5) years, identify the member of management and provide the foregoing information for that company.

3.5.4 If your organization is operating under a trade name registration with the Secretary of State for the State of Ohio, identify the entity for which the trade name is registered. If none, state "none."

3.5.5. If your organization is a division or wholly-owned subsidiary of another entity or has another relationship with another entity, identify the entity of which it is a division or wholly-owned subsidiary or with which it has another relationship and also identify the nature of the relationship. If none, state "not applicable."

New Paragraph 3.7. Add the following new paragraph:

3.7 Who will be the Project Engineer, Project Manager, and/or Project Superintendent on this Project? Provide background information on each individual to be assigned to the Project--e.g., training, education, and experience.

Subcontractor & Material Supplier Declaration

State of Ohio Standard Forms and Documents

The intent of this form is to confirm the companies submitted have been reviewed, appear to be Responsible, and are proposing to provide the services/material goods listed in compliance with the Contract Documents. If the Project is administered using OAKS CI, use the OAKS CI "Subcontractor Supplier Declaration" business process in lieu of this paper form.

Instructions

1. Contracting Authority Initial Responsibilities:

- A. Complete Contractor Information section at top of the form.
- B. Complete Project Information section at top of the form.
- C. Issue to the Contractor via e-mail as an attachment.

2. Contractor Responsibilities:

- A. Use the form provided by the Contracting Authority as a master for the project. Creation of additional pages electronically or by photocopying is permitted.
- B. Complete all required information for each Subcontractor and Material Supplier. (Attach additional sheets as necessary.) Lower tier Subcontractors who may provide on site labor must be identified as Subcontractors.
- C. Check company type as a Subcontractor or Material Supplier.
- D. Enter company name, address, phone number, fax number, federal tax I.D. number and e-mail address.
- E. Indicate the primary company officer (e.g., President, Owner) and contact person.
- F. Enter the date and amount of subcontracts and purchase orders.
- G. Enter a brief description of the type of work to be performed by the Subcontractor. Enter a brief description of the services/material brands being supplied by the company. Attach additional sheets as necessary with clear descriptions.
- H. Complete "DFSP Enrolled" section. Contractors, Subcontractors and Material Suppliers providing labor on a state construction project site must be enrolled in the BWC Drug-Free Safety Program (DFSP) or BWC-approved DFSP prior to performing work on the site. Submit supporting documentation demonstrating approval status for a BWC-approved DFSP.
- I. Enter the DFSP policy number.
- J. Complete "EDGE Status" section. See the EDGE Web site for any questions at www.EDGE.ohio.gov:
 - Certified = EDGE-certified by Equal Opportunity Division (EOD).
 - Pending = EDGE application submitted to EOD and waiting for response.
 - Mentor = Special category of participation within the EDGE program.
 - Protégé = Special category of participation within the EDGE program.
- K. Certify form by signing in the space provided and e-mail or fax to the A/E, Contracting Authority, and Construction Manager (CM) if applicable, for review.

3. A/E Review:

- A. Review form in collaboration with CM if applicable, and the Contracting Authority.
- B. When consensus is reached, sign in the space provided and e-mail or fax the form to the Contracting Authority or CM if applicable.

4. CM Review, if applicable:

- A. Review form in collaboration with the A/E and the Contracting Authority.
- B. When consensus is reached, receive the form from the A/E, sign in the space provided, and e-mail or fax the form to the Contracting Authority.
- C. The CM must sign the same form the A/E has signed.

5. Contracting Authority Approval:

- A. Verify DFSP enrollment, including supporting documentation, if applicable.
- B. Verify current EDGE-certified status using the EOD Web site.
- C. Complete "For Cont. Auth. Use Only" section in the order indicated below
 - 1. Determine status of companies listed on each sheet received.
 - a. When one or more companies require "Extended Review": mark company status for each, and then go to C2.
 - b. When one or more companies are rejected: mark company status for each, and then go to C3.
 - c. When all companies are approved: mark company status for each, and then go to C4.
 - 2. Forward a copy of the annotated form to the Contractor as its notice of the Extended Review; then, proceed to perform and complete the Extended Review. When completed, mark form as appropriate, and process per C1b or C1c.
 - 3. Prepare written documentation of basis for rejection and insert it into the project file, and if appropriate, insert a copy into the "responsibility review file" for the particular company; and then go to C4.
 - 4. Forward a copy of the annotated form to the A/E, Contractor, and CM if applicable. Insert the original form into the "Project file."

Subcontractor & Material Supplier Declaration

State of Ohio Standard Forms and Documents

Contractor Information

Company Name _____
 Address _____
 City, State, Zip _____
 Type of Contract _____

Project Information

Contract No. _____
 Project Name _____
 Project Location _____

Sheet¹ _____ of _____

	<input type="checkbox"/> Subcontractor <input type="checkbox"/> Material Supplier (check one)	<input type="checkbox"/> Subcontractor <input type="checkbox"/> Material Supplier (check one)	<input type="checkbox"/> Subcontractor <input type="checkbox"/> Material Supplier (check one)
Company Name			
Street Address			
City/State/Zip			
Telephone No.			
Fax No.			
Federal Tax I.D. No.			
E-mail Address			
Primary Officer			
Contact Person			
Subcontract/P.O. Date			
Subcontract/P.O. Amount \$			
Services/Material Brands ¹			
Skilled Trade License No.			
DFSP Enrolled	<input type="checkbox"/> Yes <input type="checkbox"/> No (when supplying labor on site)	<input type="checkbox"/> Yes <input type="checkbox"/> No (when supplying labor on site)	<input type="checkbox"/> Yes <input type="checkbox"/> No (when supplying labor on site)
DFSP Policy No.			
EDGE Status ²	<input type="checkbox"/> Certified <input type="checkbox"/> Pending <input type="checkbox"/> Mentor <input type="checkbox"/> Protégé	<input type="checkbox"/> Certified <input type="checkbox"/> Pending <input type="checkbox"/> Mentor <input type="checkbox"/> Protégé	<input type="checkbox"/> Certified <input type="checkbox"/> Pending <input type="checkbox"/> Mentor <input type="checkbox"/> Protégé
For Cont. Auth. Use Only	<input type="checkbox"/> Approved <input type="checkbox"/> Extended Review <input type="checkbox"/> Rejected	<input type="checkbox"/> Approved <input type="checkbox"/> Extended Review <input type="checkbox"/> Rejected	<input type="checkbox"/> Approved <input type="checkbox"/> Extended Review <input type="checkbox"/> Rejected

Contractor Certification

Contractor certifies that the information above is true and complete.

A/E Review

A/E has reviewed the information above and finds it in compliance with the Contract Documents as shown or as noted.

Construction Manager Review

CM has reviewed the information above and finds it in compliance with the Contract Documents as shown or as noted.

Contracting Authority Approval

Subcontractors and Material Suppliers are accepted, as shown or as noted, for use on this project subject to revocation for cause.

Signature _____

Date _____

Signature _____

Date _____

Signature _____

Date _____

Signature _____

Date _____

Subcontractor & Material Supplier Declaration

State of Ohio Standard Forms and Documents

Contractor Information

Company Name _____
 Address _____
 City, State, Zip _____
 Type of Contract _____

Project Information

Contract No. _____
Project Name _____
 Project Location _____

Sheet¹ _____ of _____

	<input type="checkbox"/> Subcontractor <input type="checkbox"/> Material Supplier (check one)	<input type="checkbox"/> Subcontractor <input type="checkbox"/> Material Supplier (check one)	<input type="checkbox"/> Subcontractor <input type="checkbox"/> Material Supplier (check one)
Company Name			
Street Address			
City/State/Zip			
Telephone No.			
Fax No.			
Federal Tax I.D. No.			
E-mail Address			
Primary Officer			
Contact Person			
Subcontract/P.O. Date			
Subcontract/P.O. Amount \$			
Services/Material Brands ¹			
Skilled Trade License No.			
DFSP Enrolled	<input type="checkbox"/> Yes <input type="checkbox"/> No (when supplying labor on site)	<input type="checkbox"/> Yes <input type="checkbox"/> No (when supplying labor on site)	<input type="checkbox"/> Yes <input type="checkbox"/> No (when supplying labor on site)
DFSP Policy No.			
EDGE Status ²	<input type="checkbox"/> Certified <input type="checkbox"/> Pending <input type="checkbox"/> Mentor <input type="checkbox"/> Protégé	<input type="checkbox"/> Certified <input type="checkbox"/> Pending <input type="checkbox"/> Mentor <input type="checkbox"/> Protégé	<input type="checkbox"/> Certified <input type="checkbox"/> Pending <input type="checkbox"/> Mentor <input type="checkbox"/> Protégé
For Cont. Auth. Use Only	<input type="checkbox"/> Approved <input type="checkbox"/> Extended Review <input type="checkbox"/> Rejected	<input type="checkbox"/> Approved <input type="checkbox"/> Extended Review <input type="checkbox"/> Rejected	<input type="checkbox"/> Approved <input type="checkbox"/> Extended Review <input type="checkbox"/> Rejected

Contractor Certification

Contractor certifies that the information above is true and complete.

A/E Review

A/E has reviewed the information above and finds it in compliance with the Contract Documents as shown or as noted.

Construction Manager Review

CM has reviewed the information above and finds it in compliance with the Contract Documents as shown or as noted.

Contracting Authority Approval

Subcontractors and Material Suppliers are accepted, as shown or as noted, for use on this project subject to revocation for cause.

Signature _____

Date _____

Signature _____

Date _____

Signature _____

Date _____

Signature _____

Date _____

004339 Bidder's Diversity & Inclusion Participation Form

A completed Bidder's Diversity & Inclusion Participation Form or documentation of good faith efforts must accompany the completed Form of Proposal or Bid Form.

_____ ("Bidder") submits the following information regarding its levels of MBE/WBE Participation:

List all MBE/WBE subcontractors and suppliers, with contract amounts, that Bidder will use for its work on the Project. (continue list on additional sheets of paper if necessary)

Name of Subcontractor / Supplier	MBE or WBE	Subcontract Amount
1.		\$
2.		\$
3.		\$
4.		\$
5.		\$
A. TOTAL AMOUNT OF MBE/WBE SUBCONTRACTS		\$
B. TOTAL BID		\$
PERCENTAGE OF DIVERSITY PARTICIPATION* (A ÷ B x 100)		%

In addition, the project will attempt to meet the State of Ohio Construction Compliance Participation Goal of 6.9% for woman (statewide), and 10% for minorities (Columbus).

The bidder's commitment of total workforce hours for Minority Workforce participation on the project is: _____%.

The bidder's commitment of total workforce hours for Women Workforce participation on the project is: _____%.

I certify under penalty of perjury that the forgoing and/or attached statements and information are true and correct. The undersigned will immediately notify the Owner in the event that any of the information provided in this Diversity & Inclusion Participation Form changes in any material way.

By: _____ Date: _____

Print Name and Title: _____

***If the Bidder does not indicate that it has achieved the Diversity & Inclusion Participation Goal set forth in the Instructions to Bidders, the Bidder must attach to this Form, a narrative, including exhibits, demonstrating and certifying that good faith efforts, as set forth in the Instructions to Bidders, were actively and aggressively undertaken by the Bidder, to reach such goals.**

OWNER-CONTRACTOR AGREEMENT

OWNER:

Columbus Metropolitan Library
Board of Trustees
96 South Grant Avenue
Columbus, OH 43215

Contact: Andrew Kistler, Director --
Property Management

Contract: _____

Alternates: _____

Contractor: _____

Address: _____

Phone: _____

Fax: _____

Date: _____

PROJECT:

TECHNOLOGY CABLING
Reynoldsburg Branch

This document is an agreement between the Owner and the Contractor for the Work (also referred to as the "Agreement") described in the Contract Documents related to the Contract identified above for the Project and is effective as of the date set forth above ("Effective Date of this Agreement"), which if no date is entered shall be the date the Agreement was signed by the Owner.

The Owner and the Contractor agree as set forth in the following paragraphs:

1. CONTRACT DOCUMENTS. The Contract Documents consist of the following documents:
 - A. Notice to Bidders;
 - B. Instructions to Bidders;
 - C. Bid Form;
 - D. Bid Guaranty and Contract Bond Form
 - E. Contract Bond Form
 - F. Contractor's Personal Property Tax Affidavit (O.R.C. §5719.042);
 - G. Owner-Contractor Agreement;
 - H. General Conditions of the Contract for Construction (AIA Document A232-2009, as modified);
 - I. Drawings;
 - J. Specifications;
 - K. Addenda issued;
 - L. Statement of Claim Form and Instructions; and
 - M. Modifications issued after the execution of the contract, including:
 - i. A written amendment to the Agreement signed by both parties;
 - ii. A Change Order;
 - iii. A Work Change Directive; or,
 - iv. A written order for a minor change of the Work issued by the Design Professional in accordance with the General Conditions

Note: Non-Contract Documents.

- (1) The following are the reports and tests of subsurface conditions at or contiguous to the Site, if any, that the Design Professional has used in preparing the Contract Documents. These are not Contract Documents. The General Conditions, as modified, contain additional terms related to these reports and tests. (None, if none are listed).
- (2) The following are those reports and drawings related to any Hazardous Conditions at the Site, if any. These are not Contract Documents. The General Conditions, as modified, contain additional terms related to these reports and drawings. (None if none are listed).

2. **DESIGN PROFESSIONAL AND CONSTRUCTION MANAGER RELATIONSHIPS.** The Contract Documents shall not be construed to create a contractual relationship of any kind between Construction Manager and the Design Professional or between the Construction Manager and the Contractor, or any Subcontractor or Material Supplier to the Project, or between the Design Professional and the Contractor or any Subcontractor or Material Supplier to the Project. The Construction Manager and the Design Professional, however, shall be entitled to performance of the obligations of the Contractor intended for its benefit and to enforcement of such obligations, but nothing contained herein shall be deemed to give the Contractor or any third party any claim or right of action against the Construction Manager or Design Professional that does not otherwise exist without regard to this Contract. The Contractor and its Subcontractors shall not be deemed to be beneficiaries of any of the acts or services of the Construction Manager and the Design Professional that are performed for the sole benefit of the Owner. The Contractor shall forward all communications to the Owner and Design Professional through the Construction Manager and hereby acknowledges and agrees that any instructions, reviews, advice, approvals, orders, or directives that are rendered to it by the Construction Manager are specifically authorized and directed by the Owner to the Contractor through the Construction Manager acting on behalf of the Owner.

2.1 The Design Professional (also called the "Architect") is:

Reynoldsburg Branch
Jonathan Barnes Architecture & Design
243 N 5th Street, Suite 200
Columbus, OH 43215

2.2 The Construction Manager is:

Turner Construction Company
262 Hanover Street
Columbus, Ohio 43215
The Construction Manager's representative is Litany Zenz.
Email: lzenz@tcco.com

3. **TIME FOR COMPLETION AND PROJECT COORDINATION.**

3.1 **DATE FOR COMMENCEMENT.** The date for commencement of the Work shall be the date established in a written Notice to Proceed issued by the Owner, through the Design Professional or the Construction Manager, to the Contractor. If no Notice to Proceed is issued, then the date for

commencement shall be the Effective Date of the Agreement. The date for commencement of the Work shall be within _____ () days from the bid opening date, unless the Owner and the Contractor agree to a later date. If there is any other date for commencement of the Work in the bid documents, Contract Documents or elsewhere, it is agreed that such other date is a tentative date and may not be relied upon by the Contractor. If the date for commencement of the Work is later than sixty (60) days from the bid opening date or, if applicable, the later date agreed to by the Owner and the Contractor, the Contractor may submit a Claim in accordance with the Contract Documents.

3.2 DATE FOR SUBSTANTIAL COMPLETION. The Contractor shall have its Work on the Project Substantially Complete by the following date or within the following Contract Time (in calendar days) _____, 2015. The Date for Substantial Completion is the foregoing date or date calculated using the Contract Time. The Date for Substantial Completion shall only be changed or modified by Change Order, other Modification, or a Claim that is Finally Resolved regardless of any dates in any schedule created by any person, including the Coordinating Contractor. The Contract Time shall run from the date of the Notice to Proceed or if there is no Notice to Proceed from the Effective Date of this Agreement.

3.2.1 Substantial Completion is the time at which the Work has progressed to the point where the Work is sufficiently complete, in accordance with the Contract Documents, so that the Work can be utilized for the purposes for which it is intended. Final Completion shall mean that the Work is complete in accordance with the Contract Documents and the Contractor has submitted to the Design Professional all documents required to be submitted to the Design Professional for final payment. A Claim is "Finally Resolved" when the claim process is complete and not subject to further proceedings.

3.2.2 SHUTDOWN DATES. Due to events scheduled by the Owner and/or other Owner considerations, Contractor will not be able to perform Work on the Project on the following dates (there are no shutdown dates if none listed):

_____ None _____

Contractor's Construction Schedule for performing the Work shall account for Contractor not being able to perform Work on these dates and the contractual dates for Substantial Completion and Final Completion will not be changed due to Contractor not being able to perform Work on these dates.

3.3 PROJECT TIME SCHEDULE. The Construction Manager shall develop the Project Time Schedule as provided in the Contract Documents. Within ten (10) calendar days of the receipt of the proposed Project Time Schedule from the Construction Manager, the Contractor shall furnish for consideration of the Construction Manager information for the scheduling of the times and sequences of operations required for its Work to meet the Owner's overall schedule requirements as set forth in the milestone schedule contained in the Scope of Work, including, but not limited to, proposed staffing levels for each phase of the Work, proposed dates for material fabrication and delivery, and proposed dates for equipment delivery. The Construction Manager shall consider, but is not bound by, the information supplied by the Contractor. The Construction Manager shall revise the initial Project Time Schedule in substantial compliance with the schedule information included with the Contract Documents and may thereafter from time to time make changes to the Project Time Schedule. The Contract Documents shall govern whether the Contractor is entitled to any additional compensation due to changes in the Project Time Schedule. The Contractor's obligation to furnish requested scheduling information is a material term of its Contract, the breach of which may be justification for withholding payment otherwise due the Contractor. Inclusion of the proper staffing levels in the Project Time Schedule shall not constitute approval of such staffing levels. The Contractor shall continuously monitor the Project Time Schedule so as to be familiar with the timing, phasing, and sequence of operations of the Work and of other Work on the Project and shall execute the Work in accordance with the requirements of the Project Time Schedule, including any revisions thereto.

3.4 LIQUIDATED DAMAGES. If the Contractor does not have its Work on the Project Substantially Complete by its Date for Substantial Completion or Finally Complete within forty-five (45)

days of achieving Substantial Completion, the Contractor shall pay the Owner (and the Owner may set off from sums coming due the Contractor) Liquidated Damages in the per diem amounts as set forth in the following tables, whichever may be applicable:

**LIQUIDATED DAMAGES – FAILURE TO COMPLETE WORK
BY THE DATE FOR SUBSTANTIAL COMPLETION**

<u>Contract Amount</u>	<u>Dollars Per Day</u>
\$1.00 to \$50,000.00	\$ 250.00
\$50,000.01 to \$150,000.00	\$ 500.00
\$150,000.01 to \$500,000.00	\$ 1,000.00
\$500,000.00 to \$2,000,000.00	\$ 1,500.00
\$2,000,000.01 to \$5,000,000.00	\$ 2,500.00
\$5,000,000.01 and above	\$ 3,000.00

**LIQUIDATED DAMAGES – FAILURE TO ACHIEVE FINAL COMPLETION
OF THE WORK WITHIN 30 DAYS OF SUBSTANTIAL COMPLETION**

<u>Contract Amount</u>	<u>Dollars Per Day</u>
\$1.00 to \$50,000.00	\$ 50.00
\$50,000.01 to \$150,000.00	\$ 100.00
\$150,000.01 to \$500,000.00	\$ 200.00
\$500,000.00 to \$2,000,000.00	\$ 300.00
\$2,000,000.01 to \$5,000,000.00	\$ 500.00
\$5,000,000.01 and above	\$ 600.00

In addition to such Liquidated Damages, the Contractor shall indemnify, defend and hold the Owner and its employees and agents harmless from any and all claims, whether or not such claims are proven, and from all costs and expenses incurred, as a result of or related to such claims, including but not limited to attorneys' and consultants' fees and expenses, provided that such claims arise out of or are related to the Contractor's failure to Substantially Complete its Work by its Date for Substantial Completion or its failure to Finally Complete its Work within forty-five (45) days of its Date for Substantial Completion. The Contractor's obligation to indemnify, defend and hold the Owner harmless under this Section 3.5 shall be joint and several. These Liquidated Damages are in addition to any other remedies available to the Owner under the Contract Documents.

The Contractor acknowledges that such amounts of Liquidated Damages represent a reasonable estimate of the actual damages for loss of or interference with the intended use of the Project that the Owner would incur if the Contractor's Work is not Substantially Complete by its Date for Substantial Completion or Finally Complete by the required date for Final Completion.

4. CONTRACT SUM (also called the Contract Price). The lump sum Contract Sum to be paid by the Owner to the Contractor, as provided herein, for the satisfactory performance and completion of the Work and all of the duties, obligations, and responsibilities of the Contractor under this Agreement and the other Contract Documents is

Dollars (\$_____). The Contract Sum includes all federal, state, county, municipal, and other taxes imposed by law, including but not limited to any sales, use, and personal property taxes payable by or levied against the Contractor on account of the Work or the materials incorporated into the Work. The Contractor will pay any such taxes. The Contract Sum includes the following:

Base Bid Amount: \$ _____
 Alternate No. ____ \$ _____
 Alternate No. ____ \$ _____

If after Substantial Completion of its Work, the Contractor fails to submit its final payment application with all the documents required to be submitted with such application within ninety (90) days after written notice to do so from the Owner and without prejudice to any other rights and remedies the Owner may

have available to it, the balance of the Contract Sum shall become the Owner's sole and exclusive property, and the Contractor shall have no further interest in or right to such balance.

5. RETAINAGE. Retainage applicable to the Contract by Ohio Revised Code Sections 153.12, .13, and .14 will be withheld as defined in the General Conditions. The Contractor agrees that the financial institution selected by the Owner for deposit of retained funds is acceptable to the Contractor and will sign any documents requested related to said account.

6. LIMITATION ON LIABILITY. The Owner's total liability under this Agreement will be limited to the amount set forth in the Fiscal Officer's certificate accompanying this Agreement. Under no circumstances will the elected officials, officers, employees, board or council members, or agents of the Owner be personally liable for any obligations or claims arising out of or related to this Agreement.

7. GENERAL.

7.1 **MODIFICATION.** No modification or waiver of any of the terms of this Agreement or of any other Contract Documents will be effective against a party unless set forth in writing and signed by or on behalf of a party. In the case of the Owner, the person executing the modification or waiver must have express authority to execute the Modification on behalf of the Owner pursuant to a resolution that is duly adopted by the Owner. Under no circumstances will forbearance, including the failure or repeated failure to insist upon compliance with the terms of the Contract Documents, constitute the waiver or modification of any such terms. The parties acknowledge that no person has authority to modify this Agreement or the other Contract Documents or to waive any of its or their terms, except as expressly provided in this section.

7.2 **ASSIGNMENT.** The Contractor may not assign this Agreement without the written consent of the Owner, which the Owner may withhold in its sole discretion.

7.3 **LAW AND JURISDICTION.** All questions regarding the validity, intention, or meaning of this Agreement or any modifications of it relating to the rights and obligation of the parties will be construed and resolved under the laws of the State of Ohio. Any suit, which may be brought to enforce any provision of this Agreement or any remedy with respect hereto, shall be brought in the Common Pleas Court of the county in Ohio in which the Owner's principal office is located, and each party hereby expressly consents to the jurisdiction of such court.

7.4 **CONSTRUCTION.** The parties acknowledge that each party has reviewed this Agreement and the other Contract Documents and entered into this Agreement as a free and voluntary act. Accordingly, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party will not be employed in the interpretation of this Agreement, the other Contract Documents, or any amendments or exhibits to it or them.

7.5 **APPROVALS.** Except as expressly provided herein, the approvals and determinations of the Owner and Design Professional will be subject to the sole discretion of the respective party and be valid and binding on the Contractor, provided only that they be made in good faith, i.e., honestly. If the Contractor challenges any such approval or determination, the Contractor has the burden of proving that it was not made in good faith by clear and convincing evidence.

7.6 **PARTIAL INVALIDITY.** If any term or provision of this Agreement is found to be illegal, unenforceable, or in violation of any laws, statutes, ordinances, or regulations of any public authority having jurisdiction, then, notwithstanding such term or provision, this Agreement will remain in full force and effect and such term will be deemed stricken; provided this Agreement will be interpreted, when possible, so as to reflect the intentions of the parties as indicated by any such stricken term or provision.

7.7 **COMPLIANCE WITH LAWS AND REGULATIONS.** The Contractor, at its expense, will comply with all applicable federal, state, and local laws, rules, and regulations applicable to the Work, including but not limited to Chapter 4115 of the Ohio Revised Code and Sections 153.59 and 153.60 of the Ohio Revised Code, which prohibit discrimination in the hiring and treatment of employees, with respect to which the Contractor agrees to comply and to require its subcontractors to comply.

7.7.1 **NON-DISCRIMINATION.** Contractor agrees:

- .1 That in the hiring of employees for the performance of Work under this Agreement or in any subcontract, neither the Contractor, subcontractor, or any person acting on behalf of either of them, shall by reason of race, creed, sex, disability as defined in Section 4112.01 of the Ohio Revised Code, or color discriminate against any citizen of the state in the employment of labor or workers who are qualified and available to perform the Work to which the employment relates.
- .2 That neither the Contractor, subcontractor, nor any person acting on behalf of either of them shall, in any manner, discriminate against or intimidate any employee hired for the performance of Work under this Agreement on account of race, creed, sex, disability as defined in Section 4112.01 of the Ohio Revised Code, or color.
- .3 That there shall be deducted from the amount payable to the Contractor by the Owner under this Agreement a forfeiture of twenty-five dollars (\$25.00) as required by Ohio Revised Code Section 153.60 for each person who is discriminated against or intimidated in violation of this Agreement.
- .4 That this Agreement may be canceled or terminated by the Owner and all money to become due hereunder may be forfeited for a second or subsequent violation of the terms of this section of this Agreement.

7.7.2 ETHICS. By signing and entering into this agreement with the Owner, the Contractor represents that it is familiar with all applicable ethics law requirements, including without limitation Sections 102.04 and 3517.13 of the Ohio Revised Code, and certifies that it is in compliance with such requirements. The Contractor understands that failure to comply with the ethics laws is, in itself, grounds for termination of this contract and may result in the loss of other contracts with the Owner.

7.7.3 NON-COLLUSION; CONFLICTS OF INTEREST. By signing and entering into this agreement with the Owner, the Contractor represents that it has not engaged in any collusion related to the contract amount or during the pre-bid period prior to submitting a bid for the work. Contractor further represents by signing and entering into this agreement with the Owner that it has not done anything that would be a conflict of interest related to the work covered by this agreement with the Owner or any member of the Owner's Board of Trustees, administrative team, faculty, or staff.

7.8 JOB MEETINGS. The Contractor or one of its representatives with authority to bind the Contractor will attend all job meetings. The Owner anticipates that job meetings will be scheduled on a weekly basis during construction or as needed. The Contractor will ensure that its Subcontractors also hold regular job meetings at which safety issues and job matters are discussed as these relate to the Work being performed. Job meetings include, but are not limited to, pre-construction meetings, weekly job meetings, weekly safety tool box meetings, and monthly safety meetings.

7.9 PROPERTY TAX AFFIDAVIT. The Contractor's affidavit given under Section 5719.024, Ohio Revised Code, is incorporated herein.

7.10 PARTNERING. Contractor agrees that it will participate, as part of the Contract Sum, in any partnering sessions scheduled by Owner.

7.11 ENTIRE AGREEMENT. This Agreement and the other Contract Documents constitute the entire agreement among the parties with respect to their subject matter and will supersede all prior and contemporaneous, oral or written, agreements, negotiations, communications, representations, and understandings with respect to such subject matter, and no person is justified in relying on such agreements, negotiations, communications, representations, or understandings.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their properly authorized representatives and agree that this Agreement is effective as of the date first set forth above.

Columbus Metropolitan Library
Board of Trustees

CONTRACTOR: _____

BY: _____

BY: _____

TITLE: _____

TITLE: _____

CERTIFICATE
(Section 5705.41, R.C.)

The undersigned, Fiscal Officer of the Columbus Metropolitan Library, Franklin County, Ohio, certifies that the moneys required to meet the obligations of the Library during the current fiscal year, under the attached Agreement for the services indicated herein have been lawfully appropriated for those purposes and are in the appropriate account of the Library, or in the process of collection to the credit of the appropriate account or fund, free from any previous encumbrances.

DATE: _____

Lauren Hagan, Fiscal Officer
Columbus Metropolitan Library

DOCUMENT 005433 – DIGITAL/ELECTRONIC DATA PROTOCOL

1. DIGITAL DATA MANAGEMENT PROTOCOLS

1. The centralized document management system on the project will be TKN Project Sites (SharePoint). In addition to the Project Manager, the Field Superintendent for each contractor must have onsite access to the TKN Project Site. This document management system will be used to create and/or store documents such as, but are not limited to, Daily Construction Reports, Requests for Information, Submittals, Meeting Minutes, Punch Lists, Site Logistics Plans, Schedules, etc. Access to the site will be provided to each contractor by a Turner Construction project team member.
2. Initial training will be required for all contractors that will be actively using the TKN Project Site. This training will include the following:
 1. (1) 1 hour long training session before the contractor begins work to go through the expectations, navigation and management of the TKN Project Site. This will also cover submission requirements and naming conventions expected by Turner Construction.
 2. If the contractor does not follow the procedures outlined in the initial training session, they may be requested at Turner's discretion to go through the training a second time.
3. The requirements and procedures for storing electronic data on the TKN Project Site are as follows:
 1. Requests for Information will only be accepted through use of the TKN Project Site. All RFIs submitted to Turner project team members will not be permitted. Once an RFI is submitted Turner will review the RFI and either answer it or redirect the RFI to the architect for review. Once the answer has been returned from the architect the RFI will be sent back to the contractor. Contractors are not permitted to contact any member of the Architect/Engineering team without Turner consent.
 2. Submittals will only be accepted through use of the TKN Project Site unless agreed upon by Turner before the submission. All product data, reports, certifications, etc. must be submitted in PDF format. If a sample is able to be scanned, it is requested a scanned PDF copy is submitted with the sample.
 3. Daily Construction Reports will only be accepted through use of the TKN Project Site.
 4. Pre-Task Plans (PTPs) are required to be submitted daily using the TKN Project Site in PDF format. There will be a workstation located in the Turner job trailer for those who may not have onsite access at the time.
 5. Job Hazard Analyses (JHAs) are required to be submitted monthly using the TKN Project Site in PDF format.
 6. All other safety forms required on the project (example: dig permits, hot work permits, excavation checklists, MSDS chemical inventory lists, etc.) must also be submitted on the TKN Project Site in PDF format unless otherwise authorized by the on-site Turner Safety Manager.
4. The intent of storing digital data on the TKN Project Site is for Turner's use. Therefore, it is the responsibility of the contractor to keep an archive copy of all digital data submitted to Turner via e-mail or on the TKN Project Site for the duration of the project.
5. Each contractor shall comply with the requirements listed in the digital data table below. This table includes the digital data type, the digital data format, the transmission method of the digital data, the authorized uses of the data, and any extra notes.

Digital Data Description	Format	Exchange Method	Notes
Project Agreements and Modifications	PDF	EM	
Project Communications			
General Communications	PDF	EM	
Meeting Minutes	PDF	TKN	
Requests For Information	PDF	TKN	
Project Communications			
General Communications	PDF	EM	
Meeting Minutes	PDF	TKN	
Requests For Information	PDF	TKN	
Contractor's Submittals			
Product Data	PDF	TKN	
Shop Drawings	PDF	TKN	
Samples	PDF	TKN	1
Modifications			
Change Orders	PDF	EM	
Construction Change Directives	PDF	EM	
Safety Forms			
Pre-Task Plans	PDF	TKN	
Job Hazard Analysis	PDF	TKN	
Project Payment Documents	PDF	EM	
Notices and Claims	PDF	EM	
Closeout Documents			
Record Documents	PDF	TKN	
Operations and Maintenance Manuals	PDF	TKN	

Abbreviations

PDF

EM

TKN

Definition

Portable Document Format

E-mail

TKN Project Site

Notes

1 – In addition to physical samples, if applicable, a photo copy of the sample must be submitted with the submittal

2. ADDITIONAL PROVISIONS

- In addition to the centralized document management system the Project Manager and Field Superintendent for each contractor must have access to PlanGrid, the Project's document viewing/document control software. A Turner team member will provide the Project Manager and Field Superintendent with access to PlanGrid. Each contractor is required to purchase (1) PlanGrid subscription and (1) mobile device that is compatible with PlanGrid for on-site use for the duration of their work. All pricing information can be found on PlanGrid's website at www.PlanGrid.com.
- Note: The desktop version of PlanGrid is free for an unlimited number of users. The cost for PlanGrid is for use on a mobile device (i.e. iPad, ANDROID tablet, etc.). As previously stated, all contractors are required to pay for at least (1) mobile subscription. If a contractor would like to add additional users without mobile capabilities there will be no cost. If a contractor would like to add additional users with mobile capabilities the contractor is responsible for this added cost.

CML Reynoldsburg Branch

CONTRACTOR QUALITY CONTROL PLAN



Prepared By: Turner's CML Project Team

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IV. DEFINITIONS

CD	Contract Documents
CDP	Construction Deficiency Program
CQC	Contractor Quality Control
DFOW	Definable Features of Work
DQCR	Daily Quality Control Report
MSDS	Material Safety Data Sheets
NCR	Non-Compliance Report
OAC	Owner/Architect/Contractor Meeting
RFI	Request for Information
RFP	Request for Proposals
ROJ	Required-on-the-Job
A/E	Architect/Engineer

I. QUALITY CONTROL ORGANIZATION

A. Purpose

1. This Contractor Quality Control (CQC) Plan has been established to assure quality construction of the NCH Behavioral Health Pavilion Project in accordance with the Contract between NCH and Turner Construction Company ("Turner") and the Contract Documents.
2. The project is designed and built per the 2011 Ohio Building Code.

B. Personnel

1. The Project Engineer and Project Superintendent will be CQC Administrators for each respected area, and will be in direct charge of the CQC Plan.
2. Additional Engineers and Superintendents may be designated to assist the CQC Administrators in the construction process.

C. Authority

1. The Quality Control Manager shall be responsible for the overall management of the CQC Plan and shall act in all quality matters for Turner. This includes the authority to inspect, reject, or accept the work of Turner and subcontractors in accordance with the Contract. The Owner and/or the Design Team may also inspect the work as necessary to assure contract compliance.
2. The CQC Plan includes submittal review, certification and a testing program. A three-phase control system shall be employed to monitor work compliance and provide for a Continuous Inspection of Workmanship. Construction deficiencies shall be corrected. In cases where Contract Documents are not clear, resolution will be determined via the Request for Information (RFI) process.

D. Organization Chart:

- a. Reference page 5 for Turner's Quality Control Organization Chart.

Turner's Quality Control Organization Chart



Quality Control Personnel Responsibilities Matrix					
P = Primary role , S = Secondary role	SPM	QCM	S	E	Sub
Prepare/administer CQC Plan & Subcontractor's QC Plan	S	P	S	S	P
Coordinate constructability review(s)	S	S		P	S
Establish document control process	S			P	
Maintain document control				P	
Conduct weekly job quality progress meetings. Including review of Non-Compliance Log and QC activities for the week with the project team. Issue minutes.	S	S	P	S	S
Conduct Owner/Architect/Contractor Meetings including review of Non-Compliance Log and QC activities for the week. Issue minutes.	S	S		P	
Maintain Non-Compliance Log		S	P	S	S
Conduct Subcontractor Preconstruction Meetings, INCLUDING Pre-installation Meetings to insure project specifications, product data and contract details / requirements are reviewed. Issue minutes.		S	S	P	S
Review submittals and product data during pre-installation meeting		S	S	P	
Create and maintain submittal log consistent with the requirements of the project schedule.			S	P	S
Create and maintain project schedule; include submittal activities on the schedule as activity predecessors			P	S	S
Create and maintain equipment and material delivery schedule			P		P
Maintain required mock-up log		S	P	S	
Develop non-required mock-up log		S	P	S	
Implement the Three-Phase Control Program		P	S	S	S
Inspect delivery of materials and equipment and document. Review documents to confirm conformance to the submittals and Contract Documents		S	S	S	P
Perform and document initial work inspections, follow up inspections, and tests			P		S
Develop site and work specific check lists			S		P
Coordinate and witness 3 rd party and other inspections and/or tests		S	P		S
Perform submittal related QC checks		S	S	S	P
Maintain as-built drawings / O&M manuals / warranties				S	P
Include tasks for quality events / deliverables on milestone schedule and Last Planner System Phase production plan.		S	P		S

(SPM) = Senior Project Manager; (QCM) = Quality Control Manager; (S) = Superintendent;
(E) = Engineer; (Sub) = Subcontractor Quality Control Manager

Project Staff Roles and Responsibilities

Senior Project Manager: Quality Duties, Responsibilities and Authority

The Senior Project Manager functions as the direct interface and day to day leader of the Turner Project Team. The SPM is responsible for monitoring the Contractor's compliance with the Construction Contract. The SPM records the progress of construction and monitors any potential items that may pose an impact to the safety, cost, schedule or quality of the project.

Regardless of other duties, the Senior Project Manager is responsible for:

1. Review Contract Documents to understand submittal / shop drawing / sample procedures, mock-up requirements, technical specification requirements, Subcontract requirements and supplemental condition requirements
2. Lead the team and act as liaison between Design Team and Subcontractors to resolve design and constructability issues
3. Provide for ongoing constructability reviews into the Construction phase as details develop or project conditions change
4. Coordinate with the Owner to determine their expectations. Make sure the Design Team and Turner Staff are communicating and executing those expectations
5. Oversee the implementation of the CQC Plan
6. Supervise and ensure quality document management
7. Determining if shop visits are necessary or beneficial. Identify who is to attend and schedule the trips
8. Confirm that quality events like design reviews, page-flips, permit agency reviews, preconstruction meetings, stand-alone mock-ups, first-in place mock-ups, and system tests are included in the Project Schedule.
9. Arrange for any design peer reviews
10. Has the authority, and is required, to stop work if found to be in non-compliance

Quality Control Manager: Quality Duties, Responsibilities and Authority

The Quality Control Manager (QCM) functions as the face and leader of the CQC Plan on this project. The QCM is responsible for monitoring the Contractor's compliance with the CQC Plan.

Regardless of other duties, the QCM is responsible for:

1. Prepare/Administer CQC Plan
2. Review Contract Documents to understand submittal / shop drawing / sample procedures, mock-up requirements, technical specification requirements, Subcontract requirements and supplemental condition requirements
3. Review generic mock up list and Contract Documents to determine required mock-ups for the project with the superintendents and engineers
4. Oversee the construction of mock-ups as required by the Contract Documents to ensure that the appropriate level of quality workmanship is achieved
5. Inspect deliveries of material/equipment in the field
6. Plan and lead the Three-Phase Control Program meetings and ensure Subcontractors are using proper materials and installation methods in the field
7. Prepare for, in conjunction with applicable Turner Engineer(s), preconstruction / pre-installation and other meetings, including agendas published in advance of the meeting, and deliverables recorded and assigned after the meeting
8. Implement the Construction Deficiency Program (CDP) and insure that CQC Administrators and Subcontractors are following the program

9. Work with Turner Engineer(s) on issuing weekly update reports indicating Non-Conforming items of work to responsible parties
10. Attend, as required, inspections of work prior to cover-up/concealment (MEP rough-in, reinforcing steel, concrete pre-pour verify someone is in charge of creating a "in wall" backing matrix)
11. Has the authority, and is required, to stop work if found to be in non-compliance

Superintendent Team: Quality Duties, Responsibilities and Authority

1. Execute CQC Plan
2. Review Contract Documents to understand submittal / shop drawing / sample procedures, mock-up requirements, technical specification requirements, Subcontract requirements and supplemental condition requirements
3. Develop and maintain site logistics plan
4. Maintain and keep the permit drawing set current on the project website
5. Arrange Structural Inspections for Local Code Compliance
6. Oversee testing and inspections with the subcontractors
7. Prepare/Maintain Equipment and Material delivery schedule
8. Develop Turner "work to complete" or incomplete items lists with the subcontractors
9. Create checklists as required for inspection of work prior to cover-up/concealment (MEP rough-in, reinforcing steel, concrete pre-pour verify someone is in charge of creating a "in wall" backing matrix)
10. Perform final walk through with the Design Team, the Owner and AHJ.
11. Establish and implement the punchlist process and complete open items in a timely manner
12. Implement the Three-Phase Control Program:
 - a. Receive from subcontractor(s) Definable Features of Work (DFOW)
 - i. **Phase 1** – setup preconstruction / pre-installation meetings with all Subcontractors, prior to the start of field activities
 - ii. **Phase 2** – conduct 1st installation observations immediately after installation of any DFW
 - iii. **Phase 3** – conduct follow-up inspections to insure continued compliance with the Contract Document
13. Review mock-up list, provide input on required mock-ups
14. Schedule and coordinate Design Team, Owner, third party and AHJ inspections
15. Coordinate and plan how to protect finished work from damage
16. Maintain the Project Schedule and provide required updates to the Owner, Design Team, Subcontractors, and Turner Staff
17. Work with Turner Engineer(s) to establish turnover procedures
18. Has the authority, and is required, to stop work if found to be in non-compliance

Engineering Team: Quality Duties, Responsibilities and Authority

1. Execute CQC Plan
2. Review Contract Documents to understand submittal / shop drawing / sample procedures, mock-up requirements, technical specification requirements, Subcontract requirements and supplemental condition requirements
3. Create and maintain submittal items list with ROJ dates
4. Maintain and update the current Contract Documents on the project website
5. Determine if any trade specialist should be consulted (i.e. UL, roofing manufacturer, etc.)
6. Establish jobsite library requirements and required purchase codes and standards
7. Assist the Turner Superintendent(s) with schedule maintenance of engineering items (contract dates, submittal dates, bulletin dates, etc.)

8. Attend Turner Three-Phase Control Program meetings and ensure subcontractors are using proper materials and installation methods in the field
9. Submit reports to the Owner indicating non-conforming items of work (subsequent reports will track the actual action taken)
10. Coordinate and communicate with subcontractors – shop drawing review and deliveries with respect to schedule
11. Establish and implement turnover procedures and complete open items in a timely manner
12. Establish and implement closeout procedures, including closeout manual / matrix, and complete open items in a timely manner
13. Has the authority, and is required, to stop work if found to be in non-compliance

Subcontractor Quality Control Manager: Quality Duties and Responsibilities

1. Review Contract Documents to understand submittal / shop drawing / sample procedures, mock-up requirements, technical specification requirements, Subcontract requirements and supplemental condition requirements
2. Compile and submit to Turner, a job site specific Quality Control Plan to be followed for the duration of the NCH Behavioral Health Pavilion project.
 - a. Provide an organization chart which will be reviewed and approved by Turner. If, in the opinion of Turner, additional staff / more qualified staff are required, the Subcontractor will provide at no additional increase to their contract sum.
3. Accountable for the day-to-day quality of work that is put in place
4. Develop and implement the use of site and work specific check lists
5. Prepare equipment/material delivery schedule
6. Inspect delivered equipment/material in the field
7. Maintain as-built drawings / O&M manuals / warranties
8. Perform submittal / shop drawing related QC checks
9. Has the authority, and is required, to stop work if found to be in non-compliance

E. CQC Software

1. Turner will utilize BIM 360 Field to record, maintain, distribute, and submit quality control information during the course of this project.

II. CONSTRUCTION QUALITY CONTROL

A. Constructability review

1. An important aspect of our work includes a constructability review of the Contract Documents and various scopes of work. This can be accomplished by a “page-flip” review of each page of the drawings. The individual with the greatest knowledge of that scope of work should take the lead with participation from other team members. Dates should be assigned for this review. A list of questionable items or details can be generated for possible review with the Design Team and Owner.

B. Submittal Procedures

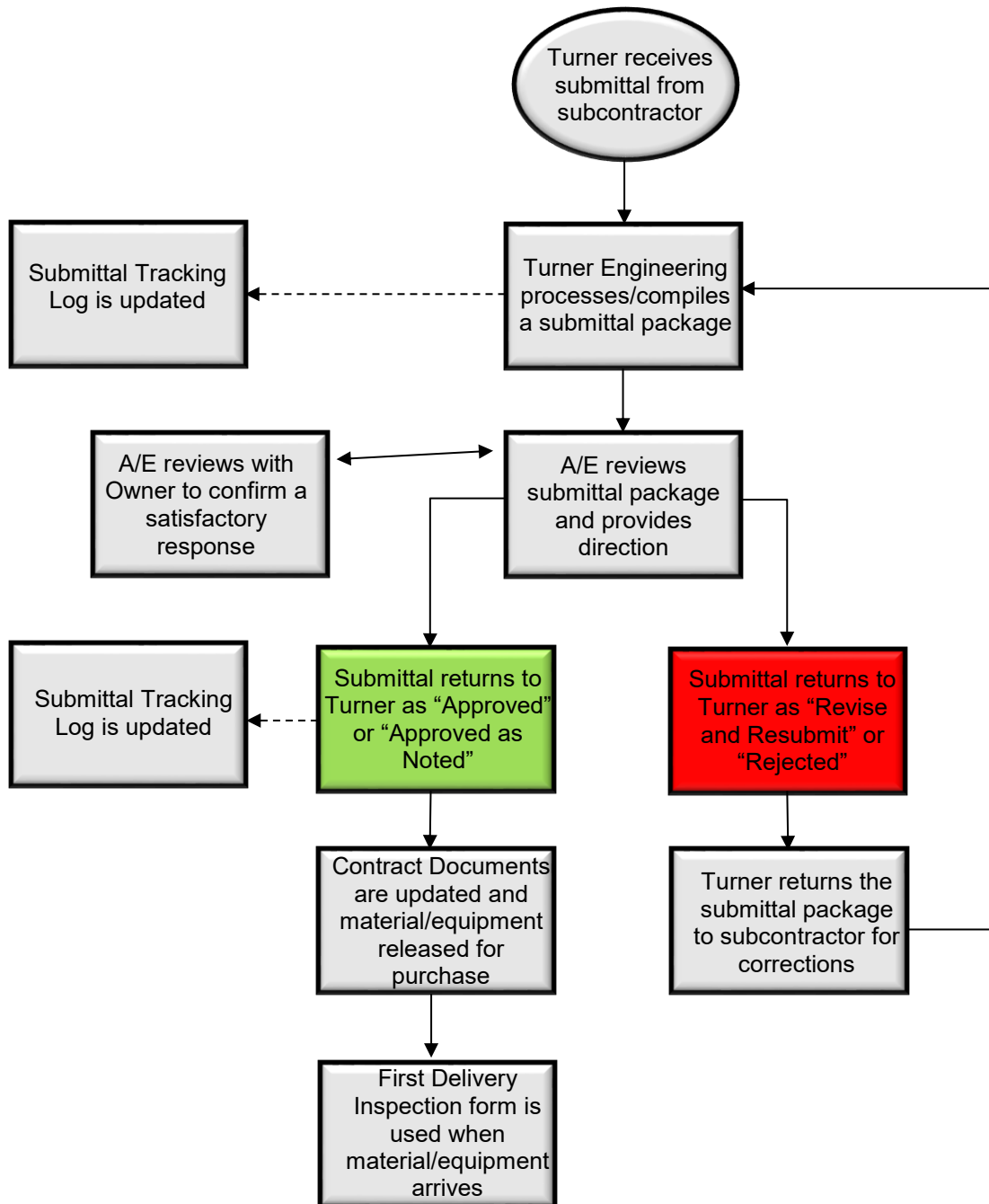
1. General
 - a. An important part of the CQC Plan is ensuring that the materials and equipment proposed and, subsequently, installed on the job meet the requirements of the Contract Documents. To this end, a submittal procedure shall be established for

managing, reviewing, and approving the submittals of subcontractors, fabricators, and suppliers—see Submittal Process Flow Chart.

- b. Reference the Submittal Process Flow Chart on page 12.
2. Submittal Requirement Identification
 - a. NBBJ shall identify in the Contract Documents those material/equipment items which will be subject to formal submittal actions (identification in a submittal log and submittal schedule), the standards by which this material/equipment will be evaluated, and the form of the submittal (product and or testing lab data, design data, shop drawing, samples, etc.). The Design Team should consolidate the submittal requirements within each specification.
3. Submittal Register (Matrix)
 - a. The Turner Engineer will verify that all submittal requirements from the specifications are included on Turner's Submittal Register and transmit this document to the Design Team and Owner. This register can be reviewed by Turner, the Design Team and Owner together. The finalized Submittal Register will then be uploaded into the project website.
 - b. The Turner Engineer will review the Submittal Register. This document shall include "required-on-the-job" (ROJ) dates for equipment and materials as required by the project schedule. In establishing the ROJ dates, the project team will allow sufficient time for review, fabrication and delivery. The reviewed Submittal Register shall be the basis for managing the submittal schedule and will be used to control submittal actions throughout the contract period.
 - c. No work shall be done in the field until a submittal is designated by NBBJ as "Approved", "Approved as Noted", "Partially Approved as Noted", "No Action Required" or "Reviewed only for".
4. Submittal Inputs
 - a. Subcontractors shall forward submittals in an electronic format or shall furnish physical samples if required by specifications. All identified submittal items covering components forming a system or items that are interrelated shall be submitted and coordinated concurrently insofar as is possible. Any deviations (variances) from the Contract Documents shall be identified; supporting rationale for the deviation shall be provided.
5. Turner's Submittal Review and Certification
 - a. The Turner Engineer will check submittals for general review and compliance. Once checked, Turner will transmit the submittal to the Design Team for their action.
 - b. The forwarded submittal will bear the stamp of Turner certifying that it has been reviewed; the review action and date of review will also be included. The Turner Engineer review does not relieve the Subcontractors of the responsibility to supply Contract compliant materials and equipment; or the responsibility to ensure forwarded material / equipment submittals conform to the Contract Documents.
 - c. A transmittal document will be prepared for each submittal package forwarded electronically to the Design Team. Physical samples (if required) will be forwarded with the appropriate transmittal.

6. Owner's Submittal Review
 - a. The Design Team shall engage the Owner during submittal reviews and provide a coordinated, unified response to Turner.
 - b. Submittals returned by the Design Team will be considered reviewed by the Owner and that the indicated action is satisfactory with the Owner.
 - c. Returned submittals directing Turner to "obtain Owner approval", "review with Owner", etc., will not be considered returned. They will remain open until a complete review has been returned.
 - d. The Design Team will be the approval authority for all construction materials and equipment items. This authority has been delegated by the Owner to the Design Team.
7. Design Team's Submittal Review
 - a. The Design Team review procedure will be per section 013300 – submittal procedures.
 - b. Reference the Submittal Process Flow Chart on page 12.
8. Procurement Responsibility
 - a. The Subcontractor shall ensure that the materials procured for installation on the job are the same as those approved for installation. Turner reserves the right to visit fabricators' off-site locations to confirm this, if deemed necessary. At Turner's discretion, no payment for materials incorporated in the work will be made if required approvals have not been obtained. The project team shall ensure that the materials delivered to the jobsite for incorporation into the project are the same as those that have been submitted and approved.

Submittal Process Flow Chart



C. Testing Procedures:

1. General
 - a. Testing is an important part of the CQC Plan. Visual observation alone is often insufficient to assess the conformance of some materials and workmanship on the job. A testing program is established as an integral part of the CQC Plan. Turner, through its subcontractors, fabricators, vendors and the owner's approved independent testing laboratories, shall perform testing, if required, by specifications, to determine whether construction materials and methods are producing the desired contractual product. Where field-testing is required by the Contract Documents, such testing must be witnessed by the CQC Administrators, or the owners testing agency personnel, and documented before the work will be accepted and/or payment made. Witnessing of tests at independent testing laboratories is not required unless special circumstances exist.
2. Required Testing and Third-Party Inspections
 - a. The Design Team will identify required tests, applicable standards, minimum test results, and required 3rd party inspections within the Contract Documents. The Turner Engineer, along with the Turner Superintendent, will consolidate these requirements into a Field Testing and Inspection Plan which identifies required tests, the materials/ equipment to be tested, the specification section and paragraph requiring the test, the testing agency, test frequency and minimum test results required, and any required 3rd party inspections.
3. Testing and Inspecting Agencies
 - a. The Owner will employ a certified Independent Testing Laboratory, for any code required testing. The structural general notes should contain a section regarding "Statement of special inspections" which will list the required structural inspections. Turner, its Subcontractors, and vendors may perform other tests; in all such cases, only personnel qualified and experienced in such testing will be utilized.
 - b. It will be the responsibility of the Subcontractors and the Turner Superintendent to coordinate such tests and inspections with the Independent testing lab. The project team will review the Ohio Building Code to determine what inspections are to be required by code and applicable to this project.
4. List of required structural inspections per the Ohio Building Code and City of Columbus
 - a. Inspections will be carried out and logged on the Inspection Log.
5. List of required non-structural inspections as required by the project specifications
 - a. Inspection(s) not required by the Ohio Building Code / City of Columbus but required by the Contract Documents will be carried out and logged on the Inspection Log.
6. Scheduling and Notification
 - a. A twenty-four (24) hour advanced notice of testing or inspections shall be provided to the Owner's testing agency by the Turner Superintendent(s) upon receiving notice from the Subcontractor that the work is ready. The Owner and Design Team may witness all required inspections and tests to verify documented contract assumptions, to establish work accomplishment, or to

certify performance attainment. The Owner and Design Team are further invited (and encouraged) to witness any or all tests conducted on (and off) the jobsite.

7. Test Reports

- a. Tests and associated results will be documented by the applicable testing agency and provided to the Turner Superintendent(s) and Turner Engineer(s). This documentation may be in the form of hand-written field notes with the formal test report to follow. Where test results are not immediately available, e.g., concrete compressive strength tests, a field test report documenting the fact that the test was conducted will be submitted. The Owner's testing agency will submit follow-up test reports as test results become available.
- b. The Turner Superintendent(s) will maintain a log(s) of tests conducted throughout the construction period. Tests logs will be entered into the project website.

8. Non-Conformance and Re-Testing

- a. Any test with less than satisfactory results shall be re-tested until satisfactory results are obtained. Re-work of the material/system being tested may be necessary in order to achieve satisfactory results. If a successful re-test cannot be achieved within forty-eight (48) hours, a Non-Conformance Report (NCR) will be initiated in accordance to the NCR procedures contained in this Plan. The Turner Superintendent(s) will enter unsatisfactory test results into the Daily Quality Control Report (DQCR).

D. Three-Phase Control Program:

1. General

- a. The core of the CQC Plan is the **three-phase control program**. The primary goal of this program is the "prevention" rather than the "detection" of deficiencies. To this end, the three-phase program requires pre-planning of significant features of work sufficiently in advance of their execution to ensure adequate preparation. This program also identifies all hazards involved in the work and the preventive measures necessary to avoid accidents associated with those hazards.

2. Definable Features of Work (DFOW)

- a. The three-phase program organizes building elements into Definable Features of Work (DFOW), which are individually more manageable than the Subcontractor's entire scope of work. A definable feature of work is a task which is separate and distinct from other tasks and has separate control requirements. A section of the specifications may be considered a definable feature; however, there may be more than one definable feature under a specification section. Conversely, there may be instances where multiple specification sections can be represented by a single DFOW. Each significant definable feature is subjected to the three-phase control program; multiple features may be combined in a single preparatory meeting if they are similar and/or related and if the timing of their performance lends itself to such combination. A list of the significant definable features of work for each Subcontractor will be developed by the Subcontract with assistance from the Turner Superintendent(s) and the Contract Documents

3. Notification

- a. The first two phases begin with jobsite meetings involving the installing Subcontractor and Turner. The Turner Superintendent(s) and/or Turner Engineer(s) will notify the Sr. Project Manager and the Subcontractor at least twenty-four (24) hours in advance of the preconstruction / pre-installation meeting.
4. Documentation
 - a. The Turner Superintendent(s) and/or Turner Engineer(s) shall be responsible for all documentation associated with the three-phase control program.
 - i. Minutes of preconstruction / pre-installation meetings shall be prepared by the Turner Superintendent(s) and/or Turner Engineer(s). A copy will be provided to the applicable subcontractor(s).
 - ii. A log will be prepared and maintained which identifies each significant DFOW and contains the date(s) on which each of the three phases for that significant DFOW were accomplished. This log is maintained within the project website.
5. Control
 - a. Three phases of control shall be administered by the Turner Superintendent(s) for each significant DFOW with the full participation and cooperation of the Turner Engineer(s) with respect to documentation and the field staff with respect to implementation and inspection.
 - i. Phase 1: Pre-Installation Meeting**
 1. This meeting shall be performed prior to beginning work on DFOWs (Phase 1 may be combined for multiple significant DFOWs if practical to do so) and will include:
 - a. A review of the subcontractor's Quality Control Plan.
 - b. A review of security, badging, drug testing, and safety requirements.
 - c. Confirm that all required plans, submittals, permits, and other documents requiring acceptance have been submitted and accepted (or pending acceptances) thus allowing work to begin upon completion of Phase 2.
 - d. A review of the applicable specifications, reference codes, and standards, to include review of all significant DFOWs to be controlled by the three-phase program.
 - e. A review of the Contract Documents; ensure all parties will be working from the most current, approved documents.
 - f. A check to ensure that all materials and/or equipment have been submitted and accepted.
 - g. A review of inspection and testing requirements.
 - h. Verify that an examination of the work area by the Subcontractor has been or will be done to assure that all required preliminary work has been completed and is in compliance with the contract
 - i. An examination of required materials, equipment and sample work to assure that they are on hand, conform to approved submittals and are properly stored.
 - j. A review of means and methods, crew-size, productivity, and project milestones to ensure conformance with the project schedule.

- k. A review of the applicable Job Hazard Analysis, MSDS, and pertinent sections of the Project Safety Program to assure that safety requirements are met.
- l. A discussion of procedures for controlling quality of work, construction tolerances, and workmanship standards shall be addressed.
- m. Identify all required Phase 2 mock-up(s) and determine whether they will be constructed-in-place or as stand-alone examples of the work.
- n. Non-conforming work and resolution process, an acceptable plan of resolution within Turner's defined time lines.
- o. Turner required forms.
- p. Daily Subcontractor Reports.

ii. Phase 2: First Installation Observation

- 1. The 1st observation will be conducted after a representative sample of the work (mock-up) has been completed (if required). Examination of mock-up(s) associated with DFOWs will facilitate determinations that contract requirements can be met and will ultimately establish the level of specified workmanship and quality for the DFOW being examined. This phase will verify that the controls established in the Pre-installation meeting have been successfully implemented and that the work can be performed safely and to the required level of workmanship. The Owner and Design Team's acceptance of additional in place mock-ups is requested but not required (other than those required in the project specifications). The following shall be accomplished during the 1st observation inspection.
 - a. Inspect the mock-up or initial work, to ensure that it is in full compliance with contract requirements.
 - b. Verify adequacy of controls, including the Subcontractor QC plan is being implemented and inspections and testing requirements are clearly understood.
 - c. Establish level of quality/workmanship and verify that it meets minimum acceptable standards.
 - d. Ensure that established safety procedures are being followed and are adequate.
 - e. Resolve all differences

iii. Phase 3: Follow-Up Inspections

- 1. The purpose of this phase is to assure continued compliance with Contract Documents. Periodic checks shall be performed, to include control inspections and testing, until completion of the DFOW. These checks shall be documented in the DQCR. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work, which may be affected by the deficient work.

iv. Additional Meetings: At Turner's discretion

- 1. Additional meetings shall be conducted on the same DFOW if:
 - a. The quality of on-going work is unacceptable
 - b. There are changes in the CQC Administrators, onsite production supervision or significant changes in the work crew
 - c. Work is resumed after a substantial period of inactivity,

d. Other problems develop

E. Material receiving inspection process:

1. As materials and equipment are brought onto the site which are to be incorporated into the project, the Turner Superintendent(s) will verify the 1st delivery of material and equipment are in compliance with the approved submittal(s).
2. Subcontractors will institute a process on subsequent deliveries that will ensure compliant materials are being delivered and incorporated into the project. Subcontractors are required to identify the deliveries in the weekly job progress meetings.
3. Turner Superintendent(s) and/or Engineer(s) will periodically and randomly check to confirm that materials/equipment being put in place on site match the reviewed submittal(s).

F. Mock up program (including required and non-required mock ups)

1. The purpose of mockups is to confirm the exact understanding of what the Contract Documents are prescribing to be built and to have the approving authority, most times the Design Team, approve the mockup which provides confirmation of the understanding of what is to be constructed.
2. Mockups will be performed to establish the level of quality that is expected and required.
3. Mockups will be performed to work out all the pertinent details and the overall fit and finish of the final product.
4. Mockups can be built in components or in total.
5. The CQC Administrators will develop and maintain a mock up log for the required mock ups. In addition, Turner may choose to build additional mockups as they deem necessary to aid in the quality of final installations.

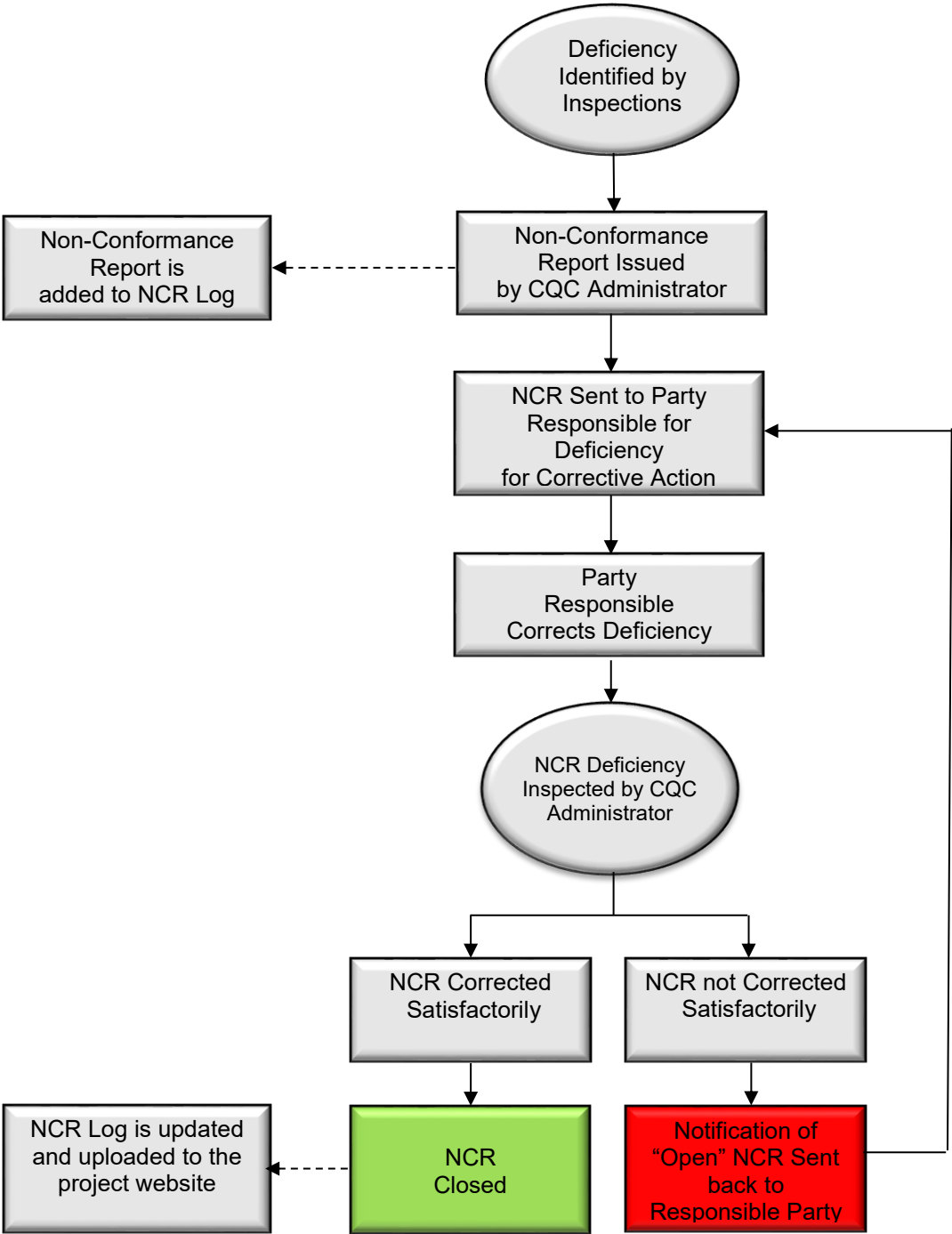
G. Construction Deficiency Program (CDP) Procedures

1. General
 - a. The three-phase control program will identify deficiencies. The CDP is intended to bring these deficiencies to the attention of responsible supervisory personnel who can effect correction.
2. Scope
 - a. The CDP will identify and correct deficiencies early to minimize the overall impact to cost and schedule.
3. Procedures
 - a. The following procedures will be followed to track construction deficiencies.
 - b. When deficiencies are noted, and work deviates from the Contract Documents which may require an engineered solution, the deficiencies will be immediately

brought to the attention of appropriate Subcontractor, Turner and the Design Team. Work affected by the related deficiency should not continue until the deficiency and the method of correction have been approved by Turner and the Design Team

- c. When a deficiency cannot, or is not, corrected within forty-eight (48) hours of discovery or within a reasonable time frame, the CQC Administrator will initiate a Non-Conformance Report (NCR). A sample copy of the NCR form is attached on page 37 along with the Non-Conformance Flow Chart on page 19.
 - i. NCR's will be sequentially numbered.
 - ii. The Turner Superintendent(s) will maintain a file of individual NCRs and NCR Log on the project website.
 - iii. A current copy of the NCR Log will be made available to the Owner.
- d. Upon receipt of the NCR, the Subcontractor will endeavor to correct the deficiency in a timely manner which will not impact the work of the installing Subcontractor, another Subcontractor, or the project schedule as a whole.
- e. Once deficiencies are remedied, the CQC Administrator will re-examine the items.
 - i. If found acceptable, the NCR will be so annotated and closed.
 - ii. If found to be unacceptable, a re-examination by supervisory personnel will be accomplished and a new plan of action formulated; the NCR will remain open until satisfactory resolution has been achieved.
- f. The NCR Log will be periodically reviewed by the Turner Project Team to formulate a disposition of each listed uncorrected deficiency. A timetable for resolution of each open deficiency will be established. Periodic review with the Sr. Project Manager and Subcontractor Sr. Management will also occur.

Non-Conformance Report Flow Chart



H. Reporting Procedures:

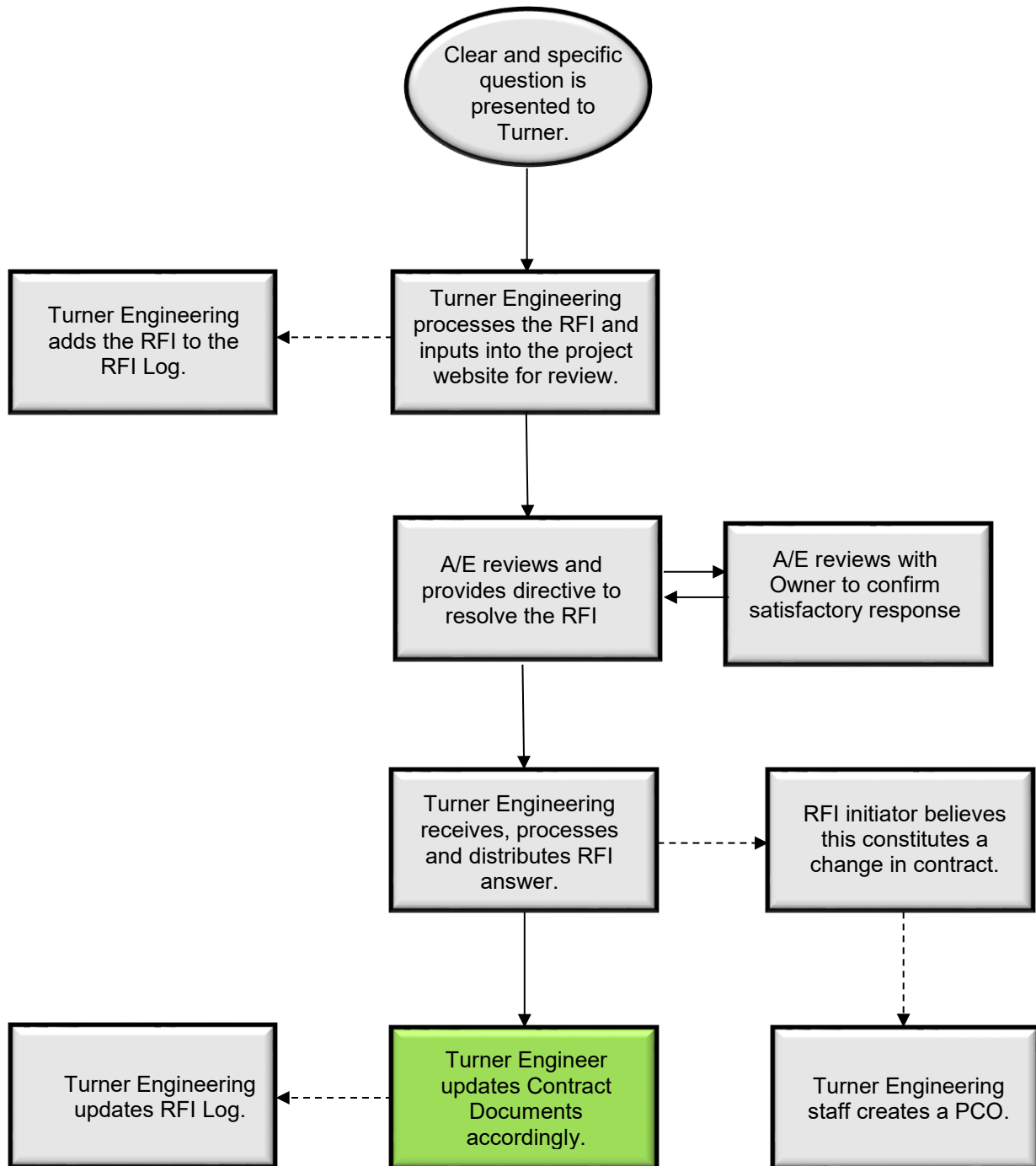
1. Several of the preceding sections (Submittals, Testing, Three-Phase Control program and Construction Deficiencies) contain reporting requirements. This section will only address those reporting requirements not covered elsewhere in this plan.
2. Subcontractor Daily Construction Reports (DCR)
 - a. Each Subcontractor shall submit a Daily Construction Report (DCR) for each day that they are on the job. Additionally, a DCR shall be submitted for days in which work would have been accomplished, but was not due to conditions beyond the control of the Subcontractor (weather, materials, equipment, etc.). The DCR shall be used to communicate work accomplished, manpower and equipment usage, material deliveries, tests & inspections, delays and instructions received. DCRs shall be submitted on the first normal workday following the day of the report. A sample DCR is shown on page 37, but other formats may be used providing they contain the necessary information.

I. Request for Information (RFI) Process:

1. General.
 - a. Despite the most comprehensive Contract Documents, there will still be occasions when clarifications are necessary, unforeseen circumstances are encountered, or conflicts and discrepancies occur. When such occasions arise, they need to be brought to the attention of appropriate project supervisory personnel for resolution.
 - b. Reference the RFI Flow Chart on page 22.
2. Resolution at the Lowest Level
 - a. Resolution of these issues at the lowest possible level, commensurate with the complexity/impact of the issue at hand, is always encouraged. Often such issues may be "minor" in nature with little or no impact on the project schedule or cost. Other issues may have simple solutions, which can be resolved by site personnel. However, judgment and caution must be exercised if/when making a decision to resolve issues at lower management levels; in making such decisions, unexpected liabilities may be incurred. Appropriate level of supervision will be utilized at all levels.
3. RFI Process
 - a. A process for making formal requests for information (RFIs) and clarification shall be implemented at the jobsite by the Turner Superintendent(s), Turner Engineer(s), or designee, who will act as the approving authority for all RFIs. All construction RFIs, including field-sketched drawings, will be transmitted from Turner to the Design Team. It is intended that RFI be paperless using the project website.
 - i. To the fullest extent possible:
 1. Questions will be specific and clearly presented; drawing and specification references should be included, when applicable.
 2. Photos will be included as well when they could assist in clarifying the question or helping in the RFI process.
 3. Recommended solutions should also be included with the RFI.

- b. Formal RFIs will be processed by the Turner Engineer(s). A unique RFI control number will be assigned and forwarded for resolution.
- c. An RFI Transmittal Log will be maintained in the project website which contains the status of all RFI's issued on this project. This log will contain such information as: RFI control number, brief description, date of issue, date of response, initiator and review authority.
- d. The Turner Engineer(s) will monitor the status of all open / unanswered RFIs. RFI status shall be a topic at periodic Owner/Architect/Contractor (OAC) progress meetings.
- e. The Design Team shall engage the Owner during RFI evaluation and provide a coordinated, unified response to Turner.
 - i. RFI returned by the Design Team will be considered reviewed by the Owner and that the response is satisfactory with the Owner.
 - ii. RFI responses directing Turner to "obtain Owner approval", "review with Owner", etc., will not be considered closed. They will remain open until a complete response has been
 - iii. Direction given in the RFI response will be implemented and will modify the Contract Documents if necessary.
- f. Upon receipt of the response to an RFI, the Turner Engineer will electronically forward the response to all Subcontractors.
- g. If the response warrants a cost or schedule adjustment, notification from the Subcontractors to the Turner Engineer is required. Turner will subsequently notify the Owner and create a PCO for change management process.
- h. The Turner Engineer or designee will appropriately annotate the Contract Documents to incorporate the RFI response, as applicable.

RFI Flow Chart



J. Project Completion and Closeout

1. Closeout Inspections

- a. Final Punch-out Inspection, Above Ceiling. Near the end of the work, or at a specified (or agreed) segment thereof, the CQC Administrator shall conduct an above ceiling punch-out inspection of the work by facility, system, or smaller subsections thereof. A punch list of items which do not meet applicable contract standards shall be prepared by Turner. This punchlist will then be submitted to the appropriate sub-contractors... This list will fully govern the above ceiling punch-out inspection process. Upon resolution of punch list items, Turner will verify the corrections have been completed
 - i. Items on the list shall be identified by location and respective discipline (i.e. electrical, plumbing, et)
 - ii. The list shall be distributed to appropriate Subcontractor personnel and shall include a date by which the punchlist items must be corrected.
 1. Subcontractors who are delinquent in their corrections will face monetary damages if others are asked to complete their work.
 - iii. A copy of this punchlist will be provided to the Owner if requested.
 - iv. The CQC Administrator and/or Subcontractors shall make a follow-up inspection to ascertain that deficiencies have been corrected.
 - v. Once the punchlist items have been corrected to the satisfaction of Turner, the Design Team will be notified and the specified ceiling systems will be installed.
- b. Final Architectural Punch-Out Inspection, Below Ceiling After the Final Above Ceiling Punch-Out Inspection is complete, or at a specified (or agreed) segment thereof, the CQC Administrator, or their assistant, along with the Design Team and the Owner shall conduct a below ceiling punch-out inspection of the work by facility, system, or smaller subsections thereof. A punchlist of items which do not meet applicable contract standards shall be prepared. This list will fully govern the below ceiling punch-out inspection process.
 - i. Items on the list shall be identified by location and respective Subcontractor
 - ii. The list shall be distributed to appropriate Subcontractor personnel and shall include a date by which the punchlist items must be corrected.
 1. Subcontractors who are delinquent in their corrections will face monetary damages if others are asked to complete their work.
 - iii. A copy of this punchlist will be provided to the Owner if requested.
 - iv. The CQC Administrator and Subcontractor shall make a follow-up inspection to ascertain that deficiencies have been corrected.
 - v. Once the punch-out items have been corrected to the satisfaction of the CQC Administrator, the Design Team shall be notified for their action.

- vi. Turner will notify the Owner that the facility, system, or smaller subsections thereof are ready for Final Acceptance Inspections.
- c. Final Acceptance Inspection. Turner management staff will schedule a final inspection of the areas with the Owner and the Design Team
 - i. The purpose of this inspection is to confirm that the items noted during the punch-out inspections have been corrected. This is not another punch-out inspection, but is intended to establish the condition of the facility for acceptance by and the beneficial use and/or occupancy of the facility by the end Users.
 - ii. Turner will provide a Warranty Management Team who will respond to latent defects or warranty issues, as required.
 - iii. CQC Administrator(s), Turner Superintendent(s) and/or other primary management personnel shall be in attendance at this inspection. The Design Team and other Owner personnel are encouraged to attend.
 - iv. Turner shall provide at least one week prior notice to the Owner that previously identified punchlist items and any remaining work in the area have been/will be completed by the date scheduled for the Final Acceptance Inspection, with the possible exception of long-lead procurement items, which will be identified.
- 2. As-Built Drawings
 - a. Turner shall maintain a conformed set of drawings electronically which will be kept current during construction of the project, to include all contract changes, modifications and clarifications.
 - b. Subcontractor's field red-lined drawings (as-built drawings) showing all deviations should be kept current and shall be made available for Turner's review, as often as requested.
 - c. After receipt of the Subcontractors As-Built Drawings, Turner shall electronically deliver a completed sets of as-built drawings to the Design Team for review and acceptance by the Owner.
 - d. Paragraphs a, b, and c shall also apply to all shop drawings.
- 3. Operation and Maintenance (O&M) Manuals
 - a. O&M's as required by the specification for each separate piece of equipment shall be delivered to the Owner coincidental with the delivery of the equipment to the job site.
 - b. O&M's shall be complete, detailed guides for the maintenance and operation of equipment. If the equipment is to be installed as part of a larger complete system, O&M's will be delivered upon final commissioning of that system.
 - c. O&M's shall include complete information necessary for starting, adjusting, maintaining in continuous operation for long periods of time and dismantling and reassembling of the complete units and sub-assembly components.

- d. O&M's shall include an index covering all component parts clearly cross-referenced to diagrams and illustrations. Illustrations shall include "exploded" views showing and identifying each separate item.
 - e. Emphasis shall be placed on the use of special tools and instruments.
 - f. The function of each piece of equipment, component, accessory and control shall be clearly and thoroughly explained.
 - g. All necessary precautions for the operation of the equipment and the reason for each precaution shall be clearly set forth.
 - h. O&M's must reference the exact model, style and size of the piece of equipment and system being furnished. Manuals referencing equipment similar to but of a different model, style, and size than that furnished will not be accepted.
4. Warranties
- a. Warranties shall be provided per the terms of the Contract.
 - i. In addition to other warranties required in the Contract Documents, Turner and its subcontractors and suppliers warrant that their work (material, equipment and workmanship) performed under this Contract shall be free of defect for a period of one (1) year from Substantial Completion Date unless noted otherwise.
 - ii. The Design Team shall identify those materials, equipment, and systems, which require extended warranties. Warranty periods shall also be identified in the specifications.
 - iii. The warranty period shall be from the date of Substantial Completion. If the Owner takes possession of any part of the work before final acceptance, the warranty period for work within that occupied portion of the work shall be from the date the Owner takes possession or as defined otherwise in the Contract Documents.
 - iv. Warranties shall be executed in writing and signed by an authorized officer of the company providing the warranty.
5. Attic Stock
- a. Requirements for "attic stock" shall be identified by the architect in the Contract Documents.
 - b. Attic stock in new condition shall be furnished by the responsible Subcontractor upon completion of the work and in the quantities specified and will be transmitted by Turner and accepted by the Owner within twenty-four (24) hours of notified delivery.
6. Owner/Operator/Maintainer Training
- a. Subcontractors shall provide qualified, factory-trained manufacturers' representatives to give detailed instructions to assigned Owner personnel for the operation and complete maintenance for each piece of equipment as required by the specifications. All such training will be at the job site.
 - b. These requirements are more specifically detailed in the various technical sections.
 - c. Instructions for different items of equipment that are component parts of a complete system, shall be given in an integrated, progressive manner.

- d. All instruction sessions for every piece of component equipment in a system shall be conducted one time or as specified. This is to assure proper and clear instruction in the operation of inter-related systems.
- e. All instruction periods shall be at such times as coordinated by the appropriate Subcontractor and/or Manufacturer providing the training.
- f. Equipment and systems for which training must be identified in the Contract Documents.
- g. Manufacturer Representatives and/or Technical Representatives of the Subcontractor responsible for the equipment/system and who are knowledgeable with the equipment or system shall provide the required training.
- h. The Turner Engineer(s) will coordinate training with the Subcontractors and Owner. Every effort will be made by all parties to maximize training effectiveness and minimize cost to the Owner, Turner and its Subcontractors / Suppliers.
- i. When the provision of equipment O&M's is also a requirement, O&M's shall be submitted in advance of the scheduled training to allow trainees the opportunity to familiarize themselves with the equipment/system.

Constructability Review



Constructability Review

Completed Yes _____ No _____
Date Completed _____
Date Scheduled _____

Page Flip Review of Drawing Details with Team (PX/PM, P/E, P/S)

Completed Yes _____ No _____
Date Completed _____
Date Schedule _____

Peer Review of Drawings/Specification by Consultants

Structural Yes _____ No _____
Concrete Yes _____ No _____
Curtain Wall Yes _____ No _____
Roofing/Waterproofing/Sealants Yes _____ No _____
Mech/Electrical/Plumbing Yes _____ No _____
Other Consultants

Mock-Up Log



Mock-Up Log-Required by Contract

Description	Room Numbers	Scheduled Completion Date	Status	Date Approved

Mock-Up Log-Required by Specifications

Description	Scheduled Completion Date	Date Reviewed	Date Approved

Pre-Installation Meeting



Pre-Installation Meeting

Definable Feature of Work (DFOW):

Meeting Date: _____

Personnel Present: Attach sign in sheet or insert names of attendees

A. Job Site Safety:

OSHA Safety Standards ☐ Yes ☐ No

Activity Hazard Analysis (AHA) ☐ Yes ☐ No

Material Safety Data Sheets (MSDS) ☐ Yes ☐ No

Additional Safety notes:

1. _____
2. _____
3. _____
4. _____

B. Activities included in this Feature of Work:

- 1.

C. Submittals:

All materials tested, submitted, and approved? ☐ Yes ☐ No ☐ N/A

If No, what items have not and have been submitted and approved?

- 1.

Submittals included for this feature of work are as follows:

- *List submittals included for this feature of work*

Comments:

D. Materials on Site:

Are all materials on site? ☐ Yes ☐ No ☐ N/A

Pre-Installation Meeting



If No, what items are missing? When will they arrive?

1. _____

If Yes, schedule first delivery inspection.

Date: _____ Time: _____

Is there any attic stock (spare parts and materials) required for this feature of work? ☐ Yes

☐ No

If yes, what items are required?

1. _____

E. Preliminary Work and Permits:

Preliminary work and permits completed and in compliance with contract? ☐ Yes ☐ No

F. Insurance and Labor Rates:

1. Is subcontractor enrolled in CCIP or provided COI? ☐ Yes ☐ No

2. Has subcontractor provided Form 1413? (*federal*) ☐ Yes ☐ No

3. Davis Bacon Summary Table (*for state jobs, federal jobs, all*

G. Specifications:

- *Specification Sections--*

- *Drawings --*

- *Reference Codes and Standards --*

- *Discuss Construction Methods, Tolerances, and Workmanship (Initial Phase Requirements) –*

1. Review Specs and Plans

2. List specific requirements in specs, product data, drawings

3. Identify everything that will be checked at the first installation inspection

4. Identify any deviations from the specification that the subcontractor will have (means and methods type items)

- *Potential Problems –*

Pre-Installation Meeting



H. Testing:

Identify tests to be performed --

1.

Who performs tests / inspections?

1.

2.

Are special inspections or 3rd party inspections required with this feature of work? ☐ Yes ☐ No

If yes, what inspections are required?

1.

What is the name of the individual performing each inspection?

1.

Has Turner been provided with the qualifications of these individuals?

☐ Yes ☐ No

I. Repetitive Deficiencies

1.

J. 1st Installation Inspection Date:_____ **Time:**_____

K. Comments and Plus/Minus:

L. Review of the subcontractors Quality Control Plan:

-Who is the responsible QC Person?

Turner employee who ran the meeting:

Signature: _____

Print (Name and Title):_____

Mock-Up Log



MOCK UP LOG NOT REQUIRED BY CONTRACT	Scheduled Completion Date	Date Reviewed	Date Approved



Mock-Up Inspection Form

Date:		Time:		Project:	NCH Behavioral Health	Job No:	
Mock-up Description:							
Location:				Meet at:			
Bid Packages:		Trade Cont.(s):					
Specification Section(s):			Drawing No(s):				
Invited Inspection Team Representatives							
Turner			Trade Cont.:				
Owner:			Arch/Eng.:				
Does the mock-up conform to the Contract Documents?				Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If not, is re-inspection acceptable for approval?				Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Comments:							
Acceptance Signatures:							
Turner			TC				
Owner			A/E				

First Work Inspection Form



Date:		Time:		Project:	NCH Behavioral Health	Job No:	
Benchmark Description:							
Location:				Meet at:			
Bid Packages:		Trade Cont.(s):					
Specification Section(s):				Drawing No(s):			
Invited Inspection Team Representatives							
Turner			Trade Cont.:				
Owner:			Arch/Eng.:				
Does the benchmark conform to the Contract Documents?				Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If not, is re-inspection acceptable for approval?				Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Comments:							
Acceptance Signatures:							
Turner			TC				
Owner			A/E				

First Delivery Inspection Form



Date:		Time:		Project:	NCH Behavioral Health	Job No:	
Material / Equipment Description:							
Location:				Meet at:			
Bid Packages:		Trade Cont.(s):					
Specification Section(s):							
Drawing No(s):							
<ul style="list-style-type: none"> • Attach copies of delivery tickets, ID labels, tags, etc., when available, to this form. • Obtain a copy of all operations and service manuals delivered with equipment. 							
Invited Inspection Team Representatives							
Turner				Trade Contractor.:			
Owner							
Owner or Arch/Eng. (optional):							
						YES	NO
Does the delivery conform to the Contract Documents?							
Has item(s) been inspected for damages or repairs?							
If no above, was material / equipment removed from the site?							
Correct quantity shipped or received?							
If no, quantity back ordered?							
Do items not received impact project or schedule?							
If yes, has Project Manager been advised?							
Items verified and logged on Project Equipment list?							
Comments:							
Acceptance Signatures:							
Turner				TC			



Closure Inspection Form

Building Name:		Date:	
Building Area:			
Description of area to be enclosed: Below Grade <input type="checkbox"/> Walls <input type="checkbox"/> Ceiling <input type="checkbox"/> Column <input type="checkbox"/> Other <input type="checkbox"/> —			
Bid Package Number:	Trade Contractor:		
Date/Time of Inspection:			
Description of inspection area and/or system(s) to be reviewed			
Location of Inspection Area By Bldg. Area/Level/Rm(s)/CL (Attach marked-up			
Applicable Specifications:		Applicable Drawings/Details:	
Inspection Results:			
Accepted <input type="checkbox"/> Accepted As Noted <input type="checkbox"/> Re-Inspection Required <input type="checkbox"/> (Check One)			
Photos Attached? (Circle One) YN			
Comments:			
Inspection Conducted By:			
Attendees	Company	Print Name	Signature
Trade Cont.			
Turner			
A/E			
Owner			
Other			

** At Turner's Superintendent's discretion a color code system may be implemented to supplement the above form. If implemented, each subcontractor will be assigned a spray paint color. When each subcontractor has completed their work and all inspections have been completed, including codes, the studs are painted. This lets the team easily see who is or is not finished and facilitates scheduling of closure inspections. This method also provides a permanent record of inspections in the event an enclosure has to be re-opened and documentations is not readily available. See Turner Standard Color Chart under separate cover.



NCR NUMBER:	
Date:	

Non-Compliance Report Form

NCR

Project:	NCH Behavioral Health Pavilion	Contractor:	Turner Construction Company
Project Number:		SubContractor:	
Contract Number:		Initiated By:	
Specification / Drawing / Other Reference:			

Description of Deficiency:

Planned Corrective Action:

Date Corrective Action Inspected & Closed:

Turner Superintendent

Name:

Signature:

Turner QC Manager:

Name:

Signature



Daily Construction Report (DCR)

Job Name: NCH Behavioral Health Pavilion

Building: _____

Date: _____

Company: _____

DAILY WORK DESCRIPTION

Include weather conditions, if applicable.

LABOR / EQUIPMENT

Provide a detailed list of labor power and equipment resources. The Trade field refers to type of labor, i.e. Carpenter, Electrician, etc. The Classification field refers to qualifications, i.e. Foreman, Journeyman, Apprentice, etc.

Trade	Classification	Quantity	UOM (Labor hours or Worker Days)

MAJOR COMPLETIONS

DELAY / WORK STOPPAGES / ACCIDENTS

Provide a complete description of events. List witnesses, times, how accident could be prevented. If none, state so.

Contractor Signature: _____

Date: _____

LEAN CONSTRUCTION STANDARDS

WHAT IS LEAN? A transformational business strategy focused on maximizing customer value while eliminating waste through continuous improvement and respect for people.

Turner has an expectation that all subcontractors will focus on the continuous improvement of the construction process through the use of Lean principles and methods. Turner and all Subcontractors and Suppliers shall participate in planning, control processes and, strategies to achieve the goal of greatest productivity for the project and maximizing value delivered to the customer.

In order to deliver the maximum value to our customers, the team must work together to eliminate waste in all processes and make improvements at every opportunity.

The 8 Wastes:

D	Defects
O	Overproduction
W	Waiting
N	Non-Utilized Talent
T	Transportation
I	Inventory
M	Motion
E	Extra-Processing

Below are tools that help create a Lean culture and mindset and reduce the 8 wastes. These are meant as a guideline and each team may apply other lean tools to aid in the lean culture transformation on each project:

5S Methodology - 5S is a system to reduce waste and optimize productivity through maintaining an orderly workplace and using visual cues to achieve more consistent operational results.

A. Sort - Eliminate all unnecessary tools, parts, materials. Keep only essential items and eliminate what is not required, prioritizing things per schedules/requirements and keeping them in easily-accessible places. Everything else is stored or discarded

B. Straighten (Set in Order for Flow) - Arrange the work, workers, equipment, parts, and instructions in such a way that the work flows free of waste through the value added tasks (work in place) with workers necessary to meet the plan/schedule. Use carts/casters/dollies/wheels as much as possible to allow for free and easy movement of materials, tools, and trash. Identify the location where items will be used and place those items close. Organize and communicate the location for items that are needed in the area.

C. Shine (Systematic Cleaning) - Clean the workspace, jobsite, and all equipment, and keep it clean, tidy and organized. At the end of each shift, clean the work area and be sure everything is restored to its place. Remove crates, pallets, dunnage, packing materials, etc, immediately – preferably before entering the building footprint. Create elevated workstations for ergonomic working and more efficient cleanup (cutoffs fall into waste bins for less double handling of waste). Employ a 'Nothing Hits the Ground' mentality to keep the project clean and free of waste. This step ensures that the workstation is ready for the next user/next day and that order is sustained.

LEAN CONSTRUCTION STANDARDS

D. Standardize - Develop cleaning schedules and cleanliness standards to maintain the first 3S's. Maximize prefab prior to placement in work/batch area, and plan ahead to keep as much packing material out of the work area/building as possible. Assemble in batch areas only.

E. Sustain - Make 5S a habit. Ensure disciplined adherence to rules and procedures to prevent backsliding. Expect to continually evolve, share ideas, and improve the systems. Verify your plan - is prefab working, is prefab complete, can there be more improvements?

5S Functions: Nothing Hits the Ground / Everything on Wheels

- **Workstation Setup** - Workstations should be setup so individuals can work in a comfortable, neutral position and have a waste container conveniently located (preferably located so that cut-offs fall directly into waste container and not the floor, thus preventing double handling). If possible, both the workstation and waste container should have lockable or retractable wheels to allow the station to move with the individual.
- **Cord Management** - Power cords can represent a major trip hazard on a job site. Ensure all cords are either elevated off the ground, away from any walkways, or protected. Spider boxes will be installed 6'-7' off the floor. Trades must run short task power cords and manage cords, hang cords, secure cords in a manger to reduce or eliminate trip hazards. A clean job free of trip hazards is more likely to be injury free, and very productive.
- **Housekeeping** - Poor housekeeping can reduce productivity, decrease morale, increase potential hazards, and simply create a poor image of the project and company as a whole. EVERYONE needs to contribute to proper housekeeping and will be required to do so. The mentality on this job will be that this will be the cleanest job anyone has been on. All tools and materials should be stored on carts and pallets, NO exceptions. Ensure debris collectors are plentiful and convenient and that they are regularly emptied. Daily cleanup from everyone is required for their respective workstations (it is in the contract!). Failure to do so, will result in Turner directing another trade held within their contract to perform the required cleanup and backcharging the costs (time and material) to the delinquent contractor.
- **Material Handling and Deliveries** - The ultimate goal is to prevent materials from being handled multiple times. Reducing the handling of materials to once can be achieved by placing material on wheeled carts, using mechanical material moving equipment, and putting trash receptacles on every floor and cutting location. Keep in mind, that the more times a material is handled, the more likely injury is to occur. Subcontractor shall insure that new materials coming in will be on carts or conveyances and debris or excess materials shall be placed in carts or conveyances to be moved out of the building efficiently. Nothing should be just stacked on or dropped on the floor. All pallets will be required to be marked (paint/stencil) specifically for the trade that will perform the installation.
- **Material Storage** - Ensure your site is clean and organized to improve efficiency and safety. Utilize just in time delivery and expect materials to be stored no longer than a specified duration. Designate material storage locations and require subs to use them. Material Storage locations will be within the CML Dublin Project site at the location and duration identified by the Turner Superintendent.

BIM

Unless a Project is specifically exempted, as a Lean Construction Practice, 3D-Modeling will be used as a coordination/collaboration tool to eliminate clashes between systems prior to fabrication and to promote off-site prefabrications. Refer to project specific BIM OVM Coordination plan for guidelines.

Last Planner® System

LEAN CONSTRUCTION STANDARDS

Located within the Bid Manual is the Pre-Construction Base Building Bid Schedule with required phase and milestone completion dates is to be used by each subcontractor for bidding purposes and for development of their own detailed schedule. Subcontractor shall participate in weekly coordination meetings and shall provide updated progress reporting on a weekly basis throughout the scheduled installation period. All subcontractors pledge to cooperate with each other adjust and update the overall project schedule based on project conditions, actual performance of the work, and detailed schedule information obtained from Subcontractors. This update is intended to be for the betterment of the project as a whole, not for advantage of the parts. The Last Planner® System will be utilized for developing additional coordination details over the life of the project this process is part of the Bid Packages as described herein:

Last Planner® System (LPS) – Production and coordinate their work for the overall good of the project. Turner reserves the right to

System Planning and Control Process:

Overview: LPS provides principles to improve coordination and smooth flow between contract milestone dates in the contract (or master) schedule. When production planning becomes reliable and people fulfill their commitments, workflow, performance, and productivity are improved, and ultimately so are the overall results of the project, thus allowing the team to deliver as maximum value to the customer.

Application: LPS involves a systematic approach aiming for more efficient overall workflow. It attempts to understand how value is delivered, making workflow as consistent and reliable as possible, and then reviewing the results to determine how to improve the planning process.

LPS differs from traditional construction methods because it decentralizes hierarchical decision-making. With LPS, those closest to the work (the “Last Planners”) must have the authority to make the decisions and plan the work. Subcontractors agree as a group to meet their deadlines, and each is held responsible to improve the reliability of their promises for work completion not only to Turner but also to fellow subcontractors.

This project will utilize six key procedures in the implementation of LPS. These steps require the input of the onsite Foremen/Field Supervisors for the trade contractors that will perform the work. As such, these leaders are required to participate in all the steps that are the Last Planner® System and be able to commit to perform work that they know can be made ready for their crews and to collaborate with the team to ensure this work can be started and completed without interruption. Last Planners must refuse to assign work they are not confident can be started and completed without interruption. The Last Planner for your crew must be involved before you mobilize to the project in order to attend these Phase Production Planning meetings. Last Planners provide valuable input to develop a well-coordinated work plan ensuring the success for you and all other parties on the project.

- A. Pull Planning – This represents the team’s specific plan for how they intend to reach the milestone dates in the contract schedule. Turner and all Subcontractors plan the milestone phases of a project starting with the last work activity of a particular phase of work and working to the beginning of the phase. This ensures that all parties consider what work must be done prior to any work activity, and ensures that adequate durations are in place for all activities. This pull plan is thought of as “What Should Be Done.” A pull plan will be done for each phase/major milestone during stages of the project with all applicable trade contractors participating and collaborating in the pull sessions. Pull plans must still meet the contract schedule requirements, and teams must work together to achieve these project milestones. We require team members to make and keep commitments based on their confidence that prerequisite work, design information, materials, labor and equipment will be ready so they can start and complete installations meeting their commitments to reach milestones in the

LEAN CONSTRUCTION STANDARDS

contract schedule. The Pull Planning Session will be scheduled following all necessary contractors being awarded their contracts for this project. It will occur prior to the beginning of the work set forth in the baseline construction schedule.

- B. Six-Week Look-ahead Plans – this is simply the 6 future weeks of the pull plan, updated with actual information weekly. All possible constraints for preventing these activities in the next six weeks are identified and added to the constraint log. This six-week look-ahead is the work that “Can Be Done” in the next six-week period.
- C. Constraint Log – The constraint log is used to aid the team in managing the make-ready planning process. It is used in conjunction with the 6-week look-ahead plan or any meeting that is repeated on routine basis. A constraint is any information, material, equipment or resource that is needed to start and/or complete a specific task on the project except prerequisite work which is shown on the plan/schedule. Make-ready planning consists of two specific planning activities: (1) identifying constraints and (2) obtaining commitments from individuals to remove the constraints.
- D. Weekly Work Plans (WWP) –The weekly work plan is a more detailed day by day, one week plan created by each trade foremen to plan the next week’s work, based on the six-week look-ahead plan. WWP’s are due each Wednesday by 2pm for the work to be performed the following week (or as identified by the Turner Superintendent). These individual trade plans are consolidated by Turner and brought to Weekly Work Planning Meetings held on Thursday’s with all subcontractor foremen and are very specific in regards to the work they “Will Be Doing” in the upcoming week. In order for work activities to be on the WWP, there cannot be any known constraints, like a request for information RFI that would prevent the work from occurring.
- E. Percent Plan Complete (PPC) – This is a calculation of the team’s production plan reliability. This is done to identify trends that prevent the reliability of the work flow. We will measure how reliable our team’s planning is. If 10 items were planned for one week and 8 items were completed according to the plan, the reliability is 80% or the percent plan complete (PPC) is 80%. Studies show that industry average reliability is 54%. We will work to achieve 85% or higher PPC in the first 2 months of the job and continue to improve over the course of the project to ensure predictable, reliable handoffs, and therefore efficient use of trade resources.
- F. 15-30 minute daily huddle – Subcontractor foremen will meet for a 15-30-minute standup meeting in the field (time and place to be determined by Project Supt) with their peers from other subs and Turner Field Staff to quickly assess the day’s performance and discuss any new issues discovered.

LEAN CONSTRUCTION STANDARDS

Summary: Ultimately, LPS aims to optimize performance through improved processes and systems by creating reliability, decentralizing decision-making and managing flow and consistency of work rather than the speed of any single aspect of the job. Below is visual aid of the weekly requirements for the project associated with Last Planner System. Once the project begins, this calendar may be altered to best benefit the project. If this is the case, the revised schedule will be communicated in the weekly Superintendent Meeting.

Example Weekly Work Calendar

Name: _____

Time / period	Monday	Tuesday	Wednesday	Thursday	Friday
6:00-7:00					
7:00-8:00	Turner Team Daily Huddle - 7:00am-7:30am - Review Constraints/ Engineering and Super Coordination				
8:00-9:00	Daily Huddle - 7:45am-8:15am - Foremen/ Superintendents - Review WWP				Daily Huddle - 7:45am-8:15am
9:00-10:00				Superintendent Meeting - 9:00am-10:30am - All come prepared to discuss WWP and Constraints identified on 6 wk Look-ahead	O/A/CM - Monthly Pencil Copy Review Meetings - 8:30am - 10:00am (RB3, OR's, Sterile)
10:00-11:00					
11:00-12:00					
12:00-1:00	Turner Weekly Staff Lunch Meeting - (RB3, OR's Sterile)				
1:00-2:00	Foremen Prepare Next Week's Weekly Workplan and 6-wk Look-ahead		Foremen Submit Weekly WorkPlan and 6-wk Look-ahead	O/A/CM - 2:00pm - 3:30pm - Review Schedule Status, Change Orders, Constraints, Bulletins, RFI's, Safety, etc.	Update and Publish Weekly Work Plan/ 6-wk Lookahead/ Schedule Updates
2:00-3:00					
3:00-4:00					
4:00-5:00					

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CONTRACTOR'S PAYMENT APPLICATION CHECKLIST

THE CONTRACTOR MUST COMPLETE THIS CHECKLIST AND SUBMIT IT TO THE CONSTRUCTION MANAGER WITH ITS PAYMENT APPLICATION AND ALL REQUIRED DOCUMENTATION.

1. Contractor's Name: _____
2. Name, title, and telephone and fax numbers of Contractor's representative to contact regarding the Payment Application and required documentation:
Name: _____ Title: _____
Office Telephone No.: (____) _____ FAX No.: (____) _____
3. Payment Application Number and Date:
No. _____ Date: _____, 20____
4. The following is a list of required documentation that must accompany its Payment Application. The Contractor certifies that it has submitted the documentation listed below with its Payment Application. If the Contractor cannot do so, the Contractor should explain why in Paragraph 5. Such explanations shall not excuse the Contractor from the requirements for submitting this documentation.

One (1)
~~Five (5)~~ copies of a properly completed and executed Application for Payment with a properly completed and executed Schedule of Values attached to each;

.2 Properly Completed Contractor's Affidavit with List of Subcontractors and Suppliers and Any Amounts Withheld;

.3 Contractor's Waiver and Release Agreement (beginning with the second Application for Payment);

.4 For each of its Subcontractors and Suppliers, a Subcontractor's – Supplier's Waiver and Release Agreement (beginning with the second Application for Payment);

.5 Schedule of all materials and equipment stored on-site;

.6 For materials and equipment stored off-site:

____ A list of the materials and equipment consigned and stored off-site in connection with the Project (which shall be clearly identified), giving the place of storage, together with copies of invoices and reasons why the materials and equipment cannot be delivered to the site;

____ Certification that all items have been tagged for delivery to the Project and that they will not be used for any other purpose;

____ A letter from the Contractor's surety bonding company indicating agreement to the arrangements and that payment to the Contractor shall not relieve either party of its responsibility to complete the facility;

____ Evidence of adequate insurance covering the material and equipment in storage, which shall name the Owner as additional insured;

- _____ Evidence that the Design Professional has visited the Contractor's place of storage and found that all the materials and equipment set forth in the payment request and represented to be stored off-site are stored at the place of storage (any costs incurred by the Design Professional to inspect material and equipment in off-site storage shall be paid by the Contractor); and
- _____ Itemization of the materials and equipment and their cost, which were approved on previous Pay Applications and which remain in off-site storage.
- _____ .7 Other documentation or information required by the Contract Documents or by the Design Professional or Owner.

5. Reason why required documentation is not submitted:

NOTE: The failure to submit required documentation, regardless of the reason, may result in non-payment, partial payment, and/or late payment.

Signature

Printed Name

Date

DESIGN PROFESSIONAL'S AND CONSTRUCTION MANAGER'S REVIEW

- _____ Checklist and documentation complete.
- _____ Checklist and documentation incomplete.

Signature of Design Professional

Printed Name

Date

- _____ Checklist and documentation complete.
- _____ Checklist and documentation incomplete.

Signature of Construction Manager

Printed Name

Date

Supplier and Electronic Funds Transfer (EFT) Authorization Agreement

(Part II -Part IV Please use ALL CAPS)



PART I – REASON FOR SUBMISSION

New Authorization

Current Supplier or EFT Revision (e.g. changes to bank ,account,or address)

Opt out of EFT Program

PART II - SUPPLIER INFORMATION

Name (as shown on W-9):

DBA Name (if different from name):

Tax ID Number TIN SSN

Able to Receive P-Card Payments Yes No

PART III – FINANCAL INSTITUTION INFORMATION

Name of Financial Institution:

Street Address:

City:

State:

ZIP Code:

Contact Name:

Phone Number:

Routing Number (9-digits):

Account Number:

Account Type: Checking or Savings

Please attach a current W-9 and voided check, deposit slip or an invoice with account details on official letterhead. This information will be used to verify your financial institution's routing number and your account number.

PART IV – CONTACT INFORMATION

Supplier Contact:

Title:

Remittance Contact:

Title:

Supplier Address:

City:

State:

ZIP Code:

Remittance Address:

City:

State:

ZIP Code:

Supplier Phone:

Fax:

Remit Phone:

Fax:

Remittance Email 1:

Remittance Email 2:

PO Submission Email:

Email 1 will be the primary email address to which notification of remittance will be sent. Two email addresses are preferable for remittance notification. Remittance Email 1 and PO Submission Email addresses are required.

PART V – AUTHORIZATION

I hereby authorize the Columbus Metropolitan Library to initiate credit entries to the above account number. I hereby authorize the financial institution named in Part III above to credit the same to such account. This authorization is active as of the date signed below and is to remain in effect until the Columbus Metropolitan Library has received written notification from an official agent or representative of this organization of termination or changes to this authorization.

Authorized Agent (print or type name):

Agent's Official Title (print or type title):


Agent's Signature and Date:

Instructions to Complete Supplier and Electric Funds Transfer (EFT) Authorization Agreement



DATE _____ 101

PAY TO THE ORDER OF _____ \$ _____ DOLLARS

 **MoneyInstructor.com Bank**
1221 Main Street
Anywhere, US 10001

FOR _____

⑆43618071⑆ 7279678402⑆ 0101⑆

Financial Institution's Routing Number <9-Digits>

Account number

Part I: Check the reason for which the company is filling out this form

Complete Part II - Part IV in ALL CAPS PLEASE

Part II: Line 1: Enter the company name as it appears on the W-9 form.

Line 2: Enter the Trade Name or DBA as it appears on the W-9 form.

Line 3: Enter the Federal Tax ID or SSN as it appears on the W-9 form. Indicate if you can receive payment by P-Card (e.g.Visa).

Part III: Line 1: Enter the name of the financial institution to which you would like payments deposited.

Line 2: Enter the street address of your financial institution.

Line 3: Enter the City, State and ZIP Code

Line 4: Enter the phone number of the financial institution. Enter the name of the business contact at the financial institution.

Line 5: Enter the 9-digit routing number of the financial institution and enter the account number to which you would like payments deposited. Please also send a voided check, deposit slip or invoice with complete remittance information on official letter head for verification.(routing & account information can be found on a deposit slip or voided check, see example above).

Line 6: Please check the appropriate account type. Include attached requested documentation of the account.

Part IV: Line 1: Enter the supplier contact name for your institution. Enter the title of the person for your institution.

Line 2: Enter the remittance contact name to receive remittance/deposit information for your institution. Enter the title of the person to receive remittance/deposit information for your institution.

Line 3: Enter the supplier address information.

Line 4: Enter the supplier city, state, and ZIP code information.

Line 5: Enter the remittance address information for your finance department. (if different than supplier information in Lines 2 & 3)

Line 6: Enter the remittance city, state, and ZIP code for your finance receivables department.

Line 7: Enter the phone and fax numbers of the supplier contact person. Enter the phone and fax numbers of the remittance contact to receive remittance/deposit information for your institution.

Line 8: Enter the primary email address to which Columbus Metropolitan Library can copy remittance information.

Line 9: Enter a secondary email address to which Columbus Metropolitan Library can copy remittance information.

Line 10: Enter the primary email address to which Columbus Metropolitan Library can send purchase orders for processing.

Part V: Please have an authorized agent of your business submit the fully executed "Supplier and Electronic Funds Transfer (EFT) Authorization Agreement" to the Procurement Department by email at procurement@columbuslibrary.org or by mail to: Columbus Metropolitan Library

ATTN: Procurement Department
96 S. Grant Ave.
Columbus, OH 43215

Change Order Markup Provisions

LUMP SUM

Predetermined Lump Sum additions and/or omissions to the Agreement are to be based upon the estimated "Net Actual Cost", plus the following maximum %'s for Overhead and Profit. The percentages for Overhead and Profit will be negotiated and may vary according to the nature, extent and complexity of the work involved. Not more than three percentage calculations each not to exceed the maximum percentages shown below, will be allowed regardless of the number of tiers of subcontractors. That is, the markup on work subcontracted by a subcontractor will be limited to one overhead and profit percentage in addition to the prime contractor's overhead and profit percentage. On proposals for decreases in the amount of the contract, the overhead and profit will be added to the "Net Actual Cost", thereby increasing the credit that would be deducted from the price of this agreement:

	<u>LABOR & MATERIAL</u>	<u>SUBLET WORK</u>
Additions:	OH <u>5%</u> P <u>5%</u>	OH <u>0</u> P <u>5%</u>
Omissions:	OH <u>5%</u> P <u>0%</u>	OH <u>0</u> P <u>5%</u>

TIME AND MATERIAL

Contract Work, authorized by Turner in advance to be performed on a Time and Material Basis, is to be based upon the "Net Actual Cost" plus the following Percentages for Overhead and Profit:

	<u>LABOR & MATERIAL</u>	<u>SUBLET WORK</u>
Additions:	OH <u>5%</u> P <u>5%</u>	OH <u>0</u> P <u>5%</u>

GENERAL

1. Submission of estimates and costs shall be itemized in a form satisfactory to Turner to permit ready analysis and evaluation. On time and material work, daily reports (in duplicate and showing all field and shop labor expended and/or material delivered) shall be submitted to Turner. Invoices shall be submitted monthly.
2. No overhead and profit will be permitted on premium time.
3. Percentages shall apply to net differences in quantities for adds and deducts in any one change.
4. Percentages applied by sub-subcontractors shall not exceed those of this subcontractor.
5. Net Actual Cost

A. Labor: and Fringes (Sections A & B of the Change Order Summary form)

1. Wages of labor, including foremen, engaged in work and directly on the Subcontractor's payroll.
2. Engineering and drafting performed at the Site with Turner's prior written approval.
3. Fringe Benefits established by governing trade organizations.
4. Federal Old Age Benefits, Federal and State Unemployment Taxes.
5. Net actual premium paid for Public Liability, Workers' Compensation, Property Damage, and any other forms of insurance required by Turner.
6. COR labor rates must match those provided on the Wage Rates Form.

B. Material: (Sections C, D, E & F of the Change Order Summary form)

1. Net cost of construction materials and supplies (FOB Job Site, where applicable) including applicable Sales and/or Use taxes if allowed by contract, trade and cash discounts.
2. Costs of a special nature, approved in advance by Turner, such as for riggers, labor, transportation, equipment rentals, royalties, permits, and other expenses of this general nature.
3. Equipment Rental & Third Party Trucking/Shipping Charges: Provide Quotes or Invoices from the supplier/vendor on letterhead, emails/faxes will not be accepted.
4. Owned Equipment: Provide a list of owned equipment rates and company trucking charges at the time of award (with the Wage Rates Form). COR owned equipment rates and company trucking charges must match those provided on the equipment rates form.
5. Provide invoices for material costs over \$100 on letterhead, emails/faxes will not be accepted. Where applicable, and when an invoice can't be provided, provide a material rates sheets for standard materials. Material credits will be based on the actual contract cost of the material less any charges actually incurred for handling or returning a material that has been delivered. No 'cancellation' charge will be allowed when material has not been shipped or released for fabrication.

C. Sublet Work:

1. Net cost to the Subcontractor of work sublet by him.

Change Order Markup Provisions

2. Submit the cost of subcontracted work on the same Change Order Summary form, with back-up meeting these requirements. Subcontractors are responsible to collect and review all quotes from lower tier subcontractors and material suppliers for completeness and accuracy.
6. Percentages shall include the following overhead costs:
 - A. Supervision (Including Field) and executive expenses.
 - B. Small tools, scaffolding, blocking, shores, appliances, etc. and the expense of maintaining same.
 - C. Administrative expenses, clerical, etc., both at the Job Site and in the Subcontractor's Office.
 - D. Taxes and any bonds required to be paid by the Subcontractor, but not included under the aforementioned Net Actual Costs.
7. Percentage markup for overhead and profit for Sub Subcontractors shall be limited to the above listed percentages also.
8. Percentages shall include all profit.
9. The Subcontractor will be at risk if adherence to these procedures is not followed.
10. Lump sum estimates will be rejected upon submittal.
11. Incomplete submissions will not be reviewed until all information is submitted.
12. Further breakdown may be requested by Turner, the Owner or the Architect at anytime prior to the change order execution.
13. If the work was performed T&M, the signed FWO/SIS/CCD and the signed T&M tickets must accompany the COR, in addition to all other required back-up.
14. O&P includes office supervision and administration, general insurance (except that listed as the labor burden), use of small tools (< \$250), shop burden and engineering/estimating costs.
15. Timely response to pricing requests is crucial. Pricing due dates will be included on proposal requests and will typically fall between 5 and 15 working days. If no pricing is received by the indicated date, a reasonable price will be assigned and the work will be performed on a T&M basis, not-to exceed.



AIA® Document A232™ – 2009

General Conditions of the Contract for Construction, Construction Manager as Adviser Edition

for the following PROJECT:
(Name, and location or address)

THE CONSTRUCTION MANAGER:
(Name, legal status and address)

Turner Construction Company
262 Hanover Street
Columbus, OH 43215
Telephone: 614-984-3000; Fax: 614-781-8553
Contact: Tony Moeller, Project Manager

THE OWNER:
(Name, legal status and address)

Columbus Metropolitan Library Board of Trustees
96 South Grant Street
Columbus, OH 43215

THE ARCHITECT:
(Name, legal status and address)

Jonathan Barnes Architecture and Design Ltd.
153 East Main St. Suite 300
Columbus, OH 43215

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A132™–2009, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; B132™–2009, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2009, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents. The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement), and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. Agreement). A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of addenda relating to bidding requirements). Architect..

§ 1.1.2 The Contract. The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and the Construction Manager or the Construction Manager's consultants, (3) between the Owner and the Architect or the Architect's consultants, (4) between the Contractor and the Construction Manager or the Construction Manager's consultants, (5) between the Owner and a Subcontractor or Sub-subcontractor (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of their duties.

§ 1.1.3 The Work. The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project. The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by other Multiple Prime Contractors and by the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager.

