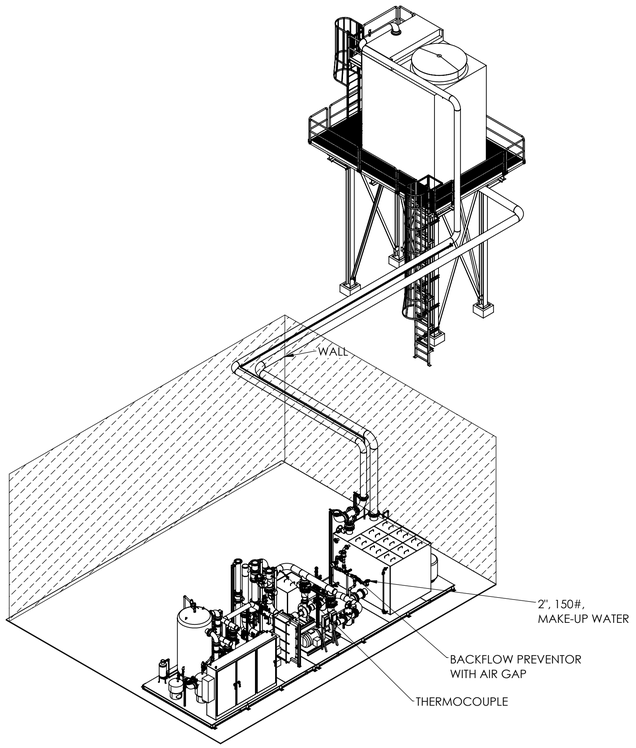
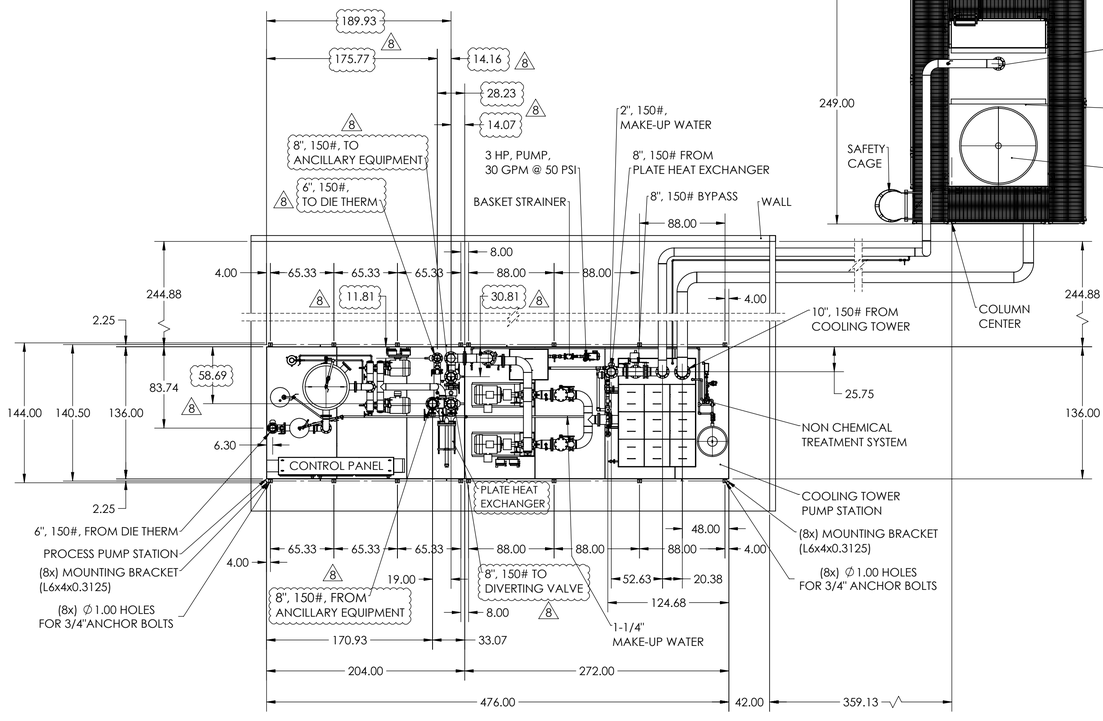
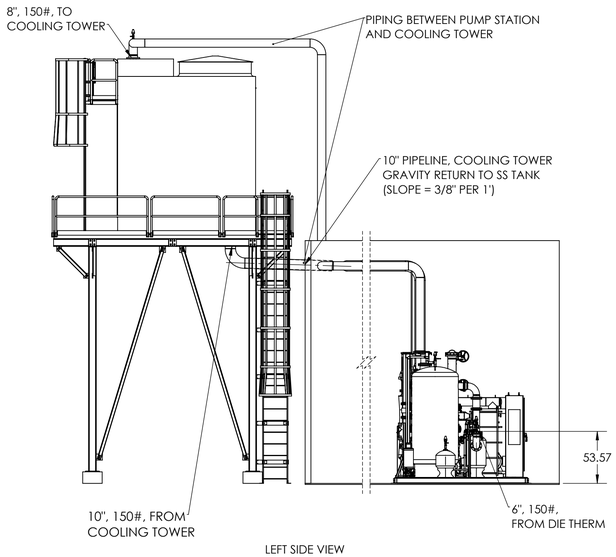


