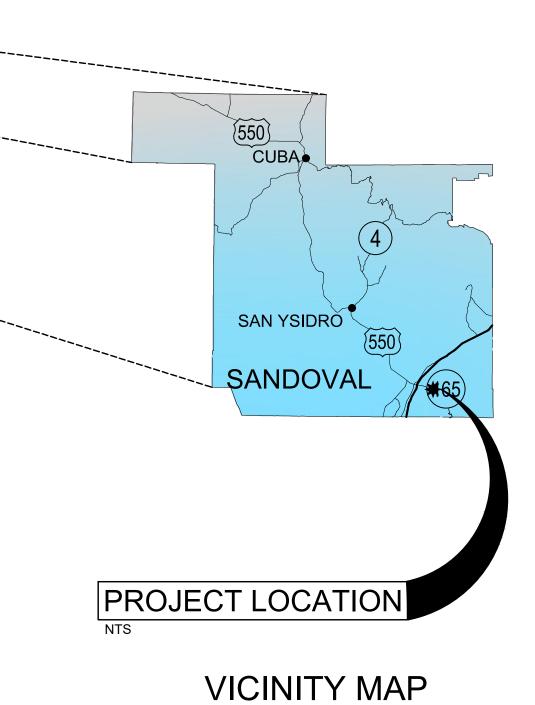


# SANDOVAL COUNTY FIRE STATION 41 WATER SYSTEM IMPROVEMENTS PROJECT **CONSTRUCTION PLANS** DRAWING INDEX SANDOVAL COUNTY, NEW MEXICO

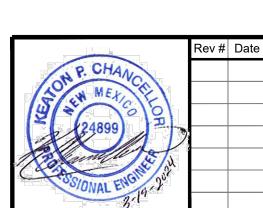
# April 2024

PROCUREMENT NO: FY24-SCPW-04

**PROJECT DESCRIPTION:** CONSTRUCTION OF 873 L.F. OF NEW 6" FIRE LINE, CHLORINATION BUILDING, CHLORINATION SYSTEM, SITE PIPING, RELOCATION OF 3 EXISTING TANKS AND ASSOCIATED APPURTENANCES.



PORTALES ROOSEVEL



NOTICE OF EXTENDED PAYMENT PROVISION - THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT.

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	D PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND
SUPERVISION O	N BEHALF OF SOUDER, MILLER & ASSOCIATES.
Autor	Starealler 3-19-2024
KEATON CHANC	ELLOR, P.E. DATE
PROJECT MANAG	GER
	GIGNATURE OF THE PROFESSIONAL REGISTRANT IDENTIFIED ON THIS COVER OT SUGGEST RESPONSIBLE CHARGE FOR ALL SHEETS CONTAINED WITHIN THIS
PACKAGE; PLAN	SHEETS NOT SIGNED AND SEALED ARE NOT THE RESPONSIBILITY OF THE
	REGISTRANT IDENTIFIED ON THIS COVER SHEET. PLEASE REFER TO REGISTRANTS IDENTIFIED ON INDIVIDUAL PLAN SHEETS.
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Descri	ption By Chk'd SOUDER, MILLER & ASSOCIATES

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### **GENERAL NOTES**

### GFNFRAI

THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND IS NOT LIABLE FOR PROBLEMS THAT ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY OR FOR PROBLEMS THAT ARISE FROM FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS.

ALL PERMITS REQUIRED FOR CONSTRUCTION, INCLUDING ALL IRRIGATION DISTRICT, LOCAL, CITY, COUNTY, STATE AND FEDERAL PERMITS, ARE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS ALREADY PROVIDED BY THE ENGINEER IN THE CONTRACT DOCUMENTS. ALL PERMIT FEES ARE PAYABLE BY THE CONTRACTOR, AND SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION UNLESS A SPECIFIC BID ITEM EXISTS FOR THE PERMIT WORK. NO TIME EXTENSIONS WILL BE ALLOWED DUE TO THE NORMAL PERMITTING PROCESSES. ANY FINES ASSOCIATED WITH NOT OBTAINING NECESSARY PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR. IT IS THE ENGINEER'S RECOMMENDATION THAT ALL BIDDERS CONTACT THE APPROPRIATE AGENCIES PRIOR TO BIDDING TO ENSURE THAT ALL APPROPRIATE FEES, COSTS, AND SCHEDULES FOR THE PERMITS REQUIRED ARE KNOWN PRIOR TO BIDDING NEW MEXICO DEPARTMENT OF TRANSPORTATION UTILITY PERMITS PERMITS HAVE BEEN ACQUIRED BY THE OWNER AND ARE AVAILABLE UPON REQUEST. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS OF THESE PERMITS RELATED TO CONSTRUCTION. COST OF COMPLIANCE WITH THESE PERMITS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, AND NO ADDITIONAL PAYMENT SHALL BE MADE THEREFOR.

### **ROCK EXCAVATION**

THE ROCK DEPTHS SHOWN IN THESE PLANS ARE APPROXIMATIONS BASED ON THE GEOTECHNICAL ENGINEERING SERVICES JOB NO. 1-00412 REPORT. THE CONTRACTOR WILL BE PAID FOR THE AMOUNT OF ROCK EXCAVATION ACTUALLY PERFORMED AT THE UNIT PRICE IN THE BID SCHEDULE. SINCE THERE MAY BE LARGE VARIATIONS IN THE QUANTITY OF ROCK EXCAVATION REQUIRED, CONTRACTOR IS HEREBY NOTIFIED THAT THERE WILL BE NO ADDITIONAL COMPENSATION FOR OVERHEAD RECOVERY OR OTHER COSTS INCURRED BY THE CONTRACTOR FOR OVERRUNS OR UNDERRUNS (NO MATTER HOW SIGNIFICANT) ON THE ROCK EXCAVATION QUANTITIES. THE CONTRACTOR SHALL COORDINATE CLOSELY WITH THE OWNER'S REPRESENTATIVE ON THE PROJECT FOR ALL ROCK EXCAVATION QUANTITIES, INCLUDING MAKING SURE THAT DEPTHS AND EXTENTS OF ROCK EXCAVATION ARE MEASURED AND AGREED UPON BEFORE ROCK EXCAVATION IS PERFORMED.

### **TRAFFIC CONTROL**

THE CONTRACTOR SHALL MAINTAIN THE PROPER TRAFFIC CONTROL DEVICES DURING CONSTRUCTION IN COMPLIANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR IMPLEMENTING, PROTECTING AND MAINTAINING ANY NECESSARY TRAFFIC CONTROL.

### UTILITY LOCATION

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR UTILITY LOCATION, PROTECTION AND VERIFICATION PER STATE LAW. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES AND THE OWNER'S REPRESENTATIVE WITH REGARD TO RELOCATING, ADJUSTING, REPLACING AND/OR REPAIRING UTILITIES DURING CONSTRUCTION.ADDITIONALLY, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS IN RELATION TO THE PROPOSED IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALI NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY. DELAYS CAUSED OR COSTS INCURRED BECAUSE OF UTILITY CONFLICTS OR OTHER OBSTRUCTIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. UTILITIES SHOWN IN THESE CONSTRUCTION PLANS ARE SHOWN IN THEIR APPROXIMATE LOCATION ONLY, AND SHALL NOT BE RELIED UPON BY THE CONTRACTOR. FIELD MARKS MADE BY THE INDIVIDUAL UTILITIES SHALL OVERRIDE ANY LOCATION SHOWN IN THESE PLANS.

THE EXISTING UTILITIES, STRUCTURES, AND CULVERTS SHOWN ON THESE PLANS ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR SHALL PERFORM A FIELD REVIEW OF THE ALIGNMENT TWO WEEKS PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ALLOW APPROPRIATE TIME FOR REDESIGN IF NECESSARY. AFTER THE CONTRACTOR HAS HAD HIS SURVEYOR STAKE THE PROPOSED WATERLINE AND THE EXISTING UTILITIES HAVE BEEN MARKED ON THE GROUND, THE CONTRACTOR SHALL CONDUCT A FIELD REVIEW OF THE WATERLINE ALIGNMENT AS IT HAS BEEN STAKED. IF THE ALIGNMENT OF THE PROPOSED WATERLINE WILL CREATE UTILITY CONFLICTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE ALIGNMENT CAN BE REVIEWED AND MODIFIED, IF NECESSARY. ALL MODIFICATIONS TO THE WATERLINE ALIGNMENT AND PROFILE MUST BE APPROVED BY THE ENGINEER. ANY CONSTRUCTION DELAYS CAUSED BY THE CONTRACTOR'S FAILURE TO PERFORM THE FIELD REVIEW, OR BY THE CONTRACTOR'S FAILURE TO NOTIFY THE ENGINEER OF ANY CONFLICTS TWO WEEKS PRIOR TO CONSTRUCTION SHALL BE DEEMED TO BE DELAYS CAUSED BY THE CONTRACTOR, AND THE CONTRACT TIME WILL NOT BE EXTENDED FOR SUCH DELAYS.

LOCATIONS OF EXISTING WATERLINES SHOWN IN THESE PLANS ARE APPROXIMATE BASED ON THE BEST INFORMATION AVAILABLE. DUE TO THE UNCERTAIN NATURE OF THE WATERLINE LOCATIONS, CONCRETE ENCASEMENT IS NOT SHOWN IN THESE PLANS, BUT WILL BE REQUIRED AS OUTLINED IN THE NMSSPWC. THE COST FOR THIS CONCRETE ENCASEMENT AND/OR PRESSURE PIPE IN LIEU OF CONCRETE ENCASEMENT SHALL BE PAID FOR AT THE UNIT PRICES OUTLINED IN THE BID SCHEDULE. THE QUANTITIES FOR THESE ITEMS SHOWN IN THE BID SCHEDULE IS A VERY ROUGH ESTIMATE INTENDED SOLELY TO ESTABLISH THE UNIT PRICE FOR THIS WORK. THE ACTUAL QUANTITY MAY VARY SIGNIFICANTLY FROM THE CONTRACT OUANTITY.

THE LOCATION OF ALL EXISTING UTILITIES, AS SHOWN ON THE CONSTRUCTION DRAWINGS, ARE APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING FINAL UTILITY LOCATION DETERMINATION IN THE FIELD DURING CONSTRUCTION. THE COST OF THIS ACTIVITY SHALL BE CONSIDERED INCIDENTAL AND NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE UTILITY COMPANIES TO PREVENT ANY SERVICE DISRUPTIONS.

THE MANHOLE RIM ELEVATIONS SHOWN ON THESE PLANS ARE FOR REFERENCE ONLY. THE ACTUAL RIM ELEVATIONS SHALL BE SET SUCH THAT THEY ARE FLUSH WITH THE EXISTING GROUND AS SHOWN IN THE DETAILS. CONTRACTOR SHALL SURVEY EXISTING GRADES PRIOR TO DISTURBANCE TO ENSURE THAT THE GRADES ARE RETURNED TO THE ORIGINAL CONDITION.

THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A COMPREHENSIVE CONSTRUCTION SEQUENCE AND SCHEDULE PRIOR TO COMMENCEMENT OF CONSTRUCTION THAT TAKES INTO ACCOUNT THE FIELD LOCATIONS OF EXISTING UTILITIES AND EXISTING SEWER LINES AND ANY CONFLICTS WITH THE PROPOSED IMPROVEMENTS.

THE EXPLORATORY DIGGING BID ITEM IS ONLY FOR EXPLORATORY DIGGING REQUIRED TO DETERMINE THE LOCATION OF THE OWNER'S UTILITY LINES WHEN THE OWNER CANNOT DETERMINE THE LOCATION OF THEIR LINE(S). THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE ENGINEER PRIOR TO COMMENCEMENT. THIS BID ITEM SHALL NOT BE USED FOR EXPLORATORY DIGGING FOR OTHER UTILITIES, WHICH SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE OWNER, ENGINEER AND POWER COMPANY TO EXTEND ELECTRICAL SERVICE TO THE BOOSTER BUILDING AND NEW WELL. THE POWER EXTENSION WILL BE PAID FOR BY THE CONTRACTOR UTILIZING THE ELECTRICAL EXTENSION ALLOWANCE. THE CONTRACTOR SHALL BEGIN THIS COORDINATION EFFORT WITH SUFFICIENT TIME IN ADVANCE OF BOOSTER BUILDING AND WELL CONSTRUCTION TO AVOID DELAYS.

### EXISTING WATER SYSTEM

THROUGHOUT THE LIFE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE EXISTING WATER SYSTEM OPERATING. THE CONTRACTOR SHALL REPORT WATER SHUTOFFS OF ANY OR ALL CONNECTIONS TO THE ASSOCIATION FORTY-EIGHT (48), OR MORE HOURS IN ADVANCE OF THE SHUT-OFFS. ALL LOCAL RESIDENTS AND BUSINESSES SHALL BE CONTACTED BEFORE ANY DISCONNECTION OF WATER SERVICE. ANY INTERRUPTION OF WATER SERVICE SHALL BE KEPT TO THE MINIMUM LENGTH OF TIME POSSIBLE.

THE EXISTING WATER SYSTEM IS TO REMAIN OPERATIONAL UNTIL THE NEW SYSTEM IS ACCEPTED BY THE OWNER & ANY DAMAGE TO THE EXISTING SYSTEM SHALL BE IMMEDIATELY REPAIRED BY CONTRACTOR.

ALL WATER SHUTOFFS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. CONNECTION TO THE NEW POTABLE WATERLINE SHALL NOT TAKE MORE THAN 8-HOURS. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED PROPERTY OWNERS OF THE PENDING OUTAGE ONE (1) WEEK PRIOR TO THE OUTAGE AND AGAIN ONE (1) DAY PRIOR TO THE OUTAGE.

LOCATIONS OF METERS AND SERVICE CONNECTIONS WILL BE LOCATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL REQUEST THE LOCATION FOR SERVICE CONNECTIONS FROM THE OWNER'S REPRESENTATIVE AT LEAST ONE (1) WEEK PRIOR TO THE WORK COMMENCING.

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

CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THE NECESSARY ADJUSTMENTS IN THE COMPACTION EQUIPMENT OR OPERATION FOR COMPACTION REQUIREMENTS SO THAT UNDERGROUND UTILITIES AND PERMANENT STRUCTURES ARE NOT DAMAGED.THE CONTRACTOR SHALL BE RESTRICTED TO A 35 TON (MAXIMUM) NON-VIBRATORY ROLLER FOR COMPACTION IN AREAS WHERE THE USE OF HEAVIER EQUIPMENT COULD DAMAGE UNDERGROUND UTILITIES OR PERMANENTLY DAMAGE ADJACENT STRUCTURES.

ALL IMPROVEMENTS (INCLUDING FENCES, DITCHES, GUARDRAIL, SIGNS, TRAFFIC CONTROL DEVICES, DRIVEWAYS, LANDSCAPING, ORNAMENTS) THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO THEIR ORIGINAL CONDITION OR BETTER. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THE EXISTING CONDITIONS OF THE PROJECT SITE THROUGH VIDEO, PHOTOS OR OTHER METHODS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE WATERLINE CONSTRUCTION, AND NO ADDITIONAL PAYMENT SHALL BE MADE THEREFOR.

# PLAN CHANGES, AS BUILTS, RECORD DRAWINGS

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

# CONSTRUCTION DEBRIS/DISPOSAL

THE CONTRACTOR SHALL PROVIDE AN AREA TO STORE CONSTRUCTION DEBRIS WHERE IT WILL NOT BE A NUISANCE. ALL DEBRIS SHALL BE CONTAINED IN SUCH A MANNER THAT WILL PREVENT SCATTERING. ALL DEBRIS, INCLUDING TREES AND UNDERGROWTH, SHALL BE DISPOSED OF PROPERLY WITHIN A PROPERLY PERMITTED LANDFILL. ALL CONSTRUCTION DEBRIS SHALL BE REMOVED FROM SITE PRIOR TO SUBSTANTIAL COMPLETION.

UNSUITABLE MATERIAL FROM SITE GRADING AND REMOVAL OPERATIONS SHALL BE STOCKPILED AT AN ONSITE LOCATION APPROVED BY THE ENGINEER.

ITEMS DESIGNATED FOR REMOVAL WITHOUT SALVAGE, UNSUITABLE CONSTRUCTION MATERIALS AND DEBRIS FROM CLEARING AND GRUBBING ARE TO BE PLACED IN AN ENVIRONMENTALLY SUITABLE DISPOSAL SITE SECURED AND COORDINATED BY THE CONTRACTOR, WITH THE APPROPRIATE REGULATORY AGENCIES' APPROVAL AND IN ACCORDANCE WITH THE SPECIFICATIONS FOR THIS PROJECT. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, IN WRITING, OF THE DETAILS OF THE DISPOSAL OPERATIONS.

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

FROM THE SITE.

SITE ACCESS AND PROTECTION THE CONTRACTOR IS RESPONSIBLE FOR SECURING A LOCATION FOR THE STAGING AND STORAGE OF EQUIPMENT AND SUPPLIES. THE OWNER SHALL NOT BE RESPONSIBLE FOR THE THEFT, LOSS, OR DAMAGE OF ANY CONTRACTOR EQUIPMENT OR SUPPLIES.

THE CONTRACTOR SHALL PROVIDE BARRIERS OR FENCING OR DIRECT OVERSIGHT TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE. ACCESS TO EXISTING FACILITIES ADJACENT TO THE CONSTRUCTION AREA SHALL BE SAFELY MAINTAINED THROUGHOUT CONSTRUCTION UNLESS APPROVED BY THE ENGINEER AND UNLESS PROPER NOTICE HAS BEEN GIVEN TO AFFECTED PARTIES.

SITE RESTORATION SITE RESTORATION, INCLUDING TEMPORARY EROSION CONTROL PROVISIONS, IS A PREREQUISITE FOR PERIODIC & FINAL PAYMENT.

SITE RESTORATION SEEDING OR PLANTING OF ANY DISTURBED AREAS SHALL FOLLOW NPDES STANDARDS. TOPSOIL EXCAVATION FROM THE SITE SHALL BE FREE OF WEEDS.

CONSTRUCTION REQUIREMENTS ALL WATERLINES SHALL BE INSTALLED TO A MINIMUM COVER OF FORTY-EIGHT (48) INCHES AND SHALL BE DETERMINED FROM THE ADJACENT ROADWAY ELEVATIONS IF THE ROADWAY IS LOWER THAN THE EXISTING ELEVATIONS ALONG THE WATERLINE ALIGNMENT, UNLESS NOTED OTHERWISE. THIS INCLUDES ANY CROSSING SERVICES OR LATERALS INSTALLED. EXCEPTIONS MUST BE AUTHORIZED BY THE ENGINEER.

THE CONTRACTOR SHALL STAMP THE CONCRETE OF EACH VALVE COLLAR AND FIRE HYDRANT COLLAR WITH THE UNDERLYING PIPE SIZES AND THE DIRECTION OF FLOW. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE MANHOLE OR CLEANOUT BID ITEMS, AND NO ADDITIONAL PAYMENT SHALL BE MADE THEREFOR.

THE COMBINATION AIR VALVES FOR THIS PROJECT SHALL BE VAL-MATIC MODEL 201C.2 COMBINATION VALVES WITH STAINLESS STEEL INLET AND OUTLET VALVES AND 5' OF HOSE FOR FLUSHING INSTALLED PER MANUFACTURER'S RECOMMENDATIONS WITH STAINLESS STEEL PIPING AND FITTINGS.

ALL FILL MATERIAL SHALL MEET THE REQUIREMENTS OF THE NMDOT SPECIFICATIONS. THE FILL SHALL BE COMPACTED PER THE NMDOT SPECIFICATIONS. ALL FILL SLOPES SHALL BE GRADED TO 3:1 MAX., AND ALL CUT SLOPES SHALL BE AT 2:1 MAX., 3:1 PREFERRED, UNLESS NOTED OTHERWISE. ALL BEDDING MATERIAL SHALL BE GRANULAR AND FREE-DRAINING, HAVE A MAXIMUM GRAIN SIZE THAT DOES NOT EXCEED 1/2 INCH, AND BE ACCEPTABLE TO THE ENGINEER.

THE PAVEMENT BID ITEMS INCLUDED IN THIS PROJECT ARE INTENDED TO REMOVE AND REPLACE THE EXISTING PAVEMENT FOR ALLEYS AND PRIVATE ROADS, ONLY THE PAVEMENT DISTURBED BY THE WATERLINE INSTALLATION SHALL BE REPLACED. THE PAYMENT FOR THE PRIVATE ROAD PAVEMENT REPLACEMENT SHALL NOT EXCEED A MAXIMUM WIDTH OF EIGHT (8) FEET. REPLACEMENT FOR WIDTHS GREATER THAN 8' SHALL BE CONSIDERED INCIDENTAL TO SEWER LINE CONSTRUCTION. THE CONTRACTOR SHALL MINIMIZE PAVEMENT REPLACEMENT. THE CONTRACTOR SHALL COORDINATE AND VERIFY THE EXISTING AND PROPOSED PAVEMENT THICKNESS WITH THE ENGINEER AT LEAST TWO WEEKS PRIOR TO DISTURBING THE PAVEMENT.

## SWPPP

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED FOR THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ITS PREPARATION AND IMPLEMENTATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THERE WILL BE NO BID ITEM INCLUDED AND NO ADDITIONAL PAYMENT MADE FOR THE PREPARATION AND IMPLEMENTATION OF A SWPPP. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER WORK.

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

CONTRACTOR SHALL VERIFY DEPTH AND SIZE OF CULVERT PIPE AT IRRIGATION AND DRAINAGE CROSSINGS PRIOR TO

### **PROTECTION OF EXISTING UTILITIES/STRUCTURES**

THE CARE AND PROTECTION OF ALL OTHER UTILITIES, PAVEMENT, DRAINAGE STRUCTURES AND OTHER STREET APPURTENANCES IS THE RESPONSIBILITY OF THE CONTRACTOR. IF DAMAGED, LOST IN TRENCH, OR OTHERWISE DISTURBED, THESE ITEMS WILL BE REPAIRED OR REPLACED AT THE CONTRACTORS EXPENSE. WHERE TRENCHING BENEATH EXISTING UTILITY LINES OCCURS, THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPORTING THE LINE DURING CONSTRUCTION AND ENSURE THAT IT IS ADEQUATELY BACKFILLED AND COMPACTED.

IF THERE IS A CONFLICT BETWEEN THE PLANS, SPECIFICATIONS AND/OR MANUFACTURER'S RECOMMENDATIONS FOR ANY DEVICE, PART, OR MATERIAL USED IN THE PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, FOR CLARIFICATION AT LEAST TWO WEEKS PRIOR TO CONSTRUCTION OF SAID DEVICE, PART, OR MATERIAL.

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

### CONSTRUCTION STANDARDS

A. THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2007 EDITION. B. THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2006 EDITION. C. NEW MEXICO ENVIRONMENT DEPARTMENT'S RECOMMENDED STANDARDS FOR WATER AND WASTEWATER LEGEND FACILITIES. D. WHERE NOT COVERED BY LOCAL ORDINANCE, THE "INTERNATIONAL BUILDING CODE" 2006 EDITION (IBC) FOR EXISTING APPLICABLE WORK. E. "OCCUPATIONAL SAFETY HEALTH ADMINISTRATION" REGULATIONS FOR TRENCHING, SHORING & EXCAVATION. F. SUPPLEMENTAL TECHNICAL SPECIFICATIONS. \_\_\_\_\_\_ OHE-----—— F0 —— — w — \_\_\_\_O\_\_\_\_O\_\_\_ \_\_\_\_C = = = =

THE CONSTRUCTION OF THE PROJECT WILL BE GOVERNED BY THE FOLLOWING SPECIFICATIONS AND GUIDELINES COPIES OF WHICH SHALL BE KEPT AT THE CONSTRUCTION SITE BY THE CONTRACTOR AT ALL TIMES. ANY CONFLICT BETWEEN THE REQUIREMENTS OF THE SPECIFICATIONS SHALL BE RESOLVED BY THE ENGINEER. IN GENERAL, THE MORE STRINGENT SPECIFICATION SHALL GOVERN. THE CONTRACTOR SHALL PROVIDE A COPY OF THE NMSSPWC TO THE FIELD REPRESENTATIVE OF THE ENGINEER AT THE BEGINNING OF THE PROJECT. THE CONTRACTOR SHALL CONSTRUCT THE WATER SYSTEM COMPONENTS ACCORDING TO NEW MEXICO DRINKING WATER BUREAU STANDARDS, "NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (NMSSPWC) 2006 EDITION, & ALL COMPONENTS, MATERIALS AND TREATMENT CHEMICALS THAT COME INTO CONTACT WITH DRINKING WATER SHALL BE CERTIFIED FOR CONFORMANCE TO ANSI/NSF STANDARD 60 OR 61, AS APPLICABLE. CONSTRUCTION LIMITS THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO THE CONSTRUCTION LIMITS OF THE PROJECT AND SHALL IN NO WAY ENCROACH ONTO ADJACENT PROPERTIES UNLESS LEGAL EASEMENTS ARE PROVIDED OR SECURED BY THE CONTRACTOR. ALL FILL AND CUT SLOPES FOR STRUCTURES SHALL BE SET BACK FROM THE PROPERTY LINE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY AGREEMENTS NECESSARY OR DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO PUBLIC OR PRIVATE PROPERTY, INCLUDING UTILITIES. THE LIMITS OF CONSTRUCTION AND LOCATIONS OF THE CONTRACTORS STAGING AREAS SHALL BE IDENTIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE LIMITS OF CONSTRUCTION SHALL BE CLEARLY DELINEATED AND SHALL BE THE MINIMUM REQUIRED TO MAINTAIN ALL WORKERS IN A SAFE CONDITION, TO PROVIDE ACCESS, AND TO MEET O.S.H.A. REGULATIONS. SAFETY THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING AND CLEANUP OF SPILLS ASSOCIATED WITH PROJECT CONSTRUCTION AND SHALL REPORT AND RESPOND TO SPILLS OF HAZARDOUS MATERIALS SUCH AS GASOLINE, DIESEL, MOTOR OILS, SOLVENTS, CHEMICALS, TOXIC AND CORROSIVE SUBSTANCES, AND OTHER MATERIALS WHICH MAY BE A THREAT TO PUBLIC HEALTH OR THE ENVIRONMENT. REPORTS SHALL BE MADE IMMEDIATELY TO THE NEW MEXICO ENVIRONMENT DEPARTMENT EMERGENCY RESPONSE TEAM AT (505) 827-4308 OR (505) 470-3657, THE NATIONAL RESPONSE TEAM AT 1-800-424-8802 AND TO THE ENGINEER.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY, AND FOR KNOWLEDGE AND COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS. THE CONTRACTOR SHALL MAINTAIN ALL TRENCHES IN A SAFE CONDITION PROTECTING THE WORKERS AND THE GENERAL PUBLIC. TRENCH PROTECTION SHALL BE IN ACCORDANCE WITH APPLICABLE O.S.H.A. REGULATIONS. EXCAVATIONS SHALL BE SLOPED, BRACED, OR SHORED AS REQUIRED BY O.S.H.A. REGULATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFE HANDLING OF CONSTRUCTION EQUIPMENT AND MATERIALS TO AND FROM THE STAGING/STORAGE AREA AND FOR SITE SECURITY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND NO ADDITIONAL COMPENSATION SHALL BE MADE THEREFOR.

THE CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIAL WITHIN 30' FROM THE EDGE OF THE DRIVING LANE UNLESS THE EQUIPMENT OR MATERIAL IS PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. THE SAFETY DESIGN FOR SHIELDING SHALL BE PROVIDED BY THE CONTRACTOR AND MUST BE APPROVED BY THE ENGINEER BEFORE IMPLEMENTING. THIS WORK, INCLUDING DESIGN, SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

DURING CONSTRUCTION, ALL ACCESS ROADS SHALL BE SERVICEABLE AND MAINTAINED FOR FIRE PROTECTION AND EMERGENCY VEHICLE ACCESS.

### SURVEY

CONTRACTOR WILL BE RESPONSIBLE FOR CONSTRUCTION STAKING NECESSARY TO CONSTRUCT THE PROJECT. THE ENGINEER WILL SUPPLY CONTRACTOR WITH INFORMATION RELATED TO PROJECT COORDINATES AND CONTROL.THE CONSTRUCTION STAKING SHALL BE COMPLETED UNDER THE SUPERVISION OF A LICENSED SURVEYOR. THE CONSTRUCTION SURVEYOR SHALL VERIFY THE PROJECT CONTROL, THE EXISTING AND PROPOSED GRADES, EXISTING AND PROPOSED BUILDING FOOTPRINTS, SETBACKS AND TOPOGRAPHY PRIOR TO CONSTRUCTION.

