



REVISION 4: October 31, 2022

Grey Turner
UTA
669 West 200 South
Salt Lake City, UT 84104

Reference: SLC_OP_1 – 300 N Pedestrian Bridge
Subject: PCO #139.04 Part A – Elevator Structure Paint and Steel Modifications – 300 N

Mr. Turner,

The information below and following capture the changes stemming from responses to RFI 87, 94, and 110. Granite is also assuming work will begin on these changes on August 29, 2022. Beyond this date, additional delay costs will be accrued. A DAP was received on August 31, 2022. Contracts have been issued to subcontractors for additional work related to this change order. The original PCO has been broken up into 3 parts. PCO #139.04 Part A contains the items in the table below.

The overhead rates in the change order table below vary slightly from the rates in the original estimate, as certain items have been removed. A table labeled “Granite Overhead Costs in Estimate” describes the indirect costs in detail.

PCO #139.04 Part A: Paint Spec Change, Elevator Tower Upper Roof & Increased Schedule Duration

Description	Quantity	UOM	Unit Rate	Extended
Paint Spec Change + Special Inspections	1	LS	\$ 185,453.50	\$ 185,453.50
Blasting & Paint Credit	1	LS	\$ (25,961.00)	\$ (25,961.00)
Steel Modifications - Upper Roof	1	LS	\$ 17,205.00	\$ 17,205.00
Granite Overhead	1	MO	\$ 42,309.38	\$ 42,309.38
Complete Overhead	2.25	MO	\$ 16,000.00	\$ 36,000.00
Traffic Control	2.25	MO	\$ 11,497.50	\$ 25,869.38
QA/QC	2.25	MO	\$ 1,100.00	\$ 2,475.00
Public Involvement	2.25	MO	\$ 2,816.00	\$ 6,336.00
Erosion Control	2.25	MO	\$ 825.00	\$ 1,856.25
RRPLI Extension	1	LS	\$ 1,500.00	\$ 1,500.00
			<i>Subtotal</i>	\$ 293,043.51
			<i>Bond</i>	\$ 1,465.22
			<i>Markup (8%)</i>	\$ 23,560.70
			GRAND TOTAL	\$ 318,069.42

UTAH OPERATIONS



Inclusions:

- scope of work per 09991M paint specification (dated 8/8/2022) & special inspections
- credit for original paint scope and blasting
- steel modifications to cut back elevator tower upper roof overhang (per RFI 87)
- increase in schedule duration due to change in paint specification
 - baseline from schedule dated 2/2/2022 after pile change order schedule submittal
 - current schedule dated 9/6/2022 has final completion date of July 12, 2023
- extension of railroad liability insurance, required to keep UTA ROW permit active

Exclusions:

- heating/cold weather protection for paint – additional cost will need to be evaluated for heating the structure if temperatures drop too low (per 09991M 3.6 B. 2. air and steel temperatures must be above 40 degrees, with < 85% relative humidity). For further information:
 - Gateway Company was put on notice 9/1/2022, upon receipt of the DAP. They were further issued a contract, with a requested start date of 10/31/2022 (60 days from issuance of DAP).
 - With the added scope of work for steel modifications, the schedule shows a blasting start date of November 16, 2022.
 - It is possible that the scaffolding and tenting process can begin prior to completion of welding.
 - However, it is likely the enclosure will need to be heated even with blasting beginning on 10/31/2022.
 - Gateway is evaluating the cost for heating the enclosure and will be presenting a contingency item as soon as possible.
- Granite notified UTA that delay costs would begin accruing on April 29; delay costs from April 29 – August 29 have been removed from this change order.
- removal of lower backer bars, per memo sent to Granite on 9/1/2022 by UTA. Per this memo, all lower backer bars will remain in place.

Please contact me with questions or concerns.

Sincerely,

Jessica Keane
GRANITE CONSTRUCTION COMPANY
Project Manager

UTAH OPERATIONS

Warm Springs Office 1000 North Warm Springs Rd, Salt Lake City Utah 84116 • PO Box 30429, Salt Lake City, Utah 84130 • Phone 801-526-6000 • Fax 801-526-6091

GRANITE OVERHEAD COSTS IN ESTIMATE

UPDATED: 9/6/2022

ITEM DESCRIPTION	UOM	ORIGINAL BID			DELAYS			CHANGES		
		Quantity	Unit Rate	Extended	Quantity	Unit Rate	Extended	Quantity	Unit Rate	Extended
MANAGEMENT PERSONNEL	MO	10.5	\$ 15,872.77	\$ 166,664.06	2	\$ 15,831.75	\$ 31,663.50	1	\$ 15,831.75	\$ 15,831.75
CRAFT SUPERVISION	MO	10.5	\$ 3,264.54	\$ 34,277.67	2	\$ 8,912.20	\$ 17,824.40	1	\$ 8,740.81	\$ 8,740.81
PICKUPS	MO	10.5	\$ 3,767.33	\$ 39,556.97	2	\$ 3,400.62	\$ 6,801.24	1	\$ 3,350.62	\$ 3,350.62
MISC PERMITS	LS	0	\$ -	\$ -	0	\$ -	\$ -	0	\$ -	\$ -
OPERATIONS & UTILITIES	MO	9	\$ 4,462.25	\$ 40,160.25	2	\$ 4,468.32	\$ 8,936.64	1	\$ 4,468.33	\$ 4,468.33
FINAL CLEANUP	LS	1	\$ 9,423.16	\$ 9,423.16	0	\$ -	\$ -	0		\$ -
SMALL TOOLS (BASED ON MH)	LS	1	\$ 30,695.69	\$ 30,695.69	0	\$ -	\$ -	0		\$ -
T&D ALLOCATION	LS	1	\$ 5,813.24	\$ 5,813.24	2	\$ 270.00	\$ 540.00	1	\$ 270.00	\$ 270.00
BUILDERS RISK	LS	1	\$ 18,331.80	\$ 18,331.80	2	\$ 165.00	\$ 330.00	1	\$ 585.00	\$ 585.00
SAFETY ALLOCATION	MO	9	\$ 5,289.19	\$ 47,602.71	0	\$ -	\$ -	1	\$ 3,282.95	\$ 3,282.95
SUBCONTRACTOR BONDS	LS	1	\$ 84,345.87	\$ 84,345.87	1	\$ 640.00	\$ 640.00	1	\$ 5,779.92	\$ 5,779.92
Totals			\$ 45,416.34	\$ 476,871.42		\$ 23,687.89	\$ 66,735.78		\$ 42,309.38	\$ 42,309.38
			<i>PER MONTH</i>	<i>PROJECT TOTAL</i>		<i>PER MONTH</i>	<i>DELAY TOTAL</i>		<i>PER MONTH</i>	<i>CO TOTAL</i>

NO SAFETY, SMALL TOOLS,
OR FINAL CLEANUP

LARGER SUB BONDS
ADDED SAFETY ALLOCATION

Date: 8/11/22

ATTN: Jessica Keane
Granite Construction Company
1000 North Warm springs Road
Salt Lake City, Utah 84116

RE: UTA 300 North Re-Painting the Elevator Structure

We are pleased to submit our proposal to supply all labor, supervision, materials, tools, equipment, and the required insurance coverages as noted on the attached sample certificates, to perform the work on the above-referenced project as follows:

SCOPE:

- Have the scaffold built by others for containment and access to the structure.
- Use a 20,000 CFM Dust collector to create negative air inside the containment. Wrap the scaffold with tarps.
- Abrasive blasting of the structural steel to a SSPC-SP-10 near white grade blast finish. Application of a three coat UDOT nepcoat system Zinc, Epoxy, Urethane. We will use the manufacturer that can provide the system.
- Prices given below reflect today's fuel, paint, abrasive, and federal wage for this project.
- Note the price is separate below for the blasting.

SCHEDULE:

2022 summer

PRICE:

Mobilization	\$5,000.00
Abrasive Blasting of Both Structures	\$62,622.00
Scaffolding for Both Structures	\$55,076.00
Painting of Both Structures	\$56,557.00

You could make a case that the scaffold and the tarps are part of the blasting or at least half.

QUALIFICATIONS:

The Following qualifications, exclusions or clarifications are applicable to this proposal and shall be included in any subsequent Contract documents.

1. Bid price is based on work being performed in one continuous operation.
2. Item prices are based on completing the entire scope of work. Mobilization, and other overhead costs have been apportioned to all items. Reduction of scope by deletion of items will not result in a full credit per item.
3. Gateway is to receive monthly progress payments, less applicable retention, for all acceptable work completed, regardless of whether the Contractor has been paid by the Owner for said work. Payment is to be received within (30) days of invoice date.
4. Bond is not included. If a bond is required, add 2% to the contract price.
5. Any grinding, patching, or welding required will be done on a T/M basis.
6. Any work completed by Gateway and subsequently damaged by Others, will be repaired by Gateway at the expense of Others.
7. Gateway will complete any work undertaken with all due care. We will be liable for any failure of our work, for a period of (1) year, only to the extent of completing necessary repairs at no additional cost.

8. All traffic control, flagging, and public notification to be provided by others
9. We require 60 calendar days prior notice to start the work and 25 working days to complete all work.
10. We have not had access to the prime contract and therefore do not accept any requirements not specifically set forth in the bid documents as received.
11. This bid is valid for 60 calendar days. After 60 days we reserve the right to withdraw or resubmit it.
12. The limits of the Sub-contractor's liability shall be the amounts set forth on the insurance certificates or the amounts specified in the Contract, whichever is less.

We appreciate the opportunity to quote on this project. If you have questions or concerns, please feel free to contact my office.

Sincerely,

THE GATEWAY COMPANY

Casey Richins

NACE Inspection Bid

Cripple Creek Consulting & Environmental
PO Box 743
Eden, UT 84310
Attn: Sherry Wiscombe
801-833-5582

08-17-22

Re: Coating Inspection 300N 500W Pedestrian Bridge

DESCRIPTION OF SERVICES:

NACE Certified Coating Inspection Services (Level 3)

Intermountain Regional Inspection Services proposes the inspection work as listed below:

4 hour minimum callout.

NACE CCI Inspector 100.00/hr.	\$400.00
Travel Time 1/hr@\$100.00/hr.	\$100.00
Mileage round trip 60/\$.65/mile.	<u>\$39.00</u>
Total	\$539.00

Any hours spent on site after the 4 hour minimum callout will be charged out at \$100.00/hr.

8 hour shift

NACE CCI Inspector \$100.00/hr.	\$800.00
Travel Time 1/hr@\$100.00/hr.	\$100.00
Mileage round trip 60/\$.65/mile.	<u>\$39.00</u>
Total	\$939.00

Per AMPP inspector, projects like this will typically include inspections of:

- Surface Preparation
- Prime Coat Quality & Dry Film Thickness
- Intermediate Coat Quality & Dry Film Thickness
- Finish Coat Quality & Dry Film Thickness

Dry film thickness readings are measured and recorded with an electronic dry film thickness gauge. All coating layers are to be inspected and dry film thickness readings will be recorded.

Thank you,

Joseph L. Benoit
NACE CCI #1381
Intermountain Regional Inspection Services
185 East Countryside Circle
Park City, UT 84098
Ph/Fax: 435-649-3784
Cell: 435-901-9469

Assume 10 trips @ 4 hour minimums - \$539/day x 10 days
Total blasting & paint duration activities assumed at 25 days
2nd tier sub to Cripple Creek



Complete Contracting Co
 5455 West 11000 North, Suite 201
 Highland, Utah 84003
 Phone: (801) 756-7000
 Fax: 801-756-2900

Project: 300 N Pedestrian Bridge - 300 N Pedestrian Bridge
 300 S 600 W
 Salt Lake City, Utah 84101

Prime Contract Change Order #002: Exterior Paint Credit

TO:		FROM:	
DATE CREATED:	6/30/2022	CREATED BY:	Levi Mitchell (Complete Contracting Company, LLC)
CONTRACT STATUS:	Approved	REVISION:	0
DESIGNATED REVIEWER:		REVIEWED BY:	
DUE DATE:		REVIEW DATE:	06/30/2022
INVOICED DATE:		PAID DATE:	
SCHEDULE IMPACT:		EXECUTED:	No
		SIGNED CHANGE ORDER RECEIVED DATE:	
CONTRACT FOR:	1:Granite Construction - CCC	TOTAL AMOUNT:	(\$18,961.00)

DESCRIPTION:
 This credit is for Granite taking the exterior paint scope.

ATTACHMENTS:

POTENTIAL CHANGE ORDERS IN THIS CHANGE ORDER:

PCO #	Title	Schedule Impact	Amount
002	Exterior Paint Credit		(\$18,961.00)
Total:			(\$18,961.00)

The original (Contract Sum)	\$1,065,867.00
Net change by previously authorized Change Orders	\$1,448.00
The contract sum prior to this Change Order was	\$1,067,315.00
The contract sum will be decreased by this Change Order in the amount of	(\$18,961.00)
The new contract sum including this Change Order will be	\$1,048,354.00
The contract time will not be changed by this Change Order.	

Primer removal quote: \$1.50/sf
 Elevator structural steel is approximately 4,540 SF
 \$7,000 blasting credit has been added to paint credit

SIGNATURE _____ DATE _____ SIGNATURE _____ DATE _____ SIGNATURE _____ DATE _____

Keane, Jessica

From: Keane, Jessica
Sent: Sunday, September 11, 2022 1:00 PM
To: Keane, Jessica
Subject: FW: 300 N Blasting Requirements - FW: DAQ

Documentation for blasting requirements.

From: Bingham, Quin <Quin.Bingham@gcinc.com>
Sent: Thursday, September 8, 2022 3:25 PM
To: Keane, Jessica <Jessica.Keane@gcinc.com>
Subject: RE: 300 N Blasting Requirements - FW: DAQ

Jessica,

Here is what I was able to find. Unconfined abrasive blasting is permissible in Salt County if we comply with regulations UAC R307-306 and R307-306-6(2) (see below). Let me know if you have any questions.

Requirements Summary:

- Unconfined abrasives blasting is permissible in SL County (PM10 attainment maintenance area), if
 - 40% opacity if blast media complies with R307-306-6(2)
 - Blast media shall not contain more than 1% by weight material that passes a #70 US Std sieve.

Regulations:

UAC R307-306

- (PM10 Nonattainment and Maintenance Areas: Abrasive Blasting) limits visible emissions from abrasive blasting operations to **less than 20% opacity except for an aggregate period of three minutes in one hour**. Visible emissions may be limited to less than 40% opacity for abrasive blasting operations that use confined blasting, wet abrasive blasting, hydroblasting, or unconfined blasting using the abrasives defined in R307-306-6(2).

R307-306-6(2)

- (2) Abrasives.
 - (a) Abrasives used for dry unconfined blasting referenced in (1) above shall comply with the following performance standards:
 - (i) **Before blasting, the abrasive shall not contain more than 1% by weight material passing a #70 U.S. Standard sieve. (Quin's Note: your sub was recommending you begin with #70 grit material, which would have been out of compliance)**
 - (ii) After blasting the abrasive shall not contain more than 1.8% by weight material 5 microns or smaller.
 - (b) Abrasives reused for dry unconfined blasting are exempt from (a)(ii) above, but must conform with (a)(i) above.
- (3) **Abrasive Certification. Sources using the performance standard of (1)(d) above to meet the requirements of R307-306-4(2) must demonstrate they have obtained abrasives from a supplier who has certified (submitted test results) to the director at least annually that such abrasives meet the requirements of (2) above.**

From: Keane, Jessica <Jessica.Keane@gcinc.com>
Sent: Thursday, September 1, 2022 4:23 PM
To: Bingham, Quin <Quin.Bingham@gcinc.com>
Subject: FW: 300 N Blasting Requirements - FW: DAQ

Hi Quin,

Hope all's well! We did get some questions from UTA asking for some other validation of the information Complete sent over. Have you had a chance to look at this?

Thanks,

Jessica

From: Keane, Jessica
Sent: Thursday, August 11, 2022 4:45 PM
To: Bingham, Quin <Quin.Bingham@gcinc.com>
Subject: 300 N Blasting Requirements - FW: DAQ

Hi Quin,

I know we talked about this last week, and I realized I forgot to send this information to you. Please see below information from our subcontractor about the DAQ & their blasting requirements.

As discussed, attached is our NEW requirement to clean and paint the elevator steel. According to our sub, BEFORE this new spec was issued, open air blasting would have been acceptable (the two documents about the crushed glass and Train Crossing are from our initial sub). He does not have the equipment to perform the work as specified in the newly modified specification, so we will be using Gateway Company. Their work includes: scaffolding, dust collector, tarps/covering of the entire structure, abrasive blasting of the structural steel, and new paint system (different from original spec).

Could you please take a look at this and let me know if you see any issues with our initial approach to the blasting? Also, feel free to reach out if you have any questions.

Thanks,

Jessica

From: John Ragan <johnr@completecco.com>
Sent: Thursday, August 4, 2022 8:59 AM
To: Keane, Jessica <Jessica.Keane@gcinc.com>; Green, Casey <Casey.Green@gcinc.com>
Subject: DAQ

CAUTION: This email originated from outside of Granite

Sand Blasting in the State of Utah requires only -

Section R307-306-4 - Visible Emission Standard **(1)** Except as provided in (2) below, visible emissions from abrasive blasting operations shall not exceed 20% opacity except for an aggregate period of three minutes in any one hour. **(2)** If the abrasive blasting operation complies with the performance standards in R307-306-6, visible emissions from the operation shall not exceed 40% opacity, except for an aggregate period of 3 minutes in any one hour.

Utah Admin. Code R307-306-4

Amended by Utah State Bulletin Number 2016-1, effective 12/15/2015

According to a call with DAQ and this Section of the law ,

The means and method is within the law and is in the parameters of a normal operation in the State of Utah and complies easily with the 40% since it is almost 0%

Our Means and method of sandblasting the paint off the steel for the elevator towers is the acceptable way according to the State.

Thanks

John Ragan

5455 West 11000 North, Suite 201

Highland, Utah 84003

P:801-756-7000 F:801-756-2900

C:801-631-3562 [email:johnr@completecco.com](mailto:johnr@completecco.com)

Website: www.completecontractingcompany.com



SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200) - GHS Classification

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name	Not applicable.
Trade Name	3-Mix-Processed Glass Abrasive
CAS No.	Mixture

Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s)	Abrasive
Uses Advised Against	None.

Details of the supplier of the safety data sheet

Company Identification	Strategic Materials, Inc. 16365 Park Ten Place Suite 200 Houston, TX 77084
Telephone	1-281-647-2705
Fax	1-281-647-2710
E-Mail (competent person)	msds@strategicmaterials.com

Emergency telephone number

Emergency Phone No.	1-281-647-2705 (Monday – Friday; 8:00 AM – 5:00 PM Central Time Zone)
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SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200) / GHS Classification	Hazard Not Otherwise Classified (HNOC) - Mechanical irritation of the respiratory tract. Mechanical irritation of the skin and eyes.
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Label elements

Hazard Symbol	None
Hazard Statement(s)	Prolonged and repeated exposures to fine particles may cause: Mechanical irritation of the respiratory tract. Mechanical irritation of the skin and eyes.

Precautionary Statement(s)	None
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Other hazards	None anticipated
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Additional Information	Warning - substance not yet tested completely.
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Hazardous Ingredient(s)	%W/W	CAS No.	Hazard Statement(s)
Glass oxides of silicon, calcium, sodium, aluminum, iron, magnesium, and/or potassium	100	-----	Mechanical irritation of the respiratory tract. Mechanical irritation of the skin and eyes.

Additional Information – This product, as supplied, contains <0.1% crystalline silica.

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation	Unlikely to be required but if necessary treat symptomatically.
Skin Contact	Unlikely to be required but if necessary treat symptomatically.
Eye Contact	If substance has gotten into the eyes, wash out with water. Get immediate medical attention.
Ingestion	Unlikely to be required but if necessary treat symptomatically.

Most important symptoms and effects, both acute and delayed None

Indication of any immediate medical attention and special treatment needed None

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

- Suitable Extinguishing Media Non-combustible. As appropriate for surrounding fire.
- Unsuitable Extinguishing Media None anticipated.

Special hazards arising from the substance or mixture None

Advice for fire-fighters As appropriate for surrounding fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Not normally required.

Environmental precautions Not normally required.

Methods and material for containment and cleaning up Transfer to a container for disposal or recovery.

Reference to other sections None

Additional Information None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling Comply with occupational limit values for dust. Ground / bond equipment to prevent build-up of static electricity.

Conditions for safe storage, including any incompatibilities

- Storage temperature Store at room temperature.
- Incompatible materials None

Specific end use(s) Abrasive

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

SUBSTANCE.	CAS No.	LTEL (8 hr TWA mg/m ³)		STEL (mg/m ³)		Note:
		OSHA PEL	TLV (ACGIH)	OSHA PEL	TLV (ACGIH)	
Particulate Matter	-----	15 [^] / 10*	10 [^] / 3*	-----	-----	See below

Calcium Oxide	1305-78-8	5 [^]	2 [^]		See below
Aluminum Oxide	1344-28-1	15 [^] / 5 [*]	1 [*]		See below
Iron Oxide	1309-37-1	10 ^{**}	5 [*]		See below
Magnesium Oxide	1309-48-4	15 ^{**}	10 ^{^^}		See below

- LTEL: Long Term Exposure Limit; - STEL: Short Term Exposure Limit; - [^]Total Dust / ^{*}Respirable Dust / ^{^^}Inhalable Dust / ^{**}Fume; Cal. OSHA 10 mg/m3.

Recommended monitoring method

NIOSH 0500 / 0600

Exposure controls

Appropriate engineering controls

The following to be used as necessary: Hand tool with integrated exhaust, glove box, local exhaust ventilation, control of release of inhalable and / or respirable particulates / aerosols. For abrasive blasting, refer to OSHA 29 CFR 1910.94(a).

Personal protection equipment

For abrasive blasting, refer to OSHA 29 CFR 1910.94(a).

Eye/face protection

The following to be used as necessary: Complete eye and face



protection. Safety spectacles/goggles/full face shield.

Skin protection (Hand protection/ Other)

The following to be used as necessary: Wear suitable protective clothing and gloves.



Respiratory protection

The following to be used as necessary: Supplied-air respirator, air-purifying respirator with N/P-95 cartridge, or filtering-facepiece respirator depending on exposure levels in relation to the above occupational exposure limits.



Thermal hazards

Not normally required.

Environmental Exposure Controls

Not normally required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Solid
Color.	Clear / Colorless, Amber, and / or Green
Odor	None
Odor Threshold (ppm)	Not applicable
pH (Value)	Not applicable
Softening Point (°C)	728 - 732
Melting Point (°C) / Freezing Point (°C)	Not applicable
Boiling point/boiling range (°C):	Not applicable
Flash Point (°C)	Not applicable
Evaporation Rate	Not applicable
Flammability (solid, gas)	Non-flammable
Explosive Limit Ranges	Not applicable
Vapour pressure (Pascal)	Not applicable
Vapour Density (Air=1)	Not applicable
Density (g/ml)	Varies (-)
Specific Gravity	Not applicable
Solubility (Water)	Insoluble
Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not applicable
Auto Ignition Point (°C)	Not available
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (mPa·s) @ 22°C	Not applicable
Explosive properties	Not explosive.

Oxidizing properties
 Other information

Not oxidizing.
 Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	None known
Incompatible materials	None
Hazardous decomposition product(s)	None known

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Skin Contact, Eye Contact, Inhalation

Information on toxicological effects

Acute toxicity	Will not occur.
Irritant	Mechanical irritation of the skin and eyes.
Sensitization	It is not a skin sensitizer.
Repeated dose toxicity	Will not occur.
Mutagenicity	Will not occur.
Carcinogenicity	Not known or reasonably anticipated to cause cancer in humans

NTP	IARC	ACGIH	OSHA
Not Listed	Not Listed	Not Listed	Not Listed

Other information Warning - substance not yet tested completely. Prolonged and repeated exposures to fine particles may cause: Mechanical irritation of the respiratory tract. Mechanical irritation of the skin and eyes. In addition, inflammation and cell damage in the nose and larynx of laboratory animals has been reported.

SECTION 12: ECOLOGICAL INFORMATION

Substances in preparations / mixtures:

Acute toxicity	Will not occur.
Long Term Toxicity	Will not occur.

Persistence and degradability

This product is predicted not to degrade in soil and water.

Bioaccumulative potential

The product has no potential for bioaccumulation.

Mobility in soil

The product is predicted to have low mobility in soil.

Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice. Used abrasive blasting grit must be characterized before disposal.

Additional Information

None known.

SECTION 14: TRANSPORT INFORMATION

Category
 transport(ICAO/IATA)

Land transport(U.S. DOT)

Sea transport(IMDG)

Air

UN number

Not classified as dangerous for transport.

Proper Shipping Name

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

RCRA Hazardous Waste Number (40 CFR 261.33): None

US RCRA Hazard Class: None

SARA 311/312 - Hazard Categories: None

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372): None

SARA 302 - Extremely Hazardous Substances: None

Proposition 65 (California): None

SECTION 16: OTHER INFORMATION

Additional Information

None

Date of preparation: April 21, 2015

The following sections contain revisions or new statements: 1 - 16

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BEEHIVE MOBILE BLASTING
2966 S 200 E SUITE 45
SOUTH SALT LAKE CITY, UT 84115

07/26/2022

John Ragan

I would like to take a few moments and describe the Mobile Media Blasting process, health implications and my experience.

In late 2020 I purchased my LLMJ DBXL500 trailer. It consists of a 185CFM compressor, a 200 lb. capacity blast pot and accessory items. For this project I recommend we begin using #70 grit Crushed Recycled Glass. As a blast media it is 100% inert and completely environmentally friendly as it has no free silica. I have attached a copy of the MDS for your review.

Among one of the recent projects, I completed was a paint removal and resurfacing of concrete pillars for a reuse project at Hill Air Force Base. HHI, Inc. was in some older squad bays into new office spaces.

I want to ensure you that any concerns can be discussed. Just realize I am a one-man I cannot afford to tent these structures. I would however be fully comfortable working in such an area. We are dealing with fresh steel coated with non-lead containing paint that once vaporized will pose no health or physical negative effects.

I hope you will select Beehive Mobile Blasting to complete this work. Additionally, I have a complete COI, W9 and my Utah Waiver of Workers Compensation Insurance.

Gregory D. Scott
CEO Scott Systems LLC
dBa Beehive Mobile Blasting

A VETERN OWNED BUSINESS

SECTION 09991M

FIELD CLEANING AND PAINTING STRUCTURAL STEEL

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Cleaning and painting erected structural steel surfaces.
- B. Removal of non-conforming paint from erected structural steel surfaces.
- C. Preparation of erected steel surfaces for painting the cleaned structural steel surfaces.

1.2 RELATED SECTIONS Not Used

1.3 REFERENCES

- A. ASTM D 4285: Indicating Oil or Water in Compressed Air
- B. ASTM D 4417: Field Measurement of Surface Profile of Blast Cleaned Steel
- C. ASTM E 11: Wire Cloth and Sieves for Testing Purposes
- D. American Institute of Steel Construction (AISC)
- E. Association for Materials Protection and Performance (AMPP)
- F. Code of Federal Regulations (CFR)
- G. Colors Used in Government Procurement (AMS-STD-595)
- H. Mine Safety and Health Administration (MSHA) Standards
- I. The National Association of Corrosion Engineers International (NACE)
- J. National Institute for Occupational Safety and Health (NIOSH)
- K. Northeast Protective Coatings Committee (NEPCOAT)

L. The Society for Protective Coatings (SSPC)

1.4 DEFINITIONS Not Used

1.5 SUBMITTALS

A. Materials

1. Source and gradation of the blast abrasive.
2. Type and source of solvent if required.
3. Manufacturer's information regarding the specified coating materials, including:
 - a. Required wet and dry film thickness
 - b. Project safety data
 - c. Thinning recommendations
 - d. Temperature requirements
 - e. Profile recommendations
 - f. Mixing and application procedures
 - g. Required equipment
 - h. Method of application
 - i. Indicate VOC content
4. Test samples
 - a. Cleaning operation samples, disposal evaluation results, and disposal certificates. Refer to this Section, article 3.3 paragraph C.
 - b. Samples to an independent accredited Materials Testing Lab for composition and disposal evaluation. Refer to this Section, article 1.7.
 - c. Paint composition and disposal evaluation results from the independent materials testing lab.
 - 1) Disposition will be given to the contractor within 30 days.
 - d. Disposal certificates for all waste paint.

B. Qualifications, methods, and documentation for information.

1. Certifications before the preconstruction meeting. Refer to this Section, article 1.8.
2. Detailed plan of protection methods that includes Environmental Protection for approval.
3. Quality Control Plan that contains at a minimum procedures and verification of the following:
 - a. Compression air check
 - b. Dry film thickness – Refer to SSPC-PA 2
 - c. Air temperature
 - d. Humidity and dew point
 - e. Surface temperature

- f. Abrasive cleanliness check – Refer to SSPC-AB 2
 - g. Degree of cleanliness achieved
 - h. Surface profile – Refer to ASTM D 4417 method C
 - i. Batch number and amount of thinner used
 - j. Batch number of paints used
 - k. Mixing procedures
 - l. Paint repair procedures for scratches, gouges, holidays, mud cracking, runs, and sags
4. Written site-specific compliance program documenting the equipment, training, containment, and monitoring system to comply with OSHA's standard on lead exposure in construction as published in Federal Register, Section 29 CFR 1926.62, May 4, 1993.
 - a. Worker Health and Safety Program
 - b. Environmental Protection and Monitoring Program
 - c. Hazardous Waste Handling and Reporting of Release Program
 - d. Refer to SSPC Guide 6 – Guide for Containing Surface Preparation Debris
 5. Submit intermediate and top coat AMS-STD-595 color numbers with paint system submittal once colors are agreed upon by SLC, UTA, and Architect of Record.
 6. Daily reports upon request.
 - a. Submit no later than 24 hours following the completion of work.

1.6 QUALITY ASSURANCE

- A. Mockups: Apply mockup of paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 1. Architect will select one surface to represent surfaces and conditions for application of each paint system.
 - a. Vertical and Horizontal Surfaces: Provide samples extending a minimum of 2 ft for a horizontal beam and 2 ft for a vertical column, all around.
 - b. Other Items: Architect will designate items or areas required.
 2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by the Architect at the cost of SLC.
 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- B. Have AMPP Certified Coatings Inspector (CIP Level 2) or equivalent (NACE CIP Level 2 or SSPC PCI Level 2) verify and document mil thicknesses and defects of each coat prior to applying subsequent coats.

1.7 TEST SAMPLES

- A. Department (UDOT) tests paint samples from each batch or lot before use.
1. Submit samples for verification.
 2. Paints must match the spectrum samples on file with the Department.
- B. Provide color samples to UTA and SLC
1. Submit samples on rigid backing, 8 inches square.
 2. Apply coats on Samples in steps to show each coat required for system.
 3. Label each coat of each Sample.

1.8 PAINTER AND BLASTER QUALIFICATIONS

- A. The entity performing surface preparation or coatings applications in the field:
1. Must have SSPC-QP 2 Category A certification before the preconstruction meeting.
 2. Remain certified for the duration of the project.
 - a. Do not perform work if certification has expired.
 3. Notify the Engineer of any changes in certification status.

PART 2 PRODUCTS

2.1 SOLVENT

- A. Solvent – Recommended by the paint system manufacturer.

2.2 COATING SYSTEM

- A. Select a complete Type B Organic three-part coating system consisting of a zinc primer, epoxy or urethane intermediate coat, and aliphatic urethane top coat from the NEPCOAT Qualified Products List. Refer to <http://www.udot.utah.gov/go/standardsreferences> for a link to this list.
- B. Paint Color – AMS-STD-595.
 - 1. Intermediate coat Color visually contrasts from top coat
 - 2. Top coat Color as specified by SLC and Architect

PART 3 EXECUTION

3.1 GENERAL

- A. Use manufacturer's information regarding the specified coating materials, including required wet and dry film thickness, project safety data, thinning recommendations, temperature requirements, profile recommendations, mixing and application procedures, and required equipment.

3.2 INSPECTION

- A. Engineer examines surfaces before surface preparation and before application of each succeeding coating. Correct any condition that is determined by the Engineer to negatively affect a proper coating application.
- B. Provide safe access to permit inspection of the steel before and after painting. Use rubber rollers or other approved protective devices for scaffold fastening. Do not mar or damage freshly coated surfaces.

3.3 PREPARATION – GENERAL

- A. Meet soluble salts requirements of SSPC-Guide 15 and the coatings manufacturer.
- B. Protection of work performed in the field.
 - 1. Stop work if protection is unsatisfactory.
 - 2. Protect pedestrian and vehicular traffic.
 - 3. Provide tenting and fully contain all material resulting from surface preparation and paint overspray.

Cleaning and Painting Structural Steel

09991M – Page 5 of 9

July 2022

4. Enclosure system must withstand extreme high winds. Suspend work in inclement weather.
 5. Protect all portions of structures that are not to be painted from splatter, splashes, and overspray. Protect areas during painting and blast cleaning operations where other damage can occur.
 6. Use barriers during any blast-cleaning operations to protect pedestrians and vehicles and the prevent spreading or falling of abrasive materials and debris on the traveled portion of the pavement. Remove any abrasive materials and debris on pavement or shoulders before reopening work areas to traffic.
 7. Provide employees performing the blast-cleaning operations air-supplied blasting hoods approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health.
 8. Minimum requirements for the air supply system:
 - a. Airline filter, pressure-reducing valve with gauge and pressure release valve.
 - b. Do not allow the air supply to be contaminated with harmful materials or elements. Refer to ASTM D 4285.
- C. Recover a minimum of 95 percent of debris from cleaning operation.
1. Sample debris from cleaning operation.
 2. Place reclaimed waste paint in EPA-USDOT approved containment. Store at the project site.
 3. Dispose of waste paint as determined by the Engineer.

3.4 PREPARE SURFACES

- A. Prior to blast cleaning.
1. Grind off all fins, tears, slivers, and burred or sharp edges present on any steel member.
 - a. Remove all mill scale.
 - b. Do not scar metal.
 - c. Grind the edges of all flame cut steel until the hardened edge accepts the blast profile. Refer to ASTM D 4417 method A.
 2. Remove all abrasive and paint residue using either a commercial vacuum cleaner or by double blowing.
 - a. Equip commercial vacuum cleaner with a brush-type cleaning tool.
 - b. Double blowing – Vacuum the top surfaces of all structural steel, including items such as top and bottom flanges, longitudinal stiffeners, splice plates, and hangers after the double-blowing operations are completed.
- B. Clean surfaces with clean petroleum solvents and then blast clean. Use

clean oil-free air.

1. Clean surfaces including bearing units of all oil, grease, and dirt with clean petroleum solvents or steam cleaning before blasting operation.
2. Blast surfaces clean to near white with 0.5 to 2 mil profile. Refer to SSPC- SP 10.
3. Discoloration, light shadows, or slight streaks caused by stains of rust is not allowed on more than 5 percent of surface area.
4. Define acceptable surface preparation using SSPC-Vis 1.
5. Use SSPC-SP 11 to clean areas such as backside of base plates and corners that cannot otherwise be cleaned.
6. Keep the steel dust free and prime the surface within 8 hours after cleaning. Do not prime the surface if rust has started to form. Reblast to a near-white condition if any rust is visible before priming.
7. Have the prepared surfaces inspected and approved by AMPP Certified Coatings Inspector (CIP Level 2) or equivalent (NACE CIP Level 2 or SSPC PCI Level 2) prior to applying primer coat.
8. Protect freshly coated surfaces from subsequent blast-cleaning operations. Repair surface if damaged.
9. Blast clean bolt heads, fasteners, and any rusted areas to a near-white finish. Thoroughly clean the coating surrounding the blasted area and re-prime the same day using organic zinc from the same paint manufacturer and the same dry film thickness specified for the shop coat. Follow SSPC-SP 10.
10. Remove all concrete drippings, abrasive, and paint residue. Vacuum items such as the top and bottom flanges, splice plates, longitudinal stiffeners, and hangers after completing double-blowing operations.
11. Allow the touch-up coat to dry according to manufacturer's recommendation as listed on the product data sheet.

3.5 PREPARE PAINT MATERIALS

- A. Mix the paint to a lump-free consistency with a high shear mixer according to the manufacturer's directions.
 1. Do not use paddle mixers or paint shakers.
 2. Keep paint in the original containers and mix until all the metallic powder or pigment is suspended.
 3. Continue mixing until all solids or pigments that may have settled to the bottom of the container are thoroughly dispersed.
- B. Strain the paint through a screen with openings no larger than those specified for a No. 50 sieve. Refer to ASTM E 11.
- C. Strain and continuously agitate the mixed material up to and during

Cleaning and Painting Structural Steel

application.

3.6 APPLY PAINT – GENERAL

- A. Consult with the manufacturer's technical representative for answers to technical questions related to the application of the specified coating materials.
- B. Project Conditions/Weather Limitations
 - 1. Follow the manufacturer's recommendations if weather conditions require paint thinning.
 - 2. Apply paint only when the following weather conditions exist:
 - a. The temperature of the air and the steel are above 40 degrees F but not so hot as to cause the paint to blister.
 - b. The relative humidity is less than 85 percent or such that the combination of temperature and humidity conditions inhibits surface condensation.
 - c. Apply a thin film of water to a small area to test humidity. The surface may be painted if the film evaporates within 15 minutes.
 - d. The steel temperature is a minimum of 5 degrees F above dew point.
- C. Use necessary equipment for proper application of the specified coating. Observe safety practices found in SSPC-PA Guide 10, Guide to Safety and Health Requirements.
- D. Apply paint with spray nozzles at pressures recommended by the manufacturer of the coating system.
- E. Use wet and dry film thickness gauges for testing the coating thickness during and after application. Refer to SSPC-PA 2. Use equipment capable of taking dry film thickness readings on all portions including nuts and bolts.
- F. Apply two or more coats if the required film thickness could not be obtained by one coat without producing runs, bubbles, or sags.
- G. Apply paint to produce a uniform, even coating that bonds to the underlying surface. Refer to SSPC-PA 1.

3.7 APPLY PAINT – PAINTING STRUCTURAL STEEL

- A. Prime Coat
 - 1. Maintain the dry film thickness of the prime coat between 2.5 and

- 6.0 mils.
 2. Blast clean any coat that produces “mud-cracking” or adds more than 7.0 mils to a soundly bonded coating on bare steel. Refer to SSPC-SP 10. Re-coat the surface.
 3. Thoroughly clean areas that have deficient primer thickness with power washing equipment to remove all dirt. Wire-brush, vacuum, and re-coat the area.
- B. Intermediate Coat
1. Use the coating type and minimum dry film thickness specified.
 2. Produce a dry-film thickness of the intermediate coat greater than 4 mils.
- C. Top coat – Keep the dry film thickness greater than 2 mils.
- D. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- E. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracks, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.8 SITE CLEANING

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.9 TOUCH UP PAINT

- A. After paint system application is complete, protect coating system from damage or marring.
- B. Touch up minor paint damage to painted members according to Part 3.