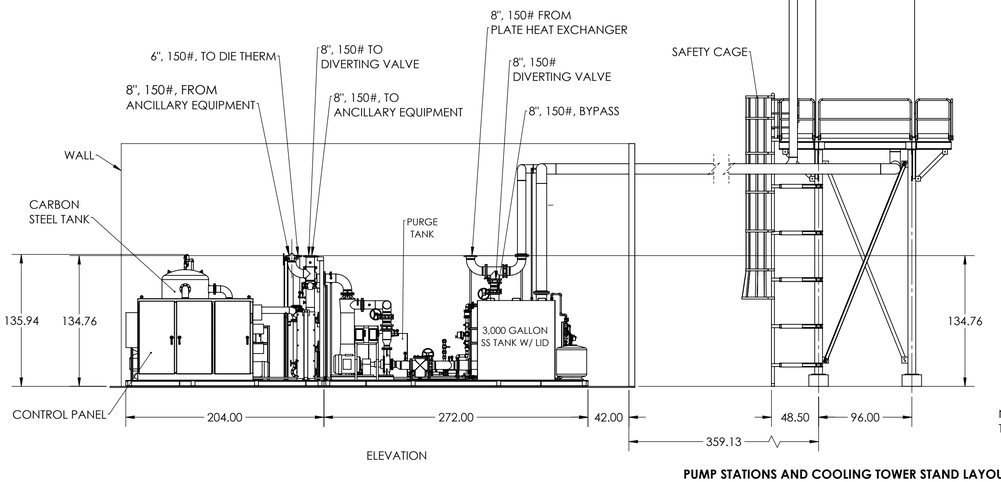
ISOMETRIC VIEW



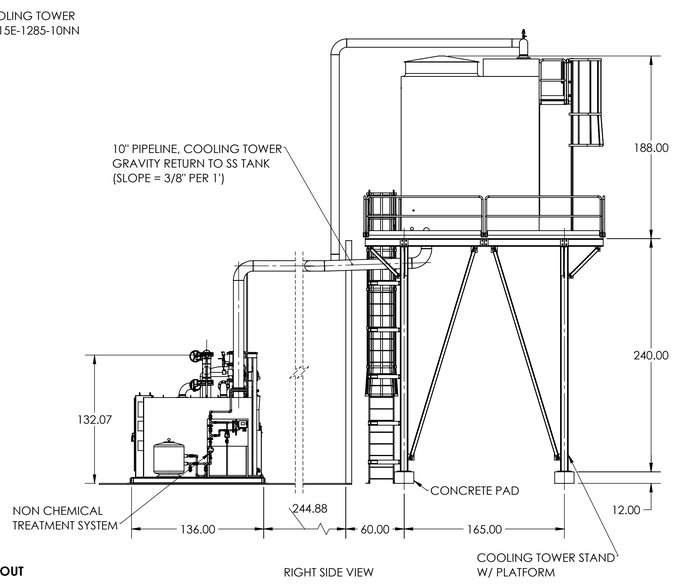
PLAN



LEFT SIDE VIEW



ELEVATION



RIGHT SIDE VIEW

PUMP STATIONS AND COOLING TOWER STAND LAYOUT

PAINT SPEC:	TBD
SYSTEM VOLTAGE:(VAC / ∅ /Hz)	230/460/3/60
PROCESS OPERATING FLOW: (gpm)	386
PROCESS OPERATING PRESSURE: (psi)	277 FT
TOWER OPERATING FLOW: (gpm)	1,191
TOWER OPERATING PRESSURE: (psi)	145.50 FT
SYSTEM TEST PRESSURE: (psi)	-

REV	DATE	DESIGN	ENG CHK	DESCRIPTION
8	03/13/24	VT	JD	PHE AND PROCESS PUMP MODEL IS UPDATED
7	03/01/24	VT	JD	MAKE-UP PIPE SPOOLS ARE UPDATED AND ANCHOR BOLT DETAILS ARE PROVIDED
6	02/20/24	VT	JD	SAFETY CAGE IS ADDED TO LADDER AND MOUNTING L-BRACKET ARE ADDED TO THE SKIDS
5	02/05/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
4	02/01/24	VT	JD	NON-CHEMICAL TREATMENT SYSTEM IS UPDATED
3	01/25/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
2	01/11/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
1	01/04/23	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
0	12/18/23	VT	JD	INITIAL REVIEW

