

GENERAL STRUCTURAL NOTES

STRUCTURAL STEEL

- Grade: All structural steel W sections shall conform to ASTM A992 (fy=50 ksi), latest edition. Tubes shall be ASTM A500 GR. B (fy=46 ksi), all other steel shall be grade A36 minimum. Anchor bolts shall be F1554 steel with ASTM A563 heavy hex nuts and hardened washers, unless noted otherwise.
- Erection and fabrication: Reference the "American Institute of Steel Construction" specifications for erection and fabrication of steel buildings, latest edition.
- Welding:
 - Welders: All shop and field welding shall be executed by AWS certified welders.
 - Electrodes: E-70 XX. E-60 XX may be used for welding steel decks. Welds designated as "Demand Critical" shall be completed with filler metal capable of providing a minimum Charpy V-Notch toughness of 20ft-lb @ -20F, and 40ft-lb @ 70F per AISC 341 Section 7.3b.
 - Fillet welds: Sizes not shown shall be "American Welding Society" minimum based on the thickness of the materials being welded.
 - Butt welds: Full penetration unless noted otherwise.
 - Quality Assurance: See Special Inspections
- Bolted Connections: Use ASTM A325 bolts for steel to steel connections, EXCEPT WHERE NOTED OTHERWISE. Tighten bolts "snug tight" unless noted otherwise. Provide hardened washers beneath turned element.
- Bearing plates: Base plates and bearing plates shall be provided with full bearing after the supported members have been plumbed and properly positioned. Separate setting plates under column base plates will not be permitted. All bearing grout shall consist of a non-shrink, expansive, metallic grout.
- Submittals: Shop drawings shall be submitted for approval to the Architect, Contractor, and Engineer, prior to fabrication.

EPOXY

- All epoxy shall be Hilti brand or equivalent.

The following systems shall be used:

 - Hollow or Grouted CMU - Hilti HY-270 with screen tubes @ hollow cells.
 - Concrete - Hilti RE500-V3
- Install all epoxied anchors per manufacturer's instructions and recommendations.
- All holes shall be sized properly and cleaned thoroughly prior to placement of epoxy adhesive, per Hilti's instructions.

SPECIAL INSTRUCTION

- The project specifications are not superseded by the General Structural Notes but are intended to be complementary to them. Consult the specification for additional requirements in each section. Notes and details on the drawings shall take precedence over General Structural Notes and typical details.
- All omissions or conflicts between the various elements of the working drawings and/or specifications shall be brought to the attention of the Architect and Structural Engineer before proceeding with any work involved. In case of conflict, follow the most stringent requirement as directed by the Architect without additional cost to the owner.
- "STRUCTURAL OBSERVATION PROGRAM" - The Engineer shall be notified forty-eight hours prior to each of the following items. A final STRUCTURAL OBSERVATION REPORT shall be submitted to the Building Official upon completion of the structural systems. This report shall note any identified deficiencies that have not been corrected. STRUCTURAL OBSERVATION for Seismic and Wind by the Engineer, or his representatives, is required for the following:
 - Placing concrete in any footing.
 - Closing any concrete wall or pier/column forms.
 - Placing concrete in suspended slabs/beams.
 - Completion of Diaphragm fastening.
 - Completion of structural field welding.
 - Grouting of Structural Masonry.

Observation visits to the site by the Engineer's field representatives shall not be construed as inspection, Special Inspection, or approval of construction.

4. Shoring and Bracing Requirements:

- The CONTRACTOR is solely responsible for the means, methods, and sequence of all structural erection, shoring, and bracing. He shall provide temporary shoring and bracing as his method of erection requires to provide adequate vertical and lateral support. Shoring and bracing shall remain in place as the chosen method requires until all permanent members are in place and all final connections are completed, including all roof attachments. The building shall not be considered stable until all connections and diaphragms are complete.

- Walls above grade shall be braced until the structural system is complete. Walls shall not be considered to be self supporting.