END OF SECTION

Cleaning and Painting Structural Steel
09991M – Page 9 of 9

July 2022



REQUEST FOR INFORMATION

Project Name: SLC – 300 N Pedestrian Bridge

Project Number: SLC_OP_1

RFI #: 94.00

DATE: 4/7/22

NO of Pages: 25

TITLE: Elevator Steel Clarification – 300 N

TO: **Grey Turner**

FROM: **Jessica Keane**

Utah Transit Authority

Granite Construction

669 W 200 S

1000 N. Warm Springs Rd.

Salt Lake City, UT 84101

Salt Lake City, UT 84116

Description of Request:

Per project specifications, the elevator steel is ASTM A992. The elevator steel as installed requires painting. This type of steel will need to be painted. Please advise what paint color should be utilized.

The following documentation shows the Structural Steel Framing specification (051200), Exterior Painting specification (099113), Structural Steel General Notes (SE002), Architectural Plans, and elevator steel shop drawings.

DUE DATE: April 12, 2022

Response Date:

Response:

May 26, 2021

SPECIAL PROVISION

**CONTRACT: 18-2399TP
PROJECT: SLC_OP_1**

SECTION 051200

STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Structural steel.
 - 2. Shear stud connectors.
 - 3. Shrinkage-resistant grout.
- B. Related Requirements:
 - 1. Section 099113 "Exterior Painting" and Section 099123 "Interior Painting" for painting requirements.

1.2 DEFINITIONS

- A. Structural Steel: Elements of the structural frame indicated on Drawings and as described in ANSI/AISC 303.
- B. Seismic-Load-Resisting System: Elements of structural-steel frame designated as "SLRS" or along grid lines designated as "SLRS" on Drawings, including columns, beams, and braces and their connections.
- C. Protected Zone: Structural members or portions of structural members indicated as "protected zone" on Drawings. Connections of structural and nonstructural elements to protected zones are limited.
- D. Demand-Critical Welds: Those welds, the failure of which would result in significant degradation of the strength and stiffness of the seismic-load-resisting system and which are indicated as "demand critical" or "seismic critical" on Drawings.

1.3 COORDINATION

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written

recommendations to ensure that shop primers and topcoats are compatible with one another.

- B. Coordinate installation of anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data:
 - 1. Structural-steel materials.
 - 2. High-strength, bolt-nut-washer assemblies.
 - 3. Shear stud connectors.
 - 4. Anchor rods.
 - 5. Shop primer.
 - 6. Shrinkage-resistant grout.
- B. Shop Drawings: Show fabrication of structural-steel components.
 - 1. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
 - 2. Include embedment Drawings.
 - 3. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld. Show backing bars that are to be removed and supplemental fillet welds where backing bars are to remain.
 - 4. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pretensioned and slip-critical, high-strength bolted connections.
 - 5. Identify members and connections of the seismic-load-resisting system.
 - 6. Indicate locations and dimensions of protected zones.
 - 7. Identify demand-critical welds.
 - 8. Identify members not to be shop primed.
- C. Welding Procedure Specifications (WPSs) and Procedure Qualification Records (PQRs): Provide in accordance with AWS D1.1/D1.1M for each welded joint whether prequalified or qualified by testing, including the following:
 - 1. Power source (constant current or constant voltage).
 - 2. Electrode manufacturer and trade name, for demand-critical welds.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer, fabricator, and testing agency.
- B. Welding certificates.
- C. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers, certifying that shop primers are compatible with topcoats.
- D. Mill test reports for structural-steel materials, including chemical and physical properties.
- E. Product Test Reports: For the following:
 - 1. Bolts, nuts, and washers, including mechanical properties and chemical analysis.
 - 2. Direct-tension indicators.
 - 3. Tension-control, high-strength, bolt-nut-washer assemblies.
 - 4. Shear stud connectors.
- F. Survey of existing conditions.
- G. Source quality-control reports.
- H. Field quality-control reports.

1.7 QUALITY ASSURANCE

- A. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category BU or is accredited by the IAS Fabricator Inspection Program for Structural Steel (Acceptance Criteria 172).
- B. Installer Qualifications: A qualified installer who complies with the AISC Quality Certification Program (or Equal) and is designated an AISC-Certified Erector (or Equal), Category ACSE or Category CSE (or Equal).
 - 1. Installers that are not AISC certified shall provide documentation, prior to bid, showing an equal level of certification and a list of recent projects of similar size and type. A list of approved alternate-AISC installers will be issued to the bidding Contractors by Addenda.
- C. Shop-Painting Applicators: Qualified in accordance with AISC's Sophisticated Paint Endorsement P1 or to SSPC-QP 3.
- D. Welding Qualifications: Qualify procedures and personnel in accordance with AWS D1.1/D1.1M.

1. Welders and welding operators performing work on bottom-flange, demand-critical welds shall pass the supplemental welder qualification testing, as required by AWS D1.8/D1.8M. FCAW-S and FCAW-G shall be considered separate processes for welding personnel qualification.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from corrosion and deterioration.
 1. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.
- B. Store fasteners in a protected place in sealed containers with manufacturer's labels intact.
 1. Fasteners may be repackaged provided Owner's testing and inspecting agency observes repackaging and seals containers.
 2. Clean and relubricate bolts and nuts that become dry or rusty before use.
 3. Comply with manufacturers' written recommendations for cleaning and lubricating ASTM F3125/F3125M, Grade F1852 bolt assemblies and for retesting bolt assemblies after lubrication.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Comply with applicable provisions of the following specifications and documents:
 1. ANSI/AISC 303.
 2. ANSI/AISC 341.
 3. ANSI/AISC 360.
 4. RCSC's "Specification for Structural Joints Using High-Strength Bolts."
- B. Connection Design Information:
 1. Option 1: Connection designs have been completed and connections indicated on the Drawings.
- C. Moment Connections: Type FR, fully restrained.
- D. Construction: Moment frame.

2.2 STRUCTURAL-STEEL MATERIALS

- A. **W-Shapes: ASTM A992/A992M.**
- B. Channels, Angles: ASTM A36/A36M.
- C. Plate and Bar: ASTM A36/A36M.
- D. Cold-Formed Hollow Structural Sections: ASTM A500/A500M, Grade C structural tubing.
- E. Steel Pipe: ASTM A53/A53M, Type E or Type S, Grade B.
 - 1. Weight Class: As indicated.
 - 2. Finish: Black except where indicated to be galvanized.
- F. Welding Electrodes: Comply with AWS requirements.

2.3 BOLTS AND CONNECTORS

- A. High-Strength A325 Bolts, Nuts, and Washers: ASTM F3125/F3125M, Grade A325, Type 1, heavy-hex steel structural bolts; ASTM A563, Grade DH, heavy-hex carbon-steel nuts; and ASTM F436/F436M, Type 1, hardened carbon-steel washers; all with plain finish.
 - 1. Direct-Tension Indicators: ASTM F959/F959M, Type 325-1, compressible-washer type with plain finish.
- B. Tension-Control, High-Strength Bolt-Nut-Washer Assemblies: ASTM F3125/F3125M, Grade F1852, Type 1, round head assemblies, consisting of steel structural bolts with splined ends; ASTM A563, Grade DH, heavy-hex carbon-steel nuts; and ASTM F436/F436M, Type 1, hardened carbon-steel washers.
 - 1. Finish: Plain.
- C. Shear Stud Connectors: ASTM A108, AISI C-1015 through C-1020, headed-stud type, cold-finished carbon steel; AWS D1.1/D1.1M, Type B.

2.4 RODS

- A. Unheaded Anchor Rods: ASTM F1554, Grade 36.
 - 1. Configuration: Hooked.
 - 2. Nuts: ASTM A563 heavy-hex carbon steel.
 - 3. Plate Washers: ASTM A36/A36M carbon steel.
 - 4. Washers: ASTM F436, Type 1, hardened carbon steel.
 - 5. Finish: Plain.

2.5 PRIMER

- A. Steel Primer:
 - 1. Comply with Section 099113 "Exterior Painting."

2.6 SHRINKAGE-RESISTANT GROUT

- A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C1107/C1107M, factory-packaged, nonmetallic aggregate grout, noncorrosive and nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.

2.7 FABRICATION

- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate in accordance with ANSI/AISC 303 and to ANSI/AISC 360.
 - 1. Camber structural-steel members where indicated.
 - 2. Fabricate beams with rolling camber up.
 - 3. Identify high-strength structural steel in accordance with ASTM A6/A6M and maintain markings until structural-steel framing has been erected.
 - 4. Mark and match-mark materials for field assembly.
 - 5. Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.
- B. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
 - 1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1/D1.1M.
- C. Bolt Holes: Cut, drill, mechanically thermal cut, or punch standard bolt holes perpendicular to metal surfaces.
- D. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.
- E. Cleaning: Clean and prepare steel surfaces that are to remain unpainted in accordance with SSPC-SP 3.
- F. Shear Stud Connectors: Prepare steel surfaces as recommended by manufacturer of shear connectors. Weld using automatic end welding of headed-stud shear connectors in accordance with AWS D1.1/D1.1M and manufacturer's written instructions.
- G. Holes: Provide holes required for securing other work to structural steel and for other work to pass through steel members.

1. Cut, drill, or punch holes perpendicular to steel surfaces. Do not thermally cut bolt holes or enlarge holes by burning.
2. Baseplate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.
3. Weld threaded nuts to framing and other specialty items indicated to receive other work.
4. Grind sheared, punched, and flame-cut edges to remove burrs and provide smooth surfaces and eased edges.
5. Make intermittent welds appear continuous, using filler or additional welding.
6. Limit butt and plug weld projections to 1/16 inch.
7. Remove weld spatter, slivers, and similar surface discontinuities.
8. Remove blemishes and surface irregularities resulting from temporary braces or fixtures by filling or grinding, before cleaning, treating, and shop priming.
9. Grind tack welds smooth unless incorporated into final welds.
10. Remove backing and runoff tabs, and grind welds smooth.
11. Conceal fabrication and erection markings from view in the completed structure.
12. Make welds uniform and smooth.

2.8 SHOP CONNECTIONS

- A. High-Strength Bolts: Shop install high-strength bolts in accordance with RCSC's "Specification for Structural Joints Using High-Strength Bolts" for type of bolt and type of joint specified.
 1. Joint Type: As indicated.
- B. Weld Connections: Comply with AWS D1.1/D1.1M and AWS D1.8/D1.8M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
 1. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in ANSI/AISC 303 for mill material.

2.9 SHOP PRIMING

- A. Shop prime steel surfaces, except the following:
 1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches.
 2. Surfaces to be field welded.
 3. Surfaces of high-strength bolted, slip-critical connections.
 4. Surfaces to receive sprayed fire-resistive materials (applied fireproofing).
 5. Galvanized surfaces [unless indicated to be painted].
 6. Corrosion-resisting (weathering) steel surfaces.

7. Surfaces enclosed in interior construction.
 8. Surface indicated in the drawings to not be primed.
- B. Surface Preparation of Steel: Clean surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces in accordance with the following specifications and standards:
1. SSPC-SP 3.
- C. Priming: Immediately after surface preparation, apply primer in accordance with manufacturer's written instructions and at rate recommended by SSPC to provide a minimum dry film thickness of 1.5 mils. Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.
1. Stripe paint corners, crevices, bolts, welds, and sharp edges.
 2. Apply two coats of shop paint to surfaces that are inaccessible after assembly or erection. Change color of second coat to distinguish it from first.

2.10 SOURCE QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform shop tests and inspections.
1. Allow testing agency access to places where structural-steel work is being fabricated or produced to perform tests and inspections.
 2. Bolted Connections: Inspect and test shop-bolted connections in accordance with RCSC's "Specification for Structural Joints Using High-Strength Bolts."
 3. Welded Connections: Visually inspect shop-welded connections in accordance with AWS D1.1/D1.1M and the following inspection procedures, at testing agency's option:
 - a. Liquid Penetrant Inspection: ASTM E165/E165M.
 - b. Magnetic Particle Inspection: ASTM E709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration are not accepted.
 - c. Ultrasonic Inspection: ASTM E164.
 - d. Radiographic Inspection: ASTM E94/E94M.
 4. In addition to visual inspection, test and inspect shop-welded shear stud connectors in accordance with requirements in AWS D1.1/D1.1M for stud welding and as follows:
 - a. Perform bend tests if visual inspections reveal either a less-than-continuous 360-degree flash or welding repairs to any shear stud connector.
 - b. Conduct tests in accordance with requirements in AWS D1.1/D1.1M on additional shear stud connectors if weld fracture occurs on shear stud connectors already tested.

5. Prepare test and inspection reports.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify, with certified steel erector present, elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements.
 1. Prepare a certified survey of existing conditions. Include bearing surfaces, anchor rods, bearing plates, and other embedments showing dimensions, locations, angles, and elevations.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place unless otherwise indicated on Drawings.
 1. Do not remove temporary shoring supporting composite deck construction and structural-steel framing until cast-in-place concrete has attained its design compressive strength.

3.3 ERECTION

- A. Set structural steel accurately in locations and to elevations indicated and in accordance with ANSI/AISC 303 and ANSI/AISC 360.
- B. Baseplates Leveling Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.
 1. Set plates for structural members on wedges, shims, or setting nuts as required.
 2. Weld plate washers to top of baseplate.
 3. Snug-tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
 4. Promptly pack shrinkage-resistant grout solidly between bearing surfaces and plates, so no voids remain. Neatly finish exposed

surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for grouting.

- C. Maintain erection tolerances of structural steel within ANSI/AISC 303.
- D. Align and adjust various members that form part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that are in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
 - 1. Level and plumb individual members of structure. Slope roof framing members to slopes indicated on Drawings.
 - 2. Make allowances for difference between temperature at time of erection and mean temperature when structure is completed and in service.
- E. Splice members only where indicated.
- F. Do not use thermal cutting during erection.
- G. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.
- H. Take special care during erection to minimize damage to shop priming.
- I. Remove welded tabs that were used for attaching temporary bracing and safety cabling and that are exposed to view in the completed Work. Take care to avoid any blemishes, holes, or unsightly surfaces resulting from the use or removal of temporary elements.
- J. Grind tack welds smooth.
- K. Remove backing and runoff tabs, and grind welds smooth.
- L. Conceal fabrication and erection markings from view in the completed structure.
- M. Remove weld spatter, slivers, and similar surface discontinuities.
- N. Grind off butt and plug weld projections larger than 1/16 inch.
- O. Continuous welds shall be of uniform size and profile.

3.4 FIELD CONNECTIONS

- A. High-Strength Bolts: Install high-strength bolts in accordance with RCSC's "Specification for Structural Joints Using High-Strength Bolts" for bolt and joint type specified.
 - 1. Joint Type: As indicated.
- B. Weld Connections: Comply with AWS D1.1/D1.1M and AWS D1.8/D1.8M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
 - 1. Comply with ANSI/AISC 303 and ANSI/AISC 360 for bearing, alignment, adequacy of temporary connections, and removal of paint on surfaces adjacent to field welds.
 - 2. Remove backing bars or runoff tabs where indicated, back gouge, and grind steel smooth.
 - 3. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in ANSI/AISC 303 for mill material.

3.5 REPAIR

- A. Touchup Painting:
 - 1. Immediately after erection, clean exposed areas where primer is damaged or missing, and paint with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
 - a. Clean and prepare surfaces by SSPC-SP 2 hand-tool cleaning or SSPC-SP 3 power-tool cleaning.
 - 2. Cleaning and touchup painting are specified in Section 099113 "Exterior Painting."

3.6 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a special inspector to perform the following special inspections:
 - 1. Verify structural-steel materials and inspect steel frame joint details.
 - 2. Verify weld materials and inspect welds.
 - 3. Verify connection materials and inspect high-strength bolted connections.
- B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
 - 1. Bolted Connections: Inspect and test bolted connections in accordance with RCSC's "Specification for Structural Joints Using High-Strength Bolts."

2. Welded Connections: Visually inspect field welds in accordance with AWS D1.1/D1.1M.
 - a. In addition to visual inspection, test and inspect field welds in accordance with AWS D1.1/D1.1M and the following inspection procedures, at testing agency's option:
 - 1) Liquid Penetrant Inspection: ASTM E165/E165M.
 - 2) Magnetic Particle Inspection: ASTM E709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration are not accepted.
 - 3) Ultrasonic Inspection: ASTM E164.
 - 4) Radiographic Inspection: ASTM E94/E94M.

END OF SECTION

May 26, 2021

SPECIAL PROVISION

**CONTRACT: 18-2399TP
PROJECT: SLC_OP_1**

SECTION 099113

EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following exterior substrates:
 - 1. Steel and iron.
 - 2. Galvanized metal.
- B. Related Requirements:
 - 1. Section 051200 "Structural Steel Framing" for shop priming of metal substrates.
 - 2. Section 055000 "Metal Fabrications" for shop priming metal fabrications.

1.2 DEFINITIONS

- A. MPI Gloss Level 5 (semigloss): 35 to 70 units at 60 degrees, according to ASTM D523.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
 - 1. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
 - 2. Indicate VOC content.
- B. Samples for Initial Selection: For each type of topcoat product.
- C. Samples for Verification: For each type of paint system and each color and gloss of topcoat.
 - 1. Submit Samples on rigid backing, 8 inches square.
 - 2. Apply coats on Samples in steps to show each coat required for system.
 - 3. Label each coat of each Sample.

4. Label each Sample for location and application area.
- D. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules. Include color designations.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Paint: 5 percent, but not less than 1 gal. of each material and color applied.

1.5 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
1. Architect will select one surface to represent surfaces and conditions for application of each paint system.
 - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft.
 - b. Other Items: Architect will designate items or areas required.
 2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
1. Maintain containers in clean condition, free of foreign materials and residue.
 2. Remove rags and waste from storage areas daily.

1.7 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Benjamin Moore & Co.
 - 2. PPG Paints.
 - 3. Sherwin-Williams Company (The).
- B. Products: Subject to compliance with requirements, provide one of the products listed in the Exterior Painting Schedule for the paint category indicated.

2.2 PAINT, GENERAL

- A. MPI Standards: Products shall comply with MPI standards indicated. Products shall be listed in its "MPI Approved Products Lists" unless indicated otherwise.
 - 1. Substitutions of products not listed on the "MPI Approved Products Lists" may be considered if product data for the product is provided that clearly indicates that the product meets or exceeds all MPI requirements.
- B. Material Compatibility:
 - 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- C. VOC Content: For field applications, paints and coatings shall comply with VOC content limits of authorities having jurisdiction and the following VOC content limits:
 - 1. Flat Paints and Coatings: 50 g/L.

2. Nonflat Paints and Coatings: 100 g/L.
3. Primers, Sealers, and Undercoaters: 100 g/L.
4. Rust-Preventive Coatings: 250 g/L.
5. Zinc-Rich Industrial Maintenance Primers: 340 g/L.

D. Colors: As selected by Architect from manufacturer's full range.

2.3 SOURCE QUALITY CONTROL

- A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure:
1. Owner will engage the services of a qualified testing agency to sample paint materials. Contractor will be notified in advance and may be present when samples are taken. If paint materials have already been delivered to Project site, samples may be taken at Project site. Samples will be identified, sealed, and certified by testing agency.
 2. Testing agency will perform tests for compliance with product requirements.
 3. Owner may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- C. Proceed with coating application only after unsatisfactory conditions have been corrected.
1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:
 - 1. SSPC-SP 3.
- E. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- F. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual."
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
 - 3. Paint both sides and edges of exterior doors and entire exposed surface of exterior door frames.

4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
 6. Do not paint finish copper, bronze, chromium plate, nickel, stainless steel, anodized aluminum, or monel metal except as explicitly indicated or specified.
- B. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- C. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- D. Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
1. Paint the following work where exposed to view:
 - a. Equipment, including panelboards and switch gear.
 - b. Uninsulated metal piping.
 - c. Uninsulated plastic piping.
 - d. Pipe hangers and supports.
 - e. Metal conduit.
 - f. Plastic conduit.
 - g. Tanks that do not have factory-applied final finishes.

3.4 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
1. Contractor shall touch up and restore painted surfaces damaged by testing.
 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 EXTERIOR PAINTING SCHEDULE

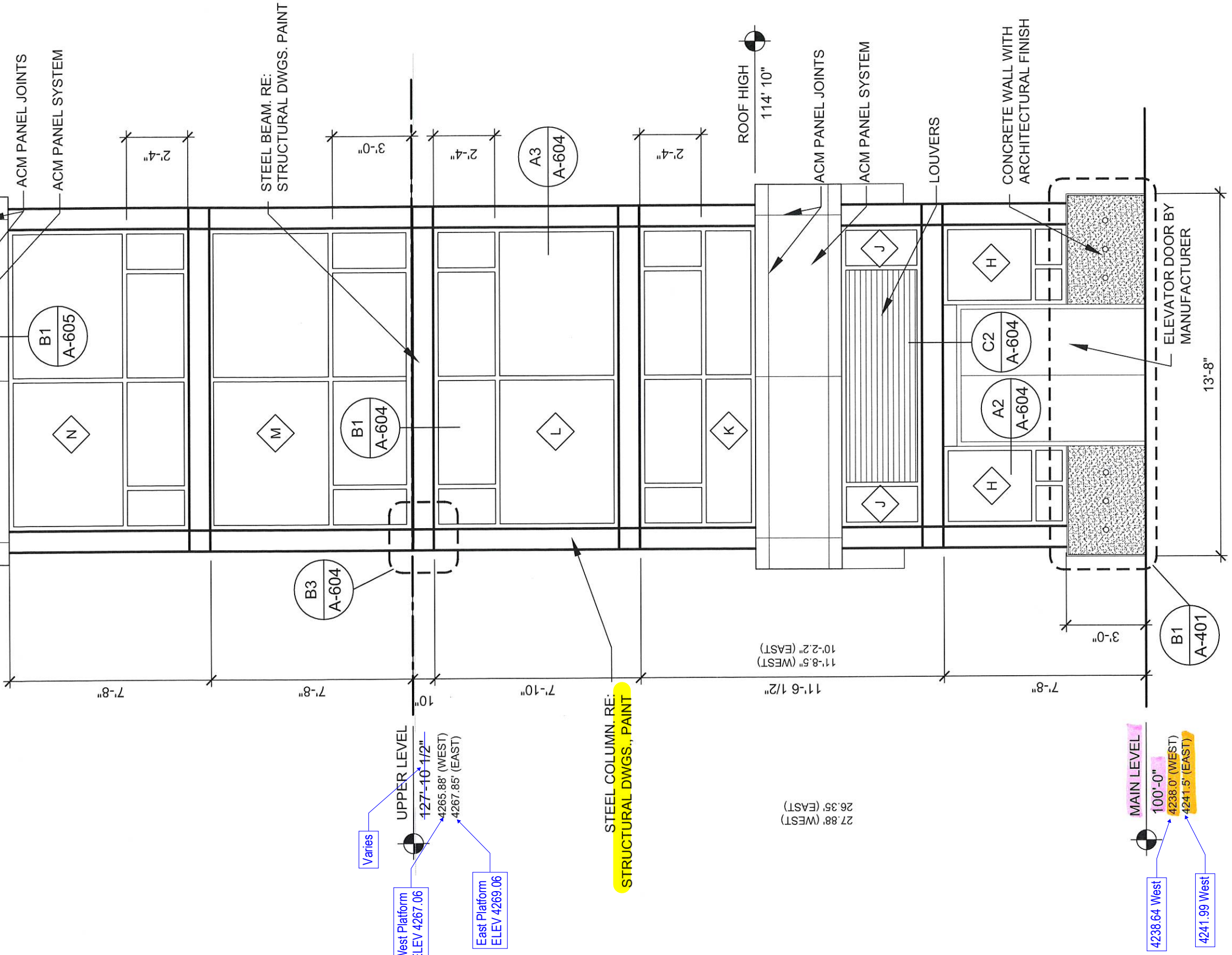
- A. Steel and Iron Substrates:
 - 1. Water-Based Light Industrial Coating System MPI EXT 5.1B:
 - a. Prime Coat: Primer, zinc rich, inorganic, MPI #19.
 - 1) PPG Architectural: Amercoat; Dimetcote 9H - DI9H-A/DI9H-B/DI9-P.
 - 2) Sherwin-Williams: Protective & Marine; Zinc Clad XI - B69V11/B69D11.
 - b. Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
 - c. Topcoat: Light industrial coating, exterior, water based, semi-gloss (MPI Gloss Level 5), MPI #163.
 - 1) Sherwin-Williams: Pro Industrial; DTM Semi-Gloss - B66W01151.
- B. Galvanized-Metal Substrates:
 - 1. Water-Based Light Industrial Coating System MPI EXT 5.3J:
 - a. Prime Coat: Primer, galvanized, water based, MPI #134.
 - 1) Benjamin Moore: Ultra Spec HP; Acrylic Metal Primer - HP04/FP04.
 - 2) PPG Architectural: High Performance Coatings; Pitt-Tech Plus 4020 PF / Devflex 4020 PF - 4020 1000.
 - 3) Sherwin-Williams: Pro Industrial; Pro-Cryl Universal Primer - B66W1310.
 - b. Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
 - c. Topcoat: Light industrial coating, exterior, water based, semi-gloss (MPI Gloss Level 5), MPI #163.
 - 1) Sherwin-Williams: Pro Industrial; DTM Semi-Gloss - B66W01151.

END OF SECTION

SINGLE PLY MEMBRANE ROOF

ROOF HIGH
148'-0"

ROOF LOW
145'-2"



A1 ELEVATOR ELEVATION
SCALE: 1/4" = 1'-0"

△		
△		
△		
0	01/22/21	100% REVIEW SUBMITTAL
REV	DATE	DESCRIPTION

Designed By
JJ

Drawn By
JK

Checked By
JJ

Approved By

FFKR ARCHITECTS

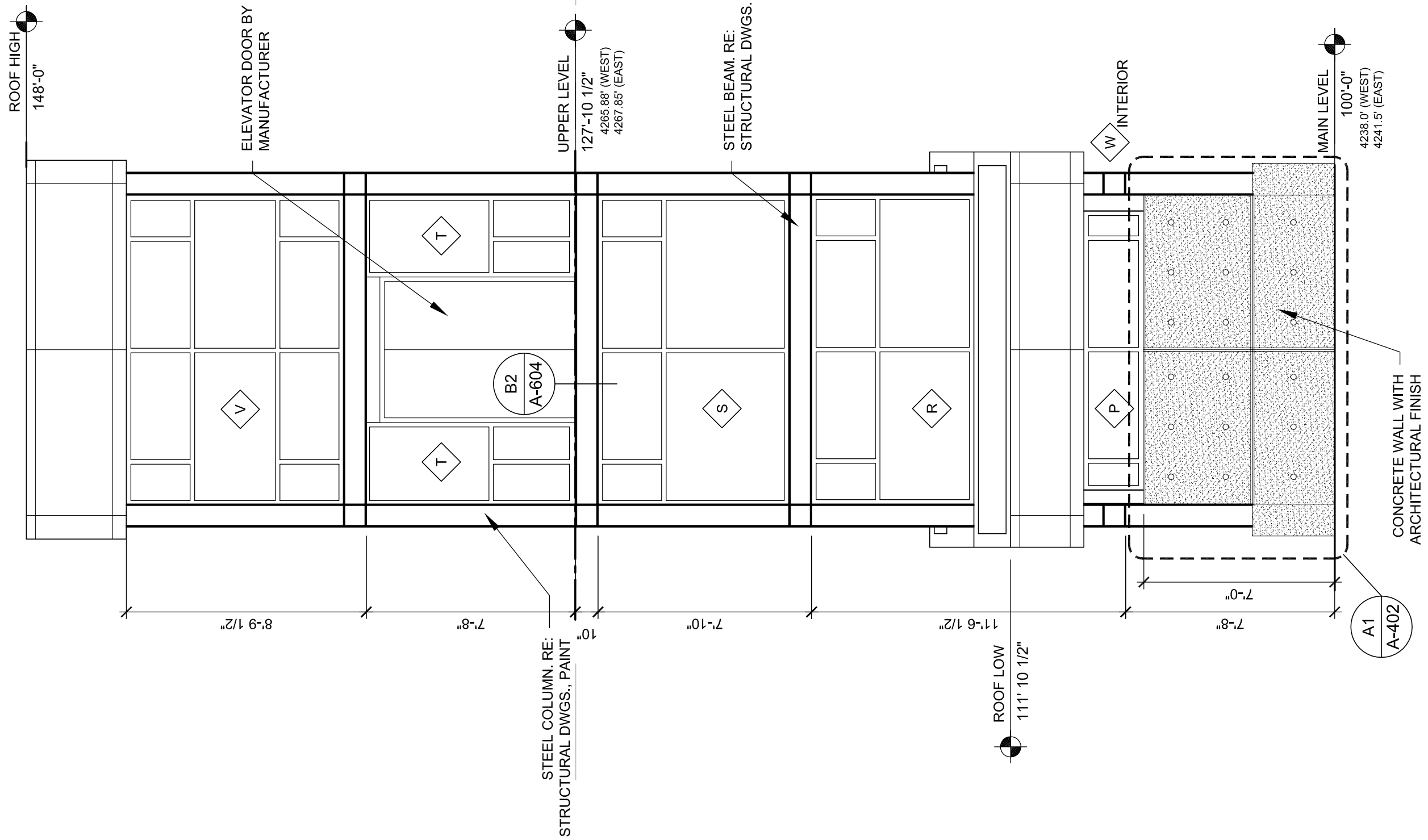
James B. Lipse



EXTERIOR ELEVATION

SALT LAKE CITY
SLC_OP_1
300 NORTH PEDESTRIAN OVERPASS STRUCTURE
OVER 500 WEST & UPRR/UTA LINES

CADD Filename	
UTA Contract No. 18-2399TP	
Drawing	Sheet No.
A-201	



A1 ELEVATOR ELEVATION
SCALE: 1/4" = 1'-0"

REV	DATE	DESCRIPTION
0	01/22/21	100% REVIEW SUBMITTAL

Designed By JJ
 Drawn By JK
 Checked By JJ
 Approved By

FFKR ARCHITECTS

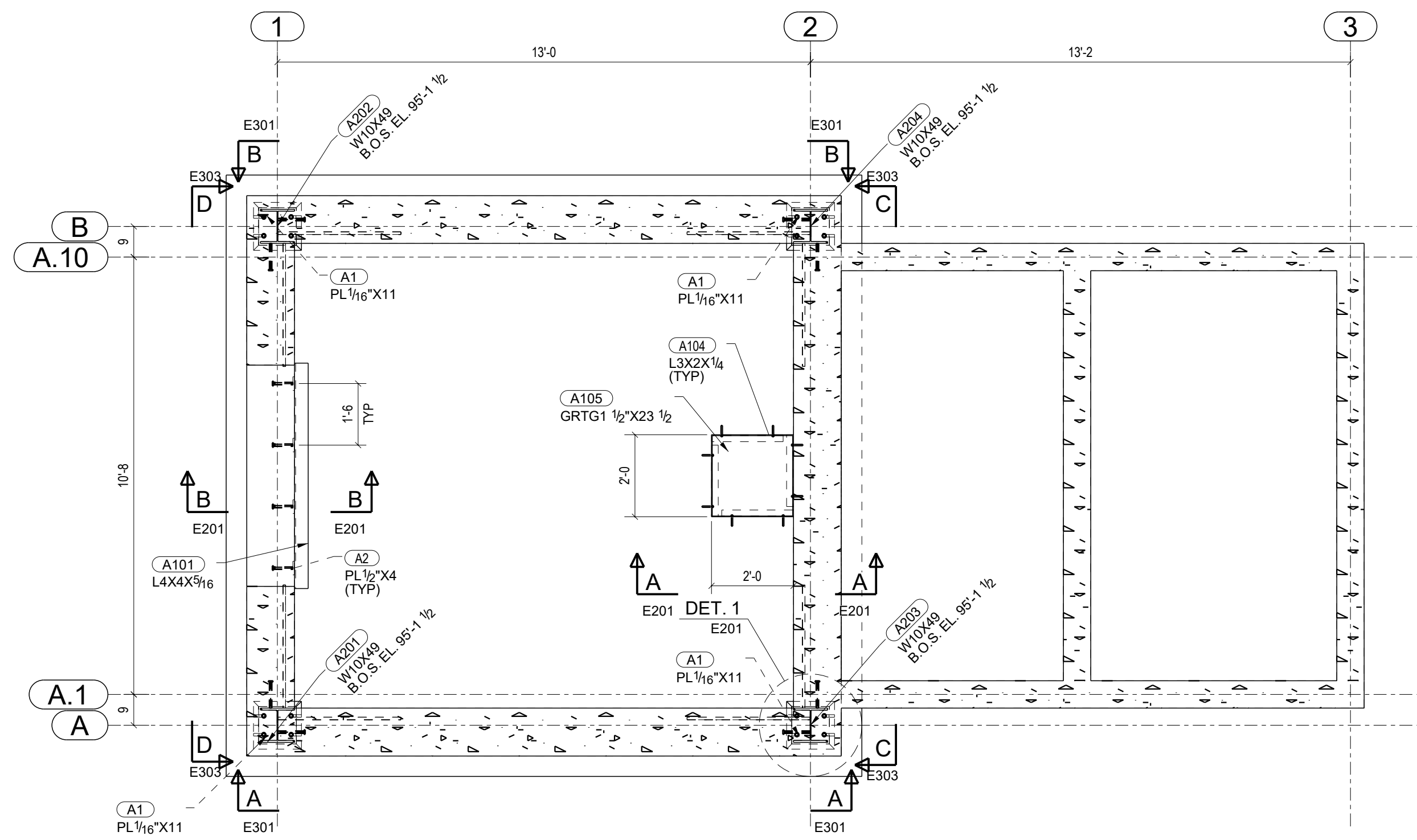
James B. Lase



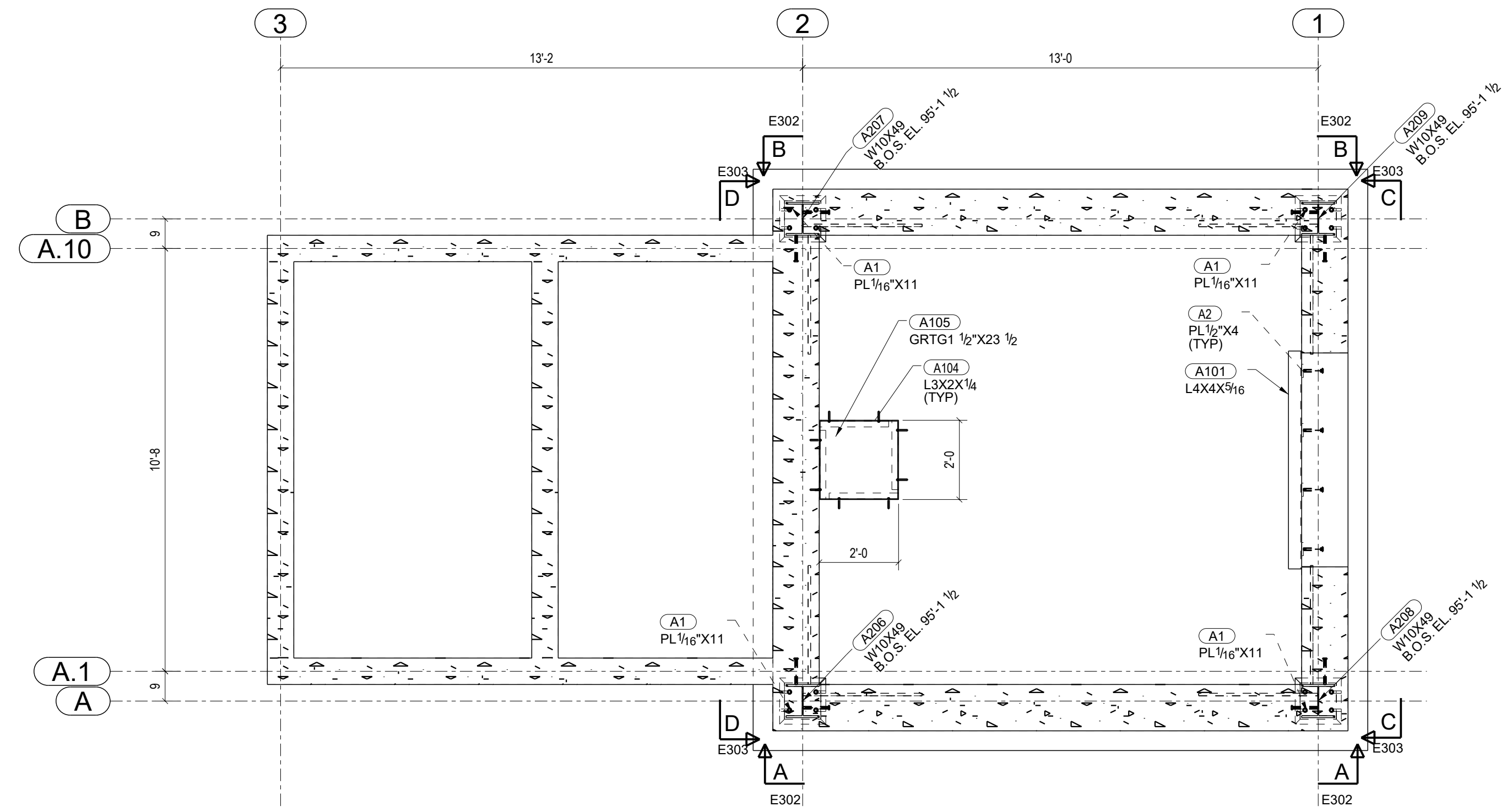
EXTERIOR ELEVATION

SALT LAKE CITY
 SLC_OP_1
 300 NORTH PEDESTRIAN OVERPASS STRUCTURE
 OVER 500 WEST & UPRR/UTA LINES

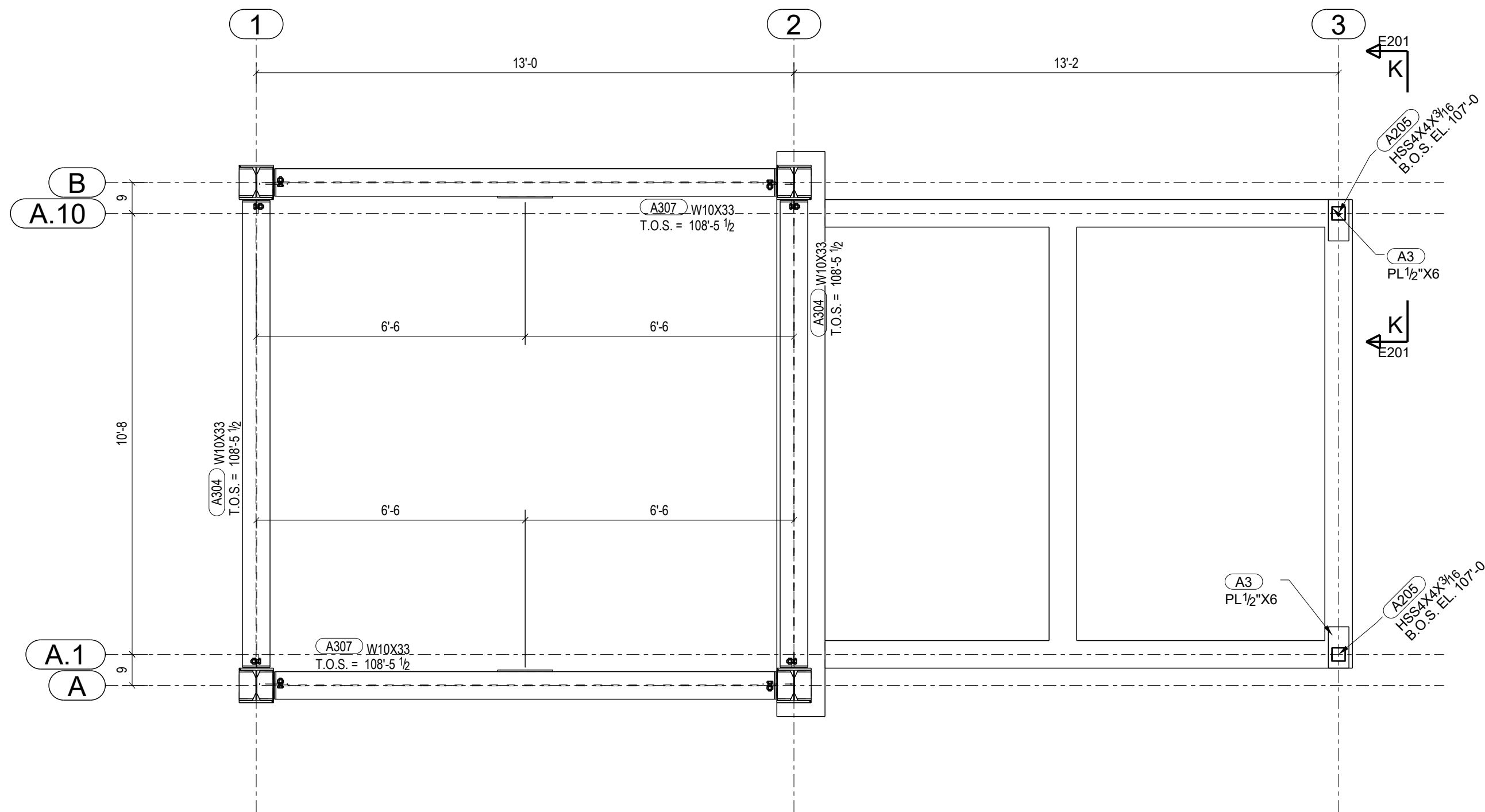
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UTA Contract No. 18-2399TP	
Drawing	Sheet No.
A-203	



