

**ADDENDUM 1  
SEPTEMBER 9, 2021**

South Jersey Transportation Authority  
Request for Bids

**ATLANTIC CITY EXPRESSWAY (ACE)  
2021 WEST MAINTENANCE ADDITION PROJECT**

**NOTICE**

This Addendum is considered part of this Request for Bids and must be acknowledged with your Bid Submission.

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The following pages contain:

- A. Meeting minutes from the non-mandatory virtual pre-bid conference held on September 8, 2021.**
- B. Submitted Questions & Answers**
- C. Additional Clarifications & Changes**
- D. Attachments**

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**A. NON-MANDATORY PRE-BID MEETING MINUTES:**

The non-mandatory pre-bid meeting was conducted on September 8, 2021 at 1:00 P.M., virtually via GoToMeeting.com. Minutes of the Pre-Bid Meeting follow. The sign-in sheet for the Pre-Bid Meeting is included as an Attachment to Addendum No. 1.

The following individuals attended:

<b><u>Name</u></b>	<b><u>Representing</u></b>	<b><u>Phone Number</u></b>
Ruth Ann Joyce	SJTA, Engineering	609-561-6643
Bhushan Pathare	SJTA, Engineering	609-561-6643
Shawn Carpenter	SJTA, Engineering	609-561-6643
Ashlee Mathes	SJTA, Purchasing	609-965-6060
Julie Manalang	SJTA, Purchasing	609-965-6060
Rich Tewksbury	T&M Associates	215-282-7857
Bob Koochagian	T&M Associates	215-282-7856
Contractors and Suppliers	See attached sign-in	

The purpose of this meeting was to discuss the ACE 2021 WEST MAINTENANCE ADDITION PROJECT Bid Package with prospective bidders.

The following items were discussed during the meeting:

- I. Introductions & Opening Remarks
- A. Shawn Carpenter gave the opening remarks, gave the introductions and asked that questions be held until the end.

II. Affirmative Action

- A. **Affirmative Action:** Shawn Carpenter discussed the following affirmative action issues. The Bidder should review and become familiar with the following items:

- Substitution Policy, *Page ITB-10*.
- Mandatory Equal Employment Opportunity “Exhibit B” Language, *Pages P-3 – P-5*. **Must be submitted with bid.**
- Affirmative Action Evidence for Procurement Form, *Page P-13*.
- AA201 forms must be submitted, once the contract is awarded and prior to the start of work, to SJTA’s Affirmative Action Officer, as listed below. The AA201 form will be generated by the State of New Jersey to the awarded contractor for the project. Certified payrolls shall also be submitted by the awarded contractor directly to the SJTA’s Affirmative Action Officer as listed below:

Doris McClinton, A.A. Officer  
South Jersey Transportation Authority  
19 South New York Avenue  
Atlantic City, NJ 08401  
(609) 344-4149 ext. 428  
Fax: (609) 344-7409  
Email: dmccclinton@sjta.com

III. Scope of Work / Project Description

- A. Rich Tewksbury provided a description of the scope of work as follows:
1. The project is located at the Atlantic City Expressway West Maintenance Yard, near mile post 38 on the Expressway.
  2. In general, the project includes the construction of a new +/- 919 square foot addition to the existing maintenance facility. The building will be constructed of concrete foundations and slab-on-grade, cold-formed-metal-framed walls and roof, metal siding and EPDM roofing.
  3. The addition will contain a storage room, locker room and a single office. It will be powered from the existing building electrical service and have dedicated HVAC equipment.
  4. All work will be required to be coordinated with the Owner and facility.
  5. The Contractor is responsible to submit, pay for and obtain DCA construction permits.

6. Revised structural drawings will be issued in Addendum #1 with a few minor changes and clarifying the testing and inspection scope (Special Inspections are not required).
7. Site Visits may be scheduled on an individual basis by submitting a request to [bids@sjta.com](mailto:bids@sjta.com) (See ITB Item #1).

#### IV. Notice to Bidders and General Requirements

##### A. Rich Tewksbury reviewed the following Notice to Bidders and General Requirements items:

1. A mandatory Bid Security is required (*pages NTB-2 and P-6 of the specifications*) to be submitted at 10% of the total bid price and not to exceed \$20,000.00, in the form of Bid Bond, Certified Check or Cashier's Check.
2. A Consent of Surety is mandatory from all bidders and can be found on *Page P-7* of the Proposal Section. All bidders must file one.
3. Sealed bids are due **Tuesday, September 21, 2021 @ 1:00 PM**, at the **SJTA Administration Building located at Farley Service Plaza**, marked to the attention of the Purchasing Department, **or via BidExpress**. Bidders and the public may witness the opening of the bids at the time and date indicated via GoToMeeting at:

<https://global.gotomeeting.com/join/718702397>

Bidders can also dial into the meeting by phone at +1 (571) 317-3112,  
Access Code: 718-702-397

4. The bid proposal/submitting a bid procedure was discussed and all parties were made aware of the following forms:
  1. Bid Proposal Section, *Page P-1 to P-38, single sided loose yellow section in clear sleeve*.
    - The single sided loose section is to be submitted with the bid in the enclosed envelope.
    - The project may be bid electronically through BidExpress, in lieu of hard copy, if the Bidder prefers.
  2. Proposal Checklist, *Page P-1 to P-2*, for mandatory and non-mandatory forms. Please complete the checklists, sign and include with your bid.
5. Subcontractor Declaration, *Page P-9*. Declaration of Subcontractors for the protected trade categories: Plumbing, HVAC, Electrical and Structural Steel as required by the State of New Jersey.

The following subcontractors must be identified and prequalified or classified in the following areas:

**Mechanical:** DPMC Code C032 – HVACR

**Electrical:** DPMC Code C047 – Electrical

Provide written proof of prequalification and include copy of matching, current license with bid.

6. **General Contractor Pre-Qualification**, *Page NTB-1, P-36 and ITB-11:* As the GC, you need to be prequalified in at least one of the following NJDPMC Trade Codes at the time of bid submission:

- DPMC Trade Code C008 – General Construction
- DPMC Trade Code C009 – General Construction / Alterations & Additions

*The bidder only need be prequalified in one of these at the time of bid submission; not all.*

7. Bid Form, *Page P-11 to P-12.*

- The Authority, according to law, reserves the right to reject any or all bids and also to waive any minor informality or non-material exceptions in any bid or bids so received. There is no guarantee that the Authority will award this bid in any form and in submitting a bid the bidder agrees to this understanding.
- **Please Note:** Page P-12 in the Project Manual included on the CD's purchased from Purchasing includes a formatting error. A corrected P-12 has been included in clear sleeve to be used when submitting your bid.

8. Contract Insurance Requirements, *GC-77 thru GC-83.* Specific requirements are specified. You need to include this in your bid. After checking with your insurance provider, include the cost in your bid and **sign off on the Insurance Acknowledgement Form, page P-35.**

9. Prevailing Wage Act Compliance Declaration, *Page P-20.* *The most current rates have been included in the specification as per the time of printing.* Contractor is responsible for checking with the NJ Department of Labor website. Please be sure to check the current rates before bidding. Also, if you are awarded the project, per the Department of Labor, the rates that are in effect on the date of the award are the rates that must be used for the project. You are required to file this certificate on your "named" subs only as well prior to award and to bid subs they must already have a Prevailing Wage Certificate.

## V. Questions

- A. Rich Tewksbury reviewed the following regarding Questions:

- A. All questions about the meaning or intent of the Bid and Contract Documents (technical questions) must be submitted in writing to the Authority's Purchasing Department via fax to 609-965-7315 or emailed to [bids@sjta.com](mailto:bids@sjta.com). Oral and other interpretations or clarifications will be without legal effect. **When submitting a question or request for clarification, the subject line of the email must contain the word "Question" followed by the title of the Bid or RFP.**
- B. Deadline for receipt of Questions is **Monday, September 13, 2021 at 4:00 P.M.**; (*see Instructions to Bidders for email/fax, Page ITB-3.*)
- C. Addenda, Page ITB-3  
Addenda will be issued and posted on the Authority's website at [www.sjta.com](http://www.sjta.com), under "Bids & Contracts". There are no designated dates for release of addenda. Addenda can be issued up to the time of bid. Therefore, interested bidders should check the Authority's website on a daily basis from the time of the bid issuance through the bid due date. It is the sole responsibility of the bidder to be knowledgeable of all addenda related to this procurement.

**Failure to acknowledge each addendum on the Acknowledgement of Receipt of Addenda (P-10) is cause for disqualification of the bid.**

#### VI. Award & Notice to Proceed

- A. Rich Tewksbury noted the following are the anticipated dates for the award and notice to proceed for this contract:
  - 1. Board Approval – October 20, 2021
  - 2. Governor's Veto Period will occur after the award and runs approximately 15 business days from receipt of the Board Meeting minutes.
  - 3. Estimated Notice to Proceed – after veto period
  - 4. Standard payment application and requirements will be provided at the preconstruction meeting. The 25<sup>th</sup> of each month is the cutoff for payment requests; all estimates are to be received by SJTA on the 25<sup>th</sup> of the month. Certified Payrolls are required with Payment applications.

#### VII. General Conditions

- A. Rich Tewksbury noted the following general conditions of the project/contract:
  - 1. **TIME TO COMPLETE:** *Page ITB-11.* The Contractor shall commence the work required by the Contract Documents within seven (7) calendar days after the date of the notice to proceed. The Contractor shall complete all work required by the Contract Documents within the number of

calendar days noted below from and including the date of the written notice to proceed unless the period of completion is extended otherwise pursuant to the Contract Documents:

- **One Hundred Fifty (150) Calendar Days**

2. Liquidated Damages may be assessed at \$1,000.00 per day for each calendar day that the Contractor shall be in default in completing the work to be done under the contract, *Page ITB-11*.
3. There are no free tolls. Contractors are to pay all tolls.
4. Contractor will be required to submit a project schedule in Primavera format or approved other.
5. Bidders are to refer to the Wage Rates provided in Appendix 1 of the Project Specifications. (Also reference item IV.9 - Prevailing Wage Act Compliance Declaration above.)
6. Contractor will be required to submit a maintenance bond at the end of the project for 100% of the final contract price for two years.
7. WORK HOURS: All work shall be completed during normal hours, weekdays 7AM-3:30PM.
8. An addendum will be issued following this meeting that includes the minutes from the Pre-Bid meeting, the sign-in sheet and any answers to questions posed at the meeting, if applicable.
9. *All bidders are hereby advised, the South Jersey Transportation Authority does not release information regarding the project costs and estimates. Therefore, any and all information from any third-party entity such as online bid sourcing companies should be considered invalid. Project information is available to Bidders on the Authority's website at [www.sjta.com](http://www.sjta.com) under "Bids & Contracts."*

### VIII. SJTA Purchasing

- A. Julie Manalang, SJTA Purchasing, discussed and made bidders aware of the following forms:
  1. Public Works Contractor Registration, Department of Labor, Wage & Hour (*P-21*).
  2. Business Registration Certification, *Department of Treasury, Division of Revenue, (Page P-22 to P-23)*. Please note new web address: <http://www.nj.gov/treasury/revenue/busregcert.shtml>

3. Ownership Disclosure and Two-Year Certification & Disclosure of Political Contributions (*P-26 to P-31*).
4. Source Disclosure Form (*P-32*).
5. Ownership Disclosure Form (*P-8*)
6. Disclosure/Certification of Investment Activities in Iran (*P-37, ITB-12*)
7. **Bid Express** – The South Jersey Transportation Authority is pleased to announce that we are now moving to electronic bidding. (*ITB-12*)

While it is a transition period, hard copies are still accepted. It is pertinent that all vendors register with Bid Express because the South Jersey Transportation Authority will be transitioning to only electronic bidding in the near future (**February 1, 2022; not 2021**).

Request Bid Startup Guide by emailing [bids@sjta.com](mailto:bids@sjta.com).

8. Physical Plans & Specs are still available for purchase if needed (\$50.00 cash or check) at the SJTA Administration Building.
9. Purchasing is available to answer questions regarding the checklist items via telephone at 609-965-6060 until the bid due date/ Please contact Darleen Adamo at ext. 232 or Ashlee Mathes at ext. 229.

#### IX. Questions posed at Pre-Bid Meeting.

See Section B. below.

### **B. SUBMITTED QUESTIONS & ANSWERS**

Q1: I understand from your comment earlier that there are no Special Inspections required. However, there is a note for independent testing to confirm the 3-hr rating of an existing wall. Who will be responsible for performing that testing?

A1: **This is in reference to CA100 Note 1 and A100 Key-Note 1. The Contractor shall disregard the notes and instead, grout the existing CMU wall solid, full height along the entire length of the new addition.**

Q2: Who is the existing fire alarm vendor.

A2: **The building does not contain an existing fire alarm system; it contains local interconnected smoke detectors. There is no existing fire alarm vendor.**

### **C. ADDITIONAL CLARIFICATIONS & CHANGES**

- Special Inspection, in accordance with IBC Chapter 17, are not required for this project.
- See attached revised Structural drawings, and corresponding revised Cover Sheet.