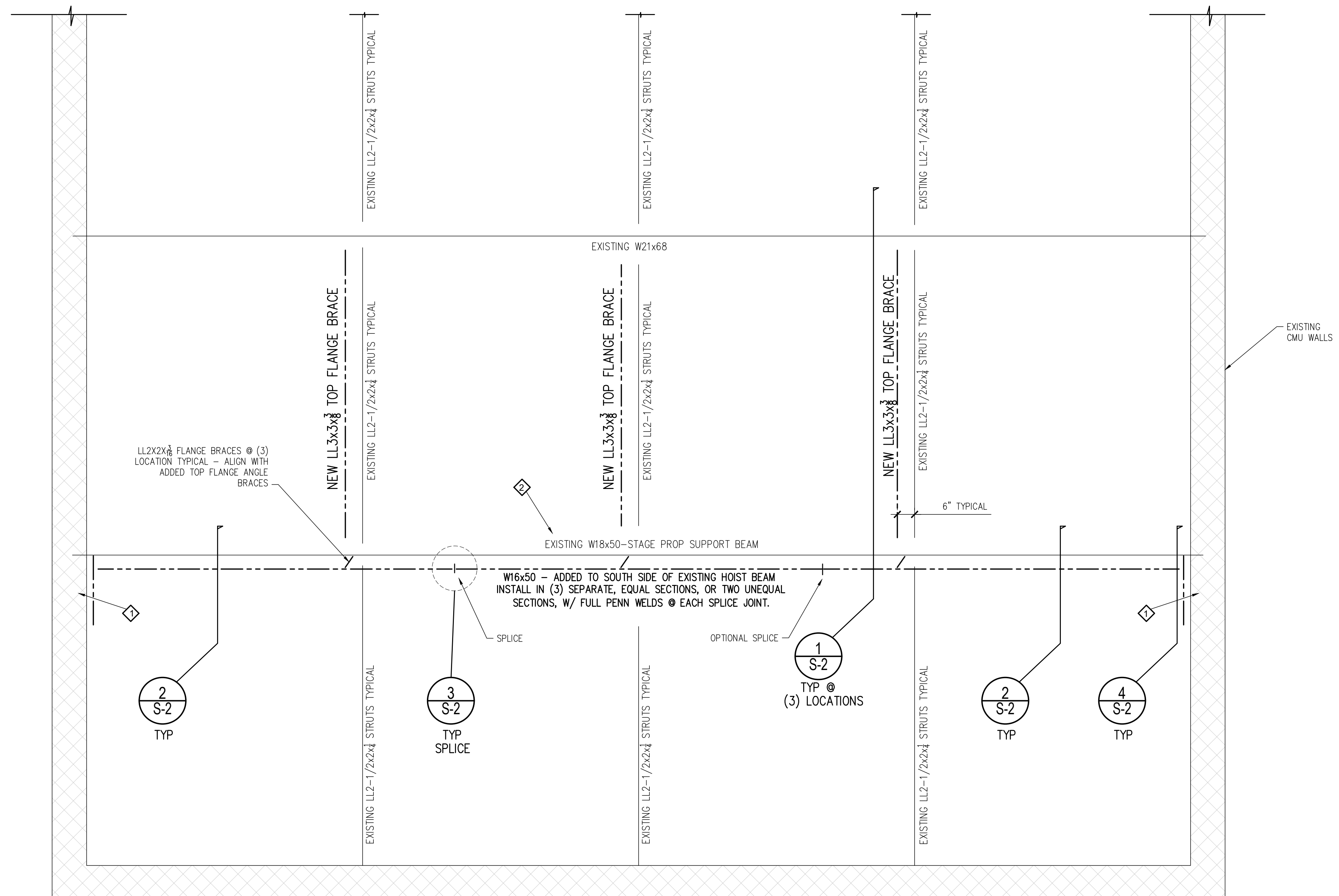
- Submittals: A copy of all shop drawings that have been submitted for review must be kept at the construction site for reference. These drawings must bear the appropriate review stamps. The shop drawing review shall not relieve the contractor of the responsibility of completing the project according to the contract documents. The CONTRACTOR shall review and mark all shop drawings prior to submitting them to the Architect for his review. Shop Drawings made from reproductions of (these) contract drawings will be rejected. Review of shop drawings is for general compliance only and is not intended for approval. The shop drawings review shall not relieve the contractor from the responsibility of completing the project according to the contract documents

- Reproduction of these contract documents for use as shop drawings will not be permitted and will be rejected.

