

CONSTRUCTION PLANS
FOR
COMMERCIAL DEVELOPMENT AREA
WATER & WASTEWATER INFRASTRUCTURE
ZUNI PUEBLO, NM
MAY 2015
INDEX

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19	10-W-03	WATER PLAN AND PROFILE - STA 43+00 TO STA 67+00			
20	10-W-04	WATER PLAN AND PROFILE - STA 67+00 TO STA 90+00			
21	10-W-05	WATER PLAN AND PROFILE - STA 90+00 TO STA 114+00			


* NOT IN CONTRACT (N.I.C.)

FUNDING SOURCES

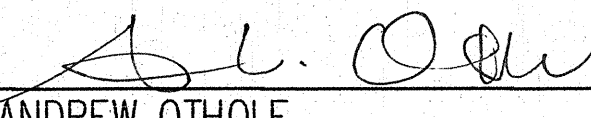
SAP 14-1656-STB
TIF 14TIF29

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

APPROVED:


HONORABLE VAL R. PANTEAH, SR.
GOVERNOR OF ZUNI

JUNE 10, 2015
DATE


ANDREW OTHOLE
DIRECTOR, OFFICE OF PLANNING AND DEVELOPMENT

6/10/15
DATE

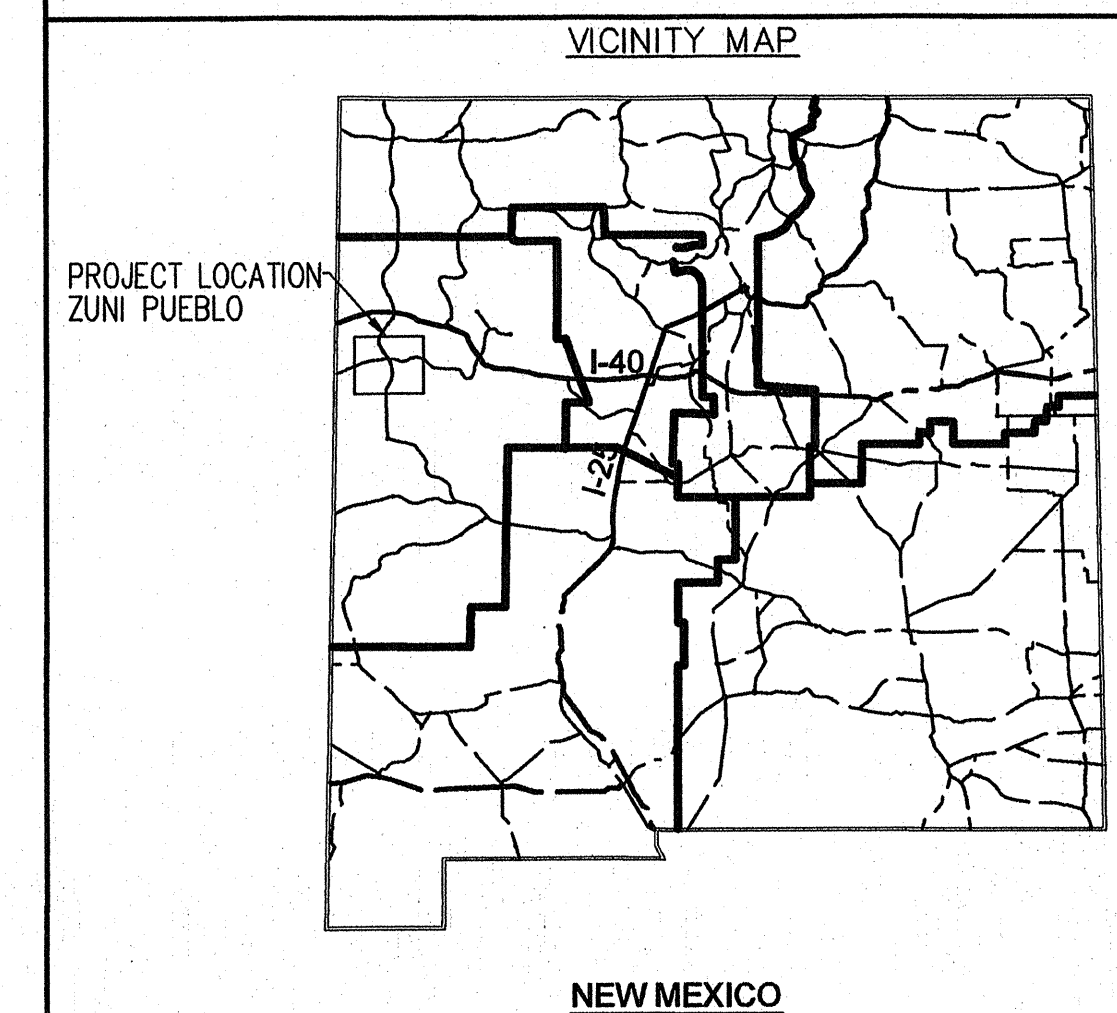
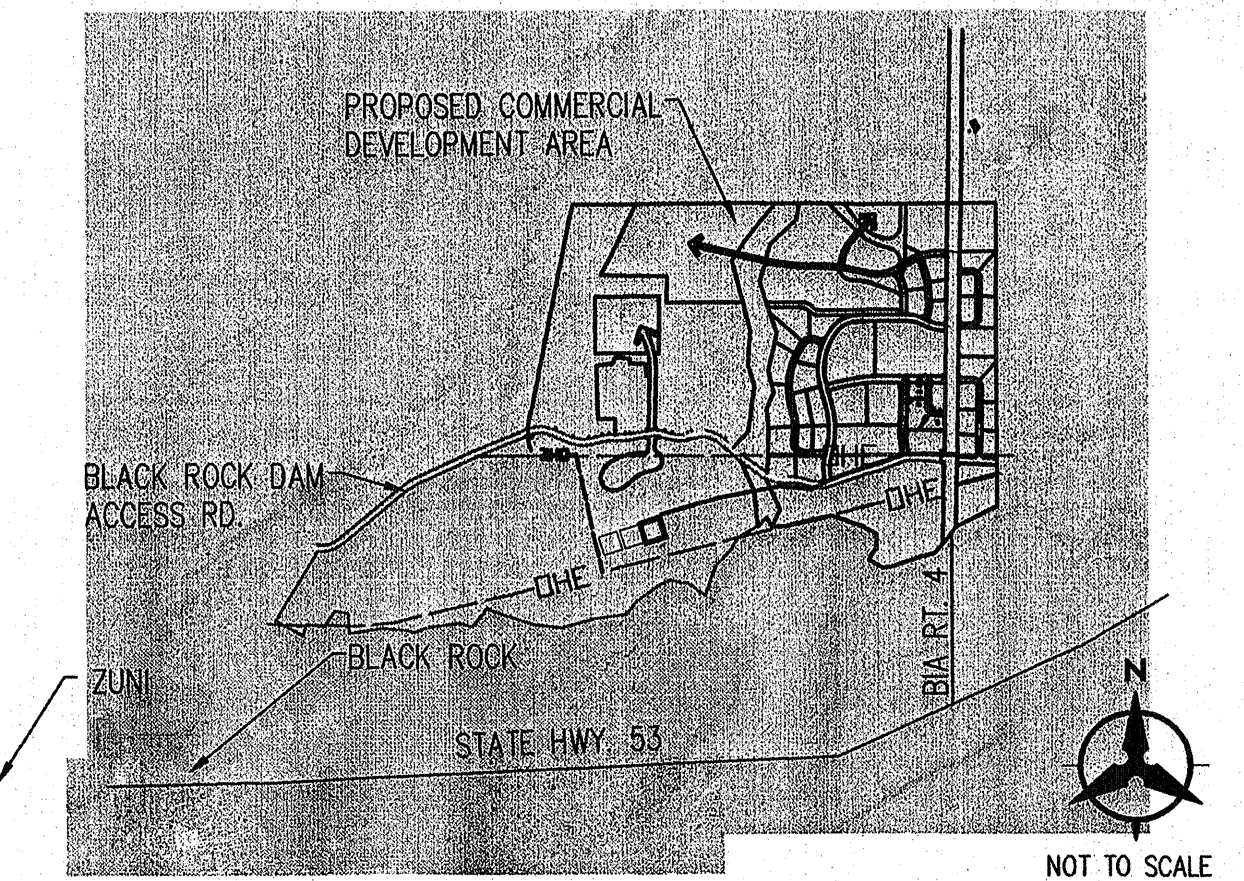


ZUNI UTILITY INFRASTRUCTURE
COVER SHEET

PROJECT NO.
20150380

DRAWING NO.
01-G-01

SHEET 1 OF 36



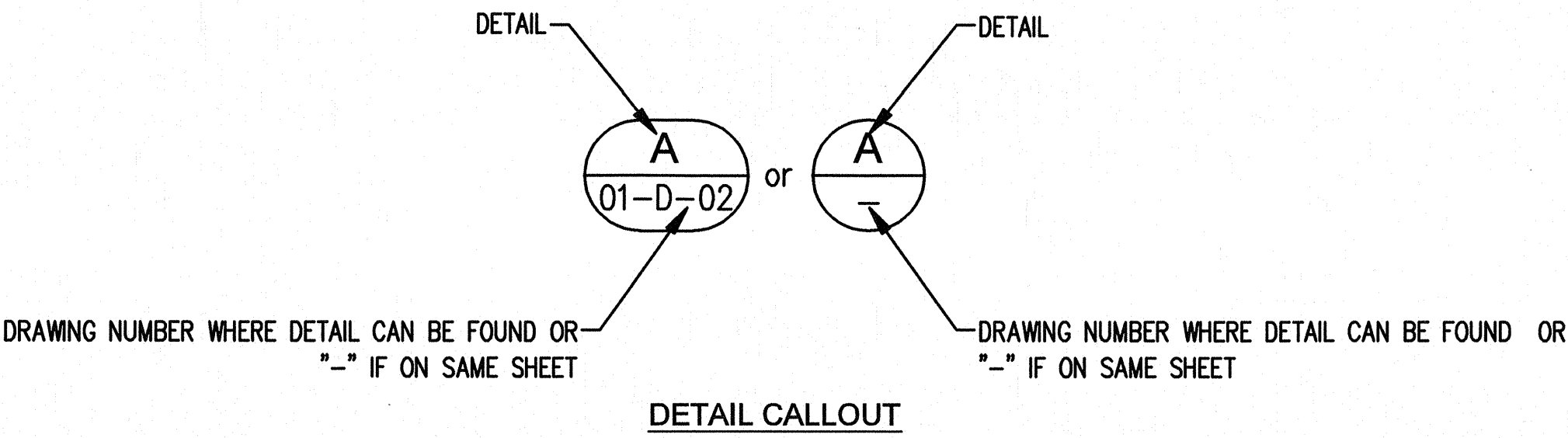
GENERAL NOTES

1. ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS.
2. PRIOR TO CONSTRUCTION ACTIVITIES, VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES AND OBSTRUCTIONS WITH POTENTIAL TO CHANGE PIPE ALIGNMENT. ALL EXISTING UTILITY ELEVATION DATA REPRESENTED ON THE PROFILE ARE APPROXIMATE.
3. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. COORDINATE ALL NECESSARY UTILITY ADJUSTMENTS. COSTS SHALL BE INCIDENTAL TO THE PROJECT.
4. DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL AND UNSUITABLE MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OWNER.
5. PROTECT THE EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL IMMEDIATELY BE REPAIRED OR REPLACED BY CONTRACTOR AT CONTRACTOR'S EXPENSE
6. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE RIGHT-OF-WAY, PROPERTY LIMITS AND/OR CONSTRUCTION WORK ZONE AS SHOWN ON DRAWINGS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT CONTRACTOR'S EXPENSE.
7. EXCEPT AS SET FORTH IN THE SPECIFICATIONS, OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E. BARRICADING, SURFACE DISTURBANCE)
8. CONTRACTOR SHALL REPLACE ANY AND ALL SURVEY MONUMENTS DESTROYED DURING CONSTRUCTION. ALL MONUMENTS MUST BE RESET BY A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR.
9. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), U.S. DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
10. MAINTAIN ALL CONSTRUCTION TRAFFIC CONTROL DEVICES AND SIGNING AT ALL TIMES. VERIFY THE PROPER LOCATION OF ALL TRAFFIC CONTROL AT THE END AND BEGINNING OF EACH DAY.
11. ALL SAWCUT PAVEMENT SHALL HAVE A UNIFORM EDGE AND BE SPRAYED WITH A TACK COAT PRIOR TO PAVEMENT PLACEMENT.
12. USE PARALLEL OR ORTHOGONAL PAVEMENT CUTS ONLY, NO DIAGONAL CUTS IN EXISTING PAVEMENT.
13. TRAFFIC CONTROL PLANS PREPARED BY CONTRACTOR SHALL BE SUBMITTED TO BIA FOR REVIEW AND APPROVAL.
14. ALL SHRUBBERY OR TREES REQUIRED TO BE REMOVED FOR THIS PROJECT SHALL BE BUCKED OR MULCHED AND DELIVERED TO ZUNI ENVIRONMENTAL PROTECTION PROGRAM YARD WASTE DISPOSAL SITE.
15. CONSTRUCTION TRAFFIC SHALL BE LIMITED TO BLACK ROCK DAM ACCESS ROAD (Z-25).

16. RIGHT-OF-WAY SHOWN ON THESE PLANS ARE FROM THE PLAT FOR ZUNI COMMERCIAL PARK, PREPARED BY MILFORD T. KEENE DATED JUNE 29, 2001, NAPSJ NO. 248NM0401 B. THE PLAT FOR BIA RD. Z-25 IS AVAILABLE FROM THE OWNER.
17. SUPPORT EXPOSED EXISTING UTILITIES SUSPENDED ACROSS OR PARALLEL WITH TRENCH EXCAVATION.
18. UTILIZE CONTROLLED LOW STRENGTH FILL PER NMAPWA SECTION 207 WHEREVER BACKFILL MATERIAL CAN NOT BE PLACED AND COMPACTED BETWEEN THE NEW PIPELINE AND EXISTING UTILITIES OR IF THE VERTICAL SEPARATION BETWEEN THE NEW PIPE LINE AND EXISTING UTILITY IS LESS THAN 12 INCHES.
19. USE CAUTION AT ALL EXISTING STRUCTURES INCLUDING ALL MASONRY WALLS, BUILDING, ETC. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY DAMAGE TO ANY STRUCTURES CAUSED BY THE CONTRACTOR'S OPERATIONS.
20. TEMPORARY DRAINAGE MEASURES SHALL BE PROVIDED AS NECESSARY TO SAFELY CONVEY STORM WATER RUNOFF TO EXISTING OUTFALLS INCLUDING SILT FENCES AND SEDIMENT CONTROL MEASURES. REPAIR ANY DAMAGE RESULTING FROM STORM WATER FLOWS TO PRIVATE PROPERTY OR IMPROVEMENTS CONSTRUCTED BY THE CONTRACTOR. PREPARATION AND EXECUTION OF THE SWPPP IS THE RESPONSIBILITY OF THE CONTRACTOR.
21. BEARINGS ARE GRID AND DISTANCES ARE GROUND.
22. ALL BURIED DUCTILE IRON SHALL BE ENCASED IN POLYETHYLENE SHEETING.
23. FOR PIPELINE TRENCH EXCAVATION, UTILIZE METHODS AND PROCEDURES OUTLINED IN THE OSHA REGULATIONS STANDARD NO. 1926 . TRENCH SUPPORT AND TEMPORARY SHORING MAY BE REQUIRED FOR PIPELINE CONSTRUCTION IN CERTAIN AREAS ALONG THE ALIGNMENT TO SATISFY CONSTRAINTS IDENTIFIED IN THE DRAWINGS FOR LIMITS OF DISTURBANCE, PROTECTION OF EXISTING UTILITIES, TRAFFIC CONTROL, ETC. AND SHALL BE DESIGNED BY CONTRACTOR TO ADHERE TO OSHA STANDARDS.
24. CONTRACTOR TO MAINTAIN RED-LINED RECORD DRAWNGS PER THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. HORIZONTAL AND VERTICAL LOCATIONS OF FACILITIES INSTALLED SHALL BE PROVIDED BY A LICENSED SURVEYOR.
25. CONTRACTOR SHALL CONTRACT WITH CERTIFIED TESTING LABORATORY TO PERFORM FIELD DENSITY TESTS OR SOIL SAMPLING DURING CONSTRUCTION.
26. EXISTING VALVES SHALL ONLY BE OPERATED BY THE OWNER. CONTRACTOR SHALL PROVIDE A MINIMUM 7 DAY NOTICE TO THE OWNER WHEN A SHUT-OFF IS REQUIRED.
27. FULL LENGTH OF PIPE (18-20 FEET) SHALL BE INSTALLED ON EACH BRANCH SIDE OF ALL TEES AND BENDS.
28. AT EACH INSTALLED CAP, WHERE THE WATER DISTRIBUTION LINE IS INTENDED TO BE EXTENDED AT A LATER DATE, A 4"x4"x4' PRESSURE TREATED TIMBER, SHALL BE INSTALLED IN A VERTICAL ORIENTATION WITH THE TOP OF THE TIMBER SET AT FINISH GRADE.
29. CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF ZUNI CULTURAL RESOURCES ENTERPRISE (ZCRE) REGARDING TREATMENT OF ARCHAEOLOGICAL SITES. A REPRESENTATIVE OF ZCRE WILL MONITOR INITIAL GROUND DISTURBING INCLUDING CLEARING AND GRUBBING AND INITIAL EARTHWORK OR TRENCHING AT OR NEAR KNOWN ARCHAEOLOGICAL SITES. CONTACT KURT DONGOSKE OF ZCRE AT (505) 782-4814.
30. STANDARD SPECIFICATIONS AND STANDARD DETAILS REFERENCED IN THIS PROJECT ARE PER NM APWA, LATEST EDITION.
31. MONITORING WELLS EXIST THROUGHOUT THE BLACK ROCK DAM AREA. LOCATIONS SHALL BE VERIFIED WITH BIA AND SHALL NOT BE DISTURBED. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING MONITORING WELLS TO PRE-CONSTRUCTION CONDITION.

LEGEND/ABBREVIATIONS

	PROPERTY BOUNDARY
	CHAIN LINK FENCE
CAV	COMBINATION AIR RELEASE VALVE
DI	DUCTILE IRON
PVC	POLYVINYL CHLORIDE
OHE	OVEHEAD ELECTRIC
WL	WATERLINE
FOC	FIBER OPTIC
	GATE VALVE
	FIRE HYDRANT
	CAV



CONTACT INFORMATION

COMPANY	UTILITY/ROLE	CONTACT NAME AND #
CENTURY LINK	TELEPHONE	BOBBY HAMM 505-782-4467
ZUNI ENVIRONMENTAL PROTECTION AGENCY	YARD WASTE DISPOSAL SITE	505-782-2484
ZUNI CULTURAL RESOURCE ENTERPRISE	ARCH. SITE MONITORING	KURT DONGOSKE 505-782-4814
ZUNI UTILITY SERVICE DEPARTMENT	WATER/SEWER	STRALLIE EDAAKIE 505-782-5654
CONTINENTAL DIVIDE	ELECTRIC	BRUCE PRICHARD 505-285-6656
BUREAU OF RECLAMATION	FUNDING AGENCY	RANDY KUZNIAKOWSKII 303-445-3043
BUREAU OF INDIAN AFFAIRS	ADMIN. AGENCY	HOLLY O'GRADY 505-563-3404
NMED	AGENCY	DAVID BISHOP 505-222-9567
BUREAU OF INDIAN AFFAIRS	ZUNI SUPERINTENDENT	CLAYTON SEOUTEWA 505-782-7271

Bohannon Huston
www.bhinc.com 800.877.5332



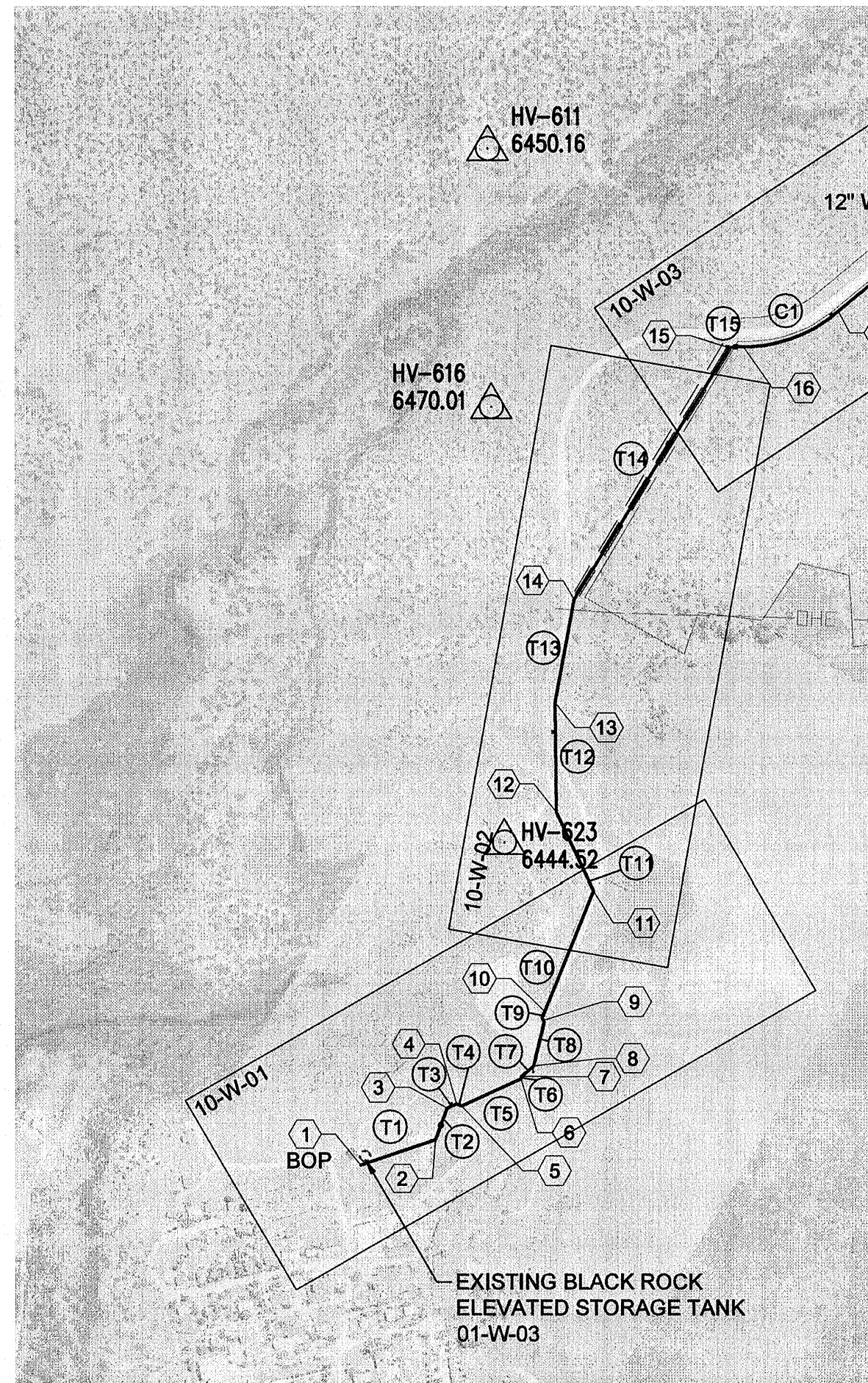
ZUNI UTILITY INFRASTRUCTURE
GENERAL NOTES AND LEGEND

PROJECT NO. 20150380	DRAWING NO. 01-G-02	SHEET 2 OF 36
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NOTICE OF EXTENDED PAYMENT PROVISION.
THIS CONTRACT ALLOWS THE OWNER TO MAKE
PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
OF AN UNDISPUTED REQUEST FOR PAYMENT.

Tangent Table			Tangent Table		
ID	BEARING	LENGTH	ID	BEARING	LENGTH
T1	N71°26'11"E	333.43'	T25	S67°03'12"E	291.43'
T2	N20°28'27"E	144.11'	T26	N77°47'40"E	214.30'
T3	N65°28'27"E	44.71'	T27	N88°57'14"E	254.36'
T4	S69°31'33"E	22.55'	T28	N79°14'16"E	270.34'
T5	N65°28'27"E	276.47'	T29	S72°09'58"E	115.11'
T6	N20°28'27"E	10.11'	T30	N71°58'50"E	63.21'
T7	N48°09'07"E	69.61'	T31	S48°22'08"E	389.62'
T8	N13°12'13"E	190.70'	T32	S89°50'16"E	2428.25'
T9	N22°06'19"W	19.80'	T33	N62°40'52"E	32.74'
T10	N21°58'50"E	582.21'	T34	S89°49'32"E	625.87'
T11	N25°25'21"W	366.43'	T35	N01°00'00"E	3919.10'
T12	N00°40'29"W	469.53'	T36	N89°49'39"E	304.41'
T13	N10°38'50"E	447.77'	T37	N02°18'41"E	1150.33'
T14	N31°35'12"E	1257.82'	T38	N60°25'08"E	103.26'
T15	N79°20'44"E	26.90'			
T16	N50°28'31"E	1248.25'			
T17	N64°52'22"E	1004.38'			
T18	N67°52'10"E	773.06'			
T19	S67°07'50"E	49.42'			
T20	N67°52'10"E	25.00'			
T21	N67°52'10"E	49.83'			
T22	N22°52'10"E	14.06'			
T23	N22°07'50"W	155.72'			
T24	N22°52'10"E	14.14'			

Curve Table						
ID	ARC	RADIUS	DELTA	TANGENT	CHORD BEARING	CHORD LENGTH
C1	473.06'	608.06'	44°34'32"	249.23'	N70°53'00"E	461.22'
C2	242.32'	930.00'	14°55'44"	121.85'	N57°45'25"E	241.63'
C3	414.00'	578.87'	40°58'38"	216.30'	S87°31'12"E	405.23'
C4	257.68'	420.00'	35°09'07"	133.04'	S84°37'47"E	253.65'
C5	112.97'	580.00'	11°09'34"	56.66'	N83°22'27"E	112.79'
C6	71.22'	420.00'	09°42'58"	35.70'	N84°05'45"E	71.14'
C7	289.48'	580.00'	28°35'47"	147.82'	S86°27'52"E	286.48'
C8	244.05'	391.42'	35°43'26"	126.14'	N89°54'26"E	240.12'
C9	572.73'	548.71'	59°48'15"	315.55'	S78°11'49"E	547.08'
C10	320.25'	905.00'	20°16'29"	161.81'	N05°51'07"W	318.58'
C11	366.62'	2905.00'	07°13'51"	183.55'	N02°46'11"E	366.37'
C12	140.61'	1295.00'	06°13'16"	70.37'	N03°16'28"E	140.54'
C13	200.70'	1295.00'	08°52'47"	100.55'	N04°16'34"W	200.50'



MAIN WATERLINE

Point Table			
STATION	NORTHING	EASTING	
1+00.00	1489920.22	2437661.82	
2	4+33.43	1490026.37	2437977.90
3	5+77.55	1490161.38	2438028.31
4	6+22.25	1490179.94	2438068.98
5	6+44.80	1490172.05	2438090.11
6	9+21.27	1490286.82	2438341.63
7	9+31.39	1490296.29	2438345.17
8	10+00.99	1490342.73	2438397.02
9	11+91.63	1490528.41	2438440.22
10	12+10.02	1490546.75	2438432.77
11	17+90.45	1491086.64	2438650.68
12	21+56.89	1491417.59	2438493.37
13	26+26.42	1491887.08	2438487.84
14	30+74.19	1492327.15	2438570.57
15	43+32.01	1493398.62	2439229.40
16	43+92.56	1493402.67	2439289.48

Point Table			
STATION	NORTHING	EASTING	
17	48+31.97	1493554.64	2439691.63
18	60+80.22	1494349.04	2440654.46
19	63+22.54	1494477.95	2440858.84
20	73+26.91	1494904.44	2441768.17
21	80+99.98	1495195.67	2442484.27
22	81+49.40	1495176.46	2442529.81
23	82+24.23	1495208.61	2442608.86
24	82+38.30	1495221.57	2442614.32
25	84+00.99	1495380.09	2442555.39
26	NOT USED	NOT USED	NOT USED
27	88+22.16	1495361.31	2442966.01
28	91+13.59	1495247.69	2443234.38
29	93+71.27	1495223.95	2443486.92
30	95+85.57	1495269.26	2443696.38
31	96+98.54	1495282.28	2443808.41
32	99+52.90	1495286.92	2444062.73

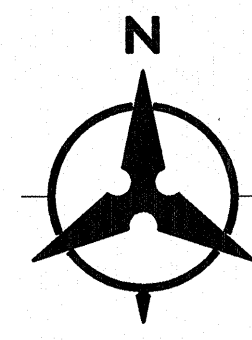
Point Table			
STATION	NORTHING	EASTING	
33	100+24.12	1495294.24	2444133.49
34	102+94.46	1495344.72	2444399.07
35	105+83.94	1495327.05	2444685.01
36	106+99.05	1495291.80	2444794.59
37	109+43.10	1495292.19	2445034.71
38	110+06.31	1495311.74	2445094.82
39	115+79.04	1495199.84	2445630.33
40	119+68.66	1494941.00	2445921.55
41	143+96.92	1494934.12	2448349.79
42	144+29.65	1494949.14	2448378.88
43	150+55.38	1494947.24	2449004.75
44	NOT USED	NOT USED	NOT USED
45	189+67.25	1498865.74	2449073.15
46	192+71.66	1498866.66	2449377.55
47	204+21.99	1500016.06	2449423.95
48	205+25.26	1500067.03	2449513.75

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

NOTES:

- CONTROL POINTS SHOWN ON THIS DRAWING ARE BASED ON FIELD SURVEY DATA FURNISHED BY SURVEYING CONTROL, INC., ALBUQUERQUE, NEW MEXICO.
- AERIAL PHOTOGRAPHY EXPOSED ON JUNE 14, 2007 BY NEW MEXICO AERIAL SURVEYS, INC., ALBUQUERQUE, NEW MEXICO, UTILIZING A ZEISS TOP 15 AERIAL MAPPING CAMERA WITH A CALIBRATED FOCAL LENGTH OF 152.757 mm.
- COORDINATES ARE MODIFIED (SURFACE) NEW MEXICO STATE PLANE COORDINATES, WEST ZONE, NAD 83(HARN), AND HAVE BEEN ADJUSTED TO THE NGS "B" ORDER CONTROL STATION "ZUNIPOINT". TO OBTAIN TRUE STATE PLANE GRID COORDINATES, MULTIPLY BY THE PROJECT AVERAGE COMBINED FACTOR CF = 0.999729248. THE ELEVATIONS ARE REFERRED TO SEA LEVEL, NAVD 88, AND HAVE BEEN ADJUSTED TO THE NGS 2ND ORDER BENCHMARK "R-217". ALL VALUES ARE EXPRESSED IN US SURVEY FEET.

CONTROL POINTS		
	NORTHING	EASTING
HV-601	1498108.77	2442866.28
HV-602	1498197.57	2446366.16
HV-603	1498179.88	2449972.04
HV-604	1497478.27	2446282.61
HV-605	1496085.32	2441307.35
HV-606	1496654.15	2442789.42
HV-607	1496636.61	2446315.72
HV-608	1496664.60	2450008.60
HV-609	1495805.02	2444517.63
HV-610	1495838.26	2447766.88
HV-611	1494247.65	2438203.55
HV-612	1494883.19	2441281.38
HV-613	1494827.37	2443931.48
HV-614	1494855.58	2446639.14
HV-615	1494878.41	2449963.99
HV-616	1493148.89	2438219.68
HV-617	1493079.37	2440717.20
HV-618	1493848.84	2441370.58
HV-619	1493092.21	2443574.44
HV-620	1493914.72	2444635.24
HV-621	1493077.07	2446602.93
HV-622	1493217.16	2449749.34
HV-623	1491289.75	2438273.46
HV-624	1491521.80	2441331.65
HV-625	1492382.45	2443438.23
HV-626	1491645.78	2446525.17



0 300 600 1200
SCALE: 1"=600'

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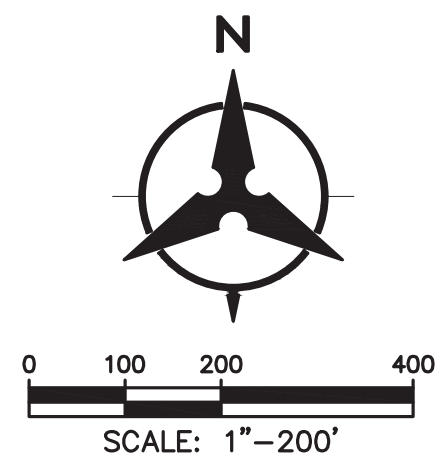


**ZUNI UTILITY INFRASTRUCTURE
OVERALL WATER KEY MAP AND SURVEY CONTROL**

PROJECT NO. 20150380	DRAWING NO. 01-G-03	SHEET 3 OF 36
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Tangent Table		
ID	BEARING	LENGTH
T1	N74°09'59"E	518.65'
T2	N74°44'23"E	414.37'
T3	N79°27'02"E	952.99'
T4	S85°20'29"E	499.88'
T5	N63°15'42"E	352.29'
T6	N70°10'04"E	236.99'
T7	N71°30'57"E	313.86'
T8	N73°08'13"E	318.32'
T9	N68°17'16"E	319.30'
T10	N69°50'38"E	611.86'
T11	N06°29'09"W	738.69'
T12	N03°30'35"E	473.30'
T13	N00°59'56"E	287.43'
T14	N35°08'04"E	328.08'
T15	N22°59'42"W	1209.60'
T16	N00°57'45"E	400.80'
T17	S89°42'22"E	272.90'
T18	S84°36'04"E	387.16'

Tangent Table		
ID	BEARING	LENGTH
T33	N62°40'52"E	32.74'
T34	S89°49'32"E	612.81'
T35	N46°40'57"E	18.26'
T36	N01°00'00"E	3906.53'
T37	N89°49'39"E	304.41'
T38	N02°18'41"E	1150.33'
T39	N60°25'08"E	103.26'
T40	N00°04'04"E	27.12'
T41	N06°29'45"W	60.92'
T42	N00°39'08"E	87.74'
T43	N89°56'03"E	603.52'
T44	N89°00'28"W	171.49'
T45	N48°41'18"W	72.80'
T46	N00°59'32"E	497.92'



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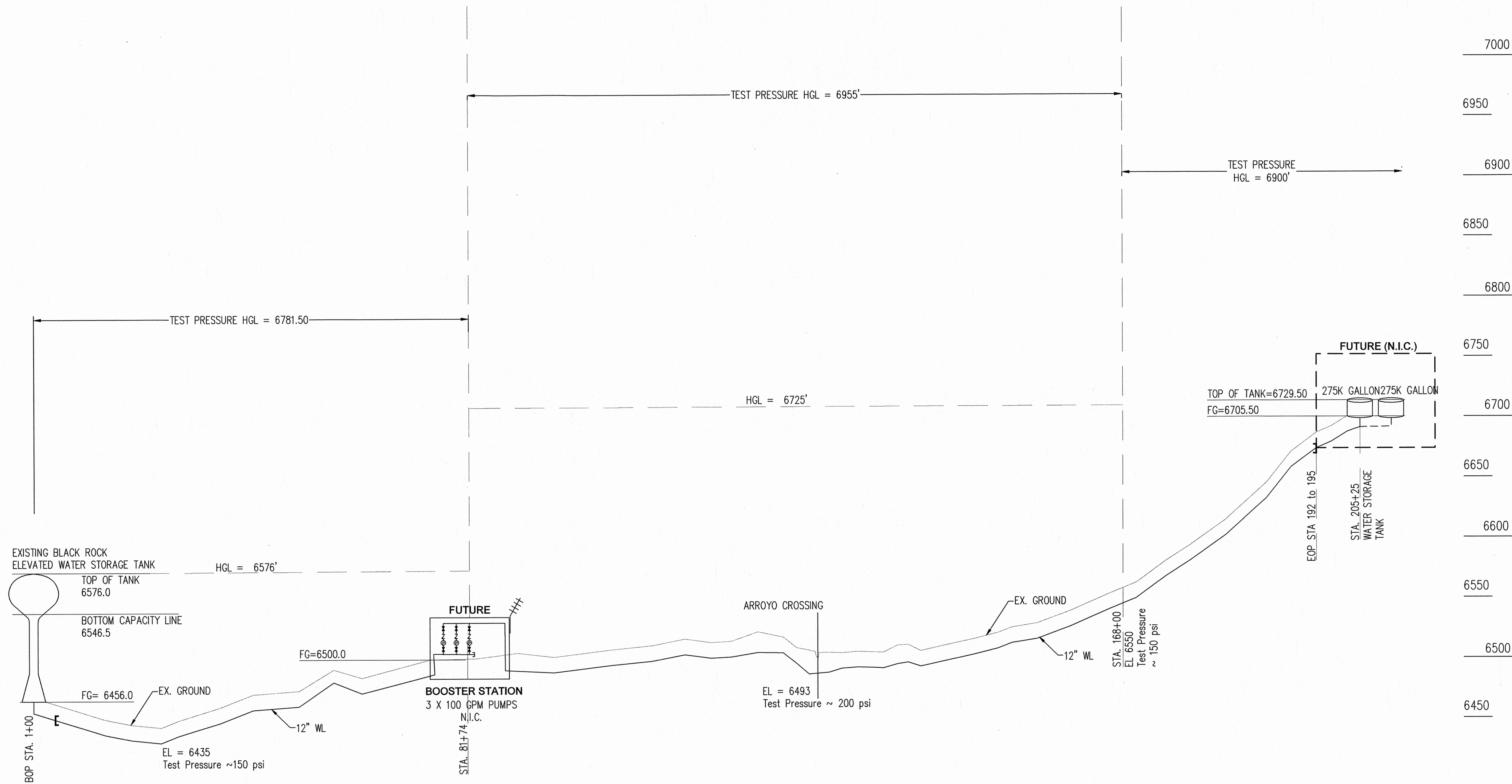
ZUNI UTILITY INFRASTRUCTURE

OVERALL WASTEWATER KEY MAP AND WATER PHASE I KEY MAP

PROJECT NO. 20150380	DRAWING NO. 01-G-04	SHEET 4	OF 36
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[illegible]

P:\20150380\WR\Design\plans\N.I.C. FOR PLOT WITH SET\20150380-4-INDEX-sas-NIC.dwg
21-May-2015 - 4:34:pm, Plotted by: JGIROD



NOTES:

- BOOSTER STATION LOW LEVEL SHUTOFF REQUIRES COMMUNICATION WITH EXISTING BLACK ROCK TANK.
- BOOSTER PUMPS TO BE CONTROLLED BASED ON DISCHARGE PRESSURES AT BOOSTER STATION SITE.
- TANK LEVEL TO BE CONTROLLED BY HYDRAULIC ALTITUDE VALVE AT TANK SITE.
- SEE SUPPLEMENTAL TECHNICAL SPECIFICATIONS SECTIONS 11200 AND 16900 FOR FURTHER DESCRIPTION OF CONTROLS.

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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ZUNI UTILITY INFRASTRUCTURE
WATER SYSTEM HYDRAULIC PROFILE

PROJECT NO. 20150380 DRAWING NO. 01-G-05 SHEET 5 OF 36

ENGINEER'S SEAL		AS-BUILT INFORMATION				
	CONTRACTOR	DATE	CONTRACTOR	DATE	CONTRACTOR	DATE
	WORK STARTED BY	DATE	WORK STARTED BY	DATE	WORK STARTED BY	DATE
	INSPECTOR'S ACCEPTANCE BY	DATE	INSPECTOR'S ACCEPTANCE BY	DATE	INSPECTOR'S ACCEPTANCE BY	DATE
	FIELD VERIFICATION BY	DATE	FIELD VERIFICATION BY	DATE	FIELD VERIFICATION BY	DATE
	DRAWINGS CORRECTED BY	DATE	DRAWINGS CORRECTED BY	DATE	DRAWINGS CORRECTED BY	DATE

NO.	DATE	REVISIONS	BY
1		DESIGN	J.C.S.
2		DESIGN	J.C.S.
3		DESIGN	J.C.S.
4		DESIGN	J.C.S.
5		DESIGN	J.C.S.
6		DESIGN	J.C.S.
7		DESIGN	J.C.S.
8		DESIGN	J.C.S.
9		DESIGN	J.C.S.
10		DESIGN	J.C.S.

