

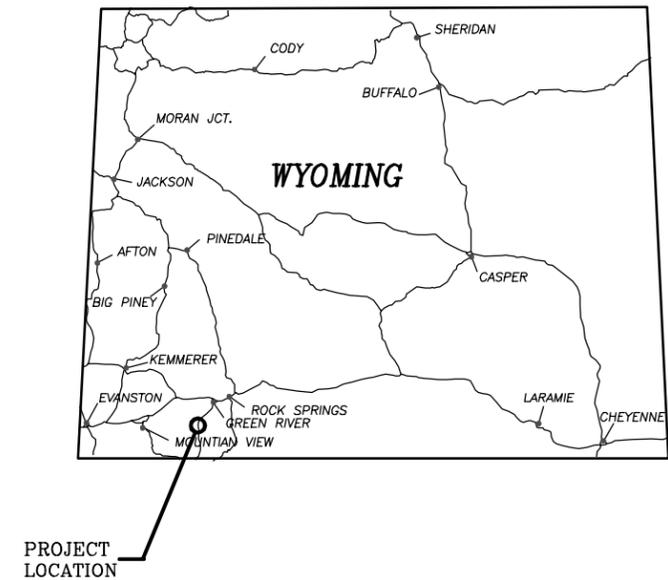
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# BUCKBOARD WATER TANK MODIFICATIONS

ASHLEY NATIONAL FOREST

FLAMING GORGE NATIONAL RECREATIONAL AREA, WY

SHT.	DWG.	SHEET TITLE
GENERAL		
1	G1	COVER SHEET
2	G2	PROJECT DESCRIPTION, LOCATION AND SCHEDULE OF ITEMS
SITE		
3	S1	SITE DEVELOPMENT PLAN -- OVERVIEW
SITE--CIVIL		
4	C1	EXISTING WATER TOWER & OVERFLOW PIPING DETAILS
5	C2	GASKET REPLACEMENT & PAINTING DETAILS
6	C3	TIE ROD TENSIONING & GROUT REPLACEMENT DETAILS
7	C4	NEW OVERFLOW PIPE CONNECTIONS



*APPROVED*

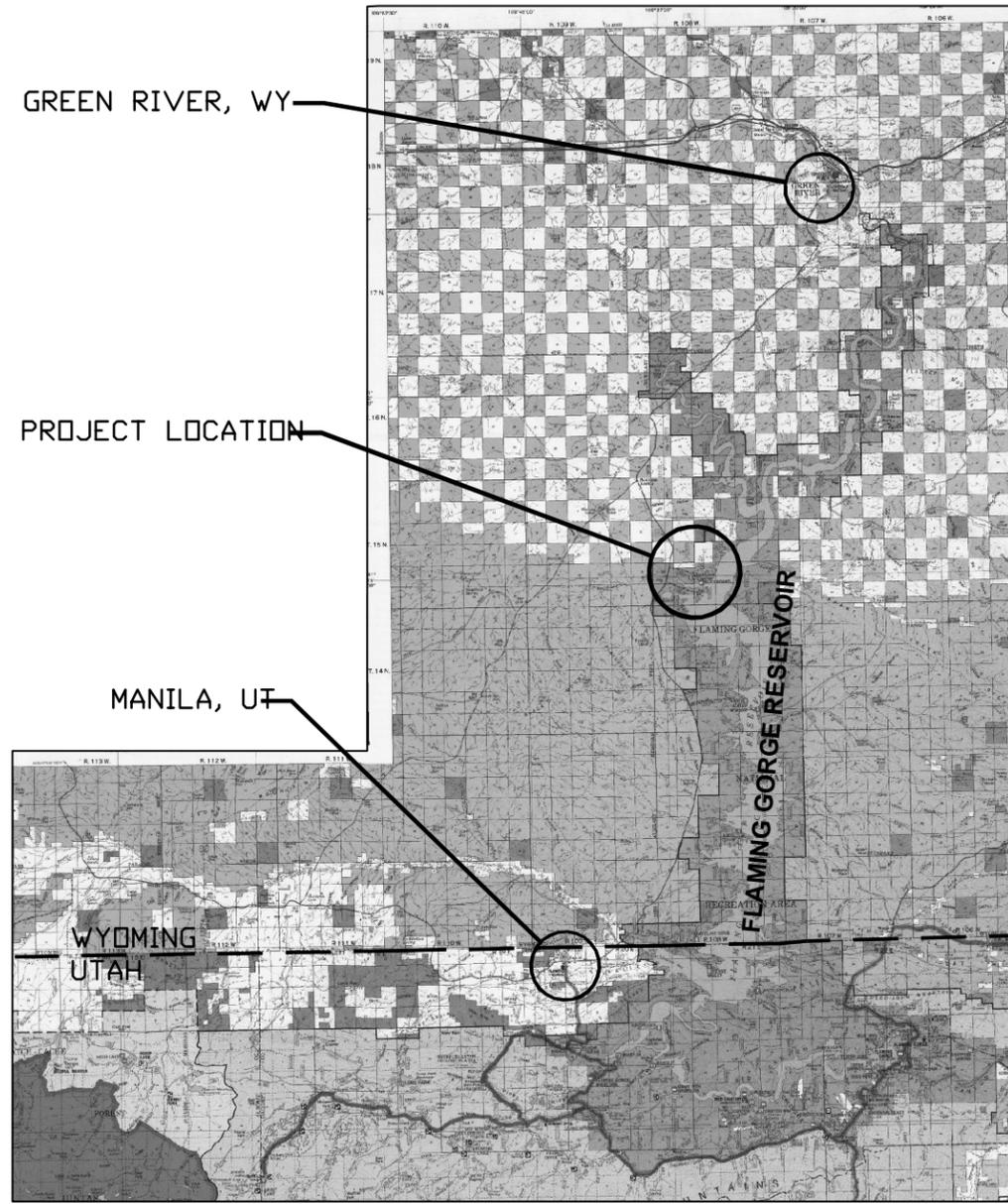
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FOREST SUPERVISOR DATE

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DIRECTOR, REGION 4 ENGINEERING DATE