§ 1.1.5 The Drawings. The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

§ 1.1.6 The Specifications. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service. Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker. The Initial Decision Maker is ~~the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2 and certify termination of the Agreement under Section 14.2.2.~~ Architect.

§ 1.1.9 FINALLY RESOLVED

Finally Resolved means that the Initial Decision Maker has made a decision on a Claim under Section 15.2.6.1 of the General Conditions and that any litigation regarding the Claim has been concluded.

§ 1.1.10 CLAIM

Claim is defined in Section 15.1.1 of these General Conditions.

§ 1.1.11 STATEMENT OF CLAIM FORM

Statement of Claim Form means the Statement of Claim Form included with the Project Manual.

§ 1.1.12 FINAL COMPLETION

Final Completion shall mean that the Work is complete in accordance with the Contract Documents and the Contractor has submitted to the Architect all documents required to be submitted to the Architect for final payment.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications and Other Instruments of Service

§ 1.5.1 ~~The~~ Unless otherwise indicated in the Owner-Architect Agreement, the Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and will retain all common law, statutory and other reserved rights, including copyrights. The Contractor, Subcontractors, sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Architect, or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers are authorized to use and reproduce the Instruments of Service provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers may not use the Instruments of Service on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect and the Architect's consultants.

§ 1.6 Transmission of Data in Digital Form

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a ~~representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Article 4, the~~ representative. The Owner's representative shall only have such authority as is expressly authorized by the Owner's Board and as is permitted under the laws of the State of Ohio. The Contractor is

responsible for determining the limits of that authority. The Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall prepare a Notice of Commencement for the Project, as required by the Ohio Revised Code, and furnish to the Contractor a copy of the Notice of Commencement for the Project within fifteen days after receipt of a written request, ~~information necessary and relevant for the Contractor to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.~~request.

§ 2.2 Information and Services Required of the Owner

§ 2.2.1 ~~Prior to commencement of the Work, the Contractor may request in writing that the Owner provide reasonable evidence that the Owner has made financial arrangements. The Owner shall attach to the Agreement with the Contractor the certificates of available resources required by the Ohio Revised Code as evidence of available funds to fulfill the Owner's obligations under the Contract. Thereafter, the Contractor may only request such evidence if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) a change in the Work materially changes the Contract Sum; or (3) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due. The Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change. After the Owner furnishes the evidence, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.~~

§ 2.2.2 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, through the Construction Manager, shall secure and pay for the building permit.

§ 2.2.3 ~~The~~ To the extent necessary for the Work and as requested by the Contractor, the Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.2.4 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.2.5 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.2.6 The Owner shall endeavor to forward all communications to the Contractor through the Construction Manager and shall contemporaneously provide the same communications to the Architect about matters arising out of or relating to the Contract Documents.

§ 2.3 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.4 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within ~~a ten day period~~ two (2) business days after receipt of written notice from the Owner to commence ~~and continue~~ correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case or thereafter proceed without interruption to

correct such default or neglect within fifteen (15) days of such notice, the Owner, without prejudice to its other remedies, may correct such deficiencies. Provided, however, if such default or neglect results in a threat to the safety of any person or property, the Contractor shall immediately commence to correct such fault or neglect upon receipt of written or oral notice thereof. In all such cases of default or neglect an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor ~~the reasonable cost of correcting such deficiencies, including Owner's expenses and~~ the costs arising out of or related to the investigation and correction of such deficiencies, including the Owner's attorneys' and consultants' fees and expenses and other expenses and compensation for the Construction Manager's and Architect's and their respective consultants' additional services made necessary by such default, neglect or failure. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect, after consultation with the Construction Manager. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. The Contractor irrevocably designates the Owner as the Contractor's attorney-in-fact to execute the Change Orders provided for in this Section.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The plural term "Multiple Prime Contractors" refers to persons or entities who perform construction under contracts with the Owner that are administered by the Construction Manager. The term does not include the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager.

§ 3.1.3 The Contractor shall perform the Work in accordance with the Contract ~~Documents.~~Documents and shall comply with all rules, regulations and policies of the Owner and all applicable federal, State, and local codes, statutes, ordinances, and regulations in the performance of the Work on the Project.

§ 3.1.4 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in their administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the ~~Contract Agreement~~ by the Contractor is a representation that the Contractor has visited the site, ~~become generally~~ carefully and diligently investigated the entire site and the surrounding area, including location, condition and layout of the site and utility locations, become thoroughly familiar with local conditions under which the Work is to be performed and correlated personal observations performed, including the generally occurring climatic conditions and carefully correlated personal observations and other information with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the ~~Work.~~ Work and in addition to the reviews required by the Instructions to Bidders and by these General Conditions, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.2.3, 2.2.3. In addition prior to performing each portion of its Work, the Contractor shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are it including the Work of the other Contractors. These obligations of this Section 3.2 are for the purposes of facilitating construction by the Contractor, for determining that the Work is constructible, for determining if the work of the Contractor is coordinated in the Contract Documents with the work of the other Contractors, and for verifying that field conditions, including the Work of other Contractors, are consistent with the information in the Contract Documents and ready for the Work. These obligations. These obligations are not for the purpose of discovering errors, omissions, or inconsistencies errors or omissions in the sizing, load bearing capacity or other similar design information in the Contract Documents; however, the Contractor shall promptly report to the Construction Manager and Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information submitted to the Construction Manager in such form as the Construction

Manager and Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 ~~The Contractor is not required to ascertain that the Contract Documents are in accordance-~~ Additionally, prior to performing each portion of the Work, the Contractor shall have a competent person review the Contract Documents for compliance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Construction Manager and Architect any nonconformity discovered by or made known to the Contractor as a request for information submitted to Construction Manager in such form as the Construction Manager and Architect may require, and shall immediately report in writing any conflicts with such laws, statutes, ordinances, building codes, and rules and regulations to the Architect, Construction Manager and Owner.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall make Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. ~~If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.~~

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and ~~attention-~~ attention and consistent with the skill of a competent contractor familiar with the construction of public library facilities. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the ~~Contract, unless the Contract Documents give other specific instruction concerning these matters.~~ Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner, the Construction Manager, and the Architect and shall not proceed with that portion of the Work without further written instructions from the Architect, through the Construction Manager. ~~If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner required means, methods, techniques, sequences or procedures.~~ The Contractor shall immediately upon entering the project for the purpose of beginning work, locate all general reference points and take such action as necessary to prevent their destruction. The Contractor shall lay out its own work and be responsible for all lines, elevations and measurements of the building, demolition work, utilities, and any other work to be executed by the Contractor under the contract. The Contractor shall verify grades, lines, levels, and dimensions indicated on the drawings and shall notify the Architect of errors or inconsistencies before commencing work. The Contractor shall establish and maintain a permanent bench mark, batter boards, level and grades and shall layout the exact location of all walls, partitions, openings, etc. The Contractor shall employ experienced and competent engineers and exercise proper precautions to verify the figures shown on the drawings for laying out work, and will be held responsible for any error resulting from his failure to exercise such precautions.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of the Project already performed to determine that such portions are in proper condition to receive subsequent Work.

§3.3.4 The Contractor shall maintain readily accessible to the Architect and the Owner at the Project site, the following documents all of which shall be "public records" within the meaning of the Ohio Public Records Act:

- .1 A set of Drawings and Project Manuals, as approved by the appropriate Building Department.
- .2 Unless otherwise specifically provided in the Contract Documents, a neat and legible set of As-Built Drawings and Project Manuals on which:
 - .1 The Contractor shall keep an accurate record of all approved changes made to the Drawings to show actual installation where installation varies from Work as originally shown, including the exact location and depth of underground utility lines. Any such changes shall be noted by Change Order Number and drawn neatly in a contrasting color;
 - .2 When Shop Drawings are used, the Contractor shall cross-reference the corresponding sheet numbers on the As-Built Drawings and sections of the Specifications;
 - .3 A daily log at the Project site in which it has recorded Project-related information, including, but not limited to, the weather, number of workers on site for each Contractor, identification of equipment, Work accomplished, problems encountered, and other similar relevant Project data;
 - .4 As applicable to its Work, all Bulletins, Addenda, approved Shop Drawings, Product Data, Samples, manufacturers' installation, operating and/or maintenance instructions or requirements, certificates, warranties, Change Orders, Change Directives, other Modifications and complete back up data for all Change Orders, Change Directives and other Modifications;
 - .5 All the Contractor's communications, including but not limited to letters, memoranda, e-mail, invoices and bills of lading, arising out of or related to the Project with the Architect, Owner and/or its subcontractors, materialmen and/or employees; and
 - .6 The payroll reports for its employees and the employees of its Subcontractors working on the Project.
- .3 Claims for the Contractor's failure to comply with the Ohio Public Records Act, if applicable, shall be claims under Section 3.18.1.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work authorized by the Architect in accordance with Sections 3.12.8 or 7.4, the Contractor may make substitutions only with the consent of the Owner, which the Owner may withhold in its sole discretion, after evaluation by the Architect, in consultation with the Construction Manager, and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall ~~not permit employment of unfit persons or persons not properly skilled in tasks assigned to them~~ only assign competent supervisors and workers to the Project, each of whom is fully qualified to perform the tasks assigned. If the Owner, Construction Manager or Architect deems any employee of the Contractor or a Subcontractor unsatisfactory, the Contractor will transfer or require its Subcontractor to transfer such employee from the Project immediately and replace or require the prompt replacement of such employee with a competent employee at no additional cost to the Owner. The Owner, however, shall be under no obligation to do so.

§ 3.5 Warranty

The Contractor warrants to the Owner, Construction Manager, and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform with the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.1 [Reserved]

§ 3.5.2 If the Contractor breaches any of its obligations under Section 3.5, the Contractor will pay the Owner for its damages and expenses, including but not limited to attorneys' and consultants' fees and expenses, arising out of or related to such breach.

§ 3.5.3 The Contractor warrants that any equipment or materials selected by it from among the equipment or materials specified will be fit for its intended purposes, compatible with the design intent, and, if the other contractors construct their work in accordance with the Contract Documents, constructible all without additional cost to the Owner.

§ 3.5.4 Additional Warranties. The Contractor gives the Owner the following additional warranties:

- .1 If the Contractor's Work includes all or part of the exterior roofing system, provided that the Architect has designed the roofing system to be weather tight, the Contractor warrants that the roofing system will be weather tight; and,
- .2 If the Contractor's Work includes all or part of the exterior wall system, provided that the Architect has designed the wall system to be weather tight, the Contractor warrants that the wall system will be weather tight.

Weather tight shall mean the roofing and/or wall system does not permit any infiltration of water in any form that would have any adverse effect on the Owner's operations or the Project.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, ~~use~~ use, commercial activity and similar taxes for the Work or portions thereof provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect. The Contractor acknowledges that the Owner is a political subdivision of the State of Ohio or tax exempt organization and is exempt from state sales and use taxes. Upon written request, the Owner will provide the Contractor with any applicable certificates of exemption.

§ 3.7 Permits, Fees, Notices, and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Owner, through the Construction Manager, shall secure and pay for the building permit. The Contractor shall secure and pay for other permits, fees, licenses and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders and all other requirements of public authorities applicable to performance of the Work.

§ 3.7.3 ~~If the Contractor~~ In addition to its other obligations under the Contract Documents, if the Contractor or any of its Subcontractors or Sub-subcontractors performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders and all other requirements of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions. ~~If~~ Except as provided herein, if the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner, Construction Manager, and the Architect before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect and Construction Manager will promptly investigate such conditions and, if the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner,

Construction Manager, and Contractor in writing, stating the reasons. If the Owner or Contractor disputes the Architect's determination or recommendation, either party may proceed as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner, Construction Manager, and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents:

- .1 Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2. The Contractor shall obtain the Change Order before incurring any costs in excess of an allowance.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner and Architect through the Construction Manager, the name and qualifications of a proposed superintendent. The Construction Manager may reply within 14 days to the Contractor in writing stating (1) whether the Owner, the Construction Manager, or the Architect has reasonable objection to the proposed superintendent or (2) that any of them require additional time to review. Failure of the Construction Manager to reply within the 14 day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not ~~change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.~~ replace the assigned Superintendent without the consent of the Owner, except with another Superintendent who is satisfactory to the Owner. If the Contractor proposes to change the Superintendent, the Contractor shall submit to the Construction Manager and Architect a written request for the change, including the justification for the change, the name and qualifications for the proposed replacement, and the time frame within which the change is proposed to take place. The Contractor shall provide promptly any related additional information the Construction Manager, Architect or Owner requests.

§ 3.10 Contractor's Construction Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, ~~shall prepare and submit for the Owner's and Architect's information and the Construction Manager's approval a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project schedule to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.~~

The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Multiple Prime Contractors or the construction or operations of the Owner's own forces, and within five (5) days of the date of any request from the Construction Manager, Architect or the Owner to submit scheduling information, shall submit the scheduling information for its Work to the Construction Manager, Architect and to the Owner in such form and in such detail as requested by the requesting party. The Contractor's scheduling information shall include and be consistent with any applicable Milestone Dates, dates for Substantial Completion or other deadlines in the Bidding Documents. The Construction Schedule is for the purpose of coordinating the timing, phasing and sequence of the Work of the Contractors and shall not change or modify the date for Substantial Completion. The date for Substantial Completion shall only be changed or modified by Change Order, other Modification or a Claim that is Finally Resolved, regardless of the date in the Construction Schedule.

- .1 The Contractor shall update its scheduling information each month. In preparing and updating its scheduling information, the Contractor shall take into consideration but not be bound by the scheduling and other information submitted by the Contractors;
- .2 The Contractor shall, on a weekly basis, prepare and submit to the Construction Manager a written report describing the activities begun or finished during the preceding week, Work in progress, expected completion of the Work, a look-ahead projection of all activities to be started or finished in the upcoming two (2) weeks, including without limitation the Contractor's workforce crew size and total resource hours associated with such Work and any other information requested by the Construction Manager or the Architect;
- .3 The float in the Construction Schedule and any updates to it shall belong to the Owner. Float shall mean the amount of time by which activities may be delayed without affecting the date for Substantial Completion; and
- .4 The Contractor's obligation to furnish requested scheduling information is a material term of its Contract. If the Contractor fails to furnish requested scheduling information in writing within five (5) days of a request for such information from the Construction Manager, Architect or Owner, the Contractor shall pay and the Owner may withhold from the Contractor Liquidated Damages at the rate of Fifty Dollars (\$50.00) a day for each calendar day thereafter that the Contractor fails to furnish the requested information.

§ 3.10.2 The Contractor shall prepare a submittal schedule, promptly after being awarded the Contract and thereafter update it as necessary to maintain a current submittal schedule, and shall submit the schedule(s) for the Construction Manager's and Architect's approval. The Architect and Construction Manager's approval shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Construction Manager and Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall participate with other Contractors, the Construction Manager and Owner in reviewing and coordinating all schedules for incorporation into the Project schedule that is prepared by the Construction Manager. The Contractor shall make revisions to the construction schedule and submittal schedule as deemed necessary by the Construction Manager to conform to the Project schedule.

§ 3.10.4 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner, Construction Manager and Architect and incorporated into the approved Project schedule, provided that the Contractor shall comply with any orders under Section 3.10.5.

§ 3.10.5 If the Construction Manager, Architect or the Owner determines that the performance of the Work has not progressed so that it is likely that the Contractor will not Substantially Complete its Work by its Date for Substantial Completion, the Owner shall have the right to order the Contractor to take corrective measures necessary to expedite the Work, including, without limitation: (i) working additional shifts or overtime; (ii) supplying additional manpower, equipment, and facilities; and (iii) other similar measures (collectively referred to as "Corrective Measures"). If the Owner orders the Contractor to take such corrective measures, the Contractor shall take and continue such Corrective Measures until the Owner is satisfied that the Contractor is likely to Substantially Complete its Work by its Date for Substantial Completion.

- .1 The Contractor shall not be entitled to adjustment in the Contract Sum in connection with the Corrective Measures required by the Owner pursuant to this Section 3.10.5, unless the Contractor is able to establish that it is entitled to additional compensation under the terms of the Contract Documents.

§ 3.10.6 In the event that the Owner awards a single contract for general contracting services, the Contractor providing general contracting services shall be responsible for all scheduling and coordination services and shall prepare and update on a monthly basis, a construction schedule using the critical path method and in a format acceptable to the Owner, Architect and Construction Manager.

§ 3.11 Documents and Samples at the Site

The Contractor shall maintain at the site for the Owner ~~one copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples and similar required submittals.~~ Construction Manager and Architect, the documents required by Section 3.3.4. These documents shall be available to the Architect and delivered to the Construction Manager for submittal to the Owner upon completion of the Work, or earlier when required by the Contract Documents, as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Sections 4.2.9 through 4.2.11. Informational submittals upon which the Construction Manager and Architect are not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Construction Manager Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents in accordance with the Project submittal schedule approved by the Construction Manager and Architect, or in the absence of an approved Project submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of other Multiple Prime Contractors or the Owner's own forces. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor's Shop Drawings, Product Data, Samples and similar submittals with related documents submitted by other Multiple Prime Contractors.

- .1 If the Shop Drawings or other submittals show variations from the requirements of the Contract Documents, the Contractor shall specify such variations in the Contractor's letter of submittal to the Construction Manager accompanying the submittal. Variations must be approved by Change Order.
.2 If the Contractor's Shop Drawings or its submittals do not contain sufficient information, and the Construction Manager and / or Architect must perform more than two reviews with respect to any submittal, the Contractor shall pay the additional costs and expenses incurred by the Owner as a result of such additional reviews by the Construction Manager and / or Architect, and the Owner may withhold from sums due or coming due the Contractor amounts to cover such additional costs and expenses.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents to the Owner, Construction Manager, and Architect, that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, ~~or will do so~~ and (3) checked

and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been reviewed and approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Construction Manager and Architect in writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the absence of such written notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, who shall comply with reasonable requirements of the Owner regarding qualifications and insurance and whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals, ~~provided the Owner and Architect have specified to the Contractor all performance and design criteria that such services must satisfy.~~ Pursuant to this Section 3.12.10, the Architect will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

§ 3.12.11 **Instructions.** Unless otherwise expressly provided in the Contract Documents, the Contractor shall provide typed or printed instructions covering the operation and maintenance of each item of equipment furnished in a notebook submitted to the Construction Manager for review and transmittal to the Owner. The instructions, as applicable, shall include the following:

- .1 Any schematic piping and wiring diagrams;
- .2 Any valve charts and schedules;
- .3 Any lubrication charts and schedules;
- .4 Guides for troubleshooting;
- .5 Pertinent diagrams and maintenance instructions for all equipment;
- .6 Manufacturer's data on all equipment;
- .7 Operating and maintenance instructions for all equipment;
- .8 Manufacturer's parts list;
- .9 Any testing procedures for operating tests; and
- .10 Other instructions and materials as required by the Contract Documents.

The Contractor shall provide two (2) copies of the above instruction books on or before the Substantial Completion of its Work. The books shall describe the information to be covered clearly and in detail and shall be in form and content satisfactory to the Construction Manager, Architect and the Owner.

§ 3.12.12 Testing Following Final Completion. The Contractor will participate in training sessions for the Owner's maintenance personnel. During the first twelve (12) months following Final Completion of each part of the Project, the Contractor (without additional compensation) will participate in tests scheduled by the Owner, which test the following building systems to the extent applicable to the Contractor's Work: air conditioning system (which shall be conducted during the first full summer following the completion of the Project or at such earlier time as scheduled by the Owner), heating system (which shall be conducted during the first full winter following the completion of the Project or at such earlier time as scheduled by the Owner), and such other systems, including the electrical system, plumbing system, fire protection system, communications systems, as reasonably requested by the Owner. The Owner will be advised when the testing will be conducted and may observe the testing. It is intended that the testing be a comprehensive series of operation tests designed to determine whether the systems are fully operational in accordance with the requirements of the Contract Documents. If it appears that any of the systems, including equipment and software, do not conform to the requirements of the Contract Documents, the Contractor will remedy the defective and/or non-conforming work as provided in Section 12.2.2.1 of these General Conditions.

§ 3.12.13 Manufacturer's Instructions or Requirements. Without waiving, modifying or relieving the Contractor from its other obligations under the Contract Documents, including its warranties and any performance specifications, the Contractor shall furnish and install its Work in accordance with any applicable manufacturer's instructions or requirements. Prior to installation, the Contractor shall review carefully the manufacturer's instructions and requirements, and if there is a conflict between such instructions or requirements and the Drawings and/or Specifications, the Contractor shall request clarification from the Architect prior to commencing the Work.

§ 3.13 Use of Site

§ 3.13.1 The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.13.2 Signage. The Contractor and any entity for whom the Contractor is responsible shall not erect any sign on the Project site without the prior written consent of the Owner, which may be withheld in the sole discretion of the Owner.

§ 3.13.3 Restricted Activities. Unless expressly permitted by the Contract Documents or by the Owner in writing, the Contractor shall not interfere with the Owner's ongoing operations, shall not permit any of its employees or its Subcontractor's or materialmen's employees to use any existing facilities on the Project site, including, without limitation, lavatories and toilets, and shall not permit its employees or its Subcontractor's or materialmen's employees to bring any tobacco products, alcoholic beverages, controlled substances, or firearms onto the Project site or any other property owned or controlled by the Owner. Additionally, the Contractor shall not permit its employees or its Subcontractor's or materialmen's employees to use any radios, tape or compact disc players, or sound amplification equipment at or near the Project Site.

§ 3.13.4 The Contractor shall conspicuously post notice of the prohibitions listed in the preceding subparagraphs at the Project site in the same locations as OSHA notices are required to be posted, and shall verbally inform all of the Contractor's employees, and the employees of the Contractor's Subcontractors and materialmen, regardless of tier, of such prohibitions.

§ 3.13.2 The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the site.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting and patching shall be restored to the condition existing prior to the cutting, fitting and patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner's own forces or of other Multiple Prime Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner's own forces or by other Multiple Prime Contractors except with written consent of the Construction Manager, Owner and such other Multiple Prime Contractors; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the other Multiple Prime Contractors or the Owner the Contractor's consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner, or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement from the Contractor. The Architect's determination of the costs to be charged to the Contractor shall be final and binding. The Contractor irrevocably designates the Owner as its attorney-in-fact to execute any Change Orders deducting such cost from the balance of the Contract Sum.

§ 3.16 Access to Work

The Contractor shall provide the Owner, Construction Manager and Architect access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner, Construction Manager and Architect harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner, Architect, or Construction Manager. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect through the Construction Manager.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Construction Manager, Architect, Construction Manager's and Architect's consultants, and agents and employees of any of them from and against ~~claims, claims (whether alleged or proven), damages, losses and expenses, including but not limited to architect, construction manager, consultant and attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18 or any breach of the Contractor's obligations under the Contract Documents, including but not limited to the breach of any warranty provided in the Contract Documents.~~

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

§ 3.19 Compliance with Demolition Laws. The Contractor will, at the Contractor's expense, fully comply with all statutes and regulations regarding notification and disposal of construction and demolition debris, including, without limitation, Ohio Revised Code Chapter 3714 and the regulations enacted thereunder.

§ 3.20 Underground Utility Facilities.

§ 3.20.1 The Contractor, at least two (2) working days prior to commencing construction in an area that may involve underground utility facilities, shall give notice to the Construction Manager, Architect and the Owner and to the registered underground utility protection services and the owners of underground utility facilities shown on the Drawings and Specifications.

§ 3.20.2 The Contractor shall notify immediately the occupants of any premises near the Work and the Construction Manager, Architect and the Owner as to any emergency that it may create or discover. The Contractor shall notify immediately the operator of any underground utilities and the Construction Manager, Architect and Owner of any break or leak in the lines of such operator or any dent, gouge, groove, or other damage to such lines or to their rating or cathodic protection, made or discovered in the course of excavation.

§ 3.21 Waivers of Claims

§ 3.21.1 With each Application for Payment, the Contractor will obtain from each of its Subcontractors and Material Suppliers, regardless of tier, a waiver of claim for the Project of all lien rights for the amounts for which they have received payments with respect to the Project in the form requested by the Construction Manager.

ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER

§ 4.1 General

§ 4.1.1 The Owner shall retain an architect lawfully licensed to practice architecture or an entity lawfully practicing architecture in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 4.1.2 The Owner shall retain a construction manager lawfully licensed to practice construction management or an entity lawfully practicing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 4.1.3 Duties, responsibilities and limitations of authority of the Construction Manager and Architect as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner, Construction Manager, Architect and Contractor. Consent shall not be unreasonably withheld.

~~**§ 4.1.4** If the employment of the Construction Manager or Architect is terminated, the Owner shall employ a successor construction manager or architect as to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Construction Manager or Architect, respectively.~~

§ 4.1.4.

§ 4.2 Administration of the Contract

§ 4.2.1 The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be the Owner's representatives during construction until the date the Architect issues the final Certificate for ~~Payment.~~ Payment and with the Owner's concurrence, from time to time during the one-year period for correction of Work described in Section 12.2 and for such additional periods as the Owner, Construction Manager and / or Architect may agree. The Construction Manager and Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner and Construction Manager (1) known deviations from the Contract Documents and from the most recent Project schedule prepared by the Construction Manager, and (2) defects and deficiencies observed in the Work.

§ 4.2.3 The Construction Manager shall provide a staffing plan to include one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner reasonably informed of the progress of the Work, and will report to the Owner and Architect (1) known deviations from the Contract Documents and the most recent Project schedule, and (2) defects and deficiencies observed in the Work.

§ 4.2.4 The Construction Manager will schedule and coordinate the activities of the Contractor and other Multiple Prime Contractors in accordance with the latest approved Project schedule.

§ 4.2.5 The Construction Manager, except to the extent required by Section 4.2.4, and Architect will not have control over, or charge of, construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Section 3.3.1, and neither will be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Neither the Construction Manager nor the Architect will have control over or charge of or be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work.

§ 4.2.6 **Communications Facilitating Contract Administration.** Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Construction Manager, and shall contemporaneously provide the same communications to the Architect about matters arising out of or relating to the Contract Documents. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with other Multiple Prime Contractors shall be through the Construction Manager and shall be contemporaneously provided to the Architect if those communications are about matters arising out of or related to the Contract Documents. Communications by and with the Owner's own forces shall be through the Owner.

§ 4.2.7 The Construction Manager and Architect will review and certify all Applications for Payment by the Contractor, in accordance with the provisions of Article 9.

§ 4.2.8 The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents and will notify each other about the rejection. The Construction Manager shall determine in general whether the Work of the Contractor is being performed in accordance with the requirements of the Contract Documents and notify the Owner, Contractor and Architect of defects and deficiencies in the Work. Whenever the Construction Manager considers it necessary or advisable, the Construction Manager will have authority to require additional inspection or testing of the Work in accordance with Sections 13.5.2 and 13.5.3, upon written authorization of the Owner, whether or not such Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of Sections 4.2.18 through 4.2.20 inclusive, with respect to interpretations and decisions of the Architect. However, neither the Architect's nor the Construction Manager's authority to act under this Section 4.2.8 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing any of the Work.

§ 4.2.9 The Construction Manager will receive and promptly review for conformance with the submittal requirements of the Contract Documents, all submittals from the Contractor such as Shop Drawings, Product Data and Samples. Where there are Multiple Prime Contractors, the Construction Manager will also check and coordinate the information contained within each submittal received from Contractor and other Multiple Prime Contractors, and transmit to the Architect those recommended for approval. By submitting Shop Drawings, Product Data, Samples and similar submittals, the Construction Manager represents to the Owner and Architect that the Construction Manager has reviewed and recommended them for approval. The Construction Manager's actions will be taken in accordance with the Project submittal schedule approved by the Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review by the Architect.

§ 4.2.10 The Architect will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with

information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Upon the Architect's completed review, the Architect shall transmit its submittal review to the Construction Manager.

§ 4.2.11 Review of the Contractor's submittals by the Construction Manager and Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager and Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5 and 3.12. The Construction Manager and Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Construction Manager and Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.12 The Construction Manager will prepare Change Orders and Construction Change Directives.

§ 4.2.13 The Construction Manager and the Architect will take appropriate action on Change Orders or Construction Change Directives in accordance with Article 7. and the Architect will have authority to order minor changes in the Work as provided in Section 7.4. The Architect, in consultation with the Construction Manager, will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.14 Utilizing the documents provided by the Contractor, the Construction Manager will maintain at the site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These will be available to the Architect and the Contractor, and will be delivered to the Owner upon completion of the Project.

§ 4.2.15 The Construction Manager will assist the Architect in conducting inspections to determine the dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion in conjunction with the Architect pursuant to Section 9.8; and receive and forward to the Owner written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor's compliance with the requirements of the Contract Documents.

§ 4.2.16 If the Owner and Architect agree, the Architect will provide one or more project representatives to assist in carrying out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be ~~as set forth in an exhibit to be incorporated in~~ consistent with the terms of the Contract Documents.

§ 4.2.17 The Architect will interpret and decide matters concerning performance under, and requirements of the Contract Documents on written request of the Construction Manager, Owner or Contractor through the Construction Manager. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.18 Interpretations and decisions of the Architect will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions so rendered in good faith.

§ 4.2.19 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.20 The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager's recommendation. The Architect will

review and respond in writing to the Construction Manager to requests for information about the Contract Documents. The Construction Manager's recommendation and the Architect's response to each request will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information. If no agreement is made concerning the time within which interpretations required of the Construction Manager and Architect shall be furnished in compliance with this Section 4.2, then delay shall not be recognized on account of failure by the Construction Manager or Architect to furnish such interpretations until 15 days after written request is made for them and the Contractor establishes the Construction Manager's or Architect's delay in responding delayed the Work.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include other Multiple Prime Contractors or subcontractors of other Multiple Prime Contractors.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Construction Manager for review by the Owner, Construction Manager and Architect the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Construction Manager may reply within 14 days to the Contractor in writing stating (1) whether the Owner, the Construction Manager or the Architect has reasonable objection to any such proposed person or entity or, (2) that the Construction Manager, Architect or Owner requires additional time for review. Failure of the Construction Manager, Owner, or Architect to reply within the 14-day period shall constitute notice of no reasonable objection. Copies of all bids or other proposals from Subcontractors or Sub-subcontractors shall, upon the request of the Owner, Construction Manager or Architect, be submitted to the Construction Manager.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made ~~reasonable and~~ timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner, Construction Manager or Architect has ~~reasonable an~~ objection to a person or entity proposed by the Contractor, the Contractor shall propose within 10 days another to whom the Owner, Construction Manager or Architect has no ~~reasonable~~ objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person or entity previously selected if the Owner, Construction Manager or Architect ~~makes reasonable objection to such substitution.~~ objects to such substitute. The Owner, through the Architect, may require the Contractor to change any Subcontractor previously approved and, except as provided hereafter, the Contract Sum shall be increased or decreased by the difference in cost resulting from such change. If the Contractor is in default because of the Subcontractor's performance, then the Contractor shall not be entitled to any adjustment in the Contract Sum and shall remain liable to the Owner for any damages or losses caused by such default.

§ 5.3 Subcontractual Relations

By appropriate ~~agreement, written where legally required for validity,~~ written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes

toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors. In the event that the Owner awards a single contract for general contracting services on the Project, the general contractor shall conform to the requirements of Section 153:1-3-02 of the Ohio Administrative Code and use the form of subcontract specified therein when entering into agreements with subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor in writing; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

~~When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.~~

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in ~~cost~~ direct costs incurred by Subcontractors resulting from the suspension.

§ 5.4.3 Upon such assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor Contractor or other entity. ~~If the Owner assigns the subcontract to a successor Contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor Contractor's obligations under the subcontract.~~

ARTICLE 6 CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS

§ 6.1 Owner's Right to Perform Construction with Own Forces and to Award Other Contracts

§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, which include persons or entities under separate contracts not administered by the Construction Manager, and to award other contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.

§ 6.1.2 When the Owner performs construction or operations with the Owner's own forces including persons or entities under separate contracts not administered by the Construction Manager, the Owner shall provide for coordination of such forces with the Work of the Contractor, who shall cooperate with them.

§ 6.1.3 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights that apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11 and 12.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner's own forces, Construction Manager and other Multiple Prime Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of

their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 ~~##~~ In addition to its obligations under Section 3.2.2, if part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner's own forces or other Multiple Prime Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Construction Manager and Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's own forces or other Multiple Prime Contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

§ 6.2.3 ~~The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a separate contractor or to other Multiple Prime Contractors because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of delays, improperly timed activities, damage to the Work or defective construction by the Owner's own forces or other Multiple Prime Contractors.~~

§ 6.2.4 The Contractor shall promptly remedy damage the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner, separate contractors, or other Multiple Prime Contractors as provided in Section 10.2.5.

§ 6.2.5 The Owner and other Multiple Prime Contractors shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, other Multiple Prime Contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Construction Manager, with notice to the Architect, will allocate the cost among those responsible. The Construction Manager's decision allocating the cost shall be final and binding on the Contractor and the Owner. The Contractor irrevocably designates the Owner as the Contractor's attorney-in-fact to execute Change Orders consistent with the Construction Manager's decision regarding cleanup.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Construction Manager, Architect and Contractor; a Construction Change Directive requires agreement by the Owner, Construction Manager and Architect and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

§ 7.2 Change Orders

A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Architect and Contractor, stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.2.1 The agreement on any Change Order shall constitute a final settlement of all matters relating to the change in the Work that is the subject of the Change Order, including but not limited to, all direct, indirect and cumulative costs associated with such change and any and all adjustments to the Contract Sum and the Contract Time. The Contractor

shall not proceed with any change in the Work without a signed Change Order, Construction Change Directive or Minor Change in the Work notice. The Contractor's failure to obtain such authorization as specified herein, shall constitute a irrevocable waiver by the Contractor of an adjustment to the Contract Sum or Contract Time for the related work.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Construction Manager and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 ~~Cost subject to a not-to-exceed amount a cost~~ to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.7.

§ 7.3.4 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Construction Change Directive so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 7.3.5 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager and Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.6 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.7 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Construction Manager shall determine the method and the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, ~~in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data, a true and accurate itemized accounting of all labor and material with appropriate supporting data.~~ If the Construction Manager prescribes a format for such accounting, the Contractor shall provide the accounting in such format. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.7 shall be limited to the following:

- .1 Costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers compensation insurance;
- .2 Costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- .5 Additional costs of supervision and field office personnel directly attributable to the change.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Construction Manager and ~~Architect.~~ Architect plus the credit for overhead and profit. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, or decrease if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Construction Manager and Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Construction Manager shall prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect has authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes will be effected by written order conspicuously marked at the top of the order as a "MINOR CHANGE IN THE WORK" and issued through the Construction Manager and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by an ~~act or neglect of the Owner, Owner's own forces, Construction Manager, Architect, any of the other Multiple Prime Contractors or an employee of any of them, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner pending mediation and arbitration, or by other causes that the Architect, based on the recommendation of the Construction Manager, determines may justify delay, then~~ Excusable Delay as provided in Section 15.1.5.3, then subject to the

agreement of the Owner, the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.2 Schedule of Values

~~Where the Contract is based on a Stipulated Sum or Guaranteed Maximum Price, Promptly after award of the Agreement, the Contractor shall submit to the Construction Manager, before the first Application for Payment, for the Construction Manager's review and approval, a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as the Construction Manager and Architect may require. This schedule, unless objected to by the Construction Manager or Architect, By submitting such schedule of values, the Contractor represents for the reliance of the Construction Manager, Architect and the Owner that the allocation of the values to the portions of the Work is a fair and reasonable estimate of such allocation. Once approved, the Contractor will not change the allocations in the Schedule of Values without the Construction Manager's further approval. The Construction Manager may from time to time require the Contractor to adjust such schedule if the Construction Manager determines it to be in any way unreasonable or inaccurate. The Contractor then shall adjust the schedule of values as required by the Construction Manager within ten (10) days. This schedule, with any adjustments approved by the Construction Manager shall be used as a basis for reviewing the Contractor's Applications for Payment. In the event there is one Contractor, the Construction Manager shall forward to the Architect the Contractor's schedule of values. If there are Multiple Prime Contractors responsible for performing different portions of the Project, the Construction Manager shall forward the Multiple Prime Contractors' schedules of values only if requested by the Architect.~~

§ 9.3 Applications for Payment

~~§ 9.3.1 At least fifteen days before the date established for each progress payment, the Contractor shall submit to the Construction Manager an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. Such application shall be notarized, if required, and supported by such be submitted with a properly completed Contractor's Payment Application Checklist, all the documentation required to be submitted with such Checklist, and any other supporting documentation required by the Contract Documents or by the Construction Manager. The Application for Payment will be in the form and submitted with the number of copies of it and all related documents as required by the Contract Documents. The Contractor also shall submit with its Application for Payment such other data substantiating the Contractor's right to payment as the Owner, Construction Manager or Architect may require, such as copies of requisitions from Subcontractors and material suppliers, and shall reflect retainage if provided for in the Contract Documents.~~

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or material supplier unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.1.3 The Contractor shall submit its Application for Payment to the Construction Manager on AIA Documents G-702 and G-703 and Contractor's Payment Application Checklist and Certification on or before the twenty-fifth (25th) day of each month for Work completed to that date. The Owner will issue payment to the Contractor within thirty (30) days from the date of its receipt of the certified Application for Payment from the Construction Manager.

§ 9.3.1.4 The Owner will withhold retainage from the amount set forth in the Application for Payment approved by the

Architect or Construction Manager, as provided in the Contract Documents.

§ 9.3.1.5 Documentation. Upon request, the Contractor immediately will supply the Owner, Construction Manager and the Architect with such information as may be requested so as to verify the amounts due to the Contractor, including but not limited to original invoices for materials and equipment and documents showing that the Contractor has paid for such materials and equipment, and so as to verify that amounts due laborers, Subcontractors, and Material Suppliers have been paid to them. The failure to provide such information shall be justification for withholding payment to the Contractor.

§ 9.3.1.6 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- .1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage as required by Ohio law. Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Section 7.3.9 of AIA Document A232™–2009, General Conditions of the Contract for Construction, as modified;
- .2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage as required by Ohio law;
- .3 Subtract the aggregate of previous payments made by the Owner; and
- .4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of AIA Document A232™–2009, General Conditions of the Contract for Construction, as modified.

§ 9.3.1.7 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 9.3.1.8 Construction Retainage. The Owner and the Contractor agree that any escrow account required in connection with this Agreement will be an interest-bearing savings account established at a bank or savings and loan association in the State of Ohio used by the Owner as a depository bank or a fund identified by Owner in which its project funds are held. Contractor will sign any document requested by Owner to evidence its agreement to the deposit of retained funds. This arrangement is intended to reduce the costs borne by both the Owner and the Contractor related to any separate accounts required by the Ohio Revised Code for construction retainage based upon the current interest rates that will not support maintenance costs for such an account.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work. The Contractor agrees to bond off any lien filed on the real property on which the Project is located, the Owner's interest in such real property and/or the remaining balance of the Contract Sum by providing a bond meeting the requirements of Ohio Revised Code. The Contractor shall do so within sixty (60) days of the filing of the lien.

§ 9.4 Certificates for Payment

§ 9.4.1 Where there is only one Contractor, the Construction Manager will, within seven days after the Construction Manager's receipt of the Contractor's Application for Payment, properly completed Application for Payment and Contractor's Payment Application Checklist and Certification, the documentation described in the Contractor's Payment Application Checklist and Certification and such other data substantiating the Contractor's right to payment as the Owner, Construction Manager or Architect may require, review the Application, certify the amount the Construction Manager determines is due the Contractor, and forward the Contractor's Application and Certificate for Payment to the Architect. Within seven days after the Architect receives the Contractor's Application for Payment from the Construction Manager, the Architect will either issue to the Owner a Certificate for Payment, with a copy to the Construction Manager, for such amount as the Architect determines is properly due, or notify the Construction Manager and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1. The Construction Manager will promptly forward to the Contractor the Architect's notice of withholding certification.

§ 9.4.2 Where there are Multiple Prime Contractors performing portions of the Project, the Construction Manager will, within seven days after the Construction Manager receives the Multiple Prime Contractors' Applications for Payment: (1) review the Applications and certify the amount the Construction Manager determines is due each of the Multiple Prime Contractors; (2) prepare a Summary of Contractors' Applications for Payment by combining information from each Multiple Prime Contractors' application with information from similar applications for progress payments from other Multiple Prime Contractors; (3) prepare a Project Application and Certificate for Payment; (4) certify the amount the Construction Manager determines is due all Multiple Prime Contractors; and (5) forward the Summary of Contractors' Applications for Payment and Project Application and Certificate for Payment to the Architect.

§ 9.4.3 Within seven days after the Architect receives the Project Application and Project Certificate for Payment and the Summary of Contractors' Applications for Payment from the Construction Manager, the Architect will either issue to the Owner a Project Certificate for Payment, with a copy to the Construction Manager, for such amount as the Architect determines is properly due, or notify the Construction Manager and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1. The Construction Manager will promptly forward the Architect's notice of withholding certification to the Contractors.

§ 9.4.4 The Construction Manager's certification of an Application for Payment or, in the case of Multiple Prime Contractors, a Project Application and Certificate for Payment shall be based upon the Construction Manager's evaluation of the Work and the information provided as part of the Application for Payment. The Construction Manager's certification will constitute a representation that, to the best of the Construction Manager's knowledge, information and belief, the Work has progressed to the point indicated and the quality of the Work is in accordance with the Contract Documents. The certification will also constitute a recommendation to the Architect and Owner that the Contractor be paid the amount certified.

§ 9.4.5 The Architect's issuance of a Certificate for Payment or in the case of Multiple Prime Contractors, Project Application and Certificate for Payment, shall be based upon the Architect's evaluation of the Work, the recommendation of the Construction Manager, and information provided as part of the Application for Payment or Project Application for Payment. The Architect's certification will constitute a representation that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated, that the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified.

§ 9.4.6 The representations made pursuant to Sections 9.4.4 and 9.4.5 are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Construction Manager or Architect.

§ 9.4.7 The issuance of a separate Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed the Contractor's construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and

other data requested by the Owner to substantiate the Contractor's right to payment or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Construction Manager or Architect may withhold a Certificate for Payment or Project Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager's or Architect's opinion the representations to the Owner required by Section 9.4.4 and 9.4.5 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1 and 9.4.3. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment or a Project Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment or Project Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from the acts and omissions described in Section 3.3.2 because of

- .1 defective Work not ~~remedied~~; remedied or the Contractor is in default of the performance of any of its obligations under the Contract Documents including but not limited to: failure to provide sufficient skilled workers, failure to provide scheduling information as provided in Section 3.10.1, failure to prepare the Construction Schedule as provided in Section 3.10.1, failure to conform to the Project Construction Schedule and/or failure to coordinate its Work with the work of other contractors;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a separate contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; ~~or~~
- .7 ~~repeated~~ failure to carry out the Work in accordance with the Contract Documents; Documents; or
- .8 the Contractor is in default of the performance of any of its obligations under another contract it has with the Owner.

§ 9.5.2 When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.3 If the Architect or Construction Manager withholds certification for payment under Section 9.5.1, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or material or equipment suppliers to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Construction Manager and both will reflect such payment on the next Certificate for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment or Project Certificate for Payment, the Owner shall ~~make payment in the manner and within the time provided in the Contract Documents,~~ issue payment to the Contractor within thirty (30) days from the date of its receipt of the certified Application for Payment from the Architect, and shall so notify the Construction Manager and Architect.

§ 9.6.2 The Contractor shall ~~pay each Subcontractor, no later than seven days promptly, within the time period required by Ohio law,~~ pay each Subcontractor, upon after receipt of payment from the Owner the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner. Neither the Contractor nor its Subcontractors shall withhold retainage from its Subcontractors or their sub-subcontractors beyond the retainage withheld by the Owner from the Contractor.

§ 9.6.3 The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner, Construction Manager and Architect on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. Neither the Owner, Construction Manager nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor except as may otherwise be required by law.

§ 9.6.5 Contractor payments to material and equipment suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors and suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust or shall entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.7 Failure of Payment

If the ~~Construction Manager and Architect do not issue a Certificate for Payment or a Project Certificate for Payment, through no fault of the Contractor, within fourteen days after the Construction Manager's receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents the amount certified by the Construction Manager and Architect or awarded by binding dispute resolution, the amount certified by the Architect within thirty (30) days after receipt of the certified Application of Payment from the Architect, or if Architect or Construction Manager has decertified a previously certified Certificate for Payment,~~ then the Contractor may, upon seven additional days' written notice to the Owner, Construction Manager and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Construction Manager, and the Contractor and Construction Manager shall jointly prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final ~~payment. payment together with all required documents neatly bound and indexed.~~ Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When a specific manufacturer's warranty is required by the Specifications, the Contractor shall state in writing to the Construction Manager and Architect that all the manufacturer's requirements for the issuance of the warranty has been completed and that the Work is ready for the Construction Manager's, Architect's and Owner's inspection. All manufacturer's warranties required for the Work shall commence as of the Date of Substantial Completion stated on the certificate issued by the Architect.

§ 9.8.3 Upon receipt of the ~~list, list and the documents required by Section 3.12.11,~~ the Architect, assisted by the Construction Manager, will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the list, which is

not sufficiently complete in accordance with the requirements of the Contract Documents so that the ~~Owner can occupy or utilize the Work or designated portion thereof for its intended use.~~ Work is Substantially Complete, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect, assisted by the Construction Manager, to determine Substantial Completion.

§ 9.8.3.1 Time for Completion of Items on List and Remedies. The Contractor shall complete all items on the list accompanying the Architect's Certificate of Substantial Completion within thirty (30) days of the Date of Substantial Completion shown in the Certificate. If the Contractor fails to do so, the Owner in its discretion may perform the Work by itself or others and the cost thereof shall be charged against the Contractor. The Contractor irrevocably designates the Owner as the Contractor's attorney-in-fact to execute a Change Order deducting such cost from the balance of the Contract Sum and also any additional costs or expenses incurred by the Owner arising out of or related to the failure of the Contractor to complete such items, including but not limited to attorneys', consultants' and Architect's fees. If the balance of the Contract Sum is insufficient, the Contractor will pay the Owner the balance on demand. The Contractor's warranties under the Contract Documents shall remain in full force and effect and cover any remedial work even if performed by others. If more than one inspection by the Construction Manager and / or Architect for purposes of evaluating corrected Work is required, the Contractor shall pay the additional costs and expenses incurred by the Owner as a result of more than one inspection by the Construction Manager and / or Architect, and the Owner may withhold from sums due or coming due the Contractor amounts to cover such additional costs and expenses.

§ 9.8.4 When the Architect, assisted by the Construction Manager, determines that the Work or designated portion thereof is substantially complete, the Construction Manager will prepare, and the Construction Manager and Architect shall execute a Certificate of Substantial Completion that shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and consistent with Section 9.8.3.1 shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 ~~The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of~~ Upon receipt of the Certificate of Substantial Completion from the Architect and consent of the Contractor's surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the ~~Contractor, Contractor and / or with the Architect's approval,~~ provided such occupancy or use is consented to by the insurer as required under Section 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. In the event of a disagreement about such responsibilities, correction period, or commencement of warranties, the Architect will resolve the disagreement, and the Architect's decision will be final and binding. When the Contractor considers a portion substantially complete, the Contractor and Construction Manager shall jointly prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect after consultation with the Construction ~~Manager.~~ Manager, which shall be final and binding.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Construction Manager, Contractor and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon completion of the Work, the Contractor shall forward to the Construction Manager a written notice that the Work is ready for final inspection and acceptance and shall also forward to the Construction Manager a final Contractor's Application for ~~Payment~~. Payment along with a properly completed Contractor's Payment Application Checklist, all the documentation required to be submitted with such Checklist, and any other supporting documentation required by the Contract Documents or by the Construction Manager or Architect. Upon receipt, the Construction Manager will evaluate the completion of Work of the Contractor and then forward the notice and Application, with the Construction Manager's recommendations, to the Architect who will promptly make such inspection. When the Architect, finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect will promptly issue a final Certificate for Payment or Project Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Construction Manager's and Architect's final Certificate for Payment or Project Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

§ 9.10.2.1 Unless otherwise provided in the Contract Documents, the final Application for Payment shall be itemized, and the Contractor shall ensure that the final Application for Payment transmitted to the Construction Manager also is accompanied by the following additional documents, if not previously delivered to the Construction Manager:

- .1 Evidence that all Completion/Punchlist List items have been completed;
- .2 Where applicable, keys and keying schedule;
- .3 The documents, including as-built set of Drawings and Specifications, referred to in Section 3.3.4 not otherwise required by the Contract Documents to be delivered earlier; and,
- .4 Other documents required by the Contract Documents.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from or related to:

- .1 liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents; or
- .3 terms of special warranties required by the Contract Documents; or
- .3 any claims, damages, losses or expenses for indemnification under Section 3.18.1.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the ~~Contract~~ Contract, including compliance with OSHA and other state and federal regulations applicable to the Work. The Contractor's safety program shall be written and a copy maintained at the Project site for inspection, upon request. Neither the Owner nor the Architect accept any responsibility or liability for the safety of the Contractor's employees or for enforcing the Contractor's safety program. Additionally, Contractor shall comply with the Owner's rules, regulations, and policies including, but not limited to, the Owner's safety, health, and infection control policies and programs. The Contractor shall submit the Contractor's safety program to the Construction Manager for review and coordination with the safety programs of other Contractors. The Construction Manager's responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take all reasonable precautions for safety and health of, and shall provide reasonable protection to prevent damage, injury or loss to

- .1 employees on the Work and other persons who may be affected ~~thereby~~ thereby, including the Owner's and Construction Manager's employees, employees of other contractors, their subcontractors, material suppliers, and persons on the site or adjoining property;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or ~~Sub-subcontractors~~ Sub-subcontractors and/or the Work of any other contractor and the materials and equipment to be incorporated in such Work;
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction; and
- .4 construction or operations by the Owner or other Contractors.

§ 10.2.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

§ 10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities. The Contractor shall be responsible, at the Contractor's sole cost and expense, for all Measures necessary to protect any property adjacent to the Project and improvements therein.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Contractor shall not bring any hazardous materials onto the Project site unless expressly required by the Contract Documents.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4

caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4, except damage or loss attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18. In the event of a dispute about who is responsible for damage and loss to such property, the issue shall be submitted to the Architect and the Architect's decision shall be final and binding on the respective parties. The Contractor irrevocably designates the Owner as its attorney-in-fact to execute a Change Order consistent with the Architect's decision.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner, Construction Manager and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

~~If either party the Contractor suffers injury or damage to person or property because of an act or omission of the other party, Owner, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter. the Owner is legally responsible, the Contractor shall submit a Statement of Claim Form for such injury or damage as required by Section 15.1.2.~~

§ 10.3 Hazardous Materials

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to, asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner, Construction Manager and Architect in writing.

§ 10.3.2 Upon receipt of the Contractor's written notice, the Owner shall obtain the services of a licensed laboratory to verify a presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, upon written request, the Owner shall furnish in writing to the Contractor, Construction Manager and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. ~~The Contractor, the Construction Manager and the Architect will promptly reply to the Owner in writing stating whether or not any of them has reasonable objection to the persons or entities proposed by the Owner. If the Contractor, Construction Manager or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor, the Construction Manager and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resumed upon written agreement of the Owner and Contractor. Work in the affected area shall be resumed immediately following the occurrence of any one of the following events: (i) the Owner causes remedial work to be performed that results in the hazardous substance being rendered harmless; or (ii) the Owner and the Contractor, by written agreement, decide to resume performance of the Work; or (iii) the Work may safely and lawfully proceed using appropriate protective measures, as determined by a competent person employed by the Owner. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shut-down, delay and start-up. The term "rendered harmless" shall be interpreted to mean that exposure levels of asbestos and polychlorinated biphenyl (PCB) are less than any applicable exposure standards set forth in OSHA regulations.~~

~~**§ 10.3.3** To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Construction Manager, Architect, their consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or~~

~~resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss or expense is due to the fault or negligence of the party seeking indemnity.~~

§ 10.3.4 The Owner shall not be responsible ~~under this Section 10.3~~ for materials or substances the Contractor brings to the site unless such materials or substances are expressly required by the Contract Documents. The Owner shall be responsible for materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 ~~The In addition to the Contractor's obligations in Section 3.18 and elsewhere in the Contract Documents, the Contractor shall indemnify the Owner for the cost and expense the Owner incurs (1) for remediation of a material or substance the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.~~

§ 10.3.6 ~~If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Contractor for all cost and expense thereby incurred.~~

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, without special instructions or authorization, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Liability Insurance

§ 11.1.1 The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations and completed operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- .3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- .4 Claims for damages insured by usual personal injury liability coverage;
- .5 Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- .6 Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle; and
- .7 Claims for bodily injury or property damage arising out of completed operations; and
- .8 Claims involving contractual liability insurance applicable to the Contractor's obligations under Section 3.18.

§ 11.1.2 The insurance required by Section 11.1.1 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment and, with respect

to the Contractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Contract Documents.

§ 11.1.2.1 The minimum limits of liability for the required policies shall be not less than the following, unless a greater amount is required by law:

- .1 Commercial General Liability ("CGL"): Bodily injury (including death and emotional distress) and property damage with limits of \$1,000,000 each occurrence and \$2,000,000 aggregate. CGL shall include: (i) Premises-Operations, (ii) Explosion and Collapse Hazard, (iii) Underground Hazard, (iv) Independent Contractors' Protective, (v) Broad Form Property Damage, including Completed Operations, (vi) Contractual Liability, (vii) Products and Completed Operations, (viii) Personal Injury with Employment Exclusion deleted, (ix) Stopgap liability with Ohio Intentional Tort endorsement for \$100,000 limit; and (x) per project aggregate endorsement.
- .2 Automobile Liability, covering all owned, non-owned, and hired vehicles used in connection with the Work; Bodily injury (including death and emotional distress) and property damage with a combined single limit of \$1,000,000 each accident.
- .3 Professional Liability: If the Contractor is responsible fire protection, security, electrical, plumbing, and mechanical work, which involves design of systems and installation into the Project, the Contractor must carry and maintain professional liability insurance in an amount of not less than \$1,000,000 per claim and \$1,000,000 annual aggregate. The Contractor shall maintain the professional liability policy for not less than five years after the earlier of the termination of the Contract or Final Acceptance of the Work.
- .4 Workers Compensation: statutory limits for Ohio.
- .5 Employers Liability: coverage with an each-accident limit of not less than \$1,000,000, a disease each-employee limit of not less than \$1,000,000, and a disease policy limit of not less than \$1,000,000.

§ 11.1.2.2 Such policies shall be supplemented by an umbrella policy in the amount of \$1,000,000 each occurrence and aggregate for contracts with a Contract Sum of \$250,000 or less, \$2,000,000 each occurrence and aggregate for contracts with a Contract Sum greater than \$250,000 but less than or equal to \$500,000, \$3,000,000 each occurrence and aggregate for contracts with a Contract Sum greater than \$500,000 but less than or equal to \$1,000,000; and \$5,000,000 each occurrence and aggregate for contracts with a Contract Sum greater than \$1,000,000.

§ 11.1.2.3 Insurance policies shall be written on an occurrence basis.

§ 11.1.2.4 Products and completed operations coverage shall commence with the certification of the final Certificate for Payment to the Contractor and extend for not less than two years beyond that date.

§ 11.1.2.5 The Contractor shall require all Subcontractors to provide Workers' Compensation, CGL, and Automobile Liability insurance with the same minimum limits specified herein, unless the Owner agrees to a lesser amount.

§ 11.1.2.6 All liability policies required in Section 11.1 shall include an additional insured endorsement naming the Owner, the Owner's Board members and employees, the Construction Manager and its employees and the Architect and its employees. The CGL additional insured endorsement shall be ISO 20 10 11 85 or its equivalent so that Completed Operations liability extends to the additional insureds.

§ 11.1.2.7 All liability policies required in Section 11.1 shall be primary and non-contributory.

§ 11.1.3 Certificates of insurance acceptable to the Owner shall be submitted to the Construction Manager for transmittal to the Owner with a copy to the Architect prior to commencement of the Work and thereafter upon renewal or replacement of each required policy of insurance. These certificates and the insurance policies required by this Section 11.1 shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner. An additional certificate evidencing

continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section 11.1.2. Information concerning reduction of coverage shall be furnished by the Contractor with reasonable promptness.

§ 11.1.4 The Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) the Construction Manager, the Construction Manager's consultants, the Owner, the Architect, and the Architect's consultants as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations.

§ 11.1.5 If the Contractor fails to purchase and maintain, or require to be purchased and maintained, any insurance required under Section 11.1, the Owner may but shall not be obligated to, upon five (5) days written notice to the Contractor, purchase such insurance on behalf of the Contractor and shall be entitled to be reimbursed by the Contractor upon demand.

§ 11.1.6 When any required insurance, due to the attainment of a normal expiration date or renewal date, shall expire, the Contractor shall supply the Owner with Certificates of Insurance and amendatory riders or endorsements that clearly evidence the continuation of all coverage in the same manner, limits of protection, and scope of coverage as was provided by the previous policy. In the event any renewal or replacement policy, for whatever reason obtained or required, is written by a carrier other than that with whom the coverage was previously placed, or the subsequent policy differs in any way from the previous policy, the Contractor shall also furnish the Owner with a certified copy of the renewal or replacement policy unless the Owner provides the Contractor with prior written consent to submit only a Certificate of Insurance for such policy. All renewal and replacement policies shall be in form and substance satisfactory to the Owner and written by carriers acceptable to the Owner.

§ 11.1.7 Any aggregate limit under the Contractor's liability insurance shall, by endorsement, apply to the Project separately.

§ 11.1.8 The Contractor shall cause each of its Subcontractors to (i) procure insurance reasonably satisfactory to the Owner and (ii) name the Owner, Construction Manager and Architect, and any of their employees and agents, as additional insureds under the Subcontractor's CGL policy. The additional insured endorsement included on the Subcontractor's CGL policy shall state that coverage is afforded the additional insureds with respect to claims arising out of operations performed by or on behalf of the Contractor. If the additional insureds have other insurance that is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the insurer's liability under this insurance policy shall not be reduced by the existence of such other insurance.

§ 11.2 Owner's Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance.

§ 11.3 Property Insurance

§ 11.3.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk "all risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.3 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project.

§ 11.3.1.1 Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for the Architect's, Contractor's, and

Construction Manager's services and expenses required as a result of such insured loss. Property insurance provided by the Owner shall not cover any tools, apparatus, machinery, scaffolding, hoists, forms, staging, shoring, and other similar items commonly referred to as construction equipment that may be on the site and the capital value of which is not included in the Work, nor shall such insurance cover any materials or equipment before these materials and equipment are physically incorporated into the Work. The Contractor shall make its own arrangements for any insurance it may require on such construction equipment and materials and equipment. Any policy obtained by the Contractor under this Section 11.3 and related sections shall include a waiver of subrogation in accordance with the requirements of Section 11.3.7. If the Work is located in a Special Flood Hazard Area, as defined by the Federal Emergency Management Agency, the Owner shall provide an endorsement to the property insurance policy that provides coverage for physical loss or damage caused by flood.

§ 11.3.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance that will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor in writing, then the Owner shall bear all reasonable costs properly attributable thereto.

§ 11.3.1.3 If the property insurance requires deductibles, the Owner shall pay costs not covered because of such deductibles. Notwithstanding the foregoing, if the cause of any loss payment under such insurance is the fault of the Contractor, then the Contractor shall pay such deductible.

§ 11.3.1.4 This property insurance shall cover portions of the Work stored off the site, and also portions of the Work in transit.

§ 11.3.1.5 Partial occupancy or use in accordance with Section 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

§ 11.3.1.6 Damages to Other Property. The maintaining of such insurance as outlined in Section 11.1 shall in no way constitute a waiver of the Contractor's legal liability for damage to any adjoining buildings or existing buildings or their contents or the Work and property of others on the site beyond the limits of insurance thus maintained. The Contractor shall hold the Owner free and harmless from any injury and damage resulting from the negligent or faulty performance of the Contract by the Contractor or its Subcontractors or others under its control or direction.

§ 11.3.2 **Boiler and Machinery Insurance.** The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Construction Manager, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

§ 11.3.3 **Loss of Use Insurance.** The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Contractor for loss of use of the Owner's property, including consequential losses due to fire or other hazards however caused.

§ 11.3.4 If the Contractor requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.

§ 11.3.5 If during the Project construction period the Owner insures properties, real or personal or both, adjoining or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of

Section 11.3.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

§ 11.3.6 ~~Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Section 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days' prior written notice has been given to the Contractor.~~ The Owner shall maintain copies of the policies of insurance it is required to purchase and maintain hereunder at its offices and shall permit the Construction Manager, Architect or the Contractor to inspect the policies during normal business hours and upon reasonable advance written notice.

§ 11.3.7 Waivers of Subrogation. The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees each of the other, and (2) the Construction Manager, Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent ~~covered by~~ of actual recovery of any insurance proceeds under any property insurance obtained pursuant to this Section 11.3 or other property insurance applicable to the Work, except such rights as the Owner and Contractor may have to the proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Construction Manager, Construction Manager's consultants, Architect, Architect's consultants, Owner's separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

§ 11.3.8 A loss insured under the Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

§ 11.3.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or as determined in accordance with the method of binding dispute resolution selected in the Agreement between the Owner and Contractor. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall be performed by the Contractor after notification of a Change in the Work in accordance with Article 7.

§ 11.3.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power; if such objection is made, the dispute shall be resolved in the manner selected by the Owner and Contractor as the method of binding dispute resolution in the Agreement. If the Owner and Contractor have selected arbitration as the method of binding dispute resolution, the Owner as fiduciary shall make settlement with insurers or distribution of insurance proceeds in accordance with the direction of the arbitrators.

§ 11.4 Performance Bond and Payment Bond

§ 11.4.1 ~~The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.~~ Contractor shall provide a contract bond to guaranty payment and performance of the Work, in the form provided in Ohio Revised Code Section 153.57 and as otherwise described in the Contract Documents.

§ 11.4.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.4.3 MATERIAL DEFAULT OR TERMINATION. If the Owner notifies the Contractor's surety that the Contractor is in material default or terminates the Contract, the surety will promptly and in not less than 21 days investigate the claimed material default or termination. If the Owner gives a notice of material default and then terminates the Contract, the surety shall complete its investigation within 21 days of the notice of material default. As part of such investigation, the surety shall visit the offices of the Contractor, Construction Manager, Architect and Owner to review the available project records. If the surety proposes to take over the Work, the surety shall do so no later than the expiration of such 21 day period or 10 days after the date the Owner terminates the Contract, whichever is later. If the Owner terminates the Work, and the surety proposes to provide a replacement contractor, the replacement contractor shall be fully capable of performing the Work in accordance with the Contract Documents, including meeting all the requirements of the Contract Documents. If the Contractor is terminated, the replacement contractor shall not be the Contractor. The surety will provide the Owner with the results of its investigation, including any written report or documents. This Section 11.4.3 is in addition to the Owner's rights under Section 14.2.2 and is not intended to create any rights of the surety, including but not limited to the right to takeover the Contractor's obligations.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Construction Manager's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by either, be uncovered for their observation and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered which the Construction Manager or Architect has not specifically requested to observe prior to its being covered, the Construction Manager or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or one of the other Contractors in which event the Owner shall be responsible for payment of such costs.

§ 12.2 Correction of Work

§ 12.2.1 Before or After Substantial Completion

~~The In addition to the rights and remedies under Section 2.4, the Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.~~

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly and in not less than 30 days after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. ~~During the one year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period 30 days~~ after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4.

§ 12.2.2.2 The one-year period shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors or other Multiple Prime Contractors caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made. Any such acceptance shall be in writing and executed by a representative of the Owner who has been expressly authorized to do so.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located ~~except that, if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern~~ Section 15.4. located.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

§ 13.3 Written Notice

Written notice shall be deemed to have been duly served if delivered in person to the individual, to a member of the firm or entity or to an officer of the corporation for which it was intended; or if delivered at or sent by registered mail, over night delivery, or certified mail or by courier service providing proof of delivery to, the last business address known to the party giving notice.

§ 13.4 Rights and Remedies

§ 13.4.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

§ 13.4.2 No action or failure to act by the Owner, Construction Manager, Architect or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

§ 13.5 Tests and Inspections

§ 13.5.1 Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. The Owner shall bear costs of (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating their cost to the Contractor.

§ 13.5.2 If the Construction Manager, Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Section 13.5.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs except as provided in Section 13.5.3, shall be at the Owner's expense.

§ 13.5.3 If such procedures for testing, inspection or approval under Sections 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses shall be at the Contractor's expense.

§ 13.5.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Construction Manager for transmittal to the Architect.

§ 13.5.5 If the Construction Manager or Architect is to observe tests, inspections or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.5.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.6 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

§ 13.7 Time Limits on Claims

~~The Owner and the Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in the Agreement within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and the Contractor waive all claims and causes of action not commenced in accordance with this Section 13.7. As between the Owner and Contractor the statute of limitations shall commence as provided in current Ohio law.~~

§ 13.8 ATTORNEY-CLIENT CONFIDENTIAL AND PRIVILEGED COMMUNICATIONS

§ 13.8.1 The Contractor acknowledges and agrees that the Owner's legal counsel may from time to time provide legal services to the Project and that in doing so may communicate with the Construction Manager and/or Architect. The Contractor agrees that such communications will be privileged communications and, if there is a Claim contemplated or pending, any written communications will be confidential work product.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency that requires all Work to be stopped;
- ~~or~~
- .3 Because the Construction Manager has not certified or the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; ~~or~~
- ~~.4 The Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Section 2.2.1, Documents.~~

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in Section 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' written notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner payment for Work executed including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' written notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents, including but not limited to failure to maintain the Construction Schedule or failure to correct defective and/or non-conforming Work.

§ 14.2.2 When any of the above reasons exist, the Owner, ~~after consultation with the Construction Manager, and upon certification by the Initial Decision Maker that sufficient cause exists to justify such action,~~ may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may, subject to any prior rights of ~~the surety; the~~ surety, as expressly stated in the applicable surety bond:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

As set forth in this section, the Owner's termination of the Contractor is without prejudice to any other rights and remedies of the Owner, including but not limited to the Owner's rights and remedies under the Contract Documents and at law, all of which shall survive termination.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, and other costs or damages incurred by the Owner and not expressly waived, including but not limited to the Owners' attorneys' and consultants' fees and expenses, arising out of or related to the termination, such excess shall be paid to the Contractor. If such ~~costs~~ costs, other costs, and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall, upon application, be certified by the Initial Decision Maker after consultation with the Construction Manager, and this obligation for payment shall survive termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and the Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

- .1 that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of this Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such ~~termination, along with reasonable overhead and profit on the Work not executed.~~ termination.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 **Definition.** A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The Contractor's Claims must be initiated by submitting the Statement of Claim Form ("Claim Form") included with the Contract Documents to the Architect and the Owner, properly completed in accordance with the instructions accompanying the Claim Form and submitted within the 21 day period under Section 15.1.2. The responsibility to substantiate Claims shall rest with the party making the Claim. The Contractor shall not knowingly present or cause to be presented to the Owner a false or fraudulent Claim. Knowingly shall have the same meaning as in Section 3729(b) USC of the Federal False Claims Act. If the Contractor knowingly presents or causes to be presented a false or fraudulent Claim, then the Contractor shall be liable to the Owner for the same civil penalty and damages as the United States Government would be entitled to recover under such Section 3729(a) USC and shall also indemnify and hold the Owner harmless

from all costs and expenses, including Owner's attorneys' and consultants' fees and expenses incurred in investigating and defending against such Claim and in pursuing the collection of such penalty, damages and fees and expenses.

The Contractor acknowledges and agrees that the Owner and/or parties in privity of contract with the Owner may delay, interfere with and/or disrupt the Work of the Contractor, and such actions shall not constitute a breach of contract by the Owner, since the Contractor is entitled to additional compensation by properly submitting and pursuing a Claim as permitted by these General Conditions. Pending final resolution of the Claim, the Contractor shall continue performance of the Work as provided in Section 15.1.3.

The responsibility to substantiate Claims shall rest with the party making the Claim.

§ 15.1.2 Notice of Claims. Claims by either the Owner or Contractor must be initiated by written notice to the other party and to the Initial Decision Maker with a copy sent to the Construction Manager and Architect, if the Construction Manager and or Architect is not serving as the Initial Decision Maker. ~~Claims by either party must be initiated within~~ The Contractor shall submit all Claims as soon as possible and not later than 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Claim by the submission to the Initial Decision Maker and the Owner of a properly completed Claim Form. The Contractor has a right to bring Claims. The Contractor must give notice of its Claims within such twenty-one (21) day period. Such twenty-one (21) day period is a contractual limitation of action. Such contractual limitation of action is a material term of the Contract Documents as its provides the Owner with timely notice and information so that the Owner can attempt to mitigate any damages, exercise remedies available to it, and investigate the Claim during a near contemporaneous time period. Failure of the Contractor to timely submit a Claim as stated herein shall constitute an irrevocable waiver of the Contractor's right to seek an adjustment to the Contract Time or Contract Sum for the related change in the Work.

§ 15.1.3 Continuing Contract Performance. Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The Construction Manager will prepare Change Orders and the Architect will issue a Certificate for Payment or Project Certificate for Payment in accordance with the decisions of the Initial Decision Maker.

§ 15.1.4 Claims for Additional Cost. If the Contractor wishes to make a Claim for an increase in the Contract Sum, ~~written notice as provided herein shall be given before proceeding to execute the Work, the Contractor shall submit the~~ Claim Form as required by Section 15.1.2. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.3.

§ 15.1.5 Claims for Additional Time

§ 15.1.5.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, ~~written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.~~ the Contractor shall submit a Claim Form as required by Section 15.1.2.

§ 15.1.5.2 ~~If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction, the Contractor is prevented from completing any part of the Work within the Contract Time due to weather conditions and the Contractor wants additional time to complete the Work, the Contractor shall initiate a Claim by submission of the Claim Form in accordance with Section 15.1.2. The Contractor's entitlement to additional time shall be evaluated and substantiated as provided in Section 15.1.5.2.1.~~

§15.1.5.2.1 Weather Delays. When the Contractor is prevented from completing any part of the Work on the critical path within the Contract Time due to weather conditions, provided the Contractor properly initiates a Claim, the Contract Time will be extended by one (1) day for each work day lost due to weather that delays Work on the critical path in excess of those in the following table:

<u>Month</u>	<u>Number of Workdays Lost Due To Weather</u>
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<u>January</u>	<u>8</u>
<u>February</u>	<u>8</u>
<u>March</u>	<u>7</u>
<u>April</u>	<u>6</u>
<u>May</u>	<u>5</u>
<u>June</u>	<u>4</u>
<u>July</u>	<u>4</u>
<u>August</u>	<u>4</u>
<u>September</u>	<u>5</u>
<u>October</u>	<u>6</u>
<u>November</u>	<u>6</u>
<u>December</u>	<u>6</u>

A work day will be lost due to weather only when weather conditions reduce production by more than 50 percent on Work on the critical path. Production shall be measured by hours worked. The Contractor shall have the burden of establishing that weather conditions reduced production by more than 50 per cent on Work on the critical path.

§ 15.1.5.3 Excusable and Compensable Delays. The delays for which the Contractor is entitled to additional time are "Excusable Delays." The only Excusable Delays are delays which the Contractor establishes were: (a) caused by the Owner or those in privity of contract with the Owner, (b) physical damage to the Project over which the Contractor has no control, (c) labor disputes beyond the control of the Contractor, (d) work days lost due to weather conditions as provided under Section 15.1.5.2, and (e) concealed or unknown conditions under Section 3.7.4.

The delays for which the Contractor is entitled to additional time and money are "Compensable Delays." The only Compensable Delays are the following Excusable Delays which the Contractor establishes were: (a) caused by the Owner or those in privity of contract with the Owner, (b) physical damage to the Project over which the Contractor has no control, and/or (c) concealed or unknown conditions under Section 3.7.4.

§ 15.1.6 Claims for Consequential Damages. The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.6 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.1.7 Settlement Offers. If the Contractor initiates a Claim, the Owner may make settlement offers to settle the Claim at any time up to the date of the trial. Such settlement offers shall be subject to Rule 408 (Compromise and Offers of Compromise) of the Ohio Rules of Evidence. If at any stage of the litigation, including any appeals, the Contractor's Claim is dismissed or found to be without merit, or if the damages awarded to the Contractor on its Claim do not exceed the Owner's last settlement offer, the Contractor shall be liable to the Owner and shall reimburse the Owner for all of the Owner's attorneys' fees and expenses, arising out of or related to such Claim since the date of such last settlement offer.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those arising under Sections 10.3, 10.4, 11.3.9, and 11.3.10, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to ~~mediation~~ any further proceeding permitted under these General Conditions of any Claim arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Initial Decision Maker with no decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ~~ten~~ thirty (30) days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§15.2.2.1 Owner's Request for Documents. The Owner may request such documents and information from the Contractor as the Owner determines necessary to evaluate and comment upon the Claim. Upon receipt of such request from the Owner, the Contractor shall provide all requested documents and information within ten (10) days. Such documents and information may include but not be limited to the Contractor's Project accounting records, estimate for the Project, daily job logs, and other information from which the Contractor's Project costs may be derived. The Contractor shall provide the requested documents in the formats requested, which include both paper and electronic copies. If requested by the Owner, the electronic copies shall be provided in native computer language. To the extent permitted by law, the Owner shall keep the Project accounting records and estimate for the Project confidential. The Contractor's provision of the requested documents to the Owner in the format requested by the Owner shall be a condition precedent to any further proceeding under the Contract Documents.

Failure to provide the requested documents shall be a material breach of the Contract, and Contractor shall indemnify Owner for all of Owner's costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to Contractor's failure to comply with this provision. If the Contractor fails to provide the requested documents, the Contractor shall be precluded from presenting such documents in any subsequent dispute resolution proceedings, if the data was reasonably available at the time of the request.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part. If the Initial Decision Maker requests supporting data from a party and the party fails to provide it, the party thereafter shall be precluded from presenting such data in any subsequent dispute resolution proceedings, if the data was reasonably available to it at the time of the request.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect and Construction Manager, if the Architect or Construction Manager is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, ~~if the parties fail to resolve their dispute through mediation, to binding dispute resolution.~~ mediation is not successful in resolving the matter, litigation. Any suit, which may be brought to enforce any provision of this Agreement or any remedy with respect hereto, shall be brought in the court of proper jurisdiction in Franklin County, Ohio, and each party hereby expressly consents to the jurisdiction of such court. The parties expressly waive the right to remove any litigation arising out of this Agreement to federal court.

§ 15.2.6 ~~Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.~~ When a written decision of the Initial Decision Maker states that (1) the decision is final but subject to mediation and litigation and (2) the litigation is not initiated within 30 days from the date of an initial decision, then failure to initiate litigation within said 30-day period shall result in the Initial Decision Maker's decision becoming final and binding upon the Owner and Contractor. If the Initial Decision Maker renders a decision after litigation has been initiated,

such decision may be entered as evidence, but shall not supersede the litigation proceedings unless the decision is acceptable to all parties concerned.

~~§ 15.2.6.1 Either party may, within 30 days from the date of an initial decision, demand in writing that the other party file for mediation within 60 days of the initial decision. If such a demand is made and the party receiving the demand fails to file for mediation within the time required, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.~~

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.6 ~~shall~~ shall, after initial decision by the Initial Decision Maker or 30 days after submission of the Claim to the Initial Decision Maker, be subject to mediation as a condition precedent to ~~binding dispute resolution, litigation.~~

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the ~~filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.~~ institution of a lawsuit.

§ 15.3.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the ~~place~~ place ~~county~~ where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration – The title of this Section is changed to "DISPUTE RESOLUTION."

§ 15.4.1 ~~If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any~~ Any ~~Claim arising out of or related to the Contract, except Claims that are not otherwise disposed of under the Contract Documents, shall, after decision by the Initial Decision Maker or 30 days after submission of the Claim to the Initial Decision Maker, be subject to mediation and then litigation unless the parties agree in writing to arbitrate the Claims. Prior to litigation, the parties shall endeavor to resolve disputes by mediation in accordance with the provisions of Section 15.3. Any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded, may be decided by arbitration if the parties mutually agree in writing. There shall be no mandatory arbitration of Claims.~~

[All of the remaining sections under Section 15.4 are deleted.]

~~§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a~~

written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

~~§ 15.4.2~~ The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

~~§ 15.4.3~~ The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

~~§ 15.4.4 Consolidation or Joinder~~

~~§ 15.4.4.1~~ Either party, at its sole discretion, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

~~§ 15.4.4.2~~ Either party, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

~~§ 15.4.4.3~~ The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as the Owner and Contractor under this Agreement.

Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, _____, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with this certification at 17:18:07 on 04/02/2013 under Order No. 1614339844_1 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A232™ – 2009, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, as published by the AIA in its software, other than changes shown in the attached final document by underscoring added text and striking over deleted text.

(Signed)

(Title)

(Dated)

STATEMENT OF CLAIM FORM

Claim No. ____ for Contractor*

1. Name of Contractor: _____.
2. Date written claim given: _____.
3. Contractor's representative to contact regarding the claim:
Name: _____ Title: _____
Telephone No. _____ (office) FAX No. _____
E-mail: _____
4. General description of claim:

5. Contract Documents. If the claim is based upon any part or provision in the Contract Documents, including but not limited to pages in the Drawings and/or paragraphs in the Specifications, Owner-Contractor Agreement, General Conditions or Supplementary General Conditions, state upon which parts or provisions the claim is based:

6. Delay claims:
 - 6.1 Date delay commenced: _____
 - 6.2 Duration or expected duration of the delay, if known: _____
 - 6.3 Apparent cause of the delay and part of critical path affected:

 - 6.4 Expected impact of the delay and recommendations for minimizing such impact:

7. Additional compensation. Set forth in detail all additional compensation to which the Contractor believes it is entitled with respect to this claim:

8. Truth of Claim. By submitting this claim, the Contractor and its representative certify that after conscientious and thorough review and to the best of his or her knowledge and belief a) the information in this State of Claim is accurate, b) the Contractor is entitled to recover the compensation in paragraph 7, and c) the Contractor has not knowingly presented a false or fraudulent claim. The Contractor by its authorized representative must acknowledge this Statement of Claim before a notary public.

CONTRACTOR: _____

By: _____

Name and Title: _____

Date: _____

CONTRACTOR'S ACKNOWLEDGMENT

State of _____,
County of _____, ss:

_____ first being sworn, states that after conscientious and thorough review the statements made in attached Statement of Claim Form are true to the best of his or her knowledge and belief.

Sworn to before me a notary public by _____ on _____, 20____.

Notary Public

WHEN COMPLETED, FORWARD A COPY OF THIS NOTICE AND STATEMENT OF CLAIM FORM TO THE OWNER AND ARCHITECT AS DESCRIBED IN THE INSTRUCTIONS FOR COMPLETING THE NOTICE AND STATEMENT OF CLAIM FORM.

INSTRUCTIONS FOR COMPLETING THE STATEMENT OF CLAIM FORM

1. Completing the Statement of Claim Form ("Claim Form") is a material term of the Contract. The Claim Form tells the Owner and Architect that the Contractor is making a Claim and that they need to act promptly to mitigate the effects of the occurrence giving rise to the Claim. The Claim Form also provides them with information so that they can mitigate such effects. The Contractor acknowledges that constructive knowledge of the conditions giving rise to the Claim through job meetings, correspondence, site observations, etc. is inadequate notice, because knowledge of these conditions does not tell the Owner and Architect that the Contractor will be making a Claim and most often is incomplete.
2. The Contractor must provide preliminary information in all blanks in the Claim Form, except for paragraph 7, within the ten (10) day period required by the Contract Documents. After providing the preliminary information, the Contractor must supplement the Claim Form with complete and detailed information within thirty (30) days of submitting the Claim Form. If the space provided in the Claim Form is insufficient, the Contractor, as necessary to provide complete and detailed information, must attach pages with the required information to the Claim Form.
3. Paragraph 4. The Contractor must state what it wants, *i.e.*, time and/or compensation, and the reason why it is entitled to time and/or compensation.
4. Paragraph 5. The Contractor must identify the exact provisions of the Contract Documents it is relying on in making its Claim. For example, if the Claim is for a change in the scope of the Contractor's Work, the Contractor must identify the specific provisions of the Specifications, and the Plan sheets and details that provide the basis for the scope change.
5. Paragraph 6. This paragraph applies to delay claims, including delays that the Contractor believes result in constructive acceleration. The Contractor must identify the cause of the delay, party or parties responsible, and what the party did or did not do that caused the delay, *i.e.*, specific work activities. The Contractor acknowledges that general statements are not sufficient, and do not provide the Owner with sufficient information to exercise the remedies available to the Owner or to mitigate the effects of the delay.

For example, if the Contractor claims a slow response time on submittals caused a delay, the Contractor must identify the specific submittals, all relevant dates, and then show on the applicable schedule, by circling or highlighting, the activities immediately affected by the delays. Also for example, if the Contractor claims it was delayed by another Contractor, the Contractor must identify the delaying Contractor, specifically what the delaying Contractor did or did not do that caused the delay, and then show on the applicable schedule, by circling or highlighting, the activities immediately affected by the delays. Further by example, if the Contractor seeks an extension of time for unusually severe weather, the Contractor must submit comparative weather data along with a record of the actual weather at the job site and job site conditions.

6. Paragraph 6.4. Time is of the essence under the Contract Documents. If there is a delay, it is important to know what can be done to minimize the impact of the delay. It therefore is important that the Contractor provide specific recommendations on how to do so.
7. Paragraph 7. The Contractor must provide a specific and detailed breakdown of the additional compensation it seeks to recover. For future compensation, the Contractor shall provide its best estimate of such compensation.
8. Paragraph 8 and Acknowledgment. In completing the Claim Form, the Contractor and its representative certify that after conscientious and thorough review and to the best of its knowledge and belief (a) the information in this Claim Form is accurate, (b) the Contractor is entitled to recover the compensation in Paragraph 7, and (c) the Contractor has not knowingly presented a false or fraudulent claim. The Contractor by its authorized representative must acknowledge this Statement of Claim before a notary public at the time of the preliminary submission and also when making the supplemental submission.

End of Instructions

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

WELCOME LETTER

Dear Subcontractor or Supplier:

The project information and procedures contained in this manual are to serve as a guide in routing of correspondence, submittals, requests for information, pay applications, and change orders. Also included is pertinent information regarding special aspects of this project, which may affect your portion of the work.

The information contained herein is considered to be an attachment to your Contract, Subcontract, and/or Purchase Order, where this manual is in conflict with the specifications or drawings, the specifications or drawings take precedence.

We are excited to potentially have your firm as part of the construction team, and we look forward to a mutually successful project.

Sincerely,

Turner Construction

**Litany Zenz
Project Manager**

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

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ADDITIONAL SUBCONTRACTOR REQUIREMENTS

I have read the 007300 Additional Subcontractor Requirements and will adhere to them.

SUBCONTRACTOR ACKNOWLEDGEMENT

Acknowledged by:

Company Name: _____

Contact Person: _____

Date: _____

Note: **This form must be completed and returned to CM Manager prior to start up of any work at the construction site. CM reserves the right to retain partial or full payment until this requirement has been fulfilled.**

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

TERMS AND CONDITIONS

1. The terms and conditions of the Subcontract are not subject to negotiation or modification. Any proposal that is submitted with qualifications may be rejected at the sole discretion of Turner. The Subcontractor is required to execute the Subcontract in these bid documents without alteration or modification.

PERFORMANCE AND LABOR BONDING

1. Should a performance and payment bond be needed after bids are received, items 2 and 3 below would apply. You will be contacted by the CM's procurement department if these are required.
2. The Subcontractor shall provide performance and payment bonds, utilizing Turner Performance and Labor & Material Payment Bond Forms. These forms shall be used without change of wording.
3. The Performance and Labor & Material Payment Bonds must be signed by an Authorized Agent of an acceptable Surety Bonding Company and by the Bidder, and be accompanied by a notarized Power of Attorney. The bond must be issued by a surety company authorized by the Ohio Department of Insurance to transact business in the State of Ohio. It is essential that a surety company, which can adequately demonstrate a record of competent underwriting, efficient management, adequate reserves and soundness of investments, issue the bond.

EXAMINATION OF THE DOCUMENTS

1. Each Bidder shall examine all Bid Documents, including, but not limited to, Drawings, Specifications, General and Supplemental Conditions, Scope of Work, Project Schedules, Notice to Bidders, Instructions to Bidders, Form of Subcontract, Addenda, etc. for all other divisions of the Work as well as its own, noting particularly all requirements which will affect its Work in any way. These Bid Documents shall become the Contract Documents, as defined in the Subcontract that govern the relationship between the successful Bidder and Turner when the Subcontract is executed. Failure of a Bidder to become fully acquainted with the amount and nature of Work required to complete its division of the Work in conformity with all requirements for the project as a whole will not be considered subsequently as a basis for extra compensation.
2. Should any requirements in the Plans and/or Specifications for the project, as a whole, appear to a Bidder to be in disagreement with those for the part of the Work on which the bidder proposes to bid or in the case of a discrepancy in the Plans and Specifications, a Request For Interpretation (RFI), in writing, should be addressed to Turner at least five (5) calendar days prior to the bid due date. Turner and the Architect will reply to all such inquiries through an Information Letter and, if necessary, an Addendum. Turner will forward copy of same to all individuals holding Plans and Specifications.
3. If, in examining the Contract Documents, the Bidder discovers an apparent violation of the applicable Building Code, or other applicable statute or regulation, he shall report such apparent violation to Turner promptly. However, this provision shall not be construed as imposing responsibility on the Subcontractor to insure

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

conformity of the Plans and Specifications to the applicable Building Code and other applicable regulations.

4. No allowance will be made subsequently for any omission, error, or negligence of the Bidder.
5. Each bidder assumes responsibility to cross-reference the indices in the Specifications and the Scope of Work to confirm the completeness of the documents received including all addenda information.
6. Bidders are responsible to identify and notify Turner in writing at least five (5) days prior to the date for receipt of bids if there are any inconsistencies in the design requirements that would preclude the Subcontractor from achieving the intent of the design. If these inconsistencies are not brought to Turner's attention until after receipt of bids and/or award of contracts, the Architect shall have sole discretion to make modifications of specifications and drawings as necessary to achieve the design intent. The bidder shall be responsible for any additional costs associated with this supplemental information.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

CONSTRUCTION MANAGER LEAD CONTACTS

Individual	Description	Mobile	Email	Location
Dave Brown Project Executive	Overall project management and Oversight	513.535.1280	dbrown@tcco.com	Varies
Litany Zenz Project Manager	Tactical Day-day Operations, Including Procurement, Phasing, Submittals, RFI's, Drawings, Pay Applications, Change Orders, Insurance.	614-374-0986	lzenz@tcco.com	Varies
Tyler Pica Jobsite Superintendent	All Scheduling Issues, Safety reports, Safety related orientations, All Safety Related Items, Quality Control, Preparatory, Initial, Final Follow-Up Inspections/Meetings, and All Field-Coordination Issues.	(614) 256.3551	tpica@tcco.com	Jobsite
Lexie Perrine Project Engineer	On-site coordinator of submittals, RFI's, drawings, and design related meetings.	614-301-8386	lperrine@tcco.com	Jobsite
Andy Beitel Procurement Manager	Main Bidding Contact and Contract Discussions	614-813-0174	abeitel@tcco.com	Office

Jobsite Address	Main Office Address
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ADDITIONAL SUBCONTRACTOR REQUIREMENTS

1402 Brice Rd Reynoldsburg, OH 43068	Turner Construction«Company_Name» 262 Hanover St. Columbus, OH 43215 614.984.3000 – Phone
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ADDITIONAL SUBCONTRACTOR REQUIREMENTS

SUBCONTRACTOR PAYMENTS/ACCOUNTING

After determination of the lowest responsible bid, Turner shall issue an approval letter to the Owner. After approval by the Owner, the successful Bidder shall be notified by Turner and will receive a copy of the Subcontract Agreement for execution.

The following items shall be completed and sent to our Main Office prior to the start of work and prior to your request for payment.

1. Within seven (7) days of receipt of the Subcontract Agreement, the successful Bidder will submit the following to CM:
 1. Executed Subcontract
 2. Performance Bond and Labor & Material Payment Bond (if required)
 1. Including Certificate of Compliance issued by the Department of Insurance, showing the Bonding Company is licensed to do business in the State of Ohio.
 2. Including a Financial Statement of the Bonding Company
 3. Certificate of Insurance on the approved form.
 4. Workers' Compensation Certificate.
 5. An executed form W-9 (Request for Taxpayer Identification Number and Certification).
 6. An executed Safety Sign-off sheet for the Jobsite Safety and Fire Prevention Program, including supporting documentation of an OSHA 30hr registered supervisor.
2. Within thirty (30) days of receipt of the Subcontract Agreement, the successful Bidder will submit the following to CM:
 1. Schedule Of Values - The breakdown of Labor and Material for the Project, including the sum thereof. The initial SOV shall contain the following General Items regardless of trade package:
 1. Mobilization
 2. Demobilization
 3. Shop Drawings
 4. Daily Clean-up (3% of Contract Value)
 5. Safety (3% of Contract Value)
 6. Contract Closeout (2% of Contract Value)
 7. Contract Deliverables (2% of Contract Value)
 8. A properly calculated individual line item for Sales and Use Tax for each line item of the SOV subject to Sales/Use tax per state law.
 9. Change Order Administration
 10. Allowances - Itemized
 11. Changes – Itemized

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

2. A list of materials that Subcontractor intends to bill as “stored materials” at a point throughout the project. The list may be modified prior to approval by the Owner and Turner. Materials not on this list will not be considered during the project.
3. Subcontractor’s submittal items list that identifies all required shop drawings, submittal items, and samples. Include anticipated submittal dates and lead times. This submittal items list will be the 1st submittal and will be sent to the A/E for their review.
4. Subcontractor’s schedule showing, at a minimum, detailed work operations, sequences and durations. Cost and resource loading is required and will be used as a basis of the payment applications.
5. Subcontractor’s Quality Control Plan.
6. Subcontractor’s Safety Program, including the executed Subcontractor Agreement & Signature page from the Project Safety Program (007319).

If the Subcontractor fails to provide any of these contract deliverable documents, the Subcontractor remains solely responsible to meet all schedule requirements regardless of the date of the formal execution of the Subcontract. Failure of the Subcontractor to provide these documents may result in rejection of bid.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

3. Subcontractor payment requests will be submitted only after the monthly schedule meeting where the progress of work is recorded and agreed upon. Each SOV line item shall have a corresponding schedule activity on the Project Schedule. The % complete obtained during the schedule update will serve as the basis of the % complete on each line item of the payment application.
4. Subcontractor payment requests shall be completed on Subcontractor's Application for Payment through Textura, (see section 006276.01) no later than the dates indicated on the approved payment application process schedule (to be issued to successful Subcontractors). The following information shall accompany your pay request:
 - a. Pay request form properly filled out, signed, and notarized.
 - b. Approved Schedule of Values noting a description of the work, percentage complete this period, materials stored, certified payroll, etc.
 - c. Consent of Surety for Payment (if required).
 - d. Waiver of lien and claim for the covered pay period properly signed and notarized.
5. No payment for materials stored off site will be made without an executed change order and prior approval by CM and The Owner.

Payments can only be made for limited material stored on site pending approval by CM and the Owner. Additionally, if the schedule requires materials be fabricated and stored off site, payments for off-site stored material may be allowed with the prior approval of the Owner and CM. Any material stored off-site, must be properly protected and secured from damage or theft per the conditions of CM's stored materials. To apply for payment of stored materials off-site, the following documentation is required:

- a. Completed Bill of Sale on a form acceptable to CM
 - b. A complete inventory of the stored materials including photographs
 - c. A Certificate of Insurance signifying the stored material is properly and adequately insured.
 - d. An executed right of entry and/or lease agreements
 - e. (Upon receipt of the documentation and prior to payment, representatives from CM will visit the storage facility to verify the material inventory. Verification of inventory does not relieve the Subcontractor from their obligations to properly protect, deliver, and install the material for the Project.)
6. The Subcontractor must incorporate all changes made to the "pencil copy" and resubmit the final or "hard copy" within 48 hours of the requested change. The following items are to be submitted with each "hard copy" partial payment request:
 - a. Conditional Waivers of Lien and Unconditional Waivers of Lien will be submitted electronically through Textura-CPM™ as part of the submission process for the Subcontractor
 - b. One (1) original of a Partial Unconditional Waiver of lien for all the Subcontractor's and their lower tier Subcontractors and suppliers, current through the date of the Subcontractor's previous Application for Payment.
 - c. Schedule of all materials and equipment stored on-site and off-site.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

7. Materials delivered at the site and included in an Application for Payment shall become the property of the Owner and in no case shall such materials be removed from the site. This, however, does not waive the Subcontractor of the responsibility to protect and secure such material as specified throughout this document, and other related contract documents.
8. Progress Per section 005226 Agreement between Owner and Construction Manager: 8% of the labor associated with the Cost of the Work until the contract is 50% complete, at which time no additional retainage will be withheld. Retainage of 8% will be withheld on any materials or equipment purchased for the project until the items are incorporated into and accepted as part of the Project.
9. The Subcontractor shall promptly pay each Sub-subcontractor and material supplier upon receipt of payment from CM. The Subcontractor shall by appropriate agreement with each Sub-subcontractor, require each Sub-subcontractor to make payments to all lower tier Subcontractors in similar manner.
10. There will be no interim progress payments other than the monthly progress payments discussed hereinabove.
11. Do not include any change orders, work orders, or other costs not covered by an executed change order from CM in your requests for payment.
12. Final payment requests or retainage payments will not be processed until all inspections, punch lists, guarantees, warranties, bonds, final waiver, operation and maintenance manuals, instructions, etc. have been completed and accepted by CM and The Owner.

At a minimum final payment will be made based on the below: Final Payment will be made based on the completion of the above items and any additional contract requirements along with a final application for payment including but not limited to:

1. One (1) original of a Final Unconditional Waiver of lien for all the Subcontractor's lower tier Subcontractors and suppliers from whom CM has received a Notice of Furnishings, current through the date of the Subcontractor's final Application for Payment.
 2. Consent of Surety (if applicable)
 3. A properly executed General Release on a form provided by CM
13. The CM has provided an accelerated payment program for the benefit of its contractors, please review section 006276.02.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

JOB GUIDELINES FOR SUBCONTRACTORS

Pre-start Meetings:	All subcontractors are required to have a Pre-start Meeting for specific scope of work. It will take place two (2) weeks, if possible, prior to beginning work to discuss safety, quality, insurance requirements, schedule of your work around other trades, site logistics and any contract issues. The subcontractor's ONSITE superintendent, project manager, and safety manager are to be present at this meeting.
Pre-installation Meetings:	All Subcontractors are required to have a Pre-installation Meetings for specific definable features of work as detailed in the Project Quality Control Plan (005440).
Orientation:	Every person on-site is required to attend project specific orientation prior to performing any work. Every person must have provide proof of a negative 9-panel drug screen, no older than 12 months, prior to being permitted to receive orientation. Subcontractors must provide trade specific orientation for all of their employees prior to coming onsite. Refer to the ORIENTATION section below for more information.
Boundaries:	Construction area is defined on drawings; existing facilities are not for construction use. All areas utilized by the Subcontractor are subject to approval by CM.
Personnel:	CM reserves the right to remove any individual from the project at any time at its sole discretion.
Conduct on Site:	We ask employees to refrain from profanity on site. Sexual harassment and racism will not be tolerated and will constitute employee removal.
Signage:	No individual company signs, political or union signs are permitted on the Project.
Temporary Facilities:	Temporary electricity and water will be furnished to the site, but generators may have to be used in some cases. Temporary toilets and site dumpsters will be provided unless noted otherwise.
Security:	All workers must have personal identification and a site orientation decal displayed at all times. No guns, drugs, or contraband material are allowed on the jobsite. Fighting or otherwise objectionable behavior will not be tolerated and employees are subject to removal for cause.
Working Hours:	Normal workweek will be from 7:00 am to 5:00 pm, Monday through Friday, or as otherwise set by Turner. In case of a rain out day, Saturdays will be used to make up lost time due to rain. If extra hours of work are needed to comply with the schedule, contact Turner Superintendent 24 hours in advance.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

Parking:	All workers will be asked to park in designated areas only. No personal vehicles will be permitted on jobsite. Any company vehicles to access the site must have proper commercial insurance.
Break Areas:	Lunch and breaks will not be allowed inside the buildings, except in designated areas. Glass bottles / containers are prohibited.
Severe Weather:	In the event of severe weather, this will be communicated to all Subcontractors on site via radio, telephone or in person.
Environmental Concern:	All spillage of fuel, oils and other hazardous materials must be reported to Turner, contained and removed from the project. Reference the attached Project Safety Program (007319) for additional information. Any cost of disposal / clean-up of waste is the responsibility of the Subcontractor.
First Aid & CPR:	Each Subcontractor shall have at least 10% (or 1 at the minimum) of their onsite work force with current training in First Aid & CPR & Blood Borne Pathogens. Reference the attached Project Safety Program (007319) for additional information.
First Aid Kits:	First aid kits are to be located in each Subcontractor's office and/or on the gang box. Reference the attached Project Safety Program (007319) for additional information.
Accidents:	Turner requires an accident report within 24 hours of every Subcontractor's accident or near miss. Report all accidents / incidents to Turner immediately, no matter how minor they may seem.
Burning/Welding:	Hot work permits are required prior to any burning or welding. A fire watch is mandatory during and 60 minutes after any burning or welding activity. A designated fire extinguisher is required specifically for the burning activity. Reference the attached Project Safety Program (007319) for additional information.
Blasting/Excavation:	No blasting is allowed. Excavation by permit only, must be coordinated with onsite supervision.
Safety Training:	<p>Each Subcontractor must have a written safety program that outlines safety procedures and responsibilities. The program must be submitted to Turner within 30 days of receipt of the Subcontract Agreement as previously outlined.</p> <p>Subcontractors are required to turn in weekly toolbox safety meeting minutes every Monday. Turner will hold monthly safety meetings each month. All personnel on site is required to attend.</p>
Drug & Alcohol-Free Workplace:	Intoxicants, illegal substances and non-prescription drugs are not permitted on the job. (See attached drug and alcohol abuse policy).
Hazard Communications:	All workers have the right to know about any hazardous materials or chemicals, you may encounter on the jobsite. Each Subcontractor's employee must be trained by the Subcontractor

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

on the hazards that he/she may be exposed to. Each Subcontractor will maintain a list of all chemicals on the jobsite.

Read danger warnings on container labels. Follow any health or safety precautions. Replace lost or damaged labels. All chemicals or containers MUST have a label.

Each Subcontractor must have a written HAZCOM program on site. No material will be brought on site without prior receipt of its M.S.D.S. Submit M.S.D.S. sheet to Turner a minimum of 48 hours in advance of delivery.

Personal Protective Equipment

Subcontractors are required to inspect all PPE on a daily basis prior to putting into use. All PPE must be used per the manufacturers' requirements.

Housekeeping:

A clean jobsite is a safe jobsite. Subcontractors must clean up daily and dispose of waste in the site dumpster designated by Turner. Do not block aisles, traffic lanes, or fire exits. Each Subcontractor is required to have brooms, shovels and trash carts for their workforce.

Equipment/Hoisting:

Subcontractors are required to provide all hoisting for their needs. All regulations will be met on equipment and will be inspected by the Subcontractor to maintain safety devices.

Work on Energized Systems:

Lock and tag-out system will be utilized any time work is to be performed on active electrical equipment and only after approved by the local power company, Turner and the Owner. Mobile cranes and equipment are not permitted within 10 feet of energized lines.

Daily Construction Reports:

Subcontractors are required to submit daily construction reports (DCR) as outlined in the Project Quality Control Plan (005440).

Protection of Work:

Subcontractors are required to protect their own work, and the work of others during the installation of their work.

Material Deliveries:

Subcontractors are to notify Turner if a problem exists with delivery of any materials that may delay their work or follow on work by another Subcontractor. All Deliveries are to be coordinated with Turner well in advance. Deliveries will be accepted only during normal work hours and the responsible subcontractor must be present at the time of delivery.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

ORIENTATION

1. Subcontractors are required to provide trade orientation to all new employees prior to working on this Project.
2. A jobsite specific orientation will be attended by any personnel planning to work on this project in advance of performing their work. No person may perform work on the site without first attending orientation. Reference (007319 and 007319.02).
3. All potential workers must present proof of a negative 9-panel drug screen, no longer than 12 months old, before being allowed to participate in the jobsite specific orientation.
4. The following is a summary of the items to be discussed during the project specific orientation:
 - Hard Hats 100%
 - Gloves 100%, appropriate for the task
 - Eye Protection 100%
 - Alcohol & Drug Policy
 - Fall Protection required at all times when working above 6 feet.
 - Clothing
 - Outer-most layer high visibility at all times.
 - Shirts minimum of 4 inch sleeves.
 - Long pants/trousers only. No Shorts.
 - Work boots (no tennis shoes).
 - Housekeeping
 - A clean job is a safe, quality job.
 - All Subcontractors are responsible for clean-up of their work.
 - Excavation & Trenching
 - Sloping, benching or shoring at a depth of 4 feet or greater.
 - In and out of trench at a depth of 4 feet or greater.
 - Inspected by a competent person.
 - Storm water best management practices.
 - Equipment
 - Back up alarms on all equipment.
 - Seatbelts must be worn in equipment with rollover protection.
 - Fire extinguishers installed and inspected by Subcontractor.
 - Daily inspections.
 - Accident & Injury Reporting
 - All incidents must be reported immediately to your supervisor and Turner regardless of how minor they may be.
 - Environmental protection plan
 - Spill procedures
 - Emergency Evacuation Procedures
 - Crisis management map.
 - Owner procedures.
 - Hot Work
 - Hot work permit.
 - Fire extinguishers must be within 20 feet of cutting, welding, etc.
 - Secure all cylinders.
 - Valve caps in place when not in use and bottles secured.
 - Security

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

- Hard hat stickers & name labels.
- Employee parking – as designated by Turner.

SUBMITTALS

1. Refer to the Contract Specifications for specific requirements in submitting shop drawings, samples, and project data to CM. A contracts item's list including the spec section and sub section of each item is required to be submitted to CM within 5 days of award of your contract.
2. The submittal procedure between Turner and the Design Team is defined in the Project Quality Control Plan (005440). Subcontractors are required to understand the process and know where their interaction is required.
3. Subcontractors shall be responsible to make all required submittals as necessary to not have a negative impact on the project schedule. Closeout submittals shall be submitted at the point the Work is 75% complete. Failure to meet submittal requirements may serve as a basis for rejection of, or a portion thereof, progress payments.
4. Subcontractors must review, approve and stamp the submittals declaring that they comply with the provisions of the Contract Documents.
5. Refer to Specification Section 012500 for Substitutions Procedures. Substitutions for Convenience will only be permitted if accompanied by a cost savings and schedule improvement.
6. Failure to comply with submittal requirements will result in return of submittals without action. Payments for non-approved materials, equipment or products will not be made.
 - a. An electronic submittal process has been established for this Project regarding printing, transmittal and distribution of submittals and shop drawings. All Subcontractors will follow this procedure. It will be as follows:
 - b. Submittal packages are to be submitted to the TKN Project Site as detailed in the Digital Data and Communication Protocol (005433).
 - c. Correspondence regarding status of submittal packages will be through email.
7. All documents regarding submittals will be stored on the TKN Project Site.
8. Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate the way by which the Subcontractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.
9. Submittals that show variations from the requirements of the Contract Documents because of standard shop practice or any other reason, the Subcontractor shall make specific mention, in writing, of such variation in a letter of transmittal to Turner.
10. Where field measurements and required or necessary, they shall be made before preparation of shop drawings and noted as such on shop drawings. Subcontractors shall be responsible to field verify all conditions and dimensions shown on the

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

Contract Documents for the preparation of shop drawings and prior to the fabrication of materials. While the Contract Documents may indicate that the Construction Manager is to verify field dimension, this responsibility is delegated to the installing Subcontractor.

11. Review of a submittal by Turner and the Design Team does not relieve the Subcontractor of responsibility for errors or omissions and deviations from the Contract Documents.
12. Turner or the Design Team shall have the right to request additional submittals from the Subcontractor which may not be specifically called for in the Contract Documents, but necessary for the coordination of the Work.
13. An additional five (5) working days will be added to the processing time to allow Turner to review submittals prior to sending to the Design Team.

FIELD USE DOCUMENTS

1. When a submission is returned "Approved" or "Approved as Noted", final file and field copies must be issued to CM if requested. Final Copies are to be submitted in quantities as follows or as noted on transmittal letter. The number of shop drawings, manufacturer's literature or specifications concerning equipment or items which may involve coordination with several contractors will be specifically noted for each cast. The words "**Field Use**" must appear on all final distribution copies.

2.

Item	Quantity
A. Shop Drawings	1 Reproducible and 1 Electronic
B. Manufacturer's Literature	1 Reproducible and 1 Electronic

3. As-built drawings and specifications are to be maintained by each subcontractor for any deviations to drawings as provided by Contract Specification Section. At project closeout, they will be transferred to CM Construction in electronic and hard copy format.
4. Operation and Maintenance Data required by contract specifications must be submitted thirty (30) days prior to system start up. Subcontractor's as-built drawings must be submitted in addition to the electronic file format.
5. This Project will utilize an electronic closeout process. Please review the Electronic Document Section of this DOCUMENT.

You must retain the required shop drawings or manufacturer's literature until completion of the project. IN ADDITION, Final Payment will not be released until all final closeout documents have been submitted.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

ELECTRONIC DOCUMENTS

1. Overview: CM obtains project information and documentation in electronic format, and organizes this data in a web-style, searchable format. The resulting product is delivered on CD or DVD to the Owner at the end of the project. This electronic delivery method does not eliminate any other paper delivery closeout requirements spelled out in the Contract Documents.
2. Scope of electronic documents required from Subcontractor:
 - a. Documents included: The documents required from the Subcontractor in electronic format shall correspond to the scope of the project closeout documentation, as generally and specifically required per the Contract Specifications. Typical closeout documentation may include:
 - commissioning reports
 - contact information
 - controls information and sequence of operation
 - engineering guides
 - equipment schedules
 - equipment serial numbers
 - equipment tag numbers
 - fixture schedules
 - color and pattern selections
 - installer information
 - manufacturer information
 - meeting minutes
 - operations and maintenance manuals
 - cleaning instructions
 - preventative maintenance procedures
 - product information
 - record drawings
 - shop drawings
 - spare parts information
 - subcontractor information
 - supplier information
 - test and balance reports
 - training documentation
 - valve schedules
 - warranties
 - b. See the Contract Specifications for this project's documentation specific requirements.
4. Electronic Document Format and Collection will be per section 005433.
5. Schedule: All required electronic documents shall be provided to CM prior to Substantial Completion.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

WARRANTY/GUARANTEE

1. By mutual agreement, the Owner may occupy a portion of the Work prior to total project completion. Acceptance of any work by the Owner shall be accomplished by the issuance of a Partial Certification of Contract Completion. From the date of the issuance of such certificate, the Subcontractor shall be relieved of obligation to maintain the portion of the premises accepted but shall remain obligated to correct any "Punch List" items then uncorrected. The Subcontractor shall continue to carry insurance to protect the Owner, CM, and Subcontractor for workers engaged on "Punch List" items.
2. If there are more than three (3) calls for warranty work for any reason on a specific system, piece of equipment, area or item of work, the warranty period shall extend to a period of one (1) year beyond the date of the last repair or the date that can be established that the product or work item is functioning as intended for an industry standard period of time without requiring service or repairs. This provision is to prevent a situation where a piece of equipment or item of work presents repeated problems during the normal one (1) year warranty/guarantee period, receives repeated, incomplete or partial repair and/or corrective warranty work and then continues to require repair and rework after the warranty has expired.
3. The Subcontractor shall, upon completion of the Work, assign to the Owner all warranties obtained or obtainable by the Subcontractor from manufacturers and suppliers of equipment and materials incorporated into the Work by written instrument of assignment in form acceptable to CM and the Owner.
4. Subcontractor will provide and execute the basic contract warranty on the form provided in the bid documents, in addition to any specific warranties required by specification. Any of these additional standard forms of Subcontractor, sub-Subcontractor, vendor, manufacturer, supplier, etc. warranties or guarantees shall not include any limitations, restrictions, exclusions, or terms that otherwise reduce the Subcontractor's responsibility as defined by the Contract Documents. The terms, conditions, covenants and provisions for the warranty shall be as defined by the requirements of the Contract Documents without alteration. Final Subcontract payment and request for reduction of retainage will not be reviewed or processed until the Subcontractor provides the required warranties acceptable to CM.
5. All warranties will commence starting with the date as required per the General Contract. Early use of equipment or materials for temporary use or aid to construction shall not constitute the start of the warranty period. Partial occupancies may result in earlier warranty dates than the overall building completion.
6. Any warranties required in the specification with a term longer than one year will be made out directly to the Owner.
7. The standard builder's warranty will utilize the form provided in section 006536 .

SUBCONTRACT COMPLETION AND ACCEPTANCE

1. Substantial Completion
 1. Neither final payment nor any remaining retained percentage shall become due until the Subcontractor completes and/or submits to CM the following:
 - a. A fully executed Application for Final Payment form for final signature by the Architect, CM and Owner; (This is to be submitted through Textura-CPM™)

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

- b. One (1) original and three (3) copies of a properly completed and executed Application for Payment and Schedule of Values;
 - c. One (1) original and three (3) copies of an Affidavit (sworn statement) setting forth a final list of the Subcontractor's Subcontractors and suppliers showing their respective Subcontract sums, amount previously paid, and current/final amount due (balance to complete equal to zero). Subcontractors shall utilize the affidavit form provided.
 - d. One (1) original and three (3) copies of a Final Conditional Waiver of lien rights for all the Subcontractor's Sub-Subcontractors and suppliers listed on the Affidavit current through the date of the Subcontractor's Final Application for Payment. Subcontractors shall utilize the Final Conditional Waiver form provided.
- 2. Completion of all submittal requirements including all O&M Manuals, Warranties and Guarantees, As-built drawings, etc.;
 - 3. Consent of surety to final payment;
 - 4. Completion of Final Inspections by governing authorities;
 - 5. Completion of Owner Training on equipment (if any) in accordance with paragraph B below;
 - 6. Completion of Final Insurance Certificate for insurance to remain in force after project completion;
 - 7. Completion of items from Final Inspection.
- 2. The Subcontractor will develop and conduct training sessions for the Owner's maintenance personnel, which are scheduled by CM. Prior to these training sessions, as-built information and approved Operation and Maintenance manuals will be turned over to CM. Training sessions and instructions will be recorded by the Subcontractor and will be turned over to the CM in a DVD type format.
 - 3. During the first twelve (12) months following Final Completion of each part of the Project, the Subcontractor (without additional compensation) will participate in tests scheduled and supervised by the Architect and CM which test the following building systems to the extent applicable to the Subcontractor's work: air conditioning system (which shall be conducted during the first full summer following the completion of the Project or at such earlier time as scheduled by CM), heating system (which shall be conducted during the first full winter following completion of the Project or at such earlier time as scheduled by CM), electrical system, plumbing system, fire protection system, communications systems, building controls, and hood controls systems, security systems and such other systems as reasonable requested by the Owner. It is intended that the testing be a comprehensive series of operational tests designed to determine whether the systems are fully operational in accordance with the requirements of the Contract Documents. If it appears that any of the systems, including equipment and software, do not conform to the requirements of the Contract Documents, the Subcontractor will remedy the defective and/or non-conforming work within fourteen (14) calendar days. These requirements shall be supplemental to all requirements of the technical specifications.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

CONTRACT CHANGES AND PROPOSAL

1. Prior to performing any work outside that identified per the current contract documents (i.e. extra work), the subcontractor is required to obtain a PCO # from the Project Engineer / Manager and written approval from the Project Manager. This PCO # must be written on every T&M ticket and Change Proposal. Work performed without a PCO number and written approval will not be recognized as extra work.
2. Each Subcontractor will provide CM with time and material rates and unit prices for approval prior to any extra work occurring on a T & M basis. Rates will be broken down into base rate, payroll taxes and insurance, overhead and markup. Unit prices are subject to the same form of breakdown.
3. Upon a change in contract scope, all subcontractors and/or vendors must submit in writing a cost breakdown stating what has been changed and how they are being affected by this change. Those breakdowns must be submitted as soon as possible, but notification of possible change must occur within the period specified by contract.
4. Cost breakdowns will not be acceptable unless they include an itemized breakdown stating material quantities and material unit prices, labor costs (separated into trades and construction equipment). identify unburdened labor totals for mark up with OCIP/CCIP insurance rates.
5. Labor costs are to be identified with specific material placed or operation performed. All labor costs must be broken down into trades and unit prices per hour and the specific work performed.
6. All equipment must be broken down into rental rate and time used. The size of each piece of equipment must also be designated. Rental rates for owned equipment shall not exceed eighty-five percent (85 %) of the standard rate paid at the place of the Project. Contractor is to provide verification of standard rates from the most current Equipment Watch Rate <http://equipmentwatch.com> or the most current MCAA guide for Tools and Equipment.
7. In your change proposal, identify schedule issues associated with the change and ways to recover and/or mitigate the schedule impact. Recovery costs should be shown as a separate line item.
8. Overhead and Profit calculations will be per 006357.

Under No Circumstances Will Lump Sum Figures Be Acceptable For Labor, Material, or Equipment For Any Item.

REQUEST FOR INFORMATION

1. All questions, clarifications and requests for information concerning the drawings or specifications must be forwarded through CM. **Do Not** contact the Owner or Architect directly.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

2. Use the electronic Request for Information process. Please be specific in your request, and give any specification or drawing reference that applies to your question. Suggested solutions shall be noted in the RFI.
3. Any replies from Owner or Architect to these requests that change the scope and/or duration of your work shall not be implemented unless directed by CM per the established process identified in 005433. If you feel that the scope and/or duration of your work is affected, notify CM Construction immediately with an estimate of your costs and/or time.

PRODUCT SUBSTITUTION

1. All items concerning the drawings or specifications must be forwarded through CM. **Do Not contact the Owner or Architect directly.**
2. Use the project specific Substitution Request form. Please be specific in your request, and give any specification or drawing reference that applies to your substitution.
3. Any replies from Owner or Architect to these substitutions shall not be implemented unless directed by CM.
4. Incomplete Substitution Request forms will not be considered.

