REQUEST FOR PROPOSAL

FANNIN COUNTY

COURTHOUSE RESTORATION

BONHAM, TEXAS

Prepared by

Turner

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04/24/2019

REQUEST FOR PROPOSAL 02

FANNIN COUNTY COURTHOUSE RESTORATION

BONHAM, TEXAS

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REQUEST FOR LUMP SUM PROPOSALS

FANNIN COUNTY COURTHOUSE RESTORATION

BONHAM, TEXAS

Turner Construction Company is the Construction Manager as Advisor (Agent - CMA) for Fannin County for work to be performed on the Fannin County Courthouse Restoration project. This solicitation is being conducted pursuant to the CMA agreement between Turner Construction Company and Fannin County.

You are invited to submit your Lump Sum Proposal (LSP) for all labor, material, equipment, required taxes, and other necessary items to complete the work in your trade for this project. The LSP's are to be in strict accordance with the Plans and Project Manual prepared by Architexas.

Project Description:

Restoration of historic site, restoration and reconstruction of exterior masonry, tower and roof reconstruction, integration of new mechanical / plumbing / electrical / AV / IT / security systems, ADA upgrades, complete finish out and restoration of interior.

All work is to be bid in strict accordance with the Package(s) contained herein, this RFP and the Contract Documents (including Plans, Specifications, and RFP Documents). However, cost saving suggestions are acceptable and encouraged and are to be bid as voluntary alternates to the base bid plans and specification. All work is to be bid in strict accordance with the Request for Proposal Manual and contract documents. Please refer to the Request for Proposal Manual for Instructions to Bidders, Insurance requirements, Proposal Forms, etc.

Proposal documents can be obtained from Building Connected, a site maintained by Turner Construction or Fannin County's website: http://www.co.fannin.tx.us. To request access to Building Connected please contact Farid Ehsai (fehsai@tcco.com).

Bidding Schedule and Dates:

1. **Pre-Bid Meeting** – Thursday, May 9th @ 1:00 pm
   Located at:
   Fannin County Courthouse
   101 E. Sam Rayburn Dr.
   Bonham, TX 75418

2. **RFI Period** – due to Turner Construction (fehsai@tcco.com) by 2:00 pm on Thursday, May 16th

3. **Proposals Due** – Friday, May 24th @ 2:00 pm

   Bids are to be submitted via e-mail to: Michelle Case (mcase@fanninco.net) **AND** copied to: Alicia Whipple (awhipple@fanninco.net) and (fannincounty@tcco.com) **OR** mailed/hand delivered to Fannin County Purchasing Office, 200 East 1st Street, Bonham TX 75418; **Attention: PURCHASING**.

SECTION 01

INSTRUCTIONS TO BIDDERS

FANNIN COUNTY COURTHOUSE RESTORATION

BONHAM, TEXAS

A. Invitation to Bid:

Fannin County and Turner Construction are requesting Lump Sum Proposals for all labor, material, equipment and other items necessary to complete the work of your trade for the **Fannin County Courthouse Restoration, Bonham, Texas** at the time and date specified below. Proposals are to be in accordance with the Contract Documents as prepared by Architexas, their consultants, Fannin County and their agent Turner Construction Company, and Request for Proposal dated April 24th, 2019.

B. Scope of the Project:

Restoration of historic site, restoration and reconstruction of exterior masonry, tower and roof reconstruction, integration of new mechanical / plumbing / electrical / AV / IT / security systems, ADA upgrades, complete finish out and restoration of interior.

C. Schedule Compliance

Time is of the essence on this Project and your Proposal shall reflect and include an assertive, expeditious approach to schedule compliance.

The overall project schedule for this project will commence approximately **June, 2019** with overall Project substantial completion **October, 2020**.

1. Bidders are to include in their proposal all costs required to achieve the schedule and the bidder agrees that by submitting a proposal that no additional overtime or premium payments shall be made for schedule compliance once they have been awarded the Work.
2. Bidders recognize that more than one mobilization may be necessary to accomplish the work and has included more than one mobilization where necessary.
3. Bidders recognize that there will be off normal business hours' work, of out of sequence and "comeback work", and stacked trades work and shall include any costs associated with the "off-hour", out of sequence and "comeback work" and stacked trades work in its bid. Bidder also recognizes that some work will have to be performed outside of "normal" working hours and will be performed at night and/or on weekends at the discretion of Fannin County or their agent and that this has been included in the bid.
4. Bidder recognizes in preparing its proposal that it is imperative that the Work proceed uninterrupted and shall endeavor to prevent and shall promptly cure any work stoppage caused by any labor or jurisdictional disputes arising out of the assignment of work to be performed by the bidder or its trade partner's.
5. The bidder acknowledges and understands that the ability to complete the Work in the least amount of time and in accordance with the Preliminary Schedule shall be taken into consideration for award of the Work.

D. Proposal Instructions:

1. The Request for Proposal shall become a binding part of the Contract and such portions of the RFP shall be considered when preparing your proposal.
2. The "Base Proposal" is to be quoted strictly in accordance with the plans and specifications as prepared by the Architect and its consultants and "Scope of Work" for the trade. Proposals not quoted per plans and specifications and "Scope of Work" may be subject to rejection as a non-responsive Proposal.
3. Alternates that are applicable to bidders "Scope of Work" are outlined in the Contract Documents. All ADD and DEDUCTIVE alternates, prime contractor shall include bond adds and deductions within these alternate numbers.

   For the SHELL SPACE ALTERNATES, include electrical and mechanical infrastructure to the shell spaces as illustrated on the contract drawings (e.g. homeruns, distribution duct, VAV boxes, balancing dampers, thermostat, etc.) for a conditioned space with electrical to the space for the future completion of these rooms as illustrated. All finishes including drywall, plaster, paint, lighting, switches, grills, window treatment, etc. shall not be installed or provided on the project. ALL doors entering these SHELL spaces from the main corridors shall be completed on the corridor side as a complete and finished product. The delineation between the SHELL space and historic corridors shall be at the entrance(s) to these SHELL Spaces.

   Should the bidder wish to quote alternative materials, equipment or systems then it shall do so as a "voluntary alternate" to the "base proposal". Voluntary cost-saving alternates should be presented on separate sheets with your Proposal.

   We strongly urge you to propose voluntary cost savings as alternates to your base proposal. Those cost savings alternates that are acceptable to the Owner, Architect, Texas Historical Commission (THC), and Turner will be used in the evaluation of your Proposal and the successful bidder may be selected on the basis of the voluntary cost-saving alternates.
4. No extension of the bid time and/or date shall be allowed without specific written authorization from the Owner or Turner.
5. All proposals must be held firm for acceptance for a period of not less than **ninety (90)** calendar days.
6. **In the event of a conflict between these RFP requirements and the Bidding Requirements section of the Architect's Project Manual, assume that the requirements of the RFP govern.**
7. The Owner does qualify for exemption from state and local. Sales tax shall be included in all proposals on items as required by governing tax laws.
8. Supplemental Conditions (included in Section 5 of this RFP) shall be made a part of any Agreement and are to be considered when preparing your proposal.
9. The successful bidder shall enter into agreement with Fannin County on the basis of the attached contract agreement (Form 367) without exception, restriction or modification. Copies of these forms of agreement are included in Section 6 of this RFP.
10. In responding to this RFP the bidder understands that the "Site Specific Safety Program" (Section 7 of this manual) shall be made part of any Agreement and should be considered when preparing your Proposal.
11. Proposal documents may be obtained via Building Connected or Fannin County's website Site: http://www.co.fannin.tx.us. Questions during the bid process shall be submitted in writing, on your company letterhead, by email to Farid Ehsai (fehsai@tcco.com). **Dead line for asking Questions will be May 16, 2019.**

12. Bidder shall include providing one (1) man-day of clean up labor for every 40 man-days worked as its contribution to a composite cleanup crew for general building cleaning.
13. Bidder shall include daily clean-up of all trash and debris at dumpsters located on site. Project will provide the dumpster and be responsible for offsite disposal at no cost to the bidder except for the following trades: Demolition, Concrete, Masonry, Earthwork, Steel, Misc. Steel and Site Utilities. These trades shall provide their own trash removal.
14. Cost of utility consumption charges for power to be paid for by others.
15. A pre-bid will be held on **May 9th, 2019 @ 1:00 pm,** at the project site for interested Contractors and Vendors prior to submitting their Proposal to ensure a complete understanding of the existing site conditions and Scope of Work.
16. Bidders shall be responsible for all receiving, unloading, hoisting, stocking/distribution and installation of all materials on the site and into the building. At no time shall material be left in paths of egress, pathways or other areas that will prevent the movement manpower and material.
17. Reasonable care and protection of the work of others is required by all trades.
18. This is a non-tobacco usage site. Tobacco products are not allowed within the building, this includes vapor cigarettes and electronic cigarettes.
19. Any required equipment necessary to perform the work under a Bid Package is required to be included in the Package. All hoisting necessary shall be included to perform the work shall be included the proposal. A project elevator may be available near project completion, but only during that specific phase which includes the new elevator. All usage to be coordinated with Turner.
20. Proposal shall be based on a five percent (5%) retainage withheld for all work until 30 days after final acceptance of the entire Project.
21. Bidders are to familiarize themselves with and base their proposal on the requirements contained in **Section 3 – Additional Provisions** of this RFP as this section further describes the scope of the work to be bid on and contracted for and expands the contract language contained in **Section 6 - Form of Agreements**.
22. <u>OSHA 30-Hour Training</u>:

    The successful bidders and their prime contractors (trade partners) shall commit their key field supervisory staff to register and complete, within three (3) months of award, an OSHA 30-Hour Safety Certification training course via The Turner Knowledge Network (TKN) or submit proof of Certification that key field supervisory staff have already successfully completed the OSHA 30-Hour Safety Certification training course from a recognized industry training source within the past three (3) years.

    Immediately upon award, Trade Partner and its trade partners shall submit in writing to Fannin County's Purchasing Department, the names and proof of the OSHA 30-Hour trained field supervisory staff on the project and/or the names of field supervisory staff on the project that will be trained via the Turner Knowledge Network (TKN).

23. <u>Substance Abuse Policy:</u>

    All workers are subject to substance abuse screening prior to starting work and during employment on the site. This policy is non-discriminatory and applies equally to all Turner employees, employees of all contractors and trade partner, employees of all lower tier trade partners, trade partner construction managers, consultants, outside workers, craft personnel, management personnel and temporary personnel.

    No site orientation shall be provided for any worker until such time that it has been confirmed that the individual has successfully completed Drug Testing and/or provide documentation of a clear drug screen conducted within the previous 12 months.

E. Insurance:

Work performed under contract with Fannin County will be endorsed in insurance policies and certificates of insurance will be required to include Description of Operation, Locations and Vehicles and reference: Work performed at the Fannin County Courthouse Restoration project located at: 101 E. Sam Rayburn Drive, Bonham, TX 75418.

Additionally, insureds (Fannin County, City of Bonham and Turner Construction Company) will be on a Primary and Non-contributing bases on the General Liability (ISO endorsement CG 20 10 11 85 or its equivalent), Automobile and Excess/Umbrella Liability Polices, Waiver of Subrogation in favor of Certificate Holders applies to all policies. GL and WC coverage will apply off-site. This bid should include the cost of naming the Owner and any other designated agency of the Owner as additional insured for all insurance coverage and the acceptance of the indemnification and hold harmless clauses contained within the Trade Partner Agreement.

The Bidder acknowledges that no work shall commence until such time as all insurance documents have been provided, reviewed and accepted by Owner as being in accordance with the requirements of the Trade Partner Agreement. The Bidder acknowledges that the Bidder, at no additional expense the Owner, shall remedy any delay in the commencement of the Bidder's work as the result of failure on the part of the Bidder to provide the required coverage in a timely manner.

If Trade Partner or Insurance Provider terminates the project coverage prior to final completion, or if Owner determines to end the Trade Partners continued participation in the project, a thirty (30) - day written notice shall be given.

Owner reserves the right to transfer insurance coverage on this project to use an OCIP (Owner Controlled Insurance Program). Bidder shall provide a breakout cost for General Liability coverage for consideration of this program.

F. Proposal Submittal:

1. Sealed Bids are to be submitted via e-mail to**:** Michelle Case **(**mcase@fanninco.net**) AND copied to**: Alicia Whipple **(**awhipple@fanninco.net**)** and **(**fannincounty@tcco.com**) OR** mailed/hand delivered to **Fannin County Purchasing Office, 200 East 1st Street, Bonham TX 75418; Attention: PURCHASING.** E-mail bids are to reference: **Fannin County Courthouse Restoration – (Bid Package # XX Scope of Work)** in the e-mail subject line.
2. Envelopes containing proposals are to be sealed and marked with a notation on the lower left hand corner of the envelope, **"REQUEST FOR PROPOSAL ON "Fannin County Courthouse Restoration",** AND INDICATE "**BID PROPOSAL".**
3. The Proposal must be submitted in writing on the Proposal Form supplied with this RFP package. **AND THE SCOPE OF WORK FOR ALL TRADES AND THE BID PACKAGE SCOPE OF WORK SIGNED INDICATING COMPLIANCE WITH THE RFP PACKAGE**. Proposals not submitted on this form or without the signed scopes of works may be cause for rejection.
4. Fannin County reserve the right to reject any or all Proposals and to waive irregularities or formalities as may be deemed in the Owner's interest.
5. The following information is to be provided **as an attachment to your Proposal**:
   a. Provide a list of three (3) similar projects that your company has completed in the past five (5) years including name of project, year completed, Owner's name, Architect's name, dollar value, square footage, project duration, and General Contractor reference (including name of person to contact and telephone number).

b. Provide written statement from surety company authorized to do business in the State of Texas that Bidder qualifies for bonding to the full proposal capacity, if not, provide willingness to be included under a Multi-Prime contract agreement in order to conduct work on behalf of the COUNTY.

c. Provide the quantity of the available manpower and equipment that can be committed to this project.

d. Provide resumes of the Project Manager and Project Superintendent to be assigned to this project.

e. Scope of work from Section 3 signed and dated.

G. Proposal Documents:

The following documents are attached herewith or are available for inspection in Fannin County Purchasing office and on-line at Building Connected. Each of these documents will be considered a formal Proposal Document by firms making Proposals and each bidder shall be bound to them.

- Request for Proposal
- Invitation to Bid
- Instructions to Bidders
- Bid Form
- Additional Provisions
- Documents List
- Supplemental Conditions
- Form of Agreement (Form 367)
- Site Specific Safety Program
- Project Schedule
- Site Logistics Plan
- Trade Partner | Vendor Pre-Qualification Statement
- Insurance and Bond Requirements
- Equal Employment Opportunity Policy
- Site Specific Quality Assurance | Quality Control Plan
- Geotechnical Report
- Lean Plan
- BIM Implementation Plan

H. Criteria for Selection:

Criteria on which a trade partner award will be made include the following:

1. Base Proposal Amount.
2. Historical Restoration construction experience.
3. Proposed Project Team
4. Bonding Capacity
5. Acceptable references from other Owners.
6. Current job workload and manpower availability.

I. Equal Employment Opportunity:

The Trade Partner shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation or national origin. The Trade Partner will take affirmative action to ensure that applicants are employed and that employees are treated equally during employment, without regard to their race, color, religion, sex, sexual orientation or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. The Trade Partner agrees to post in conspicuous places, available to employees and applicants for employment notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause. The Trade Partner shall in all solicitations or advertisements for employees placed by or on behalf of the Trade Partner state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation or national original. Furthermore, the Trade Partner will comply with all the necessary provisions of Executive Order No. 11246 dated 9/24/98.

J. Professional Liability (E&O) Insurance:

For work of the Documents or Scopes requiring stamped and sealed drawings and/or calculations, the Contractor, Trade Partner, Vendor is required to provide Professional Liability Insurance with an insured amount no less than Two Million ($2,000,000) Dollars per claim. Contractor, Trade Partner, Vendor is responsible for all deductibles associated with this policy. Stamped and sealed drawings will be stamped and sealed by a registered Professional Engineer with valid and active registration/licensure in the State of Texas from the responsible appropriate engineering discipline.

* By submitting a proposal, each proposer agrees to waive any claims it has or may have against the Owner, the Construction Manager Agent, the Architect, and their respective employees, agents, or representatives, arising out of or in connection with the administration, evaluation recommendation, or selection of any proposal; waiver of any requirements under the proposal documents or contract documents; acceptance or rejection of any proposal; and award of the contract.

END OF REQUEST FOR PROPOSAL

SECTION 2

PROPOSAL FORM

FANNIN COUNTY COURTHOUSE RESTORATION

BONHAM, TEXAS

To: **Fannin County Purchasing**
200 East 1st
Bonham, TX 75418
Attn: Michelle Case

Date: _____

Submitted By:

Company Name: _____

Contact Person: _____

Telephone No.: _____

Note: If a firm is proposing on more than one RFP package, then separate proposals are required for each RFP package.

The undersigned, in compliance with the Request for Proposal (RFP) for construction of the above referenced project, having carefully examined all of the drawings, specifications, related documents and site of the proposed work, and being familiar with all of the conditions surrounding the work, including the proposed construction schedule and the availability of specified materials, labor and equipment necessary to construct the Work, hereby proposes to furnish all labor, materials, taxes, equipment, tools, machinery, transportation and supervision required to perform all work, provide all services and to construct all work in accordance with the RFP Documents for the amount stated below. This proposal is to cover all expenses incurred in performing the work required for this RFP Package under the RFP Documents and includes all warranty costs, overhead and profit.

Bid Package No.: _____, **Description**: _____

(Bidders should refer to the "Bid Package No." specified in Section 3, Additional Provisions)

A. Base Bid

1. VALUE OF SCOPE OF WORK $_____

2. TAXES ON INCORPORATED MATERIALS $_____

GRAND TOTAL BASE BID $_____

Bid Breakdown:

- ***Bidders shall initial the bottom of the scope of work for all trades and provide a detail scope of work on trade partner's letter head clearly listing all inclusions and exclusions.***
- ***Elevation Breakdown – (for exterior work only)***

Elevation	*Labor*	*Material & Equipment*	*Work Days Required*
NORTH	***$***	***$***	
SOUTH	***$***	***$***	
EAST	***$***	***$***	
WEST	***$***	***$***	
OVERHEAD & PROFIT	***$***	***$***	

- ***Clean –Up Hours Included*** _____

Alternate

Alternate Prices include all labor, material, equipment, engineering, overhead, profit, applicable taxes, bond and all else necessary to complete the work. Alternate Prices are firm for the life of the Project. Award of any Alternate will be at the sole discretion of Fannin County.

* **See Specification Section 01 2300 – Alternates**

* **Applicable alternates are included in Scope Sheets**

Unit Prices:

Unit Prices are firm and include all labor, material, equipment, applicable taxes, overhead, profit and all else necessary to complete the Work.

Unit Price No.1: _____ $_____

(Description)

Unit Price No.2: _____ $_____

(Description)

Unit Price No.3: _____ $_____

(Description)

Cost Saving Alternates - Trade Specific

All Proposals shall be per plans and specifications "**NO SUBSTITUTES".** Any cost saving for use of an alternate product, manufacture or mean of construction shall be list below for evaluation. Cost Saving Alternates are firm and include all labor, material, equipment, applicable taxes, overhead, profit and all else necessary to complete the Work. Please include any "synergy" savings in this section.

Item No.1: _____ Dollars $_____ Time _____Wks

(Description)

Item No.2: _____ Dollars $_____ Time _____Wks

(Description)

Addenda:

Acknowledge receipt of the following Addenda to the drawings and specifications and all of the provisions and requirements of said Addenda have been taken into consideration in preparation of this Proposal.

Addendum No. _____Dated_____

Addendum No. _____Dated_____

Addendum No. _____Dated_____

Acknowledge that the following items will be Required for Award:

- List of projects of similar experience attached _____
- Agree to sign Trade Partner form 367 without modification _____
- Quantity of Available Manpower and Equipment attached _____
- Resumes for Proposed Staff attached _____

HUB/MBE/WBE Participation:

In submitting this proposal, the undersigned agrees to work towards a goal of achieving 25% HUB/MBE/WBE/LGTB participation for this project as described in paragraph "I" of the Instructions to Bidders.

Bidder agrees to actively consider the placement of contracts for material and services with HUB, LGTB and other minority/woman-owned businesses. By submission of this bid, bidder acknowledges to have given careful attention to all such sources to assure that they are utilized to their fullest capabilities when a demonstrated ability to perform has been established. During the course of this project, payments to HUB,LGTB and other minority/ woman-owned businesses shall be reported on a monthly basis to Fannin County by completion and submission of a M/WBE Assessment Report with each invoice.

Bidder acknowledges the following as potential awards to HUB, LGTB and/or M/WBE firms:

_____ _____% of Bid Price HUB/MBE/WBE/LGTB

_____ _____% of Bid Price HUB/MBE/WBE/LGTB

_____ _____% of Bid Price HUB/MBE/WBE/LGTB

Bidder agrees that the Owner has the right to reject any and all proposals and to waive any informality:

Bidder agrees that it has reviewed all of the Proposal Documents to its own complete satisfaction, including all exhibits, and has made note herein of any specific qualifications or exceptions it has to any of this documentation. Failure to note any specific qualifications or exceptions to the Proposal Documents will be deemed as acceptance of them as written. A general qualification stating the Proposal is based on reaching "mutually acceptable contract terms" is not acceptable.

Submitted By:

Company Name (typed): _____

Signed by (typed): _____

Signature: _____

Title (typed): _____

Legal Address (typed): _____

Cell Number (typed): _____

Telephone No. (typed): _____

Fax No. (typed): _____

Email (typed): _____

Date _____

INDIVIDUAL SCOPES OF WORK TO BE ISSUED VIA ADDENDUM

FORMULA FOR CHANGES

Percentage Markup and Procedures Applicable to Work Added to or Omitted from the Original Contract Agreement.

1. LUMP SUM

Predetermined Lump Sum additions and/or omissions to the Agreement are to be based upon the estimated "Net Actual Cost", plus the following percentages for Overhead and Profit:

	Labor	Material	Sublet work
Additions:	5%	5%	5%
Omissions:	5%	5%	5%

(Contingent upon Owner negotiations)

2. TIME AND MATERIAL

Additional work to the Contract, authorized by Fannin County in advance to be performed on a Time and Material basis, is to be based upon the "Net Actual Cost", plus the following percentages for Overhead and Profit:

	Labor	Material	Sublet work
Additions:	5%	5%	5%

(Contingent upon Owner negotiations)

3. GENERAL:

Submission of estimates and costs shall be itemized in a form satisfactory to Fannin County to permit ready analysis and evaluation. On Time and Material work, daily reports, in duplicate, showing all field and shop labor expended and/or material delivered shall be submitted to Fannin County's Project Manager. Invoices shall be submitted monthly.

4. No overhead or profit will be permitted on premium time.

5. Percentages shall apply to net difference in quantities for adds and deductions.

6. "Net Actual Cost" defined:

a. Labor

1) Wages of labor, including foreman, engaged in work and paid directly by the Trade Partner.

2) Engineering, layout and drafting performed at the Project with Fannin County's prior authorization.

3) Fringe Benefits, Federal and State Unemployment Taxes.

4) Federal Old Age Benefits, Federal and State Unemployment Taxes.

5) Net actual premium paid for Public Liability, Workers' Compensation, Property Damage, and any other forms of insurance required by Fannin County.

b. Material

1) Net Cost of construction materials and supplies delivered to site including applicable Sales and/or Use taxes, transportation costs, trade and cash discounts. (Sales tax frequently not applicable to transportation costs.)

2) Costs of a special nature, approved in advance by Fannin County, such as for riggers, labor transportation, equipment rentals, royalties, permits and other expenses of this general nature.

7. Percentages shall include the following overhead costs:

a. Supervision and executive expenses.

b. Small tools, scaffolding, blocking, shores, appliances, etc., and the expense of maintaining same.

c. Administrative expenses, clerical, etc., both at the Project and in the Trade Partner's office.

d. Taxes required to be paid by the Trade Partner, but not included under the aforementioned "Net Actual Cost".

e. Interest on Capital Employed.

8. Percentages shall include all profit, Bond premium cost.

SECTION 4

4/24/2019

CONTRACT DOCUMENT LIST

FANNIN COUNTY COURTHOUSE

BONHAM, TEXAS

The following documents as prepared by Architexas and their Consultants form the basis for the Scope of Work under this contract.

PLANS

GENERAL

Section	Title	Date
A0.00	COVER SHEET	4/22/2019
A0.01	PROJECT INFORMATION AND SHEET INDEX	4/22/2019
A0.02	CODE REVIEW	4/22/2019
A0.03	LIFE SAFETY PLANS	4/22/2019

DEMOLITION

Section	Title	Date
D1.01	DEMOLITION SITE PLAN	4/22/2019
D2.01	BASEMENT LEVEL DEMO FLOOR PLAN & RCP	4/22/2019
D2.02	GROUND LEVEL DEMO FLOOR PLAN & RCP	4/22/2019
D2.03	SECOND LEVEL DEMO FLOOR PLAN & RCP	4/22/2019
D2.04	THIRD LEVEL DEMO FLOOR PLAN & RCP	4/22/2019
D2.05	ATTIC & ROOF LEVEL DEMO PLANS	4/22/2019

LANDSCAPE

Section	Title	Date
L1.00	SITE LAYOUT PLAN AND HARDSCAPE DETAILS	4/22/2019
L2.00	SITE PLANTING PLAN AND PLANTING DETAILS	4/22/2019
L3.00	SITE IRRIGATION PLAN	4/22/2019
L3.01	SITE IRRIGATION DETAILS	4/22/2019

CIVIL

Section	Title	Date
C1.00	DEMOLITION PLAN	4/22/2019
C3.00	DIMENSION CONTROL PLAN	4/22/2019
C4.00	PAVING PLAN	4/22/2019
C5.00	GRADING PLAN	4/22/2019
C6.00	DRAINAGE PLAN	4/22/2019
C7.00	UTILITY PLAN	4/22/2019
C8.00	CIVIL DETAILS	4/22/2019
C8.01	CIVIL DETAILS	4/22/2019
C8.02	CIVIL DETAILS	4/22/2019

ARCHITECTURAL		
Section	**Title**	**Date**
A1.00	SITE PLAN	4/22/2019
A1.01	ACCESS RAMP PLAN & DETAILS	4/22/2019
A1.02	SITE DETAILS	4/22/2019
A1.03	SITE DETAILS	4/22/2019
A1.04	BASEMENT LEVEL FLOOR PLAN	4/22/2019
A1.05	BASEMENT LEVEL RCP	4/22/2019
A1.06	GROUND LEVEL FLOOR PLAN	4/22/2019
A1.07	GROUND LEVEL RCP	4/22/2019
A1.08	SECOND LEVEL FLOOR PLAN	4/22/2019
A1.09	SECOND LEVEL RCP	4/22/2019
A1.10	THIRD LEVEL FLOOR PLAN	4/22/2019
A1.11	THIRD LEVEL RCP	4/22/2019
A1.12	ATTIC LEVEL PLAN	4/22/2019
A1.13	ROOF PLAN	4/22/2019
A1.14	ROOF DETAILS	4/22/2019
A1.15	TOWER LEVEL FLOOR PLANS & LADDER DETAILS	4/22/2019
A2.01	NORTH ELEVATION	4/22/2019
A2.02	PARTIAL NORTH ELEVATIONS	4/22/2019
A2.03	EAST ELEVATION	4/22/2019
A2.04	PARTIAL EAST & WEST ELEVATIONS	4/22/2019
A2.05	SOUTH ELEVATION	4/22/2019
A2.06	PARTIAL SOUTH ELEVATIONS	4/22/2019
A2.07	WEST ELEVATION	4/22/2019
A2.08	ELEVATION DETAILS	4/22/2019
A3.01	BUILDING SECTION	4/22/2019
A3.02	BUILDING SECTION	4/22/2019
A4.01	INTERIOR ELEVATIONS - BASEMENT LEVEL	4/22/2019
A4.02	INTERIOR ELEVATIONS - BASEMENT LEVEL	4/22/2019
A4.03	INTERIOR ELEVATIONS - GROUND LEVEL	4/22/2019
A4.04	INTERIOR ELEVATIONS - GROUND LEVEL	4/22/2019
A4.05	INTERIOR ELEVATIONS - GROUND LEVEL	4/22/2019
A4.06	INTERIOR ELEVATIONS - GROUND LEVEL	4/22/2019
A4.07	INTERIOR ELEVATIONS - GROUND LEVEL	4/22/2019
A4.08	INTERIOR ELEVATIONS - GROUND LEVEL AND SECOND LEVEL	4/22/2019
A4.09	INTERIOR ELEVATIONS - SECOND LEVEL	4/22/2019
A4.10	INTERIOR ELEVATIONS - SECOND LEVEL	4/22/2019
A4.11	INTERIOR ELEVATIONS - SECOND LEVEL	4/22/2019
A4.12	INTERIOR ELEVATIONS - SECOND LEVEL	4/22/2019
A4.13	INTERIOR ELEVATIONS - SECOND AND THIRD LEVEL	4/22/2019
A4.14	INTERIOR ELEVATIONS - THIRD LEVEL	4/22/2019
A4.15	INTERIOR ELEVATIONS - THIRD LEVEL	4/22/2019

A6.01	FINISH SCHEDULE	4/22/2019
A6.02	WALL TYPES	4/22/2019
A6.03	CEILING & FLOOR TYPES	4/22/2019
A6.04	DOOR & CASING TRIM SCHEDULE & TYPES	4/22/2019
A6.05	DOOR SCHEDULES	4/22/2019
A6.06	DOOR & CASING TRIM DETAILS	4/22/2019
A6.07	WINDOW/ LOUVER/ VENT TYPES AND DETAILS	4/22/2019
A6.08	WINDOW/ LOUVER/ VENT SCHEDULES	4/22/2019
A6.09	WINDOW/ LOUVER/ VENT SCHEDULES AND DETAILS	4/22/2019
A6.10	WINDOW DETAILS	4/22/2019
A7.01	ELEVATOR PLAN, SECTIONS, AND DETAILS	4/22/2019
A7.02	STAIR PLANS, SECTIONS AND DETAILS	4/22/2019
A7.03	CAST IRON STAIRS PLANS, SECTIONS, AND DETAILS	4/22/2019
A7.04	CAST IRON STAIRS PLANS, SECTIONS, AND DETAILS	4/22/2019
A7.05	MILLWORK DETAILS	4/22/2019
A7.06	MILLWORK DETAILS	4/22/2019
A7.07	MILWORK DETAILS	4/22/2019
A7.08	BALCONY DETAILS	4/22/2019
A7.09	TOWER PLANS AND ELEVATIONS	4/22/2019
A7.10	TOWER PLANS AND ELEVATIONS	4/22/2019

STRUCTURAL

SECTION	**TITLE**	**DATE**
S1.01	STRUCTURAL NOTES	4/22/2019
S1.02	STRUCTURAL NOTES, SYMBOLS LEGEND AND ABBREVIATIONS	4/22/2019
S1.03	SPECIAL INSPECTION TABLES	4/22/2019
S2.00	BASEMENT FRAMING PLAN	4/22/2019
S2.01	GROUND LEVEL FRAMING PLAN	4/22/2019
S2.02	SECOND LEVEL FRAMING PLAN	4/22/2019
S2.03	THIRD LEVEL FRAMING PLAN	4/22/2019
S2.04	ATTIC LEVEL FRAMING PLAN	4/22/2019
S2.05	ROOF FRAMING PLAN	4/22/2019
S2.06	ENLARGED PLANS	4/22/2019
S2.10	MECHANICAL YARD PLAN AND DETAILS	4/22/2019
S3.01	TYPICAL CONCRETE SECTIONS & DETAILS	4/22/2019
S3.02	TYPICAL CONCRETE SECTIONS & DETAILS	4/22/2019
S3.03	CONCRETE DETAILS	4/22/2019
S4.01	TYPICAL MASONRY DETAILS	4/22/2019
S5.01	FRAMING DETAILS	4/22/2019
S5.02	FRAMING DETAILS	4/22/2019
S5.03	FRAMING DETAILS	4/22/2019
S5.04	FRAMING DETAILS	4/22/2019
S5.05	FRAMING DETAILS	4/22/2019
S5.10	TOWER FRAMING ELEVATIONS	4/22/2019
S5.11	TOWER FRAMING DETAILS	4/22/2019
S6.01	LIGHT GAUGE METAL TRUSS PROFILES	4/22/2019
S6.02	LIGHT GAUGE METAL FRAMING DETAILS	4/22/2019
SD1.01	DEMOLITION STRUCTURAL NOTES AND TYPICAL DETAILS	4/22/2019
SD2.01	STRUCTURAL DEMOLITION PLANS	4/22/2019
SD2.02	STURUCTURAL DEMOLITION PLANS	4/22/2019

FIRE PROTECTION		
SECTION	**TITLE**	**DATE**
FP0.01	FIRE PROTECTION GENERAL NOTES AND LEGEND	4/22/2019
FP1.01	BASEMENT AND GROUND LEVEL FIRE PROTECTION FLOOR PLANS	4/22/2019
FP1.02	SECOND, THIRD AND ATTIC LEVEL FIRE PROTECTION FLOOR PLANS	4/22/2019

MECHANICAL		
SECTION	**TITLE**	**DATE**
M0.01	MECHANICAL GENERAL NOTES AND LEGEND	4/22/2019
M1.01	MECHANICAL SITE PLAN	4/22/2019
M2.00	BASEMENT LEVEL MECHANICAL FLOOR PLAN	4/22/2019
M2.01	GROUND LEVEL MECHANICAL FLOOR PLAN	4/22/2019
M2.02	SECOND LEVEL MECHANICAL FLOOR PLAN	4/22/2019
M2.03	THIRD LEVEL MECHANICAL FLOOR PLAN	4/22/2019
M2.04	ATTIC LEVEL MECHANICAL FLOOR PLAN	4/22/2019
M2.05	CLOCK TOWER PLAN	4/22/2019
M3.00	BASEMENT LEVEL MECHANICAL PIPING FLOOR PLAN	4/22/2019
M3.01	GROUND LEVEL MECHANICAL PIPING FLOOR PLAN	4/22/2019
M3.02	SECOND LEVEL MECHANICAL PIPING FLOOR PLAN	4/22/2019
M3.04	ATTIC LEVEL MECHANICAL PIPING FLOOR PLAN	4/22/2019
M4.01	MECHANICAL ENLARGED PLANS	4/22/2019
M5.01	MECHANICAL DETAILS	4/22/2019
M5.02	CHILLED WATER FLOW DIAGRAM	4/22/2019
M5.03	MECHANICAL SECTION VIEWS	4/22/2019
M5.04	MECHANICAL SECTION VIEWS	4/22/2019
M6.01	MECHANICAL SCHEDULES	4/22/2019
M6.02	MECHANICAL SCHEDULES	4/22/2019
M8.01	CONTROL DIAGRAMS	4/22/2019

PLUMBING		
SECTION	**TITLE**	**DATE**
P0.01	PLUMBING GENERAL NOTES AND LEGEND	4/22/2019
P1.01	PLUMBING SITE PLAN	4/22/2019
P2.01	BASEMENT LEVEL PLUMBING FLOOR PLANS	4/22/2019
P2.02	GROUND LEVEL PLUMBING FLOOR PLANS	4/22/2019
P2.03	SECOND LEVEL PLUMBING FLOOR PLANS	4/22/2019
P2.04	THIRD, ATTIC AND ROOF LEVEL PLUMBING FLOOR PLANS	4/22/2019
P3.01	PLUMBING ENLARGED FLOOR PLANS AND SECTIONS	4/22/2019
P4.01	PLUMBING DETAILS	4/22/2019
P4.02	PLUMBING WASTE AND VENT RISER DIAGRAM	4/22/2019
P5.01	PLUMBING SCHEDULES	4/22/2019

ELECTRICAL		
SECTION	**TITLE**	**DATE**
E0.01	ELECTRICAL GENERAL NOTES AND LEGEND	4/22/2019
E1.01	ELECTRICAL SITE PLAN	4/22/2019
E2.01	BASEMENT LEVEL ELECTRICAL FLOOR PLANS	4/22/2019
E2.02	GROUND LEVEL ELECTRICAL FLOOR PLANS	4/22/2019
E2.03	SECOND LEVEL ELECTRICAL FLOOR PLANS	4/22/2019
E2.04	THIRD LEVEL ELECTRICAL FLOOR PLANS	4/22/2019
E2.05	ATTIC LEVEL ELECTRICAL FLOOR PLANS	4/22/2019
E3.01	ELECTRICAL DETAILS	4/22/2019
E4.01	ELECTRICAL SCHEDULE	4/22/2019
E4.02	ELECTRICAL SCHEDULES	4/22/2019
E4.03	ELECTRICAL SCHEDULES	4/22/2019

TELECOMMUNICATIONS		
SECTION	**TITLE**	**DATE**
T0.01	TECHNOLOGY GENERAL NOTES AND LEGEND	4/22/2019
T0.02	TECHNOLOGY ONE-LINE	4/22/2019
T1.01	BASEMENT LEVEL TECHNOLOGY FLOOR PLANS	4/22/2019
T1.02	GROUND LEVEL TECHNOLOGY FLOOR PLANS	4/22/2019
T1.03	SECOND LEVEL TECHNOLOGY FLOOR PLANS	4/22/2019
T1.04	THIRD LEVEL TECHNOLOGY FLOOR PLANS	4/22/2019
T1.05	ATTIC LEVEL TECHNOLOGY FLOOR PLANS	4/22/2019
T2.01	TECHNOLOGY DETAILS	4/22/2019
T2.02	TECHNOLOGY DETAILS	4/22/2019

AUDIO/VISUAL		
SECTION	**TITLE**	**DATE**
ES0.00	GENERAL NOTES AND LEGENDS	4/22/2019
ES2.02	GROUND LEVEL FLOOR PLAN	4/22/2019
ES2.03	SECOND LEVEL FLOOR PLAN	4/22/2019
ES2.04	THIRD LEVEL FLOOR PLAN	4/22/2019
ES2.09	GROUND LEVEL RCP	4/22/2019
ES2.10	SECOND LEVEL RCP	4/22/2019
ES2.11	THIRD LEVEL RCP	4/22/2019
ES4.01	FUNCTIONALS	4/22/2019
ES5.01	DETAILS	4/22/2019
ES5.02	RACK ELEVATIONS	4/22/2019
ES5.03	JP COURT PLATE AND PANEL DETAILS	4/22/2019
ES6.02	INTERIOR ELEVATIONS	4/22/2019

SECTION 4

4/24/2019

CONTRACT DOCUMENT LIST

FANNIN COUNTY COURTHOUSE

BONHAM, TEXAS

The following documents as prepared by Architexas and their Consultants form the basis for the Scope of Work under this contract.

SPECIFICATIONS

	DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS	
SECTION	**TITLE**	**DATE**
00 0000	Project Manual - IFC	4/22/2019
00 0010	Project Team	4/22/2019
00 3126	Environmental Reports	4/22/2019
00 3138	Historic Paint and Finish Analysis Report	4/22/2019
00 3150	Acoustical Report	4/22/2019
00 7200	General Conditions	4/22/2019
00 7300	Supplementary Conditions	4/22/2019

	DIVISION 01-- GENERAL REQUIREMENTS	
SECTION	**TITLE**	**DATE**
01 1000	Summary of Work	4/22/2019
01 2100	Allowances	4/22/2019
01 2200	Unit Prices	4/22/2019
01 2300	Alternates	4/22/2019
01 2500	Substitution Procedures	4/22/2019
01 2519	Substitution Request Form	4/22/2019
01 2600	Contract Modification Procedures	4/22/2019
01 2900	Payment Procedures	4/22/2019
01 3100	Project Management and Coordination	4/22/2019
01 3216	Construction Progress Schedules	4/22/2019
01 3233	Construction Photographs	4/22/2019
01 3300	Submittal Procedures	4/22/2019
01 3591	Restoration Project Procedures	4/22/2019
01 3592	Art Conservator	4/22/2019
01 4000	Quality Requirements	4/22/2019
01 4001	Qualification Statement Form	4/22/2019
01 4523	Testing and Inspection Services	4/22/2019
01 5000	Temporary Facilities and Controls	4/22/2019
01 5800	Project Identification	4/22/2019
01 6000	Product Requirements	4/22/2019
01 7123	Field Engineering	4/22/2019
01 7329	Cutting and Patching	4/22/2019
01 7700	Closeout Procedures	4/22/2019

	DIVISION 02-- EXISTING CONDITIONS	
SECTION	**TITLE**	**DATE**
02 4119	Selective Demolition	4/22/2019

	DIVISION 03-- CONCRETE	
SECTION	**TITLE**	**DATE**
03 3000	Cast-in-Place Concrete	4/22/2019

	DIVISION 04-- MASONRY	
SECTION	**TITLE**	**DATE**
04 0341	Restoration Mortar	4/22/2019
04 0342	Masonry Restoration	4/22/2019
04 0513	Masonry Mortaring	4/22/2019
04 0516	Masonry Grouting	4/22/2019
04 2000	Unit Masonry	4/22/2019
04 4000	Stone Assemblies	4/22/2019
04 7200	Cast Stone	4/22/2019

	DIVISION 05-- METALS	
SECTION	**TITLE**	**DATE**
05 2100	Steel Joist Framing	4/22/2019
05 3100	Steel Deck	4/22/2019
05 4400	Cold-Formed Metal Trusses	4/22/2019
05 5000	Metal Fabrications	4/22/2019
05 5100	Metal Stairs	4/22/2019
05 7000	Ornamental Metals	4/22/2019

	DIVISION 06-- WOOD, PLASTICS AND COMPOSITES	
SECTION	**TITLE**	**DATE**
06 1000	Rough Carpentry	4/22/2019
06 4000	Architectural Woodwork	4/22/2019
06 4100	Architectural Wood Casework	4/22/2019
06 4600	Wood Trim	4/22/2019
06 6116	Solid Surfacing Fabrications	4/22/2019

	DIVISION 07-- THERMAL AND MOISTURE PROTECTION	
SECTION	**TITLE**	**DATE**
07 1700	Bentonite Waterproofing	4/22/2019
07 2126	Blown Insulation	4/22/2019
07 2600	Vapor Retarders	4/22/2019
07 3116	Metal Shingles	4/22/2019
07 5400	Thermoplastic Membrane Roofing	4/22/2019
07 6200	Sheet Metal Flashing and Trim	4/22/2019
07 6300	Aluminum Cornice	4/22/2019
07 6400	Aluminum Dormers	4/22/2019
07 7233	Roof Hatches	4/22/2019
07 8100	Applied Fireproofing	4/22/2019
07 8123	Intumescent Mastic Fireproofing	4/22/2019
07 8400	Firestopping	4/22/2019
07 9200	Joint Sealers	4/22/2019

	DIVISION 08-- OPENINGS	
SECTION	**TITLE**	**DATE**
08 0386	Vault Door Restoration	4/22/2019
08 1113	Hollow Metal Doors and Frames	4/22/2019
08 1433	Stile and Rail Wood Doors	4/22/2019
08 3100	Access Doors and Panels	4/22/2019
08 5200	Wood Windows	4/22/2019
08 7100	Door Hardware	4/22/2019
08 7113	Automatic Door Operators	4/22/2019
08 8000	Glazing	4/22/2019
08 9100	Louvers	4/22/2019

	DIVISION 09-- FINISHES	
SECTION	**TITLE**	**DATE**
09 2200	Metal Support Assemblies	4/22/2019
09 2300	Gypsum Plastering	4/22/2019
09 2313	Acoustical Plastering	4/22/2019
09 2900	Gypsum Board	4/22/2019
09 3000	Tiling	4/22/2019
09 6400	Wood Flooring	4/22/2019
09 6516	Resilient Sheet Flooring	4/22/2019
09 6723	Resinous Flooring	4/22/2019
09 6724	Mortar Based Polymer Coating	4/22/2019
09 9100	Painting	4/22/2019

	DIVISION 10-- SPECIALTIES	
SECTION	**TITLE**	**DATE**
10 1200	Bulletin Boards	4/22/2019
10 1400	Signage	4/22/2019
10 1460	Accessible Parking Signs	4/22/2019
10 2116	Plastic Toilet Compartments	4/22/2019
10 2813	Toilet Accessories	4/22/2019
10 4413	Fire Extinguishers	4/22/2019
10 7429	Historic Cupola Clock Tower	4/22/2019

	DIVISION 11-- EQUIPMENT	
SECTION	**TITLE**	**DATE**
11 5213	Projection Screens	4/22/2019

	DIVISION 12-- FURNISHINGS	
SECTION	**TITLE**	**DATE**
12 2113	Horizontal Louver Blinds	4/22/2019
12 5000	Chairs and Pews	4/22/2019

	DIVISION 14-- CONVEYING EQUIPMENT	
SECTION	**TITLE**	**DATE**
14 2123	Electric Passenger Elevators	4/22/2019
14 4200	Wheelchair Lifts	4/22/2019

	DIVISION 21-- FIRE SUPPRESSION	
SECTION	**TITLE**	**DATE**
21 0500	Common Work Results for Fire Suppression	4/22/2019
21 1000	Water-Based Fire Suppression Systems	4/22/2019
21 3113	Electric-Drive, Centrifugal Fire Pumps	4/22/2019

	DIVISION 22-- PLUMBING	
SECTION	**TITLE**	**DATE**
22 0500	Common Work Results for Plumbing	4/22/2019
22 0519	Meters and Gages for Plumbing Piping	4/22/2019
22 0523	General Duty Valves for Plumbing Piping	4/22/2019
22 0529	Hangers and Supports for Plumbing Piping and Equipment	4/22/2019
22 0553	Identification for Plumbing Piping and Equipment	4/22/2019
22 0700	Plumbing Insulation	4/22/2019
22 1116	Domestic Water Piping	4/22/2019
22 1119	Domestic Water Piping Specialties	4/22/2019
22 1123	Domestic Water Pumps	4/22/2019
22 1316	Sanitary Waste and Vent Piping	4/22/2019
22 1319	Sanitary Waste Piping Specialties	4/22/2019
22 1329	Sanitary Sewage Pumps	4/22/2019
22 1429	Sump Pumps	4/22/2019
22 3300	Electric Domestic Water Heaters	4/22/2019
22 4000	Plumbing Fixtures	4/22/2019
22 4700	Drinking Fountains and Water Coolers	4/22/2019

	DIVISION 23-- HEATING, VENTILATING AND AIR CONDITIONING (HVAC)	
SECTION	**TITLE**	**DATE**
23 3113	Metal Ducts	4/22/2019
23 0500	Common Work Results for HVAC	4/22/2019
23 0513	Common Motor Requirements for HVAC Equipment	4/22/2019
23 0519	Thermometers and Gages for HVAC Piping	4/22/2019
23 0523	General Duty Valves for HVAC Piping	4/22/2019
23 0529	Hangers and Supports for HVAC Piping and Equipment	4/22/2019
23 0533	Heat Tracing for HVAC Piping	4/22/2019
23 0553	Identification for HVAC Piping and Equipment	4/22/2019
23 0593	Testing, Adjusting and Balancing for HVAC	4/22/2019
23 0700	HVAC Insulation	4/22/2019
23 0800	Commissioning for HVAC	4/22/2019
23 0900	Instrumentation and Control for HVAC	4/22/2019
23 0993	Points List and Sequence of Operations for HVAC Controls	4/22/2019
23 2113	Hydronic Piping	4/22/2019
23 2123	Hydronic Pumps	4/22/2019
23 3300	Air Duct Accessories	4/22/2019
23 3600	Air Terminal Units	4/22/2019
23 3713	Diffusers, Registers and Grilles	4/22/2019
23 6423	Scroll Water Chillers	4/22/2019
23 7313	Modular Indoor Central Station Air Handling Units	4/22/2019
23 8126	Split System Air Conditioners	4/22/2019

	DIVISION 26-- ELECTRICAL	
SECTION	**TITLE**	**DATE**
26 0500	Common Work Results for Electrical	4/22/2019
26 0519	Low Voltage Electrical Power Conductors	4/22/2019
26 0526	Grounding and Bonding	4/22/2019
26 0529	Hangers and Supports for Electrical Systems	4/22/2019
26 0533	Raceway and Boxes for Electrical Systems	4/22/2019
26 0553	Identification for Electrical Systems	4/22/2019
26 0800	Electrical Commissioning	4/22/2019
26 0923	Lighting Control Devices	4/22/2019
26 0943	Network Lighting Controls	4/22/2019
26 2200	Low Voltage Transformers	4/22/2019
26 2413	Switchboards	4/22/2019
26 2416	Panelboards	4/22/2019
26 2726	Wiring Devices	4/22/2019
26 2816	Enclosed Switches and Circuit Breakers	4/22/2019
26 2923	Variable Frequency Motor Controllers	4/22/2019
26 3213	Engine Generators	4/22/2019
26 3353	Static Uninterruptible Power Supply	4/22/2019
26 3600	Transfer Switches	4/22/2019
26 4113	Lightning Protection for Structures	4/22/2019
26 5100	Interior Lighting	4/22/2019
26 5600	Exterior Lighting	4/22/2019

	DIVISION 27-- COMMUNICATIONS	
SECTION	**TITLE**	**DATE**
27 0000	Communications Basic Requirements	4/22/2019
27 0526	Communications Grounding and Bonding	4/22/2019
27 0528	Communications Building Pathways	4/22/2019
27 0800	Communications System Commissioning	4/22/2019
27 0811	Communications Twisted Pair Testing	4/22/2019
27 1100	Communications Equipment Rooms	4/22/2019
27 1313	Communications Twisted Pair Cabling	4/22/2019
27 2133	Communications Wireless Access Points	4/22/2019

	DIVISION 28-- ELECTRONIC SAFETY AND SECURITY	
SECTION	**TITLE**	**DATE**
28 0000	Security Basic Requirements	4/22/2019
28 0513	Security System Cabling	4/22/2019
28 0553	Security System Labeling	4/22/2019
28 0800	Security System Acceptance Testing	4/22/2019
28 1300	Access Control & Alarm Monitoring System	4/22/2019
28 1600	Intrusion Detection System	4/22/2019
28 2300	Video Surveillance System (VSS)	4/22/2019
28 3100	Voice Evacuation Fire Alarm System	4/22/2019

	DIVISION 31-- EARTHWORK	
SECTION	**TITLE**	**DATE**
31 1000	Site Preparation and Demolition	4/22/2019
31 2200	Earthwork	4/22/2019
31 2333	Trench Excavation	4/22/2019
31 2334	Trench Backfill	4/22/2019
31 2335	Trench Safety Systems	4/22/2019
31 2500	Erosion Control	4/22/2019
31 6301	Helical Piles	4/22/2019

	DIVISION 32-- EXTERIOR IMPROVEMENTS	
SECTION	**TITLE**	**DATE**
32 1313	Portland Cement Concrete Pavement	4/22/2019
32 8400	Planting Irrigation	4/22/2019
32 9000	Planting	4/22/2019
32 9200	Turf and Grasses	4/22/2019

	DIVISION 33-- UTILITES	
SECTION	**TITLE**	**DATE**
33 1000	Water Distribution	4/22/2019
33 3100	Wastewater Services	4/22/2019
33 4000	Storm Drainage	4/22/2019

SECTION 5

SUPPLEMENTAL CONDITIONS

FANNIN COUNTY COURTHOUSE RESTORATION

BONHAM, TEXAS

The purpose of these Supplemental Conditions is to provide a quick reference source for the most commonly required information and procedures for the Goodwill Frisco. This guide should be carefully reviewed by all your staff and we suggest that copies be made for your key personnel.

