

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

1-MG RESERVOIR ROOF REPLACEMENT & PAINTING

ISSUED FOR BID - NOVEMBER 2016

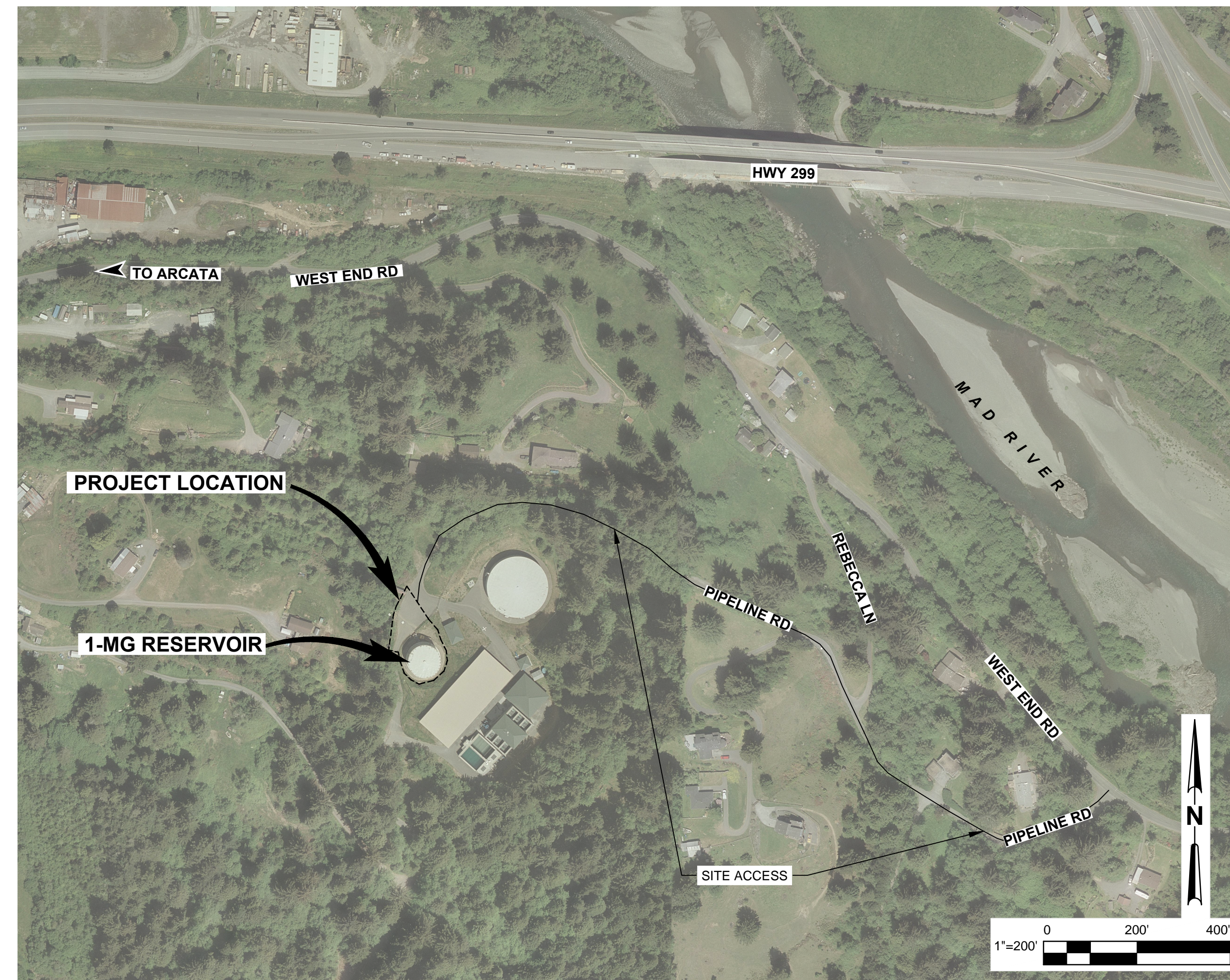
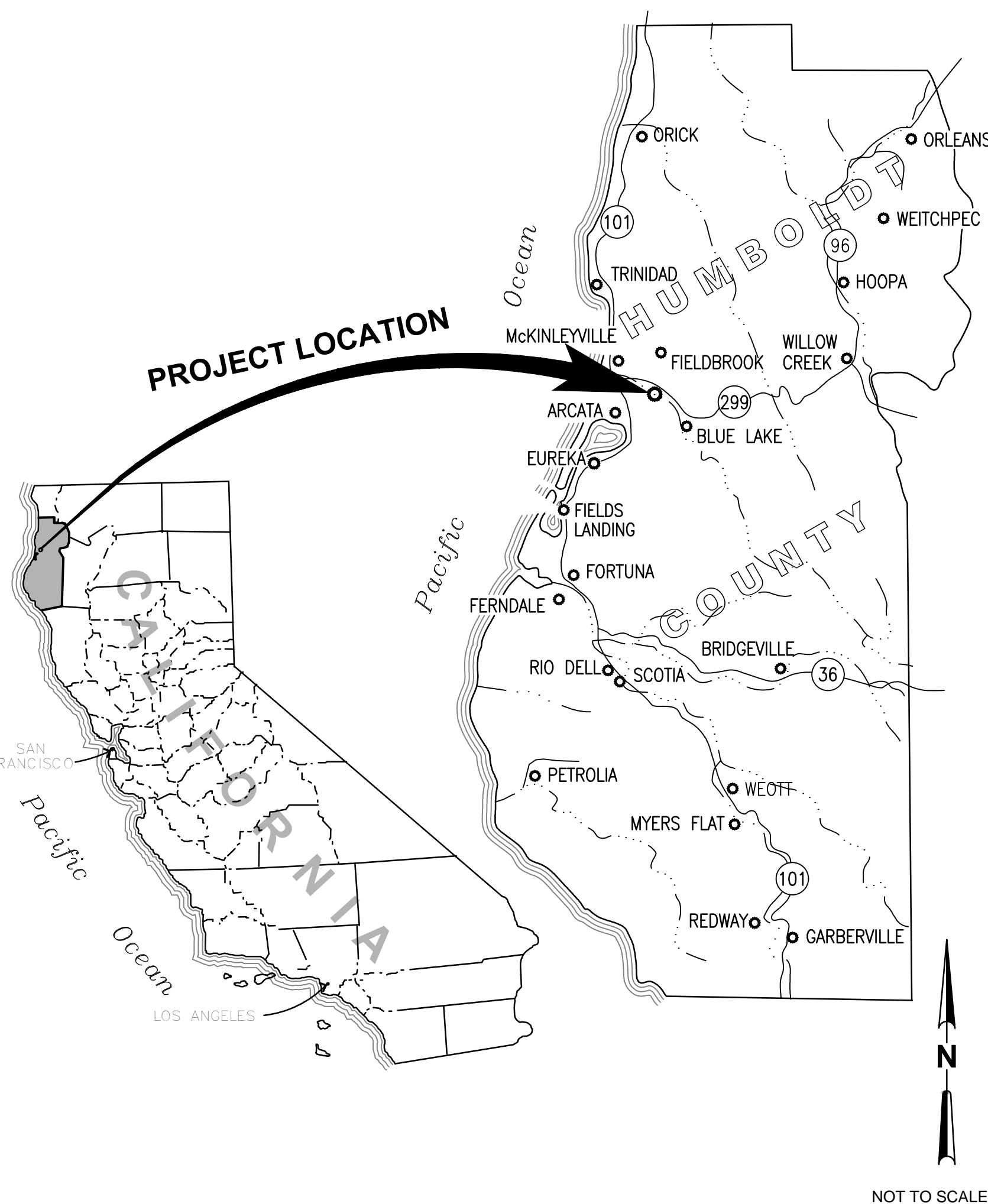
PREPARED BY



AREA MAP

LOCATION MAP

APPROVALS



PLANS AND SPECIFICATIONS APPROVED BY THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT, COUNTY OF HUMBOLDT, STATE OF CALIFORNIA, THIS 16th DAY OF NOVEMBER, 2016.

GENERAL MANAGER
PAUL HELLIKER

Paul Helliher
SIGNED

BOARD OF DIRECTORS

BARBARA HECATHORN	PRESIDENT
ALDARON LAIRD	VICE PRESIDENT
J. BRUCE RUPP	SECRETARY-TREASURER
SHERI WOO	ASSISTANT SECRETARY-TREASURER
NEAL LATT	DIRECTOR

ENGINEER: GHD Inc.
PATRICK KASPARI

PK
SIGNED 11/17/2016

SHEET INDEX

SHEET NO.	DRAWING	DESCRIPTION	SHEET NO.	DRAWING	DESCRIPTION
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0	ISSUE FOR BID	SJD	PK	AC	11/17/16				
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date			

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Drawn	BKW	Designer	BKW
Drafting Check	NS	Design Check	PK
Scale	AS SHOWN		

Client	HUMBOLDT BAY MUNICIPAL WATER DISTRICT		
Project	1-MG RESERVOIR ROOF REPLACEMENT & PAINTING		
Title	COVER SHEET		
Contract No.	11125099		
Original Size	Ansi D		
Drawing No:	G001		
Sheet	1	of	10
Rev:	0		

GENERAL SITE NOTES

- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND BECOMING FAMILIAR WITH THE SITE CONDITIONS PRIOR TO BIDDING.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE ALL SURVEY MONUMENTS, FENCES, ROADS, CORNER PIPES, OR OTHER SITE DEVELOPMENTS DISTURBED DURING THE PROCESS OF CONSTRUCTION AT THE CONTRACTOR'S OWN EXPENSE. IF A MONUMENT HAS THE POTENTIAL OF BEING DISTURBED, A CORNER RECORD SHALL BE FILED WITH THE COUNTY SURVEYOR (PER SECTION 8773.2 OF THE PUBLIC LAND SURVEYORS ACT) AS REQUIRED BY THE SUBDIVISION MAP ACT TO PRESERVE THE LOCATION OF SAID MONUMENT. CONTRACTOR SHALL, AT HIS/HER EXPENSE, HIRE A CIVIL ENGINEER OR LAND SURVEYOR TO PERFORM THE WORK.
- CONTRACTOR SHALL PROVIDE ADEQUATE DUST AND EROSION AND SEDIMENT CONTROL AND KEEP MUD AND DEBRIS OFF ROADS AT ALL TIMES.
- CONTRACTOR SHALL USE DESIGNATED STAGING AREAS AND ANY OTHER AREAS AS DEPICTED ON THESE DOCUMENTS FOR STAGING CONSTRUCTION EQUIPMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION. ADEQUATE BRACING, FALL PROTECTION, AND SUPPORTS SHALL BE USED TO PROVIDE PROPER TEMPORARY INTEGRITY AND WORKER PROTECTION DURING ALL PHASES OF CONSTRUCTION.
- UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL. ALL DAMAGE CAUSED BY THE CONTRACTOR SHALL BE RESTORED TO AN "AS GOOD OR BETTER" CONDITION.

VEGETATION PROTECTION AND RESTORATION NOTES

- NO CUTTING OF ANY PART OF TREES, INCLUDING ROOTS, SHALL BE DONE WITHOUT SECURING APPROVAL FROM OWNER.
- ALL EXISTING LANDSCAPED AND UNPAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE HAND RAKED SMOOTH AND RETURNED TO ORIGINAL EXISTING CONDITIONS.
- LANDSCAPING THAT IS REMOVED TO FACILITATE CONSTRUCTION SHALL BE REPLACED IN KIND.

UTILITY NOTES

- LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE PLOTTED FROM RECORD DRAWINGS AND INTERPOLATION OF PHYSICAL EVIDENCE ON THE SITE AND ARE SUBJECT TO FIELD VERIFICATION BY THE CONTRACTOR.

HAZARDOUS MATERIAL NOTES

- A HAZARDOUS MATERIALS SURVEY WAS CONDUCTED AT THE 1MG RESERVOIR ON AUGUST 19, 2016. SEE THE REPORT BY GHD, INC. TITLED HUMBOLDT BAY MUNICIPAL WATER DISTRICT, 1MG RESERVOIR ROOF REPLACEMENT PROJECT, HAZARDOUS MATERIALS ASSESSMENT SURVEY REPORT (PART 5 OF THE PROJECT SPECIFICATIONS).
 - VARIOUS SAMPLED SURFACE COATINGS WERE REPORTED TO CONTAIN LEAD AND/OR CHROMIUM.
 - AS THE CONCENTRATION OF LEAD REPORTED BY THE LABORATORY WAS BELOW 90 MG/KG, THE SAMPLES DO NOT MEET THE REGULATORY DEFINITION OF LEAD CONTAINING PAINT OR LEAD BASED PAINT.
 - NO SAMPLE WAS REPORTED TO CONTAIN HEXAVALENT CHROMIUM (CHROMIUM VI).
 - NO SAMPLES WERE REPORTED TO CONTAIN ASBESTOS ABOVE THE REPORTING LEVELS.
 - WORK AT THE PROJECT SITE WHICH INVOLVES DISTURBANCE OF PAINTED COATINGS SHALL BE UNDERSTOOD TO BE A TRIGGER TASK WITH REGARDS TO: LEAD AND CHROMIUM PER TITLE 8, CCR.
 - SURFACE COATINGS OF THE 1MG RESERVOIR SHOULD BE UNDERSTOOD TO BE SUBJECT TO APPLICABLE GOVERNMENTAL REGULATIONS CONCERNING LEAD AND CHROMIUM.
 - CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMANCE WITH ALL STATE AND FEDERAL REGULATIONS WITH RESPECT TO HAZARDOUS MATERIALS HANDLING AND DISPOSAL AND FOR PROTECTION OF HIS WORKERS AND OWNERS AND OWNERS REPRESENTATIVE PERSONNEL ON SITE.

ABBREVIATIONS

A B	ANCHOR BOLT	M	METER
AB	AGGREGATE BASE	MAX	MAXIMUM
AC	ASPHALT CONCRETE	MFR	MANUFACTURER
AGG	AGGREGATE	MG	MILLION GALLON
ARV	AIR VACUUM RELEASE VALVE	MH	MANHOLE
AVE	AVENUE	MIN	MINIMUM
AWWA	AMERICAN WATER WORKS ASSOCIATION	MPG	MEDIUM PRESSURE GAS
		MISC	MISCELLANEOUS
B-	BORING	N	NORTH
BC	BEGIN CURVE	(N)	NEW
BF	BLIND FLANGE	NIC	NOT IN CONTRACT
BFP	BACK FLOW PREVENTER	NO	NUMBER
BM	BENCH MARK	NPT	NATIONAL PIPE THREAD
BLDG	BUILDING	NTS	NOT TO SCALE
BLVD	BOULEVARD		
BO	BLOW OFF	OC	ON CENTERS
BOT	BOTTOM	OPNG	OPENING
BVC	BEGIN VERTICAL CURVE		
C	CONDUIT	PC	POINT OF CURVATURE
CB	CATCH BASIN	PCC	PORTLAND CONCRETE CEMENT
CBC	CALIFORNIA BUILDING CODE	PE	POLYETHYLENE
CCR	CALIFORNIA CODE OF REGULATIONS	PI	POINT OF INTERSECTION
CI	CAST IRON	PL	PROPERTY LINE
CL	CENTERLINE	PL	PLATE
CLR	CLEAR, CLEARANCE	PLCS	PLACES
CO	CLEAN OUT	PLWD	PLYWOOD
CMP	CORRUGATED METAL PIPE	POC	POINT OF CONNECTION
CMU	CONCRETE MASONRY UNIT	PP	POWER POLE
CONC	CONCRETE	PRV	PRESSURE REDUCING VALVE
CONT	CONTINUOUS	PSI	POUNDS PER SQUARE INCH
CONT'D	CONTINUED	PT	POINT
COR	CORNER	PT	POINT OF TANGENCY
CU	CUBIC	PT	PRESSURE TREATED
CV	CHECK VALVE	PTFE	POLYTETRAFLUOROETHYLENE
		PVC	POLYVINYL CHLORIDE PLASTIC PIPE
d	PENNY (NAIL SIZE)	R	RADIUS
DIA, Ø	DIAMETER	RC	RELATIVE COMPACTION
DTL	DETAIL	RCP	REINFORCED CONCRETE PIPE
DI	DROP (DRAINAGE) INLET	RD	ROAD
DF	DOUGLAS FIR	RDWD	REDWOOD
DR	DRIVE	REQ'D	REQUIRED
DW	DOMESTIC WATER LINE	REQ'T	REQUIREMENT
DWG	DRAWING	RPP	REDUCED PRESSURE PRINCIPAL
(E)	EXISTING	RT	RIGHT
E	EAST, OR EASTING	RW	RIGHT OF WAY
EA	EACH	S	SLOPE
EC	END CURVE	SAT	SATURATED
EF	EACH FACE	SCH, OR	SCHEDULE
EP	EDGE PAVEMENT	SD	STORM DRAIN
EQ	EQUAL	SDMH	STORM DRAIN MANHOLE
ER	EDGE ROAD	SDCB	STORM DRAIN CATCH BASIN
EL/ELEV	ELEVATION	SHT	SHEET
ELEC	ELECTRIC, OR ELECTRICAL	SIM	SIMILAR
ENGR	ENGINEER	SO	SOUTH
EVC	END VERTICAL CURVE	SS	SANITARY SEWER
EW	EACH WAY	SSMH	SANITARY SEWER MANHOLE
FDC	FIRE DEPARTMENT CONNECTION	SSTL	STAINLESS STEEL
FIN	FINISH	STA	STATION
FF	FINISH FLOOR	STD	STANDARD
FG	FINISH GRADE	STL	STEEL
FH	FIRE HYDRANT	TC	TOP OF CURB
FL	FIRE LINE	T, OR	THICK
FLR	FLOOR	TEL	TELEPHONE
FO	FIBER OPTIC	THK	THICK
FP	FIRE PROTECTION	TG	TOP OF GRATE
FS	FINISHED SURFACE	TP	TEST PIT
FT	FOOT, OR FEET	TRF	TURBIDITY REDUCTION FACILITY
FTG	FOOTING	TS	TOP OF SLAB
		TW	TOP OF WALL
G	GAS LINE	TYP	TYPICAL
GAL	GALLON	UBC	UNIFORM BUILDING CODE
GALV	GALVANIZED	UNO	UNLESS NOTED OTHERWISE
GR	GRADE	UP	UTILITY POLE
GRD	GROUND	V	VOLT(S)
GV	GATE VALVE	VERT	VERTICAL
HB	HOSE BIBB	W/	WITH
HCSB	HUMBOLDT COMMUNITY SERVICES	W	WATER
DISTRICT		WD	WIDE
HDD	HORIZONTAL DIRECTIONAL DRILLING	XING	CROSSING
HDPE	HIGH-DENSITY POLYETHYLENE	YD	YARD
HORZ	HORIZONTAL	&	AND
HPG	HIGH PRESSURE GAS	@	AT
HPNS	HIGH PRESSURE NATURAL GAS	°	DEGREE
HPS	HIGH PRESSURE SODIUM	Ø	DIAMETER
HWY	HIGHWAY	'	FEET
		"	INCHES
IE	INVERT ELEVATION	#	NUMBER
INV	INVERT	±	PLUS OR MINUS
IP	IRON PIPE		
IRR	IRRIGATION		
JCT	JUNCTION		
JP	JUNCTION POLE (UTILITY)		
L	LENGTH		
LAT	LATERAL		
LF	LINEAR FEET		
LS	LIFT STATION		
LT	LEFT		

NOTE:
CONTACT ENGINEER FOR ABBREVIATIONS NOT LISTED.

