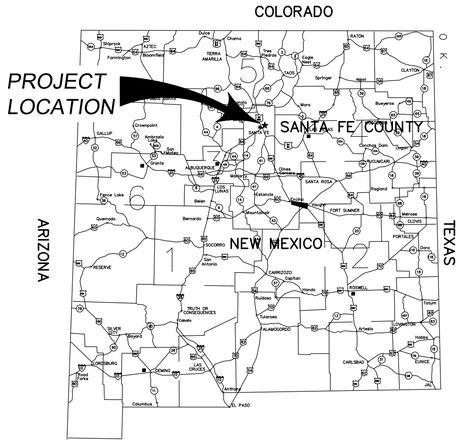
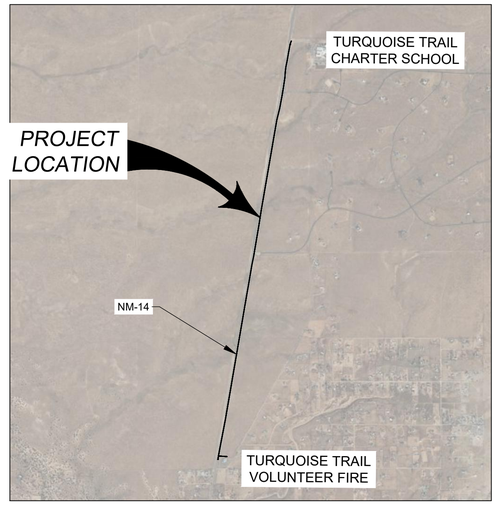


LOCATION MAP

NOT TO SCALE

COUNTY OF SANTA FE, NEW MEXICO

SANTA FE COUNTY



VICINITY MAP

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CONSTRUCTION PLANS FOR

TURQUOISE TRAIL WATERLINE

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08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE

COVER SHEET

SHEET NO:

G-001

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615600 G-001_G-002.dwg

ROADWAY CONSTRUCTION

1. ALL ROADWAY CONSTRUCTION AND RE-CONSTRUCTION SHALL COMPLY WITH THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2007 EDITION AND SUBSEQUENT REVISIONS.
2. A TRAFFIC CONTROL PLAN STAMPED BY A NM PROFESSIONAL ENGINEER IS REQUIRED FOR ALL PROJECTS WITHIN ANY SANTA FE COUNTY RIGHT OF WAY.
3. THE CONTRACTOR MUST ADHERE TO ALL REQUIREMENTS AS SET FORTH IN ORDINANCE 2003-1 EXCAVATION/RESTORATION ORDINANCE FOR ALL WORK WITHIN SANTA FE COUNTY RIGHT OF WAY.
4. THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH N.M. DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ANY APPLICABLE SPECIAL PROVISION AND/OR SUPPLEMENTAL SPECIFICATION, AS WELL AS THE MOST CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. UNLESS OTHERWISE SPECIFIED HEREIN, ALL COSTS RELATED TO TRAFFIC CONTROL SHALL BE INCIDENTAL TO THE PROJECT.
5. DRAINAGE PIPE SPECIFIED AS CORRUGATED METAL PIPE (CMP) SHALL BE 16-GAUGE MINIMUM AND STORM DRAIN MANHOLES SHALL HAVE STANDARD SF COUNTY COVERS AND RINGS.
6. CONTRACTOR SHALL NOT BEGIN ANY CONSTRUCTION ACTIVITY WITHOUT THE APPLICABLE PERMITS FROM THE SANTA FE COUNTY. A COPY OF THE APPROVED DRAWINGS SHALL ALWAYS BE AVAILABLE AT THE CONSTRUCTION SITE DURING BUSINESS HOURS AND ORGANIZED BY THE PROJECT ENGINEER.
7. A SANTA FE COUNTY INITIATED PRECONSTRUCTION CONFERENCE SHALL BE CONDUCTED IN THE PRESENCE OF THE PROJECT ENGINEER AND OR THE OWNERS PROJECT REPRESENTATIVE (OPR) PRIOR TO THE INITIATION OF ANY CONSTRUCTION ACTIVITY. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE COUNTY NO LESS THAN 24 HRS FROM THE BEGINNING OF ANY CONSTRUCTION WORK.
8. THE OPR SHALL BE RESPONSIBLE FOR INITIATING ANY NECESSARY REVISIONS TO THE APPROVED DESIGN DRAWINGS, ALL APPROPRIATE DRAWINGS AND DESIGN CRITERIA TO SUPPORT SUCH CHANGES. ALL CHANGE-SUPPORTING DOCUMENTATION SHALL BE STAMPED BY A LICENSED ENGINEER IN NEW MEXICO, AND APPROVED BY SANTA FE COUNTY AS A CHANGE ORDER PRIOR TO EXECUTING ANY WORK.
9. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A NEW MEXICO PROFESSIONAL SURVEYOR FOR VERIFICATION OF CRITICAL HORIZONTAL AND VERTICAL CONTROL AND THE CERTIFICATION OF RECORD DRAWINGS. CRITICAL ELEVATIONS OR HORIZONTAL CONTROL MAY BE IDENTIFIED IN THE DRAWINGS, OR MAY BE IDENTIFIED BY THE COUNTY PROJECT MANAGER OR OPR AT HIS/HER DISCRETION. THE CONTRACTOR SHALL MAINTAIN AT THE SITE A COPY OF ALL FIELD NOTES, TO BE MADE AVAILABLE FOR REVIEW BY THE COUNTY PROJECT MANAGER OR OPR AT ANY TIME DURING THE EXECUTION OF THE PROJECT. THE UPDATING OF SUCH DRAWINGS AND FIELD NOTES SHALL BE DONE FREQUENTLY. NOT LESS THAN ONCE EVERY TWO WEEKS PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, CONTRACTOR SHALL SUBMIT TO THE OPR COMPLETE RECORD DRAWINGS, SHOWING ANY REVISED CRITICAL X,Y, AND Z DATA FOR PIPE INVERTS, MANHOLE RIMS, VALVE BOXES, SERVICE CONNECTIONS ETC. THESE DATA SHALL BE STAMPED BY A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR, AND SUBMITTED TO THE COUNTY PROJECT MANAGER OR OPR IN PRELIMINARY FORM FOR REVIEW AND APPROVAL. ANY REVISIONS NECESSARY SHALL BE RE-SUBMITTED IN THE FINAL PROJECT CLOSEOUT SUBMITTAL PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. FINAL AS-BUILTS SHALL BE SUBMITTED ON 24X36 AND IN PDF FORMAT.
10. IF EXISTING UTILITIES HAVE BEEN SHOWN ON THESE DRAWINGS THEY ARE FOR REFERENCE PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SPOT-LOCATION OF ALL EXISTING UNDERGROUND UTILITIES BY THE APPROPRIATE UTILITY COMPANY. CONTRACTOR SHALL CONTACT NEW MEXICO ONE CALL AT (800)321-2537, TO COORDINATE SPOT LOCATION OF UNDERGROUND UTILITIES NO LESS THAN 2 DAYS PRIOR TO INITIATING ANY WORK.
11. FOR ALL CONCRETE USED, THE DESIGN COMPRESSIVE STRENGTH AT 7 DAYS 1,500 PSI MINIMUM, AND 4,000 PSI AT 28 DAYS. THE CONCRETE SHALL BE A 6 BAG MIX AND MAXIMUM 3/4 INCH AGGREGATE SIZE. AIR ENTRAINMENT SHALL BE BETWEEN 4 AND 7 PERCENT.
12. THREE (3) CONCRETE CYLINDER SAMPLES SHALL BE TAKEN FOR EVERY 50 CUBIC YARDS OF CONCRETE INSTALLED, OR A MINIMUM OF ONE SAMPLE PER DAY, WHICHEVER IS GREATER. CONCRETE CYLINDERS SHALL BE TEST-BROKEN AT 7 DAY INTERVALS. TEST RESULTS SHALL BE SUBMITTED DIRECTLY TO THE OPR, AND TO THE COUNTY IN THE FINAL PROJECT CLOSEOUT SUBMITTAL, PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
13. NOT LESS THAN 5 DAYS PRIOR TO INITIATING ANY WORK, THE CONTRACTOR SHALL SUBMIT A DUST SUPPRESSION AND EROSION CONTROL PLAN FOR THE PROJECT MANAGER AND OR OPR'S APPROVAL. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN SUCH A MANNER THAT WILL HAVE NO ADVERSE EFFECT UPON ADJACENT PROPERTIES OR PUBLIC ROADWAYS.
14. CLEARING SHALL BE KEPT TO A MINIMUM, AND STABILIZATION OF BARE SURFACES SHALL BEGIN PROMPTLY AFTER COMPLETION OF CONSTRUCTION ACTIVITIES, AND IN COMPLIANCE WITH EPA REQUIREMENTS IN THE PROJECT'S SWPPP.
15. CONTRACTOR SHALL CONFINE ALL CONSTRUCTION OPERATIONS TO THE LIMITS OF THE PROJECT DEFINED IN THESE DRAWINGS, AND IN NO WAY ENCROACH ONTO ADJACENT PROPERTIES, UNLESS LEGAL EASEMENTS ARE PROVIDED. CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR ANY AGREEMENTS NEEDED, OR DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO PUBLIC OR PRIVATE PROPERTY, INCLUDING ROADS AND UTILITIES.
16. OVER-EXCAVATION OF ANY UTILITY TRENCHES SHALL NOT BE PERMITTED, UNLESS IT IS DETERMINED, TO THE SATISFACTION OF THE DESIGN ENGINEER, THAT THE SUBSOIL IS NOT SUITABLE FOR PIPE BEDDING AND MUST BE REPLACED WITH IMPORTED FILL. OVER-EXCAVATION PERFORMED UNNECESSARILY BY THE CONTRACTOR SHALL BE REMEDIED WITH CLASSIFIED FILL AND COMPACTION AS REQUIRED FOR CLASS-D BEDDING OR BETTER, AT THE CONTRACTOR'S EXPENSE.
17. ONE SET OF BACKFILL DENSITY TESTS SHALL BE PERFORMED FOR EVERY 12 INCH LIFT FOR EACH 200 LINEAR FEET OF PIPELINE, OR FOR ANY STRUCTURE THAT REQUIRES COMPACTED FOUNDATION OR CONTROLLED BACKFILL. FOR PIPELINES OR UTILITIES IN ROADWAYS THE THE TESTING INTERVAL SHALL BE FOR EACH 100 LINEAR FEET.
18. SUBGRADE, BASE MATERIAL , ASPHALT-TREATED BASE, AND ASPHALT SURFACE COURSE (MARSHALL) SHALL BE TESTED FOR COMPACTION EVERY 100 LINEAR FEET. ONE ASPHALT SAMPLE SHALL BE TAKEN FOR EVERY 500 TONS INSTALLED, OR ONE A DAY, WHICHEVER IS LESS, SAMPLES SHALL BE TESTED AND THE RESULTS SENT TO THE OPR.
19. BASECOURSE SHALL BE COMPACTED TO NO LESS THAN 98% OF MAXIMUM DENSITY USING AASHTO, T-180 MODIFIED MOISTURE DENSITY TEST. BASECOURSE SHALL MEET GRADATION REQUIREMENTS SPECIFIED IN TABLE 421 CLASS B, NMSHTD, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
20. CONTRACTOR SHALL SUBMIT ASTM OR AASHTO CERTIFICATES OF MATERIALS' COMPLIANCE TO THE OPR, BUT NO LESS THAN 5 DAYS PRIOR TO INITIATING ANY WORK INVOLVING SUCH MATERIALS. OPR SHALL SUBMIT THESE MATERIAL CERTIFICATES TO THE COUNTY IN THE FINAL PROJECT CLOSEOUT SUBMITTAL, PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
21. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT HORIZONTAL AND VERTICAL CONTROL SURVEY MONUMENTS (MARKS) FROM DAMAGE DURING CONSTRUCTION. IF DURING THE EXECUTION OF THE PROJECT, THE CONTRACTOR'S ACTIVITIES DISTURB OR DESTROY SUCH MARKS, A NEW MEXICO LICENSED SURVEYOR HIRED BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL RE-ESTABLISH THE MARKS IN ACCORDANCE WITH THE STANDARDS AND PROCEDURES SET FORTH BY THE "GEODETIC MARK PRESERVATION GUIDEBOOK". FOR MORE INFORMATION CONTACT NGS MARK PRESERVATION CENTER, NOAA (505) 768-3606.
22. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING STRUCTURES FREE OF DUST AND/OR CONSTRUCTION DEBRIS AT ALL TIMES DURING THE EXECUTION OF THE PROJECT. ALL EXISTING AND NEW STRUCTURES SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. ALL COSTS RELATED TO THIS ITEM SHALL BE INCIDENTAL TO THE WORK AND NO EXTRA PAYMENTS SHALL BE MADE TO THE CONTRACTOR.
23. CONTRACTOR SHALL REPAIR ANY EXISTING STRUCTURE OR UTILITY CONDUIT, AND ITS UTILITY CORRIDOR/EASEMENT DAMAGED AS A RESULT OF THE EXECUTION OF THE PROJECT, AT NO ADDITIONAL COST TO SANTA FE COUNTY OR THE RESPECTIVE UTILITY. EXISTING ROADS ACCESS FOR ADJACENT PROPERTIES SHALL BE MAINTAINED UNDER ALL TYPICAL WEATHER CONDITIONS.
24. ALL AREAS DISTURBED BY THE CONSTRUCTION ACTIVITIES OF THIS PROJECT SHALL BE RESTORED, RE-GRADED, PER THE RE-VEGETATION PLAN, OR IN A MANNER ACCEPTABLE TO SANTA FE COUNTY, AND IN COMPLIANCE WITH PROJECT'S SWPPP.
25. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR EROSION CONTROL INCIDENTAL TO THE CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL SUBMIT TO SANTA FE COUNTY A STORM WATER POLLUTION PREVENTION PLAN (SWPP) THAT WILL ADDRESS ALL CONSTRUCTION PHASES. THIS SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL CONSTRUCTION PERMIT (2012 GCP) REQUIREMENTS FOR ALL CONSTRUCTION ACTIVITIES. IN ADDITION, THE CONTRACTOR SHALL PROCURE A STORM WATER POLLUTION PERMIT FROM USEPA, A MINIMUM OF 30 DAYS PRIOR TO INITIATING ANY SITE WORK.
26. CONTRACTOR SHALL PROVIDE AN AREA TO STORE CONSTRUCTION DEBRIS WHERE IT WILL NOT BE A NUISANCE TO THE SURROUNDING NEIGHBORHOOD. ALL DEBRIS SHALL BE CONTAINED IN SUCH A MANNER THAT WILL PREVENT SCATTERING, AND BE IN COMPLIANCE WITH THE PROJECT'S SWPPP. ALL DEBRIS, INCLUDING TREES AND UNDERGROWTH SHALL BE DISPOSED OF PROPERLY WITHIN AN APPROVED LANDFILL, AND REMOVED FROM THE SITE PRIOR TO FINAL INSPECTION.
27. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF THE WORK MATERIALS AND EQUIPMENT PRIOR TO AND AFTER THEIR INSTALLATION AS APPLICABLE, UNTIL THE PROJECT'S FINAL ACCEPTANCE BY SANTA FE COUNTY.
28. THE MAXIMUM DEVIATION OF THE TOP OF SURFACE AT THE CURB AND GUTTER SHALL NOT EXCEED 1/8 INCH PER 10 FEET, NOR SHALL THE INSIDE FACE DEVIATE MORE THAN 1/4 INCH PER 10 FEET FROM A STRAIGHT LINE . PRIOR OR DURING THE COUNTY'S FINAL INSPECTION, ALL CURB AND GUTTER SHALL BE TESTED FOR POSITIVE WATER FLOW. ANY AREAS THAT FAIL THIS TEST SHALL BE REJECTED.
29. UTILITY LINES SHALL BE BORED UNDER ALL EXISTING STREETS, CONCRETE FEATURES, AND A MINIMUM 12-INCH SEPARATION SHALL BE MAINTAINED BETWEEN LINES. ALL CURB, GUTTER, SIDEWALK AND ASPHALT DAMAGE IN COUNTY, STATE OR PRIVATE RIGHT OF WAY RESULTING FROM ANY CONSTRUCTION ACTIVITY SHALL BE REPAIRED BEFORE FINAL INSPECTION AT THE CONTRACTORS EXPENSE.
30. BEFORE PAVEMENT IS INSTALLED THE SANITARY SEWER TV INSPECTION SHALL OCCUR. A COMPLETION LETTER FROM EACH UTILITY COMPANY SHALL BE SUBMITTED TO THE GROWTH MANAGEMENT DEPARTMENT PRIOR TO PAVING ACTIVITIES.
31. NO ALTERATION OR MODIFICATION TO ANY DRAINAGE WAY OR ARROYO SHALL BE PERMITTED WITHOUT FIRST OBTAINING A WRITTEN APPROVAL FROM THE COUNTY FLOOD PLAN ADMINISTRATOR.
32. THE DESIGN ENGINEER AND SANTA FE COUNTY WAIVE ANY AND ALL RESPONSIBILITY AND IS NOT LIABLE FOR PROBLEMS THAT MAY ARISE FROM THE CONTRACTOR'S FAILURE TO FOLLOW THESE DRAWINGS, SPECIFICATIONS, THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS ARISING FROM FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S WRITTEN RESPONSE TO REQUESTS FOR INFORMATION OR CLARIFICATION WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS.
33. ALL ACCESS AND EXCAVATION PERMITS ARE TO BE OBTAINED FROM THE SANTA FE COUNTY PUBLIC WORKS DEPARTMENT. SUCH PERMITS SHALL BE REQUESTED FOR ALL CURB CUTS OR DRIVEWAYS TO BE BUILT IN COUNTY RIGHT OF WAY. DRIVEWAYS SHALL NOT BE INSTALLED PRIOR TO COUNTY'S APPROVAL OF SITE SPECIFIC PLANS AND THE CONTRACTOR HAS PROCURED A PERMIT FROM THE COUNTY PUBLIC WORKS DEPARTMENT.

WATERLINE CONSTRUCTION

1. ALL WATER LINE AND FITTING MATERIALS AND THEIR INSTALLATION SHALL COMPLY WITH THE AMERICAN WATERWORKS ASSOCIATION (AWWA) STANDARDS, THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, (NMAPWA) 2006 EDITION, OR SUBSEQUENT REVISIONS, AND THE SANTA FE COUNTY WATER UTILITY CONSTRUCTION STANDARD AND SPECIFICATIONS MANUAL, UNLESS OTHERWISE INDICATED ON THESE DRAWINGS. WHEN CONFLICT ARISES AMONG THESE, THE LATTER SHALL PREVAIL.
2. LOCATION OF LINES AND FITTINGS SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN ON THESE DRAWINGS.
3. UNLESS OTHERWISE INDICATED ON THESE DRAWINGS, PIPELINES AND ALL APPURTENANT FITTINGS SHALL BE DUCTILE IRON, PVC C-900, WITH CLASS-D BEDDING OR BETTER. MECHANICAL OR MEGALUG (R) JOINTS, OR THERMAL FUSION JOINING RESPECTIVELY (HDPE). EXCAVATION SHALL BE PROPERLY MADE TO ACCOMMODATE THE PIPE'S BELL ENDS AS NECESSARY. WATERLINES SHALL BE 6" DIAMETER OR LARGER.
4. ALL WATER LINES SHALL BE INSTALLED IN THEIR OWN TRENCH, WITH NO OTHER UTILITIES IN THE TRENCH, BURIED UNDER A MINIMUM 48 INCHES OF COMPACTED BACKFILL.
5. WHEN CROSSING, WATER LINES SHALL ALWAYS BE ABOVE SEWER LINES, AND A MINIMUM 18-INCH CLEARANCE SHALL BE ALLOWED BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF ANY SANITARY SEWER, UNLESS SPECIAL CROSSING PROVISIONS ARE SHOWN ON THESE DRAWINGS.
6. TYPICAL HORIZONTAL SEPARATION BETWEEN WATER LINES AND ANY SANITARY SEWER LINE SHALL BE MINIMUM 10 FEET, AND SEPARATE TRENCHES SHALL BE EXCAVATED IN ALL CASES.
7. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DISINFECTION AND PRESSURE TESTING OF ALL NEW WATER LINES, IN ACCORDANCE WITH AWWA STANDARDS. COUNTY UTILITY PERSONNEL SHALL BE PRESENT DURING SUCH TESTING, AND AN INSPECTION REPORT SHALL BE SUBMITTED BY THE CONTRACTOR TO THE COUNTY UTILITIES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE COUNTY UTILITY STAFF FOR THEIR PRESENCE DURING FIELD TESTING OF LINES. BACTERIA TEST RESULTS OVER 30 DAYS OLD, BY THE COMPLETION OF THE PROJECT SHALL BE RETESTED AT NO ADDITIONAL EXPENSE TO THE OWNER.
8. ALL VALVES 12" DIAMETER OR SMALLER SHALL BE FULL-PORT GATE TYPE, RESILIENT SEATING, MECHANICAL OR MEGALUG (R) JOINTS, PIPE, AND INSTALLED IN COMPLIANCE WITH THE COUNTY WATER SYSTEM DETAILS.
9. UPON COMPLETION ONE VALVE SHALL BE TIED TO ONE OR MORE OF THE SANTA FE COUNTY'S PERMANENT SURVEY MONUMENTS, (OR OTHER VISIBLE WATER FEATURES OR FIXTURES) SUCH AS FIRE HYDRANTS AND WATER METERS WITH DISTANCES BETWEEN ALL FITTINGS AND APPURTENANCES PROVIDED AS REQUIRED IN THE UTILITY DEPARTMENTS CONSTRUCTION STANDARDS AND SPECIFICATIONS MANUAL. THE WORK SHALL BE PERFORMED BE A REGISTERED NEW MEXICO LICENSED SURVEYOR, OR ENGINEER WITH INFORMATION PROVIDED BY THE CONTRACTOR.
10. ALL FIRE HYDRANTS SHALL BE SUPPLIED WITH NFP CONNECTORS, AND NUMBERED (NUMBER SUPPLIED BY THE COUNTY FIRE DEPARTMENT). HYDRANTS SHALL BE INSTALLED TO ALLOW A MINIMUM HORIZONTAL CLEARANCE OF 3-FEET ALL AROUND THEM.
11. WATER SERVICE CONNECTIONS AND METERS SHALL BE 1-INCH MINIMUM DIAMETER FOR LOTS THAT WILL BE THE SITE FOR RESIDENTIAL BUILDINGS EQUIPPED WITH FIRE SUPPRESSION SYSTEMS. OTHERWISE, CONNECTIONS AND METERS SHALL BE STANDARD 5/8 INCH DIAMETER. METER SETTERS SHALL BE PER STANDARD REQUIRED IN SANTA FE COUNTY UTILITY DEPARTMENT'S CONSTRUCTION STANDARDS AND SPECIFICATIONS MANUAL. METERS SHALL BE NEPTUNE MACH10 RADIO TRANSMITTER.
12. LOCATE WIRES SHALL BE INSTALLED ON ALL WATER LINES. THE LOCATE WIRE MUST BE VISIBLE IN ALL VALVE VAULTS, MANHOLES OR OTHER ACCESS STRUCTURES. THIS WILL BE VERIFIED DURING THE PRELIMINARY INSPECTION PRIOR TO PAVING. THE LOCATE WIRE SHALL BE A CONTINUOUS, 10 GAUGE, SOLID STRAND INSULATED COPPER WIRE. SPLICES OF THE LOCATE WIRE SHALL FOLLOW THE SPECIFICATIONS IN THE SANTA FE COUNTY UTILITY DEPARTMENT'S CONSTRUCTION STANDARDS AND SPECIFICATIONS MANUAL.
13. BLUE CARSONITE MARKERS WITH SFCU I.D. STICKERS ARE REQUIRED ON ALL VALVES AND APPURTENANCES, AND EVERY 200 FEET ALONG PIPELINES THAT ARE NOT IN ROADWAY.

SANITARY SEWER LINE CONSTRUCTION

1. ALL SANITARY SEWER LINE INSTALLATION SHALL BE IN COMPLIANCE WITH THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (NMAPWA), 2006 EDITION, SUBSEQUENT REVISIONS AND THE SANTA FE COUNTY WATER UTILITIES STANDARD DETAILS AND REQUIREMENTS, UNLESS OTHERWISE SPECIFIED ON THESE DRAWINGS.
2. PUBLIC SANITARY SEWER LINES SHALL BE A MINIMUM 8-INCH DIAMETER, PVC SDR 26, OR GRAY HDPE DR 11, WITH CLASS D BEDDING OR BETTER, UNLESS OTHERWISE SHOWN ON THESE DRAWINGS. SEWER SERVICE CONNECTIONS SHALL BE OF CAST IRON TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP TYPE, OR APPROVED EQUIVALENT BY ENGINEER.
3. SANITARY SEWER MANHOLES SHALL HAVE STANDARD SF COUNTY COVERS AND RINGS.
4. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PRESSURE TESTING IN ACCORDANCE WITH NMAPWA STANDARDS, AND TELEVISION INSPECTION OF ALL SEWER LINES, PRIOR TO PAVING OF THE ROADS UNDER WHICH SEWER LINES HAVE BEEN INSTALLED. COUNTY UTILITY PERSONNEL SHALL BE PRESENT DURING SUCH TESTING AND AN INSPECTION REPORT SHALL BE SUBMITTED BY THE PROJECT ENGINEER TO THE PROJECT MANAGER AND COUNTY WATER UTILITIES DEPARTMENT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. SANTA FE COUNTY SHALL REVIEW THE VIDEOS AND TESTS IN DETAIL TO IDENTIFY ANY DEFICIENCIES AND THE CONTRACTOR SHALL CORRECT THEM AS NECESSARY. ALL VIDEO AND TESTS SHALL BE PREPARED IN A RATIONAL SEQUENCE AND PROPERLY LABELED LINES AND MANHOLES SHALL BE IDENTIFIED BY THE NAMES AND STATIONING GIVEN IN THE DESIGN DRAWINGS. VIDEOS SHALL THEN BE TURNED INTO THE COUNTY FOR REVIEW PRIOR TO ACCEPTANCE OF THE SEWER LINES, AND PRIOR TO PAVING.
5. LOW PRESSURE SEWER LINES SHALL NOT LOSE ANY MORE THAN 5 PSI WHEN PRESSURIZED TO 120 PSI FOR A MINIMUM OF ONE HOUR, AN INSPECTION REPORT SHALL BE SUBMITTED TO THE OWNERS PROJECT REPRESENTATIVE (OPR) PRIOR TO PAVING OF THE ROADS UNDER WHICH THESE LINES HAVE BEEN INSTALLED.
6. UPON COMPLETION, ONE MANHOLE SHALL BE TIED TO ONE OR MORE OF THE SANTA FE COUNTY'S PERMANENT SURVEY MONUMENTS (OR OTHER VISIBLE PERMANENT FEATURES OR FIXTURES) AND SUBMITTED IN A TABLE FORMAT WITH THE ASBUILT RECORD DRAWINGS PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. AS PART OF THE FINAL RECORD DRAWINGS, SHOW CORRECTED ASBUILT BEARING AND DISTANCES BETWEEN MANHOLES ALONG THE HORIZONTAL ALIGNMENT OF THE SANITARY SEWER INCLUDING CORRECTED RIM AND INVERT ELEVATIONS AND PIPE SLOPES. THE WORK SHALL BE PERFORMED BY A NEW MEXICO LICENSED SURVEYOR.
7. GREEN CARSONITE MARKERS WITH SFCU I.D. STICKERS ARE REQUIRED ON ALL MANHOLES AND APPURTENANCES, AND EVERY 200 FEET ALONG PIPELINES THAT ARE NOT IN A ROADWAY.
8. WHENEVER SHOWN, LOW PRESSURE SERVICE SANITARY SEWER (LPSAS) LINES SHALL BE PVC SDR 21 PVC SDR 11 HDPE, INSTALLED UNDER A MINIMUM 48-INCH COVER. HIGHER PRESSURE LINES OR FORCE MAINS SHALL BE PVC C-900 CLASS 100 WPR, UNLESS OTHERWISE SPECIFIED IN THESE DRAWINGS.
9. WHEREVER DRAWINGS SHOW A LOW PRESSURE LINE AT A FLUSHING STATION, CONTRACTOR SHALL REFER TO THE MULTI-LINE FLUSHING STATION DETAIL.
10. LOCATE WIRES SHALL BE INSTALLED FOR ALL SANITARY SEWER LINES (GRAVITY AND LOW PRESSURE). THE LOCATE WIRE MUST BE VISIBLE IN ALL MANHOLES OR ACCESS STRUCTURE. THIS WILL BE VERIFIED DURING THE PRELIMINARY MANHOLE INSPECTION PRIOR TO PAVING. THE LOCATE WIRE SHALL BE A CONTINUOUS, 10 GAUGE, SOLID STRAND INSULATED COPPER WIRE. SPLICES OF THE LOCATE WIRE SHALL FOLLOW THE SPECIFICATIONS IN THE SANTA FE COUNTY UTILITY DEPARTMENTS CONSTRUCTION STANDARDS AND SPECIFICATIONS MANUAL.
11. ALL MANHOLES AND FLUSHING STATIONS SHALL BE MADE A MINIMUM OF 4-FOOT DIAMETER PRE-CAST CONCRETE CYLINDER PIPE SEGMENTS, UNLESS OTHERWISE INDICATED IN THESE DRAWINGS. MANHOLE BOTTOM AND TOP SLABS MAY BE EITHER PRE-CAST OR CAST IN PLACE CONCRETE.
12. A MINIMUM OF ONE FOOT CLEARANCE SHALL BE ALLOWED BETWEEN THE TOP OF A SANITARY SEWER LINE AND THE THE BOTTOM OF ANY STORM SEWER PIPE OR STRUCTURE.
13. GRINDER PUMPS FOR LOW PRESSURE SEWER SERVICES SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNER/USER AND SHALL BE PRE-APPROVED BY SFCU IN WRITING.
14. ALL SANITARY SEWER LINES SHALL BE INSTALLED IN THEIR OWN TRENCH, WITH NO OTHER UTILITIES TO SHARE THIS TRENCH, BURIED UNDER A MINIMUM 48 INCHES OF COMPACTED BACKFILL.
15. EXISTING SANITARY SEWER LINES MUST BE VIDEO-INSPECTED PRIOR TO A NEW SERVICE CONNECTION BEING PLACED AS WELL AS RE-VIDEOED AFTER THE SERVICES HAVE BEEN COMPLETED. THIS IS TO ENSURE THAT THE EXISTING SANITARY SEWER LINE HAS NOT BEEN DAMAGED AND THE NEW SERVICE IS INSTALLED CORRECTLY.
16. GRAVITY SEWER LINES, UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR SPECIFICALLY DELETED BY THE ENGINEER, IN WRITING, SHALL BE TESTED FOR LEAKAGE. PLEASE REFER TO SPECIFICATIONS (SECTION 901.7, NMAPWA).
17. NO DISCHARGE INTO THE SANITARY SEWER SHALL BE ALLOWED UNTIL WRITTEN NOTIFICATION BY THE COUNTY WATER UTILITIES THAT DISCHARGE IS ACCEPTABLE.
18. THE OWNER/DEVELOPER WILL BE RESPONSIBLE FOR MAINTAINING REPAIRING AND LOCATING THE SEWER SYSTEM UNTIL SANTA FE COUNTY UTILITIES ACCEPTANCE FOR PERMANENT OPERATIONS AND MAINTENANCE. DAMAGE RESULTING FROM A STOPPAGE IN ANY GRAVITY AND OR PRESSURE SEWER SYSTEM WILL BE THE SOLE RESPONSIBILITY OF THE OWNER/DEVELOPER UNTIL A FINAL ACCEPTANCE LETTER FOR PERMANENT OPERATIONS AND MAINTENANCE HAS BEEN ISSUED BY SANTA FE COUNTY UTILITY.
19. ADDITIONAL GENERAL NOTES ARE CONTAINED IN THE STANDARD COUNTY DETAIL SHEETS FOR SANITARY SEWER CONSTRUCTION.
20. WATER METERS WILL NOT BE PLACED UNTIL A FINAL ACCEPTANCE LETTER HAS BEEN ISSUED FOR ALL SANITARY SEWER NEEDED IN ORDER FOR THIS PROJECT TO CONNECT TO THE SANITARY SEWER SYSTEM.
21. SEWER BACKFLOW CHECK VALVES WILL BE REQUIRED FOR ALL SEWER SERVICE LATERAL CONNECTIONS TO SEWER MAINS 12" OR GREATER IN DIAMETER, OR WHEN A FACILITY OR RESIDENCE IS LOWER THAN THE NEAREST MANHOLES OR ROAD.
22. 20 FOOT WIDE ACCESS GATES SHALL BE PROVIDED AT ALL FENCES, WALLS OR OTHER OBSTRUCTIONS THAT CROSS A PUBLIC SEWER OR WATER LINE. ACCESS GATES TO BE LOCATED WITHIN THE SANITARY SEWER OR UTILITY EASEMENT.

RECLAIMED WATER/EFFLUENT IRRIGATION CONSTRUCTION

1. WHERE INSTALLED ALL RECLAIMED WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE NEW MEXICO STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION, THE APPLICABLE AWWA STANDARDS, APPLICABLE REQUIREMENTS OF COUNTY WATER UTILITIES OR THE RECOMMENDATION OF THE PIPE MANUFACTURER. SHOULD THERE BE ANY CONFLICT AMONG THESE DOCUMENTS, THE LATTER SHALL PREVAIL.
2. ALL PIPES, VALVES, AND FITTINGS SHALL BE COLOR-CODED PURPLE (ONE STRIPE) PVC SDR 18 OR HDPE DR 7.3 WITH CHEMICALLY-FUSED JOINTS. WHERE NECESSARY, FLANGED OR MECHANICAL JOINTS, AND OR THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH THESE DRAWINGS.
3. ALL VALVES SHALL ALSO HAVE COLOR-CODED PURPLE HANDLES AND BE FULL-PORT BALL TYPE HDPE WITH THERMO-FUSED JOINTS, RINKER POLY-PIPE OAE. CAST IRON VALVE BOX LIDS SHALL BE ENGRAVED "NON-POTABLE".
4. FLUSHING HYDRANTS AND FIRE HYDRANTS OR HOSE BIBS CONNECTED TO RECLAIMED-WATER LINES SHALL ALSO BE PAINTED PURPLE AND BARE A SIGN PROMINENTLY PLACED NEXT TO THEM WITH THE FOLLOWING TEXT: " NON POTABLE WATER DO NOT DRINK/PELIGRO - AGUA NO ES PARA BEBER".
5. SERVICE CONNECTIONS SHALL BE 1 INCH, CONSISTENTLY COLOR CODED. THESE SHALL BE THERMO-FUSED WHEN INSTALLED ONTO HDPE PIPES. SERVICE CONNECTIONS ON PVC PIPE SHALL BE MADE WITH THE APPROPRIATE TEES, REDUCERS, VALVES, VALVE BOXES ETC. INDIVIDUAL SERVICE CONNECTIONS SHALL BE METERED. METERS SHALL BE NEPTUNE MACH10 RADIO TRANSMITTER, OR CURRENT MAKE & MODEL REQUIRED BY SFC UTILITY.
6. RECLAIMED WATER/EFFLUENT IRRIGATION LINES SHALL NEVER BE CONNECTED TO THE POTABLE DOMESTIC SUPPLY SYSTEM.
7. ALL RECLAIMED WATER LINES SHALL BE INSTALLED IN THEIR OWN TRENCH, WITH NO OTHER UTILITIES SHARING THIS TRENCH, BURIED UNDER MINIMUM 48 INCHES OF COMPACTED BACKFILL.
8. LOCATE WIRES SHALL BE INSTALLED FOR ALL RECLAIMED WATER LINES. THE LOCATE WIRE MUST BE VISIBLE IN ALL MANHOLES OR ACCESS STRUCTURES. THIS WILL BE VERIFIED DURING THE PRELIMINARY INSPECTION PRIOR TO PAVING. THE LOCATE WIRE SHALL BE A CONTINUOUS, 10 GAUGE, SOLID STRAND INSULATED COPPER WIRE. SPLICES OF THE LOCATE WIRE SHALL FOLLOW THE SPECIFICATIONS IN THE SANTA FE COUNTY WATER UTILITIES CONSTRUCTION STANDARDS AND SPECIFICATIONS MANUAL.
9. PURPLE CARSONITE MARKERS WITH I.D. STICKERS ARE REQUIRED ON ALL VALVES AND APPURTENANCES, AND EVERY 200 FEET ALONG PIPELINES THAT ARE NOT IN ROADWAY.