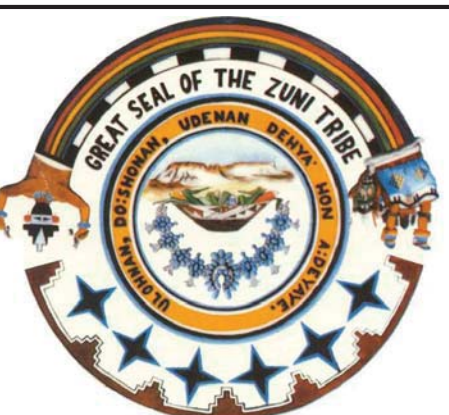


- LEGEND**
- PROPERTY LINE/EDGE OF ROW
 - - - - 5301 - - - - EXISTING CONTOURS
 - 65.23 PROPOSED SPOT ELEVATION
EX=EXISTING, TG=TOP OF GRADE
 - - - - EXISTING DIRT ROAD
 - SD PROPOSED STORM DRAIN LINE
 - WL PROPOSED WATER LINE
 - PROPOSED VALVE
 - FL PROPOSED FIRE LINE
 - PROPOSED HYDRANT
 - PROPOSED CAP
 - PROPOSED WATER METER
 - PROPOSED GATE VALVE
 - Z PROPOSED CHECK VALVE
 - P PROPOSED PUMP

- KEYED NOTES**
- CONSTRUCT GRAVEL DRIVEWAY PER DETAIL 4, SHEET 01-C-01.
 - CHAINLINK FENCE AND GATE PER STD DWG 2252.
 - PACKAGE BOOSTER PUMP STATION AND ENCLOSURE (EFI NO. 0623-01 OR APPROVED EQUAL) PER DWG 01-W-02.
 - FIRE HYDRANT PER STD DWG 2340.
 - GRADE EXISTING DITCH FOR LOW WATER CROSSING AND SITE ACCESS.
 - PROPOSED OVERHEAD ELECTRIC LINE. COORDINATE ELECTRIC SERVICE CONNECTION WITH UTILITY COMPANY. 3Ø POWER REQUIRED FOR BOOSTER STATION FACILITY. EXTENSION OF POWER BY OWNER.
 - 12" GATE VALVE, BOX AND COVER PER STD. DWG. 2326. RESTRAIN ALL JOINTS. PER DWG 10-W-4
 - GRAVEL PAVEMENT WITH FILTER FABRIC PER DETAIL 4, SHEET 01-C-01.
 - 2'X2'X2' GRAVEL SUMP ASTM C33 NO. 57 GRAVEL
 - 4" DRAIN

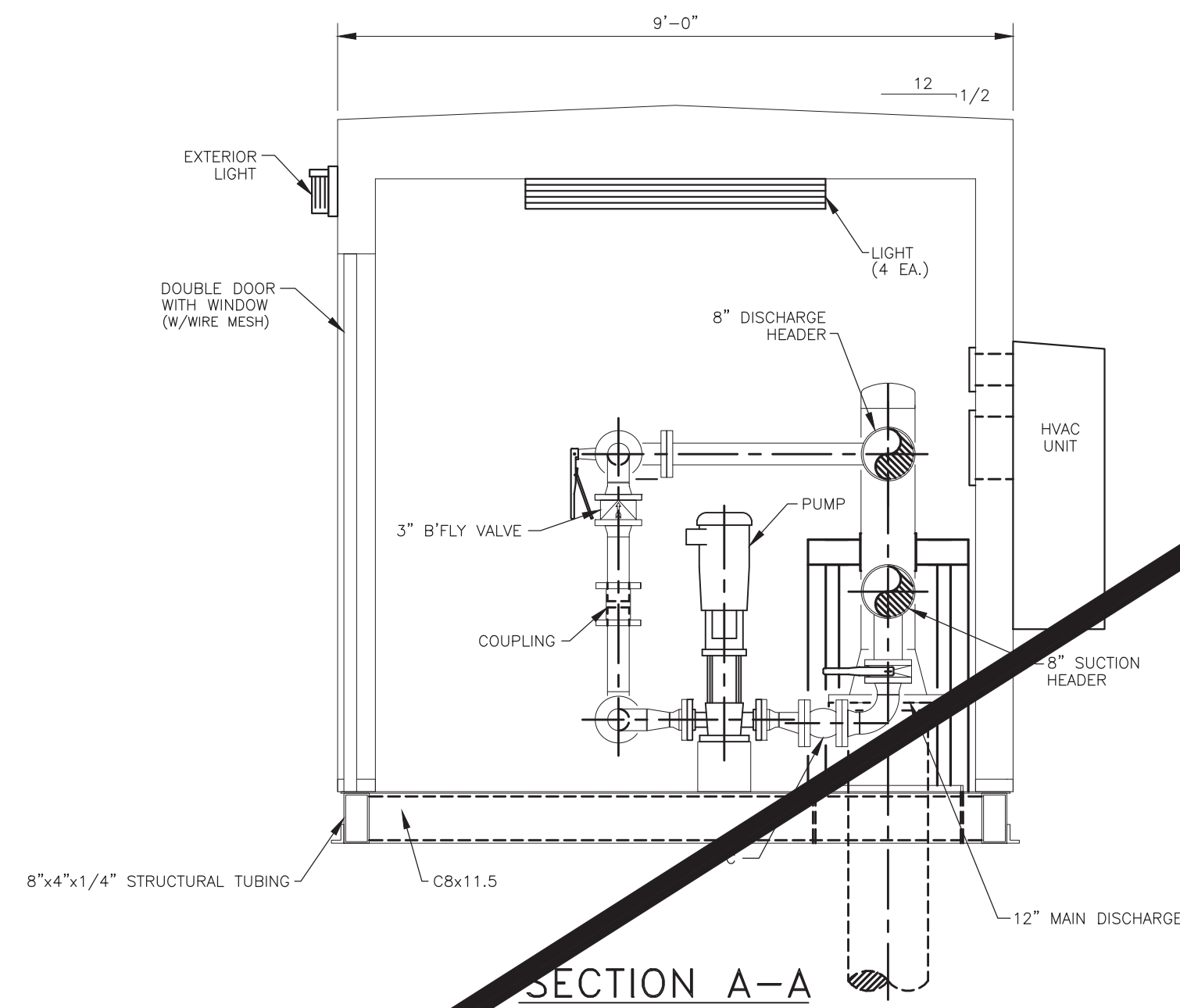
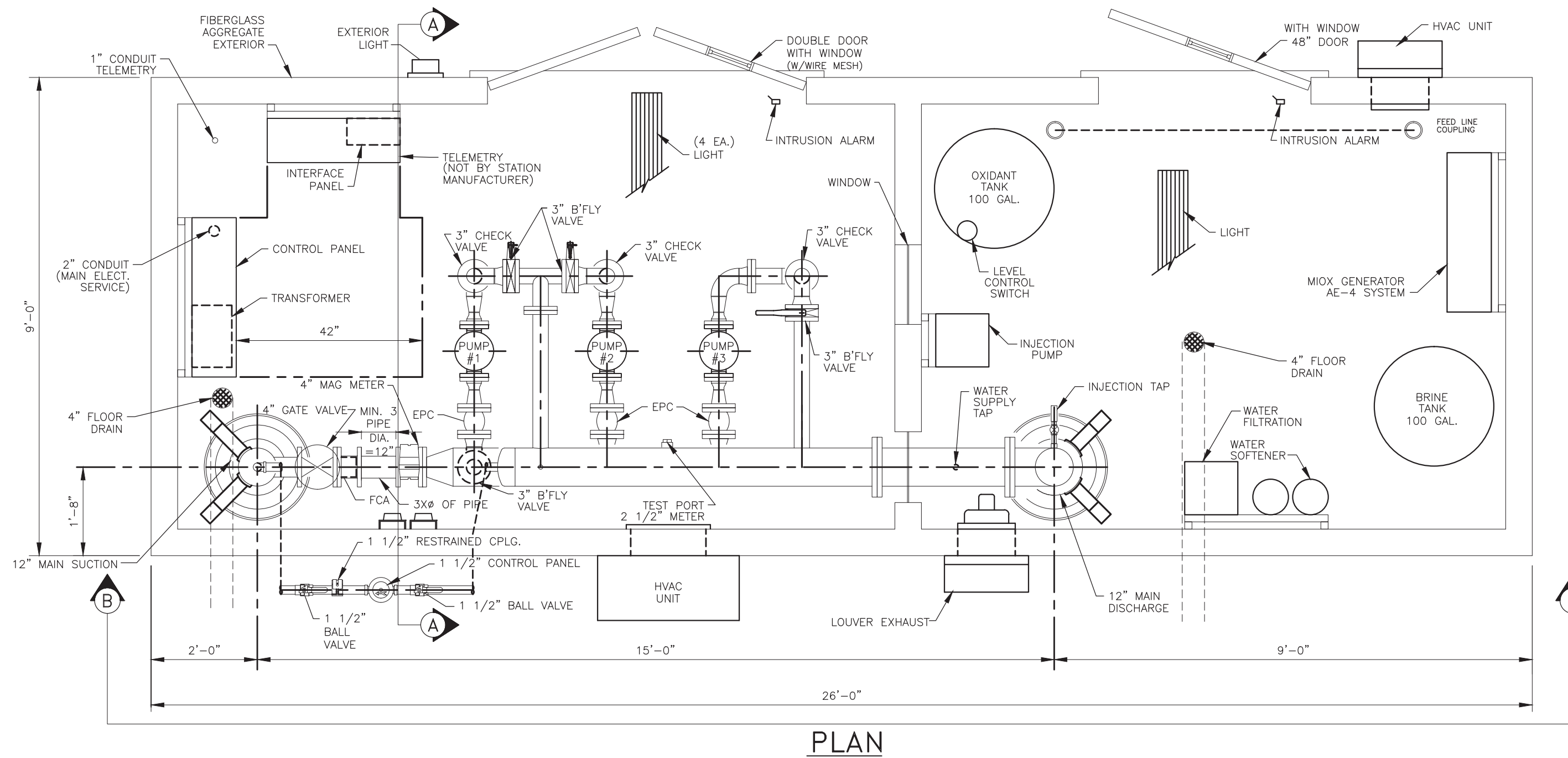
Point Table			
	NORTHING	EASTING	ELEVATION
1	1495243.40	2442508.29	6499.34
2	1495235.16	2442527.83	6500.09
3	1495204.79	2442540.18	6500.50
4	1495200.17	2442528.81	6500.50
5	1495164.04	2442543.49	6499.34
6	1495185.12	2442595.37	6498.20
7	1495221.25	2442580.69	6500.50
8	1495212.32	2442558.71	6500.50
9	1495243.30	2442546.11	6500.09
10	1495262.85	2442554.36	6500.10
11	1495191.92	2442548.35	6500.75
12	1495193.37	2442575.83	6500.75
13	1495247.13	2442533.46	6498.20
14	1495227.95	2442530.77	6500.25
15	1495235.48	2442549.29	6500.25
16	1495178.02	2442494.01	6500.0
17	1495176.61	2442601.00	6500.0
18	1495264.22	2442554.36	6500.10
19	1495191.92	2442548.35	6500.0
20	1495193.37	2442575.83	6500.0

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**ZUNI UTILITY INFRASTRUCTURE
BOOSTER STATION SITE PLAN**

PROJECT NO. 20150380	DRAWING NO. 01-W-01	SHEET 6	OF 36
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NOTE TO CONTRACTOR:
THE PACKAGE BOOSTER PUMP STATION
SHOWN IS FOR INFORMATION ONLY.
CONTRACTOR SHALL SUBMIT SHOP
DRAWINGS AND DESIGN FOR APPROVED
EQUAL. SEE SPECIFICATIONS 11200 AND
16900 FOR PERFORMANCE REQUIREMENTS.

DESIGN CRITERIA

Controls LOCAL PRESSURE WITH LOW SUCTION SIDE TANK LEVEL SHUTOFF
Power Service: 230 Volts, 3 Phase, 60 Cycle

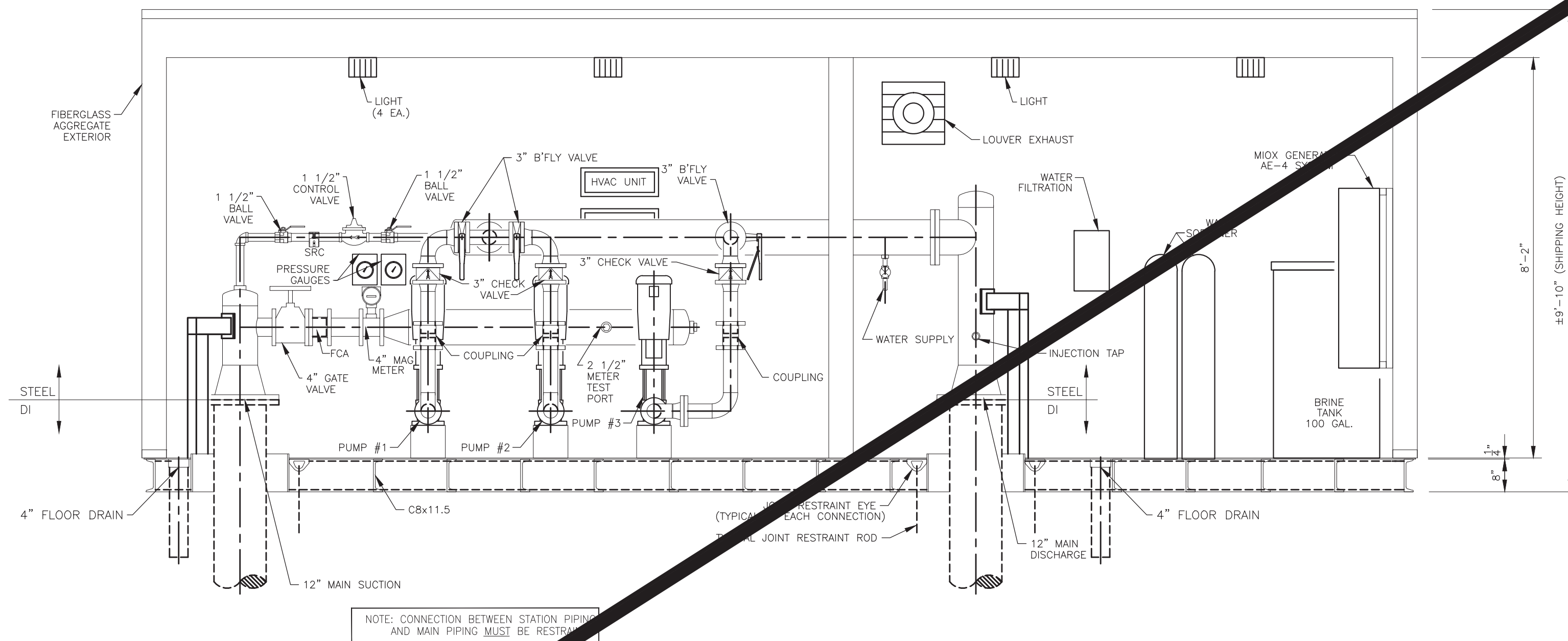
PUMP DATA

Type: VERTICAL, MULTI-STAGE, CENTRIFUGAL
Pump 1, 2 & 3
Capacity: 122 G.P.M. AT 190 FEET T.D.H.
Size: 2" X 2"
Motor: 10 H.P., 3500 R.P.M.

* THIS DESIGN IS BASED ON THE SPARLING MODEL
656 MAGNETIC FLOW METER, REQUIRING 3 UPSTREAM
AND ZERO DOWNSTREAM STRAIGHT PIPE DIAMETER
LENGTHS FOR MAINTAINING STATED ACCURACY LIMITS.
SPECIFICATION OR USE OF ANY OTHER MANUFACTURERS
FLOW METER WILL NOT KEEP THIS DESIGN WITHIN THE
ACCURACY LIMITS OF THAT FLOW METER.

NOTE: "EXCEPT FOR PIPE END SUPPORTS, WHICH ARE SHOWN, VERTICAL
AND ANGLE PIPE BRACES ARE NOT SHOWN FOR DRAWING CLARITY"

NOTE: FCA - FLANGED COUPLING ADAPTER
EPC - ELASTOMER PIPE CONNECTOR



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BOOSTER PUMP STATION

ZUNI TRIBE BPS

ZUNI, NM

JOB REF. NO. 0623

DRWG. NO. P-0623-B-001.1

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ZUNI UTILITY INFRASTRUCTURE
BOOSTER STATION DETAILS

PROJECT NO. 20150380

DRAWING NO. 01-W-02

SHEET 7 OF 36

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NOTE: FOUNDATION CUTOUT MUST BE PROVIDED TO ACCOMMODATE ADEQUATE SPACE TO CONNECT ELECTRICAL/ TELEMETRY CONDUIT(S)

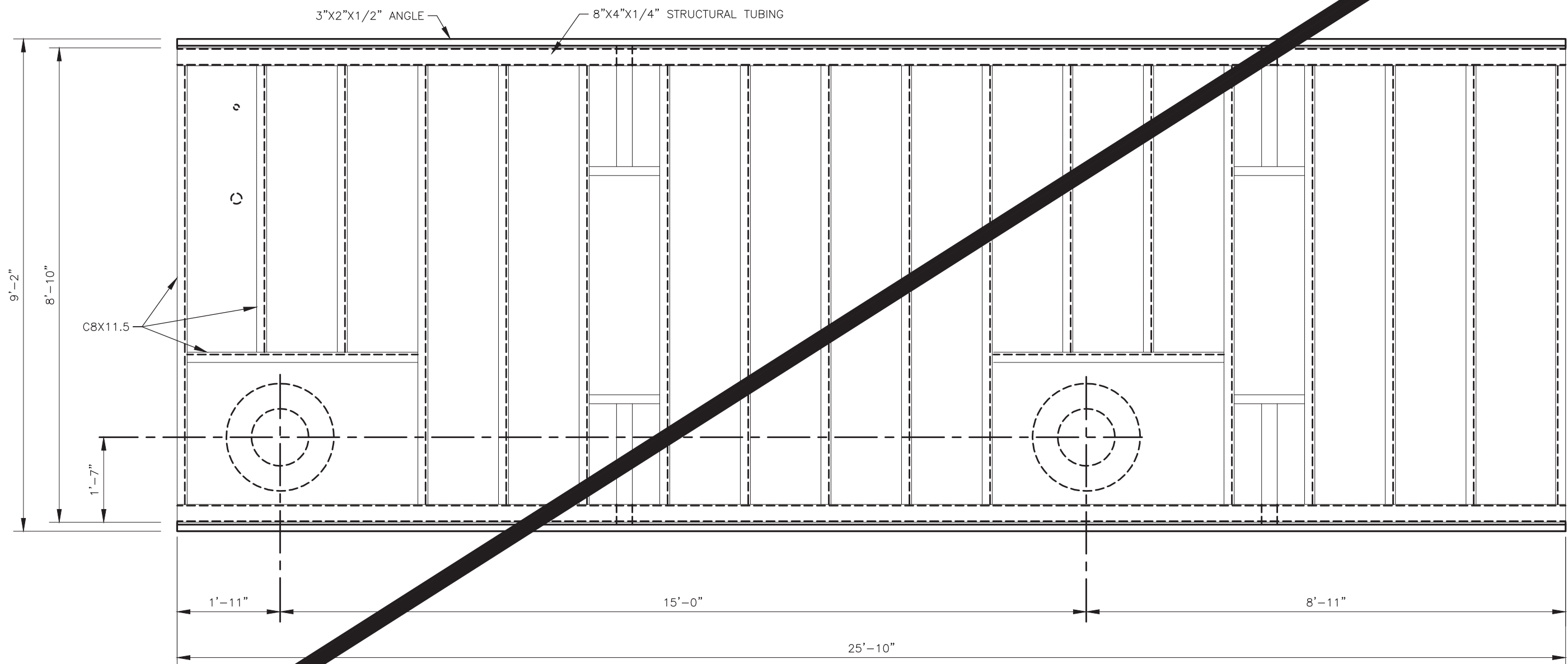
NOTE: FOUNDATION CUTOUT MUST BE PROVIDED TO ACCOMMODATE ADEQUATE SPACE TO CONNECT MAIN PIPING

ANCHOR BOLTS TYP.
(NOT BY EPI)

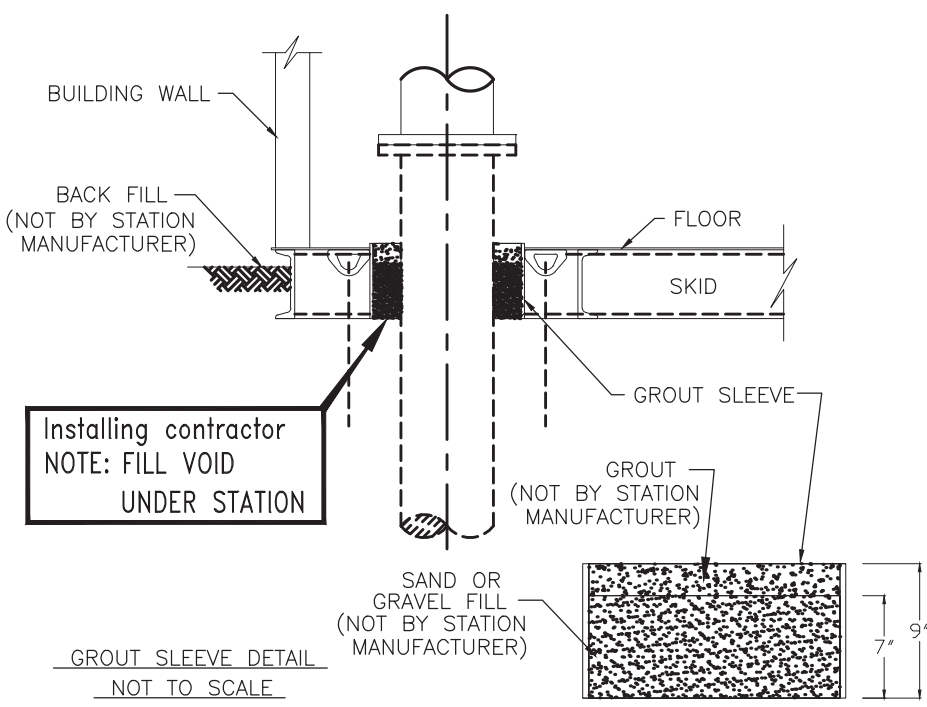
TYPICAL FOUNDATION LAYOUT

(NOT FOR CONSTRUCTION PURPOSES)

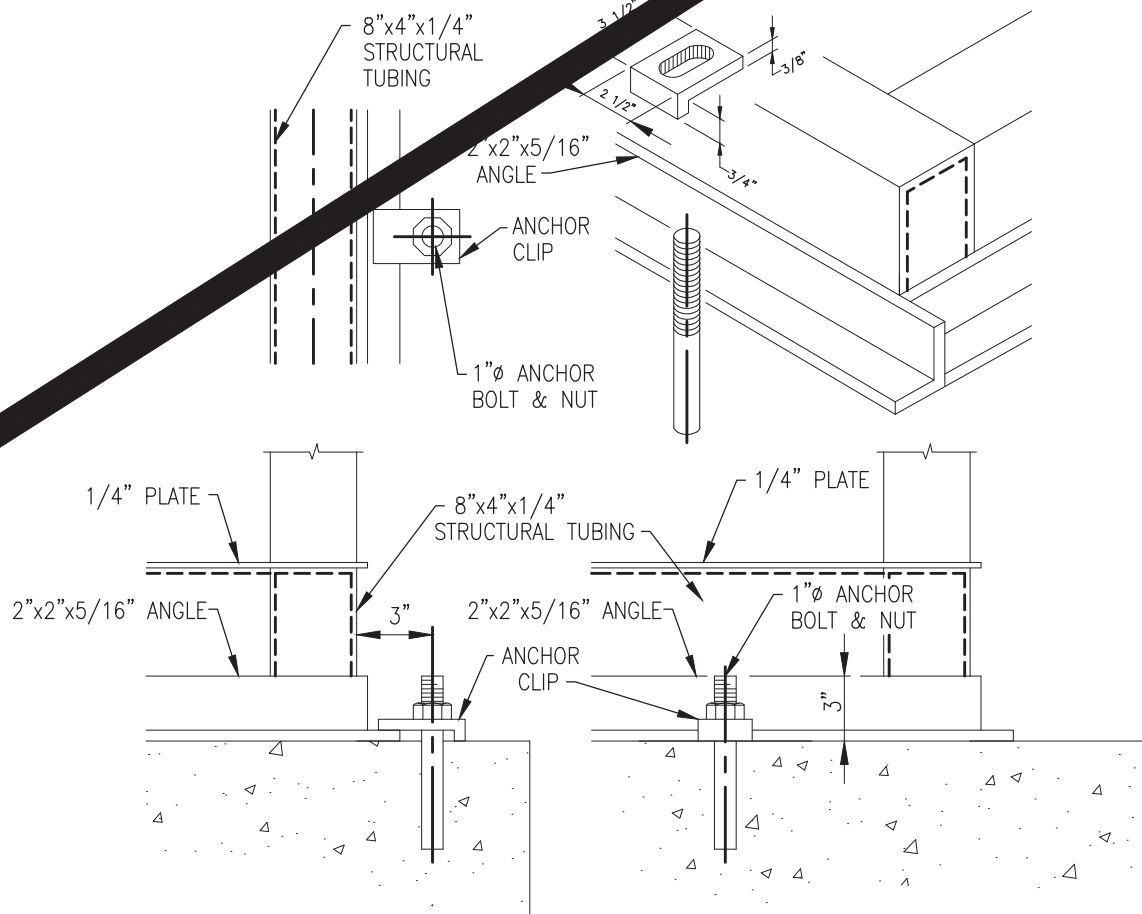
FOUNDATION AND ANCHOR BOLT DESIGN AND DIMENSIONS
AS DIRECTED BY ENGINEER



SKID PLAN



TYPICAL GROUT DETAIL



TYPICAL ANCHOR DETAIL

NOTE TO CONTRACTOR:
THE PACKAGE BOOSTER PUMP STATION SHOWN IS FOR INFORMATION ONLY. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN FOR APPROVED EQUAL.

NOT IN CONTRACT

AS-BUILT INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE		
WORK STAKED BY	DATE		
INSPECTOR'S ACCEPTANCE BY	DATE		
FIELD VERIFICATION BY	DATE		
DRAWINGS CORRECTED BY	DATE		
NO.	DATE		
REMARKS	BY		
DESIGN	DATE		
DESIGNED BY	DATE		
DRAWN BY	DATE		
CHECKED BY	DATE		

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ZUNI UTILITY INFRASTRUCTURE
BOOSTER STATION DETAILS

BOOSTER PUMP STATION

ZUNI TRIBE BPS

ZUNI, NM

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This drawing is conceptual and does not reveal certain details and manufacturing processes required to successfully build the equipment. As such, Engineered Fluid, Inc. is not responsible for injury or damages caused by any unauthorized fabrication or assembly using all or any part of this drawing.

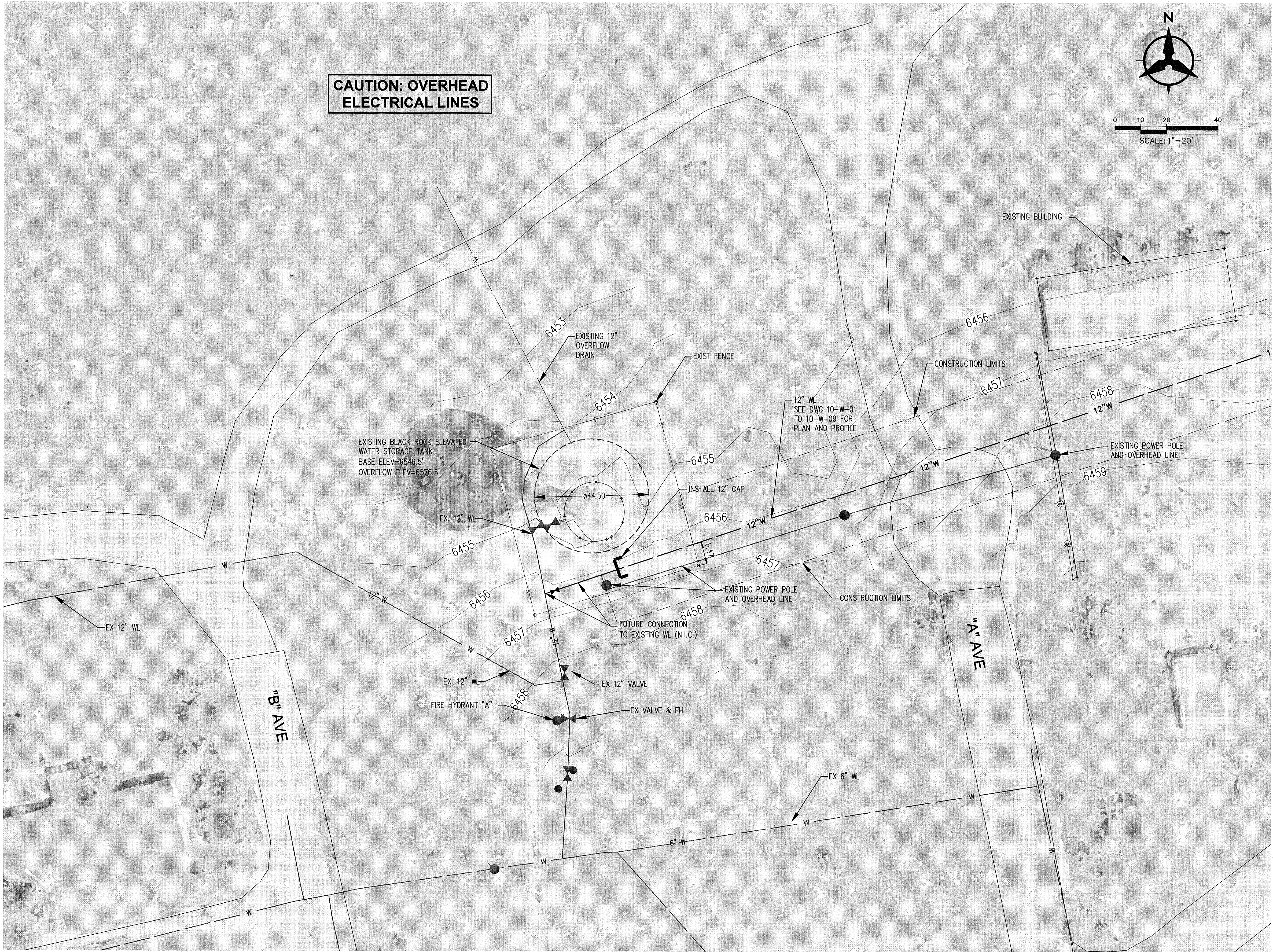
JOB REF NO. 0623

DRWG. NO. P-0623-B-002.1

PROJECT NO.
20150380


DRAWING NO.
01-W-03

SHEET 8 OF 36

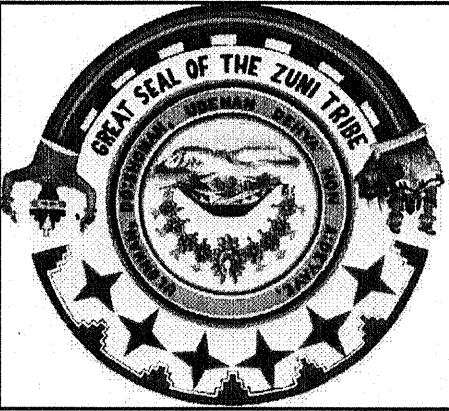


NOTES

1. TANK AND INLET/OUTLET LINE MUST REMAIN IN SERVICE AT ALL TIMES.

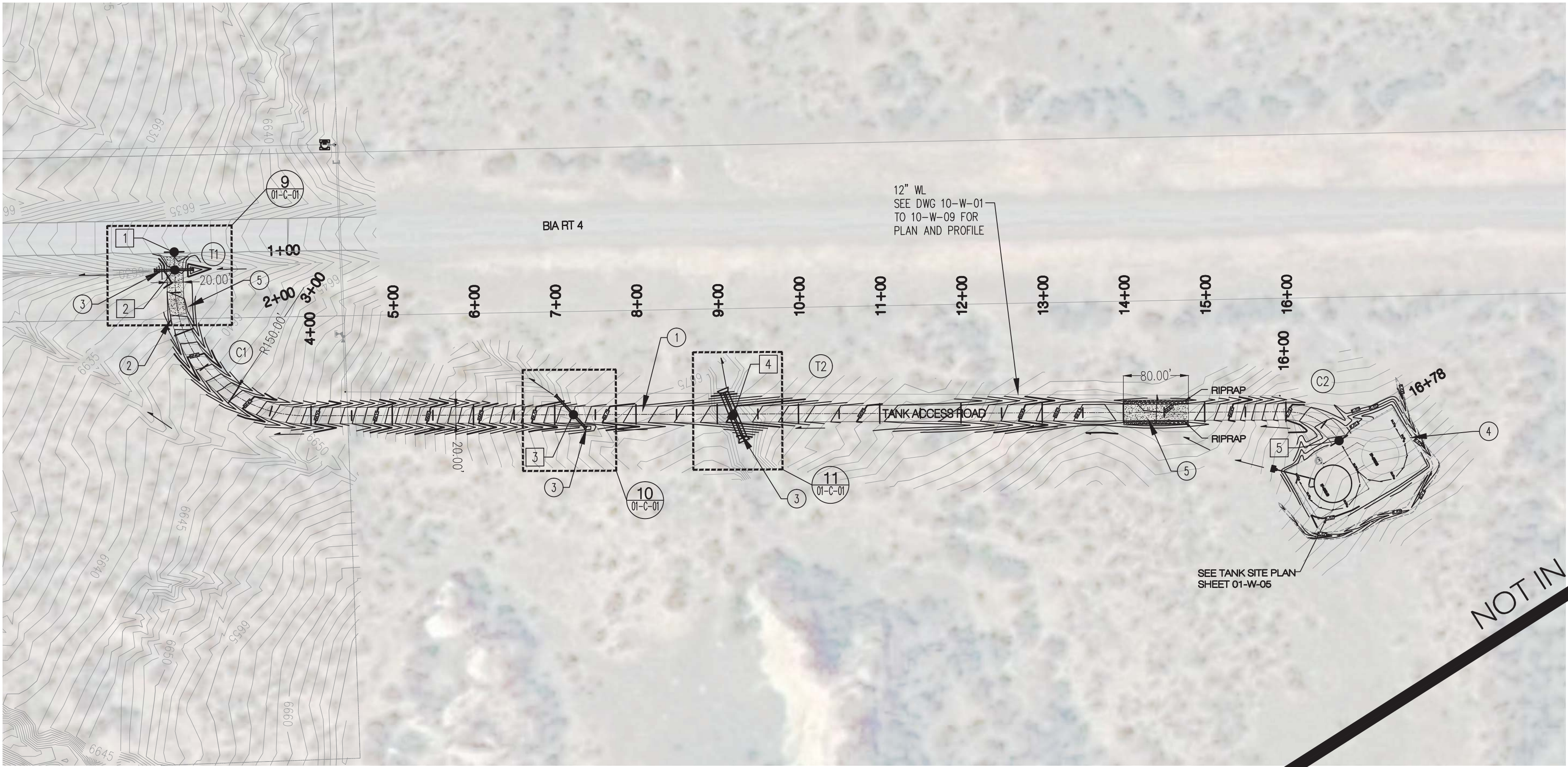
ENGINEER'S SEAL		AS-BUILT INFORMATION	
		CONTRACTOR	DATE
		WORK STAKED BY	DATE
		INSPECTOR'S ACCEPTANCE BY	DATE
		FIELD VERIFICATION BY	DATE
		DRAWINGS CORRECTED BY	DATE
REVISIONS			
NO. DATE		REMARKS	BY
DESIGNED BY J.C.S.		DATE 04/2015	
DRAWN BY J.J.G.		DATE 04/2015	
CHECKED BY T.A.B.		DATE 04/2015	

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ZUNI UTILITY INFRASTRUCTURE
EXISTING TANK SITE PLAN

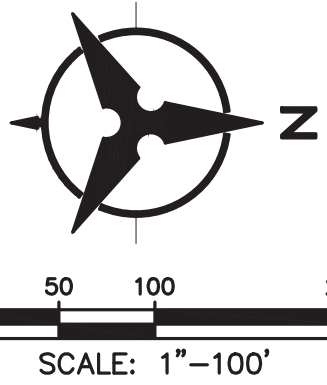
NOTICE OF EXTENDED PAYMENT PROVISION.
THIS CONTRACT ALLOWS THE OWNER TO MAKE
PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
OF AN UNDISPUTED REQUEST FOR PAYMENT.



Curve Table			
ID	RADIUS	ARC	DELTA
C1	160.00'	247.49'	88°37'27"
C2	75.00'	76.46'	58°24'45"

Tangent Table		
ID	BEARING	LENGTH
T1	S89°42'08"E	46.08'
T2	N01°50'33"E	1207.82'

Point Table			
	NORTHING	EASTING	STATION
1	1498662.44	2449197.92	1+00.00
2	1498662.33	2449220.09	1+22.17
3	1499146.39	2449415.81	7+23.07
4	1499342.26	2449423.88	9+19.46
5	1500086.95	2449481.80	16+79.27



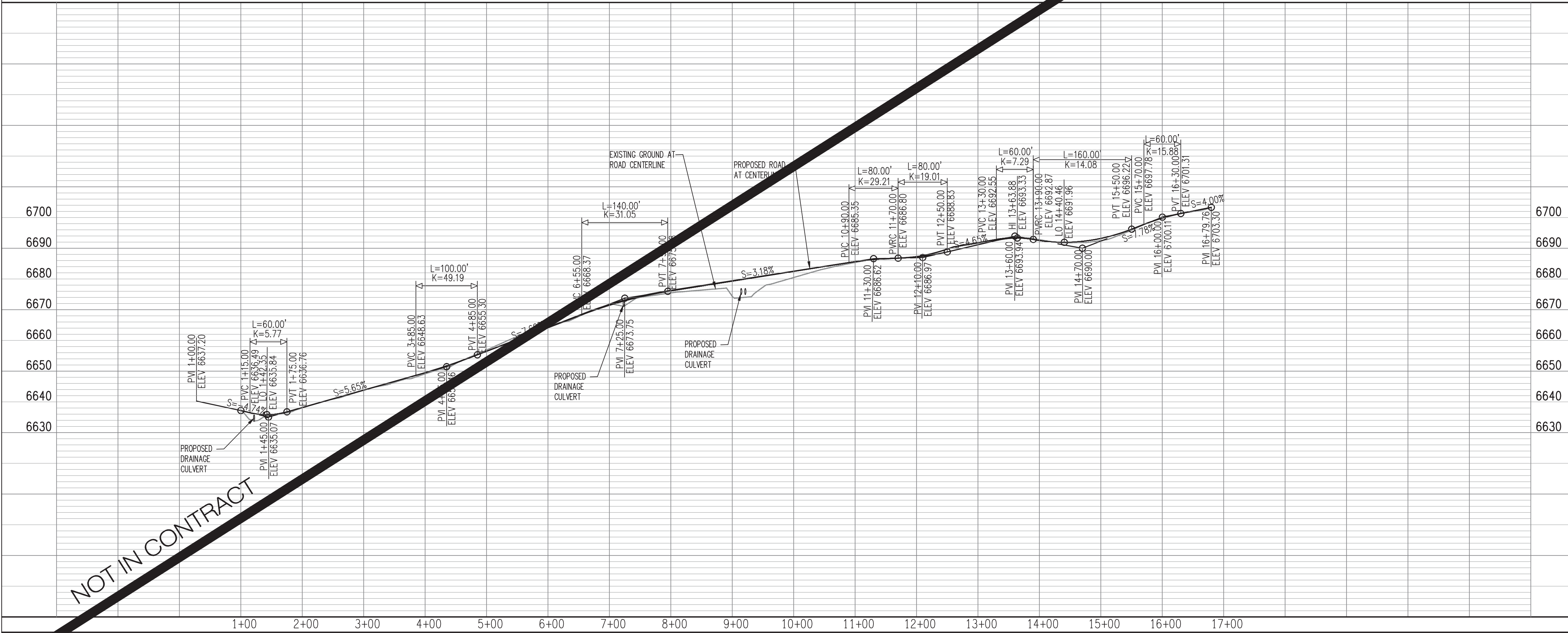
KEYED NOTES

1. CONSTRUCT TANK ACCESS ROAD. SEE SHEET 01-C-01 FOR CROSS SECTION AND PAVEMENT.
2. INSTALL GATE AT EXISTING BARBED WIRE FENCE PER STD DWG 2252.
3. CMP DRAINAGE CULVERT PER DETAIL 6, SHEET 01-C-01.
4. STORAGE TANK SITE PER DWG 01-W-06.
5. LOW WATER CROSSING WITH CONCRETE PAVEMENT PER DETAIL 5, SHEET 01-C-01. LOCATED BETWEEN:
-STA 1+05.91 TO STA 1+22.17
-STA 14+00.00 TO STA 14+80.00.