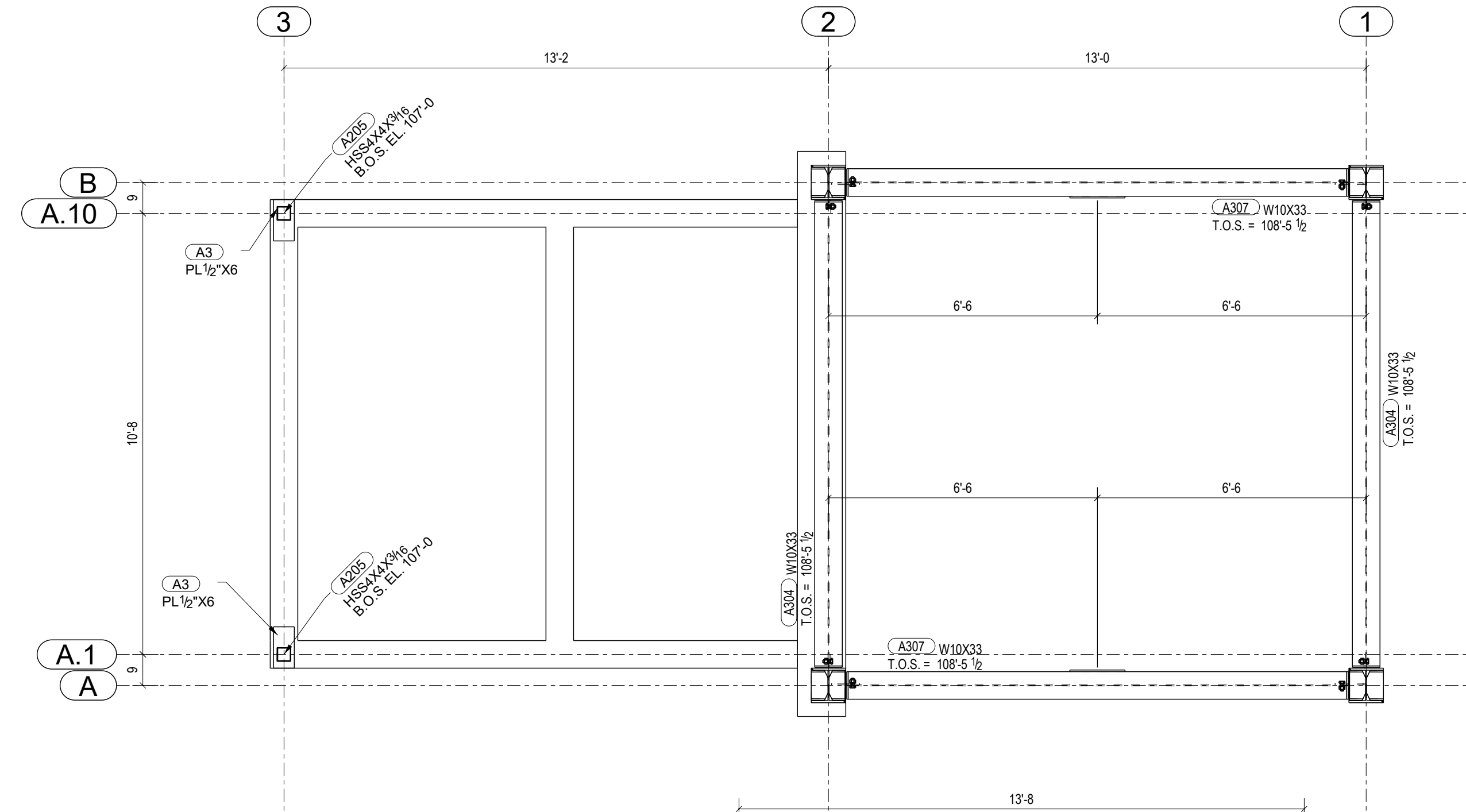
PLAN AT EL. 100'-0 WEST TOWER



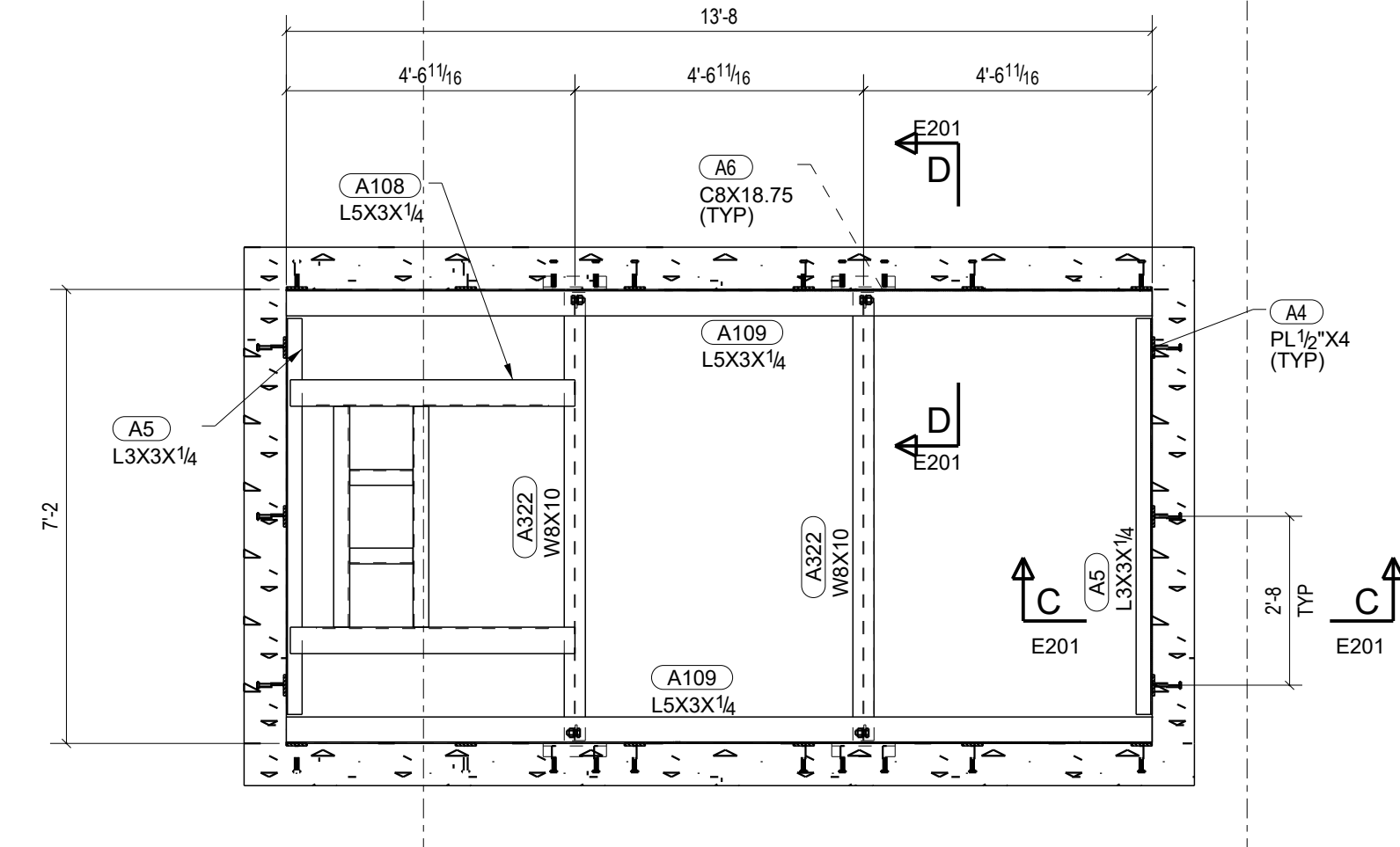
PLAN AT EL. 100'-0 EAST TOWER



PLAN AT EL. 108'-5 1/2 WEST TOWER



PLAN AT EL. 108'-5 1/2 EAST TOWER



Revised per mtg on: 2.14.22 FFKR jji 2.14.22

<input type="checkbox"/> NO EXCEPTIONS	<input type="checkbox"/> REVISE AND RESUBMIT	<input type="checkbox"/> REJECTED
<input checked="" type="checkbox"/> FURNISH AS CORRECTED	<input type="checkbox"/> SUBMIT SPECIFIED ITEM	<input type="checkbox"/> FFKR REVIEW NOT REQUIRED

This review is only for general conformance with the design concept and the information given in the Construction Documents. Corrections or comments made on the shop drawings during this review do not relieve the Contractor from compliance with the requirements of the plans and specifications and applicable laws, codes and regulations. Review of a specific item shall not include review of an assembly of which the item is a component. Review of such submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions, quantities, and installation or performance of equipment or systems, which are the Contractor's responsibility. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. Coordinate the Work with that of all other trades and perform all Work in a safe and satisfactory manner.

Date: 01/31/2022
 By: jjenzen1
 FFKR ARCHITECTS

WORKING DRAWINGS REVIEW

<input type="checkbox"/> NO EXCEPTIONS TAKEN	<input type="checkbox"/> CIVIL SCIENCE
<input checked="" type="checkbox"/> MAKE CORRECTIONS AS NOTED	DATE: 01/30/2022
<input type="checkbox"/> REVISE AND RESUBMIT	BY: AJ Yates
<input type="checkbox"/> REJECTED	

Considerations or comments made on the working drawings during review do not relieve the contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents.

SUBMITTAL REVIEW

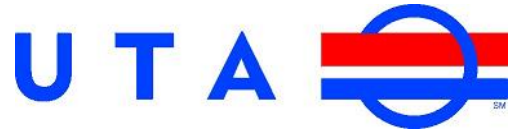
<input type="checkbox"/> NO EXCEPTIONS TAKEN
<input type="checkbox"/> NOTE MARKINGS
<input type="checkbox"/> REVISE AND RESUBMIT
<input type="checkbox"/> REJECTED
<input type="checkbox"/> NOT REVIEWED

This review is only for general conformance with the design concept and the information given in the Construction Documents. Corrections or comments made on the shop drawings during this review do not relieve the Contractor from compliance with the requirements of the plans and specifications and applicable laws, codes and regulations. Review of a specific item shall not include review of an assembly of which the item is a component. Review of such submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions, quantities, and installation or performance of equipment or systems, which are the Contractor's responsibility. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. Coordinate the Work with that of all other trades and perform all Work in a safe and satisfactory manner.

By: jjenzen1
 Date: 2022-01-28
 REAVELEY


STEEL ASTM SEE SPEC	UNO	PROJECT NAME	UTA PEDESTRIAN ELEVATOR
ELECTRODES E70-XX	UNO	LOCATION	300 N 500 W SLC, UTAH
WELDS ASW	UNO	CONTRACTOR	
OPEN HOLES 13/16"	UNO	ARCHITECT	FFKR ARCHITECTS
BOLTS A325N	UNO	DATE	10/22/2021
PAINT 1-SIC PRIMER	UNO	DRAWN BY	UTA
		DESCRIPTION	AB PLACEMENT PL
		DATE	10/22/2021
		JOB No.	UTA
		DRG No.	E101

W.O.I.
 Lindon, UT 84042
 801-420-2546 www.woisteel.com



MEMORANDUM

To: Tom Millar, SLC Project Manager/Transportation Planner, Transportation Division

From: Grey Turner, P.E., Manager of Engineering & Design 

Date: June 30, 2022

Re: 300 North Ped Bridge Structural Steel substitution

As a result of the material substitution for the elevator shafts on the 300 North Pedestrian Bridge and in response to your previous memo dated April 26, 2022 – our project team has worked diligently over the past several weeks to develop solutions that are structurally sound, visually appealing, and meets or exceeds all the industry standards for a pedestrian bridge design.

Included in this memo is:

- Condensed summary of the technical/structural fixes that will be applied to the elevator shafts,
- List of other administrative-type provisions that UTA will address,
- Matrix showing the inspections needed/QA & QC responsibilities/standards to be met,
- Modified paint specification, “09991M Field Cleaning and Painting Structural Steel”, that we have developed using UDOT specs 09972 and 09991. This modified paint specification is specific to the prepping, priming, and painting that will need to occur. Please note this new specification has been developed and reviewed internally and can be modified, if needed, based on comments from SLC review.

Then, attached to this memo is a technical memo from the structural engineers (AJ Yates from Civil Science and Jeff Miller from Reaveley Engineers) outlining the information you requested as well as a detailed discussion of the proposed solutions we are suggesting occur with this material substitution.

Condensed summary of the technical/structural fixes that are proposed:

- A thorough review of the structural properties of the structural steel and weathering steel was performed to ensure the anticipated structural integrity of the structure was maintained. There were some questions regarding the different mechanical properties of the steel. Yes, there are more mechanical properties of steel than just yield strength and modulus of elasticity. However, these are the only values relevant to the design. The other values are either not applicable or have the same values for either type of steel.
- The steel plates shown on Detail A1, Sheet SF501 that are part of the original design are there to create a mounting surface for the glass windows. These plates and the surrounding area will have small pieces of plate steel added to completely seal the boxed section to ensure no moisture or atmosphere can enter this area and thus eliminate the possibility of corrosion forming. There will also be some small plates and “seal welding” that occurs around the cover plates to ensure the area is fully sealed.

- All welds will be ground and smoothed out, mill scale/slag/flux deposits will be removed to create a smooth finished surface.
- The entire steel framework structure will be blasted to remove old primer, rust that has formed, and other small deposits to ensure a clean priming/painting surface. The specifics on how and when this is to be performed are addressed in the modified specification 09991M contained at the end of the memo.
- Priming and subsequent finish paint coats will be applied in conformance with project specifications and the above-mentioned modified specification 09991M “Field Clean and Painting Structural Steel. The proposed NEPCOAT List B primer and paint product sheets are attached to this memo. We are recommending the “Carboline Company” products be used on this structure. Paint colors will be recommended by the architect with final approval by Salt Lake City.
- A “methacrylate-type” product to be applied to the concrete immediately surrounding the structural steel that is embedded in the concrete. This will seal the concrete and fill any microcracks to inhibit moisture penetrating the concrete. Specific attention will be given during the application of this methacrylate product around the steel and concrete interface. The area of application will be contained to that area that will be covered with the metal flashing as described in the following bullet point. This will ensure that any discoloration of the concrete will be covered or hidden from general view.
- Metal flashing will be placed around the steel members where embedded in concrete. Caulking will be applied after the methacrylate product is applied and before the flashing is installed to ensure a positive slope away from the steel. This will provide an additional method to inhibit moisture penetrating the concrete and potentially corroding the embedded steel.

Your memo specifies following the UDOT paint specs and processes. After numerous meetings and research, we agree the NEPCOAT paint system (Qualified Products List B) will be a superior product to use on the structure. As previously mentioned, after reviewing the UDOT 09972 and 09991 painting specifications, we have written the modified specification 09991M “Field Cleaning and Painting Structural Steel” to address what will be needed to prep, prime, and paint the structure. After review by Salt Lake City, if there are any additions or deletions that need to be made, we will reissue the specification. We do still owe you one rendering of a “gray color” to give you the visual information you need to select a color. There is a section of the modified specification that discusses the need to provide paint samples to both UTA and SLC before a color is selected and approved. In addition, we will have certified inspectors inspect and evaluate between each paint phase and ensure proper procedures are being followed.

Other UTA Agreed-to Provisions:

- Full transparency and better communication between UTA managers/inspectors and Salt Lake City representatives – specifically field-related questions and concerns that may arise. Weekly meetings and documentation will occur to ensure concerns are being addressed.
- A current listing of all specifications used will be kept and available for easy electronic retrieval and review.

- Qualified inspectors required to satisfy the building permit requirements will provide the necessary inspections. A 3rd party structural engineer has also been retained to review the plans and provide design/construction insights.
- RS&H has been selected to inspect the fabrication of the prefabricated bridge structure currently being built in Greeley, Colorado.
- All construction inspection logs, notes, reports, photos are submitted in IPCS and will be accessible to SLC for review.
- In addition to the above-mentioned inspections, the Engineer-of-Record (EOR) and Architect-of-Record (AOR) will perform field reviews and provide notes at key milestones during the construction process. These reviews will be at the Engineer's and Architect's discretion and will be communicated to the UTA inspectors.
- Four additional on-site inspections by a structural engineer, UTA inspector, and SLC inspector(s). These inspections will only pertain to the elevator shaft structures – specifically welds/joints, steel/concrete interface, and paint/coating condition. These inspections will not include the entire bridge structure and all the other electrical, mechanical, other equipment found in the mechanical rooms – including the elevators and associated lift equipment. These inspections will occur at the following milestones:
 - #1 Year 0 – before final completion and Bill-of-Sale is submitted to SLC.
 - #2 Year 1 – one year after final completion.
 - #3 Year 3 – three years after final completion.
 - #4 Year 5 – five years after final completion.

As a result of these inspections, if there are any findings directly related to warranty issues or defects, UTA will schedule and pay for the solution(s) that are identified and agreed to by both parties.

- All paint sub-contractor's qualifications/certifications/QC plans will be submitted to SLC for review after UTA's review.
- Provide SLC an escrow account or other related means to provide a re-painting or paint touchup fund for the elevator shafts. Based on the new NEPCOAT paint system, the exact amount of this account funded by UTA will be determined and agreed to between UTA and Salt Lake City.

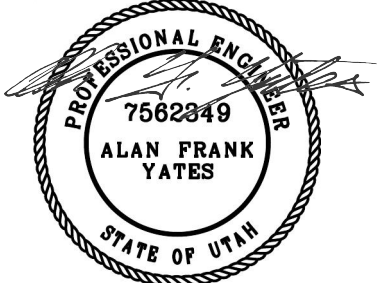
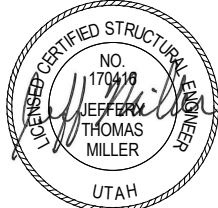
Needed Inspections:

Materials	Items	QC	QA (required for 10% of quality)	Structural Observations	Certifying Agency
Surface Preparation	Elevator Structural Steel	Complete	CMT	N/A	AMPP (SSPC and NACE)
	Truss structure	Contech	RS&H	N/A	AMPP (SSPC and NACE)
Paint System	Elevator Structural Steel	Complete	CMT	N/A	AMPP (SSPC and NACE)
Structural Steel	Field Welding Abutment Steel	Cripple Creek	CMT	Civil Science	AWS
	Elevator Structural Steel Welding	Complete	CMT	Reaveley	AWS
	Truss structure	Contech	RS&H	N/A	AWS
	High-strength bolts	Contech	RS&H	N/A	AISC
	Truss splice torque	Cripple Creek	CMT	Civil Science	AISC

The inspections shown in the table above are specifically related to the bridge structure and does not include electrical, mechanical, elevators, or other needed inspections. If there are other structure-related inspections that are needed (bearing pads have been mentioned), we will provide those inspectors to ensure adherence to the plans and specifications.

As you review this memo and the following attachments, please let me know if there are any questions or additional information you may need. If the proposed means, methods, and provisions outlined in this memo are acceptable to Salt Lake City, we would like to have Granite and their subcontractors proceed with scheduling the proposed tasks and resume work on the bridge structure as soon as possible.

MEMORANDUM

To	Grey Turner, PE Utah Transit Authority Program Manager	 06/17/2022
From	AJ Yates, PE Civil Science Project Manager Structures Design Lead	
cc	Jeff Miller, SE Reaveley Engineers Engineer of Record (Elevator Shafts)	 6/17/2022
Date	16 June 2022	
Subject	SLC_OP_1 – Structural Steel Material Substitution for the Elevator Shafts	

This memo provides information and recommendations for Utah Transit Authority (UTA) and Salt Lake City’s (SLC) consideration for accepting the structural steel as fabricated and erected on the 300 North Pedestrian Bridge (SLC_OP_1) project. The original design intent was to use weathering steel (ASTM A588 and ASTM A847) with a minimum yield strength (Fy) of 50 ksi. We understand the provided steel is non-weathering steel (ASTM A992 and ASTM A36) with a yield strength that meets or exceeds 50 ksi.

This memo also addresses selected items presented in the memorandum from Salt Lake City to UTA dated April 26, 2022 regarding “Processes & Products Required Before Salt Lake City Agrees to Assume Ownership of the 300 North Pedestrian Bridge (City Job #RDW 20038; UTA Job #SLC_OP_1)”. In this document, SLC requests the “project consultant designer to resubmit new calculations for strength, properties, performance, and maintenance...” We provide the following items to be used for UTA’s response.

The design team has reviewed the steel material certifications provided by the contractor. According to these documents, the wide flange sections conform to ASTM A992, and the steel plates conform to ASTM A36. Both materials meet the yield strength requirement of 50 ksi. While the ASTM A36 specification requires a minimum yield strength of 36 ksi, it is common for steel mills to produce A36 material with a yield strength that exceeds 50 ksi so that it can be supplied for multiple applications.

Structural Calculations (Strength and Properties)

The specified strength and stiffness mechanical properties of the ASTM A588 weathering steel and the ASTM A992 wide flange sections are equivalent. The yield strength for both types of steel is 50 ksi and the modulus elasticity is 29,000 ksi. Thus, the difference in the ASTM steel type does not change the capacity or performance of the steel structure. The original design structural calculations are still valid and do not need to be changed as the calculations use the same material properties. The design calculations do not specify a specific ASTM, just a minimum yield strength (of 50 ksi).

Structural Performance

The provided structural steel will perform in the same manner as the originally intended weathering steel. Both materials are widely used in structural systems found in similar applications. As previously

referenced, both materials meet the applicable code provisions and are expected to serve the intended purpose of supporting the structure.

Maintenance

Weathering and painted steel both require owner maintenance, but there are different activities for that maintenance to be effective. Ultimately, the maintenance is intended to prolong the service life of the structure by protecting it against deterioration caused mainly by corrosion.

Weathering steel is an exposed material that should not be covered so that protective patina is not damaged. This patina is formed by steel oxidation and seals off the steel by just being exposed to the atmosphere. The patina gives weathering steel its distinctive appearance which starts off as a bright orange that transitions into a darker brown over time.

Painted steel is defined as having paint applied to steel, creating a protective layer from the elements. Typical practice is to provide a 3-part paint system, which consists of a primer coat followed by an intermediate coat and a final finish coat. Non-weathering steel does not form a protective patina as the oxidation process continues to penetrate the steel and eventually results in section loss. The paint system can be tinted to a wide variety of colors.

Specific Maintenance Challenges

- Environmental
 - Weathering steel performs well to exposed atmosphere; however, exposure to de-icing salts accelerate the corrosion process and can destroy the protective patina. As such, snow removal activities should avoid the use of salt. Weathering steel also has the tendency to stain adjacent surfaces due to water run-off. This staining may need to be cleaned off the window systems or adjacent concrete surfaces every few years.
 - Painted steel also performs well to the exposed atmosphere if the paint system is intact. De-icing salts can be used around the structure
- Graffiti
 - Maintaining weathering steel against graffiti is difficult, time consuming, and costly. Anti-graffiti sealants should not be applied, and graffiti removal options are limited. One strategy for graffiti removal is sandblasting, which removes the surfaces of the steel and requires the patina formation process to start over. This creates a color variation that will take months to years to re-establish.
 - Painted steel can perform well against graffiti. Some paint systems counteract the adherence of spray paint. Painting over the graffiti is another option and has a relatively low maintenance effort.
- Reapplication of Coating
 - Weathering steel is a self-healing system. The material properties are constant throughout, and any exposed surface will oxide and form the patina.
 - Painted steel is expected to require one or more re-applications of paint over the life of the structure.

Site-Specific Items

Priming Coat

Due to potential quality concerns, we understand the elevator shaft structural steel will be blast cleaned and the primer coat will be reapplied. To accommodate this, and to provide results conforming to the requirements determined by the Engineer of Record, we recommend the following before blasting and priming occurs.

We understand the top and bottom of the steel seal plates shown on Detail A1, Sheet SF501 terminate an inch or two short of the beams. Because of this, there is a gap at the top and bottom of the plates, and

they are not welded all around as noted in the detail. It is important that these plates be welded all around to seal off the space between the seal plates and the side flange columns. Our proposed repair method for this condition is to add another piece of 3/16-inch thick plate to close the existing gap and weld the new plates all around to the column flanges, beam flanges, continuity plates, and existing seal plates. The plate should be placed flush with the other seal plate and should not be placed on top of the current seal plate. The welds should be ground smooth as noted on Detail A1, Sheet SF501.

The clips at the interior corners of the continuity plates shown on Detail A2, Sheet SF212 also need to be closed to seal off the space between the inside of the seal plate and the column. An 1/8-inch thick steel plate should be placed on top of the continuity plates to fully cover the corner clips. The corner of the cover plate at the column fillet between the flange and web of the column should be fitted to the shape of the fillet. The cover plate should then be welded all around with an 1/8-inch fillet weld to fully seal around the plate. Alternatively, an 1/8-inch thick steel plate can be placed at the flange tips and edges of the continuity plates and welded all around with an 1/8-inch fillet weld to fully seal around the plate.

All welds at the seal plates and corner cover plates should be continuous without any gaps or voids so the space is fully sealed. It should be noted that although the primer coat behind the seal plates will not be corrected, the continuous welding will prevent air flow and moisture from contacting these surfaces and further degrading the integrity of the structural steel.

The priming and subsequent finish coats should be applied in conformance with upcoming project specification that is currently being developed. We understand that the contractor will be applying a 3-part paint system that is pre-qualified on the NEPCOAT Qualified Products List B. List B includes a zinc primer, epoxy or urethane intermediate coat, and aliphatic urethane topcoat. These pre-qualified paint systems meet UDOT's steel painting specification standards. We support using this type of system to meet the criteria set forth by UTA and SLC.

Demand Critical Welds

Any deficiencies in the demand critical welds, which are integral parts of the Seismic Force Resisting System, should be remediated. The following recommendations address potential or known deficiencies and should be performed after the current primer coat has been removed and before the reapplication is provided. The work should also be done prior to the previously mentioned seal plate corrections to provide access to the welds.

The backer bars should be removed from the beam bottom flange to column connections (refer to Note H.4, Sheet SE003). The backer bars need not be removed from the beam top flange to column connections or at the continuity plate to column connections provided that the backer bars are welded to the column flange with a continuous 5/16-inch fillet weld on the edge below the CJP groove weld for the entire length of the backer bar (refer to Note H.5, Sheet SE003). However, if these backer bars are allowed to remain, the welds need to be finished to look like permanent, finished welds. Non-finished tack welds should not be allowed to remain. The glass window system should also be verified to fit as the backer bars could present an obstruction (unless they were placed on the web side of the flange).

If any of the continuity plates are out of alignment with the beam flanges, they should be removed and properly placed. There is one known location (the farthest northwest column at the lowest beam connection). Each demand critical weld should be observed during the Structural Observations (see below).

Please feel free to provide these recommended actions to the contractor as part of the efforts to accept the steel material substitution.

Requested Items and Services

We request the following items be provided to the Architect of Record (AOR) and Engineer of Record (EOR) for review:

- Selection of primers and topcoats, include the written verification of manufacturers' recommendations of shop primer and topcoat compatibility
- Reports and associated documentation from the special inspections – any non-compliant construction should be indicated so that a repair can be developed and implemented prior to re-application of the priming coat.
- Documentation of the certified survey (refer to Project Specification 051200, Paragraph 3.1 A.1.)

SLC has requested Structural Observations (refer to IBC 1704.6) to be performed by the EOR (Reaveley Engineers) as part of the building permit process. We agree that this would be a good opportunity to provide additional observation of the current work and aid in SLC's considerations of accepting the steel material substitution. The Structural Observations should take place prior to blasting the current steel and reapplication of the paint primer. Deficiencies, if any, will be identified and provided to UTA for consideration of remediation activities. Remediation activities should be done prior to the re-application of the paint primer to preserve its integrity.



REQUEST FOR INFORMATION

Project Name: SLC – 300 N Pedestrian Bridge

Project Number: SLC_OP_1

RFI #: 87.02

DATE: 7/9/22

NO of Pages: 4

TITLE: Roof Decking Dimensions – 300 N

TO: **Grey Turner**

FROM: **Jessica Keane**

Utah Transit Authority

Granite Construction

669 W 200 S

1000 N. Warm Springs Rd.

Salt Lake City, UT 84101

Salt Lake City, UT 84116

Description of Request:

FROM 3/21/2022:

The roof decking fabricator is requesting confirmation about the following dimensions:

- 1. On E103 (approved structural steel shop drawing), framing is shown to extend 3'4" West beyond Grid Line 3 to center of beam. On SF103, it shows framing extending East of Grid Line 2 and before Grid Line 3, but does not provide a dimension where beam is to be placed East of Grid Line 2. Please confirm which drawing is accurate. If contract drawing SF103 is accurate, please provide dimension from Grid Line 2 to Center of Beam.*
- 2. E102 & E103 show a dimension from Grid Line 2 to 3 as 14'2", but SF103 shows 13'2". Please confirm which is correct.*

Follow Up on 5/25/2022:

- 1. Plan sheets A-112, A-202, A-301, and SF103 show differing upper roof dimensions.*
- 2. If upper roof was intended to have a shorter overhang beam length than the approved shop drawings, what is the actual dimension?*
- 3. Please provide desired beam length from gridline 2 to end of beam, as shown on sheet E103 in the shop drawings.*

Follow Up upon receipt of Addendum 5:

1. Addendum 5 has indicated the desired upper roof overhang length. As the upper roof framing was installed per the approved shop drawings, which included the overhang dimensions per verification from the design team (from shop drawing review dated 1/30/2022), the upper roof frame will need to be shortened.
2. Please provide welding instructions required to reassemble the upper roof overhang once the unwanted length is cut off. This work will need to be completed in the field.

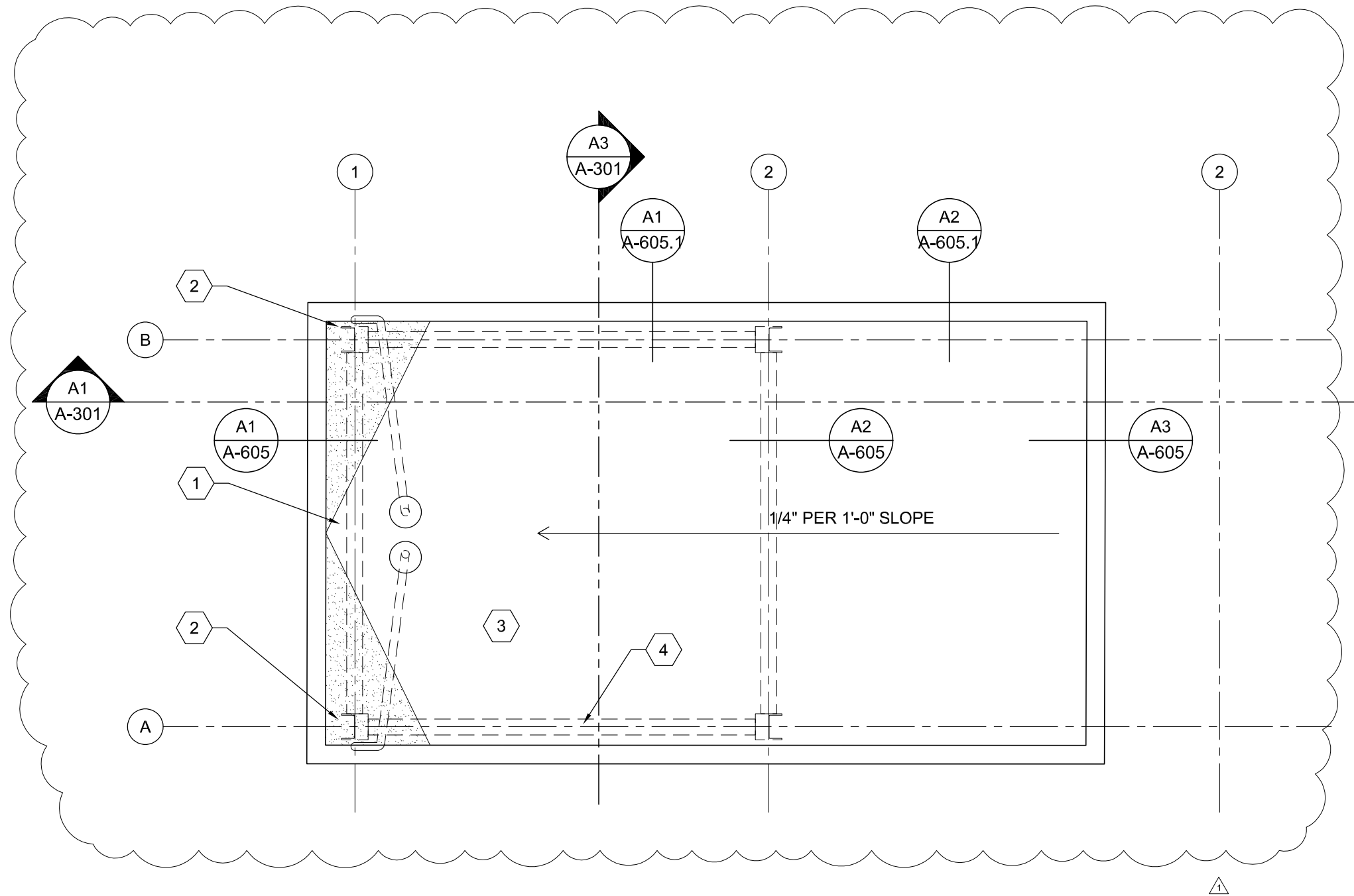
DUE DATE: JULY 15, 2022

Response Date:

Response:

REFERENCE NOTES

1. ROOF DRAINS RE: C3/A604 AND PLUMBING DWGS.
2. ROOF CRICKETS. SLOPE 1/4" PER 1'-0" MIN.
3. SINGLE PLY ROOF MEMBRANE
4. DASHED LINE DENOTES BUILDING WALLS BELOW



A1 PEDESTRIAN BRIDGE WEST UPPER ROOF PLAN
SCALE: 1/4" = 1'-0"

