

November 6, 2015
Subject: **Downtown Auburn
Transportation Center**
STATE WIN: 12326.00
Amendment No. 2

Dear Sir/Ms

Make the following changes to the Bid Documents:

CHANGES

Change: Remove and Replace entire Bid Form per this Amendment #2. Bid Date is shown as 10:00 am, November 18, 2015. Change MDOT Pay Item Numbers 815.00 to 815.10, 815.20, 815.30, 815.40 and 815.50.

Change: Make change to CONTRACT AGREEMENT, OFFER & AWARD in pen and ink- Section A- The Work, add last paragraph to read:
“FTA requirements apply for ALL aspects of the Project Work. In cases where MDOT Specifications and FTA Contract Provisions are in conflict, the stricter of the two shall apply provided the FTA Contract Provisions are met. Contact LATC for any and all discrepancies prior to construction.

Change: Make change to SPECIAL PROVISIONS TABLE OF CONTENTS in pen and ink- Add “Section 093013 Ceramic Tiling” in Table of Contents.

Change: Remove and Replace entire Special Provisions Specification Section 104 Utilities.

Change: Make Contract Completion Date Change in pen and ink- Special Provision, Section 107, Contract Completion Time – remove date “July 30, 2016” and replace with “September 30, 2016”.

Change: Add Special Provisions Specification Section 621.10- Landscape. See Amendment #2.

Change: Remove and Replace entire Special Provisions Specification Section 011010. See Amendment #2.

Change: Remove and Replace entire Special Provisions Specification Section 093013. See this Amendment.

Change: Change to TYPICAL ROOF FRAMING PLAN on Drawing S1.2. See Amendment #2.

Change: Change to TYPICAL SLAB-ON-GRADE DETAILS on Drawing S2.1. See Amendment #2.

QUESTIONS/ RESPONSES:

Question: We are concerned about wind loads at the large storefront windows. Steel has been added to the top header, but there is no support at the bottom. I'm not sure we can design something with just CFMF for that span freestanding to withstand the wind load. Is it the engineer's intent that the CFMF framed box stud shown in detail B5 on A55.1 will be adequate?

Response: Reference S1.2 Amendment #2 for added structural steel HSS between Grids 2 and 3 at bottom of storefront window. For bottom of storefront window, between Grids 1 and 2 as well as between Grids 3 and 4, boxed cold formed sections shall be designed to withstand wind loads.

Question:

In section 102600 Wall and Door protection, for the corner guards Basis of Design is Construction Specialties model CO-8. Would Inpro model 304 be an acceptable approved equal? It includes 3.5" wings, screw on with factory predrilled flush mount holes. I am attaching a drawing and specifications.

Response:

Yes, Inpro is an acceptable manufacturer. The product must also comply with all specifications and contract requirements.

Question:

A subcontractor has asked the following question: "There is no section 09301 for ceramic tile PT 1 in the specs. Is there one available?"

Response:

Please reference the specification added in this amendment.

Drawing change: Sheet A60.1 where it reads 093013 Porcelain Tile PT1 Daltile 12"x 24" Cloud, change to read 093013 Porcelain Tile PT1 Daltile 13"x 19 1/2" Concrete Connection/City Elm.

Question:

We have received the following question from a subcontractor: "In the 047200 2.3 B.1. The units shall be manufactured by vibrant dry tamp method. Can the cast stone be manufactured using the wet pour method? I have been advised by Northern Design that dry tamp is not as durable in the colder New England temperatures. Can MGA cast stone be an acceptable alternative manufacturer?"

Response:

Wet Pour Method is acceptable. This method must still meet the same requirements listed in the specification. MGA Cast Stone is an acceptable alternative manufacturer. The product must also comply with all specifications and contract requirements.

END OF AMENDMENT NO. 2

BID DATE – 10:00 am, November 18, 2015
 Amendment #2 (dated November 6, 2015)

SECTION C

BID FORM

To the City of Auburn, Maine, herein called the Owner, acting through its City Manager for the construction of the **Downtown Auburn Transportation Center**, together with all related work specified in the specifications, and any other work necessary or incidental thereto.

The undersigned, as Bidder, herein referred to as singular and masculine, declares that the only parties interested in the bid as principals are named herein; that this bid is made without collusion with any other person, firm, or corporation; that no officer or agent of the Owner is directly or indirectly interested in this bid; that he has carefully examined the location of the proposed work, the annexed form of contract, and the plans and specifications therein referred to and he proposes and agrees that if this bid is accepted he will contract with the Owner, in the form of the copy of the Contract Agreement deposited in the office of the Engineer and attached hereto, to provide all necessary machinery, tools, apparatus, and other means of construction and to do all the work and furnish all the materials specified in this contract in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth and that he will take in full payment for the work thereof the following unit prices.

Item No.	Estimated Quantity	MDOT Pay Item No., Brief Description; Unit or Lump Sum Price Bid In Both Words and Figures	Total Price In Figures
1.	1 LS	202.127 Removing of Existing Bituminous Pavement Unit Price per Lump Sum of _____ Dollars per lump sum (\$_____) / LS	\$ _____
2.	1 LS	202.128 Removing of Existing Curbs & Sidewalks Unit Price per Lump Sum of _____ Dollars per lump sum (\$_____) / LS	\$ _____

BID DATE – 10:00 am, November 18, 2015
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Item No.	Estimated Quantity	MDOT Pay Item No., Brief Description; Unit or Lump Sum Price Bid In Both Words and Figures	Total Price In Figures
3.	75 CY	203.20 Common Excavations Unit Price per Cubic Yard of _____ Dollars per cubic yard (\$_____/CY	 \$ _____
4.	50 CY	203.24 Common Borrow Unit Price per Cubic Yard of _____ Dollars per cubic yard (\$_____/CY	 \$ _____
5.	80 CY	304.10 Aggregate Subbase - Type D Unit Price per Cubic Yard of _____ Dollars per cubic yard (\$_____/CY	 \$ _____
6.	70 CY	304.14 Aggregate Base Course - Type A Unit Price per Cubic Yard of _____ Dollars per Cubic Yard (\$_____/CY	 \$ _____
7.	75 TON	403.207 Hot Mix Asphalt - 19 mm Unit Price per Ton of _____ Dollars	

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per Ton (\$ _____)/Ton \$ _____

Item No.	Estimated Quantity	MDOT Pay Item No., Brief Description; Unit or Lump Sum Price Bid In Both Words and Figures	Total Price In Figures
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8.	60 Ton	403.211 Hot Mix Asphalt - 9.5 mm Unit Price per Ton of _____ Dollars	
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per Ton (\$ _____)/Ton \$ _____

9.	25 LF	607.18 Chain Link Fence- 5 ft high Unit Price per Linear Foot of _____ Dollars	
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per linear foot (\$ _____)/LF \$ _____

10.	1 LS	607.23 Chain Link Fence Gate Unit Price per Lump Sum of _____ Dollars	
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per Lump Sum (\$ _____)/LS \$ _____

11.	126 SY	608.08 Reinforced Concrete Sidewalk Unit Price per Square Yard of _____ Dollars	
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per square yard (\$ _____)/SY \$ _____

12.	228 LF	609.11 Vertical Curb - Type 1 (Granite) Unit Price per linear foot of _____ Dollars	
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per linear foot (\$ _____)/LF \$ _____

Item No.	Estimated Quantity	MDOT Pay Item No., Brief Description; Unit or Lump Sum Price Bid In Both Words and Figures	Total Price In Figures
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13.	1 LS	621.10 Landscape - Plant Group see 6-75 of specs Unit Price per Lump Sum of _____ Dollars	
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per lump sum (\$ _____)/LS \$ _____

14.	1 LS	621.951 Bike Rack Unit Price per lump sum of _____ Dollars	
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per lump sum (\$ _____)/LS \$ _____

15.	115 LF	626.22 Non-metallic Conduit Unit Price per linear foot of _____ Dollars	
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per linear foot (\$ _____)/LF \$ _____

16.	543 SF	627.75 White or Yellow Pavement & Curb Marking Unit Price per Square Foot of _____ Dollars	
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per square foot (\$ _____)SF \$ _____

17.	82 LF	652.086 Water Service - 2 - inch Copper Tubing Unit Price per Linear Foot of _____ Dollars	
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per linear foot (\$_____) / LF \$_____

Item No.	Estimated Quantity	MDOT Pay Item No., Brief Description; Unit or Lump Sum Price Bid In Both Words and Figures	Total Price In Figures
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18.	1 LS	656.750 Temporary Soil Erosion and Water Pollution Control Unit Price per Lump Sum of _____ Dollars	
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per lump sum (\$_____) / LS \$_____

19.	60 LF	801.141 4-inch PVC Sanitary Sewer Unit Price per Linear Foot of _____ Dollars	
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per linear foot (\$_____) / LF \$_____

20.	1 LS	815.10 Building Architectural Unit Price per Lump Sum of _____ Dollars	
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per lump sum (\$_____) / LS \$_____

21.	1 LS	815.20 Building Electrical (Reference Special Provisions Section 011010) Unit Price per Lump Sum of _____ Dollars	
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per lump sum (\$_____) / LS \$_____

22.	1 LS	815.30 Building Mechanical (Reference Special Provisions Section 011010) Unit Price per Lump Sum of _____ Dollars	
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per lump sum (\$ _____)/LS \$ _____

Item No.	Estimated Quantity	MDOT Pay Item No., Brief Description; Unit or Lump Sum Price Bid In Both Words and Figures	Total Price In Figures
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23.	1 LS	815.40 Building Structural (Reference Special Provisions Section 011010) Unit Price per Lump Sum of _____ Dollars	
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per lump sum (\$ _____)/LS \$ _____

TOTAL PROJECT BID \$ _____

BID DATE – 10:00 am, November 18, 2015

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Bid Alternate #1

Item No.	Estimated Quantity	Bid Alternate Pay Item No., Brief Description; Unit or Lump Sum Price Bid In Both Words and Figures	Total Price In Figures
24.	1 LS	815.50 Building Architectural – Bid Alternate 1. - Div.12 Furnishings Unit Price per Lump Sum of _____ Dollars per lump sum (\$_____) / LS	\$ _____

TOTAL Bid Alternate #1 \$ _____

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Amounts must be shown in both words and figures. In case of discrepancy, the amount in words will govern.