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DRAWING TITLE: **PUMP STATIONS AND COOLING TOWER STAND LAYOUT**

EQUIPMENT: **SEE PROCESS DIAGRAM (P&ID)**

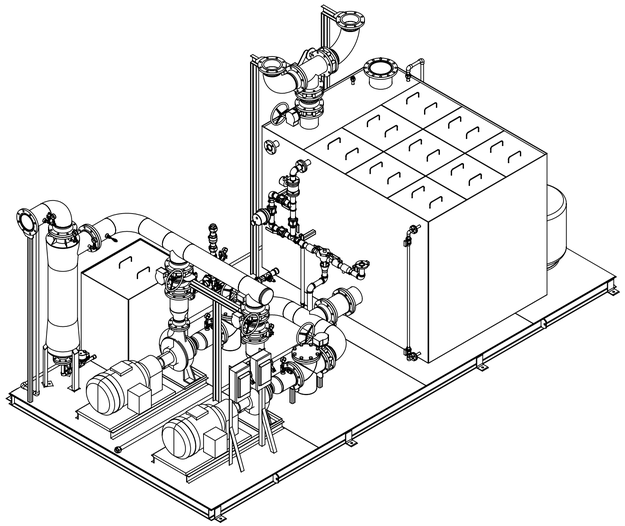
SHEET NO.: 1 OF 4

REV.: **8**

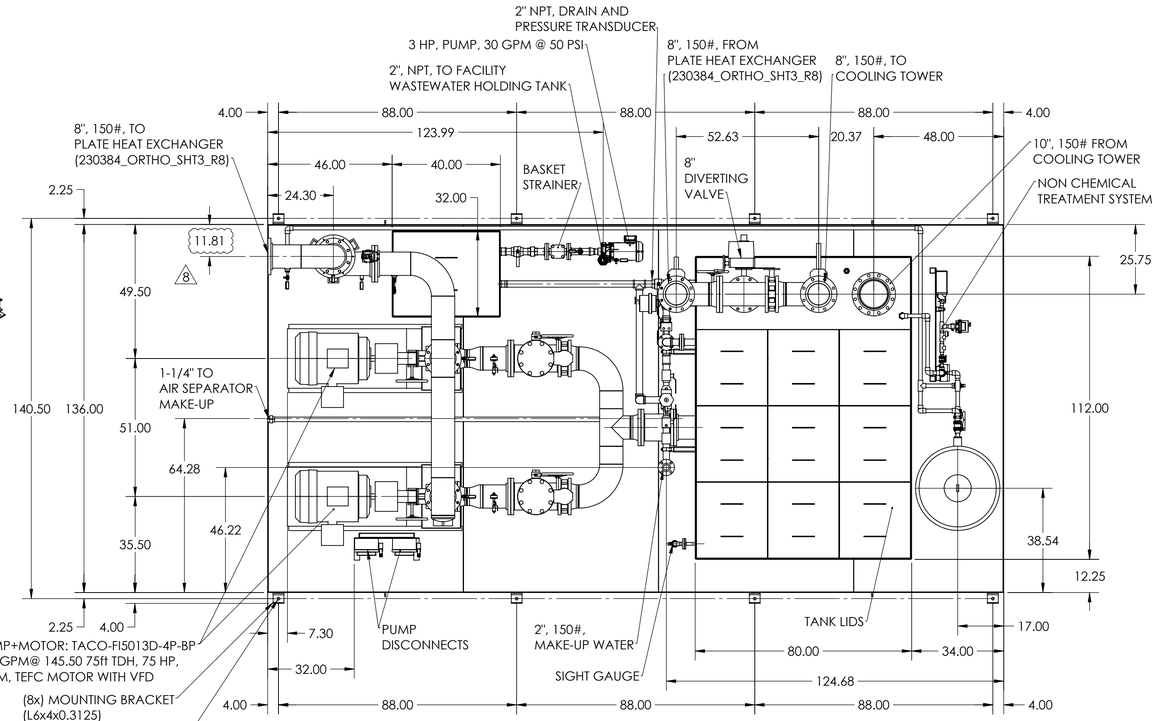
CUSTOMER:

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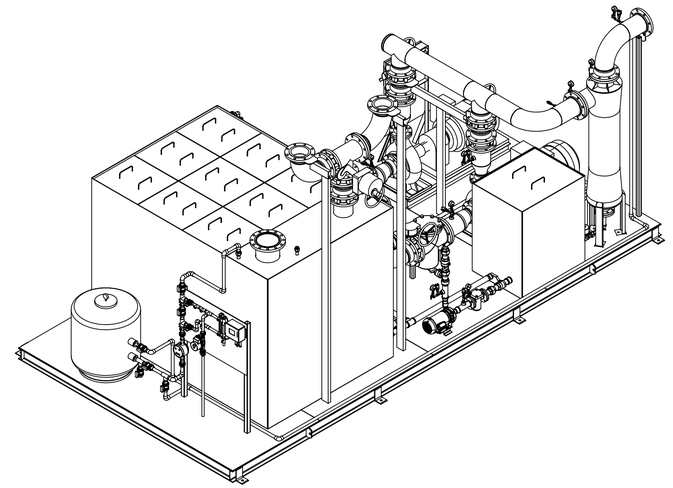
230384 FORD TDM REV 8 D