## VICINITY MAP



## SCHEDULE OF ITEMS

ITEM NUMBER	DESCRIPTION	METHOD OF MEAS	UNIT	QUANTITY
<b>BASE BID ITEMS</b>				
011900	Mobilization	LSQ	LS	Lump Sum
033020	Concrete - Splash Pad	LSQ	LS	Lump Sum
033100	Structural Grout	LSQ	LS	Lump Sum
051200	Structural Steel Framing - Tie Rod Tensioning	LSQ	LS	Lump Sum
099600	High-Performance Coatings - Painting Inlet/Outlet Pipe	LSQ	LS	Lump Sum
221110-1	Steel Water Pipe - Including Pipe Attachments, #24 Mesh Screen, Steel Plate and Welding	LSQ	LS	Lump Sum
221110-2	Access Hatch Gasket - Government Furnished Gasket Material	LSQ	LS	Lump Sum

## PROJECT LOCATION

THE PROJECT IS LOCATED ON THE FLAMING GORGE NATIONAL RECREATION AREA OF THE FLAMING GORGE RANGER DISTRICT OF THE ASHLEY NATIONAL FOREST, SWEETWATER COUNTY, WYOMING IN SECTION 29, T15N, R108W, IN THE UINTAH MERIDIAN. IT IS LOCATED APPROXIMATELY 20 MILES NORTHEAST OF MANILA, UTAH. THE PROJECT MAY BE ACCESSED FROM WYOMING STATE HIGHWAY 530 AND FOREST ROADS 009 AND 054.

## PROJECT DESCRIPTION

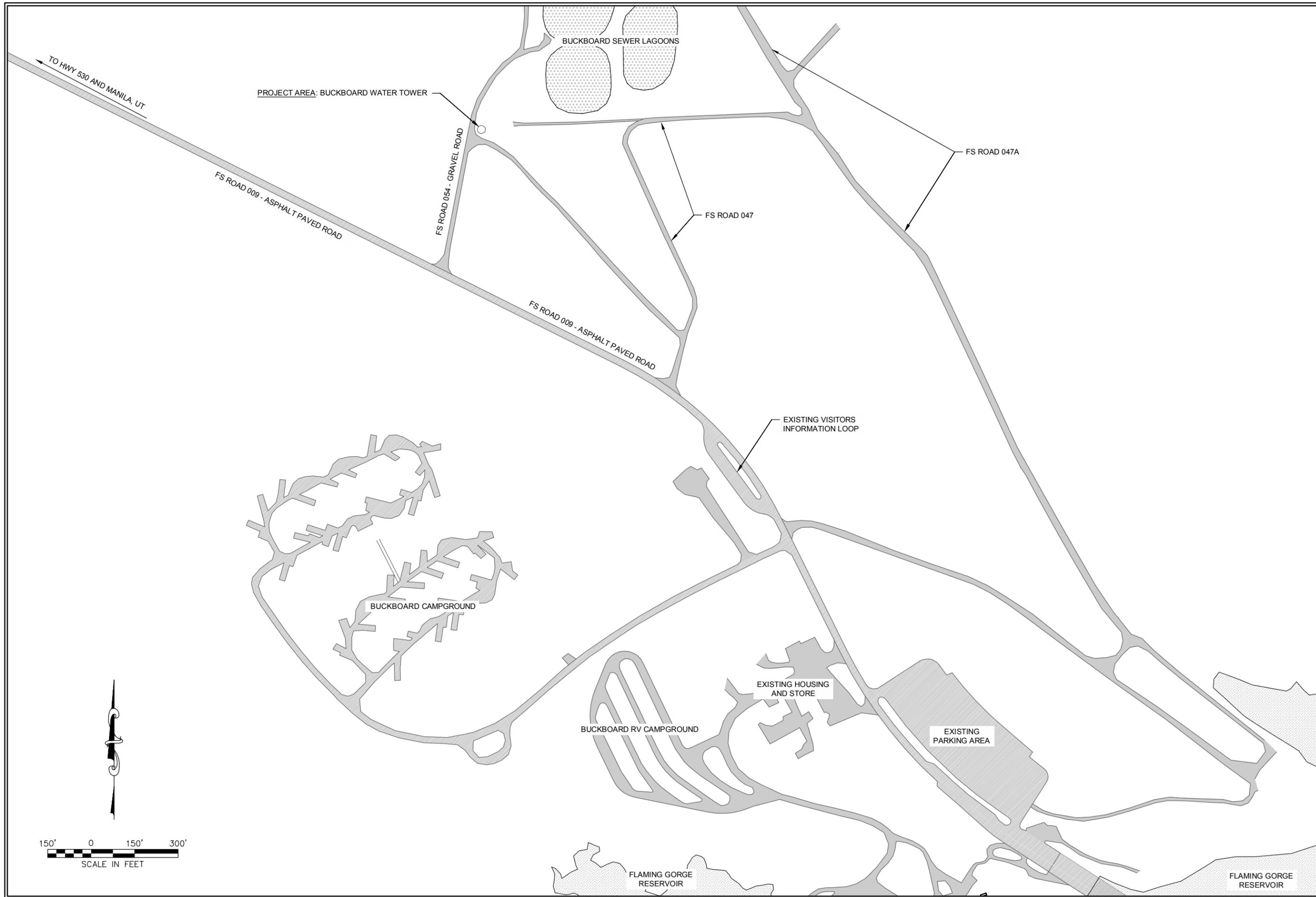
THIS PROJECT CONSISTS OF CORRECTING THE DEFICIENCIES IN THE BUCKBOARD WATER TOWER AS INSTRUCTED BY THE ENVIRONMENTAL PROTECTION AGENCY. THE WORK INCLUDES CONNECTING A 4" DIAMETER STEEL PIPE TO THE EXISTING OVERFLOW PIPE, WELDING THE NEW STEEL PIPE TO THE EXISTING TOWER, INSTALLING A CONCRETE SPLASH PAD, INSTALLING A #24 MESH SCREEN AT THE OUTLET OF THE NEW PIPE, INSTALLING A CUT TO FIT GASKET ON THE ACCESS HATCH (GASKET MATERIAL TO BE GOVERNMENT FURNISHED), REMOVING AND REPLACING STRUCTURAL GROUT AT THE BASE OF EACH COLUMN, TIGHTENING THE WATER TOWER TIE RODS TO MANUFACTURER'S RECOMMENDATIONS, AND PAINTING THE NEW PIPE AND OTHER PARTS OF THE WATER TANK THAT NEED TO BE REPAINTED.



