

CITY OF CORCORAN

WATER WELL 5F IMPROVEMENTS

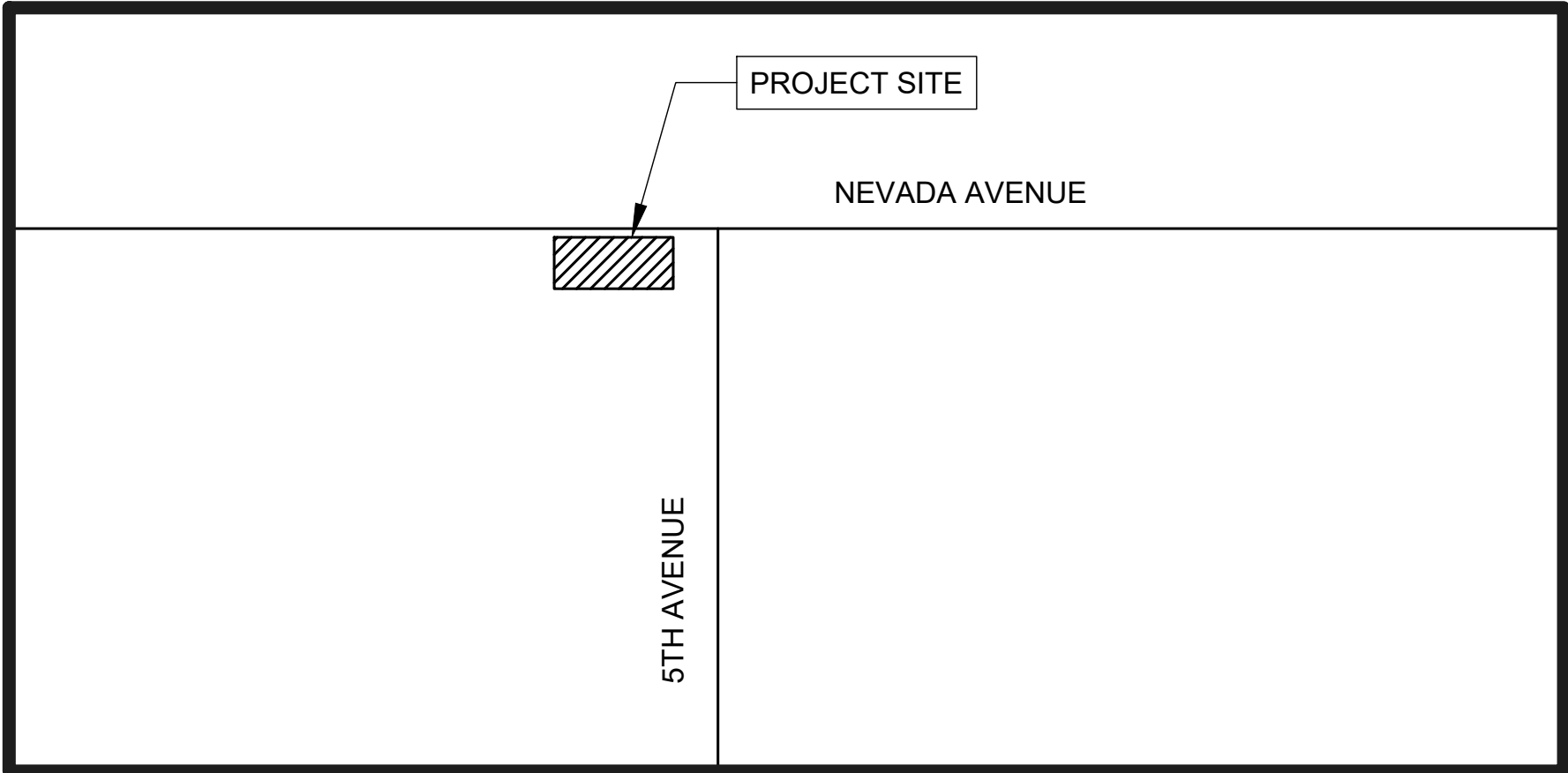
GENERAL CONSTRUCTION NOTES

- EXISTING UTILITIES AND EXISTING IMPROVEMENTS MAY BE SHOWN AT APPROXIMATED LOCATIONS DUE TO THE AVAILABLE RECORD INFORMATION AT THE TIME OF PLAN PREPARATION. OTHER UTILITY LINES MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES BY POT-HOLING OR LOCATING SERVICES "811" IF FOUND NECESSARY.
- THE CONTRACTOR SHALL NOTIFY ALL CORRESPONDING UTILITY COMPANIES AND CALL "811" AT LEAST 48 HOURS BEFORE THE COMMENCEMENT OF ANY WORK WHICH MAY REQUIRE UTILITY VERIFICATION. ADDITIONALLY, THE CONTRACTOR WILL SUPPLY SOUTHERN CALIFORNIA GAS COMPANY WITH A CONSTRUCTION SCHEDULE AND NOTIFY OF ANY PRE-CONSTRUCTION MEETINGS.
- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY OR SUBSTRUCTURE SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. NO CERTIFICATIONS IS MADE AS THE ACCURACY OR THOROUGHNESS OF THESE RECORDS. APPROVAL OF THESE PLANS BY THE CITY OF CORCORAN DOES NOT CONSTITUTE A REPRESENTATION AS THE ACCURACY OR COMPLETENESS OF LOCATION OR THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY OR SUBSTRUCTURE WITHIN THE LIMITS OF THE PROJECT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE FULL SET OF PLANS FOR ANY DISCREPANCIES AND OMISSIONS PRIOR TO THE COMMENCEMENT OF WORK. IF ANY DISCREPANCIES BETWEEN THESE PLANS AND THE FIELD ARE IDENTIFIED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WORK NOT IN CONFORMANCE WITH THE PLANS OR IN CONFLICT WITH ANY CODE.
- AN APPROVED SET OF PLANS MUST BE AVAILABLE ON THE JOB SITE AT ALL TIMES.
- THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."
- ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE PROVISIONS IN THE AWWA A100-20 WATER WELLS STANDARDS DATED 2020, ALONG WITH THE CITY OF CORCORAN STANDARD DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS, FABRICATIONS, EQUIPMENT, APPLIANCES, TRANSPORTATION, SERVICES AND LABOR NECESSARY FOR THE CONSTRUCTION, ERECTION AND INSTALLATION OF ALL WORK INDICATED ON THESE DRAWINGS AND/OR OUTLINED IN EACH SECTION OF THE SPECIFICATIONS.
- FOR THE DURATION OF THE WORK, THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN, AS MAY BE REQUIRED, ALL NECESSARY BARRICADES AND RAILINGS, LIGHTS, WARNING SIGNS AND SIGNALS, AND SHALL TAKE ALL OTHER PRECAUTIONS AS MAY BE REQUIRED TO SAFEGUARD PERSONS, THE JOB SITE AND ADJOINING PROPERTY, AGAINST INJURIES AND DAMAGE OF ANY NATURE.
- THE CONTRACTOR AND EACH SUBCONTRACTOR SHALL GIVE THEIR PERSONAL ATTENTION TO THE WORK; BE RESPONSIBLE FOR THE LAYOUT AND CORRECTNESS OF THEIR WORK AND COOPERATE WITH EACH OF THE VARIOUS TRADES TO OBTAIN A NEAT FINISHED AND WORKMANLIKE JOB.
- THE CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER AND ENGINEER, AND THE OFFICERS, DIRECTORS, MEMBERS, PARTNERS, EMPLOYEES, AGENTS, CONSULTANTS AND SUBCONTRACTORS OF EACH AND ANY OF THEM FROM AND AGAINST ALL CLAIMS, COSTS, LOSSES, AND DAMAGES (INCLUDING BUT NOT LIMITED TO ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS, AND OTHER PROFESSIONALS AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS) ARISING OUT OF OR RELATING TO THE PERFORMANCE OF THE WORK, PROVIDED THAT ANY SUCH CLAIM, COST, LOSS, OR DAMAGE IS ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE, OR DEATH, OR TO INJURY TO OR DESTRUCTION OF TANGIBLE PROPERTY (OTHER THAN THE WORK ITSELF), INCLUDING THE LOSS OF USE RESULTING THEREFROM BUT ONLY TO THE EXTENT CAUSED BY ANY NEGLIGENT ACT OR OMISSION OF CONTRACTOR, ANY SUBCONTRACTOR, ANY SUPPLIER, OR ANY INDIVIDUAL OR ENTITY DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM TO PERFORM ANY OF THE WORK OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE.
- SHOULD A CONSTRUCTION SURVEY OR CONSTRUCTION STAKING BE NECESSARY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THIS SERVICE.
- DO NOT SCALE DRAWINGS. IF UNABLE TO LOCATE DIMENSIONS FOR ANY ITEM OF WORK, CONTACT THE ENGINEER FOR DIRECTION BEFORE PROCEEDING.
- ALL DAMAGE TO AREAS AND/OR PROPERTY NOT SPECIFICALLY PART OF THE PROJECT SITE CAUSED DURING CONSTRUCTION ACTIVITIES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. TO RETURN TO PRE-CONSTRUCTION CONDITIONS.
- CHANGES TO THE APPROVED DRAWINGS SHALL BE MADE BY ADDENDUM OR A CHANGE ORDER SIGNED BY THE ENGINEER AND APPROVED BY THE PUBLIC WORKS/ENGINEERING OFFICIALS.
- DUST AND DEBRIS CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT - DISTRICT REGULATION VIII - FUGITIVE DUST RULES.

CONTRACTOR QUALIFICATION REQUIREMENTS

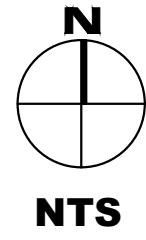
MUNICIPAL WATER WELL EXPERIENCE

- A QUALIFIED CONTRACTOR/SUBCONTRACTOR AND/OR HIS/HER SITE SUPERINTENDENT OR FOREMAN SHALL HAVE A MINIMUM OF 5 YEARS OF EXPERIENCE PERFORMING MUNICIPAL WATER WELL PROJECTS OF SIMILAR TECHNICAL COMPLEXITIES AND WORK SCOPES TO THE CITY OF CORCORAN'S WELL 5F PROJECT.
- CONTRACTOR SHALL PROVIDE THE PROJECT NAME, PROJECT OWNER, PROJECT OWNER'S CONTACT PERSON, PHONE NUMBER, ADDRESS, CONTRACTOR SITE SUPERINTENDENT OR FOREMAN PROJECT COMPLETION DATE, AND PROJECT CONTRACT AMOUNT FOR THESE PROJECTS.
- ALL BIDDERS MUST COMPLETE AND SUBMIT THE "MUNICIPAL WATER WELL EXPERIENCE VERIFICATION" BID FORM, TO THE CITY OF CORCORAN, NO LATER THAN 4:00 P.M. ON THE 5TH BUSINESS DAY AFTER PUBLIC POSTING OF BID RESULTS. FAILURE TO PROVIDE ALL THE REQUIRED INFORMATION MAY CAUSE THE BID TO BE CONSIDERED NON-RESPONSIBLE.
- VERIFICATION
 - THE EXPERIENCE OF THE APPARENT LOW BIDDER WILL BE CHECKED FOR COMPLIANCE WITH THESE REQUIREMENTS. THE CITY WILL NOTIFY THE APPARENT LOW BIDDER OF ANY DEFICIENCIES FOUND AND WILL ALLOW THE BIDDER THE OPPORTUNITY TO RESPOND IN WRITING WITH REASONABLE CLARIFICATIONS. THE DETERMINATION OF SUFFICIENT EXPERIENCE BY THE CITY SHALL BE FINAL AND CONCLUSIVE AS TO THAT BIDDER AND ALL OTHER BIDDERS.
 - IF THE APPARENT LOW BIDDER IS DETERMINED TO BE NON-RESPONSIBLE, THE CITY WILL REVIEW THE NEXT LOW BIDDER'S QUALIFICATIONS FOR COMPLIANCE WITH THE REQUIREMENTS.
- CONTRACTOR
 - THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."



VICINITY MAP

CITY OF CORCORAN



CITY & ENGINEER CONTACTS

PUBLIC WORKS DIRECTOR

JOSEPH FAULKNER
CITY OF CORCORAN
832 WHITLEY AVE
CORCORAN, CA 93212
(559) 992-2151 EXT. 2210

CIVIL ENGINEER

ORFIL MUNIZ, PE, QSD
A&M CONSULTING ENGINEERS
220 N LOCUST STREET
VISALIA, CA 93291
(559) 429-4747

PROJECT UTILITY CONTACTS

PG&E

JEFF HEIDNGER
705 P STREET
FRESNO, CA 93760
(559) 263-7368

CITY OF CORCORAN WATER & WASTEWATER

JOSEPH FAULKNER
832 WHITLEY AVENUE
CORCORAN, CA 93212
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SOUTHERN CALIFORNIA GAS CO

AMY PENA
404 N TIPTON STREET
VISALIA, CA 93292
APENA4@SOCALGAS.COM
(559) 739-2308

FRONTIER COMMUNICATIONS

STEPHEN MCDONALD
1359 G STREET
REEDLEY, CA 93654
MCDONALD.STEPHEN@FTR.COM
(559) 637-0666

NOTIFICATION REQUIREMENTS

- THE CONTRACTOR SHALL BE RESPONSIBLE TO GIVE NOTICE TO THE ENGINEER IN WRITING PRIOR TO PERFORMANCE OF SPECIFIC OPERATIONS AS FOLLOWS:
 - APPROXIMATE 30-DAY NOTICE OF INTENT TO MOBILIZE TO PROVIDE TIME FOR OWNER PRE-CONSTRUCTION CEQA COMPLIANCE SURVEYS.
 - AT LEAST FIVE (5) WORKING DAYS ADVANCE NOTICE OF INTENT TO MOVE OFFSITE.
 - AT LEAST TWO (2) WORKING DAYS NOTICE OF INTENT TO MOVE OFFSITE.
- THE ENGINEER MAY PERFORM FULL TIME CONSTRUCTION OBSERVATION AND INSPECTION. THE CONTRACTOR SHALL TELEPHONE THE ENGINEER DAILY WITH A REPORT ON THE STATUS OF THE WORK AND THE EXPECTED WORK TO BE ACCOMPLISHED IN THE NEXT 24 HOURS.

INDEX OF PLANS

- COVER SHEET
- DEMOLITION PLAN
- WATER WELL 5F SITE PLAN
- GRADING & DRAINAGE PLAN
- PROPOSED WELL 5F PUMP & DISCHARGE PLAN
- CONSTRUCTION DETAILS
- CONSTRUCTION DETAILS

CONTROL POINTS

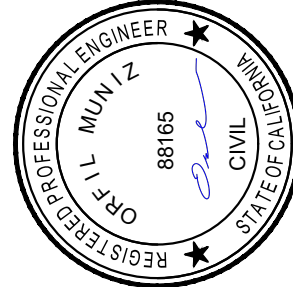
TEMPORARY CONTROL POINT 1: NAIL AND SHINER
DESCRIPTION: LOCATED ON THE SOUTHERN EDGE OF PAVEMENT OF NEVADA AVENUE, APPROXIMATELY 40' NORTH OF THE NORTHEAST CORNER OF THE FENCE LINE AT WELL 8B

TEMPORARY CONTROL POINT 2: NAIL AND SHINER
DESCRIPTION: LOCATED ON THE SOUTHERN EDGE OF PAVEMENT OF NEVADA AVENUE, APPROXIMATELY 40' NORTH OF THE NORTHWEST CORNER OF THE FENCE LINE AT WELL 8B

TEMPORARY CONTROL POINT 3: NAIL HEAD
DESCRIPTION: LOCATED IN THE PAVEMENT AT THE CENTER OF THE INTERSECTION OF NEVADA AVENUE AND 5TH AVENUE

ABBREVIATIONS & LEGEND

APPROX	APPROXIMATE	---	EXISTING RIGHT-OF-WAY
C	CONCRETE	---	DEMOLITION / SAWCUT LIMITS
CITY	CITY OF CORCORAN	---	EXISTING OVERHEAD COMM.
CL	CENTERLINE	---	EXISTING OVERHEAD ELECTRICITY UTILITY
COMM	COMMUNICATION	---	EXISTING FENCE
CR	CROWN	---	PROPOSED FENCE
DIA	DIAMETER	---	PROPOSED CONTOUR BREAKLINE
DIP	DUCTILE IRON PIPE	---	INSTALL 6" THICK LAYER OF 3/4" DIAMETER CRUSHED ROI
DWG	DRAWING	---	EXISTING ROADWAY
EP	EDGE OF PAVEMENT	---	
EXIST	EXISTING	---	
(E)	EXISTING	---	
FEN	FENCE	---	
FG	FINISHED GRADE	---	
GA	GAGE, GAUGE	---	
GPH	GALLONS PER HOUR	---	
GUY	GUY WIRE	---	
HORZ	HORIZONTAL	---	
INV	INVERT	---	
IRR	IRRIGATION	---	
LIP	GUTTER LIP	---	
LP	LIGHT POLE	---	
MAX	MAXIMUM	---	
MH	MANHOLE	---	
MIN	MINIMUM	---	
MON	MONUMENT	---	
N	NEW	---	
NO	NUMBER	---	
NTS	NOT TO SCALE	---	
N.T.S.	NOT TO SCALE	---	
OC	ON CENTER	---	
OG	ORIGINAL GROUND	---	
PL	PROPERTY LINE	---	
PP	POWER POLE	---	
PSI	POUNDS PER SQUARE INCH	---	
PT	POINT	---	
PVC	POLYVINYL CHLORIDE	---	
REBAR	REINFORCING BAR	---	
ROW	RIGHT-OF-WAY	---	
RW	RIGHT-OF-WAY	---	
RT	RIGHT	---	
SCH	SCHEDULE	---	
SD	STORM DRAIN	---	
SDMH	STORM DRAIN MANHOLE	---	
SQ	SQUARE	---	
SS	SANITARY SEWER	---	
ST	STREET	---	
STA	STATION	---	
STD	STANDARD	---	
TC	TOP OF CURB	---	
TYP	TYPICAL	---	
VERT	VERTICAL	---	
W	WATER	---	
W/	WITH	---	
WELL	WATER WELL	---	
WV	WATER VALVE	---	
@	AT	---	
Ø	DIAMETER	---	
(XXX XX)	EXISTING ELEVATION	---	
S=0.XXXX	PROPOSED SLOPE IN DECIMAL	---	



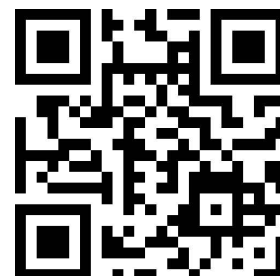
ENGINEERING PLANS FOR:
WATER WELL 5F IMPROVEMENTS

SHEET TITLE:
COVER SHEET

REVISIONS

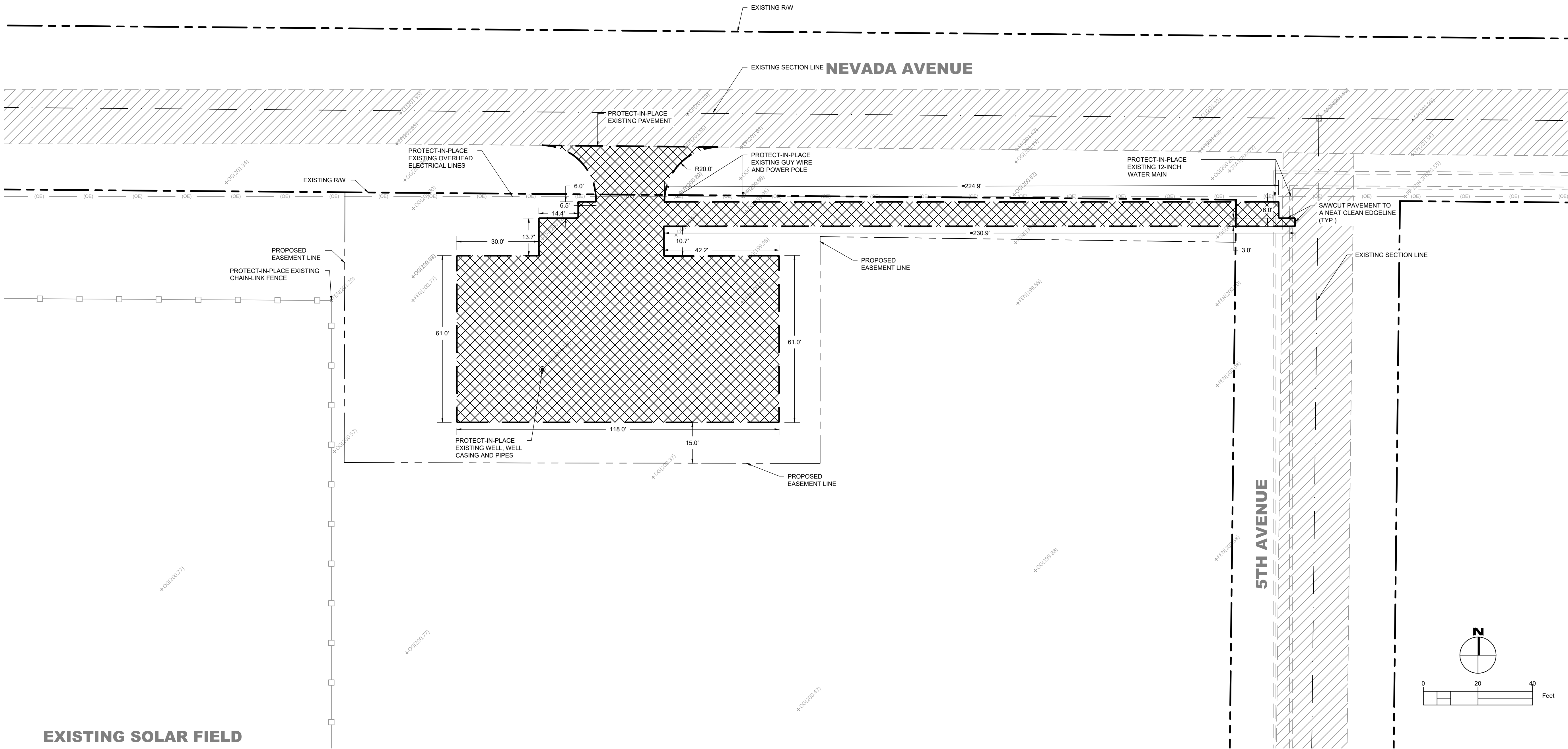
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DATE: 2/27/2023




SHEET NO.