GENERAL NOTES

1. FIELD VERIFY THE LOCATION AND ELEVATION OF EXISTING FIBER OPTIC LINE PRIOR TO EXCAVATION OR GRADING.

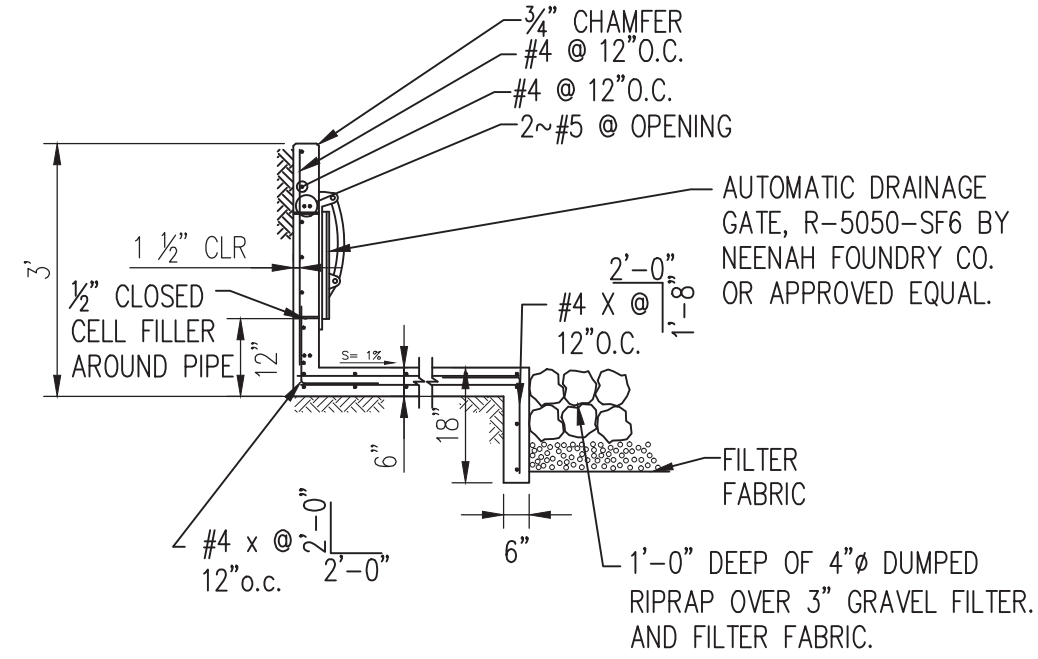
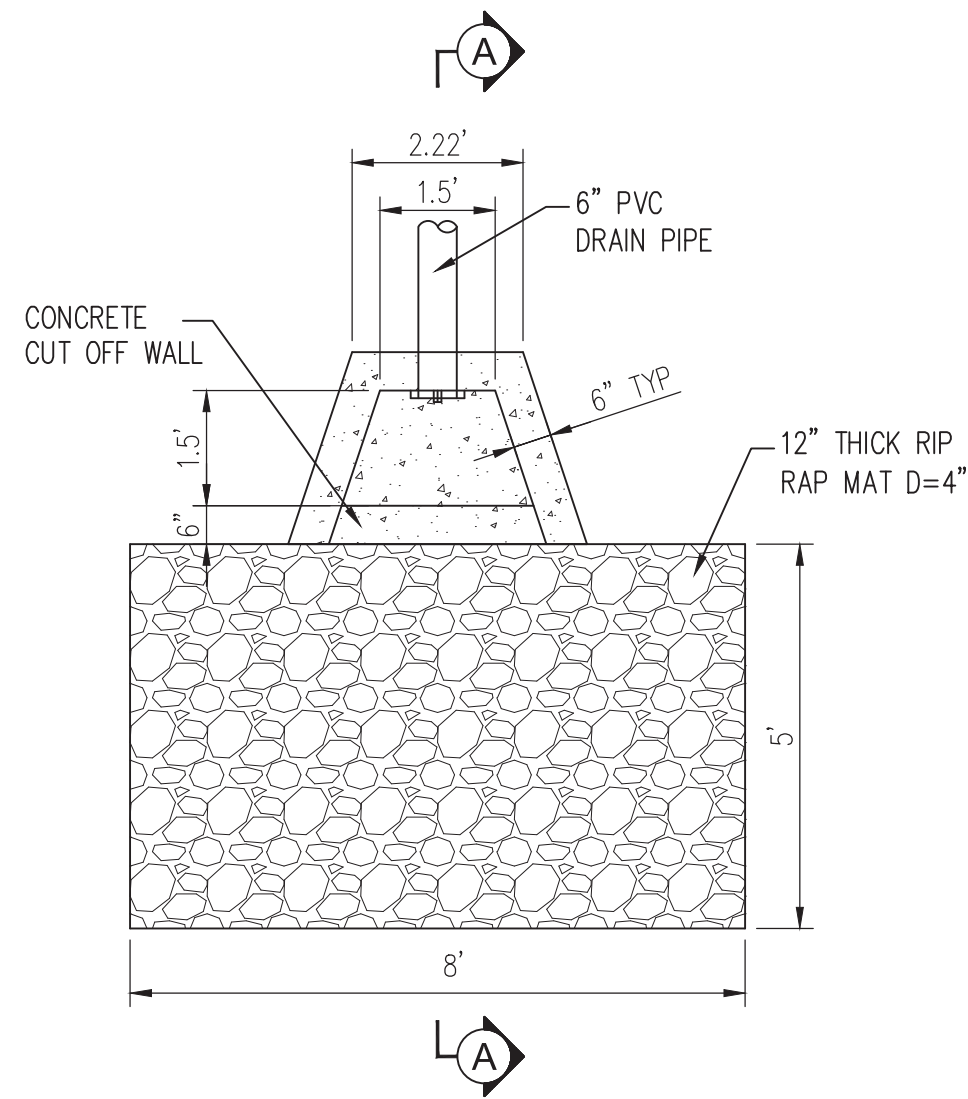
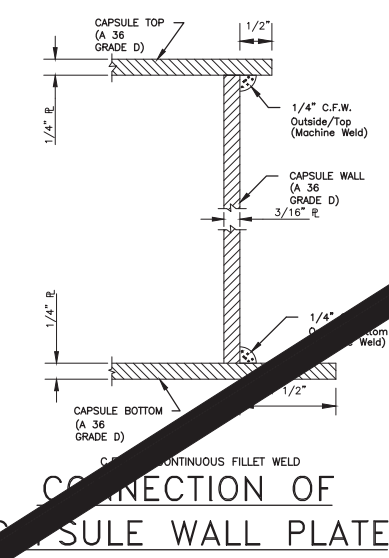
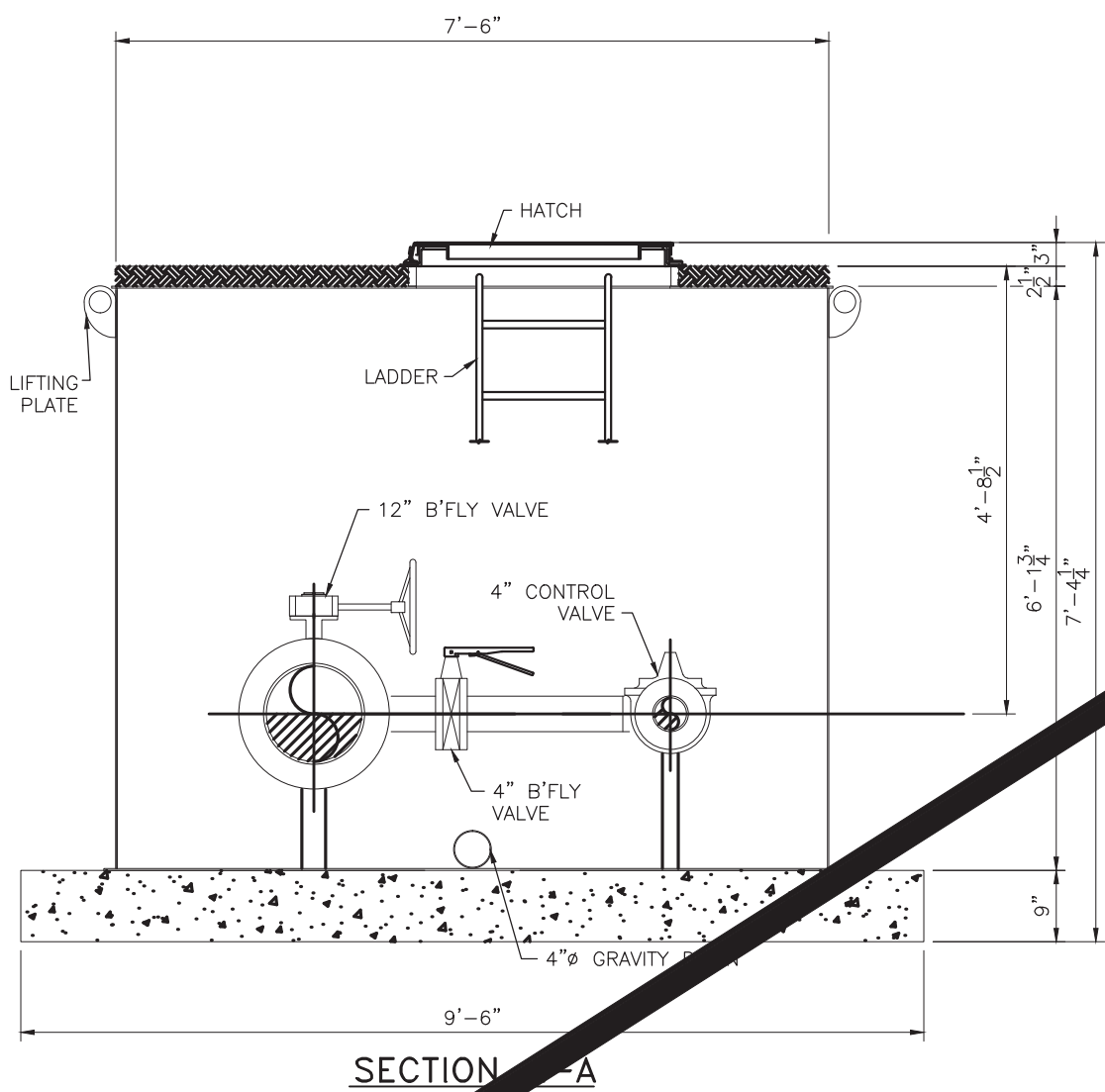
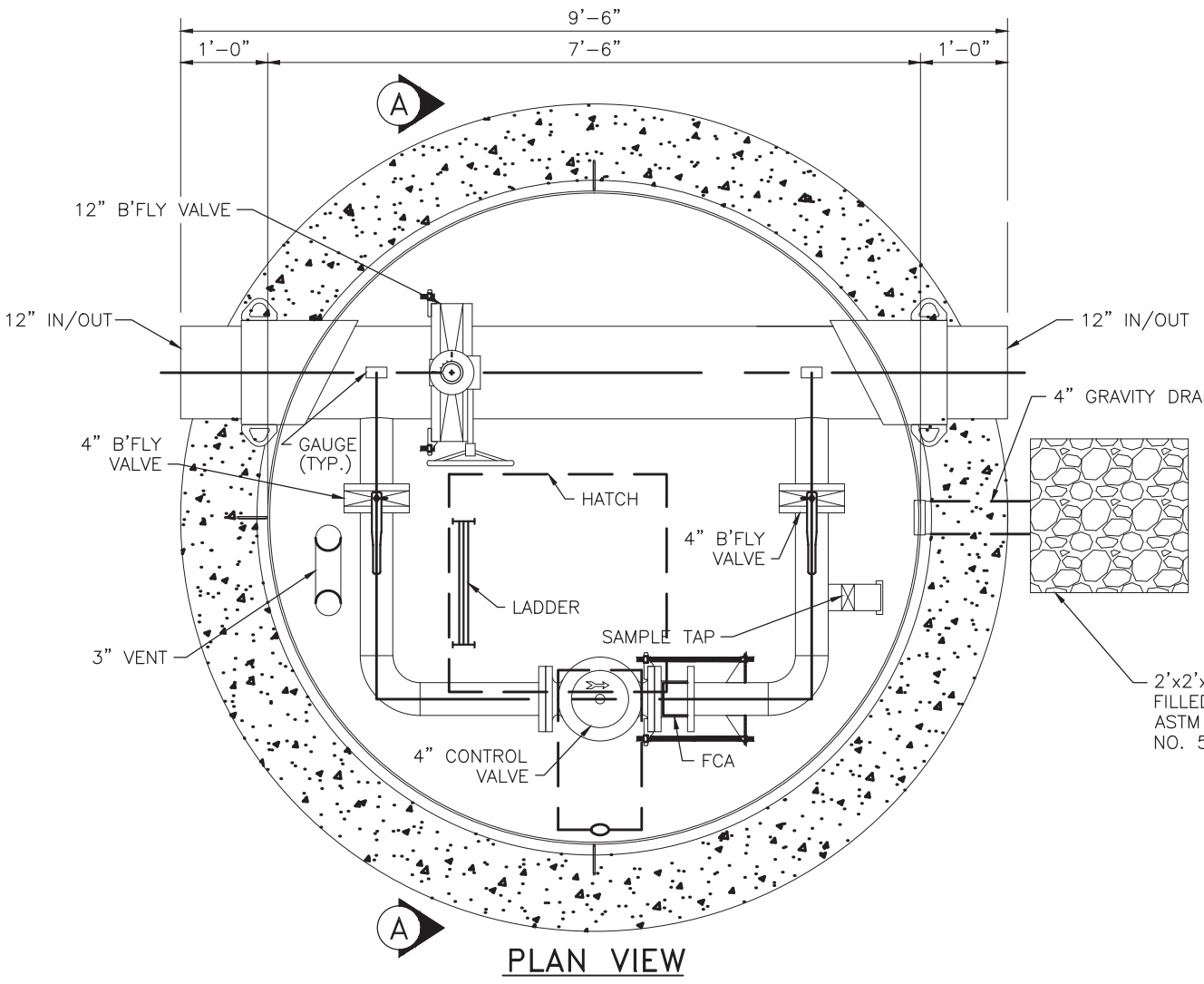
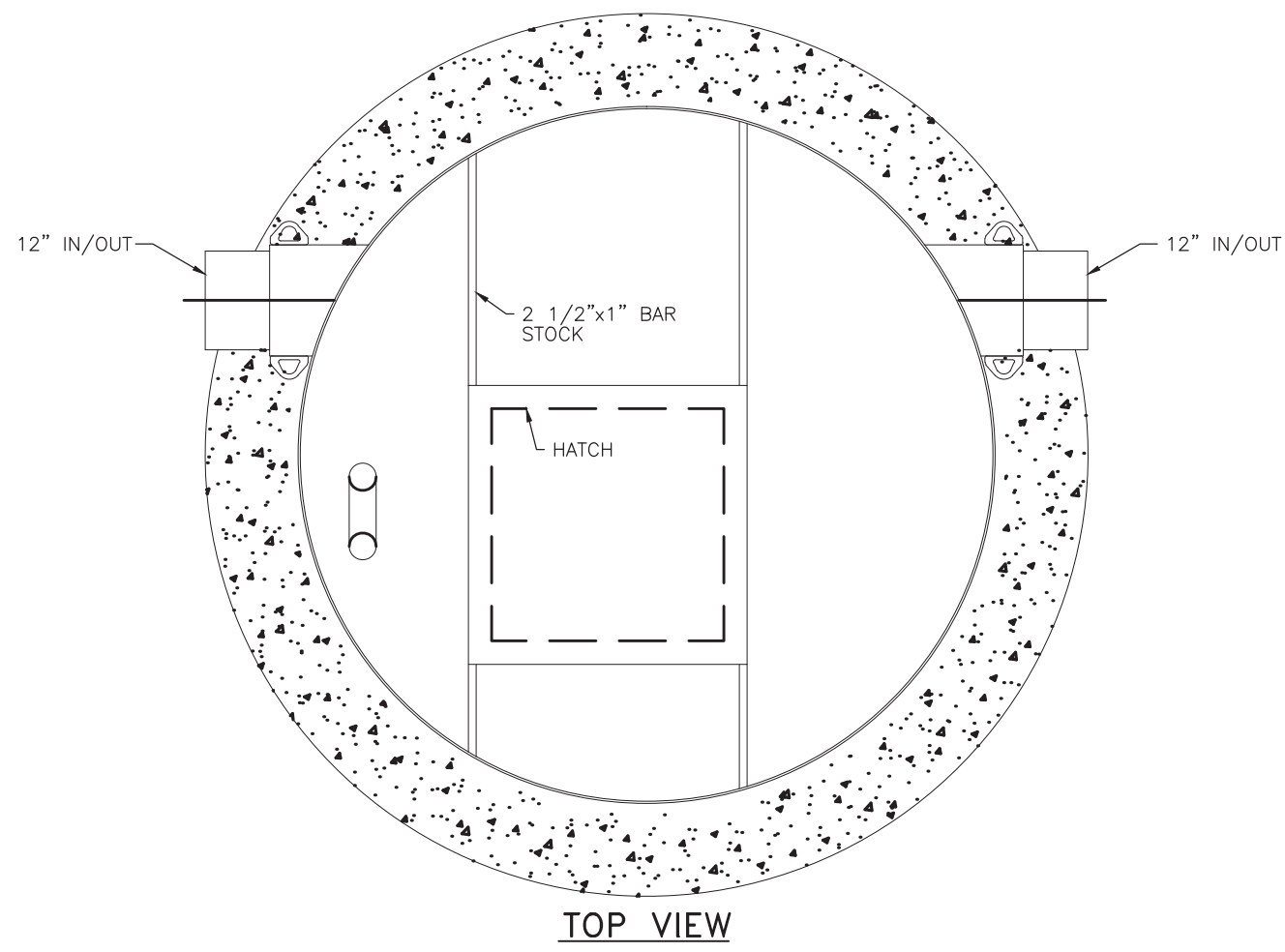
TANK ACCESS ROAD STA 1+00 TO STA 17+00



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ZUNI UTILITY INFRASTRUCTURE
TANK ACCESS ROAD PLAN & PROFILE
STA 1+00 TO STA 17+00



- LEGEND**
- PROPERTY LINE/EDGE OF ROW
 - 5301--- EXISTING CONTOURS
 - 65.23 PROPOSED SPOT ELEVATION
EX=EXISTING, TO=TOP OF GRADE
 - EXISTING DIRT ROAD
 - SD PROPOSED STORM DRAIN LINE
 - WL PROPOSED WATER LINE
 - PROPOSED VALVE
 - FL PROPOSED FIRE LINE
 - PROPOSED HYDRANT
 - PROPOSED CAP
 - PROPOSED WATER METER
 - PROPOSED GATE VALVE
 - PROPOSED CHECK VALVE
 - PROPOSED PUMP

KEYED NOTES

- CONSTRUCT TANK ACCESS ROAD. SEE DWG 01-W-05.
- 8 FT HIGH CHAINLINK FENCE AND 20FT WIDE GATE PER STD DWG 2252.
- NOT USED
- AT GRADE STEEL STORAGE TANK PER DWG 01-W-07. BASE ELEV=6705.50', OVERFLOW ELEV=6728.64'.
- 6" OVERFLOW DRAIN AND SPLASH PAD PER DETAIL 3 THIS SHEET.
- ALTITUDE VALVE BY EFI OR APPROVED EQUAL, PER DETAIL 2 THIS SHEET.
- 12" WATERLINE STUB WITH 12" TEE AND VALVE AND CAP TO SERVE FUTURE WATER TANK.
- GRAVEL PAVEMENT PER DETAIL 4, SHEET 01-C-01.
- 6" TEE, 10 LF- 6" PVC OVERFLOW DRAIN AND CAP FOR FUTURE TANK.
- 12" CHECK VALVE
- 72 L.F. OF 12" WL, CONNECTING TO TANK AND 12" INLET, OUTLET PIPING.
- 12" - 90° HORIZONTAL BEND

Coordinate Point Table		
	NORTHING	EASTING
1	1500060.47	2449593.01
2	1500018.85	2449517.75
3	1500086.95	2449481.80
4	1500153.86	2449443.66
5	1500195.48	2449518.92
6	1500077.36	2449534.69
7	1500136.97	2449501.98
8	1500009.37	2449514.88
9	1500061.91	2449504.72

1 TANK SITE PLAN
SCALE: 1"=20'

3 OVERFLOW DRAIN SPLASH PAD
N.T.S.

2 ALTITUDE VALVE BY EFI
N.T.S.

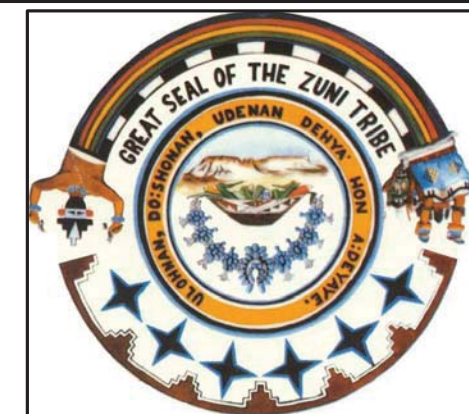
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ALTITUDE VALVE STATION

ZUNI, NM

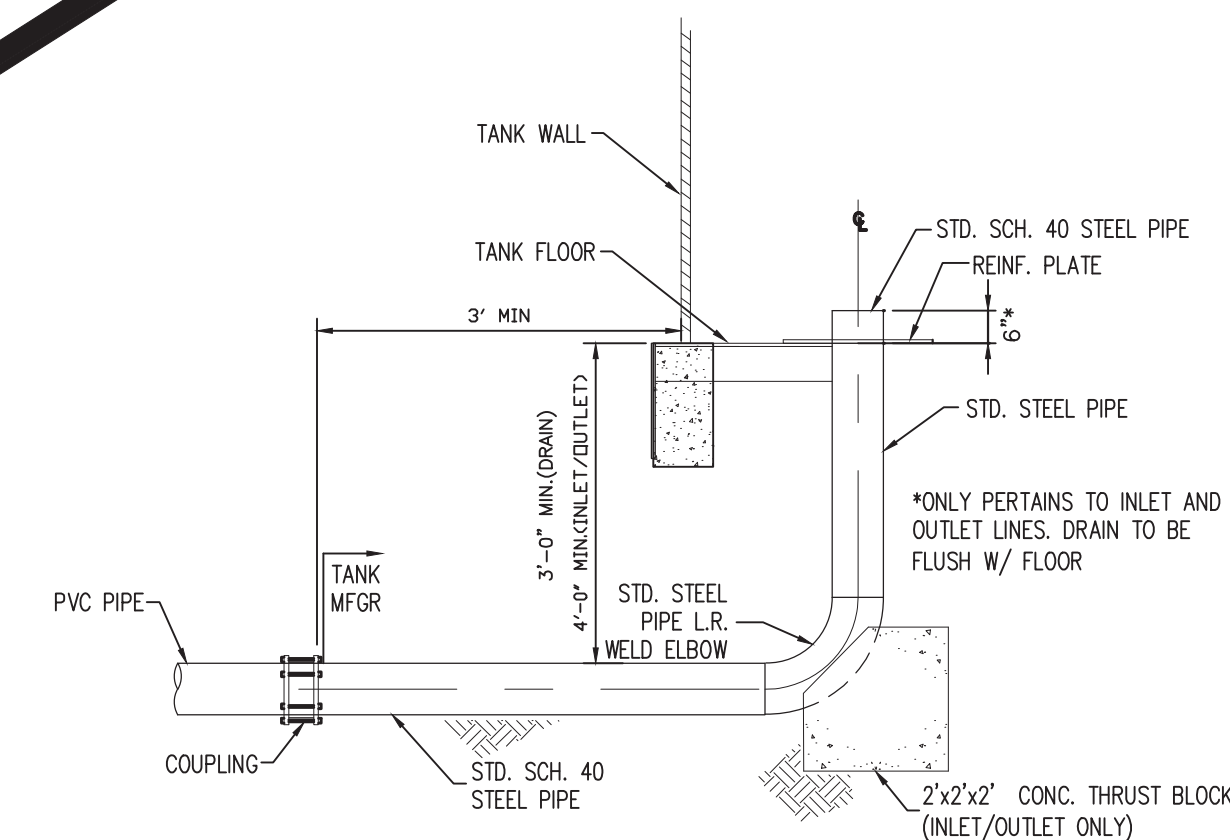
200 107 160 0623-02 2000 160 P-062302-A-001.

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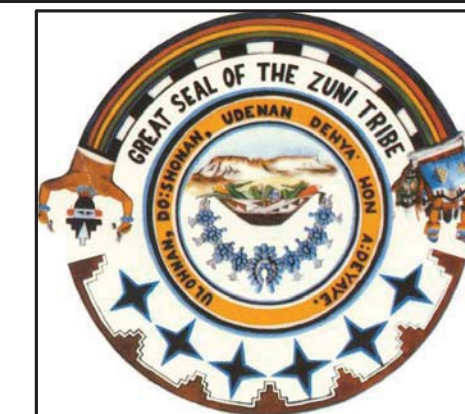


ZUNI UTILITY INFRASTRUCTURE
TANK SITE PLAN

PROJECT NO. 20150380	DRAWING NO. 01-W-06	SHEET 11	OF 36
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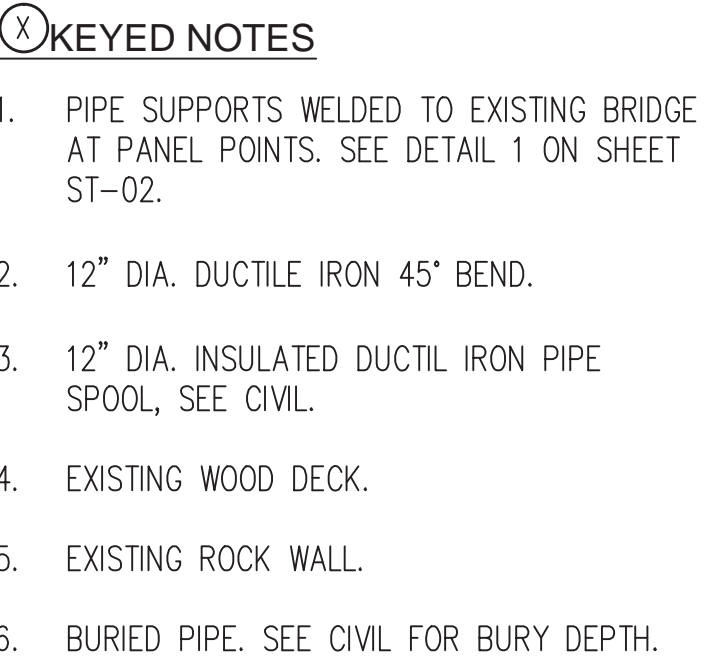


NOTE: TANK DESIGN INCLUDING FOUNDATION IS BY MANUFACTURER PER SPECIFICATION 13411. ADDITIONAL GEOTECHNICAL INVESTIGATION BY CONTRACTOR REQUIRED.



ZUNI UTILITY INFRASTRUCTURE TANK DETAILS

[illegible]



NOTE:
CONTRACTOR TO TAKE PRECAUTION WHEN
PERFORMING WORK ON HISTORIC BLACK ROCK
DAM. CONTACT ZCRE. SEE NOTE 26 ON SHEET 2
FOR CONTACT NAME AND NUMBER.



STRUCTURAL STEEL

STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC "STEEL CONSTRUCTION MANUAL" THIRTEENTH EDITION.

STRUCTURAL AND MISCELLANEOUS STEEL:
CHANNELS, ANGLES AND STRUCTURAL PLATES:
ASTM A36
 $F_y = 36,000$ PSI
STRUCTURAL TUBE:
ASTM A500
GRADE B
 $F_y = 46,000$ PSI
STRUCTURAL PIPE
ASTM A53
GRADE B

UNLESS NOTED OTHERWISE

NEW AND UNSPLICED MATERIAL SHALL BE USED THROUGHOUT.

BOLTS SHALL CONFORM TO ASTM A325 TENSION CONTROL BOLTS UNLESS NOTED OTHERWISE, WITH A MINIMUM DIAMETER OF $\frac{3}{4}$ " UNLESS NOTED OTHERWISE ON THE DRAWINGS. WHERE CLEARANCE DOES NOT PERMIT THE USE OF TENSION CONTROL BOLTS, STANDARD A325 BOLTS SHALL BE USED AND INSPECTED IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS." ALL BOLTED CONNECTIONS NOT DETAILED SHALL BE DESIGNATED AS BEARING-TYPE CONNECTIONS, WASHERS SHALL BE INSTALLED UNDER NUTS OF FASTENERS.

ALL BOLTS SHALL BE INSTALLED IN A SNUG TIGHT CONDITION EXCEPT AT MOMENT CONNECTIONS, BRACED FRAME CONNECTIONS, AND AT CONNECTIONS DETAILED WITH A325SC BOLTS. AT THESE LOCATIONS, THE BOLTS SHALL BE TIGHTENED SO AS TO SHEAR THE SPLINE OFF THE BOLT.

SHOP AND FIELD CONNECTIONS SHALL BE WELDED UNLESS SPECIFICALLY
DETAILED OTHERWISE.

ALL WELDING OR GAS CUTTING SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN WELDING SOCIETY D1.1-2000. ALL WELDING SHALL USE E70XX ELECTRODES AND BE PERFORMED BY CERTIFIED WELDERS QUALIFIED BY THE AMERICAN WELDING SOCIETY, CODE D1.1, LATEST REVISION.

NO FIELD WELDING SHALL BE DONE IF THE TEMPURATURE IS BELOW 10 DEGREES FAHRENHEIT, OR IF THE WIND SPEED IS OVER 20 MPH WITHOUT WIND BREAKS.

MANUFACTURERS STANDARDIZATION SOCIETY FOR THE VALVE AND FITTINGS
INDUSTRY INC., MSS SP-58, FACTORY-FABRICATED COMPONENTS.
APPROVED MANUFACTURERS:

U-BOLTS (MSS TYPE 24, DESIGN BASED ON TOLCO FIGURE 110 OR APPROVED EQUAL): FOR SUPPORT OF HEAVY PIPES, NPS 1/2 TO NPS 30 (DN 15 TO DN 750).

FINISHING

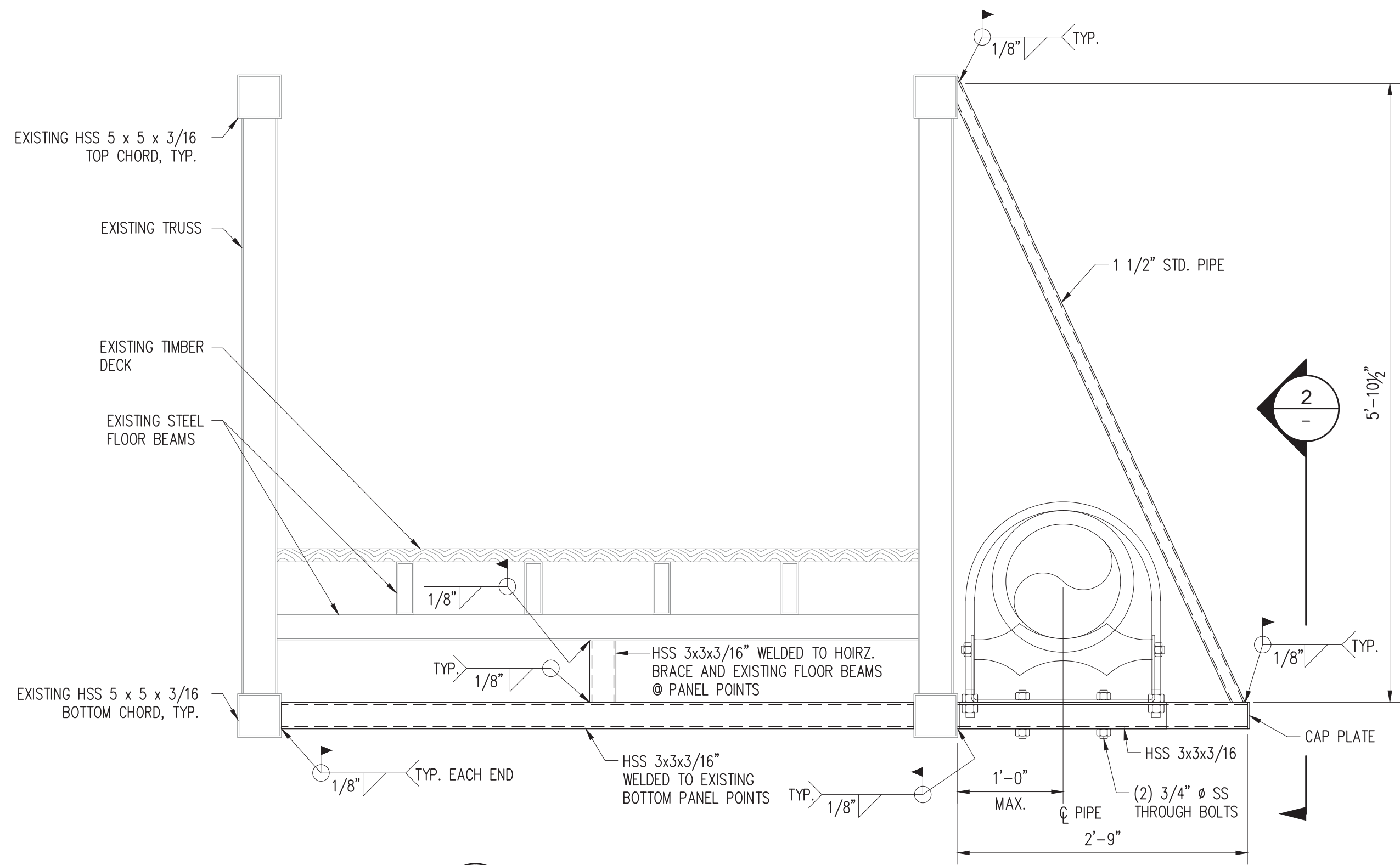
**NOTICE OF EXTENDED PAYMENT PROVISION.
THIS CONTRACT ALLOWS THE OWNER TO MAKE
PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
OF AN UNDISPUTED REQUEST FOR PAYMENT.**

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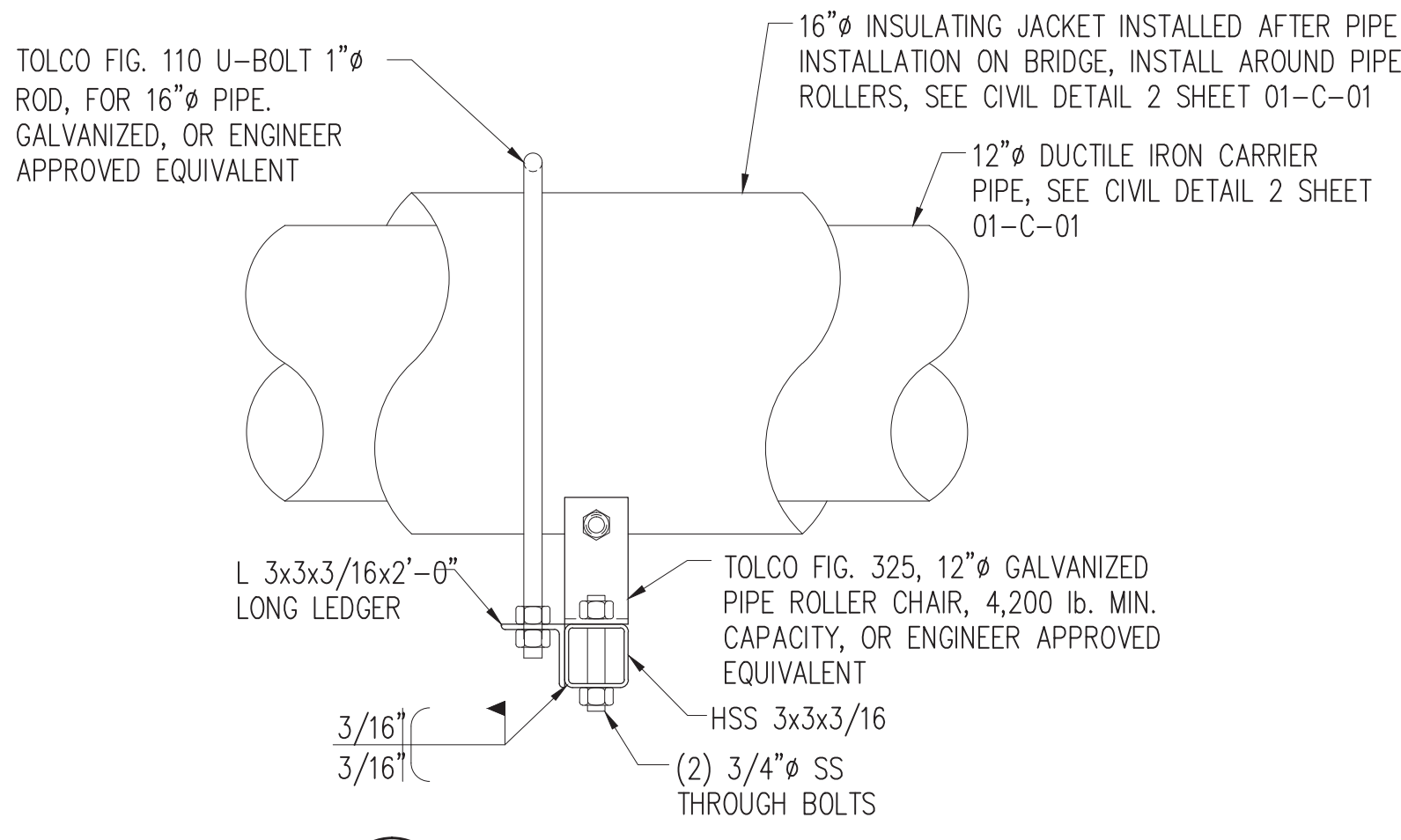


PROJECT NO. 20150380	DRAWING NO. 01-ST-01	SHEET 13	OF 36
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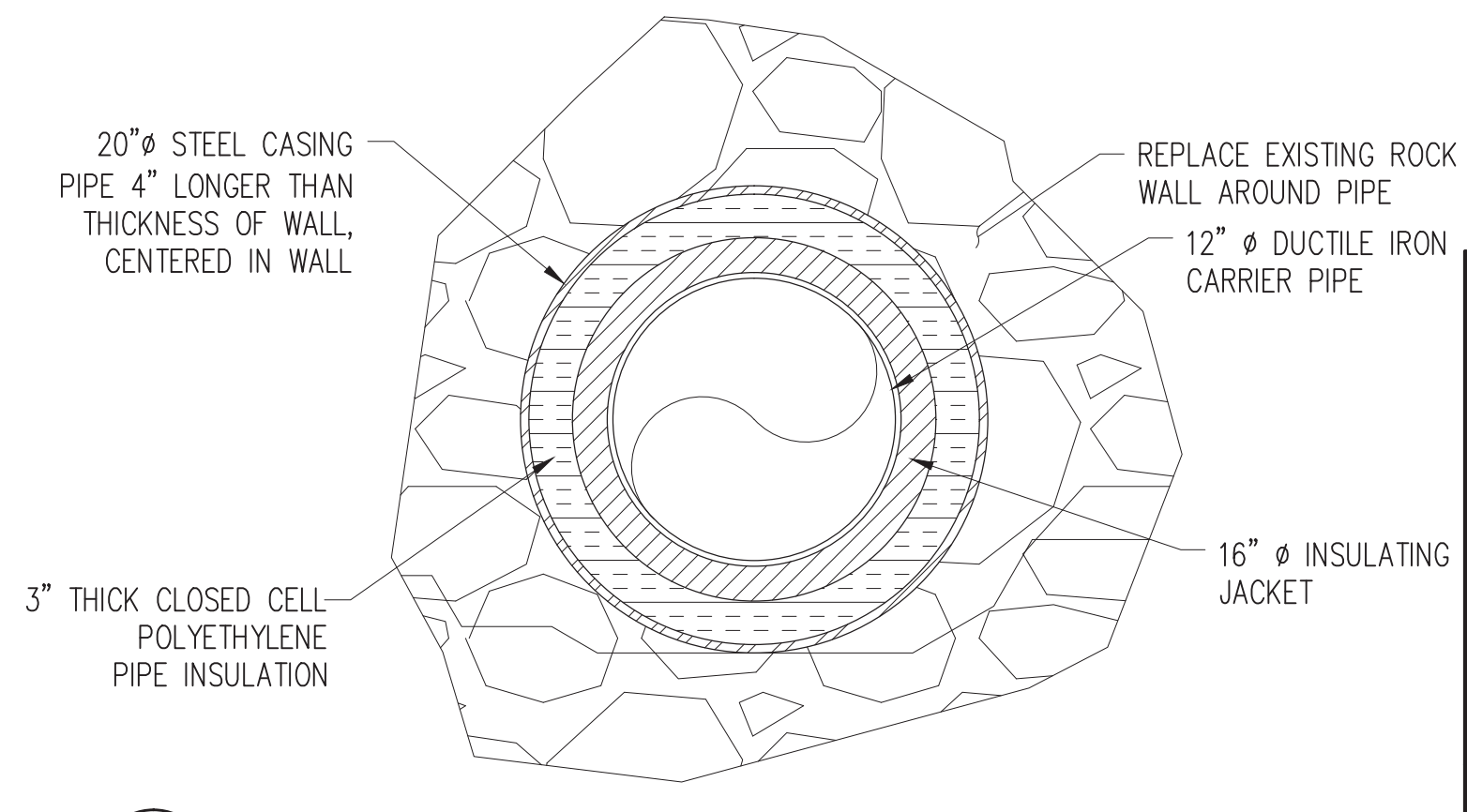
NOTE:
CONTRACTOR TO TAKE PRECAUTION WHEN
PERFORMING WORK ON HISTORIC BLACK ROCK
DAM. CONTACT ZCRE. SEE NOTE 26 ON SHEET 2
FOR CONTACT NAME AND NUMBER.



