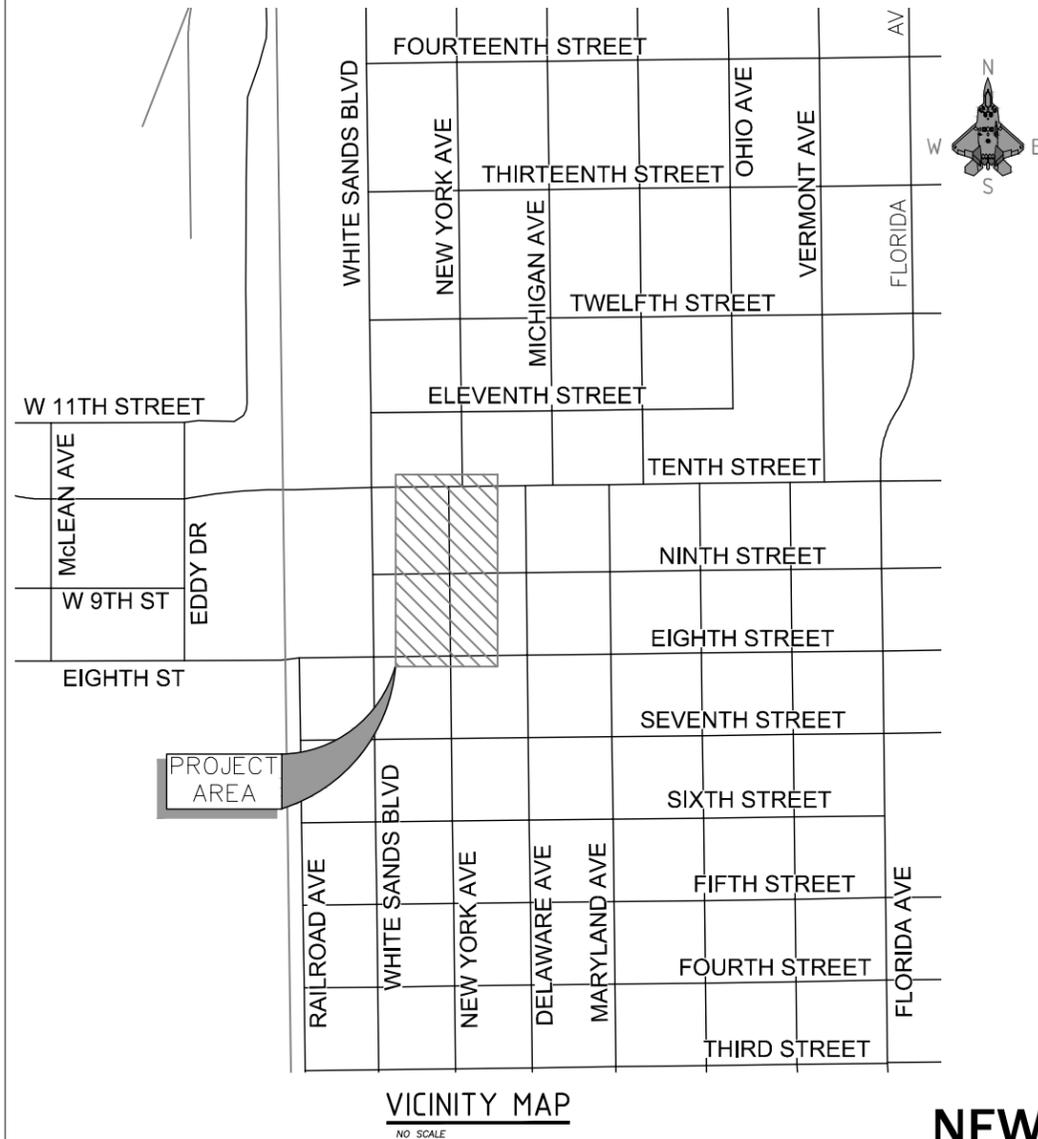


# ENGINEERING DEPARTMENT



### Sheet Legend

- Sht 1 - Cover Sheet with Vicinity Map
- G - General Sheets
- Q - Summary of Quantities
- SR - Survey Sheet and Control Points
- R - Removal Plan Sheets
- RC - Roadway Construction Plans
- GD - Grading and Drainage Plans
- ST - Pavement Marking Plans and Details
- TS - Traffic Signing Plans and Details
- U - Utility Plans and Details
- D - Miscellaneous Detail Plan Sheets
- NMDOT - New Mexico Department of Transportation Standard Drawings

### City Commissioners

Susan L. Payne, Mayor

Nick Paul

Stephen Burnett

Warren Robinson

Josh Rardin

Sharon McDonald, Mayor Pro-Tem

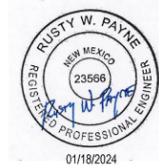
Mark Tapley

## 2024 IMPROVEMENT PLANS FOR NEW YORK AVENUE (8TH TO 10TH STREET) WATER AND SANITARY SEWER REPLACEMENT PROJECT

*Solutions for Today...  
Vision for Tomorrow*

201 N Church Street  
Suite 200A  
Las Cruces, NM 88001  
Phone: 575-523-2395  
[www.smithengineering.pro](http://www.smithengineering.pro)

AGENCY	PLAN REVIEW BY	DATE	DEPARTMENT	PLAN REVIEW BY	DATE	REVISIONS	DESCRIPTION	DATE
POWER NEW MEXICO			ENGINEERING					
NEW MEXICO GAS COMPANY			PUBLIC WORKS DEPARTMENT					
LUMEN			UTILITY DEPARTMENT					
TDS			STREETS AND DRAINAGE					
TULAROSA BASIN TELEPHONE COMPANY			FACILITY MAINTENANCE					
			COMMUNITY DEVELOPMENT					
			PLANNING AND ZONING					
			PARKS					
			DEPARTMENT OF PUBLIC SAFETY					



**ENGINEERING DEPT.**

**COVER SHEET**

Public Works Bid No.:

**2024-003**

Engineering No.:

**EN2306**

**GENERAL NOTES:**

1. **SPECIFICATIONS:** THE CITY OF ALAMOGORDO TECHNICAL STANDARDS SHALL GOVERN CONSTRUCTION OF THIS PROJECT. BIDDING DOCUMENT ORDER OF PRECEDENCE SHALL BE AS DESCRIBED IN SECTION 13 - GENERAL CONDITIONS SUBSECTION 3.2.
2. **GENERAL NOTES:** GENERAL NOTES SHALL APPLY TO ALL SHEETS, EXCEPT WHERE MORE SPECIFIC INFORMATION IS PROVIDED. SEE INDIVIDUAL DRAWINGS FOR ADDITIONAL ABBREVIATIONS, SYMBOLS, LEGENDS, NOTES, DETAILS, AND OTHER REQUIREMENTS. IN ALL CASES, THE INFORMATION SHOWN ON INDIVIDUAL DRAWINGS SHALL GOVERN OVER ANY GENERAL INFORMATION. NOT ALL SPECIFIED ITEMS AND/OR STANDARD DETAILS SHOWN MAY BE APPLICABLE TO THIS PROJECT.
3. **MEANS, METHODS OR TECHNIQUES:** THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS OR TECHNIQUES, NOR FOR THE EXECUTION OF THE WORK AS SHOWN ON THESE DRAWINGS. THE OWNER AND 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 THE CONTRACTORS OR SUBCONTRACTORS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. **SAFETY REQUIREMENTS:** THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL WORK AREAS IN SAFE CONDITION FOR THE PUBLIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE FOR ALL CONTRACTOR PERSONNEL AND SUBCONTRACTOR PERSONNEL WITH APPLICABLE CURRENT FEDERAL, OSHA, STATE, COUNTY, AND CITY LAWS, ORDINANCES, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA TRENCH SAFETY RULES AND REGULATIONS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL, AT A MINIMUM, SAFETY FENCING 48-INCHES IN HEIGHT AROUND THE PERIMETER OF OPEN TRENCHES AND REMOVAL AREAS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
5. **CONTRACTOR RESPONSIBILITY:** THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE CONTRACTORS PERFORMANCE OF WORK ON THIS PROJECT.
6. **PROJECT DEVIATIONS:** ANY PROPOSED DEVIATIONS FROM THE CONTRACT DOCUMENTS BY THE CONTRACTOR MUST BE ACCEPTED BY THE ENGINEER. IN WRITING, PRIOR TO THE WORK BEING DONE. ANY DEVIATIONS PERFORMED WITHOUT THE ENGINEER'S APPROVAL WILL NOT BE PAID FOR AND MAY BE REQUIRED TO BE RECONSTRUCTED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
7. **PUBLIC ACCESS TO LOCAL BUSINESSES & RESIDENCES:** THE CONTRACTOR SHALL PROVIDE INGRESS AND EGRESS TO LOCAL BUSINESSES AND RESIDENCES FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ADVISE PROPERTY OWNERS AND THE ENGINEER OF ANY ACCESS MODIFICATIONS, AT LEAST 24 HOURS IN ADVANCE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
8. **PERMITTING:** IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REQUEST AND OBTAIN ALL PERMITS NECESSARY FOR THIS PROJECT PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CURRENT FEDERAL, OSHA, STATE, COUNTY, AND CITY LAWS, ORDINANCES, RULES AND REGULATIONS.
9. **MAINTENANCE OF AS-BUILT PLANS:** THE CONTRACTOR SHALL MAINTAIN AN UP TO DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE PLANS SHALL BE KEPT CURRENT, WITHIN ONE-WEEK, AT ALL TIMES AND 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 7-DAYS. THE FINAL AS-BUILT PLANS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL PAYMENT. FINAL AS-BUILT PLANS SHALL BE DELIVERED IN CLEAN HARD COPY. CONTRACTOR CERTIFICATION SHALL BE CLEARLY STATED ON THE COVER SHEET. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
10. **WATER FOR CONSTRUCTION:** THE CONTRACTOR WILL BE RESPONSIBLE FOR PURCHASING ALL OF THE RECLAIMED WATER NEEDED FOR CONSTRUCTION FROM THE CITY OF ALAMOGORDO. THE COST WILL BE DETERMINED IN ACCORDANCE WITH THE CURRENT RECLAIMED WATER RATES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TRANSPORT AND APPLY THE RECLAIMED WATER AS SPECIFIED OR AS ORDERED BY THE ENGINEER. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR LOCATION OF SOURCES. THIS COST SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OF PAYMENT WILL BE MADE THEREFORE.
11. **INTERRUPTION OF SERVICE:** CONTRACTOR MUST MAINTAIN WATER SERVICE AT ALL TIMES AS DIRECTED BY THE ENGINEER. IF AN INTERRUPTION OF SERVICE IS UNAVOIDABLE, THE CONTRACTOR SHALL NOTIFY ALL AFFECTED RESIDENTS ON A DOOR-TO-DOOR BASIS OR AS AGREED WITH THE ENGINEER. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ALL WATER SHUT-OFFS.
12. **EARTHWORK HAUL:** THE EARTHWORK HAUL ON THIS PROJECT WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT PRICE FOR ITEMS "UNCLASSIFIED EXCAVATION", AND "BORROW", AS APPLICABLE. AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR HAUL.
13. **PAVEMENT DROP-OFF POLICY:** IF A PAVEMENT DROP-OFF IS CREATED DURING CONSTRUCTION, THE CONTRACTOR SHALL INITIATE PROTECTIVE ACTION IN ACCORDANCE WITH THE NMDOT'S CURRENT "DROP-OFF POLICY". THE POLICY IS AVAILABLE FROM THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
14. **WARPING OF SLOPES:** THE CONTRACTOR SHALL WARP SLOPES WHERE NECESSARY TO STAY WITHIN THE RIGHT OF WAY OR CONSTRUCTION EASEMENT LIMITS.
15. **MATERIAL PITS:** NO MATERIAL PITS HAVE BEEN DESIGNATED FOR THIS PROJECT. THE CONTRACTOR MAY OBTAIN SPECIFICATION BORROW OR SURFACING MATERIAL FROM ANY ACCEPTABLE SOURCE. ALL MATERIAL PITS SHALL BE GOVERNED BY SECTION 106 OF THE NMDOT STANDARD SPECIFICATIONS.
16. **CONSTRUCTION EQUIPMENT & MATERIAL STORAGE:** THE CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIAL WITHIN 28 FEET FROM THE EDGE OF THE DRIVING LANE UNLESS THE EQUIPMENT OR MATERIAL IS PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. ALL EQUIPMENT AND MATERIAL STORED IN STAGING YARD SHALL BE PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. IN NO CASE SHALL THE CONTRACTOR STORE EQUIPMENT OR MATERIAL IN THE DRIVING LANE. THE SAFETY DESIGN FOR SHIELDING SHALL BE PROVIDED BY THE CONTRACTOR AND MUST BE APPROVED BY THE ENGINEER BEFORE IMPLEMENTING. THIS WORK, INCLUDING DESIGN, INSTALLATION AND REMOVAL OF THE SHIELDING, SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
17. **PROTECTION OF SURVEY MONUMENTS:** THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT HORIZONTAL AND VERTICAL CONTROL SURVEY MONUMENTS AND CONTROL POINTS FROM DAMAGE PRIOR TO INITIATING CONSTRUCTION. AN INVENTORY OF THE EXISTING MONUMENTS WILL BE TAKEN BY THE ENGINEER AND THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. IF, DURING THE COURSE OF CONSTRUCTION OPERATIONS, THE CONTRACTOR DISTURBS OR DESTROYS A MARK, THE CONTRACTOR SHALL ESTABLISH A NEW MARK IN COMPLIANCE WITH THE STANDARDS AND PROCEDURES SET FORTH IN THE "GEODETIC MARK PRESERVATION GUIDEBOOK", NATIONAL GEODETIC SURVEY, MARCH 1990, CONTACT: NGS MARK PRESERVATION CENTER-NOAA, TELEPHONE (505) 768-3606.

18. **REMOVALS:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOVALS REQUIRED TO COMPLETE THE PROJECT. REMOVALS NOT SHOWN ON THE PLANS WILL BE DESIGNATED BY THE ENGINEER. THIS WORK WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT PRICE FOR ITEM "REMOVAL OF STRUCTURES AND OBSTRUCTIONS" AND THE CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR UNLISTED REMOVALS. ITEMS THAT ARE SCHEDULED TO BE REMOVED AND REPLACED SHALL BE REPLACED WITHIN SEVEN (7) DAYS OF THEIR REMOVAL.
19. **SAW CUTTING:** CONTRACTOR SHALL SAW CUT PAVEMENT, CONCRETE SIDEWALK, CONCRETE DRIVEWAYS AND CURB AND GUTTER AT TIENS AS REQUIRED FOR A SMOOTH TRANSITION. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
20. **SALVAGEABLE MATERIALS:** SALVAGEABLE MATERIALS FROM THIS PROJECT ARE TO BE HAULED AND STOCK PILED AT THE CITY YARD LOCATED AT 2600 N. FLORIDA AVENUE. HAUL OF SUCH MATERIAL SHALL BE PERFORMED DURING NORMAL WORKING HOURS AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM "REMOVAL OF STRUCTURES AND OBSTRUCTIONS".
21. **WASTE MATERIALS:** WASTE MATERIAL MUST BE DISPOSED OF AT A STATE APPROVED SITE.
22. **PROTECTION OF EXISTING UTILITIES:** THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND AND OVERHEAD UTILITIES AND SHALL COORDINATE ALL WORK WITH UTILITY OWNERS. ALL IMPROVEMENTS WHICH ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED, RECONSTRUCTED OR REPLACED WITHIN 24 HOURS TO THE ENGINEER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
23. **CONTRACTOR COORDINATION WITH UTILITIES:** THE CONTRACTOR IS HEREBY ADVISED THAT UTILITY RELOCATION WORK BY THE UTILITY OWNERS MAY BE PERFORMED CONCURRENT WITH CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE FOR UTILITY WORK IN CONJUNCTION WITH CONSTRUCTION OPERATIONS AND SHALL BE REQUIRED TO COORDINATE THE SCHEDULING OF WORK WITH THE RESPECTIVE UTILITY OWNERS. ANY CLAIMS FOR DELAY SHALL BE CONTROLLED BY THE TERMS AND CONDITIONS OF THE NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION.
24. **VERIFY ELEVATIONS:** THE CONTRACTOR SHALL EMPLOY A LICENSED NEW MEXICO SURVEYOR AND SHALL FIELD VERIFY ALL ELEVATIONS, DIMENSIONS, AND RIGHT-OF-WAY PRIOR TO THE BEGINNING OF CONSTRUCTION. THE ELEVATIONS WERE BASED ON AS-BUILT AND FIELD SURVEY DATA. THE CONTRACTOR SHALL LIMIT ALL WORK ON THIS PROJECT TO WITHIN THE EXISTING RIGHT-OF-WAY AND EASEMENTS. THIS WORK WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION STAKING BID ITEM AND TO THE COMPLETION OF THE PROJECT, NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.
25. **UTILITY DISCLAIMER:** UTILITY LOCATIONS SHOWN HEREON ARE BASED ON THE BEST AVAILABLE EVIDENCE INCLUDING PHYSICAL FEATURES SUCH AS VALVES, PEDESTALS, WARNING MARKERS AND SPOTS BY UTILITY LOCATING SERVICES. THERE IS NO GUARANTEE AS TO THE COMPLETENESS OR ACCURACY OF THE UTILITY DATA SHOWN ON THE PLANS. THE CONTRACTOR SHALL CONTACT ALL UTILITY OWNERS TO VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE CONFLICT WITH MINIMUM DELAY. EXCAVATION TO VERIFY LOCATIONS SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT, NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.
26. **TRAFFIC CONTROL:** THE CONTRACTOR SHALL MAINTAIN AND CONTROL TRAFFIC AS OUTLINED IN THE "MUTCD, LATEST EDITION" DURING CONSTRUCTION. ANY NECESSARY DEVIATION FROM THE "MUTCD, LATEST EDITION" SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT A COPY OF TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL, PRIOR TO START OF CONSTRUCTION.
27. **TRUCK WEIGHT:** MAXIMUM WEIGHT OF TRUCKS SHALL CONFORM TO N.M.D.O.T. STANDARDS. CONTRACTOR TO REPLACE ANY DAMAGED STREETS USED DURING CONSTRUCTION HAULING. REPLACEMENT OF DAMAGED STREETS SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT, NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.
28. **WORK CONFINEMENT:** THE CONTRACTOR SHALL BE REQUIRED TO CONFINE HIS WORK WITHIN THE CONSTRUCTION LIMITS OR RIGHT-OF-WAY. PARKING OF EMPLOYEE'S PRIVATE VEHICLES SHALL NOT BE ALLOWED ALONG CONSTRUCTION AREAS THROUGHOUT CONSTRUCTION LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROHIBIT ASPHALT VEHICLES AND EQUIPMENT, ROLLERS, CRANES, ETC., FROM DRIVING UPON, ACROSS, OR TURNING ON PRIVATE PROPERTY ADJACENT TO PROJECT WORK AREAS.
29. **SURFACE FEATURES:** CONTRACTOR SHALL REPAIR OR REPLACE FENCES, BLOCK WALLS, OR SURFACE FEATURES, DAMAGED BY CONTRACTOR'S OR SUBCONTRACTOR'S OPERATIONS, TO EXISTING OR BETTER CONDITION. REPAIR OR REPLACEMENT OF FENCES, BLOCK WALLS, OR SURFACE FEATURES SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
30. **PROJECT VIDEO:** PRIOR TO INITIATING CONSTRUCTION OPERATIONS, CONTRACTOR, SHALL PERFORM DIGITAL VIDEO RECORDING OF THE ENTIRE PROJECT, ITS FULL LENGTH AND WIDTH. THE CONTRACTOR, SHALL ALSO INCLUDE OR ADD AS NECESSARY, ANY AREAS TO BE DISTURBED FOR MATERIAL STORAGE, EMPLOYEE PARKING OR EQUIPMENT STORAGE.  
  
THE VIDEO DOCUMENTATION SHALL BE COMPLETED IN DIGITAL FORMAT; IT SHALL BE A MINIMUM RESOLUTION OF 1920 X 1080 PIXELS, AT 60 FPS (FRAME PER SECOND) AND IN COLOR. THE VIDEO DOCUMENTATION SHALL BE PERFORMED BETWEEN 10:00 A.M. AND 2:00 P.M. DURING PERIODS OF FULL SUN EXPOSURE. THE ACTUAL DATE OF RECORDING SHALL BE DATE-STAMPED WITHIN EACH FRAME OF THE VIDEO. APPROVAL OF THE VIDEO MUST BE OBTAINED FROM THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY CLEARING AND GRUBBING OPERATIONS.  
  
THE VIDEO RECORDING SHALL BE SUBMITTED TO THE CITY ON A USB FLASH DRIVE FOR REVIEW AND PROJECT REFERENCE.  
  
ALL COSTS ASSOCIATED WITH THE VIDEO RECORDING SHALL BE CONSIDERED INCIDENTAL TO OTHER RELATED ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE.
31. **SITE CLEAN UP:** PROJECT SITE(S) AND YARD(S) SHALL BE MAINTAINED BY CONTRACTOR AND KEPT IN A CLEAN AND ORDERLY MANNER TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
32. **CONCRETE WASHOUT:** CONTRACTORS SHALL DESIGNATE, MAINTAIN, AND REMOVE CONCRETE WASHOUT WASTES IN ACCORDANCE WITH THE EPA BEST MANAGEMENT PRACTICES. THIS SHALL INCLUDE COLLECTION, RETENTION, AND RECYCLING/DISPOSAL OF WASHOUT WATER AND SOLIDS TO PREVENT CAUSTIC MATERIAL EXPOSURE TO SOILS AND GROUND WATER. MEASURES SHALL INCLUDE WASHOUT CONTAINMENT FACILITY(S), DIRECTIONAL SIGNAGE, AND DAILY INSPECTIONS FOR LEAK MONITORING AND CAPACITY OF CONTAINMENT FACILITY. ALL COSTS ASSOCIATED WITH THE CONCRETE WASHOUT SPECIFIED HEREIN SHALL BE CONSIDERED INCIDENTAL TO OTHER RELATED ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE UNLESS SPECIFICALLY INDICATED ELSEWHERE IN THE SPECIAL PROVISIONS.
33. **POST CONSTRUCTION SURVEY:** THE CONTRACTOR, IN CONJUNCTION WITH A PROFESSION SURVEYOR LICENSED IN THE STATE OF NEW MEXICO, SHALL COMPLETE A POST CONSTRUCTION SURVEY FOR DELIVERY TO THE CITY IN ACCORDANCE WITH THE TECHNICAL STANDARDS.

**UTILITY COMPANY CONTACTS:**

CITY OF ALAMOGORDO:  
 WATER/SEWER: DAVE NUNNELLEY - 575.430.1947  
 FACILITY/FIBER OPTIC: PAUL BENNETT - 575.921.4402  
 PARK SUPERVISOR: ERIC MARION - 575.439.4139

PNM ELECTRIC: (OFFICE) 575.443.6610  
 WILSON GUIN 575.430.2977  
 ISAAC MUNCY 575.430.2171

NEW MEXICO GAS COMPANY: NATURAL GAS (OFFICE) 1.888.664.2726  
 TIM TURRI 575.443.6424  
 MARIO ESTRADA 575.430.8381  
 ORLANDO MARTINEZ 575.202.9545

TELEPHONE (CENTURY LINK): GARY NELSON (O) 575.767.7467

REV. No.	DATE	DESCRIPTION	APPROVED

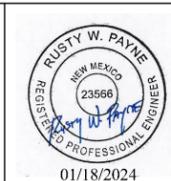
New Mexico One Call, Inc. Call 2 days before you dig!  
  
