SECTION 00 9113 – ADDENDUM NO. 1

Central Middle School
Greenwich, Connecticut

S/L/A/M Project No. 22367.00

This Addendum, dated October 16, 2024, forms a part of the Contract Documents, and modifies the original Bidding Documents dated September 30, 2024. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum is comprised of Page Nos. 1 of 1, and the following attachments:

1.1 **BID RFI LOG** (GCMS Phase 2 – Bidder's Question Log – dated 10/16/2024)

1.2 00 4000 – Turner Construction: Phase 2 of 3 Procurement Manual

A. 03 – Updated Boiler Plate Additional Provisions For All Subcontractors.

B. 05 – Updated Project Phasing, Logistics Plans & Delivery Routes (Page 3)

C. 06 – Updated Turner Corporate Environmental Health & Safety Policy.

1) Full Time Dedicated Safety requirements – page 48
2) Appendix D - Blasting Guidelines

D. 34 – Updated Form of Proposal showing Bid Extension to 11/14/2024.
1) Note: Bidder Question Deadline is also extended to 11/1/2024

1.3 **PROJECT MANUAL**

E. No Changes at this time

1.4 DRAWINGS

A. Replace the following Drawing, previously issued on 09/30/2024 for BIDDING/PERMIT, with new drawing dated 10/10/2024

1. A641 – Aluminum Frame Window Details

END OF DOCUMENT 00 9113 - ADDENDUM No. 1

END OF SECTION 00 09113

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GCMS Phase 2 - Bidder's Question Log

10/16/2024

BQ #	Responsible Consultant	Reference	Date	Question	Answer	Date Item Responded	Answered By (Name / Company)	Attachment (SK# or Spec Section)	Status ("Closed")	Date Closed
1	Turner	Procurement Manual	10/1/24	What type of labor is being requested for this project? Union or CT Prevailing wage ? When is the estimated installation of the food service equipment? Substantial completion date ? Do you expect to need BIM Coordination on this project?	As this is a public bid, all work must be Prevailing Wage, there is not a requirement for Union Carpentry on this project. Reference Project manual item 10 – Minimum Rates and Classifications for Building Construction – CT Prevailing Wage Rates dated 9.23.24. Note that the State of Connecticut issues updated required rates each year on July 1. Review project schedule for Lower Level fitout scheduled to start September 2025 through June 2026 specific kitchen development will be within this range. See Additional Provisiosn/Scope of Work for all Subcontractors, item #55. Kitchen equipment to participate in BIM 3D Modeling.	10/1/2024	Turner/ J Phelan		Closed	10/1/2024
2	Turner	Procurement Manual	10/1/24	Is this project being done under Carpenter Union?	As this is a public bid, all work must be Prevailing Wage, there is not a requirement for Union Carpentry on this project. Reference Project manual item 10 – Minimum Rates and Classifications for Building Construction – CT Prevailing Wage Rates dated 9.23.24. Note that the State of Connecticut issues updated required rates each year on July 1.	10/1/2024	Turner/ J Phelan		Closed	10/1/2024
3	SLAM	A111.16	10/1/24	No Basis of Design was found for the Ballistic Level 3 Transaction Window at Entry Vestibule. Please provide basis of design for this product. **Turner Follow-up (10/16/24):** Please provide a spec to cover this item.	BOD will be ARMORTEX Aluminum Transaction Window system w/speaker furnished & installed by BP #19.					
4	SLAM	Spec -1 3575 & Dwg GC01	10/1/24	Delegated Design Procedure Spec (01 3573) and table on drawing GC01 includes Spec 28 5319, Distributed Antenna System. This spec was not found in document. Please confirm if applicable and provide spec.						
5	Turner	Procurement Manual	10/2/24	Where can I find the information on Small Business / MWBE participation percentage requirements.	Refer to the Invite to bid for specific package requirements in the Chart on Page 1 and 2. Also, reference the Boilerplate additional provisions item #4 page 3C.	10/2/2024	Turner/ J Phelan		Closed	10/1/2024
6	Turner	Procurement Manual	10/2/24	Is a bid bond required for bid submission?	A bid bond is applicable for bids in excess of $100,000. This information is detailed in the Invitation to Bid document along with additional required information for bid submission.	10/2/2024	Turner/ B Moore		Closed	10/7/2024
7	SLAM	3D/A522	10/3/24	Please confirm that the anchorage at Curtain Wall header is the Anchorage is concealed in mullions per detail 6C/A640.	Confirmed	10/9/2024	SLAM		Closed	10/16/2024
8	SLAM	1D/A640	10/3/24	Please provide clarifying detail of sunshade attachment to storefront mullion. Additionally, clarify how flashing/roof membrane extends around attachment bracket.	The Sunshade is provide by the window manufacture - all attchment detail is per there typical instaltion method for their system. The shade does not interact with the roof or wall membrane flashings as it attached to the window system only.	10/9/2024	SLAM		Closed	10/16/2024
9	SLAM	1C/A640	10/3/24	At South Elevation Main Entrance (5C/A310), there is concern of potential condensation accumulation at metal panel infill. Please confirm that no insulation is required on the inside of the glazed-in metal insulated panel.	There is no condesation concern and no insulation is required.	10/9/2024	SLAM		Closed	10/16/2024

BQ #	Responsible Consultant	Reference	Date	Question	Answer	Date Item Responded	Answered By (Name / Company)	Attachment (SK# or Spec Section)	Status ("Closed")	Date Closed
10	SLAM	A901C	10/3/24	Please confirm that the wall panels (AWP8) in the Media/Production Classroom 1063 & Media Sound Booth are to be full height at all walls.	Per the Finish Product List AWP6 is to be full height. It is only to be installed on the 2 walls per room as shown on the Finish Plan A901C. Furnished & Installed by BP #18.	10/8/2024	SLAM		Closed	10/16/2024
11	SLAM	A122	10/3/24	Please confirm that 3A/A501 is the applicable detail for waterproofing at the elevator pit (A122). Additionally, will waterproofing be required at the interior of the elevator pit? Please provide details.	3A/A501 is the correct detail refernnce for the Elevator Pit. No see 5E/A122 plan refernce tht calls for exterior side waterproofing on all sides of the elevatior pit.	10/9/2024	SLAM		Closed	10/16/2024
12	SLAM	S410, S411, S420, S421, S430	10/3/24	There are details throughout the S400 series of drawings that do no show all the connection types, i.e. bolt sizes, weld types & sizes, etc..for items like hung lintels and perimeter angles. For example see 9/S410 or 15/S410. Are these intended to be delegated design? If so, no loads seem to have been provided. Please advise & provide these connection details where missing. **Turner Follow-up (10/16/24):** Confirm typical welds shown on Detail 1 of same page are adequate for these conditions.						
13	SLAM	6/S420	10/3/24	Please confirm that the joist bridging, diagonal horizontal bracing, and rigging beam connections to the joists will be a delegated design.	Confirmed.	10/8/2024	SLAM		Closed	10/16/2024
14	SLAM	S302B	10/3/24	Please confirm that the intent is for the basketball hoop supplemental steel supports, attachement to the roof joists, and any associated bracing to be a delegated design.	Basketball hoop supplemental steel supports and attachments to roof joists by basketball supplier (BP #21), inclusive of delegated design.	10/8/2024	SLAM		Closed	10/16/2024
15	SLAM	S302B	10/3/24	It is not clear how motorized partition will be mounted to the roof joists. Please provide details and a section cut. **Turner Follow-up (10/16/24):** Provide detail of mount to roof joists.						
16	SLAM	A522	10/3/24	Detail 3B/A522 shows CFMF angles attached to the top flange of the steel beams to support the skylight framing. Will CFMF be sufficient to carry this load or will strcutrual steel angles welded to the steel be required?						
17	SLAM	GC12	10/3/24	The steel framing between gridlines XB-XC and in front of gridline AK seems to be called out to be galvanized as well as coated in thermal insulative coating and intumescent paint. Are any special primers or prep required for these 3 coating to be applied on top of each other? Please confirm the order these coatings should be applied in.						
18	SLAM	S502	10/3/24	Please confirm that all the shear walls shown on S502 are 12" CMU.	See architect plans and arch wall type sheets for wall designations	10/10/2024	SLAM		Closed	10/16/2024
19	SLAM	S401 & A122	10/3/24	No elevator hoist beam size has been provided. Please provide size and bearing details.	This identified on the related structural drawings S302E.	10/10/2024	SLAM		Closed	10/16/2024
20	SLAM	Spec 055000	10/3/24	Please confirm that the "ships ladder" spec also applies to roof hatch ladders in 055000 2.6.c						
21	SLAM	T400	10/3/24	Please confirm the fiber & copper backbone interconnecting the IDF & MDF rooms is not required to be run in conduit, and that armored cable is sufficient.						
22	SLAM	T400	10/3/24	Please confirm scope & devices noted on the T set and TY set generally have conduit pathways to above accessible ceilings, unless otherwise noted. And that scope & devices on TA set (AV) have conduit directly to the AV cabinet supporting the space, unless otherwise noted as to be above accessible ceiling.						
23	SLAM	T101A & T101D	10/3/24	There doesn't appear to be any data, voice, or network connections shown for the fire alarm system on the technology drawings. Please advise and provide details.						

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24	SLAM	T series	10/3/24	There doesn't appear to be any data or network connections shown for the BMS system on the technology drawings. Please advise and provide details.						
25	SLAM	Spec 276010	10/3/24	Sheet GC0A calls for the DAS to be a delegated design. The spec doesn't explicitly mention any engineering or delegated design requirements or deisgner certifications. **Turner Follow-up (10/16/24):** Spec section 276010 was issued, but is not listed on the delegated design schedule shown on sheet GC0A. Spec section 28 5319 was not issued, but is listed on sheet GC0A. Please advise.						
26	SLAM	E602-E607	10/3/24	The panel schedules indicate a lot of spares. Are there truly this many spares available?	Spare capacity in panels to remain at this time.	10/10/2024	CES		Closed	10/16/2024
27	SLAM	SU500	10/3/24	Detail 1 and 4 on SU500 reference a concrete encasement detail in Note #4. Has this detail been provided? What sheet is it on? Please add sheet reference to this Note #4. Also, please confirm if any concrete encasement around site conduit is required. **Turner Follow-up (10/16/24):** On C508 ductbank detail notes reference concrete being needed beneath paved areas only. Please confirm. Also please provide spacing and concrete encasement dimensions (i.e. concrete cover).	Refer to CIVIL (Tighe and Bond) drawings for trenching detail requirements. Concrete encasement as required furnished & installed by Site Contractor (BP #09).	10/10/2024	CES			
28	SLAM	SU500	10/3/24	Sheet SU100 references a detail on SU500 for the primary electric manhole. There is no detail on SU500. Please provide this detail, size, and specifications on the primary electric manhole.	Refer to sheet SU501 for eversource hex manhole detail. References to SU500 will be changed to reference SU501. Site Contractor (BP #09) shall furnish & install the Eversource manhole & associated details, inclusive of coordination with BP #38.	10/10/2024	CES		Closed	10/16/2024
29	SLAM	C301, SU100	10/3/24	Note 28 on C301 alludes to utility company review and the design being subject to change pending utility company review. Have the utility companies reviewed & approved the current design? There is also mention of ultility "design by others". Can you please clarify the intent?						
30	SLAM	09 6500	10/3/24	RT1, RT2 and RT3 are all listed as 4mm thick. Can you please confirm that they should be listed as 2.5 mm thick to match up to all the other LVT's on the job.	All should be 2.5mm (not 4mm)	10/11/2024	SLAM		Closed	10/16/2024
31	SLAM	09 6500	10/3/24	RT2 and RT3 come with the same wear layer as all the other RT's lised but they are both 40 mill and the warranty is 25 years. This 40 mill and 25 year warranty are specific to the Amtico selections	The minimum wear layer for the resilient tiles is 20 mil and the basic warranty is 15 years - RT2 and RT3 exceed this with 40mil wear layer and a 25 year Warranty which is acceptable but not a requirement.	10/11/2024	SLAM		Closed	10/16/2024
32	SLAM	C301, SU100	10/3/24	Please confirm that the electrical utility company will install conductors from Stanwich Road to the pad mounted transformer. Please confirm that the utility company will also furnish & install the pad mounted transformer. The EC will then provide conductors from the utility transformer to MSB-1 & FP-DS. Please confirm that the telecom service provider will be installing conductors from Stanwich road to a demarcation / box in MDF 1066.	The electric utility company will provide primary cable from the riser pole to the pad mounted transformer. The project will provide the conduit ductbank, pulling structure with proper subgrade and grounding, transformer pad with subgrade and grounding, secondary conductors from the transformer to MSB-1 and FP-DS in conformance with the identified trench detail.The communication utility company will provide service cable from the riser pole to the Telecommunications Equipment Room full length underground.	10/11/2024	CES		Closed	10/16/2024

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33	SLAM	Spec 260573	10/3/24	Please confirm all electrical power studies required. Spec section 260573 didn't seem to mention an Arc-Flash study. Is that required? Other spec sections refer to arc-flash labeling. We want to ensure all the studies required is clear.						
34	SLAM	Electrical Specs	10/3/24	We didn't see a spec for electrical infrastructrure vibration & seismic controls. Please confirm that there are no vibration or Seismic requirements for electrical systems. If there are, then please provide the appropriate spec.						
35	SLAM	Spec 323120, SU100, TY100	10/3/24	The spec for vehicle barrier gates calls for communiction wiring. SU100 shows power run to the gates, but doesn't explicitly show any communications cabling or infrastructure run to the gates. Please advise and update the drawings to clearly shown interconenctions and/or wiring details.	Refer to keynote E13 and note calling for (1) 2" conduit. Refer to note on site plan "(2) 2" CONDUITS FOR COMMUNICATIONS TO SITE CAMERAS AND EV CHARGING EQUIPMENT." Refer to EV charging detail for communication conduit requirements. The base electrical contractor (BP #38) shall funrish & install all conduits / pathways. Low voltage contractor (BP #39) to furnish, install, terminate, & test all low voltage cabling.	10/13/2024	CES		Closed	10/16/2024
36	SLAM	Spec 262653 & SU100	10/3/24	The spec calls for the EV charging stations to be networked. There doesn't seem to be any data / LV cabling or connections indicated. Will these be connected via a cellular or wifi signal? Please advise and update the drawings to clearly show network connections required and/or wiring details.						
37	SLAM	Spec 260533	10/3/24	This spec section mentions related spec sections that have not been issued, i.e. 270533 Raceways for Communications Systems. Please advise and provide all specs required. Please ensure all related specs are provided or delete references throughout. **Turner Follow-up (10/16/24):** Please provide an updated spec with the corrected references.	Refernces to 27 0533 in this spec section should be replaced with 27 0536.	10/9/1902	CES			
38	SLAM	E Series	10/3/24	Please confirm that all motorized shades are intended to be manually & locally controlled. Confirm that they will not be integrated with any lighting controls system or have any automation.	Motorized shade control shall be manual and locally controlled.	10/13/2024	CES		Closed	10/16/2024
39	SLAM	E701 & Spec 262826	10/3/24	This spec mentions an Engine Start Monitoring system that is integrated with the Fire Alarm system. There doesn't appear to be reference to this on the fire alarm riser SOO (E701). Please advise and update accordingly.						
40	SLAM	Spec 283100	10/3/24	Please confirm that MC Cable is acceptable for fire alarms systems in all concealed conditions (i.e. within walls and above accessible, finished ceilings), and that conduit is only required in "exposed" installations. Please confirm if areas with "cloud" ceilings are considered "exposed" (i.e. the Cafeteria).	MC Cable is acceptable for fire alarm systems in concealed areas. Areas with cloud ceilings are considered exposed, provide wire in conduit.	10/10/2024	CES		Closed	10/16/2024
41	SLAM	Spec 270536	10/3/24	This spec section mentions delegated design for seismic restraints. Is this required for the small amount of cable tray scope in IDF/MDF rooms? If so, please reference this spec in the delegated design matrix on the GC series of drawings.						
42	SLAM	E Series	10/3/24	Is there a spec for the overhead cord reels? Please advise or provide.	Cord reel spec to be "Industrial cord reel, with Hubbell HBL4729C twist-lock input connector, 25' SJO Cable Jacket, 12/3, Nema 5-20R connector for use by owner. White housing. Shall be provided with the following: Pivot Base Hubbell #HBLI340PH; Mounting Bracket Hubbell #HBLIMB; Ball Stop Hubbell #HLI12BS". Cord reels shall be furnished & installed by BP #38.	10/11/2024	CES		Closed	10/16/2024

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43	SLAM	S421 & A521	10/3/24	Detail 1B on A521 shows CFMF supports for the MCM panel soffit around the Gym. Detail 1 on S421 shows a top chord extension for the roof joists to create a an overhang. What is the profile / shape of this top chord extension because it looks larger than a typical top chord. Also, is the intent for the CFMF to attach to this extension or will the CFMF hang from the roof deck overhang?	Top chord extension & profile (i.e. depth) is by joist fabricator (BP #12) as part of the delegated design process. CFMF is intend to attach to the extended top cord, infilling between members. CFMF furinshed & installed by BP #21.	10/9/2024	SLAM		Closed	10/16/2024
44	SLAM	MEPFS Drawings	10/3/24	Please provide matchlines on all plans.						
45	SLAM	L503 & L504	10/3/24	Please confirm the manufacturer and model number intended to be used for the metal screen fence and black chainlink viynl coated fence shown on L503 & L504.	Please see spec section 12 9300 for METAL SCREEN FENCE – Basis of Design is Pallisade Fortress Screen Fence as provided by Palm SHIELD. Please see spec section 32 3113 for CHAIN LINK FENCE – components called out. B.O.D. EAGLE FENCE or equal. Furnished & installed by BP #09.	10/11/2024	SLAM		Closed	10/16/2024
46	SLAM	TR1 & TR2	10/3/24	Details 7 & 8 seem to show a rigging beam up high and then a pipe batten hung from that beam. Details 3, 5, & 6 on TR1 show "compression tubes" and "strongbacks" between the rigging beam and pipe baten, which are not part of the details on TR2. It is not clear from the sections & details provided what the intended theatrical lighting / rigging assembly should be. Please provide updated or additonal details.						
47	SLAM	TR1 & TR2	10/3/24	Please confirm how the curtain tracks shown in Detail 2 on TR1 on the perimeter (adjacent to gridlines CN & CJ) should be supported. Can they be hung directly from the roof deck or is that an issue structurally?	Theatrical rigging contractor (BP #31) to provide intermediate support strut between rigging beams to support track. System is not to be huing directly form the roof deck.	10/9/2024	CT/SLAM		Closed	10/16/2024
48	SLAM	T-Series & A912	10/3/24	It is not clear from the drawings & specs if there will be any owner furnished, contractor installed Low Voltage and/or AV equipment and components (for example network switches, smartboards, etc.). If there is anything, please provide a responsibility matrix indicating this scope. Ideally an OFCI vs. OFOI vs. CFCI matrix should be provided, similar to the specialty equipment matrices on A912.						
49	SLAM	Spec 276010	10/3/24	Please confirm that the distributed antena system shown in the bid documents is intended for Emergency Responder Radio Coverage Only. And that there will not be a system for extended cellular coverage.	Confirmed. DAS is intended for Emergency Responder Radio Coverage only.	10/11/2024	CES		Closed	10/16/2024
50	SLAM	E400 & EP101D	10/3/24	It seems like under slab conduit and electrical circuit infrastructure will be required, especially for the kitchen and auditorium spaces. There doesn't appear to be any typcial below slab typical details in the E500 series. Please advise and provide. Also, please confirm it is acceptable to run feeders and branch circuits below the slab on grade generally. **Turner Follow-up (10/16/24):** Please follow-up with a typical below slab conduit detail for within the footprint of the school.	Underslab feeders and branch circuits below slab are acceptable means and methods procedure.	10/11/2024	CES			
51	SLAM	E700	10/3/24	E700 shows the PV 1200A NEMA 3R disconnect and meter cabinet as "future" with dashed lines, seeming to indicate it is not part of the scope of work for this project. Is that true? However, E700 shows 1200A feeders from these future cabinets as being part of the scope of work for this project. Is this true? **Turner Follow-up (10/16/24):** Please provided updated drawings showing the (4) 4" empty conduits.	PV disconnect and meter cabinet is future and not part of the scope of work for this project. Space reserved for future PV equipment shown on EP101A, EP101C, EP101E and roof plans. 1200A feeder shown on E700 was intended to just be conduit and pull string. Reference to 1200A feeder will be removed in next addendum and replaced with note for (4) 4” conduits and pull strings, furnished & installed by BP #38.	10/11/2024	CES			

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52	SLAM	E700	10/3/24	Detail 2 on E700 shows a Future PV System Riser Diagram. Please clarify what should be included in the base electrical bids. Will it be empty conduit w/ drag lines only to the general locations indicated.	Yes, base electrical bid (BP #38) will be empty conduit w/ drag lines. Refer to E700 Future PV System Conduit Riser Diagram, and roof plans for conduit stub up locations.	10/11/2024	CES		Closed	10/16/2024
53	SLAM	E700	10/3/24	Please confirm if the submetering shown in the submetering schedule on E700 is the only submetering required. Or is there addition submetering required for mechanical system and/or lighting not currently shown in this schedule? If so, please advise on a full list of submetering.						
54	SLAM	S401 & A121	10/3/24	It is not clear from detail 1/S401 or 3D/A121 how the 2nd floor curtain wall / window will be supported. Please advise and provide the corresponding detail(s).	At the limited width of that window (7'-6) typical CFMF detailing & framing by BP #21 will be required (i.e. box headers and sills - double jamb king suds). Similar to 2D/A641 added in this Addednum	10/9/2024	SLAM		Closed	10/16/2024
55	SLAM	S211	10/3/24	Detail 1/S211 notes that 1st floor slab needs to be poured prior to backfill. Can you confirm if it is acceptable to backfill prior to pouring slab? Also note that detail 3/S211 does not require slab install prior to backfill. **Turner Follow-up (10/16/24):** Initial SLAM response will provide a hardship to construction sequence & scheduling. Please provide detail and plan locations for keyway at retaining wall footing to eliminate the requirement for placing this SOG prior to backfilling.						
New Bidder's Questions as of 10/04/24										
56	Turner	Procurement Manual	10/8/24	Will the Turner Pre-Qualification Form be required for the bid, if the potential subcontractor has recently filled out pre-quals with Turner Construction?	Subcontractors who are currently Prequalified with Turner may request Turner provide a letter to verifiy prequalification. Copy of letter can be submitted with Bid in lieu of submission of the "Turner Prequalification Response Form" included within the project manual. Send requests for Prequalified letter Francesca Perugini at fperugini@tcco.com.	10/9/2024	JP/Turner		Closed	10/9/2024
57	Turner	Procurement Manual	10/8/24	What time do te buses arrive in the morning, and when do they pick-up in the afternoon.	CMS Dropoff starts at 7:20 a.m. and Dismissal time is 2:45 p.m.	10/9/2024	JP/Turner		Closed	10/9/2024
58	Turner	Procurement Manual	10/8/24	What percentage of the project is State funded vs. town funds?	Not applicable	10/16/2024	JP/Turner		Closed	10/16/2024
59	Turner	Procurement Manual	10/8/24	Is Turner planning on submitting and self-perform scopes?	Turner Self Perform (SPO) will not be bidding on any of the prime bid packages.	10/9/2024	CL/Turner		Closed	10/9/2024
60	SLAM	C305	10/9/24	There is a Heat Trace system for the grease waste system. The Civil Drawings say to reference details on the MEP drawings, MEP drawings only show HT-1 on the interior and then HT-2 on the portion of the exterior line shown on Drawing P100A. Shall HT-2 extend all the way to the grease trap on the site or just required for the first 10 feet of piping?						
61	SLAM	A902A	10/9/24	Classroom 2019 also does not show roller shades at the counter space. Please confirm if this area is to have roller shades.						
62	SLAM	21 05 33, 22 05 33	10/9/24	There is no Heat Trace Specificaiton for Fire Protection or Plumbing systems. Please provide specifications.						
63	SLAM	275313	10/9/24	Is it acceptable to utilize Primex Clocks in lieu of SiteSync IQ by American Time?						
64	SLAM		10/9/24	Are the site boulders intended to be iported to site or harvested from site?						
65	SLAM	L404	10/9/24	On drawing L404 the site irrigation plan what is the location of the point of connection to the new building for irrigation piping?						

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66	SLAM	Spec 08 4413	10/10/24	In regards to the ballistic curtainwall type ICW02, no specification was found for ballistic curtainwall framing. Can you please clarify or provide? **Turner Follow-up (10/17/24):** The lower section of the frame (3E/A632) has the bullet resistant glass, but not the upper. Typically, if any part of the frame is to have bullet resistant glass in it than the entire frame is to be bullet resistant. The glass doesn't have to be, as it shows in this case, but the frame does. Please clairfy if the entire frame is to be bullet resistant.					
67	TCCO	A924	10/10/24	Please confirm that the masonry for Sign Type R is not within the scope of the signage contractor.	The masonry will be by the Masonry subcontractor (BP #11) and the fiber cement paneling system will be by the drywall subcontractor (BP #21). The flush mount alum. letters will be by the signage contractor (BP #28).	10/16/2024	JM/Turner		Closed	10/16/2024
68	SLAM	A924	10/10/24	Please confirm that halo lit is acceptable for Sign Type S.						
69	TCCO	10-1416-1	10/10/24	Is the dedication plaque detailed in Section 10-1415 part of the signage scope?	The millwork subcontractor (BP #18) will be responsible for the Plaques spec section.	10/16/2024	JM/Turner		Closed	10/16/2024
70	SLAM	Existing / As-Built Dwgs	10/10/24	Can drawings of the Existing Building Construction be provided?						
71	SLAM	05 2100	10/10/24	Specification section 05 2100-1.3B notes comprehensive engineering analysis of "special joists", signed and sealed by qualified engineer. It appearst the joist sizes are already on the documents, please clarify the intent of what joists are to be delegated design as 'special joists". Are there restrictions on the 'special joists', meaning do portions of the design need to align with sizes provided on the documents?						
72	SLAM	05 5000	10/10/24	Specification section 05 5000 is identified as delegeted design on sheet GC0A. Reviewign 05 5000-1.5 is notes notes ladders, backstop and elevator beams as delegated design. Please confirm these items are the extents of the delegated design requirements of this specification section 05 5000.						
73	SLAM	08 4313	10/10/24	Specification section 08 4313 is identfied as delegated design on sheet GC0A. Reviewing the spec section 08 4313-1.5E it appears only to indicated attachments and anchors require delegated engineering analysis. Confirm this is the correct interpretation and that standard manufacturer data for the storefont framing in lieu of delegated design calcs.						
74	SLAM	A911	10/10/24	Finish Schedule doesn't have a color for PL5 Wilsonart Plam, only a finish. It also shows PL7 Wilsonart Plam with no color or finish. Please advise a color and or finish selection are for these Plastic Laminates.						
75	TCCO	Millwork SOW	10/10/24	SOW for Millwork and Casework (Scope Item #19) states we own furnish and install of TRM1 through TRM5. Details 1A, 1B, 3B/A805 all show Fry Reglet TRM trim being installed behind either wallcovering or AWP's, both we don't own. Shouldn't this be furnished and installed under the Bid Packages that own the wallcovering and AWP Panels? Of all 5 TRM's, the only one I see our Bid Package owning would be TRM3 per A911 as this if for the exposed edges tackboard that we do own. Please advise who will own the furnish and install of TRM1, TRM2, TRM4, & TRM5.	The Millwork subcontrator (BP #18) shall furnish and install all metal trim as noted in the millworks scope line item 19. The trim shall be coordinated with the adjacted trades material.	10/16/2024	JM/Turner		Closed	10/16/2024

BQ #	Responsible Consultant	Reference	Date	Question	Answer	Date Item Responded	Answered By (Name / Company)	Attachment (SK# or Spec Section)	Status ("Closed")	Date Closed
76	SLAM	1E, 2E, 3E/A805	10/10/24	1E, 2E, & 3E/A805 show what looks like gyp. Panels on the top and bottom of all 3 types of display cases. Please advise if this is the design intent or are the tops and bottoms supposed to be Plam like the side walls? If gyp. on the top and bottom is the design intent, please advise who owns the gyp. furnish and install.						
77	SLAM	64100	10/10/24	Spec Section 064100 – Architectural Wood Casework sub-section 2.9 Hardware states product grade as Grade 2. Since no cabinet door and drawer locks are listed, please confirm Grade 1 locks are not required. Also please advise the specific locks that are required for all cabinet doors and drawers since none are listed. a. 2.9/C states either side mounted recessed metal shelf standards or multiple holes for pin shelf rests with nominal 1in. spacing. Will standard 32mm spacing be acceptable, or are Metal Pilaster shelf standards required? b. 2.9/J calls for soft close door and drawer adjustable dampers. Are dampers required with self close European hinges and drawer slides, or are soft closed hinges and slides acceptable, not requiring the dampers?						
78	SLAM	64100	10/10/24	Architectural Wood Casework sub-section 2.1C states multiple-dovetailed/dovetail joint construction. Please advise if standard hardwood dowel construction is acceptable.						
79	SLAM	123553.19	10/10/24	Wood Laboratory Casework lists Acid Storage Cabinets, Solvent Storage Cabinets, and Mobile Tables. Please advise where these items are located as nothing is shown on any floor plans or elevations for these items. If these items are not required for this project, please advise if Div. 6 Architectural Wood Casework would be acceptable ilo of Div. 12 Lab Casework, still following hardware materials but using AWI Standard Construction as outlined in Spec Section 064100. Div. 12 Epoxy counters, google cabinets, and drying racks would still be supplied as speced.						
80	SLAM	08 4413	10/10/24	Specification section 08 4413 is identfied as delegated design on sheet GC0A. Reviewing the spec section 08 4413-1.5F and 1.6A it does not indicated any signed and sealed calculations are required. Please clafify the delegated design intent of this specification section.						
81	SLAM	08 4413	10/10/24	Specification section 08 4413-1.6B seems to indicate an off site mockup performance test. If this is required, additional information is required for testing procedures, size of mockup, etc. Or can standard manufacturer systems specified provide performance testing of the specified systems to meet this requirement.	The two required fleld tests are outlined in part 3.4 Field Qulaity Control to be included by BP #19.	10/13/2024	SLAM		Closed	10/16/2024
82	SLAM	12 6613	10/10/24	Specification section 12 6613 is identfied as delegated design on sheet GC0A. Reviewing the spec section 12 6613 and the requirements noted, can the specified manufacturers standard certification statement meet the delegated design requirements, assuming the specified seating meeting the requirements of this specification section.	Delgated design is required of the project specific seating design and layout, by BP #32.	10/13/2024	SLAM			
83	SLAM	22 1123	10/10/24	Specification section 22 1123-1.7C seems to indicate delegated design which is not called for on GC0A. Reviewing this spec section it is not clear if delegated design of "design piping system" is intended to included. Please clarify the design requirements of this specification section.						

BQ #	Responsible Consultant	Reference	Date	Question	Answer	Date Item Responded	Answered By (Name / Company)	Attachment (SK# or Spec Section)	Status ("Closed")	Date Closed
84	SLAM	11 0610	10/10/24	Specification section 11 0610-1.9C seems to indicate delegated design which is not called for on GC0A. Reviewing this spec section it is not clear what portions of the specification section are to be delegated design and associated criteria. Please clarify the design requirements of this specification section.						
85	SLAM	14 2100	10/10/24	Specification section 14 2100-1.6A seems to indicate delegated design which is not called for on GC0A. Reviewing this spec section appears guide rails are to be delegated design. Please confirm the design requirements of this specification section.						
86	SLAM	22 0516 & 23 0516	10/10/24	Specification section 22 0516 and 23 0516 seems to indicate delegated design which is not called for on GC0A. Please confirm if these spec sections should be added to GC0A.						
87	Turner	A610	10/10/24	Please clarify under which bid package the Sliding Window at the Nurses Office, and the Bullet Resistant Pass Thru Window at the Admin Office fall under. Are there any specification for them?	Per the BP#19 scope of work, the Sliding Window at the Nurses Office and the BR Pass Thru Window at the Admin Office are to be furnished and installed by BP #19 (Glass & Glazing). No specs are provided for these items. A basis of design for the Bullen Resistant Pass Thru Window is referenced in RFI #3. Reference RFI #88 for product information of the sliding window at the Nurse's office.	10/10/2024	BM/Turner			
88	SLAM	A610	10/10/24	Please provide basis of design and specification of sliding window at the Nurse's office.						
89	SLAM	10 5113	10/10/24	Please see attached RFI 89 attachments for potential locker substatution request. Please advise if this substitution is acceptable.						
90				BQ NOT UTILIZED						
91	SLAM	00 3132	10/11/24	The Geotechnical boring information provided within the specification 00 3132 provides limited information at the phase 2 Turnaround (dwg C303) and deep Sanitary sewer roadwork excavation along Indian rock lane(C306, C307). Are Rock elevations known in these areas? What assuptions are to be made?						
92	SLAM	Site Utility	10/11/24	When reviewing the permit application for the Sanitary sewer the town noted the new lines need to be videoed to show the install from within the new pipes/manholes. There does not appear to be a mention of this video documentaiton. Will this be required by the Sitework Subcontractor? If yes please provide the details and specifications.						
93	SLAM	Civil Series	10/11/24	There does not appear to be a Storm Water Pollution Prevention Plan included in the contract documents. Please advise if Sitework Subcontractor will be responsible for SWPPP and if so provide aproject specific plan						
94	SLAM	05 3100	10/11/24	Detail 1B/A521 calls for Steel plates top and bottom of deck - fasten and seal with continuous butyl. Please confirm these steel plates are to be by the metal deck manfacturer as no plates are shown on the structural documents. Please provide length of steel plates, and the fastening requirements of the steel plates top and bottom. Where should continuous butyl be applied? Is the butyl part of the roofing specification to be installed by the roofer? **Turner Follow-up (10/16/24):** Please confirm that this plate is not structural. Are there any specific fastening requirements for the attachment of these plates?	Structural Steel subcontractor (BP #12) shall furnish & install steel plates called for on A521 and detailed on 1E/A501. See 1E/A501 detail for length requirement of the steel plates. Fastening requirements are to coordinated between the trades by the Contractor. The mason (BP #11) shall furnish & install two lines of butyl sealant & insulation called for on 1E/A501 at all block exterior wall locaitons and the drywall contractor (BP #21) at all other locations. Sealant should be provide at outermost parrallel flute and each perpendicular flute.	10/13/2024	SLAM			

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95	SLAM	Civil Series	10/11/24	Will Sitework Subcontractor be responsible for to perform the Turbidity tests (as part of a SWPPP) for the stormwater leaving the site which typically is performed by the Geotech engineer/by Owner?						
96	SLAM	02 4100	10/11/24	During the site walk through it was clear there was a significant amount of existing tables, chairs, file cabinets, general ffe, etc. throughout the existing building. What is the intent for the removal of this equipment? Can a schedule be provided for what is to be salvaged by the owner and what is to be removed as waste by the demo subcontractor?						
97	SLAM	02 4100	10/11/24	During the site walk through it was clear there was a significant amount of exterior items not called to be demolished on the site demolition plans (C402, C403) including chain link backstops, basketball hoops, fenced garden, soccer goals, etc. Can a schedule be provided for what is to be salvaged by the owner and what is to be removed as waste by the Sitework subcontractor?						
98				BQ NOT UTILIZED						
99	SLAM	31 2300	10/11/24	Are reports available regarding the hazardous material clasification of the exiting soils to be removed?						
New Bidder's Questions as of 10/11/24										
100	SLAM	M601	10/11/24	Remark #5 on the HVLS Fan Schedule on Drawing M601 states the color and finish of the CF-A fans shall be selected by the Architect. Please provide desired color and finish.						
101	CES	M502	10/11/24	The Mechanical piping floor plans indicate HWS, HWR, MCHWS & MCHWR feeding the active chilled beams, however, Details 6 & 7 on Drawing M502 indicate HWS, HWR, CHWS & CHWR. Please advise which is correct.						
102	SLAM	A200 Series	10/11/24	General Note #12 on the A200 series drawings state nothing other than ceiling systems can be supported from the roof deck where there is no concrete fill. In instances where long duct runs on the roof occur (i.e. from RTU-1 into the building), does this statement still apply? 9/M500 and 9/M501 indicate duct/pipe supports sitting on top of the roof insulation; In most cases, these supports will not be located over structural steel, but solely on top of metal decking. Should curbs/rails be specified? Is there a wind load concern for detail 9/M500 and 9/M501?						
103	SLAM	003132	10/14/24	Specification Section 003132 Geotechnical Data The contract documents only include the boring locations and data. Please provide the complete Geotechnical report by Tighe & Bond dated 01/26/24 as referenced on drawing S-001 Paragraph C : Foundations and Geotechnical Report.						
104	SLAM	Civil Series	10/14/24	Will Versa Lok retaining walls be an acceptable substitiion to the specified product? See attached Product Data.						
105	Turner	Procurment Manual	10/14/24	Is the request for the bid bond a dual oblige (i.e. Construction and Board of Education of the Town of Greenwich)?	Confirmed Dual Oblige. Turner Construction and "Town of Greenwich"	10/14/2024	JP/Turner		Closed	

BQ #	Responsible Consultant	Reference	Date	Question	Answer	Date Item Responded	Answered By (Name / Company)	Attachment (SK# or Spec Section)	Status ("Closed")	Date Closed
106	Turner	Procurment Manual	10/14/24	Do we need to fill out “35 - Turner Prequal form 1 17 07 format” if we’ve already submitted our prequal online with Turner for this year?	Subcontractors who are currently Prequalified with Turner may request Turner provide a letter to verify prequalification. Copy of letter can be submitted with Bid in lieu of submission of the "Turner Prequalification Response Form" included within the project manual. Send requests for Prequalified letter Francesca Perugini at fperugini@tcco.com.	10/14/2024	JP/Turner		Closed	
107	CES	M503	10/14/24	The following details were ommitted from Drawing M503 between the Phase 2 Set dated 07/08/2024 and the Bidding/Permit Set dated 09/30/2024: - 1 - Boiler - Condensing w/ Pump - 2 - Glycol Make-up Unit - 3 - Expansion Tank and Air Separator - 6 - Pump - Inline - 8 - Low Loss Header - Suspended - 9 - Pump - Base Mount Inline - 10 - Pot Feeder Please confirm these details are no longer required for this project.						
108	CES	M700, M701	10/14/24	We cannot locate Control Diagrams for the following pieces of Mechanical equipment on Drawings M700 or M701. Please provide: 1) Heat Recovery Ventilator HRV-1 2) High Volume Low Speed Fan CF-A 3) Dust Collector DC-1 4) Air Filtration Unit AFU-A 5) Heat Exchanger HX-1 6) Exhaust Fan KHEF-1 7) Exhaust Fan DEF-1						
109	CES	M700	10/14/24	Please confirm Detail 8/M700 should be utilized for both Exhaust Fans EF-1 and EF-2.						
110	CES	23 09 93	10/14/24	We cannot locate a sequence of operations for the following pieces of Mechanical equipment within Specification Section 23 09 93. Please provide: 1) Finned Tube Radiators 2) Dust Collector DC-1 3) Air Filtration Unit AFU-A						
111	CES	M601	10/14/24	Please provide a Specification Section for Dust Collector DC-1.						
112	CES	M602	10/14/24	Please provide a Specification Section for Air Filtration Unit AFU-A.						
113	CES	23 09 93	10/14/24	Mechanical pump designations were updated on the drawings in the Bidding/Permit set dated 09/30/2024, however, these designations were not updated in Specification Section 23 09 93-3.20. Please update accordingly.						
114	CES	23 09 93	10/14/24	Specification Section 23 09 93-3.20.D identifies Heat Exchanger Pumps HXP-1 and HXP-2, however, we cannot locate these pumps on the mechanical plans or schedules. Please advise.						
115	CES	23 09 93	10/14/24	Specification Section 23 09 93 contains sub-part 3.18 for Boilers as well as sub-part 3.19 for Water Heaters. The Boilers are identified throughout the Plans and Specifications, however, please advise where the Water Heaters are located an specified.						