1

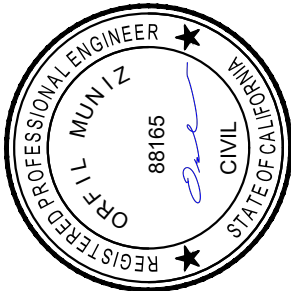


LEGEND

 DEMOLITION AREA - REMOVE AND DISPOSE OF EXISTING SURFACES, CONCRETE, ROCKS, SOLID WASTE, AND VEGETATION AS SHOWN ON PLAN

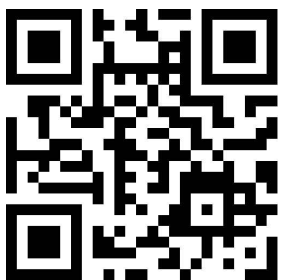
GENERAL DEMOLITION NOTES

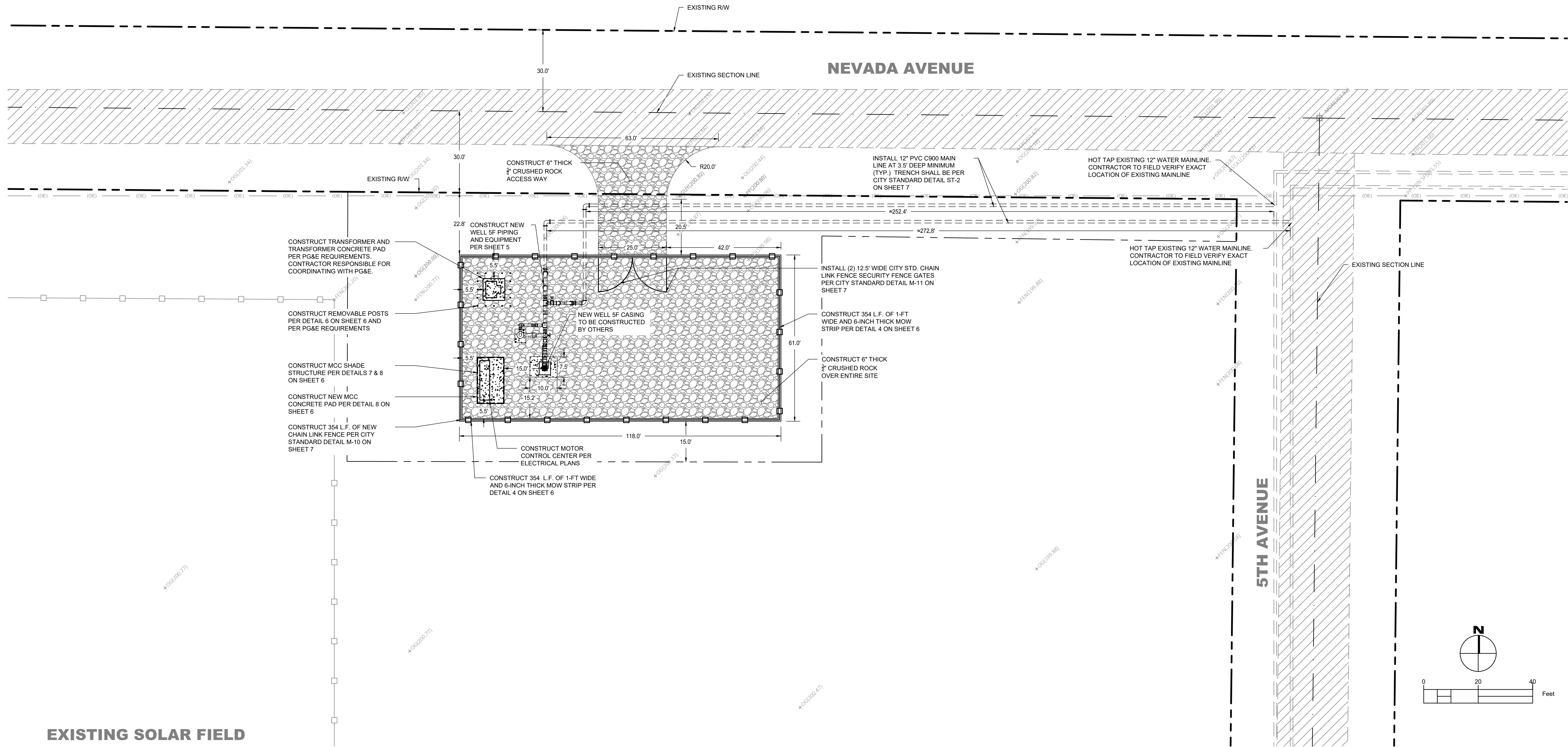
1. VERIFY FIELD CONDITIONS PRIOR TO START OF DEMOLITION AND NOTIFY THE CITY OF CORCORAN OF ANY DISCREPANCIES.
2. BEFORE COMMENCING ANY WORK, CONTRACTOR SHALL VERIFY THAT ALL UTILITY CONNECTIONS HAVE BEEN PROPERLY DISCONNECTED OR REMOVED.
3. THE CITY OF CORCORAN HAS SALVAGE RIGHT ON ALL ITEMS REMOVED.
4. KEEP CLEAN ALL EXISTING SPACES AND PROPERTIES ADJACENT TO DEMOLITION AREAS. REMOVE FROM THE SITE OR MINIMIZE ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS DAILY.
5. CONTRACTOR SHALL APPLY WATER OR OTHER SUITABLE METHODS REQUIRED BY THE ENGINEER, NECESSARY TO CONTROL DUST CAUSED BY DEMOLITION WORK.
6. ANY CAVITIES LEFT BY THE REMOVAL OF ANY ITEM SHALL BE BACKFILLED AND COMPACTED TO 90% RELATIVE COMPACTION UNLESS OTHERWISE NOTED
7. ITEMS REMOVED AS INDICATED ON THE DRAWINGS SHALL BE DISPOSED OF PROPERLY.
8. CONTRACTOR TO BE RESPONSIBLE FOR SITE SECURITY DURING WORK.
9. CONTRACTOR SHALL PROTECT-IN-PLACE EXISTING WELL CASINGS, STEEL PLATE COVER, SOUNDING PIPE AND GRAVEL PIPE.
10. LOCATION OF EXISTING WATER MAINS IS APPROXIMATE, CONTRACTOR SHALL FIELD-VERIFY ACTUAL LOCATION OF WATER MAINS



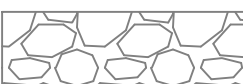
ENGINEERING PLANS FOR:
WATER WELL 5F IMPROVEMENTS
SHEET TITLE:
DEMOLITION PLAN

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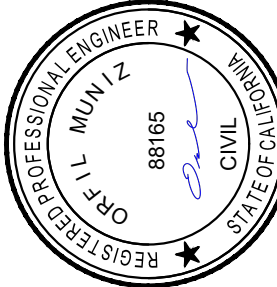
LEGEND



INSTALL 6" THICK LAYER OF 3/4" DIAMETER CRUSHED ROCK



EXISTING ROADWAY



ENGINEERING PLANS FOR:
WATER WELL 5F IMPROVEMENTS

SHEET TITLE:
WATER WELL 5F SITE PLAN

REVISIONS

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SCALE: 1" = 20'
JOB NO: 221_051
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FILE: 221_051_SITE PLANDWG
DATE: 2/27/2023

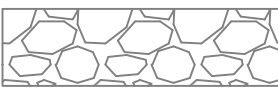



SHEET NO.

3

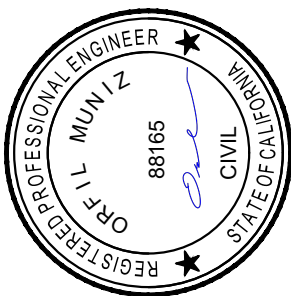
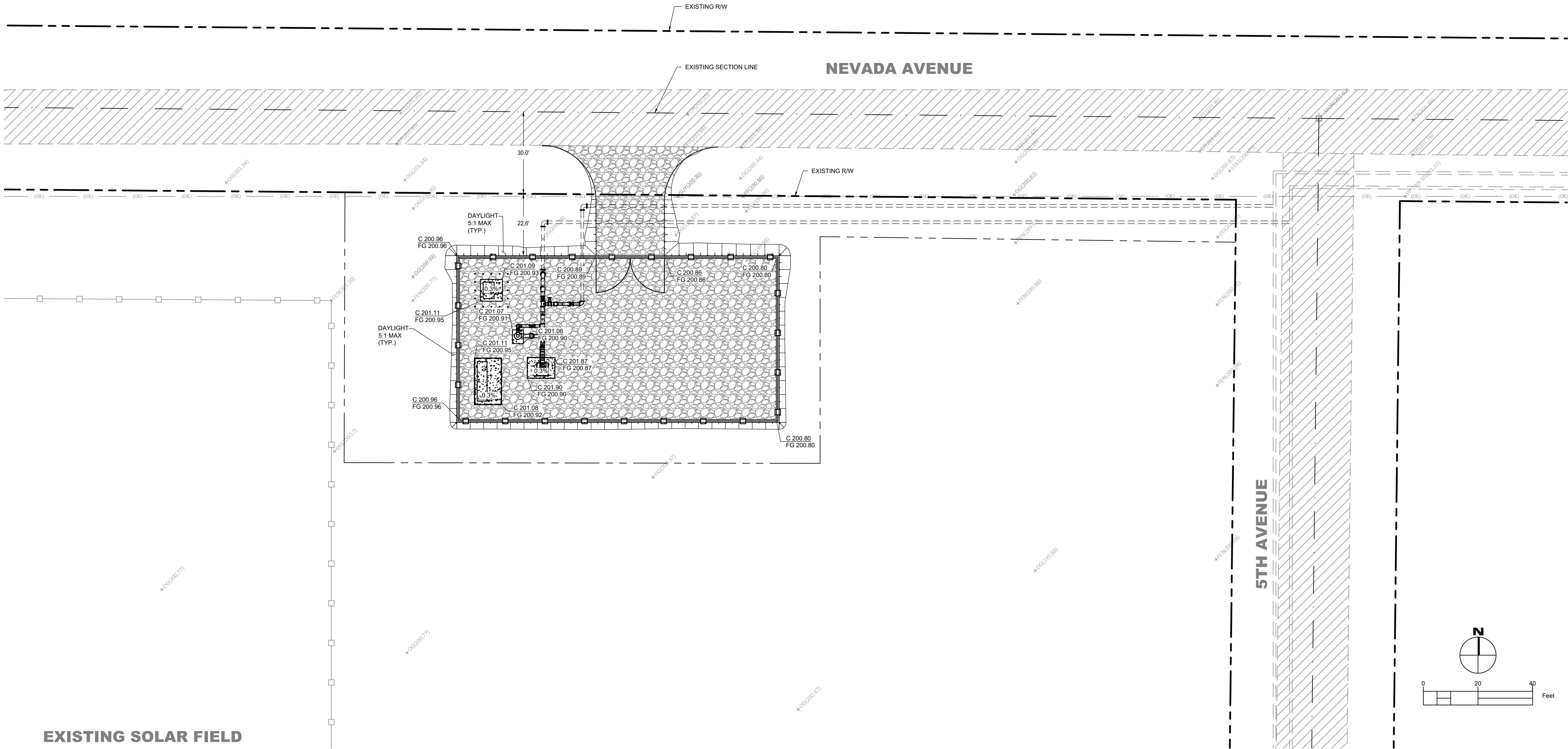
OF 7

LEGEND

- INSTALL 6" THICK LAYER OF 3" DIAMETER CRUSHED ROCK
- EXISTING ROADWAY

GRADING NOTES

1. THIS GRADING PLAN IS FOR APPROVAL OF ON-SITE ELEVATION ONLY. THE ELEVATIONS SHOWN WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRE SEPARATE PUBLIC WORKS DEPARTMENT APPROVAL & PERMIT. ANY NOTES THAT APPLY TO THE PUBLIC RIGHT-OF-WAY ARE FOR REFERENCE ONLY. IF ONSITE ELEVATIONS SHOWN DO NOT COINCIDE WITH APPROVED PLANS, AN APPROVED AMENDMENT IS REQUIRED.
2. ALL GRADING SHALL COMPLY WITH THE 2019 CBC, CALIFORNIA BUILDING CODE.
3. OVER-EXCAVATE AND REMOVE ALL LOOSE FILLS, DEBRIS, AND ORGANIC MATTER TO ALLOW PROPER PREPARATION OF THE NATIVE GRADE BEFORE PLACEMENT OF ENGINEERED/COMPACT FILL.
4. FINISH DIRT ELEVATIONS SHALL BE VERIFIED PRIOR TO PLACEMENT OF GRAVEL.
5. CONCRETE PUMP PEDESTAL SHALL BE MIN. 18" ABOVE DIRT.

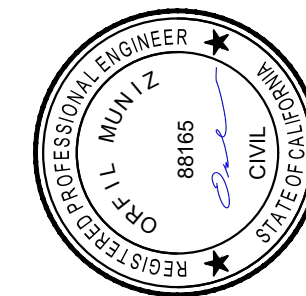


ENGINEERING PLANS FOR:
WATER WELL 5F IMPROVEMENTS

SHEET TITLE:
GRADING & DRAINAGE PLAN

REVISIONS		NO.
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QA/QC: JA	DATE: 2/27/2023	





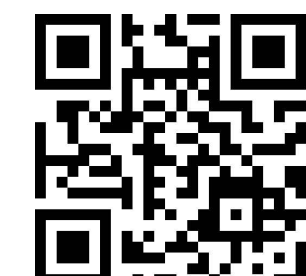
ENGINEERING PLANS FOR:
WATER WELL 5F IMPROVEMENTS

SHEET TITLE:
PROPOSED WELL 5F PUMP & DISCHARGE PLAN

REVISIONS

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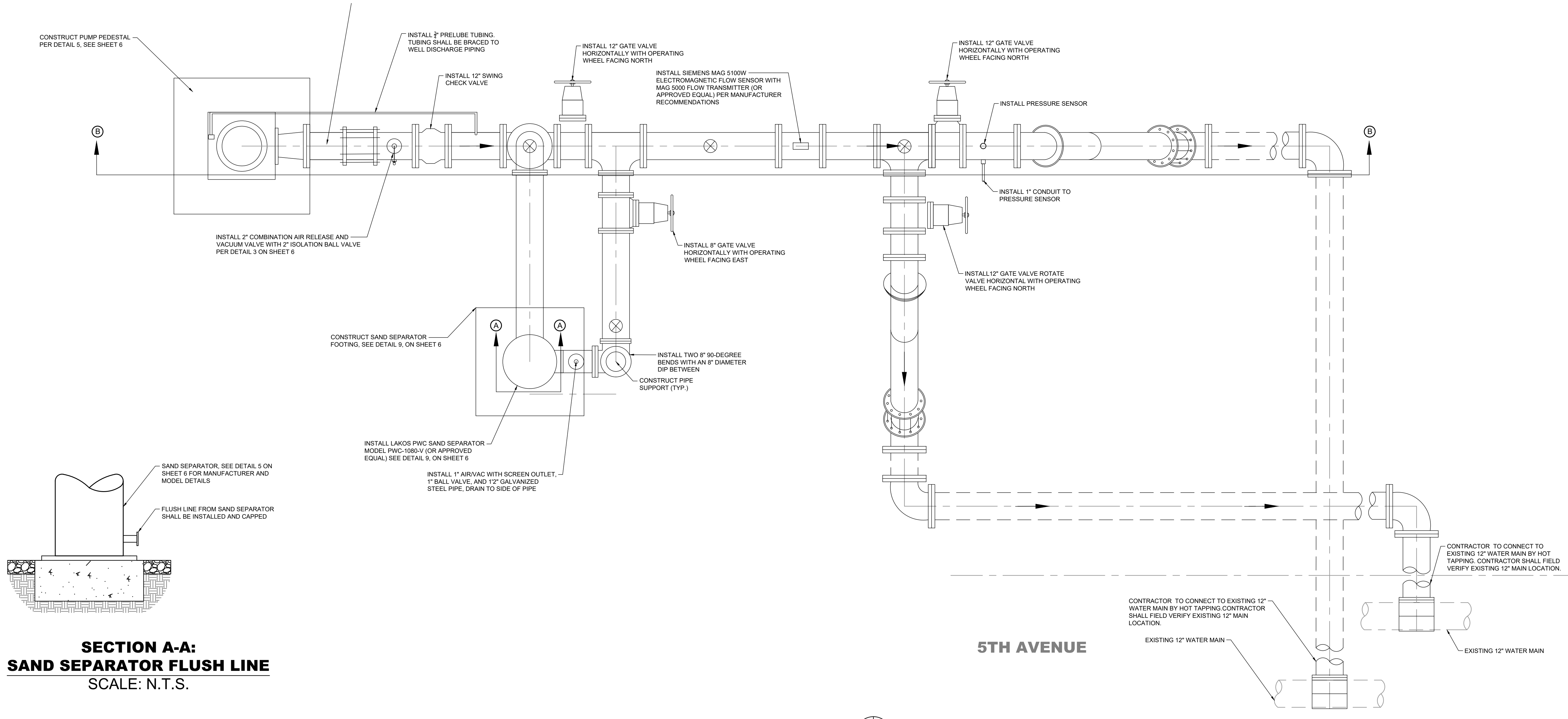
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DATE: 2/27/2023



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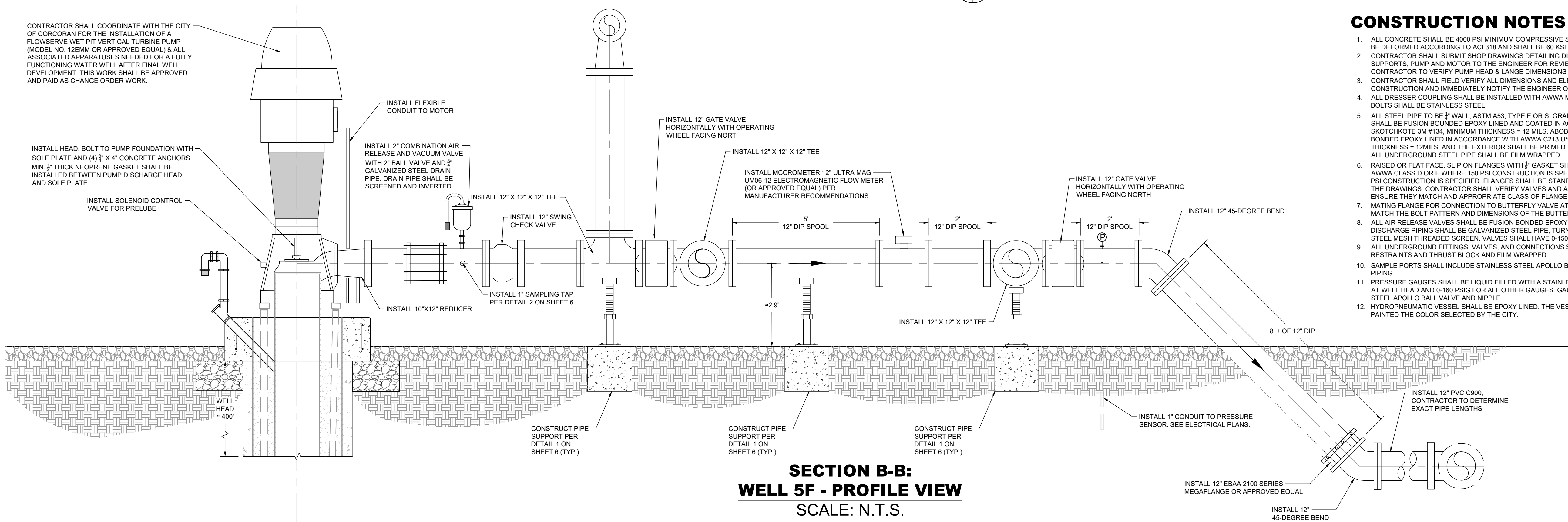
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OF 7



**SECTION A-A:
SAND SEPARATOR FLUSH LINE**
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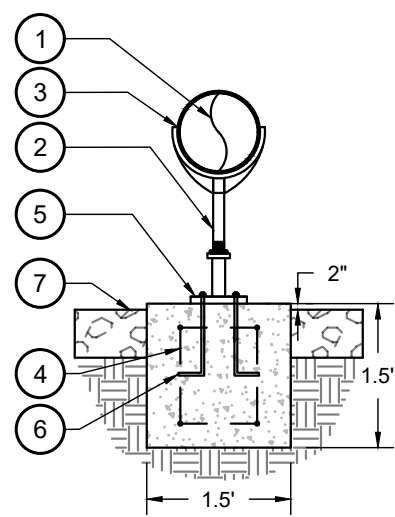
WELL 5F - PLAN VIEW
SCALE: N.T.S.



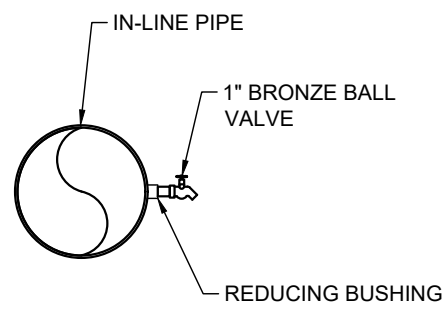
**SECTION B-B:
WELL 5F - PROFILE VIEW**
SCALE: N.T.S.