DESIGN	BY: A. MCKEAN
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APPROVED:	BY: A. MCKEAN
	CHECK: D. JEPPSEN/D. WEWER
	DIRECTOR, ENGINEERING
	DATE

**BUCKBOARD WATER TANK MODIFICATIONS**  
 VICINITY MAP, PROJECT DESCRIPTION AND SCHEDULE OF ITEMS

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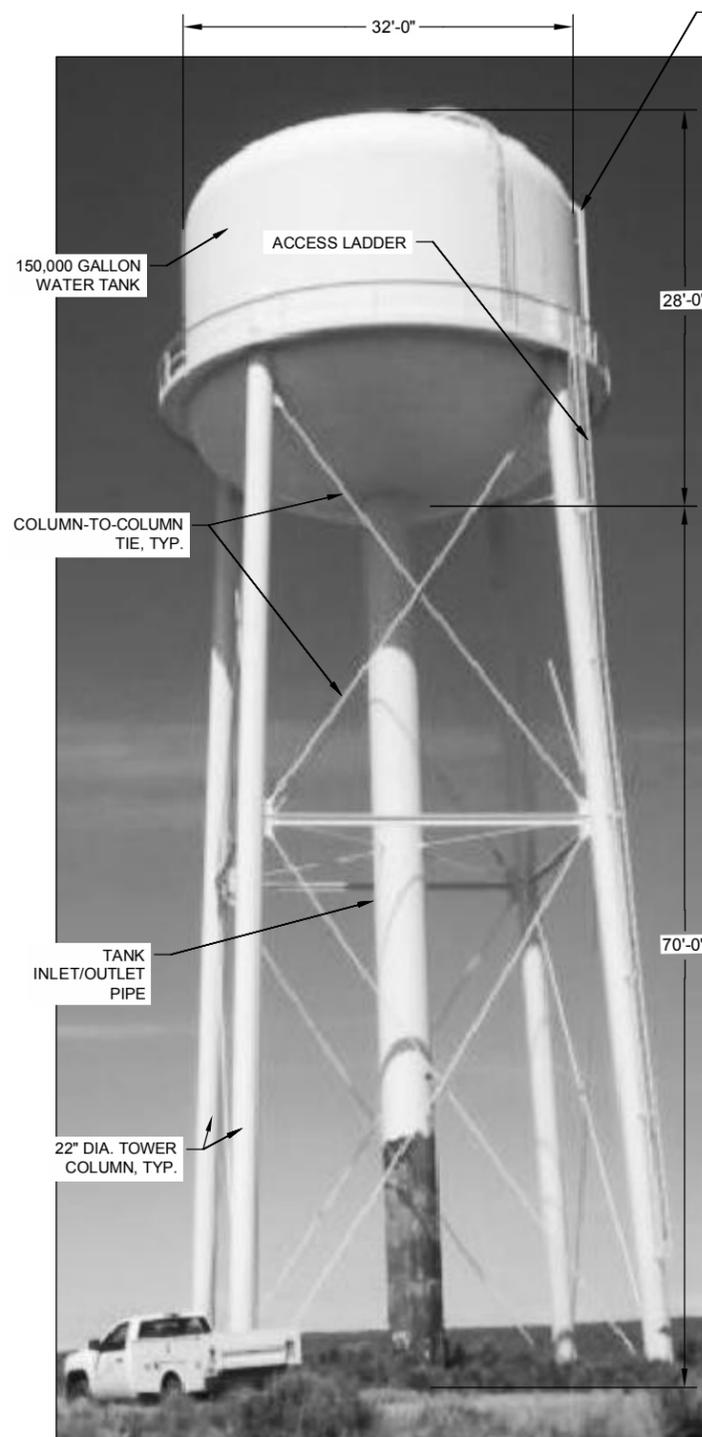


PROJECT No. DRAWING <b>S1</b>	<b>BUCKBOARD WATER TANK MODIFICATIONS</b>		U. S. Department of Agriculture <b>FOREST SERVICE</b> Intermountain Region 4 Engineering ASHLEY NATIONAL FOREST
	SITE DEVELOPMENT PLAN - OVERVIEW		
SHEET <b>3</b>	DESIGN BY: A. MCKEAN CHECK: D. JEPPESEN	DRAWING BY: A. MCKEAN CHECK: D. JEPPESEN/D. WEMER	APPROVED: DIRECTOR, ENGINEERING
P 7	DATE	DATE	DATE