 Professional Resources for Damage Prevention  
 Dial 811 or 1-800-321-2537



**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT**

**GENERAL NOTES & UTILITY CONTACTS**

CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



Public Works Bid No.: 2024-003  
 Drawn By: SMITH Designed By: COA  
 Checked By: COA Approved By: COA

Scale: HORIZ. BAR SCALE  
 INCLUDE VERT SCALE ON P&P

Sheet No.: **G1.0**

Sheet **2** of **24**

EN2306

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SHEET NO.	SHEET TITLE
--	COVER SHEET
G1.0	GENERAL NOTES & UTILITY CONTACTS
G2.0	SHEET INDEX
G3.0	RECLAIMED HYDRANT AND PROJECT LOCATION MAP
Q1.0	SUMMARY OF QUANTITIES
SR1.0	SURVEY CONTROL SHEET
U1.0	UTILITY DETAILS
U2.0	UTILITY DETAILS
U3.0	UTILITY DETAILS
U4.0	UTILITY DETAILS
U5.0	UTILITY DETAILS
U6.0	UTILITY POTHOLE MAP
U7.0	UTILITY POTHOLE DATA SHEET
U8.0	UTILITY POTHOLE DATA SHEET
U9.0	UTILITY POTHOLE DATA SHEET
U10.0	GEOTECHNICAL BORE DATA SHEET
U11.0	WEST ALLEY SANITARY SEWER REHABILITATION BOP TO STA. 5+80
U12.0	WEST ALLEY SANITARY SEWER REHABILITATION STA. 5+80 TO EOP
U13.0	EAST ALLEY SANITARY SEWER REHABILITATION BOP TO STA. 5+80
U14.0	EAST ALLEY SANITARY SEWER REHABILITATION STA. 5+80 TO EOP
U15.0	NEW YORK AVENUE WATER LINE REPLACEMENT BOP TO STA. 6+50
U16.0	NEW YORK AVENUE WATER LINE REPLACEMENT STA. 6+50 TO EOP
U17.0	8TH STREET WATER LINE REPLACEMENT
U18.0	9TH STREET WATER LINE REPLACEMENT

REV. No.	DATE	DESCRIPTION	APPROVED

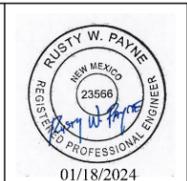
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 Professional Resources for Damage Prevention



**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT**

**SHEET INDEX**

CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



Public Works Bid No.: 2024-003  
 Drawn By: SMITH    Designed By: SMITH  
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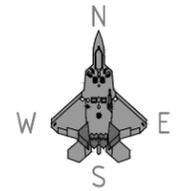
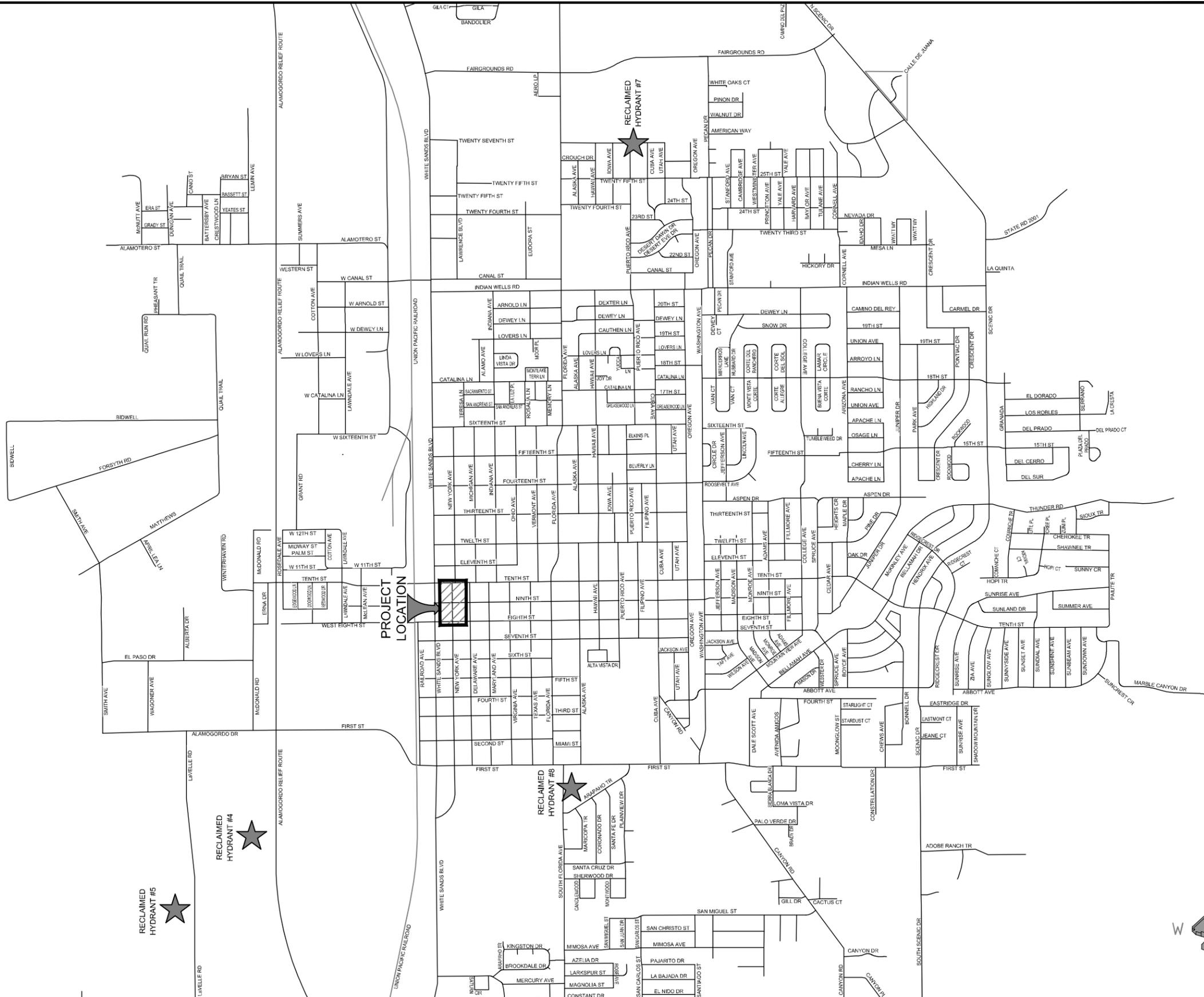
Sheet No.: **G2.0**

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**RECLAIMED HYDRANT LOCATIONS (PURPLE HYDRANTS):**

1. RS\_HYD\_01 - 3500 AIRPORT ROAD (AIRPORT USE ONLY)
2. RS\_HYD\_02 - 3500 AIRPORT ROAD
3. RS\_HYD\_03 - 2143 SOUTH WALKER AVENUE
4. RS\_HYD\_04 - 500 LaVELLE ROAD
5. RS\_HYD\_05 - 220 LaVELLE ROAD
6. RS\_HYD\_06 - 2150 US HIGHWAY 54 SOUTH
7. RS\_HYD\_07 - 2518 PUERTO RICO AVENUE
8. RS\_FIL\_01 - 800 EAST FIRST STREET

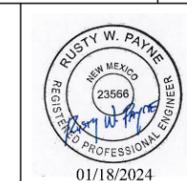


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**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT  
 RECLAIMED HYDRANT & PROJECT LOCATION MAP  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT**



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 201 N Church Street  
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 Checked By: SMITH      Approved By: COA  
 Scale: HORIZ. BAR SCALE  
 INCLUDE VERT SCALE ON P&P

Sheet No.: **G3.0**  
 Sheet 4 of 24  
 EN2306

**SUMMARY OF QUANTITIES:**

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY
1	MOBILIZATION; CIP	L.S.	1
2	FURNISH, PROVIDE, & MAINTAIN MUTCD PLAN; CIP	L.S.	1
3	SWPPP PLAN PREPARATION & MAINTENANCE; CIP	L.S.	1
4	CONSTRUCTION STAKING & SURVEYING BY THE CONTRACTOR (incl. POST CONSTRUCTION SURVEY); CIP	L.S.	1
5	VIBRATION MONITORING; CIP	L.S.	1
6	REMOVAL OF STRUCTURES & OBSTRUCTIONS; CIP	L.S.	1
7	8" PVC C-900 WATERLINE; CIP	LF	1,570
8	8" GATE VALVE w/ VALVE BOX; CIP	EA	9
9	6" PVC C-900 (DR-18) WATERLINE; CIP	L.F.	80
10	6" GATE VALVE w/ VALVE BOX; CIP	EA	3
11	FIRE HYDRANT ASSEMBLY; CIP	EA	3
12	3/4" WATER SERVICE LINE; CIP	EA	36
13	ABANDON EXISTING WATER VALVE; CIP	EA	6
14	CONNECT TO EXISTING WATERLINE; CIP	EA	6
15	ABANDON EXISTING FIRE HYDRANT; CIP	EA	3
16	ABANDON EXISTING WATER SERVICE; CIP	EA	36
17	REHABILITATE MANHOLE; CIP	EA	6
18	CONNECT TO EXISTING SANITARY SEWER LINE; CIP	EA	2
19	PIPE CLEANING & DEBRIS DISPOSAL; CIP	LF	1,370
20	PRE-REHABILITATION CCTV INSPECTION; CIP	LF	1,370
21	SEWER LINE PIPE BURSTING REHABILITATION; CIP	LF	1,370
22	SEWER LINE SERVICE REINSTATEMENT; CIP	EA	54
23	POST-REHABILITATION CCTV INSPECTION; CIP	LF	1,370
24	FLOWABLE FILL; CIP	CY	10
25	SUBGRADE PREPARATION; CIP	SY	2,060
26	8" BASE COURSE; CIP	SY	2,020
27	12" BASE COURSE; CIP	SY	40
28	PRIME COAT MATERIAL; CIP	SY	2,020
29	3" HMA SP-IV; CIP	SY	2,020
30	24" CURB & GUTTER (ALL TYPES); CIP	LF	70
31	4" THICK CONCRETE PAVEMENT; CIP	SY	150
32	9" THICK CONCRETE PAVEMENT; CIP	SY	40

**QUANTITY ASSUMPTIONS:**

**WATER SERVICE REPLACEMENT:**

1. A 5' BY 5' SIDEWALK SECTION TO BE REPLACED WITH METER CAN/SERVICE LINE INSTALLATION.
2. NO CURB & GUTTER MODIFICATIONS FOR NEW SERVICE LINE INSTALLATION.

**FIRE HYDRANT REPLACEMENT OR ABANDONMENT:**

1. A 8' BY 8' SIDEWALK SECTION TO BE REPLACED WITH FIRE HYDRANT INSTALLATION/ABANDONMENT.
2. A 10' CURB LENGTH TO BE REPLACED WITH FIRE HYDRANT INSTALLATION/ABANDONMENT.

**SEWER LINE SERVICE REINSTATEMENT:**

1. ALLEY ASPHALT REPLACEMENT (3" HMA OVER 8" BASE COURSE) ASSUMED AS 5' WIDTH BY 10' LENGTH EACH.
2. FLOWABLE FILL MAY BE UTILIZED AT THE CITY'S OPTION IF VOIDS ARE ENCOUNTERED DURING SERVICE LINE REINSTATEMENT.

**ROADWAY & UTILITY RELATED PAY ITEM NOTES**

- **MOBILIZATION:** INCLUDING GENERAL CONDITIONS ITEMS AND APPURTENANCES, AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **FURNISH, PROVIDE, & MAINTAIN MUTCD PLAN:** PROJECT WIDE TRAFFIC CONTROL PLAN, TRAFFIC CONTROL DEVICES, MANAGEMENT, IMPLEMENTATION, AND MODIFICATION FOR THE SAFE HANDLING OF PEDESTRIAN AND VEHICULAR TRAFFIC. PROVIDE TRAFFIC CONTROL SUPERVISOR (TCS) AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **SWPPP PLAN PREPARATION & MAINTENANCE:** THIS ITEM INCLUDES PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN, IMPLEMENTATION OF CONTROL MEASURES, MONITORING OF CONTROL MEASURES, AND MAINTENANCE OF FACILITIES AS REQUIRED THROUGHOUT THE PROJECT DURATION.
- **CONSTRUCTION STAKING & SURVEYING BY THE CONTRACTOR (INCLUDING POST CONSTRUCTION SURVEY):** INCLUDING ALL LAYOUT, SURVEYING, AND APPURTENANCES REQUIRED TO COMPLETE THE WORK AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **VIBRATION MONITORING:** INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE DEVELOPMENT OF A VIBRATION MONITORING PLAN, PLAN SUBMITTAL, AND VIBRATION MONITORING ACTIVITIES DURING CONSTRUCTION OF THE PROJECT AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **REMOVAL OF STRUCTURES AND OBSTRUCTIONS:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.  
  
**INCLUDING BUT NOT LIMITED TO:**  
 SAWCUTTING, REMOVAL, AND DISPOSAL OF SURFACING MATERIALS  
 SAWCUTTING, REMOVAL, AND DISPOSAL OF CONCRETE CURB AND WALKS  
 SAWCUTTING, REMOVAL, AND DISPOSAL OF PIPE (VARIOUS MATERIALS)  
 REMOVAL AND DISPOSAL OF EXISTING VALVES AND APPURTENANCES  
 REMOVAL AND DISPOSAL OF FIRE HYDRANTS AND APPURTENANCES  
 REMOVAL AND RESETTING OF SIGN POSTS
- **6" OR 8" PVC C-900 (DR-18) WATERLINE:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE INSTALLATION OF 6" OR 8" PVC C-900 (DR-18) WATERLINE (INCLUDING BUT NOT LIMITED TO EXCAVATION, FITTINGS, RESTRAINTS, DETECTABLE WARNING TAPE, TRACE WIRE, TRACE WIRE TEST STATIONS, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION) AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **6" OR 8" GATE VALVE w/ VALVE BOX:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE INSTALLATION OF 6" OR 8" GATE VALVES COMPLETE WITH VALVE BOX (INCLUDING BUT NOT LIMITED TO EXCAVATION, FITTINGS, RESTRAINTS, DETECTABLE WARNING TAPE, TRACE WIRE, TRACE WIRE TEST STATIONS, BACKFILL, COMPACTION, PRESSURE TESTING, CONCRETE COLLAR, COLLAR MARKINGS, AND DISINFECTION) AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **FIRE HYDRANT ASSEMBLY:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE INSTALLATION OF FIRE HYDRANT ASSEMBLY (INCLUDING BUT NOT LIMITED TO RESTRAINED JOINTS/THRUST BLOCK, GRAVEL DRAIN, CONNECTING PIPELINE, M.J. FITTINGS (DUCTILE IRON CLASS 250 OR HIGHER), CONCRETE COLLAR, COLLAR MARKINGS, WARNING TAPE, TRACE WIRE, TRACE WIRE TEST STATION, EXCAVATION, BACKFILL, COMPACTION, TESTING, AND DISINFECTION) AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **3/4" WATER SERVICE:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE INSTALLATION OF 3/4" WATER SERVICE (INCLUDING BUT NOT LIMITED TO REINSTALL EXISTING WATER METER UNLESS SCHEDULED FOR REPLACEMENT, NEW METER CAN, COPPER METER RESETTER (12-INCH RISER) WITH ANGLE DUAL CHECK BACKFLOW PREVENTER/DEVICE, CURB STOP, 1-INCH SERVICE LINE, SADDLE TAP, CORPORATION STOP, CUSTOMER SIDE SHUT-OFF BALL VALVE w/ VALVE BOX, FITTINGS, DETECTABLE WARNING TAPE, TRACE WIRE, EXCAVATION, BACKFILL, COMPACTION, TESTING, AND DISINFECTION) AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **ABANDON EXISTING WATER VALVE:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO ABANDON EXISTING VALVE (INCLUDING BUT NOT LIMITED TO ROAD SURFACING REMOVAL AND DISPOSAL, EXCAVATION, BACKFILL, COMPACTION, AND REMOVAL/DISPOSAL OF MATERIALS) AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY. THE VALVE FINAL POSITION (OPEN/CLOSED) SHALL BE AT THE CITY'S DISCRETION.
- **CONNECT TO EXISTING WATERLINE:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO CONNECT THE NEW WATER MAIN TO AN EXISTING WATER MAIN (INCLUDING BUT NOT LIMITED TO CUTTING OF EXISTING WATER MAIN, HANDLING OF DISCHARGE WATER, PIPING, COUPLINGS, ALL JOINING MATERIALS, RESTRAINTS, CAPS, BLOCKING, FITTINGS, EXCAVATION, BEDDING, DETECTABLE WARNING TAPE, TRACE WIRE, BACKFILL, COMPACTION, TESTING, DISINFECTION, AND APPURTENANCES TO COMPLETE CONNECTION) AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **ABANDON EXISTING FIRE HYDRANT:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO ABANDON EXISTING FIRE HYDRANT AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **ABANDON EXISTING WATER SERVICE:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO ABANDON EXISTING WATER SERVICE AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **REHABILITATE MANHOLE:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO REHABILITATE (COMPLETE REMOVAL AND INSTALLATION OF NEW MANHOLE, INCLUDING BUT NOT LIMITED TO EXCAVATION, SURFACING REMOVAL/DISPOSAL, REMOVAL/DISPOSAL OF EXISTING MANHOLE, SUBGRADE PREPARATION, NEW MANHOLE CONSTRUCTION, TRACE WIRE, TRACE WIRE TEST STATION, MANHOLE FRAME, MANHOLE COVER, CONCRETE COLLAR, ADJUSTMENT RINGS, COLLAR MARKINGS, BACKFILL, COMPACTION, AND TESTING) AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.

- **CONNECT TO EXISTING SANITARY SEWER LINE:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO CONNECT THE NEWLY REHABILITATED SANITARY SEWER MAIN TO AN EXISTING SANITARY SEWER MAIN AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **PIPE CLEANING & DEBRIS REMOVAL:** INCLUDING ALL MATERIALS, LABOR, AND EQUIPMENT TO CLEAN THE EXISTING SANITARY SEWER LINE AND REMOVAL/DISPOSAL OF ANY ACCUMULATED DEBRIS AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **PRE-REHABILITATION CCTV INSPECTION:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO COMPLETE THE CLOSED CIRCUIT TELEVISION INSPECTION OF THE EXISTING SANITARY SEWER LINE, AFTER CLEANING AND DEBRIS REMOVAL OPERATIONS, AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **SEWER LINE PIPE BURSTING REHABILITATION:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO COMPLETE THE SANITARY SEWER LINE REHABILITATION VIA PIPE BURSTING AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **SEWER LINE SERVICE REINSTATEMENT:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO REINSTATE EACH ACTIVE SANITARY SEWER SERVICE LINE TO THE NEWLY REHABILITATED SANITARY SEWER MAIN AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **FLOWABLE FILL:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT TO FILL VOIDS ENCOUNTERED DURING SERVICE LINE REINSTATEMENT, IF AUTHORIZED BY THE CITY.
- **POST-REHABILITATION CCTV INSPECTION:** INCLUDING ALL MATERIALS, LABOR, AND EQUIPMENT TO COMPLETE THE CLOSED CIRCUIT TELEVISION INSPECTION OF THE NEWLY INSTALLED SANITARY SEWER MAIN AND SERVICE PENETRATIONS AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **SUBGRADE PREPARATION:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE SCARIFICATION AND COMPACTION OF UNDERLYING MATERIALS AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **6" BASE COURSE:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE IMPORT, PLACEMENT, AND COMPACTION OF 6" THICK BASE COURSE AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **12" BASE COURSE:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE IMPORT, PLACEMENT, AND COMPACTION OF 12" THICK BASE COURSE AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **PRIME COAT MATERIAL:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT REQUIRED TO INSTALL PRIME COAT ATOP FINISHED BASE COURSE AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **3" HMA SP-IV:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE INSTALLATION OF 3" THICK HOT MIX ASPHALT (SP-IV) AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **24" CURB & GUTTER (ALL TYPES):** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE CONSTRUCTION OF ALL TYPES OF CURB AND GUTTER TO BE INSTALLED AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.
- **4" THICK CONCRETE PAVEMENT:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE INSTALLATION OF 4" THICK CONCRETE PAVEMENT AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY. (PROJECT QUANTITIES ARE ESTIMATED AS A 5' BY 5' SIDEWALK SECTION TO BE REMOVED AND REPLACED AT EACH WATER SERVICE LINE (METER CAN) AND SIDEWALK REMOVAL AND REPLACEMENT FOR FIRE HYDRANT INSTALLATION, REMOVAL, OR ABANDONMENT.)
- **9" THICK CONCRETE PAVEMENT:** INCLUDING ALL MATERIALS, LABOR, APPURTENANCES, AND EQUIPMENT FOR THE INSTALLATION OF 9" THICK CONCRETE PAVEMENT AS SPECIFIED AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, COMPLETE, IN PLACE AND ACCEPTED BY THE CITY.

REV. No.	DATE	DESCRIPTION	APPROVED

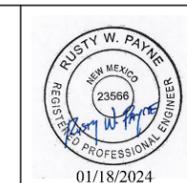
New Mexico One Call, Inc. Call 2 days before you dig!  
**NMOC** Dial 811 or 1-800-321-2537  
 Professional Resources for Damage Prevention



**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT**

**SUMMARY OF QUANTITIES**

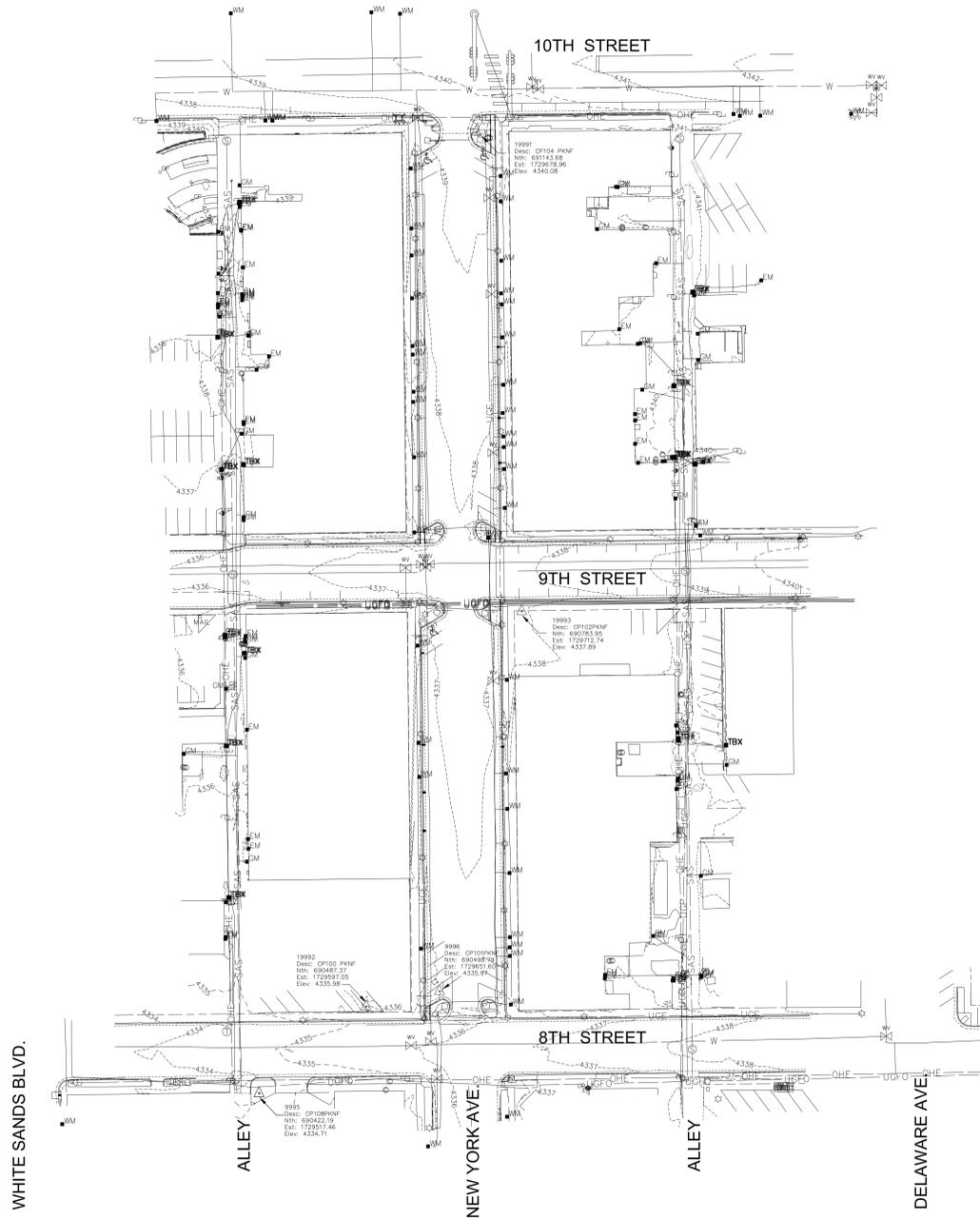
CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



Public Works Bid No.: 2024-003	Drawn By: SMITH	Designed By: SMITH
Checked By: SMITH	Approved By: COA	
Scale: HORIZ. BAR SCALE INCLUDE VERT SCALE ON P&P		

Sheet No.: Q1.0
Sheet 5 of 24
EN2306

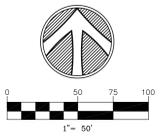
A TOPOGRAPHIC AND IMPROVEMENTS SURVEY EXHIBIT  
 WITHIN 8TH STREET, 9TH STREET, 10TH STREET,  
 NEW YORK AVENUE AND ALLEYS  
 LOCATED WITHIN THE PROJECTED SECTION 19,  
 T.16S., R.10E., N.M.P.M. OF THE U.S.G.L.O. SURVEYS,  
 CITY OF ALAMOGORDO, OTERO COUNTY, NEW MEXICO  
 SCALE 1"=50'      JANUARY 31, 2023



NOTES:  
 1. HORIZONTAL CONTROL IS BASED ON NAD 83 DATUM, AND VERTICAL CONTROL IS BASED ON NAVD88. BENCHMARK COORDINATES ARE IN GRID, AND ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE. CITY OF ALAMOGORDO BENCHMARK COA20201.

COORDINATES ARE:  
 ALUMINUM CAP FOUND COA20201  
 NORTHINGNTH: 690590.40  
 EASTING: 1734277.87  
 ELEVATION: 4391.01

- 2. THIS IS NOT A BOUNDARY SURVEY.
- 3. ONLY EXISTING MONUMENTS FOUND AT THE TIME OF THE SURVEY ARE SHOWN, UNLESS OTHERWISE NOTED.
- 4. THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPLIED AT A SCALE 1"=50' WITH A CONTOUR INTERVAL OF 1 FOOT.
- 6. THIS PLAT IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT.
- 7. ONLY VISUAL UTILITIES FOUND AT THE TIME OF SURVEY ARE SHOWN AND ARE BASED ON ONECALL TICKET NO. 23JA040431, 23JA040436, 23JA040442 AND 23JA040446.



**SURVEYOR'S CERTIFICATION**  
 I, R. GERARDO IBARRA, A NEW MEXICO PROFESSIONAL SURVEYOR  
 CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS  
 SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE  
 BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY  
 AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN  
 NEW MEXICO.

*R. Gerardo Ibarra*  
 R. GERARDO IBARRA, P.S. #23259      DATE 1/31/2023

PRECISION SURVEYORS NM  
 1400 KING ST. N.E.  
 ALBUQUERQUE, NM 87102  
 (505) 680-0071

T2023-01

**CONTRACTOR NOTE:**  
METER CAN SHALL NOT BE INSTALLED IN ACCESSIBLE (ADA) RAMP PLAN, SLOPE OR LANDINGS.  
IN SOME CASES THE EXISTING WATER METER IS SURROUNDED BY CONCRETE. ANY DAMAGE BY THE CONTRACTOR TO THE ADJACENT CONCRETE SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.  
CONTRACTOR SHALL INSCRIBE A "W" ON TOP OF CONCRETE CURB (IN-LINE W/ NEW WATER SERVICE) TO INDICATE THE LOCATION OF THE NEW WATER SERVICE LINE. CONTRACTOR TO RE-INSCRIBE "W" INTO NEW CONCRETE IF EXISTING CONCRETE IS REMOVED AND RECAST.  
THE WATER SERVICE LINE MAY BE PUNCHED UNDERNEATH THE EXISTING CURBS AND GUTTER AS LONG AS THE RESULTING HOLE IS LESS THAN 6-INCHES IN THE HORIZONTAL DIRECTION.  
METER CAN SHALL BE INSTALLED IN SIDEWALKS OR LANDSCAPE AREA (BETWEEN SIDEWALK AND BACK OF CURB) WITHIN RIGHT OF WAY. METER CANS SHALL NOT BE INSTALLED IN DRIVEWAYS OR VEHICULAR TRAFFIC FLOWS UNLESS LOCATION(S) AND METER CAN TYPE(S) HAVE BEEN PRE-APPROVED IN WRITING BY THE PUBLIC WORKS DEPARTMENT AND THE ENGINEERING DEPARTMENT PRIOR TO INSTALLATION.  
2" X 1/8" POLYMER (POLYETHYLENE) METER BOX W/ 20" LOCKABLE LID  
RE-INSTALL EXISTING METER  
NEW COPPER METER  
SETTER/RESSETTERS W/ DUAL CHECK VALVE  
SAWCUT, REMOVE AND REPLACE SIDEWALK TO ACCOMMODATE NEW METER CAN. MINIMUM SIDEWALK REMOVAL SHALL BE 5' LENGTHS.  
SAWCUT, REMOVE AND REPLACE CURB AND GUTTER TO ACCOMMODATE SERVICE LINE. MINIMUM CURB AND GUTTER REMOVAL SHALL BE 9' LENGTH. REMAINING CURB FROM CUT ADJACENT EXPANSION OR SCORE JOINT SHALL NOT BE LESS THAN 4'-FEET. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO SERVICE REPLACEMENT.  
PAVED ROAD  
CORPORATION STOP (BALL VALVE)  
METER TAIL (METER THREAD)  
PVC APPROXIMATELY 18" LONG  
200 PSI (SDR) POLYETHYLENE SERVICE LINE (1" MINIMUM SERVICE LINE), PROVIDE 12 GA. SOLID COPPER TRACE WIRE FOR NON-METAL PIPE. USE APWA COLOR CODE. TERMINATE INSIDE METER CAN BOX.  
NOTE: BEND IN TUBING TO PROVIDE FLEXIBILITY IN CASE OF EXPANSION, CONTRACTION OR SETTLEMENT.  
CONTRACTOR SHALL PROVIDE ALL FITTINGS AND APPURTENANCES TO CONNECT THE NEW SERVICE LINE TO THE EXISTING RESIDENCE SERVICE LINE.  
DISTANCE VARIES  
CONTRACTOR TO FIT FIELD CONDITIONS  
FIELD VERIFY SERVICE LINE LENGTHS  
CITY IS RESPONSIBLE TO WATER METER (TYPICAL)  
UTILITY DEPARTMENT MAINTENANCE  
OWNER MAINTAINED

**MAINTENANCE RESPONSIBILITY NOTE:**  
THE CITY OF ALAMOGORDO WATER DEPARTMENT WILL BE RESPONSIBLE FOR MAINTENANCE OF THE WATER LINE FROM THE WATER MAIN TO THE WATER METER. THE OWNER WILL BE RESPONSIBLE FOR MAINTENANCE OF THE WATER LINE FROM THE WATER METER TO THE BUILDING.

