CONSTRUCTION PLANS FOR MADRID FIRE SUPPRESSION SYSTEM IMPROVEMENTS

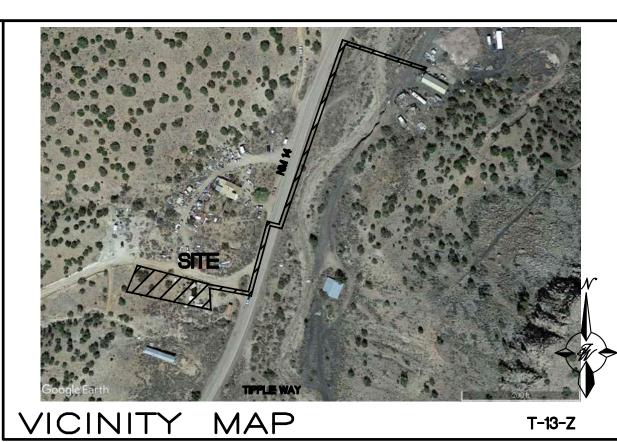
NM HIGHWAY 14

SANTA FE COUNTY, NEW MEXICO JULY, 2025





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- 2 GENERAL NOTES
- MADRID WATERLINE 10+00 TO 13+75
- 4 MADRID WATERLINE 13+00 TO 20+00
- MADRID WATERLINE 19+50 TO 21+75
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NOTE

1. ALL IMPROVEMENTS WITHIN NMDOT RIGHT OF WAY SHALL ADHERE TO THE NMDOT 2014 EDITION OF HIGHWAY AND BRIDGE CONSTRUCTION SPECIFICATIONS AND STANDARD DRAWINGS. IMPROVEMENTS RELATING TO TERRAIN MANAGEMENT MUST ALSO COMPLY WITH SECTION 7.17 OF THE SANTA FE COUNTY SUSTAINABLE LAND DEVELOPMENT CODE

2. IMPROVEMENTS ASSOCIATED WITH THIS PROJECT DO NOT MEET THE DEFINITION OF A PUBLIC WATER SYSTEM.

TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com REV SHEETS | COUNTY ENGINEER USER DEPT. USER DEPT. NGINEERS STAMP & SIGNATURE APPROVALS ENGINEER ********* APPROVED FOR CONSTRUCTION Meghan J. McDonald,P.E. Engineer Manager, NMAMLP PROJECT NO. RONALD R. BOHANNAN P.E. #7868 EMNRD-MMD-2025-01 1 OF 16



GENERAL NOTES

- 1. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2014 NMDOT SPECS FOR HIGHWAY AND BRIDGE CONSTRUCTION AND THE SANTA FE COUNTY SUSTAINABLE LAND DEVELOPMENT CODE CHAPTER 7.17 FOR TERRAIN MANAGEMENT. THESE CODES WILL BE REFERRED TO HEREAFTER AS "STANDARD SPECIFICATIONS. SEE NOTE ON SHEET 3
- 2. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 3. CONTRACTOR SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER AND ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- 4. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK. NMDOT TRAFFIC CONTROL BARRICADING WITHIN A RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO ANY WORK WITHIN STATE RIGHT OF WAY (7 DAY PROCESSING PERIOD)
- 5. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION ENGINEER (OR PROJECT MANAGER) NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE COUNTY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE COUNTY SURVEYOR AND SHALL NOTIFY THE COUNTY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. ONLY THE COUNTY SURVEYOR SHALL REPLACE SURVEY MONUMENTS. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED.
- 6. EXISTING UTILITY LINE LOCATIONS ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL THEN EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL PERTINENT EXISTING UTILITIES AND/OR OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. CONTRACTOR SHALL THEN COORDINATE RELOCATION OF UTILITY LINES WITH UTILITY COMPANIES AS REQUIRED. ANY DAMAGE CAUSED BY FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY EXISTING UTILITIES IS THE FULL RESPONSIBILITY OF THE CONTRACTOR.
- 7. CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY NMDOT AND SANTA FE COUNTY FOR THE PREPARATION OF "AS BUILT" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- 8. CONTRACTOR SHALL ASSUME FINANCIAL RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENT, PAVEMENT MARKINGS, SIGNAGE, CURB AND GUTTER, HANDICAP RAMPS, AND SIDEWALK DURING CONSTRUCTION APART FROM THOSE SECTIONS INDICATED ON THE PLANS, AND SHALL REPAIR OR REPLACE, PER THE STANDARD SPECIFICATIONS, ANY SUCH DAMAGE.
- 9. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- 10. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND MAINTAIN ALL CONSTRUCTION SIGNING UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE CITY AND OTHER JURISDICTIONAL AUTHORITIES WHERE APPLICABLE.
- 11. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS SHOWN. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR, INCLUDING ANY SUCH COSTS INCURRED.
- 12. SOIL REMOVALS MAY BE DISPOSED OF ON NORTHERN HALF OF SITE AS DIRECTED BY THE MADRID WATER BOARD PROJECT MANAGER.

UTILITIES

- 1. WATER & SEWER IF WITHIN NMDOT RIGHT OF WAY WILL REQUIRE A UTILITY PERMIT THAT SHALL BE SUBMITTED AND AND CONCURRED PRIOR TO INSTALLATION
- 2. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING. EXISTING VALVES AND MANHOLES SHALL NOT BE BURIED OR PAVED OVER BUT RIMS SHALL BE ADJUSTED TO MATCH NEW GRADE.
- 3. MANHOLE RIMS, FIRE HYDRANT ELEVATIONS, AND FLANGE ELEVATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND ADJUST TO FINAL PAVEMENT OR SURFACE GRADES.
- 4. PROPOSED WATERLINE MATERIALS SHALL BE PVC PIPE MEETING AWWA C-900: DR18 REQUIREMENTS (6" - 12") OR DUCTILE IRON PIPE MEETING AWWA C-150 REQUIREMENTS (6"
- 5. PROPOSED WATERLINE MATERIALS MUST COMPLY WITH NMDOT STANDARD SPECIFICATIONS.
- 6. ALL WATERLINE FITTINGS, VALVES, BENDS, TEES, CROSSES AND APPURTENANCES SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE NOTED ON THE PLANS. THE JOINT RESTRAINT REQUIREMENTS SHOULD BE DELINEATED WITHIN A JOINT RESTRAINT TABLE.
- 7. ALL FINAL BACKFILL FOR TRENCHES SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY PER ASTM D-1557 AND AS DIRECTED BY STANDARD SPECIFICATIONS SECTION 701.14.2 AND STANDARD DRAWING NUMBER 2465.
- 8. TRACER WIRE SHALL BE INCLUDED FOR ALL PUBLIC WATER AND SEWER MAINS AND FOR WATER SERVICES IN ACCORDANCE WITH NMDOT DETAILS.
- 9. CONTRACTOR SHALL PROVIDE THE PROPOSED HYDRO TESTING PLANS TO MADRID WATER DOMESTIC MUTUAL FOR APPROVAL PRIOR TO BEGINNING TESTING OPERATIONS.
- 10. AT UTILITY CROSSINGS, WHERE LESS THAN 18" OF VERTICAL SEPARATION FROM STORM DRAIN PIPING OR STRUCTURES IS PROPOSED, LEAN FILL CONSTRUCTION SHALL BE USED TO PROTECT THE WATER OR SEWER LINE. LEAN FILL SHALL EXTEND A PERPENDICULAR DISTANCE OF 5 FEET ON EACH SIDE OF THE STORM PIPE OR STRUCTURE.

OTHER COMMON NOTES

1. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE ACCOMPLISHED IN ACCORDANCE WITH OSHA 29CFR 1926.650 SUBPART P.

- 2. IN ADVANCE OF CONSTRUCTION, CONTRACTOR SHALL DETERMINE IF OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES, GUYS, ETC. ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION TO CONSTRUCTION OPERATIONS IS EVIDENT, CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY OWNER TO REMOVE OR SUPPORT THE UTILITY OBSTRUCTION. ANY COST ASSOCIATED WITH THIS EFFORT SHALL BE THE RESPONSIBILITY OF CONTRACTOR.
- 3. PNM WILL PROVIDE AT NO COST TO THE COUNTY OR THE CONTRACTOR THE REQUIRED PERSONNEL FOR INSPECTION OR OBSERVATION DEEMED NECESSARY BY PNM WHILE THE CONTRACTOR IS EXPOSING PNM'S CABLES. HOWEVER, THE CONTRACTOR SHALL BE CHARGED THE TOTAL COST ASSOCIATED WITH REPAIRS TO ANY DAMAGED CABLES OR FOR ANY COST ASSOCIATED WITH SUPPORTING OR RELOCATING THE POLES AND CABLES DURING CONSTRUCTION.
- 4. CONTRACTOR SHALL SUPPORT AND PROTECT ALL EXISTING, UNDERGROUND UTILITY LINES WHICH BECOME EXPOSED DURING CONSTRUCTION. PAYMENT FOR SUPPORTING WORK SHALL BE INCIDENTAL TO WATERLINE AND/OR SEWER LINE COSTS.
- 5. CONTRACTOR IS TO SUPPORT, PROTECT, AND MAINTAIN THE INTEGRITY OF ALL UNDERGROUND TELEPHONE, ELECTRIC CABLES AND CABLE TELEVISION UTILITIES AT NO ADDITIONAL COST TO THE OWNER. CABLE IS TO BE SUPPORTED AT A MAXIMUM SPACING OF FIFTEEN (15) FEET. CONTRACTOR SHALL COORDINATE WITH AND MAKE NECESSARY PAYMENT (IF ANY) TO UTILITY OWNER FOR DE-ENERGIZATION OF CABLES OR SUPPORT OF CABLES BY THE UTILITY OWNER.
- 6. CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR PRIVATE ROADWAY EASEMENTS TO PREVENT ANY EXCAVATED MATERIAL BEING WASHED DOWN THE STREET OR INTO ANY PUBLIC DRAINAGE FACILITY.
- 7. CONTRACTOR SHALL CONDUCT ALL WORK IN A MANNER WHICH WILL MINIMIZE INTERFERENCE WITH LOCAL TRAFFIC.
- 8. ALL EXISTING SIGNS, MARKERS, DELINEATORS, ETC., WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, STORED AND RE-SET BY THE CONTRACTOR.
- 9. DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL AND UNSUITABLE MATERIAL SHALL BE ARRANGED BY THE CONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE ENVIRONMENTAL REGULATIONS. NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR COSTS ASSOCIATED WITH OBTAINING A DISPOSAL SITE AND HAUL THERETO.
- 10. IF CULTURAL RESOURCES, SUCH AS HISTORIC OR PREHISTORIC ARTIFACTS, OR HUMAN REMAINS ARE DISCOVERED DURING EXCAVATION OR CONSTRUCTION, WORK SHALL CEASE AND THE CONSTRUCTION ENGINEER SHALL NOTIFY THE COUNTY OFFICE OF THE MEDICAL EXAMINER AT (505) 272-3053. IF THE MEDICAL EXAMINER DETERMINES THAT HUMAN REMAINS ARE NOT PRESENT, THE CONSTRUCTION ENGINEER SHALL NOTIFY THE STATE HISTORIC PRESERVATION OFFICER (SHPO) AT 827-6320.
- 11. AD 241 DROP OFF POLICY MUST BE ADHERED TO ACROSS PAVEMENT SECTION. EDGE OF ASPHALT MUST TAPER TO GRADE AT A 3:1 MAXIMUM SLOPE
- 12. ALL NMDOT MONUMENTS MUST BE PRESERVED. IF AN NMDOT MONUMENT IS IN CONFLICT WITH THE PROPOSED IMPROVEMENTS PLEASE CONTACT NMDOT FOR GUIDANCE