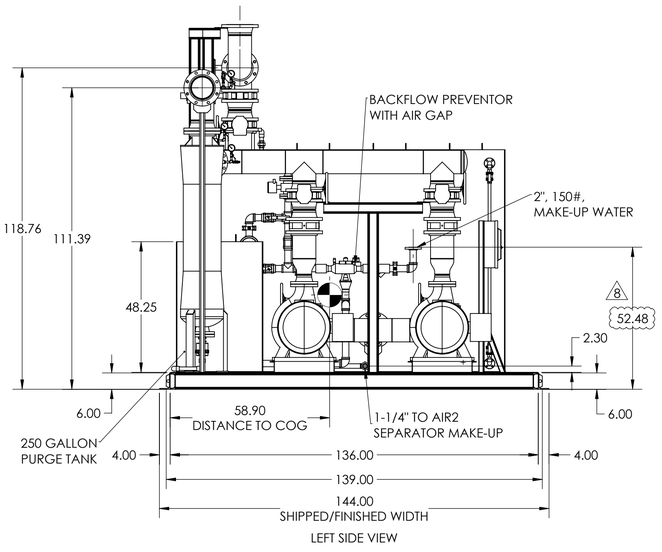
ISOMETRIC VIEW1



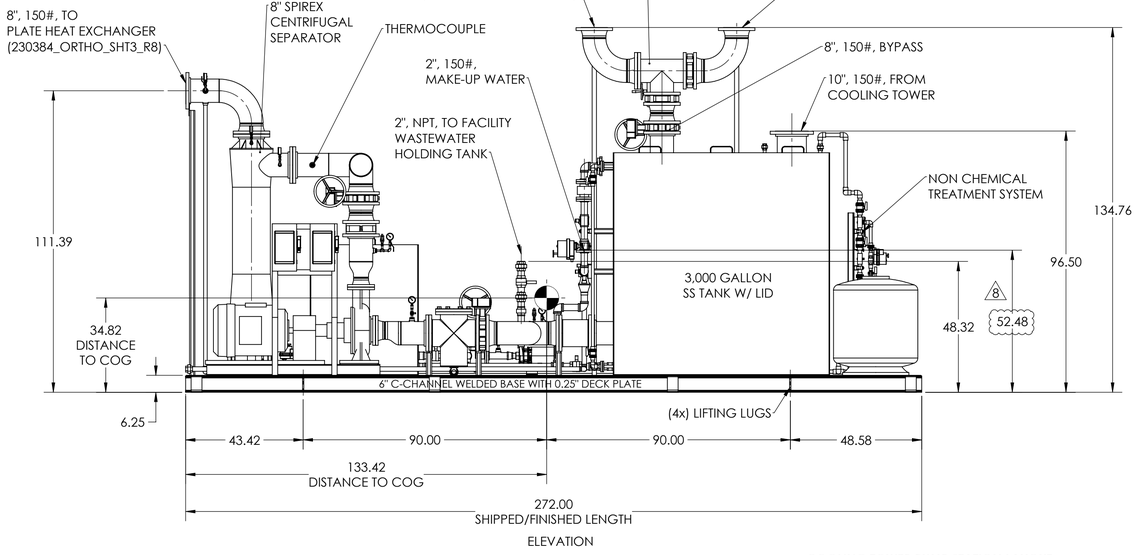
PLAN



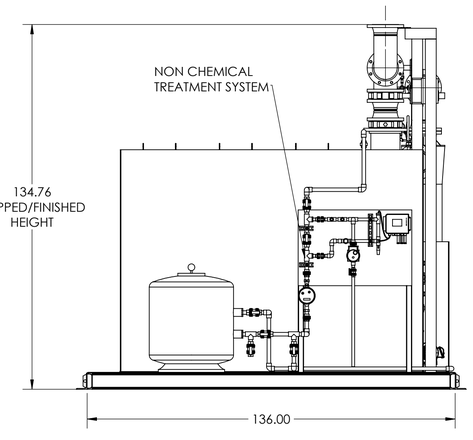
ISOMETRIC VIEW2



LEFT SIDE VIEW



ELEVATION



RIGHT SIDE VIEW

8

NOTES:
1. APPROXIMATE WEIGHT = 16334.83 LBS (DRY)
2. PRESSURE TRANSDUCER RANGE FOR COOLING TOWER SIDE SYSTEM = 0-150 PSI
3. PRESSURE TRANSDUCER RANGE FOR TANK = 0-15 PSI
4. STEEL STRUCTURE : CARBON STEEL, FINISH : PAINTED.

COOLING TOWER PUMP STATION LAYOUT

PAINT SPEC:	TBD
SYSTEM VOLTAGE:(VAC / ∅ /Hz)	230/460/3/60
PROCESS OPERATING FLOW: (gpm)	386
PROCESS OPERATING PRESSURE: (psi)	277 FT
TOWER OPERATING FLOW: (gpm)	1,191
TOWER OPERATING PRESSURE: (psi)	145.50 FT
SYSTEM TEST PRESSURE: (psi)	-

REV	DATE	DESIGN	ENG CHK	DESCRIPTION
8	03/13/24	VT	JD	PHE AND PROCESS PUMP MODEL IS UPDATED
7	03/01/24	VT	JD	MAKE-UP PIPE SPOOLS ARE UPDATED AND ANCHOR BOLT DETAILS ARE PROVIDED
6	02/20/24	VT	JD	SAFETY CAGE IS ADDED TO LADDER AND MOUNTING L-BRACKET ARE ADDED TO THE SKIDS
5	02/05/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
4	02/01/24	VT	JD	NON-CHEMICAL TREATMENT SYSTEM IS UPDATED
3	01/25/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
2	01/11/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
1	01/04/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
0	12/18/23	VT	JD	INITIAL REVIEW