TOTAL PROJECT BID

Dollars and Cents

(\$ _____)

TOTAL BID ALTERNATE #1

Dollars and Cents

(\$ _____)

*I hereby acknowledge by my signature receipt of each numbered addendum:

Addendum Number 1. _____

Contractor's Signature

*(A Signature is required to acknowledge receipt of each addendum as may be issued. Sign only upon receipt of written addendum.)

BID DATE – 10:00 am, November 18, 2015

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The foregoing prices shall include all labor, materials, equipment, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for.

If this Bid is accepted by the Owner and the undersigned fails to contract as aforesaid and to give a bond in the sum of the full amount of the Bid, with surety satisfactory to the Owner, within 10 days (not including Sundays or legal holidays) to an address given herewith that the Contract is ready for signature, then the Owner may by option determine that the Bidder has abandoned the Contract and therefore the Bid and Acceptance shall be null and void, and the bid bond shall be forfeited to the Owner.

Business Name

Street Address

City, State, Zip Code Telephone

By: _____
Name (Printed or typed) Title

Residence Address

Signature Date

SPECIAL PROVISIONS
SECTION 104
Utilities

Utility Coordination

The contractor has primary responsibility for coordinating their work with utilities after contract award. The contractor shall communicate directly with the utilities regarding any utility work needed and necessary to maintain the contractor’s schedule and prevent project construction delays. The contractor shall notify the resident of any issues. The Contractor shall plan and conduct his work accordingly.

MEETING

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications is required.

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for utility and/or railroad work to be undertaken in conjunction with this project. The following list identifies all known utilities or railroads having facilities presently located within the limits of this project or intending to install facilities during project construction.

Utilities have been notified and will be furnished a project specification book.

Overview:

Utility/Railroad	Aerial	Underground
Central Maine Power Company	X	
Time Warner Cable	X	
Fairpoint	X	X
Auburn Water		X
Auburn Sewer District		X
Unitil Gas		X
Oxford Networks	X	
Pan Am Railroad	X	

Temporary utility adjustments are **not** anticipated. If temporary relocation becomes necessary, sufficient time will need to be allowed prior to the construction for all required temporary relocation and the Contractor shall be responsible for the cost (if any) of such moves.

Town: **Auburn**
Project Name: **Bus Facility**
Project: **WIN 12326.00**
Federal Number: **ME030041**
Date: **November 3, 2015**

Utility working days are Monday through Thursday, conditions permitting. Times are estimated on the basis of a single crew for each utility.

All utility crossings over highways will provide not less than 20 feet vertical clearance over existing ground in cut or over finished grade in fill, during construction of this project.

Any times and dates mentioned are estimates only and are dependent upon favorable weather, working conditions, and freedom from emergencies. The Contractor shall have no claim against the Department if they are exceeded.

The Contractor shall not excavate around any pole, guy anchor or street light to a depth that compromises the stability of the pole.

The Contractor is urged to visit the site, prior to bid, to compare the utility scope of work as per the plans and how they relate to the existing utilities. The Contractor will be responsible for any cost related to this temporary utility work. The Contractor shall plan and schedule his work in such a manner that the utilities that are located on this project will not be harmed, damaged or impacted in any way. The Contractor and Utility will coordinate and communicate their work plans in an effort not to interfere with each other's progress or the completion of the project. This work will be done by the Contractors Superintendent and the Utility contact listed below.

AERIAL

There are aerial power lines that currently exist on the property, near the railroad, as shown on the plan. The Contractor shall communicate and coordinate with CMP and other utilities when doing their utility connection as shown on the plan. The Contractor shall be responsible for any materials or cost related to any temp power supply as well as the cost of electricity.

When permanent underground power is installed the Contractor shall coordinate all scheduling for connections from pole to meter. The Contractor shall employ a licensed electrician that knows CMP standards and to oversee this connection process. Any delays associated with the three phase line may, with proper documentation, be considered for time extension to the contract but no compensation will be entertained.

Town: **Auburn**
Project Name: **Bus Facility**
Project: **WIN 12326.00**
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Date: **November 3, 2015**

SUBSURFACE

Unless otherwise specified, any underground utility facilities shown on the project plans represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data. Underground facilities indicated on the topographic sheets (plan views) have been collected from historical records and/or on-site designations provided by the respective utility companies. The Contractor should expect some delays when in these areas and extra time should be allowed. No additional time or money will be granted for conflicts or redesign.

The **Auburn Water District** has an 8" water line with 2" service line that currently exists on the City owned property. The Contractor shall connect to this service line and extend to the building. (Reference site plan C-101) The Contractor will be responsible to layout the proposed line and have the Auburn Water District accept its location prior to installation. The **Contractor** shall notify **Auburn Water District** at least 5 working days prior any scheduled water installation for inspection schedule. The Contractor shall install this new service to the building using the methods and standards currently used by the **Auburn Water District**. The contact for the **Auburn Water District** is Sid Hazelton at 784-6460.

Unitil has a gas main in Turner Street that does not appear to have any impact to the project. The scope of the project does not include any gas main installation or connection. If needed the contact for the **Unitil** is Joe Renda at 541-2568.

The **Auburn Sewer District** has a sewer line that currently exists on Turner St and extends onto the City owned property. The Contractor shall connect to an existing manhole and extend to the building site and is responsible for any manhole invert adjustment. (Reference site plan C-101) The Contractor will be responsible to layout the proposed line and have the Auburn Sewer District accept its location prior to installation. The **Contractor** shall notify **Auburn Sewer District** at least 5 working days prior any scheduled sewer installation for inspection schedule. The Contractor shall install this new service to the building using the methods and standards currently used by the **Auburn Sewer District**. The contact for the **Auburn Sewer District** is Sid Hazelton at 784-6460.

Town: **Auburn**
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RAILROAD

The **Pan Am Railroad** operates an above grade rail in close proximity of the project. The scope of the project does not interfere with the rail tracks or rail service. No construction can take place near the tracks. If in the event that this changes and work needs to be performed near the rail, the Contractor will immediately contact **Pan Am Railroad** to discuss the change and review the needs of **Pan Am**. The Contractor must also never work in such a way that any equipment, vehicles, or personnel have the potential to foul the tracks. The contact for the **Pan Am Railroad** is Shawn Higgins at (978) 663-1127.

SAFE PRACTICES AROUND UTILITY FACILITIES

The Contractor shall be responsible for complying with M.R.S.A. Title 35-A, Chapter 7-A Sections 751 -761 Overhead High-Voltage Line Safety Act. Prior to commencing any work that may come within ten (10) feet of any distribution electrical line or twenty (20) feet of transmission; the Contractor shall notify the aerial utilities as per section 757 of the above act.

DIG SAFE

The Contractor shall be responsible for determining the presence of underground utility facilities prior to commencing any excavation work and shall notify utilities of proposed excavation in accordance with M.R.S.A. Title 23 §3360-A, Maine "Dig Safe" System. Some utilities and City lighting may not be part of the System.

MAINTAINING UTILITY LOCATION MARKINGS

The Contractor will be responsible for maintaining the buried utility location markings following the initial locating by the appropriate utility or their designated representative.

THE CONTRACTOR SHALL PLAN AND CONDUCT HIS WORK ACCORDINGLY AS WELL AS MAKE CONTACT WITH THE UTILITY DIRECTLY AS THE SITUATION WARRENTS.

Town: **Auburn**
Project Name: **Bus Facility**
Project: **WIN 12326.00**
Federal Number: **ME030041**
Date: **November 3, 2015**

The following utilities are known to be located on this project:

Central Maine Power Company	Skip McKay	626-9445
Time Warner Cable	Steve Woodcock	253-2291
Verizon	Marty Pease	797-1119
Auburn Water District	Sid Hazelton	784-6469
Auburn Sewer District	Sid Hazelton	784-6469
Unitil Gas	Joe Renda	541-2568
Oxford Networks	Scott Crocket	333-3471
Pan Am Railroad	Shawn Higgins	(978) 663-1127

Skip McKay
Steve Woodcock
Marty Pease
Sid Hazelton
Rick Bellemare
Scot Crockett

MauriceSkip.McKay@cmpco.com
steve.woodcock@twcable.com
mpease@fairpoint.com
shazelton@awsd.org
renda@unitil.com
scrockett@oxfordnetworks.com

SPECIAL PROVISION
SECTION 621.10
LANDSCAPING

The provisions of Section 621 of the “State of Maine, Department of Transportation, Standard Specifications, November 2014 Edition: shall apply with the following additions:

DESCRIPTION

Provide all materials, equipment and labor associated with landscaping scope of work. The Annual Flower Bed will be provided, installed, and planted by the City of Auburn and is not part of this contract.