CONSTRUCTION NOTES

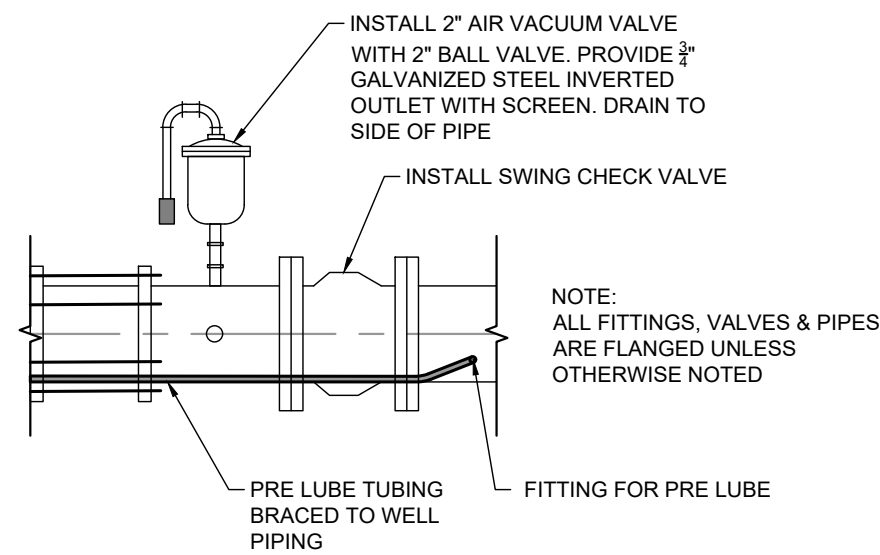
- ALL CONCRETE SHALL BE 4000 PSI MINIMUM COMPRESSIVE STRENGTH. ALL STEEL REINFORCEMENT SHALL BE DEFORMED ACCORDING TO ACI 318 AND SHALL BE 60 KSI MINIMUM YIELD STRENGTH.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DETAILING DIMENSIONS OF PIPES, VALVES, FITTINGS, SUPPORTS, PUMP AND MOTOR TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. CONTRACTOR TO VERIFY PUMP HEAD & LARGE DIMENSIONS PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS.
- ALL DRESSER COUPLING SHALL BE INSTALLED WITH AWWA M-11 JOINT HARNESSSES. DRESSER COUPLING BOLTS SHALL BE STAINLESS STEEL.
- ALL STEEL PIPE TO BE 3" WALL, ASTM A53, TYPE E OR S, GRADE B STEEL, ERW. UNDERGROUND STEEL PIPE SHALL BE FUSION BONDED EPOXY LINED AND COATED IN ACCORDANCE WITH AWWA C213 USING SKOTCHKOTE 3M #134. MINIMUM THICKNESS = 12 MILS. ABOVE GROUND STEEL PIPE SHALL BE FUSION BONDED EPOXY LINED IN ACCORDANCE WITH AWWA C213 USING SKOTCHKOTE 3M #134. MINIMUM THICKNESS = 12 MILS. AND THE EXTERIOR SHALL BE PRIMED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL UNDERGROUND STEEL PIPE SHALL BE FILM WRAPPED.
- RAISED OR FLAT FACE, SLIP ON FLANGES WITH 1" GASKET SHALL BE INSTALLED. ALL FLANGES SHALL BE AWWA CLASS D OR E WHERE 150 PSI CONSTRUCTION IS SPECIFIED AND AWWA CLASS E OR F WHERE 250 PSI CONSTRUCTION IS SPECIFIED. FLANGES SHALL BE STANDARD STEEL RING FLANGES AS INDICATED ON THE DRAWINGS. CONTRACTOR SHALL VERIFY VALVES AND APPURTENANCES FOR BOLT PATTERN TO ENSURE THEY MATCH AND APPROPRIATE CLASS OF FLANGE.
- MATING FLANGE FOR CONNECTION TO BUTTERFLY VALVE AT THE 250 PSI/150 PSI BREAK POINT SHALL MATCH THE BOLT PATTERN AND DIMENSIONS OF THE BUTTERFLY VALVE FLANGE.
- ALL AIR RELEASE VALVES SHALL BE FUSION BONDED EPOXY LINED (INTERIOR) W/ SKOTCHKOTE 134. THE DISCHARGE PIPING SHALL BE GALVANIZED STEEL PIPE, TURNED DOWN TO THE GROUND, WITH STAINLESS STEEL MESH THREADED SCREEN. VALVES SHALL HAVE 0-150 PSIG SEATING PRESSURE.
- ALL UNDERGROUND FITTINGS, VALVES, AND CONNECTIONS SHALL BE DUCTILE IRON INSTALLED WITH JOINT RESTRAINTS AND THRUST BLOCK AND FILM WRAPPED.
- SAMPLE PORTS SHALL INCLUDE STAINLESS STEEL APOLLO BALL VALVE AND 3/4" STAINLESS STEEL THREADED PIPING.
- PRESSURE GAUGES SHALL BE LIQUID FILLED WITH A STAINLESS STEEL CASE. RANGE SHALL BE 0-300 PSIG AT WELL HEAD AND 0-160 PSIG FOR ALL OTHER GAUGES. GAUGE SHALL BE PROVIDED WITH A STAINLESS STEEL APOLLO BALL VALVE AND NIPPLE.
- HYDRO-PNEUMATIC VESSEL SHALL BE EPOXY LINED. THE VESSEL EXTERIOR SHALL BE SHOP PRIMED AND PAINTED THE COLOR SELECTED BY THE CITY.



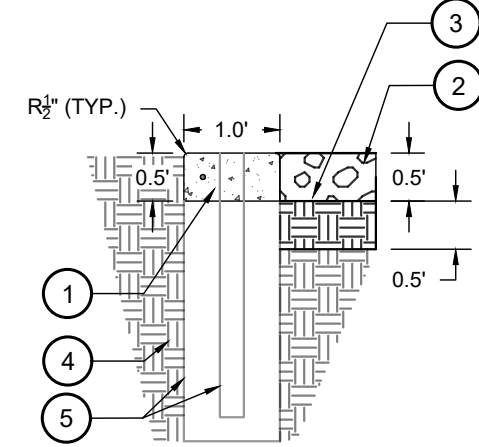
- KEYNOTE LEGEND:**
- 1 PIPE SIZE VARIES, SEE PLANS
 - 2 INSTALL ANVIL ADJUSTABLE PIPE SADDLE SUPPORT FIG 265 WITH FLANGE STAND (OR APPROVED EQUAL)
 - 3 INSTALL 1/2" THICK NEOPRENE GASKET BETWEEN PIPE SADDLE AND PIPE
 - 4 CONSTRUCT CONCRETE FOOTING FOR PIPE SUPPORT WITH #4 REBAR EACH WAY
 - 5 INSTALL 9" DIAMETER 150 LB THREAD REDUCING FLANGE
 - 6 FLANGE STAND SHALL BE BOLTED TO BASED WITH J-HOOK CAST IN PLACE BOLTS OR POWER DRIVEN ANCHORS (TYP. OF 4)
 - 7 FINISHED GRADE OF ADJACENT CRUSHED ROCK SURFACING



DETAIL 2 - SAMPLING TAP
SCALE: N.T.S.

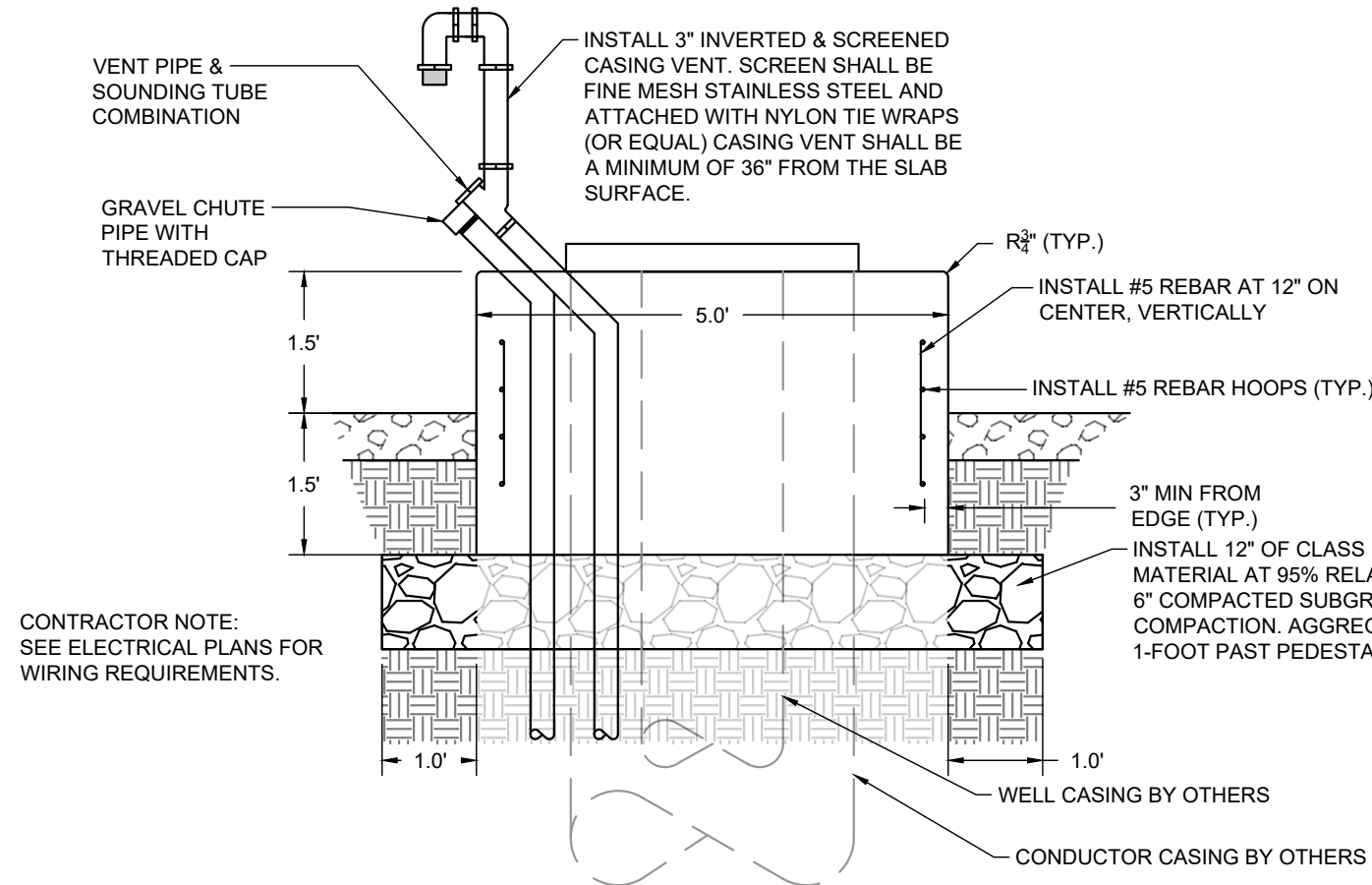


DETAIL 3 - CONTROL VALVE
SCALE: N.T.S.

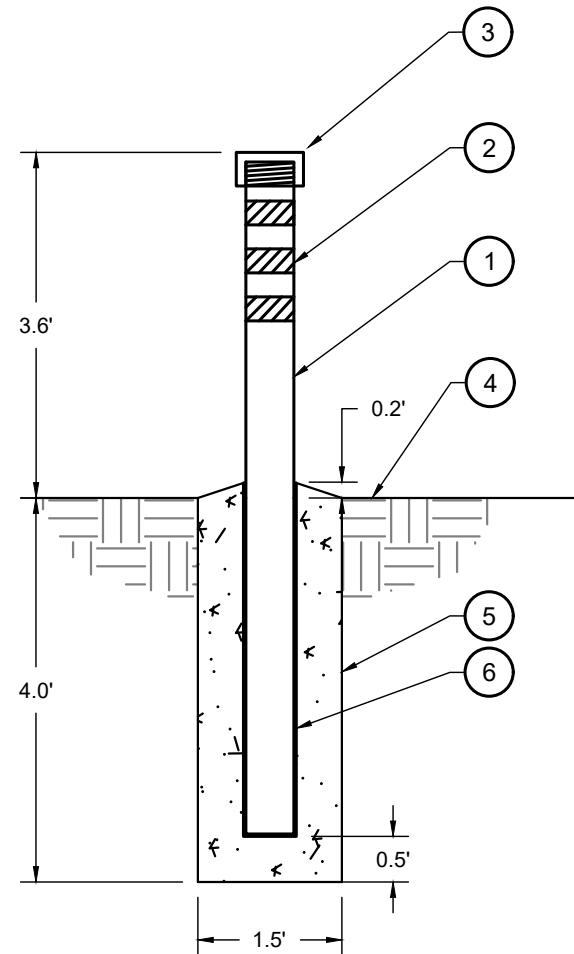


- KEYNOTE LEGEND:**
- 1 CONSTRUCT 12" X 6" CONCRETE MOW STRIP WITH CONTINUOUS #4 REBAR, CENTERED VERTICALLY IN MOW STRIP
 - 2 ADJACENT CRUSHED ROCK SURFACING
 - 3 COMPACT 6" OF NATIVE SOIL AT 90% RELATIVE COMPACTION
 - 4 NATIVE SOIL
 - 5 CHAIN-LINK FENCE POST AND FOOTING PER CITY STANDARD DETAILS M-10 AND M-11 ON SHEET 7
- CONTRACTOR NOTE:**
- 1. CONTROL JOINTS SHALL BE INSTALLED EVERY 10' ON CENTER
 - 2. EXPANSION JOINTS SHALL BE INSTALLED EVERY 30' ON CENTER

DETAIL 4 - CONCRETE MOW STRIP
SCALE: N.T.S.

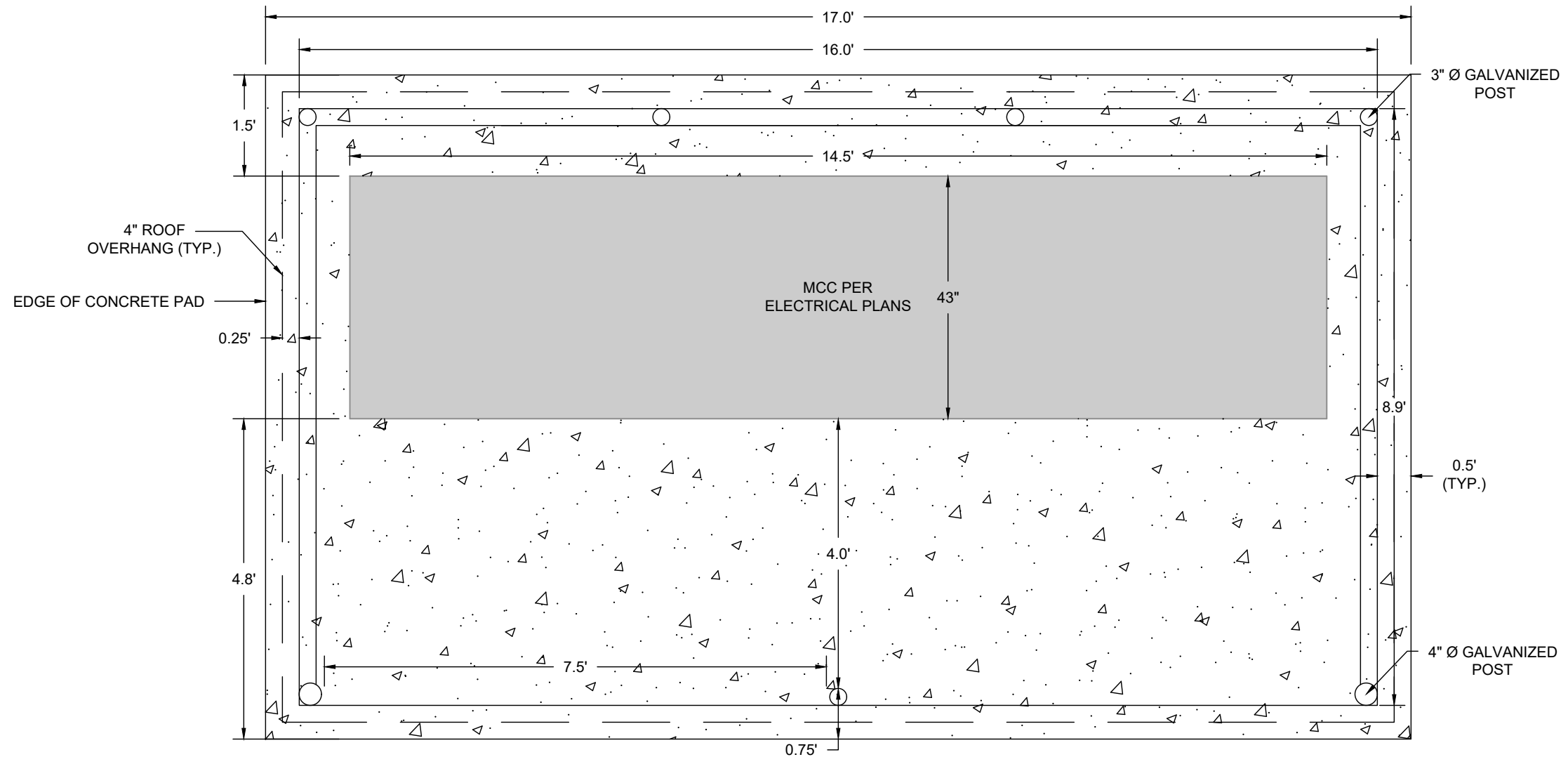


DETAIL 5 - PUMP PEDESTAL
SCALE: N.T.S.

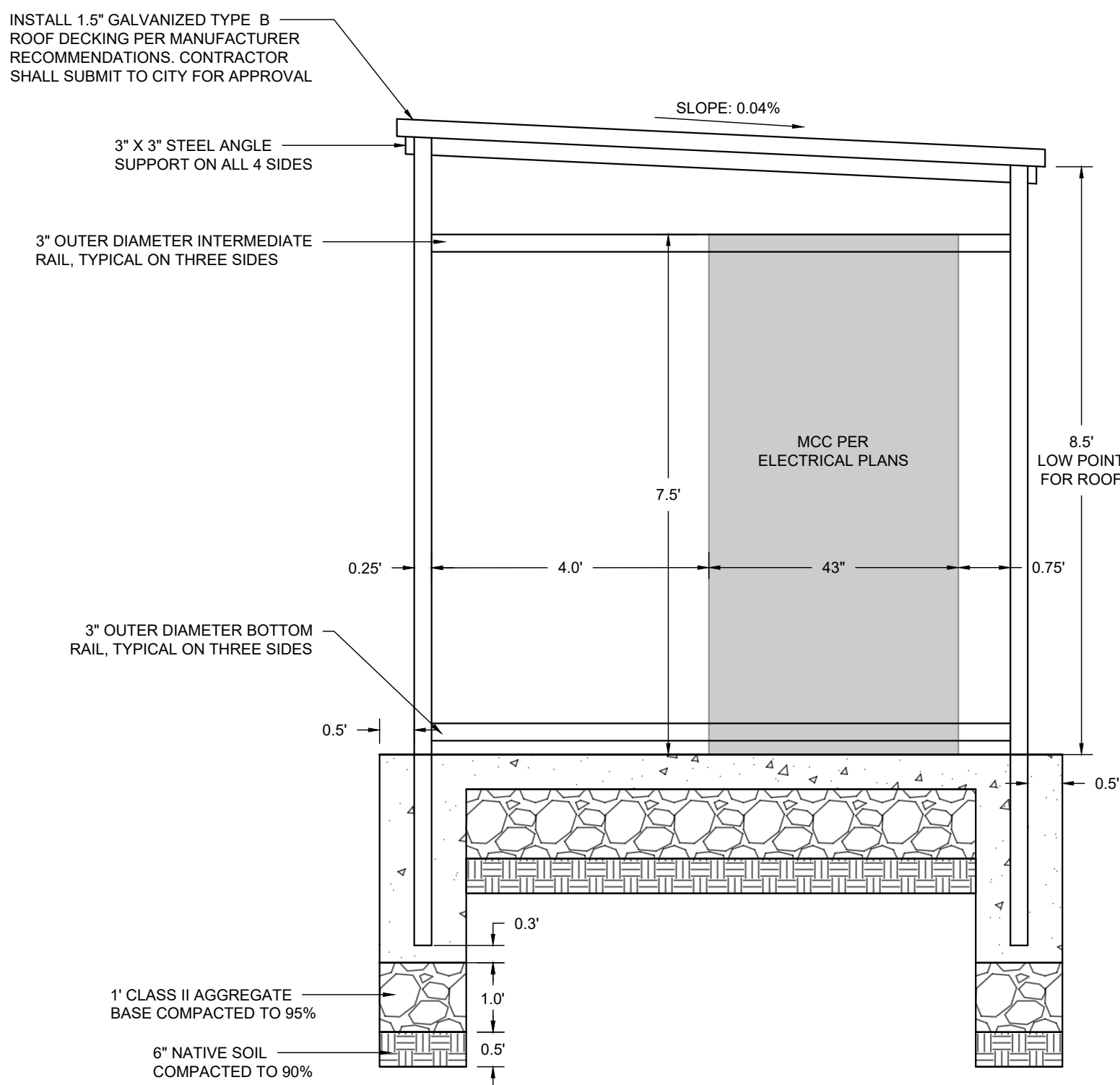


- KEYNOTE LEGEND:**
- 1 INSTALL 6" DIAMETER STANDARD GALVANIZED PIPE
 - 2 INSTALL 3" WIDE RED AND SILVER REFLECTIVE TAPE (TYP.)
 - 3 INSTALL THREADED CAP
 - 4 FINISHED ADJACENT GRADE
 - 5 CONSTRUCT 1.5' DIAMETER CONCRETE FOOTING. CONCRETE SHALL BE 3000 PSI
 - 6 INSTALL 8" DIAMETER PIPE SLEEVE