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DRAWING TITLE: **COOLING TOWER PUMP STATION LAYOUT**

EQUIPMENT: **SEE PROCESS DIAGRAM (P&ID)**

SHEET NO.: 2 OF 4

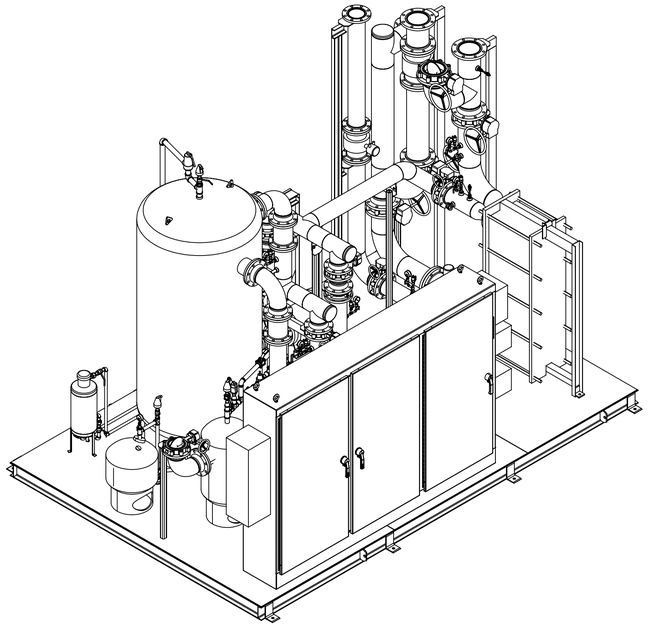
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CUSTOMER:

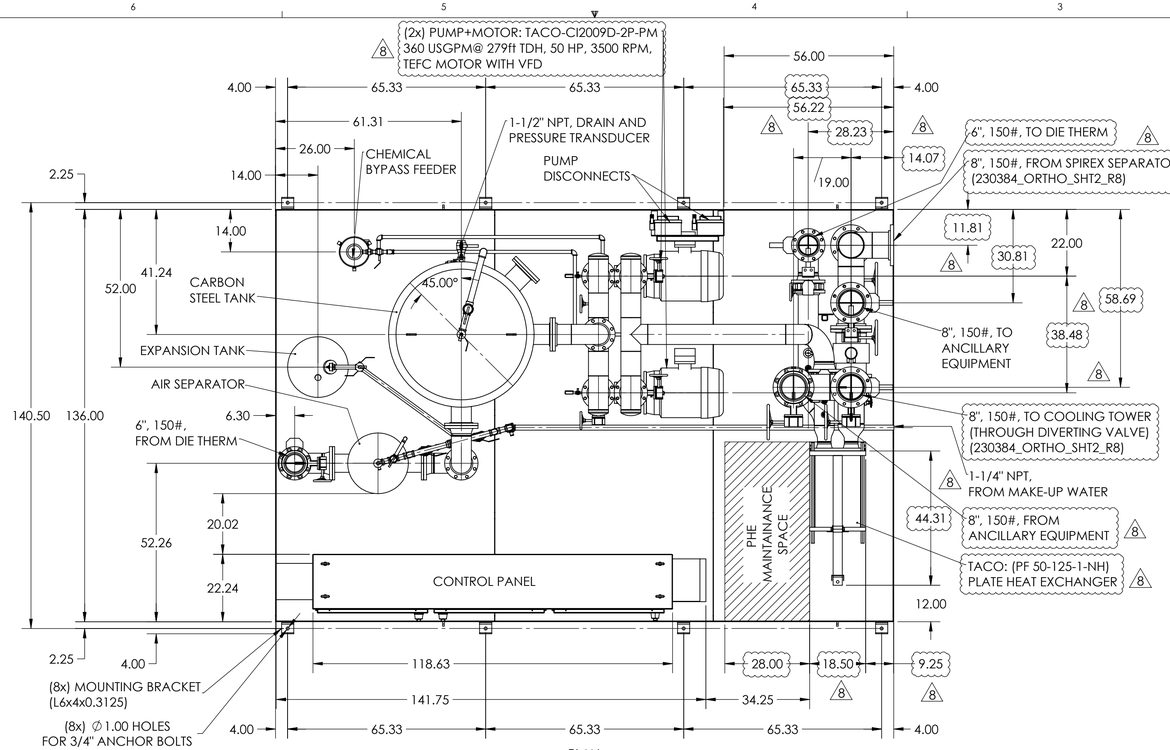
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230384 - FOND DU LAC