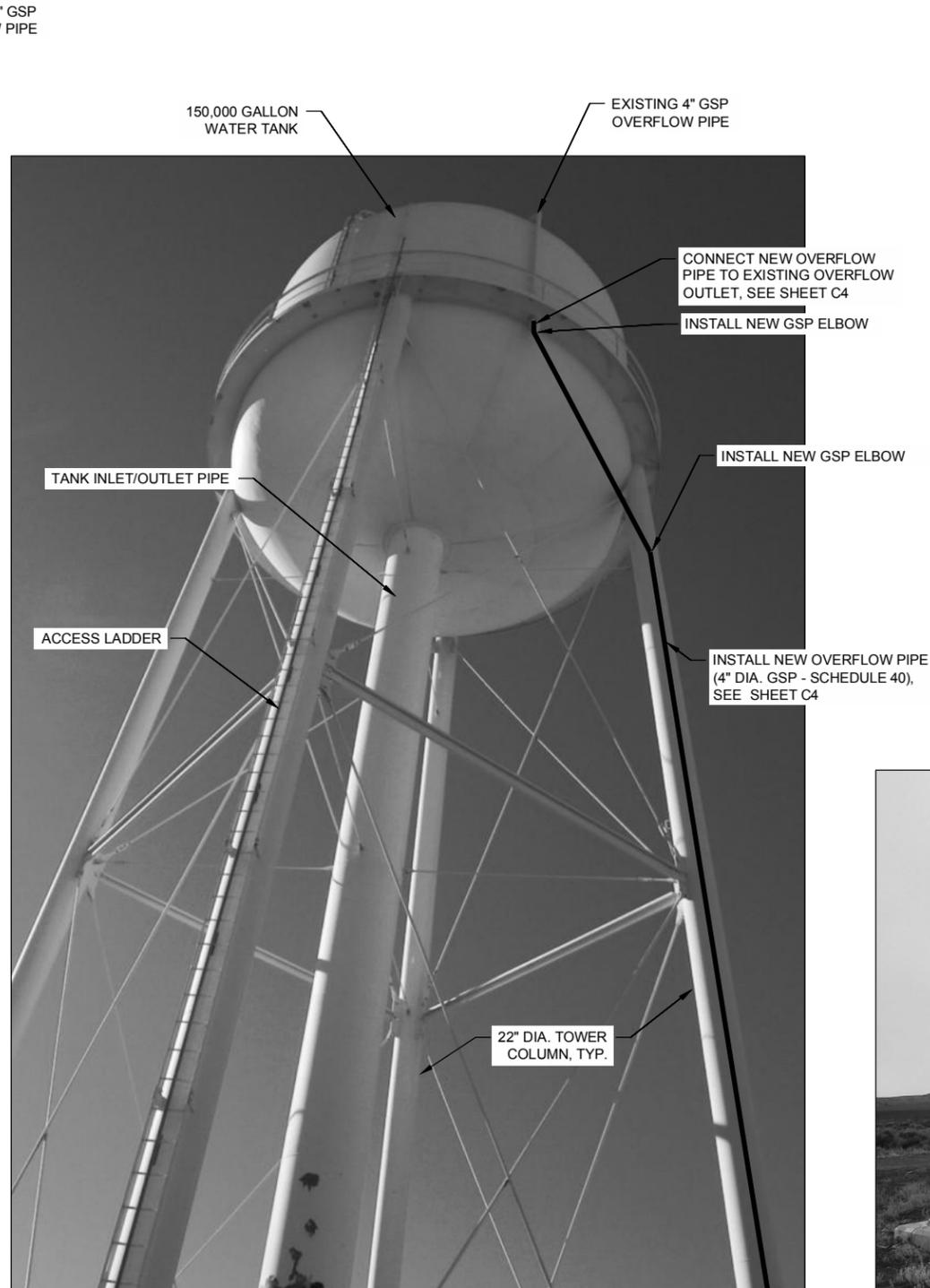
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**NOTES:**

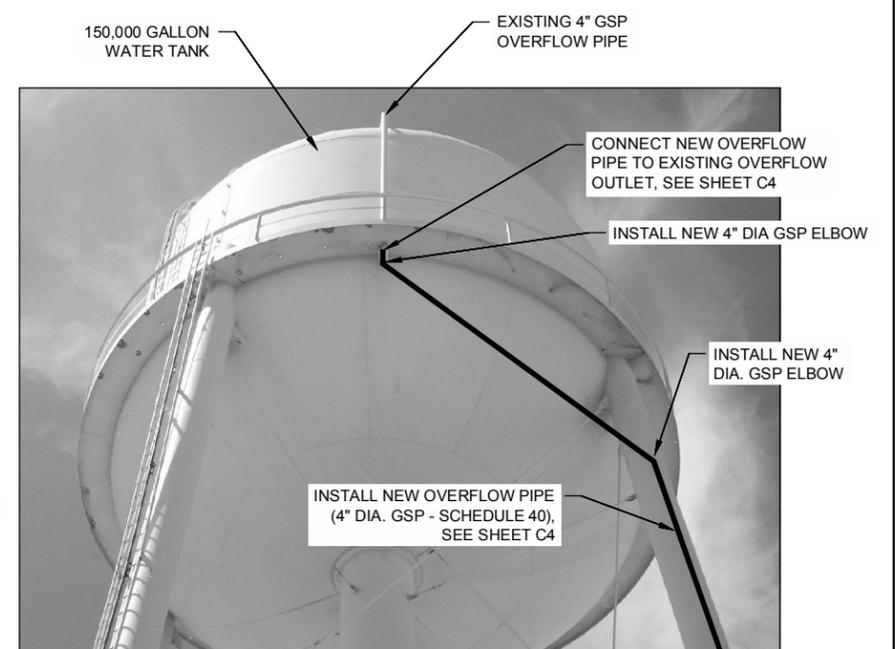
- 1. GSP REFERS TO GALVANIZED STEEL PIPE.



