

ELLISON, SCHNEIDER & HARRIS L.L.P.

CHRISTOPHER T. ELLISON
ANNE J. SCHNEIDER
JEFFERY D. HARRIS
DOUGLAS K. KERNER
ROBERT E. DONLAN
ANDREW B. BROWN
GREGGORY L. WHEATLAND
CHRISTOPHER M. SANDERS
LYNN M. HAUG
PETER J. KIEL

ATTORNEYS AT LAW
2600 CAPITOL AVENUE, SUITE 400
SACRAMENTO, CALIFORNIA 95816
TELEPHONE (916) 447-2166 FAX (916) 447-3512

ELIZABETH P. EWENS, OF COUNSEL
BRIAN S. BIERING
TERESA W. CHAN
SHANE E. CONWAY
KATHRYN C. COTTER
JEDEDIAH J. GIBSON
CHASE B. KAPPEL
SAMANTHA G. POTTENGER

March 9, 2010

DOCKET
02-AFC-4C

DATE MAR 09 2010

RECD. MAR 09 2010

Angelique Juarez-Garcia
Compliance Project Manager
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814

**RE: REQUEST FOR STAFF APPROVED MODIFICATION: WALNUT ENERGY
CENTER AUTHORITY WALNUT ENERGY CENTER (02-AFC-4C):
INSTALLATION OF MICRO FILTER FEED TANK AND SHADE STRUCTURE**

Dear Ms. Juarez-Garcia:

I am writing on behalf of Walnut Energy Center Authority ("WECA"), the license holder for the Walnut Energy Center ("WEC"). The purpose of this letter is to request Energy Commission staff approval for a modification to the WEC. Specifically, this modification includes the addition of a new Micro Filter Feed Tank and a shade structure. As described below, the Micro Filter Feed Tank is needed for WEC to continue to effectively operate its Zero Liquid Discharge ("ZLD") water treatment process. The shade structure is necessary to prevent sun damage to some of the ZLD equipment.

Micro Filter Feed Tank

In January 2009, Turlock Irrigation District ("TID") determined it was necessary to upgrade and optimize some of the internal components of the existing WEC ZLD system. The system was using multi-media filters to filter contaminants found in the reclaimed water. However, the multi-media filters were allowing excessive amounts of submicron material to pass through. This submicron material then fouled downstream equipment, resulting in poor performance, reduced run times, increased cleaning frequency, increased energy consumption, and additional waste.

As an alternative, TID sought to replace the multi-media filters with micro filtration equipment that provides more effective and efficient filtration. Since TID was replacing existing equipment with similar equipment within the same ZLD system area, the change contemplated at that time was not a modification requiring an amendment to the WEC license. The replacement of the

filtration equipment's internal systems did not change the design, operation or performance of the WEC. In essence, the internal workings of the existing system was considered to be a "black box."

TID initiated a Request for Proposal process for the micro filtration equipment in the Spring of 2009. The responsive bids included, among other things, the addition of a Micro Filter Feed Tank to contain the cooling tower blowdown stream as a feed point for the new micro filtration equipment. Given the prior advice that the ZLD system was essentially a black box, no linkage was seen between the inclusion of a new tank in the responsive bids and the possibility of a need to notify the CEC, given the CEC's continuing oversight of new facilities that may affect project description. As a result of not seeing this linkage, the Micro Filter Feed Tank was installed with the micro filtration equipment.

The Micro Filter Feed Tank is a 24,000 gallon fiberglass tank (12' diameter x 30' in height). It is gray in color, matching the other structures at the WEC, and is located in the ZLD water treatment process area. This new tank is not clearly visible from outside of the plant property. The Micro Filter Feed Tank was sized to meet the design requirements of the new micro filtration equipment and stores the cooling tower blowdown for use in the micro filters. The tank provides enough storage to handle brief upsets in the micro filters without affecting the cooling tower chemistry.

Included in Attachment 1, are three figures that depict where the tank is located and its dimensions. This first figure shows the new Micro Filter Feed Tank. The Micro Filter Feed Tank is approximately 2 feet shorter than the HERO Reject Storage Tank (on the right side in the picture). The second figure is a fabrication drawing of the Micro Filter Feed Tank that shows its dimensions. The third figure is an aerial of the WEC plant. The location of the new Micro Filter Feed Tank is shown on the figure.

Shade Structure

TID proposes to install a shade structure to protect the micro filtration equipment from sun damage. The structure would be located in the WEC ZLD area. It would be 44' long by 18'-6" wide. It would be approximately 13' in height, which is much shorter than much of the equipment and tanks in the ZLD area. The structure would be supported by galvanized steel beams and the metal roof would be painted gray to match the rest of the WEC. Included in Attachment 2 is an engineering drawing of the shade structure. The location of the shade structure is indicated in the aerial of the WEC plant in Attachment 1.

Conclusion

Based on these facts, the WECA believes that the inclusion of the Micro Filter Feed Tank and shade structure constitute an insignificant project change that can be approved by Staff. Pursuant

March 9, 2010
Page 3

to section 1769(a)(2), Title 20, California Code of Regulations, a formal amendment is not required if Energy Commission staff determines that:

- There is no possibility that the modification may have a significant effect on the environment, and
- The modification will not result in a change to or deletion of a condition of certification, or make changes that would cause the project not to comply with applicable laws, ordinances, regulations, or standards (LORS).