The Landscape Warranty Bond shall be payable to Lewiston-Auburn Transit Committee.

METHOD OF MEASUREMENT

- (8) Bar Harbor Juniper (2 gal)
- (6) Azalea (2-3 gal)
- (3) Rhododendron “Nova Zembla” (3-5 gal)
- (1) Paper Bark Maple (2 ½-3 ½)
- (14) Stella D’Ora Daylillies (1 gal)
- (1) Crabapple 2”-3” Sargentii
- (3) Viburnum “Mapleleaf” or “Judii” (3-5 gal)
- (5) Purple Fountain Grass (3 gal)

BASIS OF PAYMENT

Lump Sum for labor, materials and equipment to provide and install plantings and mulch bed.

Payment will be made under:

PAY ITEM

621.10	Landscaping	Lump Sum
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SPECIAL PROVISION
SECTION 011010
SUMMARY OF BUILDING SPECIFICATIONS

All work and materials shall conform to the “State of Maine, Department of Transportation, Standard Specifications, November 2014 Edition. Due to the inclusion of architectural components in this project, namely a proposed building, the outline of these specifications follows the CSI format with references to the Standard Specifications where applicable. Where architectural, mechanical, structural or electrical specifications do not exist in the Standard Specifications, a specification has been created to address the construction element, which is then given a unique Pay Item number from the 800 series of the Standard Specifications.

Description

The Downtown Auburn Transportation Center project (WIN 012326.00) consists of a 1400 sq.ft. one-story building to serve as a bus station in Auburn, Maine. The bus station is located in the Great Falls Plaza, north of Great Falls Road, south of Maine Central Railroad and northwest of the Esplanade and Auburn Housing Authority. The Bus Station provides an enclosed waiting area that includes women’s and men’s bathrooms, a driver break room with a private bathroom, and a utility room. FTA funds will be utilized for the construction of the building.

Materials

All backfill, not otherwise specified, shall be Granular Borrow and shall meet the requirements of Section 703.19 Granular Borrow.

Gravel borrow used for bedding for the footings shall meet the requirements of Section 703.20 Gravel Borrow.

Aggregate Subbase shall meet the requirements of Standard Specification, Section 703.06 Aggregate for Base and Subbase – Grading D.

Construction

All work shall meet the requirements of governmental agencies having jurisdiction and comply with applicable standards and codes. The Contractor shall submit two (2) copies of shop drawings to the LATC for review at least fifteen (15) days prior to incorporation into the work. Shop drawings may be submitted as pdf files if mutually agreeable to the LATC and the Contractor. Shop drawings shall be approved prior to incorporation into the work.

Excavation shall meet the requirements of Section 203 Excavation and Embankment. Common Excavation shall be used for all excavations associated with the concrete walkway and landscape. Excavations for the building shall be included in Pay Item 815- Building Structural. Excavations for utility trenches shall be included within the various Utility Pay Items.

When the structure is to rest on an excavated surface other than rock, special care shall be taken not to disturb the bottom of the excavation. If the surface upon which the structure is to rest is disturbed, it shall be regraded and re-compacted to the extent directed by the LATC.

Placing of gravel borrow used for bedding for the footings shall meet the requirements of Standard Specification, Section 206, Structural Excavation.

Common Borrow for Utility Trenches shall be included within various Utility Pay Items. Common Borrow for ancillary work per 203.24 shall be approved by LATC prior to construction.

Backfilling shall meet the requirements of Section 203 Excavation and Embankment. Backfilling shall consist of placing suitable material in all spaces not occupied by structures up to the elevation of the existing ground or other elevations shown on the plans or designated. Backfill material shall be granular borrow or other material designated on the plans and shall be at or near optimum moisture content and shall not contain stones larger than 3 in, frozen lumps, chunks of clay, mineral matter or any other objectionable matter.

Unless otherwise approved the material shall be deposited and spread upon compacted material in full width layers not more than 8 inches in depth, loose measure. Sand or gravel soils shall be compacted by vibratory type compaction equipment or by pneumatic tired equipment and, if necessary, by the addition of water. The compacting operations shall be continued until each layer is satisfactorily compacted to its full depth and width.

Unless otherwise indicated on the plans or directed, all sheeting and bracing used during structural excavation shall be removed by the Contractor following the completion of the work, and all voids resulting from use of the sheeting and bracing backfilled where necessary.

Subgrades shall be promptly graded and rolled to minimize absorption of water. When excavating results in a subgrade of unsuitable soil, LATC may require the Contractor to remove the unsuitable material and backfill the area with approved material.

Placing and compacting of Aggregate Subbase shall meet the requirements of Standard Specification, Section 304 Aggregate Base and Subbase Course.

Variations from Materials Specified

Whenever and wherever items have been identified by describing a proprietary product, such identification is intended to be descriptive, but not restrictive, and is used to indicate the quality and characteristics of products that are satisfactory. Bids shall be considered as offering the item specified in the Invitation for Bid and shall adhere to all FTA Buy America requirements. LATC will consider all alternates submitted by the Contractor, but

is not bound to accept any which, in its opinion, is not in LATC's best interest and are determined by LATC to be of equal value in all material respects to the proprietary items specified. The evaluation of and determination as to equality of the product offered shall be the responsibility of LATC and will be based on information furnished by the Contractor, as well as information reasonably available to the purchasing activity.

Quality and Standards

Materials and manufactured products incorporated into the work shall be new unless otherwise specified, free from defect, and in conformity with the contract. When material is fabricated or treated with another material or where any combination of materials is assembled to form a finished product, any or all of which are covered by specifications, LATC may reject the finished product if any of the components do not comply with the specifications. LATC may reject materials not conforming to the Specifications at any time, and the Contractor shall remove them immediately from the project site unless otherwise instructed by LATC.

If there is no applicable standard set forth in this contract for particular Work, then the Contractor shall perform that Work in accordance with industry standards prevailing at the time of bid. If LATC determines that Work is non-conforming, the Contractor shall remove, replace, or otherwise correct all unacceptable work as directed by LATC at the expense of the Contractor, without cost or liability to LATC.

Submittals

The Contractor shall submit manufacturers' specifications, product data and installation instructions for all items furnished. The Contractor shall not be relieved of responsibility for any deviation from the requirements of the specifications unless the contractor has specifically informed LATC in writing of such deviation at the time of submission and LATC has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions. No portion of the work shall be commenced until LATC has approved the submittal.

Delivery, Storage, and Handling

- Store materials off the ground and protected from the weather.
- Deliver products in manufacturers' original containers, dry, undamaged, with seals and labels intact.

Installation

- Installation, handling and storage of all materials shall comply with manufacturer's instructions and recommendations.
- The Contractor shall make provisions to allow safe access to the work for LATC in order to inspect the work, facilitate ongoing inspection of the work and to measure the work for payment purposes.
- Complete installation to provide weather tight service.

- Completed installation for the roof shall conform, to all applicable National, State and local codes

Contractor's Safety Program

Contractor must submit an acceptable Contractor's Safety Plan to LATC prior to Contract award. The Contractor shall designate which portions such submissions it considers confidential business information. If such program is revised during the Contract Time, the Contractor shall provide the updated program to LATC. The Contractor shall comply with its safety program and the Standard Specifications. The Contractor shall be responsible for all claims or damages arising from failure to so comply and indemnifies and holds harmless the LATC from all claims and damages arising from such non-compliance.

The contractor shall be responsible for the safety of all operations in connection with the Contract and shall take all necessary actions to ensure the safety of all persons who may be in, on or adjacent to the Site. The Contractor shall perform Work in a manner that is in compliance with the Contractor's Plan, an applicable OSHA requirements, and established safety practices.

Failure by the Contractor to comply with the Contractor's Plan or an applicable OSHA requirement or to follow all established safety practices pertaining to the work being performed, will result in the immediate suspension of Work on the entire project until all unsafe practices are corrected and comply with the applicable requirements, standard or practice.

Environmental Requirements and Waste Materials

Excavation is expected to include deleterious materials such as asphalt pavement. This excavation shall not be reused by the Contractor. The Contractor shall stockpile the excavation material on site as directed by the Department.

All waste materials shall be removed and disposed of in accordance with all federal, state, and local laws.

All materials removed from the site shall be the property of the contractor. Sale of these materials on site, and removal by persons other than the contractor or his personnel, shall be at the risk of the contractor. Once the contract is signed, responsibility for the safety of the public within the confines of the project shall be the responsibility of the contractor. The contractor shall be responsible for any and all materials dropped from his trucks distant from the project. The contractor shall make his own arrangement for disposal of materials taken from the site, and there will be no burning of materials on or adjacent to the site.