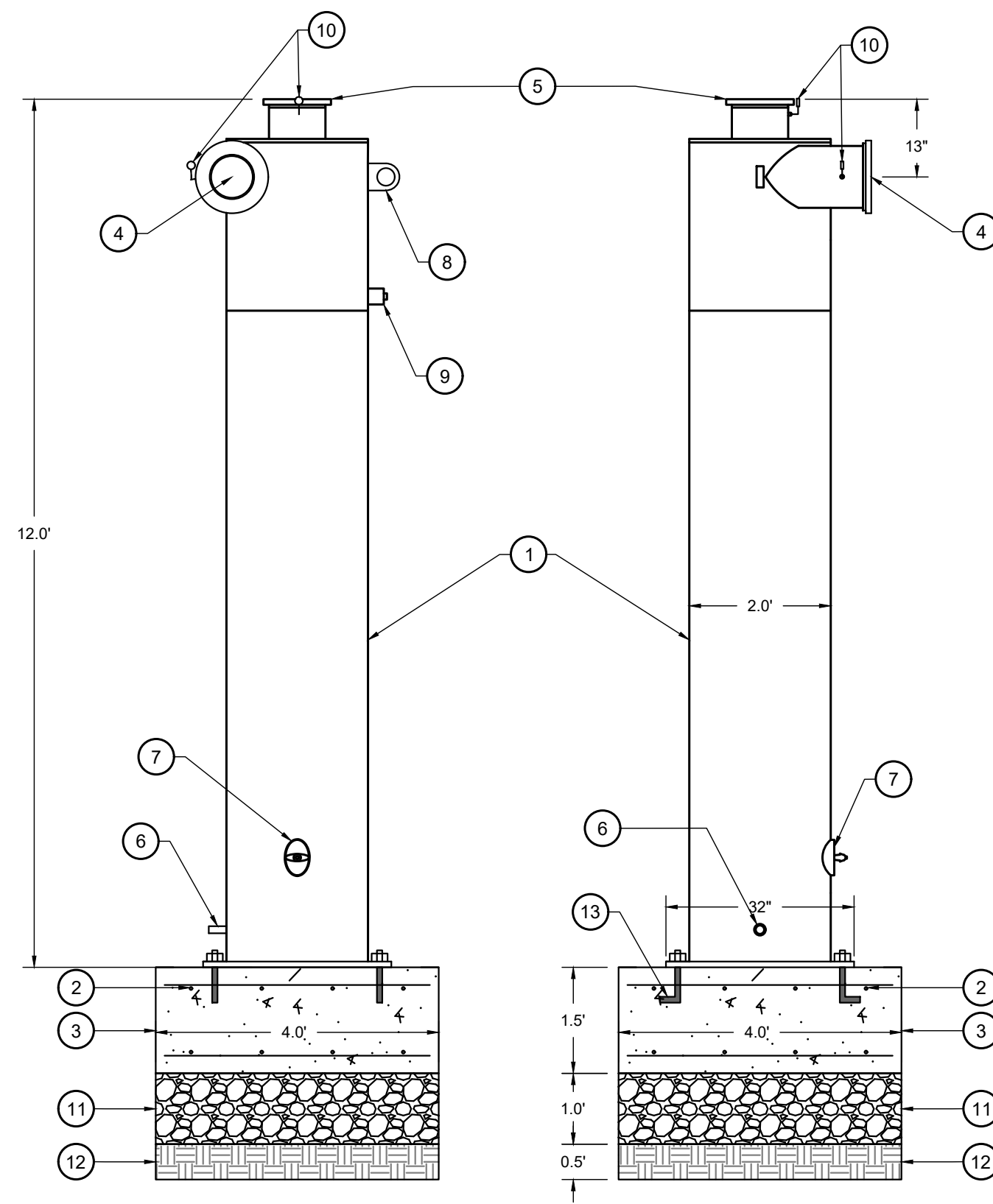
DETAIL 6 - REMOVABLE POSTS
SCALE: N.T.S.



DETAIL 7 - MCC (PLAN VIEW)
SCALE: N.T.S.

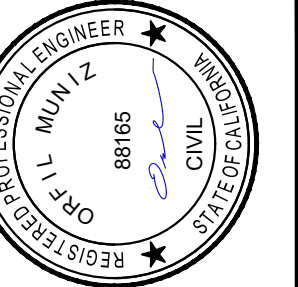


DETAIL 8 - MCC (ELEVATION VIEW)
SCALE: N.T.S.



- KEYNOTE LEGEND:**
- 1 INSTALL LAKOS PWC SAND SEPARATOR MODEL PWC-1080-V (OR APPROVED EQUAL) PER MANUFACTURER RECOMMENDATIONS
 - 2 INSTALL #4 REBAR 12" ON CENTER EACH WAY (TYP.)
 - 3 CONSTRUCT SAND SEPARATOR FOOTING. DESIGN SHOWN IS FOR MINIMUM FOOTING REQUIREMENTS. CONTRACTOR SHALL OBTAIN STAMPED AND SIGNED FOOTING DESIGN FROM SAND SEPARATOR MANUFACTURER.
 - 4 SAND SEPARATOR INLET
 - 5 SAND SEPARATOR OUTLET
 - 6 SOLIDS PURGE
 - 7 HAND-HOLE INSPECTION PORT
 - 8 LIFTING RINGS
 - 9 1" NPT FEMALE INSPECTION/DRAIN PLUG
 - 10 PRESSURE GAUGE
 - 11 INSTALL 12" CLASS II AGGREGATE BASE AT 95% RELATIVE COMPACTION
 - 12 6" NATIVE SOIL, COMPACTED TO 90% RELATIVE COMPACTION
 - 13 ANCHORS PER MANUFACTURER'S RECOMMENDATIONS

DETAIL 9 - SAND SEPARATOR
SCALE: N.T.S.



ENGINEERING PLANS FOR:
WATER WELL 5F IMPROVEMENTS

SHEET TITLE:
CONSTRUCTION DETAILS

REVISIONS

NO.

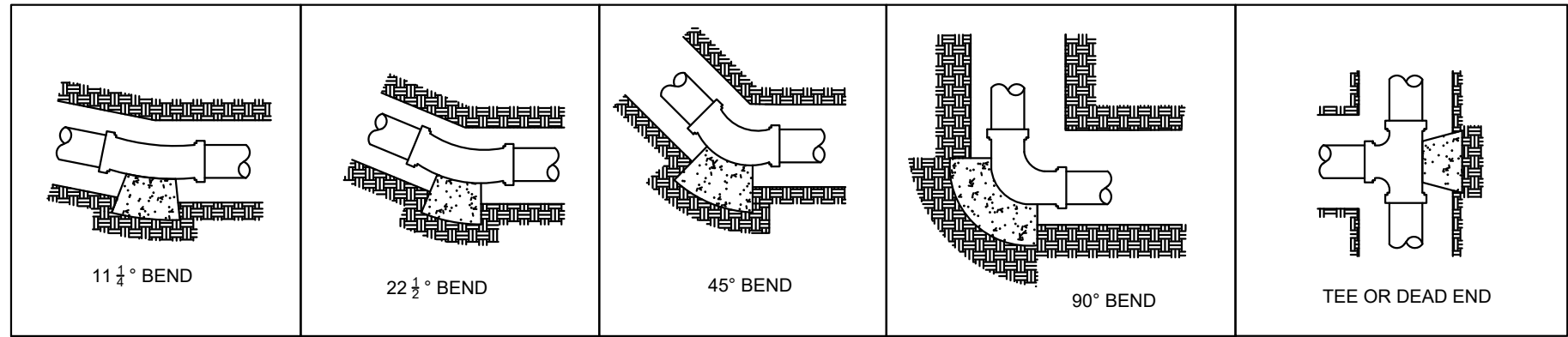
AS SHOWN
JOB NO: 221_051
QA/QC: JA
FILE: 221_051 CONSTRUCTION DETAILS.DWG
DATE: 2/27/2023



SHEET NO.

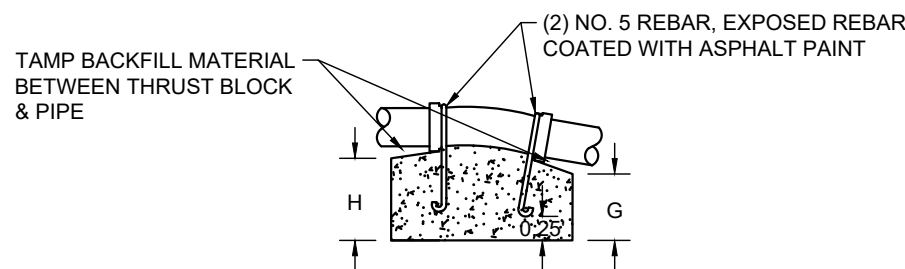
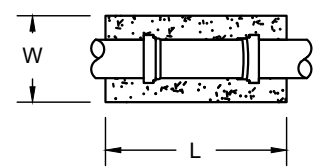
6

OF 7



DIAMETER OF PIPE, INCHES	REQUIRED BEARING AREA, TOTAL SQUARE FEET				
	11 1/2"	22 1/2"	45"	90"	TEES & DEAD ENDS
4	1	2	3	3	2.5
6	1	2.0	3.5	6.5	5
8	2	3.5	6.5	12	8.5
10	3	5	10	18.5	13
12	4	7.5	14	26	18.5
14	5	9.5	19	35	25
16	6.5	12.5	25	45.5	32

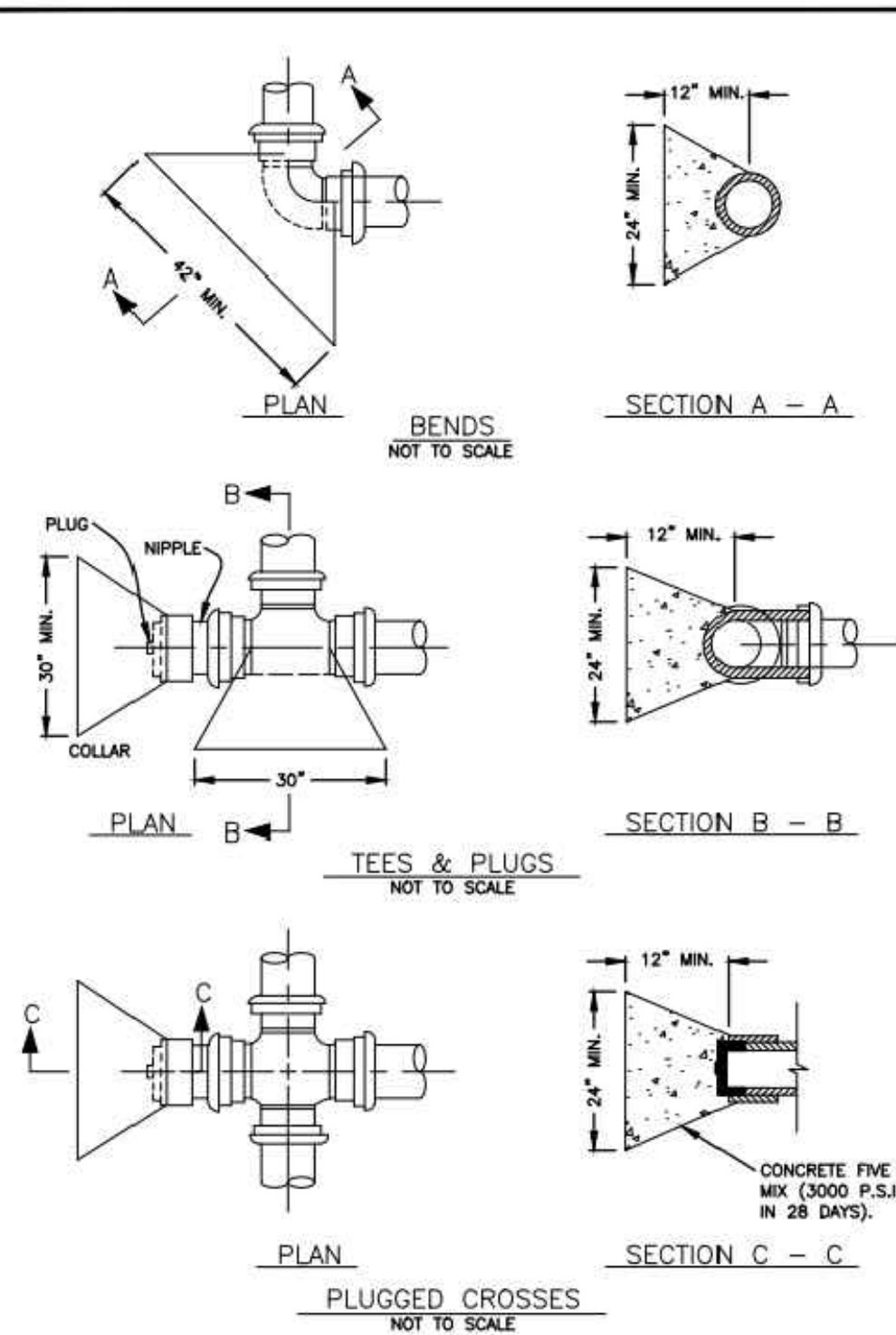
UPWARD THRUST BLOCK DIMENSIONS			
PIPE SIZE, INCHES	11 1/2" BEND	22 1/2" BEND	45" BEND
6	0.35 CY	0.70 CY	1.35 CY
8	0.65 CY	1.25 CY	2.45 CY
12	1.40 CY	2.75 CY	5.40 CY



- NOTES:
- ALL CONCRETE MUST BE CALTRANS CLASS 2, WITH GRADE 60 REINFORCEMENT
 - BLOCKS MUST BE POURED AGAINST UNDISTURBED SOIL
 - JOINTS & FACE OF PLUG TO BE KEPT CLEAR OF CONCRETE
 - MINIMUM THICKNESS OF THRUST BLOCKS TO BE FIVE (5) INCHES
 - AREAS GIVEN ARE FOR CLASS 150 PIPE AT A PRESSURE OF 150 PSI IN SOIL WITH 1,500 PSF BEARING CAPACITY. INSTALLATION USING DIFFERENT PIPE, TEST PRESSURES AND/OR SOIL TYPES SHOULD ADJUST AREAS ACCORDINGLY, SUBJECT TO APPROVAL OF ENGINEER.
 - RESTRAINED FITTINGS MAY BE USED IN PLACE OF THRUST BLOCKS.

CONCRETE THRUST BLOCKS

SCALE: NTS



NOTE:
THRUST BLOCKS ACCORDING TO PIPE MANUFACTURER
INSTALLATION GUIDE AND APPROVAL OF CITY ENGINEER.

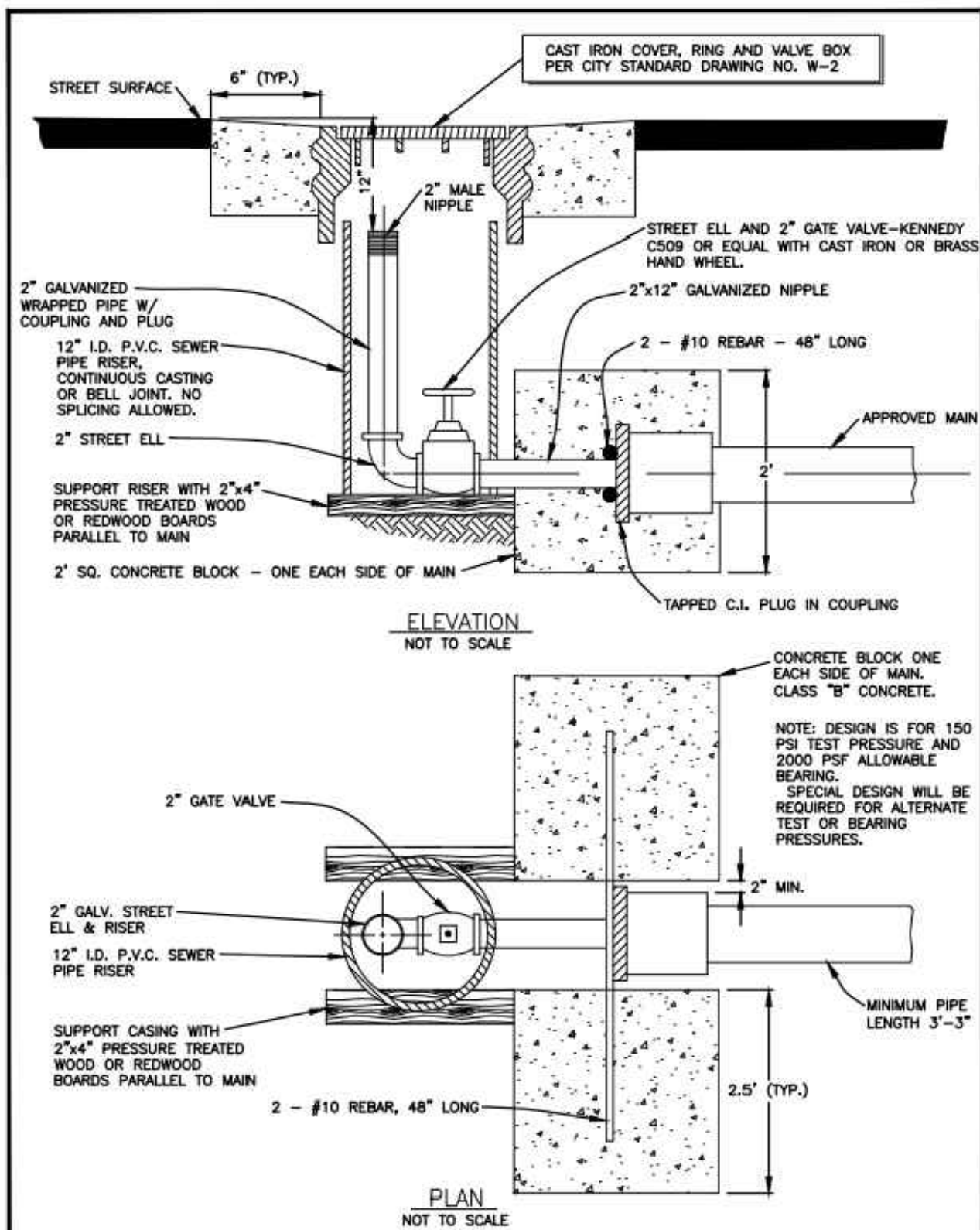
CITY of CORCORAN • Department of Public Works

Standard Drawing for:

CONCRETE THRUST
BLOCKS

APPROVED BY: *[Signature]* R.C.E. 53350 03/01/17
Date
Revised: *[Signature]* W-4

SCALE: NTS



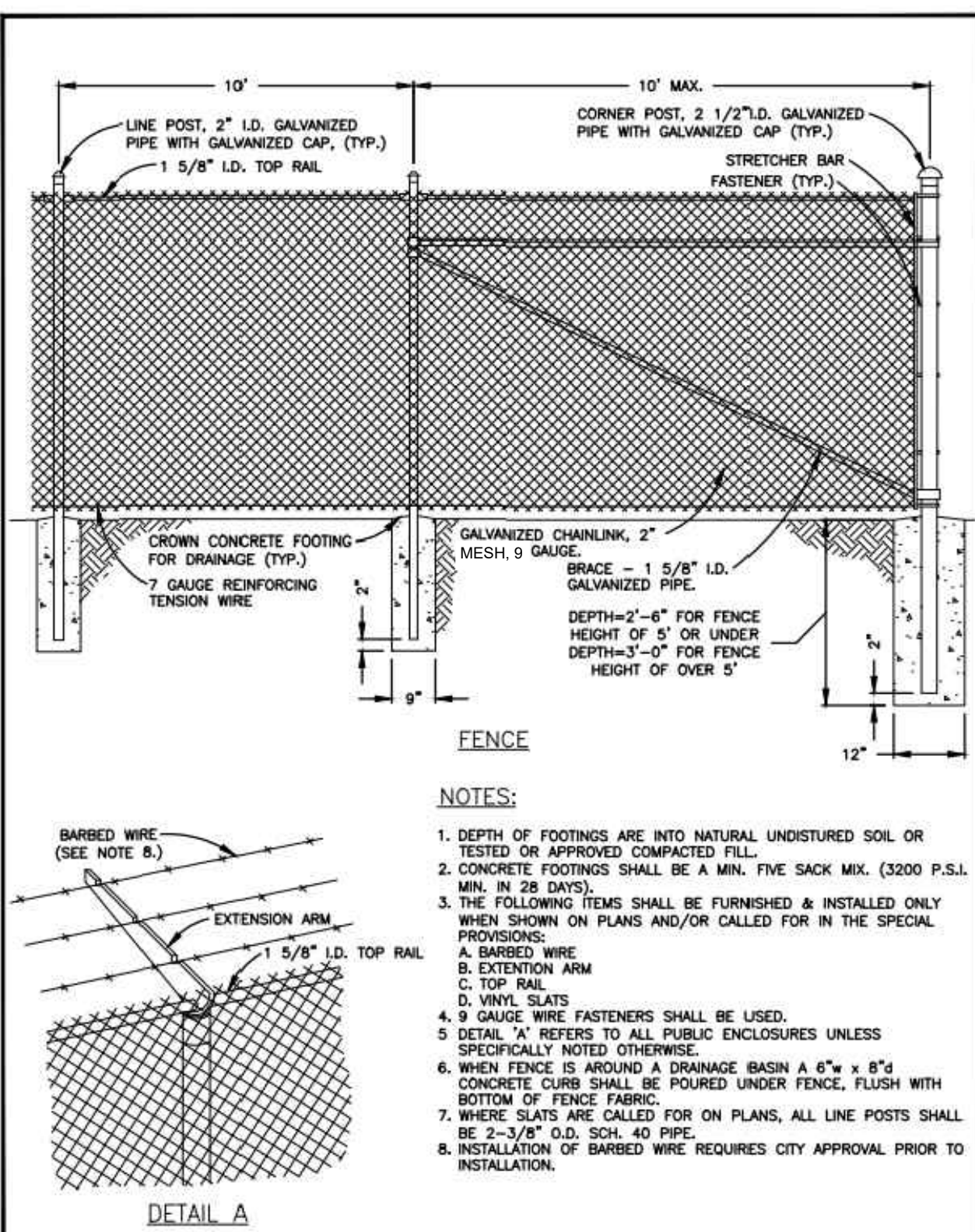
CITY of CORCORAN • Department of Public Works

Standard Drawing for:

BLOW-OFF ASSEMBLY

APPROVED BY: *[Signature]* R.C.E. 53350 03/01/17
Date
Revised: *[Signature]* W-3

SCALE: NTS



NOTES:

- DEPTH OF FOOTINGS INTO NATURAL UNDISTURBED SOIL OR TESTED OR APPROVED COMPACTED FILL.
- CONCRETE FOOTINGS SHALL BE A MIN. FIVE SACK MIX. (3200 P.S.I. MIN. IN 28 DAYS).
- THE FOLLOWING ITEMS SHALL BE FURNISHED & INSTALLED ONLY WHEN SHOWN ON PLANS AND/OR CALLED FOR IN THE SPECIAL PROVISIONS:
A. BARBED WIRE
B. EXTENSION ARM
C. TOP RAIL
D. VINYL SLATS
E. 9 GAUGE WIRE FASTENERS SHALL BE USED.
- DETAIL 'A' REFERS TO ALL PUBLIC ENCLOSURES UNLESS SPECIFICALLY NOTED OTHERWISE.
- WHEN FENCE IS AROUND A DRAINAGE BASIN A 6" x 6" CONCRETE CURB SHALL BE POURED UNDER FENCE, FLUSH WITH BOTTOM OF FENCE FABRIC.
- WHERE SLATS ARE CALLED FOR ON PLANS, ALL LINE POSTS SHALL BE 2-3/8" O.D. SCH. 40 PIPE.
- INSTALLATION OF BARBED WIRE REQUIRES CITY APPROVAL PRIOR TO INSTALLATION.