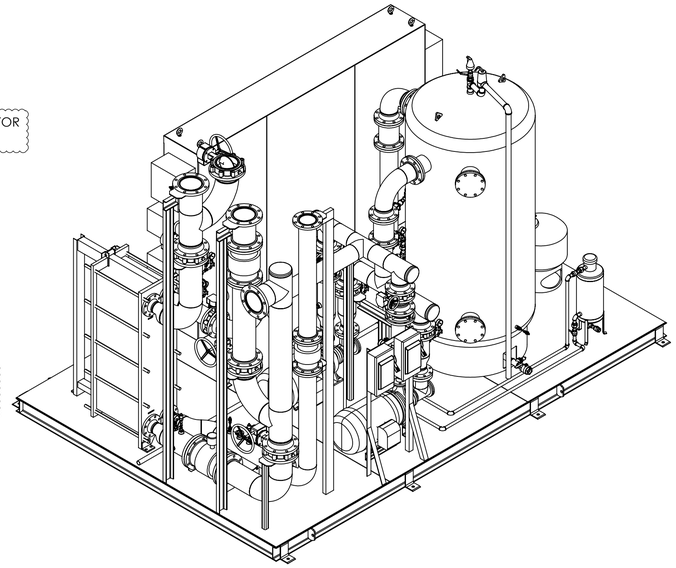
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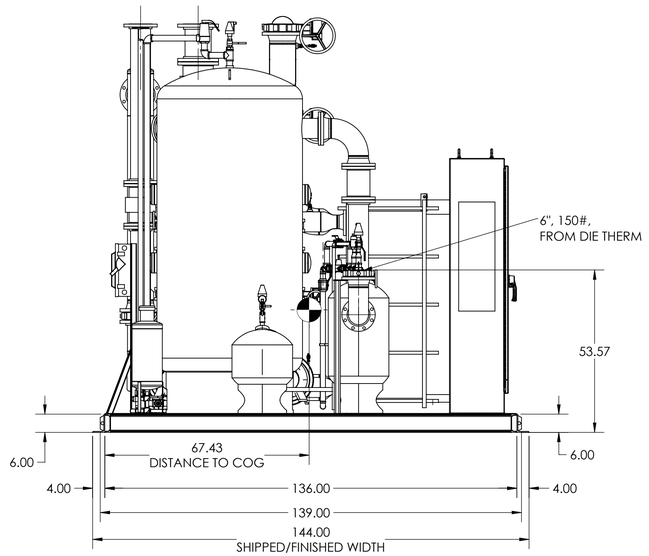
ISOMETRIC VIEW



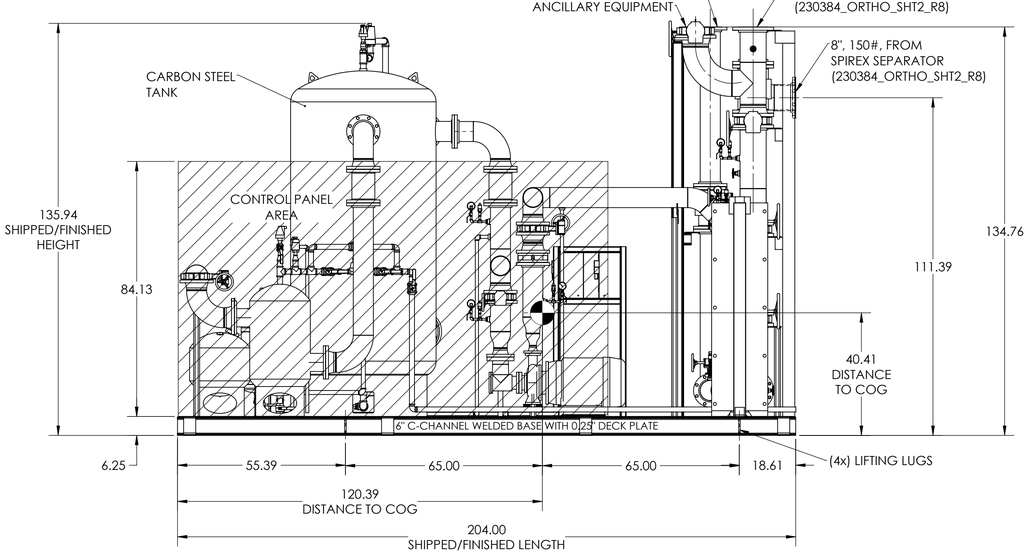
PLAN



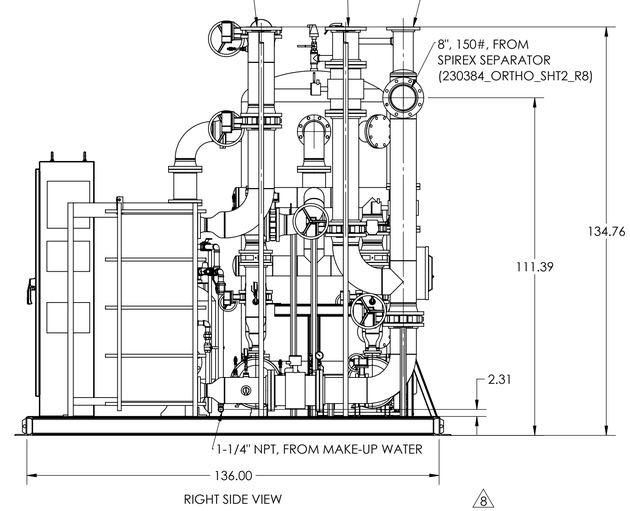
ISOMETRIC VIEW



LEFT SIDE VIEW



ELEVATION



RIGHT SIDE VIEW

PROESS PUMP STATION LAYOUT

NOTES:
1. APPROXIMATE WEIGHT = 15055.69 LBS (DRY)
2. PRESSURE TRANSDUCER RANGE FOR PROCESS SIDE SYSTEM = 0-200 PSI
3. PRESSURE TRANSDUCER RANGE FOR TANK = 0-15 PSI
4. STEEL STRUCTURE : CARBON STEEL, FINISH : PAINTED.