Hazardous Materials

If the Contractor encounters any condition that indicates the presence of uncontrolled petroleum or hazardous Materials, the Contractor shall immediately stop Work, notify

LATC, treat any such conditions with extreme caution, and secure the area of potential hazard to minimize health risks to Workers and the public, and to prevent additional releases of contaminants into the environment. Such conditions include the presence of barrels, tanks, unexpected odors, discoloration of soil or water, an oily sheen on soil or water, excessively hot earth, smoke, or any other condition indicating uncontrolled petroleum or hazardous Materials. The Contractor shall continue Work in other areas of the Project unless otherwise directed by the LATC. The Contractor shall comply with all federal, State, and local laws concerning the handling, storage, treatment, and disposal of uncontrolled petroleum or hazardous material.

Permits, Fees, and Notices

The Contractor shall also acquire, at its sole expense, all licenses, Permits and other permissions that are necessary, appropriate and legally required to perform the Work. The contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and lawful orders of any public authority bearing on the performance of the work. If the contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to LATC, he shall assume full responsibility therefore and shall bear all cost attributable thereto.

Closeout Procedures

The Contractor shall make final changeover of permanent locks and deliver keys to Department, and complete final cleaning requirements, including touchup painting, touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

Final Cleaning

The Contractor shall clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program and comply with manufacturer's written instructions.

1. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
3. Remove tools, construction equipment, machinery, and surplus material from Project site.
4. Remove snow and ice to provide safe access to building.
5. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
6. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
7. Sweep concrete floors broom clean in unoccupied spaces.

8. Remove labels that are not permanent.
9. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
10. Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
11. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
12. Replace parts subject to unusual operating conditions.

Closeout Documentation

The following documents shall be added to the required list of closeout documentation:

- Project Record Drawings
- Warranties
- Maintenance & Operations Manual

The Contractor shall prepare and submit Project Record Documents, operation and maintenance manuals, and similar final record information.

Warranty

The Contractor shall guarantee work for one (1) year from date of Final Acceptance by LATC. The Physical Work must be Complete and in Conformity with the Contract and the Closeout Documentation, exclusive of the All Bills Paid and Request for Final Payment Letters, in order for LATC to finally "accept" the Project. All defects, including leaks occurring during guarantee period, shall be corrected without cost to the Owner. The contractor unconditionally warrants and guarantees to LATC that all work will be of good quality, free from faults and defects, and in conformance with the specification. All work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by LATC, the contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If LATC discovers any warranty defects during the warranty period, the Contractor agrees to perform all remedial work, at no additional cost or liability to LATC. Remedial Work will be completed within two weeks unless a more immediate response is required for safety or convenience, as determined by LATC.

The Contractor agrees that the warranty obligations provided by this Contract shall be reported as an outstanding obligation in the event of bankruptcy, dissolution, or the sale, merger, or cessation of operations of the Contractor.

Operations and Maintenance Manual

The Contractor shall prepare operation and maintenance manuals, including the following:

- Emergency data
- Operation data for systems, subsystems, and equipment

- Maintenance data for the care and maintenance of systems and equipment

PAY ITEM

Pay Items for the proposed building shall be condensed into Civil Pay Items plus the four items shown below for simplicity in bidding plus an Add Alternate #1. The Contractor shall note Special Provisions, including Section 104, and FTA Contract Requirements which identifies the various components to be included in each of the items.

815.10 **Building – Architectural** **LUMP SUM**

Division 04 - Masonry
 Division 06 - Wood and Carpentry Division
 Division 07 - Thermal Moisture Protection
 Division 08 - Doors and Windows
 Division 09 - Finishes
 Division 10 - Specialties
 Division 12 - Casework and Millwork

815.20 **Building – Electrical** **LUMP SUM**

Division 26 - Electrical

815.30 **Building - Mechanical** **LUMP SUM**

Division 22 - Plumbing Division 23 – HVAC
 Includes Structural Concrete Mechanical Equipment Pad

815.40 **Building – Structural Division** **LUMP SUM**

03 - Concrete Division
 05 - Structural Steel

Includes work, materials, labor and equipment associated with construction of building including foundation, foundation walls, excavation, structural fill, backfill for foundations walls, compaction, 6-inch underdrain with outlet pipe and connection to catch basin.

Building – Civil

Reference Schedule of Values and Schedule of Items

ADD ALTERNATE #1

815.50 **Building – Furnishings** **LUMP SUM**

Division 12 - Furnishings

SPECIAL PROVISION
SECTION 093013
CERAMIC TILING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Made in USA Porcelain tile.
2. Waterproof membrane for thinset applications.
3. Crack isolation membrane.
4. Metal edge strips.

B. Related Requirements:

1. Section 072100 "Building Insulation" for waterproofing under thickset mortar beds.
2. Section 079200 "Joint Sealants" for sealing of expansion, contraction, control, and isolation joints in tile surfaces.
3. Section 092950 "Gypsum Board Assemblies" for glass-mat, water-resistant backer board.

1.3 DEFINITIONS

- A. General: Definitions in the ANSI A108 series of tile installation standards and in ANSI A137.1 apply to Work of this Section unless otherwise specified.
- B. ANSI A108 Series: ANSI A108.01, ANSI A108.02, ANSI A108.1A, ANSI A108.1B, ANSI A108.1C, ANSI A108.4, ANSI A108.5, ANSI A108.6, ANSI A108.8, ANSI A108.9, ANSI A108.10, ANSI A108.11, ANSI A108.12, ANSI A108.13, ANSI A108.14, ANSI A108.15, ANSI A108.16, and ANSI A108.17, which are contained in its "Specifications for Installation of Ceramic Tile."
- C. Module Size: Actual tile size plus joint width indicated.
- D. Face Size: Actual tile size, excluding spacer lugs.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
1. Review requirements in ANSI A108.01 for substrates and for preparation by other trades.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show locations of each type of tile and tile pattern. Show widths, details, and locations of expansion, contraction, control, and isolation joints in tile substrates and finished tile surfaces.
- C. Samples for Initial Selection: For tile, grout, and accessories involving color selection.
- D. Samples for Verification:
 - 1. Full-size units of each type and composition of tile and for each color and finish required.
 - 2. Full-size units of each type of trim and accessory for each color and finish required.
 - 3. Metal edge strips in 6-inch (150-mm) lengths.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Master Grade Certificates: For each shipment, type, and composition of tile, signed by tile manufacturer and Installer.
- C. Product Certificates: For each type of product.
- D. Product Test Reports: For tile-setting and -grouting products and certified porcelain tile.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match and are from same production runs as products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed for each type, composition, color, pattern, and size indicated.
 - 2. Grout: Furnish quantity of grout equal to 3 percent of amount installed for each type, composition, and color indicated.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications:
 - 1. Installer is a five-star member of the National Tile Contractors Association.
 - 2. Installer's supervisor for Project holds the International Masonry Institute's Foreman Certification.
 - 3. Installer employs Ceramic Tile Education Foundation Certified Installers or installers recognized by the U.S. Department of Labor as Journeyman Tile Layers.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirements in ANSI A137.1 for labeling tile packages.
- B. Store tile and cementitious materials on elevated platforms, under cover, and in a dry location.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination can be avoided.
- D. Store liquid materials in unopened containers and protected from freezing.

1.10 FIELD CONDITIONS

- A. Environmental Limitations: Do not install tile until construction in spaces is complete and ambient temperature and humidity conditions are maintained at the levels indicated in referenced standards and manufacturer's written instructions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations for Tile: Obtain tile of each type from single source or producer.
 - 1. Obtain tile of each type and color or finish from same production run and of consistent quality in appearance and physical properties for each contiguous area.
 - 2. Must be "Made in USA" certified.
- B. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from single manufacturer and each aggregate from single source or producer.
 - 1. Obtain setting and grouting materials, except for unmodified Portland cement and aggregate, from single manufacturer.
 - 2. Obtain waterproof membrane and crack isolation membrane, except for sheet products, from manufacturer of setting and grouting materials.
- C. Source Limitations for Other Products: Obtain each of the following products specified in this Section from a single manufacturer:
 - 1. Waterproof membrane.
 - 2. Crack isolation membrane.
 - 3. Metal edge strips.

2.2 PRODUCTS, GENERAL

- A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1 for types, compositions, and other characteristics indicated.
 - 1. Provide tile complying with Standard grade requirements unless otherwise indicated.

- B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced by TCNA installation methods specified in tile installation schedules, and other requirements specified.
- C. Factory Blending: For tile exhibiting color variations within ranges, blend tile in factory and package so tile units taken from one package show same range in colors as those taken from other packages and match approved Samples.

2.3 TILE PRODUCTS

- A. Ceramic Tile Type PT: Made in USA Unglazed porcelain tile.
 - 1. Daltile Concrete Connection or approved submitted equal.
 - 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
 - 3. Made in USA
 - 4. Face Size: 13 by 19 1/2 inches (328 by 494 mm).
 - 5. Face Size Variation: Rectified.
 - 6. Thickness: 3/8 inch (9.5 mm).
 - 7. Face: As indicated.
 - 8. Dynamic Coefficient of Friction: Not less than 0.42.
 - 9. Tile Color, Glaze, and Pattern: City Elm CN92.
 - 10. Grout Color: As selected by Architect from manufacturer's full range.
 - 11. Trim Units: Coordinated with sizes and coursing of adjoining flat tile where applicable and matching characteristics of adjoining flat tile. Provide shapes as follows, S-36E9T Cove Base
 - a. Base for Thinset Mortar Installations: Straight, module size 6 by 13 inches.
 - b. External Corners for Thinset Mortar Installations: SC-36E9T Surface bullnose, 1 by 6 inches.