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116	SLAM	FS141	10/14/24	Details 1/FS141 shows recessed slab and pourable fill and 2 " concrete topping within the Refrigerator rooms, who is to provide this scope.	Recessed slab, Pourable Fill and 2" concrete topping to be furnihsed and installed by the Concrete Bid Package #10. Concrete Bid Package #10 to also provide the concrete fill shown on 2/FS141	10/14/2024	JP/Turner		Closed	
117	SLAM	FS141	10/14/24	Detail 2/FS141 calls for back fill by GC below floor pan and grate. Please provide what this backfill material is intended to be?						
118	Turner	23 7413, 262413, 262416	10/14/24	Can shipping splits and informatoin be provided for the PrePurchsed Equipment	See attached BQ 118 for use in HVAC Bid Package #37 and Electrical Bid Package #38 information for spilts and weights.	10/14/2024	JP/Turner	Yes -- Prepurchased Equip. List & Shipping Splits	Closed	
119	Turner	096466	10/14/24	Please advise if the attached wood flooring product can be substituted for the current speced out wood flooring.						
120	Turner	L501	10/15/24	The curb detail calls for 6”x20” curb. Greenwich municipal standard is 5”x18” with a buzzed edge. Can you confirm the 6”x20” is correct?						
121	Turner	L202C	10/15/24	Please clarify the proposed condition within the chiller pad area on L202C. There is a callout for stone mulch as well as heavy duty concrete pavement.						
122	Turner	S210	10/15/24	2.Please provide a detail for the chiller and generator pads. The detail callout of 7/S210 doesn’t seem to be correct.						
123	Turner	Civil / Landscape Series	10/15/24	Is there supposed to be a warning track along the baseball and softball backstops? If so, please provide a detail for the warning track						
124	Turner	L601	10/15/24	Please clarify the limits of detail 3C/L601 on the ball fields as well as the limits of sod in alternate #’s 1 & 2						
125	Turner	Existing / As-Built Dwgs	10/15/24	Please provide existing building drawings to help estimate the existing building slab elevations and the conditions the sitework contractor will be left with after the demolition contractor removed the building slab and foundations						
126	Turner	Civil / Landscape Series	10/15/24	Please confirm all existing topsoil is to be stripped and exported. None is to be left onsite for reuse a.Please confirm that BP#9 does NOT own furnishing and installing any topsoil or athletic field topsoil mix.	Confirmed. Top soil shall be removed from site by the Sitework Subcontractor (BP #09). Furnishing and installing topsoil is assigned to the Landscape Bid Package (BP #41).	10/15/2024	JAC - Turner			
127	Turner	Civil Series	10/15/24	Please provide a detail for the concrete weirs under the porous asphalt						
128	Turner	Geotech Report	10/15/24	I see the boring and soil information, but I do not see a geotechnical report with engineering directives/recommendations. Please provide a complete geotechnical report.						
129	Turner	Scope of Work	10/15/24	BP #9 scope of work item #93 states that the excavation is considered to be unclassified. We will utilize any provided information to include in our bid any and all rock, unsuitable soils, etc. that can be reasonably anticipated. If we encounter soil conditions that could not have been reasonably anticipated based on the contract documents, will extra compensation be paid via change order? a.Please provide a definition of “unclassified” as it relates to all excavation onsite. Confirm that it only applies to the subgrade level and any excavation required beyond subgrade level would be paid via change order.						

BQ #	Responsible Consultant	Reference	Date	Question	Answer	Date Item Responded	Answered By (Name / Company)	Attachment (SK# or Spec Section)	Status ("Closed")	Date Closed
130	SLAM	A600	10/15/24	Can you identify the typical locations that Partition Type B is found within the building/on the drawings? For Type B Partitions - are these to be full height to underside of deck or just above ceiling ?						
131	SLAM	S211	10/15/24	As a follow up to Bidder Question #55 - For the portion of SOG that needs to be poured prior to the backfill taking place on the back side of the Retaining Wall, what is the minimum distance off the wall that the SOG needs to be poured?						
132	SLAM	Geotech Report	10/15/24	Only page 1 of the boring plan is visible. Page 2 is just a white screen. Please provide page 2 of the boring plan because the plan is cut off at the new baseball fields home plate area.						
133	TCCO	Proj. Schedule/ Logistics Plans	10/15/24	1. Phased Project for Millwork Install? How Many? When do they Start & Complete? 2. Any special delivery times or requirements? 3. Elevator/Hoist available?	1. Please reference the project schedule where it references Start Finishes. 2. No specific delivery requirements other than what is shown on the logistics plans. Each delivery will have to be coordinated/ scheduled with the TCCO super. 3. No elevator/ Hoist available- However there will be access to the second-floor level through the back of the building as it is on grade.	10/15/2024	JM-Turner		Closed	10/16/2024
134	Turner	098416	10/15/24	Does ADC1 found in Spec Section 098416 belong to bid package #22 – Acoustical ceilings?	Yes ADC1 is part of the BP#22 Ceilings package.	10/15/2024	JM-Turner		Closed	10/16/2024
135	Turner	098416	10/15/24	BP#22, Line 18 refers to Spec Section 098416 for SAC1 locations. SAC1 is found in Spec Section 098430. Please Clarify.	BP#22 Ceilings shall furnish and install all Sound absorbing ceiling panels. BP#18 Millwork will install all sound absorbing Wall panels.	10/15/2024	JM- Turner		Closed	10/16/2024
136	Turner	098416	10/15/24	Is BP #22 responsible for work shown in Spec 098416?	Spec section 098416 Fixed Sound Reflective Panels is a shard spec section between BP#22 Ceilings and BP#18 Millwork. See specific scope of work for clarifications.	10/15/2024	JM- Turner		Closed	10/16/2024
137	Turner	098416	10/15/24	Which bid package is responsible for ceiling type ADC1?	Yes ADC1 is part of the BP#22 Ceilings package.	10/15/2024	JM-Turner		Closed	10/16/2024
138	SLAM	A901C	10/15/24	Is AWP8 only to be installed on 2 walls in room #'s 1059 and 1061?						
139	SLAM	A901D	10/15/24	Finish plan on A901D calls for AWP11 in rooms 1119 & 1110 while the finish schedule calls for AWP8 in practice rooms. Which is the correct?						
140	SLAM	A901D	10/15/24	Are AWP panels in rooms 1119 and 1110 to extend floor to ceiling?						
141	SLAM	095100	10/15/24	Finish schedule on A9111 specifies USG 88983 for APC2. This tile does not have the NRC value specified in Spec Section 095100. USG 86258, however, does meet the specified NRC value. Should 86258 be used instead of the specified 88983?						
142	SLAM	098416	10/15/24	The finish schedule lists a USG Geometrix product for ADC1 while Spec Section 098416 lists a Kinetics product. Which is correct?						
143	SLAM	A911	10/15/24	Are perforations and acoustical felt required for ADC1 panels?						
144	SLAM	A910	10/15/24	The finish schedule lists a specification for AWP7. No AWP7 panels can be located on the architectural drawings. Is this specification relevant to this project?						
145	Turner	Logistics Plans	10/15/24	Regarding the debris netting on the Turner Logistics Plans - A site bidder asked what is this 12'-15' feet debris netting? Is this 4 more feet on top of the fence w/ driving range style golf protection? How high? 12 or 15?	This is additional protection on top of the 8ft construction fence for the egress door on that side of the building. It can be an extension of the fence posts, provided it works, or a separate system. Spacing that would prevent a golf ball size object should be sufficient. The height should be 15 feet.	10/15/2024	JAC - Turner		Closed	10/16/2024

BQ #	Responsible Consultant	Reference	Date	Question	Answer	Date Item Responded	Answered By (Name / Company)	Attachment (SK# or Spec Section)	Status ("Closed")	Date Closed
146	Turner	34 0000	10/16/24	Sitework Bid Package includes spec. 34 0000 – Transportation. Can you please clarify are we to trench and backfill for the electrical package or do we own furnish and install of all aspects of the traffic control signal plans?						
147	Turner	Logistics Plans & Sitework Scope	10/16/24	1. Please clarify the reference to 12-15'H debris netting requirements with 8'H driven temp fence. 2. Scope of Work 75 thru 77 - Please confirm this equipment will remain property of Sitework Subcontractor at end of project or if it is to be handed over to Turner/owner permanently? 3. Scope of work 88 - "This subcontractor shall furnish and install all rain gardens and swales..." Is landscaping package responsible for any planting? 4. Scopes of work for utility coordination references "this subcontractor shall include all fees..." Please confirm any new service or connection fees required by utility companies will be paid for by the owner. If this is not the case, please provide appropriate allowance or amounts for bidding purposes. 5. scope of work 123 and 124 - Confirm sitework is to furnish concrete bases, but all anchor bolts, conduit or other embedded items that may be required from other trades' lighting vendors, will be provided to sitework prior to precast.	1. See RFI Response #145 2. These will become property of the Town of Greenwich. 3. Landscaping Bid Package (BP #41) will be reponsible for Plantings. 4. This is will be sitework subcontractors (BP #09) responsibility to include the fees associated with utility tie-ins, tap fees and/or conection fees due to the utility company. 5. Anchor Bolts shall be funished and installed by Sitework Subcontractor (BP #09). Conduit inside concrete bases provided by Sitework Bid Pacakge shall be furnished and installed by Sitework Subcontractor. Furthurmore it is the Sitework Subcontractor's responsibility to cooridnate Anchor Bolt Size and Locations and conduit size and location with Electrical Subcontractor (BP #38 & 39). Additionaly, sitework subcontractor to include delegated design of footings, per the contract documents, including the anchor bolts.	10/16/2024	JAC-Turner		Closed	10/16/2024
148	Langan	28213	10/16/24	Specification Section 028213-1.6 notes that the contractor is to provide Testing Lab Services for asbestos abatement. Please clarify what the extent of these services would be and how this differs from the Testing Lab Services provided by Langan and the Owner.						
149	Langan	28432	10/16/24	Specification Section 028432-1.6 notes that the contractor is to provide Testing Lab Services for PCB remediation. Please clarify what the extent of these services would be and how this differs from the Testing Lab Services provided by Langan and the Owner.						
150	Turner	PSU001	1/16/24	Drawing PSU001 shows the 4" fire protetion line up to Fire Dept. Connection by DIV 21, but Turner's scope of work assigns this to sitework subcontractor. Please clarify	Sitework Subcontractor (BP #09) is responsible for this scope outside of the building up to 5 feet from the building. Itis their responsibility to be licenced to install this scope of work. Fire protection subcontrator (BP #35) will be rsponsible to bring this, and other fire protection services, from 5 feet outside the building into the building including providing the foundation penetration or sleeve / link seal.	10/16/2024	JAC- Turner		Closed	10/16/2024
151	Turner	Scope of Work	10/16/24	Sitework Scope Of Work #133, Furnish & Install Vertical Foundation Insulation Spec. Section 07 21 00; Thermal Insulation; Details 3A/A501 and 5E/A501. Please confirm that BP #14 - Waterproofing is responsible for the 3" thick rigid insulation as shown in details 3A & 5E/A501						
152	Turner	Scope of Work	10/16/24	Sitework Scope Of Work #70 states...'This contractor shall furnish, install and maintain asphalt millings, including removal for 50' around perimeter of the building. Does this mean 50 feet in width around the perimeter?? Many areas do not have 50 feet in width available.						

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153	Turner	Scope of Work	10/16/24	Sitework Scope Of Work #28 - Turner's Site Trailer, paragraph (a), refers to 'plans for layout and furniture requirements. Please provide plan for the trailer and the wood platform/stairs.						
154	SLAM	TC Series	10/17/24	TC Drawings show Solar Powered Rapid Flashing Beacons and specification 344114 page 19, mentions hardwired 100-240VAC connections but no electrical scope is shown on the contract documents for the hardwired connection. Please confirm these units are only solar/battery and no line voltage connection is required. If line voltage is required please provide the electrical information						
155	Turner	Scope of Work	10/17/24	What bid package is required to wire the rapid flashing beacon	Sitework subcontractor (BP #09) shall be reponsible for all wiring with the exception of line voltage that may be required per RFI#154's response. If line voltage power is required then pathways, conductors, termination, & testing shall be furnished and installed by the base electrician (BP #38). Trenching, backfill, etc. will be by the site contractor (BP #09).	10/16/2024	JAC- Turner		Closed	10/16/2024
156	SLAM	TC Series	10/17/24	TC Drawings show radar speed display and indicate a hardwired connection. No electrical scope is sown on the CDs. If line voltage is required for radar speed display please provide the electrical information						
157	Turner	Scope of Work	10/17/24	What bid package is required to wire the Radar Speed Display?	Sitework subcontractor (BP #09) shall be reponsible for all wiring with the exception of line voltage that may be required per RFI#156's response. If line voltage power is required then pathways, conductors, termination, & testing shall be furnished and installed by the base electrician (BP #38). Trenching, backfill, etc. will be by the site contractor (BP #09).	10/16/2024	JAC- Turner		Closed	10/16/2024

BQ#118 Attachment

GCMS SB Pre-Purchased Equipment & Shipping Splits									10/9/2024
		Section Specs				Overall Unit Specs			
Equipment Tag	Number of Sections	Max Height	Max Length	Max Width	Max Weight	Height	Length	Width	Total Weight
RTU-1	5	87"	181"	72"	3,053 lbs	86.75"	305"	72"	6,600 lbs
RTU-2	5	127"	195"	80"	4,380 lbs	126.75"	325"	80"	8,300 lbs
RTU-3	5	102"	185"	72"	3,255 lbs	101.75"	310"	72"	7,200 lbs
Curbs: RTU-1,2,3	3 (Prefabricated)								
DOA-1	6	102"	79"	72"	1,616 lbs	102"	310"	72"	8,200 lbs
DOA-2	8	109"	79"	80"	1,543 lbs	109.25"	310"	80"	9,300 lbs
DOA-3	8	110"	80"	80"	1,543 lbs	109.25"	310"	80"	9,400 lbs
DOA-4	8	110"	79"	80"	1,543 lbs	109.25"	310"	80"	9,600 lbs
DOA-5	8	102"	79"	72"	1,475 lbs	102"	315"	72"	9,000 lbs
Curb: DOA-5	1 (Prefabricated)								
HRV-1	1					61"	190"	63"	3,500 lbs
CH-1	1					92.8"	335.2"	88.3"	17,271 lbs
CH-2	1					92.8"	335.2"	88.3"	17,271 lbs
Generator	1					108"	181"	58"	8,750 lbs
ATS-1	1								
ATS-2	1								

BQ#118 Attachment

GCMS SB Pre-Purchased Equipment & Shipping Splits									10/9/2024
		Section Specs				Overall Unit Specs			
Equipment Tag	Number of Sections	Max Height	Max Length	Max Width	Max Weight	Height	Length	Width	Total Weight
MSB-1	4	90"	45"	36"	2,400 lbs	90"	156"	36"	6,815 lbs

Transformers	QTY
T2 - 15KVA	1
T3 - 30 KVA	1
T4 - 45 KVA	3
T5 - 75 KVA	2
T7 - 150KVA	1
T8 - 225 KVA	1
T9 - 300 KVA	1
Electrical Panels	**QTY**
GP1A-F	6
GDP	1
GDPC	1
GDPE	1
GP2A, C, E	3
GP-CL	1
GP-WS	1
MHDP	1
MP1A-1E	5
OSDP	1
OSDPC & OSDPE	2
OSP1A-F	6
OSP2A, 2C, 2E	3
OSKP	1
ELDP	1
LP1B-E	4
SHP	1
SLP	1
KHP	1
KP	1
ELP1B-E	4
TLCP-1	1
EVLP1	1
EVLP2	1
EVHP	1
LDP	1
Secondary Overcurrent Protection	12
Utility Meter	1

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New Central Middle School
State Project No. 057-0114 N
Greenwich, CT
<<For All Bid Packages>>
Dated: 07.08.2024
Revised: 10.16.2024

A. Documents & Policies

This Subcontractor agrees to perform all the work necessary to provide ***<<Bid Package Description>> Work*** for the ***New Central Middle School Project*** in **Greenwich Connecticut** in accordance with the following documents:

1. List of attached Contract Documents for ***New Central Middle School Project***:

   a. List of Contract Drawings and Specifications for the ***New Central Middle School Project,*** dated ***07.08.2024***.

   NOTE #1: This Subcontractor shall be responsible for all information contained in the Contract Drawings and Specifications as related to your work. If the Contract Drawings and Specifications conflict, then the greater quantity and quality shall apply.

   The Board of Education of the Town of Greenwich will be referred to as "Owner" in this document.

   b. Bid Package Breakdown for the ***New Central Middle School Project,*** dated ***09.30.2024***.

   c. Construction Schedule for the ***New Central Middle School Project,*** dated ***09.24.2024***.

   d. Phasing / Logistics Plans, for the ***New Central Middle School Project,*** dated ***07.08.2024***.

   e. Safety & Health Program & Additional Provisions for the ***New Central Middle School Project ,*** dated ***August 2024***

   f. CCIP Manual, for the ***New Central Middle School Project,*** dated ***07.08.2024***.

   g. Equipment Coordination Matrix(ces), for the ***New Central Middle School Project,*** dated ***08.13.2024***.

   h. Accelerated Payment Program Rider, Not Dated

   i. Minimum Rates and Classifications for Building Construction as issued by the Connecticut Department of Labor Wage and Workplace Standards Division for the ***New Central Middle School Project,*** dated ***09.23.2024***.

   j. Invitation to Bid for the ***New Central Middle School Project,*** dated ***09.30.2024***. (including reference documents).

   k. ***<<Bid Notice #>>*** for the ***<<Project Name>> Project,*** dated ***<<TBD>>*** (including reference documents).

   l. Bidders Question Log for the ***<<Project Name>> Project,*** dated ***<<TBD>>***

   m. Turner Utility Metering Schematic & Fuel Tracking Log

   n. Inclusive and Respectful Workplace Playbook dated **May 3, 2023**

   o. Worker Experience for the ***New Central Middle School Project,*** dated ***07.08.2024***.

2. List of referenced forms and policies that are hereby specifically made part of the Contract Documents:

   a. Turner Construction Company's Payment and Performance Bonds **(Nos. 111 and 112 – Multiple Obligee) (if Payment and Performance Bond alternate is accepted only).**

   b. Turner Construction Company's Partial Waiver of Lien and Release

   c. Turner Construction Company's Sub-Subcontractor/ Supplier Affidavit and Partial Release of Claims and Lien Waiver

   d. Turner Construction Company's General Release (final payment)

   e. Contractor Sworn Statement

   f. Turner Construction Company's Corporate Master Safety and Health Program

   g. The Turner Corporation's Substance Abuse Policy.

   h. The Turner Corporation's National Anti-Harassment Policy

i. The Turner Corporation's Equal Employment Opportunity Policy

j. State of Connecticut Public Act 89-255, License Requirements for Subcontractors.

k. Turner Construction Company's TurnerTracker Manual dated December 2023

l. Turner Construction's Code of Conduct

m. The Turner Corporation Jobsite and Office Vandalism, Graffiti and Defacement of Property Policy dated September 15, 2022

n. **Standard Form of Agreement between Owner and CM AIA A133 for the *New Central Middle School Project.***

o. General Conditions from Owner Agreement AIA A201 for the *New Central Middle School Project*

p. Form 36 Public Work Rider dated 2022

q. UBE Subcontractor Commitment Plan

These documents are available for viewing at Turner Construction Company's office located at 6 Corporate Drive, Suite 820, Shelton, CT 06484 (contact the Purchasing Dept. @ 203-712-6070).****Note**:** By signing this agreement, the Subcontractor acknowledges that he has read these referenced documents and will unconditionally abide by its terms and conditions.

3. **Diversity:** Turner Construction believes that its success comes from the value it places on diversity. To Turner, Diversity is a way of life. In an ever-changing global marketplace, diversity is good for business. It positions us well to meet the needs of our evolving customer base, and it facilitates the exchange of new perspectives and ideas. When all employees feel they can achieve their full potential, quality and productivity thrive.

Turner's environment, culture, policies, programs, and practices reflect the high value we place on diversity. We have an unwavering commitment to:

a. Promote an open and supportive work environment;
b. Value diversity in all its forms;
c. Encourage the candid expression of ideas;
d. Allow a free exchange of points of view; and
e. Support each other in the pursuit of common goals

It is the expectation of Turner, and the responsibility of every Subcontractor and Vendor with whom we work, to respect, value, and display Diversity through their daily actions on this and every project which we perform together.

Turner has and shall enforce a **Zero-Tolerance Policy** with Subcontractors, Vendors and/or workers who violate this policy and Federal, State, and Local law as it applies.

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THIS AGREEMENT INCLUDES AND ACKNOWLEDGES THE ADDITION OF THE FOLLOWING ARTICLE AS IF INSERTED IMMEDIATELY FOLLOWING THE ETHICS AND COMPLIANCE ARTICLE OF THIS AGREEMENT AS FOLLOWS:

"IT IS THE GOAL OF CONTRACTOR TO PROMOTE A WORK ENVIRONMENT AT THE PROJECT THAT IS FREE FROM HARASSMENT OF ANY KIND. CONTRACTOR HAS ZERO TOLERANCE FOR 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. SUBCONTRACTOR AGREES TO BE BOUND BY THE POLICY STATEMENT ON HARASSMENT REFERENCED IN ARTICLE XXII BELOW, AND ANY VIOLATION OR SUSPECTED VIOLATION OF SUCH POLICY BY SUBCONTRACTOR OR ANY OF ITS OFFICERS, AGENTS, SERVANTS, EMPLOYEES, SUBCONTRACTORS OR SUPPLIERS SHALL BE CONSIDERED AS SUBCONTRACTOR'S FAILURE TO PERFORM ITS OBLIGATIONS UNDER THE TERMS AND CONDITIONS OF THIS AGREEMENT. SUCH FAILURE SHALL BE CONSIDERED ADEQUATE AND JUSTIFIABLE GROUNDS FOR CONTRACTOR TO EFFECTUATE ITS RIGHTS AND REMEDIES UNDER THE PROVISIONS OF ARTICLE XI OF THIS AGREEMENT. SUBCONTRACTOR SHALL ACTIVELY PROMOTE A HARASSMENT-FREE WORK ENVIRONMENT AMONG ITS OFFICERS, AGENTS, SERVANTS, EMPLOYEES, SUBCONTRACTORS, AND SUPPLIERS."

4. **SMALL AND MINORITY OWNED BUSINESS ENTERPRISES (SBE OR MBE):** The Owner and Turner Construction support and encourage SBE and MBE participation in this project.

   Aspirational inclusion goals for this project are 25% DAS-certified Small and Minority owned business, with 25% of that specific with DAS-certified Minority (6.25%). Successful prime bidders will be expected to make every effort to provide opportunities to MBE by actively soliciting bids for portions of the package prior to submitting a bid to Turner, and state on the Form of Proposal the specific intended percentage of awards to MBE firms. Where MBE utilization is intended but the specific subcontractor is still unknown, note a "TBD" and dollar amount on the plan. The Contracting Plan will be reviewed during the subcontractor closedown meeting. If you are unable to satisfy the package goals, be prepared to discuss your good efforts and plan for Set-Aside plan approval from CHRO.

   On a monthly basis, all subcontractors will be expected to report on the payment status of their subcontractors (sub tiers). The format of the MBE reporting tool is nearly identical to the Contracting Plan and is accessed through Textura, the monthly billing website. Failure to report on a monthly basis could result in a delay of payment.

   All Subcontractors noted as requiring CHRO SBE/MBE participation on the invitation to bid must follow required measures and submit appropriate Set-Aside plans to the Commission on Human Rights and Opportunities per the State of Connecticut requirements for approval.

5. Subcontractor acknowledges that this Subcontract is based on reasonable interpretation and within the confines of the documents / information/ specifications provided. This pricing shall be full compensation to the subcontractor for the complete work of the associated trade required at the Project. Subcontractor has included any necessary elaboration, missing segments, obvious requirements, etc. that would be necessary for a functioning system at the quality level established by the Contract Documents.

6. All pricing submitted by Subcontractors and Vendors, including pricing of change orders, alternates, and unit pricing, shall include all things necessary for a complete installation of the work. This includes, but is not limited to, all labor, materials, tools, bond premiums, shop drawings, allowances for waste, equipment, shipping costs, handling, storing, hoisting, rigging, distribution, protection of materials, fringe benefits, taxes, overhead, profit, applicable insurance, etc.. Pricing of RFP's and other proposed extras must be submitted within the time period as per Form 36, Article IX.

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7. The allowable combined percentage mark-up for overhead and profit on direct costs of changes when work is performed by the Subcontractor shall be as noted in Form 36, Artcle IX.b or as governed by the General Contract. This same percentage shall be allowed for any changes performed by Sub-Subcontractors and five percent (5%) may be added by the Subcontractor to the Sub-Subcontractor's estimate. The total on all tiers shall not exceed fifteen percent (15%) in the aggregate. If this subcontractor subcontracts work to a subsidiary or parent company of itself, the total markup shall not exceed ten percent (10%).

8. **Subcontractor's Partial Waiver of Lien, Sub-Subcontractor/ Supplier Affidavit and Partial Release of Claims and Lien Waiver, and Contractors Sworn Statement** for the Project is hereby made part of this Contract Agreement. Refer to Progress Payment Procedures in Section C below.

9. The following are hourly wage rates for all tradesmen associated with this bid package for performing extra work on a time and material basis. These rates are fully loaded (including benefits, taxes (All Sales Taxes, Labor and Material as applicable for this project and type of work), applicable insurance, overhead and profit, bond costs (if Subcontractor has provided Surety Bonds), small tools, travel, parking, and any other costs associated with labor, etc.) and are in accordance with the prevailing wages of the trade having jurisdiction in areas where the work is performed. The wage rates that are agreed upon shall be valid for the life of the project unless union contract or union contract renewal indicates periodic adjustment OR unless annual wage rate adjustment is issued by the CT Department of Labor. ***NOTE: Further, no mark-up shall be allowed on the premium time portion of the wage rate.*** These wage rates including detail and supporting documentation shall be made available within 5 days of verbal award and shall be broken down sufficiently representing all of the items noted above. ***All rates are subject to thorough analysis and subject to reduction if deemed inaccurate by Turner Construction Company and/or The Owner. THESE RATES ARE GOOD FOR BOTH ADDS AND DEDUCTS.***

Foremen	Straight Time	Time & One Half	Double Time
_____	$_____	$_____	$_____
_____	$_____	$_____	$_____

Journeymen	Straight Time	Time & One Half	Double Time
_____	$_____	$_____	$_____
_____	$_____	$_____	$_____

Apprentice	Straight Time	Time & One Half	Double Time
_____	$_____	$_____	$_____
_____	$_____	$_____	$_____

See from of Proposal to provide rates to be included per above:

10. Refer to Subcontract Article XV, Labor to be Employed, 2nd paragraph which refers to "Davis-Bacon Act or the Walsh-Healy Act, or other similar laws, statutes or requirements at a state or local level" and the requirement to "submit to Turner, as a condition for payment, certified payrolls in the form prescribed by any such laws, regulations or requirements". In compliance with this requirement, this project requires that this Subcontractor shall pay wages to workers in strict accordance with the laws of the State of Connecticut. This Subcontractor shall electronically submit payroll records, certified payroll, and related or required payroll documentation through www.LCPTracker.net hereinafter referred to as "certified payroll compliance system", within 14 days after the end of each payroll period. Failure to submit this information shall constitute a breach of this requirement. This requirement shall apply to [and Subcontractor shall be obligated to ensure that] all lower tier Subcontractors comply with these requirements. Access to the certified payroll compliance system and training will be facilitated by Turner Construction Company. Cost of access to the certified payroll compliance system shall be borne by Turner. Up to date payroll submissions are necessary to maintain monthly progress payments.

11. The successful bidder is responsible for procuring all documents required for construction purposes once awarded the contract. Neither Turner Construction Company nor The Owner will be furnishing construction documents to the successful bidder.

12. ~~All bidders performing or subcontracting carpentry work (including resilient flooring and carpet) shall be union contractors and any work subcontracted shall utilize union labor. The successful bidder will furnish evidence of such.~~

To the extent required under section 31-53 of the Connecticut General Statutes, the wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herin contracted to be done and the amount of payment or contribution paid or payable on behalf of each person to any employee welfare fund, as defined in subsection (i) of section 31-53 of the General Statutes of Connecticut shall be at a rate equal to the rate customary or prevailing for same work in the same trade or occupation in the town in which such public works project is being constructed.

Contractor may engage in activities in the field or otherwise to verify the information provided by Subcontractor or any lower-tier subcontractor with regard to the payment of prevailing wages. Such activities may include, but are not limited to, interviews of workers to confirm their hourly compensation and trade classification and review of documentation (e.g., copies of pay stubs and/or payroll records) establishing that prevailing wages properly were paid. Subcontractor agrees to cooperate and assist Contractor is performing these verification activities including, but not limited to, making workers available for interview and providing documentation requested by Contractor. Subcontractor shall require its lower-tier subcontractors to similarly cooperate and assist Contractor

B. Taxes, Bonds, Insurance, Etc.

1. If Turner Construction Company requires this Contractor to provide Payment and Performance Bonds, this Contractor shall provide Payment & Performance Bonds at the premium indicated by the Add Alternate on the Bid Form and the following shall apply:

   a) **100% Payment and Performance Bonds** are being furnished as part of this Agreement (Surety must be listed on the current issue of US Treasury Federal Register). Refer to Form 36, Article XV for Rider "A" requirements.

   b) The successful Subcontractor must be able to provide the Payment and Performance bonds on the Turner Bond Forms noted above.

   c). Bond costs shall be included in all Change Order Pricing however they shall be reconciled at the end of the project as substantiated by invoices from the Surety. Variations between cost charged for Bonds and actual invoices from Surety will result in downward adjustment if overcharged.

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2. **Connecticut State Sales and Use Taxes are INCLUDED in this Subcontract Agreement as per the Project Status Noted: *(TAX EXEMPT STATUS)*** and shall be paid by this subcontractor in accordance with the Laws and Statutes of the State of Connecticut for a project with this Tax Status. Further, all applications for payment shall indicate on the G702 Application for Payment Form that "Connecticut State Sales and Use Tax is included".

3. **Non-Resident Subcontractor Requirements:**

   In accordance with State of Connecticut Department of Revenue Services SN 2012 (2) Special Notice 2011, Non-Resident Subcontractors must either provide a current State of Connecticut Department of Revenue Services "Nonresident Contractor Notice of Verified Status"

   OR

   In accordance with SN 2012(2), Turner must withhold 5% of the amount due to unverified subcontractor (e.g. 5% in addition to retainage) until the subcontractor obtains and furnishes Form AU-968 Certificate of Compliance from the Department of Revenue Services (DRS) at which time Turner will release monies to the extent approved.

   Further, when all work is completed under the contract and if unverified subcontractor has not submitted Form AU-967 (Request for Certificate of Compliance) within 90-days of the completion date, then Turner must remit the amount held back to the DRS on Form OS-114 on the first return due after the 90 day period following the completion of the Contract. In this event, Subcontractor explicitly agrees herein to execute a deduct Change Order for the amount held back.

Insurance:

4. **Additional Insured:** Turner Construction Company, The Turner Corporation, Owner, Town of Greenwich, the Greenwich Board of Education, the Central Middle School Building Committee, State of Connecticut, the Owner's Representative (Construction Solutions Group, LLC & Jones Lang LaSalle) and their respective, officers, agents, officials, employees, volunteers, boards and commissions shall be named as Additional Insured on all insurances required with exception of Workers Compensation and Professional Liability Coverages.

5. Additional insured coverage shall be provided on form CG 20 10 (11/85), or on forms providing equivalent coverage. In lieu of the aforementioned form, Turner will accept a combination of CG 20 10 (Ongoing Operations) and CG 20 37 (Products-Completed Operations). Coverage forms shall be submitted to Turner for review and approval.

6. **FOR BID PACKAGES EXCLUDED FROM CCIP (Demo & Abatement to be excluded from CCIP. All other subcontractors, only if alternate for traditional insurance is exercised)** Minimum insurance limits per occurrence of **$5,000,000** for General Liability, Statutory Workers Compensation, **$2,000,000** for Employers Liability, **$2,000,000** disease limit, **$2,000,000** disease-policy limit and **$2,000,000** for Automobile Liability – refer to Form 166 for additional requirements. Any subcontractor performing Structural Demolition to include $20,000,000 for General Liability limit.

7. **Pollution Liability Insurance: Subcontractor (for disposal of contaminated material)** shall provide a minimum insurance limit of **$5,000,000 /Occurrence and $10,000,000 Aggregate** for Pollution Liability (non-project specific) – refer to Form 36 for additional requirements. This subcontractor shall provide endorsements for contingent transportation and contingent non-owned disposal site.

   a. Lead Containing Material - **$5,000,000 /Occurrence and $10,000,000 Aggregate**

   b. Contaminated Materials- **$5,000,000 /Occurrence and $10,000,000 Aggregate**

c. For all lead work performed by this Subcontractor, this Subcontractor shall be responsible to place all lead waste in a separate container provided by this Subcontractor, and remove this waste to a dumpster provided by this subcontractor and properly dispose of this material. This Subcontractor shall ensure that the hauler has the appropriate pollution liability insurance in accordance with the boilerplate additional provisions.

8. **CCIP FOR ALL OTHER BID PACKAGES**: In lieu of providing Commercial General Liability Insurance, Workers Compensation and Employer's Liability Insurance, **for on-site work activities**, directly through insurance carriers of the Subcontractors choosing, this Subcontractor shall enroll in Turner Construction Company's Contractor Controlled Insurance Program (CCIP). This Subcontractor shall provide all required information, including but not limited to, the Enrollment Application for the CCIP provided within the CCIP Insurance Manual and other forms as required in a timely manner as required. Failure to produce information for itself and the work of its secondary tier contractors will result in the lack of coverage in accordance with the insurance manual. Turner Construction Company pays the cost of the coverage provided under the CCIP directly, and **the related insurance premiums are NOT included in the Subcontract Price** in accordance with Article XXIV of Turner Construction Company's Standard Subcontract Agreement (Form 36S). ***Refer to the CCIP Insurance Manual for more complete coverage information, policy exclusions and additional Subcontractor Responsibilities.***

In addition to the insurance coverage provided under the CCIP, the following shall remain required to be provided by Subcontractor:

a. **Automobile Insurance:** A Minimum insurance limit per occurrence of **$2,000,000** for Automobile Liability insurance – refer to Form 36 for additional requirements.

Minimum insurance limits per occurrence of **$5,000,000** for General Liability and Statutory Coverage for Workers Compensation for **all off site work activities** – refer to Form 36 for additional requirements.

9. **Professional Liability Insurance:** For bid packages requiring stamped and certified design drawings, the Professional Engineer hired by this Subcontractor shall assume professional responsibility for any design work required in this Subcontract including but not limited Structural and Life Safety design components.

a. This Subcontractor will include PRACTICE (OFFICE) PROFESSIONAL LIABILITY INSURANCE (E&0) for protection from claims arising out of the performance of any design or engineering services performed or furnished in connection with the Work caused by any negligent act error or omission for which Provider and/or the Provider's Architect(s) and/or Engineer(s) may become legally liable. If this subcontractor intends to have a lower tier subcontractor provide this insurance, this must be indicated with bid and prior to contract issuance and requires GM approval. Such professional liability insurance shall provide for coverage as follows:

b. Limit of liability - **$3,000,000**

c. Deductible Amount - Not more than **$50,000** (payable by the Subcontractor)

d. Subcontractor agrees that he will maintain this Professional Liability coverage for **5 years** after substantial completion of the Project, will notify Turner of any changes in the policy in subsequent years and will ensure that the policy will not provide less limits or coverage than the current policy."

e. Sixty (60) days prior written notice to Turner of cancellation of such insurance or any material change with respect thereof.

f. Such professional liability insurance shall be in a form and from a company acceptable to Turner and policy shall be available for review by Turner as requested.

10. **Builders Risk Insurance Deductible: Turner Construction shall procure and maintain Property Insurance (Builders Risk). In the event that this Subcontractor is determined to be responsible for losses covered under this insurance, this Subcontractor shall bear and be responsible for the $10,000 deductible of each such occurrence.**

11. This Subcontractor hereby acknowledges that the Contract between Turner and the Owner provides that Turner shall become obligated to pay certain liquidated damages to the Owner in the event the Project is not completed in accordance with the time requirements set forth therein. Subcontractor hereby agrees, in addition to its other duties and obligations under this Agreement and not in limitation thereof, to indemnify and save harmless Turner Construction Company from any and all such penalties, including any loss, cost, expenses and/or legal fees and disbursements, incurred in connection therewith which Turner may become obligated to pay to the Owner by reason of, resulting from or otherwise caused by Subcontractor's failure to perform and prosecute its work in accordance with the terms of this Agreement and the Contract Documents.

Liquidated Damages shall be shall be $6,000 / Day for each day that Substantial Completion of the Work is delayed beyond Substantial Completion.

Subcontractor's Licenses:

12. This Subcontractor shall provide a **State of Connecticut Subcontractor's License** in accordance with The State of Connecticut Public Act 89-255 and Connecticut General Statutes Chapter 393c, Section 20-341gg. Furthermore, substantiating evidence must be forwarded to Turner Construction Company for new and renewal licensing, in the form of one of the following:

    a.) Copy of the actual Subcontractor's license.

    b.) Verification from The State of Connecticut that the license application has been received and is being processed (a copy of the actual license when received must be forwarded to Turner Construction Company).

    c.) Verification from the State of Connecticut stating that a Subcontractor's License is not required for your firm.

GENERAL NOTE: No final payment or reduction in reserve or will be entertained until Turner Construction Company receives and verifies one of the above documents.

C. Scope of Work

Without the intent of limiting the Scope of Work to be performed by the Subcontractor, included is the furnishing and installing of the ***<<Bid Package Name>> Work*** in accordance with the contract documents and as further enumerated herein:

1. Includes performing all the ***<<Bid Package Name>> Work*** in accordance with the Contract Documents and including but not limited to the following Specifications:

Division 0 – Bidding and Contract Requirements
Division 1 – General Requirements

See Section C.1 Trade Specific Scope of Work for Specifications List as per the Bid Package Breakdown

General Trade Requirements

2. This subcontractor has examined the Drawings and Specifications and any modifications necessary to conform to Code and/or good practice will be included at no additional cost.

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3. This subcontractor represents that they are familiar with and have expertise in the performance of this work. Further, Subcontractor is cognizant of, and agrees to, the project requirement for premium quality consistent with a first class facility in accordance with the best practice of the trade.

4. Considering the Subcontractor's skills and knowledge of their specialty, it shall be their responsibility upon discovery to immediately notify Turner, in writing, of errors, omissions, discrepancies and non-compliance with applicable codes and regulations within the documents, or any work which will not fit or properly function if installed as indicated in the Contract Documents.

5. Each Subcontractor understands that Quality Control and Quality Assurance is a specific commitment and attitude, which is required during the implementation of the Work. The focus required to establish a first-class quality level by providing skilled supervision and by monitoring daily production quality are expected to be carried out during the execution of this Contract. With this commitment in mind, this Subcontractor shall cooperate and participate in the Project Specific Quality Program developed for this Project by Turner Construction's Project Team. This includes, but is not limited to the following:

   (a) At a minimum of 4-weeks prior to the start of Work, this Subcontractor shall furnish their own Subcontractor Project Specific Quality Program which shall be tailored specifically to the performance of Work on this project and include documented staff responsibility. This Subcontractor shall review this Program with Turner's Project Team and make any necessary adjustments prior to approval by Turner Construction. Turner reserves the right to approve or reject any Subcontractor Project Specific Quality Program that is not project specific and/or does not include sufficient detail to maintain a first-class quality level.

   (b) This Subcontractor shall be responsible to attend, cooperate and participate in Pre-installation Meetings for Work items or Systems, also termed Definable Features of Work (DFOW), as determined by Turner Construction.

   (c) This Subcontractor shall be responsible to coordinate and schedule First-Delivery Reviews with Turner.

   (d) This Subcontractor shall include all mockups required by the Contract Documents and schedule / coordinate Mockup Reviews for the same. In addition, this Subcontractor shall include in-place mockups for DFOW's as determined by Turner Construction, including cooperation and coordination with other trades. This Subcontractor is responsible to schedule / coordinate First-Installation Reviews for the same.