PLAN SYMBOLS

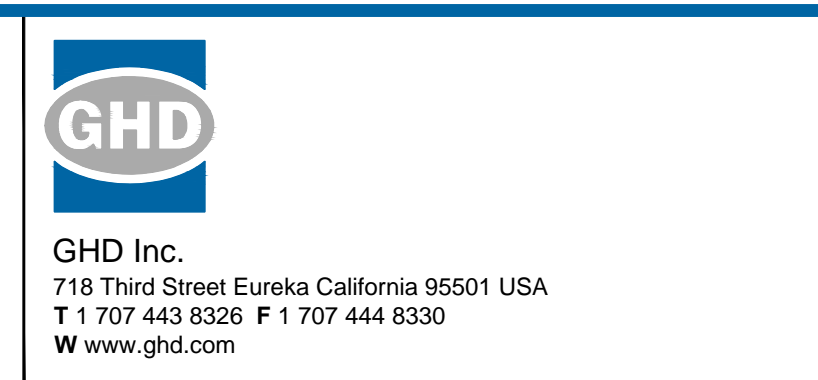
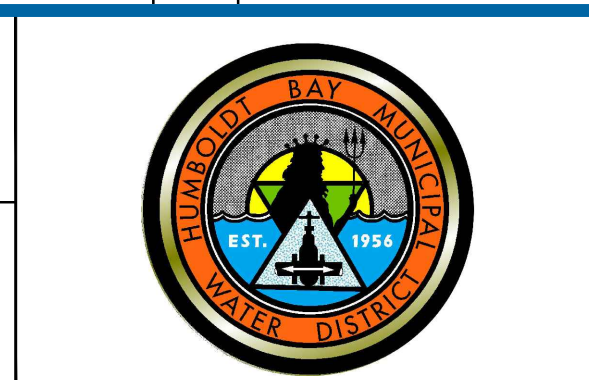
	EDGE OF AC PAVEMENT		GAS METER
	OVERHEAD WIRES		GAS VALVE
	OVERHEAD ELECTRIC WIRES		WATER METER
	OVERHEAD TELEPHONE WIRES		WATER VALVE
	UNDERGROUND ELECTRIC LINE		WATER VAULT
	ELECTRIC LINE		HOSE BIBB
	STREET LIGHT CONDUIT		FIRE HYDRANT
	GAS LINE		WATER TAPPING SADDLE
	SANITARY SEWER LINE		SANITARY SEWER MANHOLE
	SANITARY SEWER FORCE MAIN		SANITARY SEWER CLEANOUT
	STORM DRAIN LINE		SEWER VENT
	TELEPHONE LINE		STORM DRAIN MANHOLE
	TELECOMMUNICATIONS		CATCH BASIN
	LIGHTING CONDUIT		CURB INLET
	TELEVISION LINE		DRAINAGE INLET
	WATER LINE		STORM DRAIN CLEANOUT
	WATER LINE TO ABANDONED		ELECTRIC VAULT COVER
	WATER LINE TO BE DEMOLISHED		ELECTRIC PULLBOX
	CHAIN LINK FENCE		TELEPHONE PULLBOX
	CONTOUR ELEVATION LINE		HIGH VOLTAGE ELECTRIC
	CENTER LINE		TELEPHONE MANHOLE
	PROPERTY LINE		POWER POLE
	MONUMENT LINE		GUY WIRE & ANCHOR
	EASEMENT LINE		JOINT POLE WITH (2) RISERS
	SPOT ELEVATION		JOINT POLE
			STREET LIGHT
			ELECTROLIER
			SIGN (AS NOTED)

GENERAL SHEET SYMBOLS

	KEYNOTE		DEMOLITION NOTE
	DETAIL INDICATOR		SECTION INDICATOR

0	ISSUE FOR BID	SJD	PK	AC	11/17/16
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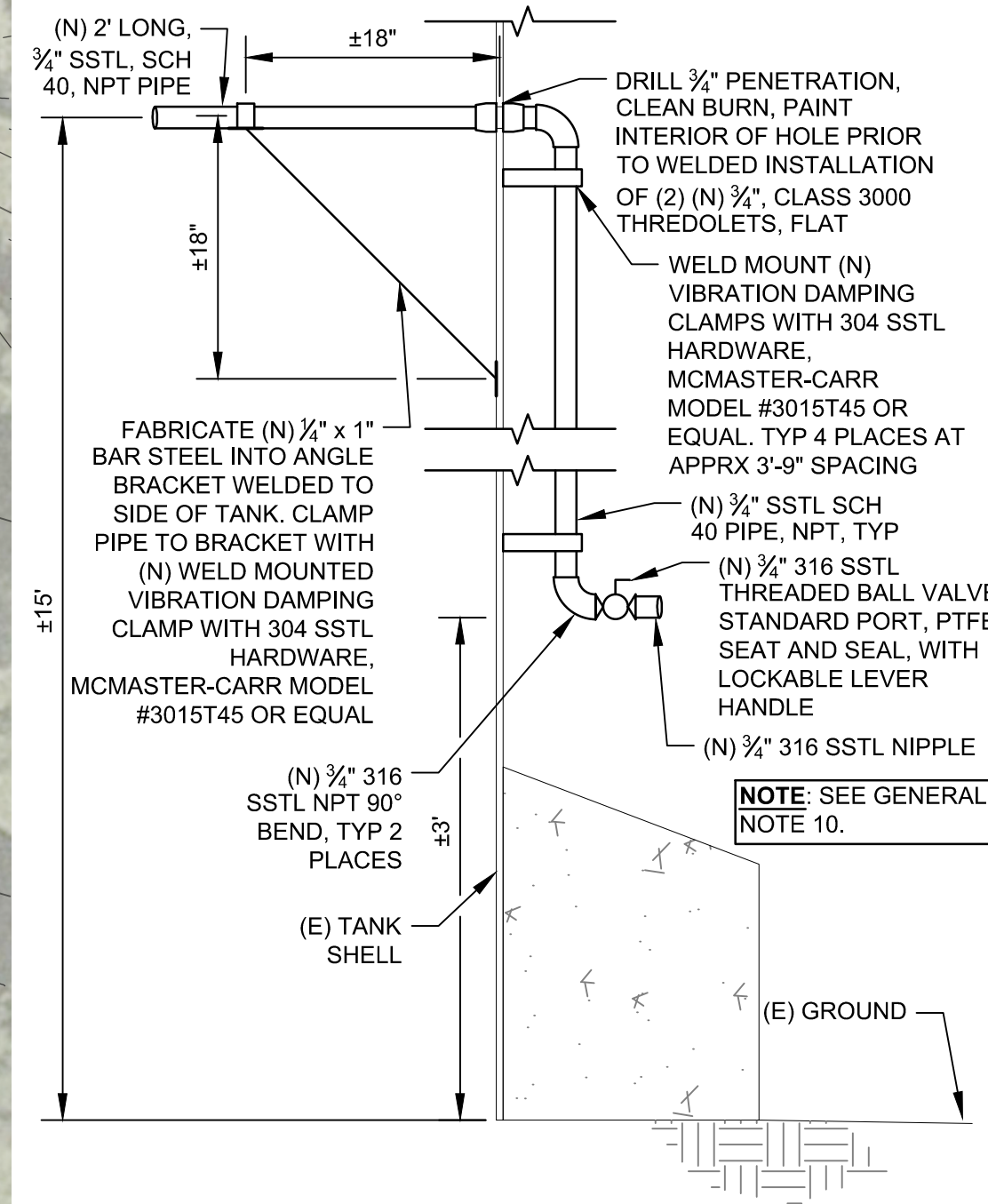
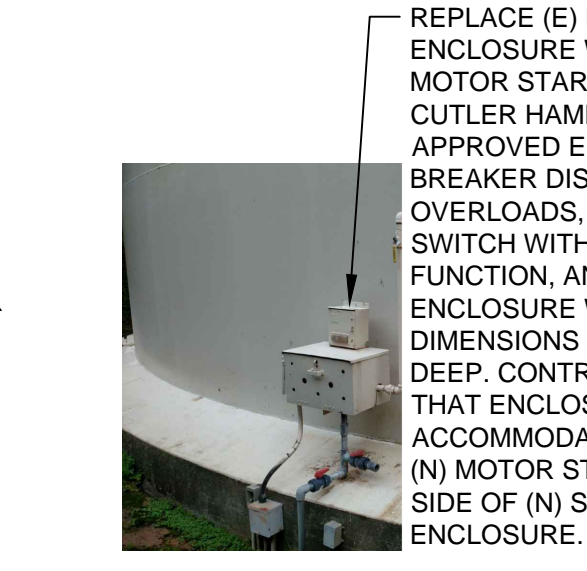
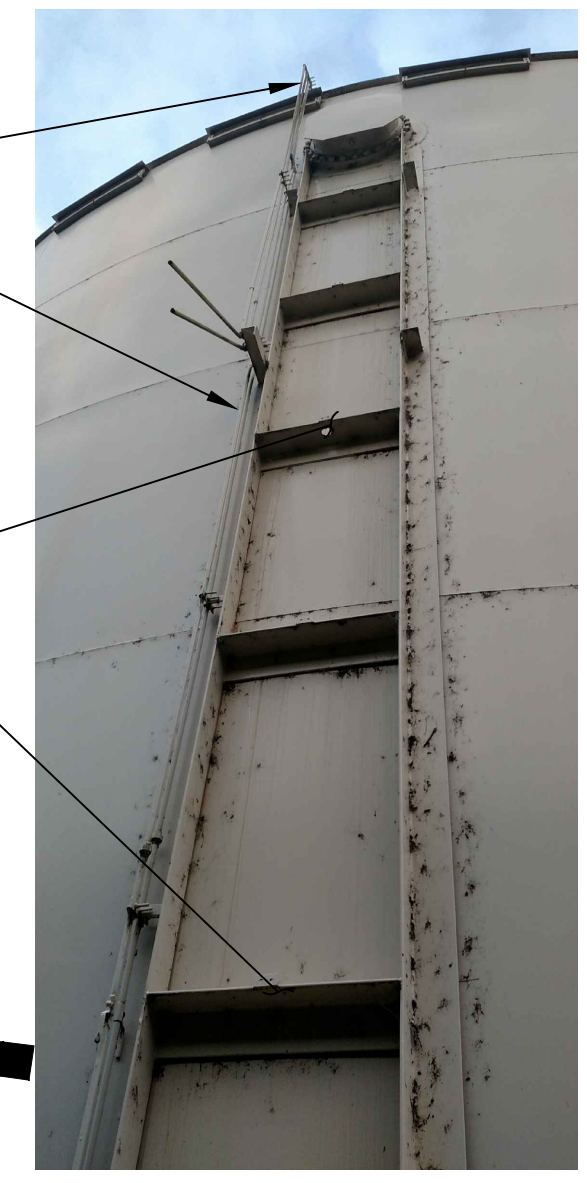
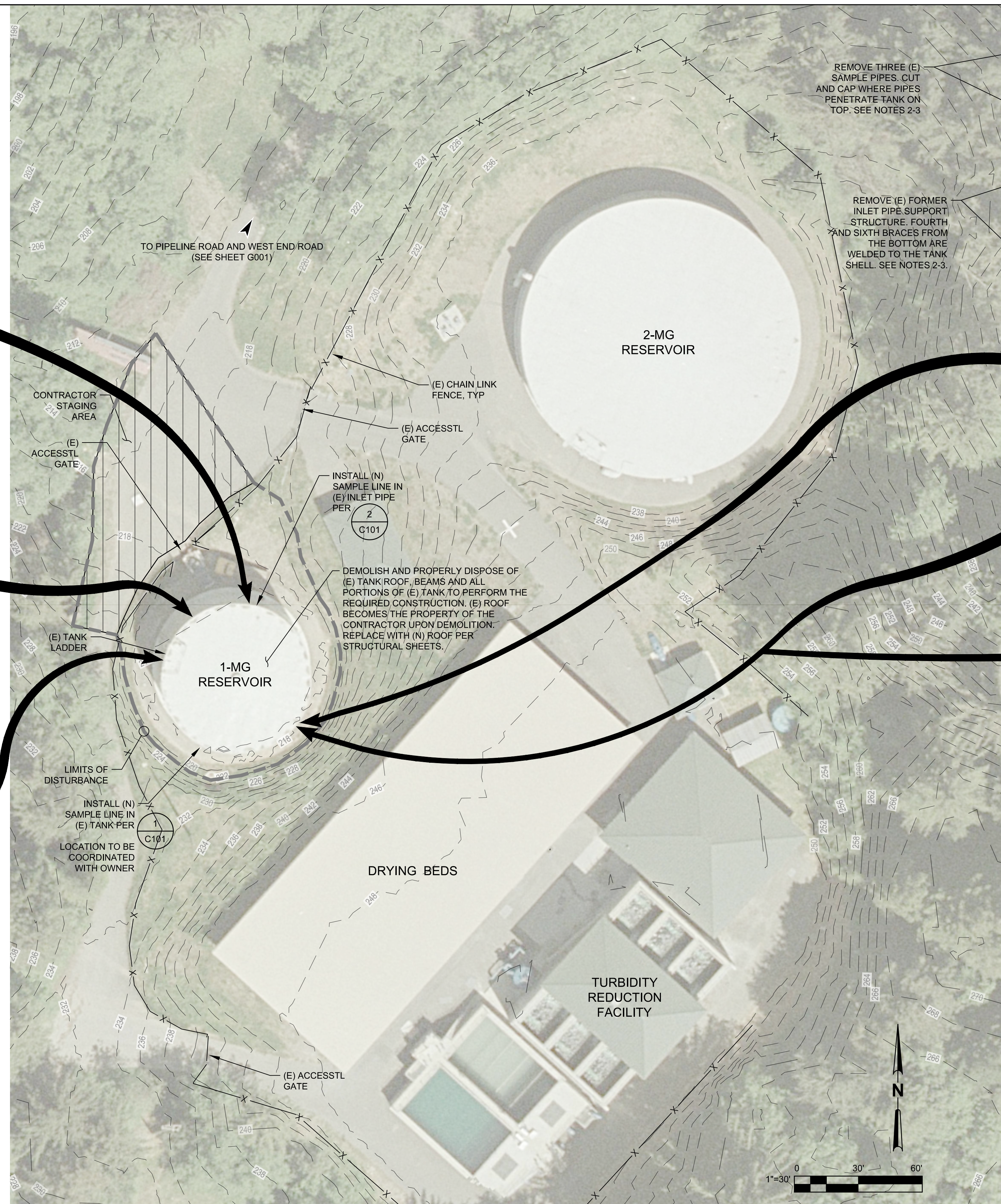


Drawn	BKW	Designer	BKW
Drafting Check	NS	Design Check	PK
Scale	AS SHOWN	This Drawing shall not be used for Construction unless Signed and Sealed For Construction	

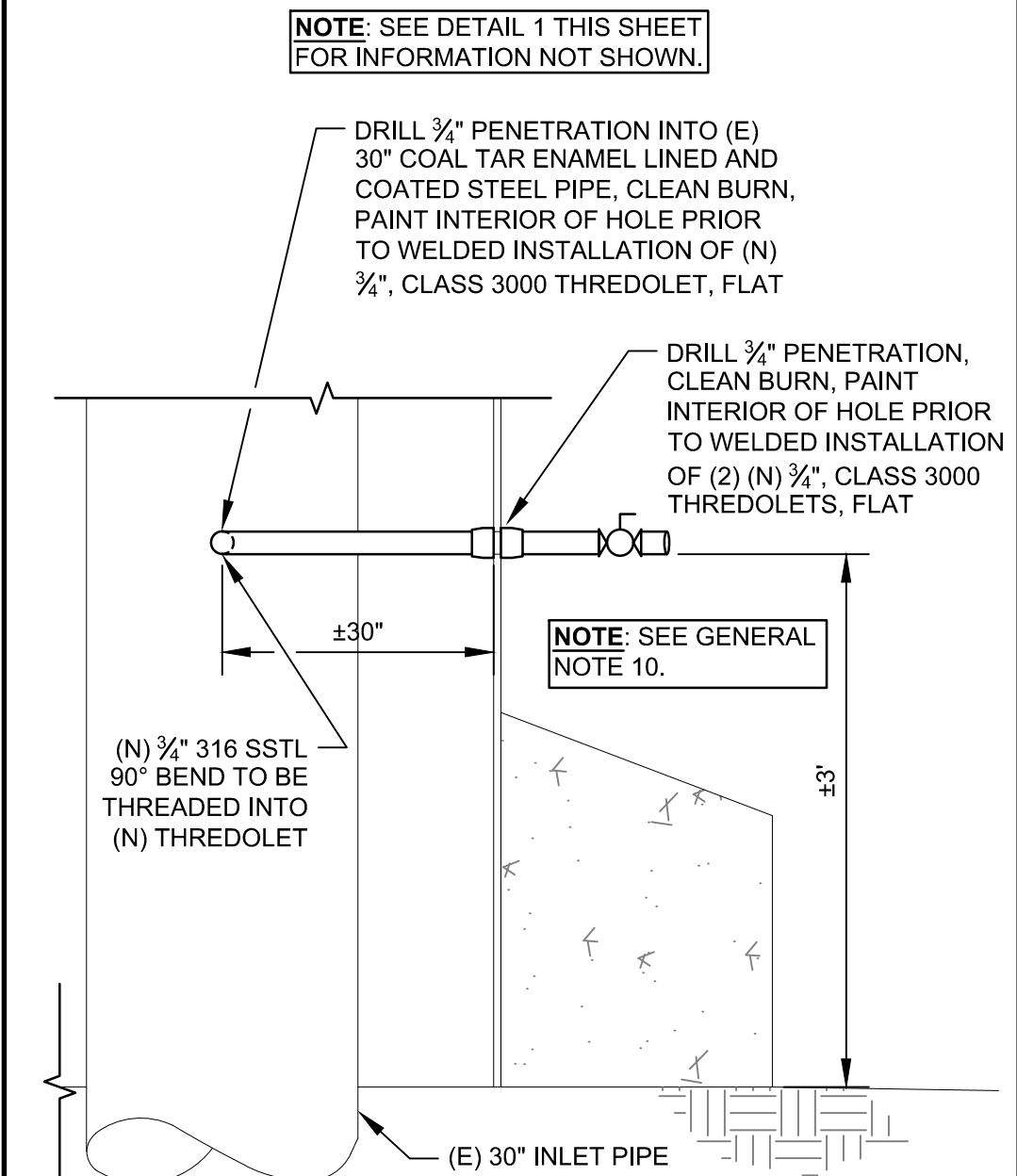
Client	HUMBOLDT BAY MUNICIPAL WATER DISTRICT		
Project	1-MG RESERVOIR ROOF REPLACEMENT & PAINTING		
Title	GENERAL NOTES, SYMBOLS, & ABBREVIATIONS		
Contract No.	11125099		
Original Size	Ansi D Drawing No: G002		
Sheet	2 of 10		Rev: 0

SHEET GENERAL NOTES

1. CONTOURS SHOWN ON THIS DRAWING ARE NOT THE PRODUCT OF SURVEY AND ARE APPROXIMATE.
2. THE INTERIOR OF THE (E) 1-MG TANK AND NEW ROOF SHALL BE PREPPED AND PAINTED PER SPECIFICATION SECTION 09 91 00 - TANK PREPARATION AND COATING. REQUIRED TOUCH-UP PAINT LOCATIONS ON THE EXTERIOR OF THE TANK SHALL ALSO BE PREPPED AND PAINTED PER THE ABOVE REFERENCED SPECIFICATION.
3. WHERE ITEMS ARE TO BE REMOVED FROM THE OUTSIDE OF THE TANK, THE CONTRACTOR SHALL GRIND DOWN AND PAINT OVER ALL (E) BOLT PENETRATIONS, BRACKETS, ETC. IT SHALL BE ASSUMED THAT THESE AND ANY OTHER LOCATIONS REQUIRING PAINTING SHALL BE PREPPED AND PAINTED PER SPECIFICATION SECTION 09 91 00.
4. ALL NEW METAL COMPONENTS SHALL BE PREPPED AND COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09 91 00.
5. CONTRACTOR SHALL COORDINATE WITH OWNER FOR TRANSFER OF UTILITY CONNECTIONS INSIDE ENCLOSURES THAT ARE TO BE REPLACED.
6. CONTRACTOR MAY REMOVE FENCING AS NEEDED FOR THE PERFORMANCE OF THE WORK, BUT IS RESPONSIBLE FOR THE REPLACEMENT OF THE FENCE TO RETURN IT TO EXISTING CONDITION, AND FOR THE PLACEMENT OF TEMPORARY FENCING DURING THE PERFORMANCE OF THE WORK TO PREVENT PUBLIC ACCESS TO THE SITE.
7. THE OWNER SHALL REMOVE THE (E) CATHODIC PROTECTION ANODES PRIOR TO THE PERFORMANCE OF THE WORK AND SHALL REPLACE THEM UPON PROJECT COMPLETION.
8. THE OWNER SHALL DRAIN AND PERFORM INITIAL "MUCK OUT" OF THE TANK PRIOR TO THE PERFORMANCE OF THE WORK.
9. THE OWNER WILL PERFORM ALL ELECTRICAL WORK REQUIRED FOR REPLACEMENT OF ELECTRICAL COMPONENTS.
10. CONTRACTOR SHALL PROVIDE SUBMITTALS/SHOP DRAWINGS PRIOR TO FABRICATION AND/OR ORDERING OF ENCLOSURES, EQUIPMENT, PARTS, ETC.