- The Contractor shall coordinate with all other trades any items that are to be integrated into the structural system such as openings, penetrations, mechanical and electrical equipment, etc. Sizes and locations of mechanical and other equipment that differ from those shown on the contract drawings shall be reported to the architect / engineer.

- Project Coordination: It shall be the responsibility of the CONTRACTOR to coordinate with all trades any and all items that are to be integrated into the structural system. Openings or penetrations through, or attachments to the structural system that are not indicated on these drawings shall be the responsibility of the CONTRACTOR and shall be coordinated with the Architect/Engineers. The order of construction is the responsibility of the CONTRACTOR. It is the contractor's obligation to provide all items necessary for his chosen procedure.

- Contractor shall field verify all dimensions, and conditions. If the contract drawings do not represent actual conditions, contractor shall notify Architect/Engineer prior to fabrication or construction within that area.



NORTH

HOIST BEAM STRENGTHENING PLAN - PLAN VIEW

SCALE: 1/2"=1'-0"

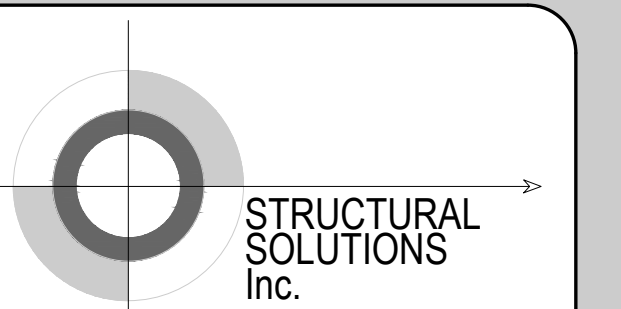
PLAN NOTES:

- COORDINATE & VERIFY THIS DRAWING WITH EXISTING SITE CONDITIONS PRIOR TO START OF CONSTRUCTION.
- APPLY DETAILS TO ALL APPLICABLE LOCATIONS.
- MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THIS INCLUDES MEANS AND METHODS OF ADEQUATE SHORING AND BRACING OF ALL APPLICABLE STRUCTURAL ELEMENTS AND SYSTEMS DURING CONSTRUCTION.
- ENSURE ALL LOADING ON PROP HOIST BEAM IS ELIMINATED, & SNOW LOADING ON ADJACENT ROOF SUPPORT BEAM IS MINIMAL, DURING ALL CONSTRUCTION & BEAM STRENGTHENING.

KEYED NOTES:

IF CMU IS NOT GROUTED SOLID @ ADDED WALL PLATE EPOXY ANCHORS, CORE INSIDE FACE SHELLS & ADD GROUT AS REQ'D TO ACHIEVE SOLID GROUTING 16" MINIMUM IN EACH DIRECTION FROM ALL EPOXY BOLTS. GROUT SHALL BE TYPICAL 2500 PSI FLOWABLE CMU GROUT. CONSOLIDATE VIA MECHANICAL VIBRATION.

THE WORST CASE TOTAL WEIGHT SUPPORTED BY THE EXISTING PROP HOIST BEAM IS ESTIMATED TO BE 10,000# OR LESS. THIS LOADING INFORMATION WAS PROVIDED BY BRUCE PARKER (CCSD Rep.). VERIFY LOADING UNDER WORST CASE SCENARIO CONDITIONS, DOES NOT EXCEED 10,000#. IF LOADING IS DETERMINED TO EXCEED THIS VALUE, CONSULT STRUCTURAL ENGINEER.