2.4 WATERPROOF MEMBRANE

- A. General: Manufacturer's standard product, selected from the following, that complies with ANSI A118.10 and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.
- B. Fabric-Reinforced, Fluid-Applied Membrane: System consisting of liquid-latex rubber or elastomeric polymer and continuous fabric reinforcement.
- C. Fluid-Applied Membrane: Liquid-latex rubber or elastomeric polymer.

2.5 CRACK ISOLATION MEMBRANE

- A. General: Manufacturer's standard product, selected from the following, that complies with ANSI A118.12 for standard performance and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.

- B. Fabric-Reinforced, Fluid-Applied Membrane: System consisting of liquid-latex rubber or elastomeric polymer and fabric reinforcement.
- C. Fluid-Applied Membrane: Liquid-latex rubber or elastomeric polymer.
- D. Latex-Portland Cement Crack-Resistant Mortar: Flexible mortar consisting of cement-based mix and latex additive.
- E. Crack Isolation Membrane and Tile-Setting Adhesive: One-part, fluid-applied product intended for use as both a crack isolation membrane and tile-setting adhesive in a two-step process.

2.6 SETTING MATERIALS

- A. Latex Additive: Manufacturer's standard water emulsion, serving as replacement for part or all of gaging water, of type specifically recommended by latex-additive manufacturer for use with field-mixed portland cement and aggregate mortar bed.
- B. Latex-Portland Cement Mortar (Thinset): ANSI A118.4.
 - 1. Provide prepackaged, dry-mortar mix containing dry, redispersible, vinyl acetate or acrylic additive to which only water must be added at Project site.
 - 2. Provide prepackaged, dry-mortar mix combined with liquid-latex additive at Project site.
 - 3. For wall applications, provide mortar that complies with requirements for nonsagging mortar in addition to the other requirements in ANSI A118.4.
- C. Medium-Bed, Latex-Portland Cement Mortar: Comply with requirements in ANSI A118.4. Provide product that is approved by manufacturer for application thickness of 1-1/2 inches.
 - 1. Provide prepackaged, dry-mortar mix containing dry, redispersible, vinyl acetate or acrylic additive to which only water must be added at Project site.
 - 2. Provide prepackaged, dry-mortar mix combined with acrylic resin liquid-latex additive at Project site.

2.7 GROUT MATERIALS

- A. Sand-Portland Cement Grout: ANSI A108.10, consisting of white or gray cement and white or colored aggregate as required to produce color indicated.
- B. Standard Cement Grout: ANSI A118.6.

2.8 MISCELLANEOUS MATERIALS

- A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
- B. Vapor-Retarder Membrane: Polyethylene sheeting, ASTM D 4397, 4.0 mils (0.1 mm) thick.

- C. Metal Edge Strips: Angle or L-shaped, height to match tile and setting-bed thickness, metallic or combination of metal and PVC or neoprene base, designed specifically for flooring applications; stainless-steel, ASTM A 666, 300 Series exposed-edge material.
 - 1. Schleuter
- D. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.
- E. Floor Sealer: Manufacturer's standard product for sealing grout joints and that does not change color or appearance of grout.

2.9 MIXING MORTARS AND GROUT

- A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.
- B. Add materials, water, and additives in accurate proportions.
- C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
 - 1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
 - 2. Verify that concrete substrates for tile floors installed with bonded mortar bed or thinset mortar comply with surface finish requirements in ANSI A108.01 for installations indicated.
 - a. Verify that surfaces that received a steel trowel finish have been mechanically scarified.
 - b. Verify that protrusions, bumps, and ridges have been removed by sanding or grinding.
 - 3. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work, and similar items located in or behind tile has been completed.
 - 4. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust joint locations in consultation with Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with thinset mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.
- B. Where indicated, prepare substrates to receive waterproofing by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot (1:50) toward drains.
- C. Blending: For tile exhibiting color variations, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.

3.3 CERAMIC TILE INSTALLATION

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.
 - 1. For the following installations, follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage:
 - a. Tile floors consisting of tiles 8 by 8 inches (200 by 200 mm) or larger.
- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- D. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.
- E. Where accent tile differs in thickness from field tile, vary setting-bed thickness so that tiles are flush.
- F. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.
 - 1. For tile mounted in sheets, make joints between tile sheets same width as joints within tile sheets so joints between sheets are not apparent in finished work.
 - 2. Where adjoining tiles on floor, base, walls, or trim are specified or indicated to be same size, align joints.

3. Where tiles are specified or indicated to be whole integer multiples of adjoining tiles on floor, base, walls, or trim, align joints unless otherwise indicated.
- G. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
1. Glazed Wall Tile: 1/8 inch (3.2 mm).
 2. Porcelain Tile: 1/4 inch (6.4 mm).
- H. Lay out tile wainscots to dimensions indicated or to next full tile beyond dimensions indicated.
- I. Expansion Joints: Provide expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated. Form joints during installation of setting materials, mortar beds, and tile. Do not saw-cut joints after installing tiles.
1. Where joints occur in concrete substrates, locate joints in tile surfaces directly above them.
- J. Metal Edge Strips: Install where exposed edge of tile flooring meets carpet, wood, or other flooring that finishes flush with or below top of tile and no threshold is indicated.
- K. Floor Sealer: Apply floor sealer to cementitious grout joints in tile floors according to floor-sealer manufacturer's written instructions. As soon as floor sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

3.4 WATERPROOFING INSTALLATION

- A. Install waterproofing to comply with ANSI A108.13 and manufacturer's written instructions to produce waterproof membrane of uniform thickness that is bonded securely to substrate.
- B. Allow waterproofing to cure and verify by testing that it is watertight before installing tile or setting materials over it.

3.5 CRACK ISOLATION MEMBRANE INSTALLATION

- A. Install crack isolation membrane to comply with ANSI A108.17 and manufacturer's written instructions to produce membrane of uniform thickness that is bonded securely to substrate.
- B. Allow crack isolation membrane to cure before installing tile or setting materials over it.

3.6 ADJUSTING AND CLEANING

- A. Remove and replace tile that is damaged or that does not match adjoining tile. Provide new matching units, installed as specified and in a manner to eliminate evidence of replacement.
- B. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
 1. Remove grout residue from tile as soon as possible.
 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions but no sooner than 10 days after installation. Use only cleaners recommended

by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.

3.7 PROTECTION

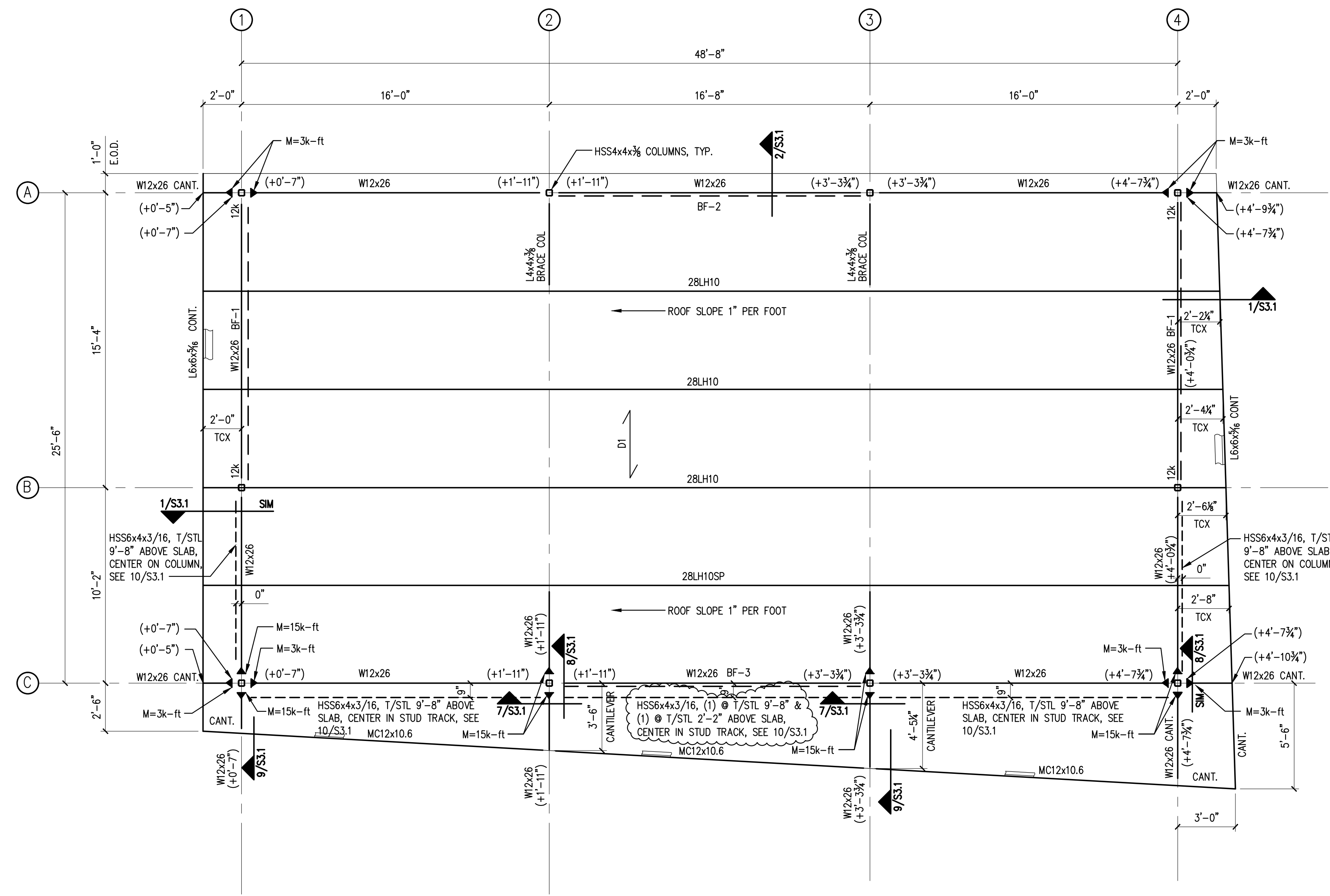
- A. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear. If recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors.
- B. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
- C. Before final inspection, remove protective coverings and rinse neutral protective cleaner from tile surfaces.