		INFORMATION		DATE	DATE	DATE	DATE	1 INFORMATION	DATE		
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THE CONSTRUCTION LIMITS OR. ID UNSUITABLE MATERIAL TH ALL APPLICABLE OR PAYMENT WILL BE MADE O HAUL THERETO.		SURVEY INFORMATION	FIELD NOTES	BY							
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					BY			DATE: JUNE 2024	DATE: JUNE 2024	JOB NO.: 2023094	DATE: JUNE 2024
					REMARKS	REVISIONS	DESIGN			WATER TANK IMPROVEMENTS	
TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com					NO. DATE			DESIGNED BY: JN	DRAWN BY: RMG	DRAWN NAME: MADRID WA	CHECKED BY: RRB
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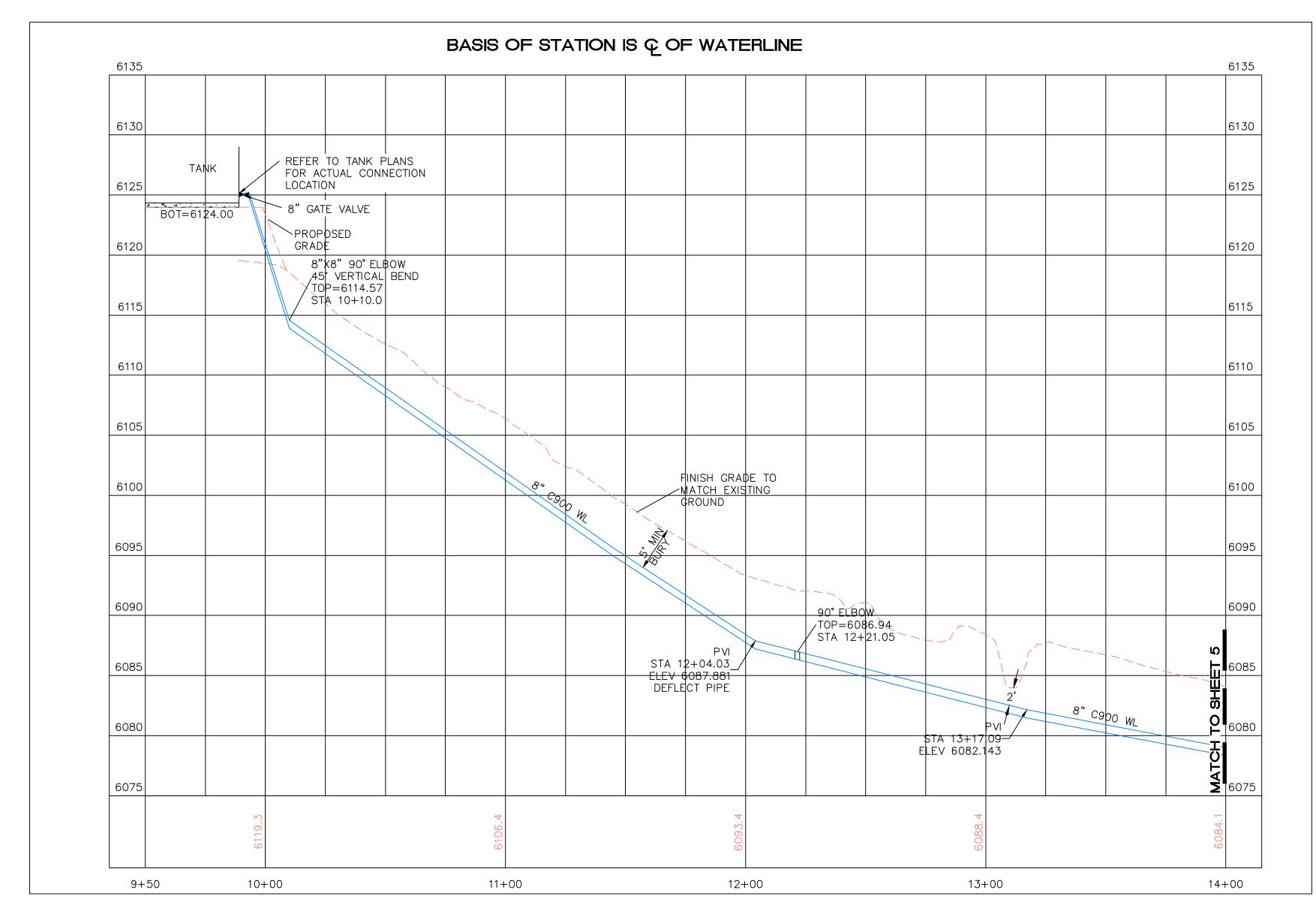
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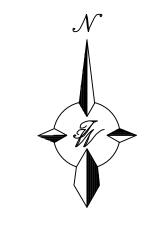






Phone: 505-858-3100 PROJECT NO. Fax: 505-858-1118 EMNRD-MMD-2025-01





GRAPHIC SCALE

(IN FEET)

1 inch = 30 ft.

KEYED NOTES

LEGEND

1) PROPOSED TANK 125000 GAL 30' DIA 25' HIGH BOTTOM=6124.00

---- EASEMENT

BOUNDARY LINE

EXISTING EDGE OF PAVEMENT

EXISTING OVERHEAD POWER LINE

EXISTING UNDERGROUND TELEPHONE LINE

EXISTING POWER POLE EXISTING WATER METER

EXISTING GUY ANCHOR

PROPOSED 8" WATERLINE

- 2 CONNECT TO TANK PER MANUFACTURER SPECIFICATIONS IE=6124.6
- 3 10+10.00 0.0 RT 2-45 ELBOWS
- 4 12+21.05 0.0 RT 2-45 ELBOWS
- 5 NOT USED
- 6 2" END CAP TO BE INSTALLED BY UTILITY CONTRACTOR AT INTERIM
- 7) 11+11.8 21.2 RT ELEV AT EXIST WELL HOUSE 6100.00
- 8 10+25.4 35.1 RT ELEV AT TANK HOUSE 6124.00

<u>NOTES</u>

- 1. "UTILITY CONTRACTOR" REFERS TO THE PARTY RESPONSIBLE FOR INSTALLING TANK SITE PLAN AND THE PROPOSED FIRE SUPPRESSION LINE EXTENDING FROM THE TANK FLANGE STUB OUT INDICATED ON THIS SHEET TO THE TIE-IN POINT AT THE EXISTING FIRE SUPPRESSION LINE.
- 2. "TANK CONTRACTOR" REFERS TO THE PARTY RESPONSIBLE FOR INSTALLING THE PROPOSED WATER STORAGE TANK AND CONSTRUCTING ITS FOUNDATION.
- 3. 3/4" PEP CONDUIT FOR SCADA SYSTEM TO BE INSTALLED IN SHARED TRENCH WITH 2" FILL LINE AT MINIMUM 1' OF SEPARATION.
- 4. UPGRADES TO WELL HOUSE EQUIPMENT TO INTEGRATE THE NEW TANK WILL BE THE RESPONSIBILITY OF MADRID WATER MUTUAL DOMESTIC WATER
- 5. ALL WATERLINES TO BE C 900 PVC, AT ARROYO CROSSING TO BE DUCTILE IRON (SEE SHEET 5)
- 6. TRENCH FROM WELL HOUSE TO TANK WILL INCLUDE A SEPARATE CONDUIT FOR A SCADA PRESSURE TRANSDUCER.
- 7. UTILITY CONTRACTOR IS RESPONSIBLE FOR THE WATERLINE UP TO THE LIMITS DESIGNATED ON THIS SHEET.
- 8. INSTALLATION OF THE WATER TANK AND TANK FOUNDATION IS THE

RESPONSIBILITY OF THE TANK INSTALLER.

- 9. ACCESS TO SITE FOR MATERIAL DELIVERY AND STAGING IS LIMITED. IT IS THE RESPONSIBILITY OF THE TANK INSTALLER TO REVIEW DELIVER AND INSTALLATION LOGISTICS.
- 10. UTILITY CONTRACTOR TO REQUEST INSPECTIONS FOR WATERLINE PRIOR TO BACKFILLING.
- 11. MINIMUM BEND RADIUS OF 8" C900 PIPE IS 188.54 FT. MAXIMUM DEFLECTION ANGLE IS 3 DEGREES.

SITE BENCHMARK OPUS POINT SET CP-NO. 5 REBAR WITH ALUMINUM CAP "PS 11993" N=1,601,031.522 E=1,668,078.227 EL=6098.877

CAUTION ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS, IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH

AND APPROVED BY THE ENGINEER. TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tiérrawestllc.com

NEW MEXICO ENERGY MINERAL AND NATURAL RESOURCE ABANDONED MINE LAND PROGRAM

MADRID WATER - FIRE SUPPRESSION IMPROVEMENTS STA 10+00 TO STA 14+00

MO./DAY/YR. MO./DAY/YR.

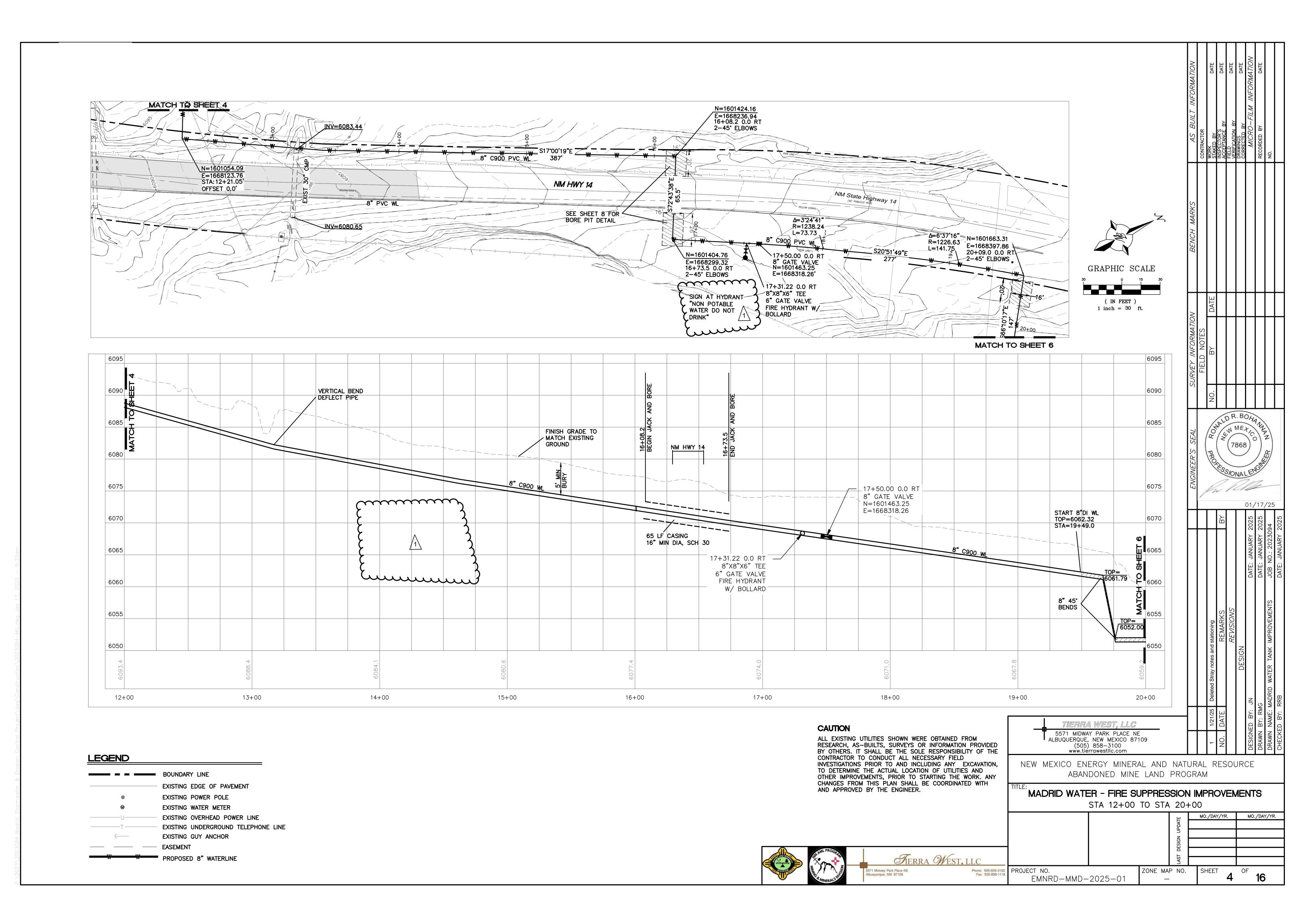


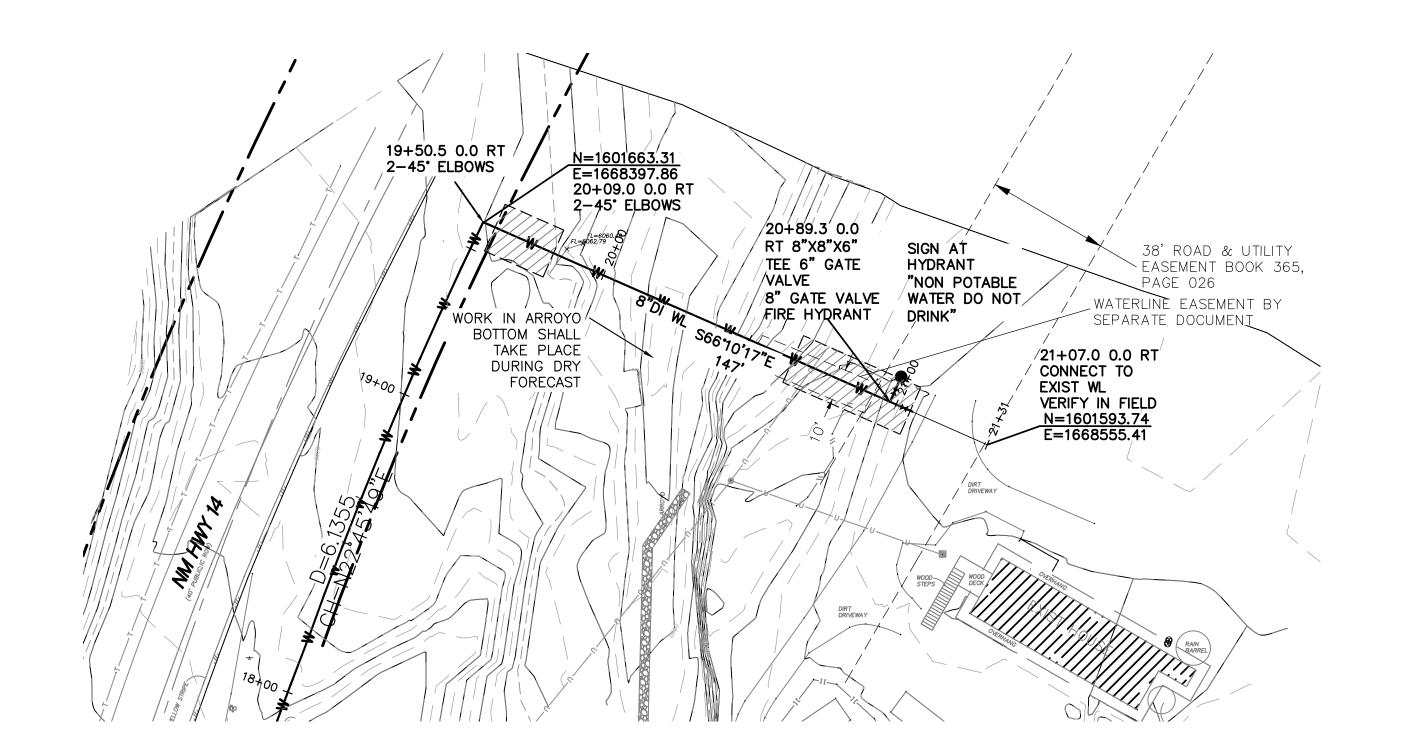
Phone: 505-858-3100 PROJECT NO. Fax: 505-858-1118 EMNRD-MMD-2025-01