Nevertheless, the information presented herein is consistent with the requirements of Section 1769 of the California Energy Commission regulations. The information presented herein provides a complete description of the proposed modifications, as required by Section 1769(a)(1)(A). The information also includes a discussion of the necessity of the proposed changes, per Section 1769(a)(1)(B). The project modification is based on information that was not known during the time of the certification, and it does not undermine the assumptions, rationale, findings, or other bases for the final decision, per Sections 1769(a)(1)(C) and 1769(a)(1)(D). As discussed above, the modification does not have the potential to create any significant impacts on the environment and makes the project consistent with all applicable LORS, per Sections 1769(a)(1)(E) and 1769(a)(1)(F). The modification will not adversely affect the public, per Section 1769(a)(1)(G). In addition, the modification will have no adverse effects on nearby property owners, per Sections 1769(a)(1)(H) and 1769(a)(1)(I).

Should you have any questions, please do not hesitate to contact George Davies, Turlock Irrigation District Combustion Turbine Department Manager at (209) 883-3451 or me at 916-447-2166.

Sincerely,

ELLISON, SCHNEIDER & HARRIS L.L.P.



Jeffery D. Harris

Attorneys for Walnut Energy Center Authority

Attachment

cc: Jack Caswell, CEC with Attachment

ATTACHMENT 1



UNLESS OTHERWISE NOTED, ALL 150# FF FLANGES TO BE 25 PSI RATED.
Δ - CONICAL GUSSET O - NON-GUSSETED

NOZZLE SCHEDULE

MARK	SIZE	REQ'D	DESCRIPTION	SERVICE	Q.C. CHECK LIST
A1	8"	1	EXT. 150# FF FLG W/INT. D/C INLET	INLET	DRAWN AFTER TANK CHECK
A2	8"	1	INTERNAL 150# FF FLG	INLET	
B	10"	1	150# FF FLG	OUTLET	
C	3"	1	150# FF FLG	DRAIN	
D	12"	1	150# FF FLG	OVERFLOW	
E	24"	1	STD. SIDE ENTRY	MANWAY	
F	18"	1	STD. TOP ENTRY	MANWAY	
G	10"	1	DUCT FLG W/FRP MITRD G/N VENT	VENT	
H	3"	1	150# FF FLG	LEVEL	
I	4"	1	150# FF FLG W/FRP BLIND/ELBOW SPARE	SPARE	
J	8"	1	150# FF FLG W/FRP BLIND SPARE	SPARE	
K	10"	1	150# FF FLG W/FRP BLIND SPARE	SPARE	
LD	---	12	GALVANIZED: SEE REF062B	GALV. TIE DOWN	
LL	---	4	SEE REF010	GALV. LIFT LUG	
NP	---	1	SEE REF010	DEF. NAMEPLATE	
PC1	---	5	EXTERNAL: SEE DETAIL	(A) PIPE CLIPS	
PC2	---	3	INTERNAL: SEE DETAIL	(A) PIPE CLIPS	
PC3	---	3	EXTERNAL: SEE DETAIL	(D) PIPE CLIPS	
PC4	---	5	EXTERNAL: SEE DETAIL	(D) PIPE CLIPS	

NOTES:
RESIN, CORROSION LINER: ISOPHTHALIC POLYESTER
CORROSION LINER THICKNESS: 100 MILS NOMINAL
SURFACING VEIL: SINGLE PLY NEXUS

RESIN, STRUCTURAL: ISOPHTHALIC POLYESTER

GELCOAT: LIGHT GRAY WITH UV INHIBITORS

NUMBER REQUIRED: 1

CUSTOMER P.O.#	PO65415	MODEL NO.	VT1230 DT-SB
DEF. WORK ORDER #	22117	MF FEED TANK	
TANK SERIAL #		TURLOCK IRRIGATION DISTRICT	
TANK COMPLETION DATE:		for	
DESIGNED BY:	BAW	WALNUT ENERGY CENTER	
DRAWN BY:	C. G. H.	TURLOCK, CALIFORNIA	
CUST. APPL. BY:			
REVISIONS		CHD/JAP/DO	
1	SUBMITTED FOR CUSTOMER APPROVAL		CS
2	RESUBMITTED PER CUSTOMER COMMENTS		CS
3	RESUBMITTED FOR CUSTOMER APPROVAL		CS
4	ADDED PIPE CLIPS FOR (D) AND ELBOW ON (I)		CS
5	RESUBMITTED FOR CUSTOMER APPROVAL		CS
6	APPROVED AS SUBMITTED; CERTIFIED FOR CONSTRUCTION		CS