DRY UTILITIES

1. SHADING AND BEDDING MATERIAL SHALL BE TYPE IV. CLASS 1 FOR DIRECT BURY CABLE, AND TYPE IV. CLASS 2 FOR CABLE IN CONDUIT. TYPE 111 MATERIAL SHALL BE CONSIDERED SUITABLE FOR EITHER TYPE OF INSTALLATION.
2. IF TRENCH-RUN MATERIAL MEETS BACKFILL MATERIAL REQUIREMENTS, 3-INCH BEDDING MAY BE OMITTED, PROVIDED THAT THE TRENCH BOTTOM IS SMOOTH, FLAT, AND WITHOUT SURFACE IRREGULARITIES.
3. SEPARATION BETWEEN JACKETED PRIMARY AND COMMUNICATION CABLES SHALL BE AT LEAST 12 INCHES.
4. WARNING TAPE SHALL BE PLACED A MINIMUM 12 INCHES ABOVE THE UPPER LEVEL OF UTILITIES AT THE CENTER OF THE TRENCH.
5. DRY UTILITY REQUIREMENTS SPECIFIED BY THE RESPECTIVE UTILITY SHALL BE FOLLOWED.

ENVIRONMENTAL EROSION AND SEDIMENT CONTROL REQUIREMENTS

1. THE CONTRACTOR SHALL SUBMIT TO THE PROJECT MANAGER AND OR OPR A SWPP PLAN THAT COMPLIES WITH THE 2012 CONSTRUCTION GENERAL PERMIT AND SUBSEQUENT REVISIONS.
2. AT A MINIMUM, ALL AREAS DENUDED AND/OR DISTURBED BY CONSTRUCTION TRAFFIC SHALL BE SPRAYED WITH WATER ON A DAILY BASIS TO CONTROL DUST GENERATION. ADDITIONAL WATER SHALL BE APPLIED ON WINDY DAYS AS NEEDED OR AS REQUIRED BY SANTA FE COUNTY.
3. AS SOON AS FINAL GRADES ARE ACHIEVED, AND PROPER CLIMATIC CONDITIONS PREVAIL, NATIVE GRASS SEEDS SHALL BE APPLIED. CONTRACTOR SHALL PERFORM THIS ACTIVITY IN CONFORMANCE WITH THE APPROVED TERRAIN MANAGEMENT PLAN FOR SEED MIX DETAILS, AS WELL AS APPLICATION AND CARE METHODOLOGY.
4. GRAVEL BAGS AND OTHER EPA APPROVED DEVICES SHALL BE INSTALLED AROUND DROP INLET GRATES IMMEDIATELY AFTER THEIR INSTALLATION TO PREVENT SEDIMENT FROM ENTERING THE STORM WATER SYSTEM. SEDIMENT DEPOSITED AROUND GRAVEL BAGS AND OTHER EPA APPROVED DEVICES SHALL BE SWEPT AND REMOVED IMMEDIATELY UPON DEPOSITION.
5. SILT FENCES OR WADDLES MEETING EPA REQUIREMENTS FOR SEDIMENT CONTROL SHALL BE INSTALLED AT ALL SLOPES IN STRICT ACCORDANCE WITH SWPP PLAN.
6. CONTRACTOR SHALL DISPOSE OF ITEMS DESIGNATED FOR REMOVAL WITHOUT SALVAGE, WHICH ARE UNSUITABLE FOR USE AS CONSTRUCTION MATERIALS IN THIS PROJECT. DISPOSAL SHALL BE PERFORMED IN AN ENVIRONMENTALLY SOUND SITE, SECURED BY THE CONTRACTOR IN CLOSE COORDINATION WITH THE APPROPRIATE REGULATORY AGENCIES. CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER AND OR OPR, IN WRITING, OF ANY RELEVANT DETAILS IN CONNECTION WITH THE DISPOSAL OPERATIONS.
7. BORROW MATERIAL, CONSTRUCTION WASTE, VEGETATIVE DEBRIS, ETC SHALL NOT BE PLACED IN WETLAND AREAS ARROYOS, OR ANY AREAS ENDANGERED SPECIES, OR HABITAT RESOURCES MAY BE AFFECTED. BORROW AREAS NOT CONTIGUOUS TO THE PROJECT SITE SHALL BE SHOWN IN THE SWPPP.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP SPILLS ASSOCIATED WITH THE PROJECT'S CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL REPORT AND PROPERLY RESPOND TO SPILLS OF HAZARDOUS MATERIALS SUCH AS GASOLINE, DIESEL, MOTOR OIL, SOLVENTS, TOXIC AND CORROSIVE SUBSTANCES, AND OTHER MATERIALS WHICH MAY REPRESENT A THREAT TO THE HEALTH AND WELFARE OF HIS WORKERS, THE GENERAL PUBLIC, OR THE ENVIRONMENT, CONTRACTOR SHALL REPORT EVIDENCE OF PAST SPILLS ENCOUNTERED DURING CONSTRUCTION, OR PRESENT SPILLS NOT ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT. REPORTS SHALL BE MADE IMMEDIATELY TO THE THE PROJECT MANAGER AND OR OPR AND THE APPROPRIATE STATE AGENCY RESPONSIBLE FOR THE EMERGENCY RESPONSE. CLEAN UP OF ANY UNREPORTED SPILLS THAT MAY HAVE OCCURRED DURING THE CONSTRUCTION OF THIS PROJECT, IDENTIFIED AFTERWARDS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
9. ALL WORK PERFORMED IN THE VICINITY OF EXISTING STREAMS, WATER IMPOUNDMENTS, WETLANDS OR IRRIGATION WATER SOURCES SHALL BE PERFORMED IN SUCH A MANNER AS TO MINIMIZE VEGETATION DAMAGE OR REMOVAL, AS WELL AS ANY SOIL EROSION. CONSTRUCTION EQUIPMENT'S CROSSINGS OF EXISTING STREAMS, WHETHER THE STREAMS ARE EPHEMERAL OR PERENNIAL SHALL BE MINIMIZED, AND IN COMPLIANCE WITH THE CLEAN WATER ACT (CWA), USACE 404, OR OTHER FEDERAL PERMIT REQUIREMENTS.
10. ALL WORK PERFORMED IN A FLOOD PLAIN SHALL COMPLY WITH THE SANTA FE COUNTY FLOOD PLAIN ORDINANCE.
11. RE-FUELING OPERATIONS AND CONCRETE DUMPING IN THE VICINITY OF ANY BODY OF WATER SHALL BE STRICTLY PROHIBITED.

TERRAIN MANAGEMENT AND RE-VEGETATION WORK REQUIREMENTS

1. ALL AREAS DISTURBED BY THE CONSTRUCTION ACTIVITIES OF THIS PROJECT, INCLUDING ANY TEMPORARY ACCESS ROAD, SHALL BE RE-GRADED TO THEIR ORIGINAL CONTOURS, AND RE-SEEDED IN ACCORDANCE WITH THE FOLLOWING PLAN AFTER COMPLETION OF THE CONSTRUCTION OPERATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUCCESSFUL RECOVERY OF DISTURBED AREAS FOLLOWING RE-VEGETATION THROUGH THE FIRST GROWING SEASON AFTER COMPLETION OF THIS PROJECT. IN THE EVENT THAT THE REVEGETATION PLAN CANNOT BE ACCOMPLISHED BEFORE SEPTEMBER 1 DUE TO CONSTRUCTION DELAYS, AND DISTURBED SURFACES MUST REMAIN EXPOSED AFTER THIS DATE, THE CONTRACTOR SHALL INSTALL TEMPORARY PROTECTION SUCH AS A COVER CROP OR A MULCH TO PREVENT SOIL EROSION, AT NO ADDITIONAL COST TO THE OWNER. A TEMPORARY CONSTRUCTION FENCE SHALL BE MAINTAINED AROUND THE DISTURBED AREA UNTIL THE NEW VEGETATION IS ESTABLISHED.
3. AREAS WITH A SLOPE LESS THAN 4:1 SHALL BE TREATED WITH DRILL SEEDING, WHILE SLOPES EXCEEDING 4:1 SHALL BE TREATED WITH BROADCAST OR HYDRO SEEDING AND SHALL INCLUDE HAND-RAKING OR CHAIN-HARROWING TO COVER SEED TO A DEPTH OF 1/4-INCH TO 1/2-INCH. SLOPES EXCEEDING 3:1 SHALL BE TREATED WITH THE EROSIN BLANKET, MEETING NMDOT CLASS D SPECIFICATIONS AND IN COMPLIANCE WITH THE EPA'S (CONSTRUCTION GENERAL PERMIT) FOR FINAL STABILIZATION. ALL TOP SOIL WHICH MUST BE REMOVED OR DISTURBED DURING CONSTRUCTION SHALL BE SAVED AND STOCKPILED AT A LOCATION DESIGNATED BY THE OPR. ANY DISTURBED AREA TO BE SEEDED WHICH HAS LESS THAN 6 INCH TOTAL TOP SOIL DEPTH SHALL BE SUPPLEMENTED TO A 6 INCH DEPTH WITH THE STOCKPILED MATERIAL.
4. THE SEED BED SHALL BE PREPARED TO A MINIMUM 4-INCH DEPTH BY TILLING WITH A DISC, HARROW, OR CHISELING TOOLS. ALL COMPETITIVE VEGETATION SHALL BE UPROOTED DURING THIS PREPARATION, AND THE SOIL SHALL BE UNIFORMLY WORKED TO A SMOOTH, FIRM SURFACE FREE OF CLODS, STONES OR OTHER EXTRANEOUS MATERIALS 4 INCH OR LARGER THAT WOULD INTERFERE WITH SEEDING EQUIPMENT AND GERMINATION. SEED BED PREPARATION BY MECHANICAL MEANS WILL NOT BE REQUIRED ON SLOPES EXCEEDING 3:1 IF, IN THE OPINION OF THE PROJECT MANAGER AND OR OPR, SEED BED PREPARATION ON THESE SLOPES IS IMPRACTICAL OR UNSAFE. ALL TILLING SHALL BE PERFORMED ACROSS THE SLOPE WHEN PRACTICAL AND SHALL BE PERFORMED IN TWO DIRECTIONS WHENEVER ONE PASS IS INSUFFICIENT, IN THE OPR'S OPINION, TO ADEQUATELY BREAK UP THE SOIL. TILLING SHALL NOT BE PERMITTED WHEN THE WIND BLOWS AT MORE THAN 10 MPH CAUSING DUST GENERATION AND MOVEMENT IN TO ADJACENT AREAS. NO WORK SHALL BE PERFORMED WHEN THE SOIL'S MOISTURE CONTENT IS UNFAVORABLE, OR THE GROUND CONDITIONS ARE NOT SUITABLE FOR TILLING.
5. SEED SHALL BE UNIFORMLY APPLIED OVER THE AREA TO BE TREATED. THE CONTRACTOR'S EQUIPMENT SHALL NOT TRAVEL OVER THE SEEDED AREAS. IF RAIN OR OTHER NATURAL PHENOMENA, WHICH MAKE THE SOIL UNSUITABLE FOR SEEDING, THE CONTRACTOR SHALL RE-PREPARE THE SOIL AS DESCRIBED HEREBY AT NO ADDITIONAL COST TO THE OWNER. SEEDS SHALL BE DRILLED TO A MINIMUM OF 1/2-INCH, UNLESS OTHERWISE INDICATED ON THESE DRAWINGS. DIRECTION OF SEEDING SHALL BE ACROSS THE SLOPES AND ON THE CONTOUR WHENEVER POSSIBLE.
6. BROADCAST SEEDING SHALL ONLY BE PERFORMED IN SLOPES EXCEEDING 3:1 OR IN AREAS INACCESSIBLE TO THE SEED DRILL. BROADCAST SEEDING SHALL BE PERFORMED WITH A ROTARY SPREADER OR A SEEDER BOX WITH GEAR FEED MECHANISM IF DRILL SEEDING IS NOT PRACTICAL. RICE HULLS OR OTHER FILLERS SHALL BE USED TO PREVENT UNEVEN SEPARATION OF LIGHTER SEED. SEED BED SHALL BE LIGHTLY RAKED IMMEDIATELY FOLLOWING THE SEEDING OPERATION, TO PROVIDE 1/2-INCH SOIL COVER OVER THE SEED.
7. MULCH SHALL BE PLACED OVER ALL SEEDED AREAS. THE MULCH SHALL BE MADE OF STRAW OR HAY, AND APPLIED TO PRODUCE A DEPTH OF 1-1/2-INCH TO 2-INCH. STRAW OR HAY WITH NOXIOUS SEEDS OR PLANTS, ROTTED, BRITTLE, SHORT FIBERED, OR IMPROPERLY CURED IS NOT ACCEPTABLE.
8. SEED MIX AND SEEDING RATE ARE AS FOLLOWS:
DRYLAND BLEND

SEED	PERCENTAGE OF SEED MIX
SIDE OATS GRAMA	20%
BLUE GRAMA	30%
LITTLE BLUESTEM	20%
INDIAN RICEGRASS	10%
SHEEP FESCUE	10%
STREAMBANK WHEATGRASS	4%
ALKALI SACATON	3%
GALLETA	3%
WILD FLOWER MIX	5% OF TOTAL SEED WEIGHT

NOTE: POUNDS PER ACRE OF SEED MIXTURE: 15-20 LBS IF DRILLED; 20-25 LBS. IF BROADCAST, SEED SHALL BE CERTIFIED NOXIOUS WEED FREE.

THIS FILE IS AVAILABLE ELECTRONICALLY UPON REQUEST

REVISION		
SYMBOL	DATE:	BY:
	04/05/2013	PC
	09/25/2020	LMA

SANTA FE COUNTY
WATER UTILITIES 424 NM 599, SANTA FE, NM 87507

SANTA FE COUNTY
PROJECT NAME:

GENERAL CONSTRUCTION

APPROVED BY: JOHN DUPUIS REVIEWED BY: LA
DATE: SCALE: NA SHEET NO: 1
DRAWN BY: PCASAUS

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25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME
SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 23-600-156-00
DESIGNED BY: IS
DRAWN BY: MAB
CHECKED BY: TCM
DATE: AUGUST 2024

SHEET TITLE
GENERAL NOTES

SHEET NO:
G-002

GENERAL NOTES

1. WORK FOR THE IMPROVEMENTS AS SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," 2006 EDITION AS AMENDED, AS PREPARED BY THE NEW MEXICO CHAPTER, AMERICAN PUBLIC WORKS ASSOCIATION, EXCEPT AS MODIFIED BY THESE PLANS AND TECHNICAL SPECIFICATIONS WITHIN THE PROJECT MANUAL.

2. STANDARDS FOR ADDITIVES, MATERIALS AND EQUIPMENT - DIRECT ADDITIVES. EACH PRODUCT ADDED DIRECTLY TO WATER DURING PRODUCTION OR TREATMENT, INCLUDING TREATMENT IN STORAGE AND DISTRIBUTION, SHALL CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) OR NATIONAL SANITATION FOUNDATION INTERNATIONAL (NSF) STANDARD 60. PRODUCTS COVERED BY THIS SUBSECTION MAY INCLUDE BUT ARE NOT LIMITED TO:(1) COAGULATION AND FLOCCULATION CHEMICALS;(2) CHEMICALS FOR CORROSION AND SCALE CONTROL;(3) CHEMICALS FOR SOFTENING, PRECIPITATION, SEQUESTERING, AND PH ADJUSTMENT;(4) DISINFECTION AND OXIDATION CHEMICALS;(5) CHEMICALS FOR FLUORIDATION, DEFLUORIDATION, ALGAE CONTROL, AND DECHLORINATION;(6) DYES AND TRACERS;(7) ANTIFREEZES, ANTIFOAMERS, REGENERANTS, AND SEPARATION PROCESS SCALE INHIBITORS AND CLEANERS;(8) WATER WELL DRILLING AND REHABILITATION AIDS; AND(9) WELL PUMP LUBRICANTS AND WELL SEALANTS. STANDARDS FOR ADDITIVES, MATERIALS AND EQUIPMENT - INDIRECT ADDITIVES. EXCEPT AS IDENTIFIED IN NMAC 20.7.10.400 SUBSECTIONS N AND O, A MATERIAL OR PRODUCT THAT COMES INTO CONTACT WITH WATER OR WATER TREATMENT CHEMICAL SHALL CONFORM TO ANSI/NSF STANDARD 61. PRODUCTS AND MATERIALS COVERED BY THIS SUBSECTION MAY INCLUDE BUT ARE NOT LIMITED TO:(1) PROCESS MEDIA, SUCH AS CARBON AND SAND;(2) JOINING AND SEALING MATERIALS, SUCH AS SOLVENTS, CEMENTS, WELDING MATERIALS, AND GASKETS;(3) MECHANICAL PLUMBING DEVICES;(4) PIPES AND RELATED PRODUCTS, SUCH AS PIPE AND FITTINGS;(5) MECHANICAL DEVICES USED IN TREATMENT, TRANSMISSION, OR DISTRIBUTION SYSTEMS SUCH AS TANKS, VALVES, CHLORINATORS, AND SEPARATION MEMBRANES; AND(6) PROTECTIVE (BARRIER) MATERIALS SUCH AS COATINGS.

3. A COPY OF THE NEW MEXICO APWA STANDARD SPECIFICATIONS, THE PROJECT MANUAL AND THE PROJECT PLANS, SHALL BE KEPT AT THE JOB SITE BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.

4. SPECIFICATIONS FOR THE IMPROVEMENTS AS SHOWN ON THESE PLANS, WITHIN NMDOT ROW, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (LATEST EDITION). IN CASE OF CONFLICTING SPECIFICATIONS, THE ENGINEER WILL DETERMINE THE GOVERNING SPECIFICATION .

PERMITS

5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND GOVERNMENT REGULATIONS. BEFORE WORK MAY BEGIN, CONTRACTOR SHALL SECURE ALL APPROPRIATE PERMITS AS REQUIRED -IF NOT ALREADY OBTAINED BY THE OWNER - AT CONTRACTOR'S EXPENSE AND CONSIDERED INCIDENTAL TO THE PROJECT. PERMIT AND APPROVAL MAY BE REQUIRED FROM NMDOT, DISTRICT #4, PRIOR TO CONSTRUCTION ON U.S. OR STATE HIGHWAYS. NO TIME EXTENSIONS WILL BE ALLOWED DUE TO THE NORMAL PERMITTING PROCESSES. ANY FINES ASSOCIATED WITH NOT OBTAINING NECESSARY PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR. COST OF COMPLIANCE WITH THESE PERMITS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, AND NO ADDITIONAL PAYMENT SHALL BE MADE.

EXISTING UTILITY LOCATION AND SUBSURFACE CONDITIONS

6. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE DRAWINGS HAVE BEEN OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS AND FROM INFORMATION PROVIDED BY THE VARIOUS UTILITIES. LOCATIONS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE DEPICTED LOCATION AND THE EXISTENCE OR NONEXISTENCE OF UTILITY LINES. THE CONTRACTOR IS ADVISED TO FULLY INVESTIGATE UTILITY LOCATION AND ROCK EXCAVATING CONDITIONS PRIOR TO BIDDING BY POTHOLING, OR OTHER MEANS, IN ORDER TO BE FULLY AWARE OF THE PROJECT CONDITIONS.

7. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT THE NEW MEXICO ONE-CALL SYSTEM, STATEWIDE, 1-800-321-2537, FOR LOCATION ON EXISTING UTILITIES.

8. PRIOR TO CONSTRUCTION IN ANY AREA, THE CONTRACTOR SHALL VERIFY, BY WHATEVER MEANS NECESSARY, THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES AND OBSTRUCTIONS. IN PARTICULAR, THE EXACT LOCATIONS AND MATERIALS OF ALL EXISTING UTILITIES AT PROPOSED CONNECTIONS SHALL BE VERIFIED BY THE DIRECT EXCAVATION OR "POT HOLING" IN ORDER TO IDENTIFY THE DETAILS OF CONNECTION PRIOR TO THE PARTICULAR SEQUENCE OF WORK. SHOULD A CONFLICT BE VERIFIED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THE CONFLICT MAY BE RESOLVED. THE OWNER OR ENGINEER SHALL NOT BE RESPONSIBLE FOR DELAY OR ADDITIONAL COST RESULTING FROM CONTRACTORS FAILURE TO FOLLOW THIS PROCEDURE.

9. ALL GAS, ELECTRIC, TELEPHONE LINE CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY RELOCATIONS, ENCROACHMENTS, TEMP ACCESS, AND ADJUSTMENT TO GRADE OF MANHOLES AND VALVE COVERS.

10. A PRELIMINARY GEOTECHNICAL INVESTIGATION HAS BEEN COMPLETED AND INCLUDED IN THE PROJECT MANUAL FOR INFORMATION PURPOSES ONLY.

TRAFFIC CONTROL

11. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR IMPLEMENTING, PROTECTING AND MAINTAINING ANY NECESSARY TRAFFIC CONTROL IN COMPLIANCE WITH NMMUTCD. TYPICAL STREET AND HIGHWAY TRAFFIC CONTROL DETAILS ARE PROVIDED, AND CONTRACTOR SHALL FURNISH THE TRAFFIC CONTROL AS PROVIDED THEREIN, TO COINCIDE WITH SEQUENCING OF CONSTRUCTION. CONTRACTOR SHALL FURNISH A TRAFFIC CONTROL PLAN (DRAWING) WITH ANY DETOUR ARRANGEMENTS TO THE OWNER AND ENGINEER FOR APPROVAL AT LEAST 7 WORKING DAYS PRIOR TO CONSTRUCTION. CONTRACTOR MUST NOTIFY THE LOCAL POLICE DEPARTMENT 72 HOURS IN ADVANCE OF STARTING OR ALTERING ANY TRAFFIC CONTROL PROGRAM.

12. WHEN DETOURS ARE NOT AVAILABLE; CONTRACTOR SHALL PROVIDE PROVISIONS ON-SITE TO STOP CONSTRUCTION AND PROVIDE A SAFE, PASSABLE ACCESS FOR EMERGENCY VEHICLES WHEN NEEDED.

13. DRIVEWAY ACCESS TO RESIDENTIAL HOMES SHALL BE AVAILABLE DURING THE HOURS OF 6:00 PM TO 8:00 AM, AND ALL BUSINESSES SHALL HAVE 24 HOUR ACCESS EXCEPT IN EMERGENCIES. CONTRACTOR SHALL ASSIST IN ANY ARRANGEMENTS FOR "SPECIAL NEEDS" RESIDENTS, AND SHALL AT ALL TIMES PROVIDE NOTIFICATION TO AFFECTED RESIDENTS PRIOR TO ANY DRIVEWAY ACCESS SHUTDOWNS OR WATER AND SEWER SERVICE SHUTDOWNS, THROUGH "DOOR HANGER" NOTICES AND PUBLIC INFORMATION ANNOUNCEMENTS, AT LEAST 48 HOURS IN ADVANCE. CONTRACTOR SHALL PROVIDE EGRESS AND INGRESS FOR ALL EMERGENCY VEHICLES, AND SHALL KEEP STEEL PLATES ON-SITE FOR ANY NECESSARY TEMPORARY EMERGENCY TRENCH CROSSINGS.

14. ALL STREET STRIPING ALTERED AND/OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO THE SAME LOCATION OR AS SHOWN IN THE PLAN SET.

15. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL CONSTRUCTION SIGNAGE UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE OWNER.

SITE ACCESS AND PROTECTION

16. THE CONTRACTOR SHALL NOT ALLOW HIS CONSTRUCTION, STORAGE, OR PARKING OF EQUIPMENT OR VEHICLES TO ENCROACH ON PRIVATE PROPERTY EXCEPT WHERE PERMANENT OR TEMPORARY EASEMENTS HAVE BEEN GRANTED. IN ANY CASE, THE CONTRACTOR SHALL OBSERVE THE FOLLOWING CONDITIONS:
    A. THE CONSTRUCTION AREA SHALL BE KEPT TO THE MINIMUM WIDTH REQUIRED FOR THE OPERATION.
    B. NO TREES OVER 6 INCH DIAMETER SHALL BE REMOVED, UNLESS AUTHORIZED BY THE OWNER.
    C. ANY DAMAGE DONE TO STRUCTURES, PAVING, GRAVEL, FENCES, UTILITY POLES, CULVERTS, ETC. SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.

CONSTRUCTION DEBRIS/DISPOSAL

17. THE CONTRACTOR SHALL PROVIDE AN AREA TO STORE CONSTRUCTION DEBRIS WHERE IT WILL NOT BE A NUISANCE AND CONTAINED TOT PREVENT SCATTERING. ALL DEBRIS SHALL BE DISPOSED OF PROPERLY WITHIN A PROPERLY PERMITTED LANDFILL. ALL CONSTRUCTION DEBRIS SHALL BE REMOVED FROM SITE PRIOR TO SUBSTANTIAL COMPLETION AND CONSIDERED INCIDENTAL.

18. CONTRACTOR IS HEREBY GRANTED SALVAGE RIGHTS TO ANY AND ALL CONSTRUCTION DEBRIS (EXCEPT AS SHOWN IN THE PLANS AND SPECIFICATIONS), PROVIDED THE CONTRACTOR USES SAID DEBRIS IN A LAWFUL MANNER. A LIST OF ITEMS SALVAGED SHALL BE REPORTED IN WRITING TO THE ENGINEER AND THE OWNER PRIOR TO SALVAGE ITEMS LEAVING THE SITE.

19. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STREETS FREE AND CLEAR OF ANY DEBRIS THAT IS TRACKED TO AND FROM THE SITE.

PLAN CHANGES, AS BUILTS, RECORD DRAWINGS

20. CHANGES SHALL NOT BE MADE TO THESE PLANS WITHOUT THE SPECIFIC APPROVAL OF THE OWNER AND THE ENGINEER. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION METHODS OR TECHNIQUES OR FOR THE EXECUTION OF THE WORK AS SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

21. THE CONTRACTOR SHALL MAINTAIN AN UP TO DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE PLANS SHALL BE KEPT CURRENT, WITHIN TWO WEEKS, AT ALL TIMES. THESE PLANS SHALL BE SUBJECT TO REVIEW BY THE ENGINEER THROUGHOUT THE PROJECT AND WILL BE REVIEWED BY THE ENGINEER FOR ACCURACY AND COMPLETENESS AT LEAST ONCE EVERY 30 DAYS. PAYMENT MAY BE WITHHELD UNTIL AS BUILT PLANS ARE CURRENT. TWO (2) SETS OF THE FINAL AS-BUILT PLANS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL PAYMENT.

CONSTRUCTION REQUIREMENTS

22. ALL NEW WATER LINES SHALL BE CONSTRUCTED WITH A MINIMUM OF 4.0 FT. COVER MEASURED FROM FINISH GRADE TO THE TOP OF THE PIPE, UNLESS OTHERWISE NOTED. UNDERGROUND INSTALLATION OF SEWER PIPE SHALL BE PER APWA STANDARDS.

23. WATER AND SEWER CONFLICTS SHALL BE RESOLVED IN ACCORDANCE WITH NMED REQUIREMENTS, SHOULD THEY OCCUR. SEWER WILL BE LAID AT LEAST 10 FT HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. DISTANCE WILL BE MEASURED EDGE TO EDGE. WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10-FT SEPARATION, THE APPROPRIATE REVIEWING AGENCY MAY ALLOW DEVIATION ON A CASE-BY-CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE, BOTH THE WATER MAIN AND SEWER WILL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS OF THE AGENCY AND SEWER TO BE PRESSURE TESTED TO 150 PSI TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.

24. ALL NEW PIPING THRUST RESTRAINT SHALL BE PROVIDED BY RESTRAINED JOINT SYSTEMS. IN ADDITION, CONCRETE THRUST BLOCKING SHALL BE UTILIZED IN THOSE LOCATIONS WHERE EXISTING PIPING CONNECTIONS PREVENT FULL DEVELOPMENT OF RESTRAINED LENGTH OF PIPE BY NEW PIPE CONNECTIONS. ALL THRUST RESTRAINTS ARE TO MEET 150 PSI TEST PRESSURE CONDITIONS.

25. ALL PVC PIPE FOR WATER MAIN SHALL BE AWWA C-900, DR-18 FOR THIS PROJECT. ALL DUCTILE IRON PIPE SHALL BE AWWA C-150, PRESSURE CLASS 250 OR BETTER. ALL FITTINGS SHALL BE DUCTILE IRON, CLASS 250 PSI, OR BETTER IN ACCORDANCE WITH NMAPWA REQUIREMENTS.

26. ALL PIPING, VALVES, FITTINGS, AND SERVICES UTILIZED FOR POTABLE WATER SERVICE, SHALL BE DISINFECTED IN ACCORDANCE WITH NMED REQUIREMENTS. PIPELINES SHALL BE FLUSHED, DISINFECTED AND SAMPLED IN ACCORDANCE WITH AWWA C-651.

27. EXISTING PAVEMENT SHALL BE SAW CUT TO STRAIGHT EDGES TO AVOID ANY BROKEN OR CRACKED PAVEMENT. SEE TRENCHING AND STREET RESURFACING DETAILS FOR LIMITS OF SAW CUT. THE PAVEMENT BID ITEM INCLUDED IN THIS PROJECT IS INTENDED TO REMOVE AND REPLACE THE EXISTING PAVEMENT. THE PAYMENT FOR THE ROAD PAVEMENT REPLACEMENT SHALL NOT EXCEED A MAXIMUM WIDTH OF EIGHT (8) FEET. REPLACEMENT FOR WIDTHS GREATER THAN 8' SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION. THE CONTRACTOR SHALL MINIMIZE PAVEMENT REPLACEMENT. THE CONTRACTOR SHALL COORDINATE AND VERIFY THE EXISTING AND PROPOSED PAVEMENT THICKNESS WITH THE ENGINEER AT LEAST TWO WEEKS PRIOR TO REPLACING THE PAVEMENT.

28. THE CONTRACTOR IS REQUIRED TO PROVIDE DUST AND EROSION CONTROL PROTECTION, AS A PART OF GRADING WORK, THROUGHOUT CONSTRUCTION IN ACCORDANCE W/ NPDES BEST MANAGEMENT PRACTICES. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE NECESSARY SITE EROSION CONTROL DEVICES FOR INHIBITING DUST, WIND, AND AIR SEDIMENT MOVEMENT OFFSITE THROUGHOUT CONSTRUCTION.

29. CONTRACTOR SHALL INSTALL MARKER BALLS AT ALL DUCTILE IRON FITTINGS. MARKER BALLS SHALL BE 3M EMS OR APPROVED EQUAL. CONTRACTOR SHALL PROVIDE ONE MARKER BALL DETECTION DEVICE TO THE OWNER. MARKER BALLS AND DETECTION DEVICE ARE CONSIDERED INCIDENTAL TO THE DUCTILE IRON COST.

EXISTING WATER SYSTEM

14. THROUGHOUT THE LIFE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE EXISTING WATER SYSTEM OPERATIONAL UNTIL THE NEW SYSTEM IS ACCEPTED BY THE OWNER & ANY DAMAGE TO THE EXISTING SYSTEM SHALL BE IMMEDIATELY REPAIRED BY CONTRACTOR.

15. ALL WATER SHUTOFFS MUST BE COORDINATED WITH THE ENGINEER AND OWNER'S REPRESENTATIVE A MINIMUM OF ONE (1) WEEK OR MORE IN ADVANCE OF THE SHUT-OFFS. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED PROPERTY OWNERS OF THE PENDING OUTAGE A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE OUTAGE AND AGAIN ONE (1) DAY PRIOR TO THE OUTAGE. ANY INTERRUPTION OF WATER SERVICE SHALL BE KEPT TO THE MINIMUM LENGTH OF TIME POSSIBLE. CONNECTION TO THE NEW POTABLE WATERLINE SHALL NOT TAKE MORE THAN 4-HOURS.

16. FIRE HYDRANT LOCATIONS INDICATED ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION BY THE CONTRACTOR. THE CONTRACTOR SHALL REQUEST THE LOCATION FOR FIRE HYDRANT FROM THE OWNER'S REPRESENTATIVE AT LEAST ONE (1) WEEK PRIOR TO THE WORK COMMENCING.

17. CONTRACTOR SHALL NOT CONNECT TO EXISTING SYSTEM UNTIL ALL TESTING IS COMPLETE AND SHALL OBTAIN WRITTEN PERMISSION FROM THE ENGINEER TO PROCEED WITH CONNECTION TO THE EXISTING SYSTEM.

18. A PRESSURE TESTING PLAN SHALL BE PREPARED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER AND OWNER. THE PRESSURE TESTING PLAN SHALL MEET AWWA C-651 AND SHALL BE PERFORMED SUCH THAT ALL VALVES ARE PRESSURE TESTED ON EACH SIDE OF THE VALVE.

19. CONTRACTOR SHALL NOT OPERATE VALVES OR ISOLATE ANY PORTION OF THE WATER DISTRIBUTION, COLLECTOR, OR TRANSMISSION SYSTEM. CONTRACTOR SHALL COORDINATE ALL VALVE OPERATIONS WITH THE OWNER AT LEAST SEVEN(7) WORKING DAYS PRIOR TO THE VALVE CLOSURE.

20. CONTRACTOR SHALL LIMIT THE AMOUNT OF OPEN TRENCH TO 660 FEET MAXIMUM AT ANY ONE TIME, UNLESS OTHERWISE APPROVED BY THE ENGINEER AND OWNER.

21. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE DISPOSAL OF WATER TO BE DRAINED FROM EXISTING WATERLINES. CONTRACTOR SHALL PROVIDE SANITARY, TEMPORARY CAP ON EXISTING PIPELINES UNTIL READY TO MAKE FINAL CONNECTION. PRIOR TO THE START OF WORK THE CONTRACTOR SHALL SUBMIT PROPOSED METHODS AND PROCEDURES FOR DRAINING OF PIPELINES, INCLUDING DISPOSAL LOCATION TO THE ENGINEER AND OWNER FOR REVIEW AND APPROVAL..

SITE RESTORATION

22. SITE RESTORATOIN, INCLUDING TEMPORARY EROSION CONTROL PROVISIONS, IS A PREREQUISITE FOR PERIODIC AND FINAL PAYMENT. ANY AND ALL DISTURBED AREAS DURING CONSTRUCTION SHALL BE RETURNED TO MATCH OR EXCEED CONDITION PRIOR TO CONSTRUCTION COMMENCEMENT.

23. CONTRACTOR SHALL PROVIDE A VIDEO DOCUMENTATION OF THE ENTIRE SITE ALONG ALL ALIGNMENTS PRIOR TO CONSTRUCTION COMMENCEMENT. THE VIDEO SHALL COVER THE ENTIRE ANTICIPATED AREA OF DISTURBANCE FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE TWO (2) COPIES OF THE VIDEO DOCUMENTATION ON A USB FLASH DRIVE TO THE ENGINEER.

ENVIRONMENTAL AND HISTORICAL PRESERVATION

24. IN THE EVENT THE CONTRACTOR ENCOUNTERS ITEMS OF HISTORICAL IMPORTANCE, THE ENGINEER AND OWNER SHALL BE NOTIFIED IMMEDIATELY AND WORK IN THE AREA SHALL IMMEDIATELY CEASE UNTIL THE SITE CAN BE CLEARED PROPERLY.

25. IF HUMAN REMAINS ARE ENCOUNTERED, THE CONTRACTOR SHALL CEASE ALL WORK AND CONTACT THE OFFICE OF THE MEDICAL EXAMINER FOR FURTHER INSTRUCTION.

NMDOT

26. WORK TO BE PREFORMED IN NMDOT ROW SHALL BE IN ACCORDANCE WITH NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2019 EDITION. NMDOT MUST BE CONTACTED FIVE (5) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WITHIN NMDOT ROW.

27. SUBMITTAL OF CONTRACTOR'S AND ALL SUBCONTRACTOR'S CERTIFICATE OF INSURANCE, WITH NMDOT LISTED AS ADDITIONAL INSURED AND THE AMOUNTS STATED IN THE NMDOT RAILROADS & UTILITIES MANUAL PRIOR TO COMMENCEMENT OF CONSTRUCTION.