**NOTE:**  
1. THE CITY OF ALAMOGORDO RESERVES THE RIGHT TO CHANGE AND/OR MODIFY ANY ITEM(S) EITHER DETAILED OR SPECIFIED ON THIS DRAWING.  
2. WATER SERVICE DETAIL AND WATER SERVICE INSTALLATION MATERIAL LISTING ARE TYPICAL FOR 3/4" WATER SERVICE. ADJUSTMENTS SHALL BE MADE TO FITTINGS, CONNECTIONS, SERVICE LINE, ETC. SIZE AS REQUIRED FOR WATER SERVICES LARGER THAN 3/4".  
3. ALL FITTING, CONNECTIONS, SERVICE LINE, ETC. SHALL BE RATED FOR 200 P.S.I. (MINIMUM) WORKING PRESSURE.  
4. METER RISERS SHALL BE SET PLUMB AND VERTICAL WITHIN THE METER CAN.

**CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS**  
JUNE 14, 2022  
2022-28  
W-1  
SCALE: NOT TO SCALE

**TYPICAL WATER SERVICE INSTALLATION MATERIAL LISTING**

**COLD WATER METER:** WATER METERS SHALL BE M&L T. READING IN CUBIC FEET AND ACCEPTABLE FOR USE WITH ZENNER STEALTH READER MIU SYSTEM. NO SUBSTITUTIONS. REFER TO ARTICLE 02-026.1 WATER SUPPLY SYSTEM AND ACCEPTABLE FOR USE WITH ZENNER STEALTH READER MIU SYSTEM. 2-INCHES SHALL BE POSITIVE DISPLACEMENT (COMPOUND) METERS AND ACCEPTABLE FOR USE WITH ZENNER STEALTH READER MIU SYSTEM.

**SERVICE (TAPPING) SADDLE:** TAPPING SADDLES REQUIRE THE PRE-APPROVAL IN WRITING BY PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT PRIOR TO INSTALLATION. ACCEPTABLE SADDLES SHALL HAVE DOUBLE STRAPS STRAP SECURED BY FOUR BOLTS. SADDLES SHALL ALSO HAVE 1" P" THREADED OUTLET AND BE MADE OF THE FOLLOWING ACCEPTED MATERIALS:  
BODY - DUCTILE IRON BODY, CONFORMING TO ASTM A-536, WITH 10-12 MIL. FUSION EPOXY COATING OR NYLON COATED.  
STRAPS - TYPE 304 (18-8) HEAVY GRADE STAINLESS STEEL, CONFORMING TO ASTM A-240.  
NUTS & WASHERS - UNC ROLL THREAD TYPE 304 (18-8) STAINLESS STEEL BOLTS WITH HEAVY HEX NUTS. ROD FOR BOLTS, CONFORMING TO ASTM A-240, AND NUTS, CONFORMING TO ASTM A-240, ALL WELDED FULLY PASSEATED FOR ENHANCED CORROSION RESISTANCE. NUTS COATED TO PREVENT GALLING. INSTALLATION SHALL CONFORM TO MANUFACTURERS TORQUE SPECIFICATIONS.  
GASKET - NITRILE BUTADIENE RUBBER (NBR), ASTM D-2000 MHC-610 OR HD EPM O-RING.  
NOTE: SADDLE W/ SLENDER SINGLE STRAPS SECURED BY TWO BOLTS, CAST IRON BODY AND STEEL STRAPS ARE NOT ACCEPTABLE.

**CORPORATION STOP:** CORPORATION STOP SHALL BE BALL VALVE TYPE AND RATED FOR 150 P.S.I. (MINIMUM) WORKING PRESSURE. CORPORATION STOP SHALL HAVE A 1" P" THREADED INLET WITH A PACK JOINT CONNECTION FITTING OR MUELLER INSTA-TITE CONNECTION FOR 1" PVC SERVICE LINE.

**SERVICE LINE:** SERVICE LINE SHALL BE 1" BLUE SDR POLYETHYLENE, 200 PSI, CONFORMING TO ASTM D2737 AND SPECIFIED FOR POTABLE WATER.

**CURB STOP:** CURB STOP SHALL BE BALL VALVE TYPE AND RATED FOR 250 P.S.I. (MINIMUM) WORKING PRESSURE.

**COPPER METER RESSETTER:** COPPER METER RESSETTER (METER YOKER) SHALL BE HORIZONTAL STYLE, 3/8" X 3/4" (METER YOKER), BRASS/COPPER WITH LOCK WING STYLE ANGLE METER VALVE ON INLET AND TOP ENTRY VALVE ON OUTLET WITH BRASS SUPPORT BAR. THE CONNECTIONS FOR WATER METER SHALL BE BRASS SWIVEL NUT WITH WIRE SEAL HOLE AND METER SUPPORT INLET AND OUTLET THREADS SHALL BE METER THREAD. THE CONNECTION TO THE "1" SERVICE LINE SHALL BE MADE WITH AN ANNEALED 7032 G.A.E. GTS MAC-PAC JOINT/FIT CURB STOP AND A 3/4" X 3/4" BRASS METER BURNING. IF A THERMAL-COL BOX IS UTILIZED THE FOLLOWING MATERIALS SHALL BE USED VERSUS THE METER YOKER:  
- POLYETHYLENE TUBING  
- LOCK WING METER STOP (INLET 3/4")  
- DUAL CHECK VALVE (OUTLET 3/4")  
- 3/4" OUTSIDE METER THREADED ALLET  
- 3/4" OUTSIDE METER THREADED OUTLET

**METER BOXES:** SPECIFICATION IS BASED ON USE OF "DOW PLASTICS, INC." BY DOW PLASTICS, INC., 901 E INDUSTRIAL AVENUE, SAGINAW TX 76131; WITH ATTRIBUTES AS DESCRIBED BELOW. EQUAL PRODUCTS OF OTHER WATER METER CAN MANUFACTURERS MAY BE ACCEPTABLE WHEN PRE-APPROVED BY PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT. PRE-APPROVED EQUAL SUBSTITUTIONS UNDER ARTICLE 02-024. SHALL ONLY BE USED FOR CITY WATER METER INSTALLATIONS. THIS PRODUCT IS DESIGNED TO WITHSTAND LOADING IN NON-DEBRISATE AND INCIDENTAL TRAFFIC. NOT TO BE INSTALLED IN ROADWAYS, DRIVEWAYS, PARKING LOTS, OR ALLEYS. METER FIT LID SHALL BE BLACK AND CONSTRUCTED OUT OF MODIFIED POLYETHYLENE MATERIAL FOR MAXIMUM DURABILITY AND CORROSION RESISTANCE. THE BLACK MATERIAL IS FOR MAXIMUM UV PROTECTION. THE BLACK MATERIAL SHALL BE UNIFORM THROUGHOUT THE METER PIT LID FOR MAXIMUM LONGEVITY AND NOT HAVE A FOAMING AGENT THAT CREATES POCKETS WITHIN THE POLYMER LID.

**VERTICAL AND LATERAL LOAD RATING:**  
- COMPLIANT WITH AASHTO, DESIGN LOAD OF 14-10; ASTM C807-16, DESIGN LOAD OF A-8, 8,000 LBS. TRANSFERRED THROUGH A 10" X 10" STEEL PLATE CENTERED IN THE COVER AND BODY.  
- COMPLIANT WITH AASHTO, DESIGN LOAD OF H-20; ASTM C807-16, DESIGN LOAD OF A-16, 16,000 LBS. TRANSFERRED THROUGH A 10" X 20" STEEL PLATE CENTERED ON THE COVER AND BODY.  
- THIS PRODUCT IS DESIGNED TO WITHSTAND H-10 AND H-20 LOADING IN NON-DEBRISATE OR INCIDENTAL TRAFFIC AREAS.  
NOT INTENDED TO BE INSTALLED IN ROADWAYS.

**POLYMER LID:**  
- THE POLYMER LID SHALL HAVE A MOLDED KEY HOLE AND PLASTIC LOCK UNDERNEATH LID - AS ILLUSTRATED.  
- THE POLYMER LID SHALL HAVE ONE (1) MOLDED SLOPE MOUNT FOR PLACEMENT OF ARRIMM AGENT - AS ILLUSTRATED.  
- THE POLYMER LID SHALL SEAT SECURELY AND EVENLY INSIDE THE METER PIT AND SHALL NOT OVERLAP THE TOP EDGE OF THE METER PIT.  
- THE POLYMER LID SHALL HAVE MOLDED TREAD PATTERN FOR SKID RESISTANCE. TREAD DIMENSIONS SHALL BE 0.188" X 0.200" X 0.100" DEEP.  
- THE POLYMER LID SHALL HAVE "WATER METER" MOLDED INTO THE LID - FONT SHALL BE STD FADAL CMC FONT WITH 1" CHARACTERS X 5.100" DEEP.  
- THE POLYMER LID SHALL BE BLACK AND RECYCLED WITH A MINIMUM OF 50% POST CONSUMER RECYCLED AND 50% POST INDUSTRIAL/PRE CONSUMER RECYCLED CONTENT - VERIFIED WITH A LEED PRODUCT DOCUMENTATION.

**POLYMER BODY:**  
- THE POLYMER BODY SHALL BE BLACK AND HAVE A MINIMUM OF 3/8" WALL THICKNESS - AS ILLUSTRATED.  
- THE POLYMER BODY SHALL HAVE MINIMUM INSIDE WORKING ROOM OF 28".  
- THE POLYMER BODY SHALL HAVE ORIGIN RESISTANT RIBBING ALONG THE OUTSIDE OF THE BOX WITH 1-5/8" BASE FOOTING LOCATED AT THE BOTTOM OF THE METER PIT TO HELP PREVENT FLOATING DURING INSTALLATION.  
- THE POLYMER BODY SHALL HAVE A STRAIGHT WALL DESIGN AND NOT BE FLARED AS TO ALLOW FOR ADJUSTMENT TO GRADE AFTER INSTALLATION.  
- THE POLYMER BODY SHALL HAVE ONE PIPE SLOT MOLDED ON EACH END OF THE BODY THAT MEASURES 2" X 3-3/4".  
- THE POLYMER BODY SHALL HAVE A RECYCLED EMBLEM WITH A MINIMUM OF 30% POST INDUSTRIAL/PRE CONSUMER RECYCLED CONTENT - VERIFIED WITH A LEED PRODUCT DOCUMENTATION.

WHENEVER IN THE SPECIFICATIONS ANY PARTICULAR MATERIALS, PROCESS AND/OR EQUIPMENT IS INDICATED OR SPECIFIED BY PATENT, PROPRIETARY, OR BRAND NAME, OR BY NAME OF MANUFACTURER, THE CONTRACTOR SHALL BE OBLIGATED TO USE THE MATERIALS, PROCESS, AND/OR EQUIPMENT DESCRIBED. AND SHALL BE DEEMED TO BE FOLLOWING BY THE WORDS "OR EQUAL". THE LISTS OF ACCEPTABLE MATERIAL ARE NOT INTENDED TO BE COMPREHENSIVE LISTS, OR PLACEMENT SHALL OCCUR WITHIN 2% OF OPTIMUM MOISTURE CONTENT.

THE NOTED METER BOX SIZE IS FOR A TYPICAL FOR 3/4" AND 1" WATER SERVICES. METER BOXES FOR WATER SERVICES LARGER THAN 1 1/2" SHALL BE PRE-APPROVED IN WRITING BY THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT.

**CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS**  
JUNE 14, 2022  
2022-28  
W-2  
SCALE: NOT TO SCALE

**VALVE BOX DETAIL**

**CONCRETE COLLAR TABLE**

DIMENSION	PAVED	UNPAVED
A	2'-0"	4'-0"
B	1'-0"	2'-0"

**WATER VALVE NOTES:**  
1. VALVE EXTENSIONS ARE REQUIRED ON ANY VALVE NUT OVER 36-INCHES IN DEPTH. THE EXTENSION SHALL BE WITHIN 18-INCHES OF THE SURFACE.  
2. INTERSECTING WATER MAINS SHALL BE EQUIPPED WITH 3 OR 4 ISOLATION CONTROL VALVES.  
3. VALVE BOX SHALL BE CENTERED ABOUT OPERATING NUT AND BE PLACED TRUE AND VERTICAL.

**CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS**  
JUNE 14, 2022  
2022-28  
W-5  
SCALE: NOT TO SCALE

**ADJUST VALVE BOX DETAIL**

**CONCRETE COLLAR TABLE**

DIMENSION	PAVED	UNPAVED
A	2'-0"	4'-0"
B	1'-0"	2'-0"

**GENERAL NOTES:**  
1. SEE TECHNICAL SPECIFICATION FOR BACKFILL MATERIAL SPECIFICATIONS AND COMPACTION REQUIREMENTS.  
2. SEE CHAPTER 5, STREET STANDARDS FOR PAVEMENT, BASE COURSE COURSE AND SUB-GRADE PREP. REQUIREMENTS.  
3. SIDES OF CONCRETE COLLAR TOP SHALL BE PARALLEL AND PERPENDICULAR TO THE NORMAL STREET TRAFFIC FLOW.  
4. VALVE BOX SHALL BE CENTERED ABOUT OPERATING NUT AND BE PLACED TRUE AND VERTICAL.

**CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS**  
JUNE 14, 2022  
2022-28  
W-6  
SCALE: NOT TO SCALE

**Valve Box Concrete Collar Detail**

**CONCRETE COLLAR TABLE**

DIMENSION	PAVED	UNPAVED
A	2'-0"	4'-0"
B	1'-0"	2'-0"

**Valve Box Collar Marking Fire Hydrant Valve Detail**

**GENERAL NOTES:**  
1. SIDES OF CONCRETE COLLAR TOP SHALL BE PARALLEL AND PERPENDICULAR TO THE NORMAL STREET TRAFFIC FLOW.  
2. SCRIBE CONCRETE WITH LINE DIRECTIONAL ARROWS, PIPE SIZE AND PIPE TYPE. FIRE HYDRANT VALVES SHALL BE SCRIBED WITH "FH" FOR FIELD IDENTIFICATION.  
3. TEXT SIZE SHALL BE 4-INCHES TALL AND SCORED 3/8" DEEP IN A NEAT AND CONSISTENT MANNER, TYPICAL.

**CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS**  
JUNE 14, 2022  
2022-28  
W-7  
SCALE: NOT TO SCALE

**UTILITY TRENCH CROSS-SECTION DETAIL**

**TYPE II AGGREGATE BASE BACKFILL GRADATION AND REQUIREMENTS**

SEIVE SIZE	PERCENT OF DRY WEIGHT PASSING SEIVE
1-INCH	100
3/4-INCH	85 - 95
NO. 4	60 - 70
NO. 10	35 - 45
NO. 16	25 - 35
NO. 30	12 - 15
PLASTIC INDEX	12 MAXIMUM
LIQUID LIMITS	35 MAXIMUM
FRACTURED FACES	70% MINIMUM
TOTAL AVAILABLE WATER SOLUBLE SULFATES	3% MAXIMUM

**GENERAL NOTES:**  
1. SEE TECHNICAL STANDARDS FOR BACKFILL MATERIAL SPECIFICATIONS AND COMPACTION REQUIREMENTS.  
2. NATIVE SOIL MAY BE USED AS FINAL BACKFILL IF FREE OF ORGANIC MATTER/DEBRIS, MAXIMUM PARTICLE SIZE OF TWO-INCH (2"), LIQUID LIMIT OF <math>35</math>, AND PLASTICITY INDEX OF <math>15</math>. COMPACTION REQUIREMENTS FOR NATIVE MATERIAL SHALL REMAIN THE SAME AS IMPORTED MATERIALS AND PLACEMENT SHALL OCCUR WITHIN 2% OF OPTIMUM MOISTURE CONTENT.  
3. COMPACTION OF THE PIPE BEDDING MAY BE ACCOMPLISHED USING MECHANICAL TAMING DEVICES PRIOR TO PLACEMENT OF THE PIPE OR CONDUIT. MINIMUM EXCAVATION FOR PIPE BELLS MAY BE ACCOMPLISHED AS NECESSARY TO ALLOW PROPER ALIGNMENT AND ELEVATION OF THE PIPE OR CONDUIT.  
4. COMPACTION IN THE HAUNCH ZONE SHALL BE COMPLETED BY HAND WITH TAMPERS OR SUITABLE POWER COMPACTORS IN MAXIMUM LIFTS OF SIX-INCHES (6"). TAMPERS SHALL NOT CONTACT PIPE OR CONDUITS DURING THE TAMING PROCESS.  
5. THE CONTRACTOR SHALL NOT EMPLOY THE USE OF IMPACT TAMPERS DIRECTLY ABOVE THE PIPE OR CONDUIT UNTIL THE FULL LOOSE LAYER BACKFILL DEPTH ABOVE THE PIPE IS OBTAINED.  
6. TRENCHING AND EXCAVATION OPERATIONS SHALL CONFORM TO THE CURRENT FEDERAL, STATE, AND LOCAL SAFETY ORDINANCES, INCLUDING OSHA REGULATIONS.

**CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS**  
JUNE 14, 2022  
2022-28  
W-8  
SCALE: NOT TO SCALE

**FIRE HYDRANT DETAIL**

**GENERAL NOTES:**  
1. FIRE HYDRANT SHALL BE INSTALLED 6-FEET FROM BACK OF CURB TO CENTER OF HYDRANT OR AS SPECIFIED BY THE UTILITY DEPARTMENT AND/OR ENGINEERING DEPARTMENT.  
2. ALL FITTINGS FROM WATER MAIN LINE TO FIRE HYDRANT SHALL BE M.J. FITTINGS.  
3. USE OF RESTRAINED JOINTS IS MANDATORY. ALL FIRE HYDRANT LEG PIPING AND FITTINGS INCLUDING THE TEE AT THE MAIN SHALL BE RESTRAINED JOINT.  
4. GRIP RING PIPE RESTRAINT, OR PRE-APPROVED EQUAL, SHALL BE INSTALLED ON PIPE FROM HYDRANT VALVE TO HYDRANT BOOT WHEN VALVE IS LOCATED WITHIN THE 5-FEET MINIMUM SEPARATION. THIS INSTALLATION MUST BE PRE-APPROVED BY UTILITY DEPARTMENT AND/OR ENGINEERING DEPARTMENT.  
5. FIRE HYDRANT VALVE SHALL NOT BE LOCATED IN THE CURB OR THE GUTTER. CONSULT WITH UTILITY DEPARTMENT AND/OR ENGINEERING DEPARTMENT FOR APPROPRIATE LOCATION.

**CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS**  
JUNE 14, 2022  
2022-28  
W-9  
SCALE: NOT TO SCALE

**PIPE CONCRETE ENCASUREMENT DETAIL**

**GENERAL NOTES:**  
1. PROVIDE AT LOCATIONS WHERE WATERLINE CROSSES SANITARY SEWER LINE, STORM DRAIN LINE, AND/OR REUSE WATERLINE WITH A CLEARANCE LESS THAN 24-INCHES. ENCASE PIPE FOR A MINIMUM OF 10'-0" ON EACH SIDE OF THE CROSSING AND CROSSINGS TO BE ARRANGED SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SANITARY SEWER LINE, STORM DRAIN LINE, AND/OR REUSE WATERLINE JOINTS.  
2. WHERE 36-INCH MINIMUM COVER CANNOT BE MAINTAINED CONSULT WITH UTILITY DEPARTMENT AND/OR ENGINEERING DEPARTMENT ON LOWERING OF UTILITY.

**CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS**  
JUNE 14, 2022  
2022-28  
W-11  
SCALE: NOT TO SCALE

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NEW YORK AVENUE (8TH TO 10TH STREET)  
WATER AND SANITARY SEWER REPLACEMENT PROJECT  
UTILITY DETAILS  
CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT

RUSTY W. PAYNE REGISTERED PROFESSIONAL ENGINEER 23566  
01/18/2024

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Public Works Bid No.: 2024-003  
Drawn By: SMITH Designed By: SMITH  
Checked By: SMITH Approved By: COA  
Scale: HORIZ. BAR SCALE INCLUDE VERT SCALE ON P&P

Sheet No.: U1.0  
Sheet 7 of 24  
EN2306

**GENERAL NOTES:**

- DIMENSIONS ±1/8" U.N.O.
- LID MATERIAL: HDPE
- BODY MATERIAL: LLDPE
- WALL THICKNESS: 3/8" MINIMUM
- I.W.A. = INSIDE WORK AREA
- SNAP LOCK POCKET WILL RECEIVE AMIRAMI DEVICE ENDPOINT. SNAP LOCK SLOT IS 1.80" ±.015" TO ALLOW FOR A FINGER FORCE INSTALL. POCKET HEIGHT IS 15/16" FOR A MINIMUM 1/8" AIR GAP.

SCALE: NOT TO SCALE

CITY OF ALAMOGORDO  
TECHNICAL STANDARD DRAWINGS  
JUNE 14, 2022  
2022-28  
WATER METER CAN DETAIL  
W-12

**GENERAL DESIGN RESTRAINT NOTES:**

- BASIS OF DESIGN: EBAA IRON RESTRAINT LENGTH CALCULATOR
- PIPE MATERIAL: PVC
- SOIL TYPE: ML (ALSO ACCEPTABLE FOR GP, GM, SP, AND CL)
- TRENCH TYPE: 4
- TEST PRESSURE: 150 psi
- FACTOR OF SAFETY: 1.5 TO 1
- DEPTH OF BURY: 3 FEET
- ALL JOINTS WITHIN LENGTH "LGTH" ARE TO BE RESTRAINED.
- POLYETHYLENE WRAPPED DUCTILE IRON WILL REQUIRE SEPARATE CALCULATIONS.
- PIPE SIZES LARGER THAN 12" DIAMETER WILL REQUIRE A SEPARATE DESIGN.

SCALE: NOT TO SCALE

CITY OF ALAMOGORDO  
TECHNICAL STANDARD DRAWINGS  
JUNE 14, 2022  
2022-28  
RESTRAINED TEE DETAIL  
W-15

**GENERAL DESIGN RESTRAINT NOTES:**

- BASIS OF DESIGN: EBAA IRON RESTRAINT LENGTH CALCULATOR
- PIPE MATERIAL: PVC
- SOIL TYPE: ML (ALSO ACCEPTABLE FOR GP, GM, SP, AND CL)
- TRENCH TYPE: 4
- TEST PRESSURE: 150 psi
- FACTOR OF SAFETY: 1.5 TO 1
- DEPTH OF BURY: 3 FEET
- ALL JOINTS WITHIN LENGTH "LGTH" ARE TO BE RESTRAINED.
- POLYETHYLENE WRAPPED DUCTILE IRON WILL REQUIRE SEPARATE CALCULATIONS.
- PIPE SIZES LARGER THAN 12" DIAMETER WILL REQUIRE A SEPARATE DESIGN.

SCALE: NOT TO SCALE

CITY OF ALAMOGORDO  
TECHNICAL STANDARD DRAWINGS  
JUNE 14, 2022  
2022-28  
RESTRAINED DEAD END & REDUCER DETAILS  
W-16

**GENERAL DESIGN RESTRAINT NOTES:**

- BASIS OF DESIGN: EBAA IRON RESTRAINT LENGTH CALCULATOR
- PIPE MATERIAL: PVC
- SOIL TYPE: ML (ALSO ACCEPTABLE FOR GP, GM, SP, AND CL)
- TRENCH TYPE: 4
- TEST PRESSURE: 150 psi
- FACTOR OF SAFETY: 1.5 TO 1
- DEPTH OF BURY: 3 FEET
- ALL JOINTS WITHIN LENGTH "LGTH" ARE TO BE RESTRAINED.
- POLYETHYLENE WRAPPED DUCTILE IRON WILL REQUIRE SEPARATE CALCULATIONS.
- PIPE SIZES LARGER THAN 12" DIAMETER WILL REQUIRE A SEPARATE DESIGN.

SCALE: NOT TO SCALE

CITY OF ALAMOGORDO  
TECHNICAL STANDARD DRAWINGS  
JUNE 14, 2022  
2022-28  
RESTRAINED HORIZONTAL BEND DETAILS  
W-17

**GENERAL DESIGN RESTRAINT NOTES:**

- BASIS OF DESIGN: EBAA IRON RESTRAINT LENGTH CALCULATOR
- PIPE MATERIAL: PVC
- SOIL TYPE: ML (ALSO ACCEPTABLE FOR GP, GM, SP, AND CL)
- TRENCH TYPE: 4
- TEST PRESSURE: 150 psi
- FACTOR OF SAFETY: 1.5 TO 1
- DEPTH OF BURY: 3 FEET
- ALL JOINTS WITHIN LENGTH "LGTH" ARE TO BE RESTRAINED.
- POLYETHYLENE WRAPPED DUCTILE IRON WILL REQUIRE SEPARATE CALCULATIONS.
- PIPE SIZES LARGER THAN 12" DIAMETER WILL REQUIRE A SEPARATE DESIGN.

SCALE: NOT TO SCALE

CITY OF ALAMOGORDO  
TECHNICAL STANDARD DRAWINGS  
JUNE 14, 2022  
2022-28  
WATER LINE LOWERING DETAIL  
W-18

**CONTRACTOR NOTES:**

- TRACE WIRE ACCESS BOXES SHALL BE LOCATED AT ALL FIRE HYDRANT LOCATIONS.
- TRACE WIRE ACCESS BOXES SPACING SHALL NOT EXCEED 600 LINEAR FEET.
- COORDINATE WITH UTILITY DEPARTMENT AND/OR ENGINEERING DEPARTMENT FOR TRACE WIRE ACCESS BOXES FINAL LOCATION(S).