1. PROJECT INFORMATION LIST

Project Name:	**Fannin County Courthouse Restoration** Bonham, Texas
Jobsite Location:	**101 E. Sam Rayburn Drive** Bonham, Texas 75418
Fannin County Purchasing Office:	**200 East 1st Street** Bonham, Texas 75418

Project Staff:

Owner:

Project Manager	Commissioner Dean Lackey
Project Director	Judge Randy Moore
Purchasing Agent	Michelle Case
Project Accountant	Sherry Zindars

Construction Management Agent:

Sr. Project Manager	Robert Hirsch
Project Manager	Tony Jarecki
Project Engineer	Linda Stern
Project Superintendent	Ben O'Keefe
Project Safety Manager	James Reinhardt

Architect:	**Architexas** 1907 Marilla, 2nd Floor Dallas, Texas 75201
Subject:	**Competitive Sealed Lump Sum Proposal**
Proposal Due Date	**Friday, May 24th , 2019 @ 2:00 pm**

2. PROJECT COMMUNICATION

A. Unless you are otherwise instructed, correspondence on this project should be directed as follows:

Procurement & Insurances
Michelle Case
Purchasing Agent
Fannin County

Engineering, Administrative
Linda Stern
Project Engineer
Turner Construction Company

Field Issues, Scheduling
Ben O'Keefe
Project Superintendent
Turner Construction Company

B. Progress Billings are to be directed to:
Sherry Zindars
Accounting & Auditing
Fannin County

3. KEY PERSONNEL

Upon the start of the work a list of key Trade Partner personnel with addresses and telephone numbers for emergency situations shall be furnished to Turner. The telephone numbers are for after-hour emergencies. Trade Partner supervisory personnel are required to be involved in this project with adequate input into the daily management of the project. Key personnel will have a thorough understanding of the schedule requirements and shall proactively deal with all issues affecting the schedule.

4. SCHEDULE AND PROGRESS

Progress of the Trade Partner's work shall meet the "Specific Progress" of the Project, with the understanding that time is of the essence. "Specific Progress" shall be defined as such progress as will maintain the Schedule as set by Fannin County & Turner Construction, precedent and contiguous trades, and such progress as will not delay the Schedule of next dependent trades, all to the entire satisfaction of Fannin County & Turner Construction so as not to delay the completion of the whole or any part of the work. It shall be understood and agreed that the Construction Schedule may be revised from time to time in order to meet project completion date requirements.

The Scope of Work includes any out-of-sequence work ordered which is required by the project schedule, such as, but not limited to work made necessary by removal of plant equipment, temporary power, temporary piping, braces, etc. which are not removed until the building is substantially complete.

5. JOB MEETINGS

Weekly Coordination Meetings
Each Trade Partner will be required to have an authorized and responsible representative attend weekly job site coordination meetings prepared to discuss the overall project safety and schedule and to coordinate all field activities for the week. Attendance at these meetings is **MANDATORY!!** Failure to attend these meetings will not excuse the Trade Partner for being responsible for all items discussed and dates established whether the Trade Partner had input or not into their formulation.

Mechanical/Electrical Coordination Meetings
For purposes of coordination, Mechanical and Electrical Trade Partners (or any others with work in tight or congested areas) will be required to submit coordination drawings at ¼" scale and in electronic format such as pdf. The drawings are to illustrate work above ceilings and in closely confined areas. The drawings should detail elevations and dimensions in order to adequately coordinate with the work of other trades.

The Mechanical Trade Partner will submit one (1) electronic formatted coordination drawing to Turner for use at the Engineering Coordination Meeting, which will be retained for record purposes. In addition, three (3) sets of bluelines of each coordination drawing will be required to sign off on one another's drawings acknowledging that all the work of other trades has been reviewed and coordinated for elimination of interferences and work of your trade is installed in such a manner to allow maximum accessibility for maintenance, service and repair work.

Engineering Coordination Meetings will be held in advance of mechanical and electrical rough-in for each area of construction. The Mechanical, Electrical, and Fire Protection contractors will be required to attend these meetings. These meetings will be conducted on a weekly basis until such time as all the mechanical and electrical rough-in work is coordinated and signed off by pertinent trades.

Following coordination of rough-in drawings, the Engineering Meetings will be held on an as-needed basis.

If BIM (Building Information Modeling) is required per other sections of the subcontract then those requirements shall take precedence over requirements for submitting transparencies, etc. Coordination meetings shall still be a requirement for each Trade Partner that has work above the ceilings.

6. SITE LOGISTICS

Parking on and adjacent to the project site is not permitted and trade contractors will be required to schedule all deliveries with Turner's superintendent. Personal vehicles will be parked in the designated area. Parking lot is approx. 500 ft. from construction site. Parking is provided free of charge by the county.

Movement of all vehicles and equipment into and on the site including unloading, shall be subject to the control of Turner and follow traffic patterns established by Turner and must comply with local jurisdiction requirements. Construction traffic shall not block public or private roadways, driveways, parking or adjacent areas. Queuing of trucks or equipment on adjacent streets shall not be permitted. Individual Trade Partners shall be responsible for observing established traffic regulations and for providing flagmen, as required, to prevent disruption to general traffic by construction vehicles, equipment or operations. This Trade Partner is also responsible for cleaning daily all debris from streets or public areas resulting from its operations.

Turner's field office telephones, copier, fax machine, stationery supplies, rest room facilities, office compound, etc., are strictly for the use of Fannin County & Turner Construction. All Trade Partners are to make arrangements for their own needs.

Trade Partner trailers will be placed on site according to Turner's site logistics plan. Temporary offices must be equipped with a fire extinguisher, appropriate first aid kit, and 50-gallon trash receptacle as acceptable to Turner and shall conform to applicable codes. Services to temporary offices will be at Trade Partner's expense. All structures of any kind must meet the requirements of Turner's Superintendent and the Project Safety Program.

Trade Partner shall be responsible for providing storage facilities for its own materials. The storage of Trade Partner materials and equipment anywhere around or within the jobsite shall be permitted only as approved in advance by Fannin County and Turner Construction, and as job conditions permit. If material and equipment as stored obstructs progress of any portion of the work or the Owner's activities, it shall be removed or relocated by the Trade Partner without delay as directed by Turner without additional cost.

Due to the lack of space on the job site, and for infection control purposes, effort shall be made to deliver material only as progress demands and avoid unnecessary and/or long term stockpiling. The Trade Partner shall coordinate and schedule deliveries of all materials and equipment with Turner Superintendent no less than 48 hours prior to arrival at jobsite. Trade Partner shall be responsible for receiving, distributing, storing, maintenance, care and insurance, or any loss or damage to all equipment or materials stored, regardless of location and cause. Turner will **NOT** sign for or accept any deliveries.

Fannin County and Turner shall approve location of Trade Partner's items of plant and tools such as hoist, mixers, cutters, etc. in advance.

The Trade Partner shall schedule with Turner 72 hours in advance, for the use of cranes, pumps, etc., and shall coordinate the work with other operations. The Trade Partner shall coordinate and schedule deliveries of materials and equipment to meet Turner's requirements. The Trade Partner is responsible for the hoisting of materials and/or equipment. Turner will not provide a hoist or elevator for your use.

If the Trade Partner requires a crane, pumps, etc., to be located in the public streets or sidewalks, Trade Partner shall be responsible for the securing of and cost of any permits, police details, etc., that might be required by the agency having jurisdiction. Fannin County and Turner must grant written approval prior to any equipment set-up or road blockage/excavation even though City approval might have been granted.

Trade Partner shall not place any signs on the property, either temporary or permanent.

Trade Partner shall comply with the Project Storm Water Pollution Prevention Plan (SWPPP) as it applies to their operations, including but not limited to, excavations, erosion, water pumping, vehicle access, vehicle traffic, material storage and delivery.

7. SUPERINTENDENT COMMUNICATION

The lead person for each Trade Partner shall have a telephone to communicate with Turner. iPads or equivalent hardware will be required to review project specific contract documents.

8. SAFETY

Trade Partners shall conduct their operation in accordance with all applicable regulations and requirements of Local, State and Federal laws, which include regulations of the Occupational Safety and Health Act and the Site Specific Safety Manual, whichever is most stringent.

Turner will hold a safety meeting on a scheduled basis each week with on-site staff personnel from each trade currently performing work at the site. At least one Representative (Foreperson or above) shall attend safety meetings and be continually alert for safety hazards and report them to Turner immediately.

The Trade Partner's Foreperson will be required to attend weekly Safety/Coordination Meetings at a location on the site designated by Turner. Meeting minutes of Trade Partner's weekly jobsite safety/toolbox meetings are to be submitted to Fannin County and Turner weekly.

Each Trade Partner must furnish Fannin County and Turner with a copy of their job safety program and SDS documentation within five (5) working days of their start of work on the project. This program shall be in compliance with the safety requirements of governing codes, agencies, general safety as listed in Turner's Safety Program and shall comply with the Accident Prevention portion of the Turner Safety program. Each Trade Partner shall provide their own fire watch and be responsible for all fire prevention in connection with its work.

To comply with OSHA Communications Regulations CFR 1926.21(b)(3) and the Hazard Communication Final Rule dated August 24, 1987, CFR 1926.59 and CFR 1910.1200 if applicable, the Trade Partner shall supply to Turner's Project Superintendent the required Safety Data Sheets (SDS) for any hazardous materials used by the Trade Partner on this Project and to comply with all local, city, county, and state regulations regarding storage, transportation and disposal of hazardous materials.

9. TEMPORARY FACILITIES

Unless stated otherwise herein, Fannin County and Turner will provide the following services for the Trade Partner at the jobsite:

A. Temporary toilet facilities.

B. Rubbish container(s) at the ground level for disposal of non-hazardous recyclable construction waste only. The Trade Partner shall collect and place its debris, generated by its work, in rubbish container(s) furnished by Turner. Turner shall be responsible for removal and disposal of full rubbish containers at no cost to the Trade Partner. However, Trade Partner will crush/flatten cardboard boxes, crates, etc. in order to maximize dumpster capacity. It will be the Trade Partner's responsibility to legally dispose of offsite all hazardous materials and other materials which are not normally handled by the rubbish company such as paints, solvents, etc. as well as soil, gravel, concrete, etc.

   Turner will be recycling all construction waste and debris. Each Trade Partner will be responsible for sorting and putting the waste/debris in the proper location. Some Trade Partners shall be required to provide their own dumpsters for the work of their trade, specifically all Demolition, Concrete, Site Utility, and Earthwork Trade Partners. Trade Partner shall review scope of work for individual requirements. Where specifically included, Trade Partner shall be responsible for removal and disposal of rubbish containers.

C. Electrical power in the building for the use of the Trade Partners for all general lighting and the operation of small tools. It shall be the Trade Partner's responsibility to provide extension cords and/or wiring from central distribution points. Power for welding equipment is not provided. Hook up for power for all equipment is the responsibility of the Trade Partner.

D. General lighting during working hours to maintain minimum foot-candle coverage required by the law. Trade Partners requiring additional lighting shall provide or pay for all local lighting as may be required to perform its work. Trade Partners shall provide temporary light and power consumption charges for its temporary buildings and facilities.

E. Furnishing, placing and maintaining lights, barricades, fences and protection, necessary for safety. The Trade Partner shall notify Turner 24 hours in advance prior to removing any safety installation. Any Trade Partner damaging or removing any safety or protective work at any time shall be responsible for the immediate restoration of the safety or protective work to insure continuous compliance with all applicable safety regulations.

F. Jobsite normal work hours are 7:00 a.m. to 3:30 p.m. Any Trade Partner working beyond the regularly established working hours, Monday through Friday, the Trade Partner shall notify Turner of desired overtime work in sufficient time so Turner can make arrangements to provide supplemental services, personnel or inspections.

G. Control axis lines and benchmarks through the building as the work progresses. The Trade Partner shall lay out its own work from these references and shall be responsible for damage or loss due to incorrect layout. Immediately report any discrepancy found in control lines and benchmarks to Turner for verification and disposition.

H. Water for construction. Trade Partner shall provide containers for drinking water and ice for its employees.

10. TEMPORARY ELECTRIC

Temporary Electrical for construction will be provided and maintained by the Electrical Trade Partner as follows:

A. Legal Requirements
The electrical work for construction purposes shall conform to all Federal, State, and Municipal requirements, and must comply with the National Electrical Code and OSHA Standards. The Electrical Contractor shall obtain and pay for any required applications, permits, utilities charges and inspections pertaining to this work. Turner Construction Company or the Owner will pay power consumption.

B. Insurance Requirements
The insurance requirements are the same as for the permanent installation.

C. General
Temporary work shall be installed in such a manner as not to interfere with the permanent construction or temporary work of the other trades. If such interference does occur, it will be the responsibility of the Trade Partner to make such changes as may be required to overcome the interference. The cost of these changes will be included as part of the subcontract price.

D. Material
As the life of this installation is limited, and as this installation will not form a part of the finished building, minimum cost is the basic requirement consistent with material and workmanship, which will satisfactorily, meet job conditions.

E. Maintenance
All temporary electrical facilities are to be maintained and kept in good operation condition. Maintenance is to include replacing lamps as necessary.

F. Transfer to Permanent Service
When power becomes available from the permanent building service, it will be necessary to transfer temporary requirements to permanent source. Transfers are to be made when directed by Turner Construction Company, and shall be included in the cost of work, including any overtime or work outside normal working hours necessary to assure no work stoppage.

G. Removal and Salvage
The Electrical Contractor shall disassemble and remove from the property all temporary electrical wiring and equipment when its use is no longer required.

H. Protection
The Electrical Contractor shall protect the entire temporary power installation against weather damage and normal operations of other trades.

I. Scope of the Work

i. Service

Provide adequate services with all required metering, switches, ground fault interruption and other equipment. Location as directed by Turner's Superintendent.

ii. Power

Power requirements shall include, but not be limited to the following:

a. Provide temporary power boxes (spider boxes) such that all work areas can be reached with an extension cord no longer than 75 feet. Provide ten (10) outlets at each of these locations.

b. Should permanent power be unavailable, provide temporary power for testing and temporary start-ups for all mechanical equipment.

c. Temporary power may be served from temporary transformer.

d. Include hook-up and dismantle of temporary power for Tuner trailers.

e. Hook-up of welders, threading machines and shanties for other Trade Partners is not part of this work, however the main temporary service to the site should include the potential of trailers for the Trade Partners and exterior lighting of this compound.

f. Include the capacity to hook-up a 208-volt masonry saw for the masonry Trade Partner.

g. Temporary electric is to be a GFCI system. Each Trade Partner will be responsible for their own equipment-grounding program.

h. All cable and components of the temporary power system will be completely removed once permanent power is established and temporary power is no longer in use.

iii. Lighting

a. Temporary lighting must comply with the minimum illumination intensities in foot-candles listed in Table D-3 of OSHA Standard 1926.56. Temporary lighting must be installed, relocated and readjusted to meet job conditions. Lighting requirements shall include, but not be limited to the following:

b. b. Stairway lighting shall be on separate switching from other temporary power Stairways, stairway landings and intermediate landings are considered corridors, hallways and exit ways as it relates to Table D-3 of OSHA Standard 1926.56. Stairway lighting shall be maintained daily.

c. Cleaning of permanent fixtures used as temporary lighting.

d. All bulbs or lamps in permanent fixtures used for temporary construction use lighting will be replaced before owner acceptance.

e. Include flood/security lights at Turner's trailers.

f. Include motion sensors connected to security light at Turner's trailers.

g. All cable and components of the temporary lighting system will be completely removed once permanent is functional and temporary lighting is no longer in use.

iv. Permanent Equipment

The permanent power may be used when approved by Turner and the Owner for temporary purposes provided it is refurbished as required at time of final acceptance by Owner.

11. TEMPORARY PLUMBING

Temporary Plumbing for construction will be provided and maintained by the Plumbing Trade Partner and includes the minimum.

A. Legal Requirements
The plumbing work for construction purposes shall conform to all Federal, State, and Municipal requirements, and must comply with the Uniform Plumbing Code and OSHA Standards. The Plumbing Contractor shall obtain and pay for any required applications, permits, utilities charges, meter fees, tap fees and inspections pertaining to this work. Turner Construction Company or the Owner will pay water consumption.

B. Insurance Requirements
The insurance requirements are the same as for the permanent installation.

C. General
Temporary work shall be installed in such a manner as not to interfere with the permanent construction or temporary work of the other trades. If such interference does occur, it will be the responsibility of the Trade Partner to make such changes as may be required to overcome the interference. The cost of these changes will be included as part of the subcontract price.

D. Material
As the life of this installation is limited, and as this installation will not form a part of the finished building, minimum cost is the basic requirement consistent with material and workmanship, which will satisfactorily, meet job conditions.

E. Maintenance
All temporary plumbing facilities are to be maintained and kept in good operation condition. Maintenance personnel necessary to perform this work shall be provided in accordance with requirements. Maintenance time shall include allowance for normal working hours for all trades, including start-up and shutdown overtime as required.

F. Procedure
All temporary facilities and allied piping shall utilize permanent piping where practical; otherwise PVC piping shall be used. Temporary facilities will be remote and installed so as not to interfere with the completion of the permanent work and shall remain in use until directed by Turner. They shall then be removed from the site and all piping permanently capped.

G. Removal and Salvage
All temporary plumbing will be removed upon completion of the permanent installation.

H. Temporary Protection
The Plumbing Contractor shall protect the entire temporary plumbing installation against weather damage and normal operations of other trades.

I. Scope of the Work
Furnish, install and maintain all temporary plumbing work for the entire project. The work shall include the following items:

i. Provide a temporary water service, metering and distribution piping, including backflow protection to service the Buildings with temporary water. Include removal and disposal of all temporary systems when directed by Turner Superintendent.

a. Provide temporary mop sinks located as directed until finishes are complete enough to install the permanent sinks.

b. Provide separate hose bibs, at the exterior of the building, at locations acceptable to Fannin County and Turner.

c. Insulate temporary water service to prevent freezing.

d. Provide temporary pumps to pump out the sanitary and storm sumps during construction until permanent pumps are available.

J. Permanent Equipment
The permanent equipment may be used for temporary purposes as provided it is refurbished as required at time of final acceptance by Owner.

12. TEMPORARY FIRE PROTECTION

Temporary Fire Protection for construction will be provided and maintained by the Fire Protection Trade Partner and includes but not limited to:

A. Legal Requirements
The Fire Protection work for construction purposes shall conform to all Federal, State, and Municipal requirements, and must comply with the National Electric Code and OSHA Standards. The Fire Protection Contractor shall obtain and pay for any required applications, permits, utilities charges, meter fees, tap fees and inspections pertaining to this work. Portable fire extinguishers shall be provided and maintained by The Fire Protection Contractor unless otherwise stated in the Instructions to Bidders.

B. Insurance Requirements
The insurance requirements are the same as for the permanent installation.

C. General
Temporary work shall be installed in such a manner as not to interfere with the permanent construction or temporary work of the other trades. If such interference does occur, it will be the responsibility of the Trade Partner to make such changes as may be required to overcome the interference. The cost of these changes will be included as part of the subcontract price.

D. Scope
The Fire Protection Trade Partner shall install a temporary fire protection system that complies with all City, State and Federal requirements and as a minimum shall include a standpipe with hose connections on each floor and a temporary connection on the exterior of the building.

13. SMOKING

This project will be a non-smoking project anywhere within the confines of the building, on the roof, or anywhere on the property. This includes e-cigarettes. Smokeless Tobacco products and spitting is prohibited within the building or on the construction project.

14. REQUEST FOR INFORMATION

Instances will occur when an ambiguity of detail makes it necessary for you to request the Architect to interpret a specific area of the plans. The contract documents should be carefully reviewed first to assure the interpretation or clarification is not already noted.

Should it still be necessary to request a clarification, a written request clearly stating the question(s) being asked in simple English language sentences is to be forwarded to Turner's Project Engineer for submittal to the Architect. Be sure to reference the appropriate specification section or drawing details. Include any photographs and/or sketches that might help expedite a response. Provide suggestions and/or other pertinent information that may accelerate the response process. Ambiguous RFI's will be returned to the Trade Partner unanswered. All RFI's are to include a required due date for response. This date should reference coordination with construction progress.

If the response from the Architect involves a change in the scope of your work, it is your responsibility to identify this change to Turner's Project Engineer. Under no circumstances are you to perform work that increases or decreases the scope of your contract without prior written directive.

15. SHOP DRAWINGS, SUBMITTALS, AND AS-BUILTS

The following procedure for the submission of the shop drawings, material lists, manufacturer's shop drawings, and samples shall be as follows:

All submissions and correspondence pertaining to the following items shall be directed to:

Turner Construction Company
Jobsite Office
Bonham, TX
Attn: Linda Stern

All samples and shop drawings submitted for the Architect's approval shall be in accordance with Specification requirements for submittals and must bear the minimum following identification:

"The undersigned hereby certifies that
(i) I have examined and verified all materials, systems, equipment, construction criteria and measurements related to this submittal, and
(ii) I have checked and coordinated the information contained in this submittal and determined that this submittal satisfies the performance criteria required by the Contract Documents and otherwise satisfies the requirements of the Work and the Contract Documents.

Project: Fannin County Courthouse Restoration
101 E. Sam Rayburn Drive
Bonham, TX

Construction Manager Agent: Turner Construction Company

Contract Number:
Trade Partner: _____
Trade: _____
Description of Item: _____
Drawing or Specification Reference: _____

All submittals must be accompanied with a letter of transmittal. In general, product or material substitutions will only be allowed if the specified material is no longer available or inappropriate for the intended use. All substitution requests must be submitted separately from the specified submittal package and include a cover letter addressing the reason for the proposed substitution and any credit offered for the change. Failure to follow this procedure will result in the immediate rejection of the submittal.

Shop Drawings - Unless otherwise noted, submit one (1) electronic copy. Shop drawings for each portion of work shall be numbered consecutively, and the numbering system shall be retained through all revisions.

Material, equipment or other items indicated on submitted drawings as furnished by another Trade Partner shall be identified with the respective Trade Partners' name or section of work. Note any and all deviations from plans and specifications clearly on the shop drawing and transmittal letter.

Shop drawings shall be prepared as required for all equipment, fabricated items or special material of all trades, including mechanical and electrical items.

Shop drawings shall be submitted for Architect's approval prior to fabrication of the respective item or execution of the work and in such a sequence that shop drawings upon which others are dependent for dimensions or details shall be submitted without causing delay to the progress of the work.

Manufacturers' Brochures and Cut Sheets - Trade Partner shall submit one (1) electronic copy. Full Manufacturers Brochures without project specific items identified for review will be returned without approval.

Upon approval, one (1) copy of the approved data will be returned to the Trade Partner for their file.

Samples - Trade Partner shall submit eight (8) samples for approval. The samples should be identified as noted as submittal identification and provide a clear space (4" x 4" min. size) for the Architect's approval stamp. The Trade Partner shall be notified by letter of the Architect's action and comments, and will receive one (1) sample back for their records. Approval of a drawing or a sample is not to be interpreted as approval of a change in contract price or recognition of a claim for a change in contract price. Manufactures brochures will not be considered for color samples.

It will be your obligation, upon submitting a drawing or a sample that involves a change in contract price not covered by a specific authorization, to include with your submission an estimate of the change of cost.

The above are general instructions. Instructions pertaining to specific items in the specification take precedence over these general instructions. You should allow a minimum of 21 days for the review of shop drawings. Large submittal packages may take longer.

"As-Built" Record Drawings - As-built drawings are an important part of this project and will be carefully monitored by Turner and the Owner. As-Built Drawings shall be maintained and submitted immediately after the relevant work has been completed and accepted. This Trade Partner shall include all costs for providing as-built drawings of the Work. There will be one set of "As-Built" drawings kept in Turner's jobsite office, which must be updated weekly and signed off by Turner. **Up-to-date as-builts IS a requirement for receiving monthly progress payments.**

Substitutions - Requests for substitutions will only be considered when accompanied by a substitution request letter stating the reasons for the substitution.

General - It is very important that you submit on each and every item noted in the specifications pertaining to your trade. In addition, all submittals for a particular trade or specification should be submitted at one time in bulk. Partial or incomplete submittals may be returned without review, thereby delaying the approval process.

16. CHANGES

Briefly, the Change Order system that will be employed on this project will be as follows:

Drawings and/or information will be forwarded to you with a letter notifying you of the change number assigned to this segment of additional information and requesting a quotation for any change in your contract scope of work.

Your quotation must be a complete, itemized estimate showing actual labor rates (burden broken out and listed as separate line item), material, bond and equipment costs, overhead and profit. Cost of normal estimating, processing and supervision by management personnel are considered indirect costs included in standard overhead mark up.

Your response should be prompt, and in no case should we receive your reply later than two (2) weeks after your receipt of our request.

Your quotation will then be analyzed for correctness. After Turner's approval, it will be incorporated in the referenced change number and submitted to the Architect/Owner for their approval. On receipt of their approval, a Subcontract Change Order will be issued by Fannin County and your contract changed by the appropriate amount.

It is our intent to follow these changes closely; and if we find that the Architect/Owner does not act upon them promptly, we will request an immediate review. It is desirable that these changes be processed and your Contract Change Order issued before the work involved is actually performed unless otherwise directed in writing by Fannin County or Turner Construction Company. Prompt submission of the requested changes, together with itemized quantity breakdowns and sub-Trade Partners' or material vendor's back-up papers is required and will expedite approval of all changes.

All changes in the work will be in accordance with the Contract and the following Formula for Changes.

FORMULA FOR CHANGES (3B)

Percentage Markup and Procedures Applicable to Work
Added to or Omitted from the Original Trade Partner Agreement

A. LUMP SUM (NOT USED UNLESS SPECIFIED BY FANNIN COUNTY)
Pre-determined Lump Sum additions and/or omissions to the Agreement are to be based upon the estimated "Net Actual Cost", plus overhead and profit.

B. TIME AND MATERIAL
Additional work to the Contract, authorized by Fannin County or Turner in advance to be performed on a Time and Material basis, is to be based upon the "Net Actual Cost", plus overhead and profit.

C. GENERAL
i. Submission of estimates and costs shall be itemized in a form satisfactory to Fannin County, THC and Turner to permit ready analysis and evaluation. On Time & Material work, daily reports, showing all field and shop labor expended and/or material delivered shall be verified by Turner's Superintendent and be submitted to with final cost. Invoices shall be submitted monthly.
ii. No overhead and profit will be permitted on premium time.
iii. Percentages shall apply to net differences in quantities for adds and deducts.

D. "NET ACTUAL COST" DEFINED

i. Labor

a. Wages of labor, including foreman, engaged in work and directly on the Trade Partner's payroll.
b. Engineering and drafting performed at the Project with Fannin County or Turner's prior approval.
c. Fringe benefits established by governing trade organizations.
d. Federal Insurance Contributions Act, Federal and State Unemployment Taxes.
e. Net actual premium paid for Public Liability, Workmen's Compensation, Property Damage and any other form of insurance required by Turner.

ii. Material

a. Net cost of construction materials and supplies delivered to site including applicable Sales and/or use taxes, transportation costs, trade and cash discounts.
b. Costs of a special nature, approved in advance by Fannin County or Turner, such as for riggers, labor transportation, equipment rentals, royalties, permits and other expenses of this general nature.

E. PERCENTAGES SHALL INCLUDE THE FOLLOWING OVERHEAD COSTS:

i. Supervision and executive expenses.
ii. Small tools, scaffolding, blocking, shores, appliances, etc., and the expense of maintaining same.
iii. Administrative expense clerical, etc., both at the Project and in the Trade Partner's office.
iv. Taxes required to be paid by the Trade Partner, but not included under the aforementioned "Net Actual Cost".
v. Additional Bond Premiums.

F. PERCENTAGES SHALL INCLUDE ALL PROFIT

17. EXTRA WORK DAILY TIME TICKETS

When necessary, you may be directed to make certain changes in the field by authorized Fannin County or Turner Construction Company personnel. All field changes must be covered by a Superintendent's Instructions to Trade Partner (SIS) form outlining the work change involved, and the basis for computing the change in work. This form will be issued with the signature of the authorizing party, and all resulting field tickets signed by the authorized Fannin County or Turner representative should be clearly identified as chargeable against the particular SIS number.

In order to avoid future complications, daily time tickets must be submitted for our Superintendent's review and signature. Tickets must be numbered sequentially and are to list the names of the workmen and the hours spent performing the work, and also the material used. The time tickets are to be signed daily.

No ticket will be recognized without the signature of a duly authorized Fannin Count or Turner Superintendent. All work done without written authorization will not be considered as extra work.

Invoices against authorized field changes must include copies of all time tickets and should be forwarded to the Project Engineer. Again, your subcontract will be adjusted accordingly by change order.

Please provide your foreman with a copy of these instructions.

18. PROGRESS PAYMENTS

Progress Billings: All progress billings are to be sent to the project to the attention of the **Tony Jarecki**. All billings are subject to the approval of the Owner, THC, Architect, and Turner.

Upon execution of your Contract Agreement, you must submit an itemized "Schedule of Values" of your scope of work, which must be approved by Fannin County, THC and Turner. This contract breakdown will be used as the basis for all billings throughout the project until you receive the final payment.

The Schedule of Values MUST be submitted in the format of AIA Form G702 and G703 and will be used for all billings.

Billings can only be made for extra work after a Change Order to the subcontract has been fully executed.

All payment requests must be accompanied by a Lien Waiver for the period in which payment is being requested. Fannin County will provide the Lien Waiver form.

Certified Payroll:
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 Fannin County, 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 Trade Partner shall pay wages to workers in strict accordance with TX138 Davis Bacon Prevailing Wage scale and shall electronically submit payroll records, certified payroll, and related or required payroll documentation through means and methods Fannin County deems appropriate, hereinafter “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 Trade Partner shall be obligated to ensure that] all lower tier Trade Partners comply with these requirements.

19. 3rd Party Labor Service Providers (1099 Independent Contractors)

Documentation & Verification
Any Trade Partner, or sub-tier vendor, that proposes to use 3rd Party labor service providers will be required to provide documentation and verification throughout the Project to evidence accurately recorded time and substantiation of all payments made to each provider prior to release of any payment to the labor Trade Partner (similar to lien release requirements).

All Trade Partners will have Workers Compensation coverage for all employees working on Turner Construction Projects.

Preconstruction Meeting Requirements
Two (2) weeks prior to the onsite preconstruction meeting, the prevailing wage rate and tracking requirements will be defined with each Trade Partner to re-confirm that they are committed to following all the Project requirements related to labor compliance with reporting and payment practices. All 3rd Party labor service provider tiers shall be identified at this meeting or a minimum of 3 days prior to their deployment on site if unknown at time of pre-mobilization meeting.

All Trade Partners utilizing 3rd party labor services hiring 1099 Independent Contractors are required to give official prompt notice to the Fannin County and Turner Project Manager. Trade Partner shall be fully liable for all penalties, fees or costs associated with inaccuracies or noncompliance with the reporting, time sheet compliance or worker’s compensation coverage of such 3rd party labor services. Furthermore, Trade Partner shall fully indemnify Turner against all such costs.

20. PERMITS

Each Trade Partner will be required to obtain any permits required for and/or by their work. It shall be the responsibility of each Trade Partner to obtain any permits and/or permissions from agencies and/or governing bodies for any work that affect vehicular or pedestrian traffic pertaining to their work. The General Building Permit will be provided and paid for by others. The Trade Partner shall secure any local business license required.

21. TAXES

This project is a tax-exempt project.

22. DAILY WORK REPORTS

The Trade Partner's Foreperson shall be required to submit a Daily Work Report to Turner by the end of each workday. Fannin County and Turner will be utilizing Procore for Daily Work Reports. Procore is a free service to all Trade Partners permissioned to the project. Daily Work Reports can be generated and submitted through a Foreperson's phone, computer or iPad. Training will be provided by Turner Construction on site during the Pre-Construction meetings.

23. COMPLETION OF WORK

Trade Partner agrees to complete the Project Punch list within **14** days of issuance by Fannin County and Turner.

23. EPA STORMWATER COMPLIANCE REPORTING

All Trade Partners working on the site will be required to attend the Turner Stormwater Trade Partner Orientation, which will be held in conjunction with the required Preconstruction Meeting.

A. Each Trade Partner working on the site is required to have one Trade Partner superintendent or field supervisor attends this orientation.

C. **Only** those Trade Partners involved in earth moving/disturbing activities (excavation, grading, landscaping, paving, on site batch plant) or those responsible for installing or maintaining Best Management Practices (BMP's) will be required to take the online Turner Stormwater Trade Partner Short Course Introduction to Erosion and Sediment Control, or present evidence of equal completed training, prior to attending the preconstruction meeting. The person or persons taking this online course must have a regular presence on the project.

24. SCOPE OF WORK FOR ALL TRADES

A. Furnish electronic versions of submittals.

B. Foremen are required to have iPads or equivalent hardware to upload and review contract documents.

C. Clean truck wheels and tires prior to leaving the site. Trade Partner will be responsible for street cleaning resulting from failure to comply with this requirement.

D. Submit payment applications not later than the **20th** day of each month, projected through the final day of the month. Submit pay applications to Tony Jarecki, with copies to the Fannin County's Michelle Case, who processes the pay application. SOV must be approved by THC and Turner.

E. A principal or designated representative of the Company authorized by Principal(s) of the subcontract firm may be required to attend a monthly jobsite meeting and project tour with Turner to review safety, quality and schedule, as well as to provide feedback to Turner project staff.

F. Professional Liability Insurance: For bid packages requiring stamped and certified design drawings, the Professional Engineer hired by this Trade Partner shall assume professional responsibility for any design work required in this Contract Agreement including but not limited to Structural and Life Safety design components.
   a. This Trade Partner 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. Such professional liability insurance shall provide for coverage as follows:
      i. Limit of liability - $3,000,000 per occurrence
      ii. Deductible Amount – Not more than $50,000 (payable by the Trade Partner)
   b. Trade Partner agrees that they will maintain [or cause to be maintained] 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."
   c. Sixty (60) days prior written notice to Fannin County and Turner of cancellation of such insurance or any material change with respect thereof.
   d. Such professional liability insurance shall be in a form and from a company acceptable to Fannin County and Turner and policy shall be available for review by Fannin County and Turner as requested.

G. Builder's Risk Insurance is provided by Owner; however, the Trade Partner is responsible for the deductible in the event of a loss. Trade Partner will only pay for the prorated share of the deductible based on their portion of the loss.

H. Include receiving, unloading and handling of all materials and equipment required for the performance of this Work including equipment furnished by others. Store materials and equipment at the site in such a manner as to prevent theft and damage. Coordinate all deliveries in advance with Turner's on-site Superintendent. Trade Partner shall provide competent flagmen for any traffic control required for this Work (both vehicular and pedestrian) to direct traffic per the requirements of governing authorities. The use or blocking of residential drives and properties is prohibited.

I. Include all hoisting and scaffolding for work of this trade.

J. Provide a Site Specific Quality Control Plan, and indicate in this plan a reporting matrix. In addition, indicate who will perform control measures, that ensure that the Trade Partner's work and all materials delivered to the project site conforms to the contract requirements, indicate in the site specific quality control plan how this will be accomplished. Trade Partner shall submit quality control program for all manufacturers, vendors and Trade Partners prior to the start of any fabrication.

K. Provide all layout, field engineering and field verification of dimensions required for the performance of the work of the trade from existing property corners and benchmarks.

L. Provide protection for your own work through project completion. Relative to work performed by other Trade Partners, include the protection, repair or replacement of any adjacent work damaged
by your forces.

M. Include daily clean up and removal of the Trade Partner's trash and debris to a dumpster at grade as directed by Turner Project staff. All debris is to be segregated as required for proper disposal. Turner will provide suitable dumpsters for trash removal at no additional cost to the Trade Partner. Crates, boxes and other large items of debris must be broken down by Trade Partner to maximize dumpster use. Dunnage may not be left on site. If this is not completed to the satisfaction of Turner's superintendent, Turner will perform this work at Trade Partner's expense. Hazardous materials and petroleum products may not be placed in the dumpster(s). Trade Partner must legally dispose of any hazardous or petroleum waste that is generated and provide Turner with the required documentation related to disposal of hazardous or petroleum wastes.

N. Provide one (1) man-day of clean-up labor for every 40 man-days worked as a contribution to a composite cleanup crew for general building cleaning (i.e. unidentifiable trash). Only contribute to the composite clean-up crew when directed so by Fannin County or Turner and sign-in daily with authorizing party verifying hours worked.

O. The Trade Partner shall sequence the Work so as to conform to Project Schedule. When project phasing interrupts, the Work, the Trade Partner shall be responsible for any demobilization and remobilization necessary to complete the Work in accordance with the Project Schedule. Trade Partner shall be responsible for coordinating the Work and complying with Project schedule by providing transitions in the Work so as to minimize any impact.

P. Provide a Weekly Status Report regarding procurement status, fabrication, etc. of items required for this Work.

Q. Trade Partner's Work includes providing coordination with Turner, Turner's Trade Partners and Owner's Trade Partners. This includes out of sequence and comeback work when work of other trades are required prior to and/or affects the work of this trade.

R. Provide all testing required by the Contract Documents and Code requirements that will not be performed by the Owner's Independent Testing Laboratory.

S. Trade Partner includes taking all necessary precautions and protecting the existing work identified to remain, the work of others and its own, including protection after installation, any materials stored on the site or within the building, until project completion. If such work or materials become damaged, then the Trade Partner includes the repair and/or replacement of such damaged work or materials to the satisfaction of Turner and the Owner. Trade Partner acknowledges responsibility for breakage, damage, nicks, vandalism, sabotage, etc. up to acceptance of the finished Work by Turner and the Owner and shall promptly replace any material damaged by breakage, nicks, vandalism, sabotage, etc. should it be requested by Turner and Owner. This includes, but is not limited to, replacing work damaged for any reason including unidentifiable damage and damage by Trade Partner's forces. In the event the cause for damage to Trade Partner's Work is identified by another trade, Turner will assist Trade Partner's pursuit to recover costs.

T. The Trade Partner acknowledges visiting the Site and has become familiar with all of the existing conditions, access to work areas, adjacent structures, etc. Trade Partner will field measure and survey existing conditions and no additional compensation will be considered as a result of existing conditions. Trade Partner shall report any findings or discrepancies to Fannin County and Turner for purposes of coordination with other trades and not for purposes of additional compensation.

U. Trade Partner shall remove and replace perimeter OSHA cabling, barricades and/or toe boards, which have been installed by others, during the performance of its own Work. If any existing fall protection is altered and/or removed by this Trade Partner in order to conduct their Work, this Trade Partner is responsible to create and maintain a controlled access zone until such time the fall protection has been replaced/reinstalled by Trade Partner to OSHA specifications and/or Turner requirements, whichever is more stringent. Any personnel working in the controlled access zone while the fall protection is not in place is required to be utilizing another means of fall protection, i.e. tied off with a safety harness and lanyard.

V. Participate in all project coordination activities, including BIM requirements, as directed by Fannin County or Turner.

W. Provide CAD drawing as-builts of the contract drawings for Work installed under this contract agreement.

X. This Trade Partner acknowledges that the best practices of Lean Construction will be administered on this project. Lean principles can be reviewed at www.leanconstruction.org Weekly
meetings and site planning will be dedicated in efforts to promote Lean Construction

Y. This Trade Partner will not be allowed to store material at the site unless Turner's Superintendent gives specific approval for location and duration. This Trade Partner shall only delivery materials that will be installed within one (1) weeks of delivery. All materials, tools, equipment, etc. must be stored on wheels to facilitate relocation if required to allow other trades to continue with their work.

Z. Materials shall be secured to prevent unintentional displacement.

AA. Trade Partners must comply with the NOTHING HITS THE GROUND. General items include:

1. FABRICATION:

- All material fabrication shall be performed at a work station between 30 and 39 inches off the floor.
- Work station shall be mobile and include a fire stop directly behind all chop saws.
- Rubbish containers shall be mobile and located directly adjacent to the work station.
- The Trade Partner is to furnish all mobile rubbish containers for their work.

2. HOUSEKEEPING:

- All rubbish shall be disposed of as it is generated and be immediately place in a mobile rubbish container provided by the Trade Partner.
- Cordless power tools are required unless the Trade Partner can demonstrate a hardship or need to use tools with power cords.
- The Trade Partner is required to elevate off the ground all power cords in order to minimize tripping hazards on walking/working surfaces.
- Debris is not allowed to be consolidated on the floor.

MATERIAL HANDLING/ STORAGE:

- Material may not be stored within 10 feet of the building perimeter or adjacent to shafts or stairwells.
- All material lay-down areas must be coordinated and designated by Turner.
- Material must be stored to promote mobility of material. Pipes, conduits, metal fabrications and steel framing are to be stored on rolling racks or similar means of conveyance. Bulk material should be palletized to allow for easy mobility using a pallet jack.
- "Just in Time" delivery required to minimize clutter. Nothing should be stored on a floor that cannot be installed within one week.
- Heavy material such as glass, masonry and drywall must be loaded so as not to overload the structure. The Trade Partner is required to do a floor loading analysis for submission to Turner for review and approval.
- Turner to post the design live load prominently on each floor.

BB. "Ladders Last" Policy: Ladders must be considered as a last means of access and egress for all work, and only be used where no other means is possible, with preference given to safer means of access. Safer means may include, but not be limited to: stairs, rolling stairs, scissor and aerial lifts, scaffolds and Tele-towers. Additionally, it may be possible to plan and sequence work in a way that minimizes the number of times that a worker has to leave the floor working level via ladder or other means to access other elevations, which often raises the frequency and severity of risk exposure. During Job Safety Analyses and pre-planning, give preference to methods that reduce elevated exposure. A ladder-use permit may be required by Turner.

Reference Section 03 for Trade Specific Scopes of Work for items in addition to the Scope of work for All Trades.

25. INSURANCE

As directed by your contract agreement, **the automobile General Liability and Worker's Compensation insurance for this project will be carried by you and all of your Trade Partners**. Fannin County and Turner Construction will request an insurance certificate (on the standard Acord certificate format) in triplicate, which must be submitted immediately, indicating the coverage as required by your contract agreement. **This requirement must be completed before your work at the jobsite is started.** Your insurance must be kept up to date at all times throughout the course of the project until final payment. Also, **you will not receive your monthly payment request if your insurance is not current.**

EACH CERTIFICATE MUST COMPLY WITH THE FOLLOWING:

1. Use the standard Acord certificate format.
2. Provide the limits of coverage set forth in your Contract Documents.
3. **"Fannin County, City of Bonham, Turner Construction Co., and any other Owner designees" must be named as *additional insured***.
4. The Name of the Project must be listed in the special items area.
5. The *cancellation clause must be revised, marking out* "endeavor to" mail "30" days written notice named to left "period/end sentence", marking out "but failure....or representatives". (if you can't revise; provide a letter.)
6. Triplicates of the certificates must be delivered to the **Fannin County Purchasing, Attn: Michelle Case, or e-mailed to: mcase@fanninco.net**

Commercial General Liability (CGL) Insurance

The following are the **minimum limits** for Trade Partners on Corporate Insurance Projects classified according to general degree of hazard and location of the project.

General Degree of Hazard:

"N" Nonhazardous work – interior work and finishing work. Also non-construction trade services.

"H" Hazardous Work – exterior work, structural concrete work, electrical, mechanical, miscellaneous iron, structural steel and elevator trades.

"X"Extra Hazardous Work – wrecking, demolition, excavation, window washing and foundation work. If a subcontract involves two or more types of work, rate according to most hazardous of types involved.

"XX" Tower Crane Hazard

"XXX" Blasting/Structural Demolition Hazard

Minimum Limits	URBAN SITE	NON-URBAN SITE
"N" Nonhazardous		
Bodily Injury and Property Damage	$2,000,000/Occurrence	$1,000,000/Occurrence
"H" Hazardous		
Bodily Injury and Property Damage	$3,000,000/Occurrence	$3,000,000/Occurrence
"X" Extra Hazardous		
Bodily Injury and Property Damage	$5,000,000/Occurrence	$5,000,000/Occurrence
"XX" Tower Crane Hazard		
Bodily Injury and Property Damage	$10,000,000/Occurrence*	$10,000,000/Occurrence*
"XXX" Blasting/Structural Demolition Hazard		
Bodily Injury and Property Damage	$20,000,000/Occurrence*	$20,000,000/Occurrence*

***Must have minimum $2,000,000 Primary**

CGL policies also have an Aggregate limit. The aggregate limit is the maximum the carrier will pay in any policy year on behalf of the insured Trade Partner. Therefore, we would prefer the that Aggregate limit be at least twice the Occurrence limit, so that it is less likely that the Aggregate could be exhausted before the claim on our project is handled. However, we will accept an Aggregate limit equal to the Occurrence limit.