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DECEMBER 13, 2021

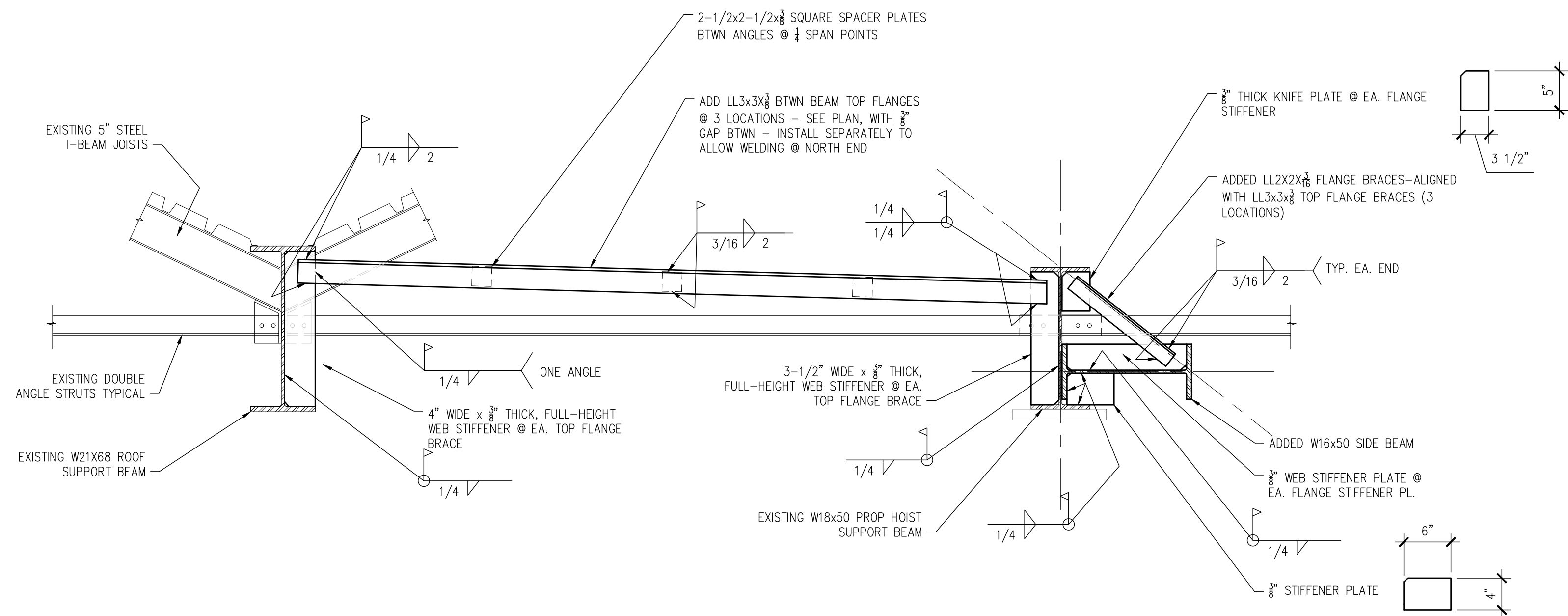
-DWA CONSTRUCTION-
SKY VIEW HIGH
STAGE PROP HOIST BEAM STRENGTHENING
SMITHFIELD, UT