0	01/22/21	100% REVIEW SUBMITTAL
1	06/15/22	RFI 87 AND 98
REV	DATE	DESCRIPTION

Designed By	JJ
Drawn By	JK
Checked By	JJ
Approved By	

FFKR ARCHITECTS

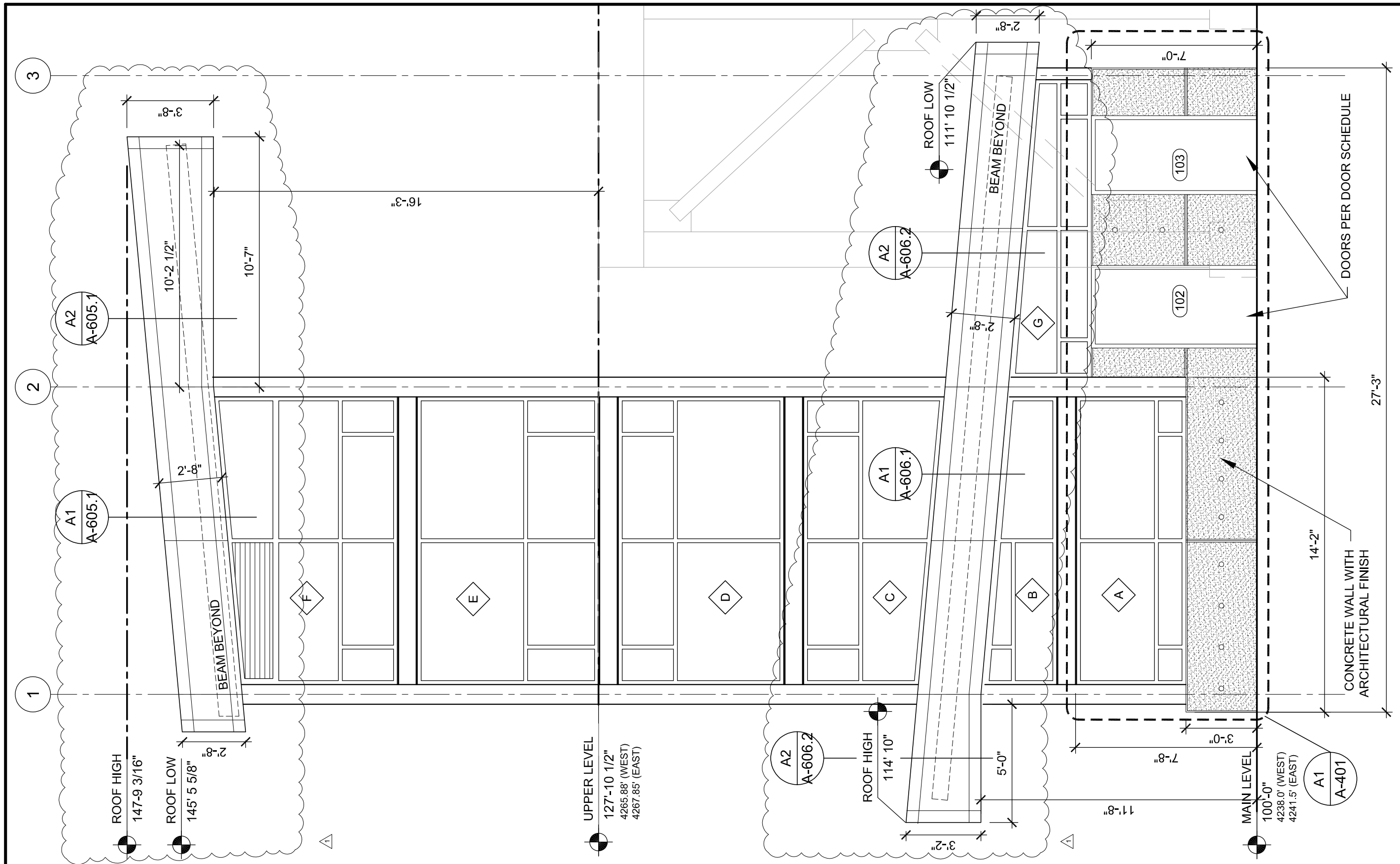
James B. Lipse



WEST - UPPER ROOF PLAN

SALT LAKE CITY
SLC_OP_1
300 NORTH PEDESTRIAN OVERPASS STRUCTURE
OVER 500 WEST & UPRR/UTA LINES

CADD Filename	
UTA Contract No. 18-2399TP	
Drawing	Sheet No.
A-112	



REV	DATE	DESCRIPTION
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1	06/15/22	RFI 87 AND 98

Designed By	JJ
Drawn By	JK
Checked By	JJ
Approved By	

FFKR ARCHITECTS

James B. Larsen

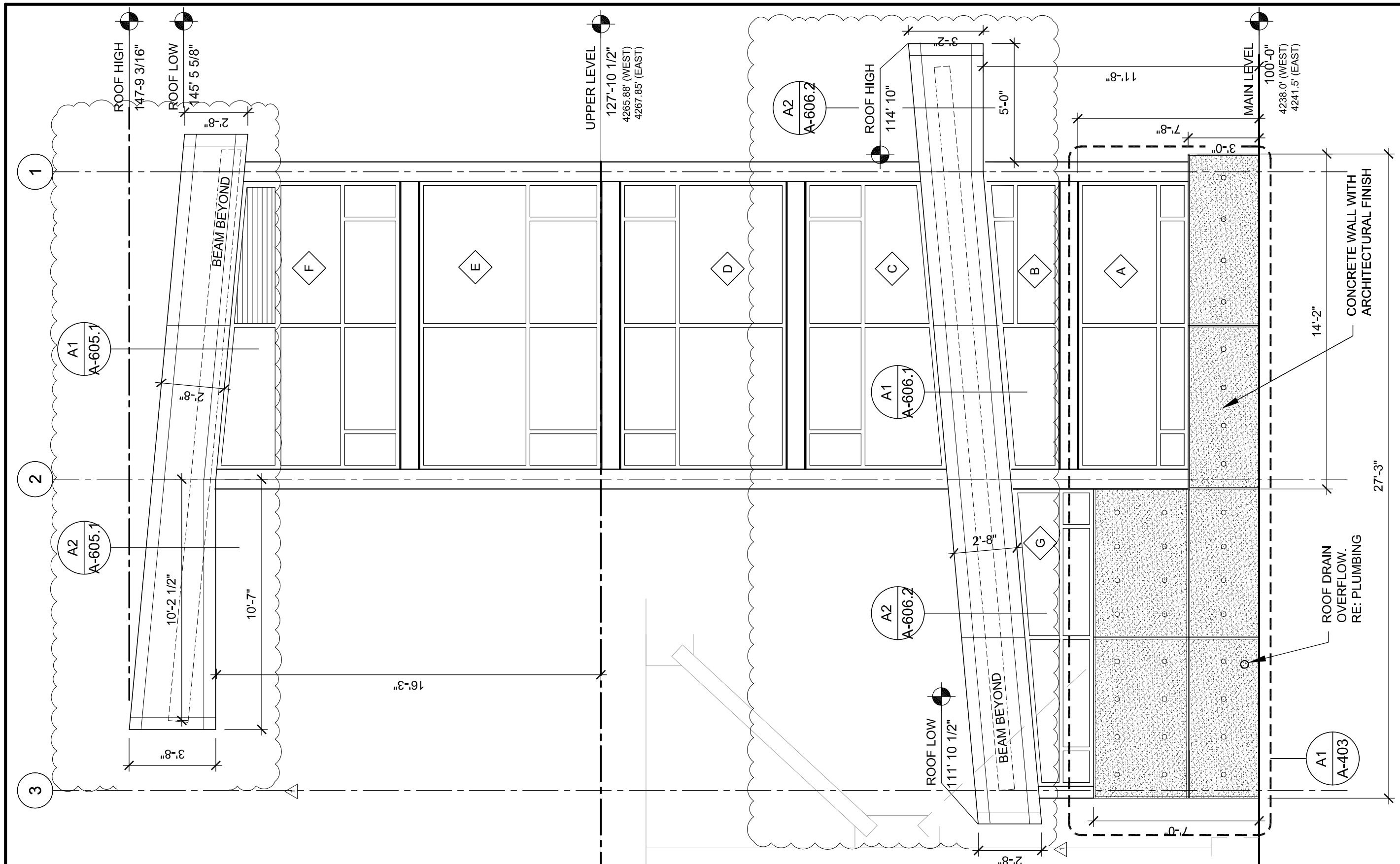


EXTERIOR ELEVATION

SALT LAKE CITY
SLC_OP_1
300 NORTH PEDESTRIAN OVERPASS STRUCTURE
OVER 500 WEST & UPRR/UTA LINES

CADD Filename	
UTA Contract No. 18-2399TP	
Drawing	Sheet No. A-202

A1 ELEVATOR ELEVATION
SCALE: 1/4" = 1'-0"



ELEVATOR ELEVATION
 SCALE: 1/4" = 1'-0"

REV	DATE	DESCRIPTION
0	01/22/21	100% REVIEW SUBMITTAL
1	06/15/22	RFI 87 AND 98
0	01/22/21	100% REVIEW SUBMITTAL

Designed By
JJ
 Drawn By
JK
 Checked By
JJ
 Approved By

FFKR ARCHITECTS

James B. Lipse

UTA

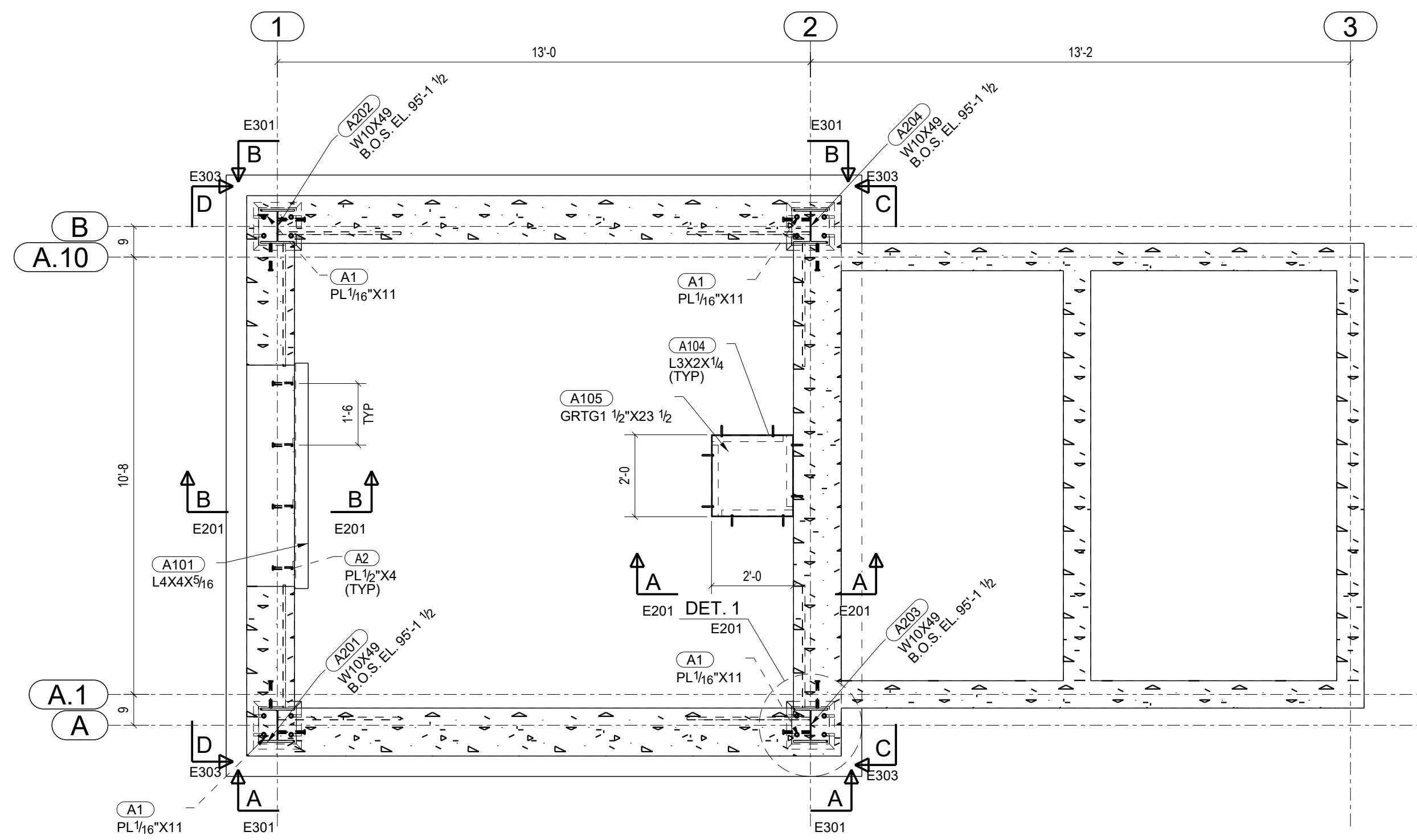
EXTERIOR ELEVATION

SALT LAKE CITY
 SLC_OP_1
 300 NORTH PEDESTRIAN OVERPASS STRUCTURE
 OVER 500 WEST & UPRR/UTA LINES

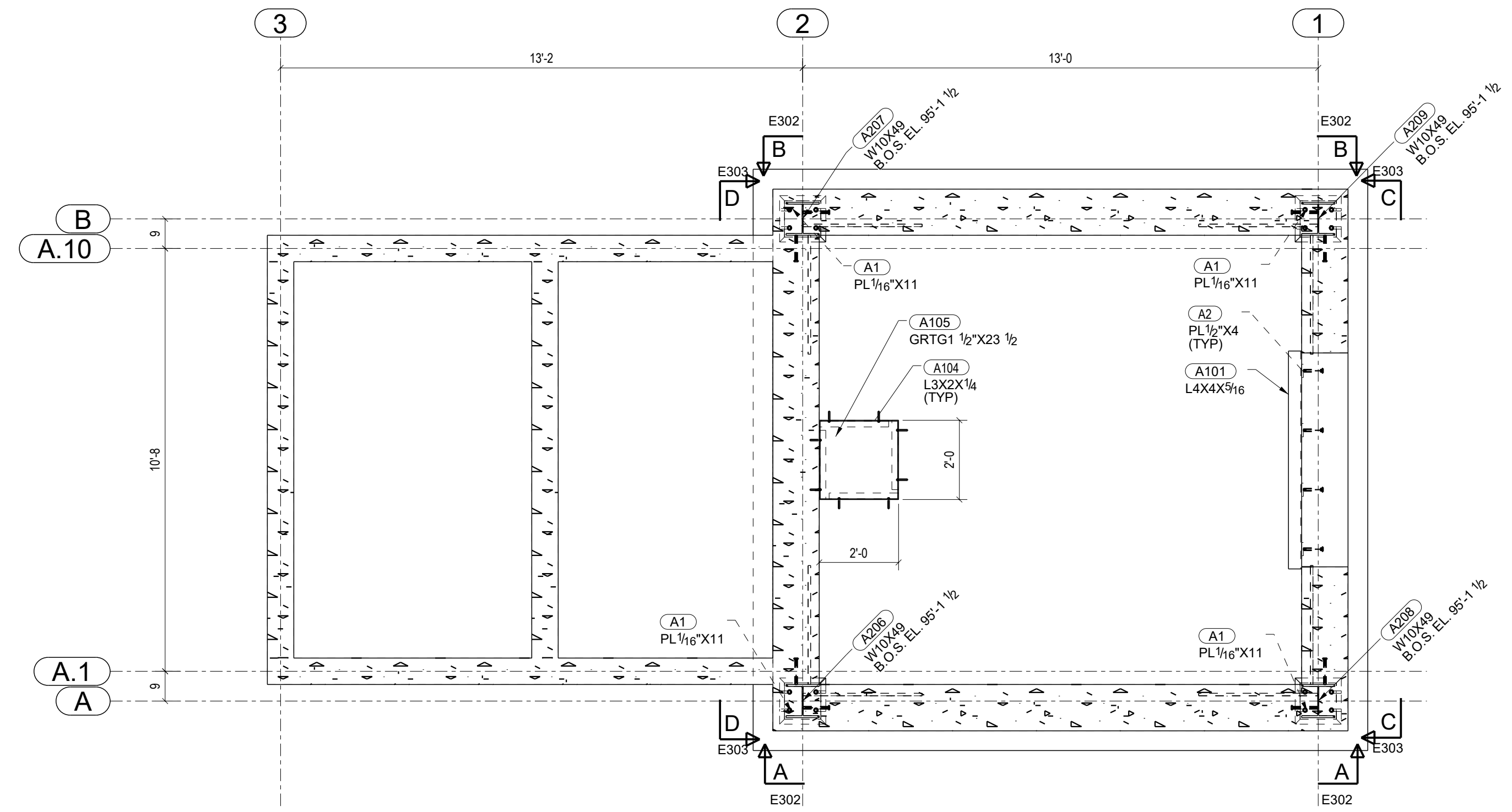
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UTA Contract No.
18-2399TP

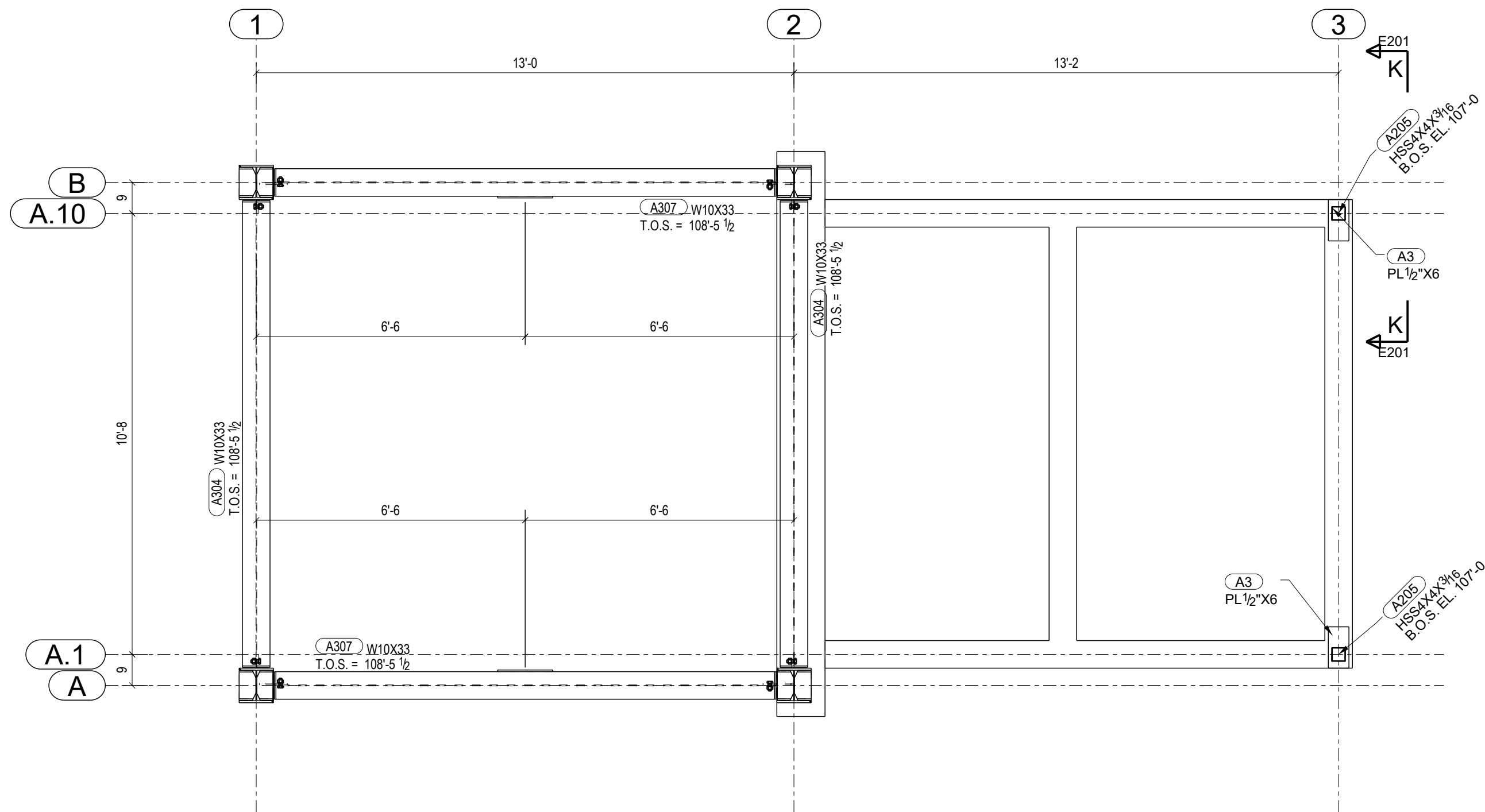
Drawing Sheet No.
A-204



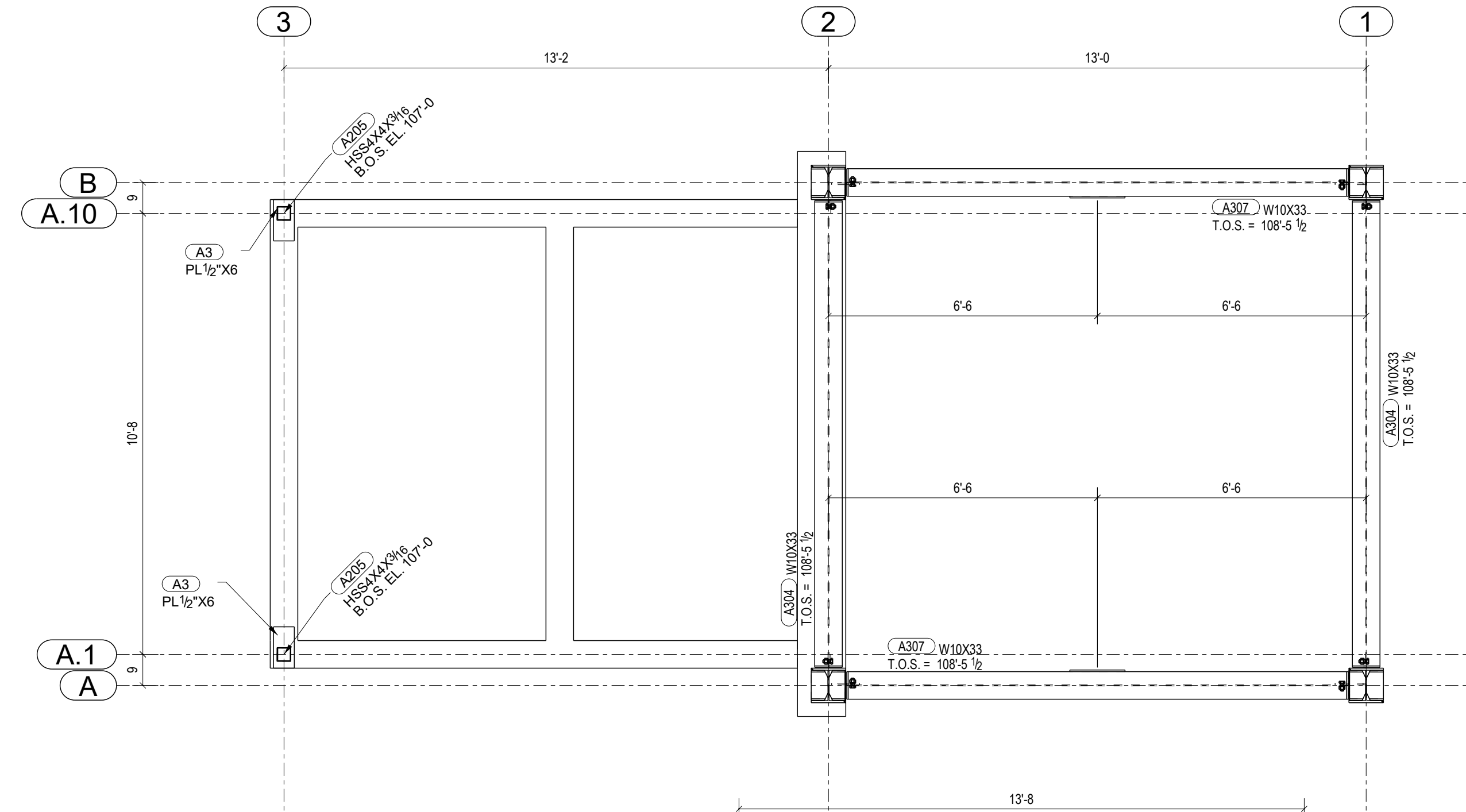
PLAN AT EL. 100'-0 WEST TOWER



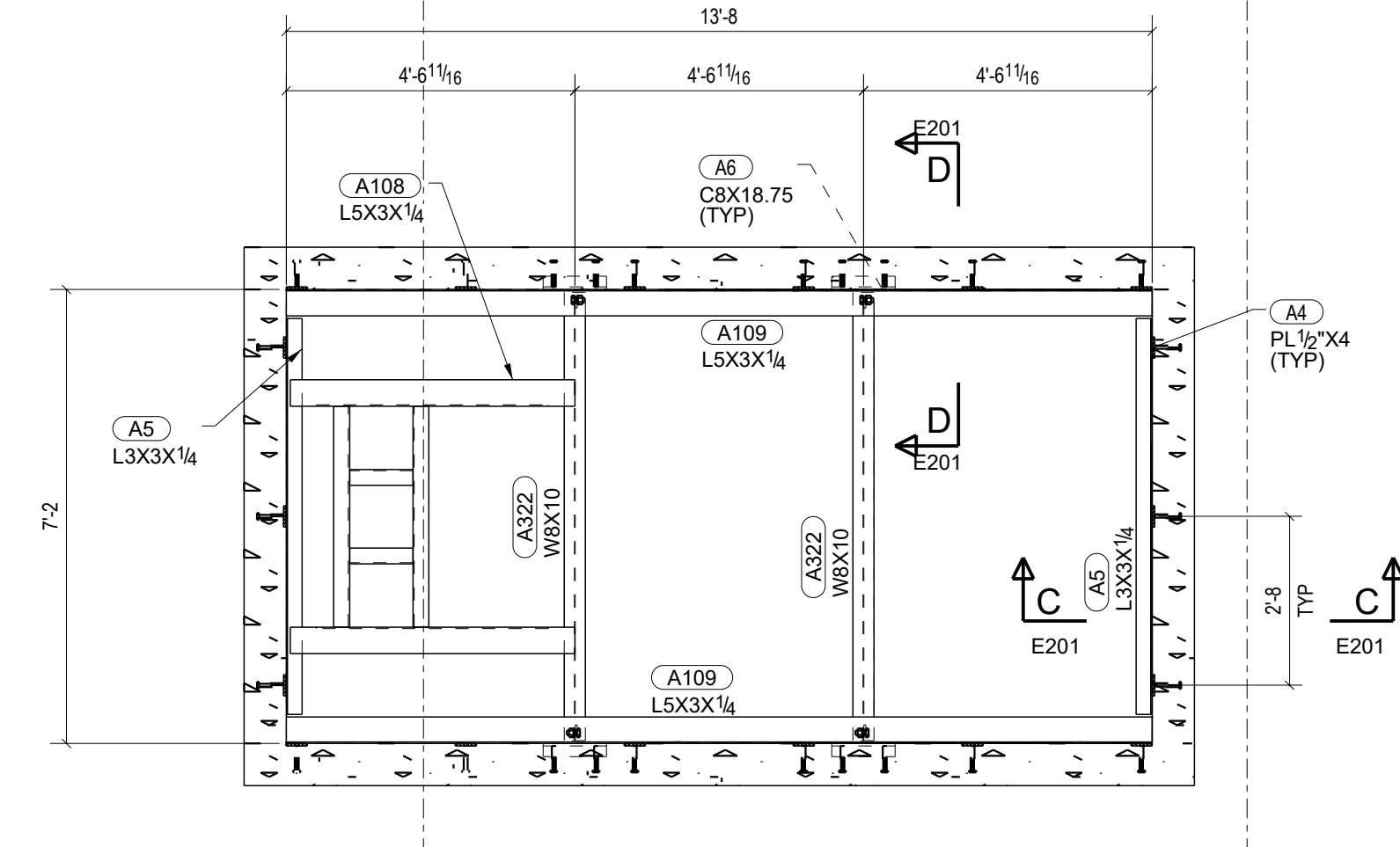
PLAN AT EL. 100'-0 EAST TOWER



PLAN AT EL. 108'-5 1/2 WEST TOWER



PLAN AT EL. 108'-5 1/2 EAST TOWER



Revised per mtg on: 2.14.22 FFKR jji 2.14.22

<input type="checkbox"/> NO EXCEPTIONS	<input type="checkbox"/> REVISE AND RESUBMIT	<input type="checkbox"/> REJECTED
<input checked="" type="checkbox"/> FURNISH AS CORRECTED	<input type="checkbox"/> SUBMIT SPECIFIED ITEM	<input type="checkbox"/> FFKR REVIEW NOT REQUIRED

This review is only for general conformance with the design concept and the information given in the Construction Documents. Corrections or comments made on the shop drawings during this review do not relieve the Contractor from compliance with the requirements of the plans and specifications and applicable laws, codes and regulations. Review of a specific item shall not include review of an assembly of which the item is a component. Review of such submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions, quantities, and installation or performance of equipment or systems, which are the Contractor's responsibility. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. Coordinate the Work with that of all other trades and perform all Work in a safe and satisfactory manner.

Date: 01/31/2022
 By: jjenzen1
FFKR ARCHITECTS

WORKING DRAWINGS REVIEW

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<input checked="" type="checkbox"/> MAKE CORRECTIONS AS NOTED	DATE: 01/30/2022
<input type="checkbox"/> REVISE AND RESUBMIT	BY: AJ Yates
<input type="checkbox"/> REJECTED	

Considerations or comments made on the working drawings during review do not relieve the contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents.

SUBMITTAL REVIEW

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This drawing is reviewed for general conformance with the contract documents and does not constitute approval of the contractor's work. The contractor remains responsible for providing accurate and complete information, including drawings, and performing the work in a satisfactory manner.

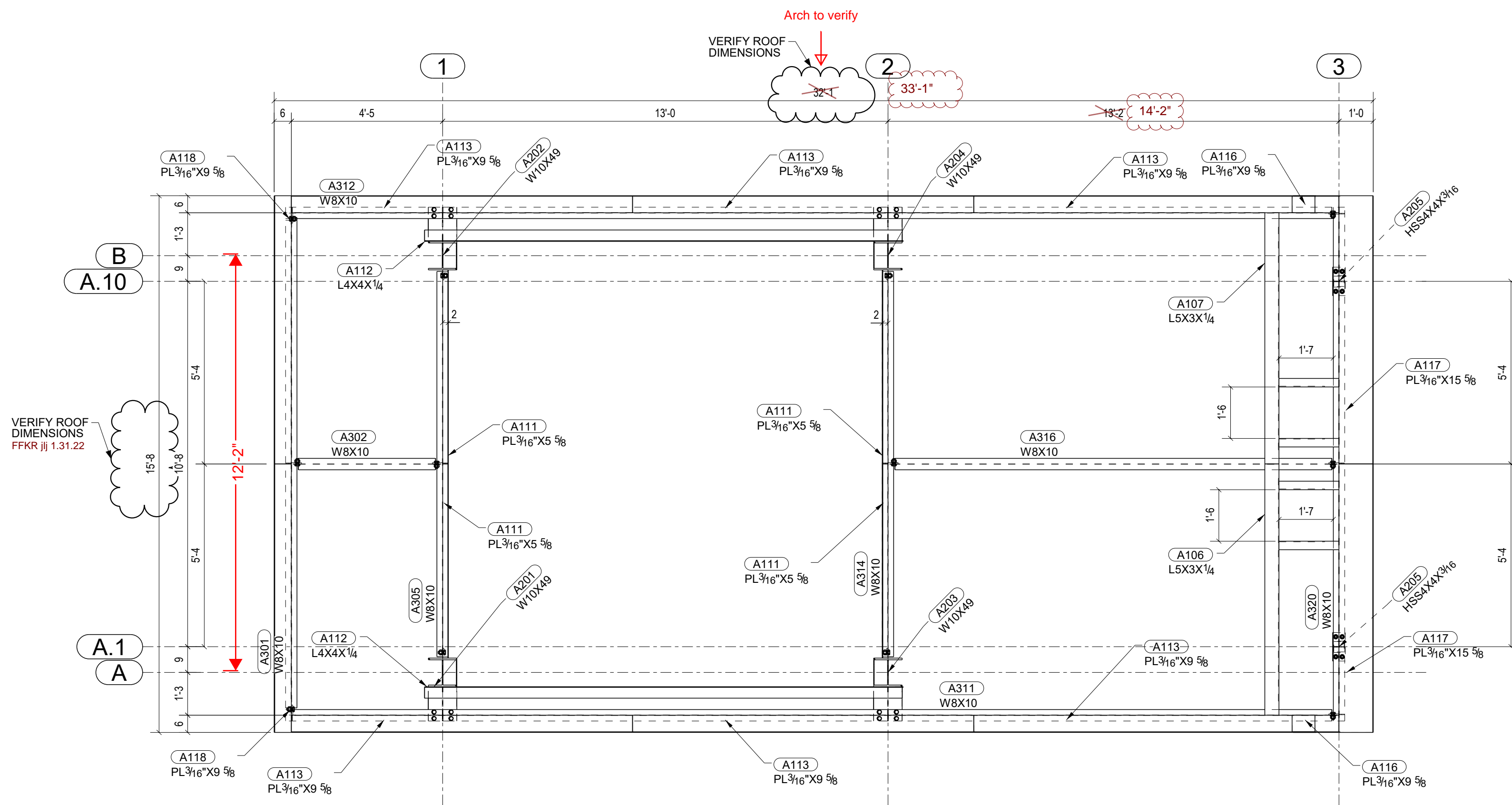
By: jplater
 Date: 2022-01-28
REAVELEY

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WELDS ASW	UNO	CONTRACTOR	
OPEN HOLES 13/16"	UNO	ARCHITECT	FFKR ARCHITECTS
BOLTS A325N	UNO		
PAINT 1-SIC PRIMER	UNO		

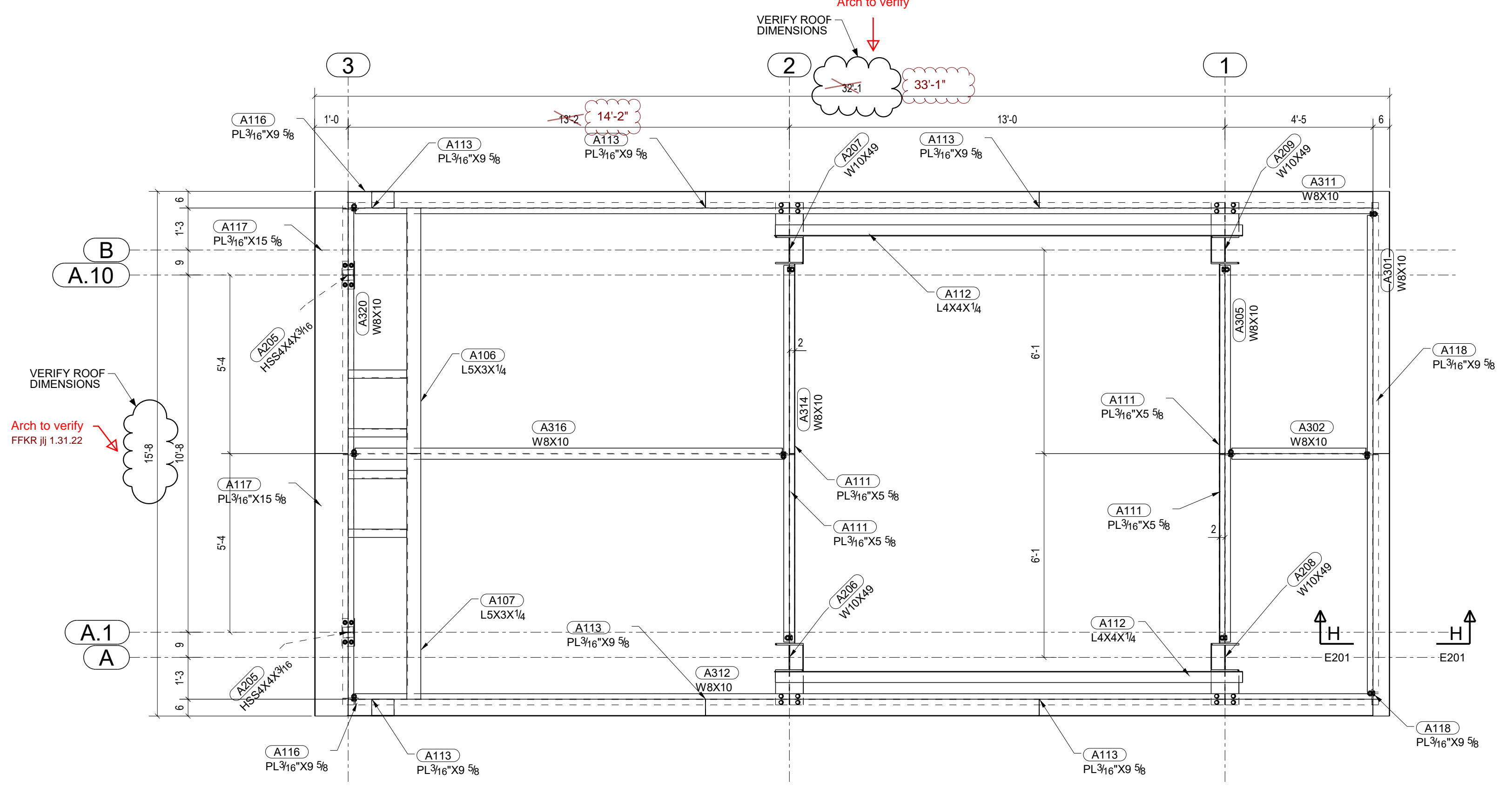
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01/17/2022		For Re-Approval	JB
10/22/2021		For Approval	JB

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	DRAWN BY	CRG No.
		E101

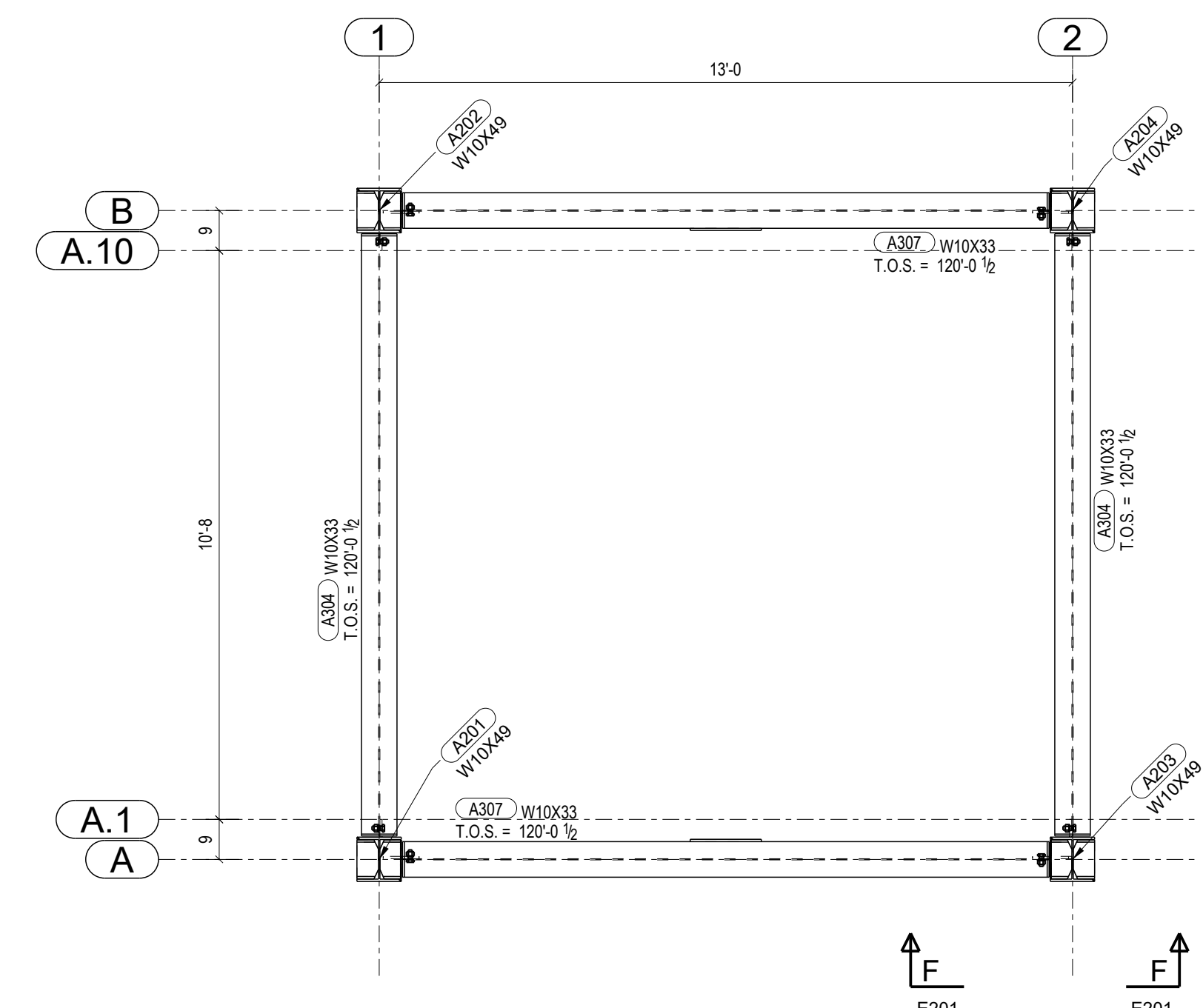
W.O.I.
 Lindon, UT 84042
 801-420-2546 www.woisteel.com