1 SAMPLE LINE DETAIL #1
SCALE: NOT TO SCALE
C101



2 SAMPLE LINE DETAIL #2
SCALE: NOT TO SCALE
C101

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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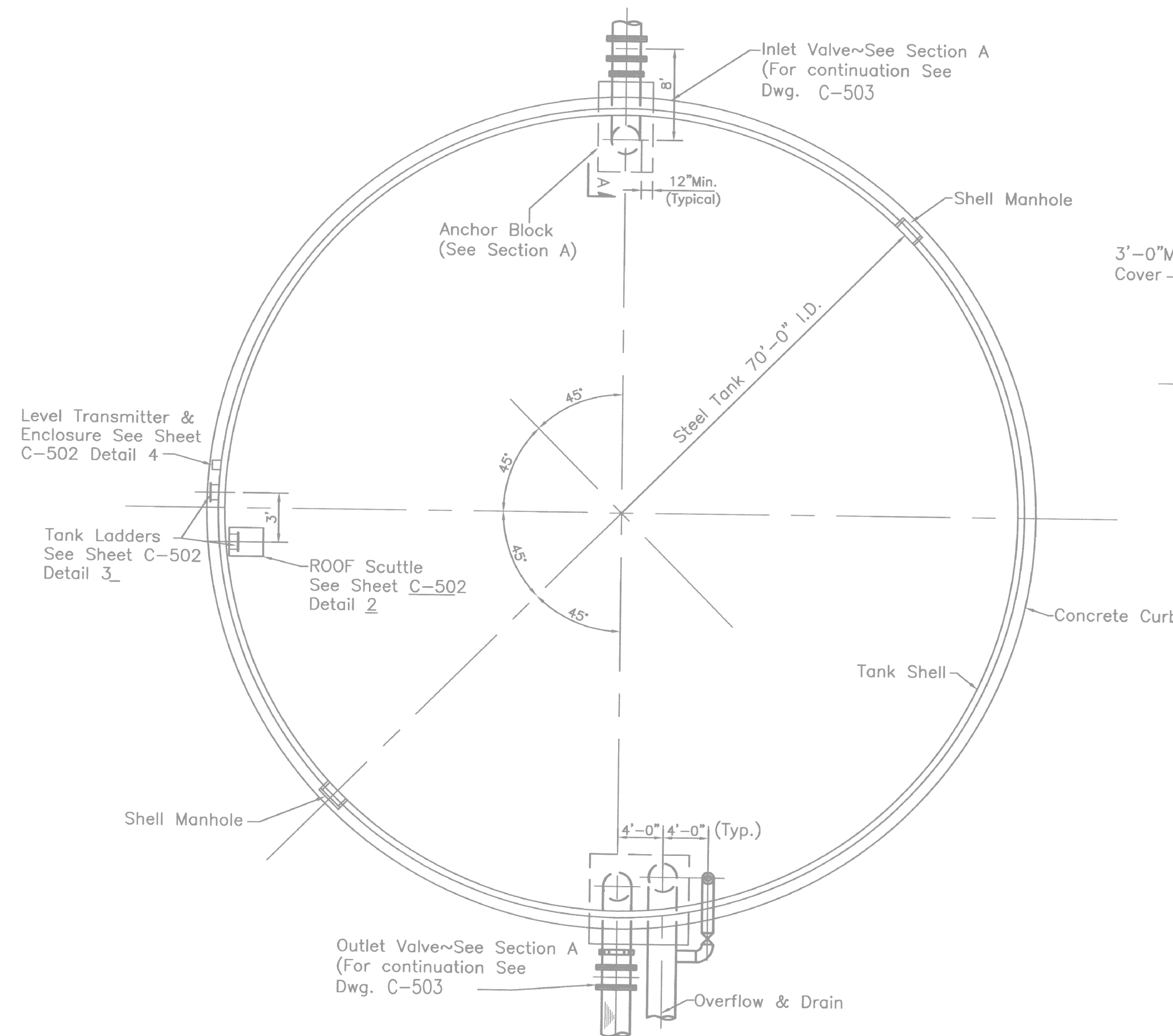


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Drafting Check	NS	Design Check	PK
Scale	AS SHOWN	This Drawing shall not be used for Construction unless Signed and Sealed For Construction	

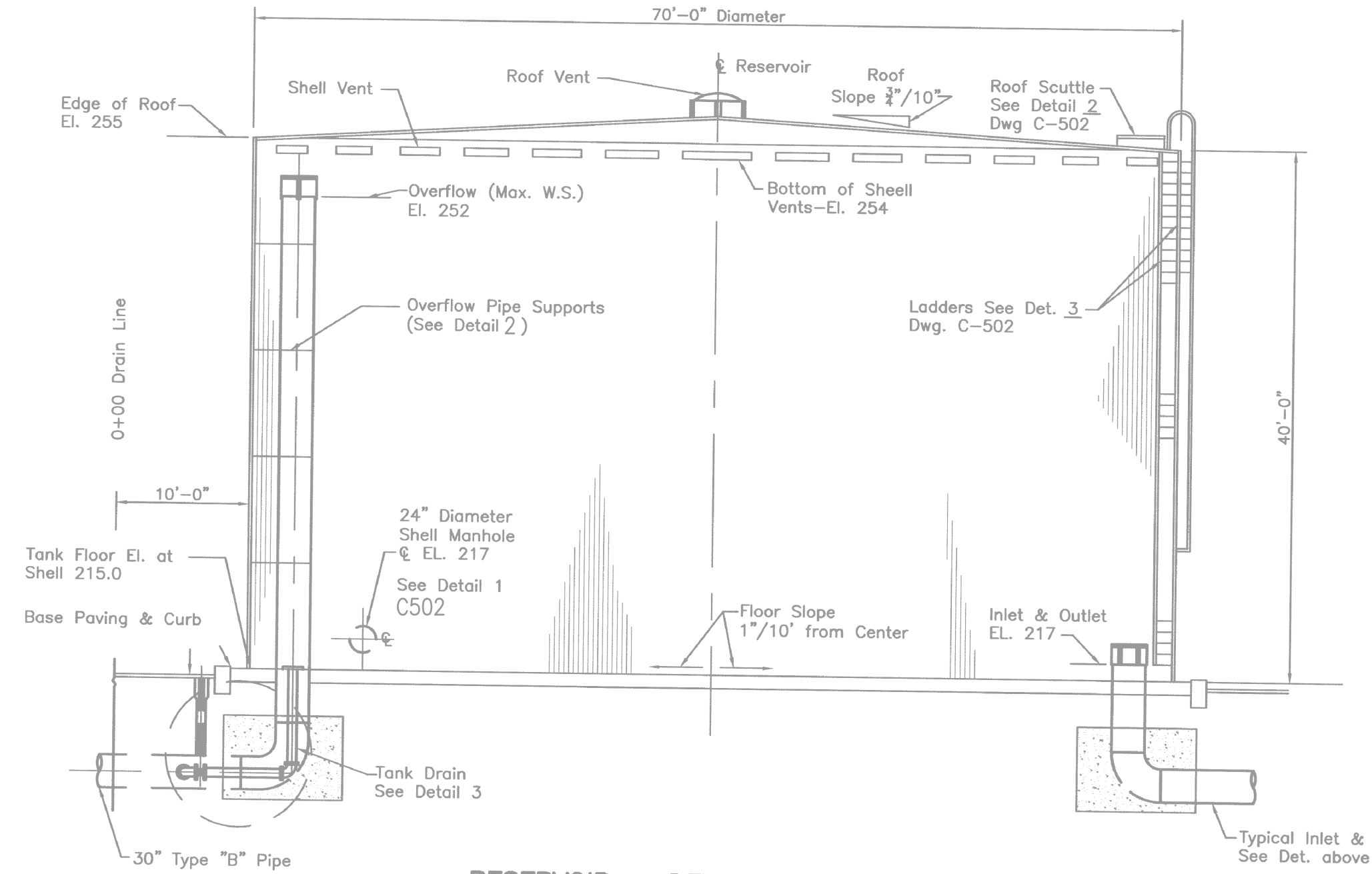
Client	HUMBOLDT BAY MUNICIPAL WATER DISTRICT		
Project	1-MG RESERVOIR ROOF REPLACEMENT & PAINTING		
Title	SITE PLAN		
Contract No.	11125099		
Original Size	Ansi D Drawing No: C101		
Sheet	3	of	10
Rev:	0		

SHEET GENERAL NOTES

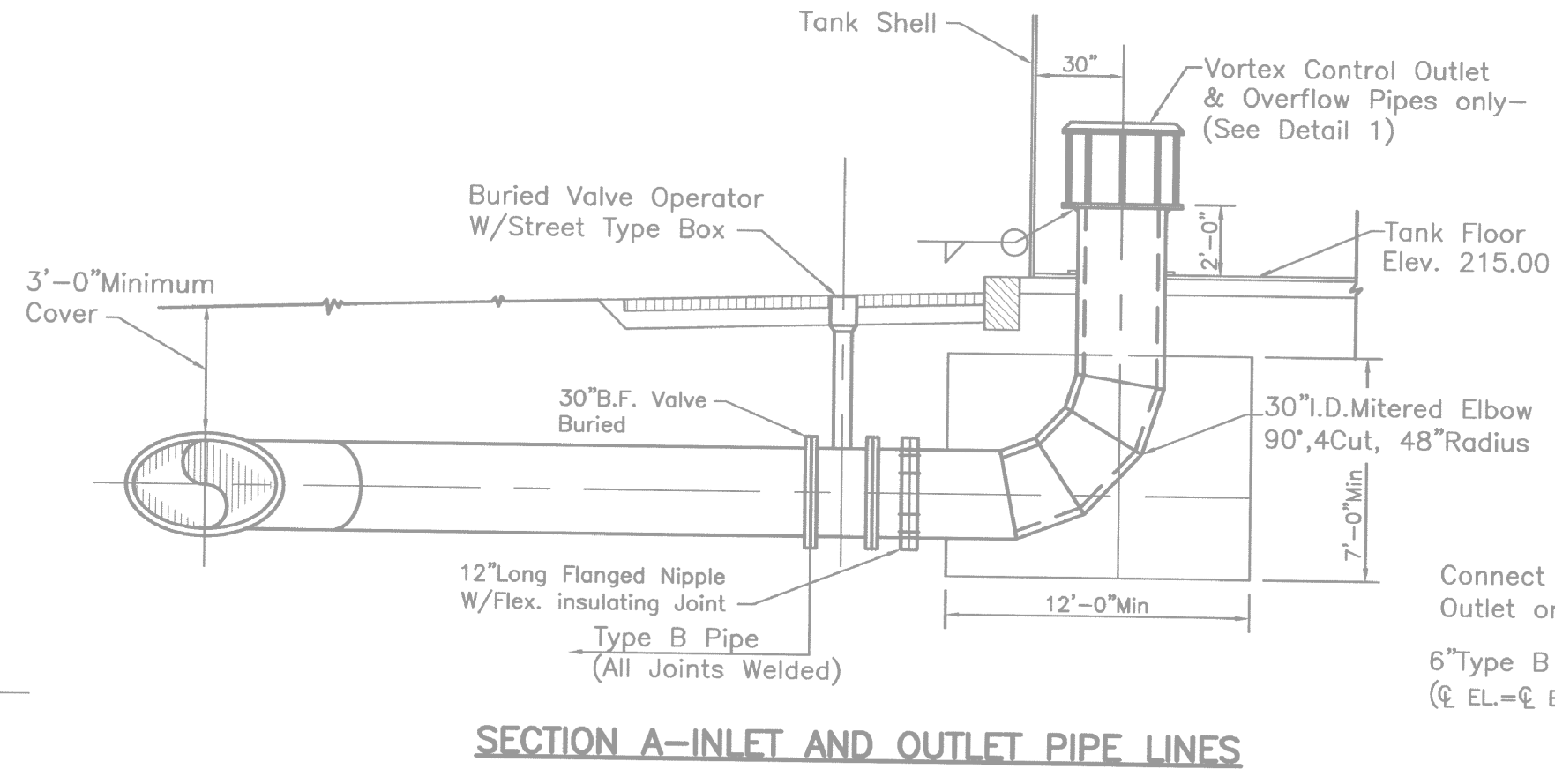
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2. EXISTING STRUCTURES, PIPING, AND EQUIPMENT ARE SHOWN ON THIS SHEET AS THEY ARE DEPICTED IN THE 1966 CONSTRUCTION DRAWINGS. THEY ARE SHOWN FOR CONTRACTOR REFERENCE ONLY, AND MAY NOT EXACTLY REPRESENT CURRENT CONDITIONS.
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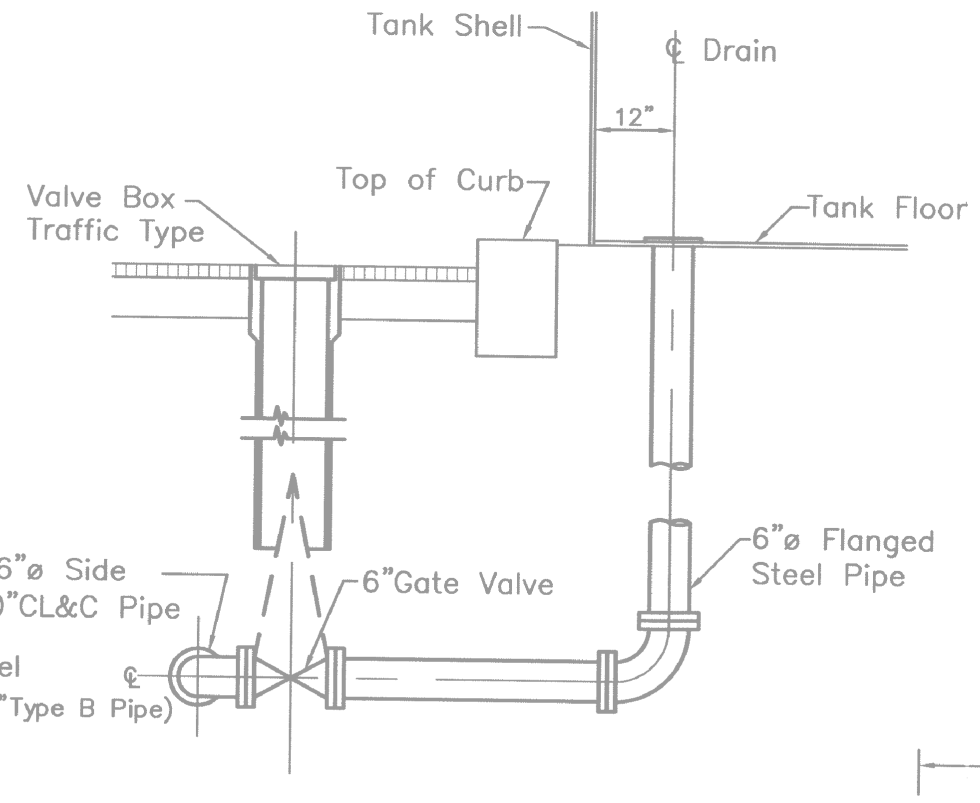
RESERVOIR PLAN



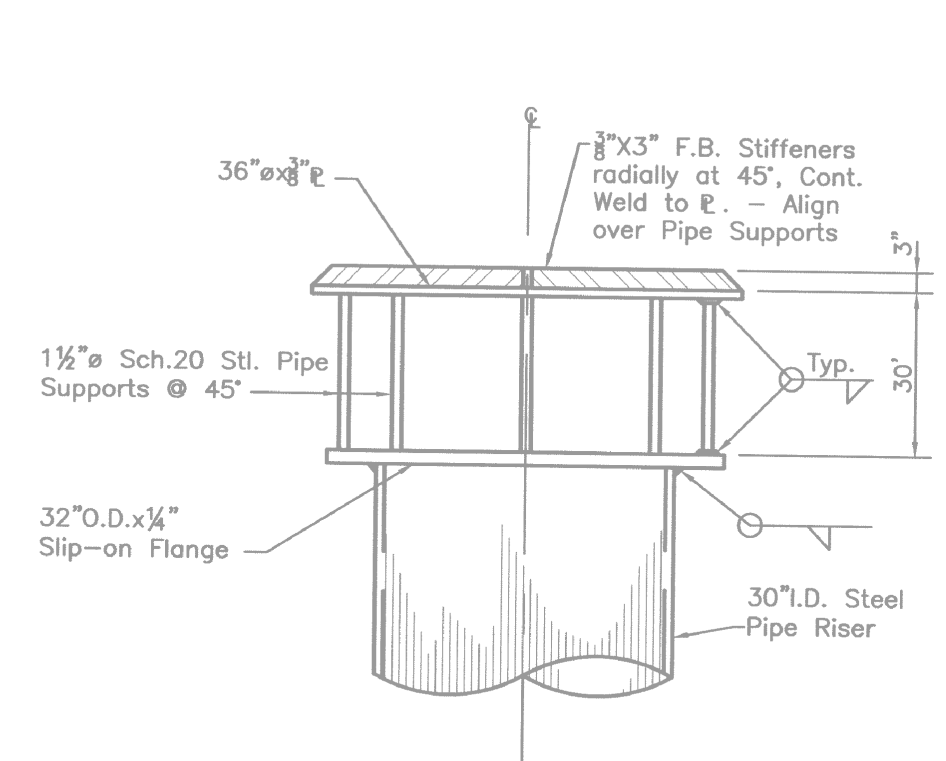
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SCALE: NTS



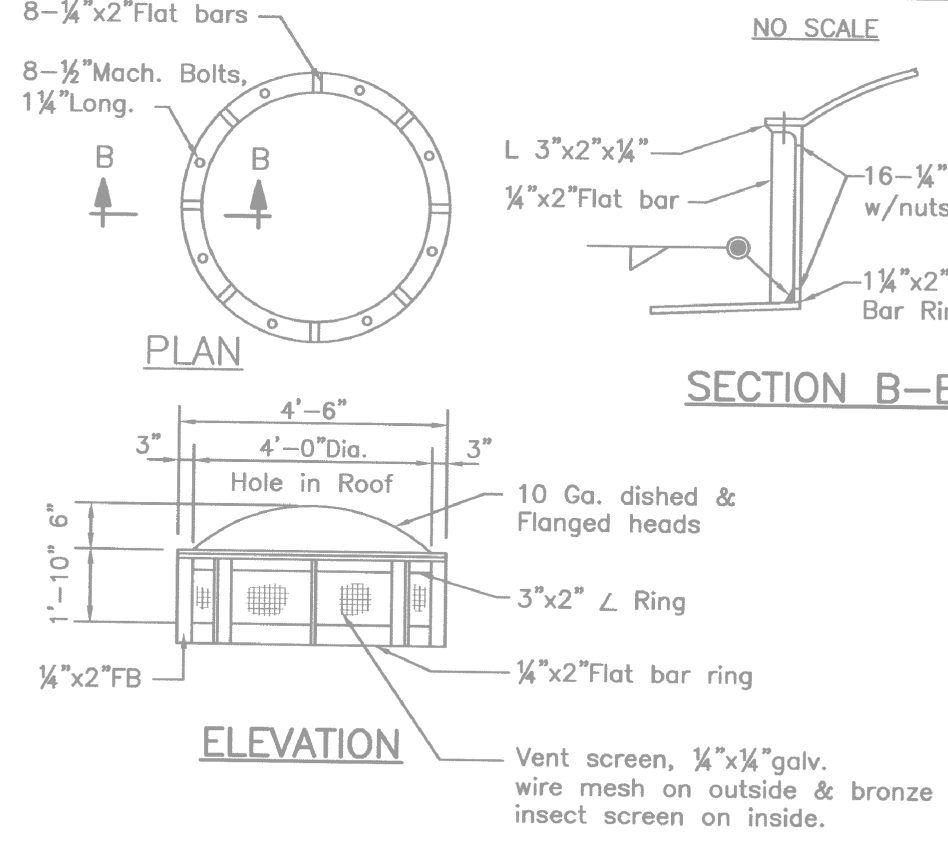
SECTION A-INLET AND OUTLET PIPE LINES
NO SCALE



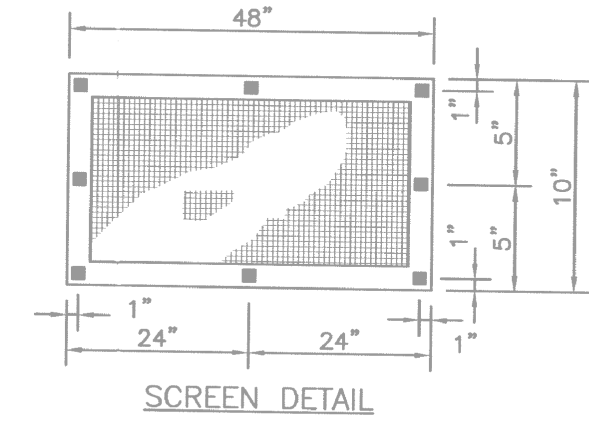
DETAIL 3-DRAIN PIPING
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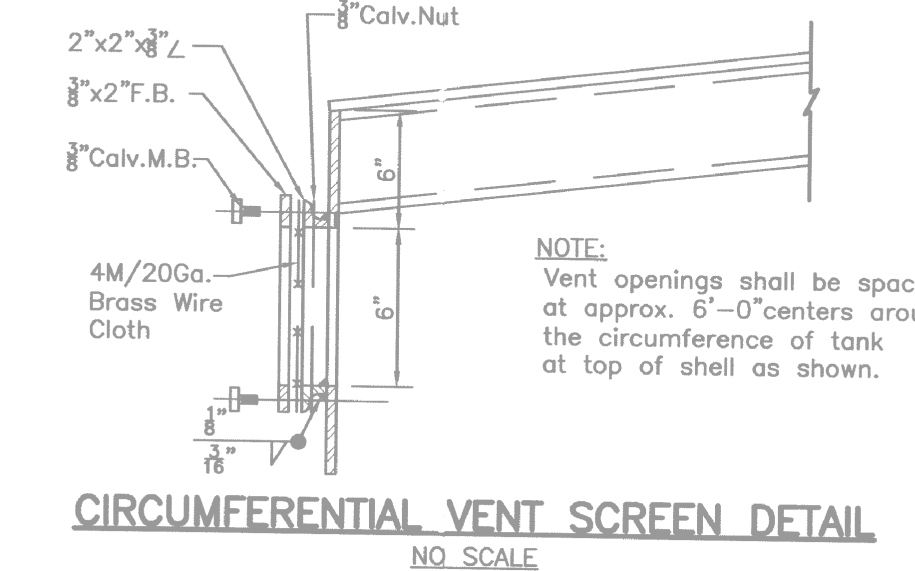
DETAIL 1-VORTEX CONTROL
NO SCALE