### **PROJECT SPECIFIC**

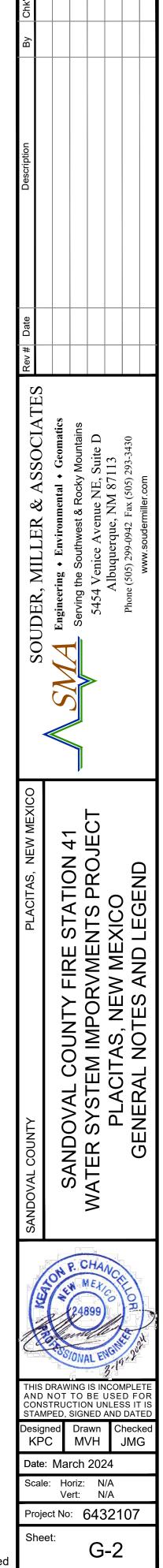
AT THE BEGINNING OF THE PROJECT, THE CONTRACTOR SHALL FURNISH THE AUTHORITY WITH TWO (2) ELECTRONIC MARKER DISK LOCATORS, RYCOM INSTRUMENTS MODEL 8891 (PART NO. 001-00147-00-SW) OR APPROVED EQUAL TO BE KEPT BY THE AUTHORITY. THE COST OF THESE LOCATORS SHALL BE CONSIDERED INCIDENTAL TO THE SEWER LINE CONSTRUCTION, AND NO ADDITIONAL PAYMENT SHALL BE MADE THEREFOR. THE CONTRACTOR SHALL INSTALL EMDS AT ALL LOCATIONS IDENTIFIED IN NMSSPWC.

ALL MAINS, LATERALS, AND MANIFOLD LINE SHALL BE MARKED WITH #12 AWG-UNDERGROUND SOLID COPPER TRACER WIRE ATTACHED TO PIPE AND PLASTIC METALIZED RIBBON TAPE: BLUE COLORED, CONTINUOUSLY PRINTED, MINIMUM 6 INCHES WIDE BY 4 MIL THICK, MANUFACTURED FOR DIRECT BURIAL SERVICE, IMPRINTED WITH "BURIED WATER SERVICE" IN LARGE LETTERS AT LEAST THIRTY (30) INCHES ABOVE BURIED PIPE. SERVICE LINES WILL BE MARKED WITH THE 2" METALIZED DETECTABLE WARNING TAPE.

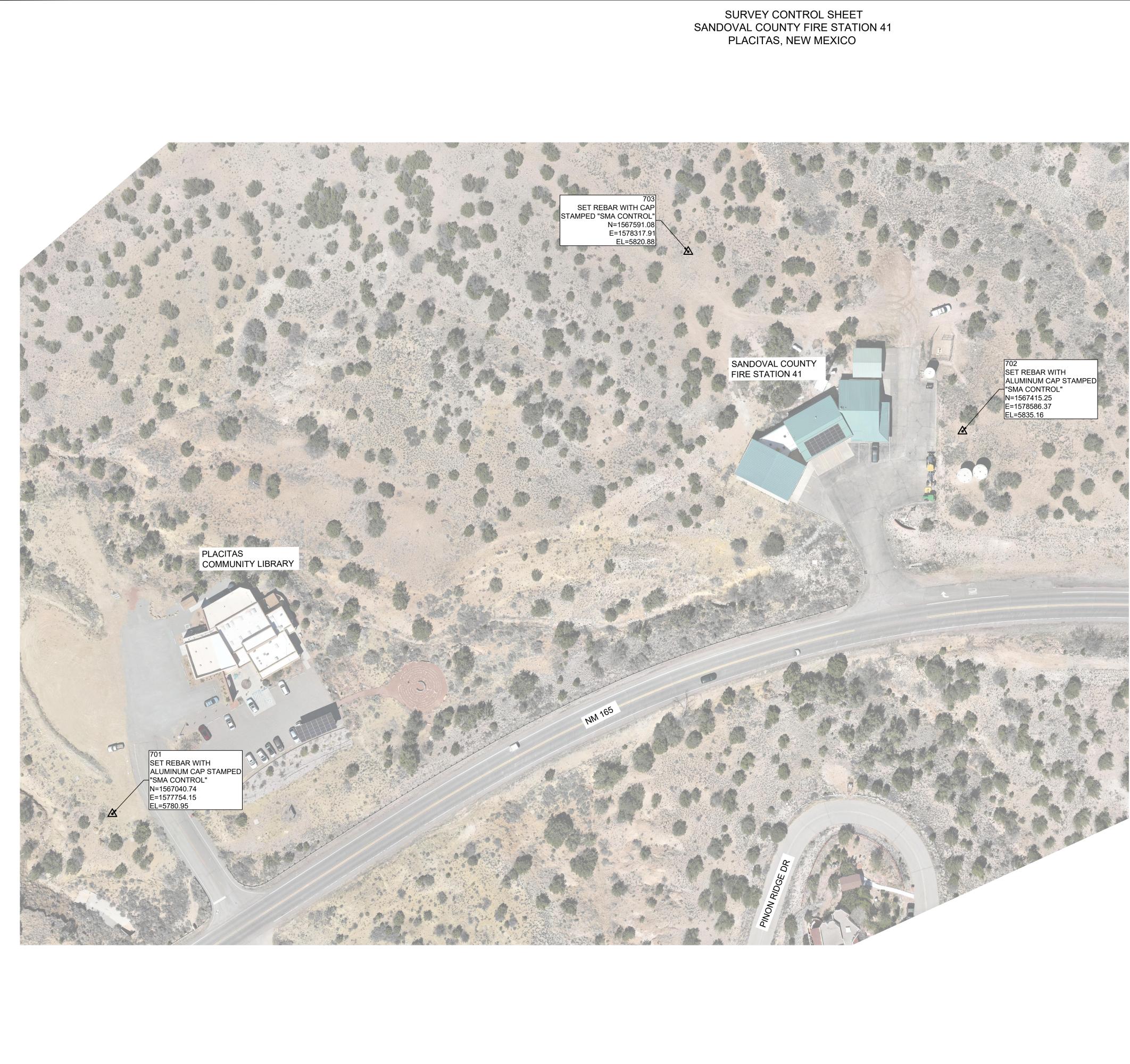
wv X	WATER VALVE
WM	WATER METER
$\bigotimes$	WELL
МВ	MAIL BOX
$\bowtie$	MILE MARKER
-	FIBER OPTIC MARKER
	SURVEY CONTROL
	POWER POLE
—)	GUY ANCHOR
	RIGHT OF WAY
OHE OHE	OVERHEAD ELECTRIC LINE
UGE	UNDERGROUND ELECTRIC LINE
UGT	UNDERGROUND TELEPHONE LINE
FO FO	UNDERGROUND FIBER OPTIC
w w	WATERLINE
oo	FENCE
<u>0</u>	FENCE WITH BRICK PILLARS
=======	CULVERT
	MAJOR CONTOUR
6401	MINOR CONTOUR

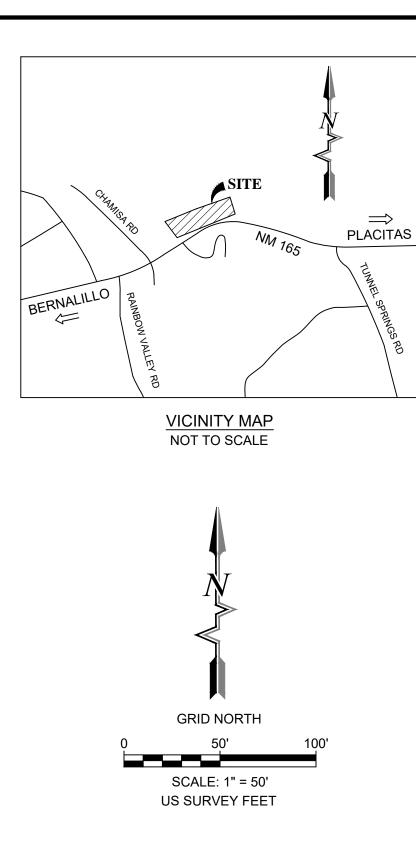
### PROPOSE

_	WATERLINE
	GATE VALVE
	AIR RELEASE VALVE
	FLUSH HYDRANT



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## BASIS OF BEARINGS:

### BASIS OF BEARING

THE BASIS OF BEARING OF THIS SURVEY SHOWN HEREON IS GRID NORTH BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM. DISTANCES AND COORDINATES ARE MODIFIED (SURFACE) NEW MEXICO STATE PLANE COORDINATES, NEW MEXICO CENTRAL ZONE 3002, NAD83, NAVD88, FROM A CONTROL POINT DETERMINED BY AN OPUS SOLUTION.

REFERENCE FRAME: MODIFIED NAD83(2011) (EPOCH:2010.0000) ORIGIN OF SCALE: N= 1567040.74 E= 1577754.15 (N35°18'24.69078"

W106°27'36.11066")

GRID TO GROUND SCALE FACTOR: 1.0003689254

POINT # NORTHING EASTING ELEVATION

CONVERGENCE: - 0° 7' 16.99" ALL DISTANCES ARE GROUND DISTANCES, UNITS ARE U.S. SURVEY FEET

ELEVATION USED FOR SCALE: 5780.95' VERTICAL DATUM: NAVD88 (ORTHOMETRIC HEIGHTS COMPUTED USING GEOID18)

### METHODS:

ALL CONTROL ON THIS PROJECT WAS OBSERVED AND SET ON MARCH 31, 2023 WITH FINAL ADJUSTMENTS MADE BY APRIL 3, 2023. ALL POINTS WERE OBSERVED USING TRIMBLE R8 GPS RECEIVERS UTILIZING RTK GPS METHODS.

Point Table

701	1567040.74	1577754.15	5780.95	ALUMINUM CAP STAMPED "SMA CONTROL"
702	1567415.25	1578586.37	5835.16	SET REBAR WITH ALUMINUM CAP STAMPED "SMA CONTROL"
703	1567591.08	1578317.91	5820.88	SET REBAR WITH CAP STAMPED "SMA CONTROL"

# CERTIFICATION:

I, JAYSON NATERA, NEW MEXICO PROFESSIONAL SURVEYOR NO. 27749, DO HEREBY CERTIFY THAT THIS CONTROL SURVEY REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION BASED ON AN ACTUAL SURVEY ON THE GROUND AS DESCRIBED HEREIN; THAT I AM RESPONSIBLE FOR THIS SURVEY; AND THAT THE SURVEY AND REPORT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

NATERA, N.M.P.S. 27749

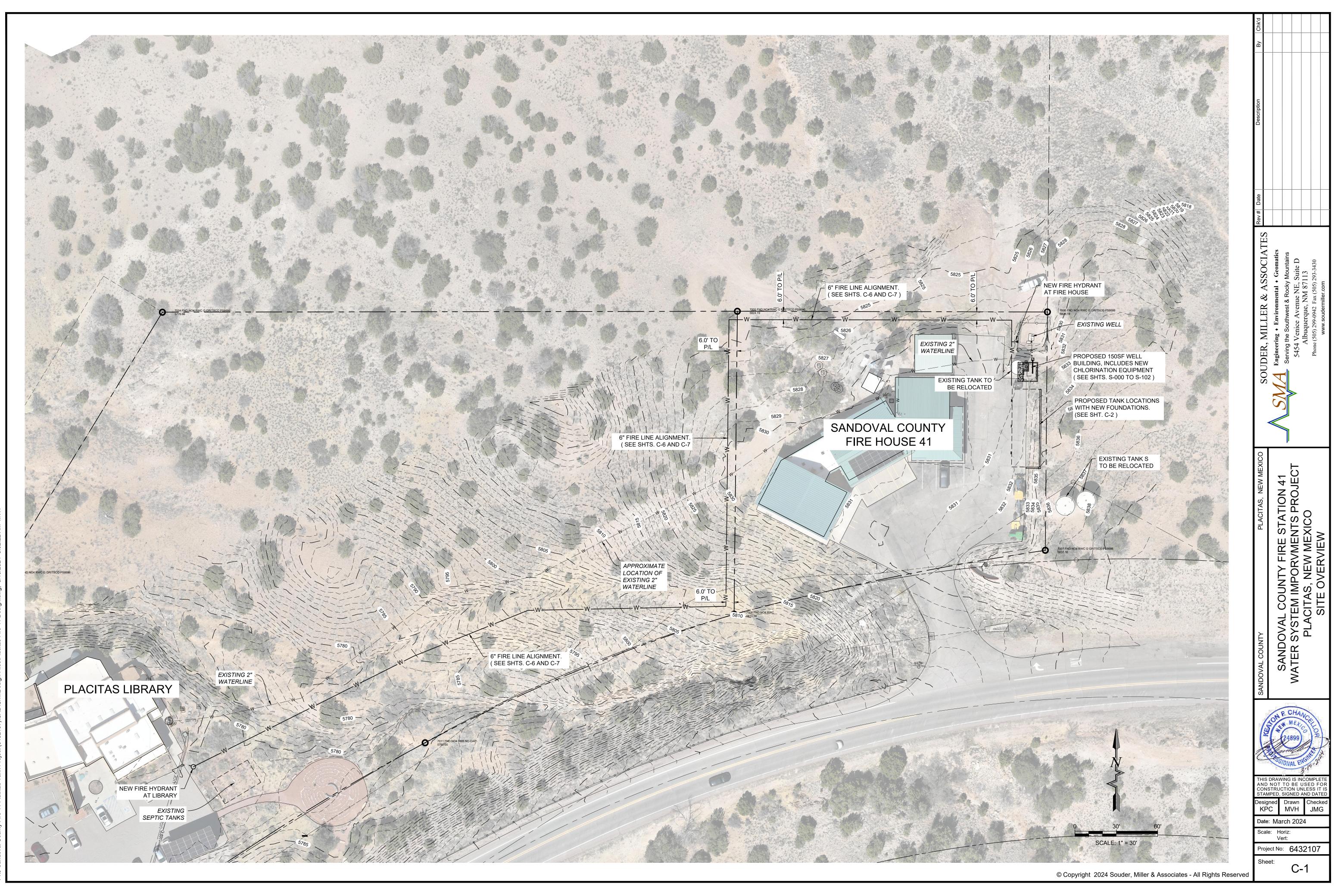
DESCRIPTION

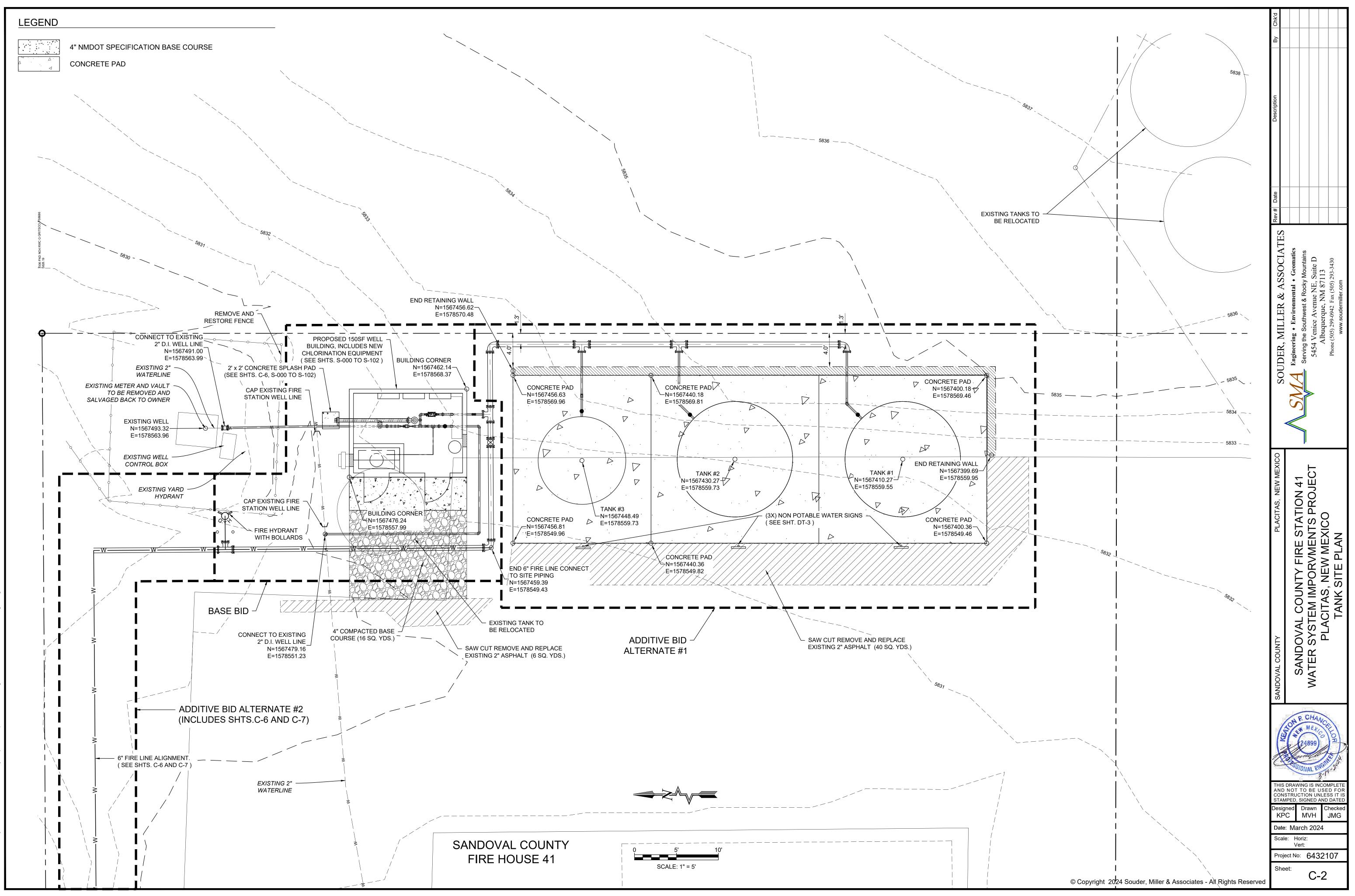
SET REBAR WITH

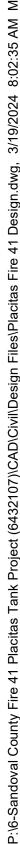
7/24/2023 DATE

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	Chk'd						
	By						
	Description						
	Rev # Date						
	SOUDER, MILLER & ASSOCIATES	SANA Engineering • Environmental • Geomatics	Serving the Southwest & Rocky Mountains	V 5454 Venice Avenue NE, Suite D	Albuquerque, NM 87113	Phone (505) 299-0942 Fax (505) 293-3430	www.soudermiller.com
	SANDOVAL COUNTY PLACITAS, NEW MEXICO			WALER SYSTEM IMPORVMENTS PROJECT	PLACITAS, NEW MEXICO		SURVEY CONTROL SHEET
	AND	DRAW	то	BEI	JSE	DF	ETE OR
	STAN Desig KP	ned C C Ma e: Ha	SIGN Dra M rch oriz: ert:	iwn /H 202 1" =	AND C 24 50'	DA1 hec JM	reD ked G
ed	Proje She	ect No et:	): <b>(</b>	643 G	-3		,







KEYE	D NOTES - SANDOVAL FIRE STATION #41 PIPING				
ITEM NO.	DESCRIPTION				
1	PRE-ENGINEERED MANUFACTURED BUILDING (SEE SHTS. G-100 TO S-102)				
2	EXISTING 2" FROM WELL ( SEE SHT. C-2 )				
3	AIR RELEASE VALVE VAL-MATIC MODEL NO. 15A.3DISVH( SEE SHT. DT-2 )				
4	2" SS STEEL PIPE, NPT				
5	2" 90° BEND, SS, NPT				
6	2" BALL VALVE, NPT				
7	6" PVC C900 PIPE				
8	6" MJ x MJ TEE, DI				
9	6" MJ x MJ 90° BEND, DI				
10	6" x 2" MJ TAPPED CAP				
11	2" PVC CAP				
12	2" PIPE, STEEL, NPT				
13	2" TEE, STEEL, NPT				
14	2" 90° BEND, STEEL, NPT				
15	1" NPT x NPT FLOW METER, RECORDALL, MODEL 55				
16	2" WYE STRAINER, NPT				
17	2" ZURN MODEL 375 WITH FULL PORT QUARTER TURN BALL VALVE REDUCED PRESSURE BACK FLOW PREVENTER ASSEMBLY. PLUMB 1" DRAIN TO FLOOR DRAIN WITH A 4" AIR GAP				

18	2" x 1" REDUCER, STEEL NPT
19	2" UNION, STEEL, NPT
20	1" PIPE, STEEL, NPT
21	1" TEE, STEEL, NPT (NOT SHOWN THIS SHEET
22	1" x 3/4" FEMALE REDUCING BUSHING, D.I. NP
23	PRESSURE GAUGE, 0-100 PSI, WITH PVC/TEFL AND 1/2" BALL VALVE
24	1" UNION, STEEL, NPT
25	1" EXISTING PRESURE SWITCH TO BE RELOC BUILDING FROM STORE ROOM
26	1" CROSS, STEEL, NPT AND 1" PLUG POINTED
27	2" HYMAX 2-BOLT COUPLING
28	3/4" SMOOTH NOSE HOSE BIB WITH VACUUM
29	2" MALE x 3/4" FEMALE REDUCING BUSHING,
30	4" PVC C900 PIPE
31	4" MJ x MJ 90° BEND, DI WITH 4" FLOOR DRAIN
32	4" CAST IRON FLAP VALVE ( SEE SHT. )
33	6" MJ x MJ GATE VALVE ( SEE DETAIL DT-2 ) 3
34	2" CHECK VALVE, NPT
35	NON POTABLE WATER SIGNS( SEE SHT. DT-3
36	NO HUB FLOOR DRAIN (ZN415-4NH-6B)
37	2" GATE VALVE, NPT

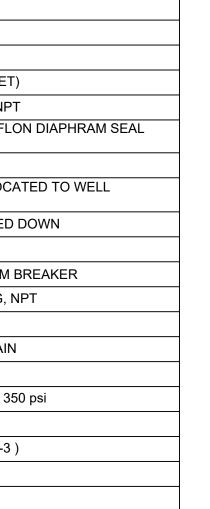
## NOTES:

- 1. PRIOR TO COMMENCING ACTIVITIES, CONTRACTOR SHALL COMPLETE EXPLORATORY DIGGING AT THE CONNECTION LOCATIONS TO EXISTING LINES AND DETERMINE LOCATION AND DEPTHS OF EXISTING DISTRIBUTION LINES AND VALVES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DEVIATIONS FROM DESIGN LAYOUT IN ADVANCE OF CONSTRUCTION WITH ENOUGH NOTICE TO ENABLE DESIGN MODIFICATION IF NECESSARY.
- 2. EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY, BASED ON INFORMATION PROVIDED BY UTILITY COMPANIES OR AS-BUILT DRAWINGS. CONTRACTOR MUST CONTACT NM ONECALL TO OBTAIN SPOTS AND SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS IN THE FIELD. SEE GENERAL NOTES FOR FURTHER INFORMATION.



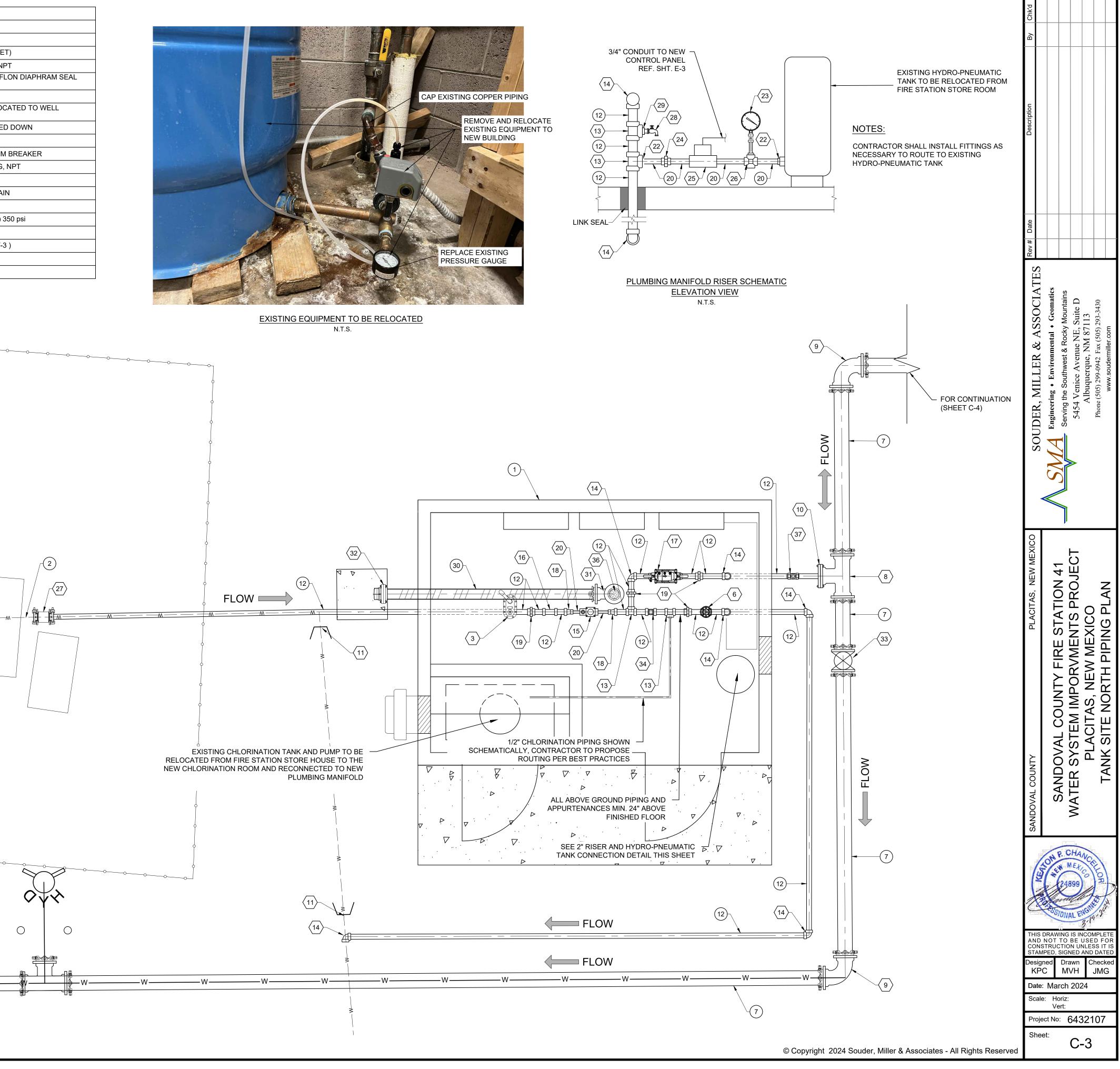
SCALE: 1" =4'