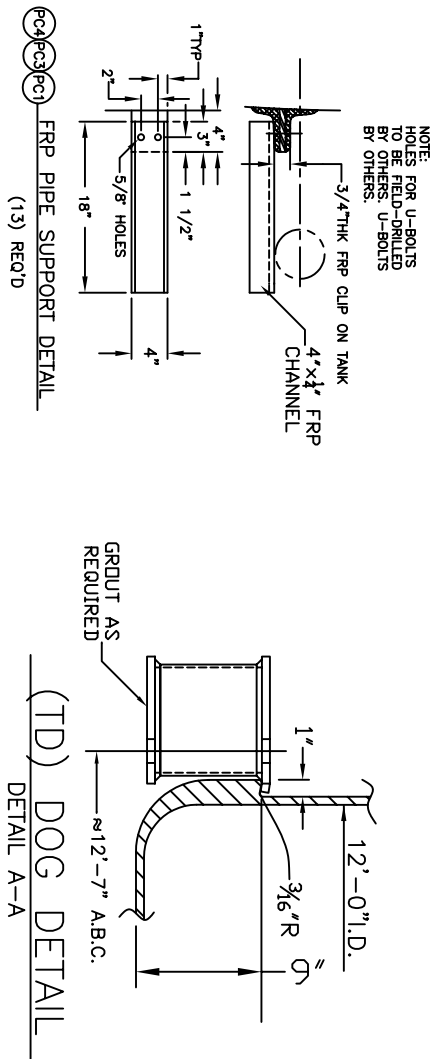
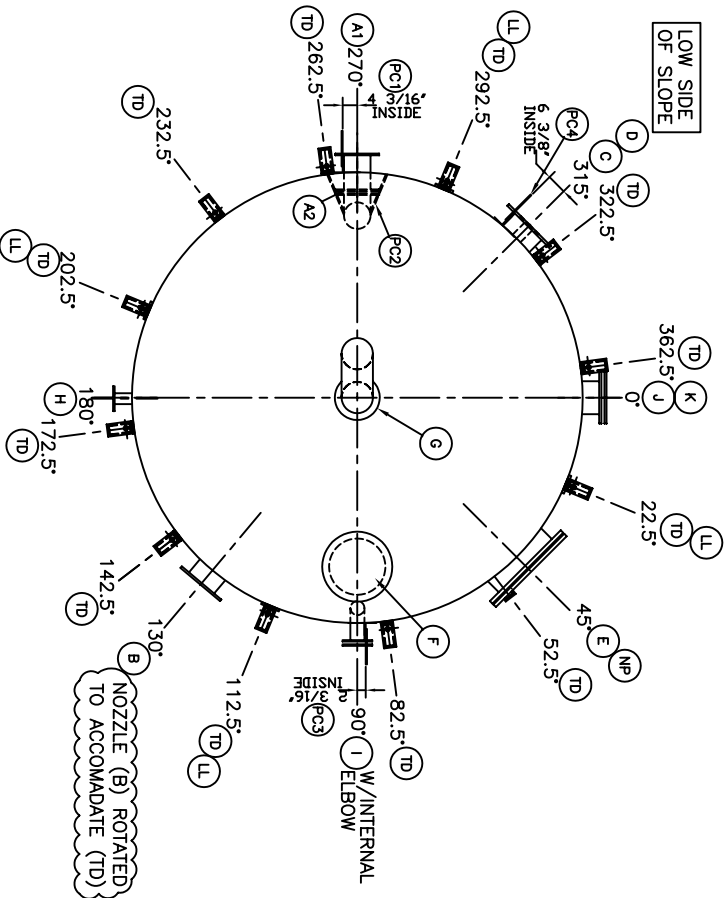


1036 Industrial Blvd. P.O. Box 1600, Turlock, CA 95352
Tel: (209) 575-5651 Fax: (209) 575-5651
www.diamondfiberglass.com

DRAWING NO. IND5458

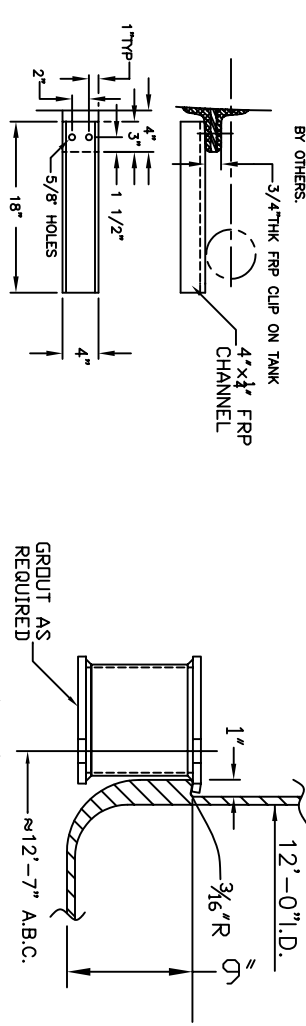
REV 3

PLAN VIEW



APPROXIMATE ANCHOR BOLT CIRCLE IS 12'-7" Ø.
PLEASE NOTE DIAMOND RECOMMENDS THAT
ANCHOR BOLTS BE SET AFTER TANK IS IN
PLACE TO INSURE PROPER FIT. SEE IND5458A