SCALE: NOT TO SCALE

CITY OF ALAMOGORDO  
TECHNICAL STANDARD DRAWINGS  
JUNE 14, 2022  
2022-28  
TRACE WIRE TERMINATION DETAIL  
W-19

**TYPICAL MINIMUM HORIZONTAL UTILITY SEPARATION**

	GAS MAIN	GAS SERVICE	SEWER MAIN	SEWER SERVICE	WATER MAIN	WATER SERVICE
GAS MAIN	5 FEET	5 FEET	10 FEET	5 FEET	10 FEET	5 FEET
GAS SERVICE	5 FEET	5 FEET	5 FEET	5 FEET	5 FEET	5 FEET
SEWER MAIN	10 FEET	5 FEET	5 FEET	10 FEET	5 FEET	5 FEET
SEWER SERVICE	5 FEET	5 FEET	5 FEET	5 FEET	5 FEET	5 FEET
WATER MAIN	10 FEET	5 FEET	10 FEET	5 FEET	5 FEET	5 FEET
WATER SERVICE	5 FEET	5 FEET	5 FEET	5 FEET	5 FEET	5 FEET
STORM SEWER	10 FEET	5 FEET	10 FEET	5 FEET	5 FEET	5 FEET
WIRE UTILITY	5 FEET	5 FEET	5 FEET	5 FEET	5 FEET	5 FEET
MANHOLE	10 FEET	5 FEET	N/A	N/A	10 FEET	5 FEET

**TYPICAL MINIMUM VERTICAL UTILITY SEPARATION**

	GAS MAIN	GAS SERVICE	SEWER MAIN	SEWER SERVICE	WATER MAIN	WATER SERVICE
GAS MAIN	NM/GCO	NM/GCO	NM/GCO	NM/GCO	NM/GCO	NM/GCO
GAS SERVICE	NM/GCO	NM/GCO	NM/GCO	NM/GCO	NM/GCO	NM/GCO
SEWER MAIN	12 INCHES	6 INCHES	12 INCHES	6 INCHES	24 INCHES	6 INCHES
SEWER SERVICE	6 INCHES	6 INCHES	6 INCHES	6 INCHES	6 INCHES	6 INCHES
WATER MAIN	12 INCHES	12 INCHES	24 INCHES	6 INCHES	12 INCHES	6 INCHES
WATER SERVICE	12 INCHES	12 INCHES	6 INCHES	6 INCHES	6 INCHES	6 INCHES
STORM SEWER	12 INCHES	6 INCHES	12 INCHES	6 INCHES	12 INCHES	6 INCHES
WIRE UTILITY	PNM/CITY	PNM/CITY	PNM/CITY	PNM/CITY	PNM/CITY	PNM/CITY

SCALE: NOT TO SCALE

CITY OF ALAMOGORDO  
TECHNICAL STANDARD DRAWINGS  
JUNE 14, 2022  
2022-28  
TYPICAL UTILITY SEPARATION  
W-24

**CONSTRUCTION NOTES:**

- TRACE WIRE #12 AWG COPPER CLAD STEEL, TAPED TO TOP OF PIPE; HDPE INSULATION APWA COLOR CODED FOR RESPECTIVE UTILITY
- TRACE WIRE #12 AWG COPPER CLAD STEEL - RED FACTORY CONNECTED TO GROUND ANODE
- SPRICE CONNECTION
- TRACE WIRE JUMPER
- LOCKING WATERPROOF CONNECTOR
- DRIVE-IN MAGNESIUM GROUNDING ANODE AT ALL TERMINATION/DEAD ENDS (INCLUDING EDGE OF RIGHT-OF-WAY AND CONNECTION POINTS/TERMINAL ENDS OF REHABbed SECTIONS); CONNECT TO MAIN LINE TRACE WIRE USING SPLICE CONNECTIONS

SCALE: NOT TO SCALE

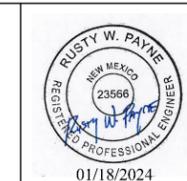
CITY OF ALAMOGORDO  
TECHNICAL STANDARD DRAWINGS  
JUNE 14, 2022  
2022-28  
WATERLINE OR RECLAIMED WATER TRACE WIRE DETAILS  
W-33

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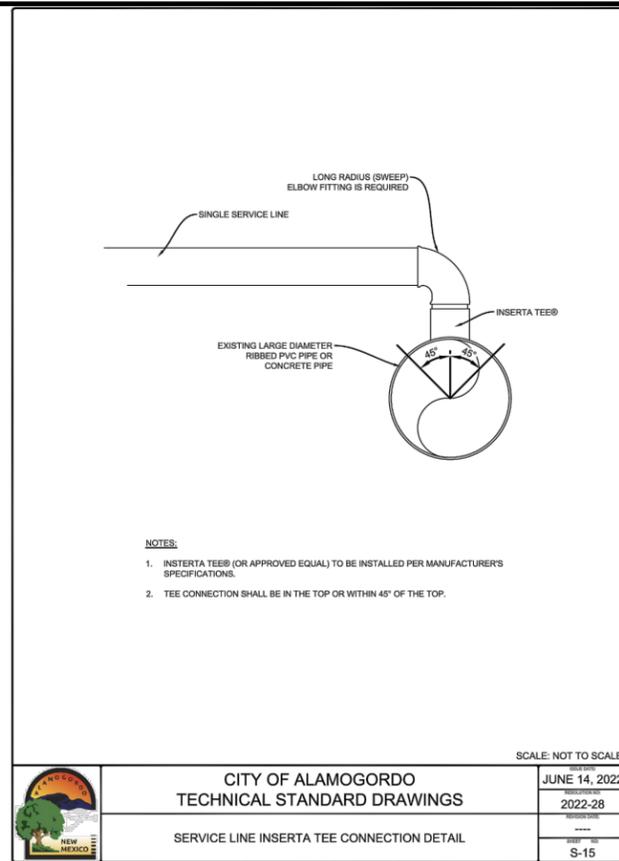
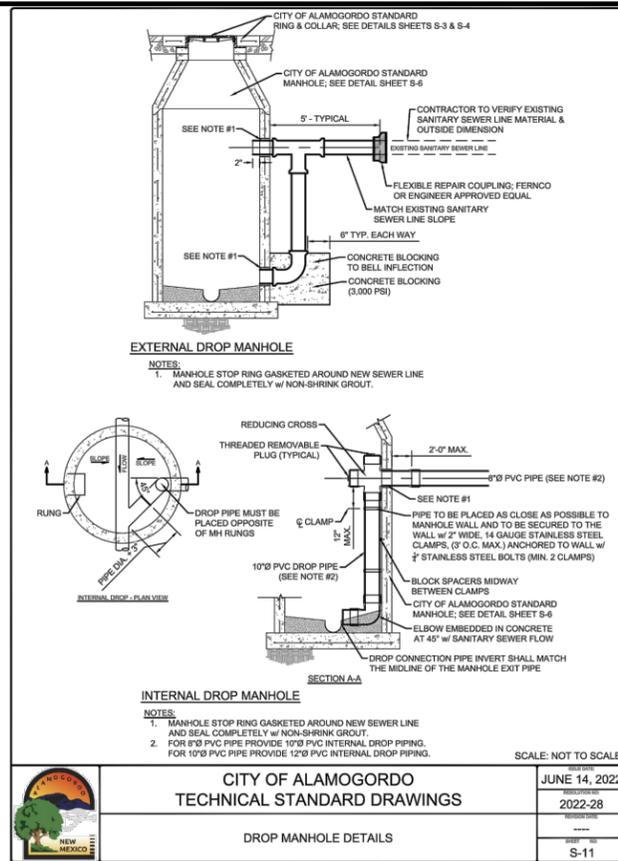
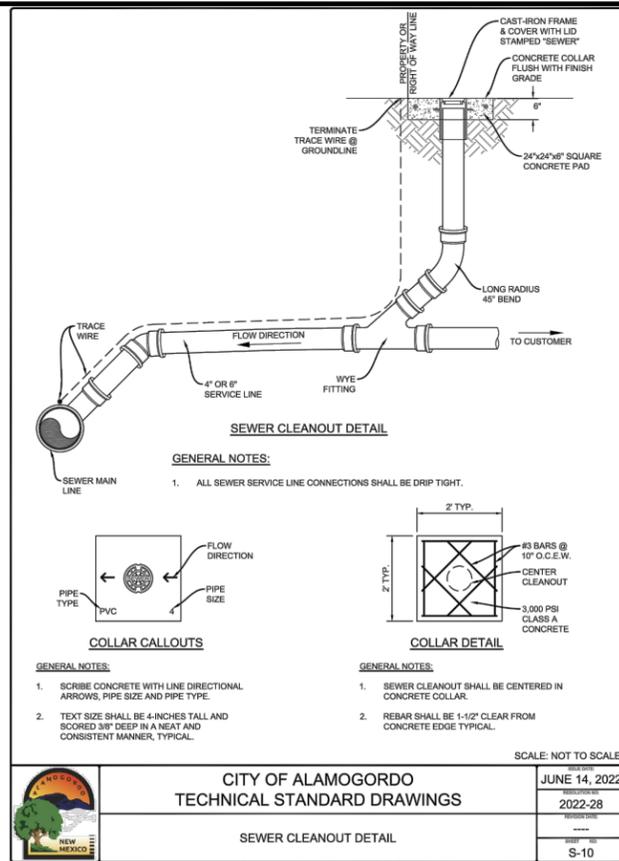
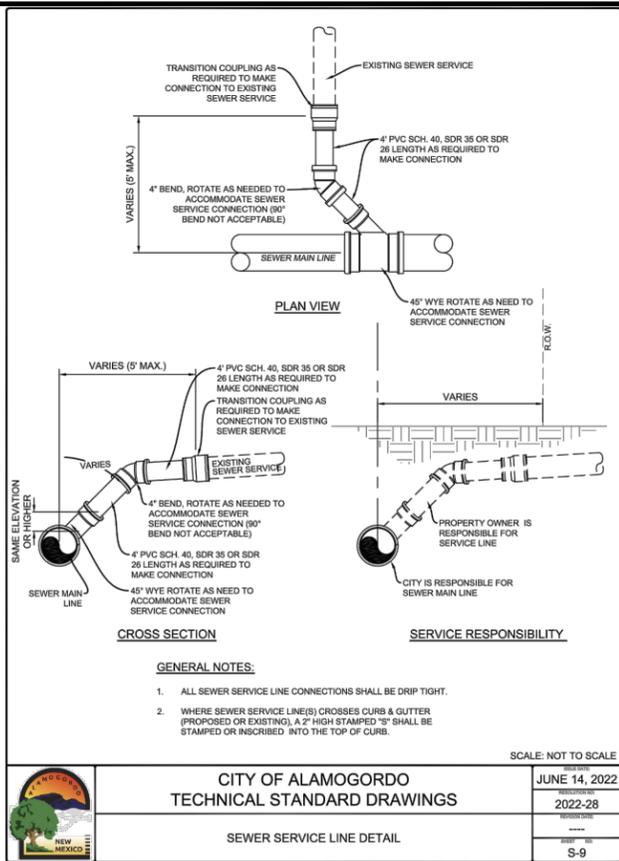
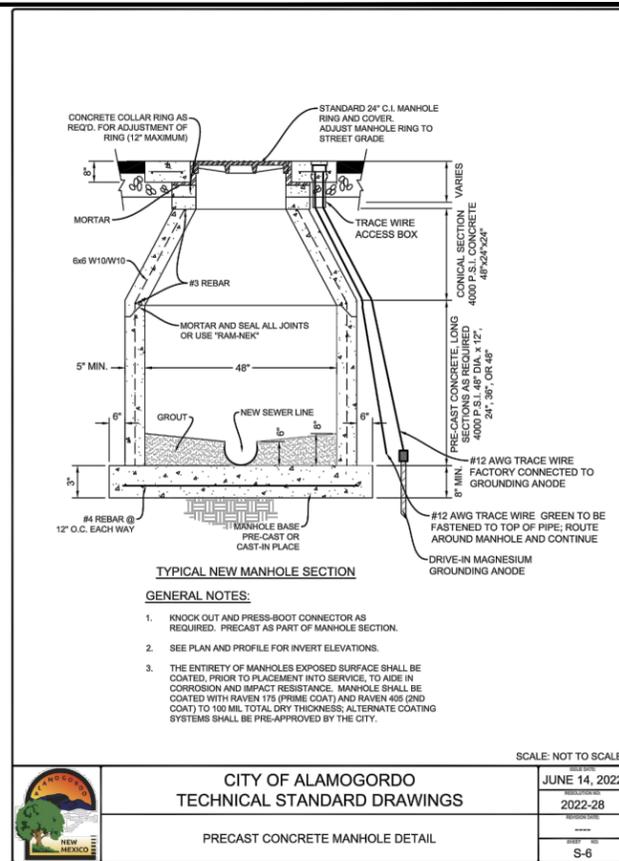
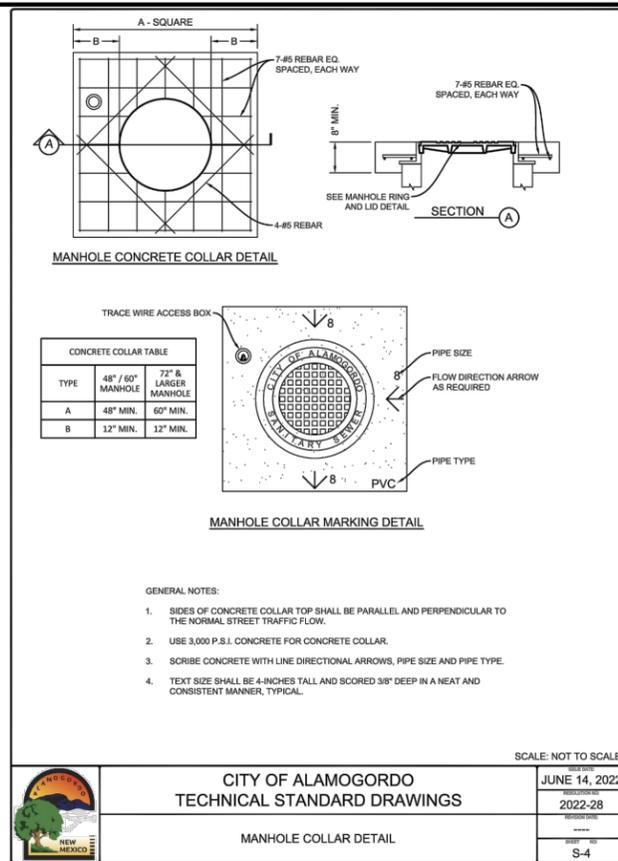
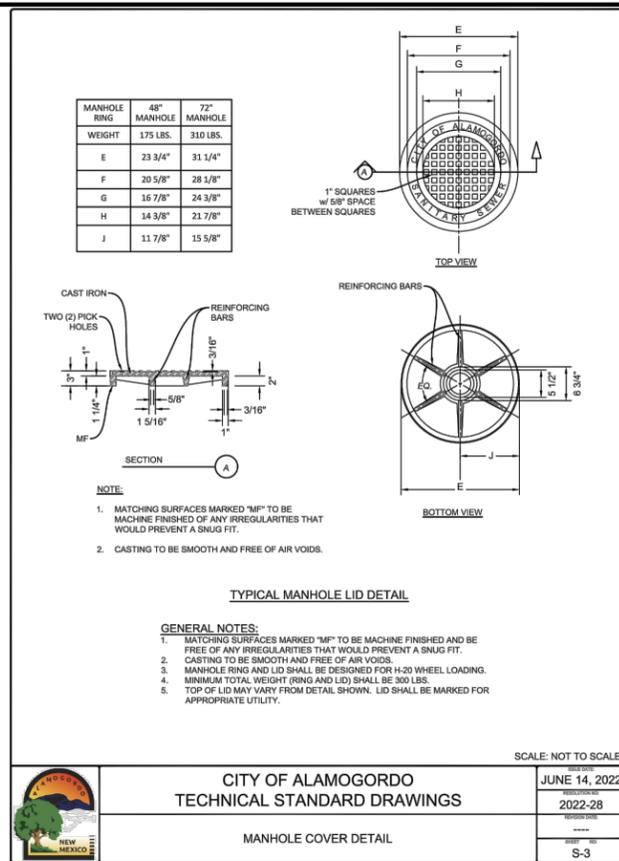
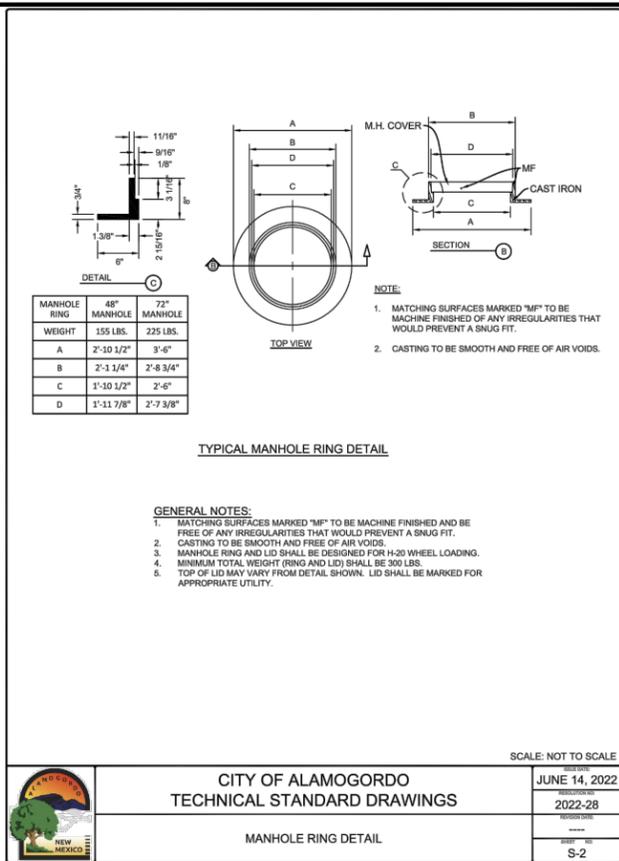
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 Professional Resources for Damage Prevention



NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT  
 UTILITY DETAILS  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



Public Works Bid No.: 2024-003  
 Drawn By: SMITH Designed By: SMITH  
 Checked By: SMITH Approved By: COA  
 Scale: HORIZ. BAR SCALE  
 INCLUDE VERT SCALE ON P&P

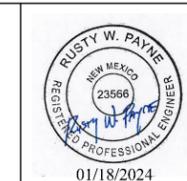


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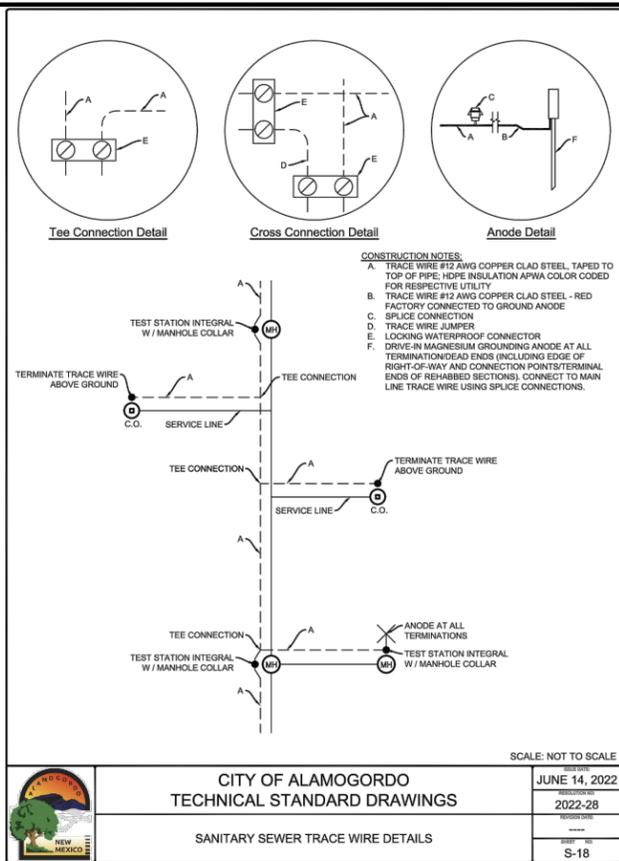


**NEW YORK AVENUE (8TH TO 10TH STREET)**  
**WATER AND SANITARY SEWER REPLACEMENT PROJECT**  
**UTILITY DETAILS**  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT

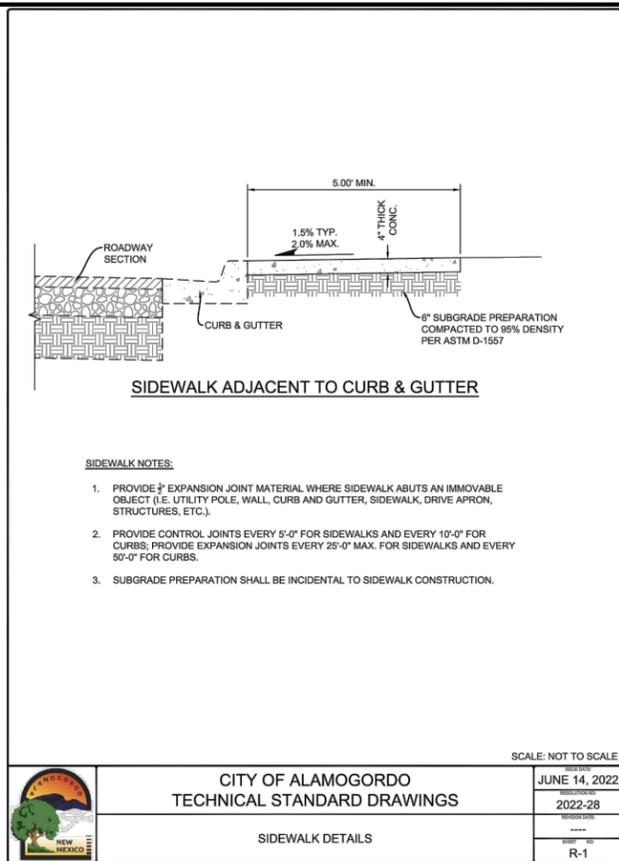


Public Works Bid No.: 2024-003  
 Drawn By: SMITH Designed By: SMITH  
 Checked By: SMITH Approved By: COA  
 Scale: HORIZ. BAR SCALE  
 INCLUDE VERT SCALE ON P&P

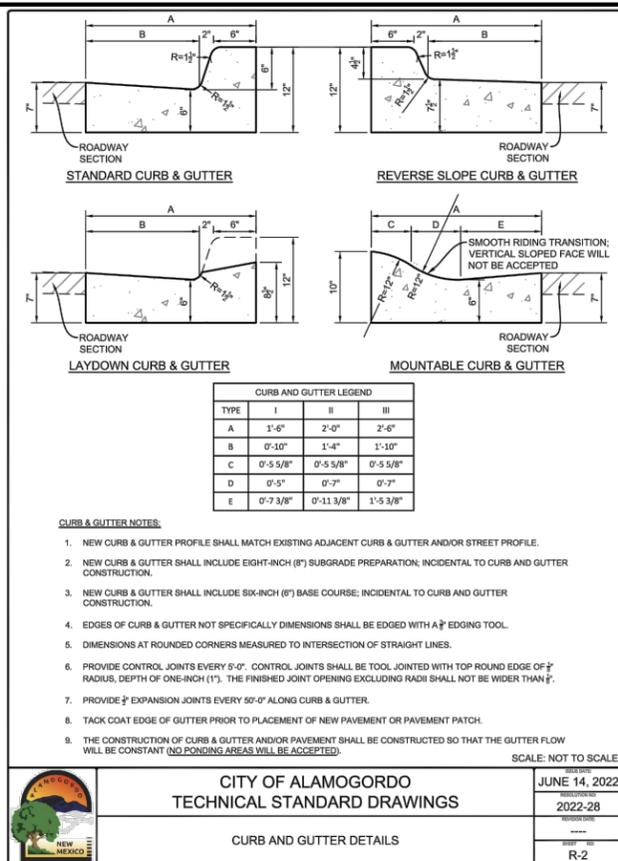
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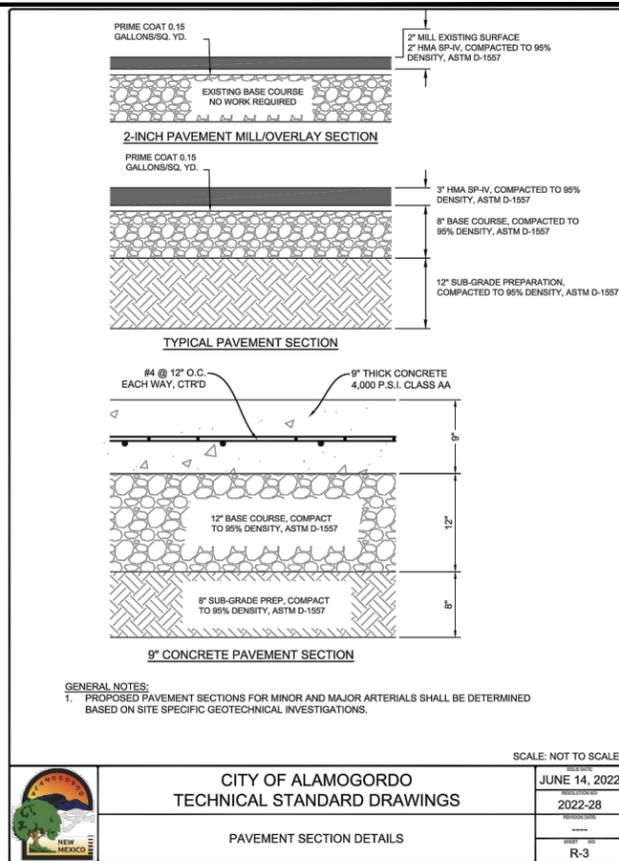
CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS  
 JUNE 14, 2022  
 2022-28  
 SANITARY SEWER TRACE WIRE DETAILS  
 S-18



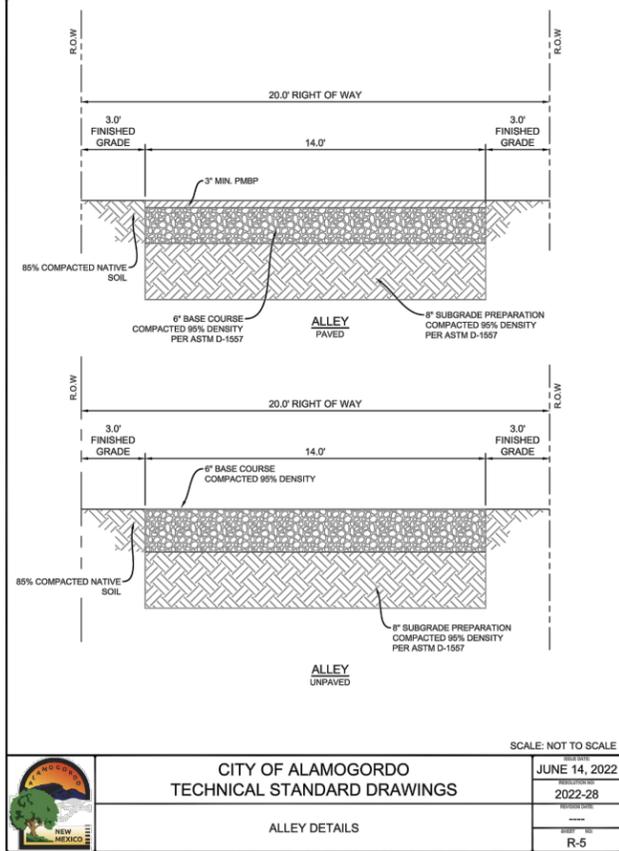
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 2022-28  
 SIDEWALK DETAILS  
 R-1



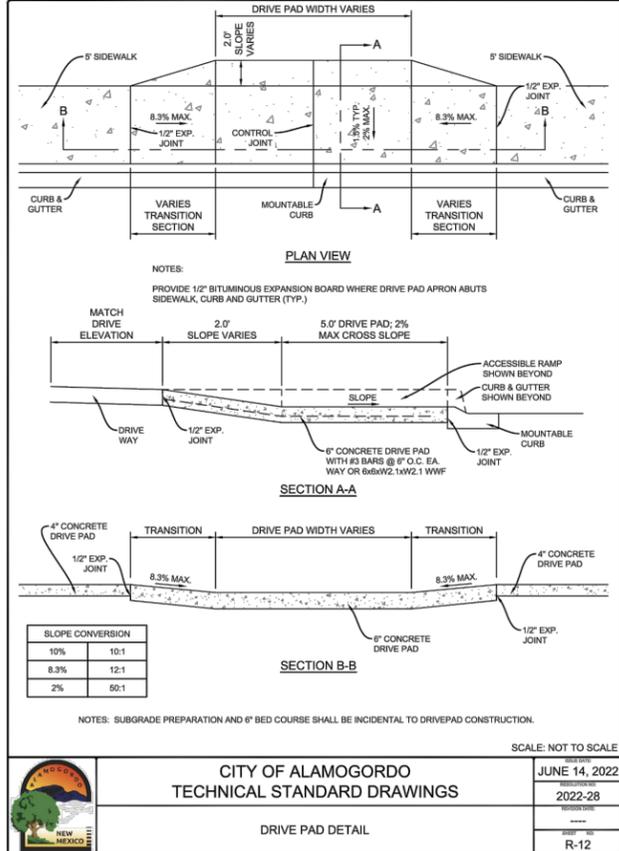
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 JUNE 14, 2022  
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 CURB AND GUTTER DETAILS  
 R-2