TANK SITE NORTH PIPING PLAN



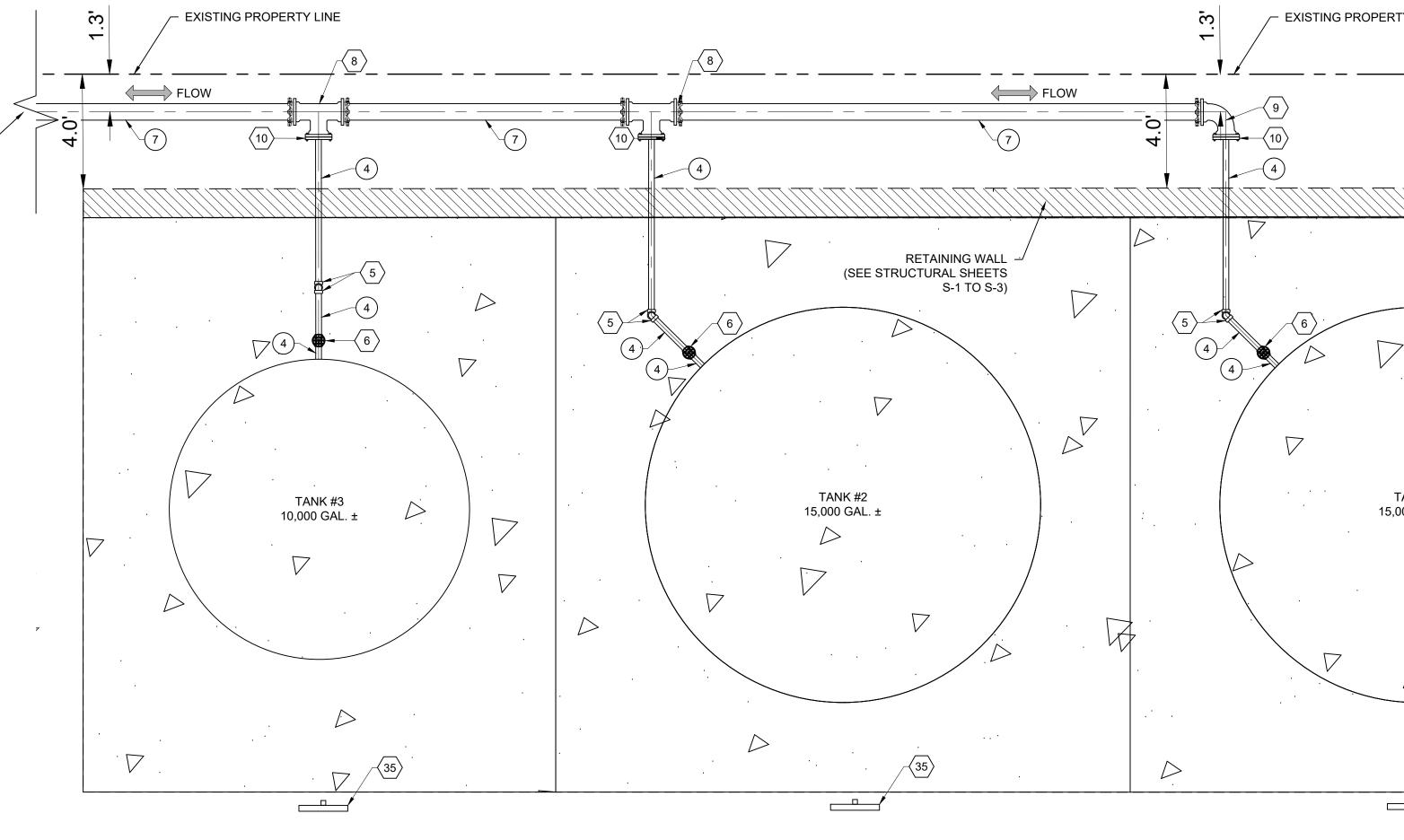






KEYEL	D NOTES - SANDOVAL FIRE STATION #41 PIPING		
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18 2" x 1" REDUCER, STEEL NPT				
19 2" UNION, STEEL, NPT	NOTES:			
20 1" PIPE, STEEL, NPT	1. PRIOR TO COMMENCING ACTIVITIES, CONTRACTOR SHALL COMPLETE			
21 1" TEE, STEEL, NPT (NOT SHOWN THIS SHEET)	EXPLORATORY DIGGING AT THE CONNECTION LOCATIONS TO EXISTING			
22 1" x 3/4" FEMALE REDUCING BUSHING, D.I. NPT	LINES AND DETERMINE LOCATION AND DEPTHS OF EXISTING DISTRIBUTION LINES AND VALVES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY			
23 PRESSURE GAUGE, 0-100 PSI, WITH PVC/TEFLON DIAPHRAM SEAL AND 1/2" BALL VALVE	DEVIATIONS FROM DESIGN LAYOUT IN ADVANCE OF CONSTRUCTION WITH ENOUGH NOTICE TO ENABLE DESIGN MODIFICATION IF NECESSARY.			
24 1" UNION, STEEL, NPT				
25 1" EXISTING PRESURE SWITCH TO BE RELOCATED TO WELL BUILDING FROM STORE ROOM	2. EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY, BASED ON INFORMATION PROVIDED BY UTILITY COMPANIES OR AS-BUILT			
26 1" CROSS, STEEL, NPT AND 1" PLUG POINTED DOWN	DRAWINGS. CONTRACTOR MUST CONTACT NM ONECALL TO OBTAIN SPOTS AND SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS IN THE FIELD.			
27 2" HYMAX 2-BOLT COUPLING	SEE GENERAL NOTES FOR FURTHER INFORMATION.			
28 3/4" SMOOTH NOSE HOSE BIB WITH VACUUM BREAKER	3. ALL ABOVE GROUND EXTERIOR PIPING FOR CONNECTION TO THE EXISTING			
29 2" MALE x 3/4" FEMALE REDUCING BUSHING, NPT	TANKS SHALL HAVE HEAT TRACE AND SHALL BE INSULATED.			
30 4" PVC C900 PIPE				
31 4" MJ x MJ 90° BEND, DI WITH 4" FLOOR DRAIN				
32 4" CAST IRON FLAP VALVE ( SEE SHT. )				
33 6" MJ x MJ GATE VALVE ( SEE DETAIL DT-2 ) 350 psi				
34 2" CHECK VALVE, NPT				
35 NON POTABLE WATER SIGNS( SEE SHT. DT-3 )				
36 NO HUB FLOOR DRAIN (ZN415-4NH-6B)				
37 2" GATE VALVE, NPT				

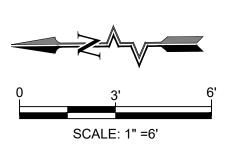


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MVH

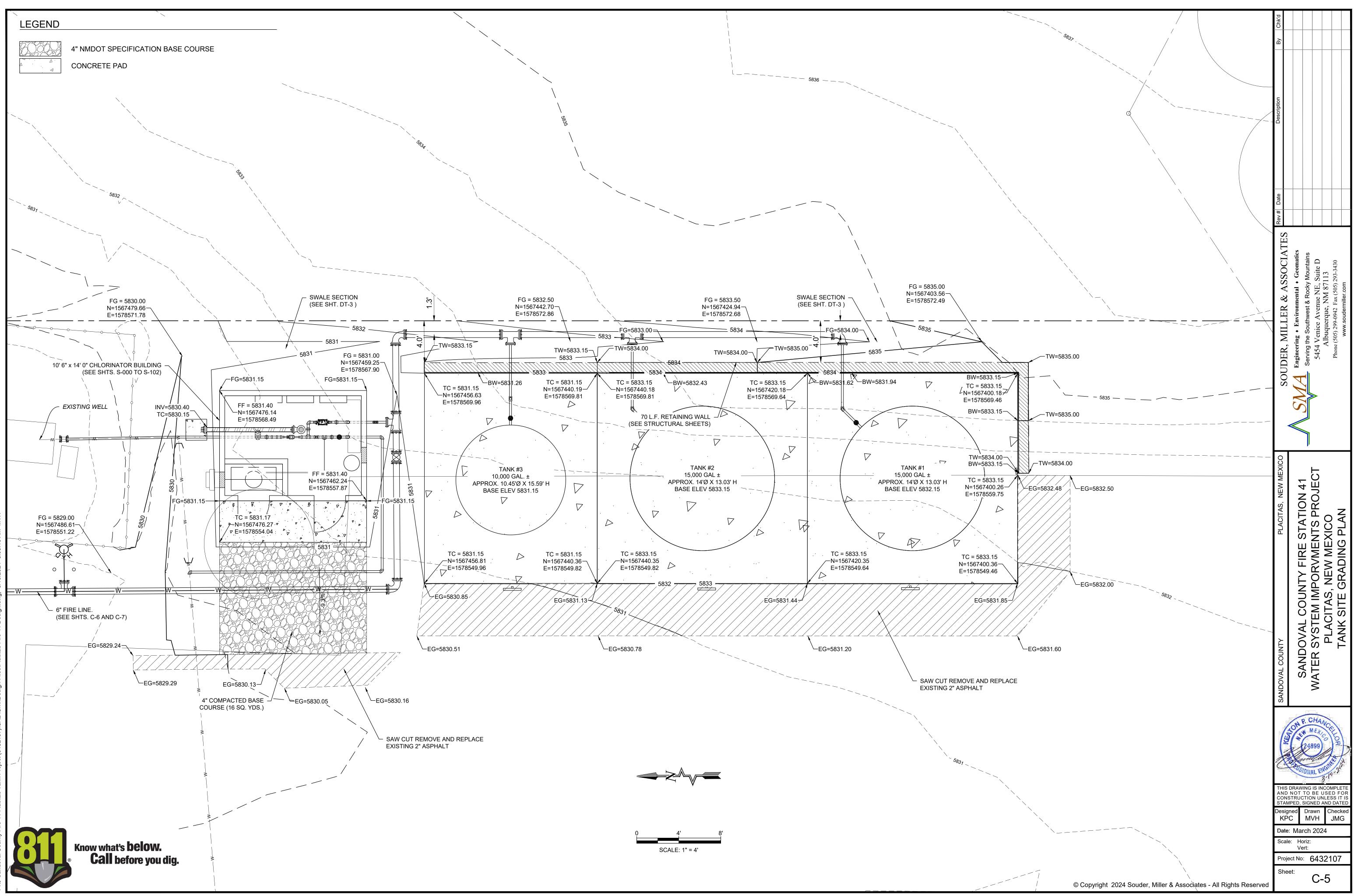


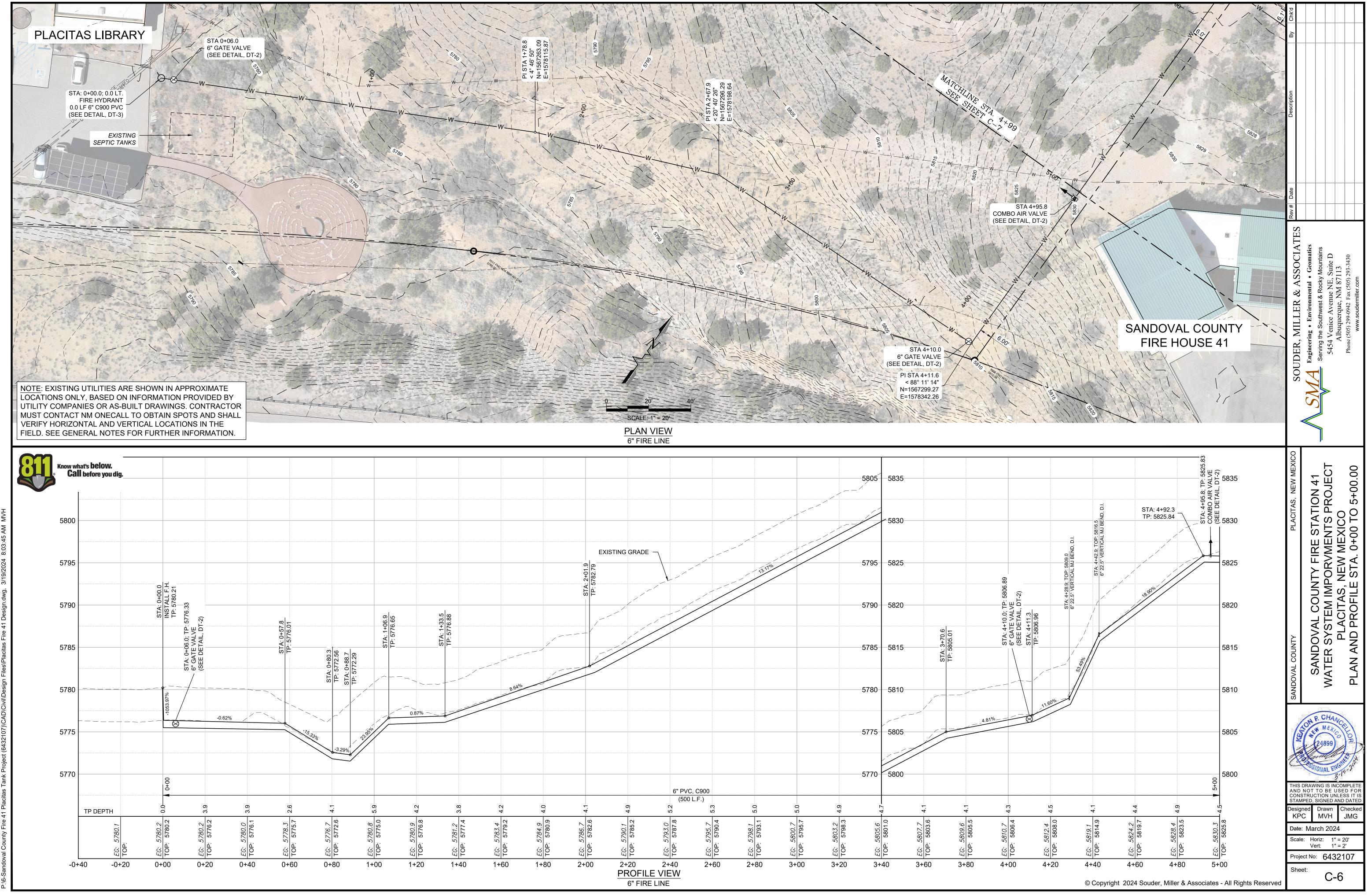
Know what's **below.**Call before you dig.

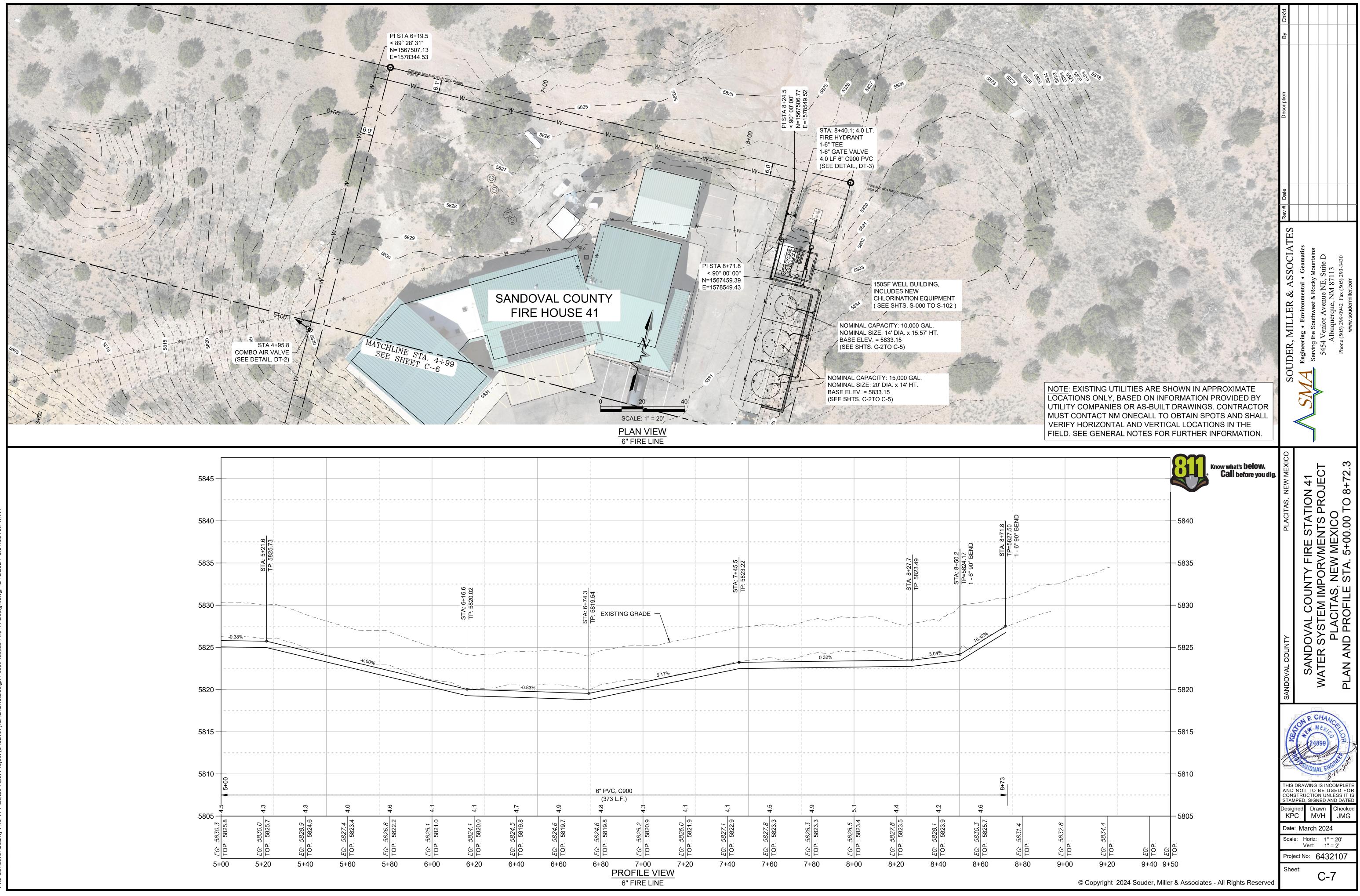


TANK SITE SOUTH PIPING PLAN

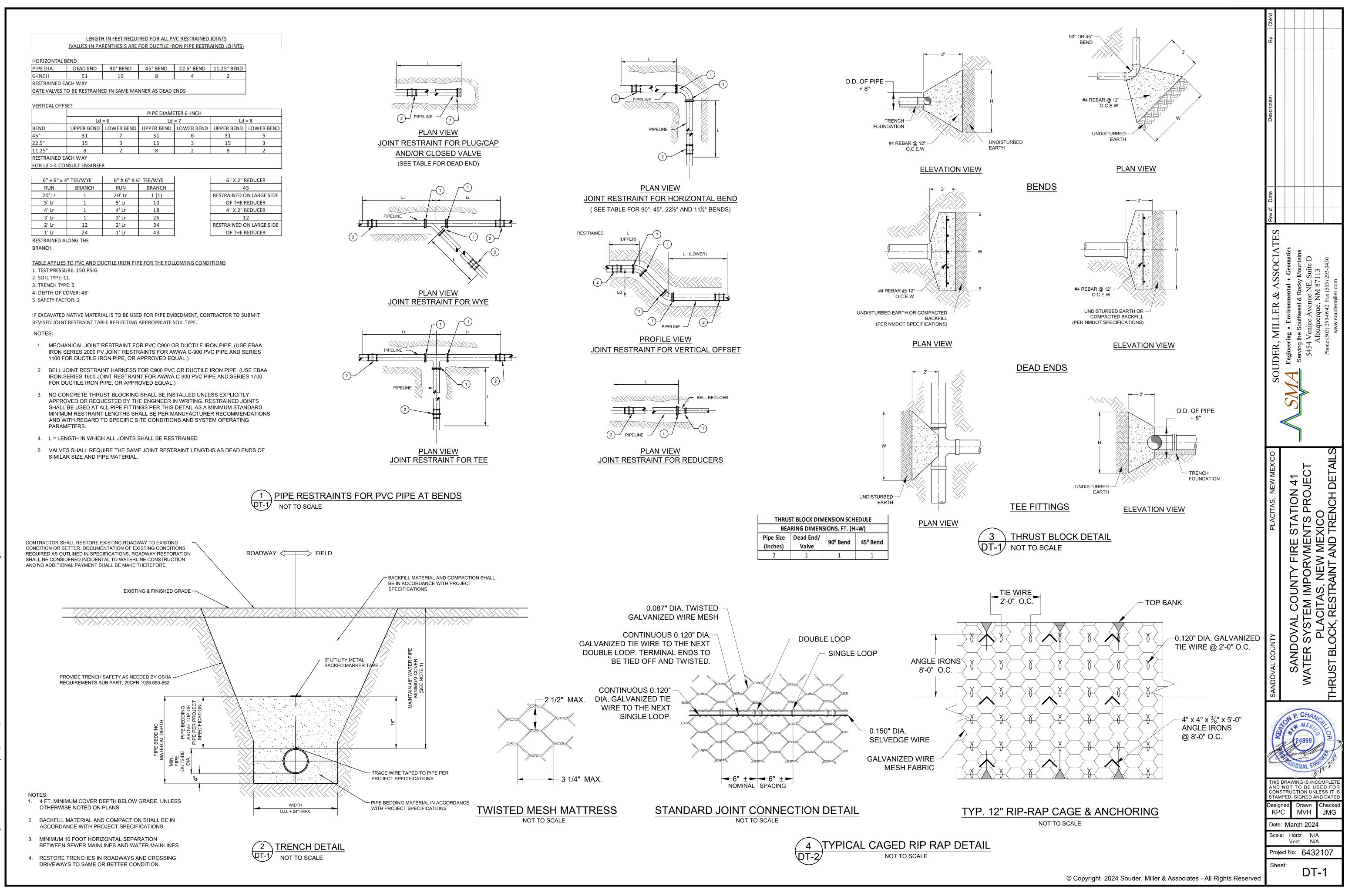
	By Chk'd	
	Description	
	Rev # Date	
RTY LINE	SOUDER, MILLER & ASSOCIATES	Engineering • Environmental • Geomatics Serving the Southwest & Rocky Mountains 5454 Venice Avenue NE, Suite D Albuquerque, NM 87113 Phone (505) 299-0942 Fax (505) 293-3430 www.soudermiller.com
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	EXICO	
TANK #1 5,000 GAL. ±	PLACITAS, NEW MEXICO	SANDOVAL COUNTY FIRE STATION 41 ATER SYSTEM IMPORVMENTS PROJEC PLACITAS, NEW MEXICO TANK SITE SOUTH PIPING PLAN
	SANDOVAL COUNTY	SANDOVAL COUNTY FIRE STA WATER SYSTEM IMPORVMENTS PLACITAS, NEW MEXIC TANK SITE SOUTH PIPING I
		CHANCHLOR CHANCH
	ANE CON STAI Desi KF Date Sca	B DRAWING IS INCOMPLETE O NOT TO BE USED FOR ISTRUCTION UNLESS IT IS MPED, SIGNED AND DATED Green Drawn Checked MVH JMG E: March 2024 le: Horiz: Vert:
© Copyright 2024 Souder, Miller & Associates - All Rights Reserved	She	eet: C-4

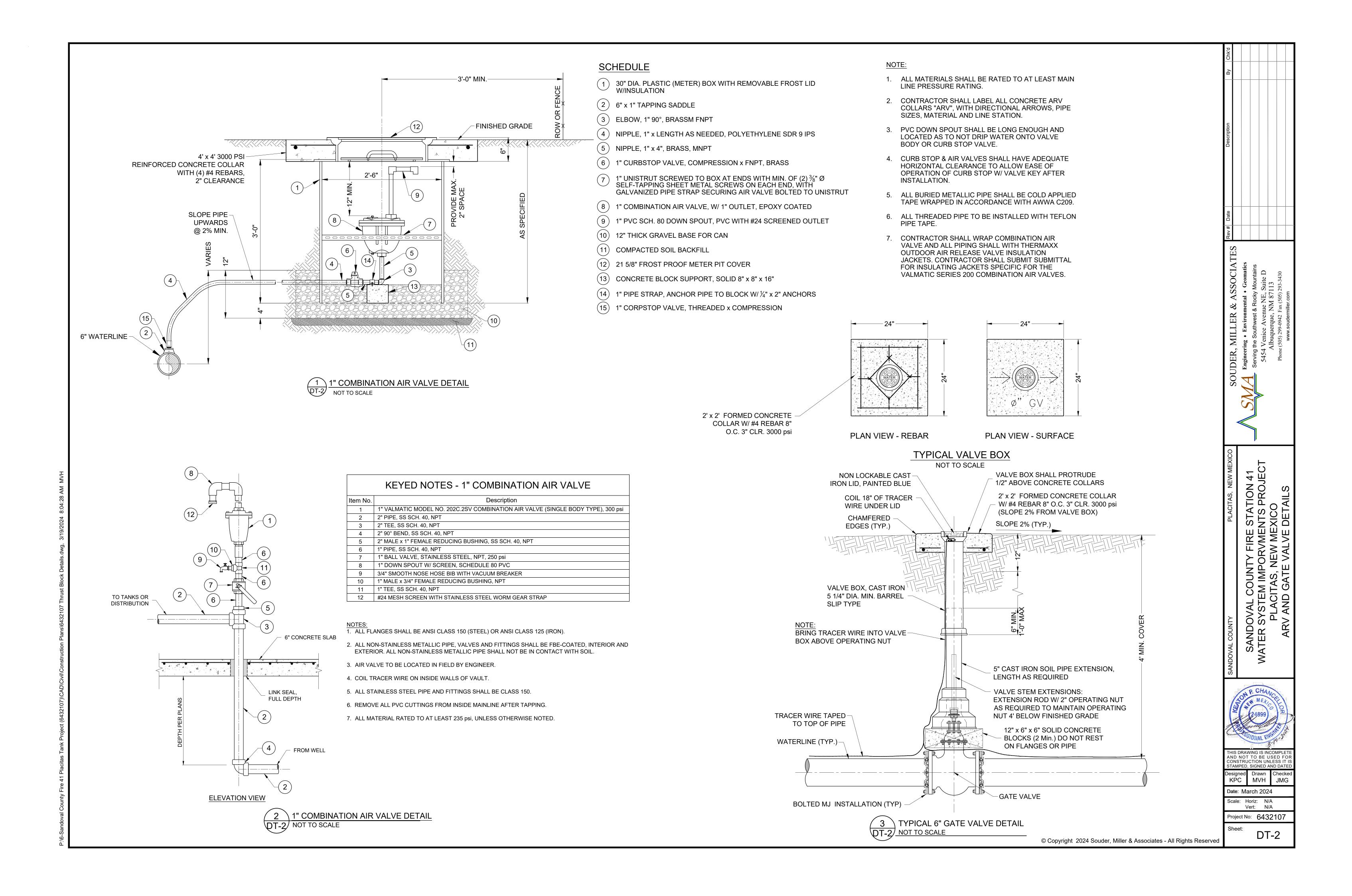


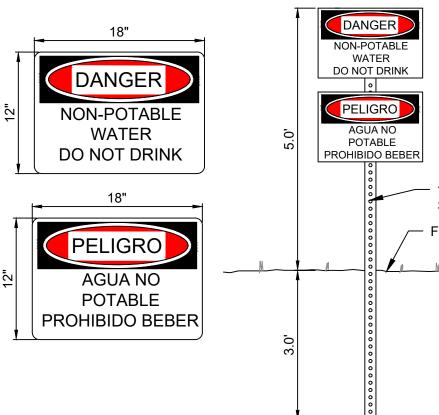




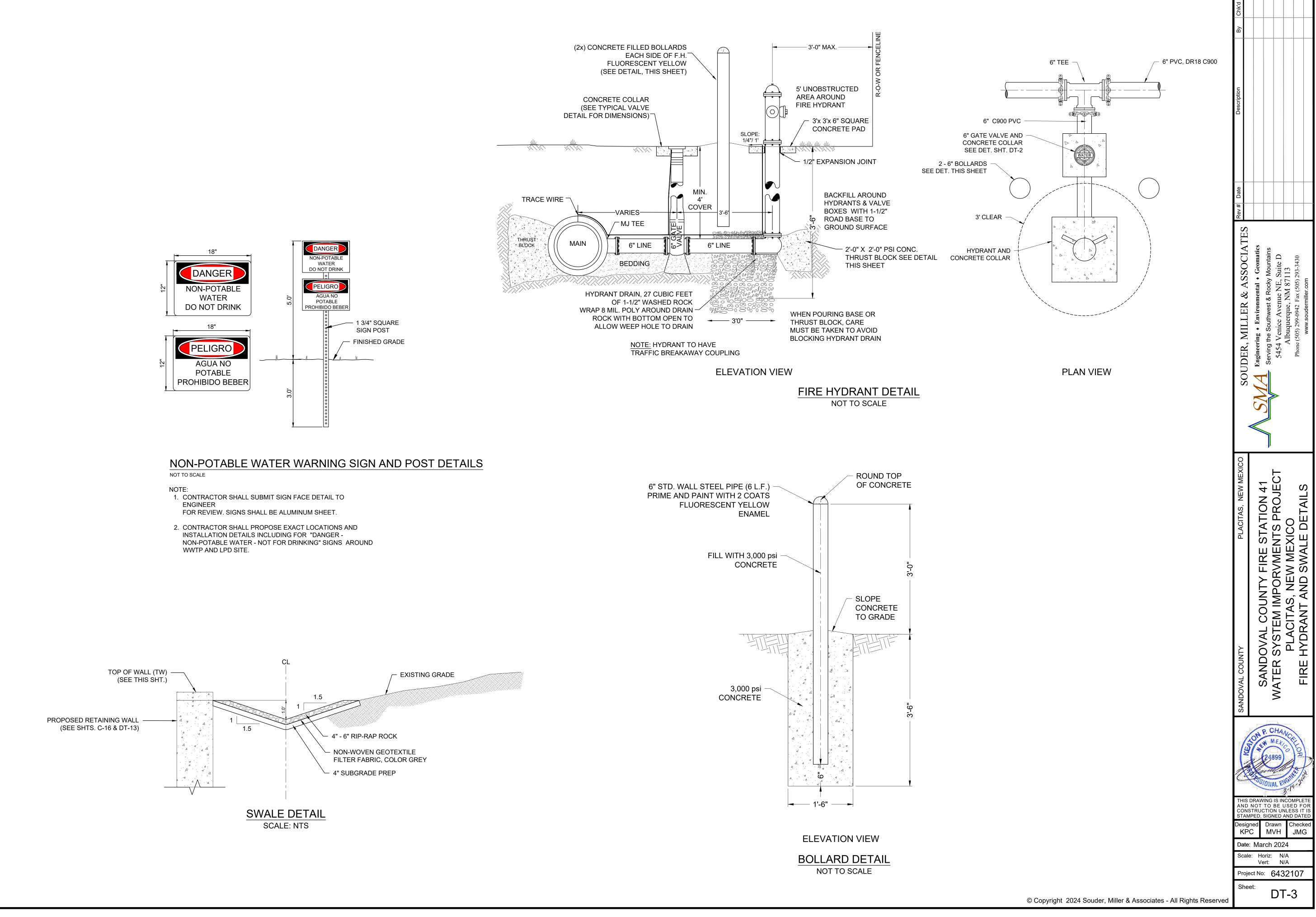
2:16-Sandoval County Fire 41 Placitas Tank Project (6432107)/CAD/Civil/Design Files/Placitas Fire 41 Design.dwg. 3/19/2024 8:04:08 AM I







- ENGINEER FOR REVIEW. SIGNS SHALL BE ALUMINUM SHEET.
- INSTALLATION DETAILS INCLUDING FOR "DANGER -WWTP AND LPD SITE.