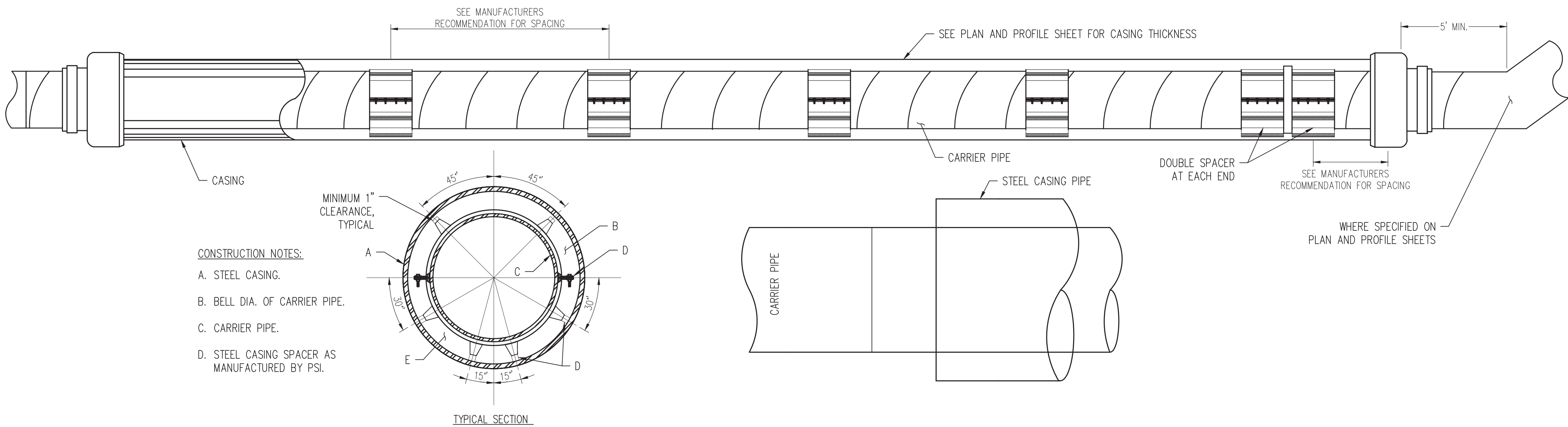
1 SECTION
01-ST-02 SCALE: NTS



2 SECTION
01-ST-02 SCALE: NTS

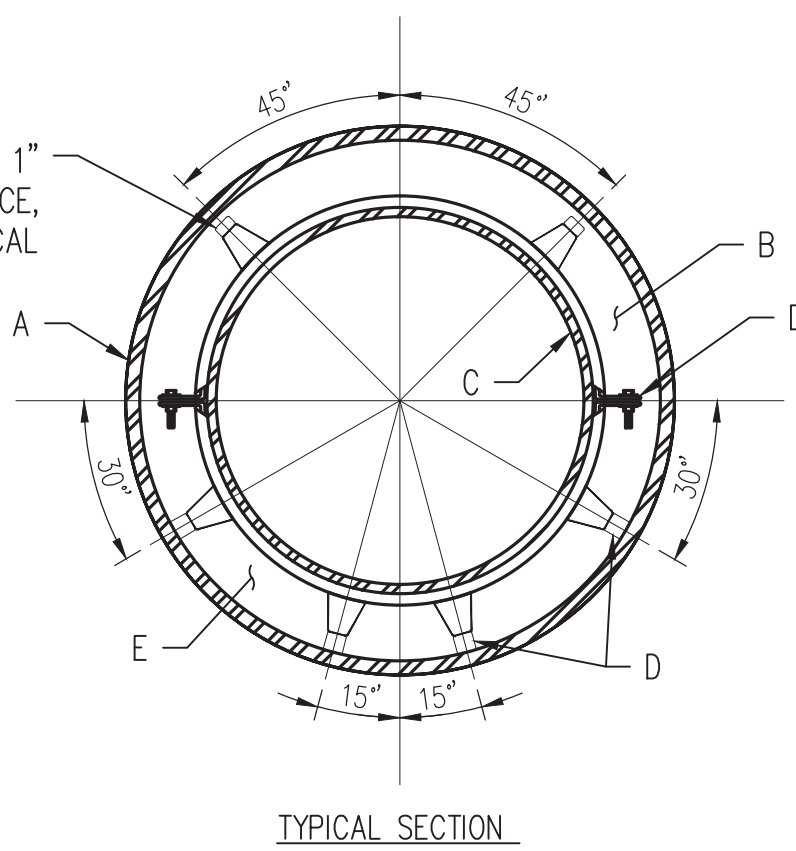


3 SECTION
01-ST-02 SCALE: NTS



CONSTRUCTION NOTES:

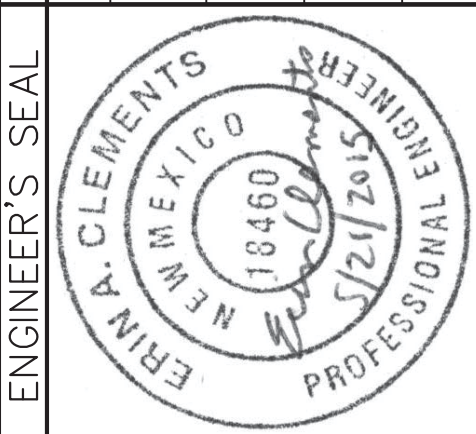
- A. STEEL CASING.
B. BELL DIA. OF CARRIER PIPE.
C. CARRIER PIPE.
D. STEEL CASING SPACER AS MANUFACTURED BY PSI.



5 JACK AND BORE DETAIL
01-ST-02 SCALE: NTS

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

AS-BUILT INFORMATION		DATE
CONTRACTOR	WORK	DATE
INSPECTOR'S	ACCEPTANCE BY	DATE
VERIFICATION BY		DATE
DRAWINGS	CORRECTED BY	DATE



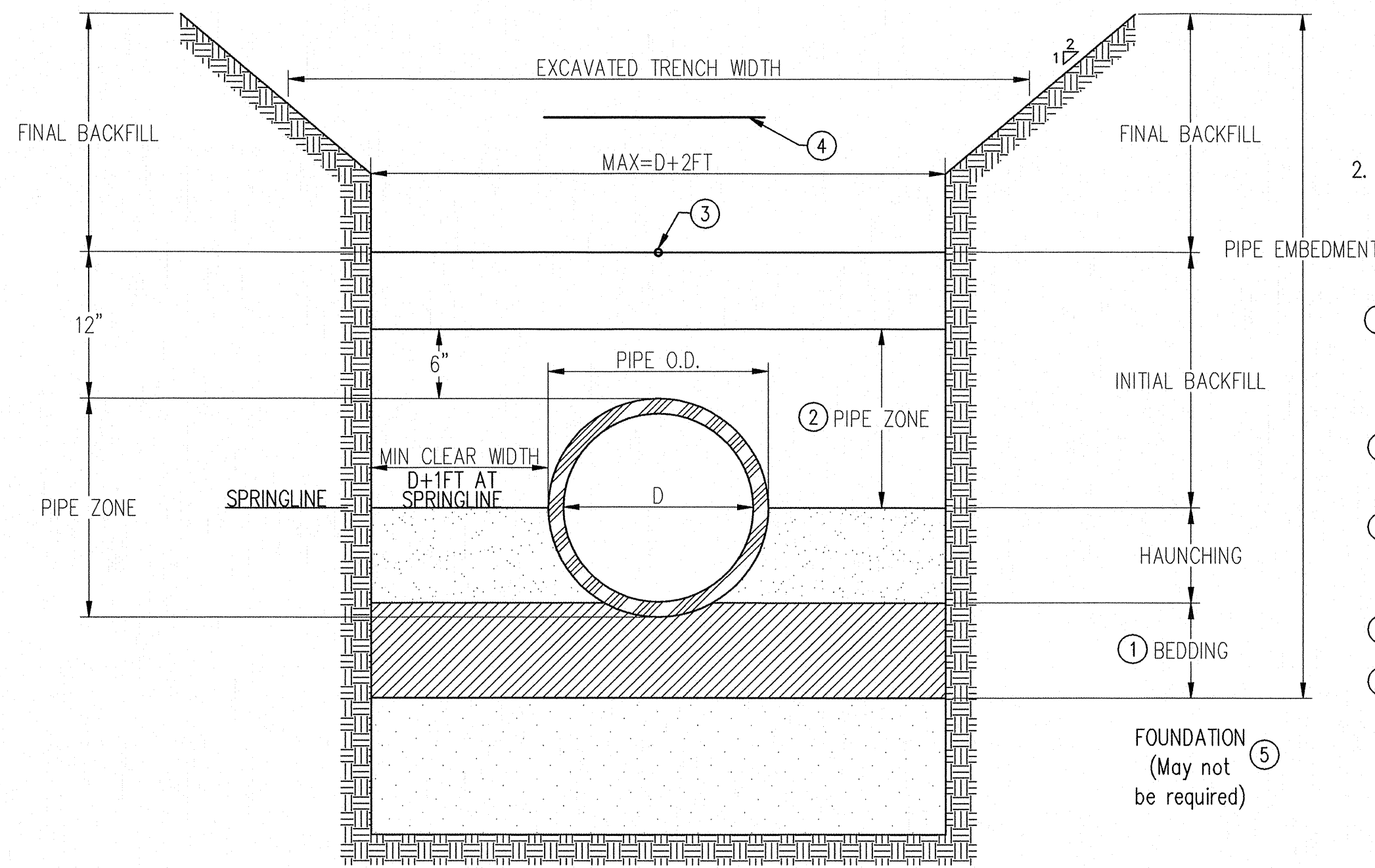
REVISIONS		BY
NO.	DATE	
DESIGNED BY	S.M.	DATE 04/2015
DRAWN BY	J.J.G.	DATE 04/2015
CHECKED BY	E.C.	DATE 04/2015

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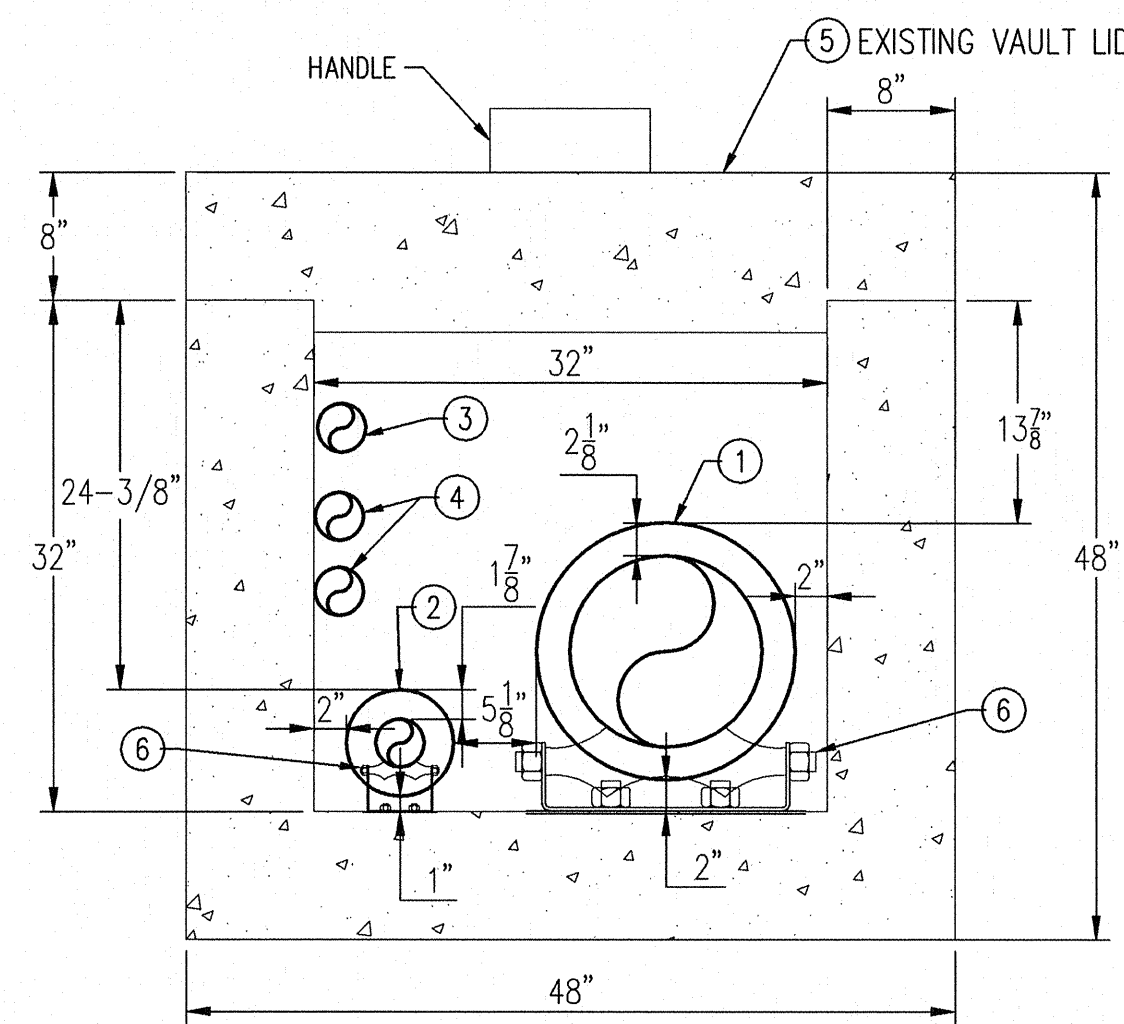


ZUNI UTILITY INFRASTRUCTURE
PEDESTRAIN BRIDGE SECTIONS AND DETAILS

PROJECT NO. 20150380	DRAWING NO. 01-ST-02	SHEET 14	OF 36
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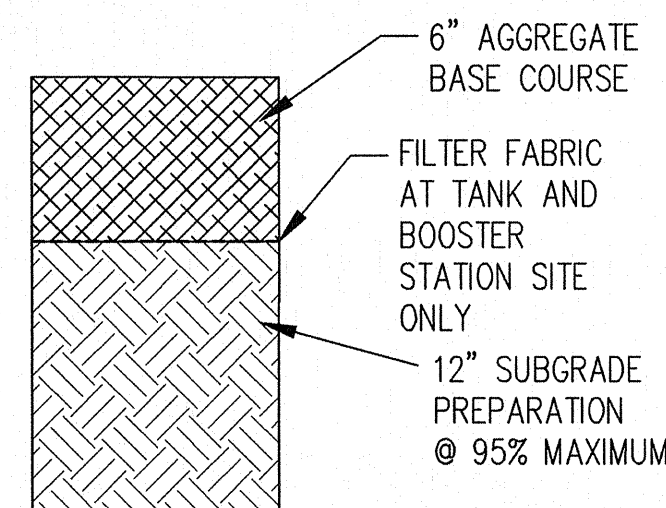
1 TYPICAL TRENCH DETAIL
N.T.S.



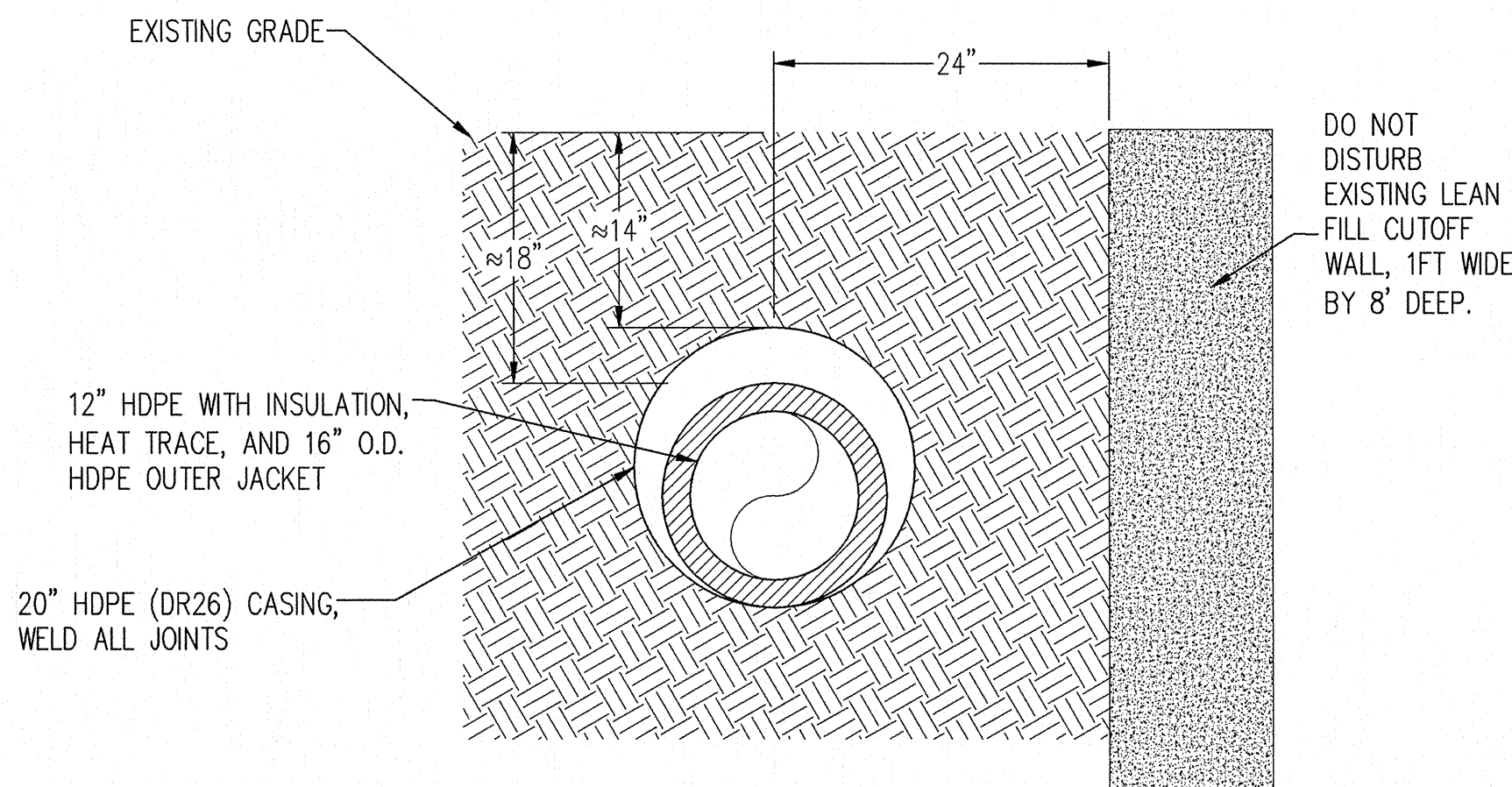
2 UTILITY CORRIDOR CROSS SECTION
N.T.S.

KEYED NOTES

1. INSTALL NEW 12" INSULATED WATERLINE. OD = 16.14"
2. REMOVE & REPLACE EXISTING 3" WATERLINE WITH INSULATED PIPE. OD = 6.68"
3. INSTALL POWER FOR HEAT TRACE CABLE.
4. EXISTING CONDUIT FOR POWER AND CONTROL CABLE.
5. CONCRETE ACCESS LID (TYP.) CONTRACTOR SHALL REMOVE AND REPLACE ALL LIDS FOR CONSTRUCTION OF WATERLINES. ALL JOINTS SURFACES SHALL BE CLEANED TO REMOVE ANY LOOSE SEALANT. ALL JOINTS SHALL BE SEALED USING SEALANT OR BACKER ROD AND SEALANT APPROPRIATE FOR EACH TYPE OF JOINT (VAULT TO LID, LID TO LID), AND BE OF ONE MANUFACTURER TO ENSURE COMPATIBILITY.
6. PIPE ROLLER CHAIR AT 10'-0" O.C. MAXIMUM, GALVANIZED, TOLCO FIG. 325, SIZED TO MATCH CARRIER PIPE O.D. ATTACH TO FLOOR WITH SS ANCHORS AND BOLTS.



4 GRAVEL PAVEMENT
N.T.S.



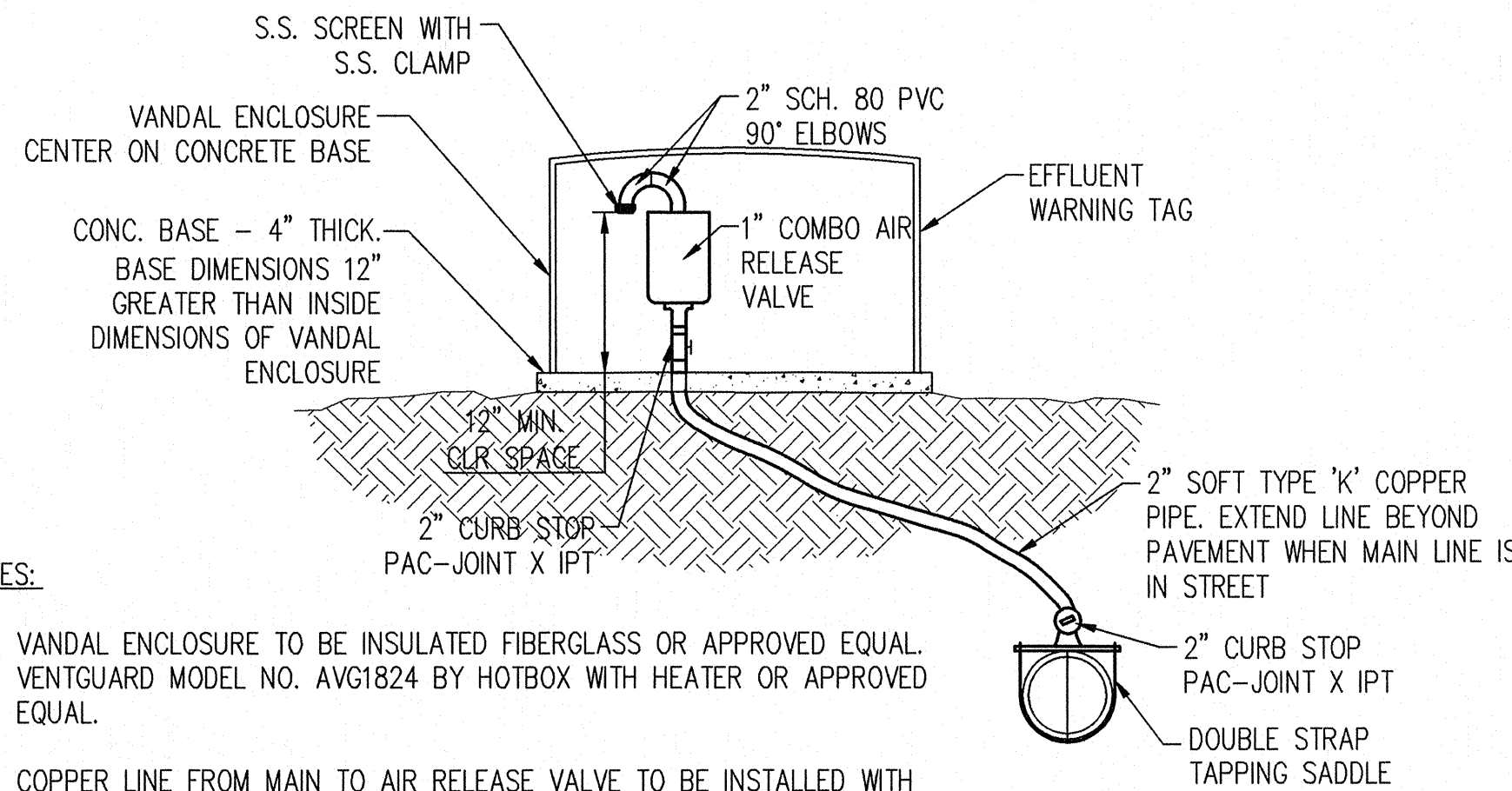
9 TYPICAL SECTION, DAM CREST WL CONSTRUCTION
SCALE: 1"=1'

GENERAL NOTES:

1. MECHANICAL TAMPERS SHALL NOT BE USED IN THE INITIAL BACKFILL REGION FOR FLEXIBLE PIPE. WHEN FLEXIBLE PIPE IS USED, CONTRACTOR SHALL, PRIOR TO THE START OF CONSTRUCTION, PROVIDE THE PROPOSED COMPACTION METHOD IN THE INITIAL BACKFILL REGION TO THE ENGINEER FOR APPROVAL.
2. MINIMUM CLASS "C" BEDDING WILL BE USED.

KEYED NOTES:

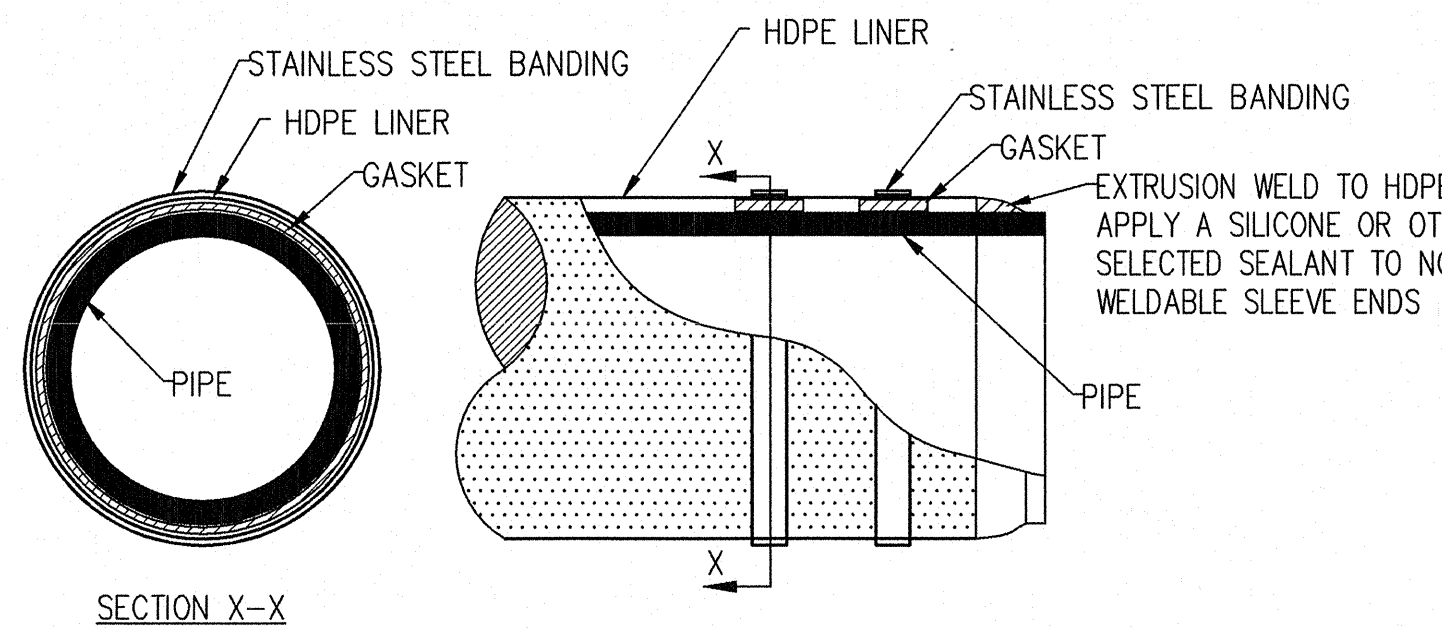
1. SAND FOR INSULATED PIPE. CLASS I, II, III SOILS OR LEAN FILL PER SECTION 207. COMPACTION > 90% MAX DENSITY PER ASTM D 1557.
2. SAND OR SELECT BACKFILL SHALL BE USED IN THE PIPE ZONE FOR INSULATED PIPE.
3. LOCATER WIRE, SINGLE INSULATED NO. 12 COPPER WIRE, THNN OR THWN, GASOLINE AND OIL RESISTANT.
4. WARNING TAPE PER SPEC. SECTION 801.9.9
5. FOR PIPE INSTALLATION ACROSS TRENCH, COMPACT FOUNDATION TO 90% OF MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D1557



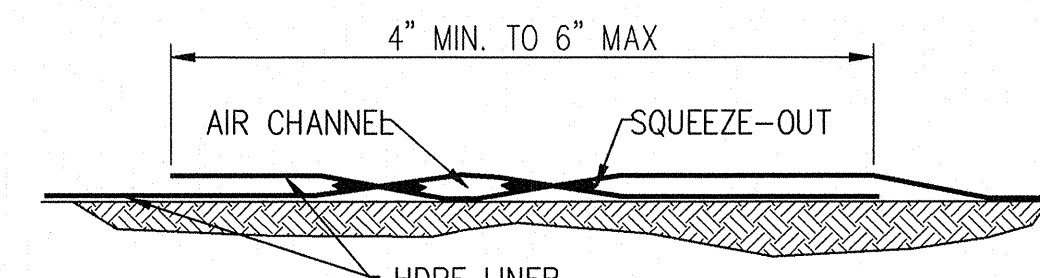
NOTES:

1. VANDAL ENCLOSURE TO BE INSULATED FIBERGLASS OR APPROVED EQUAL. VENTGUARD MODEL NO. AVG1824 BY HOTBOX WITH HEATER OR APPROVED EQUAL.
2. COPPER LINE FROM MAIN TO AIR RELEASE VALVE TO BE INSTALLED WITH POSITIVE SLOPE TO PREVENT BLOCKAGE.
3. COMBINATION AIR RELEASE VALVE SHALL BE VALMATIC MODEL 201C.2 OR APPROVED EQUAL.

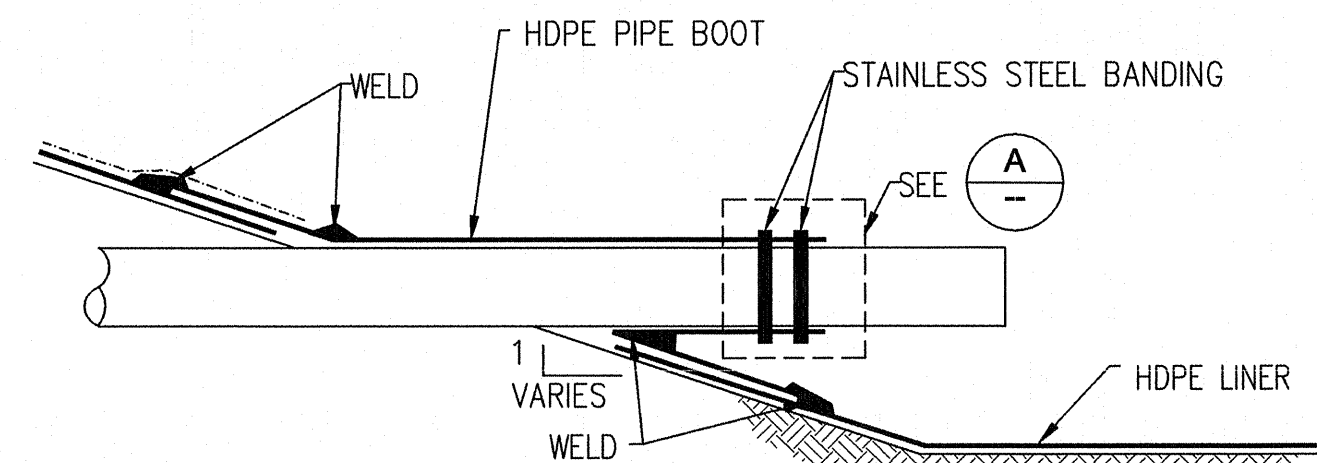
7 ABOVE GRADE AIR RELEASE VALVE DETAIL
N.T.S.



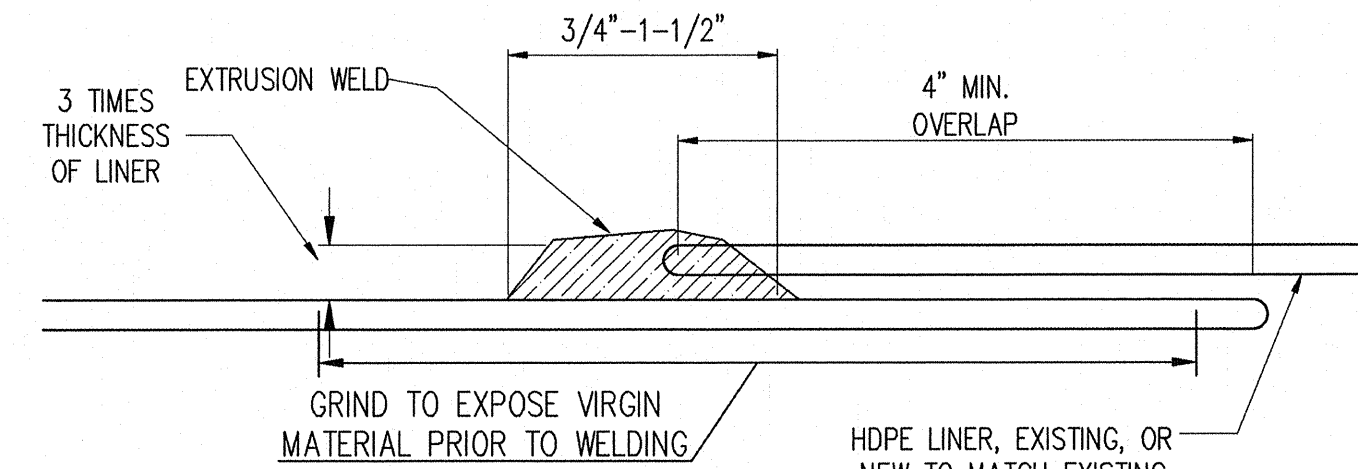
A PIPE PENETRATION SEAL
(VERTICAL OR HORIZONTAL)
NOT TO SCALE



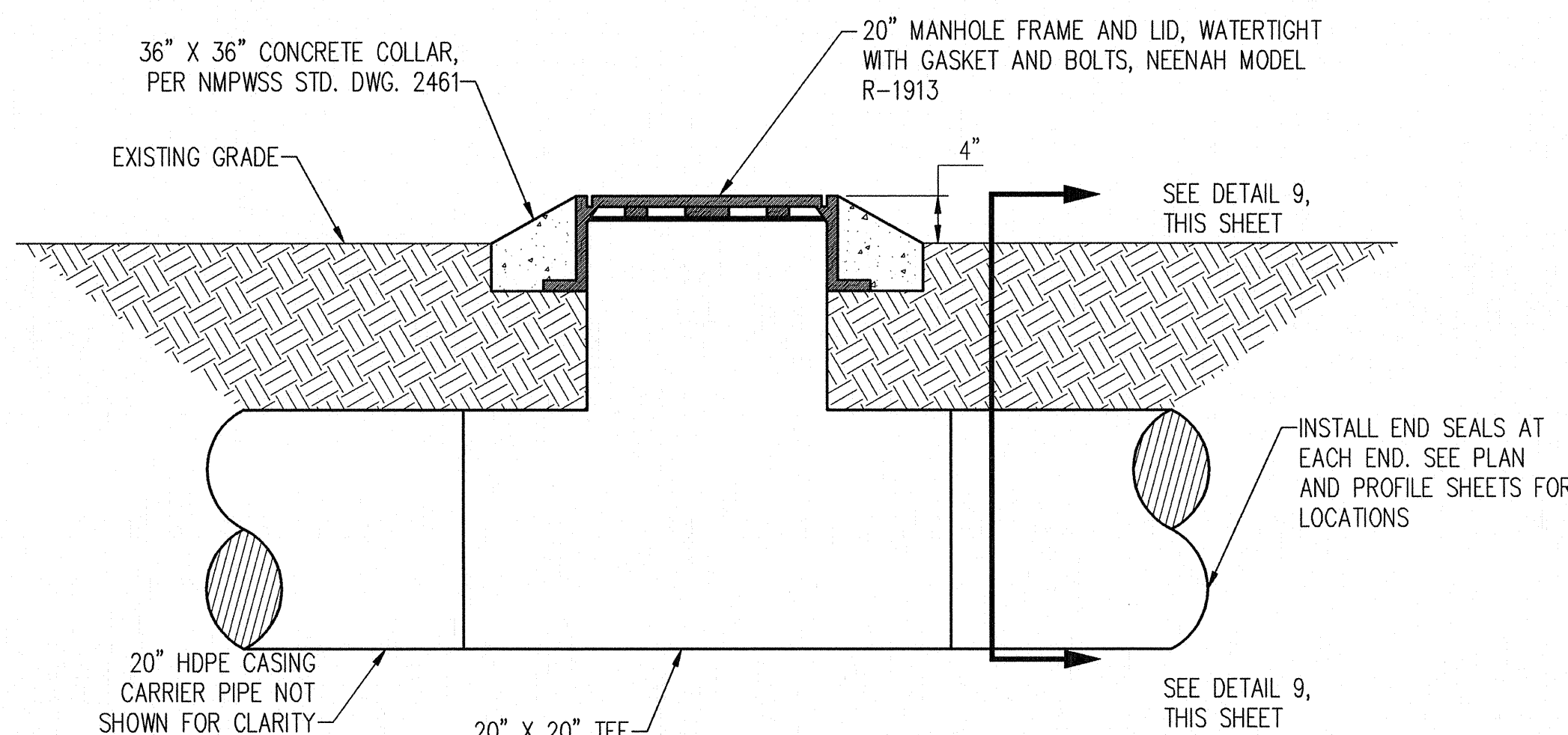
C TYPICAL HOT WEDGE DOUBLE TRACK FUSION WELD
NOT TO SCALE



B TYPICAL PIPE PENETRATION
NOT TO SCALE



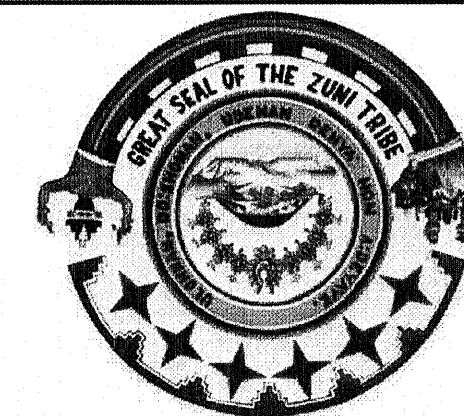
D TYPICAL EXTRUSION WELD
NOT TO SCALE



10 TYPICAL HEAT TRACE HAND HOLE
SCALE: 1"=1'

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

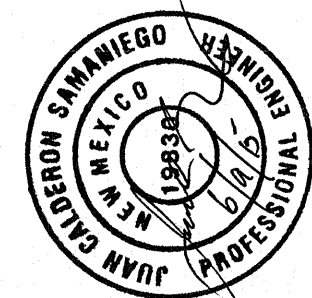
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CIVIL DETAILS

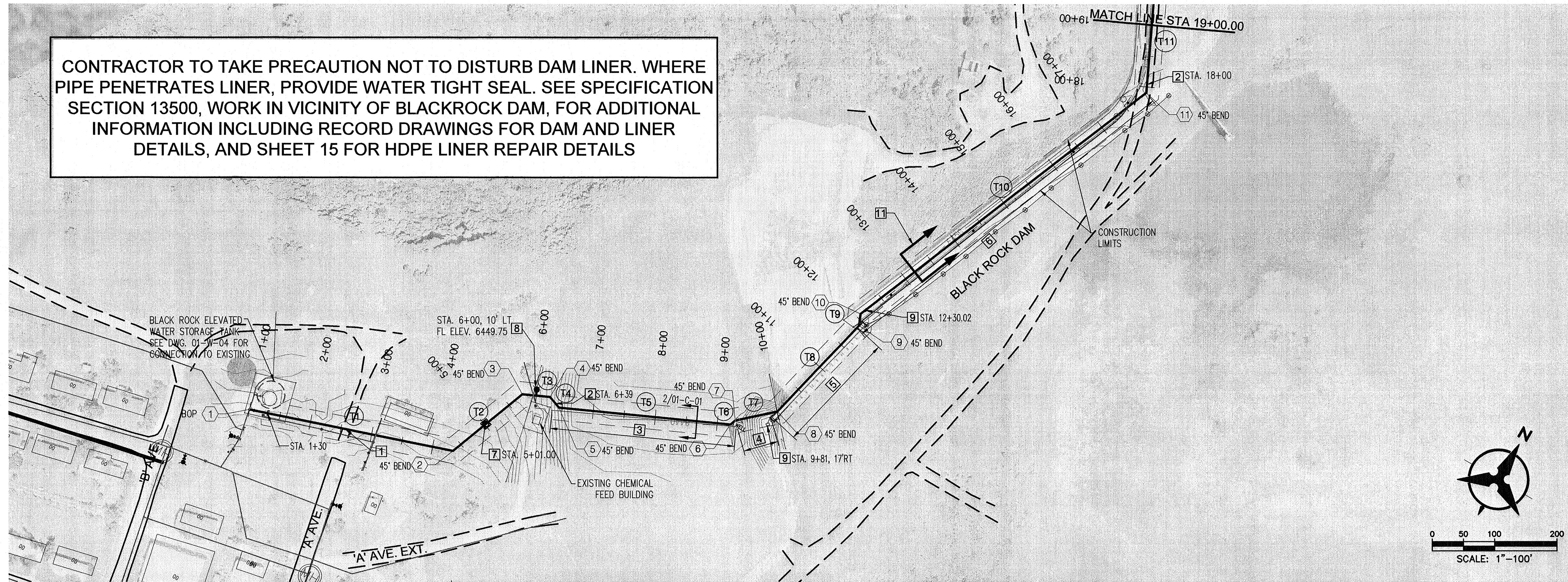
PROJECT NO.	DRAWING NO.	SHEET	OF
20150380	01-C-01	15	36

AS-BUILT INFORMATION	
CONTRACTOR	DATE
WORK STARTED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

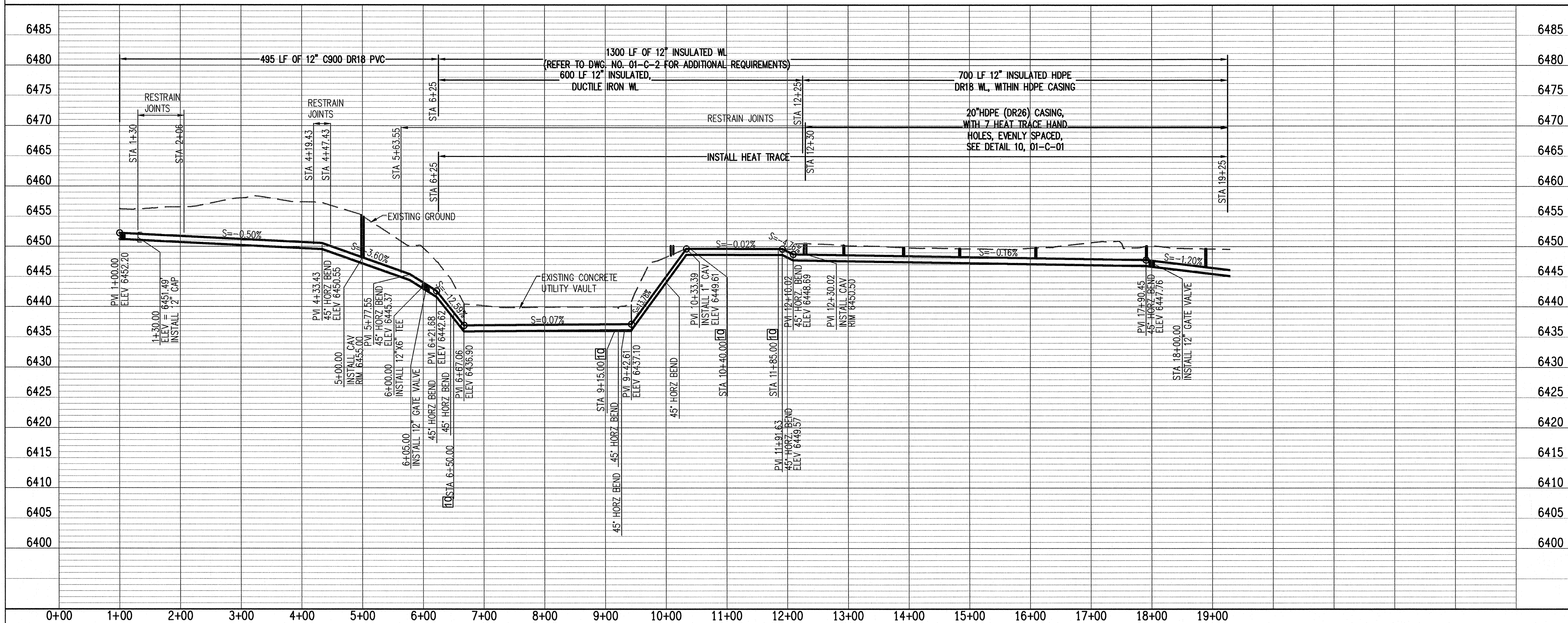


ENGINEER'S SEAL	
NO.	DATE
REVISIONS	BY
DESIGN	DATE 04/2015
DRAWN BY J.C.S.	DATE 04/2015
CHECKED BY T.A.B.	DATE 04/2015

CONTRACTOR TO TAKE PRECAUTION NOT TO DISTURB DAM LINER. WHERE PIPE PENETRATES LINER, PROVIDE WATER TIGHT SEAL. SEE SPECIFICATION SECTION 13500, WORK IN VICINITY OF BLACKROCK DAM, FOR ADDITIONAL INFORMATION INCLUDING RECORD DRAWINGS FOR DAM AND LINER DETAILS, AND SHEET 15 FOR HDPE LINER REPAIR DETAILS



STA 1+00 TO STA 19+00



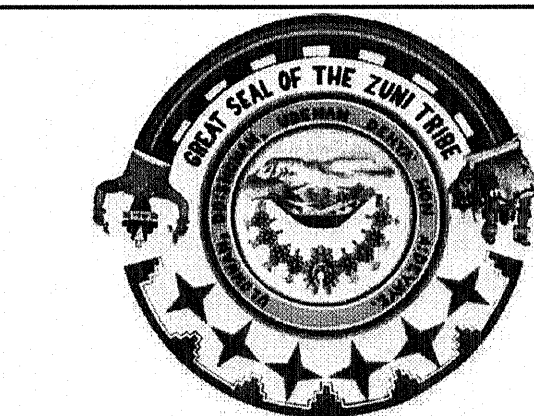
- GENERAL NOTES:**
- RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY EBAA IRON OR APPROVED EQUAL.
 - HDPE PIPE SHALL BE RESTRAINED BY WELDING JOINTS PER MANUFACTURERS INSTRUCTIONS.
 - EXPOSED DUCTILE IRON PIPE ALONG THE PEDESTRIAN BRIDGE AND WITHIN THE UTILITY CORRIDOR, SHALL BE PREPARED TO BE USED WITH STANDARD GROOVE END COUPLINGS AND FITTINGS, AS MANUFACTURED BY VICTAULIC, OR ENGINEER APPROVED EQUAL.
 - MONITORING WELLS SHALL NOT BE DISTURBED. CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE TO EXISTING CONDITIONS. CONTRACTOR SHALL IDENTIFY ALL MONITORING WELLS CONSULTATION WITH BIA REPRESENTATIVES.
 - PIPE TRANSITIONS FROM DUCTILE IRON TO HDPE, PVC TO DUCTILE IRON, OR HDPE TO PVC, SHALL BE MADE USING A RESTRAINED TRANSITION COUPLING, SUCH AS ROMAC MODEL ALPHA, OR ENGINEER APPROVED EQUAL.