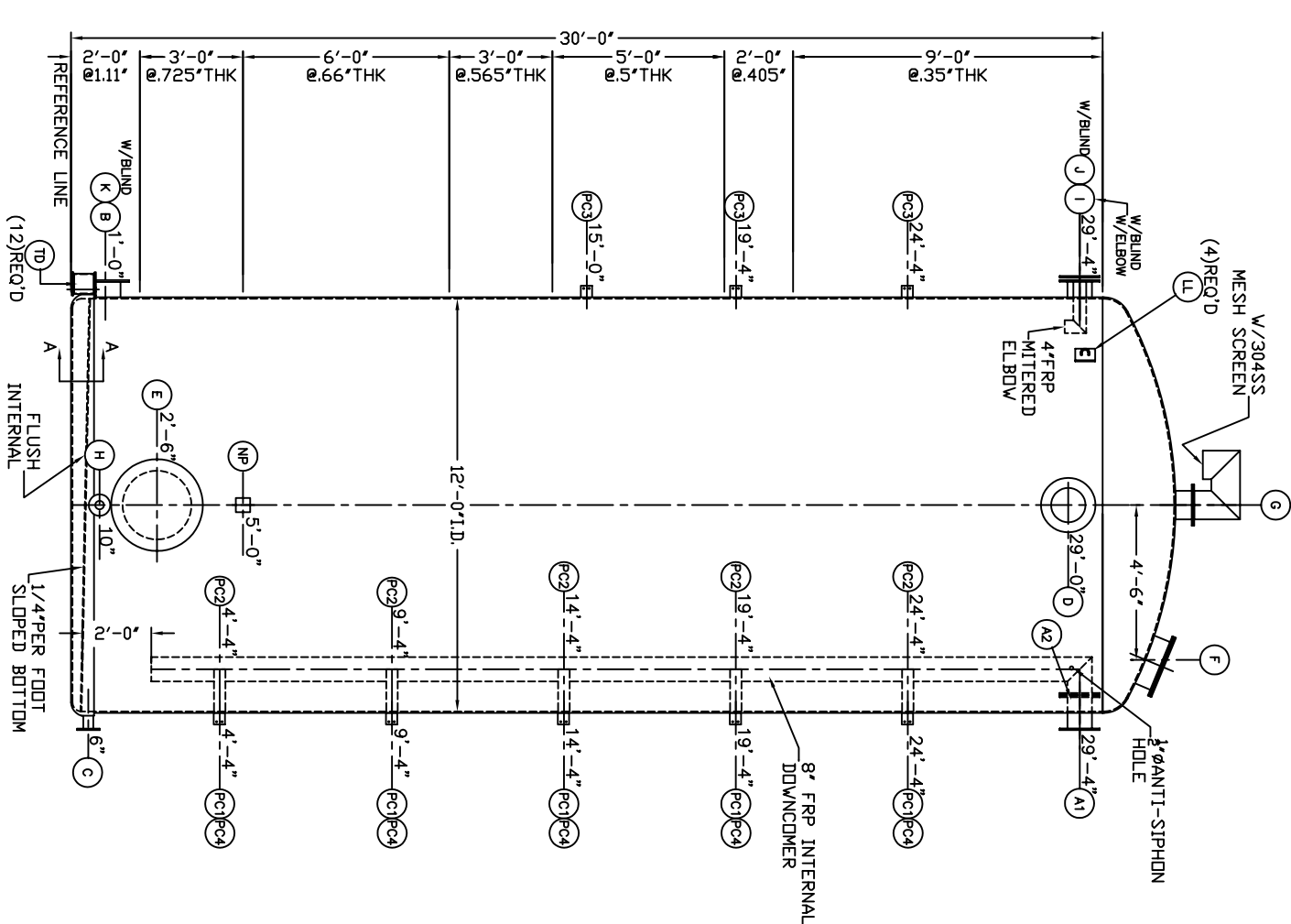
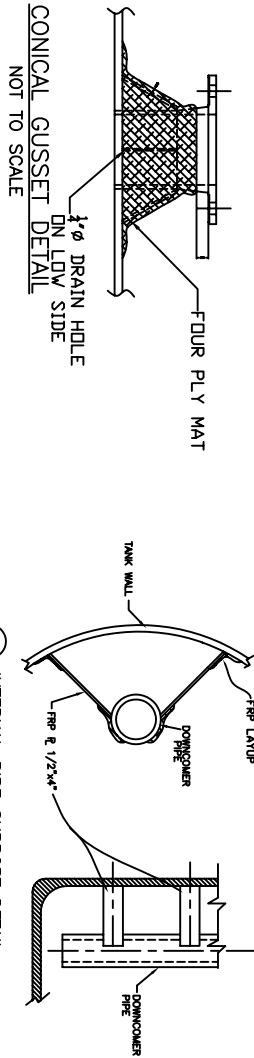
(TD) DOG DETAIL
DETAIL A-A



ASSEMBLY PARTS LIST

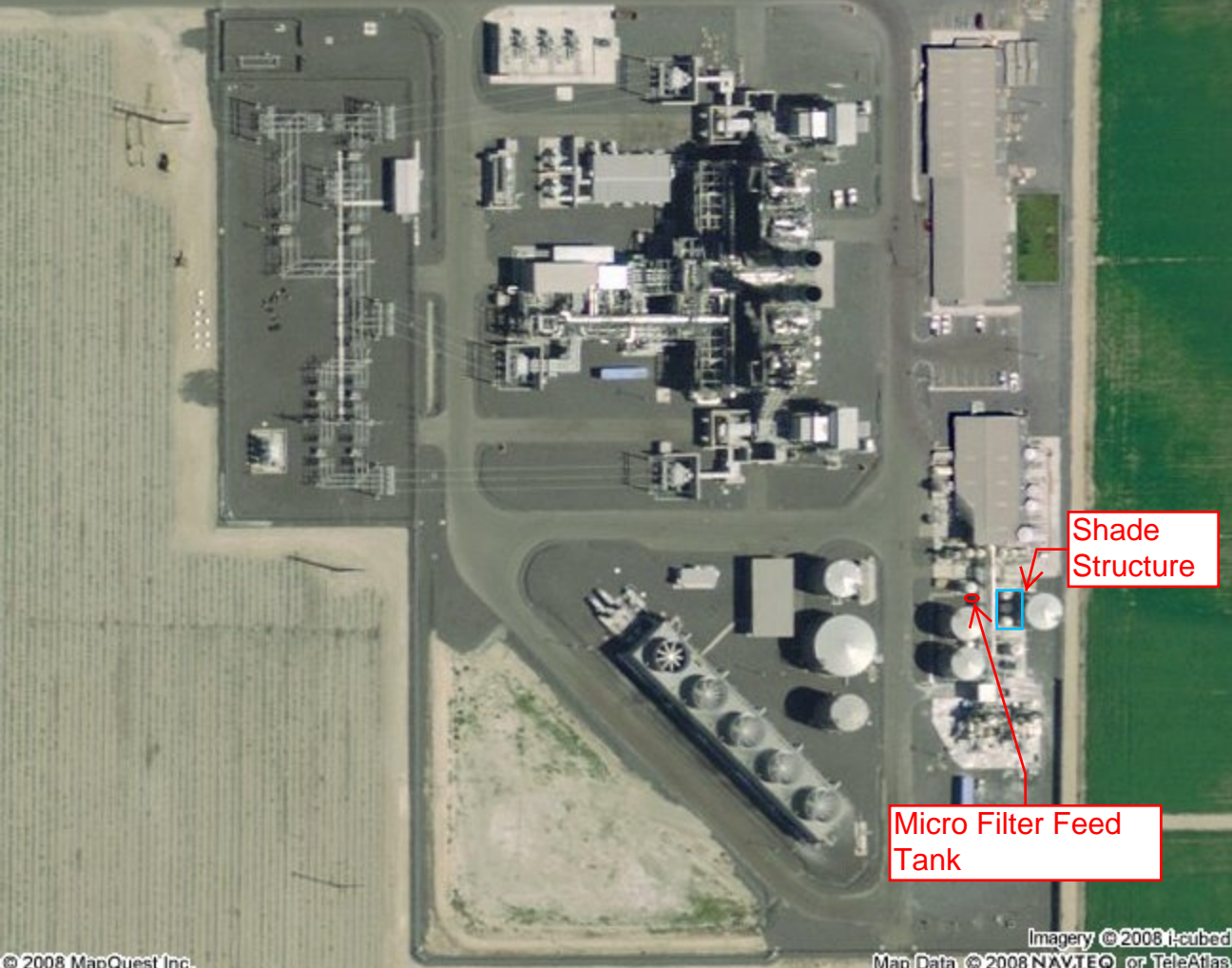
QTY	SIZE	DESCRIPTION	MATERIAL	SERVICE
1	24"	STD. SIDE ENTRY GASKET	NEOPRENE	MANWAY
20	5/8"x3/4"	BOLTS, NUTS, WASHERS	PLATED	MANWAY
1	18"	STD. TOP ENTRY GASKET	NEOPRENE	MANWAY
16	3/8" x 2"	BOLTS, NUTS, WASHERS	PLATED	MANWAY
1	10"	DUCT GASKET	NEOPRENE	G
12	3/8"x1 3/4"	BOLTS, NUTS, WASHERS	PLATED	G
1	4"	BLIND/GASKET	FRP/NEO	I
8	5/8"x3"	BOLTS, NUTS, WASHERS	FRP/NEO	J
1	8"	BLIND/GASKET	FRP/NEO	J
8	3/4"x3/4"	BOLTS, NUTS, WASHERS	PLATED	J
1	10"	BLIND/GASKET	FRP/NEO	K
12	7/8"x3 1/2"	BOLTS, NUTS, WASHERS	PLATED	K
26	1/2"x2"	BOLTS, NUTS, WASHERS	PLATED	PC1, PC3