28. ALL EXCAVATION WITHIN THE ROW SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557. ALL FILL MATERIAL IN NMDOT RIGHT OF WAY SHALL MEET THE REQUIREMENTS OF THE NMDOT SPECIFICATIONS. THE FILL SHALL BE COMPACTED PER THE NMDOT SPECIFICATIONS.

29. ROW SHALL BE RESTORED TO ORIGINAL CONDITION TO MEET PERMIT REQUIREMENTS.

SAFETY

30. CONTRACTOR SHALL PROVIDE AND INSTALL SHEETING, SHORING, TRENCH BOX OR OTHER MEANS NECESSARY TO LIMIT THE TRENCH WIDTH TO WITHIN THE LIMITS SHOWN ON THE PLANS.

31. CONTRACTOR SHALL BE RESPONSIBLE OF INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK TO CONSTRUCT THE FACILITIES SHOWN ON THE DRAWINGS. ALL TRENCHING, EXCAVATION AND SHORING ACTIVITIES SHALL BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.

32. CONTRACTOR SHALL CONDUCT REGULARLY SCHEDULED SAFETY MEETINGS AT THE JOB SITE, WITH THE OWNER AND ENGINEER MAY BE INVITED.

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CONSULTANTS

SEAL

LIDIA CEPEDA
NEW MEXICO
25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE

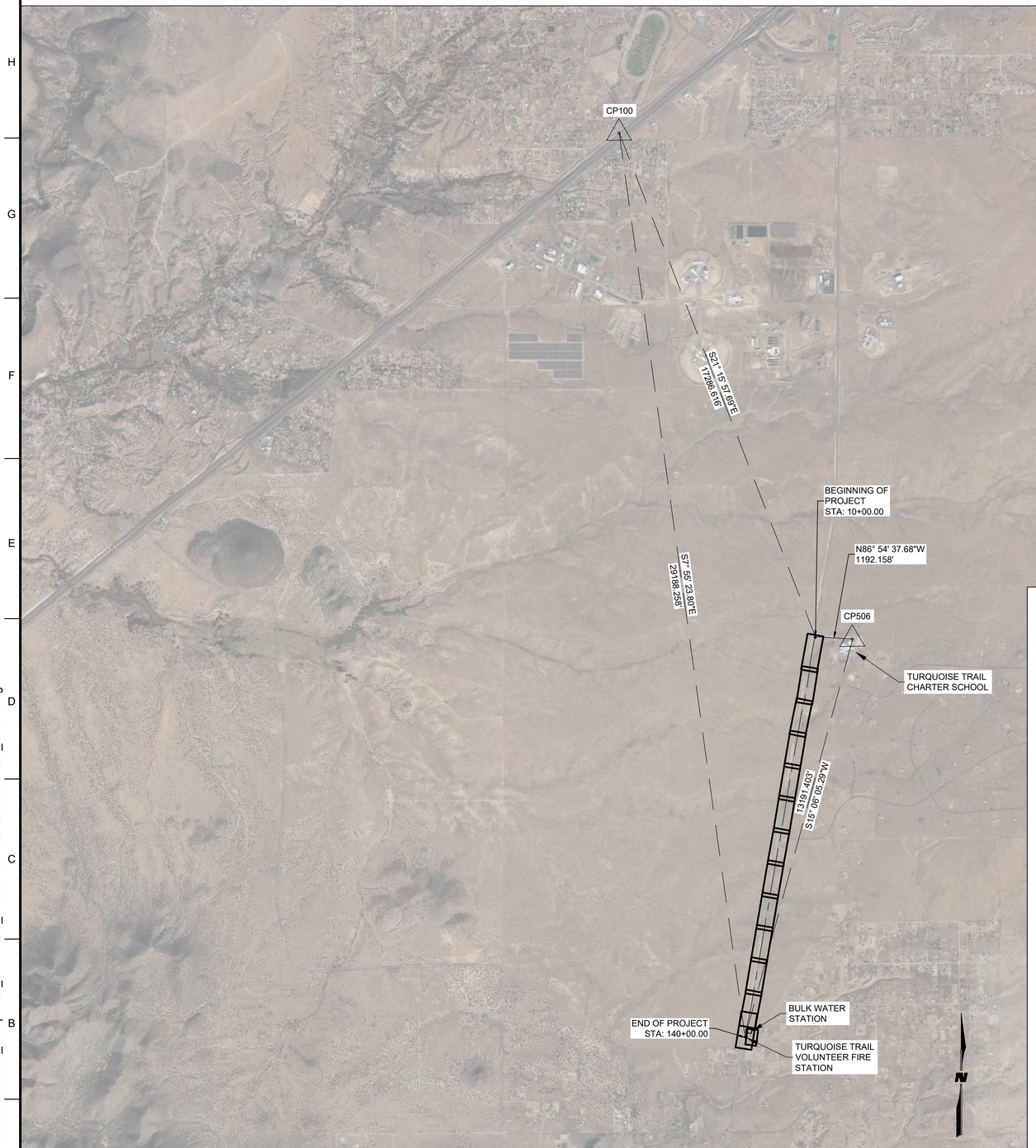
GENERAL NOTES

SHEET NO:

G-003

M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\2361560 G-001_G-002.dwg

8/15/2024



GENERAL SURVEY NOTES

NOTICE:

THE UTILITY LOCATIONS SHOWN ON THIS MAP ARE APPROXIMATE ONLY AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. IN ADDITION, THERE MAY BE FACILITIES IN EXISTENCE DUE TO RECENT CONSTRUCTION THAT ARE NOT SHOWN. WILSON & COMPANY, INC. DOES NOT GUARANTEE THE ACCURACY OF THE UTILITY LOCATIONS.

DTM AND PLANIMETRY COMPILED BY A COMBINATION OF AERIAL TOPOGRAPHIC LIDAR AND FIELD SURVEY.
AERIAL PHOTOGRAPHY & LIDAR WERE ACQUIRED WITH A ULTRACAM Lp DIGITAL MAPPING CAMERA AND A RIEGL VQ-580 AIRBORNE LASER SCANNER ON 9/24/20 AT 1900 FT ABOVE MEAN TERRAIN WITH A NOMINAL GROUND SAMPLE DISTANCE OF 0.16 FEET (5cm).

FIELD SURVEY OF GROUND CONTROL AND UTILITIES PERFORMED JANUARY 2024.

HORIZONTAL DATUM: NAD 83
VERTICAL DATUM: NAVD 88
COORDINATE SYSTEM: BASED ON NEW MEXICO STATE PLANE CENTRAL ZONE SCALED TO GROUND AROUND (0,0)
COMBINED GRID TO GROUND SCALE FACTOR: 1.0003938651
GEOID: 12B
UNITS: US SURVEY FEET

DTM DATA WILL MEET 1990 ASPRS TOPOGRAPHIC ELEVATION ACCURACY FOR CONTOUR INTERVAL 1; CLASS 1 PLANIMETRIC AND ORTHOPHOTO DATA WILL MEET ASPRS PLANIMETRIC FEATURE COORDINATE ACCURACY FOR TARGET MAP SCALE 1" = 50' CLASS 1; FOR WELL-DEFINED POINTS WHEN COMPARED TO THE GROUND CONTROL USED FOR THE PHOTOGRAMMETRIC MAPPING AND LIDAR.

SURVEY AND MAPPING PERFORMED BY:
WILSON & COMPANY, ENGINEERS & ARCHITECTS, INC

CONTROL POINT DATA

CP100
N: 1667573.926
E: 1692510.647
ELEV: 6215.611

CP506
N: 1651400.157
E: 1699970.914
ELEV: 6299.525

FO — FO	FIBER OPTIC LINE
COM — COM	UNDERGROUND TELEPHONE
G — G	GAS LINE
UGE — UGE	UNDERGROUND POWER
E — E	OVERHEAD POWER
SS — SS	PROPOSED SANITARY SEWER
	EXISTING SANITARY SEWER LINE
	CULVERT
W — W	EXISTING WATER LINE
	BUILDING OVERHANG
	FEATURE CENTER LINE
	UNPAVED SURFACE
	GRAVEL SURFACE
	GUARDRAIL
X — X — X	FENCE - CABLE
o — o — o	FENCE - CHAIN LINK
	FENCE - WROUGHT IRON
	FENCE - PIPE
WOOD — WOOD — WOOD	FENCE - WOOD
	BUSHES
	TREE LINE
	OBSCURED AREA
	WALL - RETAINING
	WALL - STONE
6XXX.X / 6XXX.XX	CENTERLINE OF ROADWAY ELEVATION

	MARKER - FIBER OPTIC
	MARKER - WATER
	MARKER - TELEPHONE
	SIGN - MILE POST
PROPANE	PROPANE TANK
	POLE - YARD LIGHT
	POLE - LARGE POWER
	SIGN - COMMERCIAL
	BOLLARD
	POST
	POLE - FLAG
MBX	MAILBOX
	TRASH BIN
	TRAFFIC LIGHT
	BUSH
	PALM TREE
	TREE - CONIFEROUS
	TREE - DECIDUOUS
	LOCATED OBJECT - ROUND
	LOCATED OBJECT - SQUARE
BENCH	BENCH
	MARKER - MISCELLANEOUS
	MARKER - GAS LINE

	CLEANOUT - SANITARY
	CULVERT END
	FIRE HYDRANT
GTE	GATE
	GUY WIRE
E	JUNCTION BOX - ELECTRIC
FO	JUNCTION BOX - FIBER
SIG	JUNCTION BOX - SIGNAL
SS	MANHOLE - SANITARY
T	MANHOLE - TELEPHONE
W	MANHOLE - WATER
INLET	INLET
E	METER - ELECTRIC
W	METER - WATER
MISC	MISCELLANEOUS FEATURE
E	PEDESTAL - ELECTRIC
TEL	PEDESTAL - TELEPHONE
	POLE - LIGHT
P	POLE - POWER
PB	PULLBOX - ELECTRIC
	SIGN - SINGLE POST
G	VALVE - GAS
W	VALVE - WATER
T	VAULT - TELEPHONE
UK	VAULT - UNKNOWN

A1 SURVEY CONTROL

0 1000' 2000'

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CONSULTANTS

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LIDIA CEPEDA
NEW MEXICO
25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

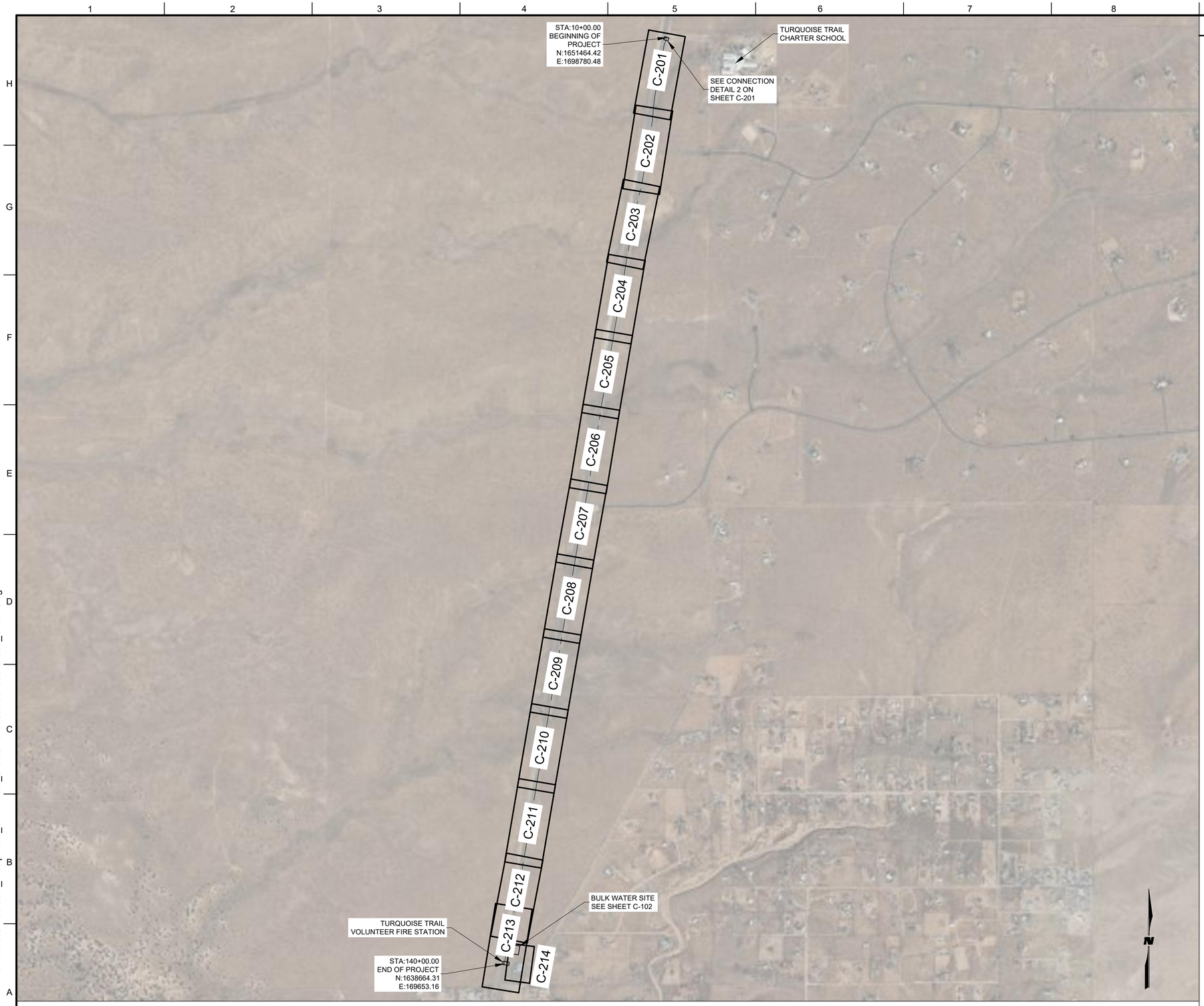
SHEET TITLE

OVERALL SURVEY CONTROL

SHEET NO:

G-004

8/15/2024 M:\MSD\23-600-156-0012_Disciplines_SHEETS\8_sheets - utilities\2361560 G-003_C-101.dwg



A1 OVERALL SITE PLAN

GENERAL NOTES:

1. LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE BASED ON AVAILABLE RECORD INFORMATION, ABOVE GROUND FEATURES VISIBLE IN THE FIELD, AND VERBAL DESCRIPTIONS BY SANTA FE COUNTY. IN THE EVENT CONDITIONS IN THE FIELD ARE NOT AS SHOWN ON THE DRAWINGS, CONTRACTOR SHALL NOTIFY THE PUBLIC INFRASTRUCTURE PROJECT MANAGER OR THE ENGINEER IMMEDIATELY SO THAT NECESSARY CHANGES TO THE DESIGN MAY BE MADE WITH THE MINIMUM OF INTERRUPTION TO THE PROJECT SCHEDULE.
2. ALL UTILITY CONSTRUCTION FOR IRRIGATION LINES, WATER LINES, SANITARY SEWER LINES, AND ALL APPURTENANCES SHALL BE IN ACCORDANCE WITH SANTA FE COUNTY STANDARDS.
3. CONTRACTOR SHALL VERIFY FIELD LOCATION, TYPE, AND DEPTH OF ALL UTILITIES SHOWN AND NOT SHOWN.

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08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE

OVERALL SITE PLAN

SHEET NO:

C-101

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8/15/2024

A1 BULK WATER SITE PLAN

0 30' 60'

GENERAL NOTES:

1. LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE BASED ON AVAILABLE RECORD INFORMATION, ABOVE GROUND FEATURES VISIBLE IN THE FIELD, AND VERBAL DESCRIPTIONS BY SANTA FE COUNTY. IN THE EVENT CONDITIONS IN THE FIELD ARE NOT AS SHOWN ON THE DRAWINGS, CONTRACTOR SHALL NOTIFY THE PUBLIC INFRASTRUCTURE PROJECT MANAGER OR THE ENGINEER IMMEDIATELY SO THAT NECESSARY CHANGES TO THE DESIGN MAY BE MADE WITH THE MINIMUM OF INTERRUPTION TO THE PROJECT SCHEDULE.
2. ALL UTILITY CONSTRUCTION FOR IRRIGATION LINES, WATER LINES, SANITARY SEWER LINES, AND ALL APPURTENANCES SHALL BE IN ACCORDANCE WITH SANTA FE COUNTY.
3. CONTRACTOR SHALL VERIFY FIELD LOCATION, TYPE, AND DEPTH OF ALL UTILITIES SHOWN AND NOT SHOWN.
4. BULK WATER STATION MODEL NO.
FP-WG-3OH-2L-075-BF-1AT-CC-ETN

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08/16/2024

PROJECT NAME
SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

	BY	DESCRIPTION	DATE	REV.

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE
BULK WATER
SITE PLAN

SHEET NO:
C-102

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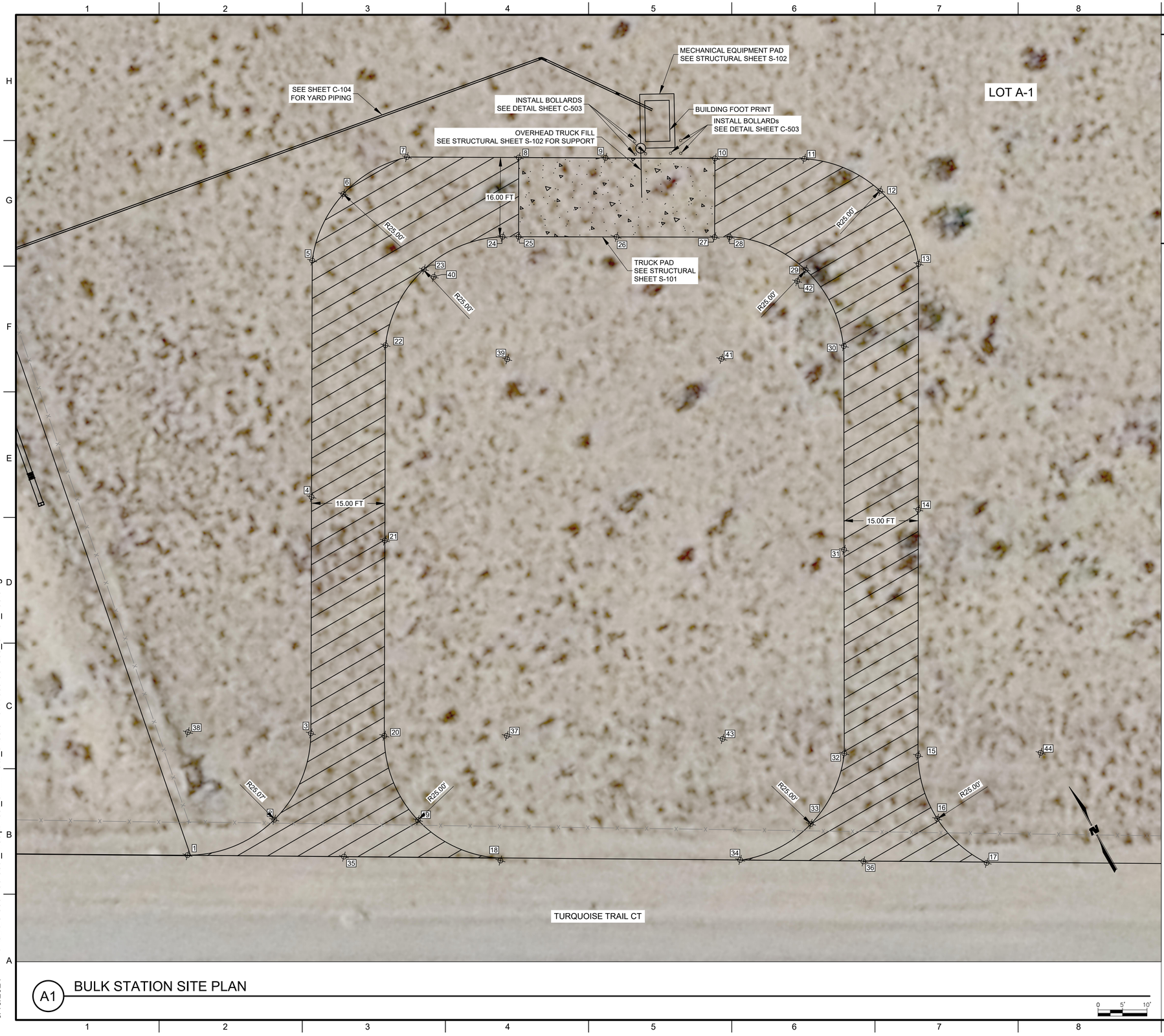
8/15/2024



A1 BULK STATION SITE PLAN

0 5' 10'

GENERAL NOTES:

1. LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE BASED ON AVAILABLE RECORD INFORMATION, ABOVE GROUND FEATURES VISIBLE IN THE FIELD, AND VERBAL DESCRIPTIONS BY SANTA FE COUNTY. IN THE EVENT CONDITIONS IN THE FIELD ARE NOT AS SHOWN ON THE DRAWINGS, CONTRACTOR SHALL NOTIFY THE PUBLIC INFRASTRUCTURE PROJECT MANAGER OR THE ENGINEER IMMEDIATELY SO THAT NECESSARY CHANGES TO THE DESIGN MAY BE MADE WITH THE MINIMUM OF INTERRUPTION TO THE PROJECT SCHEDULE.
2. ALL UTILITY CONSTRUCTION FOR IRRIGATION LINES, WATER LINES, SANITARY SEWER LINES, AND ALL APPURTENANCES SHALL BE IN ACCORDANCE WITH SANTA FE COUNTY.
3. CONTRACTOR SHALL VERIFY FIELD LOCATION, TYPE, AND DEPTH OF ALL UTILITIES SHOWN AND NOT SHOWN.

CONSTRUCTION NOTES:

1. DRIVE PAD SHALL NOT HAVE CURB AND GUTTER. TAPER OFF ASPHALT EDGES.

Point Table

Point #	Northing	Easting	Description
1	1638630.36	1696931.86	EDGE OF ROAD
2	1638649.30	1696934.49	EDGE OF ROAD
3	1638664.59	1696923.01	EDGE OF ROAD
4	1638688.92	1696881.40	EDGE OF ROAD
5	1638713.25	1696839.78	EDGE OF ROAD
6	1638725.56	1696831.23	EDGE OF ROAD
7	1638740.54	1696831.21	EDGE OF ROAD
8	1638760.23	1696842.75	EDGE OF ROAD
9	1638775.48	1696851.70	EDGE OF ROAD
10	1638794.73	1696862.99	EDGE OF ROAD
11	1638810.43	1696872.20	EDGE OF ROAD
12	1638820.52	1696885.65	EDGE OF ROAD
13	1638819.81	1696902.44	EDGE OF ROAD
14	1638794.59	1696945.76	EDGE OF ROAD
15	1638769.36	1696989.09	EDGE OF ROAD
16	1638766.28	1697002.22	EDGE OF ROAD
17	1638770.46	1697015.04	EDGE OF ROAD
18	1638684.98	1696964.85	EDGE OF ROAD
19	1638674.59	1696949.28	EDGE OF ROAD
20	1638677.29	1696930.96	EDGE OF ROAD
21	1638697.40	1696896.58	EDGE OF ROAD
22	1638717.50	1696862.20	EDGE OF ROAD
23	1638732.05	1696852.76	EDGE OF ROAD
24	1638749.25	1696855.06	EDGE OF ROAD
25	1638752.08	1696856.71	EDGE OF ROAD
26	1638769.33	1696866.76	EDGE OF ROAD
27	1638786.60	1696876.84	EDGE OF ROAD
28	1638789.26	1696878.38	EDGE OF ROAD
29	1638799.30	1696891.93	EDGE OF ROAD
30	1638798.23	1696909.28	EDGE OF ROAD
31	1638777.40	1696945.23	EDGE OF ROAD
32	1638756.58	1696981.18	EDGE OF ROAD
33	1638743.47	1696990.18	EDGE OF ROAD
34	1638727.31	1696989.30	EDGE OF ROAD
35	1638657.80	1696948.14	EDGE OF ROAD
36	1638748.89	1697002.17	EDGE OF ROAD
37	1638698.89	1696943.51	CENTER OF RADIUS
38	1638643.03	1696910.21	CENTER OF RADIUS
39	1638737.53	1696877.15	CENTER OF RADIUS
40	1638733.02	1696855.09	CENTER OF RADIUS
41	1638775.32	1696899.01	CENTER OF RADIUS
42	1638796.63	1696893.05	CENTER OF RADIUS
43	1638736.60	1696966.15	CENTER OF RADIUS
44	1638791.25	1697001.17	CENTER OF RADIUS

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08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

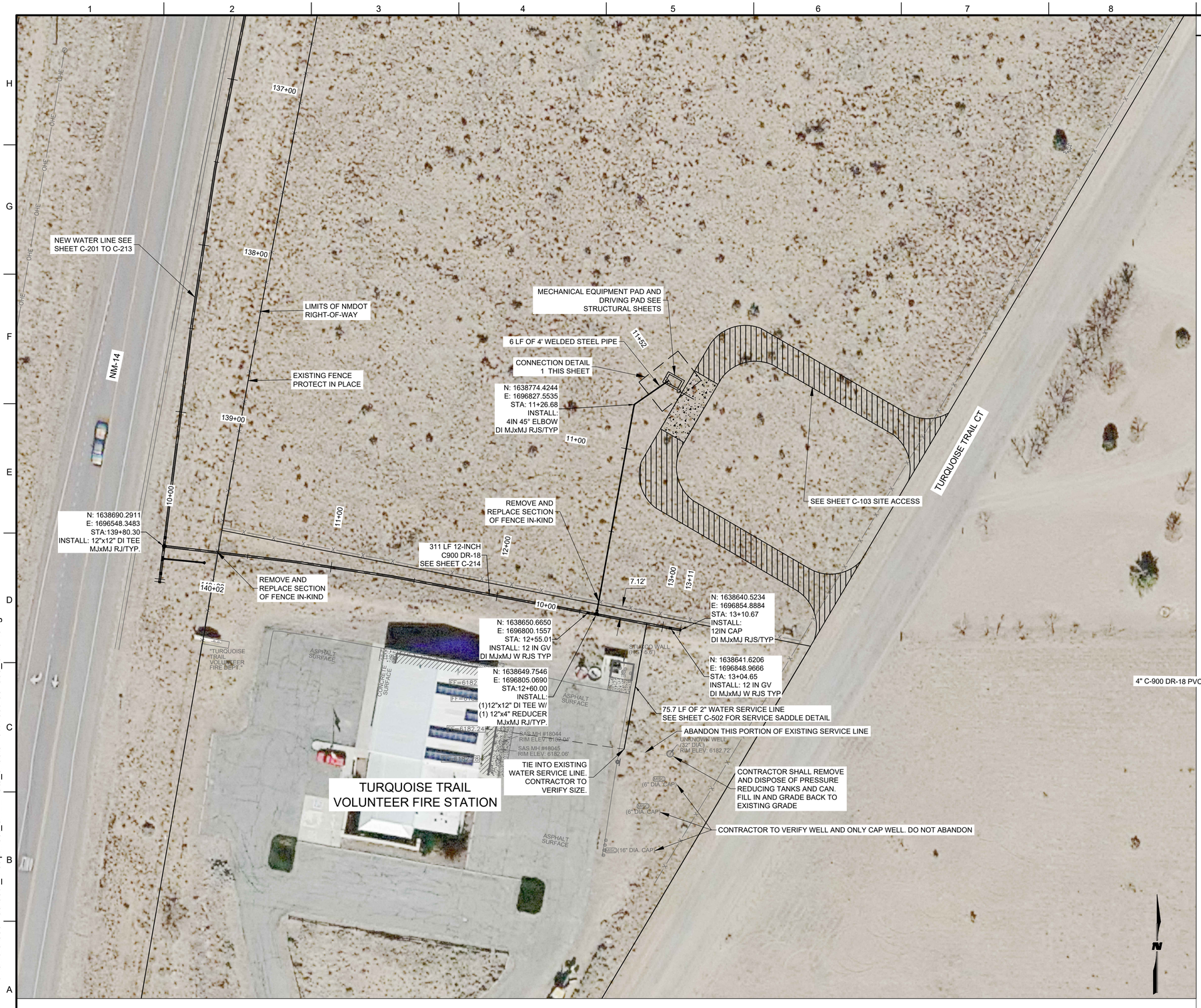
SHEET TITLE

BULK STATION
SITE PLAN

SHEET NO:

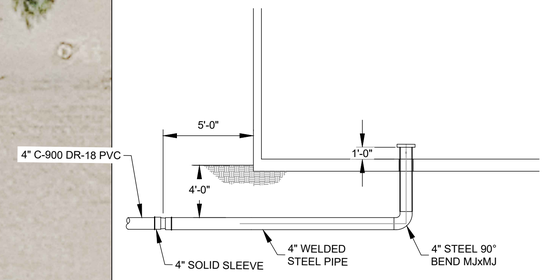
C-103

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\2361560_C-102_103.dwg



GENERAL NOTES:

1. LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE BASED ON AVAILABLE RECORD INFORMATION, ABOVE GROUND FEATURES VISIBLE IN THE FIELD, AND VERBAL DESCRIPTIONS BY SANTA FE COUNTY. IN THE EVENT CONDITIONS IN THE FIELD ARE NOT AS SHOWN ON THE DRAWINGS, CONTRACTOR SHALL NOTIFY THE PUBLIC INFRASTRUCTURE PROJECT MANAGER OR THE ENGINEER IMMEDIATELY SO THAT NECESSARY CHANGES TO THE DESIGN MAY BE MADE WITH THE MINIMUM OF INTERRUPTION TO THE PROJECT SCHEDULE.
2. ALL UTILITY CONSTRUCTION FOR IRRIGATION LINES, WATER LINES, SANITARY SEWER LINES, AND ALL APPURTENANCES SHALL BE IN ACCORDANCE WITH SANTA FE COUNTY.
3. CONTRACTOR SHALL VERIFY FIELD LOCATION, TYPE, AND DEPTH OF ALL UTILITIES SHOWN AND NOT SHOWN.



CONNECTION DETAIL 1

SCALE: NTS

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08/16/2024

PROJECT NAME

SANTA FE COUNTY
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WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE

YARD PIPING

SHEET NO:

C-104

A1 YARD PIPING

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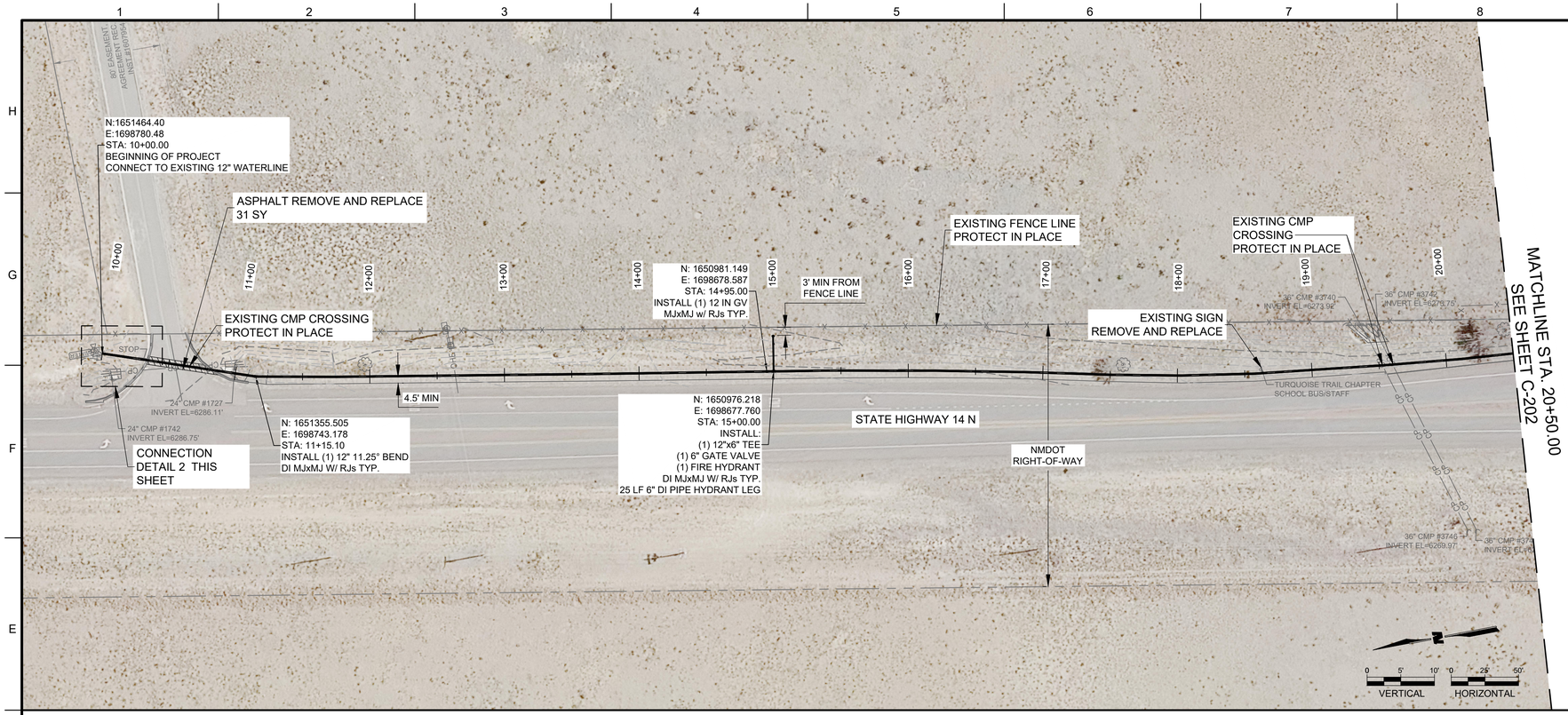
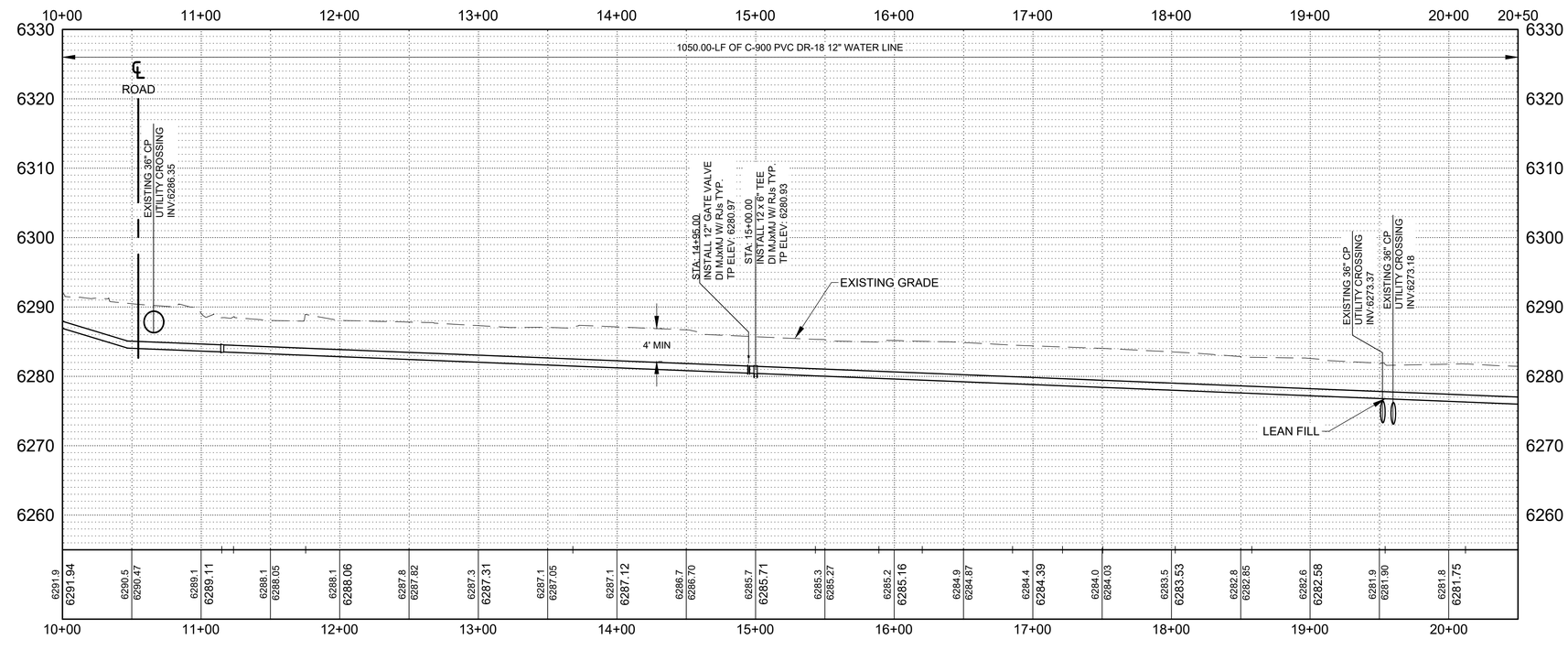
8/15/2024





GENERAL NOTES:

1. DEFLECT PIPE JOINTS AS NECESSARY TO MAINTAIN ALIGNMENT SHOW. MAXIMUM DEFLECTION SHALL BE NO MORE THAN 75% OF PIPE MANUFACTURER'S RECOMMENDATION.
2. ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE LOCATIONS. CONTRACTORS SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING WORK.
3. ALL FITTINGS AND VALVES SHALL BE RESTRAINED PER PRESSURE PIPE RESTRAINED JOINT LENGTH REQUIREMENTS ON SHEET C-502. WHERE FULL JOINT RESTRAINT LENGTH CANNOT BE CONSTRUCTED, CONCRETE BLOCKING SHALL BE USED PER SHEET C-501.
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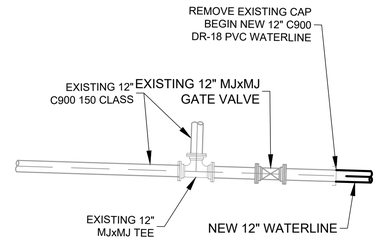
3. CONTRACTOR SHALL MAINTAIN A HORIZONTAL MINIMUM DISTANCE OF 10'-0" BETWEEN THE WATER AND EXISTING SEWER LINES THROUGHOUT THE PROJECT IF ENCOUNTERED.