# STRUCTURAL NOTES

### FOUNDATION

- GN-1 ALL DETAILS ARE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS UNLESS NOTED OTHERWISE.
- GN-2 THE CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL HOLES AND SLEEVES THROUGH WALLS AND SLABS WITH ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND CIVIL DRAWINGS. ALL PLUMBING AND MECHANICAL PENETRATIONS THROUGH WALLS AND SLABS SHALL BE PROPERLY SLEEVED. PENETRATING FOOTINGS, BEAMS, JOISTS, OR COLUMNS IS PROHIBITED. PLUMBING AND CONDUITS SHALL NOT BE INSTALLED BELOW FOOTINGS WITHOUT PRIOR WRITTEN APPROVAL FROM STUBBS ENGINEERING, INC.
- GN-3 THE STRUCTURE AS SHOWN IN THESE DRAWINGS IS STABLE UNDER THE FINAL CONDITION. THE STRUCTURE IS DESIGNED FOR THE IN-SERVICE LOADS ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE STRUCTURAL STABILITY DURING CONSTRUCTION. SEQUENCE OF CONSTRUCTION, SHORING, AND MEANS AND METHODS SHALL BE DETERMINED BY THE CONTRACTOR.
- GN-4 NON-LOAD BEARING ELEMENTS SHALL BE CONNECTED TO THE STRUCTURE BY METHODS THAT ALLOW VERTICAL DEFLECTION OF THE STRUCTURE. ALLOWABLE DEFLECTIONS OF THE STRUCTURE SHALL BE THE MAXIMUM OF EITHER A HALF INCH OR THE STRUCTURAL SPAN DIVIDED BY 360.
- GN-5 NOTCHING, CUTTING OR MODIFYING STRUCTURAL ELEMENTS IN THE FIELD IS PROHIBITED.
- GN-6 THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
- GN-7 THE ATTACHMENT OF ROOF TOP EQUIPMENT TO THE STRUCTURE SHALL BE INSTALLED PER DESIGNS PROVIDED BY THE MANUFACTURE. THE MANUFACTURE SHALL CERTIFY THAT THE ATTACHMENTS HAVE BEEN DESIGN TO WITHSTAND LOADS BASED ON THE DESIGN CRITERIA LISTED BELOW.

DESIGN CRITERIA

GENERAL

DC-1 THE STRUCTURAL DESIGN WAS COMPLETED IN ACCORDANCE WITH THE FOLLOWING CODES: IBC 2015

ASCE 7-10 ACI 318-14 ACI 530-13/ASCE 5-11/TMS 402-13

### AISC 360 - MANUAL OF STEEL CONSTRUCTION 14TH EDITION AWWAD100-11

- DC-2 DEAD LOAD ARE CALCULATED IN ACCORDANCE WITH AWWAD100-11.
- DC-3 LIVE LOADS ARE CALCULATED IN ACCORDANCE WITH AWWAD100-11:

	MAX WATER HEIGHT 1	15.5 ft
	DIAMETER 1	10.45 ft
	MAX WATER HEIGHT 2	13 ft
	DIAMETER 2	14 ft
	SPECIFIC GRAVITY	1.00
C-4	WIND PRESSURES SHALL BE CALCULATED IN ACCORDANCE WITH CHAPTER 26-31 OF THE	ASCE 7-10 AS FOLLOWS:

RISK CATEGORY	IV
WIND VELOCITY	120 MPH
DIRECTIONAL FACTORS (Kd)	0.85 MFRS 0.85 COMPONENTS
TOPOGRAPHIC FACTOR (Kzt)	1.00
WIND EXPOSURE	c
INTERNAL PRESSURE COEFFICIENT	±0.18

- DC-5 SNOW LOADS SHALL BE CALCULATED IN ACCORDANCE WITH CHAPTER 7 OF THE ASCE 7-10 AS FOLLOWS: RISK CATEGORY GROUND SNOW (pg) 24.4 PSF EXPOSURE FACTOR (Ce) 0.90
- THERMAL FACTOR (Ct) 1.2 IMPORTANCE FACTOR DC-6 SEISMIC LOADS SHALL BE CALCULATED IN ACCORDANCE WITH CHAPTER 11 AND 12 OF THE ASCE 7-10 AS FOLLOWS:

RISK CATEGORY		IV

MAPPED MCE	Ss=0.35 S1=0.109
SPECTRAL RESPONSE COEFFICIENT	SDs=0.354 SD1=0.172
SITE CLASSIFICATION	D
IMPORTANCE FACTOR	1.5
SEISMIC DESIGN CATEGORY	D
Ri =	3
Ai =	0.126
Ac1 =	0.158
Ms1 =	72.6k-ft
Vs1 =	8.9k
Ac2 =	0.119
Ms2 =	73.9k-ft

### SHOP DRAWINGS

Vs2 =

SD-1 THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ARCHITECT/ENGINEER PRIOR TO FABRICATION AS REQUIRED BY THE SPECIFICATIONS AND SHALL INCLUDE AT A MINIMUM THE FOLLOWING SUBMITTALS: STRUCTURAL FILL AND EARTHWORK

13.2k

STRUCTURAL STEEL REINFORCING STEEL

CONCRETE MIX DESIGNS MASONRY GROUT MIX DESIGN

CONCRETE MASONRY UNIT PRODUCT DATA MASONRY TRUSS TYPE JOINT REINFORCING PRODUCT DATA

SD-2 REVIEWS BY THE ARCHITECT/ENGINEER SHALL BE FOR GENERAL CONFORMANCE TO THE PLANS AND SPECIFICATIONS ONLY.

MODIFICATIONS, COMMENTS AND INFORMATION PROVIDED BY THE ARCHITECT/ENGINEER ON THE SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. SD-3 THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING DIMENSIONS AT THE JOB SITE AND COORDINATING THEM WITH THE PLANS

AND SPECIFICATIONS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT / ENGINEER. SD-4 THE FABRICATION AND CONSTRUCTION PROCESS, MEANS AND METHODS OF CONSTRUCTION, AND COORDINATING ALL TRADES FOR PERFORMING THE WORK IN A SAFE AND SATISFACTORY METHOD SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

SD-5 REPRODUCTION OF CONSTRUCTION DOCUMENTS AS PART OF THE SHOP DRAWINGS IS PROHIBITED. THE SHOP DRAWINGS SHALL BE INDEPENDENTLY PRODUCED DRAWINGS BASED ON THE CONSTRUCTION DOCUMENTS. USE OF ELECTRONIC FILES PRODUCED BY STUBBS ENGINEERING, INC. TO GENERATE SHOP DRAWINGS IS PROHIBITED WITHOUT PRIOR WRITTEN APPROVAL FROM STUBBS ENGINEERING, INC. IF ELECTRONIC DRAWINGS PRODUCED BY THE STUBBS ENGINEERING, INC. ARE USED IN THE PRODUCTION OF THE SHOP DRAWINGS, ANY COMPANY LOGOS, TITLE BLOCKS AND SEALS SHALL BE REMOVED FROM THE SUBMITTAL.

SD-6 THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELAYS DUE TO REJECTION OF INADEQUATE OR INCORRECT SHOP DRAWINGS.

SD-7 SHOP DRAWINGS SUBMITTED WITHOUT PRIOR REVIEW BY THE GENERAL CONTRACTOR SHALL NOT BE REVIEWED BY THE ENGINEER. SD-8 REQUESTS FOR SUBSTITUTION SHALL BE CLEARLY SHOWN ON SHOP DRAWINGS. SUBSTITUTIONS SHALL NOT BE IMPLEMENTED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE ARCHITECT/ENGINEER.

- FND-1 THE CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH THE SOIL, WATER AND SITE CONDITIONS DESCRIBED IN THE SOILS REPORT PRIOR TO BIDDING THE PROJECT. SOILS BORINGS AND CONDITIONS DESCRIBED IN THE SOILS REPORT ARE FOR GENERAL INFORMATION PURPOSES ONLY. THE ACTUAL CONDITIONS MAY VARY AT THE SITE. FND-2 ALL EARTHWORK AND SITE PREPARATION SHALL BE IN COMPLIANCE WITH THE GEOTECHNICAL REPORT PREPARED BY GEO TEST
- DATED SEPTEMBER 19, 2023 . THE GEOTECHNICAL ENGINEER'S PROJECT NUMBER IS 1-30804 . ADDITIONAL INFORMATION IS CONTAINED IN THE GEOTECHNICAL REPORT.
- FND-3 THE SITE SHALL BE PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT TO PROVIDE A MINIMUM ALLOWABLE BEARING PRESSURE OF 2.000 PSF.
- FND-4 REMOVE ALL BRUSH, RUBBISH, AND VEGETATION MATERIAL FROM THE BUILDING PAD PRIOR TO EXCAVATION. FND-5 THE SITE SHALL BE OVEREXCAVATED TO ALLOW FOR A MINIMUM OF 2 FEET OF STRUCTURAL SELECT FILL BELOW ALL FOOTINGS
- AND A MINIMUM OF 2 FEET OF STRUCTURAL SELECT FILL BELOW ALL SLABS ON GRADE.
- FND-6 NATIVE SOILS BELOW STRUCTURAL SELECT FILL SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES. THE NATIVE SOILS SHALL BE COMPACTED TO A MINIMUM DRY DENSITY OF 95% PER THE MODIFIED PROCTOR (ASTM D1557) AT A MOISTURE CONTENT OF +/-2% OPTIMUM. WEAK OR COMPRESSIBLE NATIVE SOILS IDENTIFIED DURING EARTHWORK SHALL BE REMOVED AND REPLACED WITH STRUCTURAL SELECT FILL PER THE REQUIREMENTS FOR STRUCTURAL FILL.

FND-7 STRUCTURAL SELECT FILL SHALL BE FREE OF ROCKS, ROOTS, VEGETABLE MATTER, CLAY CLUMPS OR ROCKS GREATER THAN 3 INCHES IN ANY DIMENSION. STRUCTURAL SELECT FILL SHALL MEET THE FOLLOWING REQUIREMENTS:

NO EXPANSIVE MATERIAL MAXIMUM PLASTICITY INDEX (ASTM D4318): 15 UNIFIED SOILS CLASSIFICATION SYSTEM: SP-SM, SM, SC, SC-SM, GC, GC-GM, & GP-GC

GRADATION PASSING SIEVE

ADATION (ASTM	D422)
SIEVE SIZE	PERCENT PA
3-INCH	100%
1½−INCH	90-100%
NO. 4	25-55%
NO. 40	15-50%
NO. 200	15-45%

- FND-8 PLACE ALL STRUCTURAL SELECT FILL IN 8 INCH MAXIMUM LOOSE LIFTS WITH APPROVED COMPACTION EQUIPMENT OR 4 INCH MAXIMUM LIFTS WITH HANDHELD EQUIPMENT. MOISTEN TO A MOISTURE CONTENT OF +/- 2% OPTIMUM MOISTURE CONTENT AND COMPACT TO A MINIMUM DENSITY OF 95% MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY.
- FND-9 ALL EARTHWORK SHALL BE INSPECTED BY A LICENSED GEOTECHNICAL ENGINEER TO ENSURE ALLOWABLE BEARING PRESSURE IS MET, THERE IS A LOW SETTLEMENT POTENTIAL AND THE ABSENCE OF EXPANSIVE MATERIAL.
- FND-10 CONSTRUCTION JOINTS IN FOOTINGS AND STEM WALL CAN BE PLACED AT CONTRACTOR'S OPTION. FOOTINGS AND STEM WALL CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAIL 1 / S-1.1.

FND-11 SAW CUT CONTROL JOINTS AS INDICATED ON PLANS WITHIN 12 HOURS OF PLACING CONCRETE.

- CONCRETE
- CNC-1 ALL CONCRETE SHALL BE PROPORTIONED, CONSTRUCTED AND CONFORM TO THE SPECIFICATION OF ACI 301-16. CONCRETE DESIGN SHALL CONFORM TO ACI 318-14.
- CNC-2 PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I OR II. CONCRETE IN CONTACT WITH SOIL SHALL BE TYPE II
- CNC-3 FLY ASH SHALL NOT BE USED IN ARCHITECTURALLY EXPOSED CONCRETE, TILTWALLS OR SLABS ON GRADE. FLY ASH IS ALLOWED IN ALL OTHER NON-ARCHITECTURALLY EXPOSED CONCRETE, UP TO A MAXIMUM OF 20% OF THE CEMENT CONTENT. THE MIX DESIGN SHALL INDICATE THAT THE FLY ASH SHALL NOT ADVERSELY EFFECT THE PERFORMANCE OF OTHER PRODUCTS
- AND MATERIALS THAT WILL BE IN CONTACT WIT THE CONCRETE.

CNC-4	CONCRETE SHALL BE	PROPORTIONED T	O THE FOLLOWIN	G REQUIREMENTS:			
	LOCATION	f'c AT 28 DAYS	MAX SIZE Aggregate	SLUMP	AIR CONTENT	CONCRETE TYPE	MAXIMUM WATER TO CEMENT RATIO

LOCATION	f'c AT	MAX SIZE	SLUMP	AIR	
	28 DAYS	AGGREGATE		CONTENT	

	ZO DATS	AGGREGATE		CONTENT	
FOOTINGS	3,000 PSI	1 - INCH	3 – 5 INCH	0 - 5%	NORMAL WEIGHT

SLAB C	N GRA	DE	4,000 PSI		3/4 - 1	INCH	4	ļ -	6 INCH		NONE		NORMAL	WEIGHT	0.55
CONCRETE	SHALL	BE	PROPORTIONED	T0	EXCEED	75%	OF	THE	28-DAY	STR	RENGTH	IN 7	DAYS.		

CNC-5	CONCRETE REINFORCING STEEL	ND EMBEDS SHA	LL HAVE THE FO	DLLOWING PROPERTIES	:
	TYPE	DESIGNATION ON PLAN	ASTM	YIELD STRENGTH	NOTES

0.55

	REBAR	#	A615		60 KSI			NOT WELDA	BLE		
CNC-6	UNLESS OTHERWISE SHOWN THE	CLEAR DISTANCE	FOR THE FACE	0F (	CONCRETE F	ORMS TO	D THE	REINFORCING	STEEL	SHALL	BE:
	CONDITION		CLEAR DISTANCE					NOTES			
	CONCRETE CAST AGAINST EAI	RTH OR WATER	3 – INCH			EXCL	UDES	SLABS ON GR	ADE		
			2 – INCH			FR	OM BC	TTOM SURFAC	E		
		-	4.4./0 10/			50/					

SLABS ON GRADE 1 1/2 - INCH FROM TROWLED SURFACE 3/4 - INCH FROM SCREED SURFACE

CNC-7 REINFORCING DETAILING AND PLACEMENT SHALL BE IN COMPLIANCE WITH ACI 315-08. CNC-8 ALL REBAR SHALL BE SPLICED IN ACCORDANCE WITH DETAIL 2 / S-1 AND STANDARD HOOK SHALL BE PROVIDED PER

DETAIL 1/S-1 CNC-9 ALL REBAR AND REINFORCING MESH SHALL BE CHAIRED TO PROVIDE REQUIRED COVER AND SUPPORT THE REINFORCING ADEQUATELY TO PREVENT ACCIDENTAL DISPLACEMENT. CHAIRS FOR SLABS ON GRADE SHALL BE SPECIFICALLY DESIGNED FOR

USE ON SOIL. CHAIRS FOR SLABS ON METAL DECK SHALL BE SPECIFICALLY DESIGNED FOR USE ON METAL DECK. CNC-10 ALL CONCRETE SHALL BE CONSOLIDATED BY VIBRATORY MEANS. CONSOLIDATIONS SHALL BE OBSERVED BY INSPECTION AGENCY. CNC-11 CONCRETE DIMENSIONS SHOWN ON DRAWINGS ARE ACTUAL DIMENSIONS NOT NOMINAL DIMENSIONS.

CNC-12 ALL CONTINUOUS REINFORCING IN FOOTINGS AND WALLS SHALL EITHER BE CONTINUOUS AROUND CORNERS OR HAVE BENT

CORNER BARS OF THE SAME SIZE AND SPACING AS THE HORIZONTAL BARS.

CNC-13 FORM TIES SHALL BE EITHER OF THE THREADED OR SNAP OFF TYPE. NO EXPOSED METAL SHALL BE ALLOWED WITHIN ONE

INCH OF THE SURFACE. ALL RECESSES SHALL BE POINTED WITH MORTAR.

CNC-14 ALL DOWELS, EMBEDS AND REINFORCING BARS SHALL BE SECURELY TIED PRIOR TO PLACING CONCRETE. INSTALLATION OF ITEMS INTO WET CONCRETE WILL NOT BE ALLOWED.

CNC-15 ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 3/4" CHAMFER.

MASONRY MSN-1 ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530/ASCE 5/TMS 402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND ACI 530.1/ASCE 6/TMS 602 "SPECIFICATION FOR MASDNRY STRUCTURES", LATEST EDITION.

MSN-2 MASONRY UNITS SHALL MEET ASTM C-90 FOR HOLLOW LOAD BEARING TYPE MASONRY WITH A UNIT STRENGTH OF 1,900 PSI ON A NET AREA (f'm = 1,500 PSI) MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C-270.

MSN-3 GROUT SHALL BE 2,000 PSI MINIMUM COMPRESSIVE STRENGTH AND MEET ASTM C-476 AND HAVE A SLUMP BETWEEN 8 AND 11

### MSN-4 CELLS CONTAINING REBAR SHALL BE GROUTED SOLID FROM THE BOTTOM TO THE TOP OF THE WALL IN ACCORDANCE WITH THE LOW LIFT GROUT METHOD. USE OF METHODS OTHER THAN THE LOW LIFT GROUT METHOD SHALL ONLY BE USED WITH PRIOR WRITTEN APPROVAL FROM THE ENGINEER.

MSN-5 MASONRY REINFORCING SHALL BE AS FOLLOWS:

LOCATION	ASTM	YIELD STRENGTH	NOTES
BOND BEAM AND VERTICAL REINFORCING	A615-09	60 KSI	
TRUSS TYPE JOINT REINFORCING	A82-07	70 KSI	PROVIDE W1.7 WIRE IN TRUSS CONFIGURATION
RUSS TYPE JOINT REINFORCING SHALI	. HAVE PREFABRICATED (	CORNERS OR TEES AT WA	LL INTERSECTIONS.

MSN-6 ALL HORIZONTAL REINFORCING IN BOND BEAMS SHALL BE CONTINUOUS AT CORNERS AND INTERSECTION OR USE CORNER BARS. VERTICAL REINFORCING SHALL BE CONTINUOUS THROUGH BOND BEAMS.

MSN-7 CELLS TO BE GROUTED SOLID SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED, CONTINUOUSLY GROUT SPACE.

MSN-8 LAP REBAR IN ACCORDANCE WITH DETAIL 3/S-1 LAP JOINT REINFORCING A MINIMUM OF 6".

MSN-9 ALL MASONRY BELOW GRADE AND/OR IN CONTACT WITH SOIL SHALL HAVE CELLS, VOIDS AND CAVITIES GROUTED SOLID.

INCHES. THE MAXIMUM SIZE AGGREGATE SHALL BE 3/8 INCH.

# QUALITY ASSURANCE

STRUCTURAL INSPECTION AND TESTING 1. STRUCTURAL INSPECTIONS SHALL BE PROVIDED IN ACCORDANCE WITH CHAPTER 17 OF THE 2015 IBC.

2. IT IS THE GENERAL CONTRACTORS RESPONSIBILITY TO SCHEDULE AND COORDINATE THE PERFORMANCE OF INSPECTIONS AND TESTING IN ACCORDANCE WITH THE SPECIFICATIONS, BUILDING CODE AND THE SPECIAL INSPECTION SCHEDULES.

- 3. SPECIAL INSPECTION AND TESTING SHALL BE PERFORMED BY A QUALIFIED PERSON OR AGENCY THAT IS APPROVED BY THE BUILDING OFFICIAL. INSPECTIONS PROVIDED BY LOCAL BUILDING OFFICIALS SHALL NOT BE CONSIDERED A SUBSTITUTION FOR SPECIAL INSPECTIONS OR TESTING REQUIREMENTS.
- 4. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:
- A. THE SPECIAL INSPECTOR SHALL INSPECT THE WORK AS REQUIRED BY THE SPECIAL INSPECTION SCHEDULES TO ENSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
- B. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL IMPLEMENT A TIMELY PLAN TO CORRECT ANY DISCREPANCIES. IN THE EVENT THE DISCREPANCIES ARE NOT CORRECTED. THE ENGINEER. ARCHITECT AND BUILDING OFFICIAL SHALL BE NOTIFIED.
- C. THE SPECIAL INSPECTOR SHALL PROVIDE INSPECTION REPORTS TO THE GENERAL CONTRACTOR, ARCHITECT, ENGINEER AND THE BUILDING OFFICIAL IN A TIMELY MANNER.

REQUIRED SPECIAL INSPECTION .	AND TH	ESTS OF	SOILS
VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	IBC REFERENCE
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATION ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		X	1705.6
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		X	1705.6
3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS		X	1705.6
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X		1705.6
5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		X	1705.6

REQUIRED SPECIAI				IS		
OF CONCRETE CONSTRUCTION						
	FREQUENCY	OF INSPECTION	REFERENCE FOR CRITERIA			
VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	IBC SECTION	REFERENCE STANDARD		
1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS AND PLACEWENT		х	1910.4	ACI 318:CH. 20, 25.2,25.3, 26.6.1-26.6.3		
2. REINFORCING BAR WELDING:						
a. VERIFY WELDABILITY OF REINFORCING BARS Other than Astm A706		X		AWS D1.4 ACI 318: CH.		
b.INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"		X		26.6.4		
c. INSPECT ALL OTHER WELDS	X					
3. INSPECT ANCHORS CAST IN CONCRETE		Х		ACI 318: 17.8.2		
4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS				ACI 318: CH.		
a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	X			ACI 318: CH		
b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a.		X		17.8.2		
5. VERIFY USE OF REQUIRED DESIGN MIX		Х	1904.1, 1904.2, 1908.2, 1908.3	ACI318: CH.19, 26.4.3, 26.4.4		
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X		1908.10	ASTM C172 ASTMC31 ACI318: CH. 26.4, 26.12		
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X		1908.6, 1908.7, 1908.8	ACI 318: 26.5		
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X	1908.9	ACI 318: CH. 26.5.3-26.5.5		
9. INSPECT PRESTRESSED CONCRETE FOR:						
a. APPLICATION OF PRESTRESSING FORCES	X			ACI 318: CH. 26.10		
b. GROUTING OF BONDED PRESTRESSING TENDONS	X			20110		
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS		Х		ACI 318:CH. 26.8		
11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORING AND FORMS FROM BEAMS AND STRUCTURAL SLABS.		X		ACI 318: CH. 26.11.2		
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER DEING FORMED		X		ACI 318: CH. 26.11.1.2(b)		

FOR SI: 1 INCH = 25.4mm

a. WHERE APPLICABLE, SEE ALSO SECTION 1705.11, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE b. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH ACI 355.2 OR OTHER QUALIFICATION PROCEDURES, WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

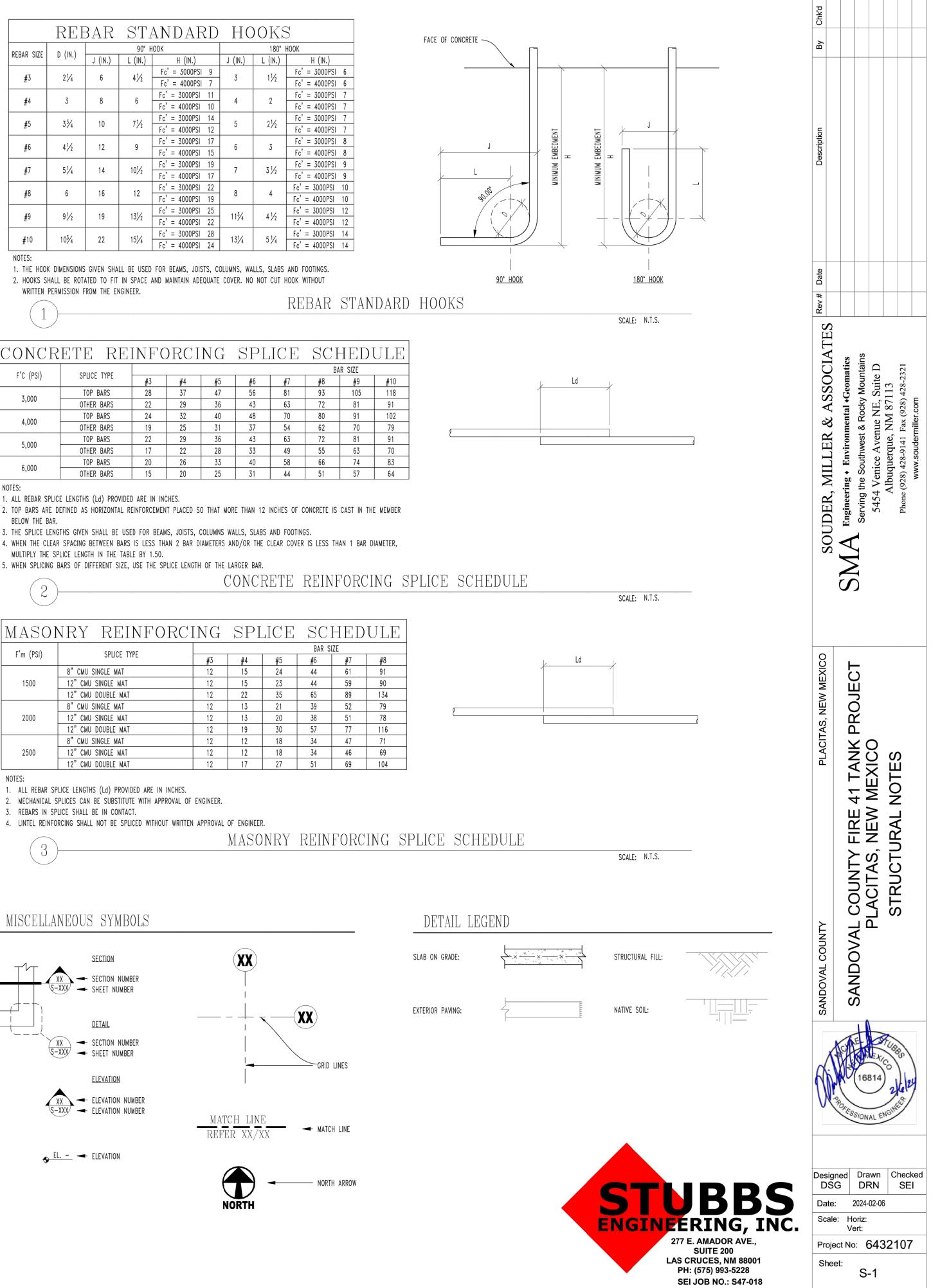
REQUIRED VERIFICATION AND INSPECTION
OF MASONRY - LEVEL A
PRIOR TO CONSTRUCTION, VERIFY CERTIFICATES OF COMPLIANCE USED IN MASONRY CONSTRUCTION