THIS DRAWING IS PROPERTY OF DIAMOND FIBERGLASS. NO PARTS TO BE REPRODUCED OR COPIED WITHOUT THE WRITTEN CONSENT OF DIAMOND FIBERGLASS. THE DRAWING MUST NOT BE COPIED OR ITS CONTENTS MADE KNOWN OR AVAILABLE TO THIRD PARTIES WITHOUT THE PRIOR WRITTEN CONSENT OF DIAMOND FIBERGLASS.

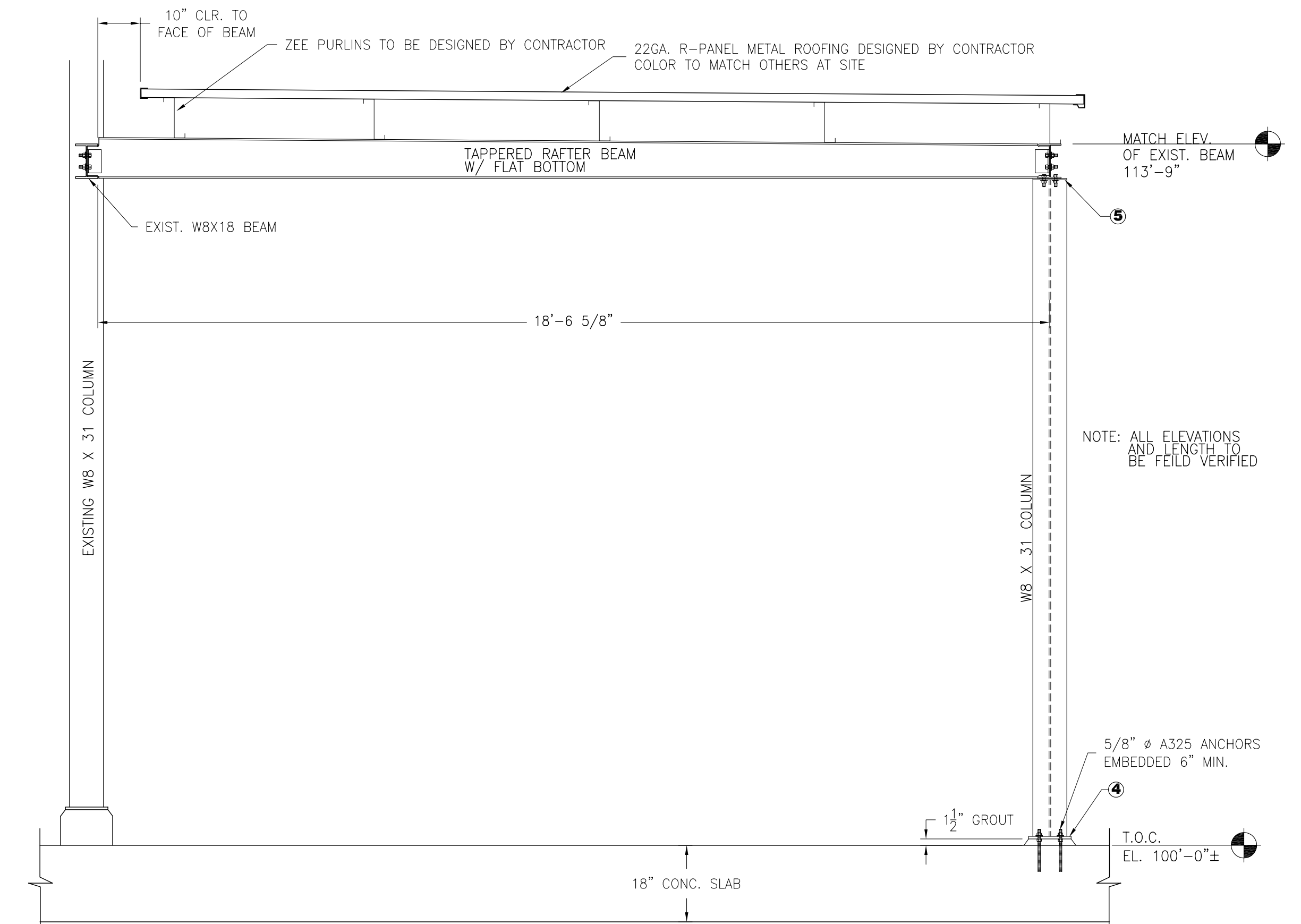


ELEVATION VIEW

(TRUE ORIENTATION IN PLAN VIEW ONLY)