### **D. ATTACHMENTS**

- Pre-Bid Meeting – Sign-in Sheet
- Revised Drawings: CS-1, S200, S200a, S201, S300 and S500





# SOUTH JERSEY

## TRANSPORTATION AUTHORITY

FARLEY SERVICE PLAZA • P.O. BOX 351  
HAMMONTON, N.J. 08037

(609) 965-6060 • (800) 658-0606 • FAX (609) 965-7315

Philip D. Murphy  
Governor

Sheila Y. Oliver  
Lt. Governor

Diane Gutierrez-Scaccetti  
Chair

Stephen F. Dougherty  
Executive Director

THE ATLANTIC CITY ESPRESSWAY 2021 WEST MAINTENANCE ADDITION PROJECT  
NON-MANDATORY PRE-BID MEETING  
WEDNESDAY, SEPTEMBER 8, 2021 @ 1:00 P.M.  
South Jersey Transportation Authority

Please join my meeting from your computer, tablet or smartphone.  
<https://global.gotomeeting.com/join/718702397> You can also dial in using your phone. United States: +1 (571) 317-3112 Access Code: 718-702-397  
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NAME	COMPANY	PHONE	EMAIL
Ruth Ann Joyce	SJTA/Engineering	609 561 6643 ext. 346	rjoyce@sjta.com
Doris McClinton, Affirmative Action	SJTA	N/A	via conference call
Shawn Carpenter	SJTA	Scarpecker@sjta.com	
Blushen Patkare	SJTA	bpatkare@sjta.com	
Ashlee Mathes	SJTA	bls@sjta.com	
Tulie Mandany	SJTA	bls@sjta.com	

Rich Teukisburg T + M Teukisburg Tandm Associates.com

Sean Braks Newport Construction 856 662 9500

Josh Leng - Leng Construction 856 547 0707

Jonathan Peji Shore Building Contractor 609 569 4915

Bob Koockagian - T + M - Koockagian Tand Associates.com

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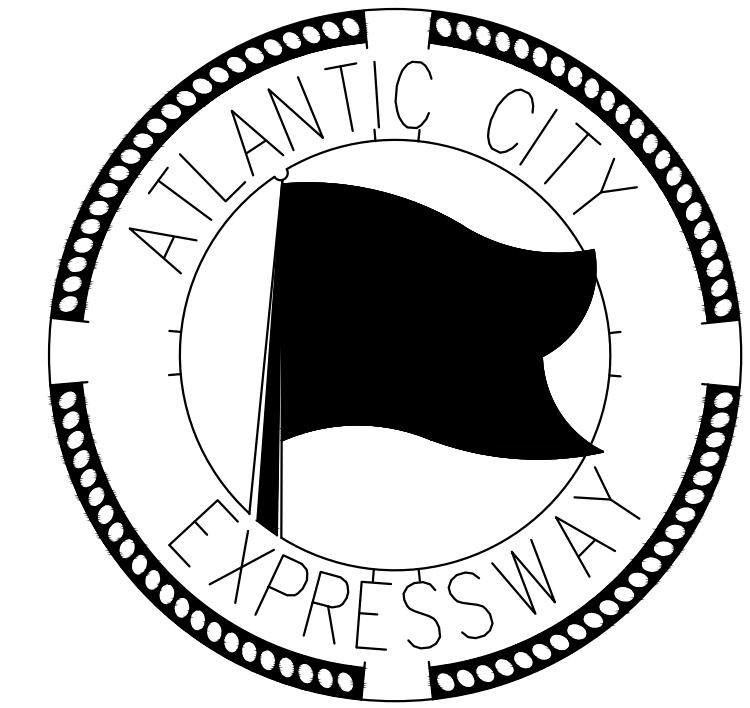
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# SOUTH JERSEY TRANSPORTATION AUTHORITY ATLANTIC CITY EXPRESSWAY



## 2021 WEST MAINTENANCE ADDITION PROJECT

September 1, 2021



WINSLOW TOWNSHIP  
CAMDEN COUNTY

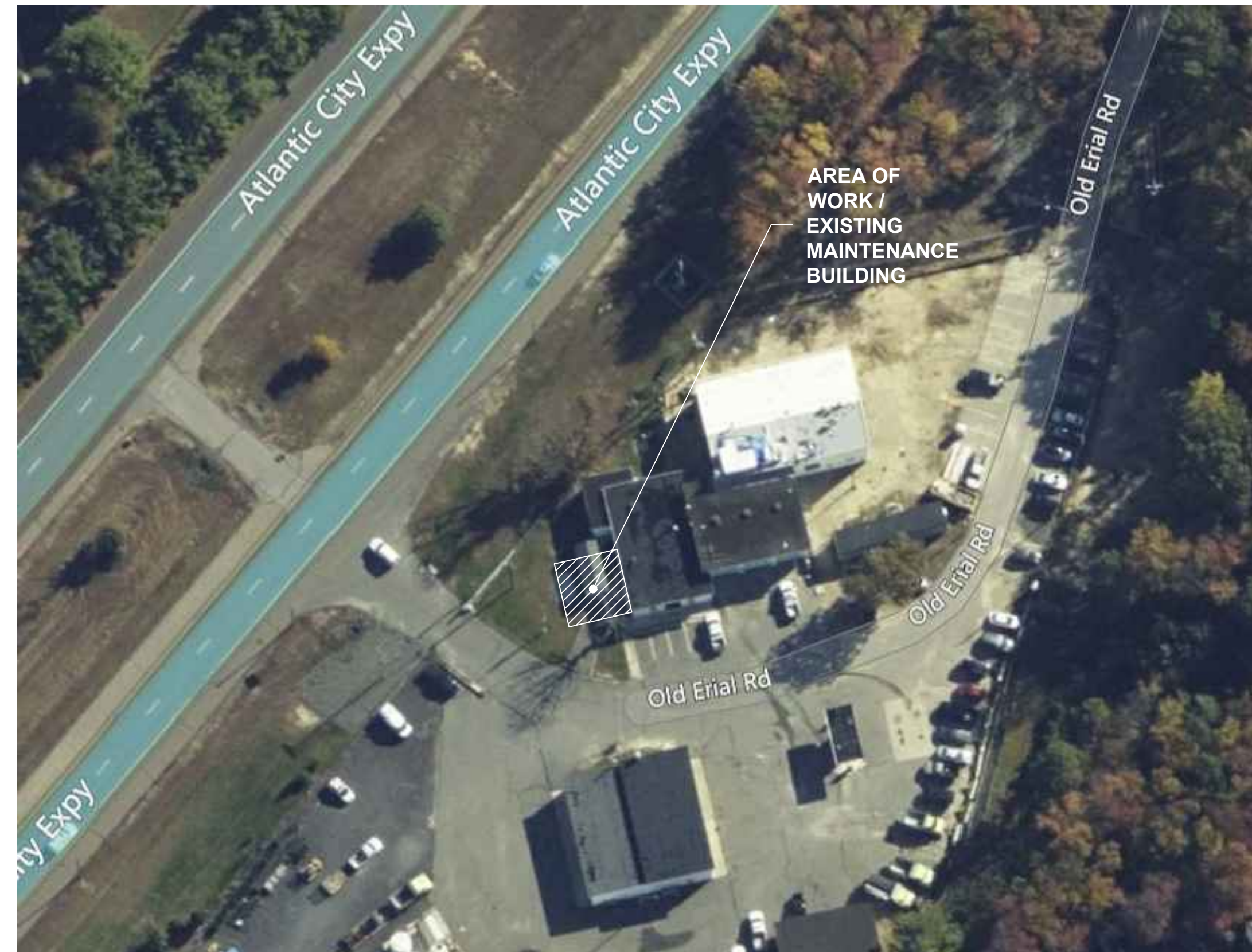
**COMMISSIONERS**

DIANE GUTIERREZ-SCACETTI  
CHRISTOPHER M. MILAM  
JAMES McMULLOUGH  
C. ROBERT MCDEVITT  
JOSEPH RIPA  
MAURICE B. HILL, JR. DMD  
JEFFERY A. APRIL, ESQ.  
BRYAN J. BUSH

CHAIR  
VICE CHAIRMAN

STEPHEN F. DOUGHERTY

EXECUTIVE DIRECTOR



LOCATION MAP  
NOT TO SCALE

INDEX OF DRAWINGS			
DWG. No.	DESCRIPTION	DWG. No.	DESCRIPTION
CS1	COVER SHEET		
<b>ARCHITECTURAL</b>			
CA100	CODE REVIEW		
A001	GENERAL NOTES & ABBREVIATIONS		
A002	GENERAL NOTES & FIRE RATED PENETRATION DETAILS		
A100	OVERALL BUILDING PLAN		
A201	DEMOLITION & NEW WORK FLOOR PLANS		
A202	REFLECTED CEILING & ROOF PLANS		
A301	EXTERIOR ELEVATIONS & SCHEDULES		
A302	BUILDING SECTIONS & WALL SECTIONS		
A303	ENLARGED WALL SECTIONS		
A304	DETAILS		
A401	STANDARD ADA DETAILS 1		
A402	STANDARD ADA DETAILS 2		
<b>STRUCTURAL</b>			
S200	STRUCTURAL GENERAL NOTES		
S200a	STRUCTURAL TESTING & INSPECTIONS		
S201	NEW FOUNDATION & FRAMING PLANS		
S300	FOUNDATION AND MASONRY DETAILS		
S500	COLD FORMED METAL FRAMING DETAILS		
<b>MECHANICAL</b>			
M001	MECHANICAL SYMBOLS AND ABBREVIATIONS		
M101	MECHANICAL PARTIAL PLANS		
M201	MECHANICAL DETAILS		
M202	MECHANICAL DETAILS		
M300	MECHANICAL SCHEDULES AND CONTROLS		
M400	MECHANICAL SPECIFICATIONS		
<b>ELECTRICAL</b>			
E001	ELECTRICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS		
E101	ELECTRICAL POWER PARTIAL PLANS		
E102	ELECTRICAL REFLECTED CEILING PARTIAL PLAN		
E201	ELECTRICAL SCHEDULES		

PREPARED AND RECOMMENDED BY:

M. ELAINE DASTI, P.E.  
NEW JERSEY PROFESSIONAL ENGINEER  
T & M ASSOCIATES

DATE

APPROVED BY SOUTH JERSEY TRANSPORTATION AUTHORITY:

STEPHEN M. MAZUR, P.E., P.T.O.E.  
CHIEF ENGINEER  
SOUTH JERSEY TRANSPORTATION AUTHORITY

DATE

UTILITIES
SOUTH JERSEY GAS COMPANY (GAS MAINS)
ATLANTIC CITY ELECTRIC COMPANY (POLE LINES, CONDUIT)
VERIZON OF NEW JERSEY, INC. (POLE LINES, CONDUIT)
SPRINT NEXTEL
COMCAST (CABLE) OF SOUTH JERSEY
AT&T
NEW JERSEY AMERICAN WATER CO.
VERIZON BUSINESS
SJTA / ADESTA, LLC
EGG HARBOR MUNICIPAL UTILITIES AUTHORITY
CAMDEN COUNTY MUNICIPAL UTILITIES AUTHORITY
WINSLOW TOWNSHIP DEPARTMENT OF MUNICIPAL UTILITIES
ATLANTIC COUNTY UTILITIES AUTHORITY

Sep 07, 2021 - 3:46pm - CADD FILE: \\PDSERVER\Shared Folders\Current Projects\427\_ West Maint New Addition\CAD\SJTA West Maint\_CSI.dwg

NO.	DATE	REVISION
1	09/09/2021	ADDENDUM #1

GENERAL NOTES

1.0 GENERAL

- All work shall conform to the IBC 2018 Building Code, NJ Edition and to all other applicable Federal, State, and local regulations.
- Work not indicated on a part of the drawings but reasonably implied to be similar to that shown at corresponding places shall be repeated.
- Contractor shall coordinate openings and penetrations through the structure as shown on the Architectural, Structural, Mechanical, Electrical, and Plumbing drawings. Provide additional reinforcement as required per the typical details.
- Contractor shall verify and/or establish all existing conditions and dimensions at the site.
- If the existing field conditions do not permit the installation of the work in accordance with the details shown, the Contractor shall notify the Engineer immediately and provide a sketch of the condition with their proposed modification of the details given on the contract documents.
- Contractor shall provide for dewatering as required during excavation and construction.
- Where alterations involve the existing supporting structure, the Contractor shall provide shoring and protection required to ensure the structural integrity of the existing structure.
- Bracing, sheeting, shoring, etc., required to support existing buildings, sidewalks, utilities, etc., shall be designed by a professional engineer licensed in the State of New Jersey, engaged by the Contractor; Contractor to provide signed and sealed detailed shop drawings and calculations indicating all shoring work to be performed for submission and review.
- In no case shall heavy equipment be permitted closer than 8'-0" from any foundation wall. If it is necessary to operate such equipment closer than 8'-0" to the wall, the Contractor shall be the sole responsible party and, at their own expense, shall provide adequate supports or brace the wall to withstand the additional loads superimposed from such equipment.
- No blasting shall be permitted without written approval.

11. Testing & inspection is required of all construction delineated on the Structural drawings. The Owner shall employ a testing/inspection agency for the concrete and soil testing and inspections. The Contractor shall employ a testing/inspection agency for the Hilli anchor installation inspections. These agencies shall provide personnel with the following minimum qualifications:

- Certified by National Institute for Certification in Engineering Technologies (NICET), or other recognized comparable organization.
- For inspection, sampling, testing concrete: ACI Certified Concrete Field-Testing Technician, Grade I; and Construction Inspector, Level II.
- Submit periodic reports to Engineer during construction. Submit final inspection report summary for each division of work, certified by a licensed professional engineer, that testing & inspections were performed, and that work was performed in accordance with Contract Documents.

- Initial inspections made by either testing or inspection agency reveal that any portion of the work does not comply with the Contract Documents, additional tests, inspections, and necessary repairs will be made at the Contractor's expense.
- If differences occur within or between drawings and specifications regarding materials, strength, or quantities, the better material, higher strength, and greater quantity indicated, specified, or noted shall be provided.

14. For the addition to the SJTA West Maintenance Building, existing structural information, dimensions, and elevations were obtained from original design drawings dated January 1964 and drawings for the SJTA West Maintenance Building Addition dated February 25, 2013.

2.0 EXISTING CONDITIONS

- Verify and/or establish all existing conditions, locations, and dimensions of walls, slabs, framing, utilities, finishes, materials, and systems affecting the work. Notify the Engineer of any discrepancies from information indicated on contract documents prior to ordering materials. Verify clearances required for all new equipment, piping, ductwork, and related components.
- The structural work is based on documents of the existing construction referenced above. Verify and/or establish that existing building components conform to the original building documents. Examine the layout, elevations, member sizes, connection, details, etc. of the existing structure. Report any discrepancies with the original building construction documents to the Engineer before any affected work is performed.

3.0 SELECTIVE DEMOLITION

- Where building alterations involve supporting the existing structure, provide shoring and protection to ensure the structural integrity of the existing structure. Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain.
- The Contractor is responsible for determining all instances in which shoring is required. Shoring indicated in the Contract Documents may or may not constitute the extent of shoring required.
- Shoring required to support the existing structure shall be designed by a Professional Engineer licensed in the State of New Jersey, engaged by the Contractor. The Contractor to provide signed and sealed detailed shop drawings and calculations indicating all shoring work to be performed for submission and review.
- Selective Demolition Definitions:
  - Remove:** Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or reinstalled.
  - Remove and Salvage:** Detach from existing construction, in a manner to prevent damage, and deliver to Owner/G.C.
  - Remove and Reinstall:** Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
  - Existing to Remain:** Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- The Contractor shall protect the existing building during all selective demolition for the duration of the construction activities.
- Contractor is to coordinate with Architectural and MEP drawings to establish the extent of wall and slab removal.

- Coordinate size of openings with tolerances required for casework, stairs, door jambs, ducts, utilities, etc. Coordinate size of opening with ADA requirements, as required.
- Do not cut openings in beams, columns, walls, or footings without the approval of the Engineer before field cutting the opening.

4.0 EARTHWORK

- Engineered (controlled compacted) fill within the building area shall be constructed prior to footing excavation. See specifications for requirements of controlled compacted fill.
- Excavation shall be performed so as not to disturb existing adjacent buildings, streets and utility lines. Verify location of all utilities prior to commencement of work. Hand excavate around utilities as required.
- Backfill shall be brought up equally on each side of walls.