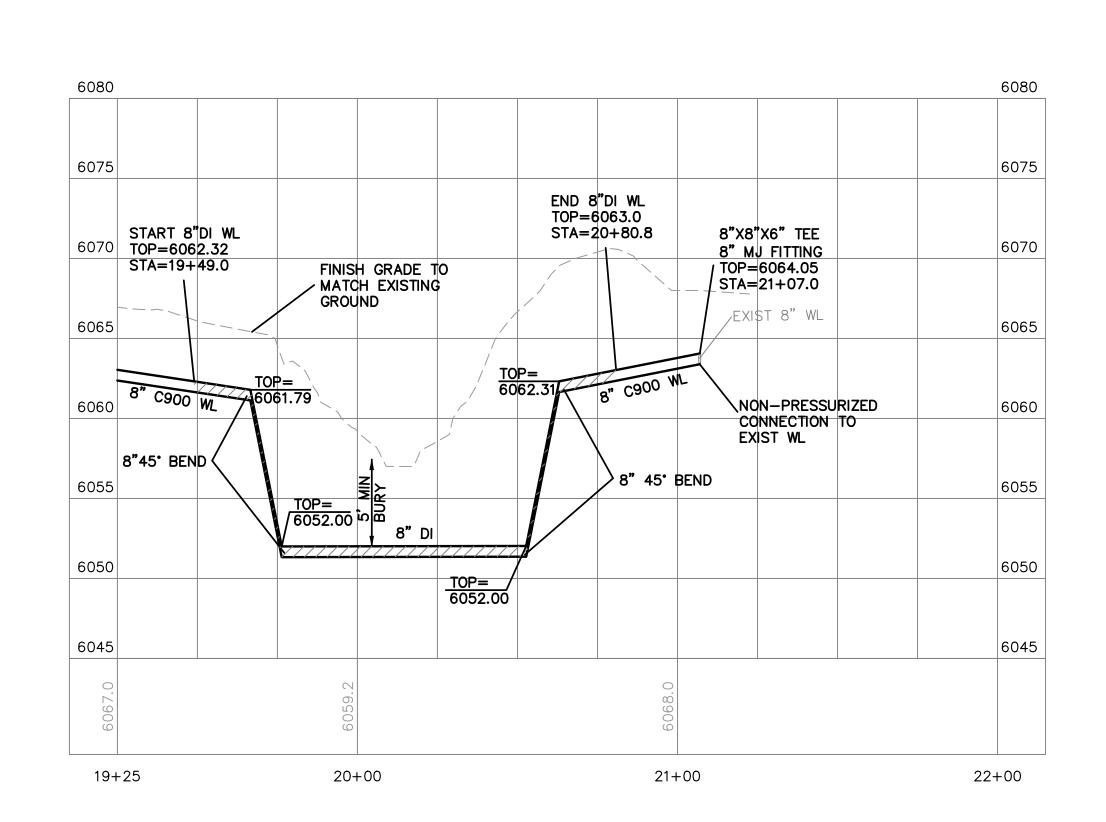
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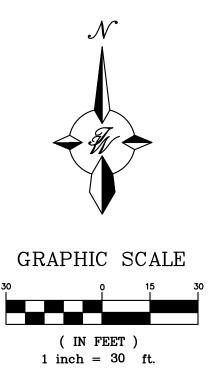
3 OF SHEET

06/26/24









NOTES

- 1. IF JOINTS ARE REQUIRED FOR THE SEGMENT OF PIPE UNDER THE ARROYO, BUTT FUSION WILL BE REQUIRED AT
- 2. IT WILL BE THE RESPONSIBILITY OF THE UTILITY CONTRACTOR TO DECOMMISSION AND ABANDON THE EXISTING FIRE SUPPRESSION LINE IN PLACE.

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			DATE			.: B	BY: RM	NAME: I	ED BY:
5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com			NO.			DESIGNED	DRAWN	DRAWN	СНЕСКЕВ
NEW MEXICO ENERGY MINERAL AND NAT	UR	4L	RES	SOL	JRC	Έ			

01/17/25

ABANDONED MINE LAND PROGRAM

MADRID WATER - FIRE SUPPRESSION IMPROVEMENTS

STA 19+50 TO STA 21+75 MO./DAY/YR. 5 OF ZONE MAP NO. SHEET EMNRD-MMD-2025-01



ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.









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LEGEND

BOUNDARY LINE

---- EASEMENT

EXISTING EDGE OF PAVEMENT

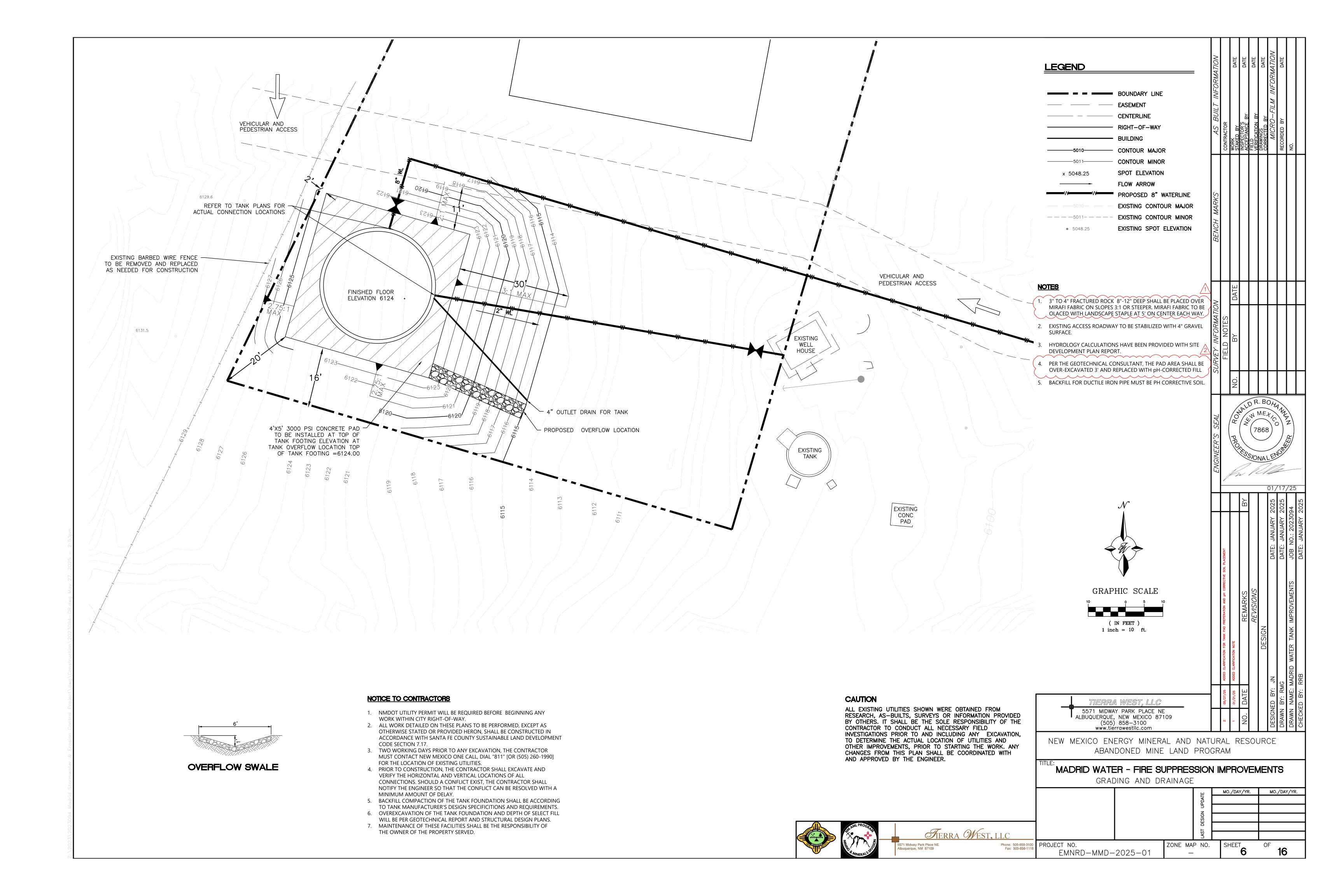
EXISTING OVERHEAD POWER LINE

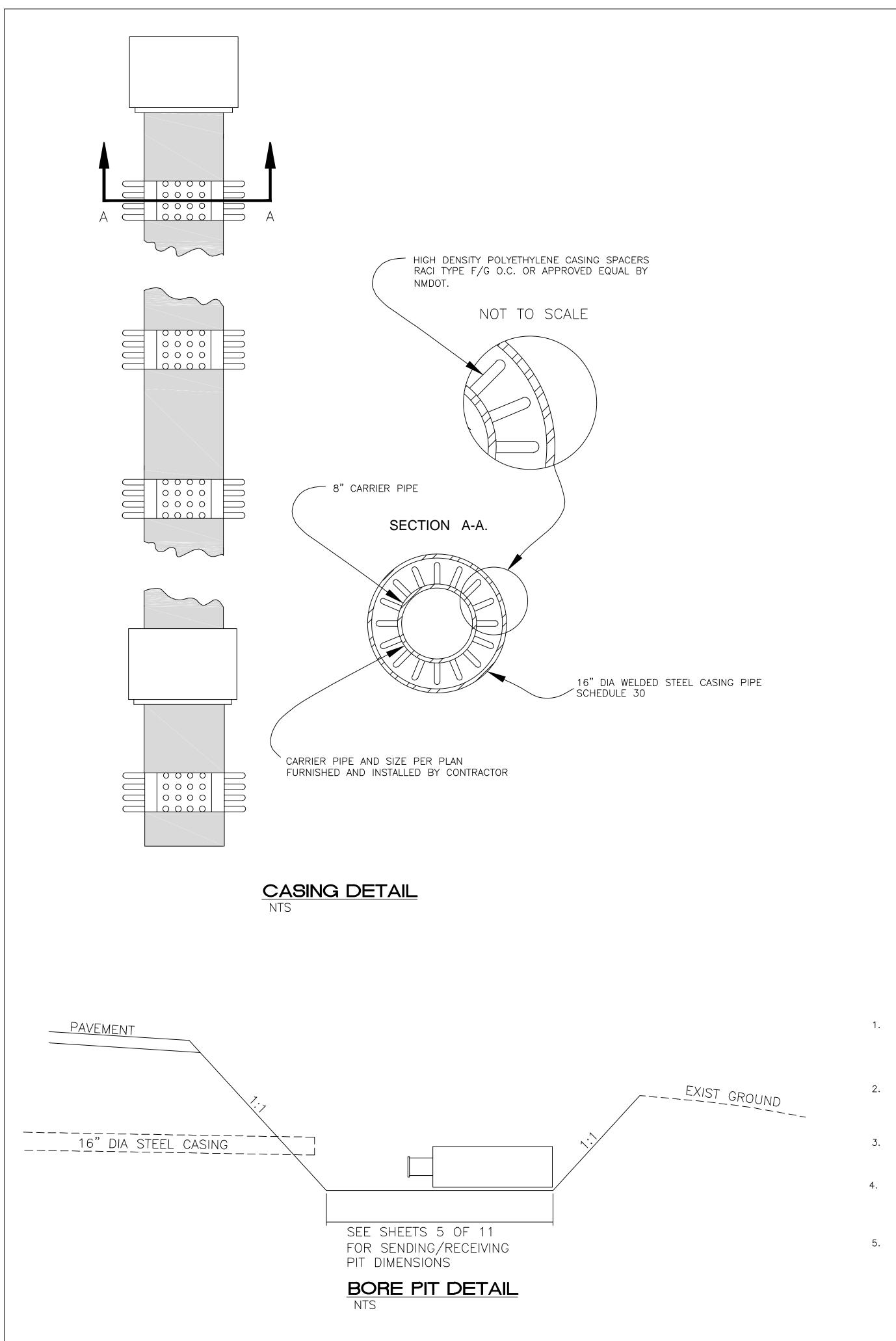
EXISTING UNDERGROUND TELEPHONE LINE

EXISTING POWER POLE EXISTING WATER METER

EXISTING GUY ANCHOR

PROPOSED 8" WATERLINE





THE FOLLOWING TABLES WERE CREATED USING EBAA IRON INC. SOFTWARE FOR RESTRAINING JOINTS WITH THESE CRITERIA:

DEPTH OF BURY: 3.0' MINIMUM SAFETY FACTOR: 1.5 TO 1

PIPE MATERIAL:

GM/SM-SILTY GRAVEL/SILTY SAND, GRAVEL-SAND MIXTURES SOIL TYPE: TEST PRESSURE: 150 PSI TRENCH TYPE 3: PIPE BEDDED IN 4" MINIMUM LOOSE SOIL

BACKFILL LIGHTLY CONSOLIDATED TO TOP OF PIPE THESE LENGTHS WILL BE AFFECTED IF THE TYPE OF MATERIAL, GREATER DEPTH OF BURY, ETC. CHANGES. THESE MUST BE RECALCULATED BY THE DESIGN ENGINEER PRIOR TO

CONSTRUCTION.							
RESTRAINED JOINT LENGTHS FOR TEES*							
CIZE		LE	NGTH AL	ONG RUI	/* *		
SIZE	10'	8'	6'	4'	2'	0'	
12x12x12	61	68	76	83	90	98	
12x12x10	39	48	56	65	74	83	
12x12x8	15	26	37	48	59	70	
12×12×6	1	1	9	24	38	53	
12x12x4	1	1	1	1	16	37	
10x10x10	46	54	61	68	76	83	
10×10×8	25	34	43	52	61	70	
10x10x6	1	5	17	29	41	53	
10x10x4	1	1	1	2	20	37	
8x8x8	34	42	49	56	63	70	

*RESTRAINTS ONLY PLACED ON THE BRANCH **LENGTH ALONG RUN REFERS TO THE LENGTH OF PIPE ON EITHER SIDE OF THE TEE BEFORE THE NEXT JOINT.