   (e) Non-Conformance and Deficiency Notifications will be issued throughout the performance of Work on this Project by Turner Construction, The Design Team, The Owner and their Consultants. This Subcontractor shall take immediate action and close all non-conformance items within 2-workdays following the date of notification. This Subcontractor shall coordinate and schedule Follow-up Inspections with Turner Construction prior to commencement of subsequent Work which may be affected by or will conceal such Work. In the case of repeat Work, this Subcontractor shall not proceed with such work until the Follow-up Inspection confirms that the non-conformance or deficiency has been corrected.

6. Each Subcontractor is expected to be experienced and familiar with the requirements and conditions of construction of similar buildings. One of these conditions is the necessary performance of "out of sequence" work. This terminology shall include "come-back", including but not necessarily limited to work that may be necessary for dirt chutes, plants, temporary wire and piping, protection, etc. "Sequence" work shall include phasing of the construction cycle to accommodate the installation of the work of all Subcontractors in a logical and orderly fashion, including all necessary temporary block outs, connections, framing, and supports as required for the work of others.

7. Subcontractor shall maintain a full-time superintendent at the jobsite during any time in which his employees or Subcontractors are involved on this project. This superintendent will be responsible to attend all coordination meetings as scheduled by the Construction Manager's Project Manager and have the authority to make decisions. This superintendent shall furthermore be equipped with a cellular phone for communication with Turner and other trades. In addition this superintendent shall maintain a full set of up to date drawings and specifications on site at all times.

8. This Subcontractor shall attend regularly scheduled job meetings. This Subcontractor will properly coordinate their work with other trades and will resolve coordination issues as required to ensure the completion of work in accordance with the Project Schedule. The work of Subcontractor shall be performed in a manner that does not impede or delay another Subcontractor in the performance of his work.
9. A principal of this Subcontractor shall be required to attend a monthly "Principal's Meeting" conducted by Turner Construction Company at the project site. This meeting is intended to cover current project-wide issues including scheduling and logistics.

Submittal Requirements

10. This project will utilize Procore for the submittal and RFI process. Subcontractors will be provided access and reasonable guidance for use of this site. All product data shall be submitted electronically. Hard copy shop drawings and product samples as required in the contract documents shall be submitted to the TCCo field office.
11. Key Personnel:
    a.) Due from Subcontractor: Prior to the start of Subcontractor's start of Work
    b.) Includes: list of key personnel with addresses and telephone numbers for emergency situations
12. Schedule of Submittals – Shop Drawings, Products Data, Samples, Etc:
    a.) Due from Subcontractor: Within 10 working days of verbal award
    b.) Includes: complete listing of all shop drawings, samples, manufacturer's data, certifications, warranties/guarantees, O & M Manuals, etc., required by the specifications to be submitted for review, along with the subcontractor's submission date for each item listed consistent with the Construction Schedule.
        (i) Timing of Submittals: Submittals shall be provided allowing for sufficient time for review, approval, and delivery of materials in time as scheduled for this project, however, it remains the Subcontractors responsibility to ensure delivery of all material to the Jobsite to meet the schedule. The Architect will review these submittals on a priority basis. Subcontractors will be responsible for any delays to other Subcontractors as a result of delayed delivery of materials.
        (ii) No substitutions or variations from the specified manufacturers will be allowed without written review and approval of both the Architect and Turner. Requests for substitutions must be submitted in writing as defined within the Division 1 specifications.
        (iii) Shop drawings shall show all dimensions and clearances in coordination with other trades. All attachments must be designed and detailed on said shop drawings.
        (iv) Mockups as required by any or all of the specification sections are included in this Agreement.
13. Schedule of Values:
    a.) Due from Subcontractor: 30 working days prior to first application for payment
    b.) Includes: Draft AIA G703 (or equal) broken down with individual line items for labor and material for each major component of the work, including values for Daily Cleaning and Safety and Protection, mobilization, submittals, punch list and closeout. This document shall be subject to review and approval by Turner.
14. Equipment Commissioning / Owner Training Required:
    a.) Due from Subcontractor: Within 20 working days of verbal award where applicable. Source Blue providing Commissioning and Owner Training on equipment they furnished.
    b.) Includes: A schedule of all equipment requiring commissioning and Owner training including at minimum equipment name (tag #), location, area served
15. Man-Loaded Schedule:

a.) Due from Subcontractor: Within 10 working days of verbal award

b.) Includes: Construction schedule for all of Subcontractor's activities that fits within the time frame allotted by the Construction Schedule. This schedule shall be updated monthly, submitted with the application of payment , shall reflect the actual progress achieved to date and shall incorporate any recovery program to maintain the original submitted schedule. The Subcontractor is responsible to meet the requirements of the overall Construction Schedule included in this Subcontract. This includes providing the appropriate resources, equipment, and resources.

16. List of proposed or anticipated Lower Tier Contractors & Vendors:

a.) Due from Subcontractor: 30 working days prior to first application for payment

b.) Includes: List of Proposed lower tier Contractors and Vendors.

17. Requests for Information shall be made on standard forms made available by Turner.

18. Daily Construction Reports, and Daily Safety Checklists

a.) Due from Subcontractor: by 9:30 a.m. of each workday for all work completed on the previous day. The Daily Construction Reports do not constitute notification to Turner of delays or provide any other notifications to Turner other than that represented below. DCRs shall be submitted by the Subcontractor Superintendent / Foreman utilizing the Procore Application Technology on a Smart Phone or Tablet for the Project.

b.) Includes:
(i) The number of employees at the site, broken down by trade
(ii) Indicate for each crew the classifications (i.e., foremen, journeymen, apprentices, etc.)
(iii) Indicate a count of minority and female employees
(iv) Include a description of the type of work being performed and the location
(v) Include a count of **TOWN/CITY** residents and **TOWN/CITY** resident apprentices
(vi) Failure to maintain these records on a daily basis may result in the delay in monthly requisition payments on a day for day basis.

19. All foreman must have electronic access to Procore site in the field via Ipad, Smart Phone, etc.

Schedule and Progress

20. The Subcontractor shall perform all out-of-sequence work, phasing of work and protection of work as required by the Logistics Plans and to maintain the schedule at no additional cost to the Owner or Turner Construction Company. No additional compensation will be considered for comeback work. Each subcontractor understands that the schedule drives the project and will cooperate with Turner in meeting the schedule.

21. All shutdowns and tie-ins for active MEP, Security and Data systems must be performed on off hours. Premium time is included for the performance of this Work. All off-hours work must be scheduled 24 hours in advance with Turner Construction Company.

22. Unless noted to the contrary within individual Additional Provisions / Scopes of Work (i.e. refer to Sections C.1 or above), Working hours for this Project are 7:00 a.m. to 3:30 p.m. All trades will work common eight-hour (8) days Monday through Friday. There will be a coffee break in the morning only at the assigned time of 9:00 a.m. All trades will celebrate the agreed upon Holidays specified. Any Subcontractor working beyond the normal hours of 7:00 a.m. to 3:30 p.m. must bear any added costs for providing temporary services such as electricity, and heat, and any personnel such as Shop Stewards, Turner Staff, or inspectors. The Subcontractor shall notify Turner 48 hours prior to their intention to work overtime to allow sufficient time for arrangement of any support services and/or personnel.

a.) There will be no work on Saturdays or Sundays without direction and approval by Turner & the Owner. If work is performed on weekends, this subcontractor shall perform all work in accordance with the appropriate town ordinances.

b.) all perform all work in accordance with the appropriate town ordinances.

Additional Provisions/Scope of Work

New Central Middle School
State Project No. 057-0114 N
Greenwich, CT
<<For All Bid Packages>>
Dated: 07.08.2024
Revised: 10.16.2024

Operations & Site Logistics

23. Permits: The General building permit will be obtained and paid for by others. The MEP subcontractors and any other subcontractors requiring a special permit will be required to pull their permits against the general building permit. This Subcontractor is required to meet and walk with local code officials at every inspection regardless if Turner is present.
24. This Subcontractor shall include all line & grade work for the performance of their work. Baseline survey only will be provided by Turner Construction. All other survey work required to perform this subcontractors work shall be provided under this contract. The layout within the building must be coordinated with all contractors onsite.
25. The Subcontractor shall locate and mark the exact locations of the utilities or during the work. This Subcontractor shall immediately repair or replace any utilities damaged by their work and restore service as promptly as possible at this Subcontractor's expense, including but not limited to Owner facility workers, utility companies, Town officials and resources. This subcontractor shall, at the time of installation, update their record set of documents and provide as-built information to Turner Construction. This is to be done as work is performed and evidence of such may, at Turner's discretion, be a requirement for progress payments.
26. Include all costs for erection aids, scaffolding, chain hoists, bracing, shoring, guy cables, falsework, and hoisting necessary to complete the work under this contract as well as all engineering, approvals, permits, and inspections for the same. This shall include providing shoring/re-shoring drawings stamped by a professional engineer licensed in the **State of Connecticut**.
    a.) This Subcontractor shall comply with the requirements for the inspection and certification of lifting devices and include all costs for them in the lump sum base bid as required by the Contract Documents, and the **State of Connecticut** and local authorities.
27. Furnish and install all sleeves, inserts, hangers, supporting devices, equipment dunnage beyond that shown on the Contract Drawings as required in connection with this Subcontractor's work. Submit shop drawings for review by the Structural Engineer for any additional support/framing. All exterior metal supports must be galvanized.
28. Each Subcontractor shall be responsible for all cutting, patching and coring which may be required in connection with the installation of their work unless otherwise noted in the Subcontract Agreement. This will include repair of insulation or spray on fireproofing damaged during this work.
29. This Subcontractor shall protect all of the equipment furnished or installed by this Subcontractor from the elements, damage, dust, non-use, etc. until the Owner accepts it in writing.

Clean-up

30. This subcontractor shall abide by Turner Construction's safety policy of "Nothing hits the Ground".as defined more clearly in the Turner Construction Company's Master Safety and Health Program and as referenced in the Safety Additional Provisions. This Subcontractor shall perform all necessary cleanup of all rubbish, debris, excess materials; etc. associated with this Subcontractor's work on a daily basis to a dumpster to be provided by Turner (unless noted to the contrary below). This Subcontractor shall perform all necessary clean-up associated with or resulting from their work to maintain a clean and acceptable condition as determined by Turner at all times. All work areas are to be broom swept on a daily basis. Failure to keep a clean work area may result in a project "shut down" requiring all Subcontractors to stop work and clean. All costs associated with the "shut down" will be borne by the Subcontractors. The Subcontractors will be required to make up any lost time associated with a "shut down".
    (a) The following Bid Packages shall provide their own dumpsters: ***Demolition & Abatement, Sitework, Concrete, Masonry, Roofing, Concrete Flatwork and Landscaping.***
    (b) Dumpsters / Waste Removal Requirements: For all Subcontractors providing Dumpsters or Waste Removal under their Scope of Work, the following shall apply:

This Subcontractor will make every effort possible to ensure that their waste is properly sorted and disposed of to divert as much waste as possible from disposal in a land fill. This Subcontractor will track this recycling effort using the TurnerTracker System established by Turner Construction Company. Each dumpster ticket is to be logged into this system and its recycled content reported as a means of tracking the total percentage of construction and demolition debris diverted from landfills. Refer to the Turner Construction Company TurnerTracker User Manual dated December 2023 included within the Project Manual and included as a reference document to this agreement. No payment will be authorized without On-Line Waste Reporting compliance.

31. **If any general debris is left behind by the trades, such as soda cans, juice bottles, paper products, banding material, snippets of wire, etc., Turner reserves the right to proportionately backcharge every Subcontractor on the site for this cleaning. In addition, eating in the building will be restricted. This will be a non-negotiable item.**
32. This Subcontractor is responsible to cleaning the tires of this subcontractor's vehicles and equipment exiting the site to avoid tracking mud, dust, etc. from the site and into public streets.

Site Logistics/Temporary Facilities

33. Provide traffic control for your work, including policemen, flagmen, barricades, signage, etc. as required by the City and/or The **State of Connecticut**.
34. This Subcontractor is to coordinate all requirements for testing and inspection in accordance with the specifications. The Owner will contract with the Testing and Inspection Company, but it is this Subcontractors responsibility to coordinate, schedule, provide access, and accommodate all testing and inspections as required for their work. This subcontractor shall include testing accessories as may be required, i.e. a cylinder curing box. Any testing or inspections by the Town, Municipal, or State Authorities will be the responsibility of this Subcontractor to coordinate.
35. Access to and use of the site is restricted in terms of space. See Site Logistics Plan for staging, parking, & loading areas. Onsite parking **IS NOT** permitted for contractors with the exception of 1 vehicle per Trade bid package can park on site. All other contractor Parking area will be provided at a location within 3 miles of the project site (Final location tbd), each contractor shall be responsible for shuttling of their employees to and from the site location from parking area. There will be approximate 40 spaces for worker parking available at the Baptist Church on Indian Rock Lane available on a fist come, first serve bases during the course of the project. Workers are encouraged to carpool to this location due to the limited number of spaces.
36. Where material is specified to be furnished by others, it shall be understood that such materials are to be furnished and delivered F.O.B. Jobsite. The receiving, unloading, inventory, handling and storage of materials furnished by others, including security for such stored materials, is the responsibility and obligation of the Subcontractor to whom the materials are delivered.
37. "Substantial Completion" shall be defined as when the Owner accepts the space for the use intended as further defined within the General Contract. All required warranties and guarantees are to commence at this time. The Owner reserves the right to accept individual pieces of equipment or systems early. In these individual cases, the warranty/guarantee shall begin upon written acceptance by the Owner.
38. Office trailers will not be allowed on site without specific permission granted by the Turner Superintendent.
    a.) If any temporary facilities are permitted by the Turner Superintendent, they are to be constructed utilizing fire-resistant materials. Each of these must be equipped with an ABC type fire extinguisher and shall conform to applicable codes. Subcontractors may be required to relocate their trailers or shanties during the progress of the job at the Subcontractors expense. All Power and Telephone hook-up costs and usage fees will be the responsibility of this Subcontractor.

Additional Provisions/Scope of Work

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39. In support of Turner's safety initiative of "Nothing Hits the Ground", material delivery shall follow the premise of "Just in Time" delivery. The storage of materials and equipment anywhere around or within the Jobsite shall be permitted only as approved in advance by the Turner Superintendant AND shall include only materials that will be installed within a 72 Hour time frame from the date of delivery unless approved by the Turner Superintendent in writing prior to delivery. If material and/or equipment are stored in a manner, which obstructs the progress of any portion of the work without Turner's approval, the Subcontractor shall remove or relocate as directed by Turner immediately upon notification and without reimbursement of cost.

40. Temporary Power- will be provided as specified by the Electrical Subcontractor. Trade Subcontractors are responsible for hookups, extensions and removal of their equipment.

    a.) The Electrical Contractor shall provide temporary power and lighting within the work area during each phase of the project. Temporary lighting shall be provided in all areas in which work is being performed in order to adequately illuminate the work area. Trade Subcontractors are responsible for any task lighting required for their work.

    b.) actors are responsible for any task lighting required for their work.

41. Water - will be provided by the Plumbing Subcontractor as specified for reasonable construction purposes. Hoses, extensions and damage resulting from careless use will be each Trade Subcontractors responsibility.

42. Toilets – temporary toilets will be provided and maintained by the Sitework Subcontractor for the use of all workers.

43. Fire Protection - will be the responsibility of everyone on site. Adequate numbers of portable 20 lb ABC type extinguishers will be located within the work areas by Turner. Any Subcontractor performing cutting, grinding, burning, welding, or other heat, spark, or flame generating type of work will be required to submit a hot work permit with Turner Construction. A fire watch must be performed during the activity and for a minimum of one hour after completion. The subcontractor must have their own 20 lb Fire Extinguisher during hot work and they must be certified every year by a 3rd party and inspected monthly by a competent person by initialing the certification tag.

44. Drinking Water - Each Subcontractor will be responsible for all drinking water for their own forces, including containers, ice, and cups.

Stormwater Compliance –

45. Turner Construction Company ("Turner") is committed to achieving and maintaining full compliance with the federal Clean Water Act and applicable state statutes providing for the implementation of the National Pollutant Discharge Elimination System ("NPDES") related to the discharge of stormwater from construction activities. To that end, Turner has established and shall implement the following mandatory Construction Stormwater Compliance Program at all projects or portions of a project on which Turner is a party required by applicable federal or State law (1) to obtain a construction stormwater NPDES permit in its own name or (2) to assume responsibility for compliance with a construction stormwater NPDES permit obtained by another party (hereinafter, "Sites").

46. Specific Stormwater training requirements for Subcontractors engaged in earth moving/disturbing activities (excavation, grading, landscaping, paving, on site batch plant) or those responsible for installing or maintaining BMP's.

47. Requirement for subcontractor attendance at a project specific Stormwater Management orientation held in conjunction with a preconstruction meeting.

48. All subcontractors working on the site will be required to attend the Turner Stormwater Subcontractor Orientation which will be held in conjunction with the required Preconstruction Meeting and led by the Site SCC.

    a) Each subcontractor working on the site is required to have one subcontractor superintendent or field supervisor attend this orientation.

    b) Only those Subcontractors involved in earth moving/disturbing activities (excavation, grading, landscaping, paving, on site batch plant) or those responsible for installing or maintaining BMP's will be required to take the online Turner Stormwater Subcontractor Short Course Intro into Erosion and Sediment Control prior to attending the

preconstruction meeting. The person or persons taking this online course must have a regular presence on the project.

Progress Payments

49. Applications for Payment and all supporting documents (including but not limited to lien waivers, sworn statements, and the like) for Subcontractor and its sub-subcontractors and suppliers, shall be in electronic format and shall be submitted to Turner using the Textura® Construction Payment Management (CPM) system. Subcontractor shall be responsible for the fees and costs owed associated with Subcontractor's use of the Textura CPM payment management system and shall enter into an agreement with Textura® directly and provide evidence of this agreement to Turner. Subcontractor shall include a similar provision in its sub-subcontracts and purchase orders. Fees to Subcontractors are calculated as 0.22% (22 basis points) of contract value, with a maximum fee of $5,000. Fees to Subcontractors' sub-subcontractors and suppliers are a fixed fee of $100 per sub-subcontractor or supplier contract. Subcontractor is directed to Subcontractor's Procedure Manual, Part IV, for Accounting – Payment Procedures and Textura® procedures.
50. The attached Accelerated Payment Program Rider [State] amends and supplements your Agreement with Turner and provides you the opportunity to enroll in the Program through Textura CPM and receive accelerated payments from Turner on your invoices. Formal enrollment into the Program can then be accomplished via the Textura CPM system. Additional information and Program benefits are included in the attached Turner Accelerated Payment Program summary. You may be contacted by a representative from Turner or Textura who can provide additional information on the Program and answer questions you may have or you may call Textura at 1-866-TEXTURA (839-8872) with any questions.
51. All invoices and requisitions for payment shall be submitted on AIA Document G-702 and G-703 or such other forms as may be required by the Owner. All forms must include a breakdown by area for material and labor. Turner shall approve this breakdown and format prior to submittal of the first application for payment (refer to Submittal requirements above).
    a.) With the second Application for Payment, and with each application thereafter, this Subcontractor shall provide along with the Application for payment a **Subcontractor's Partial Waiver of Lien, Contractors Sworn Statement, and Sub-Subcontractor/ Supplier Affidavit and Partial Release of Claims and Lien Waiver (for each sub-subcontractor or vendor / supplier listed on the Contractors Sworn Statement)** whereby this Subcontractor and its Subcontractors, Laborers, Material-men and Suppliers do hereby expressly waive, release and relinquish all rights to file or maintain such liens and claims and agrees further the right to file or maintain such liens and claims shall apply as well to work, labor and services performed and materials, supplies, equipment, applicable taxes and other items furnished under any change order or supplemental agreement for extra or additional work in connection with the project as the original work covered by this agreement. Waivers shall be for work paid for from the previous Payment Applications beginning with the second Application and shall be on the job specific forms provided by Turner Construction Company. ***Note: Failure to provide all documents will delay the issuance of progress payments.***
52. All applications for payment drafts are required to be submitted to the Turner Project Superintendent for initial review by the **20th of the month**. This Turner review will occur within one week of receipt of application. The revised/corrected application is due for formal submission no more than 2 business days after approval. . Note: This Subcontractor will project their billings through the entire month.
53. Should this Subcontractor fail to submit their formal corrected version of their application for payment as stated above, they will miss the billing cycle and may not bill until the following billing cycle.

Stored Materials

54. If authorized by Turner Construction Company and the Owner, it is agreed that progress payments may be made for materials stored in a secure off-site location (less retention as required by contract) based upon TCCo's receipt of the documentation required by Turner's Procurement Department including but not limited to: Bill of Sale, Schedule A, Consent of Surety (if applicable), Insurance Certificate, Loss Payable Endorsement, Lease Agreement, and UCC-1.

    a. It shall be the responsibility of this Subcontractor to properly mark/identify all materials being stored with Project Name or similar so they may be inspected/quantified in an expeditious manner by all parties. This Subcontractor must submit all documentation referenced above prior to this inspection being scheduled, and this Subcontractor shall reimburse Turner for all travel expenses associated with the required inspections.

    b. Any subcontractor receiving and storing pre-purchased Sourceblue equipment shall complete the Receipt Verification Form and provide stored material paperwork for this equipment.

MEP Coordination

55. This project shall utilize 3D Modeling for the coordination of all Structural Steel, HVAC & Controls, Plumbing, Elevator, Electrical & Fire Alarm (include all conduit 1" and larger), Low Voltage & AV(include all conduit 1" and larger), Fire Protection, Misc Metal (stairs, gym supports), Acoustical Ceilings, Drywall & General Trades(CFMF, Drywall ceilings/supports), Kitchen Equipment, Masonry openings for MEPs and Steel support, etc. This includes performing all work in accordance with the Contract Documents and including but not limited to the following Guidelines:

    a. **Subcontractor** agrees to participate in the use of digital/computer based three dimensional models and other related functionality, generally referred to as building information modeling (such models and functionality are referred to herein as BIM) as Turner may determine to be beneficial for use in facilitating coordination, sequencing, scheduling and/or production of as- built depictions of the Project and performance of the Work and as hereafter provided. The Subcontractor's costs of such participation are included in the Price unless explicitly outlined herein.

    b. **Subcontractor** shall participate in BIM coordination and review meetings as Turner Construction may require. **Subcontractor** acknowledges that such meetings will require attendance of personnel that are familiar with both the data entry aspects of the BIM as well as an understanding of the work to be performed and its relation to other elements of the Project, and subcontractor therefore agrees that personnel conversant in both shall attend all such meetings.

    c. **Subcontractor** agrees that neither the BIM nor the use of the BIM is in lieu of nor intended to relieve the **Subcontractor** of its responsibilities under the Subcontract.

    d. In the event the **Subcontractor** discovers any error, inconsistency, or omission in its information or submissions, the information or submissions provided by others or any BIM, it shall be reported to Turner via written notice which shall contain all relevant specifics.

    e. **Subcontractor** acknowledges that the BIM may require updating throughout the life of the Project to addresses any changes to the Work so that the BIM at the conclusion of the Project accurately depicts the Work as actually performed and installed. **Subcontractor** agrees to promptly update and provide revised submissions to Turner throughout the course of the Project.

    f. Turner Construction will make available their *Document Management Server (DMS)* that will enable all project parties to upload and download their respective models, manage electronic drawing files, and other electronic documents used in the coordination process. When the coordination drawings are uploaded, **The BP#37 HVAC & Controls Contractor** will be the ***"Gatekeeper"*** and download all trade models and integrate them into a consolidated model. After this a clash report will be created by the **Gatekeeper** identifying all the clashes and

conflicts between trade systems. This report will be issued to the subcontractors for action and resolution. Turner may require that subcontractors divide their systems models by floors, zones, and/or areas in order to better manage the coordination process in a manner that is most conducive to meeting the project's schedule and needs.

g. Turner will collect and distribute 3-Dimensional Architectural and Structural Models from the design team in their native format for use as backgrounds for coordination. *If a 3D model (.rvt) format is provided, it is* ***Subcontractor's*** *responsibility to export into other formats if required for their work (ie. 2D CAD (.dwg) format, etc…).* Models may only include basic architectural features, such as the floors, a rough approximation of ceilings chases, door openings, partitions exterior wall surfaces, window openings, roofs, elevator shafts, and stairs, and basic Structural features such as slabs and walls, steel framing – columns, beams, and major structural elements. **Subcontractor** is ultimately responsible for coordinating to all information contained in the 2-Dimensional Contract Drawings and Specifications as related to their work.

h. Once the Architectural/Structural models are posted on the DMS, **Subcontractor** is required to download and use these files to create their respective system models by sequence or geographic area dictated by Turner's representatives.

i. **Subcontractor** is required to run the clash detection analysis for their respective trade system against the Architectural/Structural models to ensure that there are no conflicts with their respective system(s).

j. **Subcontractor** is required to post to the DMS, up-dated drawings/models at least once per week, and one day prior to the clash detection analysis run by the **Gatekeeper**. (Day and time to be determined). This will continue until the area is completely coordinated.

k. The clash reports will be run for MEP systems in conflict with other trades and systems. A clash analysis report will be generated by the **Gatekeeper**. The **Gatekeeper** will create a Navisworks .NWD (or BIM 360 Glue view) file showing the clash viewpoints. This Clash report & Navisworks .NWD file will be posted to the DMS by the **Gatekeeper** and a corresponding notice sent by the **Gatekeeper** to all parties involved that the report is ready. **The Gatekeeper** will run the clash detection analysis as frequently as required for all systems modeled.

l. **Subcontractor** is required to review the clash detection report generated by the **Gatekeeper** before the weekly meeting, and arrive at the meeting prepared to address the unresolved clashes in a constructive manner.

m. **Subcontractor** is responsible for producing a traditional 2-Dimensional coordination drawing after cleaning up resolved all clashes and collisions. The final Coordination CAD drawing file will be re-circulated through all trades after a BIM sign-off meeting. This electronic coordination drawing files shall include all coordinated drawing information, fully dimensions (especially elevation dimensions), texts, and tags, etc.

n. **Subcontractor** is required upload their 3-Dimensional As- Built models, once all issues are addressed from above. Turner reserves the right to request additional file formats as the needs of the client or project require.

o. **Subcontractor** is required to update and post any changes originating from RFI's, Submittal's and Bulletin's that have changed their perspective work. **Subcontractor** making changes shall post onto the BIM Server site and send out a corresponding notice indicating the changes and reasoning behind the change with-in two weeks from receipt of changes.

p. All work on the coordination drawings (including 3D models) shall be performed by competent draftsmen in a clear legible manner utilizing standard industry conventions. **Subcontractor** shall be responsible for providing their coordination drawing files according to the established coordination schedule. It is the responsibility of each contractor to supply a sufficient number of draftsmen so as not to delay the BIM 3-Dimensional coordination process and shop drawing submittals.

q. **Subcontractor** will use a mandated file naming convention for their files. *During the Coordination Kickoff meeting Turner will provide the detailed file naming convention to all subcontractors.* Any files that do not follow the file naming convention will be deleted and removed from the server at any time without any notification.

r. **Subcontractor's** drawing and model files shall be based on an agreed upon and authorized origin point. The cost of any changes required by the **Subcontractor** to their drawings or models due to the use of an unauthorized origin shall be borne by the trade contractor.

Jobsite Metering & Utility Tracking

56. The Electrical Subcontractor shall provide the following:

    (a) This Subcontractor shall furnish and install hardware for metering temporary electrical usage for the project. Commissioning of hardware and metering system to be purchased from Vitality. Coordinate with Turner Construction for vendor information. Components include:

        (i) A8810 AcquiSuite Gateway Panel and Power Supply located within the jobsite trailer/office (Part# IDAS-A8810)

        (ii) Wireless Enclosed Metering Panel. Contains Veris Power Meter, Wireless Modbus/Pulse Transceiver, Power Supply and Antenna. Rope CT Included. UL 508A (Part # IDAS-MH-V1A). Meter panel communicates via Modbus RS485 to the Gateway Panel.

        (iii) Wireless Modbus/Pulse Transceiver radio transmitters

    (b) This Subcontractor shall provide 120v electrical service to radio transmitters, data acquisition hub, and water/electrical meters

    (c) This Subcontractor shall wire the water meter furnished and installed by the plumbing subcontractor. This includes providing 120v power and step-down connections between metering components (e.g. water meter to modhopper via RS485 cabling) for a complete system connection.

    (d) This Subcontractor shall install Antenna at jobsite trailer/office as required

    (e) This Subcontractor shall perform amperage test post-install to verify that meter readings are accurate to field conditions.

    (f) This Subcontractor shall disconnect and remove metering equipment installed under this scope prior to turnover of building. Disconnect CT cables to maximize reusable length. Return to Turner in original packaging.

    (g) This Subcontractor shall engage with 3rd-party commissioning agent (Vitality) prior to, during, and after installation to ensure hardware is correctly communicating with network.

57. The Plumbing Subcontractor shall provide the following:

    (a) This Subcontractor shall furnish and install hardware for metering temporary water usage for the project. Commissioning of hardware and metering system to be purchased from Vitality. Coordinate with Turner Construction for vendor information. Components include:

        (i) Micronics Clamp-On Water Meter. Measurement Value: Gallons Per Minute, Modbus Comms, Factory Calibrated. (Part# U1000 Ultrasonic Meter)

    (b) The electrical subcontractor shall wire the water meter once installed by this subcontractor.

(c) Relocate water meters upon switchover to permanent water source.

(d) Disconnect and remove water metering equipment under this scope prior to turnover of building. Return to Turner in original packaging.

58. All Subcontractors shall provide the following Fuel Tracking:

(a) On a monthly basis, submit Monthly Fuel Tracking Log with all fuel (diesel, gasoline) used by Contractor's onsite equipment and trucked-in water. Data shall be categorized by fuel type (Diesel, E10 gasoline, E85 gasoline, biodiesel, ethanol, etc.). Tracking form to be provided by Turner - see Monthly Fuel Tracking Log). Transient and/or personal vehicles not stationed for use within the project boundary are exempt from this tracking requirement.

(b) On a monthly basis, submit tracking log of all natural gas, propane and steam and other energy sources used for temporary services. Example include generators, temp heating, etc. Tracking form to be provided by Turner- see Monthly Fuel Tracking Log.

59. **Earthwork/Sitework Tracking & Reporting:** Subcontractor will submit documentation via Turner Tracker on a monthly basis memorializing cut/fill on site as well as materials removed from site. A 'Disposal Method' must be selected for each material group reported to accurately represent next use of material. Data must be entered into Turner Tracker by the fifth (5th) day of the month following the invoice period. The Subcontractor shall make every effort to maximize diversion from landfill.

Green Equipment

60. All light towers, electric sign boards and security cameras to be fully electric, hybridized or solar.

61. All Small Off-Road Engine-powered equipment (under 25HP) that has an electric alternative and that does not impede production to be battery electric.

62. Compact telehandlers and warehouse forklifts to be fully electric unless vertical reach height required does not exist in that product line.

63. Slab-driven boom lifts to be fully electric or hybrid. When able, 60' hybrid off-road lifts are preferred (e.g. M-600 JLG).

64. All small tools to be run off of temporary power. In emergency situations, if generators are required, generators are required to be coupled with battery storage, use load sharing technology, utilize energy storage systems, or utilize renewable energy in order to reduce the project's greenhouse gas emissions.

Close Out

65. Turner follows the philosophy that "Project close-out begins with job start-up." Therefore, the following close-out procedures shall be adhered to:

(a) The Schedule of Values on the Subcontractor's application for payment shall include line items and values for all close-out documents and activities, such as as-builts, O&M Manuals, punchlist, attic stock, etc.

(b) Operations and Maintenance Manuals are due three months prior to anticipated turnover of each phase to the Owner. This subcontractor is required to provide 4 sets of CD's and 4 sets of Hard Copies for O&M's and As-Builts.

(c) Final As-built drawings, attic stock, and special tools shall be submitted within one month following Substantial Completion.

(d) Warranties and Guarantees are due within one month following substantial completion of the Project. This Subcontractor shall provide warranties and guarantees which start upon substantial completion for each phase of this project.

(e) The punchlist work must be complete per Turner's punchlist completion schedule (and prior to turnover to the Owner).

(f) The final application for payment is to be submitted no later than three months after substantial completion. All work must be complete and verified prior to review of this final application.

66. Failure to comply with the above requirements will result in a $1,000 deduct change order per item and will result in delays in progress and final payment(s).

Personnel Conduct

67. There shall be NO FRATERNIZATION OR INTERFERENCE with the Owner staff, neighboring businesses, or visitors; no verbal, physical, telephone or electronic contact with students or minor on the property of any kind, by any Construction Workers on or near the **Project** site. Any complaints by the Owner with regard to this matter will result in the immediate and permanent dismissal of the said employee from the Project site. Reference also AIA A133 section 14.7.6.2, all subcontractors to include this language in any subcontract to lower tier.

68. NO FOUL OR ABUSIVE LANGUAGE will be tolerated or allowed, also there is NO SMOKING/VAPING OR DRINKING allowed on the Owner's property and either infraction will result in immediate and permanent dismissal.

69. ALL EMPLOYEES AND VISITORS SHALL WEAR "SAFETY TRAINED HARD HAT LABEL IDENTIFICATION" AT ALL TIMES WHILE ON THE PROJECT JOB SITE. THE METHOD OF IDENTIFICATION IS FURTHER DESCRIBED IN TURNER'S SAFETY & HEALTH PROGRAM. LABELS WILL BE DISTRIBUTED UPON COMPLETION OF THE WORKERS SAFETY ORIENTATION TRAINING.

70. This subcontractor shall comply with all badging/background check requirements associated with performing work on the Owner's property as defined per **State of Connecticut Contractor Verification (in accordance with Public Act 16-67), reference form to be completed within Project Manual.**

71. Drug Testing: This Subcontractor shall participate in the drug testing required per the Project Specific Safety Manual and in accordance with Turner's Substance Abuse Policy. As part of your proposal, this Subcontractor shall include **$48/worker** for the drug testing associated with your workforce. Upon award, this Subcontractor will register all workers with Concentra via an online portal and shall report to a predetermined Concentra facility at the time that the drug screen testing is performed.

LEAN Approach

72. Lean focuses on maximizing customer value while eliminating waste through continuous improvement and respect for people. Turner requires that all subcontractors actively participate with Turner in the continuous improvement of the construction process. Turner and subcontractors will collaboratively participate in learning, planning, control processes, and strategies to achieve the goal of the greatest productivity for the project, thereby maximizing the value delivered to the customer. Maximizing value requires elimination of waste in all processes and implementing improvements at every opportunity. Subcontractors will assign an individual to represent them in these efforts. Qualifications for this individual include that they are on site daily, have the authority to make decisions and commitments on behalf of the subcontractor (including lower tiers) and whose behaviors support collaboration with the project team. This individual will be referred to as "On-Site Field Supervisor" throughout this Section.

    Turner may utilize some or all of the approaches and tools listed below for the betterment of the project, and Subcontractor will cooperate, contribute, and participate with Turner in these endeavors:

5S Methodology

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

1. Sort – Eliminate all unnecessary tools, parts, materials. Keep only essential items, eliminate what is not required, prioritize things per schedules/requirements and keeping them in easily accessible places.
2. Straighten (Set in Order for Flow) – Arrange the work, workers, equipment, parts, and instructions in such a way that workflows free of waste through value added tasks. Identify locations where items will be used and place those items close. Organize and communicate the location for items needed in the area.
3. 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. Create elevated workstations for ergonomic working and more efficient cleanup. Employ a 'Nothing Hits the Ground' mentality to keep the project clean and free of waste.
4. Standardize – Develop cleaning schedules and cleanliness standards to maintain the first 3S's. Employ visual management to reveal abnormalities and potential problems.
5. Sustain – Follow the rules, schedules, and established standards.

Last Planner System®: Production System Planning

73. **Pull Planning** – This represents the Project team's (Turner and subcontractors) specific plan for how they intend to reach the milestone dates in the contract schedule. Pull plans must meet the contract schedule requirements, and teams must work together to achieve these project milestones. Turner requires 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 to meet their commitments to reach milestones in the contract schedule.
74. **Make Ready Planning** – Make ready planning is a process of identifying work, typically six weeks out and verifying the work will be able to be completed as planned. Constraints that will prevent these activities in the next six weeks from starting and/or finishing are identified and added to the Constraint Log.
75. **Weekly Work Plans (WWP)** –The WWP is a detailed day-by-day, one week production plan created by each subcontractor's On-Site Field Supervisor to plan the next week's work, based on the project's production plan. WWP's are due weekly at a time established by Turner for the work to be performed the following week. Turner will establish the format for WWP's and the method of delivery for each project.

76. **Daily Production Huddle** – Subcontractor's On-Site Field Supervisor and Turner will meet for a daily stand-up discussion with their peers from other subcontractors and Turner field staff to assess the day's performance and discuss any new issues discovered. Turner's Project Superintendent will identify the time and place of the daily huddle, which will typically occur on the project site and last approximately 15 minutes.
77. **The Last Planner System® (LPS)** provides principles to improve coordination and create 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. Turner may require Subcontractor's On-Site Field Supervisor(s), Superintendents and/or the Project Manager to attend orientation and training sessions to prepare for the implementation of LPS.
78. When requested, Subcontractor shall participate in weekly coordination meetings with other subcontractors and shall provide updated weekly work plans on a weekly basis throughout the scheduled installation period. All subcontractors pledge to cooperate with each other and coordinate their work for the overall good of the project. Turner reserves the right to adjust and update the overall project schedule based on project conditions, the 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. At Turner's discretion, it may utilize The Last Planner System® for developing additional coordination details over the life of the project.
79. Subcontractor will require its On-Site Field Supervisor(s) to participate in all the steps that comprise LPS and be able to commit to perform work 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. Subcontractor shall ensure that its On-Site Field Supervisors, the "Last Planners", have the authority to make decisions and plan the work and are involved before Subcontractor mobilizes to the project. Subcontractor shall direct its On-Site Field Supervisors to attend planning meetings

C.1 Specific Scope of Work

Without the intent of limiting the Scope of Work to be performed by the Subcontractor, included is the furnishing and installing of the ***<<Bid Package Description>> Work*** in accordance with the contract documents and as further enumerated within these Additional Provisions. The items listed herein are NOT intended to be a complete list of work items to be performed under this agreement. Furthermore, detail references are included for convenience but are not intended to identify all applicable details.

1. Includes performing all of the ***<<Bid Package Description>> Work*** in accordance with the Contract Documents and as established in the Project Specifications and Document List. This includes the following Specification Sections specifically but does not limit the Subcontractor from the responsibility of the entire Project Documents Scope of Work:

Additional Provisions/Scope of Work

New Central Middle School
State Project No. 057-0114 N
Greenwich, CT
<<For All Bid Packages>>
Dated: 07.08.2024
Revised: 10.16.2024

Exclusive Specifications

Specification Sections listed below as 'Exclusive' shall be considered the sole responsibility of this Subcontractor. This Subcontractor shall furnish and install all products listed within these specification sections in conformance with all requirements and as indicated in the Contract Documents, including coordination with other related sections as listed within these specification sections and in reference to the entire Contract Specifications and Drawings. This Subcontractor shall be responsible to perform a complete and thorough review of the Contract Documents and include in their lump sum bid amount all costs to complete the entire scope of work for products listed within these specification sections. This includes, but is not limited to, the review of all drawings, details, notes, keys, keynotes, legends, symbols, abbreviations, schedules, callouts, and all applications of the products listed within these exclusive specification sections for a complete system which are reasonably inferable (i.e. similar detail/symbol/illustration, adjacent construction, means & methods, etc.) from the Contract Documents. No additional costs will be considered without clear and definitive substantiation.

Spec. #	Specification Name

Shared Specifications

Specification Sections listed below as 'Shared' shall be considered the mutual responsibility of two (2) or more Subcontractors. This Subcontractor shall furnish and install products listed within these specification sections in conformance with all requirements and as indicated in the Contract Documents, including coordination with other related sections as listed within these specification sections and in reference to the entire Contract Specifications and Drawings. This Subcontractor shall be responsible to perform a complete and thorough review of the Contract Documents and include in their lump sum bid amount all costs to complete the specific scope, as defined below, for products listed within these specification sections. This includes, but is not limited to, the review of all drawings, details, notes, keys, keynotes, legends, symbols, abbreviations, schedules, callouts, and all applications of the products listed within these shared specification sections for a complete system which are reasonably inferable (i.e. similar detail/symbol/illustration, adjacent construction, means & methods, etc.) from the Contract Documents. No additional costs will be considered without clear and definitive substantiation.