3.8 INTERIOR CERAMIC TILE INSTALLATION SCHEDULE

- A. Interior Floor Installations, Concrete Subfloor:
 - 1. Ceramic Tile Installation CTI-1: TCNA F121 and ANSI A108.1A; cement mortar bed (thickset) on waterproof membrane.
 - a. Ceramic Tile Type: PT-1.
 - b. Bond Coat for Cured-Bed Method: Medium-bed, latex-portland cement mortar.
 - c. Grout: Standard sanded cement grout.
 - 2. Ceramic Tile Installation CTI-2: TCNA F122; thinset mortar on waterproof membrane.
 - a. Ceramic Tile Type: PT-2.
 - b. Thinset Mortar: Latex- portland cement mortar.
 - c. Grout: High-performance sanded grout.
- B. Interior Wall Installations, Wood or Metal Studs or Furring:
 - 1. Ceramic Tile Installation CTI-3: TCNA W245 or TCNA W248; thinset mortar on glass-mat, water-resistant gypsum backer board.
 - a. Ceramic Tile Type: CT-1 & CT-2.
 - b. Thinset Mortar: Latex- portland cement mortar.
 - c. Grout: Standard unsanded cementgrout.

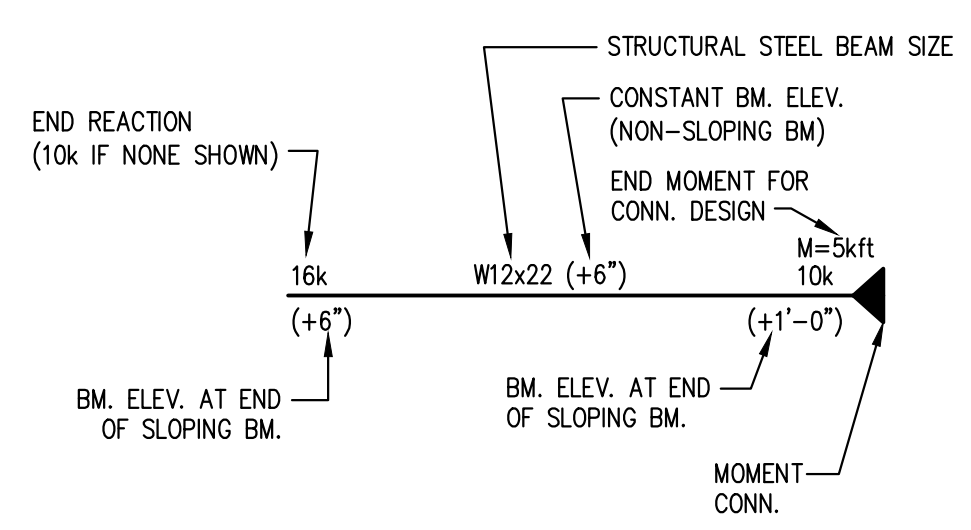
END OF SECTION 093013

PRINTED: Nov 06, 2015

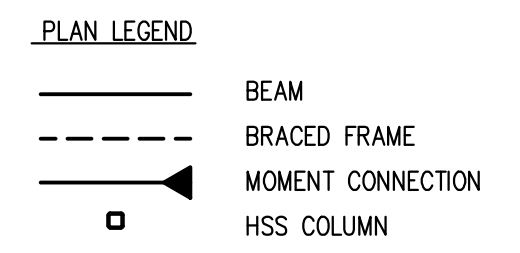


ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

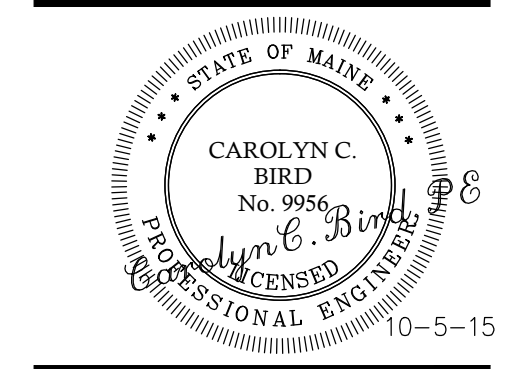
- PLAN NOTES:**
1. $\overleftarrow{D1}$ DENOTES SPAN OF 1.5" METAL ROOF DECK, 20 GAGE.
 2. REFERENCE T/STEEL ELEVATION = 12'-1" FROM REFERENCE ELEVATION 0'-0"
 3. (±XX'-XX") DENOTES T/STEEL ELEVATION ABOVE OR BELOW REFERENCE T/STEEL ELEVATION.
 4. "BF-X" DENOTES BRACED FRAME, SEE BRACED FRAME ELEVATIONS ON S3.1.
 5. SEE TYPICAL BEAM SHEAR TAB CONNECTION ON SHEET S3.1
 6. SEE SPECIAL JOIST 28LH10SP LOADING DIAGRAM ON SHEET S2.1.