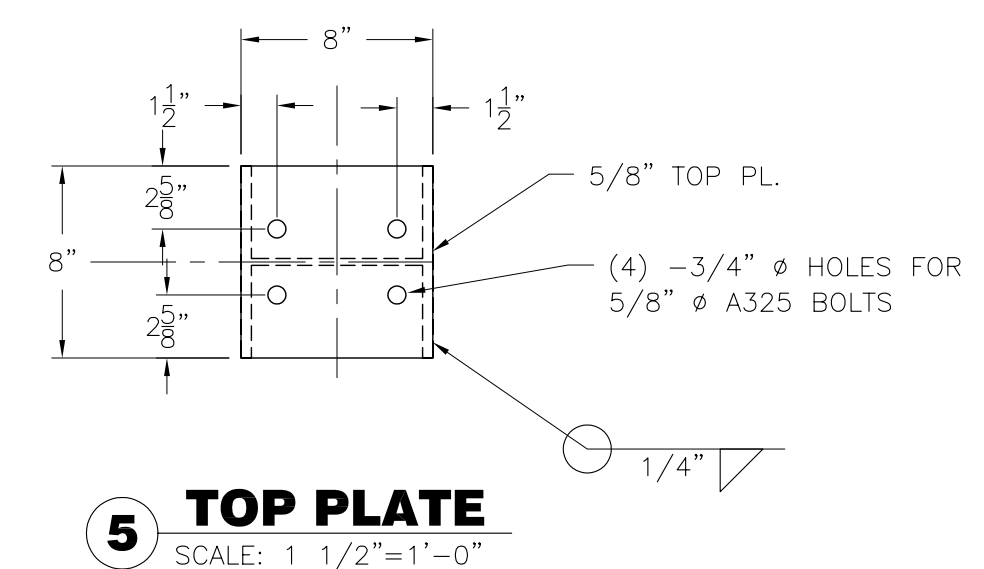
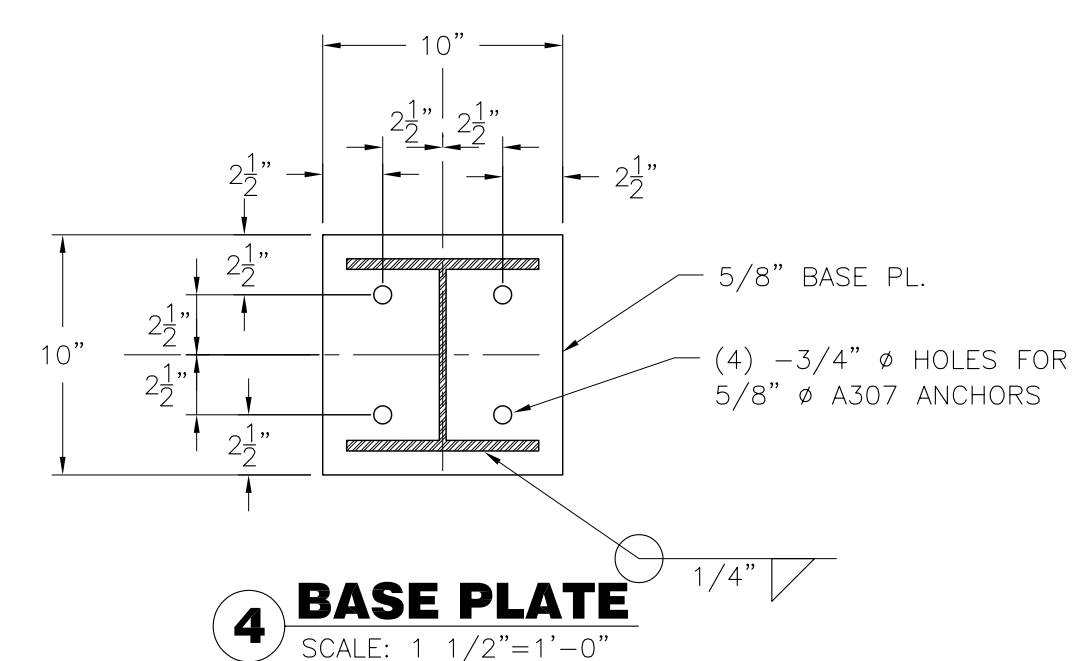
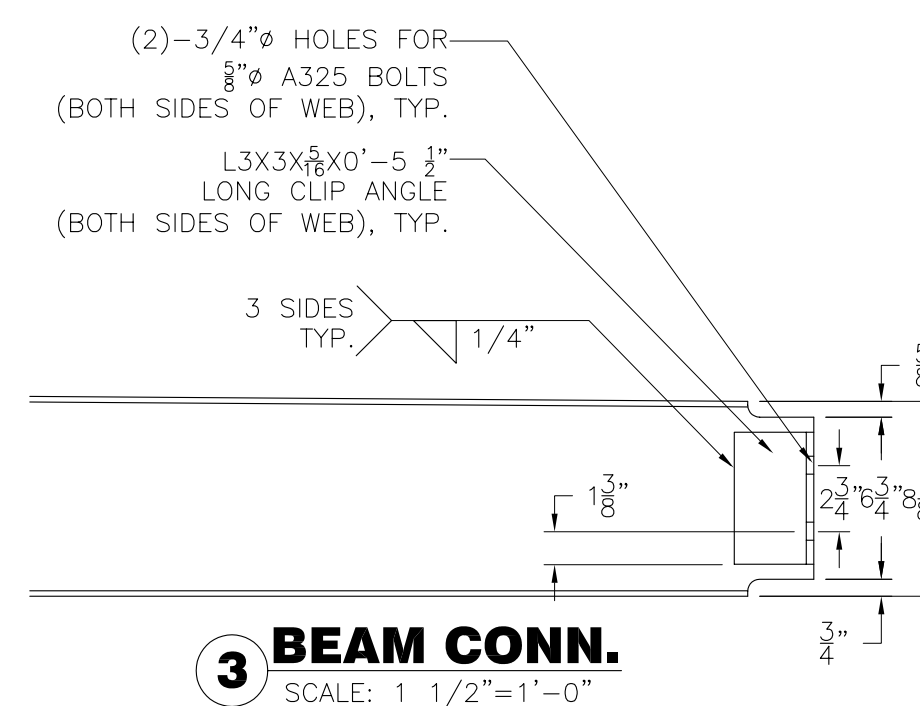