5.0 FOUNDATIONS

- Foundations have been designed and footing elevations established on assumptions made by CVM due to no Geotechnical Report available. Design assumptions must be verified/confirmed in the field by a Geotechnical Engineer.
- Footings shall bear on undisturbed stratum or engineered fill with an assumed minimum bearing capacity of 2,000 psf, which is required to be verified by a Geotechnical Engineer.
- Prior to footing concrete placement, the footing subgrade shall be approved by the inspecting engineer/geotechnical engineer. If conditions prove to be unacceptable at elevations shown, the excavation shall be lowered to acceptable subgrade material. Fill over-excavation with lean concrete (2500 psi).
- The bottom of external footings shall be a minimum of three (3) feet below finished grade, U.N.O.
- Slabs on ground shall bear on mechanically compacted soil capable of supporting 1000 psf. Drainage fill under slabs shall be compacted sand and gravel or crushed stone (6" minimum thickness).
- Contractor shall verify all existing field conditions that may affect the installation of the foundation system as shown prior to starting work.
- Provide Testing & Inspections for all soils, foundations and related work as required on sheet S200a.

6.0 CONCRETE

- Concrete shall be reinforced, detailed, and constructed in accordance with the Building Code Requirements for Structural Concrete (ACI 318-14) and the Manual of Standard Practice.
- Concrete shall have a minimum 28-day compressive strength as follows:

Type	f <sub>c</sub> (psi)	Air Entrainment (Y/N)
Footings	4,000	N
Foundation Walls	5,000	Y
Slabs on Grade	4,000	N

3. Reinforcing steel: ASTM A-615 Grade 60.

- All hooks on reinforcement bars shown in sections and details are to be standard hooks per ACI, unless noted otherwise.
- At the Contractor's option, all hooks on reinforcement bars shown in sections and details for #5 bars and smaller are permitted to be stirrup hooks if a continuous nosing bar is provided.

6. Fiber Reinforcement:

- Synthetic macro fiber complying with ASTM C1116, Type 3, to be placed in slabs on grade.
- For pumped concrete with fiber reinforcement, to avoid the potential of the concrete mix clogging the pump, it is recommended to use a 5" minimum diameter pump and pump line.
- The macro-synthetic fibers are to be added to the mix at the batch plant. Per fiber manufacturer's recommendations the fibers should be the last item added to the truck/mix.

7. Fiber Reinforcement Dosage Criteria:

- Polypropylene/polyethylene synthetic macro fiber complying with ASTM C1116 Type 3, minimum 2-inch length, having an aspect ratio 50 to 90 and meeting ICC-ES Acceptance Criteria for Polyolefin Chopped Strands for use according to AC-308.
  - Basis of Design
    - Euclid Chemical Company (The); Tuf-Strand SF
- Synthetic Macro Fiber Reinforcement
  - Measure, batch and mix per ASTM C94 and C1116
  - For 6" thick slabs-on-grade:
    - Use dosage that will provide minimum Re3 (R150) value of 22 +/- 3% per ASTM C1116 and C1609 in the specified concrete. In no case shall dosage rate be less than 4.0 pounds per cubic yard on concrete.

8. Placing of concrete shall not start until the placement of reinforcing has been approved by the Owner's inspection agency.

9. The following minimum concrete cover shall be provided for reinforcement placed in cast-in-place concrete (non-prestressed) U.N.O.:

- Concrete cast against and permanently exposed to earth: 3"
- Concrete exposed to earth or weather:
  - No. 6 through No. 18 bars: 2"
  - No. 5 bar, W31 or D31 wire, and smaller: 1.5"

10. Bonding agent shall be used where new concrete is placed against existing concrete. Epoxy bonding agent is required if joint will be exposed to moisture.

- Use the following cementitious materials, of the same type, brand, and source, throughout the Project:
  - Portland Cement: ASTM C150, Type I.
  - Fly Ash: ASTM C618, Class C. Limit percentage, by weight, to 25 percent.
  - Ground Granulated Blast-Furnace Slag: ASTM C989, Grade 100 or 120. Limit percentage, by weight, to 50 percent.

12. Use normal-weight, ASTM C33, Class 3S coarse aggregate or better, graded. Maximum aggregate size is ¾" nominal. Provide aggregates from a single source. Submit material test reports for the aggregate to include service record data indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.

- Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
  - Water-Reducing Admixture: ASTM C494, Type A.
  - Retarding Admixture: ASTM C494, Type B.
  - Water-Reducing and Retarding Admixture: ASTM C494, Type D.
  - Air-Entraining Admixtures: ASTM C260

14. Prepare concrete design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test date, or both, according to ACI 301. Proportion normal weight concrete mixtures as follows:

- 4,000 psi non-air entrained:
- Minimum Compressive Strength: 4000 psi at 28 days.
  - Maximum Water-Cementitious Materials Ratio: 0.45.
  - Slump Limit: 4 inches, plus or minus 1 inch.
  - Synthetic Macro-Fiber: Where req'd, uniformly disperse in concrete mixture at manufacturer's recommended rate, but not less than stated in these notes.

- 5,000 psi air entrained:
- Minimum Compressive Strength: 5000 psi at 28 days.
  - Maximum Water-Cementitious Materials Ratio: 0.40.
  - Slump Limit: 4 inches, plus or minus 1 inch.
  - Air Content: 6 percent, plus or minus 1.5 percent at point of delivery.

15. Contraction joint spacing in slab on grade is as follows U.N.O. on drawings:

- Contractor is to submit proposed layout for review by Engineer before placing slab on grade (not structural slab).
- Provide maximum spacing 2.5 x slab thickness (in feet) with a maximum aspect ratio of 1.5.

16. Coordinate all under-slab and in-slab utilities and floor penetrations with Civil, M/E/P, and Architectural drawings.

17. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:

- Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. If the pour is less than 5 cu. yd., obtain one composite sample minimum.
- Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
- Air Content: ASTM C 231, pressure method, for normal-weight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
- Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.
- Compression Test Specimens: ASTM C 31/C 31M.
  - Cast and laboratory cure three sets of cylinder specimens for each composite sample.
    - A set of cylinder specimens is defined as follows:
      - If the cylinder size is 6x12, the set shall consist of 2 cylinders.
      - If the cylinder size is 4x8, the set shall consist of 3 cylinders.
    - Compressive-Strength Tests: ASTM C 39/C 39M; one test set of laboratory-cured cylinder specimens at 7 days, one set of cylinder specimens at 28 days and hold one set of cylinder specimens to be tested at 56 days if the 28 day breaks are low.
      - A compressive-strength test shall be the average compressive strength from a set of cylinder specimens obtained from same composite sample and tested at age indicated.
  - Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- Test results shall be reported in writing to Engineer, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.

18. The following items must be submitted for review and approval by Engineer:

- Product Data: for each type of product indicated.
- Design Mixtures: For each concrete mixture. Indicate amounts of mixing water to be withheld for later addition at Project site.
- Material Test Reports: For aggregate, from a qualified testing agency, indicating compliance with requirements.
- Material Certificates: For each of the following, signed by manufacturers:
  - Cementitious materials
  - Admixtures
  - Steel reinforcement and accessories
  - Fiber reinforcement
- Documentation from synthetic macro fiber manufacturer showing that proposed fiber dosage will meet or exceed the specified Re3 (R150) value.
- Reinforcement Shop Drawings:
  - Placing drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material grade, bar schedules, bent bar diagrams, bar arrangement, splices and laps, and supports for concrete reinforcement.
  - Submit all drawings to Engineer for review prior to the start of fabrication or commencement of work.

7.0 STRUCTURAL STEEL

1. Fabrication and erection of structural steel shall conform to AISC 360-16, Fifteenth Edition of the AISC Steel Construction Manual (LRFD - Load and Resistance Factor Design), ANSI/AISC 360-16 Specification for Structural Steel Buildings, and ANSI/AISC 303-16 Code of Standard Practice, except Section 4.4.1.b of the Code which shall not be applicable to this project. Section 4.4.1.b of the Code shall not imply that the approval constitutes the owner's acceptance of all responsibility for the design adequacy of any detail configuration of connections developed by the fabricator as part of their preparation of these shop drawings.

- Structural Steel:
  - ASTM A-36 for Channels, Angles, and Plates (U.N.O.)
- Anchor Rods: ASTM F1554 (S1), Grade 55, weldable.
- Steel angles and plates, along with bolts and washers, in direct contact with exterior finish masonry and all exposed structural steel, shall be hot-dipped galvanized.

5. All long slots and oversized holes to be covered with 5/16" plate washers that are large enough to cover the entire slot, U.N.O. These plate washers shall have standard holes.

8.0 POST INSTALLED ANCHORS

A. General Requirements:

- Anchor capacity is dependent upon distance between adjacent anchors and proximity of anchors to the edge of concrete. Install anchors in accordance with spacing and edge clearances indicated on the drawings.
- Substitution requests for alternative products must be approved in writing by the Engineer prior to use. If the Contractor requests the use of a substitution for an anchor product, the Contractor shall provide signed and sealed calculations demonstrating the substitution can achieve the performance values of the specified anchor product and the design value is equal to or greater than the product specified on the Contract Documents. The Contractor shall also submit the ICC ESR showing compliance with the relevant building code. All anchor sizes and embedment depths must be evaluated and compared to the specified anchor product for the substitution to be reviewed and approved.
- All anchors shall assume the concrete is cracked, U.N.O.
- Anchor shall be installed by qualified personnel in accordance with the Contract Documents.
- The installation of post installed anchors shall be in accordance with the Manufacturer's Printed Installation Instructions (MPI).

6. Provide Testing & Inspections for post installed anchors and related work in compliance with ACI 305.4-11 and individual product ESRs. Refer to sheet S200a for additional information.

7. The Contractor shall arrange for an anchor manufacturer's representative to provide onsite installation training for all the anchors specified. The Engineer must receive documentation confirming that all the Contractor's personnel who install anchors are trained prior to the commencement of installing anchors.

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9.0 COLD FORMED METAL FRAMING

1. Fabricate cold-formed metal framing to comply with American Iron and Steel Institute "North American Specification for the Design of Cold-Formed Steel Structural Members" and "Standard for Cold-Formed Steel Framing - General Provisions" latest editions.

- All galvanized studs and/or joists, 12, 14, and 16 gauge, shall be formed from steel that corresponds to the requirements of ASTM A1003, with a minimum yield strength of 50,000 psi.
- All galvanized 18- and 20-gauge studs and/or joists and all galvanized track, bridging, and accessories shall be formed from steel that corresponds to the requirements of ASTM A1003, with a minimum yield strength of 33,000 psi.
- All galvanized studs, joists and accessories shall have a minimum G-60 coating in conformance with ASTM A1003/A653.

5. Prior to fabrication of framing, the Contractor shall submit fabrication and erection drawings to the Engineer for review.

6. Framing components may be preassembled into panels prior to erecting. Prefabricated panels shall be square with components attached in a manner as to prevent racking.

7. Axially loaded studs shall be installed in a manner which will assure that ends of the studs are positioned against the inside track web prior to stud and track attachment.

8. Studs shall be plumbed, aligned, and securely attached to the flanges or webs of both upper and lower tracks, unless noted otherwise.

9. All stud ends shall be nested tight in track, or tied to adjacent framing members as detailed, except at deflection track detail.

10. Punched holes in studs occurring at connections or track locations shall be capped with an 18" long section of track fastened to the stud with a minimum of (6) #10 self-drilling screws.

11. All headers and sills shall be continuous members constructed with unpunched studs or tracks.

12. Field cuts shall be made with saws and shall be square and true. Torch cutting of framing members shall not be permitted.

13. Framing members shall be held in place until properly fastened. Temporary bracing shall be provided until erection is complete and all attached adjacent framing is complete.

14. Wall stud bridging shall be attached in a manner to prevent stud rotation. Bridging rods shall be spaced according to the following schedule:

- Walls less than 5'-0" in height: bridging not required.
- Walls up to 8'-0" in height: one row of bridging at mid-height.
- Walls over 8'-0" in height: bridging rows equally spaced, 4'-0" O.C. maximum.

15. Framed wall openings shall include headers and supporting studs as shown on the plans.

16. Splices in axially loaded studs are not permitted.

17. Joists shall be located directly over bearing studs or a load distribution member to be provided at the top track.

18. Welded connections shall be wire brushed and coated with a zinc rich paint, and shall comply with American Welding Society "Structural Welding Code (D.1.1)" and "Specifications for Welding Sheet Steel in Structures (D1.3)" latest editions.

19. Screws to conform to SAE J78, unless otherwise noted.

20. All fasteners connecting cold-formed members shall be a minimum of (2) No. 10 screws (0.19-inch diameter) at each connection, unless specifically detailed. All screws shall extend a minimum of three threads beyond the last ply penetrated. Wire-tying is not permitted. Screws shall be spaced not less than 3/4 inch on center and shall be a minimum of 3/4 from the edge of cold-formed surfaces. All studs shall be secured to tracks with one screw through each flange except where noted.

21. All fasteners connecting cold-formed members to concrete shall be HILTI X-U Powder Actuated Fasteners (PAF) of 0.157 inch diameter (unless noted otherwise) with the following criteria:

- Spacing requirements for PAFs into concrete:
  - Minimum spacing distance = 4"
  - Minimum edge distance = 3"
- PAF embedment = 1.25"
- Fasten PAF into concrete with low-velocity fasteners only.
- Provide multiple fasteners for any attachment unless noted otherwise.

10.0 SHEATHING AND WOOD DECKING

1. Plywood shall be identified with the APA grade-trademark of the American Plywood Association and shall be installed in accordance with the project specifications.

2. Plywood face grain shall be perpendicular to supports. Joints in plywood are to be staggered. Nailing and screwing of plywood floor/roof diaphragms shall comply with APA requirements, and unless noted otherwise, fasteners are to conform to Fastening Schedules Table 2304.10.1 of IBC 2018.

3. Plywood for roof sheathing shall be minimum 3/4" and each shall conform to APA PS-1 rated sheathing, 32/16, exterior, 48" x 96" plywood, and shall be two span continuous. Provide lumber blocking at edge supports as indicated, otherwise, use panel edge clips, tongue and groove plywood.

4. Plywood for roof sheathing shall be minimum 3/4" and each shall conform to APA PS-1 rated sheathing, 32/16, exterior, 48" x 96" plywood, and shall be two span continuous. Provide lumber blocking at edge supports as indicated, otherwise, use panel edge clips, tongue and groove plywood.