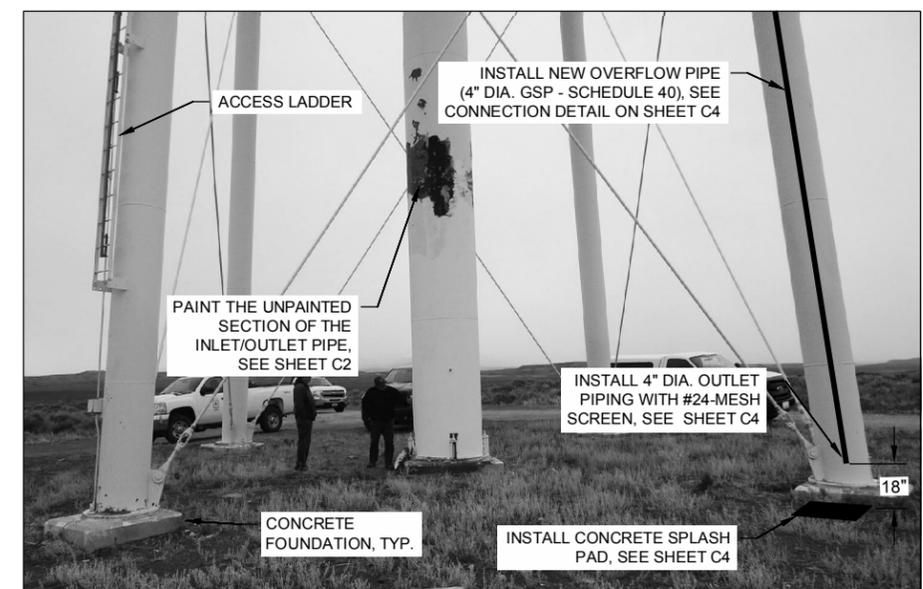
**EXISTING WATER TOWER**  
NOT TO SCALE



**OVERFLOW PIPING DETAIL (1 OF 3)**  
NOT TO SCALE



**OVERFLOW PIPING DETAIL (2 OF 3)**  
NOT TO SCALE



**OVERFLOW PIPING DETAIL (3 OF 3)**  
NOT TO SCALE

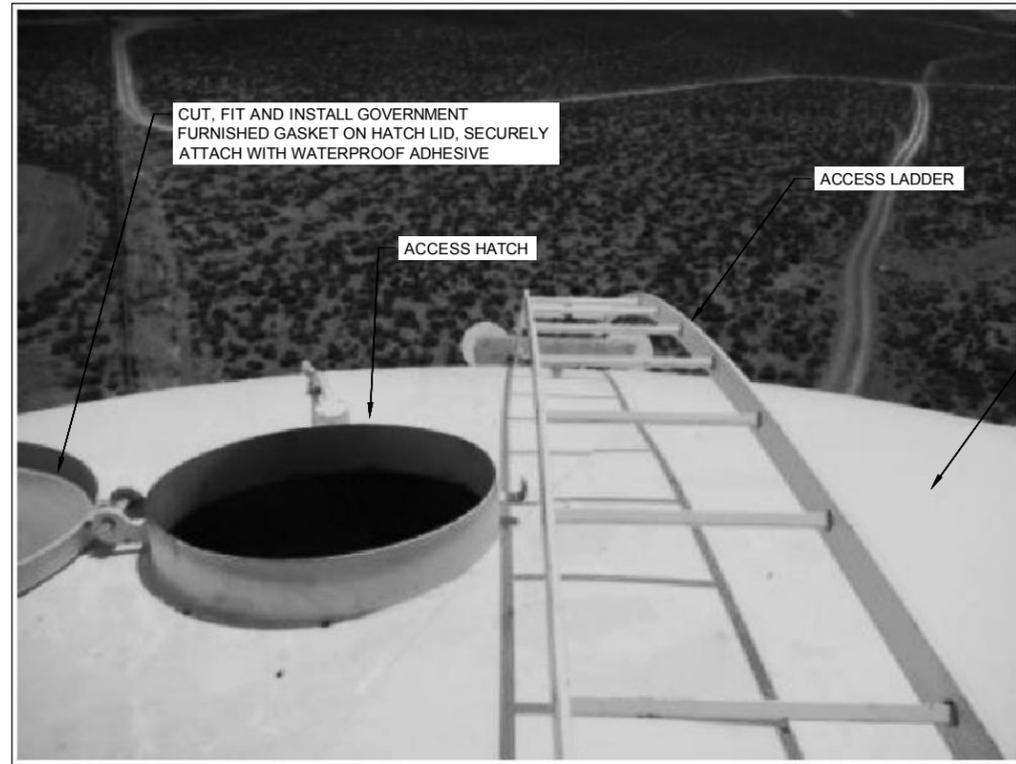


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APPROVED:	BY: A. MCKEAN	
DIRECTOR, ENGINEERING	CHECK: D. JEPPESEN/D. WENNER	

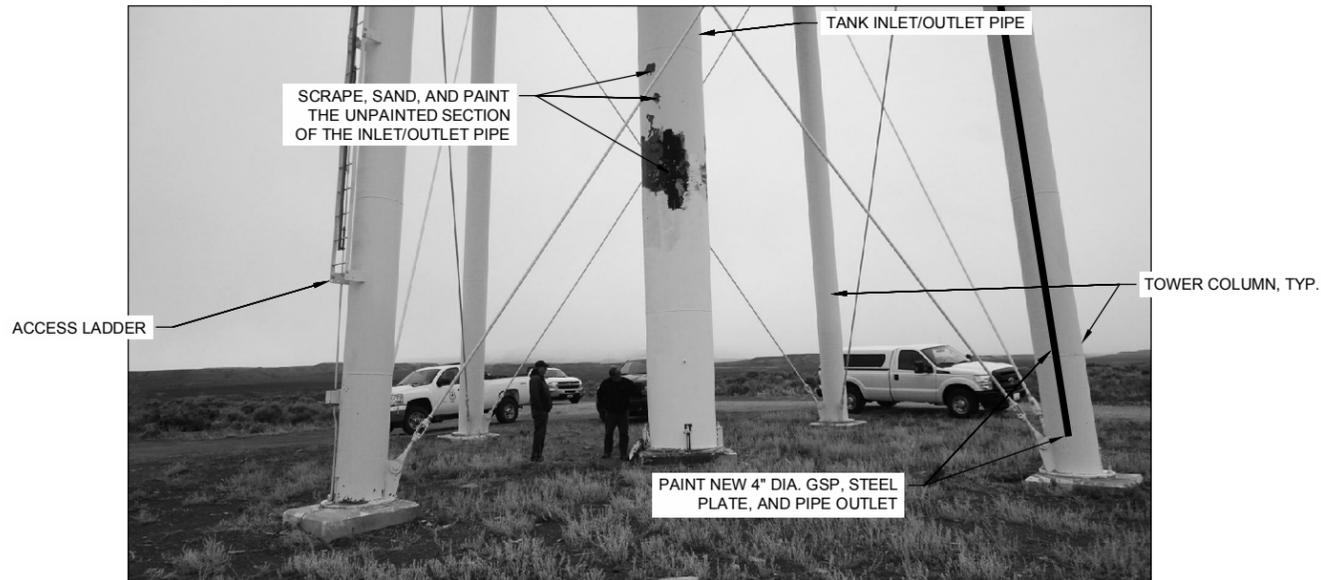
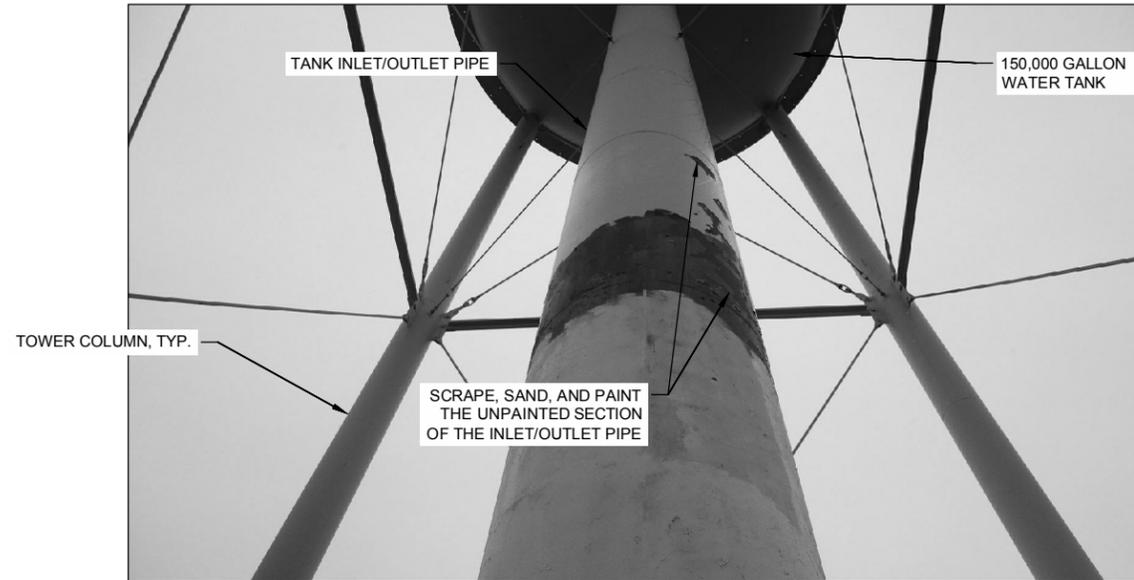
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**NOTES:**