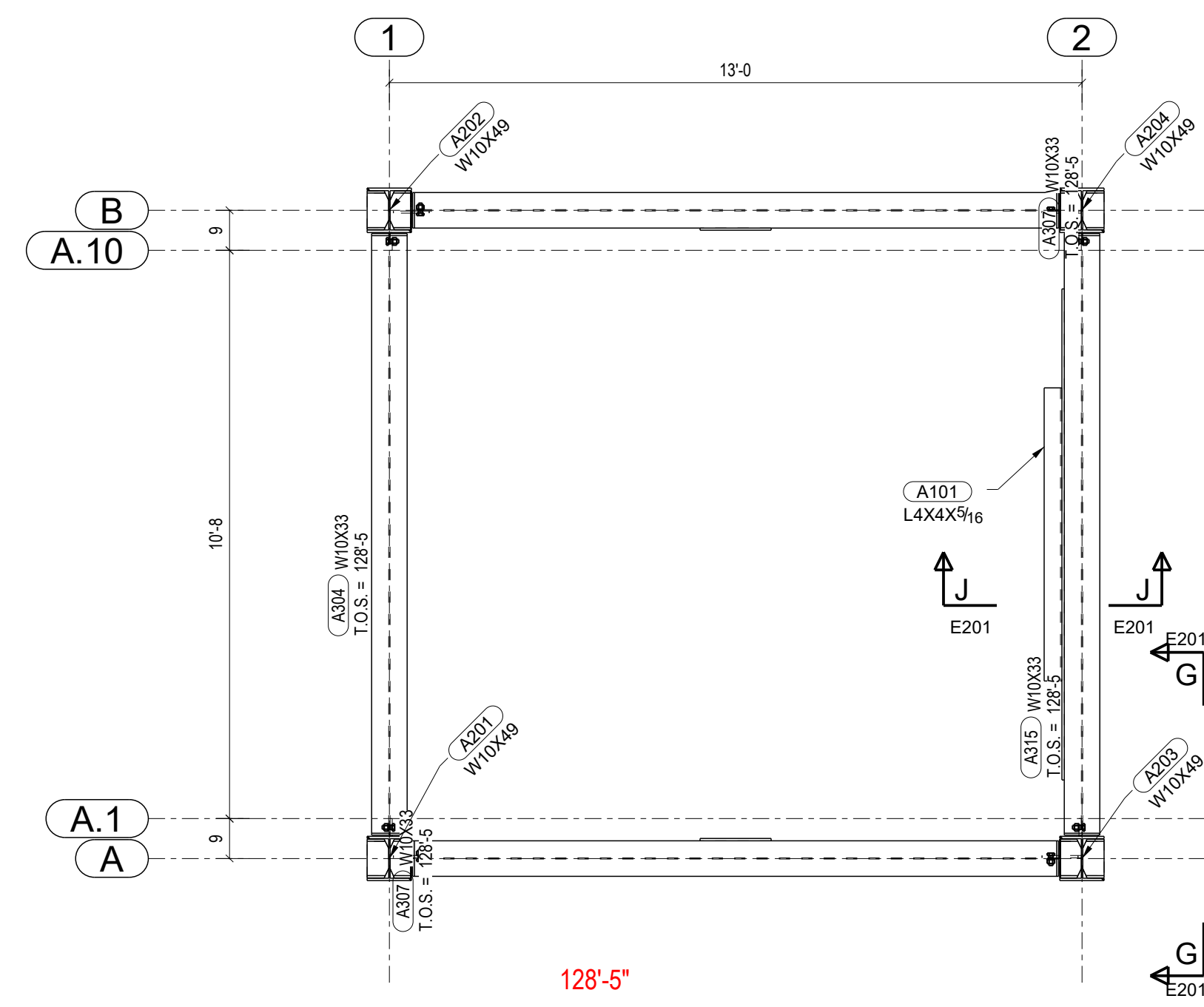
PLAN AT EL. 113'-11 WEST TOWER



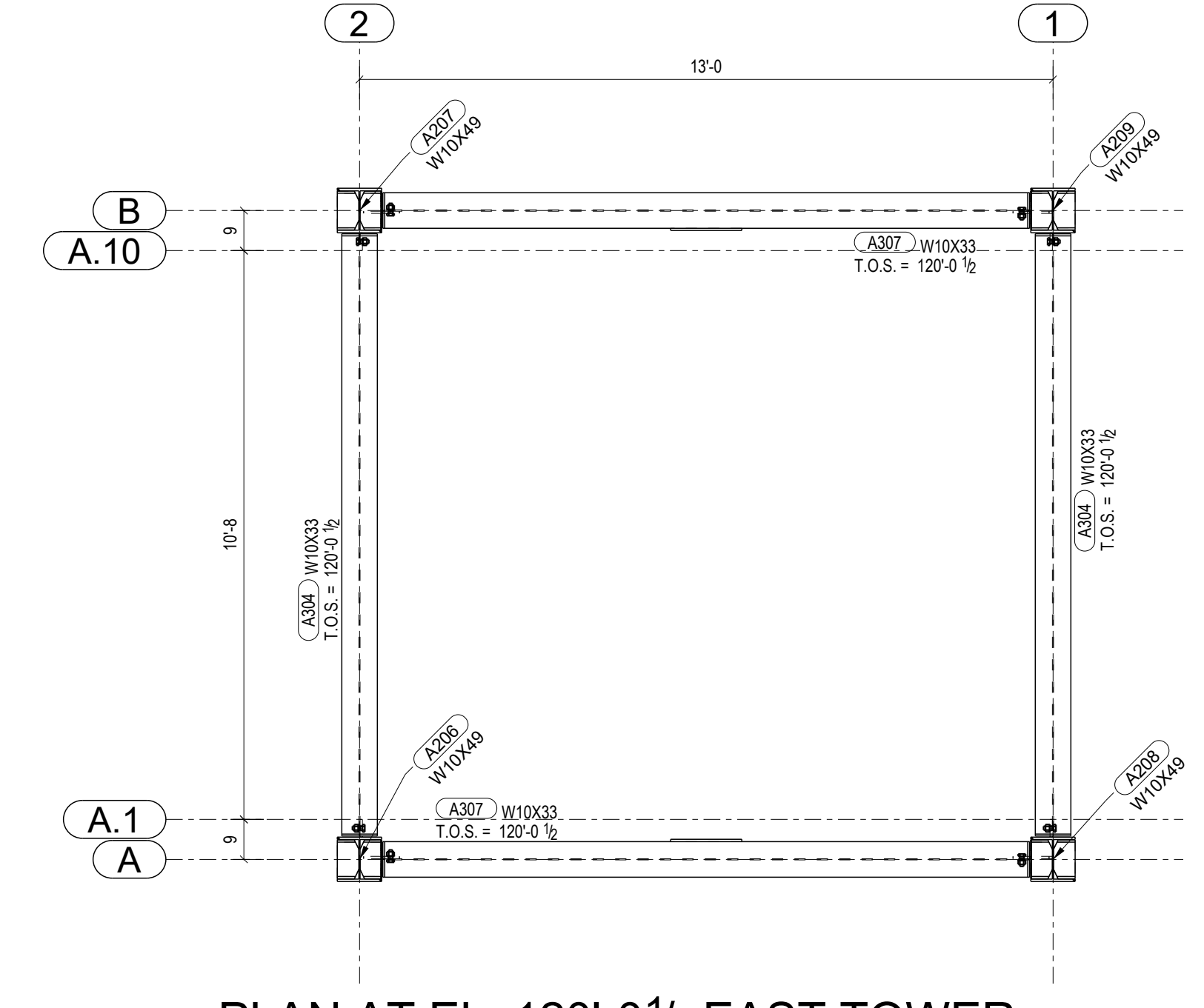
PLAN AT EL. 113'-11 EAST TOWER



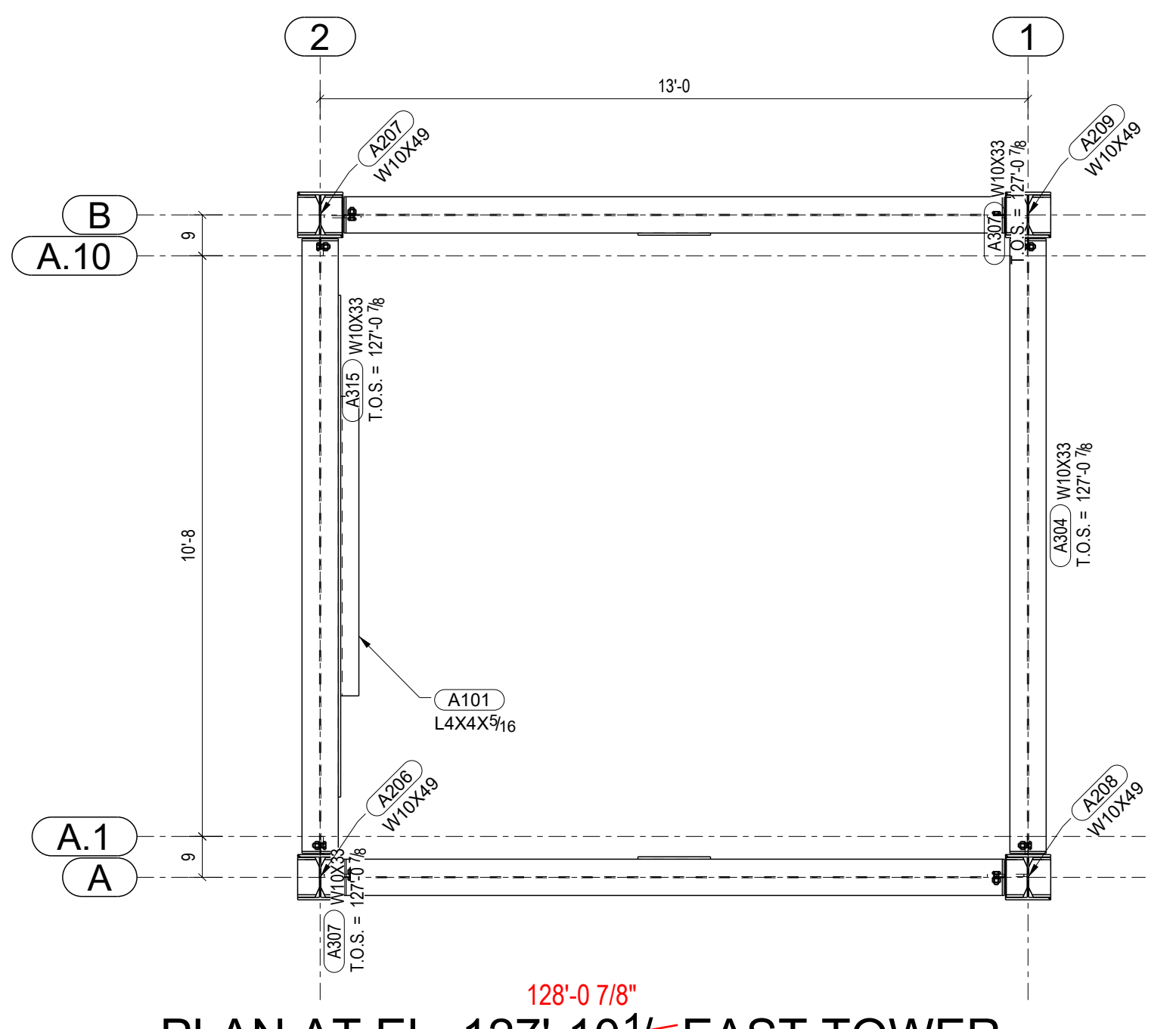
PLAN AT EL. 120'-0 1/2 WEST TOWER



PLAN AT EL. 127'-10 1/2 WEST TOWER



PLAN AT EL. 120'-0 1/2 EAST TOWER



PLAN AT EL. 127'-10 1/2 EAST TOWER

WORKING DRAWINGS REVIEW

NO EXCEPTIONS TAKEN
 MAKE CORRECTIONS AS NOTED
 REVISE AND RESUBMIT
 REJECTED

CIVIL SCIENCE
 DATE: 01/30/2022
 BY: AJ Yates

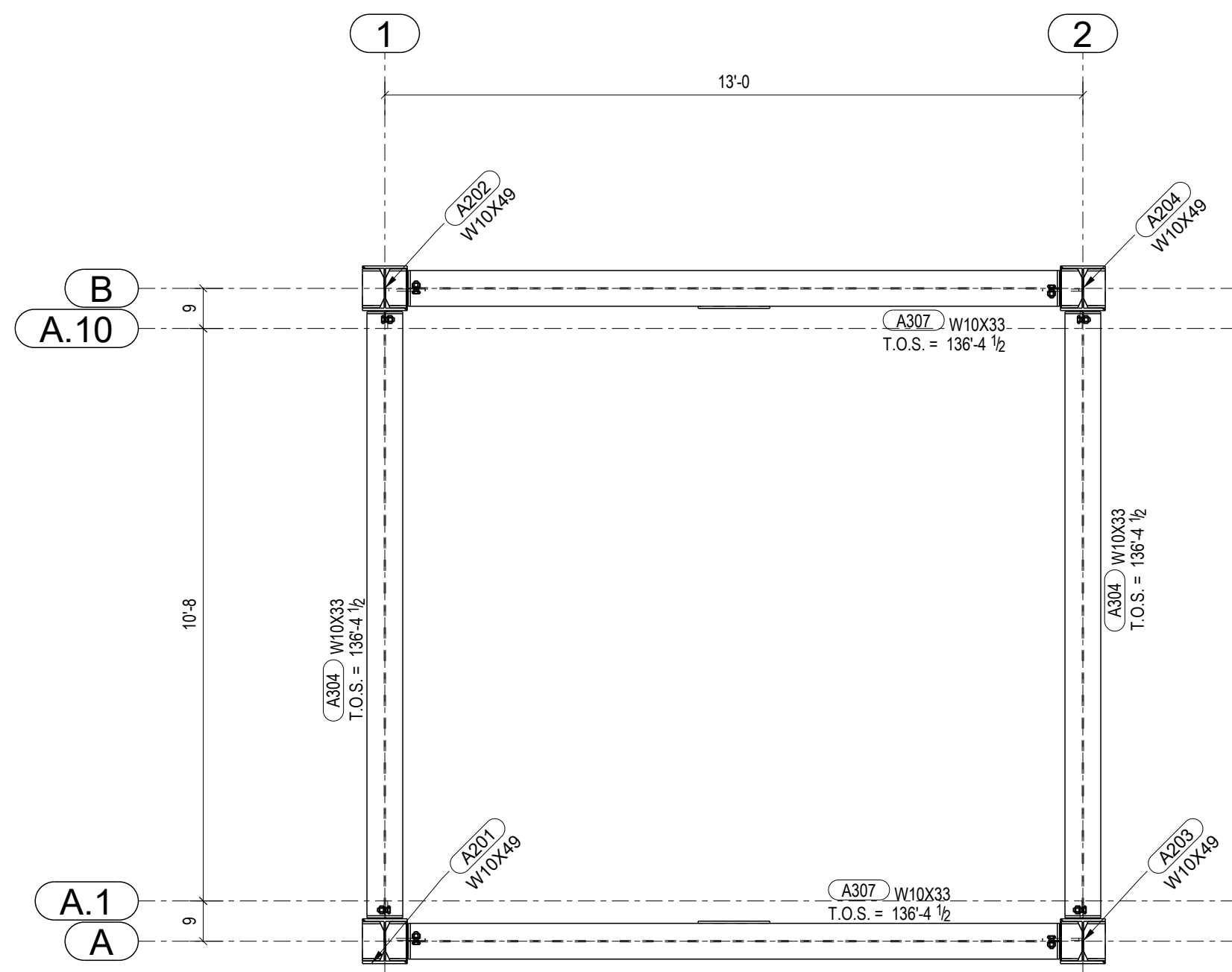
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10/22/2021		For Approval	JB

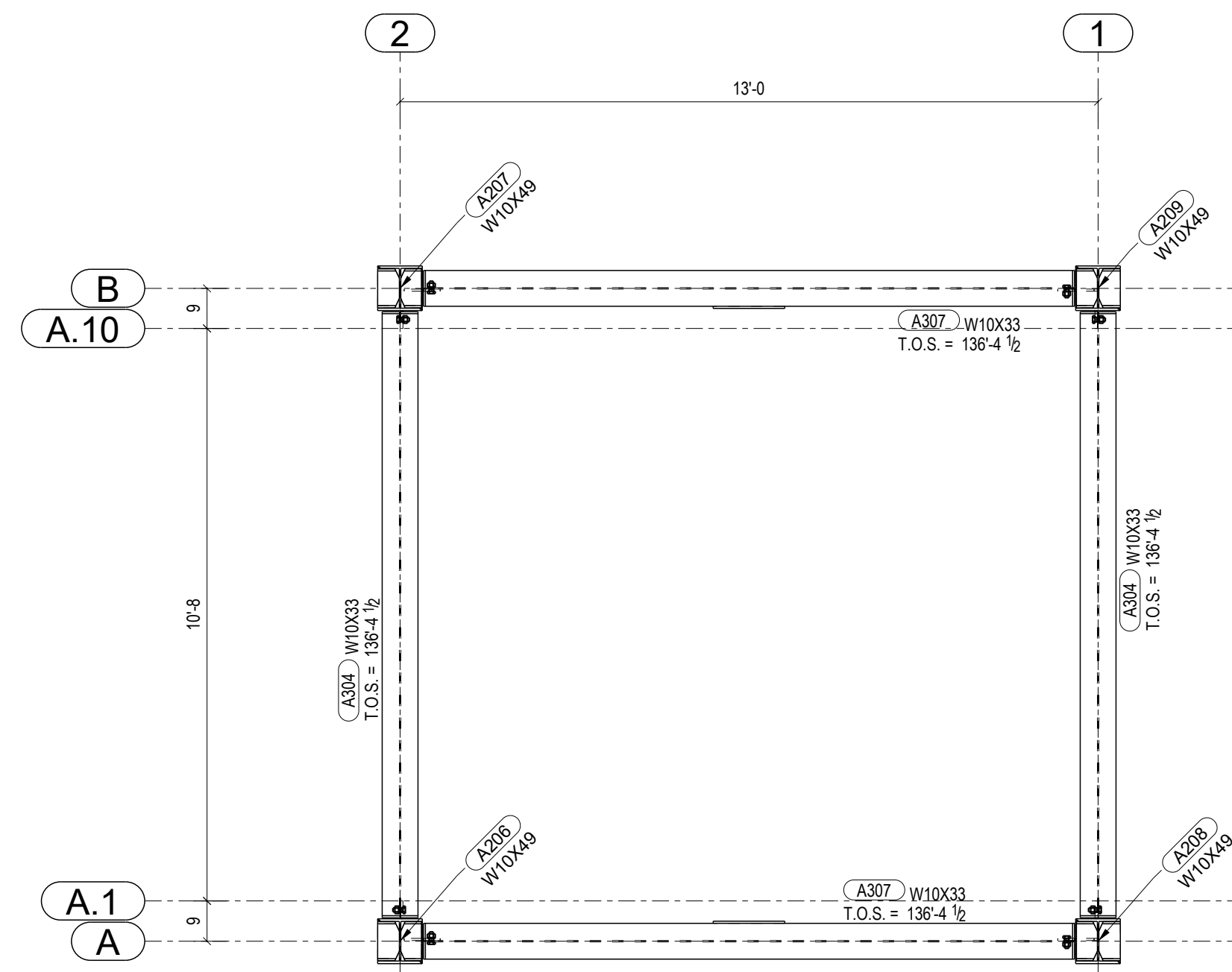
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WELDS	ASW		UNO	LOCATION
OPEN HOLES	13/16"		UNO	CONTRACTOR
BOLTS	A325N		UNO	ARCHITECT
PAINT	1-SIC PRIMER		UNO	

DESCRIPTION	DATE	JOB NO.
PLACEMENT PLAN	10/22/2021	UTA
		E102

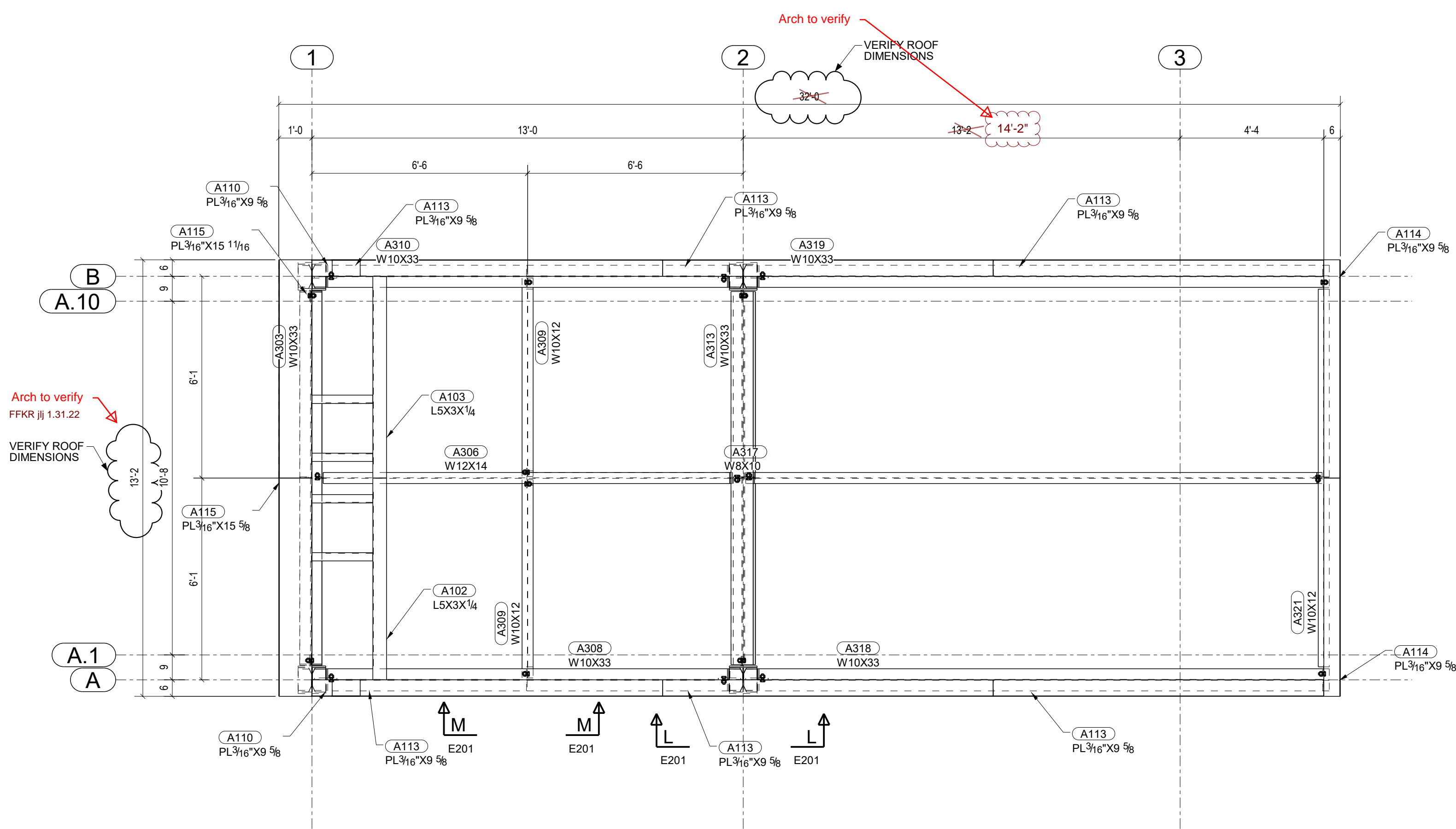
W.O.I.
 Lindon, UT 84042
 801-420-2546 www.woisteel.com



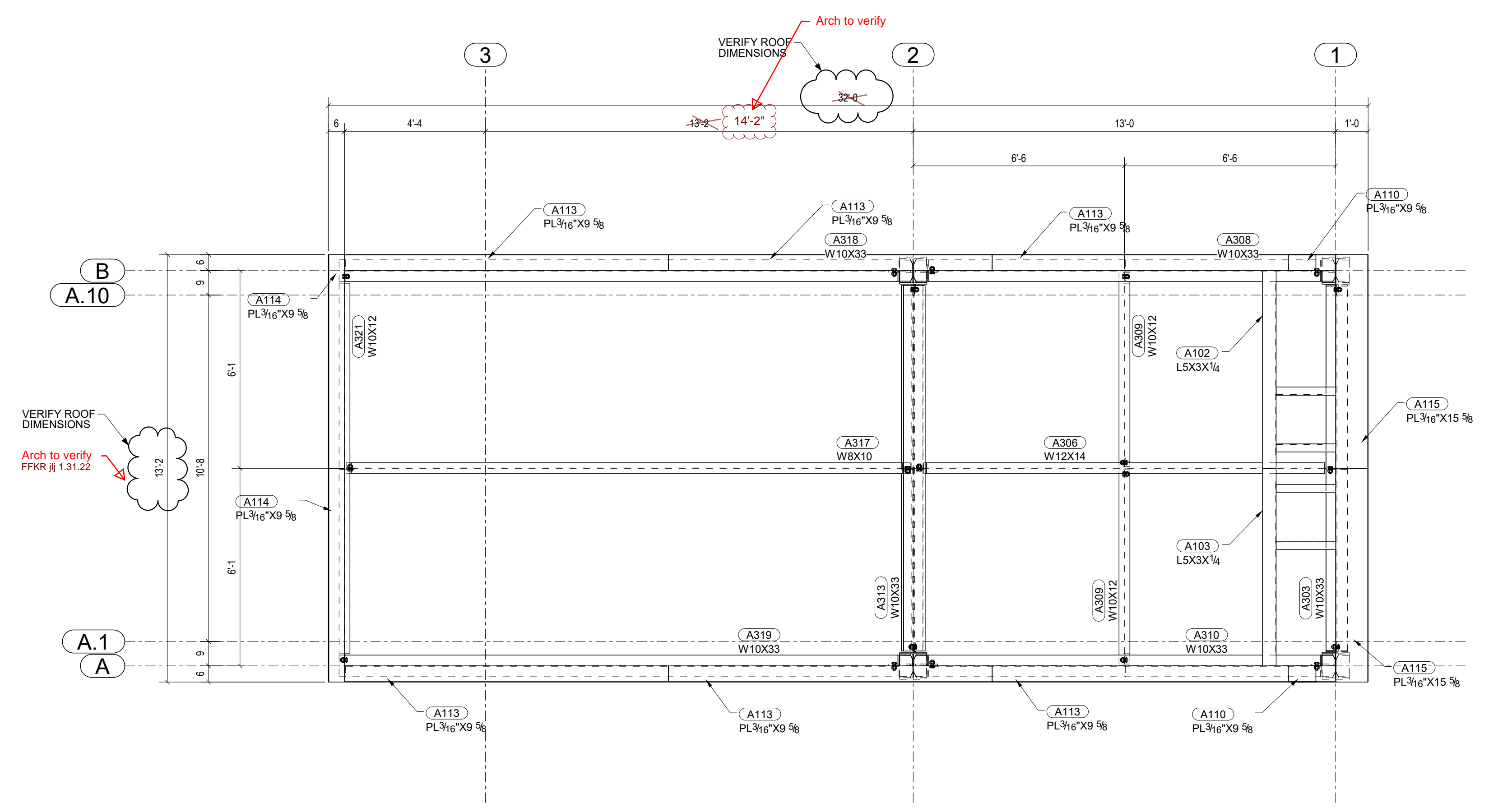
PLAN AT EL. 136'-4 1/2 WEST TOWER



PLAN AT EL. 136'-4 1/2 EAST TOWER



PLAN AT EL. 147'-10 WEST TOWER



PLAN AT EL. 147'-10 EAST TOWER

WORKING DRAWINGS REVIEW

NO EXCEPTIONS TAKEN
 MAKE CORRECTIONS AS NOTED
 REVISE AND RESUBMIT
 REJECTED

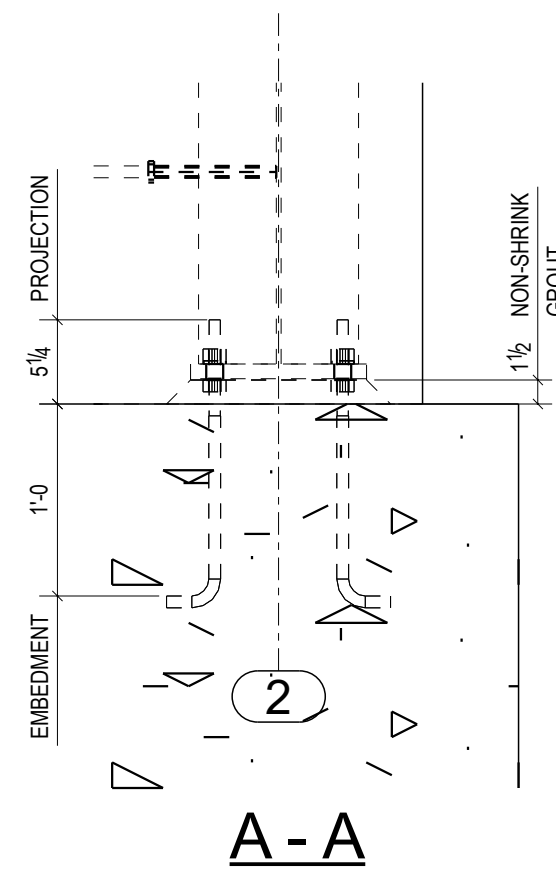
CIVIL SCIENCE
 DATE: 01/30/2022
 BY: AJ Yates

Considerations or comments made on the working drawings during review do not relieve the contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design content of the project and general compliance with the information given in the contract documents.

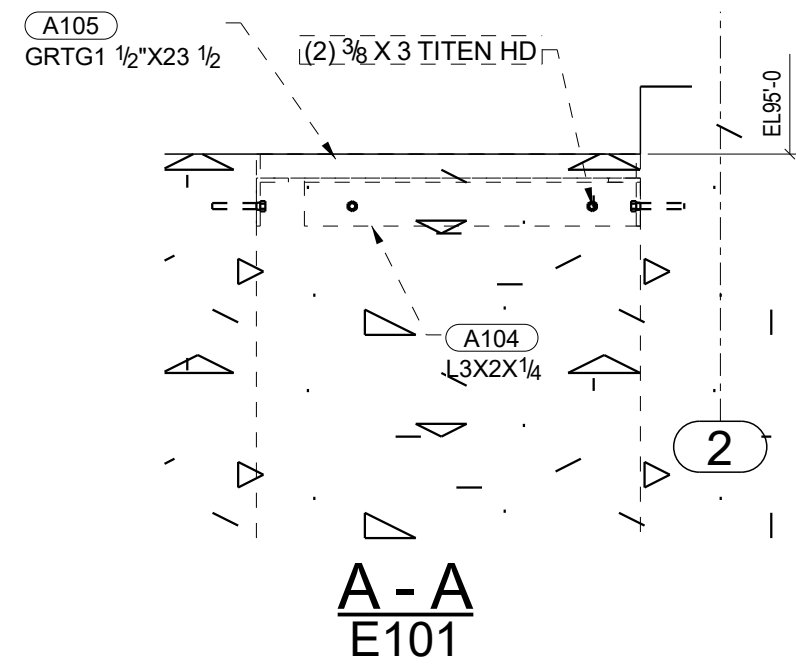
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10/22/2021	2	For Approval	JB

STEEL ASTM	SEE SPEC	UNO	PROJECT NAME	UTA PEDESTRIAN ELEVATOR
ELECTRODES	E70-XX	UNO	LOCATION	300 N 500 W SLC, UTAH
WELDS	ASW	UNO	CONTRACTOR	
OPEN HOLES	13/16"	UNO	ARCHITECT	FFKR ARCHITECTS
BOLTS	A325N	UNO		
PAINT	1-S/C PRIMER	UNO		

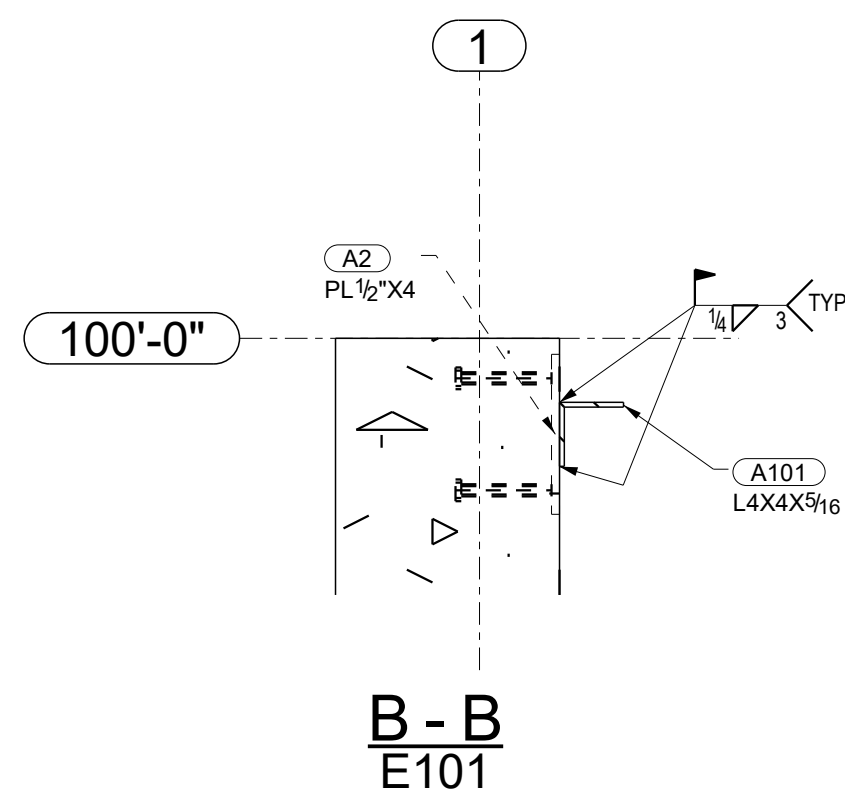
W.O.I. Lindon, UT 84042 801-420-2546 www.woisteel.com		DATE	10/22/2021	JOB NO.	UTA
		DRAWN BY		CRG NO.	E103
DESCRIPTION			PLACEMENT PLAN		