Automobile Liability Insurance		
Bodily Injury and Property Damage	$1,000,000 combined single limit for either urban or non-urban locations	

The following chart is to be used to determine the Insurance Limits:

TRADE CLASSIFCATION FOR INSURANCE LIMITS	
SUBCONTRACT WORK	**LIMIT CLASSIFICATION**
Division 1: General Requirements	
Tower Crane (Erected and/or operated by crane rental firm)	XX
Mobile Cranes, man/material hoists	X
Division 31, 32: Sitework	
Structural Demolition * See below for hazardous removal	XXX
Non-structural demolition	X
Shoring	X

Excavating *See below for hazardous removal	X
Site Utilities (Storm Drain, Sewer, Electric, etc.)	H
Exterior Improvements (fencing, playground, signage)	N
Landscape & Irrigation	N
Paving, Curb & Gutter	N
Blasting	XXX
Implosion	**CALL RISK MANAGEMENT**
Division 3: Concrete	
Concrete Work (Fdn. And/or CIP Frame – no Tower Crane)	X (or XX with Tower Crane)
Concrete Work (Cast-in-place on Metal Deck)	H
Placing of Reinforcing Steel & Mesh	H
Precast Structural Concrete (no Tower Crane)	X (or XX with Tower Crane)
Precast Architectural Concrete (no Tower Crane)	X (or XX with Tower Crane)
Division 4: Masonry and Stone	
Brick and Block Masonry	H
Stone Pavers	H
Exterior Wall	X
Division 5: Metal	
Structural Steel (no Tower Crane)	X (or XX with Tower Crane)
Misc. Iron/Steel Stairs	H
Metal Deck	X
Ornamental Iron	N
Space Frame	H
Division 6: Carpentry	
Install Wood Doors, Rough Carpentry	N
Architectural Millwork	N
Division 7: Moisture Protection	
Roofing	X
Waterproofing	H
Sheet metal	H
Insulation	N
Caulking (exterior)	H
Division 8: Doors, Windows and Glazing	
Overhead Doors & Grilles	N
Storefront, Curtainwall, Glass & Glazing	H
Division 9: Finishes	
Spray or Fireproofing, Drywall	N
Lath & Plaster	N
Acoustic Ceilings	N
Ceramic Tile	N
Resilient Flooring, Carpeting	N
Painting, Vinyl Wallcovering	N
Division 10: Specialties	
Toilet Partitions & Accessories	N
Mail Chutes	N
Draperies & Blinds	N
Structural/Limited Access: Canopy, Shelters, Cupolas, Spires	X
Division 11: Equipment	
Window Washing Equipment	X
Structural/Limited Access/Height – Theater Rigging and similar risks	X
Other (non-structural, no access/height concerns)	N

Division 12: Furnishings	
ALL	N
Division 13: Special Construction	
Structural/Limited Access/Height – Theater Rigging and similar risks	X
Grandstands	X
Other (Non-structural, no access/height concerns – e.g. Cold Rooms)	N
Division 14: Vertical Transportation	
Elevators and Escalators	H
Scaffolding	H
Division 21, 22, 23, 25: Mechanical	
Fire Suppression	H
Plumbing	H
HVAC	H
Building Automation	H
Division 25, 27, 28: Electrical	
Electrical	H
Communications	H
Security	H

NOTES:

1.) Interior Architectural Trades not specifically mentioned shall be Classification “N” non-hazardous.
2.) Trades not specifically mentioned shall use classification that in the judgement of the Procurement Department is closest or most similar.

***Any hazardous material remediation must be handled in accordance with the Environmental Operations Policy located on TKN, under the Safety section. Required insurances will be decided upon review with Safety and Risk Management.**

END OF DOCUMENT

Construction Contractor Agreement

This Agreement, made as of the CDS day of CDS in the year CDS by and between CDS (hereinafter called Owner) and CDS (See Contract Data Sheet for this Item and all other Items marked CDS) (Hereinafter called the Contractor).

Witnesseth, that the Owner and Contractor agree as follows:

Description of Work

ARTICLE I. The Contractor shall perform and furnish all the work, labor, services, materials, plant, equipment, tools, scaffolds, appliances and other things necessary for CDS (Hereinafter called the Work) for and at the (Hereinafter called the Project), located on premises at CDS (Hereinafter called the Premises), as shown and described in and in strict accordance with the Plans, Specifications, General Conditions, Special Conditions and Addenda thereto prepared by CDS (hereinafter called Architect) and in strict accordance with the additional Provisions, page(s) CDS annexed hereto and made a part hereof.

Contract Documents

ARTICLE II. The Plans, Specifications, General Conditions, Special Conditions, and Addenda hereinabove mentioned, are available for examination by the Contractor at all reasonable times at the office of the Construction Manager ,Turner Construction Company(hereinafter referred to as Turner) ; all of the aforesaid, including this Agreement, being hereinafter sometimes referred to as the Contract Documents. The Contractor represents and agrees that it has carefully examined and understands this Agreement and the other Contract Documents, has investigated the nature, locality and site of the Work and the conditions and difficulties under which it is to be performed and that it enters into this Agreement on the basis of its own examination, investigation and evaluation of all such matters and not in reliance upon any opinions or representations of Turner, or of the Owner, or of any of their respective officers, agents, servants, or employees.

This Contract Agreement and the other Contract Documents are intended to supplement and complement each other and shall, where possible, be thus interpreted. If, however, any provision of this Contract Agreement irreconcilably conflicts with a provision of the other Contract Documents, the provision imposing the greater duty or obligation on the Contractor shall govern.

The parties recognize that problems and disputes between them may occur and that it is preferable for them to reach an amicable resolution of same without the need to resort to formal dispute resolution procedures. In that regard, they each pledge to participate in good faith in voluntary and non-binding Alternate Dispute Resolution (ADR) procedures. However, in the event that such disputes are not resolved by mediation or another ADR procedure as Owner and the Contractor may agree then such disputes shall be resolved at Owner's sole option according to law. Furthermore, the Contractor agrees that Owner shall have the exclusive right to join the Contractor as a party in any dispute resolution procedure (including without limitation ADR procedures, binding arbitration or other judicial or non-judicial proceeding) between the Owner and such other Contractors or parties as may be appropriate, where in the judgment of Owner the issues in dispute are related to the work or performance of the Contractor. Furthermore, the Contractor expressly agrees to waive its right to trial by jury in case Owner elects to resolve the dispute in litigation.

Relationship

The Contract Documents shall not be construed to create a contractual relationship of any kind between Turner and the Architect, or between Turner or the Architect and the Contractor, or any subcontractor or supplier to the Project.

Turner and the Architect, however, shall be entitled to performance of the obligations of the Contractor intended for their benefit and to enforcement thereof, but nothing contained herein shall be deemed to give the Contractor or any third party any claim or right of action against Turner or the Architect which does not otherwise exist without regard to this Agreement. The Contractor and its subcontractors shall not be deemed to be beneficiaries of any of the acts or services of Turner, which are performed for the sole benefit of the Owner. Contractor shall forward all communications to the Owner and Architect through Turner and hereby acknowledges and agrees that any instructions, reviews, advice, approvals, orders or directives that are rendered to it by Turner are specifically authorized and directed by the Owner to the Contractor through Turner acting on behalf of the Owner as agent. Turner shall not be responsible for any monies due to the Contractor.

The Contractor shall supervise and direct the Work using Contractor's best skill and attention. Contractor shall be solely responsible for all construction means, methods, techniques, sequences, and procedures and for safety precautions and programs in connection with the Work and hereby agrees with respect hereto that neither Turner nor the Architect will be responsible therefor or have control or charge thereof. Contractor further assumes entire responsibility for the acts and omissions of its agents or employees, subcontractors, suppliers, any of their agents or employees, or any other persons performing any of the Work and agrees that neither Turner nor the Architect will be responsible for or have control or charge over any such acts or omissions. Contractor further agrees that neither Turner nor the Architect will be responsible for Contractor's failure to carry out the Work in accordance with the Contract Documents and waives all claims against Turner arising out of or related to the Project, including, but not limited to, claims for payment, delays, construction defects, design defects, or any other similar claims.

Time of Completion

ARTICLE III. The Contractor shall commence the Work when notified to do so by Owner and shall diligently and continuously prosecute and complete the Work and coordinate the Work with the other work being performed on the Project, in accordance with those project schedules , as may be issued from time to time during the performance of the Work and any other scheduling requirements listed in this Agreement, so as not to delay, impede, obstruct, hinder or interfere with the commencement, progress or completion of the whole or any part of the Work or other work on the Project.

The Contractor shall participate and cooperate in the development of schedules and other efforts to achieve timely completion of the Work providing information for the scheduling of the times and sequence of operations required for its Work to meet Owner's overall schedule requirements, shall continuously monitor the project schedule so as to be fully familiar with the timing, phasing and sequence of operations of the Work and of other work on the Project, and shall execute the Work in accordance with the requirements of the project schedule including any revisions thereto. The Contractor acknowledges that it must, at its own expense, work cooperatively with all other Contractors on site to coordinate its work with the work of such Contractors, including modifying its schedule and activities. To further such coordination it must, when requested by Turner or the Owner submit to Turner a current updated copy of its detailed schedule to demonstrate the status of such coordination and, if the Owner or Turner deems it necessary, to modify its schedule as and in the manner required by the Owner or Turner and to execute its work in the manner shown on the revised schedule. It is agreed that any such modifications required by the Owner or Turner shall not result in claims against Turner or the Owner and all such claims are waived. While the Owner or Turner may have the right to take such action, in no respect shall the Owner or Turner be obliged to do so.

Should the progress of the Work or of the Project be delayed disrupted, hindered, obstructed, or interfered with by any fault or neglect or act or failure to act of the Contractor or any of its officers, agents, servants, employees, subcontractors or suppliers so as to cause any additional cost, expense, liability or damage to the Owner or Turner including legal fees and disbursements incurred by Owner or Turner (whether incurred in defending claims arising from such delay or in seeking reimbursement and indemnity from the Contractor and its surety hereunder or otherwise) or any damages or additional costs or expenses for which Turner or the Owner may or shall become liable, the Contractor and its surety shall and does hereby agree to compensate the Owner and Turner for and indemnify them against all such costs, expenses, damages and liability.

The Owner or Turner, if the Owner deems necessary, may direct the Contractor to work overtime and, if so directed, the Contractor shall work said overtime and, provided that the Contractor is not in default under any of the terms or provisions of this Agreement or of any of the other Contract Documents, the Owner will pay the Contractor for such actual additional wages paid, if any, at rates which have been approved by the Owner and Turner plus taxes imposed by law on such additional wages, plus workers' compensation insurance, liability insurance and levies on such additional wages if required to be paid by the Contractor.

If, however, the progress of the Work or of the Project be delayed by any fault or neglect or act or failure to act of the Contractor or any of its officers, agents, servants, employees, subcontractors or suppliers, then the Contractor shall, in addition to all of the other obligations imposed by this Agreement upon the Contractor in such case, and at its own cost and expense, work such overtime as may be necessary to make up for all time lost in the completion of the Work and of the Project due to such delay. Should the Contractor fail to make up for the time lost by reason of such delay, the Owner shall have the right to cause other Contractors to work overtime and to take whatever other action it deems necessary to avoid delay in the completion of the Work and of the Project, and the cost and expense of such overtime and/or such other action shall be borne by the Contractor.

Price

ARTICLE IV. The sum to be paid by the Owner to the Contractor for the satisfactory performance and completion of the Work and of all of the duties, obligations and responsibilities of the Contractor under this Agreement and the other Contract Documents shall be **CDS** (hereinafter called the Price) subject to additions and deductions as herein provided.

Monthly Estimate

The Price includes all Federal, State, County, Municipal and other taxes imposed by law and based upon labor, services, materials, equipment or other items acquired, performed, furnished or used for and in connection with the Work, including but not limited to sales, use and personal property taxes payable by or levied or assessed against the Owner, Turner or the Contractor. Where the law requires any such taxes to be stated and charged separately, the total price of all items included in the Work plus the amount of such taxes shall not exceed the Price.

On or before the last day of each month the Contractor shall submit to the Owner, in the form required by Owner, a written requisition for payment showing the proportionate value of the Work installed to that date, from which shall be deducted: a reserve of **CDS**; all previous payments; and all charges for services, materials, equipment and other items furnished by Turner to or chargeable to the Contractor; and the balance of the amount of such requisition, as approved by Owner, Turner and the Architect , shall be due and paid to the Contractor on or about the fifteenth (15th) day of the succeeding month or in accordance with the Contract Documents.

The Contractor shall submit with its first requisition for payment a detailed schedule showing the breakdown of the Price into its various parts for use only as a basis of checking the Contractor's monthly requisitions.

Owner reserves the right to advance the date of any payment (including the final payment) under this Agreement if, in its sole judgment, it becomes desirable to do so.

The Contractor agrees that, if and when requested to do so by the Owner or Turner, it shall furnish such information, evidence and substantiation as the Owner or Turner may require with respect to the nature and extent of all obligations incurred by the Contractor for or in connection with the Work, all payments made by the Contractor thereon, and the amounts remaining unpaid, to whom and the reasons therefor.

Final Payment

Final payment to the Contractor shall be made only with funds received by the Owner, the Construction Lender or the Owner's Agent as final payment for Work under the General Contract. In addition, final payment by the Owner to the Contractor shall not become due and payable until the following other express conditions precedent have been met: (1) the completion and acceptance of the Work by the Owner, Turner and the Architect; (2) provision by the Contractor of evidence satisfactory to the Owner that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, materials, equipment, taxes or other items performed, furnished, or incurred for or in connection with the Work; and (3) execution and delivery by the Contractor, in a form satisfactory to the Owner of a General Release running to and in favor of the Owner. Should there prove to be any such claim, obligation or lien after final payment is made, the Contractor shall refund to the Owner or Turner all monies that the Owner or Turner shall pay in satisfying, discharging or defending against any such claim, obligation or lien or any action brought or judgment recovered thereon and all costs and expenses, including legal fees and disbursements, incurred in connection therewith. The final payment shall be due within forty (40) days after all of these express conditions precedent have been met.

Payments Withheld

If any claim or lien is made or filed with or against Turner, the Owner, the Project, the Premises or the Project funds by any person claiming that the Contractor or any subcontractor or other person under Contract has failed to make payment for any labor, services, materials, equipment, taxes or other items or obligations furnished or incurred for or in connection with the Work, or if at any time there shall be evidence of such nonpayment or of any claim or lien for which, if established, Turner or the Owner might become liable and which is chargeable to the Contractor, or if the Contractor or any subcontractor or other person under subcontract causes damage to the Work or to any other work on the Project, or if the Contractor fails to perform or is otherwise in default under any of the terms or provisions of this Agreement, the Owner shall have the right to retain from any payment then due or thereafter to become due an amount which it deems sufficient to (1) satisfy, discharge and/or defend against any such claim or lien or any action which may be brought or judgment which may be recovered thereon, (2) make good any such nonpayment, damage, failure or default, and (3) compensate the Owner or Turner for and indemnify and hold them harmless against any and all losses, liability, damages, costs and expenses, including legal fees and disbursements, which may be sustained or incurred by either or both of them in connection therewith. The Owner shall have the right to apply and charge against the Contractor so much of the amount retained as may be required for the foregoing purposes. If the amount is insufficient therefor, the Contractor shall be liable for the difference and pay the same to the Owner.

Payments etc., non Acceptance

No payment (final or otherwise) made under or in connection with this Agreement shall be conclusive evidence of the performance of the Work or of this Agreement, in whole or in part, and no such payment shall be construed to be an acceptance of defective, faulty or improper work or materials nor shall it release the Contractor from any of its obligations under this Agreement; nor shall entrance and use by the Owner constitute acceptance of the Work or any part thereof.

Extension of Time

ARTICLE V. Should the Contractor be delayed, obstructed, hindered or interfered with in the commencement, prosecution or completion of the Work by any cause including but not limited to any act, omission, neglect, negligence or default of the Owner or Turner or of anyone employed by the Owner or Turner or by any other contractor or subcontractor on the Project, or by the Architect, the Owner or their contractors, subcontractors, agents or consultants, or by damage caused by fire or other casualty or by the combined action of workers or by governmental directive or order in no wise chargeable to the Contractor, or by any extraordinary conditions arising out of war or government regulations, or by any other cause beyond the control of and not due to any fault, neglect, act or omission of the Contractor, its officers, agents, employees, subcontractors or suppliers, then except where the Contract Documents has specific requirements at variance with the foregoing, in which case the requirements of the Contract Documents shall govern, the Contractor shall be entitled to an extension of time for a period equivalent to the time lost by reason of any and all of the aforesaid causes; provided, however, that the Contractor shall not be entitled to any such extension of time unless the Contractor (1) notifies the Owner and Turner in writing of the cause or causes of such delay, obstruction, hindrance or interference within forty eight (48) hours of the commencement thereof and (2) demonstrates that it could not have anticipated or avoided such delay, obstruction, hindrance or interference and has used all available means to minimize the consequences thereof. Notwithstanding the foregoing, if the Contract Documents are at variance with granting such time extension, then the provisions of the Contract Documents shall control.

Freight Charges and Shipments

ARTICLE VI. The Contractor in making or ordering shipments shall not consign or have consigned materials, equipment or any other items in the name of the Owner or Turner. The Owner and Turner is under no obligation to make payment for charges on shipments made by or to the Contractor but may, at its option, pay such charges, in which case the Contractor shall reimburse the Owner or Turner for the amount of such payments plus a service charge of twenty-five percent (25%) of the amount so paid.

Dimensions

ARTICLE VII. Notwithstanding the dimensions on the Plans, Specifications and other Contract Documents it shall be the obligation and responsibility of the Contractor to take such measurements as will insure the proper matching and fitting of the Work covered by this Agreement with contiguous work.

Shop Drawings

The Contractor shall prepare and submit to the Architect through Turner such shop drawings as may be necessary to describe completely the details and construction of the Work. Approval of such shop drawings by the Architect and/or Turner shall not relieve the Contractor of its obligation to perform the Work in strict accordance with the Plans, Specifications, the Additional Provisions hereof and the other Contract Documents, nor of its responsibility for the proper matching and fitting of the Work with contiguous work and the coordination of the Work with other work being performed on the site, which obligation and responsibility shall continue until completion of the Work.

The Contractor's submission of a shop drawing to the Architect or Turner shall constitute the Contractor's representation, upon which the Architect and Turner may rely, that the Contractor has reviewed the submission for accuracy and compliance with all Contract Documents and that wherever engineering is required to be performed, same has been performed by a qualified and licensed engineer. Furthermore, the review of the Shop Drawing by the Architect and/or Turner shall not constitute an undertaking by them to identify deficiencies in the submission, that being an undertaking within the sole responsibility of the Contractor.

Contiguous Work

Should the proper and accurate performance of the Work hereunder depend upon the proper and accurate performance of other work not covered by this Agreement, the Contractor shall carefully examine such other work, determine whether it is in fit, ready and suitable condition for the proper and accurate performance of the Work hereunder, use all means necessary to discover any defects in such other work, and before proceeding with the Work hereunder, report promptly any such improper conditions and defects to the Owner and Turner in writing and allow the Owner a reasonable time to have such improper conditions and defects remedied.

Interpretation of Plans and Specifications

ARTICLE VIII. The Work hereunder is to be performed and furnished under the direction and to the satisfaction of the Owner, the Architect and Turner. The decision of the Architect as to the true construction, meaning and intent of the Plans and Specifications shall be final and binding upon the parties hereto. The Owner will furnish to the Contractor such additional information and Plans as may be prepared by the Architect to further describe the Work to be performed and furnished by the Contractor and the Contractor shall conform to and abide by the same.

The Contractor shall not make any changes, additions and/or omissions in the Work except upon written order of the Owner or Turner as provided in Article IX hereof.

Change Orders, Additions Deductions

ARTICLE IX. The Owner reserves the right, from time to time, whether the Work or any part thereof shall or shall not have been completed, to make changes, additions and/or omissions in the Work as it may deem necessary, upon written order to the Contractor. The value of the work to be changed, added or omitted shall be stated in said written order and shall be added to or deducted from the Price.

The value of the work to be changed, added or omitted shall be determined by the lump sum or unit prices, if any, stipulated herein for such work. If no such prices are stipulated, such value shall be determined by whichever of the following methods or combination thereof the Owner or Turner may elect:

(a) By adding or deducting a lump sum or an amount determined by a unit price agreed upon between the parties hereto.

(b) By adding (1) the actual net cost to the Contractor of labor in accordance with the established rates, including required union benefits, premiums the Contractor is required to pay for workmen's compensation and liability insurance, and payroll taxes on such labor, (2) the actual cost to the Contractor of materials and equipment and such other direct costs as may be approved by Turner less all savings, discounts, rebates and credits, (3) an allowance of **CDS** for overhead on items (1) and (2) above, and (4) an allowance of **CDS** for profit on items (1), (2) and (3) above.

Should the parties hereto be unable to agree as to the value of the work to be changed, added or omitted, the Contractor shall proceed with the work promptly under the written order of the Owner or Turner from which order the stated value of the work shall be omitted, and the determination of the value of the work shall be referred to the Architect whose decision shall be final and binding upon the parties hereto.

In the case of omitted work the Owner shall have the right to withhold from payments due or to become due to the Contractor an amount which, in the Owner's or Turner's opinion, is equal to the value of such work until such time as the value thereof is determined by agreement or by the Architect as hereinabove provided.

All changes, additions or omissions in the Work ordered in writing by the Owner or Turner shall be deemed to be a part of the Work hereunder and shall be performed and furnished in strict accordance with all of the terms and provisions of this Agreement and the other Contract Documents. Contractor accepts the responsibility to keep its surety informed of all such modifications to its contract. The obligations of Contractor's Surety shall not be reduced, waived or adversely affected by the issuance of such change orders, additions or deductions even if the Owner or Turner fails to inform surety of same and the Owner or Turner shall not be required to obtain consent of the surety to such modifications.

Inspection and Defective Work

ARTICLE X. The Contractor shall at all times provide sufficient, safe and proper facilities for the inspection of the Work by the Owner, Turner, the Architect, and their authorized representatives in the field, at shops or at any other place where materials or equipment for the Work are in the course of preparation, manufacture, treatment or storage. The Contractor shall, within twenty-four (24) hours after receiving written notice from the Owner or Turner to that effect, proceed to take down all portions of the Work and remove from the premises all materials whether worked or unworked, which the Architect and/or the Owner or Turner shall condemn as unsound, defective or improper or as in any way failing to conform to this Agreement or the Plans, Specifications or other Contract Documents, and the Contractor, at its own cost and expense, shall replace the same with proper and satisfactory work and materials and make good all work damaged or destroyed by or as a result of such unsound, defective, improper or nonconforming work or materials or by the taking down, removal or replacement thereof.

Failure to Prosecute, etc

ARTICLE XI. Should the Contractor at any time refuse or neglect to supply a sufficiency of skilled workers or materials of the proper quality and quantity, or fail in any respect to prosecute the Work with promptness and diligence, or cause by any act or omission the stoppage, impede, obstruct, hinder or delay of or interference with or damage to the work of any other contractors or subcontractors on the Project, or fail in the performance of any of the terms and provisions of this Agreement or of the other Contract Documents, or should the Architect determine that the Work or any portion thereof is not being performed in accordance with the Contract Documents, or should there be filed by or against the Contractor a petition in bankruptcy or for an arrangement or reorganization, or should the Contractor become insolvent or be adjudicated a bankrupt or go into liquidation or dissolution, either voluntarily or involuntarily or under a court order, or make a general assignment for the benefit of creditors, or otherwise acknowledge insolvency, then in any of such events, each of which shall constitute a default hereunder on the Contractor's part, then Owner shall have the right, in addition to any other rights and remedies provided by this Agreement and the other Contract Documents or by law, after three (3) days written notice to the Contractor mailed or delivered to the last known address of the latter, (a) to perform and furnish through itself or through others any such labor or materials for the Work and to deduct the cost thereof from any monies due or to become due to the Contractor under this Agreement, and/or (b) to terminate the employment of the Contractor for all or any portion of the Work, enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment, scaffolds, tools, appliances and other items thereon, all of which the Contractor hereby transfers, assigns and sets over to the Owner for such purpose, and to employ any person or persons to complete the Work and provide all the labor, services, materials, equipment and other items required therefor. In case of such termination of the employment of the Contractor, the Contractor shall not be entitled to receive any further payment under this Agreement until the Work shall be wholly completed to the satisfaction of the Architect ,the Owner and Turner and shall have been accepted by them, at which time, if the unpaid balance of the amount to be paid under this Agreement shall exceed the cost and expense incurred by the Owner in completing the Work, such excess shall be paid by the Owner to the Contractor; but if such cost and expense shall exceed such unpaid balance, then the Contractor or its surety shall pay the difference to the Owner. Such cost and expense shall include, not only the cost of completing the Work to the satisfaction of the Owner, Turner and the Architect and of performing and furnishing all labor, services, materials, equipment, and other items required therefor, but also all losses, damages, costs and expenses, (including legal fees and disbursements incurred in connection with reprocurement, in defending claims arising from such default and in seeking recovery of all such cost and expense from the Contractor and/or its surety), and disbursements sustained, incurred or suffered by reason of or resulting from the Contractor's default.

It is recognized that if the Contractor institutes or has instituted against it a case under Title 11 of the United States Code (Bankruptcy Code), such event could impair or frustrate the Contractor's performance of this Agreement. Accordingly, it is agreed that upon the occurrence of any such event, the Owner shall be entitled to request of Contractor or its trustee or other successor adequate assurances of future performance. Failure to comply with such request within ten (10) days of delivery of the request shall entitle the Owner in addition to any other rights and remedies provided by this Agreement or by law, to terminate this Agreement. Pending receipt of adequate assurances of performance and actual performance in accordance herewith, the Owner shall be entitled to perform and furnish through itself or through others any such labor, materials or equipment for the Work as may be necessary to maintain the progress of the Work and to deduct the cost thereof from any monies due or to become due to the Contractor under this Agreement. In the event of such bankruptcy proceedings, this Agreement shall terminate if the Contractor rejects this Agreement or if there has been a default and the Contractor is unable to give adequate assurance that it will perform as provided in this Agreement or otherwise is unable to comply with the requirements for assuming this Agreement under the applicable provisions of the Bankruptcy Code.

Loss or Damage to Work

ARTICLE XII. The Owner or Turner shall not be responsible for any loss or damage to the Work to be performed and furnished under this Agreement, however caused, until after final acceptance thereof by Owner and the Architect, nor shall the Owner or Turner be responsible for loss of or damage to materials, tools, equipment, appliances or other personal property owned, rented or used by the Contractor or anyone employed by it in the performance of the Work, however caused.

Builder's Risk

Turner or Owner shall effect and maintain All-Risk Builder's Risk insurance in accordance with the Contract Documents upon all Work, materials and equipment incorporated in the Project and all materials and equipment on or about the Premises intended for permanent use or incorporation in the Project or incident to the construction thereof, the capital value of which is included in the cost of the Work, but not including any contractors' machinery, tools, equipment or other personal property owned, rented or used by the Contractor or anyone employed by it in the performance of the Work.

A loss insured under Turner or the Owner's All-Risk Builder's Risk insurance shall be adjusted by the Turner or the Owner as fiduciary and made payable to Turner or the Owner as fiduciary for the Insureds, as their interests may appear. Turner or the Owner shall pay contractors their just shares of insurance proceeds received by Turner or the Owner, and by appropriate agreements, written where legally required for validity, and shall require contractors to make payments to their subcontractors in a similar manner.

Cleaning Up

ARTICLE XIII. The Contractor shall, at its own cost and expense, (1) keep the Premises free at all times from all waste materials, packaging materials and other rubbish accumulated in connection with the execution of its Work by collecting and depositing said materials and rubbish in locations or containers as designated by the Owner or Turner from which it shall be removed by the Owner or Turner from the Premises without charge, (2) clean and remove from its own Work and from all contiguous work of others any soiling, staining, mortar, plaster, concrete or dirt caused by the execution of its Work and make good all defects resulting therefrom (3) at the completion of its Work in each area, perform such cleaning as may be required to leave the area "broom clean", and (4) at the entire completion of its Work, remove all of its tools, equipment, scaffolds, shanties and surplus materials. Should the Contractor fail to perform any of the foregoing to the Owner's satisfaction, the Owner shall have the right to perform and complete such work itself or through others and charge the cost thereof to the Contractor.

Compliance with Law and Permits

ARTICLE XIV. The Contractor shall obtain and pay for all necessary permits and licenses pertaining to the Work and shall comply with all Federal, State, Municipal and local laws, ordinances, codes, rules, regulations, standards, orders, notices and requirements, including but not limited to those relating to safety, discrimination in employment, fair employment practices, immigration laws or equal employment opportunity, and whether or not provided for by the Plans, Specifications, General Conditions, or other Contract Documents, without additional charge or expense to Owner and shall also be responsible for and correct, at its own cost and expense, any violations thereof resulting from or in connection with the performance of its Work. Each requisition for payment shall constitute a representation and warranty that Contractor is in compliance with applicable law.

The Contractor shall at any time upon demand furnish such proof as Owner may require showing such compliance and the correction of such violations. The Contractor agrees to save harmless and indemnify Owner from and against any and all loss, injury, claims, actions, proceedings, liability, damages, fines, penalties, costs and expenses, including legal fees and disbursements, caused or occasioned directly or indirectly by the Contractor's failure to comply with any of said laws, ordinances, rules, regulations, standards, orders, notices or requirements or to correct such violations therefore resulting from or in connection with the performance of Work.

The Immigration and Nationality Act as amended by the Immigration Reform and Control Act of 1986 (IRCA) makes it illegal for employers to knowingly hire persons who are not authorized to work in the United States. For all employees, employers are required to complete an Employment Eligibility Verification form I-9 which requires the prospective employee to produce documentation that establishes identity and employment eligibility. For more information visit www.uscis.gov, or speak to your attorney. Each Contractor is solely responsible for properly completing Employment Eligibility Verifications for their own employees.

Contractor acknowledges represents and warrants that Contractor is aware of and understands IRCA, that Contractor is in compliance with IRCA, and that Contractor is not knowingly employing workers who are not authorized to work in the United States. Contractor agrees that Contractor will not employ any worker under this subcontract for whom Contractor has not completed and maintained I-9 verification. Contractor agrees that if Contractor acquires knowledge (constructive or otherwise, including receipt of a "no match" letter from Social Security Administration) indicating that one of Contractor's workers on this project may not be authorized to work in the United States, despite Contractor having conducted a facially valid I-9 verification, that Contractor will exercise due diligence as required by law to confirm authorization status and take appropriate action which may include termination of employment. Contractor represents and warrants that they will not subcontract to or utilize labor sources that it knows or has reason to know violate IRCA.

The provisions of this Article must be incorporated into any subcontract Contractor enters into in connection with the performance of the Work.

Labor to be Employed

ARTICLE XV. The Contractor shall not employ men, means, materials or equipment which may cause strikes, work stoppages or any disturbances by workers employed by the Contractor, Turner or other contractors or subcontractors on or in connection with the Work or the Project or the location thereof. The Contractor agrees that all disputes as to jurisdiction of trades shall be adjusted in accordance with any plan for the settlement of jurisdictional disputes which may be in effect either nationally or in the locality in which the Work is being done and that it shall be bound and abide by all such adjustments and settlements of jurisdictional disputes, provided that the provisions of this Article shall not be in violation of or in conflict with any provisions of law applicable to the settlement of such disputes. Should the Contractor fail to carry out or comply with any of the foregoing provisions, the Owner shall have the right, in addition to any other rights and remedies provided by this Agreement or the other Contract Documents or by law, after three (3) days written notice mailed or delivered to the last known address of the Contractor, to terminate this Agreement or any part thereof or the employment of the Contractor for all or any portion of the Work, and, for the purpose of completing the Work, to enter upon the Premises and take possession, in the same manner, to the same extent and upon the same terms and conditions as set forth in Article XI of this Agreement.

ARTICLE XVI. The Contractor for the Price herein provided, hereby accepts and assumes exclusive liability for and shall indemnify, protect and save harmless the Owner and Turner from and against the payment of:

1. All contributions, taxes or premiums (including interest and penalties thereon) which may be payable under the Unemployment Insurance Law of any State, Federal Social Security Act, Federal, State, County and/or Municipal Tax Withholding Laws, or any other law, measured upon the payroll of or required to be withheld from employees, by whomsoever employed, engaged in the Work to be performed and furnished under this Agreement.

2. All sales, use, personal property and other taxes (including interest and penalties thereon) required by any Federal, State, County, Municipal or other law to be paid or collected by the Contractor or any of its subcontractors or vendors or any other person or persons acting for, through or under it or any of them, by reason of the performance of the Work or the acquisition, ownership, furnishing or use of any materials, equipment, supplies, labor, services or other items for or in connection with the Work.

3. All pension, welfare, vacation, annuity and other union benefit contributions payable under or in connection with labor agreements with respect to all persons, by whomsoever employed, engaged in the Work to be performed and furnished under this Agreement.

In furtherance of, and in addition to the agreements, duties obligations and responsibilities of the Contractor with respect to the payment of sales, use, personal property and other taxes set forth in Articles IV and XVI of this Agreement, the Contractor agrees to reimburse and otherwise indemnify the Owner and Turner for any expenses, including legal fees and litigation arising from, or related to the Contractor's failure to pay any sales, use, personal property or other taxes based upon labor, services, materials, equipment or other items acquired, performed, furnished or used for or in connection with the Work.

Patents

ARTICLE XVII. The Contractor hereby agrees to indemnify, protect and save harmless Turner and the Owner from and against any and all liability, loss or damage and to reimburse Turner and the Owner for any expenses, including legal fees and disbursements, to which the Owner or Turner may be put because of claims or litigation on account of infringement or alleged infringement of any letters patent or patent rights by reason of the Work or materials, equipment or other items used by the Contractor in its performance.

Mechanics' Liens or Claims

ARTICLE XVIII. To the fullest extent permitted by law, Contractor for itself and for its subcontractors, laborers and materialmen and suppliers and all others directly or indirectly acting for, through or under it or any of them covenants and agrees that no liens or claims, whether a mechanics' lien or an attested account or otherwise, will be filed or maintained against the Project or Premises or any part thereof or any interests therein or any improvements thereon, or against any monies due or to become due from the Owner to the Contractor, for or on account of any work, labor, services, materials, supplies, equipment, or other items performed or furnished for or in connection with the Work, and the Contractor for itself and its subcontractors, laborers, and materialmen and suppliers and all others above mentioned does hereby expressly waive, release and relinquish all rights to file or maintain such liens and claims and agrees further that this waiver of the right to file or maintain such liens and claims shall be an independent covenant and shall apply as well to work, labor and services performed and materials, supplies, equipment and other items furnished under any change order or supplemental agreement for extra or additional work in connection with the Project as to the Original Work covered by this Agreement.

If any subcontractor, laborer, materialman or supplier of the Contractor or any other person directly or indirectly acting for, through or under it or any of them files or maintains a lien or claim, whether a mechanics' lien or an attested account or otherwise, a mechanic's lien or claim against the Project or Premises or any part thereof or any interests therein or any improvements thereon or against any monies due or to become due from the Owner to the Contractor, for or on account of any work, labor, services, materials, supplies, equipment or other items performed or furnished for or in connection with the Work or under any change order or supplemental agreement for extra or additional work in connection with the Project, the Contractor agrees to cause such liens and claims to be satisfied, removed or discharged at its own expense by bond, payment or otherwise within ten (10) days from the date of the filing thereof, and upon its failure to do so the Owner shall have the right, in addition to all other rights and remedies provided under this Agreement and the other Contract Documents or by law, to cause such liens or claims to be satisfied, removed or discharged by whatever means Owner chooses, at the entire cost and expense of the Contractor (such cost and expense to include legal fees and disbursements). The Contractor agrees to indemnify, protect and save harmless Turner and the Owner from and against any and all such liens and claims and actions brought or judgments rendered thereon, and from and against any and all loss, damages, liability, costs and expenses, including legal fees and disbursements, which Turner and/or the Owner may sustain or incur in connection therewith.

Assignment and Subletting

ARTICLE XIX. To the fullest extent permitted by law, Contractor agrees that it shall not assign, sell, transfer, delegate or encumber any rights, duties or obligations arising under this Agreement including, but not limited to, any right to receive payments hereunder, without the prior written consent of the Owner in its sole discretion and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments. In the event Contractor assigns, sells, encumbers or otherwise transfers its right to any monies due or to become due under this Agreement as security for any loan, financing or other indebtedness (hereafter “Assignment”), notification to the Owner of such Assignment must be sent by certified mail, return receipt requested, and the Assignment shall not be effective as against the Owner until the Owner provides its written consent to such Assignment. Contractor agrees that any such Assignment shall not relieve the Contractor of any of its agreements, duties, responsibilities or obligations under this Agreement and the other Contract Documents and shall not create a contractual relationship or a third party beneficiary relationship of any kind between the Owner and such assignee or transferee. Contractor further agrees that all of the Owner’s defenses and claims arising out of this Agreement with respect to such Assignment are reserved unless expressly waived in writing by a duly authorized corporate officer. Contractor hereby agrees to indemnify and hold harmless the Owner and Turner from and against any and all loss, cost, expense or damages the Owner or Turner has or may sustain or incur in connection with such Assignment

Termination for Convenience

ARTICLE XX. The Owner shall have the right at any time by written notice to the Contractor, to terminate this Agreement without cause and require the Contractor to cease work hereunder, in which case, provided the Contractor be not then in default, the Owner shall indemnify the Contractor against any damage directly resulting from such termination. In the event of such a termination for convenience, the Contractor shall be entitled to payment pursuant to the terms of the contract for all Work performed as of the date of termination, together with reasonable costs of demobilization and such other reasonable costs as may be encountered by the Contractor and directly attributable to such termination. However, the Contractor shall only be entitled to profit on that portion of the work actually performed and approved for payment to the date of termination together with retainages held upon payments made prior thereto. Contractor waives any claim for loss of anticipated profits in the event the Owner exercises this clause.

Guarantees

ARTICLE XXI. The Contractor hereby guarantees the Work to the full extent provided in the Plans, Specifications, General Conditions, Special Conditions and other Contract Documents.

The Contractor shall remove, replace and/or repair at its own expense and at the convenience of the Owner any faulty, defective or improper Work, materials or equipment discovered within one (1) year from the date of the acceptance of the Project as a whole by the Architect and the Owner or for such longer period as may be provided in the Plans,

Specifications, General Conditions, Special Conditions or other Contract Documents.

Without limiting the generality of the foregoing, the Contractor warrants to the Owner, the Architect and Turner, and each of them, that all materials and equipment furnished under this Agreement will be of first class quality and new, unless otherwise required or permitted by the other Contract Documents, that the Work performed pursuant to this Agreement will be free from defects and that the Work will strictly conform with the requirements of the Contract Documents. Work not confirming to such requirements, including substitutions not properly approved and authorized, shall be considered defective. All warranties contained in this Agreement and in the Contract Documents shall be in addition to and not in limitation of all other warranties or remedies required and/or arising pursuant to applicable law.

Accident Prevention

ARTICLE XXII. The Contractor agrees that the prevention of accidents to workmen engaged upon or in the vicinity of the Work is its responsibility. The Contractor agrees to comply with all Federal, State, Municipal and local laws, ordinances, rules, regulations, codes, standards, orders, notices and requirements concerning safety as shall be applicable to the Work, including, among others, the Federal Occupational Safety and Health Act of 1970, as amended, and all standards, rules, regulations and orders which have been or shall be adopted or issued thereunder, and with the safety standards established during the progress of the Work by Contractor, Turner or the Owner. When so ordered, the Contractor shall stop any part of the Work which the Owner or Turner deems unsafe until corrective measures satisfactory to the Owner and Turner have been taken, and the Contractor agrees that it shall not have nor make any claim for damages growing out of such stoppages. Should the Contractor neglect to take such corrective measures, the Owner or Turner may do so at the cost and expense of the Contractor and may deduct the cost thereof from any payments due or to become due to the Contractor.

Failure on the part of the Owner or Turner to stop unsafe practices shall in no way relieve the Contractor of its responsibility therefor.

This Contractor acknowledges the receipt of the Owner's or The Turner Corporation's policies on "Safety", "Drug and Alcohol Abuse and "Sexual Harassment". Subject to applicable law this Contractor further agrees to be bound to these policies as a part of the supplemental and special conditions to the contract for construction of the project.

In the event that hazardous substances of a type of which an employer is required by law to notify its employees are being used or stored on the site by the Contractor, the Contractor's subcontractor and anyone directly or indirectly employed or otherwise retained by them or either of them, the Contractor shall immediately provide written notice of the chemical composition thereof (including, without limitation, a copy of the applicable Material Safety Data Sheet) to the Owner in sufficient time to permit compliance with such laws by the Owner, other contractors and other employers on the site. In the event that the Contractor encounters on the site material reasonably believed to be hazardous substances (including, without limitation, asbestos or polychlorinated biphenyl) which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and immediately report the condition to the Owner in writing. Work in the affected area shall resume when such hazardous substances has been rendered harmless or removed as determined by the Owner in its sole and absolute discretion. To the extent of its responsibilities hereunder, Contractor does indemnify and save harmless the Owner and Turner from and against any and all loss, injury, claims, actions, proceedings, liability, damages, fines, penalties, cost and expenses, including legal fees and disbursements, caused or occasioned directly or indirectly by the Contractor in regard to such hazardous substances.

Liability for Damage and Personal Injury

ARTICLE XXIII. Throughout this Agreement, the "Indemnified Party (ies)" means Turner, the Owner, any party required to be indemnified pursuant to the General Contract, and any of their respective officers, agents, servants, or employees, and affiliates, parents and subsidiaries. Except as otherwise provided below, the Contractor hereby assumes the entire responsibility and liability for any and all damage or injury of any kind or nature whatsoever (including death resulting therefrom) to all persons, whether employees of the Contractor, any tier of the Contractor or otherwise, and to all property caused by, resulting from, arising out of or occurring in connection with the execution of the Work, or in preparation for the Work, or any extension, modification, or amendment to the Work by change order or otherwise. Should any claims for such damage or injury (including death resulting therefrom) be made or asserted, whether or not such claims are based upon an Indemnified Party's alleged active or passive negligence or participation in the wrong or upon any alleged breach of any statutory duty or obligation on the part of an Indemnified Party, the Contractor agrees to indemnify and save harmless the Indemnified Party from and against any and all such claims and further from and against any and all loss, cost, expense, liability, damage, penalties, fines or injury, including legal fees and disbursements, that the Indemnified Party may directly or indirectly sustain, suffer or incur as a result thereof. However, this Article shall not be construed in any way to require the Contractor, its agents, and its employees to indemnify the Indemnified Party for damages because of property damage or bodily injury caused by or resulting from the negligence of anyone other than the Contractor, its agents, employees, and/or other entities within the Contractor's control. When the Contractor has the obligation to indemnify the Indemnified Party, the Contractor agrees to and does hereby assume, on behalf of the Indemnified Party, the defense of any action at law or in equity which may be brought against the Indemnified Party upon or by reason of such claims and to pay on behalf of the Indemnified Party, upon demand, the amount of any judgment that may be entered against the Indemnified Party in any such action. In the event that any such claims, loss, cost, expense, liability, damage, penalties, fines or injury arise or are made, asserted or threatened against the Indemnified Party, Owner shall have the right to withhold from any payments due or to become due to the Contractor an amount sufficient in its judgment to protect and indemnify the Indemnified Party from and against any and all such claims, loss, cost, expense, liability, damage, penalties, fines or injury, including legal fees and disbursements, or Owner in its discretion may require the Contractor to furnish a surety bond satisfactory to Owner guaranteeing such protection, which bond shall be furnished by the Contractor within five (5) days after written demand has been made therefor.

In furtherance to but not in limitation of the indemnity provisions in this Agreement, Contractor hereby expressly and specifically agrees that its obligation to indemnify, defend and save harmless as provided in this Agreement shall not in any way be affected or diminished by any statutory or constitutional immunity it enjoys from suits by its own employees or from limitations of liability or recovery under worker's compensation laws.

IN THE EVENT THAT THE LAW OF THE STATE IN WHICH THE PROJECT IS LOCATED (OR OTHER APPLICABLE LAW) LIMITS THE INDEMNITY OBLIGATIONS OF THE CONTRACTOR, THEN THE INDEMNITY OBLIGATIONS OF THE CONTRACTOR SHALL BE ENFORCED TO THE FULLEST EXTENT PERMITTED BY

APPLICABLE LAW, AND THIS ARTICLE SHALL BE CONSTRUED TO CONFORM TO SUCH LAW.

Compensation and Liability Insurance

Before commencing the Work, the Contractor shall procure and maintain, at is own expense, until completion and final acceptance of the Work at least the following insurance from insurance companies satisfactory to Owner:

1. WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE in accordance with laws of the State in which the Work is situated.

2. COMPREHENSIVE GENERAL LIABILITY INSURANCE INCLUDING COMPLETED OPERATIONS, CONTRACTUAL LIABILITY INSURANCE AGAINST THE LIABILITY ASSUMED HEREINABOVE, and including INDEPENDENT CONTRACTORS LIABILITY INSURANCE if the Contractor sublets to another all or any portion of the Work, Personal Injury Liability, Broad Form Property Damage (including completed operations), and Explosion, Collapse and Underground Hazards, with the following minimum limits:

   $ **CDS** /Occurrence
   $ **CDS** Aggregate

3. COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE covering all owned, non-owned and hired automobiles used in connection with the Work, with the following minimum limits:

   Bodily Injury (including death) $ **CDS** combined single limit
   and Property Damage

Before commencing the Work, the Contractor shall furnish a certificate, satisfactory to Owner from each insurance company showing that the above insurance is in force, stating policy numbers, dates of expiration, and limits of liability thereunder, and further providing that the insurance will not be canceled or changed until the expiration of at least thirty (30) days after written notice of such cancellation or change has been mailed to and received by Owner. Turner, the Owner and other entities as may be reasonably requested shall be named as an additional insured under these policies of insurance. It is expressly agreed and understood by and between Contractor and Owner that the insurance afforded the additional insureds shall be primary insurance and that any other insurance carried by the Owner or Turner shall be excess of all other insurance carried by the Contractor and shall not contribute with the Contractor's insurance. Contractor further agrees to provide endorsements on its insurance policies which shall state the foregoing; however, Contractor's failure to provide such endorsement shall not affect Contractor's agreement hereunder.

If the Contractor fails to procure and maintain such insurance, the Owner shall have the right, but not the obligation, to procure and maintain the said insurance for and in the name of the Contractor and the Contractor shall pay the cost thereof and shall furnish all necessary information to make effective and maintain such insurance or at Owner's option, Owner may offset the cost incurred by Owner against amounts otherwise payable to Contractor hereunder.

Bonds

ARTICLE XXIV. The Contractor shall furnish to Owner a performance bond in the amount of $ **CDS** and a separate payment bond in the amount of $ **CDS** the form and contents of such bonds and the Surety or Sureties thereon to be satisfactory to Owner. Such bonds shall be furnished to Owner within ten (10) calendar days after Contractor has executed this Agreement or within such other time period agreed to by Owner in writing. In the event Contractor fails to furnish such bonds to Owner within the time period as hereinabove provided, such failure shall constitute a default under this Agreement in which event Owner shall have all of the rights and remedies provided in Article XI hereof with respect to default on the part of Contractor including, without limitation, the right to terminate this Agreement.

Without limiting the responsibilities of Contractor and its Surety under the terms of this Agreement, Contractor and its Surety hereby agree to promptly pay all lawful claims of Contractors, materialmen, laborers, persons, firms or corporations for labor or services performed or materials, supplies, machinery equipment, rentals, fuels, oils, tools, appliances, insurance and other items furnished, used or consumed in connection with the prosecution of the Work provided for in said Contract and any and all modifications thereof, and shall indemnify and save harmless the Owner and Turner of and from all liability loss, damage and expense, including interest, costs and attorney fees, which the Owner or Turner and/or their Sureties may sustain by reason of Contractor's or its Surety's failure to do so.

Severability

ARTICLE XXV. In the event that any provision or any part of a provision of this Agreement shall be finally determined to be superseded, invalid, illegal or otherwise unenforceable pursuant to applicable laws by an authority having jurisdiction, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provisions or parts of provisions of this Agreement, which shall remain in full force and effect as if the unenforceable provision or part were deleted.