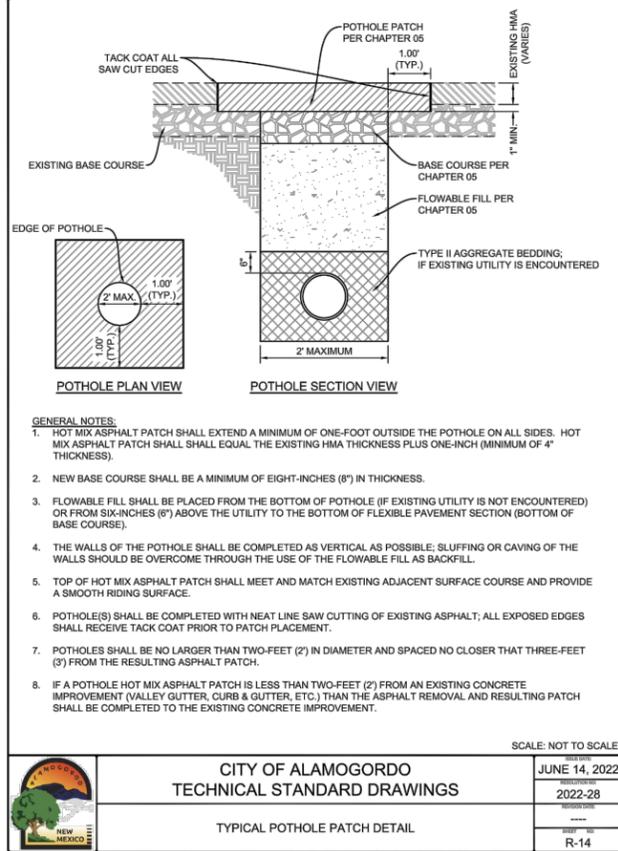
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 JUNE 14, 2022  
 2022-28  
 PAVEMENT SECTION DETAILS  
 R-3



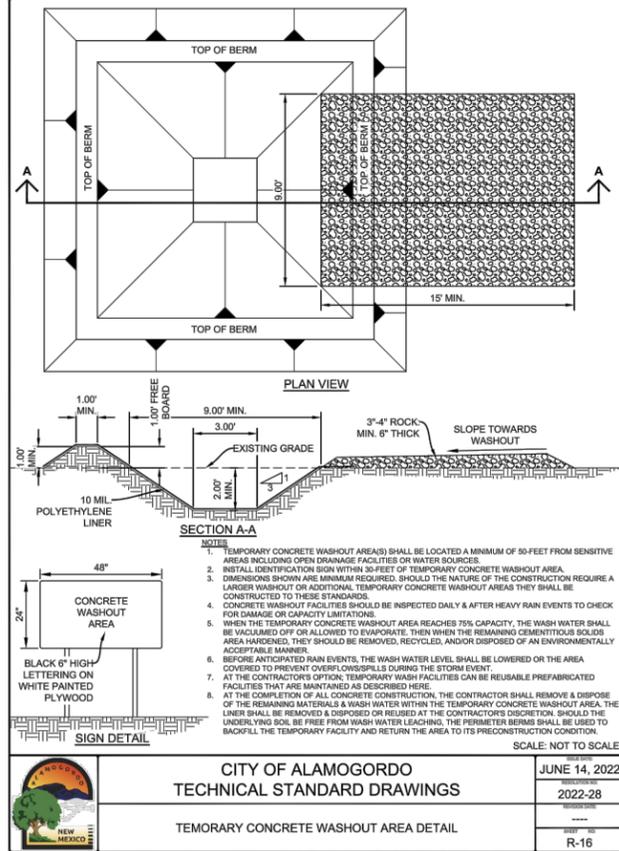
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 JUNE 14, 2022  
 2022-28  
 ALLEY DETAILS  
 R-5



CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS  
 JUNE 14, 2022  
 2022-28  
 DRIVE PAD DETAIL  
 R-12



CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS  
 JUNE 14, 2022  
 2022-28  
 TYPICAL POT HOLE PATCH DETAIL  
 R-14



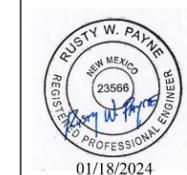
CITY OF ALAMOGORDO TECHNICAL STANDARD DRAWINGS  
 JUNE 14, 2022  
 2022-28  
 TEMPORARY CONCRETE WASHOUT AREA DETAIL  
 R-16

REV. No.	DATE	DESCRIPTION	APPROVED

New Mexico One Call, Inc. Call 2 days before you dig!  
**NMOC** Dial 811 or 1-800-321-2537  
 Professional Resources for Damage Prevention

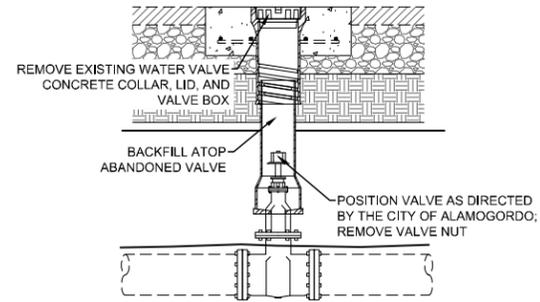


NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT  
 UTILITY DETAILS  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT

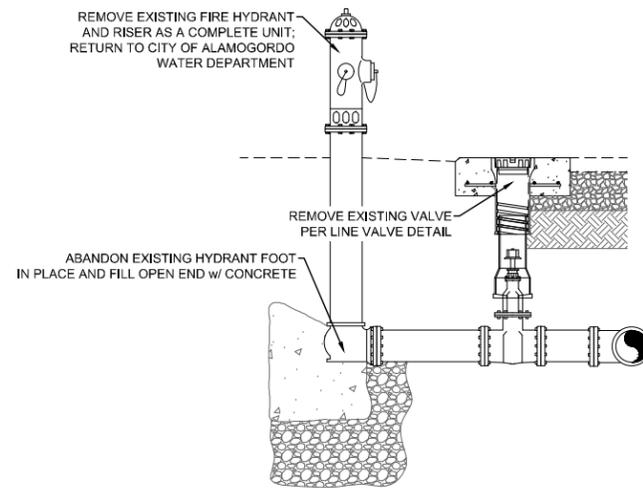


Public Works Bid No.: 2024-003  
 Drawn By: SMITH Designed By: SMITH  
 Checked By: SMITH Approved By: COA  
 Scale: HORIZ. BAR SCALE  
 INCLUDE VERT SCALE ON P&P

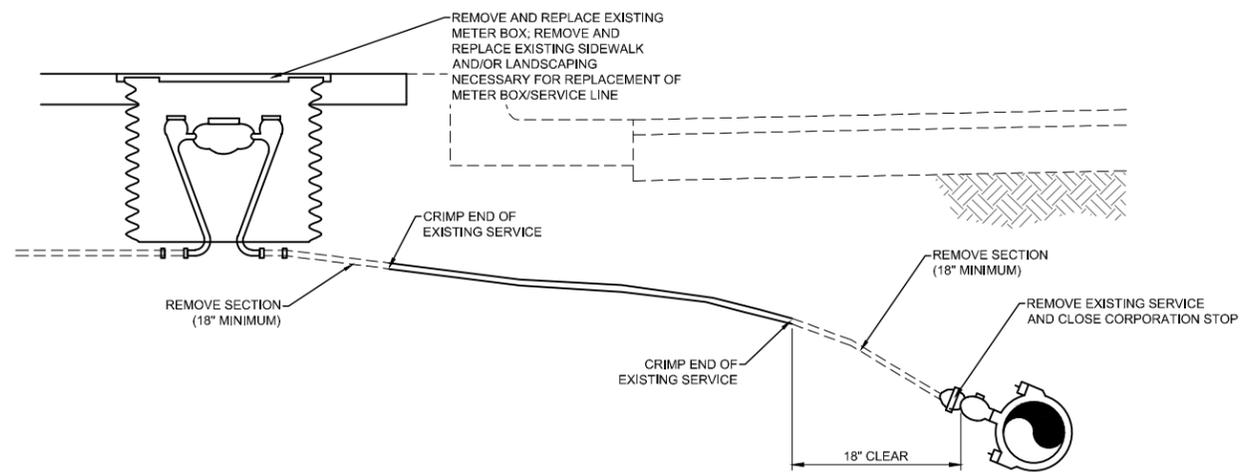
Sheet No.: U4.0  
 Sheet 10 of 24  
 EN2306



**ABANDON EXISTING LINE VALVE DETAIL**  
NOT TO SCALE



**ABANDON EXISTING FIRE HYDRANT DETAIL**  
NOT TO SCALE



**ABANDON EXISTING WATER SERVICE DETAIL**  
NOT TO SCALE

REV. No.	DATE	DESCRIPTION	APPROVED

New Mexico One Call, Inc. Call 2 days before you dig!  
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 Professional Resources for Damage Prevention



**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT**

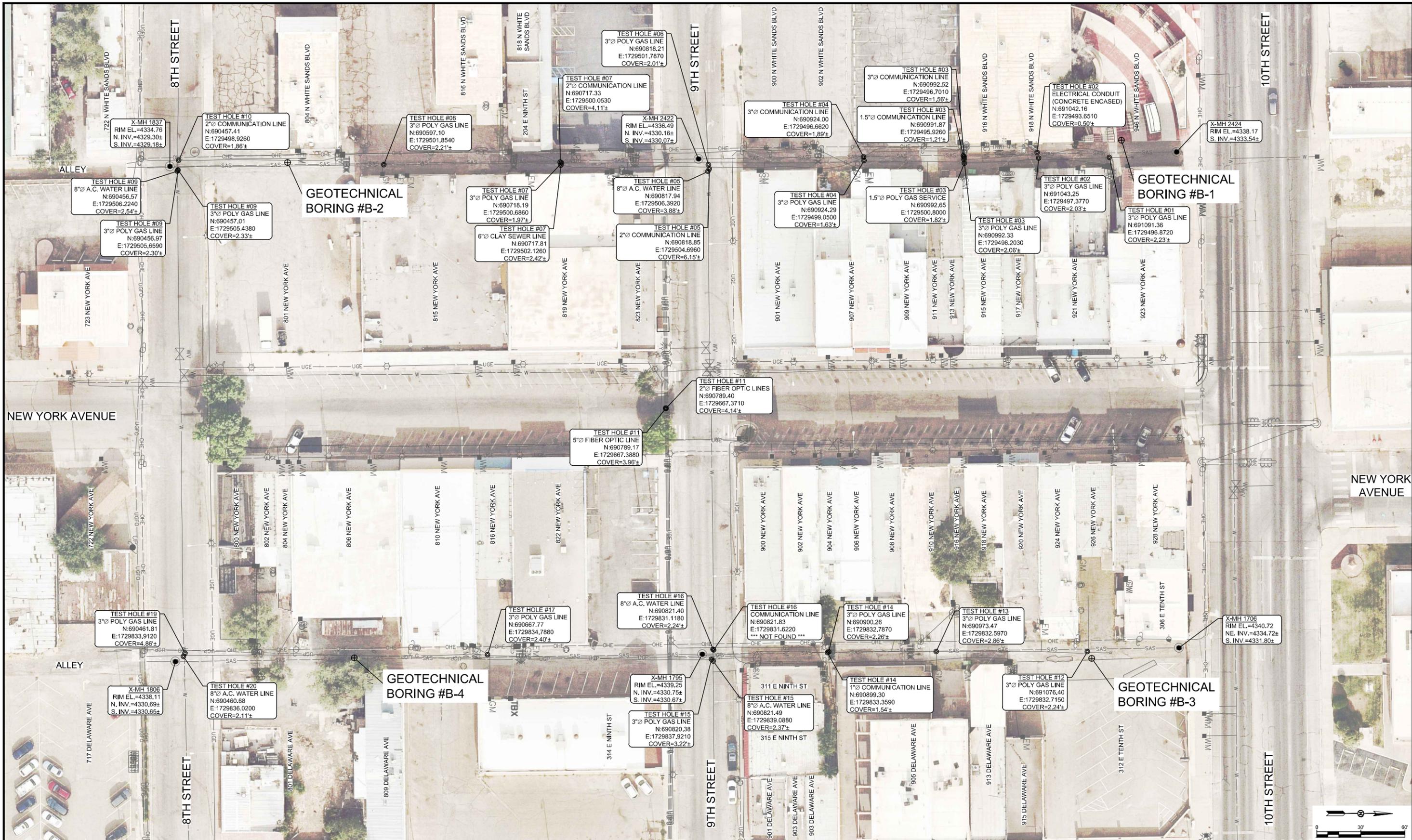
**UTILITY DETAILS**  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



Public Works Bid No.: 2024-003  
 Drawn By: SMITH    Designed By: SMITH  
 Checked By: SMITH    Approved By: COA

Scale: **HORIZ. BAR SCALE**  
 INCLUDE VERT SCALE ON P&P

Sheet No.: **U5.0**  
 Sheet 11 of 24  
 EN2306

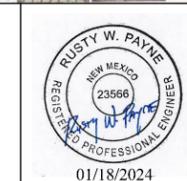


REV. No.	DATE	DESCRIPTION	APPROVED

New Mexico One Call, Inc. Call 2 days before you dig!  
**NMOC** Dial 811 or 1-800-321-2537  
 Professional Resources for Damage Prevention



**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT  
 UTILITY POTHOLE MAP  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT**



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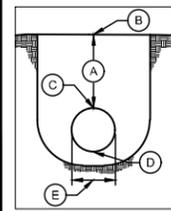
Public Works Bid No.: 2024-003  
 Drawn By: SMITH      Designed By: SMITH  
 Checked By: SMITH      Approved By: COA  
 Scale:      HORIZ. BAR SCALE  
                   INCLUDE VERT SCALE ON P&P

Sheet No.: **U6.0**  
 Sheet 12 of 24  
 EN2306

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 01
Project No. 822101-01 Utility Gas Line
Location West Alley North of 9th Street Weather Clear
Date March 2023

- A. Depth of Utility 2.23±
B. Reference Marker (RM) ADJACENT GROUND
Elevation at RM 4338.18
C. Elevation at Top of Utility 4335.95±
D. Elevation at Bottom Of Utility 4335.70±
E. Width / Dia. of Utility 3"
F. Material of Utility BLACK POLY PIPE
G. General Condition GOOD
H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT
Pavement Material REFER TO GEOTECHNICAL REPORT
I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING NORTH/SOUTH

UTILITY IMAGE



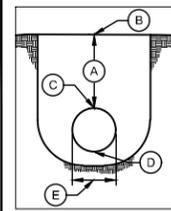
Remarks: None

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 02
Project No. 822101-01 Utility Gas Line & Electric Line
Location West Alley North of 9th Street Weather Clear
Date March 2023

- A. Depth of Utility 2.03±
B. Reference Marker (RM) ADJACENT GROUND
Elevation at RM 4337.88
C. Elevation at Top of Utility 4335.85±
D. Elevation at Bottom Of Utility 4335.60±
E. Width / Dia. of Utility 3"
F. Material of Utility BLACK POLY PIPE
G. General Condition GOOD
H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT
Pavement Material REFER TO GEOTECHNICAL REPORT
I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING NORTH/SOUTH

UTILITY IMAGE



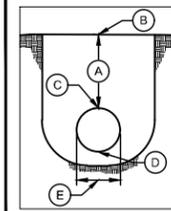
Remarks: Electric line is concrete encased just below alley asphalt surfacing. Concrete encasement is approximately 0.5' below finished alley surfacing.

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 03
Project No. 822101-01 Utility Gas Lines
Location West Alley North of 9th Street Weather Clear
Date March 2023

- A. Depth of Utility 2.06±
B. Reference Marker (RM) ADJACENT GROUND
Elevation at RM 4337.62
C. Elevation at Top of Utility 4335.56±
D. Elevation at Bottom Of Utility 4335.31±
E. Width / Dia. of Utility 3"
F. Material of Utility BLACK POLY PIPE
G. General Condition GOOD
H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT
Pavement Material REFER TO GEOTECHNICAL REPORT
I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING NORTH/SOUTH

UTILITY IMAGE



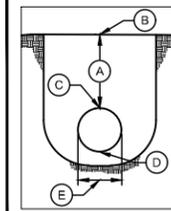
Remarks: 1.5"Ø gas service line approximately 1.82± of cover.

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 03
Project No. 822101-01 Utility Communication Lines
Location West Alley North of 9th Street Weather Clear
Date March 2023

- A. Depth of Utility 1.56±
B. Reference Marker (RM) ADJACENT GROUND
Elevation at RM 4337.62
C. Elevation at Top of Utility 4336.06±
D. Elevation at Bottom Of Utility 4335.81±
E. Width / Dia. of Utility 3"
F. Material of Utility BLACK PVC PIPE
G. General Condition GOOD
H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT
Pavement Material REFER TO GEOTECHNICAL REPORT
I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING NORTH/SOUTH

UTILITY IMAGE



Remarks: 1.5"Ø black PVC communication conduit; approximately 1.21± of cover. Note yellow marking tap on gas line on left edge of Photo #2 (gas line below).

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 04
Project No. 822101-01 Utility Gas Line & Communication Line
Location West Alley North of 9th Street Weather Clear
Date March 2023

- A. Depth of Utility 1.63±
B. Reference Marker (RM) ADJACENT GROUND
Elevation at RM 4337.14
C. Elevation at Top of Utility 4335.51±
D. Elevation at Bottom Of Utility 4335.26±
E. Width / Dia. of Utility 3"
F. Material of Utility BLACK POLY PIPE
G. General Condition GOOD
H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT
Pavement Material REFER TO GEOTECHNICAL REPORT
I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING NORTH/SOUTH

UTILITY IMAGE



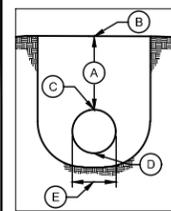
Remarks: 3"Ø black PVC communication conduit; approximately 1.89± of cover. Communication line located west of the gas line.

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 05
Project No. 822101-01 Utility Water Line & Communication Line
Location 9th Street/West Alley Intersection Weather Clear
Date March 2023

- A. Depth of Utility 3.88±
B. Reference Marker (RM) ADJACENT GROUND
Elevation at RM 4336.52
C. Elevation at Top of Utility 4332.66±
D. Elevation at Bottom Of Utility 4331.91±
E. Width / Dia. of Utility 8"
F. Material of Utility ASBESTOS CEMENT PIPE
G. General Condition GOOD
H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT
Pavement Material REFER TO GEOTECHNICAL REPORT
I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING EAST/WEST

UTILITY IMAGE



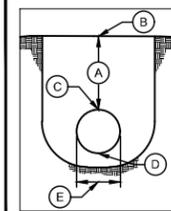
Remarks: 2"Ø communication conduit (orange).

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 06
Project No. 822101-01 Utility Gas Line
Location 9th Street/West Alley Intersection Weather Clear
Date March 2023

- A. Depth of Utility 2.01±
B. Reference Marker (RM) ADJACENT GROUND
Elevation at RM 4336.51
C. Elevation at Top of Utility 4334.50±
D. Elevation at Bottom Of Utility 4331.91±
E. Width / Dia. of Utility 3"
F. Material of Utility BLACK POLY PIPE
G. General Condition GOOD
H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT
Pavement Material REFER TO GEOTECHNICAL REPORT
I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING NORTH/SOUTH

UTILITY IMAGE



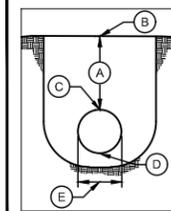
Remarks: None

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 07
Project No. 822101-01 Utility Gas Line/Sanitary Sewer/Comm. Line
Location West Alley South of 9th Street Weather Clear
Date March 2023

- A. Depth of Utility 1.97±
B. Reference Marker (RM) ADJACENT GROUND
Elevation at RM 4336.59
C. Elevation at Top of Utility 4334.62±
D. Elevation at Bottom Of Utility 4334.37±
E. Width / Dia. of Utility 3"
F. Material of Utility BLACK POLY PIPE
G. General Condition GOOD
H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT
Pavement Material REFER TO GEOTECHNICAL REPORT
I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING NORTH/SOUTH

UTILITY IMAGE



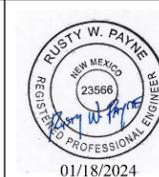
Remarks: 2"Ø communication line (orange) approximate cover - 4.11±. 6"Ø clay sanitary sewer service approximate cover - 2.42±.

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

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NEW YORK AVENUE (8TH TO 10TH STREET) WATER AND SANITARY SEWER REPLACEMENT PROJECT
UTILITY POT HOLE DATA SHEET
CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



Public Works Bid No.: 2024-003
Drawn By: SMITH Designed By: PLSNM
Checked By: SMITH Approved By: COA
Scale: HORIZ. BAR SCALE INCLUDE VERT SCALE ON P&P

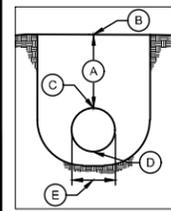
Sheet No.: U7.0
Sheet 13 of 24
EN2306

Table with columns: REV. No., DATE, DESCRIPTION, APPROVED

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 08  
 Project No. 822101-01 Utility Gas Line  
 Location West Alley South of 9th Street Weather Clear  
 Date March 2023

- A. Depth of Utility 2.21'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4335.51
- C. Elevation at Top of Utility 4333.30±
- D. Elevation at Bottom Of Utility 4335.05±
- E. Width / Dia. of Utility 3"
- F. Material of Utility BLACK POLY PIPE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



UTILITY IMAGE



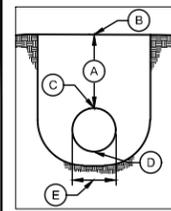
Remarks:  
None

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 09  
 Project No. 822101-01 Utility Water Line & Gas Line  
 Location 8th Street/West Alley Intersection Weather Clear  
 Date March 2023

- A. Depth of Utility 2.54'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4334.72
- C. Elevation at Top of Utility 4332.18±
- D. Elevation at Bottom Of Utility 4331.43±
- E. Width / Dia. of Utility 8"
- F. Material of Utility ASBESTOS CEMENT PIPE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



UTILITY IMAGE



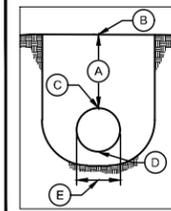
Remarks:  
(2)-3"Ø gas lines directly above the 8"Ø water line.

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 10  
 Project No. 822101-01 Utility Communication Line  
 Location 8th Street/West Alley Intersection Weather Clear  
 Date March 2023

- A. Depth of Utility 1.86'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4337.62
- C. Elevation at Top of Utility 4335.56±
- D. Elevation at Bottom Of Utility 4335.31±
- E. Width / Dia. of Utility 2"
- F. Material of Utility ORANGE CONDUIT
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



UTILITY IMAGE



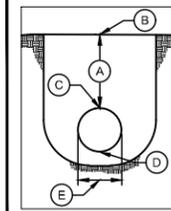
Remarks:  
None

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 11  
 Project No. 822101-01 Utility Fiber Optic Lines  
 Location 9th Street/New York Avenue (South Side) Weather Clear  
 Date March 2023

- A. Depth of Utility 3.96'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4337.65
- C. Elevation at Top of Utility 4333.69±
- D. Elevation at Bottom Of Utility 4333.27±
- E. Width / Dia. of Utility 5"
- F. Material of Utility GRAY CONDUIT
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



UTILITY IMAGE



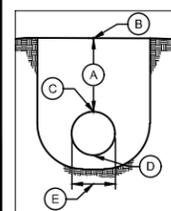
Remarks:  
2"Ø black fiber optic conduit; approximate cover 4.14'±.

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 12  
 Project No. 822101-01 Utility Gas Line  
 Location East Alley North of 9th Street Weather Clear  
 Date March 2023

- A. Depth of Utility 2.24'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4340.41
- C. Elevation at Top of Utility 4338.17±
- D. Elevation at Bottom Of Utility 4337.92±
- E. Width / Dia. of Utility 3"
- F. Material of Utility YELLOW POLY PIPE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



UTILITY IMAGE



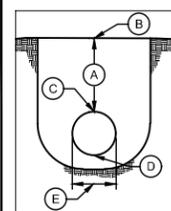
Remarks:  
None

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

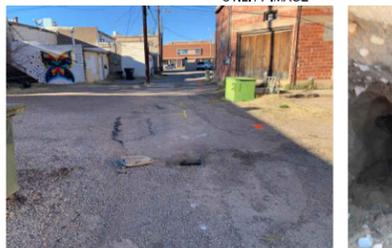
TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 13  
 Project No. 822101-01 Utility Water Line & Communication Line  
 Location East Alley North of 9th Street Weather Clear  
 Date March 2023

- A. Depth of Utility 2.86'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4340.01
- C. Elevation at Top of Utility 4337.15±
- D. Elevation at Bottom Of Utility 4336.90±
- E. Width / Dia. of Utility 3"
- F. Material of Utility YELLOW POLY PIPE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



UTILITY IMAGE



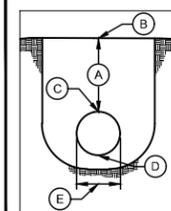
Remarks:  
None

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

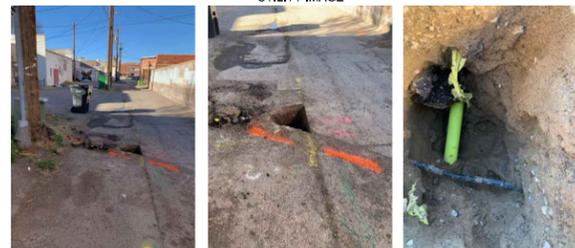
TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 14  
 Project No. 822101-01 Utility Gas Line & Communication Line  
 Location East Alley North of 9th Street Weather Clear  
 Date March 2023

- A. Depth of Utility 2.26'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4339.56
- C. Elevation at Top of Utility 4337.30±
- D. Elevation at Bottom Of Utility 4337.05±
- E. Width / Dia. of Utility 3"
- F. Material of Utility YELLOW POLY PIPE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



UTILITY IMAGE



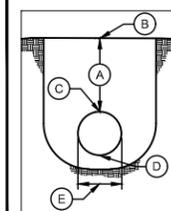
Remarks:  
1"Ø black communication cable; approximate cover 1.54'±.

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 15  
 Project No. 822101-01 Utility Water Line & Gas Line  
 Location 9th Street/East Alley Intersection Weather Clear  
 Date March 2023

- A. Depth of Utility 2.37'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4339.26
- C. Elevation at Top of Utility 4336.81±
- D. Elevation at Bottom Of Utility 4336.06±
- E. Width / Dia. of Utility 8"
- F. Material of Utility ASBESTOS CEMENT PIPE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



UTILITY IMAGE



Remarks:  
3"Ø black poly gas line; approximate cover 3.22'±.

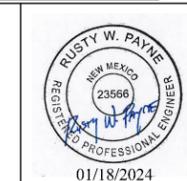
TECHNICIAN(S): PRECISION LAND SURVEYORS NM

REV. No.	DATE	DESCRIPTION	APPROVED

New Mexico One Call, Inc. Call 2 days before you dig!  
**NMOC** Dial 811 or 1-800-321-2537  
 Professional Resources for Damage Prevention



**NEW YORK AVENUE (8TH TO 10TH STREET)**  
**WATER AND SANITARY SEWER REPLACEMENT PROJECT**  
 UTILITY POT HOLE DATA SHEET  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



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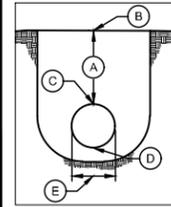
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 Drawn By: SMITH Designed By: PLSNM  
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 Scale: HORIZ. BAR SCALE  
INCLUDE VERT SCALE ON P&P

Sheet No.: **U8.0**  
 Sheet **14** of **24**  
 EN2306

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 16  
 Project No. 822101-01 Utility Water Line  
 Location 9th Street/East Alley Intersection Weather Clear  
 Date March 2023

- A. Depth of Utility 2.24'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4339.27
- C. Elevation at Top of Utility 4337.03±
- D. Elevation at Bottom Of Utility 4336.28±
- E. Width / Dia. of Utility 8"
- F. Material of Utility ASBESTOS CEMENT PIPE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING EAST/WEST

UTILITY IMAGE



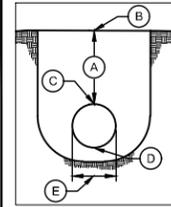
Remarks:  
Anticipated communication line in this location, but was not found.