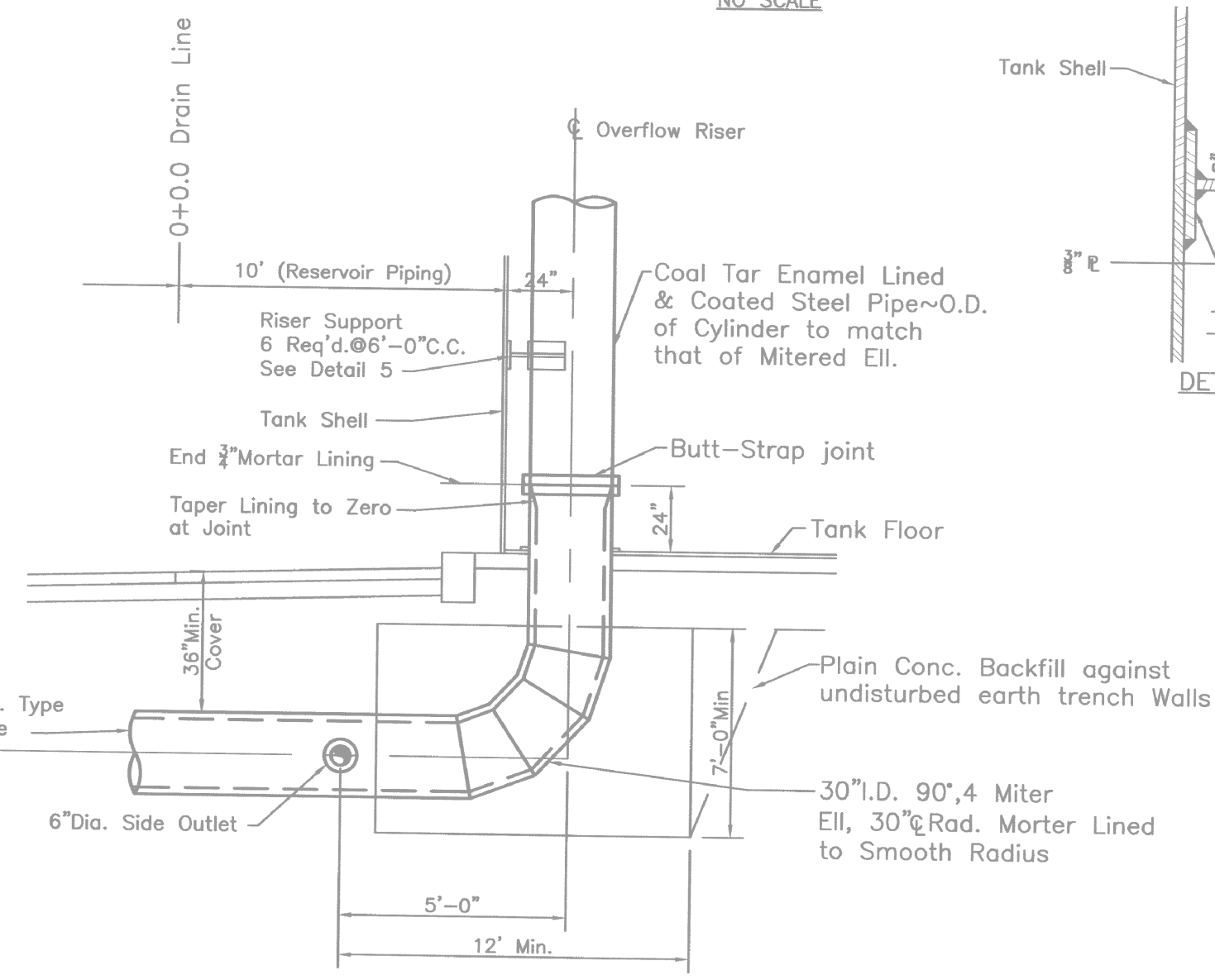
CENTER VENT
NO SCALE



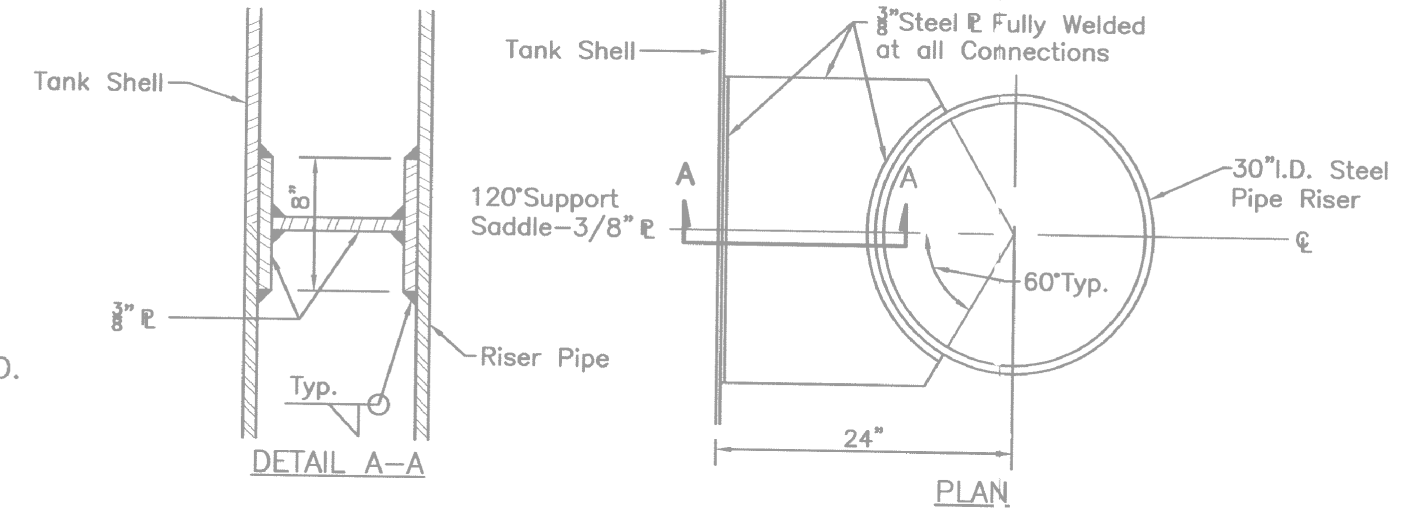
SCREEN DETAIL
NO SCALE



CIRCUMFERENTIAL VENT SCREEN DETAIL
NO SCALE



DETAIL 2-OVERFLOW RISER
NO SCALE



RISER SUPPORT
NO SCALE

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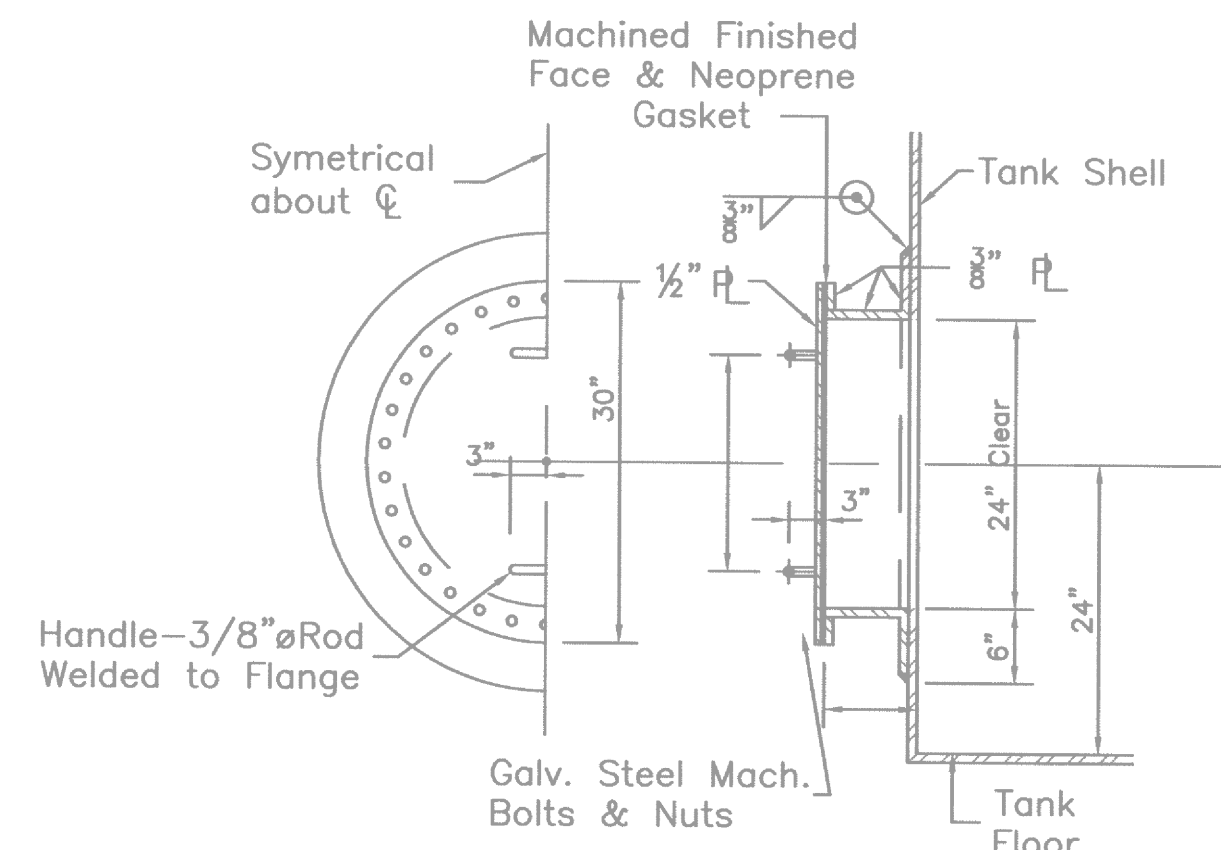
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Drafting Check	NS	Design Check	PK
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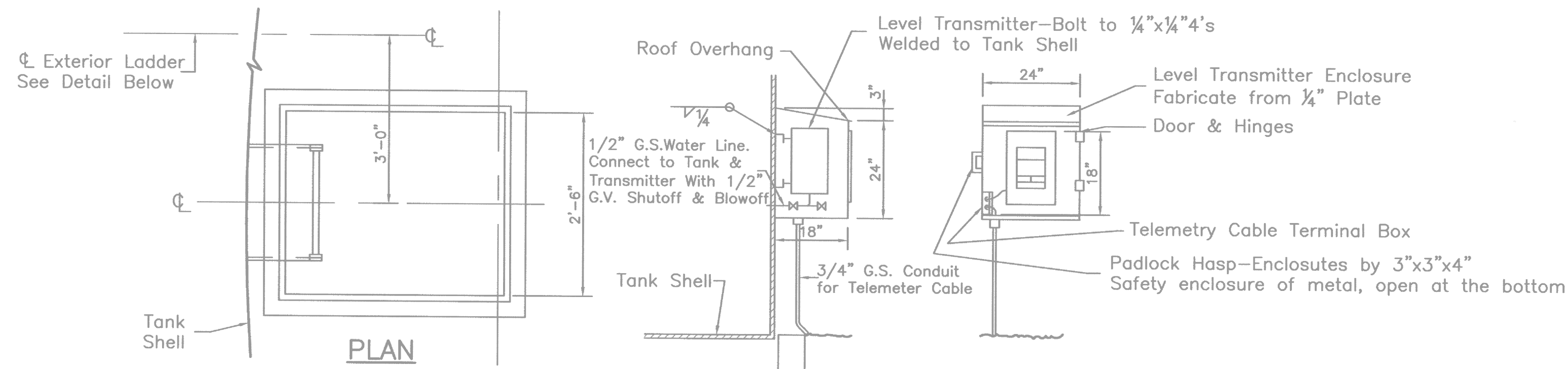
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Project	1-MG RESERVOIR ROOF REPLACEMENT & PAINTING		
Title	EXISTING TANK INFORMATION - 1 OF 3		
Contract No.	11125099		
Original Size	Ansi D Drawing No: C501		
Sheet	4	of	10
Rev:	0		

SHEET GENERAL NOTES

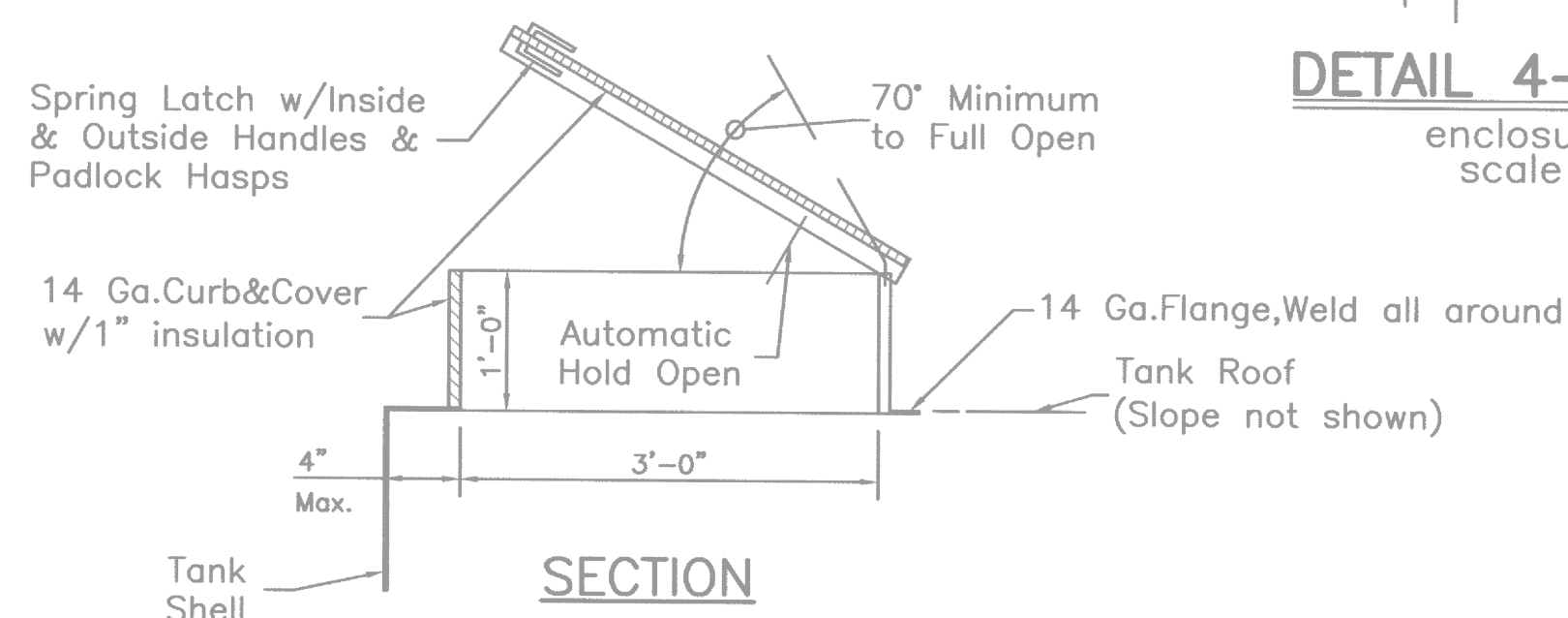
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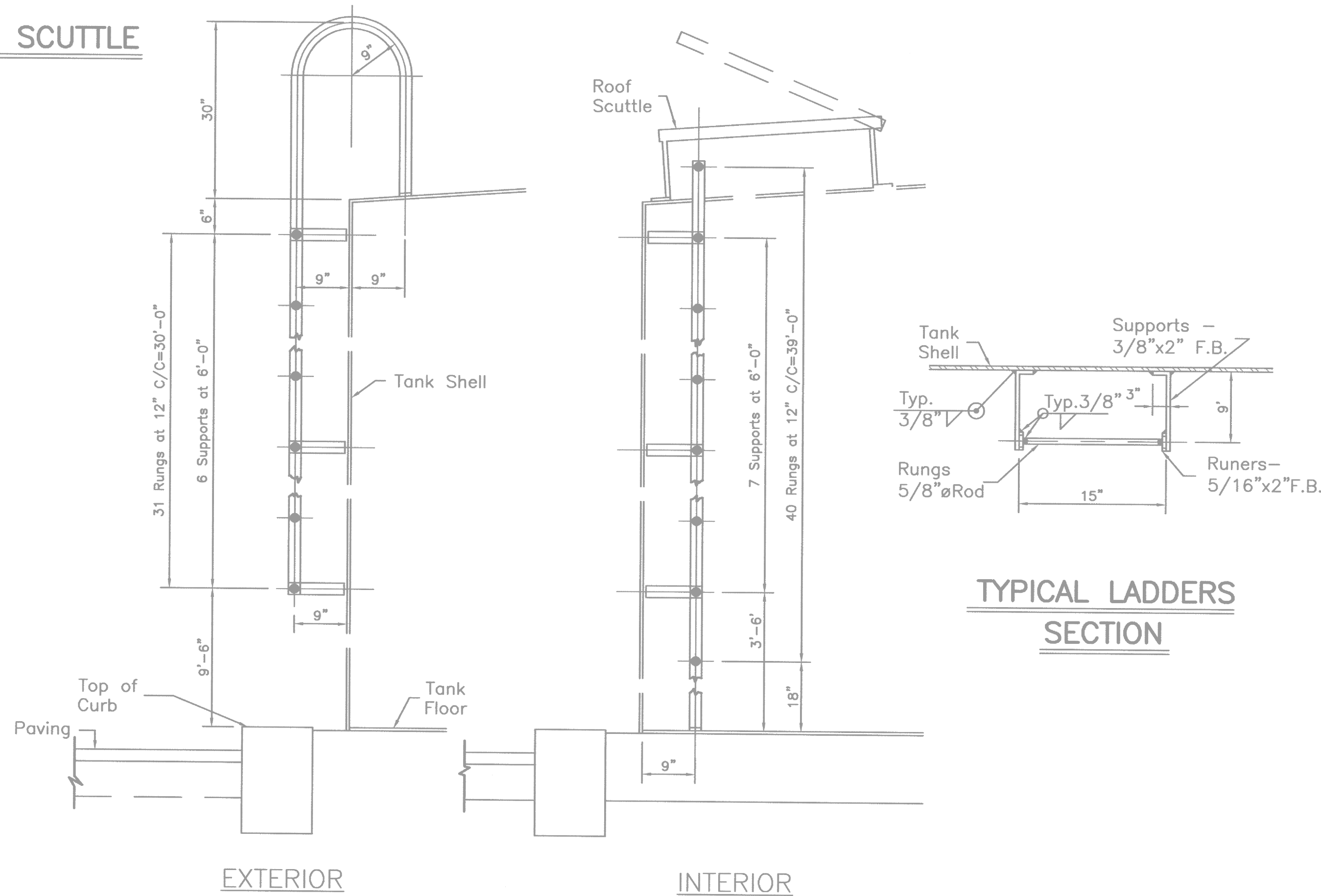
HALF ELEVATION SECTION
DETAIL 1-SHELL MANHOLE
 SCALE: 3/4"=1'-0"



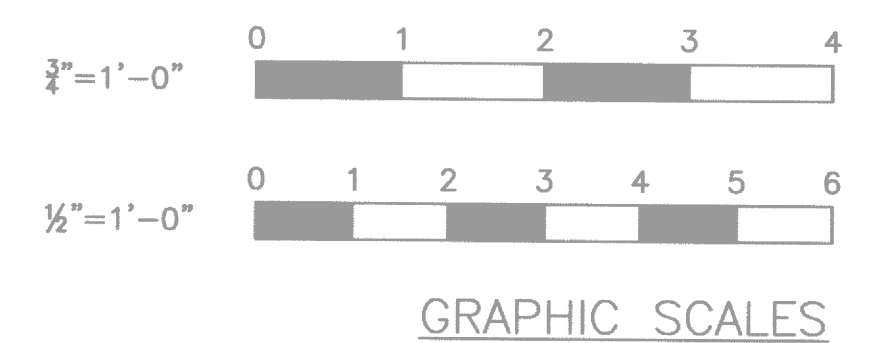
DETAIL 4-LEVEL TRANSMITTER
 enclosure scale 3/4"=1'-0"
 scale 1/2"=1'-0"



SECTION
DETAIL 2-ROOF SCUTTLE
 SCALE: 3/4"=1'-0"



TYPICAL LADDERS
SECTION



DETAIL 3- TANK LADDERS
 SCALE: 3/4"=1'-0"

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0	ISSUE FOR BID	SJD	PK	AC	11/17/16	
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date