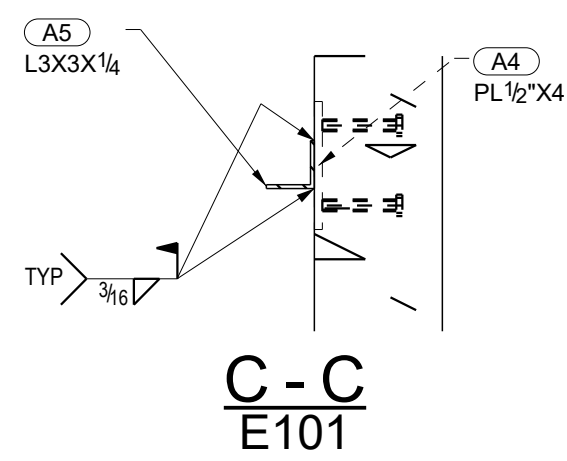
A-A
E101



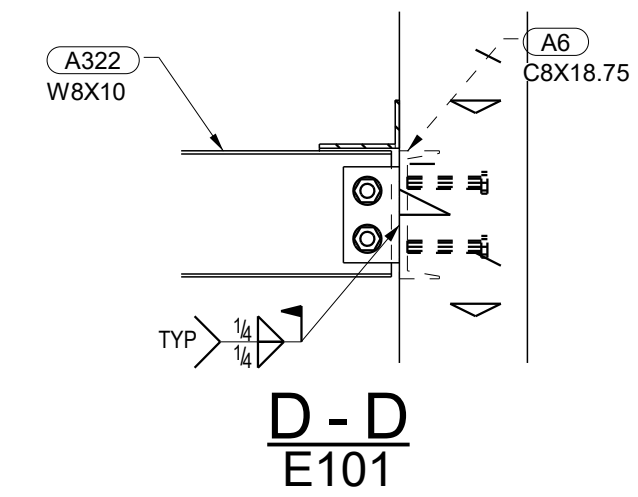
A-A
E101



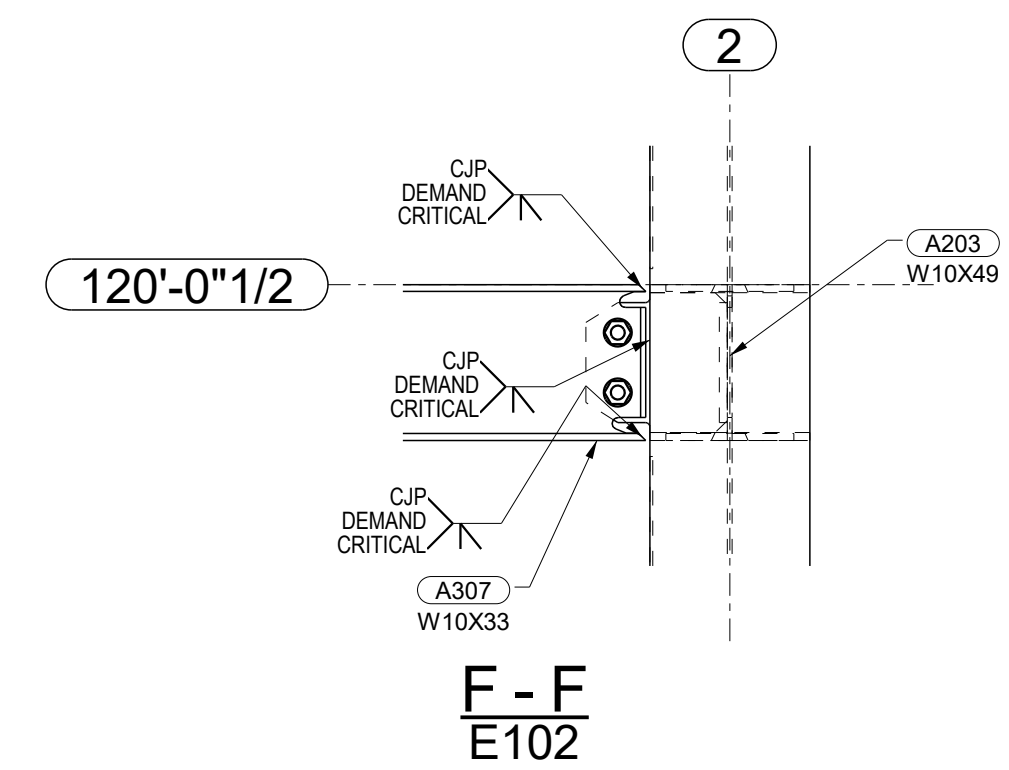
B-B
E101



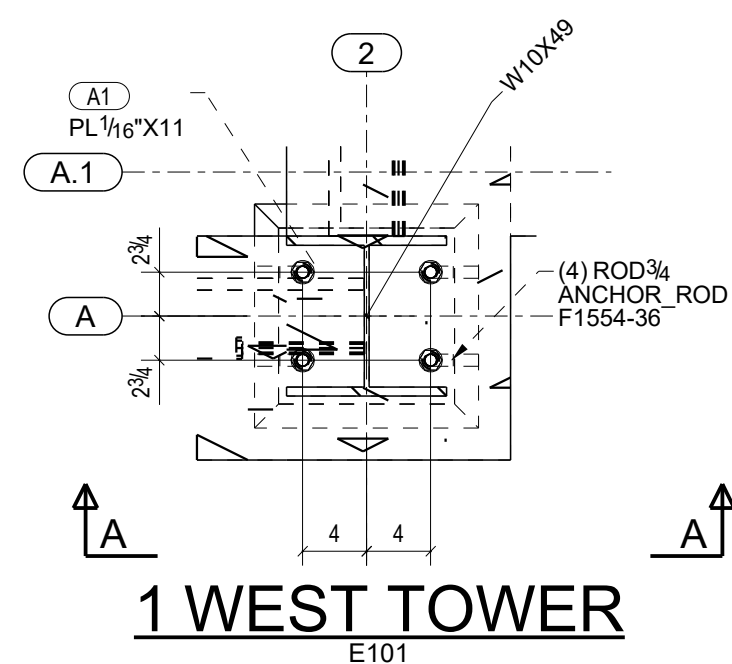
C-C
E101



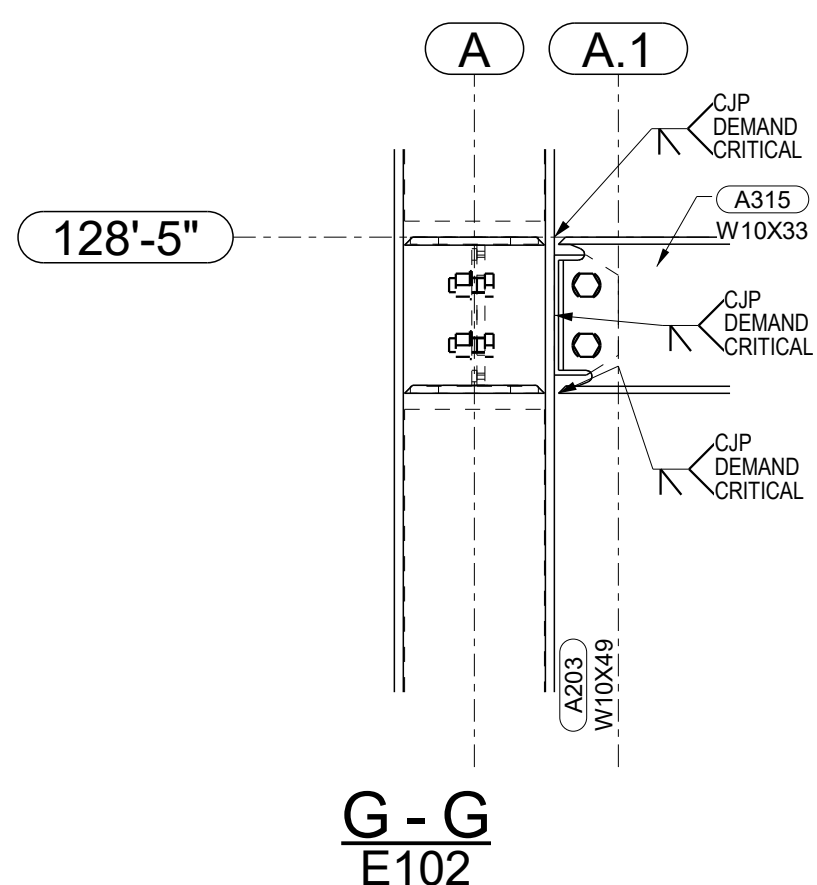
D-D
E101



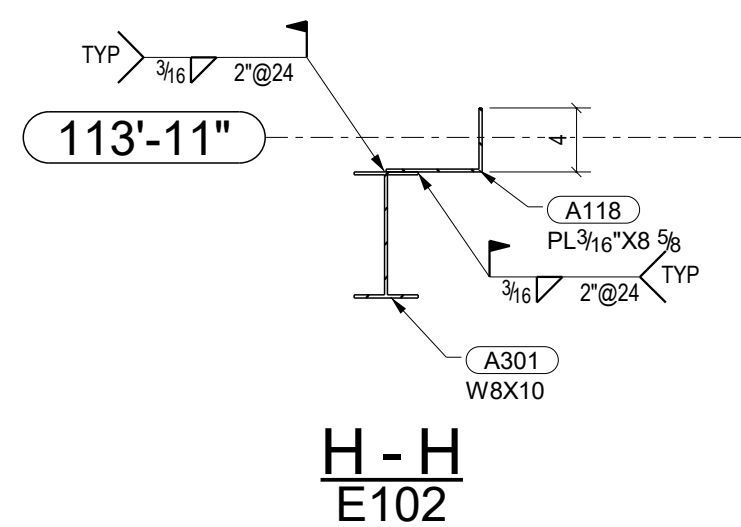
F-F
E102



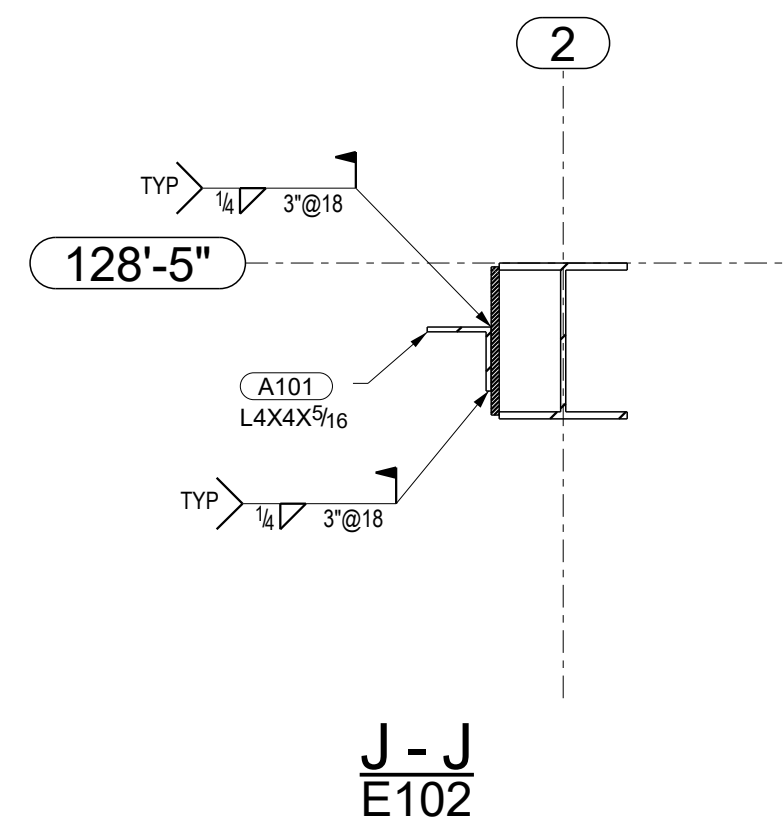
1 WEST TOWER
E101



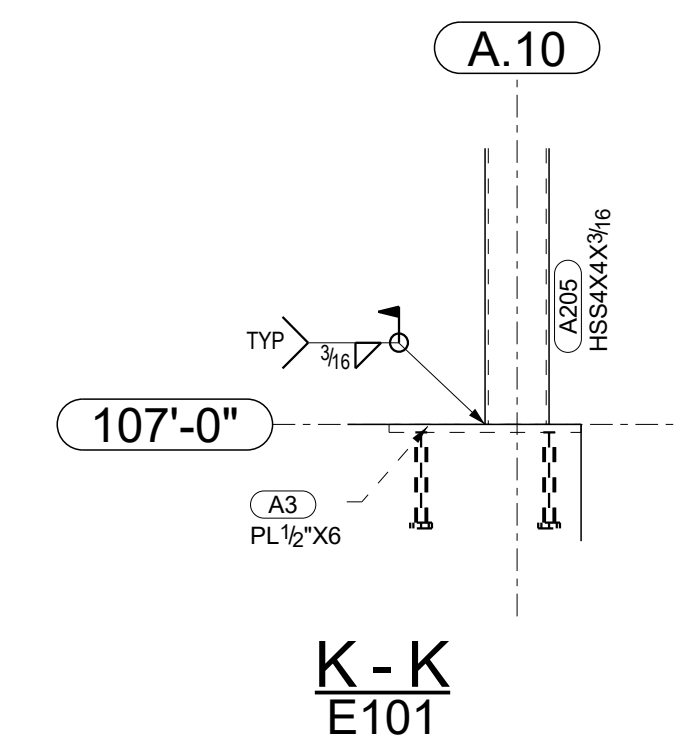
G-G
E102



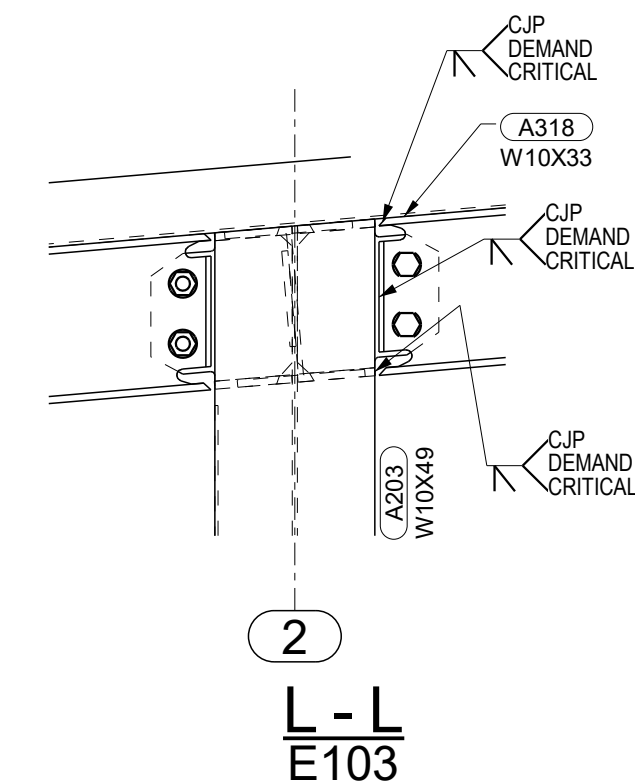
H-H
E102



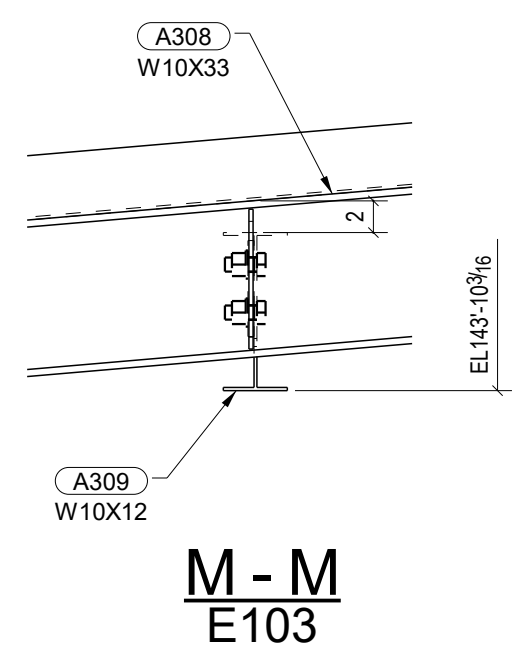
J-J
E102



K-K
E101



L-L
E103



M-M
E103

WORKING DRAWINGS REVIEW

NO EXCEPTIONS TAKEN **CIVIL SCIENCE**

MAKE CORRECTIONS AS NOTED DATE: 01/30/2022

REVISE AND RESUBMIT BY: AJ Yates

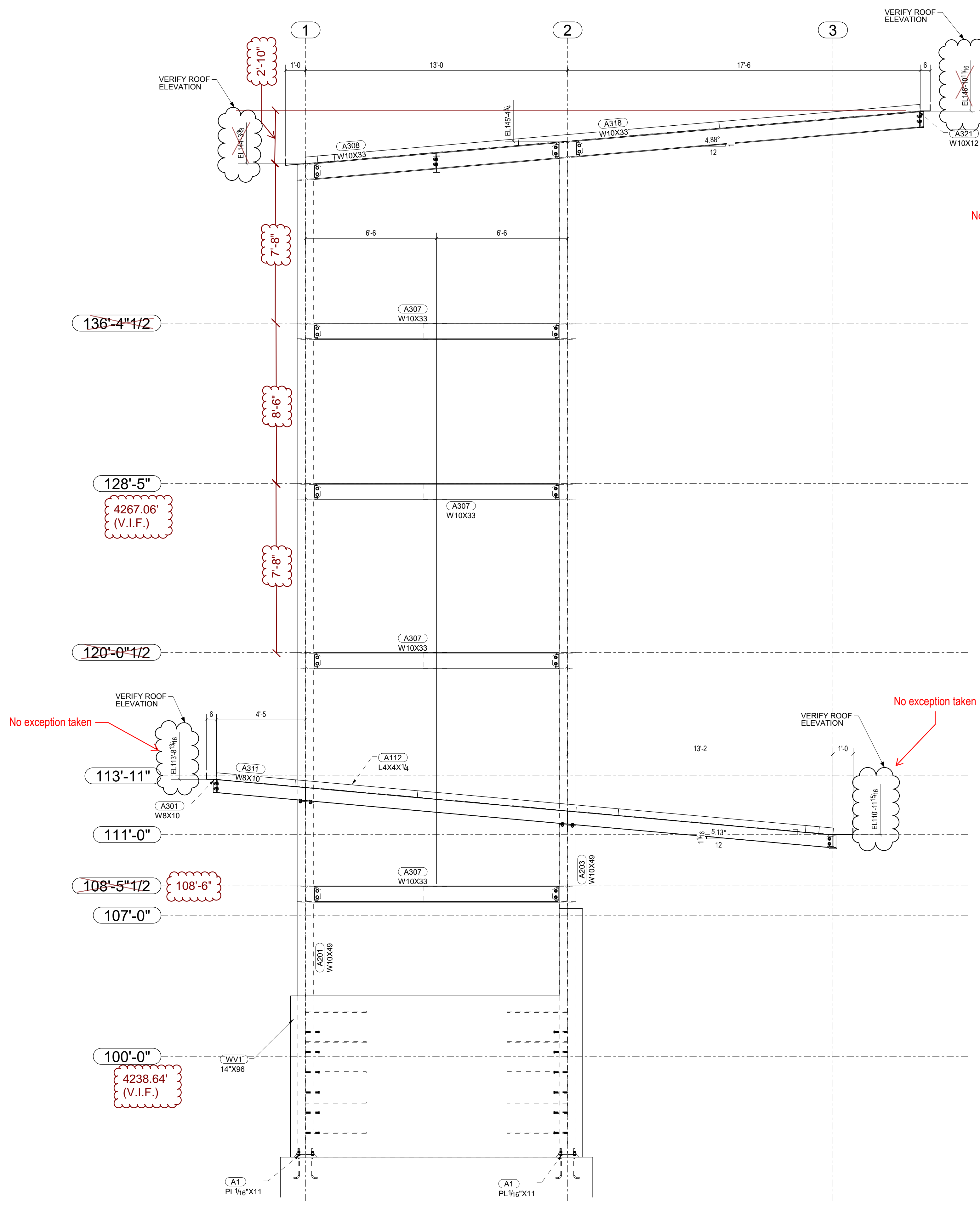
REJECTED

Compliance to comments made on the working drawings during review do not release the contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformances with the design concept of the project and general compliance with the information given in the contract documents.

DATE	NO	DESCRIPTION	BY	STEEL	ASTM	SEE SPEC	UNO	PROJECT NAME	UTA PEDESTRIAN ELEVATOR
01/17/2022	1	For Re-Approval	JB	ELECTRODES	E70-XX		UNO	LOCATION	300 N 500 W SLC, UTAH
10/22/2021	2	For Approval	JB	WELDS	ASW		UNO	CONTRACTOR	
				OPEN HOLES	13/16"		UNO	ARCHITECT	FFKR ARCHITECTS
				BOLTS	A325N		UNO	DATE	10/22/2021
				PAINT	1-SIC PRIMER		UNO	DRAWN BY	UTA
								JOB No.	UTA
								CRG No.	E201

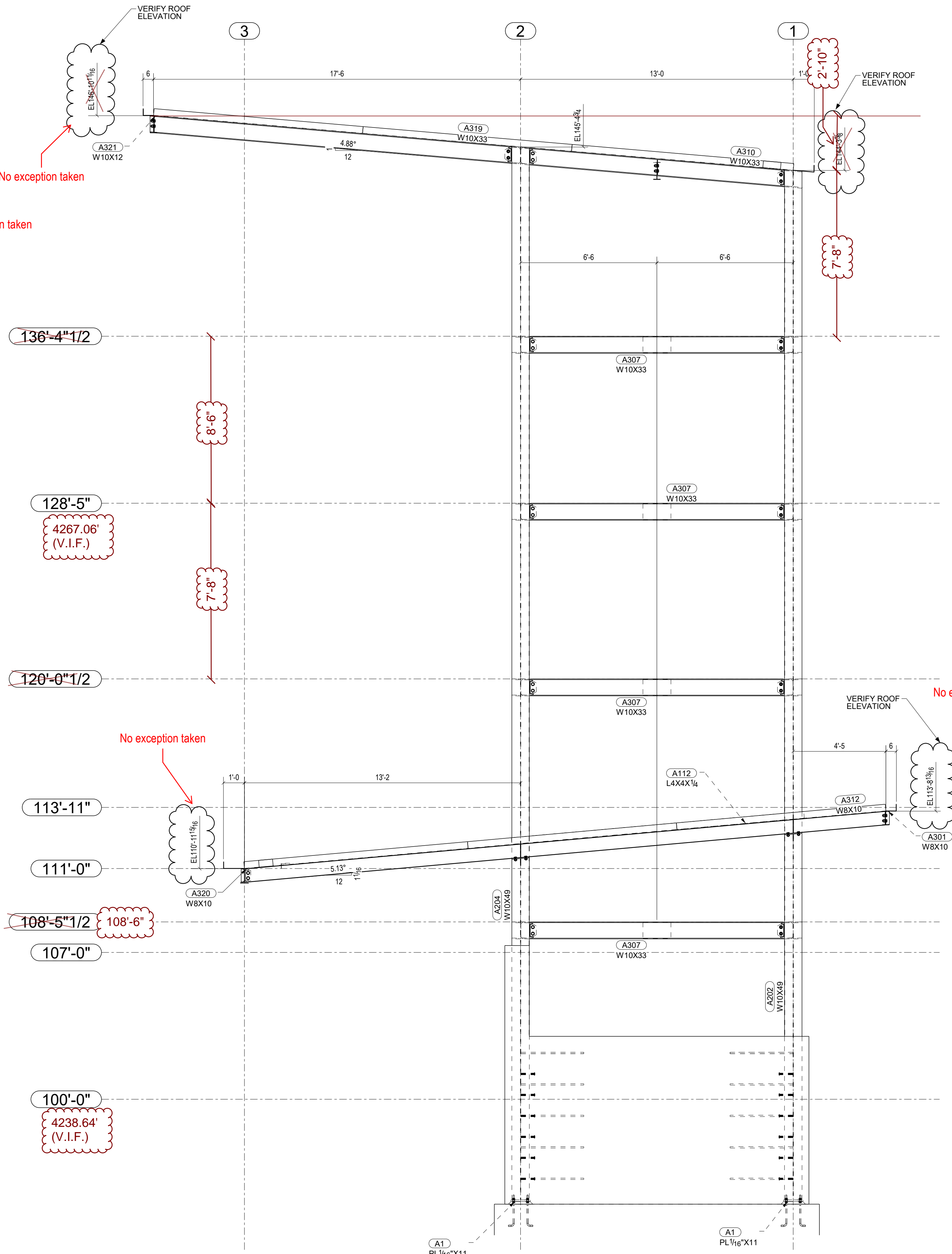
W.O.I.
Lindon, UT 84042
801-420-2546 www.woisteel.com

SECTIONS



A - A
E101

WEST TOWER



B - B
E101

WORKING DRAWINGS REVIEW

<input type="checkbox"/> NO EXCEPTIONS TAKEN	CIVIL SCIENCE
<input checked="" type="checkbox"/> MAKE CORRECTIONS AS NOTED	DATE: 01/30/2022
<input type="checkbox"/> REVISE AND RESUBMIT	BY: ALY/MS
<input type="checkbox"/> REJECTED	

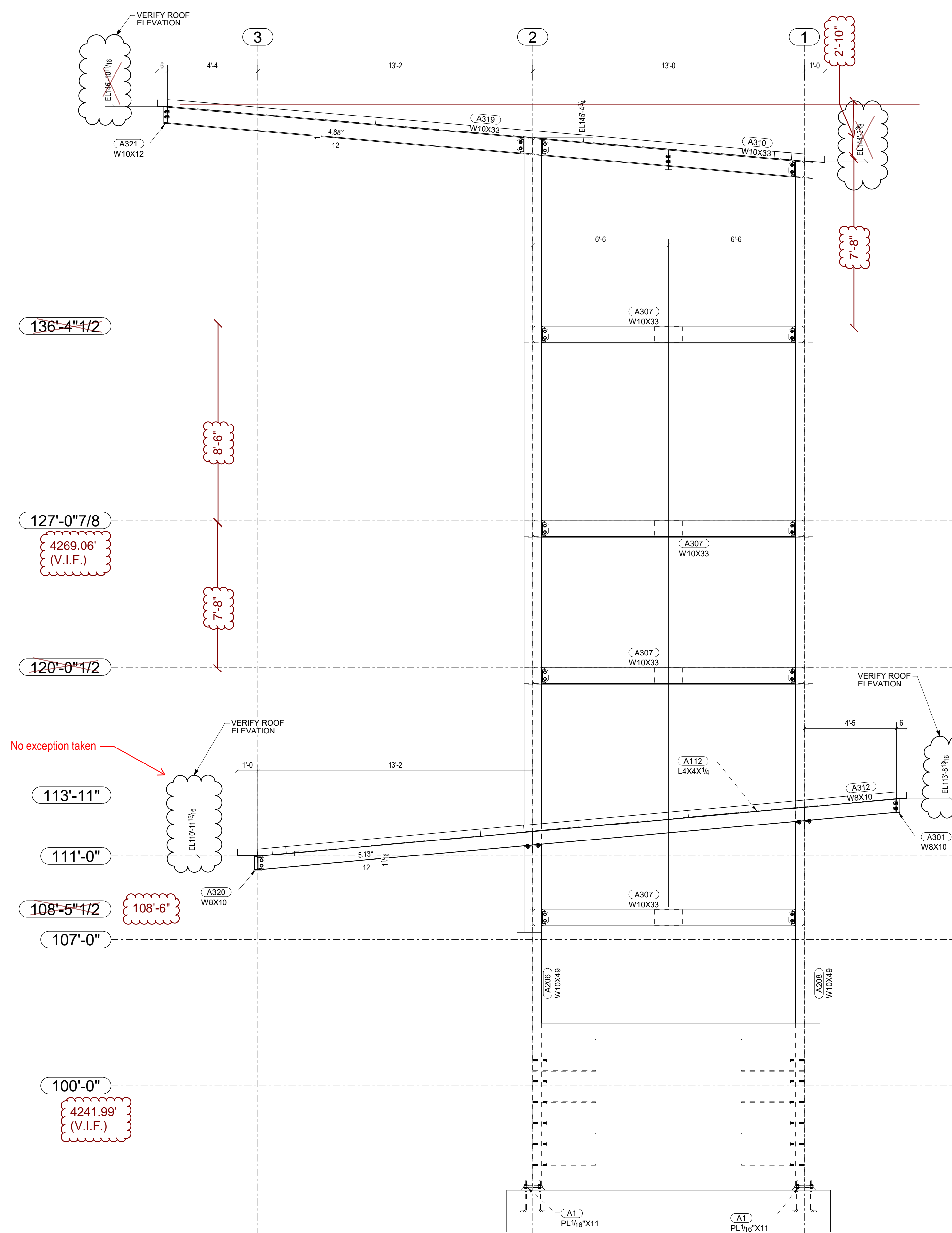
Corrections or comments made on the working drawings during review do not relieve the contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in this contract document.

DATE	NO.	DESCRIPTION	BY
01/17/2022	1	For Rb-Approval	JB
10/22/2021	2	For Approval	JB

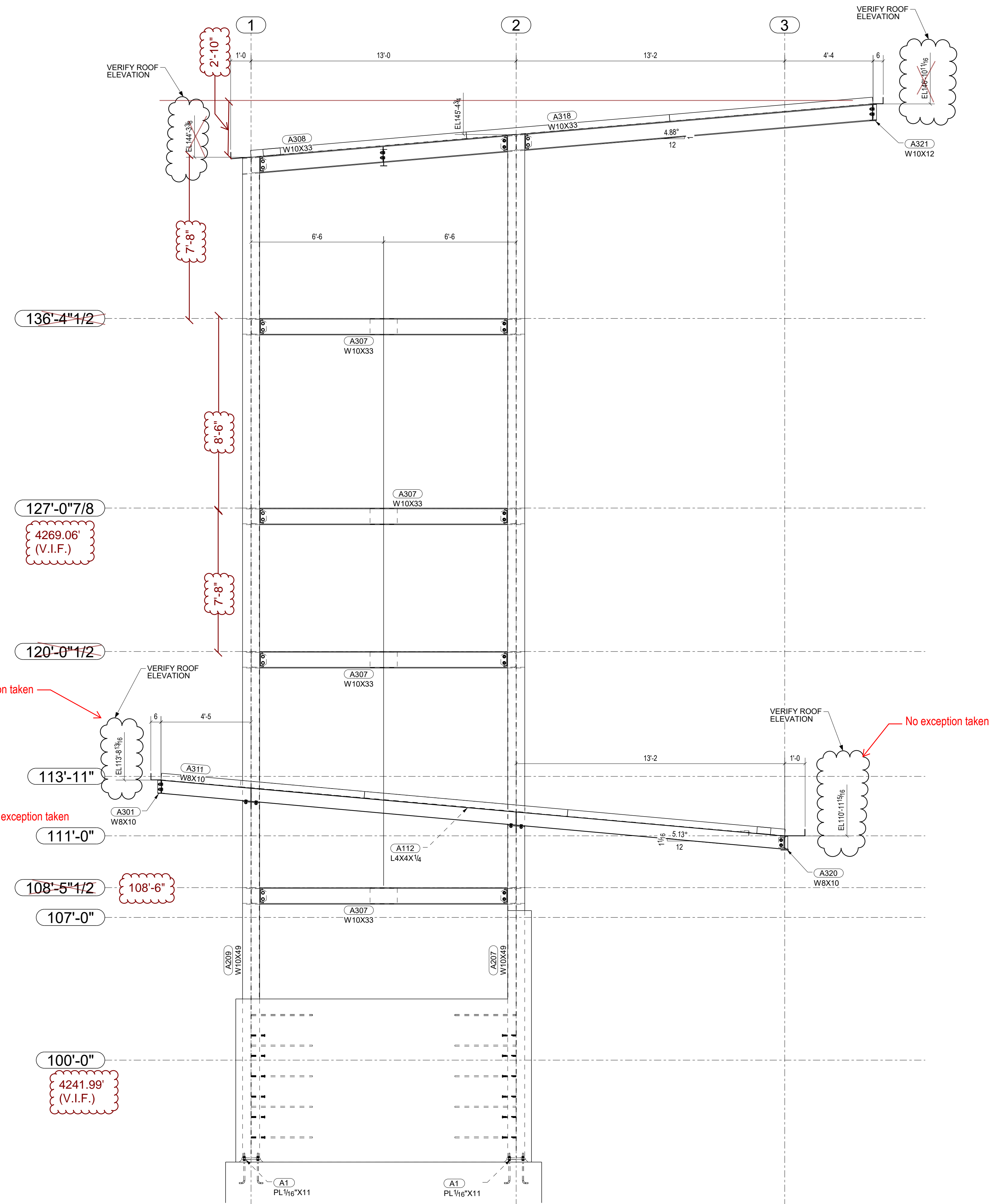
STEEL	SEE SPEC	UNO	PROJECT NAME
ELECTRODES	E70-XX	UNO <td>UTA PEDESTRIAN ELEVATOR</td>	UTA PEDESTRIAN ELEVATOR
WELDS	ASW	UNO <td>LOCATION</td>	LOCATION
		UNO <td>300 N 500 W SLC, UTAH</td>	300 N 500 W SLC, UTAH
OPEN HOLES	13/16"	UNO <td>CONTRACTOR</td>	CONTRACTOR
BOLTS	A325N	UNO <td>ARCHITECT</td>	ARCHITECT
PAINT	1-S/C PRIMER	UNO <td>FFKR ARCHITECTS</td>	FFKR ARCHITECTS

W.O.I.	
Lindon, UT 84042	
801-420-2546 www.woisteel.com	
DESCRIPTION	ELEVATIONS
DATE	10/22/2021
DRAWN BY	UTA
JOB No.	UTA
CRG No.	E301

Title Structures



A-A
E101



B-B
E101

EAST TOWER

WORKING DRAWINGS REVIEW

<input type="checkbox"/> NO EXCEPTIONS TAKEN	CIVIL SCIENCE
<input checked="" type="checkbox"/> MAKE CORRECTIONS AS NOTED	DATE: 01/30/2022
<input type="checkbox"/> REVISE AND RESUBMIT	BY: AJ YATES
<input type="checkbox"/> REJECTED	

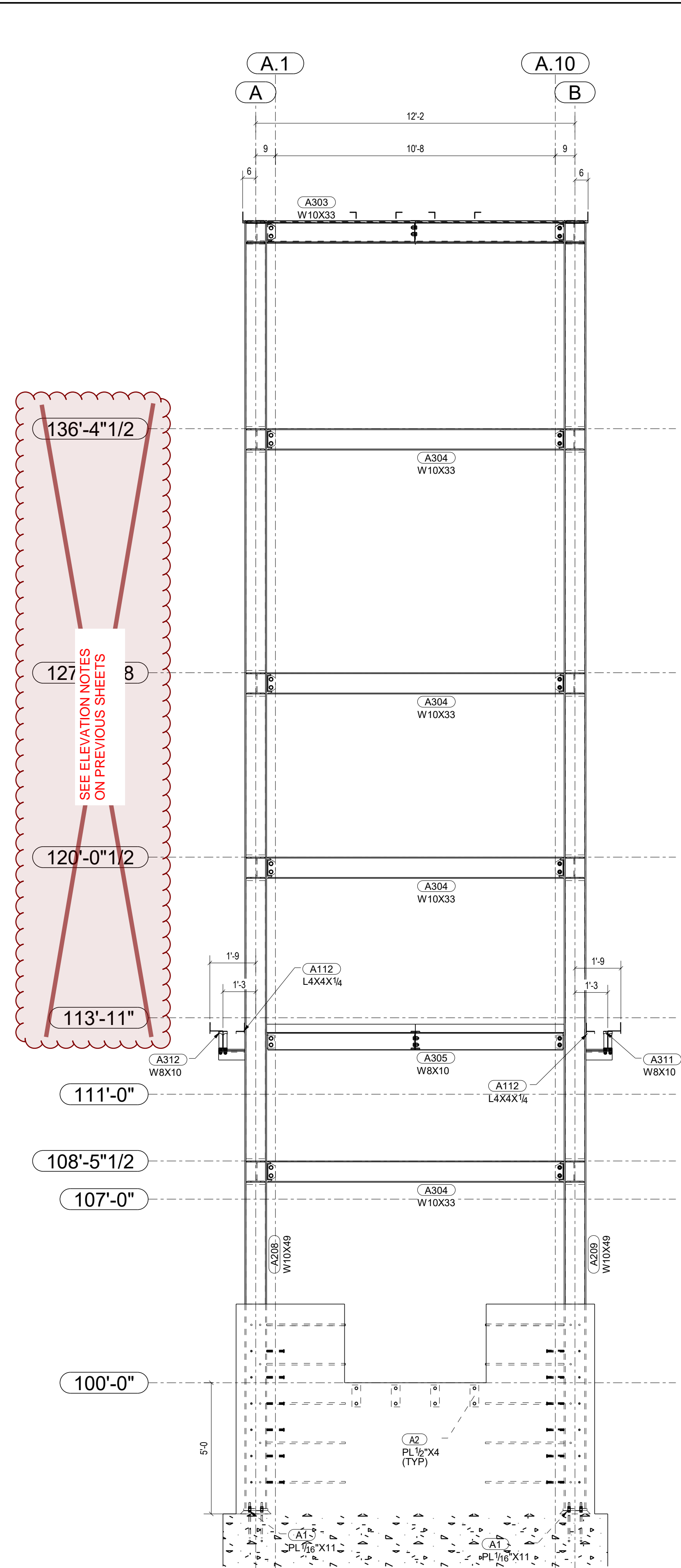
Conditions or comments made on the working drawings during review do not relieve the contractor from compliance with requirements of the drawings and specifications. This check is only for review of general compliance with the design concept of the project and general compliance with the information given in the contract documents.