STANDARDS

1. Those articles, devices, materials, forms of construction, fixtures, etc., named in the Specifications to denote the kind and quality required shall be known, as "Standards" and all Proposals shall be based on same.
2. Where the phrase "or equal" or "or equal as approved by the Architect" occurs in the Contract documents, do not assume that material, equipment or methods will be approved as equal by the Architect unless the item has been specifically approved for this Work by the Architect by Addendum prior to bidding. No "Or equal" items or substitutions will be considered after the award of the Subcontract. Failure to accept the "or equal" will not constitute the basis of any claim by a Subcontractor to additional compensation.
3. Where two or more "Standards" are named together, the successful Bidder may furnish any one of the "Standards" named, but Subcontractors shall make their selections known to Turner within thirty (30) days following award of their Subcontract. Failure to comply with this requirement will automatically hold up Payment Requests from the Subcontractor in view of possible improper materials being used on the project.
4. Bidders are responsible to identify and notify Turner in writing at least ten (10) days prior to the date for receipt of bids if any of the materials, equipment, or named "Standards" are no longer available or if any named manufacturers are no longer in business.
5. Bidders are cautioned not to assume that their Scope of Work is solely defined by one component of the drawings or specifications. The Subcontract Summaries of Work identify and define Work responsibilities that require the bidder to thoroughly understand all elements of the bid documents. It shall be the bidder's sole responsibility

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

to insure that bids taken from sub-Subcontractors or vendors include the entire Scope of Work as defined by the Contract Documents and the Bid Package Summary of Work.

6. When a duplication of material or equipment occurs in the Summaries of Work by assignment of the same Work to separate contracts, each Subcontractor shall be deemed to have bid on the basis of each furnishing such material or equipment. CM will decide which Subcontractor(s) shall furnish the same and which subcontract amount(s) shall be adjusted, for not incorporating such material or equipment into the Project.

CONTRACT DOCUMENTS

1. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all. The Subcontractor acknowledges and agrees that the Contract Documents are sufficient to provide for the completion of the Work and include all Work, whether or not shown or described, which reasonably may be inferred to be required or useful for the completion of the Work in accordance with all applicable laws, codes, and professional standards. In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.
2. Should any part of the Contract Documents appear to be in disagreement with each other relative to the quality or quantity of Work required, the better quality and/or the greater quantity shall govern, and shall be provided, unless instructions are otherwise furnished to the Subcontractor by CM in writing.
3. The Work hereunder is to be performed and furnished under the direction of CM and the satisfaction of CM, Architect, and the Owner. The decision of CM and Architect as to the true construction, meaning and intent of the Contract Documents shall be final and binding upon the parties hereto. CM will furnish to the Subcontractor such additional information and plans as may further describe the Work to be performed and furnished by the Subcontractor, and the Subcontractor shall conform to and abide by the same.
4. All Contract Documents will be distributed electronically. Each Contractor is responsible for printing out any hard copies of documents they require for their use or for the use of their subcontractors.
5. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants or (4) between any persons or entities other than the Owner and CM and between CM and their subcontractors.. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.
6. The Subcontractor shall supervise and direct the Work, using the Subcontractor's best skill and attention. The Subcontractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Subcontractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Subcontractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Subcontractor shall give timely written notice to the Owner and Architect and shall not proceed with that portion of the Work without further written instructions from the Architect.

PERMITS

1. The Owner, Architect and CM will obtain the Certificate of Plan Approval/General Building Permit. All other necessary permits shall be paid for by the Subcontractor and shall be included as part of its bid. The Subcontractor shall be responsible for scheduling and paying for inspections of applicable Work in accordance with the Project Schedule. Reference individual Scopes of Work for specific detail or exceptions.
2. Under the mandatory submittal schedule for Fire Alarm and Fire Suppression Systems in a new building, the complete submittal must be entered into the system and the actual fire alarm and/or fire suppression permit(s) issued by the local building authorities with approved drawings placed on the job site prior to the installation and no later than the time when the initial structural framing inspection is made and/or approved. NOTE that no covering of walls will be permitted until this schedule is met. Also, it is not necessary to have a building permit prior to applying for either a fire alarm and/or a fire suppression permit. Regardless of how these submittals are made and permitted by the local building authorities, all Fire Protection Subcontractors are still required to submit drawings and fees to the Local Fire Department, Fire Prevention Bureau for review and payment of applicable fees.
3. Tap fees, capacity charges and meter fees related to water and sanitary systems on the project are by the Owner, unless otherwise specified in the Scope of Work

SCHEDULE

1. The Project Schedule (Section 003113), as revised from time to time by CM, shall constitute the schedule to be used by all Subcontractors. A Project Schedule is included in the bid documents. Bidders are responsible to thoroughly review the Project Schedule. The Subcontractor shall execute its Work, at the direction of CM, furnishing at all times sufficient skilled workmen, materials and equipment to perform its Work to meet the line item progress required by the Project Schedule so as not to delay the completion of the whole or any part of the Work. The Subcontractor shall continuously monitor the project schedule so as to be fully familiar with the timing and phasing of the Work and shall implement all Subcontract Changes at the direction of CM.
2. The Scope of Work includes any out-of-sequence work directed by CM that is required to meet Project Schedule. The cost of all such out-of-sequence work shall be included in the Subcontract price.
3. It is the Bidder's responsibility to review the schedule in conjunction with the Scope of Work to determine overtime requirements. Any/all shift work or overtime needed to meet the bid schedule shall be included in the base bid.
4. Each Subcontractor shall immediately notify CM of a delay in delivery of products or any activity that may affect the total progress of construction.

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5. To the extent that the Project could be completed earlier than the Date(s) shown on the project schedule, the difference, i.e., "float," is the property of CM, and the Subcontractor will not have the right to rely on the use of the float.
6. It is expressly understood that all durations and timeframes in the Project Schedule include necessary inspections, reviews, permits and approvals by all Federal, State, Municipal and local governmental agencies with jurisdiction over the Work. The Subcontractor shall plan, coordinate, and account for such inspections and approvals in order to meet the timeframes required by the Project Schedule. In addition, the Subcontractor shall be solely responsible to include, anticipate, and account for all weather delays / days (snow, rain, cold, etc.) and include provisions to complete the Work within the project schedule.
7. The sequence of work functions must be scheduled in advance (a minimum of 4 weeks) to minimize disruptions and/or disturbances to the Project and surrounding properties.
8. The Baseline Construction Schedule included within the Bidding Documents is intended to: represent the general flow of construction, represent reasonable activities, represent anticipated trade stacking if applicable, show approximate required on job dates for long lead material / equipment.
9. The Baseline Construction Schedule is not intended to show all work to be performed by each subcontractor. It is assumed that ancillary work will be performed and completed within the durations and sequence shown in the baseline schedule.
10. Prior to commencing work onsite, CM will hold a scheduling meeting to discuss improvements or changes to the project schedule with each subcontractor. During this time, the subcontractor may offer suggestions or changes to the schedule that represent an overall improvement to project. CM reserves the right to revert to the Baseline Construction Schedule contained within the bidding documents should it become necessary. The contractor shall supply all Resource / Cost information required by CM within 10 days of receipt of the revised schedule.
11. By signing the revised Baseline Construction Schedule the Contractor further defines the time for Contract Completion, any specified milestone completion dates and agrees that they are reasonable, taking into consideration the average climatic range and usual conditions prevailing in the locality of the Project. Acceptance of the baseline schedule does not alleviate the Contractor of any contractual obligations.
12. The Construction Schedule shall be used to plan, organize and perform the Work. It will also be used to record and report actual performance / progress and to show how the subcontractor plans to complete the remaining Work by the Contractual Completion Date and/or any Contractual interim milestone dates. The Construction Schedule percentages will be used in conjunction with and as a reference for the monthly payment applications approval process.
13. The subcontractor shall, on a weekly basis, prepare and submit to CM a written report referencing Construction Schedule activities begun or finished during the preceding week, Work in progress, expected completion of the Work, a projection of all Construction Schedule activities to be started or finished in the following two (2) weeks, including without limitation, the subcontractor's resource loading curve associated with such Work, and any other information requested by CM. This information is vital for the accurate and timely updating of the Construction Schedule. Untimely or irregular submission of this information will affect the processing of payment applications.

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

14. CM can process progress payments to the subcontractor when the monthly Construction Schedule acceptance form is signed and returned by the subcontractor.

LIQUIDATED AND CONSEQUENTIAL DAMAGES

1. Each Subcontractor is bound to CM by each and all of the terms and provisions of CM's contract with the Owner, including any liquidated/consequential damages and clauses. Should the job be delayed due to the action or inaction of the Subcontractor, they may be subject to the provisions of this clause.

EXECUTION OF THE WORK

1. It shall be the duty of the Subcontractor to notify their various other Sub Subcontractors when their presence is required on the job, expedite the flow of materials, and secure all necessary inspections. In addition to the Subcontractor's Project Superintendent or Manager, the Subcontractor shall require that all its Sub-Subcontractors have a competent supervisor on the site whenever its work is being performed. The Subcontractor shall give reasonable notice when CM's or Architect's presence is required for special consultations, examinations, or decisions.
2. Each Subcontractor shall afford other Subcontractors reasonable opportunity for the introduction or storage of their materials and the execution of their work and shall properly connect and coordinate its own work with the Work of the other Subcontractors.
3. No Subcontractor shall encase or cover the Work of any Subcontractor, or any self-installed work, until it has been completed and approval has been obtained from CM and any required authorities. If the Subcontractor does cover up such work, which is not complete and approved, CM may require same to be exposed for inspection. If this happens, Subcontractor shall assume all costs and expenses in connection with the removal and subsequent replacement of all finished or partially finished work for such inspections.
4. Each Subcontractor whose work is executed in relation to prior work shall carefully inspect this prior work and submit written notice of any defects, improper workmanship or materials, or other conditions that would affect the satisfactory execution and permanency of his work. No further work shall be executed until such defects or conditions have been corrected or an agreement reached regarding defects which may develop due to conditions so noted. The absence of any such notifications will be construed as an acceptance by the Subcontractors of all prior related work, and later claims of defects in this work will not in any way relieve the Subcontractors from responsibility for correcting their work.
5. If any work has been covered up contrary to the specific requirement of the Contract Documents or instructions of CM before it has been observed by CM, such work must, if requested by CM, be uncovered for its observation and replaced and recovered, at the expense of the Subcontractor at fault and without reimbursement under the Subcontract.
6. It shall be the responsibility of each Subcontractor to inform CM in a timely manner of the location and dimensions of all pipes, sleeves and openings as shown or implied on the Drawings for the completed structure. This information must be submitted on a full size drawing with each opening dimensioned from building column lines. This information must be submitted and approved prior to the scheduled start of concrete

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

formwork operations or interior or exterior wall construction. It shall be the responsibility of the Subcontractor requiring the opening to submit all approved information to the Subcontractor responsible to create the opening in a timely fashion. This shall mean that the Subcontractor building the wall, floor, or roof shall be able to draw, fabricate, and construct the openings in their final location at their final dimensions in normal sequence in accordance with the project schedule. Any costs incurred to revise, relocate or add openings after the normal sequence of construction that are a result of missing or inaccurate information shall be the responsibility of the Subcontractor requiring the opening. It shall be the responsibility of the Subcontractor requiring the opening to verify the location and size of all openings shown on the Subcontract drawings.

7. Unless specifically excluded, each Subcontractor shall be responsible for demolition, disposal, and cutting and patching as required for the completion of all work related to the Subcontract. Any patching shall match the existing undamaged adjacent construction and shall extend to an unobtrusive point as determined by CM, the Architect, and the Owner. Approval of the match in finishes shall be made by the Architect. Reference spec sections for additional information on cutting and patching.
8. Cutting of concrete shall be done on two (2) sides where possible, to avoid spalling, and shall be performed by a specialty contractor with expertise in this work. No cutting or coring of any concrete will be done without the prior consent of the Structural Engineer. The costs of any testing or x-ray investigation required for structural investigation will be borne by the Subcontractor requiring the Work. Reference spec sections for additional information on cutting and patching.
9. No Subcontractor will endanger any work of others by cutting or digging. No Subcontractor will cut or alter the Work of other Subcontractors without the consent of CM and the affected Subcontractor.
10. The Subcontractor shall bear all costs associated with correcting any rejected work, including the cost of the Owner's, Construction Manager's, Architect's, Engineer's, and Testing Agency's time and additional services thereby made necessary. Unacceptable work, whether the result of poor workmanship, incompleteness, non-conformity with the Subcontract Documents, or use of defective material found to exist prior to the final acceptance of the Work, shall be removed immediately and replaced in a manner approved by CM. The Subcontractor shall bear the expense of all work of other Subcontractors destroyed or damaged as a result of the unacceptable work and as a result of the removal and/or replacement.
11. No Subcontractor will remove or damage the Work or materials of other Subcontractors during the installation of their work. This includes but is not limited to, the excessive removal of fireproofing from structural elements, crushing floor track with lifts or wheeled carriers, cutting or punching holes in drywall, removing or cutting steel studs.

PROTECTION OF THE WORK

1. Any materials delivered to the job in finished condition, installed in finished condition, or installed and finished before completion of the Work, shall be protected from damage until acceptance of the Work and until occupancy and use by the Owner. Pre-finished materials that are damaged before, during, or after installation shall be replaced with new and perfect material at the Subcontractor's expense. Materials finished after installation which are damaged shall be replaced or refinished as CM may direct. No

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additional charge will be honored by CM or the Owner for replacement or repair of finished materials.

2. Each Subcontractor is responsible for any damage to their work prior to turnover. If the responsible party for the damage is identified, the cost to remove or repair the damaged work will be charged to the responsible party. The repair of damage from unidentified sources will be the responsibility of the Subcontractor whose work was damaged.
3. Each Subcontractor shall protect building elements and products when subject to damage. Should workmen or other persons employed or commissioned by one Subcontractor be responsible for damage, the entire cost of repairing said damage shall be assumed by said individual Subcontractor. Should damage be done by a person or persons not employed or commissioned by a Subcontractor, the respective Subcontractors shall make repairs and charge the cost to the responsible person or persons. The affected Subcontractors shall be responsible for collecting such charges. If the person or persons responsible for damage cannot be discovered, full and satisfactory repairs shall be made by the affected Subcontractor, and the cost of Work shall be borne by the affected Subcontractor.
4. The Subcontractor shall protect all adjacent buildings, roads, walks, shrubbery, plants, trees, turf and all other adjacent property. Any portion of buildings or other property injured during construction operations shall be properly and thoroughly repaired to the satisfaction of the Architect, Owner, & CM or replaced by the responsible party.
5. The Subcontractor shall protect the Work from damage at all times in a proper manner, or as CM may direct, erect all necessary barriers, furnish and keep lighted the required danger signals at night, employ necessary watch persons when required to protect the Work and take every precaution to prevent injury to persons or property.
6. The Subcontractor shall be responsible for any damage which may occur to the property of any other Subcontractor connected with the Work, or to adjacent private or public properties, or to any portion of the structure which in any way results from the acts or neglect of employees.
7. No Subcontractor shall cut away any timber, dig under any foundations or into any walls, or other parts, or in any manner allow the same to be done without the full knowledge and consent of CM and shall be held responsible for any damage resulting from any violations of the provisions of this clause. Excavation under foundations shall be back-filled with concrete by or at

LAYOUT AND CONTROL

1. The Subcontractor shall have full responsibility for the proper laying out of the Subcontractor's own work and for any rework and/or damage which may occur to the Work of any other Subcontractor as the result of any inaccuracy. CM will have the site surveyed by a licensed surveyor who will provide primary control points and benchmarks around the perimeter of the site. Each Subcontractor shall layout its own work from these references including surveying and staking as required and shall be responsible for damage or loss due to incorrect layout. This also includes the verification of adjacent or contiguous work performed by others. Primary column line offsets and elevation benchmarks will be provided on each floor. The transfer of these lines of reference and elevation benchmarks is dependent on the completion of the

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concrete slabs on each floor. Refer to individual Scope of Work or any further specific requirements.

2. The accuracy of all layout work shall be verified by the Subcontractor. In no case shall CM or Owner assume responsibility as to the accuracy of any work laid out. Nor will CM be responsible to provide layout for Subcontractors. The Subcontractor shall be furnished selected column centerlines and an elevation benchmark. All additional lines, measurements, or elevations, which may be necessary to the proper construction of the Work, shall be the responsibility of the Subcontractor. The Subcontractor shall be responsible to verify the accuracy of any base layout control before that base layout control is to be used.
3. Field Conditions - The Subcontractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Subcontractor with the Contract Documents before commencing activities. Any discrepancies from the Subcontract Documents shall immediately be brought to the attention of the CM. Subcontractors shall not build adjacent to or attach to any prior work of another Subcontractor that does not meet the requirements of the Subcontract Documents.
4. The Owner shall furnish a survey as to the physical characteristics of, legal limitations of, and utility locations for the Project site. The Subcontractor shall confirm the location of each utility prior to the start of Work. The Subcontractor shall not be entitled to any additional compensation resulting from its failure to confirm the location of site utilities or any existing structures prior to the start of Work.

SECURITY

1. Subcontractors shall be solely responsible to protect and secure tools, equipment, and material. Subcontractors shall be solely responsible for any loss or damage to their property, operations or work.
2. If a Subcontractor requires traffic control, it shall be provided by said Subcontractor at his expense. Police or Security personnel may be provided by CM to assist with on-site traffic control during normal working hours due to special circumstances.
3. All pedestrian and vehicular gates must be kept closed at all times during the normal course of the work day when not in direct use. After hours, these gates will be kept locked

CLEANING

1. The Subcontractor, at the completion of its work, shall remove all surplus material, false work, temporary structures, including foundations thereof, plants of any description and debris of every nature resulting from its operations, and put the site in a neat and orderly condition.
2. Each Subcontractor shall clean up, on a daily basis, all refuse, rubbish, scrap materials and debris caused by its operations and dispose of it, into the primary dumpster on site provided by CM. This requirement is also to include the daily maintenance of all work, storage, staging, and break areas to keep them free of all debris. Trash carts are to be provided by each Subcontractor unless specified otherwise. Unless specified otherwise, each Subcontractor shall be responsible to final clean each area/phase of construction just prior to turnover to the Owner. This may include the cost of a "comeback" operation if the schedule of turnover so dictates. This shall include, wiping down all

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surfaces, mopping, vacuum clean carpeting, cleaning tile flooring, glass cleaning, the removal of debris, marks, stains, dirt, paint, etc., regardless of origin, and any other final detailing required for final occupancy by the Owner.

3. Chemicals and hazardous materials are to be properly and legally disposed of off-site by the responsible Subcontractor and are not to be disposed of in any on site dumpsters.
4. All paint containers are to be legally disposed of off-site by the responsible Subcontractor and not in the site dumpsters.
5. If any Subcontractor is delinquent with regard to cleaning, CM will, after a 24-hour written notice, have said clean-up work performed at the cost of the responsible Subcontractor. If the cleaning required involves multiple Subcontractors, CM will have the clean-up work performed, after a 24-hour written notice, and determine the appropriate pro-ration of the cost to the responsible Subcontractors.
6. Each Subcontractor shall be responsible for all street and roadway cleaning as a result of their operations.
7. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
 - a. Do not burn or bury rubbish and waste materials on project site.
 - b. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
 - c. Do not dispose of wastes into streams or waterways.
 - d. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
 - e. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.
 - f. Exercise caution that cleaning materials do not damage adjacent finished materials and construction
8. Permanent basins, sinks, water closets, urinals, janitor closets, mop sinks, etc. are not permitted for use of any kind.

EXPLOSIVES AND BLASTING

1. The use of explosives and blasting for construction are prohibited on this Project

TEMPORARY FACILITIES

1. Unless specifically noted otherwise in the Subcontract Summaries of Work, each Subcontractor shall be responsible for each of the following items:
2. Construction Trailer Electric/Plumbing Services: N/A
3. Construction Trailer Telephone and Internet Service: N/A
4. Toilet Facilities: The CM will be responsible for supplying and maintaining the toilet facilities through the end of the Project. They will be provided and maintained in the quantities of 1 per 10 workers onsite and serviced twice weekly.

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5. Dumpsters for Construction: Unless otherwise indicated the CM will provide and change out dumpsters for general construction debris. If a contractor is required to provide its own dumpsters (i.e. Structural building demolition) all waste is to be tracked via the TurnerTracker system. Data must be entered into the TurnerTracker system by the fifth (5th) day of the month following the invoice period. See Section 007300.01 for a guide to use with the system. Subcontractors shall make every effort to maximize percentage of material recycled.
6. Temporary Fire Extinguishers: The CM will provide fire extinguishers for general hazard use. All contractors are required to provide their own 20lb ABC fire extinguishers for specific scope of work needs such as Hot Work.
7. Temporary Water: Unless otherwise indicated the CM will provide temporary water.
8. Site Protection: The CM will provide and maintain fences, to provide protection of persons, new and existing construction, utilities, streets, trees, landscaping and adjoining property. All contractors requiring modification, relocation or removal of any site fencing or scaffolding must secure pre authorization from the Construction Manager. At the end of each work day, each subcontractor shall be responsible for securing any openings which they created during the workday at the perimeter of the construction fence. Fence and protection will be returned to original condition.
9. Signage: Subcontractor signage of any form shall not be permitted unless specifically pre-approved by The Construction Manager and The Owner. This includes any graphics, company branding or signage painted on or applied to jobsite trailers. One small 17" by 11" identifying sign on the jobsite trailer / office door is permitted. This signage ban also applies to storage and tool trailers
10. Traffic Control: All contractors are individually responsible for traffic control required for the performance of their Work. Any specific traffic control requirements should be requested and coordinated with The Construction Manager far in advance to comply with The Owner and City requirements and conditions and State and Local Regulations.
11. It is clearly understood and agreed that the project must be completed without disruption to The Owner's activities, functions, and operations. This means that work may need to be completed on second shift, swing shift, and/or weekends to maintain the project schedule. Conditions may not be created by construction operations, which adversely affect the The Owner environment with respect to sound, vibrations, fumes, dust, air quality, etc. In the event that such adverse conditions are determined to exist, CM reserves the authority to direct the Subcontractor to stop its operations and resume work on second shift and/or weekends as required to meet the project schedule. The bid price shall include all such temporary work stoppages, second shift and/or weekend work as necessary and as directed by CM to work around The Owner's operations. CM & the Owner have sole authority and discretion in the determination to temporarily stop work or require that work be completed on second shift or weekends.
12. The use of vibration causing equipment may be limited. Subcontractor must exercise appropriate means and methods to keep noise, vibration and fumes generated by this Work, to a minimum. Caution must also be exercised in the placement of gasoline/diesel powered welding machines and cranes to avoid exhaust fumes from entering the building through the fresh air intakes or any other openings of the adjacent The Owner facility. Coordinate the placement of equipment with CM's Superintendent.

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13. Work may take place in or around active/occupied The Owner space at times other than during normal The Owner use and operation. The Subcontractor shall be responsible to move, protect, reinstall, and clean any The Owner furnishings necessary for the prosecution of the Work. The Subcontractor, at the end of each day, shall return the room and its furnishings to the original condition ready for The Owner use the following day.
14. The Subcontractor shall exercise caution and good judgment in the use of power driven anchors, especially in or above or adjacent to occupied areas. Power driven anchors are defined as anchors, which are driven into place by any device which produces and imparts force by use of a powder charge, compressed air, gas or any other propellant.
15. With adjacent areas being in use during the time of normal operation, the Subcontractor is All Subcontractors and their vendors must observe the posted speed limit through the adjacent streets, parking areas, and yield to all emergency and pedestrian traffic.
16. The Owner's loading dock shall not be used to receive any material or parcels and is to be considered off-limits to construction personnel.

DISCRIMINATION AND INTIMIDATION

1. The Subcontractor will adhere to all policies relating to discrimination, intimidation, harassment, and equal opportunities as described below and further detailed in sections 007319B, 007319.99C, and 007319.99D of the Bid Manual.
2. The Subcontractor will not discriminate against any employee or application for employment because of race, color, religion, national origin, ancestry, sex, handicap, sexual orientation, or any other basis prohibited by law. The Subcontractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, national origin, ancestry, sex, handicap, sexual orientation, or any other basis prohibited by law. Such action shall include, but is not limited to, the recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Subcontractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Subcontracting officer setting forth the provisions of this nondiscrimination clause.
3. The Subcontractor will, in all solicitations or advertisements for employees placed by or on behalf of the Subcontractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry, sex, handicap, sexual orientation, or any other basis prohibited by law.
4. The Subcontractor agrees that he will fully cooperate with any official or agency of the Owner, the city, state, or federal government which seeks to eliminate unlawful employment discrimination, and with all other Owner, city, state, and federal efforts to assure equal employment practices under this Subcontract, and said Subcontractor shall comply promptly with all requests and directions from the Owner, both before and during performance.
 1. Full cooperation as expressed in paragraph 3 above, shall include, but not be limited to, being a witness and permitting employees to be witnesses and complainants in any proceeding involving questions of unlawful employment practices, furnishing all information and reports required by the Owner, and

ADDITIONAL SUBCONTRACTOR REQUIREMENTS

permitting access to his books, records, and accounts by the Owner for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

5. Every Subcontract for or on behalf of the Owner shall contain provisions by which the Subcontractor agrees:
 1. That in the hiring of employees for the performance of work under this Subcontract or any Subcontract, no Subcontractor, Sub-subcontractor, or any person acting on their behalf, shall, by reason of race, color, religion, natural origin, ancestry, sex, or handicap or any other basis prohibited by applicable law, discriminate against any citizen in the employment of labor or workers who are qualified and available to perform the Work to which the employment relates.
 2. That no Subcontractor, Sub-subcontractor, nor any person on their behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this Subcontract on account of race, color, religion, natural origin, ancestry, sex, or handicap, or any other basis prohibited by applicable laws.

LABOR DISPUTES

1. Wherever any provision of any section of the Contract Documents conflict with any agreements or regulations of any kind in force among members of any Trade Associations, Unions, or Councils, which regulate or distinguish what work shall be or shall not be included in the Work of any particular trade, the Subcontractor shall make all necessary arrangements to reconcile any such conflict without delay, damage, or cost to the Owner or without recourse or charge to CM or the Owner

ENVIRONMENTAL PROTECTION

1. In the event the Subcontractor encounters potentially hazardous material on-site, the Subcontractor shall immediately stop work in the area affected and report the condition to CM and Owner in writing. Thereafter, the Subcontractor shall not resume work until such time as testing of the affected area confirms that exposure is within permissible limits.
2. In order to prevent and to provide for abatement and control of environmental pollution arising from the construction activities of the Subcontractor and his sub-Subcontractors in the performance of this Contract, they shall comply with applicable federal, state, and local laws, and regulations concerning environmental pollution control and abatement as well as the specific requirements stated elsewhere in the Contract Documents, including specifically the SWPPP plan(s)
3. No Subcontractor shall pollute water resources with fuels, oils, bituminous, calcium chloride, acids or harmful materials. It is the responsibility of each Subcontractor to investigate and comply with applicable federal, state, county, and municipal laws concerning pollution of rivers and streams. Work under this Contract shall be performed in such a manner that objectionable conditions will not be created in water resources through or adjacent to the project areas.
 - a. Spillages: Throughout the duration of the Project, special measures shall be taken to prevent chemicals, fuels, oils, grease, bitumen's materials, waste washing, herbicides and insecticides, and cement from entering water resources.

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- b. Disposal: If waste material is dumped in unauthorized areas, the Subcontractor shall remove the material and restore the area to the condition of the adjacent undisturbed area. If necessary, contaminated ground shall be excavated and disposed of as directed by CM, and replaced with suitable fill material, compacted and finished with topsoil, at the expense of the Subcontractor.

WEATHER PROTECTION

1. It is the responsibility of each Subcontractor to provide their own weather protection needs. It is also the intent to have each Subcontractor protect their work and existing or adjacent property against weather, to maintain their work, materials, apparatus and fixtures free from injury or damage in accordance with the Contract Documents during the entire construction period. Any work that is damaged shall be removed and replaced with new work at each Subcontractor's expense. It shall be each Subcontractor's responsibility to review any/all weather protection provided by others to confirm that such protection is adequate to protect their work.
2. Each Subcontractor shall be responsible to remove all snow and ice from their work within the construction area as may be required for proper protection and execution of the Work and protection and safety of the public. Responsibility for common areas as defined in the Scopes of Work.

Introduction

As the leader in the construction industry, Turner Construction Company (also referred to as Turner) is committed to promoting a proactive safety program, which will lead to the establishment of a positive safety culture among all project employees. Every effort will be made to integrate the use of safe work practices into daily work activities performed by trade contractors and their employees. Our approach is to realize the benefits of Living Injury Free Everyday® (L.I.F.E.). This will be achieved with thorough pre-planning and daily vigilance. By planning for safe and efficient production, incidents that may cause suffering to a person or increase cost to the project will be eliminated or minimized.

Project Managers, Superintendents, Assistant/Area Superintendents, Safety Representatives, and Foreman are the key individuals responsible for implementing and maintaining an effective safety program. Each of these individuals must ensure personnel working under their control are provided the tools and knowledge to work safely, and are performing their tasks in a safe manner.

It is the responsibility of each worker to follow every precaution in their Daily Pre-Task Plan to protect them and their fellow workers.

Each subcontractor and lower tier subcontractor is solely responsible for the safety of their employees and/or visitors as required by the rules described in this Program, OSHA requirements, and all local, state, and federally recognized standards and codes.

All contractors and subcontractors are responsible to train and educate their employees, and/or visitors on the contents, requirements and policies contained within this Program.

Project Description

Enter project description and scope here.

Key Project Staff

- A. Project Executive – David Brown
- B. Project Manager – Litany Zenz
- C. Purchasing Agent – Andy Beitel
- D. Project Superintendent – Tyler Pica
- E. Project Engineer – Lexie Perrine
- F. Environmental, Health and Safety Director – Brandon Herdman

Responsibilities

Turner Project Safety Superintendent

- Enforce compliance by all parties with principle of the Project Safety Program.
- Assist all Subcontractors in pre-planning their operations to prevent personal injury or property damage to employees, other contractor's employees or to the public.
- Chair safety meetings.

- Review and enforce the recommendations of the Project Safety Coordinator job safety tours and of the toolbox meeting minutes.
- Conduct periodic safety tours of their own, to assure compliance.

Turner Safety Coordinator

- Investigate incidents and direct the elimination of hazardous conditions.
- Make at least a weekly formal safety tour and submit copy to responsible party for action.
- Evaluate the safety of the project daily.
- Gather facts on accidents and thefts for action by the Project Safety Superintendent.
- Periodically attend trade and subcontractor toolbox meetings.
- Distribute and post all safety meeting minutes, safety bulletins and incident data.
- Prepare minutes of project safety meetings.
- Issue safety bulletins for the project.

Subcontractor Safety Superintendent and Foreman

Subcontractor Safety Superintendent and all subcontractors must have completed an OSHA 30 hour for construction class. One person must be certified for all contracts under \$5M, and two people must be certified for contracts over \$5M. The 30 hour certified person(s) must be on-site 100% of the time. This OSHA 30 hour certification must be within the past two years of the award of subcontract; if not the subcontract employee must be re-certified through Turner's online TKN Training Course titled, *Turner Safety Refresher*.

- The Subcontractor Safety Superintendent must be identified before subcontractors start work. If the subcontractor's contract value is \$5M or greater and/or the subcontractor will have 25 employees or more on site, including sub tiers, for more than two weeks, they must provide a full time Safety Coordinator who:
 1. Is qualified to recognize safety hazards; and
 2. Has the authority to take corrective action; and
 3. Possesses current certifications in first aid, CPR and AED; and
 4. Possesses a recent OSHA 30-hour Construction card (within the last two years or has taken Turner's Safety Refresher); and
 5. Has an academic degree in safety, ASP, CHST, or CSP designation, OR has a minimum three (3) years of prior work history as a designated construction safety coordinator.

Turner reserves the right to approve or deny the subcontractor's fulltime safety personnel for each project.

- At a minimum each contractor will designate one Foreman for each 10 employees. Once a contractor has three Foremen, one will be designated as a non-working Foreman with their primary responsibility of acting as the subcontractor safety representative and will not be working with their tools. Additional specific requirements may be identified in a Contractor's scope of work. Generally, if there is a conflict between this document and the scope of work the most stringent will take precedence. The Business Unit Safety Director reserves the right to evaluate and determine what is best for the safety of the project.

1. At a minimum the Subcontractor Safety Superintendent will be requested to:
 - a) Ensure their employees attend jobsite orientation before start of work on the project.
 - b) Take the lead in recognition and abatement of hazardous situations.
 - c) Conduct a daily “Safety Huddle” prior to the start of each shift and submit a Daily Pre Task Plan (PTP) (Form 03) each morning prior to the start of work.
 - d) Perform and document weekly safety inspections (1 per week at minimum).
 - e) Conduct at least one monthly safety tour with your Safety Director and submit findings to Turner.
 - f) Ensure that Competent Persons submit, at a minimum, the below listed safety inspections at the designated frequency to the Turner Project Superintendent or Safety Manager. Note: An OSHA 30-hour Construction card alone does not satisfy OSHA requirements for a competent person.

<u>Inspection</u>	<u>Frequency</u>
Fall Protection	Before Each Shift
Excavations	Before Each Shift
Scaffold	Before Each Shift
Crane Inspections	Before Each Shift
Confined Space	Before Each Shift
Hot Work	Before Each Shift
Heavy Equipment	Before Each Shift
GFCI	Weekly
Personnel Hoist	Per OSHA Reqs.
Dig Permit	Before Each Shift
Tools Box Talks & Report	Weekly

- g) Conduct and document toolbox meetings on a weekly basis.
- h) Issue minutes of the weekly toolbox meeting to Turner.
- i) Effectively utilize and train employees in pre-planning, recognition, and remediation of hazards.
- j) Each subcontractor, regardless of tier, is to submit in writing toolbox meeting minutes containing the following:
 - (1) Name of subcontractor and date.
 - (2) Name of Subcontractor Safety Superintendent.
 - (3) Name of employees attending.
 - (4) Name of employees onsite not attending.
 - (5) Number of employees on their payroll that day.
 - (6) Subjects discussed.
 - (7) Safety observations of employees.
- k) Attend project safety meetings.

- l) Enforce disciplinary measures when need arises for their employees.

1st Violation

Verbal or written warning to employee and their Supervisor.

2nd Violation

Suspension from job, until retrained by a third party and verbal or written notice to employer.

3rd Violation

Permanent removal from jobsite.

Note: Gross disregard for policy or procedures, as determined by Turner, can result in immediate removal from the project.

- m) Each subcontractor is responsible for all of their subcontractors and suppliers, regardless of tier, compliance with the Project Safety Program.

2. Employees / Employers

- a) Perform their work to prevent accidents to themselves, fellow workers, and property.
- b) Use Personnel Protection Equipment as required, to meet all Turner, federal, state and local requirements.
- c) Alert supervisors to dangerous situations.
- d) Cooperate with principles of the Project Safety Program.
- e) Utilize all tools and equipment in a safe manner and in accordance with manufacturer's recommendations.
- f) Complete project safety orientation before starting work on the jobsite.
- g) Acknowledge and abide by the project enforcement rules.

1st Violation

Verbal or written warning to employee and their Supervisor.

2nd Violation

Suspension from job, until retrained by a third party and verbal or written notice to employer.

3rd Violation

Permanent removal from jobsite.

Note: Gross disregard for policy or procedures, as determined by Turner, can result in immediate removal from the project.

3. Visitors

Any person not directly involved with the onsite construction of this Project must not enter the site without first going to Turner's job office, signing a visitor's release, obtaining a hard hat and safety glasses which is to be returned to Turner. All visitors must adhere to Turner Project Safety Program and be 18 years of age or older.

General Requirements

Employee / Visitor Access

All employees and visitors must satisfy the following drug and orientation provisions before being permitted access to this project site:

1. Employees must produce a drug screen card or similar document as verification of having successfully met the pre-employment requirements contained in the drug program for this project. Those not possessing such can undergo testing at the on-site medical office or designated clinic before reporting for employee orientation. The cost of drug screening test will be at the expense of the subcontractor.
2. Employees must complete the project's safety orientation at which time they will register personal, drug testing, and training information. Employees will be issued a hard hat sticker or equivalent identification upon completion of the orientation process. Identification must be displayed at all times while on the project.
3. Visitors will be required to obtain visitation approval and be escorted by an assigned employee.

No pets are allowed on Turner property.

Walking or driving on projects while talking or texting on phones or a walkie-talkie is prohibited. Stop and focus on the task at hand.

Anti-Idling of Vehicles and Equipment

All trade partner vehicles within the project site fence (including, but not limited to, transportation and construction equipment, delivery trucks, and personal or company trucks) shall not idle. The only allowable exceptions to the standard are as follows:

1. Ambient air temperature exceeds 85°F or falls below 32°F (or as defined by local or regional temperature limits, whichever is stricter)
2. Engine idling is required for the function of auxiliary equipment (i.e. cranes, concrete pumps, etc.)

COVID-19 Safety Requirements

At a minimum, a surgical mask or 100% cotton cloth face covering that covers the nose and mouth must be worn when required by the client, OSHA, State, other local authority, or by Turner. Additionally, a

KN95, or similar mask may also be worn. Note: all work must be evaluated for the appropriate minimum PPE required by OSHA.

Subcontractors are responsible for planning all work during the morning Pre-Task Plan (PTP) to allow for 6' distancing of workers. If 6' distancing is not feasible, face coverings should be worn and this should be documented on the PTP. It is the responsibility of the subcontractor foreman to enforce the adherence of mandatory face coverings when and where required.

Subcontractors are responsible for daily disinfecting of their tools, equipment, break areas, and common touch surfaces.

Subcontractors are responsible for all testing, notifications, follow-up, and documentation of COVID-related matters required by the client, OSHA, State, other local authority, or by Turner."

Pre-planning

Contractors are required to produce Site Specific Safety Plans and Job Hazard Analyses ((JHAs) (Form 01)) for each major task they plan to perform. These documents are required to be submitted to Turner at the first pre-construction meeting.

Pre-Task Planning – PTP

The PTP is a formal daily work plan. Each supervisor should meet with their crew to discuss the tasks to be accomplished and the steps that need to take place to work safely. All workers should review and sign the relevant PTP for their assigned work before beginning the tasks. When the scope of work or conditions change, the PTP should be revised and resubmitted. The main components of the Pre-Task Plan will include the following:

For each task of work a PTP will be completed to identify the following:

- Evaluating the work area
- What permits and proof of training may be required
- Potential hazard checklist
- Description of steps to be performed
- Hazards associated with each step
- Required actions to eliminate or control the hazard
- All PPE requirements for the activity
- Crew sign-off
- In accordance with Building L.I.F.E., plan out steps and controls to minimize risk using the Hierarchy of Controls, as well as by reducing frequency, likelihood, and severity

Work shall not begin until the PTP for the work activity has been discussed with all engaged in the activity, including the Contractor, subcontractor(s), and other affected on-site representatives at a safety pre-construction meeting or daily huddle.

When there is a change in condition (unplanned encounter of an activity, job step, or sequence of events), work must be stopped and the PTP must be updated with safe work procedures with the impacted persons or crew.

The information the supervisors are relaying to the workers is the same that was developed in the JHA however, the PTP will more specifically define the plan for that phase of work that is occurring that day.

Pre-Task Planning is also accomplished on a daily and pre-shift basis through the pre-shift safety huddles.

Each crew leader is responsible for ensuring the crew holds a safety huddle prior to the beginning of the shift, and as necessary during the shift, to develop and revise a PTP for that day's work.

The huddle should be collaborative with input from multiple members of the crew.

The hazard analysis is typically captured on a dry-erase board laid out like a JHA/PTP (steps / hazards / controls).

Workers sign an attendance record showing they participated and then sign out at the end of the shift indicating they safely completed work that day and are leaving the project.

A copy of the PTP and/or a photo of each huddle board shall be kept near the work location and will be submitted to Turner daily.

The JHA and PTP will be used as a primary means of accident prevention. Each work crew is required to participate in the development and review of applicable PTPs for their work in the huddle with their Foreman, prior to the start of each work shift.

Each work crew will facilitate a mandatory stretch and flex in combination with their morning huddles.

Hazard Communication

As a minimum, the subcontractor shall incorporate all the basic principles of the Project Safety Program into their Safety Program. The above shall also include the subcontractor's Hazard Communications Program with SDS (Safety Data Sheets) to be provided before start of work. Each month subcontractors will provide an updated list of the hazardous materials they have on the project by submitting a Chemical Inventory (Form 12) to the Project Superintendent or Project Safety Manager.

The subcontractor is responsible for maintaining an updated binder of their respective SDSs on the project and will make them immediately available for review upon employee, Turner or any other request. This can be an electronic binder or system in order to provide information across multiple sites as long as the documents are immediately available.

Subcontractors are responsible for training their workers on Hazard Communications and Globally Harmonized Systems. In addition, subcontractors must include a review of Safety Data Sheets for chemicals they work with during each morning's Pre-Task Plan (PTP).

Safety Data Sheets must be referenced and included in daily PTPs as a means of identifying proper personal protective equipment as well as other control measures including spill response and first aid measures. No work is permitted without first having all necessary equipment and controls for the chemical being used on the project.

Each subcontractor is responsible for proper chemical container labeling and maintenance. This includes gasoline, kerosene, and diesel containers.

Silica

Exposure to respirable crystalline silica must be evaluated by each work crew during their daily PTPs. Exposure control plans for each crew must be developed and documented on the PTP, prior to starting work, under the direction of a designated silica competent person. Considerations must be made to control exposures to the workers immediately performing the work as well as other workers or people in the area. The generating/exposing Subcontractor is responsible to ensure that all persons in the work area and members of the general public are not exposed to the hazards of silica.

Fall Protection

All work performed at or above 6 feet will be done in conjunction with positive fall protection 100% of the time, including but not limited to, loading and unloading trailers and the leading edge of excavations. At no time shall a Safety Monitor or Attendant be used as a means of fall prevention.

Each contractor is responsible for protecting its own employees by using conventional means of fall protection such as standard guardrails or perimeter cables. The ongoing maintenance and daily inspection of this protection must also be included. If a contractor's employee cannot be protected by conventional methods, then adequate pre-planning must be conducted to provide for anchorage points capable of withstanding 5000 lbs. in combination with a safety harness and self-retracting lanyard.

Perimeter protection should never be used as an anchorage point unless it has been designed by a Professional Engineer (PE) to withstand such force.

If warning lines are used it must be maintained at least 15 feet from the leading edge for all subcontractors. The warning line height must be between 34" & 39" from the walking/working surface. The rope, wire or chain must have a breaking strength of 500 pounds and must be flagged every 6 feet. After erected, the stanchions must be secured from tipping due to wind, etc.

100% tie off is required when working from articulating personnel platforms.

Subcontractors are required to follow the manufacturer's recommendations for fall prevention when working from a scissorlift. Typically this means a full body harness and a restraint lanyard connected to

the lift's designated attachment point. Subcontractors must refer to the equipment manual and specify whether a fall prevention or restraint system will be utilized in their daily PTPs.

All floor openings exceeding 2 inches in diameter shall be covered, barricaded, or otherwise protected. Covers shall be designed to withstand twice the weight of workers, equipment, and materials. Covers shall be secured against displacement horizontally and vertically. All covers must be clearly marked with the words "HOLE" or "COVER" and beveled or flush to prevent trip hazards.

Each contractor employee exposed to fall hazards must be trained in the recognition of fall hazards, the avoidance of fall hazards, the purpose, use, and requirements of conventional fall protection methods, and the use, inspection, and care of harnesses, lanyards, and rescue devices.

Since contractors are experts at their specialized trades, they shall provide Turner with their own project-specific Fall Prevention Plan, to include rescue, which describes the methods they intend to use to provide adequate fall protection for each contractor's specific operations and to comply with OSHA Subpart M, and Turner's six foot rule.

Guardrails

All cable guardrails must be a minimum ½" diameter steel cable. All cable guardrails must be looped connections with three cable clamps on each side of the connection. Open eye turnbuckles are not permitted. Guardrails made of 2x4's shall not have any nails protruding. Guardrails cannot be made of metal studs.

PPE

Subcontractor must provide their employees with all necessary personal protection equipment and tools, and enforce their use as required by the Safety Program, as well as federal, state and local codes and regulations.

Hard Hats

Each Subcontractor shall enforce the wearing of ANSI Z89.1-1981 approved hard hats and Eye Protection (ANSI Z87.1) during the total construction of this project, and shall immediately remove anyone from their forces not complying with this requirement. Beginning July 1, 2022, subcontractor employees and visitors will be required to wear an ANSI-approved type II safety helmet with a four-point chin strap fully attached and secured.

Cowboy hard hats, aluminum/metal hard hats, and bump caps are not permitted on Turner Construction Company projects. Employees exposed to electrical voltages of 600 V or greater shall wear hard hats that meet the requirements of ANSI Z89.2 type hard hats.

Safety Glasses and Face Protection

Safety glasses (minimum eye protection)

- Safety glasses with fixed side shields must be worn at all times on the project. All safety eyewear must meet the requirements of ANSI Z-87.1
- Dark safety glass lenses are not permitted inside of buildings, in enclosed areas, or at night.

Goggles or spoggles

- Goggles or spoggles must be worn (instead of safety glasses) when working above shoulder and no falling debris is expected. Examples of these type of activities include installing ceiling tile, pulling wire, etc.

Face shield plus safety glasses

- Where employees are performing work that could potentially cause materials to become flying objects such as, but not limited to, chipping, welding, grinding, cutting, drilling, chiseling, and using powder-actuated tools they shall utilize a face shield in addition to safety glasses.

Clamp-on full face shield plus unvented goggles or spoggles

- A full face shield that clamps tightly onto the brim of the hard hat and unvented safety goggles or spoggles that fit snugly against the skin must be worn when drilling, cutting, or performing other above shoulder activities that create falling debris as well as when performing interior demolition activities.

*For all scenarios above, please refer to manufacturer and Safety Data Sheet (SDS) for specific eye and face protection requirements.

Clothing & Hi-Vis Vests

All personnel shall wear shirts with sleeves and long trousers.

No shorts or tennis shoes of any kind will be permitted on this project.

High visual, safety vests, shirts or jackets shall be worn as the outermost apparel by all employees, 100% of the time. ANSI Class 2 (0-44 MPH) and Class 3 (45 MPH or more) outerwear must be worn whenever working on or near (within 10 feet) of a roadway.

Foot Protection

All Turner employees, subcontractors and visitors are required to wear, at a minimum, closed toe, sturdy shoes or boots.

ASTM-rated safety toe shoes or boots, or toe guards must be worn when using jackhammers, tampers or similar equipment which could be dropped or landed on a worker's toes / feet. ASTM-rated Safety shoes or boots must also be worn by masons, drillers, pile driving, steel erectors, and riggers due to the hazards inherent with their work.

Hand and Arm Protection

All Turner employees, subcontractors and visitors are required to wear ANSI cut level 4 (at a minimum, unless the competent person determines that the use of protective gloves for a specific activity creates a greater hazard) protective gloves 100% of the time on this project. A competent person for each trade or group of employees is expected to identify and specify (include in daily PTPs) the appropriate glove that best mitigates the potential hazard presented to their employees.

Appropriate arm protection is required during operations where the arms are exposed to cut hazards (i.e. cut-rated sleeves, etc.). These operations shall be identified on the JHA and PTP.

First Aid and CPR

Each subcontractor must have their own adequate first aid kit and at least one qualified first aid and CPR-trained employee onsite full time. The name of this person, along with copies of their current certification cards, shall be submitted to Turner prior to beginning any work. Prior to expiration of such certification, the employee is required to become re-certified.

Respiratory Protection

Respiratory protection is required to meet all federal, state and local OSHA regulations.

Respirators are to be worn when employees are working with or are exposed to gases, fumes, vapors or dusts above the OSHA-permissible exposure limit (PEL) or when an oxygen-deficient atmosphere exists.

- Respirator users must be trained in use, selection, maintenance, storage and inspection prior to use. It is the responsibility of contractor management to train its employees.
- Respirator users must have a fit test conducted prior to wearing a negative pressure respirator. It is the responsibility of the contractor to conduct the test and to enforce a facial hair policy.

Lock Out / Tag Out (LOTO)

A Lock Out / Tag Out program must be submitted by any subcontractor, per OSHA standards 29 CFR 1910.147.

Nothing Hits the Ground

Fabrication

All material fabrication shall be performed at a work station between 30 and 39 inches off the floor.

Work stations shall be mobile and include a fire stop directly behind all chop saws.

Rubbish containers shall be mobile and located directly adjacent to the work station.

The subcontractor is to furnish all mobile rubbish containers for their work.

Housekeeping

All rubbish shall be disposed of as it is generated and be immediately placed in subcontractor-provided mobile rubbish containers.

Cordless power tools are required unless the subcontractor can demonstrate a hardship or need to use tools with power cords.

The subcontractor is required to elevate off the ground all power cords in order to minimize tripping hazards on walking/working surfaces. Cords, hoses and welding leads must be kept off the floor at least 8 feet high in walkways, aisles, stairs and access points. Suspension of cords will be by non-conductive means only such as plastic S-hangers or wooden cord trees.

Debris is not allowed to be consolidated on the floor.

Material Handling and Storage

Materials may not be stored within 10 feet of the building perimeter or adjacent to shafts or stairwells.

All tools and materials must be tethered where there is a risk of materials falling or being dropped, including during a lifting operation, unless the project team determines an exclusion zone must be established. The exclusion zone must be constructed of hard barriers such as wood or metal guardrail systems, cable wire rope or chain, red plastic chain, or similar material. Danger and caution tape will not be accepted for use in exclusion zone construction. Exclusion zone must be maintained during work and have legible Danger signage posted along the perimeter. The size of the exclusion zone must consider deflection or arc of the falling material. All tools, materials, or equipment which have the potential to breach the perimeter protection must be positively secured back to the worker or structure through the use of tool lanyards or synthetic rope (natural fiber rope is not permitted). Lanyards or ropes must be appropriately sized for the weight of the tool, material or equipment. Anchorages must be snap-hook, carabineer, shackle or similar device that provides positive locking. The use of knots to secure lanyards is not permitted. Subcontractors must evaluate the size and weight of any object which will be secured to a worker's wrist, belt, etc. to ensure it will not cause injury in the event it is dropped.

All material laydown areas must be coordinated and designated by Turner.

Material must be stored to promote mobility of material. Pipes, conduits, metal fabrications and steel framing are to be stored on rolling racks or similar means of conveyance. Bulk material must be palletized to allow for easy mobility using a pallet jack.

“Just in Time” delivery required to minimize clutter. Nothing should be stored on a floor that cannot be installed within one week.

Heavy material such as glass and drywall must be loaded so as not to overload the structure. The subcontractor is required to do a floor loading analysis for submission to Turner PM/ PE for review.

Steel Erection

Fall protection shall be used above 6 feet in conjunction with 100% positive fall protection. At no time shall a Safety Monitor or Attendant be used as a means of fall protection. A site-specific erection and fall protection plan must be submitted prior to start of erection.

A guardrail system, tie-off system, or netting must be used.

The area below steel erection activities must be barricaded to prevent access by unauthorized personnel.

Guardrail cables of one-half inch wire rope or the equivalent shall be installed at 42 & 21 inches high, around the perimeter of each floor and all interior floor openings during erection. These cables shall be maintained to OSHA requirements by the erector until the erector is offsite. The erector and fabricator are responsible for providing means for erecting cable (i.e. pre-punch columns, angle iron). Toe boards at least 3.5 inches high must be provided and all perimeter cabling must be flagged at 6 foot intervals.

A hoisted steel member shall not be released until it is anchored by at least two bolts at each connection.

Tag lines must be used to control loads.

Multiple lift rigging (“Christmas Treeing”) may be used when limited to a maximum of 3 members.

Personnel are prohibited from climbing columns, walking on beams, traversing the trusses and sitting on top of columns unless fall protection is provided.

Tools and containers for rivets, bolts or welding rods must be secured to prevent falling.

The erector is responsible to determine if extra plumbing equipment is needed, and provide as needed.

The steel fabricator/steel erector will assume all responsibility for adequate lay down and erection site conditions beyond the Site Logistics Plan.

Structural steel erection is not to be done using forklifts.

- Small miscellaneous pieces may be lifted if a lift plan is prepared and Turner's Safety Manager (or superintendent if a Safety Manager is not present) allows the lift, the piece does not exceed 70% of the forklift's capacity as configured, and is allowed by the load chart.
- The lift must be made with an attachment designed and/or approved by the forklift manufacturer.
- The Business Unit EHS Director must review all plans, prior to lifting, if a contractor intends to use a forklift for lifting small, miscellaneous, pieces of steel.

Confined Space

Confined space entry procedures must be submitted and approved by Turner’s Business Unit EH&S Director prior to the start of work where they are required per 29 CFR 1926 Subpart AA, 29 CFR 1910.146, and /or host facility requirements. The more stringent rule will always apply.

Entering or knowledge of entry into a confined space without all appropriate planning and permits is a zero tolerance issue for Turner Construction and will be dealt with appropriately.

Turner Construction requires onsite rescue services for all permit-required confined spaces. Subcontractors must provide Turner’s Business Unit EH&S Director with rescue service team credentials, which must be approved, prior to entry.

Before beginning work, each contractor must ensure their designated confined space competent person identifies each space, evaluates the space to determine its classification (permit-required, alternative entry or non-permit-required), and provides appropriate pre-planning documentation including a written confined space program, employee training records, equipment type and service records, rescue provisions, communications, and permitting as applicable.

Turner considers all confined spaces to be permit-required spaces until a competent person can provide Turner with documentation adequate to support alternative or non-permit provisions per Turner’s *Confined Spaces in Construction* policy.

All permit-required confined space work will require a mandatory pre-planning meeting with Turner project staff as well as a documented *Project-Specific Confined Space Procedure* that must identify the following, at minimum: Job-specific safety analysis, atmospheric testing, assigned duties, unauthorized entry, rescue equipment and emergency services, entry permit, training, respiratory protection, and hot work safety.

All confined space entries require the use of Turner’s Confined Space Entry Permit which must be approved and signed prior to daily entry.

Excavations

Prior to any digging a “Dig Permit” (Form 21) must be obtained and the utility protection services (811) must be contacted.

Excavations greater than 4 feet in depth shall utilize protective systems (i.e. trench shields, sloping, benching, or shoring) at all times to protect employees against potential cave-ins.

A competent person must be identified and their certification submitted to Turner prior to the start of work. A competent person will be on-site during all excavation work to determine the soil type and its stability by performing one visual and one manual test in accordance with 29 CFR 1926, Subpart P Appendix A and submit an Excavation Safety Checklist (Form 11) to the Project Superintendent prior to each shift.

Subcontractors must develop a written plan to protect excavations they create on the project. Plans must be reviewed and approved by the Turner project team prior to start of work and must include provisions for safe access points, such as portable stairs.

All hydraulic shoring fluid must be environmentally-friendly.

Ground Fault Circuit Interrupters (GFCI)

All 120-volt single phase 15 & 20-ampere receptacles shall have approved GFCI's.

The electrical contractor must turn in written verification (Form 18) that they have tested all GFCI receptacles once each month, at minimum.

Temporary Lighting

All temporary lighting shall be run with sheathed multi-conduction wire. No single strand wiring is allowed. Temporary lighting must never be put on the same circuit as temporary or permanent receptacles; temporary lights must be on a dedicated circuit and cannot be used for power.

Temporary lighting must be at least 8' off the ground and provide a minimum of 5 candle feet in each area of the project.

Burning, Welding and Cutting

Hot Work is defined as any work using open flames or sources of heat that could ignite materials in the work area. Examples of hot work are:

- Welding
- Burning
- Brazing
- Propane smoldering
- Oxyacetylene cutting
- Grinding ferrous metals
- Considerations for unattended temporary heating must be evaluated and approved by the Senior Operations Lead and Business Unit Safety Director

Before beginning hot work, contact the project superintendent or designated safety personnel to have a Hot Work Permit issued (Form 16). Permits are issued for the specific job being done, and for a specific time period. The time period is usually for the working shift, but may never exceed twenty-four hours. No hot work is permitted without prior approval from the project superintendent or superintendent designee.

The following precautions must be ensured during all hot work activities:

20 pound dry chemical, type ABC fire extinguisher(s) in place.

Proper PPE is available and utilized.

Sprinklers are in service.

Cutting and welding equipment is in good repair.

During cutting and welding, ventilation and/or respiratory protection must be used when hazardous fumes, gases or dust are present.

Precautions within 35 feet of work

Flammables and combustibles have been removed from a 35 ft. perimeter of the hot work area.

Floors are swept clean of combustibles.

Combustible floors are wet down, covered with damp sand or fire-resistant blankets.

Flammable liquids removed; other combustibles, if not removed, protected with fire-resistive tarpaulins or metals shields.

Potential explosive atmosphere has been evaluated and eliminated.

All wall and floor openings have been protected.

Fire-resistive tarpaulins suspended beneath work.

Work on Walls or ceilings

Construction is noncombustible and without combustible covering or isolation.

Combustibles moved away from other side of wall.

Work on Enclosed Equipment

Enclosed equipment cleaned of all combustibles

Containers purged of flammable liquids.

Fire Watch

Fire Watch will be provided during and for at least 60 minutes after work and during any coffee or lunch breaks.

Fire Watch is supplied with suitable extinguishers (20 pound, dry chemical, type ABC unless otherwise specified due to project hazards).

Fire Watch is trained in use of this equipment, in sounding alarm and in emergency evacuation procedures.

Fire Watch persons must be designated by a red safety vest only when acting as a Fire Watch.

Misc.

Cylinders shall be secured in an upright position at all times.

Oxygen and acetylene cylinders not in use must be separated by 20' or ½ hour fire rated wall with regulators removed and caps in place.

Flash back protection must be provided by an approved device to prevent flame from passing into the fuel gas system.

The welder must wear the welding hood attached to the hard hat. It is not acceptable to wear the hood without the hard hat.

Hearing Protection

Hearing protection must be used to meet OSHA standards, this Safety Program, Federal, State and Local Codes and Regulations. A generalized guideline to follow is if the worker would need to raise his/her voice to communicate in an area or while operating a piece of equipment, hearing protection (muffs or plugs) should be worn. Adequate training must be provided by contractor per OSHA requirements.

General Safety Rules

Horseplay of any kind is absolutely forbidden on the project site.

Do not walk or stand under or beside suspended loads.

When discarding boards, always remove protruding nails or bend them down.

The use, possession, sale, transfer or purchase of alcohol, illegal drugs controlled substances on this project is prohibited.

To the maximum extent permitted by applicable law, the possession on Company premises or while on duty of firearms, clubs, explosives, or other weapons that could be used to cause harm to personnel or property, other than that used to perform specific construction activities. This would include Turner projects and client-owned buildings and facilities we work in, project-provided parking areas, and while in the execution of work duties.

It is each employee's responsibility to be familiar with emergency safety equipment in the area which they are working.

To prevent impalement of personnel, exposed reinforcing rods and other materials that could cause impalement must be provided with protection such as rebar caps, 2 x 4 lumber, etc. The use of mushroom caps is not permitted for impalement hazards.

Where employees must walk across rebar, temporary walkways must be installed to prevent trip hazards.

Manufacturer requirements/ recommendations for equipment or the Turner Safety Program must be followed (whichever is more stringent).

No headphones, iPods, radios, etc. are permitted on the job.

All tobacco products, smokeless tobacco products, and e-cigarettes (nicotine or no nicotine) are prohibited in all Turner offices, project offices, warehouses, and on projects. The project or office can designate smoking areas that must comply with all ADA, state, and municipal regulations. Certain owners may also have non-smoking policies and Turner employees, subcontractors and visitors will comply with those policies fully.

Man baskets such as those utilized from fork truck type vehicles are not allowed on Turner projects.

Glass containers are not permitted on site.

No hoist shall be placed into service on a Turner project until it has been inspected and the supplemental reports are submitted to Turner.

Lift support struts are required to be in place and operational on the lids of all gang / job boxes.

Wall / Floor Openings

Once a contractor begins his work directly above, below, or within eighteen inches (18") of a floor or perimeter opening, that contractor is to maintain the protection of that opening.

Unmarked Pipes

In renovation and/or alternation work, identification of unmarked pipes must be made prior to any demolition or work being performed.

Public Areas

All work performed in or adjacent to public spaces will be required to have barricades separating the public from the work. Public protection should be a minimum of 6' tall and installed in a manner that does not create an additional hazard such as tripping, and capable of sustaining, without failure, high winds and wind gusts. Warning signs must be posted approximately every 100' of linear fence to inform the public of hazards. All public areas are to be kept clean/clear of debris at all times.

Safety Meetings

Onsite employees shall attend safety meetings as scheduled by the owner or Turner Construction Company and the time and cost will be the responsibility worker's employer.

Hand Tools

Inspect all tools before using. Never use defective tools.

Keep hand tools in good condition – sharp, clean, oiled, dressed and not abused.

Keep tools subject to impact (chisels, caulking irons and star drills) dressed to avoid flying spalls from "mushrooming." Use tool holders.

Do not force tools beyond their capacity or use "cheaters" to increase their capacity.

Do not use tools or materials for pry-bars unless it is an actual pry-bar.

Do not leave tools on scaffolds, ladders or overhead working spaces.

Do not throw tools from one location to another, from one employee to another or drop them to lower levels.

ANSI cut level 5 gloves (at minimum) must be worn when using box cutters and utility knives.

Portable Power Tools

All portable power tools must be maintained in a safe condition.

Portable power tools must not be operated unless the employee is trained in their use.

Electrical power tools must be double insulated or shall be of an approved system that contains three wires with a ground.

Guards or shields must be installed on all power tools before use.

Electrical power tools are not be used in explosive atmospheres unless the tool is approved for service in a hazardous location.

Pneumatic-powered tools are to be secured to the hose by positive means to prevent the tool from becoming accidentally disconnected. Radiator-type hose clamps are not permitted on hoses.

Pneumatic hose sections must be wired together at each coupling connection.

Operators of powder-actuated tools must be authorized, must possess valid credentials, and wear proper personnel protective equipment.

All defective power tools must be taken out of service immediately and tagged defective.

All hammer drills and rotary hammers must have integrated technology such as a safety clutch that will stop the drill bit rotation should the drill bind in a hole. An example of this is Hilti's anti-torque control (ATC).

Personal protective equipment must be worn specific to each tool manufacturer. Refer to tool manual for direction.

Extension Cords

Extension cords must be of the three-wire type with ground plug.

Only round, heavy-duty (type S, SJO, SJTW, ST, SO and STD), minimum 12 gauge cords are permitted.

Extension cords and cables must be protected from traffic or sharp corners.

Cords must be kept out of walkways and other areas where they present trip hazards. See "Nothing Hits the Ground."

Electrical connections, cables, etc. must be kept away from water or damp surfaces.

Inspection and testing of cords shall be performed as required by OSHA 1926.404.

Bad cords must be taken out of service and tagged defective and repaired or removed from jobsite.

All cords must be stored and put away after use (i.e. not coiled up on the floor).

Turner does not allow extension cords to be connected in series.

Equipment

Each contractor employee has the responsibility to inspect equipment before use. Defective equipment must be tagged with a "Defective – Do Not Use" tag and taken out of service.

Know the limitations of the equipment used and do not exceed those limits.

Ladders and Scaffolds

Ladder use on Turner Construction projects will be allowed only when it has been determined by Project Manager and Turner's Business Unit EH&S Director that it is unfeasible to use all other options to complete the task.

If it is determined that a ladder is the only means of performing the job at elevated height, a ladder permit must be submitted prior to starting work. At no time will a ladder be on site without a current permit and safety checklist.

Use of job built ladders is prohibited on Turner Construction Projects. Temporary stair towers or prefabricated stairs shall be used to access different building levels.

Only fiberglass, type 1A (at a minimum) ladders will be used. Platform ladders are preferred.

Procedures for identifying and responding to all tasks that require the use of a device that allows work from a height:

- Prior to beginning work, the subcontractor or superintendent (for self-perform work) shall evaluate all tasks that require individuals to work at elevated heights. It is the expectation that these tasks will be performed using methods other than a ladder. Use of lifts and portable scaffold devices shall be the preferred method to perform this type of work.

If it is determined that a ladder must be used:

- The subcontractor shall complete the Turner Construction Ladder Use Permit and have it reviewed and approved by the Turner Superintendent.
- Workers must maintain three points of contact at all times when ascending and descending a ladder. If this cannot be done, worker must tie off at any height.
- When working at a height greater than four (4) feet, and where three points of contact cannot be maintained, 100% fall protection is required.
- Prior to starting work each shift, The Turner Construction Ladder Safety Inspection Checklist shall be completed and affixed to all ladders.
- Platform ladders shall be the ladder of choice, when permitted, on Turner Construction projects.
- Prior to using a ladder, the Turner Superintendent will review and approve the Job Hazard Analysis, Pre Task Plan, and Ladder Use Permit.

Concrete and Masonry

Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart Q – Concrete and Masonry Construction, in addition to the following guidelines. Unless otherwise stated in the contract, the concrete or masonry contractor must provide at least two covered entrances into each building or structure during perimeter work. They must also cordon off other means of access/egress.

No load may be placed on a concrete structure unless a qualified person, knowledgeable in structural design, determines that the structure is capable of supporting the load.

Protruding reinforced steel, onto which employees could fall or fall into, must be protected to eliminate the hazard of impalement. The use of mushroom caps is not permitted for impalement hazards.

No worker, except those involved in post tensioning operations, shall be permitted to be behind the jack during tensioning operations. Signs and barricades shall be erected to limit access to the area.

No worker shall be permitted to walk under concrete buckets while it is being elevated or lowered into position.

No worker shall be permitted to apply cement, sand and water mixture through a pneumatic hose unless the employee is wearing the proper PPE including face protection.

The subcontractor shall provide an eye wash station with at least 15 minutes of eye wash solution within 75 feet of any concrete, painting or masonry work.

Equipment and Tool Requirements

Powered and rotating concrete troweling machines must have a switch that automatically shuts off power whenever the hands of the operator are removed from the machine.

Cast-In-Place Concrete Requirements

Formwork must be designed, fabricated, erected, supported, braced and maintained so it is capable of supporting all lateral and vertical loads anticipated to be applied to it.

All shoring equipment must be inspected prior to erection to determine if it meets the requirements specified in the formwork drawings.

Erected shoring equipment must be inspected immediately prior to, during and after concrete placement.

An inspection of the shoring prior to, during, and after the concrete pour is an OSHA requirement.

The concrete contractor is to determine their means and methods for inspection without placing any person directly under a live concrete pour.

A Controlled Access Zone must be established around the live pour so no one can enter. If an individual is assigned to inspect the shoring, they will be positioned outside of the controlled access zone of the concrete being placed and the previous bay where concrete was placed. This type of inspection of a live pour can also be completed with the use of technology. How the inspection is to be completed will be determined in the preconstruction meeting and will be detailed in the JHA and reviewed with all workers prior to the concrete pour. The location of the person inspecting shoring and performing tasks during concrete placement will be detailed on the project-specific Job Hazard Analysis (JHA) and daily PreTask Plan. The placement sequence will also be noted in the JHA.

A qualified designer must prepare the design of the shoring and reshoring. A third-party engineer qualified (certified, registered engineer) in structural design shall review the design of the shoring.

The designer of the shoring must inspect the (initial) erected shoring to ensure it is installed per design prior to concrete pour. Assignment and training of a minimum of one competent person that must be on site at all times to inspect shoring prior to any concrete pour by the installing contractor. Any change of formwork should be inspected by designer.

Forms and shores must not be removed until the employer determines that the concrete has gained sufficient strength.

100% Fall protection will always be required while accessing or working on temporary outrigger platform systems. Any anchors for outrigger platforms must be cast in place.

At building perimeters where the decking steps down to allow for a beam pour, the height of the rails shall be increased accordingly.

Areas where form stripping is to be performed must be properly barricaded with tape or fence and signage must be posted on all sides. This should include areas below stripping.

Protruding nails should be removed or bent immediately.

Where employees must walk across rebar, temporary walkways must be installed to prevent trip hazards.

Outrigger platforms used for material movement in and out of the building via a crane or forklift must be designed by an engineer and incorporate 100% fall protection systems.

Authorization to Strip Formwork

When given Authorization that the concrete has reached strength in accordance with project specifications by the Structural Engineer of the Project, the written notification from said engineer (third party that does break strength testing) will be forwarded to the structural concrete trade and Turner. Stripping activities regarding formwork and work platforms will not proceed prior to receiving the authorization.

If any change in conditions occurs while stripping a work platform or shoring, all work must be stopped. A written notification must be sent by the Structural Concrete subcontractor to Turner Management staff and a review meeting held to assess the change. A revised risk mitigation plan will be established and reviewed with all workers prior to work restarting.

Use of Proper Barricades and Signage on the Formwork

The use of fixed, physical barricades in lieu of Caution / Danger Tape, where appropriate, to further inform and protect employees from changes in elevation must be utilized.

The use of fixed, physical barricades to further inform and protect employees whenever there is a fall hazard must be utilized. Caution / Danger Tape can never be used to barricade for a fall hazard.

Additional warning signage that contains the appropriate contact information for the contractor which has installed the barricade must be installed on the barricade.

Masonry Requirements

A limited access zone (LAZ) must be established prior to the start of any masonry work.

The zone must be equal to the height of the wall, plus four feet for the entire length of the wall.

All masonry walls over 8 feet in height shall be adequately braced and remain in place until the permanent supporting elements of the structure are in place.

For overhand bricklaying from a scaffold, fall protection is required if the working side of the scaffold has a gap greater than 12" between the scaffold and structure.

Scaffolds

All persons and scaffolds are to be built under the supervision of a Competent Person and meet the specifications required by 29 CFR 1926.451. 100% fall protection at six foot shall be provided regardless of the type of scaffold during all phases of construction.

Lean-to scaffolds are prohibited.

The Competent Person shall inspect scaffolds daily and submit a completed Scaffold Inspection Checklist (Form 23) to the Project Superintendent daily.

All scaffolding must have an inspection tag.

All mobile scaffolds must have rails at heights of four (4) feet or more and the wheels locked when in use.

Scaffolding shall be erected with one of the following: base plates, screw jacks or casters, on sound, rigid footing.

Use of concrete block for footing is not permitted.

Scaffolding greater than 4 feet, must be equipped with top rails, midrails, toe boards, and deck boards.

Cross bracing shall not be used as handrails.

A body harness must be worn and properly tied off on any scaffold platform greater than six feet in height and not equipped with standard handrails, midrails, or decking.

Scaffold planks must extend a minimum of 6" but no more than 12" over the end supports and be of scaffold-grade lumber. All scaffold boards that do not extend over the centerline of their support by at least 6" are to be cleated on each end.

Provide an access for all scaffolds. Climbing the side of scaffolding is not permitted unless the scaffold is designed with a built-in ladder.

Scaffolds must be tied off or stabilized with outriggers when the height is more than three times the smaller dimension of the length or the width. Scaffolds must be tied off horizontally every 30 feet.

Suspended scaffolding, such as swinging stages, boatswain (bos'n) chairs, floats and needle beams, requires special approval by the Business Unit EH&S Director before use.

While using suspended scaffolding, attach and secure a safety harness before stepping on the platform and do not remove it until clear of the scaffold. Tie off to an independent lifeline or building structure. Use one lifeline per person.

Signs, Signals, and Barricades

At locations where potential hazards exist, contractor personnel shall be responsible for posting, installing, and maintaining signs, signals, and barricades to detour the passage of persons or vehicles. There should be a limited use of caution or danger tape. Subcontractors installing danger or caution tape are responsible for maintaining for the duration of their work, or as long as the hazard exists, and removing immediately after. Turner prefers hard barricades with appropriate signage is to be used in situations where entry is prohibited or requires special permission. Danger signs are to be posted to communicate a potentially dangerous, do not enter situation. Caution signs are to be posted in areas where entry is allowed but caution must be followed.

All barricades must be 42 inches high.

Contractor employees shall obey all signs, signals, and barricades which are posted to warn of potential or existing hazards.

Flagmen must wear red or orange vests, and the flags must be red or orange and at least eight inches square.

The selection and use of signs and tags shall be in conformance with ANSI requirements.

Tape of any kind is not permitted for use as fall protection nor swing radius delineation. Leading edge awareness for fall protection must be perimeter warning flags or a hard barrier, a minimum of 15 feet away from the leading edge. The swing radius of cranes and other equipment must be a hard material such as red-colored, plastic chain.

Rigging

Any contractor performing rigging must have a qualified rigger.

If the wire rope sling is missing its identification marking, consistent with the latest ASME B 30.09 standard the sling must be removed from service until the identification markings are reaffixed.

The qualified rigger shall inspect all rigging prior to each shift.

Safety latches must be installed on all hooks (shakeout hooks are an exception).

Do not leave unsecured or unattended suspended loads.

Use softeners when possible, to obtain a “bite” on material being rigged.

Inspect wire rope slings for frays, kinks, and worn spots before each use. Do not exceed safe working capacity.

Inspect fiber rope slings for broken fibers, wear, and deteriorated inner and outer strands prior to use. Do not use fiber rope slings where fumes, vapors, sprays, mist and corrosive chemicals are present. The use of chains is not allowed.

Destroy damaged slings immediately. Except for steel erection, multiple lift rigging (“Christmas Treeing”) of any material is prohibited.

Compressed Air

Hoses and coupling must be checked daily before use. All hose couplings must be provided with a positive locking device.

Compressed air used for cleaning purposes must not exceed 30 psi.

Hose and coupling connections must be safety-wired together.

Compressed air is not to be used for blowing material off you or others.

Compressor must be equipped with shut off valve.

Compressed air equipment, including valves and receivers must be inspected, tested and drained regularly, following the manufacturer’s guidelines.

Air receivers must be equipped with pressure regulators and gauges.

Power Industrial Trucks and Power-Operated Equipment
Trucks and Automobiles

Jobsite speed limits and other regulatory signs must be obeyed.

Pedestrians always have the right of way.

Seatbelts must be worn at all times when riding in a vehicle equipped with seatbelts.

Riding on the side, on the tailgate, or in the bed of a pickup truck is prohibited.

All vehicles used during a project for contract activities must have reverse signal alarms.

Flaggers and spotters must be provided for cranes and vehicles in congested areas and when backing up. Flaggers must be certified in the jurisdiction where the work is being performed. The worker must have the card on their person when flagging.

Heavy equipment (i.e. dozers, scrapers, back hoes, etc.) shall be inspected by the operator prior to each shift. A completed Equipment Inspection Form (Form 17) shall be submitted to the Project Superintendent daily.

The use of a mobile phone while operating any power-industrial trucks or power-industrial equipment is strictly prohibited.

When loading and unloading materials, equipment, and products from trucks we must have:

- Proper pre-planning.
- Use spotters.
- Proper training of the workers.
- Selection of the right equipment to load/unload the material or equipment.
- Established controlled or restricted access zone for workers around the area.
- Engaged the driver in the activity.

The driver must be in full view to a forklift operator at all times. All loading or unloading activity must stop if the driver cannot be seen, or needs to enter the exclusion zone to inspect a load. Alternatively, if it is safe to do so, the operation can allow the driver to stay in the truck cab during loading and unloading

Establish a restricted access zone around the truck to prohibit entry into the load/unload area. The zone must be equal to the area needed to load/unload plus ten feet around the entire truck area.

Workers on the ground within the zone should never be on the opposite side of a truck from a forklift while it is loading or unloading material.

Cranes

All cranes must use anti-two blocking devices, as specified in ANSI B30.5 for each load hoisting line. Cranes must be operated in compliance with 29CFR1926.1400 and the requirements listed in the Turner Crane Pre-Plan Checklist.

Crane Inspections - Annual certificate of inspection (by a third party) must be on file on site prior to operation of any crane. In addition, the following inspections are required:

Mechanical parts of any crane must be inspected by the operator (Form 14) and given to the Turner Superintendent prior to each shift and monthly.

All Cranes must be inspected by a Third Party Qualified Person after being assembled, whenever any components are modified or repaired, involved in an incident, and annually. If the crane was disassembled then reassembled on site, a third party inspection must be performed and documented after reassembly. This does not include attaching a jib to a mobile crane.

Tower Cranes must be inspected during erecting, climbing (e.g. “jumping”) or dismantling activities by a Qualified Person. Additionally a Registered Professional Engineer must verify that the host structure is strong enough to withstand forces imposed on it by braces, anchorages, and supporting floors.

Cranes are to be operated within the design limits specified by the manufacturer.

All crane operators must be certified by an independent testing agency approved by the National Commission for the Certification of Crane Operators. (NCCCO)

All Riggers and Signalers are to be “Qualified” riggers and “Qualified” Signal persons and must be designated by wearing a hard hat cover and/or a designated high-vis vest that is solely different than those worn throughout the rest of the project.

The rated load capacity of the crane is never to be exceeded.

Rated load capacities, recommended operation speeds, and special hazard warnings or instructions shall be posted conspicuously on all equipment.

All accessible areas within the radius of the counterweight swing must be barricaded to limit access.

Cranes, hoists, boom trucks and derricks shall not be installed or operated within 20’ of any power line unless lines have been de-energized and grounded, or other options per OSHA 1926.1407 are implemented.

Personnel are prohibited from riding on the hook of the “headache” ball.

The use of personnel hoists must be approved by Turner’s EH&S Director after the subcontractor has proven there is no other practical safer means.

All OSHA requirements must be followed when using personnel baskets.

Outriggers must be fully extended and on firm ground.

Crane inspections must be conducted on equipment per the OSHA standards. These inspections and the competent person are the responsibility of the crane owner and the contractor providing the crane.

The use of a mobile phone while operating a crane is strictly prohibited.

Tower, rough terrain and crawler crane operations must have an operable anemometer to measure onsite wind speeds during work. This can be a crane-mounted unit or a handheld device.

Crane appurtenances that exceed 200 above the ground shall be marked and lighted, unless an exemption is received from the FAA.

Mobile Elevated Work Platforms (MEWPs)

All scissorlifts and boom lifts shall have an approved shroud or guard over the joystick/controls.

Scissorlifts require a three-sided joystick guard. Scissorlifts should also have a timeout feature on the

lift/lower and drive selector, which disables the lift/lower and drive functions after several seconds of inactivity. Moreover, boom lifts must be delivered with anti-crush or secondary-guard technology.

Prior to mobilizing, all Mobile Elevated Work Platforms must be inspected to ensure compliance with Turner requirements. MEWP's (scissor lifts, aerial boom lifts, and knuckle booms) must have dual action controls to be approved for use. Dual action controls require that there be two separate actions to activate the lift. If a MEWP arrives on site and does not have dual action controls, then it must remain inoperable until a dual action control is installed. The dual action control may consist of a button that must be depressed in order for the controls to operate, or a toggle switch that must be activated prior to operating the MEWP controls (The toggle switch must automatically return to the center when released).

Subcontractors are required to complete a daily inspection sheet for all mobile elevated work platforms. The inspection includes operational and physical parameters for operation of the equipment being inspected. The inspection form must be posted in a visible location during operations and a copy made available to Turner upon request.

Field modifications are not allowed on aerial lifts.

Only trained and authorized individuals may operate aerial lifts.

When a lift is delivered to the project, the rental company or the owner of the lift shall inspect the lift & provide documentation the lift is safe to operate onsite. The lift shall be free from any physical defects in new or like new condition with all the safety placards present. The operator's manual and inspection documentation shall be included.

Employees must use personal fall arrest systems (PFAS) when working from boom platforms. Employees shall follow the manufacturer's recommendations for the type of (PFAS) when working from an aerial lift. At a minimum, employees shall follow the manufacturer's recommendations for the type of fall arrest/restraint when working from a scissors lift. If scissorlifts are equipped with an attachment point provided by the manufacturer for a restraint system, they are to be used. The intent of this protection is to keep workers within the confines of the passive protective system (rails) so the shortest length of lanyard that allows the task to be completed and keep the worker confined to the walking/working surface is required. Note: These attachment points are not designed as fall protection anchorages.

Never climb above the work platform. Employees must keep both feet on the floor of the basket and not stand on the railing or toe board during operation. If it has been determined by the subcontractor's competent person that there are no feasible means to access an area without leaving the basket of a scissor lift, a modified Pre-Task Plan must be completed as well as a Fall Protection Plan. This plan must be completed by the competent person with details of the anchorage point outside the scissor lift and above the employee's head. Any worker engaged in the activity should be active in the preplanning of the modified plan. All workers involved must review and sign off on the plan. This must be reviewed with Turner's Superintendent. Each work activity and area will require their own PTP and Fall Protection Plan.

A dedicated spotter is required any time a scissor lift must be moved in an elevated state or when operated in congested areas. Spotters will be responsible for ensuring that the area around the MEWP and the travel path are free of obstruction and clear of equipment and personnel.

Mobile Elevated Work Platform Use in High Lift Situations (applies to boom lifts with an operating platform height of 30' and above) require the following:

A dedicated JHA shall be developed for each activity operating a MEWP above 30'.

A system for managing the affected area below the basket and movement of the MEWP's is necessary to decrease the risk of struck-by hazards.

If any of the workers in the Aerial Boom Lifts are incapacitated and incapable of descending, a rescue may be required. Due to the nature of this type of work, it is prudent to establish an emergency response plan which has redundancy built into it.

Boom lifts cannot be operated by the basket controls without first depressing a covered, protected foot switch. This causes the operator to be intentional about basket movement and reduces the risk of incidental operations.

The lifts should have a pressure-actuated auto shut-off across the controls which shuts down the equipment to prevent entrapment.

A dedicated ground spotter (with no other collateral duties) shall be in place whose duties are as follows:

- Visually verify and communicate via two-way radio that all obstructions are clear of the path of travel at the ground level.
- Visually verify that all obstructions are clear while basket is moving.
- The ground spotter shall be responsible for no more than 1 Controlled Access Zone (CAZ).
- Additional spotters will be required if MEWP's will need to be operated/relocated simultaneously within 1 CAZ (Approximate size and dimension of CAZ is below).

Spotter Logistics:

- If 2 or more lifts are required to operate simultaneously, each operator/spotter team will utilize their own dedicated radio channel.
- The Spotter shall not use a cell phone, head phones or other devices which may distract them from their duties.
- The Spotter shall have stop work authority.
- The spotter shall wear, at a minimum, a Class II high visibility vest, shirt or jacket.
- The Spotter/operator team shall perform a "radio" check prior to the commencement of the activity and every 30 minutes thereafter if no communications occur during that time frame.
- Operation of MEWP from the basket is prohibited without prior communication with the spotter and an "All Clear" is given.

Other Traffic at base of operating MEWP:

- A Controlled Access Zone will be established in the affected areas of the MEWP operation to include the base and working zone beneath the platform.
- The CAZ should be constructed with physical barriers such cable, wire rope or chain, or flagging. Danger, Caution tape and spray-painted lines will not be accepted.
- The CAZ must be secured from tipping and signed every 30'. The size of the CAZ must consider deflection or arc of the falling material.
- Each CAZ will be adequately sized to have a 15' buffer zone on each side of the MEWP to include under the platform.
- Each CAZ will hold no more than 3 boom lifts.
- No other equipment or vehicle will be allowed to operate within a dedicated CAZ.

A 30' Wide dedicated path of travel for vehicles and other equipment shall be established using rope, traffic cones, delineators or other clear markings which safely guide other equipment and vehicles around the MEWP CAZ.

Any changes in the path of travel must be approved by the Turner Superintendent.

Boom lifts shall not operate within or over the traffic zone.

The Spotter shall monitor vehicle traffic and shall have authority to stop work and or vehicle traffic.

Emergency Response

There shall be, at a minimum, (2) two MEWP's on site when working in excess of 85 vertical feet. This is to ensure that one could assist another which has the capability to reach the basket in the event of an emergency. Exceptions include when there is a means of safely reaching the platform via catwalk or other elevated surface, or when there is a means to reach the platform from above via rope, slings or other climbing type equipment.

The Spotter shall be trained on how to safely use the ground controls. The ground controls shall be tested prior to work occurring each day and/or shift.

The Local Fire Department Shall be invited to the project site to review conditions and site activities which may have the potential for a "Vertical Rescue" in the event of an emergency.

The emergency response number shall be conspicuously posted.

Turner, the Fire Department and Dispatch shall determine a key phrase or word which indicates that a "Vertical Rescue Team" is required. (These teams have specialized training and equipment to respond to high rescue conditions.)

Workers on the ground shall stay out of the CAZ and communicate with the spotter if entrance is needed.

A Stop Work must immediately be called when any deviations are observed with fall protection.

Identify and discuss task which have the potential for falling tools, materials and/or debris. Do not start work until procedures are in place to prevent the loss of tools or equipment (tethering or other means) and/or a Controlled Access Zone is established.

Workers should avoid positioning themselves, and their equipment, in a line of fire where they could be struck by falling, flying or moving objects from the overhead platform.

Utilize tag lines to maintain positive control of objects being removed or hoisted to ensure the object does not come in contact with the lift.

Industrial Vehicles

The Company has determined that certain powered industrial vehicles are utilized at its projects and has developed this policy to establish the procedures that must be followed for the use of such vehicles at the Company's projects. Provide for proper equipment selection, inspection and operation of certain powered industrial vehicles, including but not limited to All Terrain Vehicles (ATV) or Quads, Three Wheeler, Four Wheeler, Gators, Mules, and all other similar vehicles. Only vehicles that have previously been approved by the Operations Manager and Business Unit EH&S Director for use at its projects may be utilized at the Company projects and must be in compliance with the policy. This policy also applies to vehicles owned and operated by Subcontractors and Subcontractor employees. All vehicles covered under this policy are to be scheduled to Turner's property plant and equipment (contractor's) policy. It is the responsibility of the jobsite accountants to properly report all equipment under this policy.

All vehicles with the following features (in combination) are prohibited from all Turner projects:

- Typically carry one rider;
- Have no rollover protection or seat belts; and
- Have a handlebar similar to a motorcycle for navigation.

These vehicles may be commonly referred to as All-Terrain Vehicles (ATV), Quads, Three Wheelers, or Four Wheelers (or other similar equipment). This prohibition includes vehicles owned by subcontractors as well.

Follow OSHA 29 CFR 1910.178, Powered Industrial Trucks, as applicable.

All personal (owned by an individual) All-Terrain Vehicles (ATV's), Quads, Three Wheelers, Four Wheelers, Mules, Gators, or other similar equipment are prohibited on all Turner Projects.

All authorized drivers must complete training as follows:

Manufacturer requirements (as coordinated through the dealership of the equipment) for the safe operation of the vehicle including use of personal protective equipment, authorized surfaces for operation of the vehicle, weight restrictions, and other operational conditions.

Follow OSHA 29 CFR 1910.178 Powered Industrial Trucks.

This training shall be written formally into the Project Specific Safety Plan by the project team, approved by the Business Unit EH&S Director.

A documented sign-off for the authorized driver must be a part of the training manual provided with the training.

Drones

Turner's policy on drone use is they should only be used as a last resort. If there are other means available to inspect, survey and document jobsite conditions, they should be used in lieu of a drone. All drones must be operated by a third party who is licensed by the FAA and insured per Turner's insurance policy guidelines.

Drones are only permitted with a completed "Drone Use Approval Request Form" to be reviewed and approved by the Operations Manager and Business Unit EHS Director.

Housekeeping

Housekeeping at the project site is the responsibility of each individual and housekeeping hazards will not be tolerated. The following rules are enforced at all facilities:

- Keep work areas in a neat and orderly manner. Keep exits and emergency escape route unobstructed.

- Dispose of cigarette stubs in butt cans. Smoke only in designated areas.

- Store and contain materials so that the area is fire safe.

- Daily cleanup is required by each contractor.

Subcontractor Injury Reporting Requirements

If an employee is injured:

Provisions shall be made by each Contractor for immediate and proper first aid, and/or doctor treatment, for every work injury.

Turner Construction Company is to be notified immediately.

An accident investigation is to be conducted with a written report of the findings and any photos copied to Turner immediately.

One copy of all Workers' Compensation Accident reports involving Contractor's employees shall be promptly forwarded to Turner Construction Company.

Contractors will be individually responsible to notify Federal, State and local authorities in the event of a death and/or multiple injuries. Notify OSHA within eight hours of fatality or hospitalization of three or more employees.

Total man-hours worked and lost time due to accidents on this project must be turned into Turner on a monthly basis.

Turner Construction Company's Project Superintendent is to be notified immediately.

Send Public Liability Report to your insurance carrier promptly and forward one copy of the report to Turner Construction Company.

Submit injury statistics to Turner including OSHA 300 log on a monthly basis.

Fire Prevention

Shanties:

Are to be constructed using only fire retardant materials and all glass is to be wire glass. As a minimum, any lumber used in shanty construction shall meet the American Wood Preserves Associations Standard C1, C20, and C27, and shall bear certificates of performance.

All materials shall have a flame spread rating no greater than 25 (ASTM Standard E84) with no evidence of progressive combustion for at least 30 minutes.

All shanties shall be located at least 10 feet from materials which present extraordinary fire hazards.

Each shanty shall have at least one (1) 20# ABC fire extinguisher.

Rubbish shall not be permitted to accumulate within an adjacent area to any shanty.

No oily clothes, oily rags, nor fuels, shall be stored in shanties.

All shanties shall be constructed in such a manner that shanty fire shall cause no damage to permanent construction and installations.

Each subcontractors is responsible for installing and maintaining a combination smoke and carbon monoxide detector in their shanty.

Electric heaters, if permitted on the project, must be equipped with hi temp shut down and tip-over protection. Electric heaters are not permitted to be operated while unattended.

All temporary electric must be in accordance with all existing codes.

Storage of any material within 10 feet of fire hydrants is strictly prohibited.

Work areas shall be monitored on a regular basis to prevent accumulation of material.

No motors or machinery shall be left running during non-working hours except as specifically directed by Turner.

All heating equipment shall have necessary safety devices and shall be wired, piped, and operated according to all applicable codes, rules, and regulations.

All tarps, blankets, and poly shall be of fire retardant material.

Each contractor is required to provide fuel tank containment equal to 110% of tank capacity.

No open burning or fires shall be permitted on site. Anyone doing so is subject to immediate dismissal.

No solid fuel (i.e. coke, etc.) shall be permitted on site.

Standpipe system shall be kept as close as possible to progress of the structure and prevented from freezing.

Fire extinguishers shall be a minimum of 20# ABC type and placed and maintained on the job in conspicuous locations according to OSHA requirements. Fire extinguishers must be affixed in a location to prevent damage from water or other materials. These fire extinguishers shall not be moved or discharged except for fighting a fire. Anyone discharging an extinguisher as a prank will be subject to immediate dismissal. Use of carbon tetrachloride extinguishers is prohibited.

All gas bottles such as propane, oxygen and acetylene shall be properly supported and stored and tied in a vertical position in areas designated by Turner. All stored bottles shall be capped.

All gas bottles in use shall be tied in the vertical position and capped at the end of the working day.

All oxygen and acetylene in use shall be in a proper cart with an attached fire extinguisher.

All “HOT WORK” procedures will be followed.

Fire Response:

Appropriate action is the key to the prevention of loss of life and property damage. This action in the first minute is worth tons of water 10 minutes later.

If a fire occurs, notify the local fire department (telephone number is posted at all the phones) and Turner.

Evacuate area of fire immediately.

Extinguish fire with a non-combustible such as sand or an available fire extinguisher. Only those individuals with adequate training will be permitted to extinguish incipient fires. Those individual with no training are required to evacuate and proceed to the predestined meeting area.

Building L.I.F.E.

Building L.I.F.E. (Living Injury Free Everyday)® is a continuous improvement process with an upstream focus on risk and the systems which produce risk. The program endeavors to produce a bottom-up safety culture driven by increased worker engagement in safety and planning processes. Building L.I.F.E.® (BL) places an emphasis on optimizing human performance, anchored by a focus on observation & feedback. The outcome of implementing the BL Model is a culture-shift in worker attitudes toward teamwork and proactive safety involvement. Below are the three primary goals associated with BL and the processes supporting each goal:

1. Systems Focused Approach – Integrate the BL “systems model” into key processes such as pre-planning, performance evaluation and incident analysis. Move preplanning farther upstream. Sharpen our focus on risk analysis and reduction. Involving those “closest to the risk” in preplanning.
 - a. BL JHA - The JHA has been the standard Turner pre-planning tool thus far. With BL, the JHA has evolved into the BL JHA which places a focus on risk & the system factors which drive that risk. Subcontractors complete the form ahead of the pre-construction meeting and submit to Turner. The Turner project team (safety & operations) reviews the quality of the BL JHA and push back if the assessment is not deemed to be of adequate quality. At the pre-construction meeting, Turner will review the final BL JHA and facilitate a discussion with the subcontractor to see if risk can be further reduced (with additional controls). As an option, this may include a Turner facilitated Residual Risk Reduction (R3) step which involves quantified risk assessment. Again, the main difference between standard Turner JHAs and the BL JHA is the focus on reducing risk (frequency, likelihood, severity), and the systems which drive that risk (environment, capability, motivation).
 - b. Pre-Task Plans (PTP) – This is traditional and effective Turner short-range planning tool is that is supplemented with the Daily Huddle. PTP frequency can be locally determined as

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- either daily or weekly. If weekly is the option selected, and the risk changes during the course of the week, a new PTP is required.
- a. Rapid Improvement Events - Conduct Rapid Improvement Event analysis with front line workers at regular intervals, where they have an opportunity to (using the BL JHA as a starting point) examine work process and look for improvements (risk, efficiency or quality).
 - c. Daily Huddles – The Daily Huddles are designed for each subcontractor to conduct a meaningful, two-way discussion of anticipated risk & planned controls on a daily basis. The pattern of Huddle dialog (bottom-up) should be – What are our key activities today? What are the key risks we need to be thinking about? What controls do we need in place to protect? Note – those controls need to include physical safeguards, training/procedural safeguards, and required actions (behavior) to keep the task safe.
 - d. BL Root Cause - In short, we’re looking to incorporate the three systems circles (environment, capability, motivation) into our root cause analysis, whether we’re looking at an incident, a near miss, or even an “at-risk” observation.
 - e. BIM/Safety Integration – Where BIM Models are available, the project team should work with the BIM engineer recognize and analyze risk and to pre-plan for safety. BIM should be used to develop safety and logistics plans.
2. Engage the Workers – To facilitate a culture-change at our projects toward partnering and proactive safety engagement, the project team, including subcontractor supervision, needs to continuously seek out opportunities for front line workers to participate in, and contribute to, the safety process. Each subcontractor should feel free to add creative opportunities, but the primary opportunities are:
- a. BL JHA & PTP Review – Once mobilization ramps up, each subcontractor should have the front line workers review the JHA (could be done in a tool box talk format), and ask them to add missing pieces, contribute new ideas, etc. The key is participation. The same holds true for PTPs – getting the workers involved in the process.
 - b. Daily Huddles – This is the primary opportunity for front-line workers to be part of the safety process. An effective two-way daily discussion of risk & control plans will be essential to successful Building L.I.F.E.®. Huddles supplement the PTP process.
 - c. 5-Worker Lunches - Provides another venue for workers to be involved and have a voice into safety management.
 - d. Observation Circles – Great opportunities to get front line workers involved in the work process (not just safety), at regular intervals.
 - e. Safety Perception Surveys and Safety Observation and Recognition (SOAR) stations allow the workforce to provide us a “report card” on what’s working and what’s not.
3. Optimizing Human Performance – In order to help optimize (safety) performance, the Building L.I.F.E.® process employs a number of tools to achieve continual improvement.
- a. Coaching Training – This is aimed at Turner and subcontractor leadership, and is designed to help them become better safety coaches during their planned & unplanned observation opportunities. Training will include how to better understand what drives

better safety performance (behavior), and how to conduct meaningful safety observations.

Daily Feedback - aspects include a focus on feedback and a formal process for Safety Coaching and Observation (SCO) (also in Predictive Solutions). The project team will be required to participate in helping build safe work habits out on the project by making observations, driving the feedback process and using the Safety Coaching Observation (SCO) form. The SCO form elevates the importance and knowledge of “Critical Safe Behaviors” associated with high frequency and severity injuries. The purpose of feedback is two-fold. Feedback builds safe work habits by providing more positive reinforcement for safe observations while giving us the opportunity to coach at-risk behavior.

Stretch and Flex

All subcontractor employees are required to participate in a Stretch and Flex Program on this project. A stretch and flex will be facilitated by each subcontractor’s superintendent or designee at a central location, every morning, prior to start of work. All employees are required to participate but only to their level of comfort.

Drug-Free Workplace Policy

Importance of Policy to Turner Core Values

To help insure a safe, healthy, and productive work environment for the Employees of The Turner Corporation, Turner Construction Company and all subsidiaries (collectively known as “Company or Turner”), and other persons on Turner projects or at Turner Facilities, and to protect Company property and ensure efficient operations, Turner has adopted a policy of maintaining a workplace free of drugs and alcohol.

Policy Summary

All Turner Employees and Other Workers are prohibited from using, possessing, distributing, dispensing, manufacturing, or being under the influence of illegal substances and from abusing chemicals, controlled substances, or alcohol while working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. Turner is committed to this Policy on substance abuse to maintain a safe environment for all Turner Employees and Other Workers. This Policy establishes guidelines for acceptable and unacceptable behavior in connection with working on behalf of Turner. Turner will not tolerate substance abuse in violation of this Policy.

Persons to Whom Policy Applies

This Policy specifically applies to all Turner Employees, Other Workers, and any and all employers of Other Workers working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business.

Turner Employees means all persons employed directly by Turner, whether staff management, corporate, or trade. This includes employees at any and all Turner Facilities, including business centers, offices and construction worksites.

Other Workers means all other persons, not directly employed by Turner, working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. This includes all contractors, subcontractors, consultants, construction managers, and their respective employees or agents working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. The term “Other Worker” includes, but is not limited to, craft personnel, management personnel, temporary and/or consultants.

This Policy is non-discriminatory and applies equally to all Turner Employees, Other Workers, and their respective employers, as defined above, working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business.

Applicable Definitions

- Adulterated Specimen – A specimen that contains a substance that is not expected to be present in human urine, or contains a substance expected to be present, but which is at a concentration so high that it is not consistent with human urine, which will obstruct the testing process or results.
- Accident/Incident – A work-related event which results in personal injury to a Turner Employee or Other Worker or to any other person, damage to property or the workplace, or which could have resulted in personal injury or damage to property or the workplace. An Accident/Incident includes, but is not limited to, any Accident/Incident on Turner Property or at a Turner Facility which results in:
 - a) A fatality;
 - b) Bodily injury requiring a visit to any medical provider
 - c) Vehicular and/or equipment damage in apparent excess of \$1,000;
 - d) Non-vehicle property damage in apparent excess 1,000; or
 - e) Any work-related event that could have resulted in any of the above.
- Alternative Program - An Alternative Program is a substance abuse program administer by an entity other than Turner under procedure equal to or more stringent than this Policy and which has been approved and accepted by Turner as an alternative or reciprocal substance abuse testing program.
- Alternative Program Administrator – The individual responsible for drug and alcohol testing and related procedures for all Turner Employees and/or Other Workers covered under an Alternative Program.
- Annual Screen – A drug screen which Turner may require of any Turner Employee or Other Worker on a yearly basis in addition to any other screen that was given in the previous twelve month period.

- Chain of Custody – The protocol followed when submitting specimens for drug and alcohol testing. This protocol assures that there is no opportunity for contamination or switching of samples. Elements include signed and witnessed forms, sealed and initialed containers, and couriers requiring a receipt.
- Collection Site – A place where individuals provide specimens of their urine to be analyzed for the presence of alcohol. This site may or may not be owned and/or operated by the laboratory that actually analyzes the specimen.
- Confirmatory Test – When testing for drugs, this is the second analytical procedure performed to confirm the presence of a specific drug/metabolite in a urine specimen. This procedure uses a more sophisticated technique (e.g. Gas Chromatography / Mass Spectrometry, EBT) to ensure reliability and accuracy. With breath testing for alcohol, the Confirmatory Test is conducted on an EBT which has the capability to print out the results, date and time, a sequential test number, and the name and serial number of the testing device.
- Consent – Written consent for testing is required for all tests. A Donor will be asked to give written consent immediately prior to submitting a drug or alcohol test.
- Covered Site – A particular Turner Project or Turner Project or Turner Facility selected for random testing by a Third Party Provider.
- Cut-off Level - A pre-determined amount of drug metabolite, measured in nanograms (ng) per milliliter (ml) of urine, which dictates whether a tested specimen is negative or positive. As to alcohol, a pre-determined amount of blood alcohol content, which dictates whether a tested specimen is negative or positive. For example, a test would be declared positive if the amount of drug/metabolite or blood alcohol content were equal to or above the Cut-Off Level.
- Designated Jobsite Turner Representative – Turner Employee who is the designated representative on a particular Turner Project or at a Turner Facility responsible for coordinating drug and alcohol testing and related procedures.
- Diluted Sample – A specimen with creatine and specific gravity values that is lower than expected for human urine. This type of test will always be sent with MRO comments stating, “Recollection suggested no fluids three (3) hours prior to test.” A Donor providing a Diluted Sample will be retested within twenty-four (24) hours and in no case more than forty-eight hours after the Diluted Sample was obtained.
- Donor – a Turner Employee or Other Worker giving a urine, breath, blood, or saliva (which is only used for alcohol testing) sample for drug or alcohol testing.
- Medical Review Officer (MRO) - A licensed physician responsible for receiving laboratory results generated by a substance abuse screening program who has knowledge of substance abuse disorders and who received appropriate medical training to interpret and evaluate a worker's medical history and other relevant biomedical information. The MRO is certified by either the

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- American Association of Medical Review Officers (AAMRO) or the American College of Occupational and Environmental Medicine (ACOEM).
- Medical Examination – An examination conducted by a duly licensed medical provider.
 - Negative Test Result - A negative screening is obtained if: (1) the screen test indicated the absence of legal or illegal substances below the screen limit, or (2) the screen test indicates the presence of legal or illegal substances in excess of the screen limit but the confirming test indicates the absence of legal or illegal substances below the confirming limits
 - Other Workers – All other person, not directly employed by Turner, working on a Turner Project, at a Turner Facility, or working on or otherwise engaged in Turner business. This includes all contractors, subcontractors, consultants, construction managers, and their respective employees or agents working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. The term “Other Worker” includes, but is not limited to, craft personnel, management personnel, temporary personnel and/or consultants.
 - Positive Test Result (Alcohol)- A Positive Test Result (Alcohol) is obtained if a Confirmatory Test indicates the presence of alcohol at or in excess of the Cut-Off Level of 0.04% blood alcohol content.
 - Positive Test Result (Drugs) - A Positive Test Result (Drugs) is obtained if the MRO has verified that the test results contain illegal substances at or above the standard Cut-Off Levels of any of the substances tested and for which there is no valid medical or other explanation.
 - Post-Accident/Incident Testing – A drug or alcohol test which may be conducted following the occurrence of an Accident/Incident.
 - Quick / Instant Test – A test that is a qualitative one-step immunochromatographic test panel for the detection of Cannabinoids (THC), Opiates, Amphetamines, Cocaine, Phencyclidine (PCP), Barbiturates, Benzodiazepines, Propoxyphene, and Methamphetamines 3, 4-Methylenedioxymethamphetamine drugs and/or their metabolites in human urine. This test provides only a preliminary analytical result. A more specific alternate chemical method must be used in order to obtain a confirmed analytical result. This device includes a Lateral Flow (LATFLO) Adulterant Strip (LFAS) for the visual determination of Specific Gravity, Nitrite, Oxidants, and pH to evaluate human urine specimens for adulteration prior to drugs of abuse urine testing.
 - Random- A system of drug testing imposed without individualized suspicion that a particular individual is using illegal substances. Random drug testing consists of unannounced substance abuse screens of particular groups or individuals selected through a neutral randomizing system.
 - Refusal to Test – When a Donor refuses to provide a urine, breath, saliva or (on occasion) blood sample upon reasonable request from Turner or from the employer of an Other Worker, based on any circumstances in the “Types of Testing” Section.

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- Reasonable Suspicion- Reasonable Suspicion of drug or alcohol abuse is based on objective evidence about the Turner Employee's or Other Worker's conduct in the workplace that would cause a reasonable person to believe that the individual is demonstrating signs of impairment. In most cases, the objective evidence giving rise to Reasonable Suspicion will be observed by at least two (2) Turner Employees or Other Workers, but recognizing that in certain circumstances the observation may be made by only one (1) such person. Examples of objective evidence include, but are not limited to, odors, difficulty in maintaining balance, slurred speech, erratic or atypical behavior.
 - Screen or Screening – The initial drug or alcohol test given to screen out potential substance abusers. After the initial screen, a Confirmatory Test will be performed on any Positive Results to verify the initial Screen.
 - Screening For Cause – Drug or alcohol screen which may be ordered when a Turner Employee's or Other Worker's Fitness for Duty is in question or following treatment in a drug or alcohol treatment program.
 - Split Specimen Testing – When a urine sample is taken for drug screen testing, the specimen is split and one part is used for initial testing and the remainder of the specimen is reserved for additional retesting.
 - Substance Abuse and Mental Health Services Administration (SAMHSA) - A federal government agency, which certifies substance abuse laboratories.
 - Substance Abuse Administrator – A Turner designated employee and/or his or her designees responsible for the coordination, implementation and administration of this Policy.
 - Substituted Test – A Substituted Test is a urine sample with creatine and specific gravity values that are so diminished that they are not consistent with human urine. This could indicate evidence of a substance other than the Donor's urine being substituted for the urine screen. This type of verified result is reported as a Refusal to Test, which is treated the same way as a Positive Test Result.
 - Third Party Provider – A neutral third party company engaged by Turner or an approved Alternative Program Administrator to manage drug and alcohol testing and to design and/or implement random selection procedures and systems.
 - Turner Employee – All persons employed directly by Turner, whether staff, corporate, or trade. This includes employees at any and all Turner Facilities, including business centers, offices, and construction worksites.
 - Turner Project or Turner Facility – A project or facility which Turner owns, operates, manages, or over which Turner exercises control, including state, federal or other contracts held by Turner, and to which this Policy applies.

- Turner Property – Includes, but not is not limited to, all Turner owned or leased buildings, parking lots, recreation areas, vehicles, equipment, desks, lockers, furnishings, and equipment wherever located. It may also include state property at construction projects over which Turner exercises control.
- Termination- In the case of a Turner Employee, Termination shall mean termination of employment by Turner. In the case of an Other Worker, Termination shall mean a ban from working at or on a Turner Project or Turner Facility in any capacity to which this Policy applies.
- Verified Positive Test Result – A test result that was positive on an initial immunoassay test or alcohol test, confirmed by a Confirmatory Test using a Gas Chromatography/Mass Spectrum assay for drugs or EBT device for alcohol, and reviewed and verified by the MRO in accordance with this Policy.
- Voluntary Assistance – Any Turner Employee who feels that he or she has a drug, alcohol, or related issue is encouraged to seek professional help. Turner can refer such Turner Employee to seek voluntary professional assistance. Assistance given to the Turner Employee shall be kept strictly confidential.

Scope and Application

All persons or entities covered by this policy understand and agree that Alternative Programs may be utilized as required by law, contract, or insurance agreement and they will comply with such other Alternative Programs where applicable.

During orientation/training Turner may accept, from Other Workers, substance abuse testing cards, badges, or proof of Negative Test Results within the last twelve (12) months, provided by the respective Other Worker's employer or trade union. All Other Workers reporting to work on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business, without substance abuse testing cards, badges, or proof of a Negative Test Results (and ID), will not be permitted to work unless and until such proof is demonstrated. Turner reserves the right to require retesting if there is no proof of Negative Test Results within the last twelve (12) months.

Additionally, Turner will work with any union representing Turner Employees or Other Workers covered by this Policy.

This Policy includes pre-employment, post- Accident/Incident, reasonable suspicion, re-employment, medical examination, annual and random testing, to the extent permissible by law.

Strict Adherence to Policy Required of Turner Employees, Other Workers and Their Respective Employers

Every Turner Employee and Other Worker is responsible for reviewing and understanding this Policy. As a condition of employment, all Turner Employees must abide by this Policy. With respect to Other Workers, Continued work and engagement on Turner Projects is conditioned on strict adherence to this Policy or an acceptable Alternative Program.

Any and all employers of Other Workers must ensure full compliance with any and all aspects of this Policy or an acceptable Alternative Program, including the compliance of their respective employees.

Designation and Responsibilities of the Substance Abuse Administrator

Turner will designate a Substance Abuse Administrator to be responsible for the administration and implementation of this Policy. Among other things, the Substance Abuse Administrator will:

- Have primary responsibility for the coordination, implementation, and administration of this Policy;
- Coordinate all testing with any appropriate Third Party Provider(s);
- Receive the test results from the MRO and notify the Designated Jobsite Turner Representative and Safety Personnel of the drug results, and notify the tested Turner Employee or Other Worker and the Other Worker's employer of the results; and
- Assure the reliability and confidentiality of testing processes and procedures.

General Substance Abuse Rules

1. Using, possessing, distributing, dispensing, manufacturing, or being under the influence of illegal substances, and/or abusing chemicals or controlled substances while working on a Turner Project at a Turner Facility, or while working on or otherwise engaged in Turner business, is strictly prohibited.
2. Legally prescribed drugs may be permitted, provided that the drugs are prescribed to the Turner Employee or Other Worker by an authorized medical practitioner for current use by the Turner Employee or Other Worker and provided that such legally prescribed drugs do not prevent the safe performance of such person's essential job functions. Please see "Prescription Drugs" for further information.
3. The possession or use of alcohol while working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business is prohibited. Turner sponsored or approved meetings/functions are exempt from this rule. However, this does not relieve Turner Employees or Other Workers from possessing or using alcohol responsibly and safely in such situations.
4. Refusing to report for or submit consent to drug or alcohol testing is prohibited and may be treated as if a Positive Test Result had been obtained.
5. Adulteration or Substitution of a test is prohibited.

Confidentiality

All substance abuse testing will be performed with concern for each Turner Employee's or Other Worker's personal privacy, dignity, and confidentiality. Each Turner Employee and Other Worker will

be required to sign a consent and chain of custody form, assuring proper documentation and accuracy. Turner Employee testing records shall not be maintained in personnel files. Records may be kept at the project level for that particular project. Turner Employees shall have the right to a copy of their drug testing results within a reasonable amount of time following a request. Other Workers shall contact the Substance Abuse Administrator if they wish to have a copy of their drug testing results. All actions taken under this Policy will be confidential and disclosed only to those with a need to know.

Protections Related to Drug Screen Testing

- A formal Chain of Custody will be established for every drug test.
- Initial samples (or a split portion thereof) that test non-negative will be retested for verification with a Confirmatory Test, using the Gas Chromatography/Mass Spectrometry ("GC/MS") test,
- GC/MS Positive Test Results will be communicated to the MRO,
- The MRO will receive the GC/MS Positive Test Results and convey the fact of a Verified Positive Test Result to the Substance Abuse Administrator and to the Donor tested.
- Turner Employees or Other Workers who test positive may, within twenty-four (24) hours of being advised of the results, request a retest of the original split-specimen sample by a different SAMHSA certified laboratory, at the Turner Employee's or Other Worker's expense.
- No drug or alcohol test will be conducted without the Turner Employee's or Other Worker's consent. The Donor shall be required to sign a consent form. Refusal to give consent shall be cause for removal/barring from the Turner Project or Turner Facility and may be treated as if a Positive Test Result had been obtained.

Testing Procedures

Procedures for Drug Screen Testing

Urine specimens will be analyzed for the presence of all or some of the following:

- Cannabinoids (Marijuana)
- Cocaine
- Opiates
- Amphetamines
- Phencyclidine
- Barbiturates
- Benzodiazepenses
- Proporyphene
- Methadone

Each employee must provide documentation of a current (within the last 12 months, 9-panel test (at minimum) from a SAMHSA approved testing authority (or test per union bargaining agreement).

Documentation of testing is required before the employee will be permitted to work on the project.

The following chart illustrates the Cut-Off Levels for some of the drugs tested:

Drug	EMIT Screen (ng/ml)	GC/MS Confirmation (ng/ml)
Amphetamines	1,000	500
Cannabinoids (Marijuana/THC)	50	15
Cocaine	300	150
Opiates	2,000	2,000
Phencyclidine (PCP)	25	25

Appropriate Cut-Off Levels for all other drugs tested will be determined by the SAMHSA approved laboratory conducting the testing and the Medical Review Officer.

1. Urine drug screen specimens may be collected on-site by a SAMHSA approved laboratory or at an offsite medical facility or clinic. In general, Donors will be permitted to give a urine specimen in privacy and without being observed by collection site personnel. However, a Donor forfeits this right whenever there is a reason to believe that he/she may alter or substitute a specimen.
2. For on-site drug tests, Turner Employees and Other Workers will be tested using the Quick/Instant Test Drug Test. This system provides results in five (5) minutes.
3. If the Donor does not provide a sufficient amount of urine for a drug test, he/she must drink up to forty (40) ounces of fluid, distributed reasonably through a period of up to three (3) hours, or until the Donor has provided a sufficient urine specimen. If the Donor refuses to make the attempt to provide a new urine specimen or leaves the area where the collections are being done this will be considered a Refusal to Test. If the Donor has not provided a sufficient specimen within three (3) hours of the first attempt. The collector will discontinue the collection and notify the Substance Abuse Administrator and/or Designated Jobsite Turner Representative or Alternative Program Administrator. After consulting with the MRO, the Donor will be directed to obtain within five (5) business days, an evaluation from a licensed physician. If the Donor proves that he or she has a medical condition that has, or with a high degree of probability could have precluded the Donor from providing a sufficient amount of urine, the MRO will mark the test as "Cancelled" and no further action will be taken. A medical condition includes an ascertainable physiological condition (e.g., a urinary

- system dysfunction) or a medically documented pre-existing psychological disorder, but does not include unsupported assertions of “situational anxiety” or dehydration. If there is not an adequate basis for determining that a medical condition has, or with a high degree of probability could have, precluded the Donor from providing a sufficient amount of urine, the MRO will mark the test as Refusal to Test.
4. Urine substance abuse screens and preliminary testing may be performed on-site. A SAMHSA approved laboratory will confirm on-site screens that test non-negative. All urine samples will be split-specimen tests, ensuring that any required or requested retests can be done using the original sample. A Confirmatory Test will use GC/MS to ensure reliability and accuracy.
 5. Before a Donor’s test result will be confirmed positive for drugs, the Donor will be given the opportunity to speak with a MRO and bear the burden of proof that there was a legitimate medical explanation for the Positive Test Result. If the MRO determines that a legitimate medical reason does exist, the test result will be reported as a Negative Test Result. If the MRO determines that a legitimate medical reason does not exist, the test result will be reported as a Verified Positive Test Result. A Positive Test Result will not be reported to Turner until the Confirmatory Test has been completed and the MRO has consulted with the Turner Employee or Other Worker regarding any legitimate medical explanations. Since the Policy is first and foremost concerned with the safety, the Donor whose results are pending will not be allowed on-site until this process is complete.
 6. Diluted Samples occur when a Donor drinks large amounts of fluids before the drug test, or adds water to the specimen so that it is harder to detect drug abuse. Donors may innocently drink too many fluids before the drug test in order to be able to give a sample. This can be avoided by telling the Donor not to drink more than twenty-four (24) ounces within three (3) hours of the drug test. It is the responsibility of the Donor to provide Turner with an undiluted sample that can be tested. Turner’s Policy regarding Diluted Samples is to retest the Donor one (1) additional time. Ideally, the Turner Employee or Other Worker should be retested within twenty-four (24) hours of receiving the results from the MRO, and in no case more than forty-eight (48) hours after the Diluted Sample was obtained, if the Donor provides a second Diluted Sample, the MRO will conduct a medical interview with the Donor. During the interview process, if it is determined that there is no legitimate medical reason; the Donor’s test will be treated as a Positive Test Result.
 7. A Verified Positive Test Result shall mean that the verified results are above standard Cut-Off Levels and that there is not a medically valid reason for the result. Any Turner Employee or Other Worker who tests positive for drugs, and who believes the test results are incorrect, may request a test of the original specimen at his/her own cost within twenty-four (24) hours.