ALL LOADS ARE IN ALLOWABLE STRESS DESIGN (ASD)
TYPICAL STRUCTURAL STEEL BEAM LEGEND



CLIENT:
LATC
c/o AVCOG
125 MANLEY ROAD
AUBURN, ME 04210



DOWNTOWN AUBURN TRANSPORTATION CENTER
GREAT FALLS PLAZA
WIN #12326.00
AUBURN, MAINE
FED #ME03-0041
PROPOSED BUILDING

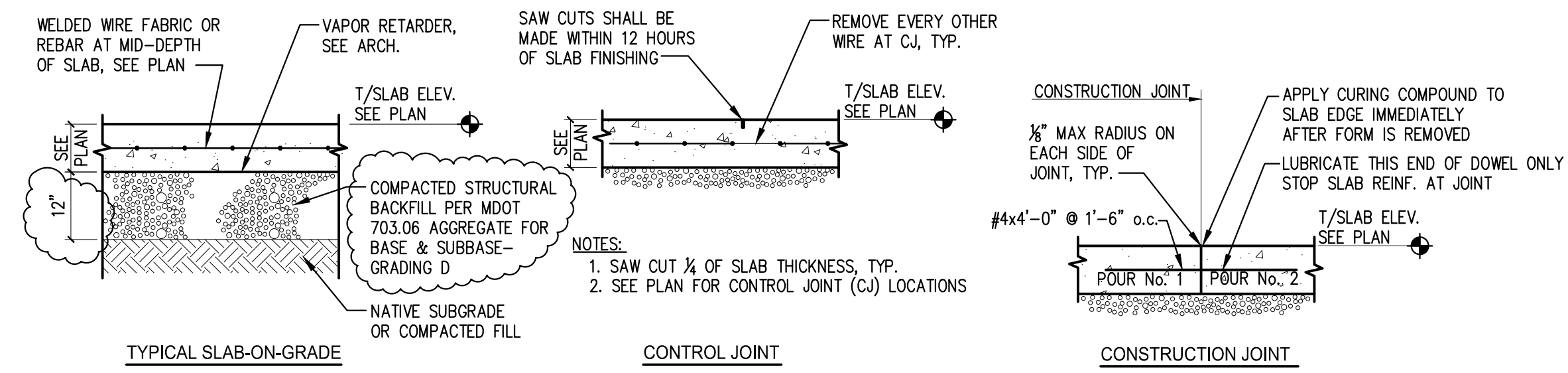
ISSUED

NO.	DESCRIPTION	DR.	CHKD.	DATE
	ISSUED FOR BID	CB	CB	10-5-15
	AMENDMENT #2	CB	CB	11-6-15

SHEET TITLE:
ROOF FRAMING PLAN

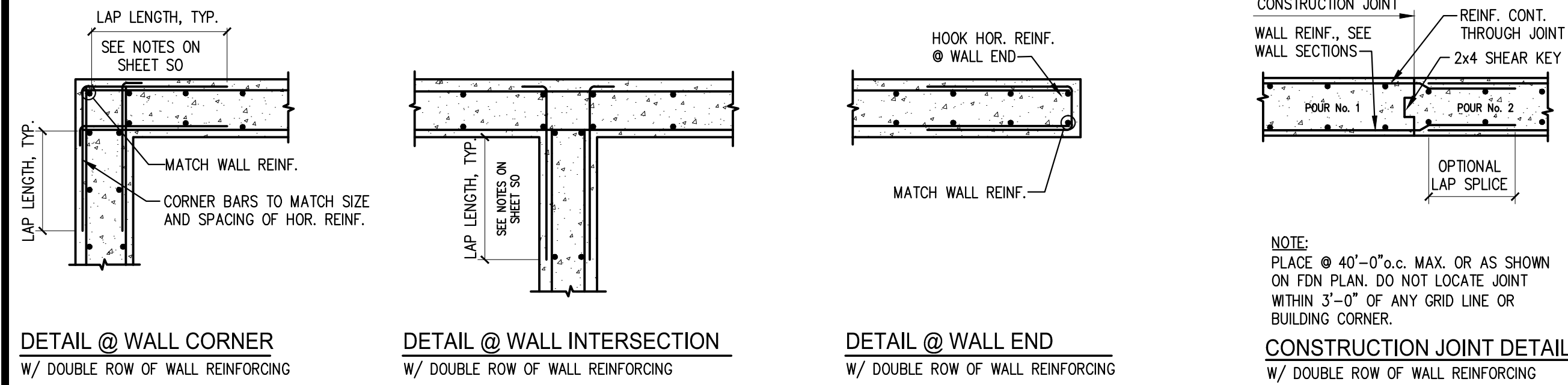
DESIGNED: CB
DRAWN: CB
DATE: 2-24-15
PROJECT NUMBER: 14-124

PRINTED: Nov 06, 2015



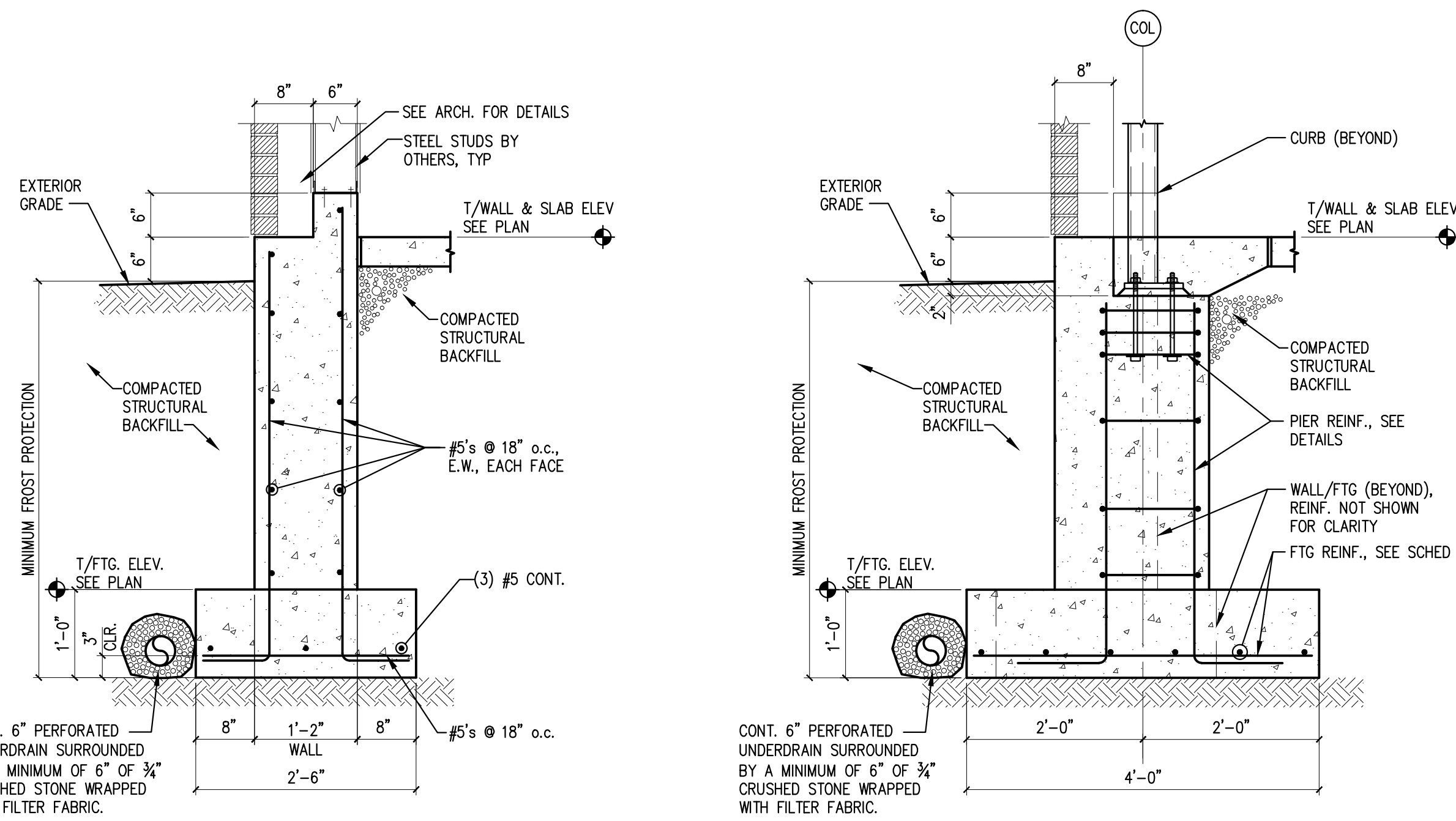
TYPICAL SLAB-ON-GRADE DETAILS

SCALE: NTS



TYPICAL FOUNDATION WALL DETAILS

SCALE: NTS

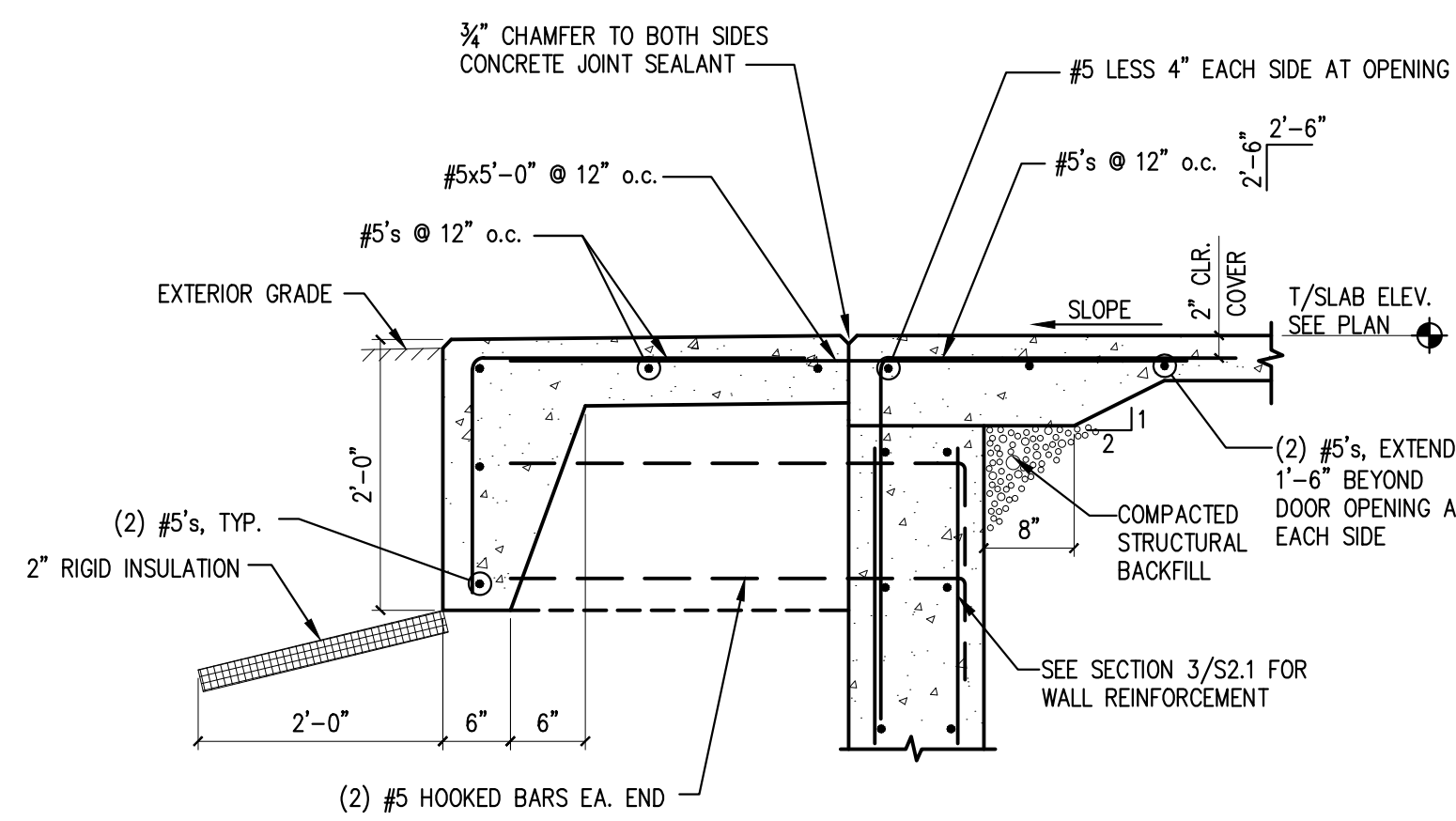


1 TYPICAL FOUNDATION WALL SECTION

3/4" = 1'-0"