ABBREVI	ATIONS
& – AND © – AT	FIN. – FINISH FLR. – FLOOR.
• – DEGREE	F.V. – FIELD VERIFY
$\phi$ – DIAMETER	HAS - HEADED ANCHOR STUD
ALT. – ALTERNATE	FT. – FEET
ALUM. – ALUMINUM	FTG FOOTING
ANSI. – AMERICAN NATIONAL STANDARDS	ga. – GAGE
INSTITUTE	GALV. – GALVANIZED
APPROX. – APPROXIMATE	GR. – GRADE
ARCH. – ARCHITECTURAL	HORIZ. – HORIZONTAL
ASTM. – AMERICAN SOCIETY FOR TESTING	HSS - HOLLOW STEEL SECTION
AND MATERIALS	lb. – POUNDS
AWS - AMERICAN WELDING SOCIETY	LT. – LIGHT
B/F - BOTTOM OF FOOTING	LLH - LONG LEG HORIZONTAL
BLDG. – BUILDING	LLV – LONG LEG VERTICAL
BOT. — BOTTOM	JST. – JOIST
BRG. – BEARING	MAX. – MAXIMUM
CANT. – CANTILEVER	MCJ – MASONRY CONTROL JOINT
CEA - CONCRETE EXPANSION ANCHOR	MFG. — MANUFACTURE
CIP. — CAST IN PLACE	MIN. — MINIMUM
CJ – CONTROL JOINT	NTS - NOT TO SCALE
🐔 – CENTERLINE	OPP. – OPPOSITE
CLR. – CLEARANCE	PCP PRECAST CONCRETE PANEL
CMU - CONCRETE MASONRY UNIT	PEN. – PENETRATION
COL. – COLUMN	الا – PLATE
CONC. – CONCRETE	PREFAB. – PREFABRICATED
CONST. – CONSTRUCTION	REFER - REFERENCE
CONT. – CONTINUOUS	REINF REINFORCE, REINFORCEMENT
CONX. – CONNECTION	SCH. – SCHEDULE
COORD. – COORDINATE	SIM. – SIMILAR
DBL. – DOUBLE	SPEC. – SPECIFICATION
DEMO. – DEMOLISH; DEMOLITION	SQ. – SQUARE
DET. – DETAIL	STD. — STANDARD
DIM. – DIMENSION	STRL. – STRUCTURAL
DWG. – DRAWING	TOS - TOP OF STEEL
EA – EPOXY ANCHOR	TOW - TOP OF WALL
EJ – EXPANSION JOINT	TYP. – TYPICAL
EL – ELEVATION	VERT VERTICAL
EXIST. – EXISTING	WWF - WELDED WIRE FABRIC

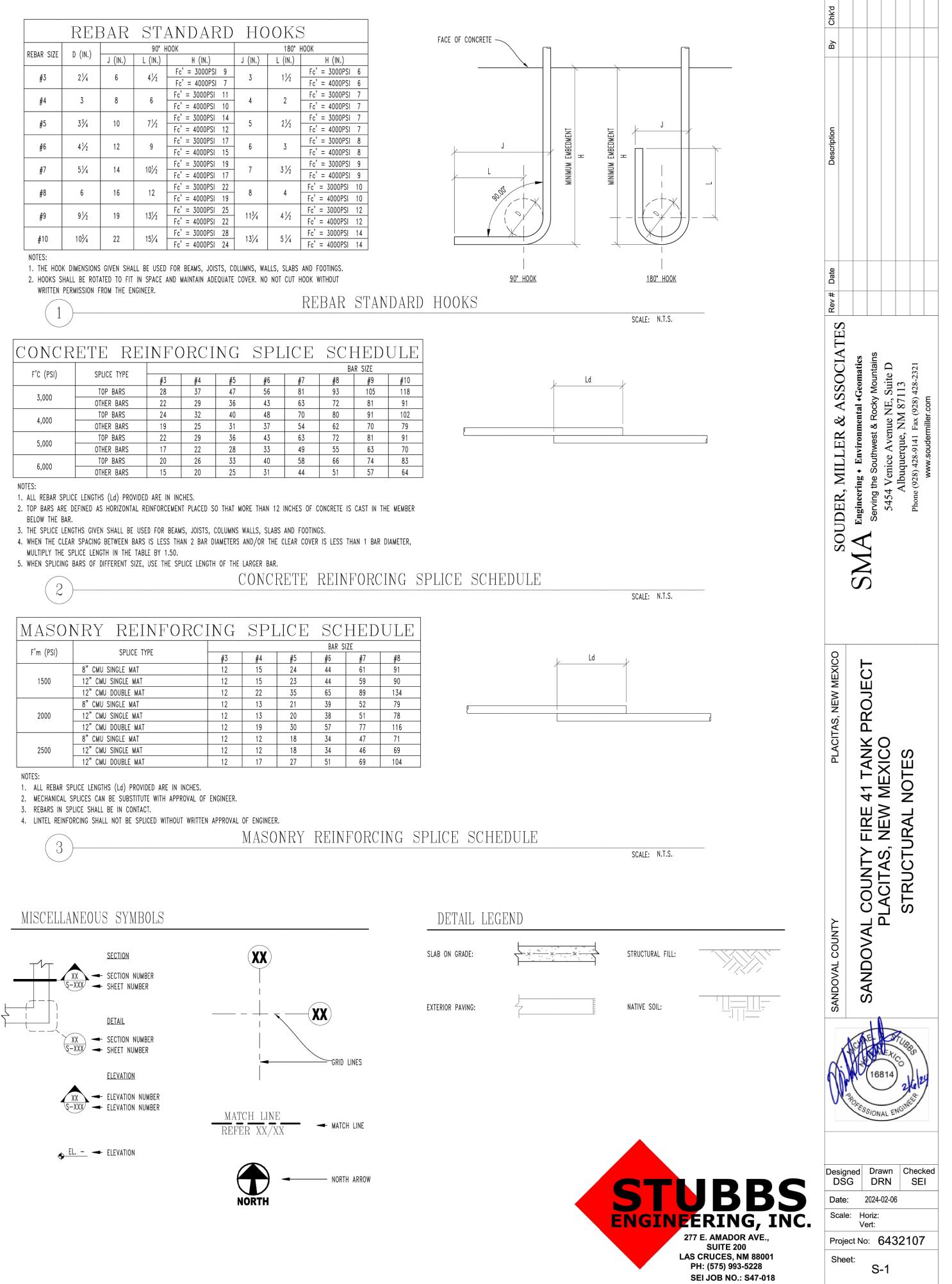
EQ. – EQUAL

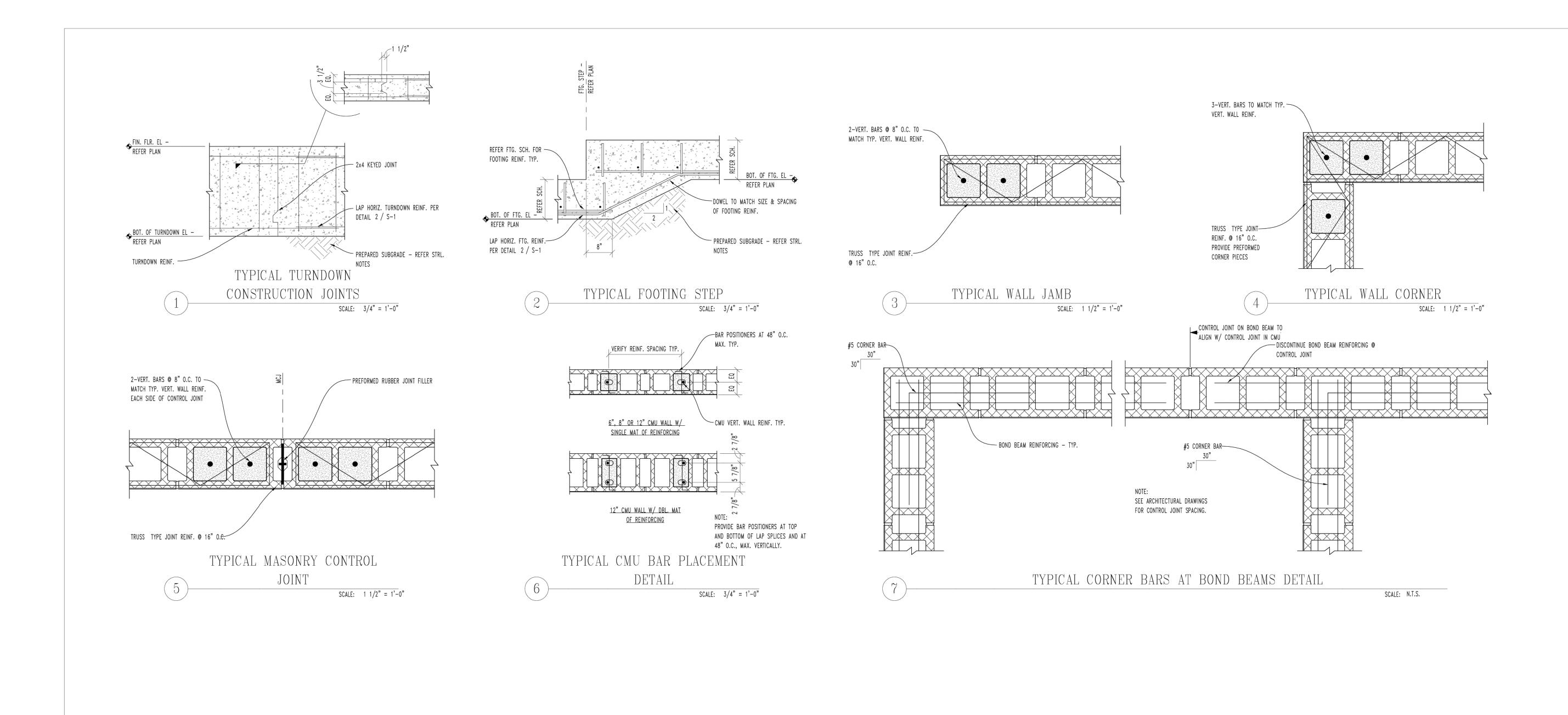
	REI	BAR	ST	ANDARD	НC	OKS	3
REBAR SIZE			90° H	100K		180°	HOOK
REBAR SIZE	D (IN.)	J (IN.)	L (IN.)	H (IN.)	J (IN.)	L (IN.)	H (IN.)
#7	21/	6	412	Fc' = 3000PSI 9	3	11/	Fc' = 3000PS
#3	21⁄4	0	41⁄2	Fc' = 4000PSI 7	5	11/2	Fc' = 4000PS
	3	8	6	Fc' = 3000PSI 11		2	Fc' = 3000PS
#4	5	0	6	Fc' = 4000PSI 10	4	2	Fc' = 4000PS
// 5	z3/	10	71/2	Fc' = 3000PSI 14	5	21/2	Fc' = 3000PS
#5	33⁄4	10	172	Fc' = 4000PSI 12	5	272	Fc' = 4000PS
#6	412	10	9	Fc' = 3000PSI 17	6	3	Fc' = 3000PS
#6	41/2	12	9 Fc' = 4000PSI 15	6	5	Fc' = 4000PS	
17	F1/	14	101/	Fc' = 3000PSI 19	7	31/2	Fc' = 3000PS
#7	51⁄4	14	101/2	Fc' = 4000PSI 17	/	572	Fc' = 4000PS
10	6	10	10	Fc' = 3000PSI 22	8		Fc' = 3000PSI
#8	0	16	12	Fc' = 4000PSI 19	0	4	Fc' = 4000PSI
10	01/	19	171/	Fc' = 3000PSI 25	113/	A 1Z	Fc' = 3000PS
#9	91/2	19	131/2	Fc' = 4000PSI 22	113⁄4	4 1/2	Fc' = 4000PS
#10	103/	0.0	151/	Fc' = 3000PSI 28	171/	E 17	Fc' = 3000PSI
#10	103⁄4	22	151⁄4	Fc' = 4000PSI 24	131/4	51⁄4	Fc' = 4000PSI

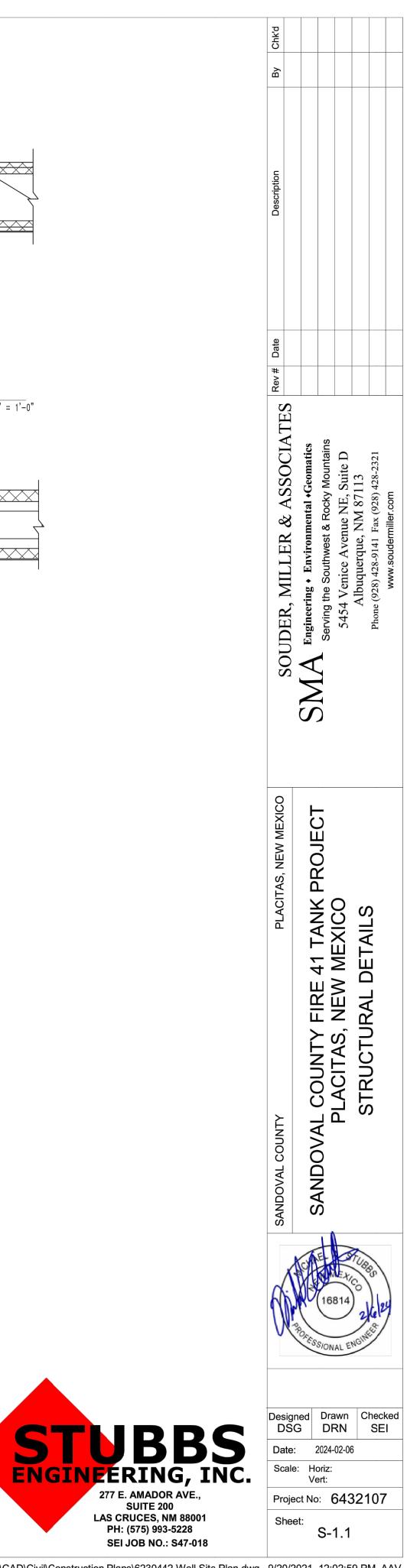
CONCR	ETE RE	INFO	DRCI	NG	SPL	ICE	SC]	
							B	٩F
F'C (PSI)	SPLICE TYPE	#3	#4	#5	#6	#7	#8	Ι
7.000	TOP BARS	28	37	47	56	81	93	T
3,000	OTHER BARS	22	29	36	43	63	72	T
4 000	TOP BARS	24	32	40	48	70	80	
4,000	OTHER BARS	19	25	31	37	54	62	T
E 000	TOP BARS	22	29	36	43	63	72	T
5,000	OTHER BARS	17	22	28	33	49	55	T
	TOD DIDC	0.0	0.0	77	10	E 0	00	Т

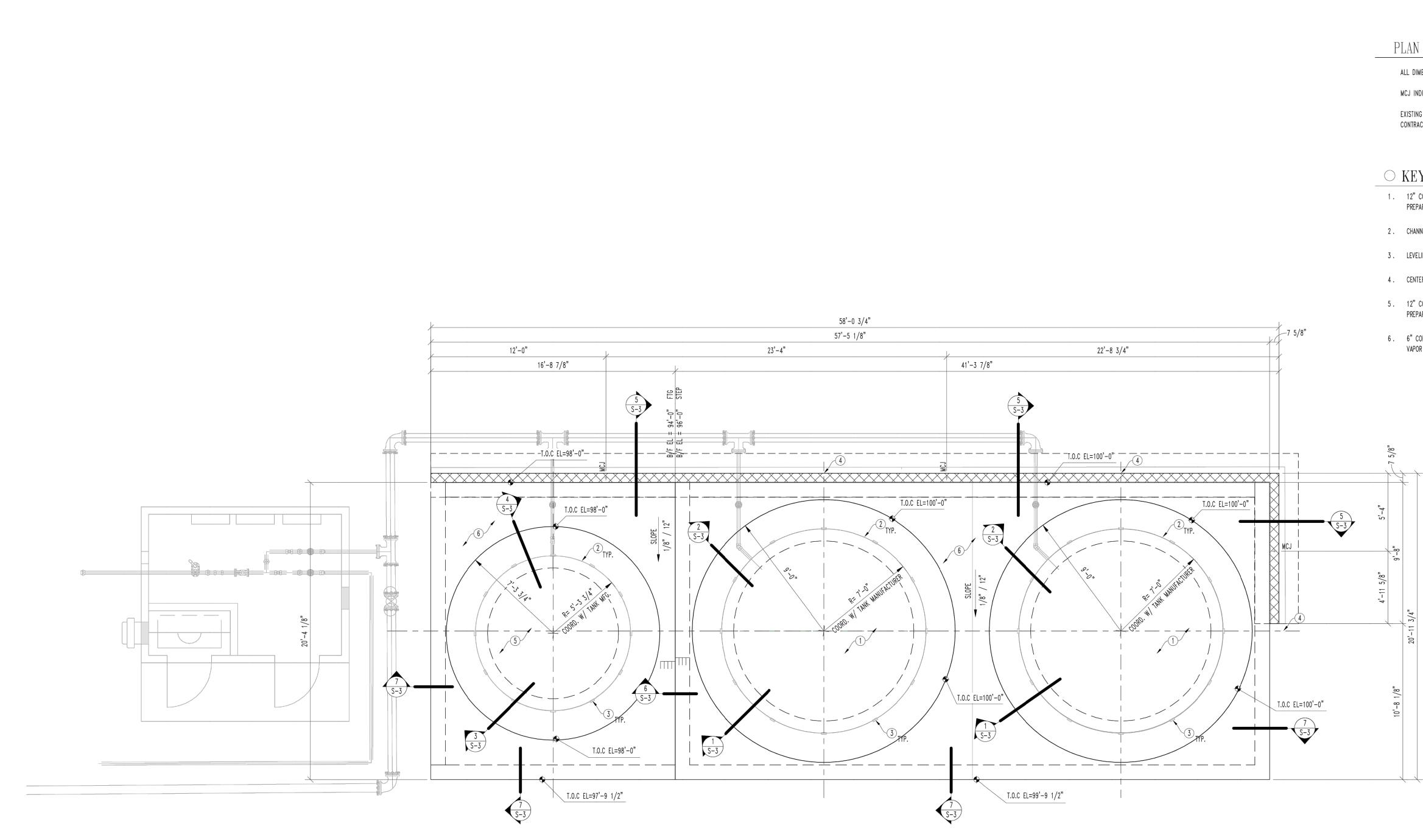












FOUNDATION PLAN	
SCALE: $1/4$ " = 1'-0"	NORTH



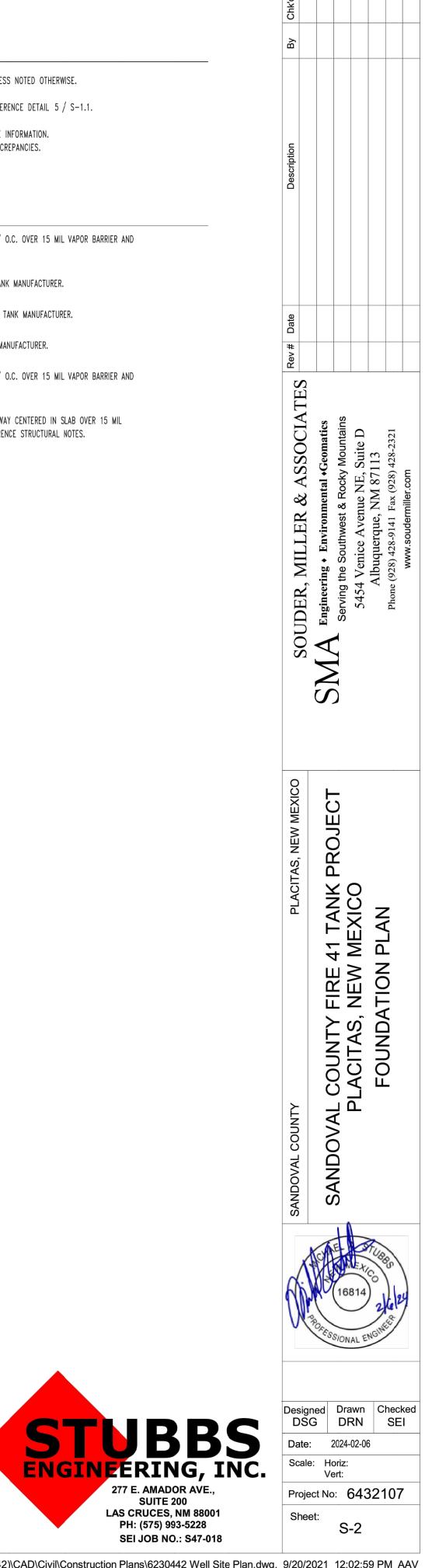
ALL DIMENSIONS ARE TO FACE OF CONCRETE UNLESS NOTED OTHERWISE.

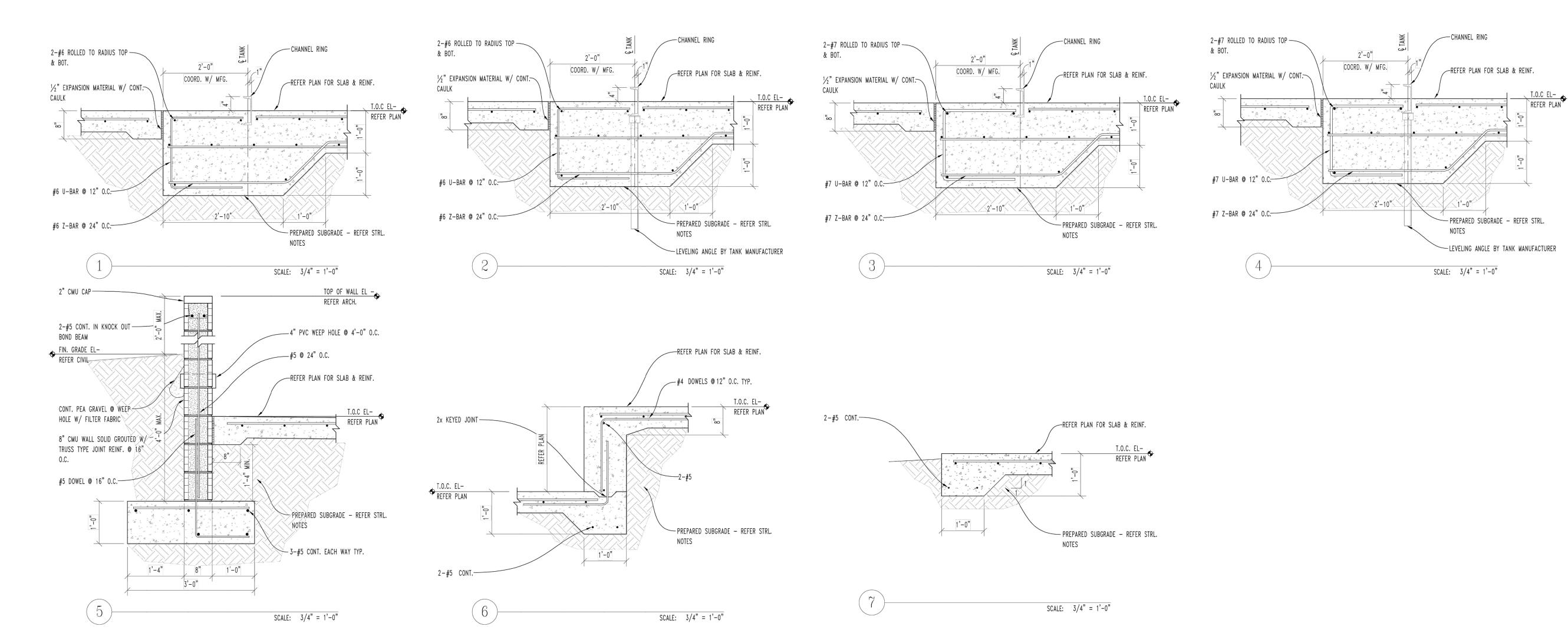
MCJ INDICATES A MASONRY CONTROL JOINT. REFERENCE DETAIL 5 / S-1.1.

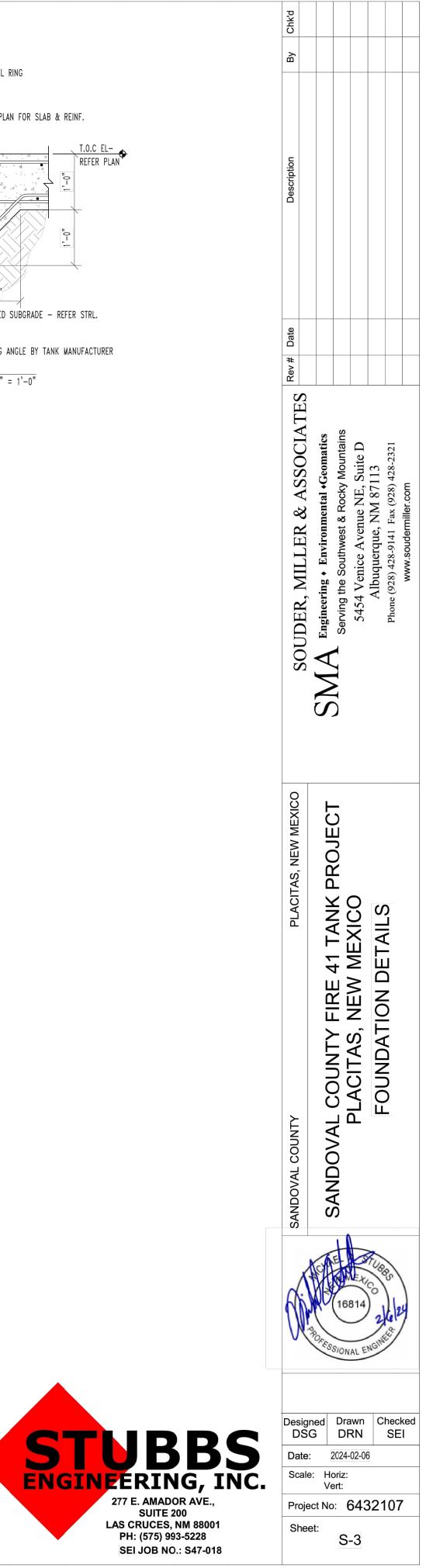
EXISTING CONSTRUCTION SHOWN IS PER AVAILABLE INFORMATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.

# ○ KEY NOTES

- 1. 12" CONCRETE SLAB WITH 2 MATS OF #5 @ 12" O.C. OVER 15 MIL VAPOR BARRIER AND PREPARED SUBGRADE.
- 2. CHANNEL RING TO BE SIZED AND LOCATED BY TANK MANUFACTURER.
- 3. LEVELING ANGLES TO BE SIZED AND LOCATED BY TANK MANUFACTURER.
- 4. CENTER LINE OF TANK. COORDINATE WITH TANK MANUFACTURER.
- 5. 12" CONCRETE SLAB WITH 2 MATS OF #6 @ 12" O.C. OVER 15 MIL VAPOR BARRIER AND PREPARED SUBGRADE.
- 6 . 6" CONCRETE SLAB WITH #4 ◎ 16" O.C. EACH WAY CENTERED IN SLAB OVER 15 MIL VAPOR BARRIER AND PREPARED SUBGRADE. REFERENCE STRUCTURAL NOTES.