5. Gypsum sheathing on exterior walls to be a minimum of 5/8" thick (U.N.O.). Installation of gypsum sheathing shall conform to IBC 2018 and ASTM Standard C1396. Fasteners shall not be less than 3/8" from all edges of gypsum and studs, blocking, and plates.

6. Concrete shall have a minimum age of 21 days at the time of anchor installation.

7. Concrete temperature at time of anchor installation shall be at least 50 degrees F.

8. Moisture condition of concrete at the time of installation shall be considered "dry".

9. All holes must be hammer drilled, no core drilling unless approved by the Engineer. If core drilling is approved, the hole must be intentionally roughened using the manufacturer's recommended roughening drill bit (Hilti Roughening tool, TE-YRT).

11.0 DESIGN LOADS

Dead: Dead loads vary based on actual building construction. Refer to complete set of Contract Documents for determining dead loads

Live: Typical rooms: 100 psf

Roof Live: 20 psf

Snow: Roof Snow: 20 psf

Ground Snow Load - P<sub>g</sub>: 20 psf

Flat-Roof Snow Load - P<sub>f</sub>: 14 psf

Exposure Factor - C<sub>e</sub>: 1.0

Thermal Factor - C<sub>t</sub>: 1.0

S

**STRUCTURAL TESTING & INSPECTION NOTES:**

1. Refer to General Notes for additional information regarding testing and inspection.
2. Continuous Inspection is defined as "the full-time observation of work requiring inspection by an approved Inspector who is present in the area where the work is being performed." When Continuous inspection is required, 100% of the work must be inspected and it must be inspected as the work is being performed.
3. Periodic Inspection is defined as "the part-time or intermittent observation of work requiring inspection by an approved Inspector who is present in the area where the work has been or is being performed and at the completion of the work." When periodic inspection is indicated, inspection of less than 100% of the work may be acceptable for certain items.
4. Provide Continuous or Periodic Inspections for the following items.
5. Provide Continuous or Periodic Inspections for the following Adhesive Anchor items, as required by ESR-3187 (Hilti HIT-HY 200), ESR-4143 and ESR-4144 (Hilti HIT-HY 270), and ACI 308.4R-11. The Inspector or Hilti Representative, engaged by the Contractor, must verify the initial installations of each type and size of adhesive anchor by construction personnel on site. Subsequent installations of the same anchor type and size by the same construction personnel are permitted to be performed in the absence of the inspector. Any change in the anchor product being installed or the personnel performing the installation requires an initial inspection.
6. Any work which has been covered or otherwise made inaccessible prior to review by the Inspector is subject to removal or exposure, at no additional cost to the Owner.

1

**TESTING & INSPECTION OF SOILS**

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	-	X
2. Verify excavations are extended to proper depth and have reached proper material.	-	X
3. Perform classification and testing of compacted fill materials.	-	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	-
5. Prior to placement of compacted fill, inspect subgrade and verify that the site has been prepared properly.	-	X

**TESTING & INSPECTION OF CONCRETE CONSTRUCTION**

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1. Inspection of all reinforcing steel, and verify placement. Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters.	-	X
2. Inspect anchors cast in concrete.	-	X
3. Inspect anchors post-installed in hardened concrete members: <sup>(B)</sup>		
a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads.	X	-
b. Mechanical anchors and adhesive anchors not defined in section a above.	-	X
4. Verify use of required design mix.	-	X
5. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	-
6. Inspect concrete placement for proper application techniques.	X	-
7. Verify maintenance of specified curing temperature and techniques.	-	X
8. Inspect formwork for shape, location, and dimensions of the concrete member being formed.	-	X

<sup>(B)</sup> Specific requirements for inspection shall be included in the research report for the anchor issued by an approved source. Where specific requirements are not provided, inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

**INSPECTION & QUALITY ASSURANCE OF ADHESIVE ANCHORS INSTALLED IN HARDENED CONCRETE PER ACI 308.4R-11, ESR-3187 (Hilti HIT-HY 200),**

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1. Anchor type.		X
2. Anchor dimensions.		X
3. Concrete type.		X
4. Concrete compressive strength.		X
5. Adhesive identification and expiration date.		X
6. Hole dimensions.		X
7. Hole cleaning procedures.		X
8. Anchor spacing.		X
9. Edge distances.		X
10. Concrete thickness.		X
11. Anchor embedment.		X
12. Installation torque and adherence to the manufacturer's printed installation instructions.		X

**TESTING & INSPECTION & QUALITY ASSURANCE OF ADHESIVE ANCHORS INSTALLED IN CONCRETE MASONRY PER ESR-4143 & ESR-4144 (Hilti HIT-HY 270)**

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1. Anchor type.		X
2. Anchor dimensions.		X
3. Masonry type.		X
4. Masonry compressive strength.		X
5. Adhesive identification and expiration date.		X
6. Hole dimensions.		X
7. Hole cleaning procedures.		X
8. Anchor spacing.		X
9. Edge distances.		X
10. Masonry wall thickness.		X
11. Anchor embedment.		X
12. Base material temperature.		X
13. Installation torque and adherence to the manufacturer's printed installation instructions.		X

**CONSULTANT:**



**AND**  
YOUR GOALS. OUR MISSION.

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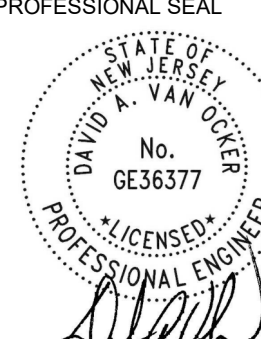
**SUB-CONSULTANT:**




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610-989-3800 - www.cvmprofessional.com

DESIGNED BY:  
DRAWN BY: AJC  
CHECKED BY: EMJ  
APPROVED BY: LRS

**PROFESSIONAL SEAL**

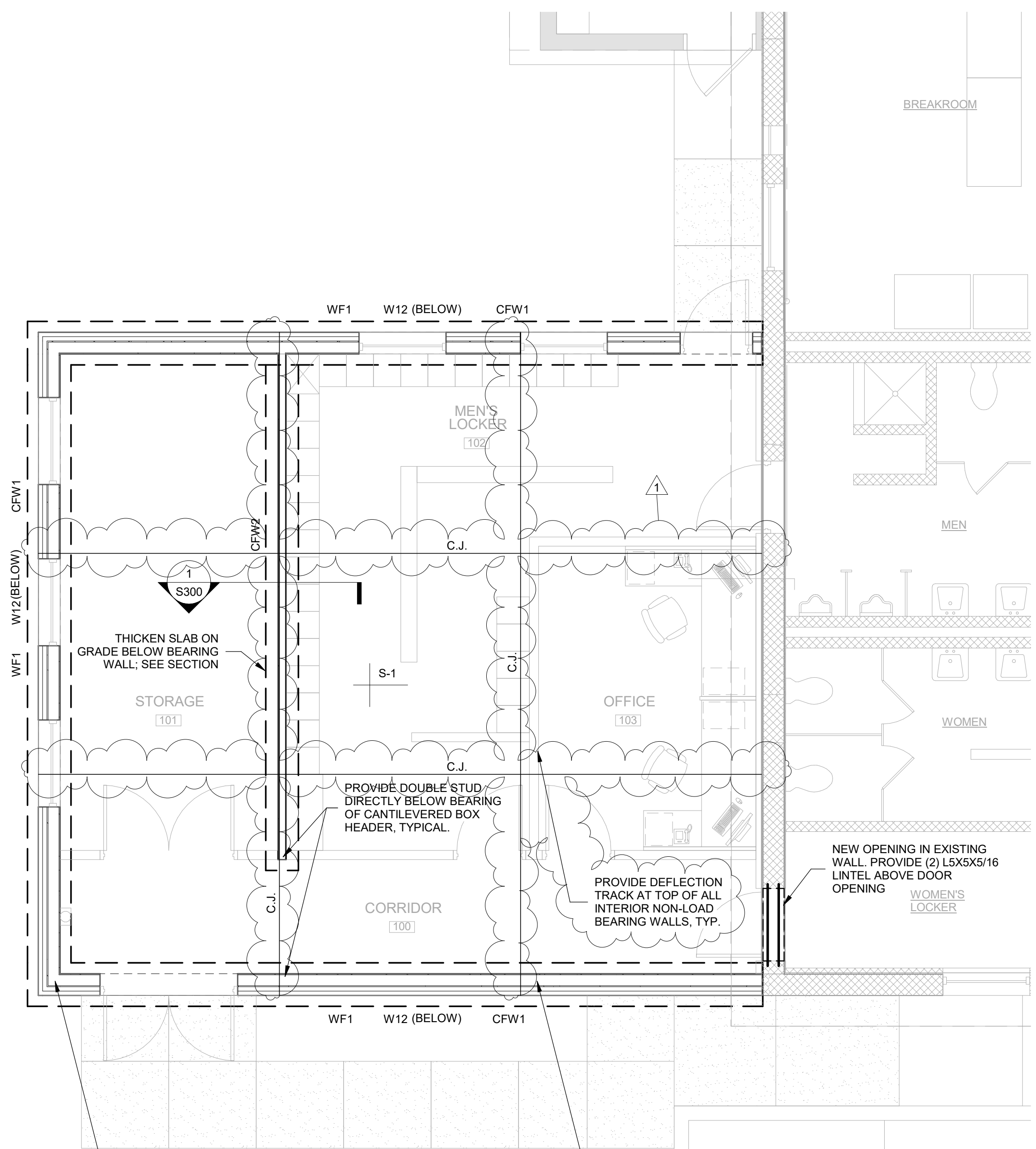


REVISION NO.	REVISION DATE	DESCRIPTIONS
1	09/09/2021	ADDENDUM #1



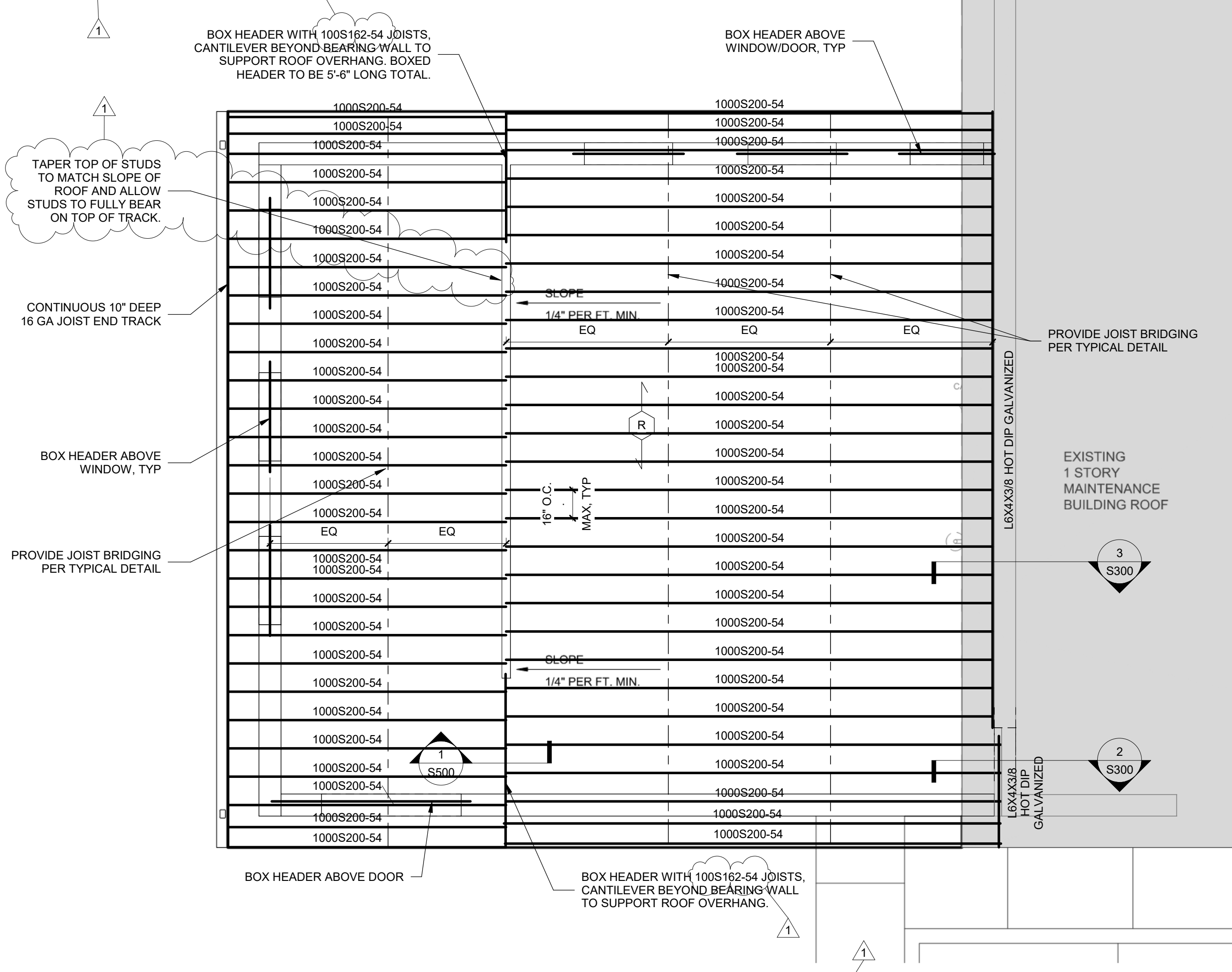
**SOUTH JERSEY TRANSPORTATION AUTHORITY**  
FARLEY SERVICE PLAZA  
P.O. BOX 351  
HAMMONTON, NJ 08037  
(609) 965 - 6060

PROJECT TITLE	ATLANTIC CITY EXPRESSWAY 2021 WEST MAINTENANCE ADDITION PROJECT WINSLOW TOWNSHIP, CAMDEN COUNTY, N.J.		DRAWING NO.	<b>S200a</b>
SHEET TITLE	STRUCTURAL TESTING & INSPECTIONS		SHEET NO.	
SCALE	12" = 1'-0"	DATE	09/01/2021	



**Cold-Formed Metal Framing Legend**

600S162-54	6" X 1 5/8" X 16 GA.
1000S200-54	10" X 2" X 16 GA.
362S162-54	3.5/8" X 1 5/8" X 16 GA.
100S162-54	10" X 1 5/8" X 16 GA.



PROVIDE SIMPSON S/HDS8S HOLD DOWN, OR APPROVED EQUAL, AT EACH CORNER AND AT EACH JAMB STUD. HOLD DOWN TO BE ATTACHED TO DOUBLE STUD FOLLOWING MANUF WRITTEN INSTRUCTIONS. FASTEN TO CONCRETE WITH 7/8" Ø ANCHOR BOLT WITH 7/8" EMBED IN HILTI HY-200 ADHESIVE.