- 1. GSP REFERS TO GALVANIZED STEEL PIPE.



**GASKET REPLACEMENT DETAIL**  
NOT TO SCALE



**PAINTING DETAIL**  
NOT TO SCALE

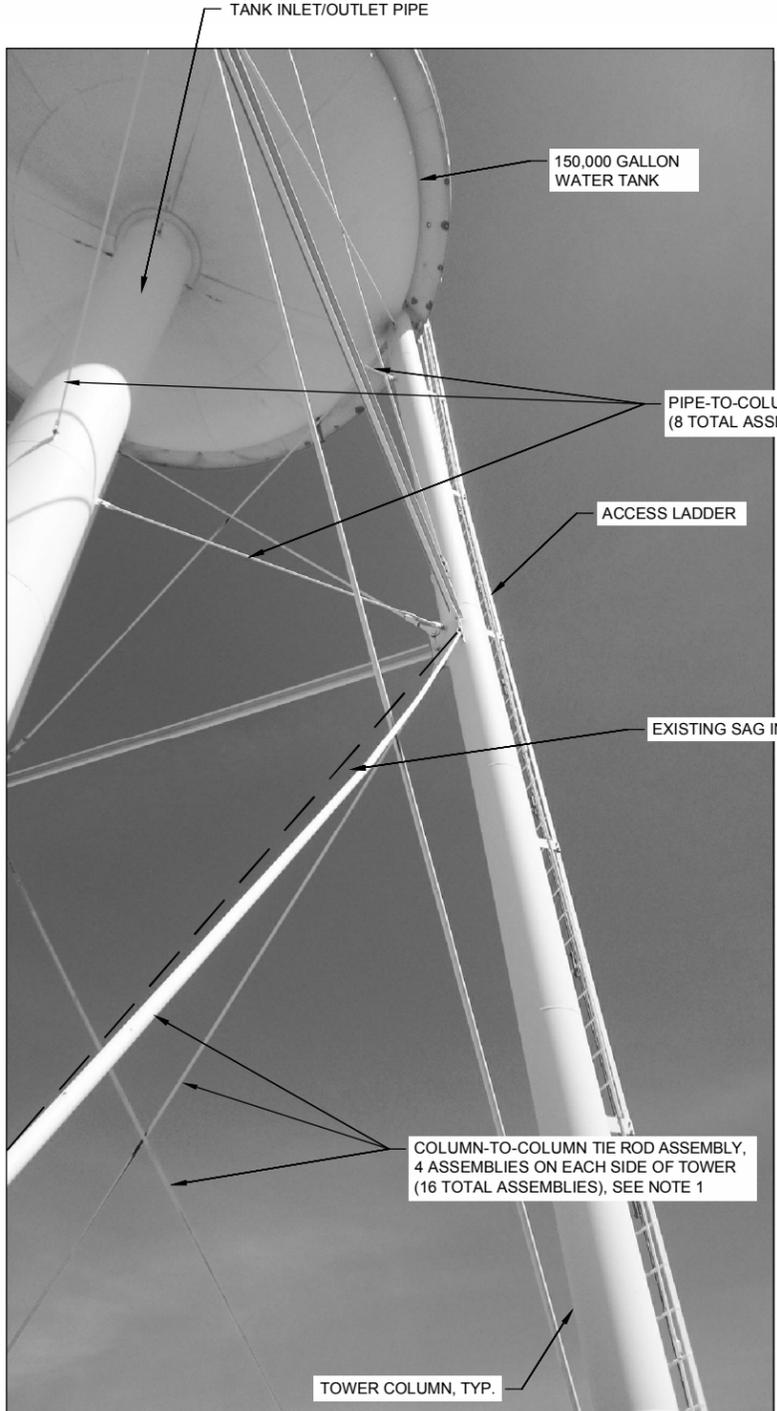


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	BY: A. MCKEAN		
	CHECK: D. JEPPESEN/D. WEMER		