CONNECTION DETAIL 2

SCALE: NTS

WILSON & COMPANY
4401 MASTHEAD ST. NE., SUITE 150
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PHONE: 505-348-4000
FAX: 505-348-4055
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CONSULTANTS

SEAL

LIDIA CEPEDA
NEW MEXICO
25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

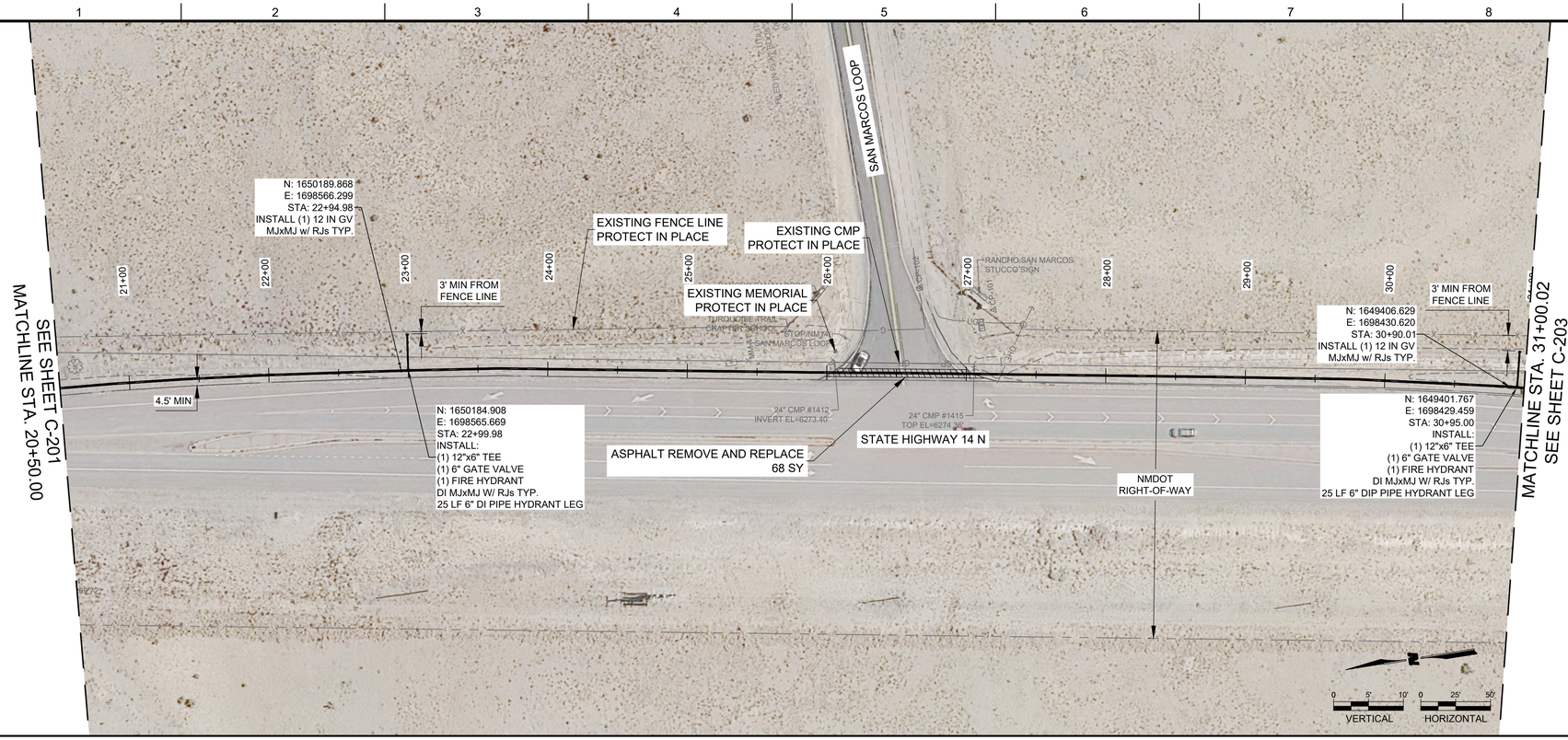
SHEET TITLE

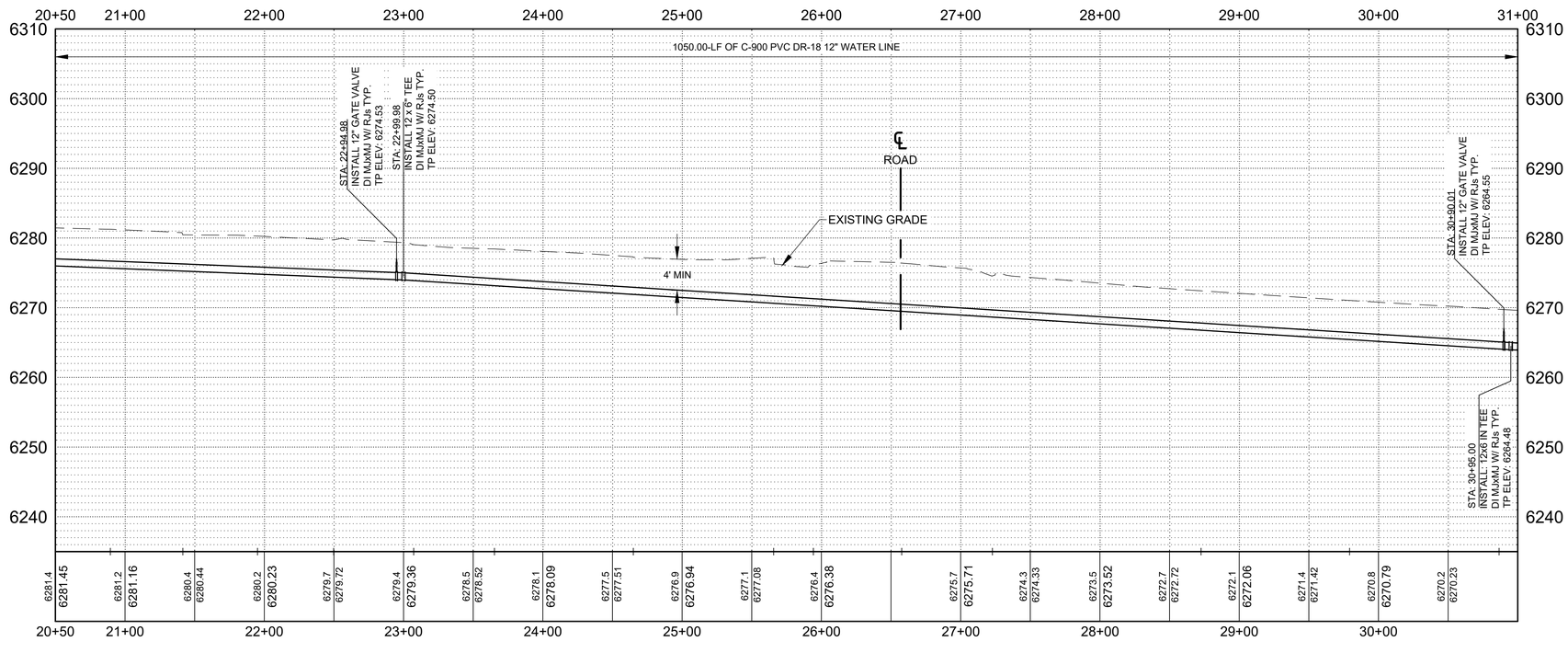
WATERLINE PLAN AND PROFILE

SHEET NO:

C-201

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615600_C-201.dwg





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CONSULTANTS

SEAL

LIDIA CEPEDA
NEW MEXICO
25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

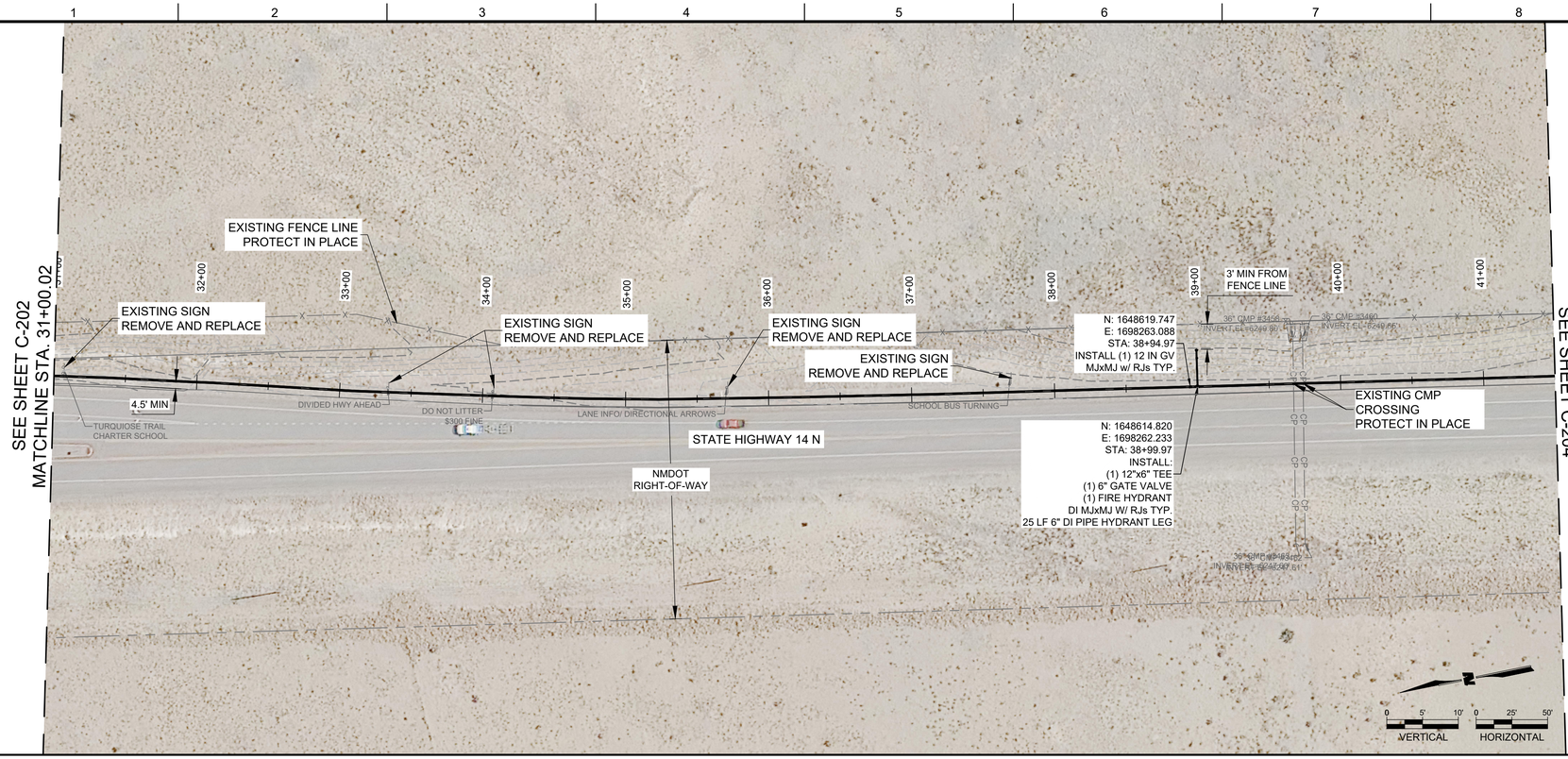
SHEET TITLE

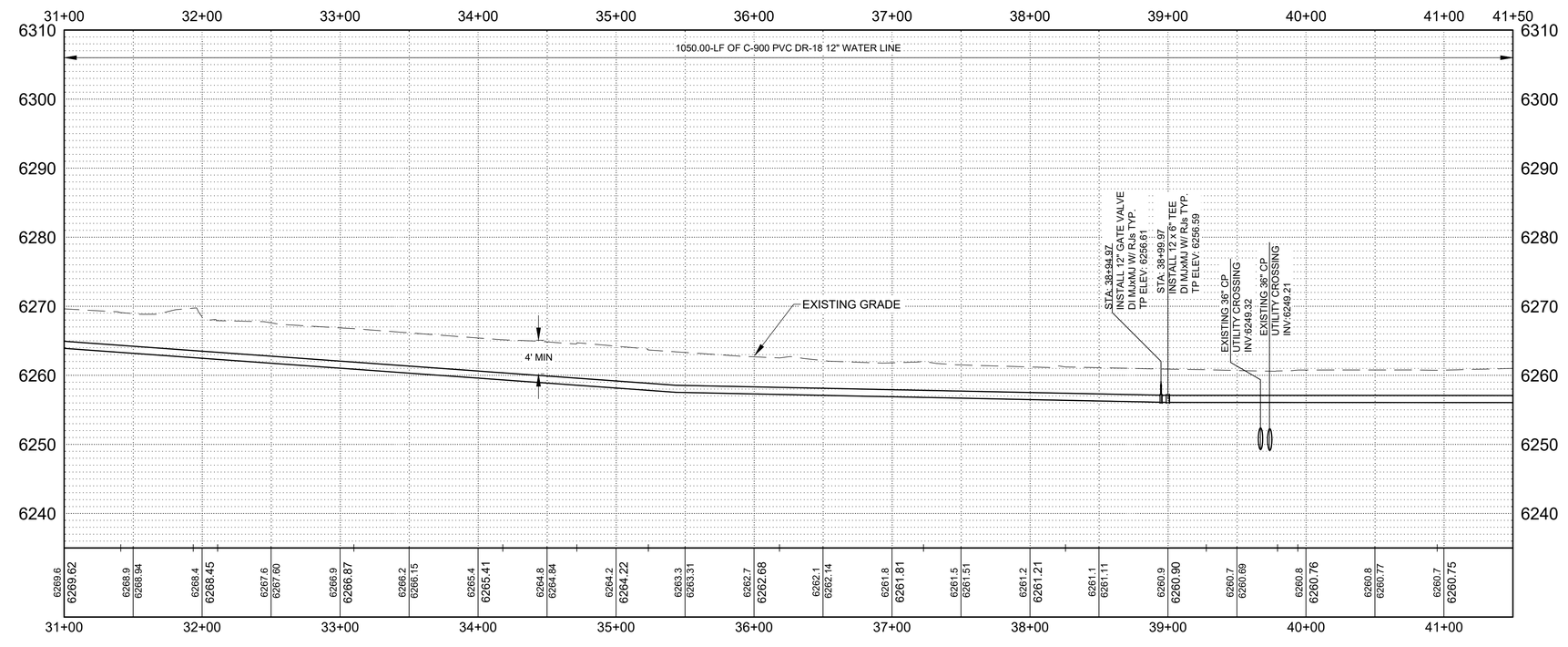
WATERLINE PLAN AND PROFILE

SHEET NO:

C-202

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615600_C-201.dwg





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CONSULTANTS

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LIDIA CEPEDA
NEW MEXICO
25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

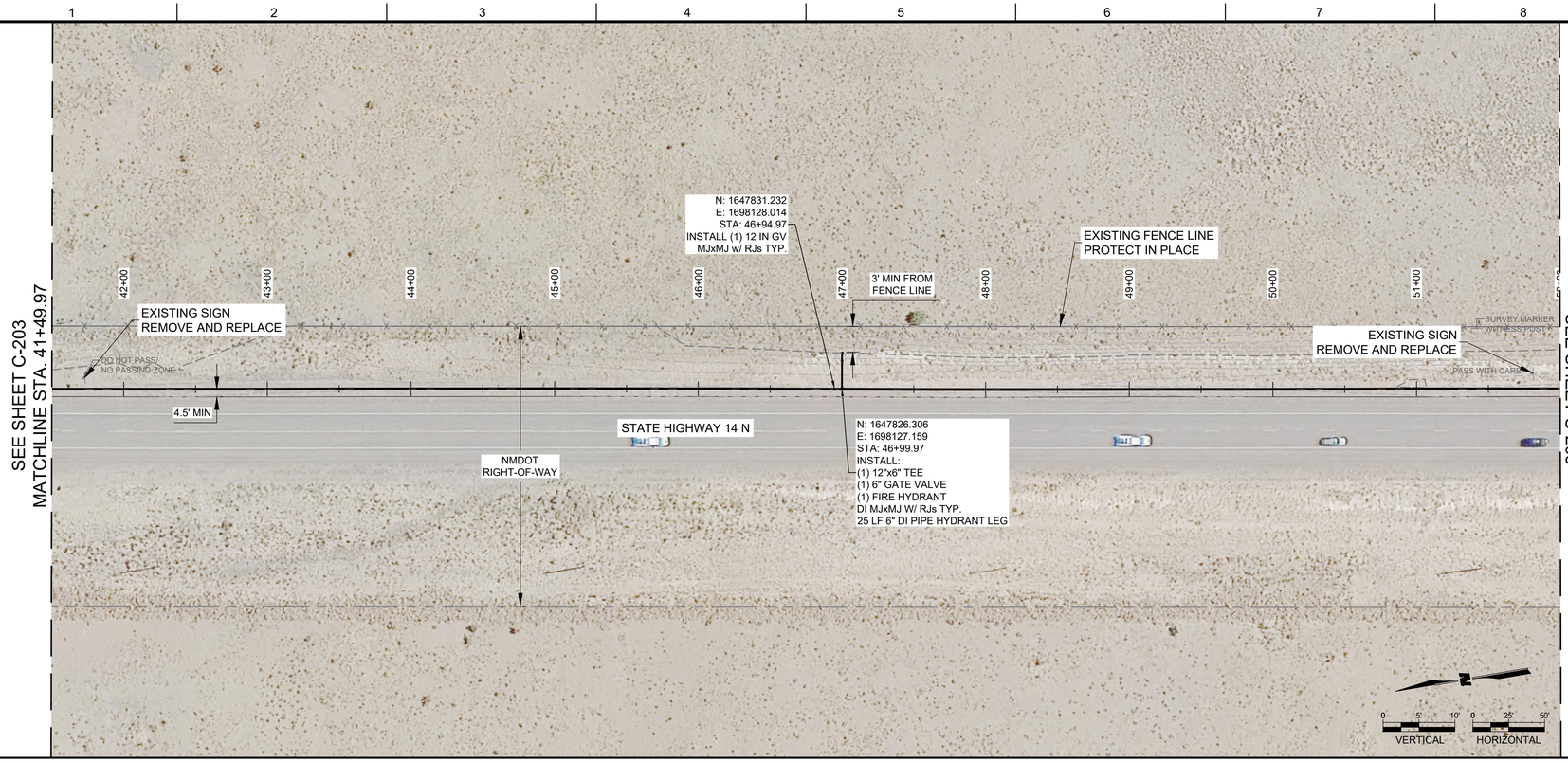
SHEET TITLE

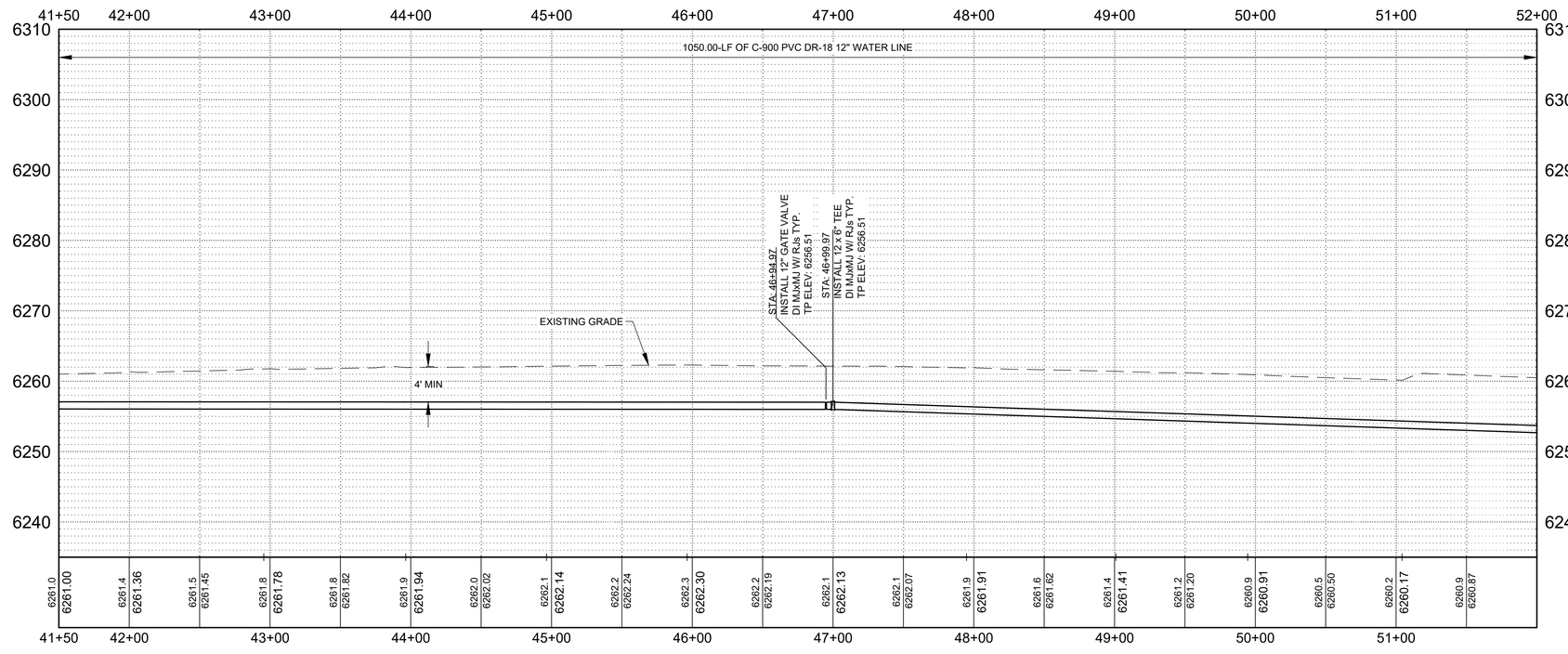
WATERLINE PLAN AND PROFILE

SHEET NO:

C-203

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23961560_C-201.dwg





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CONSULTANTS

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LIDIA CEPEDA
NEW MEXICO
25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

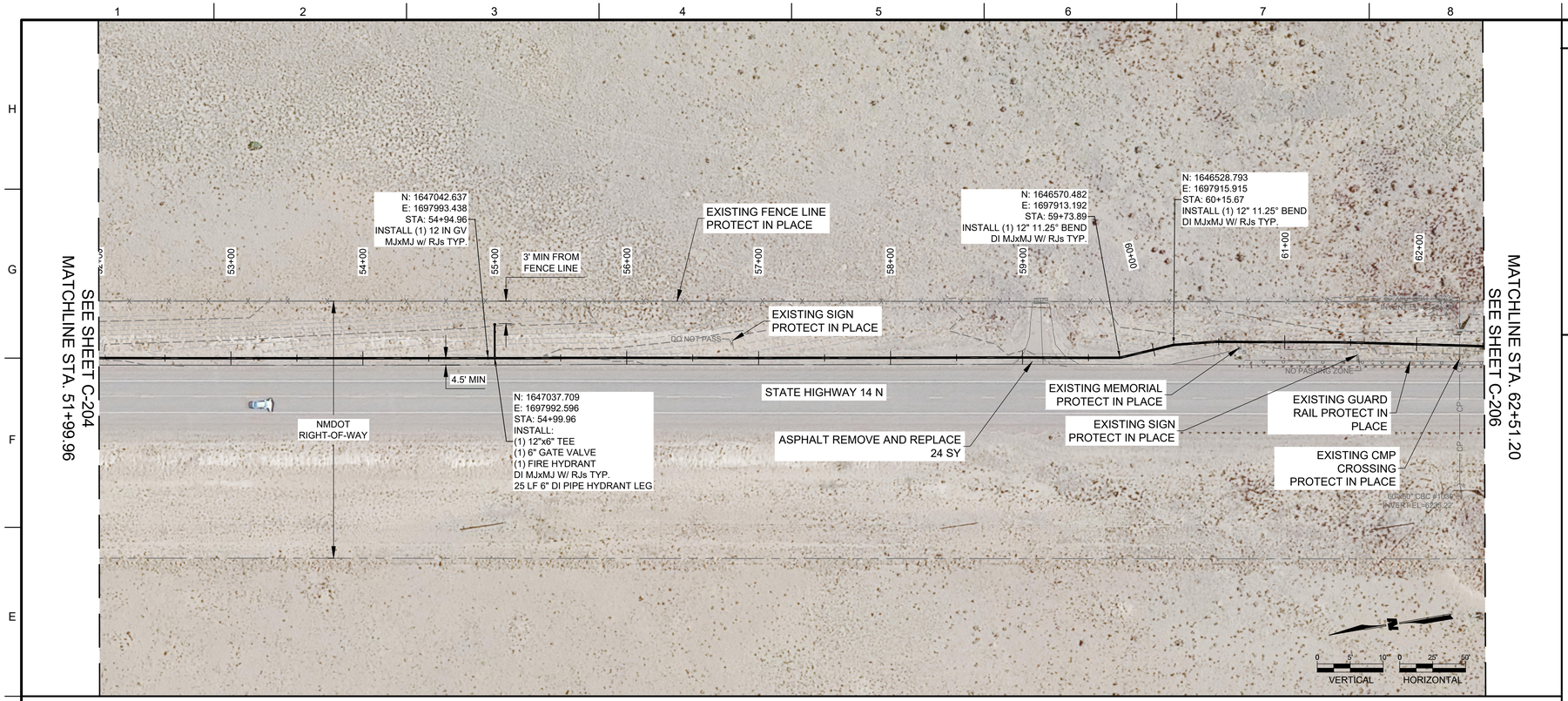
PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

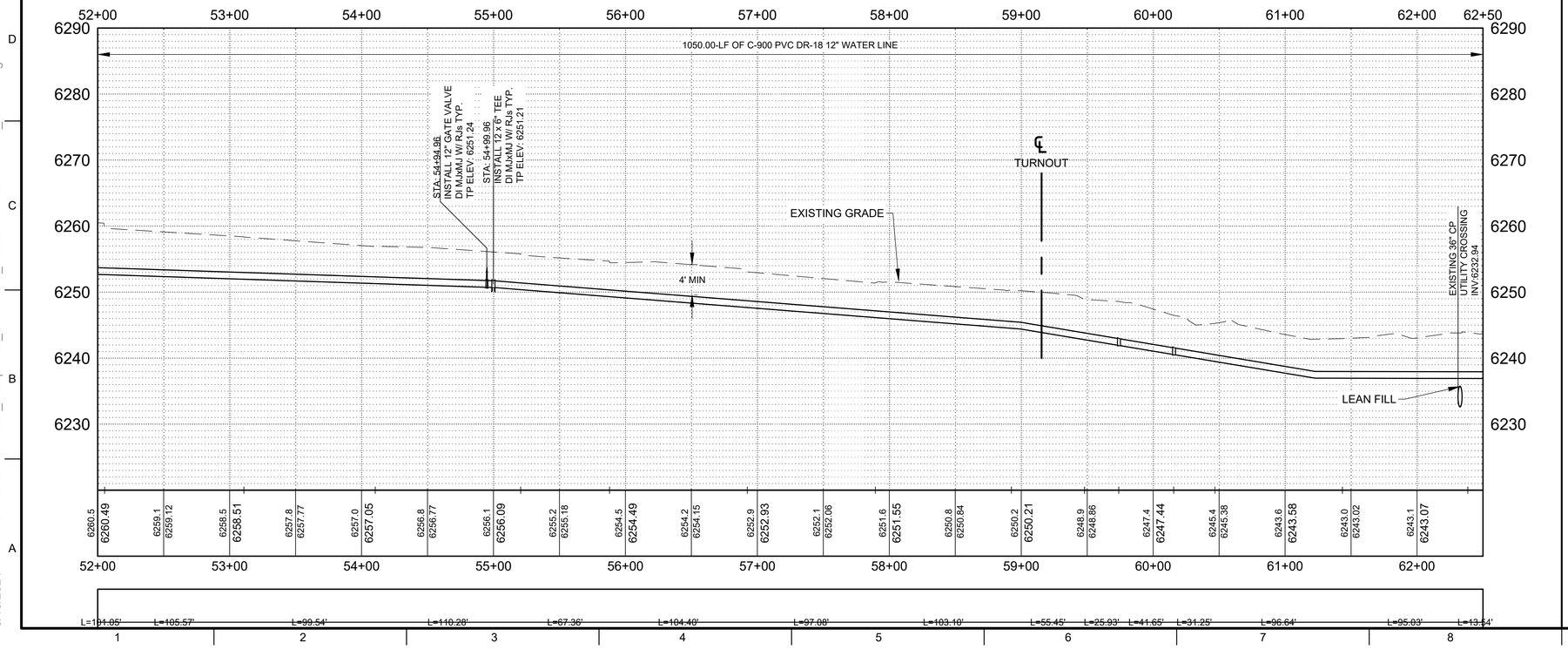
SHEET TITLE

WATERLINE PLAN AND PROFILE

SHEET NO:

C-204





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CONSULTANTS

SEAL

LIDIA CEPEDA
NEW MEXICO
25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

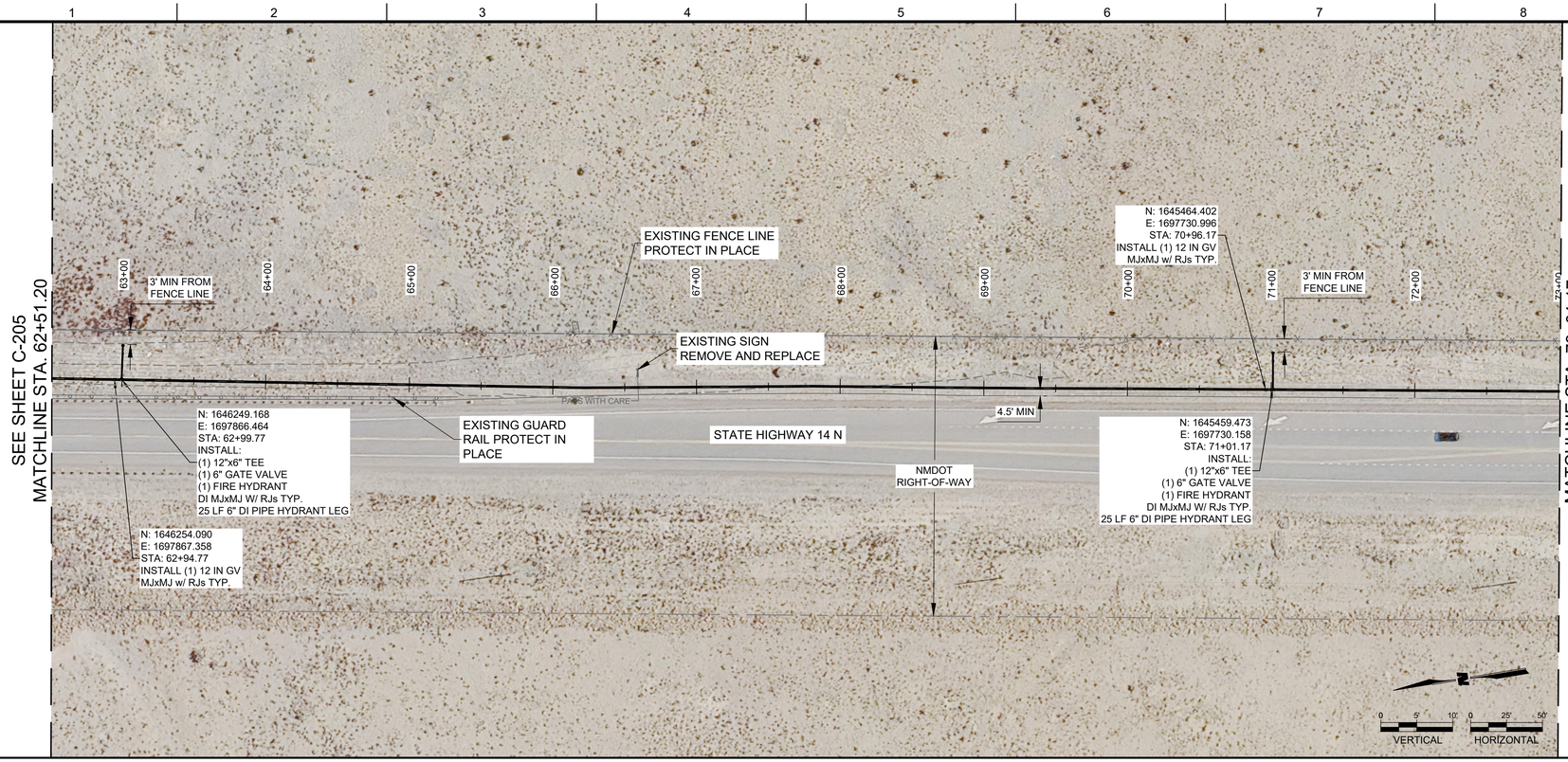
PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