Entire Agreement

ARTICLE XXVI. This Agreement constitutes the entire agreement between the parties hereto. No oral representations or other agreements have been made by the Owner or Turner except as stated in the Agreement. This Agreement may not be changed in any way except as herein provided, and no term or provision hereof may be waived by the Owner except in writing signed by its duly authorized officer or agent. The marginal descriptions of any term or provision of this Agreement are for convenience only and shall not be deemed to limit, restrict or alter the content, meaning or effect thereof.

The said parties, for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of all of the terms and provisions herein contained.

In Witness Whereof, the parties to these presents have hereunto set their hands as of the day and year

first above written.

Contractor		Owner	
CDS		CDS	
BY:	CDS	BY:	CDS
TITLE:	CDS	TITLE:	CDS
Witness:	CDS	Witness:	CDS

Contractor's Federal Employers Identification Number (FEIN) CDS

Contractor's State Unemployment Ins. No. CDS

(Insert State and Register No. for State in which the Work is to be performed)

Contractor's License No. CDS

(Insert License No., if any, for State or locality in which the Work is to be performed)

Contractor's State Sales Tax Registration No. CDS

01-339 (Back)
(Rev.4-13/8)

Texas Sales and Use Tax Exemption Certification

This certificate does not require a number to be valid.

Name of purchaser, firm or agency	
Fannin County	
Address *(Street & number, P.O. Box or Route number)*	Phone *(Area code and number)*
101 E Sam Rayburn Dr Ste 303	**903-583-7451**
City, State, ZIP code	
Bonham, TX 75418	

I, the purchaser named above, claim an exemption from payment of sales and use taxes (for the purchase of taxable items described below or on the attached order or invoice) from:

Seller: _____

Street address: _____ City, State, ZIP code: _____

Description of items to be purchased or on the attached order or invoice:

for services and materials used in the restoration of the Fannin County Courthouse project # 1737

Purchaser claims this exemption for the following reason:

Counties are exempt from Texas sales tax because the County is a government entity and a political subdivision of the state.

I understand that I will be liable for payment of all state and local sales or use taxes which may become due for failure to comply with the provisions of the Tax Code and/or all applicable law.

I understand that it is a criminal offense to give an exemption certificate to the seller for taxable items that I know, at the time of purchase, will be used in a manner other than that expressed in this certificate, and depending on the amount of tax evaded, the offense may range from a Class C misdemeanor to a felony of the second degree.

sign here ▶ Purchaser	Title	Date
Alicia R Whipple	Fannin County Auditor	2/8/19

NOTE: This certificate cannot be issued for the purchase, lease, or rental of a motor vehicle.

THIS CERTIFICATE DOES NOT REQUIRE A NUMBER TO BE VALID.

Sales and Use Tax "Exemption Numbers" or "Tax Exempt" Numbers do not exist.

This certificate should be furnished to the supplier.
Do <u>not</u> send the completed certificate to the Comptroller of Public Accounts.

Fannin County

Fannin County Courthouse Restoration

SAFETY PROGRAM

TABLE OF CONTENTS *(Ctrl + Click to follow link)*

Fannin County

CONTRACTOR SAFETY AGREEMENT

I, the undersigned contractor have read the attached **PROJECT SAFETY PROGRAM** for Fannin County Courthouse Restoration Project. In accordance with this safety program, our company, our trade partners at all tiers, our vendors, and our trade partner vendors agree to abide by the policies and procedures contained within this Project Safety program and any future addendum's, Owner's Environmental Safety and Health Program, Federal OSHA Regulations, federally recognized standards and codes, and all applicable state and local laws.

In conjunction with reviewing this Project Safety Program, I have provided all direct tiered trade partners under our contract a copy of the Project Safety Program and submitted in writing and/or electronically all of the requested safety material and information found within this program. See Attachments.

Please sign and return this Contractor Safety Agreement acknowledgement page prior to initiating work on the project.

_____

Name of Contractor, Trade Partner

_____ _____

Name of Officer (*please print*)

Name of on Site Contractor Project Manager, Superintendent, or Foreman *(please print)*

_____ _____

Officer's Title (*please print*)

Title *(please print)*

_____ _____

Officer's Signature

Project Manager, Superintendent, or Foreman Signature

_____ _____

Date Date

EMERGENCY CONTACT INFORMATION

Project Address: 101 E. Sam Rayburn Drive, Bonham, Texas 75418	
Minor Injuries and Drug Testing: **US Health Works** 1837 W. Frankford Road Suite 116 Carrollton, TX 75007 **FC Background** 2600 North Stemmons Freeway Suite 162 Dallas TX 75207	**U.S. Health works** Days: Mon - Fri Hours: 8:00 AM to 5:00 PM (972) 236-1941 **FC Background** Days: Mon - Fri Hours: 6:00 AM to 6:00 PM (214) 951-7499
Emergencies / After Hours: TMC Bonham Hospital 504 Lipscomb Boulevard Bonham, TX 75418	Hours: 24 hours Phone: (903)-583-8585
OSHA – Dallas Fort Worth Area Office 1100 East Campbell Road Suite 250 Richardson, TX 75081	Local: (972)-952-1330 FAX: (972)-952-1338
Owner 10100 North Central Expressway, Suite 600 Dallas, TX 75231	Office: (214)
Project Superintendent: Ben O'Keefe	Cell: (469) 243-6230 Email: bokeefe@.com
Project Safety Manger: James Reinhardt	Cell: (469) 520-3479 Email: jreinhardt@tcco.com
Sr. Project Manager: Robert Hirsch	Cell: (214) 412-7599 Email: rhirsch@.com
Project Executive: Mike Huechteman	Cell: (972) 670-3959 Email: mhuechteman@tcco.com
Project Manager: Tony Jarecki	Cell: (214) 604-7847 Email: tjarecki@tcc.com
Project Engineer: Linda Stern	Cell: (713) 539-0449 Email: lstern@tcco.com

SAFETY POLICY

As a leader in the construction industry, Turner Construction is committed to jobsite safety through the guiding principles of **Building L.I.F.E.** (Living Injury Free Everyday). Below are the guiding principles to Building L.I.F.E on this project:

- Injuries are preventable
- Perform a task only if it is safe
- Working safely is a condition of employment
- Practice and expect safe behavior everywhere, everyday

Through these guiding principles it is our intention to ensure that the safest possible working conditions are provided for all workers and visitors. This will be achieved through the implementation of this safety program and all contractors and trade partner safety programs. By promoting jobsite safety, incidents that increase cost to the project and suffering to the workers will be eliminated / reduced. It is our belief that with complete cooperation and compliance from all contractors and trade partner workers, the ultimate goal of "**ZERO ACCIDENTS**" can be achieved.

In achieving our desired goal of "**ZERO ACCIDENTS**", Fannin County and Turner Construction, in conjunction with all contractors and trade partners, will work diligently in the implementation of this safety program. In addressing this goal, this safety program will be implemented as warranted by the Owner. Fannin County has the authority to waive any specific safety program requirement(s), however, any such changes must be made in writing.

Contractors and trade partners are solely responsible for the safety of their workers and / or visitors as mandated by the rules and regulations of this safety program, their corporate safety program, OSHA 29 CFR 1926 Safety Standards for the Construction Industry, and all local, state, and federally recognized standards and codes

Project Managers, Superintendents, Assistant/Area Superintendents, Safety Coordinators, and Foreman are also recognized as the key individuals to the successful implementation and safety management of this safety program. It is the responsibility of each individual to manage safety on the jobsite by ensuring their workers are properly trained and equipped to perform their work task in a safe manner.

All workers also have a safety responsibility to protect themselves, their fellow workers, and visitors to the jobsite by maintaining safe work areas and performing all work tasks in a safe manner. Workers are also required and empowered to immediately stop and report all unsafe work practices and conditions which could result in injury or property damage to management.

BUILDING L.I.F.E (LIVING INJURY FREE EVERYDAY)

Objective:
Adhere to the Environmental, Health and Safety policies and procedures. Fannin County's objective is to provide the best service while maintaining a safe and healthy work environment.

Purpose:
The Purpose of the Injury Free Environment (IFE) program is to develop a project workforce (both management and craft personnel) dedicated and personally committed to eliminating all occupational injuries and incidents.

Scope:
The IFE program implementation is required for all projects. It is an integral element in Fannin County's philosophy and program execution.

***See attached (Corporate Environmental Safety and Health Program (CEHSP) pg.6)*

SAFETY GOALS

Scope and Application

In order to prevent incidents and injuries that may result from the activities of independent contractors, Fannin County has set forth safety goals for which the project will maintain. The result will be minimal disruption to the project construction activities and will assist in monitoring the success of the program by maintaining statistics involving Trade partner accident/incidents. The goals apply to the project as a whole but each individual Trade partner shall establish their own company safety goals.

Definitions

- Lost Time Incident - Incident that involves an employee receiving a work related injury that does not allow the employee to return to work (based on the restriction of work by the attending physician).

- OSHA Recordable Incident - Incident that involves a Trade partner employee receiving a work related injury that results in loss of consciousness, restriction of work or motion, transfer to another job, or requiring medical treatment considered beyond first aid.

- Lost Workday – One or more days away from work beginning with the full day after the incident. Do not count the day on which the incident occurred. If an employee returns to work at any time the day following the incident, it is not a lost time incident.

- Near Miss - Any situation that could have reasonably caused serious injury, illness, fire, property damage or any other serious hazard as defined by the owner.

- Light Duty - The light duty program encourages the return to work of employees who receive limited work restrictions placed on them by the employer or by their attending physician.

Procedures

Trade partner employees must immediately report all incidents to their supervisor at the time of occurrence. It is then the Trade partner's responsibility to immediately report all Incidents to Fannin County and its agent. Complete incident investigation reports shall be submitted within 8 hours of the incident occurrence to Owner project management. Monthly reports tracking Lost Time injuries, Lost Workdays, OSHA Recordable injuries, and Fatalities will be developed.

Our reason for reducing injuries and accidents on Fannin County projects is for the sole purpose to reduce the needless pain and suffering to our fellow workers.

Project Safety Goals are as follows:

- "Zero Accidents"
- OSHA Recordable Incident Rate – 1.31
- Lost Workday Incident Rate – 0.0
- Fatality Rate – 0.0

CONTRACTOR SAFETY QUALIFICATIONS

Scope and Application

The goal of this process is to evaluate a Trade partner's historical statistical safety data and current written safety programs in order to indicate to Fannin County the level of safety that can be expected from a Trade partner if hired. Safety qualification applies to all Trade partners being considered to perform construction activities. The goal of Fannin County is to evaluate contractors and trade partners written safety programs, statistical safety data, and current safety activities prior to issuing contracts and initiating work on Fannin County Courthouse Restoration Project. The management team shall evaluate the information submitted by the Trade partners. All Trade partners are responsible for collecting and evaluating the safety information of their Trade partners, and must submit it to Fannin County management at *least two weeks prior to the start of work*.

The following terms are utilized in the qualification process:

- Experience Modification Rate (EMR) – This rating is issued by the Trade partner's worker compensation carrier; it is determined / influenced by the number, costs, and severity of Incidents.
    - All contractors and trade partners agree to subcontract work only to trade partners (all tiers) with an Experience Modification Factor of 1.0 or less.
- Lost Time Incident Rate – The total number of lost time injuries and illnesses that occurred during the year divided by the number of total man-hours worked multiplied by 200,000.
- OSHA Recordable Incident Rate – The total number of recordable injuries and illnesses that occurred during the year divided by the number of total man-hours worked multiplied by 200,000.

Procedures

Before considering a Trade partner for work, Fannin County shall request the Trade partner to complete the *Owner Pre-qualification* Form and submit it along with any other requested paperwork, and a copy of the Trade partner's written safety program. *The site-specific safety program shall be submitted when the bid is awarded.*

Fannin County will review the submitted information based upon criteria**.** If the Trade partner's data is deemed acceptable, the Trade partner can be considered for work. If the Trade partner's data is not acceptable, Fannin County may:

1. Use an alternative contractor or trade partner who meets required safety standards.

2. Contractor or trade partner will develop a "Project Specific Safety Action Plan". All alternative options must be approved by the Business Unit Safety Director.

3. Justify to Top Management (i.e. new technology, emergency situation, past onsite experience, positive trends in Incident rates, etc.) that despite Trade partner's safety record, they should be utilized.

(CEHSP pg.10)

SAFETY RESPONSIBILITIES

Scope and Application

The assignment of a Safety Manager, insurance loss prevention, or state safety consultation personnel to monitor jobsite safety responsibilities is not intended to relieve the contractor, trade partner, or tiered-trade partner of their responsibilities for providing a safe and healthy work environment for their workers. It is the sole responsibility of all contractor, trade partner, and tiered-trade partners on the project to comply with all federal, state, and local safety and

health guidelines and requirements, and the provisions within this governing Site Safety Program. This program is to supplement and assist in their efforts for such compliance.

This section is to confirm the contractors and trade partners' commitment of safety by establishing and assigning specific safety and health responsibilities to their representatives by implementing and maintaining the owner's Safety Program and/or Policies.

Procedures

During the evaluation of job performance of the Trade partners, the fulfillment of the Trade partner's safety program responsibilities will be given consideration as a performance standard.

The Trade Partner Safety Coordinator or individuals designated by the Trade partners' owner will meet every week to review the success of the implementation of the Trade partner safety program and identify areas of concern in a Safety Committee Team Meeting. The "designated Trade partner safety person" shall be at the Trade partner's management level and have a minimum of OSHA 30-hour training.

Trade Partner Contractual Requirements

Contractual requirements of this project require each prime contractor and trade partner to provide the Owner with a copy of a written Project Specific Safety Plan. This plan must contain, at a minimum, the following requirements:

- The name of the management person who is responsible for the implementation of the plan and what roles this person plays during the project.
- How each will conduct their weekly toolbox talks.
- Provisions for safety inspections of the job site by supervision.
- Process for completing job hazard analysis (JHA) for all critical tasks and processes for developing detailed work plans/procedures for the successful accomplishment of these identified critical tasks. To be done **Daily**.
- How the job trailers or gang boxes will be equipped to meet OSHA standards.
- The method that will be used to ensure that all OSHA required training and the Project Safety Program requirements have been communicated to craft persons.
- Company policy on safety and substance abuse.
- Incident reporting, first aid, and emergency procedures. Details for the management of work related injuries.
- Describe the company safety recognition/incentive policy (if any) that will be in effect for this project.

- How their program will mesh with the Project Safety Program.
- The procedure for ensuring that the previously stated information will be implemented and enforced for workers, supervision, and trade partners.
- A list of all competent person(s) overseeing those tasks in which OSHA requires such person(s) or that have been requested by Owner.
- Review of site specific fall protection plan and retrieval plans.
- Collect, review, and submit sub-tiers safety material and contact information outlined on the Pre-Construction Safety Checklist form to the Safety Manager two weeks prior to starting work on the project.
- Monitor and track Trade Partner Safety Orientations to ensure all sub-tiers are training new workers as they come on site.
- Conduct all necessary safety and health training as required by CFR 1926 and this Site Safety Program;
- Maintain a master or central file (as warranted – not mandatory) for safety and health related documentation on the jobsite. Files shall be maintained in such a manner that distinguishes each contractor and their tiered-trade partners from other subs & tiered-trade partners. Recommended file information is below:
    - Written Safety & Loss Prevention Program;
    - Hazard Communication Plan and site specific SDS;
    - Site specific Crisis Management Plan;
    - Site Specific Hazardous Materials Management Plan;
    - Specific Job Hazard worker training documentation;
    - Equipment inspection reports;
    - Crane inspection reports;
    - Orientation training records;
    - Incident investigation reports;
    - Daily Safety Pre-Task Planning reports
    - Designated Competent Person qualifications;
    - Industrial Hygiene monitoring results for Noise & Air Quality;
- Conduct the “Trade Partner Jobsite Safety Orientation” by training all workers in the “Site Specific Fall Protection and Rescue Plan” and “Job Hazard Analysis” prior to assigning work task to the new worker. All training will be documented on the Trade Partner Safety Orientation Sign-In form;
- Assists the Safety Manager in regards to their company and their trade partners’ safety activities;
- Disciplines and takes corrective actions when directed by the Safety Manager, or when conditions warrant such actions;

- The inclusion of a light duty/return to work program;
- Ensures their company's workers and trade partners workers follow all aspects of this program;
- Make daily safety inspections of the job site and make necessary immediate corrective action to eliminate unsafe acts and conditions;
- Maintain the OSHA 300 Injury and Illness Log Form Report;
- Review accident/incident reports and initiate immediate corrective action;
- Provide job foreman with appropriate safety material relevant to jobsite work activities for use in conducting weekly "tool box" safety meetings;
- Attend foreman "tool box" safety meetings and evaluate their effectiveness;
- Assist in the preparation and review of the incident investigation and reporting procedures;
- Encourage programs for recognition of individual worker's safety efforts and their contribution toward improved work procedures;
- Be responsible for the control and availability of the necessary safety equipment, including worker's personal protective equipment;
- Coordinate safety activities with all contractors, trade partners, Safety Manager, and the Owners Representatives;
- Attend weekly safety coordinators and claims meetings for safety and health training, discussing safety issues, reviewing claims, accidents, incidents, and current work activities, etc.;
- Attend the Pre-construction meeting
- Conduct and document Daily Safety Pre-Task Planning meetings with all workers before the start of each work shift;

Trade partners may utilize and abide by their prime contractors written Site Specific Safety Plan. However, Fannin County requires confirmation in writing stating from the trade partners that they will abide by their prime's programs. In so doing this, it is critical that the primes acknowledge this understanding and ensuring Fannin County that their subs will abide and follow by their programs, as long as they meet or exceed Owner's Safety Program. This in no way alleviates the Trade partners from having a "company" safety program of their own. It just applies to the "site-specific" program.

Competent Persons

All contractors and trade partners on the project will designate a "Competent Person" as warranted by OSHA 29 CFR 1926 Safety Standards for the Construction Industry. If there is a

change in competent persons, this form and qualifications must be updated and resubmitted to Jobsite Management prior to the new competent person accessing the jobsite.

Qualifications should consist of training certifications, OSHA Certifications, classroom training, etc. in conjunction with a detailed resume of his/her work experience for the competent person designation.

A "Competent Person" is defined as, "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 authority to take prompt corrective measures to eliminate them". This "Competent Person" will also be the primary contact person for The Owner on safety and compliance related issues.

Competent Persons will include, but not limited to the following: Fall Protection, Scaffolding, Cranes / Rigging, Ladders, Tilt Panel Operations, Electrical, Confine Space Entry, Trenching / Excavating, Steel Erection, Respiratory Protection, Demolition, Welding / Torch Cutting, etc.

TRADE PARTNER SAFETY REPRESENTATIVE AND FOREMAN

Scope and Application

All trade partners 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 Owner's Safety Update Training every two years.

- If the trade partner will exceed an average of 25 employees or more on site, including sub tiers, for more than two weeks, they must provide a full time Safety Manager for the duration of the project while the workforce exceeds the threshold above, who:
    1. Is qualified to recognize safety hazards; and
    2. Has the authority to take corrective action;
    3. Possesses current certifications in first aid, CPR and AED;
    4. Possesses a recent OSHA 30-hour card (within the last three years);
    5. Has an academic degree in safety, CSP or CHST designation, OR has a minimum three (3) years of prior work history as a designated construction Safety Representative. Fannin County reserves the right to approve or deny the trade partner's fulltime safety representatives for the project.
- Once a contractor has three Foremen, one will be designated as a non-working Foreman with their primary responsibility of acting as the trade partner safety representative and will not be working with their tools. Additional specific requirements may be identified in a Contractor's scope of work. Generally, if there is a

conflict between this document and the scope of work the most stringent will take precedence. The Safety Manager reserves the right to evaluate and determine what is best for the safety of the project.

1) At a minimum the Trade Partner Safety Representative will be required to:
    a. Ensure their employees attend jobsite orientation before start of work on the project.
    b. Take the lead in recognition and abatement of hazardous situations.
    c. Conduct a daily "Safety Huddle" prior to the start of each shift and submit a Daily Pre Task Plan (PTP) Report each morning prior to the start of work.
    d. Perform and document weekly safety inspections (1 per week at minimum).
    e. Conduct at least one monthly safety tour with your Safety Director and submit findings to Owner.
    f. Ensure that Competent Persons submit, at a minimum, the below listed safety inspections at the designated frequency to the 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.
Excavation Permit	Before Each Shift
Tools Box Talks & Report	Weekly

    g. Conduct and document toolbox meetings on a weekly basis.
    h. Issue minutes of the weekly toolbox meeting to Owner.
    i. Effectively utilize and train employees in pre-planning, recognition, and remediation of hazards.
    j. Each trade partner, regardless of tier, is to submit in writing toolbox meeting minutes containing the following:
        i. Name of Trade Partner and date.
        ii. Name of Trade Partner Safety Representative.
        iii. Name of employees attending.
        iv. Name of employees onsite not attending.
        v. Number of employees on their payroll that day.
        vi. Subjects discussed.
    k. Attend project safety meetings.
    l. Enforce disciplinary measures when need arises for their employees.

m. Each trade partner is responsible for all of their trade partners and suppliers, regardless of tier, compliance with the Project Safety Program.

2) Employees / Employers
   (a) Perform their work to prevent accidents to themselves, fellow workers, and property.
   (b) Use Personnel Protection Equipment as required, to meet all Fannin County, federal, state and local requirements.
   (c) Alert supervisors to dangerous situations.
   (d) Cooperate with principles of the Project Site Specific Safety Program.
   (e) Utilize all tools and equipment in a safe manner and in accordance with manufacturer's recommendations.
   (f) Complete project safety orientation before starting work on the jobsite.
   (g) Acknowledge and abide by the project enforcement rules.

3) Visitors
   Any person not directly involved with the onsite construction of this Project must not enter the site without first going to Owner's job office, signing a visitor's release, obtaining a hard hat and safety glasses which is to be returned to Fannin County. All visitors must adhere to Owner Project Safety Program and be 18 years of age or older.

Other Responsibilities

- Implements and enforces Owner's **ZERO TOLERANCE POLICY** for project safety program violations. Work closely with project management to ensure proper communication of actions taken.
- Must have access to equipment that will allow for electronic documentation (i.e.: Smartphone, iPad, tablet, scanner, email, computer, etc.).
- Organize a new-hire Project Tour.
- Attend bi-weekly Project Safety Walks with Owner Safety, relating to safety regulations to ensure proper compliance.
- Maintain a directory of on-site employees with their acquired trainings, certifications, and disciplinary actions.
- Provide an investigation and a root cause analysis for all safety violations.
- Record, notify and prepare a report of any violations or unsafe practices for immediate correction actions.
- Implement the corrective action plans and re-training as warranted to prevent reoccurring safety violations.
- Stop at once any violation or unsafe practice where there is imminent danger to life or property. Report immediately to the Safety Manager.
- Monitor compliance in testing and recording all potential unsafe environmental conditions such as air quality, noise levels and chemical exposures. Require written documentation of those test results and file.

- Recognize workers that promote the Owner's Building L.I.F.E. (Living Injury Free Everyday) principles and excel in project safety.
- Perform LEAN Safety and Ergonomic Reviews.
- Assist Safety Manager in establishing and implementing proper fire prevention, evacuation, and fire control procedures.
- If directed, establish and maintain a Safety Awards program for the project that will award employees and/or trade partner that excels in safety excellence.
- Follow all Fannin County guidelines relating to the implementation of the Drug Abuse Program. No worker shall be allowed to perform his or her duties until such time that a negative report has been obtained from the Trade partner within Owner's policy guidelines.
- In addition to the above requirements, the Safety Manager may add other duties should the need arise.

SAFETY PRE-CONSTRUCTION MEETINGS

Pre-Construction Safety Checklist

Contractual requirements of this project require each contractor and trade partner to provide Fannin County a completed "Pre-Construction Safety Checklist" form and the below attachments **3 weeks** prior to the start of work.

1. Project Specific Safety Program
2. Hazard Communication Program and **Jobsite Specific** SDS's (< 5 years)
3. Site Specific Fall Protection and Rescue Plan
4. Job Hazard Analysis (JHA) for all primary and critical work tasks
5. Procedures for complying with the following programs:
    a. Ladders Last Program
    b. Nothing Hits the Ground
6. Procedures for complying with the Trade Partner Jobsite Safety Orientation
7. Job Hazard Analysis
8. Site Specific Fall Protection and Rescue Plan
9. Cranes
    a. Annual Inspection Certification
    b. Third Party Annual Inspection to be done on-site prior to the crane's use.
    c. If Crane will be onsite for less than 24 hours the following will apply to the third party inspection.
        i. Third Party Annual inspection shall be dated no more than 90 days from the time it arrives on site.
    d. Crane operators, Riggers, Signal Persons, and Assembly/Disassembly
    e. Director Qualifications
10. A signed copy of the "Competent Persons Acknowledgement" form with the name and **qualifications** of the OSHA required competent persons for scaffolding,

trenching/excavating, fall protection, ladders, rigging, etc. working "Onsite" on this project – See attachments

11. A signed copy of the "Contractor Safety Agreement" form
12. "Trade partners Safety Pre-Qualification" form and documents – Upon Request Only
13. Name and qualifications of the "Onsite" Safety Coordinator
14. Name and cell phone number of the "Onsite" Foreman / Superintendent
15. Name, cell phone number, and email address for the "Offsite" Project Manager
16. Name of the "Onsite" OSHA 30 Hour Certified Worker
17. Name of the "Onsite" FA / CPR Certified Worker
18. Name, cell phone number, and email address for the Safety Director
19. Name, phone / fax number, and email address of the WC Coordinator
20. Name, phone number, and email address of the person to receive SafetyNet Reports

Pre-Construction Meetings

Prior to the start of work on the project, contractors along with their sub-tiers will meet with the Safety Manager or another Owner representative to review insurance and safety requirements for the project. Attendance at the meeting should include the contractors and sub-tiers onsite and offsite field / office management staff, safety director, and their designated safety coordinator.

Note: The completed "Pre-Construction Safety Checklist" and mandated safety attachments will be provided to Owner's Safety Manager for review prior to attending the Pre-Construction Safety Meeting.

Owner's Safety Team has developed trade specific Preconstruction Meeting Agenda's for all trades. The following is a list of required preconstruction meetings to be held.

1. Demolition
2. Earthwork
3. Chemical Injection (Soil Stabilization)
4. Utility Installation
5. Crane Activities
6. Pier Drilling
7. Concrete (Flatwork, Structural, Vertical, Precast)
8. Mechanical and Plumbing
9. Electrical (Specific meeting held for any Electrical Shut Down)
10. Waterproofing
11. Steel Erection (Fabricator and Erector)
12. Tilt Wall Erection
13. Drywall and Framing (Interior and Exterior)
14. Fireproofing

15. Fire Sprinkler
16. Masonry
17. Roofing
18. Glaziers
19. Stucco
20. Elevators
21. Interior Finishes (Paint, Millwork, Flooring, Specialties)
22. Controls and Balancing
23. Landscaping
24. Traffic Control

All pre-construction meetings to be held at least one (1) week prior to the start of work. This list is not inclusive and specialized pre-construction meetings shall be held on as needed basis.

SAFETY MEETINGS AND TRAINING

Scope and Application

With Fannin County, designated contractor and trade partner safety coordinators managing safety and potential exposures, jobsite hazards can be eliminated and/or minimized to create a safe and healthy work environment. This environment will further be enhanced through safety meetings, training, and education of workers assigned to this project. This will include items contained in, but not limited to, Owner Project Safety Program, OSHA 29 CFR 1926 Standards, and pertinent OSHA 29 CFR 1910 Standards.

Contractors and trade partners are solely responsible for all federal and/or state required safety training and certification of their personnel on this project.

All Contractors and trade partners are required to comply with the following meeting, training, and education program requirements. Contractors and trade partners with non-English speaking work forces are also responsible for providing an interpreter for all training sessions.

Daily Pre-Operation Stand Downs (Stretch and Flex)

Contractors and trade partners are required to participate in "Daily Pre-Operation Stand Downs" with all workers at the beginning of each work shift to discuss safety and upcoming daily work activities for the site (i.e.: site logistics, access/egress changes, high risk activities, congested areas, upcoming events, etc..) and to complete Stretch and Flex exercises. These are held by Owner Safety at 7AM Monday – Friday.

Monthly Safety Stand Downs

Contractors and trade partners are required to participate in "Monthly Safety Stand Downs" with all workers in order to discuss a specific safety topic in detail.

Daily Safety Pre-task Planning Meetings

Contractors and trade partners are required to conduct "Daily Safety Pre-Task Planning" meetings with all workers at the beginning of each work shift to discuss safety and upcoming daily work activities (i.e.: specific work task, equipment to be utilized, hazards associated with the work tasks, safety procedures, etc.).

All trade partners will submit the "Daily Safety Pre-Task Planning" meeting form the day before the meeting to their respective Owner Superintendent / Engineer for review and sign off.

All meetings will be documented on the "Daily Safety Pre-Task Planning" meeting form and submitted **DAILY**, in the morning, to the Safety Manager. See attachments.

The original "Daily Safety Pre-Task Planning" form with worker's signatures must be submitted.

Weekly "Toolbox Safety" Meetings

Contractors and trade partners will conduct Weekly "Toolbox Safety" Meetings at the jobsite for all workers to increase safety awareness on this project. The safety topics for these meetings must relate to the work that is underway or immediately coming up.

Every worker that attends these weekly toolbox safety meetings will sign their signature documenting attendance.

A copy of the weekly toolbox safety meeting minutes with signatures will be provided to the Safety Manager within 1 day (weekly) of conducting the meeting.

Trade partner's workers may attend the contractor's weekly toolbox safety meeting if a separate list of signatures identifying the trade partner workers is maintained.

Safety Pre-Planning Meetings

All contractors and trade partners will be responsible for participating in a formal "Safety Pre-Planning Meeting" prior to the start of all high-risk work activities. Prior to this meeting, contractors and trade partners will develop and have available a formal "Job Hazard Analysis" form addressing all primary work activities, exposures associated with these work activities, and safety policies and procedures to address the exposures. For additional details, please see Job Hazard Analysis.

Contractors and trade partners are responsible and accountable for contacting Owner representatives, Safety Manager, and arranging a date and time for the meeting.

All Safety Pre-Planning Meetings will be documented and maintained on file.

Attendance at the meetings should include the contractor and trade partner Superintendent, Foreman, and Safety Coordinator, Owner's Superintendent, Assistant Superintendent, and/or Field Engineer, and Owners Safety Manager.

Stand Downs (Owner/OSHA)

A Safety Stand Down focusing on safety related topics will be presented in conjunction with a "Daily Pre-Operation Stand Downs" to review jobsite exposures and hazards. Therefore, all trade partners' workers will be required to attend and/or participate in the stand down(s).

OSHA 30 Hour Training

As stipulated in the contract, all contractors and trade partners will have onsite full time workers who are OSHA Certified by completing the OSHA 30-hour training program. If training has not been completed, then contractors and trade partner's worker(s) must be enrolled and work towards completion of the training program within 3 months' execution of the contractor and trade partners contract. Upon completion, an OSHA refresher course must be completed every 3 years to maintain certification.

Outside OSHA 30-hour training programs and certifications will be accepted if approved by the Safety Manager. However, training and certifications must be less than 3 years old. If older than 3 years, then retraining and recertification is required.

Owner Safety Orientations

Contractors and trade partners are responsible for ensuring that all workers assigned to this project attend the jobsite safety orientation provided by Safety Manager. No workers will be permitted to work onsite until the safety orientation has been successfully completed.

All personnel (delivery, maintenance, owner representatives, vendors, inspectors, management, etc.) needing access to the site must attend the site orientation if all of the following apply:

1. IF they have to access the site to perform work.
2. IF they are entering the building, not just delivering to the dock or material hoist.
3. IF they are onsite frequently (once or more times a month).

The jobsite safety orientation program will contain the following:

A. Safety Orientation Sign-In Form – See attachments
B. Safety Orientation Policies and Procedures Form – See attachments
C. Substance Abuse Drug Testing Results
   - Workers will provide a copy of drug testing results upon arrival at the orientation to Owner

Note: Policies and procedures reviewed at the safety orientation may be expanded / modified as warranted.

(CEHSP pg.42)

Trade Partner Jobsite Safety Orientation

A site-specific new hire safety orientation shall be conducted prior to allowing any workers access to the field. Trade Partner Jobsite Safety Orientation must be approved by the Safety Manager.

No Orientation shall be provided for any worker until such time that it has been confirmed that the individual has successfully completed Trade Partner Drug Testing and/or provide documentation of a clear drug screen conducted within the previous 12 months.

Additional OSHA Construction Standards that require specific training include, but are not limited to:

- Hazard Communication Training - 29 CFR 1926.59.
- Stairway and Ladder Safety Training - 29 CFR 1926.1050.
- Fall Protection Training - 29 CFR 1926. 503
- Personal Protective Equipment - 29 CFR 1926.95
- Scaffold Training - 29 CFR 1926.450
- Forklift Training – 1910.178 (General Industry/Construction)
- Arc Flash and NFPA 70E
- Job Hazard Analysis' and Pre-Task Plan Training
- Site Specific Fall Protection and Rescue Plan
- Hazard Recognition and Mitigation Procedures
- Incident and Injury Reporting
- Project Tour

The orientation will be maintained electronically and will include all Job Hazard Analysis, the Site Specific Fall Protection and Rescue Plan, and documentation of training. Documentation will be available upon request. Prior to workers coming on site, trade partner must ensure workers are trained in the above standards and any other State, Federal, Local, or owner required training. These records should be reviewed with Owner's on site management and a copy provided to the Safety Manager.

(CEHSP pg.69)

NON-COMPLIANCE WITH SAFETY POLICIES

Scope and Application

In an effort to ensure compliance to this program and all other established OSHA standards, Fannin County hereby implements this procedure of non-compliance to all Contractors working on this project. This is established to promote safety and eliminate offenders and repeat offenders, and may lead up to contract termination with a Contractor.

This program may be used or may be superseded with more severe discipline based on the degree of the infraction(s). It is designed to hold contractors and / or trade partners responsible and accountable for safety violations committed by their workforces. In any case, Fannin County has sole authority in what type of discipline is issued up to and including removal from the project, in conjunction with monetary fines.

1st Violation – Violator is issued a verbal warning (written record kept). Monetary fines may be issued.

2nd Violation – Violator is issued a written warning and the supervisor is brought into the office for a "discussion" with the General Superintendent and the Project Executive. A copy of the written warning is sent to the offending Workers Company's office. With a statement to the effect that if this happens again the worker will be removed from the project and could lead to a termination of the contract. Monetary fines may be issued.

3rd Violation – Violator is suspended (1-3 days) or removed from the project. Monetary fines may be issued.

In conjunction with the above suggested guidelines, training or retraining of the worker(s) or crew may be dictated as deemed necessary by Fannin County.

If repeat occurrences with other crewmembers are found the supervisor of said offenders shall be subject to removal from the project.

Immediate termination may result when the nature of the violation or when repeated violations make retention of the violator unacceptable.

Willful disregard for serious safety hazards will result in immediate termination of individuals directly responsible. Examples: fall protection, lockout/tag out, confined space, trenching. Violations involving these types of work could result in serious injury or death to one or more employees.

If at any time you are unsure of safety conditions or procedures, stop immediately and contact your direct supervisor.

In addition, Fannin County may impose monetary penalties to the first tier trade partners for the following infractions, regardless of whether the infraction was performed by first tier trade partner employees or its trade partner's employees. This will be implemented monthly with a deductive change order.

(CEHSP pg.56)

Zero Tolerance

Fannin County reserves the rights to impose "zero tolerance" on the project by immediately removing worker(s) and their foreman from the project and issuing monetary fines for any safety violations.

If the foreman is not removed and repeat "safety violations" occur with other crew members, the foreman of the violators shall be subject to removal from the project and monetary fines will be issued.

Safety Enforcement Fine System

To assist in our efforts to provide a safe workplace for all workers and visitors, the following monetary safety fines (where permitted by law) are available for application at the discretion of the Superintendent, Safety Manager, or any Representative. Depending on the frequency and severity of the violation(s), fines can be assessed per exposure, per worker, and/or per day. Category and amount of fines is at the discretion of Owner Construction.

Contractors will also be responsible for any fines levied against any trade partners under their direct contract or their sub-trade partner direct contract. Fines will be charged through an invoice or a deduct change order to the contractor.

*** Please review the Safety Enforcement Policy - Citation Schedule listed below.*

SAFETY ENFORCEMENT POLICY - CITATION SCHEDULE		
Offense	**Owner Employees**	**Trade partner Employees**
1. No Hard Hat Or Safety Glasses	**1st Offense**: Verbal Warning **2nd Offense: removed from project for 1 week** **3rd Offense**: Not Allowed To Work On Project For 2 Weeks **Subsequent Offense**: Discharge	**1st Offense**: Verbal Warning **2nd Offense**: Written Warning Plus $200.00 Fine **3rd Offense**: Not Allowed To Work On Project For 2 Weeks **Subsequent Offense**: Discharge
2. Remove Guardrail Without Adequate Replacement	**1st Offense**: remove from project for 1 week **2nd Offense**: Discharge	**1st Offense**: $500.00 Owner Fine **2nd Offense**: Discharge
3. Remove Opening Protection Without Adequate Replacement	**1st Offense**: remove from project for 2 weeks **2nd Offense**: Discharge	**1st Offense**: $1000.00 Owner Fine **2nd Offense**: Discharge
4. Unsecured Compressed Gas Cylinders	Owner To Confiscate And Remove From Site Plus $500.00 Owner Fine	
5. Improper Storage of Flammable Materials	Owner To Confiscate And Remove From Site Plus $500.00 Owner Fine	
6. No Fire Watch	**1st Offense**: remove from project for 2 weeks **2nd Offense**: Discharge	**1st Offense**: $1000.00 Owner Fine **2nd Offense**: Discharge
7. Open Electric Panels	N/A	**1st Offense**: $1000.00 Owner Fine **2nd Offense**: Discharge
8. No Fall Protection or Inadequate Fall Protection	**1st Offense**: Discharge	**1st Offense**: $1000.00 Owner Fine and Discharge
9. Late Reporting of Injures (Beyond 24 Hours)	N/A	**1st Offense**: $1000.00 Owner Fine **2nd Offense**: Discharge
10. Other Serious or Life-Threatening Violations	**1st Offense**: remove from project for 2 weeks **2nd Offense**: Discharge	**1st Offense**: $1000.00 Owner Fine **2nd Offense**: Discharge
11. Other Non-Serious Violations	**1st Offense**: remove from project for 1 week **2nd Offense**: Discharge	**1st Offense**: $200.00 Owner Fine **2nd Offense**: Discharge
12. Improper Rigging/Crane Use	**1st Offense**: remove from project for 2 weeks **2nd Offense**: Discharge	**1st Offense**: $1000.00 Owner Fine **2nd Offense**: Discharge
13. No GFCI protection	**1st Offense**: remove from project for 1 week **2nd Offense**: Discharge	**1st Offense**: $500.00 Owner Fine **2nd Offense**: Discharge
14. No protection from rebar (and other) impalement hazards	**1st Offense**: remove from project for 1 week **2nd Offense**: Discharge	**1st Offense**: $500.00 Owner Fine **2nd Offense**: Discharge
15. Improper disposal/storage of Powder Actuated Tool cartridges	**1st Offense**: remove from project for 1 week **2nd Offense**: Discharge	**1st Offense**: $500.00 Owner Fine **2nd Offense**: Discharge
16 Improper Ladder Usage	**1st Offense**: remove from project for 2 weeks **2nd Offense**: Discharge	**1st Offense**: $1000.00 Owner Fine **2nd Offense**: Discharge

OWNER REQUIREMENTS EXCEEDING OSHA STANDARDS

OSHA STANDARDS	FANNIN COUNTY
Metal Ladders - allowed for certain operations.	**NOT ALLOWED** for any operations.
Ladders – No restrictions on ladder ratings.	Ladders must be a minimum Type 1A – 300 # rated
Safety Glasses - needed for exposure operations.	Required at all times. (**100%**).
High Visibility Vest – needed for exposure operations.	Required at all times. (**100%**)
Gloves – needed for exposure operations.	Required at all times (**100%**)
Scaffolding - Cross bracing is allowed by itself if it meets the height requirements (42" and 21").	Cross bracing is **NOT ALLOWED** by itself. It must be accompanied by an **additional** top rail and mid rail. Don't forget about the toe boards.
Scaffolding - Handrails/Fall Protection is required at 10 feet or more.	Handrails/Fall Protection required at **6 feet.** Baker Scaffolding – Handrails required at **Any** height & outriggers when platform height is 4 feet or greater.
Electrical - Use only extension cords that are marked with the designation code for hard or extra hard usage.	Only 12 gauge or heavier cords, rated for hard or extra hard usage are permitted. Flat Cords are **NOT ALLOWED**.
Electrical - The employer shall use either ground fault circuit interrupters or assured equipment grounding conductor program.	Assured equipment grounding may be used but it **MUST BE IN ADDITION TO** ground fault circuit interrupters which must be used 100% of the time.
Excavations/Trenches – must be sloped or shored at 5 feet in depth or greater.	Must be sloped or shored at **4 feet** in depth or greater.
Fall Protection – Fall protection height requirements vary from trade to trade, operation to operation.	Mandatory fall protection is required at **6 feet** for all trades and operations.
Roofers are allowed to use the Safety Monitoring System for fall protection (instead of tying off).	Roofers **CAN NOT USE** the Safety Monitoring System for fall protection. **WORKERS MUST BE TIED OFF**.
Ironworkers 15-25 feet off the ground need to have fall protection in place.	Ironworkers **6 FEET OR MORE** off the ground need to have fall protection in place (**100% Tie off**).*

Ironworkers are allowed to use a "Controlled Decking Zone" for fall protection	Ironworkers **CAN NOT USE** a "Controlled Decking Zone" for fall protection. **WORKERS MUST BE TIED OFF.**
Various trades are allowed to use a "Controlled Access Zones" for fall protection	"Controlled Access Zones" are prohibited for fall protection. Only exception is for overhead fall protection.
Cranes lifting capacity is restricted by the manufacturer load chart.	Lifting capacity **CAN NOT** exceed **90%** of the manufacturer load chart.
Multiple Lift rigging of structural steel (5 pieces) is allowed if proper OSHA procedures and standards are followed.	Multiple Lift rigging of bundles of material other than structural steel (**Max. 3 pieces**) IS NOT ALLOWED on any Owner project.
Cranes must maintain a minimum of 10' from power lines.	Cranes will maintain a minimum of **15'** from power lines.
Tie off in scissor lifts is not mandatory	100% tie off in scissor lifts is mandatory at all times

SPECIFIC SAFETY REQUIREMENTS

Visitors

All visitors shall be required to report to the project field office upon entering the project site. Each individual must complete the "General Release – Visitors" release form. Access to the site shall be denied to any individual who does not have justifiable business on the job site.

If minors tour the site, the minor's parents must sign the "General Release – Visitors" release form for the minor. All tours involving minors must be approved by the Safety Manager.

Requests for tours of the project site shall be carefully screened and limited in frequency and numbers of people. Tours of the site shall be approved by the Owner Representative, Project Manager, Superintendent and Safety Manager. Project tours shall be conducted during non-working hours.

Visitor Procedures

Owner and Turner Construction shall establish the time and travel route for any tour. Areas, which may present hazards to the tour group, shall be prohibited. The tour's travel route shall be cleared of any tripping hazards, cleaned, and properly protected to avoid potential personal injury. A designated member of the Owner's Construction management team shall guide the approved tours.

All members of a tour group shall sign a release prior to touring the site. If minors, the parents must sign the release but must be approved by the Safety Manager.

Any project site visitors who are permitted access to the site but are not on official on-site business shall sign the release before being authorized to proceed beyond the project office.

All visitors including delivery personnel, truck drivers, and etc.., must wear long pants, shirts with sleeves over the shoulder, hard hats, safety glasses, and hard-soled work boots when on site. The sturdy work boots shall be with durable sidewalls, toes and soles. No sneakers, penny loafers, dress shoes, etc. shall be permitted. Cowboy hard hats will not be permitted. Visitors must wear appropriate sturdy shoes or be kept out of the construction area.

All contractors and trade partners will be responsible and accountable for their visitors, vendors, supply companies, rental companies, etc. signing a "General Release – Visitors" release form and providing mandatory PPE. At no time will contractors or trade partners leave any visitor(s) unattended on the site project.

Safety Recognition Program

To create and build a safety culture on County projects, it is essential that we remember to promote Building L.I.F.E. (Living Injury Free Everyday) principles to celebrate milestones and recognize employees for excellence in safety.

To accomplish this goal Fannin County and Turner Constrution creates a Site Specific Incentive Program, which may include:

- Safety BBQs (for each major safety milestone on our projects)
- Monthly Safety Awards
- 5 Worker Lunches with employee's onsite
- Safety Raffles
- Trade Partner Employee Recognition

Building L.I.F.E. Style Program (Worker Wellness)

Fannin County follows the principles of Building L.I.F.E. (Living Injury Free Everyday). Since 2008, more than half of the calls to Owner's Crisis Hotline are related to personal illness. We recognize the need to go beyond the fences of the jobsite and spend time communicating about the importance of making healthy lifestyle choices for our site workers. We want to increase awareness of early warning signs to avoid and minimize the number and impact of personal health emergencies.

During the length of the project there will be opportunities for all project team members to participate in health related activities/events/programs. The Owner Construction team and onsite medic will work together to provide a number of services related to worker health and wellness.

Drug /Alcohol Testing Program

At Fannin County and Turner's sole discretion, the acceptance of substance abuse testing cards, or proof of Negative Test Results for a worker, within the last twelve (12) months that is provided by the respective Trade Partner's employer or trade union will be accepted for Safety Orientation and cleared to work on site. 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 or proof of a Negative Test Results (and ID), will not be permitted to work unless and until such proof is demonstrated or such worker has submitted and successfully passed a Pre-Employment Drug Test.
The project has a drug testing policy that all trade partners and their employees (including **sub-tiers**) must have a negative drug screen on file prior to starting work on site. All drug screens are valid for 12 months and a new sample must be tested upon expiration. Therefore, if you have any workers that have been on site for a year or longer, they need to submit a new drug screen or they will be removed from site.

If a worker attends the Project Safety Orientation without having screening documentation, they will not receive their Orientation sticker and they will not be allowed to step on site after orientation, unless their test is on file.

***Please refer to The Owner Trade Partner Substance Abuse Program (CEHSP pg.238)*

INCIDENT INVESTIGATION AND REPORTING

Incident Reporting

For an incident involving personal injury, the trade partner shall complete their own incident investigation report form and submit it to Owner and its Agent, as soon as reasonably possible (same work shift) but no later than 24 hours.

Responsibilities

All incidents resulting in injury or property damage are to be reported at the time of occurrence to the Superintendent and/or Safety Manager. The Superintendent and/or Safety Manager, will speak with the worker involved in the incident as well as the trade partner in charge of the person(s) involved or witnesses to the event. The contractor will complete their own incident investigation report form and request each craft person involved to complete a written statement whenever such events take place. The Owner may require a more detailed investigation and the Trade partner shall comply with their directions.

Incident Reporting Procedures

1. Near Miss/ Injury Free Event

It is the responsibility of the Superintendent or Safety Manager to complete the investigation Incident investigation report. 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 24 hours. A gathering of all involved 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. If applicable a Lesson Learned will also be developed and approved to relay any information gathered that may assist in the elimination of a future similar occurrence.

2. First Aid Event

Any first aid event will result in a full incident investigation. Fannin County 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 shall be maintained in Risk Console for record purposes only.

3. Medical Treatment Event

If the injury is considered an emergency call 911. It is the responsibility of the trade partner to immediately notify the Superintendent, and the Safety Manager of any event requiring medical treatment. Failure to do so may result in trade partner disciplinary action.

4. Serious Injury Event

It is the responsibility of each trade partner's safety representative to immediately notify the Superintendent of a serious injury requiring medical treatment. The Owner Safety Manager or senior project representative will oversee the completion of required Owner reporting forms. The Owner will contact OSHA when required, regardless of the trade partner's requirement to notify. Updates to OSHA's Recordkeeping rule effective January 1, 2015 requires employers to report all work-related fatalities within 8 hours and all in-patient hospitalizations, amputations, and losses of an eye within 24 hours of finding out about the incident.