PAINT SPEC:	TBD
SYSTEM VOLTAGE:(VAC / ∅ /Hz)	230/460/3/60
PROCESS OPERATING FLOW: (gpm)	386
PROCESS OPERATING PRESSURE: (psi)	277 FT
TOWER OPERATING FLOW: (gpm)	1,191
TOWER OPERATING PRESSURE: (psi)	145.50 FT
SYSTEM TEST PRESSURE: (psi)	-

REV	DATE	DESIGN	ENG CHK	DESCRIPTION
8	03/13/24	VT	JD	PHE AND PROCESS PUMP MODEL IS UPDATED
7	03/01/24	VT	JD	MAKE-UP PIPE SPOOLS ARE UPDATED AND ANCHOR BOLT DETAILS ARE PROVIDED
6	02/20/24	VT	JD	SAFETY CAGE IS ADDED TO LADDER AND MOUNTING L-BRACKET ARE ADDED TO THE SKIDS
5	02/05/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
4	02/01/24	VT	JD	NON CHEMICAL TREATMENT SYSTEM IS UPDATED
3	01/25/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
2	01/11/24	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
1	01/04/23	VT	JD	CUSTOMER COMMENTS ARE INCORPORATED
0	12/18/23	VT	JD	INITIAL REVIEW

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DRAWING TITLE: **PROESS PUMP STATION LAYOUT**

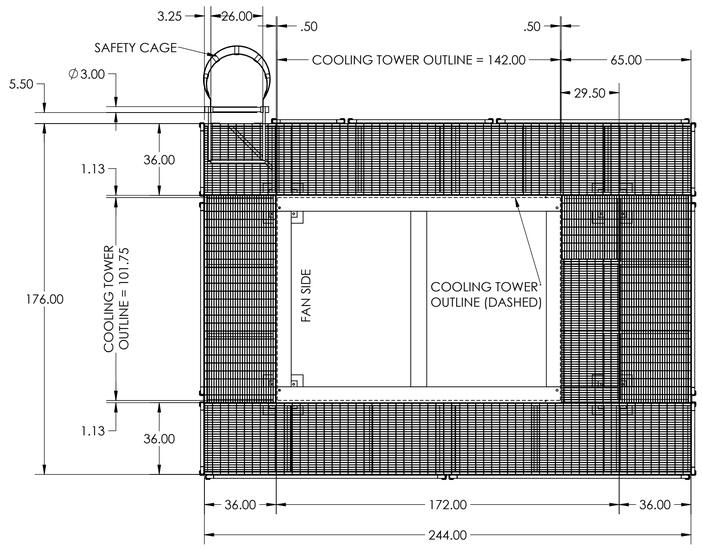
EQUIPMENT: **SEE PROCESS DIAGRAM (P&ID)**