6x6x4 | 1 | 1 | 6 | 17 | 27 | 37

6 | 15 | 25 | 34 | 43 | 53

1 1 1 10 24 37

7 | 24 | 31 | 39 | 46 | 53

RESTRAINED JOINT LENGTHS FOR HORIZONTAL BENDS, VALVES, AND DEAD ENDS (EACH SIDE)										
CIZE	HORIZONTAL BENDS VALVES									
SIZE	90°	45°	DEAD END							
12	45	19	9	4	102					
10	38	16	8	4	86					
8	32	13	6	3	72					
6	25	10	5	2	55					
4	18	7	4	1	39					

	INED JO R REDU		
SI7F	L. SIDE	SIZE	L. SIDE
5	L. JIDL	JIZL	L. SIDL
12x10	50	10x6	53
12x8	54	10x4	70
12×6	74	8x6	30
12x4	88	8x4	52
10×8	29	6x4	28

***RESTRAINTS ONLY PLACED ON LARGE SIDE

THE FOLLOWING TABLES WERE CREATED USING EBAA IRON INC. SOFTWARE FOR RESTRAINING JOINTS WITH THESE CRITERIA:

DEPTH OF BURY: 3.0' MINIMUM TO 6.0'

SAFETY FACTOR: 1.5 TO 1 PIPE MATERIAL: PVC

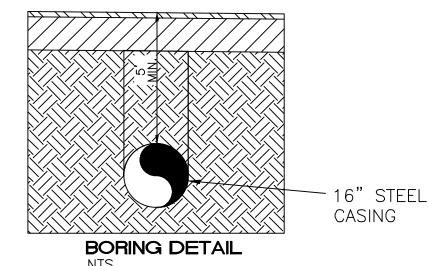
GM/SM-SILTY GRAVEL/SILTY SAND, GRAVEL-SAND MIXTURES TEST PRESSURE: 150 PSI

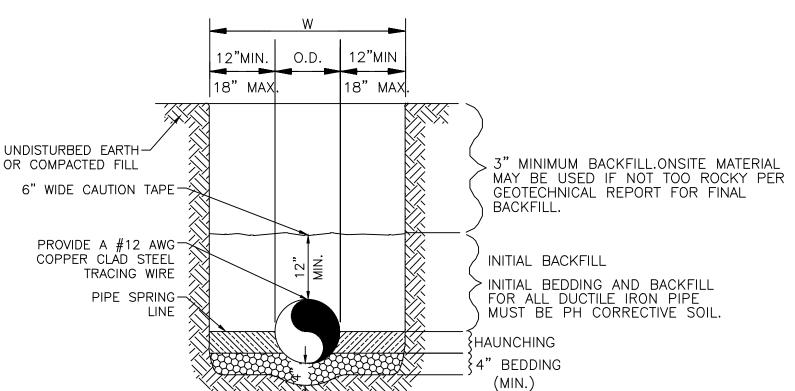
TRENCH TYPE 3: PIPE BEDDED IN 4" MINIMUM LOOSE SOIL BACKFILL LIGHTLY CONSOLIDATED TO TOP OF PIPE

THESE LENGTHS WILL BE AFFECTED IF THE TYPE OF MATERIAL, GREATER DEPTH OF BURY, ETC. CHANGES. THESE MUST BE

RECALCULATED BY THE DESIGN ENGINEER PRIOR TO

	RESTRAINED JOINT LENGTHS FOR VERTICAL OFFSETS/BENDS (EACH SIDE)							
			HORIZON	TAL BENDS				
SIZE		90°	45°	22-1/2*	11-1/4°			
12	UPPER LOWER	DON'T USE	42 10	20 5	10 2			
10	UPPER LOWER	DON'T USE	36 8	17 4	8 2			
8	UPPER LOWER	DON'T USE	30 7	14 3	7 2			
6	UPPER LOWER	DON'T USE	23 5	11 3	5 1			
4	UPPER LOWER	DON'T USE	16 4	8 2	4 1			





TRENCH DETAIL GENERAL NOTES

- BEDDING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR. (SEE SPECIFICATIONS FOR GRADATION)
- HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A OR CLASS I-B OR CLASS II COMPACTED TO 85% PROCTOR.
- INITIAL BACKFILL SHALL BE CLASS I—A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
- 4. INITIAL BACKFILL NOT UNDER PAVED AREAS OR ALONG NM14 CAN BE COMPACTED TO 90% STANDARD PROCTOR OR OTHERWISE MUST BE COMPACTED TO 95% PROCTOR PER NMDOT SPECIFICATION.
- 5. FINAL BACKFILL SHALL BE CLASS I, OR II COMPACTED AS NOTED IN NOTES 3. AND 4.

- 6. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE TYPE II COMPACTED TO 95% STANDARD PROCTOR PER NMDOT SPECIFICATION
- 7. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-89.
- 8. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698.
- 9. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
- 10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)
- 11. REFER TO NMDOT DETAIL 206-10-1/1FOR AGENCY SPECIFIC STANDARDS

TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com

NEW MEXICO ENERGY MINERAL AND NATURAL RESOURCE ABANDONED MINE LAND PROGRAM

MADRID WATER - FIRE SUPPRESSION IMPROVEMENTS CONSTRUCTION DETAILS

MO./DAY/YR. ZONE MAP NO.

UTILITY TRENCH AND BEDDING DETAIL





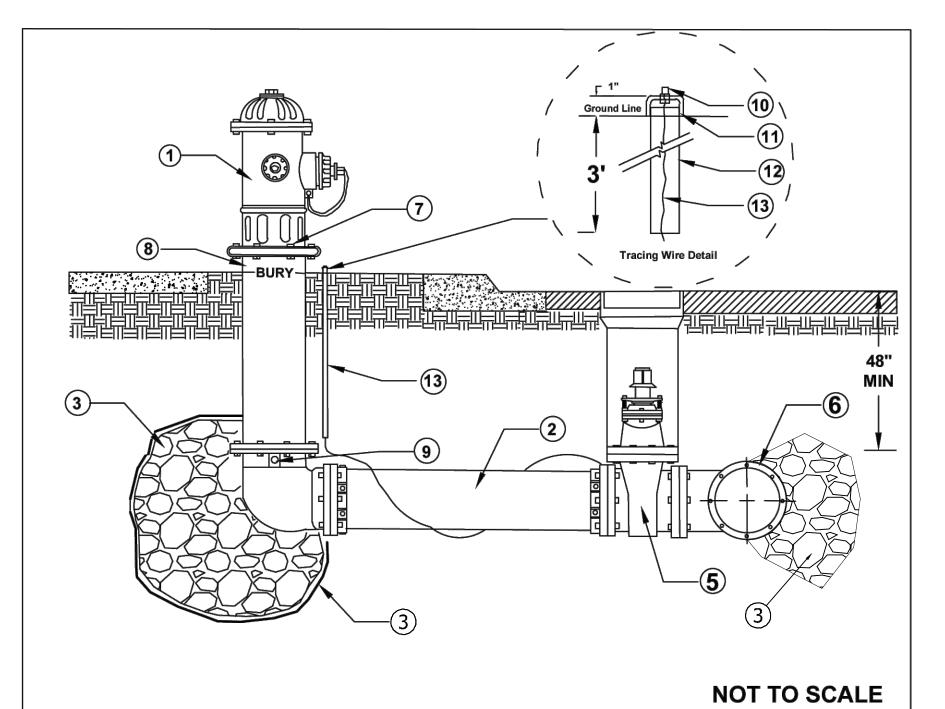


Phone: 505-858-3100 PROJECT NO. Fax: 505-858-1118 EMNRD-MMD-2025-01 SHEET

OF

MO./DAY/YR.

06/26/24

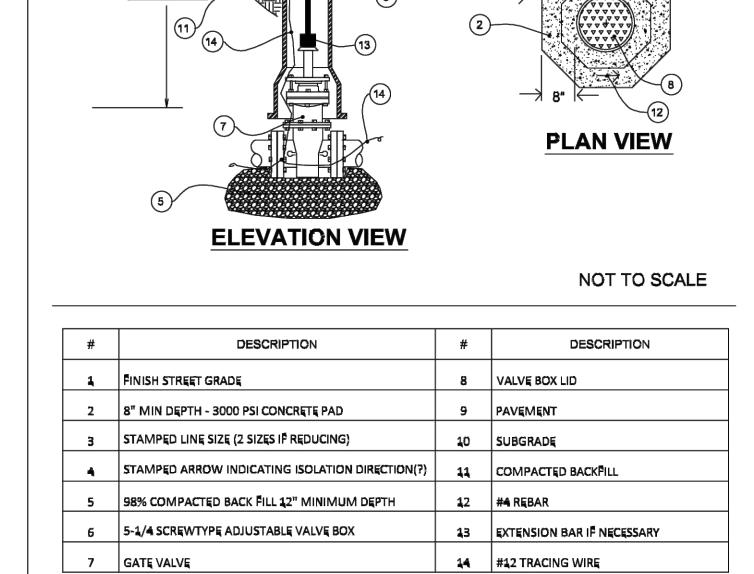


#	DESCRIPTION	#	DESCRIPTION
1	FIRE HYDRANT	8	2" MINIMUM 4" MAXIMUM GAP FROM FINISH GRADE TO BREAK AWAY JOINT
2	6" MINIMUM DUCTILE IRON PIPE*	9	DRAIN (DO NOT BLOCK)
3	CONCRETE THRUSTING BLOCK PER TABLE THIS SHEET	10	NUT AND BOLT WITH WIRE SECURED BY SILVER SOLDER
4		11	GLUED PVC CAP
5	6" MINIMUM GATE VALVE	12	3/4" PVC
6	6" MINIMUM MECHANICAL JOINT TEE FITTING	13	#10 TRACING WIRE
7	BREAK-AWAY CONNECTION	*	ALL BURRIED DUCTILE IRON SHALL HAVE CATHODIC PROTECTION

pro co	SANTA FE COUNTY UTILITIES
nta fe me d	STANDARD DETAILS

FIRE HYDRANT

DATE: 3/2021



SANTA FE COUNTY UTILITIES

STANDARD DETAILS

PIPE SIZE	ELBOW ANGLE	ELBOW (B) DIM.	ELBOW (H) DIM.	TEE OR PLUG (B) DIM.	TEE OR PLUG (H) DIM.
4"	90°,45°	2'	2'	2'	2'
4"	22.5°,11.25°	2'	2'		
6"	90°,45°	2'	2'	2'	2'
6"	22.5°,11.25°	2'	2'		
8"	90°	3'	3'	3'	3'
8"	45°	2'	2'		
8"	22.5°,11.25°	2'	2'		
10"	90,	3'-6"	3'-6"	3'	3'
10"	45°	3'	3'		
10"	22.5*,11.25*	2'	2'		
12"	90°	4'	4'	3'-6"	3'-6"
12"	45°	3'-6"	3'-6"		
12"	22.5°,11.25°	2'	2'		
14"	90°	5'	5'	4'	4'
14"	45°	3'-6"	3'-6"		-
14"	22.5°,11.25°	3'	3'		