5. Owner Reporting Definitions

    a. **Incident** - An UNPLANNED EVENT that may or may not result in personal injury or property damage
    b. **Loss Time** - an accident that is an OSHA recordable incident in which an employee is not able to return to work or is assigned restricted work on the day or shift following the incident.
    c. **Recordable** - work-related injury or illness that requires medical treatment beyond first aid.
    d. **Frist Aid** - medical attention that is usually administered immediately after the injury occurs and at the location where it occurred. It often consists of a one-time, short-term treatment and requires little technology or training to administer.
    e. **Line Strike** - an unplanned event that results in a service interruption or damage of a utility line regardless of condition (active, inactive, etc.)."Damage" means any impact that would necessitate repair.
    f. **Near Miss** - an unplanned event that could have resulted in injury, illness or property damage, if given a different set of circumstances, but didn't.
    g. **Safety Observation** - the identification of safe and/ or un-safe conditions measuring the impact of an organization’s safety program while providing focused areas for reinforcement or improvement.

(CEHSP pg. 27-32)

Scope and Application

Contractors and trade partner's workers are potentially exposed to flying particles, falling objects, chemical splashes, sharp objects, dust, vapors, noise, and other hazards requiring personal protective equipment (PPE). Therefore, all contractors and trade partners are responsible for issuing, training, and enforcement of workers in the proper use and wearing of PPE. Only PPE approved by the American National Standard Institute (ANSI) or National Institute of Occupational Safety & Health (NIOSH) will be utilized.

Contractors and trade partners will also be responsible for providing and enforcing the wearing of appropriate PPE for their visitors (i.e.: visitors, vendors, material suppliers, etc.). Shorts, sleeveless shirts and athletic or tennis type shoes will not be permitted.

Inappropriate material (profanity, obscene pictures, drawings, etc.) is prohibited on hardhats, shirts, etc. and will be defined by the Safety Manager and/or Owner Management representative.

All PPE and clothing (free of tears and holes) must be clean and maintained in good condition. Any worn out, damaged, or defective PPE or clothing must be properly disposed of.

Training of workers should include: PPE to use, when to use PPE, how to wear PPE, limitations of PPE, and proper care of PPE. Workers should also demonstrate an understanding of the training conducted by the contractor and trade partner.

All PPE requirements will be specified on all Job Hazard Analysis submitted to Owner prior to the initiation of work on the project and reviewed with workers at the Daily Safety Pre-Task Planning Meetings.

(CEHSP pg.33-35)

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Body Protection

All workers will wear shirts and long trousers to protect themselves against weather elements and work site hazards. No sleeveless or cutoff shirts, shirts with excessive arm pit openings, tank tops, mesh shirts, shorts, or sweat pants will be permitted. Sleeves shall extend a minimum of 3" to 4'' from the top of the shoulder.

Workers performing work on their knees will be required to wear knee pads or utilize "kneeling creepers" to protect their knees from the hard surfaces of the floor.

Special clothing (i.e.: Tyvek suit, rubber boots, cooling bands, cooling vest, etc..) may be required for working in hot, cold, wet work places, places with biological exposures, working with chemicals such as alkalis, etc... Contractors and trade partners are responsible for providing workers with proper clothing and training when working under these conditions.

Chaps will be worn by all workers to protect their legs while operating chain saws.

Hardhats

All Owner employees, trade partner employees and visitors to project sites are required to wear hardhats that comply with ANSI Z89.1. Cowboy hardhats, aluminum hardhats, and bump caps are not permitted on Fannin County Projects. Employees exposed to electrical voltages of 600 V or greater shall wear hardhats that meet the requirements of ANSI Z89.2 Type Hardhats. No "soft top" welding shall be permitted. Chin straps will be worn as warranted. Long hair must be confined to prevent entanglement.

Safety Glasses

Safety glasses with side shields, complying with the requirements of ANSI Z87.1, will be worn by all workers and visitors on the job site. Standard street prescription glasses with safety lenses do **not** constitute ANSI Z87.1 safety glasses.
Safety glasses must comply with the following:

1. ANSI Z87.1 Safety Glasses
2. ANSI Z87.1 Prescription Safety Glasses with hard plastic side shields
3. ANSI Z87.1 Safety Glasses or Goggles over prescription glasses

Workers are prohibited from wearing shaded ANSI Z87.1 Safety Glasses while working inside building. Clear ANSI Z87.1 Safety Glasses will be worn by all workers unless authorized by Owner and outlined on the Job Hazard Analysis as required PPE.

Face Shields, Welding Hoods, Burning Goggles

Face shields will be worn in conjunction with ANSI Z87.1 safety glasses for protection from flying particles: overhead drilling, grinding, breaking, chipping, power saws (i.e.: masonry saws, power cut off saws, power chop saws, chain saws, walk behind floor saws, etc..), blowing air hoses for cleaning, chemical splashes when working with acid and caustic liquids, hot tar, or any other work task representing a hazardous exposure to the face.

When working above shoulder level, additional eye protection is required, beyond regular safety glasses. A full face-shield that clamps tightly onto the brim of the hardhat should be worn in most cases to prevent dusts and debris from falling behind the safety glasses into the eyes. Unvented safety-goggles that fit snugly against the skin can be substituted.
A face shield shall be worn while using powder-actuated tools and drilling overhead.
Welding hoods shall be worn for all welding operations.
Burning goggles and/or welding hoods shall be worn for gas burning and cutting.
Note: ANSI Z87.1 Safety glasses or burning goggles must be worn under welding hoods to protect workers while chipping and/or grinding slag.

Respiratory Protection

Workers exposed to dust, metal fumes, fibers, vapors, gases, etc. will be provided with proper respiratory protection (NIOSH approved) designed to protect the worker against the particular substance encountered. The contractor and trade partner is solely responsible for providing proper respirators, proper training, and proper testing of the worker(s) per Federal OSHA Standards.

Hand and Arm Protection

Gloves will be worn by all workers and visitors on the job site 100% of the time. Gloves are to be worn by workers to protect their hands against hazards such as electrical shock, harmful substances (chemicals, dust, concrete, etc..), lacerations, abrasions, punctures, burns, harmful temperature extremes (hot & cold), vibration, etc...

The wearing of gloves is mandatory and will include, but not limited to: rubber gloves to handle alkalis and other chemicals, leather gloves to handle rough items such as reinforcing steel, lumber, masonry, etc.., special leather gloves to protect against welding heat sparks and slag, cut resistant gloves (Minimum Level 3) when exposed to sharp edges (i.e.: metal studs, duct work, etc.), using utility knives for cutting sheetrock/carpet/opening boxes/etc.., working on energized electrical panels, anti-vibration gloves while using vibration producing power tools, etc..

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.

In conjunction with hand protection, workers will wear cut resistant sleeves (i.e. Kevlar, Dyneema sleeves, etc..) to protect their forearms from potential lacerations from performing demolition work (i.e.: cutting out drywall, removing metal studs/HCB, etc.), handling/reaching through building material which represent sharp edges, etc. These operations shall be identified on the JHA/PTP.

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.

***The only exception to this policy is if the competent person determines that the use of protective gloves for a specific activity creates a greater hazard.*

Foot Protection

All workers will wear sturdy work boots or shoes in good condition with durable sidewalls, toe protection, and rubber soles with tread. Soft leather, canvas shoes, sneakers, open toe/heel shoes, sandals, high heels, etc. are not permitted. Worn out and damaged boots and shoes are prohibited. Visitors shall wear appropriate boots or shoes, or be kept out of the construction area.

Workers will wear foot guards (steel toe and/or metacarpal guards) when working with soil tampers. During stripping operations, workers will wear boots or shoes with steel insoles to protect against nail punctures. Shoe cleats or similar products will be worn by workers to protect workers from slipping and falling on ice.

Special Protective Equipment

Workers working in hazardous operations (chemical plants, petro-chemical plants, etc.) will be provided and wear any specialized personal protection equipment (nail less soled boots/shoes, non-sparking tools, personal badges, detectors, pumps, etc.) designed for that particular operation.

Reflective/High-Visibility Vests

Reflective/High-visibility vests (ANSI/ISEA 107-2010 CLASS 2) shall be worn as the outermost apparel by all employees and visitors 100% of the time. ANSI Class 3 (45 MPH or more) outerwear must be worn whenever working on or near (within 10 feet) of a roadway. Dirty and faded out vests and tee shirts are prohibited.

Hearing Protection

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 damage with an 8 hour TWA exposure greater than 85 dBA, the trade

partner shall be required to submit a detailed hearing conservation program to Owner. This program shall be approved prior to beginning work.

Roles and Responsibilities

1. Owner and Construction Management Agent -
    1. Conduct hazard assessments to identify specific PPE for Owner Craft Workers and ensure adequate hazard assessments are conducted by the trade partners.
    2. Supply necessary PPE and training to Owner staff.
    3. Monitor use of PPE by Owner staff and trade partners.

2. Trade Partner Management
    1. Conduct hazard assessments to identify specific PPE for Trade Partner Workers and ensure adequate hazard assessments are conducted by their trade partners
    2. Provide necessary PPE and training.
    3. Monitor use of PPE.
    4. Provide replacement PPE when needed.
    5. Identify any new hazards that would require the use of PPE.
    6. Be responsible for the assurances of PPE adequacy, maintenance and sanitation.

3. Trade Partner Employees
    1. Properly use and care for assigned PPE.
    2. Immediately inform supervisor if PPE is damaged or not effective.

(CEHSP pg.33-35)

INDUSTRIAL VEHICLE REQUIREMENTS

Any time crews are working around or with heavy equipment:

1. Inspect work area and identify potential hazards
2. Crews in same area, congestion, type of equipment in the area, etc.
3. Address potential hazards in the Morning PRE TASK PLAN sessions
4. Open communication addressing risk and mitigation plan (mitigation may include re-sequencing work, creating a Controlled Access Zone, collaborative PTP sessions with other trades in the area, etc.)
5. Continue to inspect and monitor work area.

If conditions change or new hazards are identified, STOP and update PTP with crew exposed to new changes or hazards.

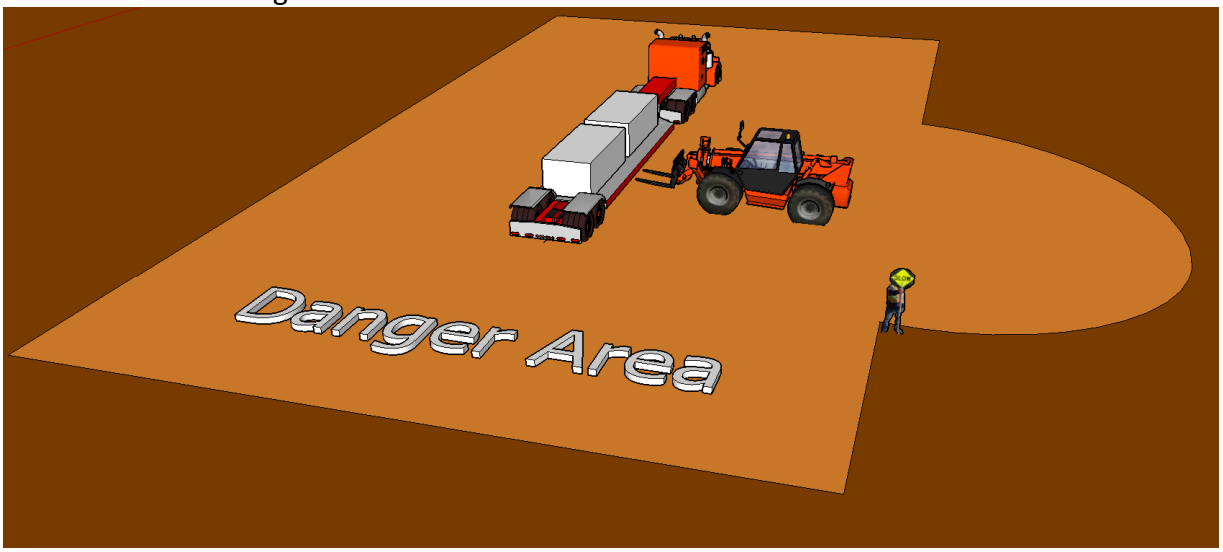
Be aware and yield to moving equipment at all times. Risk increases if workers are within 20 feet of heavy equipment.

1. Identify spotters and listen to direction.

2. Always make eye contact with operators before entering or crossing a work zone.
3. If you have not been given clear acknowledgment of direction, you are at risk.

30' CAZ- Controlled Access Zone for loading and unloading (to include aggregate)

1. The CAZ should be barricaded with proper signage 6 feet around the vehicle at minimum. The perimeter length will be increased to the height of the load if greater than 6 feet high.



Always Stay Clear of Heavy Equipment (Take the long way around if needed)

--Ex. Dirt work, loading and unload material, Ariel lift use, etc.

Operating Heavy Equipment:

1. Operating equipment speed on site is **5MPH**, slower based on working conditions.
2. Trained Operators Only.
3. All equipment (ex: dirt working equipment, aerial lifts, scissor lifts, forklifts, etc.) will be inspected daily to ensure proper working order. Defective equipment will be removed from service and tagged "Defective" or "Out of Service" immediately.
4. Inspect: Back up alarms, leaks, controls, tires, electrical components, rear view mirror and tools, etc.

When Operating:

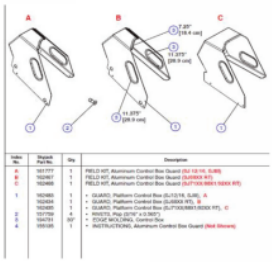
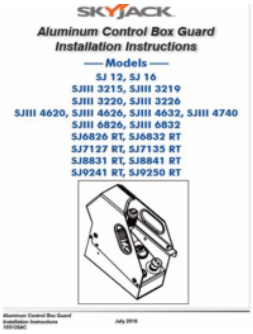
1. Yield to foot traffic.

2. Use all precautions to identify unauthorized personnel in your work area. Mirrors, 360 ° evaluation at all times, especially when backing up.
3. Identify and pay attention to your spotter.
4. Seatbelts required when operating.
5. Ensure solid foundation while operating.
6. Follow Handheld Unit Use Policy (CEHSP pg. 16)

(CEHSP pg.117-120)

Mobile Elevated Work Platform (MEWP)

1. All scissor lifts and boom lifts shall have an approved shroud and guard over the joy stick/controls, and a timeout feature (Genie Smart Link) on the lift/lower and drive selector, which disables the lift/lower and drive functions after several seconds of inactivity. Moreover, boom lifts must be delivered with anti-crush or secondary guard technology.

2. Prior to mobilizing, all Mobile Elevated Work Platforms (MEWP) must be inspected to ensure compliance with Owner requirements.
3. Man baskets such as those utilized from fork truck type vehicles are not allowed on Fannin County projects.

4. 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 upon request. An inspection form is available. Field modifications are not allowed on aerial lifts.
5. Only authorized and trained individuals may operate aerial lifts.
6. 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.
7. 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'.

8. The lifts should have a pressure actuated auto shut-off across the controls which shuts down the equipment to prevent entrapment.
9. A dedicated ground spotter (with no other collateral duties) shall be in place whose duties are as follows:
    1. Visually verify and communicate via two-way radio that all obstructions are clear of the path of travel at the ground level.
    2. Visually verify that all obstructions are clear while basket is moving.
    3. The ground spotter shall be responsible for no more than 1 Controlled Access Zone (CAZ). Additional spotters will be required if MEWP's will need to be operated/relocated simultaneously within 1 CAZ (Approximate size and dimension of CAZ is below).
    4. Spotter Logistics:
        i. If 2 or more lifts are required to operate simultaneously, each operator/spotter team will utilize their own dedicated radio channel.
        ii. The Spotter shall not use a cell phone, head phones or other devices which may distract them from their duties.
        iii. The Spotter shall have stop work authority.
        iv. The spotter shall wear, at a minimum, a Class II High Visibility Vest.
        v. 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.
        vi. Operation of MEWP from the basket is prohibited without prior communication with the spotter and an "All Clear" is given.
10. Emergency Response:
    1. There shall be, at a minimum, (2) two MEWP's on site when working in excess of 85 vertical feet. This is to ensure that one could assist another which has the capability to reach the basket in the event of an emergency. (A typical FD ladder truck can reach 85'-90' vertical feet)
    2. Exceptions
        1. There is a means of safely reaching the platform via catwalk or other elevated surface.
        2. There is a means to reach the platform from above via rope, slings or other climbing type equipment. This equipment is only to be used by trained professionals.

11. Aerial Lift Training Requirements
    1. Only trained and authorized persons are allowed to operate an aerial lift. Training should include:
    2. Explanations of electrical, fall and falling object hazards;
    3. Procedures for dealing with hazards;
    4. Recognizing and avoiding unsafe conditions in the work setting;

5. Instructions for correct operation of the lift (including maximum intended load and load capacity);
6. Demonstrations of the skills and knowledge needed to operate an aerial lift before operating it on the job;
7. When and how to perform inspections; and
8. Manufacturer's requirements

(CEHSP pg. 135 - 140)

SPOTTER REQUIREMENTS

Flag persons for traffic control will wear an ANSI Class 2 (0-44 MPH) and Class 3 (45 MPH or more) outerwear must be worn whenever flagging on or near (within 10 feet) of a roadway. If traffic control is performed in the early morning, late evening, during the night, on overcast or rainy days, etc.., the high visibility vest or tee shirt must be reflective.

Flagmen or Spotter Requirements:

1. Trained to identify hazards and mitigate risk.
2. Spotter must have the ability to immediately alert operator or works at risk of hazards.
    a. **Air Horn or whistle is required**
        i. A single air horn blast or whistle shall stop all operations in that area.
3. Spotters must provide, secure, and maintain CAZs as needed.
    1. Provide and install a proper barricade system.
    2. Fill out and post required signage for barricades.
    3. Control access in the high risk area and/or inside the CAZs.
    4. Communicate with all parties involved in the operation.
    5. Communicate with external operations and other workers in the area.
    6. Confirm set up and procedure is approved by their foremen and/or Safety Coordinator.
    7. Ensure that the plan is properly documented on their PTP.
4. When spotting dump trucks:
    1. When the truck dumps its load, the spotter must increase its distance from the vehicle by the height of the truck while dumping.
5. **Spotter will be visually identified with a lime green class II hardhat cover and at least <u>one</u> of the following:**
    - Red Head Lamp
    - Traffic Wand
    - High Visibility Flag
    - Unique High Visibility Vest
6. If it is dark, be sure to utilize wands/lamps as identifiers.

Flagmen or Spotters have FULL AUTHORITY:

1. To stop operations
2. Restrict access
3. Close roads and/or walk paths
4. Re-direct foot and vehicle traffic
5. Block/close hallways and doors

Flagmen or Spotters are required when:

1. Backing up vehicles
2. Forklifts/lulls with load in the building
3. Operating in a congested area
4. Pulling on to public roads
5. When views are obstructed by loads or other conditions
6. Operating heavy equipment inside the building (Semi-trucks, dump trucks)

STEEL ERECTION & CRANES

- Each contractor working on the project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart R – Steel Erection, in addition to the following.
- Procedures
    - General Site, Erection and Construction Sequence Requirements
        - 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.
        - 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.

- A site-specific erection plan must be developed by a qualified person and submitted prior to the start of work.
- A site-specific fall prevention plan must be developed, submitted 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.
- The controlling contractor must ensure that state and municipal permitting issues are addressed when off-loading steel and /or materials on public roads.

- Hoisting and Rigging
  - Cranes being used in steel erection must be visually inspected by a competent person prior to each shift.
  - Individuals who rig loads must be qualified. An employer may not permit an individual to rig loads to be a lifted by a crane unless the individual has received training and also has the experience appropriate to their level of work.
  - Outrigger pads should be at least 3 times the dimension of the crane float. The outrigger pads are to be pre-manufactured.

  - A qualified rigger must inspect all rigging prior to each use. The qualification of the qualified person must be submitted for review prior to the start of work.
  - 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.
  - 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.

- Beams and Column Anchorage
  - All columns must be anchored by a minimum of 4 anchor bolts.

        - All columns must be evaluated by a competent person to determine whether guying or bracing is necessary.
        - During the placing of structural beams, the load must not be released until a minimum of two bolts, per connection, are secured in place.
        - 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).

    - Anchor bolts shall not be repaired, replaced or field modified without the approval of the project structural engineer of record.
    - 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.
- Personal Fall and Falling Object Prevention
    - All material, equipment and tools must be secured against accidental displacement while aloft.
    - 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. Fannin County 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.
    - During metal decking installations only self-retracting lanyards approved by the manufacturer for leading edge work shall be used.
- Crane Inspections
    - Third Party Inspection to be done prior to the crane's use on-site.
    - If Crane will be onsite for less than 24 hours the following will apply w/o the third party inspection:
        - Annual inspection shall be dated no more than 90 days from the time it arrives on site.
    - If necessary, post assembly inspection conducted by contractor competent person.
    - Daily Inspection / Monthly Inspection / Annual Inspection
    - Wire rope, its attachments, fittings, sheaves and safety devices must be inspected according to the manufacturer's recommendations. Copy of current inspections (100hr, 250hr, 600hr and monthly wire rope inspection, per manufactures recommendations) must be submitted.
- Pre-Planning
    - Any lift exceeding 75% of the cranes rated capacity shall be considered a critical lift. A critical lift plan shall be submitted for review prior to lift.

        - Critical Lift (Yes / No)
        - If Critical Lift Please see Crane Critical Lift Plan Worksheet.
    - A pre-planning meeting to discuss the critical lift will be held in the field with the crew to discuss.

- Additional Tower Crane Parameters
    - Tower crane that are altered “jumped” or modified needs to be re-inspected by third party inspector.
    - Tower Crane Rental Equipment Checklist Information must be completed and submitted prior to use.

- Training
    - All training must be provided by a qualified person, knowledgeable in the recognition and avoidance of hazards associated with steel erection.
    - Training includes, but is not limited to; fall hazards, multiple lift rigging and steel connection.

LADDERS LAST POLICY STATEMENT

- Ladder use on project will be allowed only when it has been determined that it is unfeasible to use all other options to complete the task.
- If it is determined that a ladder is the only means of performing the job at elevated height, a ladder permit must be submitted prior to starting work. At no time will a ladder be on site without a current permit and safety checklist.
- 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.
- Use of job built ladders is prohibited on Owner Construction Projects. Temporary stair towers or prefabricated stairs shall be used to access different building levels.

Procedures for identifying and responding to all tasks that require the use of a device that allows work from height:

1. Prior to beginning work, the trade partner 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 trade partner shall complete the use Permit and have it reviewed and approved by the 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 **Ladder Safety Inspection Checklist** shall be completed affixed to all ladders.
    d. **Prior to using a ladder, the 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 projects. **Podium ladders** shall be the **preferred** ladder.
    f. At a minimum, only Type IA Heavy Duty (300 lb. limit) ladders may be used.

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. Pull ropes should be placed at all access ladders so employees can safely lift tools or equipment to upper levels.
i. Stepladders must be opened fully and set level when in use.
j. When extension ladders are used to access upper landings, the side rails must extend at least 3 feet above the landing and secured at the top.
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.
n. All weight limits must be checked to avoid exceeding the manufacturer's limits.
o. Weight limits must also be checked to avoid exceedances.

4. Training

a. Each employee involved in ladder use must be trained by a competent person in the recognition and avoidance of stair hazards.

SILICA EXPOSURE PREVENTION & CONTROL

- 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, shall be designated to implement the exposure control plan. A copy of the designation by the employer will be provided to Owner.

- Each exposing employer must notify Fannin County in writing of any activities to be undertaken that could lead to silica exposure above the action limit. Owner 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 trade partners. 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.

SWPPP – STORM WATER POLLUTION PREVENTION PLAN

1. Trade partners and sub-tiers disturbing soil will have one field personnel (i.e.: superintendent / supervisor / foreperson) assigned to the project on a full time basis complete the **Introduction into Erosion and Sediment Control**" within 7 days of starting work on site.

2. Trade partners and sub-tiers must ask an Owner Superintendent prior to **de-watering** or disposing of waste water in any drains or inlets.

3. Report any damage to any Storm Water BMPs (i.e.: silt fence, hay waddles, etc.)

4. Trade partners and sub-tiers utilizing earthmoving equipment, above ground fuel storage tanks, etc. will provide onsite a "Hazardous Material" Clean Up kit (**Spill Kit**) for accidental spills of hydraulic fluids, gasoline, diesel, etc.

5. Trade partners and sub-tiers utilizing "**fuel storage tanks**" with secondary confinement systems will cover all tanks with tarps to eliminate / reduce contamination of rain water.

6. Trade partners and sub-tiers utilizing "**concrete mixers**" will provide ground protection by using tarps, plastic, etc.

7. Trade partners and sub-tiers working with "**concrete**" will provide concrete tubs, temporary concrete washouts meeting SWPPP requirements, etc.

Introduction to Chemical Spill Response

Despite the best efforts on the construction site to practice environmental procedures, a release of chemicals may occur. For this reason, it is essential that all personnel have a spill response plan on each and every project. The following procedures should be used as a guide to help personnel through the various spill responses that they may face.

Spill Response Procedures (Major Spill)

In the event of a spill which:

1. Involves the release of a type or quantity of a chemical that poses an **immediate** risk to public health
2. Involves an uncontrolled fire or explosion
3. Evacuate the building/construction site and follow Crisis Management Plan protocol
4. Call **911** and give details of the accident including location, types of hazardous materials involved, and whether there is a personal injury

If the accident involves personal injury or chemical contamination, follow the steps as appropriate and at the same time:

- Move the victim from the immediate area of fire, explosion, or spill (if this can be done without further injury to the victim or you)
- Remove any contaminated clothing from the victim and flush all areas of the body contacted by chemicals with copious amounts of water for 15-20 minutes
- Administer first aid as appropriate and seek medical attention

Spill Response Procedures (Minor Spill)

In the event of a spill involving the release of a type or quantity of a chemical which doesn't pose an immediate risk to health and doesn't involve chemical contamination to the body:

1. Notify personnel and neighbors if necessary. Call EHS Team.
2. Isolate the area
3. Remove ignition sources and unplug nearby electrical equipment and/or any equipment that may throw sparks.
4. Establish exhaust ventilation if necessary. Vent vapors to outside of building (only windows)
5. Locate spill kit.
6. Choose appropriate Personal Protective Equipment (PPE) which may include goggles, face shield, impervious gloves, apron, etc. All personnel MUST be properly fit tested before using any type of respiratory equipment.
7. Confine and contain spill. Cover with appropriate absorbent materials. Acid and base spills should be neutralized prior to cleanup. Sweep solid materials into a plastic dust pan and place in a sealed container.
8. If indoors, wet mop spill area. Be sure to decontaminate any cleaning utensils. Place all contaminated items with contents of container.

Chemical Spill Kits Contents

Spill kits can be purchased through most supply vendors that sell chemical or safety supplies. Demand Safety: Ron Burns (214) 412-4758

Contents may include the following:

1. Universal Spill Absorbent
2. Acid Spill Neutralizer
3. Alkali (Base) Neutralizer
4. Solvents/Organic Liquid Absorbent
5. Bromine Neutralizer

PPE:

1. Goggles
2. Face-Shield
3. Heavy Neoprene Gloves
4. Disposable Lab Coat and Corrosive Apron
5. Plastic Vinyl Booties
6. Dust Mask/Respirator

Clean Up Material:

1. Plastic Dust Pan/Scoop
2. Plastic Bags (30 gallon bags)
3. Plastic Bucket

Spills: Reportable Quantities

The RQ depends on the substance released and where released. Use this table to determine whether you must report and under what rule.

In Texas, upon determining that a reportable discharge or spill has occurred, the responsible person must notify the state. The threshold quantity that triggers the requirement to report a spill is called the **reportable quantity (RQ).** The reportable quantity depends on the type of substance released and where released (e.g. into water vs. on land); different kinds of spills are subject to different provisions of state and federal rules.

Kind of spill	Where discharged	Reportable quantity	Rule, statute, or responsible agency
Hazardous substance	onto land	"Final RQ" in Table 302.4 in 40 CFR 302.4 (PDF) Exit...	30 TAC 327 Exit...
	into water	"Final RQ" or 100 lbs, whichever is **less**	
Any oil	coastal waters	as required by the Texas General Land Office	Texas General Land Office Exit...
Crude oil, oil that is neither a petroleum product nor used oil	onto land	210 gallons (five barrels)	30 TAC 327 Exit...
	directly into water	enough to create a sheen	

Petroleum product, used oil	onto land, from an exempt PST facility	210 gallons (five barrels)	30 TAC 327 Exit...
	onto land, or onto land from a non-exempt PST facility	25 gallons	
	directly into water	enough to create a sheen	
Industrial solid waste or other substances	into water	100 lbs	30 TAC 327 Exit...
From petroleum storage tanks, underground or aboveground	into water	enough to create a sheen on water	30 TAC 334.75-81 Exit...
From petroleum storage tanks, underground or aboveground	onto land	25 gallons or equal to the RQ under 40 CFR 302 Exit...	30 TAC 327 Exit...
Other substances that may be useful or valuable and are not ordinarily considered to be waste, but will cause pollution if discharged into water in the state	into water	100 lbs	30 TAC 327 Exit...

Spills: Reporting

Report an environmental emergency, discharge, spill, or air release.

Contact TCEQ Emergency Response.

To report an environmental emergency, discharge, spill, or air release, call:

State

- State of Texas Spill-Reporting Hotline and the SERC: **1-800-832-8224**
- TCEQ Regional Office, Monday–Friday, 8:00 a.m.–5:00 p.m.

Federal

- National Response Center: **1-800-424-8802** (notifying the NRC does **not** constitute notice to the state)

Spills: Cleanup Vendors
TAS Environmental Services LP
Fort Worth, TX 76119
Tel +1 (817) 535-7222
Tel +1 (888) 654-0111
Fax +1 (817) 535-8187
Emergency response, oil spill cleanup, hazardous material cleanup, waste management
TAS Environmental Services LP
Dallas, TX 75252
Tel +1 (972) 638-9700
Tel +1 (888) 654-0111
Fax +1 (972) 638-9702

HOUSEKEEPING (Nothing Hits the Ground/LEAN Construction)

Cleanup must be performed continuously **throughout the day**. In the event housekeeping isn't being performed trade partner agrees to provide manpower for a composite crew. The values for a trade partner's Safety Program and Cleanup Program including the level of manpower contribution to a Composite Cleanup Crew will be determined prior to the execution of the Contract.

1. **Glass containers** are not permitted on site.
2. Each Trade partner for the disposal of break trash and drinking cups must provide containers**. At no time will food trash be left lying around.**
3. **Protruding nails** must be bent flat or removed as the work proceeds and before disposal.
4. **Off cuts of welded wire mesh** must be tied into the pour or placed in a trash container as they are cut.
5. **Banding iron** must be flattened and/or placed in a proper trash container, as the bands are broken.
6. **Off cuts of round stock** such as all-thread rod and conduit must be contained as they are cut.
7. **Elevate work** to reduce sprains and strains
8. Debris bins must be provided by each trade partner to catch waste material immediately.
9. **Every crew needs a broom** in order to maintain their work area continually throughout the workday.
10. **Incorporate Just-In-Time Deliveries** to reduce the amount of stored materials in the work areas.
11. **Use of material carts, dollies and racks** to store and move materials around the jobsite. These tools will elevate the amount of material handling.

12. Trade partner to hang **electrical cords** off the ground utilizing non-conductive materials.
13. **No Corridor, aisle, stairway, door or exit shall be obstructed** or used in such a manner as to encroach upon routes of ingress or egress that would present an unsafe or unhealthy condition to the public or any occupant of the building.
14. **Work Stations** to be utilized for any repetitive work encouraging good ergonomics, which reduces bending, twisting, turning, and kneeling.
15. **Provide** adequate trash containers for each crew to clean up as work progresses.

CEHSP pg.24-26)

REFERENCES

Corporate Environmental, Health and Safety Policy 2017

- Appendix A: Environmental Operational Policy
- Appendix B: Moisture Control Plan Guideline
- Appendix C: Spill Prevention and Control Plan for Construction
- Appendix D: Confined Space Program
- Appendix E: Lockout/Tag out Safety Program
- Appendix F: Written Lead and Heavy Metal Program
- Appendix G: Infection Control Plan 2013
- Appendix H: Owner Asbestos, Lead, Silica and Respirator Management Program
- Appendix I: Construction Management Safety Policy
- Appendix J: Heat and Cold Stress Prevention Plan
- Crisis Management Plan
- OHSAS 18001 Safety Management System
- Program SWPPP

ATTACHMENTS – SPECIFIC SAFETY FORMS *(available upon request)*

Job Hazard Analysis (JHA) Form

Instructions for Completing the Job Hazard Analysis Form

Pre-Task Planning (PTP) Form

Incident Investigation Report

Employee Statement Form

Witness Statement Form

Excavation Permit

Strike Avoidance Plan

Daily Equipment Inspection Sheet

Crane Pick Plan Checklist

Daily Lift Inspection Sheet

Monthly Color Code

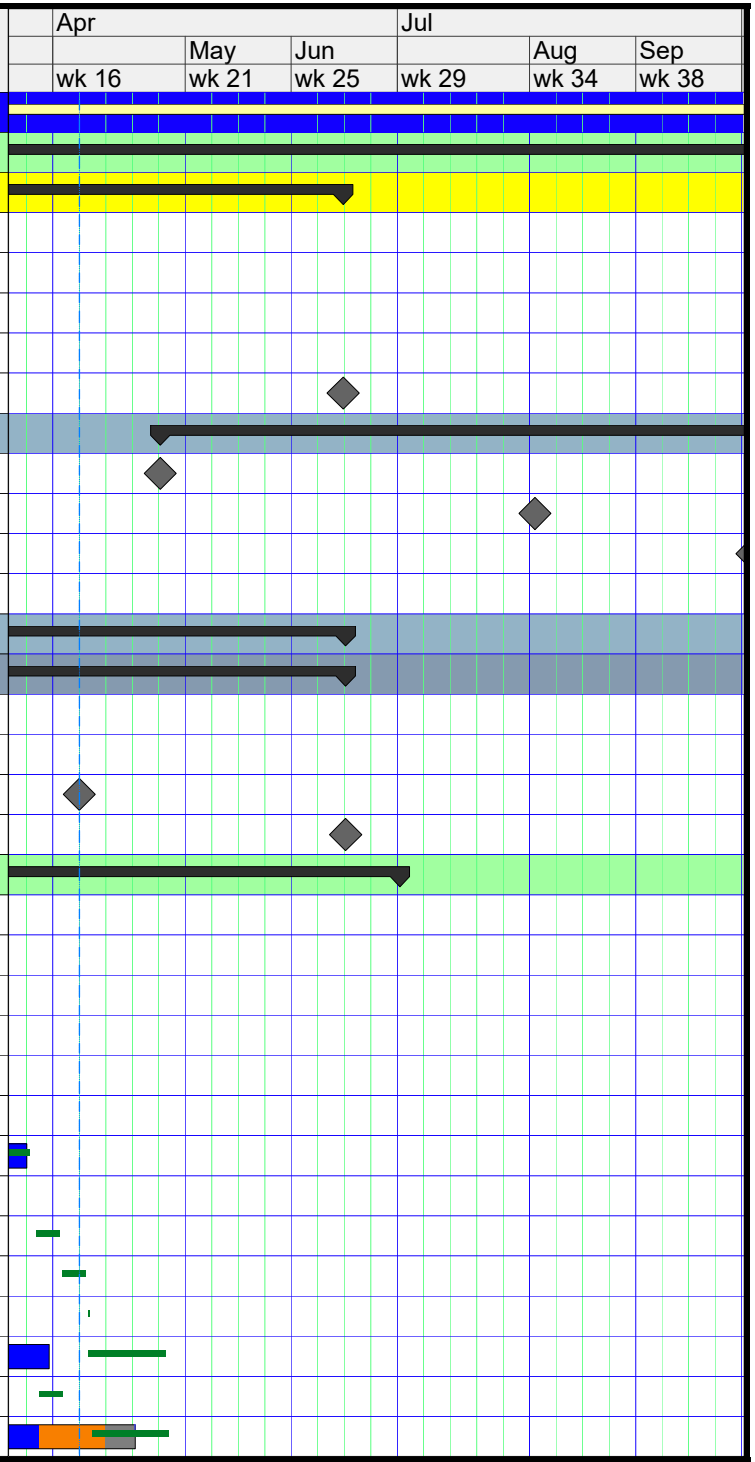
Hot Work Permit

Ladder Permit

Required Safety Documentation for Trade Partners Checklist

Caution and Danger Tape Signage

	ID	Description	Days	Rem Days	Start	Finish	Comments
1	FCCR.000	FCCR - Preconstruction and Construction Schedule	580d	500d	12/18/2018	3/8/2021	
2	Mi	Milestones	580d	500d	12/18/2018	3/8/2021	
3	Mi.001	Pre-Construction Milestones	130d	50d	12/18/2018	6/17/2019	
4	Mi.PC.010	Executed Agreement	0d	0d		12/18/2018 (A)	Fannin County
5	Mi.PC.020	Kick-off Meeting	0d	0d	1/7/2019 (A)		Team (ALL)
7	Mi.PC.030	Preconstruction Begins	0d	0d	1/7/2019 (A)		Turner Preconstruction
6	Mi.PC.040	Pull Planning Meeting	0d	0d	1/24/2019 (A)	1/24/2019 (A)	Team (ALL)
8	Mi.PC.050	Preconstruction Ends	0d	0d		6/17/2019	Turner Preconstruction
9	Mi_002	Construction Milestones	485d	485d	4/30/2019	3/8/2021	
10	Mi.CM.010	RFP #1 - Construction Begins	0d	0d	4/30/2019		Turner Construction
11	Mi.CM.020	RFP #2 - Construction Begins (04-01-19)	0d	0d	8/7/2019		Turner Construction
12	Mi.CM.030	RFP #1 - Substantial Completion	0d	0d		10/3/2019	Turner Construction
13	Mi.CM.900	RFP #2 - Substantial Completion (10-31-20)	0d	0d		3/8/2021	Turner Construction
14	Mi_003	Owner Milestones	80d	50d	2/26/2019	6/18/2019	
15	Mi.CC	Commissioners Court - Key Dates	80d	50d	2/26/2019	6/18/2019	
16	CC 19-01	Commissioners Court	0d	0d	2/26/2019 (A)	2/26/2019 (A)	Fannin County
17	CC 19-02	Commissioners Court	0d	0d	2/26/2019 (A)	2/26/2019 (A)	Fannin County
18	CC 19-03	Commissioners Court	0d	0d	4/9/2019 (A)		Fannin County
19	CC 19-04	Commissioners Court	0d	0d	6/18/2019		Fannin County
20	PC.PP	Pre-Construction Activities - Pull Planning	124d	61d	1/10/2019	7/2/2019	
40	PC.PP.010	Determine Quarry for Stone	15d	0d	1/10/2019 (A)	1/31/2019 (A)	Turner Preconstruction
21	PC.PP.020	Identify Early Work Packages	5d	0d	1/24/2019 (A)	1/31/2019 (A)	Team (ALL)
23	PC.PP.030	Develop VE Cost	23d	0d	1/24/2019 (A)	2/26/2019 (A)	Turner Preconstruction
22	PC.PP.040	Identify County Self Perform Scopes of Work	5d	0d	1/24/2019 (A)	1/31/2019 (A)	Fannin County
24	PC.PP.050	Develop / Issue Bid Proposal (RFP#1)	17d	0d	2/1/2019 (A)	2/26/2019 (A)	Turner Preconstruction
25	PC.PP.060	Approval of RFP #1	0d	0d	2/26/2019 (A)		Fannin County
29	PC.PP.070	Advertisement for RFP #1	20d	0d	2/26/2019 (A)	3/26/2019 (A)	Fannin County
28	PC.PP.080	Issue RFP #1	0d	0d	2/26/2019 (A)		Turner Construction
26	PC.PP.090	Finalize List of VE Items	3d	0d	2/27/2019 (A)	3/4/2019 (A)	Team (ALL)
27	PC.PP.100	Evaluate Cost of VE Items	4d	0d	3/5/2019 (A)	3/11/2019 (A)	Team (ALL)
36	PC.PP.110	Submit Cost Estimate to County	0d	0d	3/12/2019 (A)	3/12/2019 (A)	Turner Preconstruction
32	PC.PP.120	Review of VE Items	14d	0d	3/12/2019 (A)	4/1/2019 (A)	Texas Historic Commission
37	PC.PP.130	Evaluate Cost Estimate by County	4d	0d	3/13/2019 (A)	3/19/2019 (A)	Fannin County
42	PC.PP.140	Develop Remaining Bid Package	27d	11d	3/18/2019 (A)	4/23/2019	Turner Team



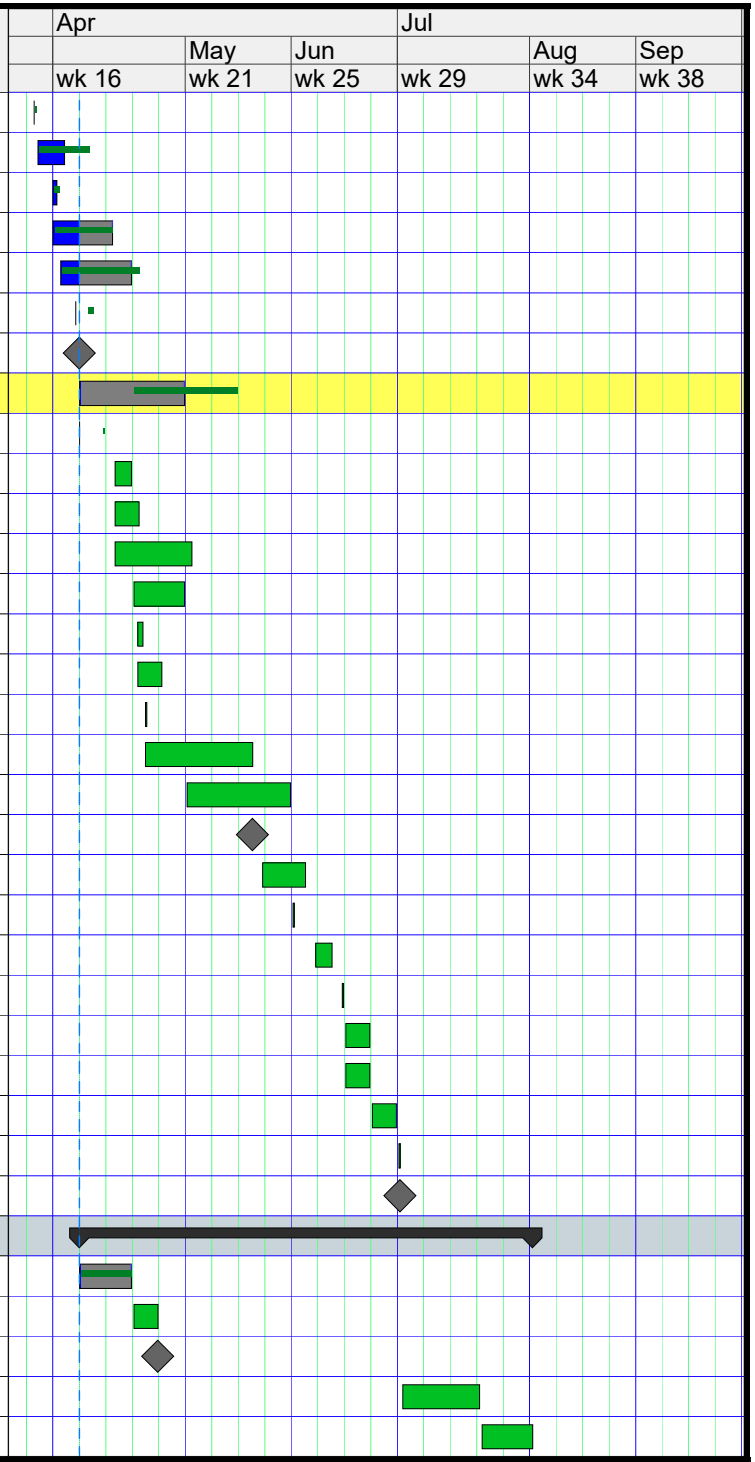
Project title	FANNIN COUNTY COURTHOUSE RESTORATION	Dated	4/9/2019	Drawn by	RLH
Programme title		Rev No	02	Rev comments	2019-0409 Schedule Update
Client	FANNIN COUNTY	Notes			

Programme No

Turner Building the Future

Printed: 4/9/2019

	ID	Description	Days	Rem Days	Start	Finish	Comments
30	PC.PP.150	*** Public Bid Opening for RFP #1 ***	0d	0d	3/28/2019 (A)	3/28/2019 (A)	Fannin County
31	PC.PP.160	Evaluate RFP #1 Proposals	5d	0d	3/29/2019 (A)	4/5/2019 (A)	Turner Construction
41	PC.PP.170	ID Bid Breakdown | SOV Required	1d	0d	4/2/2019 (A)	4/3/2019 (A)	Turner Construction
43	PC.PP.180	Update Drawings with VE Items	12d	7d	4/2/2019 (A)	4/17/2019	Architexas & Consultants
33	PC.PP.190	Approval of Additional VE Items	13d	10d	4/4/2019 (A)	4/22/2019	Texas Historic Commission
34	PC.PP.200	Develop Award Recommendation for County & Arch	0d	0d	4/8/2019 (A)	4/8/2019 (A)	Turner Construction
39	PC.PP.210	Award Contracts for RFP #1	0d	0d		4/9/2019 (A)	Fannin County
47	PC.PP.240	Identify Dignataries for Ground Breaking	20d	20d	4/9/2019 (A)	5/6/2019	Fannin County Historic Commission
35	PC.PP.220	Commissioners Approve Recommendation	0d	0d	4/9/2019 (A)	4/9/2019 (A)	Fannin County
44	PC.PP.230	Final Drawings Issued for Bidding	3d	3d	4/18/2019	4/22/2019	Architexas & Consultants
46	PC.PP.250	Issue Drawings to City of Bonham	5d	5d	4/18/2019	4/24/2019	Turner Construction
45	PC.PP.260	Review NTP	15d	15d	4/18/2019	5/8/2019	Team (ALL)
38	PC.PP.270	Revise Funding Agreement	10d	10d	4/23/2019	5/6/2019	Fannin County
62	PC.PP.280	Develop Public Advertisement	2d	2d	4/24/2019	4/25/2019	Fannin County
49	PC.PP.290	Advertise Project to Local Community	5d	5d	4/24/2019	4/30/2019	Fannin County
61	PC.PP.300	Local & HUB Outreach Event in Bonham	1d	1d	4/26/2019	4/26/2019	Fannin County & Turner Team
50	PC.PP.310	Bid Development Period	21d	21d	4/26/2019	5/24/2019	Prime Contractors / Trade Partners
48	PC.PP.320	Mail Invitations / Returned RSVP to Dignitaries	20d	20d	5/7/2019	6/3/2019	Fannin County Historic Commission
58	PC.PP.330	*** Public Bid Opening ***	0d	0d		5/24/2019	Fannin County & Turner Team
51	PC.PP.340	Evaluate Bid Proposals	10d	10d	5/27/2019	6/7/2019	Team (ALL)
60	PC.PP.370	Ground Breaking Ceremony	1d	1d	6/4/2019	6/4/2019	Fannin County Historic Commission
53	PC.PP.360	Complete Estimate & Assumptions | Clarifications	5d	5d	6/10/2019	6/14/2019	Turner Team
54	PC.PP.380	Internal Review of Estimate, Recommendation, etc.	1d	1d	6/17/2019	6/17/2019	Turner Team
55	PC.PP.390	Commissioners Evaluation of Recommendation	5d	5d	6/18/2019	6/24/2019	Fannin County
52	PC.PP.350	Develop Recommendation to County & Architexas	5d	5d	6/18/2019	6/24/2019	Turner Team
56	PC.PP.400	Architexas Evaluation of Recommendation	5d	5d	6/25/2019	7/1/2019	Architexas
57	PC.PP.410	Commissioners Approve Recommendation	1d	1d	7/2/2019	7/2/2019	Fannin County
59	PC.PP.420	Award Contracts for Balance of the Project	0d	0d		7/2/2019	Fannin County
63	**PC.PR**	**Pre-Construction Activities - Procurement**	**86d**	**86d**	**4/9/2019**	**8/6/2019**	
64	PC.PR.010	Issue Contract Agreement for Ext. Masonry	10d	10d	4/9/2019 (A)	4/22/2019	Fannin County & Turner Team
65	PC.PR.020	Ext. Masonry Contract for Executed by Fannin Co.	5d	5d	4/23/2019	4/29/2019	Fannin County & Frontier Waterproofing
66	PC.PR.030	Executed Agreement form Ext. Masonry	0d	0d		4/29/2019	Fannin County & Frontier Waterproofing
67	PC.PR.040	Develop Contracts for Trade Partners	15d	15d	7/3/2019	7/23/2019	Fannin County & Prime Contractors
68	PC.PR.050	Issue Contracts for Trade Partners	10d	10d	7/24/2019	8/6/2019	Fannin County & Prime Contractors