An equally qualified laboratory shall perform the retest. If the retest is negative, a third test of the original split specimen shall be completed by a third laboratory to confirm or deny the previous test results. A toxicologist and MRO will review all data for a final determination. If it is determined that the initial confirmation screen was incorrect, the Turner Employee or Other Worker shall be allowed to resume work.

8. If the Confirmatory Test or retest for drugs is negative, Turner shall pay the Turner Employee for any lost time that may have occurred and reimburse the Turner Employee for the cost of a negative retest that was borne by the Turner Employee. The employer of an Other Worker whose Confirmatory Test or retest for drugs is negative shall be responsible for paying the Other Worker for any lost time that may have occurred and/or for reimbursing the Other Worker for the cost of a negative retest that was borne by the Other Worker.
9. Turner Employees who are removed from working on a Turner project, at a Turner Facility, or from working on or otherwise engaging in Turner business following a Positive Test Result, may only be returned to work if certain criteria are met (as outlined below in the “Possible Re-Employment with Turner” Section). In all cases, there is no guarantee of re-employment.

Procedures for Alcohol Testing

1. A Department of Transportation (DOT) approved saliva testing device or “hand held” Breathalyzer unit or equivalent device, similar to those used by law enforcement for field sobriety tests, will be used for the initial alcohol screen. In cases where a “hand held” Breathalyzer is used for initial alcohol screen, a saliva testing device must be used for the Confirmatory Test. Saliva or alcohol screen collections by breath or their equivalent may be performed on-site. Any initial screens at or in excess of 0.02% blood alcohol content will be tested with a Confirmatory Test performed after a waiting period of at least fifteen (15) minutes, but not more than thirty (30) minutes. A SAMHSA approved laboratory will confirm on-site screens that test non-negative with a Confirmatory Test using an EBT that has the ability to print out the results, date and time, a sequential test number, and the name and serial number of the testing device. Any Confirmatory Tests at or in excess of 0.04% blood alcohol content will be considered a Positive Test Result (Alcohol). If a Confirmatory Test shows a blood alcohol content at or above 0.02% but below 0.04%, the Donor will be suspended from safety-sensitive functions for at least twenty-four (24) hours following administration of the test. A Confirmatory Test at or above 0.02% but below neither 0.04% will not be considered either a Negative Test Result nor a Positive Test Result (Alcohol).
2. Before a Donor’s test result will be confirmed as a Positive Test Result (Alcohol), the Donor will be given the opportunity to speak with Turner’s MRO and bear the burden of proof that there was a legitimate medical explanation for the Positive Test Result (Alcohol). If the MRO determines that a legitimate medical reason does exist, the test result will be reported as a Negative Test Result.

If the MRO determines that a legitimate medical reason does not exist, the test result will be reported as a Verified Positive Test Result. A Positive Test Result (Alcohol) will not be reported to Turner until the Confirmatory Test has been completed and the MRO has consulted with the Donor regarding any legitimate medical explanations. Since the Policy is first and foremost concerned with safety, the Donor whose results are pending will not be allowed on-site until this process is complete.

3. A Positive Test Result (Alcohol) shall mean alcohol levels are officially recognized as demonstrating alcohol intoxication at or in excess of 0.04% blood alcohol content. Any Turner Employee or Other Worker who tests positive for alcohol, and who believes the test results are incorrect, may request a retest of the original specimen of saliva at his/her own cost within twenty-four (24) hours. An equally qualified laboratory shall perform the retest. If the retest is negative, a third test shall be completed by a third laboratory to confirm or deny the previous test results. A toxicologist and MRO will review all data for a final determination. If it is determined that the initial confirmation screen was incorrect, the Donor shall be allowed to resume work.
4. If the Confirmatory Test or retest for alcohol is negative, Turner shall pay Turner Employee for any lost time that may have occurred any reimburse the Turner Employee for the cost of a negative retest that was borne by the Turner Employee. The employer of an Other Worker whose Confirmatory Test or retest is negative shall be responsible for paying the Other Worker for any lost time that may have occurred and/or for reimbursing the Other Worker for the cost of a negative retest that was borne by the Other Worker.
5. Turner Employees or Other Workers who are removed from working on a Turner project, at a Turner Facility, or from working on or otherwise engaging in Turner business following a Positive Test Result, may only be returned to work if certain criteria are met. In all cases, there is no guarantee of re-employment.

Cost of Testing

Turner will pay the cost of the initial screen and Confirmatory Test for testing Turner Employees under this Policy. The employers of Other Workers are responsible for the cost of screening and confirmation required under this Policy, to include random testing. Any Donor who tests positive and believes that the initial screen test results are incorrect may request a retest at his or her own cost.

Refusal to Consent or Submit to/Report for Test When Directed

Any Turner Employee who refuses to sign a consent form and/or to submit to or report to a drug or alcohol screening test will be immediately removed from the Turner Project or Turner Facility and will be terminated, with no possibility of reemployment. Other Workers who refuse to sign a consent form and/or to submit to or report to a drug or alcohol screening test will be immediately removed from the Turner Project or Turner Facility, will further be barred from any subsequent work on Turner Projects or at Turner Facilities, and their Employer will be notified.

Prescription Drugs

Reporting to and being at work under the influence of prescribed or over-the-counter drugs, where such use prevents a Turner Employee or Other Worker from performing his or her essential job functions, or poses a safety risk to him or her and/or other Turner Employees or Other Workers property, or which has the potential to cause an Accident/Incident, is prohibited. Turner Employees or Other Workers taking a prescription or over-the-counter drug are personally responsible for confirming with their physicians that they may safely perform any job duties while taking such items. Turner Employees or Other Workers taking a legal substance that could impair their safe work must advise their immediate supervisor.

Types of Testing

To the extent consistent with applicable federal, state and local laws, a Turner Employee or Other Worker may be required to undergo a screening test for the use of illegal and non-prescription drugs, alcohol, or other substances under any of the following (or other) circumstances which may be determined by Turner management under this Policy:

1. Pre-employment – After a confidential offer of employment or prior to admission to a Turner Project. All potential Turner Employees will be tested after a conditional offer of employment but prior to the employment commencing. Potential Turner Employees who obtain a Positive Test Result will not be permitted to work on Turner Projects, at Turner Facilities, or otherwise engage in Turner business. The conditional offer of employment will be rescinded and such potential Turner Employees will not subsequently be considered for any other Turner employment opportunities. If a former Turner Employee returns to employment with Turner following an absence longer than one (1) year, Turner will retest such Turner Employee with pre-employment testing prior to the re-employment commencing (former Turner Employees who are re-employed following a violation of this Policy and rehabilitation, however will be tested as outlined on page 12 in “Re-Employment” Testing). All Other Workers will be tested by their employer(s) prior to beginning any work on a Turner Project, at a Turner Facility, or working on or otherwise engaging in Turner business. However, during orientation/training, Turner may accept, from Other Workers, substance abuse testing cards, badges, or proof of Negative Testing Results from the last twelve (12) months provided by the respective Other Worker’s employer or trade union. Turner reserves the right to require retesting if there is no proof of Negative Test Results within the last twelve (12) months.
2. Post-Accident/Incident – When a Turner Employee or Other Worker is involved in an Accident/Incident (as defined above in “Applicable Definitions”). If the Turner Employee or Other Worker is treated in a medical facility which fails to collect a specimen for testing, Turner may require the Turner Employee or Other Worker to be tested within thirty-two (32) hours of the event. A Positive Test Result may result in the denial of Workers’ Compensation for an injury resulting from the Accident/Incident.
3. Reasonable Suspicion – When there is reasonable suspicion, satisfactory to Turner management, to believe that a Turner Employee or Other Worker is using, possessing, distributing, dispensing, manufacturing, or is under the influence of illegal substances or abusing chemicals, controlled substances, or alcohol while working on a Turner Project, at a Turner facility, or while working on

or otherwise engaged I Turner business, or when there is reasonable suspicion satisfactory to Turner management to believe that the Turner Employee or Other Worker has reported to work under the influence of illegal drugs, unauthorized controlled substances, alcohol or other intoxicants which could affect the safety of others or of property.

4. Medical Examination – As part of any medical examination or fitness for duty examination provided or required by Turner.
5. Re-Employment – Upon re-employment or re-instatement to a Turner Project, at a Turner Facility, or to work on Turner business following a violation of this Policy and rehabilitation as outlined on page 18 in “Possible Re-Employment with Turner.” Further testing will occur without prior notice for a period of eighteen (18) months following re-employment or re-instatement.
6. Annual – When Turner requires screening on a yearly basis.
7. As needed – As required by Turner/Owner Agreements, other applicable agreements, contractual obligation or government regulation.
8. Random – Turner will conduct Random Testing as follows:
 - Random Testing will be conducted at a predetermined frequency, to be reasonably spaced throughout the calendar year. At least five percent (5%) of Turner Employee will undergo Random Testing on an annual basis. Unless subject to an acceptable or negotiated Alternative Program, all Turner Projects and/or Turner Facilities will be subject to Random Testing. Included in the testing pools will be Turner Employees and Other Workers on any Covered Site. All random selections and test processing will be administered by the Third Party Provider(s) selected by Turner. However, when applicable, the terms of a state, federal, or owner contract regarding frequency of testing and percentage to be tested will control. Costs associated with random testing will be the responsibility of each respective contractor.
 - Covered Sites will be assigned to testing pools distinguished by job-type criteria agreed upon by Turner management. A random number generator will be used to generate a set of random numbers corresponding to specific Covered Sites. When a selection occurs, Turner Projects or Turner Facilities that are available for selection will be put on a run list. At the time of selection, the Third Party Provider’s computerized program will randomly assign generated numbers to Turner Projects or Turner Facilities in each group or pool. The selected lists will be managed by the Third Party Provider and the Substance Abuse Administrator. All Turner Projects and Turner Facilities will be eligible each time random testing occurs, regardless of having been selected previously, unless state or local laws or regulations provide for a different frequency of testing.
 - The Third Party Provider will schedule an on-site collector to be dispatched to the selected Covered Site on the arranged date and time, unannounced to the personnel at the Covered Site selected. All available Turner Employees or Other Workers on the selected Covered Site are subject to testing at the date and time of the scheduled random testing. As stated above, the percentage of individuals selected for testing may depend on the requirements of the particular testing pool from which the selection is generated, or on any Alternative Programs or state or federal contracts governing the Covered Site. Any Turner Employee or Other Worker not present at the selected Covered Site for any legitimate business reason (e.g., vacation, illness, business travel, etc.) will be considered unavailable for testing. A Turner

Employee or Other Worker visiting a selected Covered Site for any reason at the time the random testing is scheduled, will be considered eligible and subject to Random Testing.

Company-Provided Education and Training

General Provisions

In conjunction with its commitment to a drug free workplace, Turner will provide education or ensure such education is provided to all Turner Employees, Other Workers and their respective employers where required by law. This education will cover substance abuse issues and is intended to help reduce the risk of Accidents/Incidents caused by drugs and/or alcohol. Supervisors will receive additional training which will help them identify and help employees who show signs of alcohol or drug use.

Education for All Turner Employees and Other Workers

Prior to working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business, all Turner Employees and Other Workers will receive at least one (1) hour of educational awareness training. This training will focus on problems in the workplace and preventing workplace Accidents/Incidents caused by substance abuse.

Additional Training for Supervisors

Prior to working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business, all Turner Employees or Other Workers who are in a supervisory or management position will receive at least one (1) hour of additional training. This additional training will focus on identifying substance abuse problems in the workplace and how to handle such problems in and appropriate manner.

Penalties

Violation of any of the rules associated with this Policy may result in disciplinary action up to and including termination of employment for Turner Employees or the future inability to work on Turner Projects or Turner Business for Other Workers. The following penalties exist for violation of this Policy:

Violation	First Offense	Second Offense
Possession of illegal / illicit drugs or paraphernalia	Turner Employees- Immediate removal from Turner Project or Turner Facility and termination, with no possibility or re-employment.	N/A.
	Other Workers-Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects of at Turner Facilities and Employer notified.	N/A.

Distribution of drugs/paraphernalia	Turner Employees-Immediate removal from Turner Project or Turner Facility and termination, with no possibility or re-employment.	N/A.
	Other Workers – Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified.	N/A.
Use of Illegal Drugs or Alcohol Abuse (Upon discovery via actions or testing)	Turner Employee-Immediate removal from Turner Project or Turner Facility and termination. Possible re-employment upon proof of successful rehabilitation and re-employment testing. Clean screen required prior to re-employment and continued testing over the eighteen (18) months following re-instatement.	Termination, with no possibility of re-employment.
	Other Workers-Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified. Turner does not provide Employee Assistance to Other Workers. Other Workers must approach their respective employers.	N/A.
Use of Illegal Drugs or Alcohol Abuse (Per voluntary request by Turner Employee for help)	Turner Employee-Immediate removal from Turner Project or Turner Facility. Re-instatement upon proof of successful rehabilitation and re-employment testing. Clean screen required prior to returning to work and continued testing over the eighteen (18) months following the return to work.	Termination with no possibility of re-employment.
	Other Workers-Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified. Turner does not provide Employee Assistance to	N/A.

	Other Workers. Other Workers must approach their respective employers.	
Under the Influence of Drugs or Alcohol at Work	Turner Employee-Immediate removal from Turner Project or Turner Facility and termination. Possible re-employment upon proof of successful rehabilitation and re-employment testing. Clean screen required prior to reinstatement and continued testing over the eighteen (18) months following re-instatement.	Termination, with no possibility of re-employment.
	Other Workers-Immediate removal from Turner Project or Turner Facility, Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified. Turner does not provide Employee Assistance to Other Workers must approach their respective employers.	N/A.
Failure to Report Use of Over the Counter Prescription Drugs Which Affect Performance	Turner Employees-Discipline, up to and including termination, with no possibility or re-employment.	Termination, with no possibility of re-employment.
	Other Workers-Discipline, up to and including being barred from any subsequent work on Turner Projects or at Turner Facilities, and Employer notified.	Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects or at Turner Facilities and Employer notified.
Positive Test Following Accident/Incident	Turner Employee-Immediate removal from Turner Project or Turner Facility and termination. Possible re-employment upon proof of successful rehabilitation and re-employment testing. Clean screen required prior to reinstatement and continued testing over the eighteen (18) months following re-instatement. May be ineligible for Worker's Compensation.	Termination with no possibility of re-employment.
	Other Workers-Immediate removal from Turner Project or Turner Facility. Barred	N/A.

	from any subsequent work on Turner Projects or at Turner Facilities and Employer notified. Turner does not provide Employee Assistance to Other Workers. Other Workers must approach their respective employers.	
Refusal to Consent or Submit to/Report for Test When Directed	Turner Employee-Immediate removal from Turner Project or Turner Facility and termination, with no possibility of re-employment.	N/A.
	Other Workers-Immediate removal from Turner Project or Turner Facility. Barred from any subsequent work on Turner Projects or at a Turner Facility and Employer notified.	N/A.

Notwithstanding the stated penalties, Turner reserves the right to discipline, up to and including termination, any Turner Employee and/or to ban Other Workers from any Turner Project and/or Turner Facility.

Notification of Authorities

In addition to all other remedies or penalties, Turner may report information concerning possession or distribution of any illegal drugs or unauthorized controlled substances to law enforcement officials will cooperate fully in the prosecution and/or conviction of any violators of the law.

Employees Convicted of Drug Offenses

Turner Employees or Other Workers must, as a condition of continued employment, notify their “Operations Manager” or employer, respectively, of any conviction of a criminal drug offense within five (5) days after said conviction. IF an employer is notified, then that employer shall notify the Turner Operations Manager immediately. If the Turner Employee or Other Worker convicted of the criminal drug offense is working on federal contract or grant, Turner will notify the Federal Contracting Agency of criminal drug convictions within thirty (30) days after Turner has received notice. Any Turner Employee or Other Worker so convicted must satisfactorily complete a Turner approved drug rehabilitation program and agree to periodic testing any time thereafter, before Re-Employment or a lift on a ban from working the federal contract will be considered. Failure to report such a conviction and/or participate in a drug rehabilitation program may result in disciplinary action, up to and including, suspension, barring, and/or termination.

Employee Assistance Program: Rehabilitation and Treatment

Turner is committed to helping Turner Employees who seek help from Turner for substance or alcohol abuse problems prior to any drug/alcohol testing or Accidents/Incidents.

Any Turner Employee who feels that he or she has a drug or alcohol related problem is encouraged to seek professional help. If a Turner Employee voluntarily notifies a supervisor or manager before testing that he or she may have a drug or alcohol problem, Turner will counsel the Turner Employee voluntarily seeking such help. Such person will be provided with a list of employee assistance vendors. Any such action by a Turner Employee shall be kept strictly confidential.

In certain circumstances, Turner Employees who have violated this Policy may also be referred to Turner's Employee Assistance Program ("EAP") and be eligible for a leave of absence and re-instatement (for those Turner Employees who have voluntarily requested help from Turner for the use of illegal drugs or alcohol abuse). Further details regarding the EAP may be found in Turner's Summary Plan Description ("SPD") or by visiting www.turnerbenefits.com and clicking on "Plan Details." In addition, a Turner Employee may contact the EAP directly by dialing 1-877-887-6266 and following the instructions.

Please refer to the Penalties Chart on pages 14-16 for the consequences and re-instatement and re-employment rights for various drug and alcohol violations.

If treatment necessitates a leave of absence, accrued vacation, or sick leave time, an unpaid leave of absence may be used, pursuant to the limitations of those respective policies.

Other Workers are not eligible for Turner's EAP. Such a benefit may be provided by Other Worker's respective employers.

Possible Re-Employment with Turner

Employment with Turner is an at-will employment relationship. There is never a guarantee of re-employment with Turner.

Turner Employees who are terminated from working on a Turner Project or at Turner Facility following certain Violations, including Use of Illegal Drugs or Alcohol (Upon discovery via actions or testing), Use of Illegal Drugs or Alcohol (Per voluntary request by Turner for help), Under the Influence of Drugs or Alcohol at Work, and Positive Test Following Accident/Incident may be returned to work only if following criteria are met:

- The Turner Employee works with an EAP counselor as detailed above and/or successfully completes and provides proof of completing a Turner Certified/Recognized Substance Abuse Rehabilitation Program at their own expense or at the expense of an Alternative Program Administrator if such Alternative program has an accepted program in place;
- The Turner Employee submits a written request to the Business Unit EH&S Director and Loss Control for approval prior to his/her return to work. A copy of the certificate of completion of the program must be attached;

-
- The Turner Employee submits to a re-employment drug test which has a Negative Test Result; and
 - The Turner Employee consents and submits to additional testing without prior notice for a period of eighteen (18) months following re-employment or re-instatement, with all tests having a Negative Test Result.

Summary

Turner reserves the right to add or change this Program, as deemed necessary, to maintain the safety of the project personnel, property and environment.

The Project Safety Program is designed to proactively manage, control and eliminate incidents throughout the construction process.

This Program is to be used in conjunction with the Turner Corporation Subcontractor Substance Abuse Program as well as the Subcontractor's Safety Program(s). The more stringent element of each program shall supersede the other and will be followed unless otherwise directed by Turner.

Turner Construction Company expects full cooperation of all contractors, regardless of tier, in monitoring, supervising, and enforcing the Project Safety Program.

It is mandatory that all contractors, regardless of tier, engaged in work on this project, comply with Turner's Project Safety Program, as well as all Federal, State, and local safety codes and regulations.

Each subcontractor/contractor is responsible to follow the Turner Corporation Subcontractor Substance Abuse Program.

All contractors are responsible for training their employees in the recognition of hazards which could result in illness or injury. Training must include procedures for proper elimination or control of said unsafe conditions.

Good safety practices carried out on this project will produce a safe and healthful workplace for all employees.

Neglecting safety is neglecting job responsibilities.

Subcontractor Agreement & Signature

We are in receipt of, and will cooperate and comply with all elements contained within, Turner's Project Safety Program, and Turner's Corporate Environmental Health and Safety Policy, adhering to the most stringent rules between the two.

A copy of the Program and Policy will be provided and discussed with all assigned project personnel, prior to starting work on this project.

Company Name: _____

Company Representative's Name (please print): _____

Company Representative's Signature: _____

Company Representative's Title: _____

Today's Date: _____



Building L.I.F.E.®

Living Injury Free Every Day

Corporate Environmental, Health and Safety Policy

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AddendumSilica Exposure Prevention Table 1

TURNER
CORPORATE ENVIRONMENTAL,
HEALTH AND SAFETY POLICY

Letter of Introduction

Environmental, Health & Safety Policy

Turner's safety culture is reflected in the principle of Building L.I.F.E. ® (Living Injury Free Every Day) with an expectation that all projects provide the safest workplace possible for our employees, contractors, clients and members of the communities in which we work everywhere, every day.

We expect our contractors to meet their contractual obligations of performing safe work, and to promote a culture within their own organization that aligns with the Turner ideal, executing work safely at every project every day.

Our history has demonstrated that the more aligned our business partners are with the principle of Building L.I.F.E. ® rather than regulatory compliance, the safer and more successful the project outcome.

Turner's Building L.I.F.E. ® safety program is a continuous improvement process with a focus on upstream risk avoidance and the activities, which produce risk. The Building L.I.F.E. ® process seeks to increase frontline worker engagement in the safety and planning processes through engaging those closest to the risk in the decision making process. Building L.I.F.E. ® is anchored by a focus on positive reinforcement and feedback on safe behaviors by everyone involved in the delivery of the project. The Building L.I.F.E. ® model promotes teamwork and proactive safety engagement by everyone.

The guiding principles of Building L.I.F.E. ® are:

- Injuries are Preventable
- Perform a Job Only if it is Safe
- Working Safely is a Condition of Employment
- Practice and Expect Safe Behavior Everywhere, Every Day

It is Turner's expectation that everyone is responsible and accountable for the safe performance of work. If anyone sees something that is unsafe, or someone performing work in an unsafe manner, it is their responsibility to do everything they can to stop the activity. If they are not able to do so, it is their responsibility to immediately bring the situation to the attention of a person with authority to eliminate the danger.

Thank you for your support and help maintaining a workplace that promotes the Building L.I.F.E. ® culture. Together, we will continue to improve our performance and make our projects the safest possible.

Peter J. Davoren
President and Chief Executive Officer
Turner Construction Company

TURNER
CORPORATE ENVIRONMENTAL,
HEALTH & SAFETY POLICY

**Administration &
Programs**

Crisis Management Plan

I. Policy Statement

Turner's Crisis Management Plan provides an outline of actions that must be taken to prepare for a crisis and response plan in the event of a crisis. The plan defines the action steps necessary and the responsibility assigned for such actions. A crisis is any event that has created and/or may still pose an immediate threat to life, property or business as usual. This may occur at a jobsite, a Business Unit office or other locations related to our business.

Such situations may include, but are not limited to:

- Incidents involving serious bodily harm and/or deaths, or property damages,
- Bomb threats, terrorist attacks,
- Collapse of a building or portion of a building,
- Earthquake, hurricane, tornado,
- Fire/explosion, water events, spills
- Equipment failure such as the collapse of a crane,
- Workplace violence,
- Environmental exposures,
- Extreme Business Interruption,
- Pandemic Illness,
- Labor Events, Protests, Immigration.

II. Procedures

1. The following are highlights of the Crisis Management Plan and may be found and viewed in detail in the Safety Section of the SharePoint Document Management System.

a) Section 1 – General

- The severity of the event will dictate the appropriate response. Your Business Unit Environmental, Health, and Safety Director (BUEHSD) and Operations Manager must be contacted before calling in a crisis using the National Crisis Number, 1-866-3-TURNER (1-866-388-7637).

b) Section 2 – Preparing for a Crisis

- The key to success in handling a crisis situation is preplanning, prior preparation, organization, and rehearsal / practice drills.
- Each project and office must have pre-determined Action Plans and Teams that are ready to react to any crisis situation.

c) Section 3 – Event Response Plans

- Several immediate and simultaneous actions must take place during a crisis regardless of the type of event.
- These actions should be directed by the Project Superintendent or, in his/her absence, the Project Safety Manager. Again, it is important to notify your BUEHSD and Operations Manager before contacting the National Crisis

Number, 1-866-3-TURNER (1-866-388-7637). The Site Specific Crisis Plan will detail the actions needed.

d) Section 4 – Media Management

- All inquiries by the media should be referred to the General Manager or Operations Manager.
- Turner's Corporate Public Relations Group must also be contacted immediately by the Operations Manager or General Manager of the Business Unit.

e) Section 5 – Crisis Preparedness Checklist

- Turner's level of preparedness for a crisis prior to its occurrence will determine the success of effectively managing such an event.
- Crisis practice drills must be conducted semi-annually for project sites and offices. These also should occur at the start of every project.
- Checklists provided on SharePoint will assist in drill preparation.
- Projects should utilize posters, wallet cards, etc. to maintain a level of awareness and preparedness for any crisis that may develop. They are available on the Safety SharePoint site on the right hand side under Safety links and clicking on the Turner EH&S store.

EMR Policy

I. Policy Statement

In our ongoing efforts as the leader in construction safety, Turner has adopted the following policy to ensure that Subcontractors with the best safety performance are contracted to work with us. Subcontractors who have an Experience Modification Rate (EMR) greater than 1.0 will not be allowed to bid or be awarded work for Turner. This policy applies to all secondary tier subs as well. For projects where Turner doesn't hold the agreements, we should recommend the same policy to the Owner, but the final decision is obviously the Owner's. Please refer to TKN/Procurement/Procurement Manual/EMR policy for the specific policy requirements that must be adhered to.

II. Procedures

1. In rare occasions, Turner may issue a waiver to this policy. A one-page waiver request is available from Business Unit Procurement Managers or Business Unit Environmental, Health, and Safety Directors.
2. Every EMR waiver request must be submitted to the Business Unit Environmental, Health, and Safety Director and Business Procurement Manager prior to submittal to the Corporate Safety Director for approval.
3. Every EMR waiver request must contain a specific Risk Mitigation Action Plan to ensure the subcontractor can perform the scope of work without incident. The Business Unit Environmental, Health, and Safety Director and the Procurement Manager are responsible for developing the plan.
4. If a Subcontractor has been given a waiver based on his current published EMR and the BU wants to award another subcontract to the Subcontractor in the same EMR year, no additional waiver is required as long as the Business Unit Environmental, Health, and Safety Director and Procurement Manager agree that the Subcontractor's safety performance is meeting their expectations. The scope of work must be similar and the value of the project must be within 50% of the original Subcontractor Approval Request (SAR) value.
5. The Subcontractor Approval Request (S.A.R.) will indicate "see attached previously approved EMR waiver in place" and the previous waiver will be attached to the S.A.R. The same safety measures from the initial waiver will incorporate in future awards.
6. Once the Subcontractor's new EMR is promulgated, if it increases from the previous year, the waiver process starts over. If it decreases, the old EMR waiver may be used providing that the Procurement Agent and Safety Director review the updated OSHA 300 and 300A's to confirm that the EMR Waiver Risk Mitigation Plan is still valid and does not need to be adjusted based on trending information from the OSHA 300 Logs. If no adjustment is needed, no further approval is required outside of the Business Unit.
7. Each new waiver request must be accompanied with the S.A.R., the OSHA 300 and 300A Forms for the previous 3 years, a Risk Mitigation Action Plan for the Subcontractor on this project and letter(s)

from their insurance broker confirming the past three years EMR's and incidence rates and what they are doing to help the subcontractor improve their performance.

8. The subcontractor must clearly submit in writing what they will be doing to lower their EMR to acceptable levels.
9. If the Subcontractor is not going to be onsite, except for supervisory oversight and the onsite installer has an EMR less than 1.00, then no waiver is necessary.

III. Roles and Responsibilities

1. Turner Procurement Manager & Safety Director:
 - a) Must ensure EMR policy is adhered to by all Turner employee and all processes for waivers are followed prior to subcontractor selection.
 - b) Must develop a risk mitigation plan, ensure it is in the subcontract, and conduct pre-planning meetings. They must require the use of Job Hazard Analysis (JHA) and daily Pre-Task Planning (PTP) meetings.
2. Subcontractor Management:
 - a) Must comply with and furnish materials necessary to comply with Turner policy.
 - b) Must attend and participate in project orientations.
 - c) Must participate in any and all required pre-planning meetings, JHA's and PTP meetings.

Mold and Moisture Remediation Policy

I. Policy Statement

Turner is not in the business of performing mold abatement or remediation work.

Turner Construction Company's Mold Taskforce was established to develop suggested practices to assist and provide guidance to the Business Units in connection with possible mold contamination. The taskforce has developed specific protocols to guide Turner Project Staff regarding mold, including the remediation process. All documents and forms are located in the Claims & Legal folder on the TKN Document Management System (TKN/Claims & Legal/Site Documents/Policy & Guideline /Business Unit Mold Suggested Practices).

The suggested practices begin once mold has been detected in the building and continue through complete remediation. The key to these practices is rapid response with prudent and reasonable judgment made depending on each situation.

II. Procedures

1. Initial Identification and Assessment – Once mold has been discovered, the business unit is to investigate, document and identify the problem and assess the magnitude of the situation. **An initial call must be made to The Business Unit Environmental, Health, and Safety Director and Claims Manager.**
2. Notification – All communications shall be legally protected by addressing the correspondence to Peckar & Abramson and copying only those with a need to know.
3. Remediation Evaluation – Working in conjunction with Turner Risk Management the project team and Operations Manager should determine the level of remediation needed and the need for external expertise.
4. Evaluate Responsibility – It is critical that the source of the mold is determined and a root cause is identified. The Project Team, Operations Manager, and Turner Risk Management will determine what caused the mold contamination and what parties are responsible for the remediation.
5. Parties on Notice – As soon as reasonably possible, the BU Claims Manager shall place the culpable parties on notice. Refer to Turner's Procurement Manual for guidance in 24 hour and 3-day notice letters per Subcontract Form 36. The Project Manager must notify the subcontractor that Turner is proceeding to have the mold problem corrected and that the subcontractor will be held accountable for the cost. Specific details can be found in the Claims and Legal folder on TKN titled "Tender Letter Protocol for Mold" (TKN/Claims & Legal / Site Documents / Correspondence / Mold Tender Letter). This document provides guidance on how to protect our interest relative to contractual indemnification and additional insured status.
6. Crisis Management – Depending on the extent of contamination, there may be a need for public relations involvement to minimize exposure.

7. Remediation Protocol – The Project Team manages the remediation of the mold with either a consultant and / or remediation contractor. **Specific details can be found at the Claims and Legal folder on TKN titled Mold Protocols 2 (TKN /Claims & Legal/ Best Practices & Lessons Learned / Mold Additional Protocol Levels).**
8. Closing Report – Maintaining Legal Privilege, complete Interim Mold Closing report and forward to Peckar and Abramson and Turner Risk Management.

A comprehensive sample Moisture Control Plan Guideline is available in Appendix B of this manual.

Spill Prevention Control Policy

I. Policy Statement

As the leader in the construction industry, Turner Construction Company is committed to the prevention of unwanted chemical releases, specifically related to potential entrainment into ground water sources. It is our intention to provide and maintain the best possible work conditions to ensure the minimization of potential spills. This will be achieved through the continued implementation of our Spill Prevention Control Plan (SPCP). By promoting safe and efficient production and by minimizing all incidents that could increase cost to the project and potentially impact the environment. It is our belief that with complete cooperation from all workers, the SPCP program will continue to achieve commendable results.

This Spill Prevention Control Plan has been prepared by Turner Construction Company to assist projects in managing hazardous substance spills including, but not limited to, oil and other petroleum products. The SPCP is to be used to inform contractors of the potential hazardous materials, contamination prevention measures, emergency spill response, and responsibilities associated with hazardous materials during construction.

II. Procedures

1. Spill Prevention And Containment Measures

The number one defense against a spill is prevention. The easiest way to prevent spills is to: conduct proper vehicle maintenance and inspections; never place vehicles or equipment in or near sensitive environments; store all materials in protected and approved areas; store all chemicals in approved and labeled containers and follow the OSHA hazard communication standard / GHS; and train workers on the proper storage, handling and treatment of all hazardous chemicals on the project.

This section identifies the types of secondary containment or diversionary structures that will be used to handle spill sources.

- a) **Contaminated Soil:** An equipment leak from a fuel tank, equipment seal, or hydraulic line will be contained within a spill pad placed beneath potential leak sources. An undetected leak from parked equipment will be contained within the equipment staging area by removing the soil to a drum using a shovel or by installing a temporary berm.
- b) **Equipment Staging Area and Material Staging Area:** An equipment leak from a fuel tank, equipment seal, or hydraulic line will be contained within a spill pad placed beneath potential leak sources. An undetected leak, from parked equipment will be contained within the equipment staging area by removing the soil to a drum using a shovel or by installing a temporary berm.
- c) **Fuel Staging Area:** A spill during fueling operations will be contained within a spill pallet for small container handling or secondary containment berms. The transfer of fuel into portable equipment will be performed using a funnel and/or hand pump and a bucket or containment pan will be placed directly underneath the fueling operation to prevent any incidental spills or drips. A spill response kit will be located near the fueling area for easy access. The spill response kit will include plastic sheeting, tarps, absorbent pads, Lite-Dri absorbent (or equivalent) and shovels.

- d) Unknown soil and groundwater contamination: When contaminated soil is encountered, refer to the Environmental Policy section of the Safety, Health and Environmental Policy.
- e) Underground pipelines: If a leaking underground pipeline is encountered, the leaking material will be contained within the excavation. Turner Project Staff will contact Risk Management immediately.

III. Roles and Responsibilities

- 1. A project specific Spill Prevention Plan shall be developed and posted in the project Trailer prior to mobilization. A comprehensive sample Spill Prevention and Control Plan is available in Appendix C of this manual. This plan shall include the following:
 - i. Roles Responsibilities for Owner, Turner, Subcontractors, and Vendors.
 - ii. Formal inspection protocol and archiving procedures.
 - iii. Emergency procedures following a spill.
 - iv. Spill Containment Equipment List & Sourcing information.
 - v. Local Emergency Response Contact Information.
 - vi. Project Specific Hazardous Materials Communication.
- 2. Standards of Business Conduct and Ethics Policy requires that all contact by any government agency (including OSHA, EPA) be reported to the project BUEHSD, BU Operations Manager and notification sent to TCCO VP of Safety and TCCO Risk Management legal counsel. The government representative is to be escorted at all times by the senior TCCO representative onsite.
- 3. The project specific Spill Prevention plan shall be communicated to all Turner Project staff and key subcontractor personnel.
- 4. Coordinate with BU Stormwater Compliance Coordinators on complying with the National Pollutant Discharge Elimination System ("NPDES") related to the discharge of stormwater from construction activities. See Turner Construction Company Stormwater Compliance Program.

Handheld Unit Use Policy

*Mobile Handheld Units are handheld devices, including cell phones, iPhones, Androids, Blackberries, pagers, MP3 players (or equivalent), radios, and other communication devices.

Turner Construction Company and all subcontracted employees are prohibited from using mobile handheld units without a hands-free device (defined as vehicle mounted or headset ear clip) while driving on company time or while conducting Turner business. This Policy includes all calls made from the following types of vehicles on or off all Turner jobsites.

1. Vehicles provided by Turner Construction Company including:
 - Leased vehicles;
 - Golf carts and similar vehicles used for jobsite transportation;
 - Construction equipment to include cranes, scissor and aerial lifts, earthmoving, hauling, and excavating equipment, except for radios, when radios are the primary means of controlling the operation of the equipment.
2. Turner employee personal vehicles if the employee is receiving a vehicle allowance and/or the employee has been issued a company telephone.

Procedures/Expectations:

A driver's first responsibility while on company time or while conducting Turner business, on or off a jobsite, is the safe operation of the vehicle. The Policy should be followed accordingly.

Hands-Free Devices

Hands-free operation does not guarantee 100% safety but will provide drivers with less distraction.

1. Always use the appropriate hands-free device for your Mobile Handheld Unit. For telephones issued by the company, an appropriate hands free device will also be issued at company expense or the individual reimbursed for its purchase.
2. Use the Mobile Handheld Unit's speed dial and voice activated functions.
3. Turner employees should keep all calls while driving brief, and should end any call that distracts them from the road.
4. Inform regular callers of the best time to reach you based upon your driving schedule.
5. If a hands-free device is not available:
 - Do not use the Mobile Handheld Unit; send calls to voicemail, forward them to another number or turn off the unit.
 - Pull off the road to a safe location to make or receive a call or ask a passenger to make or take the call.

6. Never take notes, type, refer to maps, input information into a global positioning system (GPS), or any materials while operating a vehicle.
7. Check state requirements and follow the law. Example: In California, if you are punching a button, and therefore taking your eyes off the road, you are in violation of the law.

This mobile handheld device use policy is intended to reduce the likelihood of motor vehicle accidents. It may not prevent all motor vehicle accidents from occurring. It does not address potential compliance issues with Federal, State, local OSHA or any other regulatory agency standards. Nor is it meant to be exhaustive or construed as legal advice.

Hazard Communication Policy

I. Policy Statement

OSHA's Hazard Communication Standard, also known as HAZCOM, is now aligned with the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals, and requires each employer to establish a hazard communication program. GHS is based on major existing systems around the world, including OSHA's Hazard Communication Standard and the chemical classification and labeling systems of other international and US agencies. The result of the collaboration is a document called "The Purple Book." OSHA has modified the Hazard Communication Standard (HCS) to adopt the GHS to improve safety and health of workers through more effective communications on chemical hazards. This program must provide a means to inform employees about the hazards associated with chemicals that they may be exposed to in the workplace. Turner's Hazard Communication Program (HCP) has been established to comply with this standard by ensuring that hazards associated with chemicals in the workplace are communicated to all employees who may be exposed to them. The Turner HCP applies to all employees (Turner, Contractor, and Subcontractor employees) who perform work on projects managed by Turner. The communication of potential hazards associated with chemicals and hazardous materials in the work place shall be accomplished by means of implementing the following practices on each job site:

1. A written hazard communication program,
2. Use of container labeling,
3. Availability of Safety Data Sheets (SDS),
4. Maintenance of an on-site Chemical Inventory,
5. Employee training.

II. Procedures

- A. Written Hazard Communication Program - Each Business Unit shall include the Turner HCP in its safety program and ensure that a site - specific HCP is provided for each job. The jobsite program document must describe the manner in which labeling, SDSs and employee training requirements will be satisfied. The BUEHSD shall assist the Project Staff with development of this program.
- B. Chemical Inventory List - A list of chemicals known to be present on the jobsite will be compiled by the Turner Project Staff. This list will be maintained in the Turner project office and will be updated on a monthly basis. The list of the hazardous chemicals must be assigned a unique product identifier (i.e. number scheme) that can be cross-referenced on each corresponding SDS. Each subcontractor will submit an updated Chemical Inventory List to the Turner Project Staff.
- C. Safety Data Sheets (SDS) – The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs) (formerly known as Safety Data Sheets or SDSs) to communicate the hazards of hazardous chemical products. As of June 1, 2015, the HCS will require new SDSs to be in a uniform format. The Turner Project Staff will be responsible to obtain and maintain the on-site file of all SDS's supplied by each Subcontractor. Turner project staff should coordinate the exchange of SDSs between the subcontractors when requested. SDS information should be for materials specific to the site. SDSs shall be accessible to all employees on-site. Chemical manufacturers, importers, distributors, or employers who become

newly aware of any significant information regarding the hazards of a chemical shall revise the labels for the chemical within six months of becoming aware of the new information, and shall ensure that labels on containers of hazardous chemicals shipped after that time contain the new information. As part of the GHS, all SDS's will be uniform in appearance and must contain the following sections:

- a) Section 1. Identification
- b) Section 2. Hazard(s) identification
- c) Section 3. Composition/information on ingredients
- d) Section 4. First-Aid measures
- e) Section 5. Fire-fighting measures
- f) Section 6. Accidental release measures
- g) Section 7. Handling and storage
- h) Section 8. Exposure controls/personal protection
- i) Section 9. Physical and chemical properties
- j) Section 10. Stability and reactivity
- k) Section 11. Toxicological information
- l) Section 12. Ecological information
- m) Section 13. Disposal considerations
- n) Section 14. Transport information
- o) Section 15. Regulatory information
- p) Section 16. Other information, including date of preparation or last revision

D. Container Labeling – A hazard classification will be completed by the manufacturer and the following information is to be provided for each hazard class and category. Labels will require the following elements:

- a) Product Identifier (Ingredient Disclosure),
- b) Signal words,
- c) Hazard Statement,
- d) Pictograms,
- e) Precautionary Statements,
- f) Supplier Identification,
- g) Supplemental Information.

Secondary Container Labeling - Employers may choose to label workplace containers either with the same label that would be on shipped containers for the chemical under the revised rule, or with label alternatives that meet the requirements for the standard. However, the information supplied on these labels must be consistent with the revised HCS, e.g., no conflicting hazard warnings or pictograms.

E. Employee Training and Education – Turner Construction Company is responsible for training all Turner employees with regards to the HCP and the new GHS label elements (i.e., pictograms, hazard statements, precautionary statements, and signal words) and SDS format. An on-line training module on Turner University titled OSHA Global Harmonizing System Introduction will be required to be taken by all new and experienced hires. Full compliance

with the final GHS rule will begin in 2015. The list below contains the minimum required topics for the OSHA Global Harmonizing System Introduction training that must be completed.

1. Label elements
 - a. Type of information the employee would expect to see on the new labels, including the product identifier, signal word, pictogram, hazard statement, and precautionary statement.
 - b. Name, address and phone number of the chemical manufacturer, distributor, or importer.
 - c. How an employee might use the labels in the workplace.
 - d. General understanding of how the elements work together on a label.
 2. SDS
 - a. Standardized 16-section format, including the type of information found in the various sections.
 - b. How the information on the label is related to the SDS.
 - c. How to read and understand the information provided on the SDS.
 3. An overview of the OSHA Hazard Communication Standard (29 CFR 1926.59).
 4. The inclusion of welding or burning gases, cement, solvents, glues, wood dust, and soldering fumes as examples of common items to most jobsite, which present hazardous exposures to employees.
 5. All employees attending a training class will sign an attendance form to verify that they have been properly trained in the Hazard Communication Program.
- F. Hazardous non-routine tasks - Periodically, employees are required to perform hazardous non-routine tasks. An example of hazardous non-routine tasks is confined space entry to check the bottom of caisson. Prior to starting work on such projects, each affected employee will be given information by their supervisor about hazardous chemicals to which they may be exposed during such activity.

This information will include, but not be limited to:

- i. Specific chemical hazards.
 - ii. Measures that employees will take to prevent exposures.
 - iii. Measures the company has taken to lessen the hazard, including ventilation, respirators, presence of another employee, and emergency procedures.
6. Demolition / Renovation - When doing renovations or demolition at a jobsite, it is important to know the contents of all unmarked pipes, vessels, tanks or other type

of containers as well as the location of lead, asbestos or other potentially hazardous materials that may be encountered. This information should be obtained from the Phase 1 Environmental Assessment and/or similar reports provided by the building owner. Once such information is identified, all of the above Hazard Communication program requirements must be enforced in order to communicate appropriate information to employees.










III. Employee Training Requirements

In compliance with the OSHA Hazard Communication Standard (HCS), Turner Construction Company has developed a Hazard Communication Program. This program is intended to inform employees of the potential hazards of chemical products that they may be exposed to while on the jobsite. By providing this information, our goal is to ensure that proper precautions are taken to minimize the health risks associate with the use of materials used in the construction of any building by Turner.

In accordance with Turner policy, a written Hazard Communication Program (HCP) is prepared and maintained on the job by the Turner Project Staff. Included are specific guidelines concerning requirements of the Federal Law, such as safety data sheets, labeling and personal protection. The following areas must be covered during each training session:

- A. Safety Data Sheets - These are information sheets developed by the manufacturer of products (i.e. glues, solvents, paints, insulation), which contain hazardous materials are required to have the standardized 16 sections. SDS's are obtained by Turner for all material brought on the site by Turner or any subcontractor.
- B. Labeling - Labels are an appropriate group of written, printed or graphic information elements concerning a hazardous chemical (i.e. paint, caulk, thinner, glue, or other material) that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging. Labels from the containers should never be removed. Labels must include the product identifier, signal word, pictogram, hazard statement, and precautionary statement.
- C. Personal Protective Equipment - If personal protection is required, it will be provided for you by Turner or by subcontractors. In most cases, you will need nothing more complicated than safety glasses or goggles, gloves or a respirator. Equipment you will need will be determined by the information on the SDS provided by the product's manufacturer.

HCS Pictograms and Hazards

<p>Health Hazard</p>  <ul style="list-style-type: none"> ▪ Carcinogen ▪ Mutagenicity ▪ Reproductive Toxicity ▪ Respiratory Sensitizer ▪ Target Organ Toxicity ▪ Aspiration Toxicity 	<p>Flame</p>  <ul style="list-style-type: none"> ▪ Flammables ▪ Pyrophorics ▪ Self-Heating ▪ Emits Flammable Gas ▪ Self-Reactives ▪ Organic Peroxides 	<p>Exclamation Mark</p>  <ul style="list-style-type: none"> ▪ Irritant (skin and eye) ▪ Skin Sensitizer ▪ Acute Toxicity ▪ Narcotic Effects ▪ Respiratory Tract Irritant ▪ Hazardous to Ozone Layer (Non-Mandatory)
<p>Gas Cylinder</p>  <ul style="list-style-type: none"> ▪ Gases Under Pressure 	<p>Corrosion</p>  <ul style="list-style-type: none"> ▪ Skin Corrosion/Burns ▪ Eye Damage ▪ Corrosive to Metals 	<p>Exploding Bomb</p>  <ul style="list-style-type: none"> ▪ Explosives ▪ Self-Reactives ▪ Organic Peroxides
<p>Flame Over Circle</p>  <ul style="list-style-type: none"> ▪ Oxidizers 	<p>Environment (Non-Mandatory)</p>  <ul style="list-style-type: none"> ▪ Aquatic Toxicity 	<p>Skull and Crossbones</p>  <ul style="list-style-type: none"> ▪ Acute Toxicity (fatal or toxic)

IV. Roles and Responsibilities

- A. Turner Management:
 - a) Must conduct inspections of the workplace for compliance with this policy.
 - b) Must discuss policy applications during project orientation with subcontractors.
- B. Subcontractor Management:
 - a) Must comply with and furnish materials necessary to comply with Turner policy.
 - b) Must conduct mandatory GHS Training for their employees as required by the revised hazard communication standard.
 - c) Must provide their company's Hazard Communication Program with SDS's and chemical inventory list prior to arrival to project.
- C. Subcontractor Employees:
 - a) Must attend and participate in HCP Training and project orientations.
 - b) Must comply with this policy.

Housekeeping Policy

I. Policy Statement

This policy will apply to all work performed by Turner Project employees, contractors and tool vendors including, but not limited to, the following activities: construction, installation, demolition, remodeling, relocation, refurbishment, testing, and servicing or maintenance of equipment or machines. In addition, each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart C – General Safety and Health Provisions.

II. Procedures

1. Work areas must be kept clear and free of obstructions by material/debris as follows:
 - a) Clean-as-you-go practices are required. Do not wait until all work has been completed before cleaning up. Instead, break the work down into smaller tasks and clean the area after each task is completed.
 - b) Materials will not be stored in a manner that will block, restrict, impede or prevent access to an egress path or emergency equipment, such as fire extinguishers, emergency eyewash or shower, emergency shutoff buttons or emergency disconnect devices.
 - c) Stairways shall not be used as storage areas.
 - d) Work that may temporarily block emergency exits, safety showers, elevators, corridors, and hallways will require prior Turner approval.
 - e) Project will enforce Turner's "Nothing Hits the Ground" requirements. All trash, debris, and scrap materials are to be placed into contractor-provided rolling trash hoppers, forklift-mounted hoppers, or other trash collection receptacles (that do not require workers to lift and carry) immediately upon creation. Upon filling any such receptacle, Contractors must remove all of its trash/debris and recyclables from the building to the agreed upon roll-off or dumpster. Provide an ample number of trash receptacles to allow each crew/team that generates waste or recyclables to have one. No "piling" will be allowed on the floors. Construction materials, job-boxes and tools must be stored/staged in approved areas, and never in walkways or stairways. Cords, hoses and welding leads must be kept off the floor at least 8 feet high in walkways, aisles, and stairs and access points.
 - f) Housekeeping methods will be specified within your Job Hazard Analysis (JHA) and Pre-Task Plan (PTP).
2. Power Cord and other Utility or Hose Management:
 - a) All cords must be inspected before use.
 - b) At no time shall cords be strung across exits or in front of emergency equipment.

- c) Run cords overhead in a supported fashion, when feasible.
 - d) Run cords around perimeters, when feasible.
 - e) Tape cords down or use cord covers, if they present a tripping hazard.
 - f) Support all cords that run through floors or ceilings with appropriate means.
 - g) All cords must be stored and put away after use. (I.e. not coiled up on floor).
 - h) All extension cords must be equipped with GFCI protection or be plugged into wall GFCI outlet.
 - i) Provide non-conductive hanger mechanisms or cord/hose pole-stands. Must be anchored to prevent accidental displacement.
 - j) If the above listed safety requirements cannot be met, temporary wiring must be installed to facilitate proper cord management.
3. Material Storage:
- a) Lay-down and storage areas are extremely limited on site. Contractors are not to bring more materials onto site than they will install during a week. All Materials stored in the building must be staged on wheels to allow for quick and easy relocation.
 - b) Materials stored in the vicinity of the area where work is performed should be limited to only those materials that will be used in the same shift.
 - c) Materials not to be stored in egress paths, stairways or within 10 feet of any opening edge, shaft or side which material could fall to next level.
 - d) Any material stored in a work area longer than 24 hours must be approved by Turner.
 - e) Materials should be stacked in a safe and orderly manner. Materials to be secure to prevent accidental displacement.
 - f) Material must be stored to promote mobility of material. Pipes, conduits, metal fabrications and steel framing are to be stored on rolling racks or similar conveyance. Bulk material should be palletized to allow for easy mobility using a pallet jack. Store all items neatly on carts, in cabinets or on shelves. Storage containers to have casters or other mechanism for easy movement of containers.
 - g) Materials stored should be designed and stage to incorporate ergonomic and mechanical advantage. Material movement and storage methods will be specified within your Job Hazard Analysis (JHA) and Pre-Task Plan (PTP).
 - h) Gang boxes and toolboxes should not have materials stored on top of them.

- i) Small tools and materials should be kept on Industrial Carts or the equivalent when not being used. No tools or materials should be left on the ground that could present a trip and fall hazard.
 - j) If more storage area is needed, contact Turner.
4. Chemical Storage:
- a) Turner reserves the right to approve all chemicals and quantities brought on site.
 - b) The user of the chemical must provide Turner Construction a Safety Data Sheet prior to bringing the substance on site.
 - c) All chemicals and equipment containing chemicals must be stored in approved areas. (i.e. chemical cabinet, bunker)
 - d) Contractors are responsible for removing all unused chemicals from the Turner Project site at the completion of their contract.
 - e) All chemical containers must be properly labeled.
 - f) Chemical/gas cylinders (welding, purging, leak detection cylinders, etc.) must be secured at all times.
 - g) All dedicated chemical storage areas must have safety data sheet (SDS) available at the storage location.
 - h) If you are unsure of appropriate storage areas, contact Turner for direction.
5. Material/Waste Disposal:
- a) Waste disposal methods will be specified within your Job Hazard Analysis (JHA) and Pre-Task Plan (PTP).
 - b) All hazardous waste must be disposed of in accordance with Federal, State, and Local regulations and shall comply with applicable Turner hazardous waste programs.
 - c) All hazardous waste must be properly labeled.
 - d) Hazardous waste materials must be discarded into proper disposal containers
 - e) Non-hazardous waste must be disposed of into appropriate recycle or disposal containers.
 - f) Waste separation, recycling and reduction methods are encouraged on all projects and are to be made a part of the project logistics plan.

Incident and Near-Miss Investigation and Reporting

I. Incident Reporting

For any incident involving personal injury, the subcontractor will complete their own incident investigation report form and submit it to Turner as soon as reasonably possible (same work shift) but no later than 24 hours after the incident occurred.

The Project Safety Manager and/or Superintendent will notify the Business Unit Claims Coordinator and BU EH&S Director (BUEH&SD) as soon as practical after the incident, but no longer than 1 hour. In addition, a Turner Incident Investigation Report will also be completed in RiskConsole by the Turner Project Superintendent and/or Project Safety Manager (if assigned) based on the information collected from witnesses and contractors. All matters pertaining to medical records and reports will be kept strictly confidential by the responsible party.

II. Responsibilities

All incidents resulting in injury or property damage are to be reported, at the time of occurrence to the Turner Project Superintendent and/or Project Safety Manager. The Turner Superintendent and/or Project Safety Manager will speak with the worker involved in the incident as well as the subcontractor in charge of the person(s) involved or witnesses to the event. The contractor will complete their own incident investigation report form and will require each craft person involved to complete a written statement whenever such events take place. Turner and or the Owner may require a more detailed investigation and the Subcontractor will comply with their directions.

The BUEH&SD will call the Turner Help Line when appropriate. See Turner Incident and Near-Miss Reporting Matrix for reference of when to call the Turner Help Line 1(866) 3-TURNER / 1 (866) 388-7637. Updates to OSHA's Recordkeeping rule effective January 1, 2015 requires employers to report all work-related fatalities within 8 hours and all in-patient hospitalizations, amputations, and losses of an eye within 24 hours of finding out about the incident.

III. Incident Reporting Procedures

1. Near-Miss Event

A Near-Miss is an unplanned event that did not result in injury, illness, or damage – but had the potential to do so. Only a fortunate break in the chain of events prevented an injury, fatality or damage; in other words, a miss that was nonetheless very near. A faulty process or management system invariably is the root cause for the increased risk that leads to the near miss and should be the focus of improvement. Other familiar terms for these events are a “close call,” or “near-hit.”

It is the responsibility of the Turner Project Superintendent or Project Safety Manager to complete the investigation using the Turner Construction Company Incident investigation report in RiskConsole. This report will include recommendations / implementation of corrective actions. The report will be submitted as soon as reasonably possible (same work shift) but no later than 8 hours. A gathering of all involved parties will take place within 24 hours of the incident to review the case and determine if the steps taken to remediate the incident were appropriate.

2. First Aid Event

Any first aid event will result in a full incident investigation. TCCO feels that no injury is minor but an opportunity to learn and eliminate like occurrences. Daily records of all first-aid treatments not otherwise reportable will be maintained in RiskConsole for record purposes only. Refer to the Turner Incident and Near-Miss Reporting Matrix for reporting requirements.

3. Medical Treatment Event

It is the responsibility of the each subcontractor to immediately notify the Turner Project Superintendent of an injury requiring medical treatment. If the injury is considered an emergency call 911. The Turner Safety Manager or senior TCCO project representative will oversee the completion of required Turner reporting forms in RiskConsole. The Turner Business Unit Environmental, Health, and Safety Director and Claims Manager shall be notified as soon as possible. The Turner Business Unit Environmental, Health, and Safety Director will contact OSHA when required, regardless of the of the subcontractor's requirement to notify. The BUEH&SD will call the Turner Helpline when appropriate. See Turner Incident and Near-Miss Reporting Matrix for reporting requirements and when to call the Turner Help Line.

4. Fatality

It is the responsibility of the subcontractor to immediately notify the Turner Project Superintendent or the Turner Safety Manager of an event resulting in a fatality. The Turner Project Superintendent will then implement the Turner Crisis Management Plan. All notifications must follow in accordance with the Turner Crisis Management Plan notifications flowchart. The BUEH&SD, BU Claims Manager, General Manager, and Operations Manager must be notified immediately. All media inquiries are to be referred to the Owner or as the Site Specific Crisis Plan dictates. A notification must be made by the employer to OSHA within 8 hours. The BUEH&SD will call the Turner Helpline.

5. Property/Environmental Damage

It is the responsibility of the Turner Project Superintendent to notify the Turner Project Manager and Owner of the incident and assist in the assessment of damages. The Business Unit Environmental, Health, and Safety Director and Claims Manager shall be notified in all cases. The Claims Manager will be responsible for notifying applicable insurance carriers in accordance with policy provisions. Turner Project Superintendent or Safety manager shall input a report into RiskConsole for record purposes only. The BUEH&SD will call the Turner Helpline when appropriate. See Turner Incident and Near-Miss Reporting Matrix for reference of when to call the Turner Help Line

6. General Liability Accident

It is the responsibility of the subcontractor to immediately notify the Turner Project Superintendent of an event involving the third parties or the general public. The Turner Project Manager will immediately notify the Owner, BUEH&SD and Claims Manager. The subcontractor involved will complete an incident report and submit it to the Turner Superintendent or his/her designee. Turner Project Superintendent or Safety manager shall input a report into RiskConsole for record purposes only. The BUEH&SD and Claims Manager will determine if a Third-Party Investigator will be needed. The BUEH&SD will call the Turner Helpline when appropriate. See Turner Incident and Near-Miss Reporting Matrix for reference of when to call the Turner Help Line. In all cases, including a near-miss, a full investigation will be conducted by TCCO and the contractors to determine potential contributors to the incident in hopes of eliminating the conditions reoccurrence on this or any project. The intent of the investigation is not to affix blame but to

learn from the event

7. Turner Incident and Near-Miss Reporting Matrix

LEVEL 4 CODE RED Call Turner Help Line Immediately	Incidents, injuries, or near misses that caused or could have caused a fatality of or not of multiple fatalities	Notify PM/PX, BU EH&S Director and OM/GM. BU EH&SD calls Help Line. Enter into RiskConsole.
LEVEL 3 CODE BLUE Call Turner Help Line Immediately	Incidents, injuries or near misses that caused or could have caused severe bodily harm with long-term and/or life-altering complications or impact to business such as: <ul style="list-style-type: none"> Any in-patient hospitalization of any worker Significant third degree burns Amputations (all, including fingertip) Loss/impairment of body organ function Loss of an eye Any fall or fall/catch of 6' or greater Bomb threat or terrorist threats/attacks Severe fire or explosion Union or labor issues (i.e. picket) Utility line strike (gas, sewer, water, electric, phone/data) If the injured (or ill) worker is transported to a medical facility via ambulance Loss of hearing Severe visual impairment to total blindness Collapse of a structure or portion of a structure Equipment collapse (cranes, scaffolds, etc.) Environmental crisis or regulatory visit (OSHA, EPA, etc.) with potential violation/citation Building shutdown due to emergency Jobsite shutdown due to safety (by owner or Turner) Heart attack Hate crime Workplace violence Active shooter 	Notify PM/PX, BU EH&S Director, and OM/GM. BU EHSD call help line. Enter into RiskConsole.
LEVEL 2	Incidents, injuries, or near misses that caused or could have caused significant bodily harm; reasonably expected to heal without significant life-altering complications in a moderate time period (week(s) to months) or significant impact to business such as: <ul style="list-style-type: none"> If the injured (or ill) worker seeks medical treatment Media is on site Property damage greater than 10K Fractures, loss of tooth/teeth Dislocations Minor third degree burns Significant sprains and strains Fire/police department is on the scene and engaged 	Notify PM/PX, BU EH&S Director and OM/GM. Enter into RiskConsole. Schedule incident review call with SVP.
LEVEL 1	Incidents, injuries, or near misses that caused or could have caused only minor bodily harm; reasonably expected to heal without any life-altering complications in a short time period (hours to days) or minor impact to business such as: <ul style="list-style-type: none"> Mild eye (corneal) abrasions Minor sprains and strains Minor lacerations/penetrations Minor chipping or cracking of a tooth/teeth Property damage Skin rashes/burns from exposure to chemicals Minor second degree burns (blistering) 	Notify PM/PX, BU EH&S Director and OM/GM. Enter into RiskConsole.

IV. Documentation for all Incidents and Near-Misses

The following forms must be completed and delivered to the Project EH&S Manager when there is one or to the Superintendent. These will be made available at the site.

- Turner Construction Company Incident Report form in RiskConsole.
- Complete a root-cause investigation
- Employee Incident Statement(s) (speak with all employees and workers that may have information regarding the incident)
- Subcontractor's Incident Report

All incidents, near-misses, injuries, illnesses and unusual events that have occurred will be investigated thoroughly.

Projects are responsible to have onsite equipment to document the accident scene. Photos, sketches, schematics and related evidence/equipment should be collected for report and preservation as soon as practicably possible after an incident. Photos should be taken of the site of loss as soon as practicably possible. Do not take photos of the injured if at all possible.

Except for rescue and emergency measures, the accident scene shall not be disturbed and should be barricaded until it has been released by the investigating official. The Subcontractor is responsible for obtaining appropriate medical and emergency assistance and to ensure timely response to injured worker or event.

It is required that the investigation team inspect any equipment involved in the incident and secure it for future use as evidence, if practicable, i.e. ladders, tools, PPE involved in the incident, etc. If the incident involves a ladder, the permit must be collected along with any inspection forms for the ladder.

Incident reports are to be completed in RiskConsole, within 8 hours even though supplementary information may be necessary but not available for a period of time.

“Subcontractor” is intended to mean any contractor working under Turner’s inspection, supervision and/or direction whether under contract to Turner or the Owner as on Construction Management. This policy will be used on all projects at all times.

In all cases, the Site Specific Crisis Management Plan and the Site Specific Health and Safety Plan will be the guiding document.

If applicable, a Lessons Learned document will be developed and approved by TCCO to relay any information gathered that may assist in the elimination of a future similar occurrence.

Turner Construction Company - Incident Investigation Report

To be completed within 24 hours by Supervisor.

If incident may be COVID-19 related, complete General and Involved Party information Sections and jump to COVID-19 Supplement on last 2 pages and complete that information.

GENERAL INFORMATION

Date: _____ Contract Number: _____
BU Name: _____ Project Name: _____
Project Address: _____
Program: ☐ CCIP ☐ CORP ☐ OCIP ☐ Other Explain (if other): _____
Site Contact Name: _____ Phone: _____ Cell: _____
Exec: _____ Superintendent: _____
Date of Incident: _____ Time: _____ AM _____ PM Shift: _____
Jobsite/Area (refer to columns/beams/drawings as needed): _____
Weather Condition: _____ Lighting Condition: _____

INVOLVED PARTY INFORMATION

Name: _____
☐ Male ☐ Female Date of Birth: _____ Height: _____ Weight: _____
Address: _____
Home Phone: _____ Cell Phone : _____
Employee ID: _____ E-mail Address: _____
Employee Job Title: _____ Length Employed: _____
Employer Name: _____ Supervisor: _____
Cell #: _____ Employer Address: _____
Shop Steward: _____ Cell #: _____
Speaks Fluent English: ☐ Yes ☐ No Language: _____

INCIDENT DESCRIPTION

Describe in detail how the incident occurred and the task being performed by the involved party when he/she claims to have been injured or became ill including how long and with whom they were performing the task. Include specifics such as equipment, structure, tools, materials, objects (size, shape and weight), positions, distances, sequence of events, etc. [Facts Only]

Enter Description Here

Date: _____ Prepared By: _____

Turner Construction Company - Incident Investigation Report

WITNESS INFORMATION

Name: _____ Phone: _____ Cell: _____

Company: _____

Name: _____ Phone: _____ Cell: _____

Company: _____

Name: _____ Phone: _____ Cell: _____

Company: _____

Name: _____ Phone: _____ Cell: _____

Company: _____

INCIDENT INFORMATION

Describe the nature and extent of all claimed injury(s) / illness (body part affected, type of injury, etc)

Enter Description of Claimed Injury Here

Was First Aid Administered? ☐ Yes ☐ No By Whom? _____

Was Employee/Third Party taken to Hospital / Clinic? ☐ Yes ☐ No

If yes, list name, phone and address: Name: _____ Phone: _____

Address: _____

Is employee in a Trade Union? ☐ Yes ☐ No If yes, provide Trade & Local #: _____

Additional Comments:

Enter Any Additional Comments Here

**All incidents need to be immediately reported to your BU Safety Director & Claim Coordinator.
Copy to be submitted to BUSD and Claim Coordinator for filing. Original to be kept with job files.**

Date: _____ Prepared By: _____

COVID-19 SUPPLEMENT (COMPLETE THIS SECTION IF COVID-19 Might Be INVOLVED)

What Day Did Worker Start on Project? _____ What was the worker's last day on the project? _____

Date of Onset of Symptoms: _____ HR Representative (Turner or Other): _____

Designated person to follow up with P1: _____ Role: _____

Did worker test positive for COVID 19? ☐ Yes ___ No ___ If Yes, on what day? _____

Isolation (P1) or Quarantine (P2) Start Date: _____ Isolation (P1) or Quarantine (P2) End Date: _____

Was worker hospitalized and / or did worker receive medical treatment? ___ Yes ___ No

Permission granted by employee to use employee's name to assist with identifying P2's? ___ Yes ___ No

Identify any P2 employees (as defined by "Containing The Spread of CoVid-19" communication)

Is worker assigned to more than one project? ___ Yes ___ No If yes, provide other projects and time frame below:

Provide specific location(s) and schedule of work during the 2 weeks prior to the onset of symptoms.

If on a project, provide specifics as to areas where work was performed.

Has worker worked with more than one crew or shift while on this project? ___ Yes ___ No

List all: _____

Did co-workers from same crew or company test positive for COVID-19? ___ Yes ___ No

If so, who and when? _____

Are there any common entrances or security check-ins for workers and if so, how many people use it and is it being cleaned regularly? ___ Yes ___ No Details _____

Did the worker come in contact with a person known or presumed to be positive for COVID-19? ___ Yes ___ No

If yes, who, when and where? _____

Have any family members shown symptoms or tested positive for COVID-19? ___ Yes ___ No

If yes, who and when? _____

What means of transportation did the worker use to travel to/from work during the 2 weeks prior to the onset of symptoms or testing positive for COVID-19? (Drive alone/Ride share/Public)

Has the worker or any family member(s) recently traveled to the high risk areas (eg. Public gatherings or locations where people congregate)? ☐ Yes ☐ No

Does the worker do any other type of work for pay or volunteer? ☐ Yes ☐ No

If yes, where and when was the last date of that work? _____

Was the worker contacted by a contact tracer and if so whom and what agency? ☐ Yes ☐ No

Identify the Personal Protective Equipment (PPE) used by worker – e.g. apparel worn_____

Work Environment – Identify the environmental factors including working surfaces cleaning and disinfecting, hygiene protocols, etc. that were performed at the project.

Please enter any additional comments or information below:

Personal Protective Equipment

I. Policy Statement

All employees of Turner will be provided the personal protective equipment necessary to complete their jobs safely. A competent person onsite will determine necessary equipment. Each subcontractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart E – Personal Protective and Lifesaving Equipment in addition to the following guidelines.

II. Procedures

1. All Turner employees, subcontractor employees and visitors to project sites are required to wear safety glasses that comply with ANSI Z87.1. Dark lenses are not to be worn inside of buildings, in enclosed areas or at night. Prescription eyeglasses and sunglasses that do not comply with ANSI Z87.1 are **prohibited**.
2. High visual, safety vests, shirts or jackets shall be worn as the outermost apparel by all employees, 100% of the time. ANSI Class 2 (0-44 MPH) and Class 3 (45 MPH or more) outerwear must be worn whenever working on or near (within 10 feet) of a roadway.
3. All Turner employees, subcontractor employees and visitors to project sites are required to wear hardhats that comply with ANSI Z89.1. Cowboy hardhats, aluminum hardhats, and bump caps are not permitted on Turner Construction Company Projects. Employees exposed to electrical voltages of 600 V or greater shall wear hardhats that meet the requirements of ANSI Z89.2 Type Hardhats.
4. All Turner employees, subcontractor employees and visitors to project sites are required to wear at a minimum, hard sole safety shoes or boots. Safety toe shoes or boots, or toe guards must be worn when using jackhammers, tampers or similar equipment which could be dropped or landed on a worker's toes / feet. Safety shoes or boots must also be worn by masons, drillers, pile driving, steel erectors, and riggers due to the hazards inherent with their work.
5. Where employees are performing work that could potentially cause materials to become flying objects such as, but not limited to, chipping, welding, grinding, cutting, drilling and chiseling, they shall utilize a face shield in addition to safety glasses. A face shield shall be worn while using powder-actuated tools and drilling overhead. When working above shoulder level, additional eye protection is required, beyond regular safety glasses. A full face-shield that clamps tightly onto the brim of the hardhat should be worn in most cases to prevent dusts and debris

from falling behind the safety glasses into the eyes. Unvented safety-goggles that fit snugly against the skin can be substituted.

6. Where necessary, each employee shall use equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation.
7. Where employees are performing work that could potentially expose them to harmful chemicals or micro airborne particles they may be required to utilize safety goggles and or a face shield. Please refer to manufacturer SDS for specific requirements. Goggles are required for abrasive actions in which dust can enter the eye.
8. Employees are required to wear protective gloves 100% of the time.
 - a) The only exception to this policy is if the competent person determines that the use of protective gloves for a specific activity creates a greater hazard.
9. Appropriate arm protection is required during operations where the arms are exposed to cut hazards (i.e. Kevlar, Dyneema sleeves, etc.). Examples of these activities are working around metal studs and pull boxes, tight confines as between wall studs or above ceiling and all demo activities. These operations shall be identified on the JHA/PTP.
10. Contractors exposed to dust, fumes, and/or gases shall be provided with proper respiratory protection designed to protect against the particular substance encountered. The Contractor is solely responsible for the proper testing and training per OSHA standards, and to provide the appropriate equipment.
11. Workers exposed to roofing tar must wear long sleeved shirts and gloves. Workers who are directly exposed to hot tar must also wear a full apron and face shield.
12. Where an employee could be exposed to noise in excess of 85 dBA, their employer will provide hearing protection, which will reduce the noise to an acceptable level. If the noise levels are determined to cause an 8 hour TWA exposure greater than 85 dBA, the subcontractor shall be required to submit a detailed hearing conservation program to Turner. This program shall be approved prior to beginning work.
13. **Covid-19 PPE Minimum Requirements: At a minimum a cotton cloth face covering that covers the nose and mouth (cotton cloth, bandana, or buff) must be worn. Additionally a surgical, KN95, or similar mask can also be worn. Note: all work must be evaluated for the appropriate minimum PPE required by OSHA.**

If the work as planned in the PTP does NOT allow for 6' distancing, a surgical mask and face shield with a goggle underneath or surgical mask and a goggle/face shield

combo must be worn. If a face shield or goggle/face shield combo cannot be obtained then a KN95 or similar mask with goggle should be used. Nitrile gloves under task-specific gloves must be worn.

III. Roles and Responsibilities

1. Turner management-
 - Conduct hazard assessments to identify specific PPE for Turner Craft Workers and ensure adequate hazard assessments are conducted by the subcontractors.
 - Supply necessary PPE and training to Turner staff.
 - Monitor use of PPE by Turner staff and subcontractors.
2. Subcontractor management
 - Conduct hazard assessments to identify specific PPE for Subcontractor Workers and ensure adequate hazard assessments are conducted by their subcontractors
 - Provide necessary PPE and training.
 - Monitor use of PPE.
 - Provide replacement PPE when needed.
 - Identify any new hazards that would require the use of PPE.
 - Be responsible for the assurances of PPE adequacy, maintenance and sanitation.
3. Subcontractor employees
 - Properly use and care for assigned PPE.
 - Immediately inform supervisor if PPE is damaged or not effective.

Job Hazard Analysis / Pre-Task Planning

I. Policy Statement

This policy identifies the method of Job Hazard Analysis and Pre-Task Planning that are required for each work operation not only by Turner but also for each subcontractor, regardless of tier. The Job Hazard Analysis (JHA) will be submitted to the project team for review and comment **prior to starting the work in the field**. Sample forms are available in the forms section of the manual, the Subcontractor Safety Requirements section and in the Safety Section of the TKN2 Document Management System.

II. Procedures

1. Job Hazard Analysis – JHA

- a) For each phase or major type of work a JHA will be completed to identify the following:
 - Safety and Health Considerations
 - Description of Steps to be Performed
 - Hazards Associated with Each Step
 - Required Action to Eliminate or Control the Hazard
 - Supervision Sign-off
- b) **Work shall not begin until the JHA for the work activity has been reviewed by Turner Construction** and discussed with all engaged in the activity, including the Contractor, subcontractor(s), and other affected on-site representatives at safety pre construction meetings.

2. Pre-Task Planning – PTP

This daily plan is designed to take place at the start of each work shift. Subcontractor supervisors should meet with their crews to discuss the tasks to be accomplished and the steps that need to take place to work safely. All workers should review and sign the relevant PTP for their assigned work. The main components of the Pre-Task Plan will include the following:

- a) For each phase or major type of work a PTP will be completed to identify the following:
 - Evaluating the Work Area
 - Potential Hazard Checklist
 - Description of Steps to be Performed
 - Hazards Associated with Each Step
 - Required Actions to Eliminate or Control the Hazard
 - Crew Sign-off
- b) **Work shall not begin until the PTP for the work activity has been** discussed with all engaged in the activity, including the Contractor, subcontractor(s), and other affected on-site representatives at a safety pre-construction meeting or daily huddle.

A copy of the PTP shall be kept near the work location and **will be submitted to Turner on a daily basis.**

The information the supervisors are relaying to the workers is the same that was developed in the JHA however, the PTP will greater define the plan for that particular phase of work.

III. Roles and Responsibilities

- 1) The Subcontractor representative is responsible for submitting JHA's to the Turner Project Superintendent 7 days prior to the start of work. The JHA shall be utilized during the safety preplanning meetings with subcontractors.
- 2) The Subcontractor representative is responsible for completion of PTPs, communications with trade workers, and archiving of the documents. The frontline workers shall be engaged during the creation of the PTP's.
- 3) The Project Superintendent will ensure that all JHA's and PTP's are completed for all phases of construction activities for Turner, subcontractors and all tiers.
- 4) Pre-construction meetings should always be held by the project team and attended by direct supervisory personnel of the subcontractors who will perform the work.

IV. List of General Hazards by Trade

Trade	Hazards
All Trades	Slips, trips, & falls, caught-between, struck-by's, electrocutions.
Brick Layers	
Stone Masons	Cement dermatitis, awkward positions, heavy loads, Silicosis, Falls(Slips, Trips and from Height), Lacerations, Head Injury, Back Injury
Hard tile setters	Vapor from bonding agents, Lacerations, Slips, Trips and Falls, Back Injury
Carpenters	Wood dust, heavy loads, repetitive motion, Sheet rock Dust, Slips, Trips and Falls, Falls from Height, Struck By, Debris in eye, Lacerations,

Drywall installers	Plaster dust, walking on stilts, heavy loads, awkward positions, Falls from Height, Debris in eye, Struck By, Slips, Trips and Falls, Lacerations
Electricians	Electrocution, Struck By, Lacerations, Falls from Height, Slips Trips and Falls, Punctures, Back injury
Painters	Solvent vapors, paint additives, Falls from Height, Slips, Trips and Falls, Struck By's
Paperhangers	Vapors from glue, awkward positions, Lacerations, Falls from Height, Struck By
Plumbers	Caught Between, Lead fumes and particles, welding fumes, Burns, Lacerations, Falls from height, Struck By's
Pipefitters	Caught Between, Struck By's, Lead fumes and particles, welding fumes, asbestos dust, burns, Falls
Steamfitters	Welding fumes, asbestos dust, burns, Struck By's, Caught Between, Lacerations, Falls from height
Carpet layers	Knee trauma, awkward positions, glue and glue vapor, lacerations, debris in eye
Concrete and terrazzo finishers	Awkward positions, Silica exposure, burns, back injury, Slips, trips and Falls
Glaziers	Awkward positions, Falls from height, Slips Trips and Falls lacerations, Back Injury, Eye injury, Head injury
Insulation workers	Asbestos, synthetic fibers exposure, awkward positions, Falls from height, Lacerations
Paving, surfacing and tamping equipment operators	Asphalt fumes, gasoline and diesel engine exhaust, heat, burns
Roofers	Roofing tar, heat, working at heights, falls, burns,
Sheet metal duct installers	Lifting heavy loads, noise, lacerations, debris in eyes, head injury

Structural steel installers	Lifting heavy loads, working at heights, Falls from heights, Slips Trips and Falls, Caught Between, Struck By, head Injury
Welders	Welding fumes, burns, eye injury
Pile driving operators	Noise, whole-body vibration
Crane and tower operators	Stress, isolation, falls
Excavating and loading machine operators	Silica dust, , whole-body vibration, heat stress, noise,
Grader, dozer and scraper operators	Silica dust, whole-body vibration, heat, noise,
Demolition workers	Asbestos, lead, dust, noise

I.

List of General Hazards by Region

Region	Hazards
South East Region	Poison Ivy/Oak/Sumac
South East Region	Hurricanes/Tornadoes
South East Region	Proximity to Nuclear Power Plants
South East Region	Numerous venomous snakes (Coral, Moccasin, Copperhead, Rattler)
South East Region	Alligators on the coastal counties and sporadic further inland
South East region	Radon Gas in certain geographical areas
West Coast Region	Earthquakes
Central Region	High Winds, Cold Related Weather
West Coast Region	Heat related exposure

West Coast Region	Wild Fires
West Coast Region	Flooding/Mud Slides
West Coast Region	Venomous snakes(Rattler)
West Coast Region	Venomous spiders (Brown Recluse)
West Coast Region	Tsunami
Texas Region (All Areas)	Severe heat related exposure
Texas Region(All Areas)	Proximity to Oil Pipelines
Texas Region (All Areas)	Proximity to Natural Gas Pipelines
Dallas Area	Tornadoes
Dallas Area	Ice Storms
Houston Area	Hurricanes
Houston Area	Flash Flooding
San Antonio Area	Flash Flooding
San Antonio Area	Venomous Snakes (Various)
West Texas area	Dust Storms

Central and Southern Texas	Border Violence
Colorado Area	Hypothermia
Colorado Area	Winter heating
Colorado Area	Hail Storms
Colorado Area	Flash Flooding
Iowa Area	Hypothermia
Iowa Area	Winter Heating
Iowa Area	Flash Flooding
NE Region	Venomous Snakes (Copperhead, Timber Rattler)
Mid-Atlantic Region	Venomous Snakes, Poison Ivy/Sumac/Oak, Hurricanes Tornados, Thunderstorms w/Lightning ,Earthquakes Heat Exposure, Cold Exposure, Flash Flooding Venomous Spiders, Ice Storms, High Winds/Derecho Gang Violence, Traffic, Ticks, Snowstorms Terrorism
Great Lakes Region	High Winds, Cold Related Weather

Project Safe and Sustainable Onsite Orientation

Hardhat Sticker #: _____ Badge #: _____

The signatures below document that the appropriate elements have been discussed to the satisfaction of parties, and that both supervisor and employee accept responsibility for maintaining a safe and healthful work environment. **By signing, I am verifying that I have participated in the COVID-19 orientation and understand and will comply with all additional requirements.**

Print Name: _____

Sign Name: _____

Company Name / Date _____ / _____

Supervisor _____

Acknowledgement: _____

Emergency Contact Name and Number: _____

The Message of “Building L.I.F.E. ®”

At Turner, we call our safety program and culture “Building L.I.F.E. ®” L.I.F.E. is an acronym for *Living Injury Free Every Day*. Our goal here is to create a workplace *free from any level of harm* to our workforce, our clients, and the community we work in. Only with your help and commitment can we all achieve this goal. We’re asking that you take an active role making this the safest project we can, for all of us. If you see a hazard, bring it to our attention if you can’t correct it. If you see a coworker at-risk, stop and say something. If someone approaches you because *you* are at risk, accept their help graciously, without attitude, and thank them. If you know a smarter or safer way to accomplish a task, raise it up.

You will be given ample opportunities to play an active role with safety on this project. This includes daily safety huddles where each team prepares their safe plan of work; it also includes safety committees, safety meetings, and 5-Worker Lunches where we ask for your feedback on how safety is doing on this project. We want to hear about near-misses and incidents, not so we can find someone to blame, but so we can learn from the problems that lead to the event – to prevent recurrence. Like any safety program, we have some policies you need to be familiar with, and many of them are stricter than OSHA, or any other General Contractor/Construction Manager you have worked for. If you have any questions about our expectations or any of the policies you’re about to see, please bring them up as we go along.

General	<ol style="list-style-type: none"> No one under the age of 18 is allowed to work on the Project property / construction site. A minimum 10-panel drug testing is mandatory <ol style="list-style-type: none"> Your employer must provide the results to Turner in order to attend orientation. Pre-employment/prior to receiving a hardhat sticker or ID badge Additional testing may be required Post-Incident, for cause or suspicion If tested positive or refuse to test, you will not be allowed on site Badging / orientation sticker <p>All employees on site must attend orientation after the drug screen and receive an orientation sticker.</p> <p>Many projects require a photo-ID badge per terms of subcontract agreement.</p> Every crew member must participate in a morning safety huddle to develop a safe plan of work for the shift. Throughout the day (or night) if any new tasks or changes come up that weren’t planned for at the beginning of the shift, work must stop, and the plan must be revised. All personnel are empowered and encouraged to stop unsafe acts, identify unsafe conditions, and to escort non-construction personnel out of the work areas. Please care for your project teammates. No headphones, iPods, radios, etc. are permitted on the job. No streaming of music from the internet. No walking or driving while talking on phone or walkie-talkie. Zero use of tobacco policy. Zero tolerance policy for smoking in building during construction. No e-cigarettes or smokeless tobacco are allowed either. Turner may elect to establish a “tobacco zone” outside of the project. Eating is allowed only in approved areas. No glass containers are permitted onsite. A fluent interpreter must be provided and on site for any crew that has one or more non-English speaking workers. The confined spaces on this project include:
Initials	

11. I will not enter a confined space unless trained and authorized by my employer. Proof of training must be provided to Turner Construction.
12. The employer entering a permit-required confined space must arrange for on-site rescue team to be present and provide for continuous air monitoring, and if applicable, monitoring for other hazards (i.e. engulfment).

The list of behaviors below, while not inclusive, provides examples of conduct that is prohibited:

13. Causing physical injury to another person.
14. Making threatening remarks.
15. Aggressive or hostile behavior that creates a reasonable fear of injury to another person or subjects another individual to emotional distress.
16. Intentionally damaging employer property or property of another employee.
17. To the maximum extent permitted by applicable law, the possession on Company premises or while on duty of firearms, clubs, explosives, or other weapons that could be used to cause harm to personnel or property, other than that used to perform specific construction activities. This would include Turner projects and client-owned buildings and facilities we work in, project-provided parking areas, and while in the execution of work duties.

EEO Policy <hr/> Initials	1. Turner provides equal employment opportunity (EEO) to all persons based on qualifications and merit, without regard to race, sex, gender identity, sexual orientation, pregnancy, childbirth and other pregnancy-related conditions, color, national origin, ancestry, age, creed, religion, citizenship, marital status (including registered domestic partners), parental status, disabilities, genetic information, status as a recently-separated veteran, Armed Forces service medal veteran, disabled veteran, active duty wartime or campaign badge veteran, or any other protected characteristic or status.
Policy Statement Against Harassment <hr/> Initials	1. Turner will not tolerate unlawful harassment, including sexual harassment or harassment on the basis of race, sex, gender identity, sexual orientation, pregnancy, childbirth and other pregnancy-related conditions, color, national origin, ancestry, age, creed, religion, citizenship, marital status (including registered domestic partners), parental status, disabilities, genetic information, status as a recently-separated veteran, Armed Forces service medal veteran, disabled veteran, active duty wartime or campaign badge veteran, or any other protected characteristic or status.
Incident Reporting <hr/> Initials	1. Any injuries / illnesses / near misses must be reported to your supervisor <u>immediately</u> after the event, <u>if physically possible</u> . Those supervisors are to verbally report the incident to Turner immediately after stabilizing any injury or making safe any unsafe conditions. 2. An incident investigation report must be filed with Turner within eight (8) hours after an accident. 3. If sent to a doctor for treatment all, follow-up appointments must be kept. 4. A Temporary Modified Duty policy is in place. 5. The worker must strictly follow any and all work restrictions issued by doctor.
100% 6-Foot Fall Protection (Regardless of Trade) <hr/> Initials	1. 100% FALL PROTECTION required where a 6-foot fall exposure exists (includes all trades). See additional ladder rules below. 2. ZERO TOLERANCE – For Fall Violations 3. Snap-hooks on lanyards must be double locking. Self-Retracting Lanyards (SRLs or yo-yos) or fall limiting devices are typically required. Whichever is connecting device is used, two connecting devices are required on each harness (twin-leg). Short lanyards may be required in some types of scissor and aerial lifts. The competent person from each trade must specifically identify fall protection methods and equipment on JHAs and PTPs. 4. Gear to be inspected prior to every use. Contact your supervisor immediately if gear is damaged. DO NOT USE DAMAGED GEAR. 5. Warning lines are to be a min. of 15 feet back from the edge. (see criteria in Turner Safety Manual) 6. Tie-off point must hold 5,000 LBS per person. 7. 100% tie-off when working from extensible / articulating boom aerial lift. 8. Employees must be trained on the use of fall protection. Provide proof of training to Turner. 9. Vertical or horizontal rebar or other impalement hazards shall be protected. 10. Any hole 2" or larger must be covered, secured, labeled (supporting 2X max the indented load) 11. Scaffolds <ul style="list-style-type: none"> A. Must be built under supervision of competent person who has necessary certifications (w/ 100% Fall Protection while erecting) B. Cross-bracing cannot be used as a ladder, or instead of either a top or mid-rail. You must have both a top and mid-rail. C. Scaffold must be inspected before each shift by the Subcontractors competent person and tagged/dated as safe. If you climb onto a scaffold not tagged and dated as safe, you may be removed from the jobsite. All non-compliant scaffolds must be "red-tagged" out of service. D. 100% tie off when working from all types of lifts that have a manufactured tie off point. Dual action controls require that there be two separate actions to activate the lift. If it arrives on site and does not have dual action controls, then it must remain inoperable until a Dual action control is installed.

	<p>E. Mobile scaffolds must have the wheels locked when in use and require guardrails at 4 foot in height.</p> <p>F. Scaffold stairs shall be installed instead of a ladder to access frame and system scaffolds. If a ladder is required for some reason, ladder access points must only be at “swing-gates” on the ends of the frames, or through spring-loaded deck-hatches.</p> <p>12. Standard Railing</p> <p>A. Top edge height of top rail must be 42” above the walking/working level and all systems must include a toe board and midrail. Cable rails must not deflect more than 3” with 200 lbs applied.</p> <p>B. Guardrails will not be used as a horizontal anchorage for personal fall arrest equipment. Do not tie off to guardrails</p> <p>C. Guardrails must be provided at floor openings and open sides, or personal fall protection must be used.</p> <p>D. Wood rail stanchions (or posts) shall not be more than 8 foot on center.</p> <p>E. Wire rope guardrails – min 3/8-inch cable, flagged every 6 feet, cannot have more than 3 inches of deflection, 3 clips are required at each termination, no open turnbuckles</p> <p>13. Ladders</p> <p>A. Turner’s Ladders Last Policy states that ladders are not to be used on this project unless no other means of accessing elevated work is feasible. The tool of choice for elevated work is a mobile elevated work platform (MEWP) such as a scissor or aerial lift. Where MEWPs cannot be used, scaffolds can be used.</p> <p>B. Where ladders must be used, a Ladders Last Permit must be completed by the contractor and approved by Turner. The permit must be hung on the ladder and the ladder inspected daily.</p> <p>C. No aluminum or wood ladders are permitted on the site.</p> <p>D. Never use a stepladder while it’s still folded up.</p> <p>E. Never use the top two (2) steps or the top of the ladder.</p> <p>F. Never store material or tools on the ladder</p> <p>G. Use the 3-point rule: 2 hands and a foot or vice versa to be in contact with ladder at all times. Keep belt buckle between side rails.</p> <p>H. Fall protection is also required when above 4’ on a ladder, even if three points are maintained.</p> <p>Turner will approve perimeter access points for material handling. Personal fall protection must be installed and used before cables or rails are taken down, or holes uncovered. Barricade the area, place signs, and leave a spotter.</p>
<p>Safety Enforcement</p> <hr/> <p>Initials</p>	<p>1. All personnel are encouraged to ask questions and report actual and perceived hazardous conditions to site supervision. Perceived hazardous conditions may need further clarification and hazard assessment. If you have any questions or concerns, please ask for assistance.</p> <p>2. There is a “Safety Enforcement” Fine System in place on this project.</p> <p>A. You are accountable for your actions on this project.</p> <p>B. Monetary fines imposed upon your employer for worker safety violations or complacency w/ regard to “minimum” safety rules</p> <p>C. \$250.00 - \$5,000.00 – depending upon severity of violation.</p> <p>3. All OSHA regulations will be strictly enforced. Turner has many policies stricter than OSHA and you need to be familiar with these.</p> <p>4. Disciplinary Procedures – 3 strikes policy</p> <p>1. Verbal = Orientation</p> <p>2. Written</p> <p>3. Termination</p> <p>4. Turner retains the right to have anyone removed from site, based on the nature of the violation, without the 3 strikes</p>

<p>Emergency Procedures</p>	<ol style="list-style-type: none"> 1. In the event of an emergency <ol style="list-style-type: none"> A. Notify job foreman immediately B. Give the exact nature of the emergency (i.e. broken leg, fire, etc.) C. Give the exact location by area, column number or other easily recognizable terms D. Stay on the phone until Safety has confirmed that you have provided accurate information E. If an evacuation is not required, stay on the scene to brief emergency personnel upon their arrival. 2. Evacuation Procedures <ol style="list-style-type: none"> A. Our project evacuation signals are: (example: 3 horn blasts will indicate site is to be evacuated) B. Proceed in a calm, orderly manner to the designated safety zone. <ol style="list-style-type: none"> 1. <u>Evacuation Gathering Points are located ...</u> 2. Report to your designated foreman/superintendent in designated area for head count. C. Do not leave the emergency gathering point until instructed to do so by your supervisor. D. All dangerous and/or emergency situations must be reported to Turner staff immediately, if feasible. E. Call 911 for ambulance or fire departments as when necessary. F. Where is the location of your first aid kit and fire extinguishers? G. For confined space entry, trained emergency rescuers must be on site during the entry.
<p>Initials</p>	
<p>Personal Protective Equipment</p>	<ol style="list-style-type: none"> 1. 100% Hardhat Protection, Non Metallic, <u>REQUIRED AT ALL TIMES. ANSI approved</u> 2. 100% Eye Protection (ANSI Z87.1) <u>REQUIRED AT ALL TIMES.</u> 3. Hard sole safety shoes or boots are required, no sneakers or soft shoes are allowed, ANSI Z41.1. Safety-toed boots and/or metatarsal protectors must be worn as dictated by the hazard assessment. Safety-toed boots required for erection, demolition, masonry and rigging, at a minimum. 4. Long pants in good condition, no shorts allowed 5. Shirts must have sleeves at least 4" long 6. Gloves are required at all times unless the Job Hazard Analysis specifically states they are not required because they create a greater hazard (using rotating parts, etc.). Cut-resistant gloves are required when using knives or handling sharp material/objects. Additional hand protection may be required depending on the hazard assessment. Appropriate arm protection is required during operations where the arms are exposed to cut hazards (i.e. Kevlar, Dyneema sleeves, etc.). Examples of these activities are working around metal studs and pull boxes, tight confines as between wall studs or above ceiling and all demo activities. These operations shall be identified on the JHA/PTP. 7. Ear protection as required when exposed to noise above 85 DBA or when noise levels require you to raise your voice when talking to someone 3 feet from you. 8. Face-shields required when cutting / grinding / chipping or working above your shoulders; or when the hazard exists of projectile particles. Goggles required when there is a splash or dust hazard such as working with chemicals, sawing lumber and grinding. Both may be required if both hazards exist. 9. No loose clothing or jewelry 10. High visual, safety vests, shirts or jackets shall be worn as the outermost apparel by all employees, 100% of the time. ANSI Class 2 (0-44 MPH) and Class 3 (45 MPH or more) outerwear must be worn whenever working on or near (within 10 feet) of a roadway. 11. Any contractors requiring the use of dust masks and/or respirators must submit a written respiratory protection program Turner. This program must address medical surveillance, fit testing, etc. Voluntary usage of dust mask type respirators used by employees must also be included in the respiratory protection program and shall meet or exceed OSHA standards. 12. Regular utility-cutters (like box-knives) are not allowed. All utility cutters should be equipped with self-closing blade guards or self-retracting blades that engage when the blade loses contact with the cutting surface.
<p>Initials</p>	
<p>Electrical/LOTO</p>	<ol style="list-style-type: none"> 1. Industrial heavy-weight cords (14 gauge or heavier) with proper grounds are to be used at all times. 2. 100% Ground Fault Circuit Interrupter (GFCI) Protection. 3. Inspect all cords and welding leads before each use 4. All electrical and mechanical systems are to be considered energized. When pressurizing any pipe, vessel or system, refer to Turner's procedures. 5. All panels, boxes, switches and receptacles containing live wires must have a cover.

Initials	<ol style="list-style-type: none"> NEVER work on live electrical panels or parts without prior approval from Turner. Complete the Turner Energized Work Permit and submit prior to the work taking place. LO/TO – Single-key locks required (cannot have multiple keys for a lock). Each worker must apply a lock when exposed. NFPA 70E compliance is required for energized work. This includes testing and commissioning activities, as well.
Equipment	<ol style="list-style-type: none"> Proper training and certification is required prior to operating any equipment. Speed limit on site is 5 mph. A spotter is mandatory when a vehicle or equipment has restricted view. A spotter is necessary when backing up any vehicle or equipment on site. Backup alarms must be present on all required vehicles. Horns and lights are recommended for all equipment. Always follow the manufacturer’s operating instructions for all equipment and tools used on this project. Seatbelts must be worn at all times. The use of cell phones is prohibited while the machine or vehicle is in motion. The forks of a forklift cannot be used for free rigging. When off-loading trucks with forks or crane, no person should be on the truck bed or around the truck after rigging. Set up a safe zone around the truck with tape or barricades. Use a spotter to keep people out.
Initials	
Cranes	<ol style="list-style-type: none"> Awareness of overhead loads – listen for horns. Never stand or walk under an elevated load. Awareness of crane swing radius (should be flagged off). Cannot operate a crane within 20’ of any power line. Rigging must be inspected before each use by a <u>qualified rigger</u>. Damaged rigging must be removed from service. Crane operator must submit operator certifications (NCCCO or NCCER) Employees cannot signal a crane unless trained and certified, and authorized to do so. Each rigger & signal person must be qualified & proof of training given to Turner Construction
Initials	
Barricade Tape	<ol style="list-style-type: none"> Barricaded areas must have posted signage on each side of the area. Signage should identify the hazard, the controlling contractor for the area, a point of contact and his or her phone number. Types of Tape <ol style="list-style-type: none"> <u>Red Danger</u> – <i>Imminent Danger</i> exists. Only authorized personnel performing actual work are to be allowed in this barricade tape area. The only exception for entry into a red area is with prior permission of those authorized to work within the area <u>Yellow Caution</u> – a hazard exists that would warrant <i>Caution</i>. A yellow area can be accessed by anyone who is authorized to be on the job site, and who stops to observe the existing hazard and takes the proper precautions prior to entering the tape barricade area.
Initials	
Training Requirements	<ol style="list-style-type: none"> Must be trained / certified to operate forklifts, aerial lifts, cranes, and use scaffolding, etc. Contractors are required to provide workers that are trained as required by OSHA standards and site policies. All workers are to be trained by their employer for the task and/or tool/equip being used – ladders, scaffolds, excavations, etc. No worker may lift more than 50 pounds, unassisted. Use mechanical means first.
Initials	
Hand & Power Tools	<ol style="list-style-type: none"> All drills, grinders, etc. that are designed with guards and/or control bars must have them in place when the tool is in use. The grinding wheels must be rated to meet or exceed the RPM specifications of the grinder. Workstations are to be elevated. This includes saws, pipe benders and threaders & other work activities. Powder Actuated Tools - No lead-based shot is permitted onsite Tools are to be used the way the manufacturer intended. Do not modify any tool. For tools that would normally create dust, Turner requires them to have integrated protective measures to capture or minimize the dust, such as HEPA vacuums or water-spray, etc.
Initials	

<p>Hot Work</p> <hr/> <p>Initials</p>	<ol style="list-style-type: none"> 1. The contractor performing hot work will be required to have a charged and inspected 20-pound ABC dry chemical fire extinguisher present in the work area. 2. Appropriate permit procedures, shields, and blankets shall be used when developing site specific fire prevention programs. 3. Subcontractor is required to implement a fire-watch during all burning operations and for a minimum of 30 minutes following completion. 4. Hard Hats are required while welding. 5. Safety glasses are required under the shield when chipping or grinding 6. Cylinder Storage must be stored upright and properly secured. When not in use, disconnect hose/gauge assemblies and cap the cylinder. Stored cylinders must have a ½ hour fire rated barrier 5 feet tall or be stored 20 feet apart. Propane tanks cannot be stored in any building. (Turner must be notified prior to propane used onsite) All torch carts are to have a fire rated barrier between the cylinders. 7. Anti-flashback devices are to be located at the torch head & at the cylinders 8. Hot Work activities must be pre-approved by Turner (Permit to be issued). A fire watch must be present where sparks could fall (multiple levels if necessary).
<p>Excavations</p> <hr/> <p>Initials</p>	<ol style="list-style-type: none"> 1. Any excavation greater than 4' must be sloped, shielded or benched properly. 2. The bottom of the trench box must be within 2 feet of the bottom of the trench. The top of the trench box must stick up 18 inches above the slope or the bench. The box cannot be moved while workers are inside. 3. Access must be provided by a ramp or stair. Travel distance to that means of access/egress must not exceed 25 feet. 4. Any excavation (includes trenches) must be barricaded off with orange fence or equivalent, regardless of depth. 5. You cannot bench Type C soil. 6. Before you dig or drill, complete a Turner "Ground Penetration Request Form." Your utility locator service must be notified days in advance, as well. 7. Fall protection is required at the top of excavations greater than 6 feet deep when the slope is less than 45 degrees.
<p>Hazard Communication / GHS</p> <hr/> <p>Initials</p>	<ol style="list-style-type: none"> 1. This employee, by his initials in this section acknowledges that he/she has been trained by their employer, on hazard communication and, 2. Turner has reviewed the location of Chemical Inventory Lists and Safety Data Sheets with me. 3. You must provide Turner a Safety Data Sheet for any chemical you bring onto the project. 4. Turner will coordinate the sharing of Safety Data Sheets (SDS) between contractors. 5. If you transfer chemicals from one container to another, you must provide a proper chemical label complying with OSHA. 6. Renovation projects often have health hazards in the form of asbestos, lead, PCBs, Mercury, etc. The known health hazards on this project include: _____ 7. If this project contains known health hazards, I certify that I was given training on those hazards including their identity, location, hazards of exposure, and control methods used to protect me. If I discover any "suspected" hazardous material, I'll immediately stop work and bring it to the attention of my employer.

<p>Construction Waste Management</p>	<ol style="list-style-type: none"> 1. All waste leaving this project is tracked on Turner’s Online Waste Tracking (OWT) system. Strict compliance with the project Construction Waste Management Plan (CWMP) is required. The recycling goal is ____%. The construction and demolition dumpsters on this project are (co-mingled) (site-sorted). Materials recycled include, at a minimum: <ol style="list-style-type: none"> A. Wood: pallets, wood-framed boxes, temporary lumber, etc. B. Concrete: concrete, block, brick, asphalt C. Metal: scrap metal, metal studs, metal pipe, etc. D. Cardboard, paper E. Drywall: drywall, mold board, (NO Dens-Glass) F. Construction Trash: food waste, sweepings, non-recyclable waste, etc. 2. Collect and sort your construction waste throughout the workday and transport the waste to the appropriate dumpster at the time established by your Foreman or Project Manager. 3. All Subcontractors are required to recycle to the maximum extent possible as a part of their Contracts using Turner’s OWT tool. In cases of non-compliance, only the Subcontractor(s) responsible for contaminating dumpsters (placing waste in the wrong dumpster) will be responsible for fines, additional tipping fees, or other penalties as may apply.
<p>Initials</p>	
<p>Indoor Air Quality</p>	<ol style="list-style-type: none"> 1. Strict compliance with the project Indoor Air Quality (IAQ) Management Plan is required. 2. Safety Data Sheets (SDS), along with VOC content, of all adhesives, sealants, coatings, paints, carpets, composite woods, etc. must be submitted for review and approval prior to these products being brought on site. 3. Stored material shall be covered, stored off of the deck, and kept in a dry environment. Quantities should be limited to what can be installed in a reasonable time (e.g. two weeks or less). 4. Changes in finished areas should be treated as renovations. 5. For large changes, install temporary dust protection to separate the work area from the finished space. The work area should be kept negative and a HEPA filter should be used to filter the air prior to it leaving the space. The temporary protection and filter system should be approved by a Turner superintendent before beginning work. Once the work is complete, the area should be thoroughly cleaned, and the temporary protection should be removed. 6. For small changes, a vacuum with a HEPA filter should be used to collect any dust that is generated, and the areas should be thoroughly cleaned after the work is complete. 7. All subcontractors will be required to use sweeping compound. 8. All cleaning products used on the project must comply with Green Seal Standard GS - 37 for Industrial and Institutional Cleaners. 9. Mold and moisture control are a key to proper indoor air quality. If possible, drywall activities should not begin until the building is watertight. If drywall must start before the building is watertight, moisture resistant board should be used. 10. Notify Turner if you see any wet building materials (before mold grows).
<p>Initials</p>	

Stormwater Management	<ol style="list-style-type: none"> 1. The SWPPP requirements including Best Management Practices (BMP's) were reviewed and will be followed as required by the SWPPP. 2. The SWPPP drawings, project sequence and how sequencing will affect BMP locations were reviewed. 3. Notify Turner of any disturbances of the Best Management Practices (BMP's) including silt fences, vehicle mud removal areas, vegetative cover, other sediment and erosion controls. 4. Ensure all concrete/cement washout is performed at designated locations and into designated containers, notify Turner personnel immediately if washout is not adequately containing wash water and stop washout activity 5. All site dewatering must be performed in a manner compliant with the SWPPP and all pump discharge locations must be previously approved by Turner. 6. Inspect all equipment and chemical storage containers for leaks as well as excess grease/grim/oil/fuel, if any of the above are discovered ensure that mechanics are notified (if necessary) and equipment/containers are wiped clean and containments disposed of properly. 7. Ensure parked equipment and chemical storage containers are parked/stored in locations previously approved by Turner and are identified on the SWPPP map.
Initials	<ol style="list-style-type: none"> 8. Use only designated areas for equipment maintenance and wash down. 9. Minimize the generation of dust and the tracking of sediment to off-site paved areas.
Nothing Hits the Ground	<p>FABRICATION:</p> <ol style="list-style-type: none"> 1. All material fabrication shall be performed at a workstation between 30 and 39 inches, off the floor. 2. Workstation shall be mobile and include a fire stop directly behind all chop saws. 3. Rubbish containers shall be mobile and located directly adjacent to the workstation. 4. Mobile rubbish containers must be made available for subcontractor's work. <p>HOUSEKEEPING:</p> <ol style="list-style-type: none"> 1. All rubbish shall be disposed of as it is generated and be immediately placed in a mobile rubbish container provided by the subcontractor. No trash/scraps to touch the floor. 2. Cordless power tools are required unless the subcontractor can demonstrate a hardship or need to use tools with power cords. 3. The subcontractor is required to elevate off the ground all power cords, hoses and welding leads in order to minimize tripping hazards on walking/working surfaces. They must be elevated at least 8 feet. Any sub using these is responsible for purchasing/installing their own means of support. 4. Debris is not allowed to be consolidated on the floor. 5. Maintain clear paths to move materials and facilitate emergency egress. 6. When stilts are allowed on a project, the floor must be broom swept with no trip hazards. (Cords, material, screws and trash). Turner will provide a stilt-use permit where they are allowed. <p>MATERIAL HANDLING/ STORAGE:</p> <ol style="list-style-type: none"> 1. Material may not be stored within 10 feet of the building perimeter or adjacent to shafts or stairwells. 2. All material laydown areas must be coordinated and designated by Turner. 3. Material must be stored to promote mobility of material. All materials including pipes, conduits, metal fabrications and steel framing are to be stored on rolling racks or similar means of conveyance. Bulk material should be palletized to allow for easy mobility using a pallet jack. 4. Just in Time" delivery required to minimize clutter. Nothing should be stored on a floor that cannot be installed within one week. 5. Heavy material such as glass and drywall must be loaded so as not to overload the structure. The subcontractor is required to do a floor loading analysis for submission to Turner for review and approval. 6. Any contractor creating floor holes must cover those holes with covers capable of supporting 2x the intended load. Covers shall be installed flush to allow easy movement of rolling materials and trash hoppers. There are manufacturers that make these covers for smaller diameter holes ("Paragon" and "Hole Solution" are two). Turner does not endorse any manufacturer or product. 7. The biggest contributor to construction injuries is when we manually handle material (carrying, pushing, and pulling). Our goal is to identify and use mechanical means of moving material and tools whenever possible. This might include cranes, forklifts, dollies, carts, etc. It means never carrying materials up and down stairs. It definitely means right-sizing the loads we are handling – such as not lifting more than 50lbs or not overfilling tool buckets or trash cans with heavier materials. Buy smaller bags of grout and mortar instead of the big 80lb bags. Find ways to work smarter. Not harder.
Initials	
OHSAS 18001 Safety Management System	<ol style="list-style-type: none"> 1. OHSAS 18001 is an internationally recognized health and safety management system to improve safety performance of a company and control the risks associated with their operations. 2. Turner has received registration in OHSAS 18001 by the third-party auditor NSF, International as of March 2014. 3. Achieving registration through OHSAS 18001 demonstrates Turner's commitment to elevate the company's already mature and advanced safety standards and programs. OHSAS 18001 registration also confirms Turner's dedication to improving Occupational Safety and Health performance through control and management of associated risks and hazards in the workplace. 4. Turner truly cares about your well-being while working on this project.



<div>Initials</div>	<div>5. Turner wants to see you go home the same way you came to work. 6. Your opinion matters on this project! If you have a question or concern related to safety and health, please ask a Turner representative.</div>
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Project Safety Staffing Policy

I. Policy Statement

Full time, Turner project safety staff is required on all projects with an initial contract value of \$25 million dollars or greater. It is recommended that the safety staff be assigned prior to the beginning of work, as with other site staff. Additional safety staff may be required when project size is greater or risk management plan dictates a need.

II. Roles and Responsibilities

This safety staff person should perform the following functions prior to and during the life of the project:

- Assist the Business Unit Environmental, Health, and Safety Director in creating the site-specific safety program
- Setup and implement substance abuse testing
- Create and implement a project safety orientation
- Attend pre-bid meetings to inform subcontractors of specific project safety requirements
- Establish safety pre-planning meetings with all subcontractors and assist the Project Staff in placing meeting times in the project schedule
- Meet with and coordinate response from local EMS officials
- Conduct project safety audits using the Predictive Solutions SafetyNet Reporting System
- Conduct toolbox safety meetings for Turner employees
- Establish and maintain site record keeping files
- Establish and encourage Project Staff safety auditing requirements
- Ensure that all precautions / requirements found in the environmental site assessment are complied with
- Other safety requirements as deemed necessary by the BUEHSD and / or Project Staff

III. Subcontractor Safety Requirements

All subcontractors must have completed an OSHA 30-hour class. One person must be certified for all contracts under \$5M, and two people must be certified for contracts over \$5M. The 30-hour certified person(s) must be on-site 100% of the time. This OSHA 30-hour certification must be updated through Turner's Safety Update Training every two years through Turner University.

- If the subcontractor will exceed 25 employees or more on site, including sub tiers, for more than two weeks, they must provide a full time Safety Manager for the duration of the project when the workforce exceeds threshold above, who:
 1. Is qualified to recognize safety hazards; and
 2. Has the authority to take corrective action; and
 3. Possesses current certifications in first aid, CPR and AED; and
 4. Possesses a recent OSHA 30-hour card (if not within the last three years Turner's 2-year Safety Update Training has been completed and is up to date through Turner University); and
 5. Has an academic degree in safety, CSP, ASP, or CHST designation, OR has a minimum three (3) years of prior work history as a designated construction safety manager.
 6. At a minimum the Subcontractor Foreman or Safety Manager will be requested to:
 - a) Ensure their employees attend jobsite orientation before start of work on the project.
 - b) Take the lead in recognition and abatement of hazardous situations.

- c) Conduct a daily “Safety Huddle” prior to the start of each shift and submit a Daily Pre Task Plan (PTP). Report each morning prior to the start of work.
- d) Perform and document weekly safety inspections (1 per week at minimum).
- e) Conduct at least one monthly safety tour with their Safety Director and submit findings to Turner.
- f) Ensure that Competent Persons submit, at a minimum, the below listed safety inspections at the designated frequency to the Turner’s Project Superintendent or Safety Manager.

<u>Inspection</u>	<u>Frequency</u>
Fall Protection	Before Each Shift
Excavations	Before Each Shift
Scaffold	Before Each Shift
Crane Inspections	Before Each Shift
Confined Space	Before Each Shift
Hot Work	Before Each Shift
Heavy Equipment	Before Each Shift
GFCI	Weekly
Personnel Hoist	Per OSHA Reqs.
Dig Permit	Before Each Shift
Tools Box Talks & Report	Weekly

- g) Conduct and document toolbox meetings on a weekly basis.
- h) Issue minutes of the weekly toolbox meeting to Turner.
- i) Effectively utilize and train employees in pre-planning, recognition, and remediation of hazards.
- j) Each subcontractor, regardless of tier, is to submit in writing toolbox meeting minutes containing the following:
 - (1) Name of subcontractor and date.
 - (2) Name of Subcontractor Safety Manager.
 - (3) Name of employees attending.
 - (4) Name of employees onsite not attending.
 - (5) Number of employees on their payroll that day.
 - (6) Subjects discussed.
 - (7) Safety observations of employees.
- k) Attend project safety meetings.
- l) Enforce disciplinary measures when need arises for their employees.
- m) Each subcontractor is responsible for all of their subcontractors and suppliers, regardless of tier, compliance with the Project Safety Program.

Regulatory Inspection Procedure

I. Policy Statement

The purpose of this procedure is to provide guidance to Turner personnel on how to respond to any regulatory agency inspection on our projects. In addition, this procedure should be utilized for advance preparation for regulatory inspections.

II. Procedures

1. Turner will strive to maintain a positive working relationship with all regulatory agencies. By law, any regulatory agency or compliance officer (Authority) has the right to enter and inspect any place of employment during normal working hours. Also, by law, Turner has the right to deny entry into our project. It is Turner's policy NOT to deny entry and to fully cooperate with Regulatory Inspectors. The BUEHSD must be contacted if the project team intends to deny entry.
2. The Site Safety Manager or Project Superintendent should meet with the Authority to determine the nature of their visit and to verify credentials, if necessary.
3. The BUEHSD must be contacted immediately upon notification of a regulatory agency inspection. The Turner Risk Management Reporting Form should be used and is available in the safety section of the TKN2 Document Management System.
4. The CO or Authority has the right to enter any place of employment accompanied or assisted by outside engineers or specialists.
5. The CO or Authority is entitled to bring cameras, video equipment, tape recorders and other testing equipment that is required to perform their audit.
6. Turner has the right and duty to ensure the CO or Authority is escorted for safety, coordination and property protections. A CO must never be allowed on site without an escort.
7. Opening conference guidelines:
 - Ensure that the CO or Authority presents all of the required information in the opening conference.
 - Ask clarifying questions to thoroughly understand the nature of the inspection. If the inspection is due to a complaint, obtain a copy of the complaint letter.
 - Inquire how long the CO anticipates the inspection will take so you may estimate your time commitment and level of resources needed to support the inspection.
 - Verify if the CO or Authority will need to perform any sampling and ensure that action is monitored by a Turner Construction Staff Member.
 - Provide only the specific documentation requested.

8. Documentation – the following is a list of documentation that is often requested during a regulatory agency inspection:
 - Written Accident Prevention Program
 - Site Specific Safety and Health Program.
 - Subcontractor Accident Prevention Programs
 - OSHA 300 Log
 - Hazard Communication Program
 - Safety Committee Meeting minutes
 - Safety Training Records
 - CPR / First Aid Training Records
9. A Turner representative must remain with the CO or Authority at all times unless they request privacy for interviews with employees or management. Turner should remind employees that they are under no obligation to speak privately with a CO or Authority.
10. A CO or Authority may request certain documents and duplicate copies may be turned over with approval from the Business Unit Environmental, Health, and Safety Director.
11. Discussions and negotiation regarding distribution of company confidential documents will involve the BUEHSD. All documentation with employee's names will be blackened out to protect confidentiality.
12. During the walk around portion of the inspection, all attempts to correct apparent violations should be made by Turner staff and/or the hazard creating subcontractor.
13. The CO or Authority will take photographs, videos and measurements during the walk around phase. The Turner representative must duplicate each photograph, video and measurement and document the circumstances concerning the alleged violation. Additional photographs should be taken at different angles to provide additional views.
14. Do not volunteer any additional information than what is necessary to answer a question concerning an alleged violation.
15. During the closing conference, the CO or Authority will likely state if there will be a follow-up inspection from another agency and any apparent violations noted during the walk around phase.
16. All documentation must be forwarded to Turner Risk Management (via the Business Unit Environmental, Health, and Safety Director) at the conclusion of the inspection.