CODE INFORMATION	FOOTINGS SHALL BE A M
2015 NEW MEXICO COMMERCIAL BUILDING CODE 2015 INTERNATIONAL BUILDING CODE ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES	ALL FOOTINGS ARE TO E PROCTOR DENSITY PER REPORT).
RISK CATEGORY IV (FIRE STATION)	CENTER ALL FOOTINGS
OADS ROOF DEAD LOAD 10 PSF	NOTIFY SOILS ENGINEER PLACEMENT OF ANY FIL
ROOF LIVE LOAD     20 PSF       SNOW LOAD(pg)     25 PSF       VALL "TYPE A" DEAD LOAD     3 PSF	FOR SOIL DRAINAGE RE
VALL "TYPE A" DEAD LOAD 3 PSF VALL "TYPE B" DEAD LOAD 7 PSF VALL "TYPE C" DEAD LOAD 7 PSF	CONCRETE
SEISMIC FORCE RESISTING SYSTEM:	ALL CAST-IN-PLACE CON SATISFY THE FOLLOWIN
STEEL INTERMEDIATE MOMENT FRAMES (R = 4.5) SEMI-RIGID DIAPHRAGM SEISMIC IMPORTANCE FACTOR 1.5	CONCRETE ITEM FOOTINGS
Ss 0.517 61 0.156	FOUNDATION WALLS GRADE BEAMS
Sds     0.478       Sd1     0.226       SEISMIC DESIGN CATEGORY     D	INT. SLABS ON GRADE SLABS ON METAL DECK EXTERIOR CONCRETE
SEISMIC RESPONSE COEF. (Cs) 0.1593	CONTRACTOR SHALL SA
/AIN WIND FORCE RESISTING SYSTEM (MWFRS): 3UILDING CONSIDERED RIGID FOR WIND 3EMI-RIGID DIAPHRAGM	SAWCUT OR TROWELCU REINFORCEMENT THRO
BASIC WIND SPEED 120 MPH WIND EXPOSURE C	SLABS, TOPPING, FOOTI CONCRETE WORK MUST
COMPONENTS AND CLADDING NET WIND PRESSURES FOR WIND (+PRESSURE/-SUCTION) (PSF):	KEYS UNLESS OTHERWI ENGINEER.
BASED ON (10) PSF EFFECTIVE WIND AREA         ROOF ZONE 1       +16/-34         ROOF ZONE 2       +16/-40	ALL CONCRETE WORK A LATEST EDITION, UNLES
ROOF ZONE 2'         +16/-48           ROOF ZONE 3         +16/-53	ALL EXPOSED EDGES O
ROOF ZONE 3'         +16/-74           VALL ZONE 4         +29/-32           VALL ZONE 5         +29/-39	REINFORCEMENT
	TIES, STIRRUPS AND PLA ASTM A706 GRADE 60.
COMPONENTS AND CLADDING NOTES: . THE PRESSURES LISTED ARE IN ACCORDANCE IBC AND ASCE 7 AND THE DESIGN FORCES USED BY THE SUBCONTRACTOR FOR THEIR SPECIFIC APPLICATION ARE THEIR RESPONSIBILITY.	WELDED WIRE FABRIC S AND END SPLICES AND
2. WIND PRESSURES ARE ULTIMATE DESIGN LEVEL. 3. REFERENCE ASCE 7 FIG. 30.4-5A FOR ZONE DEFINITIONS AND EXTENT OF ZONES.	REINFORCEMENT PROT
B. SUBMIT DESIGN CALCULATIONS PREPARED BY A NEW MEXICO LICENSED PROFESSIONAL ENGINEER FOR ANY DESIRED MODIFICATION OF THE STATED PRESSURES. DEFERRED SUBMITTALS	<ol> <li>CONCRETE POURED</li> <li>CONCRETE POURED</li> <li>COLUMNS AND BEAN</li> <li>SLABS AND WALLS (N</li> </ol>
. LIGHT GAUGE FRAMING 2. STRUCTURAL STEEL	REINFORCEMENT PLACE
DEFERRED SUBMITTAL NOTES: . DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND THE DESIGN PROFESSIONALS	NO SPLICES OF REINFO ENGINEER. LAP SPLICES SMALLER AND SHALL BE
AND REVIEWED PRIOR TO INSTALLATION. 2. ALL DEFERRED SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF THE LICENSED PROFESSIONAL	OTHERWISE. MAKE ALL
ENGINEER RESPONSIBLE FOR THE PREPARATION OF THESE DOCUMENTS.	PLACE TWO #5 (PER 8" T AND BEAMS. ALSO PRO
ESTING, INSPECTIONS AND OBSERVATIONS	STRUCTURAL STEEL
IAY MAKE PERIODIC OBSERVATIONS OF THE CONSTRUCTION; SUCH OBSERVATIONS SHALL NOT REPLACE REQUIRED INSPECTIONS BY THE GOVERNING AUTHORITIES OR SERVE AS "SPECIAL INSPECTIONS" AS MAY BE REQUIRED BY CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.	ALL STRUCTURAL STEE ASTM 992, (50 KSI) AND I A500, GRADE B, LATEST MISCELLANEOUS EMBEI
THE FOLLOWING WORK SHALL BE INSPECTED BY THE SPECIAL INSPECTOR UNLESS SPECIFICALLY WAIVED BY THE BUILDING OFFICIAL.	ALL STRUCTURAL BOLT SHALL CONFORM TO AS
a. EARTHWORK EXCAVATION, PLACEMENT AND COMPACTION OF FILL AND IN-PLACE DRY DENSITY OF THE	STRUCTURAL STEEL SH "MANUAL OF STEEL CON
COMPACTED FILL FOR CONFORMANCE WITH THE APPROVED REPORT.	EXCEPT WHERE DETAIL
a. PERIODIC INSPECTION OF REINFORCING STEEL.	STEEL CONSTRUCTION" (OR WELDED EQUIVALE NOT SHOWN, SELECT C
<ul> <li>b. PERIODIC VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A706.</li> <li>c. CONTINUOUS INSPECTION OF BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF</li> </ul>	STEEL CONSTRUCTION
CONCRETE d. PERIODIC VERIFICATION OF USE OF REQUIRED DESIGN MIX. e. CONTINUOUS INSPECTION AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR	ALL WELDERS SHALL HA
STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	MINIMUM WELDS TO BE OTHERWISE.
<ul> <li>f. CONTINUOUS INSPECTION OF CONCRETE AND PLACEMENT FOR PROPER APPLICATION TECHNIQUES.</li> <li>g. PERIODIC INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.</li> <li>h. PERIODIC INSPECTION OF THE ERECTION OF PRECAST CONCRETE MEMBERS.</li> </ul>	FOR ALL BEAM/COLUMN MEMBER ONLY (WT-SEC
8. STEEL CONSTRUCTION - COMPLY WITH AISC 360, CHAPTER N.	STRUCTURAL STEEL SU
<ul> <li>ALL WELDING SHALL RECEIVE CONTINUOUS SPECIAL INSPECTION EXCEPT THE FOLLOWING:</li> <li>WELDING DONE IN AN APPROVED FABRICATOR'S SHOP IN ACCORDANCE WITH SECTION 1704.3.</li> </ul>	OR AS SHOWN OTHERW HORIZONTALLY TO ALLC
b. THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING WELDING OF THE FOLLOWING ITEMS, PROVIDED THE MATERIALS, WELDING PROCEDURES AND QUALIFICATIONS OF WELDERS ARE VERIFIED PRIOR TO THE START OF WORK; PERIODIC INSPECTIONS ARE MADE OF WORK IN PROGRESS; AND A VISUAL	PROVIDE TEMPORARY E STANDARDS AND TO WI COMPLETED AND PERM
<ul> <li>INSPECTION OF ALL WELDS IS MADE PRIOR TO COMPLETION OR PRIOR TO SHIPMENT OF SHOP WELDING.</li> <li>SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16" IN SIZE.</li> <li>FLOOR AND ROOF DECK WELDING.</li> </ul>	STEEL JOISTS AND/OR J IN ACCORDANCE WITH S
<ul> <li>WELDED STUDS WHEN USED FOR STRUCTURAL DIAPHRAGM.</li> <li>WELDED SHEET STEEL FOR COLD FORMED STEEL FRAMING MEMBERS SUCH AS STUDS AND JOISTS.</li> </ul>	THE DRAWINGS. PROVID
<ul> <li>WELDING OF STAIRS AND RAILING SYSTEMS.</li> <li>C. VERIFY WELD FILLER MATERIALS CONFORM TO AWS SPECIFICATIONS AND MANUFACTURER'S CERTIFICATE OF COMPLIANCE IS REQUIRED.</li> </ul>	NAME THE REGISTERED
d. PERIODIC INSPECTION OF THE STEEL FRAME TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE APPROVED CONSTRUCTION DOCUMENTS SUCH AS BRACING, STIFFENING, MEMBER LOCATIONS AND PROPER	WIND.
APPLICATION OF JOINT DETAILS AT EACH CONNECTION. e. VERIFY STRUCTURAL STEEL MATERIAL CONFORMS TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS AND MANUFACTURER'S CERTIFIED MILL TEST REPORTS.	STEEL FABRICATOR SH REVISIONS TO ERECTIO APPROVAL OF ERECTIO
<ul> <li>f. PERIODIC VERIFICATION OF HIGH STRENGTH BOLTS, NUTS AND WASHERS FOR CONFORMANCE TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS AND MANUFACTURER'S CERTIFICATE</li> </ul>	METAL DECK
	UNLESS NOTED OTHER
OUNDATIONS	SHORED. DECK SUPPLIE
GEO-TEST DATED SEPTEMBER 19, 2023. MPORTANT ADDITIONAL INFORMATION CONCERNING SPECIFIC SOIL CONDITIONS TO BE ENCOUNTER IS AVAILABLE	MANUFACTURER'S STAN
N THE SOILS REPORT AND SHOULD BE REVIEWED PRIOR TO START OF CONSTRUCTION.	1. ATTACH ROOF DECK PER SHEET MINIMUM
THE GEOTECHNICAL INVESTIGATION REPORT CONTAIN SPECIFIC REQUIREMENTS CONCERNING CLEARING AND GRUBBING, SITE, SUBFLOOR AND BEARING SURFACE PREPARATION, OVER-EXCAVATION, STRUCTURAL FILL REQUIREMENTS, AND COMPACTION REQUIREMENTS NOT NECESSARILY SHOWN IN THIS SET OF PLANS.	<ol> <li>LONGITUDINAL JOINT MANUFACTURER REC</li> <li>ATTACH ROOF DECK CENTER.</li> </ol>
ALL FOOTING BEARING ELEVATIONS SHOWN ARE ASSUMED. EXACT BEARING ELEVATIONS SHALL BE VERIFIED IN THE FIELD WITH ACTUAL CONDITIONS BY CONTRACTOR WITH APPROVAL OF SOILS ENGINEER AND ALL BOTTOMS OF	<ol> <li>ATTACH FLOOR DECH LAPS PLUS ONE INTE REQUIRED.</li> <li>LONGITUDINAL JOINT MAXIMUM SPACING V</li> </ol>

AND/OR JOIST GIRDERS SHALL BE DESIGNED, FABRICATED AND ERECTED NCE WITH STEEL JOIST INSTITUTE (SJI) SPECIFICATIONS AND SHALL BE THE TYPE AND SIZE SHOWN ON GS. PROVIDE AND INSTALL BRIDGING IN ACCORDANCE WITH SJI SPECIFICATIONS. SHOP DRAWING SHALL BE ACCOMPANIED BY VERIFICATION THAT MANUFACTURER IS SJI CERTIFIED AND SHALL GISTERED PROFESSIONAL STRUCTURAL ENGINEER IN CHARGE OF DESIGN.

STEEL SUPPLIER TO FURNISH LINTELS FOR ALL MASONRY OPENINGS PER LOOSE LINTEL SCHEDULE N OTHERWISE ON STRUCTURAL DRAWINGS. ONE END OF THE LINTEL SHALL BE FREE TO MOVE LY TO ALLOW FOR ELONGATION AND SHORTENING. PORARY BRACING AND PRECAUTIONS NECESSARY TO COMPLY WITH ALL STEEL ERECTION AND TO WITHSTAND ALL CONSTRUCTION AND/OR LATERAL LOADS UNTIL ALL FIELD CONNECTIONS ARE

AND PERMANENT LATERAL SYSTEMS AND DECKS ARE IN PLACE.

ISTS AND JOISTS GIRDERS SHALL BE DESIGNED FOR A NET UPLIFT OF 38 PSF ON THE ROOF DUE TO

CATOR SHALL NOT RECEIVE ADDITIONAL COMPENSATION FOR SHOP DRAWING TIME FOR ANY

ERECTION DRAWINGS NOR FOR ANY REVISIONS TO PIECE DRAWINGS PRIOR TO ENGINEER'S ERECTION DRAWINGS.

ED OTHERWISE, DECK SHALL BE SHOP-PAINTED STEEL, SHALL BE OF THE TYPE CALLED FOR ON THE NS AND SHALL BE TWO SPAN MINIMUM WHERE POSSIBLE.SINGLE SPAN DECK CONDITIONS SHALL BE CK SUPPLIER SHALL VERIFY COMPATIBILITY OF HIS DECK FINISH WITH FIRE PROOFING REQUIREMENTS. LL BE INSTALLED AND ALL OPENINGS IN DECK CUT AND REINFORCED IN ACCORDANCE WITH

RER'S STANDARD DETAILS AND SPECIFICATIONS EXCEPT AS NOTED OTHERWISE.

- MINIMUM)
- S ONE INTERMEDIATE POINT WITH 5/8" DIAMETER PUDDLE WELD. PROVIDE WELD WASHERS AS

### HALL BE A MINIMUM OF 24" BELOW EXTERIOR GRADE.

### S ARE TO BE PLACED ON COMPACTED SOIL. SOIL IS TO BE COMPACTED TO AT LEAST 95% MODIFIED NSITY PER ASTM D-1557. EXISTING FILL AND STRUCTURES TO BE COMPLETELY REMOVED. (RE: SOILS

FOOTINGS UNDER WALLS, COLUMNS OR GRID LINES UNLESS NOTED OTHERWISE ON PLANS.

ENGINEER WHEN EXCAVATION IS COMPLETED SO THAT CONDITIONS MAY BE INSPECTED PRIOR TO OF ANY FILL OR CONCRETE.

AINAGE REQUIREMENTS REFER TO SOILS REPORT AND CIVIL DRAWINGS.

PLACE CONCRETE SHALL BE MADE WITH TYPE I/II PORTLAND CEMENT, STONE AGGREGATE AND SHALL FOLLOWING REQUIREMENTS:

F'c (KSI)	MIX TYPE	MAX W/C RATIO	% AIR REQ.
4000	STD	-	-
4000	STD	-	-
4000	STD	-	-
4000	STD	0.45	-
4000	STD	0.45	-
4000	STD	0.45	6%-8%

SHALL SAWCUT OR TROWELCUT JOINTS IN SLABS ON GRADE. JOINTS SHALL BE SPACED 15 FEET AND TROWELCUT 1/4 OF SLAB DEPTH X 1/8" WIDE FROM 8-24 HOURS AFTER POURING. CARRY ALL SLAB IENT THROUGH JOINT.

NG, FOOTINGS, BEAMS AND WALLS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE. ANY STOP IN ORK MUST BE MADE AT THIRD POINT OF SPAN WITH VERTICAL BULKHEADS AND HORIZONTAL SHEAR OTHERWISE SHOWN. ALL CONSTRUCTION JOINTS SHALL BE AS DETAILED OR AS REVIEWED BY THE

TE WORK AND REINFORCEMENT DETAILING SHALL BE IN ACCORDANCE WITH ACI BUILDING CODE 318 ION, UNLESS NOTED OTHERWISE. USE STANDARD HOOKS FOR DOWELS UNLESS NOTED OTHERWISE. EDGES OF CONCRETE WORK SHALL HAVE 3/4 INCH CHAMFER.

CING SHALL BE HIGH-STRENGTH DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 EXCEPT PS AND PLATE ANCHORS WHICH SHALL BE DEFORMED BARS, ASTM DESIGNATION A615, GRADE 40 OR

FABRIC SHALL CONFORM TO ASTM A185 GRADE 65 AND SHALL BE LAPPED ONE FULL MESH AT SIDE ICES AND WIRED TOGETHER.

1-1/2"

3/4"

ENT PROTECTION UNLESS NOTED OTHERWISE:

E POURED AGAINST EARTH POURED IN FORMS (EXPOSED TO WEATHER OR EARTH) AND BEAMS (TIE BARS) WALLS (NOT EXPOSED TO WEATHER)

IENT PLACEMENT AND TOLERANCES SHALL BE IN ACCORDANCE WITH OF ACI 318, LATEST EDITION.

OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAILED OR AUTHORIZED BY THE STRUCTURAL AP SPLICES, WHERE PERMITTED, SHALL BE A MINIMUM OF 48 BAR DIAMETERS FOR #6 BARS AND ) SHALL BE A MINIMUM OF 80 BAR DIAMETERS FOR #7 AND #8 REINFORCEMENT UNLESS NOTED MAKE ALL BARS CONTINUOUS AROUND CORNERS.

5 (PER 8" THICKNESS) WITH 2'-0" PROJECTION AROUND ALL OPENINGS IN CONCRETE WALLS, SLABS, ALSO PROVIDE TWO #5 X 4'-0" DIAGONALLY AT EACH CORNER.

RAL STEEL SHALL CONFORM TO ASTM A36 EXCEPT WIDE FLANGE BEAMS WHICH SHALL CONFORM TO KSI) AND EXCEPT PIPE COLUMNS WHICH SHALL CONFORM TO ASTM A53 AND TUBE COLUMNS TO ASTM B, LATEST EDITIONS. STEEL SUPPLIER MAY PROVIDE ASTM A572, GRADE 50 AT THEIR OPTION. OUS EMBEDDED ITEMS SHALL BE A36 STEEL.

RAL BOLTS SHALL BE A325N INSTALLED TO A MINIMUM SNUG TIGHT CONDITION. ALL ANCHOR BOLTS ORM TO ASTM F1554 UNLESS NOTED OTHERWISE.

L STEEL SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH THE LATEST PROVISIONS OF AISC STEEL CONSTRUCTION."

RE DETAILED OTHERWISE, FABRICATOR SHALL SELECT STEEL CONNECTIONS PER AISC "MANUAL OF RUCTION" (ASD), TABLE 11-A AND/OR AISC "SIMPLE SHEAR CONNECTION MANUAL" WITH A325 N BOLTS EQUIVALENT) TO SUPPORT LOADS INDICATED ON THE STRUCTURAL DRAWINGS. WHEN LOADS ARE SELECT CONNECTION TO SUPPORT 60% THE TOTAL UNIFORM LOAD CAPACITY PER AISC "MANUAL OF TRUCTION" FOR EACH GIVEN BEAM AND SPAN FOR NON-COMPOSITE MEMBERS.

SHALL HAVE EVIDENCE OF PASSING THE AMERICAN WELDING SOCIETY STANDARD QUALIFICATIONS TLINED IN AWS-D1.1.

LDS TO BE PER AISC TABLE J2.4 BUT NOT LESS THAN 3/16" CONTINUOUS FILLET UNLESS NOTED

M/COLUMN OR BEAM/BEAM CONNECTIONS, PROVIDE HORIZONTAL SHORT SLOTS IN CONNECTION Y (WT-SECTIONS, ANGLES OR SHEAR PLATES).

UIREMENTS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON DRAWINGS.

DOF DECK TO SUPPORT BEAMS, STEEL JOISTS OR PLATES WITH 5/8" PUDDLE WELDS AT 6" (7 WELDS NAL JOINTS BETWEEN ADJACENT ROOF DECK UNITS (SIDELAPS) SHALL BE SCREWED PER URER RECOMMENDATIONS AT (4) LOCATIONS PER SPAN.

OOF DECK TO BEAMS OR PLATES PARALLEL TO DECK WITH 5/8" DIAMETER PUDDLE WELDS AT 12" ON OOR DECK TO EACH END SUPPORT AT 12 INCHES AND TO EACH INTERMEDIATE SUPPORT AT SIDE

NAL JOINTS BETWEEN ADJACENT FLOOR DECK UNITS SHALL BE FASTENED TOGETHER AT 36" SPACING WITH 5/8" DIAMETER PUDDLE WELDS (OR SCREWS OR BUTTONPUNCHING). FASTEN FLOOR PARALLEL AND PERIMETER BEAMS AT 12"ON CENTER.

6. HEADED ANCHOR STUDS SHALL BE WELDED DIRECTLY TO STEEL BEAMS THROUGH DECK. LIGHT GAUGE FRAMING

MINIMUM YIELD STRESS OF 33,000 PSI.

MINIMUM YIELD STRESS OF 50,000 PSI.

NON-SHRINK GROUT

- 1. BETWEEN COLUMN BASES AND CONCRETE OR MASONRY SUPPORTS.
- BUILDING LOADS ABOVE.

### GENERAL

ENGINEER'S ACCEPTANCE MUST BE SECURED FOR ALL STRUCTURAL SUBSTITUTIONS.

RESPONSIBILITY.

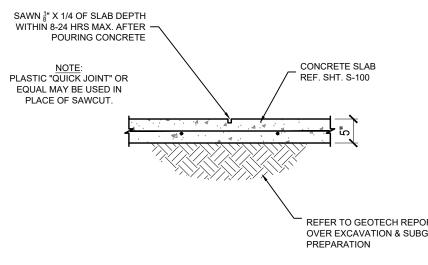
SUPPLIER AND INSTALLED BY CONCRETE CONTRACTOR. STEEL SHALL FULFILL ASTM A36.

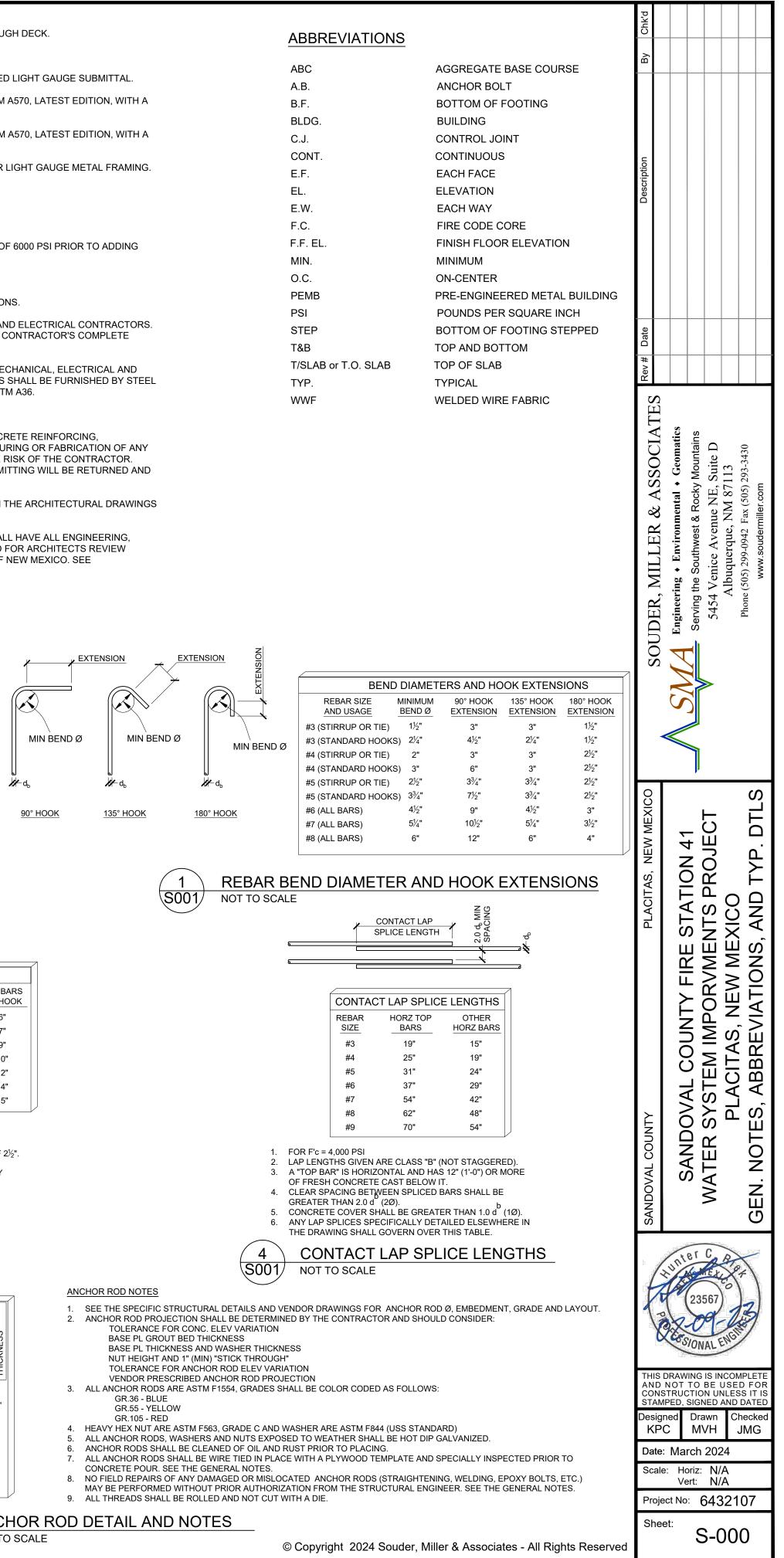
PROVIDE ASPHALTIC MASTIC-COATING ON ALL STEEL EXPOSED TO EARTH.

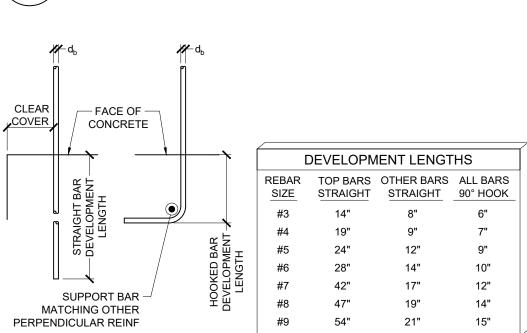
NOT REVIEWED

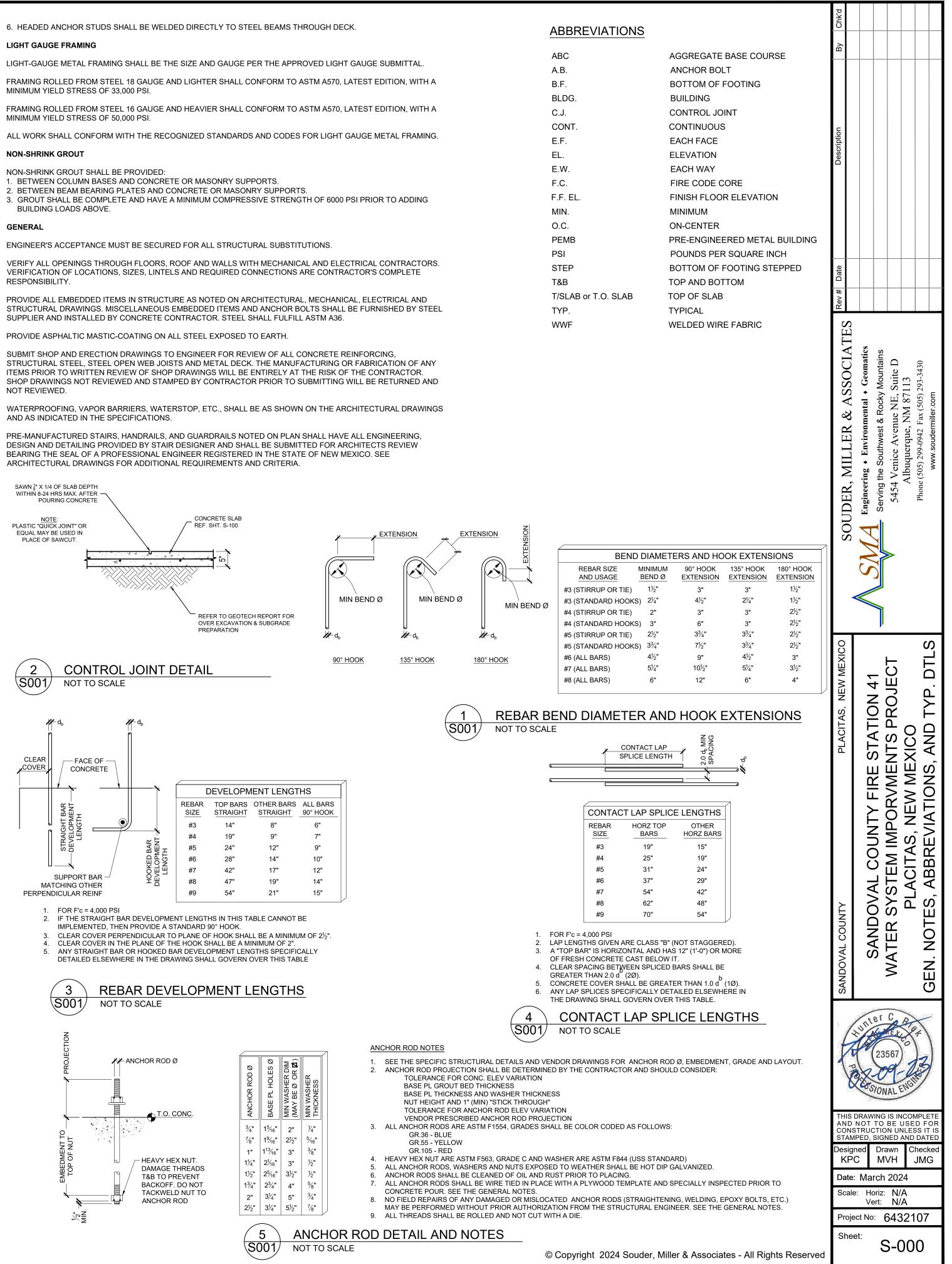
AND AS INDICATED IN THE SPECIFICATIONS.