Spec. #	Specification Name

General Items

1. The Bidder shall note that the use of the term "Subcontractor" shall be synonymous with the term "Bidder".
2. This Subcontractor has reviewed the Logistics Plans and the Construction Schedule and has included all associated costs as relevant to this scope of work. This includes all necessary lifts, cranes, scaffolding and all other equipment as required to perform the work. It is extremely important to coordinate your work with the other adjacent Subcontractors during the various phases and perform the work as required by these documents. No come back costs will be entertained. This Subcontractor shall include and allow Turner access without restriction to all scaffolds for use to access the work being performed by this subcontractor.
3. This Subcontractor will provide all pricing for changes within five (5) calendar days of notice of change (without exception). If subcontractor does not submit pricing within these terms, it will be assumed a ZERO cost change. The change orders shall include man-hours, material costs, tax (if applicable) and mark-ups as line items broken out separately.

Additional Provisions/Scope of Work

New Central Middle School
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Greenwich, CT
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4. Intent of the project Lean initiative is that all items that are to be installed are to prefabricated, arranged and shipped to project for ease of installation. Deliveries are to be packaged and labeled by room/area for ease of installation (kit-of-parts).
5. This Subcontractor shall be responsible to provide out of sequence work at no additional costs when required in coordination with other trades.
6. This Subcontractor shall include consistent and complete scheduling and coordination with all other trades to properly sequence the work and for the complete scope under this agreement.
7. This Subcontractor's Project Manager/Foreman shall participate in Pull Planning Sessions which affect their scope of work. This Project Manager/Foreman shall provide input to further develop the accurate sequence and timing for completion of the work.
8. This Subcontractor shall examine the layout and installation of all adjacent work performed by others at weekly intervals leading up to the date of installation and shall report to Turner in writing any discrepancies that may affect the installation or operation of the scope provided under this agreement to avoid any delay in starting work as scheduled.
9. This Subcontractor shall include multiple mobilizations as required by the latest issuance of the project schedule.
10. This Subcontractor shall organize and neatly place all materials, tools, etc. This Subcontractor shall remove all debris resulting from their work on a daily basis to a trash Rubbermaid tilt truck provided by Drywall Contractor. Each subcontractor shall be responsible for emptying their trash from the Rubbermaids to the dumpster at the end of each shift. No trash or debris will remain in the work areas at the end of the shift. If debris is left in the work areas, it will be removed to the dumpster by others, and the labor expense back-charged to the responsible Subcontractor. Large sections of debris shall be disposed of to a dumpster provided by others by this Subcontractor.
11. This Subcontractor shall be required to store all onsite material on racks, carts or pallets capable of being easily moved and shall coordinate the delivery of and location of stored material with the Turner Superintendent. If material is stored on pallets, this Subcontractor is responsible to have a pallet jack onsite at all times. This Subcontractor shall include relocation and consolidation of materials as directed by Turner.
12. This Subcontractor must meet the latest issuance of the project schedule. To this end, this Subcontractor understands that all adjacent work may not be 100% complete at the time of field dimension verification and this Subcontractor shall coordinate with other trades and accept reasonable hold-to dimensions which may be required to meet the delivery and installation dates.
13. This Subcontractor shall clean all items installed by this Subcontractor and install, secure and maintain appropriate protection to prohibit damage from subsequent work. Protection must be approved by Turner.
14. This Subcontractor shall review, conform to, and furnish and install all requirements included in the Safety Additional Provisions included in this Agreement. This Subcontractor understands that this document is project specific and all provisions must be included in this Subcontractors' bid.
15. This Subcontractor shall ensure that they are able to supply the necessary manpower, equipment and materials to complete the Work for each Phase in its entirety as identified in Turner's Project Schedule.
16. This Subcontractor acknowledges that NO additional compensation will be considered for comeback work required as a result of your failure to perform work in accordance with the Contract Documents or your failure to coordinate your work with the work of others.
17. This Subcontractor will be responsible for the third-party engineering review for utilizing equipment and/or lifts on elevated slabs.
18. This subcontractor shall only be permitted one vehicle for onsite parking per the Logistics plans.
19. This subcontractor shall provide all hoses for when requiring water. A water source will be provided per the Logistics plans.

20. The Sitework Contractor shall be responsible for snow removal of the site, access roads and walkways to the building. This subcontractor will be responsible to remove snow and ice from all other areas for their work including but not limited to their work areas, material areas, storage conex's and trailers. Snow and ice removal is not allowed to free fall from upper levels of buildings, scaffolding or platforms.
21. This Subcontractor shall provide a site-specific plan on how they will comply with Turner's Ladder's Last Program.
22. This subcontractor shall ensure that any Lulls used on site are equipped with hydraulic fork positioners.
23. This subcontractor shall engage a 3rd Party to complete a GPR Survey to mark out existing utilities under and in the general area of any proposed Mobile Crane locations.

Bid Package Specific Scope

24. Refer to the Scope of Work Sheets Issued as part of the Bid Documents

D. Exclusions

25. Refer to the Scope of Work Sheets Issued as part of the Bid Documents

E. Safety – See Safety Additional Provisions

1. ***Include cost associated with EMR ACTION PLAN HERE IF EMR >1, refence Turner EH&S Manual.***
2. ***For subcontractors who's RIR is greater than 3 for previous year through the course of the project, this subcontractor shall include a full time dedicated safety manager if the crew size on site reaches 10 or more. Reference Turner EH&S Manual regarding Project Safety Staffing Policy.***

F. Unit Prices:

The following Unit Prices reflect the work of this bid package under which the bid proposal was submitted, and all unit prices shall remain valid for the life of the project and include all costs for a complete installation. Unit prices which do not affect the work of this bid package have been filled in "not applicable (n/a)". ***UNIT PRICES ARE GOOD FOR BOTH ADDS AND DEDUCTS.***

Unit Prices:	**Amount**
Refer to Form of Proposal	

G. Alternate Prices

The following Alternate Prices reflect the work of this bid package under which the bid proposal was submitted, and these alternate shall remain valid for the life of the project and include all costs for a complete installation.

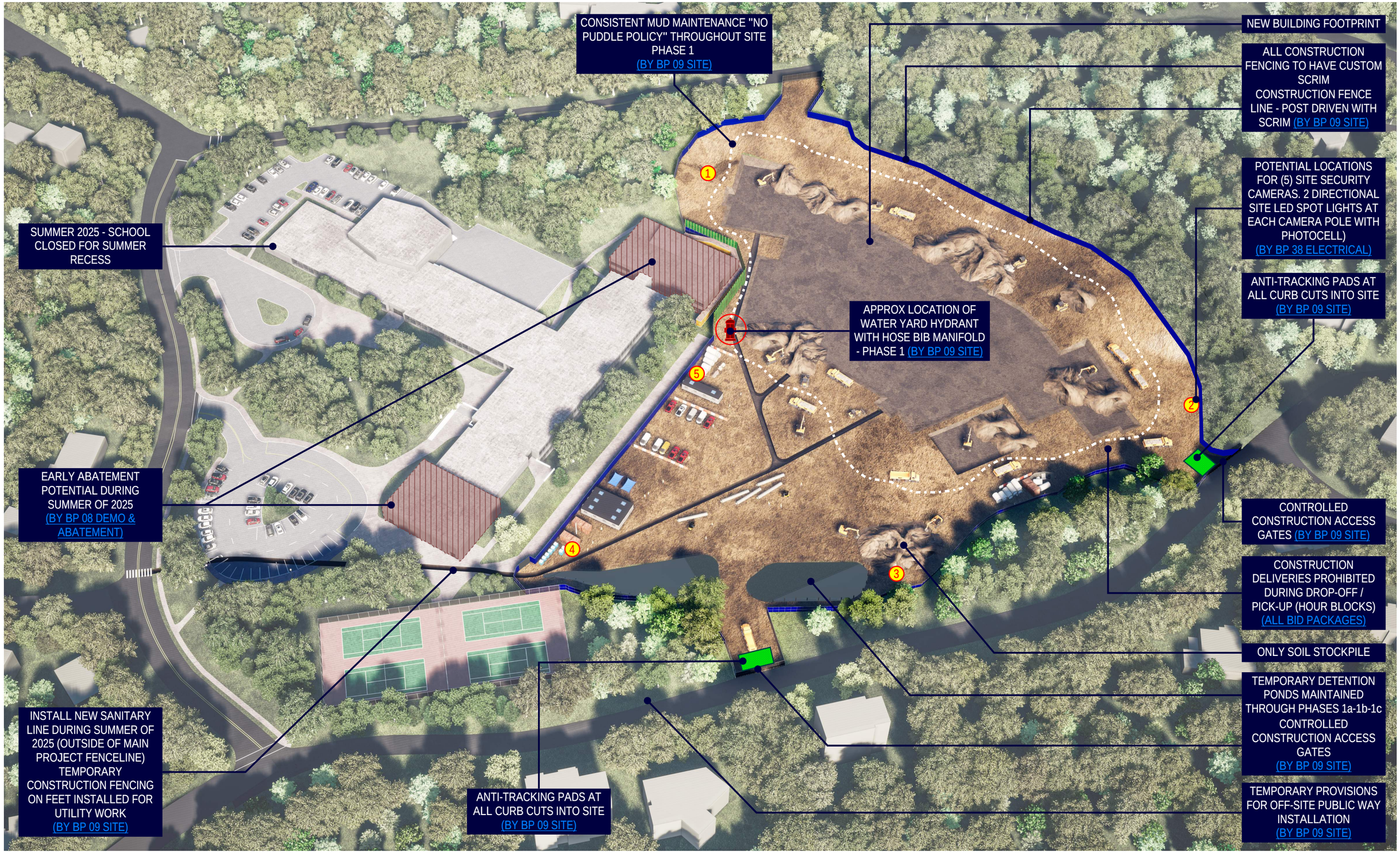
Alternates:	**Amount**
Deduct Alternate to Exclude 100% Payment & Performance Bonds on Turner Standard Bond Forms	

Additional Provisions/Scope of Work

New Central Middle School
State Project No. 057-0114 N
Greenwich, CT
<<For All Bid Packages>>
Dated: 07.08.2024
Revised: 10.16.2024

Add Alternate to Provide Traditional Insurance in lieu of enrolling in the Turner CCIP / Owner OCIP Program	
Refer to Form of Proposal	

END OF ADDITIONAL PROVISIONS


CONSISTENT MUD MAINTENANCE "NO PUDDLE POLICY" THROUGHOUT SITE PHASE 1 (BY BP 09 SITE)
NEW BUILDING FOOTPRINT
ALL CONSTRUCTION FENCING TO HAVE CUSTOM SCRIM CONSTRUCTION FENCE LINE - POST DRIVEN WITH SCRIM (BY BP 09 SITE)
POTENTIAL LOCATIONS FOR (5) SITE SECURITY CAMERAS. 2 DIRECTIONAL SITE LED SPOT LIGHTS AT EACH CAMERA POLE WITH PHOTOCELL) (BY BP 38 ELECTRICAL)
ANTI-TRACKING PADS AT ALL CURB CUTS INTO SITE (BY BP 09 SITE)
SUMMER 2025 - SCHOOL CLOSED FOR SUMMER RECESS
APPROX LOCATION OF WATER YARD HYDRANT WITH HOSE BIB MANIFOLD - PHASE 1 (BY BP 09 SITE)
1
2
3
4
5
EARLY ABATEMENT POTENTIAL DURING SUMMER OF 2025 (BY BP 08 DEMO & ABATEMENT)
CONTROLLED CONSTRUCTION ACCESS GATES (BY BP 09 SITE)
CONSTRUCTION DELIVERIES PROHIBITED DURING DROP-OFF / PICK-UP (HOUR BLOCKS) (ALL BID PACKAGES)
ONLY SOIL STOCKPILE
TEMPORARY DETENTION PONDS MAINTAINED THROUGH PHASES 1a-1b-1c
CONTROLLED CONSTRUCTION ACCESS GATES (BY BP 09 SITE)
INSTALL NEW SANITARY LINE DURING SUMMER OF 2025 (OUTSIDE OF MAIN PROJECT FENCELINE) TEMPORARY CONSTRUCTION FENCING ON FEET INSTALLED FOR UTILITY WORK (BY BP 09 SITE)
ANTI-TRACKING PADS AT ALL CURB CUTS INTO SITE (BY BP 09 SITE)
TEMPORARY PROVISIONS FOR OFF-SITE PUBLIC WAY INSTALLATION (BY BP 09 SITE)

Turner

Building L.I.F.E.®

Living Injury Free Every Day

Corporate Environmental, Health, and Safety Policy



CENTRAL MIDDLE SCHOOL
GREENWICH, CONNECTICUT
STATE PROJECT NO. 057-0114N
PHASE 2 OF 3 - CONSTRUCTION
7/08/2024

Disclaimer

All employees using safety documents posted on TKN, including this EHS manual, must utilize the most recent version 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 through the course of the project to obtain any updated versions.

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Turner

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Turner

Section

1

TURNER

CORPORATE ENVIRONMENTAL, HEALTH AND SAFETY POLICY

Letter of Introduction

Environmental, Health & Safety Policy

We think of our workplace as “our house.” In our house, we foster a caring environment. We want every person at Turner and every person who steps onto a Turner site to truly believe that they are contributing to, and have a sense of belonging to, something extraordinary. We are focused on maintaining and sustaining the Right Environment where people feel included, engaged, empowered, and connected.

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, trade partners, clients, and members of the communities in which we work.

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.

Building L.I.F.E.® Vision
Create and sustain a culture which promotes an incident-free environment and provides the safest workplace possible to live injury free every day.

Building L.I.F.E.® Guiding Principles

- Injuries are preventable.
- We will coach and practice safe behavior to live injury free every day.
- We will engage and look out for each other to properly plan work.
- We will perform a task only if it is safe.
- We will speak up and stop work if there is an unsafe condition, action, or safer way to perform a task.

Let’s be relentless and keep each other accountable by making sure we pre-plan and discuss risk every day and that we continue to actively care. 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

Section

2

TURNER

CORPORATE ENVIRONMENTAL,

HEALTH & SAFETY POLICY

Administration & Programs

Building L.I.F.E.®

Building L.I.F.E.® is a collection of tools designed to enhance operational staff's ability to engage with trades to improve safety outcomes and measure performance. This program is designed to:

- Enhance the recognition of and reduce risk through better operational planning while increasing safety acumen resulting in fewer incidents and near-misses.
- Encourage all Turner employees, trade partners, clients, and design team to make safety a personal value.

The Building L.I.F.E.® program is a continuous-improvement program aimed at reducing process discrepancies and risks that in turn lead to unplanned events or loss. This program also aims to create a more positive working climate by frequently involving our project teams and subcontractors (including the frontline worker) in many aspects of our safety processes.

Note: Refer to the Turner Building L.I.F.E.® instruction manual for detailed guidance on each aspect of the program.

Program Goals & Objectives

- Implement a more comprehensive continuous improvement model for safety & risk management that supports Lean Construction, Human and Organizational Performance, and ISO 14001 by building continuous improvement cycles into each of our key risk-reduction processes.
- Embed an upstream "systems focus" into our planning and problem-solving tools focusing on risk and the systems that are driving risk.
- Increase the engagement and participation of frontline workers in our processes to increase ownership, change culture and improve results.
- Utilize Human and Organizational Performance principles to provide a more holistic approach to safety management and culture change.

Program Elements

All elements of the Building L.I.F.E.® program are based on engagement and feedback at all stages and levels of the construction process. Key elements of the program are:

- Pre-planning process
- Assessments
- Coaching activities
- Feedback processes

Notes:
Pre-Planning Process: This element is detailed in the "Job Hazard Analysis / Pre-Task Planning" section of this Policy Manual
Assessments: This element is detailed in the "SafetyNet Operational Guidelines" section of this Policy Manual.

I Coaching Activities

CSB Coaching Process

The critical safe behavior coaching process is intended to close a gap in our Safety Management System and bring balance to the "systems-approach." Critical safe behavior coaching is focused on positive and delivering actionable

feedback. We strive for CSB coaching to be a welcome event that draws on workers skills and actions in the construction environment.

These are conducted with the engagement of the those directly performing a task, the supervisor and foreman of the workers, and the Turner Staff Coach.

There are five primary categories considered during this process:

- Visual Focus
- Body Position
- Manual Material Handling
- Organization and Housekeeping
- Elevated Work

The intended outcome of this collaborative activity is process improvement, improving efficiencies and risk reduction.

Staff engagement expectations with CSB Coaching are defined in the “SafetyNet Operational Guidelines” section of this Policy Manual.

Rapid Improvement Events

A rapid improvement event is a continuous improvement process meant to accomplish the following:

- Ensure every major task of work has been optimized for safety, efficiency, and quality, thus reducing all forms of waste.
- Improve the quality of our work plans, such as JHAs and PTPs.
- Taking a systems-based approach
- Engaging the workforce
- Continuous improvement

Unlike a Critical Safe Behavior coaching activity which is task focused, the Rapid Improvement Event takes a much broader look at the overall operation and the context in which the tasks are taking place. These are conducted with the engagement of the those directly performing a task, the supervisor and foreman of the workers, and the Turner Staff Coach.

The intended outcome of this collaborative activity is process and efficiency improvement and risk reduction.

Engagement expectations are to be established at a project level based on scope, size and complexity.

II Feedback Processes

Five Worker Lunches

This feedback-based process supports continual improvement and worker engagement. Turner selects 5 workers from various contractors to have an informal free lunch with Turner site management team and available BU Managers. The Turner facilitator explains to them over lunch that “we need their input so we can continue to assess and improve the effectiveness of our safety program and leadership. Although we will keep notes during the meeting so we can follow up on their feedback and ideas, no names will be attached, and their comments are confidential for the staff in the room only.”

How to select the five workers

Each worker should be from a different subcontractor. Preference should be given to companies that meet the following:

- Program and policy non-conformance issues have been noted.
- New subcontractor to Turner Construction.
- High-risk activities.
- High EMR Risk Management Waiver was executed.

This is a monthly process, at a minimum. 5 workers is a guideline. The feedback received from this meeting should be tracked in meeting minutes. Select items requiring Turner action should be addressed and resolution shared verbally at all-hands safety meetings and noted on “You Said / We Did” boards.

Safety Observation and Recognition Cards (S.O.A.R.)

Safety Observation and Recognition Cards, or SOAR Cards for short, serve two purposes in supporting Building L.I.F.E.®.

- SOAR Cards provide a good avenue for workforce engagement which creates further ownership in our safety program and supports the desired culture shift.

- SOAR is another feedback mechanism supporting continuous improvement - this mechanism focuses on providing feedback to Turner Construction. It allows workers the opportunity to anonymously become extra eyes and ears in the field.

The SOAR Card signs with drop-boxes should be prominently displayed at the entrance to the project. Turner staff should check the drop-box daily.

Observations and recognition submitted should be shared during morning safety meetings to discuss actions taken and to close the loop with the workers, shared verbally at all-hands safety meetings and noted on “You Said / We Did” boards.

III Training Requirements

To ensure the consistent and effective program implementation and integration, training will be completed as defined below:

Turner Field Operations Staff: Attend and actively participate in the Building L.I.F.E.® 5 training module series and complete the learning application activities as delivered and facilitated by a designated program trainer.

Turner Staff (non-field operations): Attend the Building L.I.F.E.® program overview training module delivered by a designated program trainer. (1 hour in duration)

Trade Partner Staff and Craft: A Building L.I.F.E.® overview is presented in the Turner site orientation video.

General Rules

I. This section captures general rules that are not discussed elsewhere in this program.
   i. Where discrepancies exist between this Environmental Health & Safety Program, and other regulations, standards, safety plans and contract documents, the more protective requirement will apply.
   ii. The possession or use of alcohol, marijuana, or any controlled substance by any Turner staff, trade, or any subcontractor on any Turner jobsite is prohibited at any time including non-working hours. Turner sponsored or approved meeting/functions, not located at a Turner Jobsite, may serve alcohol with approval by the BU General Manager or HQ Department Head. However, this does not relieve Turner Employees or Other Workers from possessing or using alcohol responsibly and safely in such situations.
   iii. No one under the age of 18 is allowed to work on the Project property / construction site.
   iv. Turner offices and projects are tobacco-free zones. This includes e-cigs and all forms of tobacco.
   v. No animals are allowed on Turner property. Please contact Headquarters EHS and Human Resources if you are requesting to bring a service animal on Turner property.
   vi. No walking or driving on projects while talking or texting on phone or walkie-talkie.
   vii. 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.
   viii. No headphones, iPods, radios, etc. are permitted on the job. No streaming of music from the internet. No walking or driving on projects while talking or texting on phone or walkie-talkie.
   ix. A fluent interpreter must be provided and on site for any crew that has one or more non-English speaking workers.
   x. The list of behaviors below, while not inclusive, provides examples of conduct that is prohibited:
      1. Causing physical injury to another person.
      2. Making threatening remarks, verbal abuse, derogatory remarks, racial or bias motivated statements (verbal or in writing).
      3. Aggressive or hostile behavior that creates a reasonable fear of injury to another person or subjects another individual to emotional distress.
      4. Intentionally damaging employer property or property of another

employee.

xi. 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, is not permitted. 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.

i. Employees must:

1. Perform their work to prevent accidents to themselves, fellow workers, and property.
2. Use Personnel Protection Equipment as required, to meet all Turner, federal, state, and local requirements.
3. Alert supervisors to dangerous situations.
4. Cooperate with principles of the Project Site Specific Safety Program.
5. Utilize all tools and equipment in a safe manner and in accordance with manufacturer's recommendations.
6. Complete project safety orientation before starting work on the jobsite.
7. Acknowledge and abide by the project enforcement rules.

ii. All visitors must sign a visitor release at the project site office or into the visitor logbook when visiting an office. All visitors must be escorted while on site and must adhere to Turner Project Safety Program and be 18 years of age or older.

iii. 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.)

iv. A List of General Hazards by Trade and Region can be found on the reference tool on TKN EH&S Website

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 been 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. The full Crisis Management Plan is available on the Safety SharePoint site.

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,
- Natural disasters and severe weather events
- Fire/explosion, water events,
- Equipment failure such as the collapse of a crane,
- Workplace violence,
- Environmental incidents,
- Extreme business interruption,
- Pandemic Illness,
- Active shooter events
- Bias Motivated Events
- 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 reporting a crisis by submitting a New Notification using the AlertMedia! application on your mobile device or go to turner.alertmedia.com OR call 1-866-3-TURNER (1-866-388-7637) or 201-903-4127.

    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 submitting a New Notification using the AlertMedia! application on your mobile device or go to turner.alertmedia.com OR call 1-866-3-TURNER (1- 866-388-7637) or 201-903-4127. 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 Manger 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.
   - During a pandemic, refer to specific programs for cleaning and disinfecting, PPE, and general guidance documents.
   - Projects should utilize posters, applications, etc. to maintain a level of awareness and preparedness for any crisis that may develop. They are available on the Turner Homepage at the Turner store.

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 (BUEHSD) 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 Origami 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 theirdirections.

The BUEHSD will notify the Turner Helpline when appropriate. See Turner Incident and Near-Miss Reporting Matrix for reference of when to submit a New Notification using the AlertMedia! application on your mobile device or go to turner.alertmedia.com OR call 1(866) 3-TURNER / 1 (866) 388-7637 OR 201-903- 4127 OSHA's Recordkeeping rule 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 Origami. 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. If the near miss could have resulted in a severe injury or fatality a call must be set up within 4 hours with the EVP, SVP, HQEHSO, GM, OM, BUEHSD, and the project team to review. 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 Origami 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 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 Origami. 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 subcontractor's requirement to notify.

The BUEHSD will notify the Turner Helpline when appropriate. See Turner Incident and Near-Miss Reporting Matrix for reporting requirements and when to notify the Turner Helpline.

4. Recordable Injury Event

It is the responsibility of 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 Origami. 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 subcontractor's requirement to notify. The BUEHSD will notify the Turner Helpline when appropriate. The BUEHSD will set up a call within 24 hours to review the incident/injury with HQ EHSO, SVP, GM, OM, BUEHSD and project team. If the Recordable is considered a SIF or SIFP, a call must be set up within 4 hours of the incident and include HQ EHSO, EVP, SVP, GM, OM, BUEHSD, SHRD, and project team. See Turner Incident and Near-Miss Reporting Matrix for reporting requirements and when to notify the Turner Helpline.

5. 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 BUEHSD, BU Claims Manager, General Manager, and Operations Manager must be notified immediately. A call must be set up within 4 hours with the EVP, SVP, HQ EHSO, GM, OM, BUEHSD, and the project team to review the incident. 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 BUEHSD will notify the Turner Helpline.

6. 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 Origami for record purposes only. The BUEHSD will notify the Turner Helpline when appropriate. See Turner Incident and Near-Miss Reporting Matrix for reference of when to notify the Turner Helpline.

7. General Liability Accident

It is the responsibility of the subcontractor to immediately notify the Turner Project

Superintendent of an event involving third parties or the general public. The Turner Project Manager will immediately notify the Owner, BUEHSD 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 Origami for record purposes only. The BUEHSD and Claims Manager will determine if a Third-Party Investigator will be needed. The BUEHSD will notify the Turner Helpline when appropriate. See Turner Incident and Near-Miss Reporting Matrix for reference of when to notify the Turner Helpline. 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.

IV. Return to Work Provision

1. Trade partners and tiered contractors must provide a modified return to work program for any of their employees returning from an occupational injury for a minimum of 90 days after the injury date.

2. Failure to provide accommodations to an injured employee may result in a penalty assessment, at Turner Construction's discretion, to the trade partner of $2500 per week until such time as the injured employee is returned to work.

Turner Incident and Near-Miss Reporting Matrix

Serious Injury Fatality (SIF) or Serious Injury Fatality Potential (SIFP)	
Work-related incidents, injuries, illnesses or near misses that caused, or could have caused, a serious injury or fatality. SIF and SIFP Examples: • Any fall or fall exposure 6' or greater (Including fall-catch) • Severe fire or explosion • Active shooter • Loss of a suspended load • Object falling from a building • Collapse of a structure or portion of a structure • Equipment collapse (cranes, scaffolds, etc.) • Bomb threat or terrorist threats/attacks • Trench/Excavation Collapse • Inadequate hole protection • Any in-patient hospitalization of a worker related to a workplace incident • Significant third-degree burns • Amputations (all, including fingertip) • Loss/impairment of body organ function • Loss of an eye • Utility line strike (Gas/Electric) • Loss of hearing • Severe visual impairment to total blindness • Broken bone • Missing or faulty guarding • Deficient or faulty temporary elevated working platforms 6' or above • Other SIF or SIFP incident identified by BUEHSD, OM, GM	BUEHSD Enter into Alert Media/Turner Help Line Immediately BUEHSD sets up a call within 4 hours with EVP, HQ EHSO, SVP, GM, OM, BUEHSD, SHRD, and the Project Team members closest to the incident Enter into Origami.
Recordable Injury (Non-SIF/SIFP)	
Work-related recordable injury or illness that did not cause, or could not have caused, a serious injury or fatality (SIF/SIFP).	Project Team sets up a call within 24 hours of incident with HQ EHSO, SVP, GM, OM, BUEHSD & the project team members closest to the incident Enter into Origami
Other Alert Media Reportable Events	
Events that would not be considered SIF or SIFP and may or may not have resulted in a recordable injury but are required to be reported through Alert Media for Risk Management tracking and support purposes. Examples: • Union or labor issues (i.e., picket) • Utility line strike (sewer, water, phone/data) • Worker is transported to a medical facility via ambulance (workplace related or personal medical) • Environmental crisis, regulatory visit or inquiry (OSHA, EPA, etc.) • Building shutdown due to emergency • Jobsite shutdown due to safety (by owner or Turner) • Workplace violence • Property damage greater than $10,000	BUEHSD or designee enter into Alert Media/Turner Helpline Immediately GM, OM, BUEHSD, or HQ EHSO to determine if a follow up call is needed. BU sets up call if required. Enter into Origami
Minor Injuries	
Minor Injuries that were not a SIFP or a recordable Injury Minor Injury examples: • Mild eye (corneal) abrasions • Minor sprains and strains • Minor lacerations/penetrations • Minor chipping or cracking of a tooth/teeth • Property damage less than 10K • Minor Skin rashes/burns (blistering)	Notify PM/PX, BUEHSD, Claims & Insurance, and OM/GM. Enter into Origami

V. Return to Work Provision

1. Trade partners and tiered contractors must provide a modified return to program for any of their employees returning from an occupational injury for a minimum of 90 days after the injury date.
2. Failure to provide accommodations to an injured employee may result in a penalty assessment, at Turner Construction's discretion, to the trade partner of $2500 per week until such time as the injured employee is returned to work.

VI. Documentation for all Work-Related Incidents, Illnesses 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 on the site.

- Turner Construction Company Incident Report form in Origami.
- 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 for having 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 orevent.

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 Origami, 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.

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 HQ, Chief EHS Officer 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 be incorporated 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 of less than 1.00, then no waiver is necessary.

III. Roles and Responsibilities

1. Turner Procurement Manager & BUEHSD:
   a) Must ensure EMR policy is adhered to by all Turner employees 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 Turnerpolicy.
   b) Must attend and participate in project orientations.
   c) Must participate in any and all required pre-planning meetings, JHA's and PTP meetings.

Recognition/Award Programs and Criteria

I. Policy Statement

Recognition/award programs can be an important tool to promote workplace safety, health, and safe working environments and should serve to encourage and motivate workers to go above and beyond to enhance the current safety culture.

Given OSHA's scrutiny of "incentive" programs that reward workers based on no one getting hurt, all programs should assure they meet certain criteria to ensure its compliance with OSHA's rules. Additionally, there are certain tax and legal implications that must be considered.

II. Guidelines to make the recognition/award program OSHA compliant and more effective:

1. The program should be behavior-based rather than injury-rate-based. Provide recognition/awards to workers practicing safe operating procedures and best practices instead of incentivizing plans based solely on number of incidents.
2. Encourage reporting of near misses, hazardous conditions or behavior, and situations which will prevent future accidents and injuries. (Leading vs. Lagging Indicators)
3. Recognize employees through top management, in a timely manner, and in front of others to acknowledge their safe behavior and encourage others to act in the same manner.
4. Pure monetary (cash) awards should not be utilized. Non-monetary awards are acceptable if they are not based on "reporting an incident". Other best practices include utilizing other awards such as points or an award, safety bucks, certificates, days off, safety pins or challenge coins, lunches, and recognition boards.
5. Recognize workers for a wide variety of safety activities such as providing safety suggestions to daily operating procedures, guiding a co-worker or new hire to perform a task safely, identifying a hazard or participating in safety committees.
6. Programs cannot be vague or limited to the actual reporting of an incident. "No injuries reported" or "hours worked with no lost time incidents" or "Act Safely" (which is too vague) should not be the basis for the recognition/award program, as these metrics give clear motivation for employees not to report injuries, or they are vague and unclear as to what needs to be done to qualify.
7. Direct awards based on worker behavior, and the qualifying metrics/procedures should be documented clearly. A basic example would be "workers must participate and engage in the daily pre task safety huddle, follow all company outlined safety

procedures and day to day tasks as outlined in the pre-task plan to qualify for the recognition/award program."

8. Make sure the program is robust and clear, outlining how employees will conduct themselves and how you want them to perform the key elements of their job (3 points of contact if using a ladder, using all required PPE, observing, and following all posted road/traffic signs, walking only in required and designated walkways, observing Turner project rules, etc.).
9. It is vital to recognize workers equally and fairly. What we want to do is applaud/appreciate the behavior/action evenly across the workforce. This also requires management/supervisors to be engaged and actively observing all the time and then comparing results prior to an award/recognition.
10. Allow workers a voice in setting safety goals and expectations for themselves. This will motivate them to ensure their own buy-in and commitment to safety and work towards achieving it.

III. Tax Implications and recordkeeping:

- Monetary recognition/award to a subcontracting entity
  - The amount required to be reported is $600 or more within the calendar year.
  - Subcontractor employees – once the award is valued over $600, the amount will be required to be reported to the individual on Form 1099 as nonemployee compensation. This would be reportable as other income by the recipient subcontracting entity.
  - If it is not over $600.00 is there any tracking of information required?
    - The $600 is within the calendar year. It would be advisable to track all to ensure no one person receives $600 or greater in awards within a year.
    - The value of the item awarded must be calculated as fair market value.
- What information is required: name, contractor, address, phone number and the Individual's Social Security Number
- Turner employee –the fair market value of the item is expected to be required to be included in taxable wages and is subject to employment taxes (including social security & Medicare tax)
  - The IRS would view this recognition/award as compensation attached to their employment and require it be included in the employee's taxable compensation (Form W-2). The threshold is lower than the $600 for an employee (general rule = $100).
- The recognition/award should be for demonstrating safe behavior and going above and beyond for safety while performing their services on a Turner construction project.
  - For tax purposes, the focus is that the award is attached to their employment and will need to be tracked and, when applicable, report the award to the IRS.

- If the program is legally permissible, it is recommended that an independent group of members, the majority of which will not be officers of Turner would be the decision makers on who receives the recognition/award. Generally, independent is defined as most of the members of a committee consisting of persons who are not able to exercise substantial influence over the relationship with the party receiving the recognition/award.

IV. Legal considerations:

- Do we plan to have the Owner pay for the reward program, or will it be a non-reimbursable expense? If we plan to bill the program to the Owner as a job cost, we should review the relevant contracts to see if that is permitted. Even if it is, it would be a best practice to get the Owner's pre-approval of the expense. If Turner plans to absorb the costs as a non-reimbursable expense, there is no reason to consult the Owner.
- Private jobs. Our compliance policy would not prevent us from providing these rewards to our trade partners.
- Public jobs. We must be mindful of appearances when we give anything of value to an employee of a trade partner, so we should have further discussion about how we manage that before rolling the program out for public jobs.
- Some trade partners might have compliance policies that would prevent their employees from accepting the rewards. We should become familiar with and respect any such prohibitions in our trade partners' policies.

V. OSHA Considerations:

Incentives can be based on injury rates with the right provisions. Rate-based programs that reward employees (or managers) with a prize or bonus for low/no injury rates are permissible as long they "are not implemented in a manner that discourages reporting." If an employer withholds a prize or bonus because of a reported injury, OSHA will not cite the employer under § 1904.35(b)(1)(iv) as long as the employer has implemented adequate precautions to ensure that employees feel free to report an injury or illness.

It may not be sufficient to simply make a statement encouraging reporting or prohibiting retaliation. To stay on the right side of the law, OSHA says that employers using a rate-based incentive program may also want to implement:

- Recognition for workers identifying unsafe conditions,
- Recognition for workers proactive safety performance,

- Training to reinforce reporting rights and responsibilities and non-retaliation policies, and
- A mechanism for accurately evaluating employees' willingness to report injuries and illnesses.

Safety recognition and award programs that judge workplace safety just by the number of accidents can lead to un- and under-reported injuries, especially when teams are rewarded. The peer pressure adds up, meaning employees reluctantly report injuries. No one wants the blame for an entire team losing a reward. Done right and with proper planning and forethought, these programs can have a positive influence on safety and preventing injuries.

If you have questions about how to set up a recognition/award program or these guidelines reach out to: Steve Spaulding II (EH&S) or Regina Fogarty (Finance).

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. No walking or driving on projects while talking or texting on phone or walkie-talkie.
8. 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 and Subcontractor employees) who perform work on projects managed by Turner. The communication of potential hazards associated with chemicals and hazardous materials in the workplace 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) 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 for obtaining and maintaining 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.

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 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 Turner Construction hires. 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 jobsites, 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.
    1. This information will include, but not be limited to:
        a. Specific chemical hazards.
        b. Measures that employees will take to prevent exposures.
        c. Measures the company has taken to lessen the hazard, including ventilation, respirators, presence of another employee, and emergency procedures.

G. 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 (and 2 when applicable) Environmental Assessment, Pre-Demolition Hazardous Materials Survey, and/or similar reports provided by the building owner or Environmental Consultant. Once such information is identified, all of the above Hazard Communication program requirements must be enforced in order to communicate appropriate information to employees.

H. Chemical Storage
    1. Turner reserves the right to approve all chemicals and quantities brought on site.
    2. The user of the chemical must provide Turner Construction a Safety Data Sheet prior to bringing the substance on site.
    3. All chemicals and equipment containing chemicals must be stored in approved areas. (i.e., chemical cabinet, bunker)

4. Contractors are responsible for removing all unused chemicals from the Turner Project site at the completion of their contract.
5. All chemical containers must be properly labeled.
6. Chemical/gas cylinders (welding, purging, leak detection cylinders, etc.) must always be secured.
7. All dedicated chemical storage areas must have safety data sheets (SDS) available at the storage location.
8. If you are unsure of appropriate storage areas, contact Turner for directions.

I. Material/Waste Disposal

1. All hazardous waste must be disposed of in accordance with Federal, State, and Local regulations and shall comply with applicable Turner hazardous waste programs.
2. All hazardous waste must be properly labeled.
3. Hazardous waste materials must be discarded into proper disposal containers.
4. Non-hazardous waste must be disposed of into appropriate recycling or disposal containers.
5. Waste separation, recycling and reduction methods are encouraged on all projects and are to be made a part of the project logistics plan.

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 associated 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. The equipment you will need will be determined by the information on the SDS provided by the product's manufacturer.

HCS Pictograms and Hazards

Health Hazard	Flame	Exclamation Mark
		
▪ Carcinogen ▪ Mutagenicity ▪ Reproductive Toxicity ▪ Respiratory Sensitizer ▪ Target Organ Toxicity ▪ Aspiration Toxicity	▪ Flammables ▪ Pyrophorics ▪ Self-Heating ▪ Emits Flammable Gas ▪ Self-Reactives ▪ Organic Peroxides	▪ Irritant (skin and eye) ▪ Skin Sensitizer ▪ Acute Toxicity ▪ Narcotic Effects ▪ Respiratory Tract Irritant ▪ Hazardous to Ozone Layer(Non-Mandatory)
Gas Cylinder	**Corrosion**	**Exploding Bomb**
		
▪ Gases Under Pressure	▪ Skin Corrosion/Burns ▪ Eye Damage	▪ Explosives ▪ Self-Reactives
	▪ Corrosive to Metals	▪ Organic Peroxides
Flame Over Circle	**Environment**	**Skull and Crossbones**
	**(Non-Mandatory)** 	
▪ Oxidizers	▪ Aquatic Toxicity	▪ 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 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 the 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 for 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 staged 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 ofthem.

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.

Personal Protective Equipment

I. Policy Statement

All employees of Turner will be provided with 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, at a minimum, sturdy work boots. Metatarsal guards must be worn when using jackhammers, tampers or similar equipment which could be dropped or landed on a worker's toes / feet. ANSI-approved safety-toed boots must also be worn by masons, drillers, pile driving, steel erectors, and riggers due to the hazards inherent with their work.

4. 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. For above shoulder activities in which dust, metal shaving, fasteners or other similar hazards could fall onto your face, enhanced eye protection such as face shield, spoggles or helmet visor are to be used.

5. 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.

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. Anyone entering a Turner Construction Project is required to wear at a minimum cut resistant level 4 protective gloves 100% of the time, unless the competent person can demonstrate to Turner that wearing gloves for a particular task creates a greater hazard. If agreed upon with Turner, this deviation to not wear gloves must be identified on the PTP, reviewed, and acknowledged. Refer to ANSI cut levels for determining the correct glove. Additional hand protection may be required depending on the hazard assessment.

8. 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 such as between wall studs or above ceiling, and all demo activities.

9. Contractors exposed to dust, fumes, and/or gases shall be provided with proper respiratory protection designed to protect against the substance encountered. The Contractor is solely responsible for the proper testing and training per OSHA standards, and to provide the appropriate equipment. Reference Respiratory Protection Program herein.

10. 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.

11. 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 and 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.

12. All Turner employees, subcontractor employees and visitors to project sites are required to wear hardhats that comply with ANSI Z89.1. Employees exposed to electrical voltages of 600 V or greater shall wear hardhats that meet the requirements of ANSI Z89.2 Type Hardhats. Turner employees are required to wear one of the currently approved ANSI Type II or EN12492 safety helmet models with an integrated four-point chin strap attached and secured under the chin.

    Trade partner employees, vendors and visitors are required to wear an ANSI Type II or an EN12492 safety helmet (i.e., a safety helmet that meets the requirements of testing against vertical, front, back, and side impacts and penetration) with the four-point chin strap tightly attached and secured under the chin. The chin strap shall be secured with no more than a 2-finger gap between strap and chin.