Turner Construction Company OSHA Inspection Form

Project: _____

Project No.: _____

Project Superintendent: _____

Project Safety Manager/Coordinator: _____

Inspection Dates & Times: _____

I. Pre-Inspection

A. Person & Title contacted by OSHA _____

B. Did inspector show his credentials? Yes () No ()
If No, comment: _____

C. Names of OSHA Inspector(s) and their Area Offices: _____

D. What was the reason for the inspection?
1. Employee complaint? Yes () No ()
(If yes, attach copy. OSHA is required by law to give you a copy)
2. Random scheduled inspection? Yes () No ()
3. Other (comment): _____

E. Did OSHA review record keeping: Yes () No ()

1. Required OSHA poster, was it posted?	Yes () No ()
2. Turner's Project Safety Program	Yes () No ()
3. OSHA Form #300:	Yes () No ()
4. Minutes of Project Safety Meetings:	Yes () No ()
5. Minutes of Weekly Tool Box Talks:	Yes () No ()
6. Copies of Safety Coordinator Inspection Reports:	Yes () No ()
7. Hazard Communication Program:	Yes () No ()
8. Correspondence to contractors informing them to correct unsafe working conditions:	Yes () No ()
9. Other (comments):	_____

II. Opening Conference

A. Names of Contractors, their representatives and titles:
(or attach a list) _____

Turner Construction Company OSHA Inspection Form

III. Inspection Tour

- A. Who from Turner accompanied the OSHA Inspector? _____
 Who else joined the OSHA Inspection Group? _____
- B. Did the Inspector take any photographs? Yes () No ()
 Did Turner take the same photographs? Yes () No ()
- C. Were safety hazards and unsafe acts observed? Yes () No ()
 If Yes, what were they and who had responsibility? _____

- D. Was immediate corrective action taken? Yes () No ()
 If No, comments: _____

- E. Special comments regarding inspection: _____

IV. Closing Conference

- A. Did OSHA hold closing conference with Turner? Yes () No ()
 With other contractors? Yes () No ()
- B. Names of contractors, their representatives & titles:
 (or attach a list) _____

- C. What alleged OSHA Violations were discussed and with whom?
 (or attach a list) _____

Note: It is of the utmost importance that correct assignments of OSHA Violations are made at this time. Neglecting this shall cause contesting of citations that may be wrongfully issued to The Turner Construction Company.

Project Supt/Coordinator/Safety Manager

Date

This OSHA Inspection Report is to be started at the beginning of and completed immediately after an OSHA inspection.

Orig: Business Unit Environmental, Health, and Safety Director
 cc: Business Unit Operations Manager
 cc: Turner Risk Management (cdeprater@tcco.com, acboyd@tcco.com, sjspaulding@tcco.com)
 cc: Compliance rpreiss@pecklaw.com

Safety Enforcement Penalty Guidelines

I. Policy Statement

To assist in Turner's efforts to provide a safe workplace, the following violations and penalties associated with them are to be included and enforced on all projects, at the discretion of the local Business Unit. Once a fine is assessed it must be collected.

	<u>Turner Employees</u>	<u>Subcontractor Employees</u>
1. No Hard Hat	1st Offense - Written Warning 2nd Offense – Discharge	\$500.00 Fine
2. No Safety Glasses	1st Offense - Written Warning 2nd Offense - Discharge	\$500.00 Fine
3. Remove Guardrail Protection Without Replacement	Discharge	\$2,500.00 Fine
4. Remove Opening Protection Without Adequate Replacement	Discharge	\$2,500.00 Fine
5. Unsecured Compressed Gas Cylinders	-----	\$1,000.00 Fine
6. Concrete coring holes in deck left unprotected.	1st Offense - Written Warning 2nd Offense - Discharge	\$300.00 per hole
7. Open Electric Panels	-----	\$1,000.00 Fine
8. No Fall Prevention	Discharge	\$5,000.00 Fine
9. Other violations	Discharge	\$500.00 Fine

Project signage outlining this policy is to be created and conspicuously displayed at your job site. Fines collected shall be added to the project safety recognition program. Fines will be assessed to the Employee's company regardless of whether the individual is discharged. Any fines collected may only be used for the project's safety incentive program.

NOTE: The above Penalty Program is only a sample and a job site-specific program should be written into each subcontract. Copies of the policy shall be given to the Turner Business Unit EH&S Director for approval.

SafetyNet Operational Guidelines

I. Procedures

It is the responsibility of the Business Unit Environmental, Health, and Safety Director and the Operations Manager to ensure SafetyNet is fully implemented and used within their organization. The SafetyNet link and new user request link can be found on TKN2 at Turner Resources / Safety. Specific requirements shall be detailed in the Business Unit Annual Action Plan. Below is a recommended protocol. In addition, the OM's and PX's are required to review all related inspection information at each ORM or other project-based meeting. Information shall be shared with the entire team and specific action plans shall be developed and implemented as appropriate.

1. Minimum auditing requirements are as follows:

- a) Project Managers – 1 inspection per project per month.
- b) Business Unit Environmental, Health, and Safety Directors
 - Monthly inspections for each project
 - Projects in the following phases of work require monthly reports; excavation, superstructures and exterior walls
- c) Superintendents – 1 inspection per week (only 1 person)
- d) Project Safety Managers
 - 1 project – 3 inspections per week
 - 2-4 projects – 1 inspection per project per week.
 - 5-10 projects – 2 inspections per project per month.

Note: the above are minimum requirements and at the Operations Manager's and BU EH&SD's discretion, the frequency of inspections will be increased, especially if incidents on a given project are trending in a less than favorable direction.

Safety Roles and Responsibilities

Effective implementation of the Turner Construction Company's Comprehensive Safety Resource Manual requires teamwork. The Company's senior management is committed to fulfill this program through each and every Business Unit. The following outlines the role of each.

Business Unit General Manager

- Implement a culture for establishing a positive attitude towards safety by all Turner personnel.
- Ensure Business Development Manager's compliance with Turner's safety program and policies.
- Ensure compliance reporting requirements are met for regulatory inspections.
- Market Turner's safety program to owners.
- Ensure Operation Manager's compliance with Turner's safety program and policies.
- Ensure adequate funding for the safety program.
- Participate in safety related programs.
- Begin all senior staff meetings with a discussion of safety.

Operations Manager

- Maintain an environment where safety is a core value.
- Ensure cooperation and support of the Business Unit Environmental, Health, and Safety Director by all staff.
- Make safety attitude, management and implementation a primary focus on performance evaluations.
- Develop a procedure to establish consistency of safety evaluations of key personnel, including management, engineering and field staff, from project-to-project.
- Review safety at all Operation Review Meetings.
- Ensure that all personnel are given clear job descriptions and performance criteria, including adequate and proper training to implement Turner's safety policies as required by their job responsibilities.
- Participate in safety related training programs. Keep current on new legislative policies for OSHA, and new Turner policies and requirements.
- Require full use of the SafetyNet inspection program by Business Unit to include PM, Superintendent, and all safety staff.
- Ensure that all safety staffing requirements are followed.

Business Unit Environmental, Health, and Safety Director

- Walk the jobsite before construction begins and understand the history of the site to identify potential environmental hazards.
- Ensure receipt of a comprehensive Phase I (and Phase II if appropriate) Environmental Site Assessment and pre-demolition survey prior to signing the contract.
- Establish and implement a site-specific safety program for the Business Unit.
- Establish and implement emergency evacuation and crisis management programs for the Business Unit and project sites, and monitor project site programs.
- Monitor overall construction safety performance through project management, SPD managers and staff.

- Ensure procedures are established and maintained to provide a safe work site, and written reports are completed in a timely manner.
- Monitor and inspect each project monthly using the SafetyNet system. (See Section 2, SafetyNet Operational Guideline)
- Ensure that corrective actions have been implemented for all hazards noted by insurance carriers, Turner staff, local, state and federal agencies or others.
- Attend senior staff meetings to report on/review safety and environmental issues.
- Attend progress meetings or safety meetings as requested or deemed necessary.
- Review accident, safety and environmental reports, investigate all serious/fatal and/or catastrophic accidents, notify appropriate parties, and maintain permanent file.
- Establish and make available safety and environmental training.
- Maintain safety and environmental reference materials.
- Provide projects with necessary reporting forms and posters.
- Establish and maintain liaison with insurance carriers for loss prevention and claims service.
- Establish and maintain liaison with appropriate local, state or federal agencies.
- Implement Turner Risk Management initiatives per Safety Action Planning each year.
- Coordinate all responses to mold or moisture intrusion events.
- Read all contracts for scopes of work as they pertain to safety and loss control. The BUEHSD should review all safety additional provisions. In addition, the BUEHSD must read and approve all SAR's.

Chief Estimator

- Ensure an adequate safety budget, including cost for Business Unit Environmental, Health, and Safety Director and specific line items for safety management depending on project exposures.
- Verify the owner has included an environmental survey in project documents, and obtain copies of all pertinent reports, documents, etc.
- Discuss and review site specific safety requirements with the Project Management and Turner's Safety Director.
- Coordinate with the Procurement Department and the Business Unit Environmental, Health, and Safety Director on the scope of safety requirements and how they will be purchased.

Procurement Manager

- Before a quote is accepted from a subcontractor, ensure that the sub has submitted their current safety qualification information and have an EMR of 1.0 or less. If greater than 1.0, evaluate risks associated with each contractor and include money and resources to manage that risk.
- Ensure that the subcontractors meet with the Business Unit Environmental, Health, and Safety Director, who must approve the subcontractor's safety program before start of work.
- Ensure that Turner Construction receives proof that all sub tier EMR's do not exceed 1.0.
- Ensure subcontractors have all the appropriate insurance (including Workmen's Compensation for rented labor or piece workers), by obtaining certificates of insurance. Also, implement a program to manage the expiration dates with ample time to receive current certificates without impacting project performance.
- Ensure all appropriate Exhibits are included in the contract, i.e. specific project hazards, drug and alcohol testing, and mitigation measures.
- Ensure the on-site safety program is included in the subcontractors' bid and contract documents.
- Implement a proactive subcontractor evaluation program with safety performance being one of the primary evaluation criteria.
- Coordinate with the Estimating Department and the Business Unit Environmental, Health, and Safety Director on the scope of safety requirements and how they will be purchased.

- Coordinate all scopes of work that pertain to safety and loss control with the BUEHSD.

Project Executive/ Project Manager

- Work with the pre-construction team to ensure an adequate safety budget is estimated.
- During project set-up, evaluate specific project exposures and risks. Implement safety-preplanning programs to properly mitigate risks during subcontract buy-out. Involve insurance companies and Business Unit Environmental, Health, and Safety Director in project preplanning activities.
- Conduct pre-construction staff meetings establishing goals and responsibilities, in addition to reemphasizing Turner's mission to be the leader in construction safety.
- Include field staff early on in projects to review for safety concerns during the preplanning phase.
- Ensure a member of the project Sr. Management Team (Project Manager or higher) conducts a monthly safety inspection and makes a written report to the Business Unit Environmental, Health, and Safety Director.
- Work with the Business Development Department to ensure that a Phase I Environmental Study is conducted on all potential new work.
- Ensure project staff is completing required safety responsibilities throughout the duration of the project.
- Participate in safety related training programs. Keep current on all new legislative policies for OSHA and new Turner policies and requirements.
- Lead by example.

Business Development Manager

- Notify Business Unit Environmental, Health, and Safety Director of potential project pursuits.
- Walk the jobsite before construction begins and understand the history of the site to identify potential environmental hazards.
- Ensure the Owner provides a comprehensive Phase I (and Phase II if appropriate) Environmental Site Assessment and pre-demolition survey prior to signing the contract.
- Proactively market the need for an effective safety program and adequate budget in selling new work. Help the client to understand that safety pays in cost, time, and quality of construction.
- Inform Owner of Turner's Environmental Policies.
- Add Business Unit Environmental, Health, and Safety Director to the distribution list of both one (1) and 1-A meetings.

Project Superintendent

- Responsible for taking leadership role on their project and for implementing Turner's safety policies and procedures.
- Review subcontractors' competent person qualifications (resume) and discuss with BUEHSD to assure subcontractor is properly staffing project.
- Supervise, manage and require compliance to the site specific safety program by all personnel working on the project.
- Conduct pre-construction safety meetings with all subcontractors prior to their start of work.
- Conduct preplanning safety meetings prior to the start of new phases of construction.
- Participate in the development of the Site Specific Project Safety Program, Fire Prevention and Protection Program, Crisis Management Program, and additional safety programs as required.
- Create a Site Logistics Plan for the project.
- Set up the project trailer/office to be compliant with federal, state and local regulations.
- Provide the project trailer/office with a first aid kit, fire extinguishers, exit signs, and an evacuation route.

- Ensure all Turner and Subcontractor's staff completes project safety orientation prior to beginning work.
- Conduct and document a weekly safety inspection using SafetyNet.
- Ensure compliance with Turner pre-task planning (PTP) requirements.
- Assume overall responsibility for job site safety. If needed, appoint a qualified individual to be the safety coordinator.
- Conduct monthly project safety meetings and weekly coordination meetings with safety as the first topic of discussion. Subjects for discussion should cover but not be limited to:
 - Superintendents' observations regarding safety.
 - Reports of the Project Safety Manager and actions taken on any recommendations
 - Accidents which have occurred during the past month and methods of eliminating or protecting against them.
 - Conditions and/or actions that may affect the public and methods for correcting them.
 - Identify critical safety work activities.
 - Issue safety information to job staff, foremen and subcontractors once a month concerning safety subjects pertinent to the job.
- Require that each Turner and Subcontractor's foreman hold a Toolbox Safety Meeting with their crew at least once each week to discuss the following:
 - Minutes of staff safety meeting as they affect the work.
 - Instruct the employees in safe and efficient planning of their work.
 - The safety subject assigned at the staff safety meeting; safety subjects shall be pertinent to the current work activity.
 - Injuries or near misses that have occurred to their employees.
 - Solicit comments and suggestions relating to safety.
 - Minutes shall include dates and signatures.
- Require all subcontractors to provide their employees with the proper safety equipment required by the site specific safety program, and federal, state and local requirements.
- Require all subcontractors with non-English speaking employees to have a translator on site any time workers are present.

Project Safety Manager

- Perform a minimum of three safety inspection of the project each week using SafetyNet.
- Ensure that all recommendations noted are corrected immediately, and noted in a timely fashion using SafetyNet.
- Review and comment on pre-task plans completed by Turner and subcontractors.
- Distribute and post safety information.
- Maintain First Aid equipment – ensure the First Aid Kit is inspected weekly.
- Monitor the Site Specific Safety Program.
- Assist in the investigation of all accidents, including those of Subcontractors. Submit a written report, within RiskConsole and notify the Business Unit Environmental, Health, and Safety Director.
- Keep current on all new legislative policies for OSHA and new Turner policies and requirements.
- Establish a relationship with all relevant regulatory agencies that might inspect Turner projects, Escort compliance officers on walk, follow Turner policies and file required reports to the BUEHSD.

Safety Training and Education Policy

I. Policy Statement

Turner believes a key component in driving an injury free environment is to develop and maintain a well-trained work force that understands basic safety and health principles. The following are minimal requirements that must be met by all Turner employees.

II. Procedure

1. Required Course Work:

- a) **New Employee Orientation – On Day One**, the employee's supervisor shall provide critical safety and health training for all new or re-hired employees. Information provided shall include:
 - i. Hazards associated with their job and proper ways to perform the task safely.
 - ii. Chemical Management & Hazard Communication Program.
 - iii. Emergency Response Procedures.
 - iv. PPE Requirements
- b) The Supervisor shall schedule a meeting with the Business Unit Environmental, Health, and Safety Director to discuss the following key topics: Turner Construction Safety Policies, Developing an Injury Free Culture, and Turner Strategic Safety Objectives.
- c) OSHA 30 - All Turner employees in safety sensitive positions are required to have a 30-hour card. It is preferred that Turner's web-based course is utilized to fulfill these requirements. Individuals who already have a 30-hour card must take the Turner Web based Safety Refresher (2-Year Safety Refresher) course within the first six months of placement.
 - The Turner CN and Safety family, due to their interface with subcontractors and clients, is required to take the refresher course, as appropriate, every two years: Logistics, Estimating, Procurement, and Business Development. Also, all new CN family recruits should receive OSHA 30 training regardless of their initial assignment and this training should be completed within the first 90 days of start date. Close coordination with HR for tracking of required training of each person.
 - The following Turner families are exempt for the OSHA 30 Hour and refresher courses: Cost/accounting, BIM/VDC, Scheduling, Human Resources, Community Affairs, and Administrative. If any of the above staff are assigned to a project and are working from the project site, then they need to follow the policy requirement with respect to the OSHA 30 and Refresher.
- d) Subcontractor Substance Abuse Testing & Reasonable Suspicion Training - All Turner employees that interact with subcontractor workforce are required to attend training and adhere to the corporate policy regarding prescreening, random, post incident, and reasonable suspicion drug abuse testing.
- e) First Aid/CPR – A minimum of one Turner employee shall be on site per project and office location with an active CPR/FA/BBP/AED certification.

- f) OSHA Specific Training - When needed, individuals will be required to attend specific training that will enable Turner to be fully compliant with all applicable regulations. Scaffolds, Traffic Safety, Fall Protection, Hoists/Cranes, are a few examples of specific

TURNER
**CORPORATE ENVIRONMENTAL,
HEALTH AND SAFETY POLICY**

**Engineering &
Technology**

Concrete and Masonry

I. Policy Statement

Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart Q – Concrete and Masonry Construction, in addition to the following guidelines.

II. Procedures

1. General Requirements

- a) Unless otherwise stated in their contract, the concrete or masonry contractor must provide at least two covered entrances into each building or structure during perimeter work. They must also cordon off other means of access/egress.
- b) No load may be placed on a concrete structure unless a qualified person, knowledgeable in structural design, determines that the structure is capable of supporting the load.
- c) Protruding reinforced steel, onto which employees could fall or fall into, must be protected to eliminate the hazard of impalement. The use of mushroom caps is not permitted for impalement hazards.
- d) Subcontractors must submit a formal Fall Prevention Plan to Turner, including the name and qualifications of their designated competent person.
- e) No worker, except those involved in post tensioning operations, shall be permitted to be behind the jack during tensioning operations. Signs and barricades shall be erected to limit access to the area.
- f) No worker shall be permitted to walk under concrete buckets while it is being elevated or lowered into position.
- g) No worker shall be permitted to apply cement, sand and water mixture through a pneumatic hose unless the employee is wearing the proper PPE including face protection.
- h) This subcontractor shall provide an eye wash station with at least 15 minutes of eye wash solution within 75 feet of any concrete, painting or masonry work.

2. Equipment and Tool Requirements

- a) Powered and rotating concrete troweling machines must have a switch that automatically shuts off power whenever the hands of the operator are removed from the machine.
- b) Masonry saws must be provided with a semi-circular guard (180 degrees of protection).

- c) Machines must be locked and tagged out of service, per Section K, before employees can perform any maintenance or repair work.

3. Cast-In-Place Concrete Requirements

- a) Formwork must be designed, fabricated, erected, supported, braced and maintained so it is capable of supporting all lateral and vertical loads anticipated to be applied to it.
- b) All shoring equipment must be inspected prior to erection to determine if it meets the requirements specified in the formwork drawings.
- c) Erected shoring equipment must be inspected immediately prior to, during and after concrete placement.
- d) A qualified designer must prepare the design of the shoring and an engineer qualified in structural design must inspect the erected shoring.
- e) Forms and shores must not be removed until the employer determines that the concrete has gained sufficient strength.
- f) 100% fall prevention/protection must be maintained anytime a worker is exposed to falls greater than 6'.
- g) At building perimeters where the decking steps down to allow for a beam pour, the height of the rails shall be increased accordingly.
- h) Areas where form stripping is to be performed must be properly barricaded with tape or fence and signage must be posted on all sides. This should include areas below stripping.
- i) Protruding nails should be removed or bent immediately.
- j) Where employees must walk across rebar, temporary walkways must be installed to prevent trip hazards.
- k) Outrigger platforms used for material movement in and out of the building via a crane or forklift must be designed by an engineer and incorporate 100% fall protection systems.

4. Masonry Requirements

- a) A limited access zone must be established prior to the start of any masonry work.
- b) The zone must be equal to the height of the wall, plus four feet for the entire length of the wall.
- c) All masonry walls over 8 feet in height shall be adequately braced and remain in place until the permanent supporting elements of the structure are in place.

- d) Employees that are working at heights greater than 6 feet must be protected from falling by guardrail systems, safety net systems or personal fall arrest systems.
- e) For overhand bricklaying from a scaffold, fall protection is required if the working side of the scaffold has a gap greater than 12" between the scaffold and structure.
- f) The specific fall prevention/protection method shall be documented in the JHA/PTP.

Confined Spaces in Construction

I. Policy Statement

This program has been developed to comply, at a minimum, with 29 CFR 1926 Subpart AA Permit-Required Confined Spaces. This program sets forth requirements for practices and procedures to protect employees engaged in construction activities at a worksite with one or more confined spaces. Entering or knowledge of entry into a confined space without all appropriate planning and permits is a zero tolerance issue for Turner Construction and will be dealt with appropriately.

As a reminder you may be required to also follow the 29 CFR 1910.146 General Industry Confined Spaces Program, but the more stringent of the two will always apply.

II. Definitions

1. Confined space means a space that:
 - a) Is large enough and so configured that an employee can bodily enter it;
 - b) Has limited or restricted means for entry and exit (definition below); and
 - c) Is not designed for *continuous employee occupancy*.

Confined spaces may include, but are not limited to, the following: Bins; boilers; pits (such as elevator, escalator, pump, valve or other equipment); manholes (such as sewer, storm drain, electrical, communication, or other utility); tanks (such as fuel, chemical, water, or other liquid, solid or gas); incinerators; scrubbers; concrete pier columns; sewers; transformer vaults; heating, ventilation, and air-conditioning (HVAC) ducts; storm drains; water mains; precast concrete and other pre-formed manhole units; drilled shafts; enclosed beams; attics; interstitial spaces; vessels; digesters; lift stations; cesspools; silos; air receivers; sludge gates; air preheaters; step up transformers; turbines; chillers; bag houses; and/or mixers/reactors.

2. *Permit-required confined space* (permit space) means a confined space that has one or more of the following characteristics: (a) Contains or has a potential to contain a hazardous atmosphere; (b) Contains a material that has the potential for engulfing an entrant; (c) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or (d) Contains any other recognized serious safety or health hazard.
3. *Non-permit required confined space* means a confined space that meets the definition of a confined space but does not meet the requirements for a permit-required confined space, as defined in this subpart.
4. Limited or restricted means for entry or exit means a condition that has a potential to impede an employee's movement into or out of a confined space. Such conditions include, but are not limited to, trip hazards, poor illumination, slippery floors, inclining surfaces and ladders.
5. Controlling Contractor is the employer that has overall responsibility for construction at the worksite.

6. Attendant means an individual stationed outside one or more permit spaces who assesses the status of authorized entrants and who must perform the duties specified in §1926.1209. Note: the attendant must have knowledge of existing and potential hazards, including signs/symptoms of exposure. Must maintain accurate head count/communication with entrants, is aware of possible behavioral effects of hazard exposure in authorized attendants, and assesses activities and conditions inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately as required by the standard.
7. Authorized entrant: means an employee who is authorized by the entry supervisor to enter a permit space and must perform the duties found in section VIII.
8. Entry Supervisor means the qualified person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this standard.

III. General Requirements

Before beginning work at a project site, each contractor must ensure that a competent person identifies all confined spaces in which one or more of the employees it directs may work, and identifies each space through consideration and evaluation of the elements of that space, including continuous testing as necessary. All confined spaces that an employee will enter must be classified as either a “permit-required space,” a “non-permit space,” or an “alternate-entry space.” Classification of each type of space must be accomplished using the Turner Confined Space Entry Permit, regardless of classification. If the workplace contains one or more permit-required spaces, the employer who identifies, or who receives notice of, a permit space must:

1. Inform exposed employees of the existence and location of danger posed at each permit space by posting danger signs or any other equally effective means. Post signs in English plus any additional languages spoken by non-English speaking workers.



2. Inform, in a timely manner and in a manner other than posting, its employees' authorized representatives and the controlling contractor of the existence and location of, and the danger posed by, each permit space.
3. Each employer who identifies, or receives notice of, a permit space and has not authorized employees it directs to work in that space must take effective measures to prevent those employees from entering that permit space.
4. If any employer decides that employees it directs will enter a permit space, that employer must have a **written permit confined space program** implemented at the construction site. The written program must be made available prior to and during entry operations for inspection by employees and their authorized representatives.
5. If there is a potential for an atmospheric hazard, then the contractor desiring to perform entry must monitor the atmosphere in the confined space prior to breaking the plane of the entry portal. If you are unsure if monitoring must be done, contact the BU Environmental, Health, and Safety Director. Some examples of situations where an atmospheric hazard might exist would include, but not be limited to, the use of fossil-fuel powered engines and tools in the area; chemicals or paints being used in the area, compressed gases stored or used in the area, etc.

Alternate Entry Procedure

An employer whose employees enter a permit space need not comply with 1926.1204 through 1206 and 1926.1208 through 1211, provided that all of the following conditions are met:

The employer can demonstrate that all physical hazards in the space are eliminated or isolated through engineering controls so that the only hazard posed by the permit space is an actual or potential hazardous atmosphere;

The employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry, and that, in the event the ventilation system stops working, entrants can exit the space safely;

The employer develops monitoring and inspection data that supports the demonstrations required by paragraphs (e)(1)(i) and (ii) of this section;

If an initial entry of the permit space is necessary to obtain the data required by this paragraph the entry is performed in compliance with §§ 1926.1204 through 1926.1211;

The determinations and supporting data required by paragraphs (e)(1)(i), (ii), and (iii) of this section are documented by the employer and are made available to each employee who enters the permit space under the terms of paragraph (e) of this section or to that employee's authorized representative; and

Entry into the permit space under the terms of paragraph (e)(1) of this section is performed in accordance with the requirements of the following section:

The following requirements apply to entry into permit required spaces that meet the Alternate Entry Requirements above:

- Any conditions making it unsafe to remove an entrance cover must be eliminated before the cover is removed.
- When entrance covers are removed, the opening must be immediately guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space.
- Before an employee enters the space, the internal atmosphere must be tested, with a calibrated (annual-factory calibration and daily site calibration) direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order. Any employee who enters the space, or that employee's authorized representative, must be provided an opportunity to observe the pre-entry testing. Only a competent and qualified person may use the air monitor. Submit air monitoring results and calibration records to Turner upon request.
- No hazardous atmosphere is permitted within the space whenever any employee is inside the space.
- Continuous forced air ventilation must be used, as follows:
 - An employee must not enter the space until the forced air ventilation has eliminated any hazardous atmosphere;
 - The forced air ventilation must be so directed as to ventilate the immediate areas where an employee is or will be present within the space and must continue until all employees have left the space;
 - The air supply for the forced air ventilation must be from a clean source and must not increase the hazards in the space
- The atmosphere within the space must be continuously monitored unless the entry employer can demonstrate that equipment for continuous monitoring is not commercially available or periodic monitoring is sufficient... If continuous monitoring is used, the employer must ensure that the monitoring equipment has an alarm that will notify all entrants if a specified atmospheric threshold is achieved, or that an employee will check the monitor with sufficient frequency to ensure that entrants have adequate time to escape. If continuous monitoring is not used, periodic monitoring is required. All monitoring must ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Any employee who enters the space, or that employee's authorized representative, must be provided with an opportunity to observe the testing.
- If a hazard is detected during entry:
 - Each employee must leave the space immediately.
 - The space must be evaluated to determine how the hazard developed.
 - The employer must implement measures to protect employees from the hazard before any subsequent entry takes place.

- The employer must ensure a safe method of entering and exiting the space. If a hoisting system is used, it must be designed and manufactured for personnel hoisting; however, a job-made hoisting system is permissible if it is approved for personnel hoisting by a registered professional engineer, in writing, prior to use.
- The employer must verify that the space is safe for entry and that the pre-entry measures have been taken through a written certification that contains the date, location of the space and signature of persons providing the certification. The certification must be made before entry and must be made available to each employee entering the space or to that employee's authorized representative. A copy must be provided to Turner Construction before entry begins.

Reclassifying a Permit Space to a Non-Permit Confined Spaces

A space classified by an employer as a permit-required confined space may only be reclassified as a non-permit confined space when a competent person determines that all of the applicable requirements in paragraphs of this section have been met:

- If the permit space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated or isolated without entry into the space (unless the employer can demonstrate that doing so without entry is infeasible), the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated or isolated;
- The entry employer must eliminate or isolate the hazards without entering the space, unless it can demonstrate that this is infeasible. If it is necessary to enter the permit space to eliminate or isolate hazards, such entry must be performed under §§ 1926.1204 through 1926.1211. If testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated or isolated, the permit space may be reclassified as a non-permit confined space for as long as the hazards remain eliminated or isolated;
 - Note: Control of atmospheric hazards through forced air ventilation does not constitute elimination or isolation of the hazards. Paragraph (e) of this section covers permit space entry where the employer can demonstrate that forced air ventilation alone will control all hazards in the space.
- The entry employer must document the basis for determining that all hazards in a permit space have been eliminated or isolated, through a certification that contains the date, the location of the space, and the signature of the person making the determination. The certification must be made available to each employee entering the space or to that employee's authorized representative;
- If hazards arise within a permit space that has been reclassified as a non-permit space under paragraph (g) of this section, each employee in the space must exit the space. The entry employer must then reevaluate the space and reclassify it as a permit space as appropriate in accordance with all other applicable provisions of this standard.

IV. Permit Space Entry Communication and Coordination

Before entry operations begin, the controlling contractor must obtain the host employer's information about the permit space hazards and previous entry operations and provide the following information to each entity entering a permit space and any other entity at the worksite whose activities could foreseeably result in a hazard in the permit space:

- a. The information received from the host employer;
- b. Any additional information the controlling contractor has about the space.
- c. The precautions that the host employer, controlling contractor, or other entry employers implemented for the protection of employees in the permit spaces.

A boilerplate letter is attached to this program to send to host employers to obtain the necessary information.

The controlling contractor and entry employer(s) must coordinate entry operations when:

- a. More than one entity performs permit space entry at the same time; or
- b. Permit space entry is performed at the same time that any activities that could foreseeably result in a hazard in the permit space are performed.

After entry operations:

The controlling contractor must debrief each entity that entered a permit space regarding the permit space program followed and any hazards confronted or created in the permit space(s) during entry operations. This debrief needs to happen with the crew performing the entry immediately, or as soon as possible after entry. Document this meeting on the cancelled permit and submit the permit to the BU Environmental, Health, and Safety Director.

The entry employer must inform the controlling contractor in a timely manner of the permit space program followed and of any hazards confronted or created in the permit space(s) during entry operations; and the controlling contractor must apprise the host employer of the information exchanged with the entry entities pursuant to this subparagraph. Submit copies of each cancelled permit and any lessons-learned to the Host Employer. Document this was done on the cancelled permit that goes to the BUEHSD.

Unless the controlling contractor has or will have employees in a confined space, it is not required to enter any confined space to collect the information.

V. Permit Required Confined Spaces

1. Permit Required Spaces – If permit spaces are identified, the following program elements must be addressed by the entry contractor's competent person in a **Written Project Specific Confined Space Procedure**. This procedure must be submitted in advance to the Turner project manager.
 - a) Job Specific Safety Analysis – Include a review of site specific hazards and details on how to control these hazards such as; ventilation, protective clothing, respiratory equipment, air testing and monitoring, fire prevention, training, rescue plan, documentation and access.
 - b) Atmospheric Testing – Specify how the space will be tested for oxygen content, combustible gases and vapors, toxic gases and vapors to ensure that acceptable entry conditions exist. Permit Confined spaces will be continuously monitored while entrants are in the confined space.
 - c) Assigned Duties – Provide training for all personnel entering a confined space, attendants and entry supervisors on their duties, the nature of existing and potential hazards in and around the space, precautions to avoid any incidents and the use of personal protective equipment and emergency rescue equipment.
 - d) Unauthorized Entry – Procedures they will implement that are necessary to prevent unauthorized entry
 - e) Rescue Equipment and Emergency Services
 1. A rescue procedure shall be developed by the subcontractor responsible to enter the space and submitted to Turner prior to commencing a confined space entry. If subcontractor decides to use a rescue service vendor that service must be on site at the beginning of and during the permit space work. Fire and emergency rescue services are not a substitute for a qualified and trained rescue team or vendor service. At a minimum 29 CFR Appendix F to Subpart AA Rescue Team and Rescue Service Evaluation Criteria must be utilized when assessing rescue operations.
 2. A pre-planned rescue procedure shall be developed for the attendant who is stationed outside the space to observe and communicate with the entrant(s). The procedure should discuss how to:
 - a. summon the on-site rescue and emergency services
 - b. procedures for rescuing entrants from permit spaces
 - c. provide necessary emergency services to rescued employees
 - d. and prevent unauthorized personnel from attempting a rescue.

3. All persons entering a permit-required confined space shall wear a full-body harness with retrieval system attached. Wristlets may be used in lieu of the chest or full body harness if it can be demonstrated the use of a chest or full body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.
 4. All retrieval and rescue equipment to meet applicable ANSI or OSHA requirements and be designed for intended operations.
 5. A trained attendant with a pre-planned rescue procedure shall be stationed outside to observe (if possible) and/or communicate with the entrant at all times and be capable of putting rescue operations into effect. At a minimum 29 CFR Appendix F to Subpart AA Rescue Team and Rescue Service Evaluation Criteria must be utilized when assessing rescue operations. If a subcontractor decides to use a rescue service vendor, that service must be on-site during the full duration of the permit space work. Fire and emergency rescue services are not a substitute for a qualified and trained rescue team or vendor service, on-site.
- f) An **Entry Permit** must be used to record critical data and serve as official Final entry authorization to enter the permit required space and must be implemented prior to entering the space. Develop and implement the means, procedures, and practices necessary for safe permit space entry operations. Identify and evaluate the hazards of permit spaces before employees enter them.
- g) Training – documentation of employees expected to enter permit spaces must be provided and reviewed by the Project Superintendent and Project Safety Manager (if assigned) to ensure that they have been trained per the requirements of 29 CFR 1926.1207. Training documentation must be verified for all rescue personnel or rescue service that will be used. Training should also include respirators where they might be used for rescue.
- h) If respiratory protection is required, the subcontractor responsible to make entry into the space will submit their Respiratory Protection Plan to Turner Construction for review. The plan shall include identified hazards associated with the space and their concentrations, what respiratory protection is needed, medical screening/fit testing, signs and symptoms of exposure, what are the cartridge/canister change-out procedures, respiratory training, etc.
- Note: any contractor that will self-perform rescue into a confined space that could potentially have a hazardous atmosphere must have the appropriate level of respiratory protection on hand for the number of rescuers assigned. Potentially IDLH atmospheres will necessitate either SCBAs or SARs be provided.*
2. Atmospheric Air Monitoring shall occur before entering a confined space. Continuous monitoring, using a four gas meter, is required. Testing the Atmosphere in the confined space is required by a qualified Entry Supervisor prior to entry. Take samples at all accessible areas of the confined

space. The qualified person must note the results of the sampling. The atmosphere must meet the following conditions:

- a) Oxygen: 19.5 percent minimum, 23.5 percent maximum,
 - b) Flammable gases and vapors: less than 10 percent,
 - c) Toxic gases: persons monitoring the atmosphere of permit spaces will adhere to the lowest published exposure limit among OSHA, NIOSH and ACGIH to determine when evacuation from a permit space is necessary. Alarm settings on instruments must never exceed these limits. Additionally, when any toxic gas or vapor reading is above background, but below published exposure limits, the entry supervisor will evaluate.
 - d) IF the above atmospheric conditions are not attainable, the area is a Permit Required Confined Space. A plan must be developed and the permit submitted to Turner Construction for review and comments.
 - e) If the work performed inside the space could generate flammable vapors or produce an oxygen-deficient atmosphere, this space is a Permit Required Confined Space and continuous air monitor is required by the construction standard. Non-sparking tools and intrinsically safe tools and equipment such as lights, radios, and monitors may be necessary when flammability is an issue.
 - f) Maintain a log of all readings.
3. Welding and Burning: Prior to any spark and/or heat producing activities in a confined space, the subcontractor must obtain a Hot Work Permit and determine there is no danger of flammable atmosphere.
 4. Burning / Welding Procedures: When burning or welding inside a confined space, all cylinders and welding machines shall be located outside the confined space. Check hose connections or welding leads prior to entry. Remove all hoses from the confined space at the end of the work shift.
 5. All potential confined spaces, both existing and new, shall be marked, labeled or appropriately identified. The controlling contractor, rather than the host employer, is the primary point of contact for information about permit spaces at the worksite. The host employer must provide information it has about permit spaces at the work site to the controlling contractor, who then passes it on to the employers whose employees will enter the spaces (entry employers). In addition, entry employers must give the controlling contractor information about their entry program and hazards or improvement opportunities they encounter in the space. The controlling contractor will provide the new information on to other entry employers and back to the host. The controlling contractor

will make sure employers outside a space know not to create hazards in the space, and that entry employers in a space at the same time do not create hazards for one another's workers.

VI. Permitting Process

All confined space entries requiring a permit will utilize the Turner Confined Space Entry Permit. Before the entry begins, the Entry Supervisor identified on the permit must sign the entry permit to authorize entry. The completed permit must be made available at the time of entry.

The Entry Supervisor must terminate entry and take the following action when:

- Cancel the permit when the operations associated with the permit are complete.
- Suspend or cancel the permit and fully reassess the permit space before allowing reentry when a condition arises in or near the space that is not allowed under the entry permit.

The Entry Employer must retain each canceled entry permit for at least one year to facilitate the review of the permit-required confined space program. Any problems encountered during an entry operation must be noted on the permit so that the appropriate revisions to the permit space program can be made.

Entry Permit (See Forms Section for Confined Space Permit)

The entry permit document that authorizes entry into a permit space must:

- Identify the permit to be entered,
- Purpose of the entry,
- Date and authorized duration of the entry permit,
- Authorized entrants by name in the permit space,
- Identify the means of detecting an increase of atmospheric hazard levels,
- The person, by name, currently serving as the attendant,
- The individual, by name, currently serving as the Entry Supervisor and the signature or initials of each Entry Supervisor who authorizes entry,
- The hazards of the permit space to be entered,
- The measures used to isolate the permit space and to eliminate or control permit space hazards before entry,
- Identify the acceptable entry conditions,
- The results of tests with the names of the testers and the time the test was performed,
- Identify the rescue and emergency services to be contacted and the means of contacting those services (equipment to use and the numbers to call).
- Identify the communication procedures used by authorized entrants and attendants.

- Identify the PPE that will be utilized, the testing equipment, communication devices, alarm systems and the rescue equipment that will be provided.
- List any additional information necessary for the particular confined space to ensure employee safety.
- List any additional permits required, such as hot work permits, etc. that have been issued to authorize work in the permit space.
- Conduct a meeting with the appropriate parties, including owner, to review the written site-specific confined space plan and make necessary adjustments before activity begins.

VII. Training

The employer must provide training to each employee and ensure that the employee possesses the understanding, knowledge and the skills necessary for the safe performance of their assigned duties. The training must result in the understanding of the hazards in the permit space and the methods used to isolate, control or in other ways protect employees from the hazards, and for those employees not authorized to perform entry rescues, in the dangers of attempting rescues.

- The training must be in the language and vocabulary that the employee can understand.
- Training is required before the employee is first assigned duties, before there is a change in assigned duties or when there is a change in the permit space entry where an employee has not previously been trained.
- Training is required when there is evidence of a deviation from the permit space entry procedures or there are inadequacies in the employee's knowledge or use of the procedures.
- The employer must maintain training records that training was accomplished. The training records must contain the employee's name, the name of the trainers and the dates of training.

Supervisor's Training (Individual authorizing or in charge of entry):

- A. Entry Permit – content and completeness,
- B. Procedures, practices and equipment,
- C. Entry operations monitoring,
- D. Entry cancellation,
- E. Closing procedures after completion,
- F. Dealing with unauthorized personnel.

Entrants and Attendants Training:

- A. Hazard Recognition:
 - a. Type of Hazard,
 - b. Signs and symptoms,
 - c. Consequence of exposure.
- B. Communication

- a. Maintain contact between entrant and attendant.
- b. Entrant should notify the attendant prior to attempting self-evacuation.
- c. Notification of entrants by attendant if:
 - o Behavioral changes are observed.
 - o Dangerous situations occur in or around the space.
 - o Condition exists that is not consistent with the permit.
 - o The attendant must leave the workstation.
- C. Protective Equipment:
 - a. Appropriate equipment- respirators, clothing, retrieval lines, etc.
 - b. Proper use of protective equipment
 - c. External protective barriers to prevent unauthorized entries
- D. Self- rescue:
 - a. When ordered by attendant to evacuate
 - b. If the entrant's monitor alarm sounds
 - c. If the entrant perceives danger
- E. Rescue:
 - a. Attendant will not enter the space to attempt save
 - b. Attendant should be trained in rescue procedures and the proper use of rescue equipment

Rescue Team Training:

- a. Hazard Recognition
- b. Proper use of protective equipment including respirator and rescue equipment
- c. Rescue Procedures
- d. Emergency first aid, CPR and AED
- e. Simulated rescue operation drills

VIII. Duties of Authorized Entrants

The entry employer must ensure that all authorized entrants:

- Are familiar with and understand the hazards that they may face during entry
- Properly use the equipment provided
- Communicate with the attendant as necessary on their status
- Alert the attendant if there is a warning sign or symptom of exposure to a dangerous situation or detects a prohibited condition
- Exit the space when an order to evacuate is given by the attendant or entry supervisor, there is a warning sign or symptom to a dangerous situation, the entrant detects a prohibited condition or an evacuation alarm is activated

IX. Duties of Attendants

The entry employer must ensure that each attendant:

- Is familiar with and understands the hazards that may be faced during entry
- Is aware of possible behavioral effects of hazard exposure of the entrants
- Continuously maintains an accurate count of entrants in the permit space
- Remains outside the permit space during entry until relieved by another attendant
- Communicates with entrants as necessary to access the status of the entrant and to alert entrants of the need to evacuate the space
- Assesses activities and conditions inside and outside the space to determine if it is safe for the entrants to remain in the space. Orders entrants to evacuate the space if there is a prohibited condition, if there are behavioral effects of an apparent hazard exposure, if there is a situation outside the space that could endanger the entrant or if the attendant cannot effectively or safely perform all the duties required.
- Summon rescue or other emergency services if the entrants need assistance
- Warns all unauthorized persons that they must stay away from the permit space
- Advises the unauthorized persons that they must exit immediately if they entered the permit space
- Informs the authorized entrants and the entry supervisor if unauthorized person have entered the permit space
- Performs no duties that might interfere with the attendants primary duty to access and protect the authorized entrants

X. Duties of the Entry Supervisor

The entry employer must ensure that each entry supervisor:

- Is familiar with and understands the hazards that may be faced during entry
- Verifies by checking that all the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing the entry to begin
- Terminates the entry and cancels or suspends the permit as required by 1926.1205 (e)
- Verifies the rescue services are available and the means of contacting them are operable and the employer will be notified as soon as the services are unavailable
- Removes unauthorized individuals who enter or attempt to enter the permit space

XI. Rescue and Emergency Services

- Rescuers must be on-site during the entry.
- If an employer brings in a third party to perform rescue services, the employer shall evaluate the prospective rescuer service's ability, in terms of proficiency with rescue related tasks and equipment, to function properly while rescuing entrants.

- The rescue team or service must be stationed close by the space, on the project, in order to reach the victim promptly and is equipped for and proficient in performing rescue services.
- The employer shall inform each rescue team or service of the hazards that they may confront when called upon to perform a rescue at the site.
- Provide the rescue team or service selected with access to all permit spaces so they can develop an appropriate rescue plan and to practice rescue operations.
- The employer shall train affected employee to perform assigned rescue duties and ensure that such employees successfully complete the training required and establish proficiency as authorized entrants.
- Train each affected employee in the basic first aid/CPR and ensure one member of the rescue team or service has a current first aid/CPR certification available.
- The employer shall ensure that affected employees practice making permit space rescues before attempting an actual rescue at least once every 12 months. This can be done by a simulated rescue operation in which they remove dummies, etc. from an actual permit space.
- Planning and providing for non-entry rescue is required unless the retrieval equipment would increase the overall risk or not contribute to the rescue of the entrant. The employer must still have an on-site rescue team. Each authorized entrant must wear a full body harness with the retrieval line attached to the back. The other end of the retrieval device must be attached to a mechanical device or a fixed point outside the permit space in a manner that a rescue can begin when necessary. Equipment that is unsuitable for retrieval must not be used. The SDS's must be made available to the treating medical facility where the worker is being treated.

XII. Annual Program Review

Each business unit will review cancelled permits and incident reports involving confined spaces from each project's confined space entries to assess the effectiveness of this program, lessons-learned and make appropriate changes to this program if necessary. This review must happen annually.

Sample Letter to “Host Employer” regarding confined space information:

Turner Construction Company
[Office Street Address]
[City, State, ZIP]

[Date]

[Recipient Name]
[Recipient Address]
[Recipient City, State, Zip Code]

Dear [Recipient Name]:

I’m writing as a courtesy to make sure you’re aware of the new OSHA regulations regarding Confined Spaces in Construction – Subpart AA, and how it may now create obligations for your organization. While the majority of the standard applies directly to the contractors that will perform confined space entry on your site, there are brand new requirements that apply to you, the “host employer.” OSHA defines host employer as “the employer that *owns or manages the property* where the construction work is taking place.” As required by Subpart AA, the host employer must now provide the “controlling contractor,” Turner Construction, with the following information, if it has it:

- The location of each known *permit-required confined space*;
- The hazards or potential hazards in each space or the reason it is a permit space; and
- Any precautions that the host employer, any previous controlling contractor or entry employer implemented for the protection of employees in the permit space.

OSHA defines a Permit-required confined space (permit space) as a confined space that has one or more of the following characteristics:

1. Contains or has a potential to contain a hazardous atmosphere;
2. Contains a material that has the potential for engulfing an entrant;
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
4. Contains any other recognized serious safety or health hazard.

If you have any of the information requested above, please forward to me at your earliest convenience and we will, in turn, provide the information to any subcontractors that will be performing confined space entry. Thanks for your assistance in this matter.

Sincerely,

[Your Name]

[Title]

Cranes and Derricks in Construction

I. Policy Statement

Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart CC – Cranes and Derricks in Construction, in addition to the following guidelines.

II. Procedures

1) General Requirements

- a) No crane shall be placed in service on a Turner project until an annual, third party inspection and supplemental reports are submitted to Turner indicating that the crane meets the manufacturer's inspection criteria.
- b) A daily crane inspection, performed by the competent person, is to be documented and those reports are to be given to Turner when requested.
- c) Any crane that is altered, repaired, "jumped", or modified in a similar manner onsite must be re-inspected by an independent third party inspection company. Any crane after assembly must be inspected by an independent third party inspection company.
- d) If the manufacturer's inspection criterion does not exist, a qualified person, familiar with crane design and dynamics, may develop inspection criteria.
- e) Turner requires that all crane operators be certified by an accredited testing organization. Currently there are four organizations offering crane operator certifications. The three are the National Commission for the Certification of Crane Operators (NCCCO); the Operating Engineers Certification Program (OECF); and the National Center for Construction Education and Research (NCCER). Copies of their certifications must be submitted to Turner. In addition, a resume indicating the specific type of crane must be submitted to TCCO supervision prior to operation. Additional certifications for operators by other accredited testing organizations must be vetted by Turner BUEHSD before acceptance.
- f) Any lift exceeding 75% of the cranes rated capacity or lifts involving two or more cranes shall be considered a critical lift. In addition, the following factors should be considered when determining whether or not a critical lift plan should be developed:
 - Potential hazards to personnel and the public
 - Hazards in proximity to the work area (i.e. power lines)
 - Complexity of the load (i.e. shifting loads)
 - Adverse impact from environmental conditions (i.e. winds)
 - Adverse commercial impact (i.e. job shutdown and cost to replace)
 - Site requirements / owner requirements

A critical lift plan must be submitted to TCCO supervision for review prior to the lift. A sample plan and checklist has been linked to this document.

- g) A pre-planning meeting to discuss the critical lift will be held in the field with the appropriate parties to discuss the lift. At a minimum, the following shall be reviewed:
 - The critical lift plan.
 - The contingency plan if something goes wrong during the lift.
 - The emergency response.
- h) Mobile crane movement on site must be in accordance with manufacturer's recommendations.
- i) At 20 mph, crane operations need to be evaluated by the competent person regarding the safe operation of the crane & the task associated with the crane. The crane shall not operate outside its wind limitations as stated in the operator's manual.
- j) The swing radius of cranes must be properly barricaded at all times while working on site. Tape is not an acceptable barrier.
- k) Outrigger pads should be at least 3 times the dimensions of the crane floats. The outrigger pads are to be pre-manufactured. The weight must be determined prior to lifting the load.
- l) Wire rope, its attachments, fittings, sheaves and safety devices must be inspected according to the manufacturer's recommendations. Copies of the inspections must be submitted to Turner.
- m) Wedge sockets and fittings must be the proper size to match the wire rope and must move to hold the wire rope under load. The dead end must be terminated according to ANSI B30.5.
- n) An anti two-block or warning device is required on all cranes as specified in ANSI B30.5 for each hoist line. This requirement may be waived by the BUEHSD for certain cycle duty crane operations such as pile driving and drilling rigs.
- o) A qualified rigger must inspect the rigging prior to each use.
- p) All windows in cabs must be safety glass that produces no visible distortion that will interfere with the safe operation of the machine.
- q) Cranes, hoists, boom trucks and derricks shall not be installed or operated within 20' of a power line unless they follow 1926.1408 (a) (2).
- r) Assembly/disassembly must be directed by a person who meets the criteria for both a competent person and a qualified person, or by a competent person who is assisted by one or more qualified persons ("A/D director"). See 1926.1404

- s) Before commencing assembly/disassembly operations, the A/D director must ensure that the crew members understand all of the following
 - 1. Their tasks,
 - 2. The hazards associated with their tasks.
 - 3. The hazardous positions/locations that they need to avoid.

2) Ground Conditions

- a. Ensure that ground preparations necessary to meet the requirements. The equipment must not be assembled or used unless ground conditions are firm, drained, and graded to a sufficient extent so that, in conjunction (if necessary) with the use of supporting materials, the equipment manufacturer's specifications for adequate support and degree of level of the equipment are met. The requirement for the ground to be drained does not apply to marshes/wetlands. "Ground conditions" means the ability of the ground to support the equipment (including slope, compaction, and firmness).
- b. Inform the user of the equipment and the operator of the location of hazards beneath the equipment set-up area (such as voids, tanks, utilities) if those hazards are identified in documents (such as site drawings, as-built drawings, and soil analyses) that are in the possession of the controlling entity (whether at the site or off-site) or the hazards are otherwise known to that controlling entity.
- c. If the A/D director or the operator determines that ground conditions do not meet the requirements in paragraph (a) of this section, that person's employer must have a discussion with the controlling entity regarding the ground preparations that are needed so that, with the use of suitable supporting materials/devices (if necessary), the requirements in paragraph (a) of this section can be met.

3) Signal Person Qualifications

- a. Know and understand the type of signals used. If hand signals are used, the signal person must know and understand the Standard Method for hand signals.
- b. The employer must make the documentation for whichever option is used available (Third party qualified evaluator or Employer's qualified evaluator) at the site while the signal person is employed by the employer. The documentation must specify each type of signaling (e.g. hand signals, radio signals, etc.) for which the signal person meets the requirements
- c. Please refer to 1926.1428 for reference.

Crane Critical Lift Plan

1. This plan is to be followed if any of the following apply (check where applicable):
 - A. Load capacity is equal to, or exceeds 75% of load chart rating _____
 - B. 2 or more cranes will be used during lift _____
 - C. Any unusual circumstances _____ Specify _____
2. Crane description: _____
3. Load Description: _____

4. Load Weight: _____
Specify how the weight was determined and by whom: _____
5. Description and weight of rigging and attachments:
 - A. Weight: _____
 - B. Description: _____

 - C. Weight determined by whom and how: _____

6. Total weight of Load/Rigging/Attachments/Load Chart Deductions: _____

7. Equipment:
 - A. Maximum operating radius: _____
 - B. Planned operating radius: _____
 - C. Allowable load from crane load chart: _____
 - D. Ratio of lift to allowable load (actual total load from line 5 divided by allowable load from chart): _____
8. Clearance:
 - A Clearance between boom and lift: _____
 - B Clearance to surrounding objects: _____
 - C Clearance for load movement sufficient: _____
9. Stability of Ground:
 - A Is the ground compact & stable: _____
 - B Are mats required: _____
 - C Outriggers in place and blocking used: _____

D. Verify that the weight of the crane and units to be lifted are structurally supported by the public way: _____

10. Is a lift drawing required for this lift (if so, attach): _____

11. What type of communication will be used by operator and signal man:

12. What are wind and weather conditions: _____

A. If wind speed is over 25 mph, do not proceed with the lift: _____
B. If wind speed is over 20 mph, consider postponing: _____

13. How will area be kept clear of pedestrian traffic: _____

14. Comments:

Lift Approval:

Signature:

Date:

A. Crane Operator: _____	_____
B. Crane Inspector: _____	_____
C. Rigging Supervisor: _____	_____
D. Lift Supervisor: _____	_____
E. Signal Man: _____	_____
F. Project Superintendent: _____	_____

Critical Lift Checklist

Project Name: _____

Address: _____

Project No.: _____

Planning Data:

A. Trade Contractor: _____

1. Superintendent: _____

2. Lift Supervisor: _____

3. Crane Operator: _____

B. Description of Item to be lifted: _____

C. Major hoisting Equipment to be used:

1. Make and model of crane: _____

2. Serial Number: _____

3. Length of Boom: _____

B. Equipment and Lift relationship:

1. Operating Radius: _____

2. Boom length: _____

3. Allowable Load (from load chart): _____

4. Ratio of Lift to allowable load: _____

5. Clearance between Boom and Lift: _____

6. Clearance to surrounding facilities: _____

C. Schedule of Operations (include time for rigging and equipment inspection): _____

D. Basis for Critical Lift:

1. Load exceeds 75% of Load Chart for Crane or Derrick: _____

2. Load exceeds 50% of Load Chart and failure would endanger existing facilities: _____

3. Two Cranes are required: _____

4. Other: _____

E. How weight of Critical Lift was obtained:

1. Certified Scale Weight: _____

2. Calculated independently by more than one source:

a. Source: _____ Weight: _____

b. Source: _____ Weight: _____

3. If lift is an existing item (being removed or demolished), the weight is to be recalculated, taking into account all modifications including internal as well as an allowance for scale, sediment, sludge, insulation, liquid, etc.

a. Source: _____ Weight: _____

b. Source: _____ Weight: _____

Date: _____ **Signature** (Lift Supervisor): _____

Environmental, Health and Safety Policy

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April 15, 2020

All employees who are using safety documents that are posted on TKN must utilize the most recent version that is available. If a document is printed, the document must contain a date stamp on the hard document indicating when it was printed and the version date. Employees must regularly check TKN throughout the course of the project to obtain any updated versions.

Hoists and Elevators

1) Crane Suspended Personnel Platforms

- a) The use of a crane suspended personnel platform is prohibited on Turner projects unless the employer can demonstrate that conventional methods to do the work are more hazardous. The BUEHSD shall be notified of each request and must review and approve any deviations to this requirement.
- b) Specific crane operational criteria, listed in 29 CFR 1926, Subpart N, must be followed if it is determined that a suspended personnel platform will be used. The criteria includes, but is not limited to, the following:
 - Crane configuration requirements and inspections,
 - Additional crane instrumentation and/or components,
 - Specific platform design, construction and loading requirements,
 - Specific rigging and trial lift guidelines.

2) Material and Personnel Hoists

a) Material Hoists

- All entrances to hoists must be protected by substantial gates or bars, which guard the full width of the landing entrance.
- Operating rules must be posted at the operator's station along with the notice "No Riders Allowed".

b) Personnel Hoists

- Hoist way doors or gates shall be at least 6'6" high and shall have a mechanical lock, which cannot be operated from the landing side.
- All entrances to hoists must be protected by substantial gates or bars, which guard the full width of the landing entrance.
- Hoists shall be inspected on a weekly basis.
- All hoists shall be inspected and tested at not more than three-month intervals.
- All hoists shall have a "No Smoking" sign posted in the car and a fully charged fire extinguisher available for use.
- No hoist shall be placed into service on a Turner project until inspected and tested and the supplemental reports are submitted to Turner.

Demolition

I. Policy Statement

Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart T – Demolition, in addition to the following guidelines.

Prior to mobilizing, all projects must obtain a hazardous materials pre-demolition survey from the owner. This Survey must be prepared by a qualified third party environmental firm and shall identify all hazardous materials associated with the affected area.

II. Procedures

1. Preparatory Operations

- a) Prior to initiating demolition activities, an engineering survey of the building must be made by a competent person to determine the condition of the structure and identify areas subject to unplanned collapse. A copy of this inspection must remain on site.
- b) In select demolition, if the utilities cannot be capped, shut off or locked out, a system must be in place to identify what utilities are active or de-energized. All utilities must be shut off, capped or locked out of service beyond the building line before demolition work is initiated. A Hazard Assessment must be performed prior to the start of work to identify any hazardous chemicals, gases, explosives, flammable materials or similarly dangerous substances that may have been used on the property.
- c) Where employees are exposed to fall hazards, guardrail and personal fall arrest systems must be used. Hole covers must be identified and secured against accidental displacement.
- d) Any openings cut in a floor for the disposal of materials can be no larger than 25% of the aggregate of the total floor area, unless the lateral supports of the removed flooring remain in place.
- e) Employee entrances to multi-story structures being demolished shall be completely protected by installing a canopy or sidewalk shed that is at least 8 feet out from the building with the walkway at least 2 feet wider than the building entrance/exit.
- f) Turner must ensure that the subcontractor has verified that all local ordinances and permitting issues have been addressed as they relate to demolition.

2. Stairs, Passageways and Ladders

- a) Access to a structure being demolished will be restricted to designated means of access and egress. Other access points will be closed at all times.
- b) All designated access points will be periodically inspected and maintained in a clean, safe condition.

3. Chutes

- a) No material may be dropped to a point outside the building unless a protective barricade is established. The material being dropped cannot be deflected or bounced any closer than 20' to the protective barricade.
- b) All chutes must be entirely enclosed except for openings at or slightly above the floor level for the insertion of materials.
- c) A substantial gate must be installed in each chute at or near the discharge end. A competent person must be assigned to control the operation of the gate and the backing and loading of trucks.
- d) Chutes must be designed and constructed of such strength as to eliminate failure due to the impact of material and debris loaded into them.
- e) When machinery will be near a chute opening, floor bumpers 4 inches thick & 6 inches wide are to be utilized, to prevent equipment from getting too close to the edge.

4. Removal of Walls, Floors & Steel

- a) Masonry walls, including sections of walls, will not be permitted to fall onto the floor of the building under demolition unless an engineer has determined that the floor can withstand the imposed load.
- b) No wall section, more than one story in height, will be permitted to stand alone without lateral bracing unless it was designed to stand alone.
- c) Structural or load-supporting members of any floor will not be cut or removed until all stories above such a floor have been demolished or removed.

5. Removal of Walls, Floors and Material with Equipment

- a) Mechanical equipment will not be used on floors unless the floors are of sufficient strength to safely support the equipment.
- b) Mechanical equipment will only be used for its intended purpose according to the manufacturer's recommendations.

6. Removal of Steel Construction

- a) Steel construction will be dismantled column length by column length, tier by tier.
- b) When floors have been removed, planking 10" wide by 2" thick must be used by employees engaged in razing the steel framing.

7. Mechanical Demolition

- a) No employees will be permitted in an area where "ball" or "clam" work is being performed. Only employees necessary for the performance of the operation may be permitted in this area.

- b) The area must be identified with warning barricades and signs.
 - c) During this operation continuous observations, by the competent person, must be made to identifying potential areas of failure.
8. Storage
- a) Storage of material or debris on any floor shall not exceed the allowable floor loads.

Electrical Hazards Prevention

I. Policy Statement

Use of electricity on the jobsite poses serious hazards, with employees potentially becoming exposed to such dangers as electric shock, electrocution, fires and explosions. All Turner employees and subcontractors working on a Turner project will comply with NFPA 70E Electrical Safety Practices and 29 CFR 1926, Construction Industry Regulations, Subpart K – Electrical in addition to the following guidelines.

II. Procedures

1. Working On or Near Exposed Energized Parts

- a) It is Turner policy that no one works on live electrical circuits. If a situation arises where it is impossible to perform a task with the circuit de-energized, the Turner Superintendent or Safety Manager shall contact the Business Unit Environmental, Health, and Safety Director prior to performing the work. A formal pre-construction meeting shall occur prior to any such work occurring. All Hot electrical work shall comply with NFPA 70E Requirements.
- b) Only qualified persons may work on electric circuit parts that have not been de-energized under the procedures of 1910.333.
- c) Such persons must be capable of working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials and insulated tools.
- d) All work must be completed with strict compliance to NFPA 70-E requirements and guidelines.
- e) The sub-contractor shall provide proof of training for their workers.
- f) Light switches and receptacles must be protected by permanent or temporary cover plates prior to energizing the circuit.
- g) All boxes containing energized circuits must have a cover in place, regardless of height.
- h) All electrical panels (temporary or permanent) must be locked at all times.
- i) Electrical room doors shall be secured at the earliest possible date.
- j) Even when all conducting parts are 100% insulated, entry into all junction and pull boxes will be treated as energized work until made safe by the steps below.
- k) Always de-energize if possible, following the lock-out/tag-out procedure discussed in this plan.

- l) When removing a cover from a junction box, before working, inspect all energized current-carrying parts. Check insulation and splices for damage. This inspection should be done by journeyman electricians as “energized work,” adhering to NFPA 70E practices and using arc-flash gear. Use infrared testing if necessary (for instance, if there is observed damage that appears to be due to excessive heat at a splice or a loose mechanical connection).
 - m) After inspection, while still adhering to NFPA 70E and wearing appropriate arc flash gear, protect all conductors with blankets or barriers to prevent shock or damage during cable pulling.
 - n) Care should be taken during the installation/removal of sheaves to prevent contact and damage to energized conductors.
 - o) If the above steps cannot be taken to control the potential for electrical hazards, then work in the box will require appropriate arc-flash protection.
2. Ground Fault Circuit Interrupters
- a) All 120-volt, single-phase 15 and 20 ampere receptacle outlets which are not part of the permanent wiring of the structure and which are in use by employees shall have approved GFCI's.
 - b) **Turner requires that all projects are 100% GFCI compliant.**
 - c) The installing subcontractor, i.e. the electrical subcontractor, shall test each power receptacle for proper installation including polarity, grounding, etc. The electrical subcontractor will conduct and document monthly tests after the initial installation.
3. Electric Tools
- a) All portable electric tools such as saws, hammers, drills, vibrators and float machines must bear the label of a Certified Testing Agency, such as Underwriters Laboratories, CSA, ETL, or the like.
4. Extension Cords
- a) Only round, heavy-duty (type S, SJO, SJTW, ST, SO, STD), minimum 14-gauge cords are acceptable for use on site.
 - b) Cords must be maintained in their original design configuration.
 - c) Any cord which is damaged or has the grounding pin removed shall be removed from service.
 - d) Plug ends can only be repaired by a qualified electrician.
 - e) Whenever an extension cord is used for construction work, a GFCI is required between the extension cord and the receptacle.

- f) Some electrical cords cannot be connected in series. Manufacturer's recommendations must be followed.
- g) All electrical cords shall be elevated 8' in the air in hallways, corridors, aisles, stairways, doorways, and exit areas where a tripping hazard may occur.
- h) If the cords cannot be elevated, they shall be protected from damage by equipment, carts, trucks, and other rolling objects.
- i) Extension cords shall not be fastened with staples, hung from nails, or suspended with non-insulated wire.

5. Temporary Wiring

- a) All temporary wiring and lighting must meet current NEC codes. Flat cords (Romex) are not to be used as a flexible cord and are to be hardwired.
- b) Temporary lighting must never be put on the same circuit as temporary receptacles.

6. Temporary Lighting

- a) The minimum illumination level is 5 foot-candles.
- b) Installation of temporary lighting must be per manufacturer's specifications and in compliance with OSHA, NFPA, NEC and local codes

Excavations

I. Policy Statement

The intent and purpose of this policy is to limit and/or eliminate the dangers associated with excavation and trenching operations that could expose workers to the possibility of serious injury or death. Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, and Subpart P – Excavations in addition to the following guidelines.

II. Procedures

1. Specific Excavation Requirements

- a) A comprehensive training program in the recognition, identification, evaluation and control of excavation hazards must be provided to all workers prior to working in an excavation or trenching operation.
- b) Underground utility installations must be identified and marked prior to beginning any excavation. The Contractor's proposed method for identifying known utilities must be identified as required by Turner Construction's Ground Penetration Request Permit. The Project Superintendent will ensure that JHA's are completed and reviewed for all excavation activities for Turner, subcontractors and all their tiers.
- c) A competent person must be identified and submitted to Turner prior to the start of work.
- d) The competent person will be on-site during all excavation work to determine the soil type and its stability by performing one visual and one manual test in accordance with 29 CFR 1926, Subpart P Appendix A.
- e) Inspections must be conducted daily and after every rainstorm or other hazard-increasing occurrence. Daily inspection reports must be submitted to Turner upon request.
- f) All excavations, regardless of depth, shall be protected by safety fence or guardrails
- g) Any excavation greater than 4' in depth must have access/egress provided. The maximum travel distance to a means of egress cannot exceed 25'.
- h) A Ground Penetration Request Permit must be utilized when a sub plans to dig deeper than 6 inches in depth.

2. Requirements for Protective Systems

- a) **Excavations greater than 4 feet in depth must be protected by one or more of the following systems:**

- Sloping / benching of sides to allowable configurations and slopes.
 - Cannot bench C type soil.
 - Using tabulated data.
 - Utilizing a trench box or shield.
 - Using a slope or shield system designed by a registered professional engineer. Refer to 29 CFR Subpart P, Appendix B.
 - Shield within 2 feet of the bottom of trench,
 - Employees are not permitted in the trench when the shield is moved,
 - Shield sticks up 18" above the top of slope.
- b) Spoil piles must be kept back no less than two feet from the leading edge of an excavation.
- c) A registered professional engineer must design sloping or benching systems for excavations greater than 20 feet in depth.
- d) Persons walking or working adjacent to an excavation greater than 6 feet in depth must be protected from fall hazards in accordance with Turner's 100% Fall Protection Policy.

3. Training Requirements

- a) Each employee affected by the excavation and trenching systems must be trained in the procedures specific to the project, i.e. access / egress points, location of utilities, etc.
- b) Each affected employee must be trained in all sloping, benching, and shoring procedures prior to entering the excavation or trench.
- c) A competent person must be on-site throughout the excavation and/or trenching operation to determine soil type through visual and manual testing, hazard identification, effectiveness of sloping, benching, or shoring procedures, etc.
- d) Atmospheric monitoring, if deemed necessary by the Competent Person or other competent party, must be documented and conducted by someone trained in the use of atmospheric monitoring equipment.

GROUND PENETRATION REQUEST PERMIT

This request form must be completed and authorized prior to penetrating the ground greater than 6 inches anywhere on site. The contractor disturbing soil is required to contact the locator and review as-builts. J.H.A. **MUST** be submitted prior to commencing all ground-penetrating activities on site. And prior to the start of the work in the field, the supervisor will conduct a Pre-Task Planning meeting with the crew performing the work.

Date: _____

Contractor requesting excavation / surface penetration: _____

1. Name of Superintendent / Foreman _____ Phone _____

Anticipated Dates of Work: _____

Anticipated Hours of Work: _____

Remarks / Clarifications (as necessary) _____

Location of excavation or surface penetration: _____ (attach plan)

Description of Work: _____

Means of disturbing soil (*check one*):

Excavator/Heavy Equip _____ Backhoe _____ Pneumatic Driver (fence posts) _____
Drilling/Auger _____ Motorized Saw _____ Hand Removal (Shovel) _____ Other: _____

Contractor's Proposed Method of Identifying Known Utilities (Circle One)

- | | | |
|---|-----|----|
| 1. Vacuum Excavating | Yes | No |
| 2. Ground Penetrating Radar | Yes | No |
| 3. Hand Excavation | Yes | No |
| 4. Other Explain : _____ | | |
| 5. Were all known utilities identified? | Yes | No |
- If no, which known utilities were not identified and why?

Layout of Proposed or New Work (Circle One)

- | | | |
|--|-----|----|
| 1. Has the Contractor clearly identified the line of the proposed excavation | Yes | No |
|--|-----|----|

Utility Locate Organizations:

1. Identify organizations that have completed utility locates.

_____	_____	(date / permit)
_____	_____	(date / permit)
_____	_____	(date / permit)

Approved Private Locator Company Name: _____

Method of Locating: _____

Identified Utilities: _____

GROUND PENETRATION REQUEST PERMIT

Have all known Utilities around the facility been physically located on the ground as applicable? Identify point of origin and point of termination of each line.

a. Power	N/A	Yes	No
b. Control	N/A	Yes	No
c. Grounding	N/A	Yes	No
d. Comm / Data	N/A	Yes	No
e. Water	N/A	Yes	No
f. Sewer	N/A	Yes	No
g. Gas	N/A	Yes	No
h. Other	N/A	Yes	No

Utility Delineation:

Has a ten foot utility channel "five feet on either side of the known utilities" been marked or delineated with snow fence, orange silt fence or the equivalent where the new work crosses the utility to ensure adequate recognition? (*Circle One*) Yes No

As Built Reviewed? (*Circle One*) Yes No Date of Drawings/Docs: _____

Documented Safety Preplanning Meeting (*Circle One*): Yes No

Are any overhead lines in the area? (*Circle one*): Yes No
If yes, they **MUST** be marked at ground level with signage.

Have the areas beneath the concrete slabs been X-rayed prior to any saw cutting or removal? Yes No

Competent Equip Oper. (*Print*): _____

Foreman (*Print*): _____

Spotter Required? (*Circle One*) Yes No

Are there existing utilities in the area described in this request? (*Circle One*) Yes No

IF YES, the areas to be excavated are clearly marked-out and utilities within or near the proposed excavation will be "pot-holed" every 15 feet at a minimum using a vacuum process and protected through backfill operations. If multiple known existing utilities are within or near the proposed excavation, increased potholing will be required as determined on the JHA. Unknown existing utilities may be in the area of the work and excavation shall be done with due diligence, strict adherence to the Job Hazard Analysis (JHA), and awareness to prevent damage to unknown utilities.

CERTIFICATION:

By signing below, I understand that falsifying any part of this request will lead to my immediate dismissal from this project and that my employer will be responsible for any damages incurred as a result of my negligence. I certify that all records of existing utilities in the described area, including but not limited to As-BUILTS, Mark-Out and Underground Utility Coordination Reports have been examined and ALL KNOWN UTILITIES HAVE BEEN IDENTIFIED AND WILL BE PROTECTED FROM DAMAGE. Employees not aggressively identifying and protecting utilities will be removed from the project.

Subcontractor Superintendent/Foreman: _____

Turner Superintendent: _____

Fall Prevention

I. Policy Statement

Turner has a **Zero Tolerance Policy** in effect for violations of our 6' fall prevention policy. Anyone found violating this policy may be permanently removed from the project. Each contractor must designate a competent person trained in fall prevention techniques and submit their qualifications to Turner upon request. Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart M - Fall Protection, in addition to the following guidelines.

II. Procedures

1) General Fall Prevention Requirements

- a. Each contractor, with employees exposed to a fall greater than 6', must submit their fall prevention plans to Turner prior to beginning work on site. The subcontractor and Turner staff will conduct a weekly inspection of their system.
- b. At no time shall a Safety Monitor system be used as a means of fall protection.
- c. With regard to fall of materials, Turner operates with a strict "No Gaps" policy. All working platforms or edge protection must be constructed to ensure there are no gaps which material could fall through. Employees must be protected from falling objects by the installation of toe boards, barricades, safety nets or canopy structures.

Where a risk of materials falling or being dropped, including during a lifting operation, an exclusion zone must be established. The exclusion zone should be constructed with physical barriers such as wood or metal guardrail systems, cable wire rope or chain or flagging. Danger and Caution tape will not be accepted for use in exclusion zone construction. The exclusion zone must be secured from tipping and signed. The size of the exclusion zone must consider deflection or arc of the falling material.

- d. All tools, materials or equipment which have the potential to breach the perimeter protection must be positively secured back to the worker or structure through the use of tool lanyards or synthetic rope of line (natural fiber rope is not permitted). Lanyards or ropes must be appropriately sized for the weight of the tool, material or equipment. Anchorages must be snap-hook, carabineer, shackle or similar device that provides positive locking. The use of knots to secure lanyards is not permitted. Subcontractors must evaluate the size and weight of any object which will be secured to a worker's wrist, belt, etc. to ensure it will not cause injury in the event it is dropped. Tethering also applies when there is falling object exposure for employees in the vicinity of elevated work, even when "exclusion zones" are used.

- e. A Personal Fall Arrest System (PFAS) comprised of a full body harness, 2 lanyards with double locking snap hooks or retractables, a guardrail and / or safety net system must be in place to protect all employees working above 6 feet.
- f. Covers for roof and floor openings shall be capable of supporting, without failure, twice the weight of the employees, equipment and materials that may be imposed on the cover at any one time. All covers shall be secured when installed to prevent accidental displacement by the wind, equipment or employees. All covers shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard. Turner recommends that holes greater than 18"x 18" be protected by a guardrail system. Protection systems must be sufficient to avoid harm or hazard.
- g. Any floor opening 2" or larger must be protected by a cover of sufficient protection to avoid any harm or hazard.

2) Fall Prevention Systems

a. Guardrail Systems

- The top rail height of a guardrail system must be 42", + or – 3". Midrail heights must be half of that distance. If stilts are used in the vicinity, the rail must be increased by the height of the stilts used.
- Perimeter cable may be ½" steel cable, but in no situation may they be less than 3/8" steel cable.
- The cable must be flagged at 6' intervals and must be terminated with three "Crosby clips" on each end & deflect no more than 3". The cable rail cannot deflect below 39".
- The U-bolt clips must have the U-bolt section on the dead or short end of the rope and the saddle on the live or long end of the rope.
- When using cables for perimeter guarding closed turnbuckles are to be used for every 3 bays or 100 feet, whichever is less.
- A Personal Fall Arrest System (PFAS) must not be attached to a guardrail system unless the system is designed by a Professional Engineer to accommodate the PFAS.
- Guardrail systems must be able to withstand a force of 200 lbs. in all directions, without failure, and be smooth surfaced to prevent hand injuries. The use of metal studs or similar is prohibited.
- The sub-contractor installing the perimeter cable guardrail system shall submit a design with details on how the system will be installed and maintained.

b. Safety Net Systems

- Safety net systems must be installed as close as practical below the working deck, not to exceed a distance of 30'.
- Safety net systems must be drop tested after initial installation and before being used as a fall prevention system.
- Additional drop tests are required after any repair, whenever the nets are relocated and at 6-month intervals, if the nets are left in place.

c. Personal Fall Arrest Systems

- A PFAS must be used when working from suspended scaffolds, articulating boom lifts or when working above the protective system over floor openings and unprotected floor openings and unprotected perimeter edges.
- A competent person must assure that fall distance calculations have been evaluated in each circumstance where a PFAS is used. The competent person must ensure that the intended uses of all PFAS assemblies are reviewed for each application on the project to ensure they are truly fit for the purpose which they are intended.
- A PFAS is not required when climbing up or down a ladder. However, if employees are working from a ladder, fall protection is required.
- Employees must use positive fall prevention devices when working in proximity to any leading edge work.
- All leading edge construction requires the use of a Controlled Access Zone (CAS) or Controlled Decking Zone (CDZ)
- Exterior plywood, or equivalent, shall be installed around columns where planks or metal decking do not fit tightly. The materials used must be of sufficient strength to provide fall protection for personnel and prevent objects from falling through.
- All anchorage points must be capable of supporting a load of no less than 5000 lbs. Engineered (PE Stamp) anchorage point and fall protection systems are also authorized.
- Steel erectors, connectors, and metal decking installers must utilize 100% fall prevention devices at all times when working over 6'.
- Horizontal lifelines must be designed by an engineer and installed under the supervision of a qualified person. A safety factor of two must be maintained.
- Turner does not allow the use of Safety Monitor Systems.
- Adequate fall prevention devices must be used at all loading platforms prior to removing existing perimeter protection.

d. Warning Line Systems

- If a warning line is utilized it must be 15 feet or more back from the edge.
- If a worker is required to work or enter between the warning line & the edge, 100% fall protection is required.
- The warning line height must be between 34" & 39" from the walking/working surface.
- The rope, wire or chain must have a breaking strength of 500 pounds and must be flagged every 6 feet.
- After erected, the stanchions must be secured from tipping due to wind, etc.

e. Controlled Decking Zone (CDZ)

- Leading-edge workers in a CDZ are required to be protected from fall hazards (personal fall arrest system at a minimum).
- Have completed CDZ training in accordance with 29 CFR 1926.761.
- Employees who are not engaged in leading-edge work and properly trained in the hazards involved are prohibited from entering the CDZ.
- The CDZ is required to:

1. Be no more than 90 feet wide and 90 feet deep from any leading edge. It may not exceed 3,000 square feet of unsecured decking.
 2. Have designated and clearly marked boundaries with control lines or the equivalent. NOTE: Control lines are commonly used as a marker because they create a highly visible boundary. See requirements below.
 3. Have safety deck attachments placed from the leading edge back to the control line.
 4. Have at least two safety deck attachments for each metal decking panel.
- Final deck attachments and the installation of shear connectors are prohibited from being done in the CDZ.
 - Perimeter safety cables must be installed at the final interior and exterior perimeters of multi-story structures as soon as the decking has been installed. This means there should be no unprotected openings or edges on the non-leading edge side of the "control line."
 - A control line for a CDZ must be erected not less than 15 feet nor more than 90 feet from the leading edge. Control Lines must be a physical barrier. This will primarily be a rigid guardrail, tight cable or flagging. The rope, wire or chain must have a breaking strength of 500 pounds and must be flagged every 6 feet. Caution and Danger tape, and spray-painted lines cannot be used.
 - Each line is constructed in such a way that its lowest point (including sag) is not less than 39 inches from the walking/working surface and its highest point is not more than 45 inches from the walking/working surface.

3) Training Requirements

- a. Each employee exposed to a fall hazard must be trained by a competent person in the recognition and avoidance of such a hazard. Proof of training shall be made available to Turner Construction upon request.
- b. Specific training includes, but is not limited to the following:
 - The type of fall exposures expected.
 - The correct procedures for erecting, maintaining, dismantling and inspecting of any fall prevention system used by the employee.

Fire Protection and Prevention

I. Policy Statement

Each subcontractor working on a Turner project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart F – Fire Protection and Prevention, in addition to the following guidelines.

II. Procedures

1. General Requirements

- a) A site-specific fire prevention program shall be developed at each project.
- b) Hot work permit procedures, fire watches, shields and blankets must be considered when developing site-specific fire prevention programs. All areas and equipment where hot work is anticipated is to be reviewed in detail by the subcontractor with the Turner Superintendent and/or Safety Manager.
- c) All firefighting equipment must be clearly visible and access to the equipment must be maintained at all times.
- d) A 20 lb. ABC dry chemical fire extinguisher or equivalent must be provided for each 3,000 square feet of protected building area. It is required that an extinguisher be placed at every stairwell on each level.
- e) Travel distance to a fire extinguisher must not exceed 100 feet.
- f) Portable fire extinguishers must be inspected monthly. The documentation must be a weather resistant tag attached to the extinguisher. In addition, the fire extinguisher must have the pin secured by a safety pull tab to be considered serviceable.
- g) Every fire extinguisher must have an annual inspection..

2. Fire Prevention

- a) Temporary offices or trailers, when located inside of a building under construction, must be constructed of fire retardant materials.
- b) Combustible materials, such as cardboard, wooden pallets, etc., must be removed from the work area as it is created.

3. Flammable and Combustible Liquids
 - a) Flammable and combustible liquids must be stored in approved metal safety cans. An approved safety can is a closed container, not more than 5 gallons, with a flash-arresting screen and a spring closing lid. Plastic cans are not permitted onsite.
 - b) Indoor storage of flammable or combustible liquids in excess of 25 gallons must be in an approved cabinet.
 - c) Onsite fuel tanks must be double walled, be protected from construction vehicle traffic & have a spill containment system capable of holding all contents of the tank in the event of a leak. Dirt berms & dikes are not permitted. Jersey barriers are considered a best practice for protecting fuel storage containers or storage of other flammable or combustible materials.
 - d) At least one 20 lb. ABC dry chemical fire extinguisher must be located within 25' to 75' of an outdoor storage area.
4. Liquefied Petroleum Gas (LPG)
 - a) LPG must never be stored inside buildings. LPG gas must not be used in any building unless authorized by Turner Construction.
 - b) When damage to LPG systems from vehicular traffic is possible, precautions must be taken to eliminate the hazard.
5. Temporary Heating Devices
 - a) Fresh air must be supplied in quantities sufficient to maintain the health and safety of all employees. If a competent person deems natural airflow inadequate, then mechanical ventilation must be provided.
 - b) Heaters used in the vicinity of tarpaulins, canvas or similar coverings must be located at least 10' from the covering and be secured so as to prevent ignition due to wind.
 - c) Open fires are not allowed on Turner projects.
 - d) Solid fuel salamanders are not allowed in buildings or on scaffolds.
 - e) Hot Work permits are required for temporary heating devices.
6. Housekeeping is the best defense against fires. Place all trash and debris in proper containers. Place oily and/or paint soaked rags in a covered metal container.
7. Hot Work Permits
 - a) A Turner Construction Hot Work Permit will be filled out by the Subcontractor Foreman/Supervisor after surveying the area. The subcontractor must review the area and permit with a Turner Superintendent and/or Safety Manager and get their initials on the permit prior to starting work. One copy will be turned into the Turner Project Superintendent/Safety office and one copy posted in the area where the hot work is

being performed prior to beginning any hot work. These notices include any activity that may present a fire hazard. These activities include but are not limited to cutting, burning, welding, soldering, brazing, and grinding where sparks are created.

- b) Subcontractor shall provide a fire watch person on duty at all times (i.e. including breaks, lunch, etc.) during hot work operations. A 30 minute minimum fire watch is required after hot work is completed. The **fire watch time requirement may need to be increased in sensitive areas (such as historic buildings, healthcare facilities, etc.) as determined by need and or contract.** Each subcontractor is responsible to notify Turner when the fire watch is complete.
- c) The fire watch person is required to be trained as to their duties and responsibilities and have no other duties. Fire watch procedures are to be reviewed with the subcontractor by the Turner Superintendent and/or Safety Manager. In some cases two or more fire watches may be required.
- d) Smoke exhaust equipment (smoke eaters) shall be provided by the subcontractor in occupied buildings or where otherwise required. The exhaust duct should be coordinated through Turner.
- e) The disconnecting or disengaging of fire zones or smoke sectors/detectors shall be coordinated with the building owner or manager.
- f) Subcontractors installing tarps that may be exposed to sparks are required to use fire retardant material.

Hand and Power Tools

I. Policy Statement

All Turner Employees and Subcontractors working on a Turner project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart I – Tools – Hand and Power, in addition to the following guidelines.

II. Procedures

1. General Requirements

- a) All hand and power tools and similar equipment, whether furnished by the employer or the employee, shall be maintained in a safe condition, per the manufacturer's guidelines.
- b) If the tool is designed to accommodate a guard or handle bar, the guard or handle bar and must be in place while the tool is being used.
- c) Additional personal protective equipment (PPE), such as a face shield, goggles and/or hearing protection, may be required while operating a tool.
- d) Typical box-cutters and utility-knife type cutters are not allowed on Turner projects. Cutters and knives must have automatic self-closing blade-guards, or, blades that retract into the handle when the blade loses contact with the cutting surface.

2. Electric Powered Tools

- a) All power tools must be double insulated or provided with a three wire, grounded connection.
- b) All cords are to be inspected prior to their use. Cords having the outer jacket damaged shall be removed from service or must be replaced or repaired per the manufacturer's instructions.
- c) Only a qualified electrician may replace a cord and/or cord end.
- d) All hammer-drills and rotary hammers must have integrated technology, such as a "safety clutch," that will stop drill-bit rotation should the bit bind up in the hole. An example of this is Hilti's Anti-torque control (ATC) technology.

3. Pneumatic Power Tools

- a) Each connection on a pneumatic tool and air hose must be secured with a "whip-check" or similar device.
- b) All air hoses, with an inside diameter exceeding ½ inch, must have a flow reduction device at the supply source to reduce pressure in case of hose failure.
- c) Compressed air must not be used for cleaning unless the pressure is reduced to less than 30 p.s.i. and appropriate guarding and PPE are in place.

- d) The 30 p.s.i. requirement does not apply to “blowing down” concrete decks or forms; however a spring loaded “dead man” control must be attached to the blowpipe.

4. Fuel Powered Tools

- a) Fuel powered tools must be stopped and turned off while being refueled, serviced or maintained.
- b) Combustion powered tools/equipment must not be utilized inside structures unless an evaluation has been conducted to ensure fumes will not affect personnel. The subcontractor who is utilizing the equipment is responsible to test and monitor the indoor air quality. Scrubbers and/or mufflers may be required as dictated by the testing.

5. Powder-Actuated Tools

- a) The manufacturer, or their representative, must train employees in the safe use of powder-actuated tools.
- b) The tool must be tested each day, according to manufacturer’s recommendations, before loading to see that safety devices are in proper working condition.
- c) Tools must not be loaded until just prior to the intended firing time.
- d) Loaded tools must not be left unattended.
- e) All tools must be used with the correct shield, guard or attachment recommended by the manufacturer.
- f) No lead based cartridges are to be used.
- g) Cartridges are to be safeguarded at all times.

6. Abrasive Wheels and Tools

- a) The RPM rating on all grinding machine motors must not exceed the speed rating of the grinding wheel attachment.
- b) All abrasive wheels must be closely inspected by the competent person and ring tested before mounting to ensure they are free from cracks or defects.

7. Woodworking Tools

- a) All fixed, power driven woodworking tools must be equipped with a disconnect switch that can be locked out in the off position.
- b) All portable, power driven circular saws must be equipped with guards above and below the base plate or shoe.
- c) When the tool is withdrawn from the wood, the lower guard must automatically and instantly return to the covering position.

LockOut / TagOut Procedure

I. Policy Statement

The intent and purpose of this procedure is to limit and / or eliminate the danger of the unexpected release of stored or residual energy that could cause injury or death to the employee or to the general public. Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart K, Section 1926.417, "Locking and Tagging of Circuits", in addition to the following.

II. Procedures

1. LockOut/TagOut (LOTO) will not be considered for use until all other avenues of attaining a "zero-energy state" have been exhausted.
2. All subcontractors working with electrical systems are required to have a written LockOut / TagOut Procedure. A **Competent Person** shall be responsible to control all aspects of the LockOut / TagOut (LOTO) procedure. They will ensure coordination with the appropriate tradesmen.
3. If a system can be locked out through design or by other means, this will be the preferred method.
4. The lockout device shall be substantial enough to prevent removal.
5. The lock shall be a separately keyed lock for use only with the lockout system.
6. The lockout device must be tagged with the name of the employee and their company. There shall be one lock for each employee (including Turner) exposed to the system.
7. If working in a multi-shift environment, each employee shall remove their respective locks at the end of their shift, with Turner being the last lock removed.
8. Employees shall not leave their lock on past the end of their shift. The use of 100% LOTO must be maintained until the completion of the task. **Verification by all competent persons in charge of the LOTO shall be completed prior to re-energizing the system.**
9. If the energy isolation device cannot be locked out and a tag must be used, authorization from the Business Unit Environmental, Health, and Safety Director (BUEHSD) is required prior to start of work.
10. Tag out devices, including their means of attachment, shall be substantial enough to prevent accidental removal.
11. The tag shall warn against energizing the tagged out system such as: Do Not Start, Do Not Open, Do Not Close, Do Not Energize, Do Not Operate, etc.

12. The name of each employee shall be displayed on the tag.
13. The competent person shall be responsible for untagging and activating the system after all exposed employees have removed their tags.

III. Training and Documentation

1. Each employee affected by the LOTO procedure shall be trained in the procedure. Records of training will be kept on site and be made available to Turner Construction upon request.
2. Each employer utilizing LOTO must establish a program and utilize procedures for affixing appropriate lockout or tagout devices to energy isolating devices, and to otherwise disable machines, piping or equipment to prevent unexpected release of stored or residual energy in order to prevent injury to employees.
3. Each employee shall be trained in the identification of the lockout / tagout device.
4. A log shall be maintained on site that identifies the following:
 - Date of usage,
 - Number of locks and tags used,
 - Contractors involved,
 - Time of LOTO initiation,
 - Time of LOTO removal,
 - Designated competent persons.
5. In the event a lock is left on the lockout device and all of the subcontractors have verified with Turner that the lock should be removed and the system is safe to energize, a Turner Senior Manager must be notified. After consultation between the BUEHSD and the Turner Senior Manager, the subcontractor owning the lock may remove it.
6. This process must be **DOCUMENTED** to show you have followed all the steps to keep the workforce safe and have used “all reasonable means” to contact the employee who was responsible for the lock.
7. In the event an employee is discovered tampering with or violating the LOTO procedure, the employee will be removed from the project.

A comprehensive sample Lockout / Tagout Safety Program is available in Appendix E of this manual.

Material Handling and Rigging

I. Policy Statement

Material handling and rigging incidents account for a large number of workers compensation claims annually. Each contractor working on a Turner project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart H – Materials Handling, Storage, Use and Disposal, in addition to the following guidelines.

II. Procedures

1. General Material Storage

- a) Aisles and passageways must be kept clear at all times for the safe movement of material handling equipment and employees. Storage areas must be kept free of accumulating materials that contribute to hazards of tripping, fire & pest harborage.
- b) Do not store material within 6' of any hoist way or interior floor opening.
- c) Do not store material within 10' of an exterior wall which does not extend above the material.
- d) Subcontractors must ensure each employee is trained in proper lifting techniques. Employees shall not lift more than 50 pounds per person. Mechanical means should be used as much as possible.

2. Rigging

a) General Requirements

- A maximum of (3) three members (only beams and similar structural members) may be hoisted per lift. Materials other than structural steel members may not be multiple lift rigged and lifted.
- Ensure the weight of the load and approximate center of gravity has been obtained.
- Rig the load in a manner to ensure balance and stability during lifting activities
- Individuals who rig loads must be qualified by their employer. An employer may not permit an individual to rig loads to be lifted by a crane unless the individual has received training and also has the experience appropriate to their level of work. All riggers must be documented as a qualified person.
- A competent rigging supervisor must be onsite and engaged in all critical lifts.
- Subcontractors must provide and maintain a current list of all qualified riggers to the Turner Project Staff.
- A qualified rigger must inspect all rigging to be used prior to each use. Routes for suspended loads must be pre-planned to ensure that no employee is required to work directly below a load, unless they are engaged in the connection of the steel.

- Inspections must also be conducted during use and where additional service conditions warrant.
- Defective or damaged slings must be removed from service immediately. Follow manufacturer's removal criteria.
- Taglines shall be utilized to control the load to minimize worker exposure to swinging loads.
- Review proper rigging requirements when lifting palletized materials.
- Slings in contact with sharp edges or corners should be protected with softeners or materials designed to prevent damage to the sling

b) Lifting Chains

- Alloy steel lifting chains must have a permanently affixed, durable identification tag stating size, grade, rated capacity and sling manufacturer. Only Grade 8 or better is permitted.
- Job made shop hooks or links, makeshift fasteners formed from rebar or bolts or other such attachments are not allowed on Turner projects.
- Lifting chain inspection criteria is based upon the frequency of use, the severity of the service conditions, the nature of the lifts being made and the experience gained on the service life of slings used in similar circumstances. Such inspections shall in no event be at intervals greater than once every 12 months. A written record must be provided to Turner upon request.
- Lifting chains must be visually inspected, prior to each use.

c) Wire Rope Slings

- The manufacturer's safe working loads must be followed at all times. Wire rope slings shall be removed from service if missing sling identification.
- Wire rope must not be used if, in any length of eight diameters, the total number of visible broken wires exceeds 10% of the total number of wires. Follow manufacturer's removal criteria.
- Wire rope must not be used if it shows signs of excessive wear, corrosion or defects.
- Slings must not be shortened with knots, bolts or other makeshift devices.
- Slings must be protected from sharp edges with padding, softeners or similar devices.
- Shock loading of a sling is prohibited and slings must not be pulled from under a load when the load is resting on the sling.

d) Synthetic Slings

- Each synthetic sling must be identified with the name of the manufacturer, rated capacities and type of material.
- Synthetic slings must be immediately removed from service if any of the following conditions are present; acid or caustic burns, melting or charring of any of the sling surface, snag, puncture, tear or cut, broken or worn stitches or distorted fittings. Follow manufacturer's removal criteria.

e) Shackles & Eye bolts

- Attachments, including, but not limited to hooks, rings, shackles, oblong links, pear-shaped links or other welded or mechanical links, must have a rated capacity sufficient for the lift.
 - Eyebolts not shouldered to the load shall only be used for in-line loads.
 - If the shackle is side loaded the rated load should be reduced according to the recommendations from the manufacturer. Each shackle body shall show the name or trademark of the manufacturer rated load and size.
- f) Chainfalls / Manual Chain Hoist: Inspected before each use. The hoist chain shall not be wrapped around the load. The load shall be attached to the load hook by suitable means. The load shall not be applied to the point of the hook.
- g) Winches: Attachments and anchorages for the winch base shall be capable of withstanding the loads imposed by the hoist during operating conditions.

Motor Vehicles, Mechanized Equipment and Marine Operations

I. Policy Statement

Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart O – Motor Vehicles, Mechanized Equipment, and Marine Operations. In addition, the Turner specific requirements as it relates to trucks driven onto Turner projects, the method used to load and unload equipment and materials from trucks on Turner projects and the preplanning needed to establish controlled access zones around trucks to protect workers and the general public, and the use of spotters, must be followed.

II. General Procedures

1. All operations requiring the use of heavy equipment will require a pre-planning meeting to coordinate and prevent injuries to workers and the public
2. All subcontractors delivering material and equipment to projects will be required to complete a risk assessment and pre task plan that must be performed prior to any loading/unloading activities to establish safe work procedures for working around trucks and to protect workers and the general public. This includes:
 - a) The subcontractor ensuring a risk assessment and preplan is conducted
 - b) The risk assessment completed prior to any work being conducted on the site with Turner safety or superintendent, and if high risk activities are identified, then no work should be completed until measures are taken to reduce or eliminate the risk.
 - c) All personnel involved with a loading or unloading operation should assess the potential hazards before the operation begins. A clear understanding of the procedures and communication between workers must be established.
 - d) Each project shall maintain a current site logistics plan clearly identifying controlled access or restricted access zones for truck loading and unloading, required traffic controls, and best practices for unloading or loading materials. Logistics plans must be updated regularly to reflect evolving conditions. Controlled access zones or restricted access zones must be flagged / barricaded on site and kept clean and clear of non-essential materials and personnel.

The pre task plan should include, but is not limited to:

- Accessing the site
- Parking trucks safely; chock wheels and fully engage the parking brake during loading and unloading
- Lighting is adequate for the work
- Unloading procedures are clear and defined
- The right equipment is chosen for the job
- Damage reporting procedures are available for reporting incidents and near misses.
- How the driver will be briefed on loading/unloading procedures and understand their responsibilities
- Overhead power lines

3. All motor vehicles and material handling equipment, with an obstructed view to the rear, must have a reverse signal alarm audible above the surrounding noise.
4. Machinery with rubber tires that are capable of driving down a low speed road (<30 mph) must be equipped with an orange triangle on the back or a vehicle with their blinkers on.
5. A "spotter", wearing an ANSI approved high visibility traffic vest, may be used in lieu of an alarm, but only if such devices are not routinely supplied on such a vehicle. Vehicle must never back "blind" on a Turner project.
6. Drivers should visually inspect the area around the truck before moving it to assure all workers are clear prior to moving the truck.
 - a) The spotter must be used when backing any vehicle
 - b) When reversing, the vehicle must be equipped with a functioning audible alarm.
7. Forklift operator training records must be submitted to Turner prior to site use. The forks cannot be used for free rigging (straps or slings over forks). Forklifts with a hook or a winch attached are considered "cranes" per the crane standard.
8. A seatbelt must be provided and used when operating equipment on a Turner project.
9. All windows must be in full working condition. Any equipment with broken glass of any size, including mirrors will be taken out of service.
10. Each employee working near or crossing a site where equipment is in use must wear High Visibility Clothing.
11. Equipment without a rollover protective structure (ROPS) or seatbelt is not allowed on any Turner project.
12. The use cell phones (talking/texting) shall not be used while operating machinery/equipment or vehicles.
13. No one may work within 20' of motorized equipment like an excavator, backhoe, loader etc. unless that persons presence is fundamental to the operation underway and the operator can observe the person at all times.
14. All vehicles in use shall be checked at the beginning of each shift to assure that the following parts, equipment, and accessories are in safe operating condition and free of apparent damage that could cause failure while in use: service brakes, including trailer brake connections; parking system (hand brake); emergency stopping system (brakes); tires; horn; steering mechanism; coupling devices; seat belts; operating controls; and safety devices. All defects shall be corrected before the vehicle is placed in service. These requirements also apply to equipment such as lights, reflectors, windshield wipers, defrosters, fire extinguishers, etc., where such equipment is necessary.

15. Cannot operate a machine/equipment within 20 feet of any overhead energized line, unless specifically outlined in the JHA/PTP and reviewed by the Turner Project Superintendent & Project Safety Manager if assigned.
16. Whenever visibility conditions warrant additional light, all vehicles, or combinations of vehicles, in use shall be equipped with at least two headlights and two taillights in operable condition.

III. Site Clearing

1. Workers engaged in site clearing shall be protected from hazards irritant and toxic plants (poison ivy, sumac, etc.)
2. Each worker is to be instructed in the first aid treatment available onsite in regards to irritant and toxic plants.
3. All equipment shall be equipped with roll over protection and shall have overhead protection.
4. The overhead protection on the canopy structure shall not be less than 1/8" steel plate or 1/4" woven mesh with no openings greater than 1" or equivalent.

IV. Pile Driving

1. Overhead protection shall not obscure the vision of the operator. The protection shall be equivalent to 2" planking or other solid material of equivalent strength.
2. Stop blocks shall be provided for the leads to prevent the hammer from being raised against the head block.
3. A blocking device, capable of supporting the weight of the hammer, shall be provided for placement in the leads under the hammer at all times when workers are working under the hammer.
4. Guards shall be provided across the top of the head block to prevent the cable from jumping out of the sheaves.
5. When leads must be inclined in the driving of batter piles, provisions shall be made to stabilize the leads.
6. Safety chains or equivalent shall be provided for each hose connection to prevent the line from thrashing around in case the coupling becomes disconnected.
7. Engineers and winchmen shall accept signals only from the designated signal person.
8. All workers shall be kept clear when piling is being hoisted into the leads.
9. When piles are being driven in an excavated pit, the walls of the pit shall be sloped to the angle of repose (type C soil) or sheet piled and braced.

10. An Anti-two block device is not required when using leads in pile driving.

Industrial Vehicles

I. Introduction

The Company has determined that certain powered industrial vehicles are utilized at its projects and has developed this policy to establish the procedures that must be followed for the use of such vehicles at the Company's projects.

II. Purpose

Provide for proper equipment selection, inspection and operation of certain powered industrial vehicles, including but not limited to All Terrain Vehicles (ATV) or Quads, Three Wheeler, Four Wheeler, Gators, Mules, and all other similar vehicles. Only vehicles that have previously been approved by the Operations Manager and BU Environmental, Health, and Safety Director for use at its projects may be utilized at the Company projects and must be in compliance with the policy. This policy also applies to vehicles owned and operated by Subcontractors and Subcontractor employees.

III. Insurance

All vehicles covered under this policy are to be scheduled to Turner's property plant and equipment (contractor's) policy. It is the responsibility of the jobsite project manager & accountants to properly report all equipment under this policy.

IV. Prohibited Vehicles

1. All vehicles with the following features (in combination) are prohibited from all Turner projects:

- 1) Typically carry one rider;
- 2) Have no rollover protection or seat belts; and
- 3) Have a handlebar similar to a motorcycle for navigation

These vehicles may be commonly referred to as All-Terrain Vehicles (ATV), Quads, Three Wheelers, or Four Wheelers (or other similar equipment). This prohibition includes vehicles owned by subcontractors as well.

2. All personal (owned by an individual) All-Terrain Vehicles (ATV's), Quads, Three Wheelers, Four Wheelers, Mules, Gators, or other similar equipment are prohibited on all Turner Projects.

V. Regulatory References

OSHA 29 CFR 1910.178, Powered Industrial Trucks, as applicable.

VI. Procedures

1. All powered industrial vehicles must be equipped as follows:

- a. Each vehicle must have a legible nameplates and markings that indicate its load limits;

- b. Any modifications and additions, which affect capacity and safe operation, must not be performed without manufacturer's prior written approval. Where modifications and additions are made, the capacity, operation, and maintenance instruction plates, tags or decals must be marked accordingly.
2. Where liquid fuels, such as gasoline, diesel fuel or LPG, are used for powered industrial vehicles the following precautions must be followed:
 - a. Appropriate handling and storage safeguards followed;
 - b. Fuel tanks must not be filled while the engine is running;
 - c. Spillage from refilling fuel tanks must be avoided;
 - d. Spillage or oil or fuel must be carefully washed away or completely evaporated and the fuel tank cap replaced before restarting engine;
 - e. No vehicle may be operated with a leak in the fuel system until the leak has been corrected;
 - f. No smoking or open flame while refueling; and
 - g. Appropriate PPE must be worn while refueling.
 - h. Refer to Section IV of the Carbon Monoxide Exposure Prevention program for information regarding requirements for use of equipment with internal combustion engines.
3. Where electric powered industrial vehicles are used, the following precautions must be followed:
 - a. Battery charging installations must be located in areas designated for that purpose;
 - b. Facilities must be provided for flushing and neutralizing spilled electrolyte;
 - c. Facilities must be provided for fire protection;
 - d. Facilities must be provided for protecting charging apparatus from damage by trucks;
 - e. Facilities must be provided for adequate ventilation for dispersal of fumes from gassing batteries;
 - f. Material handling equipment must be provided for handling batteries;
 - g. Reinstalled batteries must be properly positioned and secured in all electric powered trucks;
 - h. A carboy tilter or siphon must be provided for handling electrolyte;
 - i. When batteries are charged, acid must be poured into water and water is not poured into acid;
 - j. Appropriate PPE must be worn when adding acid;

- k. Vehicles must be properly positioned with the brakes applied before their batteries are changed or charged;
 - l. When batteries are charging, their vent caps must be clear and functioning and the battery (or compartment) cover(s) must be left open to dissipate heat; and
 - m. Precautions must be taken to prevent smoking and other sources of ignition out of the charging area.
4. Adequate lighting must be provided for all powered industrial vehicle operations.
 5. Carbon monoxide concentrations as a result of powered industrial vehicle operations must not exceed the Permissible Exposure Limit of 50 ppm.
 6. Powered industrial vehicle drivers must follow appropriate safe operating practices as contained in the manufacturer's manual. Non-authorized associates must never operate powered industrial trucks.
 7. Powered industrial trucks must be inspected and repaired as follows:
 - a. Drivers must conduct pre-operation and post-operation safety inspections at least at the start of each shift on which the vehicle is used;
 - b. Any power-operated industrial vehicle not in safe operating condition must be removed from service;
 - c. All repairs must be made by authorized personnel;
 - d. Repairs must be made only in a location designated for such repairs;
 - e. Vehicles in need of repairs to the electrical system must have the battery disconnected prior to such repairs;
 - f. All replacement parts used on industrial vehicles must be equivalent to the safety features as used in the original design;
 - g. Industrial vehicles must not be altered so that they have different configurations, extra parts or additional counterweighting, unless approved by the vehicle manufacturer;
 - h. Any vehicle that emits hazardous sparks or flames from the exhaust system must be immediately removed from service, and not returned to service until the cause for the emission of such sparks, and flames has been eliminated;
 - i. When the temperature of any part of any vehicle is found to be in excess of its normal operating temperature, thus creating a hazardous condition, the vehicle must be removed from service and not returned to service until the cause for such overheating has been eliminated; and
 - j. Industrial vehicles must be kept in a clean condition, free of lint, excess oil and grease.

VII. Training

1. All authorized drivers must complete training as follows:
 - a. Manufacturer requirements (as coordinated through the dealership of the equipment) for the safe operation of the vehicle including use of personal protective equipment, authorized surfaces for operation of the vehicle, weight restrictions, and other operational conditions.
 - b. OSHA 29 CFR 1910.178 Powered Industrial Trucks.
 - c. This training shall be written formally into the Project Specific Safety Plan by the project team, approved by the BU Environmental, Health, and Safety Director.
 - d. A documented sign-off for the authorized driver must be a part of the training manual provided with the training.
2. All non-authorized associates who work in areas where powered industrial vehicles are in operation will be instructed to never operate any powered industrial vehicle, and will be instructed in work practices for pedestrians working in those areas.
3. Retraining must be repeated at least every three years and as necessary to maintain the required driver skills and when:
 - a. The operator has been observed to operate the vehicle in an unsafe manner;
 - b. The operator has been involved in an accident or near-miss incident;
 - c. The operator has received an evaluation that reveals that the operator is not operating the vehicle safely;
 - d. The operator is assigned to drive a different type of vehicle; or
 - e. A condition in the workplace changes in a manner that could affect safe operation of the vehicle.

Unmanned Aircraft Systems/Drones Policy

I. Policy Statement

In our ongoing efforts as the leader in construction safety, Turner has adopted the following policy to ensure that Unmanned Aircraft Systems (UAS)/Drones are operated in a manner that meets or exceeds all known federal, state & local municipality, Drone Safety Council, Unmanned Safety Institute, FAA & DOT standards & regulations (as of the 3/4/2015 version these are being proposed by congress). The most restrictive guidelines take precedence over our limits. Operator must strictly adhere to all manufacturer operational requirements. Modifications can only be made according to the manufacturer instructions and approvals. The operator, by federal guidelines, cannot operate a drone for hire without meeting at a minimum FAA regulation Title 14 part 107, and must provide Turner with this documentation.

It is our policy that all drones utilized in Turner Construction must be from a third party, licensed/approved by the FAA to operate in a commercial setting and insured per Turner Limits. TURNER CONSTRUCTION EMPLOYEES WILL NOT OPERATE DRONES. Also, ONLY ONE DRONE CAN BE FLOWN ON A PROJECT AT ANY GIVEN TIME.

A coordination meeting must be held to discuss/plan out use of a drone. Discussions must include other drones that might be in the same area being operated by other entities, FAA rules governing use of the drone under this particular scenario, city or state requirements, privacy issues, insurance requirements, flight plans, safety issues and mitigation plan, operating times, date the drone will be in use, protection of the public and workers, neighborhood concerns, type of drone being used, and overall compliance with this policy's rules and regulations. Meeting minutes and a flight plan will be published. A call will be held with Risk Management to review the plan prior to moving forward. All data obtained during the drone flight should be downloaded securely and not erased or duplicated without written approval.

UAS's/Drones can be hazardous if operated incorrectly and irresponsibly or without following specific safety guidelines and are operated by the young or inexperienced.

II. Procedures

1. A pre-flight Job Hazard Analysis must be developed by the operator at least 7 days prior to flight. The Job Hazard Analysis meeting and job walk must be held with the operator prior to actual operation. Look for sources that may cause RF interference (radio towers, transmitters, etc.). If it's reasonable to anticipate that these sources may cause RF interference, then they must be de-energized during the flight, or no flight may take place.

2. The pilot of the UAS/Drone must do a test flight in a clear area to show they have control of the drone. This must include a roll, yaw, back and forth, and a figure 8. If the pilot cannot maintain control they cannot not be allowed to operate on site.
3. Only UAS's/Drones powered by battery are permitted. Fuel operated UAS's/Drones are prohibited.
4. UAS's/Drones can only be operated when visual line of sight is maintained throughout the flight. The use of monitoring, corrective lenses like binoculars, and first person view goggles cannot be used by the operator as they are prohibited by the FAA.
5. UAS's/Drones must be operated between sunrise and sunset. No operating in the dark is permitted. Each drone has temperature requirements for flight. Most require at 104 degrees Fahrenheit and 0 degrees Fahrenheit the drones cannot be flown. The manufacturer paperwork detailing these requirements must be submitted to Turner and reviewed at the preplan meeting. All manufacturer recommendations must be followed.
6. UAS's/Drones cannot be flown over 400 foot altitude.
7. **UAS's/Drones will be operated during off hours such as weekends when the pedestrians, employees, vehicles, etc. are absent or minimal. It is NEVER permitted to operate a UAS/Drone over any person. Area below the flight path MUST be completely free of people.**
8. Maintain at least 100 feet between the UAS/Drone and people, vehicles, roadways (unless closed), buildings and electrical lines and power stations. This helps protect these in the event of an unplanned landing. In some areas, such as with a tower crane, 100 feet vertical clearance is not feasible to comply with keeping the drone under a 400 foot altitude. In these areas maintain 100 feet horizontally from the structure and a minimum of 30 feet vertically.
9. During set up and testing of the drone double check the measurement to the top of the highest point of adjacent buildings, cranes, etc. and verify the height. Measure to the top of crane first so flight heights and distances can be evaluated and maintained.
10. AS's/Drones shall not be flown over areas occupied by employees, subs or pedestrians. Areas where UAS/Drone are to be operated must be closed off with an exclusion zone large enough to anticipate where a UAS could drift/drop, accounting for elevation, wind and other factors.
11. Automobiles and other moveable pieces of property shall be removed from the flight area prior to launch when feasible. Exclusion zones shall include visible barriers and warning signs. Area monitors shall be assigned to keep people out of the exclusion zone. Take steps to protect non-moveable property and equipment where feasible.
12. Do not operate a UAS/Drone within 5 miles of an airport or where manned aircraft are operated (hospital helipad).

13. UAS's/Drones shall not be permitted to be operated when winds exceed the 10 miles per hour.
14. UAS's/Drones shall not be permitted to be operated when lightning is detected within 10 miles. The only acceptable UAS's/Drones to be operated on a Turner Construction project are those with:
 - a) GPS, Radio Controlled (RC) transmitter and low battery fail safe are absolutely required. These must return the unit to its launching point if the GPS or RC Transmitter fail or the battery reaches 30% charge.
15. The operator must be at least 21 years of age and have obtained an UAS/Drone safe operator certificate. *(Presently the Unmanned Safety Institute has aeronautical and operator certification programs.)*
16. Only UAS's/Drones that are less than or equal to 10 pounds can be operated on a Turner Construction project.
17. Immediately prior to launch, the operator must verify with a Turner Construction representative that the remaining battery charger is greater than 95%.

III. Roles and Responsibilities

1. Permission to utilize UAS's/Drones by a third party on a Turner Construction project must be granted by the VP of Safety and National Legal Counsel.
2. The entire Turner Construction project staff must complete a course of UAS/Drone safety overview.
3. At least 48 hours prior to UAS/Drone use, Turner will notify *in writing* the property owner, architects/engineers and any other stakeholders of the intended plan for UAS/Drone use and safety precautions to be taken. Stakeholders may include residents in neighboring buildings that may have privacy concerns of a camera-mounted on a UAS/Drone.
4. Within 24 hours prior to flying a UAS, Turner will hold an all-hands safety meeting to discuss the operation with everyone on site. Discuss timing and location of UAS/Drone use, safety measures and precautions.
5. The operator must meet at a minimum FAA regulation Title 14 part 107, meet the qualifications from an accredited, experienced training organizations/agency, and have operated in a commercial capacity for at least 1 year. FAA regulations require that all commercial drone operators have a commercial pilot license. There is no exception to this and documentation must be submitted to Turner.
6. Appropriate type and limits of insurance must be obtained and approved by Susan Hughes.
7. Any incidents using drones that the operator has been involved in must be reported.

IV. Employee Safety

Superintendent/Safety Manager:

1. Hazards at the site are mitigated:
 - a. Wires/cables/utility lines/cranes identified and flagged or identified on flight plan
 - b. Worker areas identified and flight plan adjusted to stay away from workers or workers reassigned to another area
 - c. If you have information that would be helpful to the drone operator please share that information. They will be coming into your project and it is up to you to control safety in the area.
 - d. Turner safety program for drones shared with the operator/company who operates the drone.
 - e. Turner visitor agreements signed by operator and orientation held.
 - f. Turner safety program reiterated to the operator, all PPE to be worn discussed, work rules discussed and signed off on.
 - g. Property in the vicinity that might be impacted is identified and communicated to the drone operator
 - h. Buffer zones established between aircraft and personnel;
 - i. Investigate potential alternative landing sites away from workers in case take-off/landing site is obstructed or compromised.
2. Weather considerations at the project must be taken into consideration: Project staff must verify:
 - i. Temperature
 - ii. Visibility
 - iii. Precipitation
 - iv. Wind Speed
3. Notify any workers or nearby property owners of your intentions (permission) – Superintendent... but what is the communication plan
4. Discuss flight plan with subcontractors at superintendent meeting and workers the day of the flight
5. Emergency plan:
 - a. Crisis management plan in place
 - b. First aid kit ready

- c. Communication plan in place

6. Workers

- a. Situational Awareness:
 - At all times stay a minimum of 100' away from any unmanned aircraft (drone)
 - Act professionally when a drone is flying around. You are a representative of your company and your actions will be captured on the drone
 - Know at all times the location of the drone if you are in close proximity to the flight path.
- b. If at any time you feel that continuing to work is unsafe contact your superintendent and you will be reassigned to another area.
- c. If a drone lands in or around your work area contact the superintendent who will notify the operator as to the location. Please note that at no time will the drone be out of site of the operator.
- d. If a drone is flying on your project during your shift, identify safety measures on your pre task plan and discuss at your daily huddle
- e. Assure you understand emergency procedures and what to do if an emergency arises. Listen for signals (pre identified) and act according to the safety plan discussed in your daily huddle.
- f. Assure you have been debriefed by your superintendent and foreman of drone activity, the flight plan, times of flight, path of travel, and how it will affect your work area and activities.
- g. If you have information that would be helpful to the drone operator please share that information. They will be coming into your work area and it is up to you to control safety in the area.

Drone Use Approval Request Form

Business Unit:

Project name:

Date:

Requested by:

1. What is the duration of the project?
2. Where is the project located? (List any adjacent structures and their use, FAA flight path areas in close proximity to the project, location of the nearest airport, location of the nearest helipad and a general overview of the neighborhood) Provide a Google Map overhead map view of the project and surrounding structures.
3. What is the reason your project wants to utilize a drone?
4. Is there any other way to achieve the desired results without using a drone?
5. What is the purpose and scope of the request?
6. How often will the drone fly? And what is the frequency of each flight?
7. How long will this drone use activity continue? (Also provide dates from start to finish)
8. What will they be capturing?
9. Have the local rules, guidelines, and laws been researched and if so what are their restrictions?
10. What company (from the approved vendor list) will be employed?
11. What is the project plan for controlling and eliminating the risk (including privacy concerns)?