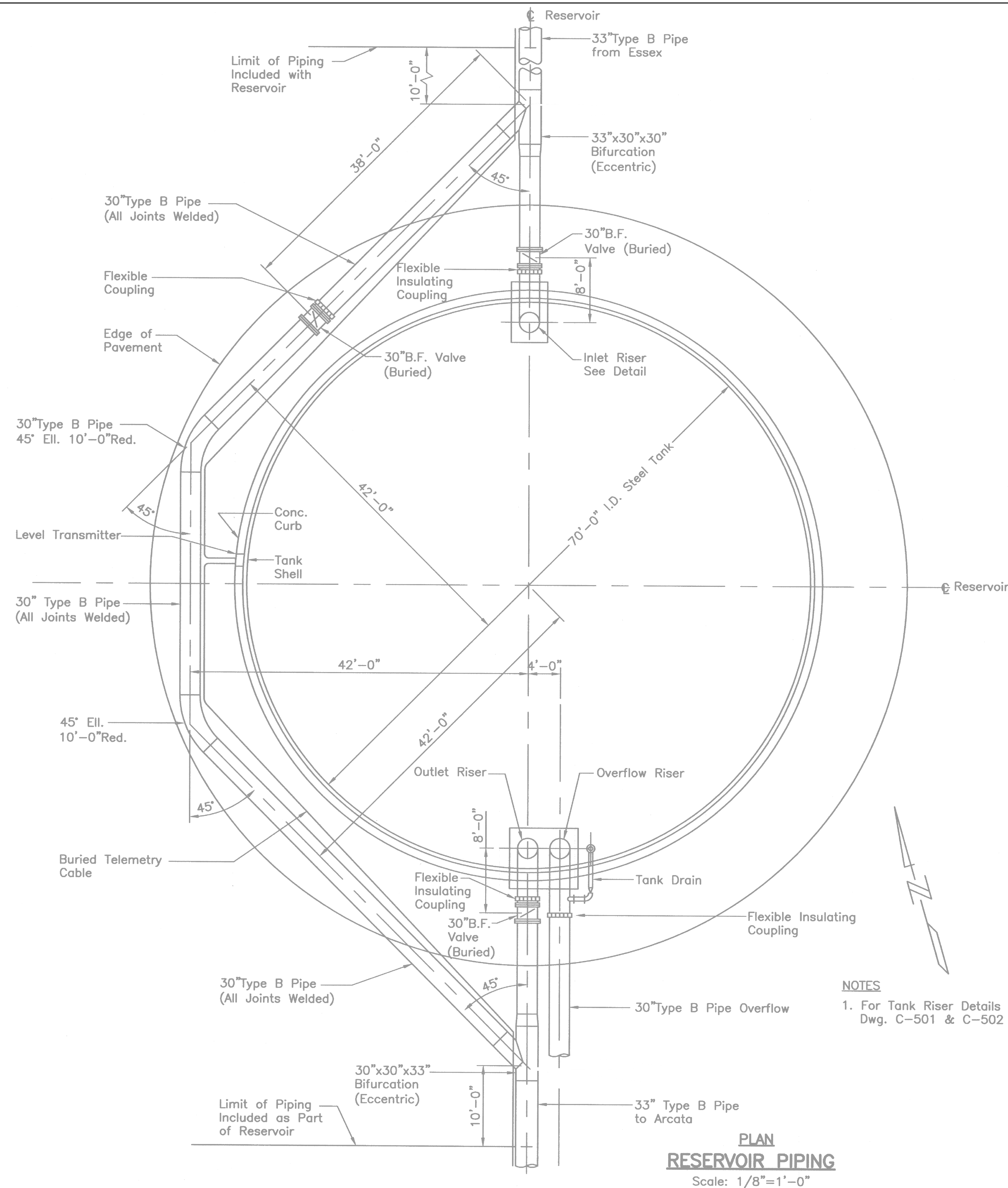
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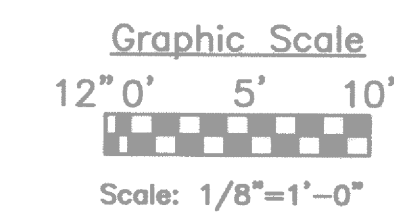
Client	HUMBOLDT BAY MUNICIPAL WATER DISTRICT		
Project	1-MG RESERVOIR ROOF REPLACEMENT & PAINTING		
Title	EXISTING TANK INFORMATION - 2 OF 3		
Contract No.	11125099		
Original Size	Ansi D Drawing No: C502		
Scale	AS SHOWN		
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Sheet	5	of	10
Rev:	0		

SHEET GENERAL NOTES

1. ALL STRUCTURES, PIPING, AND EQUIPMENT ARE EXISTING UNLESS SPECIFICALLY LABELED AS NEW (N).
2. EXISTING STRUCTURES, PIPING, AND EQUIPMENT ARE SHOWN ON THIS SHEET AS THEY ARE DEPICTED IN THE 1966 CONSTRUCTION DRAWINGS. THEY ARE SHOWN FOR CONTRACTOR REFERENCE ONLY, AND MAY NOT EXACTLY REPRESENT CURRENT CONDITIONS.
3. ALL EXISTING STRUCTURES, PIPING AND EQUIPMENT SHALL BE PROTECTED AND MAINTAINED, WITH THE EXCEPTION OF THOSE STRUCTURES TO BE REMOVED AND REPLACED WITH THE NEW ROOF WORK. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROTECTION OF AND REPLACEMENT OF ANY DAMAGE TO (E) STRUCTURES DURING THE PERFORMANCE OF THE WORK.



NOTES
1. For Tank Riser Details See Dwg. C-501 & C-502



PLAN RESERVOIR PIPING
Scale: 1/8"=1'-0"

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Scale	AS SHOWN	This Drawing shall not be used for Construction unless Signed and Sealed For Construction	

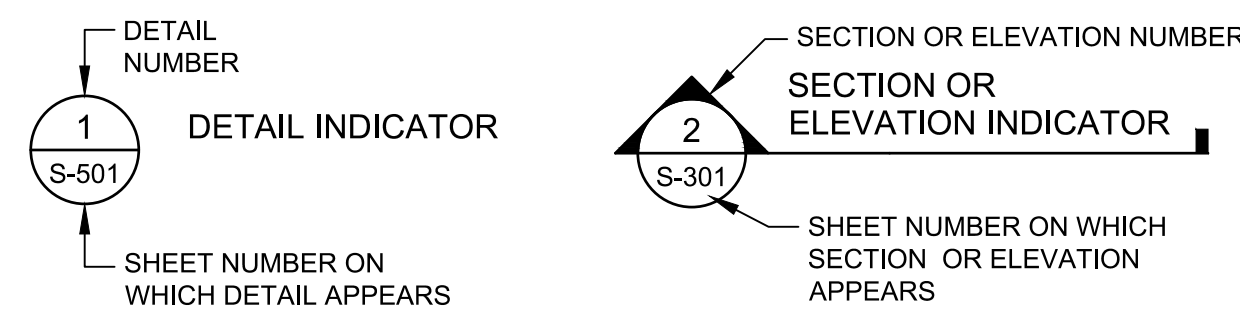
Client	HUMBOLDT BAY MUNICIPAL WATER DISTRICT		
Project	1-MG RESERVOIR ROOF REPLACEMENT & PAINTING		
Title	EXISTING TANK INFORMATION - 3 OF 3		
Contract No.	11125099		
Original Size	Ansi D Drawing No: C503		
Sheet	6	of	10
Revision	0		

STRUCTURAL ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	EQUIP ETC EW EWEF (E)EXIST EXP EXT	EQUIPMENT ET CETERA EACH WAY EACH WAY EACH FACE EXISTING EXPIRATION EXTERIOR	(N) NIC NO. NOM NS NTS	NEW - CONTRACTOR TO FURNISH AND INSTALL NOT IN CONTRACT NUMBER NOMINAL NEAR SIDE NOT TO SCALE
AB	ANCHOR BOLT	FD	FLOOR DRAIN	OC	ON CENTER
ABC	AGGREGATE BASE COURSE	FF	FINISHED FLOOR	OD	OUTSIDE DIAMETER
ABV	AGGREGATE COURSE	FG	FINISHED GRADE	OF	OUTSIDE FACE
AC	AGGREGATE COURSE	FH	FULL HEIGHT	OPG	OPENING
ACI	AMERICAN CONCRETE INSTITUTE	FL	FLOOR	OPP	OPPOSITE
ADD'L	ADDITIONAL	FLG	FLANGE	PEB	PRE ENGINEERED BUILDING
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	FN	FACE NAIL	PEMB	PRE ENGINEERED METAL BLDG
AISI	AMERICAN IRON AND STEEL INSTITUTE	FO	FOUNDATION	PL	PLATE
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION	FOM	FACE OF MASONRY	PLCS	PLYWOOD
ALT	ALTERNATE	FORG	FACE OF WALL	PLYWD	PLYWOOD
ALUM	ALUMINUM	FRMG	FRAMING	PNL	PANEL
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	FS	FAR SIDE	PREFAB	PREFABRICATED
APA	AMERICAN PLYWOOD ASSOCIATION	FTG	FOOTING	PT	POINT, PRESSURE TREATED
ARCH	ARCHITECT/ARCHITECTURAL	GA	GAUGE	PVMT	PAVEMENT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	GALV	GALVANIZED	QTY	QUANTITY
AWS	AMERICAN WELDING SOCIETY	GF	GOVERNMENT FURNISHED	R/RAD	RADIUS
AWWA	AMERICAN WATER WORKS ASSOCIATION	GR	GRADE	REF	REFERENCE
B	BOTTOM	GRT	GROUT	REINF	REINFORCING
B/	BOTTOM OF	GSN	GENERAL STRUCTURAL NOTES	REQD	REQUIRED
BB	BOTTOM BARS	GYP	GYP SUM	RF	ROOF
BO	BOND	HAS	HEADED ANCHOR STUDS	RM	ROOM
BLDG	BUILDING	HD	HAND	SCHED/SCH	SCHEDULE
BLKG	BLOCKING	HEF	HORIZONTAL EACH FACE	SEC	SECTION
BM	BEAM	HIF	HORIZONTAL INSIDE FACE	SF	SQUARE FEET
BN	BOUNDARY NAIL	HK	HOOK	SHT	SHEET
BRG	BEARING	HM	HOLLOW METAL	SIM	SIMILAR
BS	BOTH SIDES	HOF	HORIZONTAL OUTSIDE FACE	SP	SPACE/SPACES
BTWN	BETWEEN	HORIZ	HORIZONTAL	SPCG	SPACING
C	CHANNEL	HP	HIGH POINT	SPEC	SPECIFICATIONS
C/C	CENTER TO CENTER	HSS	TUBE STEEL	SST	STAINLESS STEEL
CANT	CANTILEVER	HT	HEIGHT	STD	STANDARD
CAP	CAPACITY	IBC	INTERNATIONAL BUILDING CODE	STIFF	STIFFENER
CBC	CALIFORNIA BUILDING CODE	ID	INSIDE DIAMETER	STL	STEEL
CF	CUBIC FEET	IE	THAT IS	STRUCT	STRUCTURAL
CHKD	CHECKED	INFO	INFORMATION	SYM	SYMMETRICAL
CI	CONTRACTOR INSTALLED	INT	INTERIOR	T	TOP
CJ	CONTRACTION/CONTROL JOINT	INT	INTERMEDIATE	T/	TOP OF
CL	CENTERLINE	INTERMED	INTERMEDIATE	T&B	TOP AND BOTTOM
CLR	CLEAR	INTERSECT	INTERSECTION	TB	TOP OF BAR
CLG	CEILING	INV	INVERT	THK	THICK
CMU	CONCRETE MASONRY UNIT	JST	JOIST	TOC	TOP OF CONCRETE
COL	COLUMN	JT	JOINT	TOS	TOP OF STEEL
CONC	CONCRETE	L	ANGLE	TYP	TYPICAL
CONN	CONNECTION	LBS	POUNDS	UHMW	ULTRA HIGH MOLECULAR WEIGHT
CONSTR	CONSTRUCTION	LG	LONG	UNO	UNLESS NOTED OTHERWISE
CONT	CONTINUOUS	LL	LIVE LOAD	UON	UNLESS OTHERWISE NOTED
COORD	COORDINATE	LLH	LONG LEG HORIZONTAL	UPR	UPPER
CRSI	CONCRETE REINFORCING STEEL INSTITUTE	LLV	LONG LEG VERTICAL	UT	ULTRASONIC TESTING
CTR/CTR'D	CENTER/CENTERED	LOC	LOCATION	VEF	VERTICAL EACH FACE
d	PENNY (NAIL SIZE)	LONGIT/LONGL	LONGITUDINAL	VERT	VERTICAL
DBL	DOUBLE	LP	LOW POINT	VIF	VERTICAL INSIDE FACE
DEG	DEGREES	LT	LEFT	VOF	VERTICAL OUTSIDE FACE
DET	DETAIL	LWR	LOWER	W/	WITH
DF	DOUGLAS FIR	MACH	MACHINE	W OR WF	WIDE FLANGE (BEAM)
DIA	DIAMETER	MAINT	MAINTENANCE	WGT	WEIGHT
DIAG	DIAGONAL	MAS	MASONRY	W/O	WITHOUT
DIM	DIMENSION	MAX	MAXIMUM	WP	WORK POINT
DISCONT	DISCONTINUE	MB	MACHINE BOLT	WS	WATERSTOP
DL	DEAD LOAD	MC	CHANNEL	WT	TEE
DN	DOWN	MCJT	MASONRY CONTROL JOINT	&	AND
Do	DITTO	MECH	MECHANICAL	@	AT
DP	DEEP	MFR	MANUFACTURER	°	DEGREE
DWG	DRAWING	MHHW	MEAN HIGHER HIGH WATER	Ø	DIAMETER
DWL	DOWEL	MIN	MINIMUM	'	FEET
(E)	EXISTING	MISC	MISCELLANEOUS	"	INCHES
EA	EACH	MLLW	MEAN LOWER LOW WATER	#	NUMBER
EF	EACH FACE	MNTG	MOUNTING	±	PLUS OR MINUS
EG	FOR EXAMPLE	MO	MASONRY OPENING		
ELE/ELEV	ELEVATION	MOD	MODIFIED		
EMBED	EMBEDMENT	MTL	METAL		
EN	EDGE NAIL				
ENGR	ENGINEER				
EQ	EQUAL				

NOTES: 1. ABBREVIATIONS ON THIS SHEET APPLY ONLY TO THE STRUCTURAL DRAWINGS, REFER TO OTHER DISCIPLINES FOR APPLICABLE SYMBOLS NOT PROVIDED HERE.
 2. THIS IS A STANDARD ABBREVIATION, THEREFORE, SOME ABBREVIATIONS MAY APPEAR ON THIS SHEET AND MAY NOT BE UTILIZED ON THIS PROJECT.

ANNOTATION LEGEND



GENERAL STRUCTURAL NOTES

GENERAL

- CONTRACTOR TO COORDINATE ALL STRUCTURAL DOCUMENTS WITH ALL OTHER DISCIPLINES AND REPORT ANY DISCREPANCIES TO THE OWNER PRIOR TO THE START OF ANY FABRICATION OR CONSTRUCTION.
- CONTRACTOR TO COORDINATE ALL NEW WORK WITH EXISTING SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE OWNER PRIOR TO CONSTRUCTION.
- DO NOT SCALE DRAWINGS.
- DESIGN CRITERIA: 2013 CALIFORNIA BUILDING CODE (2013 CBC)
AWWA D100-11
ACI 318-11
CAL / OSHA
- LOADS:
ROOF LIVE LOADS: 20 PSF (REDUCTIONS TAKEN AS ALLOWED BY BUILDING CODE)
MAINTENANCE PLATFORM: 60 PSF
WIND LOADS:
MAIN FORCE RESISTING SYSTEM:
BASIC WIND SPEED: V = 115 MPH
RISK CATEGORY: IV (ESSENTIAL FACILITY)
EXPOSURE CATEGORY: C
INTERNAL PRESSURE COEFFICIENT: ±0.18
SEISMIC LOADS:
SEISMIC IMPORTANCE FACTOR: I_e = 1.50
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
S_s = 2.87 g
S₁ = 1.14 g
SPECTRAL RESPONSE COEFFICIENTS:
SDS = 1.91 g
SD1 = 1.14 g
SOIL SITE CLASS: D
SEISMIC DESIGN CATEGORY: E
- REFERENCE TO CODES, RULES, REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST PRINTED EDITION OF EACH IN EFFECT AT THE DATE OF SUBMISSION OF BID UNLESS THE DOCUMENT DATE IS SHOWN.
- THESE DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION. SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND FOR CHECKING DIMENSIONS. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK.
- PROVIDE MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES INCLUDE, BUT MAY NOT BE LIMITED TO, BRACING AND SHORING FOR LOADS DURING CONSTRUCTION. RETAIN A REGISTERED CIVIL ENGINEER WHOM IS PROPERLY QUALIFIED TO DESIGN BRACING, SHORING, ETC. VISITS TO THE SITE BY THE OWNER'S REPRESENTATIVE WILL NOT INCLUDE OBSERVATION OF THE ABOVE NOTED ITEMS.
- INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING A SAFE PLACE TO WORK AND MEETING THE REQUIREMENTS OF ALL APPLICABLE JURISDICTIONS. EXECUTE WORK TO ENSURE THE SAFETY OF PERSONS AND ADJACENT PROPERTY AGAINST DAMAGE BY FALLING DEBRIS AND OTHER HAZARDS IN CONNECTION WITH THIS WORK.
- UNLESS NOTED OTHERWISE, REFER TO DRAWINGS OTHER THAN STRUCTURAL FOR FINISHES, SLOPES, DEPRESSIONS, OPENINGS, CURBS, STAIRS, RAMPS, TRENCHES, EQUIPMENT AND LOCATIONS AND EXTENT OF SUCH CONDITIONS.
- CONTRACTOR TO COORDINATE ALL NEW WORK WITH EXISTING SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- DETAILS OR CONDITIONS NOT FULLY DEVELOPED ON STRUCTURAL DOCUMENTS ARE SIMILAR TO DEVELOPED DETAILS.
- SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- ALL PLANS TO BE COORDINATED WITH GENERAL NOTES AND TYPICAL DETAILS AS APPLICABLE.
- ALL LADDERS, RAILINGS, PLATFORMS, AND SAFETY ELEMENTS SHALL BE PROVIDED IN CONFORMANCE WITH CAL / OSHA STANDARDS.

SPECIAL INSPECTION

- SPECIAL INSPECTION IN ACCORDANCE WITH 2013 CALIFORNIA BUILDING CODE CHAPTER 17 IS REQUIRED ON THE FOLLOWING PORTIONS OF THE WORK:
STRUCTURAL STEEL
(REFER TO THE STATEMENT OF SPECIAL INSPECTIONS FOR MORE SPECIFIC REQUIREMENTS)

STEEL

- DETAIL, FABRICATE, AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (LATEST EDITION AND SUPPLEMENTS).
- ANCHOR BOLTS: ASTM F1554 GRADE 55.
- ALL STEEL BARS & PLATES SHALL BE ASTM A36 UNLESS OTHERWISE NOTED.
- ALL STEEL SHAPES SHALL BE ASTM A992 GRADE 50 UNLESS OTHERWISE NOTED.
- ALL TUBES SHALL BE ASTM A500 GRADE B.
- ALL PIPES TO BE ASTM A53 GRADE B.
- ALL THREADED RODS: ASTM F1554 GRADE 55.
- BOLTED CONNECTIONS, UNLESS NOTED OTHERWISE: 1-INCH DIAMETER A325-N BOLTS.
- INSTALL HIGH STRENGTH BOLTS IN ACCORDANCE WITH SECTION 8 OF THE "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", LATEST EDITION.
- PROVIDE BEVELED WASHERS ON ALL CONNECTION TO SLOPING FLANGES OF W SECTIONS AND CHANNELS WHERE SLOPE EXCEEDS 1:20.
- ANCHOR RODS SHALL BE THREADED ANCHOR RODS WITH NUT. THE EMBEDDED NUT SHALL BE TACK WELDED TO THE ANCHOR ROD TO PREVENT ROTATION DURING TIGHTENING.
- BOLT HOLES IN STEEL SHALL BE "STANDARD" (1/16-INCH LARGER IN DIAMETER THAN THE NOMINAL BOLT SIZE), UNLESS OTHERWISE NOTED.
- WELDING ELECTRODES (FILLER METAL): E70XX (70 KSI), WITH EXACT FILLER METAL SELECTED BY THE FABRICATOR.
- WELD LENGTHS CALLED FOR ON THE PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE LENGTH OF WELD IS NOT SHOWN IT SHALL BE THE FULL LENGTH OF THE JOINT.

STEEL (CONTINUED)

- COMPLETE PENETRATION WELDS SHALL BE MADE WITH PROPER BACKING WHEREVER POSSIBLE. FULL PENETRATION WELDS MADE WITHOUT PROPER BACKING SHALL HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OTHER SIDE EXCEPT AS PROVIDED IN AWS D1.1.
- ALL BUTT AND GROOVE WELDS SHALL BE FULL PENETRATION, UNLESS NOTED OTHERWISE.
- ALL SPLICING OF MEMBERS SHALL BE AS SHOWN ON THE DRAWINGS. ANY SPLICING OF THE STEEL MEMBERS PROPOSED BY THE STEEL FABRICATOR SHALL BE SHOWN ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER PRIOR TO FABRICATION.
- ALL STEEL FABRICATION SHALL BE PERFORMED BY A FABRICATOR APPROVED BY THE OWNER.
- ALL ANCHOR BOLTS SHALL BE EMBEDDED AS SHOWN ON THE DRAWINGS.
- MINIMUM PLATE THICKNESS: 3/8 INCH UNLESS OTHERWISE NOTED. MINIMUM WELD: 1/4" UNLESS OTHERWISE NOTED.
- ALL STEEL FABRICATION AND DETAILS TO COMPLY WITH MOST STRINGENT OF: AISC CODE, AWS CODE, AND THE 2013 CBC.
- ALL WELDING TO BE BY AWS CERTIFIED WELDERS AND SHALL CONFORM TO ALL 2013 CBC AND AWS REQUIREMENTS. ALL WELDERS SHALL BE PRE-QUALIFIED BY THE PROJECT WELDING INSPECTOR FOR THE WELD TYPES AND POSITIONS USED IN THE PROCEDURES THEY WILL BE PERFORMING.
- UNLESS NOTED OTHERWISE, ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIP GALVANIZED, UNLESS IT IS PART OF THE PAINTED TANK ASSEMBLY.

DEFERRED SUBMITTAL

- DEFERRED SUBMITTALS ARE BY CONTRACTOR. DETAILS SHOWN IN THESE SECTIONS ARE FOR BIDDING PURPOSES ONLY AND NOT FOR CONSTRUCTION.
- CONTRACTOR SHALL SUBMIT STEEL TANK ROOF PLANS AND CALCULATIONS TO THE OWNER FOR APPROVAL AND PERMIT PRIOR TO ANY CONSTRUCTION. PLANS AND CALCULATIONS MUST BE PREPARED, SEALED, AND SIGNED BY A CALIFORNIA LICENSED ENGINEER. CALCULATIONS SHALL INCLUDE ANALYSIS OF NEW ROOF WITH SEISMIC SLOSHING WAVE CONSIDERATION.
- CONTRACTOR'S STEEL TANK ROOF SUBMITTAL PACKAGE WILL BE SUBJECT TO OWNER REVIEW AND COMMENT. CONTRACTOR WILL BE RESPONSIBLE FOR ADDRESSING OWNER REVIEW COMMENTS AND RESUBMITTING THE TANK ROOF SUBMITTAL AS NECESSARY. OWNER RESERVES RIGHT TO REQUEST DESIGN MODIFICATIONS BASED ON SERVICABILITY / MAINTENANCE REQUIREMENTS, ETC.