    No other type of hard hat will be permitted on any Turner Construction Site.

Turner Staff and Hourly Employees Safety Helmet Guidance

Turner staff, Turner employed hourly workers, Trade partner employees, vendors and visitors are required to wear one of the Turner approved safety helmets that meet the requirements of an ANSI Type II or an EN12492 approved safety helmet (i.e., a safety helmet that meets the requirements of testing against vertical, front, back, and side impacts and penetration) with an integrated four-point chin strap tightly attached and secured under the chin with no more than a 2-finger gap between strap and chin.

Turner Construction moved to the use of Type II or EN12492 Safety Helmets for all individuals at our project sites in lieu of Hard Hats or Type I helmets.

Construction workers sustain more traumatic brain injuries than employees at any other type of workplace in the United States, according to a recent report from NIOSH. Traumatic brain injuries represented one-quarter of all construction fatalities during the eight-year study period. According to the report, workers 65 and older were nearly 4 times more likely to sustain a fatal traumatic brain injury than workers 25 to 34 years old. More than half of fatal work-related traumatic injuries are a result of falls – particularly from roofs, ladders, and scaffolds.

Armed with the above data and our commitment to the safety of all individuals, Turner raised the standard for head protection. For years, the traditional Type I hardhat was the first line of defense in preventing the types of head injuries stated above. With new technology and innovation comes added protection and the latest Type II (and EN12492) four-point chin strap safety helmets offer the highest protection standards, while still being comfortable and versatile.

What is the benefit of Safety Helmets that are Type II or EN12492 certified?
These helmets are **designed to reduce impact force as a result of a blow to the top or sides of the head**.

The performance requirements include:

(Type 1 and 2)	**(Type 2/ EN12492)**
Flammability	**Impact Energy Attenuation**
Force Transmission	**Off-Center Penetration**
Apex Penetration	**Chinstrap Retention**
Electrical Classification	**Front, Side, and Rear Impact Protection**

Some additional benefits of the Type II or EN12492 Safety Helmets:

- Four-point, adjustable chin strap - provides a secure fit; easilyremoved/replaced
- Ratchet suspension - easily adjustable, to comfortably fit different headsizes which ensures a precise and comfortable fit around the back of the head.
- Vented, Non-Vented and Short Brim Options
- Universal accessory slots for adding an integrated visor, glasses, or faceshield
- Electric shock protection - Protection against electrical hazards (Check electricalclassification)

FAQS:

Has Turner piloted the new Safety Helmets?
Yes, Turner has spent significant resources in the development and piloting of several Safety Helmets along with providing funding research in conjunction with NIOSH (National Institute for Occupational Safety and Health). Turner will continue to invest in products that provide additional levels of protection for those on our projects. Injuries to the head, either from heights, a simple slip and fall, or dropped

objects, can be irreversible or even fatal. Because of these life threatening/altering consequences, Turner is taking steps to require additional protection for those on our sites.

Why not expect just those working at heights to use these new helmets? Although those working at heights are at greater risk of injuries from falls, certain other activities including material handling and falling objects or simply slipping and tripping can cause the traditional helmet to come off which can lead to serious injuries. In addition, a 4-point strap will assure that the helmet stays in place regardless of the type of task being performed.

Does the chin strap always need to be engaged? Yes, the chinstrap should always be attached and secured under the chin, with no more than a 2-finger gap between the strap and chin.

What is the difference between Type II and EN12492?

See attached fact sheet.

What should I do with my old Hard Hat?

There are several of us who are nostalgic and would like to keep our hard hats and that is great. Adding a chinstrap to your old hard hat will not make it compliant with this new PPE standard.

If you would like to turn it in so that we can recycle your personal hard hat and support our sustainability efforts, we will be providing a location at each of our projects to collect them. The standard hard hat has a stamped expiration date and many of our “favorite” hats have expired.

In Conclusion
Thank you for your dedication in continuing to grow and nurture our Building L.I.F.E. culture. If you have any questions, please reach out to your Turner BUEHSD for any further clarification or questions.

Turner approved Type II or EN12492 Safety Helmets for Turner staff and employed trade workers:

When purchasing Type II or EN 12492 safety helmets for Turner Staff or Trade workers you must purchase the approved helmets below from the approved listed vendor.

Type II or EN12492 Safety Helmets

EN12492 certified: Centurion Height Master – Turner Store
EN12492 certified: Kask Zenith X – Colony Hardware
EN 12492 certified: KASK Zenith X2 Air (Vented)
Type II: Wavecel T2+ Pro (Non-Vented)
Type II: Wavecel T2+Max (Vented)
Type II: Studson SHK-1 Full Brim (Vented)
Type II: Studson SHK-1 Full Brim (Non-Vented)
Type II certified: Milwaukee - Colony Hardware or Turner Store

Turner employees must wear one of these Turner standard white safety helmets:

Centurion—EN 12492
Nexus HeightMaster



Kask—EN 12492
Zenith X HiVis



Milwaukee—Type 2
Front Brim (unvented)



Chinstraps on all types must be “two finger” snug.

Safety Helmet Fact Sheet

NORM COMPARISION			
	EN 12492	ANSI Z89.14 Type1	ANSI Z89.14 Type2
TOP IMPACT	Hemispheric anvil 5 Kg Fall height: 2 mt. Transferred force < 10 KN	Hemispheric anvil 3,6 Kg Fall height: 5,5 m/s (1,6 mt.) Transferred force <4450 N Average transferred force <3780 N	Same as type 1
SIDE IMPACT	Flat position: Front side and rear Fall height: 0,5 mt. Transferred force < 10 KN	Not required	The helmet falls on the hemispherical anvil above the DTL line.5 Kg. Fall height: 3,5 m/s (62 cm.) Max acceleration: 150 g.
TOP PENETRATION	Area: top within a radius of 55 mm. Anvil: cone 3 Kg. Fall height: mt. 1,0.	Cone of 1 Kg. Top in a radius of 75 mm. Cone Fall height: 2.5 (speed 7 m/s)	Same as type 1
RETENTION SYSTEM STRENGTH	Force: from 30 N. (3 kg) to 500 N. (50 kg) Requirement: max. elongation 25 mm.	Not required	Weight: 10 kg. Fall height:10 cm. Max extension: 25 mm.
FRONT AND REAR RETENTION SYSTEM	Weight: 10 kg. Fall height: 175 mm. Requirement: The helmet must not come off the test head.	Not required	Not required
CHINSTRAP WIDTH	> 15 mm	Not required	> 12.7 mm
VENTILATION	Mandatory holes, total area ≥ 4 cm2	Not required	Not required

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 TKN Document Management System.

II. Procedures

1. Job Hazard Analysis – JHA
   a) Every subcontractor will prepare a JHA for each phase of work 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

   The PTP is a formal daily work plan. Each supervisor should meet with their crew, preferably at the place of the work or task, 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:

   a) For each task of work a PTP will be completed to identify thefollowing:
      - 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(s)
- All PPE requirements for the activity, keep in mind that PPE is the last resort.
- 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. A copy of the PTP shall be kept near the work location.

The information the supervisors are relaying to the workers is the same that was developed in the JHA however, the PTP will more greatly define the plan for the 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 pre task plan 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.

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.** Some states and local municipalities have requirements pertaining to pre-task planning, whichever is more stringent must be followed.

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 pre-planning meetings with subcontractors.

2. The Subcontractor representative is responsible for completion of PTPs and daily hurdles, 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. Turner Staff will attend PTP/Daily Huddle

every morning, focus should be placed on the subcontractors with High-Risk Activities.

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.

Project Safety Staffing Policy

I. Turner EH&S Staffing Requirements

Full-time Turner project safety staff are 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. Refer to current job description and CDQ's for requirements, education, and certifications when assigning a full time EHS professional to a project. Consult with the BU EHSD and VP, Chief EHS Officer as needed to assure right staffing requirements are met based on project size and risk.

II. Turner Craft Workforce (SPO/GR) EHS Staffing Requirements

Full time Area EHS Manager (level 4 or higher): Each Business Unit with a sustained SPO crew size of 50 or over shall establish a full time Area EHS Manager SPO. The duties of the Area EHS Manager SPO are the following:

- Help to establish and maintain safe working practices and methods for SPO work.
- Launch and plan upcoming SPO work including pre-construction meetings.
- Perform day 1 onboarding training and full day training for new SPO members.
- Manage and direct activities of any FT project SPO Safety Managers
- Perform Audits of SPO work on each project in the Business Unit to measure compliance against Turner's program.
- Train SPO staff on Building LIFE and perform Process Assessments
- Work with outside stakeholder (Liberty Mutual) assess and improve EHS processes.
- Identify current state, ideal state and perform gap analysis for improvement.
- Participate in Foreman meeting.
- Provide and/or organize training for SPO crew to maintain needed certification/ qualifications, competencies or other OSHA required training.
- Assist in writing and/or reviewing JHA's for SPO work.
- Complete SafetyNet Inspection equal to SafetyNet Inspection Goals for Project EHS Managers.
- Assist in SPO related incident/injury investigation and facilitate co-learning process according to the Incident response matrix.
- Perform case management and work with claims for SPO related injuries.
- Designated Responsible Person Development

Full Time Project Safety Manager: SPO will provide a full time Safety Manager when the field workforce equals or exceeds 25 persons for 5 consecutive days, OR if a particular scope of work is considered "High Risk" (e.g. vertical form work and concrete, high bay work on scaffold of boom lifts etc.)

- The full-time Safety Manager shall not be assigned any other collateral duties and will coordinate all SPO safety efforts. The full- time Safety Manager shall meet the following qualifications detailed in Turner EHS Policy.
- Additional safety manager required at 100 onsite workers engaged in construction activities after the initial requirement at 25 workers.

Full time dedicated Safety Managers required	When Onsite Workers reaches:
1	~~25~~ → 15
2	100

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:

a. Is qualified to recognize safety hazards; and
b. Has the authority to take corrective action; and
c. Possesses current certifications in first aid, CPR and AED; and
d. 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
e. 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.

Turner reserves the right to approve or deny the subcontractor's fulltime safety representatives for the project.

f. At a minimum, the Subcontractor Foreman or Safety Manager will be requested to:
    1. Ensure their employees attend jobsite orientation before the start of work on the project.
    2. Take the lead in recognition and abatement of hazardous situations.
    3. 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.
    4. Perform and document weekly safety inspections (1 per week at minimum).
    5. Conduct at least one monthly safety tour with their Safety Director and submit findings to Turner.
    6. 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.

Inspection	Frequency
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

7. Conduct and document toolbox meetings on a weekly basis.
8. Issue minutes of the weekly toolbox meeting to Turner.
9. Effectively utilize and train employees in pre-planning, recognition, and remediation of hazards.

g. 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.
    8) Attend project safety meetings.
    9) Enforce disciplinary measures when need arises for their employees.
    10) Each subcontractor is responsible for all of their subcontractors and suppliers, regardless of tier, compliance with the Project Safety Program.

Safety Enforcement Penalty Guidelines

I. Policy Statement

To assist in Turner's efforts to provide a safe workplace, the following three-strike policy is to be enforced on all projects. The Penalty Schedule listed below is to be used at the discretion of the local Business Unit. Once a fine is assessed it must be collected. Money collected is intended to be used for safety recognition or training programs only.

Turner Construction will employ a three-strike policy related to violations of this policy.

1. For first-time non-repeat violations, a verbal warning may be issued.
2. On the second violation, a written warning shall be issued to the employer and a record of the action taken documented in a violation log.
3. On the third violation, the employee will be removed from the project and the removal shall be documented in the violation log.

Turner reserves the right to remove any employee of any company for serious, repeat, willful or egregious violations, skipping the three-strike process listed above. Turner may also require outside third-party training relative to the safety infraction for any employee to be able to return to the site.

Superintendents/Foremen may be held accountable for the actions of their employees, as well.

Penalty Schedule	
Non-serious violations (examples: basic PPE, missing PTP or ladder permit, etc.)	**$500**
Serious safety violations (including but not limited: to fall protection violations, unauthorized energized work, failure to follow Confined Space Procedures, etc.)	**$2,000**
Failure to provide modified duty when authorized by physician.	**$2,500/week**

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 (Predictive Solutions) is fully implemented and used within their Business Unit/Region. The SafetyNet link and new user request link can be found on TKN/Safety/SafetyNet at Turner Resources / Safety. Specific requirements can 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 and Construction Executives – 1 inspection per month per project
    b) Project Managers – 1 Safety inspection, Building LIFE Process Assessment or CSB Observation per project per month.
    c) Business Unit Environmental, Health, and Safety Directors – Three per week minimum (Safety Inspection or CSB Observation)
    d) Superintendents – 1 Safety inspection per week and 1 CSB Observation per week. May substitute a monthly Building LIFE Process Assessment or Worker Perception Survey for one of the Safety or CSBs.
    e) Project Safety and EHS Managers – minimum of 3 inspections per week (a combination of Safety Inspections, CSB Observations, and at least one Building LIFE Process Assessment.
    f) There may be additional periodic inspections required such as "Quarterly Fall Protection and Rigging" or inspections specific to temporary focus items such as COVID-19 that are not covered in this program, but are required, nonetheless.

Note: the above are minimum requirements and at the Operations Manager's and BUEHSD's discretion, the frequency of inspections will be *increased* if incidents on a given project are trending in a less than favorable direction.

The intent is for every project, regardless of size, to have weekly "Safety Inspections", as well as periodic Critical Safe Behavior Observations (input into SafetyNet). Each project should also perform a Building LIFE Process Assessment at least once a month. On a periodic basis (every one or two months), projects lasting longer than 6 months should perform a Worker Perception Survey and document the findings in SafetyNet.

Utilizing the Data to Drive Continuous Improvement

At least monthly, staff at each project, and at the BU-level, should review data gathered in SafetyNet at a staff meeting to identify trends by observation type, by contractor against incident type; successes and challenges for the purposes of identifying opportunities for improvement. The easiest method to perform this analysis is to use the real-time "Analyze" dashboards in SafetyNet. Reports may be run as well. Some datapoints that may provide opportunities for improvement include, but are not limited to:

- Review most frequent and most severe hazards.
- Review worst-performing contractors.
- Review the Building LIFE Process Assessment
- Review Worker Perception Survey results.
- Review which projects are underperforming the benchmark.
- Review "red flag" matrix.

Document these meetings and develop action plans around your findings.

SafetyNet Inspection Goals

	"Safety" Checklist (Long form)	**"Critical Safe Behaviors"** (short form) w/coaching	**B.L. Process Assessment**
BUEHSD	2/wk.	1/wk.	1/month
Project EH&S	2/wk.	1/wk.	1/month
PM, PX, CX	1/month/project	Weekly if on-site full-time	1/month or delegate
General Super	1/wk.	1/wk. (except the week doing "Safety" checklist)	
Asst. Super(s)	1/wk.	1/wk.	
Engineer (s)	2/month (every other week)	2/month (every other week)	

Other goals:

Each project: conduct a focused quarterly fall protection and rigging inspection using the sections in the "Safety" checklist.

Add new subcontractors to the drop-down menu as they are issued contracts.

Use the new Disciplinary Action Form to document written infractions.

Use the "insert picture" button for each unsafe condition.

Insert comments for each "unsafe." Record location info and worker name if possible.

Close out (correct and document) uncorrected observations promptly.

Give feedback (both appreciative and constructive) to workers after observations.

Designated Responsible Person for Turner Hourly Employees

I. Policy Statement:

Turner cares about the health and wellness of our employees and Safety is our number one value. It is imperative to have a leader to be fully engaged with front line craft to create a safe environment. This policy is to set an expectation for our **D**esignated **R**esponsible **P**erson that is accountable and responsible for leading our Turner craft employees to have safe work production. Each project will work with the SPO Manager to identify the Designated Responsible Person for Turner craft employees.

II. Roles and Responsibilities:

The Designated Responsible Person is accountable for the overall Health and Welfare of any Craft employees under their direct guidance. This will include the following elements:

- Understand the full scope of the work.
- Ensure the development of a Job Hazard Analysis with engagement of the craft employees.
- Identify competent person(s) for specific scope of work.
- Identify training that is needed and coordinate the training.
- Ensure a project specific safety orientation has been completed.
- Ensure that proper tools and equipment have been identified and procured.
- Ensure a Pre-Task Plan is completed and reviewed with craft employee engagement.
- Ensure work is stopped and re-planned if conditions, work, or task changes.
- Ensure that all work has been planned (PDCA) throughout the day.
- Ensure that a daily safety huddle is being attended by craft employees.
    - Periodically review the quality of the engagement
    - Ensure any required permit is completed and followed.
        - To include but not limited to Ladder Permits, Surface Penetration, Hot Work
- Ensure that documented Safety Inspections have been completed for the scope of work in SafetyNet.
- Understand EH&S Policies and provide guidance for any questions or concerns (if applicable)
- Coach and Mentor craft employees; Recognize safe performance and apply disciplinary action policy as appropriate.
- Ensure that all craft employees understand their rights of “Stop Work Authority.”
- Identify and ensure that a translator is available (if applicable) for all of the above

III. Prerequisites to be a Designated Responsible Person:

To positively impact and lead craft employees the following are minimum requirements for the Designated Responsible Person.

- OSHA 30 Hour
- First Aid / CPR

- Turner - Building L.I.F.E.
- Reasonable Suspicion
- Qualified to recognize hazards and has authority to take corrective action.

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) Attend Building L.I.F.E. Training – coordinate with the BUEHSD to schedule in the first 30 days of employment.

b) 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

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.

i. 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.
ii. 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 competent and compliant with all applicable regulations. Scaffolds, Traffic Safety, Fall Protection, Hoists/Cranes, are a few examples of specific technical training required to build safety acumen.

g) Storm Water Training – The Business Unit Storm Water Coordinator will assign necessary personnel to attend the Turner University Storm Water Training class. Local or state governments may have additional requirements for stormwater certification. Following Stormwater Training, the Business Unit Storm Water Coordinator will ensure these employees are trained to use EVOCO when required.

h) Pre-Task Plan and Job Hazard Analysis Training – All Turner site staff, and trade foreman trained in how to properly develop a quality pre task plan and execute a daily huddle.

i) All Turner staff shall be trained in the expectations of Turner's EH&S policies, programs, and processes.

i. Ensure enhanced focus on Proper Safety Preplanning, risk management, and worker engagement from the launch of the project through turnover.

Section

3

TURNER

CORPORATE ENVIRONMENTAL, HEALTH AND SAFETY POLICY

Engineering & Technology

Vertical Wall Penetration "Cut Outs"

The following relates to any vertical wall "Cut Outs" that weighs more than 50 lbs. to allow for utilities or other material to pass through. This applies to all Turner projects.

The high risk associated with these "cut outs" necessitates additional proactive management as well as the establishment of procedural elements to reduce the risks involved with these tasks.

Note: These requirements will apply to cuts where vertical wall saw cutting is required (*Reference CSO Alert 1002).*

- It does not apply to core drilling roro openings that weigh less than 50 lbs.
- If opening is less than 50 lbs. a Job Hazard Analysis and Pre-Task Plan (PTP) should address how to safely remove the "cut out."
- For masonry walls, a lintel engineering plan and PTP must be in place.

I. Procedures (to be taken in this order)

1. The following sequence must be followed. These requirements must be taken in the order listed below.
    a) A plan must be discussed with the designer and client that assures block outs for openings will be made at the time of casting.
    b) If block outs cannot be made at the time of casting and must be done in the field, the panel that requires a cut out will be lowered to the ground and placed on dunnage so the sawcut can be made on the ground.
    c) If the block out for the opening cannot be made at the time of casting or the panel cannot be lowered to the ground:
        i. The contractor making the "cut out" will provide an engineered Method of Procedure (MOP) with means and methods that is signed and sealed by a licensed 3rd party engineer.
        ii. The MOP will be submitted to the Engineer of Record for their review and approval.
        iii. The plan will be reviewed by Turner with assistance from TEG as needed. Final comments from this plan review will be incorporated into the plan.

Example of Engineered Solution MOP (Method of Procedure) if "cut outs" were not done at the time of casting and panel cannot be lowered for saw cuts to be made on the ground.

Prior to the cuts being made in the field from a vertical position, the developed MOP which has been reviewed and approved by a 3rd party engineer for the contractor will be reviewed by the Engineer of Record and then reviewed by Turner and any final comments incorporated into the plan. The plan should include (not all inclusive):

a. The JHA and Pre-task plan submitted by the contractor performing the work.
b. Identification of team members, their role and responsibility and qualifications/certifications of those doing the work
c. Description of the item(s) to be cut, how many, location, weight, etc.
d. Cutting equipment that will be used
e. Bracing required
f. Crane or hoisting equipment that will be used (including certifications of operators) to remove "cut outs"
g. Calculations of weight of "cut outs" and crane or hoist equipment limits
h. Weather conditions
i. Location of Controlled Access Zones
j. Rigging procedures
    a. Manufacturers' rigging specifications must be reviewed and followed, if applicable
    b. Worker training and PPE requirements
k. Procedures for removing the "cut out" from the rigging once the load is landed
    a. If blind picking or landing follow the Blind Landing Procedure CSO Alert that was issued in January 2021
        i. Document blind landing procedures and include in High-Risk Activity Pre-Task Planning and communications
        ii. Coordinate a communication meeting between the crane or hoisting operator and signal person
        iii. Facilitate training with all trade workers and partners involved to assure comprehension of the specific procedures for the entire procedure including rigging removal in conjunction with an awareness barrier separating the load and workers

Final approval and review of the engineered plan will be made by the Business Unit Safety Director and Operations Manager.

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) 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.

    e) No worker shall be permitted to walk under concrete buckets while it is being elevated or lowered into position.

    f) 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.

    g) 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.

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.

    a. 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 Pre- Task Plan. The placement sequence will also be noted in the JHA.

d) A qualified designer must prepare the design of the shoring and re-shoring. A third-party engineer qualified (certified, registered engineer) in structural design shall review the design of the shoring.

e) 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 the designer.

f) Forms and shores must not be removed until the employer determines that the concrete has gained sufficient strength.

g) 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.

h) At building perimeters where the decking steps down to allow for a beam pour, the height of the rails shall be increased accordingly.

i) 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.

j) Protruding nails should be removed or bent immediately.

k) Where employees must walk across rebar, temporary walkways must be installed to prevent trip hazards.

l) 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. Authorization to Strip Formwork:

a) 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.
b) 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.

5. Use of Proper Barricades and Signage on the formwork:

a) 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.
b) 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.
c) Additional warning signage that contains the appropriate contact information for the contractor which has installed the barricade must be installed on the barricade.

6. Concrete Core Formwork Systems
a) The business unit must schedule a Teams conference call prior to erecting any concrete core formwork at the project. Ideally this call will be scheduled post concrete interviews but pre award so that the business unit and this team have an understanding of what formwork systems and methodologies will be utilized for the concrete formwork system.

a. This meeting should include Andrew Leone aleone@tcco.com, Jack Dawson jdawson@tcco.com, John Grafrath jgrafrath@tcco.com, Karl Kinsella kkinsella@tcco.com, Steve Garrett srgarrett@tcco.com, and Doug LaPlante dlaplante@tcco.com.

b. The goal of this meeting is to have a peer review done to include new policy elements in the Turner EHS Program in relation to concrete core formwork systems that are above OSHA and industry standards.

c. Please include in the invite to the call.
    - Concrete Core Formwork System Questionnaire
    - Concrete Core Formwork drawing
    - Engineered anchor detail drawing
    - Erection / Dismantle Plan
    - Fall Protection Plan
    - Access Plan

7. Masonry Requirements

a) A limited access zone (LAZ) 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) A top guard rail is required to be installed on the working side of the masonry scaffold unless the height of the installed block is 39” or other suitable fall protective systems used.

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 the 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 orisolated.
- 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 the 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 for entering 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 rescue 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 a 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 for making 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 the 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:
    - Behavioral changes are observed.
    - Dangerous situations occur in or around the space.
    - Conditions exist that are not consistent with the permit.
    - 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 maintain 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 has entered the permit space
- Performs no duties that might interfere with the attendant's 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 employees 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 [Date]
[Office Street Address]
[City, State, ZIP]

[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) An annual third-party inspection is required for all cranes(s). Documentation of the annual third-party inspection and report must be submitted to Turner prior to use. Third party inspectors are required to possess local and federal credentials to which type of crane they are inspecting.
   b) An additional project specific third-party inspection is required for any crane that will be assembled, erected and/or modified on site that requires more than adding counterweights or a seeing on jib. An additional third-party inspection will be required for each modification made to the crane while on site.
   c) Re-inspection may be required if repairs or modifications are required after the initial inspection.
   d) A daily crane inspection, performed by a competent person, is to be documented and those are reports are to be given to Turner when requested.
   e) If the manufacturer's inspection criterion does not exist, a qualified person, familiar with crane design and dynamics, may develop inspection criteria.
   f) Turner requires that all crane operators be certified by an accredited testing organization. Currently there are four organizations offering crane operator certifications. The four are the National Commission for the Certification of Crane Operators (NCCCO); the Operating Engineers Certification Program (OECP); 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.
   g) All operators are required to verify the weight of each load prior to hoisting.
   h) 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.

i) 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.

j) Mobile crane movement on site must be in accordance with manufacturer's recommendations.
k) 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.
l) The swing radius of cranes must be properly barricaded at all times while working on site. Tape is not an acceptable barrier.
m) 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.
n) 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.
o) 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.
p) 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.
q) A qualified rigger must inspect the rigging prior to each use.
r) All windows in cabs must be safety glass that produces no visible distortion that will interfere with the safe operation of the machine.
s) 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).
t) 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
u) 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.

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) Chain-falls / 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.

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 include, 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 follow the Turner Environmental Operations Program and 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 onsite.

    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. Holes and openings must be identified, covered, and secured against accidental displacement, with appropriate “Danger - Hole” markings.

    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.

3. Chutes

a) All openings into the chute must be a minimum of 42" (+ or – 3") above floor elevation or fall prevention/protection must be provided.

b) 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.

c) All chutes must be entirely enclosed except for openings at or slightly above the floor level for the insertion of materials.

d) 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.

e) Chutes must be designed and constructed of such strength as to eliminate failure due to the impact of material and debris loaded into them.

f) 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. 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. The area must be identified with warning barricades and signs.

   b) During this operation continuous observations, by the competent person, must be made to identifying potential areas of failure.

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 energized electrical work shall comply with NFPA 70E Requirements. This includes exposures related to start-up, testing and commissioning.

   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 subcontractor 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 elevation above floor.

   h) Electrical room doors shall be secured prior to energization.

   i) 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.
   j) Always de-energize if possible, following the lock-out/tag-out procedure discussed in this plan.

   k) 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).

l) 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.

m) Care should be taken during the installation/removal of sheaves to prevent contact and damage to energized conductors.

n) 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 be 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, minimum AWG 12-gauge cords are acceptable for use on site. Extension cords must include, at a minimum, the following designations on the cord jacket: W for outdoor use (or S if indoors), and O when the cord is present in an oily environment.

   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 a power tool or cord is used where the circuit is not GFCI-protected, a portable GFCI is required at the receptacle.

   f) Extension cords cannot be connected in series. The manufacturer's recommendations must be followed.

g) Extension cords cannot exceed 100’ or run through doorways. The electrical contractor is to install temporary receptacles within 100’ of where any employee might be standing inside the structure.

h) All electrical cords shall be elevated to a minimum 8’ in the air in hallways, corridors, aisles, stairways, doorways, and exit areas where a tripping hazard may occur.

i) If the cords cannot be elevated, they shall be protected from damage by equipment, carts, trucks, and other rolling objects.

j) 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 in general areas and 15 in electrical or mechanical rooms, special areas where additional lighting might be needed, or where contractors are placing temporary offices. The electrical contractor is to provide LED lights in every room.

   b) When installing temporary lights and choosing the elevation to hang them, anticipate the future placement of ductwork, piping, etc., that may block and reduce light.

   c) Installation of temporary lighting must be per manufacturer’s specifications and in compliance with OSHA, NFPA, NEC and local codes.

7. Pulling Cable

   a) When blowing line into a conduit to pull wire or cable, follow the manufacturer’s instruction for the tools being used. When pressurizing the conduit, do not exceed the allowed pressure. The assembly must have a pressure release valve set for the maximum pressure not to be exceeded, as well as a pressure gauge. No one should be located where they could be struck by components used to pressurize the conduit or by the plug pulling the line shooting out the other end.

   b) When using a “tugger” (puller motor assembly) to pull cable or wire, first document that all applicable employees have received training on the equipment and then follow the manufacturer’s instructions. The force gauge must be operable and calibrated, and the anti-reversing pawl must be functional. Do not use in a wet environment. Use the correct size rope with the diagramed configuration. Keep the rope away from the operator’s feet and keep body parts

out of pinch points. Never wrap rope around wrists or body parts. Never exceed the load rating.

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Control of Hazardous Energy – LockOut/TagOut (LO/TO) Program

I. Policy Statement

1. This program applies to all Turner Construction personnel and contracted trade partners or vendors and complies with all applicable OSHA regulations, codes, NFPA 70E standards, or other requirements during all project phases.

2. The purpose of this program is to eliminate the potential release of energy that could threaten the safety and health of people or damage equipment. Energy includes, but is not limited to, electrical, mechanical, hydraulic, pneumatic, chemical, thermal, medical gases, gravitational, potential, kinetic and other energy.

3. The intent of this program is to provide practical safe work conditions for employees relative to the hazards and hazardous energy around them. These hazards may arise from different phases including construction, start-up and commissioning, maintenance, operations, troubleshooting, testing, inspections, or another phase of a project.

II. Scope and Requirements

1. Turner Construction personnel and all contracted trade partners, vendors, and other contractors are required to have a written Lockout/Tagout procedure if there is potential for employees to be exposed to a hazardous energy. The LO/TO procedure shall identify the minimum procedural steps necessary to verify a “zero energy state” before any work is started.

2. Turner Construction project staff has the responsibility to ensure a written site-specific LO/TO program is established by its respective contractors who will have personnel potentially exposed to hazardous energy. They will review it for effectiveness and will verify that it addresses all forms of hazardous energy. This includes fixed, permanently installed equipment, temporarily installed equipment, portable equipment, temporary and permanent power.

3. Each contractor working around a potentially hazardous energy will administer their own LO/TO program. Each contractor will designate one or more competent persons who will be responsible for their entire program and will also ensure proper coordination with affected contractors.

4. Appendix E contains Turner Construction’s LO/TO procedure and is the minimum required for a project. As outlined in the regulation, each employer shall implement and document an overall hazardous energy safety program that directs activities appropriate to the risk associated with the hazardous energy.

5. Site specific Environmental Health and Safety Plans may have a more complex LO/TO procedure.

6. All personnel involved in LO/TO shall be trained according to OSHA and NFPA 70E and it shall be documented.

7. All personnel involved in LO/TO shall address employee exposure to hazardous energy with a Pre-Task Plan (PTP) or Method of Operating Procedure (MOP) that incorporates the following:

    7.1. Identify hazards.

    7.2. Assess risks.

    7.3. Implement risk control according to the hierarchy of risk control methods. These include Elimination, Substitution, Engineering Controls, Awareness, Administrative Controls, and PPE.

    7.4. Shall address the potential for human error and its negative consequences on people, processes, the work environment, and equipment.

III. Communication and Responsibility

1. Each employer shall be responsible for the following:

    1.1. Providing the equipment necessary to execute LO/TO procedures.

    1.2. Providing LO/TO training to workers in accordance with OSHA and NFPA70E

        A. The initial LO/TO training shall encompass the LO/TO procedures and.

        B. The employee's responsibility in the execution of the procedures

2. Auditing the LO/TO program in accordance with OSHA and NFPA 70E.

3. Auditing execution of the LO/TO program in accordance with OSHA and NFPA

4. Employee responsibility:

    4.1. The employee shall comply with the safety-related work practices and procedures provided by the employer.

    4.2. Be responsible and have the knowledge and understanding required if directing work, to stop work, identify hazards, read and mark-up applicable drawings for isolation points, review for potential back-feed, walk the system down, LO/TO, or MOP for safe application and use of LO/TO, and removal of all energy controls and isolation devices.

4.3. Shall ensure procedural compliance with the LO/TO procedure for all personnel.

4.4. Ensure coordination with others who are affected.

IV. Training and Documentation

1. Each employee affected by the LO/TO 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 LO/TO 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 LO/TO initiation,
    - Time of LO/TO 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.

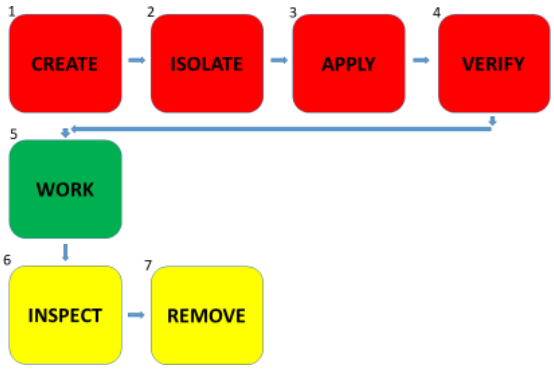
6. This process must be documented to show you have followed all the steps to keep the workforce safe and have used “all reasonable means” to contact the employee who was responsible for the lock.

7. In the event an employee is discovered tampering with or violating the LO/TO procedure, the employee will be removed from the project.

Appendix E: Lockout/Tagout (LO/TO) Procedure

Table of Contents:

1. LO/TO Operations and Log
2. Definitions
3. Competent Person and List
4. Locks, tags, and energy isolating devices (EID)
5. Simple LO/TO and Complex LO/TO Operations
6. Emergency Release
7. Zero Energy State Verification
8. LO/TO Process
9. Discipline and Enforcement





RED / Danger – Perform these steps in order and verify ZERO energy state BEFORE work can begin



GREEN / GO – WORK can begin once a ZERO energy state has been reached for the given work scope AND personnel apply their lock



YELLOW / Caution – Verify work is complete and Inspect equipment is free from hazards before removing LO/TO

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1. LO/TO Operations and Log

1.1. Lockout/Tagout is required per NFPA 70E and OSHA and it is required when an employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle.

1.2. Personnel who are working around hazardous energy shall use Lockout/Tagout (LO/TO) procedures. Personnel shall affix their personal lock and tag to an energy isolating device (EID) such that the component is isolated and can't be operated or the machine can't be started. The component(s) will be de-energized, isolated, and locked out to obtain a "Zero energy state" before work may start.

1.3. Affected employees shall be notified by the employer or authorized employee of the application and removal of lockout devices. Notification shall be given before the locks are applied, and after they are removed from the machine or equipment.

1.4. The LO/TO Log is used to track the placement and removal of energy isolating devices (EID). Whenever there is a need for an EID or a LO/TO, this log will be used.

1.5. Personnel who are using LO/TO shall sign on to the LO/TO Log when they place their personal lock and tag on an isolation device. They will sign off the LO/TO Log when they remove their personal lock and tag.

1.6. The foreman, first line supervisor, or person directing the work will leave their personal lock(s) and tag(s) on until work is complete.

- Exception, there is a transfer of responsibility of that work scope to another responsible foreman or supervisor. After having a turn-over, walking the work scope and LO/TO down, the new foreman/supervisor may place their personal lock(s) and tag(s) on the identical EIDs of the foreman/supervisor being relieved. Next, the new foreman/supervisor may now sign on to the LO/TO Log and the previous foreman/supervisor may now sign off the LO/TO Log. The responsibility of care and custody of the work scope, the zero-energy state, and the LO/TO has now been transferred.

1.7. The LO/TO Log contains the following information:

- Project Name / Site
- Location: Name of the electrical/mechanical room, floor, level, elevation, building
- Today's Date
- Scope of work – describe the work scope in detail.
- List the Energy Isolating Devices (EIDs) that need to be isolated to obtain a Zero Energy State (Use electrical single one-line diagrams, P&IDs, drawings, and attach to this LO/TO Log).
- Competent person requesting the LO/TO – Did you perform a walk down to verify? Yes or No
- Competent Person Isolating the EIDs and/or verifying Isolation – Did you perform a walk down to verify? Yes or No
- (Print Name/Company): Foreman / Supervisor sign on after they place their lock(s) on. Their lock(s) stay on the EID(s) / isolation point(s) or group LO/TO box until the work is complete.

  - The only exception is a transfer of responsibility to another Foreman / Supervisor who will place their lock on and sign on to the LO/TO Log first.

- Affected Employees sign on and place their lock(s) on before they start work and sign off and remove their lock(s) at the end of their shift, using a time stamp.

1.8. See an example of the LO/TO Log at the end of this procedure.

2. Definitions

2.1. Affected employee: An employee whose job requires him/her to operate or use a machine or equipment on which servicing, or maintenance is being performed under lockout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

2.2. Authorized employee: A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.

2.3. Capable of being locked out: An energy isolating device (EID) is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it. Other energy isolating devices are capable of being locked out, if lockout can be achieved without the need to dismantle, rebuild, or replace the energy isolating device or permanently alter its energy control capability.

2.4. Complex LO/TO: All complex LO/TO procedures shall require a written plan of execution that identifies the person in charge. It shall vest primary responsibility in an authorized employee for employees working under the protection of a group LO/TO box or device. The person in charge shall be held accountable for safe execution of the complex LO/TO. All complex LO/TO plans shall identify the method to account for all persons who might be exposed to hazardous energy. A complex LO/TO procedure shall be permitted where one or more of the following exists:

- 1) Multiple energy source
- 2) Multiple crews
- 3) Multiple crafts
- 4) Multiple locations
- 5) Multiple employers
- 6) Multiple disconnecting means
- 7) Particular sequences
- 8) Job or task that continues for more than one work period or shift

2.5. Control lock: A padlock used to secure a group LO/TO box or device and ensure the established LO/TO work boundary can't be modified until authorized by the person in charge of the LO/TO procedure. The person in charge of LO/TO maintains control of the control lock keys.

2.6. Energized: Connected to an energy source containing residual or stored energy.

2.7. Energy isolating device (EID): A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and, in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy. Push buttons, selector switches and other control circuit type devices are not energy isolating devices.

2.8. Energy source: Any source of energy includes, but is not limited to, electrical, mechanical, hydraulic, pneumatic, chemical, thermal, medical gases, gravitational, potential, kinetic and other energy.

2.9. Hot tap: A procedure used in the repair, maintenance and services activities which involves welding on a piece of equipment (pipelines, vessels, or tanks) under pressure, in order to install connections or appurtenances. It is commonly used to replace or add sections of pipeline without the interruption of service for air, gas, water, steam, and petrochemical distribution systems.

2.10. Lockout: The placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

2.11. Lockout device: A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds. Lockout devices shall be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or other metal cutting tools.

2.12. Normal production operations: The utilization of a machine or equipment to perform its intended production function.

2.13. Servicing and/or maintenance: Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the unexpected energization or startup of the equipment or release of hazardous energy.

2.14. Setting up: Any work performed to prepare a machine or equipment to perform its normal production operation.

2.15. Simple LO/TO: All LO/TO procedures that involve only a qualified person(s) de-energizing one set of conductors, circuit part source, or EIDs for the sole purpose of safeguarding employees from exposure to hazards shall be considered to be a simple LO/TO. Simple LO/TO procedures shall not be required to be written for each application. Each worker shall be responsible for his or her own LO/TO.

- Exception: LO/TO is not required for work on cord and plug connected equipment for which exposure to the hazards of unexpected energization of the equipment is controlled by the unplugging of the equipment from the energy source, provided that the plug is under the exclusive control of the employee performing the servicing and maintenance for the duration of the work.

2.16. Standardized: Lockout devices shall be standardized within the facility in at least one of the following criteria: Color; shape; or size.

3. Competent person and list

3.1. “Competent person” means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

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3.2. Every trade partner, vendor, contractor, or other company that will have personnel potentially exposed to hazardous energy shall designate at least one person as a competent person relating to LO/TO.

3.3. The LO/TO competent person or designee(s), shall be responsible to control all aspects of the LO/TO procedure per NFPA 70E and OSHA. This includes ensuring training and documentation for the appropriate personnel. The LO/TO competent person will also ensure coordination with other contractors, vendors, and tradesmen.

3.4. Each company's leadership team (Site Manager, Project Manager, etc.) shall list their competent person(s) name(s) and contact information on company letterhead which Turner Construction will procure.