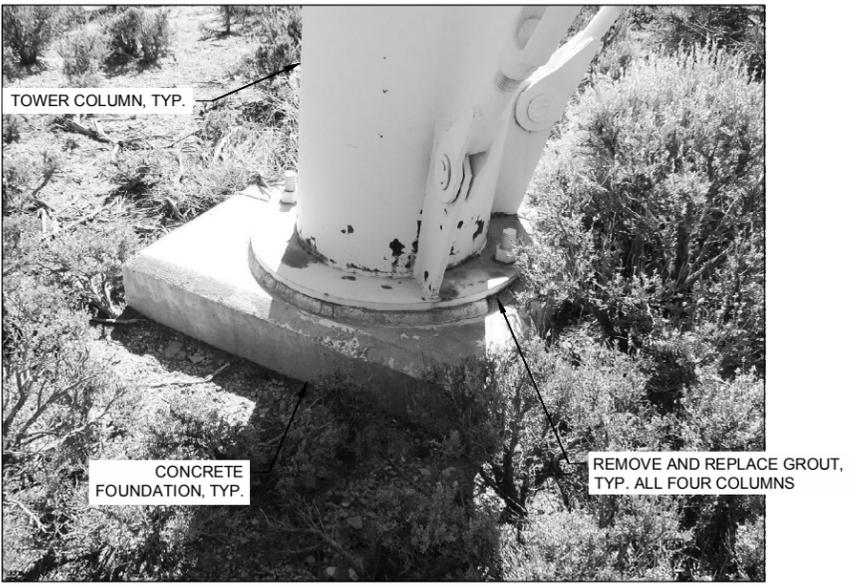
**BUCKBOARD WATER TANK MODIFICATIONS**  
GASKET REPLACEMENT & PAINTING DETAILS

**NOTES:**

1. THE CONTRACTOR SHALL ADJUST THE TENSIONS IN ALL COLUMN-TO-COLUMN AND PIPE-TO-COLUMN TIE RODS TO MANUFACTURER'S RECOMMENDATIONS. THERE ARE 16 COLUMN-TO-COLUMN TIE RODS (CROSS BRACING) AND 8 PIPE-TO-COLUMN TIE RODS, WITH A TOTAL OF 24 TIE RODS. THE CONTRACTOR SHALL ADJUST THE TURNBUCKLES ON EACH TIE ROD ASSEMBLY TO ELIMINATE SAGGING IN THE RODS.
2. GSP REFERS TO GALVANIZED STEEL PIPE.

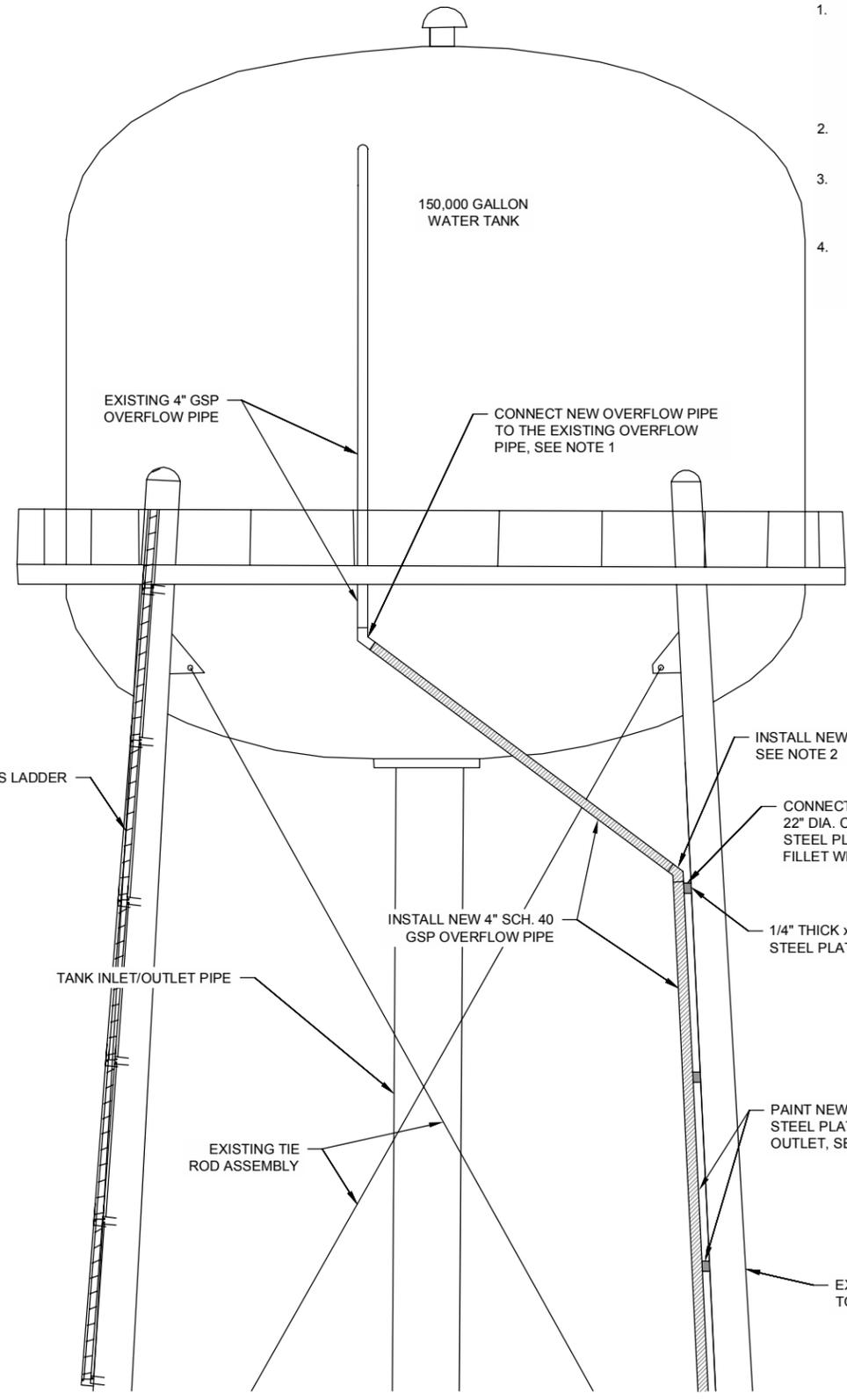


**TIE ROD TENSIONING DETAIL**  
NOT TO SCALE



**GROUT REPLACEMENT DETAIL**  
NOT TO SCALE

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	BY: A. MCKEAN		
	CHECK: D. JEPPESEN/D. NEWER		