- KEYED NOTES:**
- 12" WL PER SECTION 801.
 - 12" GATE VALVE, BOX AND COVER PER DWG 2326.
 - INSULATED PIPE INSIDE EXISTING UTILITY VAULT, REPLACE EXISTING 3" WL. SEE DWG, 01-C-02 FOR WORK IN THIS AREA.
 - INSULATED PIPE.
 - INSULATED PIPE HUNG ON NW EDGE OF WALKWAY (SEE DWG NO. 01-ST-01).
 - INSULATED PIPE ACROSS PARAPET, 1.5' COVER.
 - CAV PER STD. DWG. 2350.
 - FIRE HYDRANT PER STD. DWG. 2340.
 - ABOVE GROUND CAV PER DETAIL 7, DWG. 01-C-01.
 - EXPANSION JOINT, INSTALL ROMAC MODEL DJ400 DISMANTLING JOINT, WITH LIMIT RODS SET TO ALLOW 1" OF EXPANSION.
 - EXISTING LEAN-FILL CUT-OFF WALL SHALL NOT BE DISTURBED, SEE DETAIL 9, SHEET 15 FOR TYPICAL SECTION AT DAM CREST

LEGEND
SEE POINT TABLE DWG # 01-G-03

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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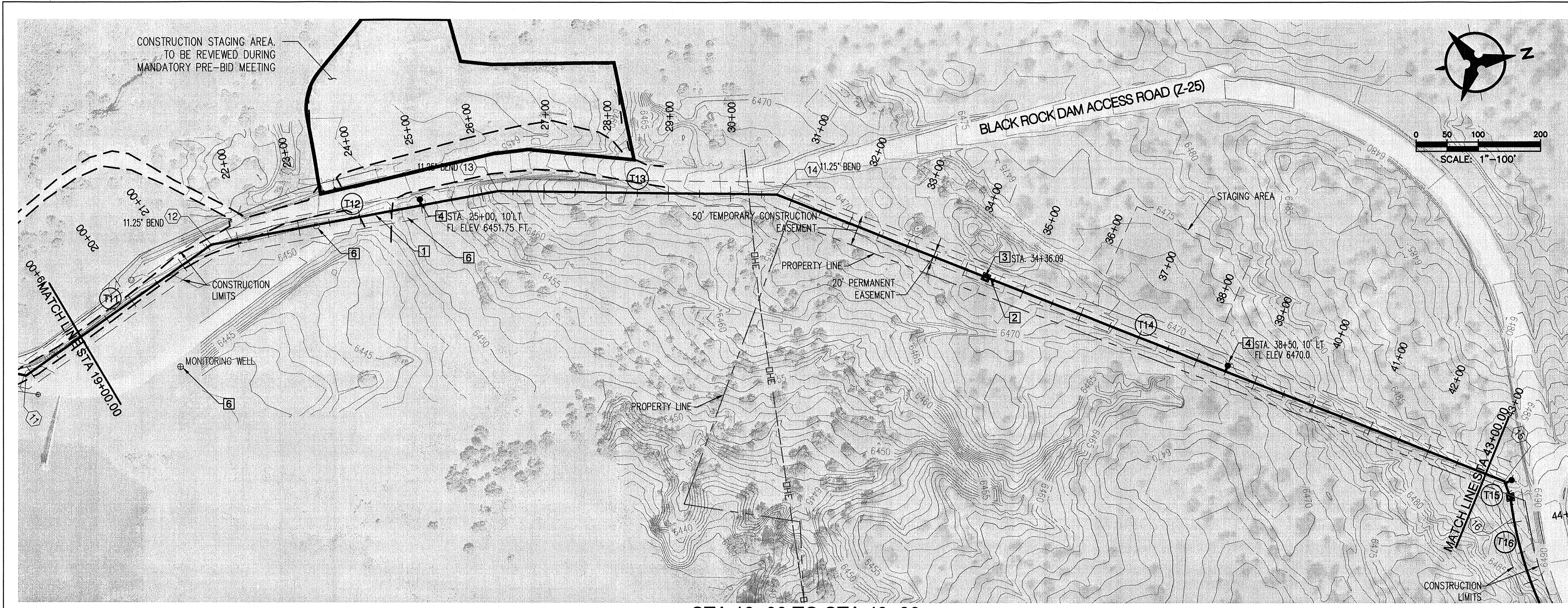
ZUNI UTILITY INFRASTRUCTURE
WATER PLAN AND PROFILE
STA 1+00 TO STA 19+00

PROJECT NO. 20150380 DRAWING NO. 10-W-01 SHEET 17 OF 36

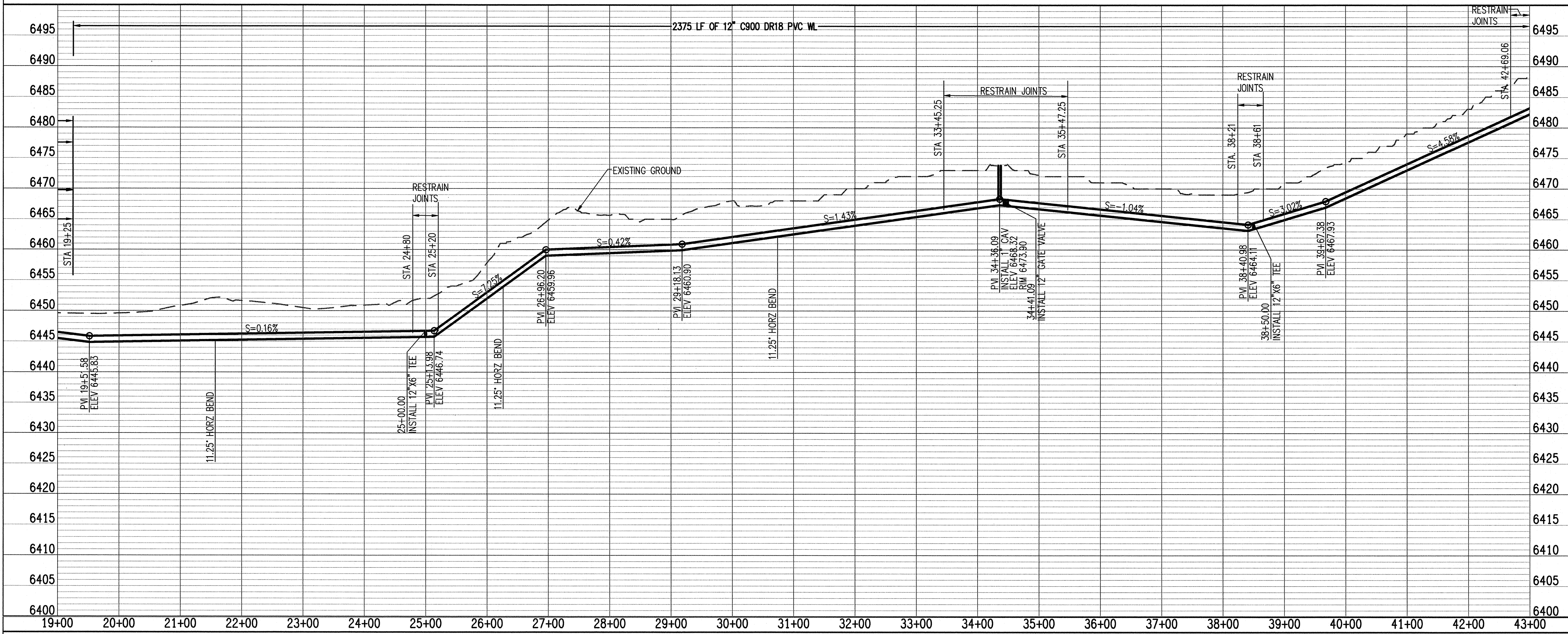
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BHI JOB NO. 20100147

SCALE: 1" = 100' HORIZ.
1" = 10' VERT.



STA 19+00 TO STA 43+00



- GENERAL NOTES:**
1. RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY EBAA IRON OR APPROVED EQUAL.
 2. EASEMENT SHOWN TO BE OBTAINED BY ZUNI OFFICE OF PLANNING AND DEVELOPMENT.
 3. MONITORING WELLS SHALL NOT BE DISTURBED. CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE TO EXISTING CONDITIONS. CONTRACTOR SHALL IDENTIFY ALL MONITORING WELLS CONSULTATION WITH BIA REPRESENTATIVES.

- KEYED NOTES:**
- 1 12" WL PER SECTION 801
 - 2 12" GATE VALVE, BOX AND COVER PER DWG 2326
 - 3 CAV PER STD. DWG. 2350
 - 4 FIRE HYDRANT PER STD DWG 2340
 - 5 REMOVE AND RELOCATE FENCE 10' SOUTH OF WL FOR ENTIRE LENGTH IN CONFLICT WITH WL
 - 6 MONITORING WELL, DO NOT DISTURB DURING CONSTRUCTION.

- LEGEND**
- REGISTERED ARCHAEOLOGICAL SITES
 - ISOLATED OCCURRENCE
 - LA 88072 HISTORIC WAGON TRAIL
 - SEE POINT TABLE DWG # 01-G-03

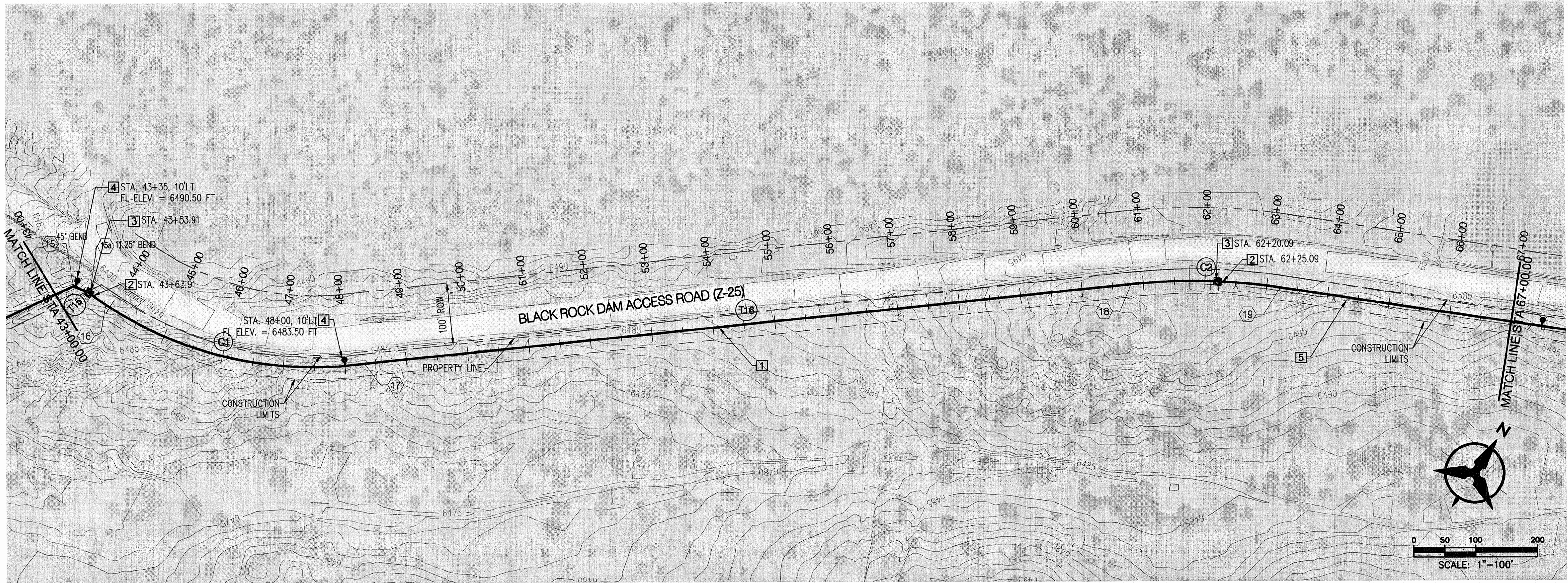
**NOTICE OF EXTENDED
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SUBMISSION OF AN
UNDISPUTED REQUEST FOR
PAYMENT.**

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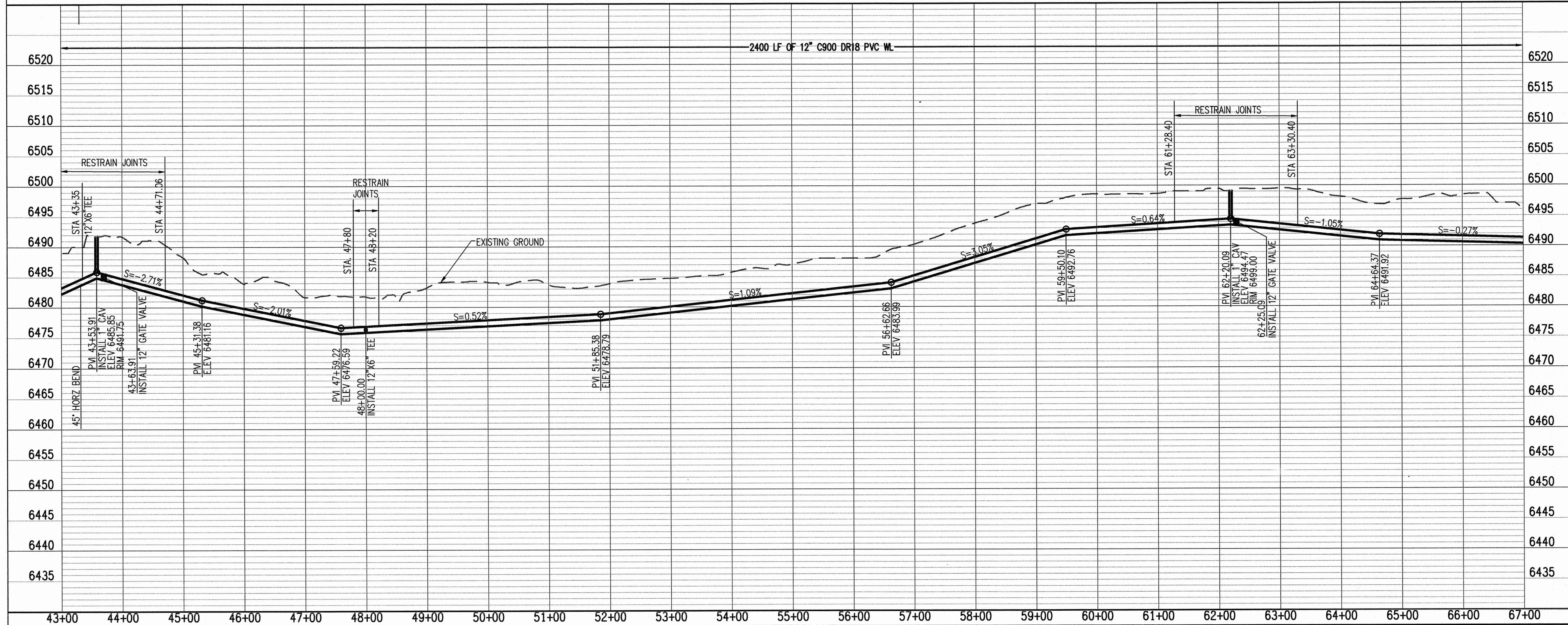


**ZUNI UTILITY INFRASTRUCTURE
WATER PLAN AND PROFILE
STA 19+00 TO STA 43+00**

AS-BUILT INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE		BY
WORK STAGED BY	DATE		REMARKS
INSPECTOR'S ACCEPTANCE BY	DATE		REVISIONS
FIELD VERIFICATION BY	DATE		DESIGN
DRAWINGS CORRECTED BY	DATE		
NO.	DATE	DESIGNED BY	J.C.S.
		DRAWN BY	J.J.G.
		CHECKED BY	T.A.B.



STA 43+00 TO STA 67+00



GENERAL NOTES:

1. RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY EBAA IRON OR APPROVED EQUAL.

KEYED NOTES:

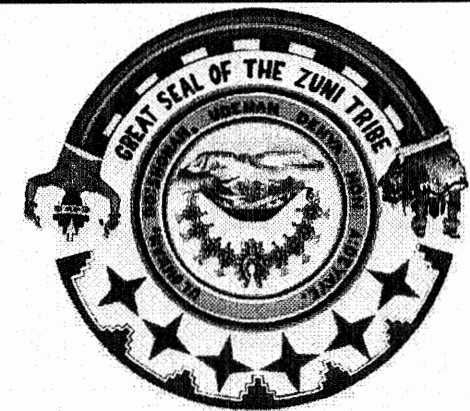
- 1 12" WL PER SECTION 801
- 2 12" GATE VALVE, BOX AND COVER PER DWG 2326
- 3 CAV PER STD. DWG. 2350
- 4 FIRE HYDRANT PER STD DWG 2340
- 5 REMOVE AND RELOCATE FENCE 10' SOUTH OF WL FOR ENTIRE LENGTH FENCE IS IN CONFLICT WITH WL.

LEGEND

- REGISTERED ARCHAEOLOGICAL SITES
- ISOLATED OCCURRENCE
- SEE POINT TABLE DWG # 01-G-03

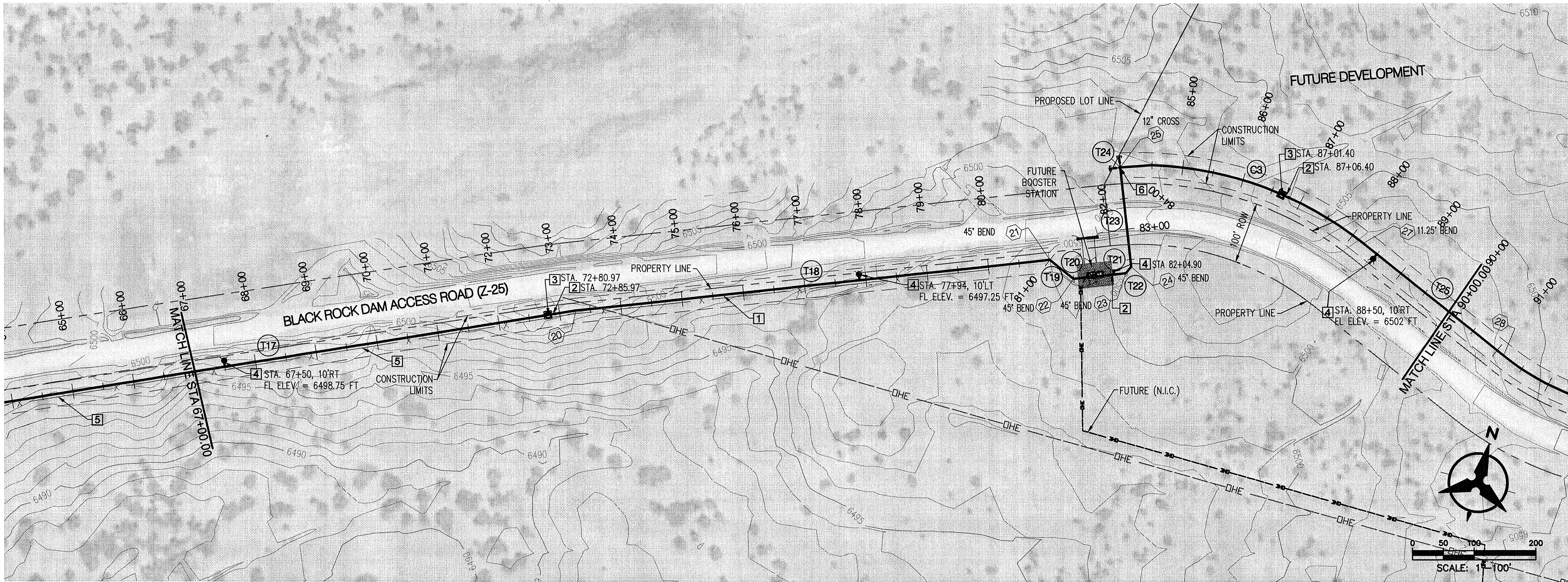
NOTICE OF EXTENDED
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SUBMISSION OF AN
UNDISPUTED REQUEST FOR
PAYMENT.

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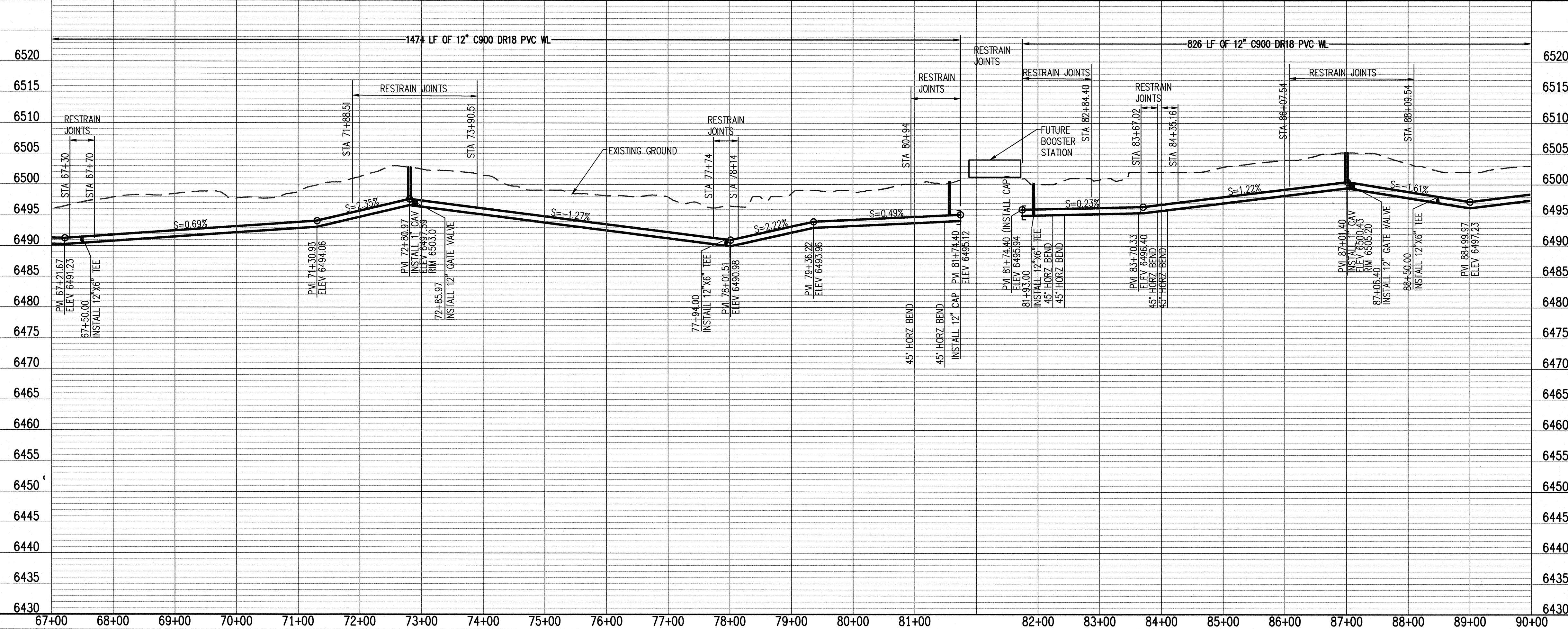


ZUNI UTILITY INFRASTRUCTURE
WATER PLAN AND PROFILE
STA 43+00 TO STA 67+00

PROJECT NO. 20150380	DRAWING NO. 10-W-03	SHEET 19	OF 36
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STA 67+00 TO STA 90+00



GENERAL NOTES:

1. RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY EBAA IRON OR APPROVED EQUAL.

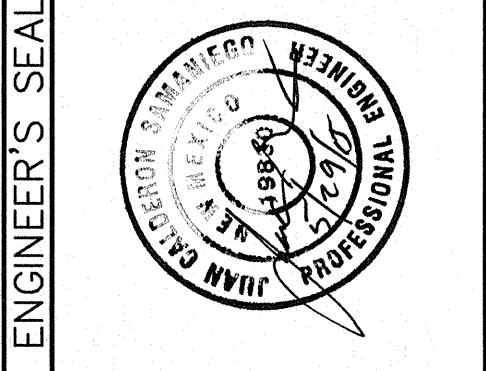
KEYED NOTES:

- 1 12" WL PER SECTION 801
2 12" GATE VALVE, BOX AND COVER PER DWG 2326
3 CAV PER STD. DWG. 2350
4 FIRE HYDRANT PER STD DWG 2340
5 REMOVE AND RELOCATE FENCE 10' SOUTH OF WL FOR ENTIRE LENGTH IN CONFLICT WITH WL
6 INSTALL CROSS, WITH GATE VALVES, 10' OF PIPE AND CAP, ON NORTH AND WEST BRANCH.

LEGEND

- REGISTERED ARCHAEOLOGICAL SITES
ISOLATED OCCURRENCE
SEE POINT TABLE DWG # 01-G-03

AS-BUILT INFORMATION	
CONTRACTOR	DATE
WORK STARTED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE



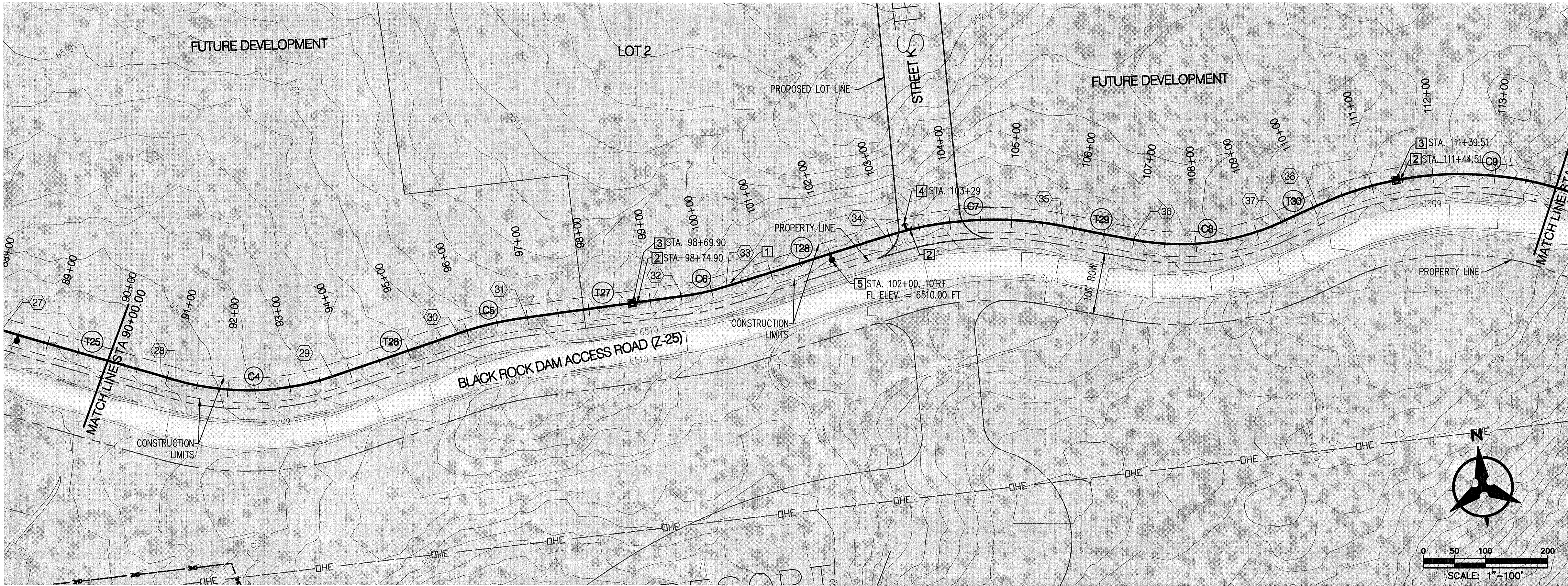
ENGINEER'S SEAL	
NO.	DATE
REVISIONS	BY
DESIGN	DATE
DESIGNED BY	J.C.S.
DRAWN BY	J.J.G.
CHECKED BY	T.A.B.

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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WATER PLAN AND PROFILE
STA 67+00 TO STA 90+00



STA 90+00 TO STA 114+00

GENERAL NOTES:

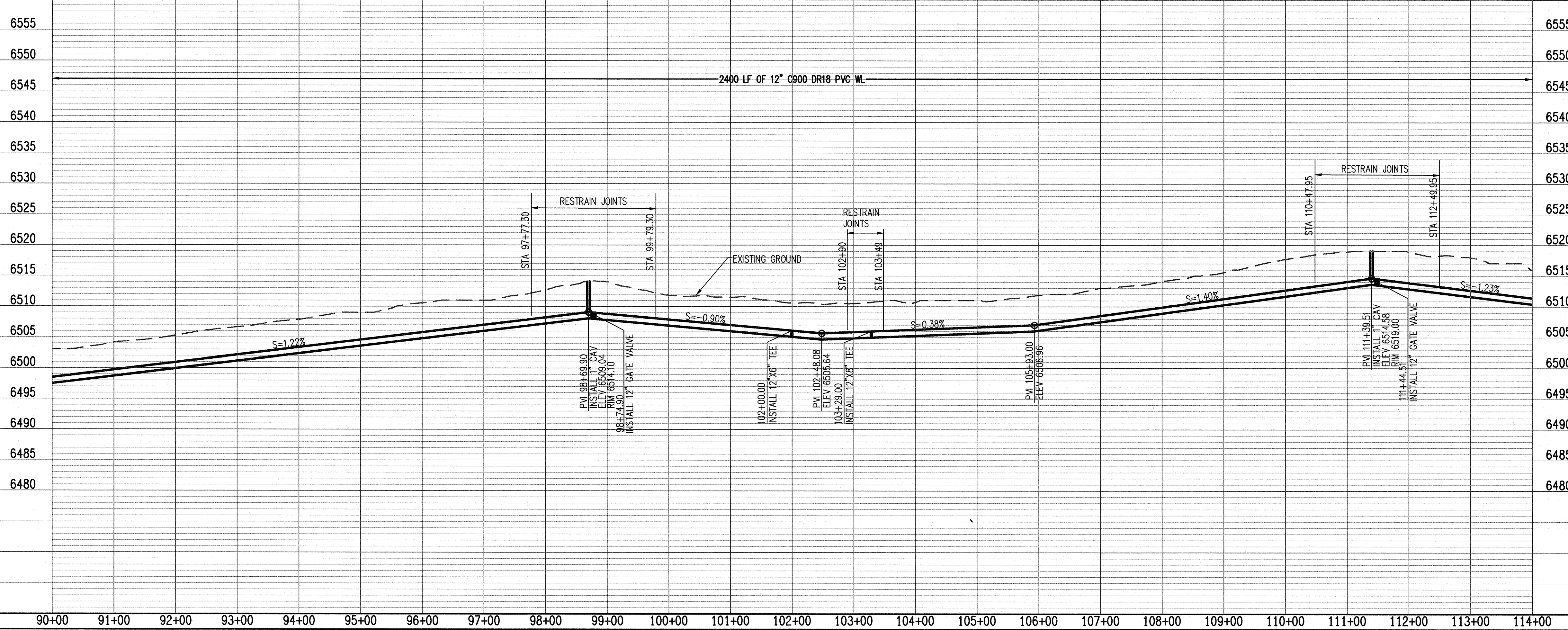
1. RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY EBAA IRON OR APPROVED EQUAL.

KEYED NOTES:

- 1 12" WL PER SECTION 801
- 2 12" GATE VALVE, BOX AND COVER PER DWG 2326
- 3 CAV PER STD. DWG. 2350
- 4 12" X 8" TEE, 8" GATE VALVE, STUB AND CAP FOR FUTURE CONNECTION
- 5 FIRE HYDRANT PER STD DWG 2340

LEGEND

- REGISTERED ARCHAEOLOGICAL SITES
- ISOLATED OCCURRENCE
- SEE POINT TABLE DWG # 01-G-03

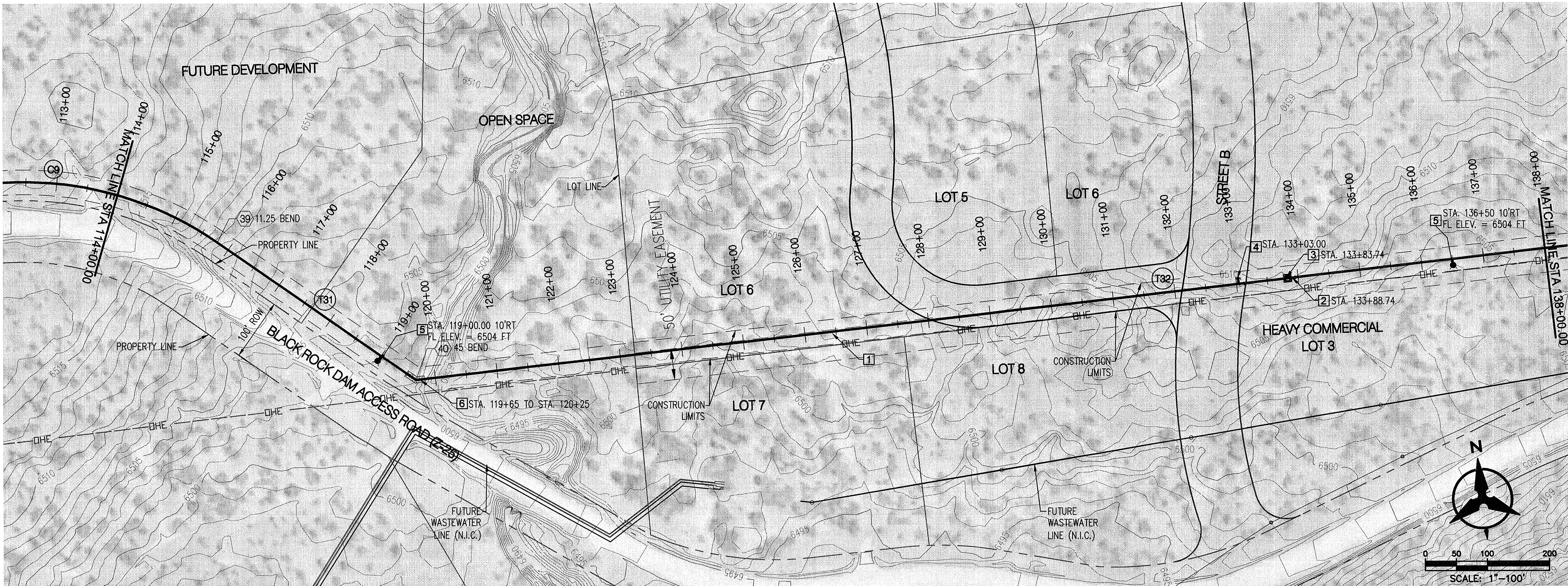


**NOTICE OF EXTENDED
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PAYMENT.**

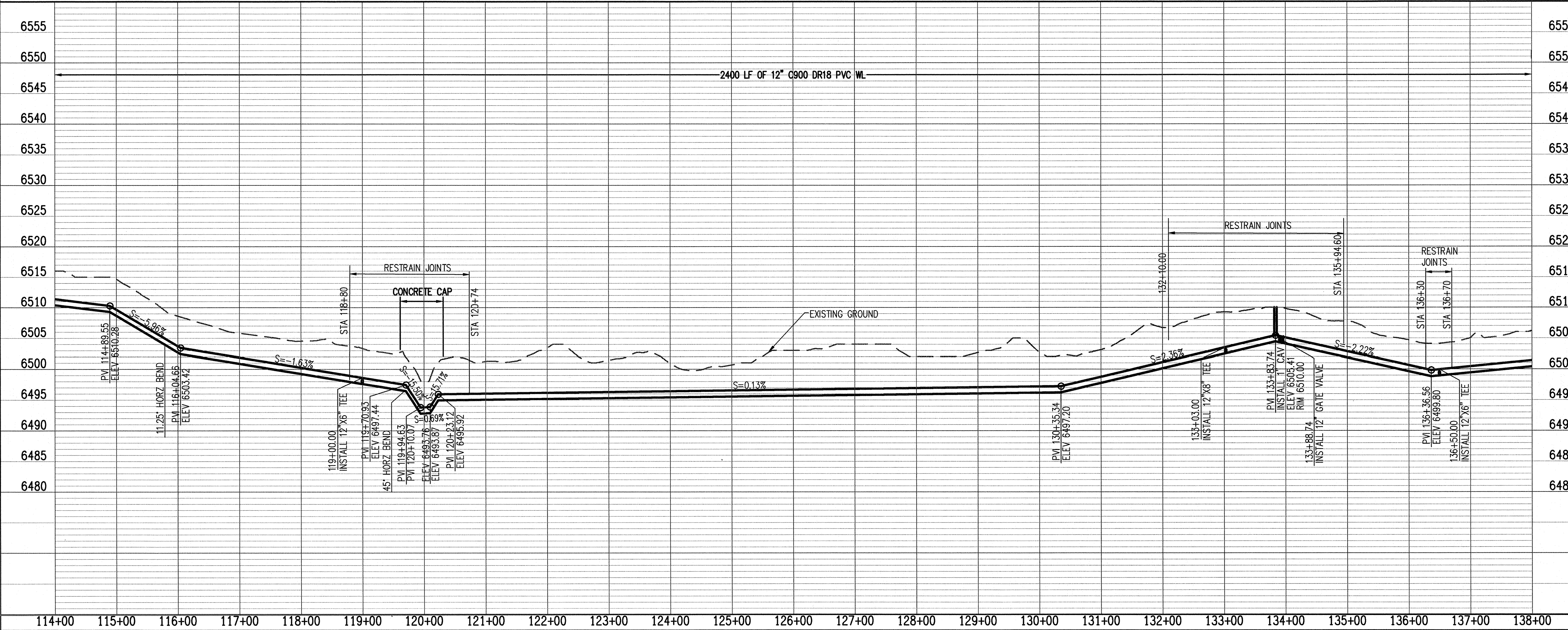
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ZUNI UTILITY INFRASTRUCTURE
WATER PLAN AND PROFILE
STA 90+00 TO STA 114+00



STA 114+00 TO STA 138+00



GENERAL NOTES:


1. RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY EBAA IRON OR APPROVED EQUAL.

KEYED NOTES:

- 1 12" WL PER SECTION 801
2 12" GATE VALVE, BOX AND COVER PER DWG 2326
3 CAV PER STD. DWG. 2350
4 12" X 8" TEE, 8" GATE VALVE, STUB AND CAP FOR FUTURE CONNECTION
5 FIRE HYDRANT PER DWG 2340
6 404 JURISDICTIONAL WATERWAY. PROVIDE CONCRETE CAP OVER PIPE PER DETAIL 8, DWG. 01-C-01