3.5. Turner Construction will compile these contacts in the competent person list which will be conspicuously posted around the jobsite/project (Ex: near hazardous energy, in electrical rooms, in meeting rooms, in offices).

3.6. The purpose of the competent person list is to identify and promote communication amongst personnel which have been deemed competent relating to LO/TO. It also acts as a tool for everyone to use when there is a question pertaining to hazardous energy, LO/TO, or to call and ask for help.

3.7. See an example of the competent person list at the end of this procedure.

4. Locks, tags, and energy isolating devices (EID)

4.1. Lockout devices shall be standardized within the facility in at least one of the following criteria: Color; shape; or size.

4.2. Lockout devices shall be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or other metal cutting tools.

4.3. All employee locks are keyed differently.

4.4. A DANGER, "DO NOT OPERATE" (DNO) Tag shall be affixed to employee personal locks at all times (See an example of a "DNO" tag at the end of this procedure).

4.5. All DANGER, (DNO) tags will have the following information on them at a minimum:

- Employee Name
- Contact Number
- Company Name

4.6. Personal locks and tags shall only be used in accordance with the LO/TO procedure.

4.7. All component locks will be the same color but a different color than control locks. They will all be keyed differently.

4.8. All control locks will be the same color but a different color than component locks. They will all be keyed differently.

4.9. An energy isolating device is a mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and, in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy.

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4.10. Push buttons, selector switches and other control circuit type devices are not energy isolating devices. The use of software or programming controls, interlocks, or other non-physical disconnecting devices are prohibited from being used to isolate energy.

4.11. See an example of a pictures of the tags at the end of this procedure.

5. Simple LO/TO and Complex LO/TO Operations

5.1. Simple LO/TO Operations

- When work involves all of the following a simple LO/TO may be used.
  - A single employee, and a single EID will remove all hazardous energy, and work will not exceed the employee's shift, a simple LO/TO may be used.
- A simple LO/TO operation is one in which the employee applies their personal lock and tag either to an EID or to a LO/TO device such as a LO/TO hasp that is attached to an EID such that it can't change position or be operated.
- Simple LO/TO does not require completion of a LO/TO Log.
- If the simple LO/TO extends past the work shift when it was applied, has more than one EID, or requires additional people, it shall be made into a group LO/TO.

5.2. Complex LO/TO Operations

- When work involves any of the following a group LO/TO operation shall be used.
  - More than one employee, a vendor, or another contractor, more than one EID to isolate the hazardous energy, or exceeds one shift.
- A complex LO/TO operation is one in which a group LO/TO box and control lock will be used to maintain control of the work boundary and allow employees to attach their personal locks and tags.
- Control lock keys are maintained by the person in charge of the LO/TO procedure.
- All of the component lock keys shall be placed inside the lock box before the control lock is placed on the lock box.
- Before work can begin, all employees who potentially could be entering or crossing the work boundary shall attach their personal lock and tag to the group LO/TO box and sign on to the LO/TO Log. They must all verify the EIDs. Also, they must perform or directly observe verification of zero energy.

6. Emergency Release

6.1. Under extraordinary circumstances, it may be necessary to remove a lock that has been affixed by someone else or without the proper signoff.

6.2. Only the Site Manager/Project Manager or designee (Owner) may authorize the removal of a lock and only in accordance with the following stipulations:

6.2..1. The worker who is responsible for the lock is not present at the facility/project, and all reasonable efforts have been taken to contact the responsible worker and their supervisor.
6.2..2. All measures are taken to notify the worker prior to them resuming work.
6.2..3. In addition, if the lock is on a component, EID, or lock box relating to work or an inspection that is in the construction or startup and commissioning phase, the authorization of the energy marshal and commissioning manager will also be required, respectively. An Emergency Release Authorization form will be kept documenting these authorizations.

7. Zero Energy State Verification

7.1. All machines, equipment, and components shall be treated as energized.
7.2. Never assume that because an electrical disconnect is open / off or a valve handle is in a closed position that the EID is operating properly or verification of zero energy is not needed.
7.3. Each authorized employee will perform these verifications of zero energy or directly observe them in their entirety prior to starting work and will document the verification.
7.4. If a worker is isolating equipment where look-alike equipment is energized in the immediate area, refer to the Electrical Safety Standard.

7.5. Electrical Verification (Live-Dead-Live)

7.6. In the case of isolations above 1,000 volts AC, residual energy shall be discharged, and all conductors must be grounded.
7.7. A tag will be affixed to the ground cluster, and it will be added to the LO/TO Log. The intent is such that after the work is complete and the locks are being removed from the EIDs to close out the LO/TO, these grounds will be un-installed before the locks are removed from the EIDs isolating them.
7.8. When testing for voltage or doing electrical fault finding, all appropriate personal protective equipment (PPE) and insulated hand tools rated for the voltage under test shall be used.
7.9. When testing for the absence of voltage, an appropriate calibrated multi-meter shall be used.
7.10. Live-dead-live checks will be completed using a meter by first testing a known source, then the component within the work boundary, and finally, against the same known energized source to ensure its proper operation (i.e., using a voltage providing unit or equivalent).

7.11. Be sure to check neutral to ground voltage as part of live-dead-live verification. For more information on this process, see the Electrical Safety Standard.

7.12. Mechanical Verification

7.13. These energy sources may be either the primary energy source or can be a residual, or stored energy source. Stored or potential energy still exists when a valve is closed on a pneumatic, or

hydraulic system and must be dissipated properly through the use of vents and/or drains, as applicable. These vents or drains may need to be locked open to prevent system pressure from rising unexpectedly.

7.14. Water storage tanks, even though vented to the atmosphere, could be under pressure at their low points. The amount of pressure is dependent on the height of the water since one foot of water creates .433 PSI / 2.985 kPa of pressure.

7.15. Take caution when working on fan systems such as fan arrays or relief fans to ensure that kinetic, or rotational energy has been mitigated properly. Fans that are not operational can rotate freely and should be blocked by appropriate means.

7.16. Primary or stored energy must be removed, bled down, dissipated, and/or blocked as applicable. Proper means to determine zero energy on mechanical systems may include, but are not limited to, live dead live verification, attempt to start, observing existing and/or applied temperature instruments, or pressure gauges as applicable to the mechanical equipment and the condition of the equipment.

7.17. For mechanical systems, where feasible, high point vents shall be used to verify a system is depressurized and low point drains shall be used to ensure the system is properly drained.

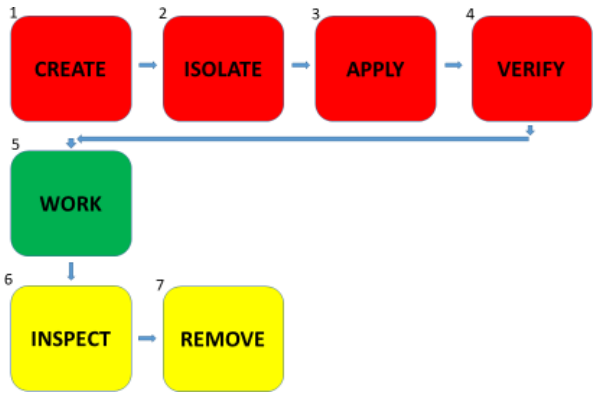
7.18. Drains shall be left in the open position to ensure isolations are holding.

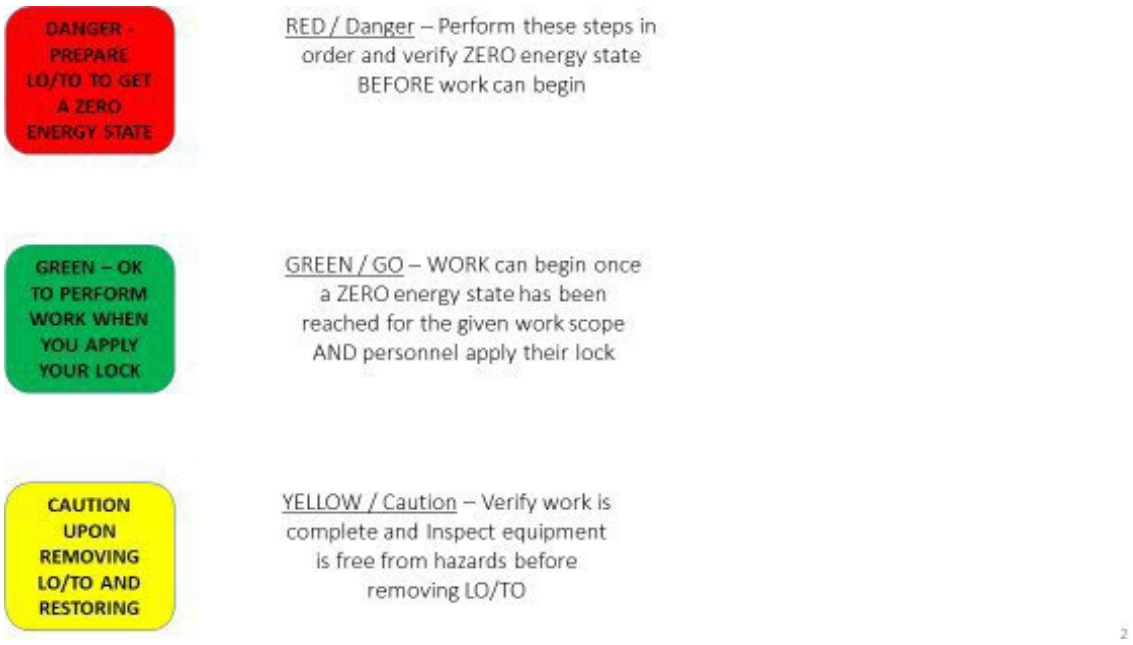
7.19. Check temperature gauges to confirm that thermal energy has been discharged.

7.20. Check pressure gauges to confirm that hydraulic pressures have been discharged.

8. LO/TO Process

LO/TO PROCESS FLOW DIAGRAM





8.1. Create - In this phase it is imperative to:

8.1..1. Understand the point of operation, location, and type of hazardous energy
8.1..2. Understand the work scope and work boundaries
8.1..3. Identify the proper isolation points

8.1..4. Use the correct updated revision of electrical single one-line diagrams, P&IDs, drawings, as-built and other documentation
8.1..5. Physically walking down, the system and components
8.1..6. Competent people communicate and have a LO/TO safety discussion and shall identify and notify all affected parties.
8.1..7. Use the LO/TO Log to document this process, and the documentation used to identify the EIDs shall be attached to the LO/TO Log

8.2. Isolate

8.2..1. Once the LO/TO Log has been created the competent person or an authorized employee shall operate EIDs as needed so they are in the correct position before applying LO/TO.
8.2..2. A competent LO/TO or authorized employee physically installs and attaches the component locks to the EIDs.

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8.2..3. This step can be performed after the entire work boundary is established or after each EID is placed and checked in the correct position.

8.2..4. After the component lock is placed on the EID, the component key is placed into a group LO/TO box.

8.2..5. The component lock is checked to make sure it is locked, and the EID is checked so it can't be operated without removing the component lock.

8.2..6. When all of the component locks are applied, and all of the keys are in a group LO/TO box, then a control lock is placed on the group LO/TO box.

8.2..7. A competent person (Typically the LO/TO Manager, Electrical Superintendent, or coordinator) will maintain care and custody of the control lock.

8.3. Apply

8.3..1. A competent LO/TO or authorized employee physically walks down all of the EIDs and ensures they are in the correct positions and locked out.

8.3..2. The affected employee(s) directing the work scope will attend this walk through and witness the position of the EIDs being checked in the correct position/direction.

8.3..3. The affected employee(s) apply their personal lock to the group LO/TO box, sign on to the LO/TO Log and maintain exclusive control of their personal key.

8.3..4. All personnel applying a lock to either a group LO/TO box or to a LO/TO hasp or device will maintain care and custody of the key(s) to their personal lock(s).

8.3..5. All affected personnel who will be performing work near a point of operation, potentially near hazardous energy, or where an associated danger zone exists, shall place their personal lock and tag on the group LO/TO box and sign on to the LO/TO Log before work begins.

8.4. Verify

8.4..1. Verify adequate isolation of work area prior to releasing and verifying zero energy (e.g., comparison of drawing to established boundaries).

8.4..2. In accordance with approved procedure, release stored hazardous energies still present after LOTO is applied.

8.4..3. Install necessary controls (e.g., blocks) to prevent uncontrolled rotating/moving energy release during work.

8.4..4. Verify absence of hazardous energy (e.g., live-dead-live, open drains, witness pressure drops, etc.).

8.4..5. Each authorized employee entering the work boundary shall perform a walk down to verify EIDs or isolation points prior to commencing work.

8.4..6. Each authorized employee entering the work boundary shall perform or directly observe verification of zero energy tests.

8.5. Work

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8.5..1. Personnel who have their personal locks and tags on the group LO/TO box that has the component keys in it per the LO/TO Log and they are signed on to the LO/TO Log may now begin work.

8.5..2. If the work is not complete when the worker is ready to leave (due to end of their shift, injury/illness, re-assigned to a different foreman or crew or another reason), the worker removes their personal lock(s) and tag(s) from the group LO/TO box and signs off the LO/TO Log

8.5..3. The Foreman/Supervisor directing the work will maintain their personal lock on the group LO/TO box until the work is complete.

8.5..3.1. Exception, there is a transfer of responsibility of that work scope to another responsible foreman or supervisor. After having a turn-over, walking the work scope and LO/TO down, the new foreman/supervisor may place their personal lock(s) and tag(s) on the identical EIDs of the foreman/supervisor being relieved. Next, the new foreman/supervisor may now sign on to the LO/TO Log and the previous foreman/supervisor may now sign off the LO/TO Log. The responsibility of care and custody of the work scope, the zero-energy state, and the LO/TO has now been transferred.

8.5..4. The competent LO/TO or authorized employee may then unlock the control lock with the control key, obtain the component keys, and unlock the component locks clearing the LO/TO

8.6. Inspect

8.6..1. Once the work scope is complete, the Foreman/Supervisor verifies the work is complete and the work area is free of hazards, then they may inspect the work boundary area.

8.7. Remove

8.7..1. When the inspection is satisfactory, the work is complete and there are no hazards the Foreman/Supervisor may remove their personal lock and sign off of the LO/TO Log.

8.7..2. The competent LO/TO or authorized employee may now unlock the control lock on the applicable group LO/TO box.

8.7..3. The competent LO/TO or authorized employee may now unlock the component locks on the EIDs using the LO/TO Log to close the LO/TO.

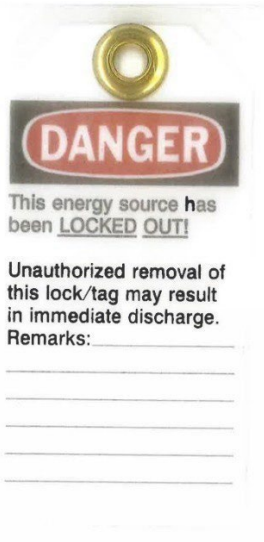
9. Discipline and Enforcement

9.1. Failure to comply with the LO/TO Procedure shall be considered just cause for discharge or removal of the person(s) involved from the job site.

9.2. Examples of failure to comply include the following:

- Operating or working on a component, EID, system, or piece of equipment that is energized or the potential of hazardous energy is present, without obtaining a proper LO/TO. This includes verifying a Zero Energy State for the work area.

- Operating or working on a component, EID, system, or piece of equipment in violation of the lock(s) in place.
- Removing a lock from an EID, component, system, or piece of equipment without proper authorization.










GROUP
LOCK / TAG-OUT


PNL-LE19A
Arc Flash Information
DANGER
DANGER
PANELS ARE
ENERGIZED

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 Surface 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.

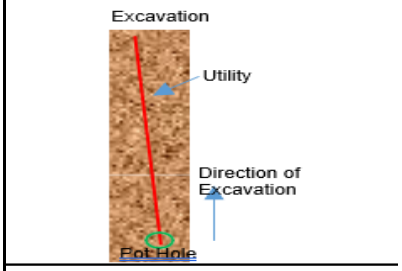
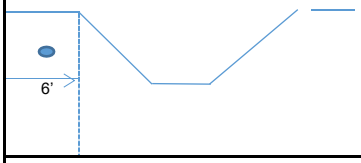
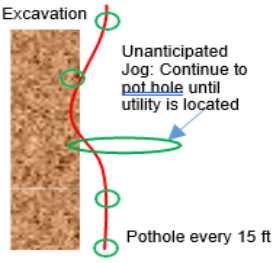
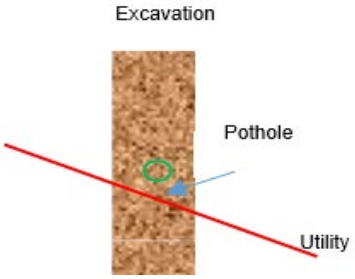
    f) All excavations, regardless of depth, shall be protected by safety fence or guardrails.

    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 Surface Penetration Permit must be utilized when a sub plans to penetrate the ground at any depth. This should be filled out and utilized for cutting into slabs and coring walls as well.
        - All utilities identified to be located within 6' of excavation must be daylighted by hydro excavating or hand digging.
        - All utilities must be potholed at the start of excavation and every 15' by hydro excavation or hand digging. No machinery is allowed to be used until

known utilities are located.

- In all cases, interior or exterior, surface must be evaluated for appropriate type of scan (GPR, X-Ray, Utility Locator, wand, etc..) in the area of intended excavation.

Condition	Action	Example
Known utility is within excavated/disturbed area and being uncovered as work progresses	• Pothole location at the start of the of the known utility in excavation • Utility must be potholed every 15'. • Note: Utilize non- intrusive methods (hand digging or hydro-excavate) when within 24" of a known utility	
Utility runs parallel and within 6 feet of the edge of excavated/disturbed area. 	• All utilities identified to be located within 6' of excavation must be daylighted by hydro excavating or hand digging. • Pothole at the start location of the excavated/disturbed area and every 15' along the parallel length of the excavated area. • The intent is to verify that the utility does not veer into path of excavated/disturbed area.	
Utility intersects excavated/disturbed area	• Pothole the approximate center of the intended excavated/disturbed area. Follow condition 1 if utility will remain visible while excavating along width of excavated/disturbed area. • Note: Utilize non- intrusive methods (hand digging or hydro-excavate) when within 24" of a known utility.	

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.

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 a written fall prevention plan to Turner prior to beginning work on site. The subcontractor and Turner staff will conduct a weekly inspection of their system.

   b. All conditions that will require personal fall protection shall be discussed and documented in the daily Pre-Task Plan and reviewed in the field by the crew leader.

   c. At no time shall a Safety Monitor system be used as a means of fall protection.

   d. 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.

   e. 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.

f. A Personal Fall Arrest System (PFAS) comprised of a full body harness, Leading Edge Retractable (Exception being in scissor lifts), a guardrail and / or safety net system must be in place to protect all employees working above 6 feet.

g. 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.

h. 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”. Midrails 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 wire rope clips, “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. Fall Protection Net Systems

- Safety netting systems (as a primary means of fall protection for humans) must not be used in lieu of other fall prevention or protection means unless no other means is feasible.
- 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 ensure 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 for 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'.
   - The type of PFAS shall be reviewed prior to beginning work. Lanyard style, nylon, PFAS shall not be used when there is a potential for abrasion.
   - Horizontal lifelines must be designed by an engineer & installed under the supervision of a qualified person. A safety factor of 2 must be maintained. Leading Edge Retractable must be used with HLL.
   - 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.
        - The inspection and use of personal fall arrest systems and anchorage points.

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 for each project. The site safety logistics plan and map should include locations of hydrants/FDCs, designated flammable storage locations, designated routes for emergency response vehicles to be maintained, emergency muster points, etc. The plan should discuss site evacuation signals and drills.

    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 are 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 mounted or on a stand for each 3,000 square feet of protected building area. It is also required that an extinguisher be placed at every stairwell on each level. Travel distance to a fire extinguisher must not exceed 100 feet.

    e) For areas where liquid fuel is stored outside in a tank, at least one 20 lb. ABC dry chemical fire extinguisher must be mounted no closer than 25’ and no farther than 75’ from the tank.

    f) Portable fire extinguishers must be inspected.
        a. Monthly
        b. Annually
        c. Hydrostatic every five years

    In addition, the fire extinguisher must have the pin secured by a safety pull tab to be considered serviceable.

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) Store flammable liquids must be in approved flammable storage lockers, outside of the building under construction, unless otherwise permitted by Turner.

    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.

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) Solid fuel may not be burned anywhere on a Turner project for heating.

    c) 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.

    d) Open fires are not allowed on Turner projects.

    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 permit applicant after surveying the area. The applicant must review the area and permit with a Turner Superintendent and/or Safety Manager. 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 activities include any spark or heat producing activity that could be considered an ignition source.
    b. The 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 for notifying Turner when the fire watch is complete.

7. The fire watch person is required to be trained as to their duties and responsibilities and has 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.
8. 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.
9. The disconnecting or disengaging of fire zones or smoke sectors/detectors shall be coordinated with the building owner or manager.
10. 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) Employees must be trained on each hand and power tools to be used.

    b) 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.

    c) If the tool is designed to accommodate a guard or handlebar, the guard or handlebar must be in place while the tool is being used.

    d) Additional personal protective equipment (PPE), such as a face shield, goggles and/or hearing protection, may be required while operating a tool.

    e) Cutters and knives with automatic self-closing blade-guards, or blades that retract into the handle when the blade loses contact with the cutting surface are the preferred tool of choice for making cuts. If these cannot be used for a certain task or activity it must be outlined in the PTP and reviewed with a Turner Superintendent.

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.

    e) All bandsaws must be equipped with a dual trigger design with triggers located on both the back and front handles to be engaged for safe cutting. Single hand bandsaws must be used according to the

manufacturer's requirements.

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 hosefailure.
   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 (PPE should include goggles and a face-shield for anyone in the area). Means and methods for using compressed air for cleaning formwork must adhere to the OSHA Silica standard and may not expose employees of other contractors. Use HEPA vacuuming or water in lieu of compressed air, to the extent feasible.
   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 for testing and monitoring 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 the 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 firingtime.
   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 cartridges are to be used that contain toxic heavy metals such aslead.
   g) Follow the manufacturer's guidelines for storage, disposal and handling of cartridges and tools.
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.

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 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:
   i. Ambient air temperature exceeds 85°F or falls below 32°F (or as defined by local or regional temperature limits, whichever is stricter)
   ii. Engine idling is required for the function of auxiliary equipment (i.e., cranes, concrete pumps, etc.)

2. All operations requiring the use of heavy equipment will require a pre-planning meeting to coordinate and prevent injuries to workers and the public.

3. 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 ensures a risk assessment and preplan is conducted.

   b) The risk assessment is 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.

- 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.
- Ensuring documentation is shared with Turner supervision.
- How the driver will be briefed on loading/unloading procedures and understand their responsibilities
- Overhead power lines

4. **High Visibility Vests must be worn by all personnel associated with the loading/unloading operation**.
    a) Truck drivers should wear a high visibility vest whenever they exit theirvehicle.
    b) All personnel working around moving vehicles and mechanized equipment during loading and unloading operations should wear a high visibility vest.
5. Provide drivers a place to wait during the loading/unloading operation.
    a) 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.
    b) Alternatively, if it is safe to do so, the operation can allow the driver to stay in the truck cab during loading and unloading.
6. Establish a restricted access zone around the truck to prohibit entry into the load/unload area. High visibility “do not enter” tape should be used. “Do not enter” tape is intended to prohibit access and should only be used as a substitute for physicalbarricades.
    a) No worker, except those involved in the load/unload operations shall be permitted to be behind the “Do not enter” area. Signs and barricades shall be erected to restrict access to the area.
    b) The zone must be equal to the area needed to load/unload plus ten feet around the entire truck area.
    c) All designated personnel within the zone must be clear of the load during all loading or unloading operations by at least 30 feet.
    d) A qualified “spotter”, wearing an ANSI approved high visibility traffic vest, must be utilized during the loading/unloading operation. Vehicles must never back “blind” on a Turner project.
    e) 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.
    f) A rigging plan must be in place if lifting using a crane.
    g) Do not allow workers on top of the truck while any equipment is being used in loading/unloading operations unless the operation requires then a competent person is the only person allowed as described in the pre-task plan.
    h) An all-clear signal (different from an evacuation signal) must be used before the load/unloading operations begin.

i) All workers in the loading zones should be trained in these safe work practices and given refresher training periodically.

7. Truck parking when loading/unloading materials should be:
   a) Safely surfaced.
   b) Clearly marked.
   c) Adequately lit.
   d) Unobstructed

8. Ensure appropriate forklift or equipment selection, and operator training.
   a) Forklift and equipment operators are responsible for the safety of ground personnel at the site as well as themselves. Operators must be trained in safe operation of the equipment, load limits, loading procedures, and communication with other personnel.
   b) 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.
   c) 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).
   d) Loads must never be swung over workers or the general public.

9. 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.

10. 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.

11. 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.

12. Drivers should visually inspect the area around the vehicle/equipment before moving it to ensure all workers are clear prior to movement.
    a) The spotter must be used when backing any vehicle or equipment with a blind spot.
    b) When reversing, the vehicle must be equipped with a functioning audible alarm.

13. 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.

14. A seatbelt must be provided and used when operating equipment on a Turner project.

15. All windows must be in full working condition. Any equipment with broken glass of any size, including mirrors, will be taken out of service.

16. Each employee working near or crossing a site where equipment is in use must wear High Visibility Clothing.

17. Equipment without a rollover protective structure (ROPS) or seatbelt is not allowed on any Turner project.

18. The use cell phones (talking/texting) shall not be used while operating machinery/equipment or vehicles.

19. No one may work within 20' of motorized equipment like an excavator, backhoe, loader etc. unless that person's presence is fundamental to the operation underway, and the operator can observe the person at all times.

20. 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.

21. 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.

22. 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.

23. Pickup trucks driven on site must never have riders in the bed of the truck.

24. Pickup trucks used for hauling material must be inspected by a competent person to ensure the load is secured properly prior to entering, exiting, or moving on site.

25. Third party haulers like concrete trucks and dump trucks must inspect their vehicle prior to leaving the site to ensure there is no debris that can be thrown from the vehicle and that the dump bed is lowered prior to leaving the site. Refer to local regulatory requirements for covering loads.

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 regard to irritant and toxic plants.

3. All equipment shall be equipped with rollover protection and shall have overhead protection.

4. The overhead protection on the canopy structure shall not be less than 1/8" steel plate or ¼" 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 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 the 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. The spillage of oil or fuel must be carefully cleaned up or completely evaporated and the fuel tank cap replaced before restarting engine.

   d. No vehicle may operate with a leak in the fuel system until the leak has been corrected.

   e. No smoking or open flame while refueling; and

   f. Appropriate PPE must be worn while refueling.

   g. 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 the 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 from coming 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- 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 serviceable condition.

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. Conditions 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. Operators must strictly adhere to all manufacturer operational requirements. Modifications can only be made according to the manufacturer's 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 the EH&S Director and Operations Manager 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 a remote pilot 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 above 104 degrees Fahrenheit and below 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, unless the small, unmanned aircraft:

    a) Is flown within a 400-foot radius of a structure; and
    b) Does not fly higher than 400 feet above the structure's immediate uppermost limit.

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. The 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.

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 Operations Manager and BUEHSD in the Business Unit.

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 *and* have operated in a commercial capacity for at least 1 year. FAA regulations require that all commercial drone operators have a Remote Pilot Certification issued by the FAA. Documentation must be submitted to Turner.

6. Appropriate types 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.

III. Employee Safety

Superintendent/Safety Manager:

1. Hazards at the site are mitigated:

    a. Wires/cables/utility lines/cranes identified and flagged or identified on flightplan.

    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 ensure 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 were 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 ensure safety in the area.

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) Access and Egress
      - Frame and system type scaffolds, including but not limited to masonry and tube & coupler, must be accessed via scaffold stair attachments. Where space does not permit the use of a stair, alternate means of access/egress may be utilized including ladder systems when a Turner Ladder Permit is issued. When ladders are used to access scaffolds, the competent person shall work with Turner to explore the use of personal fall protection systems while ascending/descending the ladder (such as retractable lanyards attached above the scaffold ladder to an OSHA compliant anchor point.

   c) 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.

   d) 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.
      - "X" or cross bracing is not considered to be a guard rail system. Guard rails

(horizontal top and mid-rails) must be installed when the platform reaches four feet in height.

e) 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 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.

f) Scaffold Access
- Cross bracing must never be used as a means of access.
- Stair rail and handrail systems must be smooth surfaced 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.

g) 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.

h) Fall Prevention
- A Personal Fall Arrest System or a guardrail system must be in place on all scaffolds exceeding 6’ in height. Mobile scaffolds require guardrails at 4 foot in height. When rails cannot be installed, utilize a Personal Fall Arrest System

(PFAS) anchored overhead.
- 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 is 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 top-rail height to the platform deck. Toe boards should be constructed from 2"x4" material or equivalent and must meet existing state or client requirements.
- "X" or cross bracing is not considered to be a guard rail system. Guard rails (horizontal top and mid-rails) must be installed when the platform reaches four feet in height.

i) 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 require guardrails at 4 feet in height, unless required at a lower height by the manufacturer.
      - 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.

   e) Mast Climber Systems
      - 100% personal fall arrest systems (PFAs) are required when working on a mast climber system.
      - PFAS Anchors shall be located on the building above the work platform

unless it creates a hazard or when performing an activity where there is no structure above.

- PFAS Connectors, ropes or other systems must not interfere with the safe operation of the mast climber. A vertical rope anchor system must be collected into a receptable on the platform so not to “catch” on the platform or cause a hazard to those on the platform.
- In the event the PFAS anchor cannot be connected to the building or structure; a platform integrated PFAS anchor system must be engineered by the mast climber manufacturer and used according to the manufacturer direction and limitations.
- Access to the Mast climber platform must be by stair or established, pre-determined access points at floor levels.

f) Cantilevered and Suspended Work Platforms: Personal Fall Arrest System (PFAS) Policy

- 100% Personal Fall Arrest Systems (PFAS) is required on Cantilevered and Suspended Work Platforms.
- The Cantilevered and Suspended Work Platforms covered under this policy are as follows (but may not be limited to):
  - Jump/climbing formwork systems (all types)
  - Stacker bracket, wall bracket, hanging bracket, bridge bracket and other similar cantilevered systems
  - Wall or waler bracket scaffold platform (typically attached and supported by vertical formwork)
  - Outrigger scaffold platforms
  - Cantilevered loading platforms (retractable and stationary)
  - Suspended scaffold, swing stage, bosun’s chair and other similar suspended systems

General Requirements:

- Guard rail systems must be constructed in accordance with OSHA Regulation and Manufacture’s specifications.
- A PFAS shall be installed and used on all cantilevered and suspended work platforms.
- The complete cantilevered or suspended platform system shall be engineered detailing each component (fastening devices, brackets, working platform, guard rails, PFAS etc) and include guidelines for safe installation/use and limitations of that system.
- Any additional engineering required to adequately assess the compatibility and performance of a PFAS is the performing/installing contractors' responsibility. The performing/installing contractor shall coordinate with all other contractors who will need to access and/or perform work on that system.
- Each trade partner planning on using any of the above systems must give Turner a fall prevention and PFAS plan before installation. At a minimum the plan must include the following:
  - The cantilevered or suspended system intended to be installed
  - Maximum intended deck height of cantilevered or suspended system
  - Maximum number of workers allowed on each cantilevered or suspended system
  - Engineering and/or manufacture’s specification detailing PFAS compatibility and performance criteria/limitations

- Access to cantilevered or suspended system
- Rescue plan in the event of a fall-catch
- Locations with no guard rail and or sequences where guard rail will be removed and/or modified
- PFAS system(s) to be used (including anchor point(s), connecting device(s), harness)
- Training program implementation plan
- For jump/climbing system, the number of “plus” and/or “minus” decks in the system

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.

4. Temporary work platform access system inspection
    - In addition to manufacturer, OSHA and local jurisdiction inspection requirements; all temporary work platforms and access systems shall be inspected, at a minimum, after initial installation and quarterly by a qualified third party or manufacturer representative.

Mobile Elevated Work Platforms and 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 retrofitting 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 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 joystick/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 *(Reference CSO Alert #1001).* 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 aerial-lifts shall have an approved (see below) shroud or guard over the joystick/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, aerial- lifts must be delivered with anti-crush or secondary-guard technology.

b) 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 aerial-lifts.

c) Prior to mobilizing, all Mobile Elevated Work Platforms (MEWP) must be inspected to ensure compliance with Turner requirements. MEWP's (scissor-lifts, aerial-lifts, and knuckle-booms) must have dual action controls to be approved for use.

d) 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).

e) 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.

f) Only authorized and trained individuals may operate aerial lifts.

g) When a lift is delivered to the project, the rental company or the owner of the lift shall inspect the lift & provide documentation that 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.

h) 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.

i) 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. 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.

j) Employees must keep both feet on the floor of the basket and not stand on the railing or toe board during operation.

k) 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.

l) 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.
m) 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) MEWPs 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 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 or communication method.
        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. The spotter shall wear, at a minimum, a Class II High Visibility Vest.
        d. 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.
        e. 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 MEWPs 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 another 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 in 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 tasks 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

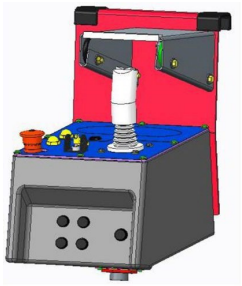
Please see below for examples of approved guards and shrouds for lift controls on Turner projects.

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.

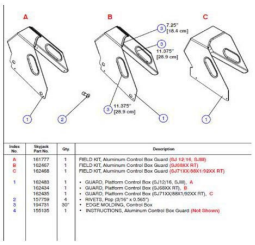
JLG Scissor Lift Guard

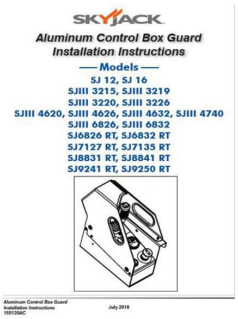


JLG All-Terrain

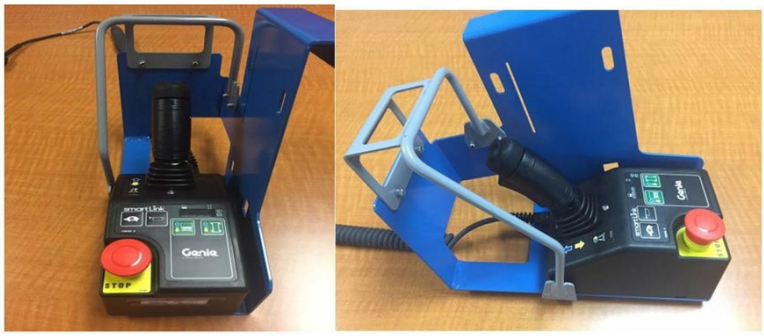


- **Skyjack Scissor Lift**





- **Genie Scissor Lifts**
  The Genie Smart Link control scissor for slab scissors must include a platform control, ground control, and joystick cover as shown below.



3. Aerial Lift Training Requirements
   Only trained and authorized persons are allowed to operate an aerial lift. Training should include:
   a) Explanations of electrical, fall and falling object hazards.
   b) Procedures for dealing with hazards.
   c) Recognizing and avoiding unsafe conditions in the work setting.
   d) Instructions for correct operation of the lift (including maximum intended load and load capacity).
   e) Demonstrations of the skills and knowledge needed to operate an aerial lift before operating it on the job.
   f) When and how to perform inspections; and
   g) Manufacturer's requirements

V. MEWP Safe Operation and "Walking the MEWP"

When operating a mobile elevated work platform (MEWP) operators are required to stay inside the confines of the basket on the platform. Site-specific conditions should be discussed and documented in the Pre-Task Plan or PTP Huddle Board. Prior to driving or walking the MEWP through any entry, doorway, or corridor, the operator must take a mandatory pause to re-evaluate potential hazards such as door heights, overhead hazards, etc.

Ensure Risk Assessments on Pre-Task Plan includes using mobile equipment, and that potential hazards and mitigations are identified. For example:

- Travel path and travel restrictions including doorways, semi-permanent structures, overhead hazards, pinch points, and obstructions.
- Drop-offs/holes and floor/ground obstructions
- Energized power lines
- Pedestrian and vehicle traffic
- Concurrent work (e.g. drop zones)
- Situations that may require additional spotters.

Implement the below controls if it is determined that walking the MEWP provides a safer alternative:

Definition of "WALKING THE MEWP": The term is used when maneuvering or travelling a MEWP using the platform controls from the ground by walking alongside or in the rear of the MEWP. This includes those that use an 'umbilical cord', radio/remote control or fixed point of control at the chassis.

“Walking the MEWP” will be allowed when it is determined by the competent person that there is insufficient/restricted space above the platform to operate safely from the platform, such as through doorways, corridors, or when any other hazard is recognized by the competent person and operator. Hazards should be identified and discussed in the Pre-Task Plan and mitigating factors such as walking the MEWP should be identified. The following precautions shall be taken when the decision to walk a MEWP has been determined:

- Follow manufacturer’s safety recommendations and training.
- Define alternative MEWP equipment and features such as manual push behind lifts & other alternative means of equipment, especially for accessing through doorways and other low clearance openings.
- Prior to driving or walking the MEWP through any entry, doorway, or corridor, the operator must take a mandatory pause to re-evaluate potential hazards such as door heights, overhead hazards, etc.
- Review process of “Walking the MEWP” and site-specific conditions should be discussed and documented in the Pre-Task Plan or PTP Huddle Board. Ensure Risk Assessments on Pre-Task Plan includes using mobile equipment, and that potential hazards and mitigations are identified.
- A spotter is required when walking a MEWP and should be positioned away from the lift in a manner that gives the operator another set of eyes on the side of the MEWP that is difficult for the operator to see.
- The operator should be trained for the MEWP category and familiarized with the MEWP being moved.
- The operator and spotter must walk the path of travel for the MEWP and remove any obstacles and debris from the route.
- The path of travel should be barricaded off or overseen by spotters during this activity.
- The operator and spotter should maximize their stand-off distance from the MEWP during this activity and out of the direction of travel while walking with the controls in hand from behind the MEWP. The activity should not proceed if the MEWP controller does not allow the operator to walk from behind.
- Hold the control box in your hands while operating the MEWP. Do not operate the MEWP while the control box is secured to the machine.
- Select the lowest speed when operating outside of the guardrails.
- Maintain a clear view of the support surface and path of travel.
- Stop the work if additional personnel are needed to perform the MEWP task safely

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 in1926.200.

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.

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 be 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.

   f. At a minimum, only Type IA Heavy Duty (300 lb. limit) ladders (red and orange) may be used on Turner projects.

   g. 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.

   h. When extension ladders are used to access upper landings, the side rails must extend at least 3 feet above the landing and secure at the top. Install overhead fall protection anchor point where feasible to allow for the use of PFASs while ascending/descending.

   i. Pull ropes should be placed at all access ladders so employees can safely lift tools or equipment to upper levels.

   j. Stepladders must be opened fully and set level when in use.

   k. All ladders must be used for the purpose for which they were designed.

   l. 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.

   m. 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.

   n. 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 ladder 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.

    f) Steel erection activities such as connecting, bolting, and welding are to be accomplished from aerial or scissor-lifts to the extent feasible.

    g) 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's manufacturer. "BUEHSD must review all plans if a contractor intends to use a forklift for steel."

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’ WITH OUT 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 actual or potentially hazardous 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. Welding, Brazing and Cutting
    a) Transporting, Moving and Storing Compressed Gas Cylinders and bottles
        - 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.
        - There shall be no "soft top welding". The use of head protection is required, at all times.

    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
   a) 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.

   b) If the object cannot be moved, positive means must be taken to confine the heat, sparks, and slag.

   c) 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.

   d) Drums, containers, or hollow structures, which contain toxic or flammable substances, must be filled with water and thoroughly cleaned, ventilated and tested

before welding or cutting them.

e) Hot Work Permits must be used and are valid for one shift only.

f) A fire watch must be maintained during and at least 30 minutes (60 minutes depending on client expectations) after the hot work completion.

Temporary and Permanent Tent Structures

The following alert relates to all tent or similar structures on all Turner Construction Company and Turner Construction JV projects.