0	ISSUE FOR BID	SJD	PK	AC	11/17/16	
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Scale	AS SHOWN	This Drawing shall not be used for Construction unless Signed and Sealed For Construction	

Client **HUMBOLDT BAY MUNICIPAL WATER DISTRICT**
 Project **1-MG RESERVOIR ROOF REPLACEMENT & PAINTING**
 Title **LEGEND, ABBREVIATIONS & GENERAL NOTES**
 Contract No. 11125099
 Original Size 7 of 10
 Drawing No: **S001**
 Rev: 0

STATEMENT OF SPECIAL INSPECTIONS

STATEMENT OF SPECIAL INSPECTIONS

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE SPECIAL INSPECTION AND STRUCTURAL TESTING REQUIREMENTS OF THE BUILDING CODE SECTIONS 1704 AND 1705.

THIS STATEMENT OF SPECIAL INSPECTIONS ENCOMPASS THE FOLLOWING DISCIPLINES:

- STRUCTURAL SPECIAL INSPECTIONS PER 1704
- STRUCTURAL SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE
- STRUCTURAL SPECIAL INSPECTIONS FOR WIND RESISTANCE

THE SCHEDULE OF SPECIAL INSPECTIONS SUMMARIZES THE SPECIAL INSPECTIONS AND TESTS REQUIRED. SPECIAL INSPECTORS WILL REFER TO THE APPROVED PLANS AND SPECIFICATIONS FOR DETAILED SPECIAL INSPECTION REQUIREMENTS. ANY ADDITIONAL TESTS AND INSPECTIONS REQUIRED BY THE APPROVED PLANS AND SPECIFICATIONS WILL ALSO BE PERFORMED.

THE SPECIAL INSPECTIONS IDENTIFIED ARE IN ADDITION TO THOSE REQUIRED BY OTHER SECTIONS OF THE BUILDING CODE.

THE SPECIAL INSPECTION COORDINATOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH INSPECTION REPORTS TO THE OWNER AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITIES.

INTERIM REPORTS SHALL BE SUBMITTED TO THE OWNER AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 1704.1.2.

A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS, TESTING AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY PER SECTION 1704.1.2. THE FINAL REPORT WILL DOCUMENT THE REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF DISCREPANCIES NOTED IN INSPECTIONS.

JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR IS REQUIRED TO COORDINATE ALL INSPECTIONS. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND THE SPECIAL INSPECTOR A MINIMUM OF 24 HOURS PRIOR TO ANY SPECIAL INSPECTIONS THAT ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND THE SPECIAL INSPECTOR A MINIMUM OF 24 HOURS PRIOR TO ANY CONCRETE TO BE POURED.

ALL SPECIAL INSPECTORS AND QUALIFICATIONS SHALL BE SUBMITTED TO GHD INC. AND THE OWNER FOR REVIEW.

SPECIALY INSPECTED WORK THAT IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE OWNER IS SUBJECT TO REMOVAL OR EXPOSURE.

CONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS OTHERWISE SPECIFIED. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED, IT IS THE AGENT'S RESPONSIBILITY TO EMPLOY A SUFFICIENT NUMBER OF INSPECTORS TO ASSURE THAT ALL THE WORK IS INSPECTED IN ACCORDANCE WITH THE PROVISIONS OF THE BUILDING CODE.

CONTRACTOR STATEMENT OF RESPONSIBILITY

EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OR FABRICATION OF A SYSTEM OR COMPONENT DESIGNATED ABOVE AS PART OF THE MAIN WIND FORCE OR MAIN SEISMIC FORCE RESISTING SYSTEMS ABOVE MUST SUBMIT A STATEMENT OF RESPONSIBILITY PER SECTION 1706.

QUALIFICATIONS OF INSPECTORS AND TESTING TECHNICIANS

THE QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTION AND TESTING ACTIVITIES ARE SUBJECT TO THE APPROVAL OF OWNER. THE CREDENTIALS OF ALL INSPECTORS AND TESTING TECHNICIANS SHALL BE PROVIDED IF REQUESTED.

KEY FOR MINIMUM QUALIFICATIONS OF INSPECTION AGENTS:

WHEN THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE DEEMS IT APPROPRIATE THAT THE INDIVIDUAL PERFORMING A STIPULATED TEST OR INSPECTION HAVE A SPECIFIC CERTIFICATION OR LICENSE AS INDICATED BELOW, SUCH DESIGNATION SHALL APPEAR BELOW THE AGENCY NUMBER ON THE SCHEDULE.

PE/SE STRUCTURAL ENGINEER - A LICENSED SE OR PE SPECIALIZING IN THE DESIGN OF BUILDING STRUCTURES

PE/GE GEOTECHNICAL ENGINEER - A LICENSED GE OR PE SPECIALIZING IN SOIL MECHANICS AND FOUNDATIONS

EIT ENGINEER-IN-TRAINING - A GRADUATE ENGINEER WHO HAS PASSED THE FUNDAMENTALS OF ENGINEERING EXAMINATION

AMERICAN CONCRETE INSTITUTE (ACI) CERTIFICATION

ACI-CFTT CONCRETE FIELD TESTING TECHNICIAN - GRADE 1
 ACI-CCI CONCRETE CONSTRUCTION INSPECTOR
 ACI-LT LABORATORY TESTING TECHNICIAN - GRADE 1&2
 ACI-STT STRENGTH TESTING TECHNICIAN

AMERICAN WELDING SOCIETY (AWS) CERTIFICATION

AWS-CWI CERTIFIED WELDING INSPECTOR
 AWS/AISC-SSICERTIFIED STRUCTURAL STEEL INSPECTOR

INTERNATIONAL CODE COUNCIL (ICC) CERTIFICATION

ICC-SMSI STRUCTURAL MASONRY SPECIAL INSPECTOR
 ICC-SWSI STRUCTURAL STEEL AND WELDING SPECIAL INSPECTOR
 ICC-SFSI SPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR
 ICC-PCSI PRESTRESSED CONCRETE SPECIAL INSPECTOR
 ICC-RCSI REINFORCED CONCRETE SPECIAL INSPECTOR

AMERICAN SOCIETY OF NONDESTRUCTIVE TESTING (ASNT)

SCHEDULE OF INSPECTION AND TESTING AGENCIES

THIS STATEMENT OF SPECIAL INSPECTIONS / QUALITY ASSURANCE PLAN INCLUDES THE FOLLOWING BUILDING SYSTEMS:

- SOILS AND FOUNDATIONS
- CAST-IN-PLACE CONCRETE
- PRECAST CONCRETE
- MASONRY LEVEL 1
- MASONRY LEVEL 2
- WOOD CONSTRUCTION
- MECHANICAL & ELECTRICAL SYSTEMS
- ARCHITECTURAL SYSTEMS
- STRUCTURAL STEEL
- COLD-FORMED STEEL FRAMING

SPECIAL INSPECTION AGENCIES	FIRM AND CONTACT INFO.
1. SPECIAL INSPECTION COORDINATOR	TBD
2. CONCRETE INSPECTOR	TBD
3. STEEL INSPECTOR	TBD
4. SOILS INSPECTOR	TBD
5. CONCRETE TESTING AGENCY	TBD

STRUCTURAL STEEL

ITEM 1: MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS, AND WASHERS.	AGENCY # (QUALIF.): AWS/AISC-SSI, ICC-SWSI
SCOPE:	
A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
ITEM 2: INSPECTION OF HIGH-STRENGTH BOLTING.	AGENCY # (QUALIF.): AWS/AISC-SSI, ICC-SWSI
SCOPE:	
A. BEARING-TYPE CONNECTIONS.	
B. SLIP-CRITICAL CONNECTIONS.	
<input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS <input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS	
ITEM 3: MATERIAL VERIFICATION OF STRUCTURAL STEEL	AGENCY # (QUALIF.): PE/SE
SCOPE:	
A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED DOCUMENTS.	
B. MANUFACTURER'S MILL TEST REPORTS	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
ITEM 4: MATERIAL VERIFICATION OF WELD FILLER MATERIALS.	AGENCY # (QUALIF.): AWS-CWI, ASNT
SCOPE:	
A. IDENTIFICATION MARKINGS TO CONFORM TO AWS DESIGNATION LISTED IN THE WPS.	
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
ITEM 5: INSPECTION OF WELDING.	AGENCY # (QUALIF.): AWS-CWI, ASNT
SCOPE:	
A. STRUCTURAL STEEL	
1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS.	
<input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS <input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS	
2) MULTIPASS FILLET WELDS.	
<input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS <input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS	
3) SINGLE-PASS FILLET WELDS > 5/16".	
<input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS <input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS	
4) SINGLE-PASS FILLET WELDS <= 5/16".	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
5) FLOOR AND ROOF DECK WELDS.	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
B. REINFORCING STEEL	
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A706.	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
2) REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS, AND SHEAR REINFORCEMENT.	
<input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS <input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS	
3) SHEAR REINFORCEMENT	
<input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS <input type="checkbox"/> PERIODIC <input checked="" type="checkbox"/> CONTINUOUS	
4) OTHER REINFORCING STEEL	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
ITEM 6: INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS.	AGENCY # (QUALIF.): PE/SE
SCOPE:	
INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS.	
A) DETAILS SUCH AS BRACING AND STIFFENING.	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
B) MEMBER LOCATIONS.	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
C) APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
ITEM 7: WELDED STUDS WHEN USED FOR STRUCTURAL DIAPHRAGMS.	AGENCY # (QUALIF.): AWS-CWI, ASNT
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
ITEM 8: WELDING OF COLD-FORMED SHEET STEEL FRAMING MEMBERS.	AGENCY # (QUALIF.): AWS-CWI, ASNT
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	
ITEM 9: WELDING OF STAIRS AND RAILING SYSTEMS.	AGENCY # (QUALIF.): AWS-CWI, ASNT
<input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS <input checked="" type="checkbox"/> PERIODIC <input type="checkbox"/> CONTINUOUS	

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0		ISSUE FOR BID	SJD	PK	AC	11/17/16

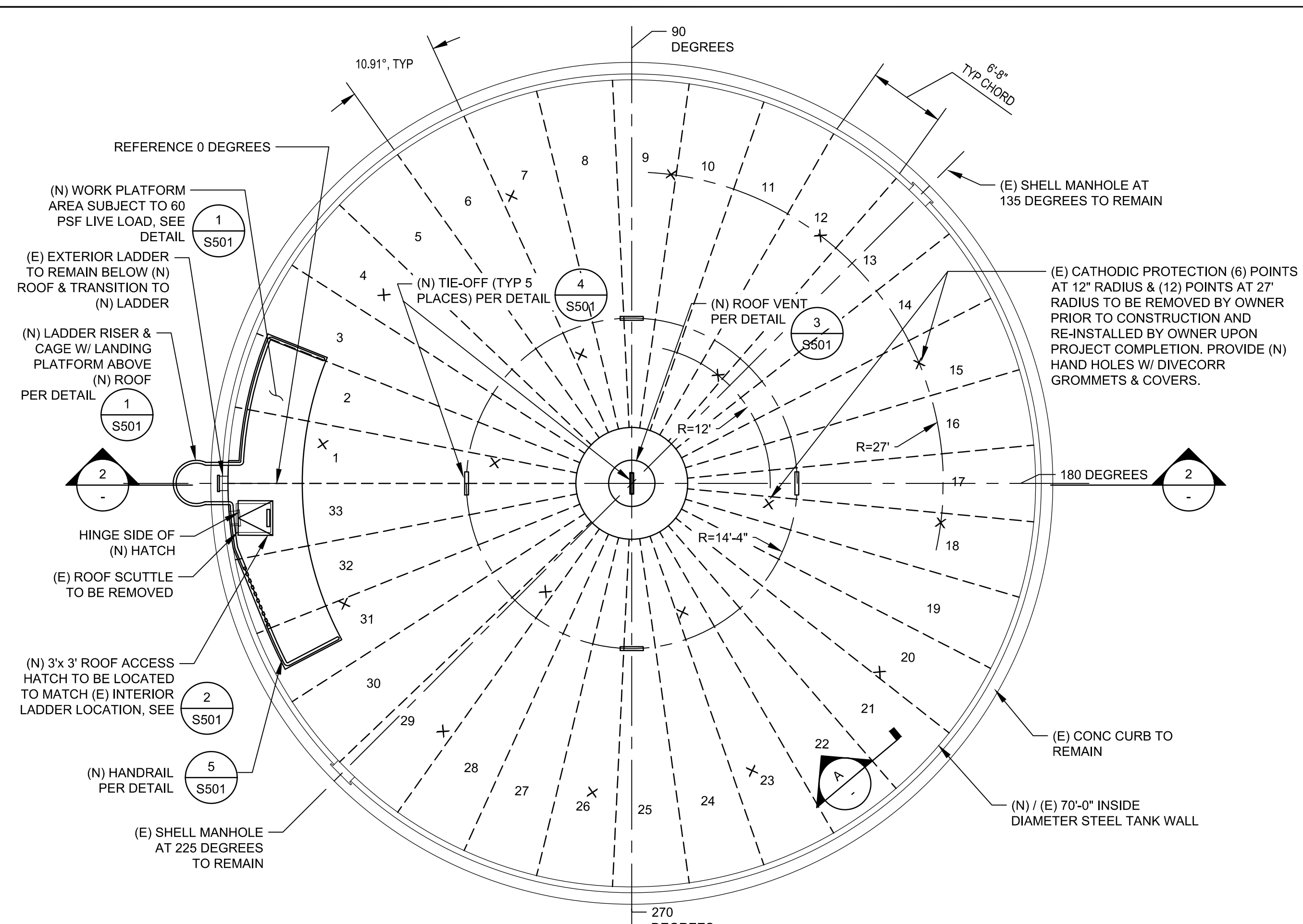
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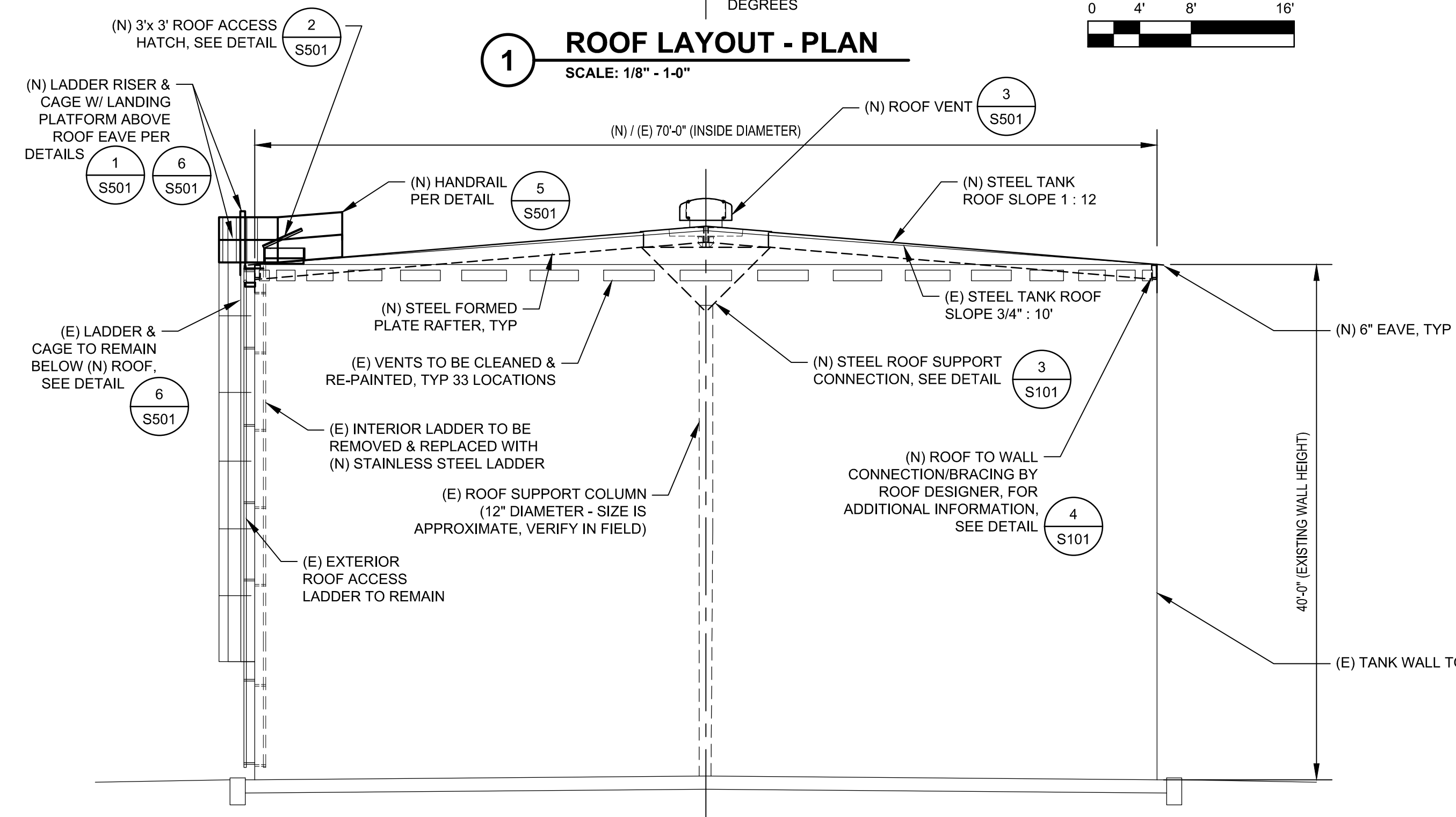
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Drafting Check	PK	Design Check	BLC
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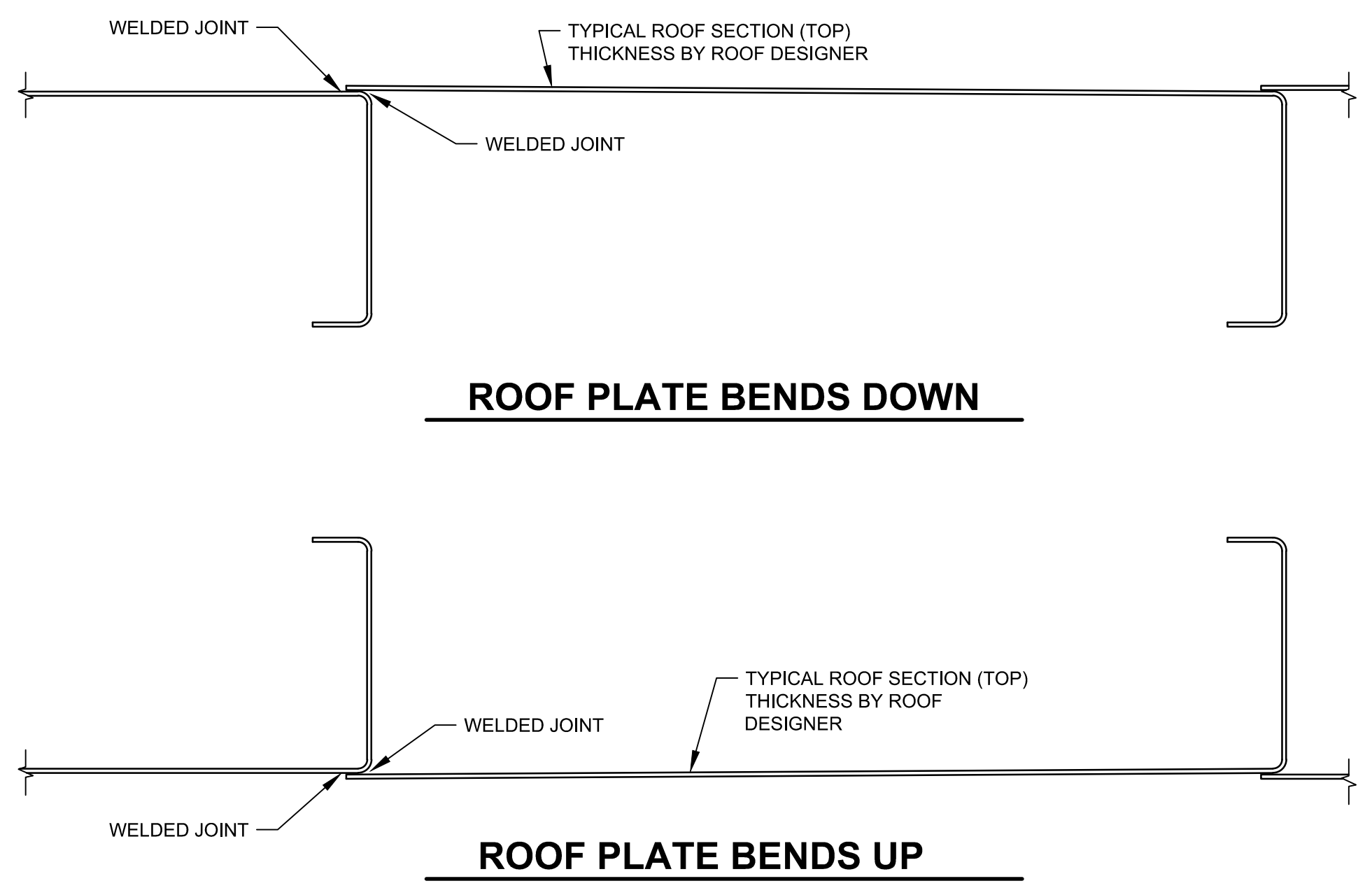
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Title	STATEMENT OF SPECIAL INSPECTIONS		
Contract No.	1125099		
Original Size	8	of	10
ANSI D	Drawing No:	S002	Rev: 0