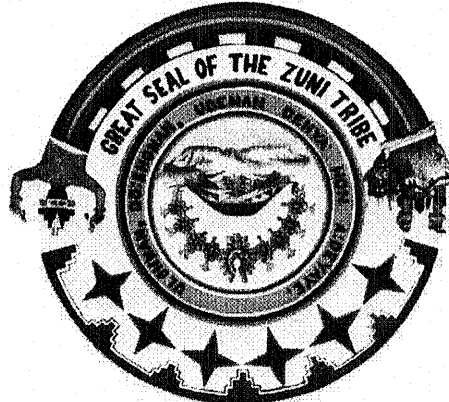
LEGEND

- REGISTERED ARCHAEOLOGICAL SITES
ISOLATED OCCURRENCE
SEE POINT TABLE DWG # 01-G-03

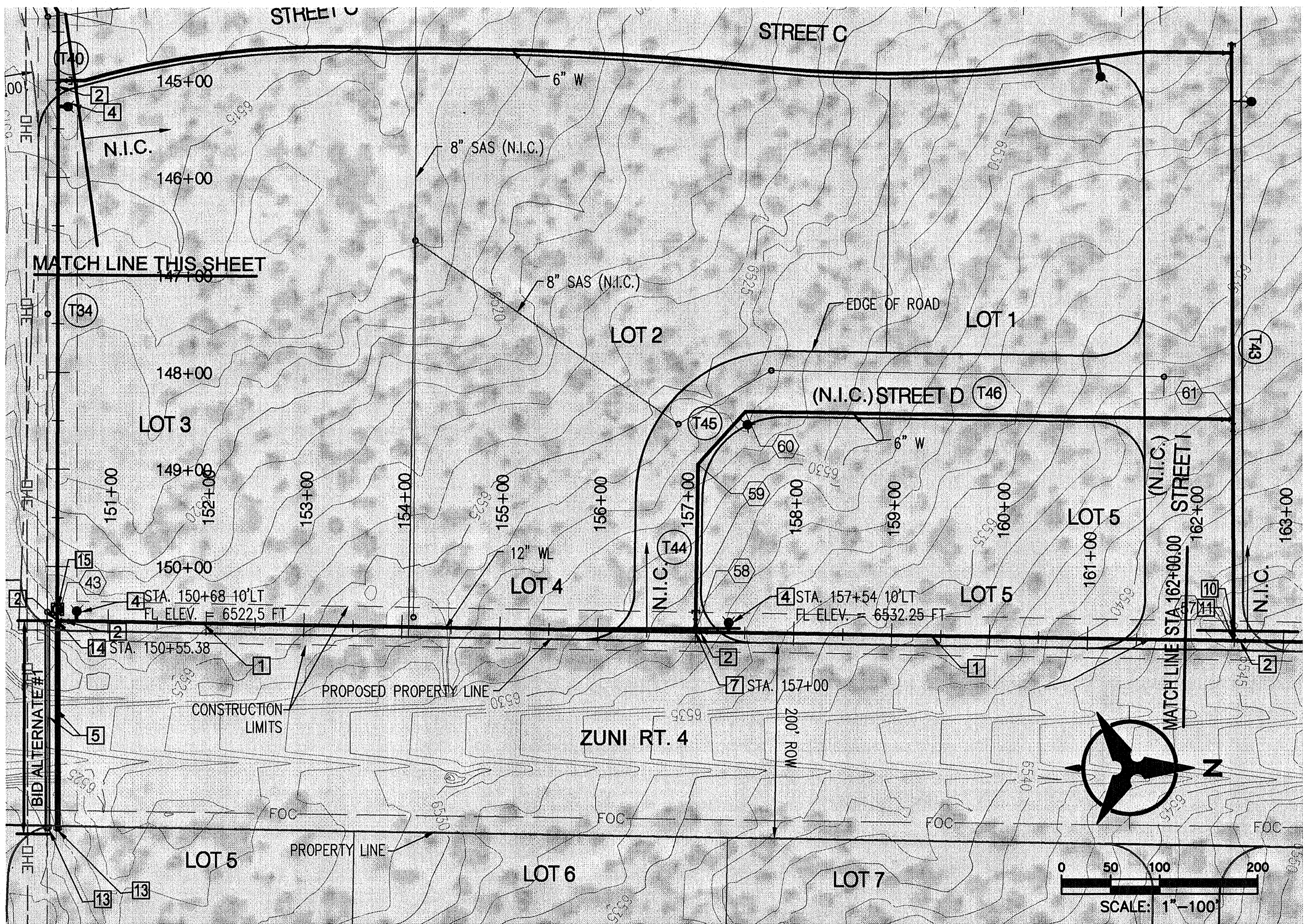
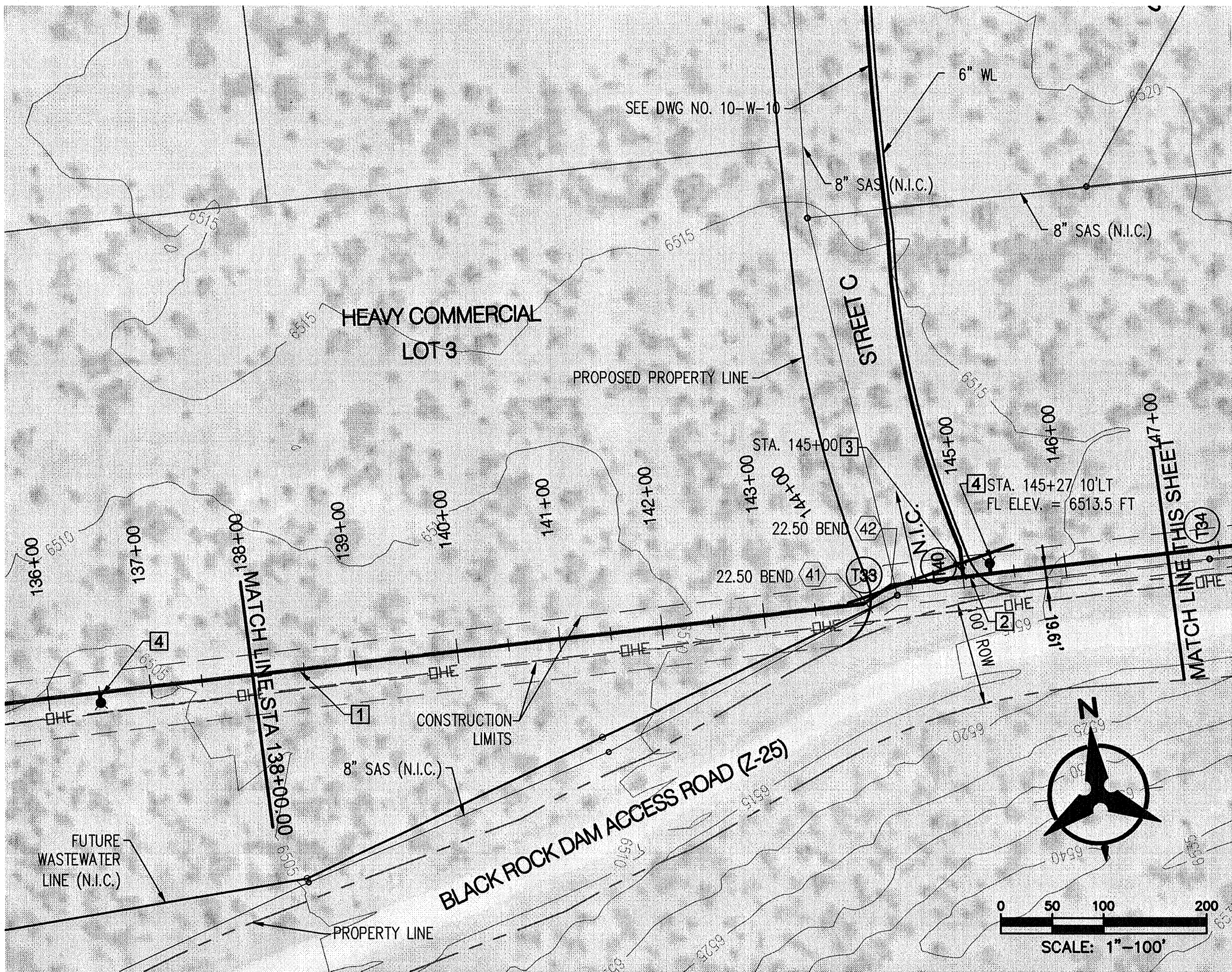
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		CONTRACTOR	DATE
		WORK STAKED BY	DATE
		INSPECTOR'S ACCEPTANCE BY	DATE
		FIELD VERIFICATION BY	DATE
		DRAWINGS CORRECTED BY	DATE
REVISIONS			
NO.	DATE	REMARKS	BY
		DESIGNED BY J.C.S.	DATE 04/2015
		DRAWN BY J.L.G.	DATE 04/2015
		CHECKED BY T.A.B.	DATE 04/2015

NOTICE OF EXTENDED
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UNDISPUTED REQUEST FOR
PAYMENT.

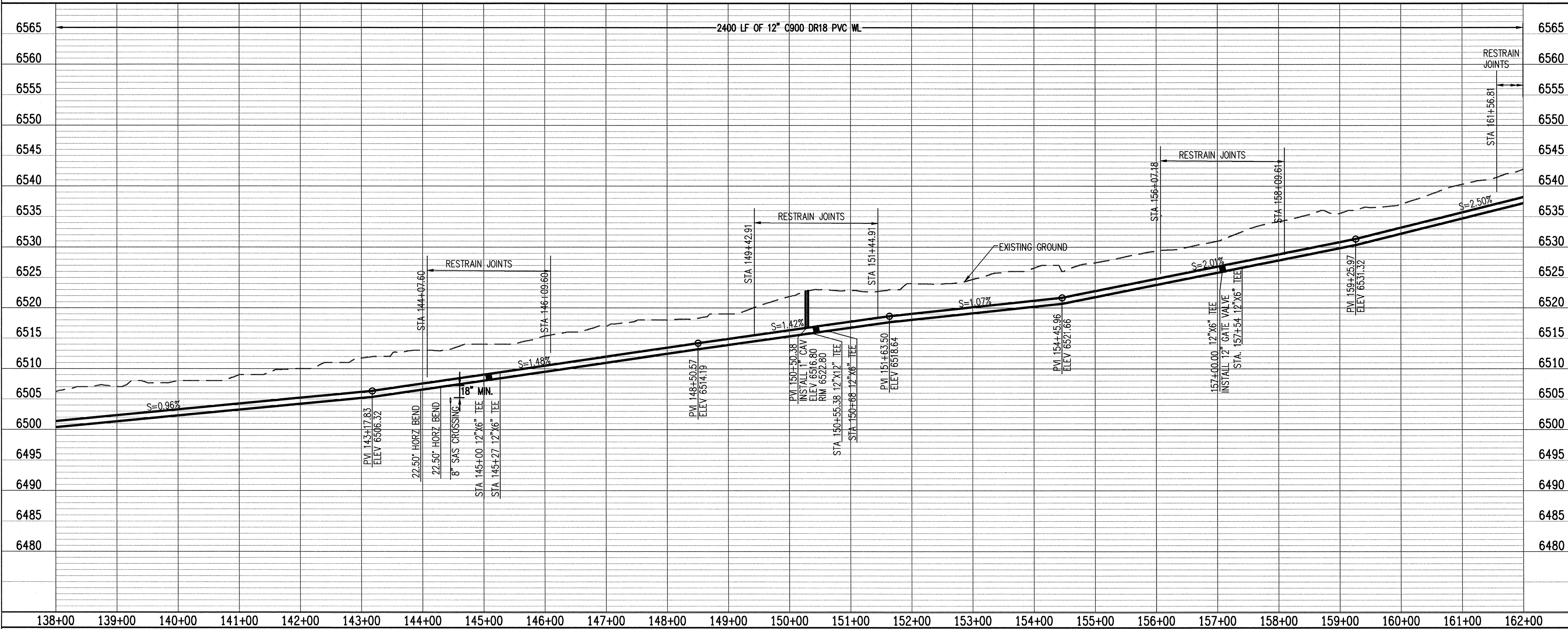
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WATER PLAN AND PROFILE
STA 114+00 TO STA 138+00



STA 138+00 TO STA 162+00



GENERAL NOTES:

1. RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY EBAA IRON OR APPROVED EQUAL.
2. FIELD VERIFY LOCATION AND ELEVATION OF EXISTING FIBER OPTIC PRIOR TO EXCAVATION OF BORE PITS. CONTACT CENTURY LINK FOR REQUIREMENTS.
3. 10' MINIMUM HORIZONTAL SEPERATION REQUIRED BETWEEN SEWER AND WATER.

KEYED NOTES:

- 1 12" WL PER SECTION 801
- 2 12" GATE VALVE, BOX AND COVER PER STD DWG 2326
- 3 12" X 6" TEE, 6" GATE VALVE AND 6" CAP
- 4 FIRE HYDRANT PER STD DWG 2340
- 5 BID ALTERNATE #1, (2) JACK AND BORES PER DWG. 10-ST-02
- 7 12"x6" TEE WITH 6" GATE VALVE, 6" CAP, BOX AND COVER PER STD. DWG. 2326
- 8 NOT USED
- 9 8" WL PER SECTION 801
- 10 8" GATE VALVE, BOX AND COVER PER STD DWG 2326
- 11 12"x8" TEE
- 12 8"x6" TEE
- 13 STUB AND CAP FOR FUTURE CONNECTION
- 14 12"x12" TEE, CAP AFTER VALVE. FOR BID ALTERNATE #1, EXTEND 12" WL TO END OF BORE PLUS 5 FEET AND CAP.
- 15 CAV PER STD. DWG. 2350

LEGEND

- REGISTERED ARCHAEOLOGICAL SITES
- ISOLATED OCCURENCE
- SEE POINT TABLE DWG # 01-G-03

**NOTICE OF EXTENDED
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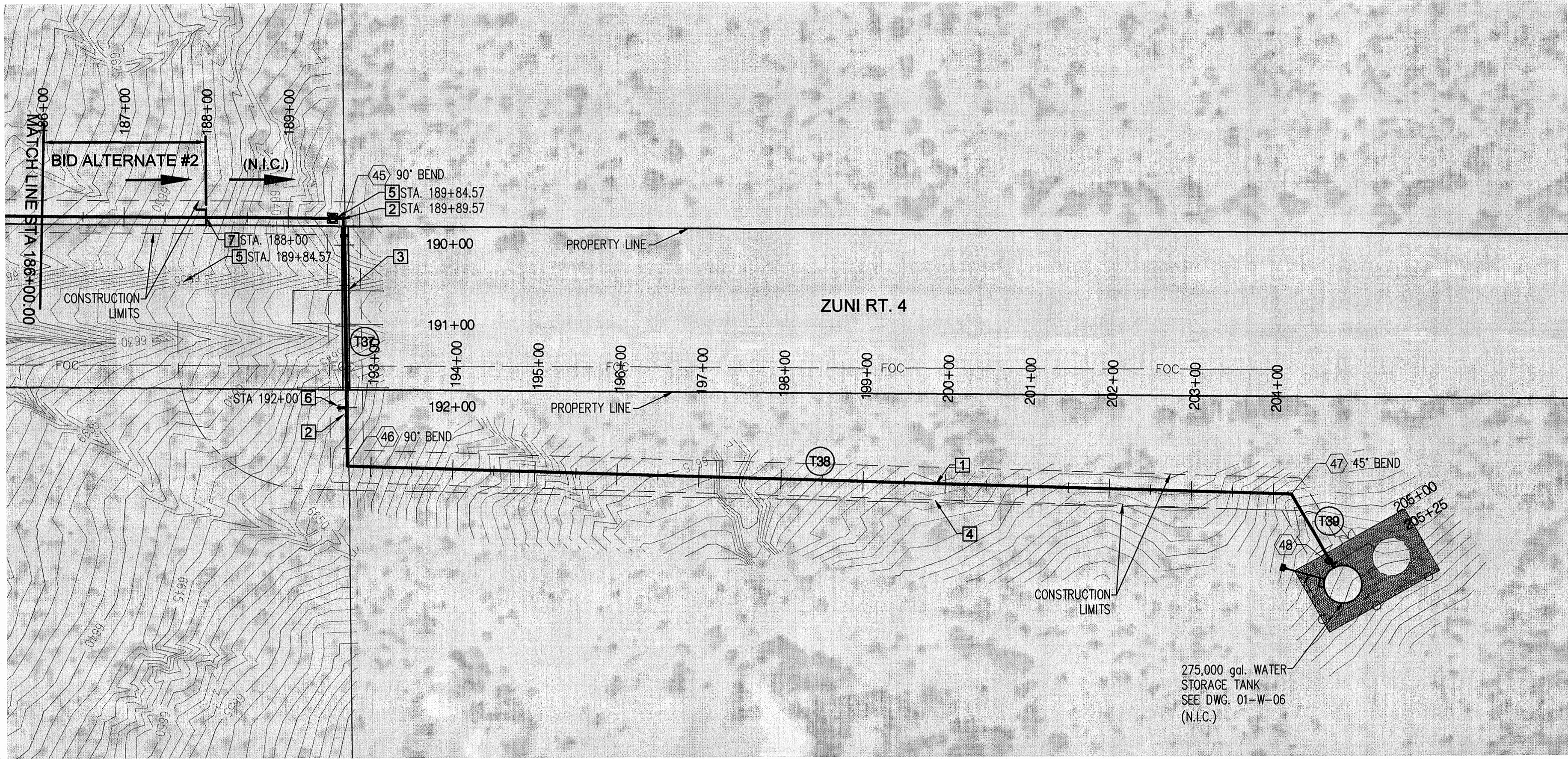
**ZUNI UTILITY INFRASTRUCTURE
WATER PLAN AND PROFILE
STA 138+00 TO STA 162+00**

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BHI JOB NO. 20100147
SCALE: 1" = 100' HORIZ.
1" = 10' VERT.

PROJECT NO. 20150380	DRAWING NO. 10-W-07	SHEET 23	OF 36
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AS-BUILT INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE		BY
WORK STAKED BY	DATE		REMARKS
INSPECTOR'S ACCEPTANCE BY	DATE		REVISIONS
FIELD VERIFICATION BY	DATE		DESIGN
DRAWINGS CORRECTED BY	DATE	DESIGNED BY	DATE 04/2015
		DRAWN BY	DATE 04/2015
		CHECKED BY	DATE 04/2015



GENERAL NOTES:

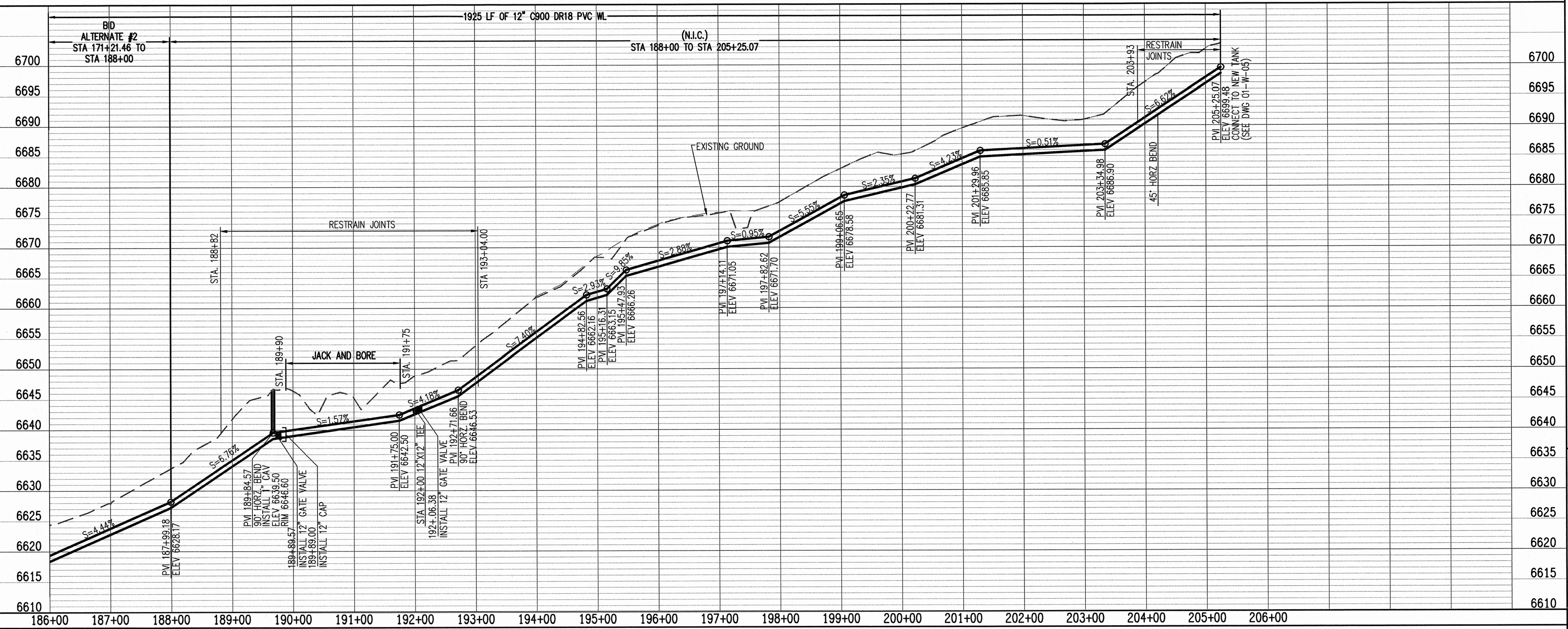
1. RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY ABAA IRON OR APPROVED EQUAL.

KEYED NOTES:

- 1 12" WL PER SECTION 801
- 2 12" GATE VALVE, BOX AND COVER PER STD DWG 2326
- 3 JACK AND BORE, INSTALL 22" STEEL CASING PER STD DWG 2380 AND SECTION 710
- 4 ACCESS ROAD SEE DWG. 01-W-05
- 5 CAV PER STD. DWG. 2350
- 6 12"x12" TEE, 12" GATE VALVE, BOX & COVER PER STD DWG 2326 STUB & CAP FOR FUTURE CONNECTION
- 7 12" CAP.

LEGEND

- REGISTERED ARCHAEOLOGICAL SITES
- ISOLATED OCCURRENCE

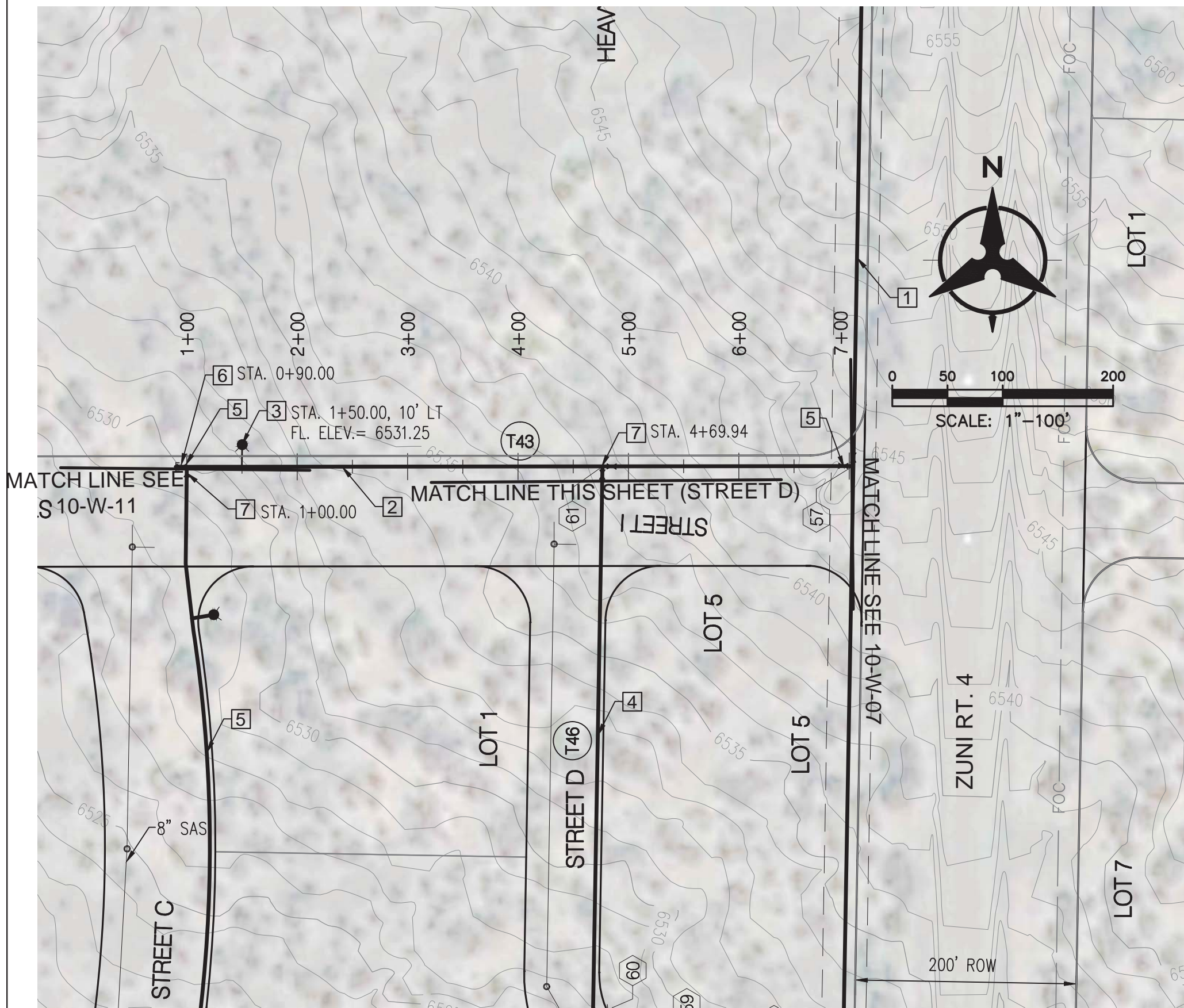


NOTICE OF EXTENDED
PAYMENT PROVISION. THIS
CONTRACT ALLOWS THE
OWNER TO MAKE PAYMENT
WITHIN 45 DAYS AFTER
SUBMISSION OF AN
UNDISPUTED REQUEST FOR
PAYMENT.

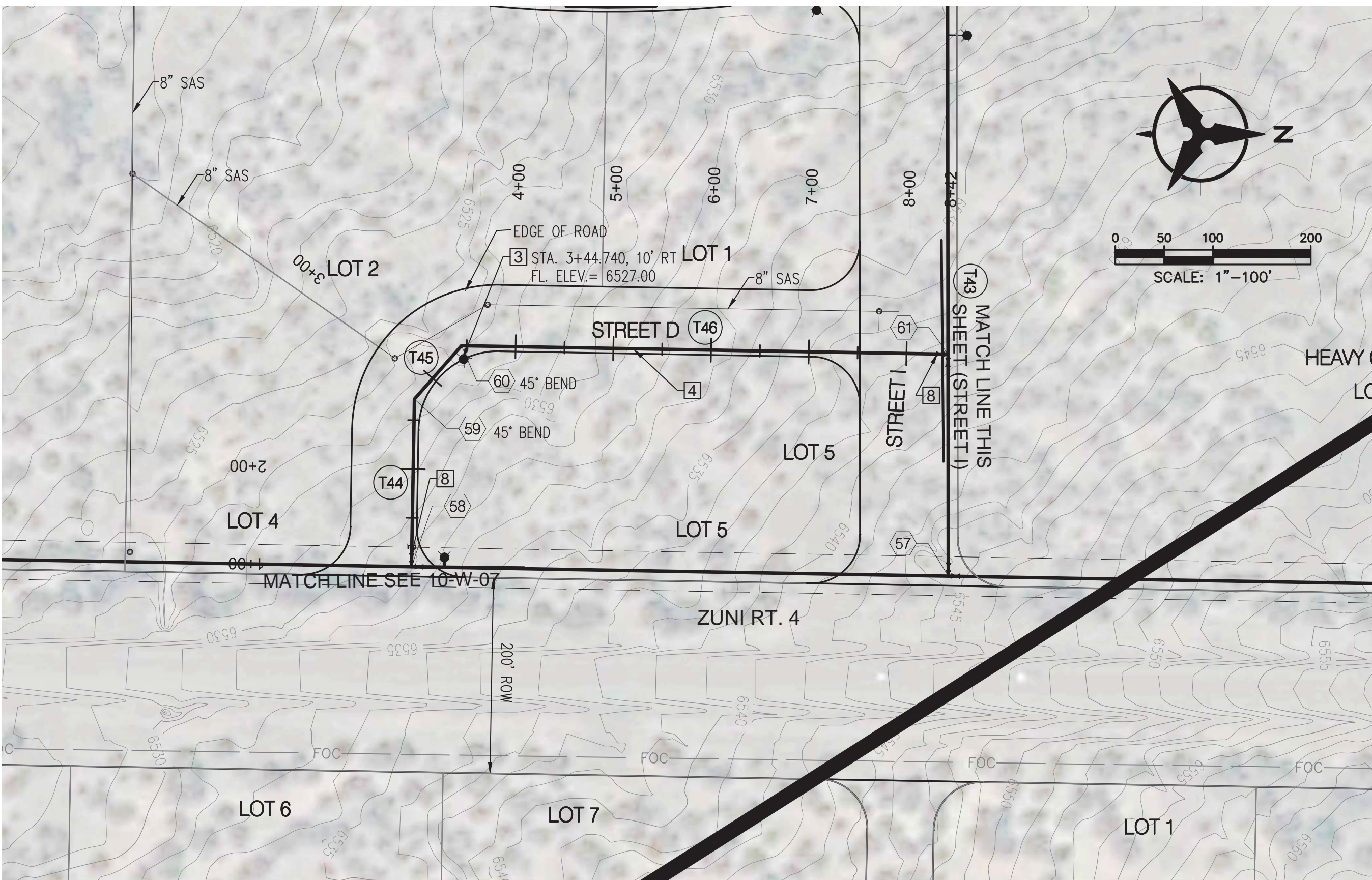
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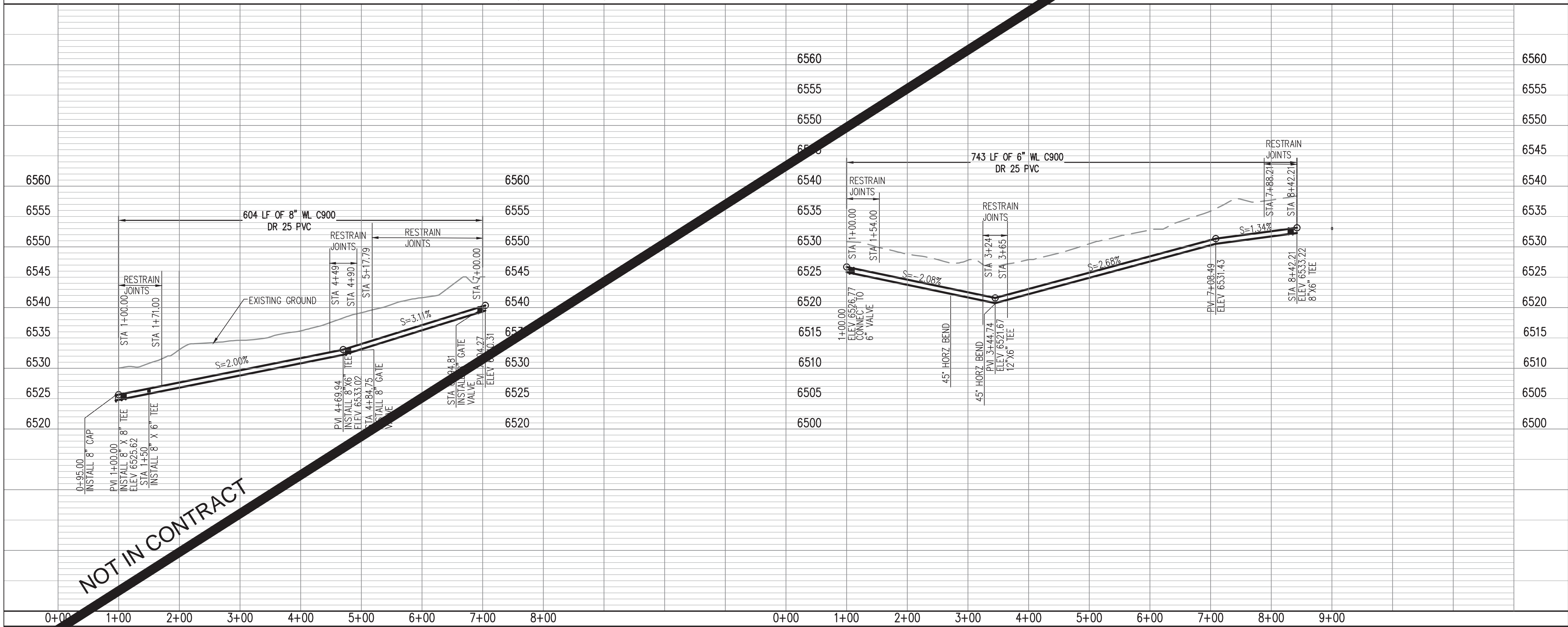
ZUNI UTILITY INFRASTRUCTURE
WATER PLAN AND PROFILE
STA 186+00 TO STA 205+25



STA 1+00 TO STA 7+04 (STREET I)



STA. 1+00 TO STA. 8+43 (STREET D)



GENERAL NOTES:

1. RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY ABAA IRON OR APPROVED EQUAL.

KEYED NOTES:

- 1 12" WL PER SECTION 801
- 2 8" WL PER SECTION 801
- 3 FIRE HYDRANT PER STD DWG 2340
- 4 6" WL PER SECTION 801
- 5 8" GATE VALVE BOX & COVER PER STD DWG 2326
- 6 STUB AND CAP FOR FUTURE CONNECTION
- 7 8" X 6" TEE WITH 6" GATE VALVE
- 8 CONNECT TO 6" VALVE

LEGEND

- REGISTERED ARCHAEOLOGICAL SITES
- ISOLATED OCCURRENCE

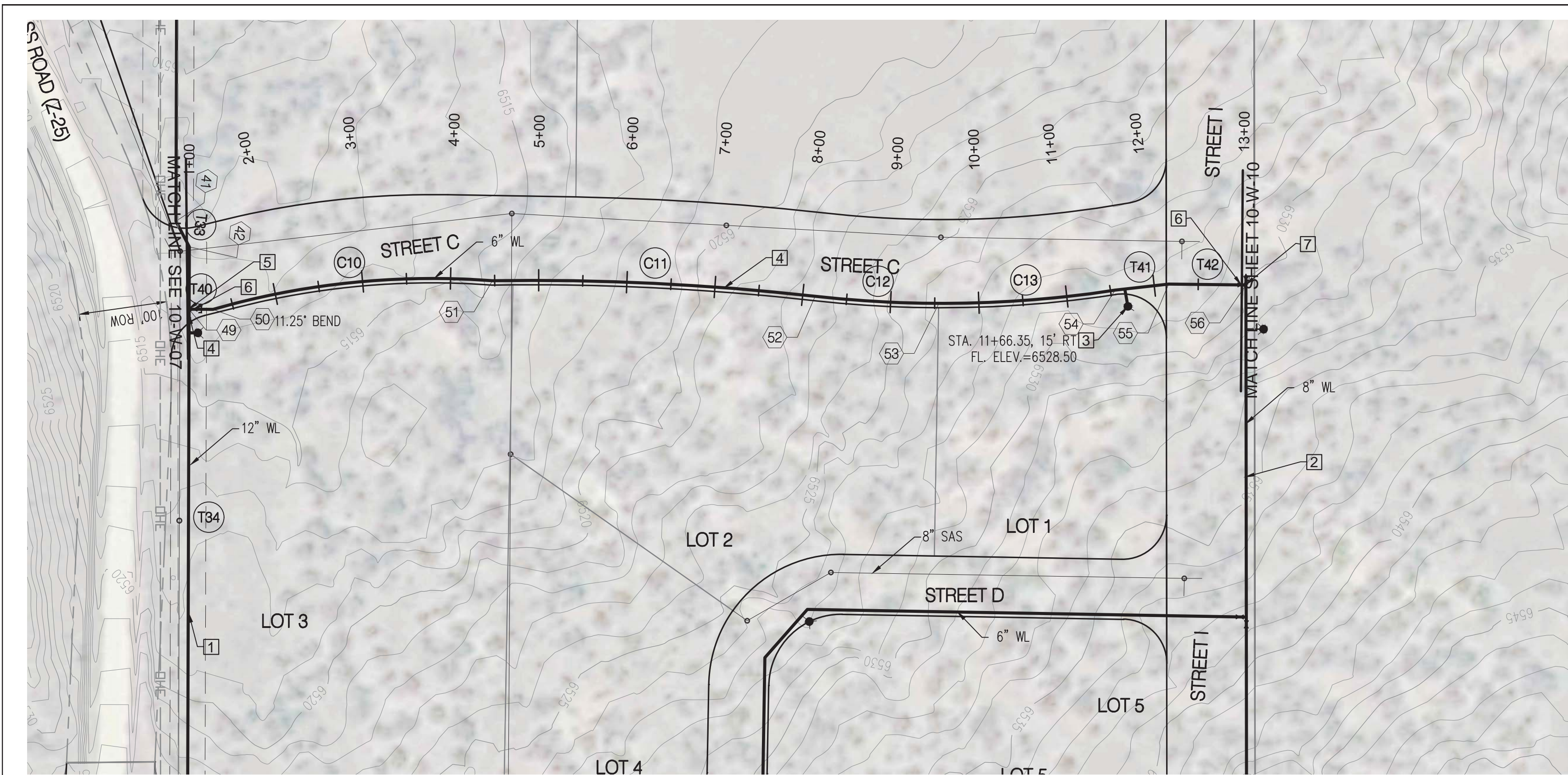
NOT IN CONTRACT

ENGINEER'S SEAL		AS-BUILT INFORMATION		
		CONTRACTOR		DATE
		WORK STARTED BY		DATE
		INSPECTOR'S ACCEPTANCE BY		DATE
		FIELD VERIFICATION BY		DATE
		DESIGNED BY J.C.S.		DATE 04/2015
		DRAWN BY J.J.C.		DATE 04/2015
		CHECKED BY T.A.B.		DATE 04/2015
		DRAWINGS CORRECTED BY		DATE

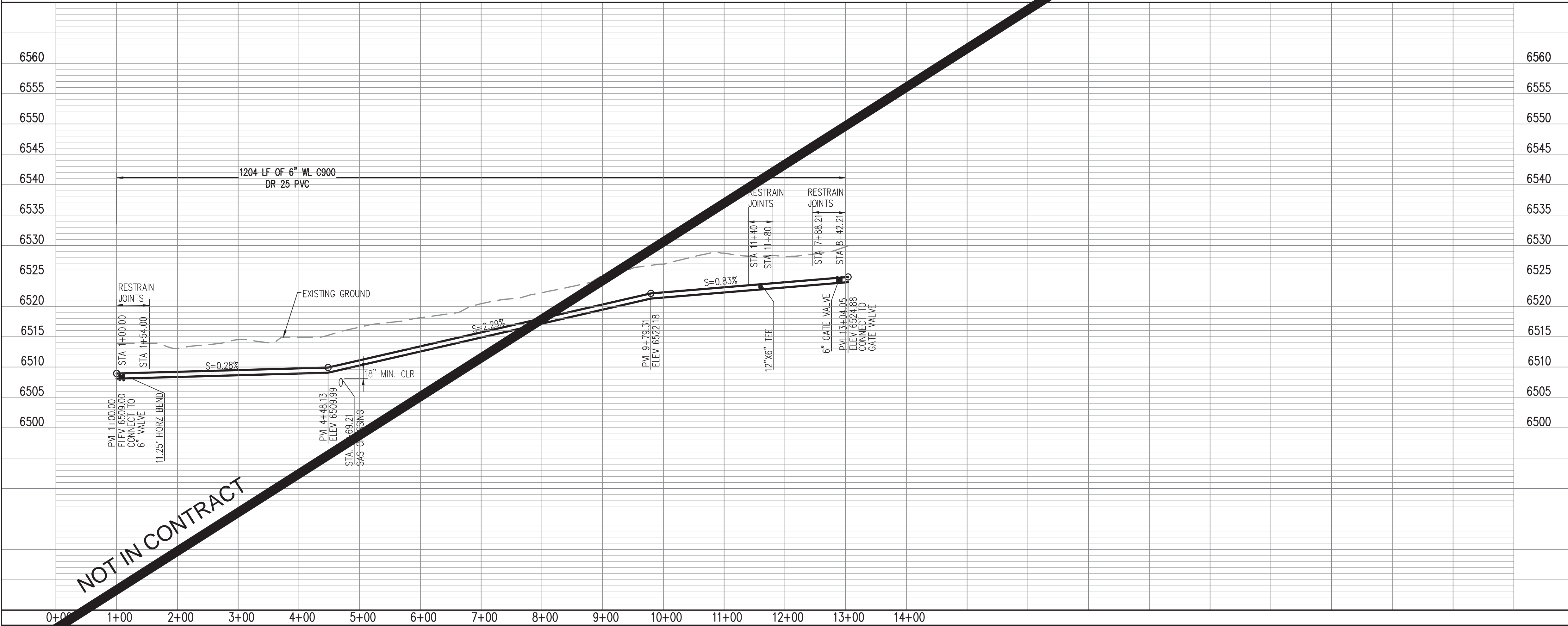
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ZUNI UTILITY INFRASTRUCTURE
WATER PLAN AND PROFILE STREET I
AND STREET D



STA 1+00 TO STA 13+25 (STREET C)



GENERAL NOTES:

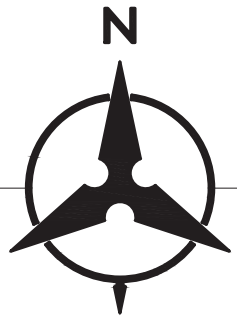
1. RESTRAIN PIPE FOR LENGTH SHOWN USING MECHANICAL RESTRAINTS, MEGALUG BY ABAA IRON OR APPROVED EQUAL.