PROVIDE 1/2" Ø DRILL AND EPOXY ANCHOR WITH 4 1/2" EMBED IN HILTI HY-200 ADHESIVE @ 4' - 0" O.C. TO CONNECT BOTTOM TRACK TO CONCRETE SLAB AT ALL EXTERIOR WALLS.

ALL JOISTS ARE DESIGNED TO SUPPORT THE WEIGHT OF THE TWO PROPOSED UNIT HEATERS WITH A WEIGHT OF 60 LBS PER UNIT. IT IS OUR UNDERSTANDING THE UNIT HEATERS WILL BE HUNG BY THREADED RODS SUPPORTED BY UNISTRUT CONNECTED TO THE ROOF JOISTS. GC TO SEND CONNECTION DETAIL AND OPERATING WEIGHT OF APPROVED UNITS TO ENGINEER FOR REVIEW AND APPROVAL. UNISTRUT TO CONNECT TO WEB OF JOISTS, NOT BOTTOM FLANGE.

**1 FOUNDATION PLAN**  
S201 1/4" = 1'-0"



**2 ROOF PLAN**  
S201 1/4" = 1'-0"



- NOTES:
- DATUM EL. 0' - 0" IS REFERENCED AS TOP OF EXISTING SLAB IN ADJACENT BUILDING.
  - TOP OF SLAB ELEVATION IS AT DATUM UNLESS NOTED THUS ON PLAN FROM DATUM.
  - TOP OF FOOTING ELEVATION IS 3' - 0" BELOW DATUM UNLESS NOTED THUS ( ).
  - TOP OF CONCRETE WALL ELEVATION IS 1' - 0" BELOW DATUM UNLESS NOTED < > .
  - WF1 DENOTES REINFORCED CONCRETE WALL FOOTING. SIZE AND REINFORCING PER TYPICAL DETAIL.
  - C.J. DENOTES CONTRACTION JOINT. SEE TYPICAL DETAILS ON SHEET S300.
  - SEE SHEET S300 FOR TYPICAL FOUNDATION DETAILS.
  - W12 DENOTES REINFORCED CONCRETE WALL. SIZE AND REINFORCING PER TYPICAL DETAIL.
  - S-1 DENOTES 6" THICK SLAB-ON-GRADE, REINFORCED W/ SYNTHETIC FIBER REINFORCEMENT, DOSAGE AS SHOWN IN GENERAL NOTES.
  - CFW1 DENOTES COLD FORMED METAL FRAMED BEARING WALL WITH 600S162-54 STUDS AT 16" O.C.
  - CFW2 DENOTES COLD FORMED METAL FRAMED BEARING WALL WITH 362S162-54 STUDS AT 16" O.C.
  - SEE SHEET S500 FOR TYPICAL COLD FORMED METAL FRAMING DETAILS.
  - REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
  - SEE SHEET S200 FOR GENERAL NOTES.
  - SEE SHEET S200a FOR TESTING & INSPECTIONS.

- NOTES:
- TOP OF ROOF JOIST ELEVATION SLOPES; SEE ARCH DWGS.
  - (R) DENOTES SPAN OF 3/4" FRTW APA STRUCTURAL 1 RATED PLYWOOD SHEATHING.
  - SLOPE DENOTES SLOPE TO LOW POINT.
  - SEE SHEET S500 FOR COLD FORMED METAL FRAMING TYPICAL DETAILS
  - SEE SHEET S200 FOR GENERAL NOTES.
  - SEE SHEET S200a FOR TESTING & INSPECTIONS.
  - REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.

**CONSULTANT:**

1700 MARKET STREET, SUITE 3110  
PHILADELPHIA, PA 19103  
TEL 215-262-7850  
FAX 215-627-3459  
www.andmassociates.com

**SUB-CONSULTANT:**

1002 West 9th Avenue, King of Prussia, PA 19406  
610-989-3800 - www.cvmprofessional.com

DESIGNED BY:  
DRAWN BY: AJC  
CHECKED BY: EMJ  
APPROVED BY: LRS

**PROFESSIONAL SEAL**

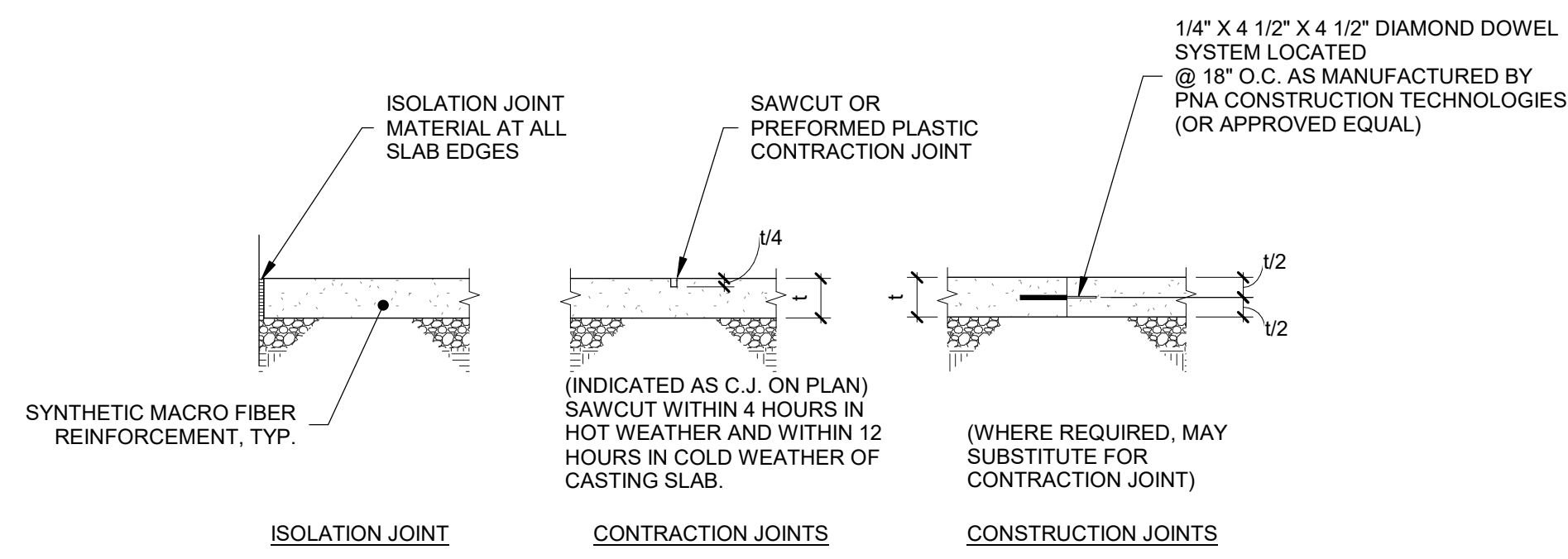
REVISION NO.	REVISION DATE	DESCRIPTIONS
1	09/09/2021	ADDENDUM #1



**SOUTH JERSEY TRANSPORTATION AUTHORITY**  
FARLEY SERVICE PLAZA  
P.O. BOX 351  
HAMMONTON, NJ 08037  
(609) 965 - 6060

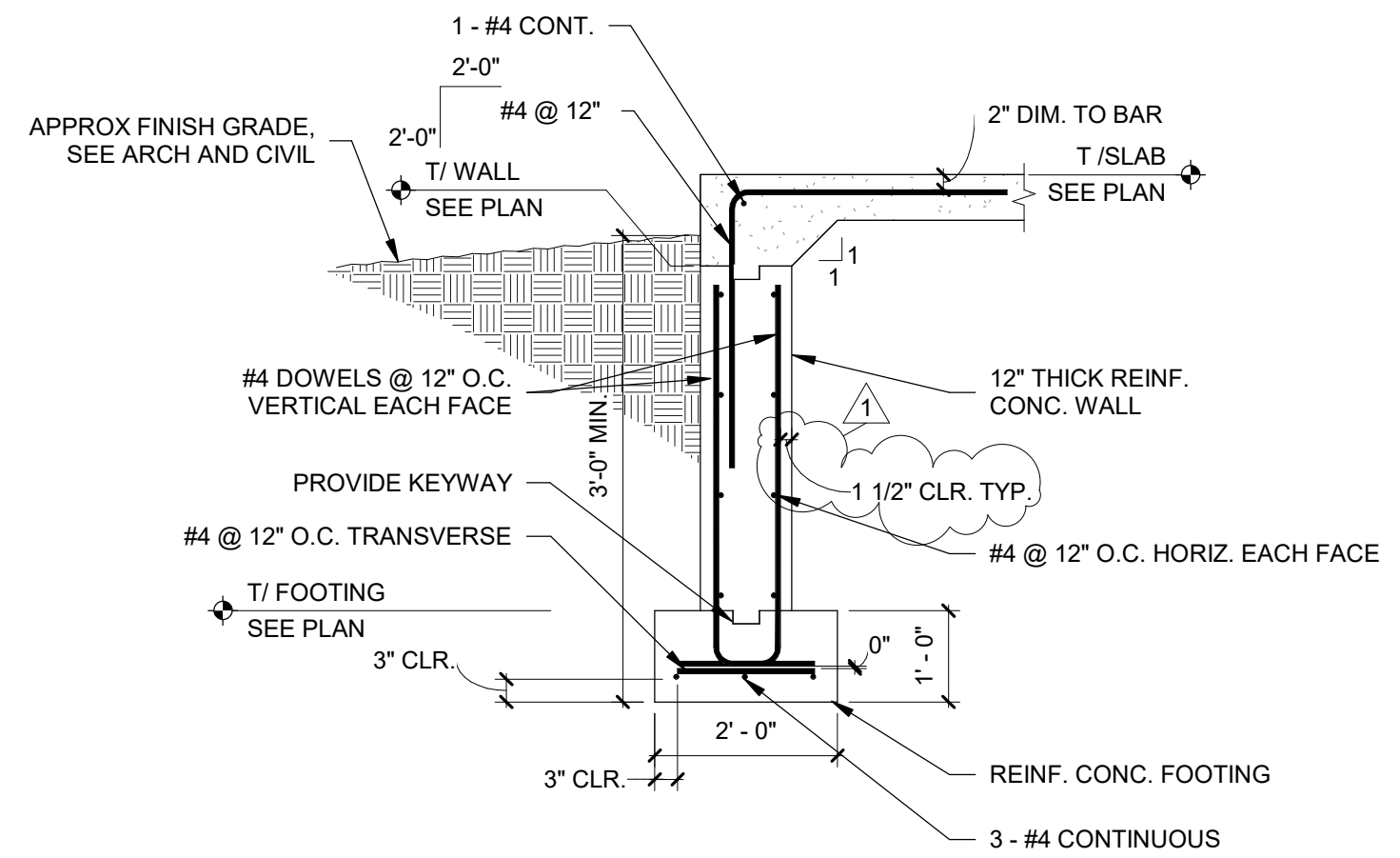
PROJECT TITLE	ATLANTIC CITY EXPRESSWAY 2021 WEST MAINTENANCE ADDITION PROJECT WINSLOW TOWNSHIP, CAMDEN COUNTY, N.J.	
SHEET TITLE	NEW FOUNDATION & FRAMING PLANS	
SCALE	As indicated	DATE 09/01/2021

DRAWING NO.  
**S201**  
SHEET NO.



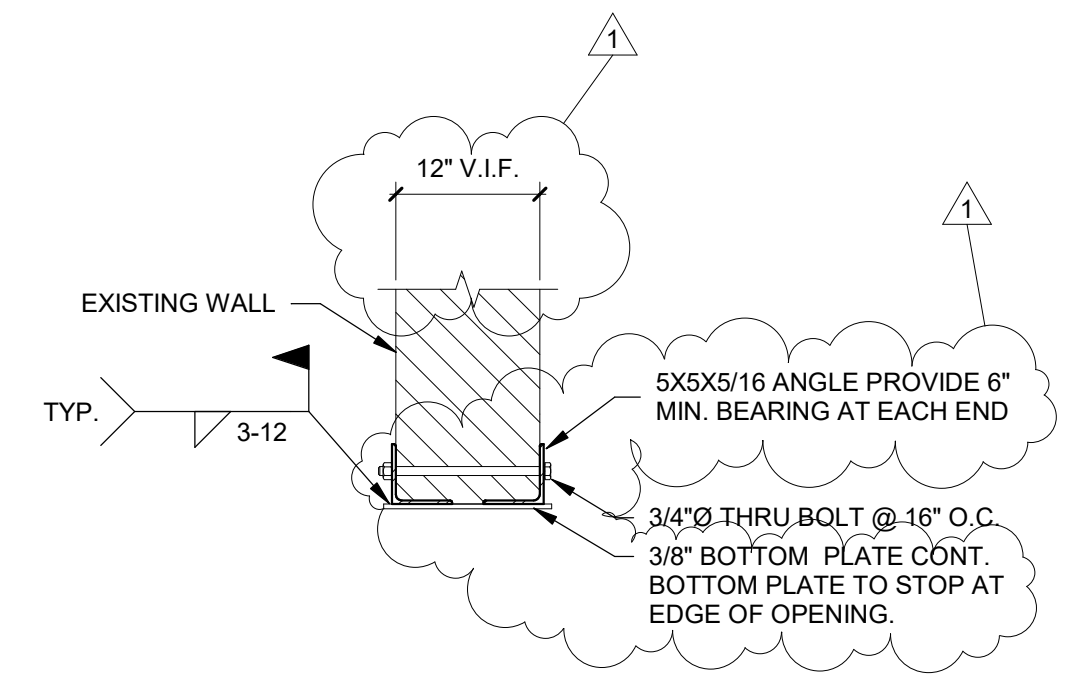
**A SLAB ON GRADE JOINT DETAILS**

NOTE: W.W.R. IS NOT REQUIRED WHERE SYNTHETIC MACRO FIBER REINFORCEMENT IS PROVIDED PER THE SPECIFICATIONS.