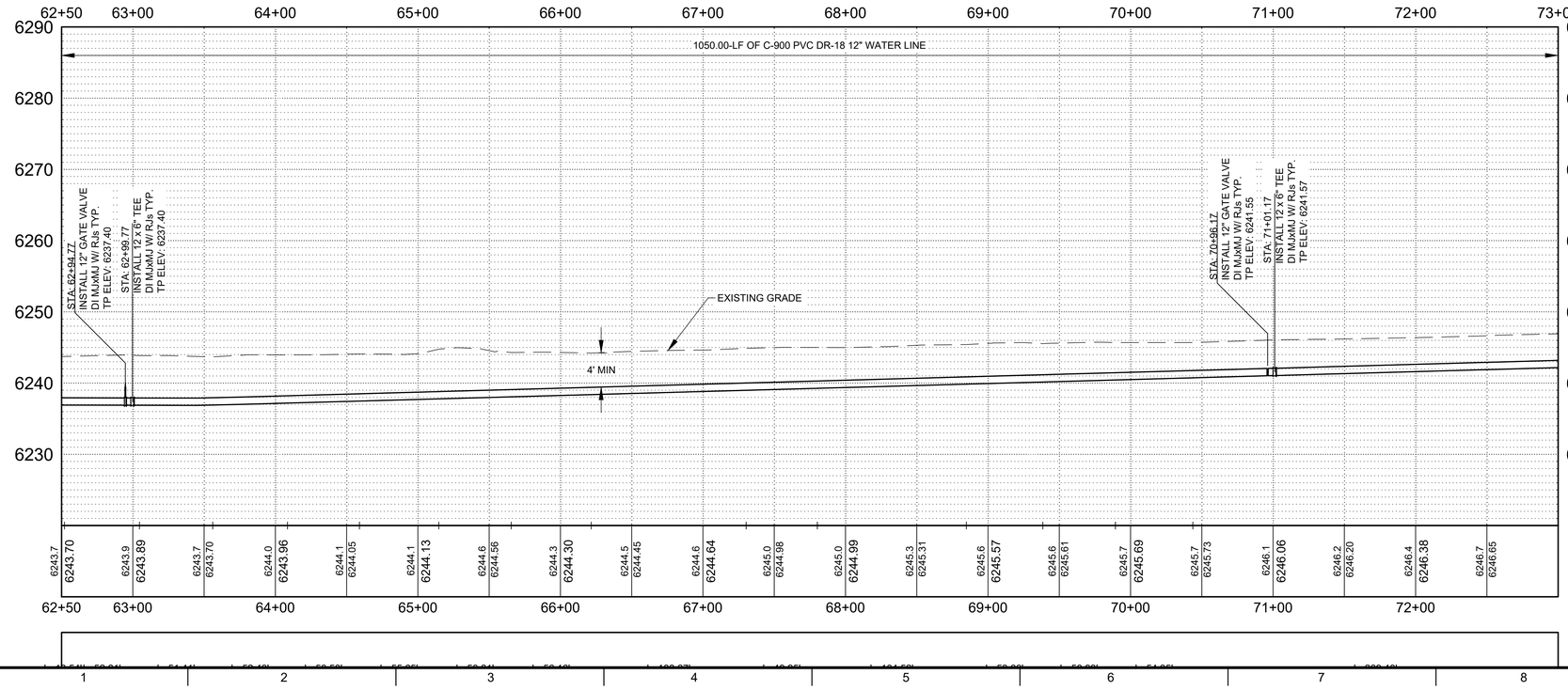
SHEET TITLE

WATERLINE PLAN AND PROFILE

SHEET NO:

C-205





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PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

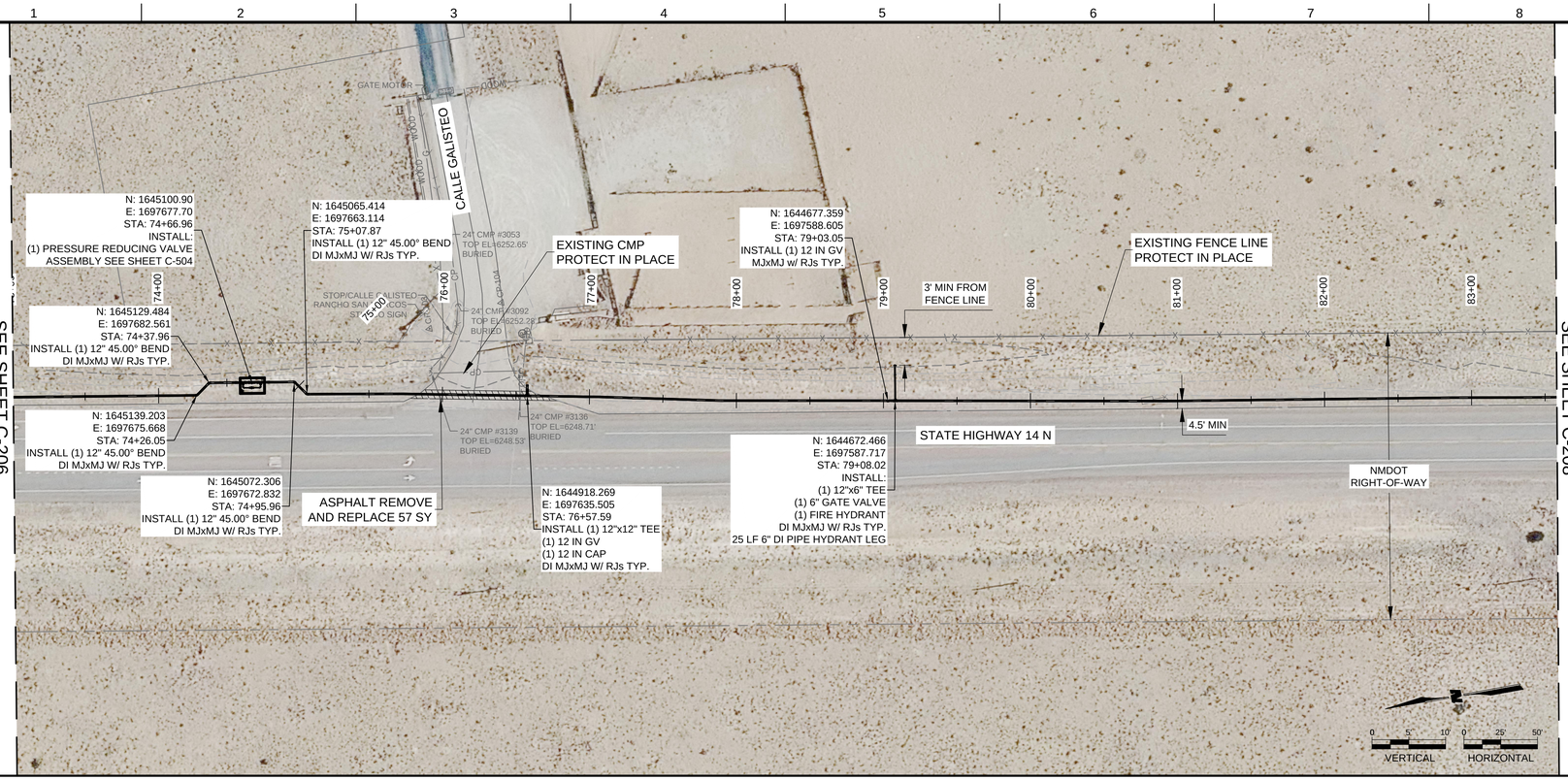
SHEET TITLE

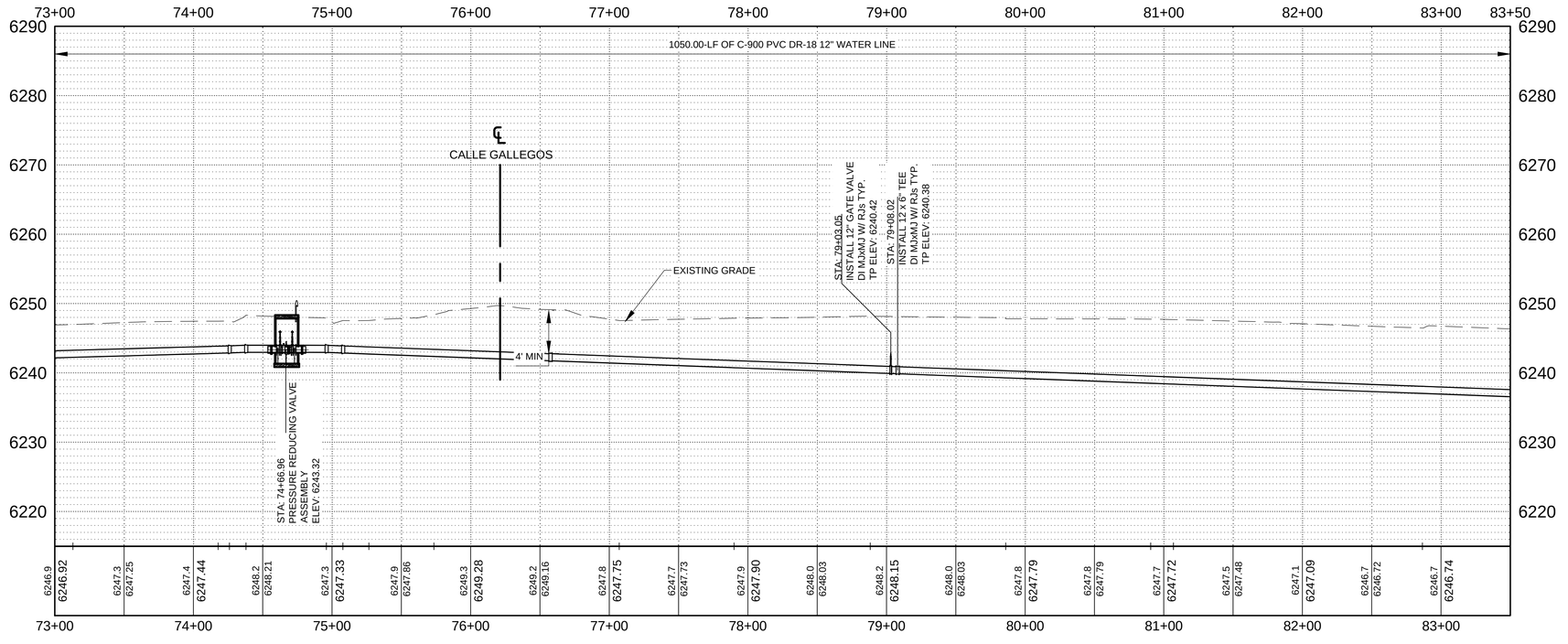
WATERLINE PLAN AND PROFILE

SHEET NO:

C-206

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615560_C-201.dwg





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SEAL

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25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

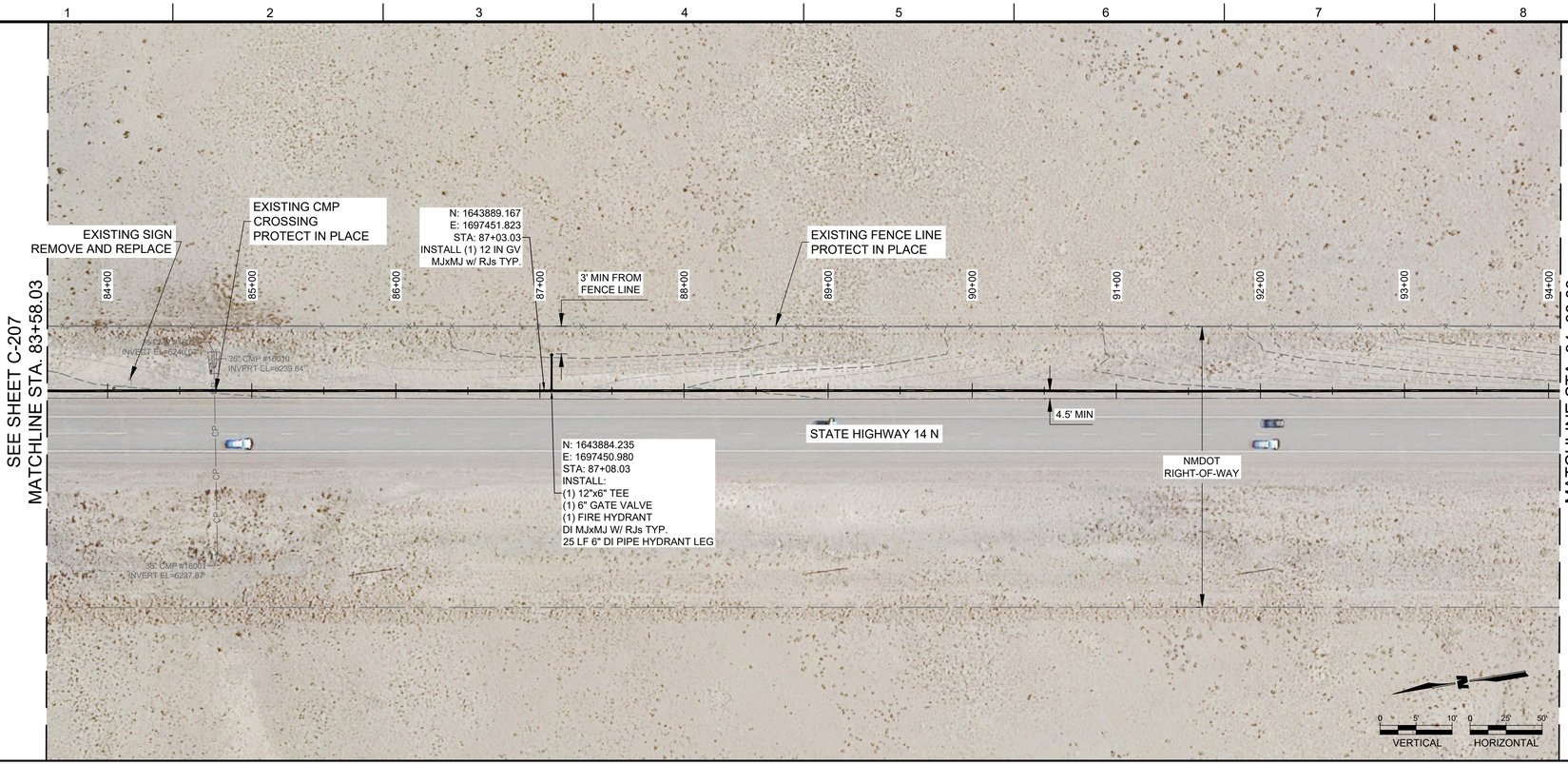
SHEET TITLE

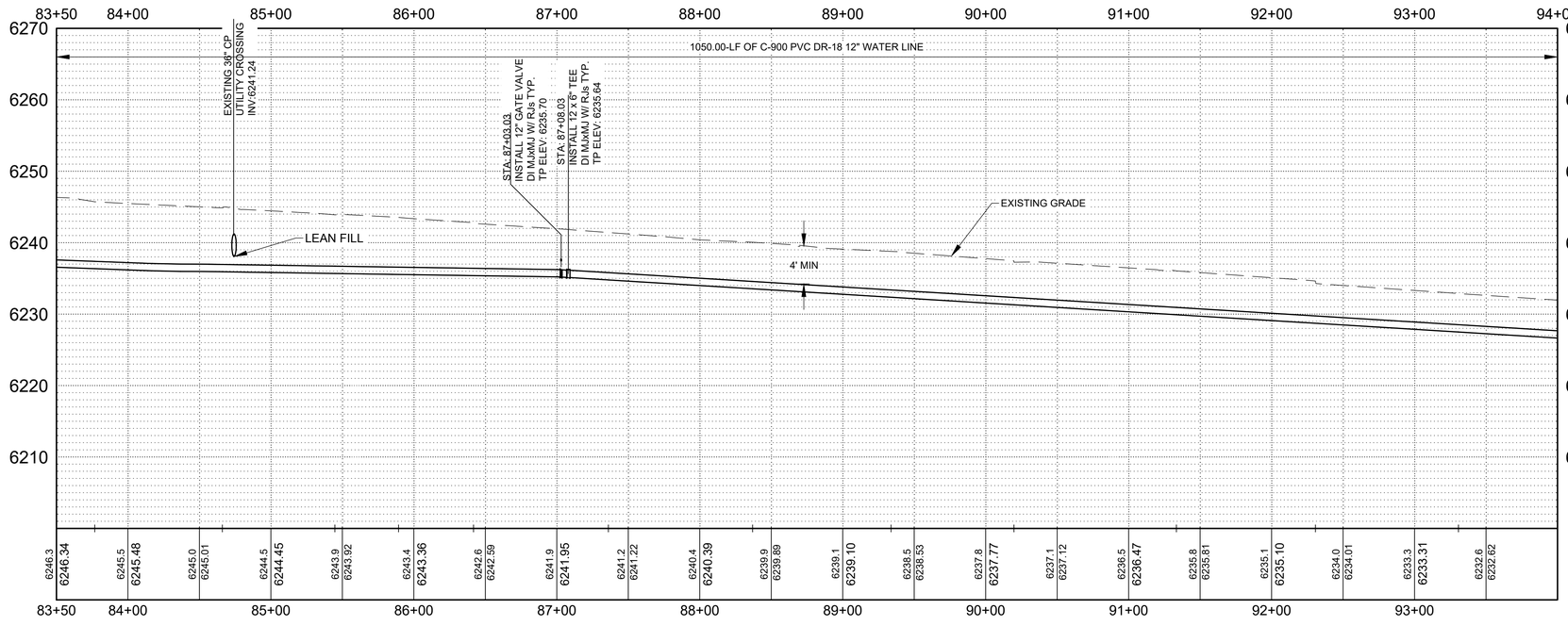
WATERLINE PLAN AND PROFILE

SHEET NO:

C-207

8/16/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615560_C-201.dwg





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08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

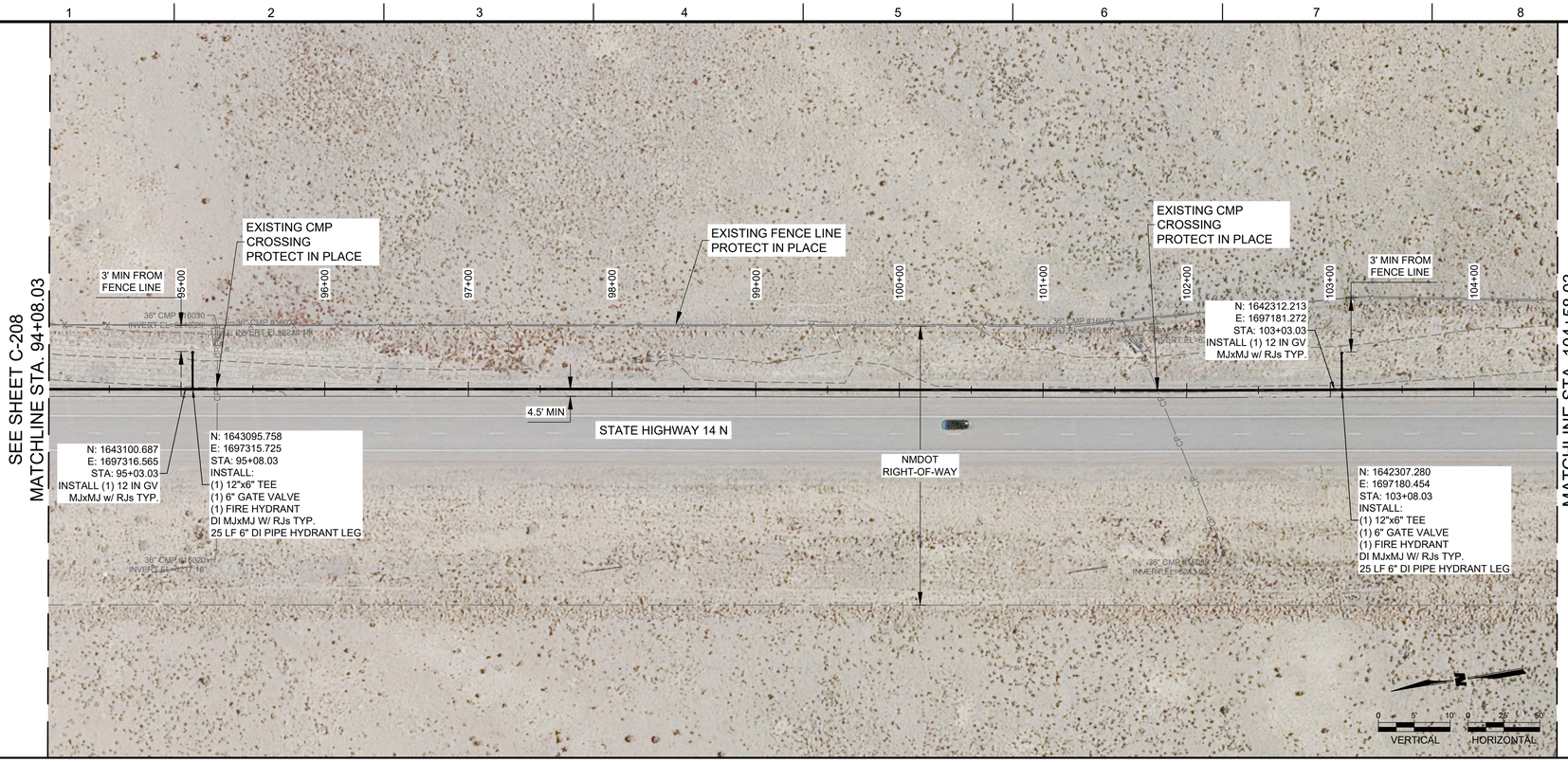
SHEET TITLE

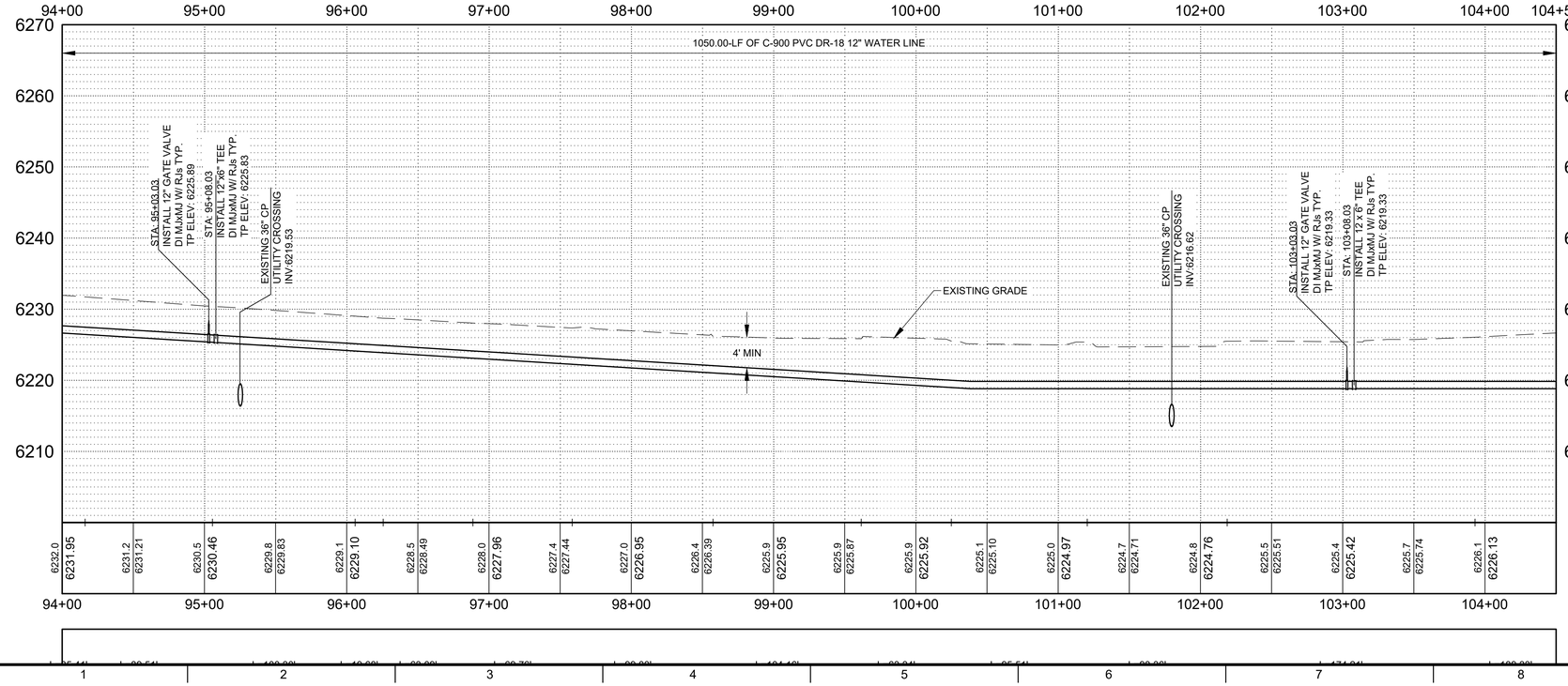
WATERLINE PLAN
AND PROFILE

SHEET NO:

C-208

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615560_C-201.dwg





GENERAL NOTES:

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2. ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE LOCATIONS. CONTRACTORS SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING WORK.
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WILSON & COMPANY
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FAX: 505-348-4055
www.wilsonco.com

CONSULTANTS

SEAL

LIDIA CEPEDA
NEW MEXICO
25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

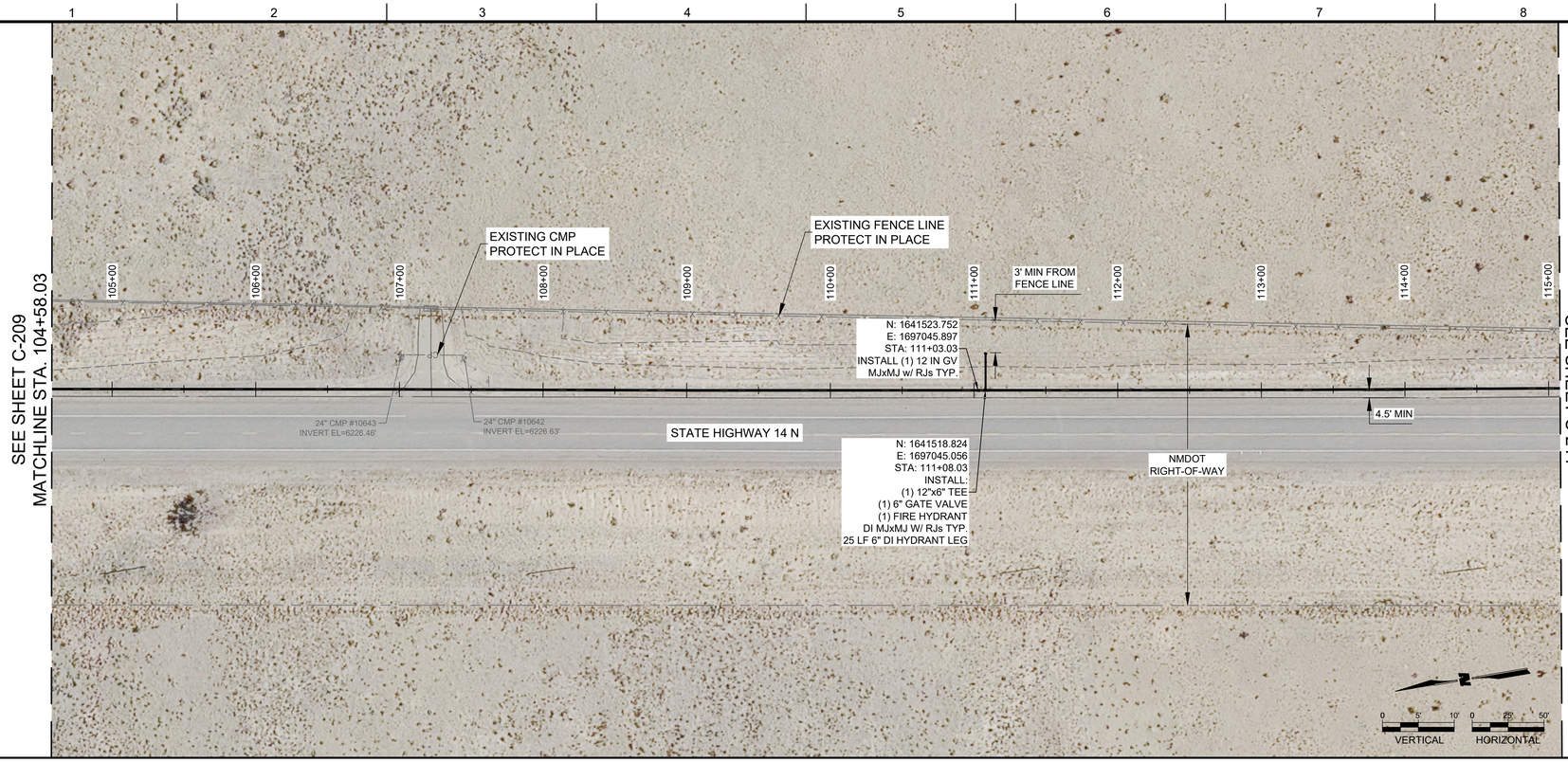
SHEET TITLE

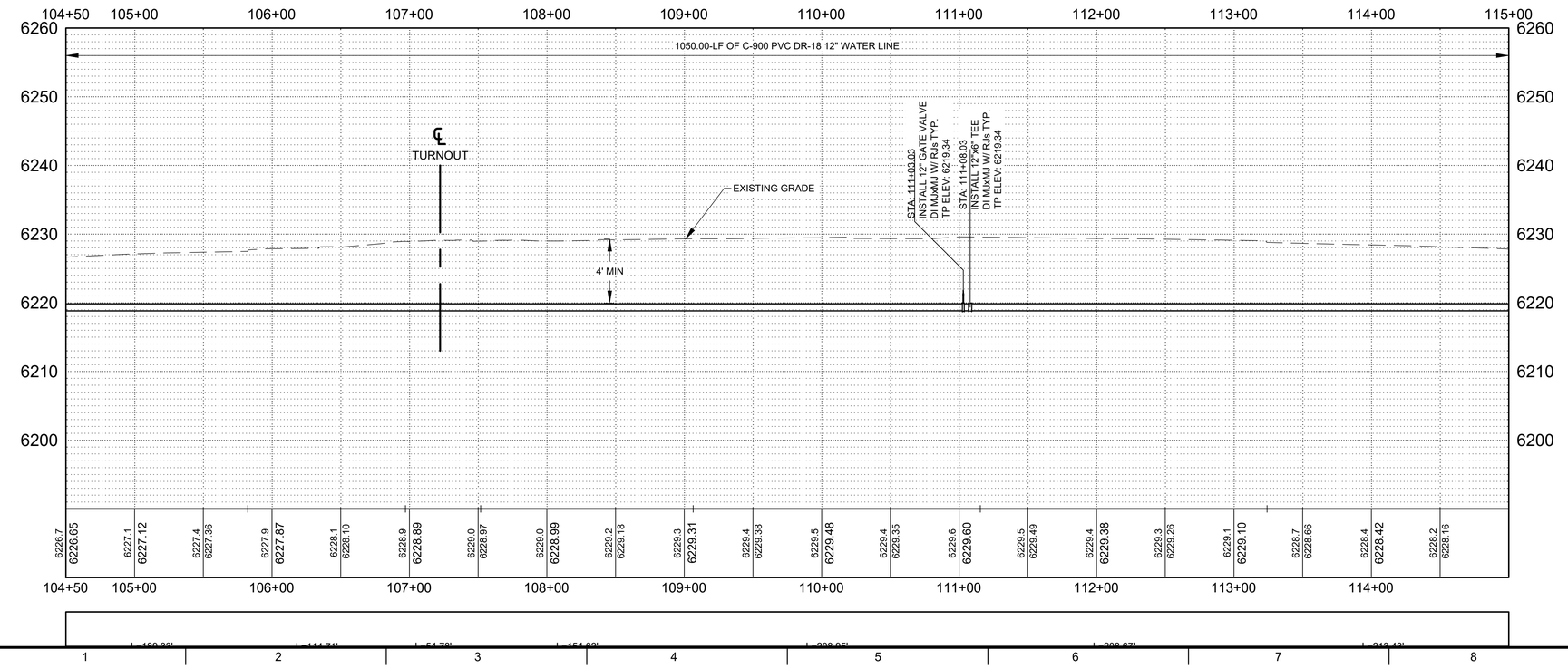
WATERLINE PLAN AND PROFILE

SHEET NO:

C-209

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615600_C-201.dwg





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08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

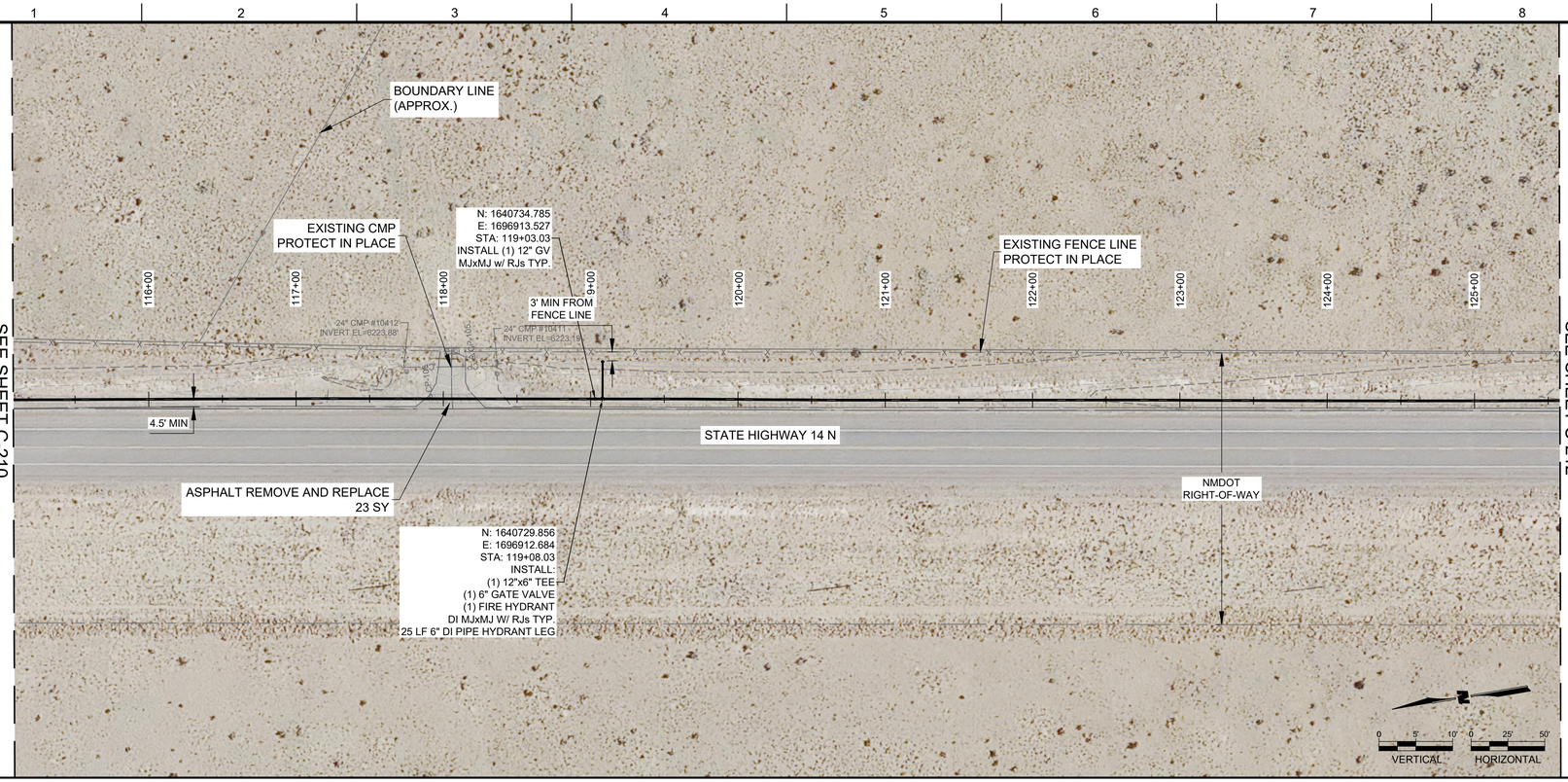
SHEET TITLE

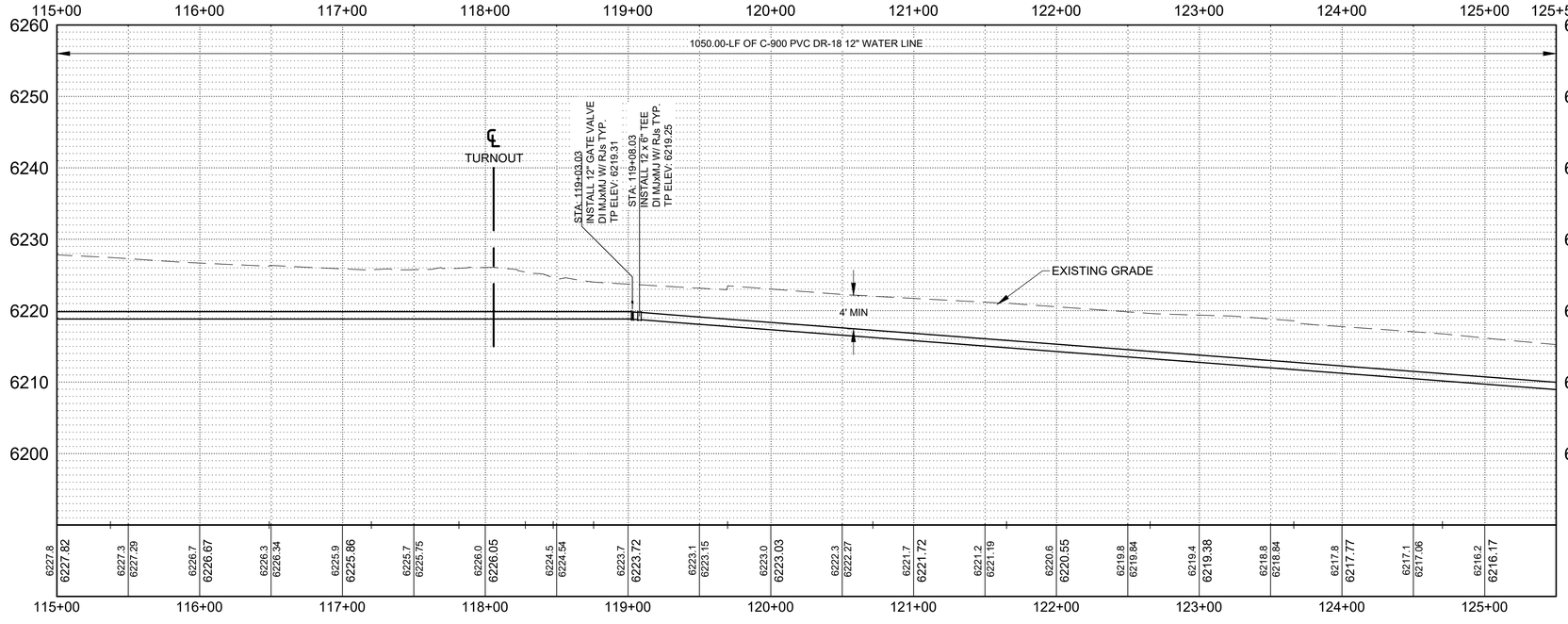
WATERLINE PLAN AND PROFILE

SHEET NO:

C-210

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615560_C-201.dwg





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08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

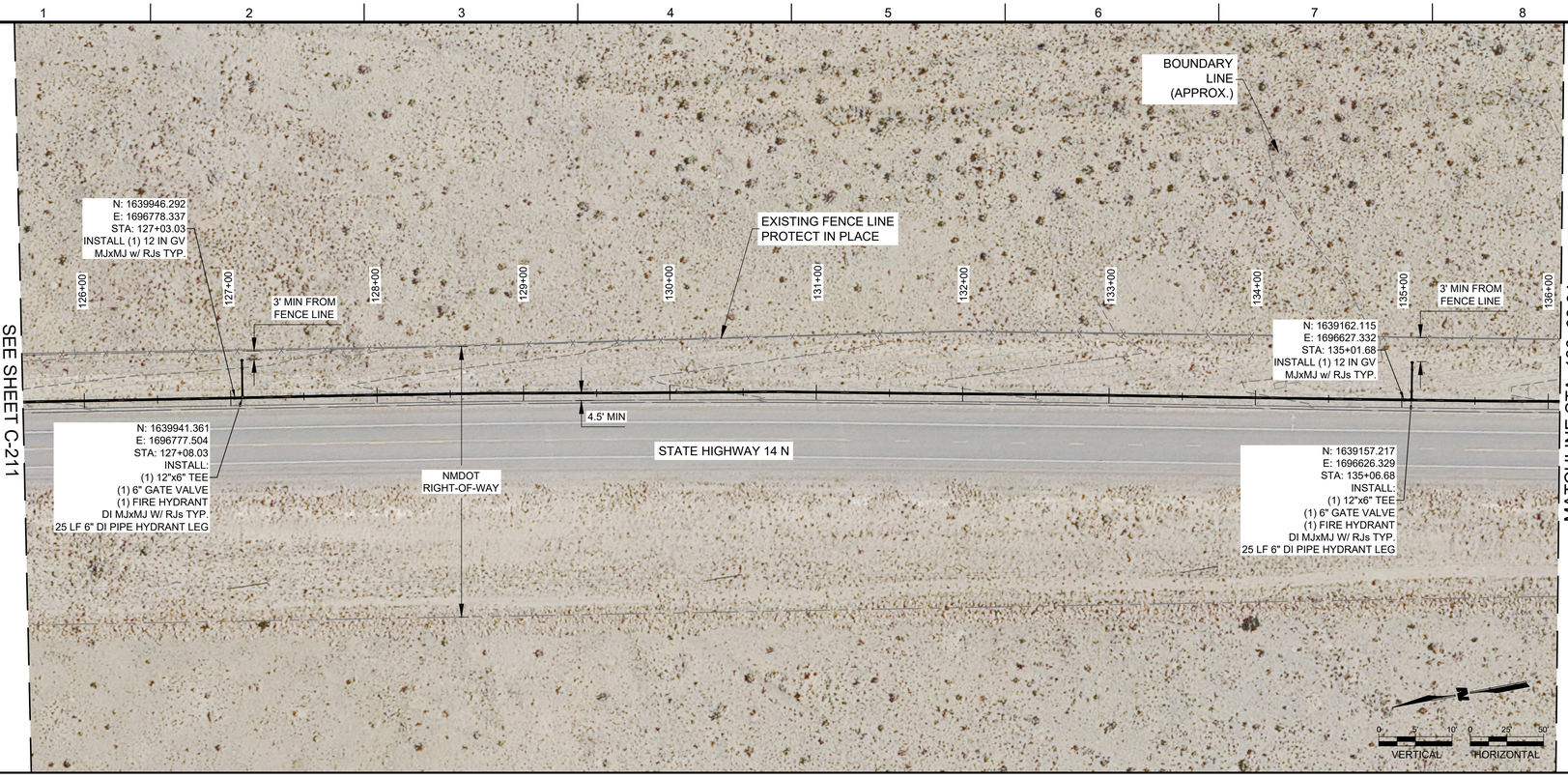
SHEET TITLE

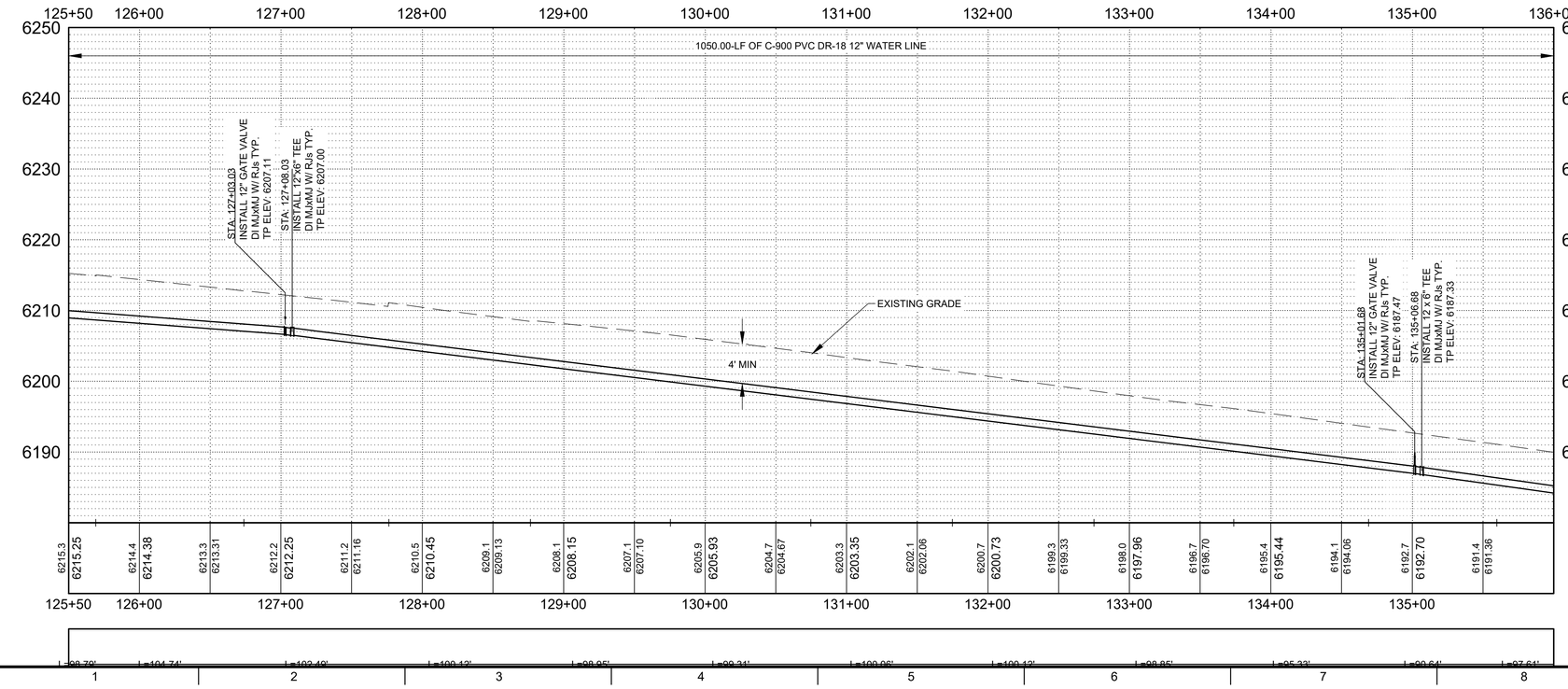
WATERLINE PLAN AND PROFILE

SHEET NO:

C-211

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\2361560_C-201.dwg





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08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

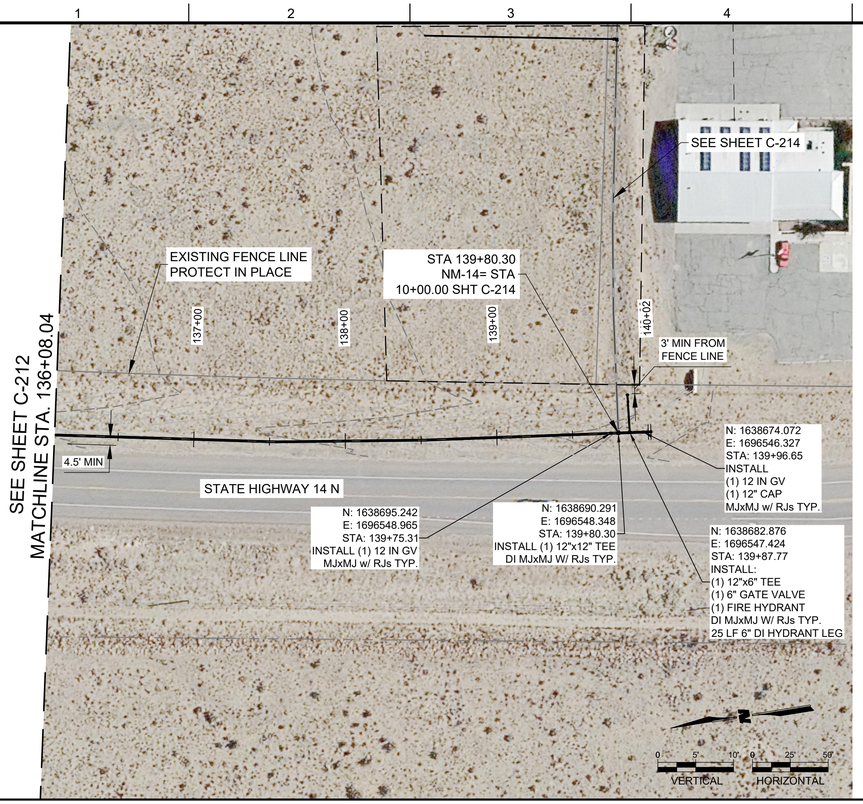
SHEET TITLE

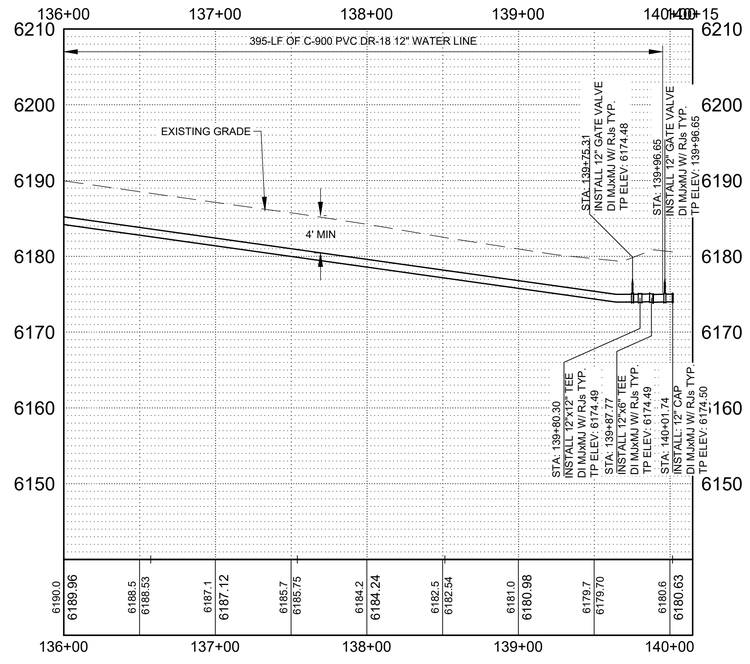
WATERLINE PLAN AND PROFILE

SHEET NO:

C-212

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615560_C-201.dwg





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08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

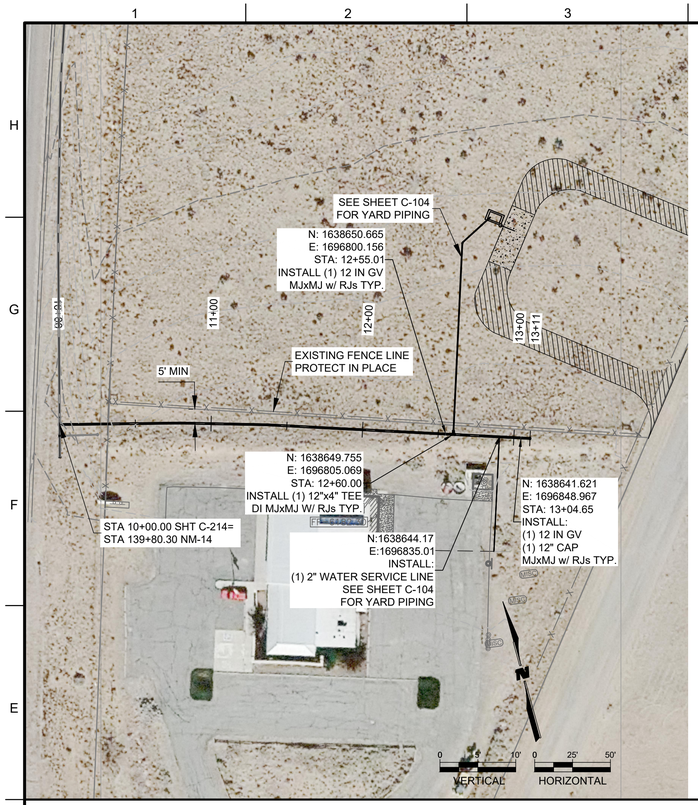
SHEET TITLE

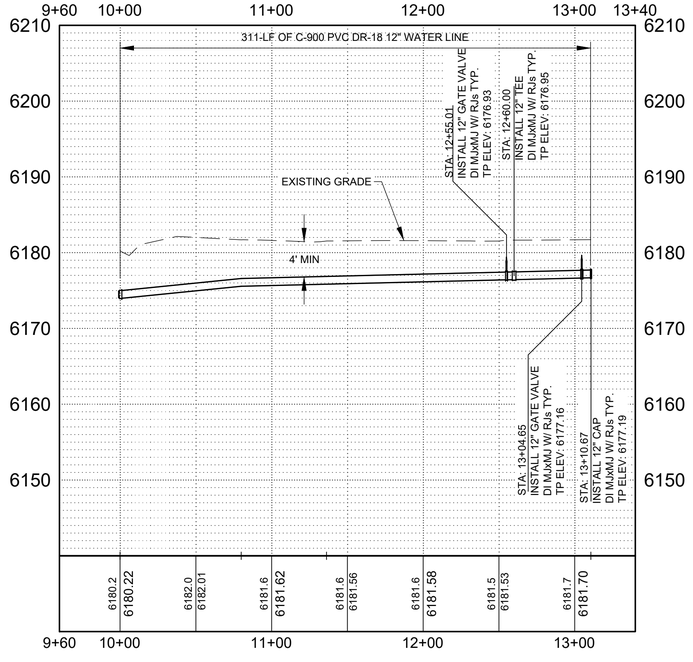
WATERLINE PLAN AND PROFILE

SHEET NO:

C-213

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\23615560_C-201.dwg





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PROJECT NO:	23-600-156-00
DESIGNED BY:	ERC
DRAWN BY:	AC/SAS
CHECKED BY:	LC
DATE:	AUGUST 2024

SHEET TITLE

WATERLINE PLAN
AND PROFILE

SHEET NO:

C-214

WATER LINE PRESSURE PIPE RESTRAINED JOINT LENGTH REQUIREMENTS-THIS PROJECT ONLY

TEST PRESSURE @ 150 PSI

LENGTHS OF PIPE TO BE RESTRAINED (APPLIES TO UNWRAPPED DUCTILE IRON AND PVC, ONLY) (2)
(FEET)

FITTING TYPE								VERTICAL BEND					
					TEE	TEE		45°		22 1/2°		11 1/4°	
PIPE SIZE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	RESTRAINED LENGTH ALONG 4"-12" BRANCH	RESTRAINED LENGTH ALONG MAIN LINE	DEAD END OR VALVE	UPPER BEND RESTRAINT	LOWER BEND RESTRAINT	UPPER BEND RESTRAINT	LOWER BEND RESTRAINT	UPPER BEND RESTRAINT	LOWER BEND RESTRAINT
4" (3)	13'	6'	3'	2'	1'	5'	29' (1)	15'	6'	7'	3'	4'	2'
12" (3)	33'	14'	7'	4'	54'	5'	76' (1)	39'	14'	19'	7'	10'	4'
6" (4)	14'	6'	3'	2'	1'	5'	22'	12'	6'	6'	3'	3'	2'

REDUCERS	
SIZE	RESTRAINT LENGTH LARGER END
12"x4"	66'
12"x6"	55'

(1) RESTRAINED LENGTH FOR VALVES SHALL BE PROVIDED ON BOTH SIDES OF VALVE.
(2) WHERE POSSIBLE, CONTRACTOR SHALL INSTALL FULL 20-FT JOINT OF PIPE ON EITHER SIDE OF ALL MECHANICAL JOINT VALVES, FITTINGS, AND APPURTENANCES. FOR ALL CIRCUMSTANCES WHERE A 20-FT JOINT CAN BE UTILIZED AND THE CONTRACTOR ELECTS TO USE A SHORTER PIPE JOINT, CONTRACTOR SHALL PROVIDE, AT CONTRACTOR'S SOLE EXPENSE, ALL NECESSARY JOINT RESTRAINTS REQUIRED BY TABLE ABOVE. NUMBER OR WEIGHT OF EXTRA JOINT RESTRAINTS SHALL NOT BE INCLUDED IN MEASUREMENT OR PAYMENT.
(3) PVC PIPE
(4) DUCTILE IRON PIPE

THRUST RESTRAINT NOTE:

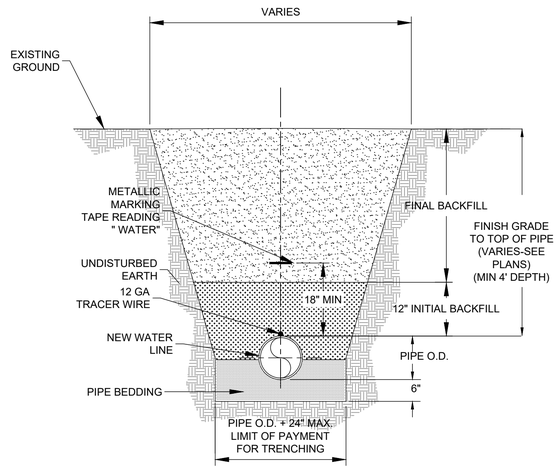
ALL BURIED VALVES, FITTINGS, AND APPURTENANCES SHALL BE MECHANICAL JOINT-TYPE UTILIZING "MEGA-LUG" STYLE MECHANICAL JOINT RESTRAINTS IN CONJUNCTION WITH "MEGA-LUG" PIPE BELL-HARNESS RESTRAINTS WHEN ADEQUATE RESTRAINED LENGTH CAN BE OBTAINED. IN THE EVENT ADEQUATE RESTRAINED LENGTHS CANNOT BE OBTAINED, CONTRACTOR SHALL IMMEDIATELY CONTACT ENGINEER FOR DETERMINATION OF APPROPRIATE ACTION TO BE TAKEN. THE EBAA IRON "RESTRAINED LENGTH CALCULATION" PROGRAM (VERSION 5.4) HAS BEEN USED TO DETERMINE MINIMUM RESTRAINED LENGTHS SHOWN IN TABLE ABOVE. THE FOLLOWING GENERAL ASSUMPTIONS APPLY TO ALL CALCULATIONS:

TRENCH TYPE _____3 (ACTUAL TRENCH TYPE SHALL BE PER DETAILS FOR THIS PROJECT.)
SOIL TYPE _____SC (CLAYEY SANDS)
SAFETY FACTOR _____1.5 TO 1

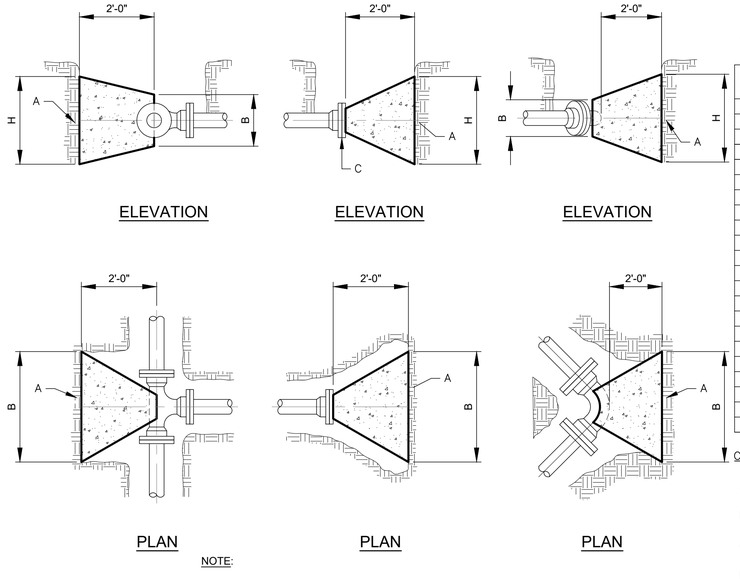
TYPICAL BURY DEPTH:
4" THROUGH 12" DIAMETER PIPE DEPTH AS REQUIRED

TYPICAL BURY DEPTHS FOR VERTICAL OFFSETS:
4" THROUGH 12" DIAMETER PIPE 4 FT TO TOP OF UPPER BRANCH
7 FT TO TOP OF LOWER BRANCH

CONTRACTOR MAY SUBMIT SUBSTITUTE REDUCED RESTRAINED JOINT LENGTHS IF SOIL AND DEPTH OF BURY CONDITIONS WARRANT. CONTRACTOR SHALL PROVIDE SOIL TEST RESULTS AND APPROPRIATE CALCULATIONS TO SUPPORT THE LENGTH REDUCTION. SOIL TESTING AND CALCULATIONS SHALL BE PERFORMED AT CONTRACTOR'S SOLE EXPENSE.



E7 PIPE TRENCH DETAILW/O PAVEMENT
NOT TO SCALE



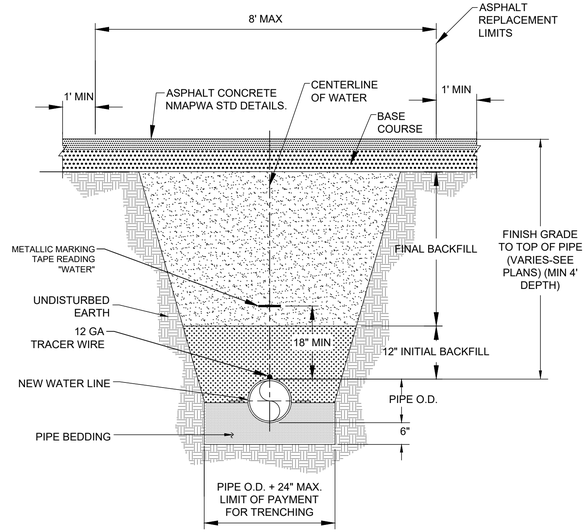
NOTE:
USE CONCRETE THRUST BLOCK ONLY UPON APPROVAL OF THE ENGINEER AND OWNER.

A2 CONCRETE BLOCKING
NOT TO SCALE

GENERAL NOTES:
1. ALL THRUST CONTROL BY RESTRAINED JOINTS ONLY UNLESS DIRECTED BY ENGINEER, AND FOR "SPECIAL" SITUATIONS SPECIFIED BY THE SANTA FE COUNTY UTILITIES.
2. PIPE SIZE GREATER THAN 14" ø REQUIRES DESIGN BY ENGINEER TO BE SUBMITTED TO THE SANTA FE COUNTY UTILITIES FOR APPROVAL.
3. CONCRETE BLOCKING PER SEC. 101 EXTERIOR CONCRETE, f'c=3000 psi @ 28 DAYS.

PIPE SIZE	ELBOW ANGLE	ELBOW (B) DIM.	ELBOW (A) DIM.	TEE OR PLUG (B) DIM.	TEE OR PLUG (H) DIM.
4"				2'	1'
4"	90° 45°	2'	2'		
4"	22.5° 11.25°	2'	2'		
6"				2'	2'
6"	90° 45°	2'	2'		
6"	22.5° 11.25°	2'	2'		
8"				3'	3'
8"	90°	3'	3'		
8"	45°	2'	2'		
8"	22.5° 11.25°	2'	2'		
10"				3'	3'
10"	90°	3'-6"	3'-6"		
10"	45°	3'	3'		
10"	22.5° 11.25°	2'	2'		
12"				3'-6"	3'-6"
12"	90°	4'	4'		
12"	45°	3'-6"	3'-6"		
12"	22.5° 11.25°	2'	2'		
14"				4'	4'
14"	90°	5'	5'		
14"	45°	3'-6"	3'-6"		
14"	22.5° 11.25°	3'	3'		

CONSTRUCTION NOTES:
A. UNDISTURBED EARTH.
B. OD OF PIPE + 8".
C. OD OF CAP OR PLUG, MIN 12"x12".
D. USE ONLY FOR EXCEPTIONAL SITUATIONS, USE OF MECHANICAL RESTRAINTS TAKES PRECEDENCE.



A7 PIPE TRENCH DETAIL WITH PAVEMENT CUT
NOT TO SCALE

WILSON & COMPANY
4401 MASTHEAD ST. NE., SUITE 150
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CONSULTANTS

SEAL
LIDIA CEPEDA
NEW MEXICO
25667
PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME
SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

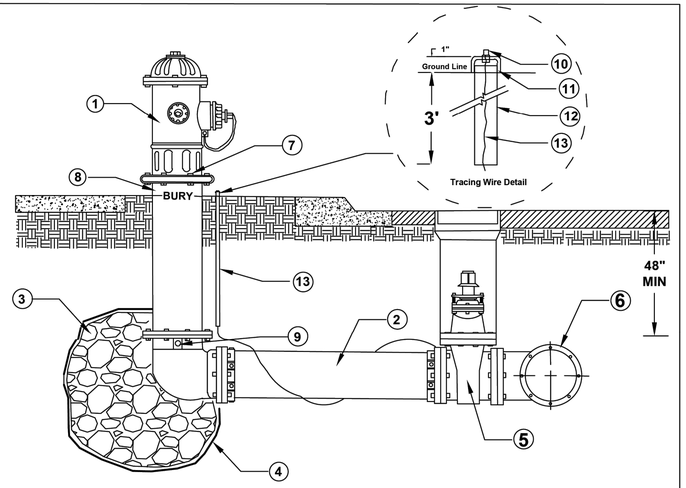
BY	DESCRIPTION	DATE	REV.

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE
WATER DETAILS

SHEET NO:
C-501

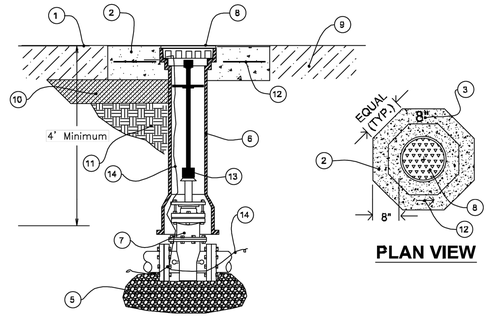
8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\2361560_C-501 WATER DETAILS.dwg



NOT TO SCALE

#	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	1/2 CUBIC YARD 3/8" GRAVEL DRAIN	10	NUT AND BOLT WITH WIRE SECURED BY SILVER SOLDER
4	PERMEABLE GEOTEXTILE	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

SANTA FE COUNTY UTILITIES STANDARD DETAILS	FIRE HYDRANT	DATE: 3/2021



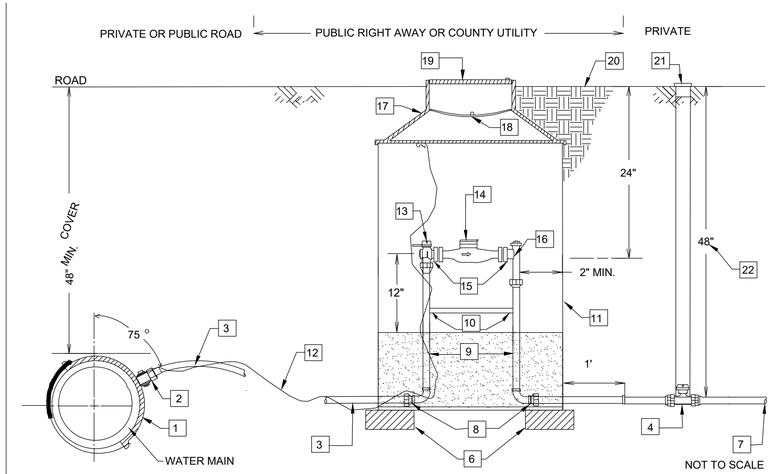
ELEVATION VIEW

PLAN VIEW

NOT TO SCALE

#	DESCRIPTION	#	DESCRIPTION
1	FINISH STREET GRADE	8	VALVE BOX LID
2	8" MIN DEPTH - 3000 PSI CONCRETE PAD	9	PAVEMENT
3	STAMPED LINE SIZE (2 SIZES IF REDUCING)	10	SUBGRADE
4	STAMPED ARROW INDICATING ISOLATION DIRECTION(?)	11	COMPACTED BACKFILL
5	98% COMPACTED BACK FILL 12" MINIMUM DEPTH	12	#4 REBAR
6	5-1/4 SCREWTYPE ADJUSTABLE VALVE BOX	13	EXTENSION BAR IF NECESSARY
7	GATE VALVE	14	#12 TRACING WIRE

SANTA FE COUNTY UTILITIES STANDARD DETAILS	VALVE & VALVE BOX INSTALLATION	DATE:



NOTES			
ITEM	SIZE	DESCRIPTION	SFCU STANDARDS MATERIALS LIST #
1	2"	SERVICE SADDLE - FULL WRAP AROUND STAINLESS STEEL INSPECTION REQUIRED	
2	2"	CORPORATION STOP (A.W.W.A. TAPERED THREAD)	
3	2"	HDPE SERVICE TUBING, SDR 9 CTS BLUE, WITH 10-GAUGE TRACING WIRE	
4	2"	BRASS CURB STOP	
5	2"		
6		BLOCKS, USED AS NECESSARY	
7		POINT OF CONNECTION FOR CUSTOMER AT END OF EASEMENT (CAP IF NOT CONNECTING)	
8	2"	ADAPTER COUPLING	
9	2"	PREFABRICATED METER SETTER (NO BY-PASS)	
10	1" x 24"	BRACING PIPE (MUST REMAIN VISIBLE)	
11	36"D x 36"	METER CAN	
12	10 GAUGE	TRACING WIRE	
13	2"	LOCKABLE ANGLE VALVE	
14	2"	SEALED REGISTER WATER METER (2" MACH10 COMPOUND LENGTH METER)	
15	2"	2 BOLT FLANGE CONNECTION	
16	2"	ANGEL CARTRIDGE WITH DUAL CHECK VALVE	
17	36"H x 20"D	OUTER DOUBLE LID COVER - HAT	
18	3/4"	CONCAVE POLYMER FROST LID	
19	21-5/16"	POLYMER LID - COUNTER SUNK CONFIGURATION (DFW20AXXF-1WA SFC-LID)	
20		FINISHED GRADE AROUND METER CAN TO BE EARTHERN, NOT CONCRETE	
21	2"	VALVE CAN FOR 2" BRASS CURB STOP	
22		IF DEPTH IS GREATER THAN 48" UTILIZE THERMOCOIL DETAIL.	
*		NOTE: Each Residential Service is required to install a Pressure Reducing Valve (PRV).	

SANTA FE COUNTY UTILITIES STANDARD DETAIL	2" SINGLE SERVICE	DATE: 10/2020

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08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

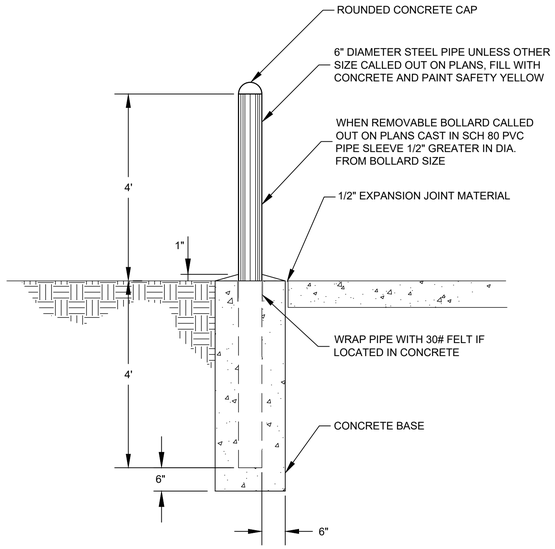
SHEET TITLE

WATER DETAILS

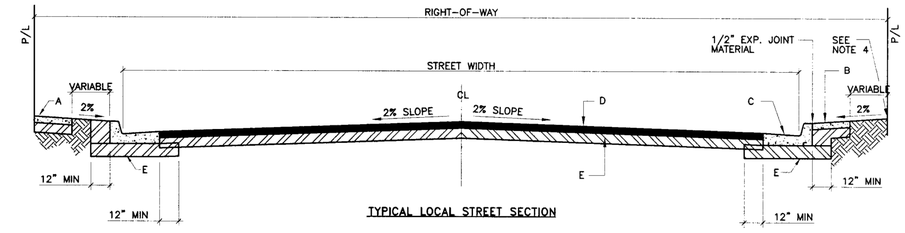
SHEET NO:

C-502

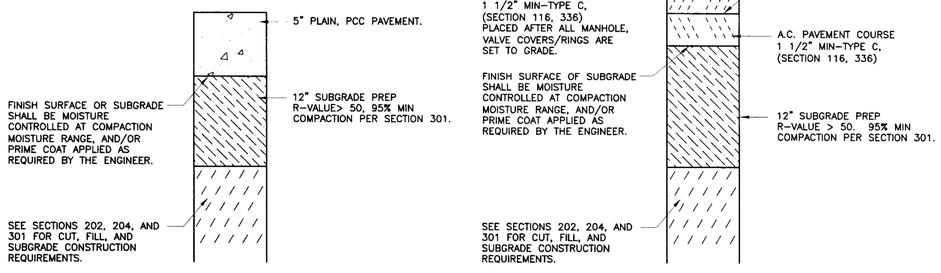
M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\2361560_C-501 WATER DETAILS.dwg
8/15/2024



C8 PIPE BOLLARD
NOT TO SCALE



TYPICAL LOCAL STREET SECTION



RIGID PAVEMENT SECTION

FLEXIBLE PAVEMENT SECTION

GENERAL NOTES:

1. CROWN ON STREET SHALL BE AS FOLLOWS:
   a. 32' STREET = 3"
   b. 40' STREET = 5"
   c. LESS THAN 32' STREET, PAVEMENT SLOPE = 2%
2. ALL SUBGRADE COMPACTION FOR C & G SHALL EXTEND 12" MIN ON EITHER SIDE OF C & G OR CURB SECTION.
3. SUBGRADE PREPARATION UNDER SIDEWALK AND DRIVE PADS SHALL BE INCIDENTAL TO ITEM.
4. FINISH GRADE AT PROPERTY LINE SHALL BE BASED ON A MIN 2% SLOPE FROM TOP OF CURB.
5. ALL ASPHALT CONCRETE (AC) PAVEMENT SHALL COMPLY WITH SECTION 116.
6. ALL PORTLAND CEMENT CONCRETE (PCC) PAVEMENT SHALL COMPLY WITH SECTION 101.
7. THE FOLLOWING APPLIES UNLESS AUTHORIZED OTHERWISE BY THE ENGINEER:
   * RESIDENTIAL STREETS SERVING 50 LOTS OR LESS SHALL BE DESIGNED AS LOCAL RESIDENTIAL STREETS.
   * RESIDENTIAL STREETS SERVING MORE THAN 50 LOTS WITH AN ANTICIPATED AWDT < 3000 SHALL BE DESIGNED AS MAJOR LOCAL STREETS.
8. FOR SUBGRADE R-VALUE < 50, PAVEMENT SECTION SHALL BE DESIGNED BY ENGINEER
9. SUBGRADE PREPARATION SHALL BE PERFORMED AFTER ALL SUBSURFACE UTILITIES ARE CONSTRUCTED.