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 17  
 Project No. 822101-01 Utility Gas Line  
 Location East Alley South of 9th Street Weather Clear  
 Date March 2023

- A. Depth of Utility 2.40'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4338.83
- C. Elevation at Top of Utility 4336.43±
- D. Elevation at Bottom Of Utility 4331.43±
- E. Width / Dia. of Utility 3"
- F. Material of Utility BLACK POLY PIPE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING NORTH/SOUTH

UTILITY IMAGE



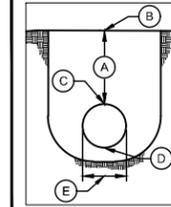
Remarks:  
None

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 19  
 Project No. 822101-01 Utility Gas Line  
 Location 8th Street/East Alley Intersection Weather Clear  
 Date March 2023

- A. Depth of Utility 4.86'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4337.98
- C. Elevation at Top of Utility 4333.12±
- D. Elevation at Bottom Of Utility 4332.87±
- E. Width / Dia. of Utility 3"
- F. Material of Utility POLY GAS LINE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING NORTH/SOUTH

UTILITY IMAGE



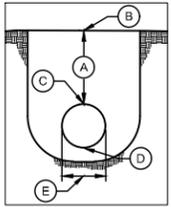
Remarks:  
None

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

TEST HOLE DATA SHEET

Project Name New York Ave Utility Replacement Test Hole No. 20  
 Project No. 822101-01 Utility Water Line  
 Location 8th Street/East Alley Intersection Weather Clear  
 Date March 2023

- A. Depth of Utility 2.11'±
- B. Reference Marker (RM) ADJACENT GROUND  
Elevation at RM 4338.09
- C. Elevation at Top of Utility 4335.98±
- D. Elevation at Bottom Of Utility 4335.23±
- E. Width / Dia. of Utility 8"
- F. Material of Utility ASBESTOS CEMENT PIPE
- G. General Condition GOOD
- H. Thickness of Pavement REFER TO GEOTECHNICAL REPORT  
Pavement Material REFER TO GEOTECHNICAL REPORT
- I. Description of Soil REFER TO GEOTECHNICAL REPORT



RUNNING EAST/WEST

UTILITY IMAGE



Remarks:  
None

TECHNICIAN(S): PRECISION LAND SURVEYORS NM

REV. No.	DATE	DESCRIPTION	APPROVED

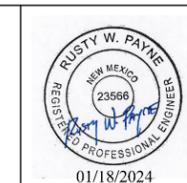
New Mexico One Call, Inc. Call 2 days before you dig!  
**NMOC** Dial 811 or 1-800-321-2537  
 Professional Resources for Damage Prevention



**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT**

**UTILITY POT HOLE DATA SHEET**

CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



**SMITH ENGINEERING**  
 Solutions for Today...  
 Vision for Tomorrow  
 201 N Church Street  
 Suite 200A  
 Las Cruces, NM 88001  
 Phone: 575-523-2395  
 www.smithengineering.pro

Public Works Bid No.: 2024-003  
 Drawn By: SMITH Designed By: PLSNM  
 Checked By: SMITH Approved By: COA

Scale: HORIZ. BAR SCALE  
INCLUDE VERT SCALE ON P&P

Sheet No.: **U9.0**

Sheet **15** of **24**

EN2306



DEPTH (ft)	LOGGED BY	DATE	LOCATION	LOGGED BY	DATE	LOCATION
0	D. Tarim	January 24, 2023	See Boring Location Plan	D. Tarim	January 24, 2023	See Boring Location Plan
0	CQC-CME 75		D. Tarim	CQC-CME 75		D. Tarim
0	Hollow Stem Auger Method		Hollow Stem Auger Method	Hollow Stem Auger Method		Hollow Stem Auger Method
0	Existing Ground Surface		Existing Ground Surface	Existing Ground Surface		Existing Ground Surface
0	4" Asphaltic material		4" Asphaltic material	4" Asphaltic material		4" Asphaltic material
0	6" Aggregate base coarse		6" Aggregate base coarse	6" Aggregate base coarse		6" Aggregate base coarse
0	Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, moist.		Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, moist.	Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, moist.		Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, moist.
0	Stiff PP=3.0tsf		Stiff PP=3.0tsf	Stiff PP=3.0tsf		Stiff PP=3.0tsf
0	Reddish brown...		Reddish brown...	Reddish brown...		Reddish brown...
0	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf
0	Lean Clay - Reddish yellow lean CLAY, few sand, medium plastic fines, damp.		Lean Clay - Reddish yellow lean CLAY, few sand, medium plastic fines, damp.	Lean Clay - Reddish yellow lean CLAY, few sand, medium plastic fines, damp.		Lean Clay - Reddish yellow lean CLAY, few sand, medium plastic fines, damp.
0	Very Stiff PP=3.0tsf		Very Stiff PP=3.0tsf	Very Stiff PP=3.0tsf		Very Stiff PP=3.0tsf
0	Fat Clay - Reddish yellow fat CLAY, few sand, high plastic fines, moist.		Fat Clay - Reddish yellow fat CLAY, few sand, high plastic fines, moist.	Fat Clay - Reddish yellow fat CLAY, few sand, high plastic fines, moist.		Fat Clay - Reddish yellow fat CLAY, few sand, high plastic fines, moist.
0	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf
0	Auger terminated at 15 feet. Sampler terminated at 16.5 feet.		Auger terminated at 15 feet. Sampler terminated at 16.5 feet.	Auger terminated at 15 feet. Sampler terminated at 16.5 feet.		Auger terminated at 15 feet. Sampler terminated at 16.5 feet.
0	NE - Not Encountered		NE - Not Encountered	NE - Not Encountered		NE - Not Encountered
0	PF - Pocket Penetrometer		PF - Pocket Penetrometer	PF - Pocket Penetrometer		PF - Pocket Penetrometer
0	tsf - tons per square foot		tsf - tons per square foot	tsf - tons per square foot		tsf - tons per square foot

DEPTH (ft)	LOGGED BY	DATE	LOCATION	LOGGED BY	DATE	LOCATION
0	D. Tarim	January 24, 2023	See Boring Location Plan	D. Tarim	January 24, 2023	See Boring Location Plan
0	CQC-CME 75		D. Tarim	CQC-CME 75		D. Tarim
0	Hollow Stem Auger Method		Hollow Stem Auger Method	Hollow Stem Auger Method		Hollow Stem Auger Method
0	Existing Ground Surface		Existing Ground Surface	Existing Ground Surface		Existing Ground Surface
0	4" Asphaltic material		4" Asphaltic material	4" Asphaltic material		4" Asphaltic material
0	6" Aggregate base coarse		6" Aggregate base coarse	6" Aggregate base coarse		6" Aggregate base coarse
0	Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, trace gravel, subangular, dry.		Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, trace gravel, subangular, dry.	Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, trace gravel, subangular, dry.		Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, trace gravel, subangular, dry.
0	Stiff PP=2.0tsf		Stiff PP=2.0tsf	Stiff PP=2.0tsf		Stiff PP=2.0tsf
0	Lean Clay with Sand - Dark brown lean CLAY, few sand, medium plastic fines, damp.		Lean Clay with Sand - Dark brown lean CLAY, few sand, medium plastic fines, damp.	Lean Clay with Sand - Dark brown lean CLAY, few sand, medium plastic fines, damp.		Lean Clay with Sand - Dark brown lean CLAY, few sand, medium plastic fines, damp.
0	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf
0	Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, moist.		Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, moist.	Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, moist.		Lean Clay - Dark reddish brown lean CLAY, few sand, medium plastic fines, moist.
0	Hard PP=4.5tsf		Hard PP=4.5tsf	Hard PP=4.5tsf		Hard PP=4.5tsf
0	Fat Clay - Reddish yellow fat CLAY, few sand, high plastic fines, moist.		Fat Clay - Reddish yellow fat CLAY, few sand, high plastic fines, moist.	Fat Clay - Reddish yellow fat CLAY, few sand, high plastic fines, moist.		Fat Clay - Reddish yellow fat CLAY, few sand, high plastic fines, moist.
0	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf
0	Auger terminated at 15 feet. Sampler terminated at 16.5 feet.		Auger terminated at 15 feet. Sampler terminated at 16.5 feet.	Auger terminated at 15 feet. Sampler terminated at 16.5 feet.		Auger terminated at 15 feet. Sampler terminated at 16.5 feet.
0	NE - Not Encountered		NE - Not Encountered	NE - Not Encountered		NE - Not Encountered
0	PF - Pocket Penetrometer		PF - Pocket Penetrometer	PF - Pocket Penetrometer		PF - Pocket Penetrometer
0	tsf - tons per square foot		tsf - tons per square foot	tsf - tons per square foot		tsf - tons per square foot

DEPTH (ft)	LOGGED BY	DATE	LOCATION	LOGGED BY	DATE	LOCATION
0	D. Tarim	January 24, 2023	See Boring Location Plan	D. Tarim	January 24, 2023	See Boring Location Plan
0	CQC-CME 75		D. Tarim	CQC-CME 75		D. Tarim
0	Hollow Stem Auger Method		Hollow Stem Auger Method	Hollow Stem Auger Method		Hollow Stem Auger Method
0	Existing Ground Surface		Existing Ground Surface	Existing Ground Surface		Existing Ground Surface
0	2" Asphaltic material		2" Asphaltic material	2" Asphaltic material		2" Asphaltic material
0	6" Aggregate base coarse		6" Aggregate base coarse	6" Aggregate base coarse		6" Aggregate base coarse
0	Lean Clay - Dark brown lean CLAY, few sand, medium plastic fines, moist.		Lean Clay - Dark brown lean CLAY, few sand, medium plastic fines, moist.	Lean Clay - Dark brown lean CLAY, few sand, medium plastic fines, moist.		Lean Clay - Dark brown lean CLAY, few sand, medium plastic fines, moist.
0	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf
0	Yellowish brown...		Yellowish brown...	Yellowish brown...		Yellowish brown...
0	Stiff PP=4.0tsf		Stiff PP=4.0tsf	Stiff PP=4.0tsf		Stiff PP=4.0tsf
0	Reddish brown...		Reddish brown...	Reddish brown...		Reddish brown...
0	Very Stiff PP=4.0tsf		Very Stiff PP=4.0tsf	Very Stiff PP=4.0tsf		Very Stiff PP=4.0tsf
0	Lean Clay - Reddish brown lean CLAY, few sand, medium plastic fines, damp.		Lean Clay - Reddish brown lean CLAY, few sand, medium plastic fines, damp.	Lean Clay - Reddish brown lean CLAY, few sand, medium plastic fines, damp.		Lean Clay - Reddish brown lean CLAY, few sand, medium plastic fines, damp.
0	Very Stiff PP=3.0tsf		Very Stiff PP=3.0tsf	Very Stiff PP=3.0tsf		Very Stiff PP=3.0tsf
0	Fat Clay - Reddish brown fat CLAY, few sand, high plastic fines, damp.		Fat Clay - Reddish brown fat CLAY, few sand, high plastic fines, damp.	Fat Clay - Reddish brown fat CLAY, few sand, high plastic fines, damp.		Fat Clay - Reddish brown fat CLAY, few sand, high plastic fines, damp.
0	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf	Very Stiff PP=4.5tsf		Very Stiff PP=4.5tsf
0	Gypsum encountered in sample.		Gypsum encountered in sample.	Gypsum encountered in sample.		Gypsum encountered in sample.
0	Auger terminated at 15 feet. Sampler terminated at 16.5 feet.		Auger terminated at 15 feet. Sampler terminated at 16.5 feet.	Auger terminated at 15 feet. Sampler terminated at 16.5 feet.		Auger terminated at 15 feet. Sampler terminated at 16.5 feet.
0	NE - Not Encountered		NE - Not Encountered	NE - Not Encountered		NE - Not Encountered
0	PF - Pocket Penetrometer		PF - Pocket Penetrometer	PF - Pocket Penetrometer		PF - Pocket Penetrometer
0	tsf - tons per square foot		tsf - tons per square foot	tsf - tons per square foot		tsf - tons per square foot

DEPTH (ft)	LOGGED BY	DATE	LOCATION	LOGGED BY	DATE	LOCATION
0	D. Tarim	January 24, 2023	See Boring Location Plan	D. Tarim	January 24, 2023	See Boring Location Plan
0	CQC-CME 75		D. Tarim	CQC-CME 75		D. Tarim
0	Hollow Stem Auger Method		Hollow Stem Auger Method	Hollow Stem Auger Method		Hollow Stem Auger Method
0	Existing Ground Surface		Existing Ground Surface	Existing Ground Surface		Existing Ground Surface
0	4" Asphaltic material		4" Asphaltic material	4" Asphaltic material		4" Asphaltic material
0	6" Aggregate base coarse		6" Aggregate base coarse	6" Aggregate base coarse		6" Aggregate base coarse
0	Clayey Sand - Dark brown medium to fine SAND, some clay, medium plastic fines, moist.		Clayey Sand - Dark brown medium to fine SAND, some clay, medium plastic fines, moist.	Clayey Sand - Dark brown medium to fine SAND, some clay, medium plastic fines, moist.		Clayey Sand - Dark brown medium to fine SAND, some clay, medium plastic fines, moist.
0	Medium Dense		Medium Dense	Medium Dense		Medium Dense
0	Sandy Lean Clay - Dark brown lean CLAY, some sand, medium plastic fines, damp.		Sandy Lean Clay - Dark brown lean CLAY, some sand, medium plastic fines, damp.	Sandy Lean Clay - Dark brown lean CLAY, some sand, medium plastic fines, damp.		Sandy Lean Clay - Dark brown lean CLAY, some sand, medium plastic fines, damp.
0	Potential void observed. Cuttings did not come up from auger.		Potential void observed. Cuttings did not come up from auger.	Potential void observed. Cuttings did not come up from auger.		Potential void observed. Cuttings did not come up from auger.
0	Stiff PP=2.5tsf		Stiff PP=2.5tsf	Stiff PP=2.5tsf		Stiff PP=2.5tsf
0	Firm		Firm	Firm		Firm
0	Soft PP=2.5tsf		Soft PP=2.5tsf	Soft PP=2.5tsf		Soft PP=2.5tsf
0	Soft PP=2.0tsf		Soft PP=2.0tsf	Soft PP=2.0tsf		Soft PP=2.0tsf
0	Auger terminated at 15 feet. Sampler terminated at 16.5 feet.		Auger terminated at 15 feet. Sampler terminated at 16.5 feet.	Auger terminated at 15 feet. Sampler terminated at 16.5 feet.		Auger terminated at 15 feet. Sampler terminated at 16.5 feet.
0	NE - Not Encountered		NE - Not Encountered	NE - Not Encountered		NE - Not Encountered
0	PF - Pocket Penetrometer		PF - Pocket Penetrometer	PF - Pocket Penetrometer		PF - Pocket Penetrometer
0	tsf - tons per square foot		tsf - tons per square foot	tsf - tons per square foot		tsf - tons per square foot

LOG OF TEST BORING NO. B-1  
GPR Coordinates: 32°53'58.31"N, 105°57'35.26"W  
Page 1 of 1

LOG OF TEST BORING NO. B-2  
GPR Coordinates: 32°53'52.69"N, 105°57'35.12"W  
Page 1 of 1

LOG OF TEST BORING NO. B-3  
GPR Coordinates: 32°53'58.10"N, 105°57'31.15"W  
Page 1 of 1

LOG OF TEST BORING NO. B-4  
GPR Coordinates: 32°53'53.13"N, 105°57'31.17"W  
Page 1 of 1

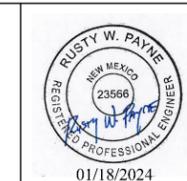
**GEOTECHNICAL NOTES:**  
THE GEOTECHNICAL REPORT COMPLETED BY WSP USA ENVIRONMENT & INFRASTRUCTURE INC. (WSP) CAN BE FOUND IN ITS ENTIRETY AT THE END OF THE CONTRACT DOCUMENTS.

REV. No.	DATE	DESCRIPTION	APPROVED

New Mexico One Call, Inc. Call 2 days before you dig!  
Dial 811 or 1-800-321-2537  
Professional Resources for Damage Prevention

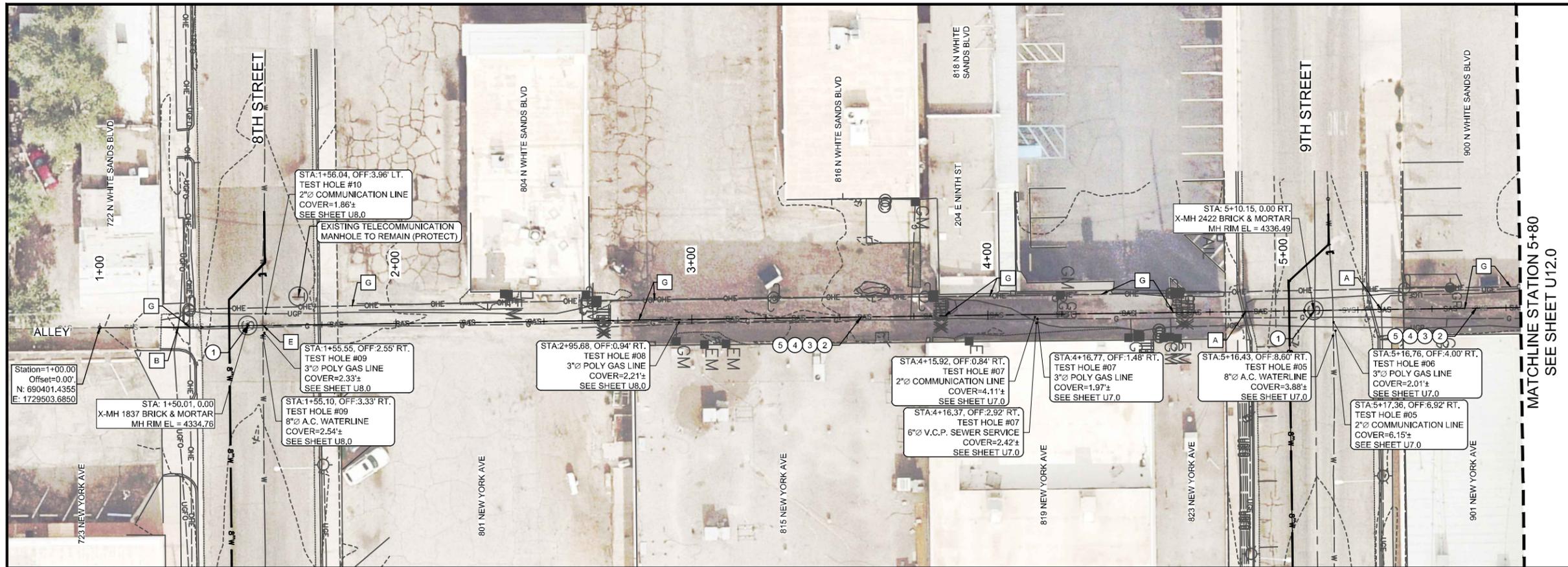


NEW YORK AVENUE (8TH TO 10TH STREET)  
WATER AND SANITARY SEWER REPLACEMENT PROJECT  
GEOTECHNICAL BORE DATA SHEET  
CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT

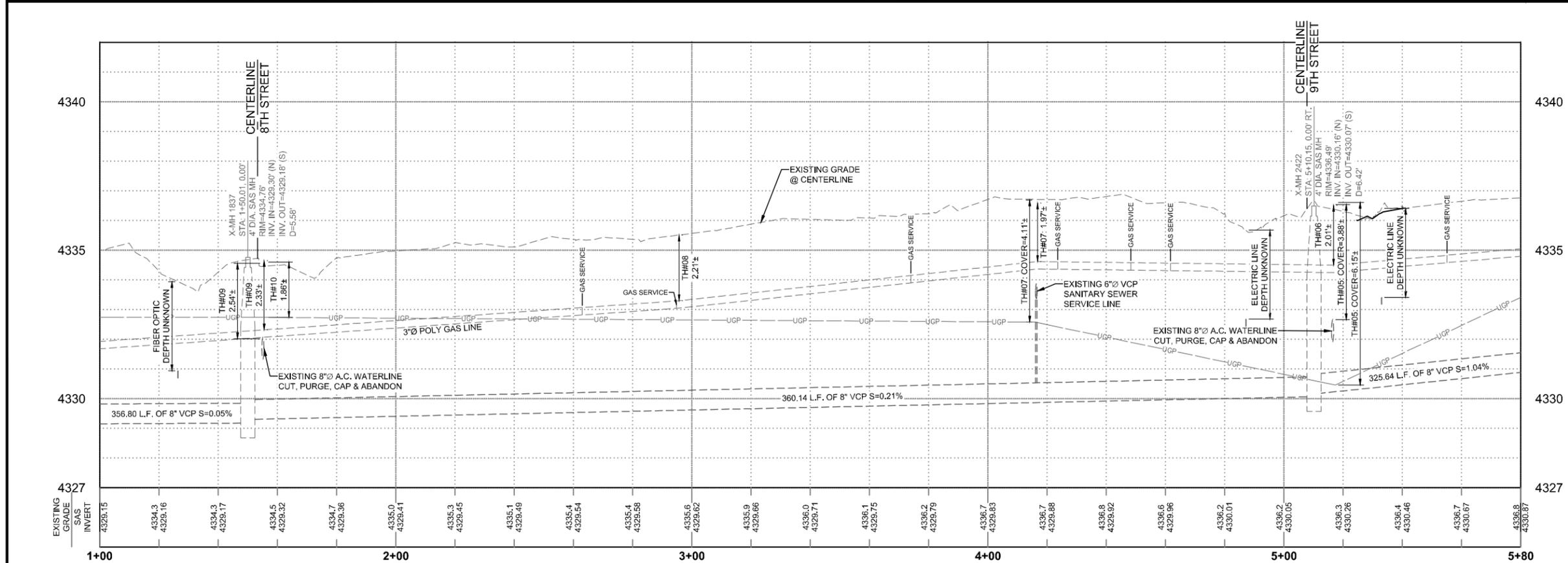


Public Works Bid No.: 2024-003  
Drawn By: SMITH Designed By: WSP  
Checked By: WSP Approved By: COA  
Scale: HORIZ. BAR SCALE  
INCLUDE VERT SCALE ON P&P

Sheet No.: U10.0  
Sheet 16 of 24  
EN2306



- BUILD NOTES—#**
- REPLACE EXISTING SANITARY SEWER MANHOLE (4-FT DIAMETER) INCLUDING MANHOLE COATING, CONCRETE COLLAR, AND NEW FRAME/COVER.
  - PIPE CLEANING AND DEBRIS DISPOSAL. EIGHT-INCH (8") NON-METALLIC SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 12.
  - PRE-REHABILITATION CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION. EIGHT-INCH (8") SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 13.
  - PIPE BURST EXISTING EIGHT-INCH (8") DIAMETER VITRIFIED CLAY SANITARY SEWER LINE (4-FEET TO 8-FEET TO INVERT WITHIN A PAVED ALLEY), COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 14.
  - POST-REHABILITATION CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION. EIGHT-INCH (8") SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 13.
- SCALE:  
HORIZONTAL: 1" = 20'  
VERTICAL: 1" = 2'



- GENERAL NOTES**
- SEWER LINE SERVICE REINSTATEMENTS WERE ESTIMATED BASED ON THE NUMBER OF WATER SERVICES CONNECTIONS/METERS PER BLOCK. THE ACTUAL NUMBER OF LIVE SEWER SERVICES WILL BE DETERMINED BY THE PRE-REHABILITATION CCTV INSPECTION AND THE CONTRACTOR WILL BE COMPENSATED FOR THE TOTAL NUMBER OF SERVICE LINES REINSTATED.