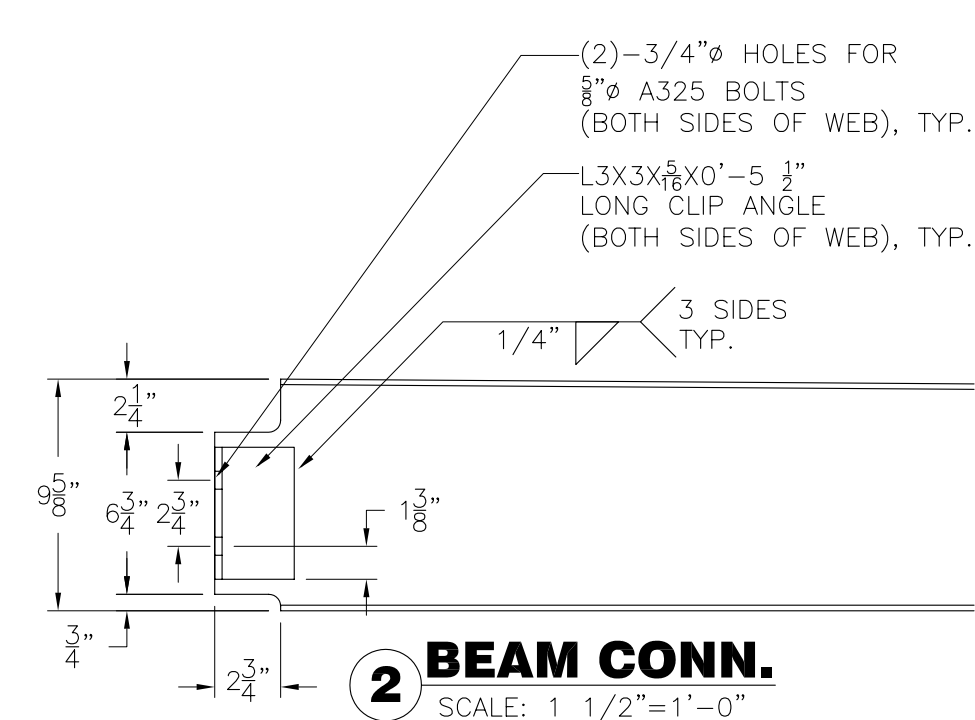
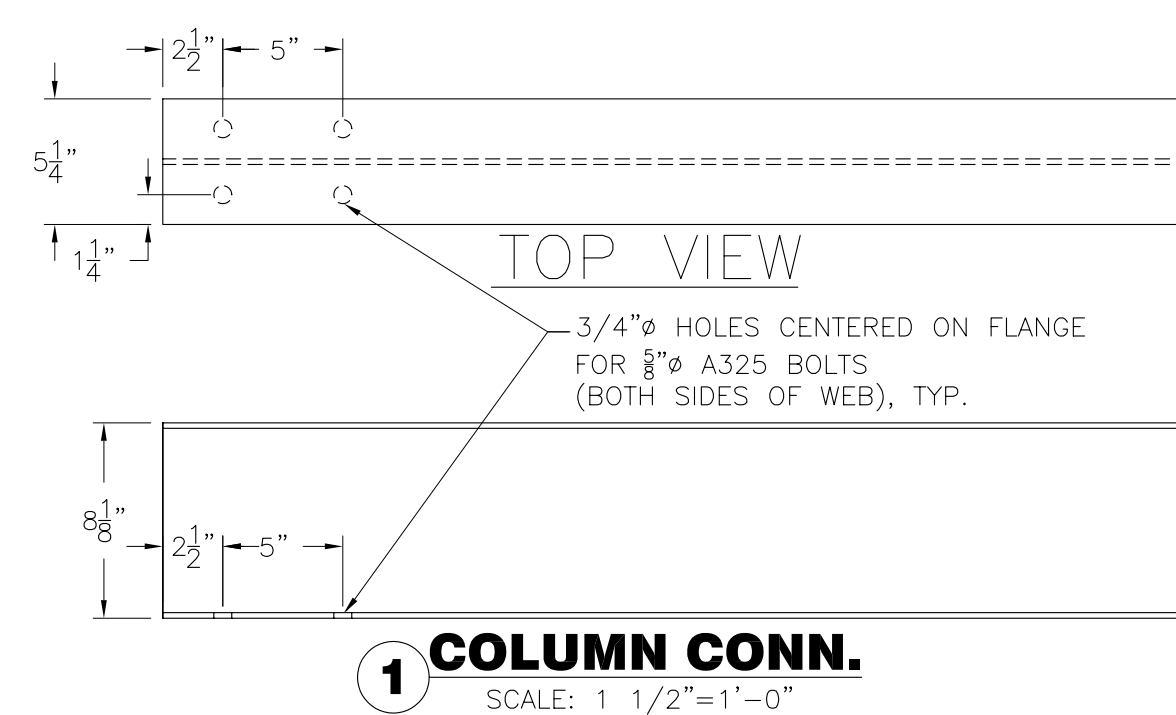
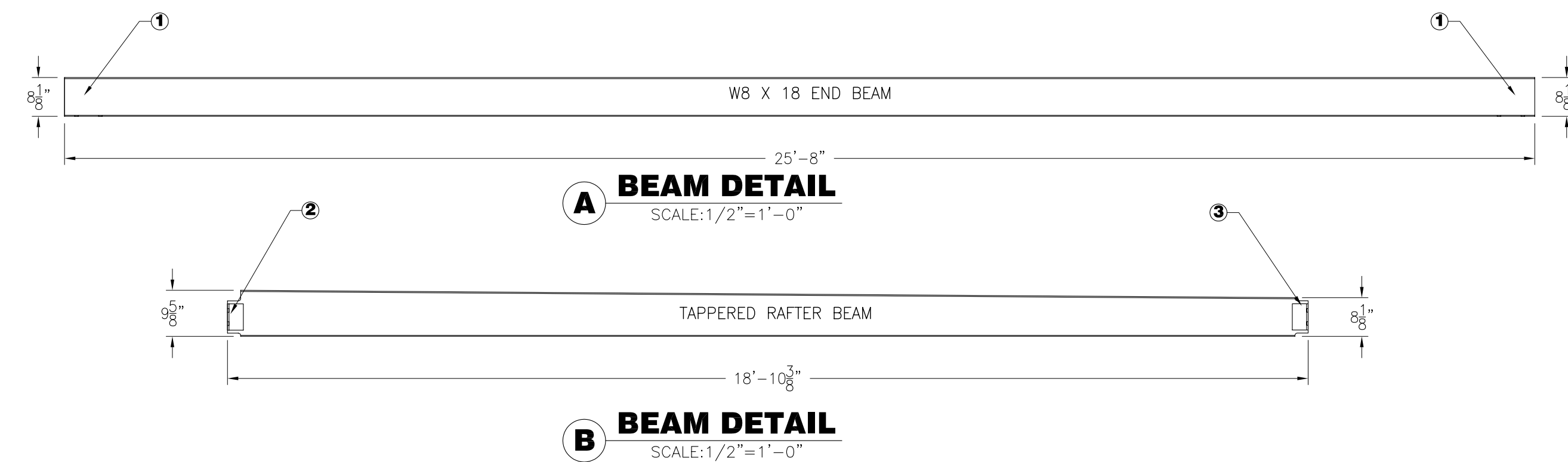