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Turner Building the Future

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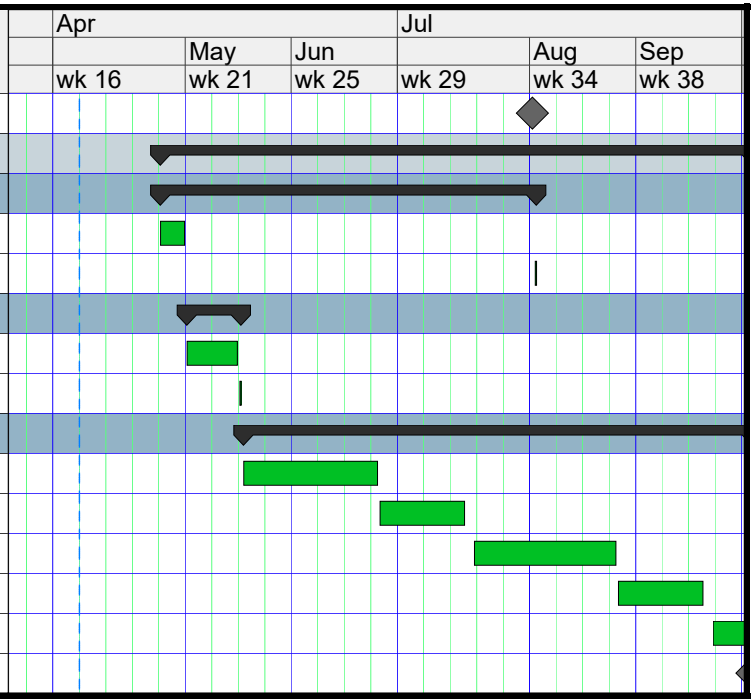
	ID	Description	Days	Rem Days	Start	Finish	Comments
69	PC.PR.060	Executed Contracts Returned from Trade Partners	0d	0d		8/6/2019	Fannin County & Prime Contractors
70	**CO**	**Construction Activities**	**113d**	**113d**	**4/30/2019**	**10/3/2019**	
71	**CO.MO**	**Mobilization**	**72d**	**72d**	**4/30/2019**	**8/7/2019**	
72	CO.MO.010	Mobilization for Ext. Masonry Cleaning	5d	5d	4/30/2019	5/6/2019	Frontier Waterproofing
73	CO.MO.020	Turner Mobilization for RFP #2 Scopes	1d	1d	8/7/2019	8/7/2019	Turner Construction
74	**CO.MU**	**Mock-ups**	**11d**	**11d**	**5/7/2019**	**5/21/2019**	
75	CO.MU.010	Develop Exterior Masonry Mock-up	10d	10d	5/7/2019	5/20/2019	Frontier Waterproofing
76	CO.MU.020	Review & Approve Exterior Masonry Mock-up	1d	1d	5/21/2019	5/21/2019	Architexas & THC
77	**CO.EC**	**Exterior Cleaning**	**97d**	**97d**	**5/22/2019**	**10/3/2019**	
78	CO.EC.010	North Elevation	26d	26d	5/22/2019	6/26/2019	Frontier Waterproofing
79	CO.EC.020	East Elevation	17d	17d	6/27/2019	7/19/2019	Frontier Waterproofing
80	CO.EC.030	South Elevation	28d	28d	7/22/2019	8/28/2019	Frontier Waterproofing
81	CO.EC.040	West Elevation	17d	17d	8/29/2019	9/20/2019	Frontier Waterproofing
82	CO.EC.050	Weather Delays (10% Float on 88 Days)	9d	9d	9/23/2019	10/3/2019	Fannin County
83	CO.EC.060	Exterior Cleaning Completed	0d	0d		10/3/2019	Team (ALL)



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Construction Fence

Porta-Potty

Construction Gate

Construction Fence

Contracor Connex

Contractor Laydown

Turner Trailer

Lunch Area

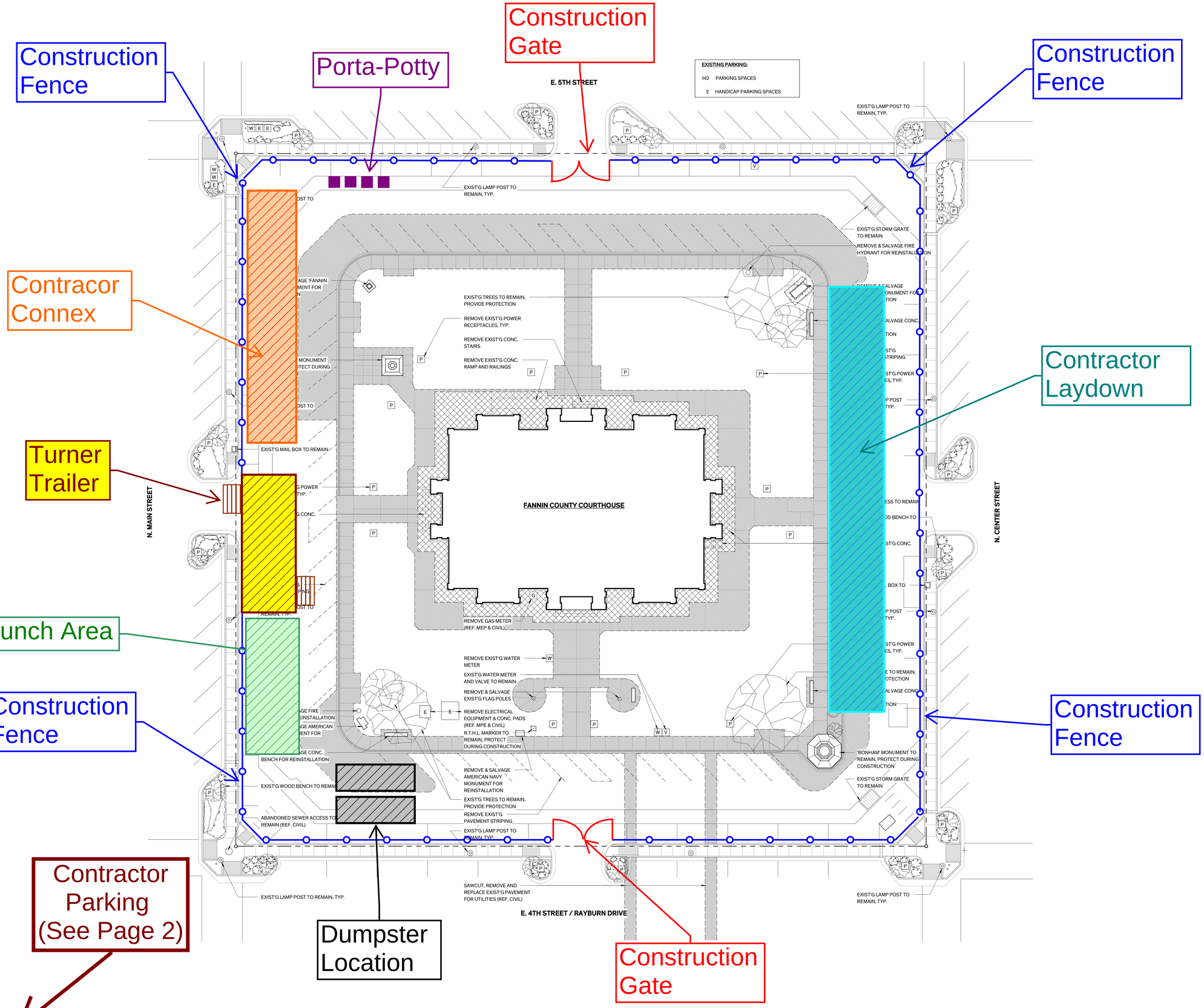
Construction Fence

Construction Fence

Contractor Parking (See Page 2)

Dumpster Location

Construction Gate



CONTRACTOR PARKING (CITY OWNED LOT)
N. MAIN STREET & W. 3RD

PREQUALIFICATION INFORMATION

NOTE: Please fill out as completely as possible; however if something does not apply to your company write N/A (not applicable)

Date_____

Subcontractor _____

Type of Work _____

Address _____

City, State, Zip Code _____

Contact_____email_____

Telephone_____Website_____

Pre-qualification information required:

1. Attach an audited financial statement not older than 12 months or
2. Past two years of internal statements if you do not use audited statements.
3. Attach a list of projects under construction including contract amounts and percent complete.
4. Attach a list of five (5) client references including contact name and telephone number.
5. State number of years in business:_____
6. State last year's revenue from contracts: $_____
7. State largest contract completed: $_____Year_____
8. State name of largest project:_____
9. State current Workers' Compensation Insurance Employer Modification Rate (EMR): _____
10. State disadvantaged business status: ☐MBE, ☐WBE, ☐SBE, ☐DBE, ☐LGTB, ☐None,

    (Attach current certification certificates)

E-mail the above information to (Linda Stern), email: lstern@tcco.com

Contact (Linda Stern) at (713-539-0449) if you have questions.

BIM PROJECT EXECUTION PLAN

Fannin County Courthouse Restoration

Issued Draft 4/02/2019

BIM EXECUTION PLAN

Table of Content

I. Project Information

Project Name:	Fannin County Courthouse – Interior & Exterior Restoration
Project Number	190358
Client Name:	Fannin County
Project Address:	101 E. Sam Rayburn Drive, Bonham, Texas 75418
Contract Type:	Construction Manager-Agent Agreement
Additional Info:	Architexas, Project No. 1737
Client Project No.	TBD
Project Description:	Interior and exterior restoration of the 1888 downtown courthouse. Includes court rooms, offices and amenity areas to support the courthouse.

II. Project Team

i. A/E Team

ORGANIZATION	CONTACT NAME	ROLE/TILE	EMAIL	PHONE	LOCATION
Architexas	Anne Stimmel	Associate	astimmel@architexas.com	817-600-2913	Dallas, TX

ii. CM Agent Team

ORGANIZATION	CONTACT NAME	ROLE/TILE	EMAIL	PHONE	LOCATION
Turner Construction	Tony Jarecki	Project Mangaer	tjarecki@tcco.com	214-604-7847	Dallas, TX
Turner Construction	Ben O'Keefe	Project Superintendent	bokeefe@tcco.com	469-243-6230	Dallas, TX
Turner Construction	Linda Stern	Project Engineer	lstern@tcco.com	713-539-0449	Dallas, TX
Mechanical	*TBD*	Modeler	*TBD*	*TBD*	*TBD*

Mechanical	*TBD*	Superintendent	*TBD*	*TBD*	*TBD*
Mechanical	*TBD*	Project Manager	*TBD*	*TBD*	*TBD*
Plumbing	*TBD*	Modeler	*TBD*	*TBD*	*TBD*
Plumbing	*TBD*	Superintendent	*TBD*	*TBD*	*TBD*
Plumbing	TBD	Project Manager	TBD	TBD	TBD
Electrical	TBD	Modeler	TBD	TBD	TBD
Electrical	TBD	Superintendent	TBD	TBD	TBD
Electrical	TBD	Project Manager	TBD	TBD	TBD

III. BIM Scope / Requirement

Fannin County Courthouse Restoration project shall utilize 3D Modeling for the coordination of all Mechanical, Plumbing, and Electrical Systems. Model will be provided by the architect/engineer. Once the model is provided by the A/E after 100% CD, trade partners will provide staff to support the BIM execution plan as noted below.

Virtual Design and Construction Techniques

1- Trade partner 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 the County and 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 Trade Partner's costs of such participation are included in the Price unless explicitly outlined herein.

2- Trade Partner shall provide digital submissions of information describing its respective Work in a form and manner that Fannin County and Turner may require and that can be loaded into a BIM assembled by Turner.

3- Trade Partner's submissions shall be of sufficient detail to enable accurate and complete clash detection and shall be provided by Trade Partner at a point in time that is reasonably in advance of Trade Partner's shop drawing submittals and the subsequent on site construction of the Trade Partner's Work and such submissions shall contain such details and follow such procedures as Fannin County and Turner may require.

4- The digital format of such BIM submissions shall be as described herein (specifying the necessary digital formats, software requirements, etc.), which will be provided to trade partner after execution of Agreement and prior to the start of coordination.

5- Trade Partner shall participate in such BIM coordination and review meetings as Fannin County and Turner may require and agrees that, as a result of the information exchanged at such meetings, both the digital submission and the Work depicted in the Trade Partner's digital submission may be required to be changed by Trade Partner to achieve coordination with other elements of the Project being provided by others. Such changes shall be accomplished at no increase in the Price or Time of Completion. Trade Partner 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 trade partner therefore agrees that personnel conversant in both shall attend all such meetings.

6- Trade Partner agrees that neither the BIM nor the use of the BIM is in lieu of nor intended to relieve the Trade Partner of its responsibilities under the Trade Partner, including to (i) coordinate its Work with the work of others involved in the Project and (ii) strictly comply with the other requirements of the Contract Agreement and the Contract Documents. It is expressly understood and agreed that, notwithstanding the requirement for submittals in connection with the BIM, traditional shop drawings and other submissions shall be required of Trade Partner as required by the Contract Documents and no party shall be liable to the

other for any claim, dispute, controversy, cost or expense arising solely out of the use of the BIM.

7- Fannin County, Turner or Architexas does not waive any of its intellectual property rights and shall have the sole and exclusive right to use the BIM and all submissions made by Trade Partner as it deems appropriate, whether during or after construction.

8- Trade Partner agrees that notwithstanding the fact that it may participate in the BIM process or receive information or materials from others in connection with the Project through the course of the use or development of the BIM, it shall not take any position that the receipt of such participation or information has or will, in any respect, operate to waive, release or otherwise invalidate any of its obligations or responsibilities under the Trade Partner or any intellectual property rights (copyrights, trademarks/logos, patents, etc.) that may apply to such information or materials.

9- Trade Partner acknowledges and agrees that Fannin County and Turner shall incur no responsibility or liability with respect to the BIM or the use thereof, including that resulting from errors, omissions or deficiencies in the BIM. In the event that Trade Partner provides deficient information or data that does not represent the Work it will be ultimately providing, that is corrupted, that contains a virus and/or that otherwise damages the BIM, Trade Partner shall bear all costs associated with reconstructing the BIM and to otherwise remediate such deficiencies or their effects.

10- In the event the Trade Partner discovers any error, inconsistency or omission in its information or submissions, the information or submissions provided by others or any BIM, it shall promptly report the same to Fannin County and Turner via written notice which shall contain all relevant specifics.

11- Trade Partner 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. Trade Partner agrees to promptly update and provide revised submissions to Fannin County and Turner throughout the course of the Project so that the BIM at the conclusion of the Project accurately depicts the Work as actually performed and installed.

12- The foregoing process is in addition to the Trade Partner's obligations to make the traditional submissions and shall not relieve or lessen in any way the Trade Partner's obligations contained throughout this Agreement and the other Contract Documents, defined in Article II of this Agreement.

The Roles and Responsibilities of Each Trade Partner are Defined Below:

1. **Turner Construction Company** will make available their national BIM Server that will enable all project parties to upload and download their respective "in progress shop models," manage electronic drawing files or models and other electronic documents used in the coordination process. When the coordination drawings are uploaded, The **HVAC Contractor** will download and integrate all trade models into a consolidated model. After this a clash

report will be created identifying all the clashes and conflicts between trade systems. This report will be issued to the trade partners for action and resolution. Turner may require that trade partners 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.

2. **Turner** will provide 3-Dimensional Architectural and Structural Models based on the design and scan of the building for use as backgrounds for coordination. Models will 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. Each Trade is ultimately responsible for coordinating to all information contained in the 2-Dimensional Contract Drawings and Specifications as related to their work. The model(s) Turner will provide are used as diagrammatic representation only and is not to be relied upon for their accuracy nor as a reflection of the design, design intent, or representation of existing conditions. The trade partner is not required nor encouraged to wait for the distribution of 3D background models by Turner to begin their engineering and drafting efforts. Each trade partner shall proceed with the most haste using the 2D contract documents to begin their engineering and drafting in order to meet the project schedule.

3. The **HVAC Contractor** will generate and provide in a timely manner 3D Models of the HVAC Systems including, but not limited to, duct work, piping, and all equipment installed in the HVAC Scope of work (Fans, AHU's, Built Up AHU's., pumps, tanks, valves, controls, heat exchangers, Smoke & Fire Dampers, All Valves (including valve stems and handles), gauges & control valves, Insulation on piping & Ductwork, Hangers & Seismic Bracing, Diffusers, Registers, louvers, grilles, High & low point drains, Starters, etc.). The HVAC Contractor shall also include in the 3D model Concrete Equipment pads, inertia pads and Access Doors. The HVAC Contractor shall identify under separate drawing layer Access doors and Accessibility requirements for above listed items for code and maintenance purposes.

4. The **Plumbing Contractor** will generate and provide in a timely manner 3D Models of the Plumbing Systems including, but not limited to, all piping systems, and equipment installed in the Plumbing Scope of work. (Domestic Water, Chilled Water, Steam, Storm/Roof Leaders, pumps, tanks, water heaters, in wall carriers, In wall plumbing equipment., All Valves, gauges & control valves, Insulation on piping, Hangers & Seismic bracing, Clean-outs, etc.). The Plumbing Contractor shall also include in the 3D model Concrete Equipment pads, inertia pads and Access Doors. The Plumbing Contractor shall identify under separate drawing layer Access doors and Accessibility requirements for above listed items for code and maintenance purposes.

5. The **Electrical Contractor** will generate in a timely manner 3D Models of the Electrical Systems including, but not limited to, all conduit systems, and equipment installed in the Electrical Scope of work. (Individual Conduits over 1", racks carrying more than 4 conduits 1" and smaller, panels, transformers, switch/paralleling gear, ATS's, generators, cable tray, data racks, starters, VFD's, Hangers & Seismic Bracing, etc. for Normal, Emergency and Isolated Power Systems). The Electrical Contractor shall also include in the 3D model Equipment pads, inertia pads, Light Fixtures, Exit Signs, Fire Alarm, Speakers, AV Equipment, Recessed Electrical

devices and Access Doors. The Electrical Contractor shall identify under separate drawing layer Access doors and Accessibility requirements for above listed items for code and maintenance purposes.

6. The **Facilities Management System Contractor (Controls)** will generate in a timely manner 3D Models of the Building Management Systems including, but not limited to, all conduit systems, and equipment installed in the Facilities Management System Scope of work. (Individual Conduits over 1", racks carrying more than 4 conduits 1" and smaller, panels, transformers, controls, cable tray, data racks, starters, VFD's , Hangers & Seismic Bracing, etc.). The Facilities Management System Contractor shall also include in the 3D model Concrete Equipment pads, inertia pads and Access Doors. The Controls Contractor shall identify under separate drawing layer Access doors and Accessibility requirements for above listed items for maintenance purposes.

7. Once the Architectural/Structural models are posted on the Turner BIM Server, each trade is required to down load and use these files to create their system models by sequence or geographic area dictated by Turner's representatives. The process is to create and upload system models to the BIM Server as frequently as required by Turner for other trades to use while modeling their systems. Turner's BIM coordination process in many respects follows a traditional sequence of drawing / modeling those systems with the most constraints on their routing and then following with those trades that have more flexibility in their placement. Coordination will be expected to start as soon as contracts are awarded and follow the typical sequence:
    i. Duct will be laid out in conformance with design documents. If floor size permits, duct layout to flow systematically across a floor allowing other trades to follow behind drafted areas.
    ii. Thereafter all pitched plumbing systems are to be drawn and coordinated w/ the ductwork.
    iii. Once duct/pitched pipe are coordinated, other major constrained trade systems' components including all HVAC, Fire Protection, electrical cable tray, conduit racks, plumbing racks, are to be drawn /modeled and coordinated.
    iv. Upon completion of drawing / modeling and coordination of major system components of the constrained trades, "minor" components are to follow including branch piping & smaller conduit runs.

8. **Each Trade** is required to run the clash detection analysis for their respective trade system against the Architectural/Structural design models to ensure that there are no conflicts between the architectural/structural elements and their system(s).

9. **Each Trade** is required to post to the Turner BIM Server, up-dated drawings/models at least once per week, prior to the clash detection analysis run by the BIM Coordinator / Gatekeeper. (Day and time to be determined). This will continue until the area is completely coordinated.

10. 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 BIM Coordinator / Gatekeeper which involves looking at each individual clash, and documenting it, by saving the appropriate view points. The Coordinator / Gatekeeper will create a Navisworks .NWD file showing the clash

viewpoints & Corresponding Word Document showing clashes. This Clash report & Navisworks .NWD file will be posted to the BIM Server by the Coordinator / Gatekeeper and a corresponding notice sent by the Coordinator / Gatekeeper to all parties involved that the report is ready. Alternatively, Turner may elect to have the **HVAC Contractor** take the LEAD roll as the **"BIM Gatekeeper"** and run the clash detection analysis as frequently as required for all systems modeled.

11. **Each Trade** is required to review the clash detection report generated by the BIM Coordinator / Gatekeeper before the weekly meeting, and arrive at the meeting prepared to address the unresolved clashes in a constructive manner.

12. **Each Trade** is required to collaborate with each other trade through email, telephone, and in person to resolve basic clashes outside of the weekly Coordination meetings. It is expected that the weekly Coordination meetings are held to address difficult areas that are not able to be coordinated between the multiple trades themselves. At these meetings, the resolution will be collectively agreed upon, and a trade will be identified as having to "move". This trade will adjust the respective model and repost it for the following week's meeting. All trades are responsible to update and post the changes agreed upon at the meeting with-in 1 week after the coordination meeting.

13. **Each Trade** is required to submit the number of copies of their respective, coordinated systems in a -2-Dimensional format as required by their contract, for approval through the regular submittal process. This is required for each floor as well as each riser. In addition to the development of 3-Dimensional coordination models, all trade trade partners are responsible for producing a traditional 2-Dimensional coordination drawing after cleaning up resolved all clashes and collisions. In the preparation of the final composite 2-Dimensional coordination drawings, large scale details as well as cross and longitudinal sections developed at Coordination Meetings shall be made by the trade partner as required to fully delineate all conditions. 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.

14. If required per contract documents, the HVAC Contractor is required to compile and plot the number of copies of the 2-Dimensional, multi-trade, coordinated drawings required by the contract documents for approval through the regular submittal process, for each floor. This is required for each floor as well as each riser.

15. **Each Trade** is required to maintain and provide the 3-Dimensional Model with respect to generating As-Built Drawings/Models. It is the responsibility of each trade to update their respective 3-Dimensional Model throughout construction to reflect field conditions to accurately document As-built conditions.

16. **Each Trade** is required to submit the number of color copies of their respective, As-Built – 2-Dimensional drawings as required by the contract documents, for approval through the regular close-out process. . This is required for each floor as well as each riser.

17. **Each Trade** is required to submit three copies of CD's containing the 3-Dimensional As-Built models, once all issues are addressed from item 19 above. This CD shall contain As Built models in Autodesk .DWG and .NWD formats as well as including the original authoring files in the native format of the program that created the models. Turner reserves the right to request additional file formats as the needs of the client or project require.

18. **Each Trade** is required to update and post any changes originating from RFI's, Submittal's and Bulletin's that have changed their perspective work. Each Trade 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.

19. **Each Trade** is required to draw in a format that a 3rd party individual can highlight and track progress of work thru selecting individual items in each trades model thru Navisworks.

20. **Each Trade** is required to attend a separate bi-monthly meeting to review accessibility of equipment, devices, panels, valves, etc. above ceiling with the owner, Architect, Engineer and Turner. Each Trade is responsible to provide and identify under separate drawing layer Access doors and Accessibility requirements for above listed items for maintenance purposes.

21. **Each Trade** will execute all coordinated BIM models in the field for layout and coordination purposes using Trimble (www.trimble.com) or equal technology.

22. **Change Order / Bulletin Process:** The process for quantifying and correcting clashes caused by a design change to a signed off and in-progress area is as follows:
    - Trade(s) that have work directly affected by the bulletin documents will take the lead in drafting the revised 3-Dimensional layout, minimizing the clashes w/ other trades as much as possible. Revised layouts are to be drawn in an identifiable layer, labeled to match the respective bulletin.
    - Once the work is drafted by the affected trade(s), a clash report is to be prepared by the BIM Coordinator / Gatekeeper with all latest posts.
        - While running the clash detection feature in Navisworks, the Coordinator / Gatekeeper will turn on the 'links view' option and all clashes are labeled while navigating through the model.
        - Coordinator / Gatekeeper will audit and report the clashes that are local to the area affected by the change documents, similar to the analysis of detected vs. reported clashes in preparation for weekly clash reports.

MISCELLANEOUS REQUIREMENTS

A. Coordination is the responsibility of all contractors. Turner will call meetings, as required, which contractors must attend. Failure to attend will result in work by the absent contractor on sheets reviewed at meeting being declared improperly coordinated and will require the contractor to relocate work as shown by Turner, or to field run the work not coordinated. No extra compensation will be paid to any contractor for relocating any duct, pipe, conduit, or other material that has been installed without proper coordination between all the contractors and the trades involved. If any improperly coordinated work, or work installed that is not in accordance with the approved coordination composites, necessitates additional work by other contractors, the cost of such additional work shall be assessed to the contractor responsible as determined by

Turner. Errors in coordination will be resolved by the contractor at his own expense. Where agreements cannot be reached, Turner will furnish a resolution. The contractor will bear the expense of said resolution.

B. All work on the coordination drawings (including 3D models) shall be performed by competent draftsmen in a clear legible manner utilizing standard industry conventions. All trade contractors 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.

C. Coordination drawings are not to be construed as and not to relieve each contractor from their shop drawing obligations required under the project specifications, and are distinctly separate from the requirements to provide final "As-Built" drawings.

D. All files supplied by Architexas and Turner will be as AutoDesk .dwg file format and be readable by other trades' CAD system and NavisWorks. Being 'readable' means the ability to open a file without any errors (such as prox, xref resolution, geometry error, etc) and with objects, layers, and other file properties remaining intact. In addition all .dwg files shall be saved down to the lowest common version which will be determined.

E. The trade contractors are responsible for providing 3-Dimensional solid or surface models (not line & wireframe models) that represents the actual dimensions of the trade system elements and the equipments that will be installed.

F. It is critical that all trade contractors' use a mandated file naming convention for their CAD file's name to track the version and date by each trade. Turner will provide the detailed file naming convention to all MEP contractors. An example would be as follows: "Project_Responsibility_Phase_Trade_Floor_Area_Version_Date". Final determination of file naming to be determined by Turner BIM Engineer. Any files that do not follow the file naming convention will be deleted and removed from the server at anytime without any notification.

G. All trade partners' drawing and model files shall be based on an origin point provided by Turner. The cost of any changes required by the Trade Contractor to their drawings or models due to the use of an unauthorized origin shall be borne by the trade contractor.

IV. BIM Kick-Off Meeting

Prior to the publishing of 100% construction document, Fannin County and Turner will hold a BIM Introduction or "kickoff" meeting to establish the BIM program, procedures, organizations and setups for all members of the Design Build Team.
Topics to be covered are:

- Project Information
  - BIM Execution Plan
  - Coordination Schedule and Critical Path Deadlines
  - Version & Build of Revit to be used on the project
  - Identify Software tools to be used on the project

  - General Requirements/Deliverables
- Coordination
  - Model Sharing and Uploads
  - Building Areas of Responsibilities (shared models)
  - Team Responsibilities (BIM points of Contact)
  - File Divisions / Organization
- Best Practices/Guidelines
  - Anticipated Model Uses
  - Procedure for Updates, Coordination, and Communication
  - Best Practices

V. Objective

Design Validation/Clash Detection

The objective of the Design Validation process is to introduce tools and techniques that help project personnel provide an optimized and well coordinated design. Proper 3D coordination should allow the trades to work together to optimize entire systems and the installation process. Having confidence in the quality of the coordination and in the plan for installing building elements and equipment means that Trade Partners will be able to prefabricate substantial parts of their scope of work and deliver the project more efficiently with significantly less rework and schedule risk. The final coordinated 3D model of the building or facility should represent the AS BUILT conditions at the end of the project that are assembled in an ongoing basis during construction.

4D Schedule Simulation and Visualization (INPUT BY Ops) - TBD

The term 4D is often used to refer to 3D models that are linked to a construction schedule. The objective of 4D schedule model is to visualize the construction process and allow all project participants to review, understand, and optimize the sequence of the construction operations, as well as the project schedule. Well executed 4D schedule visualization is also able to assist working site organization, and eliminates the temporary materials stored on site getting in the way of workers or working schedule collision. The intent is to link the model to the contract schedule as well as the progress schedule using Synchro.

5D Cost & Quantity Take Off (INPUT BY Ops) - TBD

The model should include 3D elements to represent Schedule B, F, Equipment List, etc. for cost analysis and quantity take off / tracking purposes.

VI. Model Planning

General Requirements

Origin Point: Is to be the same as that established during the design phase of the project. All models must be in the correct location in 3D space (x, y, and z coordinates). These coordinates will be set by Turner and distributed to all consultants & trade contractors for their use. This includes correct floor elevations(s) (z coordinates). The correct insertion point is critical and ensures that each model will align properly for the master aggregate model without modification.

Tolerances: Models(s) and Model elements must be within 1/8" of theoretical dimension. Tolerances for specific items and systems will be determined as necessary. Model tolerances are not to be construed as construction tolerances.

Units: Imperial units. One (1) unit in the model equals 0'-1".

Scale: BIM/3D Models need to be in the correct scale and units. One unit (in the model) equals One inch.

Systems of Model and Level of Detail (LoD)

All models submitted need be LoD350 or above, special cases may apply and must be approved by Turner's BIM Engineer. Reference the BIM Forum 2013 Level of Development Specification for more info and examples on LoD.

Color Scheme

BIM Coordination demands combination of multiple models. Assign designated color scheme to each trade can minimize any similar geometrical confusion, and effectively detect the clashing spot. All trade partners are required to agree and comply with the color scheme through the entire project duration. Alteration of color scheme can be discussed at the first Kick-Off meeting, and have consent from all participating parties.

Trade		Color	
ARCH	Architectural	Gray	
ST	Structural	Gray 80%	
MB	Metal Building	Dark Red	
STLDM	Structural Steel	Light Blue	
MP	Mechanical Piping	Purple	
DUC	Mechanical Duct	Orange	Accent 6, Darker 25% (228,109,10)
PL	Plumbing	Green	
EL	Electrical	Yellow	
FP	Fire Protection	Red	
CONC	Concrete	Olive Green	Accent 3, Darker 50% (79,98,40)
MPA	Metal Panels	Red Accent 2	
DWAC	Drywall/Acoustical	Light Orange	
CWG	Curtain Wall/Glazing	Blue	
SU	Site Utility	Dark Blue	

VII. Design Validation Procedure

Project Setup

Before the modeling of the different systems begins, the project team discusses which areas of the project and which systems need to be represented in the model; a detail list of the model elements desired is listed in the "BIM scope" above. Often times it is advisable to begin creating a model of a limited area that is expanded during the process as the need arises. It is advisable to get as many systems as possible represented in the model to ensure meaningful coordination. The architectural

and structural model must include elements that are relevant for the MEP coordination process (e.g. full height walls, structural elements, openings), but can ignore or abstract elements that are less relevant (e.g. window mullions, furniture, textures and finishes) if not listed in BIM scope. The BIM Forum 2013 Level of Development Specification will give actual suggestions for an appropriate level of detail.

A critical part of the project setup process is communication of the expectations of each participant in the collaborative process and the inclusion of contract language in the subcontracts. The requirements that need to be communicated to the Trade Partners comprise of file naming conventions, the expected scope of models supplied by others, and process requirements for collaboration, data exchange and model updates by specific file naming schema and security profiles.

Designers are encouraged to submit uploads of their design and retrieve recent designs uploaded by other trades regularly. On a scheduled basis, Turner's Project Model Coordinator (PMC) will integrate the different models into a Consolidated Model and publish the findings to all project participants. The role of the Project Model Coordinator is typically assumed by Turner's BIM Engineer on the project. The Consolidated Model is used to analyze the designs and to identify conflicts and clashes between the disciplines or trades. Turner documents the clashes and conflicts in a Clash Report. This report serves as the agenda for the Coordination Meeting in which design representatives from the Owner, Architect, Turner and each trade participate. The participation of all of the involved parties is important; to allow meaningful discussions of issues and minimal latency of the resolution of coordination issues. Using the most recent Consolidated Model, the group will develop, agree on and document solutions to the identified clashes and conflicts. Turner will assume the role of a Moderator and Facilitator in the Coordination Meeting and allow the Designers and Trade Partners to bring their knowledge and expertise to bear. After the Coordination Meeting, the agreed on changes will be incorporated into the design documents, shop drawing documents and 3D models and the process will enter a new cycle. Typically, one cycle is completed each week. The coordination cycles are repeated for each floor, area or zone until all clashes and conflicts have been resolved and the Trade Partners and Turner have confidence in the constructability of the design. This process has proven to be a more efficient method of coordinating designs compared to the traditional 2D drawing based coordination process.

A file sharing service is available to all project participants to access and continually check the design of the other disciplines and trades, thereby ensuring that each design is developed in a collaborative fashion. The process creates a high level of awareness among the Trade Partners of the design and constraints of the different trades and allows the team to design in parallel rather than in sequence. Generally, the best results are achieved when the large components and components with little flexibility (e.g. components in vertical shafts) are modeled and coordinated first. This form of collaborative parallel design introduces a higher degree of optimization as the detailers become aware of issues early; giving them a greater opportunity to work through 'what if' scenarios. Once agreement of the placement of large components has been reached, smaller components and branch lines should be coordinated.

The Design Validation process is very visual and enhances communication, collaborative coordination and conflict resolution. It enables all participants to contribute their knowledge, experience, insights and ideas to the coordination process which helps to develop an optimal solution on a systems level and creates "buy-in" and confidence in the execution plan by all participants.

Layer Management

It is extremely important that each model organized in an orderly manner. Therefore clear layers need to be defined per trade. Trade Partner can submit separate layer list as long as the layer system will keep consistent through the entire project.

Design Validation Coordination Timeline

BIM Meeting	Model Submission (ViCon) *		Turner to Generate Clash Report		Meeting Date		Update Model
1							
2							
3							
4							
5							
6							
7							

Design Coordination Milestone

Discipline/Area	Date
Foundation	
Underground Utility	
Main Structure	
Envelope Structure	
Main Equipment RM	

File Exchange/File organization

Ensure all participants of the project have basic understanding of the file sharing service, and comfortable with its layout and mechanism a week or two before the first coordination meeting. Have quick demonstration of the file sharing service at sub kick-off meeting. All users with access to the project can see and download any files stored for the project. Managed File upload must comply with a segmented file naming convention.

Project_Organization_Trade_Area

Each section will be defined by the Turner BIM Engineer; failure to name your file accordingly will lead to the Turner BIM Engineer deleting the file from the site. The Turner BIM Engineer will assign roles and affiliations accordingly, so, each trade partner can only upload the files corresponding to its unique responsibility.

Design Validation Coordination demands all participants incorporate their best knowledge into their shop drawing model, and upload to the file sharing service on time in order for Turner to generate initial clash report in time for coordination meeting. One party's failure to upload files on time can delay the entire process.

Turner forbids any trade partner from deleting any file or uploading files other than their model file to the file sharing service without the express permission of the Turner BIM Engineer, TBD, e-mail (TBD).

VIII. Quality Assurance / Quality Control

Checks	Definition	Responsible	Software / Method	Frequency
Visual Check	Ensure there are no unintended model components and the design intent has been followed.	Turner BIM Engineer / Project Team	Review Revit / CAD files before consolidating models.	Weekly
Interference Check	Detect problems in the model where two building components are clashing.	Turner BIM Engineer / Project Team	Navisworks	Weekly
Standard Check	Ensure that the BIM and AEC CADD Standards have been followed (fonts, dimensions, line styles, layers, etc)	BIM Engineer	Review Revit / CAD files before consolidating models.	Weekly
Model Integrity Check	Ensure that the design / Information in the 3D model correspond to the 2D approved and submitted designed.	Assistant Superintendent / Project Team	BIM Engineer will provide with 2Ds derived from 3D model for review.	Every other week

IX. Software Infrastructure Needs

BIM Use	Discipline	Software	Version
Design	**Architecture**	***TBD***	***TBD***
Design	**Structural**	***TBD***	***TBD***
Design	**Mechanical**	***TBD***	***TBD***
Design	**Electrical / Comm.**	***TBD***	***TBD***

Design	**Plumbing**	***TBD***	***TBD***
Design	**Fire Protection**	***TBD***	***TBD***
Design	**Civil**	***TBD***	***TBD***
4D Modeling	**All**	***TBD***	***TBD***
Existing Conditions	**All**	***TBD***	***TBD***
Site Utilization		***TBD***	***TBD***
3D Coordination	**All**	***TBD***	***TBD***

X. Deliverables

BIM Submittal	Discipline	Format	Frequency
As-Built	**MEPF/Structural/SU**	**3D Model**	**Monthly**
As-Built	**MEPF/Structural/SU**	**2D documents**	**Substantial Completion**
As-Built	**General Trade**	**3D Model**	**Monthly**
As-Built	**General Trade**	**2D documents**	**Substantial Completion**
Shop Drawings	**All**	**2D drawings match 3D sign off model**	**Per shop drawing submission schedule**

Electronic As-Built (LoD 400).
As-Built model should be uploaded upon request, normally on a monthly basis or prior to each pay app period. Failure to update the As-Built model may cause delay of paying process. Superintendent needs to notify the modeler as well as the BIM Gatekeeper immediately, if any in place work deviates from the coordinated model due to unanticipated field condition or changes due to late issued ASI and RFI since sign off coordination meeting, to ensure the flow of the schedule.

Contractor's Minimum WC, CGL, and Auto Insurance Limits and Certificate Requirements for Corporate Projects

Requirements for Trade Partners on Corporate Projects For all Corporate Insurance projects (definition of a Corporate Insurance project is trade partner's provide their own insurance coverage) each Fannin County trade partner is required, in accordance with Article XXVI of Fannin County's Form 367 contract agreement, to maintain the following insurance coverage. We may also require some or all of these coverages from other entities who sign other types of Agreements with Fannin County.

a) Workers' Compensation and Employers' Liability (WC) Insurance in accordance with the regulations of the state in which the work is situated.

b) Commercial General Liability (CGL) Insurance including Contractual Liability Insurance against liability assumed in its subcontract and Contractor's Protective Liability Insurance if any of the work is sublet.

c) Automotive Liability (AL) Insurance covering the trade partner's owned, non-owned and hired vehicles used in connection with the work.

Fannin County, the Owner, Turner Construction Company and any others that Fannin County is required by Contract to list on our CGL and Automobile policies as Additional Insured must also be listed as Additional Insured via an endorsement to the trade partner's CGL and Auto Liability policies. Procurement must obtain a copy of the endorsement. Please review the current "Corporate Projects COI Requirements and Waivable Items" spreadsheet on TKN. (* See Blanket Insurance Certificate Alternate below)

It is the responsibility of the Procurement Department to obtain, review for correct coverage and advise the Fannin County field staff and accounting that each trade partner or other entity that is required by Agreement to provide insurance has provided a Certificate of Insurance (COI) as evidence of that coverage. It is not necessary to distribute the actual certificate to the other departments but is critical that Procurement maintains the certificates in the project files in case of a problem later when we will require the certificates. It is also the Procurement Department's responsibility to monitor expiration dates and obtain new certificates and advise others as directed above until the trade partner is final paid. Since insurance coverage is so critical to have from our trade partners, the Procurement Department must ensure that these minimum "checks and balances" exist in the Business Unit:

a) Procurement monitors the status of certificates as a minimum a spreadsheet and advises field and accounting as needed that trade partners have the correct coverage.

b) The field staff does not allow trade partners on site until the field has verified with Procurement that insurance has been received.

c) Accounting does not pay the Trade partner until accounting has verified with Procurement that insurance has been received.

If the Business Unit determines to use any other process, Procurement must maintain in their files for audit purposes a memo signed by the General Manager agreeing to the alternative process.

Blanket Insurance Certificates – Alternate Process

1. A Blanket Insurance Certificate would allow for one (1) Insurance Certificate received per Trade partner or Vendor per policy year that instead of separate certificates for each project listing Project Name and Project Specific Additional Insured's. This could apply to ALL work performed under contract in that policy year for that Trade partner or Vendor PROVIDED the language on the Certificate and Additional Insured Endorsement conform to the requirements per the Contract Agreement.
2. Use of Blanket Certificates is acceptable under this Policy provided:
    a. The limits obtained on the Blanket Insurance Certificate are at minimum those recommended for the trade and work as per the matrix below.
        i. If there are Project Specific requirements with a higher level of coverage than those obtained on the Blanket Certificate, either a new Blanket Certificate with higher limits would be required OR a Project Specific Certificate would be required.
    b. It does not conflict with a specific project requirement such as where an Owner insists on being named as the Certificate Holder or where the Owner insists on seeing their specific names listed as Additional Insured. Under a Blanket Insurance Certificate scenario, we and all required parties are covered if they are listed in the General Contract or the Subcontract and we follow the SDV Guidelines and ensure that the Certificate and Endorsement cover *"All projects involving Fannin County and Turner Construction Company, its wholly owned subsidiaries or parent organization. Additional Insureds include: Fannin County and Turner Construction Company and all other parties as required by any written agreement*."
3. This will also simplify and expedite the Project Closeout process where older jobs often led to expired Insurance that required updating before final payment. Under the Blanket Certificate scenario, provided there was a current blanket certificate for this Trade partner or Vendor, we no longer need to chase an updated certificate to comply with the requirement for current insurance.

Review of Insurance Certificate

1. County accept the Acord Form (the standard of the insurance industry). Coverage must be in accordance with the current "Corporate Projects COI Requirements and Waivable Items".
2. Per the matrix, Procurement must obtain the trade partner's Additional Insured Endorsement.
3. **The Acord Form 25 (2010/05) Insurance Certificate language on Cancellation is acceptable as the brokers cannot legally modify or change any wording on the form. In addition, proprietary forms from Owners or Turner Construction Company cannot be used as brokers will not execute them.**
4. Certificate must indicate in which state the insurance applies.
5. Coverage for C.G.L. and A.L. must be on an "occurrence basis", not "claims made".
6. Fannin County would prefer that the per Occurrence limits shown below are met by the Trade partner's Primary C.G.L. policy limits , however we will accept Trade partner's "Excess" or "Umbrella" limits added to the Primary to make up the required limits. **See Tower Crane Hazard below for an exception to 6.**
7. Watch for of any added wording and/or additional endorsements beyond the Additional Insured Endorsement attached to the certificate. If you are not familiar with the terms, it should be reviewed by the Business Unit Insurance Manager, Risk Management or Corporate Procurement, if necessary.

Commercial General Liability (CGL) Insurance

The following are the **minimum limits** for trade partners on Corporate Insurance Projects classified according to general degree of hazard and location of the project. Reductions below the minimum limit are not recommended however under certain circumstances may be allowable following a risk analysis by the Procurement Manager and General Manager and review with Risk Management and/or Corporate Procurement (with a memo on file for verification by Internal Review). As a rule of thumb, it's always OK to ask for MORE insurance than you think you need. Risk should be evaluated for every project and where it is determined that a project or bid package risk is atypical or higher than "normal", the Procurement Manager may elect to increase the minimum requirements. Corporate Procurement and Risk Management are available to assist as needed.

General Degree of Hazard:

"N" Nonhazardous Work - interior work and finishing work. Also non-construction trade services.

"H" Hazardous Work - exterior work, structural concrete work, electrical, mechanical, miscellaneous Iron, structural steel and elevator trades.

"X" Extra Hazardous Work - wrecking, demolition, excavation, window washing and foundation work. If a subcontract involves two or more types of work, rate according to most hazardous of types involved.

"XX" Tower Crane Hazard

"XXX" Blasting / Structural Demolition Hazard

Minimum Limits	URBAN SITE	NON-URBAN SITE
• **"N" Nonhazardous**		
Bodily Injury and Property Damage	$ 2,000,000/Occurrence	$ 1,000,000/Occurrence
• **"H" Hazardous**		
Bodily Injury and Property Damage	$ 3,000,000/Occurrence	$ 3,000,000/Occurrence
• **"X" Extra Hazardous**		
Bodily Injury and Property Damage	$ 5,000,000/Occurrence	$ 5,000,000/Occurrence
• "**XX" Tower Crane Hazard**		
Bodily Injury and Property Damage	$ 10,000,000/Occurrence*	$ 10,000,000/Occurrence*
• "**XXX" Blasting / Structural Demolition Hazard**		
Bodily Injury and Property Damage	$ 20,000,000/Occurrence*	$ 20,000,000/Occurrence*

*** Must have minimum $2,000,000 per occurrence and $2,000,000 Aggregate for the primary policy limits**

CGL policies also have an Aggregate limit. The Aggregate limit is the maximum the carrier will pay in any policy year on behalf of the insured trade partner. Therefore, we would prefer that the Aggregate limit be at least twice the Occurrence limit, so that it is less likely that the Aggregate could be exhausted before the claim on our project is handled. However, we will accept an Aggregate limit equal to the Occurrence limit.

Automobile Liability Insurance

Bodily Injury and Property Damage	$1,000,000 combined single limit for either urban or nonurban location

The following chart is to be used to determine the Insurance Limits:

TRADE CLASSIFICATION FOR INSURANCE LIMITS

SUBCONTRACT WORK	LIMIT CLASSIFICATION
Division 1: General Requirements	
Tower Crane (erected and/or operated by crane rental firm)	XX
Mobile cranes, man/material hoists	X

Division 31, 32 : Site Work	
Structural Demolition* see below for hazardous removal	XXX
Non-Structural or Interior Selective Demolition	X
Shoring	X
Excavating * see below for hazardous removal	X
Site Utilities (Storm Drain, Sewer, Electric, etc.)	H
Exterior Improvements (fencing, playground, signage)	N
Landscape & Irrigation	N
Paving, Curb & Gutter	N
Blasting	XXX
Implosion	***CALL RISK MANAGEMENT***
Division 3: Concrete	
Concrete Work (Fnd. and/or CIP Frame - no Tower crane)	X (or XX with Tower Crane)
Concrete Work (Cast-In-Place on Metal Deck)	H
Placing of Reinforcing Steel & Mesh	H
Precast Structural Concrete (no Tower Crane)	X (or XX with Tower Crane)
Precast Architectural Concrete (No Tower Crane)	X (or XX with Tower Crane)
Division 4: Masonry and Stone	
Brick and Block Masonry	H
Stone Pavers	H
Exterior Wall	X
Division 5: Metal	
Structural Steel no Tower Crane	X (or XX with Tower Crane)
Misc. Iron/Steel Stairs	H
Metal Deck	X
Ornamental Iron	N
Space Frame	H
Division 6: Carpentry	
Install Wood Doors, Rough, Carpentry	N
Architectural Millwork	N
Division 7: Moisture Protection	
Roofing	X
Waterproofing	H
Sheet Metal	H
Insulation	N
Caulking (Exterior)	H
Division 8: Doors, Windows, Glazing	
Overhead Doors & Grilles	N
Storefront, Curtain Wall, Glass & Glazing	H
Division 9: Finishes	
Spray-On-Fireproofing, Drywall	N
Lath & Plaster	N
Acoustic Ceilings	N
Ceramic Tile	N
Resilient Flooring, Carpeting,	N
Painting, Vinyl Wall Covering	N
Division 10: Specialties	
Toilet Partitions & Accessories	N
Mail Chutes	N
Draperies & Blinds	N
Structural/Limited Access:	
Canopies, Shelters, Cupolas, Spires and similar	X
Division 11: Equipment	

Window Washing Equipment	X
Structural/Limited Access/Height – Theater Rigging and similar risk	X
Other (non-structural, no access / height concerns)	N

Division 12: Furnishings

ALL	N

Division 13: Special Construction

Structural/Limited Access/Height – Theater Rigging and similar risk	X
Grandstands	X
Other (non-structural, no access / height concerns) e.g. Cold Room	N

Division 14: Vertical Transportation

Elevators & Escalators	H
Scaffolding	H

Division 21, 22, 23, 25: Mechanical

Fire Suppression, Plumbing, HVAC, Building Automation	H

Division 26, 27, 28 : Electrical

Electrical, Communications, Security	H

NOTES:

1. Interior Architectural Trades not specifically mentioned shall be Classification N Nonhazardous.

2. Trades not specifically mentioned shall use classification that in the judgment of the Procurement Department is closest or most similar

AIA® Document A312™ – 2010

Performance Bond

CONTRACTOR:
(Name, legal status and address)

SURETY:
(Name, legal status and principal place of business)

OWNER:
(Name, legal status and address)

CONSTRUCTION CONTRACT
Date:
Amount: $
Description:
(Name and location)
Uninterruptible Power Supply (UPS)

BOND
Date:
(Not earlier than Construction Contract Date)

Amount: $
Modifications to this Bond: ☐ None ☐ See Section 16

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:		Name and Title:	

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or **BROKER:**

OWNER'S REPRESENTATIVE:
(Architect, Engineer or other party:)

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§ 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

.1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

.2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

.3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

.2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and

.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 14 Definitions

§ 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:		Name and Title:	
Address:		Address:	

Additions and Deletions Report for
AIA® Document A312™ – 2010

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 15:25:48 on 01/10/2013.