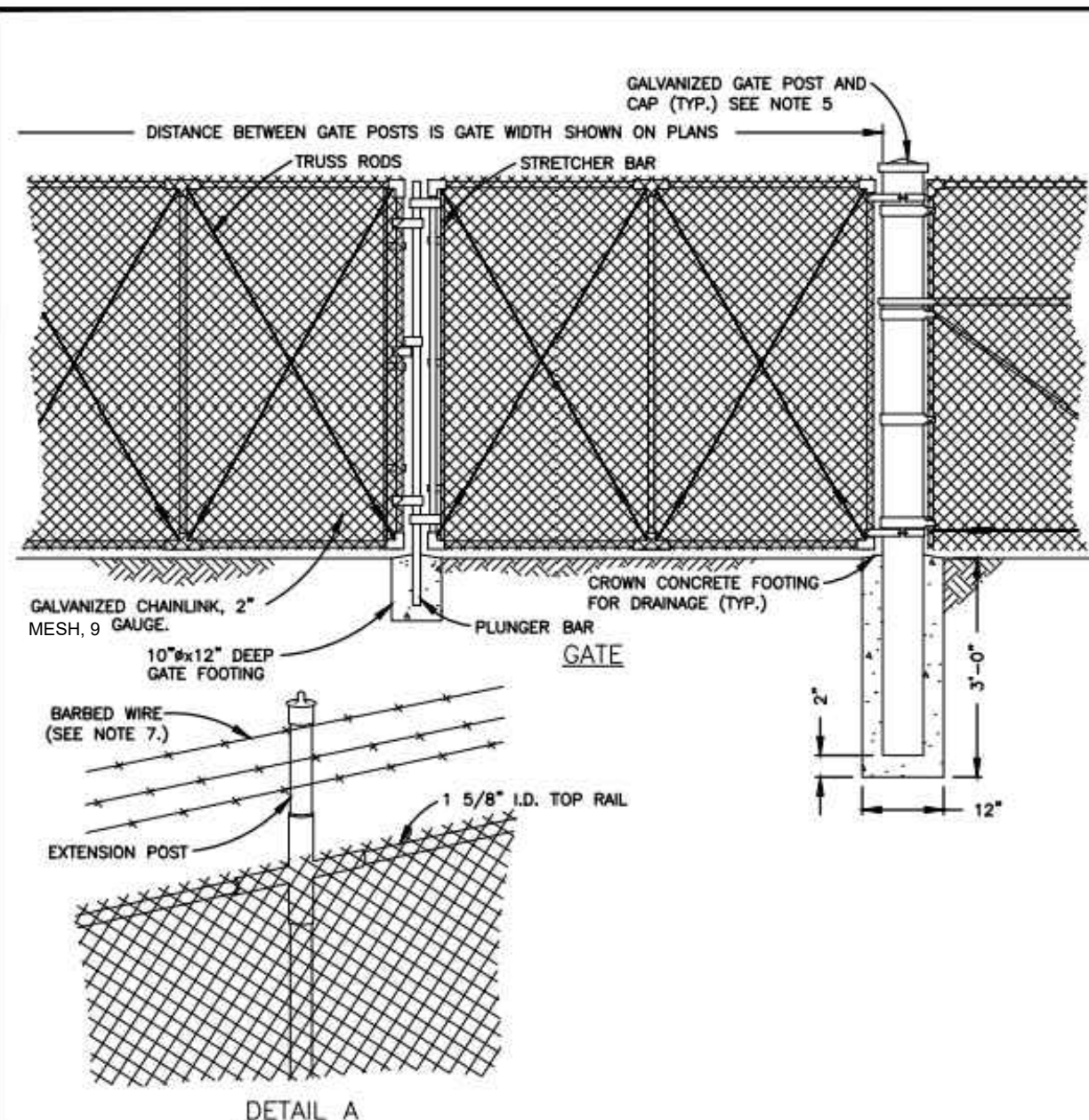
CITY of CORCORAN • Department of Public Works

Standard Drawing for:

CHAIN LINK FENCE
DETAILS

APPROVED BY: *[Signature]* R.C.E. 53350 03/01/17
Date
Revised: *[Signature]* M-10

SCALE: NTS



NOTES:

- DEPTH OF FOOTINGS INTO NATURAL UNDISTURBED SOIL OR TESTED AND APPROVED COMPACTED FILL.
- CONCRETE FOOTINGS SHALL BE A MIN. 5 SACK MIX AND TEST TO A MIN. OF 3200 P.S.I. IN 28 DAYS.
- THE FOLLOWING ITEMS SHALL BE FURNISHED AND INSTALLED ONLY WHEN SHOWN ON PLANS AND/OR CALLED FOR IN THE SPECIAL PROVISIONS:
A. BARBED WIRE
B. EXTENSION ARM
C. TOP RAIL
D. VINYL SLATS
E. 9 GAUGE WIRE FASTENERS SHALL BE USED.
- DETAIL 'A' REFERS TO ALL PUBLIC ENCLOSURES UNLESS SPECIFICALLY NOTED OTHERWISE.
- INSTALLATION OF BARBED WIRE REQUIRES CITY APPROVAL PRIOR TO INSTALLATION.

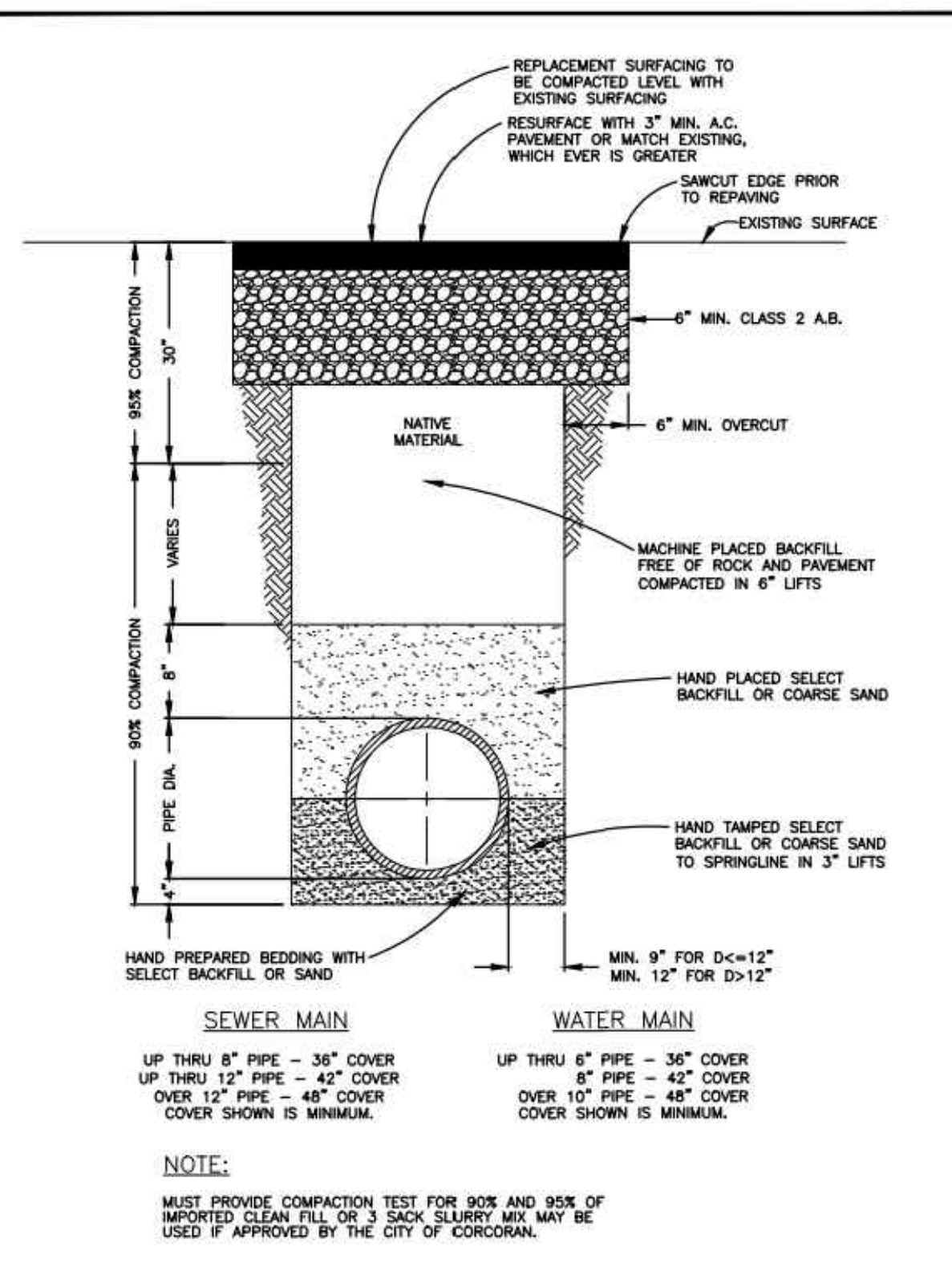
CITY of CORCORAN • Department of Public Works

Standard Drawing for:

CHAIN LINK GATE
DETAILS

APPROVED BY: *[Signature]* R.C.E. 53350 03/01/17
Date
Revised: *[Signature]* M-11

SCALE: NTS



NOTE:

- MUST PROVIDE COMPACTION TEST FOR 90% AND 95% OF IMPORTED CLEAN FILL OR 3 SACK SLURRY MIX. MAY BE USED IF APPROVED BY THE CITY OF CORCORAN.

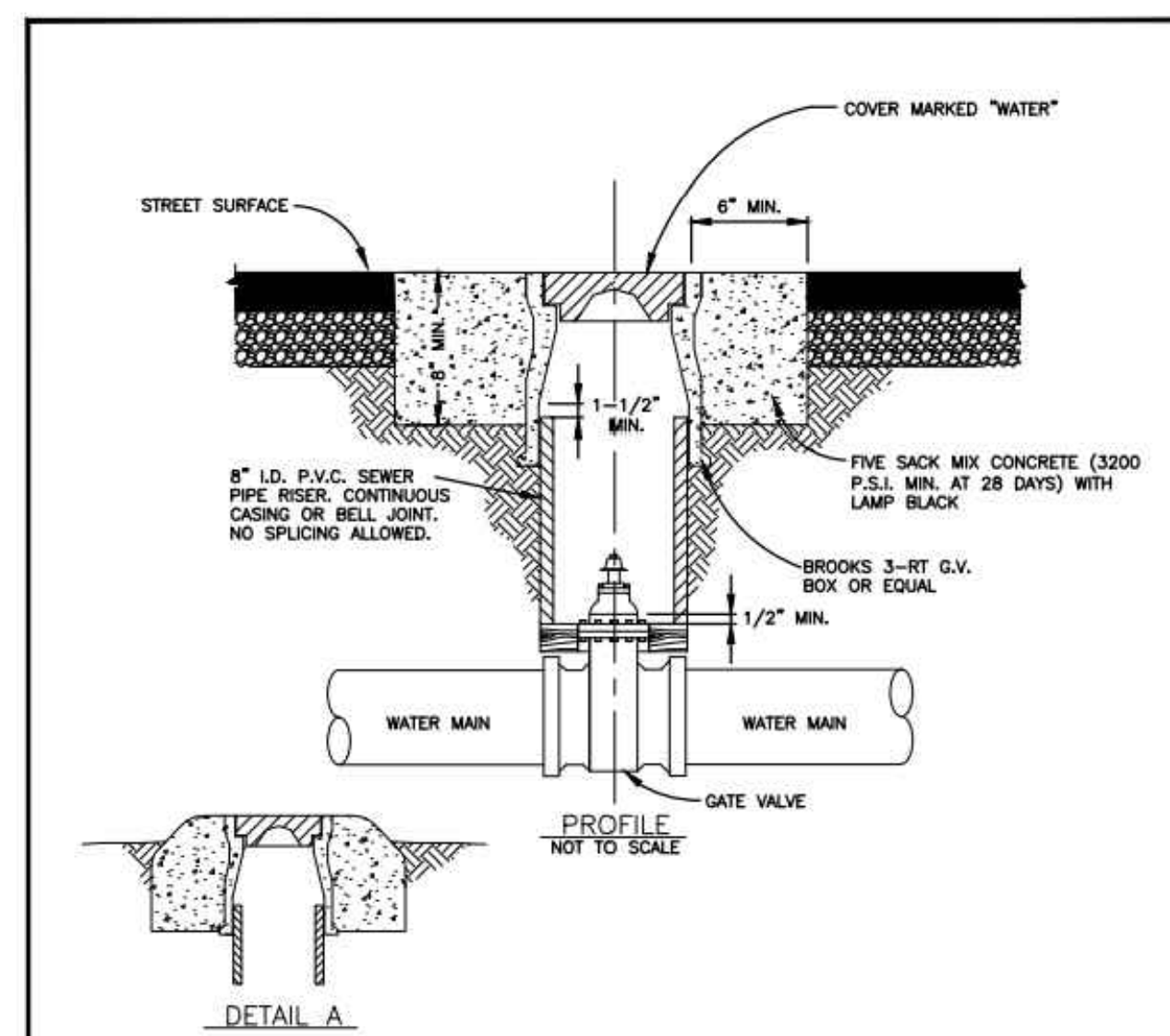
CITY of CORCORAN • Department of Public Works

Standard Drawing for:

TRENCH IN SURFACED
AND UN-SURFACED AREA

APPROVED BY: *[Signature]* R.C.E. 53350 03/01/17
Date
Revised: *[Signature]* ST-2

SCALE: NTS



NOTE:

- VALVE BOXES SET IN ROAD SHOULDERS, FIELDS, ETC. SHALL BE AS SHOWN IN DETAIL 'A'.

APPROVED GATE VALVES

6" - 10"

CLOW F-5082 MUELLER A-2380-24

KENNEDY 573X MUELLER A-2370-26

M & H 67 RT, O-RING WATEROUS SERIES 500

MUELLER A-2370-28 WATEROUS SERIES 500

ALL VALVES SHALL BE A.W.W.A. APPROVED RESILIENT WEDGE

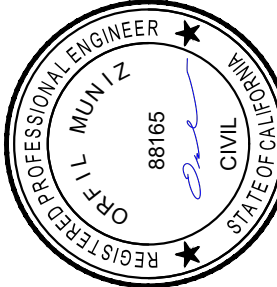
CITY of CORCORAN • Department of Public Works

Standard Drawing for:

VALVE WELL & COVER

APPROVED BY: *[Signature]* R.C.E. 53350 03/01/17
Date
Revised: *[Signature]* W-2

SCALE: NTS



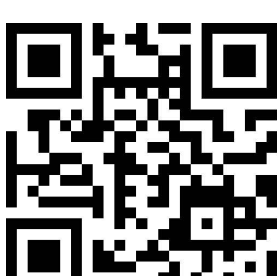
ENGINEERING PLANS FOR:
WATER WELL 5F IMPROVEMENTS

SHEET TITLE:
CONSTRUCTION DETAILS

REVISIONS

NO.

AS SHOWN
SCALE: JOB NO: 221_051
QA/QC: JA
FILE: 221_051 CONSTRUCTION
DETAILS DWG
DATE: 2/27/2023



SHEET NO.

7

CITY OF CORCORAN

WELL 8C WATER QUALITY IMPROVEMENTS

GENERAL CONSTRUCTION NOTES

- EXISTING UTILITIES AND EXISTING IMPROVEMENTS MAY BE SHOWN AT APPROXIMATED LOCATIONS DUE TO THE AVAILABLE RECORD INFORMATION AT THE TIME OF PLAN PREPARATION. OTHER UTILITY LINES MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES BY POTHOLING OR LOCATING SERVICES "811" IF FOUND NECESSARY.
- THE CONTRACTOR SHALL NOTIFY ALL CORRESPONDING UTILITY COMPANIES AND CALL "811" AT LEAST 48 HOURS BEFORE THE COMMENCEMENT OF ANY WORK WHICH MAY REQUIRE UTILITY VERIFICATION. ADDITIONALLY, THE CONTRACTOR WILL SUPPLY SOUTHERN CALIFORNIA GAS COMPANY WITH A CONSTRUCTION SCHEDULE AND NOTIFY OF ANY PRE-CONSTRUCTION MEETINGS.
- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY OR SUBSTRUCTURE SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. NO CERTIFICATIONS IS MADE AS THE ACCURACY OR THOROUGHNESS OF THESE RECORDS. APPROVAL OF THESE PLANS BY THE CITY OF CORCORAN DOES NOT CONSTITUTE A REPRESENTATION AS THE ACCURACY OR COMPLETENESS OF LOCATION OR THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY OR SUBSTRUCTURE WITHIN THE LIMITS OF THE PROJECT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE FULL SET OF PLANS FOR ANY DISCREPANCIES AND OMISSIONS PRIOR TO THE COMMENCEMENT OF WORK. IF ANY DISCREPANCIES BETWEEN THESE PLANS AND THE FIELD ARE IDENTIFIED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WORK NOT IN CONFORMANCE WITH THE PLANS OR IN CONFLICT WITH ANY CODE.
- AN APPROVED SET OF PLANS MUST BE AVAILABLE ON THE JOB SITE AT ALL TIMES.
- THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."
- ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE PROVISIONS IN THE AWWA A100-20 WATER WELLS STANDARDS DATED 2020, ALONG WITH THE CITY OF CORCORAN STANDARD DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS, FABRICATIONS, EQUIPMENT, APPLIANCES, TRANSPORTATION, SERVICES AND LABOR NECESSARY FOR THE CONSTRUCTION, ERECTION AND INSTALLATION OF ALL WORK INDICATED ON THESE DRAWINGS AND/OR OUTLINED IN EACH SECTION OF THE SPECIFICATIONS.
- FOR THE DURATION OF THE WORK, THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN, AS MAY BE REQUIRED, ALL NECESSARY BARRICADES AND RAILINGS, LIGHTS, WARNING SIGNS AND SIGNALS, AND SHALL TAKE ALL OTHER PRECAUTIONS AS MAY BE REQUIRED TO SAFEGUARD PERSONS, THE JOB SITE AND ADJOINING PROPERTY, AGAINST INJURIES AND DAMAGE OF ANY NATURE.
- THE CONTRACTOR AND EACH SUBCONTRACTOR SHALL GIVE THEIR PERSONAL ATTENTION TO THE WORK; BE RESPONSIBLE FOR THE LAYOUT AND CORRECTNESS OF THEIR WORK AND COOPERATE WITH EACH OF THE VARIOUS TRADES TO OBTAIN A NEAT FINISHED AND WORKMANLIKE JOB.
- THE CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER AND ENGINEER, AND THE OFFICERS, DIRECTORS, MEMBERS, PARTNERS, EMPLOYEES, AGENTS, CONSULTANTS AND SUBCONTRACTORS OF EACH AND ANY OF THEM FROM AND AGAINST ALL CLAIMS, COSTS, LOSSES, AND DAMAGES (INCLUDING BUT NOT LIMITED TO ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS, AND OTHER PROFESSIONALS AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS) ARISING OUT OF OR RELATING TO THE PERFORMANCE OF THE WORK, PROVIDED THAT ANY SUCH CLAIM, COST, LOSS, OR DAMAGE IS ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE, OR DEATH, OR TO INJURY TO OR DESTRUCTION OF TANGIBLE PROPERTY (OTHER THAN THE WORK ITSELF), INCLUDING THE LOSS OF USE RESULTING THEREFROM BUT ONLY TO THE EXTENT CAUSED BY ANY NEGLIGENT ACT OR OMISSION OF CONTRACTOR, ANY SUBCONTRACTOR, ANY SUPPLIER, OR ANY INDIVIDUAL OR ENTITY DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM TO PERFORM ANY OF THE WORK OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE.
- SHOULD A CONSTRUCTION SURVEY OR CONSTRUCTION STAKING BE NECESSARY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THIS SERVICE.
- DO NOT SCALE DRAWINGS. IF UNABLE TO LOCATE DIMENSIONS FOR ANY ITEM OF WORK, CONTACT THE ENGINEER FOR DIRECTION BEFORE PROCEEDING.
- ALL DAMAGE TO AREAS AND/OR PROPERTY NOT SPECIFICALLY PART OF THE PROJECT SITE CAUSED DURING CONSTRUCTION ACTIVITIES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RETURN TO PRE-CONSTRUCTION CONDITIONS.
- CHANGES TO THE APPROVED DRAWINGS SHALL BE MADE BY ADDENDUM OR A CHANGE ORDER SIGNED BY THE ENGINEER AND APPROVED BY THE PUBLIC WORKS/ENGINEERING OFFICIALS.
- DUST AND DEBRIS CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT - DISTRICT REGULATION VIII - FUGITIVE DUST RULES.