ATTACHMENT 2



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

1. ALL STRUCTURAL STEEL MEMBERS, COMPONENTS, CONNECTION PIECES AND BOLTS ETC. SHALL BE HOT DIP GALVANIZED ACCORDING TO ASTM A123 COATING THICKNESS AND GRADES
2. FIELD CONNECTIONS SHALL BE AISC ASD TYPE 2 (SIMPLE MOMENT CONNECTION), BEARING TYPE BOLTED CONNECTIONS USING ASTM A325 BOLTS IN STANDARD SIZE HOLES, UNLESS NOTED OTHERWISE.
3. ANY WELDING SHALL BE IN ACCORDANCE WITH A.W.S. STRUCTURAL WELDING CODE D.1.1 AND AISC MANUAL OF STEEL CONSTRUCTION, AISC 9TH ED.
4. MEMBERS MAY BE SHOP WELDED IN ORDER TO ASSEMBLE THE LARGEST TRANSPORTABLE UNITS.
5. ALL LENGTHS AND ELEVATIONS WILL BE VERIFIED BY THE CONTRACTOR BEFORE FABRICATION OF ANY STRUCTURE COMPONENTS.
6. CONTRACTOR WILL COORDINATE INSTALLATION WITH CIVIL ENGINEERING FIVE WORKING DAYS PRIOR TO SITE CONSTRUCTION.
7. ALL CONSTRUCTION WORKERS SHALL COMPLY WITH TID SAFETY AND CONSTRUCTION GUIDELINES WHILE WORKING AT POWERPLANT. (MANDATORY 15 MIN. SAFETY COMPLIANCE SESSION FOR EACH ONSITE WORKER.)



REV	DATE	DESCRIPTION	DR	CHK	APP	REV	DATE	DESCRIPTION	DR	CHK	APP	DRAWN	DATE	REVIEWED	DATE
												ABO	1/28/2010		
												CHECKED	DATE	REVIEWED	DATE
												TBH	2/1/2010		
												REVIEWED	DATE	APPROVED	DATE

WALNUT ENERGY CENTER

ZLD - PALL M.F.S.
SHADE STRUCTURE
PLAN @ EL. 113'-9" & SECTIONS

MDB&M	S:	SCALE: <i>AS SHOWN</i>	
	T:	SHEET: <i>2</i>	OF: <i>2</i>
	R:	FILE #:	

DWG # 2405

REV
00