PAGE 1

Uninterruptible Power Supply (UPS)

Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, , hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 15:25:48 on 01/10/2013 under Order No. 6871475021_1 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A312™ – 2010, Performance Bond, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

_____

(Signed)

_____

(Title)

_____

(Dated)

EQUAL EMPLOYMENT OPPORTUNITY

Fannin County is an equal opportunity employer. The county will not discriminate on the basis of race, color, religion, national origin, sex, age, genetic information, pregnancy, veteran status, and disability, or any other condition or status protected by law in hiring, promotion, demotion, raises, termination, training, discipline, use of employee facilities or programs, or any other benefit, condition, or privilege of employment except where required by state or federal law or where a bona fide occupational qualification exists. If an employee needs an accommodation as a result of a condition or status protected by law, please advise your elected official, appointed official, or department head.

AMERICANS WITH DISABILITIES ACT AMENDMENTS ACT

It is the policy of Fannin County to prohibit any harassment of, or discriminatory treatment of employees on the basis of a disability or because an employee has requested a reasonable accommodation. If an employee feels he or she has been subject to such treatment, or has witnessed such treatment, the situation should be reported to your elected official, appointed official, department head or the county attorney. All elected officials, appointed officials, department heads and employees with responsibilities requiring knowledge are instructed to treat the employee's disability with confidentiality.

It is Fannin County's policy to reasonably accommodate qualified individuals with disabilities unless the accommodation would impose an undue hardship on the county. In accordance with the Americans with Disabilities Act, as amended (ADAAA), reasonable accommodations may be provided to qualified individuals with disabilities when such accommodations are necessary to enable them to perform the essential functions of their jobs, or to enjoy the equal benefits and privileges of employment. This policy applies to all applicants for employment, and all employees. If you require accommodation, please contact your elected official, appointed official, or department head. Reasonable accommodation shall be determined through an interactive process of consultation.

Fannin County is committed to a workplace free of harassment. Harassment includes unlawful, unwelcome words, acts or displays based on sex, race, color, religion, national origin, age, genetic information, pregnancy, disability, family or military leave status or

veteran's status. Such conduct becomes harassment when (1) the submission to the conduct is made a condition of employment; (2) the submission to, or rejection of, the conduct is used as the basis for an employment decision; or (3) the conduct creates an offensive, intimidating or hostile working environment or interferes with work performance.

Harassment is strictly prohibited by Fannin County whether committed by an elected official, appointed official, department head, co-worker or non-employee with whom the county does business.

Employees who feel they have been harassed should immediately report the situation to the elected or appointed official who is responsible for the department in which they work. If, for any reason, the employee feels that reporting the harassment to the department head may not be the best course of action, the report should be made to the County Judge or to the County Attorney.

Every reported complaint will be investigated promptly and thoroughly. The official or department head to which a claim has been reported shall be responsible for seeing that prompt action is taken to investigate the claim.

Once the investigation is complete, the employee making the claim shall be notified of the result of the investigation and any actions which are to be taken.

Retaliation against an employee who reports harassment or who cooperates in the investigation is prohibited by law as well as this policy. Employees who feel they have been subjected to illegal retaliation should immediately report the situation to the elected or appointed official who is responsible for the department in which they work. If, for any reason, the employee feels that reporting the retaliation to the department head may not be the best course of action, the report should be made to the County Judge or to the County Attorney.

Remedial action will be taken in accordance with the circumstances when the county determines unlawful harassment or retaliation has occurred, up to and including termination.

SEXUAL HARASSMENT

Sexual harassment is strictly prohibited by Fannin County, whether committed by elected official, appointed official, department head, co-worker or non-employee the

County does business with. It is the policy of Fannin County to provide a work place free from sexual harassment for all employees and to take active steps to eliminate any sexual harassment of which the County becomes aware.

Employees engaging in sexual harassment shall be subject to discipline, up to and including termination of employment. Sexual harassment shall include, but not be limited to, unwanted sexual advances, requests for sexual favors, and other verbal, non-

verbal or physical conduct of a sexual nature, which includes slurs, jokes, statements, gestures, touching, pictures, emails or cartoons where:

(1) the submission to such conduct is either an expressed or implied condition of employment; or
(2) the submission to or rejection of such conduct is used as a basis for an employment decision affecting the harassed person; or
(3) the conduct has the purpose or effect of substantially interfering with an affected person's work performance or creating an intimidating, hostile, or offensive work environment.

All claims of sexual harassment shall be taken seriously and investigated promptly and thoroughly. While all claims of sexual harassment shall be handled with discretion, there can be no complete assurance of full confidentiality.

Employees who feel they have been sexually harassed should immediately report the situation to the elected or appointed official who is responsible for the department in which they work. If, for any reason, the employee feels that reporting the harassment to the department head may not be the best course of action, the report should be made to the County Judge or to the County Attorney.

Every reported complaint will be investigated promptly and thoroughly. The official or department head to which a claim has been reported shall be responsible for seeing that prompt action is taken to investigate the claim.

Once the investigation is complete, the employee making the claim shall be notified of the result of the investigation and any actions which are to be taken.

Use the following procedures so that your complaint maybe resolved quickly and fairly.

A. When practical, confront the harasser and ask them to stop the unwanted behavior.
B. Record the time, place and specifics of each incident, including any witnesses.
C. Report continuing sexual harassment to the Elected Official or Appointed Official who is responsible for your department or to the County Judge or the County Attorney.
D. If a thorough investigation reveals that unlawful sexual harassment has occurred, Fannin County will take effective remedial action in accordance with the circumstances, up to and including termination.

Retaliation against an employee who reports sexual harassment or who cooperates as a witness in the investigation is prohibited by law as well as this policy.

Employees who feel they have been subjected to illegal retaliation should immediately report the situation to the elected or appointed official who is responsible for the

department in which they work. If, for any reason, the employee feels that reporting the retaliation to the department head may not be the best course of action, the report should be made to the County Judge or to the County Attorney.

Reporting or failing to report claims in accordance with the procedure given in this policy shall not limit other legal recourse an employee may have in regard to sexual harassment charges.

Section 14

Quality Assurance
Quality Control Plan

FANNIN COUNTY COURTHOUSE RESTORATION

Table of Contents

QA/QC PLAN

1. Purpose

To provide a Quality Assurance-Quality Control (QA/QC) Program customized to this project and gain commitment from members of the project team through construction and closeout. To deliver this project per contract documents, so that in that process we understand what the contract documents require and surface any gaps in the documents or our efforts to meet them.

2. General

The QA/QC Plan will comply with and enhance the contract documents, which will be followed unless modified by Fannin County with the approval of design team. Changes to the project scope may result in a review of the QA/QC Plan for modification.

Beginning with contract buy-out, Fannin County and Turner Staff will work with Fannin County purchasing to develop Trade Partner scopes not only cover scope of work items, but address submittal, mock-up, and constructability and quality issues.

This effort will be followed by a thorough review of Trade Partner submittals, including shop drawings, certifications, samples, and product data, by the engineering staff. This review will ensure that Trade Partners have planned for and will conform to the requirements outlined in the contract documents. From this review, problem areas can be discussed with Trade Partners, Architect, MEP Consultant, THC, and Owner so that methods for fabrication and installation of the work may be established. After approval, we will review the submittal item with the appropriate trade contractors so that there is a complete understanding of the installation techniques and quality control standards.

Prior to the start of a new item of work, we may have the Trade Partner prepare initial sample installations or mock-ups to review quality and performance, which will establish the standards that will be enforced until final completion and acceptance of the work. Work falling below the standard expectations of the approved sample area of work will be rejected and reviewed with the trade contractor.

Where appropriate, materials and fabricated items will be inspected at the shops or plants of the manufacturers and again on site to ensure that material is satisfactory before installation. Superintendents will oversee the inspection of field installation work.

First operation of new trade work will be followed and inspected so that the acceptable level of workmanship is established from the start. A day-to-day check of new items of trade work is made by the appropriate staff. In new applications or complex systems, we may supplement job staff with specialists, consultants, and in-house experts with the necessary experience and information to assist the project team.

3. Quality Review Prior to Work

Constructability Reviews

Constructability reviews will be performed early in the project, for the purpose of reviewing the existing design drawings and specifications and evaluating building systems based on our experience on other projects. Specifically, the review will include:

- Evaluating building details for constructability and design efficiency.
- Reviewing technical details and building systems to clarify construction sequence and design tolerances.
- Evaluating building system mock-ups, in order to ensure a smoothly sequenced construction project.

Trade Partner Selection

With much of our work being performed by vendors and Trade Partners, purchasing and estimating have a major role in planning and quality assurance. Hiring the right Trade Partner for the project is essential to our success. By hiring Trade Partners with good reputations producing quality work, the chances of achieving a quality final product are greatly increased.

When selecting Trade Partners for Fannin County Courthouse Restoration Project we verified with each low bidder that their entire scope was complete and that they understood the quality standards for this project prior to awarding subcontracts.

Trade Partner Involvement

Upon contract award, and prior to submittal preparations and start of construction, Turner will review the quality requirements with the Trade Partner so that they understand that we want focus on quality from the start of the project so that the punch list or other end-of-project measures will not be the first time quality issues are addressed. If the Trade Partner understands precedence early, the chance of getting a quality job done right the first time improves. For our major Trade Partners, Turner will require that they provide a job specific QA/QC plan. The Turner project team will establish the expectations for the Trade Partner QA/QC plans and will ensure that the submitted plans address those expectations. Several of these Trade Partner superintendents and project managers have been doing their specialty work for many years, and have accumulated numerous “lessons-learned” along the way that could be used to improve the overall quality of the project.

Submittal Reviews (shop drawings, samples, product data, etc.)

The Turner engineering staff will review shop drawings and submittals prior to submitting them to Architect, THC, Owner & MEP Consultants. This review will not only take into account contractual obligations but also the work of other Trade Partners with which it must be coordinated. Shop drawings and material submittals that do not comply with contract requirements will be returned for correction prior to formal submittal to the design team. The Turner staff will create a submittal schedule that has been coordinated with the construction schedule to monitor and control the submittal process. Wherever possible submittals are to be completed well ahead of the time material is needed on site.

4. Quality Control Coordination

This plan establishes quality control checks so that we can ensure all of the work installed meets the established standards. This plan will be initiated at the start of the work, and implemented throughout the entire job. By following this plan, instances of poor quality can be avoided. The following are tools available to the project team to help maintain the level of quality established by the contract documents.

Meetings

Over the life of the project various types of meetings will be held. While these meetings are not explicitly QC meetings, quality control issues will be discussed, problem areas recognized, and corrective plans put into action.

- OAC (Owner/Architect/Contractor) Meetings – Turner conducts OAC meetings regularly. In this meeting we will address quality control for the project in general and for specific trade items. By continuing to focus on quality, the project team can address concerns brought to the meeting by any party. The team will discuss items that have been discovered from other meetings during the OAC to help inform the project team and find resolutions in a timely manner.

- Internal Staff Meetings – At Turner our internal staff meetings, we will review the status of purchasing, engineering, fabrication, deliveries, field installation, problem areas, closeout, and other issues that affect quality.

- Trade Partner Coordination Meetings – Turner superintendents will hold meetings with Trade Partners to coordinate the work and special difficulties that may arise in scheduling the work. These meetings will provide early detection of problems from the preparation of shop drawings, product data submittals or building information modeling (BIM). Shop drawings should be coordinated to interface properly with existing conditions, identify conflicts in design documents, and determining long lead time items based upon fabrication processes and market conditions.

- Superintendents' Meeting – Site safety, logistics, major milestones and coordination items are discussed in this meeting. Minutes are distributed to attendees and a copy is kept with job files.

- Pull Plan Meetings – Turner shall hold weekly Pull Plan Meetings led by the superintendent staff to plan and review all field work that is to occur within the upcoming 6 weeks. The purpose of this meeting is to ensure that all work is sequenced correctly, confirm material for work is released and scheduled for delivery, coordinate inspections, and to identify and resolve potential issues including pending submittals, delivery delays, manpower issues, schedule/sequencing issues.

- Daily Field Huddles – Turner superintendents will hold daily huddles with Trade Partner foremen to review the daily work in the field to catch and resolve coordination or quality issues. Huddle areas will have boards to display the current weekly work plan, constraints, and workflow floor plans to show where trades are working that day.

Quality Control cont'd.

- Pre-Construction Meetings – Handoff meeting from office to field for each trade, and as otherwise necessary. The focus of these meetings is to highlight unusual details and/or unique requirements and to create deliverables to track the completion of these items.

- Pre-Installation Meetings – These meetings will be held for major subcontracts prior to start of physical work and will include the relevant Trade Partners, Turner, consultants, and any testing agencies. The agenda will be developed by Turner staff prior to the meeting and will be based on the scope of work, contractual relationships, communications, a discussion of the appropriate plans, specifications, contract requirements, testing and inspection, and other pertinent matters. We will also review the status of submittals and shop drawings. Emphasis must be placed on the importance of doing the job right the first time to avoid costly and time consuming re-work. Turner staff will record outcomes and assign deliverables.

Daily Supervision of the Work

Turner's field staff will review quality each day. The superintendent staff will oversee the operations of trades for which they are responsible. The following quality control activities will be done by the field supervision staff:

- Become familiar with contract documents, submittals, samples, mock-ups, and shop drawings prior to start of work in the field.
- Check and material conformance to contract documents upon receipt.
- At the beginning of the job, inspect the first installation. The aim is to be thorough and detailed which will reinforce our strong commitment to quality.
- Coordinate and ensure materials are properly stored and protected from the elements.
- Monitor production daily and promptly reject nonconforming work.
- Ensure Trade Partners protect their finished (and any existing elements to remain) from damage.
- Compliment work that is well done.
- Enter, track and close QA/QC issues and damage to work-in-place Procore and coordinate with the Owner and Trade Partners.

Mock-ups

Turner has coordinated with the contract documents regarding which specific in-place mock-ups will be required for the project. As the need arises, a mock-up will be done to help with constructability, fit, appearance, and quality of certain items within the project. Mock-ups will be done prior to the work and reviewed by the project team for approval We will incorporate mock-ups into the final work wherever possible.

Mockup List per contract documents is attached to the end of this plan.

5. Quality Control Inspections

First Delivery Inspections
The first delivery inspection of material is followed to ensure that only approved materials are delivered and used on site. The appropriate Turner superintendent and Trade Partner representative will inspect materials brought on site for compliance with the contract documents and whether it has been reviewed and approved by Design Team. Report will be accompanied with photos for documentation.

First Work Inspections
The first operation of any new trade is closely followed and inspected so that the expected level of workmanship is established from the beginning. The appropriate Turner superintendent and Trade Partner representative will inspect the work together to determine if it is in compliance with the contract documents and whether it meets quality standards.

Prior to the inspection, Turner and the Trade Partner representative will familiarize themselves with the specifications and installation methods required by the manufacturer that are included in the approved submittal data or shop drawings. Details or notes on shop drawings will be reviewed as applicable.

A Turner superintendent will attend the initial inspections to review material type, manufacturer, color and other identified quality issues. Any discrepancies will be noted and corrected by the Trade Partner. Upon completion of corrective work, a follow-up inspection will be made to confirm that work in place is satisfactory. Should the Trade Partner not comply or concur with discrepancies noted, the project manager will be notified for further action.

Regular and Periodic Inspections
Work areas will be inspected daily by the Turner superintendent to ensure proper installation and sequencing of work. Most inspections are performed without any formal reporting. However, many inspections will have items tracked through Procore and deficiencies will be noted as necessary.

Trade Partner Inspections
Trade Partners are responsible for scheduling inspections for their work. The Trade Partner will notify the appropriate Turner superintendent of upcoming inspections. The Trade Partners will record these inspections on their daily report. The Trade Partner will correct deficiencies ASAP. The Project Superintendent will confirm that deficiencies have been corrected.

Interior Fit-Out Sequence Inspections
Turner superintendent staff will organize, schedule, and coordinate inspections for building sequences. Sequence inspections include:

- Pre-finish (fire stopping, before sheetrock or ceiling grid)
- Ceiling closure
- Finishes

Quality Control Inspections cont'd.

Building Final Inspections
The Turner superintendent staff will organize, schedule and coordinate final inspections. Building Final Inspections include:

- Fire Protection System
- Plumbing System
- HVAC System
- Life Safety/Fire Alarm
- Electrical Distribution
- Final Building Inspections
- ADA Walk Through

Inspection observations, comments and associated due dates will be distributed to the Trade Partners' on-site personnel. The project manager will be advised if corrective action is not taken.

Sequence Pre-Finish Installation
The intent of the Sequence Pre-Finish Inspection is to ensure that floor slabs, drywall, mechanical, electrical, and plumbing (MEP) rough-in and work above the ceiling line is 100% complete, of good quality, and compliant with contract and code requirements. Upon completion, the area should be ready for finish work, such as ceiling grid, paint and casework.

The scope of work and the degree of completeness to be reviewed during this inspection is defined by the following list of work topics:

- Drywall: 100% Complete – Prime Painted
- Penetrations Sealing: 100% Complete
- Fireproofing Final Touchup: Complete
- Sprinkler Piping: Piping modifications installed with drops placed
- Mechanical and Plumbing Piping: Installed, tested and identified
- HVAC Ductwork: Installed, Sealed, tested, insulated and cleaned
- Flex Duct: Connections to duct complete, outlet ends temporarily tied above ceiling
- Controls: Complete above-ceiling and VAV boxes static commissioned
- Dampers: Complete in Accordance with UL Assembly Requirements
- Duct Access Doors: Complete and labeled
- Conduit and Wire: All conduits installed and wire pulled
- Lighting: Lighting circuits completed and ready for fixture connections once they are installed
- Junction Boxes: Covers installed and circuits identified
- Electrical Panels: Cans installed and built-out to support lighting, power, and temperature controls
- Wall-Mounted Wiring Devices: Switches and receptacles installed
- Area Clean-up: Area broom cleaned

Quality Control Inspections cont'd.

Ceiling Closure Inspection

The intent of the Sequence Ceiling Closure Inspection is to confirm that all above ceiling work and trim out is complete prior to ceilings being closed. The scope of the work to be reviewed and the degree of completion is defined as follows:

- Pre-Finish Sequence Punch List Items: Complete
- Ceiling Grid: Installed
- Ceiling Tiles: Installed at Ceiling Devices and Border Cuts only
- Ceiling-Mounted Devices: Installed-Speakers, Light Fixtures, etc.
- Ceiling Access Doors: Installed
- Sprinkler System: Heads Installed and Water in System
- HVAC Duct System: Run-outs, Volume Dampers, Grilles/Diffusers and Insulation Installed
- Electrical Panels: Wire Terminations made, Breakers Installed and Panel Covers in place
- Owner-Furnished Equipment: Installed with Above-Ceiling Hook-up complete to the greatest extent possible

Ceiling closure sign-off will be tracked using "Above Ceiling Closure Checklist". Each applicable Trade Partner will be issued an item to complete. Changing the status of this item from "Open" to "Work Completed" will signify that the work as listed above is complete.

Finishes Inspection

The intent of the Sequence Finishes Inspection is to ensure that finish work including casework is of proper quality and compliant with contract and code requirements. Additionally, it is to ensure that work is 100 percent complete. The scope of work reviewed during this inspection will include, but is not limited to, the following:

- Painting and Caulking
- Wood Wall Covering
- Wood casework
- Base
- Tile
- Toilet Accessories
- Doors and Hardware
- Window Water Testing per AAMA 501.2 Standard
- Diffusers and Grilles
- Plumbing Trim and Fixtures
- Sprinkler Heads and Trim
- Wiring Devices and Cover Plates Installed
- Fire Alarm and Security Devices
- Electrical Panel and Cover Installation
- Light Fixtures

Quality Control Inspections cont'd.

Weekly QA/QC Reports

Throughout the life of the project Turner's designated staff will submit weekly QC reports to Trade Partners indicating open non-conforming items whether identified by Turner, Owner or other consultants.

The project QA/QC tracking program is Procore

Overview:

- Procore will be used for the project QA/QC tracking program will be used to track:
  - Owner Observations
  - Consultant Field Observation Reports
  - QA/QC Issues
  - Damage to Work-in-Place
  - Work to Complete
  - Punch List
- Turner will provide necessary training
- Central clearinghouse for identifying and resolving quality issues
- Use to issue customized reports
- Real-time
- Transparent

Site Storage of Materials

Trade Partners will ensure that proper handling, storage, shipping and preservation precautions are adhered to for those items requiring special care and protection. The ultimate responsibility for material handling, storage and preservation lies with the responsible Trade Partner. The Turner superintendents will perform periodic audits to ensure Trade Partners comply with the minimum requirements.

Each Trade Partner will confirm that materials and equipment are packed and protected to avoid effects from supports, bracing, lifting, and that items can withstand shipping and handling. Unloading at the site shall be accomplished using only the proper equipment of the correct size and standard practices. Materials will be inspected before unloading and after unloading. Damage is to be immediately noted and reported to the Trade Partner for replacement before installation.

Protection of Finish Work

One way to maintain quality is to protect the product from the construction environment after it is completed. Each Trade Partner will be responsible to protect their work. We will promote respect for the work of others.

6. Independent Testing Labs and Agencies (by Owner)

The Turner superintendent staff will coordinate with the Owner and architect's representatives to ensure appropriate tests are performed and that test reports are properly routed and filed. Any deficiencies identified tracked and closed using the project QC tracking program.

List of require structural inspections per the 2012 IBC

- Reinforcing steel placement.
- Concrete work.
- Welding of reinforcing steel.
- Bolts to be installed in concrete.
- Bolts, anchors, and reinforcing bars installed in hardened concrete (post-installed anchors).
- Inspection of structural steel, bolting, and welding material.
- Welding of structural steel.
- High-strength bolting.
- Cold-formed metal framing

Independent Testing Labs and Agencies (by Owner) cont'd.

- Welding of Reinforcing Steel
- Sprayed Fire-Resistant Materials
- Mastic & Intumescent Fire-Resistant Coatings
- Metal Trusses
- Special Cases

List of required non-structural inspections as required by the project specifications (Those listed below are examples)

- Masonry Mortar & Grout
- Stone Assemblies
- Cast Stone
- Vapor Retarders
- Thermoplastic Membrane Roofing
- Applied Fireproofing
- Intumescent Mastic Fireproofing
- Gypsum Plastering
- Concrete Substrate for Tile & Resilient Sheet Flooring
- Resinous Flooring
- Paint Primer
- Projection Screens

7. Safety Requirements

- Trade Partners will submit project specific safety manuals (not a copy of their corporate manual)
- Completion of SDS Manual
- Designated Safety representative has the appropriate and current credentials
- including the authority for position
- Pre-task planning and daily huddles are conducted regularly
- Stretch and flex conducted daily
- Tool box talks conducted and documentation submitted weekly
- All Trade Partner training documents are on file and current
- EHS meetings attendance
- On site safety representative contact information along with corporate safety contact
- info current and on file
- Turner Building LIFE is evident on project
- SOAR Cards available and being used
- Lean Practices key to raising the bar for safety of the site implemented across
- project (5S, NHG, All on Wheels, etc.)
- Trade Partners will be routinely involved so their understanding is clear

8. QA/QC Staff Responsibilities

Responsibilities for the project manager, superintendent and engineering staff are as follows:

Project Manager

- Identify, enter, track and close QA/QC items in Deficiency Log
- Coordinate with Owner to determine their expectations. Make sure the consultants and staff are communicating and executing those expectations
- Verity that the Turner staff are performing their QA/QC responsibilities
- Ensure the quality sections of the job meeting minutes are reviewed
- Review generic mock up list and project specifications and determine required mockups for job with the design team.
- Solicit and review Trade Partner QA/QC plans
- Meet with Trade Partners where possible to discuss QA/QC plans and quality standards for this project
- Determine if shop visits are necessary or beneficial. Identify who is to attend and schedule the trips
- Determine if any trade specialist should be consulted.
- Encourage Turner engineering staff to make weekly field walks to provide another set of eyes to monitor the work as it goes in place.
- Set up preconstruction and other meetings, including preparing agendas and record/assign deliverables after the meeting
- Facilitate and assist with compilation of work-to-complete and punch lists.

QA/QC Staff Responsibilities cont'd.

Project Superintendent

- Maintain a safe and clean project
- Arrange for any design peer reviews
- Identify, enter, track and close QA/QC items in Deficiency Log
- Perform and file materials inspections
- Review contract documents including the drawings, specifications, general contract, general conditions, and subcontracts
- Review mock up list – provide input on required mock-ups
- Inspect ongoing work and work in place, using checklists
- Issue weekly reports indicating non-conforming items of work to responsible parties
- Create checklists as required for inspection of work prior to cover-up/concealment (MEP rough-in, reinforcing steel, concrete pre-pour)
- Schedule and coordinate Owner, third party and city inspections
- Ensure finished work is protected
- Monitor Trade Partner performance
- Understand and communicate sequence of work
- Develop Turner work to complete lists
- Perform final walk through with Owner, assist with creating actual punch list
- Work with engineer staff to establish turnover procedures
- Solicit and review Trade Partner QA/QC plans
- Meet with Trade Partners where possible to discuss QA/QC plans and quality standards for this project
- Determine if any trade specialist should be consulted.

Project Superintendent cont'd.

- Encourage staff to enter QA/QC items into the project QC tracking program
- Monitor items entered into the project QC tracking program and remind responsible parties to complete assigned items
- Ensure that Turner staff are setting up preconstruction, preinstallation and other meetings, including agendas published in advance of the meeting, and deliverables recorded and assigned after the meeting
- Create checklists as required for inspection of work prior to cover-up/concealment (MEP rough-in, reinforcing steel, concrete pre-pour)

Engineering Staff

- Review contract documents including drawings, specifications, general contract, general conditions, and subcontract
- Identify, enter, track and close QA/QC items in Deficiency Log
- Inspect Deliveries
- Participate and conduct meetings as required for added coordination
- Develop quality content in job meeting minutes
- Review shop drawings, samples, and product data
- Coordinate and communicate with Trade Partners about shop drawing review and deliveries with respect to schedule
- Establish turnover procedures
- Establish closeout procedure and closeout manual/checklist

QA/QC Staff Responsibilities cont'd.

Owner Staff (includes Owner's Representatives, Inspectors, Consultants, Engineers)

- Help identify potential Quality issues or other issues of concern
- When notified by Turner that QA/QC items created by Owner are ready for inspection, inspect and approve or reject item

9. Punchlist Prevention Plan

Turner will implement a plan to reduce the number of potential punchlist items. This plan will include the following:

- Trade Partners will be required to develop a project specific quality plan. Two key elements that will be required in each plan:
    - Means of visually identifying/tagging quality issues (eg flagging, spray paint, etc.).
    - Punchlist prevention plan (Trade Partners will be required to complete punching their own work prior to Turner and Owner punch to minimize/eliminate potential punch items).
- Turner staff will work with each other to compile pre-punch or work-to-complete lists.
- Turner will emphasize the importance of protecting work in place.

The actual punchlist process will be a coordinated, one-time effort. Key elements of this process will include:

- Owner/Architect/Consultant punch walks will be scheduled in advance by area.
- A senior Turner staff member will assist with/oversee the punchlist in order to assure completion within scheduled time frame.

Punchlist Prevention Plan cont'd.

- A list of pertinent punch list walk attendees will be developed consisting of personnel from Gensler, Turner, 1445 Ross Avenue LLC, and any other entities deemed necessary. These individuals will be points of contact for their respective companies, ensuring all parties are on the same page with regards to the punchlist and that the necessary people are coordinated/scheduled for punch walks.
- Punchlist items will be tracked by Turner by Procore which will be distributed to all affected Trade Partners and Owner/Architect

10. Warranty Phase

The Turner Project Team will implement and manage the warranty procedures for this project.

11. Conclusion

Quality is an attitude and commitment from within to meet the customer's expectations. The quality of the finished product is the customer's final impression.

TCCO QA/QC Personnel Responsibilities/Duties Matrix P= Primary role/ S= secondary role	PM	PS	PE
Prepare/Administer Quality Control Program		S	P
Develop moisture mitigation plan	S	P	
Coordinate constructability review(s)		P	S
Establish Document Control Process	S		P
Maintain Document Control	S		P
Conduct Weekly Job Progress Meetings. Including review of Non-Compliance Log and QC activities for the week with the project staff.	P		S
Conduct Owner Meetings including review of Non-Compliance Log and QC activities for the week.	P		S
Maintain Non-Compliance Log		S	P
Conduct Sub Preconstruction Meetings	S	P	
Prepare minutes and distribute for Sub Preconstruction Meetings		S	P
Prepare and Conduct Sub Pre Installation Meetings insure project specifications ,product data and contract details are reviewed		P	S
Take and distribute pre installation meeting minutes	S		P
Review Submittals and product data during pre-installation meeting		S	P
Maintain Submittal Log/Schedule	S		P
Maintain Required Mock-Up Log Schedule		S	P
Develop Mock up log project team will want to build	S		P
Prepare/Maintain Equipment and Material Delivery Schedule		S	P
Inspect Delivered Equipment and First delivery of Materials in the field		P	S
Perform and Document Initial work and Follow Up Inspections and/or Tests		P	S
Develop site specific check lists utilizing Turner playbook		S	P
Coordinate and witness 3rd Party and other inspections and/or tests		P	S
Perform Submittal related QC checks		S	P
Prepare Minutes for Weekly Job Progress Mtgs.	S		P
Assemble As-Builts/O&M Manuals/Warranties		S	P
Include tasks for quality events / deliverables on milestone schedule and Last Planner System Phase production plan.	S	P	

Division	Description	Sample Required (Y/N)	Testing Required (Y/N)	Inspection Required (Y/N)	Preinstallation Meeting Required (Y/N)	Preinstall MTG Date:	Preinstall Trade Partners:	Mock Up Required (Y/N)	Mockups required
03 0330	Concrete Restoration & Cleaning	Y	Y	Y	N	N/A	**N/A**	**Y**	Cleaners (Concrete, Paint & Repair)
4	Masonry								
04 0341	Restoration Mortar	Y	Y	Y	N	N/A	**N/A**	**Y**	Consistency, Color & Strenght
04 0342	Masonry Restoration	Y	Y	Y	N	N/A	**N/A**	**Y**	Replacement, patching, veneering, repointing, color, texture, joint tooling
04 0344	Masonry Cleaning	Y	Y	Y	N	N/A	**N/A**	**Y**	Efectivness, method, water method, concentrations, adjacent non-masonry material
04 4000	Stone Assemblies	Y	Y	Y	N	N/A	**N/A**	**Y**	Color & Texture, joint size color & profile, bond pattern, anchors, flashing & weeps
04 7200	Cast Stone	Y	Y	Y	N	N/A	**N/A**	**Y**	Profile, color, finish, anchors & flashing
5	Metals								
05 7000	Ornamental Metals	Y	N	N	N	N/A	**N/A**	**Y**	Balcony Railing, Perementer Fencing, Stairs & Railing, Basement Vent Grille, Vault Casing Tripm, Corrugated Metal Ceiling
6	Wood, Plastics, and Composites								
06 4000	Architectural Woodwork	Y	N	N	Y			**Y**	Judges Bend, Attorney Tables, Courtroom Wood Railing, Sliding Wood Shutters
06 4100	Architectural Casework	Y	N	N	Y			**Y**	Base & Wall Cabinet with Hardware
06 4600	Wood Trim	Y	N	N	Y	N/A	N/A	**Y**	Eacch Trim Profile
06 6116	Solid Surfacing Fabrications	Y	N	N	N	N/A	N/A	**Y**	Counter Top, Splash, Apron & Trim
7	Thermal and Moisture Protection								
07 1700	Bentonite Waterproofing	N	N	Y	Y			**N**	N/A

Division	Description	Sample Required (Y/N)	Testing Required (Y/N)	Inspection Required (Y/N)	Preinstallation Meeting Required (Y/N)	Preinstall MTG Date:	Preinstall Trade Partners:	Mock Up Required (Y/N)	Mockups required
07 3116	Metal Shingles	Y	N	N	N	N/A	N/A	**Y**	Underlayment, Shingles & Flashing
07 5400	Thermoplastic Membrane Roofing	N	N	Y	Y			**N**	N/A
07 6200	Sheet Metal Flashing & Trim	Y	N	N	N	N/A	N/A	**Y**	Each Flashing & Trim
07 6300	Aluminum Cornice	Y	N	N	N	N/A	N/A	**Y**	Each Component
07 6400	Aluminum Dormers	Y	N	N	N	N/A	N/A	**Y**	Each Component
8	Openings								
08 0386	Vault Door Restoration	N	N	N	N	N/A	N/A	**Y**	Decorative Painting min.
08 1433	Stile and Rail Wood Doors	Y	N	N	N	N/A	N/A	**Y**	Corner with stile, rail & panel
08 5200	Wood Windows	Y	N	N	N	N/A	N/A	**Y**	Full Sized Window
9	**Finishes**								
09 2300	Gypsom Plastering	Y	N	N	N	N/A	N/A	**Y**	Application, Patching & Bonding
09 2313	Acoustical Plastering	Y	N	N	N	N/A	N/A	**Y**	Application, Patching & Bonding with Texture
09 3000	Tilings	Y	N	N	N	N/A	N/A	**Y**	Color, Patern, Joint Profile & Control Joint
09 6400	Wood Flooring	Y	N	N	N	N/A	N/A	**Y**	Size, Pattern & Finish
09 6723	Resinous Flooring	Y	N	N	N	N/A	N/A	**Y**	Flat Surface, Cove Base
09 9100	Painting	Y	N	N	N	N/A	N/A	**Y**	Color & Texture
10	**Specialties**								
10 7429	Historic Cupola Clock Tower	N	N	Y	Y			**N**	N/A
11	**Equipment**								
12	**Furnishings**								
12 5000	Chairs & Pews	Y	N	N	N	N/A	N/A	**Y**	Full Size Chair, Back, Seat & Ends
13	**Special Construction**								
14	**Conveying Equipment**								
21	**Fire Suppression**								
22	**Plumbing**								
23	**Heating, Ventilating, And Air Conditioning (HVAC)**								
26	**Electrical**								
27	**Communications**								

Division	Description	Sample Required (Y/N)	Testing Required (Y/N)	Inspection Required (Y/N)	Preinstallation Meeting Required (Y/N)	Preinstall MTG Date:	Preinstall Trade Partners:	Mock Up Required (Y/N)	Mockups required
28	Electronic Safety and Security								
31	Earthwork								
32	Exterior Improvments								
33	Utilities								

GEOTECHNICAL ENGINEERING REPORT

FANNIN COUNTY COURTHOUSE RESTORATION
101 W. SAM RAYBURN DRIVE
BONHAM, TEXAS

TERRACON PROJECT NO. 94095056
April 7, 2009

Prepared for:

KSA Engineers, Inc.
McKinney, Texas

Prepared by:

Terracon Consultants, Inc.
Dallas, Texas

Terracon
Consulting Engineers & Scientists

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www.terracon.com

April 7, 2009

KSA Engineers, Inc.
8875 Synergy Drive
McKinney, Texas 75070

Attn: Mr. Bob Jutton, P.E.

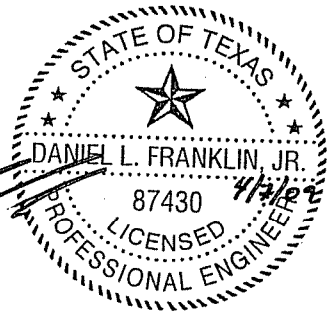
RE: Geotechnical Engineering Report
Fannin County Courthouse Restoration
101 W. Sam Rayburn Drive
Bonham, Texas
Terracon Project No. 94095056

Gentlemen:

Attached is our geotechnical report for the planned additions and modifications to the Fannin County Courthouse located in Bonham, Texas. The accompanying report presents the findings of the subsurface exploration and geotechnical recommendations regarding the design and construction of foundations, floor slabs, pavements, and earthwork for the proposed construction.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report, or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.



Daniel L. Franklin, Jr., P.E.
Senior Geotechnical Engineer

Ralph B. Barnes, Jr., P.E.
Principal

Copies to: Addressee (2)
Mr. Stephen Lucy, P.E. – Jaster-Quintanilla Dallas, LLP (1)

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APPENDIX **Figure**

GEOTECHNICAL ENGINEERING REPORT

FANNIN COUNTY COURTHOUSE RESTORATION
101 W. SAM RAYBURN DRIVE
BONHAM, TEXAS

TERRACON PROJECT NO. 94095056
April 7, 2009

INTRODUCTION

Terracon has completed the geotechnical engineering services for the planned additions and modifications to the Fannin County Courthouse located in Bonham, Texas. The purpose of this report is to describe the subsurface conditions encountered in the borings, analyze and evaluate the test data, and provide geotechnical recommendations regarding the design and construction of foundations, floor slabs, subgrades, pavements, and earthwork for the project. Additionally, we were asked to excavate two test pits adjacent to exterior walls in an attempt to examine below grade foundations. Our scope of services included drilling and sampling two borings, excavation of two test pits, laboratory testing, and engineering analyses.

PROJECT DESCRIPTION

The site is located at northeast corner of N. Main Street and W. Sam Rayburn Drive in Bonham, Texas. The historic Fannin County Courthouse was built in 1889. Historic documents indicate that the three-story structure was supported by continuous strip footings founded on fifteen foot long Bois d'Arc timber piles. In 1929 a fire destroyed the roof and tower structure. It was later rebuilt without the clock tower. In 1965 the courthouse was remodeled by covering the exterior with marble. A crawl space exists beneath portions of the basement floor.

We understand that the courthouse will be restored to its pre-fire appearance, including the clock tower. It is envisioned that a new foundation may be required in the cross corridor to support steel framing forming the restored clock tower. Loads on the order of 10 to 80 kips for columns and 1 to 5 kips per foot of wall are anticipated.

SUBSURFACE EXPLORATION AND LABORATORY PROCEDURES

Field Exploration

The subsurface conditions were explored by drilling two borings at the approximate locations indicated on the Boring Location Diagram on Figure 1 in the Appendix. The field exploration was performed on March 17, 2009. The boring locations were chosen by the structural engineer. The boring locations were established in the field by measuring from available reference features and estimating right angles. The boring locations should be considered accurate only to the degree implied by the methods employed to determine them.

The borings were performed using a truck-mounted drill rig. Continuous-flight augers were used to advance the boreholes. Samples of the soils encountered in the borings were obtained

using thin-walled tube sampling procedures. In the thin-walled tube sampling procedure, a seamless steel tube with a sharp cutting edge is pushed hydraulically into the soil to obtain a relatively undisturbed sample. The soil samples were tagged for identification, sealed to reduce moisture loss, and taken to the laboratory for further examination, testing, and classification.

Field logs of the borings were prepared by the drill crew. The logs included visual classifications of the materials encountered as well as interpretation of the subsurface conditions between samples. The boring logs included with this report represent the engineer's interpretation of the field logs and include modifications based on laboratory evaluation of the samples. Logs of the borings are presented on Figures 2 and 3 in the Appendix. General notes to log terms and symbols are presented on Figure 4.

Laboratory Testing

The boring logs and samples were reviewed by a geotechnical engineer who selected soil samples for testing. Tests were performed by technicians working under the direction of the engineer. A brief description of the tests performed follows.

Liquid and Plastic Limit tests and moisture content measurements were performed to aid in classifying the soils in accordance with the Unified Soil Classification System (USCS). The USCS is summarized on Figure 5. These tests were also used for evaluating soil volume change potential. Absorption swell tests were performed on selected samples of the cohesive materials. These tests were used to more quantitatively evaluate volume change potential at in-situ moisture levels. Unconfined compression and hand penetrometer tests were performed on samples of the cohesive soils to evaluate the strength and consistency of these materials.

The results of the laboratory tests are presented on the Logs of Boring. Results of the swell tests are presented in Table 1.

TABLE 1 – SUMMARY OF SWELL TESTS

Boring No.	Depth (feet)	Surcharge (psf)	Initial Moisture (%)	Final Moisture (%)	Swell (%)
B-1	6 – 8	750	21.2	22.5	0.5
B-2	4 – 6	500	17.3	21.0	0.5
B-2	8 – 10	1,000	17.5	20.2	2.0

SITE AND SUBSURFACE CONDITIONS

Soil Conditions

The subsurface conditions encountered at the individual test locations are indicated on the attached boring logs. The stratification boundaries on the boring logs represent the approximate location of changes in soil types; in-situ, the transition between materials may be gradual. A brief discussion of the stratigraphy indicated by the exploration program is presented below.

Fill materials consisting of dark brown, brown, tan and gray sandy lean clays (CL) were encountered at the ground surface and continued to depths of about 2 to 3 feet. Dark brown sandy lean clays were encountered below the fill soils to depths of about 4 feet. The Liquid Limit (LL) of these soils was 39 percent with a corresponding Plasticity Index (PI) of 19. These clay soils were medium stiff to very stiff in consistency.

Orange and gray fat clay (CH) with sand traces was next encountered. These clays extended to depths of about 22 feet below grade. These fat clays had LL's ranging from 51 to 57 percent with PI's of 31 to 37. They were very stiff to hard in consistency.

Tan and gray fat clay (CH) was found at depths of 22 feet. These very stiff to hard soils continued to the 40 foot termination depth of the borings. These soils were very stiff to hard in consistency.

The clays encountered at this site are considered to be highly active with respect to moisture induced volume changes. Active clays can experience significant volume changes (expansion or shrinkage) with fluctuations in their moisture content.

Groundwater Conditions

Groundwater seepage was not observed during drilling or at the completion of drilling in either of the borings. These groundwater level observations provide an indication of the groundwater conditions present at the time the borings were drilled. Groundwater levels may be different at the time of construction. Groundwater conditions may change because of seasonal variations in rainfall, landscape irrigation, and runoff.

Test Pits

On March 19, 2009 Weaver and Associates, a contractor hired by Terracon, began the excavation of two test pits for the purpose of allowing a representative from Jaster-Quintanilla, KSA Engineering and Architexas to view and document the type and the condition of the existing foundation.

On Monday March 23, 2009 the excavation test pits were completed to a depth of 7 feet as per our agreement. The bottom of the foundation was not visible at this depth.

On Thursday March 26, 2009 additional excavation was provide to reach the bottom of the foundation. Approximately 12 inches of additional soil was required to be removed to reach the bottom of the foundation. Weaver and Associates also excavated approximately 16 inches under the foundation searching for existing wood piles (post). In the southwest corner test pit it was reported by employees of Weaver and Associates that small pieces of wood were seen floating in water which flowed from under the structure once soil was removed from under the foundation.

At approximately 2:30 PM on March 26, 2009 Mark LaMay from Jaster-Quintanilla arrived on site to collect data from the test pits regarding the courthouse foundation. When Mr. LaMay finished viewing the pits he instructed Weaver and Associates to fill in the test pits and replace the concrete sidewalk.

ANALYSES AND RECOMMENDATIONS

Geotechnical Considerations

Expansive soils are present on this site. This report provides recommendations to help mitigate the effects of soil shrinkage and expansion. However, even if these procedures are followed, some movement and cracking in the structure should be anticipated. The severity of cracking and other damage such as uneven floor slabs will increase if wetting or drying of the expansive soils occurs.

The expansive soils can subject lightly loaded shallow foundations to significant differential soil movements. Based on the conditions encountered in the borings, underreamed drilled shafts should be used to transfer new foundation loads to the clays at a depth of about 20 feet below grade.

In conjunction with drilled shafts, the building floor slabs should be structurally supported above existing grade if slab movements are to be limited to less than one inch. It should be noted that there is a risk that even ½ inch of movement can result in unsatisfactory building performance. Some of the risks that can affect building performance include uneven floors, floor and wall cracking, and sticking doors.

Asphaltic concrete pavement or Portland cement concrete pavement can be used at this site. However, due to the highly active clays, the Portland cement concrete pavement is expected to require less maintenance.

Geotechnical recommendations for building foundation, floor slab subgrade preparation, pavement, and earthwork are presented in the following report sections.

Drilled Shafts Design Recommendations

Underreamed Shafts

Drilled and underreamed shafts should be situated in the clay soils at depths of about 20 feet below existing grade. The bearing level should be reviewed when the project grading plan is available. An allowable net bearing pressure of 4,000 psf can be used to proportion underreams. This value contains a safety factor of about three with respect to a bearing failure.

Underreamed shafts should have a minimum base to shaft diameter ratio of 2 to 1 to resist the uplift loads described below. In addition, the underream diameter should be a minimum of 30 inches larger than the straight shaft portion.

We recommend underreamed shafts maintain a minimum edge to edge spacing of one underream diameter, based on the larger of the two. Closer drilled shaft spacing should be evaluated to determine if reductions in the allowable bearing pressures should be made to control settlement.

Seventy to 80 percent of the foundation settlement of properly constructed underreamed shafts is expected to occur as the shafts are loaded. The total settlement is estimated to range from ½ to 1 percent of the underream diameter. Differential settlements of equally loaded drilled shafts are expected to range from ½ to ¾ of the total settlements.

Underreamed Shafts - Lateral Capacity

The shafts may be subject to lateral loads. Recommendations for design of laterally loaded drilled shafts are presented in this report section.

An allowable passive resistance of 1,000 psf is recommended in the overburden soils. If a shaft is not surrounded by paving or flatwork, the upper 5 feet should be neglected. This value may be increased by 20 percent when considering wind loads.

These recommended lateral earth pressures apply to shafts spaced at 5 or more shaft diameters, center to center. This office should review the lateral earth pressure recommendations for shafts spaced closer than 5 shaft diameters.

Underreamed Shafts - Uplift Resistance

Drilled and underreamed shafts will be subject to uplift as a result of heave in the overlying clay soils. The magnitude of these loads varies with the shaft diameter, soil parameters, and particularly the in-situ moisture levels at the time of construction. For the conditions

encountered at this site, the uplift load can be approximated by assuming a uniform uplift of 2,000 psf over the shaft perimeter for a depth of 8 feet. Uplift may be reduced to 1,200 psf if moisture conditioned soils are placed as discussed in the "Floor Slabs" section of this report. The shafts must contain sufficient continuous vertical reinforcing to resist the net tensile load.

Underreamed Shaft Construction

The underreamed shafts should be installed in accordance with the American Concrete Institute's Specification ACI 336. Excavation for the shafts should be maintained in the dry. Concreting should closely follow excavation to reduce potential caving and/or seepage problems. Some field adjustments in the underream depths may be necessary to keep shafts above groundwater.

The concrete should have a slump of 6 inches plus or minus 1 inch and be placed in a manner to avoid striking the reinforcing steel during placement. The top of the drilled shafts should not be allowed to have an enlarged "mushroom" shaped top.