CONSTRUCTION NOTES:

*A. SIDEWALK AT STANDARD SETBACK.

*B. SIDEWALK ADJACENT TO CURB. (NON-STANDARD, VARIANCE REQUIRED).

*C. STANDARD CURB AND GUTTER.

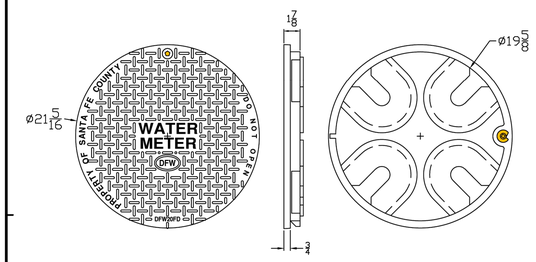
D. ASPHALT CONCRETE (AC) OR PORTLAND CEMENT (PCC) PAVEMENT.

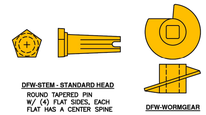
E. 12" COMPACTED SUBGRADE PREP, 95% COMPACTION.

*NOT APPLICABLE

REVISIONS	NM APWA
1/91 12/15/92 8/29/94	PAVING LOCAL – RESIDENTIAL STREET SECTION DWG. 2405A FEB. 2006

LID KEY	
XX	DUAL SET OF AMR SLIDE MOUNTS
1	BLACK COLOR
W	BRASS WORM LOCK w/ STD STEM
A	QUAD (4) AMR SLIDE MOUNTS
SFC	PROPERTY OF COUNTY OF SANTA FE





NOTES
1) DIM'S ± 1/8" U.N.O.
2) LID MATERIAL: HDPE
3) AMR SLIDE MOUNT WILL RECEIVE AMR/AMI DEVICE ENDPOINT. SNAP LOCK SLOT IS 1.80" ± .015" TO ALLOW FOR A FINGER FORCE INSTALL. POCKET HEIGHT IS 15/16" FOR MIN 1/8" AIR GAP.
4) EACH AMR SLIDE MOUNT WILL FIT TWO (2) BADGER ORION ENDPOINTS.

DFW PLASTICS, INC. ENGAGES IN ONGOING RESEARCH AND DEVELOPMENT TO IMPROVE AND ENHANCE ITS PRODUCTS. THEREFORE, DFW PLASTICS, INC. RESERVES THE RIGHT TO CHANGE PRODUCT OR SYSTEM SPECIFICATIONS WITHOUT NOTICE.

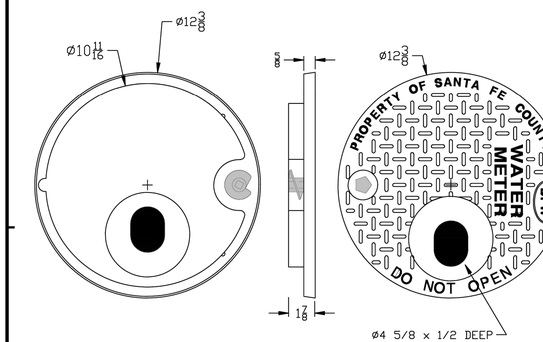
DFW PLASTICS, INC.
PO BOX 648
BEDFORD, TEXAS 76095
(817) 439-3600
(817) 439-3700 (f)
www.dfwplasticsinc.com

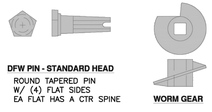
SANTA FE COUNTY

DFW20AXXF-1WA SFC-LID

CREATED:	09/13/2017
UPDATED:	09/13/2017
ACCEPTED:	JMc
DRAWN BY:	RMc
PLOT SCALE:	1:4

LID KEY	
1	BLACK COLOR
W	BRASS WORM LOCK w/ STD STEM
T	DEEP RECESS TOUCH READ HOLE
SFC	PROPERTY OF SANTA FE COUNTY





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2) LID MATERIAL: HDPE

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SANTA FE COUNTY

DFW12AFD-1WT SFC-LID

CREATED:	08/09/2017
UPDATED:	08/09/2017
ACCEPTED:	JMc
DRAWN BY:	RMc
PLOT SCALE:	1:4

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08/16/2024

PROJECT NAME
SANTA FE COUNTY
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WATERLINE

REV.	DATE	DESCRIPTION	BY

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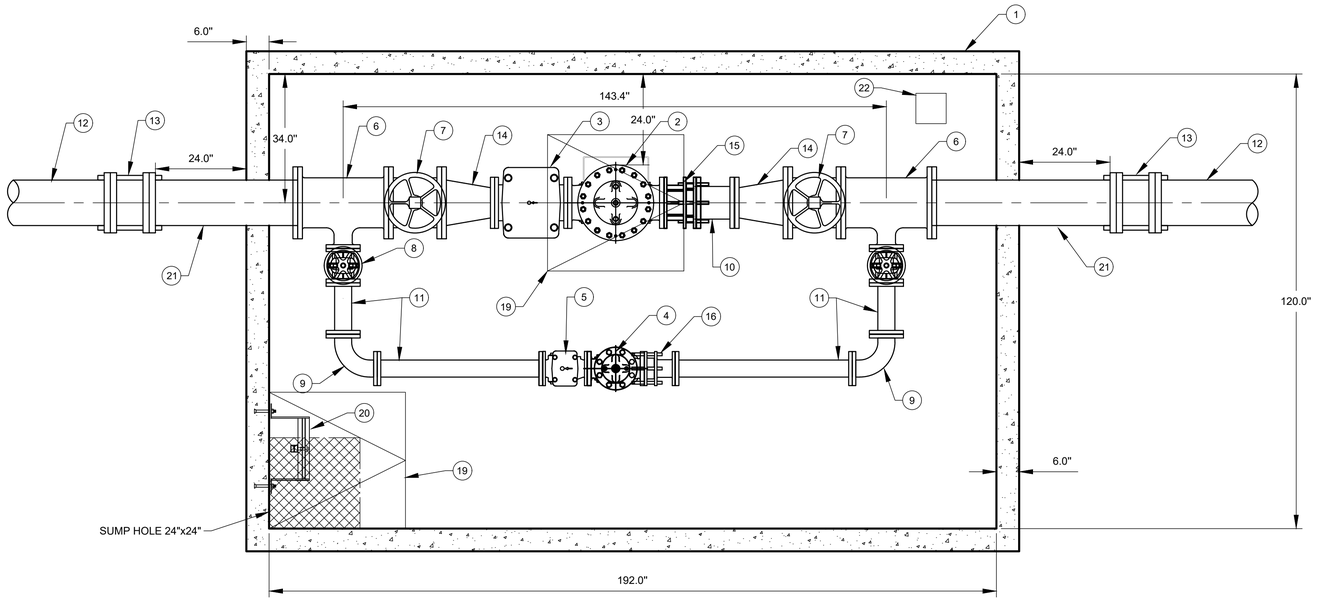
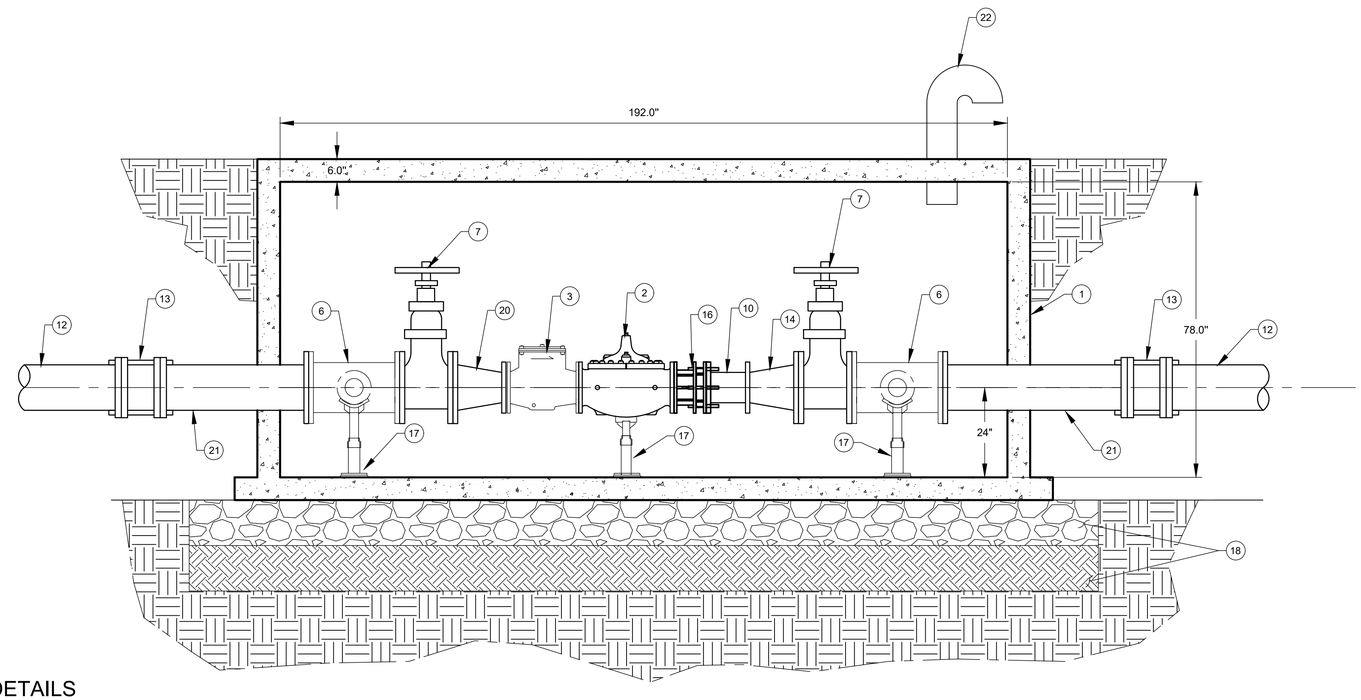
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE
WATER DETAILS

SHEET NO:
C-503

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\2361560_C-501 WATER DETAILS.dwg





A1 PRV DETAILS

SCALE: 1" = 20'

EQUIPMENT SCHEDULE

1. PRECAST CONCRETE STRUCTURE, 16'0"X10'0"X6'6" ID, MONOLITHIC FLOOR TO SLOPE 1" TO CORNER 24"X24" SUMP HOLE WITH FRP GRATING, ALUMINUM SAFETY LADDER WITH LADDER UP POST, INTERIOR WHITE PAINT, EXTERIOR DAMPROOFING, MIN. 6" THICKNESS, TOP HS20 LOAD RATED
2. 8" CLA-VAL MODEL NO. 90-01 PRESSURE REDUCING VALVE
3. 8" CLAVAL STRAINER, ¾" VALMATIC AIR RELEASE VALVE, ¾" APOLLO BALL VALVE
4. 4" CLA-VAL MODEL NO. 90-48 PRESSURE REDUCING VALVE WITH LOW FLOW BY-PASS
5. 4" CLAVAL STRAINER, ¾" VALMATIC AIR RELEASE VALVE, ¾" APOLLO BALL VALVE
6. 12"x4" TEE. DI MJxMJ.
7. 12" GATE VALVE. .
8. 4" GATE VALVE.
9. 4" 90° BEND. DI MJxMJ.
10. 8" DI PIPE SPOOL
11. 4" DI PIPE SPOOL
12. 12" C-900 DR 18 PVC PIPE.
13. SOLID SLEEVE CONNECTION BETWEEN 12" DI PIPE AND 12" PVC PIPE.
14. 12"x8" DI REDUCER MJxMJ.
15. 8" ROMAC STYLE DJ400 DISMANTLING JOINT. OR ENGINEER APPROVED EQUAL.
16. 4" ROMAC STYLE DJ400 DISMANTLING JOINT. OR ENGINEER APPROVED EQUAL.
17. ADJUSTABLE PIPE SUPPORT w/ SADDLE TO MATCH PIPE SIZE.
18. 12" THICK GRAVEL BASE W/ ¾" FRACTURED FACE WASHED ANGULAR GRAVEL OVER 12" THICK NATIVE MATERIAL SCARIFIED AND COMPACTED TO 95% RELATIVE DENSITY AT OPTIMUM MOISTURE CONTENT
19. 36"x36" TPS ALUMINUM HATCH
20. ALUMINUM SAFETY LADDER WITH LADDER UP POST
21. 12" DI PIPE SPOOL PROVIDED BY VENDOR TO EXTEND 24" FROM STRUCTURE
22. 8" VENT W/SCREEN

GENERAL NOTES

1. PRV VAULT SHALL BE PROVIDED AS A PRE-FABRICATED PACKAGE BY ONE VENDOR

2. DI PIPE AND FITTINGS SHALL BE FUSION BONDED EPOXY COATED

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PROJECT NAME

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REV.	DATE	DESCRIPTION	BY

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DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE

PRV DETAILS

SHEET NO:

C-504

8/15/2024 M:\MSD\23-600-156-002_Disciplines_SHEETS\8_sheets - utilities\23615600 C-503 PRV DETAILS.dwg

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1 CONTRACTOR MUST OBTAIN FROM NMDoT OR SANTA FE COUNTY AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE STATE OR COUNTY RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.

2 CONTRACTOR SHALL, AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY NMDoT AND SIERRA COUNTY A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.

3 THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

4 CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY NMDoT AND SANTA FE COUNTY.

5 NMDoT AND SANTA FE COUNTY SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6 ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF NMDoT AND SANTA FE COUNTY, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

7 THE CONSTRUCTION TRAFFIC CONTROL INITIAL SETUP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8 CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

9 ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10 ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY NMDoT AND SANTA FE COUNTY PER MUTCD SECTION 6A-4.

11 CONTRACTOR SHALL NOT BEGIN WORK BEFORE 7:00 A.M. OR END WORK AFTER 7:00 P.M. WITHOUT THE APPROVAL OF NMDoT AND SANTA FE COUNTY.

12 CONTRACTOR IS RESPONSIBLE TO PROVIDE OWNER DPW, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.

13 EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF NMDoT AND SANTA FE COUNTY.

14 CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15 CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

16 CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17 CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF NMDoT AND SANTA FE COUNTY. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

18 ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE NMDoT AND SANTA FE COUNTY. NMDoT AND SANTA FE COUNTY SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

19 24 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

20 ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY NMDoT AND SANTA FE COUNTY.

21 EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

22 CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
- A) STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- B) THE NMDoT TRAFFIC CODE, LATEST EDITION.
- C) ALL SECTIONS OF THE NMDoT AND SANTA COUNTY STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

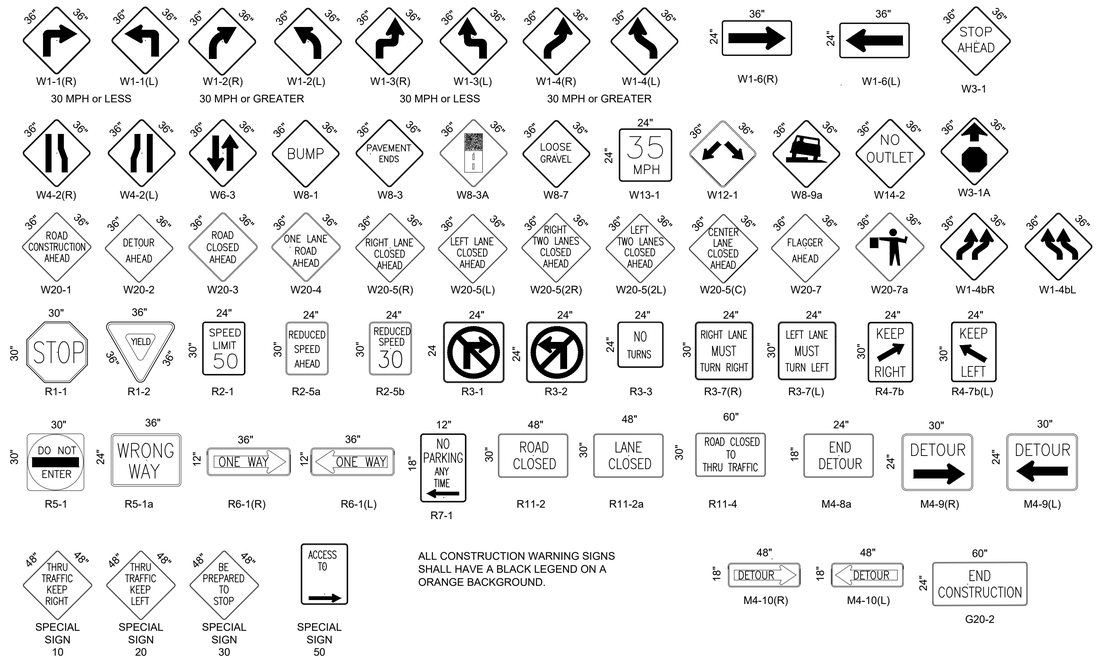
23 FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY NMDoT AND SANTA FE COUNTY.

24 ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.

25 TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

26 ADVANCE WARNING SIGNS SHALL BE 36"x36" WITH SUPER ENGINEERING GRADE SHEETING OR BETTER.

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING (TABLE 6C-1)

ROAD TYPE	DISTANCE BETWEEN SIGNS		
	A**	B **	C **
URBAN (LOW SPEED)*	100 FEET	100 FEET	100 FEET
URBAN (HIGH SPEED)*	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY / FREEWAY	1000 FEET	1500 FEET	2640 FEET

* SPEED CATEGORY TO BE DETERMINED BY HIGHWAY AGENCY

** THE COLUMN HEADINGS, **A**, **B**, AND **C** ARE THE DIMENSIONS SHOW IN FIGURES 6H-1 THROUGH 6H-46 (MUTCD, 2009 EDITION). THE **A** DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE **B** DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE **C** DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "FIRST SIGN" IS THE SIGN IN A THREE-SIGN SERIES THAT IS CLOSEST TO THE TTC ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS FURTHEST UPSTREAM FROM THE TTC ZONE.)

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES (TABLE 6C-3)

TYPE OF TAPER	TAPER LENGTH
MERGING TAPER	AT LEAST **L**
SHIFTING TAPER	AT LEAST 0.5 **L**
SHOULDER TAPER	AT LEAST 0.33 **L**
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FEET MINIMUM, 100 FEET MAXIMUM
DOWNSTREAM TAPER	50 FEET MINIMUM, 100 FEET MAXIMUM

NOTE: USE TABLE 6C-4 TO CALCULATE **L**

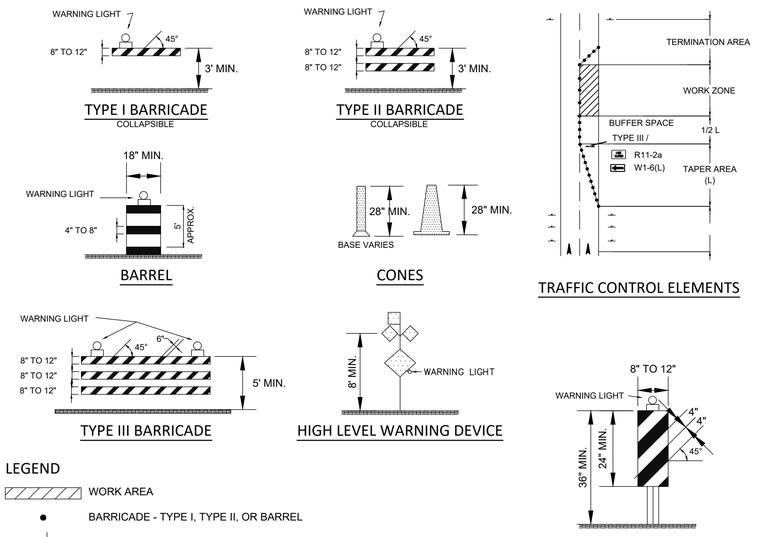
FORMULAS FOR DETERMINING TAPER LENGTH (TABLE 6C-4)

SPEED (S)	TAPER LENGTH (L) IN FEET
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	L = WS

WHERE:
- L = TAPER LENGTH IN FEET
- W = WIDTH OF OFFSET IN FEET
- S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED SPEED IN MPH

TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH IN FEET (L)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	40
25	105	115	125	6	25	50
30	150	165	180	7	30	60
35	205	225	245	8	35	70
40	270	295	320	9	40	80
45	450	495	540	13	45	90
50	500	550	600	13	50	100
55	550	605	660	13	55	110



LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR BARREL
- BARRICADE - TYPE III
- X VERTICAL PANEL
- WARNING SIGN
- FLAGMAN POSITION
- D DISTANCE BETWEEN SIGNS (A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET)
- S SPACING BETWEEN BARRICADES (A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET)
- L TAPER LENGTH (SEE CHART BELOW) *THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET

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PROFESSIONAL ENGINEER
08/16/2024

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

	BY	DESCRIPTION	DATE	REV.

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

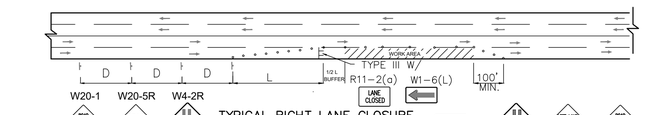
SHEET TITLE

TRAFFIC CONTROL

SHEET NO:

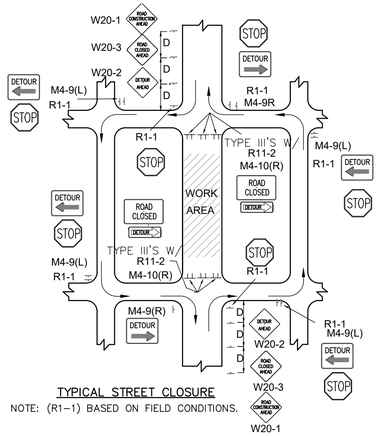
TC-501

8/15/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\8_sheets - utilities\2361560_C-501 WATER DETAILS.dwg



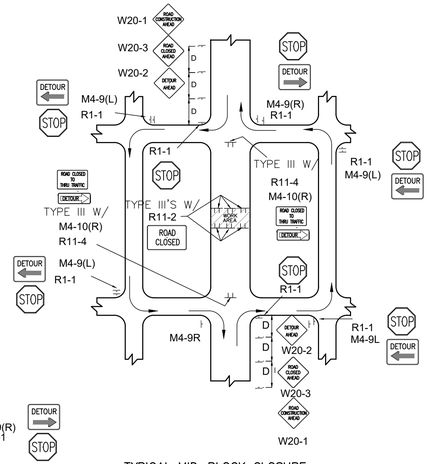
TYPICAL RIGHT LANE CLOSURE

TYPICAL LEFT LANE CLOSURE



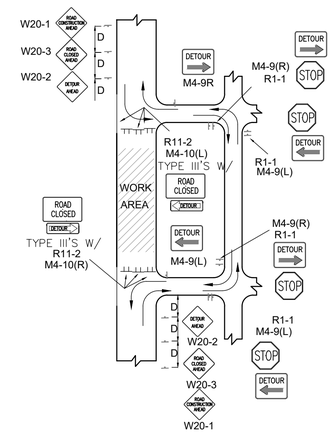
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



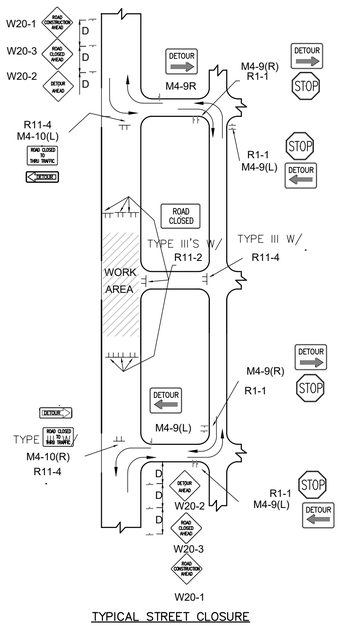
TYPICAL MID-BLOCK CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



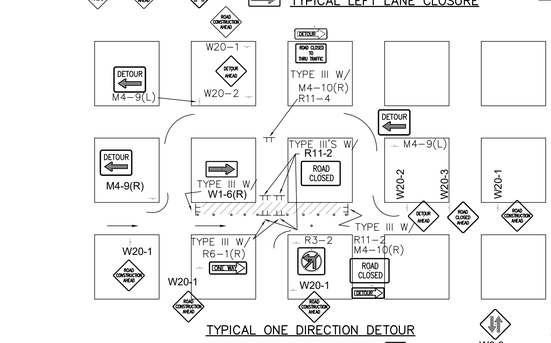
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

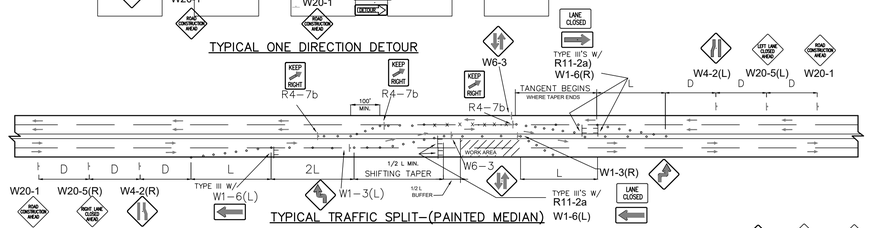


TYPICAL STREET CLOSURE

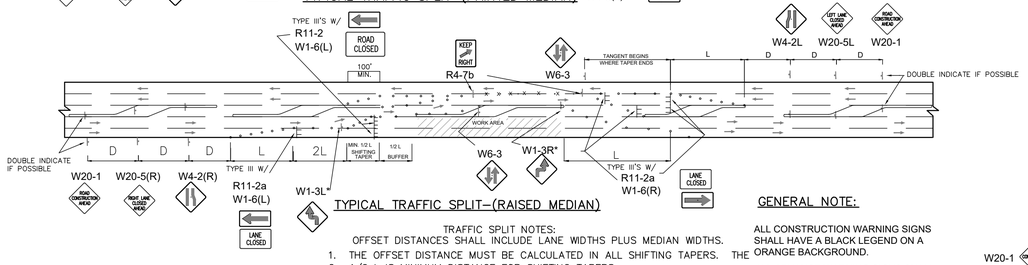
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



TYPICAL ONE DIRECTION DETOUR



TYPICAL TRAFFIC SPLIT-(PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT-(RAISED MEDIAN)

TRAFFIC SPLIT NOTES:

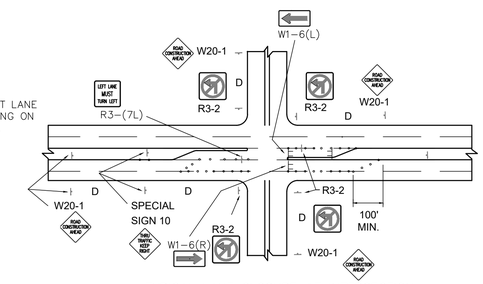
OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.

1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE
2. 1/2 L IS MINIMUM DISTANCE FOR SHIFTING TAPERS.
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
4. MEDIAN REMOVAL SHALL BE REQUIRED IF 1/2 L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS.
5. REDUCED SPEED MAY BE CONSIDERED.
6. * USE W1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER.

GENERAL NOTE:

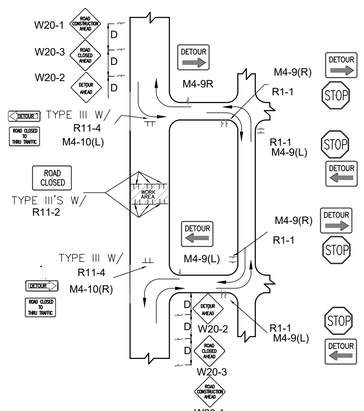
ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF FORTY EIGHT (48) INCHES BY FORTY EIGHT (48) INCHES IN SIZE AND SHALL HAVE ONE WARNING LIGHT.



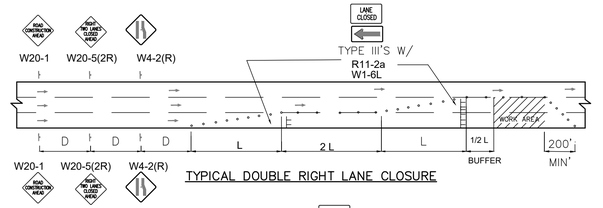
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE: DEPENDING ON WORK ZONE LOCATION

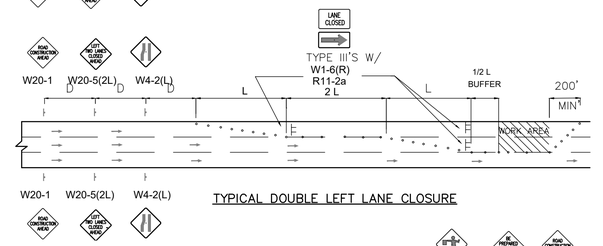


TYPICAL STREET CLOSURE

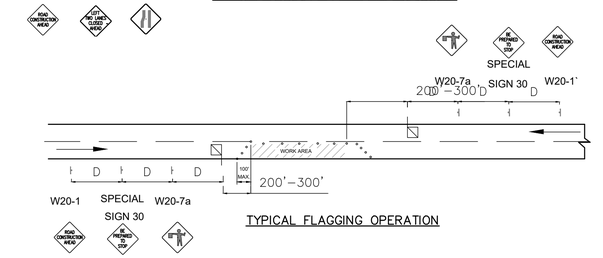
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION

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SHEET TITLE

TRAFFIC CONTROL

SHEET NO:

TC-502

8/15/2024 M:\MSD\23-600-156-001\2_Disciplines_SHEETS\8_sheets - utilities\2361560_C-501 WATER DETAILS.dwg

ABBREVIATIONS

A	AMPERE
AC	ABOVE COUNTER or ALTERNATING CURRENT
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AFI	ARC FLASH INTERRUPT
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPS INTERRUPTING CAPACITY
ALT	ALTERNATE
BAS	BUILDING AUTOMATION SYSTEM
BFG	BELOW FINISH GRADE
C	CONDUIT
CB	CIRCUIT BREAKER
CCT	CIRCUIT
CLG	CEILING
CU	COPPER
DN	DOWN
DWG	DRAWING
EGC	EQP GROUNDING CONDUCTOR
ELE	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EQP	EQUIPMENT
EXT	EXTERIOR
FLEX	FLEXIBLE CONDUIT
FLU	FLUORESCENT
FSD	FIRE-SMOKE DAMPER
FT	FEET
FVNR	FULL-VOLTAGE NON-REVERSING
G,GND	GROUND
GA	GAUGE
GEC	GND ELECTRODE CONDUCTOR
GFI	GND FAULT INTERRUPT
GRC	GALVANIZED RIGID CONDUIT
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
HPS	HIGH-PRESSURE SODIUM
IN	INCH
INC	INCANDESCENT
INT	INTERIOR
ISP	INTERNET SERVICE PROVIDER
IUC	IN-USE COVER
JB	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KW	KILOWATT
LED	LIGHT EMITTING DIODE
LT	LIQUID-TIGHT
LTG	LIGHTING
MAX	MAXIMUM
MBJ	MAIN BONDING JUMPER
MCC	MOTOR CONTROL CENTER
MCM	THOUSAND CIRCULAR MILS
MDC	MAIN DISTRIBUTION CENTER
MH	METAL HALIDE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTD	MOUNTED
NC	NORMALLY CLOSED
NEC	NATION ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOC.
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
P	PHASE, POLE
PB	PULL BOX
PNL	PANEL BOARD
PPC	POLYESTER POWDER COAT
PROV	PROVISION
PVC	POLYVINYL CHLORIDE
RCP	RECEPTACLE
RTE	REQUEST TO EXIT
SE	SERVICE EQUIPMENT
SPD	SURGE PROTECTION DEVICE
SPEC	SPECIFICATIONS
SQ	SQUARE
S/S	STAINLESS STEEL
TEB	TELEPHONE EQUIPMENT BOARD
TEL	TELEPHONE
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITER'S LABORATORIES
UTR	UP THROUGH ROOF
V	VOLT
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
W	WIRE
w/	WITH
w/o	WITHOUT
WP	WEATHERPROOF
XF	TRANSFORMER

ELECTRICAL SYMBOLS

- (1) SHEET KEYNOTE IDENTIFIER
- SHEET — DETAIL/DIAGRAM IDENTIFIER
- GROUND, NEUTRAL, PHASE — CIRCUITING
- CONCEALED CIRCUIT RACEWAY (NOT BELOW SLAB)
- EXPOSED CONDUIT
- FLEXIBLE CONDUIT
- UNDERGROUND OR EMBEDDED CIRCUIT RACEWAY
- EXISTING CIRCUIT TO REMAIN
- EXISTING CIRCUIT TO REMOVE (DEMO)
- RACEWAY DROP (DOWN)
- RACEWAY RISE (UP)
- GROUND ROD AND EXOTHERMIC WELD
- POLE MOUNTED LUMINAIRE w/ BASE
- WALL SURFACE MTD LUMINAIRE (SWITCH LEG, SCHEDULE KEY)
- TROFFER LUMINAIRE (SWITCH LEGS, LUMINAIRE SCHEDULE KEY)
- CEILING MOUNTED EXIT LUMINAIRE (SHADING INDICATES FACES, ARROWS INDICATE DIRECTIONAL FACE CHEVRONS)
- WALL MOUNTED EXIT LUMINAIRE
- S — SNAP SWITCH

a	SWITCH LEG
2	TWO-POLE
3	THREE-WAY
4	FOUR-WAY
A	DIGITAL PROGRAMMABLE 7-DAY ASTRONOMIC
D	WALL BOX DIMMER 0-10 Vdc 2W
K	KEY OPERATED
M	OCCUPANCY SENSOR
V	VACANCY SENSOR

- DUPLEX RCP

+18	MOUNTING HEIGHT INCHES AFF TO OUTLET CENTER
6	CIRCUIT IDENTIFIER
IUC	IN-USE WEATHERPROOF COVER
WP	WEATHER-PROOF COVER
WR	WEATHER RESISTANT LISTED
GFCI	

LOAD SUMMARY

FEEDER NAME	LOAD AMPS				FEEDER %		SF	W/SF	
	ALLOWED [1]	CONNECTED	DEMAND	SPARE [1]	DEMAND	LOAD [1]		CONNECT	DEMAND
SE	115	20	20	95	100	18	40	107.5	107.5

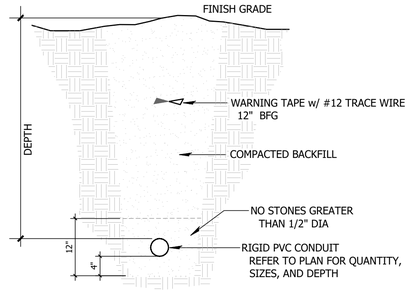
[1] ALLOWABLE LOAD AMPS, SPARE LOAD AMPS, AND FEEDER LOAD % ARE BASED ON 75°C CONDUCTOR RATING