SHEET NO. 3 OF 4 | REV. 8

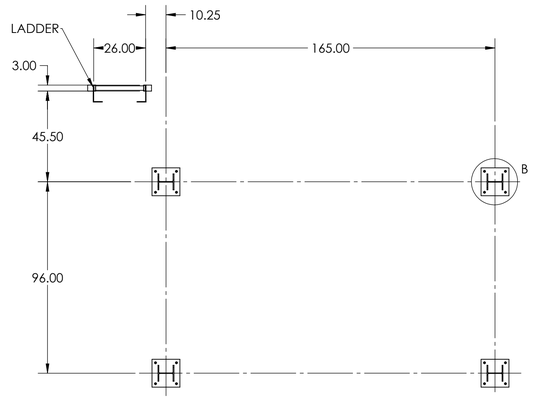
CUSTOMER

DRAWING NO. **230384_ORTHO3**

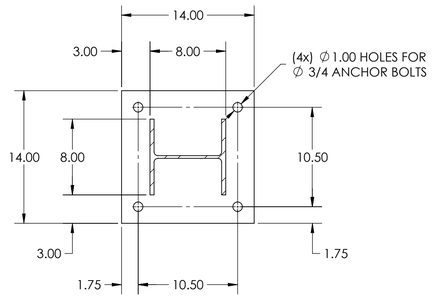
REV 8 | 230384 - FORD TDM | SIZE D



PLAN

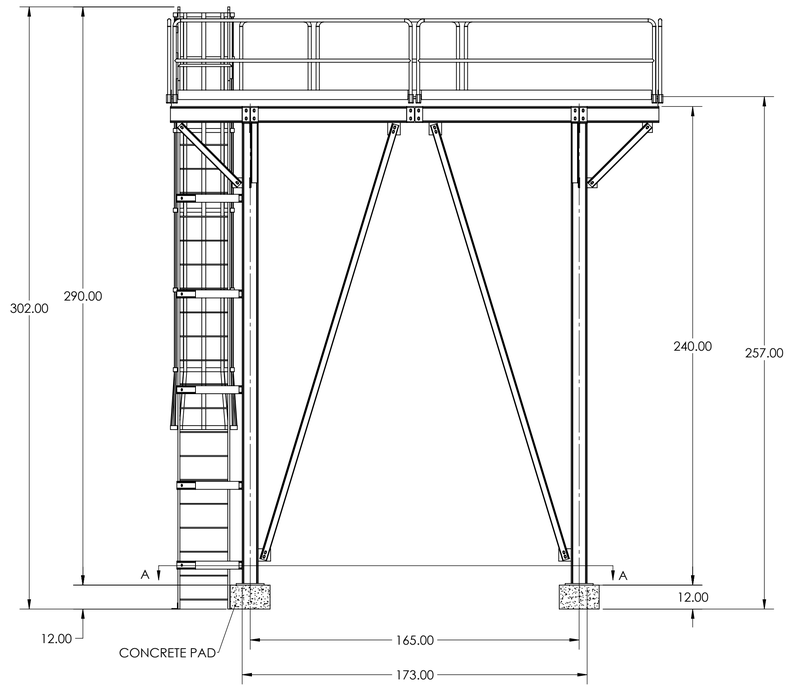


SECTION A-A
FOUNDATION PLAN

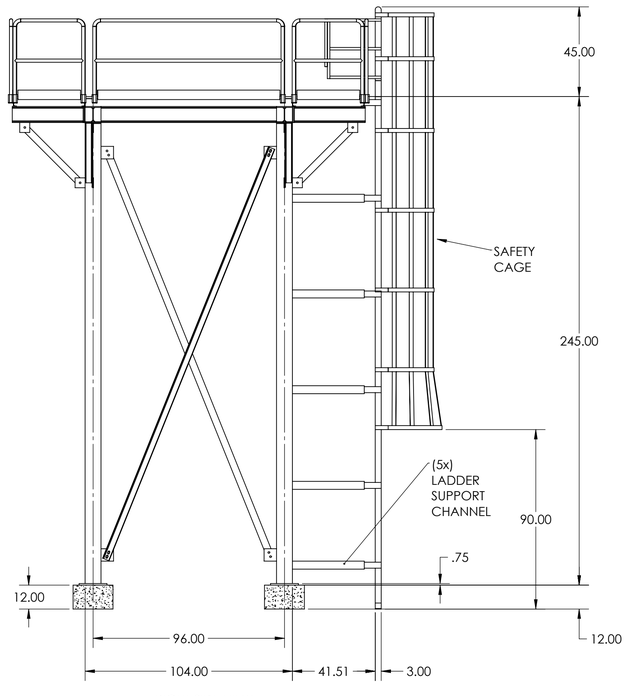


DETAIL B
SCALE 1 : 8

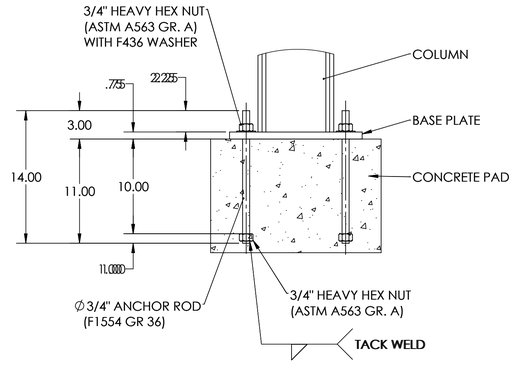
TYPICAL FOOT DETAILS
THICKNESS = 3/4"



ELEVATION



RIGHT SIDE VIEW



ANCHOR BOLT DETAILS

COOLING TOWER STAND W/ PLATFORM LAYOUT

NOTES:
1) TOTAL APPROXIMATE WEIGHT OF COOLING TOWER STAND, PLATFORM AND COOLING TOWER = 16878.67 LBS (DRY)
2) STEEL STRUCTURE MATERIAL: CARBON STEEL.
3) STEEL STRUCTURE FINISH : PAINTED.
4) ANCHOR BOLT AND NUT: HOT DIPPED GALVANIZED AS PER ASTM A153.
5) ANCHOR BOLT WASHER FINISH: LIGHT PROTECTIVE OIL
6) ADD STRUCTURAL SUPPORT TO PIPING AS REQUIRED.
7) AVOID USING DISSIMILIAR MATERIALS.
8) WELD ALL PIPES TO THE FOLLOWING STANDARDS:
COPPER - AWS D10.13, CAST IRON - AWS D11.2
STAINLESS STEEL - AWS D10.18, MILD STEEL - AWS D1.1

INSTALLATION NOTES:
1) DIMENSIONS MAY VARY DUE TO MFG. TOLERANCES.
2) DO NOT COMPLETE FIELD PIPING UNTIL SYSTEM IS PROPERLY INSTALLED.
3) DO NOT RIG FROM SYSTEM PIPING.
4) LEVEL AND SHIM BASE BEFORE ANCHORING.
5) DO NOT BIND SYSTEM CONNECTIONS.
6) FIELD PIPING MUST BE SUPPORTED INDEPENDENT OF SYSTEM CONNECTIONS.
7) MANUAL VALVES MUST BE INSTALLED IN ALL HIGH POINTS OF THE SYSTEM TO ASSIST IN VENTING AIR DURING FILL.

PAINT SPEC:	TBD
SYSTEM VOLTAGE:(VAC / Ø /Hz)	230/460/3/60
PROCESS OPERATING FLOW: (gpm)	386
PROCESS OPERATING PRESSURE: (psi)	277 FT
TOWER OPERATING FLOW: (gpm)	1,191
TOWER OPERATING PRESSURE: (psi)	145.50 FT
SYSTEM TEST PRESSURE: (psi)	

REV	DATE	DESIGN	ENG CHK	DESCRIPTION
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0	12/18/23	VT	JD	INITIAL REVIEW

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DRAWING TITLE: **COOLING TOWER STAND W/ PLATFORM LAYOUT**
EQUIPMENT: **SEE PROCESS DIAGRAM (P&ID)**
SHEET NO.: 4 OF 4
REV.: 8
CUSTOMER:
DRAWING NO.: **230384_ORTHO4**

REV 8 | 230384_FCND TDM | SIZE D