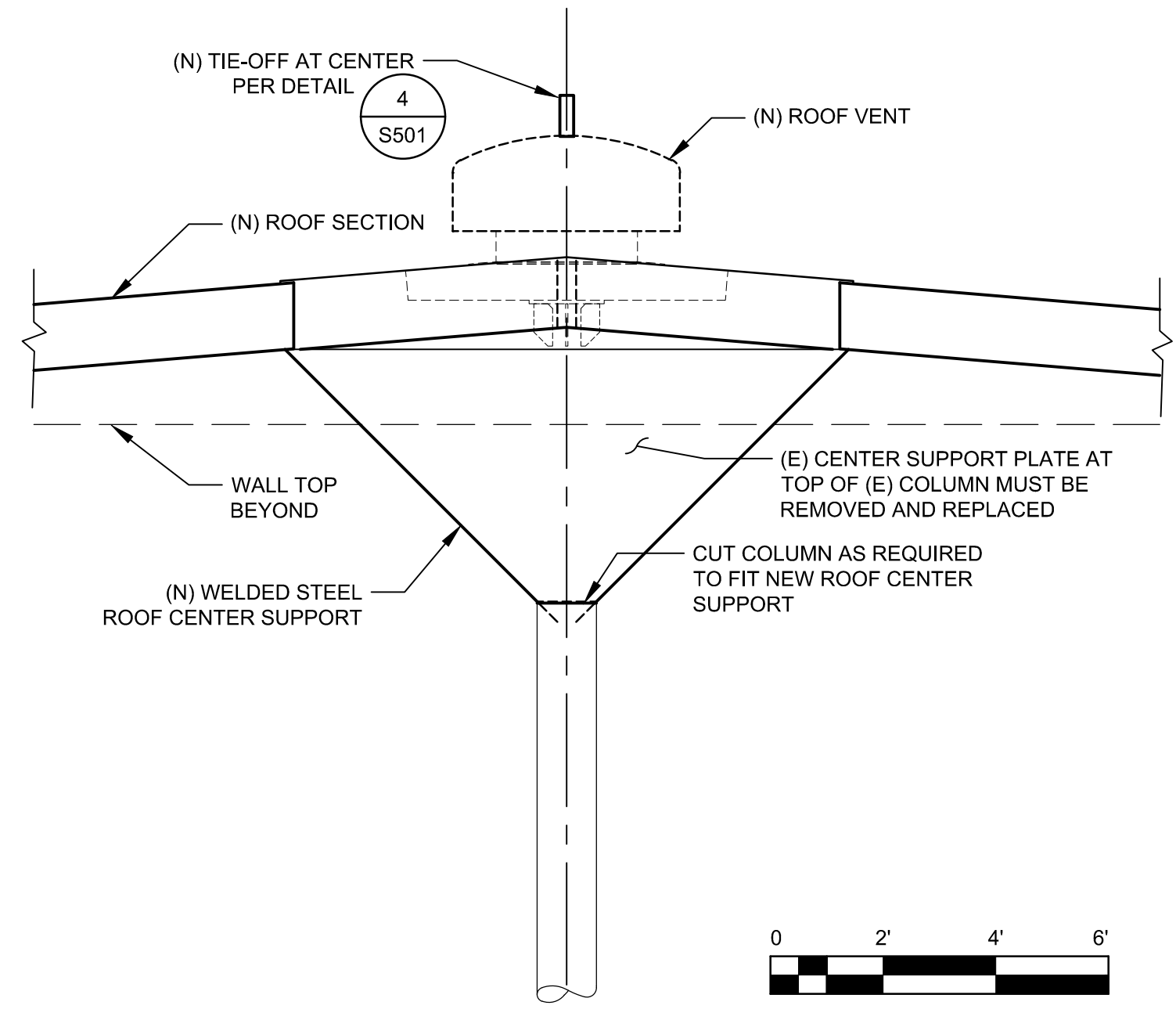
1 ROOF LAYOUT - PLAN
SCALE: 1/8" - 1'-0"



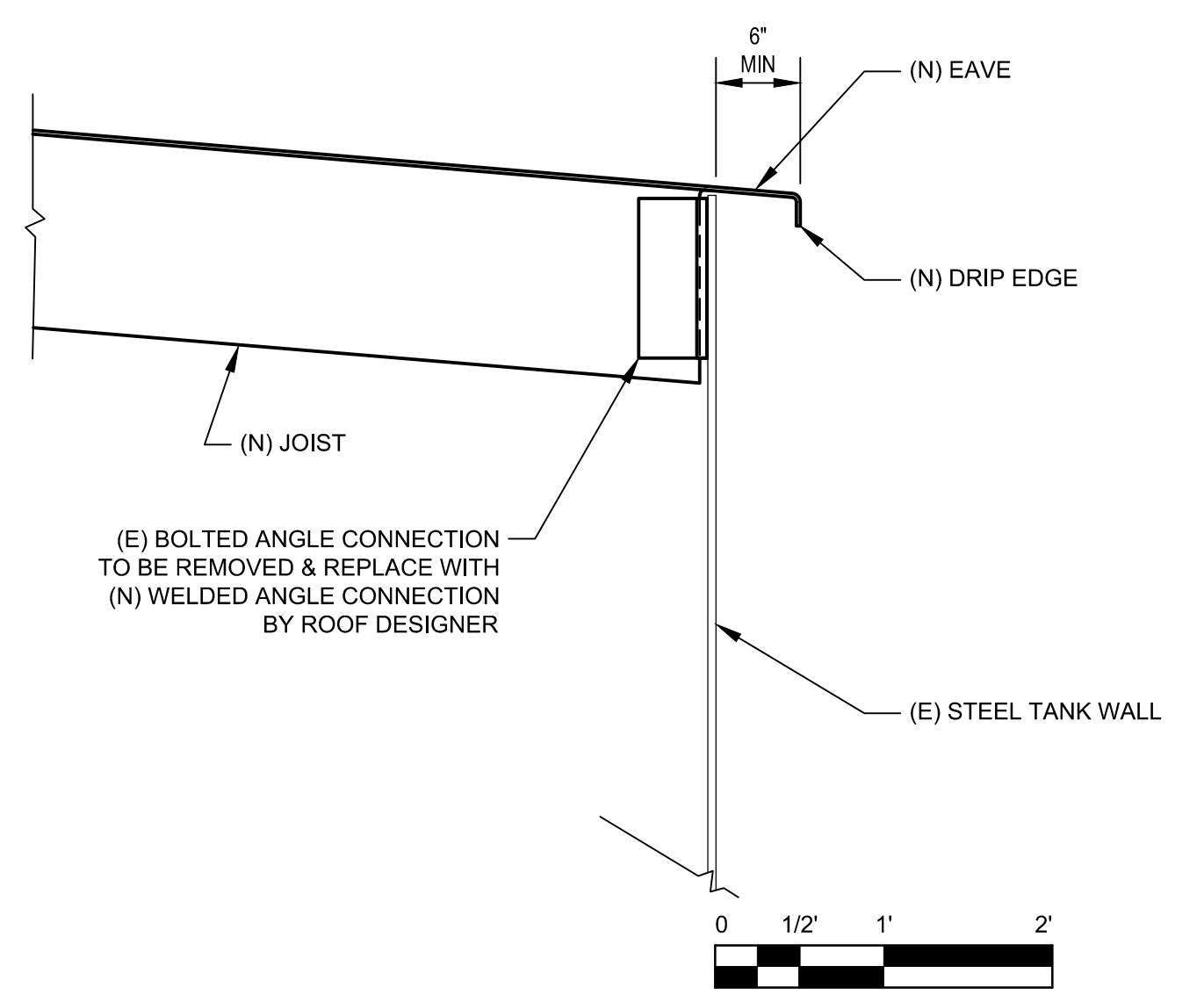
2 TANK SECTION
SCALE: 1/8" - 1'-0"



A TYPICAL FORMED ROOF SECTIONS
SCALE: 1 1/2" - 1'-0"



3 CENTER SUPPORT COLUMN CONNECTION
SCALE: 3/8" - 1'-0"



4 ROOF TO WALL CONNECTION
SCALE: 1" - 1'-0"

SHEET GENERAL NOTES

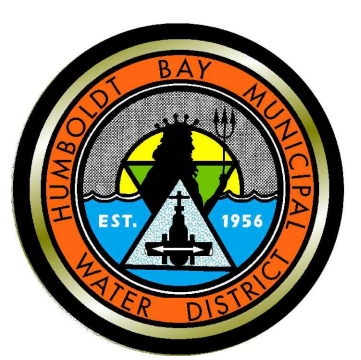
1. CONTRACTOR TO PROVIDE ALL COMPONENTS TO CONSTRUCT / INSTALL NEW WORK.

ROOF BUILD NOTE:

1. ROOF BUILD OPTIONS SHOWN ARE CONCEPTUAL ONLY. ONE-PIECE PRESS-BRAKE JOIST WITH ROOF PLATE SECTIONS WITH CONTINUOUS SEALED WELDED JOINTS ARE THE PREFERRED METHOD OF CONSTRUCTION TO PROVIDE A MORE SERVICEABLE INTERIOR ROOF SURFACE IN LIGHT OF CURRENT CORROSION ISSUES NECESSITATING THIS ROOF REPLACEMENT. CONTRACTOR BIDS SHALL INCLUDE THE METHOD OF FRAMING TO BE USED. CONTRACTOR BIDS SHALL ALSO INCLUDE JUSTIFICATION FOR ROOF FRAMING OPTION TO BE PROVIDED, INCLUDING ANY COST COMPARISON TO SERVICEABILITY/MAINTENANCE BENEFITS.

0	ISSUE FOR BID	SJD	PK	AC	11/17/16
No	Revision	Drawn	Job Manager	Project Director	Date

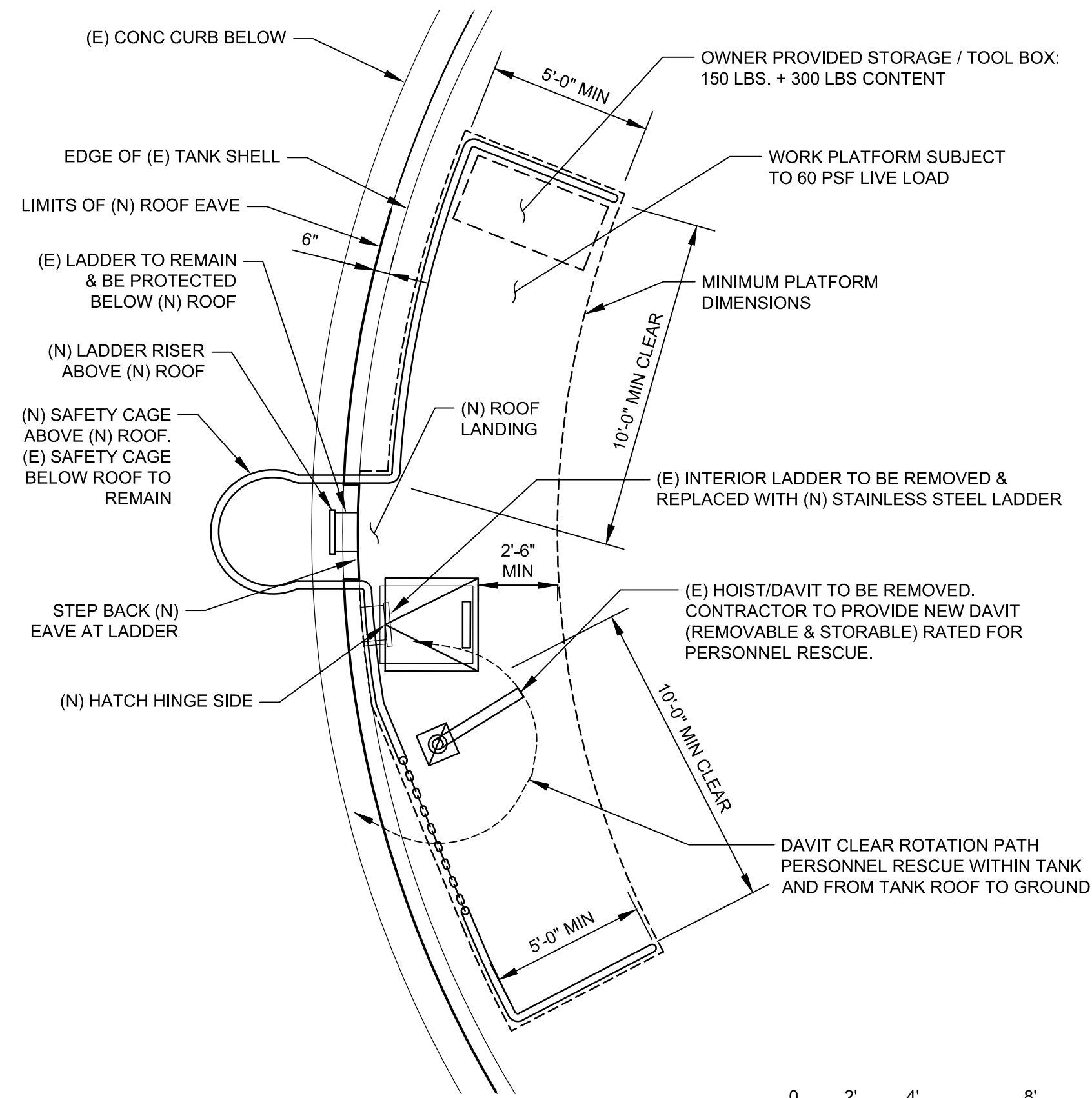
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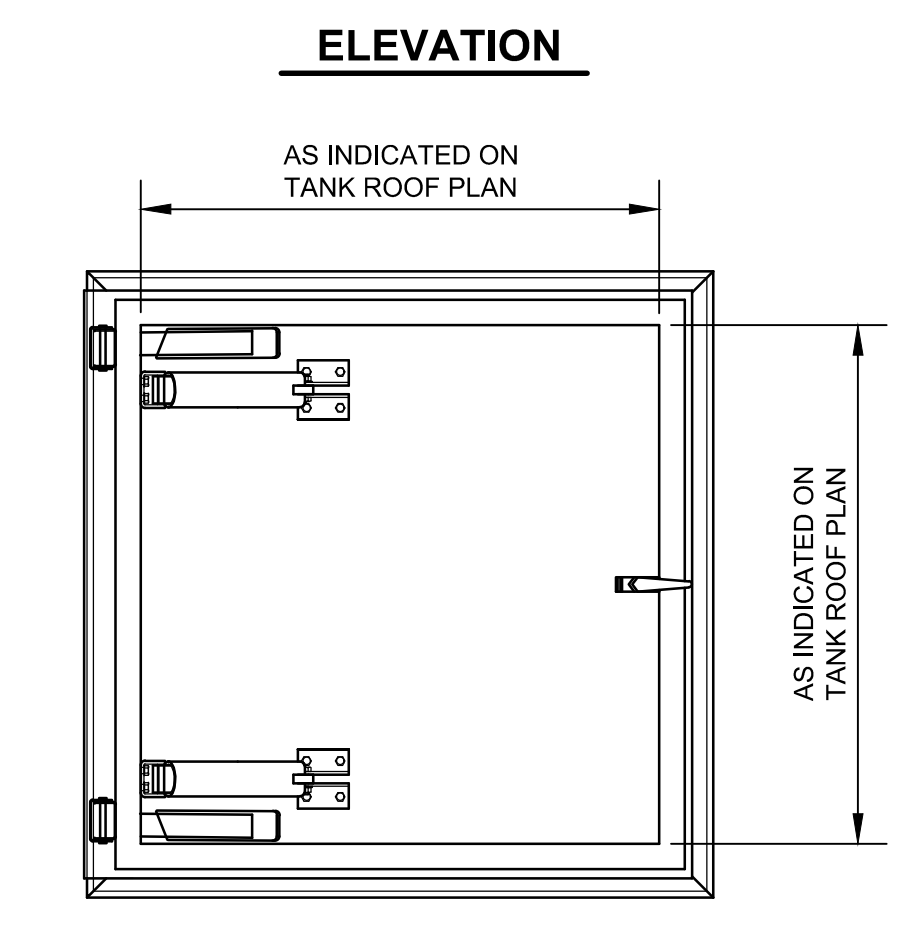
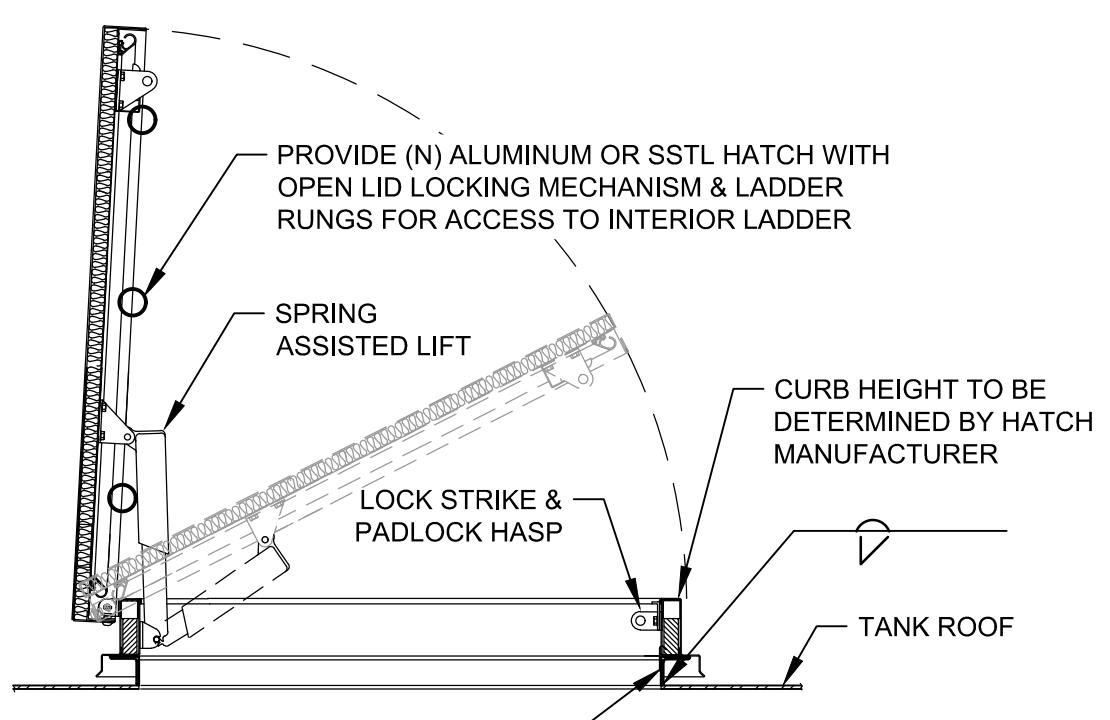
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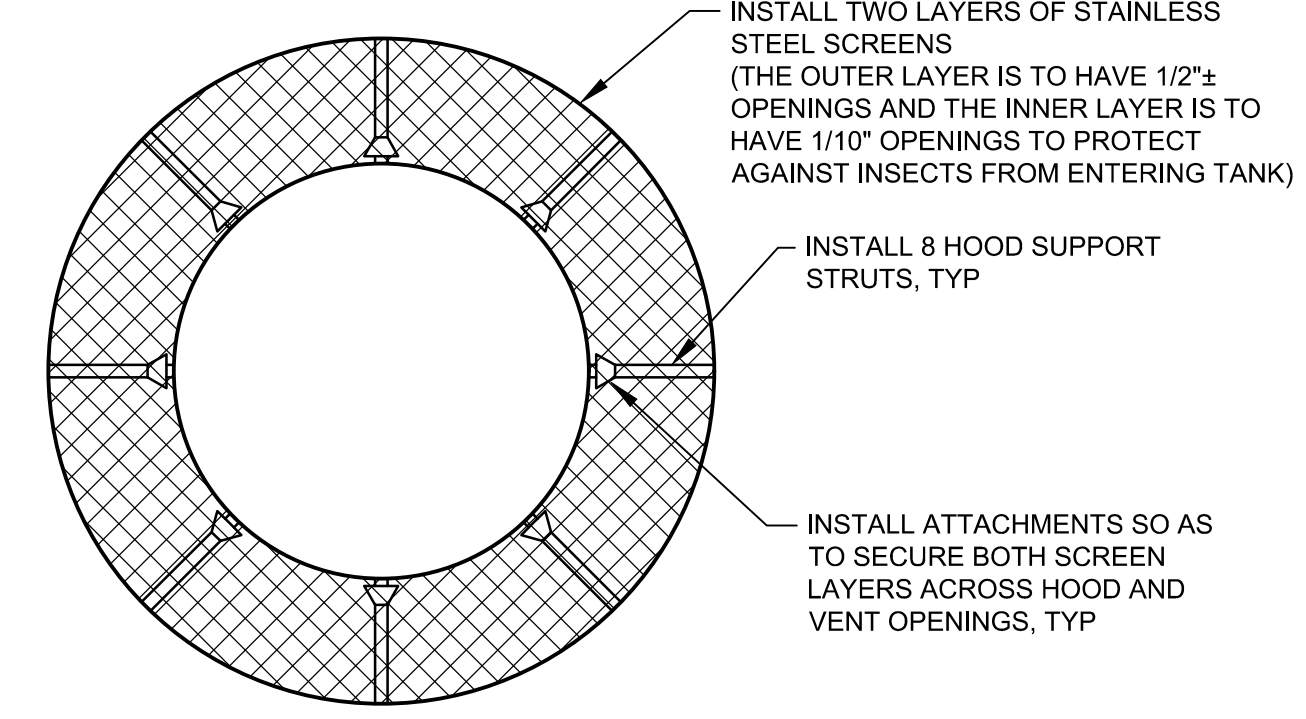
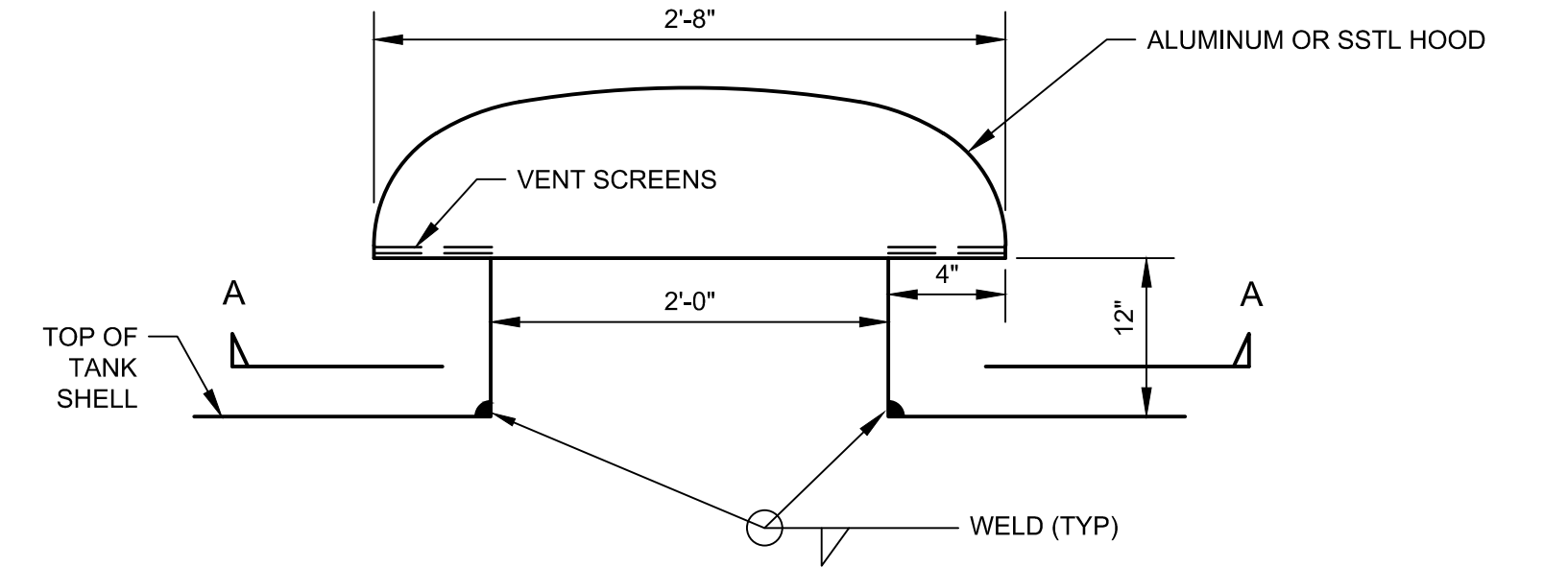
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Project	1-MG RESERVOIR ROOF REPLACEMENT & PAINTING		
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Contract No.	11125099		
Original Size	Ansi D Drawing No: S101		
Sheet	9 of 10		Rev: 0