KEYED NOTES:

- 1 12" WL PER SECTION 801
- 2 8" WL PER SECTION 801
- 3 FIRE HYDRANT PER STD DWG 2340
- 4 6" WL PER SECTION 801
- 5 12" X 6" TEE
- 6 6" GATE VALVE BOX & COVER PER STD DWG 2326
- 7 8" X 6" TEE

LEGEND

- REGISTERED ARCHAEOLOGICAL SITES
- ISOLATED OCCURENCE
- SEE POINT TABLE DWG # 01-G-03



0 50 100 200
SCALE: 1"=100'

NOT IN CONTRACT

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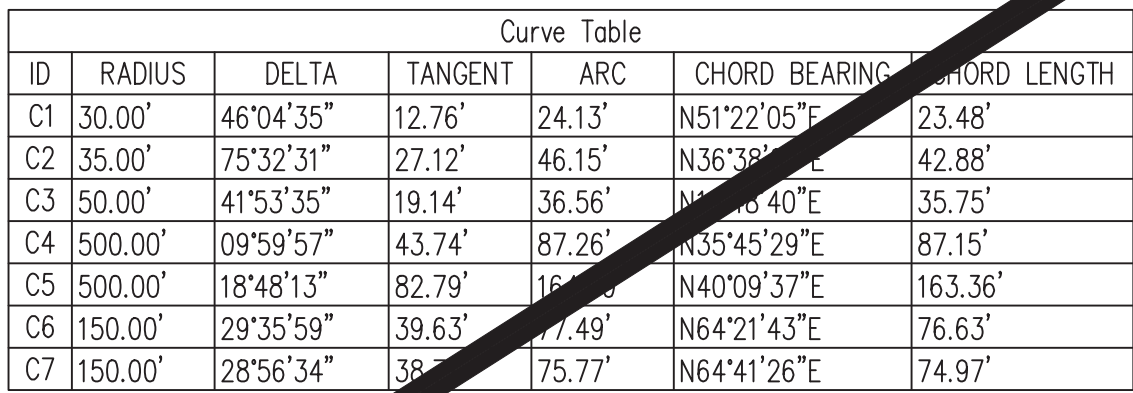
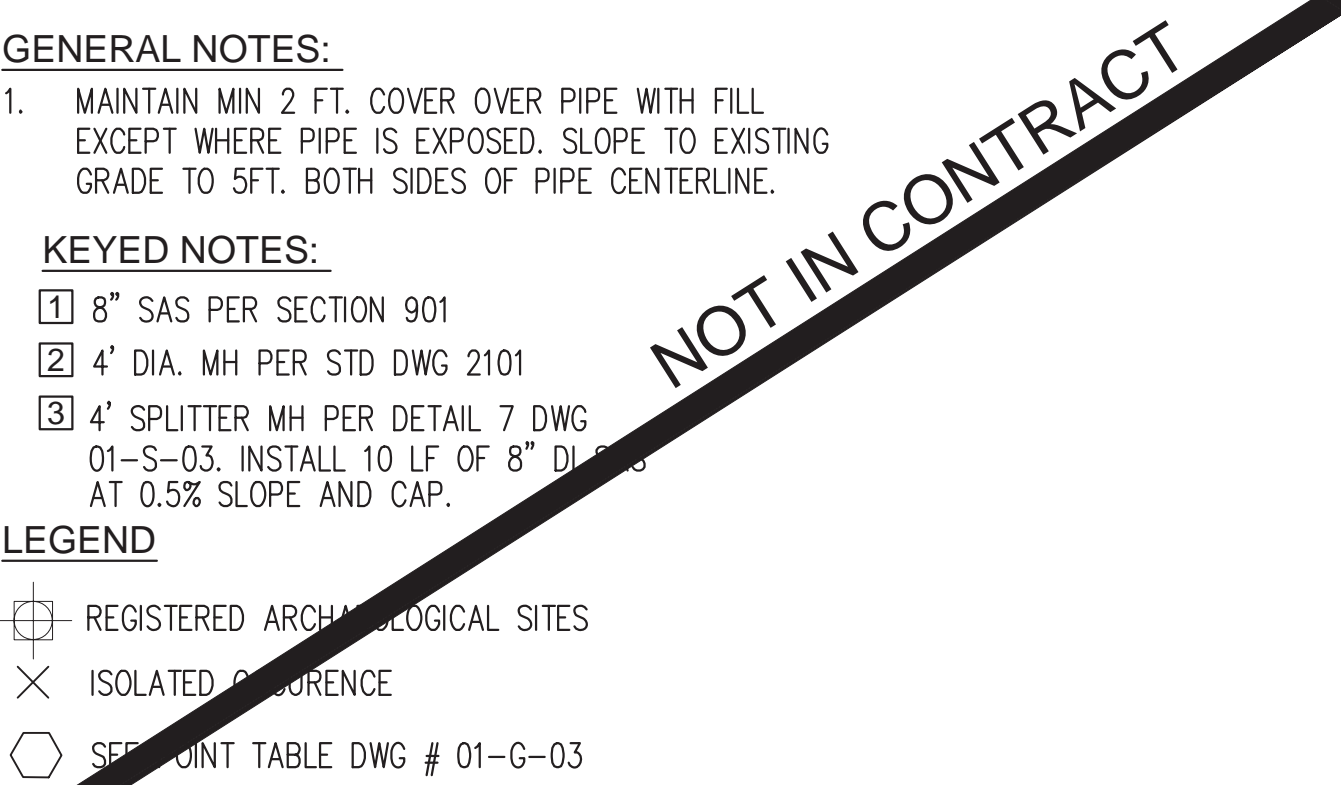
ZUNI UTILITY INFRASTRUCTURE
WATER PLAN AND PROFILE STREET C
STA 1+00 TO STA 13+25

P:\2015\20150380\WR\Design\plans\20150380-17-27PNP.dwg
Fr May-2015 - 12:15:pm, Plotted by: JGIRDD

BHI JOB NO. 20100147

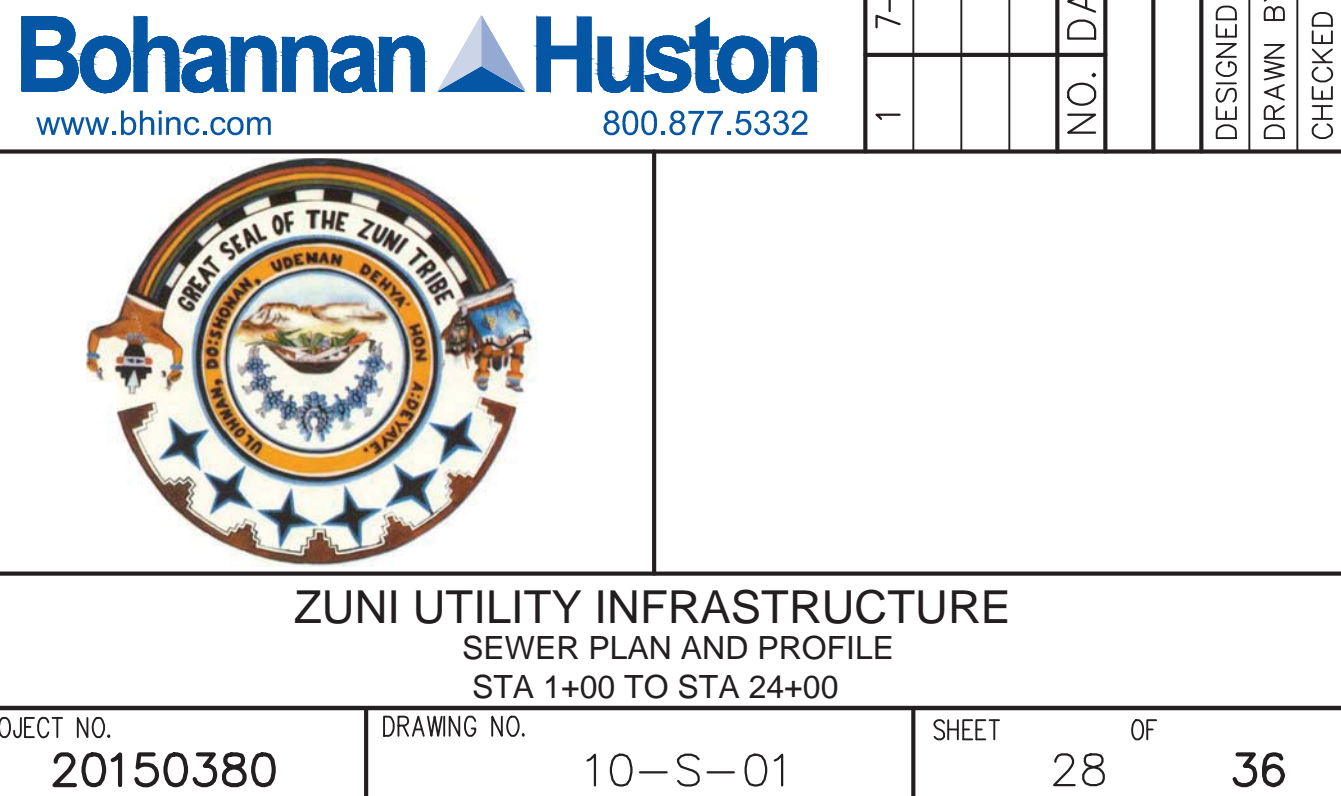
SCALE: 1" = 100' HORIZ.
1" = 10' VERT.

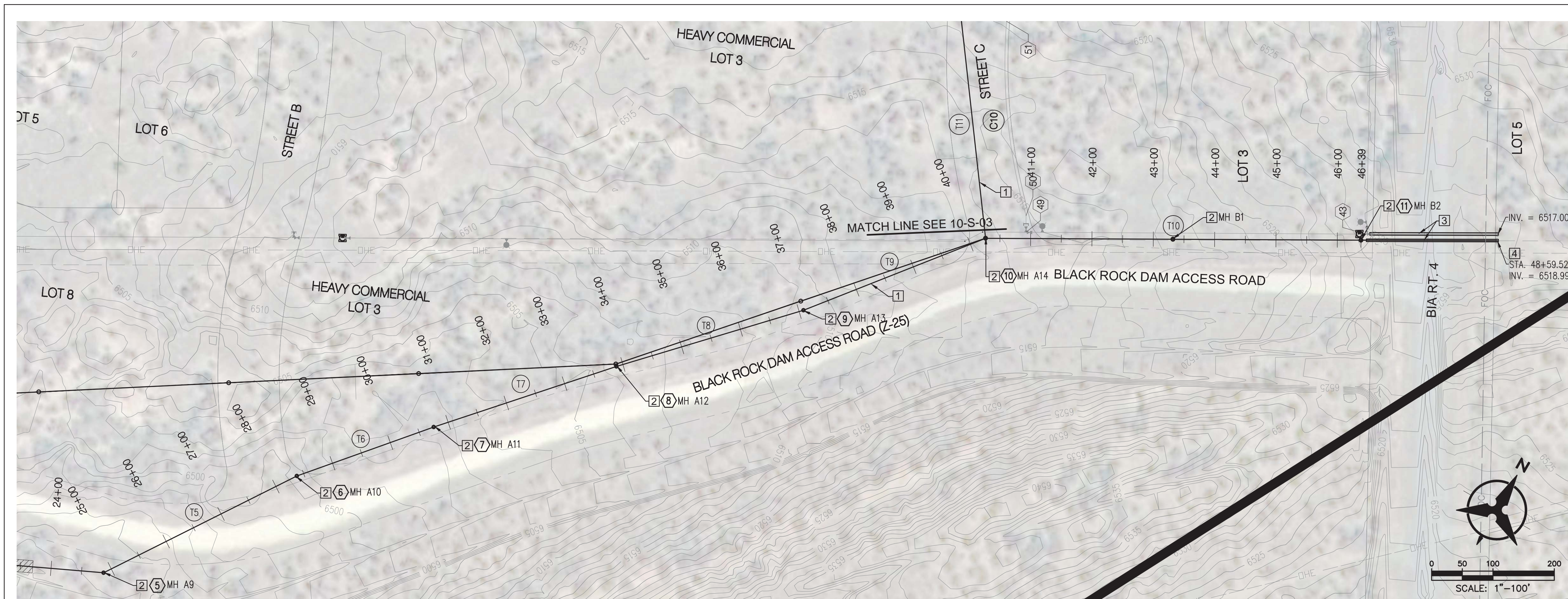
PROJECT NO. 20150380	DRAWING NO. 10-W-11	SHEET 27	OF 36
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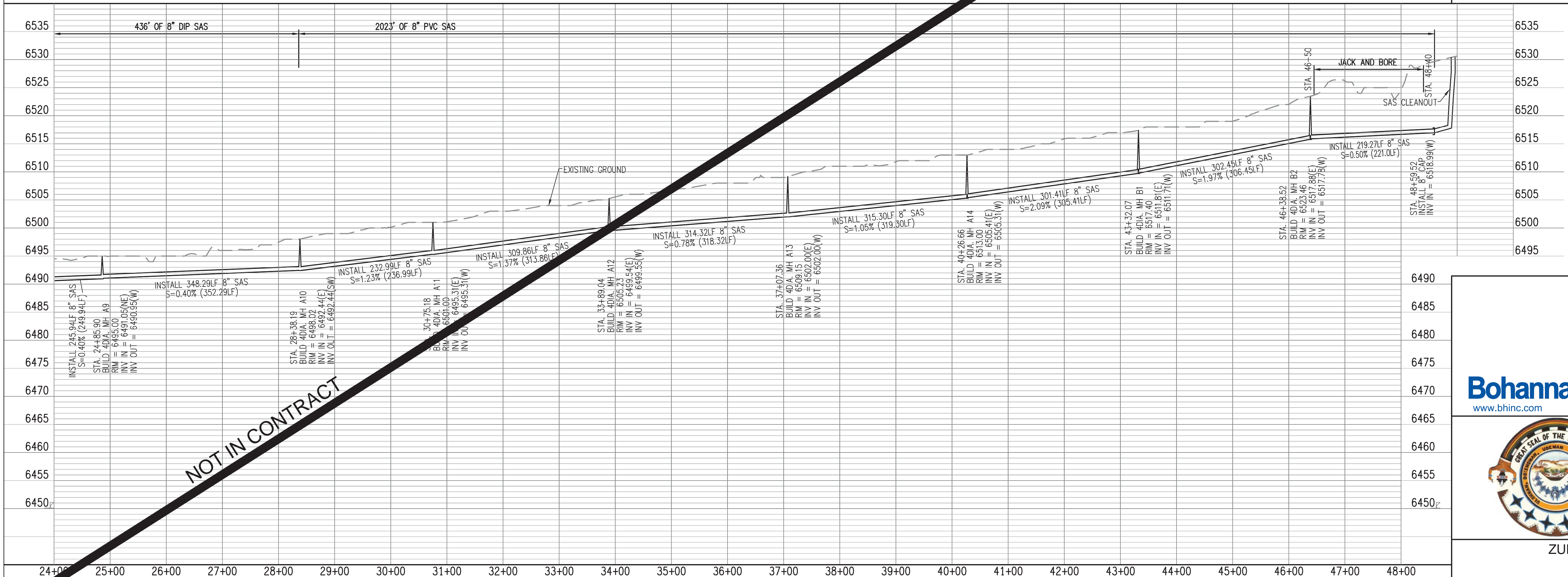
ID	BEARING	LENGTH
T1	N28°19'48"E	42.36'
T2	N74°24'23"E	446.94'
T3	N01°08'08"W	84.72'
T4	N40°45'27"E	48.64'
T5	N30°45'31"E	85.29'
T6	N49°33'44"E	148.56'
T7	N79°09'43"E	273.49'
T8	N50°13'09"E	47.36'

~~STA 1+00 TO STA 24+00~~





STA 24+00 TO STA 43+00



GENERAL NOTES:
1. MAINTAIN MIN 2 FT. COVER OVER PIPE WITH FILL EXCEPT WHERE PIPE IS EXPOSED. SLOPE TO EXISTING GRADE TO 5FT. BOTH SIDES OF PIPE CENTERLINE.

KEYED NOTES:
1 8" SAS PER SECTION 901
2 4' DIA. MH PER STD DWG 2102
3 JACK AND BORE PER SECTION 710 AND DWG 2380 INSTALL 16" STEEL CASING WITH 8" SAS CARRIER PIPE AND 22" STEEL CASING WITH 12" WATER CARRIER PIPE
4 CAP PIPE AND PROVIDE INSTALL SAS CLEANOUT

LEGEND:
REGISTERED ARCHAEOLOGICAL SITES
ISOLATED OCCURENCE
SEE POINT TABLE DWG # 01-G-03

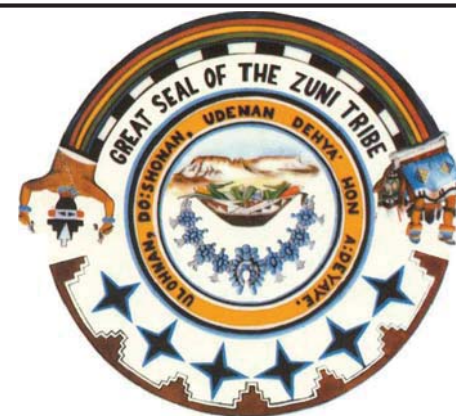
NOT IN CONTRACT

AS-BUILT INFORMATION	
CONTRACTOR	DATE
WORK STARTED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

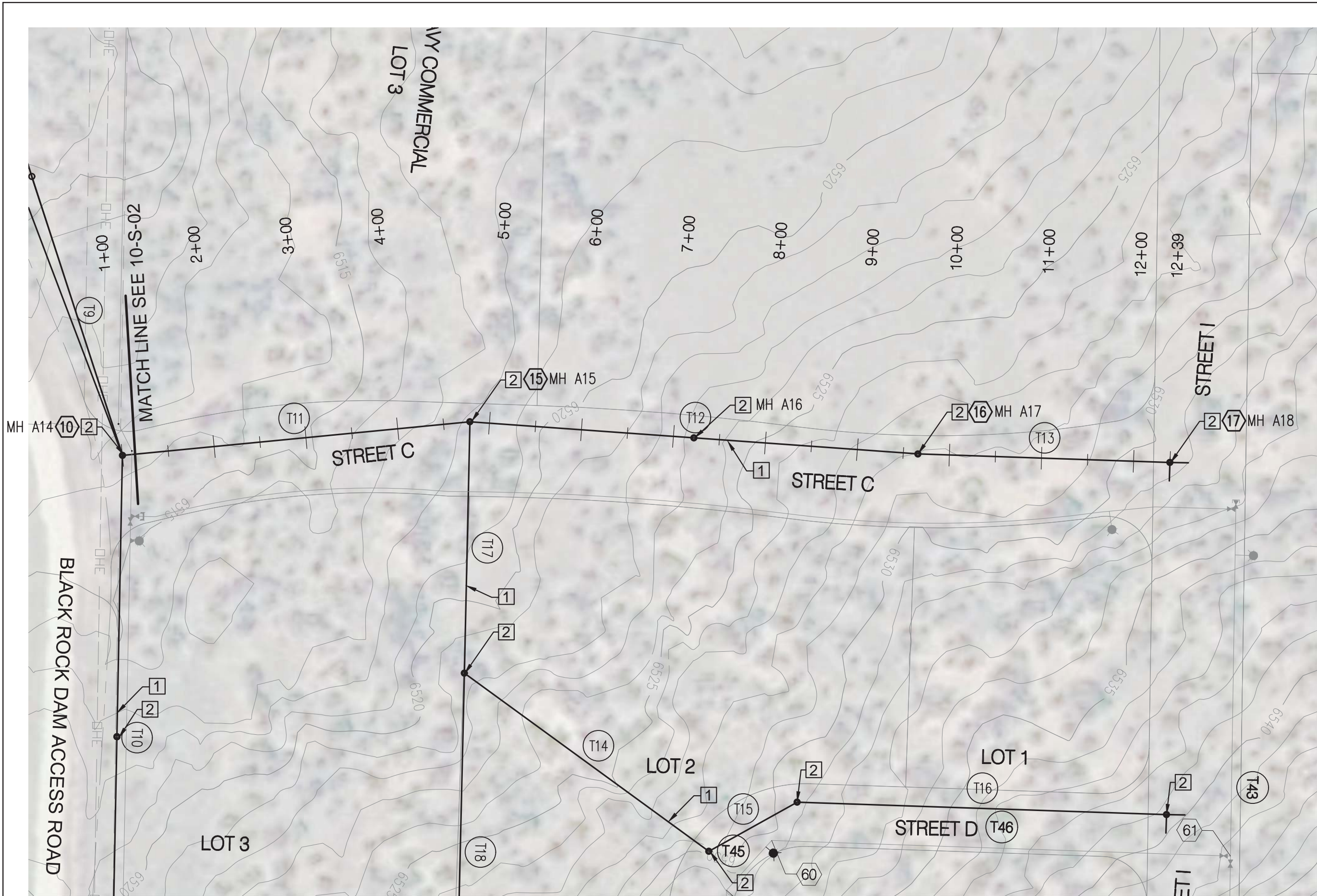
ENGINEER'S SEAL	
CONTRACTOR	DATE
WORK STARTED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MODIFY KEYED NOTE	
1	7-11
REVISIONS	
NO.	DATE
DESIGNED BY	C.K.
DRAWN BY	N.M.P.
CHECKED BY	T.A.B.
DATE	06/2010
DATE	06/2010
DATE	06/2010

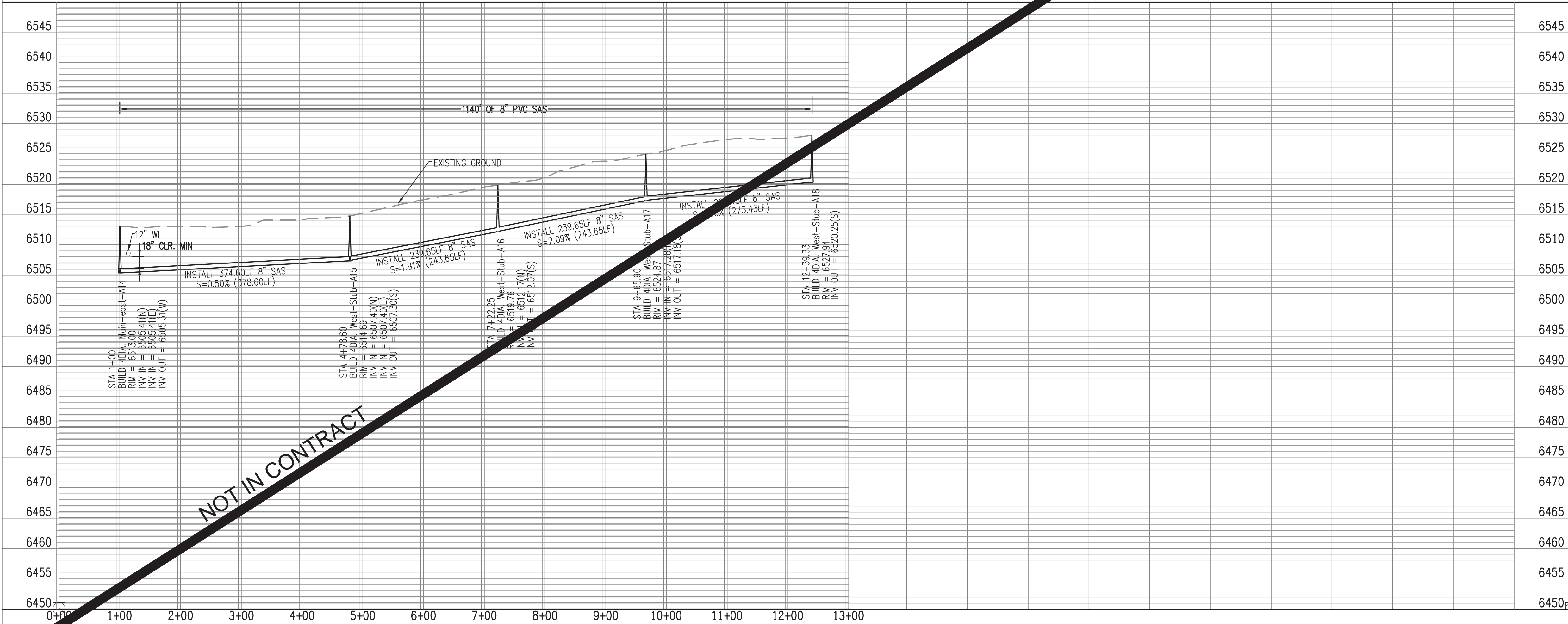
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ZUNI UTILITY INFRASTRUCTURE
SEWER PLAN AND PROFILE
STA 24+00 TO STA 43+00

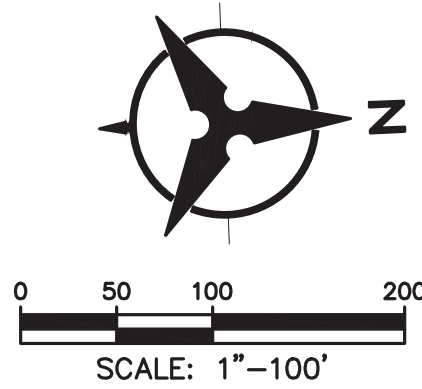


STA 1+00 TO STA 13+00 (STREET C)



KEYED NOTES:
1 8" SAS PER SECTION 901
2 4' DIA. MH PER STD DWG 2101

LEGEND
REGISTERED ARCHAEOLOGICAL SITES
ISOLATED OCCURRENCE
SEE POINT TABLE DWG # 01-G-03



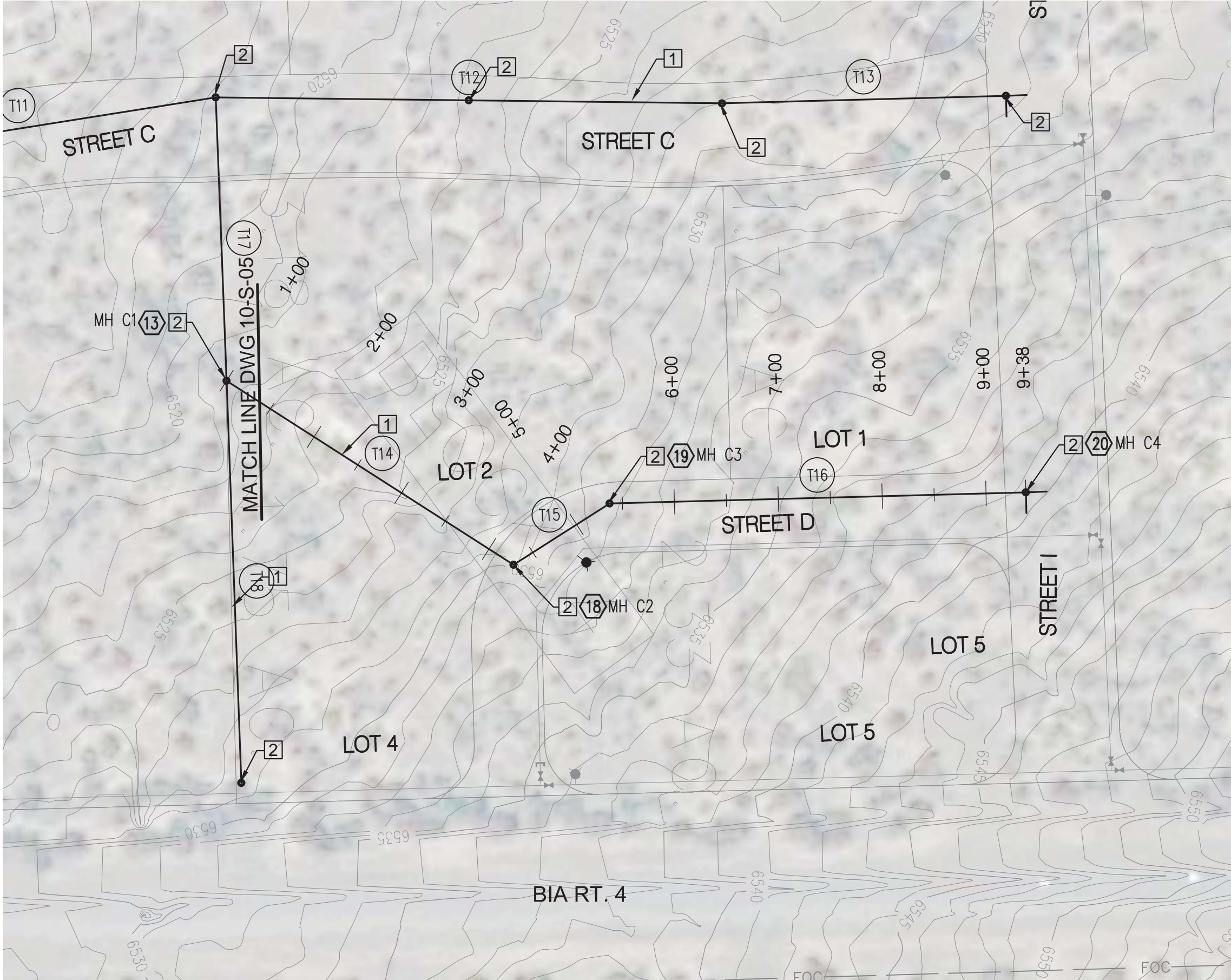
NOT IN CONTRACT

ENGINEER'S SEAL		AS-BUILT INFORMATION	
		CONTRACTOR	DATE
		WORK STARTED BY	DATE
		INSPECTOR'S ACCEPTANCE BY	DATE
		FIELD VERIFICATION BY	DATE
		DRAWINGS CORRECTED BY	DATE

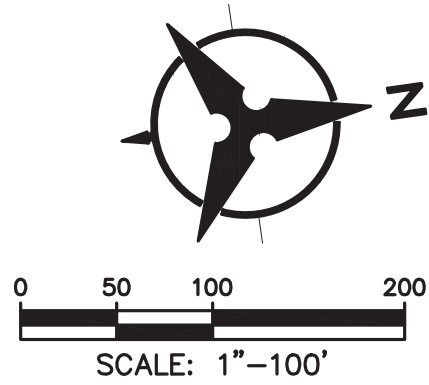
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ZUNI UTILITY INFRASTRUCTURE
SEWER (STREET C) PLAN AND PROFILE
STA 1+00 TO STA 13+00



STA 1+00 TO STA 8+00 (STREET D)



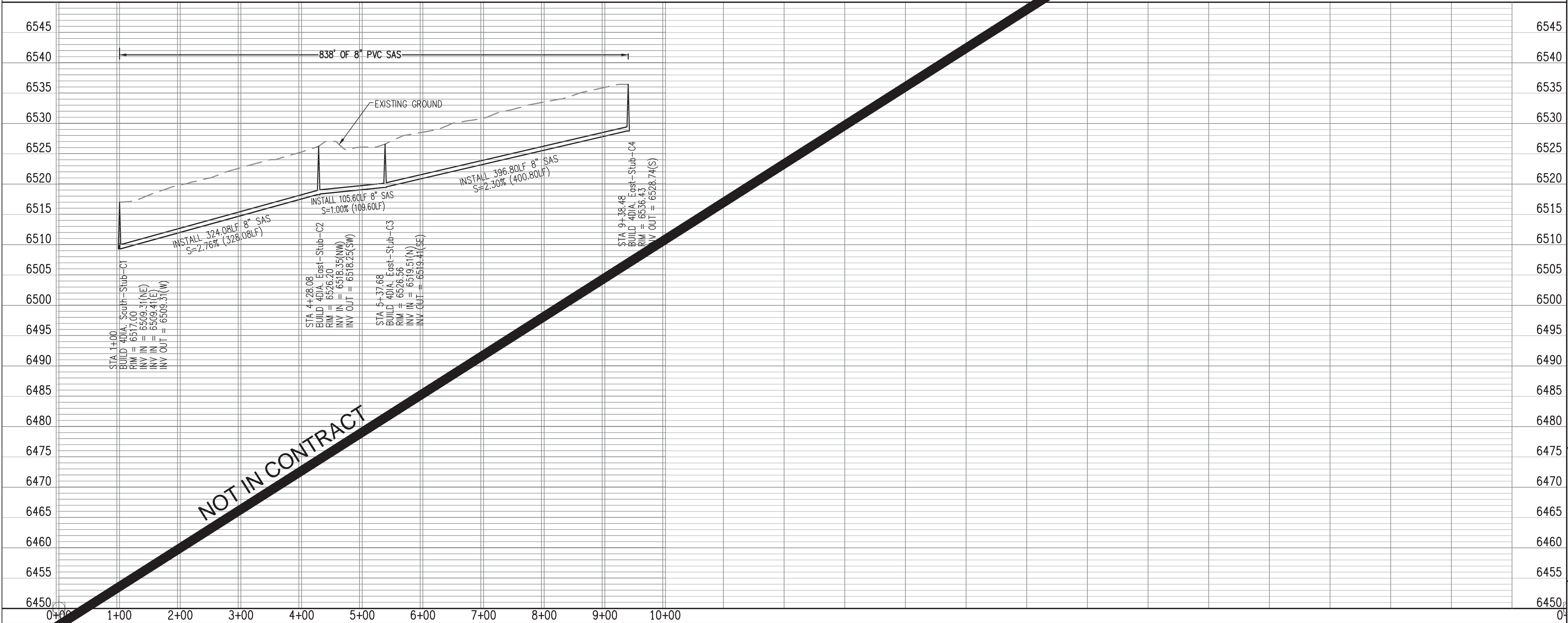
KEYED NOTES:

- 1 8" SAS PER SECTION 901
- 2 4' DIA. MH PER STD DWG 2101

LEGEND

- REGISTERED ARCHAEOLOGICAL SITES
- ISOLATED OCCURRENCE
- SEE POINT TABLE DWG # 01-G-03

NOT IN CONTRACT

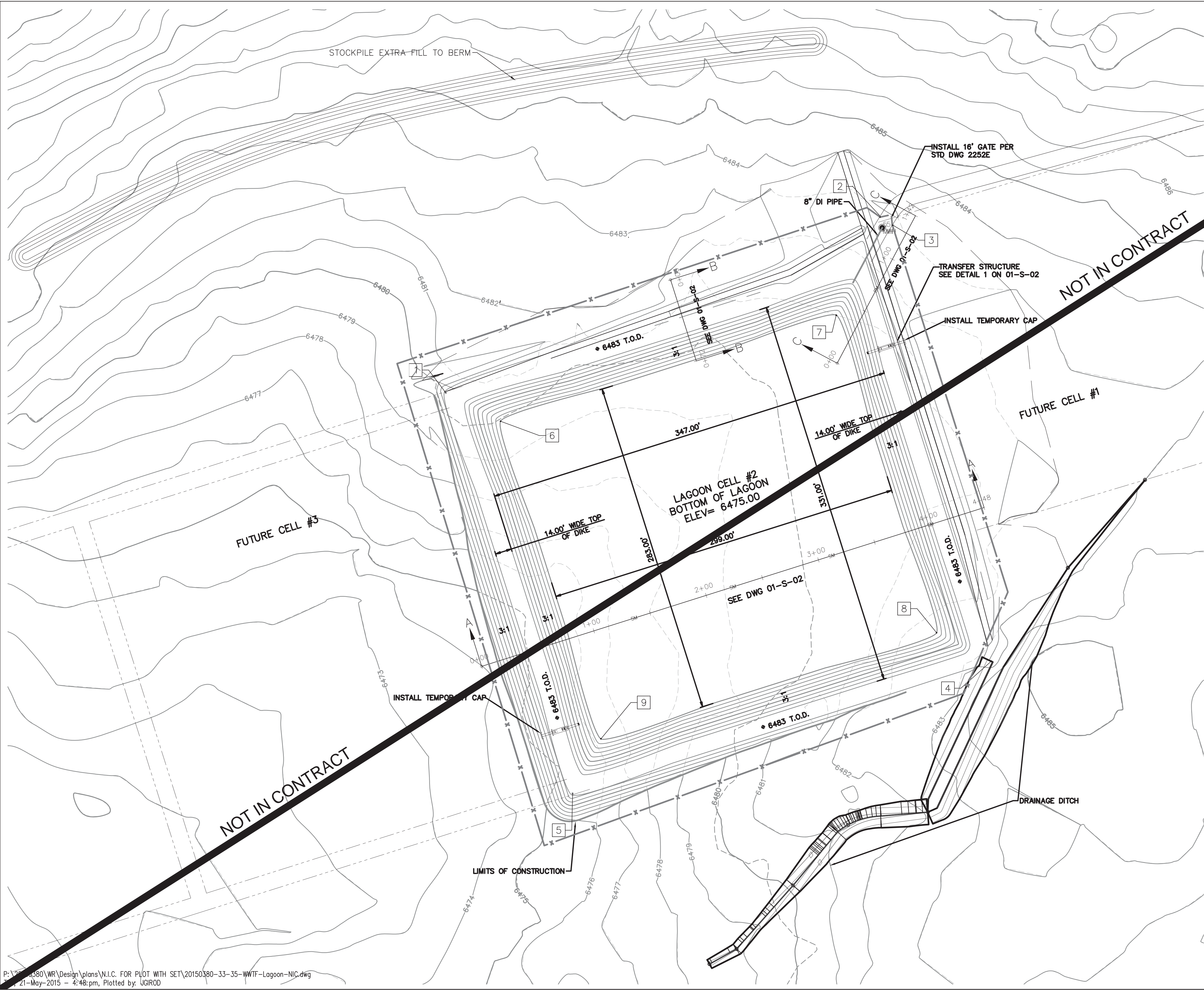


NOT IN CONTRACT

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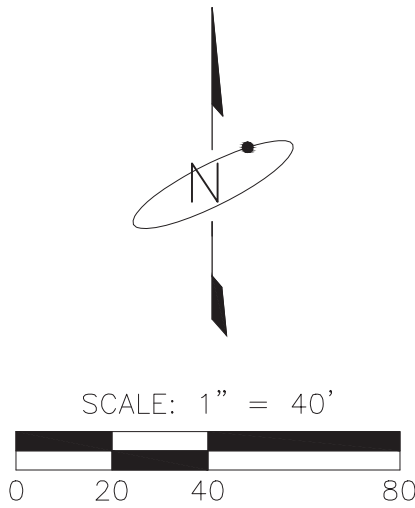


ZUNI UTILITY INFRASTRUCTURE
SEWER (STREET D) PLAN AND PROFILE
STA 1+00 TO STA 8+00



- GENERAL NOTES:
1. SEE SECTIONS ON SHEET 34.
 2. STOCKPILE EXCESS FILL IN BERM TO NORTH OF CELL 2 AND FUTURE CELL 3 STARTING FROM EAST TO WEST.
 3. INSTALL 1,659 LF FENCE AROUND OUTSIDE PERIMETER OF CELL WITH 16 FT. DOUBLE GATE.
 4. ALL CUT AND FILL CALCULATIONS ARE ESTIMATES ONLY AND WERE CALCULATED UTILIZING AUTOCAD CIVIL 3D V. 2008 BASED ON AERIAL BASED TOPOGRAPHY.
 5. PLACE 6" AGGREGATE BASE COURSE ON TOP OF DIKE ROADWAY.