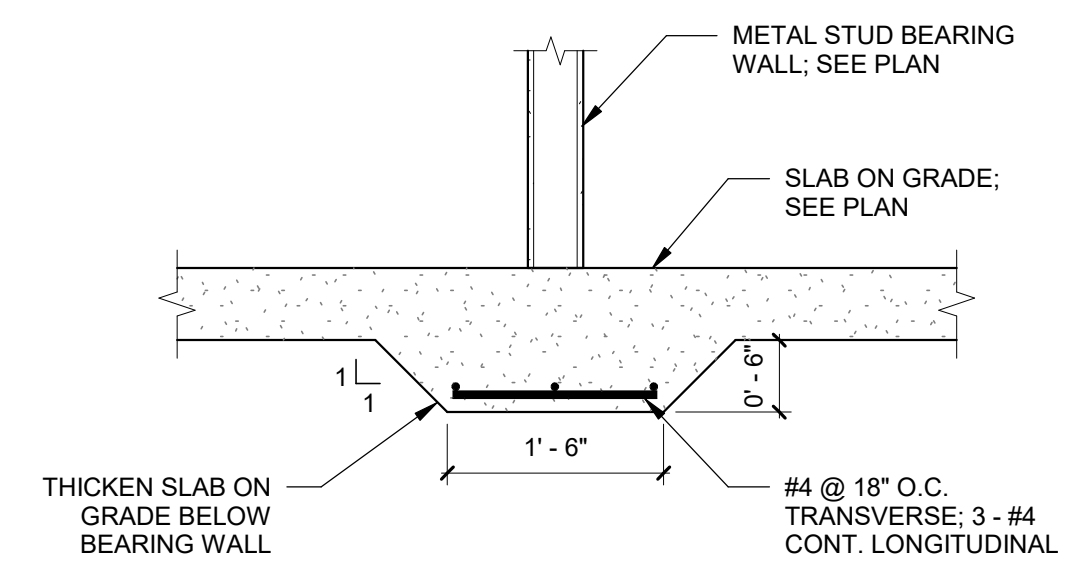
**B WALL FOOTING DETAIL**

NOTE: WALL FOOTING TO BE CENTERED ON WALL U.N.O.



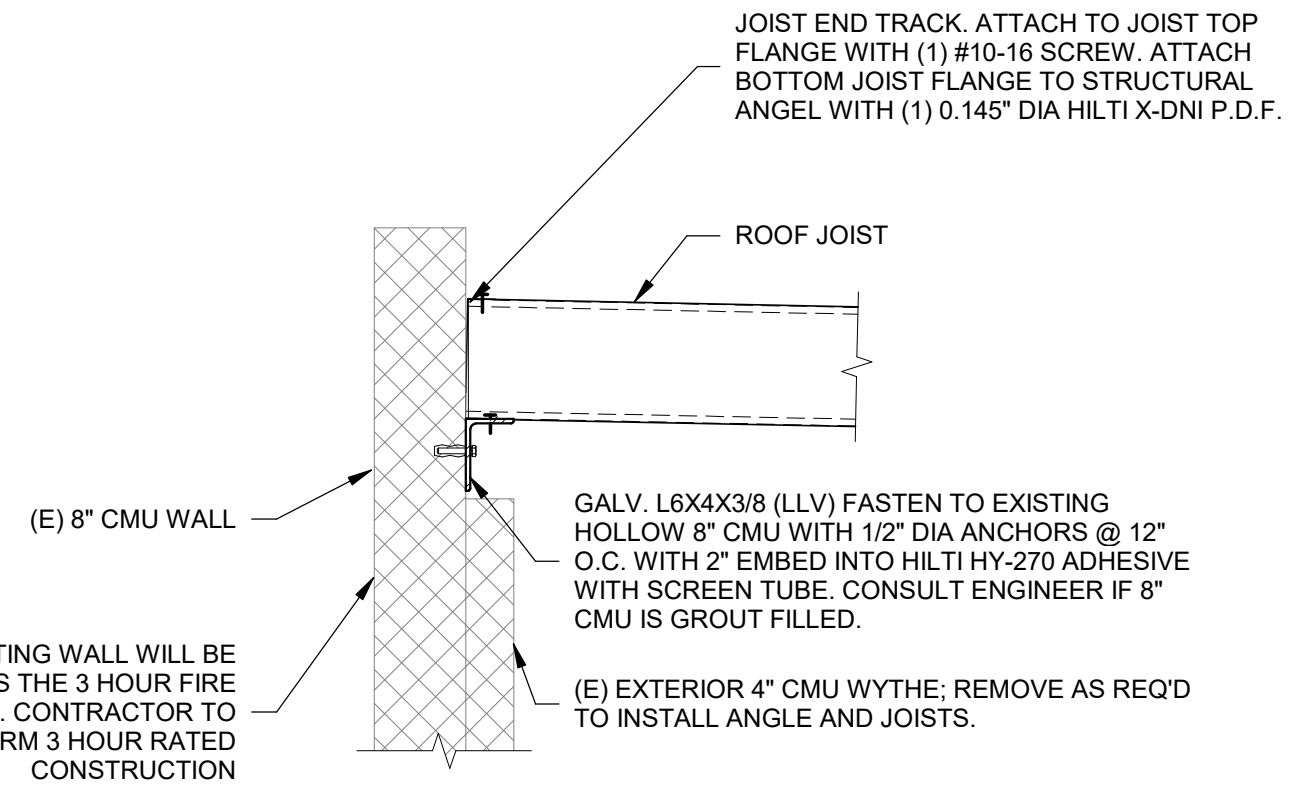
**C TYPICAL LINTEL DETAIL**

NOTE: PROVIDE TEMPORARY SHORING FOR EXISTING MASONRY ABOVE AS REQUIRED



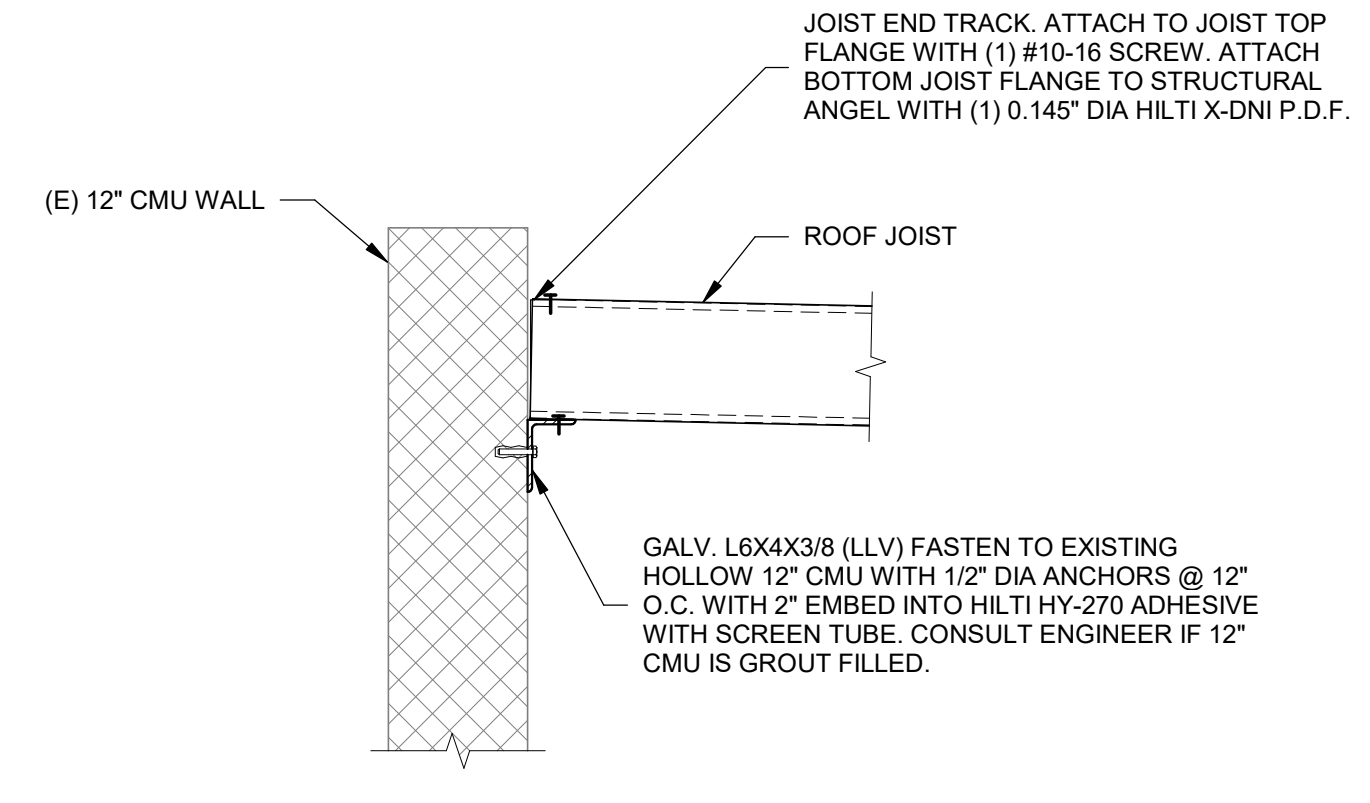
**1 SECTION**

S300



**2 SECTION**

S300



**3 SECTION**

S300

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PHILADELPHIA, PA 19103  
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SUB-CONSULTANT:

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DESIGNED BY:  
DRAWN BY: AJC  
CHECKED BY: EMJ  
APPROVED BY: LRS

PROFESSIONAL SEAL

DAVID A. VAN DYKE  
No. GE36377  
LICENSED PROFESSIONAL ENGINEER

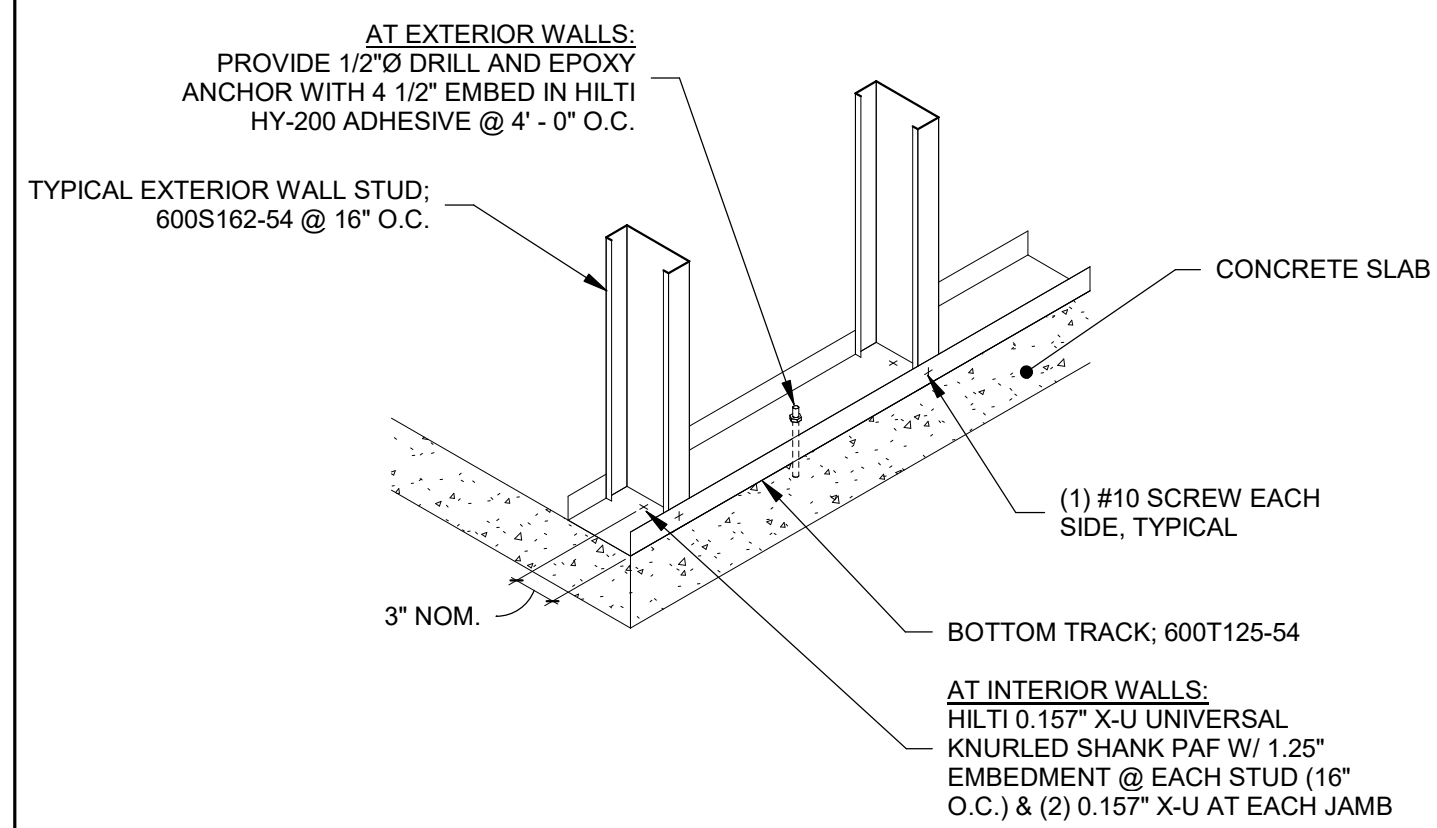
REVISION NO.	REVISION DATE	DESCRIPTIONS
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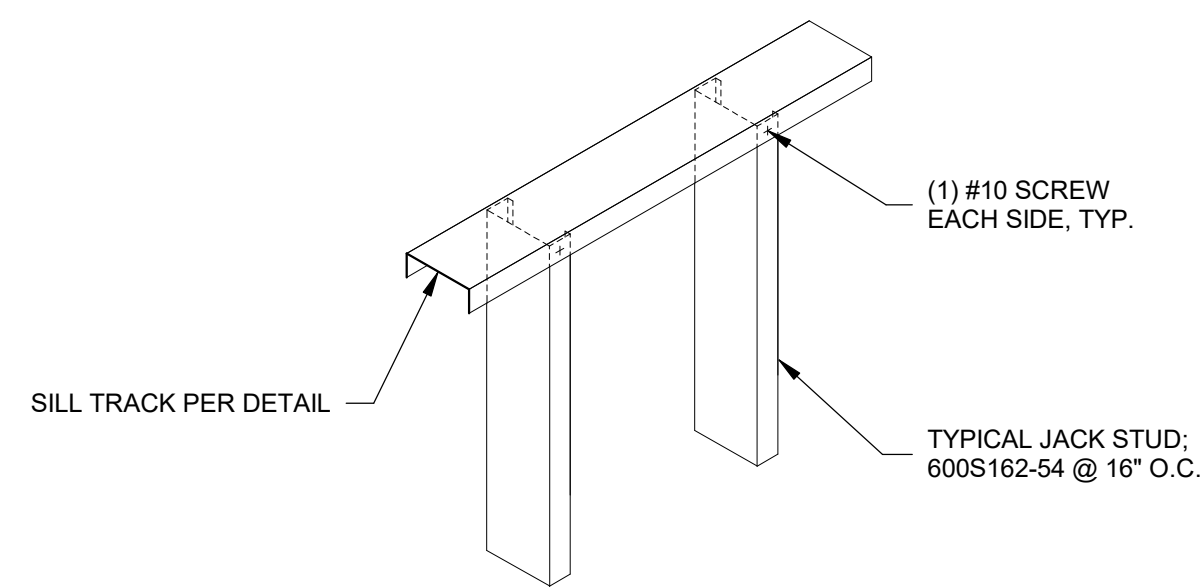
SOUTH JERSEY TRANSPORTATION AUTHORITY  
FARLEY SERVICE PLAZA  
P.O. BOX 351  
HAMMONTON, NJ 08037  
(609) 965 - 6060