FEEDER SCHEDULE

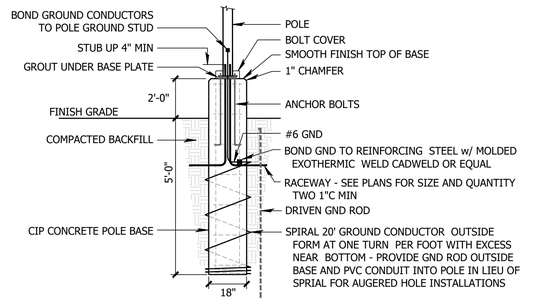
FEEDER NAME	CONDUIT COUNT	PHASE		NEUTRAL		GROUND		P & N TYPE	INSULATION TYPE	CONDUIT		SCC AMPS	VDROP MAX %	ARC FLASH		NOTES
		QUAN	SIZE	QUAN	SIZE	QUAN	SIZE			SIZE IN	FILL %			ENERGY [1]	BOUNDARY [2]	
SE	1	2	2	1	2			CU	THHN/THWN-2	1+1/2	16.5	1,779	0.04	4.23	38.9	

GENERAL NOTES
CONDUIT SIZES ARE MINIMUM GRC - CONDUCTOR SIZES ARE MINIMUM CU THHN/THWN-2 UNLESS INDICATED OTHERWISE
SPARE CONDUITS ARE NOT INCLUDED IN THIS SCHEDULE - REFER TO PLAN KEYED NOTES
FAULT CURRENT (SCC) AND ARC FLASH CALCULATED AT INDICATED EQUIPMENT LINE TERMINALS
[1] cal/cm² at 18-INCHES
[2] INCHES FROM ARC AT 1.2 cal/cm²

NUMBERED NOTES
1 EXISTING FEEDER
2 ISOLATED GROUND INCLUDED

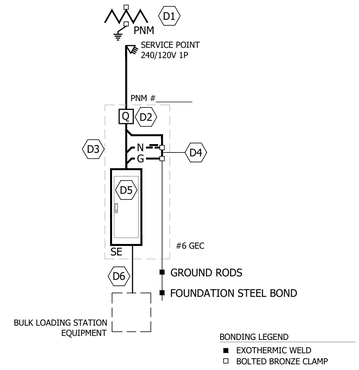


4 SECTION
BURIED CONDUIT (NOT ENCASED)
NO SCALE

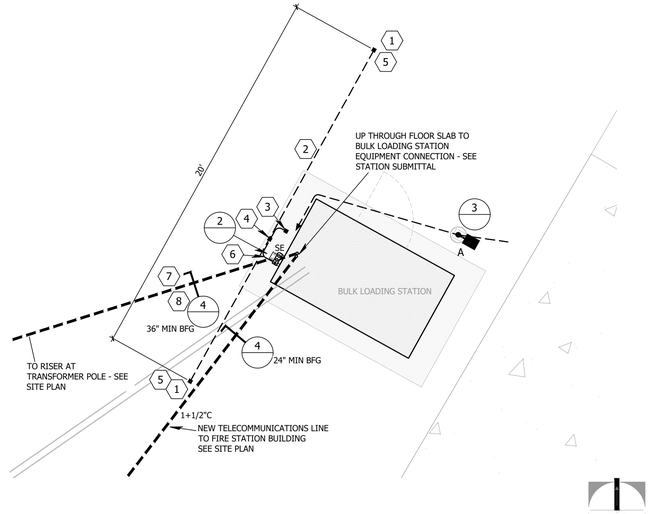


REFER TO STRUCTURAL DRAWINGS FOR DEPTH, REINFORCING, COMPACTION, AND INSTALLATION NOTES
REFER TO CIVIL SITE DRAWINGS FOR FINISH GRADE
REFER TO ARCHITECTURAL FOR BASE FINISH

3 DETAIL
ROUND FORMED POLE BASE HIGH ABOVE GRADE
NO SCALE



2 DIAGRAM
SERVICE AND DISTRIBUTION
NOT TO SCALE



1 ELECTRICAL SITE PLAN
SCALE: 1/4" = 1'-0"

PLAN KEY NOTES

1 DRIVEN GND ROD w/ TOP 12" BELOW FINISH GRADE
2 PROVIDE #4/0 AWG STRANDED BARE CU CONDUCTOR 12" BELOW FINISH GRADE
3 BOND GND TO FOUNDATION FOOTING STEEL
4 BOND GND ELECTRODE CONDUCTOR TO LOOP CONDUCTOR
5 BOND TO THE TOP OF EACH ROD
6 PROVIDE #6 AWG SOLID BARE CU GROUNDING ELECTRODE CONDUCTOR
7 PROVIDE GRC POLE RISER w/ WEATHERHEAD PER UTILITY COMPANY REQUIREMENTS AND
8 PROVIDE TRENCH AND BACKFILL PER UTILITY REQUIREMENTS TO RISER POLE BASE

GENERAL NOTES

THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS SEALED, SIGNED, AND DATED

THIS PLOT MAY NOT BE FULL SIZE - ADJUST SCALE ACCORDINGLY 1"

A THE FOLLOWING NOTES APPLY TO ALL ELECTRICAL WORK INCLUDED IN THE CONTRACT UNLESS NOTED OTHERWISE
B THE WORD PROVIDE SHALL MEAN TO FURNISH AND INSTALL - EXCEPTIONS SHALL BE NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS
C DO NOT SCALE THE DRAWINGS TO DETERMINE THE LOCATION OF LUMINAIRES, OUTLETS, OR EQUIPMENT - REFER TO THE ARCHITECTURAL DRAWINGS AND FIELD MEASUREMENTS FOR ALL PROJECT DIMENSIONS
D ALL ELECTRICAL WORK SHALL COMPLY WITH 2020 NEC, CURRENT ADOPTED NEW MEXICO ELECTRICAL CODE, AND UTILITY REQUIREMENTS AND STANDARDS
E WHENEVER MATERIALS OR EQUIPMENT ARE SPECIFIED OR DESCRIBED IN THE DRAWINGS OR SPECIFICATIONS BY REFERENCE STANDARD OR PERFORMANCE STANDARD, THE CONTRACTOR MAY SELECT ANY PRODUCT MEETING THIS STANDARD BY ANY MANUFACTURER - WHENEVER MATERIALS OR EQUIPMENT ARE SPECIFIED OR DESCRIBED IN THE DRAWINGS OR SPECIFICATIONS BY LISTING TWO OR MORE PRODUCTS OR MANUFACTURERS AS BEING EQUALLY ACCEPTABLE, THE CONTRACTOR SHALL SELECT FROM THE GIVEN MANUFACTURERS AND PRODUCTS - WHENEVER MATERIALS OR EQUIPMENT ARE SPECIFIED OR DESCRIBED IN THE DRAWINGS OR SPECIFICATIONS BY LISTING ONE PRODUCT OR MANUFACTURER, THE CONTRACTOR SHALL PROVIDE THE GIVEN MANUFACTURER AND PRODUCT
F WORKING CLEARANCE: PROVIDE WORKING CLEARANCE AS REQUIRED BY NEC ARTICLE 110
G DEDICATED SPACE: PROVIDE DEDICATED SPACE FOR ELECTRICAL EQUIPMENT AS REQUIRED BY NEC ARTICLE 110
H EXPOSED, CONCEALED, AND BURIED RACEWAY ARE SHOWN BY DRAWING LINE TYPE - REFER TO THE ELECTRICAL SYMBOL LEGEND FOR LINE TYPE DEFINITIONS
I BRANCH CIRCUIT CONDUCTORS WITH A CIRCUIT LENGTH FROM THE OVERCURRENT PROTECTION DEVICE GREATER THAN 100-FT SHALL BE SIZED NOT TO EXCEED 2.0% VOLTAGE DROP TO THE LOAD CENTER
J PANEL BOARDS, CABINETS, AND ELECTRICAL EQUIPMENT ARE SHOWN ON THE DRAWINGS WITH THE IDENTIFYING TEXT ON THE FRONT SIDE - THE EQUIPMENT FRONT IS TOWARD THE IDENTIFYING TEXT
K ALL CIRCUITS SHALL HAVE DEDICATED (UNSHARED) NEUTRAL CONDUCTORS UNLESS MULTI-POLE CIRCUIT BREAKERS ARE SHOWN FOR THE CIRCUITS IN THE PANEL BOARD SCHEDULES

DIAGRAM KEY NOTES

D1 NEW POLE-MOUNT UTILITY TRANSFORMER (PNM)
D2 NEW UTILITY METER - REF. PNM ESG MS-2-9.0
D3 PROVIDE NEMA 3R 120/240V 3W+G 200A OH/UG 22-kAIC SURFACE-MOUNT LEVER BYPASS COMBINATION SERVICE EQUIPMENT DEVICE EQUAL TO SQ-D #4120-RC816F200SL
D4 PROVIDE MAIN N-G BOND INSIDE SERVICE EQUIPMENT
D5 REFER TO SCHEDULES FOR MAIN AND BRANCH CIRCUIT BREAKERS AND LOAD INFORMATION
D6 PROVIDE 3#10 & #10G - 1"C TO LOADING STATION EQUIPMENT - SEE LOADING STATION SUBMITTAL

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONSTRUCTION CONTRACT SPECIFICALLY PROVIDES FOR A PAYMENT LATER THAN TWENETY-ONE DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT. THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT.

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SEAL
8/16/2024
DENNIS L. WETTSTROM
NEW MEXICO
9726
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME
SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	DLW
DRAWN BY:	DLW
CHECKED BY:	DLW
DATE:	8/16/2024

SHEET TITLE
ELECTRICAL DIAGRAMS, DETAILS, AND SCHEDULES

SHEET NO:
E501

009EAFP-1.DWG

LUMINAIRE SCHEDULE

KEY	DESCRIPTION	MANUFACTURER / CATALOG NO.	LUMENS	WATTS	FINISH	VOLTS	NOTES
A	LUMINAIRE: SINGLE, CUT-OFF, IES TYPE 2 DISTRIBUTION, ONE-PIECE DIE-CAST ALUMINUM HOUSING, CLEAR LENS, EXTRUDED SILICONE HOUSING GASKET, 6" DIE-CAST ALUMINUM ARM, S/S HARDWARE, THERMOSET POLYESTER POWDER PAINT FINISH, 4000°K, -40°F RATED DRIVER, 20 kA SURGE PROTECTION, IP66 RATED, UL1598, 5-YEAR LED AND DRIVER WARRANTY POLE: 25-FT 7.0" x 3.5" DIA ROUND TAPERED STEEL, 11-GA MIN WALL THICKNESS, 13.0 EPA MIN AT 100-MPH STEADY, 2-PIECE GALV STEEL MATCHING BOLT COVER, STEEL MATCHING POLE CAP, 4-1"x36" GALVANIZED ANCHOR BOLTS, 10.0" BOLT CIRCLE, 20" MIN BASE DIA, DRILLED 1 @ 90°	LUMINAIRE: BEACON / VP-Micro-2-320L210-4K8-2-UNV-A4-BLT NLS / NV2-T2-96L-7-40K8-UNV-DPS6-BLK-RPA4-FSP20 POLE: AMERICAN LIGHT POLE / RTS-25-70-11-AB-PCBL-DM19-SBC NLS / RTSP-25-11G-12BC-SGL-BLK-136	30,000	216	BLACK		1

GENERAL NOTES:
LAMPS ARE LED UNLESS NOTED OTHERWISE - LAMP CODES ARE GENERAL ELECTRIC UNLESS NOTED OTHERWISE
FINISH COLORS ARE WHITE UNLESS NOTED OTHERWISE - COLORS SHALL BE SELECTED FROM MANUFACTURER'S STANDARD DURING SUBMITTAL REVIEW UNLESS NOTED CUSTOM
LUMINAIRES SHALL BE AS SPECIFIED OR APPROVED EQUAL PRIOR TO BID/ORDER
DIMMING DRIVERS SHALL BE 0-10 Vdc 2-WIRE ELECTRONIC 100-1% DIM-TO-OFF UNLESS NOTED OTHERWISE
COLOR TEMPERATURE SHALL BE 3500°K, CRI 85 MIN, INTEGRAL BALLAST/DRIVERS 120-277V, SINGLE CIRCUIT UNLESS NOTED OTHERWISE
LUMENS LISTED ARE MINIMUM DELIVERED AND WATTS ARE MAXIMUM PER IESNA LM-79-08 BY INDEPENDENT TESTING LAB PHOTOMETRIC REPORT

NUMBERED NOTES:
1 PROVIDE HIGH-MOUNT PIR MOTION & LIGHT SENSOR AND CONTROL MODULE WITH ON/OFF RELAY AND WIRELESS (BLUETOOTH V4.1) SETUP PROGRAMMING UTILIZING FREE APP FOR ANDROID SMART DEVICE - CURRENT LTG #NXSMP-HMO-BK & #NXFMZ-1R2D-O-UNV PROGRAM TO ACTIVATE ONLY BY MOTION SENSOR WHEN AMBIENT IS DARK

PANEL BOARD SCHEDULE

VOLTAGE (L-L): 240
PHASE: 1
WIRE: 3
MOUNTING: SURFACE
MANUFACTURER:
OPTIONS: A
TOP: MCB
BOTTOM:

PANEL BOARD NAME: **P1**
BUS RATING, Amps: 200
MAIN BREAKER RATING, Amps: 100
FEEDER PROTECTION, Amps:
GROUND BUS: ISOLATED FROM NEUTRAL
MAIN BOND JUMPER: NO
SHORT CCT RATING (SCCR): 22,000
DEFAULT POWER FACTOR: 95%

LOAD TYPE	LOAD DESCRIPTION	kW	NOTE	CB SIZE	CCT #	Φ	CCT #	CB SIZE	NOTE	LOAD kW	LOAD DESCRIPTION	LOAD TYPE
SHP	BULK LOAD STATION	2.0		30 J	1	A	2					
SHP	└─┘	2.0		2P J	3	C	4					
LTG	POLE LIGHTS	0.4		20	5	A	6					
				20	7	C	8					

LOAD SUMMARY	kW
Phase A:	2
Phase C:	2
THIS SECTION:	4
Phase A:	
Phase C:	
SUB-FEED & FEED-THROUGH:	
Phase A:	2
Phase C:	2
BUS TOTAL:	4
Demand Imbalance % A:	2.4%
C:	-2.3%
Demand Imbalance %	2.4%

Notes
A - AFI arcing fault interrupter
C - Through lighting contactor
D - Dual (tandem) circuit breaker
G - GFI ground fault interrupter
K - Kirk key interlock
L - Handle LOCK-OFF/LOCK-ON
N - New CB in existing space
R - Replace existing CB with new CB
S - Switched neutral
T - 120V shunt trip
W - Switching duty rated SWD
X - Relocated existing CB
Z - 100% rated

Options
A - NEMA 12/3R enclosure
B - NEMA 12 enclosure
C - Door-in-door front
D - Hinged front
E - Top and bottom box extensions
F - 400 Hz rating
G - Isolated ground bus
H - 100% rating
J - NEMA 4X enclosure
K - Internal SPD
L - User metering (mains)
M - User metering (branch circuits)
N - Stainless Steel enclosure & trim

	Connected kW	Demand kW	Demand %	Demand Amps
Lighting	0	0	100	
Receptacles				
Other	4	4	100	
Total	4	4	100	21

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONSTRUCTION CONTRACT SPECIFICALLY PROVIDES FOR A PAYMENT LATER THAN TWENTY-ONE DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT. THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT.

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2024.009

SEAL
8/16/2024
BRANIS L. WETTERSTROM
NEW MEXICO
9726
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME
SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

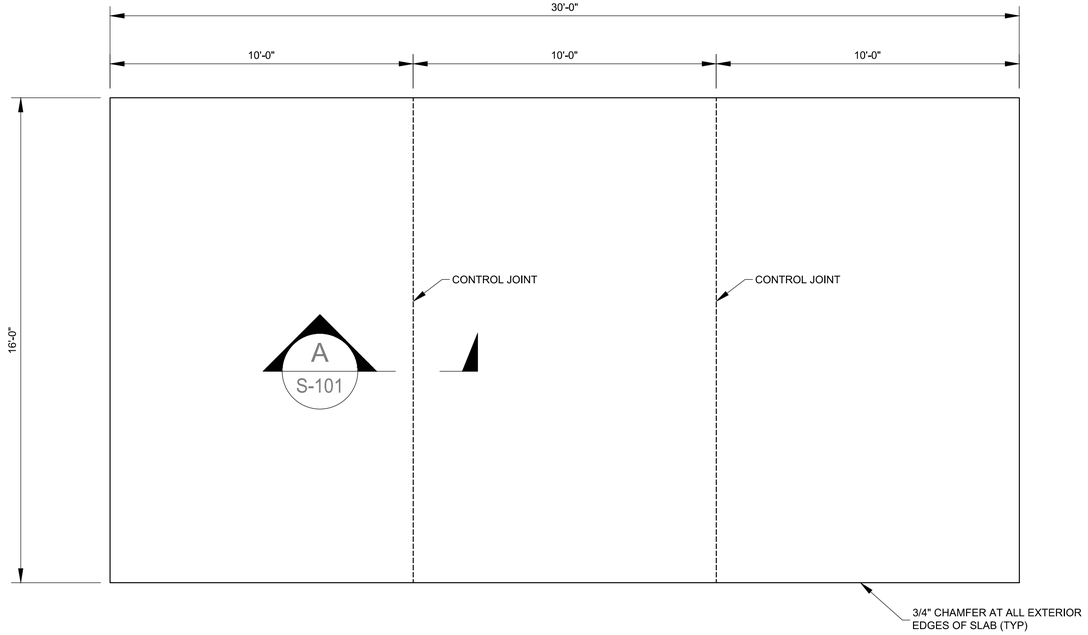
BY	DESCRIPTION	DATE	REV.

PROJECT NO:	23-600-156-00
DESIGNED BY:	DLW
DRAWN BY:	DLW
CHECKED BY:	DLW
DATE:	8/16/2024

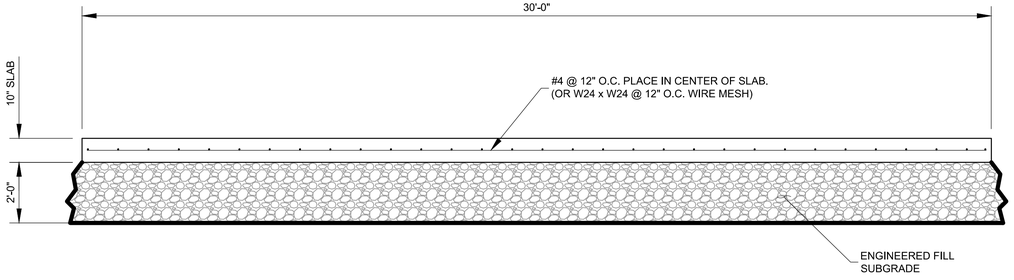
SHEET TITLE
ELECTRICAL DIAGRAMS, DETAILS, AND SCHEDULES

SHEET NO:
E502

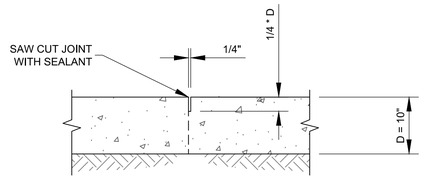
009EAFP-1.DWG



1 CONCRETE TRUCK PAD PLAN
NTS



2 TRUCK PAD TYPICAL SECTION
NTS



A CONTROL JOINT
1 1/2" = 1'-0"

GENERAL NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THESE DESIGN DRAWINGS AND THE PROJECT SPECIFICATIONS.
2. THE CONTRACTOR SHALL VERIFY ALL ELEVATIONS AND DIMENSIONS INCLUDED IN THE DESIGN DRAWINGS AND REPORT DISCREPANCIES TO THE DESIGN ENGINEER PRIOR TO APPROVAL OF FABRICATION.
3. FABRICATE AND CONSTRUCT ALL ITEMS ACCORDING TO THESE DRAWINGS, THE PROJECT SPECIFICATIONS, AND RELEVANT BUILDING CODES LISTED UNDER DESIGN CRITERIA. MAKE NO MODIFICATIONS WITHOUT THE ENGINEER'S WRITTEN APPROVAL.
4. ALL ELEVATIONS AND DIMENSIONS PROVIDED IN THE DESIGN PLANS ARE BASED ON INFORMATION PROVIDED
5. DO NOT SCALE THE DRAWINGS FOR DIMENSIONS, SIZES, OR LOCATIONS.
6. IF A DISCREPANCY IS FOUND WITHIN THE CONTRACT DOCUMENTS, IMMEDIATELY SUBMIT THE MATTER IN WRITING TO THE ENGINEER WHO WILL MAKE A DETERMINATION AND WRITTEN CLARIFICATION.
7. WHEN INSTALLING PROPRIETARY PRODUCTS, THE CONTRACTOR MUST READ AND FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PREPARATION, INSTALLATION METHOD, AND INSPECTION.
8. SUBSTITUTIONS OF MATERIALS, SIZES, OR SHAPES IS PROHIBITED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
9. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER THE PROJECT SPECIFICATIONS FOR APPROVAL BY THE ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED WITH THE EXPECTATIONS THAT THE ENGINEER WILL REQUIRE A MINIMUM OF TWO WEEKS TO REVIEW AND APPROVAL MAY TAKE ADDITIONAL TIME.
10. WHEN DISCREPANCIES EXIST BETWEEN THE DESIGN DRAWINGS AND SPECIFICATIONS, THE DESIGN DRAWINGS SHALL GOVERN.
11. THESE STRUCTURAL DESIGN DRAWINGS SHALL BE COORDINATED WITH THE CIVIL, MECHANICAL, ELECTRICAL, AND ANY OTHER PROJECT DRAWINGS. WHEN DISCREPANCIES EXIT BETWEEN THE STRUCTURAL DESIGN DRAWINGS AND THE CIVIL, ELECTRICAL OR MECHANICAL DRAWINGS OR DESIGN DRAWINGS OF OTHER TRADES, THE STRUCTURAL DESIGN DRAWINGS SHALL GOVERN.
12. USE THE FOLLOWING MATERIAL SPECIFICATIONS UNLESS OTHERWISE NOTED:

ANCHOR BOLTS:	ASTM F1554 Gr 55 (Fy = 55 KSI)
NUTS	ASTM A563
WASHERS:	ASTM F436

DESIGN AND FABRICATION CRITERIA:

1. STRUCTURAL DESIGN IS BASED ON:

   INTERNATIONAL BUILDING CODE (IBC 2018)

   ASCE 7-22 - MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES.

   ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.

   ACI 360-06 DESIGN OF SLABS-ON-GROUND

   THE CONCRETE TRUCK PAD IS DESIGNED FOR AASHTO HL-93 LOADING PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, SEPTEMBER 2017.

2. DESIGN LOADS:

LIVE LOAD ON TRUCK SLAB:	32 KIP AXLE LOAD
WIND VELOCITY:	104 MPH
GROUND SNOW LOAD:	32 PSF ASD
SESMIC DESIGN CATEGORY:	D

CONCRETE CONSTRUCTION:

1. ENGINEERED SUB-GRADE SHALL BE SELECT BACKFILL FREE OF DELETERIOUS MATERIALS. SELECT BACKFILL MATERIALS SHALL FOLLOW AASHTO SOIL CLASSIFICATIONS A-1, A-1 OR A-2-4 AS DETERMINED BY AASHTO M145. SELECT BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY, AASHTO DESIGNATION T-180.
2. REINFORCING STEEL SHALL BE ASTM A-615, GRADE 60 DEFORMED BARS (fy = 60,000 psi). TACK WELDING OF REINFORCING SHALL NOT BE PERMITTED.
3. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI (f'c 4000 PSI). ALL CONCRETE SHALL MEET THE SULFATE EXPOSURE RESISTANCE REQUIREMENTS DESCRIBED AS ALKALI-SILICA REACTIVITY IN NMDOT STANDARD SPECIFICATIONS SECTION 509.2.4.4.
4. ALL CONCRETE SHALL BE AIR ENTRAINED. REFERENCE ACI 318-18 TABLE 19.3.3.1, EXPOSURE CLASS F3.
5. WATER REDUCING, RETARDING, AND ACCELERATING ADMIXTURES SHALL CONFORM TO THE SPECIFICATION FOR CHEMICAL ADMIXTURES OF CONCRETE PER ASTM C 494 OR ASTM C 1017. FLY ASH OR OTHER PAZZOLANS USED AS ADMIXTURES SHALL CONFORM TO ASTM C 618. BLAST FURNACE SLAG USED AS AN ADMIXTURE SHALL CONFORM TO ASTM C 989. SILICA FUME USED AS AN ADMIXTURE SHALL CONFORM TO ASTM C 240.
6. CLEAR COVER TO STEEL REINFORCING SHALL BE 2-INCHES MIN. FOR ALL CONCRETE CAST AGAINST FORMWORK AND 3-INCHES MIN. FOR CONCRETE CAST AGAINST EARTH UNLESS OTHERWISE NOTED.
7. ALL CONCRETE MATERIALS SHALL CONFORM TO NMDOT STANDARD SPECIFICATION SECTION 510, "PORTLAND CEMENT CONCRETE" AND PROVISIONS OF SECTION 511 FOR CONCRETE STRUCTURES.
8. CONCRETE SAMPLING AND TESTING SHALL COMPLY WITH NMDOT STANDARD SPECIFICATION SECTION 510.3.4.3.
9. THE FREQUENCY OF CONCRETE ACCEPTANCE TESTING SHALL COMPLY WITH NMDOT STANDARD SPECIFICATION SECTION 906. AT A MINIMUM CONCRETE TEST SHALL BE TAKEN ONCE PER DAY, PER MIX DESIGN.
10. CONCRETE FORM-WORK SHALL COMPLY WITH NMDOT STANDARD SPECIFICATION SECTION 511.3.3.
11. THE CONTRACTOR SHALL KEEP CONCRETE BETWEEN 50° AND 90° FAHRENHEIT AT THE TIME OF PLACEMENT. CURING CONCRETE SHALL BE MAINTAINED AT A TEMPERATURE OF 50° FAHRENHEIT AND KEPT IN A MOIST CONDITION FOR 7 DAYS AFTER PLACEMENT, UNLESS AN ENGINEER APPROVED ACCELERATED CURING ADMIXTURE IS USED, OR IF CONCRETE IS CURED BY AN ENGINEERED APPROVED ALTERNATIVE METHOD.
12. MAINTAIN CONCRETE TEMPERATURES BELOW 95°F AND LIMIT WATER EVAPORATION RATES TO LESS THAN 0.2 LB / FT^2 / HR TO MAINTAIN CONCRETE STRENGTHS.
13. CONCRETE SLABS EXPOSED SHALL RECEIVE A CLASS 3 FINISH, FLOAT FINISH, PER NMDOT STANDARD SPECIFICATION 511.3.9.4. A FINE BRUSH OR BROOM FINISH SHALL BE USED TO REMOVE SURFACE FILM AND PRODUCE A FINE GRAINED TEXTURE.
14. CONTRACTOR SHALL USE TYPE 1-D OR TYPE 1 LIQUID MEMBRANE-FORMING CONCRETE CURING COMPOUNDS THAT COMPLY WITH ASTM C 309.
15. THE CONTRACTOR SHALL PROVIDE LIQUID-APPLIED JOINT SEALANT TO ALL CONCRETE JOINTS IN ACCORDANCE WITH NMDOT STANDARD SPECIFICATION SECTION 452, "SEALING AND RESEALING CONCRETE PAVEMENT JOINTS".
16. JOINT FILLER MATERIAL SHALL COMPLY WITH AASHTO M 171 OR ASTM D 1751.
17. GROUT SHALL BE NON-SHRINK, NON-STAINING, NON-METALLIC, FLOWABLE, AND SELF LEVELING WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI. GROUT SHALL CONFORM TO ASTM C1107 AND CRD C621. PREPARATION AND INSTALLATION SHALL MEET MANUFACTURERS RECOMMENDATIONS. GROUT TO BE USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

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CONSULTANT'S

SEAL

PROJECT NAME
SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE
TRUCK PAD

SHEET NO:
S-101

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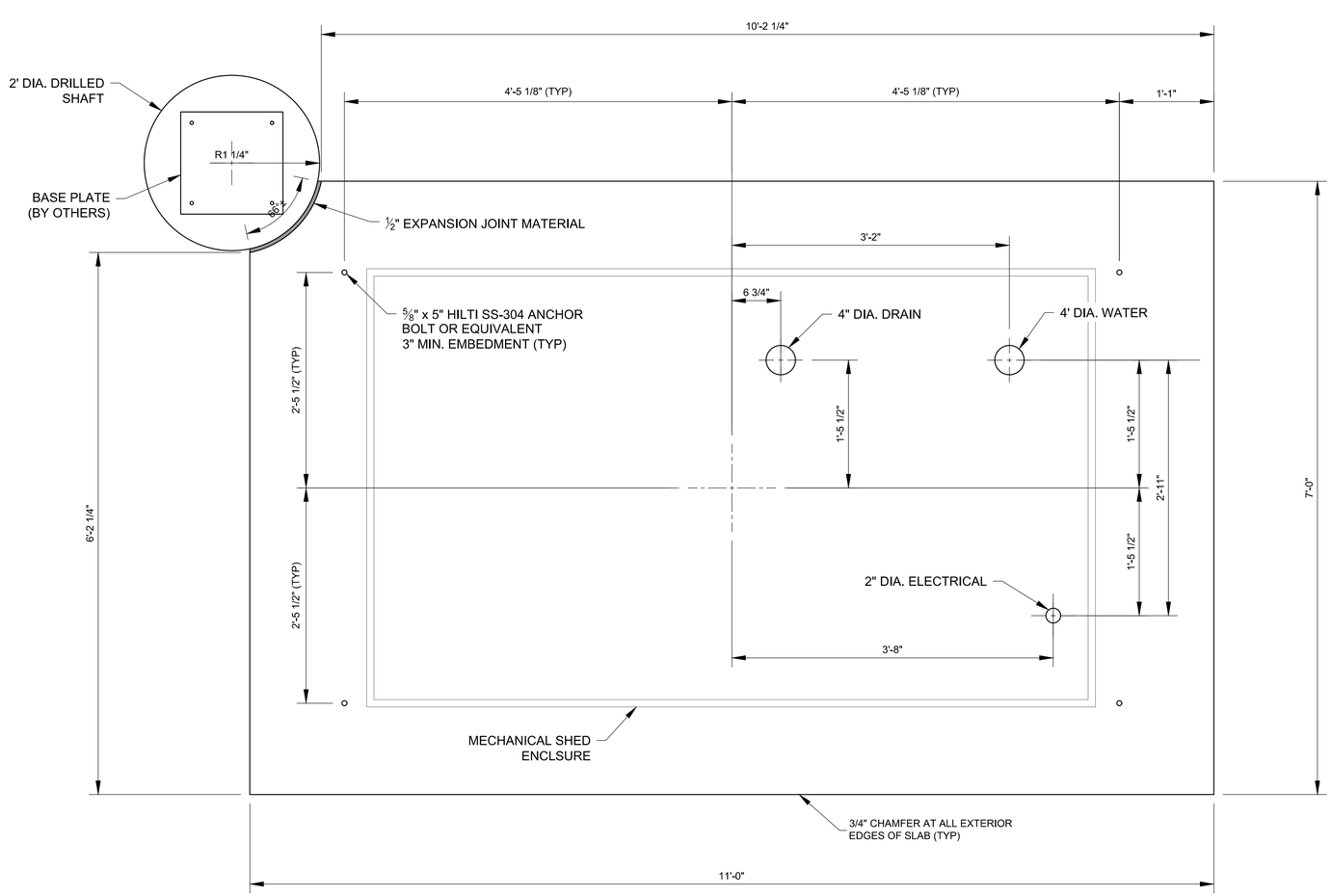
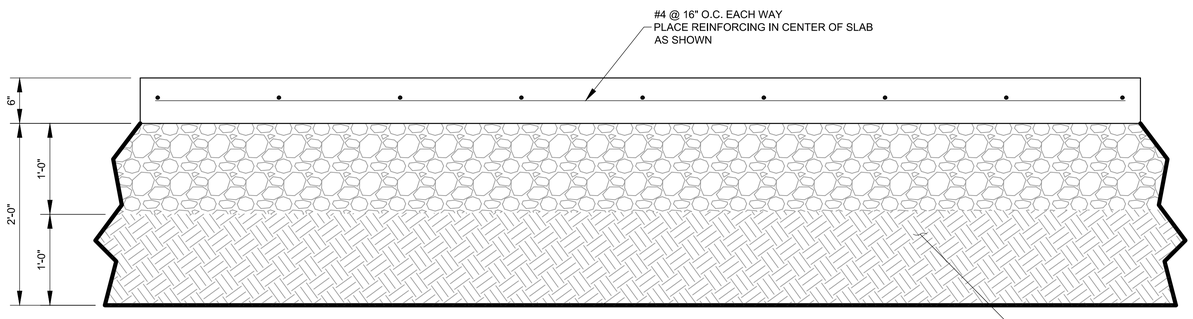
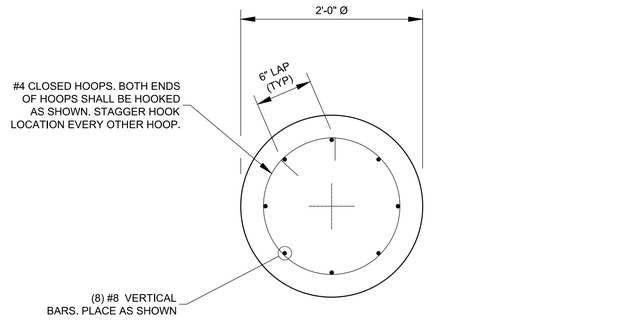
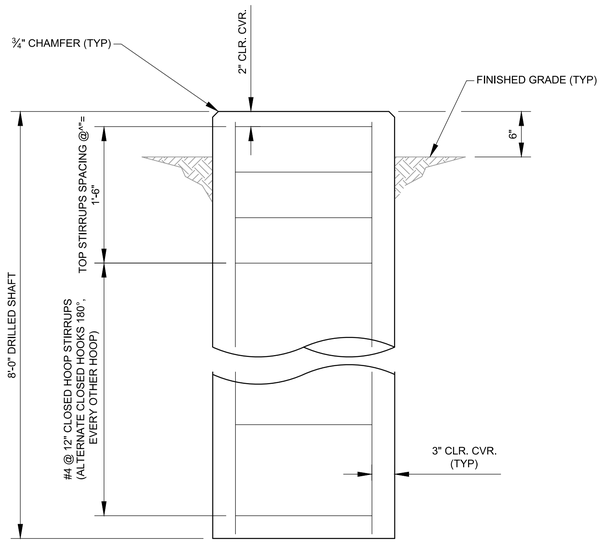


1 MECHANICAL EQUIPMENT PAD PLAN
1" = 10'

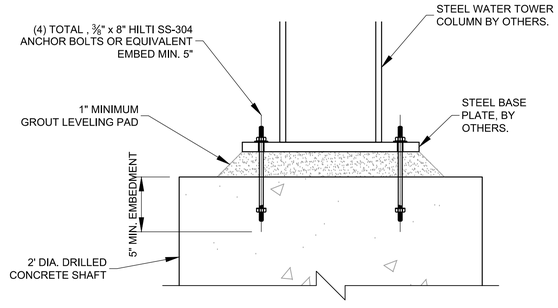


2 MECHANICAL EQUIPMENT PAD SECTION
1" = 10'





3 DRILLED SHAFT DETAILS
1" = 10'



4 COLUMN ANCHOR CONNECTION
1" = 5"

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TIMOTHY C MURPHY NEW MEXICO 23559 PROFESSIONAL ENGINEER 8.21.24

PROJECT NAME

SANTA FE COUNTY
TURQUOISE TRAIL
WATERLINE

BY	DESCRIPTION	DATE	REV.

PROJECT NO:	23-600-156-00
DESIGNED BY:	IS
DRAWN BY:	MAB
CHECKED BY:	TCM
DATE:	AUGUST 2024

SHEET TITLE

MECHANICAL ENCLOSURE PAD

SHEET NO:

S-102

8/16/2024 M:\MSD\23-600-156-00\2_Disciplines_SHEETS\4_sheets - structural\S-100.dwg