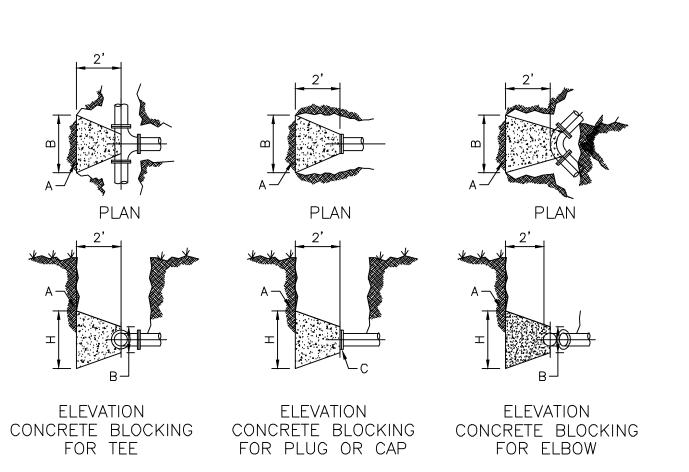
CONSTRUCTION NOTE:

A. UNIDISTURBED EARTH

B. O.D. OF PIPE +6"

C. O.D. OF CAP OR PLUG, MIN. 12"x12"

CONCRETE BLOCKING DESIGN NTS PER COA STD DWG #2320

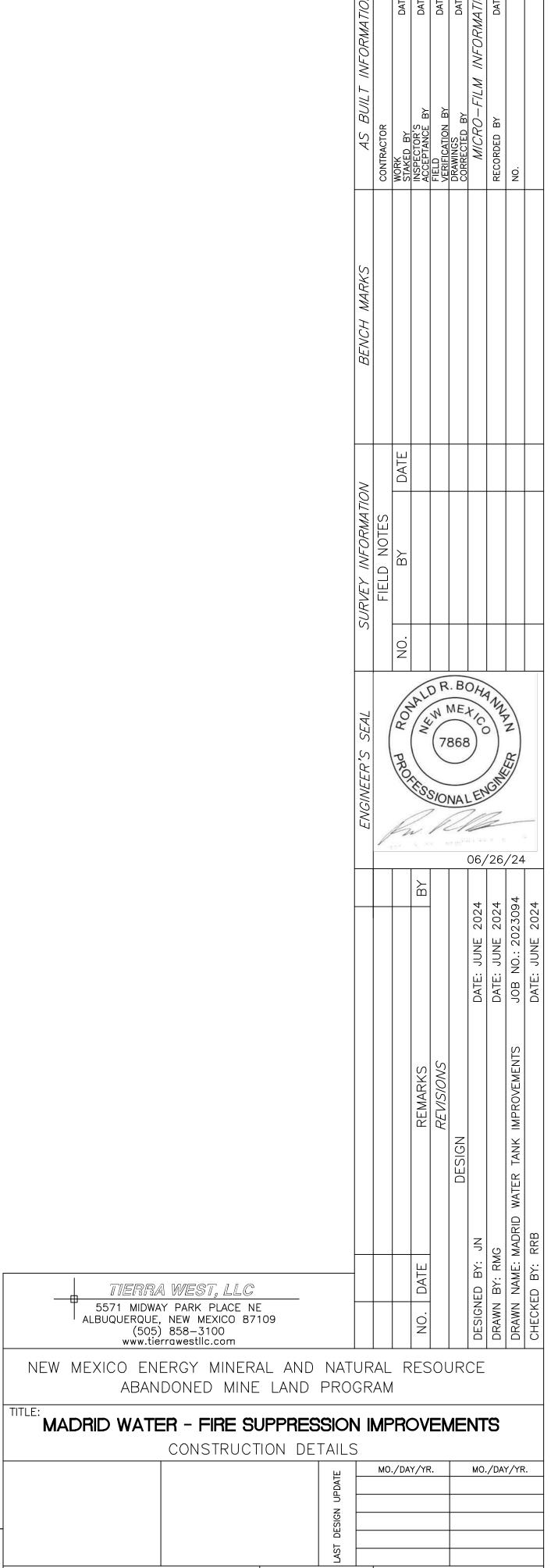




VALVE & VALVE BOX

INSTALLATION

DATE: 12/17/2020







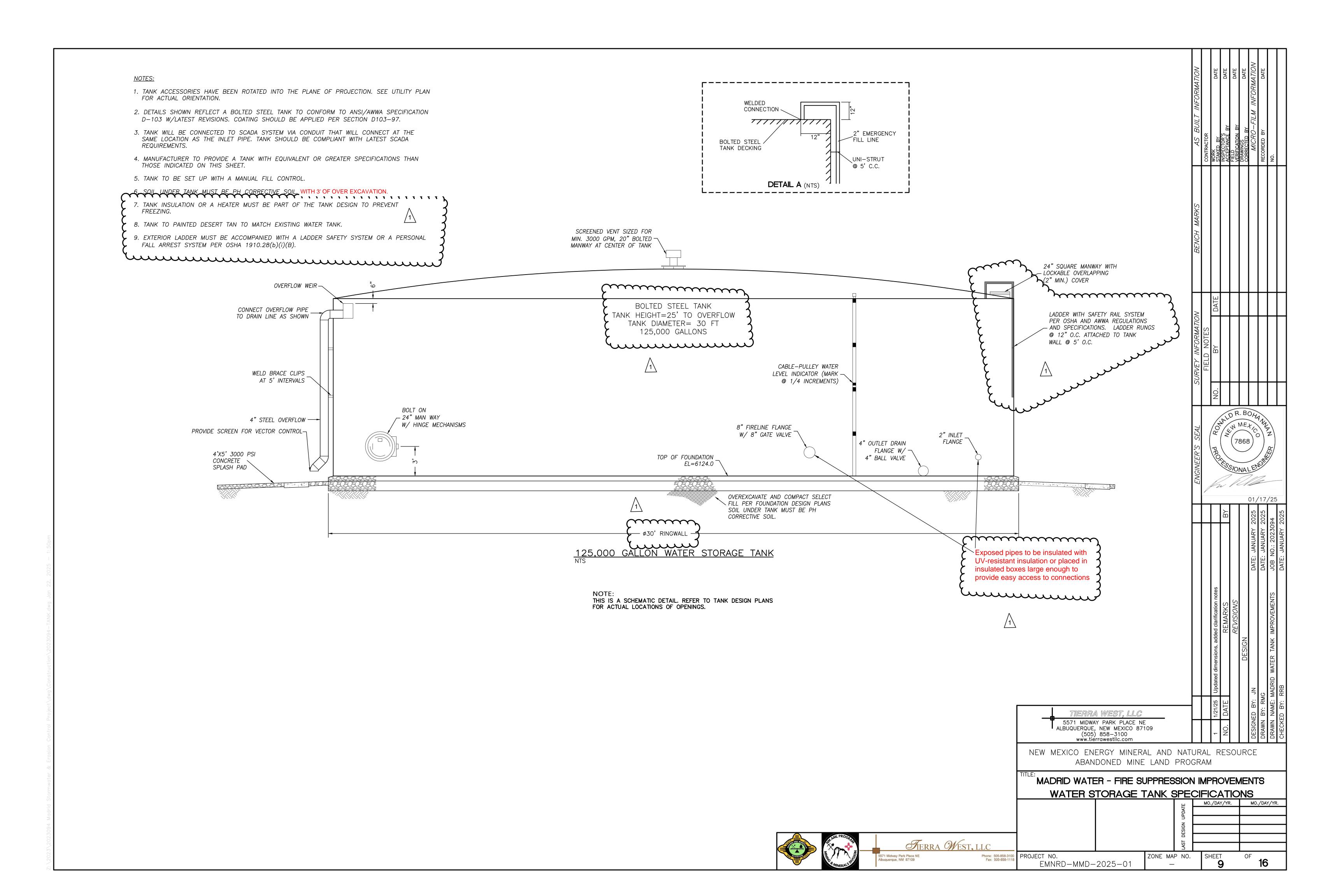


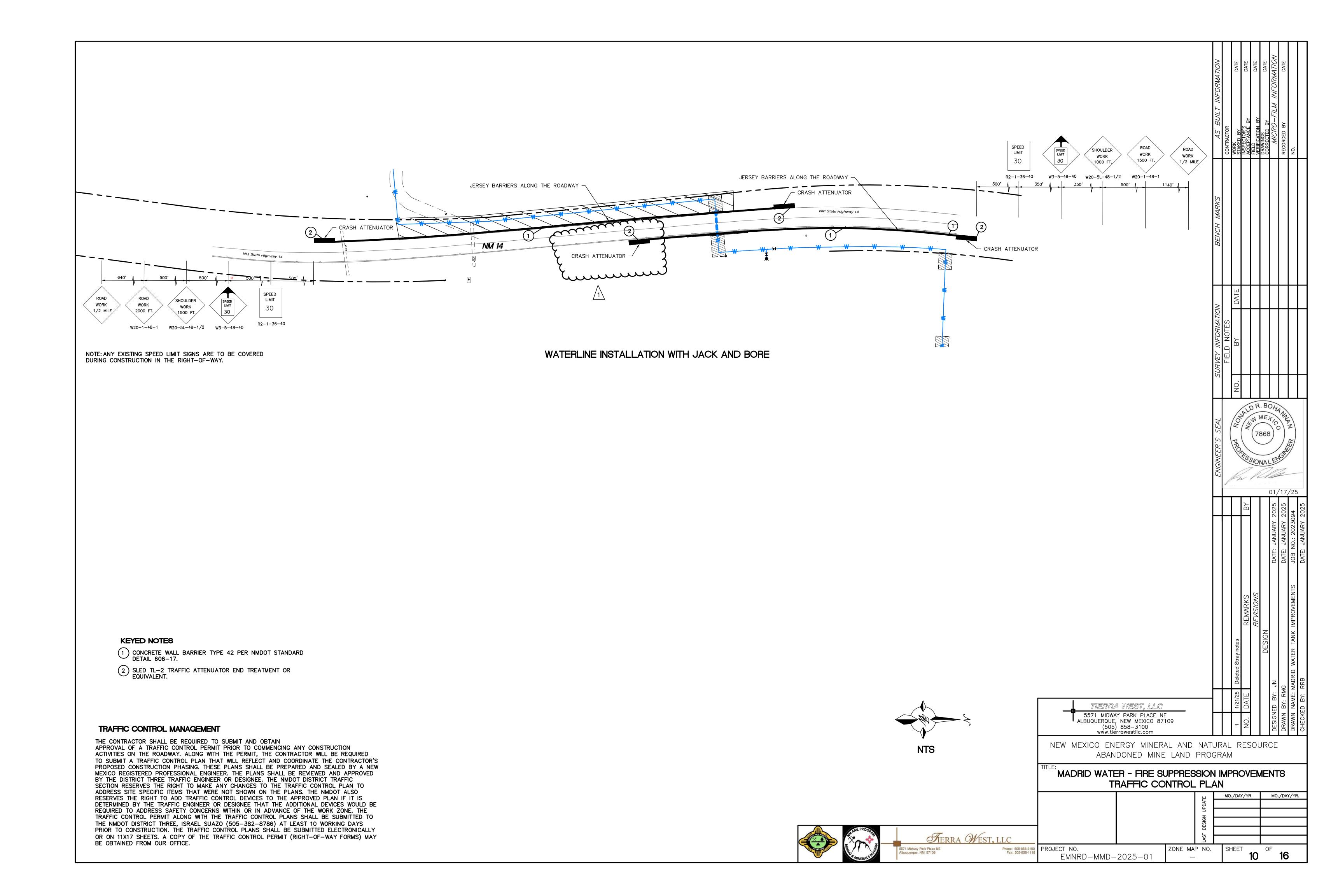
Phone: 505-858-3100 PROJECT NO. Fax: 505-858-1118