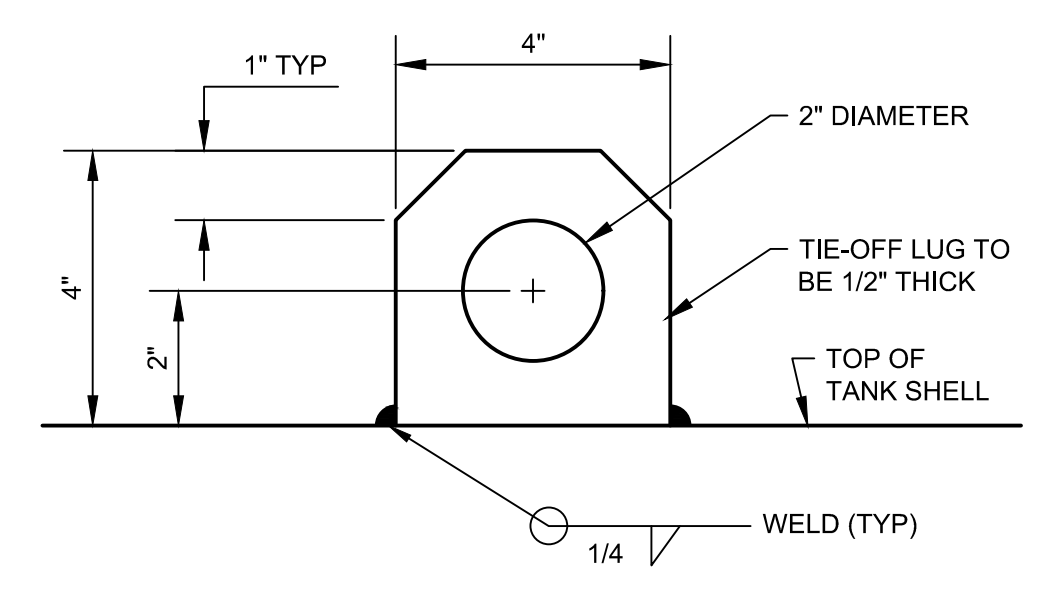
1 TANK PLATFORM & RAILING PLAN
SCALE: 1/4" = 1'-0"



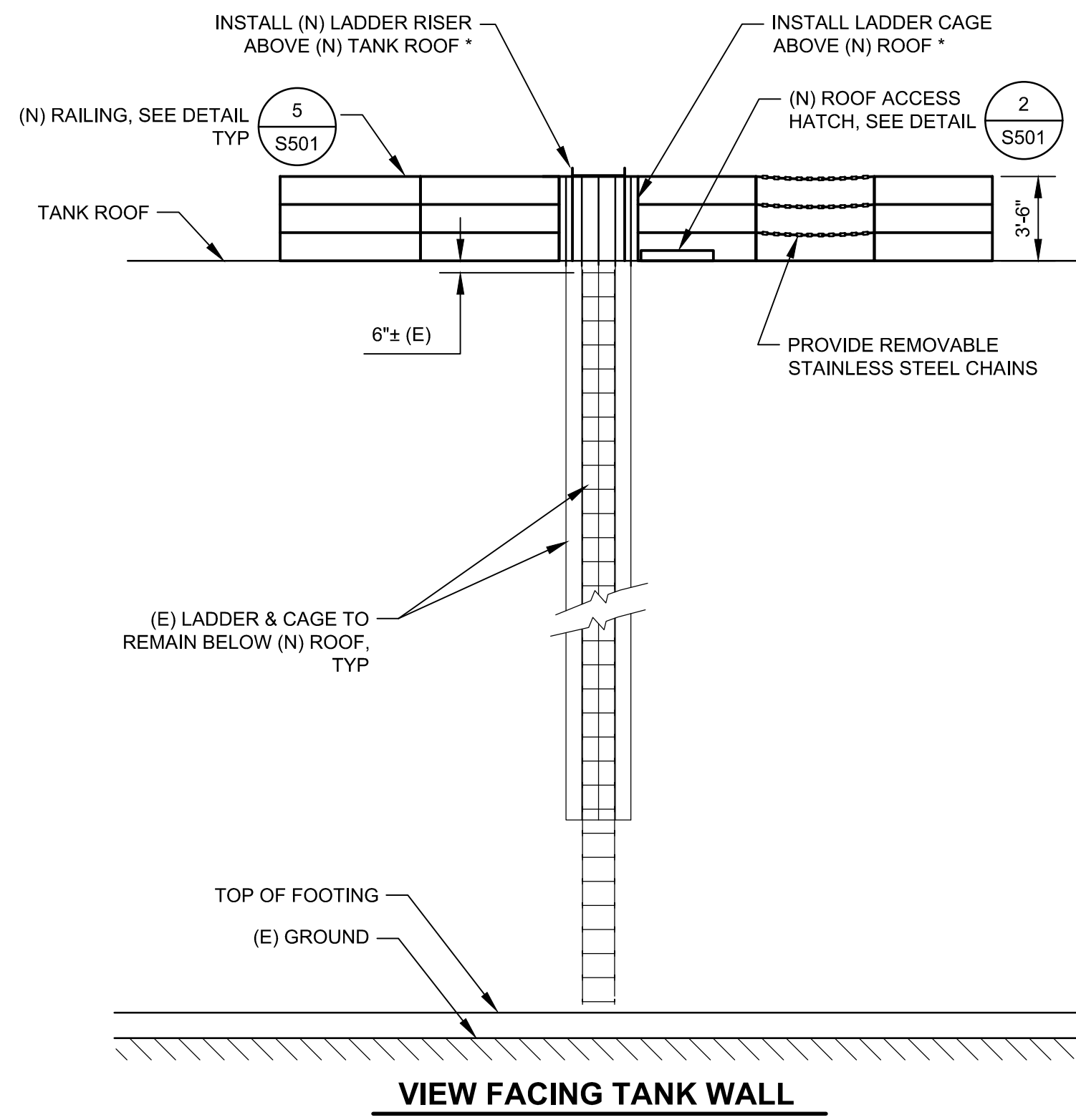
2 ROOF HATCH DETAIL
SCALE: NOT TO SCALE



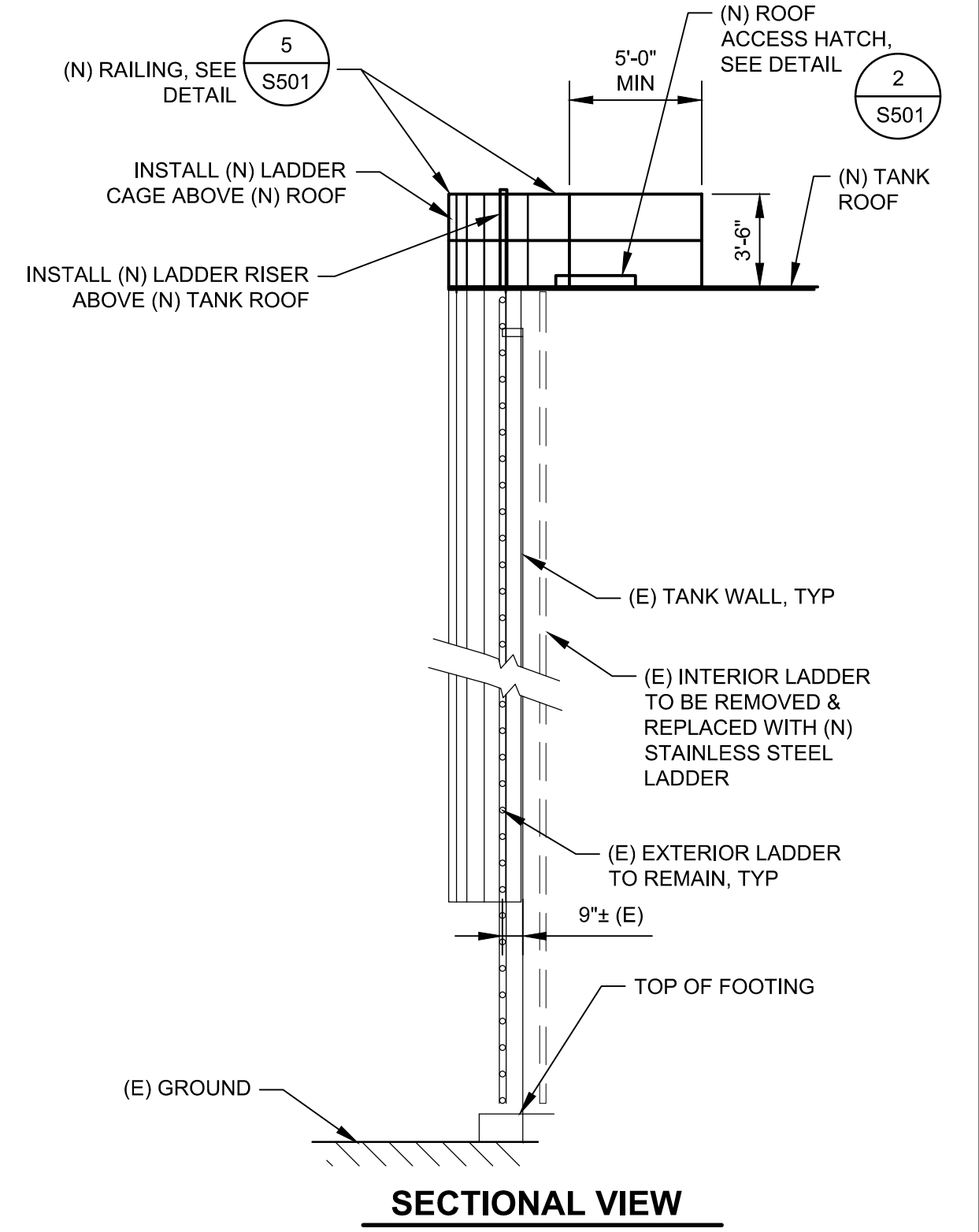
3 ROOF VENT DETAILS
SCALE: NOT TO SCALE



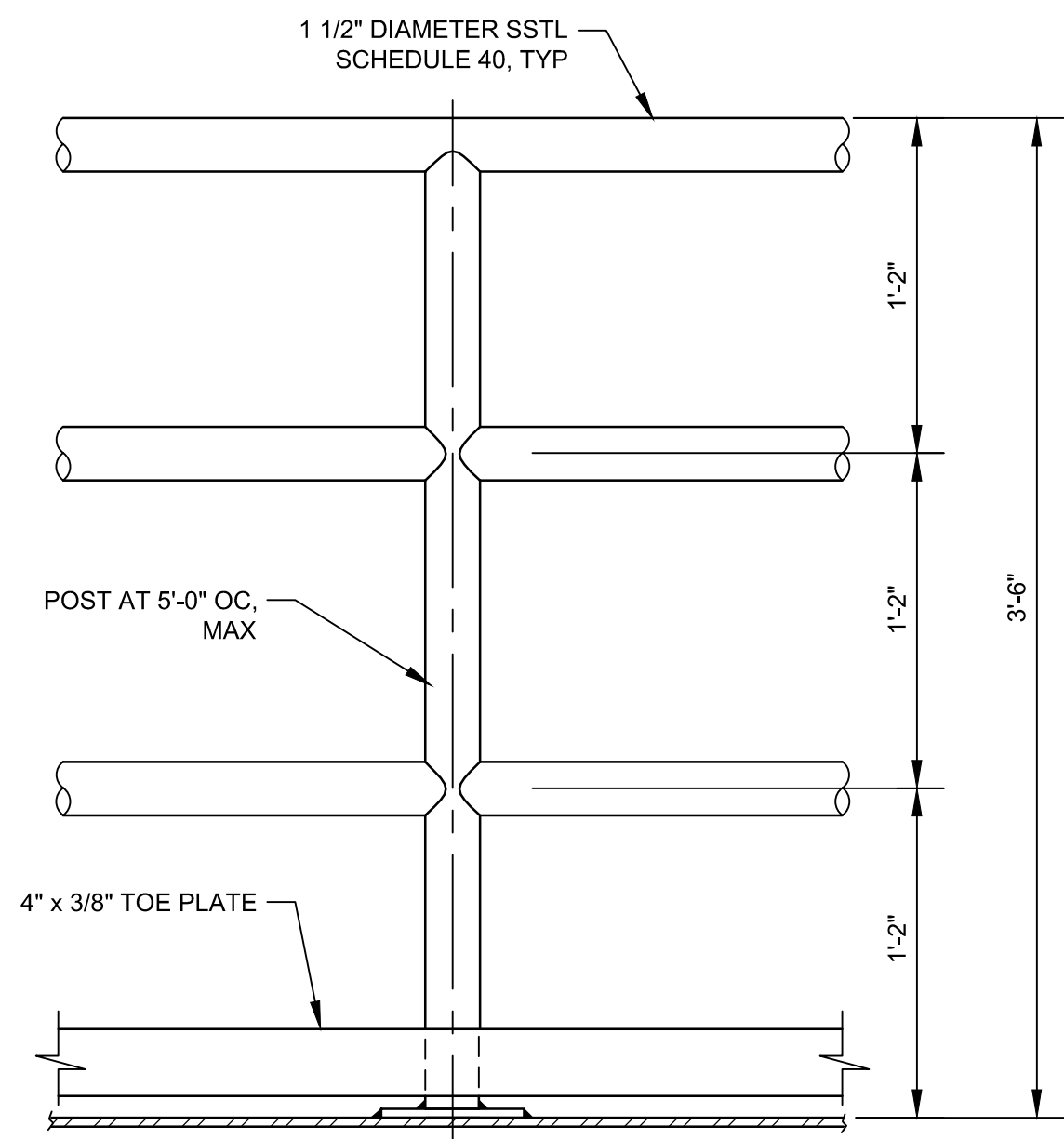
4 TIE-OFF DETAIL
SCALE: NOT TO SCALE



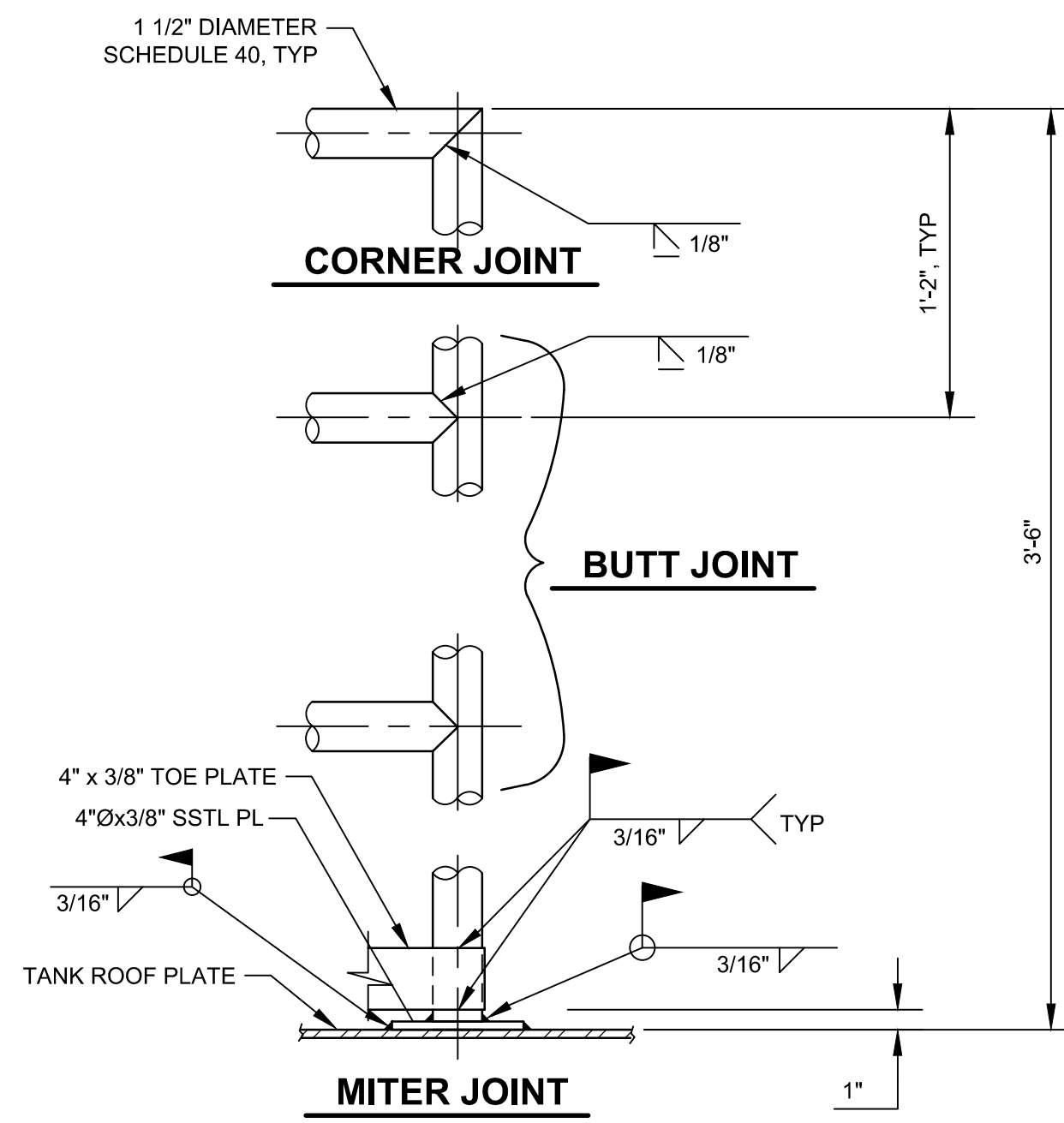
6 EXTERIOR LADDER DETAILS
SCALE: NOT TO SCALE



SECTIONAL VIEW



5 SAFETY RAILING DETAIL
SCALE: NOT TO SCALE



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No	Revision	Drawn	Job Manager	Project Director	Date

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Project	1-MG RESERVOIR ROOF REPLACEMENT & PAINTING		
Title	STRUCTURAL DETAILS		
Contract No.	11125099		
Original Size	Ansi D Drawing No: S501		
Sheet	10	of	10
Rev:	0		