Based on the high risks and potential hazards associated with the use of tents including structural failure and/or compromised structural integrity due to weather events, prolonged usage, and fire hazards, additional proactive management as well as the establishment of procedural elements to reduce the risks involved with these tents is necessary.

Definitions:

- **Pop Up Tent:** Any structure that can be assembled and disassembled with minimal effort. Typically, 10x10 or 15x15 and used for shade protection.
- **Temporary Tent:** Structures larger than a pop up, typically required to be secured to the ground with guy wires or ropes and used for worker break areas, cooling structures, and not constructed to be taken down every day, but can be disassembled in severe weather conditions.
- **Permanent Tent:** Large extruded aluminum or steel frame structures that are to be engineered and designed. Erected by 3rd party and used for mass gatherings and erected for most of the project.

The following are applicable to all tents:

1. Tent fabric must be made of fire-resistant material that meets the requirements of NFPA 701. Tents shall be labeled per International Fire Code (IFC) requirements.
2. All Tent Structures shall be inspected daily and documented by the contractor who is responsible for the tent structure.
3. For inclement/severe weather:
    a. Ensure a plan is in place to take down any pop-up tent.
    b. For temporary tents ensure they are fully secured from being displaced. If not, they should be disassembled.
    c. For permanent tents ensure they are fully engineered to prevent displacement.
4. Portable fire extinguishers (min 20 lbs. ABC) need to be provided within 25 ft of the tent premises. Ensure proper quantity based on OSHA CFR 1925.150 regulations.
5. If any electrical equipment or wiring is provided or installed, it needs to comply with **NFPA 70**. Equipment and wiring need to be listed and labeled for outdoor use.
6. Access and egress (pop-up not included) should be provided per IFC tent standards.
7. All tent structures need to comply with your local governing code, if applicable. Local BUs are responsible for knowing this and complying.

Temporary Tents:

1. Follow all manufacturer's instructions for installation and maintenance.
2. Tents should be located on firm soil, gravel base, or concrete pad. Ensure water is not retained on the floor.
3. Fully assembled tents, including their anchorage to the ground, should be rated to resist a **minimum** wind speed of 35 mph.
    a. When snow, sleet, or freezing rain is forecasted, tents should be disassembled, unless the tent is specifically rated for such loading.
4. Lighting, speakers, banners, etc., should not be hung from the tent structure unless specifically permitted by the manufacturer.

Permanent Tents: Additional requirements for Permanent Tents are as follows:

Note: In addition to the below, the above requirements for temporary tents apply to permanent tents.

a. Permit and approval from the city fire code official is typically required. Check with local officials for any permits or requirements such as weather stability, specific fire-resistant fabric, etc.

b. A 3rd party licensed structural engineer is required to be engaged in the design of this type of tent, including how the tent is secured to the ground (blocks, pins, etc.). *See attached example from Big Top Tent engineering.*

c. Permanent tent installations shall be submitted to TEG to review, comment, and make recommendations based on the 3rd party licensed structural engineers' design and drawings. (Geoffrey Morrisey, gmorrissey@tcco.com; Robert Barbera, rbarbera@tcco.com)

d. Bi-annual inspections by third party/manufacturer/installer are required.

Turner

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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 "reasonably 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 "reasonably 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 non-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 a 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 people 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/0_2/H_2S/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 the 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 is required when the concentration of carbon monoxide reaches a steady concentration of greater than 20 PPM in ambient air.

2. Use of Solid Fuel (wood, coal, paper, etc.) for heating is prohibited.

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 air blowers or other types of air exchangers. Do not use 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.

Where any tool or equipment must be used that produces CO in a partially enclosed area, then air quality monitoring must be provided by a qualified person. Readings must be taken at regular intervals and logged.

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 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.

6. Contractors should pre-plan for noisy activities that potentially expose other trades to noise in excess of this policy. These tasks can be done off-hours, outside of structures, or in areas that have added sound attenuation to limit exposure to noise.

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 for 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.

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, VP National EH&S Director, 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 VP, National EH&S Director 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.

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.

Heat & Cold Stress Prevention

I. Policy Statement

Turner Construction expects all subcontractors to provide their employees' areas of relief from the element exposure. The expectation is to utilize the best method of controlling the employee from 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 in 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 workplace; 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 secondhand 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 thefollowing:
   a) Prominently display no-smoking signs in offices and on projects,
   b) Inform individuals about this policy and let them know they may be subjectto removal, fines, and penalties (certain state or local fire departmentregulations),
   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 to 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. Non-potable water.

a) Outlets dispensing non-potable 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 non-potable 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.
   - At a minimum, 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.
   - 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.
h) No graffiti is allowed in permanent or temporary restrooms or anywhere else onsite.

Table 2-1
Minimum toilet facilities (construction sites)

Number of employees	Minimum facilities (per sex)
20 or less	One (unless manufacturer specs for fewer employees)
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 healthy 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 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 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

Wellness *Guidelines* or *Policy*:

At Turner Construction Company, we are committed to promoting the Health and Well-being of our employees through a comprehensive health and wellness program. Administering a scalable wellness program for team members will improve employee health, prevent injuries, manage chronic diseases, proactively address muscle strain and sprain issues, and support behavioral health success.

Mission:

The Wellness Program aims to improve the quality of life of our staff and all workers on our projects, employed by Turner and our trade partners by building a culture of health and wellness through education, motivation, and engagement of all to participate in maintaining healthy and safe employees. Integral to the commitment to a worker's wellness is ensuring injured workers receive prompt and quality injury care.

Goals:

- Make Health and Wellness programs accessible for every project and all site workers and staff.
- Encourage team members to adopt habits and behaviors that promote better health, a safe worksite, and an improved quality of life.
- Provide awareness and understanding of the impact of mental ill health and substance use disorder and signpost workers to national and local resources.
- Create a culture of readiness for medical or behavioral health emergencies.
- Provide prompt, quality medical care for injured workers.

Scope of Services

All Projects:

1. Provide basic first aid treatment and injury triage services for on-site work-related injuries or medical emergencies. Scope includes contacting and coordination with pre-determined off-site treatment and emergency response facilities operated by others (i.e. hospital and/or clinic, 988, 911.)
2. Provide on call (roving) AT/ EMT or telephonic injury response.
3. Contribute to the growth of Turner's Wellness Culture by providing wellness toolbox talks and wellness meetings on various topics.
4. Provide health promotion information stations on site linking workers to wellness activities, Employee Assistance Programs (EAP's), National Hotlines and resources.
5. Participate in stretch and flex to reduce the likelihood of musculoskeletal injuries.
6. Provide a room or space where first aid treatment can be rendered with privacy.

Dedicated On-Site Health and Wellness Professionals

The wellness coach will work closely with employees to provide guidance on injury management, chronic disease prevention, and proactive measures for muscle strain and sprain prevention. Additionally, the wellness coach will have specialized training to support mental health, substance use, and suicide prevention. The program shall have a broad scope offering lifestyle management tools; including health coaching, health education, wellness activities, and information (tips, recipes, news), and allows for comprehensive engagement in health risk assessment, coaching, and incentive achievement outcomes. Employees are encouraged to

utilize the services of the wellness coach to improve their overall health and well-being.

Guidelines for dedicated Health & Wellness Staffing:

- $80M or greater- Full-time on-site AT (Athletic Trainer) or EMT (Emergency Medical Technician)
- $20M up to $80M. Either Full time AT/ EMT or On Call AT/ EMT (roving)
- Under $20M. On Call (roving) AT/ EMT or telephonic incident response
- Regardless of project volume, consideration of the hazardousness or risk involved.
  Note that wellness candidate acceptable credentials may include RN, LPN, PT, OT,

General Health and Wellness Vendor Requirements

1. Maintain compliance with HIPAA, GINA, ADA, ERISA, PDA, COBRA and all other pertinent laws, rules, and regulations.
2. Provide medical treatment under the care of a medical director. Include ability to consult Physician Assistant or Medical Doctor from the wellness trailer (i.e.: tele-medicine or teams, etc.)
3. Participate in the safety orientation process. This **includes** performing brief wellness orientations.
4. Support workers by providing educational materials, toolbox talks and wellness meetings on various topics. A wellness coach is expected to coordinate with trade partners for “wellness talk” times and location (*meet them where they’re at*).
5. Provide basic first aid treatment and injury triage services for on-site work-related injuries or medical emergencies. Include Naloxone (or equivalent) in response plan.
6. In the event of an injury work with the injured employee to develop a customized injury management plan that includes rehabilitation exercises, ergonomic adjustments, and any necessary accommodations to support the employee's recovery. Coordinate with off-site treatment facilities operated by others (i.e. hospital and/or clinic) as required.
7. Include all costs for medical and wellness equipment to provide for the wellness trailer.
8. The on-site Wellness Coach will be certified in MHFA (Mental Health First Aid) or equivalent and assist with creating a safe space for the workforce and promote proactive Behavioral Health (Mental, Substance, and Physical). Be trained to provide mental health support, coaching, and contact information with stakeholder EAP’s and National Crisis Lines.
9. Provide monthly KPI’s to showcase wellness coaching, health risk appraisals, and injury trends.
10. Incentive Design and Administration
    a. Provide customized Wellness Incentive design, offering industry best-practices where appropriate.
    b. Provide administrative tools needed for Wellness Incentive promotion and communication.
11. Provide and maintain emergency contact information for all workers.
12. Offer, Coordinate and Conduct a Health Wellness Assessment (HWA) for workers designed to identify existing and emerging health issues and to provide a baseline for establishing a health improvement maintenance plan.
13. Provide a Health Wellness Report outlining overall health risk score and customized health risk education in both electronic and paper formats to frontline workers.
    a. Include guidance to help prevent and manage chronic diseases such as hypertension, heart disease, and diabetes. Include various nutrition, exercise / strength training, and other biometric tracking logs and plans for participants.
    b. Ensure content privacy, quality, and accuracy.
14. Manage program administration and marketing.
15. Provide countermeasures and support to prevent musculoskeletal and strain / sprain injuries.
    a. Provide workshops, training, and exercise programs to employees on proper lifting techniques, ergonomic practices, and how to reduce the risk of muscle strain and sprain injuries.

b. Lead a daily global exercises/stretching warm up (stretch & flex) program.
c. Provide training designed to educate and prepare Trade partner and Turner representatives to lead "exercises/stretching" warm up (stretch & flex) program.

16. Include implementation / presentation of a program to aid workers in the quitting of tobacco products.
17. Biometrics Screening Management
    a. Conduct biometric screenings in conjunction with administration of a Health Wellness Assessment (HWA) with various methods available (finger stick, venipuncture, etc.)
    b. Blood pressure, height, weight, BMI, waist circumference capabilities.

Medical Malpractice / Medical Liability Insurance

1. For on-site paramedic or other medical professionals, the providers shall provide a medical malpractice insurance that covers liability arising from disputed services or allegations of medical negligence and malpractice that result in patient's injury or death with the minimum required limits of $1,000,000 per each occurrence and $3,000,000 per general Aggregate.

Value added benefits of dedicated on-site health and wellness 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.)
- Provide potentially lifesaving care.
- Stabilizing severely injured workers
- 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.

We have partnered with who we perceive as "best in class" on-site medical care vendors. They are Atlético/Pivot, ATS, Wellness Workdays, Amphibious, Banda and On-site Health and Safety.

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 on-site Wellness Coach AT/EMT for a project, there are options which enable the project team to decide which options are more suitable.

1. Full time onsite AT/ EMT for the duration of the project-start to finish.
2. Full time onsite AT/ EMT during certain periods of time where the risk of injury is greater. The full-time onsite AT/ EMT cost is based on a flat fee for the time period of the contract.

3. Roving or “On Call” AT/ EMT. The roving EMT can respond to a site promptly following an injury. They provide the same level of experience but are not on-site full-time and are deployed on an as needed basis. Roving AT/ EMTs charge on a per visit basis.
4. Telephonic incident response. Site safety person or the responsible Turner personnel contacts an immediately available medical professional upon notice of an injury for guidance / direction.

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 use 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) Recordkeeping
- 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 affected.
- 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 are 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 the 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 that 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 to 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 conditions.
- 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 handheld/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 warning signs, similar to the one shown at right, when respirators are required as exposure control.
- Rescheduling of work 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 fir-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:

a. 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.
b. protects workers from exposures above the permissible exposure limit (PEL) of 50 micrograms per cubic meter of air averaged over an eight-hour day.
c. Dust control measures must be used to protect workers from exposures above the PEL; and

d. 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 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 toolbox talks
- Notifications and Bulletins

STANDARD FORMS

1) Project Safe and Sustainable Onsite Orientation
2) Hazardous Chemical Inventory List
3) Site Specific Chemical Inventory List
4) Ladder Safety Inspection Checklist
5) Ladder Permit
6) Mobile Elevated Working Platform Checklist
7) Initial Equipment Safety Inspection: Off-Road Heavy Equipment
8) Initial Equipment Safety Inspection: (Cranes)
9) Critical Crane Lift
10) Energized Electric Work Permit
11) Emergency Release Authorization
12) Confined Space Entry Permit
13) Fall Protection Checklist
14) Surface Penetration Procedure Permit
15) Hot Work Permit
16) Drone Use Approval Request Form
17) Drone Vendor
18) Incident Investigation Report
19) Co-Learning Investigation Form
20) Job Hazard Analysis
21) Pre-Task Planning
22) Concrete Core Formwork System Questionnaire

Turner

Project Safe and Sustainable Onsite Orientation

1. General Information	
NOTE: The signature below documents 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 healthy 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.**	
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 ®"

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 are asking that you take an active role in 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 *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 hurdles 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	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: 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.)
Initials	4. A minimum 9-panel drug testing is mandatory. 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.

	9. Zero use of tobacco policy. Zero tolerance policy for smoking in buildings during construction. No e-cigarettes or smokeless tobacco are allowed either. Turner may elect to establish a "tobacco zone" outside of the project. 10. Eating is allowed only in approved areas. No glass containers are permitted on site. 11. A fluent interpreter must be provided and on site for any crew that has one or more non-English speaking workers. 12. The confined spaces on this project include: _____ 13. I will not enter a confined space unless trained and authorized by my employer. Proof of training must be provided to Turner Construction. 14. The employer entering a permit-required confined space must arrange for an on-site rescue team to be present and provide for continuous air monitoring, and if applicable, monitoring of other hazards (i.e., engulfment). The list of behaviors below, while not inclusive, provides examples of conduct that is prohibited: 15. Causing physical injury to another person. 16. Making threatening remarks. 17. Aggressive or hostile behavior that creates a reasonable fear of injury to another person or subjects another individual to emotional distress. 18. Intentionally damaging employer property or property of another employee. 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.
EEO Policy **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 **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. 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 report to the authorities for legal action. ***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.
Incident Reporting **Initials**	1. Any injuries / illnesses / near misses must be reported to your supervisor immediately after the event, if physically possible. 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)** **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 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 in 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 intended load) 11. Scaffolds 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 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 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 of 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 the ladder at all times. Keep the belt buckle between the side rails. H. Fall protection is also required when above 4' on a ladder, even if three points are maintained. 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.
Safety Enforcement **Initials**	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. 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 *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

Emergency Procedures **Initials**	1. In the event of an emergency 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 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. ***1.*** **Evacuation Gathering Points are located...** ***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 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.
Personal Protective Equipment **Initials**	1. 100% Hardhat Protection, Non-Metallic, REQUIRED AT ALL TIMES. ANSI approved. (ANSI Type II or EN12492 with 4-point chin strap) 2. 100% Eye Protection (ANSI Z87.1) REQUIRED AT ALL TIMES. 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. ANSI Cut Level 4 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 are 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.
Electrical/LOTO **Initials**	1. Only round, heavy-duty, minimum AWG 12-gauge cords are acceptable. 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. 6. 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. 7. LO/TO – Single-key locks required (cannot have multiple keys for a lock). Each worker must apply a lock when exposed. 8. NFPA 70E compliance is required for energized work. This includes testing and commissioning activities, as well.
Equipment	1. Proper training and certification are required prior to operating any 2. equipment. Speed limit on site is 5 mph.

Equipment **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 cranes, 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 **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 qualified rigger. 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 **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 **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 **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 **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. The 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 being 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 **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 stairs. 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.
Hazard Communication / GHS **Initials**	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 with 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.
Construction Waste Management **Initials**	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: 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.
Indoor Air Quality **Initials**	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 an 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 an 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 compounds. 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 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. 10. Notify Turner if you see any wet building materials (before mold grows).
Stormwater Management	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.

Initials	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 washing down. 9. Minimize the generation of dust and the tracking of sediment to off-site paved areas.
Nothing Hits the Ground **Initials**	FABRICATION: 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. HOUSEKEEPING: 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. MATERIAL HANDLING/ STORAGE: 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.
ISO 45001 Safety Management System **Initials**	1. ISO 45001 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 ISO 45001 by the third-party auditor NSF International as of October 2021. 3. Achieving registration through ISO 45001 demonstrates Turner's commitment to elevate the company's already mature and advanced safety standards and programs. ISO 45001 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.

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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				

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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				

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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

☐ YES ☐ NO	1. Broken, bent or missing steps, rungs, cleats, or rails?
☐ YES ☐ NO	2. Steps and rungs free of water, grease, oil, or other slippery substance?
☐ YES ☐ NO	3. Free of splits, cracks, rust, corrosion, and dry rot?
☐ YES ☐ NO	4. Free of sharp edges, cuts, burns, etc.?
☐ YES ☐ NO	5. Loose or bent hinges that can't be fully opened or locked in place?
☐ YES ☐ NO	6. Stable and completely balanced (not shaking or swaying) with all legs resting firmly on the floor?
☐ YES ☐ NO	7. Loose, broken, or missing extension locks to ensure safe overlap of extension ladder sections?
☐ YES ☐ NO	8. Damaged or worn non-slip bases, safety feet, wheels, or casters?
☐ YES ☐ NO	9. Cross-over ladders have railings and non-slip steps?
☐ YES ☐ NO	10. Weight capacity label attached? Type1A?
☐ YES ☐ problems? NO	11. Other structural defects or operating

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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. **M**obile **E**levated **W**ork **P**latforms (scissor and aerial lifts, etc.) are the preferred method. You can alternately consider the use of scaffolds, rolling stairs, etc. **Note: 100% fall protection is required when using ladders when working above 4'.**	
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): ☐ **Platform-ladder** ☐ **Fixed**	☐ **Stepladder** ☐ **Trestle**	☐ **Extension** ☐ **Other:**
Ladder weight capacity (300lbs min):	**Ladder Height:**	
Will you be 4' 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):		
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?		☐ **YES** ☐ **NO**	☐ **YES** ☐ **NO**	☐ **YES** ☐ **NO**	☐ **YES** ☐ **NO**	☐ **YES** ☐ **NO**	☐ **YES** ☐ **NO**	☐ **YES** ☐ **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							

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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? ☐ YES ☐ 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	☐	☐	☐
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	☐	☐	☐

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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? ☐ **YES** ☐ **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	☐	☐	
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	☐	☐	

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Critical Crane Lift Plan

1. General Information		
This plan is to be followed if any of the following apply: ☐ **Load capacity is equal to, or exceeds 75% of load chart rating** ☐ **2 or more cranes will be used during lift** ☐ **Any unusual circumstances (Specify):**		
Employer Name:	**Project Name/Number:**	
Lift Supervisor and Contact Number:	**Assembly/Disassembly Director:** (If Applicable)	**3rd 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	
☐ **Is the ground compact & stable?**	☐ **Are crane mats required?**
☐ **Outriggers in place and cribbing / blocking used?**	☐ **Are there any hazards beneath the equipment set up area? If Yes, What?**

6. Further Information
☐ **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):** ☐ **If wind speed is over 25mph, do not proceed with lift** ☐ **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.

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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)		

	Yes	No	N/A	Details:
Facility Equipment or System that will be Affected	☐	☐	☐	
Electrical Utility Equipment	☐	☐	☐	
Emergency Generator System Critical Cooling System	☐	☐	☐	
Non-Critical Cooling System	☐	☐	☐	
Uninterruptible Power Supply System	☐	☐	☐	
Critical Power Distribution System	☐	☐	☐	
Emergency Power Off (EPO) System	☐	☐	☐	
Fire Detection Systems	☐	☐	☐	
Fire Suppression System	☐	☐	☐	
Monitoring System	☐	☐	☐	
Control System	☐	☐	☐	
Security System	☐	☐	☐	
General Power and Lighting System	☐	☐	☐	
Lockout/Tag out Required?	☐	☐	☐	
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 Star	Time End	Duration
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

4. Back-out Procedures

Step #	Action	Contractor	Time Star	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.

☐ **Safety Glasses and/or Face Shield** ☐ **Non-Conductive Hardhats**

☐	Certified Rubber Gloves and Leather Protective	☐	Insulating Sleeves and Aprons
☐	Dielectric Blanket and Insulated Mats	☐	Hearing Protection
☐	Respiratory Equipment	☐	Insulated Tools
☐	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 liver 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 if 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
☐ NO

If no, return to requester.

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****

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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?	☐ **YES** ☐ **NO**	**Has an attempt been made to contact their supervisor?**	☐ **YES** ☐ **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?	☐ **YES** ☐ **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:**	

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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 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**	☐ **AM** ☐ **PM**	☐ **AM** ☐ **PM**	☐ **AM** ☐ **PM**	☐ **AM** ☐ **PM**	☐ **AM** ☐ **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.	
☐ **No Ventilation Required**	☐ **Continuous Mechanical Ventilation Required**

6. Engulfment Hazard Early Warning System	
NOTE: Required if a potential for engulfment exists.	
☐ **No Engulfment Hazard**	☐ **Yes – Description:**
If Yes, describe method and location to monitor for Engulfment Hazard:	

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7. Emergency Rescue Personnel Must Be On-Site During Any Permit Entry

NOTE: All requirements below apply:

☐ **Rescuers informed of all hazards** ☐ **Rescue plan developed** ☐ **Current First AID/CPR**
☐ **Rescuers have required training** ☐ **Non-Entry rescue gear (Tripod, Winch, AED, etc.)**
☐ **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.

☐ **Harness w/ Retrieval System**	☐ **Hearing Protection**
☐ **Respiratory Protection (specify):**	☐ **Specify Communication Method:**
☐ **Face Shield/Goggles**	☐ **Fire Extinguisher**
☐ **Coveralls or Chem Clothing**	☐ **Other:**
☐ **Intrinsically Safe Equipment or Non-Sparking Tools**	☐ **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.

☐ **Not applicable** ☐ **Yes (specify):**

10. Has Space Contained Liquids, Gases or Solids of Toxic, Corrosive or Irritant Nature?

☐ **No** ☐ **Yes (if yes, contact the BUEHSD 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

☐ **Alternate Entry Procedure (allowed when all of the following conditions are met)**

☐ **Physical Hazards are eliminated or isolated**
☐ **Continuous forced air ventilation maintains safe air**
☐ **Documentation to support above made available to entrants**
☐ **No Hazardous atmosphere present at any time: Complete Section 4 & 5 above**
☐ **Egress points are easily accessible and easily identified**
Fall Protection system around opening.

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:**

14. Reclassification to Non-Permit 1926.1203(g)

☐ **All hazards eliminated or isolated**
above Forced air does not constitute hazard elimination.
☐ **Pre-entry air monitoring captured**

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:**

15. Designated Entry Type:

☐ **Permit-Required** ☐ **Alternate Entry** ☐ **Non-Permit-Required**

16. Post-Entry Debrief with Turner Construction (Required)

☐ **Reviewed Hazards Confronted/Created** ☐ **Turner Shared this Info with Host Employer**

17. Permit Cancellation

☐ **Entry Operation Completed** ☐ **Forbidden Condition Arises** ☐ **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 MIN	MAX	RESULT AM PM	RESULT AM PM	RESULT AM PM	RESULT AM PM	RESULT AM PM	RESULT AM PM	RESULT AM PM	RESULT AM PM
1. Oxygen	19.5%	23.5%								
2. Combustible	0%	10%LEL								
3. H2S	0%	5ppm								
4. Other	0%	__%PPM								
5. Temperature	-	-								

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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	**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.				
Safety net – personal fall arrest system					
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 the 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. Is a 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.				
Pre-Cast Concrete Erection: Guard rails – safety net Personal fall arrest system					
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 the top 2 steps. To be provided at points of access 19", inspected by competent person. Non-conductive, slip resistant, job made (cleats 10" to 14" apart and uniform 4 to 1 lean. Work facing ladder.				
Scaffolds: Guard rails – personal fall arrest system (if above guardrail system) 100% PFAS on any suspended or cantilevered scaffold. 100% PFAS on any mast-climber type work platform.					

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 is 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 100% PFAS					
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? Is Turner taking disciplinary action on fall protection offenses? Are bi-lingual provisions in place and being used?					
	Safety Monitor System: Turner does NOT allow a Safety Monitor System under any conditions or circumstances				
	Suspended Scaffold: Independent lifelines. A competent person checks connections, anchorage points and inspects scaffold. Counterweights secured by mechanical means (no				

Have all workers completed orientation? Have Vendors provided Fall Protection Training?	sandbags, masonry units, gravel, rolls of roof felt) Suspension ropes inspected by competent person prior to each shift. **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 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 tags lines. Protection system in place when lifting deck.				

3. Additional Comments

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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:**	**Date of Permit Request:**
Site Superintendent Name:	**Date of Safety Pre-Plan Meeting:**	
Permit Start Date:	**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 This is to identify utilities, GPR/scanning or daylighting per policy still required for known utilities in intended area of excavation AND potholing every 15' still required)

NOTE: Method(s) used to Identify potential utility hazards

Proposed method of identifying utilities:

- Public Locates (811) ☐
- Private Locates ☐
- Hand Excavation ☐
- As Builts ☐ _____
- Vacuum Excavating ☐
- Radar/Scanning /X-Ray ☐
- 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 Gas ☐ Data/Comms ☐ Sewer/ ☐ Electrical/ ☐ ☐ ☐

Have ALL utility locates been obtained?	YES NA	Have located utilities been clearly marked?	YES NA

3. Surface Penetration Layout (physically identify the limits of the proposed excavation, "white lining" or other means

NOTE: Attach drawing of work area

*** Pot Holing Requirements**

Surface Penetration Procedure Permit

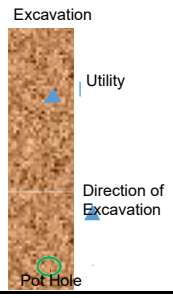
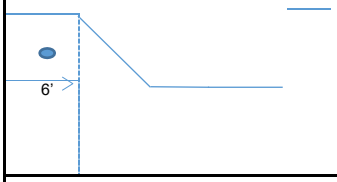
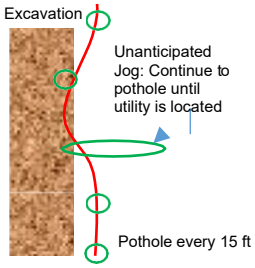
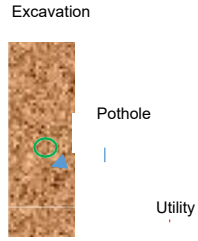
4. Excavation Hazard Assessment (All items below must be completed prior to activity. NA should only be chosen if they do not exist)

Method of excavation:	

Access and egress points will be stablished within 25 feet of each worker (stairs, ramps, or ladders).	**YES NA**	Sources that may cause an accumulation of water inside an excavation or trench have been identified and controlled.	**YES NA**
Perimeter protection will be put in place for open excavations	**YES NA**	Equipment areas and travel paths have been delineated and signed to prevent foot traffic from entering.	**YES NA**
Material and equipment storage areas will be positioned at least 4ft away from perimeter of excavation.	**YES NA**	A spotter with no other assigned duties will be appointed when operating equipment is in the immediate vicinity of workers.	**YES NA**
Sources that may contaminate the atmosphere inside an excavation or trench have been identified and will be continuously controlled and monitored	**YES NA**	A top person has been appointed (Trench work only).	**YES NA**
A Traffic controller is in place when work involves a roadway or pedestrian path.	**YES NA**	Fall Prevention/Protection Plan in place for excavations deeper than 6 feet	**YES NA**
Depth of excavation:			

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Surface Penetration Procedure Permit

Condition	Action	Example
Known utility is within excavated/disturbed area and being uncovered as work progresses	• Pothole location at the start of the known utility in excavation • Utility must be potholed at a minimum of every 15'. • Note: Utilize non- intrusive methods (hand digging or hydro excavate) when within 24" of a known utility	
Utility runs parallel and within 6 feet of the edge of excavated/disturbed area. 	• All utilities identified to be located within 6' of excavation must be daylighted by hydro excavating or hand digging. • Pothole at the start location of the excavated/disturbed area and every 15' along the parallel length of the excavated area. • The intent is to verify that the utility does not veer into path of excavated/disturbed area.	
Utility intersects excavated/disturbed area	• Pothole the approximate center of the intended excavated/disturbed area. Follow condition 1 if utility will remain visible while excavating along width of excavated/disturbed area. • Note: Utilize non- intrusive methods (hand digging or hydro excavate) when within 24" of a known utility.	

5. Interior/Concrete Penetrations Hazard Assessment (All items below must be completed prior to activity. NA should only be chosen if they do not exist)

Method of Surface Penetration: *Select all that apply*	Chipping	Drilling	Cutting	Coring	Pneumatic	Other

Areas beneath the concrete slabs MUST BE X-rayed, GPRd, or scanned prior to penetration (locates known).	**YES NA**	Slab marked accordingly with locations of embedded utilities (and PT Cables if applicable).	**YES NA**
Can sprinkler system be isolated, valved-off or drained?	**YES NA**	Can sprinkler heads be protected with temporary cage covers?	**YES NA**
Valve shut-off map posted in work area.	**YES NA**	Can utilities be temporarily disconnected during work?	**YES NA**
Active utilities are visually flagged (including sprinkler heads).	**YES NA**	Spill response kit present.	**YES NA**
Area beneath or above work location barricaded and signage present.	**YES NA**	Spotter beneath or above work location with means of communication with work crew.	**YES 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:

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Surface Penetration Procedure Permit

Turner Superintendent Review:		
Name:	Signature:	Date:

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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)?

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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 a Remote Pilot Certification issues by the FAA.		
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 Remote Pilot Certification issued by the FAA 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 larges 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?
☐ YES ☐ 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?

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 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:
    - 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

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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:	**Contract Number:**	
BU Name:	**Project Name:**	
Project Address:		
Program: ☐ **CCIP** ☐ **CORP** ☐ **OCIP** ☐ **Other (Explain):**		
Site Contact Name:	**Phone:**	**Cell:**
Project Executive:	**Superintendent:**	
Date of Incident:	**Time:** ☐ **AM** ☐ **PM**	**Shift:**
Jobsite/Area (refer to columns/beams/drawings as needed):		
Weather Condition:	**Lighting Condition:**	

2. 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:**	
Supervisor/Employer Cell Phone:	**Employer Address:**	
Shop Steward:	**Shop Steward Cell Phone:**	
Speaks Fluent English: ☐ **YES** ☐ **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 all claimed injury(s)/illness (body part affected, type of injury, etc.)

Was First Aid Administered?	☐ **YES** ☐ **NO**	**By Whom?**
Was Employee/Third Part take 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:

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:**

Co-Learning Investigation Form

Step 1: Author

The author is the person taking responsibility for completing the Co-Learning form and can be a Project Manager, Superintendent or EHS Manager. This person should be experienced in Incident investigation and can take lead in the analysis. Suggested Training/Skill Set: Incident Investigation, Fishbone Causal Analysis, 5-Why Root Cause Analysis

Date:		Investigator Name (Superintendent, EH&S, PM):	

Step 2: Incident Injury or Near Miss

This can be a "cut and paste" from box 3 of the standard incident investigation form. This is intended to be a statement on the direct cause of the incident or injury and physical effect is had. Example: "On Tuesday, April 5th at approximately 10:00 A.M.., a steel erection bolt fell from the third floor and struck a welder below in the back. The welder experienced a deep contusion requiring treatment beyond First Aid. The welder was provided prescription medication and restrictive duty work by the Occupational Doctor."

Step 3: Project Status

Describe background of project -

- Overall sq. ft. of project
- Number of stories
- Current phase (schedule – ahead/behind)
- Trades involved
- Total Number of Trades on project

Provide project context to the incident or near miss which communicates the overall project description, current phase of construction, number of workers on the project, scope of work involved and percent complete for that scope. Example: "Ground up construction of a 3 story, approximately 91,000 Sqft academic University building on an active campus. The Project is currently in the structural steel phase of construction with areas opened up to MEP trades and first floor underground installations. Structural steel is approximately 60% complete with metal decking 40% complete. There are currently 82 workers on site."

Step 4: Current Condition

- Timeline
- Witness Confirmed Facts
- Factual PTP/JHA Efforts
- Turner Policy (Compliance)
- Manufacturer Specs/Details
- Staff Perspective of Incident
- Trade Perspective of Incident
- Weather Conditions

Only include the factual details which "tell the story" of the event. Include relevant pictures, timelines, policy description, planning facts, product data and observations etc. germane to the event.

Note: Copy/paste or screenshot photos and drawings below

Step 5: Target

What do you want to prevent? – (e.g. Prevent objects from falling off building)

Keep this simple. Define what it is we would like to prevent in the future as a result of the learning from the analysis. This can be revisited and refined based on the learning process as the analysis develops. Example: "We want to prevent MEP trades from being under the steel erection crew."

Step 6: Root Cause Analysis

If inexperienced, it is recommended that the team pull in the regional Lean Manager and/or the Business Unit EHS Director to help lead this discussion. It is intended that this is a collaborative process. The Project Project manager, Superintendent, EHS manager and the trade(s) involved are to participate, but need an experienced leader to help guide the conversation.

Fishbone & 5-Why Resources/Templates: Problem-Solving (sharepoint.com)

Identify Causal Factors – Fishbone: Video Tutorial for Fishbone Diagram Approach

Identify Root Cause(s) – 5 Why: 5 Why Funnel Exercise

Step 7: Corrective Actions - Countermeasures

These action items are intended to target the root cause(s) identified in the RCA section. They should be specific, impactful and measurable.

Root Cause	Countermeasures

Step 8: Results

The intention of this section is to ensure that there is an actionable plan to the countermeasures identified. Remember that what gets measured gets done and the effectiveness of the countermeasures should be assessed. The trade/contractor involved will be the main partner in this effort. Consider completing Rapid Improvement Events, Critical Safe Behavior Coaching or similar observation and feedback exercises to evaluate if the countermeasures are meeting their intended purpose.

Countermeasure	Person Responsible to Do	Start / Finish (i.e. 1/30 - 8/05)	Result (Measurable Effect)

Step 9: Follow-Up

- Lateral Learning
- New Standard

This section allows the Author and team to capture any additional notes based on the learning generated from the Co-Learning Process. This is where the need to additional policy considerations or if an A3 is needed to further evaluate a root cause can be captured.

Building L.I.F.E.® JHA (Job Hazard Analysis)

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.

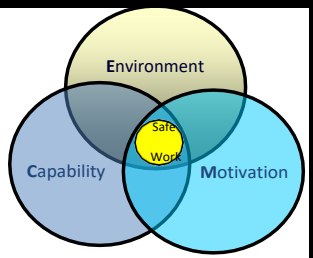
Scan the QR Code for more info.

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: (Example) Cross the street on foot.	Struck by Car	M	Look both ways before crossing.
		M	Wear reflective vest.
		E	Designate crosswalks
	Slip/Trip on walking surface	M	Look for slip/trip hazards
		C	Receive Training on traffic Awareness
Step 2: (example) Load Groceries into car	Strain or sprain lifting the groceries from the cart to the trunk.	M	Lift one or two lower weight bags at a time.
		M	Try not to over-reach or overextend
	Struck by passing car in parking lot	E/M	Pay attention to surroundings and know where to get
			out of the way.
		C	Complete "Lifting Training"
Erase all examples to complete your JHA.			

Document Control: Building LIFE JHA 08 2024

JHA-Cont'd			
Sequence of Basic Job Steps	**Hazards Associated with Each Step**	**E,C,M**	**Eliminate or Control the Hazard**
REVIEW SIGNATURES AND DATE			

Originator _____ Date _____

Contractor Superintendent _____ Date _____

Contractor Project Manager _____ Date _____

Document Control: Building LIFE JHA 08 2024

JHA Documentation of Worker Review at Orientation

JHA Number:
Date of Training:

Review JHA (and revise if necessary) with all workers before they are allowed on site. Submit signature sheet to Turner.

Print Name	Signature	Print Name	Signature

Turner Building L.I.F.E.® Living Injury Free Every Day

PRE-TASK PLAN

Date: **Company:**

Description of Activity:

Supervisor: **Location of Task:**

Safety and Health Considerations

Hierarchy of Controls

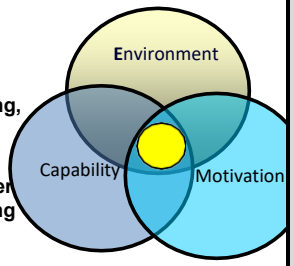
1. Elimination
2. Substitution
3. Engineering
4. Isolation
5. Administration
6. Personal Protective Equip.

Systems Approach

Environment (E): Engineering Controls, Working Conditions

Capability (C): Training, Education, Physical Capabilities

Motivation (M): Worker Actions, Factors driving motivation



Hot Work:	**Yes** ☐	**No** ☐
Energized Systems/LOTO:	**Yes** ☐	**No** ☐
Ladders Last Permit:	**Yes** ☐	**No** ☐
Ground Penetration:	**Yes** ☐	**No** ☐
Confined Space	**Yes** ☐	**No** ☐
Roof Access	**Yes** ☐	**No** ☐
6' Distance can be maintained	**Yes**	**No**

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.

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 *Manual* Handling Task List Safety Controls

PTP - Documentation of Worker Review

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.

Print Name	Signature	Print Name	Signature

Turner Turner

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 pipes, torch applied roofing and welding. Foreman for hot work operation shall complete this form prior to commencement of the hot work. Employees 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: ☐ AM ☐ PM		**Time Finished:** ☐ AM ☐ PM	
Permit Expires: (1 Shift)	**Date:**	**Time:**	☐ AM ☐ PM

2. Checklist			
NOTE: Prior to beginning any hot work, all potential hazards must be addressed including:			
YES	**NO**	**N/A**	
☐	☐	☐	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 _____
☐	☐	☐	Available sprinklers, hoses and extinguishers are in service and in good repair.
☐	☐	☐	Fire extinguishers are available at the point of hot work. (Supplied by the Permit Holder)
☐	☐	☐	Work equipment is in good repair.
☐	☐	☐	Worker has all appropriate safety equipment for the hot work (e.g., gloves, shield, respirator etc.) and not defective.
☐	☐	☐	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.
			All wall and floor openings have been covered.
			When working on or near walls, move combustibles away from both sides of walls.
			When working with suspended ceilings, be sure to protect concealed spaces.
			Floors have been swept clean of combustibles.
			Flammable liquids, dust, lint, and oily deposits have been removed.
		☐	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.
☐	☐	☐	A fire watch is equipped with an appropriate fully charged fire extinguisher and present during hot work operations.
☐	☐	☐	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:	**YES** **NO**	
Name of Fire Watch (Please Print):	**Time Started:**	**AM** **PM**
Craft Person Conducting Task:		
Turner Representative:		
Devices Reactivated:		

Turner

Concrete Core Formwork System Questionnaire:

Date:_____

Business Unit	
Project Name	
Type of Insurance	
Project Executive	
Project Manager	
General Superintendent	

1) What formwork system will be utilized? (Include explanation and methodology of system selected).

2) What will be utilized to access the core formwork? What will be utilized to access the different levels of the core once on the formwork?

3) What is the anticipated cycle/schedule of jumps?

4) When are the interior slabs going to be placed? How will they be constructed?

5) Will there be any partial jumps due to floor height changes?

6) Will there be any over pours do to door layout versus anchor layout?

7) Will modification by required to support work or jump sequencing? (i.e. rolling formwork, opening corners, guardrail modifications

8) Are there any specific weather conditions or limitations? (i.e. wind stoppage limit, temporary out of use wind bracing engineering for screen wall if applicable).

9) Is the tower crane being supported by the core?

10) List the specific fall protection plan to achieve 100% tie off all levels other than the interior 0 and +1 levels)?

11) How will the concrete core formwork system be inspected after initial erection/completion and after each jump?

12) How will the concrete core system be dismantled? How will fall exposure be engineered out?