**A UTILITY LEGEND & CAUTION NOTES**

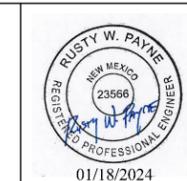
A. UNDERGROUND ELECTRIC.	— UGE
B. UNDERGROUND FIBER OPTIC.	— UGFO
C. UNDERGROUND COMMUNICATION.	— UGP
D. UNDERGROUND GAS LINE.	— G
E. UNDERGROUND WATER LINE.	— W
F. UNDERGROUND WATER SERVICE.	— WS
H. OVERHEAD ELECTRIC LINE.	— OHE
I. UNDERGROUND SEWER LINE.	— SAS
PROPOSED 6" WATERLINE C-900 DR-18	— 6"W
PROPOSED 8" WATERLINE C-900 DR-18	— 8"W
PROPOSED WATER SERVICE LINE	— WS
<b>EXISTING</b>	
SM GAS METER	— GAS METER
WM SANITARY SEWER CLEANOUT	— SS
WM WATER METER	— WM
UP UTILITY POLE	— UP
TM TELECOMMUNICATION MANHOLE	— TM
SM SANITARY SEWER MANHOLE	— SM
EM ELECTRIC GUYDOWN	— EM
EM ELECTRIC METER	— EM
WV WATER VALVE	— WV
LP LIGHT POLE	— LP
FH FIRE HYDRANT	— FH
GB GAS BOLLARD	— GB
	1 WATER LINE CAP

REV. No.	DATE	DESCRIPTION	APPROVED

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**NMOC** Dial 811 or 1-800-321-2537  
 Professional Resources for Damage Prevention

**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT**

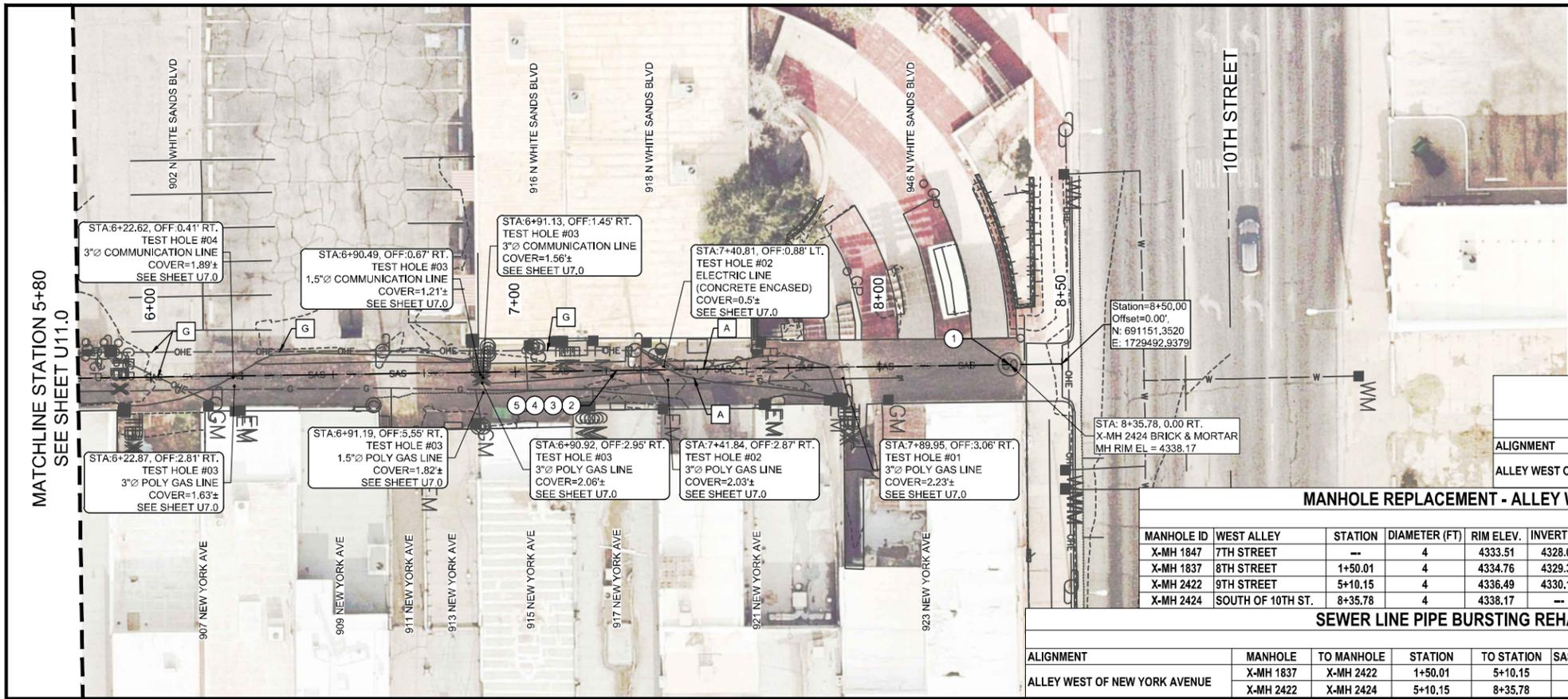
WEST ALLEY SANITARY SEWER REHABILITATION BOP TO STA. 5+80  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



**SMITH ENGINEERING**  
 Solutions for Today... Vision for Tomorrow  
 201 N Church Street Suite 200A  
 Las Cruces, NM 89001  
 Phone: 575-523-2395  
 www.smithengineering.pro

Public Works Bid No.: 2024-003  
 Drawn By: SMITH Designed By: SMITH  
 Checked By: SMITH Approved By: COA  
 Scale: HORIZ. BAR SCALE  
 INCLUDE VERT SCALE ON P&P

Sheet No.: **U11.0**  
 Sheet 17 of 24  
 EN2306



**SEWER LINE SERVICE REINSTATEMENT  
(ESTIMATED CONTRACTOR TO VERIFY)**

ALIGNMENT	MANHOLE	BY EXCAVATION	
		TO MANHOLE	EACH
ALLEY WEST OF NEW YORK AVENUE	X-MH 1837	X-MH 2422	8
	X-MH 2422	X-MH 2424	14

**MANHOLE REPLACEMENT - ALLEY WEST OF NEW YORK AVENUE**

MANHOLE ID	WEST ALLEY	STATION	DIAMETER (FT)	RIM ELEV.	INVERT (IN)	INVERT (OUT)	SLOPE (%)	DEPTH (FT)	BID ITEM: FRAME/COLLAR	REHAB MH
X-MH 1847	7TH STREET	--	4	4333.51	4328.09	4327.97	0.30%	5.54	--	--
X-MH 1837	8TH STREET	1+50.01	4	4334.76	4329.30	4329.18	0.21%	5.58	1	1
X-MH 2422	9TH STREET	5+10.15	4	4336.49	4330.16	4330.07	1.04%	6.42	1	1
X-MH 2424	SOUTH OF 10TH ST.	8+35.78	4	4338.17	--	4333.54	--	4.63	1	1

**SEWER LINE PIPE BURSTING REHABILITATION**

ALIGNMENT	MANHOLE	TO MANHOLE	STATION	TO STATION	BID ITEMS: SAS CLEANING		PRE-CCTV	8" SAS	POST-CCTV
					SAS DIAMETER	LENGTH			
ALLEY WEST OF NEW YORK AVENUE	X-MH 1837	X-MH 2422	1+50.01	5+10.15	8"	360.14	360.14	360.14	360.14
	X-MH 2422	X-MH 2424	5+10.15	8+35.78	8"	325.63	325.63	325.63	325.63

- BUILD NOTES--#**
- REPLACE EXISTING SANITARY SEWER MANHOLE (4-FT DIAMETER) INCLUDING MANHOLE COATING, CONCRETE COLLAR, AND NEW FRAME/COVER.
  - PIPE CLEANING AND DEBRIS DISPOSAL. EIGHT-INCH (8") NON-METALLIC SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 12.
  - PRE-REHABILITATION CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION. EIGHT-INCH (8") SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 13.
  - PIPE BURST EXISTING EIGHT-INCH (8") DIAMETER VITRIFIED CLAY SANITARY SEWER LINE (4- FEET TO 8- FEET TO INVERT WITHIN A PAVED ALLEY), COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 14.
  - POST-REHABILITATION CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION. EIGHT-INCH (8") SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 13.

**UTILITY LEGEND & CAUTION NOTES**

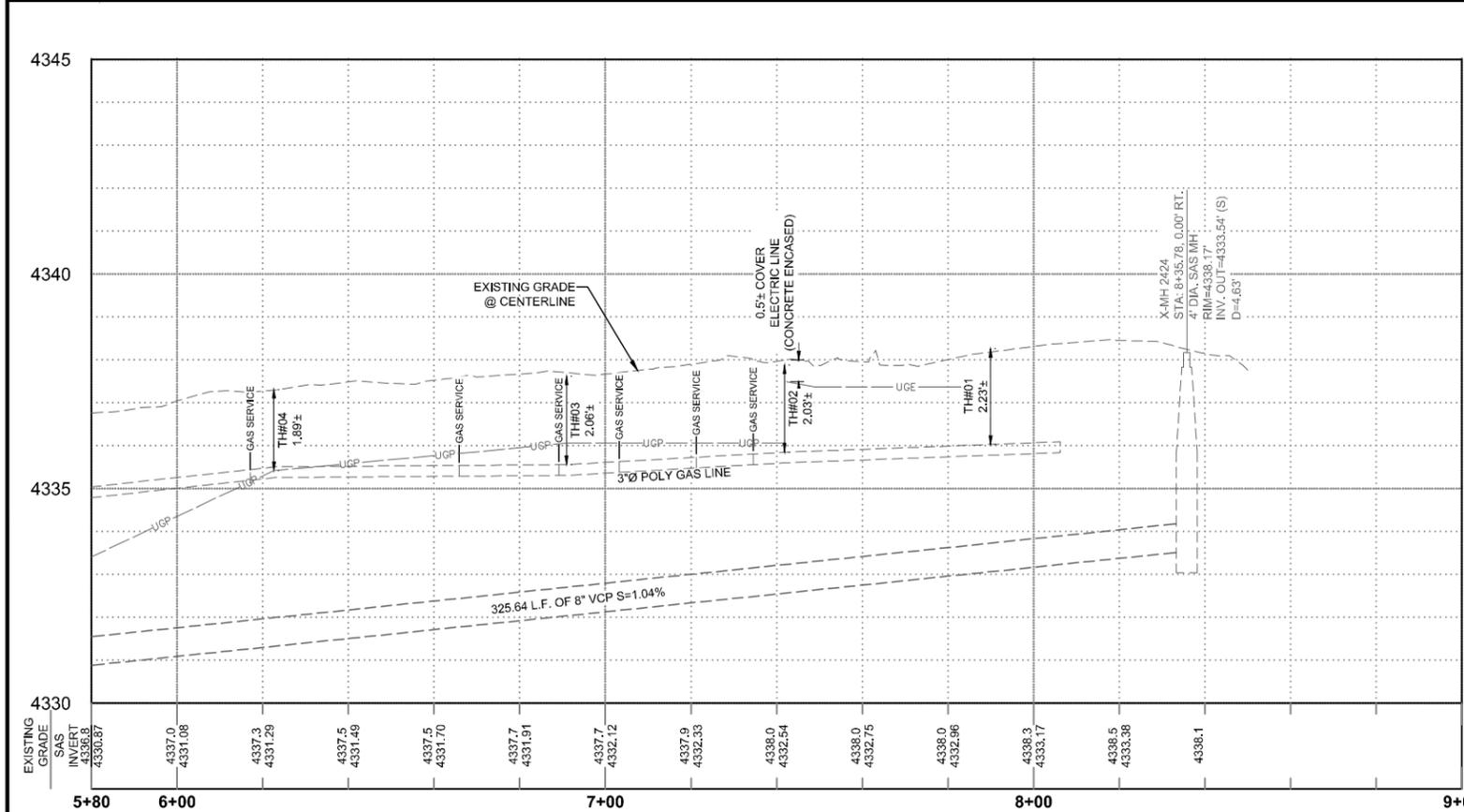
A. UNDERGROUND ELECTRIC.	---	UGE
B. UNDERGROUND FIBER OPTIC.	---	UGFO
C. UNDERGROUND COMMUNICATION.	---	UGP
D. UNDERGROUND GAS LINE.	---	G
E. UNDERGROUND WATER LINE.	---	W
F. UNDERGROUND WATER SERVICE.	---	WS
G. OVERHEAD ELECTRIC LINE.	---	OHE
H. UNDERGROUND SEWER LINE.	---	SAS
PROPOSED 6" WATERLINE C-900 DR-18	---	6"W
PROPOSED 8" WATERLINE C-900 DR-18	---	8"W
PROPOSED WATER SERVICE LINE	---	WS

**EXISTING**

- GM GAS METER
- SM SANITARY SEWER CLEANOUT
- WM WATER METER
- UP UTILITY POLE
- TM TELECOMMUNICATION MANHOLE
- SM SANITARY SEWER MANHOLE
- EG ELECTRIC GUYDOWN
- TELEPHONE BOX
- EM ELECTRIC METER
- WV WATER VALVE
- LP LIGHT POLE
- FH FIRE HYDRANT
- GB GAS BOLLARD

**PROPOSED**

- FH FIRE HYDRANT
- WV WATER VALVE
- 1 WATER LINE CAP



X-MH 2424-LOOKING NORTH



X-MH 2424-LOOKING EAST

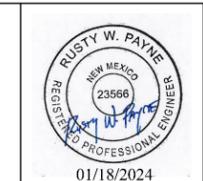
- GENERAL NOTES**
- SEWER LINE SERVICE REINSTATEMENTS WERE ESTIMATED BASED ON THE NUMBER OF WATER SERVICES CONNECTIONS/METERS PER BLOCK. THE ACTUAL NUMBER OF LIVE SEWER SERVICES WILL BE DETERMINED BY THE PRE-REHABILITATION CCTV INSPECTION AND THE CONTRACTOR WILL BE COMPENSATED FOR THE TOTAL NUMBER OF SERVICE LINES REINSTATEMENT.

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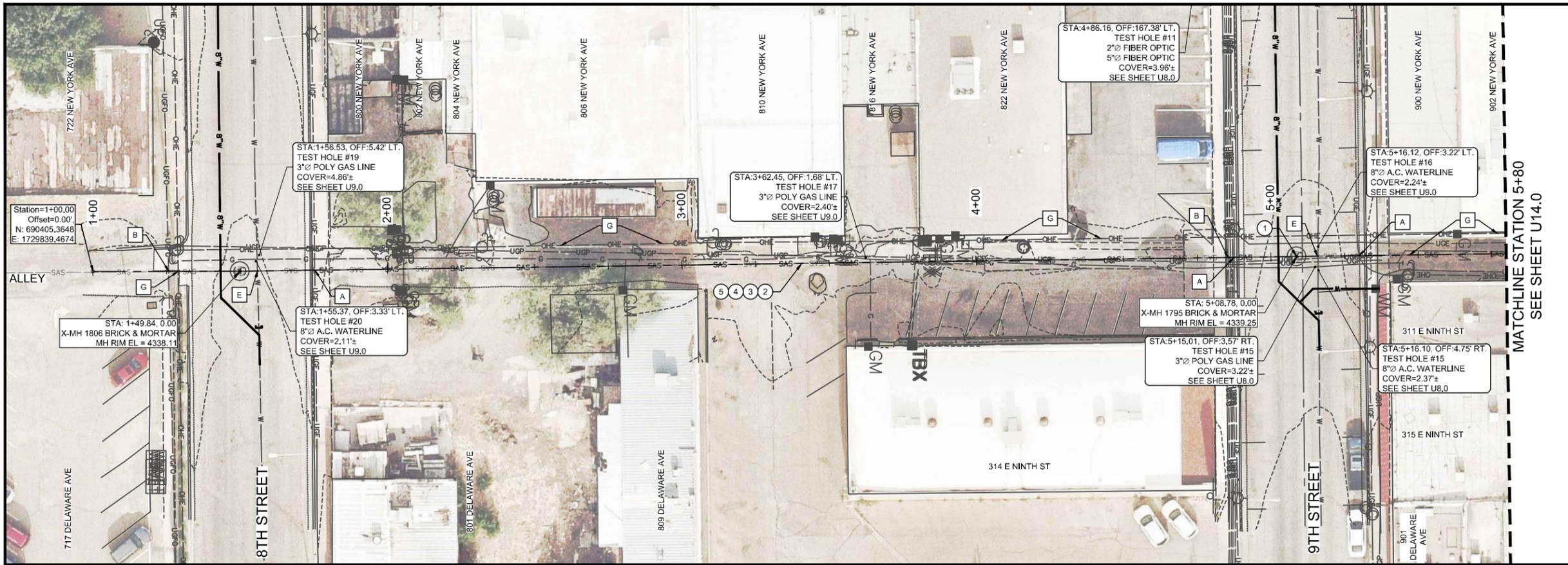
**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT**  
 WEST ALLEY SANITARY SEWER REHABILITATION STA. 5+80 TO EOP  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



**SMITH ENGINEERING**  
 Solutions for Today... Vision for Tomorrow  
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 Las Cruces, NM 89001  
 Phone: 575-523-2395  
 www.smithengineering.pro

Public Works Bid No.: 2024-003  
 Drawn By: SMITH Designed By: SMITH  
 Checked By: SMITH Approved By: COA  
 Scale: HORIZ. BAR SCALE  
 INCLUDE VERT SCALE ON P&P

Sheet No.: U12.0  
 Sheet 18 of 24  
 EN2306

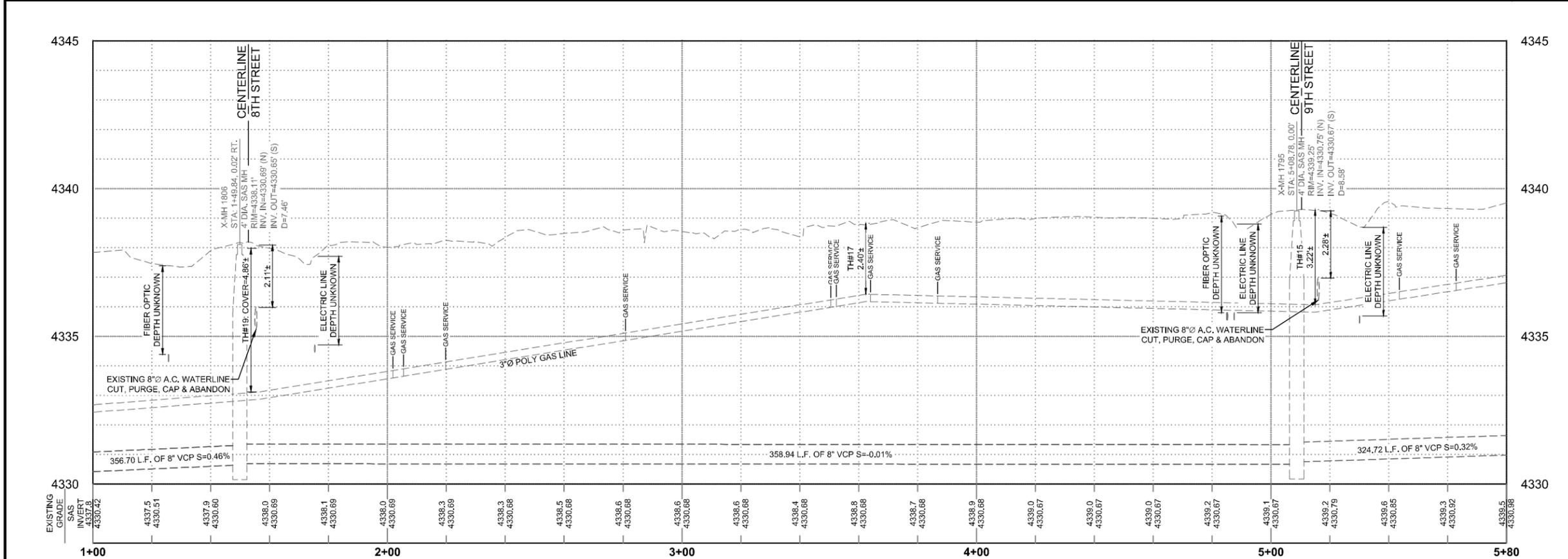


### BUILD NOTES-#

- REPLACE EXISTING SANITARY SEWER MANHOLE (4-FT DIAMETER) INCLUDING MANHOLE COATING, CONCRETE COLLAR, AND NEW FRAME/COVER.
- PIPE CLEANING AND DEBRIS DISPOSAL. EIGHT-INCH (8") NON-METALLIC SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 12.
- PRE-REHABILITATION CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION. EIGHT-INCH (8") SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 13.
- PIPE BURST EXISTING EIGHT-INCH (8") DIAMETER VITRIFIED CLAY SANITARY SEWER LINE (4-FEET TO 8-FEET TO INVERT WITHIN A PAVED ALLEY), COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 14.
- POST-REHABILITATION CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION. EIGHT-INCH (8") SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 13.

MATCHLINE STATION 5+80  
SEE SHEET U14.0

SCALE:  
HORIZONTAL: 1" = 20'  
VERTICAL: 1" = 2'



### GENERAL NOTES

- SEWER LINE SERVICE REINSTATEMENTS WERE ESTIMATED BASED ON THE NUMBER OF WATER SERVICES CONNECTIONS/METERS PER BLOCK. THE ACTUAL NUMBER OF LIVE SEWER SERVICES WILL BE DETERMINED BY THE PRE-REHABILITATION CCTV INSPECTION AND THE CONTRACTOR WILL BE COMPENSATED FOR THE TOTAL NUMBER OF SERVICE LINES REINSTATED.

### A UTILITY LEGEND & CAUTION NOTES

A. UNDERGROUND ELECTRIC.	— UGE
B. UNDERGROUND FIBER OPTIC.	— UGFO
C. UNDERGROUND COMMUNICATION.	— UGP
D. UNDERGROUND GAS LINE.	— G
E. UNDERGROUND WATER LINE.	— W
F. UNDERGROUND WATER SERVICE.	— WS
H. OVERHEAD ELECTRIC LINE.	— OHE
H. UNDERGROUND SEWER LINE.	— SAS
PROPOSED 6" WATERLINE C-900 DR-18	— 6"W
PROPOSED 8" WATERLINE C-900 DR-18	— 8"W
PROPOSED WATER SERVICE LINE	— WS
EXISTING	
SM GAS METER	—
WM SANITARY SEWER CLEANOUT	—
WM WATER METER	—
UP UTILITY POLE	—
TM TELECOMMUNICATION MANHOLE	—
SM SANITARY SEWER MANHOLE	—
EM ELECTRIC GUYDOWN	—
EM ELECTRIC METER	—
EM WATER VALVE	—
EM LIGHT POLE	—
EM FIRE HYDRANT	—
EM GAS BOLLARD	—
EM FIRE HYDRANT	—
EM WATER VALVE	—
EM WATER LINE CAP	—

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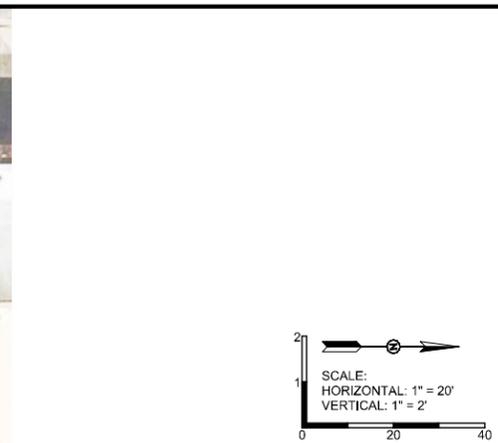
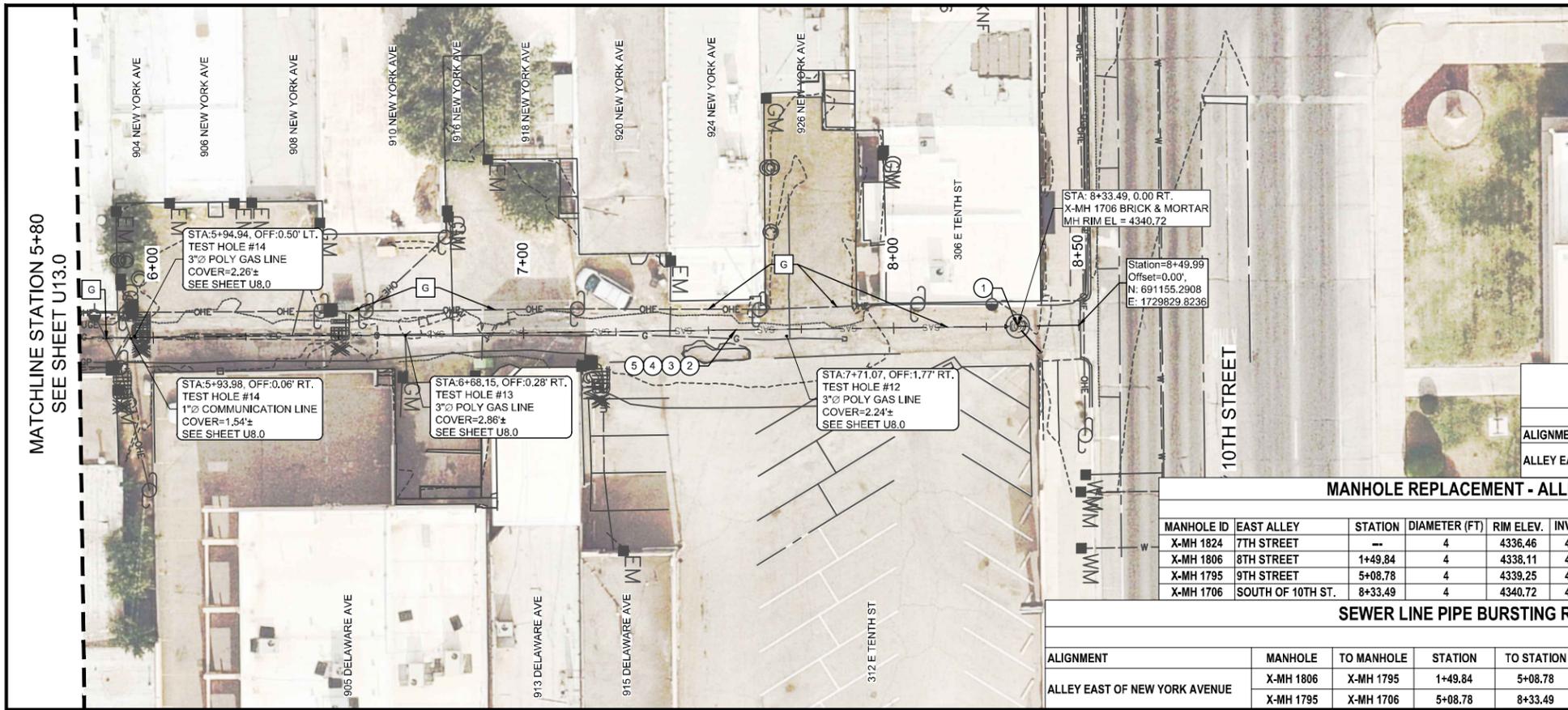
**NEW YORK AVENUE (8TH TO 10TH STREET)**  
**WATER AND SANITARY SEWER REPLACEMENT PROJECT**  
 EAST ALLEY SANITARY SEWER REHABILITATION BOP TO STA. 5+80  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT

**RUSTY W. PAYNE**  
 REGISTERED PROFESSIONAL ENGINEER  
 23566  
 01/18/2024

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Sheet No.: U13.0  
 Sheet 19 of 24  
 EN2306



**SEWER LINE SERVICE REINSTATEMENT  
(ESTIMATED CONTRACTOR TO VERIFY)**

ALIGNMENT	BID ITEM: BY EXCAVATION		
	MANHOLE	TO MANHOLE	EACH
ALLEY EAST OF NEW YORK AVENUE	X-MH 1806	X-MH 1795	11
	X-MH 1795	X-MH 1706	21

**MANHOLE REPLACEMENT - ALLEY EAST OF NEW YORK AVENUE**

MANHOLE ID	EAST ALLEY	STATION	DIAMETER (FT)	RIM ELEV.	INVERT (IN)	INVERT (OUT)	SLOPE (%)	DEPTH (FT)	BID ITEM: FRAME/COLLAR REHAB MH	
									EACH	EACH
X-MH 1824	7TH STREET	--	4	4336.46	4330.29	4330.13	0.10%	6.33	--	--
X-MH 1806	8TH STREET	1+49.84	4	4338.11	4330.69	4330.65	-0.01%	7.46	1	1
X-MH 1795	9TH STREET	5+08.78	4	4339.25	4330.75	4330.67	0.32%	8.58	1	1
X-MH 1706	SOUTH OF 10TH ST.	8+33.49	4	4340.72	4334.72	4331.80	--	8.92	1	1

**SEWER LINE PIPE BURSTING REHABILITATION**

ALIGNMENT	MANHOLE	TO MANHOLE	STATION	TO STATION	BID ITEMS: SAS CLEANING PRE-CCTV 8" SAS POST-CCTV				
					SAS DIAMETER	LENGTH	LENGTH	LENGTH	LENGTH
ALLEY EAST OF NEW YORK AVENUE	X-MH 1806	X-MH 1795	1+49.84	5+08.78	8"	358.94	358.94	358.94	358.94
	X-MH 1795	X-MH 1706	5+08.78	8+33.49	8"	324.71	324.71	324.71	324.71

**BUILD NOTES--#**

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- PIPE CLEANING AND DEBRIS DISPOSAL. EIGHT-INCH (8") NON-METALLIC SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 12.
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- POST-REHABILITATION CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION. EIGHT-INCH (8") SANITARY SEWER PIPELINE, COMPLETE IN PLACE. PER SUPPLEMENTAL TECHNICAL STANDARD CHAPTER 13.