GM APPROVAL

Maria Vallelunga
Claims Manager

Stephen Spaulding II
Senior EH&S Director

Susan Hughes
Insurance Manager

Drone Vendor – Drone Specific Prequalification Questionnaire

Legal Name of Company: _____

Year Company Started: _____

Address: _____

Additional Address: _____

City _____ State _____ Zip _____

Person filling out this Questionnaire:

Name: _____

Title: _____

Email Address: _____

Work Phone: _____

Cell Phone: _____

Please respond completely to the questions below (attach supporting documentation if requested or to support your response):

1. Are all operators at least 21 years of age and have obtained an UAS/Drone safe operator certificate. *(Presently the Unmanned Safety Institute has aeronautical and operator certification programs.)?*
2. Do all operators meet the qualifications from an experienced training organizations/agency? *Note: All commercial drone operators must meet at a minimum FAA regulation Title 14 part 107, have a valid and current commercial pilot license, and have operated in a commercial capacity for at least one year with a minimum of 100 hours of flight time. There is no exception to this and documentation must be submitted to Turner.*

3. Please provide copies of insurance certificates that show the Turner required limits have been obtained:

Drone/UAV Liability:

- a. **Minimum Required Limits:** \$5,000,000 General Aggregate \$5,000,000 Each Occurrence for Bodily Injury/Property Damage
- b. **Required Terms and Conditions:** Turner Construction Company will be included as an additional insured.

4. Have you flown on a large construction site before? (Provide a list of projects, dates, and scope of work)
 - a. What challenges did you have?
 - b. How did you overcome them?
5. What companies have you worked with in the past? (Provide any references)
 - a. What is your largest project to date?
6. What equipment do you own?
7. What equipment do you expect to use on this project and why?
 - a. Please supply the last year of maintenance records.
 - b. Has this drone ever been involved in an accident or incident? If so, please explain the circumstances and what did you change about your safety program to assure it does not happen again.
8. Has your company ever been cited or fined for a violation associated with drone use? Y/N – if so please list circumstances, fine and outcome.
9. Do you have a site checklist you follow before each flight?
10. What software does your company utilize and how familiar are the pilots with the software? (PIX4D, Drone Deploy, other.)
11. Provide information to verify and assure Turner that the control connection between the pilot and the drone are done over a secure link to ensure someone else cannot take control of the drone
12. Provide information to verify and assure Turner that the link that streams video and/or still photos is done over a secure link?
13. Where are the video and still photos going to be stored?
 - a. Is it secure?
 - b. Who has access?
 - c. Does Turner own the data?
14. Submit a copy of your safety manual. As a minimum it must include:
 - a. Federal regulations pertaining to worker safety
 - b. Identification of pilot duties and responsibilities for planning, public protection, safety operation and maintenance of the UAS
 - c. Requirements for the PIC, visual observer and crewmember (including pilot) qualifications, certifications, and training
 - d. Processes and tasks that should be completed before, during and after UAS operations
 - e. Pilot responsibilities for inspection, maintenance and safe uses. Also what requirements are in place for pilot to review manufacturers operation, safety, and maintenance manual?
 - f. General public and worker protection methods during UAS operations

- g. Privacy considerations and guidelines
- h. Flight path considerations
- i. Prohibitions that address non – business use of the UAS
- j. Other requirements that affect the safe use of the USA, such as the physical and mental conditions of the pilot
- k. Substance abuse testing program and when pilots and crewmembers are tested
- l. Expectations for conducting a preplanning and risk assessment meeting to review the risks and mitigation methods needed for safe use of the USA.
 - 1. Note: Preplanning should include at a minimum:
 - a. Responsibilities of the pilot and observers
 - b. Pilot and observer qualifications
 - c. UAS equipment specifications, software, and operating limitations
 - d. UAS preflight inspection and maintenance requirements
 - e. Clearance requirements for safety and privacy protection
 - f. Potential hazards to personnel involved in the UAS activities
 - g. Boundaries of the work zone and how to keep workers and the public safe and out of the work area
 - h. Training for workers who are not involved in the operations
 - i. Work area hazards such as power lines, other UAS, other aircraft, structures, or communication devices that could disrupt communication with the UAS flight path and if it necessitates the use of an observer (s) communication methods that will be used between the pilot and observer (s) and other backup methods when needed weather requirements, anticipated weather, and when to suspend operations
 - j. How to protect the public and surrounding structures from loss of control or power to the UAS.
 - k. Notification to all surrounding property owners
 - l. Emergency landing procedures and how to recover the UAS
 - m. Current federal, state, and local regulations on UAS use
 - n. Post flight review meeting to review UAS operation, lessons learned.

Scaffolds

I. Policy Statement

Each Contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart L – Scaffolds, in addition to the following guidelines.

II. Procedures

1. General Requirements

a) Capacity

- Scaffolds must be erected under the supervision of a competent person. The competent person shall be designated and submitted to Turner prior to the start of work.
- Scaffolds and their components must be able to support at least four times the maximum intended load.

b) Platform Construction

- Each working platform on a scaffold must be fully decked or planked. Planking must be sufficient to comply with any statutes or regulatory provisions in the applicable jurisdiction.
- Any gap in a working platform cannot exceed 1”.
- All planks or platforms must be cleated or overlap a minimum of 6”, but no more than 12”.
- Wooden scaffold planks must not be painted.
- Scaffold components from different manufacturers may be intermixed as **long as they fit together without force** and scaffold integrity is maintained.

c) Supported Scaffolds

- Supported scaffolds with a height to base width ratio exceeding 4:1 must be stabilized from tipping by a solid connection such as guy wires, bracing, tying or other equivalent means.
- When scaffolds are erected adjacent to structures, they must be secured to the structure every 26’ vertically and 30’ horizontally.
- Scaffold poles, legs, posts, frames and uprights must be placed on base plates, mudsills or other adequate firm foundations.

d) Suspension Scaffolds

- Each suspension rope, including connecting hardware, used on adjustable or non-adjustable suspension scaffolds shall be capable of supporting, without failure, at least 6 times the maximum intended load applied or transmitted to that rope with the scaffold operating at either the rated load of the hoist.
- Counterweights must be made of non-flowable material. Sand, gravel, water or similar material may not be used.
- Counterweights must be secured to the outrigger beams by mechanical means to prevent accidental displacement.

- Outrigger beams that are not bolted to the structure must be secured by tiebacks. The tiebacks must be attached to a structural member of the building. Standpipes, vents, conduit and other piping systems are not adequate structural members.
 - Tiebacks shall be equivalent in strength to the suspension ropes
 - Direct connections to roofs and floors, and counterweights used to balance adjustable suspension scaffolds, shall be capable of resisting at least 4 times the tipping moment imposed by the scaffold operating at the rated load of the hoist.
- e) Scaffold Access
- Cross bracing must never be used as a means of access.
 - Stair rail and handrail systems must be smooth surfaced so as to prevent lacerations or puncture wounds.
 - A competent person must evaluate safe means of access during erection and dismantlement of the scaffold. Proper access shall be provided to each worker that is working on/off a scaffold.
- f) Scaffold Use
- Scaffolds and scaffold components must never be loaded in excess of their maximum intended loads.
 - Scaffolds and scaffold components shall not be left loaded with material overnight, unless the materials are secured. Materials shall not be left on suspended scaffolds overnight unless the scaffold is grounded.
 - A competent person must inspect each scaffold before every shift and after any occurrence that may affect its structural integrity.
 - The competent person will “tag” the scaffold “in service” or “out of service” prior to employee use.
 - Scaffolds cannot be erected, moved, dismantled or altered except under the supervision of a competent person.
 - Snow, ice and other slippery conditions must be eliminated before employees are allowed access to a scaffold.
- g) Fall Prevention
- A Personal Fall Arrest System (PFAS) or guardrail system must be in place on all scaffolds exceeding 6’ in height. Mobile scaffolds require guardrails at 4 foot in height.
 - Each employee on a single-point or two-point suspension scaffold must be protected by a PFAS and guardrail system, except boatswains’ chair which requires PFAS.
 - The use of fall prevention devices are required during the erection or dismantling of a scaffold.
 - When vertical lifelines are used, they must be protected from surface abrasion.
 - When guardrails are used they must be 42”, + or – 3” in height. Mid-rails must be half the distance from the toprail height to the platform deck. Toe boards should be constructed from 2”x4” material or equivalent and must met existing state or client requirements.

- h) Falling Object Protection
 - The area below a working scaffold must be barricaded to protect employees from a falling object hazard.
- 2. Requirements for Specific Scaffold Types
 - a) Tube and Coupler Scaffolds
 - Tube and coupler scaffolds, in excess of 125', must be designed by a registered professional engineer (RPE).
 - b) Fabricated Frame Scaffolds
 - Frames and panels must be braced by cross, horizontal or diagonal braces.
 - Frames and panels must be joined together vertically by stacking pins or equivalent couplings.
 - Frame scaffolds, in excess of 125", must be designed by an RPE.
 - c) Pump Jack Scaffolds
 - Cannot be used on Turner projects unless approved by the BUEHSD.
 - d) Mobile Scaffolds
 - Mobile scaffolds must be braced by cross, horizontal or diagonal braces based on manufacture's requirements to prevent racking during movement.
 - Wheels must be locked when in use.
 - Workers are not permitted to be on scaffold when it is being moved.
 - Caster and wheel stems must be pinned to the scaffold legs or adjustment screws.
 - The height to base width ratio on a mobile scaffold cannot exceed 2:1 unless it is braced with outrigger frames.
 - Mobile Scaffolds require guardrails at 4 foot in height.
- 3. Scaffold Training Requirements
 - a) Each employee that works on a scaffold must be trained by a qualified person in the recognition and avoidance of hazards associated with the type of scaffold they will be required to work from.
 - b) Each employee that is involved in the erection, dismantling, moving, operating, repairing, maintaining or inspecting of a scaffold must be trained by a qualified person in the recognition and avoidance of hazards associated with these operations.

MEWP CHECKLIST

Name/Type of MEWP:				Contractor Name			
Model or Equip No.:				Contact Number			
Operator or Inspectors Name: (person performing the inspections)							
Date:		/	/	/	/	/	/
Shift:							
Is the operator trained to operate this MEWP and does the operator have a valid operator's license/card?		Y / N	Y / N	Y / N	Y / N	Y / N	Y / N
Inspection Item & Description Pass Fail Status		P/F	P/F	P/F	P/F	P/F	P/F
1	Operating and emergency controls are in proper working condition, EMO button or Emergency Stop Device						
2	Upper drive controls interlock mechanism is functional (i.e. foot pedal, spring lock, or two hand controls;)						
3	Emergency Lowering function operates properly						
4	Lower operating controls successfully override the upper controls						
5	Both upper and lower controls are adequately protected from inadvertent operation.						
6	Control panel is clean & all buttons/switches are clearly visible (no paint over spray, etc.)						
7	All switch & mechanical guards are in good condition and properly installed						

8	All Safety Indicator lights work							
9	Drive controls function properly & accurately labeled (up, down, right, left, forward, back)							
10	Motion alarms are functional							
11	Safety decals are in place and readable							
12	All guard rails are sound and in place, including basket chains							
13	Work platform & extension slides are clean, dry, & clear of debris							
14	Work platform extension slides in and out freely with safety locking pins in place to lock setting on models with extension platforms.							
15	Inspect for defects such as cracked welds ,fuel leaks, hydraulic leaks, damaged control cables or wire harness, etc.							
16	Tires and wheels are in good condition, with adequate air pressure if pneumatic							
17	Braking devices are operating properly							
18	The manufacturer's operations manual is stored on MEWP (in all languages of the operators)							

Aerial Lifts and Enhanced Safety Procedures for High-Lift Work

I. Purpose and Background

This policy directive is intended to mitigate risks related to elevated work. It reflects current evidence – and experience based safety enhancements for the use of lifts, and requires control guards for all lifts brought onto Turner sites, timely retro-fitting of lifts already on site to add control guards, and enhanced procedures for work at 30' or above in lifts.

The Policy directive addresses the following hazards and risks:

- A. Inadequate guards over controls which can lead to inadvertent operation of the lift
- B. Risk of crush injuries or entrapment in the ceiling
- C. Risk of accidental over-extension and lift tip-over
- D. Inability to rescue

The enhancements to our lift safety policy grew out of a collaboration between Turner and the industry's top scissor lift manufacturers (JLG, Skyjack, and Genie) and purveyors (United, Herc, and Sunbelt). They reflect our unwavering commitment to continuously evaluating and improving our safety program in order to provide the safest possible work environment for our people.

We know that no safety device can prevent an accident in all circumstances. But, with enhancements and modifications to lift controls, Turner is taking an important step to protect workers against known and preventable hazards.

II. The Policy

All scissor lifts and boom lifts shall have an approved shroud or guard over the joy stick/controls, or a timeout feature on the lift/lower and drive selector, which disables the lift/lower and drive functions after several seconds of inactivity. Moreover, boom lifts must be delivered with anti-crush or secondary-guard technology.

Note: Along with the scissor lift and boom lifts policy change, enhanced safety procedures for Mobile Elevated Work Platforms used in High Lift Situations have been developed and incorporated into the policy.

III. Implementing the Policy: Who is Responsible?

Procurement

All Bare Rental Agreements shall reflect Turner's updated policy regarding additional control guards for the safe use of scissor lifts, mobile elevated work platforms, and boom lifts.

Safety and Operations Leaders

Ensure that our people are aware of the policy and that they understand their responsibilities as outlined therein.

Site Safety and Field Staff

Conduct a thorough review of all active lifts to determine which must be retrofitted and work with subcontractors and rental companies to complete the necessary modifications as soon as possible. Verify that all lifts brought on site meet the safety requirements of the policy.

1. Mobile Elevated Work Platform (MEWP)

- a) All scissor lifts and boom lifts shall have an approved (see below) shroud or guard over the joy stick/controls, or a timeout feature on the lift/lower and drive selector, which disables the lift/lower and drive functions after several seconds of inactivity. Moreover, boom lifts must be delivered with anti-crush or secondary-guard technology.
- b) Any lift currently on a Turner project without an approved shroud or guard over the joy stick/controls must be retrofitted as quickly as possible but not later than the end of 2017.
- c) All Bare Rental Agreements shall reflect Turner's updated policy regarding additional control guards for the safe use of scissor lifts, mobile elevated work platforms, and boom lifts.
- d) Prior to mobilizing, all Mobile Elevated Work Platforms (MEWP) must be inspected to ensure compliance with Turner requirements. MEWP's (scissor lifts, aerial boom lifts, and knuckle booms) must have dual action controls to be approved for use.
- e) Dual action controls require that there be two separate actions to activate the lift. If a MEWP arrives on site and does not have dual action controls, then it must remain inoperable until a Dual action control is installed. The dual action control may consist of a button that must be depressed in order for the controls to operate, or a toggle switch that must be activated prior to operating the MEWP controls (The toggle switch must automatically return to the center when released).
- f) The contractor is required to complete a daily inspection sheet for all powered lift trucks and mobile elevated work platforms. The inspection includes operational and physical parameters for operation of the equipment being inspected. The inspection form must be posted in a visible location during operations and a copy made available to Turner upon request. An inspection form is available from Turner. Field modifications are not allowed on aerial lifts.
- g) Only authorized and trained individuals may operate aerial lifts.
- h) When a lift is delivered to the project, the rental company or the owner of the lift shall inspect the lift & provide documentation the lift is safe to operate onsite. The lift shall be free from any physical defects in new or like new condition with all the safety placards present. The operator's manual and inspection documentation shall be included.
- i) Employees must use personal fall arrest systems (PFAS) when working from boom platforms. **Employees shall follow the manufacturer's recommendations for the type of (PFAS) when working from an aerial lift.**
- j) At a minimum, employees shall follow the manufacturer's recommendations for **the type of fall arrest/restraint** when working from a scissors lift. If scissor lifts are equipped with an attachment point provided by the manufacturer for a restraint system, they are to be used. The intent of this protection is to keep workers within the confines of the passive protective system (rails) so the shortest length of lanyard that allows the task to be completed and keep the worker confined to the walking/working surface is required. Note: These attachment points are not designed as fall protection anchorages. Never climb above the work platform. A dedicated spotter is required any time a scissor lift must be moved in an elevated state. The lift shall be inspected daily & documentation provided to Turner upon request. Each worker operating the lift shall have a training card or documented training.
- k) Employees must keep both feet on the floor of the basket and not stand on the railing or toe board during operation.
- l) **If it has been determined by the subcontractor's competent person that there are no feasible means to access an area without leaving the basket of a scissor lift, a modified Pre-Task**

Plan must be completed as well as a Fall Protection Plan. This plan must be completed by the competent person with details of the anchorage point outside the scissor lift and above the employee's head. Any worker engaged in the activity should be active in the preplanning of the modified plan. All workers involved must review and sign off on the plan. This must be reviewed with Turner's Superintendent. Each work activity and area will require their own PTP and Fall Protection Plan.

- m) If operating in congested areas, MEWP's will require spotters. The spotters will be responsible for ensuring that the area around the MEWP and the travel path are free of obstruction and clear of equipment and personnel.
- n) Man baskets such as those utilized from fork truck type vehicles are not allowed on Turner projects.

2. Mobile Elevated Work Platform Use in High Lift Situations (applies to boom lifts with an operating platform height of 30' and above) A dedicated JHA shall be developed for each activity operating a MEWP above 30'.

- a) MEWP's often operate in close proximity to each other and workers may walk through or work close to their operation. A system for managing the affected area below the basket and movement of the MEWP's is necessary to decrease the risk of struck-by hazards.
- b) If any of the workers in the Aerial Boom Lifts are incapacitated and incapable of descending, a rescue may be required. Due to the nature of this type of work, it is prudent to establish an emergency response plan which has redundancy built into it.
- c) Boom lifts cannot be operated by the basket controls without first depressing a covered, protected foot switch. This causes the operator to be intentional about basket movement and reduces the risk of incidental operations.
- d) The lifts should have a pressure actuated auto shut-off across the controls which shuts down the equipment to prevent entrapment.
- e) A dedicated ground spotter (with no other collateral duties) shall be in place whose duties are as follows:
 - i. Visually verify and communicate via two-way radio that all obstructions are clear of the path of travel at the ground level.
 - ii. Visually verify that all obstructions are clear while basket is moving.
 - iii. The ground spotter shall be responsible for no more than 1 Controlled Access Zone (CAZ). Additional spotters will be required if MEWP's will need to be operated/relocated simultaneously within 1 CAZ (Approximate size and dimension of CAZ is below).
 - iv. Spotter Logistics:
 - a. If 2 or more lifts are required to operate simultaneously, each operator/spotter team will utilize their own dedicated radio channel.
 - b. The Spotter shall not use a cell phone, headphones or other devices which may distract them from their duties.
 - c. The Spotter shall have stop work authority.
 - d. The spotter shall wear, at a minimum, a Class II High Visibility Vest.
 - e. The Spotter/operator team shall perform a "radio" check prior to the commencement of the activity and every 30 minutes thereafter if no communications occur during that time frame.
 - f. Operation of MEWP from the basket is prohibited without prior communication with the spotter and an "All Clear" is given.

- f) Other Traffic at base of operating MEWP
 - a. A Controlled Access Zone will be established in the affected areas of the MEWP operation to include the base and working zone beneath the platform. The CAZ should be constructed with physical barriers such cable, wire rope or chain, or flagging. Danger tape and Caution tape should be the last choice and spray-painted lines will not be accepted. The CAZ must be secured from tipping and signed every 30'. The size of the CAZ must consider deflection or arc of the falling material. Each CAZ will be adequately sized to have a 15-foot buffer zone on each side of the MEWP to include under the platform. Each CAZ will hold no more than 3 boom lifts.
 - b. No other equipment or vehicle will be allowed to operate within a dedicated CAZ.
 - c. A 30' Wide dedicated path of travel for vehicles and other equipment shall be established using rope, traffic cones, delineators or other clear markings which safely guide other equipment and vehicles around the MEWP CAZ. Any changes in the path of travel must be approved by the Turner Superintendent. Boom lifts shall not operate within or over the traffic zone.
 - d. The Spotter shall monitor vehicle traffic and shall have authority to stop work and or vehicle traffic.
- g) Emergency Response;
 - a. There shall be, at a minimum, (2) two MEWP's on site when working in excess of 85 vertical feet. This is to ensure that one could assist another which has the capability to reach the basket in the event of an emergency. (A typical FD ladder truck can reach 85'-90' vertical feet)
 - i. Exceptions
 - 1. There is a means of safely reaching the platform via catwalk or other elevated surface.
 - 2. There is a means to reach the platform from above via rope, slings or other climbing type equipment. This equipment is only to be used by trained professionals.
 - b. The Spotter shall be trained on how to safely use the ground controls. The ground controls shall be tested prior to work occurring each day and/or shift
 - c. The Local Fire Department Shall be invited to the project site to review conditions and site activities which may have the potential for a "Vertical Rescue" in the event of an emergency.
 - d. The emergency response number shall be conspicuously posted.
 - e. Turner, the Fire Department and Dispatch shall determine a key phrase or word which indicates that a "Vertical Rescue Team" is required. (These teams have specialized training and equipment to respond to high rescue conditions.)
 - f. Pre-lift inspections are to include the review of available fall protection equipment and access to and the condition of anchor points.
 - g. Workers on the ground shall stay out of the CAZ and communicate with the spotter if entrance is needed.
 - h. A Stop Work must immediately be called when any deviations are observed with fall protection.
- h) Address line of fire hazards by following these work practices:

- a. Identify and discuss task which have the potential for falling tools, materials and/or debris.
- b. Workers should avoid positioning themselves, and their equipment, in a line of fire where they could be struck by falling, flying or moving objects from the overhead platform.
- c. Utilize tag lines to maintain positive control of objects being removed or hoisted to ensure the object does not come in contact with the lift.

IV. Approved Guards and Shrouds for Lift Controls

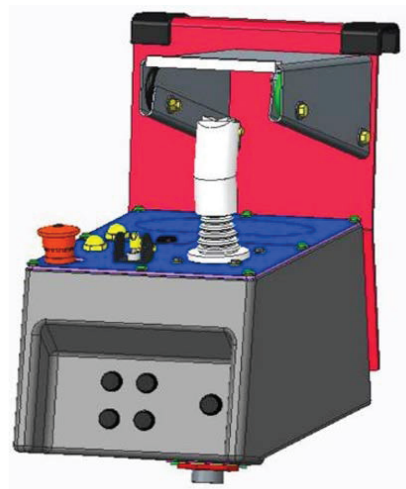
Please see below for examples of approved guards and shrouds for lift controls on Turner projects.

Note: In addition to joystick guard/shrouds, clear messages, proportional lift and drive controls, and symbol-based function selection buttons are required for easy training and operation of lifts.

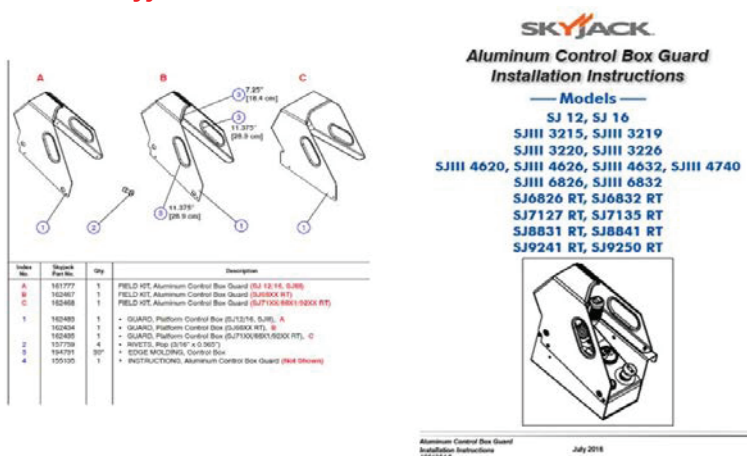
JLG Scissor Lift Guard



JLG All-Terrain

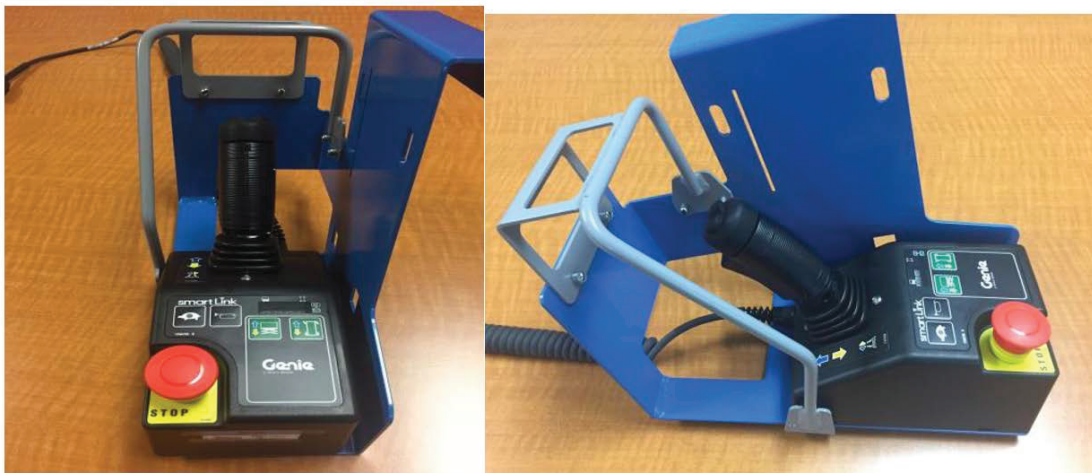


• Skyjack Scissor Lift



• Genie Scissor Lifts

The Genie SmartLink control scissor for slab scissers must include a platform control, ground control, and joystick cover as shown below.



4. Aerial Lift Training Requirements

Only trained and authorized persons are allowed to operate an aerial lift. Training should include:

- Explanations of electrical, fall and falling object hazards.
- Procedures for dealing with hazards.
- Recognizing and avoiding unsafe conditions in the work setting.
- Instructions for correct operation of the lift (including maximum intended load and load capacity).
- Demonstrations of the skills and knowledge needed to operate an aerial lift before operating it on the job.
- When and how to perform inspections; and
- Manufacturer's requirements

Signs, Signals and Barricades

I. Policy Statement

All employees of the Turner Construction Company and its subcontractors will comply with 29 CFR 1926, Construction Industry Regulations, Subpart G, Signs, Signals and Barricades, at a minimum, in addition to the following.

II. Procedures

1. Required signs will comply with the OSHA standards described in 1926.200.
2. Where areas may require additional awareness or present unique danger, the use of warning tape may be necessary.
 - a) The warning tape should have a sign with the nature of the hazard, the contractor who installed the tape with a contact number, and the duration the tape will be in place.
 - b) The intent of the warning tape is to notify of hazards that may arise during construction activities. Every effort should be made to correct these situations with permanent solutions in a timely fashion.
3. All flagmen shall be trained on appropriate procedures before controlling traffic, as required by the Manual on Uniform Traffic Control Devices (MUTCD) and any Municipal or State guidelines.
4. All flagmen shall utilize sign paddles and shall be outfitted with high visibility garments, as required by current ANSI standards. All PPE and traffic control equipment shall be outfitted with reflectorized material for night work as required by current ANSI standards.
5. All crane and hoist signals shall comply with applicable ANSI standards.
6. All traffic control devices shall comply with the MUTCD and any applicable Municipal or State guidelines.
7. Emergency communication signage / egress route signage should be posted on floors that include the locations of exits, stairs, fire extinguishers, gates, etc.

Stairways and Ladders

I. Policy Statement

Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart X – Stairways and Ladders, in addition to the following guidelines.

II. Procedures

1. General Requirements

- a) A stairway must be provided at all personnel points of access where there is a break in elevation of 19" or more.
- b) Scaffold type stair towers or prefabricated stairs shall be utilized instead of job built ladders.

2. Stairways

- a) When doors from an office or storage trailer open directly onto a stairway, a platform must be provided and the swing of the door must allow an additional 20" to prevent the door from striking an employee.
- b) Employees are not allowed to use metal pan stairs unless they have been fitted with wooden filler blocks or poured with concrete.
- c) Stairways with four or more risers or rising more than 30", whichever is less, must have a stair rail or handrail along each unprotected side or edge.
- d) Handrails that will not be a permanent part of the structure being built shall have a minimum clearance of 3 inches between the handrail and walls, stair rail systems, and other objects. 2x4 blocks are acceptable for spacers.
- e) The stair rails are to free of nails & hazardous projections.

III. Ladders Last Policy Statement

- 1. Ladder use on Turner Construction projects will be allowed only when it has been determined that it is unfeasible to use all other options to complete the task.
- 2. If it is determined that a ladder is the only means of performing the job at elevated height, a ladder permit must be submitted prior to starting work. At no time will a ladder be on site without a current permit and safety checklist.
- 3. For repetitive work, allow for the use of a "multi-day" permit to be issued in lieu of a daily permit. Daily inspections would still occur but the permit/tag would be modified.
- 4. Use of job built ladders is prohibited on Turner Construction Projects. Temporary stair towers or prefabricated stairs shall be used to access different building levels.

IV. Procedures for identifying and responding to all tasks that require the use of a device that allows work from height:

1. Prior to beginning work, the subcontractor or superintendent (for self-perform work) shall evaluate all tasks that require individuals to work at elevated heights. It is the expectation that these tasks will be performed using methods other than a ladder. Use of lifts and portable scaffold devices shall be the preferred method to perform this type of work.
2. If it is determined that a ladder must be used:
 - a. The subcontractor shall complete the Turner Construction Ladder Use Permit and have it reviewed and approved by the Turner Superintendent.
 - b. When working at a height greater than four (4) feet, 100% fall protection is required. A retractable is the only option in this case.
 - c. Prior to starting work each shift, The **Turner Construction Ladder Safety Inspection Checklist** shall be completed affixed to all ladders.
 - d. **Prior to using a ladder, the Turner Superintendent will review the Job Hazard Analysis, Pre Task Plan, and Ladder Use Permit.**
 - e. Only fiberglass ladders are to be utilized. Metal and wood ladders will not be used on Turner projects. Platform ladders shall be the ladder of choice on Turner Construction projects.
 - a. At a minimum, only Type IA Heavy Duty (300 lb. limit) ladders may be used on Turner projects.
 - b. When employees ascend or descend a ladder, they must maintain a three-point contact and not carry anything that could cause them to lose their balance.
 - c. Pull ropes should be placed at all access ladders so employees can safely lift tools or equipment to upper levels.
 - d. Stepladders must be opened fully and set level when in use.
 - e. When extension ladders are used to access upper landings, the side rails must extend at least 3 feet above the landing and secured at the top.
 - f. All ladders must be used for the purpose for which they were designed.
 - g. The base of an extension and or straight ladder is to be placed 1 foot horizontal from the face of the surface for every 4 feet vertical.
 - h. The area around all ladders must be checked to ensure there are no slippery or uneven conditions or debris in the area before placing the ladder for use. All weight limits must be checked to avoid exceeding the manufacturer's limits.

- i. Weight limits must also be checked to avoid exceedances.
4. Training
- a) Each employee involved in ladder use must be trained by a competent person in the recognition and avoidance of stair hazards.

Steel Erection

I. Policy Statement

Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart R – Steel Erection, in addition to the following.

II. Procedures

1. General Site, Erection and Construction Sequence Requirements

- a) Before authorizing the commencement of steel erection, the controlling contractor shall ensure that the steel erector is provided with the following written notification: the concrete in the footings, piers and walls and the mortar in masonry piers and walls has attained, on the basis of an appropriate ASTM standard test method of field-cured samples, either 75 percent of the intended minimum compressive design strength or sufficient strength to support the loads imposed during steel erection.
- b) The controlling contractor must ensure that site access roads and storage areas are adequate for the safe delivery and movement of cranes, trucks and other equipment necessary to erect steel. The equipment must not be assembled or used unless ground conditions are firm, drained, and graded to a sufficient extent so that, in conjunction (if necessary) with the use of supporting materials, the equipment manufacturer's specifications for adequate support and degree of level of the equipment are met.
- c) A site-specific erection plan must be developed by a qualified person and submitted to Turner prior to the start of work.
- d) A site-specific fall prevention plan must be developed, submitted to Turner and administered by a competent person prior to the start of work. The plan must include Job Hazard Analysis' (JHA's) and Pre-Task Planning (PTP) meetings.
- e) The controlling contractor must ensure that state and municipal permitting issues are addressed when off-loading steel and /or materials on public roads.

2. Hoisting and Rigging

- a) Cranes being used in steel erection must be visually inspected by a competent person prior to each shift.
- b) Individuals who rig loads must be qualified. An employer may not permit an individual to rig loads to be lifted by a crane unless the individual has received training and also has the experience appropriate to their level of work.
- c) Outrigger pads should be at least 3 times the dimension of the crane float. The outrigger pads are to be pre-manufactured.

- d) A qualified rigger must inspect all rigging prior to each use. The qualification of the qualified person must be submitted to Turner for review prior to the start of work.
- e) Routes for suspended loads must be pre-planned to ensure that no employee is required to work directly below a load, unless they are engaged in the connection of the steel.
- f) Multiple lift rigging may be performed when the following conditions are met:
 - A multiple lift rigging assembly is used.
 - A maximum of **(3) three members** are hoisted per lift.
 - Only beams or similar structural members are lifted.
 - All employees engaged in the activity have been trained in the specific procedures identified in OSHA Subpart R, 1926.761.
- g) See the Cranes and Derricks in Construction and the Material Handling and Rigging section for additional information.

3. Structural Steel Assembly

- a) There should never be more than four floors or 48', whichever is less, of unfinished bolting or welding above the foundation or permanently secured floor. An exception would be if the structural integrity were maintained as a result of the design.
- b) A fully planked or decked floor or nets must be maintained within two stories or 30', whichever is less, directly below where erection work is being performed.
- c) Shear connectors, also known as "Nelson studs", must not be attached to the top of the beam until after the decking has been installed.
- d) Metal decking shall be laid tightly and immediately secured upon placement to prevent accidental movement or displacement.
- e) At the end of each shift, unbundled metal decking shall be secured in place.

4. Beams and Column Anchorage

- a) All columns must be anchored by a minimum of 4 anchor bolts.
- b) All columns must be evaluated by a competent person to determine whether guying or bracing is necessary.
- c) During the placing of structural beams, the load must not be released until a minimum of two bolts, per connection, are secured in place.
- d) Employees connecting horizontal members shall not use the members as an anchorage point unless they have been secured at two points independent of an active hoist line. (i.e. they shall not walk out onto a member that is only connected on one side and is still attached to the crane).

- e) Anchor bolts shall not be repaired, replaced or field modified without the approval of the project structural engineer of record.
- f) Prior to the erection of a column, the controlling contractor shall provide written notification to the steel erector if there has been any repair, replacement or modification of the anchor bolts of that column.

5. Personal Fall and Falling Object Prevention

- a) All material, equipment and tools must be secured against accidental displacement while aloft.
- b) Each employee engaged in a steel erection activity that is on a walking or working surface with an unprotected side or edge 6' or more above a lower level, must be protected from fall hazards by safety net systems, guardrail systems or personal fall arrest systems. Turner Construction has a 100% Fall Protection ZERO TOLERANCE POLICY. AT NO TIME SHALL ANYONE BE AT A HEIGHT > 6' WITHOUT BEING PROTECTED. This includes connectors and any employee installing metal decking.
- c) During metal decking installations only self-retracting lanyards approved by the manufacturer for leading edge work shall be used.

6. Training

- a) All training must be provided by a qualified person, knowledgeable in the recognition and avoidance of hazards associated with steel erection.
- b) Training includes, but is not limited to; fall hazards, multiple lift rigging and steel connection.

Underground Construction, Caissons, Cofferdams and Compressed Air

I. Policy Statement

Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart S – Underground Construction, Caissons, Cofferdams and Compressed Air, in addition to the following guidelines.

II. Procedures

1. The employer must control access to all openings to prevent unauthorized entry underground. Unused chutes, man ways, or other openings must be tightly covered, bulk headed, or fenced off and must be posted with warning signs stating “Keep Out”, or similar in the appropriate languages.
2. The employer must designate in writing the competent person responsible for monitoring the air quality during underground construction.
3. The atmosphere in all underground work must be tested as often as necessary to assure that the atmosphere contains at least 19.5% oxygen, but no more than 23.5% oxygen. Continuous monitoring is recommended. These tests must be conducted before testing for air contaminants.
4. The atmosphere in all underground work must also be tested quantitatively for hazardous materials such as carbon monoxide, nitrogen dioxide, hydrogen sulfide, and other toxic gases, dusts, vapors, mists and fumes.
5. If an IDLH (Immediately Dangerous to Life and Health) atmosphere is present, the caisson then becomes a permit required confined space and Turner’s Confined Space Entry Procedure is implemented.
6. The competent person must keep a daily record of all air quality test results and submit those results to Turner, on a weekly basis and/or upon request.
7. The full depth of the shaft must be supported by casing or bracing.
8. The casing or bracing must extend 42” + or – 3” above ground level.
9. This height may be reduced to 12”, provided a standard railing is installed, the ground surrounding the shaft is sloped away from the shaft and effective barriers are in place to prevent mobile equipment from jumping over the 12” barrier.

Welding and Cutting

I. Policy Statement

Each contractor working on a Turner project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart J – Welding and Cutting, in addition to the following guidelines.

II. Procedure

1. Gas Welding and Cutting

a) Transporting, Moving and Storing Compressed Gas Cylinders

- Valve protection caps must be in place and secured.
- Cylinders must be moved by gently tilting and rolling them on their bottom edges.
- When cylinders are hoisted by cranes, or other mechanical means, magnets or choker slings must not be used.
- When cylinders are moved by powered vehicles, they must be secured in a vertical position to the vehicles by a metal bracket designed for this purpose.
- A suitable steadying device must be in place to keep cylinders in a vertical position when in use.
- Damaged or defective cylinders must be taken out of service immediately.
- Oxygen cylinders in storage must be separated from fuel gas cylinders by a minimum distance of 20'. A secondary option is to separate the cylinders using a non-combustible barrier at least 5' high that has a fire rating of 30 minutes. All torch carts are required to have a fire rated barrier between the cylinders.

b) Placing Cylinders

- Cylinders must be kept far enough away from the actual welding or cutting operation so that slag, sparks or flame will not reach them.
- Cylinders containing oxygen, acetylene or other fuel gas must not be taken into confined spaces.

d) Use of Fuel Gas

- The employer must instruct the employee in the safe use of fuel gas.
- Before a regulator is connected to a cylinder valve, the valve must be opened slightly and closed immediately. This "cracking" of the valve must be done each time before a regulator is connected.
- Flashback arrestors must be installed at the torch head and at the regulators and used according to manufacturer's recommendations. Under these circumstances, the arrestors are designed to stop the backflow (reverse flow) of unwanted gas and/or flashback into the upstream equipment.
- Flashback arrestors must be routinely inspected, per manufacturer's recommendations.
- All hoses must be routinely inspected, per manufacturer's recommendations. Specific issues include cracking and dry rot.

e) Regulators and Gauges

- Oxygen and fuel gas pressure regulators must be in proper working order, per manufacturer's recommendations, while in use.

- The regulators & gauges must be removed from the cylinders at the end of each shift.

2. Arc Welding and Cutting

a) Manual Electrode Holders

- Only manual electrode holders designed for arc welding and cutting, and are capable of handling the maximum current, can be used.
- Any and all current carrying parts of the holder must be fully insulated.
- When welding is not taking place, the rod cannot be left in the stinger.

b) Welding Cables and Connectors

- All arc welding and cutting cables must be completely insulated, flexible and capable of handling the maximum current necessary to complete the work.
- The cables must be free from splices or repair, a minimum distance of 10', from the cable end to the electrode holder.
- Cables in need of repair, beyond the distance noted above, can be repaired using friction or rubber tape, per manufacturer's recommendations.

c) Machine Grounding

- The ground return cable must have a current carrying capacity equal to or greater than the maximum specified output of the arc welding or cutting unit.
- When a single ground is used to service several machines, the current carrying capacity must be equal to or greater than the total maximum specified output of all the machines which it services.

d) Shielding

- All arc welding and cutting operations must be shielded by non-combustible or flameproof screens, which protect employees and other persons working in the area from the direct rays of the arc.

3. Fire Prevention

- When practical, the object to be welded, cut or heated should be moved to a designated safe location, away from flammable liquids and other combustibles.
- If the object cannot be moved, positive means must be taken to confine the heat, sparks and slag.
- A 20 lb., ABC dry chemical extinguisher or equivalent must be immediately available in the work area and must be maintained in a state of readiness for instant use.
- Drums, containers or hollow structures, which have contained toxic or flammable substances, must be filled with water and thoroughly cleaned, ventilated and tested before welding or cutting on them.
- Hot Work Permits must be used and are valid for one shift only.
- A fire watch must be maintained at least 30 minutes (60 minutes-depending on client expectations) after the hot work completion.

HOT WORK PERMIT

1. **DO NOT CONDUCT HOT WORK** if fire protection is not available.
2. This Hot Work Permit is required for any operation involving open flames or producing heat and/or sparks. This includes, but is not limited to: brazing, cutting, grinding, soldering, thawing pipe, torch-applied roofing and welding.
3. Foreman for hot work operation shall complete this form prior to commencement of the hot work. Employee performing hot work shall review this form and display in the area where work is being done.
4. Return form to Turner at the end of the shift.

Permit Holder / Contractor: _____ Date: ____ / ____ / ____

Foreman (Name): _____

Location (building, floor, room): _____

Devices Disabled: _____

Type of Job: _____

Time Started: _____ AM PM Time Finished: _____ AM PM

Permit Expires: (1 shift or 8-hour period) Date: ____ / ____ / ____ Time: _____ AM PM

Prior to beginning any hot work, all potential hazards must be addressed including:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Life Safety Department has been contacted for any work that will or may impair life safety systems.
What will be impaired (circle): Sprinkler heads, detectors, other _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Available sprinklers, hoses and extinguishers are in service and in good repair. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire extinguishers are available at the point of hot work. (Supplied by the Permit Holder) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Work equipment is in good repair. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Worker has all appropriate safety equipment for the hot work (e.g. gloves, shield, respirator etc.)
and not defective. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | All movable fire hazards in the vicinity have been relocated at a safe distance (at least 35 ft.) from
the point of operation or covered with fire resistive barriers if unable to move. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | All wall and floor openings have been covered. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | When working on or near walls, move combustibles away from both sides of walls. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | When working with suspended ceilings, be sure to protect concealed spaces. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Floors have been swept clean of combustibles. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Flammable liquids, dust, lint, and oily deposits have been removed. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | The area has been examined to determine if flammable or combustible liquids or vapors could
potentially be present. If present, the atmosphere shall be tested using an explosive meter. If
quantities are 10% of the lower explosive limit or greater, hot work shall not be performed. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | A fire watch is equipped with an appropriate fully charged fire extinguisher and present during hot
work operations. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | A fire watch will be provided for 30 minutes following the completion of work, including breaks. |

Final Work Area Check:

Work area monitored following Hot Work and 30 minute fire watch and found safe: Yes / No

Name of Fire Watch (Please Print): _____ Time Started: _____ AM PM

Craft Person Conducting Task: _____

Turner Representative: _____

Devices Reactivated: _____

TURNER

CORPORATE ENVIRONMENTAL, HEALTH AND SAFETY POLICY

Occupational Health

Blood-borne Pathogen Prevention Policy

I. Policy Statement

This program will apply to all Turner employees who could be "reasonable anticipated", as a result of performing their job duties, to come in contact with blood and other potentially infectious bodily fluids. Turner employees trained and certified in first aid and CPR who might be "reasonable anticipated" to come in contact with bodily fluids also must follow the rules and regulations set forth in this program.

II. Procedures

1. When dealing with blood or other bodily fluids, Turner employees are required to follow Universal Precautions. Accordingly, all human blood and other human body fluids are treated as if known to be infectious for HIV, Hepatitis B, and other blood-borne pathogens.
2. All jobsite and business unit offices are required to provide employees with disposable latex gloves and one-way resuscitation masks.
3. All certified first aid providers are required to wear disposable latex gloves and eye protection while performing first aid on an injured individual. If rescue breathing or CPR is performed, a one-way resuscitation mask shall be provided for the protection of the injured and the provider.
4. All blood spills shall be immediately contained and cleaned with an anti-viral solution, or by a solution of 5:1 water to bleach. In the event of a serious accident, Turner should consider contracting with an outside Hazmat firm.
5. Any material saturated with blood must be considered regulated waste. This means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; and items that are caked with dried blood or other potentially infectious materials. Discarded Band-Aids and gauze containing small amounts of blood products are not considered regulated waste. Disposal of all regulated waste shall be the responsibility of emergency medical personnel.

At least one Turner jobsite person shall be trained in First Aid, CPR, AED procedures and shall be trained in the decontamination of blood spills (Universal Precautions). All individuals are encouraged to attend training in emergency first aid procedures at each jobsite. At all times every project will have on site a FA/CPR/AED trained representative from Turner Construction and each subcontractor. Best Practice for each Turner representative to be trained in First Aid, CPR, AED procedures and shall be trained in the decontamination of blood spills (Universal Precautions).

Carbon Monoxide Exposure Prevention

I. Policy Statement

The purpose of this policy is to educate Turner employees and their subcontractors on the hazards associated with carbon monoxide exposure. Carbon monoxide is a highly-toxic, flammable, non-irritating, tasteless, colorless, odorless gas that is slightly lighter than air. Carbon Monoxide (CO) interferes with the oxygen-carrying capacity of blood. CO is non-irritating and can overcome persons without warning. Many people die from CO poisoning, usually while using gasoline powered tools and generators in buildings or semi-enclosed spaces without adequate ventilation. Some of the common symptoms of carbon monoxide poisoning are shortness of breath, headache, dizziness, muscular weakness and nausea. ALL fossil fuel (gasoline, diesel, propane, acetylene, etc.) burning equipment, when used where people are working in confined areas, produces carbon monoxide poisoning exposures.

II. Procedures

1. Testing Requirements - Use of any device that discharges the products of combustion into a work area where an employee exposure is possible, requires testing as defined below:
 - a) Monitor the work area to determine the concentration of carbon monoxide at least three times during each 8-hour period. Monitoring shall be conducted with a UL approved monitoring device, such as a LEL/O₂/H₂S/CO 4-gas monitor.
 - b) Monitor several different points within the area at the working/breathing heights of an employee.
 - c) Maintain a record of these tests noting the date, time and result of each test. Provide the monitoring results to all affected employees within the work area, if requested. Once the project is complete, these records must be archived with Business Unit Environmental, Health, and Safety Director.
 - d) Remove the employees from the area when the concentration of carbon monoxide reaches 20 PPM. Supplemental ventilation and reduction or elimination of the source shall be provided to reduce the concentration below 20 PPM before the employees are allowed to resume work in the area.
 - e) Continuous monitoring required when the concentration of carbon monoxide reaches a steady concentration of greater than 20 PPM in ambient air.
2. Use of Solid Fuel Salamanders - solid fuel salamanders are prohibited within buildings and on scaffolds.
 - a) OSHA has interpreted that this rule was adopted to prevent fires and carbon monoxide hazards associated with the burning of spark-producing fuels (wood and paper) in open salamanders, and was not intended to apply to properly constructed and equipped solid fuel (coke and coal) salamanders used in structures under construction. The use of solid fuel salamanders (heating units with combustion exhausting into the surrounding enclosed atmosphere) are only allowed in open spaced areas.

III. Roles and Responsibilities

1. Turner Management:
 - a) Conduct inspections of the workplace for compliance with this policy.
 - b) Discuss policy applications during project orientations and pre-plan meetings with subcontractors.
 - c) Conduct pre-planning meetings and require the use of Job Hazard Analysis (JHA) and Pre-Task Planning (PTP) meetings.
2. Subcontractor Management:
 - a) Comply with and furnish materials necessary to meet the requirements of Turner policy.
 - b) Attend and participate in any and all project orientations, pre-plan meetings, JHA discussions and PTP meetings.
3. Subcontractor Employees:
 - a) Attend and participate in any and all project orientations, pre-plan meetings, JHA discussions and PTP meetings.
 - b) Will comply with this policy.

IV. Internal Combustion Engine Equipment

Prevent CO exposure by using tools or vehicles powered by electricity or compressed air. Utilize engineering controls including exhaust scrubbers on equipment and the use of non CO type equipment. Never use equipment, vehicles, or machinery with internal combustion engines such as generators, cars, trucks, etc. indoors or in enclosed or partially enclosed spaces such as garages, crawl spaces, tunnels and basements without proper controls, ventilation, or air cleaners. Make sure all internal combustion engine equipment has adequate clear space on all sides and above it to ensure adequate ventilation. Provide for air blowers or other types of air exchangers. Do not use with internal combustion engines outdoors if placed near doors, windows, vents air handlers etc. which could allow CO to enter and build up in occupied spaces.

Hearing Conservation Program

I. Policy Statement

Turner Construction Company recognizes that excessive noise can cause permanent hearing loss if appropriate administrative or engineering controls or personal protective equipment is not used. Limiting exposure to excessive noise through engineering controls is Turner's preferred method of control. The purpose of this policy is to prevent employee exposure to excessive noise exposure during construction activities. Each contractor working on a Turner project must comply with 29 CFR 1910.95 and 1926, Construction Industry Regulations, in addition to the following guidelines.

II. Procedures

Permissible Noise Exposures

Duration per day, hours	Sound level dBA, slow response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115

1. Protection against the effects of noise exposure must be provided when the sound levels exceed those shown in the table above. The measurement must be observed on the A-scale of a sound level meter at slow response.
2. When employees are subjected to sound levels exceeding those shown above, feasible administrative or engineering controls must be utilized.
3. If such controls fail to reduce sound levels within the levels shown above, personal protective equipment must be provided and used to reduce the noise exposure.
4. In all cases where the sound levels exceed the values shown in the table above, a continuing, effective hearing conservation program must be administered.
5. All subcontractors must provide when requested by Turner Construction a comprehensive hearing conservation program prior to beginning work. At a minimum this program shall include:
 - i. Noise survey data for typical work they perform.
 - ii. Noise dosimetry data for typical exposures from the work they perform.
 - iii. Training records for employees working on the Turner Project.

III. Roles and Responsibilities

1. Turner Management:
 - a) Conduct inspections of the workplace for compliance with this policy.
 - b) Discuss policy applications during project orientations and pre-plan meetings with subcontractors.
 - c) Conduct pre-planning meetings and require the use of Job Hazard Analysis (JHA) and Pre-Task Planning (PTP) meetings.
2. Subcontractor Management:
 - a) Comply with and furnish materials necessary to meet the requirements of Turner policy.
 - b) Attend and participate in any and all project orientations, pre-plan meetings, JHA discussions and PTP meetings.
3. Subcontractor Employees:
 - a) Attend and participate in any and all project orientations, pre-plan meetings, JHA discussions and PTP meetings.
 - b) Will comply with this policy.

Hexavalent Chromium

I. Policy Statement

Hexavalent chromium (Cr(VI)) compounds are widely used in the chemical industry as ingredients and catalysts in pigments, metal plating and chemical synthesis. Hexa-chrom can also be found in the construction industry through welding or other abrasive methods, such as grinding or when the compound is heated on stainless steel or on hexa-chrom painted surfaces. Industrial uses of hexavalent chromium compounds include chromate pigments in dyes, paints, inks, and plastics; chromates added as anticorrosive agents to paints, primers, and other surface coatings; and chromic acid electroplated onto metal parts to provide a decorative or protective coating. The major health effects include lung cancer, nasal septum and skin ulcerations and contact dermatitis. The purpose of this policy is to prevent employee exposure to hexavalent chromium compounds during construction activity. Each contractor working on a Turner project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart Z – Section 1126, Chromium (VI), Subpart D (Occupational health and environmental controls) 1910 Subpart I (PPE and respiratory protection) and Subpart J (Welding and cutting) in addition to the following guidelines.

II. Procedures

1. Permissible Exposure Limit (PEL)
 - a) Since this construction activity is limited to specialty work, Turner will direct the Subcontractor to provide specific Job Hazard Analysis (JHA's) and Pre-Task Planning (PTP) meetings to address potential exposure.
 - b) The Employer must ensure that no employee is exposed to an airborne concentration Cr(VI) in excess of 5 micrograms per cubic meter of air (5 ug/m³) calculated as an 8-hour time-weighted average (TWA).
 - c) Engineering controls will be the preferred method to achieve the Permissible Exposure Limit (PEL).
2. Exposure Determination
 - a) The subcontractor must determine the 8-hour TWA exposure for each employee exposed to Cr(VI). This may be accomplished using two options; scheduled or performance-oriented monitoring.
 - b) Scheduled Monitoring
 - The subcontractor must perform initial monitoring to determine the 8-hour TWA for each employee on the basis of a sufficient number of personal breathing zone samples.
 - If the subcontractor does representative sampling, it must be conducted on the employee(s) expected to receive the highest exposure.
 - If the monitoring indicates that employee exposures are below the action level (1/2 the PEL or 2.5 ug/m³), the employee may discontinue monitoring.
 - If the monitoring indicates that employee exposures are at or above the action level, the subcontractor must perform periodic monitoring at least every six months.

- c) Performance-Oriented Monitoring
 - If this option is chosen, the subcontractor must determine the 8-hour TWA for each employee on the basis of any combination of air monitoring, historical data or objective data sufficient to accurately characterize employee exposure to Cr(VI).
3. Methods of Compliance
 - As stated previously, engineering and work practice controls must be used to reduce and maintain employee exposure to Cr(VI) to or below the PEL.
 - If feasible engineering and work practice controls are insufficient to reduce exposure below the PEL, then respiratory protection must be used.
 - The subcontractor **will not** be allowed to rotate employees to different jobs to achieve compliance with the PEL.
4. Respiratory Protection
 - a) All Turner employees must comply with the Business Unit Specific Respiratory Protection Program.
 - b) When needed, the subcontractor must provide a formal respiratory protection program. Examples include:
 - Periods necessary to install or implement feasible engineering or work practice controls.
 - Work operations where an employer has implemented all feasible engineering and work practice controls and such controls are not sufficient to reduce the PEL.
 - Emergencies
5. Protective Work Clothing and Equipment
 - Where there may be a hazard to the skin or eyes from exposure to Cr(VI) the subcontractor must provide, at no cost, protective clothing or equipment to the employee.
 - The subcontractor must ensure that the employees remove all clothing and equipment that may be contaminated with Cr(VI) when the work is complete or at the end of the shift.
 - The subcontractor must ensure that chromium-contaminated clothing is not removed from the workplace.
 - When contaminated protective clothing or equipment is removed for laundering or cleaning, the subcontractor must ensure that it is stored and transported in impermeable bags or containers.
 - The subcontractor must inform any person who launders or cleans clothing or equipment of the potential effects of exposure to Cr(VI) and that the clothing or equipment should be laundered or cleaned in a manner that minimizes skin or eye contact.
6. Hygiene Areas and Practices
 - Where protective clothing and equipment is required, the subcontractor must provide change rooms that comply with 29 CFR 1926.51.

- Where skin contact may occur, the subcontractor must provide hand-washing facilities that comply with the previously noted standard.
7. Medical Surveillance
 - a) The subcontractor must make medical surveillance available, at no cost, to employees who meet the following criteria:
 - Those who are or may be occupationally exposed to Cr(VI) at or above the action level for 30 or more days a year.
 - Those who are experiencing signs or symptoms of adverse health effects associated with Cr(VI) exposure.
 - Those exposed in an emergency.
 8. Communication of Chromium
 - Must follow the same communication of hazardous chemicals highlighted in Turner's Hazard Communication Program.
 9. Recordkeeping
 - a) The subcontractor must maintain the following data records;
 - Air monitoring ,
 - Historical monitoring,
 - Objective data,
 - Medical surveillance.

III. Roles and Responsibilities

1. Turner Management:
 - a) Conduct inspections of the workplace for compliance with this policy.
 - b) Discuss policy applications during project orientations and pre-plan meetings with subcontractors.
 - c) Conduct pre-planning meetings and require the use of Job Hazard Analysis (JHA) and Pre-Task Planning (PTP) meetings.
2. Subcontractor Management:
 - a) Comply with and furnish materials necessary to meet the requirements of Turner policy.
 - b) Attend and participate in any and all project orientations, pre-plan meetings, JHA discussions and PTP meetings.
3. Subcontractor Employees:
 - a) Attend and participate in any and all project orientations, pre-plan meetings, JHA discussions and PTP meetings.
 - b) Will comply with this policy.

Infection Control Policy

I. Policy Statement

During the planning process of the construction project, it is important to remember that a hospital is an occupied critical care facility, whose primary function is that of patient care. A construction project can be intrusive to medically fragile patients. All construction projects have the potential to impact infection control in patient areas.

The purpose of this policy is to minimize the potential acquisition of nosocomial infection in patients during hospital construction activities.

II. Procedures

The following are highlights of Turner's Infection Control Construction Policy. These guidelines are provided as a foundation for developing a site-specific control policy that may mirror or compliment an Owners program. An example may be found in the Engineering and Technology Safety section of the TKN2 document management system and in Appendix G of this manual.

1. Planning Phase

- a) Number and placement of isolation rooms,
- b) All air vents must be blocked off and sealed to prevent contamination of duct system before construction begins,
- c) Air handling systems,
- d) Ventilation shall be a high priority item,
- e) Dust mats must be used at the entrances to all work areas,
- f) Number and placement of hand washing facilities,
- g) Staff and patient traffic patterns for the duration of the project,
- h) Relocation decisions regarding patient care areas, storage areas, etc.
- i) Water supply and plumbing,
- j) Waste containment, transport and disposal,
- k) Selection of finishes and surfaces that can be effectively cleaned in clinical areas,
- l) Accommodation of personal protective equipment,
- m) Storage of moveable modular equipment.

2. Operational Phase

- a) Medical waste removal,
- b) Integrity of barrier walls,
- c) Environmental control,
- d) Traffic control,
- e) Cleaning,
- f) Contractor personnel requirements,
- g) Environmental monitoring,
- h) Policy implementation.

3. Completion Phase

- a) Ventilation specifications,
- b) Disinfection procedures,
- c) Water line flushing,

d) Water line disinfection.

4. Compliance Monitoring

- a) Air handling,
- b) Integrity of barrier walls,
- c) Dress code,
- d) Environmental control,
- e) Noise,
- f) Traffic control,
- g) Water supply.

III. Roles and Responsibilities

1. Turner management:

- a) Shall hold an infection control specific pre-planning meeting with the owner and affected subcontractors prior to all work that requires an infection control plan.
- b) Shall conduct inspections of the workplace for compliance with policy.
- c) Shall cover policy applications during project orientation with subcontractors.

2. Subcontractor management:

- a) Shall comply with and furnish materials necessary to comply with Turner policy.
- b) Shall attend relevant pre-planning meetings, project orientation, and fully participate in the Job Hazard Analysis program.

A comprehensive sample of the Infection Control Plan 2013 is available in Appendix G of this manual.

Lead

I. Policy Statement

Turner is not in the business of performing lead abatement work.

It is the policy of Turner to refrain from engaging in the removal or abatement of lead containing materials when performing renovation or building activities. Turner will request that owners have an inspection made by a certified testing company, industrial hygienist, or lead removal contractor prior to the start of work. Where lead is found, the owner must contract for its removal. Turner must obtain certification that the lead has been removed and the area is safe to work.

II. Procedures

1. Prior to the start of work, Turner will request the building owner to provide a pre-demolition survey for lead based materials, prepared by a qualified consultant.
2. All individuals must receive Lead Hazard Awareness Training prior to beginning work in areas that have materials containing lead.
3. If the assessment identifies lead containing material, Turner will request that the owner remove or abate the area of concern and provide written certification (e.g. clean letter) that the ambient condition of the area is below OSHA's action level for lead (<30ug/m3).
4. If lead is encountered during construction activity, Turner will stop work and request that the owner remove or abate the material.
5. Before resuming work, The Turner Superintendent will request a written certification (e.g. clean letter) that the ambient condition of the remediated area is below OSHA's action level for lead (<30ug/m3).
6. If the owner requests that Turner perform the abate work, a contract of convenience must be entered into with Turner and only qualified remediation contractors, who satisfy company pollution liability requirements, will be retained.
7. The Turner Superintendent must notify the Business Unit Environmental, Health, and Safety Director (BUEHSD) and the BU Claims Coordinator. They will then notify the appropriate Turner Risk Management Regional Claims Manager.
8. The BUEHSD will complete the Turner Environmental Risk Investigation Report and submit it to the Business Unit Operations Manager, National EH&S Coordinator, and the Risk Management Department Claim Director.
9. If Turner is contractually obligated to manage the remediation the Business Unit must secure written approval from the National EH&S Coordinator and the Risk Management Claim Director as required by the Environmental Operational Policy.

10. A Lead Compliance Plan that includes negative exposure assessments by work activities will be required if Turner or their subcontractors are required to disturb lead based painted surfaces during demolition or renovation activities. This plan includes the requirements for engineering controls, work practice controls, personal protective equipment, HEPA vacuums, respirators, air monitoring and dust controls for protection from exposure to lead. The Plan will provide guidance for complying with the regulatory requirements of 29 CFR 1926.62 Lead.

III. Roles and Responsibilities

1. Turner Management:
 - a) Must ensure compliance with this policy.
 - b) Must discuss policy applications during project orientation with subcontractors.
 - c) Must provide Lead Hazard Awareness Training to all employees working in or around material containing lead.
2. Subcontractor Management:
 - a) Must comply with and furnish materials necessary to comply with Turner policy.
 - b) Must attend and participate in the Lead Hazard Awareness Training.
3. Subcontractor Employees:
 - a) Must attend and participate in project orientations and Lead Hazard Awareness Training.
 - b) Must report immediately anytime lead containing material is discovered or disturbed.

A comprehensive sample of Written Lead and heavy metal Program is available in Appendix F of this manual.

Heat & Cold Stress Prevention

I. Policy Statement

Turner Construction expects all subcontractors to provide to their employees areas of relief from the element exposure. The expectation is to utilize the best method of controlling the employee from the exposure. Examples are to provide overhead tarps to shield from the sun, misters, heaters, scheduling work activities, job rotation etc. to reduce the exposure. Subcontractors shall ensure that all employees are trained on the warning signs / symptoms of early heat or cold related disorders, and instructed on the clothing and work methods best suited to avoid heat and / or cold stress.

II. Procedures

1. Turner and subcontractors must make sure workers exposed to safety and health risks because of hot or cold conditions at the workplace are provided with information, instruction and training on recognizing and avoiding injury or illness from thermal stress.
2. Turner and subcontractors must make sure all supervisors know about heat and cold related illnesses, symptoms, prevention and treatment. Supervisors must be able to recognize unsafe conditions and take corrective action immediately. It is the responsibility of the subcontractor to provide engineered prevention to minimize weather hazards.
3. The risk of heat related illnesses can be reduced by preventive and control measures, including: engineering controls to provide a cooler work place; administrative controls to reduce exposure and recognize symptoms of heat related illness; and personal protective equipment, when necessary, to further limit exposure.
4. The risk of cold related injury can be reduced by preventive and control measures, including: using a buddy system or supervision of workers; limit the amount of heavy work; wearing appropriate clothing for cold weather including layering; encourage continuous body movement (minimize sitting and standing still) in cold environments, and protect workers from drafts; educate employees on the symptoms of cold related stress including heavy shivering, uncomfortable coldness, severe fatigue, drowsiness and / or euphoria; and engineering controls can be effective such as using heaters in areas, where practical, shielding work areas from winds and drafts.

A comprehensive Heat & Cold Stress Prevention Plan is available in Appendix H of this manual.

Tobacco Policy

I. Purpose

Use of tobacco products and secondary tobacco smoke is a documented significant health hazard. Smoking activities also provide ignition sources for fires associated with flammable and combustible materials and smokeless tobacco creates sanitation hazards on floors and in working areas. In addition, these activities create a housekeeping problem in the workplace when improper disposal of smoking or smokeless material occurs. With e-cigarettes (with or without nicotine) gaining popularity it is necessary to address those as well and while they may be safer than smoking tobacco the long term risks and effects of second hand exposure are still not known. This policy will reduce employee exposure to secondary tobacco smoke, assist in the prevention of fires in the workplace, and help keep the workplace clean.

II. Scope

1. This policy covers the use of smoking tobacco products (i.e.; cigarettes, pipe embers, cigars, etc.), smokeless tobacco products (i.e.; dip, snuff, chew, etc.) and all forms of electronic cigarettes or e-cigarettes, etc.
2. This policy is to be adhered to by all Turner employees, contractors, and visitors. This policy applies to all offices (Business Unit or project), warehouses, and projects.

III. Policy Statement

1. All tobacco products, smokeless tobacco products, and e-cigarettes as described above are prohibited in all Turner offices, project offices, warehouses, and on projects. The project or office can designate smoking areas that must comply with all ADA, state, and municipal regulations.
2. Certain owners may also have non-smoking policies and Turner employees, subcontractors and visitors will comply with those policies fully.
3. In order to ensure compliance with the above provisions please do the following:
 - a) Prominently display no-smoking signs in offices and on projects,
 - b) Inform individuals about this policy and let them know they may be subject to removal, fines and penalties (certain state or local fire department regulations),
 - c) Instruct individuals found using tobacco or e-cigs to immediately stop

Turner Construction Company recognizes that our employees and workers are our most valuable assets and the most important contributors to our continued growth and success. We are not only concerned about your welfare as a Turner employee, but also the welfare of others who could be put in harm's way by secondary exposure. We are therefore firmly committed to providing a safe work environment for all workers and set forth this policy for the elimination of tobacco and related products in the workplace.

Sanitation Policy

I. Policy Statement

Each contractor working on a Turner project will comply with 29 CFR 1926, Construction Industry Regulations. Employers shall establish and maintain basic sanitation Provisions for all employees in all places of employment as Specified in the following paragraphs.

II. Procedures

1. Drinking water supply
 - a) An adequate supply of drinking water shall be provided in all places of employment. Cool water shall be provided during hot weather.
 - b) Drinking water shall be provided according to the requirements of the Safe Drinking Water Act, as amended, and all applicable Federal, state, and local regulations. Refer to the most current Version of 40 CFR 141 and 40 CFR 143, for updates to the national drinking water regulations. Refer to individual state and local regulations, as applicable, for updates in those Regulations.
 - c) Only approved potable water systems shall be used for the distribution of drinking water.
 - d) Drinking water shall be dispensed by means that prevent contamination between the consumer and the source.
2. Portable drinking water dispensers shall be designed, Constructed, and serviced to ensure sanitary conditions; shall be Capable of being closed; and shall have a tap. Containers shall be clearly marked as “**drinking water**” and shall not be used for other purposes. Water shall not be dipped from containers.
 - a) Fountain dispensers shall have a guarded orifice.
 - b) Use of a common cup (a cup shared by more than one Worker) is prohibited without the cup being sanitized between uses.
 - c) Employees shall use cups when drinking from portable water Coolers/containers. Unused disposable cups shall be kept in sanitary containers and a waste receptacle shall be provided for used cups.
3. Nonpotable water.
 - a) Outlets dispensing nonpotable water will be conspicuously posted:
"Caution - water unsafe for drinking, Washing, or cooking"
 - b) Cross-connection - open or potential - between a system
 - c) Furnishing potable water and a system furnishing nonpotable water is prohibited.
4. Toilets
 - a) When sanitary sewers are not available, one of the Following facilities, unless prohibited by local codes, shall be provided: chemical toilets, recirculating toilets, combustion toilets, or other toilet systems as approved by state/local governments.
 - b) Each toilet facility shall be equipped with a toilet seat and toilet seat cover. Each toilet facility - except those specifically designed and designated for females - shall be equipped with a metal, plastic, or porcelain urinal trough. All shall be provided with an adequate supply of toilet paper and a holder for each seat.

- c) Toilet facilities shall be so constructed that the occupants shall be protected against weather and falling objects; all cracks shall be sealed and the door shall be tight-fitting, self-closing, and capable of being latched.
- d) Adequate ventilation shall be provided and all windows and vents screened; seat boxes shall be vented to the outside (minimum vent size 4 inches (10.1 centimeters) inside diameter with vent intake located 1 in (2.5 cm) below the seat.
- e) Toilet facilities shall be constructed so that the interior is lighted.
- f) Toilets at construction job sites.
 - Toilets shall be provided according to table 2-1. Where toilet rooms may be occupied by no more than one person at a time, can be locked from the inside, and contain at least one toilet seat, separate toilet rooms for each sex need not be provided.
 - Under temporary field conditions, provisions shall be made to assure that at least one toilet facility is available.
 - Toilets should be kept inside the project fence.
- g) No Half High / High Rise portable toilets are allowed on Turner projects unless protected by a partition to assure privacy.

Table 2-1

Minimum toilet facilities (construction sites)

Number of employees	Minimum facilities (per sex)
20 or less	One
21 to 199	One toilet seat and one urinal for every 40 workers
200 or more	One toilet seat and one urinal for every 50 workers

- h) Each water closet shall occupy a separate compartment with a door that can lock from the inside and walls or partitions, between fixtures, of sufficient height to assure privacy.
- i) Provisions for routinely servicing and cleaning all toilets and disposing of the sewage shall be established before placing Toilet facilities into operation. The method of sewage disposal and location selected shall be in accordance with federal, state, and local health regulations.

5. Washing Facilities

- a) Washing facilities shall be provided at toilet facilities and as needed to maintain healthful and sanitary conditions. Washing facilities for persons engaged in the application of paints, coatings, herbicides, insecticides, or other operations where contaminants may be harmful shall be at or near the work site and shall be adequate for removal of the harmful substance.
- b) Each washing facility shall be maintained in a sanitary condition and provided with water (either hot and cold running water or tepid running water), soap, and individual means of drying. However, where it is not practical to provide running water, hand sanitizers may be used as a substitute.
- c) Whenever employees are required by a particular standard to shower, showers shall be

provided in accordance with the following:

- One shower shall be provided for every ten employees (or fraction thereof) of each sex who are required to shower during the same shift;
 - Body soap or other appropriate cleansing agent convenient to the shower shall be provided;
 - Showers shall have hot and cold running water feeding a common discharge line; and
 - Employees using showers shall be provided with individual clean towels.
- d) Whenever employees are required by a particular Standard to wear protective clothing, change rooms with storage facilities for street clothes and separate storage facilities for protective clothing shall be provided.
- e) Whenever working clothes are provided by an employer and become wet or are washed between shifts, provision shall be made to ensure such clothing is dry before reuse.

6. Food Service

- a) All cafeterias, restaurants, mess facilities, and related facilities on areas, projects, or installations shall be established, operated, and maintained in compliance with the health and sanitation recommendations of the United States public health service and applicable state and local regulations.
- b) All food service operations shall be carried out in a sound manner. Food shall be free from spoilage and kept uncontaminated throughout the storage, preparation, and serving process.
- c) No food or beverage shall be consumed or stored in a toilet room or in any area exposed to a toxic material.
- d) An adequate number of waste receptacles shall be provided in the food service area. Receptacles shall be constructed of corrosion resistant or disposable material, provided with solid tight-fitting covers (covers may be omitted where sanitary conditions can be maintained without the use of a cover), emptied at least daily, and maintained in a sanitary condition.

7. Waste Disposal

- a) Receptacles used for putrescible or liquid waste material shall be so constructed to prevent leakage and to allow thorough cleaning and sanitary maintenance. These receptacles shall be equipped with a solid tight-fitting cover, unless it can be maintained in sanitary condition without a cover.
- b) Solid and liquid waste shall be removed in a way that avoids creating a menace to health and as often as necessary to maintain a sanitary environment.

8. Vermin Control

Enclosed workplaces shall be constructed and maintained, as far as practical, to prevent the entrance or harborage of rodents, insects, and other vermin. An effective extermination program shall be instituted where the presence of such vermin is detected.

Health and Wellness Program

Overview

Turner is committed to the health and wellness of all workers who enter our jobsites. As such Turner has mandated the utilization of a Health and Wellness program for every project. The purpose of a workplace health and wellness program is to offer a comprehensive health service for all site workers who are potentially exposed to various health hazards or situations. Health and Wellness consists of different integrated concepts that we need to provide at each of our projects.

Integral to the commitment to a workers health is ensuring injured workers receive prompt and quality medical care. Similarly, wellness, or state of physical, mental and spiritual health, is essential to a healthy workplace strategy. A wellness-oriented environment encourages workers to adopt habits and behaviors that promote better health, a safe worksite and an improved quality of life. And, it's believed that this concept will cultivate a work environment that workers will look forward doing their job and doing it well.

Health

Rendering prompt and quality medical treatment at the moment of injury is the first essential step in successful care and medical management of an injured worker. The benefits of providing acute medical care include:

- Providing potentially life-saving care
- Stabilizing severely injured workers
- Preventing minor injuries from becoming more serious

Other important considerations include:

- Reducing the number of potential lost time matters
- Decrease costs arising from larger WC Claims
- Enhanced productivity by treating minor injuries on site and enabling workers to immediately return to work

Immediate and effective medical care is provided by onsite medical services typically provided by an Emergency Medical Technician (EMT) trained to respond to medical emergency such as traumatic injuries, health issues and accident scenes.

Below are project guidelines for the use of an EMT based on construction volume (actual or anticipated):

- \$80M or greater- Full time on site EMT
- \$20M up to \$80M. Either full time EMT or On Call EMT (roving)

- Under \$20M. On Call (roving) EMT or telephonic incident response
- Regardless of project volume, consideration of the hazardousness or risk involved.

If the project is on a hospital campus or a healthcare facility is in the immediate vicinity of the project, the healthcare facility can be used to meet this requirement. Each project at a minimum is to provide a room where treatment can be rendered with privacy and other wellness services furnished.

We've partnered with who we perceive as "best in class" onsite medical care vendors. They are Onsite Medical, Amphibious, Banda and Onsite Health and Safety.

Choosing these vendors involved examining a number of criteria including:

- having qualified EMTs
- geographic reach
- flexibility to respond to incidents and willingness to enhance their record keeping
- past Turner or other industry experience.

Value added benefits of onsite medical include:

- Support Return to Work efforts which results in more favorable outcomes
- Follow up with workers to ensure proper care has been provided
- Assist in understanding how losses occur and preventing them
- Provide critical documentation on the cause of loss and exact injury type in the event of litigation or governmental inquiry
- Provide incident data to support risk mitigation
- Support site safety efforts
- Conduct drug and alcohol testing
- Provide vaccinations (e.g. Flu, Tetanus, etc.)

Engagement Options

The method of engagement for these vendors will be done through a professional service agreement (PSA). Depending on the need and capacity to engage an onsite EMT for a project, there are two principal options which enable the project team to decide which options is more suitable.

1. Full time onsite EMT for the duration of the project-start to finish.
2. Full time onsite EMT during certain periods of time where the risk of injury is greater. The full time onsite EMT cost is based on a flat fee for the time period of the contract.

3. Roving or “On Call” EMT. The roving EMT can respond to a site promptly following an accident. They provide the same level of experience but are not on site full time and are deployed on an as needed basis. Roving EMTs charge on a per visit basis.
4. Telephonic incident response. A site safety person or the responsible Turner personnel contacts an immediately available medical professional upon notice of an injury for guidance / direction.

Wellness

It's understood that the advantages of wellness translates into job satisfaction for workers, and a more content and productive workforce. And, that translates into a strategic advantage as well as ensuring Turner is contributing towards its goal of being a responsible corporate citizen. By offering a wellness program at our projects it can result in behavior modification leading to a healthier and safer workforce.

With working internally and with vendors to develop a wellness program that can provide guidance that supports healthy living. They might include:

- Nutrition / Weight Loss / Smoking cessation
- Target loss driving areas to reduce or mitigate injuries
- Work/Life Balance and time management
- Physical and mental health support
- Personal health issues such as high blood pressure, diabetes, age issues, etc.

Respiratory Protection

I. Policy Statement

Turner Construction Company is committed to maintaining an injury and illness free workplace and will make every effort to protect employees from harmful airborne substances.

This will be accomplished through engineering controls such as ventilation or substitution with a less harmful substance or through administrative controls limiting the duration of exposure. When these methods are not adequate, Turner will provide training, fit-testing, medical surveillance, and proper respirators to allow Turner employees to breathe safely in potentially hazardous environments.

Turner recognizes that respirators have limitations and their successful use is dependent on an effective respiratory protection program. Our full Respiratory Protection Program is designed to identify, evaluate and control exposure to respiratory hazards and to provide for the proper use, care and maintenance of respiratory equipment. Each Business Unit affected must oversee a written respiratory program. Prior to implementation the Business Unit Environmental, Health, and Safety Director shall approve program elements.

This program is designed for Turner Construction Employees. Subcontractors are required to submit and have accepted by Turner their company's respiratory protection program prior to start of work. Compliance with this policy applies to filtering face-piece respirators (dust masks) as well.

All programs shall meet or exceed Federal, State, and Local regulatory requirements.

II. Program Elements

1. Highlights of a Business Unit Specific Program are to include the following:

a) Program Administration

- A formal annual audit of the Respiratory program is required for all companies who actively using respirators. A Respirator Program Evaluation Worksheet should be used to document the evaluation and to record recommended changes.

b) Workplace Exposure Assessment & Ongoing Surveillance

- Exposure assessment is critical in identifying harmful airborne contaminants, their extent and magnitude and how to control them.
- Turner Project Staff (TPS) must make every effort through evaluations and training to ensure that employee exposure does not exceed permissible concentrations
- Results of these evaluations will be summarized and a record maintained in the jobsite project files. Additional evaluations are necessary if exposures change due to new materials, process changes or other conditions increasing the degree of employee exposure. Copies of all results shall be sent to the Business Unit Human Resource Manager who shall maintain an archive for 30 years for all Turner employees evaluated.
- Subcontractors shall provide proof of exposure assessments, training, and medical surveillance for their employees prior to performing work with any material that may require respiratory protection.

- Subcontractors may not perform any work with chemicals or materials that may cause a respiratory hazard or nuisance odor for Turner Employees, other Subcontractors, or the general public without scheduling the work with Turner. Examples of such activities include applying hazardous paints or coatings; saw-cutting or grinding concrete, applying spray on fireproofing.
- c) Respirator Selection
- In those instances where engineering and administrative means do not achieve the desired control, respirators must be worn. Different types of respirators are available for a variety of applications. Turner must ensure that the proper NIOSH/MSHA approved respirator is selected and used for the kind of work being performed and the hazards involved.
 - Respirator selection information must be completed to document the selection process.
- d) Evaluating Respirator Wearer Health Status
- Even with appropriate equipment and adequate training provided, an employee's health status must be considered before allowing respirator use. The wearer's physical and medical condition, duration and difficulty of the tasks, toxicity of the contaminant and type of respirator all affect an employee's ability to wear a respirator while working. Therefore, Turner must ensure that each employee's physical ability to wear a respirator is evaluated.
 - Each respirator wearer will be given a medical evaluation. The project will make appropriate arrangements with a proper medical organization to perform the evaluation. The Medical Evaluation and Work Restriction report must be completed for each individual.
- e) Respirator Fit Testing & Assignment
- After selection of the appropriate type of respirator and verifying the employee's ability to work while wearing a respirator, Turner will ensure that a qualitative fit test is conducted to choose the best fitting face piece and determine the specific brand, model and size for each employee. The Qualitative Fit Test Record form will be completed. The form will record test results and document respirator assignment.
 - Quantitative fit is the preferred alternative to qualitative fitting. Although it requires specialized equipment and trained personnel, some exposures require a quantitative fit test.
- f) Training
- Once the employee is fitted with the correct respirator for the task, that employee must be thoroughly trained in the need, use, limitations, inspection, fit checks, maintenance and storage of the equipment. This training may be initiated during the fit test.
 - The manufacturer of the equipment provides detailed instructions for use and care of the respirator, and this information is to be used in the training. The Respirator User Training and Education Form is to be used as a guide and record of training received.
- g) Record keeping
- Turner must document each major component of the program to verify that each activity has occurred and evaluate the success of the program to satisfy regulatory requirements.

- These records include the written program, exposure determination, respirator selection, physical status evaluation, fit testing and respirator assignment, training form and program assessment.
- All records that involve Turner employees must be sent to the Business Unit Environmental, Health, and Safety Director and archived for a minimum of 30 years.

A comprehensive sample of the Turner, Asbestos, Lead, Silica and Respirator Management Program is available in Appendix H of this manual.

Crystalline Silica Exposure Prevention

I. Policy Statement

This policy is designed to protect employees who may come into contact with silica during the course of their work. This applies to all occupational exposures to respirable crystalline silica in construction work, except where employee exposure will remain below 25 micrograms per cubic meter of air (25 µg/m³) as an 8-hour time-weighted average (TWA), under any foreseeable conditions.

II. Silica Exposure Prevention & Control: Responsibilities

Due to the risk posed by respirable silica, it is critical that all personnel involved in activities that could potentially create silica dust take specific actions to ensure that, as much as practicable, a hazard is not created. In recognition of this, the following (Silica related) responsibilities have been established and must be adhered to:

The BU EH&S Director is responsible for:

- Ensuring project and/or task specific Exposure Control Plans (SECPs) are developed communicated and effectively implemented as appropriate.
- Ensuring that all employees (*i.e. Managers, Supervisors and Workers*) receive the necessary education and training related to this Policy, as well as project/task specific SECPs.
- Implementing a suitable respirable silica exposure monitoring program, or otherwise ensuring representative exposure monitoring results are available. The purpose of the program will ensure that (over time) Turner has quantifiable silica exposure data available for all regularly occurring, as well as reasonably foreseeable, work activities.
- Regularly evaluating new equipment and technologies that become available, as able/appropriate, purchasing the “best available” equipment/technologies. Equipment/technologies with (silica) dust suppression and/or capture technologies will generally be given preference over equipment/technologies that lack such.
- Maintaining applicable long-term records (*i.e. exposure sampling, inspections, respirator fit tests, training records, etc.*).
- Conducting a review of this Policy, as well as: (1) project/task specific SECP's, (2) available exposure monitoring data, (3) Industry/Regulatory information, and (4) new/emerging equipment/technologies on a regular (*i.e. annual*) basis.

Safety Managers/Superintendents/Foreman are responsible for:

- Developing or obtaining a copy of the project/task specific Silica Exposure Control Plans (SECPs) and ensuring such are made available at each work site.
- Ensuring that all workers (*under the supervisor's direction and control*) have received the necessary education and training. As appropriate, each supervisor must ensure that workers are available to “demonstrate competency” for identified tasks.
- Coordinating work activities of multiple contractors/crews as required, and/or otherwise implementing the controls necessary to protect others (*i.e. erecting of barricades and signage*) who could be adversely effected.
- Using control measures described in the Risk Control section of this program below, maintain employee exposure to crystalline silica to concentrations as low as possible, and in no event

exceed the OSHA Permissible Exposure Limit of 50 micrograms per cubic meter of air (50 µg/m³) as an 8-hour time-weighted average (TWA).

- Ensuring that all the tools, equipment, PPE and materials (*including water*) necessary to implement the SECP is available (*and in good working order*) prior to allowing work activities to commence.
- Maintaining applicable records (i.e. exposure sampling, inspections, respirator fit tests, training records, etc.) in accordance with [Insert Company Name Here]'s record retention procedures/practices.

III. Silica Exposure Prevention & Control: Risk Identification and Assessment

Turner has conducted extensive employee exposure sampling and obtained “objective data” from other sources and used this information to prepare a “Table 1 Silica Exposure Controls” to help us identify each task or exposure related to silica that our own employees may be subject to, and to specify controls, tools and PPE to control exposure. Please reference that document at the TKN Safety webpage and use the applicable data to prepare all site-specific Exposure Control Plans for Silica, related to Turner employee exposures.

Each employer that has employees exposed to crystalline silica must prepare and implement a written site-specific Exposure Control Plan (ECP) that identifies tasks that involve exposure and the methods used to protect workers, to include procedures to restrict access to work areas with high exposures. A competent person from each exposing employer, as well as Turner, shall be designated to implement the exposure control plan. A copy of the designation by the employer will be provided to Turner.

Each exposing employer must notify Turner in writing of any activities to be undertaken that could lead to silica exposure above the action limit. Turner will coordinate the activities of all contractors to minimize exposure from one employer to another. These activities should be discussed and planned for in weekly coordination meetings, safety meetings, and huddles. Each employer must utilize control methods that mitigate exposure to the lowest achievable level so as not to expose other employees or subcontractors. Each employer must control access to their area through the use of control zones, DANGER signs, spotters, etc. Certain tasks may have to be done off-hours so as not to expose additional employees.

Risk Identification: Silica is contained in many of the materials and products used/encountered on our projects (i.e. the Lafarge Safety Data Sheets (SDS) for concrete reveals the potential for up to 90% crystalline silica, while the SDS from Aggregate supplier (Mainland Sand & Gravel Ltd.) identifies the potential for between 50-77% Silica in aggregate). Silica dust can be readily released through the various tasks performed by Turner and its contractors. Each contractor must identify sources of exposure for its employees and plan accordingly. Reference safety data sheets and other reference sources to determine silica content. If these sources are not available, samples can be sent to a laboratory or air samples can quantify airborne exposure. Contractors may use a variety of additional methods to assist with the assessment of (possible and actual) silica exposures. These methods will include, but may not necessarily be limited to:

- Reviewing data/reports available in the public domain (i.e. OSHA, NIOSH) and industry associations (including the ABC, AGC).
- Regularly consulting with the Safety Resources/Safety Managers from firms who perform similar work (i.e. through ATAC (Asphalt Technical Advisory Committee)).
- Implementing a suitable respirable silica exposure monitoring program. This program will ensure that (over time) Turner has quantifiable silica exposure data available that is representative of all

regularly occurring, as well as reasonably foreseeable work activities. Exposure monitoring will generally be conducted “in-house”, although assistance (i.e. actual monitoring and/or interpretation of results) may be obtained through outside consultants/hygienists. All data captured, and corresponding reports and findings, must be sent to Corporate EH&S Department.

Turner will not allow the use of any compound for abrasive cleaning that contains more than 1% silica. Employee sampling must be conducted to verify that concentrations released from the media being finished does not exceed allowable OSHA PEL’s, TLVs, etc. For abrasive blasting, replace silica sand with less toxic materials. The National Institute for Occupational Safety and Health highly discourages the use of sand or any abrasive with more than 1% crystalline silica in it. As an alternative, garnet, slag and steel grit and shot may be suitable substitutes.

IV. Silica Exposure Prevention & Control: Risk Control

Control Methods: When determining measures to reduce or eliminate worker exposure to silica dust, contractors must select controls in this order of preference:

1. Elimination and Substitution
2. Engineering
3. Administrative
4. Personnel Protection Equipment (PPE)

Substitution and Elimination: Whenever possible, the exposing contractor will substitute products containing silica with products that do not contain (or contain a lower percentage of) crystalline silica. While there have historically been few “substitution” options available, each contractor must recognize the importance of planning work in order to minimize the amount of silica dust generated. During the planning phases of a project, advocate for the use of methods that reduce the need for cutting, grinding, or drilling of concrete surfaces.

Engineering Controls: Engineering controls are those controls which aim to control or otherwise minimize the release of crystalline silica. Two “common” engineering control options are available in many circumstances. These include the Local Exhaust Ventilation (LEV) and Wet Dust Suppression (WDS) systems. Another could be “Isolation” of the silica creating activity or machine/tool.

Local Exhaust Ventilation Systems: Tools/equipment specific LEV systems are available on some tools and equipment. Such LEV systems are generally comprised of a shroud assembly, a hose attachment, and a vacuum system. Dust-laden air is collected within the shroud, drawn into the hose attachment, and conveyed to the vacuum, where it is filtered and discharged. “Large scale” LEV systems, such those available on some Vacuum Trucks and Mobile Sweepers, may also be employed (at times) on Turner projects.

When/if LEV systems are used, the contractor will employ the following systems and safe work practices:

- Vacuum attachment systems that capture and control dust at its source whenever possible.
- Dust control systems will be maintained in optimal working condition.
- Grinding wheels will be operated at the manufacturer’s recommended RPM (operating in excess of this can generate significantly higher airborne dust levels).

- HEPA or good quality, multi-stage vacuum units (approved for use with silica dust) will be used in accordance with the manufacturer's instructions. Vacuums with back-pulse filter cleaning cycles are effective at avoiding clogging and maintaining dust capture velocity.
- Whenever possible, concrete grinding will be completed when the concrete is wet (*thus dust release will be significantly reduced*).

Regular fans (such as box-fans, area-fans, etc. do not qualify as an engineering control, by themselves, and may actually increase silica exposures by re-entraining settled particles into the air.

Wet Dust Suppression Systems: Many tools and equipment types are equipped with Wet Dust Suppression (WDS) systems (i.e. on the Milling equipment, sweeper equipped Bobcats, as well as attachments on various hand held/portable, abrasive/cutting equipment). When WDS Systems are not available, (as a standard or retrofitted part of a tool/appliance), similar effects can also be achieved by manually wetting the surface (i.e. with a mister or with a hose).

When WDS systems are used, the contractor will employ the following systems and safe work practices:

- If water is not readily available on the project, the project supervisor will arrange to have a water tank delivered to the site for use.
- Pneumatic or fuel (i.e. gasoline) powered equipment will generally be used instead of electrically powered equipment if water is the method of dust control, unless the electrical equipment is specifically designed to be used in such circumstances.
- Pressure and flow rate will be controlled in accordance with the tool manufacturer's specifications.
- When sawing concrete, tools that provide water directly to the blade will be used if possible.
- Wet slurry will be cleaned from work surfaces when the work is complete, if/when necessary.
- If dust suppression water is recirculated, micron filtration and sanitation must be considered.

Administrative Controls: Administrative controls are those that aim to control or otherwise minimize the release of silica through the use of work procedure and work methods, rather than by affecting the actual physical work. Common examples of administrative controls include, but are not limited to:

- Posting of warning signs similar to the one shown at right, when respirators are required as the exposure control.
- Rescheduling of work as to avoid the activities of others.
- Relocating unprotected workers away from dusty areas.



When administrative controls are used, the contractor will employ the following systems and safe work practices:

- Suitable exposure control strategies will be discussed and determined. As necessary and appropriate, supplemental (to this policy/procedure) project and task specific Exposure Control Plans will be developed.
- Suitable housekeeping, restricted work area, hygiene practices, training and supervision procedures/standards will be determined and implemented on Turner projects.
- As appropriate, barriers will be erected around known silica dust generating activities, and/or warning signs will be posted.

- As able, work activities will be scheduled to minimize the silica related effect on, and from, others.

Personal Protective Equipment Controls: When used in conjunction with the other (*i.e. Engineering and Administrative*) controls elsewhere identified, personal protective equipment and clothing can help further reduce employee exposure to silica dust. Our first line of defense is to select higher order controls that would eliminate the need for PPE.

An air purifying respirator fitted with HEPA cartridges is the most common piece of PPE that would be used to minimize exposure to silica dust. In some cases, a dust-mask (which is also a respirator) with a NIOSH “N” rating may be acceptable.

Prior to a respirator being used, the employee must be medically cleared to wear a respirator (including dust masks) and fit-tested in accordance with 29 CFR 1910.134 and Turner Construction’s Respiratory Protection Program. Employees must have documented training for respiratory protection. In addition to the medical clearance above, for any employee who is required to wear a respirator for silica exposure 30 or more days a year, the employee must have an initial medical exam including x-ray, Pulmonary Function Test, and other requirements, along with ongoing periodic medical surveillance (typically every 3 years). Records of the medical exams and any exposure monitoring records of operations are to be kept by the employer. Respirators are “seal dependent”, and thus the users must be “fit tested” annually and clean shaven where the respirator seals to the face.



In addition to respiratory PPE, protective clothing (*i.e. disposable/washable coveralls*) may be used and/or required to help prevent the contamination of the worker’s personnel clothing.

General Requirements

Employer shall not allow dry sweeping or dry brushing where such activity could contribute to employee exposure to respirable crystalline silica unless wet sweeping, HEPA-filtered vacuuming or other methods that minimize the likelihood of exposure are not feasible.

Employers who use “Table 1: Specified Exposure Control Methods When Working with Materials Containing Crystalline Silica” (found in the OSHA Silica standard for construction) correctly do not have to provide exposure monitoring of employees and are not subject to the listed PEL. The table spells out the need for respiratory protection (along with minimum assigned protection factors) for certain operations.

If exposure control methods listed in Table 1 are not used, then the employer:

- must perform an exposure assessment to assess the exposure of each employee who is or may reasonably be expected to be exposed at or above the action level.
- protects workers from exposures above the permissible exposure limit (PEL) of 50 micrograms per cubic meter of air averaged over an eight-hour day;
- Dust control measures must be used to protect workers from exposures above the PEL; and
- Provide respirators to workers when dust controls cannot limit exposures.

For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust.

Using wet methods, apply water at flow rates sufficient to minimize release of visible dust

If performing multiple tasks from Table 1 that in whole exceed 4 hours, use the respiratory protection for each task that's designated for >4 hours' work.

After working with products that contain crystalline silica, each individual will be required to thoroughly wash their hands before eating, drinking or smoking. Eating, drinking or smoking near silica or in silica-regulated areas is strictly prohibited.

V. Silica Exposure Prevention & Control: Education and Training

Education and Training: Prior to performing activities or working on project sites where personnel could be exposed to silica dust, ensure that applicable personnel receive suitable education and training. While not necessarily an exhaustive list, education and training may include:

- The hazards and risks associated with exposure to silica dust.
- The signs and symptoms of silica related diseases.
- General and specific silica exposure reduction methods/strategies (*i.e. as detailed in the general/specific exposure control plans*).
- The use of specific pieces of equipment and control systems (*i.e. LEV and WDS systems*).
- The use and care of respiratory (and other) personal protective equipment.
- How to seek first aid (*i.e. for respiratory related concerns, including those that may be caused/associated with silica dust exposure*), and
- How to report items of the concern (*i.e. those related to silica dust*).
- Be sure to reference "Table 1 Silica Exposure Controls".

The education and training detailed will be delivered through a variety of forums, including but not necessarily limited to:

- New Employee Orientations
- Project/Site Orientations
- Equipment/task specific training, *all personnel must be trained to a level of "demonstrated competency" prior to using required tools, equipment and appliances*
- Safety huddles and tool box talks
- Notifications and Bulletins

TURNER
CORPORATE ENVIRONMENTAL,
HEALTH AND SAFETY POLICY

Subcontractor Requirements

SUBCONTRACTOR SAFETY PROGRAM REQUIREMENTS

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- 5.1 Required Safety Documentation for Subcontractors
- 5.2 Overview of Project Safety Requirements
- 5.3 General Requirements
- 5.4 Subcontractor Substance Abuse Program
- 5.5 Standard Safety Forms & Postings

5.1 Required Safety Documentation for Subcontractors

Complete Package and Submit to Turner Project Superintendent of Safety Prior to Start of Work

- ☐ 1. Safety and Health Program – Site Specific – Include Substance Abuse Program
- ☐ 2. CPR/First Aid Training Cards with Expiration Dates
- ☐ 3. Identify Trained “Competent Persons” Per OSHA (see next page).
- ☐ 4. Insurance Certificates (enrollment info for CCIP or OCIPs also)
- ☐ 5. OSHA 30 Hr. Construction Safety Trained Personnel (submit a copy of cards) or enroll in 30-Hour on Turner University.
- ☐ 6. MSD-Sheets and Chemical Inventory List with HAZCOM Program. (Form #1)
- ☐ 7. Fall Protection Documentation Training (if exposed to fall hazards)
- ☐ 8. Fall Protection Site-Specific Plan (if exposed to fall hazards)
- ☐ 9. If you have a crane provide: Annual Inspection Certification, Operators Qualifications or Certifications, Monthly Crane Inspection, Daily Crane Inspection, Pick Plans, Critical Lift Plans (Form #2C), Crane & Off-Road Vehicle Inspections (Form #2B) *all crane inspections must be performed by a third party.
- ☐ 10. Job Hazard Analysis Forms (JHA) (Form #6)
- ☐ 11. Fork Lift Training Cards (Submit cards if applicable)
- ☐ 12. Scissors Lift and Aerial Boom Lift Training Cards (Submit cards if applicable)
- ☐ 12. Ladders Last Permit & Inspection Form (Form #2a)
- ☐ 13. Daily Submit Pre-Task Plan (Form #7)
- ☐ 14. Weekly Documentation
 - A. All Daily Inspection Sheets for Cranes, Equipment, Scaffolds, Lifts, Forklifts,
 - B. Weekly Safety Meeting Minutes
 - C. Weekly inspection of fall protection system.

Key Personnel and OSHA Competent Person

Company Name _____	Project Name _____
Superintendent _____	Contact Phone # _____
On-site Safety Coordinator _____	Contact Phone # _____
Company Safety Director _____	Contact Phone # _____

OSHA Regs requiring a Competent Person	OSHA Standard	Your Competent Person(s) (If applicable)
General Safety and Health Provisions (All Contractors)	1926.2	
Fall Protection	1926.502	
Excavations	1926.65	
Respiratory Protection (If your work requires PPE)	1926.103	
Rigging for Material Handling (Riggers & Signal Persons)	1926.251	
Cranes (Operators & Assembly/Disassembly Supervisors)	1926.1400	

Scaffolding	1926.451	
Steel Erection: Bolting, Riveting, Fitting Up, and Plumbing Up	1926.752	

Introduction

As the leader in the construction industry, Turner Construction Company (also referred to as Turner) is committed to promoting a proactive safety program, which will lead to the establishment of a positive safety culture among all project employees. Every effort will be made to integrate the use of safe work practices into daily work activities performed by trade contractors and their employees. Our approach is to realize the benefits of Living Injury Free Every Day® (L.I.F.E.). This will be achieved through pre-planning and daily vigilance. By planning for safe and efficient production, incidents that may cause suffering to a person or increase cost to the project will be eliminated or minimized.

Project Managers, Superintendents, Assistant/Area Superintendents, Safety Representatives, and Foreman are the key individuals responsible for implementing and maintaining an effective safety program. Each of these individuals must ensure personnel working under their control are provided the tools and knowledge to work safely, and are performing their tasks in a safe manner.

It is the responsibility of each worker to follow every precaution in their Daily Pre-Task Plan to protect them and their fellow workers.

Each subcontractor and lower tier subcontractor is solely responsible for the safety of their employees and/or visitors as required by the rules described in this Program, OSHA requirements, and all local, state, and federally recognized standards and codes.

All contractors and subcontractors are responsible to train and educate their employees, and/or visitors on the contents, requirements and policies contained within this Program.

Project Description

Enter project description and scope.

Key Project Staff

- A. Project Executive –
- B. Project Manager –
- C. Procurement Agent –
- D. Project Engineer –
- E. Project Superintendent –
- F. Business Unit EH&S Director –
- G. Project EH&S Manager

Responsibilities

Turner Project Superintendent

- Enforce compliance by all parties the Project Safety Program.
- Assist all Subcontractors in pre-planning their operations to prevent personal injury or property damage to employees and other contractor's employees or to the public.
- Chair the safety meetings.
- Review and enforce the recommendations of the Project Safety Manager pursuant to job safety tours and of the toolbox meeting minutes.
- Conduct periodic safety tours, and submit one (1) SafetyNet audit per week.

Turner Project Safety Manager

- Investigate incidents and direct the elimination of hazardous conditions.
- Evaluate the safety of the project daily and submit at least three (3) SafetyNet inspections per week.
- Gather facts on accidents and thefts for action by the Project Superintendent.

- Periodically attend trade and subcontractor toolbox meetings.
- Distribute and post all safety meeting minutes, safety bulletins and incident data.
- Prepare and distribute minutes of project safety meetings.
- Issue safety bulletins for the project.

Subcontractor Safety Representative and Foreman

All subcontractors must have completed an OSHA 30 hour class. One person must be certified for all contracts under \$5M, and two people must be certified for contracts over \$5M. The 30 hour certified person(s) must be on-site 100% of the time. This OSHA 30 hour certification must be updated through Turner's Safety Update Training every two years through Turner University.

- If the subcontractor will exceed an average of 25 employees or more on site, including sub tiers, for more than two weeks, they must provide a full time Safety Manager for the duration of the project while the workforce exceeds the threshold above, who:
 1. Is qualified to recognize safety hazards; and
 2. Has the authority to take corrective action;
 3. Possesses current certifications in first aid, CPR and AED;
 4. Possesses a recent OSHA 30-hour card (within the last three years);
 5. Has an academic degree in safety, CSP or CHST designation, OR has a minimum three (3) years of prior work history as a designated construction Safety Representative.

Turner reserves the right to approve or deny the subcontractor's fulltime safety representatives for the project.

- Once a contractor has three Foremen, one will be designated as a non-working Foreman with their primary responsibility of acting as the subcontractor safety representative and will not be working with their tools. Additional specific requirements may be identified in a Contractor's scope of work. Generally, if there is a conflict between this document and the scope of work the most stringent will take precedence. The Project Safety Manager and the Business Unit Environmental, Health, and Safety Director reserves the right to evaluate and determine what is best for the safety of the project.

1. At a minimum the Subcontractor Safety Representative will be required to:
 - a) Ensure their employees attend jobsite orientation before start of work on the project.
 - b) Take the lead in recognition and abatement of hazardous situations.
 - c) Conduct a daily "Safety Huddle" prior to the start of each shift and submit a Daily Pre Task Plan (PTP) Report each morning prior to the start of work.
 - d) Perform and document weekly safety inspections (1 per week at minimum).
 - e) Conduct at least one monthly safety tour with your Safety Director and submit findings to Turner.
 - f) Ensure that Competent Persons submit, at a minimum, the below listed safety inspections at the designated frequency to the Turner Project Superintendent or Project Safety Manager.

<u>Inspection</u>	<u>Frequency</u>
Fall Protection	Before Each Shift
Excavations	Before Each Shift
Scaffold	Before Each Shift
Crane Inspections	Before Each Shift
Confined Space	Before Each Shift
Hot Work	Before Each Shift
Heavy Equipment	Before Each Shift
GFCI	Weekly
Personnel Hoist	Per OSHA Reqs.
Dig Permit	Before Each Shift

Tools Box Talks & Report	Weekly
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- g) Conduct and document toolbox meetings on a weekly basis.
- h) Issue minutes of the weekly toolbox meeting to Turner.
- i) Effectively utilize and train employees in pre-planning, recognition, and remediation of hazards.
- j) Each subcontractor, regardless of tier, is to submit in writing toolbox meeting minutes containing the following:
 - (1) Name of subcontractor and date.
 - (2) Name of Subcontractor Safety Representative.
 - (3) Name of employees attending.
 - (4) Name of employees onsite not attending.
 - (5) Number of employees on their payroll that day.
 - (6) Subjects discussed.
- k) Attend project safety meetings.
- l) Enforce disciplinary measures when need arises for their employees.
 Note: Gross disregard for policy or procedures, as determined by Turner, can result in immediate removal from the project and a monetary fine.
- m) Each subcontractor is responsible for all of their subcontractors and suppliers, regardless of tier, compliance with the Project Safety Program.

2. Employees / Employers

- a) Perform their work to prevent accidents to themselves, fellow workers, and property.
- b) Use Personnel Protection Equipment as required, to meet all Turner, federal, state and local requirements.
- c) Alert supervisors to dangerous situations.
- d) Cooperate with principles of the Project Site Specific Safety Program.
- e) Utilize all tools and equipment in a safe manner and in accordance with manufacturer's recommendations.
- f) Complete project safety orientation before starting work on the jobsite.
- g) Acknowledge and abide by the project enforcement rules.

3. Visitors

Any person not directly involved with the onsite construction of this Project must not enter the site without first going to Turner's job office, signing a visitor's release, obtaining a hard hat and safety glasses, which is to be returned to Turner. All visitors must adhere to Turner Project Safety Program and be 18 years of age or older.

General Requirements

Employee / Visitor Access

All employees and visitors must satisfy the following drug and orientation provisions before being permitted access to this project site:

1. Employees must produce a drug screen card or similar document as verification of having successfully met the pre-employment requirements contained in the drug program for this project. Those not possessing such can undergo testing at the on-site medical office or designated clinic before reporting for employee orientation. The cost of drug screening test will be at the expense of the subcontractor.
2. Employees must complete the project's safety orientation at which time they will register personal, drug testing, and training information. Employees will be issued a hard hat sticker or equivalent

identification upon completion of the orientation process. Identification must be displayed at all times while on the project.

3. Visitors will be required to obtain a visitors pass and be escorted by an assigned employee. All visitors must be properly attired to enter the project site.

Pre-planning

Contractors are required to produce Site Specific Safety Plans and Job Hazard Analyses (JHAs) for each major task they plan to perform. These documents are required to be submitted to Turner at the first pre-construction meeting.

A daily Pre Task Plan (PTP), daily “white board” meeting each day of work on the project.

The JHA and PTP will be used as a primary means of accident prevention. Each work crew is required to review the applicable PTP for their work during the morning huddle with their Foreman, prior to the start of each work shift.

Hazard Communication

As a minimum, the subcontractor shall incorporate all the basic principles of the Project Safety Program into their Safety Program. The above shall also include the subcontractor’s Hazard Communications Program with SDS (Safety Data Sheets) to be provided before start of work. Each month subcontractors will provide an updated list of the hazardous materials they have on the project by submitting a Chemical Inventory to the Project Superintendent or Project Safety Manager.

The subcontractor is responsible for maintaining an updated binder of their respective SDSs on the project and will make them immediately available for review upon employee, Turner or any other request.

Safety Data Sheets must be referenced and included in daily PTPs daily huddles as a means of identifying proper personal protective equipment as well as other control measures including spill response and first aid measures. No work is permitted without first having all necessary equipment and controls for the chemical being used on the project.

Fall Protection

All work performed at or above 6 feet will be done in conjunction with fall protection 100% of the time.

At no time shall a Safety Monitor or Attendant be used as a means of fall prevention.

A guardrail system or tie-off system must be used 100% of the time.

When tying off is the means of fall protection, a full body harness must be used.

Each contractor is responsible for protecting its own employees by using conventional means of fall protection such as standard guardrails or perimeter cables. The ongoing maintenance and daily inspection of this protection must also be included. If a contractor's employee cannot be protected by conventional methods, then adequate pre-planning must be conducted to provide for anchorage points capable of withstanding 5000 lbs. in combination with a safety harness and self-retracting lanyard.

Perimeter protection such as guardrails and perimeter cables are not designed to withstand 5000 lbs. of force. Therefore, perimeter protection should never be used as an anchorage point unless it has been designed by a Professional Engineer (PE) to withstand such force.

If flagging is used it must be maintained at least 15 feet from the leading edge for all subcontractors. The warning line height must be between 34" & 39". The rope, wire or chain must have a breaking strength of 500 pounds and must be flagged every 6 feet. After erected, the stanchions must be secured from tipping due to wind, etc.

At a minimum, employees shall follow the manufacturer's recommendations for fall prevention when working from a scissors lift. If scissor lifts are equipped with an attachment point provided by the manufacturer for a restraint system, they are to be used. The intent of this protection is to keep workers within the confines of the passive protective system (rails) so the shortest length of lanyard that allows the task to be completed and keep the worker confined to the walking/working surface is required. Note: These attachment points are not designed as fall protection anchorages. Never climb above the work platform. A dedicated spotter is required any time a scissor lift must be moved in an elevated state. The lift shall be inspected daily & documentation provided to Turner upon request. Each worker operating the lift shall have a training card or documented training.

All floor openings exceeding 2 inches in diameter shall be covered, barricaded, or otherwise protected. Covers shall be designed to withstand twice the weight of workers, equipment, and materials. Covers shall be secured against displacement horizontally and vertically. All covers must be clearly marked with the words "HOLE" or "COVER."

Each contractor employee exposed to fall hazards must be trained in the recognition of fall hazards, the avoidance of fall hazards, the purpose, use, and requirements of conventional fall protection methods, and the use, inspection, and care of safety harnesses and shock absorbing lanyards.

Since contractors are experts at their specialized trades, they shall provide Turner with their own project-specific Fall Prevention Plan which describes the methods they intend to use to provide adequate fall protection for each contractor's specific operations and to comply with OSHA and Turner's six foot rule.

Guardrails

All cable guardrails must be a minimum ½" diameter. All cable guardrails must be looped connections with three cable clamps on each side of the connection. Open eye turnbuckles are not permitted. Guardrails made of 2x4's shall not have any nails protruding. Guardrails cannot be made of metal studs.

PPE

Subcontractor must provide their employees with all necessary personal protection equipment and tools, and enforce their use as required by the Safety Program, as well as federal, state and local codes and regulations.

Hard Hats/ Safety Glasses

Each Subcontractor shall enforce the wearing of ANSI Z89.1-1981 approved hard hats and Eye Protection (ANSI Z87.1) during the total construction of this project, and shall immediately remove anyone from their forces not complying with this requirement.

Aluminum/metal hardhats, Cowboy hats and bump caps are not permitted on Turner Construction Company Projects. Employees exposed to electrical voltages of 600 V or greater shall wear hardhats that meet the requirements of ANSI Z89.2 Type Hardhats.

Prescription glasses must be safety rated and have fixed side shields. Overwrap style safety glasses must be worn when prescription glasses are not safety rated. Safety glasses with side shields that meet the requirements of ANSI Z-87.1 must be worn at all times on the project. During the following operations, face protection in addition to approved safety glasses or goggles are required: welding, burning or cutting, using abrasive wheels, chop saws, portable grinders or files, chipping concrete, stone or metal, drilling or working under dusty conditions, using explosive actuated fastening or nailing tools, overhead work, work with hazardous liquids or gasses. Dark lenses are not to be worn inside of buildings, in enclosed areas or at night.

Clothing & Hi-Vis Vests

All personnel shall wear shirts with sleeves and long trousers.

No shorts or tennis shoes of any kind will be permitted on this project.

High visual, safety vests, shirts or jackets shall be worn as the outermost apparel by all employees, 100% of the time. ANSI Class 2 (0-44 MPH) and Class 3 (45 MPH or more) outerwear must be worn whenever working on or near (within 10 feet) of a roadway.

Foot Protection

At a minimum, safety shoes or boots are required. Safety toe shoes or boots, or toe guards must be worn when using jackhammers, tampers or similar equipment which could be dropped or landed on a worker's toes / feet. Safety shoes or boots must also be worn by masons, drillers, pile driving, steel erectors, and riggers due to the hazards inherent with their work.

Hand and Arm Protection

Employees are required to wear protective gloves 100% of the time

The only exception to this policy is if the competent person determines that the use of protective gloves for a specific activity creates a greater hazard.

Appropriate arm protection is required during operations where the arms are exposed to cut hazards (i.e. Kevlar, Dyneema sleeves, etc.). Examples of these activities are working around metal studs and pull boxes, tight confines as between wall studs or above ceiling and all demo activities. These operations shall be identified on the JHA/PTP.

First Aid and CPR

Each subcontractor must have their own adequate first aid kit and at least one qualified first aid and CPR-trained employee onsite full time. The name of this person, along with copies of their current certification cards, shall be submitted to Turner prior to beginning any work. Upon expiration of such certification, the employee is required to become re-certified.

Lock Out / Tag Out (LOTO)

A Lock Out / Tag Out program must be submitted by any subcontractor performing this type of work, per OSHA standards.

Respiratory Protection

Respiratory protection is required to meet all federal, state and local OSHA regulations. Respirators are to be worn when employees are working with or are exposed to gases, fumes, vapors or dusts above the OSHA-permissible exposure limit (PEL) or when an oxygen-deficient atmosphere exists.

- Respirator users must be trained in use, selection, maintenance, storage and inspection prior to use. It is the responsibility of contractor management to train its employees.
- Respirator users must have a fit test conducted prior to wearing a negative pressure respirator. It is the responsibility of the contractor to conduct the test and to enforce a facial hair policy.

Nothing Hits the Ground

Fabrication

All material fabrication shall be performed at a work station between 30 and 39 inches off the floor.

Work stations shall be mobile and include a fire/debris stop directly behind all chop saws.

Rubbish containers shall be mobile and located directly adjacent to the work station.

The subcontractor is to furnish all mobile rubbish containers for their work.

Housekeeping

All rubbish shall be disposed of as it is generated and be immediately placed in a mobile rubbish container.

Cordless power tools are required unless the subcontractor can demonstrate a hardship or need to use tools with power cords.

The subcontractor is required to elevate off the ground all power cords in order to minimize tripping hazards on walking/working surfaces.

Debris is not allowed to be consolidated on the floor.

Material Handling and Storage

Materials may not be stored within 10 feet of the building perimeter or adjacent to shafts or stairwells.

All material laydown areas must be coordinated and designated by Turner.

Material must be stored to promote mobility of material. Pipes, conduits, metal fabrications and steel framing are to be stored on rolling racks or similar means of conveyance. Bulk material must be palletized to allow for easy mobility using a pallet jack.

“Just in Time” delivery required to minimize clutter. Nothing should be stored on a floor that cannot be installed within one week.

Heavy material such as glass and drywall must be loaded so as not to overload the structure. The subcontractor is required to do a floor loading analysis for submission to Turner PM/ PE for review.

Steel Erection

Fall protection shall be used 6 feet and above in conjunction with 100% positive fall protection. At no time shall a Safety Monitor or Attendant be used as a means of fall protection. A site-specific erection and fall protection plan must be submitted prior to start of erection.

A guardrail system, tie-off system, or netting must be used.

The area below steel erection activities must be barricaded to prevent access by unauthorized personnel.

Guardrail cables of one-half inch wire rope or the equivalent shall be installed at 42 & 21 inches high, around the perimeter of each floor and all interior floor openings during erection. These cables shall be maintained to OSHA requirements by the erector until the erector is offsite. The erector and fabricator are responsible for providing means for erecting cable (i.e. pre-punch columns, angle iron). Toe boards at least 3.5 inches high must be provided and all perimeter cabling must be flagged at 6 foot intervals.

A hoisted steel member shall not be released until it is anchored by at least two bolts at each connection.

Tag lines must be used to control loads.

Multiple lift rigging (“Christmas Treeing”) may be used when limited to a maximum of 3 like members.

Personnel are prohibited from climbing columns, walking on beams, traversing the trusses and sitting on top of columns unless fall protection is provided.

Tools and containers for rivets, bolts or welding rods must be secured to prevent falling.

The erector is responsible to determine if additional plumbing is required, and provide as needed.

The steel fabricator/steel erector will assume all responsibility for adequate lay down and erection site conditions beyond the Site Logistics Plan.

Confined Space

Confined space entry procedures must be submitted and approved by Turner’s BUEHSD or site Safety Manager prior to the start of work where they are required per OSHA standards and /or host facility requirements. The more stringent rule will always apply.

Entering or knowledge of entry into a confined space without all appropriate planning and permits is a zero tolerance issue for Turner Construction and will be dealt with appropriately.

Turner Construction requires onsite rescue services for all permit-required confined spaces. Subcontractors must provide Turner’s BUEHSD or site Safety Manager with rescue service team credentials, which must be approved, prior to entry.

Before beginning work, each contractor must ensure their designated confined space competent person identifies each space, evaluates the space to determine its classification (permit-required, alternative entry or non-permit-required), and provides appropriate pre-planning documentation including a written confined space program, employee training records, equipment type and service records, rescue provisions, communications, and permitting as applicable.

Turner considers all confined spaces to be permit-required spaces until a competent person can provide Turner with documentation adequate to support alternative or non-permit provisions per Turner's *Confined Spaces in Construction* policy.