Meeting Agenda:

Item	Lead	Time
Open Meeting • Team Effort • Continual Improvement • Review new policy	All	5 Minutes
Explanation of Concrete Core Climbing System: • Design • Concrete Formwork Manufacturer • Erection / Dismantle Plan • Schedule • Resume of Concrete Contractor • Inspection Criteria • Access • Fall Protection	Project Team / BU	15 Minutes
Operational Peer Review Comments	Jack Dawson / John Grafrath / Steve Garrett	15 Minutes
Review Corporate Policy Changes	All	10 Minutes
Review Safety Items: • Access • Inspections • Fall Protection • Screen Wall	Karl Kinsella / Andrew Leone / Doug LaPlante	15 Minutes

Turner

CORPORATE ENVIRONMENTAL, HEALTH AND SAFETY POLICY

Drug Free Workplace Program

THE TURNER CORPORATION

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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.

- **Alterative 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 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 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 Drug Free Workplace Program

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. **All violations may be reviewed, and reasonable accommodation can be made at the discretion of Turner Headquarters EHS and Human Resources.**

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);
- 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, marijuana, or any controlled substance by any Turner staff, trade, or any subcontractor on any Turner jobsite is prohibited at any time including non-working hours. Turner sponsored or approved meeting/functions, not located at a Turner Jobsite, may serve alcohol with approval by the BU General Manager or HQ Department Head. 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 following[1]:

- Cocaine
- Opiates/Expanded opiates for Heroin.
- Amphetamines/Methamphetamines
- Phencyclidine
- Barbiturates
- Benzodiazepines
- Propoxyphene
- Methadone
- Ecstasy/MDMA

Turner reserves the right to add additional drugs to this list upon notice of the Turner Employee or Other Worker being tested, including for those situations where it is required by Department of Transportation regulations, on federally funded projects, and/or where federal/state law requirements/contracts to test for cannabinoids (marijuana/THC).

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
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 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 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 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 "handheld" 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 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 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 Tuner 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 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 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 in 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 Tuner 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 Tuner 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 Tuner 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 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 Another 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 a 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 voluntary 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 of 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.

Turner

Appendix D: Blasting Guidelines and Helicopter Lift Operations

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Helicopter Lift Operations **4**

Disclaimer

All employees using safety documents posted on TKN, including this EHS manual, must utilize the most recent version 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 through the course of the project to obtain any updated versions.

Blasting Guidelines

Contract Language Consideration:

1. Purchase with blasting company double layer of blast mats with an alternating seam pattern.
2. Establish a synchronized standard blast time where the blast caps will be charged each day.
3. Identify a traffic control plan where traffic/campus or site activities may need to be paused within a certain area of blast charge. CAZ will be determined by the size of charge.

Pre-Blast Set Up:

1. Perform a pre blast survey of existing buildings within “X” feet from project.
    a. Video survey if possible.

2. Install vibration monitors within sensitive buildings within “x” feet from project.
    a. Set a threshold to make sure we stay within.
        i. Blast charge sizes may need to be thought about to stay within these limits.
    b. Set up phone notification if threshold has been exceeded to project team(s).

3. Create a neighborhood communications tool to communicate with neighbors on:
    a. Status of blast(s) for day.
    b. Possible traffic interruptions
    c. Allow for two-way communication for questions.

4. Check to see if local municipalities (Fire, Police City) have specific permitting and notification requirements.
    a. Good practice to invite the fire department out to discuss blasting operations before the start of work to get feedback and discuss all plans and procedures.

General EHS Practices:

1. No smoking or open flame is permitted at any time.
2. Only authorized and qualified persons shall handle and use explosives.
    a. This should be achieved by reason of training, knowledge or experience.
3. All explosives shall be accounted for at all times.
    a. Explosives not in use shall be locked and unavailable to persons not authorized to handle them.
4. Original containers shall be utilized for taking detonators and other explosives from storage to the blasting area.

5. Due precautions shall be taken to prevent accidental discharge of electric blasting caps from current induced by radar, radio transmitters or other sources of extraneous electricity.
    a. Prominent display of signs, warning against the use of mobile radio transmitters within 1,000 feet of blasting operations.
        i. If this cannot be achieved a competent person shall be consulted to evaluate the particular situation and alternative provisions may be required.
6. Damaged explosives or blasting agents and supplies shall not be used.
7. The use of black power shall be prohibited.
8. The transporting of explosives shall meet the provisions of the Department of Transportation regulation contained in 46 CFR.
9. Every motor vehicle or conveyance used for transporting explosives shall be marked or placarded on both sides, the front and the rear.
10. All drill holes shall be sufficiently large to admit freely the insertion of the blasting cartridge/cap.
11. Tamping shall only be performed with non-sparking tools.
12. No holes shall be filled unless intended to be detonated during that blasting period.
13. A Controlled Access Zone (CAZ) shall be maintained around the blast area.
14. In any single blast using electric blasting caps, all caps shall be of the same style or function, and of the same manufacture.
15. Before a blast is fired, a loud warning signal shall be given by the blaster in charge.
16. A pre blast inspection shall be performed by the competent person to assure that all components of are safe to execute the blast.
17. Immediately after the blast has been fired, the firing line shall be disconnected from the blasting machine, or where power switches are used, they shall be locked open or in the off position.

Resources:

1. OSHA – Subpart U - 1926 Subpart U - Blasting and the Use of Explosives | Occupational Safety and Health Administration (osha.gov)

2. ATF – 27 CFR Regulations for Alcohol, Tobacco, Firearms and Explosives | Bureau of Alcohol, Tobacco, Firearms and Explosives (atf.gov)

Board of Education of The Town of Greenwich

New Central Middle School Project
State Project No. 057-0114 N
Greenwich, CT

Bid Due Date: November 14, 2024

FORM OF PROPOSAL dated 10/16/24

To: **Turner Construction Company**
6 Corporate Drive - Suite 820
Shelton, Connecticut 06484
Phone: 203-712-6070

Name and Address of Bidder: _____

_____

Contact Representative: _____

Telephone: _____

Email Address: _____

We offer to perform per plans, specifications, additional provisions, and addendum as acknowledged below, all the _____ Work for Bid Package #_____for Project Listed Above the lump sum of (inclusive of all applicable State and Local taxes):

Labor:	*$* _____	*dollars*
Material:	*$* _____	*dollars*
Tax:	*$* _____	*dollars*
TOTAL QUOTE:	*$* _____	*dollars*

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Information required to be provided with Bid:

A. Trade Information:

Unburdened Payroll $_____

Total Trade Hours Included _____ hrs

B. Bid Notice Receipt:

The receipt of the following Bid Notices to the Contract Documents is acknowledged:

Received Bid Notification #	_____	**dated**	_____
Received Bid Notification #	_____	**dated**	_____
Received Bid Notification #	_____	**dated**	_____
Received Bid Notification #	_____	**dated**	_____
Received Bid Notification #	_____	**dated**	_____

C. Current Experience Modification Rating (EMR): _____

(Proof required via NCCI form from insurance provider)

2023 Recordable Incident Rate (RIR): _____

2023 Lost Time Incident Rate (LTIR): _____

D. Unit Prices:

The following Unit Prices shall be valid for the life of the project and include all cost for labor, materials, tools, equipment, shipping, handling, storage, hoisting, rigging, distribution, protection of materials, fringe benefits, applicable taxes, overhead, profit, insurance, and all other things necessary for a complete installation on a per unit basis.

Abatement & Demolition Related Items

Unit Price #1: Small Containment Preparation Containment (Less than 160 square\260 linear feet of asbestos containing material) Pricing for containments with larger amounts of materials are to be INCLUDED in the unit prices themselves listed below. There is no separate unit price for containments with larger amounts.

$ _____ per containment

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Unit Price #2: Floor Tile/Flooring Materials and Mastics (Includes All layers of carpeting, adhesives, multiple layers of floor tiles/flooring materials/linoleum/sheet flooring/vinyl stairwell flooring/wood/slate/ceramic/grout/mud bed/terrazzo/concrete/mastics, levelastics, contaminated flooring materials and substrates, etc.) Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #3: Cove Base and Adhesives (multiple layers) (including contaminated substrates) Removal and Disposal as ACM.

$ _____ per linear foot

Unit Price #4: Mudded Pipe Fitting Insulation Removal and Disposal as ACM.

$ _____ per fitting/joint

Unit Price #5: Glove Bag Removal and Disposal as ACM.

$ _____ per bag

Unit Price #6: Pipe and Pipe Fitting Insulation Removal and Disposal as ACM.

$ _____ per linear foot

Unit Price #7: Pipe/Duct Insulation Buried under Floor Slabs Removal and Disposal as ACM.

$ _____ per linear foot

Unit Price # 8: Duct Insulation/Adhesives/Seam/Flange Sealant (including contaminated substrates) Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #9: Air Duct Vibration Isolation Cloth Removal and Disposal as ACM.

$ _____ per cloth

Unit Price #10: Light Backing Paper Insulation Removal and Disposal as ACM.

$ _____ per light fixture

Unit Price #11: Sink Undercoating Removal and Disposal as ACM.

$ _____ per sink

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Unit Price #12: Countertop/Millwork/Cabinet/Adhesives/Science Desk Tops Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #13: Transite Cement Board Removal and Disposal as ACM.

$ _____ per square foot

$ _____ per linear foot (buried transite piping)

Unit Price #14: Fire Door/Insulation Removal and Disposal as ACM.

$ _____ per door

Unit Price #15: Wall Adhesives and Contaminated Substrates (mirrors/blackboards/bulletin boards, wood panel walls, etc.) Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #16: Vermiculite and Associated/Contaminated Wall/Ceiling Materials Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #17: Ceramic Wall and Floor Tiles Adhesives, Damp-Proofing, Mud Bed/Grout and Contaminated Substrates Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #18: Wall/Ceiling Board/Sheetrock/Taping/Joint Compounds (multiple layers) and Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #19: Wall/Ceiling Plaster (multiple layers) and Supporting Systems and Contaminated Substrates Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #20: Electrical Insulation Removal and Disposal as ACM.

$ _____ per linear foot

Unit Price #21: Wall, Ceiling Tile and Glue Daubs and Contaminated Substrates Removal and Disposal as ACM.

$ _____ per square foot

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Unit Price #22: Water Fountain/Damp-Proofing Removal and Disposal as ACM.

$ _____ per fountain

Unit Price #23: Custodial Slop Sink/Damp-Proofing Removal and Disposal as ACM.

$ _____ per slop sink

Unit Price #24: Freezers/Damp-Proofing/Contaminated Cork/Contaminated Substrates/Other Material Removal and Disposal as ACM.

$ _____ per freezer

Unit Price #25: Incinerator/Boiler/Brick/Mortar/Interior and Exterior Insulation/Mastic/Fireproofing Materials/Gaskets/Roping Removal and Disposal as ACM.

$ _____ per boiler/incinerator

Unit Price #26: Gymnasium Flooring Materials (All Layers) and Mastics/Damp-proofing (including cleaning concrete substrates) Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #27: Caulking, Glazing and Sealant Compounds (includes substrates and contaminated materials) Removal and Disposal as ACM.

$ _____ per linear foot

$ _____ per square foot

$ _____ per window opening (multiple windows/sizes exist in openings)

$ _____ per door opening (multiple doors/sizes exist in openings)

Unit Price #28: Caulking, Glazing and Sealant Compounds (includes substrates and contaminated materials) Removal and Disposal as PCB>50 ppm Bulk Product Waste.

$ _____ per linear foot

$ _____ per square foot

$ _____ per window opening (multiple windows/sizes exist in openings)

$ _____ per door opening (multiple doors/sizes exist in openings)

Unit Price #29: Caulking, Glazing and Sealant Compounds (includes substrates and contaminated materials) Removal and Disposal as ACM and PCB>50 ppm Bulk Product Waste.

$ _____ per linear foot

$ _____ per square foot

$ _____ per window opening (multiple windows/sizes exist in openings)

$ _____ per door opening (multiple doors/sizes exist in openings)

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Unit Price #30: Interior/Exterior Wall/Ceiling/Floor/Paint Removal and Disposal as PCB>50 Bulk Product Waste.

$ _____ per ton

Unit Price #31: Interior/Exterior Wall/Ceiling/Floor/Paint Removal and Disposal as PCB<50 CT DEEP Regulated Waste.

$ _____ per ton

Unit Price #32: Interior/Exterior Wall/Ceiling/Floor Removal and Disposal as PCB Remediation Waste.

$ _____ per ton

Unit Price #33: Exterior Asphalt/Concrete Removal and Disposal as PCB Remediation Waste.

$ _____ per ton

Unit Price #34: Exterior Soil Removal and Disposal as PCB Remediation Waste.

$ _____ per ton

Unit Price #35: Roofing Core/Field Base Material (includes multiple layers and substrates) Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #36: Roof Flashing (includes multiple layers and substrates) Removal and Disposal as ACM.

$ _____ per square foot

Unit Price #37: Damp-proofing/Tars/Mastics – Interior/Exterior Walls/Floors/Ceilings/Slab/Foundation and Associated Substrate/Adjacent Materials (includes multiple layers, contaminated materials and substrates) Removal and Disposal as ACM.

$ _____ per square foot

$ _____ per ton with substrate

Site Work & Demolition Related Unit Prices (See below for add'l Sitework items)

Unit Price #38: Off-Site Transportation and Disposal of Natural Soil.

$ _____ per ton.

"Natural" Soil: Soils have no detectable concentrations of non-naturally occurring compounds.

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Unit Price #39: Off-Site Transportation and Disposal of Polluted Soil.

$ _____ per ton.

"Polluted" Soils contain concentrations of non-naturally occurring compounds detected above laboratory reporting limits, but below the CTDEEP RSR criteria in accordance with RCSA 22a -133k-1(a)(45).Polluted soils can be reused on-site with the preparation of a Materials Management Plan and approval from the Engineer.

Unit Price #40: Off-Site Transportation and Disposal of Contaminated Soil.

$ _____ per ton.

"Contaminated Materials" contain concentrations of compounds that exceed CTDEEP RSR criteria in accordance with RCSA 22a-133k. Contaminated materials (concrete, soil, sediment, groundwater or surface water) can NOT be reused on-site and must be disposed of at an off-site disposal facility.

Unit Price #41: Off-Site Transportation and Disposal of Hazardous Waste/Soils.

$ _____ per ton.

"Hazardous Waste/Soils" Includes all soil/fill material that exceeds regulatory limits for hazardous substances as defined in 40 CFR, Part 261.20 Subpart C – Characteristics of Hazardous Waste. This material can NOT be reused on-site and must be disposed of at an off site approved disposal facility.

Unit Price #42: Off-Site Transportation and Disposal of Hazardous Lead-Based Paint Demolition Debris.

$ _____ per 40 yard dumpster.

$ _____ per 100 yard dumpster.

Steel & Flooring Related Unit Prices

A. Structural Steel, more than 30 LBS/LF – New Construction; Div 05

$ _____ per ton

furnished and installed.

B. Structural Steel, less than, or equal to 30 LBS/LF – New Construction; Div 05

$ _____ per ton

furnished and installed.

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C. Beam Penetrations, field fabricated and installed - each Type; Div 05

$ _____ (6" x 6")each
furnished and installed.

$ _____ (8" x 8")each
furnished and installed

$ _____ (12" x 12")each
furnished and installed

D. 0.75 inch by 8 inches epoxy anchor, full manufacturer in place system installation
Div 05 furnished and installed

$ _____ each

E. Item: Alternate Flooring Adhesive; Div. 09.

$ _____ per square foot

F. Item: Moisture Vapor Emission Control System Control System; Div. 09.

$ _____ per square foot

G. Traffic Signage, Each type with/post/bollard/base in place; Div. 10.

$ _____ each

MEP Related Unit Prices

A. Provide an additional sprinkler head including arm-over piping with an addition (6) six feet of piping to get back to nearest branch line; Div. 21
Per Sprinkler head installed

$ _____ each

B. Provide an additional duplex receptacle including wiring to nearest normal power panel with sufficient capacity, faceplate, back-box, conduits, bushing, and pull string. Also include cutting and patching of typical interior partition; Div. 26
Per receptacle installed

$ _____ each

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C. Provide an additional duplex receptacle including wiring to nearest emergency power panel with sufficient capacity, faceplate, back-box, conduits, bushing, and pull string. Also include cutting and patching of typical interior partition; Div. 26
Per receptacle installed

$ _____ each

D. Provide an additional exit sign including power wiring and conduit system from the nearest emergency electrical power panel. Extension of the nearest exit sign circuit is acceptable if the base bid circuit capacity is sufficient: Div. 26
Per Exit Sign Installed

$ _____ each

E. Provide an additional fire alarm pull station, including wiring to panel. Also include cutting and patching of typical interior partition; Div. 28
Per pull station installed

$ _____ each

F. Provide an additional combination audible/visual fire alarm device, including wiring to panel. Also include cutting and patching of typical interior partition; Div. 28
Per fire alarm device installed

$ _____ each

G. Provide an additional ceiling smoke detector including wiring and conduit system to the nearest node. Also include cutting and patching of typical acoustical ceiling panel; Div. 28
Per smoke detector installed

$ _____ each

H. Provide an additional carbon monoxide detector including wiring and conduit system to the nearest node. Also include cutting and patching of typical acoustical ceiling panel and/or typical interior partition; Div. 28
Per carbon monoxide detector installed

$ _____ each

I. Provide an additional combination audible/visual fire alarm device, including wiring to panel. Also include cutting and patching of typical interior partition; Div. 28
Per fire device installed

$ _____ each

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J. Single Data or Voice Outlet; Div 26 & 27

1. Provide an additional back-box, conduits, cable, bushing, and pull string. Include cutting and patching of typical interior partition, to accommodate installation of Single Data Outlet, including terminations, cable mounting devices, labeling, testing, documentation, installation and supervision
2. One (1) Category 6 rated RJ45 jack mounted on a single gang faceplate with one (1) Category 6, plenum rated, unshielded twisted pair cable installed to relevant IDF or MDF patch panel.
   a) Category 6 cable shall terminate onto an available port on the IDF or MDF patch panel.
   b) Cable length: Assume 285 feet.

Per outlet installed

$ _____ each

K. Dual Data Outlet; Div 26 & 27

1. Provide an additional back-box, conduits, cable, bushing, and pull string. Include cutting and patching of typical interior partition, to accommodate installation of Dual Data Outlet, including terminations, cable mounting devices, labeling, testing, documentation, installation and supervision.
2. Two (2) Category 6 rated RJ45 jacks, mounted on a single gang faceplate with one (2) Category 6, plenum rated, unshielded twisted pair cable installed to relevant IDF or MDF patch panel.
   a) Category 6 cable shall terminate onto an available port on the IDF or MDF patch panel.
   b) Cable length to assume 285 feet.

Per outlet installed

$ _____ each

L. Wireless Access Point location; Div 26 & 27

1. Provide pathway, and cable for additional WAP. Include cutting and patching of typical interior partition and/or ceiling tile, to accommodate installation of Wireless Access Point location, including terminations, cable mounting devices, labeling, testing, documentation, installation and supervision.
2. One (1) Category 6 rated RJ45 plug, terminated onto (1) Category 6, plenum rated, unshielded twisted pair cable, with a 20ft. service loop, and installed to relevant IDF or MDF patch panel.
   a) Category 6 cable shall terminate onto an available port on the the IDF or MDF patch panel.
   b) Cable length to assume 285 feet.

Per WAP installed

$ _____ each

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Site Related Unit Prices

A. Preparation of aggregate pier design, one mobilization, one modulus test, pre-auger each aggregate pier location, pre-drill or pre-excavate 50% of pier locations, installation of aggregate pier elements, and demobilization (See Note AG-1 below); Div 31

$ _____ (Lump Sum)

B. Pre-drill aggregate pier location using down-hole hammer (See Note AG-2 below); Div 31

$ _____ per linear foot

C. Pre-excavate aggregate pier location, remove oversize materials that could obstruct aggregate pier, backfill excavation with excavated soils or imported borrow to satisfaction of aggregate pier designer (See Note AG-2 below); Div 31

$ _____ per linear foot

D. Additional aggregate piers (See Note AG-3 below); Div 31

$ _____ per linear foot

E. Additional aggregate piers (See Note AG-3 below); Div 31

$ _____ per linear foot

F. Additional modulus tests Div 31

$ _____ each

G. Additional mobilizations/demobilizations; Div 31

$ _____ each

H. Additional Contractor-provided information: Div 31

1. Total number of aggregate piers in base bid design: Quantity _____.
2. Average installed pier length in base bid design:: Linear Foot _____.
3. Volume of crushed stone import in base bid design: Cubic Yard _____.

Aggregate Pier - Notes 1-3 related to units and Alternate price

AG-1. Contractor's base bid shall include pre-drill or pre-excavate of 50% of the Contractor's design number of piers and based on the Contractor's average design pier length, in addition to pre-auger. Payment for pre-drill or pre-excavate will be based on actual installed length of pre-drill or pre-excavate in accordance with the unit costs provided under Item 2 and Item 3.

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AG-2 Contractor will only be paid for one of pre-drill or pre-excavate - whichever is the method used to achieve the final installation depth.

AG-3 Additional aggregate pier unit cost shall only apply to additional piers required to be installed outside the limits of unsuitables shown on the Drawings. Unit cost shall be based on aggregate pier installation with pre-auger. Unit cost for pre-drill/pre-excavate, as applicable, will be paid in addition to aggregate pier with pre-auger unit cost.

J. Bituminous concrete paving regular duty, in place with base, Div 32

$ _____ per square foot

K. Bituminous concrete paving heavy duty, in place with base, DIV. 32

$ _____ per square foot

L. Bituminous concrete walk paving, in place with base, DIV. 32

$ _____ per square foot

M. Pavement Stripping – 4" wide striping, Div. 32

$ _____ Linear Foot

N. Gravel subbase placed and compacted, Div. 32

$ _____ Cubic Yard

O. Processed aggregate, placed and compacted, Div. 32

$ _____ Cubic Yard

P. Unit masonry pavers, in place with base, Div 32

$ _____ per square foot

Q. Washed stone aggregate surfacing, in place with geotextile fabric and base, Div 32

$ _____ per square foot

R. Natural infield & warning track surfacing, spread and compacted, Div 32

$ _____ per square foot

S. Granite Curbing, in place with base, each, Div 32 Straight Section Linear Foot $.....
Curved Section Linear Foot $.....

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T. Chain link fence, each, Div 32

4-foot tall fence $_____ per Linear Foot

4-foot gate $_____ each

6-foot-tall fence $_____ per Linear Foot

6-foot gate $_____ each

8-foot-tall fence $_____ per Linear Foot

10-foot-tall fence $_____ per Linear Foot

12-foot-tall fence $_____ per Linear Foot

U. Segmental retaining walls with base, backfill, geotextile fiber and anchoring system, DIV. 32

$ _____ face foot

V. Athletic Field Seeding/Sodding, each, Div. 32

Seeding – Lawn

$ _____ per square foot

Sodding (Per Alternate #2)

$ _____ per square foot

W. Turf and Grasses, each, Div. 32

Seeding – Lawn

$ _____ per square foot

Seeding - Conservation Mix

$ _____ per square foot

X. Plants, Div 32

1. All planting listed on the plant list (each type), in place, with mulch

Each$ - Furnish as provide separate attachment with plant list

2. Mulch furnished, placed and fine raked

$ _____ per cubic yard

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Turner Related Unit Prices

A. Pressure treated plywood- 3/4" thick, 4'x8' sheet - material cost

$ _____ each

B. Unit price for 30 yard dumpster, assume 8 tons

$ _____ each

E. ***Alternate Prices:***

The following Alternate Prices shall be valid for the life of the project and include all cost for labor, materials, tools, equipment, shipping, handling, storage, hoisting, rigging, distribution, protection of materials, fringe benefits, applicable taxes, overhead, profit, insurance, and all other things necessary for a complete installation.

Turner Alternate #1 Exclude 100% Payment and Performance Bond

Deduct $ _____

Turner Alternate #2 Provide a cost to provide Commercial General Liability Insurance and Worker's Compensation and Employer's Liability Insurance through an insurance carrier of the Subcontractor's choosing in lieu of through the CCIP Program. ***(*Note Demo & Abatement and Sitework Bid Packages to include Commercial Insurace in base bid as they are excluded from CCIP)***

ADD $ _____

Project Alternate #1 Provide sod in lieu of seeding at the Baseball and Rectangular fields

ADD / DEDUCT $ _____

Project Alternate #2 Provide sod in lieu of seeding at the Softball field

ADD / DEDUCT $ _____

Project Alternate #3 Courtyards- Provide pavers in lieu of concrete

ADD / DEDUCT $ _____

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Project Alternate #4 Add painted graphics at all gym walls: 1. Alternate Item: Drawing number A111.4 including elevations 1B, 1D, 1E, 3B.

ADD / DEDUCT $ _____

Project Alternate #5 Add full-height wall tile at sink wall in the following restrooms: 1105, 1104, 2021, 2027, 2055, 2061, 2092 and 2098.
1. Alternate Item: Refer to Finish Plans and Finish Product List for type of tile.
2. Alternate Item: Drawing number A131 and Section 09 3000.

ADD / DEDUCT $ _____

Project Alternate #6

Add dimensional letter signage at the following:
1. Auditorium doors.
2. Cafeteria.
3. Art room.
4. Construction Tech room.
5. Main reception window.
6. Gymnasium.
7. See Drawings for specific dimensional letter signage at each location.
8. Alternate Item: Section 10 1419

ADD / DEDUCT $ _____

Project Alternate #7 Provide 250kW natural gas fueled generator in lieu of diesel fueled generator.

ADD / DEDUCT $ _____

Project Alternate #8 Delete lightning protection system.

ADD / DEDUCT $ _____

Project Alternate #9 Provide 80 mil roofing membrane and 30-year warranty in lieu of 60 mil roofing membrane and 20-year warranty:
1. Alternate Item: Section 07 5423.

ADD / DEDUCT $ _____

Project Alternate #10 The hazardous buildings material contractor shall remove and dispose of PCB greater than 50PPM containing paint/painted materials as PCB bulk product waste.
1. Alternate Item: Section 02 8432.

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ADD / DEDUCT $ _____

Project Alternate #11 The hazardous buildings material contractor shall remove and dispose of PCB less than 50PPM containing paint/painted materials as PCB CTDEEP regulated waste.
1. Alternate Item: Section 02 8432.

ADD / DEDUCT $ _____

Project Alternate #12 Aggregate pier ground improvement shall be provided as an alternate to complete removal and replacement of existing fill or buried organic-containing materials from below building structures.
1. Alternate Item: Section 31 6616.

ADD / DEDUCT $ _____

F. ***Allowance Breakout Prices:***

The undersigned proposes and agrees that the following allowances are **included** in the base bid value. All allowances are unit cost/rate/quantity allowances unless otherwise noted. Unit prices for calculating allowance values must be the same as unit prices/rate above. Fill in N/A if not applicable to your bid package.

Reference Hours within Scope of Work

BP Scope of Work Line item	Value
BP#08 - Demo Labor Hours	$
BP#09 - Sitework Dumpsters	$
BP#09 - Sitework Equip Hours	$
BP#09 - Sitework Labor Hours	$
BP#11 - Mason Labor Hours	$
BP#15 - Roofer Hours	$
BP#15 - Roofing Protection	$
BP#16 - SOFP Patching	$
BP#21 - Drywall Mechanic Hrs	$
BP#21 - Drywall Labor Hours	$
BP#21 - Drywall Carpenter Hrs	$
BP#27 - Painter Hrs	$
BP#34 - Elev. Operator Hours	$
BP#41 - Landscaping Hours	$

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G. Wage Rates:

The following are hourly wage rates for all tradespeople associated with this Bid Package for performing extra work on a time and material basis. These rates are fully loaded (including benefits, payroll and sales taxes, insurance, 10% overhead and profit, bond costs, small tools, travel, parking, supervision, and any other costs associated with labor, etc.). The wage rates shall be valid for the life of the project. ***NOTE: Further, no mark-up shall be allowed on the premium time portion of the wage rate. This Subcontractor is required to submit labor rate summary sheets, which will fully justify all these labor rates. All rates are subject to a thorough analysis and subject to reduction if deemed inaccurate at the time of Bid.***

Foreman	**Straight Time**	**Time & Half**	**Double Time**
_____	$_____	$_____	$_____
_____	$_____	$_____	$_____

Journeyman	**Straight Time**	**Time & Half**	**Double Time**
_____	$_____	$_____	$_____
_____	$_____	$_____	$_____

H. ADDITIONAL BID REQUIREMENTS:

1 Bidder acknowledges that this proposal is based on reasonable interpretation of the documents / information/ specifications provided. This pricing shall be full compensation to the subcontractor for the complete work of the associated trade required at the Project. This proposal includes any necessary elaboration, missing segments, obvious requirements, etc. that would be necessary for a functioning system at the quality level established by the Contract Documents.

2 Your bid accounts for all information contained in the Contract Documents and Design Drawings, Bid Notifications, Project Memos all other correspondence provided to you as related to your work. If the Contract Documents and/or Contract Drawings and/or Specifications conflict, then the greater quantity shall apply.

3 Your bid shall remain valid for ninety (90) days.

4 Current Financial Statements will be required at time of final scope review for the competitive bidder(s).

5 All bids must be accompanied by the NCCI form from your insurance provider indicating the subcontractor's current EMR (Experience Modification Rating).

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6 The bidder acknowledges that if successful (at the time of final scope review), it will sign the Turner Construction Company's Form of Contract **36** with no exceptions.

7 Did you verify and acknowledge all Bid Notifications on the bid form?

8 Your bid is based on TAX EXEMPT STATUS– TAX-EXEMPT ORGANIZATION.

9 Bidder has included acknowledged Non-Collusion Affidavit, Scope of Work Sheet and Insurance worksheets.

1) The following documentation **MUST** be submitted with each bid (2 copies of each) in order per below:
   a) Turner Form of Proposal
   b) Inititaled Scope of work sheet for your assigned Bid Package
   c) Non- Collusion Affidavit
   d) Bid Bond (if applicable)
   e) Turner Prequalification Response Form
   f) Curret DAS certificate (as applicable)
   g) Curret SBE/MBE Certificate (Set-aside Packages Only)
   h) OPM Ethics Form 1 or 6 as applicable

Submitted By: _____

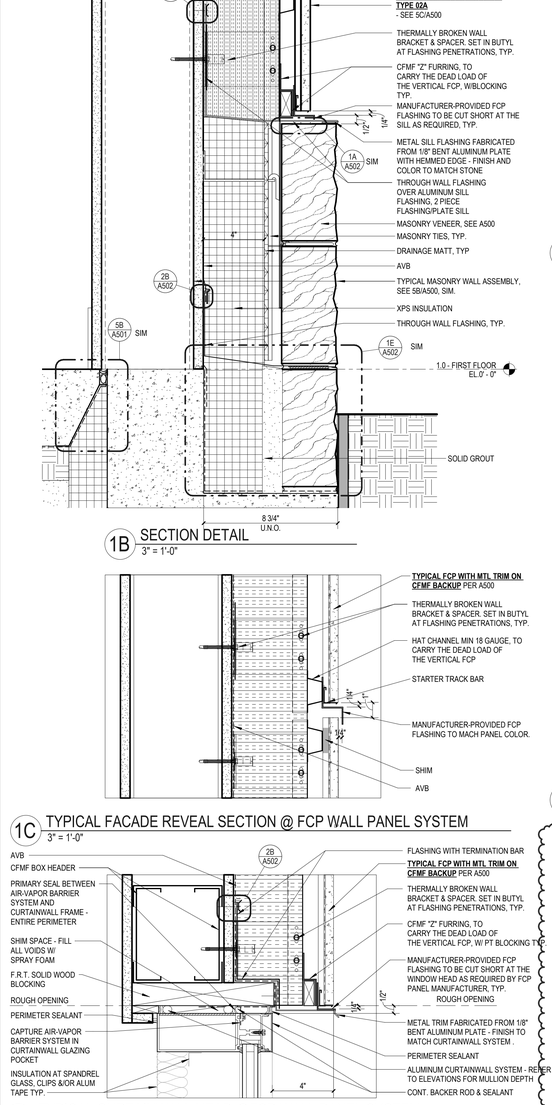
_____ Date: _____
Signature of Authorized Agent for Bidder

_____
(Title)

_____ Date: _____
(Attest)

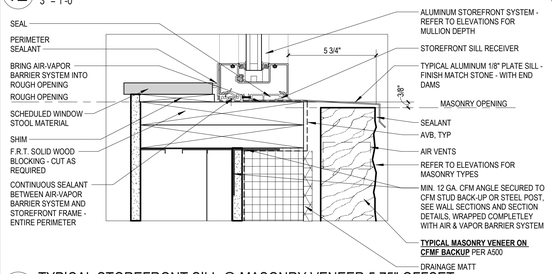
1B SECTION DETAIL
3" = 1'-0"

1C TYPICAL FACADE REVEAL SECTION @ FCP WALL PANEL SYSTEM
3" = 1'-0"

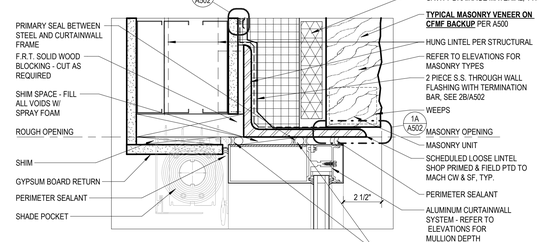


1D TYPICAL CURTAINWALL HEAD @FCP WALL PANEL SYSTEM
3" = 1'-0"

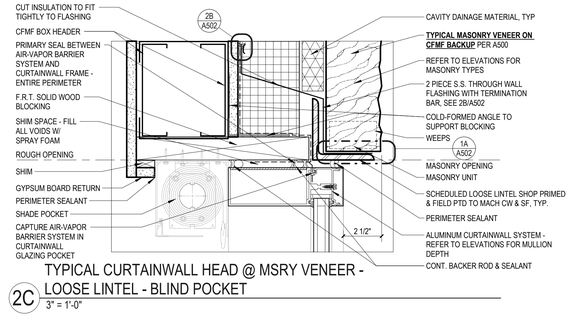
1E TYPICAL CURTAINWALL JAMB @ FCP WALL PANEL SYSTEM
3" = 1'-0"



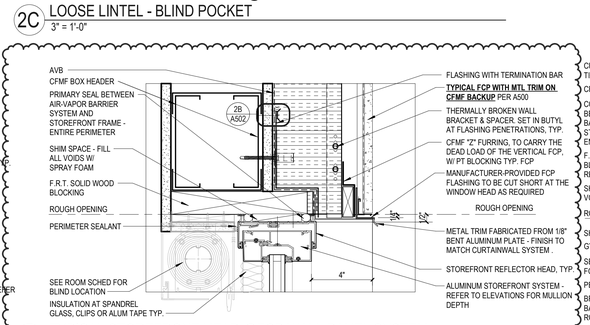
1F TYPICAL STOREFRONT SILL @ MASONRY VENEER 5.75" OFFSET
3" = 1'-0"



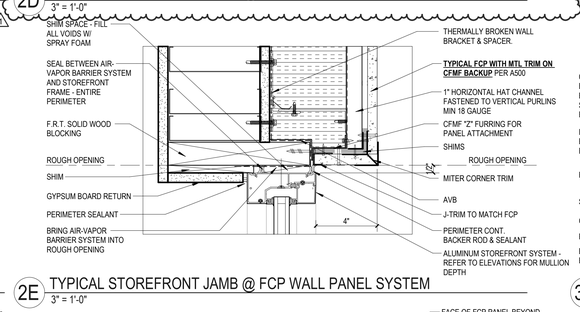
2A TYPICAL CURTAINWALL HEAD @ MSRY VENEER - HUNG LINTEL - BLIND POCKET
3" = 1'-0"



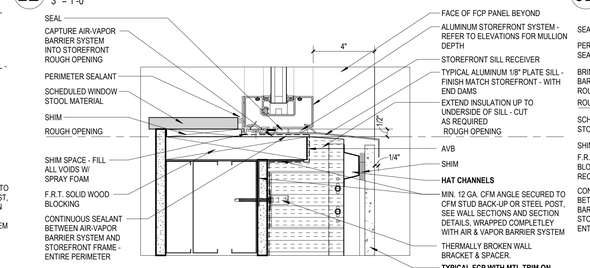
2C TYPICAL CURTAINWALL HEAD @ MSRY VENEER - LOOSE LINTEL - BLIND POCKET
3" = 1'-0"



2D TYPICAL STOREFRONT HEAD @FCP WALL PANEL SYSTEM
3" = 1'-0"

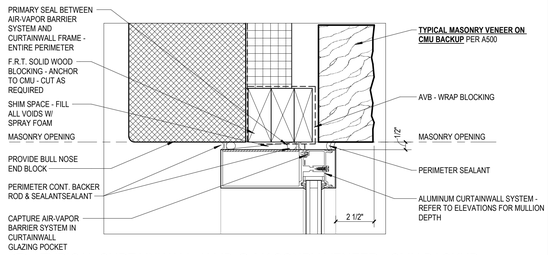


2E TYPICAL STOREFRONT JAMB @ FCP WALL PANEL SYSTEM
3" = 1'-0"

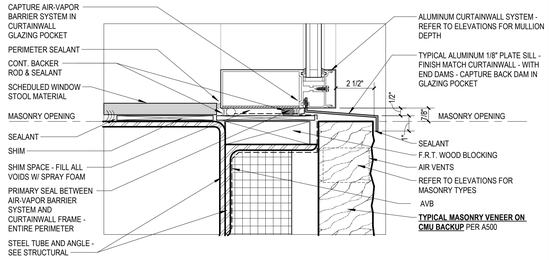


2F TYPICAL STOREFRONT SILL @ FCP WALL PANEL SYSTEM
3" = 1'-0"

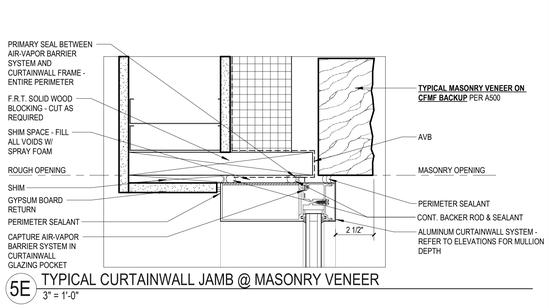
5A TYPICAL CURTAINWALL HEAD @ MSRY VENEER - CMU BACKUP
3" = 1'-0"



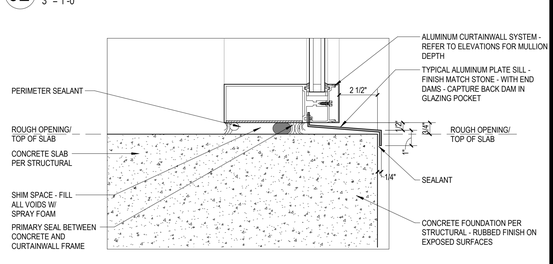
5B TYPICAL CURTAINWALL JAMB @ MASONRY VENEER - CMU BACKUP
3" = 1'-0"



5C TYPICAL CURTAINWALL SILL @ MASONRY VENEER - CMU BACKUP
3" = 1'-0"



5D TYPICAL CURTAINWALL JAMB @ MASONRY VENEER
3" = 1'-0"



5F TYPICAL CURTAINWALL SILL @ SLAB-ON-GRADE
3" = 1'-0"

3F TYPICAL STOREFRONT SILL @ MASONRY VENEER
3" = 1'-0"

3D TYPICAL STOREFRONT HEAD @ MASONRY VENEER - LOOSE LINTEL
3" = 1'-0"

5E TYPICAL CURTAINWALL JAMB @ MASONRY VENEER
3" = 1'-0"

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Drawn MG
Checked JZ

Greenwich Public Schools

Greenwich Central Middle School

9 Indian Rock Lane, Greenwich, CT 06830

STATE PROJECT NO: 057-0114 N

NORTH
EAST
SOUTH
WEST
A B C D E F

KEYPLAN

Number	Date	Issued For
1	10/10/2024	ADDENDUM NO. 1
	09/30/2024	BIDDING/ PERMIT
	07/08/2024	PHASE 2

ALUMINUM FRAME WINDOW DETAILS

Date 07/08/2024
Scale 3" = 1'-0"
Proj. Number 22367.00

Drawing Number A641

Autodesk Docs://22367.00 - Greenwich Central Middle School/A_22367_GREENWICH_CENTRAL_MS_R22.rvt
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