CONTRACTOR QUALIFICATION REQUIREMENTS

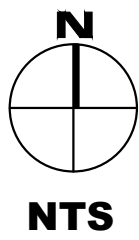
MUNICIPAL WATER WELL EXPERIENCE

- A QUALIFIED CONTRACTOR/SUBCONTRACTOR AND/OR HIS/HER SITE SUPERINTENDENT OR FOREMAN SHALL HAVE A MINIMUM OF 5 YEARS OF EXPERIENCE PERFORMING MUNICIPAL WATER WELL PROJECTS OF SIMILAR TECHNICAL COMPLEXITIES AND WORK SCOPES TO THE CITY OF CORCORAN'S WELL 8C PROJECT.
- CONTRACTOR SHALL PROVIDE THE PROJECT NAME, PROJECT OWNER, PROJECT OWNER'S CONTACT PERSON, PHONE NUMBER, ADDRESS, CONTRACTOR SITE SUPERINTENDENT OR FOREMAN PROJECT COMPLETION DATE, AND PROJECT CONTRACT AMOUNT FOR THESE PROJECTS.
- ALL BIDDERS MUST COMPLETE AND SUBMIT THE "MUNICIPAL WATER WELL EXPERIENCE VERIFICATION" BID FORM, TO THE CITY OF CORCORAN, NO LATER THAN 4:00 P.M. ON THE 5TH BUSINESS DAY AFTER PUBLIC POSTING OF BID RESULTS. FAILURE TO PROVIDE ALL THE REQUIRED INFORMATION MAY CAUSE THE BID TO BE CONSIDERED NON-RESPONSIBLE.
- VERIFICATION
 - THE EXPERIENCE OF THE APPARENT LOW BIDDER WILL BE CHECKED FOR COMPLIANCE WITH THESE REQUIREMENTS. THE CITY WILL NOTIFY THE APPARENT LOW BIDDER OF ANY DEFICIENCIES FOUND AND WILL ALLOW THE BIDDER THE OPPORTUNITY TO RESPOND IN WRITING WITH REASONABLE CLARIFICATIONS. THE DETERMINATION OF SUFFICIENT EXPERIENCE BY THE CITY SHALL BE FINAL AND CONCLUSIVE AS TO THAT BIDDER AND ALL OTHER BIDDERS.
 - IF THE APPARENT LOW BIDDER IS DETERMINED TO BE NON-RESPONSIBLE, THE CITY WILL REVIEW THE NEXT LOW BIDDER'S QUALIFICATIONS FOR COMPLIANCE WITH THE REQUIREMENTS.
- CONTRACTOR
 - THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."



VICINITY MAP

CITY OF CORCORAN



CITY & ENGINEER CONTACTS

PUBLIC WORKS DIRECTOR	CIVIL ENGINEER
JOSEPH FAULKNER CITY OF CORCORAN 832 WHITLEY AVE CORCORAN, CA 93212 (559) 992-2151 EXT. 262	ORFIL MUNIZ, PE, QSD A&M CONSULTING ENGINEERS 220 N LOCUST ST VISALIA, CA 93291 (559) 429-4747

PROJECT UTILITY CONTACTS

PG&E	CITY OF CORCORAN WATER AND WASTEWATER
JEFF HEIDNGER 705 "P" ST., FRESNO, CA 93760 (559) 263-7368	JOSEPH FAULKNER 832 WHITLEY AVE CORCORAN, CA 93212 (559) 992-2151 EXT. 262
SOUTHERN CALIFORNIA GAS CO	FRONTIER COMMUNICATION
BOB WALKER 404 N TIPTON STREET VISALIA, CA 93292 (818) 701-2552	SOCRATES LUNA 1359 "G" STREET, REEDLEY, CA 93654 (559) 637-0666

NOTIFICATION REQUIREMENTS

- THE CONTRACTOR SHALL BE RESPONSIBLE TO GIVE NOTICE TO THE ENGINEER IN WRITING PRIOR TO PERFORMANCE OF SPECIFIC OPERATIONS AS FOLLOWS:
 - APPROXIMATE 30-DAY NOTICE OF INTENT TO MOBILIZE TO PROVIDE TIME FOR OWNER PRE- CONSTRUCTION CEQA COMPLIANCE SURVEYS.
 - AT LEAST FIVE (5) WORKING DAYS ADVANCE NOTICE OF INTENT TO MOVE ONSITE.
 - AT LEAST TWO (2) WORKING DAYS NOTICE OF INTENT TO MOVE OFFSITE.
- THE ENGINEER MAY PERFORM FULL TIME CONSTRUCTION OBSERVATION AND INSPECTION. THE CONTRACTOR SHALL TELEPHONE THE ENGINEER DAILY WITH A REPORT ON THE STATUS OF THE WORK AND THE EXPECTED WORK TO BE ACCOMPLISHED IN THE NEXT 24 HOURS.

INDEX OF PLANS

- COVER SHEET
- WATER WELL 8C SITE PLAN
- GRADING & DRAINAGE PLAN
- EXISTING WATER WELL 8B PUMP AND DISCHARGE PLAN
- PROPOSED WATER WELL 8C PUMP AND DISCHARGE PLAN
- CONSTRUCTION DETAILS
- CONSTRUCTION DETAILS

ABBREVIATIONS & LEGEND

APPROX	APPROXIMATE	SD	STORM DRAIN
C	CONCRETE	SDMH	STORM DRAIN MANHOLE
CITY	CITY OF CORCORAN	SQ	SQUARE
CL	CENTERLINE	SS	SANITARY SEWER
COMM	COMMUNICATION	ST	STREET
CR	CROWN	STA	STATION
DIA	DIAMETER	STD	STANDARD
DIP	DUCTILE IRON PIPE	TC	TOP OF CURB
DWG	DRAWING	TYP	TYPICAL
EP	EDGE OF PAVEMENT	VERT	VERTICAL
EXIST	EXISTING	W	WATER
(E)	EXISTING	W/	WITH
FEN	FENCE	WELL	WATER WELL
FG	FINISHED GRADE	WV	WATER VALVE
GA	GAGE, GAUGE	@	AT
GPH	GALLONS PER HOUR	Ø	DIAMETER
GUY	GUY WIRE	(XXX.XX)	EXISTING ELEVATION
HORZ	HORIZONTAL	S=0.XXXX	PROPOSED SLOPE IN DECIMAL
INV	INVERT		
IRR	IRRIGATION		
LIP	GUTTER LIP		
LP	LIGHT POLE		
MAX	MAXIMUM		
MH	MANHOLE		
MIN	MINIMUM		
MON	MONUMENT		
N	NEW		
NO	NUMBER		
NTS	NOT TO SCALE		
N.T.S.	NOT TO SCALE		
OC	ON CENTER		
OG	ORIGINAL GROUND		
PL	PROPERTY LINE		
PP	POWER POLE		
PSI	POUNDS PER SQUARE INCH		
PT	POINT		
PVC	POLYVINYL CHLORIDE		
REBAR	REINFORCING BAR		
ROW	RIGHT-OF-WAY		
R/W	RIGHT-OF-WAY		
RT	RIGHT		
SCH	SCHEDULE		

---	EXISTING RIGHT-OF-WAY
---	EXISTING FENCE
---	PROPOSED FENCE
---	EXISTING PAVEMENT
---	PROPOSED CRUSHED ROCK

CONTROL POINTS

TEMPORARY CONTROL POINT: CP1
ELEVATION: LOCAL ASSUMED 201.50'
DESCRIPTION: NAIL AND SHINER LOCATED ON THE SOUTHERN EDGE OF PAVEMENT OF NEVADA AVENUE, APPROXIMATELY 40' NORTH OF THE NORTHEAST CORNER OF THE FENCE LINE AT WELL 8B

TEMPORARY CONTROL POINT: CP2
ELEVATION: LOCAL ASSUMED 201.57'
DESCRIPTION: NAIL AND SHINER LOCATED ON THE SOUTHERN EDGE OF PAVEMENT OF NEVADA AVENUE, APPROXIMATELY 40' NORTH OF THE NORTHWEST CORNER OF THE FENCE LINE AT WELL 8B



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ENGINEERING PLANS FOR:
CORCORAN WELL 8C
WATER QUALITY IMPROVEMENTS

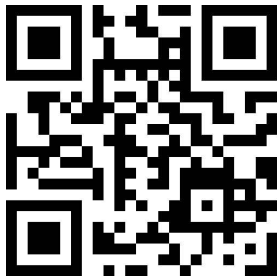
SHEET TITLE:

COVER SHEET

REVISIONS

NO.

SCALE: N.T.S.
JOB NO: 220_005
QA/QC: JA
FILE: 220_005_COVER.DWG
DATE: 2/27/2023



SHEET NO.

1

OF 7

LEGEND

- EXISTING PAVEMENT
- PROPOSED CRUSHED ROCK

CONTRACTOR NOTES

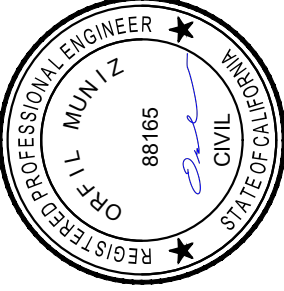
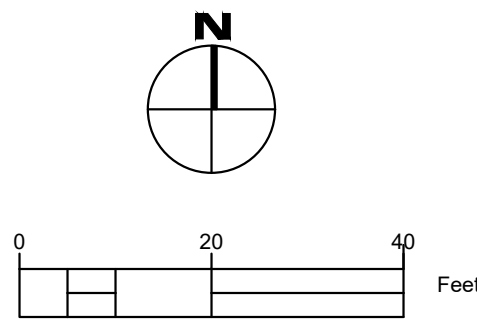
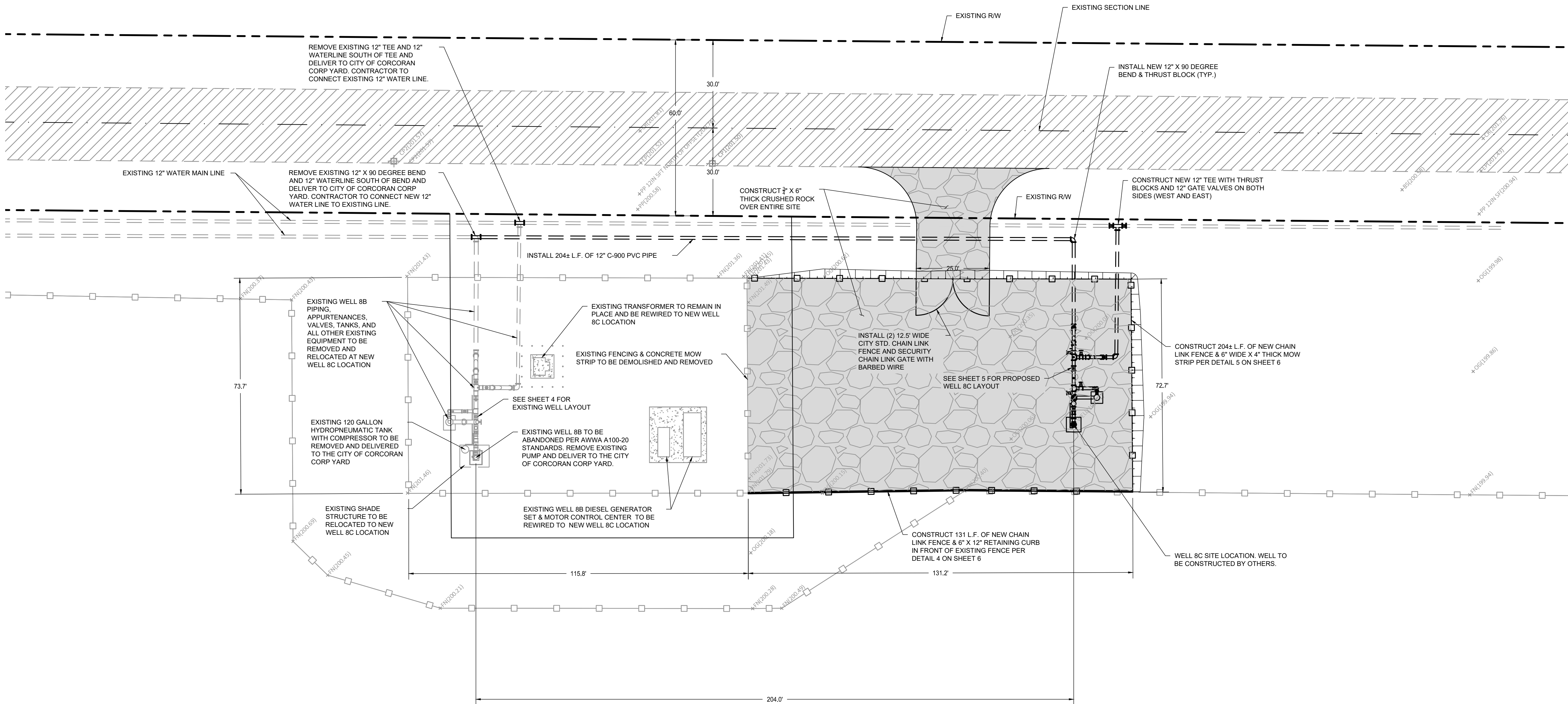
- A. THE CONTRACTOR SHALL COORDINATE THE DESTRUCTION ACTIVITIES WITH THE ENGINEER TO ALLOW FOR BOTH OBSERVATION OF THE WORK AND CONFORMANCE OF COMPLIANCE WITH THESE SPECIFICATIONS.
- B. THE WELL SHALL BE DESTROYED UTILIZING ACCEPTABLE METHODS DESCRIBED IN THE KINGS COUNTY CODE AND THE CALIFORNIA DEPARTMENT OF WATER RESOURCES BULLETIN 74-81 AND ITS SUPPLEMENT BULLETIN 74-90. THIS SHALL INCLUDE PERFORATION OF THE 18-INCH CASING FROM 20 FEET TO 150 FEET BELOW GROUND SURFACE. WELL SHALL BE FILLED WITH IMPERMEABLE MATERIAL TO THE SURFACE OF THE EXISTING CASING AND THE CASING EXTENSION ABOVE THE FLOOR LEFT INTACT FOR FUTURE DEMOLITION BY THE CITY OF ALL IMPROVEMENTS AT THIS SITE UNDER A SEPARATE CONTRACT.
- C. THE CONTRACTOR IS REQUIRED TO OBTAIN AND COMPLY WITH ALL PERMITTING REQUIREMENTS OF REGULATORY AGENCIES INCLUDING THE KINGS COUNTY DEPARTMENT OF ENVIRONMENTAL MANAGEMENT. IN ADDITION, THE CONTRACTOR SHALL PREPARE AND SUBMIT A CALIFORNIA DEPARTMENT OF WATER RESOURCES (DWR) WELL DRILLER'S REPORT SUBSEQUENT TO DESTROYING THE WELL.

NOTIFICATION NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE TO GIVE NOTICE TO THE ENGINEER IN WRITING PRIOR TO PERFORMANCE OF SPECIFIC OPERATIONS AS FOLLOWS.
- AT LEAST FIVE (5) WORKING DAYS ADVANCE NOTICE OF INTENT TO MOVE ONSITE.
- AT LEAST SEVENTY-TWO (72) HOURS ADVANCED NOTICE OF INTENT TO START DRILLING OPERATIONS OF THE PRODUCTION WELL.
- AT LEAST THREE (3) WORKING DAYS NOTICE OF INTENT TO MOVE OFFSITE.
- AT LEAST SEVENTY-TWO (72) ADVANCE NOTICE TO THE CITY INSPECTION PRIOR TO DISCHARGE OF WATER TO MID AND SHALL CONFORM WITH THE CITY INSPECTOR WITHIN TWELVE (12) HOURS OF DISCHARGE THAT DISCHARGE MAY PROCEED.
- THE ENGINEER WILL PERFORM PART TIME CONSTRUCTION OBSERVATION AND INSPECTION. THE CONTRACTOR SHALL TELEPHONE THE ENGINEER DAILY WITH A REPORT ON THE STATUS OF THE WORK AND THE EXPECTED WORK TO BE ACCOMPLISHED IN THE NEXT TWENTY-FOUR (24) HOURS.

GENERAL DEMOLITION NOTES

1. VERIFY FIELD CONDITIONS PRIOR TO START OF DEMOLITION AND NOTIFY THE CITY OF CORCORAN OF ANY DISCREPANCIES.
2. BEFORE COMMENCING ANY WORK, CONTRACTOR SHALL VERIFY THAT ALL UTILITY CONNECTIONS HAVE BEEN PROPERLY DISCONNECTED OR REMOVED.
3. THE CITY OF CORCORAN HAS SALVAGE RIGHT ON ALL ITEMS REMOVED.
4. KEEP CLEAN ALL EXISTING SPACES AND PROPERTIES ADJACENT TO DEMOLITION AREAS. REMOVE FROM THE SITE OR MINIMIZE ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS DAILY.
5. CONTRACTOR SHALL APPLY WATER OR OTHER SUITABLE METHODS REQUIRED BY THE ENGINEER, NECESSARY TO CONTROL DUST CAUSED BY DEMOLITION WORK.
6. ANY CAVITIES LEFT BY THE REMOVAL OF ANY ITEM SHALL BE BACKFILLED AND COMPACTED TO 90% RELATIVE COMPACTION UNLESS OTHERWISE NOTED.
7. ITEMS REMOVED AS INDICATED ON THE DRAWINGS SHALL BE DISPOSED OF PROPERLY.
8. CONTRACTOR TO BE RESPONSIBLE FOR SITE SECURITY DURING WORK.



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ENGINEERING PLANS FOR:
CORCORAN WELL 8C
WATER QUALITY IMPROVEMENTS
SHEET TITLE:
WATER WELL 8C SITE PLAN

REVISIONS

NO.

SCALE: 1" = 20'
JOB NO: 220_005
QA/QC: JA
FILE: 220_005_SITE PLANDWG
DATE: 2/27/2023



SHEET NO.