DATE	NO.	DESCRIPTION	BY
01/17/2022	1	For Re-Approval	JB
10/22/2021	2	For Approval	JB

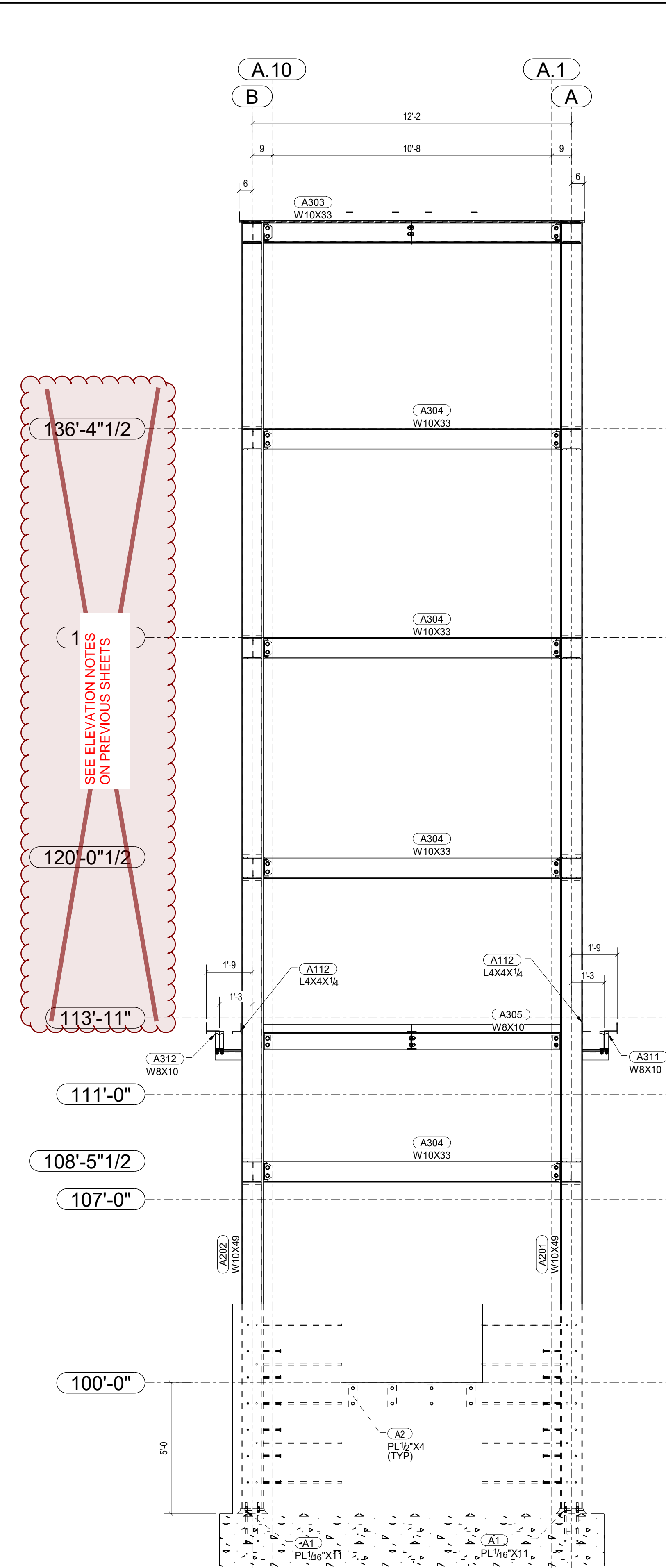
DESCRIPTION	UNO	PROJECT NAME	UNO
STEEL ASTM	SEE SPEC	UTA PEDESTRIAN ELEVATOR	
ELECTRODES	E70-XX	LOCATION	300 N 500 W SLC, UTAH
WELDS	ASW	CONTRACTOR	
OPEN HOLES	13/16"	ARCHITECT	FFKR ARCHITECTS
BOLTS	A325N		
PAINT	1-S/C PRIMER		

DESCRIPTION	UNO	DATE	JOB NO.
ELEVATIONS		10/22/2021	UTA
		DRAWN BY	CRS
			E302

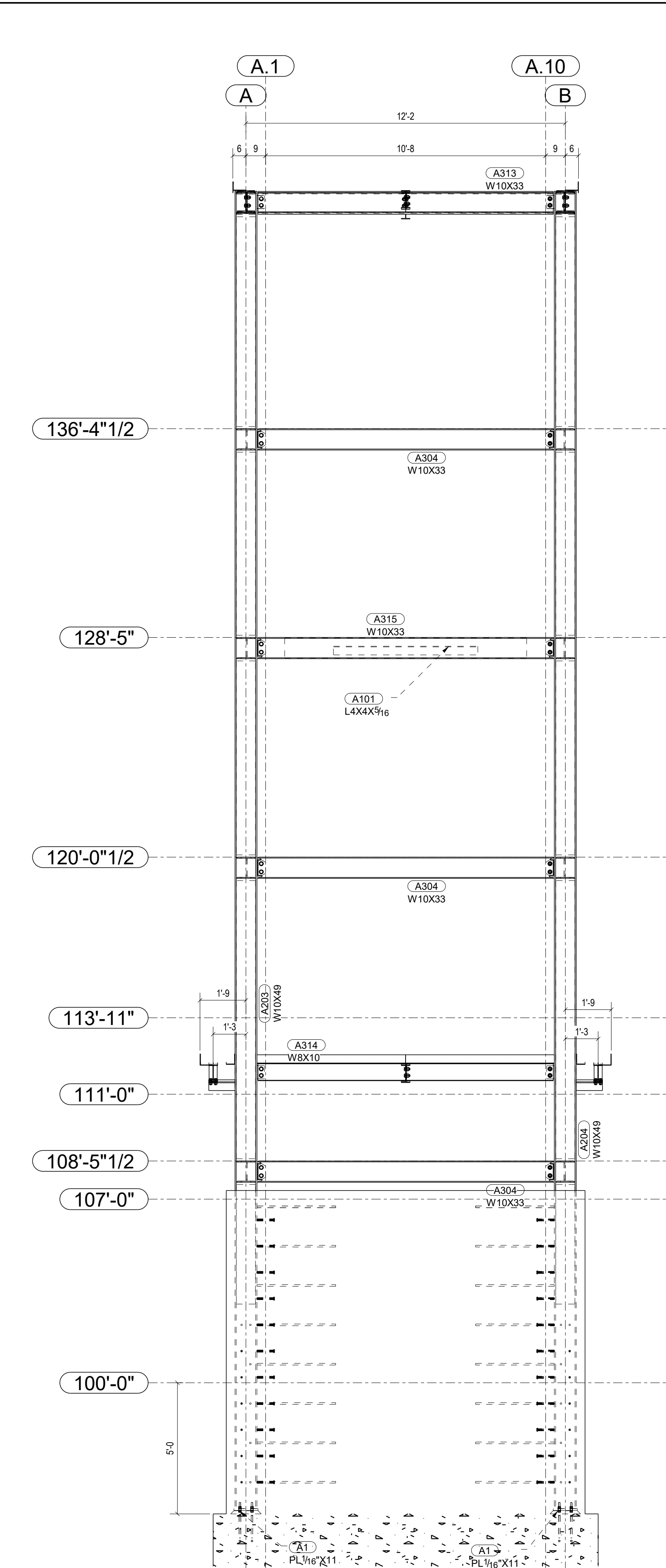
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801-420-2546 www.wolisteel.com



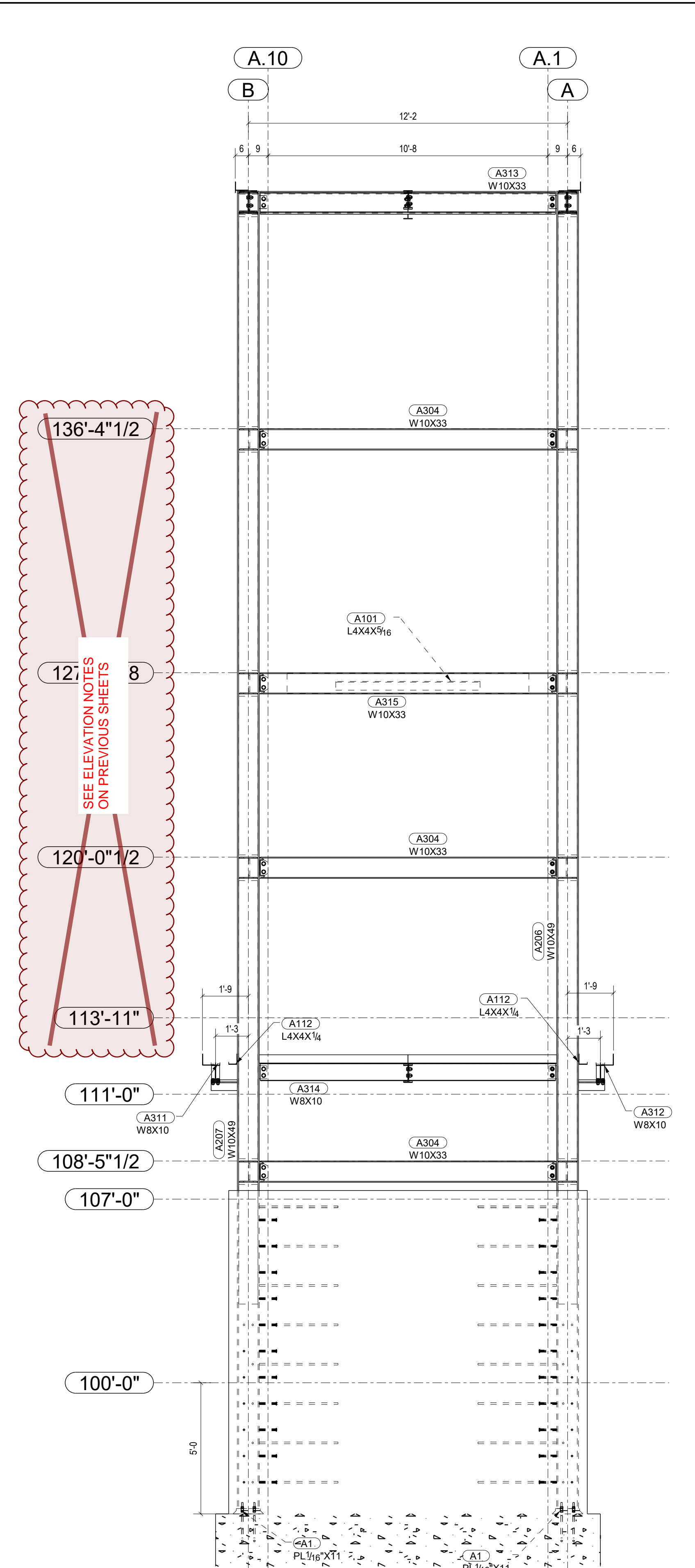
C - C
E101
EAST TOWER



D - D
E101
WEST TOWER



C - C
E101
WEST TOWER



D - D
E101
EAST TOWER

WORKING DRAWINGS REVIEW

<input type="checkbox"/>	NO EXCEPTIONS TAKEN	CIVIL SCIENCE
<input checked="" type="checkbox"/>	MAKE CORRECTIONS AS NOTED	DATE: 01/30/2022
<input type="checkbox"/>	REVISE AND RESUBMIT	BY: AJ Yates
<input type="checkbox"/>	REJECTED	

Corrections or comments made on the working drawings during review do not relieve the contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design intent of the project and general compliance with the information given in the contract documents.

DATE	NO.	DESCRIPTION	BY
01/17/2022	1	For Rb-Approval	JB
10/22/2021	2	For Approval	JB

STEEL ASTM	SEE SPEC	UNO	PROJECT NAME	UTA PEDESTRIAN ELEVATOR
ELECTRODES	E70-XX	UNO	LOCATION	300 N 500 W SLC, UTAH
WELDS	ASW	UNO	CONTRACTOR	
OPEN HOLES	13/16"	UNO	ARCHITECT	FFKR ARCHITECTS
BOLTS	A325N	UNO		
PAINT	1-S/C PRIMER	UNO		

W.O.I.	
Lindon, UT 84042	
801-420-2546 www.woisteel.com	
DESCRIPTION	ELEVATIONS
DATE	10/22/2021
DRAWN BY	UTA
JOB No.	UTA
CRG No.	E303



Complete Contracting Co
5455 West 11000 North, Suite 201
Highland, Utah 84003
Phone: (801) 756-7000
Fax: 801-756-2900

Project: 300 N Pedestrian Bridge - 300 N Pedestrian Bridge
300 S 600 W
Salt Lake City, Utah 84101

Prime Contract Potential Change Order #015: Cutting back the upper Roofs

Table with 2 columns: TO: and FROM: containing details like PCO NUMBER/REVISION, REQUEST RECEIVED FROM, STATUS, REFERENCE, FIELD CHANGE, LOCATION, SCHEDULE IMPACT, EXECUTED, CONTRACT, CREATED BY, CREATED DATE, PRIME CONTRACT CHANGE ORDER, ACCOUNTING METHOD, PAID IN FULL, SIGNED CHANGE ORDER RECEIVED DATE, and TOTAL AMOUNT.

POTENTIAL CHANGE ORDER TITLE: Cutting back the upper Roofs

CHANGE REASON: Design Development

POTENTIAL CHANGE ORDER DESCRIPTION: (The Contract Is Changed As Follows)

Cutting back the upper roofs
This cost is for cutting back the upper roofs in order to install the bridge. This cost includes 4 men for 3 days. 1 crane and 2 lifts for 3 days.
Below is the process of the work.
1. Bridge the middle beam to create support
2. Weld connection plates in 4' for the new location of the outer beam.
3. Disassemble outer beam.
4. Cut off excess material.
5. Reinstall outer beam.

ATTACHMENTS:

SIGNATURE DATE SIGNATURE DATE SIGNATURE DATE

UTA 300n Pedestrian Elevator Cut Back Roof West Tower and East Tower

Install: (2) Welders (2) Laborers = \$260 per hour/ \$2,080 per day

Total= 3 Days/ \$6240

Materials Used:

(2) Straight Boom 80-85' w/Jib Diesel = \$3600

(2) Lincoln 305 \$510

(1) Crane = \$3,040

Fuel for vehicles, and rental equipment \$1,350

Welding Rod 14" Stick Electrode 1/8" Dia., AWS E7018 \$315

Cutting Disks (1 Box)

Grinding Disks (1 Box)

Contingency 3% = \$445

Total = \$15,500.00

Complete Contracting Overhead and Profit = \$1,705

Total = \$17,205

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Qtr 1, 2022		Qtr 2, 2022		Qtr 3, 2022			Qtr 4, 2022		
								Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2021 BL300-7 300 N Update 1.26.22																	
2021 BL300-7.9 300 North Pedestrian Bridge																	
2021 BL300-7.9.9 300 North Pedestrian Bridge																	
2021 BL300-7.9.9.10 Design & Pricing Milestones																	
MS6040	30% SLC_OP_1 Design	41	0	100%	28-Apr-20/	06-Jul-20/											
MS6055	30% Quantity Reconciliation	3	0	100%	06-Jul-20A	10-Jul-20/											
MS6080	Signed Agreement	0	0	100%	02-Mar-20,												
MS6090	UPRR Concept Submittal	28	0	100%	09-Mar-20,	27-Apr-20											
MS6100	30% Price Meeting	0	0	100%	22-Jul-20A												
MS6110	30% Bid	5	0	100%	10-Jul-20A	20-Jul-20/											
MS6120	30% Price Due	0	0	100%	21-Jul-20A												
MS6280	60% SLC_OP_1 Design Review Meeting	0	0	100%	19-Oct-20/												
MS6282	Third Party Utilities - RMP WOA#1	120	0	100%	22-Feb-21,	05-Apr-21											
MS6288	Third Party Utilities - Syringa - Fiber Relocal	120	0	100%	19-Apr-21/	01-Sep-21											
MS6290	60% SLC_OP_1 Design	34	0	100%	07-Jul-20A	09-Oct-20,											
MS6300	60% Price Meeting	0	0	100%	28-Oct-20/												
MS6310	60% Bid	8	0	100%	19-Oct-20/	26-Oct-20,											
MS6400	RFC - SLC_OP_1 - Design	77	0	100%	04-Feb-21,	03-Jun-21											
MS6415	UPRR Accept 100% Plans	5	0	100%	03-Jun-21/	22-Jul-21/											
MS6420	RFC Bid	10	0	100%	09-Jun-21/	24-Jun-21											
MS6430	RFC Quantity Reconciliation	4	0	100%	09-Jun-21/	09-Jun-21											
MS6440	RFC Price Due	0	0	100%	25-Jun-21/												
MS6441	RFC Price Meeting	0	0	100%	28-Jun-21/												
MS6445	NTP	0	0	100%	27-Jul-21A												
MS6450	Contract Procurement	10	0	100%	27-Jul-21A	30-Aug-21											
MS6460	60% Quantity Reconciliation	4	0	100%	12-Oct-20/	19-Oct-20,											
MS6470	60% Price Due	0	0	100%	28-Oct-20/												
MS6480	100% SLC_OP_1 Design Review Meeting	0	0	100%	18-Feb-21,												
MS6490	100% SLC_OP_1 Design	70	0	100%	12-Oct-20/	03-Feb-21											
MS6500	100% Price Meeting	0	0	100%	19-Feb-21,												
MS6510	100% Bid	10	0	100%	08-Feb-21,	18-Feb-21											
MS6520	100 % Quantity Reconciliation	4	0	100%	03-Feb-21,	08-Feb-21											
MS6530	100% Price Due	0	0	100%	18-Feb-21,												
2021 BL300-7.9.9.1 Procurement, Permits, Submittals																	
SM4016	Elevator Shop Drawing Submittal (Initial)	20	0	100%	10-Aug-21,	21-Sep-21											
SM4017	Elevator Shop Drawing Review by Design	10	0	100%	21-Sep-21,	08-Oct-21,											
SM4018	Elevator Shop Drawing Review by City (Initi	10	0	100%	11-Oct-21A	20-Oct-21,											
SM4019	Elevator Spec Change & Re-Price	5	0	100%	20-Oct-21/	23-Nov-21											
SM4020	Elevator Contract Change Procurement	9	0	100%	23-Nov-21,	02-Dec-21											
SM4021	Elevator Redesign Shop Drawings	20	0	100%	02-Dec-21,	21-Dec-21											
SM4022	Elevator Redesign Shop Drawing Reviews	15	0	86.67%	21-Dec-21,	01-Feb-22											
SM4023	Elevator Fabrication	100	100	0%	02-Feb-22	21-Jun-22	0	Elevator Fabrication									
SM4025	Pre-Fab Bridge	145	135	86.71%	10-Aug-21,	12-Aug-22	74	Pre-Fab Bridge									
SM4026	Pre-Fab Bridge Drawing Submittal (Initial)	40	0	100%	10-Aug-21,	10-Oct-21,											
SM4027	Pre-Fab Bridge Drawing Review by Design	15	0	100%	10-Oct-21/	08-Dec-21											
SM4028	Pre-Fab Bridge Drawing Review by City (Ini	10	0	100%	08-Nov-21,	23-Nov-21											
SM4029	Pre-Fab Bridge Change & Re-Price	5	0	100%	23-Nov-21,	07-Dec-21											

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Qtr 1, 2022		Qtr 2, 2022		Qtr 3, 2022			Qtr 4, 2022	
								Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
SM4030	Pre-Fab Bridge Contract Change Procurement	5	0	100%	07-Dec-21	14-Dec-21										
SM4031	Pre-Fab Bridge Redesign Shop Drawings	20	0	100%	06-Dec-21	15-Dec-21										
SM4032	Pre-Fab Bridge Redesign Shop Drawing F	15	0	100%	18-Dec-21	24-Jan-22										
SM4033	Pre-Fab Bridge Fabrication	80	80	0%	02-Feb-22	24-May-22	44									
SM4035	SLC Permits	30	0	100%	10-Aug-21	02-Feb-22	86									
SM4060	Subcontract Contract Procurement	20	20	100%	30-Aug-21	01-Mar-22	189									
SM4070	UPRR ROE Permit	60	0	100%	27-Jul-21A	13-Aug-21										
SM4080	Submittal - Traffic Control Plan	20	0	100%	10-Aug-21	08-Oct-21										
SM4090	Submittal - Concrete, Asphalt, UTBC, Drainage	20	20	100%	21-Sep-21	01-Mar-22	189									
SM4100	Procure - Precast Boxes & Pipes	30	0	100%	06-Sep-21	15-Oct-21										
2021 BL300-7.9.9.2 Construction		292	215	0%	18-Oct-21	29-Nov-22	0									
2021 BL300-7.9.9.2.1 General/Underground/Removals		210	133	0%	18-Oct-21	08-Aug-22	82									
G100	Survey Control	3	0	100%	21-Oct-21	25-Oct-21										
G145	Drainage - Tie-in Existing CB 01-201	1	0	100%	27-Oct-21	28-Oct-21										
G150	Saw Cut Asphalt & Curb	2	0	100%	25-Oct-21	25-Oct-21										
G155	Drainage - CB 01-02	1	0	100%	27-Oct-21	27-Oct-21										
G160	Pothole Utilities	2	0	100%	25-Oct-21	15-Nov-21										
G165	Drainage - CB 01-03	1	0	100%	01-Nov-21	01-Nov-21										
G170	Install BMPs	1	0	100%	25-Oct-21	26-Oct-21										
G180	Clear, Grub & Remove Tree	1	0	100%	25-Oct-21	25-Oct-21										
G190	Drainage - P 01-02	1	0	100%	28-Oct-21	29-Oct-21										
G200	Drainage - P 01-03	1	0	100%	01-Nov-21	02-Nov-21										
G210	Drainage - P 01-202	1	0	100%	03-Nov-21	04-Nov-21										
G220	Drainage - Tie-in Existing CB 01-202	1	0	100%	04-Nov-21	04-Nov-21										
G230	Drainage - Remove Drainage Structure & Install CB 01-01	1	1	0%	14-Mar-22	14-Mar-22	179									
G240	Reconstruct Sewer MH	1	1	0%	15-Mar-22	15-Mar-22	179									
G245	Install West Sewer Lateral (Change Order)	5	0	100%	18-Nov-21	24-Nov-21										
G250	Install East Sewer Lateral	5	0	100%	29-Nov-21	02-Dec-21										
G260	Install Irrigation Connections & Meter	4	4	0%	02-Feb-22	07-Feb-22	211									
G270	Patch Sewer Trench & Median Curb	2	2	0%	04-Aug-22	08-Aug-22	82									
G300	RMP - New Service for Elevators	3	3	0%	14-Mar-22*	16-Mar-22	58									
G310	RMP - Bury UTA power East of tracks	3	0	100%	18-Oct-21	03-Dec-21										
G320	Adjust Utility Box to grade	1	1	0%	02-Aug-22	03-Aug-22	61									
G330	Remove Asphalt	3	21	0%	25-Oct-21	14-Jul-22	42									
G340	Remove Curb, Gutter & Sidewalk	3	3	0%	05-Nov-21	19-Jul-22	42									
G350	Remove Fence & Signs	2	0	0%	27-Oct-21	19-Jul-22	91									
G360	Dominion - New Gas Service	5	5	0%	08-Apr-22	15-Apr-22	112									
2021 BL300-7.9.9.2.2 Substructure & Elevator Shaft		254	192	0%	04-Nov-21	27-Oct-22	23									
2021 BL300-7.9.9.2.2.1 West Side		202	140	0%	04-Nov-21	16-Aug-22	75									
WS100	Elevator Shaft - Drill Jack Hole	2	0	100%	04-Nov-21	05-Nov-21										
WS105	Elevator Shaft - Excavate & Shore	3	0	100%	09-Nov-21	10-Nov-21										
WS110	Elevator Shaft - Install Elevator Pile	6	0	100%	08-Dec-21	22-Dec-21										
WS115	Elevator Shaft - Install Pile Rebar & Pour	2	0	100%	28-Dec-21	29-Dec-21										
WS120	Elevator Shaft - Form Footing	2	0	100%	06-Jan-22	12-Jan-22										
WS125	Elevator Shaft - Install Rebar	1	0	100%	07-Jan-22	12-Jan-22										
WS128	Elevator Shaft - Install Sump	1	1	100%	13-Jan-22	14-Mar-22	13									
WS130	Elevator Shaft - Pour Elevator Footing	1	0	100%	20-Jan-22	20-Jan-22										

█ Actual Level of Effort
 █ Remaining Work
 █ Critical Remaining Work
 ◆ Milestone
 ── summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	2022											
								Qtr 1, 2022			Qtr 2, 2022			Qtr 3, 2022			Qtr 4, 2022		
								Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		
WS135	Elevator Shaft - Cure	5	0	100%	20-Jan-22	26-Jan-22		Elevator Shaft - Cure											
WS140	Elevator Shaft - Strip Elevator Footing	1	0	100%	21-Jan-22	25-Jan-22		Elevator Shaft - Strip Elevator Footing											
WS145	Elevator Shaft - Backfill Footing	1	0	0%	02-Feb-22	02-Feb-22		Elevator Shaft - Backfill Footing											
WS148	Elevator Shaft - Steel Fabrication	15	15	13.33%	01-Feb-22	22-Feb-22	27	Elevator Shaft - Steel Fabrication											
WS150	Elevator Shaft - Structural Steel	15	15	0%	15-Mar-22	04-Apr-22	13	Elevator Shaft - Structural Steel											
WS160	Elevator Shaft - Glass glazing	14	14	0%	05-Apr-22	22-Apr-22	13	Elevator Shaft - Glass glazing											
WS170	Elevator Shaft - Roofing	3	3	0%	25-Apr-22	27-Apr-22	13	Elevator Shaft - Roofing											
WS180	Elevator Shaft - HVAC/Hoist Equipment	8	8	0%	28-Apr-22	09-May-22	13	Elevator Shaft - HVAC/Hoist Equipment											
WS190	Elevator Shaft - Electrical	8	8	0%	10-May-22	19-May-22	13	Elevator Shaft - Electrical											
WS200	Elevator Shaft - Finishes	10	10	0%	20-May-22	02-Jun-22	13	Elevator Shaft - Finishes											
WS210	Elevator - Install	40	40	0%	22-Jun-22	16-Aug-22	0	Elevator - Install											
WS300	Mech/Elec - Install Power/Com Conduit	1	1	0%	14-Mar-22	15-Mar-22	126	Mech/Elec - Install Power/Com Conduit											
WS305	Mech/Elec - Excavate Room Footing	1	1	0%	15-Mar-22	16-Mar-22	126	Mech/Elec - Excavate Room Footing											
WS310	Mech/Elec - Form Footing	3	3	0%	16-Mar-22	21-Mar-22	126	Mech/Elec - Form Footing											
WS320	Mech/Elec - Pour Footing	1	1	0%	21-Mar-22	22-Mar-22	126	Mech/Elec - Pour Footing											
WS330	Mech/Elec - Form Walls	5	5	0%	22-Mar-22	29-Mar-22	126	Mech/Elec - Form Walls											
WS335	Mech/Elec - Pour Walls	1	1	0%	02-Feb-22	02-Feb-22	214	Mech/Elec - Pour Walls											
WS340	Mech/Elec - Strip Walls	3	3	0%	29-Mar-22	01-Apr-22	126	Mech/Elec - Strip Walls											
WS350	Mech/Elec - Roofing	5	5	0%	01-Apr-22	08-Apr-22	130	Mech/Elec - Roofing											
WS360	Mech/Elec - Electrical	5	5	0%	08-Apr-22	15-Apr-22	130	Mech/Elec - Electrical											
WS370	Mech/Elec - Finishes	5	5	0%	15-Apr-22	22-Apr-22	158	Mech/Elec - Finishes											
WS500	Abutment - Excavate Footing	1	1	0%	14-Mar-22	14-Mar-22	73	Abutment - Excavate Footing											
WS505	Abutment - Install Pile	5	0	100%	08-Dec-21	22-Dec-21		Abutment - Install Pile											
WS510	Abutment - Install Pile Rebar & Pour	1	0	100%	28-Dec-21	29-Dec-21		Abutment - Install Pile Rebar & Pour											
WS520	Abutment - Form	3	3	0%	15-Mar-22	17-Mar-22	73	Abutment - Form											
WS530	Abutment - Install Rebar	1	1	0%	18-Mar-22	18-Mar-22	73	Abutment - Install Rebar											
WS540	Abutment - Pour Abutment	1	1	0%	21-Mar-22	21-Mar-22	73	Abutment - Pour Abutment											
WS550	Abutment - Cure	7	7	0%	22-Mar-22	28-Mar-22	104	Abutment - Cure											
WS560	Abutment - Strip	2	2	0%	28-Mar-22	30-Mar-22	73	Abutment - Strip											
WS570	Abutment - Erect Structural Steel	4	4	0%	30-Mar-22	05-Apr-22	73	Abutment - Erect Structural Steel											
2021 BL300-7.9.2.2.2 East Side		254	164	0%	08-Nov-21	27-Oct-22	0	2021 BL300-7.9.2.2.2 East Side											
ES100	Elevator Shaft - Drill Jack Hole	2	0	100%	08-Nov-21	09-Nov-21		Elevator Shaft - Drill Jack Hole											
ES110	Elevator Shaft - Excavate & Shore	3	3	0%	14-Mar-22	16-Mar-22	58	Elevator Shaft - Excavate & Shore											
ES120	Elevator Shaft - Install Elevator Pile	3	0	100%	08-Dec-21	07-Jan-22		Elevator Shaft - Install Elevator Pile											
ES130	Elevator Shaft - Install Pile Rebar & Pour	1	0	100%	07-Jan-22	10-Jan-22		Elevator Shaft - Install Pile Rebar & Pour											
ES140	Elevator Shaft - Form Footing	2	0	100%	12-Jan-22	19-Jan-22		Elevator Shaft - Form Footing											
ES150	Elevator Shaft - Install Rebar	1	0	0%	13-Jan-22	14-Jan-22		Elevator Shaft - Install Rebar											
ES160	Elevator Shaft - Install Sump	1	0	0%	17-Jan-22	17-Mar-22	59	Elevator Shaft - Install Sump											
ES170	Elevator Shaft - Pour Footing	1	0	0%	20-Jan-22	20-Jan-22		Elevator Shaft - Pour Footing											
ES180	Elevator Shaft - Cure	5	0	0%	20-Jan-22	27-Jan-22		Elevator Shaft - Cure											
ES190	Elevator Shaft - Strip Footing	1	0	0%	21-Jan-22	24-Jan-22		Elevator Shaft - Strip Footing											
ES200	Elevator Shaft - Backfill Footing	1	0	0%	25-Jan-22	25-Jan-22		Elevator Shaft - Backfill Footing											
ES210	Elevator Shaft - Structural Steel	15	15	0%	18-Jan-22	25-Apr-22	46	Elevator Shaft - Structural Steel											
ES220	Elevator Shaft - Glass glazing	14	14	0%	26-Apr-22	13-May-22	46	Elevator Shaft - Glass glazing											
ES230	Elevator Shaft - Roofing	5	5	0%	16-May-22	20-May-22	46	Elevator Shaft - Roofing											
ES240	Elevator Shaft - HVAC/Hoist Equipment	8	8	0%	23-May-22	01-Jun-22	46	Elevator Shaft - HVAC/Hoist Equipment											
ES250	Elevator Shaft - Electrical	8	8	0%	02-Jun-22	13-Jun-22	46	Elevator Shaft - Electrical											

█ Actual Level of Effort
 █ Remaining Work
 █ Critical Remaining Work
 ◆ Milestone
 ◆ summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Qtr 3, 2022			Qtr 4, 2022			Qtr 1, 2023			Qtr 2, 2023			
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		
2021 BL300-17 300 N Update 8.15.22																				
2021 BL300-17.9 300 North Pedestrian Bridge																				
2021 BL300-17.9.9 300 North Pedestrian Bridge																				
2021 BL300-17.9.9.10 Design & Pricing Milestones																				
MS6040	30% SLC_OP_1 Design	41	0	100%	28-Apr-20/	06-Jul-20/														
MS6055	30% Quantity Reconciliation	3	0	100%	06-Jul-20A	10-Jul-20/														
MS6080	Signed Agreement	0	0	100%	02-Mar-20,															
MS6090	UPRR Concept Submittal	28	0	100%	09-Mar-20,	27-Apr-20,														
MS6100	30% Price Meeting	0	0	100%	22-Jul-20A															
MS6110	30% Bid	5	0	100%	10-Jul-20A	20-Jul-20/														
MS6120	30% Price Due	0	0	100%	21-Jul-20A															
MS6280	60% SLC_OP_1 Design Review Meeting	0	0	100%	19-Oct-20/															
MS6282	Third Party Utilities - RMP WOA#1	120	0	100%	22-Feb-21,	05-Apr-21,														
MS6288	Third Party Utilities - Syringa - Fiber Relocate	120	0	100%	19-Apr-21/	01-Sep-21														
MS6290	60% SLC_OP_1 Design	34	0	100%	07-Jul-20A	09-Oct-20,														
MS6300	60% Price Meeting	0	0	100%	28-Oct-20/															
MS6310	60% Bid	8	0	100%	19-Oct-20/	26-Oct-20,														
MS6400	RFC - SLC_OP_1 - Design	77	0	100%	04-Feb-21,	03-Jun-21														
MS6415	UPRR Accept 100% Plans	5	0	100%	03-Jun-21/	22-Jul-21/														
MS6420	RFC Bid	10	0	100%	09-Jun-21/	24-Jun-21														
MS6430	RFC Quantity Reconciliation	4	0	100%	09-Jun-21/	09-Jun-21														
MS6440	RFC Price Due	0	0	100%	25-Jun-21/															
MS6441	RFC Price Meeting	0	0	100%	28-Jun-21/															
MS6445	NTP	0	0	100%	27-Jul-21A															
MS6450	Contract Procurement	10	0	100%	27-Jul-21A	30-Aug-21														
MS6460	60% Quantity Reconciliation	4	0	100%	12-Oct-20/	19-Oct-20,														
MS6470	60% Price Due	0	0	100%	28-Oct-20/															
MS6480	100% SLC_OP_1 Design Review Meeting	0	0	100%	18-Feb-21,															
MS6490	100% SLC_OP_1 Design	70	0	100%	12-Oct-20/	03-Feb-21														
MS6500	100% Price Meeting	0	0	100%	19-Feb-21,															
MS6510	100% Bid	10	0	100%	08-Feb-21,	18-Feb-21														
MS6520	100 % Quantity Reconciliation	4	0	100%	03-Feb-21,	08-Feb-21														
MS6530	100% Price Due	0	0	100%	18-Feb-21,															
2021 BL300-17.9.9.1 Procurement, Permits, Submittals																				
SM4016	Elevator Shop Drawing Submittal (Initial)	20	0	100%	10-Aug-21,	21-Sep-21														
SM4017	Elevator Shop Drawing Review by Designers (Initial)	10	0	100%	21-Sep-21,	08-Oct-21,														
SM4018	Elevator Shop Drawing Review by City (Initial)	10	0	100%	11-Oct-21A	20-Oct-21,														
SM4019	Elevator Spec Change & Re-Price	5	0	100%	20-Oct-21/	23-Nov-21														
SM4020	Elevator Contract Change Procurement	9	0	100%	23-Nov-21,	02-Dec-21														
SM4021	Elevator Redesign Shop Drawings	20	0	100%	02-Dec-21,	21-Dec-21														
SM4022	Elevator Redesign Shop Drawing Reviews	15	0	100%	21-Dec-21,	01-Feb-22														
SM4023	Elevator Fabrication	100	34	100%	21-Mar-22,	30-Sep-22	74													
SM4024	Elevator Structural Steel Resubmittals & Reviews	5	0	100%	01-Feb-22,	16-Feb-22														
SM4026	Pre-Fab Bridge Drawing Submittal (Initial)	40	0	100%	10-Aug-21,	10-Oct-21,														
SM4027	Pre-Fab Bridge Drawing Review by Design (Initial)	15	0	100%	10-Oct-21/	08-Dec-21														
SM4028	Pre-Fab Bridge Drawing Review by City (Initial)	10	0	100%	08-Nov-21,	23-Nov-21														
SM4029	Pre-Fab Bridge Change & Re-Price	5	0	100%	23-Nov-21,	07-Dec-21														

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								Qtr 3, 2022	Qtr 4, 2022			Qtr 1, 2023			Qtr 2, 2023				
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
SM4030	Pre-Fab Bridge Contract Change Procurement	5	0	100%	07-Dec-21	14-Dec-21													
SM4031	Pre-Fab Bridge Redesign Shop Drawings	20	0	100%	06-Dec-21	15-Dec-21													
SM4032	Pre-Fab Bridge Redesign Shop Drawing Review	15	0	100%	18-Dec-21	24-Jan-22													
SM4033	Pre-Fab Bridge Fabrication	80	19	100%	31-May-22	09-Sep-22	114												
SM4035	SLC Permits	30	0	100%	10-Aug-21	15-Aug-22	104												
SM4060	Subcontract Contract Procurement	20	20	100%	30-Aug-21	12-Sep-22	200												
SM4070	UPRR ROE Permit	60	0	100%	27-Jul-21A	13-Aug-21													
SM4080	Submittal - Traffic Control Plan	20	0	100%	10-Aug-21	08-Oct-21													
SM4090	Submittal - Concrete, Asphalt, UTBC, Drainage, Electrical	20	20	100%	21-Sep-21	12-Sep-22	200												
SM4100	Procure - Precast Boxes & Pipes	30	0	100%	06-Sep-21	15-Oct-21													
2021 BL300-17.9.9.2 Construction		434	221	0%	18-Oct-21	26-Jun-23	0												
2021 BL300-17.9.9.2.1 General/Underground/Removals		307	94	0%	18-Oct-21	30-Dec-22	127												
G100	Survey Control	3	0	100%	21-Oct-21	25-Oct-21													
G145	Drainage - Tie-in Existing CB 01-201	1	0	100%	27-Oct-21	28-Oct-21													
G150	Saw Cut Asphalt & Curb	2	0	100%	25-Oct-21	25-Oct-21													
G155	Drainage - CB 01-02	1	0	100%	27-Oct-21	27-Oct-21													
G160	Pothole Utilities	2	0	100%	25-Oct-21	15-Nov-21													
G165	Drainage - CB 01-03	1	0	100%	01-Nov-21	01-Nov-21													
G170	Install BMPs	1	0	100%	25-Oct-21	26-Oct-21													
G180	Clear, Grub & Remove Tree	1	0	100%	25-Oct-21	25-Oct-21													
G190	Drainage - P 01-02	1	0	100%	28-Oct-21	29-Oct-21													
G200	Drainage - P 01-03	1	0	100%	01-Nov-21	02-Nov-21													
G210	Drainage - P 01-202	1	0	100%	03-Nov-21	04-Nov-21													
G220	Drainage - Tie-in Existing CB 01-202	1	0	100%	04-Nov-21	04-Nov-21													
G230	Drainage - Remove Drainage Structure & Install CB 01-01	1	1	0%	02-Nov-22	02-Nov-22	163												
G240	Reconstruct Sewer MH	1	1	0%	03-Nov-22	03-Nov-22	163												
G245	Install West Sewer Lateral (Change Order)	5	0	100%	18-Nov-21	24-Nov-21													
G250	Install East Sewer Lateral	5	0	100%	29-Nov-21	02-Dec-21													
G260	Install Irrigation Connections & Meter	4	4	0%	15-Aug-22	18-Aug-22	217												
G270	Patch Sewer Trench & Median Curb	2	2	0%	16-Nov-22	18-Nov-22	153												
G300	RMP - New Service for Elevators	3	3	0%	27-Dec-22*	30-Dec-22	14												
G310	RMP - Bury UTA power East of tracks	3	0	100%	18-Oct-21	03-Dec-21													
G320	Adjust Utility Box to grade	1	1	0%	14-Nov-22	15-Nov-22	135												
G330	Remove Asphalt	3	21	100%	25-Oct-21	27-Oct-22	116												
G340	Remove Curb, Gutter & Sidewalk	3	3	100%	05-Nov-21	01-Nov-22	116												
G350	Remove Fence & Signs	2	0	100%	27-Oct-21	02-Nov-22	165												
G360	Dominion - New Gas Service	5	5	100%	15-Jun-22	19-Aug-22	170												
2021 BL300-17.9.9.2.2 Substructure & Elevator Shaft		398	200	0%	04-Nov-21	26-May-23	21												
2021 BL300-17.9.9.2.2.1 West Side		346	148	0%	04-Nov-21	15-Mar-23	73												
WS100	Elevator Shaft - Drill Jack Hole	2	0	100%	04-Nov-21	05-Nov-21													
WS105	Elevator Shaft - Excavate & Shore	3	0	100%	09-Nov-21	10-Nov-21													
WS110	Elevator Shaft - Install Elevator Pile	6	0	100%	08-Dec-21	22-Dec-21													
WS115	Elevator Shaft - Install Pile Rebar & Pour	2	0	100%	28-Dec-21	29-Dec-21													
WS120	Elevator Shaft - Form Footing	2	0	100%	06-Jan-22	12-Jan-22													
WS125	Elevator Shaft - Install Rebar	1	0	100%	07-Jan-22	12-Jan-22													
WS128	Elevator Shaft - Install Sump	1	1	100%	13-Jan-22	15-Aug-22	219												
WS130	Elevator Shaft - Pour Elevator Footing	1	0	100%	20-Jan-22	20-Jan-22													