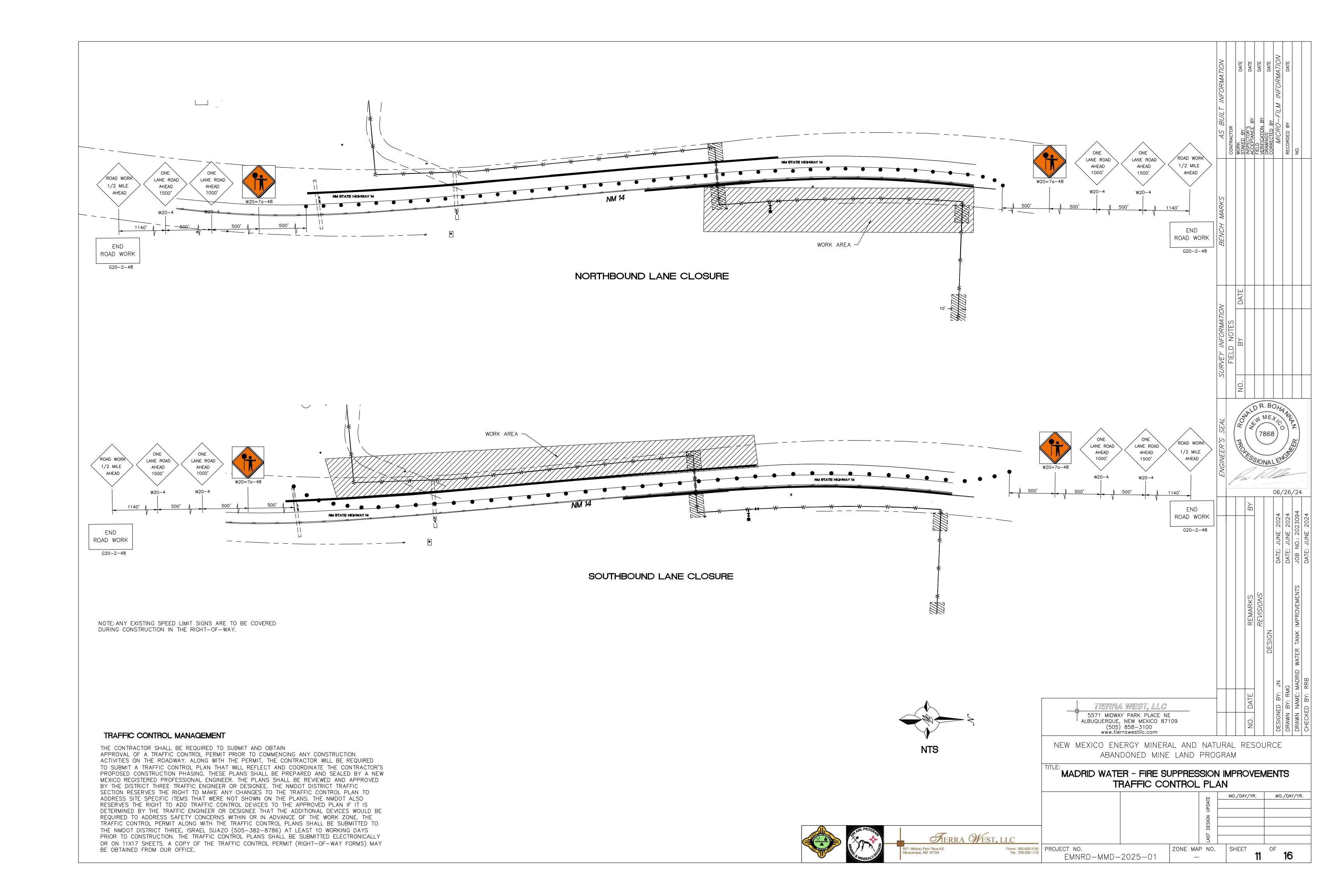
ZONE MAP NO. EMNRD-MMD-2025-01

8 OF SHEET

16







TAPER REQUIREMENTS							
SPEED LIMIT	TA	PER LENGT (FEET)	ГН	MAXIMUM DISTANCE BETWEEN	MINIMUM NUMBER OF		
(MPH)	10' LANE	11' LANE	12' LANE	DEVICES (FEET)	DEVICES REQUIRED		
25	104	115	125	25	6		
30	150	165	185	30	7		
35	204	225	245	35	8		
40	267	293	320	40	9		
45	450	495	540	45	13		
50	500	550	600	50	13		
55	550	605	660	55	13		

RECOMMENDED SIGN SPACING (D) FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTA BETWEEN SIGNS	ANCE IN FEET FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
35-40	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

LEGEND

WORK AREA

TRAFFIC SIGN & QUANTITY (SEE THIS SHEET FOR DESIGNATION)

BARRICADE - TYPE I, TYPE II, OR BARREL

BARRICADE - TYPE III

VERTICAL PANEL

WARNING SIGN

DISTANCE BETWEEN SIGNS-A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET

FLAGMAN POSITION

SPACING BETWEEN BARRICADES—A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET

TAPER LENGTH - ON CHART

TANGENT LENGTH - IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER: MERGING TAPER: SHIFTING TAPER: SHOULDER TAPER: TWO-WAY TRAFFIC TAPER: DOWNSTREAM TAPER:	SEE CHART L MINIMUM 1/2 L MINIMUM 1/2 L MINIMUM 100 FEET MAXIMUM 100 FEET PER LANE

TAPER CRITERIA

TAPER LENGTH COMPUTATION

SPEED LIMIT 45 MPH OR LESS:

 $L = \frac{WS^2}{60}$

45 MPH OR GRATER: $L = W \times S$

L = TAPER LENGTH

W = WIDTH OF OFFSET IN FEET S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

NOTES

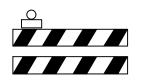
1. ALL ADVANCE WARNING SIGNS ARE TO BE DOUBLE INDICATED WHENEVER MEDIANS ARE

2. TRANSFORMATION FROM EXISTING SIGNALS

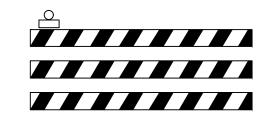
TO SPAN WIRE IS TO OCCUR AT OFF PEAK 3. THIS IS A STANDARD TRAFFIC CONTROL PLAN AND SOME TRAFFIC CONTROL SITUATIONS MAY BE SHOWN THAT ARE NOT REQUIRED ON THIS PARTICULAR PROJECT.

WARNING LIGHT (OPTIONAL)

7/X///X///X///X///X///X/// TYPE I BARRICADE

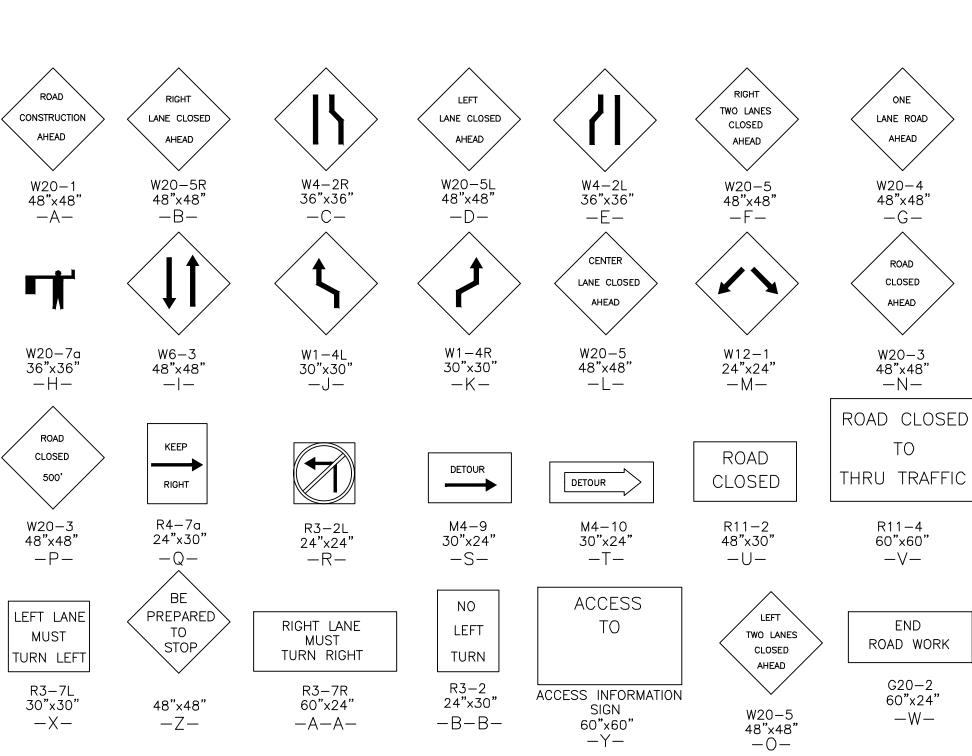


TYPE II BARRICADE



TYPE III BARRICADE

NOTE: FLASHING OR STEADY BURN WARNING LIGHTS SHOULD BE USED ON BARRICADES, PANELS, AND DRUMS AS NEEDED.



NOTE: ARROW DIRECTION TO BE ADJUSTED AS NEEDED.

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MADRID WATER - FIRE SUPPRESSION IMPROVEMENTS TRAFFIC CONTROL NOTES

06/26/24

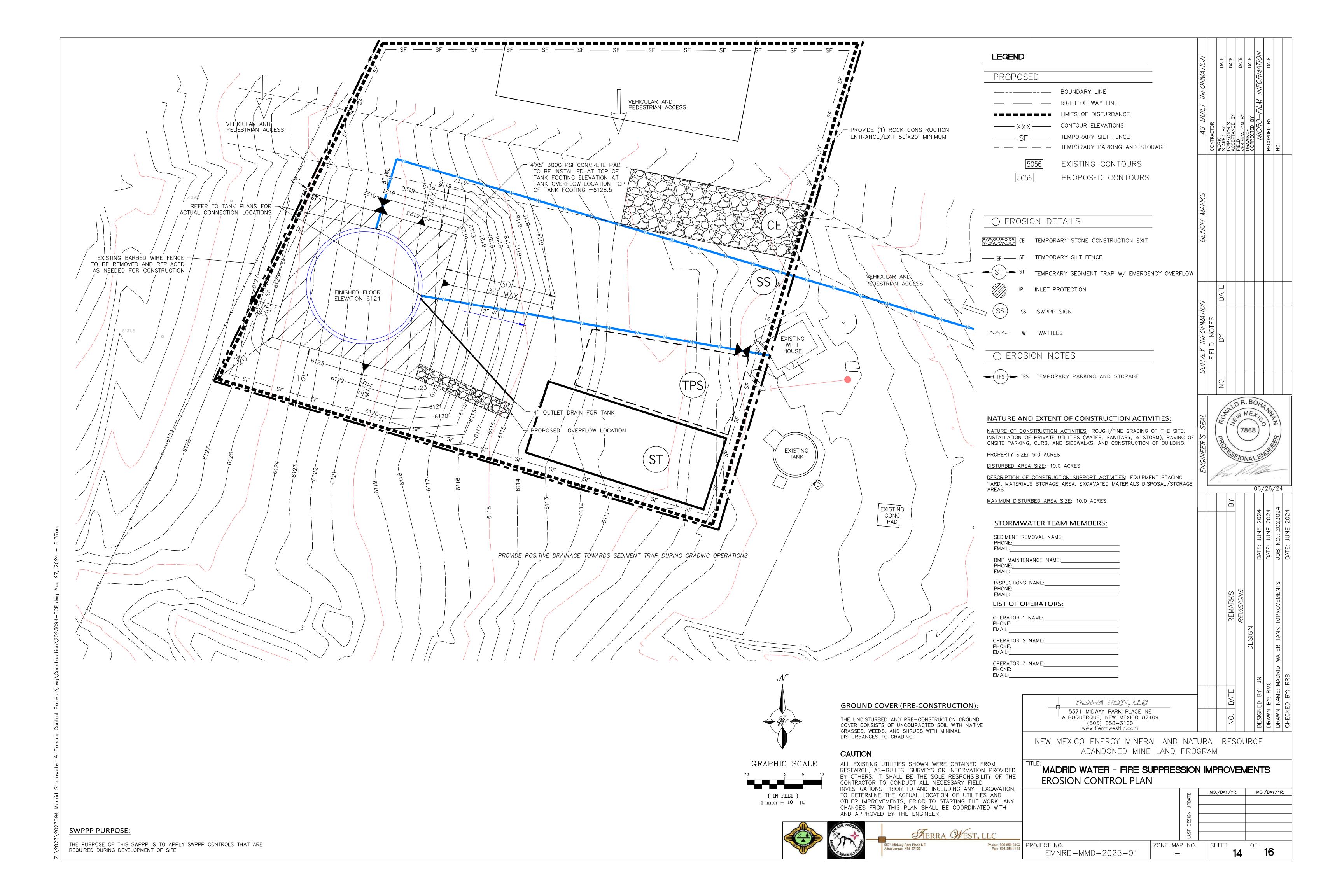






MO./DAY/YR. Phone: 505-858-3100 PROJECT NO. Fax: 505-858-1118 ZONE MAP NO. SHEET OF EMNRD-MMD-2025-01





ESC PLAN STANDARD NOTES:

- 1. ALL EROSION AND SEDIMENT CONTROL (ESC) WORK ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON SHALL BE PERMITTED, CONSTRUCTED, INSPECTED, AND MAINTAINED IN ACCORDANCE WITH: a. THE CITY ORDINANCE § 14-5-2-11, THE ESC ORDINANCE,
 - b. THE EPA'S 2022 CONSTRUCTION GENERAL PERMIT (CGP), AND
 - c. THE CITY OF ALBUQUERQUE CONSTRUCTION BMP MANUAL.
- 2. ALL BMP'S MUST BE INSTALLED PRIOR TO BEGINNING ANY EARTH MOVING ACTIVITIES EXCEPT AS SPECIFIED HEREON IN THE PHASING PLAN. CONSTRUCTION OF EARTHEN BMP'S SUCH AS SEDIMENT TRAPS, SEDIMENT BASINS, AND DIVERSION BERMS SHALL BE COMPLETED AND INSPECTED PRIOR TO ANY OTHER CONSTRUCTION OR EARTHWORK. SELF-INSPECTION IS REQUIRED AFTER INSTALLATION OF THE BMPS AND PRIOR TO BEGINNING CONSTRUCTION
- 3. SELF-INSPECTIONS IN ACCORDANCE WITH CITY ORDINANCE § 14-5-2-11(C)(1), "AT A MINIMUM A ROUTINE SELF-INSPECTION IS REQUIRED TO REVIEW THE PROJECT FOR COMPLIANCE WITH THE CONSTRUCTION GENERAL PERMIT ONCE EVERY 14 DAYS AND AFTER ANY PRECIPITATION EVENT OF 1/4 INCH OR GREATER UNTIL THE SITE CONSTRUCTION HAS BEEN COMPLETED AND THE SITE DETERMINED AS STABILIZED BY THE CITY. REPORTS OF THESE INSPECTIONS SHALL BE KEPT BY THE PERSON OR ENTITY AUTHORIZED TO DIRECT THE CONSTRUCTION ACTIVITIES ON THE SITE AND MADE AVAILABLE UPON REQUEST.
- 4. CORRECTIVE ACTION REPORTS MUST BE KEPT BY THE PERSON OR ENTITY AUTHORIZED TO DIRECT THE CONSTRUCTION ACTIVITIES ON THE SITE AND MADE AVAILABLE UPON REQUEST.
- 5. FINAL STABILIZATION AND NOTICE OF TERMINATION (NOT) IN ACCORDANCE WITH CITY ORDINANCE \$ 14-5-2-11(C)(1), SELF-INSPECTIONS MUST CONTINUE UNTIL THE SITE IS 'DETERMINED AS STABILIZED BY THE CITY." THE PROPERTY OWNER/OPERATOR IS RESPONSIBLE FOR DETERMINING WHEN THE "CONDITIONS FOR TERMINATING CGP COVERAGE" PER CGP PART 8.2 ARE SATISFIED AND THEN FOR FILING THEIR NOTICE OF TERMINATION (NOT) WITH THE EPA. EACH OPERATOR MAY TERMINATE CGP COVERAGE ONLY IF ONE OR MORE OF THE CONDITIONS IN PART 8.2.1, 8.2.2, OR 8.2.3 HAS OCCURRED. AFTER FILING THE NOT WITH THE EPA, THE PROPERTY OWNER IS RESPONSIBLE FOR REQUESTING A DETERMINATION OF STABILIZATION FROM THE CITY.
- 6. WHEN DOING WORK IN THE CITY RIGHT-OF-WAY (E.G. SIDEWALK, DRIVE PADS, UTILITIES, ETC.) PREVENT DIRT FROM GETTING INTO THE STREET. IF DIRT IS PRESENT IN THE STREET, THE STREET SHOULD BE SWEPT DAILY OR PRIOR TO A RAIN EVENT OR CONTRACTOR INDUCED WATER EVENT (E.G. CURB CUT OR WATER TEST).
- 7. WHEN INSTALLING UTILITIES BEHIND THE CURB, THE EXCAVATED DIRT SHOULD NOT BE PLACED IN THE STREET.
- 8. WHEN CUTTING THE STREET FOR UTILITIES THE DIRT SHALL BE PLACED ON THE UPHILL SIDE OF THE STREET CUT AND THE AREA SWEPT AFTER THE WORK IS COMPLETE. A WATTLE OR MULCH SOCK MAY BE PLACED AT THE TOE OF THE EXCAVATED DIRT PILE IF SITE CONSTRAINTS DO NOT ALLOW PLACING THE EXCAVATED DIRT ON THE UPHILL SIDE OF THE STREET CUT.
- 9. ESC PLANS MUST SHOW LONGITUDINAL STREET SLOPE AND STREET NAMES. ON STREETS WHERE THE LONGITUDINAL SLOPE IS STEEPER THAN 2.5%, WATTLES/MULCH SOCKS OR J-HOOD SILT FENCE SHALL BE SHOWN IN THE FRONT YARD SWALE OR ON THE SIDE OF THE

GENERAL EROSION NOTES:

- A. THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THE SWPPP BOOK, THE 2017 GENERAL CONSTRUCTION PERMIT, THIS DRAWING ("TEMPORARY EROSION CONTROL AND SEDIMENTATION PLAN"), STANDARD DETAILS ("TEMPORARY EROSION CONTROL AND SEDIMENTATION DETAILS"), EPA NOTICE OF INTENT PERMIT AND ALL SUBSEQUENT REPORTS, CORRECTIVE ACTIONS AND EROSION CONTROL RELATED DOCUMENTS.
- B. ALL OPERATORS AS DESIGNATED, CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH SITE ACTIVITIES RELATED TO STORM WATER POLLUTION PREVENTION SHALL REVIEW A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), THE 2017 CONSTRUCTION GENERAL PERMIT, THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), THE CLEAN WATER ACT OF 1972 AND BECOME FAMILIAR WITH THEIR CONTENTS.
- C. THE OPERATOR IN CONTROL OF DAILY SITE ACTIVITIES SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS THAT MAY OCCUR AT NO ADDITIONAL COST TO PROJECT OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- D. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO ALL FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLÌCABLÉ. OPERATOR WITH CONTROL OF DAILY SITE ACTIVITIÉS SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY, LOCAL JURISDICTIONAL AUTHORITY OR SWPPP COMPLIANCE INSPECTOR
- E. THE TEMPORARY EROSION CONTROL AND SEDIMENTATION PLAN IS A WORKING DOCUMENT AND IS REQUIRED TO BE UPDATED WITHIN 24 HOURS OF ANY CHANGES WHEN BMP'S ARE REPAIRED, RELOCATED OR REMOVED BY NOTING ON THE PLAN THE AREAS AND DATES OF THE REPAIRS, RELOCATIONS OR REMOVALS. AN ACTIVE COPY OF THE PLAN SHALL BE POSTED IN THE JOB SITE TRAILER ONSITE AND MUST BE MAINTAINED CURRENT AT ALL TIMES.
- F. CONTRACTOR SHALL MINIMIZE CLEARING AND EARTH DISTURBANCE TO THE MAXIMUM ACREAGE AS REQUIRED BY THE EPA CONSTRUCTION GENERAL PERMIT.
- G. CONTRACTOR SHALL DENOTE ON THIS PLAN, THE LOCATION OF TEMPORARY PARKING, STORAGE, PORTABLE SANITARY FACILITIES, OFFICE TRAILERS, AND ALL SUPPORT AREAS. RELOCATIONS OF EACH SHALL ALSO BE DOCUMENTED AS THEY OCCUR.
- H. ALL WASH OUT WATER USED FOR CONCRETE, MASONRY, PAINT AND OTHER MATERIALS SHALL HAVE ADEQUATE SIGNAGE WITH PROPER CONTAINMENT AND DISPOSED OF PROPERLY WHEN CAPACITY REACHES 50% OR PER VENDOR RECOMMENDATIONS. VENDORS AND TRADESMEN SHALL BE INFORMED OF THE REQUIREMENTS TO USE THE WASH OUT.
- I. A SPILL KIT SHALL BE READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS. A DISCHARGE OF ANY MATERIAL IN A QUANTITY THAT MAY WITHIN REASONABLE PROBABILITY CAUSE, INJURE OR BE DETRIMENTAL TO HUMAN HEALTH, ANIMAL OR PLANT LIFE, OR PROPERTY; OR INTERFERE WITH THE PUBLIC WELFARE MUST BE REPORTED TO THE NEW MEXICO ENVIRONMENTAL DEPARTMENT HOTLINE AT (505) 827-9329 FOR EMERGENCIES OR FOR NON EMERGENCIES AT (866)-428-6535.
- J. IF UNSURE IF THE SPILL IS OF A SIGNIFICANT QUANTITY, THE SPILL SHOULD BE REPORTED TO THE HOTLINE AND INFORMATION PROVIDED WITH DETAILS OF THE SPILL FOR FURTHER ACTIONS.
- K. DUST DURING CONSTRUCTION OPERATIONS SHALL BE FREQUENTLY CONTROLLED BY WATER SUPPRESSION METHODS ONLY, EARTH DISTURBING OPERATIONS SHALL CEASE IF HIGH WINDS ABOVE 35 MPH ARE PRESENT. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS IS STRICTLY PROHIBITED. OTHER CHEMICALS USED FOR DUST SUPPRESSION MUST BE APPROVED BY THE EPA PRIOR TO THEIR USE.
- L. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED. COVERED. LEAK PROOF CONTAINERS. CONTAINERS SHALL BE DISPOSED OF PROPERLY WHEN CAPACITY IS REACHED. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER.
- M. ALL STORM WATER POLLUTION PREVENTION MEASURES AND CONTROLS PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED PER THE SEQUENCE OF CONSTRUCTION AS NOTED.
- N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS BEEN TEMPORARILY SUSPENDED FOR 14 DAYS, SHALL HAVE TEMPORARILY STABILIZATION IN PLACE NO LATER THAN 14 DAYS FROM THE LAST DATE OF CONSTRUCTION ACTIVITY
- O. TEMPORARY COVER AND FINAL STABILIZATION (PART 2.2.12 (a) AND (b) RESPECTIVELY ARE TO BE PER COA STD SPEC 1012 NATIVE SEED WITH HYDROMULCH AND AGGREGATE MULCH (2-4") RESPECTIVELY.
- P. IF THE ACTION OF VEHICLES OR EQUIPMENTS TRAVELING OVER THE CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD FROM LEAVING THE SITE. THEN THE LENGTH OF THE EXIT SHOULD BE EXTENDED TO PROVIDE ADDITIONAL TIRE ROTATIONS, LARGER ROCK MAY BE USED TO CREATE A SUFFICIENT JARRING MOTION OR INSTALL A TIRE WASH OFF WITH A SEDIMENT TRAP BEFORE LEAVING THE SITE.
- Q. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- R. THE OPERATOR IN CHARGE OF THE DAILY SITES ACTIVITIES WILL BE RESPONSIBLE FOR REMOVING SEDIMENT OR SOILS ACCUMULATING MORE THAN 50% OF THE DESIGN CAPACITY IN DETENTION PONDS, SILT FENCING OR OTHER SIMILAR EROSION
- S. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES, AS REQUIRED PER THE CONSTRUCTION GENERAL PERMIT. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE ESC PLAN AND PERMITTED IN ACCORDANCE WITH LOCAL AUTHORITIES HAVING
- T. SLOPES SHALL BE LEFT WITH CROSS SLOPE GRADING PATTERN AND IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION RILLS. EXCESSIVE SLOPES MAY REQUIRE ADDITIONAL INDUSTRY STANDARD CONTROLS TO
- U. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE OPERATOR IN CONTROL OF THE SITE'S DAILY ACTIVITIES SHALL BE RESPONSIBLE FOR ADJUSTING AND MAINTAINING ALL EROSION CONTROL TO PREVENT EROSION.
- V. ALL DISTURBED AREAS SHALL BE SUPPRESSED BY WATER AND ALL CONTROLS LEFT IN GOOD WORKING CONDITION AT THE END OF EACH WORKING DAY, THIS INCLUDES REPLACEMENT OF SILT FENCING AND/OR OTHER SURFACE CONTROLS, TRACK OUT SWEPT CLEAN, BACKFILL OF OPEN TRENCHES AND ANY OTHER EROSION CONTROLS.

BMP MAINTENANCE

ALL MEASURES STATED IN THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR UNTIL FINAL STABILIZATION OF THE SITE IS ACHIEVED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT THE END OF THE WORKDAY BY A QUAILIFIED MEMBER OF THE SWPPP COMPLIANCE TEAM. THE OPERATOR WITH CONTROL OF THE SITES DAILY ACTIVITIES IS RESPONSIBLE TO MAINTAIN, CLEAN AND REPAIR EROSION CONTROLS IN ACCORDANCE WITH THE FOLLOWING:

- 1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED, IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION. SEDIMENT SHALL BE REMOVED TO INSURE PROPER FLOWS. INLET PROTECTION TYPES MAY NEED TO BE MODIFIED DURING THE CONSTRUCTION PROGRESS.
- 2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND OF VEGETATION IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RE-SEEDED
- 3. SILT FENCES, WADDLES OR OTHER CONTROLS SHALL BE REPLACED OR REPAIRED TO PROPER FUNCTIONING CONDITION, IF DAMAGED. SEDIMENT AND SOIL SHALL BE REMOVED WHEN REACHES ONE-HALF THE HEIGHT OF THE CONTROL.
- 4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING, EXTENDING OR OTHER MODIFICATIONS TO THE CONSTRUCTION EXITS AS CONDITIONS DEMAND. SITE TRAFFIC SHOULD BE LIMITED TO THE CONTROLLED
- 5. SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
- 6. REFERENCE THE SWPPP BOOK FOR ALL EROSION CONTROL MAINTENANCE PROCEDURES AND FREQUENCIES. CONSULT THE SWPPP PREPARER WITH ANY QUESTIONS REGARDING THIS SWPPP AND ITS REQUIREMENTS.

EROSION CONTROL NOTES:

- 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT FROM THE LOCAL JURISDICTIONAL AUTHORITY PRIOR TO BEGINNING WORK.
- 2. THE OPERATOR WITH CONTROL OF THE DAILY SITES ACTIVITIES IS RESPONSIBLE FOR MAINTAINING RUN-OFF and RUN ON OF SITE DURING CONSTRUCTION.
- 3. THE OPERATOR WITH CONTROL OF THE DAILY SITES ACTIVITIES IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. ALL EXPOSED EARTH SURFACES MUST HAVE APPROPRIATE CONTROLS TO PROTECT FROM WIND AND WATER EROSION DURING ALL PHASES OF THE PROJECT.
- 5. STOCKPILES INACTIVE FOR 14 DAYS ARE REQUIRED TO HAVE TEMPORARY STABILIZATION OR APPROPRIATE COVER TO CONTROL WIND AND WATER EROSION.
- 6. THE OPERATOR WITH CONTROL OF THE DAILY SITES ACTIVITIES IS REQUIRED TO MAINTAIN ALL SITE BMP'S IN GOOD CONDITION FOR THE DURATION OF THE PROJECT UNTIL A NOTICE OF TERMINATION IS ACCEPTED BY THE EPA.
- 7. IF SITE EARTH DISTURBANCES EXCEED 5 ACRES AT ANY ONE TIME, TEMPORARY AND/OR PERMANENT STABILIZATION MUST BE COMPLETED WITHIN 7 DAYS WHEN AREA BECOMES INACTIVE OR EARTH DISTURBING ACTIVITIES ARE COMPLETE. SITE EARTH DISTURBANCES OF LESS THAN 5 ACRES, HAVE 14 DAYS TO PROVIDE TEMPORARY OR PERMANENT STABILIZATION WHEN AREA BECOMES INACTIVE OR EARTH DISTURBING ACTIVITIES ARE COMPLETE.