Point Data		
	NORTHING	EASTING
1	1493865.25	2444242.92
2	1494014.62	2444611.59
3	1494007.67	2444622.67
4	1493637.29	2444706.18
5	1493524.86	2444350.54
6	1493841.12	2444289.35
7	1493931.26	2444574.44
8	1493661.42	2444659.75
9	1493571.29	2444374.66



LAGOON DIMENSIONS	
INSIDE TOP OF DIKE =	347' x 331'
WATER LEVEL =	335' x 319'
BASE OF DIKE =	299' x 283'
ELEVATIONS	
TOP OF DIKE =	6483
WATER LEVEL =	6481
BOTTOM =	6475
CALC. CUT & FILL—LAGOON ONLY (CY)	
CUT =	14,373.36
FILL =	6,771.65
NET CUT =	7,601.71
CALC. CUT & FILL—DRAINAGE DITCH	
TOTAL NET CUT = 368.74	

DRAINAGE DITCH	
SIDE SLOPE	10% MAX
SPRINGLINE SLOPE	1% MAX

AS-BUILT INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGN		DATE	
CONTRACTOR	DATE	CONTRACTOR	DATE	NO.	DATE	REMARKS	BY	DESIGNED BY	DATE
WORK	DATE	INSPECTOR'S	DATE					DRAWN BY	DATE
STAKED BY	DATE	ACCEPTANCE BY	DATE					CHECKED BY	DATE
		FIELD							
		VERIFICATION BY							
		DRAWINGS							
		CORRECTED BY							

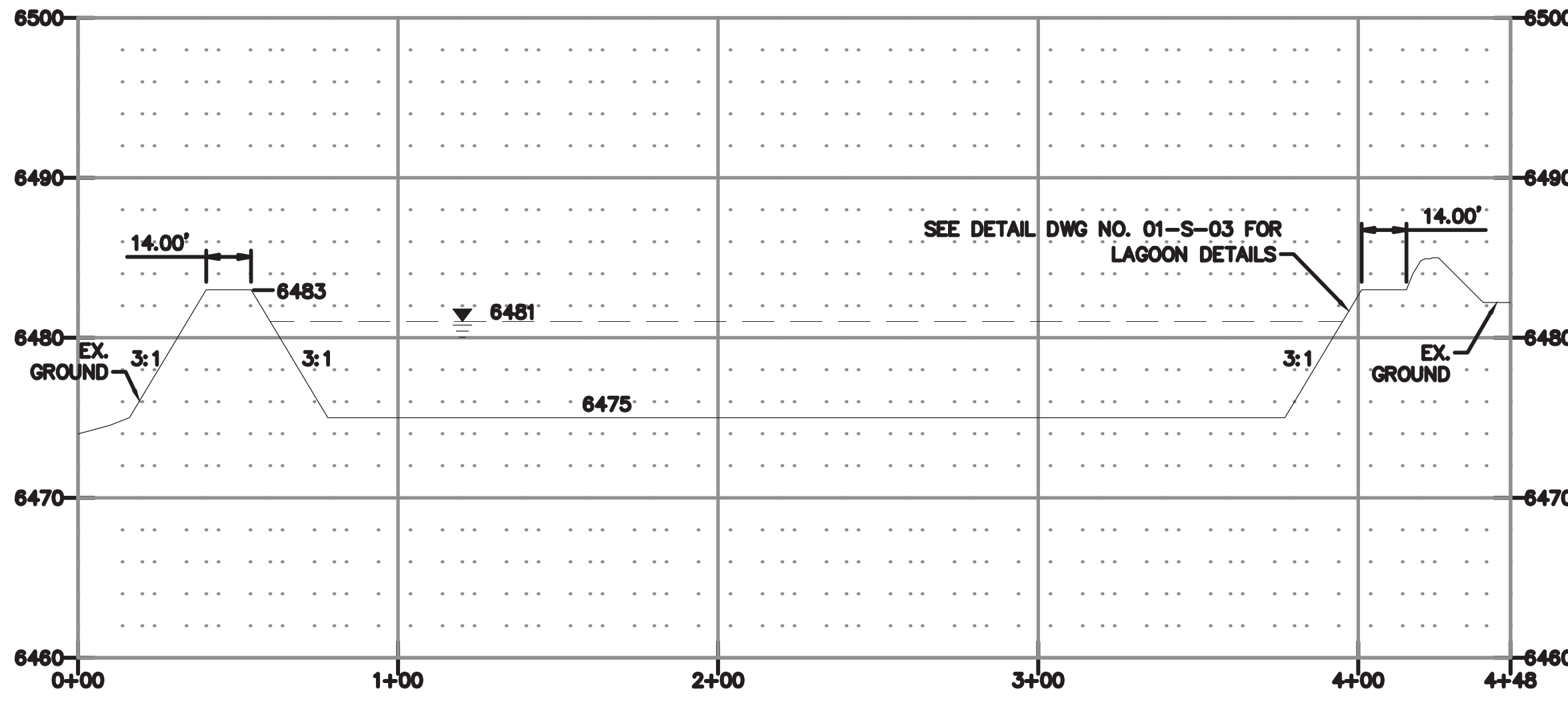
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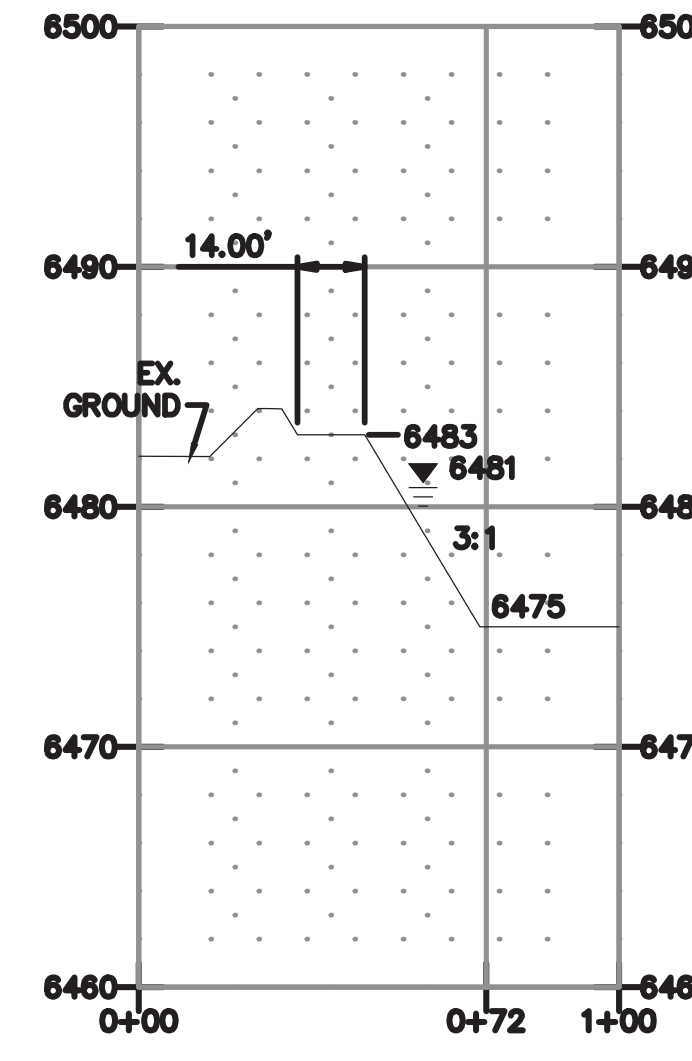
ZUNI UTILITY INFRASTRUCTURE
WASTEWATER LAGOON SITE PLAN

PROJECT NO. 20150380	DRAWING NO. 01-S-01	SHEET 33	OF 36
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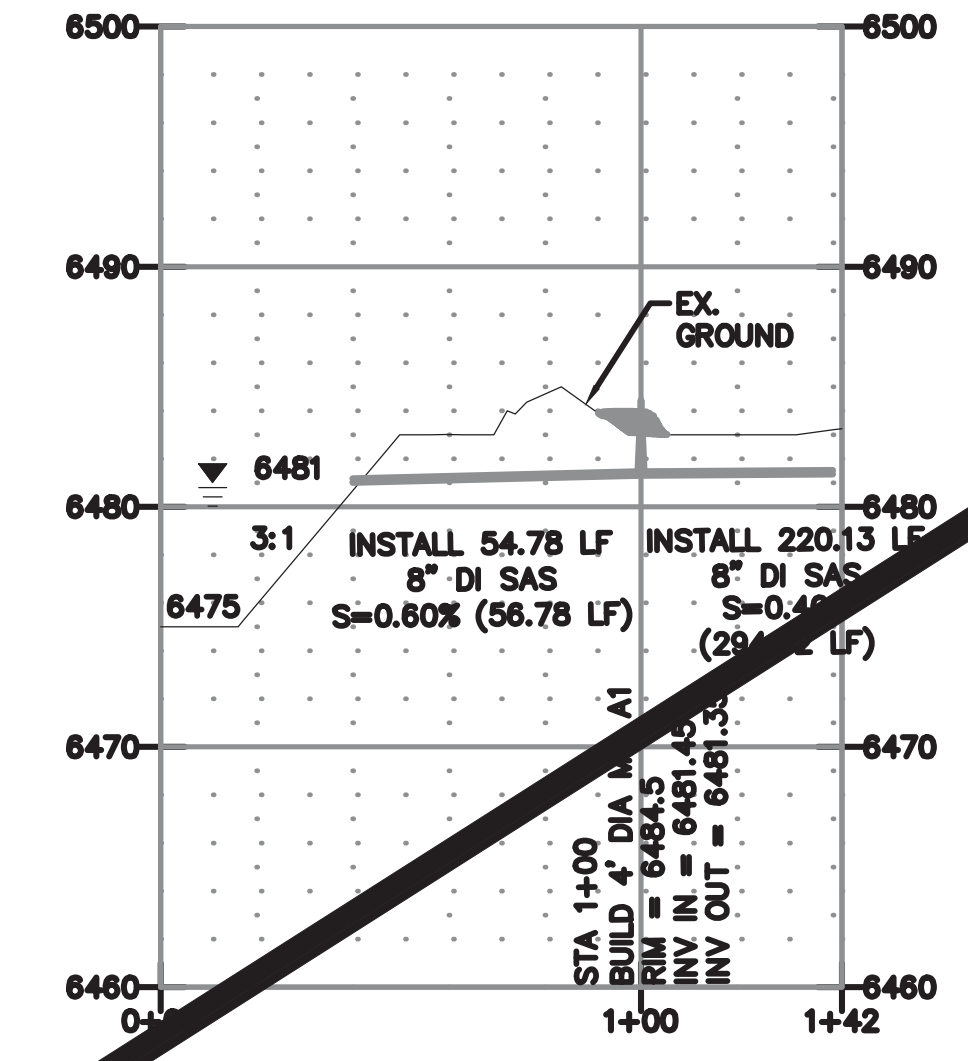
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21-May-2015 - 4:48:pm, Plotted by: UGIR0D



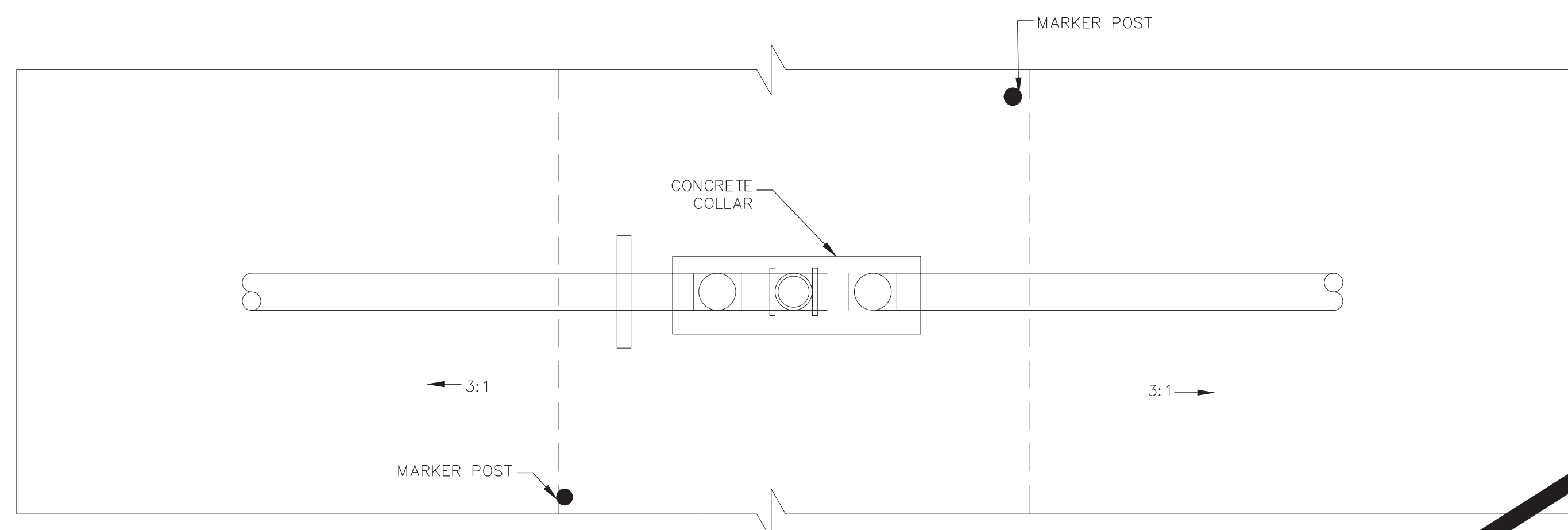
A CROSS SECTION A-A
SCALE: 1" = 40'



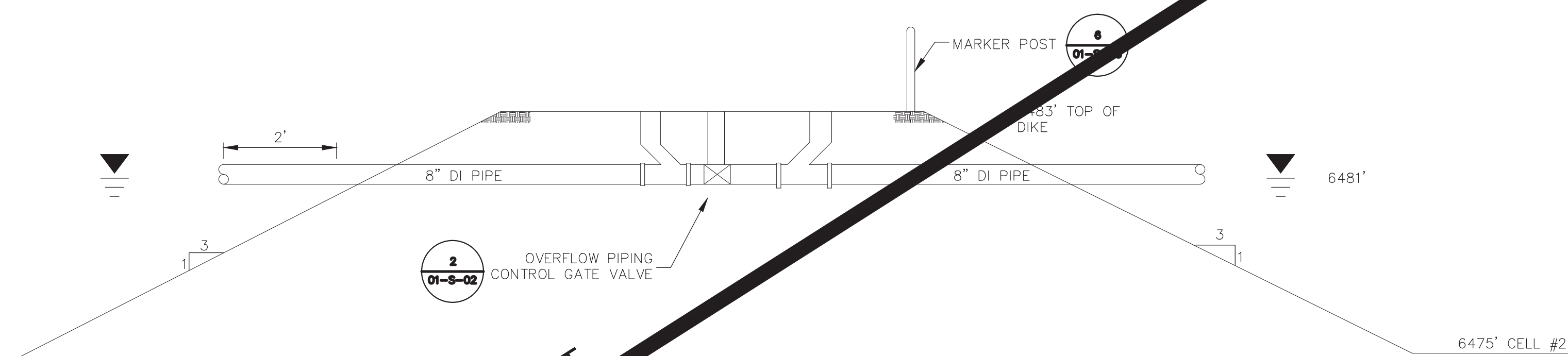
B CROSS SECTION B-B
SCALE: 1" = 40'



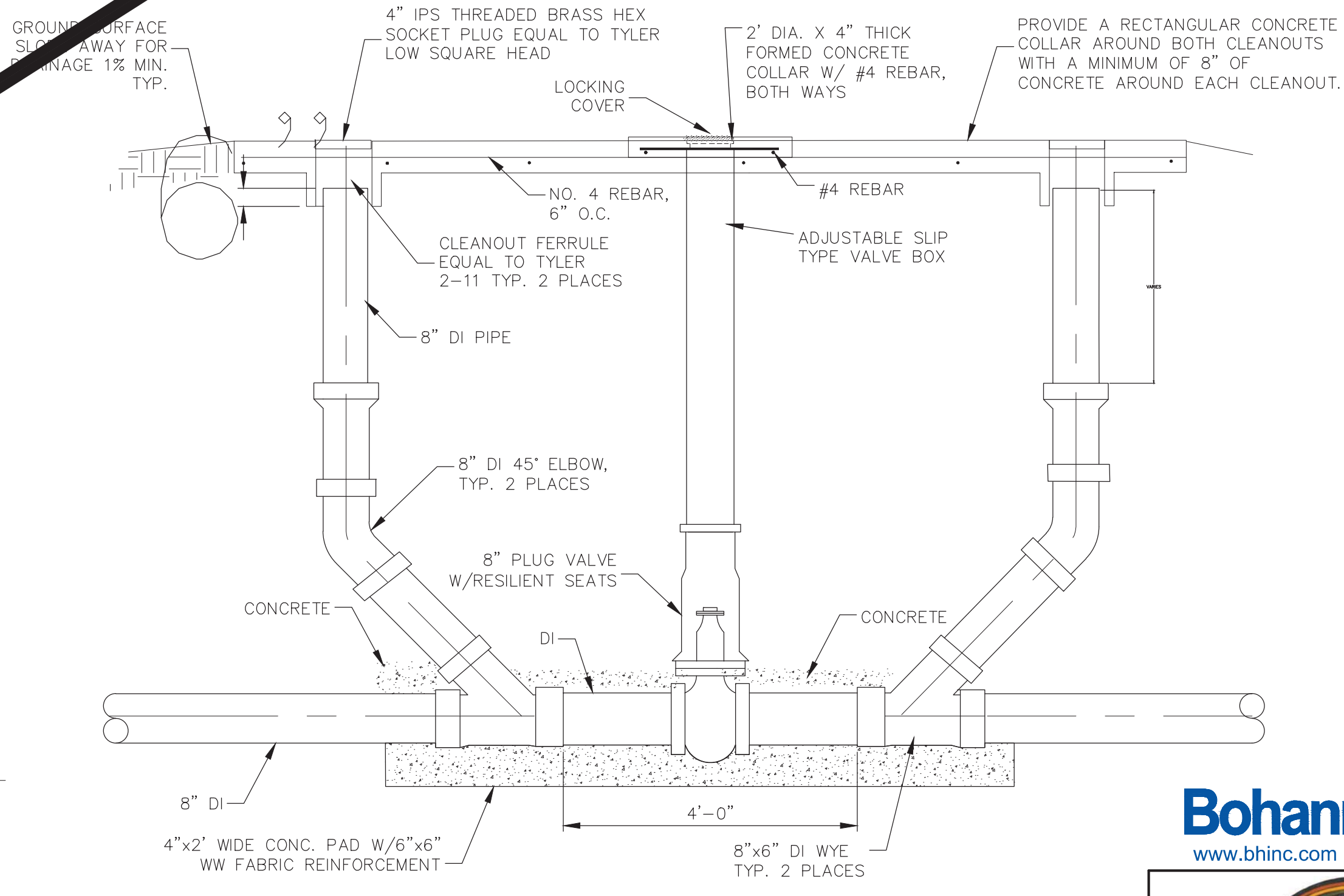
C CROSS SECTION C-C
SCALE: 1" = 40'



PLAN VIEW



1 TRANSFER STRUCTURE
SCALE: NONE

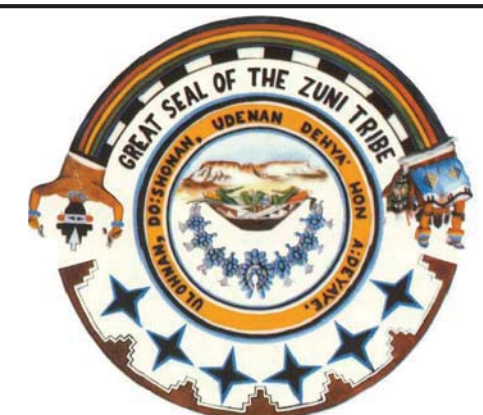


2 OVERFLOW PIPING CONTROL GATE VALVE
SCALE: NONE

NOT IN CONTRACT

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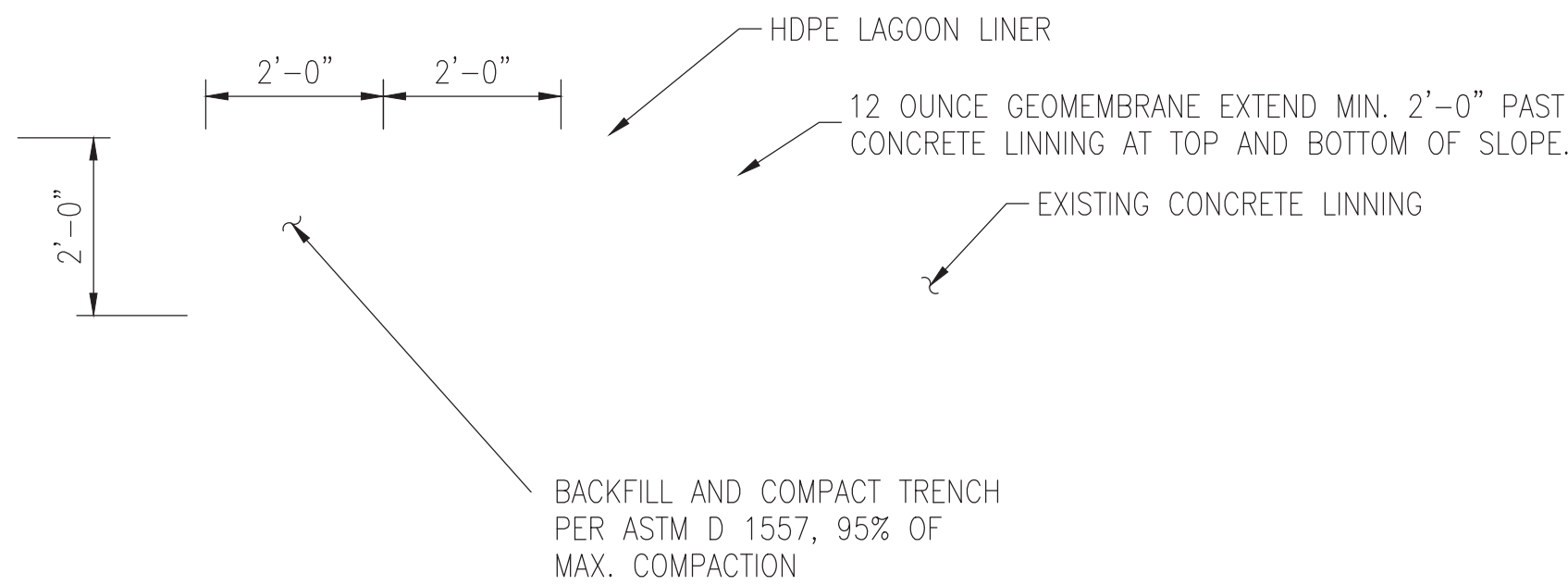
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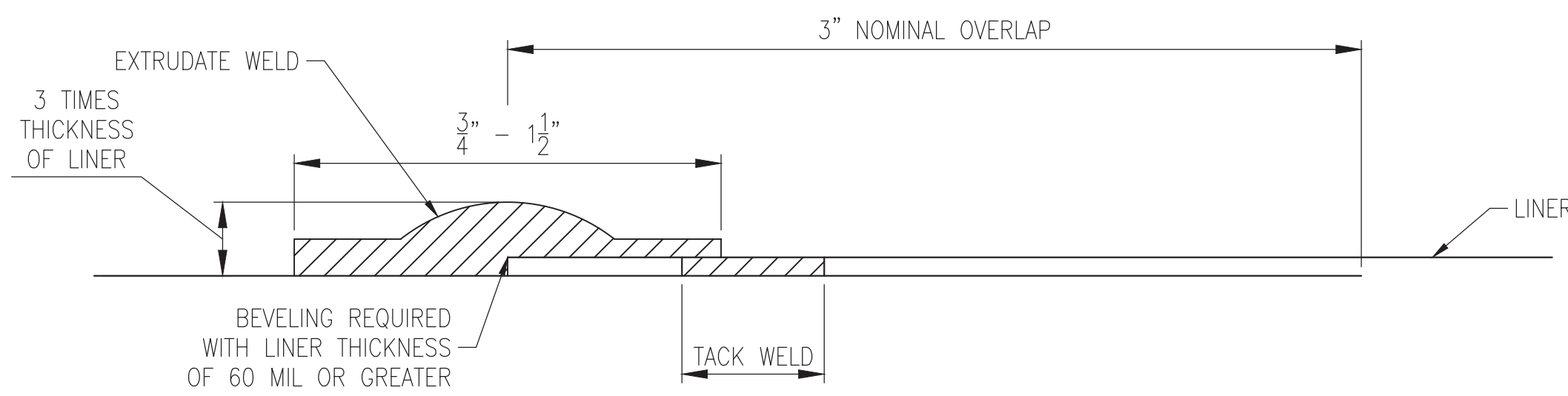
ZUNI UTILITY INFRASTRUCTURE
WASTEWATER LAGOON SECTIONS AND DETAILS

PROJECT NO. 20150380	DRAWING NO. 01-S-02	SHEET 34	OF 36
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1 LAGOON LINER FOUNDATION
SCALE: 1"=1'-0"



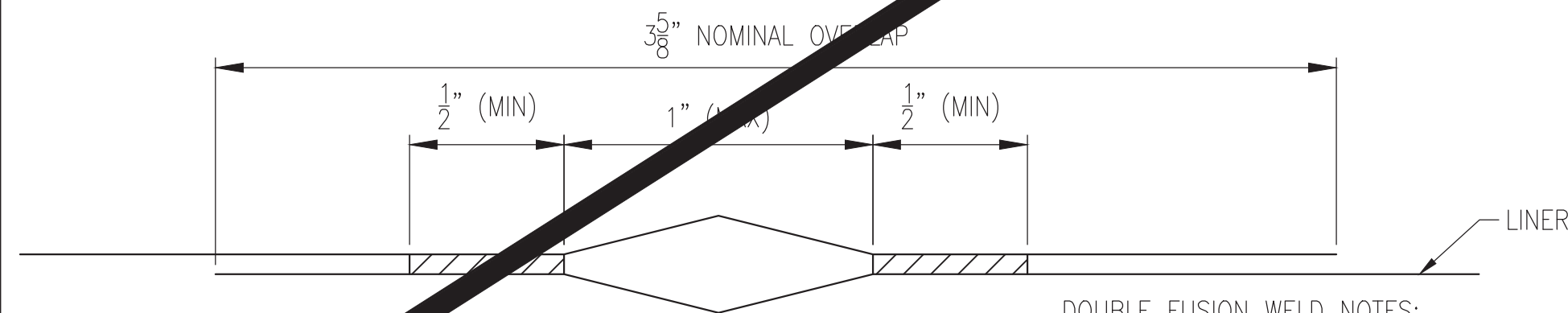
2 ANCHOR TRENCH DETAIL
SCALE: 1/2"=1'-0"



3 EXTRUSION WELD
SCALE: NONE

EXTRUSION WELD NOTES:

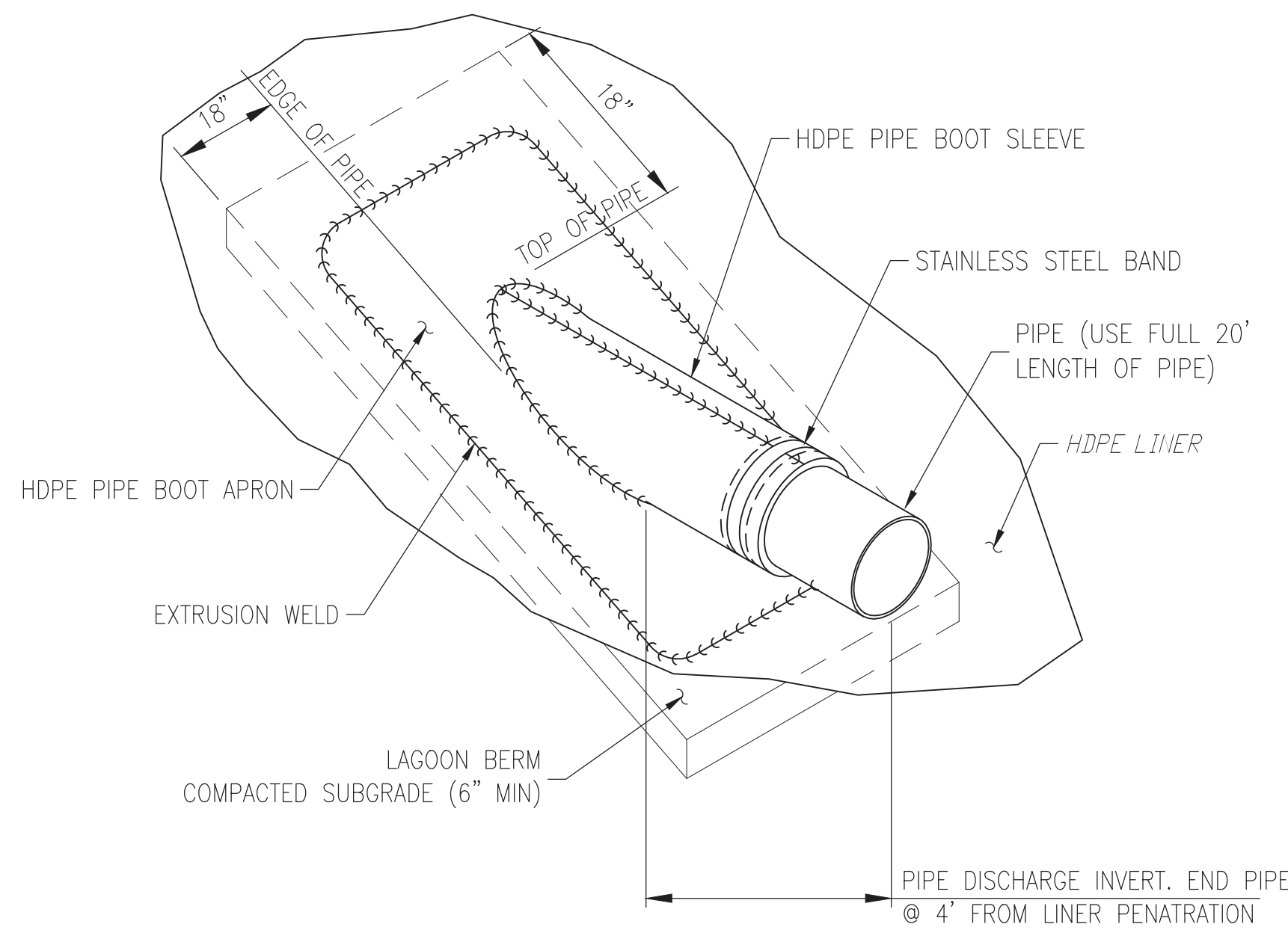
1. LINER SHEETS TACK WELDED TOGETHER AT OVERLAP TO FORM TEMPORARY BOND PRIOR TO WELDING.
2. GRINDING NOT TO EXCEED 1/4" PAST "SQUEEZE-OUT" ON EITHER SIDE. PROPER CARE SHOULD BE TAKEN IN NOT REMOVING TOO MUCH MATERIAL WHEN GRINDING.
3. VACUUM TESTING IS THE NON-DSTRUCTIVE SEAM TEST METHOD FOR EXTRUSION WELDS.



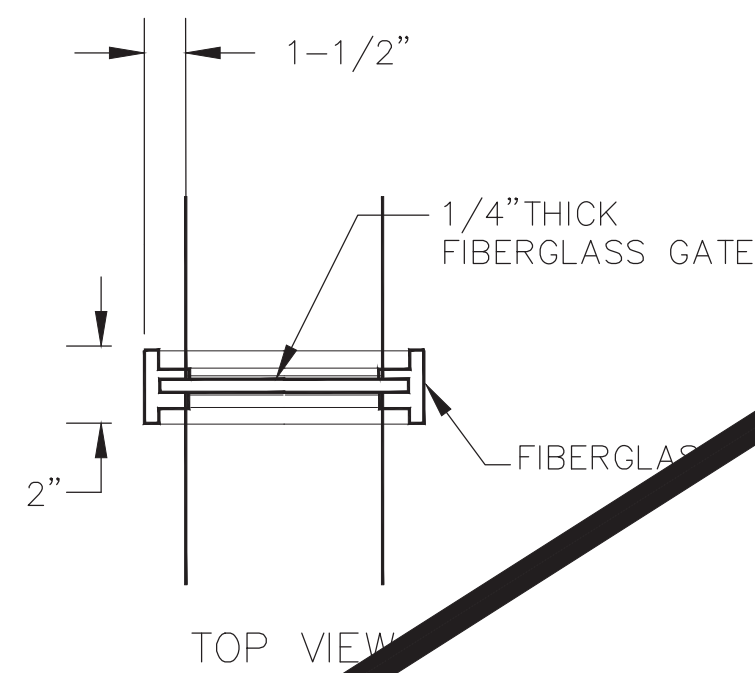
DOUBLE FUSION WELD NOTES:

1. DOUBLE FUSION WELDING IS THE PRIMARY SEAMING TECHNIQUE USED.
2. AIR PRESSURE OR VACUUM TESTING ARE THE NON-DSTRUCTIVE SEAM TEST METHODS FOR DOUBLE FUSION WELDS.

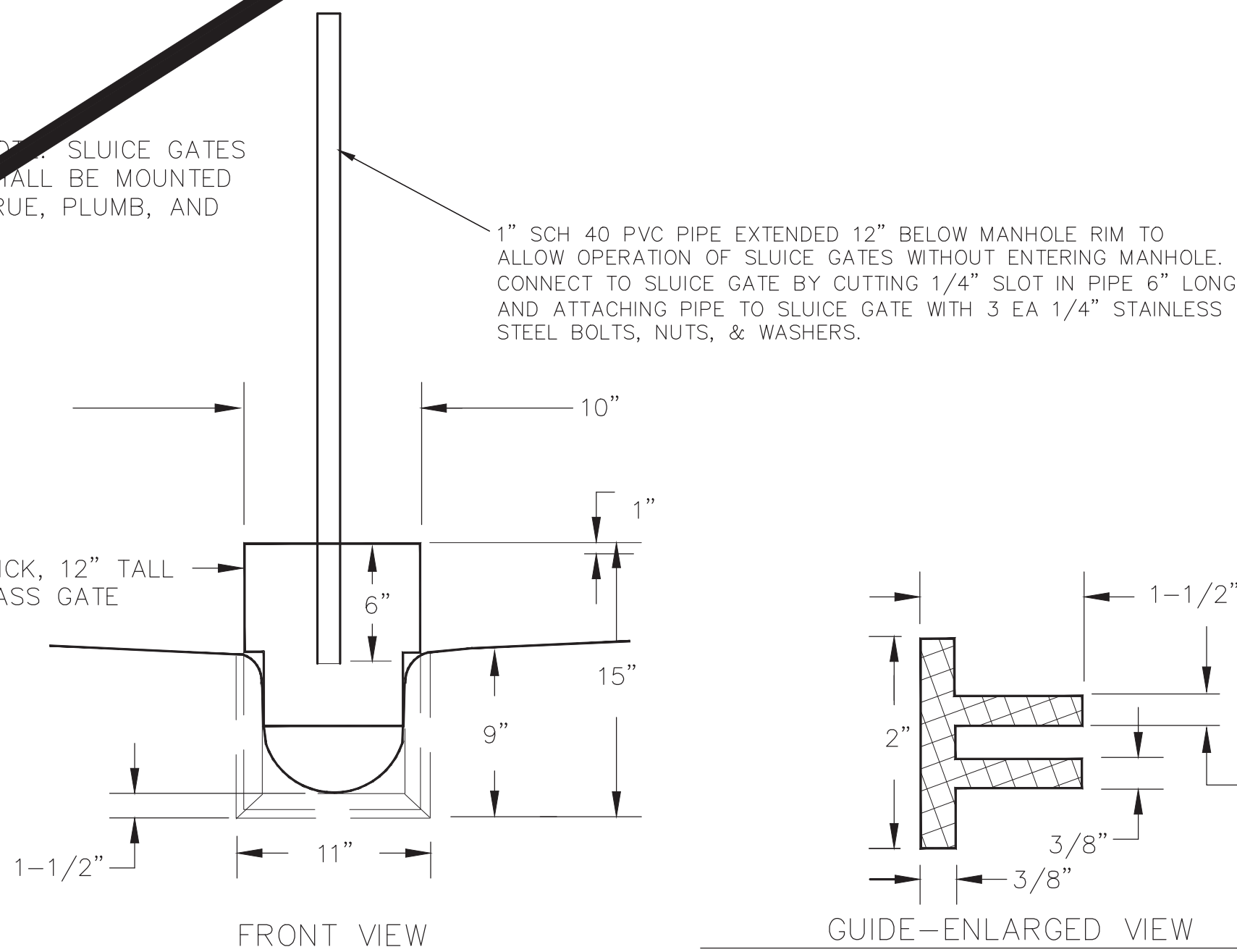
4 DOUBLE FUSION WELD
SCALE: NONE



5 PIPE BOOT ISOMETRIC
SCALE: NONE



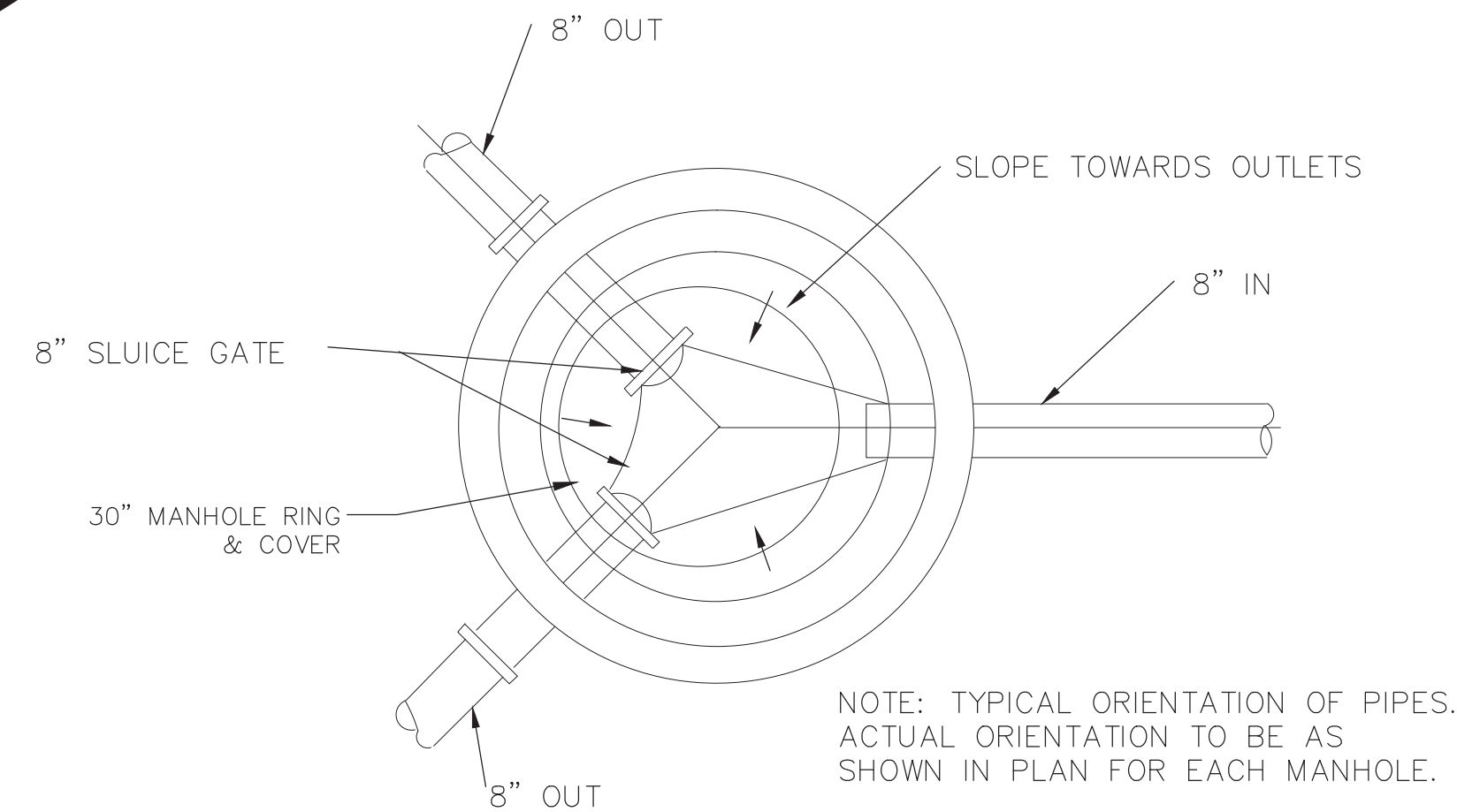
NOTE: SLUICE GATES SHALL BE MOUNTED TRUE, PLUMB, AND



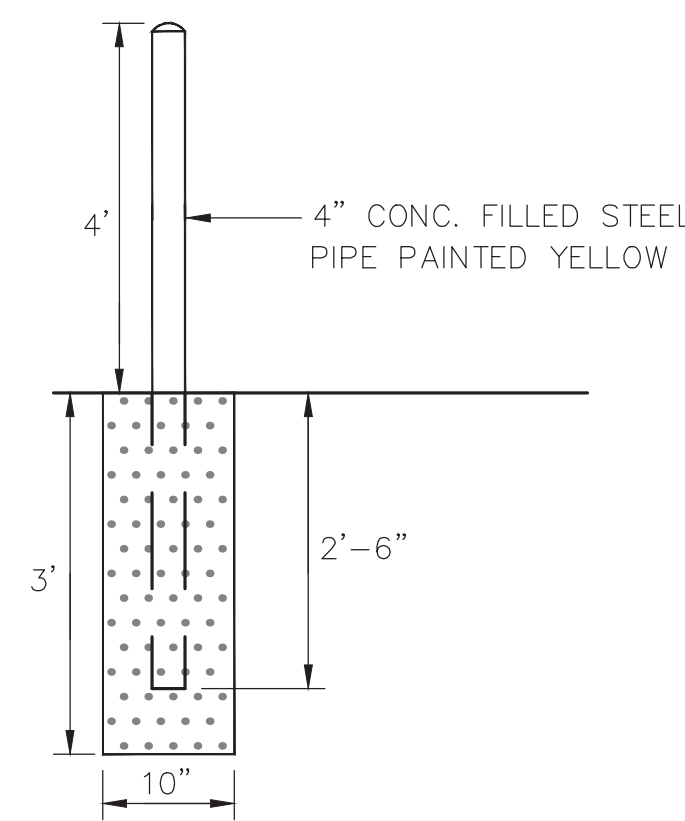
9 SLUICE GATE DETAIL
SCALE: NONE



8 LAGOON SIGN DETAIL
SCALE: NONE



7 SPLITTER MANHOLE DETAIL
SCALE: NONE



6 BOLLARD DETAIL
SCALE: NONE

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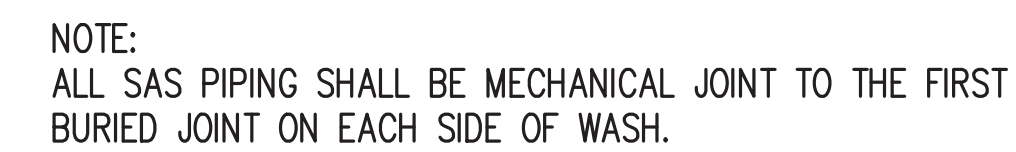


ZUNI UTILITY INFRASTRUCTURE
WASTEWATER LAGOON DETAILS

PROJECT NO. 20150380 DRAWING NO. 01-S-03 SHEET 35 OF 36



NOTE: CONCRETE FOOTINGS ARE SHOWN SCHEMATICALLY. CONTRACTOR MUST DETERMINE BEDROCK DEPTH AND INSTALL TWO FOOTINGS ON TOP OF BEDROCK. (2)



② PIPE SUPPORT DETAIL

[illegible]

ZUNI UTILITY INFRASTRUCTURE

WASTEWATER PIPE BRIDGE DETAIL

PROJECT NO. 20150380	DRAWING NO. 01-S-04	SHEET 36	OF 36
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