PROJECT TITLE	ATLANTIC CITY EXPRESSWAY 2021 WEST MAINTENANCE ADDITION PROJECT WINSLOW TOWNSHIP, CAMDEN COUNTY, N.J.	
SHEET TITLE	FOUNDATION AND MASONRY DETAILS	
SCALE	As indicated	DATE 09/01/2021

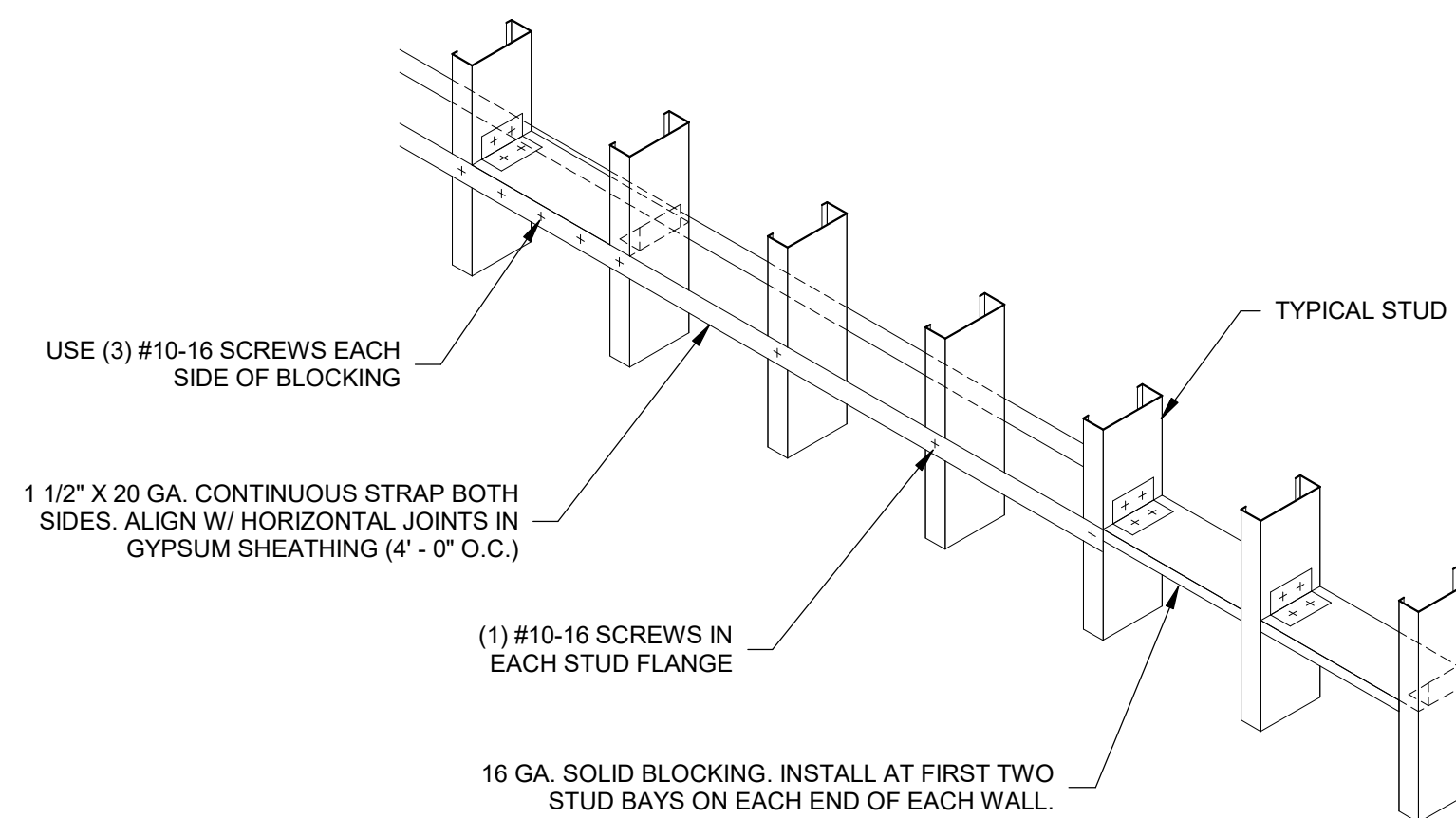
DRAWING NO.  
**S300**  
SHEET NO.