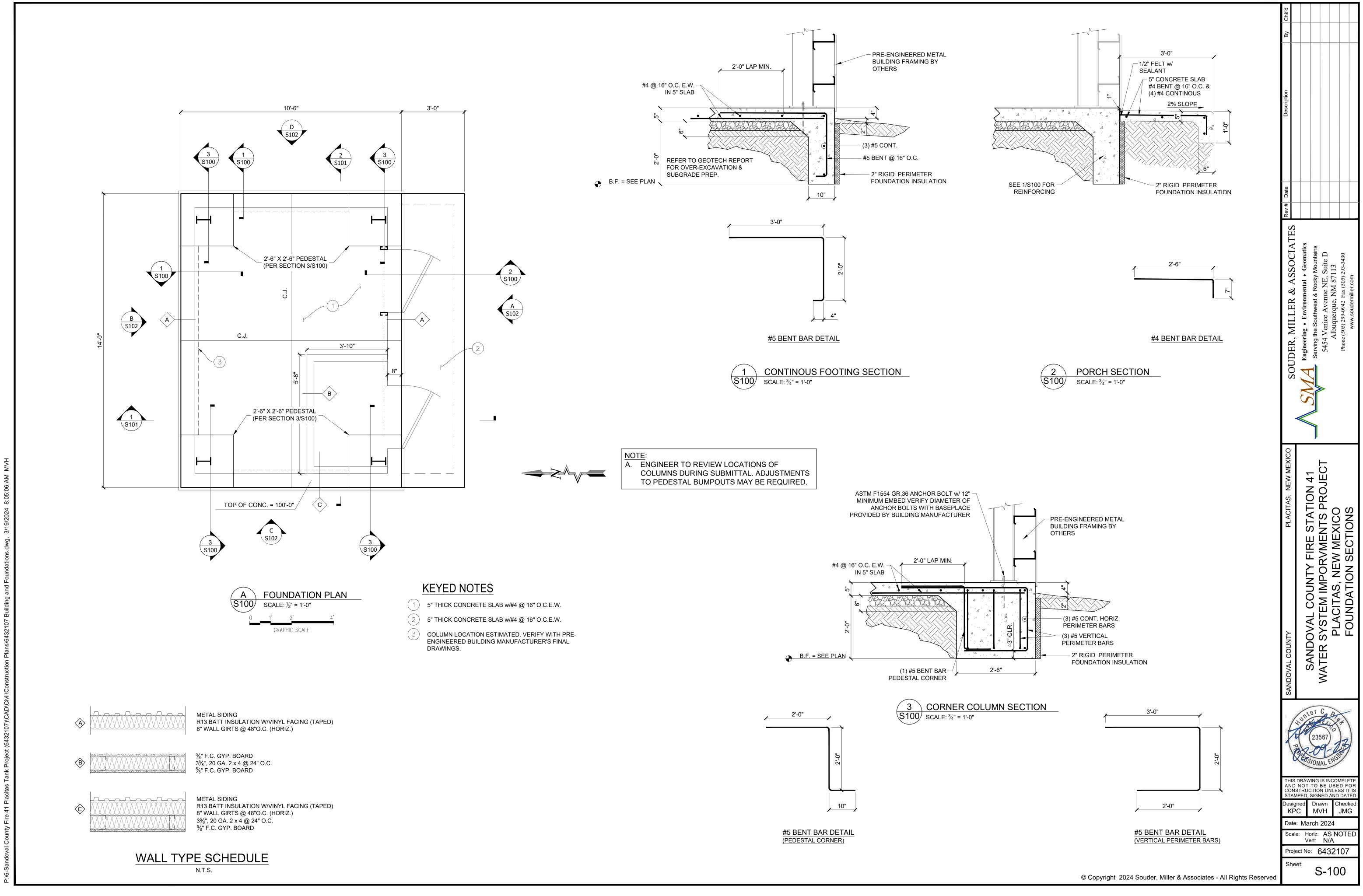
BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW MEXICO. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND CRITERIA.

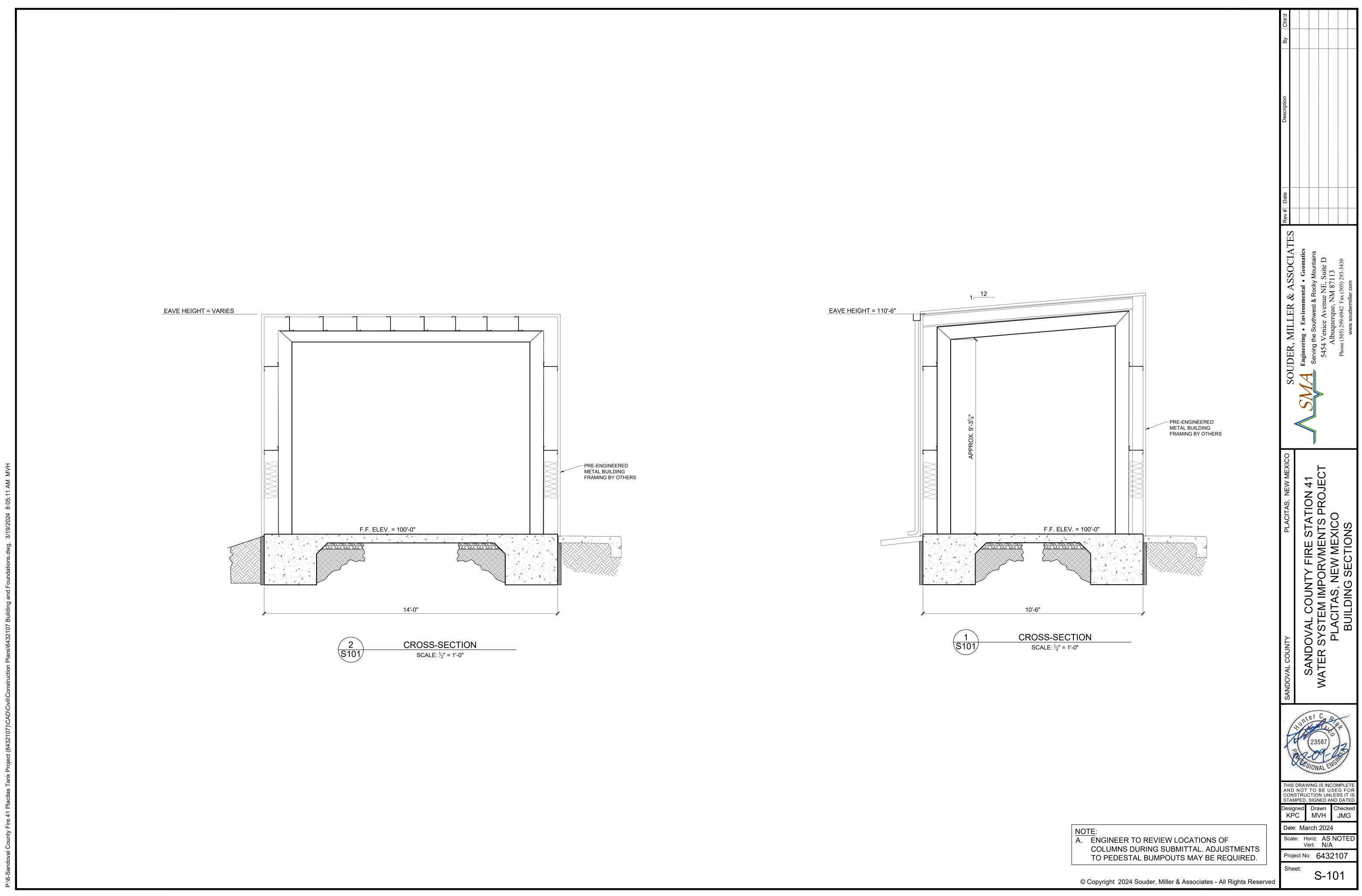


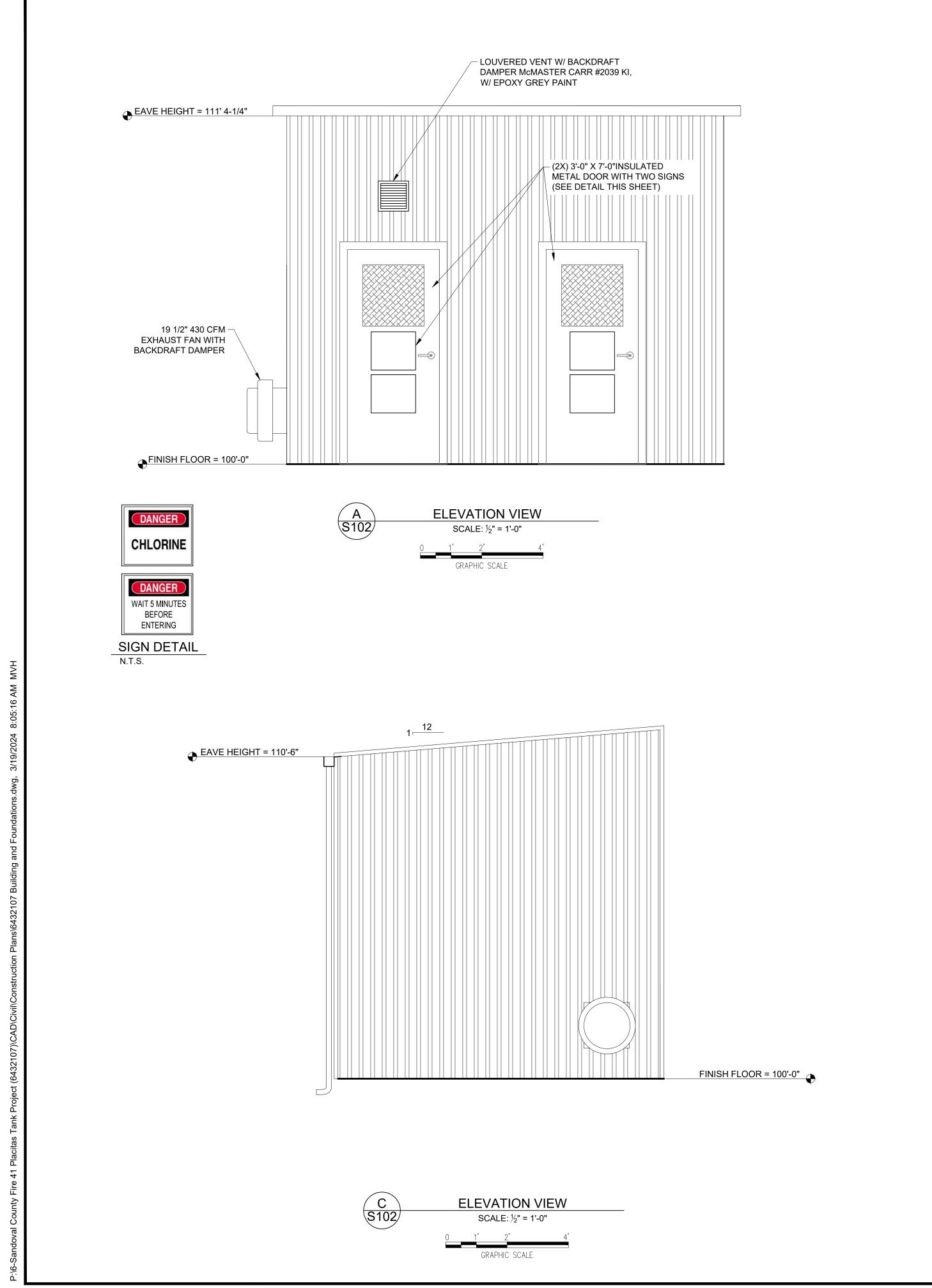






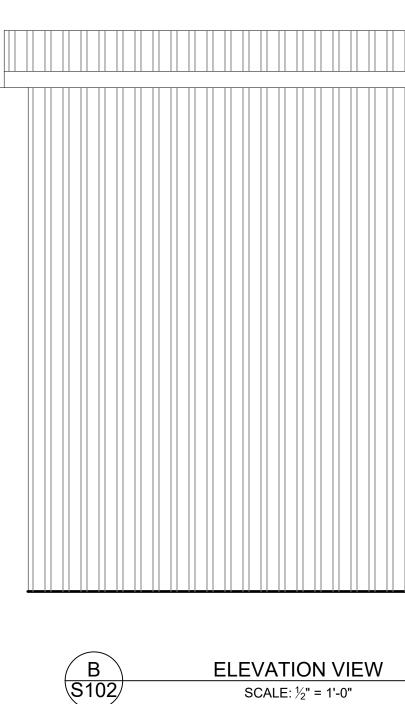


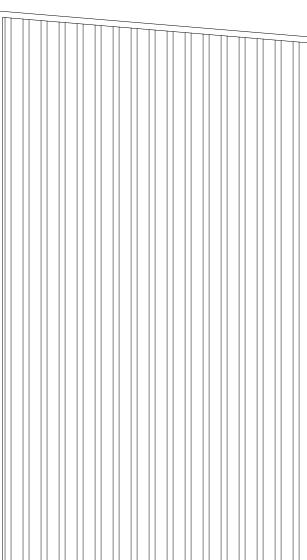




€FINISH FLOOR = 100'-0"

EAVE HEIGHT = 110'-6"





SCALE: 1/2" = 1'-0"

GRAPHIC SCALE



ELEVATION VIEV SCALE: ½" = 1'-0" GRAPHIC SCALE

	By Chkld
	JDER, MILLER & ASSOCIATES     Rev # Date     Description       Engineering • Environmental • Geomatics     Engineering • Environmental • Geomatics     Plate     Description       Engineering • Environmental • Geomatics     Formatics     Engineering     Engineering       Serving the Southwest & Rocky Mountains     5454 Venice Avenue NE, Suite D     Plate     Engineering       5454 Venice Avenue NE, Suite D     Albuquerque, NM 87113     Plate     Engineering       Phone (505) 299-0942 Fax (505) 293-3430     Plate     Engineering     Engineering
FINISH FLOOR = 100'-0"	KICO SOL
EAVE HEIGHT = 110'-6" ↔	SANDOVAL COUNTY FIRE STATION 41 SANDOVAL COUNTY FIRE STATION 41 WATER SYSTEM IMPORVMENTS PROJECT PLACITAS, NEW MEXICO ELEVATION VIEWS
	THIS DRAWING IS INCOMPLETE
<u>4'</u> © Copyright 2024 Souder, Miller & Associates - All Rights Reserved	AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED Designed KPC Drawn MVH JMG Date: March 2024 Scale: Horiz: AS NOTED Vert: N/A Project No: 6432107 Sheet: S-102

SYMBOL	ELECTRICAL SYMBOL LEGEND
н¤	WALL OUTLET AND SURFACE MOUNTED FIXTURE
	LED OUTLET AND FIXTURE
\$	SINGLE POLE SWITCH, FLUSH MOUNTED 48" A.F.F.
÷	DUPLEX CONVENIENCE OUTLET, 18" A.F.F.
•	
€ <sup>WP</sup>	
	DUPLEX CONVENIENCE OUTLET, GROUND FAULT CIRCUIT INTERRUPTER, 18" A
_0	JUNCTION BOX INSTALLED ABOVE LAY-IN CEILING WITH FLEXIBLE CONDUIT CONNECTION TO LAY-IN FIXTURES. MAXIMUM 4'-0" LENGTH OF CONDUIT, WITH REQUIRED CONDUCTORS ALONG WITH GREEN GROUND CONDUCTOR
Ю	JUNCTION BOX FLUSH IN WALL, HEIGHT AS INDICATED ON DRAWINGS, WITH CONNECTION TO EQUIPMENT
<u>  </u>	CONCEALED BRANCH CIRCUIT WITH CONDUCTORS AS INDICATED. NEUTRAL, SWITCH LEG AND GROUND RESPECTIVELY
	BRANCH CIRCUIT OR CONDUIT INSTALLED UNDERGROUND OR UNDER FLOOR
P2-2,4	HOMERUN TO PANELBOARD WITH BRANCH CIRCUIT NUMBERS INDICATED
 SV	SOLENOID VALVE
<u>s</u>	LIMIT SWITCH
Ē	PRESSURE TRANSMITTER
© ¢	FIRE ALARM SMOKE AND HEAT DETECTOR, PHOTOELECTRIC TYPE, 120V AUX ( MOTOR CONNECTION FOR FRACTIONAL HP MOTOR (1/3 HP OR LESS). PROVID THERMAL OVERLOAD SWITCH (WEATHERPROOF IF OUTSIDE) ADJACENT TO M UNLESS SWITCH IS SHOWN ELSEWHERE ON PLANS
(#)	MOTOR CONNECTION FOR MOTOR WITH HP INDICATED
Ч Ц	DISCONNECT SWITCH, POLES AND RATING AS INDICATED OR AS REQUIRED, N 3R IF INSTALLED OUTSIDE
۲Ē	FUSED DISCONNECT SWITCH, FUSE, POLES AND RATING AS INDICATED OR AS REQUIRED, NEMA 3R IF INSTALLED OUTSIDE
Ł	COMBINATION MAGNETIC MOTOR CONTROLLER/DISCONNECT SWITCH. SIZE, F FUSES AND OVERLOADS PER MOTOR SERVED
	MAGNETIC MOTOR CONTROLLER, SIZE AND POLES PER MOTOR SERVED
Т	TRANSFORMER, DRY TYPE, SIZE AS INDICATED
Ю	THERMOSTAT(M), 48" A.F.F.
	120V PANELBOARD, REFER TO PANEL SCHEDULE
	277V PANELBOARD, REFER TO PANEL SCHEDULE
	SPECIAL PURPOSE CABINET, AS INDICATED ON DRAWINGS
	INTRUSION ALARM DOOR CONTACT MAGNETIC
—  —	NORMALLY OPEN CONTACT
<del></del>	NORMALLY CLOSED CONTACT
©	CONTACTOR
─ <del>₩₩₩</del> <sub>oL's</sub>	MOTOR OVERLOADS
R ~	RED PILOT LIGHT
) IIIC	GREEN PILOT LIGHT
	TRANSFORMER
®	RELAY
.\	SWITCH
Ē	FUSE(S)
$\overline{}$	CIRCUIT BREAKER
PLC	PROGRAMMABLE LOGIC CONTROLLER
rtu <b>HO</b>	REMOTE TERMINAL UNIT
но WP	WEATHERPROOF (NEMA 3R)
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
A.F.F.	ABOVE FINISHED FLOOR
A.F.F.	ABOVE FINISHED GRADE
	IGHTING FIXTURES ARE OF TYPE AS INDICATED ON LIGHT FIXTURE SCHEDULE U.
• N	IOUNTING HEIGHTS FOR DEVICES CALLED OUT AT 18" A.F.F. ARE TO THE BOTTOM
	DEVICE UNLESS OTHERWISE NOTED.
	NOUNTING HEIGHTS FOR DEVICES CALLED OUT AT 48" A.F.F. ARE TO THE TOP OF T INLESS OTHERWISE NOTED.
	ANY SPECIFIC DETAILS ABOVE (MOUNTING HEIGHTS, PART NUMBERS, CONNECTION METHODS, ETC.) MAY BE MODIFIED OR REPLACED BY INFORMATION ON PLANS, SC

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**GENERAL NOTES** SPECIFICATIONS

G1) IF THERE IS A CONFLICT BETWEEN PLANS/SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS FOR ANY DEVICE, PART, OR MATERIAL USED IN THE PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY IN WRITING THE ENGINEER FOR CLARIFICATION.

G2) THE CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE PLANS, AND THE SITE CONDITIONS PRIOR TO BID OPENING AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY AMBIGUITIES, CONTRADICTIONS OR IRREGULARITIES IN THE PLANS.

G3) IF, DURING BIDDING OR CONSTRUCTION, THE CONTRACTOR IS IN DOUBT AS TO THE TRUE MEANING OF ANY PART OF THE PLANS, SPECIFICATIONS, OR OTHER CONTRACT DOCUMENTS, OR DISCREPANCIES IN OR POSSIBLE OMISSIONS FROM THE DRAWINGS OR SPECIFICATIONS, THEY SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND REQUEST AN INTERPRETATION OF CORRECTION THEREOF. DURING THE BIDDING PROCESS AN ADDENDUM (IF NEEDED) WILL BE ISSUED.

G3.1) THE CONTRACT, IF AWARDED, WILL BE ON THE BASIS OF MATERIAL AND EQUIPMENT SPECIFIED OR DESCRIBED IN THE BIDDING DOCUMENTS WITHOUT CONSIDERATION OF POSSIBLE SUBSTITUTE OR "OR EQUAL" ITEMS. WHEREVER A BRAND NAME IS SPECIFIED OR DESCRIBED IN THE BIDDING DOCUMENTS A SUBSTITUTE OR "OR EQUAL" ITEM OF MATERIAL OR EQUIPMENT MAY BE FURNISHED OR USED BY CONTRACTOR IF ACCEPTABLE TO ENGINEER, APPLICATION FOR SUCH ACCEPTANCE WILL NOT BE CONSIDERED BY ENGINEER UNTIL AFTER THE EFFECTIVE DATE OF AGREEMENT. THE PROCEDURE FOR SUBMISSION OF ANY SUCH APPLICATION BY CONTRACTOR AND CONSIDERATION BY ENGINEER IS SET FORTH IN THE GENERAL CONDITIONS.

# **EXISTING UTILITIES & OBSTACLES TO WORK**

G4) THE CONTRACTOR IS RESPONSIBLE TO INSTALL ALL ITEMS DESCRIBED IN THESE PLANS IN A MANNER THAT PROTECTS THE EXISTING FACILITY. THE CONTRACTOR MUST CONTACT THE ENGINEER IMMEDIATELY IF HE IS UNABLE TO PERFORM THIS WORK WITHOUT DAMAGE TO THE EXISTING FACILITY. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING INFORMATION SHOWN ON THESE PLANS. DESIGN ELEMENTS OF THIS PROJECT WILL NOT CHANGE WITHOUT CHANGE ORDER UNLESS THE CONTRACTOR NOTIFIES THE ENGINEER IN A TIMELY MANNER REGARDING ITEMS DESCRIBED IN THIS NOTE. CHANGES IN ALIGNMENT CAUSED BY UNKNOWN OR UNANTICIPATED SITE CONDITIONS SHALL BE ACCOUNTED FOR BY THE APPROPRIATE UNIT PRICES, AS RECOMMENDED BY THE ENGINEER AND APPROVED BY THE OWNER.

G5) THE EXISTENCE, CONDITION AND LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN IN THESE PLANS WAS OBTAINED BY A CAREFUL SEARCH OF AVAILABLE RECORDS. TO THE BEST OF THE ENGINEERS KNOWLEDGE, THERE ARE NO EXISTING UNDERGROUND UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN, AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS, AND IS RESPONSIBLE FOR THEIR LOCATING, PROTECTION OF, OR ANY DAMAGE TO THESE LINES OR STRUCTURES. THIS DOES NOT RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES AND OBTAIN LINE SPOTS.

G6) THE FOLLOWING IS A LIST OF POSSIBLE OBSTRUCTIONS AND SHALL NOT BE CONSIDERED A COMPLETE LIST OF POSSIBLE OBSTRUCTIONS: EXISTING UTILITIES, STRUCTURE, GEOTECHNICAL FEATURES, ALL CONDUIT, CABLES, PIPES, WATERLINES, SEWER LINES, GAS LINES, POWER LINES, TELEPHONE AND TELEGRAPH LINES, TREES, MONUMENTS, TRAFFIC CONTROL DEVICES AND OTHER STRUCTURES, BOTH BELOW AND ABOVE GROUND.

G7) CONTRACTOR SHALL BE HELD RESPONSIBLE FOR COSTS OF REPAIR OF ANY AND ALL DAMAGE TO ANY UTILITY (WHICH IS PREVIOUSLY KNOWN AND DISCLOSED TO HIM BY THE UTILITY OR SHOWN ON THESE PLANS) AS MAY BE CAUSED BY HIS OPERATIONS.

G8) FIVE (5) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE-CALL SYSTEM, INC. (505) 260-1990, FOR LOCATION OF EXISTING UTILITIES.

G9) CONTRACTOR SHALL GIVE ALL PUBLIC AND PRIVATE UTILITY COMPANIES NOTICE AS SOON AS POSSIBLE, IN NO EVENT LESS THAN FORTY EIGHT (48) HOURS, FOR ANY WORK THAT IS UNDERSTOOD TO INTERFERE WITH THE SERVICE OF ANY EXISTING PUBLIC OR PRIVATE UTILITY. IF SUCH PUBLIC OR PRIVATE UTILITY DOES NOT COOPERATE FOR THE PROTECTION OF ITS SERVICES, CONTRACTOR SHALL NOTIFY ENGINEER.

G10) CONTRACTOR SHALL IMMEDIATELY REPORT ANY DAMAGES TO PUBLIC OR PRIVATE PROPERTY TO THE OWNER OF THE PROPERTY INVOLVED AND TO THE ENGINEER. CONTRACTOR SHALL REPAIR OR RESTORE AT HIS OWN EXPENSE ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY, FOR WHICH THEY ARE DIRECTLY OR INDIRECTLY RESPONSIBLE. TO A CONDITION EQUAL TO THAT EXISTING BEFORE DAMAGE. CONTRACTOR SHALL PROMPTLY NOTIFY HIS INSURANCE CARRIER OF SUCH DAMAGE. IF CONTRACTOR FAILS TO GIVE SUCH NOTICE TO HIS INSURANCE CARRIER OR REFUSES TO EFFECT SUCH REPAIRS OR RESTORATION UPON RECEIPT OF NOTICE, THE ENGINEER MAY CAUSE SUCH REPAIRS OR RESTORATION AND DEDUCT THE COST THEREOF FROM MONEYS DUE, OR WHICH MAY BECOME DUE, TO THE CONTRACTOR.

G11) CONTRACTOR IS RESPONSIBLE FOR RECORDING EXISTING CONDITIONS IN ACCORDANCE WITH THE SUPPLEMENTARY CONDITIONS OF THE CONTRACT BEFORE CONSTRUCTION BEGINS. THE RECORD OF EXISTING CONDITIONS SHALL BE USED AS THE "EQUAL CONDITION BEFORE DAMAGE" IN THE EVENT OF DAMAGE TO PUBLIC OR PRIVATE PROPERTY. CONTRACTOR FAILURE TO RECORD EXISTING CONDITIONS WILL MAKE THE OWNERS CLAIM OF "EQUAL CONDITION BEFORE DAMAGE" THE STANDARD THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING AND THE ENGINEER WILL BE IN THE POSITION OF NOT BEING ABLE TO SUPPORT THE CONTRACTOR IN THE MEDIATION OF ANY DISPUTE.

G12) THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF LOCATION OF ALL EXISTING UTILITIES..

# SITE CONDITIONS

G13) CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES ADJACENT TO THE CONSTRUCTION AREA.

G14) THE CONTRACTOR SHALL USE WATERING EQUIPMENT FOR DUST POLLUTION ABATEMENT AS REQUIRED OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER. THIS WORK AND MATERIAL SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

G15) EPA STORM WATER DISCHARGE REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE TO APPLICABLE PORTIONS OF THE EPA STORM WATER DISCHARGE REGULATIONS.

G16) CONTRACTOR SHALL FULLY COORDINATE ALL REPLACEMENT OF DAMAGED OR DESTROYED EQUIPMENT, GRASS, TURF, ETC. THAT WAS DAMAGED OR DESTROYED DURING CONSTRUCTION.

# SITE DESIGN

G17) SUBGRADE. ALL SUBGRADE AND TRENCH BACKFILL SHALL BE COMPACTED TO 95 % OF STANDARD PROCTOR. ALL SUBGRADE AND BACKFILL SHALL BE COMPACTED IN MAXIMUM 8" LOOSE LIFTS. MOISTURE CONTENT AT THE TIME OF COMPACTION SHALL NOT EXCEED OPTIMUM OR BE LESS THAN 5 PERCENTAGE POINTS BELOW OPTIMUM. DRIVEWAYS, APRONS, FILLETS, CURB AND GUTTER, AND OTHER CONCRETE PAVEMENT SHALL BE PLACED ON 6" OF COMPACTED SUBGRADE.

G18) RESTORE SURFACE AT TRENCH TO EXISTING CONDITIONS.