2

LEGEND



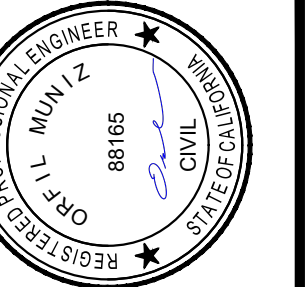
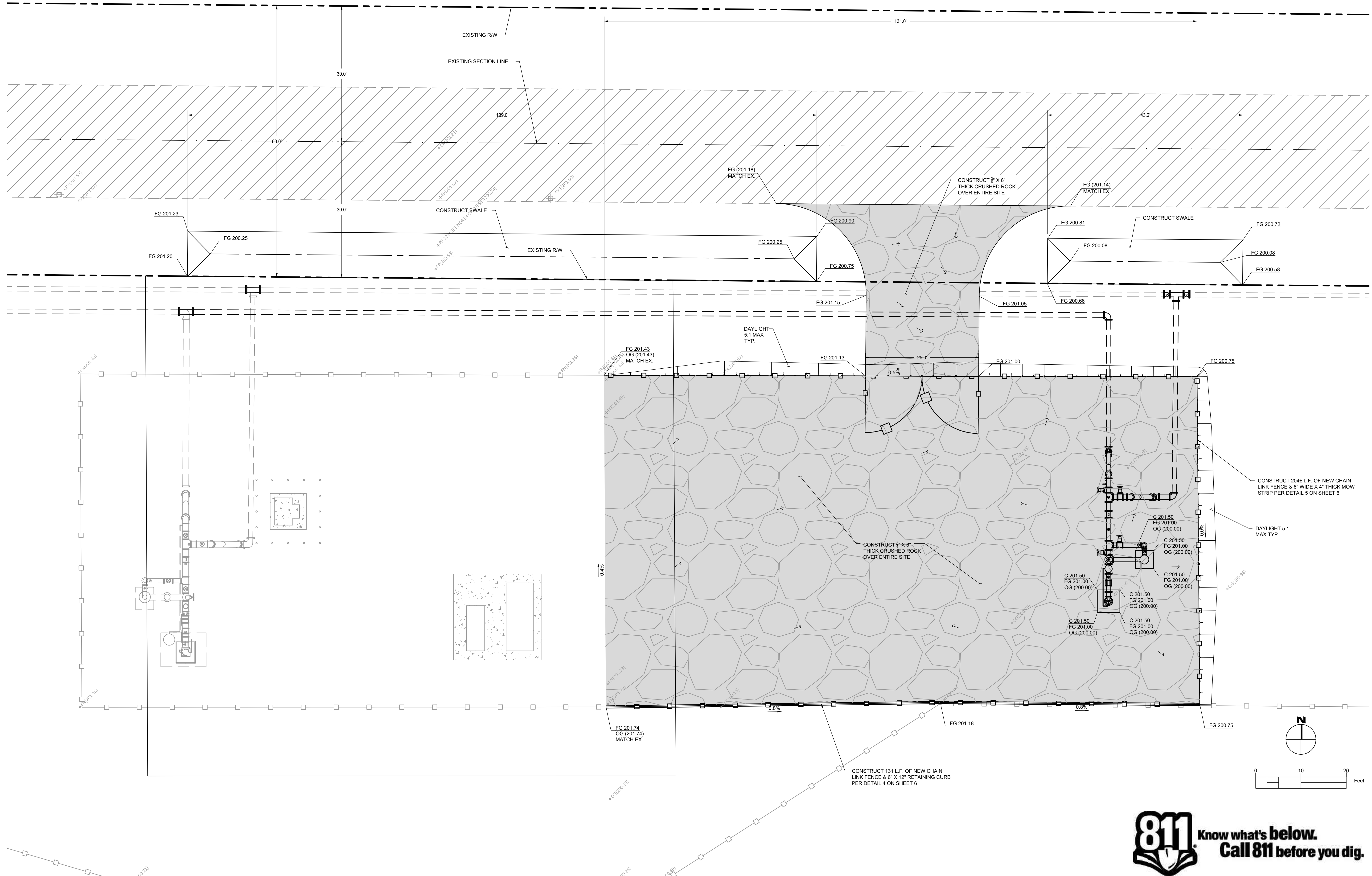
EXISTING PAVEMENT



PROPOSED CRUSHED ROCK

GRADING NOTES

1. THIS GRADING PLAN IS FOR APPROVAL OF ON-SITE ELEVATION ONLY. THE ELEVATIONS SHOWN WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRE SEPARATE PUBLIC WORKS DEPARTMENT APPROVAL & PERMIT. ANY NOTES THAT APPLY TO THE PUBLIC RIGHT-OF-WAY ARE FOR REFERENCE ONLY. IF ON-SITE ELEVATIONS SHOWN DO NOT CORRELATE WITH APPROVED PLANS, AN APPROVED AMENDMENT IS REQUIRED.
2. ALL GRADING SHALL COMPLY WITH THE 2019 CBC, CALIFORNIA BUILDING CODE.
3. OVER-EXCAVATE AND REMOVE ALL LOOSE FILLS, DEBRIS, AND ORGANIC MATTER TO ALLOW PROPER PREPARATION OF THE NATIVE GRADE BEFORE PLACEMENT OF ENGINEERED/COMPACT FILL.
4. FINISH DIRT ELEVATIONS SHALL BE VERIFIED PRIOR TO PLACEMENT OF GRAVEL.
5. CONCRETE PUMP PEDESTAL SHALL BE MIN. 18" ABOVE DIRT.



SHEET TITLE: CONCRETE WELL & WATER QUALITY IMPROVEMENTS

GRADING & DRAINAGE PLAN

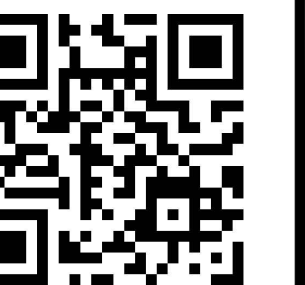
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JOB NO: 220_005

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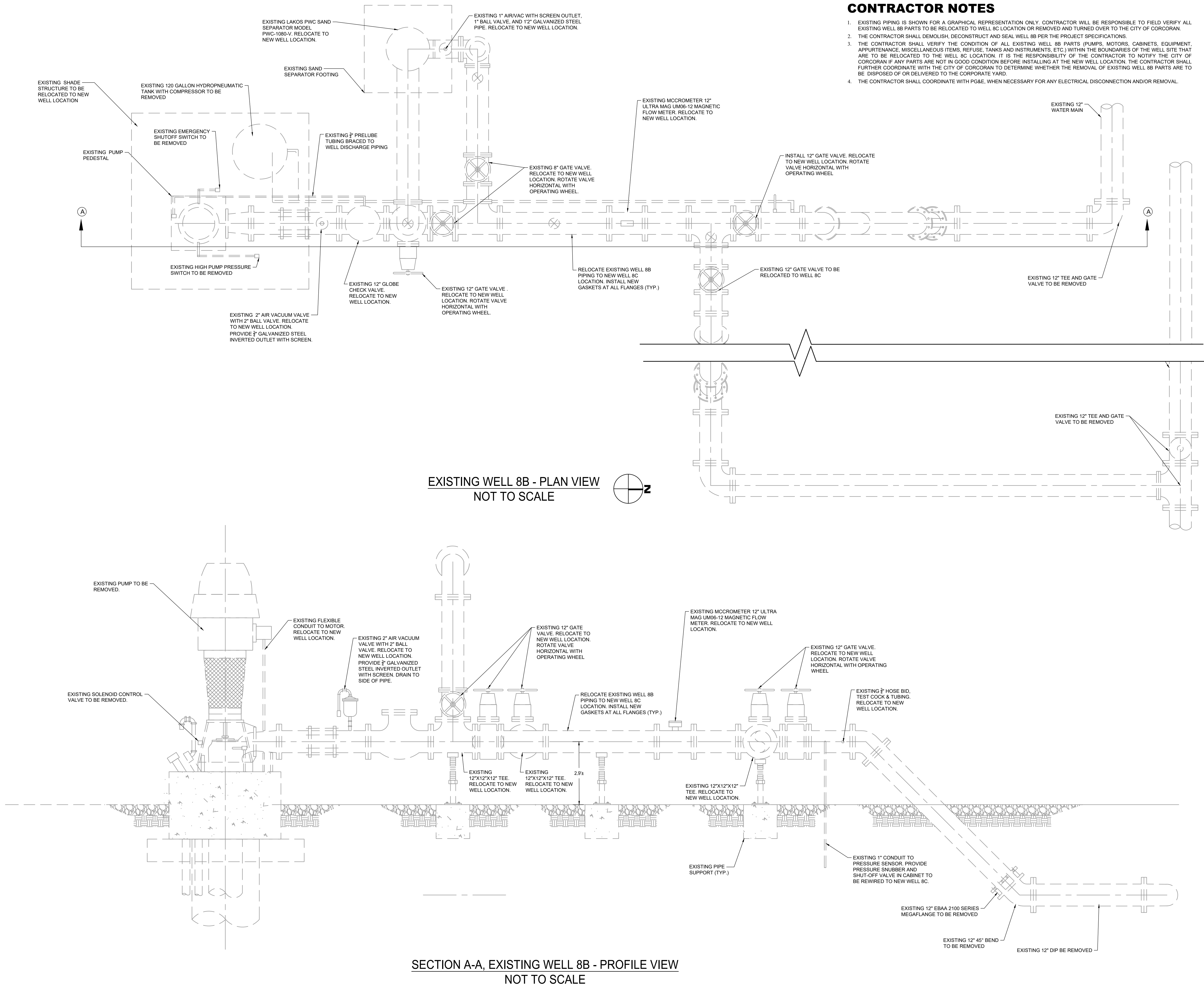
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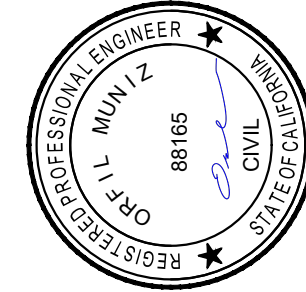
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CONTRACTOR NOTES

- EXISTING PIPING IS SHOWN FOR A GRAPHICAL REPRESENTATION ONLY. CONTRACTOR WILL BE RESPONSIBLE TO FIELD VERIFY ALL EXISTING WELL 88 PARTS TO BE RELOCATED TO WELL 8C LOCATION OR REMOVED AND TURNED OVER TO THE CITY OF CORCORAN.
- THE CONTRACTOR SHALL DEMOLISH, DECONSTRUCT AND SEAL WELL 88 PER THE PROJECT SPECIFICATIONS.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING WELL 88 PARTS, INCLUDING BUT NOT LIMITED TO: CABINETS, SINKS, EQUIPMENT, APPLIANCES, MISCELLANEOUS ITEMS, REFURISH, TANKS AND INSTRUMENTS, ETC.) WITHIN THE BOUNDARIES OF THE WELL SITE THAT ARE TO BE RELOCATED TO THE WELL 8C LOCATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE CITY OF CORCORAN IF ANY PARTS ARE NOT IN GOOD CONDITION BEFORE INSTALLING AT THE NEW WELL LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF THE EXISTING WELL 88 PARTS AND DETERMINE WHETHER THE REMOVAL OF EXISTING WELL 88 PARTS ARE TO BE DISPOSED OF OR DELIVERED TO THE CORPORATE YARD.
- THE CONTRACTOR SHALL COORDINATE WITH PG&E, WHEN NECESSARY FOR ANY ELECTRICAL DISCONNECTION AND/OR REMOVAL.



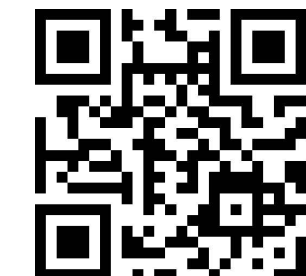
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ENGINEERING PLANS FOR:
CORCORAN WELL 8C
WATER QUALITY IMPROVEMENTS
SHEET TITLE:
EXISTING WATER WELL 8B PUMP AND DISCHARGE PLAN

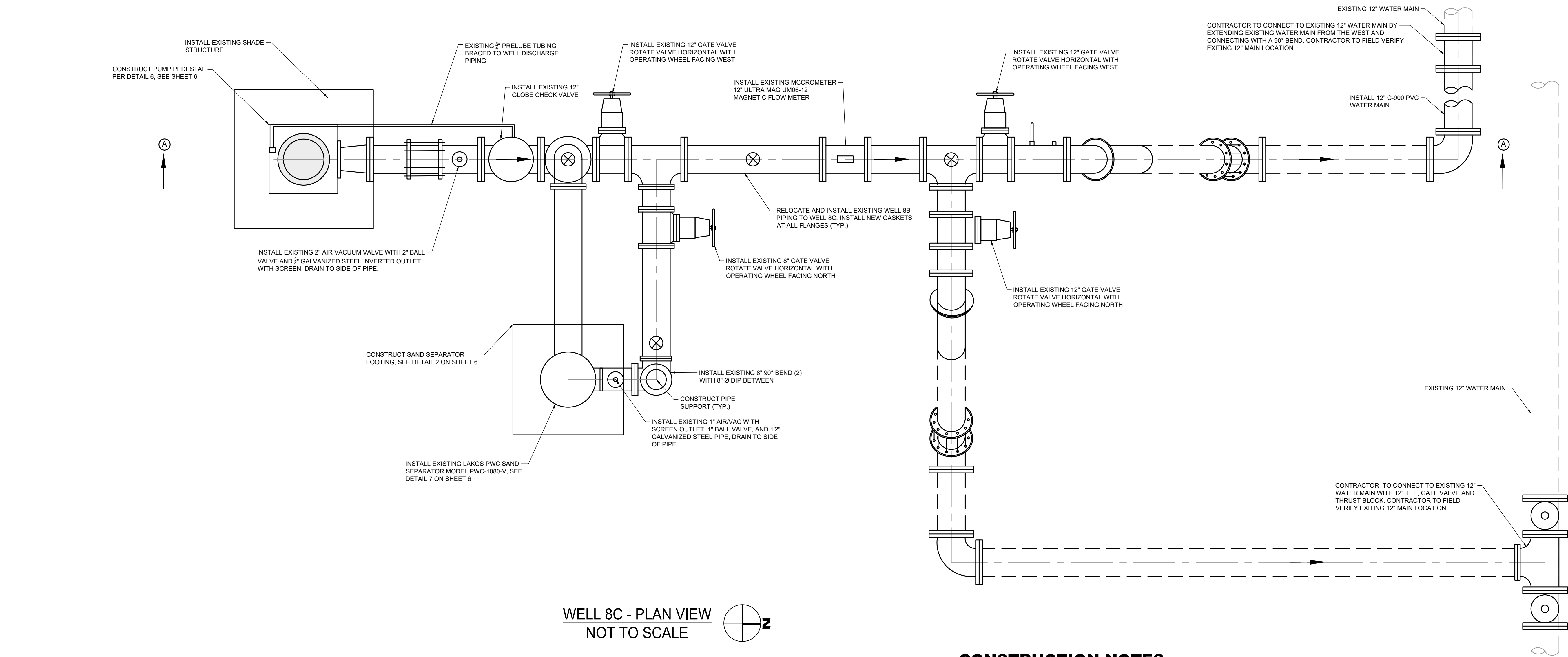
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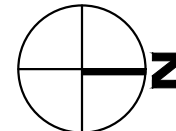
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JOB NO: 220_005
QA/QC: JA
FILE: 220_005_EX WELL.DWG
DATE: 2/27/2023



SHEET NO.

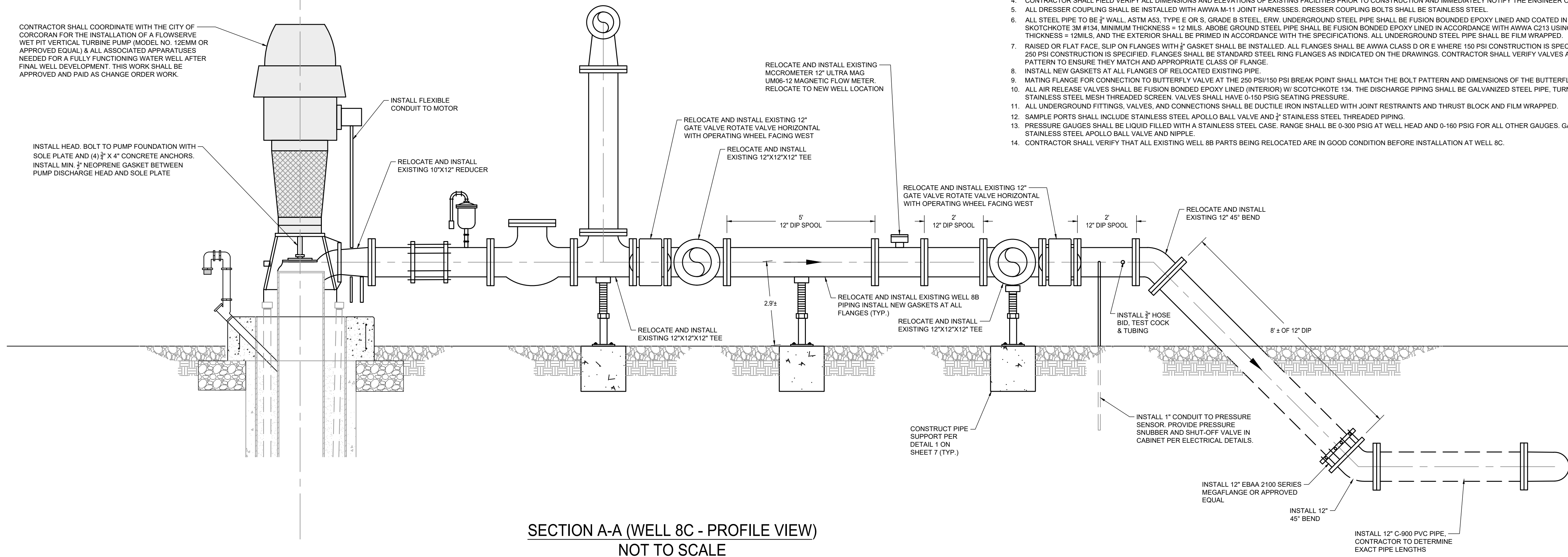


WELL 8C - PLAN VIEW
NOT TO SCALE

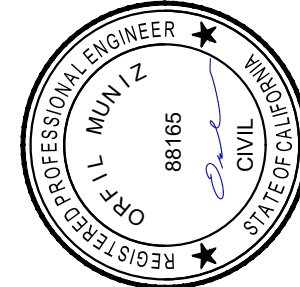


CONSTRUCTION NOTES

1. ALL CONCRETE SHALL BE 3200 PSI MINIMUM COMPRESSIVE STRENGTH. ALL STEEL REINFORCEMENT SHALL BE DEFORMED ACCORDING TO ACI 318 AND SHALL BE 60 KSI MINIMUM YIELD STRENGTH.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL WELL PARTS TO MATCH EXISTING WELL 8B COLOR.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DETAILING DIMENSIONS OF PIPES, VALVES, FITTINGS, SUPPORTS, PUMP AND MOTOR TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. CONTRACTOR TO VERIFY PUMP HEAD & LARGE DIMENSIONS PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS.
5. ALL DRESSER COUPLING SHALL BE INSTALLED WITH AWWA M-11 JOINT HARNESSSES. DRESSER COUPLING BOLTS SHALL BE STAINLESS STEEL.
6. ALL STEEL PIPE TO BE 2" WALL, ASTM A53, TYPE E OR S, GRADE B STEEL, ERW. UNDERGROUND STEEL PIPE SHALL BE FUSION BOUNDED EPOXY LINED AND COATED IN ACCORDANCE WITH AWWA C213 USING SKOTCHKOTE 3M #134, MINIMUM THICKNESS = 12 MILS. ABOVE GROUND STEEL PIPE SHALL BE FUSION BONDED EPOXY LINED IN ACCORDANCE WITH AWWA C213 USING SKOTCHKOTE 3M #134, MINIMUM THICKNESS = 12MILS. AND THE EXTERIOR SHALL BE PRIMED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL UNDERGROUND STEEL PIPE SHALL BE FILM WRAPPED.
7. RAISED OR FLAT FACE, SLIP ON FLANGES WITH 2" GASKET SHALL BE INSTALLED. ALL FLANGES SHALL BE AWWA CLASS D OR E WHERE 150 PSI CONSTRUCTION IS SPECIFIED AND AWWA CLASS E OR F WHERE 250 PSI CONSTRUCTION IS SPECIFIED. FLANGES SHALL BE STANDARD STEEL RING FLANGES AS INDICATED ON THE DRAWINGS. CONTRACTOR SHALL VERIFY VALVES AND APPURTENANCES FOR BOLT PATTERN TO ENSURE THEY MATCH AND APPROPRIATE CLASS OF FLANGE.
8. INSTALL NEW GASKETS AT ALL FLANGES OF RELOCATED EXISTING PIPE.
9. MATING FLANGE FOR CONNECTION TO BUTTERFLY VALVE AT THE 250 PSI/150 PSI BREAK POINT SHALL MATCH THE BOLT PATTERN AND DIMENSIONS OF THE BUTTERFLY VALVE FLANGE.
10. ALL AIR RELEASE VALVES SHALL BE FUSION BONDED EPOXY LINED (INTERIOR) W/ SCOTCHKOTE 134. THE DISCHARGE PIPING SHALL BE GALVANIZED STEEL PIPE, TURNED DOWN TO THE GROUND, WITH STAINLESS STEEL MESH THREADED SCREEN. VALVES SHALL HAVE 0-150 PSIG SEATING PRESSURE.
11. ALL UNDERGROUND FITTINGS, VALVES, AND CONNECTIONS SHALL BE DUCTILE IRON INSTALLED WITH JOINT RESTRAINTS AND THRUST BLOCK AND FILM WRAPPED.
12. SAMPLE PORTS SHALL INCLUDE STAINLESS STEEL APOLLO BALL VALVE AND 2" STAINLESS STEEL THREADED PIPING.
13. PRESSURE GAUGES SHALL BE LIQUID FILLED WITH A STAINLESS STEEL CASE. RANGE SHALL BE 0-300 PSIG AT WELL HEAD AND 0-160 PSIG FOR ALL OTHER GAUGES. GAUGE SHALL BE PROVIDED WITH A STAINLESS STEEL APOLLO BALL VALVE AND NIPPLE.
14. CONTRACTOR SHALL VERIFY THAT ALL EXISTING WELL 8B PARTS BEING RELOCATED ARE IN GOOD CONDITION BEFORE INSTALLATION AT WELL 8C.



SECTION A-A (WELL 8C - PROFILE VIEW)
NOT TO SCALE



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ENGINEERING PLANS FOR:
CORCORAN WELL 8C
WATER QUALITY IMPROVEMENTS
SHEET TITLE:
PROPOSED WATER WELL 8C PUMP AND DISCHARGE PLAN

REVISIONS

NO.