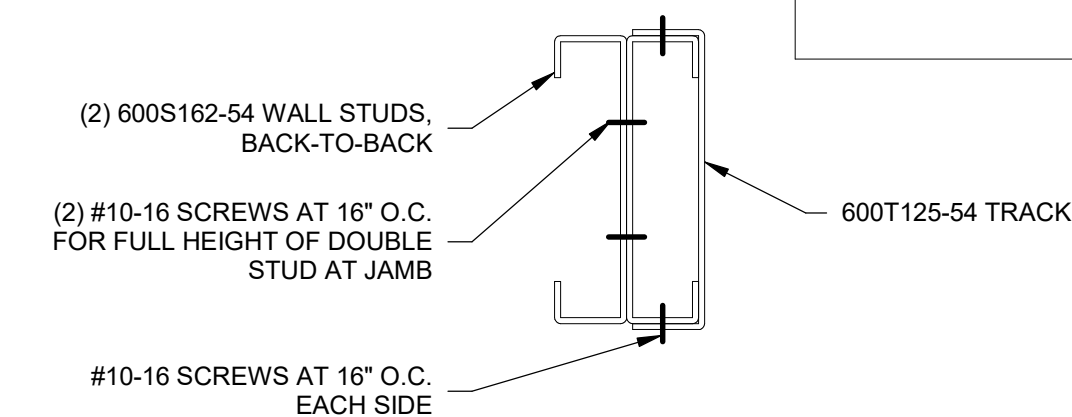
**A** STUD TO BOTTOM TRACK



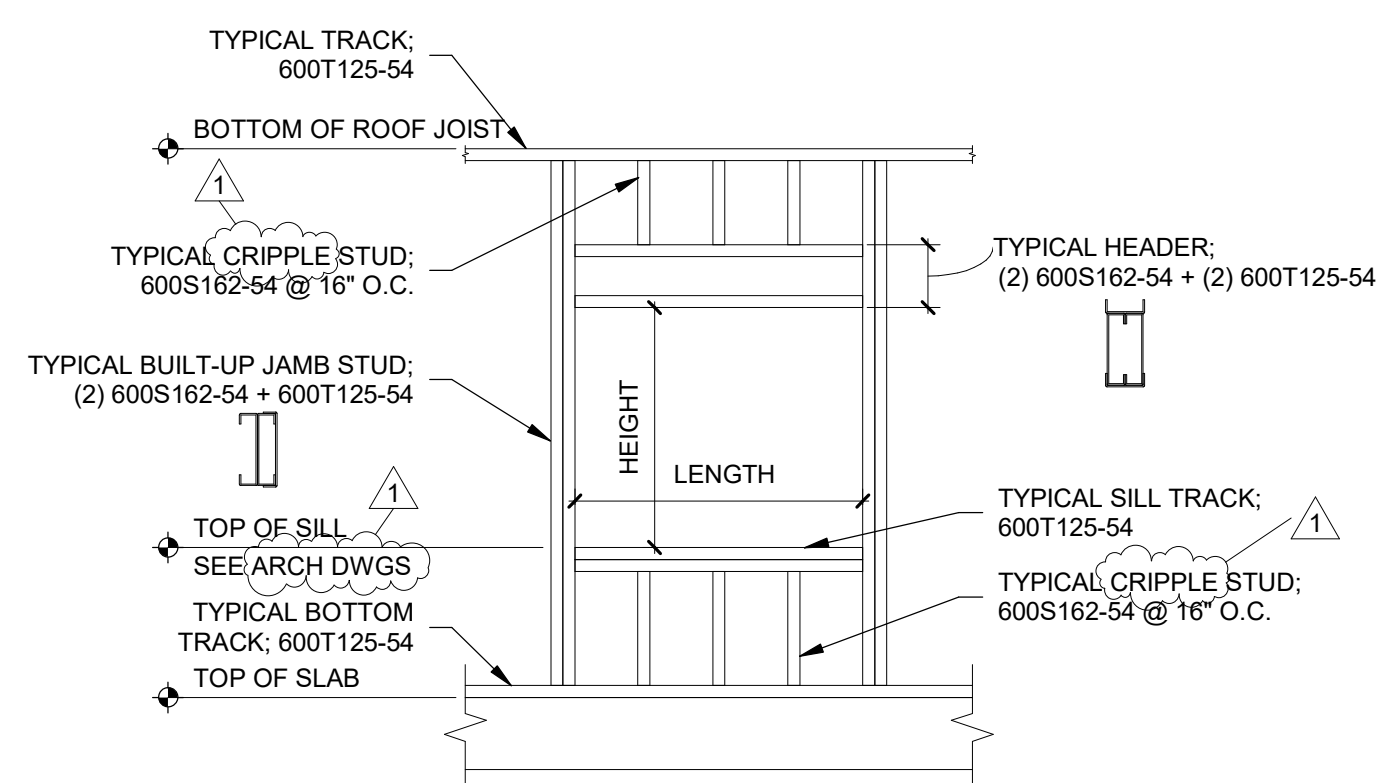
**B** STUD TO SILL TRACK



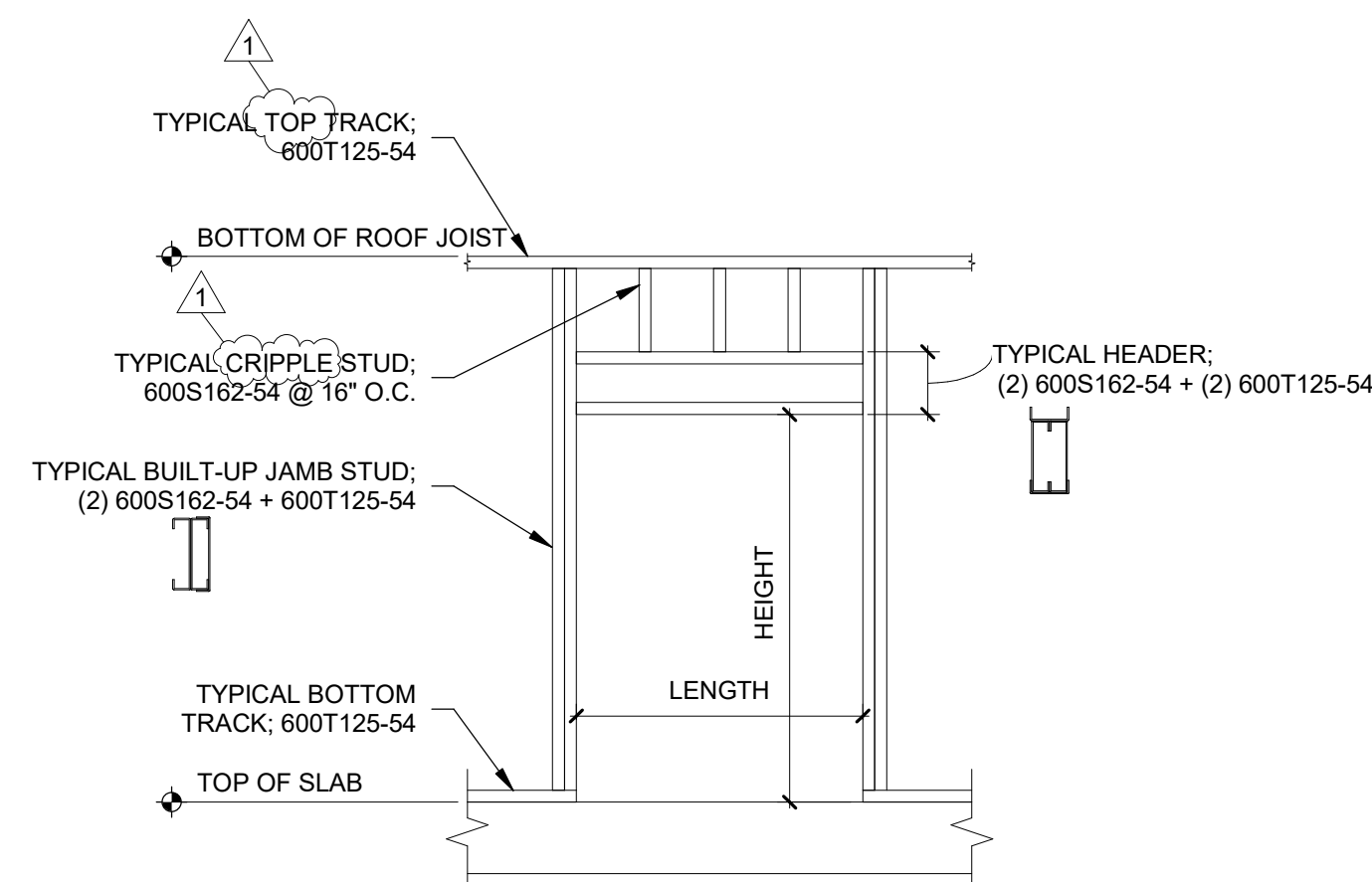
**C** WALL STUD BRIDGING AND BLOCKING



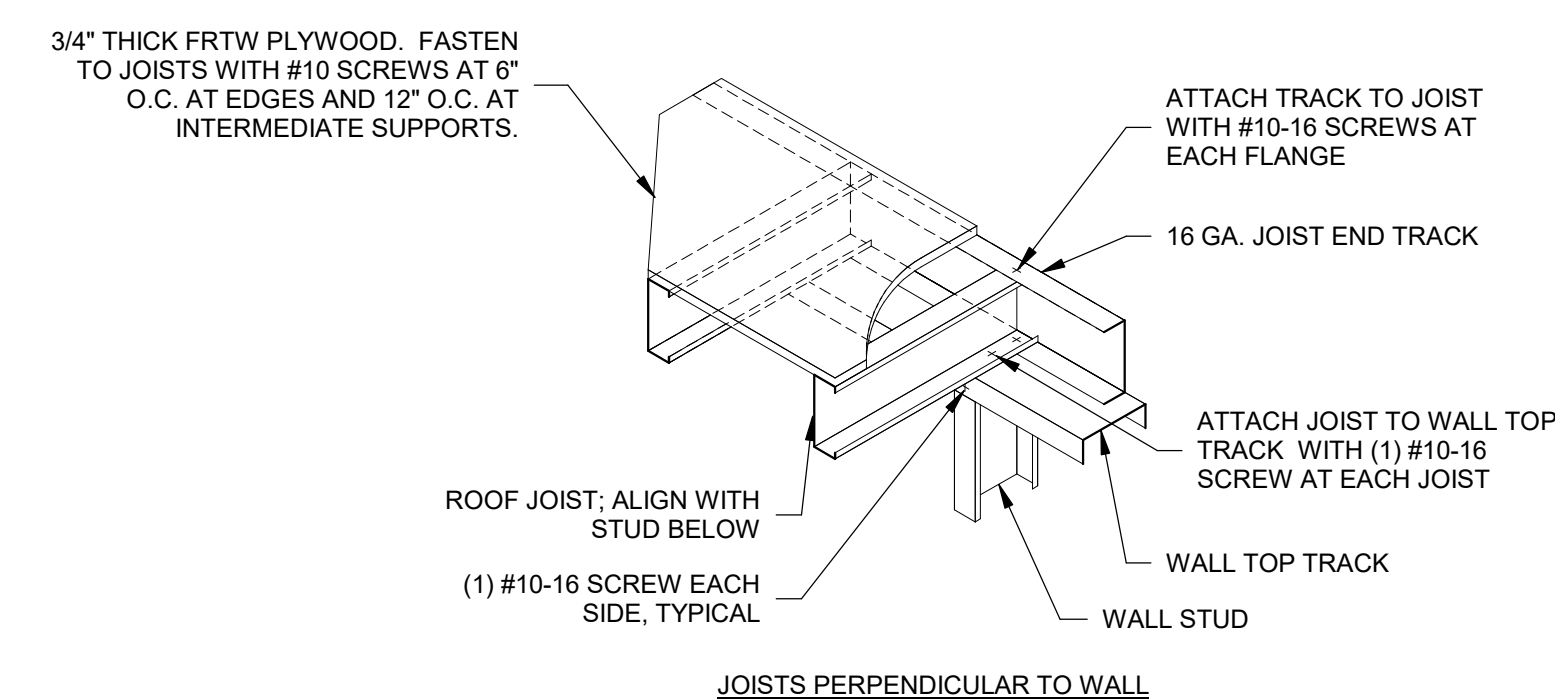
**D** BUILT-UP JAMB STUD PLAN DETAIL



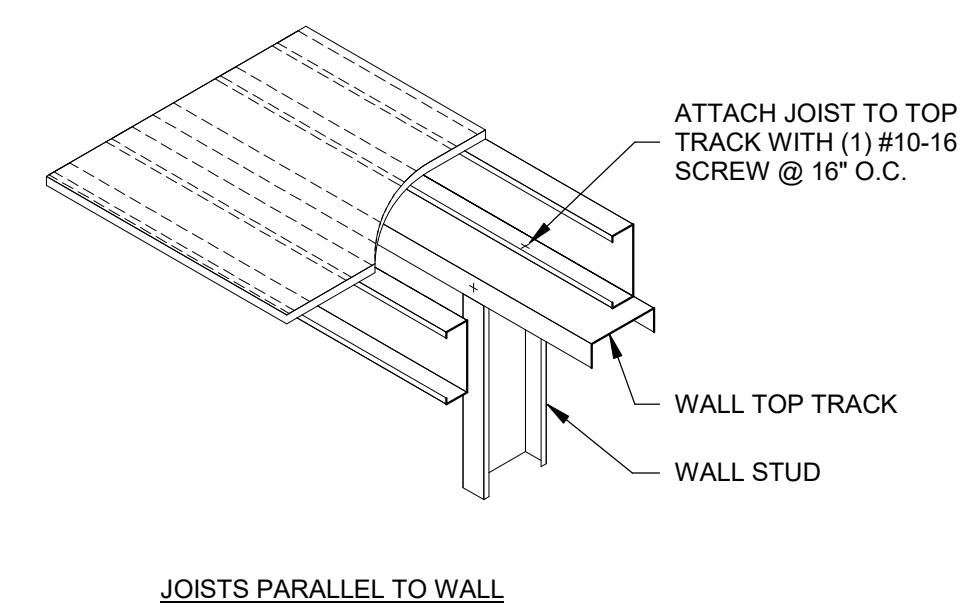
**E** EXTERIOR WALL WINDOW OPENINGS



**F** EXTERIOR WALL DOOR OPENINGS

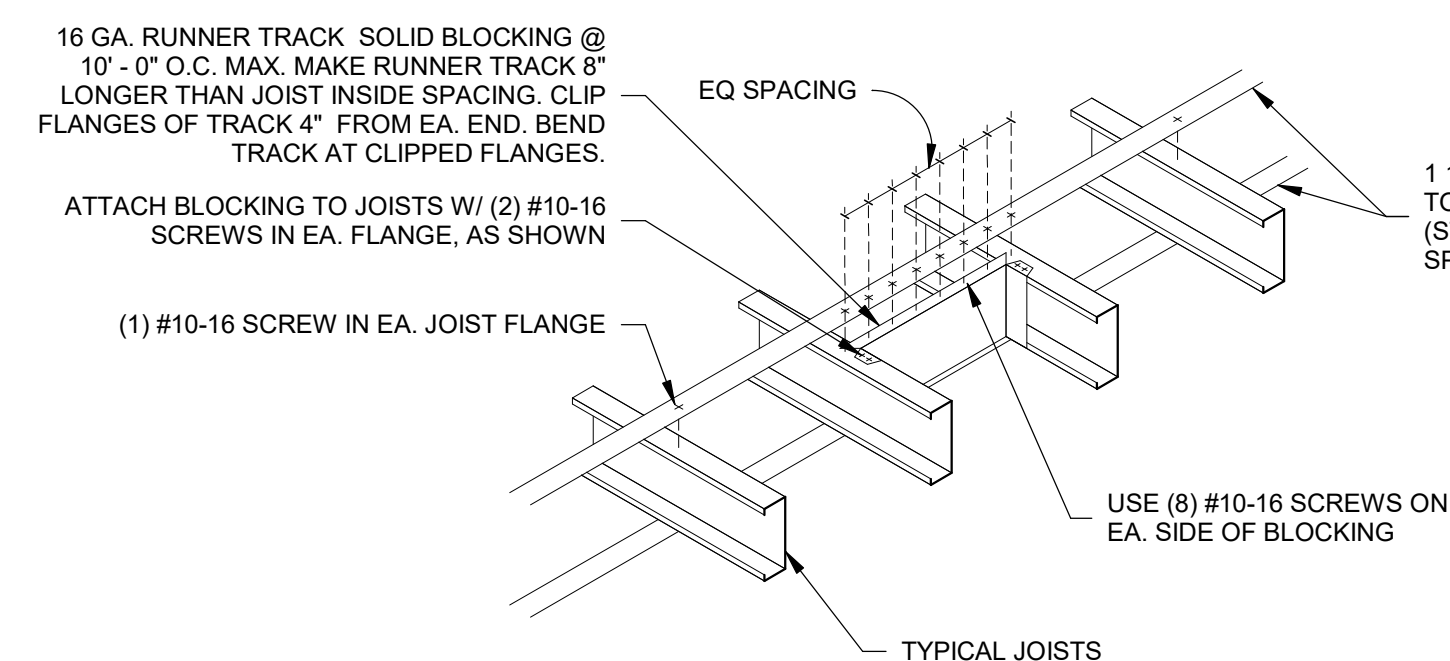


**G** JOIST TO WALL CONNECTION



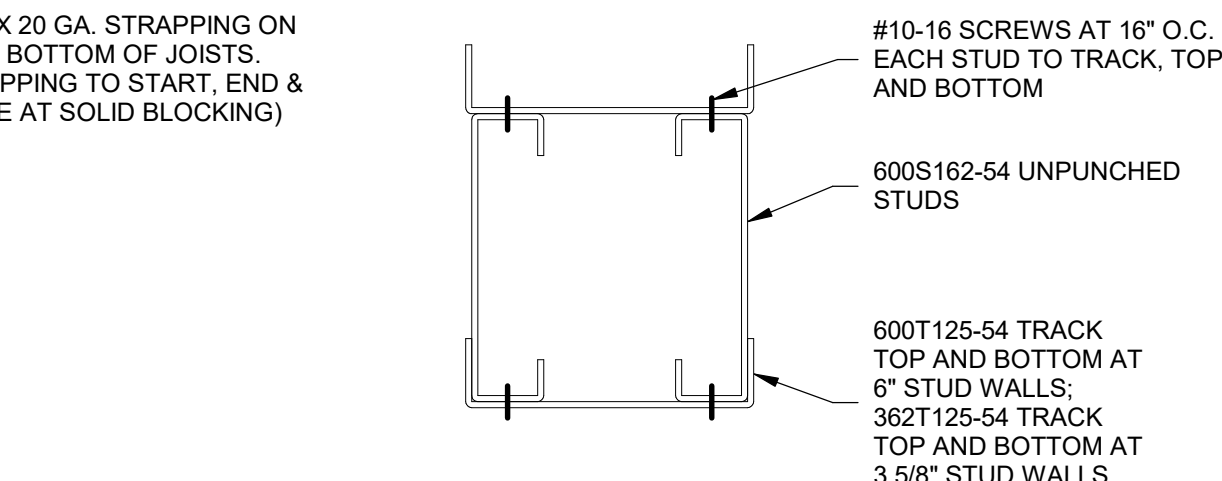
**H** JOIST BRIDGING

NOTE: PROVIDE BRIDGING AT 8' - 0" O.C. OR CENTER OF JOIST SPAN WHERE SPAN IS LESS THAN 16' - 0"

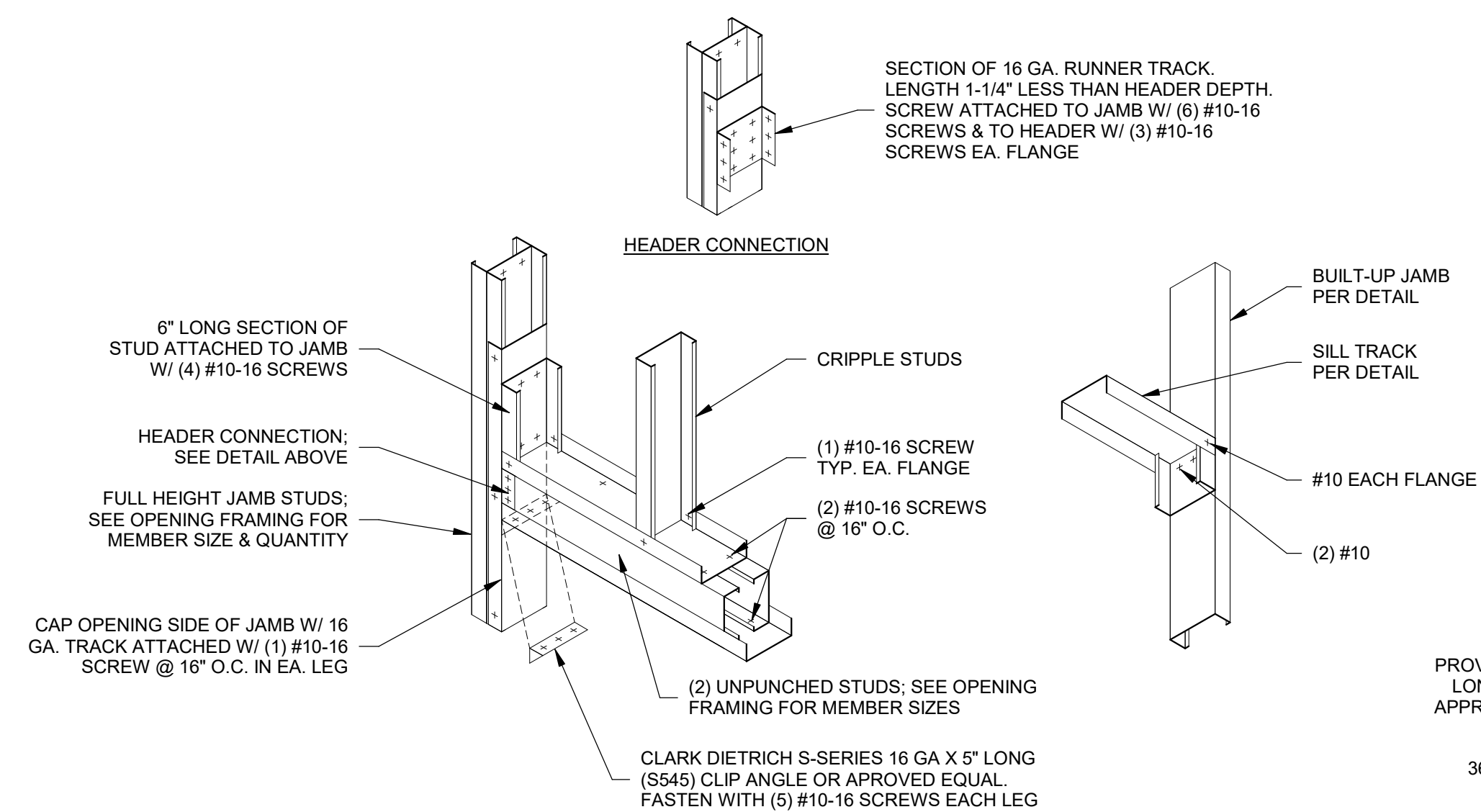


**I** HEADER & SILL ATTACHMENT TO JAMB

NOTE: ALL MEMBERS COMPRISING OF MULTIPLE COMPONENTS ARE TO HAVE THOSE COMPONENTS ATTACHED TO ONE ANOTHER AT 12" O.C. WITH #10 SCREWS ALONG THEIR ENTIRE LENGTHS. ALL COMPONENTS ARE TO BE FULL-LENGTH (NO SPLICES).



**J** BUILT-UP BOX HEADER SECTION



**K** SECTION - BOX HEADER AT ROOF

1 S500



DESIGNED BY: AJC  
DRAWN BY: AJC  
CHECKED BY: EMJ  
APPROVED BY: LRS



REVISION NO.	REVISION DATE	DESCRIPTIONS
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FARLEY SERVICE PLAZA  
P.O. BOX 351  
HAMMONTON, NJ 08037  
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PROJECT TITLE: ATLANTIC CITY EXPRESSWAY  
2021 WEST MAINTENANCE ADDITION PROJECT  
WINSLOW TOWNSHIP, CAMDEN COUNTY, N.J.  
SHEET TITLE: COLD FORMED METAL FRAMING DETAILS  
SCALE: As indicated  
DATE: 09/01/2021

DRAWING NO. S500  
SHEET NO.