The drilled shaft design recommendations provided in this report are based on proper construction procedures, including maintaining a dry shaft excavation and proper cleaning of bearing surfaces prior to placing reinforcing steel and concrete. All drilled shaft installations should be inspected by qualified geotechnical personnel to help verify the bearing stratum, the design penetration, and perform related duties.

Grade Beams/Pier Caps

All grade beams or wall panels should be supported by the drilled shafts. A minimum void space of 8 inches is recommended between the bottom of grade beams, pier cap extensions or wall panels and the subgrade. This void will serve to reduce distress resulting from swell pressures generated by the clays. Structural cardboard forms are one acceptable means of providing this void beneath cast-in-place elements. A soil retainer should be used to help prevent soil infilling of the void space.

The grade beams should be formed rather than cast against earth trenches. Backfill against the exterior face of grade beams, wall panels and pier caps should be properly compacted onsite clays. Compaction should be a minimum of 92 percent of ASTM D698, at a minimum of +3 percent above the optimum moisture content determined by that test.

Seismic Considerations

Based on the 2006 International Building Code, Table 1615.1.1 Site Class Definitions, the site soils can be characterized as Site Class C. Site Class C is described as stiff soil and soft rock for the top 100 feet of the site soil profile.

Floor Systems

Lightly loaded floor slabs placed on-grade will be subject to movement because of moisture induced volume changes in the site soils. The clays expand (heave) with increases in moisture and contract (shrink) with decreases in moisture.

The potential magnitude of the moisture-induced movements is rather indeterminate at this site. It is influenced by the soil properties, overburden pressures, and by soil moisture levels at the time of construction and following construction. The greatest potential for post-construction upward movement occurs when the soils are in dry condition at the time of construction. Based on the soil types encountered in the borings and a dry moisture state, movements in slabs-on-grade placed near existing grades are estimated to on the order of 3 inches.

A structural slab is recommended if foundation movements are to be limited to less than 1 inch. The building slabs can be supported on a modified subgrade to reduce soil movements to about 1 inch. Note that movements of ½ inch can result in uneven floors, sticking doors, and cracking of floor slabs and wall partitions. If the risk of these movements is unacceptable, the floor slab should be structural.

Structural Floor Slabs

If floor slab movement cannot be tolerated, a floor system structurally suspended above the subgrade is recommended. A minimum void space of 12 inches is recommended beneath the slabs.

The minimum void space can be provided by the use of cardboard carton forms, or a deeper crawl space. The bottom of the void should preferably be higher than adjacent exterior grades. A ventilated and drained crawl space is preferred for several reasons, including the following:

- Ground movements will affect the project utilities, which can cause breaks in the lines and distress to interior fixtures.
- A crawl space permits utilities to be hung from the superstructure, which greatly reduces the possibility of distress due to ground movements. It also can provide ready access in the event repairs are necessary.
- Ground movements are uneven. A crawl space can be positively drained preventing the ponding of water and reducing the possibility of distress due to unexpected ground movements.

Slabs/Flatwork on Grade

Slab-on-grade construction should only be considered if slab movements and potential building distress are acceptable. The active clay subgrade will need to be modified to reduce potential

slab movements. The level of acceptable movement will vary with the user. The following recommendations should be reviewed when the grading plan is available.

Reductions in anticipated movements can be achieved by using methods developed in this area to reduce slab-on-grade floor movements. The more commonly used method of subgrade preparation consists of moisture conditioning the site soils using either water pressure injection or excavation and replacement. Water pressure injection is not recommended for this project due to the existing site improvements. The moisture conditioning process should extend beyond the building line to include entrances, sidewalks, and other areas sensitive to movement that are located adjacent to the building.

Moisture conditioning the soils to a depth of 10 feet is estimated to result in slab movements are on the order of 1 inch. The moisture conditioned soils should be capped with one foot of select fill or moist cured until concrete is placed. Recommendations for excavation and replacement are presented in the "Earthwork" section of the report. The ground surface around the building should be sloped to prevent water from ponding next the building. Drainage recommendations are also presented in the "Earthwork" section of the report.

Slabs placed at the basement level, 6 to 7 feet below grade, may be designed to limit movements to about 1 inch by excavating the soils to a depth of 12 feet below grade and replacing the remaining 5 to 6 feet with moisture conditioned fill and a one foot cap of non-expansive, select fill.

Excavation adjacent to or beneath the existing structure should proceed with caution. The structural engineer should be consulted for safety and protection of the existing building.

It should be realized that slab movements of even ½ inch could result in drywall and slab cracks as well as sticking doors. Designs should be such that the movement discussed above can be accommodated.

The use of a vapor retarder should be considered beneath concrete slabs on grade that will be covered with wood, tile, or carpet with a water soluble adhesive. A vapor retarder should be used for other moisture sensitive coverings, impervious coverings, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor retarder, the slab designer and slab contractor should refer to ACI 302 for procedures and cautions regarding the use and placement of a vapor retarder.

Earthwork

Excavation and Replacement

The area to be treated should be undercut to provide 10 feet of reworked soils beneath the select fill pad for ground level slabs. The exposed soil subgrade should then be scarified to a depth of 8 inches and re-compacted to a minimum of 92 percent of Standard Proctor (ASTM D698) at a minimum of +4 percentage points above the soil's optimum moisture content. The soils can then be replaced in loose lifts, less than 9 inches thick, and uniformly compacted to the same criteria. Care should be taken that a lift is not allowed to desiccate prior to placing a subsequent lift. The select fill should then be placed above the reworked subgrade within 48 hours of completing the installation of the moisture conditioned soils.

Select Fill

The material used as select fill should be a silty or sandy clay with a Liquid Limit less than 35 percent, a Plasticity Index between 6 and 15, and no less than 60 percent passing the No. 200 sieve. It should be spread in loose lifts, not exceeding 9 inches thick, and uniformly compacted to a minimum of 95 percent of ASTM D698 at -1 to +2 percentage points of the soil's optimum moisture content. The first lift of select fill should be placed wet of optimum to prevent drying the underlying subgrade.

As an alternate to select fill, flexible base can be used. The base should meet the requirements of TxDOT Item 247, Type A, Grade 1 or 2. Recycled concrete meeting these requirements is acceptable.

Positive drainage must be provided away from the structures to prevent the ponding of water in the select fill, during and following construction. Care must be taken that backfill against the exterior face of grade beams is properly compacted onsite clay as discussed in the section "Grade Beams/Pier Caps". Leave-outs in the floor slab should be protected from ponding water during construction.

Building Area Drainage

All grades must be adjusted to provide positive drainage away from the structure. Water permitted to pond near or adjacent to the perimeter of the structure can result in soil movements that exceed those discussed in this report. Open ground should preferably be sloped at a minimum of 5 percent grade 10 feet beyond the perimeter of the building.

Flatwork and pavement will be subject to post construction movement. Maximum grades practical should be used for paving and flatwork to prevent areas where water can pond. In addition, allowances in final grades should take into consideration post-construction movement of flatwork, particularly if such movement would be critical. Flatwork sensitive to subgrade movements should be prepared as discussed in the "Earthwork" section of this report. Where

paving or flatwork abuts the structure, the pavement should be sloped down away from the building and joints properly sealed and maintained to prevent the infiltration of surface water.

Planters located adjacent to the structure should preferably be self-contained. Sprinkler mains should be located a minimum of 5 feet away from the building line. If heads must be located adjacent to the structure, then service lines off the main should be provided. Roof drains should discharge on pavement or be extended away from the structure. Ideally roof drains should discharge by closed pipe to storm drain systems.

Site Grading

The on-site soils, free of vegetation, debris, and rocks greater than 4 inches in maximum dimension, are generally suitable for site grading. If imported fill materials are used, they should be clean soil with a Liquid Limit preferably less than 60 percent and no rock greater than 4 inches in maximum dimension.

Prior to placing any fill, the areas to receive fill will need to be stripped and grubbed. It should then be proof rolled with heavy pneumatic equipment. Any soft or pumping areas should be excavated to a firm subgrade and properly backfilled.

The subgrade should then be scarified to a minimum depth of 6 inches and compacted to a minimum of 95 percent of the Standard Proctor (ASTM D698) maximum dry density. The subgrade should be compacted at moisture contents at moisture contents a minimum of +2 percent above the optimum moisture content. The fill materials should then be spread in loose lifts, less than 9 inches thick, and uniformly compacted to the same criteria.

Utilities

Care should be taken that utility trenches are not left open for extended periods, and they are properly backfilled. Backfilling should be accomplished with properly compacted on-site soils, rather than granular materials. A positive cut-off at the building line is recommended to help prevent water from migrating in the utility trench backfill.

Below Grade Walls/Retaining Walls

Retaining walls may be required at this site. Walls associated with the structure or walls that are sensitive to movements should be supported by drilled shafts as previously discussed in the "Drilled Shaft Design Recommendations" section of this report. A void of 6 inches should be provided beneath the wall and the clay subgrade, if drilled shafts are used.

Site walls that can tolerate movements can be supported by continuous footings founded in natural soils or properly compacted fill. Footings situated a minimum of 2 feet below finished grade may be proportioned with a maximum allowable bearing pressure of 1,500 pound per

square foot. A coefficient of friction of 0.35 is recommended for evaluating sliding resistance. Additional passive resistance can be developed by using a key beneath the wall footing. An allowable passive pressure of 500 psf may be considered against the face of the key.

Lateral earth pressures acting on the walls will depend on the type of backfill material used and drainage conditions behind the wall. Recommended lateral earth pressures expressed as equivalent fluid pressures are presented below in Table 3 for rigid and flexible walls for drained conditions. Rigid walls are not anticipated to deflect sufficiently to mobilize active earth pressures. Structure walls should be considered rigid. Active earth pressures can be used where the top of the wall will deflect on the order of 0.5 percent of the wall height.

TABLE 3 - EQUIVALENT FLUID PRESSURES

Backfill Material	Active (Flexible)	At-Rest (Rigid)
On-site soils	95 pcf	110 pcf
Select Fill, with Liquid Limit less than 35 and Plasticity Index less than 15	50 pcf	65 pcf
Granular backfill, less than 3% passing No. 200 sieve and less than 30% passing No. 40. Non-plastic	35 pcf	50 pcf

The wall backfill limits should extend outward at least 3 feet from the base of the wall and then upward on a 1H:2V slope. For narrower backfill widths of granular or select fill soils, the equivalent fluid pressures for the on-site soils should be used.

The lateral earth pressure values do not include surcharge loads due to overburden, traffic, equipment, etc. Surcharge loads should be considered if they apply at the surface above the wall within areas defined by an angle of 45 degrees from the base of the wall. A lateral pressure coefficient of 0.5 is recommended for uniformly distributed surcharge loads.

Wall backfill materials should be placed in loose lifts, less than 9 inches thick, and uniformly compacted to a minimum density of 95 percent of ASTM D 698. Moisture content during placement of cohesive backfill should be within 0 to +5 percentage points of the optimum moisture content as measured in test method ASTM D 698. Granular backfill should not be water jetted to achieve compaction and should be placed at a moisture content to allow the desired density to be achieved.

Care should be taken that backfill is not over compacted, which could increase the lateral pressures on the walls. The top of the backfill should be protected by flatwork, paving or for granular backfill a minimum of 2 feet of clay fill to prevent surface infiltration.

The design recommendations presented above assume hydrostatic pressures will not develop behind the wall. For structure walls, the drains should be a minimum of 12 inches lower than the adjacent slab. Drainage for free standing walls can be provided by using a collector pipe or weep holes near the base of the wall. Drains should be properly filtered to minimize the potential for erosion through these drains and/or plugging of drain lines.

Settlement of the wall backfill should be anticipated.. Piping and conduits through the fill should be designed for potential soil loading due to fill settlement. Flatwork, sidewalks and pavements over fills may also settle. Backfill compacted to the density recommended above is anticipated to settle on the order of one to two percent of the fill thickness.

Pavements

Pavement Subgrade Treatment

Subgrade materials at this site are anticipated to consist of clays. These soils are subject to loss in support value with the moisture increases, which occur beneath pavement sections. They react with hydrated lime, which serves to improve and maintain their support value. Lime stabilization is recommended beneath flexible (asphalt) pavement sections. Rigid (concrete) pavements may be placed on an unstabilized, properly compacted subgrade.

A minimum of 8 percent hydrated lime (TxDOT Item 264), by dry weight, should be used. The lime should be thoroughly mixed and blended with the top 6 inches of the subgrade (TxDOT, Item 260). Stabilization should extend a minimum of one foot beyond the edge of the pavement.

The subgrade, stabilized or unstabilized, should then be uniformly compacted to a minimum of 95 percent of ASTM D698 maximum dry density between -1 to +3 percentage points of the optimum moisture content. The subgrade should be protected and maintained in a moist condition until the pavement is placed. Pavement subgrades should be graded to prevent ponding and infiltration of excessive moisture on or adjacent to the pavement subgrade surface.

Design Traffic

Traffic patterns and anticipated loading conditions were not available; however, we anticipate that traffic loads will be produced primarily by automobile traffic, service trucks and school buses. Two pavement section alternatives are provided: Light Duty Pavements and Medium Duty Pavements. A design life of 20 years was assumed to develop the total traffic used in the thickness design.

Light Duty Pavements were designed for automobile traffic only. Medium Duty Pavements were designed for automobiles, 2 two axle 10-ton trucks per day, 2 two axle 20-ton trucks and 10 school bus per day for a total of about fifteen 18-kip Equivalent Single Axle Loads (ESAL's) per day. The Medium Duty Pavement is also appropriate for fire lanes. If the pavements are subject to heavier loading and higher traffic counts than the assumed values, this office should be notified and provided with the information so that we may review these pavement sections and make revisions if necessary.

Pavement Sections

Five inches of asphaltic concrete should be adequate in light duty traffic areas. This should be increased to six inches for medium duty traffic. The section should consist of a two-inch surface course similar to TxDOT Type D and a base course similar to Type B. The coarse aggregate in the surface course should be crushed limestone rather than gravel.

Portland cement concrete is recommended in areas subject to truck and dumpster traffic and is suitable for automobile drives and parking lots. Five inches of concrete is recommended for light duty areas and six inches in medium duty traffic. Dumpster aprons should be a minimum of 7 inches thick.

The concrete should have a minimum 28-day compressive strength of 3,000 psi in automobile lots and 3,500 psi in truck and dumpster areas. It should contain a minimum of 6 ±2.5 percent entrained air for a one-inch maximum aggregate size. As a minimum, the section should be reinforced with No. 3 bars on 18-inch centers in both directions.

Flat grades should be avoided with positive drainage provided away from the pavement edges. Backfilling of curbs should be accomplished as soon as practical to prevent ponding of water.

Openings in pavement, such as landscape islands, are sources for water infiltration into surrounding pavements. Water collects in the islands and migrates into the surrounding subgrade soils thereby degrading support of the pavement. This is especially applicable for islands with raised concrete curbs, irrigated foliage, and low permeability near-surface soils. The civil design for the pavements with these conditions should include features to restrict or to collect and discharge excess water from the islands. Examples of features are edge drains connected to the storm water collection system or other suitable outlet and impermeable barriers preventing lateral migration of water such as a cutoff wall installed to a depth below the pavement structure.

Preventative Maintenance

Preventative maintenance should be planned and provided for through and on-going pavement management program in order to enhance future pavement performance. Preventative

maintenance activities are intended to slow the rate of pavement deterioration, and to preserve the pavement investment.

Preventative maintenance consists of both localized maintenance (e.g. crack and joint sealing and patching) and global maintenance (e.g. surface sealing). Preventative maintenance is usually the first priority when implementing a planned pavement maintenance program and provides the highest return on investment for pavements. Prior to implementing any maintenance, additional engineering observation is recommended to determine the type and extent of preventative maintenance.

GENERAL COMMENTS

Terracon should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Terracon also should be retained to provide observation and testing services during grading, excavation, foundation construction and other earth-related construction phases of the project.

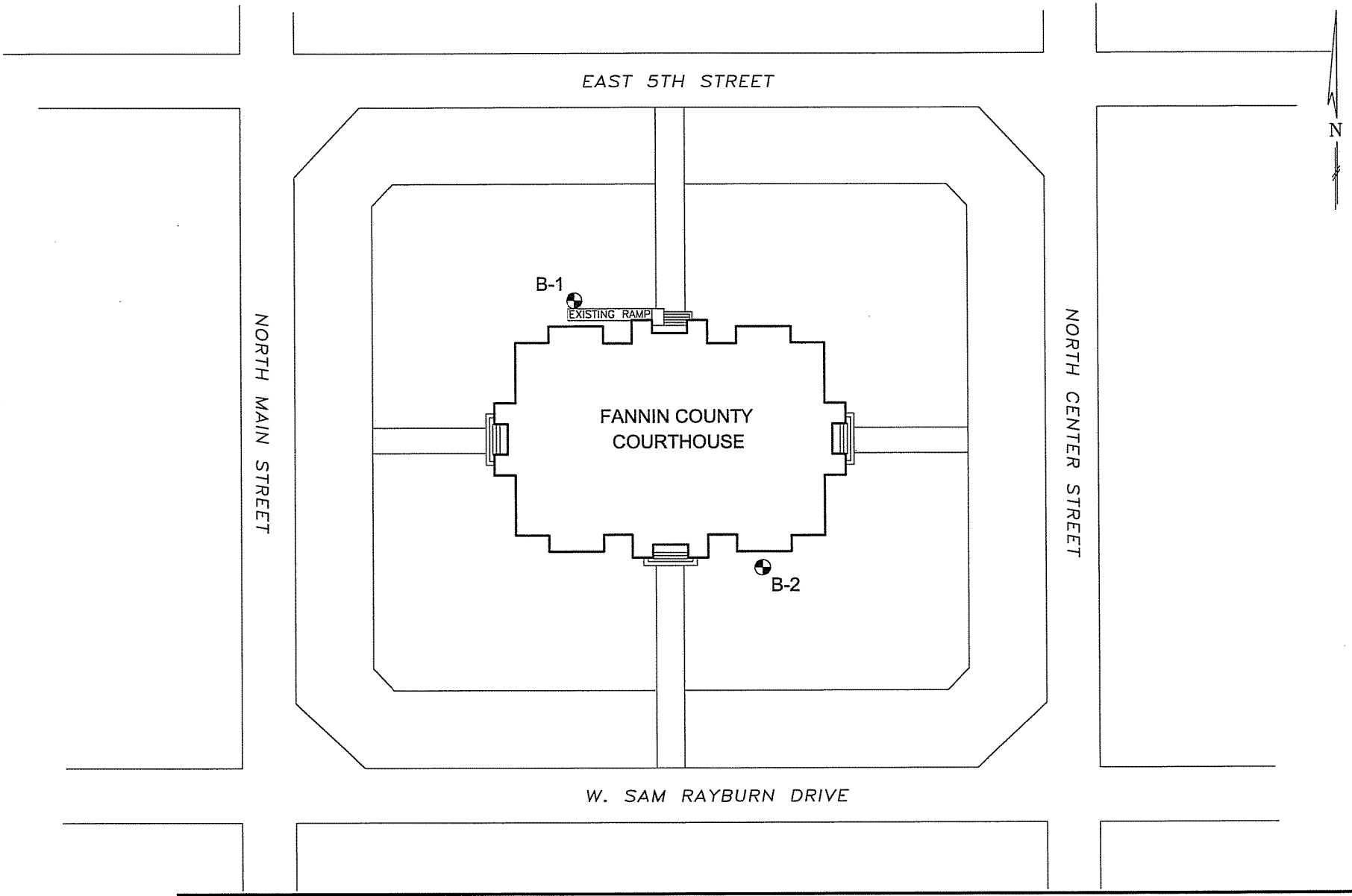
The analysis and recommendations presented in this report are based upon the data obtained from the borings performed at the indicated locations and from other information discussed in this report. This report does not reflect variations that may occur between borings, across the site, or due to the modifying effects of weather. The nature and extent of such variations may not become evident until during or after construction. If variations appear, we should be immediately notified so that further evaluation and supplemental recommendations can be provided.

The scope of services for this project does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.

APPENDIX

Date: 04/07/09 N:\Projects\2009\94095056\94095056.dwg Layout: Layout1



Project Mngr: DF	Project No. 94095056	Terracon	**BORING LOCATION DIAGRAM**
Drawn By: CDD	Scale: NOT TO SCALE	Consulting Engineers and Scientists	FANNIN COUNTY COURTHOUSE RESTORATION
Checked By: -	Date: 3/25/09	8901 CARPENTER FREEWAY DALLAS, TEXAS 75247	BONHAM, TEXAS
Approved By: -		PH. (214) 630-1010 FAX. (214) 630-7070	FIG. No. 1

LOG OF BORING NO. B- 1

CLIENT: **KSA Engineers, Inc.**
McKinney, Texas

PROJECT: **FANNIN COUNTY COURTHOUSE RESTORATION**

BORING LOCATION: **See Figure 1**

SITE: **101 W. Sam Rayburn Drive**
Bonham, Texas

Graphic Log	DESCRIPTION		DEPTH, FEET	SAMPLES: USCS SYMBOL	SAMPLES: TYPE	SAMPLES: SPT OR TXDOT CPT BLOWS/INCH	SAMPLES: CALIBRATED HAND PENETROM., TSF	SAMPLES: RECOVERY, % / RQD, %	TESTS: MOISTURE CONTENT, %	TESTS: DRY DENSITY, PCF	TESTS: LIQUID LIMIT, %	TESTS: PLASTICITY INDEX	TESTS: MINUS #200 SIEVE, %	TESTS: COMPRESSIVE STRENGTH, KSF	TESTS: FAILURE STRAIN, %
	Approx. Surface Elevation: ±600* ft														
	FILL, SANDY LEAN CLAY,			CL	ST		1.5								
	2.0 Dark brown and tan	598.0													
	SANDY LEAN CLAY,			CL	ST		1.25		24		39	19			
	4.0 Dark brown, medium stiff	596.0													
	FAT CLAY,		5	CH	ST		2.5								
	Orange and gray, marl, very stiff			CH	ST		2.75		21	108	57	37			
				CH	ST		4.5								
			10		CF										
				CH	ST		2.25		25	101				2.7	3.7
			15		CF										
				CH	ST		4.5								
			20		CF										
	22.0	578.0													
	FAT CLAY,			CH	ST		4.5								
	Tan and gray, marl, very stiff to hard		25		CF										
				CH	ST		4.5								
			30		CF										
				CH	ST		4.0		27	99				3.4	1.1
			35		CF										
	40.0	560.0													
	B.H. at 40.0'		40	CH	ST		4.0								

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL AND ROCK TYPES. IN SITU, THE TRANSITION BETWEEN STRATA MAY BE MORE GRADUAL.

REMARKS: *Groundsurface elevation estimated from USGS topographic map, Bonham, Texas

WATER LEVEL OBSERVATIONS, FEET		Terracon	DATE DRILLED	Page 1 of 1
▽	▼		3/17/2009	FIGURE 2
▼	▼		PROJECT NUMBER	
No seepage observed.			94095056	

LOB 94095056.GPJ 4/6/09

LOG OF BORING NO. B- 2

CLIENT: **KSA Engineers, Inc.**
McKinney, Texas

PROJECT: **FANNIN COUNTY COURTHOUSE RESTORATION**

BORING LOCATION: **See Figure 1**

SITE: **101 W. Sam Rayburn Drive**
Bonham, Texas

Graphic Log	DESCRIPTION	DEPTH, FEET	USCS SYMBOL	TYPE	SPT OR TXDOT CPT BLOWS/INCH	CALIBRATED HAND PENETROM., TSF	RECOVERY, % / RQD, %	MOISTURE CONTENT, %	DRY DENSITY, PCF	LIQUID LIMIT, %	PLASTICITY INDEX	MINUS #200 SIEVE, %	COMPRESSIVE STRENGTH, KSF	FAILURE STRAIN, %
	Approx. Surface Elevation: ±600* ft													
	FILL, SANDY LEAN CLAY, Brown, tan and gray, with bricks		CL	ST		1.75								
	3.0 597.0		CL	ST		4.25								
	4.0 **SANDY LEAN CLAY,** 596.0 Dark brown, very stiff	5	CH	ST		4.5+		17	115	57	37			
	FAT CLAY, Gray and orange, marl, with sand traces, hard		CH	ST		4.5								
			CH	ST		4.5+		18	115	51	31			
		10		CF										
			CH	ST		2.75								
		15		CF										
			CH	ST		4.5								
		20		CF										
	22.0 578.0													
	FAT CLAY, Tan and gray, marl, very stiff to hard		CH	ST		4.5+		22	107				2.6	1.3
		25		CF										
			CH	ST		4.5+								
		30		CF										
			CH	ST		4.25								
		35		CF										
	40.0 560.0													
	B.H. at 40.0'	40	CH	ST		4.5								

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL AND ROCK TYPES. IN SITU, THE TRANSITION BETWEEN STRATA MAY BE MORE GRADUAL.

REMARKS: *Groundsurface elevation estimated from USGS topographic map, Bonham, Texas

WATER LEVEL OBSERVATIONS, FEET

No seepage observed.

Terracon

DATE DRILLED 3/17/2009

PROJECT NUMBER 94095056

FIGURE 3

LOB 94095056.GPJ 4/7/09

GENERAL NOTES

DRILLING & SAMPLING SYMBOLS:

SS:	Split Spoon - 1-3/8" I.D., 2" O.D., unless otherwise noted	HS:	Hollow Stem Auger
ST:	Thin-Walled Tube - 2" O.D., unless otherwise noted	PA:	Power Auger
RS:	Ring Sampler - 2.42" I.D., 3" O.D., unless otherwise noted	HA:	Hand Auger
DB:	Diamond Bit Coring - 4", N, B	RB:	Rock Bit
BS:	Bulk Sample or Auger Sample	WB:	Wash Boring or Mud Rotary

The number of blows required to advance a standard 2-inch O.D. split-spoon sampler (SS) the last 12 inches of the total 18-inch penetration with a 140-pound hammer falling 30 inches is considered the "Standard Penetration" or "N-value". For 3" O.D. ring samplers (RS) the penetration value is reported as the number of blows required to advance the sampler 12 inches using a 140-pound hammer falling 30 inches, reported as "blows per foot," and is not considered equivalent to the "Standard Penetration"or "N-value".

WATER LEVEL MEASUREMENT SYMBOLS:

WL:	Water Level	WS:	While Sampling	N/E:	Not Encountered
WCI:	Wet Cave in	WD:	While Drilling		
DCI:	Dry Cave in	BCR:	Before Casing Removal		
AB:	After Boring	ACR:	After Casing Removal		

Water levels indicated on the boring logs are the levels measured in the borings at the times indicated. Groundwater levels at other times and other locations across the site could vary. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels may not be possible with only short-term observations.

DESCRIPTIVE SOIL CLASSIFICATION: Soil classification is based on the Unified Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

CONSISTENCY OF FINE-GRAINED SOILS

Unconfined Compressive Strength, Qu, psf	Standard Penetration or N-value (SS) Blows/Ft.	Consistency
< 500	0 - 1	Very Soft
500 – 1,000	2 - 4	Soft
1,000 – 2,000	4 - 8	Medium Stiff
2,000 – 4,000	8 -15	Stiff
4,000 – 8,000	15 - 30	Very Stiff
8,000+	> 30	Hard

RELATIVE DENSITY OF COARSE-GRAINED SOILS

Standard Penetration or N-value (SS) Blows/Ft.	Ring Sampler (RS) Blows/Ft.	Relative Density
0 – 3	0-6	Very Loose
4 – 9	7-18	Loose
10 – 29	19-58	Medium Dense
30 – 49	59-98	Dense
> 50	> 99	Very Dense

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 15
With	15 – 29
Modifier	> 30

GRAIN SIZE TERMINOLOGY

Major Component of Sample	Particle Size
Boulders	Over 12 in. (300mm)
Cobbles	12 in. to 3 in. (300mm to 75 mm)
Gravel	3 in. to #4 sieve (75mm to 4.75 mm)
Sand	#4 to #200 sieve (4.75mm to 0.075mm)
Silt or Clay	Passing #200 Sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 5
With	5 – 12
Modifiers	> 12

PLASTICITY DESCRIPTION

Term	Plasticity Index
Non-plastic	0
Low	1-10
Medium	11-30
High	> 30

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FIGURE 4

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests[A]					Soil Classification	
					Group Symbol	Group Name[B]
Coarse-Grained Soils More than 50% retained on the No. 200 sieve	Gravels More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels Less than 5% fines[C]	$Cu \geq 4$ and $1 \leq Cc \leq 3$[E]		GW	Well-graded gravel[F]
			$Cu < 4$ and/or $1 > Cc > 3$[E]		GP	Poorly graded gravel[F]
		Gravels with Fines More than 12% fines[C]	Fines classify as ML or MH		GM	Silty gravel[F,G,H]
			Fines classify as CL or CH		GC	Clayey gravel[F,G,H]
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands Less than 5% fines[D]	$Cu \geq 6$ and $1 \leq Cc \leq 3$[E]		SW	Well-graded sand[I]
			$Cu < 6$ and/or $1 > Cc > 3$[E]		SP	Poorly graded sand[I]
		Sands with Fines More than 12% fines[D]	Fines classify as ML or MH		SM	Silty sand[G,H,I]
			Fines Classify as CL or CH		SC	Clayey sand[G,H,I]
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays Liquid limit less than 50	inorganic	PI > 7 and plots on or above "A" line[J]		CL	Lean clay[K,L,M]
			PI < 4 or plots below "A" line[J]		ML	Silt[K,L,M]
		organic	Liquid limit - oven dried / Liquid limit - not dried	< 0.75	OL	Organic clay[K,L,M,N] / Organic silt[K,L,M,O]
	Silts and Clays Liquid limit 50 or more	inorganic	PI plots on or above "A" line		CH	Fat clay[K,L,M]
			PI lots below "A" line		MH	Elastic Silt[K,L,M]
		organic	Liquid limit - oven dried / Liquid limit - not dried	< 0.75	OH	Organic clay[K,L,M,P] / Organic silt[K,L,M,Q]
Highly organic soils	Primarily organic matter, dark in color, and organic odor				PT	Peat

[A] Based on the material passing the 3-in. (75-mm) sieve

[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ≥ 15% sand, add "with sand" to group name.

[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H] If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.

[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[N] PI ≥ 4 and plots on or above "A" line.

[O] PI < 4 or plots below "A" line.

[P] PI plots on or above "A" line.

[Q] PI plots below "A" line.

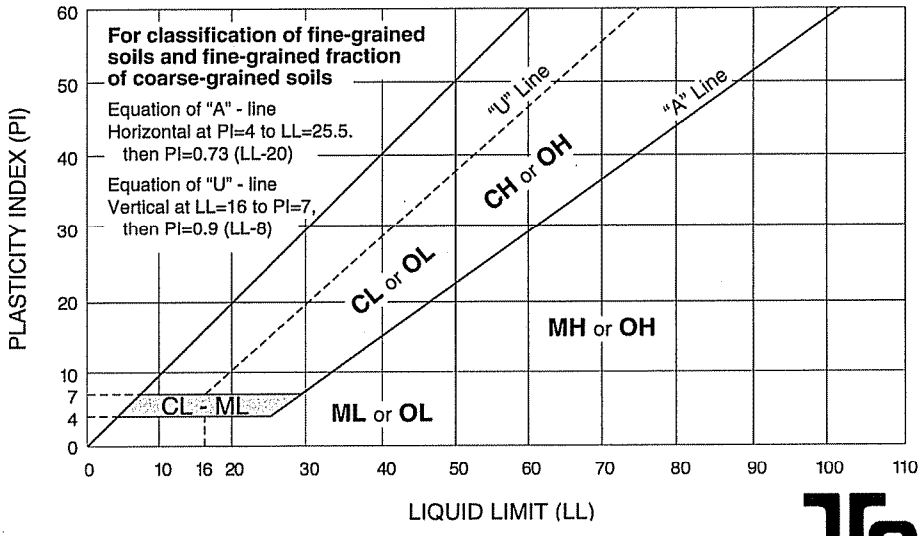

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FIGURE 5

Terracon
Consulting Engineers & Scientists

Terracon Consultants, Inc.
8901 Carpenter Frwy., Ste. 100
Dallas, TX 75247
Phone (214) 630-1010
Fax (214) 630-7070
www.terracon.com

May 19, 2009

KSA Engineers, Inc.
8875 Synergy Drive
McKinney, Texas 75070

Attn: Mr. Bob Jutton, P.E.

RE: Fannin County Courthouse Restoration
Bonham, Texas
Terracon Project No. 94095056

Gentlemen:

Based on discussions with Mr. Steve Lucy with Jaster-Quintanilla, we have further evaluated slab-on-grade construction at the basement level of the referenced project. This evaluation was based on placing the slabs-on-grade without the additional 5 to 6 feet of moisture conditioning discussed in the report.

Additional absorption swell tests were conducted to assist in the evaluation. The results of these tests are presented below.

Boring No.	Depth (feet)	Surcharge (psf)	Initial Moisture (%)	Final Moisture (%)	Swell (%)
B-1	14 – 15	1,125	21.7	23.6	0.9
B-1	19 – 20	1,750	22.0	24.1	0.3
B-2	19 – 20	1,750	20.9	22.9	0.6

Based on the original and supplemental data above, potential slab movements at the basement level are estimated to be on the order of 1½ inches at the location of Boring B-1 and 2 inches at the location of Boring B-2. These estimates are based on the moisture levels in the borings. Conditions beneath the structure may be different. Typically they would tend to be more favorable.

In the course of excavating the soils in the crawl space to create the basement, care should be taken not to disturb the existing foundations. Completion of the excavations and construction of the new slabs should proceed in a reasonably continuous manner. Consideration should be given to using a mud slab to reduce desiccation of the exposed soils.

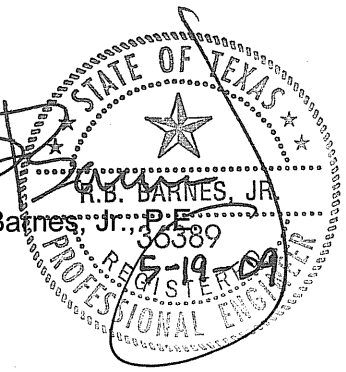
It is planned to expose the exterior of the existing basement walls and waterproof them. In order to reduce potential seepage, excavated clays will be used for backfill. These should be placed in loose lifts, less than 9 inches thick, and uniformly compacted to a minimum of 94 percent of ASTM D698 at a minimum of +1 percent above optimum moisture. A drain is recommended at the bottom of the wall. The drain should be placed in about an 18 inch square zone of drainage rock, which is wrapped in filter fabric. The invert of the drain line should be lower than the basement slab. An equivalent fluid pressure of 110 pcf is recommended for this condition.

Please contact us if there are any questions or if we can be further assistance.

Sincerely,
Terracon Consultants, Inc.

Daniel L. Franklin, Jr., P.E.
Senior Geotechnical Engineer

Ralph B. Barnes, Jr., P.E.
Principal



cc: Mr. Stephen Lucy, P.E. – Jaster-Quintanilla Dallas, LLP

SECTION 16
LEAN Plan

FANNIN COUNTY COURTHOUSE RESTORATION

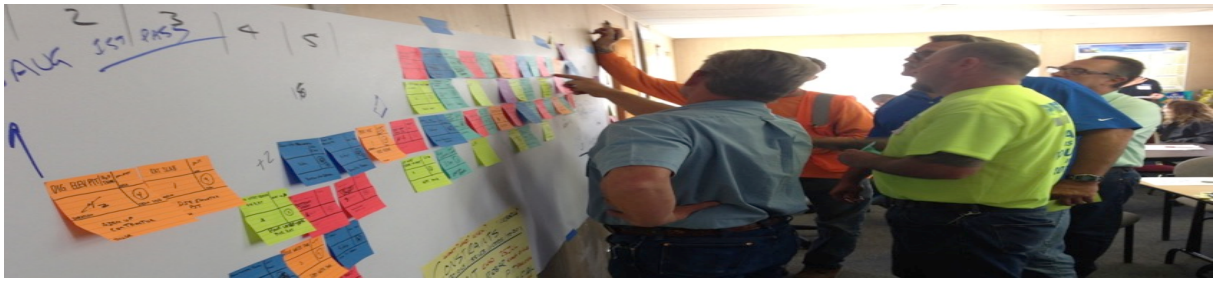
BONHAM, TEXAS

The **Fannin County Courthouse Restoration** project will participate in short-term project planning. To help create the Right Environment on this project, Turner and its Trade Partners will utilize the Last Planner® System (LPS). This system will help decentralize hierarchical decision-making and hand the authority to make the decisions and plan the work to those closest to the work (the "Last Planners").

- Trade Partner agrees to participate in all the steps that are the Last Planner® System and be able to commit to perform work that they know can be made ready for their crews and to collaborate with the team to ensure this work can be started and completed without interruption. Last Planners must refuse to assign work they are not confident can be started and completed without interruption.
- Trade Partner agrees that the Last Planner for its crew must be involved before you mobilize to the project in order to attend Phase Production Planning meetings. Last Planners provide valuable input to develop a well-coordinated work plan ensuring the success for you and all other parties on the project.
- Trade Partners agree as a group to meet their deadlines, and each is held responsible to improve the reliability of their promises for work completion not only to Fannin County but also to fellow trade partners.
- Trade Partner agree to cooperate with each other and coordinate their work for the overall good of the project. Fannin County reserves the right to adjust and update the overall project schedule based on project conditions, actual performance of the work, and detailed schedule information obtained from Trade Partners. This update is intended to be for the betterment of the project as a whole, not for advantage of the parts.

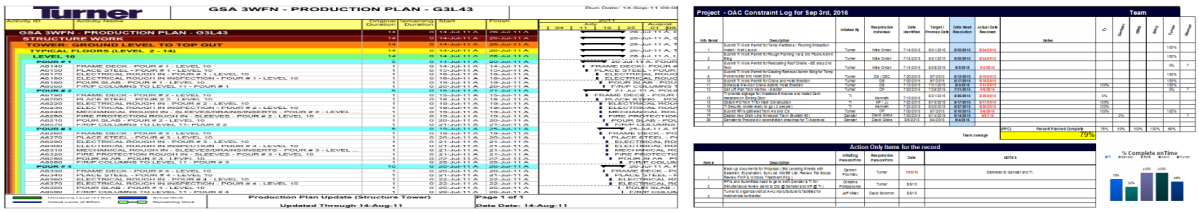
1.) Production System

A. **Phase Pull Planning** will be used to create a Look Ahead Plan and list of constraints for executing a specific phase of this project from milestones in the Master or Baseline schedule. This pull plan is thought of as "What Should Be Done."

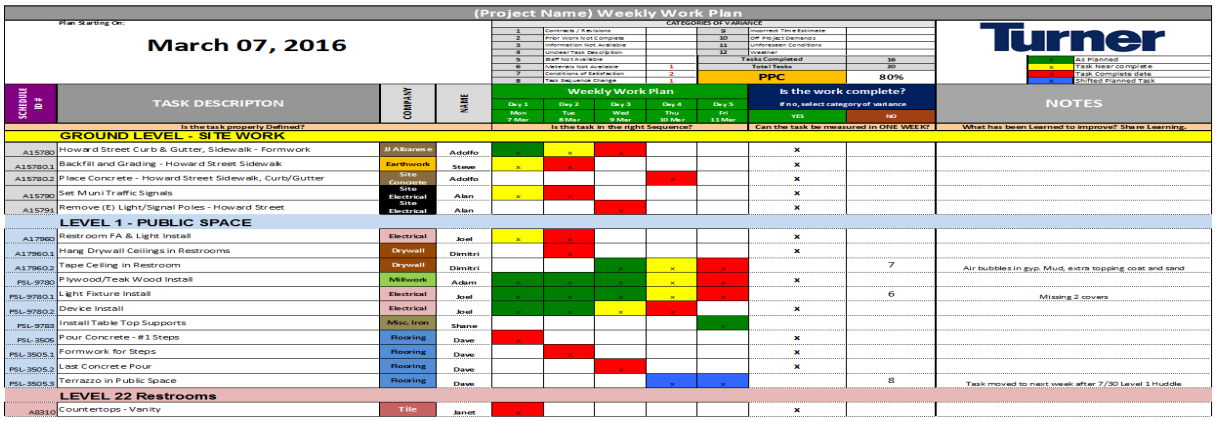


B. **Make Work Ready Planning** will be used as the second step of this system. The team will eliminate constraints that impede flow on activities by using the Look Ahead Plan and practicing Constraint analysis regularly. Through this step, trades can produce weekly plans for work that "Can Be Done".

Trade Partner Initials_____
Turner Initials_____



C. **Weekly Work Planning (WWP)** will be used as the next step for identifying specific task completions agreed upon by those performing the work. WWP's are due by Tuesday of each week at 3pm for the work to be performed the following week. These plans are very specific in regards to the "Work You Will Be Doing".



(Project Name) Weekly Work Plan

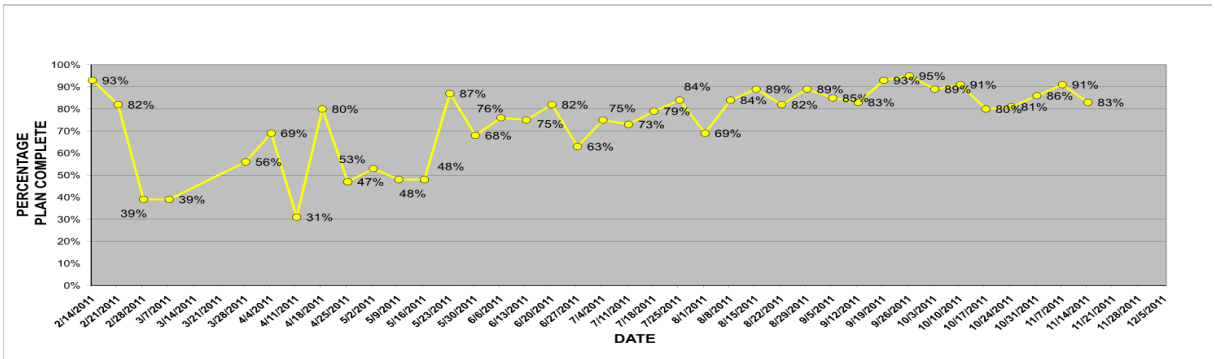
Plan Starting On: March 07, 2016

SCHEDULE ID #	TASK DESCRIPTON	COMPANY	NAME	Weekly Work Plan Day 1 Mon 7 Mar	Day 2 Tue 8 Mar	Day 3 Wed 9 Mar	Day 4 Thu 10 Mar	Day 5 Fri 11 Mar	Is the work complete? YES	Is the work complete? NO	NOTES
	Is the task properly Defined?			Is the task in the right Sequence?					Can the task be measured in ONE WEEK?		What has been Learned to improve? Share Learning.
	GROUND LEVEL - SITE WORK										
A15780	Howard Street Curb & Gutter, Sidewalk - Formwork	JJ Albanese	Adolfo						x		
A15780.1	Backfill and Grading - Howard Street Sidewalk	Earthwork	Steve						x		
A15782	Place Concrete - Howard Street Sidewalk, Curb/Gutter	Site Concrete	Adolfo						x		
A15790	Set Muni Traffic Signals	Site Electrical	Alan						x		
A15791	Remove (E) Light/Signal Poles - Howard Street	Site Electrical	Alan						x		
	LEVEL 1 - PUBLIC SPACE										
A17960	Restroom FA & Light Install	Electrical	Joel						x		
A17960.1	Hang Drywall Ceilings in Restrooms	Drywall	Dimitri						x		
A17960.2	Tape Ceiling in Restroom	Drywall	Dimitri							7	Air bubbles in gyp. Mud, extra topping coat and sand
PSL-9780	Plywood/Teak Wood Install	Millwork	Adam						x		
PSL-9780.1	Light Fixture Install	Electrical	Joel							6	Missing 2 covers
PSL-9780.2	Device Install	Electrical	Joel						x		
PSL-9783	Install Table Top Supports	Misc. Iron	Shane								
PSL-3505	Pour Concrete - #1 Steps	Flooring	Dave						x		
PSL-3505.1	Formwork for Steps	Flooring	Dave						x		
PSL-3505.2	Last Concrete Pour	Flooring	Dave						x		
PSL-3505.3	Terrazzo in Public Space	Flooring	Dave							8	Task moved to next week after 7/30 Level 1 Huddle
	LEVEL 22 Restrooms										
A8310	Countertops - Vanity	Tile	Janet						x		

D. **Daily Huddles** – Trade Partner foremen will meet for a 15-minute standup huddle daily in the field (time and place to be determined by Project Superintendent) with their peers from other trades, Fannin County and Turner Field Staff to quickly assess the day's performance and discuss any new issues discovered in the "Work You Did".

E. **Percent Plan Complete (PPC)** – Trade Partner's weekly plan will be measured daily and averaged weekly for its reliability. Trade Partners will work to achieve 85% or higher PPC in the first 2 months of the job and continue to improve over the course of the project to ensure predictable, reliable handoffs, and therefore efficient use of trade resources and increase "Your Plan's Reliability".

Trade Partner Initials_____
Turner Initials_____



Fannin County and Turner will use LPS on this project with its trade partners to optimize performance through improved processes and systems by creating reliability, decentralizing decision-making and managing flow and consistency of work rather than the speed of any single aspect of the job. Below is a visual typical template of the weekly requirements for the project associated with Last Planner System.

Monday	Tuesday	Wednesday	Thursday	Friday
STRETCH & FLEX/JHA				
	PHASE PULL PLANS As needed		**WEEKLY FIELD MEETING WITH TRADES** All come prepared to discuss the WWP and Constraints identified on the Make Work Ready Look Ahead Schedule	**UPDATE** Turner Supers Update schedule with Constraints and as-built dates
	Make Work Ready Planning Meeting (Big Projects)	**OAC** Identify Constraints Get Promises to Remove		**PUBLISH** Turner Supers Publish Make Work Ready Look-Ahead Schedule with Weekly meeting minutes
WEEKLY WORK PLAN (WWP) Trade Foremen prepare next week's WWP (turn in by 300pm - Tues.)			**DISPLAY PPC PUBLISH WWP**	
DAILY HUDDLE Trade Foremen and Supers PROGRESS & Recover on WWP				
TURNER TEAM DAILY HUDDLE Engineers and Turner Supers Review constraints and activities				

2.) 5S & 8 Waste Methodology

A. **5S** will be used by Fannin Count, Turner and the trade partners to help reduce waste present in every operation in both the field and jobsite offices. We will improve productivity in our operations. This will be an Everything on Wheels and Nothing hits the Ground level project.

- **Sort –** Trade Partner agrees to sort through designated work areas and pull out anything not needed there. A quick thumb rule is - if you are not going to use it in the next 30 days then you probably don't need to keep it anywhere near your operations
- **Straighten –** Put everything that you determined as needed or necessary during your Sort exercise, in a designated place and to visually mark it. Not only is a place established for every necessary item, but the location is based on how often it is used. - The Items we use most often are located closest to where we use them. Those used less often are farther away.

Trade Partner Initials_____
Turner Initials_____

- **Shine –** Trade Partner agree to physically clean up their work area daily and deliberately pick up all parts and material that are out of place and return each to its assigned place. – Ask: "Why are these things out of place? How can we prevent this from happening again?"
- **Standardize –** Trade Partner agree to work with Fannin County and/or Turner, to establish as a team, the project specific guidelines for Sort, Straighten, and Shine. – Help keep your project standardized by following and enforcing your own goals and guidelines agreed upon by this team for this project.
- **Sustain –** As a team, we will follow through with the 5S's agreements. If we don't maintain these changes made with the 5s's, we will not maintain or sustain the gain.

5S examples

B. **8 Wastes of lean** is an overall theory of defining waste in all everyday processes, which can hinder the maximum production and value to customers. All teams on this project must work together to eliminate waste in every process along with making improvements at every opportunity.

Waste is defined as – Anything that consumes resources and does not provide value for the customer

Trade Partner Initials_____
Turner Initials_____

3.) Innovative Techniques:

Trade Partner agrees to promote and apply innovations which improve the execution of their work. Some examples utilized on projects in the region include:

Rolling Cut Station with Trash Buggy

Strap Cart

Pre-sweated copper sections

Telescoping Metal Studs

Trade Partner Initials_____
Turner Initials_____