**UTILITY LEGEND & CAUTION NOTES**

A. UNDERGROUND ELECTRIC.	---	UGE
B. UNDERGROUND FIBER OPTIC.	---	UGFO
C. UNDERGROUND COMMUNICATION.	---	UGP
D. UNDERGROUND GAS LINE.	---	UG
E. UNDERGROUND WATER LINE.	---	W
F. UNDERGROUND WATER SERVICE.	---	WS
G. OVERHEAD ELECTRIC LINE.	---	OHE
H. UNDERGROUND SEWER LINE.	---	SAS
PROPOSED 6" WATERLINE C-900 DR-18	---	6"W
PROPOSED 8" WATERLINE C-900 DR-18	---	8"W

**EXISTING**

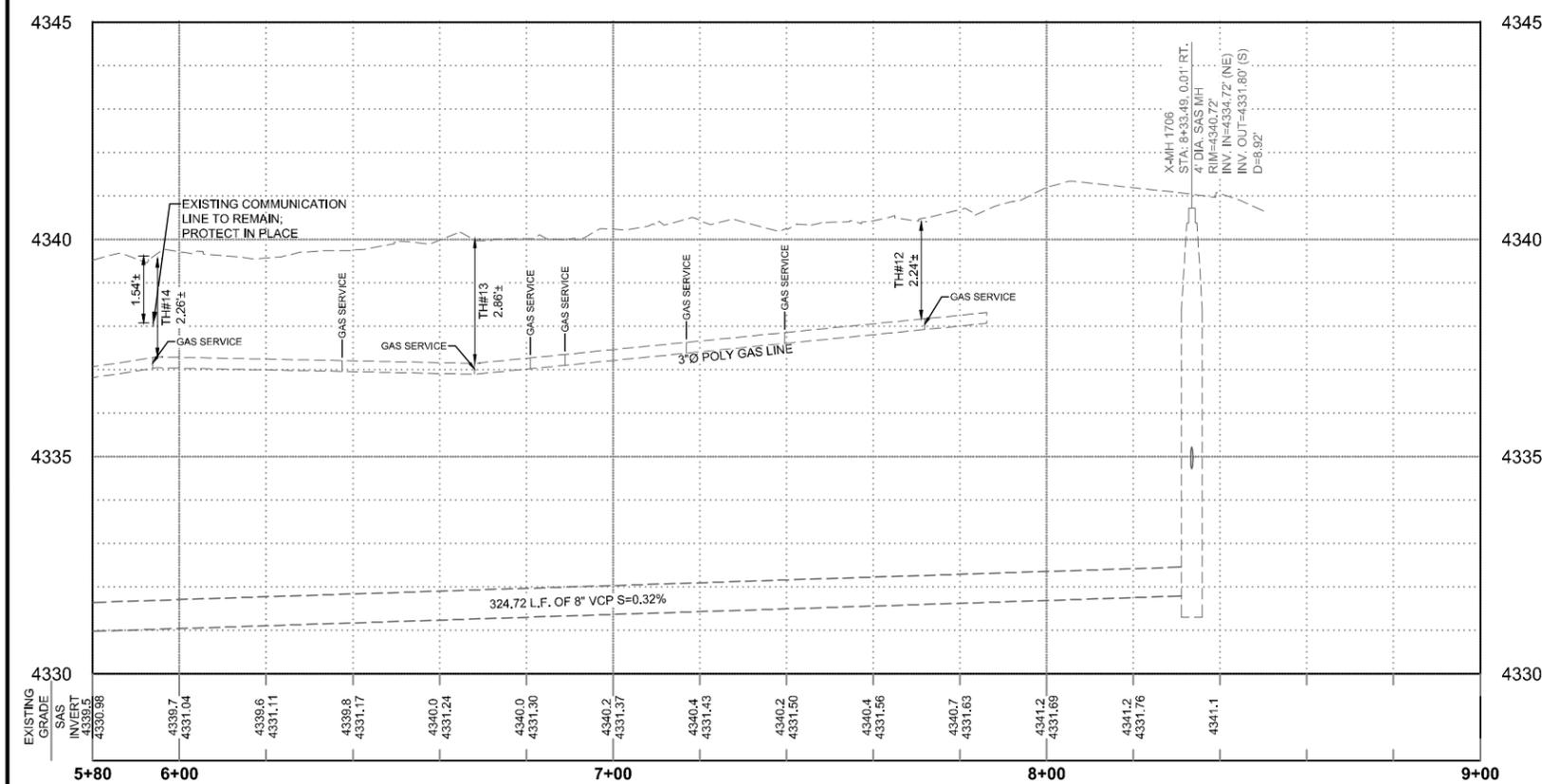
- GM GAS METER
- SM SANITARY SEWER CLEANOUT
- WM WATER METER
- UP UTILITY POLE
- TM TELECOMMUNICATION MANHOLE
- SM SANITARY SEWER MANHOLE
- EG ELECTRIC GUYDOWN
- TB TELEPHONE BOX
- EM ELECTRIC METER
- LV WATER VALVE
- LP LIGHT POLE
- FD FIRE HYDRANT
- GB GAS BOLLARD

**PROPOSED**

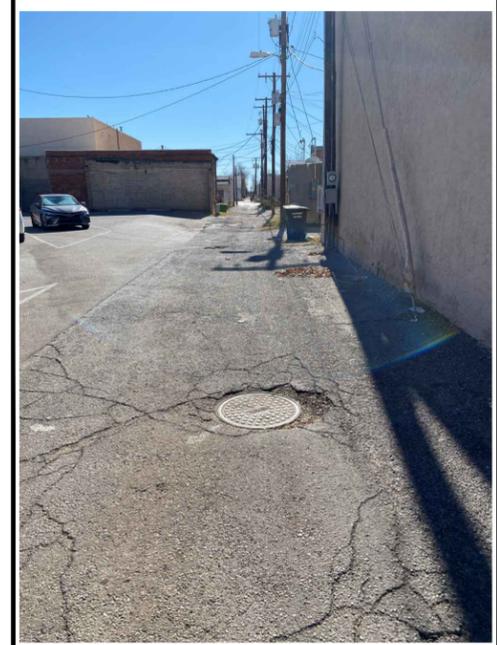
- FH FIRE HYDRANT
- WV WATER VALVE
- 1 WATER LINE CAP

**GENERAL NOTES**

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X-MH 1706-LOOKING SOUTH



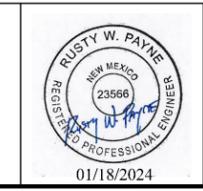
X-MH 1706-LOOKING SOUTH

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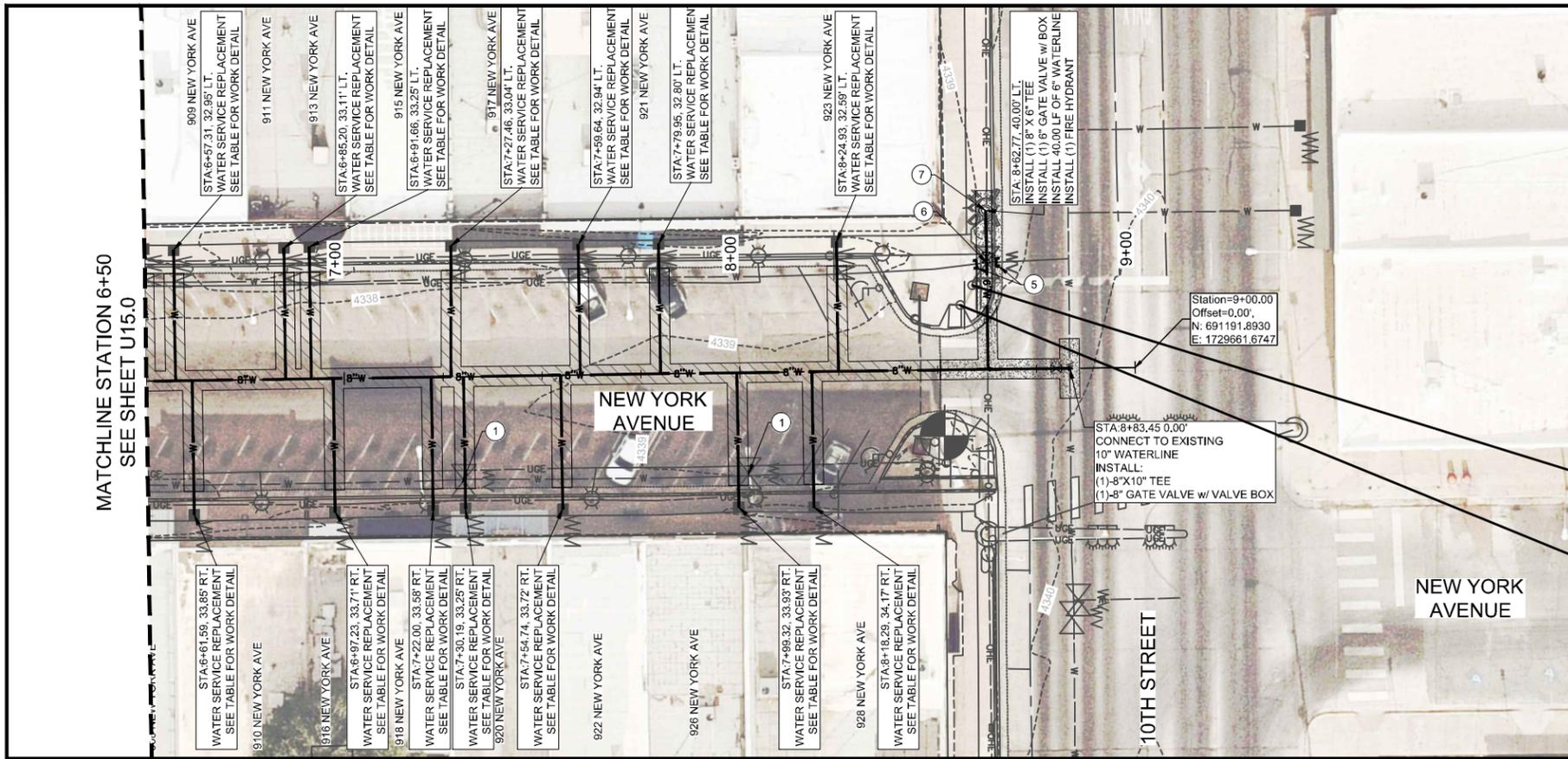
**NEW YORK AVENUE (8TH TO 10TH STREET)  
WATER AND SANITARY SEWER REPLACEMENT PROJECT**  
 EAST ALLEY SANITARY SEWER REHABILITATION STA. 5+80 TO EOP  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



Public Works Bid No.: 2024-003	Sheet No.:
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Checked By: SMITH	Approved By: COA
Scale: HORIZ. BAR SCALE INCLUDE VERT SCALE ON P&P	Sheet 20 of 24

**U14.0**  
EN2306



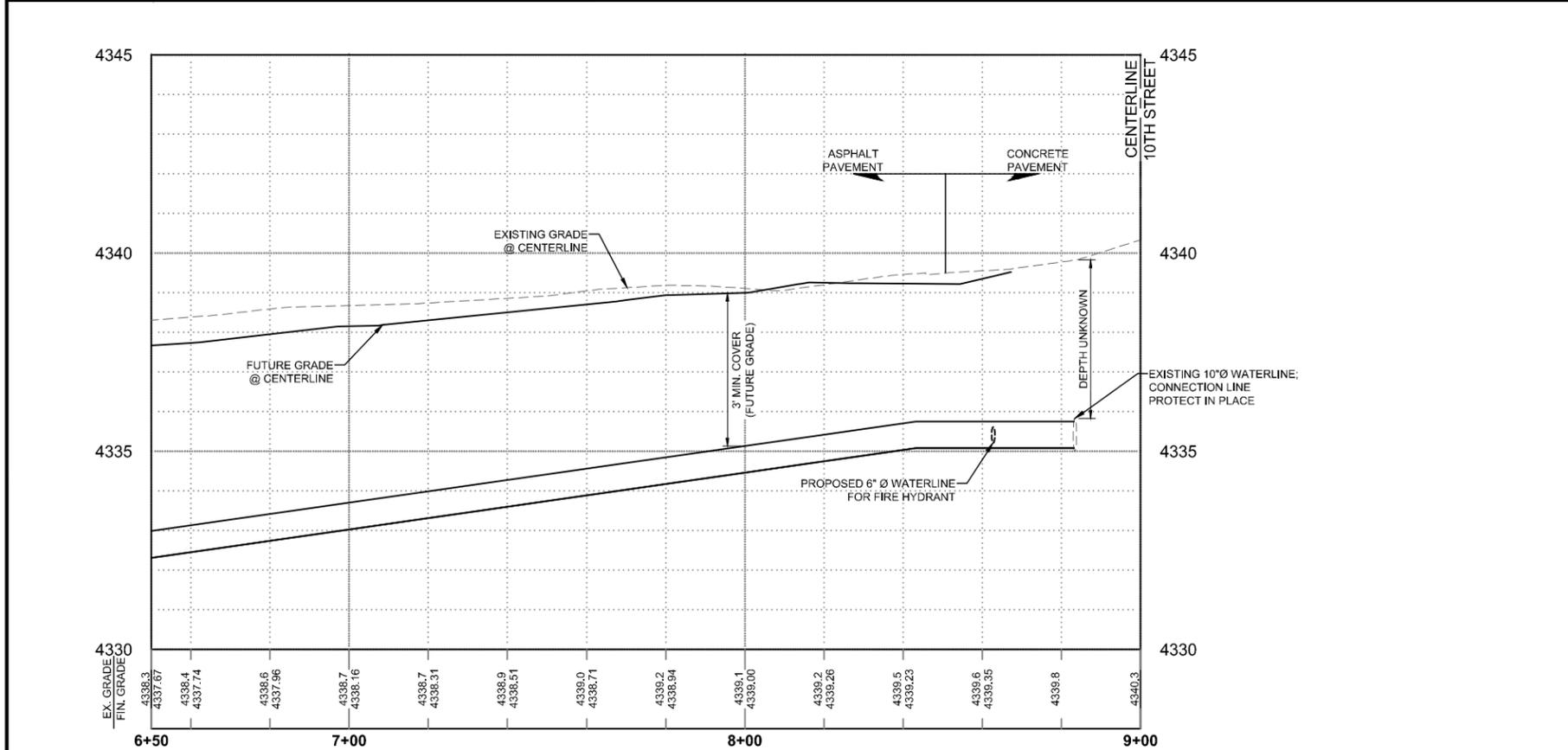
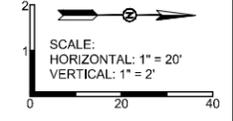


NEW YORK AVE. - FIRE HYDRANT REPLACEMENT LISTING						
HYDRANT NO.	ADDRESS/LOCATION	6" C-900 HYDRANT LINE	FIRE HYDRANT	6" GATE VALVE	VALVE BOX	MAIN LINE TEE FITTING
		LN. FEET				SIZE
--	STA: 8+62.77	40.89	1	1	1	8"x6"

NEW YORK AVENUE - WATER SERVICE REPLACEMENT LISTING							
ADDRESS	METER SIZE	ZENNER METER (CURRENT)	SADDLE TAP SIZE	CORP. STOP SIZE	CURB STOP SIZE	SERVICE LINE LENGTH-FEET	METER CAN
909 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	34	YES
910 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	35	YES
911 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	35	YES
913 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	35	YES
915 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	35	YES
916 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	35	YES
917 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	34	YES
918 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	35	YES
919 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	34	YES
920 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	35	YES
921 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	34	YES
922 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	35	YES
923 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	34	YES
926 NEW YORK AVENUE	3/4"	YES	8"x1"	1"	1"	35	YES

AT CONTRACTOR'S OPTION: REMOVE, SALVAGE, & RESET EXISTING MARQUEE SIGN OR PROTECT IN PLACE DURING FIRE HYDRANT LINE INSTALLATION. REMOVAL & RESETTING SHALL BE INCIDENTAL TO WATERLINE INSTALLATION; NO SEPARATE PAYMENT WILL BE MADE.



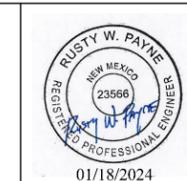
- BUILD NOTES**
1. ABANDON EXISTING WATER VALVE PER DETAIL SHEET U5.0.
  2. ABANDON EXISTING FIRE HYDRANT PER DETAIL SHEET U5.0.
  3. ABANDON EXISTING WATER SERVICE PER DETAIL SHEET U5.0.
  4. TRACE WIRE TEST STATION BOX.
  5. CUT, PURGE, CAP, AND ABANDON EXISTING WATERLINE IN-PLACE.
  6. REMOVE EXISTING WATER VALVE & VALVE BOX.
  7. REMOVE EXISTING FIRE HYDRANT.

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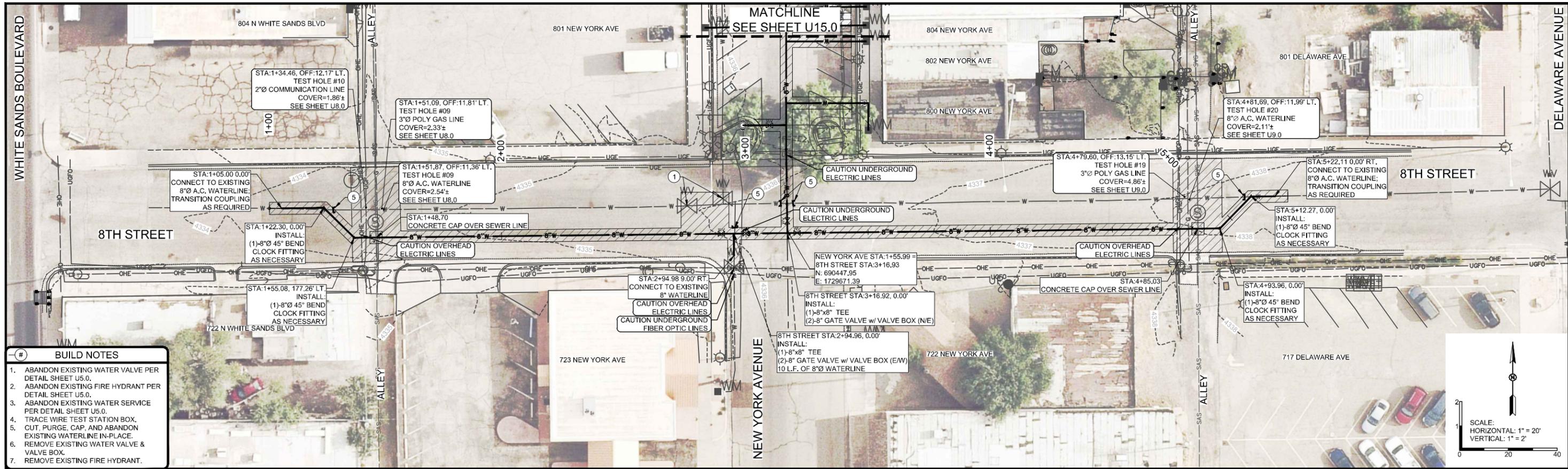


**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT**  
 NEW YORK AVENUE WATER LINE REPLACEMENT STA. 6+50 TO EOP  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT

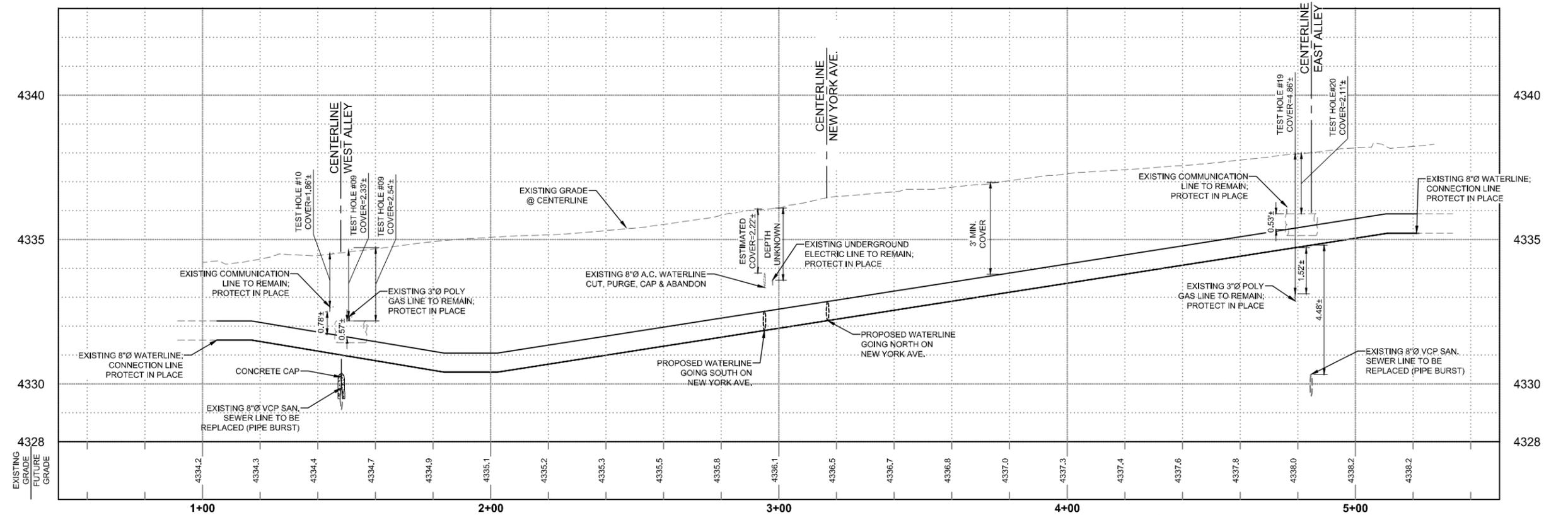
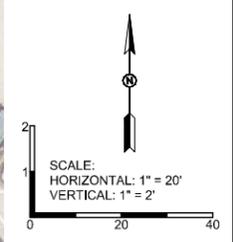


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 Checked By: SMITH    Approved By: COA  
 Scale: HORIZ. BAR SCALE  
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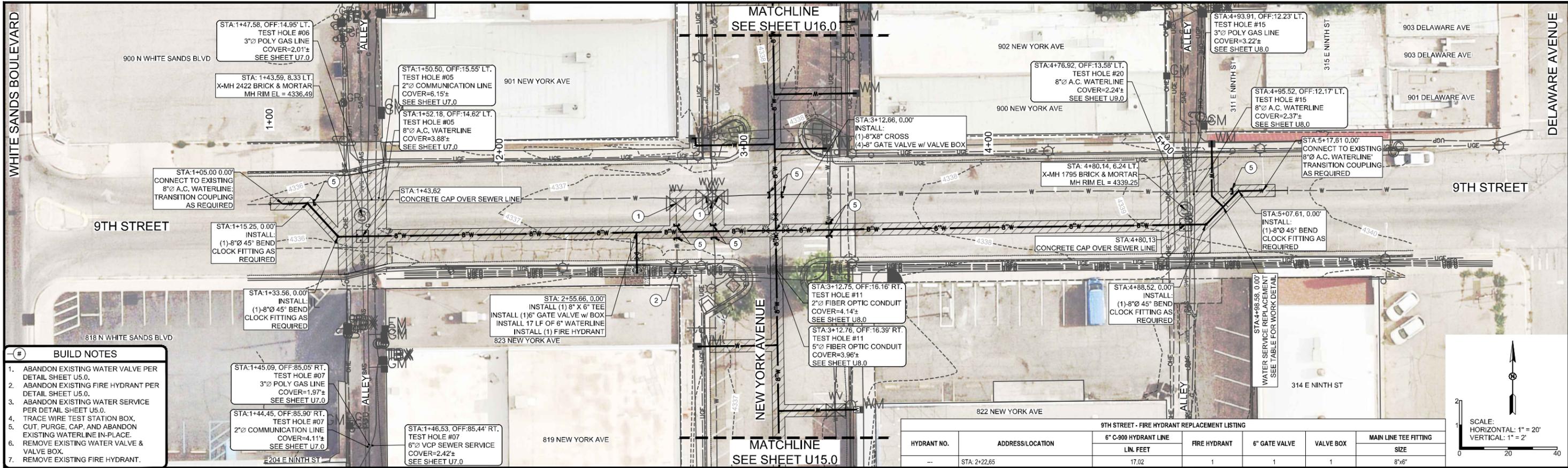
Sheet No.: **U16.0**  
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 EN2306



- BUILD NOTES**
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  2. ABANDON EXISTING FIRE HYDRANT PER DETAIL SHEET U5.0.
  3. ABANDON EXISTING WATER SERVICE PER DETAIL SHEET U5.0.
  4. TRACE WIRE TEST STATION BOX.
  5. CUT, PURGE, CAP, AND ABANDON EXISTING WATERLINE IN-PLACE.
  6. REMOVE EXISTING WATER VALVE & VALVE BOX.
  7. REMOVE EXISTING FIRE HYDRANT.



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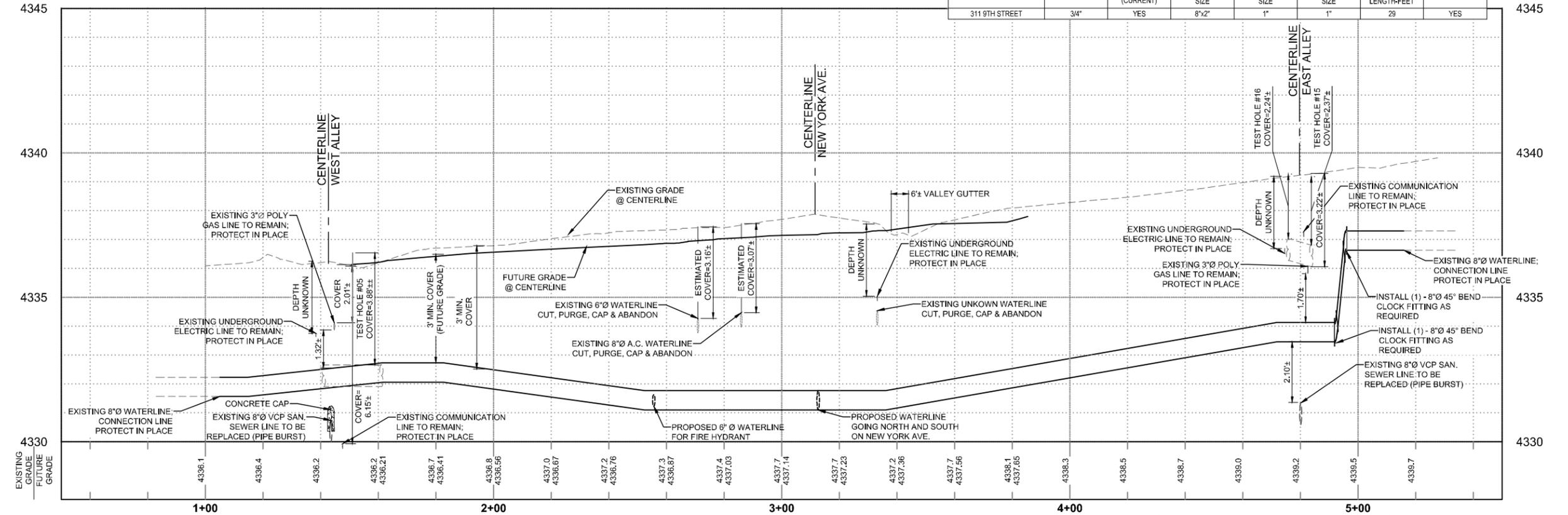
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  3. ABANDON EXISTING WATER SERVICE PER DETAIL SHEET U5.0.
  4. TRACE WIRE TEST STATION BOX.
  5. CUT, PURGE, CAP, AND ABANDON EXISTING WATERLINE IN-PLACE.
  6. REMOVE EXISTING WATER VALVE & VALVE BOX.
  7. REMOVE EXISTING FIRE HYDRANT.

**9TH STREET - FIRE HYDRANT REPLACEMENT LISTING**

HYDRANT NO.	ADDRESS/LOCATION	6" C-900 HYDRANT LINE LN. FEET	FIRE HYDRANT	6" GATE VALVE	VALVE BOX	MAIN LINE TEE FITTING	
						SIZE	
--	STA: 2+22.65	17.02	1	1	1	8" x 6"	

**9TH STREET - WATER SERVICE REPLACEMENT LISTING**

ADDRESS	METER SIZE	ZENNER METER (CURRENT)	SADDLE TAP SIZE	CORP. STOP SIZE	CURB STOP SIZE	SERVICE LINE LENGTH- FEET	METER CAN

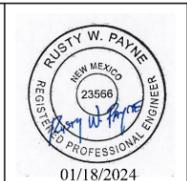


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**NEW YORK AVENUE (8TH TO 10TH STREET)  
 WATER AND SANITARY SEWER REPLACEMENT PROJECT**  
**9TH STREET WATER LINE REPLACEMENT**  
 CITY OF ALAMOGORDO, NEW MEXICO, ENGINEERING DEPARTMENT



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 EN2306