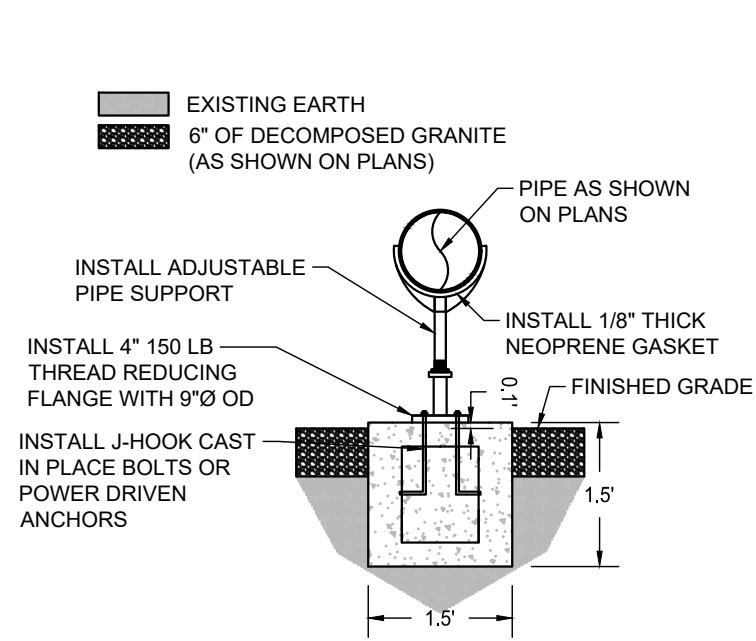
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JOB NO: 220_005
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DATE: 2/27/2023



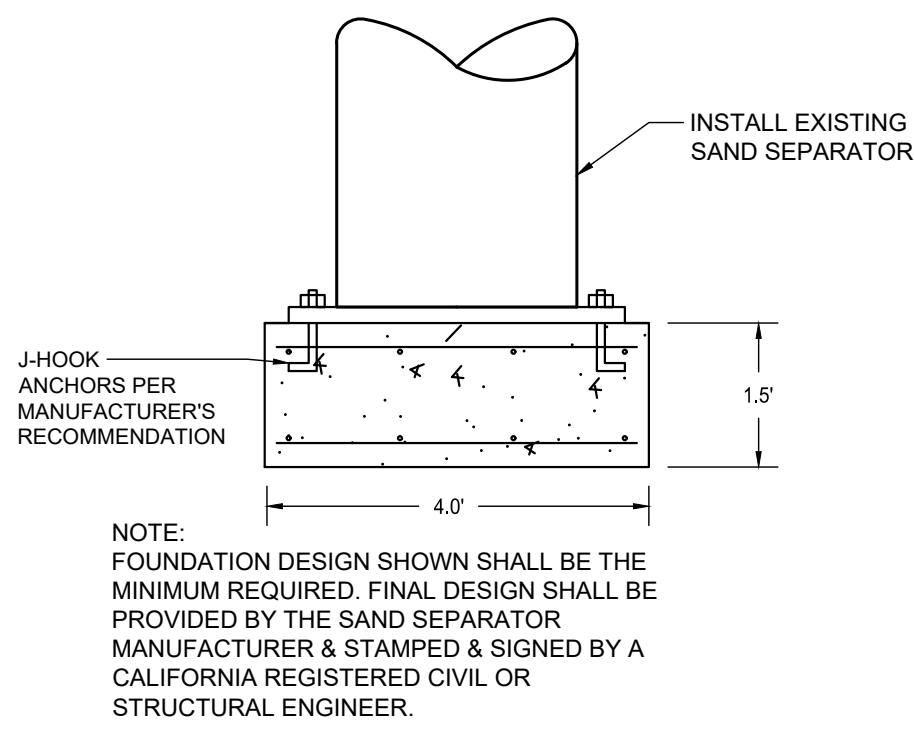
SHEET NO.

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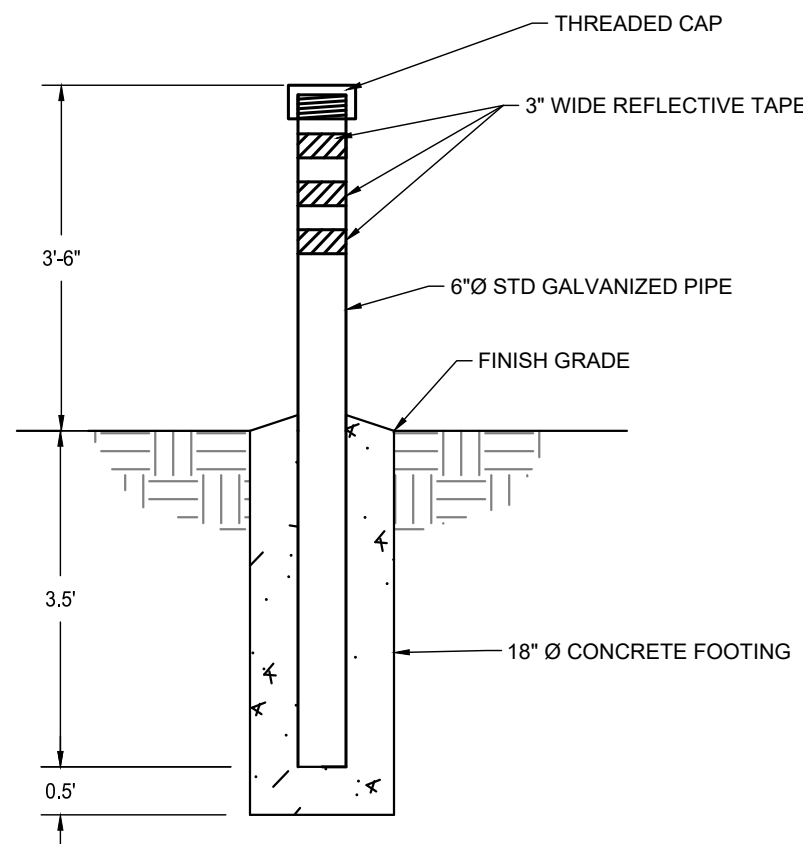
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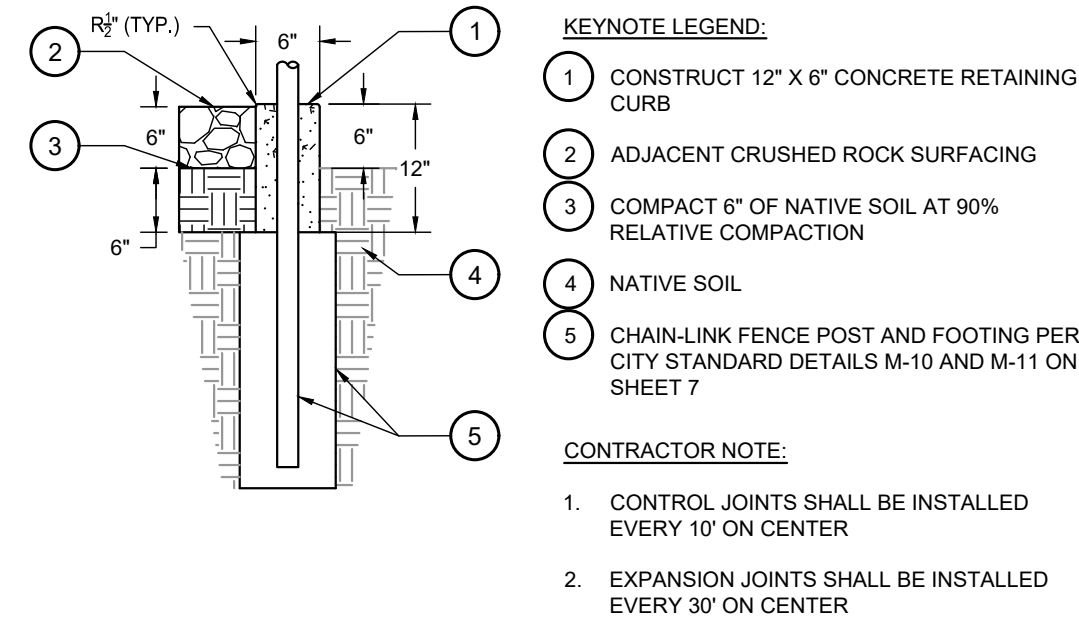
DETAIL 1 - PIPE SUPPORT
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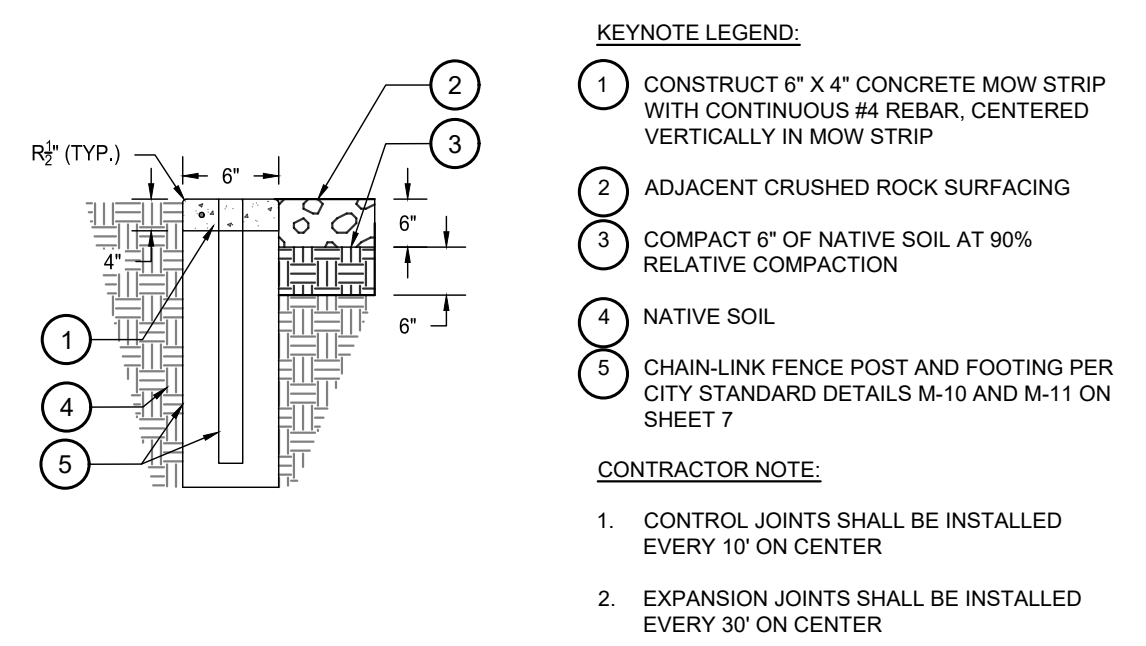
DETAIL 2 - SAND SEPARATOR BASE
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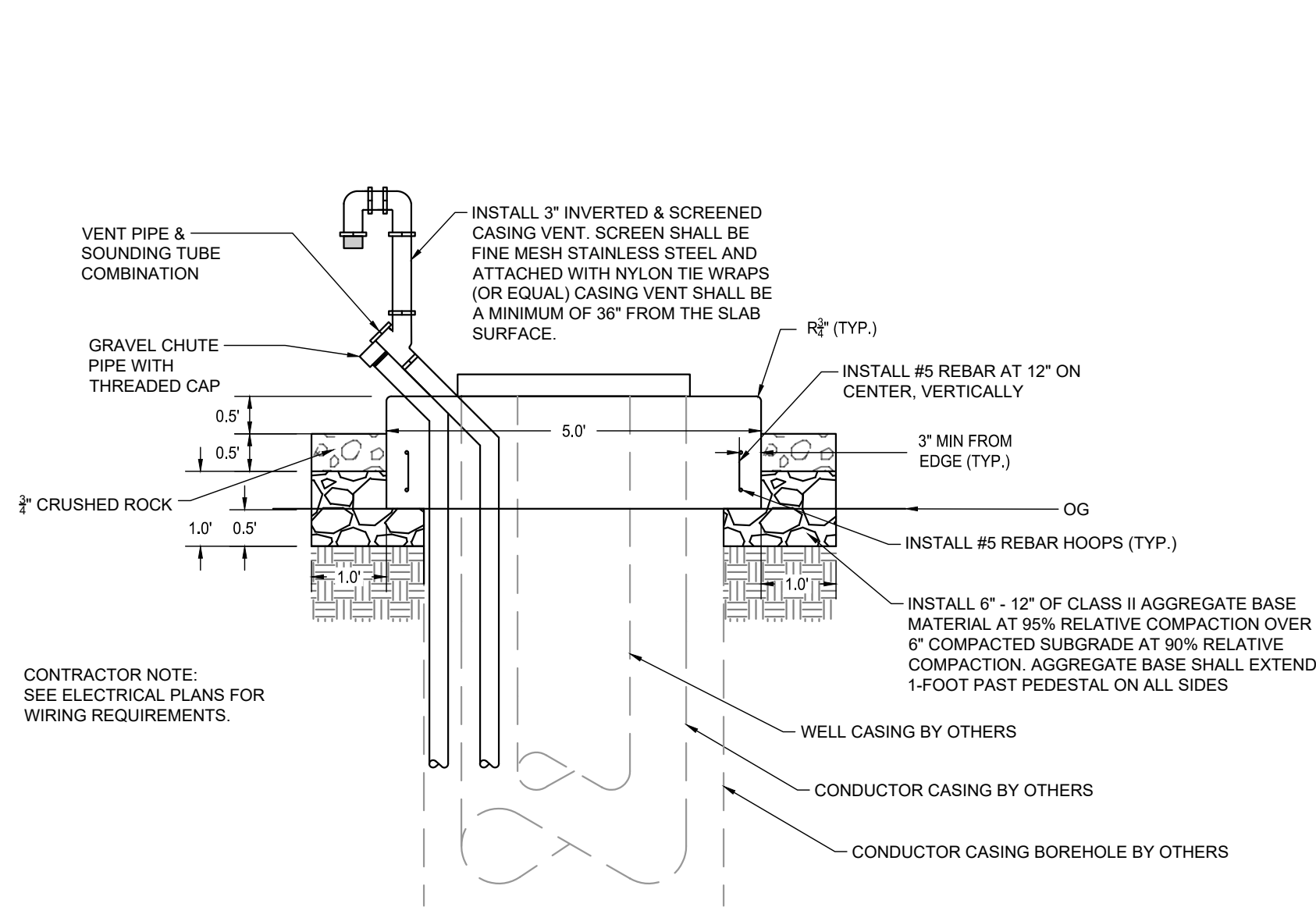
DETAIL 3 - REMOVABLE POSTS
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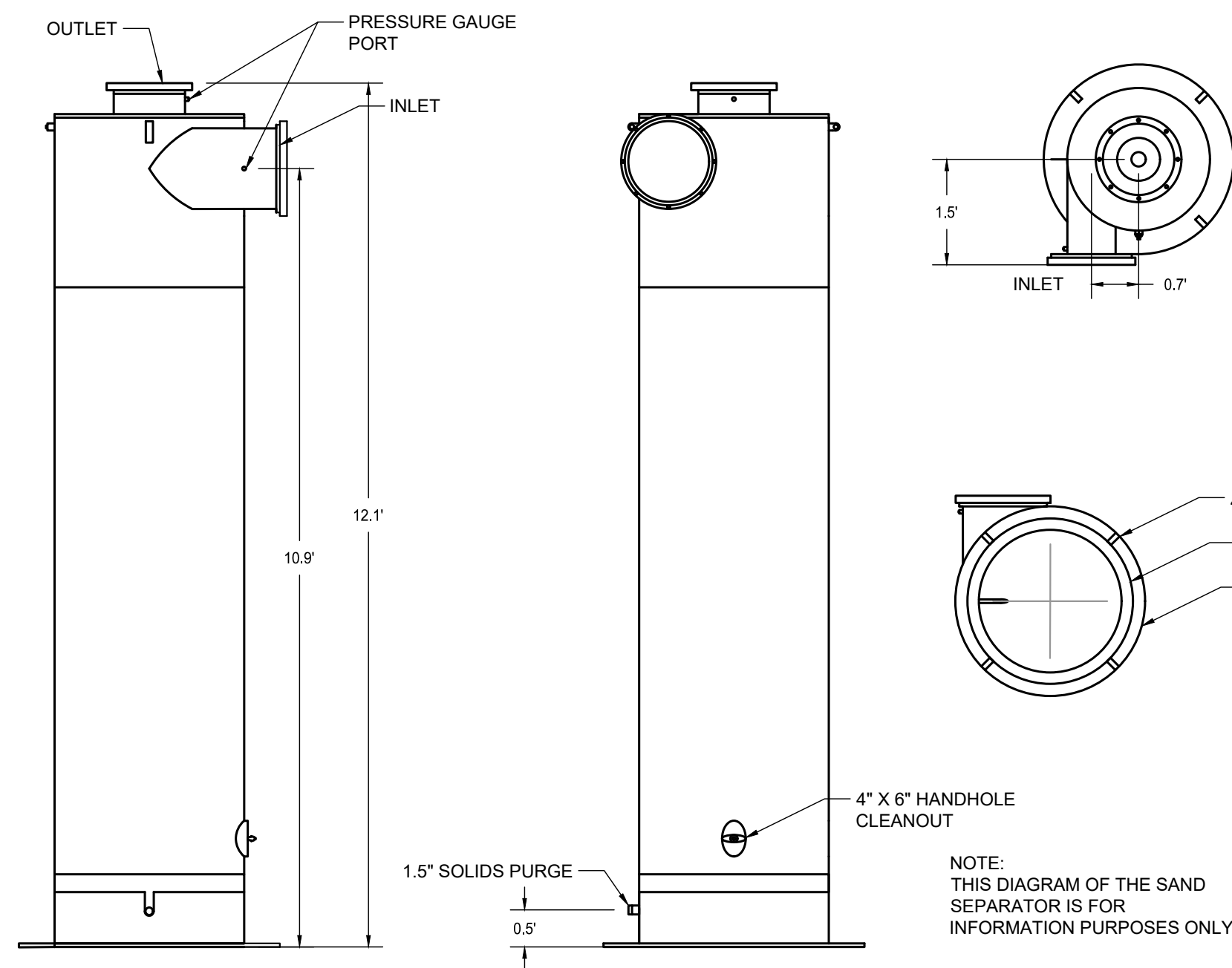
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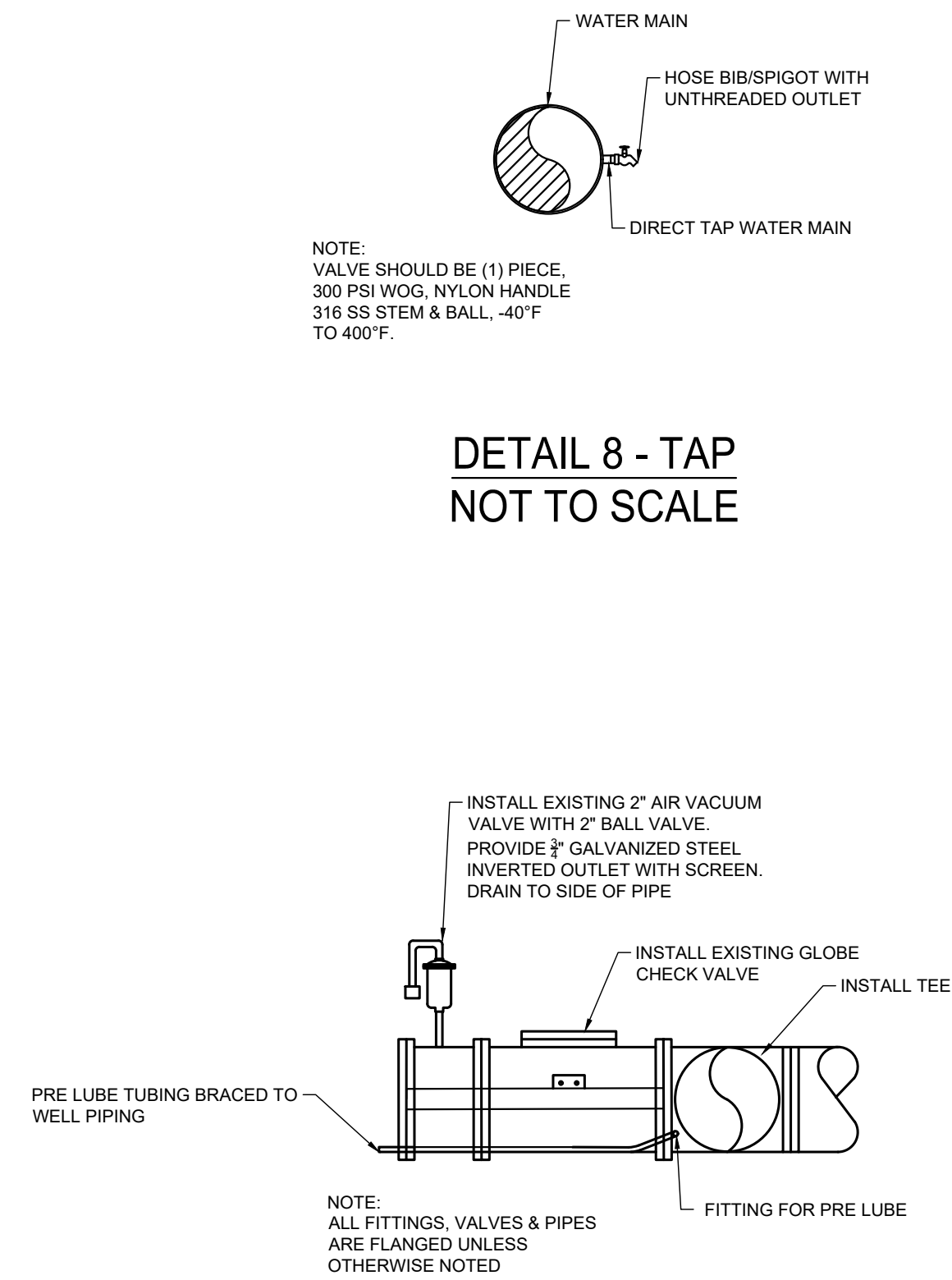
DETAIL 5 - MOW STRIP
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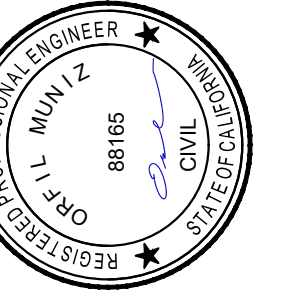
DETAIL 6 - PUMP PEDESTAL
NOT TO SCALE



DETAIL 7 - SAND SEPARATOR
NOT TO SCALE



DETAIL 9 - CONTROL VALVE DETAILS
NOT TO SCALE



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ENGINEERING PLANS FOR:
CORCORAN WELL 8C
WATER QUALITY IMPROVEMENTS
SHEET TITLE:
CONSTRUCTION DETAILS

REVISIONS

NO.

SCALE: N. T. S.
JOB NO: 220_005
QA/QC: JA
FILE: 220_005_DETAILS.DWG
DATE: 2/27/2023



SHEET NO.

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OF 7