All permit-required confined space work will require a mandatory pre-planning meeting with Turner project staff as well as a documented *Project-Specific Confined Space Procedure* that must identify the following, at minimum: Job-specific safety analysis, atmospheric testing, assigned duties, unauthorized entry, rescue equipment and emergency services, entry permit, training, respiratory protection, and hot work safety.

All confined space entries require the use of Turner's Confined Space Entry Permit.

Excavations

Prior to any digging, a facility "Dig" Permit must be obtained and the utility protection services (811) must be contacted. Excavations greater than 4 feet in depth shall utilize protective systems (i.e. trench shields, sloping, benching, or shoring) at all times to protect employees against potential cave-ins. A competent person must be identified and their certification submitted to Turner prior to the start of work. A competent person will be on-site during all excavation work to determine the soil type and its stability by performing one visual and one manual test in accordance with OSHA and submit an Excavation Safety Checklist to the Project Superintendent prior to each shift. All excavations, regardless of depth, will be protected by safety fence, barrier or guardrails.

Ground Fault Circuit Interrupters (GFCI)

All 120-volt single phase 15 & 20-ampere receptacles shall have approved GFCI's.

The electrical contractor must turn in written verification (that they have tested all GFCI receptacles once each month, at minimum.

Temporary Lighting

All temporary lighting shall be run with sheathed multi-conduction wire. No single strand wiring is allowed. Temporary lighting must never be put on the same circuit as temporary or permanent receptacles; temporary lights must be on a dedicated circuit and cannot be used for power.

Temporary lighting must be at least 8' off the ground and provide a minimum of 5 candle feet in each area of the project.

Burning, Welding and Cutting

Hot Work is defined as any work using open flames or sources of heat that could ignite materials in the work area. Examples of hot work are:

- Welding
- Burning
- Brazing
- Propane smoldering

- Oxyacetylene cutting
- Grinding ferrous metals

Before beginning hot work, contact the project superintendent or designated safety personnel to have a Hot Work Permit issued. Permits are issued for the specific job being done, and for a specific time period. The time period is usually for the working shift, but may never exceed twenty-four hours. No hot work is permitted without prior approval from the project superintendent or superintendent designee.

The following precautions must be ensured during all hot work activities:

20 pound dry chemical, type ABC fire extinguisher(s) in place.

Proper PPE is available and utilized.

Sprinklers are in service.

Cutting and welding equipment is in good repair.

Precautions within 35 feet of work:

Flammables and combustibles have been removed from a 35 ft. perimeter of the hot work area.

Floors are swept clean of combustibles.

Combustible floors are wet down, covered with damp sand or fire-resistant blankets.

Flammable liquids removed; other combustibles, if not removed, protected with fire-resistive tarpaulins or metals shields.

Potential explosive atmosphere has been evaluated and eliminated.

All wall and floor openings have been protected.

Fire-resistive tarpaulins suspended beneath work.

Work on Walls or ceilings:

Construction is noncombustible and without combustible covering or isolation.

Combustibles moved away from other side of wall.

Work on Enclosed Equipment:

Enclosed equipment cleaned of all combustibles

Containers purged of flammable liquids.

Fire Watch:

Fire Watch will be provided during and for at least 30 minutes after work and during any coffee or lunch breaks.

Fire Watch is supplied with suitable extinguishers (20 pound, dry chemical, type ABC unless otherwise specified due to project hazards).

Fire Watch is trained in use of this equipment, in sounding alarm and in emergency evacuation procedures

Misc.

Cylinders shall be secured in an upright position at all times.

Oxygen and acetylene cylinders not in use must be separated by 20' or ½ hour fire rated wall with regulators removed and caps in place.

The welder must wear the welding hood attached to the hard hat. It is not acceptable to wear the hood without the hard hat.

Hearing Protection

Hearing protection must be used to meet OSHA standards, this Safety Program, Federal, State and Local Codes and Regulations. A generalized guideline to follow is if the worker would need to raise his/her voice to communicate in an area or while operating a piece of equipment, hearing protection (muffs or plugs) should be worn. Adequate training must be provided by contractor per OSHA requirements.

General Safety Rules

Horseplay of any kind is absolutely forbidden on the project site.

Do not walk or stand under or beside suspended loads.

When discarding boards, always remove protruding nails or bend them down.

The use, possession, sale, transfer or purchase of alcohol, illegal drugs controlled substances on this project is prohibited.

To the maximum extent permitted by applicable law, the possession on Company premises or while on duty of firearms, clubs, explosives, or other weapons that could be used to cause harm to personnel or property, other than that used to perform specific construction activities, are strictly prohibited.

It is each employee's responsibility to be familiar with emergency safety equipment in the area which they are working.

To prevent impalement of personnel, exposed reinforcing rods and other materials that could cause impalement must be provided with protection such as rebar caps, 2 x 4 lumber, etc. The use of mushroom caps is not permitted for impalement hazards.

Where employees must walk across rebar, temporary walkways must be installed to prevent trip hazards.

Manufacturer requirements/ recommendations for equipment or Turner safety program must be followed (whichever is more stringent).

No headphones, iPods, radios, etc. are permitted on the job.

All tobacco products, smokeless tobacco products, and e-cigarettes (nicotine or no nicotine) are prohibited in all Turner offices, project offices, warehouses, and on projects. The project or office can designate smoking areas that must comply with all ADA, state, and municipal regulations. Certain owners may also have non-smoking policies and Turner employees, subcontractors and visitors will comply with those policies fully.

Man baskets such as those utilized from fork truck type vehicles are not allowed on Turner projects.

Glass containers are not permitted on site.

No hoist shall be placed into service on a Turner project until inspected and the supplemental reports are submitted to Turner.

Wall / Floor Openings

Once a contractor begins his work directly above, below, or within eighteen inches (18") of a floor or perimeter opening, that contractor is to maintain the protection of that opening.

Unmarked Pipes

In renovation and/or alternation work, identification of unmarked pipes must be made prior to any demolition or work being performed.

Public Areas

All work performed in or adjacent to public spaces will be required to have barricades separating the public from the work. Warning signs must be posted to inform the public of hazards. Flagmen are to be provided when necessary. All public areas are to be kept clean/clear of debris at all times.

Safety Meetings

Onsite employees shall attend safety meetings as scheduled by the owner or Turner Construction Company and the time and cost will be the responsibility worker's employer.

Hand Tools

Inspect all tools before using. Never use defective tools.

Keep hand tools in good condition – sharp, clean, oiled, dressed and not abused.

Keep tools subject to impact (chisels, caulking irons and star drills) dressed to avoid flying spalls from "mushrooming." Use tool holders.

Do not force tools beyond their capacity or use "cheaters" to increase their capacity.

Do not use tools for pry-bars.

Do not leave tools on scaffolds, ladders or overhead working spaces.

Do not throw tools from one location to another, from one employee to another or drop them to lower levels.

Typical box-cutters and utility-knife type cutters are not allowed on Turner projects. Cutters and knives must have automatic self-closing blade-guards, or, blades that retract into the handle when the blade loses contact with the cutting surface. (i.e. Olfa, Lewis and Martor are brands that make these types of safety cutters).

Portable Power Tools

Portable power tools must not be operated unless the employee is trained in their use.

Electrical power tools must be double insulated or shall be of an approved system that contains three wires with a ground.

Guards or shields must be installed on all power tools before use.

Electrical power tools are not be used in explosive atmospheres unless the tool is approved for service in a hazardous location.

Pneumatic-powered tools are to be secured to the hose by positive means to prevent the tool from becoming accidentally disconnected. Radiator-type hose clamps are not permitted on hoses.

Pneumatic hose sections must be wired together at each coupling connection.

Operators of powder-actuated tools must be authorized, must possess valid credentials, and wear proper personnel protective equipment.

All defective power tools must be taken out of service immediately and tagged defective.

All hammer-drills and rotary hammers must have integrated technology, such as a “safety clutch,” that will stop drill-bit rotation should the bit bind up in the hole. An example of this is Hilti’s Anti-torque control (ATC) technology.

Extension Cords

Extension cords must be of the three-wire type with ground plug.

Extension cords and cables must be protected from traffic or sharp corners.

Cords must be kept out of walkways and other areas where they present trip hazards. See “Nothing Hits the Ground.”

Electrical connections, cables, etc. must be kept away from water or damp surfaces.

Inspection and testing of cords shall be performed as required by OSHA.

No flat cords allowed.

Bad cords must be taken out of service and tagged defective and repaired or removed from jobsite.

Equipment

Each contractor employee has the responsibility to inspect equipment before use. Defective equipment must be tagged with a “Defective – Do Not Use” tag and taken out of service.

Know the limitations of the equipment used and do not exceed those limits.

Ladders and Scaffolds

Ladder use on Turner Construction projects will be allowed only when it has been determined by Project Manager and Turner Safety that it is unfeasible to use all other options to complete the task.

If it is determined that a ladder is the only means of performing the job at elevated height, a ladder permit must be submitted prior to starting work. At no time will a ladder be on site without a current permit and safety checklist.

Use of job built ladders is prohibited on Turner Construction Projects. Temporary stair towers or prefabricated stairs shall be used to access different building levels.

Procedures for identifying and responding to all tasks that require the use of a device that allows work from a height:

- Prior to beginning work, the subcontractor or superintendent (for self-perform work) shall evaluate all tasks that require individuals to work at elevated heights. It is the expectation that these tasks will be performed using methods other than a ladder. Use of lifts and portable scaffold devices shall be the preferred method to perform this type of work.

If it is determined that a ladder must be used:

- The subcontractor shall complete the Turner Construction Ladder Use Permit and have it reviewed and approved by the Turner Superintendent.
- Workers must maintain three points of contact at all times when working from a ladder. If this cannot be done, worker must tie off at any height.
- When working at a height of six (6) feet and above, 100% fall protection is required.
- Prior to starting work each shift, The Turner Construction Ladder Safety Inspection Checklist shall be completed affixed to all ladders.
- Prior to using a ladder, the Turner Superintendent will review the Job Hazard Analysis, Pre Task Plan, and Ladder Use Permit.

Scaffolds

All persons and scaffolds are to be built under the supervision of a Competent Person and meet the specifications required by OSHA 100% fall protection at six foot shall be provided regardless of the type of scaffold during all phases of construction.

Lean-to scaffolds are prohibited.

The Competent Person shall inspect scaffolds daily and submit a completed Scaffold Inspection Checklist to the Project Superintendent daily. All scaffolding must have an inspection tag.

All mobile scaffolds must have rails at all heights & the wheels locked when in use.

Scaffolding shall be erected with one of the following: base plates, screw jacks or casters, on sound, rigid footing. Use of concrete block for footing is not permitted.

Scaffolding must be equipped with guardrails at any height.

Cross bracing shall not be used as handrails.

A body harness must be worn and properly tied off on any scaffold platform at six feet in height and not equipped with standard handrails, mid-rails, or decking.

Scaffold planks must extend a minimum of 6" but no more than 12" over the end supports and be of scaffold-grade lumber. All scaffold boards that do not extend over the centerline of their support by at least 6" are to be cleated on each end.

Provide an access for all scaffolds. Climbing the side of scaffolding is not permitted..

Scaffolds must be tied off or stabilized with outriggers when the height is more than three times the smaller dimension of the length or the width. Scaffolds must be tied off horizontally every 30 feet.

Suspended scaffolding, such as swinging stages, boatswain ("bos'n") chairs, floats and needle beams, requires special approval by the Business Unit Environmental, Health, and Safety Director before use.

While using suspended scaffolding, attach and secure a safety harness before stepping on the platform and do not remove it until clear of the scaffold. Tie off to an independent lifeline or building structure. Use one lifeline per person.

Signs, Signals, and Barricades

At locations where potential hazards exist, contractor personnel shall be responsible for posting, installing, and maintaining signs, signals, and barricades to detour the passage of persons or vehicles.

Barricades must be 42 inches high. Barricades shall be kept back six feet from the edge of excavations, holes, platforms, and roofs.

Contractor employees shall obey all signs, signals, and barricades which are posted to warn of potential or existing hazards.

The selection and use of signs and tags shall be in conformance with ANSI requirements.

Red barricade tape is to be used in situation where entry is prohibited or requires special permission. Yellow tape with caution warnings is to be used where entry is allowed as long as the cautions are followed.

Tape of any kind is not permitted for use as fall protection nor swing radius delineation. Leading edge awareness for fall protection must be carnival flags or a hard barrier. The swing radius of cranes and other equipment must be a hard material such as red-colored, plastic chain.

Rigging

Any contractor performing rigging must have a qualified rigger.

If the wire rope sling is missing its identification marking, consistent with the latest ASME B 30.09 standard the sling must be removed from service until the identification markings are reaffixed.

The qualified rigger shall inspect all rigging prior to each shift.

Safety latches must be installed on all hooks (shakeout hooks are an exception).

Do not leave unsecured or unattended suspended loads.

Use softeners when possible, to obtain a “bite” on material being rigged.

Inspect wire rope slings for frays, kinks, and worn spots before each use. Do not exceed safe working capacity.

Inspect fiber rope slings for broken fibers, wear, and deteriorated inner and outer strands prior to use. Do not use fiber rope slings where fumes, vapors, sprays, mist and corrosive chemicals are present. The use of chains is not allowed.

Destroy damaged slings immediately. Except for steel erection, multiple lift rigging (“Christmas Treeing”) of any material is prohibited.

Compressed Air

Hoses and coupling must be checked daily before use. All hose couplings must be provided with positive locking device.

Compressed air used for cleaning purposes must not exceed 30 psi. Wear goggles over safety glasses when conducting cleaning.

Hose and coupling connections must be safety-wired together.

Compressed air is not to be used for blowing material off you or others.

Compressor must be equipped with shut off valve.

Power Industrial Trucks and Power-Operated Equipment

Trucks and Automobiles

Jobsite speed limits and other regulatory signs must be obeyed.

Pedestrians always have the right of way.

Seatbelts must be worn at all times when riding in a vehicle equipped with seatbelts.

Riding on the side, on the tailgate, or in the bed of a pickup truck is prohibited.

All vehicles used during a project for contract activities must have reverse signal alarms.

Flaggers and spotters must be provided for cranes and vehicles in congested areas and when backing up. Flaggers must be certified in the jurisdiction where the work is being performed. The worker must have the card on their person when flagging.

Heavy equipment (i.e. dozers, scrapers, back hoes, etc.) shall be inspected by the operator prior to each shift. A completed Equipment Inspection Form shall be submitted to the Project Superintendent daily.

Turner Construction Company prohibits the use of handhelds, including cell phones, Blackberries, iPhones, PDA's, MP3 players (or equivalent), radios, and other listening or communication devices on a Turner jobsite while operating vehicles, repositioning, moving or backing up equipment (lifts, excavators, tractors, dozers, etc.). Construction equipment to include cranes, scissor and aerial lifts, earthmoving, hauling, and excavating equipment, except for radio's when radios are the primary means of controlling the operation of the equipment. The use of a mobile phone while operating any power-industrial trucks or power-industrial equipment is strictly prohibited.

When Loading and unloading materials, equipment, and products from trucks we must have:

- Proper preplanning
- Proper training of the workers
- Selection of the right equipment to load/unload the material or equipment
- Established controlled or restricted access zone for workers around the area
- Engage the driver in the activity.

The driver must be in full view to a forklift operator at all times. All loading or unloading activity must stop if the driver cannot be seen, or needs to enter the exclusion zone to inspect a load. Alternatively, if it is safe to do so, the operation can allow the driver to stay in the truck cab during loading and unloading

Establish a restricted access zone around the truck to prohibit entry into the load/unload area. The zone must be equal to the area needed to load/unload plus ten feet around the entire truck area.

Workers on the ground within the zone should never be on the opposite side of a truck from a forklift while it is loading or unloading material.

Cranes

All cranes must use anti-two blocking devices, as specified in ANSI B30.5 for each load hoisting line. Cranes must be operated in compliance with OSHA standards and the requirements listed in the Turner Crane Pre-Plan Checklist.

Crane Inspections - Annual certificate of inspection (by a third party) must be on file on site prior to operation of any crane. In addition, the following inspections are required:

Mechanical parts of any crane must be inspected by the operator and given to the Turner Superintendent prior to each shift and monthly.

All Cranes must be inspected by a Third Party Qualified Person after being assembled, whenever any components are modified or repaired, involved in an incident, and annually. If the crane was disassembled then reassembled on site, a third party inspection should be performed and documented after reassembly.

Tower Cranes must be inspected during erecting, climbing (e.g. "jumping") or dismantling activities by a Qualified Person. Additionally a Registered Professional Engineer must verify that the host structure is strong enough to withstand forces imposed on it by braces, anchorages, and supporting floors.

Cranes are to be operated within the design limits specified by the manufacturer.

All crane operators must be certified by an independent testing agency approved by the National Commission for the Certification of Crane Operators. (NCCO)

All Riggers and Signalers are to be "Qualified" riggers and "Qualified" Signal persons.

The rated load capacity of the crane is never to be exceeded.

Rated load capacities, recommended operation speeds, and special hazard warnings or instructions shall be posted conspicuously on all equipment.

All accessible areas within the radius of the counterweight swing must be barricaded to limit access.

Cranes, hoists, boom trucks and derricks shall not be installed or operated within 20' of any power line unless lines have been de-energized and grounded, or other options per OSHA standards are implemented.

Personnel are prohibited from riding on the hook of the "headache" ball.

The use of personnel hoists must be reviewed by Turner Environmental, Health, and Safety Director after subcontractor has proven there is no other practical safer means.

All OSHA requirements must be followed when using personnel baskets.

Outriggers must be fully extended and on firm ground.

Crane inspections must be conducted on equipment per the OSHA standards. These inspections and the competent person are the responsibility of the crane owner and the contractor providing the crane.

The use of a mobile phone while operating a crane is strictly prohibited.

Crane appurtenances that exceed 200 above the ground shall be marked and lighted, unless an exemption is received from the FAA.

Industrial Vehicles

Only vehicles that have previously been approved by the Operations Manager and BU Environmental, Health, and Safety Director for use at its projects may be utilized at the Company projects and must be in compliance with the policy. This policy also applies to vehicles owned and operated by Subcontractors and Subcontractor employees. All vehicles covered under this policy are to be scheduled to Turner's property plant and equipment (contractor's) policy. It is the responsibility of the jobsite accountants to properly report all equipment under this policy.

All vehicles with the following features (in combination) are prohibited from all Turner projects:

- Typically carry one rider;

- Have no rollover protection or seat belts; and

- Have a handlebar similar to a motorcycle for navigation.

These vehicles may be commonly referred to as All-Terrain Vehicles (ATV), Quads, Three Wheelers, or Four Wheelers (or other similar equipment). This prohibition includes vehicles owned by subcontractors as well.

Follow OSHA standards Powered Industrial Trucks, as applicable.

All personal (owned by an individual) All-Terrain Vehicles (ATV's), Quads, Three Wheelers, Four Wheelers, Mules, Gators, or other similar equipment are prohibited on all Turner Projects.

All authorized drivers must complete training as follows:

- Manufacturer requirements (as coordinated through the dealership of the equipment) for the safe operation of the vehicle including use of personal protective equipment, authorized surfaces for operation of the vehicle, weight restrictions, and other operational conditions.

- Follow OSHA standards Powered Industrial Trucks.

- This training shall be written formally into the Project Specific Safety Plan by the project team, approved by the BU Environmental, Health, and Safety Director.

- A documented sign-off for the authorized driver must be a part of the training manual provided with the training.

Subcontractor Injury Reporting Requirements

If an employee is injured:

Provisions shall be made by each Contractor for immediate and proper first aid, and/or doctor treatment, for every work injury.

Turner Construction Company is to be notified immediately any incident, near-miss, property damage and equipment failure.

An accident investigation is to be conducted with a written report of the findings and any photos copied to Turner immediately.

One copy of all Workers' Compensation Accident reports involving Contractor's employees shall be promptly forwarded to Turner Construction Company.

Contractors will be individually responsible to notify Federal, State and local authorities in the event of a death and/or multiple injuries. Notify OSHA within eight hours of fatality or hospitalization.

Total man-hours worked and lost time due to accidents on this project must be submitted to Turner on a monthly basis.

Turner Construction Company's Project Superintendent is to be notified immediately.

Send Public Liability Report to your insurance carrier promptly and forward one copy of the report to Turner Construction Company.

Submit injury statistics to Turner including OSHA 300 log on a monthly basis.

Fire Prevention

Shanties:

Are to be constructed using only fire retardant materials and all glass is to be wire glass. As a minimum, any lumber used in shanty construction shall meet the American Wood Preserves Associations Standard C1, C20, and C27, and shall bear certificates of performance.

All materials shall have a flame spread rating no greater than 25 (ASTM Standard E84) with no evidence of progressive combustion for at least 30 minutes.

All shanties shall be located at least 10 feet from materials which present extraordinary fire hazards.

Each shanty shall have at least one (1) 20# ABC fire extinguisher.

Rubbish shall not be permitted to accumulate within an adjacent area to any shanty.

No oily clothes, oily rags, nor fuels, shall be stored in shanties.

All shanties shall be constructed in such a manner that shanty fire shall cause no damage to permanent construction and installations.

All temporary electric must be in accordance with all existing codes.

Storage of any material within 10 feet of fire hydrants is strictly prohibited.

Work areas shall be monitored on a regular basis to prevent accumulation of material.

No motors or machinery shall be left running during non-working hours except as specifically directed by Turner.

All heating equipment shall have necessary safety devices and shall be wired, piped, and operated according to all applicable codes, rules, and regulations.

All tarps, blankets, and poly shall be of fire retardant material.

Each contractor is required to provide fuel tank containment equal to 110% of tank capacity.

No open burning or fires shall be permitted on site. Anyone doing so is subject to immediate dismissal.

No solid fuel (i.e. coke, etc.) shall be permitted on site.

Standpipe system shall be kept as close as possible to progress of the structure and prevented from freezing.

Fire extinguishers shall be a minimum of 20# ABC type and placed and maintained on the job in conspicuous locations according to OSHA requirements. Fire extinguishers must be affixed in a location to prevent damage from water or other materials. These fire extinguishers shall not be moved or discharged except for fighting a fire. Anyone discharging an extinguisher as a prank will be subject to immediate dismissal. Use of carbon tetrachloride extinguishers is prohibited.

All gas bottles such as propane, oxygen and acetylene shall be properly supported and stored and tied in a vertical position in areas designated by Turner. All stored bottles shall be capped.

All gas bottles in use shall be tied in the vertical position and capped at the end of the working day.

All oxygen and acetylene in use shall be in a proper cart with an attached fire extinguisher.

All "HOT WORK" procedures will be followed.

Fire Response:

Appropriate action is the key to the prevention of loss of life and property damage. This action in the first minute is worth tons of water 10 minutes later.

If a fire occurs, notify the local fire department and Turner immediately.

Evacuate area of fire immediately. Extinguish fire with a non-combustible such as sand or an available fire extinguisher. Only those individuals with adequate training will be permitted to extinguish incipient fires. Those individuals with no training are required to evacuate and proceed to the predetermined meeting area.

5.5 STANDARD FORMS

- 1) Site Specific Chemical Inventory List (Form # 1)
- 2) Equipment Inspection
 - a. Ladder Checklist & Ladder Permit (Form #2A)
 - b. Off-Road Heavy Equipment (Form # 2B)
 - c. Initial Equipment Safety Inspection (Cranes) (Form # 2C)
 - d. Crane Critical Lift (Form #2D)
- 3) Energized Electric Work
 - a. Energized Electric Work Permit (Form # 3A)
 - b. NFPA 70 E Job Briefing and Planning Check List (Form # 3B)
 - c. Work Authorization and Job Safety Analysis (Form # 3C)
- 4) Confine Space (Form # 4)
- 5) Fall Protection (Form #5)
- 6) Injury Log (Form # 6)
- 7) Job Hazard Analysis (Form #7)
- 8) Pre-Task Planning (Form #8)
- 9) Ground Penetration Permit (Form #9)

POSTINGS

Emergency Phone Numbers and Procedures

Emergency Action Site Plan



Hazardous Chemical Inventory List

Contractor

Project

Start Date

#	April 14, on	Common Name / Chemical Name	Manufacturer	SDS on File
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				



Form 2A

LADDER SAFETY INSPECTION CHECKLIST

Inspector:	A. Date:
B. Site Location:	C. Time:

Instructions:

- 1) Complete Permit on flipside first
- 2) Affix completed inspection tag on all ladders passing inspection
- 3) Tag defective ladders "Out of Service" and discard if beyond repair
- 4) Note deficiencies/corrective actions in Comment section
- 5) Return checklist to Turner Superintendent

- | Y | N | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Broken, bent or missing steps, rungs, cleats, or rails? |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Steps and rungs free of water, grease, oil or other slippery substance? |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Free of splits, cracks, rust corrosion and dry rot? |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Free of sharp edges, cuts, burrs, etc.? |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Loose or bent hinges that can't be fully opened or locked in place? |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Stable and completely balanced (not shaking or swaying) with all legs resting firmly on the floor? |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Loose, broken or missing extension locks to ensure safe overlap of extension ladder sections? |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. Damaged or worn non-slip bases, safety feet, wheels or casters? |
| <input type="checkbox"/> | <input type="checkbox"/> | 9. Cross-over ladders have railings and non-slip steps? |
| <input type="checkbox"/> | <input type="checkbox"/> | 10. Weight capacity label attached? Type 1A |
| <input type="checkbox"/> | <input type="checkbox"/> | 11. Other structural defects or operating problems? |

Comments:

LADDER PERMIT

Project: _____ Date: _____

Contractor Company: _____

Area(s) Ladder to be used: _____

Ladder Competent Person: _____

Competent Person Contact #: _____

Consider how work may be accomplished at or from the ground-level to minimize elevated work. Ladders are to only be used where no safer means exists to access elevated areas. Consider the use of scaffolds, aerial and scissor lifts, rolling stairs, etc. as safer alternatives.

Note: If three points of contact cannot be maintained, 100% fall protection is required.

Reason ladder is only option (Note: This must be agreed to and approved by the Turner Superintendent and Safety Manager):

Activity/Task(s) to be performed from ladder:

Type of ladder (check one): ☐ Platform-ladder ☐ Stepladder ☐ Extension
☐ Fixed ☐ Trestle ☐ Other

Ladder weight capacity (300 lbs. min): _____

Ladder Height: _____

Will you be 6' or more above a working surface? ☐ Yes ☐ No

If YES, what specific Fall-Arrest System will you use and what will be your anchor point? (Retractable Device is the only appropriate method of fall protection)

<u>Worker's Name</u>	<u>Orientation Sticker #</u>
----------------------	------------------------------

_____	_____
_____	_____
_____	_____

Permit Reviewer (Turner) Print

Date

Initial Equipment Safety Inspection Off-Road Heavy Equipment

INITIAL INSPECTION APRIL 14,

TYPE OF EQUIPMENT _____ MAKE/MODEL _____ OWNER ID # _____

OWNED BY _____ IN USE BY (Co.) _____

OPERATED BY (Name of Operator) _____ EMPLOYER _____

OPERATOR CERTIFIED? [] YES [] NO CERTIFIED BY _____ DATE _____

INSPECTED BY (Print Name) _____ (Sign Name) _____

TITLE _____ EMPLOYER _____

INSPECTED BY (Print Name) _____ (Sign Name) _____

TITLE _____ EMPLOYER _____

Back up alarm is functioning and loud enough for the conditions

		YES	NO	N/A
1	Operator has reviewed charts & manuals and understands safe operating practices			
2	Operator does a Daily Equipment Inspection at the start of the shift			
3	Equipment is in proper condition for street use (turn signals, brake lights, etc.)			
4	Back up alarm is functioning and loud enough for the conditions			
5	Warning horn is functioning and loud enough for the conditions			
6	There is a charged fire extinguisher in the cab			
7	The Cab Glass is without cracks			
8	Steps and seats are in proper condition			
9	Seat belts are provided and they are used			
10	Riders are not permitted where there are no seats with seat belts			
11	Rollover protection is provided			
12	Overhead protection is provided			
13	Protection from flying debris is provided			
14	Adequate lighting is provided for work in low light/dark conditions			
15	Brakes are functioning properly			
16	Beds of dump trucks are equipped with device for locking body in raised position			
17	Tires/tracks are in good condition			
18	Pulleys, belts, gears, chains, and other nip and shear points are adequately guarded			
19	Fuel tanks are located to prevent spills and overflows from hitting hot parts or electrical equipment			
20	Windshield wipers are in good condition			
21	Exhaust is located/directed so as not to endanger workers or obstruct operator's view			
22	Fueling cans used with the equipment are the approved safety type			

Initial Equipment Safety Inspection: Cranes

INITIAL INSPECTION APRIL 14, _____ ANNUAL INSPECTION REPORT EXPIRES _____
 TYPE OF EQUIPMENT _____ MAKE/MODEL _____ OWNER ID # _____
 OWNED BY _____ IN USE BY (Co.) _____
 OPERATED BY (Name of Operator) _____ EMPLOYER _____
 OPERATOR CERTIFIED? [] YES [] NO CERTIFIED BY _____ DATE _____
 INSPECTED BY (Print Name) _____ (Sign Name) _____
 TITLE _____ EMPLOYER _____
 INSPECTED BY (Print Name) _____ (Sign Name) _____
 TITLE _____ EMPLOYER _____

*Indicates must be verified by and/or submitted to the Turner Safety Manager/Engineer
 Items (except #20) marked "NO" must be corrected prior to operation of crane

		YES	NO	N/A
1*	Current "Annual" Inspection Report w/any deficiencies noted as corrected			
2	Operator's Manual			
3*	Daily Operator's Inspections done with Inspection Log up to date			
4	Load Charts			
5*	Chart for hoisting "over the front"			
6	Signal Chart posted			
7	Operator has reviewed charts & manuals and understands capacities and limitations			
8	Functioning "Anti-Two-Block" Device as per ANSI B30.5			
9	Boom Angle Indicator			
10	Leveling Device			
11	Operator Controls legibly marked as to function			
12	FAA Light and/or Flag			
13	Cab Glass intact			
14	Functioning Warning Horn			
15	Charged Fire Extinguisher			
16	Adequate Blocking (min. sq. ft. each float = rated capacity of crane / 5)			
17	Floats positively attached to outrigger rams			
18	Block and/or ball have Capacity Plates and hooks have Safety Latches			
19	Wedge Socket termination is proper & not clipped directly to load line			
20	Will or might be Hoisting Personnel			

CRITICAL LIFT DOCUMENT FORM

Page 1 of _____

(Form # 2D)

COMPANY: _____

DATE: _____

Critical Lift Check List April 14, of Planned Lift(s): _____ Time of Planned Lift(s): _____

1. Designated Positions

a. Supervisor Responsible for Lift: _____

Qualifications _____

b. Designated Crane Operator: _____

Qualifications: _____

c. Designated Riggers: _____

Qualifications: _____

2. Description of item to be hoisted:

a. Descriptions of item (s) to be hoisted: _____

b. Weight(s) of item(s) to be hoisted: _____

c. Estimate weight(s) of item(s): _____

Estimated by Whom: _____

d. Item(s) weight verified: _____

Confirmed by Whom: _____

e. Dimensions of item(s) to be hoisted: L. _____ W. _____ H. _____

3. Hoisting equipment to be used:

a. Crane: (Make) _____ (Model) _____

Gross Lifting Capacity: _____

- b. Headache ball weight: _____ Verified By: _____
- c. Spreader beam(s) weight: _____ Capacity: _____ Verified By: _____
- d. Shackle(s) size: _____ Capacity: _____ Verified By: _____
- e. Nylon Sling size: _____ Capacity: _____ Verified By: _____
- f. Chain Sling size: _____ Capacity: _____ Verified By: _____
- g. Kevlar Belt size: _____ Capacity: _____ Verified By: _____
- h. Other: _____

4 Lift Geometry: See Attached

- a. Crane Position: _____
- b. Height of Lift: _____
- c. Load Radius: _____
- d. Boom Length: _____
- e. Boom Angle: _____
- f. Maximum Load Limits for Range of Lift: _____

5. Environmental Conditions:

- a. Weather: _____ Temp: _____ Wind: _____
- b. Type of ground crane will be set up on, asphalt, Concrete, Dirt: _____

- c. Mats required: _____ How many: _____
- d. Outriggers Required: _____ Crawler Track: _____
- e. Communication source: Two way radios / Hand Signals
- f. Day work: Y or N Night Work: Y or N If yes, type of lighting required: _____
- g. All lifting operations shall cease if the following conditions occur:
LIGHTNING, ICING AND OR WIND SPEEDS IN EXCESS OF 25 MPH

6 Rigging Procedures:

- a. Lifting Points: _____ Factory installed: _____ Field installed: _____
- b. Spreader beam required: Y or N If yes, what size: _____
- c. Sketch of piece lifted and rigging: See Attached

REMARKS & COMMENTS:

The following items must be presented to Turner Construction Company prior to the start of any crane lift:

- a. Certificate of Insurance for outside crane rental service.
- b. Copy of current annual crane inspection certificate.
- c. Copy of operators Certification.

Approved and Accepted By:

Lift Geometry

Sketch of piece lifted and rigging:

Crane position & location.

(Form # 3A)

ENERGIZED ELECTRIC WORK PERMIT**Part I: TO BE COMPLETED BY THE REQUESTER**

- 1) Detailed job description procedure to be used in performing the above described work:

- 2) Description of the Safe Work Practices to be employed:

- 3) Justification of why the circuit/equipment cannot be de-energized or the work deferred until the next scheduled outage:

Requester/Title _____ Date _____

PART II: TO BE COMPLETED BY THE ELECTRICALLY QUALIFIED PERSONS DOING THE WORK:

- 1) Detailed job description procedures to be used in performing the above description work:

- 2) Description of the Safe Work Practices to be employed:

- 3) Results of the Shock Hazard Analysis:
- 4) Determination of Shock Protection Boundaries:
- 5) Results of the Flash Hazard Analysis:
- 6) Determination of the Flash protection Boundary:
- 7) Necessary personal protective equipment to safely perform the assigned task:
- 8) Means employed to restrict the access of unqualified persons from the work area:
- 9) Evidence of completion of a Job Briefing including discussion of any job-specific hazards:
- 10) Do you agree the above described work can be done safely? Yes No (If no, return to requester)

Electrically Qualified Person(s) _____ Date _____

PART III: APPROVAL(s) TO PERFORM THE WORK WHILE ELECTRICALLY ENERGIZED:

Project Executive _____ Project Safety Manager _____

Project Manager _____ BU EH&S Director _____

Project Superintendent _____ Date _____

NFPA 70E: Job Briefing and Planning Checklist

Identify

- | | |
|-----------------------------------|-------------------------------------|
| What are the hazards? | Potential for arc flash |
| What voltage levels are involved? | Unusual work conditions |
| What skills are required? | Is this a multiple -person project? |
| "Foreign" voltage source present? | |
| Notes: | |

Ask

- | | |
|--|---------------------------------|
| Can the equipment be de-energized? Y or N | Is a "standby person" required? |
| Are there possible back feeds of the circuits to be worked on? | |
| Notes: | |

Check

- | | |
|-------------------------------------|---|
| Job Plans | Safety procedures |
| One Lines and vendor prints | Vendor information |
| Status Board
and resources. | For up-to-April 14, information on system |
| Individuals familiar with facility? | |
| Notes: | |

Know

What is the Job?
Communicate!

Who is in charge?

Notes:

Who else needs to know?

Think

The extra eventWhat if?

Lock - Tag - Test - Try

Test for voltage first.

Install and remove grounds

Notes:

Use the right tools, equipment and PPE

Install barriers and barricades

What else...?

Prepare for an Emergency

Who is First Aid/CPR Trained?

Telephone location?

Fire alarm locations?

Confined space rescue available if required?
available?

Emergency telephone numbers.

Fire extinguisher

Notes:

Exact work location.

Shut off in case of emergency.

Location of emergency equipment.

Is required emergency equipment

Radio communications available?

**Work Authorization and Job Safety Analysis
for Working on or Near Energized Electrical Circuits**

(Form # 3C)

Specific Location: _____

NOTE: All information must be completed before submission

4. Name of Electrical Workers Supervisor: _____

5. Name of Electrical Workers: _____

6. Name of Safety Observer: _____

7. Brief Description of Task to be Performed: _____

8. Description of Voltage and Location of Machine or Equipment: _____

9. Confirmation of Electrical Workers' Training and Qualifications: _____

The employee(s) must have successfully completed formal employer-approved training in the following subjects:

April 14, Completed

a. Electrical Safety _____

b. Lockout-Tagout _____

c. CPR _____

d. First Aid _____

e. 70E Standards _____

10. Identify the protective clothing or equipment required for the job: Note all equipment must have current test and/or certification.

a. _____ Safety Glasses and/or Face Shield

- b. _____ Non-Conductive Hard Hats
 - c. _____ Certified Rubber Gloves and Leather Protective
 - d. _____ Insulating Sleeves and Aprons
 - e. _____ Dielectric Blanket and Insulated Mats
 - f. _____ Hearing Protection
 - g. _____ Respiratory Equipment
 - h. _____ Insulated Tools
 - i. _____ Other: Cal rated clothing, etc.
- 11. Job Safety Analysis Form must be produced by the contractor performing the work.
 - 12. Pre-Task Planning Form must be produced by the contractor performing the work with all employees involved sign.
 - 13. Safety Checklist for Live Electrical Work:
 - 1. Specific work areas must be cordoned to prevent unauthorized access to the live work area.
 - 2. A minimum of two equally qualified workers must be present when the live work is accomplished.
 - 3. An individual certified in First Aid and CPR shall be immediately available to the area.
 - 4. All persons in the work areas should remove all jewelry.
 - 5. If ladder access is required, only fiberglass ladders are authorized. Although wood ladders are non-conductive the wood ladders are non-conductive that can absorb water and become conductive.
 - 6. If access to the live work is in a wet area, place wood planking or it's equivalence on the floor.
 - 7. Work boots for persons performing the live work should be ANSI approved for electrical work.
 - 8. Insulated gloves worn by workers performing the live work must have a current dielectric test date.
 - 9. All work must comply with OSHA 1926(Subpart K, NEC, 70 E standards and applicable NIOSH Polices.



CONFINED SPACE ENTRY PERMIT

1. LOCATION			DATE		START TIME	FINISH
2. DESCRIPTION OF TASK						
3. DESCRIPTION OF CONFINED SPACE (AND CS ID# IF APPLIC.)						
DESCRIPTION OF HAZARDS IN THE SPACE (LIST CHEMICAL, PHYSICAL, AND OTHER HAZARDS)						
4. ATMOSPHERIC SAMPLING/MONITORING CONDUCTED BY NAME (Signature)				TITLE		
ATMOSPHERIC MONITORING REQUIRED PRIOR TO AND CONTINUOUSLY DURING PERMIT-ENTRY MONITORING INSTRUMENT MANUFACTURER AND MODEL#				LAST FACTORY CALIBRATION DATE:		PRE-ENTRY CALIBRATION INITIAL IF COMPLETED
SAMPLING RESULTS (ATTACH ADDITIONAL PAGE IF NEEDED)						
MONITOR IN THIS ORDER:	ACCEPTABLE RANGES		RESULT	RESULT	RESULT	RESULT
	MINIMUM	MAXIMUM	AM PM	AM PM	AM PM	AM PM
1. Oxygen	19.5%	23.5%				
2. Combustible	0%	10% LEL				
3. H2S	0%	5 ppm				
4. Others:	0%	%PPM				
5. Temperature						
NOTE: 1. If levels are outside the acceptable levels specified above, entry is denied until 3 consecutive tests are done - 5 minutes apart, indicate whether with or without mechanical ventilation. 2. If additional space is needed, record sampling results on back.						
5. VENTILATION (REQUIRED IF A POTENTIAL OR ACTUAL ATMOSPHERIC HAZARD EXISTS)						
<input type="checkbox"/> NO MECHANICAL VENTILATION REQ'D			<input type="checkbox"/> CONTINUOUS MECHANICAL VENTILATION REQ'D			
6. ENGULFMENT HAZARD EARLY WARNING SYSTEM (REQUIRED IF A POTENTIAL FOR ENGULFMENT EXISTS)						
<input type="checkbox"/> NO ENGULFMENT HAZARD.			<input type="checkbox"/> YES - DESCRIPTION:			
IF YES, DESCRIBE METHOD AND LOCATION TO MONITOR FOR ENGULFMENT HAZARD						
7. EMERGENCY RESCUE PERSONNEL MUST BE ON-SITE DURING ANY PERMIT ENTRY (ALL REQ'S BELOW APPLY)						
<input type="checkbox"/> RESCUERS INFORMED OF ALL HAZARDS			<input type="checkbox"/> RESCUE PLAN DEVELOPED		<input type="checkbox"/> CURRENT 1ST AID/CPR	
<input type="checkbox"/> RESCUERS HAVE REQUIRED TRAINING			<input type="checkbox"/> NON-ENTRY RESCUE GEAR (TRIPOD, WENCH, AED, ETC)			
<input type="checkbox"/> SCBA OR SAR REQ'D WHEN POTENTIAL FOR IDLH ATMOSPHERE EXISTS (PLUS MED CLEARANCE AND FIT TEST TO USE)						
RESCUER NAMES:						
8. PROTECTIVE EQUIPMENT						
<input type="checkbox"/> HARNESS W/RETRIEVAL SYSTEM			<input type="checkbox"/> FACESHIELD/GOGGLES			
<input type="checkbox"/> RESPIRATORY PROTECTION (Specify): _____			<input type="checkbox"/> HEARING PROTECTION			
<input type="checkbox"/> SPECIFY COMMUNICATION METHOD _____			<input type="checkbox"/> FIRE EXTINGUISHER			
<input type="checkbox"/> COVERALLS OR CHEM CLOTHING			<input type="checkbox"/> OTHER:			
<input type="checkbox"/> INTRINSICALLY SAFE EQUIP. OR NON-SPARKING TOOLS			<input type="checkbox"/> BARRIERS TO PROTECT ENTRANTS FROM CARS/PEDESTRIANS			
9. ISOLATION OF MECHANICAL , ELECTRICAL, PHYSICAL, OR CHEMICAL ENERGY SOURCES - REQ'D FOR ALTERNATE ENTRY						
Measures might include LO/TO, blanking or blinding; removing sections of lines; a double block and bleed system; blocking or disconnecting all mechanical linkages; isolation barriers						
<input type="checkbox"/> Not applicable			<input type="checkbox"/> Yes (Specify):			
10. HAS SPACE CONTAINED LIQUIDS, GASES OR SOLIDS OF TOXIC, CORROSIVE OR IRRITANT NATURE?						
<input type="checkbox"/> No			<input type="checkbox"/> Yes If Yes, contact the BUSD prior to entry. Attach SDS to this permit.			
11. NAME(S) OF ATTENDANT						
1			2			
12. NAME(S) OF EMPLOYEE(S) AUTHORIZED TO ENTER						
1			2			
3			4			
13. SPECIAL INSTRUCTIONS/EQUIPMENT						
14. ALTERNATE ENTRY PROCEDURE (allowed when all of the following conditions are met)						
Conditions for Alt Entry:			Alternate Entry Requirements:			
<input type="checkbox"/> Physical hazards are eliminated or isolated			<input type="checkbox"/> NO Hazardous atmosphere present at anytime; Complete Section 4 & 5 above			
<input type="checkbox"/> Continuous forced air ventilation maintains safe air			<input type="checkbox"/> Egress points are easily accessible and easily identified			
<input type="checkbox"/> Documentation to support above made avail to entrants			<input type="checkbox"/> Fall protection system around opening			
			<input type="checkbox"/> Safe means of entry (harness, wench, or other applicable, etc.)			
As the competent person, I certify that the space described in section 1 above has been made safe for alternate entry, on the date listed above.						
NAME:			DATE:			
15. RECLASSIFICATION TO NON-PERMIT 1926.1203(g)						
<input type="checkbox"/> ALL HAZARDS ELIMINATED OR ISOLATED			<input type="checkbox"/> PRE-ENTRY AIR MONITORING CAPTURED ABOVE			
<input type="checkbox"/> FORCED AIR DOES NOT CONSTITUTE HAZARD ELIMINATION						
As the competent person, I certify that the space described in section 1 above has been made safe reclassification, on the date listed above.						
NAME:			DATE:			
16. DESIGNATE ENTRY TYPE:						
<input type="checkbox"/> PERMIT-REQUIRED			<input type="checkbox"/> ALTERNATE-ENTRY		<input type="checkbox"/> RECLASSIFIED TO NON-PERMIT	
17. POST-ENTRY DEBRIEF WITH TURNER CONSTRUCTION (REQ'D)						
<input type="checkbox"/> REVIEWED HAZARDS CONFRONTED/CREATED			<input type="checkbox"/> TURNER SHARED THIS INFO WITH HOST EMPLOYER			
18. PERMIT CANCELLATION						
<input type="checkbox"/> ENTRY OPERATION COMPLETED			<input type="checkbox"/> FORBIDDEN CONDITION ARISES		<input type="checkbox"/> ALTRNATE ENTRY OR NON-PERMIT	

This permit must be completed for "permit-required entries," "alternate entries," and when reclassifying a permit space to "non-permit." Permit must be posted at the entry portal of the Confined Space during entry, along with Pre-task Plan.

Send all permits to BUSD after debrief. Maintain this cancelled permit for 1 Year for Confined Space Program Review.

TURNER CONSTRUCTION COMPANY FALL PROTECTION CHECKLIST

Project Name:

Project #

Subcontractor Name:

Date:

Performed By:

Fall Protection Options for Hazardous Exposures	Look At:	Satisfactory	Unsatisfactory	Non-Applicable	Comments
Working Over Dangerous Equipment: guard rail—	Guard Rails:				
Safety net—personal fall arrest system	Top Rail @ 42"....Max 3" deflection.....Mid Rail @ 21"....Will withstand 200 Lbs. Force				
Excavations: Guard rails – Fences – Barricades	in any direction...Toe boards required...Wire rope flagged every 6' with high visible tape				
Floor/Roof Openings: Hole covers – guard rails –	Vertical Lifelines:				
Personal fall arrest – fall restraint	Free from knots.....Anchor to support 5000 lbs.				
Formwork & Re-steel:	Independently secured to structure...Line and rope grab inspected daily for wear &				
Personal fall arrest system – positioning system	deformities...Breaking strength of 6000 lbs.....One worker per lifeline				
Hoist Areas: Guard rails	Tie Off:				
Personal fall arrest system – fall restraint system	Mandatory Tie off at 6' or above...No one ties off to wire rope or wood....				
Leading Edge: Guard rails	Harness (ABC) Anchorage, body-wear				
Personal fall arrest system – Fall restraint	Connection used under direction of qualified person...Employees must wear approved				
Over-head Work: Guard rails-safety net-Personal fall arrest system-controlled access zone used only to protect worker below from "struck by" incidents	and Inspected equipment..."D" ring located between shoulder blades....Leg straps intact...				
	No exposure to fall greater than 6' when including lanyard, tie off point expansion, body height,				

Pre-cast Concrete Erection: Guard rails—safety net — Personal fall arrest system	deployment of shock absorber,/and or length of retractable grab point...Lanyard with double				
	locking snap hook, readable mfg's tag, no wear and tear, no ripped stitching...				
Roof Work: Guard rails — safety net — Personal fall arrest system—fall restraint system—	Is plan in place for recovering an individual who falls?...Self Retracting Lanyards: Inspected daily...				
	After fall or misuse, must be inspected by manufacturer and reset with applicable paperwork supplied				
	Holes/Openings:				
Unprotected Sides and Edges: Guard rails— safety net Personal fall arrest system—fall restraint system	Coverings secured both vertically and horizontally....required for all openings including				
	skylights and roof openings...capable of supporting 2 X intended weight				
Ramps, Runways, Walkways: Guard rails— Personal fall arrest system—safety net	(workers, lifts, vehicles, etc.)....Must be ¾" plywood minimum or guardrail				
	Ladders:				
Wall Openings: Guard rails—safety net — Personal fall arrest system - fall restraint system	Base level & free from debris.....No one stands on top 2 steps....				
	To be provided at points of access 19"....Inspected by competent person....				
Scaffolds: Guard rails—personal fall arrest system (If above guardrail system)	Non – conductive.....slip resistant...Job made –cleats 10" to 14" apart and uniform.....				
	4 to 1 lean. Work facing ladder				

Steel Erection: Guard rails— safety net – Personal fall arrest system - fall restraint system	Scaffolding: Set-up: Bases, cross bracing, guard rails, toe boards, mid rails, level, fully planked with scaffold grade planks...Protected from tipping...Fall protection required for erection...Fall protection required at 6' or above...Debris removed daily....				
Metal Decking: Guard rails — safety net – Personal fall arrest system - fall restraint system	Access provided by “hook –on” ladder, stair tower, ramps, walkways, scaffold stair..... Never overloaded.....Inspected and tag signed off daily by competent person....				
Siding Erection: Guard rails - safety net - personal fall Arrest system	Material secure and falling object protection with toe boards, catch platforms, canopy structures...Front edge of platform no more than 14” from face.....				
Glazing & curtain wall: Guard rails - safety net - personal Fall arrest system – fall restraint	Training required on each type of scaffold worked on				
Swing stages: Guard rails - safety net - personal Fall arrest system – fall restraint	Safety Nets: Designed by a professional for each application...Inspected weekly or after an occurrence...				
Bosun's chair: Personal fall arrest – fall restraint	Inspection documented...Material removed ASAP....Installed not more than 30' from work area...Mesh size no bigger than 6" X 6"				
Snorkel Lift: Guard rails – personal fall arrest	Safety Monitor System: Turner does NOT recognize a Safety Monitor System under any conditions or circumstances.				
General Questions: Are workers empowered to identify hazards and stop work? Are competent persons designated and on site? Is Turner taking disciplinary action on fall protection Offenses? Are Bi-lingual provisions in place & being used? Have all workers completed orientation?	Suspended Scaffold: Independent lifelines...Competent person checks connections, anchorage points, and inspects scaffold..... Counter weights secured by mechanical means (no sand bags, masonry units, gravel, rolls of roof felt)..... Suspension ropes inspected by competent person prior to each shift				

Have Vendors provided Fall Protection Training?	Aerial Lifts:				
	Tie off required inside boom lift platform per OSHA & Manufacturer's instructions.....				
	Stand firmly in basket.....				
	Inspected by competent person prior to each shift				
	Concrete Work:				
	100% tie off at 6' or above.....Approval for using positioning systems on formwork.....				
	impalement hazards covered				
	Steel Erection, Welding, Bolting, Metal Decking				
	100% tie off at 6' or above.....Erection to minimize connectors coming into				
	contact with swinging members.....Use lifts to connect.....Use tag lines.....				
	Protection system in place when lifting deck.				
Additional Comments:					

PROJECT

MONTH & YEAR F/A=FIRST AID M/O=MEDICAL ONLY L/T=LOST TIME R/T=REFUSED TREATMENT D/T=DRUG TEST

[illegible]

JHA (Job Hazard Analysis)

Standard Form #7

Project: _____ Date: _____ Contractor: _____ Page ____ of ____

Description of Work: _____ JSA# _____

Prepared By _____

Safety and Health Considerations – Circle Yes or No

Falls From Elevation:	Yes	No	Underground Utilities:	Yes	No	Energized Systems/LOTO:	Yes	No
Confined Space(s):	Yes	No	Line Breaking:	Yes	No	Health Hazards:	Yes	No
Respiratory Protection:	Yes	No	High Voltage Work:	Yes	No	Scaffolding/Arial Lifts:	Yes	No
Excavating/Trenching:	Yes	No	Work Permits	Yes	No	Asbestos and/or Lead:	Yes	No
Public Exposure:	Yes	No	MEP Issues:	Yes	No	Hazardous Materials/Waste:	Yes	No
Hot Work:	Yes	No	Cranes/Rigging:	Yes	No	Working Over Water:	Yes	No

Description of Steps to be Performed	Hazards Associated with Each Step	Required to Eliminate or Control the Hazard

[illegible]

Originator

Date _____

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April 15, 2020

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Contractor Superintendent/Engineer	Date
Contractor Superintendent/Engineer	Date

INSTRUCTIONS FOR COMPLETING THE JOB HAZARD ANALYSIS FORM

Job hazard analysis (JHA) is an important accident prevention tool that works by finding hazards and eliminating or minimizing them before the job is performed, and before they have a chance to become accidents. Use JHA for job clarification and hazard awareness, as a guide in new employee training, for periodic contacts and for retraining of senior employees, as a refresher on jobs which run infrequently, as an accident investigation tool, and for informing employees of specific job hazards and protective measures.

Set priorities for doing JHA's: jobs that have a history of many accidents, jobs that have produced disabling injuries, jobs with high potential for disabling injury or death, and new jobs with no accident history.

Select a job to be analyzed. Before filling out this form, consider the following: The purpose of the job--What has to be done? Who has to do it? The activities involved--How is it done?

In summary, to complete this for you should consider the purpose of the job, the activities it involves, and the hazards it presents. If you are not familiar with a particular job or operation, interview an employee who is. In addition, observing an employee performing the job or "walking through" the operation step by step may give additional insight into potential hazards. You may also wish to videotape the job and analyze it.
Here's how to do each of the three parts of a Job Hazard Analysis:

<p>Description of Steps To Be Performed</p> <p>Examining a specific job by breaking it down into a series of steps or tasks, will enable you to discover potential hazards employees may encounter.</p> <p>Each job or operation will consist of a set of steps or tasks. For example, the job might be to move a box from a conveyor in the receiving area to a shelf in the storage area. To determine where a step begins or ends, look for a change of activity or change in direction or movement.</p> <p>Picking up the box from the conveyor and placing it on a hand truck is one step. The next step might be to push the loaded hand truck to the storage area (a change in activity). Moving the boxes from the truck and placing them on the shelf is another step. The final step might be returning the hand truck to the receiving area.</p> <p>Be sure to list all the steps needed to perform the job. Some steps may not be performed each time; an example could be checking the casters on the hand truck. However, if that step is generally part of the job, it should be listed.</p>	<p>Hazards Associated With Each Step</p> <p>A hazard is a potential danger. The purpose of the Job Hazard Analysis is to identify ALL hazards, both those produced by the environment or conditions and those connected with the job procedure.</p> <p>To identify hazards, ask yourself these questions about each step:</p> <p>Is there a danger of the employee striking against, being struck by, or otherwise making injurious contact with an object?</p> <p>Can the employee be caught in, by, or between objects?</p> <p>Is there potential for slipping, tripping, or falling?</p> <p>Could the employee suffer strains from pushing, pulling, lifting, bending, or twisting?</p> <p>Is the environment hazardous to safety and/or health (e.g. toxic gas, vapor, mist, fumes, dust, heat, or radiation)?</p> <p>Close observation and knowledge of the job is important. Examine each step carefully to find and identify hazards -- the actions, conditions, and possibilities that could lead to an accident. Compiling an accurate and complete list of potential hazards will allow you to develop the recommended safe job procedures needed to prevent accidents.</p>	<p>Required to Eliminate or Control the Hazard</p> <p>Using the first two columns as a guide, decide what actions or procedures are necessary to eliminate or minimize the hazards that could lead to an accident, injury, or occupational illness.</p> <p>Begin by trying to: 1) engineer the hazard out; 2) provide guards, safety devices, etc.; 3) provide personal protective equipment; 4) provide job instruction training; 5) maintain good housekeeping; 6) insure good ergonomics (positioning the person in relation to the machine or other elements in such a way as to improve safety).</p> <p>List the recommended safe operating procedures. Begin with an action word. Say exactly what needs to be done to correct the hazard, such as, "lift using your leg muscles". Avoid general statements, such as, "be careful". List the required or recommended personal protective equipment necessary to perform each step of the job.</p> <p>Give a recommended action or procedure for each hazard.</p> <p>Serious hazards should be corrected immediately. The JHA should then be changed to reflect the new conditions.</p> <p>Finally, review your input on all three columns for accuracy and completeness. Determine if the recommended actions or procedures have been put in place. Reevaluate the job hazard analysis as necessary.</p>
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PTP (Pre-Task Planning)

Standard Form #8

Project: _____ Date: _____ Contractor: _____ Page ____ of ____

Description of Work: _____

Supervisor: _____ Location of Task: _____

Evaluating Your Work Area – Circle Yes or No			
Has the competent person performed req'd inspections?	Yes	No	Competent Person Name _____
Are you working around line systems?	Yes	No	Do you have the required PPE needed for this task? Yes No
Does this task require special training?	Yes	No	Are the required materials and tools provided? Yes No
Is an SDS review necessary for this task?	Yes	No	Have all tools/equipment been inspected before use? Yes No
Is air monitoring required?	Yes	No	Does this task involve a confined space? Yes No
Are work permits required for this task?	Yes	No	Should the Safety Dept. be involved in this planning? Yes No
Are you familiar with Evacuation routes?	Yes	No	Is there a safety issue that has not been addressed? Yes No
Has emergency equipment such as fire extinguishers, eyewash stations, safety showers and phones been located?			
If the work area is congested, has the work plan been coordinated with other crafts?			

Potential Hazard Checklist (place a checkmark if applicable)					
Description of Steps to be Performed	___ Caught In/Between	___ Inadequate Access	___ Hazardous Chemicals	___ Falls from Elevations	List PPE Required: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
	___ Thermal Burns	___ High Noise Levels	___ Heat Exhaustion/Stress	___ Confined Spaces	
	___ Particles in Eyes	___ Struck By	___ Sharp Objects or Tools	___ Line Breaking	
	___ Elevated Work	___ Manual Lifting	___ Radiations	___ Inhalation Hazard	
	___ Poor Housekeeping	___ Chemical Spill	___ Excavations	___ Critical Lift	
	___ Electrical Shock	___ Plant Operations	___ Lockout/Tagout	___ Compressed Gases	
	___ Chemical Burns	___ Scaffolding	___ Ladders	___ _____	
	___ Fire/Explosion	___ Mobile Equipment	___ Rigging	___ _____	
	Hazards Associated with Each Step			Required to Eliminate or Control the Hazard	

[illegible]

PTP		
Employee Name	Employee Name	Employee Name

GROUND PENETRATION REQUEST PERMIT

Ground Penetration Request Permit

This request form must be completed and authorized prior to penetrating the ground greater than 6 inches anywhere on site. The contractor disturbing soil is required to contact the locator and review as-builts. J.H.A. **MUST** be submitted prior to commencing all ground-penetrating activities on site. And prior to the start of the work in the field, the supervisor will conduct a Pre-Task Planning meeting with the crew performing the work.

Date: _____

Contractor requesting excavation / surface penetration: _____

1. Name of Superintendent / Foreman _____ Phone _____

Anticipated Dates of Work: _____

Anticipated Hours of Work: _____

Remarks / Clarifications (as necessary) _____

Location of excavation or surface penetration: _____ (attach plan)

Description of Work: _____

Means of disturbing soil (*check one*):

Excavator/Heavy Equip _____ Backhoe _____ Pneumatic Driver (fence posts) _____ Drilling/Auger _____

Motorized Saw _____ Hand Removal (Shovel) _____ Other: _____

Contractor's Proposed Method of Identifying Known Utilities (Circle One)

1. Vacuum Excavating Yes No

2. Ground Penetrating Radar Yes No

3. Hand Excavation Yes No

4. Other Explain : _____

5. Were all known utilities identified? Yes No

If no, which known utilities were not identified and why?

Layout of Proposed or New Work (Circle One)

1. Has the Contractor clearly identified the line of the proposed excavation Yes No

Utility Locate Organizations:

1. Identify organizations that have completed utility locates.

_____ (date / permit)

_____ (date / permit)
_____ (date / permit)

Approved Private Locator Company Name: _____

Method of Locating: _____

GROUND PENETRATION REQUEST PERMIT

Identified Utilities:

Have all known Utilities around the facility been physically located on the ground as applicable? Identify point of origin and point of termination of each line.

a. Power	N/A	Yes	No
b. Control	N/A	Yes	No
c. Grounding	N/A	Yes	No
d. Comm / Data	N/A	Yes	No
e. Water	N/A	Yes	No
f. Sewer	N/A	Yes	No
g. Gas	N/A	Yes	No
h. Other	N/A	Yes	No

Utility Delineation:

Has a ten foot utility channel "five feet on either side of the known utilities" been marked or delineated with snow fence, orange silt fence or the equivalent where the new work crosses the utility to ensure adequate recognition?

Yes No

As Built Reviewed? (*Circle One*) Yes No Date of Drawings/Docs: _____

Documented Safety Preplanning Meeting: Yes No

Are any overhead lines in the area? (*Circle one*): Yes No

If yes, they **MUST** be marked at ground level with signage.

Have the areas beneath the concrete slabs been X-rayed prior to any saw cutting or removal? (*Circle One*) Yes No

Competent Equip Oper. (*Print*): _____ Foreman (*Print*): _____

Spotter Required? (*Circle One*) Yes No

Are there existing utilities in the area described in this request? Yes _____ No _____

IF YES, the areas to be excavated are clearly marked-out and utilities within or near the proposed excavation will be "pot-holed" every 15 feet at a minimum using a vacuum process and protected through backfill operations. If multiple known existing utilities are within or near the proposed excavation, increased potholing will be required as determined on the JHA. Unknown existing utilities may be in the area of the work and excavation shall be done with due diligence, strict adherence to the Job Hazard Analysis (JHA), and awareness to prevent damage to unknown utilities.

CERTIFICATION:

By signing below, I understand that falsifying any part of this request will lead to my immediate dismissal from this project and that my employer will be responsible for any damages incurred as a result of my negligence. I certify that all records of existing utilities in the described area, including but not limited to As-Built, Mark-Out and Underground Utility Coordination Reports have been examined and ALL KNOWN UTILITIES HAVE BEEN IDENTIFIED AND WILL BE PROTECTED FROM DAMAGE. Employees not aggressively identifying and protecting utilities will be removed from the project.

Subcontractor Superintendent/Foreman: _____

Turner Superintendent: _____

Crisis Management/Emergency Action Site Plan

TURNER CONSTRUCTION COMPANY

Project _____

EMERGENCY PHONE NUMBERS

TURNER OFFICE..... -
FIRE/AMBULANCE.....911
POLICE/SECURITY.....911

EMERGENCY PROCEDURE:

_____ NON-EMERGENCY POLICE _____

- 1) Radio or call the TURNER Field Office and/or Call Emergency Services. (ES)
- 2) Clearly indicate that you are calling from the TURNER Construction Project at _____.
- 3) Give a detailed description of the incident and extent of damage or injury.
- 4) Specify the incident location by area and/or building as indicated on the Emergency Action Site Plan and indicate the best access way.
- 5) Give call back number and/or maintain communication for questions or instructions.
- 6) Direct TWO people to meet the emergency vehicles at the site entrance. Escort ES to the scene of the incident.
- 7) Call TURNER and notify of incident.
- 8) If an evacuation of the site is necessary, notification will be given by radio, word of mouth and/or a continuous horn blast.

Crisis Management/Emergency Action Site Plan

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PROJECT _____

**TURNER
CORPORATE ENVIRONMENTAL,
HEALTH AND SAFETY POLICY**

Substance Abuse Policy

THE TURNER CORPORATION

Substance Abuse Policy

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Definitions

- **Adulterated Specimen** – A specimen that contains a substance that is not expected to be present in human urine, or contains a substance expected to be present, but which is at a concentration so high that it is not consistent with human urine, which will obstruct the testing process or results. This type of specimen with a Verified Test Result shall be considered as a Refusal to Test, which is treated the same way as a Positive Test Result.
- **Accident/Incident** – A work-related event which results in personal injury to a Turner Employee or Other Worker or to any other person, damage to property or the workplace, or which could have resulted in personal injury or damage to property or the workplace. An Accident/Incident includes, but is not limited to, any Accident/Incident on Turner Property or at a Turner Facility which results in:
 - a) A fatality;
 - b) Bodily injury requiring a visit to any medical provider;
 - c) Vehicular and/or equipment damage in apparent excess of \$1,000;
 - d) Non-vehicle property damage in apparent excess 1,000; or
 - e) Any work-related event that could have resulted in any of the above.
- **Alternative Program**- An Alternative Program is a substance abuse program administered by an entity other than Turner under procedures equal to or more stringent than this Policy and which has been approved and accepted by Turner, in Turner's sole discretion, as an alternative or reciprocal substance abuse testing program.
- **Alternative Program Administrator** – The individual responsible for drug and alcohol testing and related procedures for all Turner Employees and/or Other Workers covered under an Alternative Program.
- **Annual Screen** – A drug screen which Turner may require of any Turner Employee or Other Worker on a yearly basis in addition to any other screen that was given in the previous twelve month period, subject to requirements and limitations of a collective bargaining agreement, when applicable, but only to the extent of a conflict therein with performing an Annual Screen.
- **Chain of Custody** – The protocol followed when submitting specimens for drug and alcohol testing. This protocol assures that there is no opportunity for contamination or switching of samples. Elements include signed and witnessed forms, sealed and initialed containers, and couriers requiring a receipt.
- **Collection Site** – A place where individuals provide specimens to be analyzed for the presence of alcohol or drugs. This site may or may not be owned and/or operated by the laboratory that actually analyzes the specimen.
- **Confirmatory Test** – When testing for drugs, this is the second analytical procedure performed to confirm the presence of a specific drug/metabolite in a urine specimen. This procedure uses a more sophisticated technique (e.g. Gas Chromatography / Mass Spectrometry, EBT) to ensure reliability and accuracy. With breath testing for alcohol, the Confirmatory Test is conducted on an EBT which has the capability to print out the results, date and time, a sequential test number, and the name and serial number of the testing device.
- **Consent** – Written consent for testing is required for all tests. A Donor will be asked to give written consent immediately prior to submitting a drug or alcohol test.
- **Covered Site** – A particular Turner Project or Turner Facility selected for random testing by a Third Party Provider.
- **Cut-off Level** - A pre-determined amount of drug metabolite, measured in nanograms (ng) per milliliter (ml) of urine, which dictates whether a tested specimen is negative or positive. As to alcohol, a pre-determined amount of blood

alcohol content, which dictates whether a tested specimen is negative or positive. For example, a test would be declared positive if the amount of drug/metabolite or blood alcohol content were equal to or above the Cut-Off Level.

- **Designated Jobsite Turner Representative** – A Turner designated employee and/or his or her designees on a particular Turner Project or at a Turner Facility responsible for coordinating drug and alcohol testing and related procedures.
- **Diluted Sample** – A specimen with creatine and specific gravity values that is lower than expected for human urine. This type of test will always be sent with MRO comments stating, "Recollection suggested no fluids three (3) hours prior to test." A Donor providing a Diluted Sample will be retested within twenty-four (24) hours and in no case more than forty-eight hours after the Diluted Sample was obtained.
- **Donor** – a Turner Employee or Other Worker giving a urine, breath, blood, or saliva (which is only used for alcohol testing) sample for drug or alcohol testing.
- **Medical Review Officer (MRO)** - A licensed physician responsible for receiving laboratory results generated by a substance abuse screening program who has knowledge of substance abuse disorders and who received appropriate medical training to interpret and evaluate a worker's medical history and other relevant biomedical information. The MRO is certified by either the American Association of Medical Review Officers (AAMRO) or the American College of Occupational and Environmental Medicine (ACOEM).
- **Medical Examination** – An examination conducted by a duly licensed medical provider.
- **Negative Test Result** - A negative screening is obtained if: (1) the screen test indicated the absence of legal or Prohibited Substances below the screen limit, or (2) the screen test indicates the presence of legal or Prohibited Substances in excess of the screen limit but the confirming test indicates the absence of legal or Prohibited Substances below the confirming limits
- **Non-Negative Test Result** - An initial drug or alcohol test result that indicates the presence of legal or Prohibited Substances in excess of the screen limit and is subject to a Confirmatory Test.
- **Other Workers** – All other person, not directly employed by Turner, working on a Turner Project, at a Turner Facility, or working on or otherwise engaged in Turner business. This includes all contractors, subcontractors, consultants, construction managers, and their respective employees or agents working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. The term "Other Worker" includes, but is not limited to, craft personnel, management personnel, temporary personnel and/or consultants.
- **Positive Test Result (Alcohol)**- A Positive Test Result (Alcohol) is obtained if a Confirmatory Test indicates the presence of alcohol at or in excess of the Cut-Off Level of 0.04% blood alcohol content.
- **Positive Test Result (Drugs)** - A Positive Test Result (Drugs) is obtained if the MRO has verified that the test results contain a Prohibited Substance(s) at or above the standard Cut-Off Levels of any of the substances tested and for which there is no valid medical or other explanation.
- **Post-Accident/Incident Testing** – A drug or alcohol test which may be conducted following the occurrence of an Accident/Incident.
- **Pre-Employment Drug Testing** – For Turner Employees, a drug and/or alcohol test which may be conducted prior to employment by Turner or prior to admission to a Turner Project. For Other Workers that do not have, in Turner's sole discretion, an acceptable substance abuse testing cards, badges, or proof of Negative Testing Results from the last twelve (12) months provided by the respective Other Worker's employer or trade union, a drug and/or alcohol test which may be conducted prior to beginning any work on a Turner Project, at a Turner Facility, or working on or otherwise engaging in Turner business.

- **Prohibited Substance** - A substance whose use or possession is controlled by federal law but that is not being used or possessed under the supervision of a licensed health care professional in a manner that is consistent with applicable federal, state, and local law.
- **Quick / Instant Test** – A test that is a qualitative one-step immunochromatographic test panel for the detection of Cannabinoids (THC), Opiates, Amphetamines, Cocaine, Phencyclidine (PCP), Barbiturates, Benzodiazepines, Propoxyphene, and Methamphetamines 3, 4-Methylenedioxymethamphetamine drugs and/or their metabolites in human urine. This test provides only a preliminary analytical result. A more specific alternate chemical method must be used in order to obtain a confirmed analytical result. The device used for this Quick / Instant Test includes a Lateral Flow (LATFLO) Adulterant Strip (LFAS) for the visual determination of Specific Gravity, Nitrite, Oxidants, and pH to evaluate human urine specimens for adulteration prior to urine testing for drugs.
- **Random**- A system of drug testing imposed without individualized suspicion that a particular individual is using prohibited substances. Random drug testing consists of unannounced substance abuse screens of particular groups or individuals selected through a neutral randomizing system, subject to requirements and limitations of a collective bargaining agreement, when applicable, but only to the extent of a conflict therein with performing a random test.
- **Refusal to Test** – When a Donor refuses to provide a urine, breath, saliva or (on occasion) blood sample upon reasonable request from Turner or from the Other Worker's employer, based on any circumstances in the "Types of Testing" Section.
- **Reasonable Suspicion**- Reasonable Suspicion of drug or alcohol abuse is based on objective evidence about the Turner Employee's or Other Worker's conduct in the workplace that would cause a reasonable person to believe that the individual is demonstrating signs of impairment. In most cases, the objective evidence giving rise to Reasonable Suspicion will be observed by at least two (2) Turner Employees or Other Workers, but recognizing that in certain circumstances the observation may be made by only one (1) such person. Examples of objective evidence include, but are not limited to, odors, difficulty in maintaining balance, slurred speech, erratic or atypical behavior.
- **Screen or Screening** – The initial drug or alcohol test given to screen out potential substance abusers. After the initial screen, a Confirmatory Test will be performed on any Non-Negative Test Result to verify the initial Screen.
- **Screening For Cause** – Drug or alcohol screen which may be ordered when a Turner Employee's or other Worker's Fitness for Duty is in question or following treatment in a drug or alcohol treatment program.
- **Split Specimen Testing** – When a urine sample is taken for drug screen testing, the specimen is split and one part is used for initial testing and the remainder of the specimen is reserved for additional retesting.
- **Substance Abuse and Mental Health Services Administration (SAMHSA)** - A federal government agency, which certifies substance abuse laboratories.
- **Substance Abuse Administrator** – A Turner designated employee and/or his or her designees responsible for the coordination, implementation and administration of this Policy.
- **Substituted Test** – A Substituted Test is a urine sample with creatine and specific gravity values that are so diminished that they are not consistent with human urine. This could indicate evidence of a substance other than the Donor's urine being substituted for the urine screen. This type of sample with a Verified Test Result shall be considered as a Refusal to Test, which is treated the same way as a Positive Test Result.
- **Third Party Provider** – A neutral third-party company engaged by Turner or an approved Alternative Program Administrator to manage drug and alcohol testing and to design and/or implement random selection procedures and systems.

- **Turner Employee** – All persons employed directly by Turner, whether staff, corporate, or trade. This includes employees of Turner at any and all Turner Facilities, including business centers, offices, and construction worksites.
- **Turner Project or Turner Facility** – A project or facility which Turner owns, operates, manages, or over which Turner exercises control, including state, federal or other contracts held by Turner, and to which this Policy applies.
- **Turner Property** – Includes, but not is not limited to, all Turner owned or leased buildings, parking lots, recreation areas, vehicles, equipment, desks, lockers, furnishings, and equipment wherever located. It may also include state property at construction projects over which Turner exercises control.
- **Termination**- In the case of a Turner Employee, Termination shall mean termination of employment by Turner. In the case of Other Workers, Termination shall mean the immediate removal of the Other Worker from the Turner Project or Turner Facility by his or her employer and a ban from working at or on a Turner Project or Turner Facility in any capacity to which this Policy applies until the Other Worker has successfully completed Rehabilitation as describe on Page 18.
- **Verified Positive Test Result** – A test result that was positive on an initial immunoassay test or alcohol test, confirmed by a Confirmatory Test using a Gas Chromatography/Mass Spectrum assay for drugs or EBT device for alcohol, and reviewed and verified by the MRO in accordance with this Policy.
- **Verified Test Result** – A test result that is confirmed by a Confirmatory Test using a Gas Chromatography/Mass Spectrum assay for drugs or EBT device for alcohol and reviewed and verified by the MRO in accordance with this Policy.
- **Voluntary Assistance** – Any Turner Employee who feels that he or she has a drug, alcohol, or related issue is encouraged to seek professional help. Turner can refer such Turner Employee to seek voluntary professional assistance. Assistance given to the Turner Employee shall be kept strictly confidential.

The Turner Corporation Policy on Substance Abuse (“Policy”)

Importance of Policy to Turner Core Values

To help insure a safe, healthy, and productive work environment for the employees of The Turner Corporation, Turner Construction Company and all Turner subsidiaries (collectively known as “Company” or “Turner”), and other persons on Turner projects or at Turner Facilities, and to protect Company property and ensure efficient operations, Turner has adopted a policy of maintaining a workplace free of drugs and alcohol.

Policy Summary

All Turner Employees and Other Workers are prohibited from using, possessing, distributing, dispensing, manufacturing, or being under the influence of Prohibited Substances and from abusing chemicals, controlled substances, or alcohol while working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business. Turner is committed to this Policy on substance abuse to maintain a safe environment for all Turner Employees and Other Workers. This Policy establishes guidelines for acceptable and unacceptable behavior in connection with working on behalf of Turner. Turner will not tolerate substance abuse in violation of this Policy.

Turner reserves the right in its sole discretion to modify, update, and/or replace the Policy's provisions. Furthermore, at all times, Turner remains solely responsible for the interpretation of the Policy's provisions and their applications.

The Policy is intended to comply and be construed in a manner so as not to conflict with applicable laws and regulations governing workplace drug testing and substance abuse policies. If any provision of the Policy or the application thereof to any person or circumstance is held invalid or unenforceable to any extent, the remainder of the Policy and the application of that provision shall remain in full force and effect to the maximum extent permitted by law.

Persons to Whom Policy Applies

This Policy specifically applies to all Turner Employees, Other Workers, and any and all employers of Other Workers working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business.

This Policy is non-discriminatory and applies equally to all Turner Employees, Other Workers, and their respective employers, as defined above, working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business.

Scope and Application

All persons or entities covered by this policy understand and agree that Alternative Programs may be utilized as required by law, contract, or insurance agreement and they will comply with such other Alternative Programs where applicable.

In Turner's sole discretion, Turner may accept substance abuse testing cards, badges, or proof of Negative Test Results for an Other Worker within the last twelve (12) months that is provided by the respective Other Worker's employer or trade union. All Other Workers reporting to work on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business, without substance abuse testing cards, badges, or proof of a Negative Test Results (and ID), will not be permitted to work unless and until such proof is demonstrated or such Other Worker has submitted and successfully passed a Pre-Employment Drug Test.

Additionally, Turner will work with any union representing Turner Employees or Other Workers covered by this Policy. Where any issues in this Policy are otherwise covered by a collective bargaining agreement, the collective bargaining agreement takes legal precedence and must be followed.

This Policy includes pre-employment, post-Accident/Incident, reasonable suspicion, re-employment, medical examination, annual and random testing, to the extent permissible by law.

Strict Adherence to Policy Required of Turner Employees, Other Workers and Their Respective Employers

Every Turner Employee and Other Worker is responsible for reviewing and understanding this Policy. As a condition of employment, all Turner Employees must abide by this Policy. With respect to Other Workers, continued work and engagement on Turner Projects is conditioned on strict adherence to this Policy or an acceptable Alternative Program.

Any and all employers of Other Workers must ensure full compliance with any and all aspects of this Policy or an acceptable Alternative Program, including the compliance of their respective employees.

Designation and Responsibilities of the Substance Abuse Administrator

Turner will designate a Substance Abuse Administrator to be responsible for the administration and implementation of this Policy. Among other things, the Substance Abuse Administrator will:

- Have primary responsibility for the coordination, implementation, and administration of this Policy;
- Coordinate all testing with any appropriate Third Party Provider(s);

Environmental, Health and Safety Policy

April 15, 2020

All employees who are using safety documents that are posted on TKN must utilize the most recent version that is available. If a document is printed, the document must contain a date stamp on the hard document indicating when it was printed and the version date. Employees must regularly check TKN throughout the course of the project to obtain any updated versions.

- Receive the test results from the MRO and notify the Designated Jobsite Turner Representative and Turner's safety personnel of the drug results, and notify the tested Turner Employee or Other Worker and the Other Worker's employer of the results; and
- Assure the reliability and confidentiality of testing processes and procedures.

General Substance Abuse Rules

1. Using, possessing, distributing, dispensing, manufacturing, or being under the influence of Prohibited Substances, and/or abusing chemicals or controlled substances while working on a Turner Project at a Turner Facility, or while working on or otherwise engaged in Turner business, is strictly prohibited.
2. Legally prescribed drugs may be permitted, provided that the drugs are prescribed to the Turner Employee or Other Worker by an authorized medical practitioner for current use by the Turner Employee or Other Worker and provided that such legally prescribed drugs do not prevent the safe performance of such person's essential job functions. Please see "Prescription Drugs" on page 11 for further information.
3. The possession or use of alcohol while working on a Turner Project, at a Turner Facility, or while working on or otherwise engaged in Turner business is prohibited. Turner sponsored or approved meetings/functions are exempt from this rule. However, this does not relieve Turner Employees or Other Workers from possessing or using alcohol responsibly and safely in such situations.
4. Refusing to report for or submit consent to drug or alcohol testing is prohibited and may be treated as if a Positive Test Result had been obtained.
5. Adulteration or Substitution of a test is prohibited and may be treated as if a Positive Test Result had been obtained.

Confidentiality

All substance abuse testing will be performed with concern for each Turner Employee's or Other Worker's personal privacy, dignity, and confidentiality. Each Turner Employee and Other Worker will be required to sign a consent and chain of custody form, assuring proper documentation and accuracy. Turner Employee testing records shall not be maintained in personnel files. Records may be kept in a separate confidential file at Turner's office or at the project level for that particular project. Turner Employees shall have the right to a copy of their drug testing results within a reasonable amount of time following a request. Other Workers shall contact the Substance Abuse Administrator if they wish to have a copy of their drug testing results. All actions taken under this Policy will be confidential and disclosed only to those with a need to know.

Protections Related to Drug Screen Testing

- A formal Chain of Custody will be established for every drug test.
- Initial samples (or a split portion thereof) that test non-negative will be retested for verification with a Confirmatory Test, using the Gas Chromatography/Mass Spectrometry ("GC/MS") test,
- GC/MS Positive Test Results will be communicated to the MRO,
- The MRO will receive the GC/MS Positive Test Results and convey the fact of a Verified Positive Test Result to the Substance Abuse Administrator and to the Donor tested and his or her employer.
- Turner Employees or Other Workers who test positive may, within twenty-four (24) hours of being advised of the results, request a retest of the original split-specimen sample by a different SAMHSA certified laboratory, at the Turner Employee's or Other Worker's expense.
- No drug or alcohol test will be conducted without the Turner Employee's or Other Worker's consent. The Donor shall be required to sign a consent form. Refusal to give consent shall be cause for removal/barring from the Turner Project or Turner Facility and may be treated as if a Positive Test Result had been obtained.

Testing Procedures

Procedures for Drug Screen Testing

Urine specimens will be analyzed for the presence of all or some of the following¹:

- Cannabinoids (Marijuana)²
- Cocaine
- Opiates
- Amphetamines
- Phencyclidine
- Barbiturates
- Benzodiazepenes
- Propoxyphene
- Methadone

The following chart illustrates the Cut-Off Levels for some of the drugs tested:

Drug	EMIT Screen (ng/ml)	GC/MS Confirmation (ng/ml)
Amphetamines	1,000	500
Cannabinoids (Marijuana/THC)	50	15
Cocaine	300	150
Opiates	2,000	2,000
Phencyclidine (PCP)	25	25

Appropriate Cut-Off Levels for all other drugs tested will be determined by the SAMHSA approved laboratory conducting the testing and the Medical Review Officer.

1. Urine drug screen specimens may be collected on-site by a SAMHSA approved laboratory or at an offsite medical facility or clinic. In general, Donors will be permitted to give a urine specimen in privacy and without being observed by collection site personnel. However, a Donor forfeits this right whenever there is a reason to believe that he/she may alter or substitute a specimen.
2. If the Donor does not provide a sufficient amount of urine for a drug test, he/she must drink up to forty (40) ounces of fluid, distributed reasonably through a period of up to three (3) hours, or until the Donor has provided a sufficient urine specimen. If the Donor refuses to make the attempt to provide a new urine specimen or leaves the area where the collections are being done this will be considered a Refusal to Test. If the Donor has not provided a sufficient specimen within three (3) hours of the first attempt. The collector will discontinue the collection and notify the Substance Abuse Administrator and/or Designated Jobsite Turner Representative or Alternative Program

¹ Turner reserves the right to add additional drugs to this list upon notice and consent of the Turner Employee or Other Worker being tested.

² Turner is aware that certain states/localities have decriminalized (or may do so in the future) the possession of marijuana for recreational and/or medicinal use. In light of the forgoing, Turner wants to make it clear that any changes to state or local laws regarding the recreational or medicinal use of marijuana will have no bearing on the Policy. Marijuana — whether used for medicinal or recreational purposes — continues to be an illegal drug under federal law and a Prohibited Substance under the Policy. As such, any worker who tests positive for marijuana above the standard cut-off level will be subject to the consequences of a positive drug test result pursuant to the Policy. Turner remains committed to its Policy in order to maintain a safe and productive workplace environment for all workers on its jobsites.

Administrator. After consulting with the MRO, the Donor will be directed to obtain within five (5) business days, an evaluation from a licensed physician. If the Donor proves that he or she has a medical condition that has, or with a high degree of probability could have precluded the Donor from providing a sufficient amount of urine, the MRO will mark the test as "Cancelled" and no further action will be taken. A medical condition includes an ascertainable physiological condition (e.g., a urinary system dysfunction) or a medically documented pre-existing psychological disorder, but does not include unsupported assertions of "situational anxiety" or dehydration. If there is not an adequate basis for determining that a medical condition has, or with a high degree of probability could have, precluded the Donor from providing a sufficient amount of urine, the MRO will mark the test as Refusal to Test.

3. Turner Employees and Other Workers will be preliminarily tested using the Quick/Instant Test Drug Test. This system provides results in five (5) minutes.
4. A SAMHSA approved laboratory will confirm screens that test non-negative. All urine samples will be split-specimen tests, ensuring that any required or requested retests can be done using the original sample. A Confirmatory Test will use GC/MS to ensure reliability and accuracy.
5. Before a Donor's test result will be confirmed positive for drugs, the Donor will be given the opportunity to speak with Turner MRO and bear the burden of proof that there was a legitimate medical explanation for the Positive Test Result. If the MRO determines that a legitimate medical reason does exist, the test result will be reported as a Negative Test Result. If the MRO determines that a legitimate medical reason that does exist, the test result will be reported as a Negative Test Result. If the MRO determines that a legitimate medical reason does not exist, the test result will be reported as a Verified Positive Test Result. A Positive Test Result will not be reported to Turner until the Confirmatory Test has been completed and the MRO has consulted with the Turner Employee or Other Worker regarding any legitimate medical explanations. Since the Policy is first and foremost concerned with the safety, the Donor whose results are pending will not be allowed to work at a Turner Project or Turner Facility until this process is complete.
6. Diluted Samples occur when a Donor drinks large amounts of fluids before the drug test, or adds water to the specimen so that it is harder to detect drug abuse. Donors may innocently drink too many fluids before the drug test in order to be able to give a sample. This can be avoided by the Donor not drinking more than twenty-four (24) ounces within three (3) hours of the drug test. It is the responsibility of the Donor to provide Turner with an undiluted sample that can be tested. Turner's Policy regarding Diluted Samples is to retest the Donor one (1) additional time. Ideally, the Turner Employee or Other Worker should be retested within twenty-four (24) hours of receiving the results from the MRO, and in no case more than forty-eight (48) hours after the Diluted Sample was obtained, if the Donor provides a second Diluted Sample, the MRO will conduct a medical interview with the Donor. During the interview process, if it is determined that there is no legitimate medical reason; the Donor's test will be treated as a Positive Test Result.
7. A Verified Positive Test Result shall mean that the verified results are above standard Cut-Off Levels and that there is not a medically valid reason for the result. Any Turner Employee or Other Worker who tests positive for drugs, and who believes the test results are incorrect, may request a test of the original specimen at his/her own cost within twenty-four (24) hours. An equally qualified laboratory shall perform the retest. If the retest is negative and it is determined by the MRO that the initial confirmation screen was incorrect, the Turner Employee or Other Worker shall be allowed to resume work.
8. If the Confirmatory Test or retest for drugs is negative, Turner shall pay the Turner Employee for any lost time that may have occurred and reimburse the Turner Employee for the cost of a negative retest that was borne by the Turner Employee. The employer of an Other Worker whose Confirmatory Test or retest for drugs is negative shall be responsible for paying the Other Worker for any lost time that may have occurred and/or for reimbursing the Other Worker for the cost of a negative retest that was borne by the Other Worker.
9. Turner Employees who are removed from working on a Turner project, at a Turner Facility, or from working on or otherwise engaging in Turner business following a Verified Positive Test Result, may only be returned to work if certain criteria are met (as outlined below in the "Possible Re-Employment with Turner" Section). In all cases, there

is no guarantee of re-employment.

Procedures for Alcohol Testing

1. A Department of Transportation (DOT) approved saliva testing device or “collect-only” device will be used for the initial alcohol screen. In cases where a saliva testing device is used for initial alcohol screen, a “hand held” Breathalyzer unit or equivalent device, similar to those used by law enforcement for field sobriety tests must be used for the Confirmatory Test. If a “collect-only” device is used, the sample will be collected and delivered to a SAMHSA approved laboratory for testing. A Confirmatory Test is not required if a “collect-only” device is used. Saliva or alcohol screen collections by breath or their equivalent may be performed on-site. When using a saliva testing device, any initial screens at or in excess of 0.02% blood alcohol content will be tested with a Confirmatory Test performed after a waiting period of at least fifteen (15) minutes, but not more than thirty (30) minutes. A SAMHSA approved laboratory will confirm on-site screens that test non-negative with a Confirmatory Test using an EBT that has the ability to print out the results, date and time, a sequential test number, and the name and serial number of the testing device. Any laboratory test from a “collect-only” device sample or Confirmatory Tests at or in excess of 0.04% blood alcohol content will be considered a Positive Test Result (Alcohol). A laboratory test from a “collect-only” device sample or Confirmatory Test at or above 0.02% but below 0.04% will not be considered either a Negative Test Result nor a Positive Test Result (Alcohol), however, the Donor will be suspended from safety-sensitive functions for at least twenty-four (24) hours following administration of the test.
2. Before a Donor’s test result will be confirmed as a Positive Test Result (Alcohol), the Donor will be given the opportunity to speak with Turner’s MRO and bear the burden of proof that there was a legitimate medical explanation for the Positive Test Result (Alcohol). If the MRO determines that a legitimate medical reason does exist, the test result will be reported as a Negative Test Result. If the MRO determines that a legitimate medical reason does not exist, the test result will be reported as a Verified Positive Test Result. A Positive Test Result (Alcohol) will not be reported to Turner until the laboratory test from a “collect-only” device sample or Confirmatory Test has been completed and the MRO has consulted with the Donor regarding any legitimate medical explanations. Since the Policy is first and foremost concerned with safety, the Donor whose results are pending will not be allowed on-site until this process is complete.
3. A Positive Test Result (Alcohol) shall mean alcohol levels are recognized as demonstrating alcohol intoxication at or in excess of 0.04% blood alcohol content. Any Turner Employee or Other Worker who tests positive for alcohol, and who believes the test results are incorrect, may request a retest of the original specimen of saliva at his/her own cost within twenty-four (24) hours. An equally qualified laboratory shall perform the retest. If the retest is negative, the MRO will review all data for a final determination. If it is determined that the initial confirmation screen was incorrect, the Donor shall be allowed to resume work.
4. If the Confirmatory Test or retest for alcohol is negative, Turner shall pay Turner Employee for any lost time that may have occurred any reimburse the Turner Employee for the cost of a negative retest that was borne by the Turner Employee. The employer of an Other Worker whose Confirmatory Test or retest is negative shall be responsible for paying the Other Worker for any lost time that may have occurred and/or for reimbursing the Other Worker for the cost of a negative retest that was borne by the Other Worker.
5. Turner Employees or Other Workers who are removed from working on a Turner project, at a Turner Facility, or from working on or otherwise engaging in Turner business following a Verified Positive Test Result, may only be returned to work if certain criteria are met (**as outlined below in the “Possible Re-Employment with Turner” Section**). In all cases, there is no guarantee of re-employment.

Cost of Testing

Turner will pay the cost of the initial screen and Confirmatory Test for testing Turner Employees under this Policy. The employers of Other Workers are responsible for the cost of screening and confirmation required under this Policy.

Refusal to Consent or Submit to/Report for Test When Directed

Any Turner Employee who refuses to sign a consent form and/or to submit to or report to a drug or alcohol screening test will be immediately removed from the Turner Project or Turner Facility and will be terminated, with no possibility or reemployment. Other Workers who refuse to sign a consent form and/or to submit to or report to a drug or alcohol screening test will be immediately removed by their employer from the Turner Project or Turner Facility, and will further be barred from any subsequent work on Turner Projects or at Turner Facilities.

Prescription Drugs

Reporting to and being at work under the influence of prescribed or over-the-counter drugs, where such use prevents a Turner Employee or Other Worker from performing his or her essential job functions, or poses a safety risk to him or her and/or other Turner Employees or Other Workers property, or which has the potential to cause an Accident/Incident, is prohibited. Turner Employees or Other Workers taking a prescription or over-the-counter drug are personally responsible for confirming with their physicians that they may safely perform any job duties while taking such items. Turner Employees or Other Workers taking a legal substance that could impair their safe work must advise their immediate supervisor.

Types of Testing

To the extent consistent with applicable federal, state and local laws and applicable collective bargaining agreements, a Turner Employee or Other Worker may be required to undergo a screening test for the use of Prohibited Substances and non-prescription drugs, or alcohol under any of the following (or other) circumstances which may be determined by Turner management in its sole discretion under this Policy:

1. Pre-employment – After a conditional offer of employment or prior to admission to a Turner Project. All potential Turner Employees will be tested after a conditional offer of employment but prior to the employment commencing. Potential Turner Employees who obtain a Positive Test Result will not be permitted to work on Turner Projects, at Turner Facilities, or otherwise engage in Turner business and the conditional offer of employment will be rescinded and such potential Turner Employees will not subsequently be considered for any other Turner employment opportunities. If a former Turner Employee returns to employment with Turner following an absence longer than one (1) year, Turner will retest such Turner Employee with pre-employment testing prior to the re-employment commencing (former Turner Employees who are re-employed following a violation of this Policy and rehabilitation, however will be tested as outlined on page 12 in “Re-Employment” Testing). All Other Workers will be tested at their employer(s) expense prior to beginning any work on a Turner Project, at a Turner Facility, or working on or otherwise engaging in Turner business. However, during orientation/training, Turner may accept, from Other Workers, substance abuse testing cards, badges, or proof of Negative Testing Results from the last twelve (12) months provided by the respective Other Worker's employer or trade union.
2. Post-Accident/Incident – When a Turner Employee or Other Worker is involved in an Accident/Incident (as defined above in “Definitions”). If the Turner Employee or Other Worker is treated in a medical facility which fails to collect a specimen for testing, Turner may require the Turner Employee or Other Worker to be tested within thirty-two (32) hours of the event. A Positive Test Result may result in the denial of Workers' Compensation for an injury resulting from the Accident/Incident.
3. Reasonable Suspicion – When there is reasonable suspicion, satisfactory to Turner, to believe that a Turner Employee or Other Worker is using, possessing, distributing, dispensing, manufacturing, or is under the influence of Prohibited Substances or abusing chemicals, controlled substances, or alcohol while working on a Turner Project, at a Turner facility, or while working on or otherwise engaged I Turner business, or when there is reasonable suspicion satisfactory to Turner to believe that the Turner Employee or Other Worker has reported to work under the influence of Prohibited Substances, unauthorized controlled substances, alcohol or other intoxicants which could affect the safety of others or of property.
4. Medical Examination – As part of any medical examination or fitness for duty examination provided or required by Turner.
5. Re-Employment – Upon re-employment or re-instatement to a Turner Project, at a Turner Facility, or to work on Turner business following a violation of this Policy and rehabilitation as outlined on page 17 in “Possible Re-

Employment with Turner.” Further testing will occur without prior notice for a period of eighteen (18) months following re-employment or re-instatement.

6. Annual – When Turner requires screening on a yearly basis.
7. As needed – As required by Turner/Owner Agreements, other applicable agreements, contractual obligation or government regulation.
8. Random – Turner will conduct Random Testing as follows:
 - All random selections and test processing will be administered by the Third Party Provider(s) selected by Turner.
 - Random Testing will be conducted at a predetermined frequency, to be reasonably spaced throughout the calendar year. At least five percent (5%) of Turner Employee will undergo Random Testing on an annual basis.
 - Except to the extent a Turner Project or Turner Facility is otherwise subject to an acceptable or negotiated Alternative Program, all Turner Projects and/or Turner Facilities will be eligible for Random Testing each time Random Testing occurs, regardless of having been selected previously. However, when applicable, the terms of a state, federal, or owner contract regarding frequency of testing and percentage to be tested will control.
 - All eligible Turner Projects and Turner Facilities will be assigned to testing pools distinguished by job-type criteria agreed upon by Turner. Subject to applicable terms of a state, federal, or owner contract regarding frequency of testing and percentage to be tested, the Third Party Provider’s computerized program will randomly select five percent (5%) of the eligible Turner Projects and Turner Facilities in each group or pool to be Covered Sites. When a selection occurs, the Turner Projects or Turner Facilities that are available for selection will be put on a run list. At the time of selection, the Third Party Provider shall notify the applicable Substance Abuse Administrator(s) and Turner safety director(s) of the selected Covered Sites.
 - Included in the testing pools will be all Turner Employees and Other Workers on any Covered Site. Subject to applicable terms of a state, federal, or owner contract regarding frequency of testing and percentage to be tested, the Third Party Provider’s computerized program will randomly select ten percent (10%) of all Turner Employees and Other Workers currently working on each of the Covered Sites as “Primary Random Selections”. Subject to applicable terms of a state, federal, or owner contract regarding frequency of testing and percentage to be tested, the Third Party Provider’s computerized program will randomly select and assign a random number to an additional ten percent (10%) of all Turner Employees and Other Workers currently working on each of the Covered Sites as “Secondary Random Selections”. The selected lists will be managed by the Third Party Provider and the Substance Abuse Administrator.
 - The Third Party Provider will schedule an on-site collector to be dispatched to the selected Covered Site on the arranged date and time, unannounced to the personnel at each of the Covered Site selected. All available Primary Random Selections at the Covered Site are subject to testing at the date and time of the scheduled random testing. Each Turner Employee or Other Worker that is a Primary Random Selection but is not present at the selected Covered Site for any legitimate business reason (e.g., vacation, illness, business travel, etc.) will be considered unavailable for testing and will be replaced, for Random Testing purposes, with a Secondary Random Selection having the lowest randomly generated number.

Company Provided Education and Training

General Provisions

In conjunction with its commitment to a drug free workplace, Turner will provide education to all Turner Employees. This education will cover substance abuse issues and is intended to help reduce the risk of Accidents/Incidents caused by drugs and/or alcohol. Turner’s supervisors will receive additional training which will help them identify and help employees who show signs of alcohol or drug use. Employers of Other Workers shall provide such education and training for their employees as may be required by applicable laws, ordinances or statutes mandated by the local, state or federal government

Penalties

Violation of any of the rules associated with this Policy may result in disciplinary action up to and including termination of employment for Turner Employees or the future inability to work on Turner Projects or Turner Business for Other Workers. The following penalties exist for violation of this Policy:

Violation	First Offense	Second Offense
Possession	Turner Employees- Immediate removal from Turner Project or Turner Facility and termination, with no possibility or re-employment.	N/A.
	Other Workers-Immediate removal from Turner Project or Turner Facility by the Other Worker's employer. Barred from any subsequent work on Turner Projects of at Turner Facilities.	N/A.
Distribution of drugs/paraphernalia	Turner Employees-Immediate removal from Turner Project or Turner Facility and termination, with no possibility or re-employment.	N/A.
	Other Workers – Immediate removal from Turner Project or Turner Facility by the Other Worker's employer. Barred from any subsequent work on Turner Projects or at Turner Facilities.	N/A.
Use of Prohibited Substances or Alcohol Abuse (Upon discovery via actions or testing)	Turner Employee - Immediate removal from Turner Project or Turner Facility and termination. Possible re-employment upon proof of successful rehabilitation and re-employment testing. Clean screen required prior to re-employment and continued testing over the eighteen (18) months following re-instatement.	Termination, with no possibility of re-employment.
	Other Workers - Immediate removal from Turner Project or Turner Facility by the Other Worker's employer. Barred from any subsequent work on Turner Projects or at Turner Facilities until Turner is provided proof of successful rehabilitation and pre-employment testing. . Turner does not provide Employee Assistance to Other Workers. Other Workers must approach their respective employers.	N/A.
Violation	First Offense	Second Offense

Use of Prohibited Substances or Alcohol Abuse (Per voluntary request by Turner Employee for help)	Turner Employee - Immediate removal from Turner Project or Turner Facility. Re-instatement upon proof of successful rehabilitation and re-employment testing. Clean screen required prior to returning to work and continued testing over the eighteen (18) months following the return to work.	Termination with no possibility of re-employment.
	Other Workers - N/A	N/A.
Under the Influence of Prohibited Substances or Alcohol at Work	Turner Employee - Immediate removal from Turner Project or Turner Facility and termination. Possible re-employment upon proof of successful rehabilitation and re-employment testing. Clean screen required prior to reinstatement and continued testing over the eighteen (18) months following re-instatement.	Termination, with no possibility of re-employment.
	Other Workers - Immediate removal from Turner Project or Turner Facility by the Other Worker's employer, Barred from any subsequent work on Turner Projects or at Turner Facilities until Turner is provided proof of successful rehabilitation and pre-employment testing. . Turner does not provide Employee Assistance to Other Workers must approach their respective employers.	N/A.
Failure to Report Use of Over the Counter Prescription Drugs Which Affect Performance	Turner Employees-Discipline, up to and including termination, with or without the possibility of re-employment.	Termination, with no possibility of re-employment.
	Other Workers - Immediate removal from Turner Project or Turner Facility by the Other Worker's employer. In Turner's sole discretion, Other Worker may be required to provide proof of successful rehabilitation and pre-employment testing prior to any subsequent work on Turner Projects or at Turner Facilities. Turner does not provide Employee Assistance to Other Workers must approach their respective employers.	N/A

Violation	First Offense	Second Offense
Positive Test Following Accident/Incident	Turner Employee - Immediate removal from Turner Project or Turner Facility and termination. Possible re-employment upon proof of successful rehabilitation and re-employment testing. Clean screen required prior to reinstatement and continued testing over the eighteen (18) months following reinstatement. May be ineligible for Worker's Compensation.	Termination with no possibility of re-employment.
	Other Workers - Immediate removal from Turner Project or Turner Facility by the Other Worker's employer, Barred from any subsequent work on Turner Projects or at Turner Facilities until Turner is provided proof of successful rehabilitation and pre-employment testing. Turner does not provide Employee Assistance to Other Workers; they must approach their respective employers.	N/A.
Refusal to Consent or Submit to/Report for Test When Directed	Turner Employee - Immediate removal from Turner Project or Turner Facility and termination, with no possibility of re-employment.	N/A.
	Other Workers - Immediate removal from Turner Project or Turner Facility by Other Worker's employer. Barred from any subsequent work on Turner Projects or at a Turner Facility.	N/A.

Notwithstanding the stated penalties, Turner reserves the right to discipline, up to and including termination, any Turner Employee and/or to ban Other Workers from any Turner Project and/or Turner Facility. Nothing herein in any way grants or confers any implied contractual right to any individual with respect to employment with Turner or alters any employment at-will status of a Turner Employee.

Notification of Authorities

In addition to all other remedies or penalties, Turner may report information concerning possession or distribution of any Prohibited Substance or unauthorized controlled substances to law enforcement officials will cooperate fully in the prosecution and/or conviction of any violators of the law.

Employees Convicted of Drug Offenses

Turner Employees or Other Workers must, as a condition of continued employment, notify their "Operations Manager" or employer, respectively, of any conviction of a criminal drug offense within five (5) days after said conviction. IF an employer is notified, then that employer shall notify the Turner Operations Manager immediately. If the Turner Employee or Other Worker convicted of the criminal drug offense is working on federal contract or grant, Turner will notify the Federal Contracting Agency of criminal drug convictions within thirty (30) days after Turner has received notice. Any Turner Employee or Other Worker so convicted must satisfactorily complete a Turner approved drug rehabilitation program and agree to periodic testing any time thereafter, before Re-Employment or a lift on a ban from working the federal contract will

be considered. *Failure to report such a conviction and/or participate in a drug rehabilitation program may result in disciplinary action, up to and including, suspension, barring, and/or termination.*

Employee Assistance Program: Rehabilitation and Treatment

Turner is committed to helping Turner Employees who seek help from Turner for substance or alcohol abuse problems prior to any drug/alcohol testing or Accidents/Incidents.

Any Turner Employee who feels that he or she has a drug or alcohol related problem is encouraged to seek professional help. If a Turner Employee voluntarily notifies a supervisor or manager before testing that he or she may have a drug or alcohol problem, Turner will counsel the Turner Employee voluntarily seeking such help. Such person will be provided with a list of employee assistance vendors. Any such action by a Turner Employee shall be kept strictly confidential.

In certain circumstances, Turner Employees who have violated this Policy may also be referred to Turner's Employee Assistance Program ("EAP") and be eligible for a leave of absence and re-instatement (for those Turner Employees who have voluntarily requested help from Turner for the use of Prohibited Substances or alcohol abuse). Further details regarding the EAP may be found in Turner's Summary Plan Description ("SPD") or by visiting www.turnerbenefits.com and clicking on "Plan Details." In addition, a Turner Employee may contact the EAP directly by dialing 1-877-887-6266 and following the instructions.

Please refer to the Penalties Chart on pages 14-16 for the consequences and re-instatement and re-employment rights for various drug and alcohol violations.

If treatment necessitates a leave of absence, accrued vacation, sick leave time, and/or an unpaid leave of absence may be used, pursuant to the limitations of those respective policies.

Other Workers are not eligible for Turner's EAP. Such a benefit may be provided by Other Worker's respective employers.

Possible Re-Employment with Turner

Employment with Turner is an at-will employment relationship. There is never a guarantee of re-employment with Turner.

Turner Employees who are terminated from working on a Turner Project or at Turner Facility following certain Violations, including Use of Prohibited Substances or Alcohol (Upon discovery via actions or testing), Use of Prohibited Substances or Alcohol (Per voluntary request by Turner for help), Under the Influence of Prohibited Substances or Alcohol at Work, and Positive Test Following Accident/Incident may be returned to work only if following criteria are met:

- The Turner Employee works with an EAP counselor as detailed above and/or successfully completes and provides proof of completing a Turner Certified/Recognized Substance Abuse Rehabilitation Program at their own expense or at the expense of an Alternative Program Administrator if such Alternative program has an accepted program in place;
- The Turner Employee submits a written request to the Business Unit EH&S Director and Loss Control for approval prior to his/her return to work. A copy of the certificate of completion of the program must be attached;
- The Turner Employee submits to a re-employment drug test which has a Negative Test Result; and
- The Turner Employee consents and submits to additional testing without prior notice for a period of eighteen (18) months following re-employment or re-instatement, with all tests having a Negative Test Result.

Rehabilitation of Other Workers

Other Workers who are removed from Turner Project or Turner Facility by the Other Worker's employer and barred from any subsequent work on Turner Projects or at Turner Facilities pursuant to the "Penalties" section of this Policy may work in the future on a Turner Project or Turner Facility only if the following criteria are met (This option for rehabilitation does not apply to an Other Worker with an offense for Possession and/or Distribution of drugs/paraphernalia or Refusal to Consent or Submit to/Report for Test When Directed) :

- The Other Worker successfully completes a Substance Abuse Rehabilitation Program at their own expense or at the expense of their employer if such employer has an accepted program in place and proof of completion of such program is provided to Turner's **Medical Review Officer** and;
- The employer submits a written request to Turner's Director of Safety and Loss Control for approval prior to Other Worker's return to work. A copy of the certificates of completion must be attached and;
- The Other Worker tests negatively for drugs and/or alcohol before returning to the work site.



Policy

Equal Employment Opportunity Policy Statement

January 2019

Turner has long recognized its responsibility to extend Equal Employment Opportunity to all individuals. The Company's Affirmative Action Program supports this policy with positive procedures and objectives to ensure fair employment practices.

The Turner Corporation and its subsidiaries demonstrate and administer strong diversity and affirmative action efforts throughout the organization. Our long-term commitment to provide equal and non-discriminatory employment opportunity to all persons based on qualifications and merit, without regard to race, sex, gender, gender identity, gender expression, transgender status, sexual orientation, pregnancy, childbirth and other pregnancy-related conditions, color, national origin, ancestry, age, creed, religion, citizenship, marital status (including registered domestic partners), parental status, disabilities (mental or physical), medical condition, genetic information, military or veteran status (including protected veteran status), or any other protected characteristic or status has not and will not waver. Non-discriminatory treatment at all levels of employment with regard to recruitment, hiring, training, promotions, benefits, compensation and all other employment-related factors is included in this Company-wide policy. Only the merit of the individual measured against objective and valid job requirements shall be considered.

All employees are expected to adhere to this Equal Employment Opportunity Policy. Turner employees must comply with all federal, state, and local laws prohibiting discrimination in employment, including discrimination based on race, sex, gender, gender identity, gender expression, transgender status, sexual orientation, pregnancy, childbirth and other pregnancy-related conditions, color, national origin, ancestry, age, creed, religion, citizenship, marital status (including registered domestic partners), parental status, disabilities (mental or physical), medical condition, genetic information, military or veteran status (including protected veteran status), and any other protected characteristic or status. The Company expects the organizations with which it does business to share this commitment.

Any employee or applicant for employment who feels that he or she has been the victim of discrimination should contact their Operations Manager, Project Executive, or Department Head; local Human Resources Director or Manager; or the Vice President of HR Operations.

The Company forbids retaliation of any kind (including harassment, intimidation, threats, coercion or discrimination) against any individual who files a charge of discrimination, reports or otherwise objects to harassment or discrimination, assists, testifies, or participates in an equal employment proceeding, or otherwise exercises any other right protected under applicable equal opportunity employment laws.

Turner recognizes that progress in diversity and affirmative action efforts requires more than policy statements alone. The Company, therefore, will make every effort to implement the letter and spirit of the law. To further the principle of equal and nondiscriminatory employment opportunity for all, Turner has developed affirmative action plans for minorities, women, individuals with disabilities, and protected veterans. These plans, or relevant portions of them, are available for your inspection upon request. In order to ensure proper implementation of these plans, I have selected Karen Sweeney, Senior Vice President of Diversity, Inclusion and Community, as the Equal Employment Opportunity (EEO) Officer for Turner. Please ask the HR department in your local Turner office for more information regarding these plans.

A copy of this EEO policy and the local EEO policy (where applicable) will be prominently posted at Turner facilities as required. Any applicant or employee may request assistance in reading or otherwise obtaining the information included in this policy.

A handwritten signature in black ink, appearing to read "P. Davoren", with a long horizontal line extending to the right.

Peter J. Davoren
President & CEO

Harassment Policy

January 2019

It is the goal of the Company to promote a workplace that is free of sexual and other unlawful harassment by employees, clients, independent contractors, vendors or non-employees of Turner, at a work site or when you are involved in any business relationship as part of your job. Sexual and other unlawful harassment of employees occurring in the workplace or in other settings in which employees may find themselves in connection with their employment is unlawful and will not be tolerated by the Company. This policy applies to all incidents of alleged harassment, including those which occur off premises, or off-hours, whether the alleged offender is a supervisor, manager, co-worker or even a third-party non-employee with whom you may be involved in any business or potential business relationship. To achieve our goal of providing a workplace free from sexual and other unlawful harassment, we have provided a procedure by which inappropriate conduct will be dealt with, if encountered by employees. Further, any retaliation against an individual who has complained about sexual or other unlawful harassment, or retaliation against individuals for cooperating with an investigation of a harassment complaint, is similarly unlawful and will not be tolerated.

The Company takes allegations of sexual and other unlawful harassment seriously. We will respond promptly to complaints of harassment and where it is determined that such inappropriate conduct has occurred, we will act promptly to eliminate the conduct and impose such corrective action as is necessary, including disciplinary action where appropriate.

Please note that while this policy sets forth our goals of promoting a workplace that is free of sexual and other unlawful harassment, the policy is not designed or intended to limit our authority to discipline or take remedial action for workplace conduct which we deem unacceptable, regardless of whether that conduct satisfies the definition of sexual or other unlawful harassment.

SEXUAL HARASSMENT

Definition of Sexual Harassment

Sexual harassment is defined as sexual advances, requests for sexual favors, and verbal or physical conduct of a sexual nature when:

- (a) submission to or rejection of such advances, requests or conduct is made either explicitly or implicitly a term or condition of employment, or made a basis for employment decisions such as favorable reviews, salary increases, promotions, increased benefits or continued employment, regardless of whether the harasser actually carries through with the threats to alter the subordinate's terms or conditions of employment;

Or

- (b) such advances, requests or conduct have the purpose or effect of unreasonably interfering with an individual's work performance by creating an intimidating, hostile, humiliating, or sexually offensive work environment.

Other sexually-oriented conduct, whether it is intended or not, that is unwelcome and has the effect of creating a workplace environment that is hostile, offensive, intimidating, or humiliating to male or female workers may also constitute sexual harassment.

While it is not possible to list all those additional circumstances that may constitute sexual harassment, the following are some examples of conduct which, if unwelcome, may constitute sexual harassment, depending upon the totality of the circumstances including the severity of the conduct and its pervasiveness:

- Unwelcome sexual advances, whether they involve physical touching or not;

- Sexual epithets, slurs, jokes, written or oral references to sexual conduct; gossip regarding one's sex life; comments on an individual's body, comments about an individual's sexual activity, deficiencies, or prowess;
- Displaying sexually suggestive objects, pictures, cartoons;
- Leering, whistling, brushing against the body, sexual gestures, suggestive or insulting comments;
- Sending or circulating, whether in print or electronic form, literature or communications (articles, magazines or e-mails) of a sexual nature;
- Inquiries into one's sexual experiences; and
- Discussion of one's sexual activities.

Complaints of Sexual Harassment

If any of our employees believes that he or she has been subjected to sexual harassment, the employee should promptly file a complaint with his/her Project Manager, Operations Manager, Project Executive, Department Head or Human Resources Director/Manager. This may be done in writing or orally. These people are also available to discuss any concerns you may have and to provide information to you about our policy on sexual harassment and our complaint process. If you feel uncomfortable bringing the matter to one of the persons listed above, you can raise the issue directly with the business unit General Manager or equivalent senior executive, or Senior Human Resources Director. You may also follow Turner's internal complaint and grievance procedure to resolve complaints by contacting compliance@tcco.com or call The Network at 888-738-1924.

Any supervisor or manager who has reason to suspect harassment or retaliation is occurring must notify the Human Resources Director/Manager.

All employees should take special note that, as stated above, retaliating against an individual who has complained about sexual harassment, and retaliating against individuals for cooperating with an investigation of a sexual harassment complaint, is unlawful and will not be tolerated by this Company. However, if after investigating any complaint of harassment the Company determines that the complaint is frivolous and was not made in good faith, or that an employee has provided false information regarding the complaint, disciplinary action may be taken against the individual who filed the bad-faith complaint or who gave the false information.

All complaints will be kept confidential to the maximum extent possible, and all employees have an obligation to maintain this confidentiality whether they are involved in the complaint or investigation or otherwise become aware of the complaint. All employees have a duty to report any conduct that they believe violates this policy. In addition, every employee has a duty to cooperate with any investigation conducted by the Company, regardless of whether the investigation is being conducted by Company officials or outside parties retained by the Company for this purpose.

Sexual Harassment Investigation

When we receive a complaint we will promptly investigate the allegation in a fair, timely, and thorough manner that provides all parties appropriate due process and reaches reasonable conclusions based on the evidence collected. The investigation will be conducted in such a way as to maintain confidentiality to the extent practicable under the circumstances. Our investigation may include a private interview with the person filing the complaint and with any witnesses. We may also interview the person alleged to have committed sexual harassment. When we have completed our investigation, we may, to the extent appropriate, inform the person filing the complaint and the person alleged to have committed the conduct of the results of that investigation.

If it is determined that inappropriate conduct has occurred, we will act promptly to eliminate the offending conduct, and where it is appropriate we will also impose disciplinary action up to and including termination of employment.

The Company's complaint and investigation process strives to maintain confidentiality to the extent practicable, provide timely responses, conduct impartial and timely investigations by qualified personnel, document and track investigations for reasonable progress, engage in appropriate options for remedial actions and resolutions, and provide for timely closures.

OTHER UNLAWFUL HARASSMENT

The Company strongly supports the rights of all its employees to work in an environment free from all forms of unlawful harassment, including harassment on the basis of race, sex, gender, gender identity, gender expression, transgender status, sexual orientation, pregnancy, childbirth and other pregnancy-related conditions, color, national origin, ancestry, age, religious creed, citizenship, marital status (including registered domestic partners), parental status, physical disability, mental disability, medical condition, genetic information, military or veteran status (including protected veteran status), or any other characteristic or status protected by law.