REVISIONS

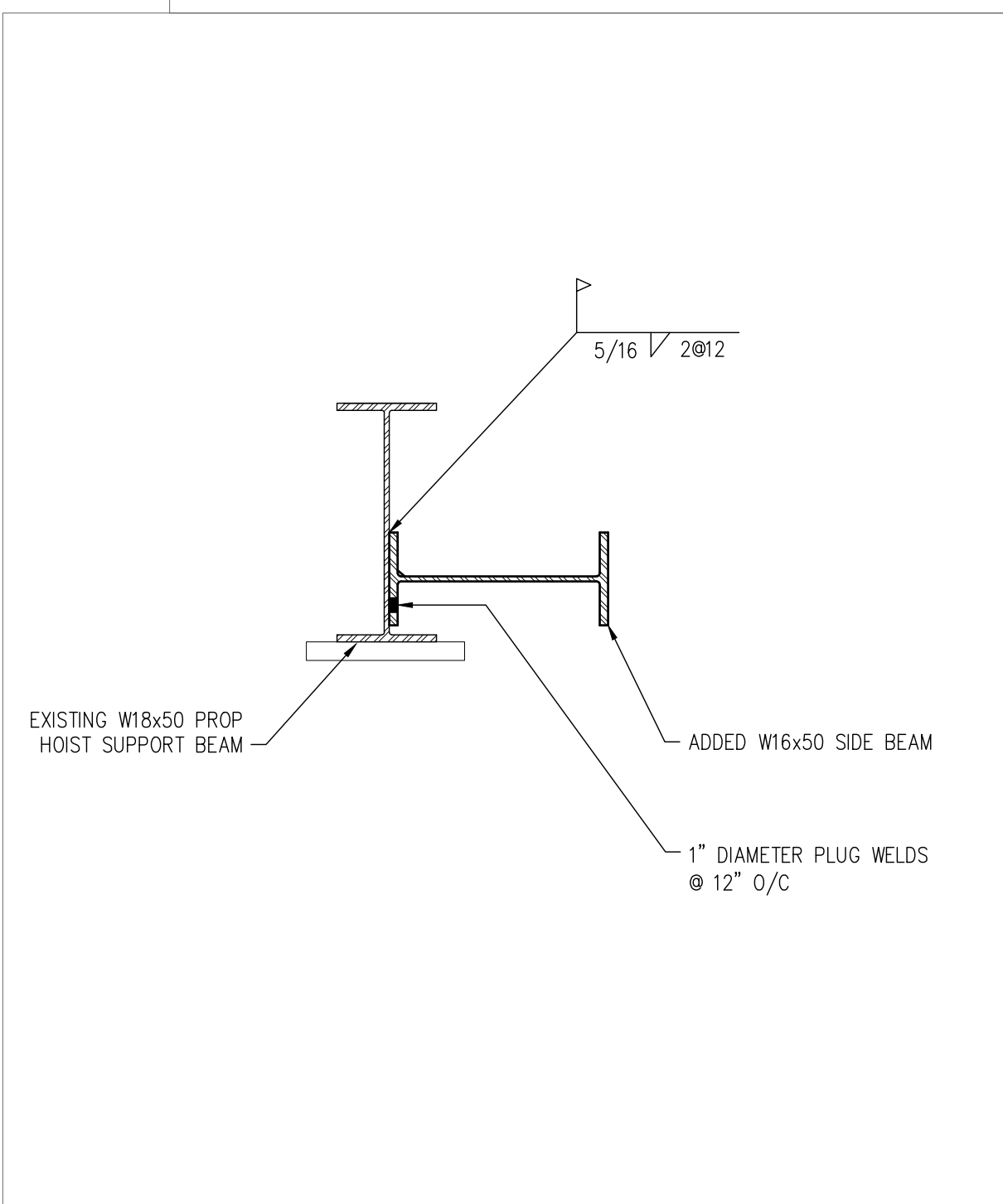
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HOIST BEAM
STRENGTHENING
PLAN