# COMMUNICA

G19) CONTRACTOR SHAL AND/OR PHASE SCHEDUL

G20) CONTRACTOR SHALL LIMITED TO NOISE ORDINA

STAGING ST G21) DEBRIS GENERATED

CERTIFIED REFUSE FACILI

RECORD DRA G22) THE CONTRACTOR S

# PHASE AND S

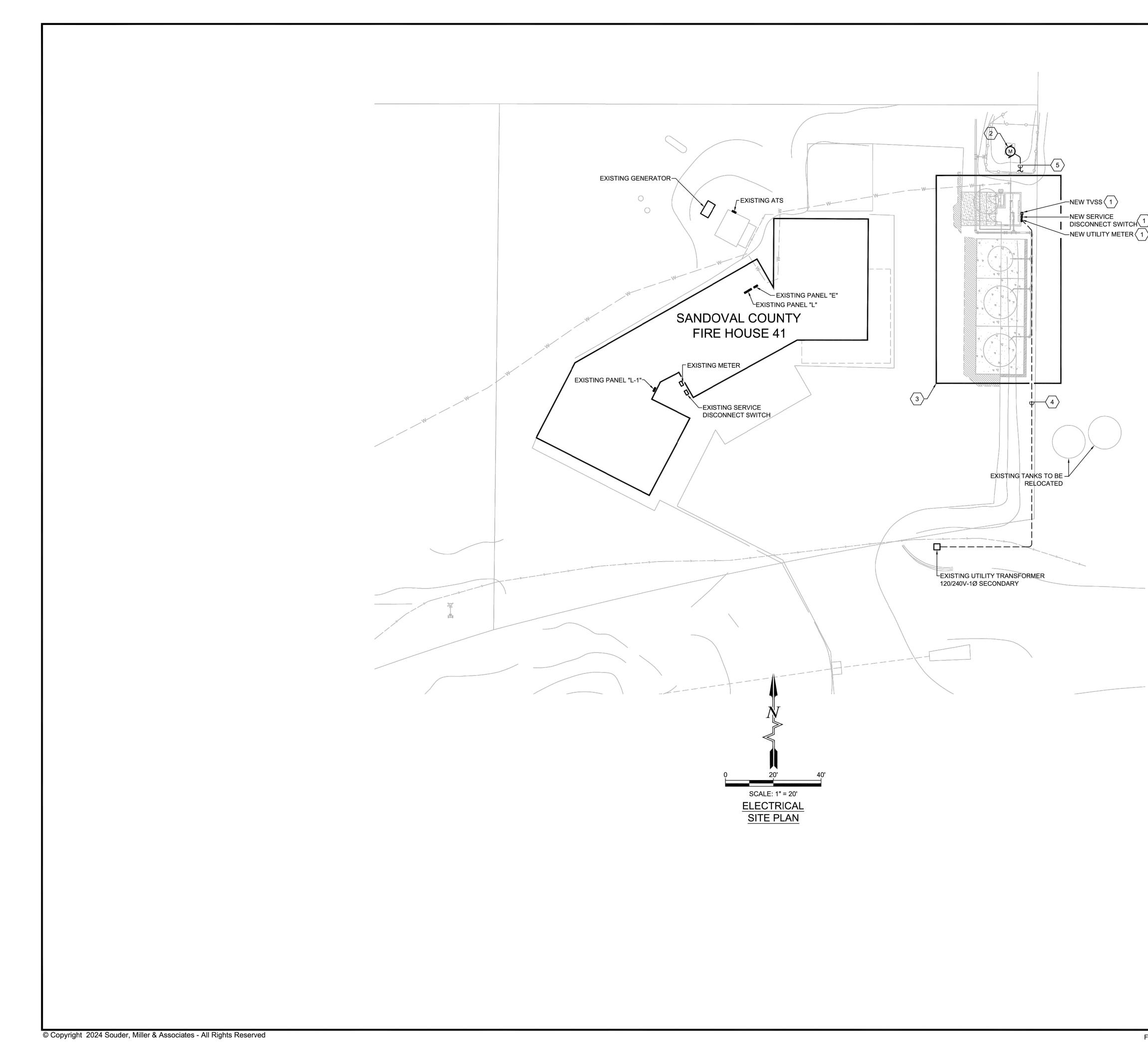
G23) CONTRACTOR SHALL FACILITY. A PROJECT SCH NOTICE-TO-PROCEED. CH PROPOSED IMPLEMENTA PROGRESSES. MOST CHA

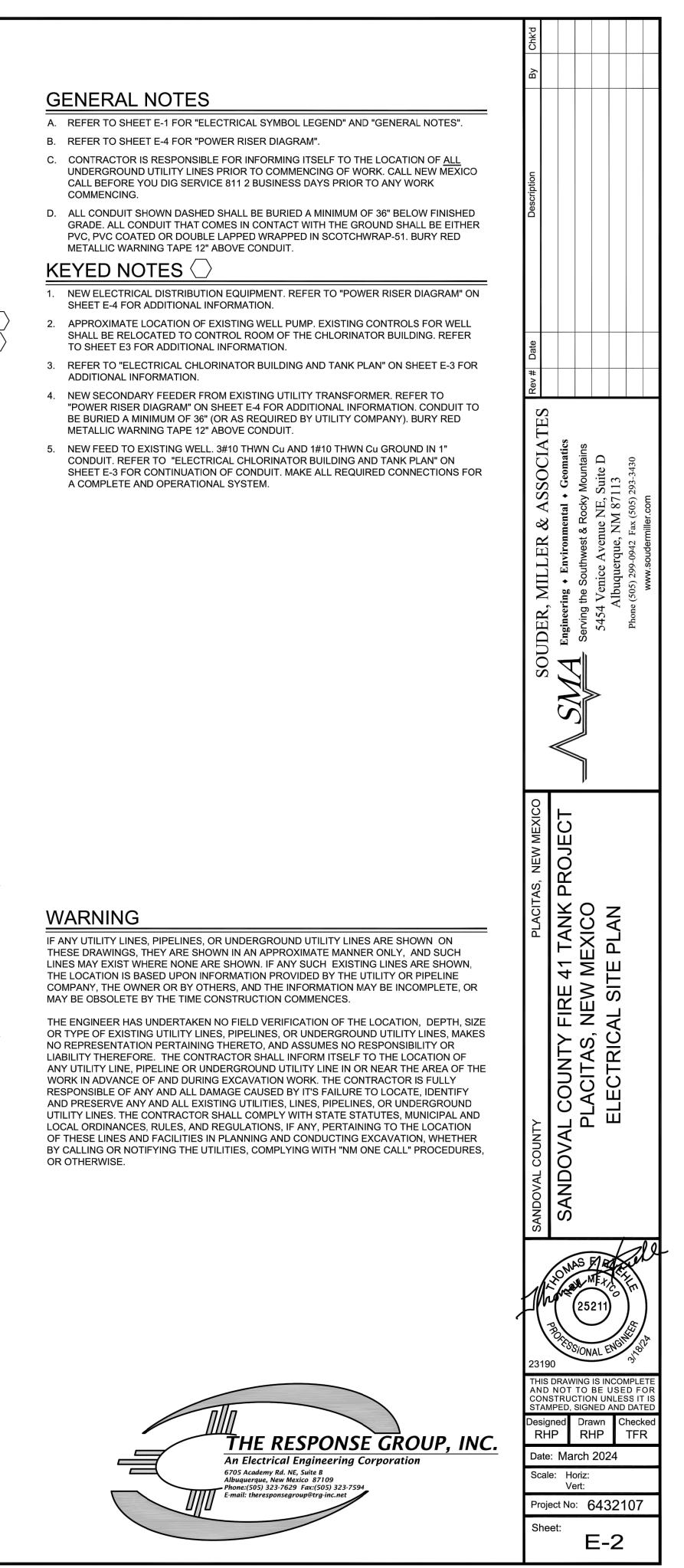
SUBMITTALS G24) CONTRACTOR SHALI REQUESTED BY ENGINEER

## INSPECTION G25) OWNER SHALL HAVE

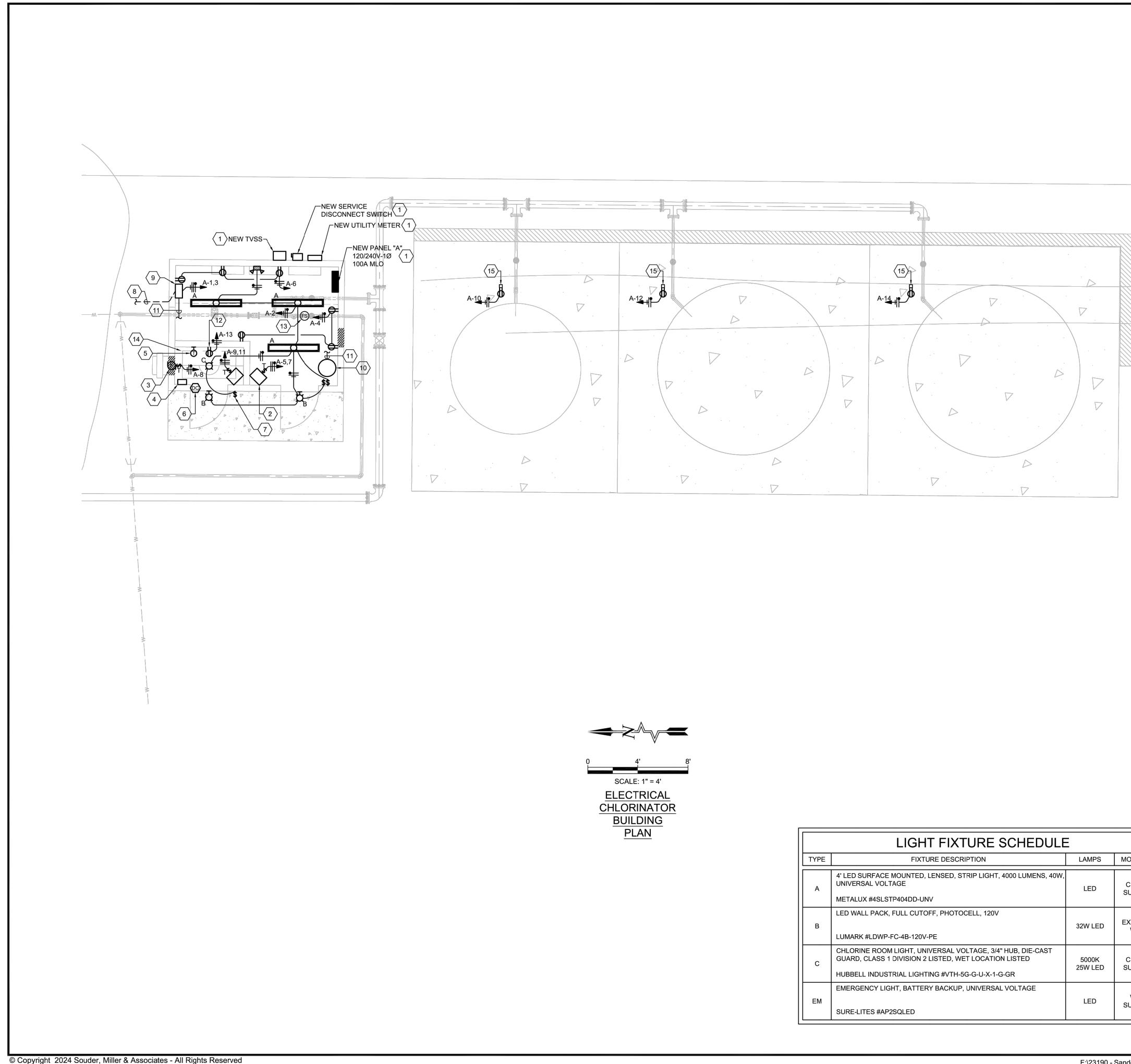
						-
	Chk'd					
	By					l
ATION						
LL KEEP THE OWNER AND THE ENGINEER UPDATED WEEKLY ON THE CONSTRUCTION SCHEDULE JLE, AND PROGRESS TO DATE.						l
ALL FULLY COORDINATE ALL WORK WITH CITY OF LOS ALAMOS P.I. OFFICER INCLUDING BUT NOT NANCE, TIME OF WORK BEING PERFORMED, ETC	iption					
ORAGE & DEBRIS DISPOSAL	Description					l
ED BY CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OF AT A PERMITTED LANDFILL OR OTHER DULY SILITY. THE DISPOSAL OF DEBRIS IS NOT A PAY ITEM.						l
AWINGS						l
SHALL PROVIDE A RECORD SKETCH ON THESE PLANS FOR THE AS-CONSTRUCTED CONDITIONS.						l
SCHEDULE	Date					
ILL PHASE AND SCHEDULE WORK IN SUCH A WAY AS TO PROVIDE MINIMAL POWER OUTAGES AT THE CHEDULE SHALL BE SUBMITTED TO THE OWNER FOR REVIEW PRIOR TO ISSUANCE OF CHANGES IN SCHEDULE SHALL BE PRESENTED TO OWNER AND ENGINEER AT LEAST 7 DAYS PRIOR TO ATION. THESE SCHEDULES, SCHEMATICS AND DIAGRAMS SHALL BE UPDATED WEEKLY AS THE WORK HANGE OVER SHALL BE DONE ON WEEKENDS OR AFTER HOURS.	Rev #					
S ILL PROVIDE SUBMITTALS FOR ALL EQUIPMENT, MATERIALS, PROCESSES AND SCHEDULES AND AS	CIATES	matics	ains	D	0	
ER.	ASSOC	Geon	Mount	suite 113	293-3430 I	
I OF WORK /E ACCESS TO FULL TIME INSPECTION OF WORK BEING PERFORMED.	& AS	intal +	Rocky	e NE, M 87]	15) 299-0942 Fax (505) 2 www.soudermiller.com	
	SOUDER. MILI		LACITAS, NEW MEXI	ELECTRICAL COMMONS Albuquerque, NM 87113	Phone (505) 299-0942 Fax (505) 293-3- www.soudermiller.com	
The Response Group, Inc.         For Sacademy Red. Ng 198         Budguergue, New Mexico 87109         Phone:(505) 323-7629 Fax:(505) 323-7594         Email: theresponsegroup@trg-inc.	2319 THIS AND CON STAN Desig RH Date Scal	PROTES 90 B DRAV D NOT ISTRU MPED, MPED, gned HP e: Ma le: H	VING IS SONAL TO BI CTION SIGNE Draw RHI arch 2 Joriz: ert:	ENGIN ENCOME UNLES D AND Mn CI	IPLETE D FOR S IT IS DATED necked TFR	
	She	et:	E	-1		
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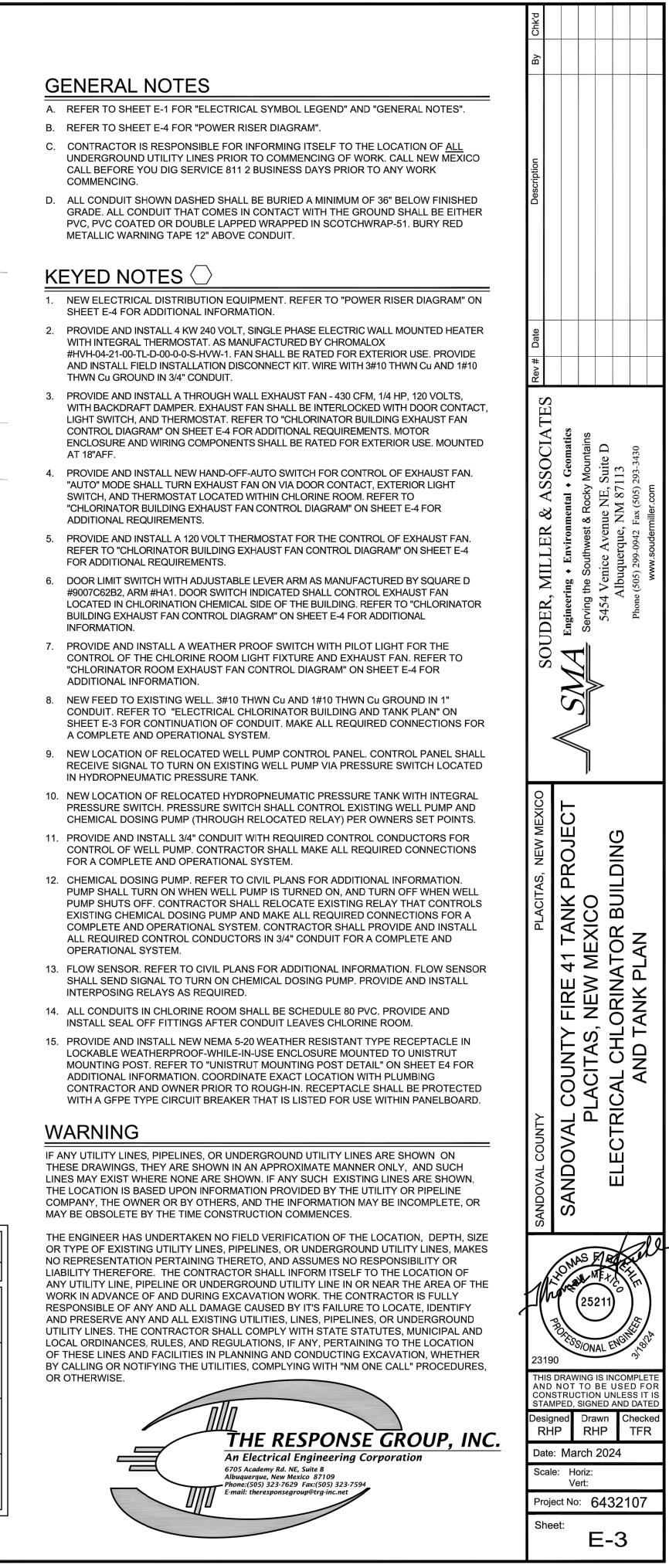




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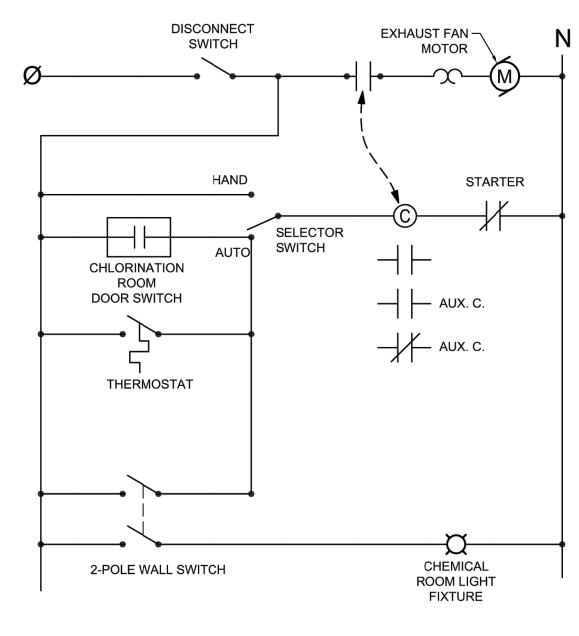


	LIGHT FIXTURE SCHEDULE								
TYPE	FIXTURE DESCRIPTION	LAMPS	MOUNTING						
A	4' LED SURFACE MOUNTED, LENSED, STRIP LIGHT, 4000 LUMENS, 40W, UNIVERSAL VOLTAGE METALUX #4SLSTP404DD-UNV	LED	CEILING SURFACE						
В	LED WALL PACK, FULL CUTOFF, PHOTOCELL, 120V LUMARK #LDWP-FC-4B-120V-PE	32W LED	EXTERIOR WALL						
с	CHLORINE ROOM LIGHT, UNIVERSAL VOLTAGE, 3/4" HUB, DIE-CAST GUARD, CLASS 1 DIVISION 2 LISTED, WET LOCATION LISTED HUBBELL INDUSTRIAL LIGHTING #VTH-5G-G-U-X-1-G-GR	5000K 25W LED	CEILING SURFACE						
EM	EMERGENCY LIGHT, BATTERY BACKUP, UNIVERSAL VOLTAGE SURE-LITES #AP2SQLED	LED	WALL SURFACE						



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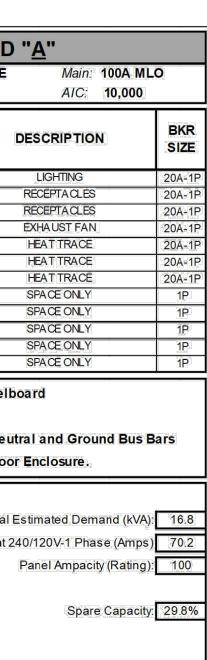
ED FROM	DESCRIPTION		ğπ	LOAD (VA)	ck #	LOAD (VA)		#		<u></u>	
BKR SIZE			DEMAND			PHASE A	PHASE B	Ckt #	LOAD (VA)	DEMAND CODE	
20A-2P	WELL F	LMECH	1440	1	1654		2	214	LTG		
20/(21				1440	3		1980	4	540	REC	
30A-2P	UNIT HEATER			2000	5	2540	10 - 6	6	540	REC	
				2000	7		2696	8	696	MECH	i
30A-2P	UNIT HE	EQP	2000	9	3000	2000	10	1000	EQP	-	
20A-1P	CHEMICAL DO	EQP	2000	11 13	1200	3000	12 14	1000	EQP		
20A-TP 1P	SPACE		MECH	200	15 15	1200		14 16	1000	EQP	
1P	SPACE				17			18			s
1P	SPACE			19		· · · · ·	20				
1P	SPACE			·	21			22			
1P	SPACE				23			24			
		Tota	alPhase	Loads (	VA):	8,394	7,676		Notes:	1. Nev	v Pane
			hase Lo	ads (An	nps):	70.0	7,676 64.0		Notes:	2. 24-0 3. Cop	
SN	Conne	Total	Phase Lo inected L	ads (An	nps):	70.0 16.1		d (kV		2. 24-0 3. Cop 4. Doc	Circuit oper Ne
SNOI	Conne	Total F Total Con	Phase Lo inected L Type:	ads (An	nps):	70.0 16.1 Estimate	64.0		A) by Loa	2. 24-0 3. Cop 4. Doc	Circuit oper Ne
		Total F Total Con ected (kVA) by	Phase Lo nected L Type: g: 0	ads (An .oads (k	nps):	70.0 16.1 Estimate	64.0 d Deman	kVA):	A) by Loa	<ol> <li>2. 24-0</li> <li>3. Cop</li> <li>4. Doc</li> <li>d Type:</li> <li>3</li> </ol>	Circuit oper Ne or-in-Do
CULATIONS	LTG	Total F Total Con ected (kVA) by Lightin	Phase Lo nected L Type: g: 0	ads (An .oads (k	nps):	70_0 16.1 Estimate Lighting	64.0 d Deman at 125% (	kVA): icles;	A) by Loa	<ol> <li>2. 24-0</li> <li>3. Cop</li> <li>4. Doc</li> <li>ad Type:</li> <li>3</li> <li>1</li> </ol>	Circuit oper Ne or-in-Do Tota
ALCULATIONS	LTG	Total F Total Con ected (kVA) by Lightin	Phase Lo nected L Type: g: 0	ads (An .oads (k	nps):	70.0 16.1 Estimate Lighting 10kVA	64.0 d Deman at 125% ( Recepta	kVA): icles: kVA):	A) by Loa	2. 24-0 3. Cop 4. Doc d Type: 3 1	Circuit oper Ne or-in-Do Tota
	LTG	Total F Total Con ected (kVA) by Lightin	Phase Lo inected L Type: g 0 s; 1	ads (An .oads (k	nps):	70.0 16.1 Estimate Lighting 10kVA Res	64.0 d Deman at 125% ( Recepta at 100% (	kVA): icles kVA): kVA):	A) by Loa 0 1	2. 24-0 3. Cop 4. Doc d Type: 3 1 1 0	Circuit oper Ne or-in-Do Tota
LOAD CALCULATIONS	LTG REC	Total F Total Con ected (kVA) by Lightin Receptacle	Phase Lo inected L Type: g 0 is 1 nt 12	ads (An .oads (k .2	nps):	70.0 16.1 Estimate Lighting 10kVA Res Eqp	64.0 ed Deman at 125% ( Recepta at 100% (	kVA): icles kVA): kVA): kVA):	A) by Los 0 1 1	2. 24-0 3. Cop 4. Doc d Type: 3 1 1 0	Circuit oper Ne or-in-Do Tota

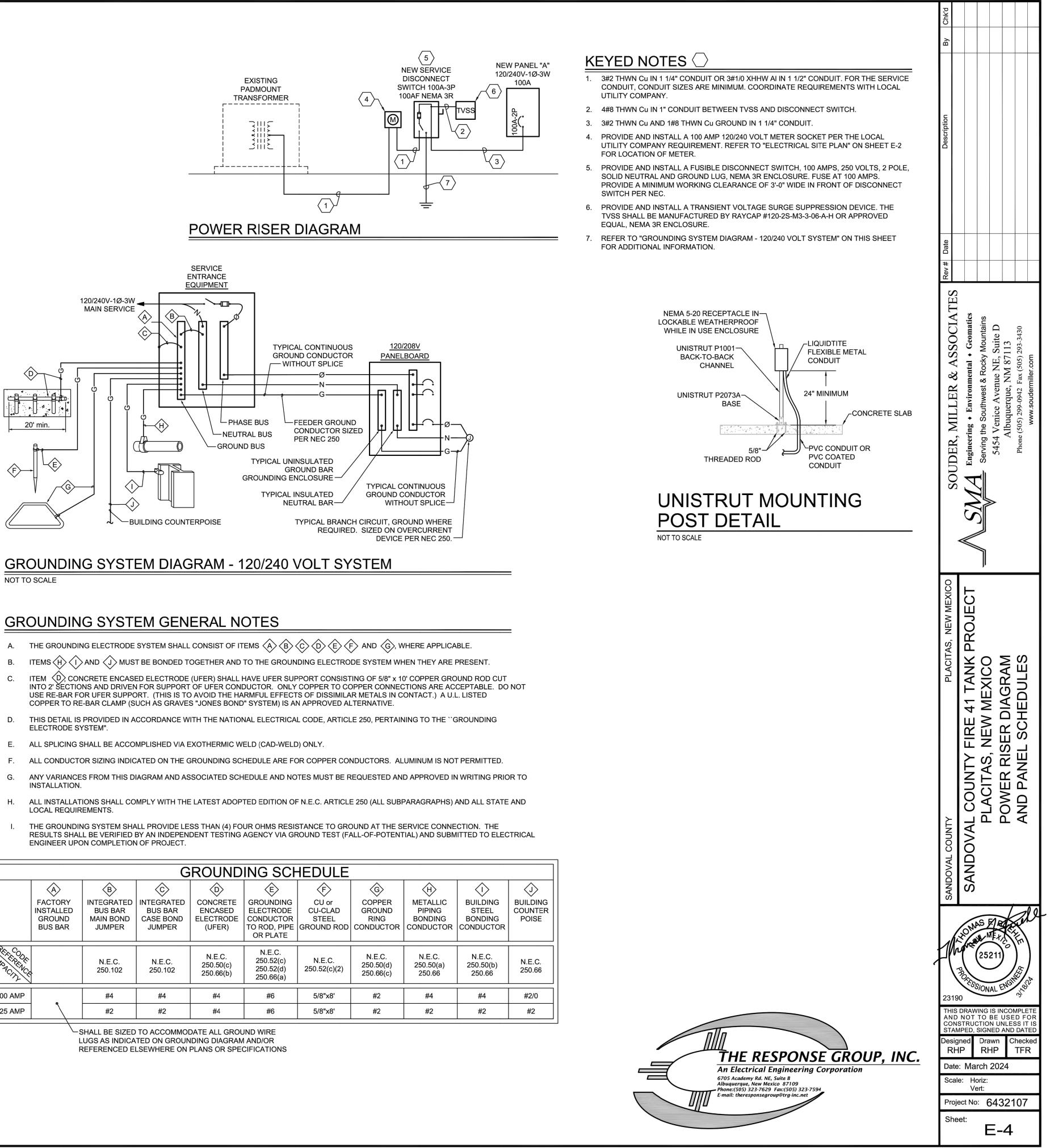


# CHLORINATOR BUILDING EXHAUST FAN CONTROL DIAGRAM

NO SCALE CHLORINATION ROOM EXHAUST FAN OPERATES AS FOLLOWS:

- WITH THE STARTER SWITCH IN AUTO:
  - 1. THE FAN WILL TURN ON WHEN THE DOOR IS OPEN VIA THE DOOR SWITCH.
- 2. WITH THE DOOR CLOSED THE FAN WILL TURN ON WHEN THE LIGHTING SWITCH IS SWITCHED ON.
- 3. WITH THE DOOR CLOSED AND LIGHTING SWITCH OFF, THE FAN WILL
- TURN ON BY THERMOSTAT.





# **GROUNDING SYSTEM DIAGRAM - 120/240 VOLT SYSTEM**

- F. ALL CONDUCTOR SIZING INDICATED ON THE GROUNDING SCHEDULE ARE FOR COPPER CONDUCTORS. ALUMINUM IS NOT PERMITTED.

			G	ROUND	ING SCH	HEDULE				
	Â	B	$\Diamond$	D	E	F	G	Ĥ	$\langle 1 \rangle$	<
	FACTORY INSTALLED GROUND BUS BAR	INTEGRATED BUS BAR MAIN BOND JUMPER	INTEGRATED BUS BAR CASE BOND JUMPER	CONCRETE ENCASED ELECTRODE (UFER)	GROUNDING ELECTRODE CONDUCTOR TO ROD, PIPE OR PLATE	CU or CU-CLAD STEEL GROUND ROD	COPPER GROUND RING CONDUCTOR	METALLIC PIPING BONDING CONDUCTOR	BUILDING STEEL BONDING CONDUCTOR	BUII COL PC
PEFFERENCE NNRACITY	\$	N.E.C. 250.102	N.E.C. 250.102	N.E.C. 250.50(c) 250.66(b)	N.E.C. 250.52(c) 250.52(d) 250.66(a)	N.E.C. 250.52(c)(2)	N.E.C. 250.50(d) 250.66(c)	N.E.C. 250.50(a) 250.66	N.E.C. 250.50(b) 250.66	N. 25
100 AMP		#4	#4	#4	#6	5/8"x8'	#2	#4	#4	#
225 AMP		#2	#2	#4	#6	5/8"x8'	#2	#2	#2	

F:\23190 - Sandoval County Fire Station 41\23190 CADD\Constructs\Electrical\23190 E4 Power Riser Dlagram and Panel Schedules.dwg, 3/18/2024 4:26:21 PM RYAN