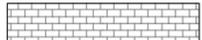


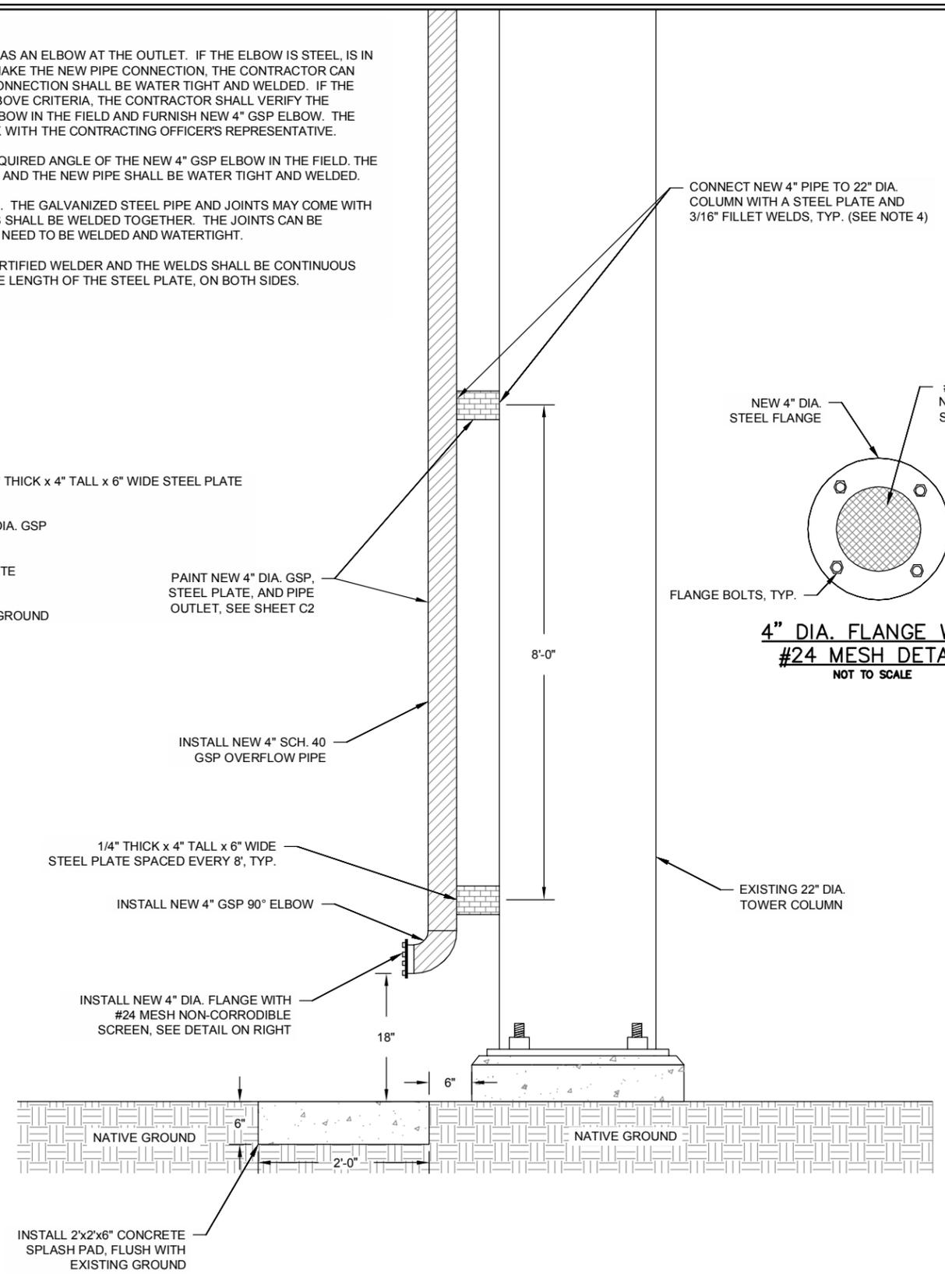
**UPPER PIPE CONNECTION**  
NOT TO SCALE

**NOTES:**

1. THE EXISTING OVERFLOW PIPE OUTLET HAS AN ELBOW AT THE OUTLET. IF THE ELBOW IS STEEL, IS IN GOOD CONDITION, AND CAN SWIVEL TO MAKE THE NEW PIPE CONNECTION, THE CONTRACTOR CAN USE THE EXISTING CONNECTION. THIS CONNECTION SHALL BE WATER TIGHT AND WELDED. IF THE EXISTING ELBOW DOES NOT MEET THE ABOVE CRITERIA, THE CONTRACTOR SHALL VERIFY THE REQUIRED ANGLE OF THE NEW 4" GSP ELBOW IN THE FIELD AND FURNISH NEW 4" GSP ELBOW. THE CONTRACTOR SHALL VERIFY THIS WORK WITH THE CONTRACTING OFFICER'S REPRESENTATIVE.
2. THE CONTRACTOR SHALL VERIFY THE REQUIRED ANGLE OF THE NEW 4" GSP ELBOW IN THE FIELD. THE CONNECTION BETWEEN THE NEW ELBOW AND THE NEW PIPE SHALL BE WATER TIGHT AND WELDED.
3. GSP REFERS TO GALVANIZED STEEL PIPE. THE GALVANIZED STEEL PIPE AND JOINTS MAY COME WITH TRHEADED ENDS. THE PIPES AND JOINTS SHALL BE WELDED TOGETHER. THE JOINTS CAN BE THREADED TOGETHER FIRST, BUT THEN NEED TO BE WELDED AND WATERTIGHT.
4. WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER AND THE WELDS SHALL BE CONTINUOUS 3/16" FILLET WELDS THAT RUN THE ENTIRE LENGTH OF THE STEEL PLATE, ON BOTH SIDES.

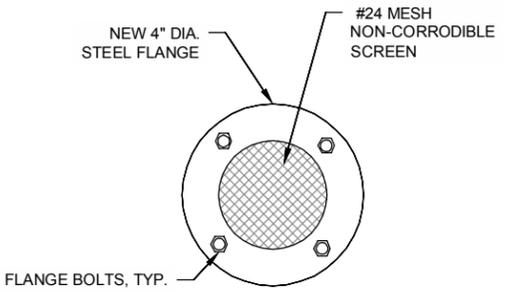
**LEGEND**

-  NEW 1/4" THICK x 4" TALL x 6" WIDE STEEL PLATE
-  NEW 4" DIA. GSP
-  CONCRETE
-  NATIVE GROUND



**LOWER PIPE CONNECTION**  
NOT TO SCALE

CONNECT NEW 4" PIPE TO 22" DIA. COLUMN WITH A STEEL PLATE AND 3/16" FILLET WELDS, TYP. (SEE NOTE 4)



**4" DIA. FLANGE WITH #24 MESH DETAIL**  
NOT TO SCALE



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APPROVED:	DIRECTOR, ENGINEERING	

**BUCKBOARD WATER TANK MODIFICATIONS**  
NEW OVERFLOW PIPE CONNECTIONS