GENERAL NOTES:

- 1. PROVIDE POSITIVE DRAINAGE TOWARDS SEDIMENT TRAPS DURING GRADING OPERATIONS.
- 2. INSTALL WATTLES ALONG LINEAR CONSTRUCTION OF SD
- 3. PROVIDE POSITIVE DRAINAGE TO TEMPORARY SEDIMENT BASIN DURING ALL GRADING ACTIVITIES
- 4. OFFSITE GRADING AND ROADWAY IMPROVEMENTS ARE TO BE COMPLETED BY OTHERS. COORDINATION OF OFFSITE BMP'S WITH PROPOSED ONSITE BMP'S SHALL BE REQUIRED BY THE CONTRACTOR(S)

	AS BUILT INFOR	CONTRACTOR	WORK STAKED BY	INSPECTOR'S ACCEPTANCE BY	FIELD VERIFICATION BY	DRAWINGS CORRECTED BY	MICRO-FILM INFC	RECORDED BY	NO.		
	BENCH MARKS										
	SURVEY INFORMATION	FIELD NOTES	BY DATE								
			NO.								
	ENGINEER'S SEAL	/		((7	7868 ONALENGIA 06/26/24					
				BY			DATE: JUNE 2024	DATE: JUNE 2024	JOB NO.: 2023094	DATE: JUNE 2024	
TIERRA WEST, LLC				DATE REMARKS	REVISIONS	DESIGN	ED BY: JN	BY: RMG	DRAWN NAME: MADRID WATER TANK IMPROVEMENTS	ED BY: RRB	
5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com				NO.			DESIGNED	DRAWN E	DRAWN	CHECKED	
NEW MEXICO ENERGY MINERAL AND NA	TUR DGR			RES	:Ol	JR(CE				
MADRID WATER - FIRE SUPPRESSIO	N I	MF	R	OV	ΕN	ΛE	NT	S			





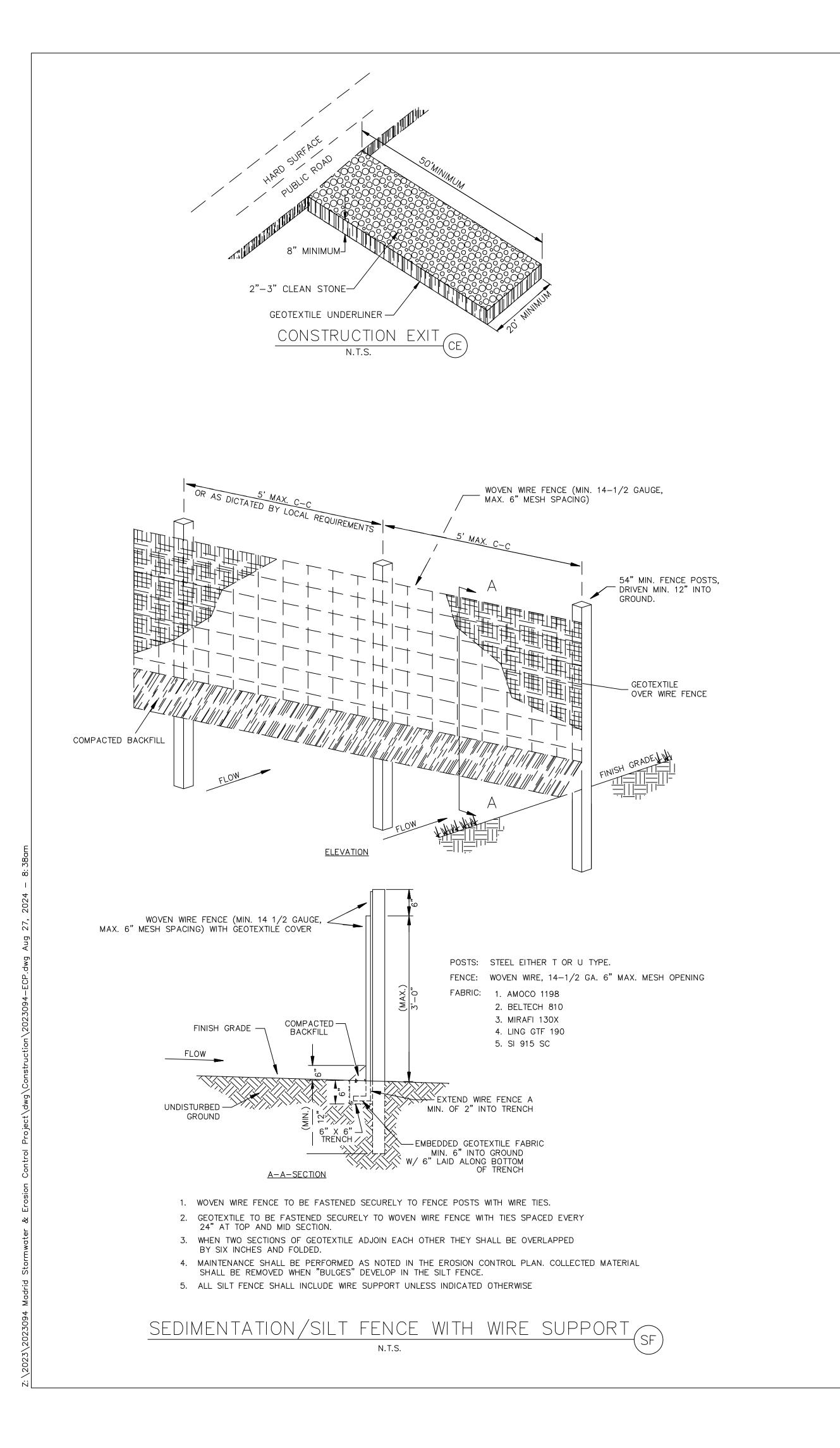
Phone: 505-858-3100 | PROJECT NO.

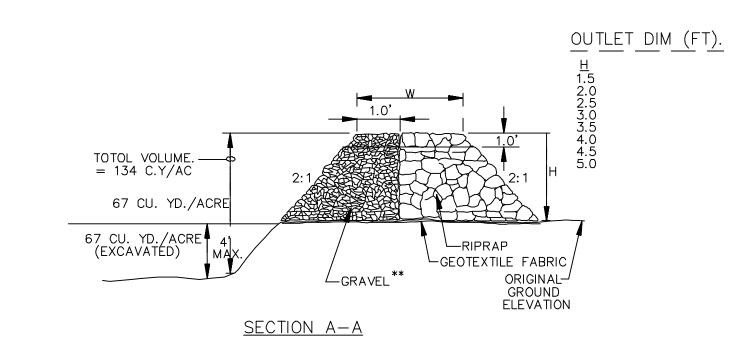
MO./DAY/YR. MO./DAY/YR. ZONE MAP NO. SHEET OF

TIERRA WEST, LLC

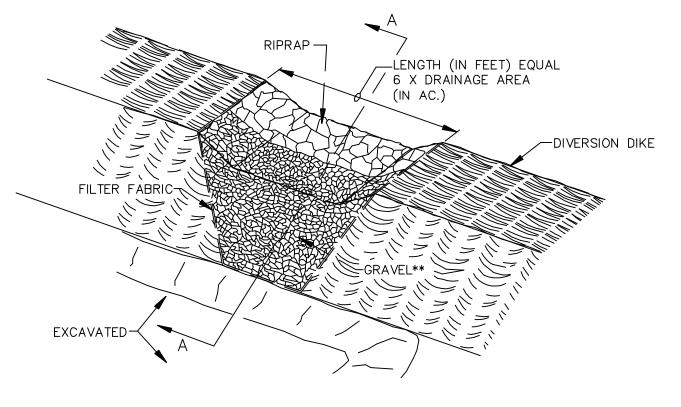
EMNRD-MMD-2025-01

EROSION CONTROL NOTES





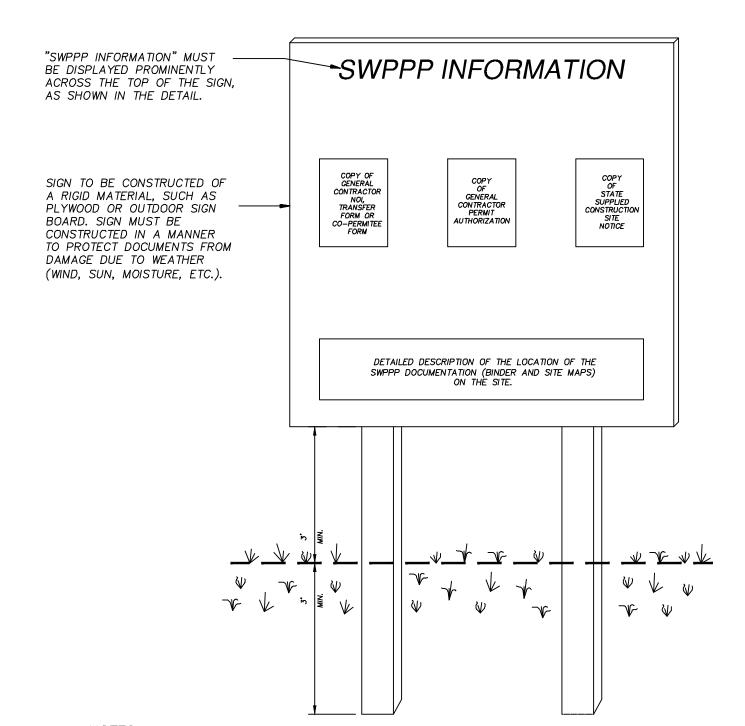
** GRAVEL SHALL BE 2"-3" CLEAN STONE



OUTLET (PERSPECTIVE)

TEMPORARY SEDIMENT TRAP

N.T.S.

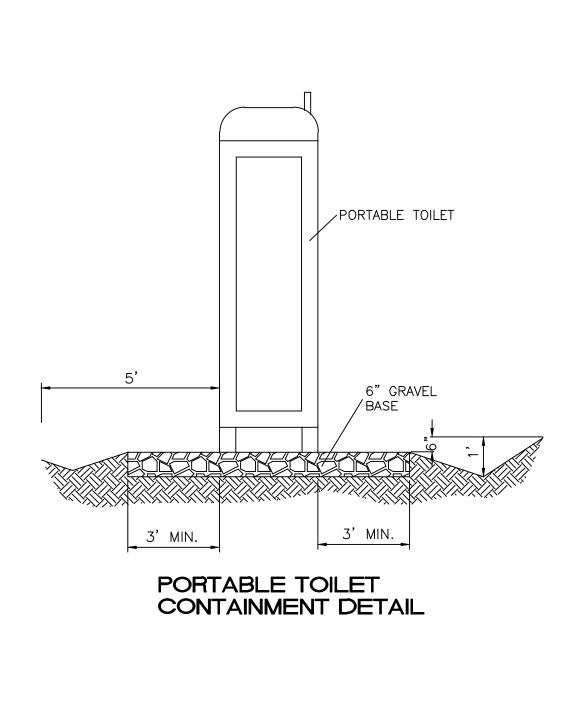


NOTES:

1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE,
SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING
VIEWS AS TO CAUSE A SAFETY HAZARD.

- 2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE—OF—TERMINATION (NOT) IS FILED FOR THE PERMIT
- CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
- 4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT—OF—WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
- 5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

SWPPP INFORMATION SIGN SS



TIERRA WEST, LLC

5571 MIDWAY PARK PLACE NE

(505) 858-3100 www.tierrawestllc.com

EROSION CONTROL DETAILS

EMNRD-MMD-2025-01

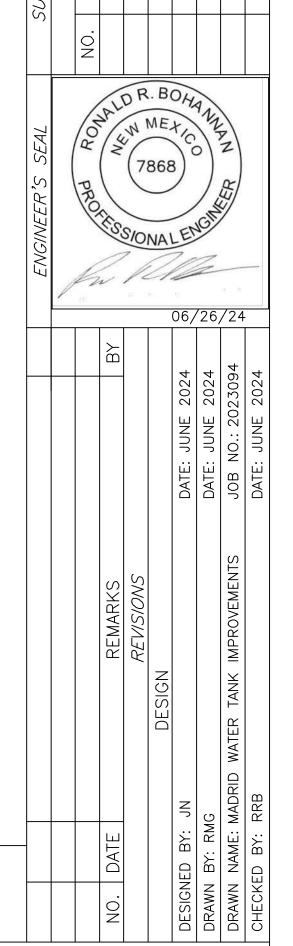
ALBUQUERQUE, NEW MEXICO 87109

NEW MEXICO ENERGY MINERAL AND NATURAL RESOURCE

ABANDONED MINE LAND PROGRAM

MADRID WATER - FIRE SUPPRESSION IMPROVEMENTS

ZONE MAP NO.



MO./DAY/YR.

16