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█ Actual Work █ Milestone ▶ summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Timeline														
								Qtr 3, 2022			Qtr 4, 2022			Qtr 1, 2023			Qtr 2, 2023					
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun				
WS135	Elevator Shaft - Cure	5	0	100%	20-Jan-22	26-Jan-22																
WS140	Elevator Shaft - Strip Elevator Footing	1	0	100%	21-Jan-22	25-Jan-22																
WS145	Elevator Shaft - Backfill Footing	1	0	100%	02-Feb-22	02-Feb-22																
WS148	Elevator Shaft - Steel Fabrication	15	0	100%	16-Feb-22	14-Mar-22																
WS150	Elevator Shaft - Structural Steel	15	0	100%	14-Mar-22	02-Apr-22																
WS151	Elevator Shaft - Structural Steel RFI Resolution	6	0	100%	04-Apr-22	15-Aug-22	0															
WS152	Elevator Shaft - Structural Steel Modifications	7	7	0%	06-Sep-22	14-Sep-22	35															
WS153	Elevator Shaft - New Structural Steel Paint CO	15	15	0%	15-Aug-22	02-Sep-22	0															
WS154	Elevator Shaft - Paint Lead Time	60	60	0%	03-Sep-22	01-Nov-22	1															
WS155	Elevator Shaft - Steel Painting	13	13	0%	01-Nov-22	18-Nov-22	1															
WS160	Elevator Shaft - Glass Framing	10	10	0%	18-Nov-22	02-Dec-22	1															
WS165	Elevator Shaft - Glass Installation	7	7	0%	27-Dec-22	04-Jan-23	0															
WS170	Elevator Shaft - Roofing	7	7	0%	02-Dec-22	13-Dec-22	1															
WS180	Elevator Shaft - HVAC/Hoist Equipment	8	8	0%	13-Dec-22	23-Dec-22	1															
WS190	Elevator Shaft - Electrical	8	8	0%	23-Dec-22	04-Jan-23	1															
WS200	Elevator Shaft - Finishes	10	10	0%	05-Jan-23	18-Jan-23	0															
WS210	Elevator - Install	40	40	0%	19-Jan-23	15-Mar-23	0															
WS300	Mech/Elec - Install Power/Com Conduit	1	1	0%	18-Nov-22	21-Nov-22	151															
WS305	Mech/Elec - Excavate Room Footing	1	0	100%	25-Mar-22	25-Mar-22																
WS310	Mech/Elec - Form Footing	3	0	100%	01-Apr-22	04-Apr-22																
WS320	Mech/Elec - Pour Footing	1	0	100%	05-Apr-22	05-Apr-22																
WS330	Mech/Elec - Form Walls	5	0	100%	06-Apr-22	08-Apr-22																
WS335	Mech/Elec - Pour Walls	1	0	100%	08-Apr-22	08-Apr-22																
WS340	Mech/Elec - Strip Walls	3	0	100%	11-Apr-22	11-Apr-22																
WS350	Mech/Elec - Roofing	5	5	0%	13-Dec-22	20-Dec-22	14															
WS360	Mech/Elec - Electrical	5	5	0%	20-Dec-22	27-Dec-22	14															
WS370	Mech/Elec - Finishes	5	5	0%	27-Dec-22	03-Jan-23	125															
WS500	Abutment - Excavate Footing	1	0	100%	25-Mar-22	25-Mar-22																
WS505	Abutment - Install Pile	5	0	100%	08-Dec-21	22-Dec-21																
WS510	Abutment - Install Pile Rebar & Pour	1	0	100%	28-Dec-21	29-Dec-21																
WS520	Abutment - Form	3	0	100%	25-Mar-22	29-Mar-22																
WS530	Abutment - Install Rebar	1	0	100%	28-Mar-22	28-Mar-22																
WS540	Abutment - Pour Abutment	1	0	100%	30-Mar-22	30-Mar-22																
WS550	Abutment - Cure	7	0	100%	30-Mar-22	05-Apr-22																
WS560	Abutment - Strip	2	0	100%	31-Mar-22	31-Mar-22																
WS570	Abutment - Erect Structural Steel	4	4	0%	12-Aug-22	19-Aug-22	123															
2021 BL300-17.9.9.2.2.2 East Side		398	200	0%	08-Nov-21	26-May-23	21															
ES100	Elevator Shaft - Drill Jack Hole	2	0	100%	08-Nov-21	09-Nov-21																
ES110	Elevator Shaft - Excavate & Shore	3	0	100%	11-Nov-21	12-Nov-21																
ES120	Elevator Shaft - Install Elevator Pile	3	0	100%	08-Dec-21	07-Jan-22																
ES130	Elevator Shaft - Install Pile Rebar & Pour	1	0	100%	07-Jan-22	10-Jan-22																
ES140	Elevator Shaft - Form Footing	2	0	100%	12-Jan-22	19-Jan-22																
ES150	Elevator Shaft - Install Rebar	1	0	100%	13-Jan-22	14-Jan-22																
ES160	Elevator Shaft - Install Sump	1	0	100%	17-Jan-22	15-Aug-22	129															
ES170	Elevator Shaft - Pour Footing	1	0	100%	20-Jan-22	20-Jan-22																
ES180	Elevator Shaft - Cure	5	0	100%	20-Jan-22	27-Jan-22																
ES190	Elevator Shaft - Strip Footing	1	0	100%	21-Jan-22	24-Jan-22																

█ Actual Level of Effort █ Remaining Work ◆ Milestone
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Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Timeline														
								Qtr 3, 2022			Qtr 4, 2022			Qtr 1, 2023			Qtr 2, 2023					
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun				
ES200	Elevator Shaft - Backfill Footing	1	0	100%	25-Jan-22	25-Jan-22																
ES210	Elevator Shaft - Structural Steel	15	0	100%	14-Mar-22	01-Apr-22																
ES212	Elevator Shaft - Structural Steel Modifications	7	7	0%	15-Sep-22	23-Sep-22	73															
ES215	Elevator Shaft - Steel Painting	13	13	0%	18-Nov-22	09-Dec-22	34															
ES220	Elevator Shaft - Glass Framing	10	10	0%	09-Dec-22	23-Dec-22	36															
ES225	Elevator Shaft - Glass Installation	7	7	0%	13-Jan-23	24-Jan-23	37															
ES230	Elevator Shaft - Roofing	7	7	0%	23-Dec-22	03-Jan-23	36															
ES240	Elevator Shaft - HVAC/Hoist Equipment	8	8	0%	03-Jan-23	13-Jan-23	36															
ES250	Elevator Shaft - Electrical	8	8	0%	13-Jan-23	25-Jan-23	36															
ES260	Elevator Shaft - Finishes	10	10	0%	25-Jan-23	08-Feb-23	36															
ES270	Elevator - Install	40	40	0%	30-Mar-23	24-May-23	0															
ES280	Elevator - Inspection	2	2	0%	25-May-23	26-May-23	0															
ES290	Abutment - Excavate Footing	1	0	100%	25-Mar-22	25-Mar-22																
ES295	Abutment - Install Pile	5	0	100%	08-Dec-21	07-Jan-22																
ES300	Abutment - Install Pile Rebar & Pour	1	0	100%	07-Jan-22	10-Jan-22																
ES310	Abutment - Form	2	0	100%	25-Mar-22	29-Mar-22																
ES320	Abutment - Install Rebar	1	0	100%	26-Mar-22	28-Mar-22																
ES330	Abutment - Pour Abutment	1	0	100%	30-Mar-22	30-Mar-22																
ES340	Abutment - Cure	7	0	100%	31-Mar-22	06-Apr-22																
ES350	Abutment - Strip	2	0	100%	31-Mar-22	31-Mar-22																
ES360	Abutment - Erect Structural Steel	4	4	0%	19-Aug-22	25-Aug-22	123															
ES390	Mech/Elec - Install Power/Com Conduit	1	1	0%	25-Aug-22	26-Aug-22	169															
ES400	Mech/Elec - Excavate Room Footing	1	0	100%	25-Mar-22	25-Mar-22																
ES405	Mech/Elec - Form Footing	3	0	100%	01-Apr-22	04-Apr-22																
ES410	Mech/Elec - Pour Footing	1	0	100%	05-Apr-22	05-Apr-22																
ES420	Mech/Elec - Form Walls	5	0	100%	06-Apr-22	08-Apr-22																
ES430	Mech/Elec - Pour Walls	1	0	100%	08-Apr-22	08-Apr-22																
ES440	Mech/Elec - Strip Walls	3	0	100%	11-Apr-22	11-Apr-22																
ES450	Mech/Elec - Roofing	5	5	0%	20-Dec-22	27-Dec-22	94															
ES460	Mech/Elec - Electrical	5	5	0%	27-Dec-22	03-Jan-23	99															
ES470	Mech/Elec - Finishes	5	5	0%	03-Jan-23	10-Jan-23	99															
ES475	Boiler Room - Exc Footing	2	0	100%	12-Apr-22	13-Apr-22																
ES480	Boiler Room - Form Footing	2	0	100%	13-Apr-22	14-Apr-22																
ES485	Boiler Room - Pour Footing	1	0	100%	14-Apr-22	14-Apr-22																
ES490	Boiler Room - Form Walls	3	0	100%	15-Apr-22	21-Apr-22																
ES495	Boiler Room - Pour Walls	5	0	100%	21-Apr-22	21-Apr-22																
ES500	Boiler Room - Strip Walls	3	0	100%	22-Apr-22	26-Apr-22																
ES505	Boiler Room - Pour Floor	1	0	100%	04-May-22	05-May-22																
ES510	Boiler Room - Roofing	5	5	0%	27-Dec-22	03-Jan-23	94															
ES515	Boiler Room - Electrical	5	5	0%	03-Jan-23	10-Jan-23	94															
ES520	Boiler Room - Finishes	5	5	0%	10-Jan-23	17-Jan-23	94															
2021 BL300-17.9.9.2.3 Super Structure, Stairs & Landing		216	46	0%	08-Dec-21	31-Oct-22	145	31-Oct-22, 2021 BL300-17.9.9.2.3 Super Structure, Stairs & Landing														
SSL100	Stairs - Footing Excavation	1	0	100%	08-Dec-21	22-Dec-21																
SSL105	Stairs - Form Footing	2	0	100%	11-Jan-22	27-Jan-22																
SSL110	Stairs - Install Footing Rebar	1	0	100%	12-Jan-22	26-Jan-22																
SSL115	Stairs - Pour Footing	1	0	100%	25-Jan-22	28-Jan-22																
SSL120	Stairs - Cure Footing	7	0	100%	25-Jan-22	01-Feb-22																

█ Actual Level of Effort █ Remaining Work ◆ Milestone
█ Actual Work █ Critical Remaining Work ➔ summary

300 N Update 8.15.22			Classic Schedule Layout					15-Aug-22 17:03										
Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Qtr 3, 2022		Qtr 4, 2022			Qtr 1, 2023			Qtr 2, 2023		
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
SSL125	Stairs - Strip Footing	1	0	100%	26-Jan-22	31-Jan-22												
SSL135	Stairs - Install Steel Stringers & SIP decking	5	5	0%	25-Aug-22	01-Sep-22	161											
SSL145	Stairs - Install Insulation & Hydronic Lines	4	4	0%	26-Sep-22	30-Sep-22	145											
SSL155	Stairs - Install Rebar	5	5	0%	30-Sep-22	07-Oct-22	145											
SSL165	Stairs - Form	8	8	0%	07-Oct-22	19-Oct-22	145											
SSL175	Stairs - Pour	1	1	0%	19-Oct-22	20-Oct-22	145											
SSL185	Stairs - Strip	3	3	0%	20-Oct-22	25-Oct-22	145											
SSL195	Stairs - Grind	3	3	0%	25-Oct-22	28-Oct-22	145											
SSL200	Landing - Form	4	4	0%	19-Sep-22	22-Sep-22	115											
SSL210	Landing - Install Insulation & Hydronic Lines	2	2	0%	23-Sep-22	26-Sep-22	115											
SSL220	Landing - Rebar	1	1	0%	26-Sep-22	27-Sep-22	115											
SSL230	Landing - Pour	1	1	0%	27-Sep-22	28-Sep-22	115											
SSL240	Landing - Cure	14	14	0%	28-Sep-22	12-Oct-22	219											
SSL250	Landing - Install Curb	2	2	0%	12-Oct-22	13-Oct-22	151											
SSL260	Landing - Install Hand Rail	2	2	0%	13-Oct-22	17-Oct-22	151											
SSL270	Landing - Strip	3	3	0%	17-Oct-22	20-Oct-22	151											
SSL300	Prefab Bridge - Splice Sections, Install SIP Deck & Fence panel	6	6	0%	10-Sep-22	15-Sep-22	166											
SSL310	Prefab Bridge - Set Bridge	3	3	0%	16-Sep-22	18-Sep-22	166											
SSL320	Prefab Bridge - Install Insulation & Hydronic Lines	2	2	0%	19-Sep-22	20-Sep-22	115											
SSL330	Prefab Bridge - Install Joints	1	1	0%	20-Sep-22	21-Sep-22	115											
SSL340	Prefab Bridge - Install Rebar	3	3	0%	21-Sep-22	26-Sep-22	115											
SSL350	Prefab Bridge - Set Grade Line	2	2	0%	26-Sep-22	27-Sep-22	115											
SSL360	Prefab Bridge - Pour Bridge	1	1	0%	28-Sep-22	28-Sep-22	115											
SSL370	Prefab Bridge - Wet Cure	14	14	0%	29-Sep-22	12-Oct-22	209											
SSL380	Prefab Bridge - Polymer Overlay	3	3	0%	26-Oct-22	31-Oct-22	144											
2021 BL300-17.9.9.2.4 Roadway		28	28	0%	01-Nov-22	14-Dec-22	116											
SRD100	Install Irrigation System	5	5	0%	01-Nov-22	08-Nov-22	115											
SRD105	Place UTBC Curb & Gutter	1	1	0%	08-Nov-22	09-Nov-22	115											
SRD110	Install Curb & Gutter	1	1	0%	09-Nov-22	10-Nov-22	115											
SRD120	Cure Curb & Gutter	5	5	0%	10-Nov-22	15-Nov-22	192											
SRD125	Place HMA	1	1	0%	15-Nov-22	16-Nov-22	133											
SRD135	Place UTA concrete Panels	1	1	0%	15-Nov-22	16-Nov-22	191											
SRD140	Install UTBC Ped Ramps, Sidewalk & Flatwork	1	1	0%	10-Nov-22	11-Nov-22	116											
SRD150	Install Sidewalk, Ped Ramps & Flatwork	1	1	0%	11-Nov-22	14-Nov-22	115											
SRD160	Install Fence, Signs & Striping	5	5	0%	14-Nov-22	21-Nov-22	115											
SRD170	Landscape	15	15	0%	21-Nov-22	14-Dec-22	115											
2021 BL300-17.9.9.2.5 Closeout		21	21	0%	26-May-23	26-Jun-23	0											
CO10060	Punchlist/Walk Through	5	5	0%	26-May-23	02-Jun-23	0											
CO10070	Substantial Completion	0	0	0%		26-May-23	0											
CO10080	Final Completion	0	0	0%		26-Jun-23	0											

Schedule updated 8/15/2022 assumes change order work will begin 8/29/2022. This schedule includes elevator steel delays from 4/7 (date initial RFI 94 submitted) - 8/29/2022 (4.75 months). Schedule dated 2/2/2022 assumes final completion date of November 29. Add 4.75 months, and the final completion date would be 4/19/2023

2.25 months of additional schedule duration is based off of final completion shift from 4/19/2023 - 6/26/2023 (2.25 months) due to added scope from 09991M specification. There is also added scope in the form of the memos between UTA, SLC, and Design Team.

█ Actual Level of Effort █ Remaining Work █ Actual Work
█ Critical Remaining Work ◆ Milestone ▶ summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	2023													
								Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul			
2021 BL300-20 300 N Update 9.6.22																					
2021 BL300-20.9 300 North Pedestrian Bridge																					
2021 BL300-20.9.9 300 North Pedestrian Bridge																					
2021 BL300-20.9.9.10 Design & Pricing Milestones																					
MS6040	30% SLC_OP_1 Design	41	0	100%	28-Apr-20/	06-Jul-20/															
MS6055	30% Quantity Reconciliation	3	0	100%	06-Jul-20A	10-Jul-20/															
MS6080	Signed Agreement	0	0	100%	02-Mar-20,																
MS6090	UPRR Concept Submittal	28	0	100%	09-Mar-20,	27-Apr-20,															
MS6100	30% Price Meeting	0	0	100%	22-Jul-20A																
MS6110	30% Bid	5	0	100%	10-Jul-20A	20-Jul-20/															
MS6120	30% Price Due	0	0	100%	21-Jul-20A																
MS6280	60% SLC_OP_1 Design Review Meeting	0	0	100%	19-Oct-20/																
MS6282	Third Party Utilities - RMP WOA#1	120	0	100%	22-Feb-21,	05-Apr-21,															
MS6288	Third Party Utilities - Syringa - Fiber Relocate	120	0	100%	19-Apr-21/	01-Sep-21															
MS6290	60% SLC_OP_1 Design	34	0	100%	07-Jul-20A	09-Oct-20,															
MS6300	60% Price Meeting	0	0	100%	28-Oct-20/																
MS6310	60% Bid	8	0	100%	19-Oct-20/	26-Oct-20,															
MS6400	RFC - SLC_OP_1 - Design	77	0	100%	04-Feb-21,	03-Jun-21															
MS6415	UPRR Accept 100% Plans	5	0	100%	03-Jun-21/	22-Jul-21/															
MS6420	RFC Bid	10	0	100%	09-Jun-21/	24-Jun-21															
MS6430	RFC Quantity Reconciliation	4	0	100%	09-Jun-21/	09-Jun-21															
MS6440	RFC Price Due	0	0	100%	25-Jun-21/																
MS6441	RFC Price Meeting	0	0	100%	28-Jun-21/																
MS6445	NTP	0	0	100%	27-Jul-21A																
MS6450	Contract Procurement	10	0	100%	27-Jul-21A	30-Aug-21															
MS6460	60% Quantity Reconciliation	4	0	100%	12-Oct-20/	19-Oct-20,															
MS6470	60% Price Due	0	0	100%	28-Oct-20/																
MS6480	100% SLC_OP_1 Design Review Meeting	0	0	100%	18-Feb-21,																
MS6490	100% SLC_OP_1 Design	70	0	100%	12-Oct-20/	03-Feb-21															
MS6500	100% Price Meeting	0	0	100%	19-Feb-21,																
MS6510	100% Bid	10	0	100%	08-Feb-21,	18-Feb-21															
MS6520	100 % Quantity Reconciliation	4	0	100%	03-Feb-21,	08-Feb-21															
MS6530	100% Price Due	0	0	100%	18-Feb-21,																
2021 BL300-20.9.9.1 Procurement, Permits, Submittals																					
SM4016	Elevator Shop Drawing Submittal (Initial)	20	0	100%	10-Aug-21,	21-Sep-21															
SM4017	Elevator Shop Drawing Review by Designers (Initial)	10	0	100%	21-Sep-21,	08-Oct-21,															
SM4018	Elevator Shop Drawing Review by City (Initial)	10	0	100%	11-Oct-21A	20-Oct-21,															
SM4019	Elevator Spec Change & Re-Price	5	0	100%	20-Oct-21/	23-Nov-21															
SM4020	Elevator Contract Change Procurement	9	0	100%	23-Nov-21,	02-Dec-21															
SM4021	Elevator Redesign Shop Drawings	20	0	100%	02-Dec-21,	21-Dec-21															
SM4022	Elevator Redesign Shop Drawing Reviews	15	0	100%	21-Dec-21,	01-Feb-22															
SM4023	Elevator Fabrication	100	0	100%	21-Mar-22,	25-Aug-22															
SM4024	Elevator Storage	132	132	0%	10-Sep-22	16-Jan-23	18														
SM4025	Elevator Structural Steel Resubmittals & Reviews	5	0	100%	01-Feb-22,	16-Feb-22															
SM4026	Pre-Fab Bridge Drawing Submittal (Initial)	40	0	100%	10-Aug-21,	10-Oct-21,															
SM4027	Pre-Fab Bridge Drawing Review by Design (Initial)	15	0	100%	10-Oct-21/	08-Dec-21															
SM4028	Pre-Fab Bridge Drawing Review by City (Initial)	10	0	100%	08-Nov-21,	23-Nov-21															

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	2023											
								Qtr 4, 2022	Qtr 1, 2023			Qtr 2, 2023			2023				
								Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
SM4029	Pre-Fab Bridge Change & Re-Price	5	0	100%	23-Nov-21,	07-Dec-21													
SM4030	Pre-Fab Bridge Contract Change Procurement	5	0	100%	07-Dec-21,	14-Dec-21													
SM4031	Pre-Fab Bridge Redesign Shop Drawings	20	0	100%	06-Dec-21,	15-Dec-21													
SM4032	Pre-Fab Bridge Redesign Shop Drawing Review	15	0	100%	18-Dec-21,	24-Jan-22													
SM4033	Pre-Fab Bridge Fabrication	80	3	100%	31-May-22	09-Sep-22	126												
SM4035	SLC Permits	30	0	100%	10-Aug-21,	07-Sep-22	100												
SM4060	Subcontract Contract Procurement	20	20	100%	30-Aug-21,	04-Oct-22	196												
SM4070	UPRR ROE Permit	60	0	100%	27-Jul-21A	13-Aug-21													
SM4080	Submittal - Traffic Control Plan	20	0	100%	10-Aug-21,	08-Oct-21,													
SM4090	Submittal - Concrete, Asphalt, UTBC, Drainage, Electrical	20	20	100%	21-Sep-21,	04-Oct-22	196												
SM4100	Procure - Precast Boxes & Pipes	30	0	100%	06-Sep-21,	15-Oct-21,													
2021 BL300-20.9.9.2 Construction		446	217	0%	18-Oct-21	12-Jul-23	0												
2021 BL300-20.9.9.2.1 General/Underground/Removals		386	157	0%	18-Oct-21	19-Apr-23	60												
G100	Survey Control	3	0	100%	21-Oct-21	25-Oct-21,													
G145	Drainage - Tie-in Existing CB 01-201	1	0	100%	27-Oct-21	28-Oct-21,													
G150	Saw Cut Asphalt & Curb	2	0	100%	25-Oct-21	25-Oct-21,													
G155	Drainage - CB 01-02	1	0	100%	27-Oct-21	27-Oct-21,													
G160	Pothole Utilities	2	0	100%	25-Oct-21	15-Nov-21													
G165	Drainage - CB 01-03	1	0	100%	01-Nov-21,	01-Nov-21													
G170	Install BMPs	1	0	100%	25-Oct-21	26-Oct-21,													
G180	Clear, Grub & Remove Tree	1	0	100%	25-Oct-21	25-Oct-21,													
G190	Drainage - P 01-02	1	0	100%	28-Oct-21	29-Oct-21,													
G200	Drainage - P 01-03	1	0	100%	01-Nov-21,	02-Nov-21													
G210	Drainage - P 01-202	1	0	100%	03-Nov-21,	04-Nov-21													
G220	Drainage - Tie-in Existing CB 01-202	1	0	100%	04-Nov-21,	04-Nov-21													
G230	Drainage - Remove Drainage Structure & Install CB 01-01	1	1	0%	02-Nov-22	02-Nov-22	175												
G240	Reconstruct Sewer MH	1	1	0%	03-Nov-22	03-Nov-22	175												
G245	Install West Sewer Lateral (Change Order)	5	0	100%	18-Nov-21,	24-Nov-21													
G250	Install East Sewer Lateral	5	0	100%	29-Nov-21,	02-Dec-21													
G260	Install Irrigation Connections & Meter	4	4	0%	07-Sep-22	12-Sep-22	213												
G270	Patch Sewer Trench & Median Curb	2	2	0%	17-Apr-23	19-Apr-23	60												
G300	RMP - New Service for Elevators	3	3	0%	12-Jan-23*	17-Jan-23	13												
G310	RMP - Bury UTA power East of tracks	3	0	100%	18-Oct-21	03-Dec-21													
G320	Adjust Utility Box to grade	1	1	0%	12-Apr-23	13-Apr-23	43												
G330	Remove Asphalt	3	21	100%	25-Oct-21	27-Oct-22	127												
G340	Remove Curb, Gutter & Sidewalk	3	3	100%	05-Nov-21,	01-Nov-22	127												
G350	Remove Fence & Signs	2	0	100%	27-Oct-21	02-Nov-22	177												
G360	Dominion - New Gas Service	5	5	100%	15-Jun-22,	13-Sep-22	166												
2021 BL300-20.9.9.2.2 Substructure & Elevator Shaft		410	196	0%	04-Nov-21,	13-Jun-23	21												
2021 BL300-20.9.9.2.2.1 West Side		358	144	0%	04-Nov-21,	31-Mar-23	73												
WS100	Elevator Shaft - Drill Jack Hole	2	0	100%	04-Nov-21,	05-Nov-21													
WS105	Elevator Shaft - Excavate & Shore	3	0	100%	09-Nov-21,	10-Nov-21													
WS110	Elevator Shaft - Install Elevator Pile	6	0	100%	08-Dec-21,	22-Dec-21													
WS115	Elevator Shaft - Install Pile Rebar & Pour	2	0	100%	28-Dec-21,	29-Dec-21													
WS120	Elevator Shaft - Form Footing	2	0	100%	06-Jan-22,	12-Jan-22													
WS125	Elevator Shaft - Install Rebar	1	0	100%	07-Jan-22,	12-Jan-22													
WS128	Elevator Shaft - Install Sump	1	1	100%	13-Jan-22,	07-Sep-22	215												

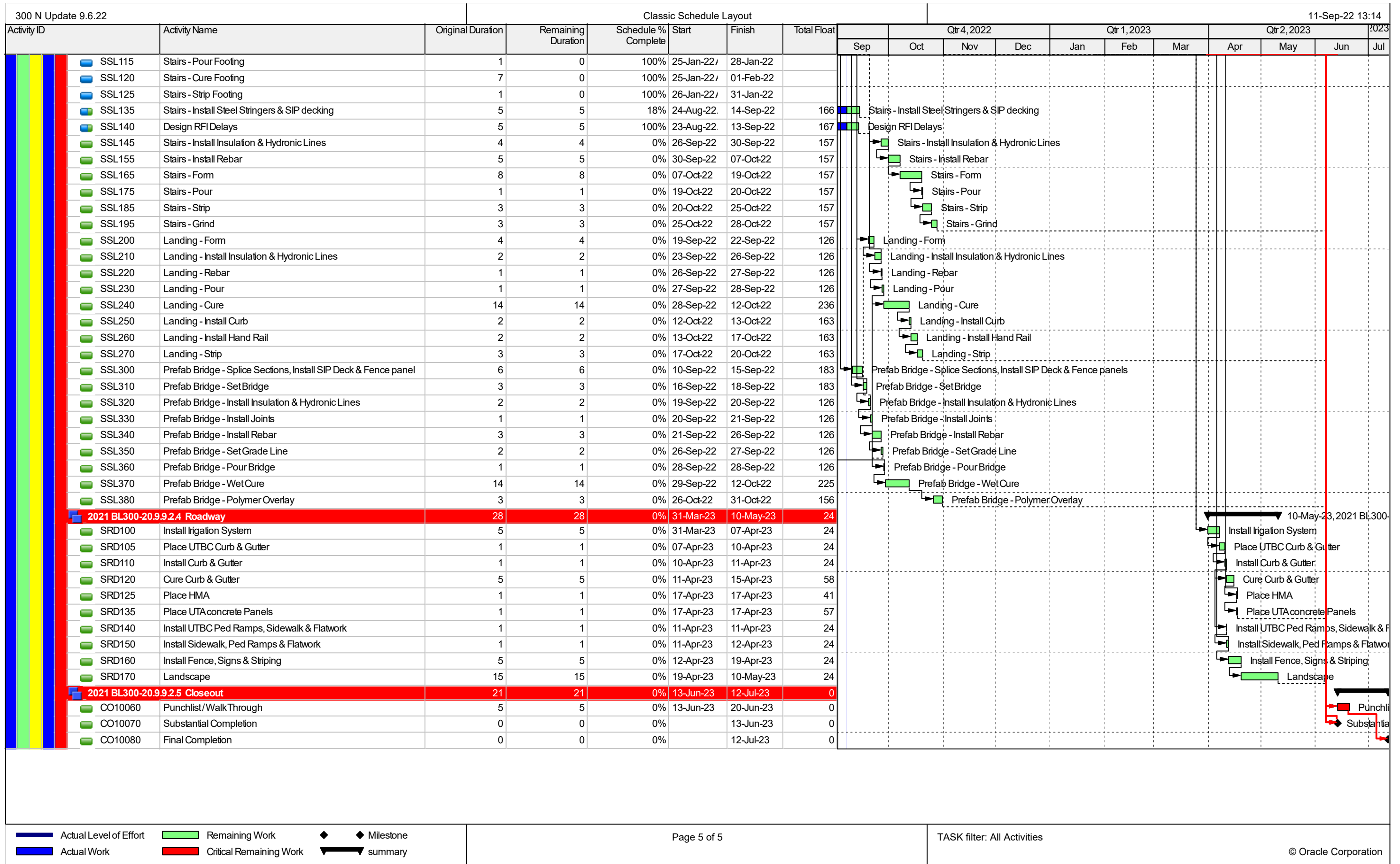
█ Actual Level of Effort
 █ Remaining Work
 █ Critical Remaining Work
 ◆ Milestone
 ─ summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	2023											
								Qtr 4, 2022				Qtr 1, 2023			Qtr 2, 2023			2023	
								Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
WS130	Elevator Shaft - Pour Elevator Footing	1	0	100%	20-Jan-22	20-Jan-22													
WS135	Elevator Shaft - Cure	5	0	100%	20-Jan-22	26-Jan-22													
WS140	Elevator Shaft - Strip Elevator Footing	1	0	100%	21-Jan-22	25-Jan-22													
WS145	Elevator Shaft - Backfill Footing	1	0	100%	02-Feb-22	02-Feb-22													
WS148	Elevator Shaft - Steel Fabrication	15	0	100%	16-Feb-22	14-Mar-22													
WS150	Elevator Shaft - Structural Steel	15	0	100%	14-Mar-22	02-Apr-22													
WS151	Elevator Shaft - Structural Steel RFI Resolution	6	0	100%	04-Apr-22	15-Aug-22													
WS152	Elevator Shaft - Structural Steel Modifications	54	50	0%	07-Sep-22	15-Nov-22	0												
WS153	Elevator Shaft - New Structural Steel Paint DAP	15	0	60%	18-Aug-22	31-Aug-22													
WS154	Elevator Shaft - Structural Steel Paint Sub Change Orders	5	0	0%	31-Aug-22	08-Sep-22													
WS157	Elevator Shaft - Paint Lead Time	60	60	0%	07-Sep-22	05-Nov-22	10												
WS158	Elevator Shaft - Steel Painting	13	13	0%	16-Nov-22	06-Dec-22	0												
WS160	Elevator Shaft - Glass Framing	10	10	0%	06-Dec-22	20-Dec-22	0												
WS165	Elevator Shaft - Glass Installation	7	7	0%	10-Jan-23	19-Jan-23	1												
WS170	Elevator Shaft - Roofing	7	7	0%	20-Dec-22	29-Dec-22	0												
WS180	Elevator Shaft - HVAC/Hoist Equipment	8	8	0%	29-Dec-22	10-Jan-23	0												
WS190	Elevator Shaft - Electrical	8	8	0%	10-Jan-23	20-Jan-23	0												
WS200	Elevator Shaft - Finishes	10	10	0%	20-Jan-23	03-Feb-23	0												
WS210	Elevator - Install	40	40	0%	03-Feb-23	31-Mar-23	0												
WS300	Mech/Elec - Install Power/Com Conduit	1	1	0%	06-Dec-22	07-Dec-22	152												
WS305	Mech/Elec - Excavate Room Footing	1	0	100%	25-Mar-22	25-Mar-22													
WS310	Mech/Elec - Form Footing	3	0	100%	01-Apr-22	04-Apr-22													
WS320	Mech/Elec - Pour Footing	1	0	100%	05-Apr-22	05-Apr-22													
WS330	Mech/Elec - Form Walls	5	0	100%	06-Apr-22	08-Apr-22													
WS335	Mech/Elec - Pour Walls	1	0	100%	08-Apr-22	08-Apr-22													
WS340	Mech/Elec - Strip Walls	3	0	100%	11-Apr-22	11-Apr-22													
WS350	Mech/Elec - Roofing	5	5	0%	29-Dec-22	05-Jan-23	13												
WS360	Mech/Elec - Electrical	5	5	0%	05-Jan-23	12-Jan-23	13												
WS370	Mech/Elec - Finishes	5	5	0%	12-Jan-23	19-Jan-23	124												
WS500	Abutment - Excavate Footing	1	0	100%	25-Mar-22	25-Mar-22													
WS505	Abutment - Install Pile	5	0	100%	08-Dec-21	22-Dec-21													
WS510	Abutment - Install Pile Rebar & Pour	1	0	100%	28-Dec-21	29-Dec-21													
WS520	Abutment - Form	3	0	100%	25-Mar-22	29-Mar-22													
WS530	Abutment - Install Rebar	1	0	100%	28-Mar-22	28-Mar-22													
WS540	Abutment - Pour Abutment	1	0	100%	30-Mar-22	30-Mar-22													
WS550	Abutment - Cure	7	0	100%	30-Mar-22	05-Apr-22													
WS560	Abutment - Strip	2	0	100%	31-Mar-22	31-Mar-22													
WS570	Abutment - Erect Structural Steel	4	0	100%	12-Aug-22	30-Aug-22													
2021 BL300-20.9.9.2.2.2 East Side		410	196	0%	08-Nov-21	13-Jun-23	21	13-Jun-23											
ES100	Elevator Shaft - Drill Jack Hole	2	0	100%	08-Nov-21	09-Nov-21													
ES110	Elevator Shaft - Excavate & Shore	3	0	100%	11-Nov-21	12-Nov-21													
ES120	Elevator Shaft - Install Elevator Pile	3	0	100%	08-Dec-21	07-Jan-22													
ES130	Elevator Shaft - Install Pile Rebar & Pour	1	0	100%	07-Jan-22	10-Jan-22													
ES140	Elevator Shaft - Form Footing	2	0	100%	12-Jan-22	19-Jan-22													
ES150	Elevator Shaft - Install Rebar	1	0	100%	13-Jan-22	14-Jan-22													
ES160	Elevator Shaft - Install Sump	1	0	100%	17-Jan-22	07-Sep-22	129												
ES170	Elevator Shaft - Pour Footing	1	0	100%	20-Jan-22	20-Jan-22													

█ Actual Level of Effort
 █ Remaining Work
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 ◆ Milestone
 ── summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	2023											
								Qtr 4, 2022	Qtr 1, 2023			Qtr 2, 2023			2023				
								Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
ES180	Elevator Shaft - Cure	5	0	100%	20-Jan-22	27-Jan-22													
ES190	Elevator Shaft - Strip Footing	1	0	100%	21-Jan-22	24-Jan-22													
ES200	Elevator Shaft - Backfill Footing	1	0	100%	25-Jan-22	25-Jan-22													
ES210	Elevator Shaft - Structural Steel	15	0	100%	14-Mar-22	01-Apr-22													
ES212	Elevator Shaft - Structural Steel Modifications	7	7	0%	16-Nov-22	28-Nov-22	41												
ES215	Elevator Shaft - Steel Painting	13	13	0%	06-Dec-22	27-Dec-22	35												
ES220	Elevator Shaft - Glass Framing	10	10	0%	27-Dec-22	10-Jan-23	35												
ES225	Elevator Shaft - Glass Installation	7	7	0%	31-Jan-23	09-Feb-23	36												
ES230	Elevator Shaft - Roofing	7	7	0%	10-Jan-23	19-Jan-23	35												
ES240	Elevator Shaft - HVAC/Hoist Equipment	8	8	0%	19-Jan-23	31-Jan-23	35												
ES250	Elevator Shaft - Electrical	8	8	0%	31-Jan-23	10-Feb-23	35												
ES260	Elevator Shaft - Finishes	10	10	0%	10-Feb-23	24-Feb-23	35												
ES270	Elevator - Install	40	40	0%	14-Apr-23	09-Jun-23	0												
ES280	Elevator - Inspection	2	2	0%	09-Jun-23	13-Jun-23	0												
ES290	Abutment - Excavate Footing	1	0	100%	25-Mar-22	25-Mar-22													
ES295	Abutment - Install Pile	5	0	100%	08-Dec-21	07-Jan-22													
ES300	Abutment - Install Pile Rebar & Pour	1	0	100%	07-Jan-22	10-Jan-22													
ES310	Abutment - Form	2	0	100%	25-Mar-22	29-Mar-22													
ES320	Abutment - Install Rebar	1	0	100%	26-Mar-22	28-Mar-22													
ES330	Abutment - Pour Abutment	1	0	100%	30-Mar-22	30-Mar-22													
ES340	Abutment - Cure	7	0	100%	31-Mar-22	06-Apr-22													
ES350	Abutment - Strip	2	0	100%	31-Mar-22	31-Mar-22													
ES360	Abutment - Erect Structural Steel	4	0	100%	15-Aug-22	02-Sep-22													
ES390	Mech/Elec - Install Power/Com Conduit	1	1	100%	06-Sep-22	07-Sep-22	174												
ES400	Mech/Elec - Excavate Room Footing	1	0	100%	25-Mar-22	25-Mar-22													
ES405	Mech/Elec - Form Footing	3	0	100%	01-Apr-22	04-Apr-22													
ES410	Mech/Elec - Pour Footing	1	0	100%	05-Apr-22	05-Apr-22													
ES420	Mech/Elec - Form Walls	5	0	100%	06-Apr-22	08-Apr-22													
ES430	Mech/Elec - Pour Walls	1	0	100%	08-Apr-22	08-Apr-22													
ES440	Mech/Elec - Strip Walls	3	0	100%	11-Apr-22	11-Apr-22													
ES450	Mech/Elec - Roofing	5	5	0%	05-Jan-23	12-Jan-23	93												
ES460	Mech/Elec - Electrical	5	5	0%	12-Jan-23	19-Jan-23	98												
ES470	Mech/Elec - Finishes	5	5	0%	19-Jan-23	26-Jan-23	98												
ES475	Boiler Room - Exc Footing	2	0	100%	12-Apr-22	13-Apr-22													
ES480	Boiler Room - Form Footing	2	0	100%	13-Apr-22	14-Apr-22													
ES485	Boiler Room - Pour Footing	1	0	100%	14-Apr-22	14-Apr-22													
ES490	Boiler Room - Form Walls	3	0	100%	15-Apr-22	21-Apr-22													
ES495	Boiler Room - Pour Walls	5	0	100%	21-Apr-22	21-Apr-22													
ES500	Boiler Room - Strip Walls	3	0	100%	22-Apr-22	26-Apr-22													
ES505	Boiler Room - Pour Floor	1	0	100%	04-May-22	05-May-22													
ES510	Boiler Room - Roofing	5	5	0%	12-Jan-23	19-Jan-23	93												
ES515	Boiler Room - Electrical	5	5	0%	19-Jan-23	26-Jan-23	93												
ES520	Boiler Room - Finishes	5	5	0%	26-Jan-23	02-Feb-23	93												
2021 BL300-20.9.9.2.3	Super Structure, Stairs & Landing	216	39	0%	08-Dec-21	31-Oct-22	157												
SSL100	Stairs - Footing Excavation	1	0	100%	08-Dec-21	22-Dec-21													
SSL105	Stairs - Form Footing	2	0	100%	11-Jan-22	27-Jan-22													
SSL110	Stairs - Install Footing Rebar	1	0	100%	12-Jan-22	26-Jan-22													

█ Actual Level of Effort
 █ Remaining Work
 █ Critical Remaining Work
 ◆ Milestone
 ◆ summary



Schedule updated 9/6/2022 shows DAP received 8/31/2022. Per PCO discussions, delay time/charges have been removed.

2.75 months of additional schedule duration is based off of final completion shift from 4/19/2023 - 7/12/2023 (2.75 months) due to added scope from 09991M specification. There is also added scope in the form of the memos between UTA, SLC, and Design Team. Per PCO discussions, it was agreed that only 1 month of added scope for Granite overhead would be included. Remainder of indirects has been left at 2.25 months.