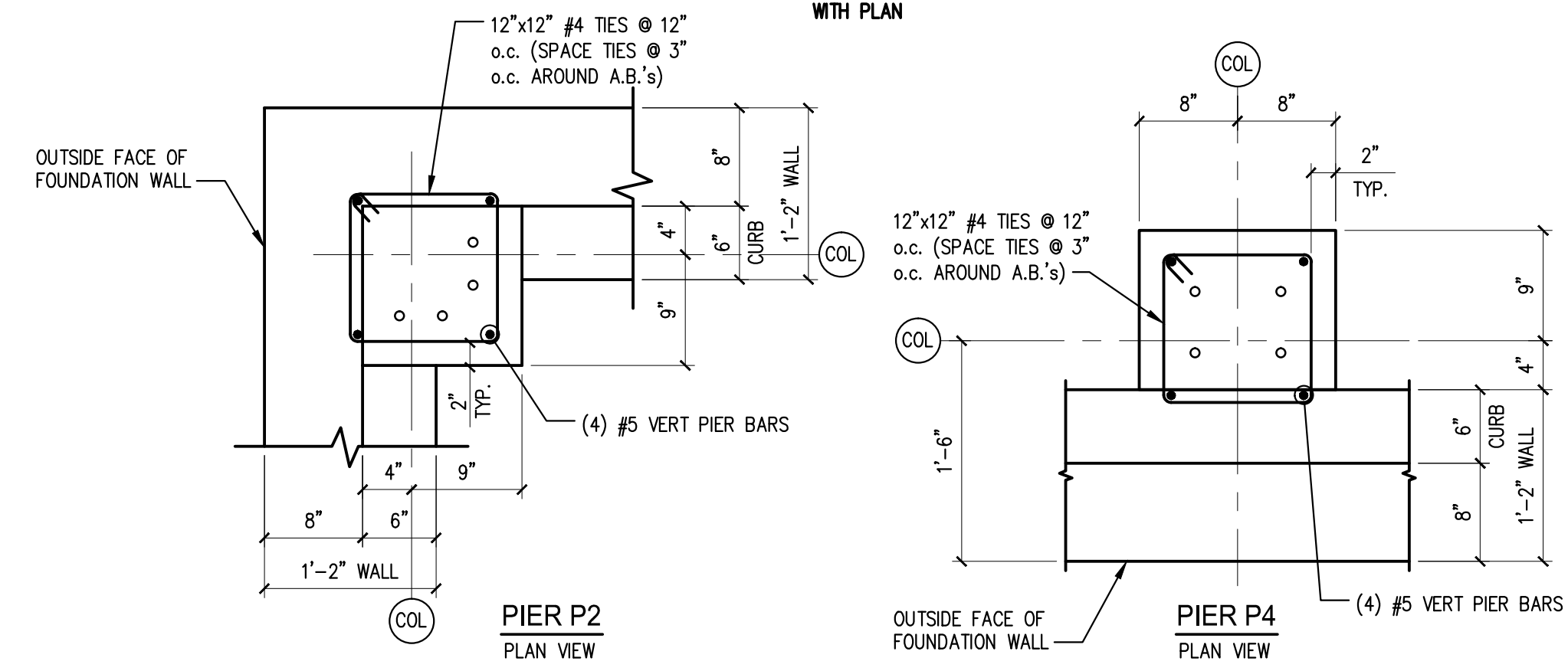
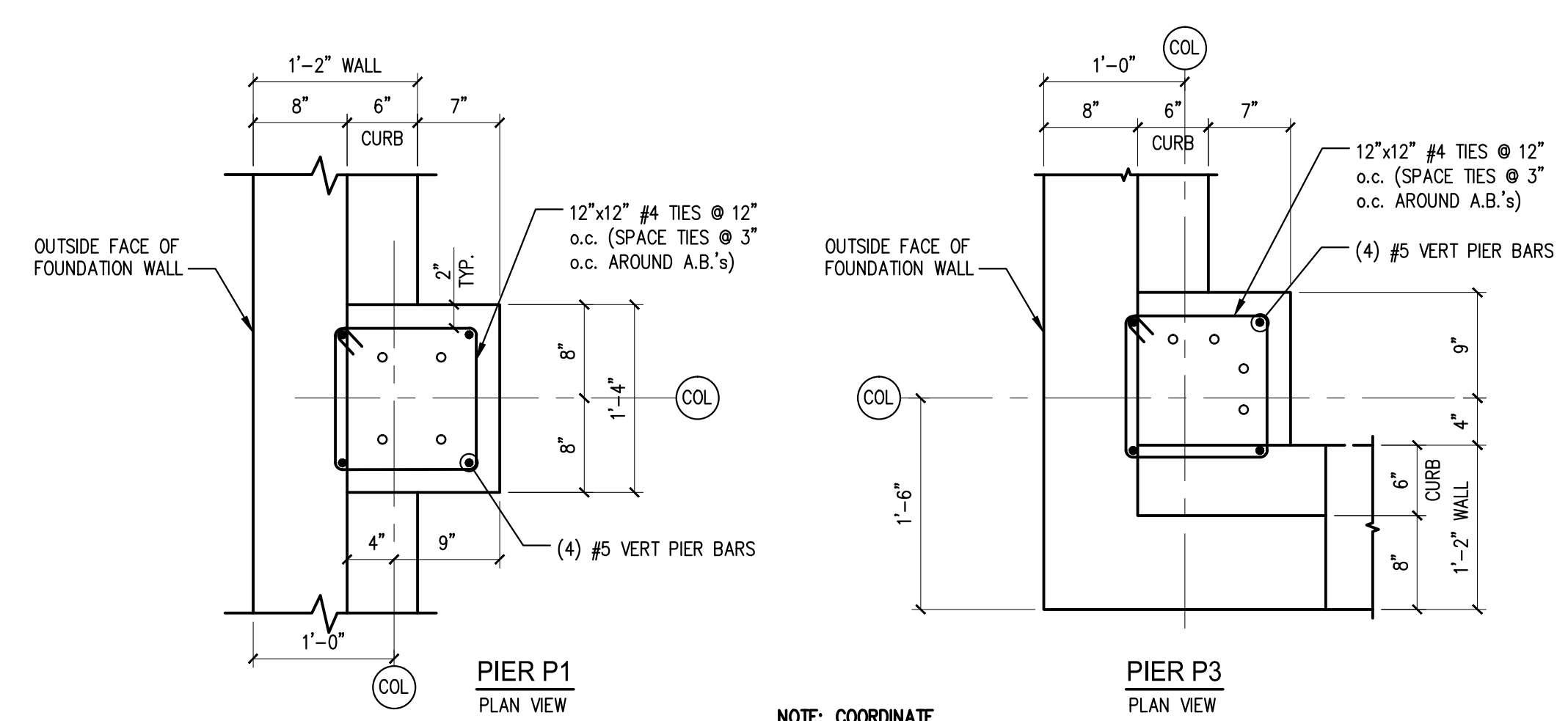
2 SECTION AT PIERS

3/4" = 1'-0"



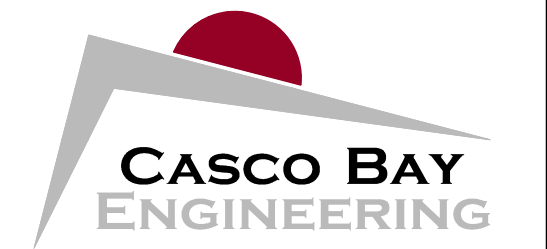
3 SECTION

3/4" = 1'-0"



PIER DETAILS

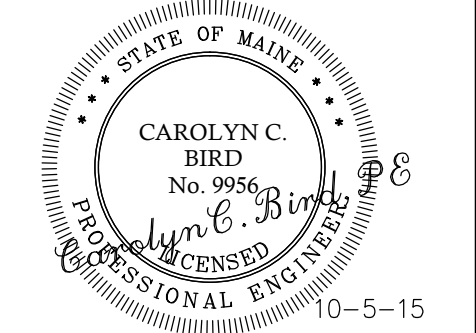
SCALE: 1" = 1'-0"



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 www.cascobayengineering.com

CLIENT:

LATC
 c/o AVCOG
 125 MANLEY ROAD
 AUBURN, ME 04210



AUBURN, MAINE
 FED #ME03-0041

DOWNTOWN AUBURN
 TRANSPORTATION CENTER
 GREAT FALLS PLAZA
 WIN #12326.00

PROPOSED BUILDING

ISSUED	DESCRIPTION	DR.	CHKD.	DATE
	ISSUED FOR BID	CB	CB	10-5-15
	AMENDMENT #2	CB	CB	11-6-15
No.				

SHEET TITLE:

FOUNDATION SECTIONS AND DETAILS

DESIGNED: CB
 DRAWN: CB
 DATE: 2-24-15
 PROJECT NUMBER: 14-124

S2.1