Unlawful harassment is verbal or physical conduct that denigrates or shows hostility or aversion toward an individual because of a protected characteristic, and that:

- (a) creates an intimidating, hostile or offensive working environment;
- (b) unreasonably interferes with an individual's work performance; or
- (c) otherwise adversely affects an individual's employment opportunities.

Unlawful harassing conduct includes, but is not limited to:

- epithets;
- slurs;
- negative stereotyping;
- threatening, intimidating or hostile acts that relate to a protected characteristic;
- written or graphic material that denigrates or shows hostility or aversion toward an individual or group because of a protected characteristic, and that is placed on walls, bulletin boards, or elsewhere on the employer's premises, or circulated in the workplace on paper or electronically.

The Company prohibits unlawful harassment or retaliation of any kind. Any violation of the Company's unlawful harassment or retaliation policy should be reported in accordance with the complaint procedure in the Sexual Harassment policy and the complaint will be handled in the manner set forth in that procedure.

If the result of the investigation indicates that corrective action is called for, such action may include disciplinary measures up to and including immediate termination of the employment of the offender.

Employee's Responsibility

- All employees should avoid contributing directly or indirectly to any form of harassment in the workplace.
- Report any observed or potential harassment promptly and confidentially to management and/or to the Human Resources Director/Manager.
- Cooperate fully in any investigation in a discreet, confidential, and sensitive manner. Failure to cooperate may be grounds for disciplinary action.

Supervisor's Responsibility

- Maintain an open-door policy for employees to communicate potential concerns at an early stage and seek counsel from the Human Resources Director/Manager.
- Take all complaints or concerns of alleged or possible harassment seriously, no matter how minor or who is involved.
- Report any alleged incidents or receipt of formal complaints immediately to the appropriate management and to the Human Resources Director/Manager.
- Cooperate fully in any investigation and maintain confidentiality to the extent possible.
- Take appropriate action to prevent retaliation or prohibited conduct from reoccurring during and after any investigations or complaints.
- Communicate support of the policy and guidelines throughout the organization.
- Make sure that all employees within your area of responsibility are aware of this policy, ensure that personnel decisions are in compliance with this policy, and initiate corrective action (after consulting with the Human Resources Director/Manager, Operations Manager, Project Executive or the Senior Human Resources Director) when improper behavior is observed or reported.

Supervisors who knowingly allow or tolerate harassment or retaliation are in violation of this policy and subject to disciplinary action.

Prevention Program

Avoidance of harassment and sexual harassment requires constant supervisory and management awareness. Publication of this policy reaffirms the Company's desire to eliminate any form of harassment. Anti-harassment training is provided to all employees throughout the Company annually, or as otherwise required by state or local law. The resulting work environment should be one sensitive to harassment and sexual harassment issues and one positioned to prevent violations. We trust that all our employees will continue to act responsibly to establish and maintain a harassment-free working environment.

MANDATORY SAFETY FORMS

The attached safety forms, shall be utilized for this project. These are subjective to change throughout the project and will be communicated by the Turner Project Team.

- 01_Project Safe and Sustainable Onsite Orientation
- 02_Hardous_ Chemical Inventory List
- 03_Site Specific Chemical Inventory List
- 04_Ladder Safety Inspection Checklist
- 05_Ladder Permit
- 06_Mobile Elevated Working Platform Checklist
- 07_Initial Equipment Safety Inspection Off Road Heavy Equipment
- 08_Initial Equipment Safety Inspection Cranes
- 09_Critical Crane Lift
- 10_Energized Electric Work
- 11_Emergency Release Authorization
- 12_Confined Space
- 13_Fall Protection
- 14_Surface Penetration Permit
- 15_Hot Work Permit
- 16_Drone Use Approval
- 17_Drone Vendor Prequalification
- 18_Incident Investigation
- 19_Job Hazard Analysis
- 20_Pre-Task Planning with Covid-19 Standards

Project Safe and Sustainable Onsite Orientation

1. General Information	
NOTE: The signature below document that the appropriate elements have been discussed to the satisfaction of parties, and that both supervisor and employee accept responsibility for maintaining a safe and healthful work environment. By signing, I am verifying that I have participated in the COVID-19 orientation and understand and will comply will all additional requirements.	
Hardhat Sticker #:	Badge #:
Print Name:	Sign Name:
Company Name:	Date:
Supervisor Acknowledgement:	
Emergency Contact Name and Number:	
2. The Message of "Building L.I.F.E. ®"	
<p>At Turner, we call our safety program and culture "Building L.I.F.E. ®" L.I.F.E. is an acronym for <i>Living Injury Free Every Day</i>. Our goal here is to create a workplace <i>free from any level of harm</i> to our workforce, our clients, and the community we work in. Only with your help and commitment can we all achieve this goal. We are asking that you take an active role making this the safest project we can, for all of us. If you see a hazard, bring it to our attention if you cannot correct it. If you see a coworker at-risk, stop and say something. If someone approaches you because <i>you</i> are at risk, accept their help graciously, without attitude, and thank them. If you know a smarter or safer way to accomplish a task, raise it up.</p> <p>You will be given ample opportunities to play an active role with safety on this project. This includes daily safety huddles where each team prepares their safe plan of work; it also includes safety committees, safety meetings, and 5-Worker Lunches where we ask for your feedback on how safety is doing on this project. We want to hear about near-misses and incidents, not so we can find someone to blame, but so we can learn from the problems that lead to the event – to prevent recurrence. Like any safety program, we have some policies you need to be familiar with, and many of them are stricter than OSHA, or any other General Contractor/Construction Manager you have worked for. If you have any questions about our expectations or any of the policies you're about to see, please bring them up as we go along.</p>	
<div style="background-color: #e6f2ff; padding: 5px; margin-bottom: 10px;">General</div> <div style="background-color: #e6f2ff; padding: 5px;">Initials</div>	<ol style="list-style-type: none"> 1. No one under the age of 18 is allowed to work on the Project property / construction site. 2. No pets or animals are allowed on site. 3. All trade partner vehicles within the project site fence (including, but not limited to, transportation and construction equipment, delivery trucks and personal or company trucks) shall not idle. The only allowable exceptions to the standard are as follows: <ol style="list-style-type: none"> A. Ambient air temperature exceeds 85°F or falls below 32°F (or as defined by local or regional temperature limits, whichever is stricter) B. Engine idling is required for the function of auxiliary equipment (i.e., cranes, concrete pumps, etc.) 4. A minimum 10-panel drug testing is mandatory. <ol style="list-style-type: none"> A. Your employer must provide the results to Turner in order to attend orientation. B. Pre-employment/prior to receiving a hardhat sticker or ID badge. C. Additional testing may be required post-Incident, for cause or suspicion D. If tested positive or refuse to test, you will not be allowed on site. 5. Badging / orientation sticker All employees on site must attend orientation after the drug screen and receive an orientation sticker. Many projects require a photo-ID badge per terms of subcontract agreement. 6. Every crew member must participate in a morning safety huddle to develop a safe plan of work for the shift. Throughout the day (or night) if any new tasks or changes come up that weren't planned for at the beginning of the shift, work must stop, and the plan must be revised. 7. All personnel are empowered and encouraged to stop unsafe acts, identify unsafe conditions, and to escort non-construction personnel out of the work areas. Please care for your project teammates. 8. No headphones, iPods, radios, etc. are permitted on the job. No streaming of music from the internet. No walking or driving while talking on phone or walkie-talkie.

	<p>9. Zero use of tobacco policy. Zero tolerance policy for smoking in building during construction. No e-cigarettes or smokeless tobacco are allowed either. Turner may elect to establish a “tobacco zone” outside of the project.</p> <p>10. Eating is allowed only in approved areas. No glass containers are permitted onsite.</p> <p>11. A fluent interpreter must be provided and on site for any crew that has one or more non-English speaking workers.</p> <p>12. The confined spaces on this project include: _____</p> <p>13. I will not enter a confined space unless trained and authorized by my employer. Proof of training must be provided to Turner Construction.</p> <p>14. The employer entering a permit-required confined space must arrange for on-site rescue team to be present and provide for continuous air monitoring, and if applicable, monitoring for other hazards (i.e., engulfment).</p> <p>The list of behaviors below, while not inclusive, provides examples of conduct that is prohibited:</p> <p>15. Causing physical injury to another person.</p> <p>16. Making threatening remarks.</p> <p>17. Aggressive or hostile behavior that creates a reasonable fear of injury to another person or subjects another individual to emotional distress.</p> <p>18. Intentionally damaging employer property or property of another employee.</p> <p>19. To the maximum extent permitted by applicable law, the possession on Company premises or while on duty of firearms, clubs, explosives, or other weapons that could be used to cause harm to personnel or property, other than that used to perform specific construction activities. This would include Turner projects and client-owned buildings and facilities we work in, project-provided parking areas, and while in the execution of work duties.</p>
EEO Policy	1. Turner provides equal employment opportunity (EEO) to all persons based on qualifications and merit, without regard to race, sex, gender identity, sexual orientation, pregnancy, childbirth and other pregnancy-related conditions, color, national origin, ancestry, age, creed, religion, citizenship, marital status (including registered domestic partners), parental status, disabilities, genetic information, status as a recently-separated veteran, Armed Forces service medal veteran, disabled veteran, active duty wartime or campaign badge veteran, or any other protected characteristic or status.
Initials	
Policy Statement Against Harassment	<p>1. Turner will not tolerate unlawful harassment, including sexual harassment or harassment on the basis of race, sex, gender identity, sexual orientation, pregnancy, childbirth and other pregnancy-related conditions, color, national origin, ancestry, age, creed, religion, citizenship, marital status (including registered domestic partners), parental status, disabilities, genetic information, status as a recently-separated veteran, Armed Forces service medal veteran, disabled veteran, active duty wartime or campaign badge veteran, or any other protected characteristic or status.</p> <p>2. It is our collective responsibility to reject bias-motivated and disrespectful behavior. I agree that I am obligated to uphold Turner’s Zero Tolerance of bias and hate, including any form of vandalism, physical destruction of property, defacement in the form of any graffiti (e.g., images drawn, sprayed, or etched, stickers, non-work-related posters, etc.) on temporary facilities or in the general workplace. Graffiti that exhibits harassment, hate or intolerance that is motivated by bias against a person’s race, religion, disability, sexual orientation, ethnicity, gender, or gender identity will be investigated and will reported to the authorities for legal action.</p> <p>I acknowledge that if found in violation of these rules I will be immediately removed from the work site and will no longer be permitted to work on this project and that it may result in permanent ban from all Turner projects.</p>
Initials	
Incident Reporting	<p>1. Any injuries / illnesses / near misses must be reported to your supervisor <u>immediately</u> after the event, <u>if physically possible</u>. Those supervisors are to verbally report the incident to Turner immediately after stabilizing any injury or making safe any unsafe conditions.</p> <p>2. An incident investigation report must be filed with Turner within eight (8) hours after an accident.</p> <p>3. If sent to a doctor for treatment all, follow-up appointments must be kept.</p> <p>4. A Temporary Modified Duty policy is in place.</p> <p>5. The worker must strictly follow any and all work restrictions issued by doctor.</p>
Initials	
100 % 6-Foot Fall Protection (Regardless of Trade)	<p>1. 100% FALL PROTECTION required where a 6-foot fall exposure exists (includes all trades). See additional ladder rules below.</p> <p>2. ZERO TOLERANCE – For Fall Violations</p> <p>3. Snap-hooks on lanyards must be double locking. Self-Retracting Lanyards (SRLs or yo-yos) or fall limiting devices are typically required. Whichever is connecting device is used, two connecting devices are required on each harness (twin-leg). Short lanyards may be required in some types of scissor and aerial lifts. The competent person from each trade must specifically identify fall protection methods and equipment on JHAs and PTPs.</p> <p>4. Gear to be inspected prior to every use. Contact your supervisor immediately if gear is damaged. DO NOT USE DAMAGED GEAR.</p> <p>5. Warning lines are to be a min. of 15 feet back from the edge. (See criteria in Turner Safety Manual)</p>
Initials	

	<ol style="list-style-type: none"> 6. Tie-off point must hold 5,000 LBS per person. 7. 100% tie-off when working from extensible / articulating boom aerial lift. 8. Employees must be trained on the use of fall protection. Provide proof of training to Turner. 9. Vertical or horizontal rebar or other impalement hazards shall be protected. 10. Any hole 2" or larger must be covered, secured, labeled (supporting 2X max the indented load) 11. Scaffolds <ol style="list-style-type: none"> A. Must be built under supervision of competent person who has necessary certifications (w/ 100% Fall Protection while erecting) B. Cross-bracing cannot be used as a ladder, or instead of either a top or mid-rail. You must have both a top and mid-rail. C. Scaffold must be inspected before each shift by the Subcontractors competent person and tagged/dated as safe. If you climb onto a scaffold not tagged and dated as safe, you may be removed from the jobsite. All non-compliant scaffolds must be "red-tagged" out of service. D. 100% tie off when working from all types of lifts that have a manufactured tie off point. Dual action controls require that there be two separate actions to activate the lift. If it arrives on site and does not have dual action controls, then it must remain inoperable until a Dual action control is installed. E. Mobile scaffolds must have the wheels locked when in use and require guardrails at 4 foot in height. F. Scaffold stairs shall be installed instead of a ladder to access frame and system scaffolds. If a ladder is required for some reason, ladder access points must only be at "swing-gates" on the ends of the frames, or through spring-loaded deck-hatches. 12. Standard Railing <ol style="list-style-type: none"> A. Top edge height of top rail must be 42" above the walking/working level and all systems must include a toe board and midrail. Cable rails must not deflect more than 3" with 200 lbs. applied. B. Guardrails will not be used as a horizontal anchorage for personal fall arrest equipment. Do not tie off to guardrails. C. Guardrails must be provided at floor openings and open sides, or personal fall protection must be used. D. Wood rail stanchions (or posts) shall not be more than 8 feet on center. E. Wire rope guardrails – min 3/8-inch cable, flagged every 6 feet, cannot have more than 3 inches of deflection, 3 clips are required at each termination, no open turnbuckles. 13. Ladders <ol style="list-style-type: none"> A. Turner's Ladders Last Policy states that ladders are not to be used on this project unless no other means of accessing elevated work is feasible. The tool of choice for elevated work is a mobile elevated work platform (MEWP) such as a scissor or aerial lift. Where MEWPs cannot be used, scaffolds can be used. B. Where ladders must be used, a Ladders Last Permit must be completed by the contractor and approved by Turner. The permit must be hung on the ladder and the ladder inspected daily. C. No aluminum or wood ladders are permitted on the site. D. Never use a stepladder while it's still folded up. E. Never use the top two (2) steps or the top of the ladder. F. Never store material or tools on the ladder G. Use the 3-point rule: 2 hands and a foot or vice versa to be in contact with ladder at all times. Keep belt buckle between side rails. H. Fall protection is also required when above 4' on a ladder, even if three points are maintained. <p>Turner will approve perimeter access points for material handling. Personal fall protection must be installed and used before cables or rails are taken down, or holes uncovered. Barricade the area, place signs, and leave a spotter.</p>
Safety Enforcement	<ol style="list-style-type: none"> 1. All personnel are encouraged to ask questions and report actual and perceived hazardous conditions to site supervision. Perceived hazardous conditions may need further clarification and hazard assessment.. If you have any questions or concerns, please ask for assistance. 2. There is a "Safety Enforcement" Fine System in place on this project. <ol style="list-style-type: none"> A. You are accountable for your actions on this project. B. Monetary fines imposed upon your employer for worker safety violations or complacency w/ regard to "minimum" safety rules. C. \$250.00 - \$5,000.00 – depending upon severity of violation. 3. All OSHA regulations will be strictly enforced. Turner has many policies stricter than OSHA and you need to be familiar with these. 4. Disciplinary Procedures – 3 strikes policy <ol style="list-style-type: none"> 1. Verbal = Orientation 2. Written 3. Termination 4. Turner retains the right to have anyone removed from site, based on the nature of the violation, without the 3 strikes
Initials	

<p>Emergency Procedures</p> <hr/> <p>Initials</p>	<ol style="list-style-type: none"> In the event of an emergency <ol style="list-style-type: none"> Notify job foreman immediately. Give the exact nature of the emergency (i.e., broken leg, fire, etc.) Give the exact location by area, column number or other easily recognizable terms. Stay on the phone until Safety has confirmed that you have provided accurate information. If an evacuation is not required, stay on the scene to brief emergency personnel upon their arrival. Evacuation Procedures <ol style="list-style-type: none"> Our project evacuation signals are: (example: 3 horn blasts will indicate site is to be evacuated) Proceed in a calm, orderly manner to the designated safety zone. <ol style="list-style-type: none"> Evacuation Gathering Points are located ... Report to your designated foreman/superintendent in designated area for head count. Do not leave the emergency gathering point until instructed to do so by your supervisor. All dangerous and/or emergency situations must be reported to Turner staff immediately, if feasible. Call 911 for ambulance or fire departments as when necessary. Where is the location of your first aid kit and fire extinguishers? For confined space entry, trained emergency rescuers must be on site during the entry.
<p>Personal Protective Equipment</p> <hr/> <p>Initials</p>	<ol style="list-style-type: none"> 100% Hardhat Protection, Non-Metallic, <u>REQUIRED AT ALL TIMES. ANSI approved.</u> 100% Eye Protection (ANSI Z87.1) <u>REQUIRED AT ALL TIMES.</u> Hard sole safety shoes or boots are required, no sneakers or soft shoes are allowed, ANSI Z41.1. Safety-toed boots and/or metatarsal protectors must be worn as dictated by the hazard assessment. Safety-toed boots required for erection, demolition, masonry and rigging, at a minimum. Long pants in good condition, no shorts allowed. Shirts must have sleeves at least 4" long. Gloves are required at all times unless the Job Hazard Analysis specifically states they are not required because they create a greater hazard (using rotating parts, etc.). Cut-resistant gloves are required when using knives or handling sharp material/objects. Additional hand protection may be required depending on the hazard assessment. Appropriate arm protection is required during operations where the arms are exposed to cut hazards (i.e., Kevlar, Dyneema sleeves, etc.). Examples of these activities are working around metal studs and pull boxes, tight confines as between wall studs or above ceiling and all demo activities. These operations shall be identified on the JHA/PTP. Ear protection as required when exposed to noise above 85 DBA or when noise levels require you to raise your voice when talking to someone 3 feet from you. Face-shields required when cutting / grinding / chipping or working above your shoulders; or when the hazard exists of projectile particles. Goggles required when there is a splash or dust hazard such as working with chemicals, sawing lumber and grinding. Both may be required if both hazards exist. No loose clothing or jewelry High visual, safety vests, shirts or jackets shall be worn as the outermost apparel by all employees, 100% of the time. ANSI Class 2 (0-44 MPH) and Class 3 (45 MPH or more) outerwear must be worn whenever working on or near (within 10 feet) of a roadway. Any contractors requiring the use of dust masks and/or respirators must submit a written respiratory protection program Turner. This program must address medical surveillance, fit testing, etc. Voluntary usage of dust mask type respirators used by employees must also be included in the respiratory protection program and shall meet or exceed OSHA standards. Regular utility-cutters (like box-knives) are not allowed. All utility cutters should be equipped with self-closing blade guards or self-retracting blades that engage when the blade loses contact with the cutting surface.
<p>Electrical/LOTO</p> <hr/> <p>Initials</p>	<ol style="list-style-type: none"> Industrial heavy-weight cords (14 gauge or heavier) with proper grounds are to be used at all times. 100% Ground Fault Circuit Interrupter (GFCI) Protection. Inspect all cords and welding leads before each use. All electrical and mechanical systems are to be considered energized. When pressurizing any pipe, vessel or system, refer to Turner's procedures. All panels, boxes, switches and receptacles containing live wires must have a cover. NEVER work on live electrical panels or parts without prior approval from Turner. Complete the Turner Energized Work Permit and submit prior to the work taking place. LO/TO – Single-key locks required (cannot have multiple keys for a lock). Each worker must apply a lock when exposed. NFPA 70E compliance is required for energized work. This includes testing and commissioning activities, as well.
<p>Equipment</p>	<ol style="list-style-type: none"> Proper training and certification is required prior to operating any equipment. Speed limit on site is 5 mph.

Equipment <hr/> Initials	3. A spotter is mandatory when a vehicle or equipment has restricted view. A spotter is necessary when backing up any vehicle or equipment on site. 4. Backup alarms must be present on all required vehicles. 5. Horns and lights are recommended for all equipment. 6. Always follow the manufacturer's operating instructions for all equipment and tools used on this project. 7. Seatbelts must be worn at all times. 8. The use of cell phones is prohibited while the machine or vehicle is in motion. 9. The forks of a forklift cannot be used for free rigging. 10. When off-loading trucks with forks or crane, no person should be on the truck bed or around the truck after rigging. Set up a safe zone around the truck with tape or barricades. Use a spotter to keep people out
Cranes <hr/> Initials	1. Awareness of overhead loads – listen for horns. Never stand or walk under an elevated load. 2. Awareness of crane swing radius (should be flagged off). 3. Cannot operate a crane within 20' of any power line. 4. Rigging must be inspected before each use by a <u>qualified rigger</u> . Damaged rigging must be removed from service. 5. Crane operator must submit operator certifications (NCCCO or NCCER) 6. Employees cannot signal a crane unless trained and certified, and authorized to do so. 7. Each rigger & signal person must be qualified & proof of training given to Turner Construction
Barricade Tape <hr/> Initials	1. Barricaded areas must have posted signage on each side of the area. Signage should identify the hazard, the controlling contractor for the area, a point of contact and his or her phone number. 2. Types of Tape A. Red Danger – Imminent Danger exists. Only authorized personnel performing actual work are to be allowed in this barricade tape area. The only exception for entry into a red area is with prior permission of those authorized to work within the area. B. Yellow Caution – a hazard exists that would warrant Caution . A yellow area can be accessed by anyone who is authorized to be on the job site, and who stops to observe the existing hazard and takes the proper precautions prior to entering the tape barricade area.
Training Requirements <hr/> Initials	1. Must be trained / certified to operate forklifts, aerial lifts, cranes, and use scaffolding, etc. 2. Contractors are required to provide workers that are trained as required by OSHA standards and site policies. 3. All workers are to be trained by their employer for the task and/or tool/equip being used – ladders, scaffolds, excavations, etc. 4. No worker may lift more than 50 pounds, unassisted. Use mechanical means first.
Hand & Power Tools <hr/> Initials	1. All drills, grinders, etc. that are designed with guards and/or control bars must have them in place when the tool is in use. The grinding wheels must be rated to meet or exceed the RPM specifications of the grinder. 2. Workstations are to be elevated. This includes saws, pipe benders and threaders & other work activities. 3. Powder Actuated Tools - No lead-based shot is permitted onsite. 4. Tools are to be used the way the manufacturer intended. Do not modify any tool. 5. For tools that would normally create dust, Turner requires them to have integrated protective measures to capture or minimize the dust, such as HEPA vacuums or water-spray, etc.
Hot Work <hr/> Initials	1. The contractor performing hot work will be required to have a charged and inspected 20-pound ABC dry chemical fire extinguisher present in the work area. 2. Appropriate permit procedures, shields, and blankets shall be used when developing site specific fire prevention programs. 3. Subcontractor is required to implement a fire-watch during all burning operations and for a minimum of 30 minutes following completion. 4. Hard Hats are required while welding. 5. Safety glasses are required under the shield when chipping or grinding. 6. Cylinder Storage must be stored upright and properly secured. When not in use, disconnect hose/gauge assemblies and cap the cylinder. Stored cylinders must have a ½ hour fire rated barrier 5 feet tall or be stored 20 feet apart. Propane tanks cannot be stored in any building. (Turner must be notified prior to propane used onsite) All torch carts are to have a fire rated barrier between the cylinders. 7. Anti-flashback devices are to be located at the torch head & at the cylinders. 8. Hot Work activities must be pre-approved by Turner (Permit to be issued). A fire watch must be present where sparks could fall (multiple levels if necessary).
Excavations <hr/> Initials	1. Any excavation greater than 4' must be sloped, shielded or benched properly. 2. The bottom of the trench box must be within 2 feet of the bottom of the trench. The top of the trench box must stick up 18 inches above the slope or the bench. The box cannot be moved while workers are inside. 3. Access must be provided by a ramp or stair. Travel distance to that means of access/egress must not exceed 25 feet. 4. Any excavation (includes trenches) must be barricaded off with orange fence or equivalent, regardless of depth.

	<ol style="list-style-type: none"> You cannot bench Type C soil. Before you dig or drill, complete a Turner "Ground Penetration Request Form." Your utility locator service must be notified days in advance, as well. Fall protection is required at the top of excavations greater than 6 feet deep when the slope is less than 45 degrees.
Hazard Communication / GHS <hr/> Initials	<ol style="list-style-type: none"> This employee, by his initials in this section acknowledges that he/she has been trained by their employer, on hazard communication and, Turner has reviewed the location of Chemical Inventory Lists and Safety Data Sheets with me. You must provide Turner a Safety Data Sheet for any chemical you bring onto the project. Turner will coordinate the sharing of Safety Data Sheets (SDS) between contractors. If you transfer chemicals from one container to another, you must provide a proper chemical label complying with OSHA. Renovation projects often have health hazards in the form of asbestos, lead, PCBs, Mercury, etc. The known health hazards on this project include: _____ If this project contains known health hazards, I certify that I was given training on those hazards including their identity, location, hazards of exposure, and control methods used to protect me. If I discover any "suspected" hazardous material, I'll immediately stop work and bring it to the attention of my employer.
Construction Waste Management <hr/> Initials	<ol style="list-style-type: none"> All waste leaving this project is tracked on Turner's Online Waste Tracking (OWT) system. Strict compliance with the project Construction Waste Management Plan (CWMP) is required. The recycling goal is ____%. The construction and demolition dumpsters on this project are (co-mingled) (site-sorted). Materials recycled include, at a minimum: <ol style="list-style-type: none"> Wood: pallets, wood-framed boxes, temporary lumber, etc. Concrete: concrete, block, brick, asphalt Metal: scrap metal, metal studs, metal pipe, etc. Cardboard, paper Drywall: drywall, mold board, (NO Dens-Glass) Construction Trash: food waste, sweepings, non-recyclable waste, etc. Collect and sort your construction waste throughout the workday and transport the waste to the appropriate dumpster at the time established by your Foreman or Project Manager. All Subcontractors are required to recycle to the maximum extent possible as a part of their Contracts using Turner's OWT tool. In cases of non-compliance, only the Subcontractor(s) responsible for contaminating dumpsters (placing waste in the wrong dumpster) will be responsible for fines, additional tipping fees, or other penalties as may apply.
Indoor Air Quality <hr/> Initials	<ol style="list-style-type: none"> Strict compliance with the project Indoor Air Quality (IAQ) Management Plan is required. Safety Data Sheets (SDS), along with VOC content, of all adhesives, sealants, coatings, paints, carpets, composite woods, etc. must be submitted for review and approval prior to these products being brought on site. Stored material shall be covered, stored off of the deck, and kept in a dry environment. Quantities should be limited to what can be installed in a reasonable time (e.g., two weeks or less). Changes in finished areas should be treated as renovations. For large changes, install temporary dust protection to separate the work area from the finished space. The work area should be kept negative and a HEPA filter should be used to filter the air prior to it leaving the space. The temporary protection and filter system should be approved by a Turner superintendent before beginning work. Once the work is complete, the area should be thoroughly cleaned, and the temporary protection should be removed. For small changes, a vacuum with a HEPA filter should be used to collect any dust that is generated, and the areas should be thoroughly cleaned after the work is complete. All subcontractors will be required to use sweeping compound. All cleaning products used on the project must comply with Green Seal Standard GS - 37 for Industrial and Institutional Cleaners. Mold and moisture control is a key to proper indoor air quality. If possible, drywall activities should not begin until the building is watertight. If drywall must start before the building is watertight, moisture resistant board should be used. Notify Turner if you see any wet building materials (before mold grows).
Stormwater Management	<ol style="list-style-type: none"> The SWPPP requirements including Best Management Practices (BMP's) were reviewed and will be followed as required by the SWPPP. The SWPPP drawings, project sequence and how sequencing will affect BMP locations were reviewed. Notify Turner of any disturbances of the Best Management Practices (BMP's) including silt fences, vehicle mud removal areas, vegetative cover, other sediment and erosion controls.

<div>Initials</div>	<ol style="list-style-type: none"> 4. Ensure all concrete/cement washout is performed at designated locations and into designated containers, notify Turner personnel immediately if washout is not adequately containing wash water and stop washout activity. 5. All site dewatering must be performed in a manner compliant with the SWPPP and all pump discharge locations must be previously approved by Turner. 6. Inspect all equipment and chemical storage containers for leaks as well as excess grease/grim/oil/fuel, if any of the above are discovered ensure that mechanics are notified (if necessary) and equipment/containers are wiped clean, and containments disposed of properly. 7. Ensure parked equipment and chemical storage containers are parked/stored in locations previously approved by Turner and are identified on the SWPPP map. 8. Use only designated areas for equipment maintenance and wash down. 9. Minimize the generation of dust and the tracking of sediment to off-site paved areas.
<div>Nothing Hits the Ground</div> <div>Initials</div>	<p>FABRICATION:</p> <ol style="list-style-type: none"> 1. All material fabrication shall be performed at a workstation between 30 and 39 inches, off the floor. 2. Workstation shall be mobile and include a fire stop directly behind all chop saws. 3. Rubbish containers shall be mobile and located directly adjacent to the workstation. 4. Mobile rubbish containers must be made available for subcontractors' work. <p>HOUSEKEEPING:</p> <ol style="list-style-type: none"> 1. All rubbish shall be disposed of as it is generated and be immediately placed in a mobile rubbish container provided by the subcontractor. No trash/scrap to touch the floor. 2. Cordless power tools are required unless the subcontractor can demonstrate a hardship or need to use tools with power cords. 3. The subcontractor is required to elevate off the ground all power cords, hoses and welding leads in order to minimize tripping hazards on walking/working surfaces. They must be elevated at least 8 feet. Any sub using these is responsible for purchasing/installing their own means of support. 4. Debris is not allowed to be consolidated on the floor. 5. Maintain clear paths to move materials and facilitate emergency egress. 6. When stilts are allowed on a project, the floor must be broom swept with no trip hazards. (Cords, material, screws and trash). Turner will provide a stilt-use permit where they are allowed. <p>MATERIAL HANDLING/ STORAGE:</p> <ol style="list-style-type: none"> 1. Material may not be stored within 10 feet of the building perimeter or adjacent to shafts or stairwells. 2. All material laydown areas must be coordinated and designated by Turner. 3. Material must be stored to promote mobility of material. All materials including pipes, conduits, metal fabrications and steel framing are to be stored on rolling racks or similar means of conveyance. Bulk material should be palletized to allow for easy mobility using a pallet jack. 4. Just in Time" delivery required to minimize clutter. Nothing should be stored on a floor that cannot be installed within one week. 5. Heavy material such as glass and drywall must be loaded so as not to overload the structure. The subcontractor is required to do a floor loading analysis for submission to Turner for review and approval. 6. Any contractor creating floor holes must cover those holes with covers capable of supporting 2x the intended load. Covers shall be installed flush to allow easy movement of rolling materials and trash hoppers. There are manufacturers that make these covers for smaller diameter holes ("Paragon" and "Hole Solution" are two). Turner does not endorse any manufacturer or product. 7. The biggest contributor to construction injuries is when we manually handle material (carrying, pushing, and pulling). Our goal is to identify and use mechanical means of moving material and tools whenever possible. This might include cranes, forklifts, dollies, carts, etc. It means never carrying materials up and down stairs. It definitely means right-sizing the loads we <i>are</i> handling – such as not lifting more than 50lbs or not overfilling tool buckets or trash cans with heavier materials. Buy smaller bags of grout and mortar instead of the big 80lb bags. Find ways to work smarter. Not harder.
<div>OHSAS 18001 Safety Management System</div> <div>Initials</div>	<ol style="list-style-type: none"> 1. OHSAS 18001 is an internationally recognized health and safety management system to improve safety performance of a company and control the risks associated with their operations. 2. Turner has received registration in OHSAS 18001 by the third-party auditor NSF, International as of March 2014. 3. Achieving registration through OHSAS 18001 demonstrates Turner's commitment to elevate the company's already mature and advanced safety standards and programs. OHSAS 18001 registration also confirms Turner's dedication to improving Occupational Safety and Health performance through control and management of associated risks and hazards in the workplace. 4. Turner truly cares about your well-being while working on this project. 5. Turner wants to see you go home the same way you came to work. 6. Your opinion matters on this project! If you have a question or concern related to safety and health, please ask a Turner representative.

Hazardous Chemical Inventory List

1. General Information				
Trade Partner:		Project:		Date:
2. Inventory				
#	On Site	Common Name/Chemical Name	Manufacturer	SDS On File
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Site Specific Chemical Inventory List

1. General Information				
Trade Partner:		Project:		Date:
2. Inventory				
#	On Site	Common Name/Chemical Name	Manufacturer	SDS On File
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Ladder Safety Inspection Checklist

1. General Information	
Inspector:	Date:
Site Location:	Time:
2. Checklist	
Instructions: 1) Complete Permit on flipside first 2) Affix completed inspection tag on all ladders passing inspection. 3) Tag defective ladders 'Out of Service' and discard if beyond repair 4) Note deficiencies/corrective actions in Comment section. 5) Return checklist to Turner Superintendent	
<input type="checkbox"/> YES	1. Broken, bent or missing steps, rungs, cleats, or rails?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	2. Steps and rungs free of water, grease, oil or other slippery substance?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	3. Free of splits, cracks, rust, corrosion, and dry rot?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	4. Free of sharp edges, cuts, burns, etc.?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	5. Loose or bent hinges that can't be fully opened or locked in place?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	6. Stable and completely balanced (not shaking or swaying) with all legs resting firmly on the floor?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	7. Loose, broken, or missing extension locks to ensure safe overlap of extension ladder sections?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	8. Damaged or worn non-slip bases, safety feet, wheels, or casters?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	9. Cross-over ladders have railings and non-slip steps?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	10. Weight capacity label attached? Type 1A?
<input type="checkbox"/> NO	
<input type="checkbox"/> YES	11. Other structural defects or operating problems?
<input type="checkbox"/> NO	

Date:

Ladder Permit

1. General Information			
Consider how work may be accomplished at or from the ground-level to minimize elevated work. Ladders are to only be used where no safer means is feasible to access the work. Mobile Elevated Work Platforms (scissor and aerial lifts, etc.) are the preferred method. You can alternately consider the use of scaffolds, rolling stairs, etc. Note: When using ladders, if three points of contact cannot be maintained, or if over 4' up, 100% fall protection is required			
Contractor Company		Project Number/Name:	
Area(s) Ladder to be used:			
Ladder Competent Person:		Competent Person Contact #:	
2. Reason Ladder is Only Option			
NOTE: Must be approved by the Turner Superintendent and/or Safety Manager.			
3. Activity/Task(s) to be Performed from Ladder			
4. Ladder Information			
Type of ladder (check one): <input type="checkbox"/> Platform-ladder <input type="checkbox"/> Stepladder <input type="checkbox"/> Extension <input type="checkbox"/> Fixed <input type="checkbox"/> Trestle <input type="checkbox"/> Other:			
Ladder weight capacity (300lbs min):		Ladder Height:	
Will you be 4' or more above a working surface?		<input type="checkbox"/> YES <input type="checkbox"/> NO	
If YES, what specific Fall-Arrest System will you use and what will be your anchor point? (Retractable Device is the only appropriate method of fall protection):			
Worker's Name:		Orientation Sticker #:	
Worker's Name:		Orientation Sticker #:	
5. Permit Reviewer (Turner)			
Name:		Date:	
Name:		Date:	

Mobile Elevated Working Platform (MEWP) Checklist

1. General Information							
Name/Type of MEWP:				Contractor Name:			
Model or Equip No.:				Contact Number:			
Operator or Inspectors Name (person performing the inspections):							
2. Inspection							
Date:	/	/	/	/	/	/	/
Shift:							
Is the operator trained to operate this MEWP and does the operator have a valid operator's license/card?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
Inspection Item & Description Pass Fail Status	P/F	P/F	P/F	P/F	P/F	P/F	P/F
1 Operating and emergency controls are in proper working condition, EMO button or Emergency Stop Device							
2 Upper drive controls interlock mechanism is functional (i.e. foot pedal, spring lock, or two hand controls)							
3 Emergency Lowering function operates properly							
4 Lower operating controls successfully override the upper controls							
5 Both upper and lower controls are adequately protected from inadvertent operation.							
6 Control panel is clean & all buttons/switches are clearly visible (no paint over spray, etc.)							
7 All switch & mechanical guards are in good condition and properly installed							

8	All Safety Indicator lights work							
9	Drive controls function properly & accurately labeled (up, down, right, left, forward, back)							
10	Motion alarms are functional							
11	Safety decals are in place and readable							
12	All guard rails are sound and in place, including basket chains							
13	Work platform & extension slides are clean, dry, & clear of debris							
14	Work platform extension slides in and out freely with safety locking pins in place to lock setting on models with extension platforms.							
15	Inspect for defects such as cracked welds, fuel leaks, hydraulic leaks, damaged control cables or wire harness, etc.							
16	Tires and wheels are in good condition, with adequate air pressure if pneumatic							
17	Braking devices are operating properly							
18	The manufacturer's operations manual is stored on MEWP (in all languages of the operators)							
19	Crush protection devise, time out switches and/or control covers installed							

Initial Equipment Safety Inspection: *Off-Road Heavy Equipment*

1. General Information				
Initial Inspection:				
Type of Equipment:		Make/Model:	Owner ID#:	
Operated By (Name of Operator):			Employer:	
Operator Certified? <input type="checkbox"/> YES <input type="checkbox"/> NO		Certified By:	Date:	
Inspected By:			Signature:	
Title:			Employer:	
Inspected By:			Signature:	
Title:			Employer:	
2. Inspection				
		YES	NO	N/A
1	Operator has reviewed charts & manuals and understands safe operating practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Operator does a Daily Equipment Inspection at the start of the shift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Equipment is in proper condition for street use (turn signals, brake lights, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Back up alarm is functioning and loud enough for the conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Warning horn is functioning and loud enough for the conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	There is a charged fire extinguisher in the cab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The Cab Glass is without cracks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Steps and seats are in proper condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Seat belts are provided, and they are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Riders are not permitted where there are no seats with seat belts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Rollover protection is provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Overhead protection is provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Protection from flying debris is provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Adequate lighting is provided for work in low light/dark conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Brakes are functioning properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Beds of dump trucks are equipped with device for locking body in raised position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Tires/tracks are in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Pulleys, belts, gears, chains, and other nip and shear points are adequately guarded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Fuel tanks are located to prevent spills and overflows from hitting hot parts or electrical equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Windshield wipers are in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	Exhaust is located/directed so as not to endanger workers or obstruct operator's view	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Fueling cans used with the equipment are the approved safety type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Initial Equipment Safety Inspection: Cranes

1. General Information				
Initial Inspection:		Annual Inspection Expires:		
Type of Equipment:	Make/Model:	Owner ID#:		
Owned By:		In Use By (Company):		
Operated By (Name of Operator):		Employer:		
Operator Certified?	<input type="checkbox"/> YES <input type="checkbox"/> NO	Certified By:	Date:	
Inspected By:		Signature:		
Title:		Employer:		
Inspected By:		Signature:		
Title:		Employer:		
2. Inspection				
NOTE: *Indicates must be verified by and/or submitted to Turner. Items (except #20) marked "NO" must be corrected prior to operation of crane.				
		YES	NO	N/A
1*	Current "Annual" Inspection Report with any deficiencies noted as corrected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Operator's Manual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3*	Daily Operator's Inspections done with Inspection Log up to date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Load Charts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5*	Chart for hoisting 'over the front'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Signal Chart posted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Operator has reviewed charts & manuals and understands capacities and limitations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Functioning 'Anti-Two-Block' Device as per ANSI B30.5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Boom Angle Indicator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Leveling Device	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Operator Controls legibly marked as to function	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	FAA Light and/or Flag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Cab Glass intact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Functioning Warning Horn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Charged Fire Extinguisher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Adequate Blocking (min. sq. ft. each float = rated capacity of crane / 5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Floats positively attached to outrigger rams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Block and/or ball have Capacity Plates and hooks have Safety Latches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Wedge Socket termination is proper & not clipped directly to load line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Will or might be Hoisting Personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Critical Crane Lift Plan

1. General Information		
This plan is to be followed if any of the following apply: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <input type="checkbox"/> Load capacity is equal to, or exceeds 75% of load chart rating </div> <div> <input type="checkbox"/> 2 or more cranes will be used during lift </div> <div> <input type="checkbox"/> Any unusual circumstances (Specify): </div> </div>		
Employer Name:	Project Name/Number:	
Lift Supervisor and Contact Number:	Assembly/Disassembly Director: (If Applicable)	3 rd Party Inspector (Company / Name)
Certified Crane Operator: (Company / Name(s))	Qualified Rigger(s): (Company / Name(s))	Qualified Signal Person(s): (Company / Name)
Note: All Insurance Certificates, Inspections, Certifications, and Training must be submitted prior to Acceptance and Approval of Critical Lift Plan		
Schedule of Operations		
NOTE: Include time for rigging and equipment inspection:		
	Permit Start Date and Time:	Permit End Date and Time:
2. Crane/Lift Information		
Make and Model of Crane/Hoist:		
Serial Number:	Length of Boom:	
Maximum Operating Radius:	Planned Operating Radius:	
Boom Angle:	Height of Lift:	
Description of Item to be Lifted: (Attach Submittal/Specification)		
Load Weight:	Specify how the load weight was determined and by whom:	
Allowable Load (from load chart):	Ratio of Lift to Allowable Load:	
Weight of rigging and attachments:		
Description of rigging and attachments:		
Specify how the rigging/attachment weight was determined and by whom:		
Total Weight of Load/Rigging/Attachments/Load Chart Deductions:		

What are the identified lifting points (Factory or Field Installed)?		
Is a Spreader Bar required (Y or N), if Yes, what is the size and capacity?		
3. Clearance		
Clearance between boom and lift: (If Applicable)		
Clearance to surrounding objects:		
Clearance for Load Movement Sufficient:		
4. Stability of Ground		
<input type="checkbox"/> Is the ground compact & stable?	<input type="checkbox"/> Are crane mats required?	
<input type="checkbox"/> Outriggers in place and cribbing / blocking used?	<input type="checkbox"/> Are there any hazards beneath the equipment set up area? If Yes, What?	
6. Further Information		
<input type="checkbox"/> Is a lift drawing required for this lift (if so, attach)		
What type of communication will be used by the operator and signal person (Two Way Radios / Hand Signals)		
What are the wind and weather conditions?		
Temperature:	Weather Condition(s):	
<input type="checkbox"/> If wind speed is over 25mph, do not proceed with lift	<input type="checkbox"/> If wind speed is over 20mph, consider postponing	
Is additional lighting required (Y or N), If Yes, What type of lighting will be required?		
Is there a traffic control plan needed for this lift? (If so, attach)		
What device(s) will be used to barricade of the counterweight swing radius of the crane?		
How will area be kept clear of pedestrian traffic:		
Comments:		
7. Lift Approval		
Crane Operators Name:	Signature:	Date:
Crane Inspectors Name:	Signature:	Date:
Rigging Supervisors Name:	Signature:	Date:
Lift Supervisors Name:	Signature:	Date:
Signal Persons Name:	Signature:	Date:
Other:	Signature:	Date:
Turner Management Review		
Name:	Signature:	Date:

Note: Prior to a critical lift being made, all associated individuals need to review the critical lift plan during their PTP Huddle.

Energized Electric Work Permit

1. General Information				
NOTE: This permit is to be completed by the electrically qualified persons doing the work.				
Name of Requester:	Title of Requester:		Date:	
Project Name:	Company Requesting Permit:			
Specific Location:	Name of Electrical Work Supervisor:			
Requested Start and Completion Date:	Weekend Work Required (Yes / No):			
Work Scope Overview: (Attach Supporting Documents)				
Facility Equipment or System that will be Affected	Yes	No	N/A	Details:
Electrical Utility Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency Generator System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Critical Cooling System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Non-Critical Cooling System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Uninterruptible Power Supply System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Critical Power Distribution System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency Power Off (EPO) System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fire Detection Systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fire Suppression System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Monitoring System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Control System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Security System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
General Power and Lighting System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lockout/Tag out Required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other (Please Specify)				
Description of Voltage and Location of Machine or Equipment:				
Justification of why the circuit/equipment cannot be de-energized or the work deferred until the next scheduled outage:				
Name(s) of Electrically Qualified Person(s):				
2. Electrical Workers' Training and Qualifications				
NOTE: The employee(s) must have successfully completed formal employer-approved training in the following subjects:				
a. Electrical Safety	Date:			
b. Lockout-Tagout	Date:			

c. CPR	Date:
d. First Aid	Date:
e. NFPA 70E Standard	Date:

3. Detailed Job Description Procedure to be Used in Performing the Above-Described Work:

Step #	Action	Contractor	Time Start	Time End	Duration
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

4. Back-out Procedures

Step #	Action	Contractor	Time Start	Time End	Duration
1					
2					
3					
4					
5					

5. Description of the Safe Work Practices to be Employed:

--

6. Results of the Arc Flash Study / Analysis:

--

7. Determination of Arc Flash Protection Boundaries:

--

8. Necessary Personal Protective Equipment to Safely Perform the Assigned Task:

Note: All equipment must have current test and/or certification.

<input type="checkbox"/> Safety Glasses and/or Face Shield	<input type="checkbox"/> Non-Conductive Hardhats
--	--

<input type="checkbox"/> Certified Rubber Gloves and Leather Protective	<input type="checkbox"/> Insulating Sleeves and Aprons
<input type="checkbox"/> Dielectric Blanket and Insulated Mats	<input type="checkbox"/> Hearing Protection
<input type="checkbox"/> Respiratory Equipment	<input type="checkbox"/> Insulated Tools
<input type="checkbox"/> Other (Cal rated clothing etc.):	

9. Means Employed to Restrict the Access of Unqualified Persons from the Work Area:

10. Safety Checklist for Live Electrical Work

☐ Specific work areas must be cordoned to prevent unauthorized access to the live work area

☐ A minimum of two equally qualified workers must be present when the live work is accomplished

☐ An individual certified in First Aid and CPR shall be immediately available to the area

☐ All persons in the work areas should remove all jewelry

☐ If ladder access is required, only fiberglass ladders are authorized. Although wood ladders are non-conductive, the wood ladders become conductive when water is absorbed into them

☐ If access to the live work is in a wet area, place wood planking or its equivalence on the floor

☐ Work boots for persons performing the live work should be ANSI approved for electrical work

☐ Insulated gloves worn by workers performing the live work must have current dielectric test date

☐ All work must comply with OSHA 1926 (Subpart K, NEC, NFPA 70E standards and applicable NIOSH Policies)

11. Do You Agree the Above-Described Work Can Be Done Safely?

☐ YES If no, return to requester.

☐ NO

12. Contacts

Name	Title	Cell	Company	Email

13. Authorization to Perform the Work While Electrically Energized

Project Executive:	Signature:	Date:
Project Manager:	Signature:	Date:
Project Superintendent:	Signature:	Date:
BU EH&S Director:	Signature:	Date:
Owner / Building Representative:	Signature:	Date:

****Note: A Pre-Task Plan along with this EEWP must be produced/reviewed with the individuals performing the work****

Emergency Release Authorization Form:

1. General Information	
Name of Person Whose Lock Must Be Removed:	
Supervisor's Name:	
Has an attempt been made to contact them? <input type="checkbox"/> YES <input type="checkbox"/> NO	Has an attempt been made to contact their supervisor? <input type="checkbox"/> YES <input type="checkbox"/> NO
Why is it critical to remove this lock now?	
Whom else is affected by removing this lock?	
Are you sure it is safe to remove this lock? <input type="checkbox"/> YES <input type="checkbox"/> NO	
Site Manager/Project Manager or designee name:	
Signature:	Date:
(If Needed) Owner or Owner's Representative name:	
Signature:	Date:
(If Needed) Commissioning Manager or designee name:	
Signature:	Date:

Confined Space Entry Permit

1. General Information							
NOTE: This permit must be completed for "permit-required entries," "alternate entries," and when reclassifying a permit space to "non-permit" required space. The permit must be posted at the entry portal of the Confined Space during entry, along with a Pre-Task Plan. Maintain record of this permit for 1 year							
Employer Name:				Project Number/Name:			
Turner Site Superintendent Name:		Permit Start Date:		Permit End Date:			
Assessment Performed By:		Permit Start Time:		Permit End Time:			
Name of Supervisor Overseeing Work:				Contact Number:			
Location of Confined Space:							
Description of Task:							
Description of Confined Space (or Confined Space ID Number):							
Description of Hazards in the Space (List chemical, physical, and other hazards):							
4. Atmospheric Sampling							
NOTE: Atmospheric monitoring required prior to and continuously during permit entry.							
Conducted By:			Signature:		Title:		
Monitoring Instrument Manufacturer and Model #:			Last Factory Calibration Date:		Pre-Entry Calibration Initial if Completed: _____		
Sampling Results							
NOTE: If levels are outside the below acceptable levels, entry is denied until 3 consecutive tests within the tolerances are completed. Test must be 5 minutes apart and indicate whether the tests are with or without mechanical ventilation. More sampling results space is located at the end of this permit.							
Monitor in this order	Acceptable Ratings		Result	Result	Result	Result	Result
	Min	Max	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM
1. Oxygen	19.5%	23.5%					
2. Combustible	0%	10%LEL					
3. H2S	0%	5ppm					
4. Other	0%	___%PPM					
5. Temperature	-	-					
5. Ventilation							
NOTE: Required if a potential or actual atmospheric hazard exists.							
<input type="checkbox"/> No Ventilation Required				<input type="checkbox"/> Continuous Mechanical Ventilation Required			
6. Engulfment Hazard Early Warning System							
NOTE: Required if a potential for engulfment exists.							
<input type="checkbox"/> No Engulfment Hazard				<input type="checkbox"/> Yes – Description:			
If Yes, describe method and location to monitor for Engulfment Hazard:							

7. Emergency Rescue Personnel Must Be On-Site During Any Permit Entry	
NOTE: All requirements below apply:	
<input type="checkbox"/> Rescuers informed of all hazards <input type="checkbox"/> Rescue plan developed <input type="checkbox"/> Current First AID/CPR <input type="checkbox"/> Rescuers have required training <input type="checkbox"/> Non-Entry rescue gear (Tripod, Wench, AED, etc.) <input type="checkbox"/> SCBA or SAR required when potential for IDLH atmosphere exists (Plus med clearance and fit test to use) Rescuer Names:	
8. Protective Equipment	
NOTE: All protective equipment shall be inspected prior to use.	
<input type="checkbox"/> Harness w/ Retrieval System	<input type="checkbox"/> Hearing Protection
<input type="checkbox"/> Respiratory Protection (specify):	<input type="checkbox"/> Specify Communication Method:
<input type="checkbox"/> Face Shield/Goggles	<input type="checkbox"/> Fire Extinguisher
<input type="checkbox"/> Coveralls or Chem Clothing	<input type="checkbox"/> Other:
<input type="checkbox"/> Intrinsically Safe Equipment or Non-Sparking Tools	<input type="checkbox"/> Barriers to Protect Entrants from Cars/Pedestrians
9. Isolation of Mechanical, Electrical, Physical or Chemical Energy Sources	
NOTE: Required for alternate entry. Measures might include LO/TO, blanking or blinding: removing sections of lines; a double block and bleed system, blocking or disconnecting all mechanical linkages; isolation barriers	
<input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes (specify):
10. Has Space Contained Liquids, Gases or Solids of Toxic, Corrosive or Irritant Nature?	
<input type="checkbox"/> No	<input type="checkbox"/> Yes (if yes, contact the BUSD prior to entry, attach SDS to this permit)
11. Name(s) of Attendant	
1.	2.
12. Name(s) of Employee(s) Authorized to Enter	
1.	2.
3.	4.
13. Special Instructions/Equipment	
14. Alternate Entry Procedure (allowed when all of the following conditions are met)	
<input type="checkbox"/> Physical Hazards are eliminated or isolated	<input type="checkbox"/> No Hazardous atmosphere present at any time: Complete Section 4 & 5 above
<input type="checkbox"/> Continuous forced air ventilation maintains safe air	<input type="checkbox"/> Egress points are easily accessible and easily identified
<input type="checkbox"/> Documentation to support above made available to entrants	<input type="checkbox"/> Fall Protection system around opening
<input type="checkbox"/> Safe means of entry (harness, winch, or other applicable, etc.)	
As the competent person, I certify that the space described in section 1 above has been made safe for alternate entry on the date listed above.	
Name:	Date:
15. Reclassification to Non-Permit 1926.1203(g)	
<input type="checkbox"/> All hazards eliminated or isolated	<input type="checkbox"/> Pre-entry air monitoring captured above
<input type="checkbox"/> Forced air does not constitute hazard elimination	
As the competent person, I certify that the space described in section 1 above has been made safe reclassification on the date listed above.	
Name:	Date:
16. Designated Entry Type:	
<input type="checkbox"/> Permit-Required	<input type="checkbox"/> Alternate Entry <input type="checkbox"/> Non-Permit-Required
17. Post-Entry Debrief with Turner Construction (Required)	
<input type="checkbox"/> Reviewed Hazards Confronted/Created	<input type="checkbox"/> Turner Shared this Info with Host Employer
18. Permit Cancellation	
<input type="checkbox"/> Entry Operation Completed	<input type="checkbox"/> Forbidden Condition Arises <input type="checkbox"/> Alternate Entry on Non-Permit

Additional Atmospheric Monitoring

NOTE: Atmospheric monitoring required prior to and continuously during permit entry.										
MONITOR IN THIS ORDER	ACCEPTABLE RANGES		RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
	MIN	MAX	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM
1. Oxygen	19.5%	23.5%								
2. Combustible	0%	10%LEL								
3. H2S	0%	5ppm								
4. Other	0%	___%PPM								
5. Temperature	-	-								

Fall Protection Checklist

1. General Information					
Project Name:			Project #:		
Trade Partner Name:		Performed By:		Date:	
2. Checklist					
Fall Protection Options for Hazardous Exposures	Look At:	Satisfactory	Unsatisfactory	Non-Applicable	Comments
Working Over Dangers Equipment: Guard rail Safety net – personal fall arrest system	Guard Rails: Top Rail @ 42" Max 3" deflection.... Mid Rail @ 21" ...Will withstand 200lbs of force in any direction... Toe boards required... Wire rope flagged every 6' with high visible tape.				
Excavations: Guard rails – fences - barricades					
Floor/Roof Openings: Hole covers – guard rails - Personal fall arrest – fall restraint.	Vertical Lifelines: Free from knots.... Anchor to support 5000lbs. Independently secured to structure...Line and rope grab inspected daily for wear & deformities...Breaking strength of 6000lbs...One worker per lifeline				
Formwork & vertical Rebar: Personal fall arrest system – positioning system					
Hoist Areas: Guard rails Personal fall arrest system – fall restraint system	Tie Off: Mandatory Tie off at 6' or above, no one ties off to wire rope or wood. Harness (ABC) Anchorage, body-wear Connection used under direction of qualified person. Employees must wear approved and inspected equipment. 'D' ring located between shoulder blades. Leg straps intact. No exposure to fall greater than 6' when including lanyard, tie off point expansion, body				
Leading Edge: Guard rails Personal fall arrest system – fall restraint system					

Over-head Work: Guard rails, safety net, Personal fall arrest system, controlled access zone used only to protect worker below from 'struck-by' incidents	height, deployment of shock absorber and/or length of retractable grab point. Lanyard with double locking snap hook, readable mfg's tag, no wear and tear no ripped stitching.				
Pre-Cast Concrete Erection: Guard rails – safety net Personal fall arrest system	Is plan in place for recovering an individual who falls? Self-Retracting Lanyards; inspected daily. After fall or misuse, must be inspected by manufacturer and reset with applicable paperwork supplied.				
Roof Work: Guard rails – safety net Personal fall arrest system – fall restraint system -					
Unprotected Sides and Edges: Guard rails – safety net Personal fall arrest system – fall restraint system	Holes/Openings: Coverings secured both vertically and horizontally, required for all openings including: Skylights and roof openings capable of supporting 2x intended weight (workers, lifts, vehicles, etc.) Must be ¾ "plywood minimum or guardrail				
Ramps, Runways, Walkways: Guard rails Personal fall arrest system, safety net					
Wall Openings: Guard rails, safety net Personal fall arrest system, fall restraint system.	Ladders: Base level and free from debris, no one stands on top 2 steps. To be provided at points of access 19", inspected by competent person.				
Scaffolds: Guard rails – personal fall arrest system (if above guardrail system)	Non-conductive, slip resistant, job made (cleats 10" to 14" apart and uniform 4 to 1 lean. Work facing ladder.				
Steel Erection: Guard rails – safety net	Scaffolding: Set-up: Bases, cross bracing, guard rails, toe				

Personal fall arrest system – fall restraint system	boards, mid rails, level, fully planked with scaffold grade planks, protected from tipping, fall protection required for erection, fall protection required at 6' or above, debris removed daily, Access provided by 'hook-on' ladder, stair tower, ramps, walkway scaffold star. Never overloaded, inspected and tag signed off daily by competent person. Material secure and falling object protection with toe boards, catch platforms, canopy structures, front edge of platform no more than 14" from face. Training required on each type of scaffold worked on.				
Metal Decking: Guard rails – safety net					
Personal fall arrest system – fall restraint system					
Siding Erection: Guard rails – safety net – personal arrest system					
Glazing & Curtain wall: Guard rails – safety net – personal fall arrest system – fall restraint					
Swing Stages: Guard rails – safety net – personal fall restraint					
Bosun's chair: Personal fall arrest – fall restraint	Safety Nets: Designed by a Registered Professional engineer (RPE) for each application, inspected weekly or after an occurrence. Inspection documented, material removed ASAP, installed not more than 30' from work area. Mesh size no bigger than 6"x6"				
Snorkel Lift: Guard rails – personal fall arrest					
General Questions:					
Are workers empowered to identify hazards and stop work?					
Are competent persons designated and on site?	Safety Monitor System: Turner does NOT allow a Safety Monitor System under any conditions or circumstances				
Is Turner taking disciplinary action on fall protection offenses?					
Are bi-lingual provisions in place and being used?	Suspended Scaffold: Independent lifelines. Competent person checks connections, anchorage points and inspects scaffold. Counterweights secured by mechanical means (no				

<p>Have all workers completed orientation?</p> <p>Have Vendors provided Fall Protection Training?</p>	<p>sandbags, masonry units, gravel, rolls of roof felt)</p> <p>Suspension ropes inspected by competent person prior to each shift.</p>					
	<p>Aerial Lifts:</p> <p>Tie off required inside boom lift platform per OSHA & Manufacturer's instructions.</p> <p>Stand firmly in basket.</p> <p>Inspected by competent person prior to each shift.</p>					
	<p>Concrete Work:</p> <p>100% tie off at 6' or above, approval using positioning systems on formwork, impalement hazards covered.</p>					
	<p>Steel Erection, Welding, Bolting, Metal Decking:</p> <p>100% tie off at 6' or above, erection to minimize connectors coming into contact with swinging members.</p> <p>Use lifts to connect, use tags lines.</p> <p>Protection system in place when lifting deck.</p>					
	3. Additional Comments					

Surface Penetration Procedure Permit

1. General Information			
NOTE: This request form must be completed and authorized prior to penetrating the ground or penetrating walls and slabs during renovation or demolition (at any depth). The contractor disturbing soil is required to contact the locator and review as-builts. A J.H.A. must be submitted prior to commencing all surface-penetrating activities on site. Prior to the start of the work in the field, the supervisor will conduct a Pre-Task Planning meeting with the crew performing the work.			
Employer Name:		Project Number/Name:	
Site Superintendent Name:		Date of Permit Request:	
Permit Start Date:		Date of Safety Pre-Plan Meeting:	
Permit Start Time:		Permit End Time:	
Name of Supervisor Overseeing Work:		Contact Number:	
Location of Surface Penetration:			
Purpose of Surface Penetration:			
2. Hazard Assessment – Utilities			
NOTE: Method(s) used to Identify potential utility hazards			
Proposed method of identifying utilities: <input type="checkbox"/> Public Locates (811) <input type="checkbox"/> Private Locates <input type="checkbox"/> Hand Excavation <input type="checkbox"/> As Builts (explain) _____			
<input type="checkbox"/> Vacuum Excavating <input type="checkbox"/> Radar/Scanning /X-Ray <input type="checkbox"/> Other (explain) _____			
Utility Locate Organizations			
NOTE: All locates expire after 30 days. Valid locates must be present at ALL times.			
Utility Locate Organization		Date Locates Completed	
Utilities Present:	<input type="checkbox"/> Gas <input type="checkbox"/> Data/Comms <input type="checkbox"/> Sewer/Storm <input type="checkbox"/> Electrical/Grounding <input type="checkbox"/> Process/Steam/Oil <input type="checkbox"/> Temp/Other (Explain)		
Have ALL utility locates been obtained?		Have located utilities been clearly marked?	
<input type="checkbox"/> YES <input type="checkbox"/> NA		<input type="checkbox"/> YES <input type="checkbox"/> NA	
3. Earth Penetration Hazard Assessment			
NOTE: Identify potential hazards associated with penetrating a surface or entering an excavation or trench.			
Soil Classification: <input type="checkbox"/> Type A <input type="checkbox"/> Type B <input type="checkbox"/> Type C <input type="checkbox"/> Stable Rock			
Method of Surface Penetration: <i>Select all that apply</i> <input type="checkbox"/> Excavator/Backhoe <input type="checkbox"/> Drilling/Auger <input type="checkbox"/> Pneumatic <input type="checkbox"/> Hand Removal <input type="checkbox"/> Coring <input type="checkbox"/> Other			
Method to protect workers from cave-ins and soil collapse.		<input type="checkbox"/> Benching Ratio: <input type="checkbox"/> Shoring/Trench Box Sloping: Ratio: <input type="checkbox"/> Other	

Access and egress points will be established within 25 feet of each worker (stairs, ramps or ladders).	<input type="checkbox"/> YES <input type="checkbox"/> NA	Sources that may cause an accumulation of water inside an excavation or trench have been identified and controlled.	<input type="checkbox"/> YES <input type="checkbox"/> NA
Perimeter protection will be put in place for open excavations	<input type="checkbox"/> YES <input type="checkbox"/> NA	Equipment areas and travel paths have been delineated and signed to prevent foot traffic from entering.	<input type="checkbox"/> YES <input type="checkbox"/> NA
Material and equipment storage areas will be positioned at least 4ft away from perimeter of excavation.	<input type="checkbox"/> YES <input type="checkbox"/> NA	A spotter with no other assigned duties will be appointed when operating equipment is in the immediate vicinity of workers.	<input type="checkbox"/> YES <input type="checkbox"/> NA
Sources that may contaminate the atmosphere inside an excavation or trench have been identified and will be continuously controlled and monitored.	<input type="checkbox"/> YES <input type="checkbox"/> NA	A top man has been appointed (Trench work only).	<input type="checkbox"/> YES <input type="checkbox"/> NA
A Traffic controller is in place when work involves a roadway or pedestrian path.	<input type="checkbox"/> YES <input type="checkbox"/> NA	Fall Prevention/Protection Plan in place for excavations deeper than 6 feet	<input type="checkbox"/> YES <input type="checkbox"/> NA
4. Surface Penetration Layout (physically identify the limits of the proposed excavation, "white-lining" or other means			
NOTE: Attach drawing of work area			
5. Interior/Concrete Penetrations Hazard Assessment			
Method of Surface Penetration: Select all that apply	<input type="checkbox"/> Chipping <input type="checkbox"/> Drilling <input type="checkbox"/> Cutting <input type="checkbox"/> Coring <input type="checkbox"/> Pneumatic <input type="checkbox"/> Other		
Areas beneath the concrete slabs have been X-rayed or scanned prior to penetration (locates known).	<input type="checkbox"/> YES <input type="checkbox"/> NA	Slab marked accordingly with locations of embedded utilities (and PT Cables if applicable).	<input type="checkbox"/> YES <input type="checkbox"/> NA
Can sprinkler system be isolated, valved-off or drained?	<input type="checkbox"/> YES <input type="checkbox"/> NA	Can sprinkler heads be protected with temporary cage covers?	<input type="checkbox"/> YES <input type="checkbox"/> NA
Valve shut-off map posted in work area.	<input type="checkbox"/> YES <input type="checkbox"/> NA	Can utilities be temporarily disconnected during work?	<input type="checkbox"/> YES <input type="checkbox"/> NA
Active utilities are visually flagged (including sprinkler heads).	<input type="checkbox"/> YES <input type="checkbox"/> NA	Spill response kit present.	<input type="checkbox"/> YES <input type="checkbox"/> NA
Area beneath or above work location barricaded and signage present.	<input type="checkbox"/> YES <input type="checkbox"/> NA	Spotter beneath or above work location with means of communication with work crew.	<input type="checkbox"/> YES <input type="checkbox"/> NA
Thickness of slab:		Max length of shots to be used:	
6. Permit Review			
NOTE: Prior to commencing work, all parties identified must sign to approve this document. By signing this document, I certify that all records of existing utilities in the described area, including but not limited to As-Builts, Marks-Outs, and Utility Coordination Reports have been examined and all known utilities have been marked, identified, and protected from damage. The employer responsible for the work outlined in this permit will be held responsible for any damages resulting from negligence and failure to protect known utilities. This permit may also require a supporting safe work procedure/method of procedure if deemed to be high risk work.			
Supervisor Sign-Off:			
Name:	Signature:		Date:
Turner Management Review:			
Name:	Signature:		Date:

Hot Work Permit

1. General Information			
NOTE: DO NOT CONDUCT HOT WORK if fire protection is not available. This Hot work Permit is required for any operation involving open flames or producing heat and/or sparks. This includes but is not limited to brazing, cutting, grinding, soldering, thawing pipe, torch applied roofing and welding. Foreman for hot work operation shall complete this form prior to commencement of the hot work. Employee performing hot work shall review this form and display in the area where work is being done. Return form to Turner at the end of shift.			
Permit Holder/Contractor:			Date:
Foreman (Name):		Location (building, floor, room):	
Devices Disabled:		Type of Job:	
Time Started:	<input type="checkbox"/> AM <input type="checkbox"/> PM	Time Finished:	<input type="checkbox"/> AM <input type="checkbox"/> PM
Permit Expires: (1 Shift)	Date:	Time:	<input type="checkbox"/> AM <input type="checkbox"/> PM
2. Checklist			
NOTE: Prior to beginning any hot work, all potential hazards must be addressed including:			
YES	NO	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Life Safety Department has been contacted for any work that will or may impair life safety systems. What will be impaired (circle): Sprinkler heads, detectors, other _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Available sprinklers, hoses and extinguishers are in service and in good repair.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fire extinguishers are available at the point of hot work. (Supplied by the Permit Holder)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Work equipment is in good repair.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Worker has all appropriate safety equipment for the hot work (e.g., gloves, shield, respirator etc.) and not defective.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All movable fire hazards in the vicinity have been relocated at a safe distance (at least 35 ft.) from the point of operation or covered with fire resistive barriers if unable to move.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All wall and floor openings have been covered.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	When working on or near walls, move combustibles away from both sides of walls.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	When working with suspended ceilings, be sure to protect concealed spaces.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Floors have been swept clean of combustibles.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flammable liquids, dust, lint, and oily deposits have been removed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The area has been examined to determine if flammable or combustible liquids or vapors could potentially be present. If present, the atmosphere shall be tested using an explosive meter. If quantities are 10% of the lower explosive limit or greater, hot work shall not be performed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A fire watch is equipped with an appropriate fully charged fire extinguisher and present during hot work operations.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A fire watch will be provided for 30 minutes following the completion of work, including breaks.
3. Final Work Area Check			
Work area monitored following Hot Work and 30-minute fire watch and found safe:			<input type="checkbox"/> YES <input type="checkbox"/> NO
Name of Fire Watch (Please Print):		Time Started:	<input type="checkbox"/> AM <input type="checkbox"/> PM
Craft Person Conducting Task:			
Turner Representative:			
Devices Reactivated:			

Drone Use Approval Request Form

1. General Information	
Business Unit:	Project Number/Name:
Date:	Requested By:
What is the duration of the project?	
2. Where is the project located? (List any adjacent structures and their use, FAA flight path areas in close proximity to the project, location of the nearest airport, and location of the nearest helipad and a general overview of the neighborhood):	
3. Provide an overhead map view of the project and surrounding structures (example: Google Maps):	
4. What is the reason your project wants to utilize a drone?	

5. Is there any other way to achieve the desired results without using a drone?
6. What is the purpose and scope of the request?
7. How often will the drone fly? And what is the frequency of each flight?
8. How long will this drone use activity continue? (Also provide dates from start to finish)
9. What will they be capturing?
10. Have the local rules, guidelines and laws been researched? And if so, what are their restrictions?
11. What company (from the approved vendor list) will be employed?
12. What is the project plan for controlling and eliminating the risk (including privacy concerns)?

Drone Vendor

1. General Information			
NOTE: Please respond completely to the questions below (attach supporting documentation if requested or to support your response)			
Legal Name of Company:		Year Company Started:	
Address:			
City:	State:	Zip:	
2. Person Filling Out This Questionnaire			
Name:		Title:	
Email Address:	Work Phone:	Cell Phone:	
3. Are all operators at least 21 years of age and have obtained an UAS/Drone safe operator certificate? (Presently the Unmanned Safety Institute has aeronautical and operator certification programs.)?			
4. Do all operators meet the qualifications from an experienced training organization/agency?			
NOTE: All commercial drone operators must meet at a minimum FAA regulation Title 14 part 107, have a valid and current commercial pilot license, and have operated in a commercial capacity for at least one year with a minimum of 100 hours of flight time. There is no exception to this, and documentation must be submitted to Turner.			
5. Please provide copies of insurance certificates to show the Turner required limits have been obtained:			
Drone/UAV Liability:			
a. Minimum Required Limits: \$5,000,000 General Aggregate \$5,000,000 Each Occurrence for Bodily Injury/Property Damage.			
b. Required Terms and Conditions: Turner Construction Company will be included as an additional insured.			
6. Have you flown on a large construction site before? (Provide a list of projects, dates, and scope of work):			
a. What challenges did you have?			
b. How did you overcome them?			

7. What companies have you worked with in the past? (Provide any references)	
a. What is your largest project to date?	
8. What equipment do you expect to use on this project and why?	
a. Please supply the last year of maintenance records.	
b. Has this drone ever been involved in an accident or incident? If so, please explain the circumstances and what did you change about your safety program to assure it does not happen again.	
9. Has your company ever been cited or fined for a violation associated with drone use?	
<input type="checkbox"/> YES <input type="checkbox"/> NO	If yes, please list circumstances, fine and outcome:
10. Provide a site checklist you follow before each flight.	
11. What software does your company utilize and how familiar are the pilots with the software? (PIX4D, Drone Deploy, other)	
12. Provide information to verify and assure Turner that the control connection between the pilot and the drone are done over a secure link to ensure someone else cannot take control of the drone.	
13. Provide information to verify and assure Turner that the link that streams video and/or still photos is done over a secure link?	

<p>14. Where are the video and still photos going to be stored?</p> <ul style="list-style-type: none"> a. Is it secure? b. Who has access? c. Does Turner own the data?
<p>15. Submit a copy of your safety manual.</p> <p>As a minimum it must include:</p> <ul style="list-style-type: none"> a. Federal regulations pertaining to worker safety. b. Identification of pilot duties and responsibilities for planning, public protection, safety operation and maintenance of the UAS. c. Requirements for the PIC, visual observed and crewmember (including pilot) qualifications, certifications and training. d. Processes and tasks that should be completed before, during and after UAS operations. e. Pilot responsibilities for inspection, maintenance and safe uses. In addition, what requirements are in place for pilot to review manufacturers operation, safety and maintenance manual? f. General public and worker protection methods during UAS operations. g. Privacy considerations and guidelines. h. Flight path considerations. i. Prohibitions that address non- business use of the UAS. j. Other requirements that affect the safe use of the UAS, such as the physical and mental conditions of the pilot. k. Substance abuse testing program and when pilots and crewmembers are tested. l. Expectations for conducting a preplanning and risk assessment meeting to review the risks and mitigation methods needed for safe use of the UAS. Note preplanning should include at a minimum: <ul style="list-style-type: none"> • Responsibilities of the pilot and observers • Pilot and observer qualifications • UAS equipment specifications, software, and operating limitations • UAS preflight inspection and maintenance requirements • Clearance requirements for safety and privacy protection • Potential hazards to personnel involved in the UAS activities. • Boundaries of the work zone and how to keep workers and the public safe and out of the work area. • Training for workers who are not involved in the operations. • Work area hazards such as power lines, other UAS, other aircraft, structures or communication devices that could disrupt communication with the UAS flight path and if it necessitates the use of an observer(s), communication methods that will be use between the pilot and observer(s) and other backup methods when needed, weather requirements, anticipated weather, and when to suspend operations. • How to protect the public and surrounding structures from loss of control or power to the UAS • Notification to all surrounding property owners • Emergency landing procedures and how to recover the UAS. • Current federal, state and local regulations on the UAS use. • Post flight review meeting to review UAS operation, lessons learned

Drone Vendor

1. General Information		
NOTE: Please respond completely to the questions below (attach supporting documentation if requested or to support your response)		
Legal Name of Company:		Year Company Started:
Address:		
City:	State:	Zip:
2. Person Filling Out This Questionnaire		
Name:		Title:
Email Address:	Work Phone:	Cell Phone:
3. Are all operators at least 21 years of age and have obtained an UAS/Drone safe operator certificate? (Presently the Unmanned Safety Institute has aeronautical and operator certification programs.)?		
4. Do all operators meet the qualifications from an experienced training organization/agency?		
NOTE: All commercial drone operators must meet at a minimum FAA regulation Title 14 part 107, have a valid and current commercial pilot license, and have operated in a commercial capacity for at least one year with a minimum of 100 hours of flight time. There is no exception to this, and documentation must be submitted to Turner.		
5. Please provide copies of insurance certificates to show the Turner required limits have been obtained:		
Drone/UAV Liability:		
<ul style="list-style-type: none"> a. Minimum Required Limits: \$5,000,000 General Aggregate \$5,000,000 Each Occurrence for Bodily Injury/Property Damage. b. Required Terms and Conditions: Turner Construction Company will be included as an additional insured. 		
6. Have you flown on a large construction site before? (Provide a list of projects, dates, and scope of work):		
<ul style="list-style-type: none"> a. What challenges did you have? b. How did you overcome them? 		

7. What companies have you worked with in the past? (Provide any references)	
a. What is your largest project to date?	
9. What equipment do you expect to use on this project and why?	
a. Please supply the last year of maintenance records.	
b. Has this drone ever been involved in an accident or incident? If so, please explain the circumstances and what did you change about your safety program to assure it does not happen again.	
10. Has your company ever been cited or fined for a violation associated with drone use?	
<input type="checkbox"/> YES <input type="checkbox"/> NO	If yes, please list circumstances, fine and outcome:
11. Provide a site checklist you follow before each flight.	
12. What software does your company utilize and how familiar are the pilots with the software? (PIX4D, Drone Deploy, other)	
13. Provide information to verify and assure Turner that the control connection between the pilot and the drone are done over a secure link to ensure someone else cannot take control of the drone.	
14. Provide information to verify and assure Turner that the link that streams video and/or still photos is done over a secure link?	
15. Where are the video and still photos going to be stored?	
a. Is it secure?	
b. Who has access?	

c. Does Turner own the data?
16. Submit a copy of your safety manual.
<p>As a minimum it must include:</p> <ul style="list-style-type: none"> a. Federal regulations pertaining to worker safety. b. Identification of pilot duties and responsibilities for planning, public protection, safety operation and maintenance of the UAS. c. Requirements for the PIC, visual observed and crewmember (including pilot) qualifications, certifications and training. d. Processes and tasks that should be completed before, during and after UAS operations. e. Pilot responsibilities for inspection, maintenance and safe uses. In addition, what requirements are in place for pilot to review manufacturers operation, safety and maintenance manual? f. General public and worker protection methods during UAS operations. g. Privacy considerations and guidelines. h. Flight path considerations. i. Prohibitions that address non- business use of the UAS. j. Other requirements that affect the safe use of the UAS, such as the physical and mental conditions of the pilot. k. Substance abuse testing program and when pilots and crewmembers are tested. l. Expectations for conducting a preplanning and risk assessment meeting to review the risks and mitigation methods needed for safe use of the UAS. Note preplanning should include at a minimum: <ul style="list-style-type: none"> • Responsibilities of the pilot and observers • Pilot and observer qualifications • UAS equipment specifications, software, and operating limitations • UAS preflight inspection and maintenance requirements • Clearance requirements for safety and privacy protection • Potential hazards to personnel involved in the UAS activities. • Boundaries of the work zone and how to keep workers and the public safe and out of the work area. • Training for workers who are not involved in the operations. • Work area hazards such as power lines, other UAS, other aircraft, structures or communication devices that could disrupt communication with the UAS flight path and if it necessitates the use of an observer(s), communication methods that will be use between the pilot and observer(s) and other backup methods when needed, weather requirements, anticipated weather, and when to suspend operations. • How to protect the public and surrounding structures from loss of control or power to the UAS • Notification to all surrounding property owners • Emergency landing procedures and how to recover the UAS. • Current federal, state and local regulations on the UAS use. • Post flight review meeting to review UAS operation, lessons learned

Incident Investigation Report

1. General Information

NOTE: To be completed within 24 hours by supervisor. If incident may be COVID-19 related, complete General and Involved Part information sections and jump to COVID-19 Supplement on last 2 pages and complete that information.

Date:		Contact Number:	
BU Name:		Project Name:	
Project Address:			
Program: <input type="checkbox"/> CCIP <input type="checkbox"/> CORP <input type="checkbox"/> OCIP <input type="checkbox"/> Other (Explain):			
Site Contact Name:		Phone:	Cell:
Project Executive:		Superintendent:	
Date of Incident:	Time:	<input type="checkbox"/> AM <input type="checkbox"/> PM	Shift:
Jobsite/Area (refer to columns/beams/drawings as needed):			
Weather Condition:		Lighting Condition:	
2. Involved Party Information			
Name:			<input type="checkbox"/> Male <input type="checkbox"/> Female
Date of Birth:	Height:	Weight:	
Address:			
Home Phone:		Cell Phone:	
Employee ID#		E-mail Address:	
Employee Job Title:		Length Employed:	
Employer Name:		Supervisor:	
Supervisor/Employer Cell Phone:		Employer Address:	
Shop Steward:		Shop Steward Cell Phone:	
Speaks Fluent English: <input type="checkbox"/> YES <input type="checkbox"/> NO		Language:	
3. Incident Description			
<p>NOTE: Describe in detail how the incident occurred, and the task being performed by the involved party when he/she claims to have been injured or became ill including how long and with whom they were performing the task. Include specifics such as equipment, structure, tools, materials, objects (size, shape and weight), positions, distances, sequence of events, etc. (Facts Only)</p>			
<p style="text-align: center;">Attach a diagram of the incident scene/site layout to better describe the incident</p>			
Date:		Prepared By:	
4. Witness Information			

Name:	Phone:
Company:	Cell:
Name:	Phone:
Company:	Cell:
Name:	Phone:
Company:	Cell:
Name:	Phone:
Company:	Cell:
5. Incident Information	
NOTE: Describe the nature and extent of <u>all</u> claimed injury(s)/illness (body part affected, type of injury, etc.)	
Was First Aid Administered?	<input type="checkbox"/> YES <input type="checkbox"/> NO
By Whom?	
Was Employee/Third Part take to Hospital/Clinic?	<input type="checkbox"/> YES <input type="checkbox"/> NO
If yes, list name, phone and address:	
Name:	Phone:
Address:	
Is Employee in a Trade Union?	<input type="checkbox"/> YES <input type="checkbox"/> NO
If yes, provide Trade & Local #:	
Additional Comments:	
6. Prepared By:	
NOTE: All incidents need to be immediately reported to you BU Safety Director & Claim Coordinator. Copy to be submitted to BUEHSD and Claim Coordinator for filing. Original to be kept with job files.	
Date:	Prepared By:

Incident Investigation Report

1. General Information			
NOTE: To be completed within 24 hours by supervisor. If incident may be COVID-19 related, complete General and Involved Part information sections and jump to COVID-19 Supplement on last 2 pages and complete that information.			
Date:		Contact Number:	
BU Name:		Project Name:	
Project Address:			
Program: <input type="checkbox"/> CCIP <input type="checkbox"/> CORP <input type="checkbox"/> OCIP <input type="checkbox"/> Other (Explain):			
Site Contact Name:		Phone:	Cell:
Project Executive:		Superintendent:	
Date of Incident:	Time:	<input type="checkbox"/> AM <input type="checkbox"/> PM	Shift:
Jobsite/Area (refer to columns/beams/drawings as needed):			
Weather Condition:		Lighting Condition:	
2. Involved Party Information			
Name:			<input type="checkbox"/> Male <input type="checkbox"/> Female
Date of Birth:	Height:	Weight:	
Address:			
Home Phone:		Cell Phone:	
Employee ID#		E-mail Address:	
Employee Job Title:		Length Employed:	
Employer Name:		Supervisor:	
Supervisor/Employer Cell Phone:		Employer Address:	
Shop Steward:		Shop Steward Cell Phone:	
Speaks Fluent English: <input type="checkbox"/> YES <input type="checkbox"/> NO		Language:	
3. Incident Description			
NOTE: Describe in detail how the incident occurred, and the task being performed by the involved party when he/she claims to have been injured or became ill including how long and with whom they were performing the task. Include specifics such as equipment, structure, tools, materials, objects (size, shape and weight), positions, distances, sequence of events, etc. (Facts Only)			



Attach a diagram of the incident scene/site layout to better describe the incident	
Date:	Prepared By:
4. Witness Information	
Name:	Phone:
Company:	Cell:
Name:	Phone:
Company:	Cell:
Name:	Phone:
Company:	Cell:
Name:	Phone:
Company:	Cell:
5. Incident Information	
NOTE: Describe the nature and extent of <u>all</u> claimed injury(s)/illness (body part affected, type of injury, etc.)	
Was First Aid Administered? <input type="checkbox"/> YES <input type="checkbox"/> NO	By Whom?
Was Employee/Third Part take to Hospital/Clinic? <input type="checkbox"/> YES <input type="checkbox"/> NO	If yes, list name, phone and address:
Name:	Phone:
Address:	
Is Employee in a Trade Union? <input type="checkbox"/> YES <input type="checkbox"/> NO	If yes, provide Trade & Local #:
Additional Comments:	
6. Prepared By	
NOTE: All incidents need to be immediately reported to you BU Safety Director & Claim Coordinator. Copy to be submitted to BUEHSD and Claim Coordinator for filing. Original to be kept with job files.	
Date:	Prepared By:

Project: _____ Date: _____ Contractor: _____ Page ____ of ____

Description of Work: _____ JHA# _____

Prepared By: _____

Permits: ☐ Hot Work ☐ Energized Work ☐ Ladders Last Permit ☐ Ground Penetration ☐ Confined Space
☐ Roof Access ☐ Scaffold

Risk Reduction Considerations				
Hierarchy of Controls 1. Elimination 2. Substitution 3. Engineering 4. Isolation 5. Administration 6. Personal Protective Equip.	 Scan the QR Code for more info.	Systems Approach E = What we have C = Our capabilities M = What we do		Risk Factors Risk = Frequency x Likelihood x Severity Consider ways to: Reduce the Frequency of exposure to a hazard Reduce the Likelihood of injury Reduce the potential Severity if the incident happens
Sequence of Basic Job Steps		Hazards Associated with Each Step	E,C,M	Eliminate or Control the Hazard
Step 1:				
Step 2:				

Document Control: Building LIFE JHA July 2021

[illegible]

Originator

Date

Contractor Superintendent

Date

Contractor Project Manager

Date

Document Control: Building LIFE JHA July 2021

JHA Documentation of Worker Review at Orientation

Review JHA (and revise if necessary) with all workers before they are allowed on site. Submit signature sheet to Turner.

JHA Number:


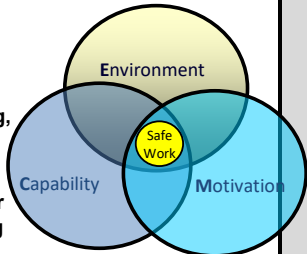
Date of Training:

[illegible]

Date: _____ Company: _____

Description of Activity: _____

Supervisor: _____ Location of Task: _____

Safety and Health Considerations				
Hierarchy of Controls 1. Elimination 2. Substitution 3. Engineering 4. Isolation 5. Administration 6. Personal Protective Equip.		Systems Approach Environment (E): Engineering Controls, Working Conditions Capability (C): Training, Education, Physical Capabilities Motivation (M): Worker Actions, Factors driving motivation		Permits Hot Work: Yes <input type="checkbox"/> No <input type="checkbox"/> Energized Systems/LOTO: Yes <input type="checkbox"/> No <input type="checkbox"/> Ladders Last Permit: Yes <input type="checkbox"/> No <input type="checkbox"/> Ground Penetration: Yes <input type="checkbox"/> No <input type="checkbox"/> Confined Space: Yes <input type="checkbox"/> No <input type="checkbox"/> Roof Access: Yes <input type="checkbox"/> No <input type="checkbox"/> 6' Distance can be maintained: Yes <input type="checkbox"/> No <input type="checkbox"/>
		Note: Include measures for Social Distancing within this section for each work activity to allow for 6' distancing between all workers.		
Sequence of Basic Job Steps	Hazards Associated with Each Step	E,C,M	Eliminate or Control the Hazard	
All persons entering the project, working on site, in the office or in jobsite trailer.	Spread of Covid-19	E	Temperature scanning Required for all personnel entering the site.	
All persons entering the project, working on site, in the office or in jobsite trailer.	Spread of Covid-19		At a minimum a cloth face covering that covers the nose and mouth (cotton cloth, bandana, or buff) must be worn. Additionally a surgical, KN95, or similar mask can be worn in lieu of face coverings. Note: All work must be evaluated for the appropriate minimum PPE required by OSHA.	

Document Control: Building LIFE Pre-Task Plan 07/2021

PTP (Con't)			
Sequence of Basic Job Steps	Hazards Associated with Each Step	E,C,M	Eliminate or Control the Hazard
Close Contact Work that does NOT allow for 6' distancing	COVID-19 minimum PPE requirements	E,C,M	Eliminate or Control the Hazard
	Option 1: Surgical mask and goggles worn under full face shield		Training on the task risks and how to properly wear, store and clean personal protection equipment
	Options 2: Surgical mask worn under face shield / goggle combination		Maintain 6 foot distancing whenever possible during the course of work. If PPE requires cleaning or replacement ensure 6 foot distancing is obtained before removing.
	Option 3. KN95 or similar mask with goggles		
	Task specific gloves.		

List Materials, Tools, Other to be Handled or Moved	List Mechanical Aids to be Used for This	Or for Each <i>Manual</i> Handling Task List Safety Controls

Document Control: Building LIFE Pre-Task Plan 07/2021

PTP - Documentation of Worker Review

Document Control: Building LIFE Pre-Task Plan 07/2021

Review PTP (and revise if necessary) with all workers before performing the tasks. Submit PTP with signature sheet to Turner. I acknowledge I attended this PTP meeting, was properly equipped and trained for my assignment, and was not injured on site the previous workday without reporting it to Turner Construction. By signing below the line indicates that I was present at the meeting and that I was equipped and trained for the task, and it also indicates that I didn't hurt myself yesterday.

[illegible][illegible]

Personal Protective Equipment – COVID-19

Update Log

January 10, 2022

1.	<p>All Turner Employee's (vaccinated and unvaccinated) must wear a surgical or KN95 mask in your office / project location when the employee (vaccinated and unvaccinated) is indoors (including vehicles) and not able to isolate (e.g., within a cubical or individual office) or outdoors and unable to physically distance. Projects in the superstructure phase of construction that have not been enclosed (permanent exterior envelope) continue to be considered "outdoors".</p> <p>This updated protocol will be managed at a regional level by the Senior Vice Presidents. This updated protocol applies to all Turner personnel including Turner tradespeople. Project Executives and Procurement will encourage all associated Owners, Designers, and Trade Partners to consider the same protocol with regards to surgical and KN95 masks. Regions are to follow state and local regulations if they are more stringent than current CDC guidelines.</p> <p>Note: Regional or Business Unit requirements for wearing a surgical or KN95 mask may be more stringent than the foregoing; If so, the more stringent requirements must be followed in those Regions or Business Units.</p>	Page 2-3
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Since the announcement of the COVID-19 pandemic all employers have been required to develop programs that contain feasible means and methods to protect their employees from exposure to COVID-19 in the workplace which are compliant with CDC Guidance as well as Orders and Guidance that are issued by state and local regulatory and health authorities.

Turner Construction Company (the Company) has developed a COVID-19 Personal Protective Equipment (COVID-19 PPE) standard which is intended to provide means and methods that are consistent with current CDC Guidance and such Orders and Guidance but may be more stringent in some cases based on the spread of COVID-19. Turner is continuing to maintain additional COVID-19 PPE for Close Contact standards defined herein for the situations where six-foot distancing cannot be maintained while performing tasks/work between unvaccinated workers.

This COVID-19 PPE standard is incorporated into the Company's EH&S program for all projects and as such, the Company expects all trade partners to meet or exceed this standard through their own EH&S programs including informing their employees of this standard, training them in its various requirements and requiring the trade partners to monitor and take immediate corrective action when any variance from the standard are observed. If a trade partner's standard is more stringent than what Turner requires, they should continue to follow their company COVID -19 safety protocols.



COVID-19 Personal Protective Equipment

January 10, 2022

Note that the Company assumes no liability for any personal injury, medical expenses or other damages that may be sustained by any trade partner, its employees or any other person who may be at a Company worksite for actual or potential exposure to COVID-19 or for subsequent illness or treatment.

Should any trade partner, trade partner employee, or any other person who may be at a Turner worksite be unable or unwilling to work within the standard, then work requiring COVID-19 PPE shall not be performed and Turner shall be notified immediately by the trade partner, its employees or any other person so work can be re-evaluated.

Effective January 10, 2022, all Turner Employee's (vaccinated and unvaccinated) must wear a surgical or KN95 mask when the employee (vaccinated and unvaccinated) is indoors and not able to isolate (e.g., within a cubical or individual office) or outdoors and unable to socially distance when the CDC recognizes your office / project location to be in an area described as either "High" or "Substantial" Risk. Projects in the superstructure phase of construction that have not been enclosed (permanent exterior envelope) continue to be considered "outdoors". See CDC COVID Data Tracker click [here](#).

This updated protocol will be managed at a regional level by the Senior Vice Presidents. This updated protocol applies to all Turner personnel including Turner tradespeople. Project Executives and Procurement will encourage all associated Owners, Designers, and Trade Partners to consider the same protocol with regards to face coverings. Regions are to follow state and local regulations if/they are more stringent than current CDC guidelines.

Note: Regional or Business Unit requirements for wearing a surgical or KN95 mask may be more stringent than the foregoing; If so, the more stringent requirements must be followed in those Regions or Business Units. Additionally, the Operations Manager or General Manager must also evaluate for and assure the BU and projects follow:

- 1. Federal, state or local requirements that are more restrictive than Turner's current protocol**
- 2. Owner requirements that are more restrictive than Turner's current protocol including, but not limited to, those that are contained in executed contracts**
- 3. Building Management requirements that are more restrictive than Turner's current protocol**

In general, people are considered fully vaccinated:

- 2 weeks after their second dose in a 2-dose series, such as the Pfizer or Moderna vaccines, or
- 2 weeks after a single-dose vaccine, such as Johnson & Johnson's Janssen vaccine

If you don't meet these requirements, you are NOT fully vaccinated. Keep taking all precautions as detailed below until you are fully vaccinated. If you have a condition or are taking medications that weaken your immune system, you may NOT be fully protected even if you are fully vaccinated. Talk to your healthcare provider. Even after vaccination, you may need to continue taking all precautions as detailed below.

COVID-19 Personal Protective Equipment

January 10, 2022

For individuals that are not fully vaccinated or those that are immunocompromised, Turner requires a surgical or KN95 mask be worn over their nose and mouth and a maintenance of 6' physical distancing except in the following circumstances:

- When you are outdoors and maintaining more than six feet of physical distance from any other person.
- When seated and alone in your cube or office and maintaining more than six feet of physical distance from any other person.
- When you are working alone in areas not accessible to others.
- While eating and drinking and distanced at least 6 feet from others.
- While operating equipment in closed cabs.
- When alone in vehicles with no passengers.

Mask Requirements

Everyone who is required to wear a surgical or KN95 mask must wear it over the nose and mouth while physically distancing at 6' or greater and wear COVID-19 PPE for Close Contact when working closer than 6' for more than 10 minutes in the aggregate. As a reminder, the most effective PPE protection against COVID-19 is a KN95 mask worn over the nose and mouth.

An N95 mask with a one-way valve does not provide protection from spreading COVID-19. Therefore, the N95 with a one-way valve is not acceptable for providing COVID-19 protection on Turner sites.

Turner is committed to actively caring for the safety, health and wellbeing of everyone on our project sites and in our offices. CDC guidelines suggest that regardless of vaccination status certain things such as using alcohol-based hand sanitizers, washing your hands, and disinfecting surfaces frequently are still the best practices to prevent the spread of the COVID-19 virus.

To reduce the potential exposure and spread of COVID-19, minimum requirements for COVID-19 PPE for Close Contact Work should be followed when engineering, administrative, and elimination of risk controls cannot maintain six-foot distance between unvaccinated workers on Turner project sites thereby putting them in close contact with one another.

All tasks and work should be reviewed in an effort to maintain six-foot distance between workers. A risk assessment and Pre-Task Plan (PTP) evaluating and documenting the controls put in place should be completed and reviewed with all workers.

January 10, 2022

Pre Task Planning

The risk assessment will contain the following questions that must be addressed:

1. Will the crew be comprised of vaccinated and unvaccinated individuals?
 - If yes, what is the plan to assure worker safety and health between the vaccinated and unvaccinated workers?
2. Will the work as planned in the PTP allow for six foot distancing?
 - If the answer to this question is yes, then proceed with the work as planned in the PTP; including, at a minimum a Turner required surgical or KN95 mask that covers the nose and mouth. If the work is indoors all workers regardless of vaccination status will be required to wear a surgical or KN95 mask that covers the nose and mouth. Note: all work must be evaluated for the appropriate minimum PPE required by OSHA.
3. If the work as planned in the PTP does NOT allow for six foot distancing, ask if there are alternative methods to put the work in place that will maintain a six-foot distance? Consideration must also be taken for maintaining a six-foot distance between other trade partner crews when planning the work.
 - If the answer to question 3 is no, fill out the section of the PTP titled Close Contact Work. The PTP should include:
 1. Minimum **COVID-19 PPE for Close Contact Work** requirements
 - Surgical mask or KN95 **and** safety glasses
 2. Training on the task risks and how to wear; put on, take off, clean and store the PPE

Eyeglasses / safety glasses - Fogging

Eyeglasses and safety glasses may fog when wearing a mask. In order to prevent this you can apply an anti-fog spray, balm, or wipe prior to use and reapply as needed. While Turner does not endorse any specific products, we have experienced good results from products like Bausch & Lomb Fogshield XO and Site Saver, Splaqua Anti-fog, Hendlex, Optix 55, and iGK Anti-fog. If your eyewear continues to fog, please contact your supervisor or EH&S Manager and they will assist with either a different application or helping you find alternate anti-fogging eye protection products.

Trade partners/vendors must have a program that is equal to or greater than the standards contained herein.

In addition to the PTP, each trade partner/vendor is responsible for having a COVID-19 risk mitigation plan that includes how they will protect both their vaccinated and unvaccinated workers as it pertains to COVID-19. The plan should address at a minimum:

- Site entry, what to do if sick, handwashing, etc.
- Risk assessment for each scope of work addressing mixed vaccination status employees, maintaining six foot distancing including dispersion of workers, crew sizes, density of crews, daily huddle and gatherings
- Assigning a monitor to assure a safe work environment is provided for all workers
- Employee training, education and safe work practices and how that is communicated and documented for each worker

COVID-19 Personal Protective Equipment

January 10, 2022

- Minimum COVID-19 PPE for distanced and close contact work of unvaccinated and fully vaccinated workers including masking requirements. As stated above, trade partners should be strongly encouraged to wear a surgical or KN95 mask vs a cloth face covering. This is the only deviation allowed in this plan for trade partners.
- Inspection criteria to review the plan
- Regular cleaning and disinfecting protocols
- Physical distancing standards and protocols for crews
- How they will meet and follow these standards and current CDC guidelines (which may be modified from time to time).

Per OSHA guidelines, employers are required to train each employee who must use PPE on the following:

- When PPE is necessary.
- What PPE is necessary.
- How to properly put on, take off, adjust and wear the PPE.
- The limitations of the PPE.
- Proper care, maintenance, useful life and disposal of PPE.

Per OSHA guidelines in 72 FR 64341 citing 29 CFR 1926 - Employer Payment for Personal Protective Equipment (November 15, 2007) each Employer is required to provide required PPE at no cost to their employees.

In addition, trade partners/vendors are required to train their employees on the standards outlined in this plan. Documentation of this training must be submitted to the Turner Superintendent prior to the commencement of any work.

Establish a Changing/Cleaning Area

A "Changing/Cleaning Area" will be provided by Turner for individuals to remove, clean, or dispose of PPE properly. This area will need to include a hand washing station (hot and cold water or tepid water), PPE cleaning supplies, a trashcan with a lid, and a way to maintain six-foot distance from other workers.

Since workers are encouraged to remain close to their work areas throughout the day, trade partners can establish their own changing/cleaning areas (a floor above or below) so workers can have a place to clean up when they take breaks, lunch, and remove PPE at the end of the day. At the end of the shift this area must be cleaned with an EPA approved disinfectant.

CDC recommended sequence to put on PPE is as follows:

Putting on a mask:

- Place it over the nose, mouth and chin.
- Fit the flexible nose piece over the bridge of the nose.
- Secure it on the head with ties or elastic.
- Adjust it to fit.

January 10, 2022

- If the mask has two elastic head bands, these should be separated. With the mask over the nose, mouth and chin, stretch the bands over the head and secure them comfortably – one on the upper back of the head and one below the ears at the base of the neck.

Putting on goggles and face shield:

- Position goggles over the eyes and secure to the head using the earpieces or headband.
- Position the face shield over the face and secure it on the brow with the headband.
- Adjust for comfort.

Putting on gloves:

- Gloves are the last element of PPE to be applied.
- Extend the hands into the gloves and extend the gloves to cover the wrist of the gown or Tyvek suit.
- Tuck the cuffs of the gown securely under each glove. (If gown or Tyvek Suit are not being worn pull gloves to cover over wrist)
- Adjust for comfort and dexterity.

Safe Work Practices:

- Keep gloved hands away from the face
- Avoid touching or adjusting other PPE
- Remove gloves if they become torn; perform hand hygiene before putting on new gloves
- Limit surfaces and items touched
- Change when torn or heavily contaminated
- Perform hand hygiene

Follow the links below for CDC sequencing for putting on or taking off PPE. Post these in each area where PPE will be put on or taken off.

<https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>

<https://www.cdc.gov/hai/pdfs/ppe/ppeposter148.pdf>

Cleaning Requirements After PPE Use

These standards for cleaning must be followed every time a person must remove their PPE. For example, morning break, lunch, afternoon break, end of day, if PPE is removed for a cigarette break, or to use the restroom.

1. Remove and dispose of gloves per CDC guidelines. Do not touch outside of gloves.
2. Wash hands immediately with soap and water for at least 20 seconds.
3. Remove mask without touching outside or front. If it still maintains functionality, place in a paper bag for reuse and label who it belongs to. That person should retain control of their mask. Used masks should never be shared with another person.
4. Wash hands immediately with soap and water for at least 20 seconds.

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5. Remove hard hat and goggles or face shield by loosening straps. Do not touch the front of the goggles or face shield. Clean thoroughly with soap and water or alcohol-based wipe or virucidal type cleaning solution
6. Wash hands immediately with soap and water for at least 20 seconds.
7. If applicable, remove protective clothing without touching outside of the garment and turn garment inside out before disposal.
8. Wash hands immediately with soap and water for at least 20 seconds.
9. Discard all non-reusable PPE in a trash receptacle with a lid.
10. Wash hands immediately with soap and water for at least 20 seconds.

**2020 VISION PROJECTS
OUTREACH & INCLUSION GUIDELINES**

As part of its bid evaluation process and in accordance with applicable law and other Columbus Metropolitan Library (“CML”) guidelines, depending on whether the work is to be bid through a direct contract with CML or through a subcontract with CML’s construction manager at risk (Turner), Turner and/or CML or its representative will review bids pursuant to these Guidelines.

1. Direct Contracts with CML. Subject to CML’s right to reject all bids, a bid for any direct contract with CML will be awarded to the lowest responsive responsible bidder, where the criteria for determining bidder responsibility will be identified in the Instructions to Bidders for each contract, and will include evaluation criteria such as a bidder’s work history, financial strength, and innovation. Innovation will be judged on the following factors:
 - a. Creativity/innovation in hiring/ training a diverse workforce;
 - b. Sustainability/Green practices and experience with LEED certified projects;
 - c. BIM, pre-fabrication knowledge and experience;
 - d. LEAN practices and experience; and
 - e. Innovative project approach.

Regardless of other bidder evaluation criteria, to be eligible for award of a direct contract with CML, a bidder must either meet the diversity and inclusion goals for the particular contract or demonstrate good faith efforts towards meeting the diversity and inclusion goals for the contract, as set forth in Section 3 of these Guidelines, below.

2. Subcontracts with Turner. Turner, in consultation with the Owner, will be the sole evaluator of whether any particular Bidders efforts sufficiently demonstrate good faith efforts. Subject to Turner’s right to reject all bids, a bid for any subcontract with Turner will be awarded to the prequalified bidder offering the best overall value. Evaluation for the best overall value will include but not be limited to bidders bid amount (subject to Turner’s rights under O.R.C. 153.502) and the bidder’s ability to meet the diversity and inclusion goals or demonstrates good faith efforts towards meeting the diversity and inclusion goals for the project. If any Bidder directly challenges, or indirectly challenges through contribution of money or other resources to a third party, the discretion of Turner and/or the Owner in determining any Bidder’s compliance with the Diversity & Inclusion Participation Goal stated, or good faith efforts pertaining to same, that Bidder agrees to indemnify Turner and/or the Owner for all claims, costs, losses and damages, including attorney and consultant fees, arising out of such challenge, should there be an adjudication by a court of competent jurisdiction that Turner and/or the Owner did not abuse its discretion.
3. Compliance with Diversity and Inclusion Goals. To be eligible for either a direct contract with CML or a subcontract with Turner, a Bidder must either meet the diversity and inclusion goals for the project or demonstrate good faith efforts towards meeting the

diversity and inclusion goals for the project, as set forth in this Section 3 of these Guidelines.

Determining diversity and inclusion participation:

- a. Diversity participation will be measured by either the bidder or its subcontractors or suppliers being certified as participants in one or more of the following programs: MBE AND WBE, by any of the following entities: Federal Government, State of Ohio, Franklin County, or City of Columbus.
- b. Level of diversity participation means percentage of participation as measured by the contract value, either self-performed by a bidder certified as a participant in one or more of the following programs: MBE and WBE, or by one or more of the bidder's subcontractors or suppliers certified as a participant in one or more of the following programs: MBE AND WBE. Bidders must affirmatively certify with their bids the level of diversity participation included in their bids.
- c. The diversity participation goals for the project is 20%.
- d. All participation declarations will be subject to verification with each pay draw and certified payroll statement. Consequences for any material misrepresentations of bidder participation and workforce diversity declarations may include cancellation of the contract and/or prosecution.
- e. Workforce Inclusion will be measured by the actual number of man hours worked on the job. Pursuant to Ohio Administrative Code Section 123:2, this project will seek to achieve the goals set forth in the Outreach and Inclusion Initiative outlined below. The State of Ohio Construction Compliance Participation Goal is 6.9% for woman (statewide), and 10% for minorities (Columbus). Subcontractors will provide a detailed written plan and all required documentation for workforce participation pursuant to the code. Our intention is to use the certified payroll software to compile the data for the project.

In lieu of achieving diversity participation goals, the Bidder must include documentation with its bid demonstrating and certifying that good faith efforts were actively and aggressively undertaken to reach the participation goal. Demonstration of good faith efforts include:

- a. Documenting attempts to obtain MBE and WBE participation sufficient to meet the participation goal.
- b. Conducting outreach and recruiting activities.
- c. Dividing scopes of work into economically feasible portions to permit maximum participation by MBE and WBE entities and selecting portions of the work to be performed by MBE and WBE entities.

- d. Informing MBE AND WBE entities of the opportunity to participate in the Project, with sufficient time to respond.
- e. Providing interested MBE AND WBE entities with adequate information about the Project.
- f. Negotiating in good faith with interested MBE AND WBE entities. Evidence of such negotiation includes the name and address of the MBE AND WBE entities that were considered, a description of the information provided, and evidence as to why an agreement could not be reached for the MBE AND WBE entities to perform the work.
- g. Documenting efforts to subcontract with a consortium of MBE AND WBE entities.
- h. Using the services and assistance of the Small Business Administration and Minority Development Agency of the U.S. Department of Commerce.

DOCUMENT 007343 – WAGE RATE REQUIREMENTS

1. **General**

1. This is a summary of prevailing wage contractors' responsibilities. For more detailed information, please refer to Chapter 4115 of the Ohio Revised Code
2. General Information
 1. Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$200,000 for new construction or \$60,000 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting.
 1. The threshold for new construction will increase to \$250,000 beginning September 29, 2013.
 2. The threshold for reconstruction will increase to \$75,000 beginning September 29, 2013.
 2. Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$82,137 for new construction that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction or \$24,609 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting of a public improvement that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction.
 1. Thresholds are to be adjusted biennially by the Administrator of Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration
 2. Biennial adjustments to threshold levels are made according to the Price Deflator for Construction Index, United States Department of Commerce, Bureau of the Census*, but may not increase or decrease more than 3% for any year. (*Please note, in the absence of a published Price Deflator for Construction Index, the threshold adjustment is calculated using the Building Cost for Skilled Labor Index published by McGraw-Hill's Engineering News-Record.)

2. **Penalties for violation**

1. Violators are to be assessed the wages owed, plus a penalty of 100% of the wages owed.

3. **Intentional Violations**

1. If an intentional violation is determined to have occurred, the contractor is prohibited from contracting directly or indirectly with any public authority for the construction of a public improvement. Intentional violation means "a willful, knowing, or deliberate disregard for any provision" of the prevailing wage law and includes but is not limited to the following actions:
 1. Intentional failure to submit payroll reports as required, or knowingly submitting false or erroneous reports.
 2. Intentional misclassification of employees for the purpose of reducing wages.
 3. Intentional misclassification of employees as independent contractors or as apprentices.
 4. Intentional failure to pay the prevailing wage.
 5. Intentional failure to comply with the allowable ratio of apprentices to skilled workers as required by the regulations established by Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration.
 6. Intentionally employing an officer, of a contractor or subcontractor, that is known to be prohibited from contracting, directly or indirectly, with a public authority.

4. Subcontractor Responsibilities

1. Pay the prevailing rate of wages as shown in the wage rate schedules issued by the Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration, for the classification of work being performed.
 1. Wage rate schedules include all modifications, corrections, escalations, or reductions to wage rates issued for the project.
 2. Overtime must be paid at time and one-half the employee's base hourly rate. Fringe benefits are paid at straight time rate for all hours including overtime.
 3. Prevailing wages must be paid in full without any deduction for food, lodging, transportation, use of tools, etc.; unless, the employee has voluntarily consented to these deductions in writing. The public authority and the Director of Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration - must approve these deductions as fair and reasonable. Consent and approval must be obtained before starting the project.
2. Use of Apprentices and Helpers cannot exceed the ratios permitted in the wage rate schedules.
 1. Apprentices must be registered with the U.S. Department of Labor Bureau of Apprenticeship and Training.
 2. Contractors must provide the Prevailing Wage Coordinator a copy of the Apprenticeship Agreement for each apprentice on the project.
3. Keep full and accurate payroll records available for inspection by any authorized representative of the Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration or the contracting public authority, including the Prevailing Wage Coordinator. Records should include but are not limited to:
 1. Time cards, time sheets, daily work records, etc.
 2. Payroll ledger\journals and canceled checks\check register.
 3. Fringe benefit records must include program name, address, account number, and canceled checks.
 4. Records made in connection with the public improvement must not be removed from the State for one year following the completion of the project.
 5. Out-of-State Corporations must submit to the Ohio Secretary of State the full name and address of their Statutory Agent in Ohio.
4. Prevailing Wage Rate Schedule must be posted on the job site where it is accessible to all employees.
5. Prior to submitting the initial payroll report, supply the Prevailing Wage Coordinator with your project dates to schedule reporting of your payrolls.
6. Supply the Prevailing Wage Coordinator a list of all subcontractors including the name, address, and telephone number for each.
 1. Contractors are responsible for their subcontractors' compliance with requirements of Chapter 4115 of the Ohio Revised Code.
7. Before employees start work on the project, supply them with written notification of their job classification, prevailing wage rate, fringe benefit amounts, and the name of the Prevailing Wage Coordinator for the project. A copy of the completed signed notification should be submitted to the Prevailing Wage Coordinator.
8. Supply all subcontractors with the Prevailing Wage Rates and changes.
9. Submit certified payrolls within two (2) weeks after the initial pay period. Payrolls must include at a minimum the following information:

1. Employees' names, addresses, and social security numbers.
 1. Corporate officers/owners/partners and any salaried personnel who do physical work on the project are considered employees. All rate and reporting requirements are applicable to these individuals.
2. Employees' work classification.
 1. Be specific about the laborers and/or operators (Group)
 2. For all apprentices, show level/year and percent of journeyman's rate
3. Hours worked on the project for each employee.
 1. The number of hours worked in each day and the total number of hours worked each week.
4. Hourly rate for each employee.
 1. The minimum rate paid must be the wage rate for the appropriate classification. The Department's Wage Rate Schedule sets this rate.
 2. All overtime worked is to be paid at time and one-half for all hours worked more than forty (40) per week.
5. Where fringes are paid into a bona fide plan instead of cash, list each benefit and amount per hour paid to program for each employee.
 1. When the amount contributed to the fringe benefit plan and the total number of hours worked by the employee on all projects for the year are documented, the hourly amount is calculated by dividing the total contribution of the employer by the total number of hours worked by the employee.
 2. When the amount contributed to the fringe benefit is documented but not the total hours worked, the hourly amount is calculated by dividing the total yearly contribution by 2080.
6. Gross amount earned on all projects during the pay period.
7. Total deductions from employee's wages.
8. Net amount paid.
10. The reports shall be certified by the contractor, subcontractor, or duly appointed agent stating that the payroll is correct and complete; and that the wage rates shown are not less than those required by the O.R.C. 4115.
11. Provide a Final Affidavit to the Prevailing Wage Coordinator upon the completion of the project.

END

DOCUMENT 007343 – Prevailing Wage Determination Cover Letter

County:

Determination Date: 12/20/2022

Expiration Date: 03/20/2023

THE FOLLOWING PAGES ARE PREVAILING RATES OF WAGES ON PUBLIC IMPROVEMENTS FAIRLY ESTIMATED TO BE MORE THAN THE AMOUNT IN O.R.C. SEC. 4115.03 (b) (1) or (2), AS APPLICABLE.

Section 4115.05 provides, in part: “Where contracts are not awarded or construction undertaken within ninety days from the date of the establishment of the prevailing wages, there shall be a redetermination of the prevailing rate of wages before the contract is awarded.” The expiration date of this wage schedule is listed above for your convenience only. This wage determination is not intended as a blanket determination to be used for all projects during this period without prior approval of this Department.

Section 4115.04, Ohio Revised Code provides, in part: “Such schedule of wages shall be attached to and made a part of the specifications for the work, and shall be printed on the bidding blanks where the work is done by contract...”

The contract between the letting authority and the successful bidder shall contain a statement requiring that mechanics and laborers be paid a prevailing rate of wage as required in Section 4115.06, Ohio Revised Code.

The contractor or subcontractor is required to file with the contracting public authority upon completion of the project and prior to final payment therefore an affidavit stating that he has fully complied with Chapter 4115 of the Ohio Revised Code.

The wage rates contained in this schedule are the “Prevailing Wages” as defined by Section 4115.03, Ohio Revised Code (the basic hourly rates plus certain fringe benefits). These rates and fringes shall be a minimum to be paid under a contract regulated by Chapter 4115 of the Ohio Revised Code by contractors and subcontractors. The prevailing wage rates contained in this schedule include the effective dates and wage rates currently on file. In cases where future effective dates are not included in this schedule, modifications to the wage schedule will be furnished to the Prevailing Wage Coordinator appointed by the public authority as soon as prevailing wage rates increases are received by this office.

“There shall be posted in a prominent and accessible place on the site of work a legible statement of the Schedule of Wage Rates specified in the contract to the various classifications of laborers, workmen, and mechanics employed, said statement to remain posted during the life of such contract.” Section 4115.07, Ohio Revised Code.

Apprentices will be permitted to work only under a bona fide apprenticeship program if such program exists and if such program is registered with the Ohio Apprenticeship Council.

Section 4115.071 provides that no later than ten days before the first payment of wages is due to any employee of any contractor or subcontractor working on a contract regulated by Chapter 4115, Ohio Revised Code, the contracting public authority shall appoint one of his own employees to act as the prevailing wage coordinator for said contract. The duties of the prevailing wage coordinator are outlined in Section 4115.071 of the Ohio Revised Code.

Section 4115.05 provides for an escalator in the prevailing wage rate. Each time a new rate is established, that rate is required to be paid on all ongoing public improvement projects.

A further requirement of Section 4115.05 of the Ohio Revised Code is: "On the occasion of the first pay date under a contract, the contractor shall furnish each employee not covered by a collective bargaining agreement or understanding between employers and bona fide organizations of Labor with individual written notification of the job classification to which the employee is assigned, the prevailing wage determined to be applicable to that classification, separated into the hourly rate of pay and the fringe payments, and the identity of the prevailing wage Coordinator appointed by the public authority. The contractor or subcontractor shall furnish the same notification to each affected employee every time the job classification of the employee is changed."

Work performed in connection with the installation of modular furniture may be subject to prevailing wage.

THIS PACKET IS NOT TO BE SEPARATED BUT IS TO REMAIN COMPLETE AS IT IS SUBMITTED TO YOU. (Reference guidelines and forms are included in this packet to be helpful in the compliance of the Prevailing Wage law.)

wh1500