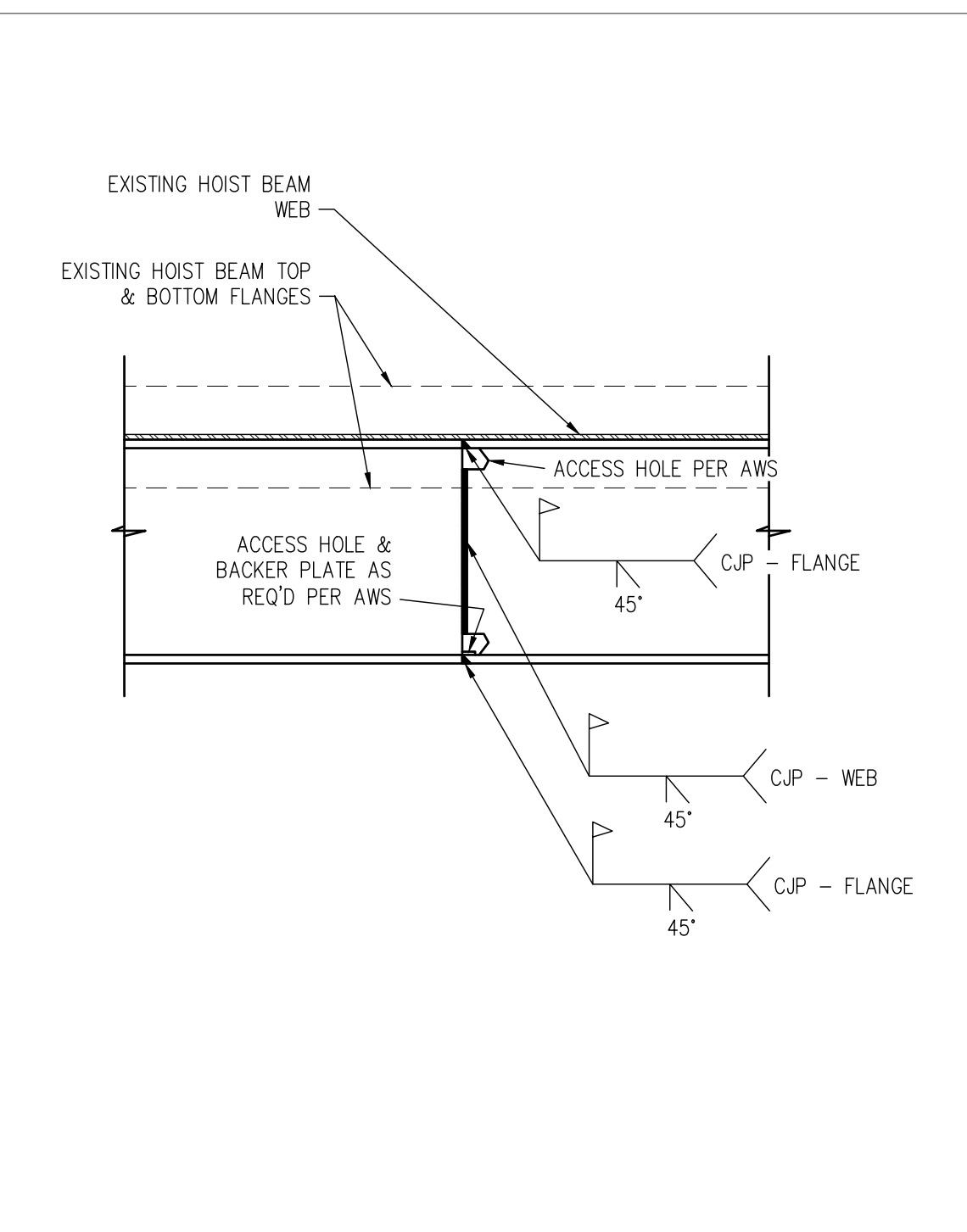
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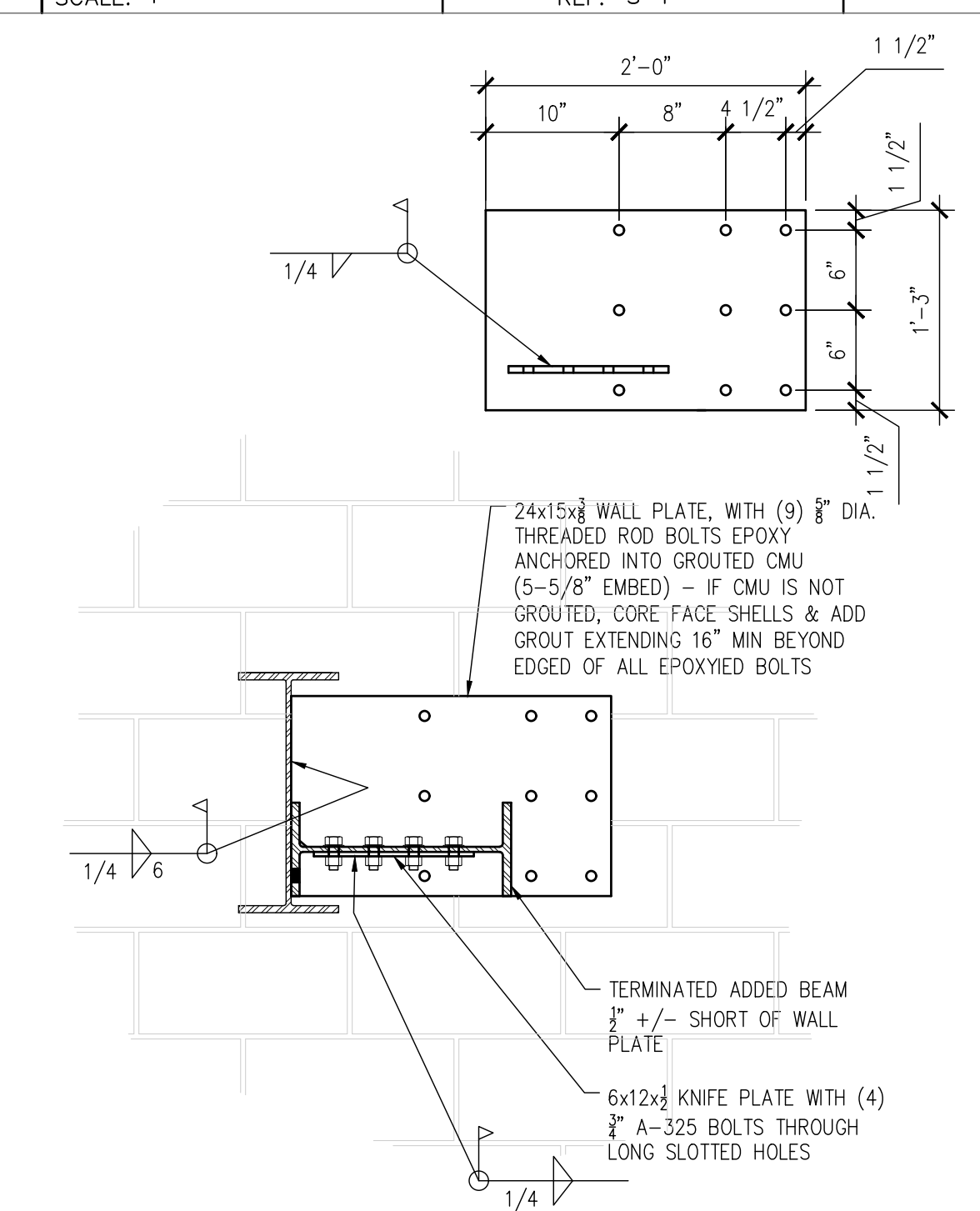
DETAIL 1
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DETAIL 2
SCALE: 1" REF: S-1



DETAIL 3
SCALE: 1" REF: S-1



DETAIL 4
SCALE: 1" REF: S-1

STRUCTURAL SOLUTIONS Inc.

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-DWA CONSTRUCTION-
SKY VIEW HIGH
STAGE PROP HOIST BEAM STRENGTHENING
SMITHFIELD, UT

REVISIONS		
REV #	DATE	COMMENTS
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STRUCTURAL DETAILS

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