

### OWNER

ROOSEVELT IRRIGATION DISTRICT 103 WEST BASELINE ROAD BUCKEYE, ARIZONA 85326 (623) 386-2046ATTN: DONOVAN NEESE

### **OWNER'S ENGINEER**

STANTEC CONSULTING SERVICES INC. 8211 SOUTH 48TH STREET PHOENIX, ARIZONA 85044 (602) 438-2200 ATTN: APRIL VICTORINO

### OWNER'S CONSTRUCTION OBSERVER

STANTEC CONSULTING SERVICES, INC. 8211 SOUTH 48TH STREET PHOENIX, ARIZONA 85044 (602) 284-7017

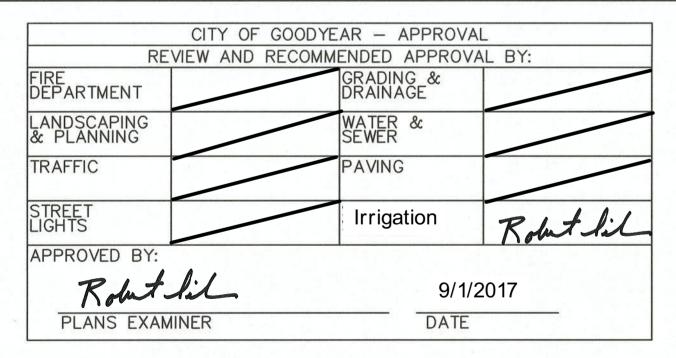
### DEVELOPER

ESTRELLA VAN BUREN PROPERTIES, INC 1203 E ALAMEDA DRIVE TEMPE, ARIZONA 85282 (602) 549-5133 ATTN: MEL ELKSTRAND

### DEVELOPER'S ENGINEER

HILGART WILSON, LLC 2141 E. HIGHLAND AVE. SUITE 250 PHOENIX, AZ 85016 (602) 490-0535 EXT 165 ATTN: DAVID GEORGE

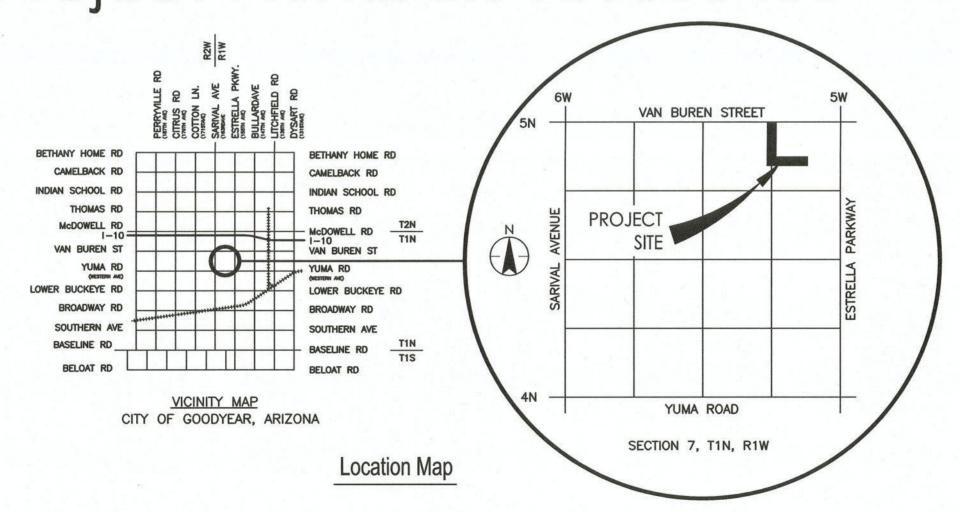
### CITY OF GOODYEAR APPROVAL



# ROOSEVELT IRRIGATION DISTRICT HUDSON COMMONS (VAN BUREN ST IMPROVEMENTS) WELL No. 25 AND LATERAL 5.5

5 N - 5 1/4 W TO 4 7/8 N - 5 3/8 W FACILITIES RELOCATION

August 2017 Project Number: 181300483



ROOSEVELT IRRIGATION DISTRICT APPROVAL THE DISTRICT APPROVES THESE PLANS FOR CONCEPT ONLY AND ACCEPTS NO LIABILITY FOR ERRORS OR OMISSIONS

Vustarino ROOSEVELT IRRIGATION DISTRICT

0/20/17 DATE

2017-2519-C5-001

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DATA CERTIFICATION

I HEREBY CERTIFY THAT THIS DESIGN IS BASED ON ACCURATE FIELD DATA WHICH HAS BEEN CHECKED IN THE FIELD PRIOR TO SUBMISSION OF THESE PLANS TO THE CITY FOR APPROVAL.



### AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN HEREON WAS OBTAINED UNDER MY DIRECT SUPERVISION AND IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

1. ADD EXISTING LIGHT POLE JJF ASV 08/28/17 By Appd. Date 
 JJF
 ASV
 JJF/HAR
 08/28/17

 Dwn.
 Chkd.
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 MM.DD.YY
 File Name: G1\_483.DWG Permit-Seal ARIZONA 811 APRIL S. VICTORINO, AL 8-1-1 OR 1-800-STAKE-IT (782-53 IN MARICOPA COUNTY: (602) 263-110 EXPIRES 03/31/2018 Client/Project Roosevelt Irrigation District WELL No. 25 AND LATERAL 5.5 **HUDSON COMMONS** (VAN BUREN ST IMPROVEMENTS) Goodyear, Arizona **COVER SHEET** Project No. Scale 181300483 NONE Drawing No. Sheet Revision G-1 of 11

DISTRICT

IRRIGATION

### ROOSEVELT IRRIGATION DISTRICT (RID) GENERAL NOTES:

- THE CONSTRUCTION CONTRACT SPECIFICATIONS FOR ALL PORTIONS OF THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SPONSORED AND DISTRIBUTED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) (LATEST EDITION), EXCEPT AS NOTED, INCLUDING REVISIONS AND
- ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS AND SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN THE DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE OWNER'S ENGINEER, IN WRITING, WHO WILL PROMPTLY CORRECT SUCH INCONSISTENCY OR AMBIGUITIES IN WRITING. WITHOUT NOTIFICATION, WORK DONE BY THE CONTRACTOR AFTER THE DISCOVERY OF SUCH DISCREPANCIES, SHALL BE DONE AT THE CONTRACTOR'S RISK.
- THE OWNER'S ENGINEER AND/OR OWNER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO.
- THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE TO THE OWNER'S ENGINEER FOR APPROVAL AND IS TO NOTIFY THE OWNER'S ENGINEER 15 CALENDAR DAYS IN ADVANCE OF EACH CONSTRUCTION PHASE SO AS TO FACILITATE CONSTRUCTION OBSERVATION SCHEDULING.
- THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW BY THE OWNER'S ENGINEER. AS MAY BE NECESSARY FOR THE EXECUTION OF THE WORK AND AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS.
- THE DEVELOPER'S ENGINEER AND/OR CONTRACTOR SHALL STAKE CONSTRUCTION AND/OR STREET(S) CENTERLINE, BACK OF CURBS, AND RIGHT-OF-WAY LINES REQUIRED FOR PROPER EXECUTION AND VERIFICATION OF THE WORK. REFERENCE STAKING SHALL BE MAINTAINED BY THE DEVELOPER'S ENGINEER AND/OR CONTRACTOR FOR THE DURATION OF RID IRRIGATION FACILITIES CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL PERMIT(S) REQUIRED FOR WORK WITHIN PUBLIC AGENCY RIGHT-OF-WAY PRIOR TO THE START OF CONSTRUCTION.
- B. STATIONS SHOWN ARE APPROXIMATE AND MAY BE VARIED AS DIRECTED BY THE OWNER'S ENGINEER.
- ALL PRECAST CONCRETE PIPE SHALL BE IN ACCORDANCE WITH ASTM C 76, CLASS III, WALL B AND ASTM C 443 UNLESS OTHERWISE NOTED.
- O. PRIOR TO THE BACKFILLING OF ALL IRRIGATION FACILITIES, THE CONTRACTOR SHALL CONDUCT TESTING PER MAG STD SPECIFICATION 611.3. ACCEPTABLE PIPE TESTING METHODS ARE AS FOLLOWS:

MAG SEC 611.3(A) - LOW PRESSURE AIR TEST MAG SEC 611.3(B) - HYDROSTATIC TEST MODIFIED AS FOLLOWS: REVISE NOTE (3) OF THE TESTING PROCEDURE IN MAG SEC 611.3(B) TO READ: "(3) A PERIOD OF AT LEAST 24 HOURS WILL BE ALLOWED FOR ABSORPTION TIME BEFORE MAKING THE TEST.

- 11. IF CONTRACTOR EXPERIENCES ADVERSE SOIL CONDITIONS (<90% STANDARD PROCTOR), CONTRACTOR MUST PROVIDE SEALED GEOTECHNICAL SUBGRADE DESIGN TO OWNER'S ENGINEER FOR APPROVAL PRIOR TO SUBGRADE PREPARATION OF BACKFILL ACTIVITIES.
- 2. THE CONTRACTOR SHALL CONTACT THE ROOSEVELT IRRIGATION DISTRICT'S CONSTRUCTION OBSERVER AS NOTED ON DRAWING G-1 FOR IRRIGATION SYSTEM DRY-UP SCHEDULING.
- 3. EXISTING RID FACILITIES MUST REMAIN OPERATIONAL, AND SHALL NOT BE DISTURBED OR RENDERED INACCESSIBLE TO RID OPERATIONS AND MAINTENANCE STAFF UNTIL THE CONSTRUCTION OF THE NEW RID FACILITIES HAS BEEN COMPLETED AND ACCEPTED AS ADEQUATE BY RID.
- 4. THE USE OF TEMPORARY IRRIGATION BY-PASS FACILITIES TO FACILITATE THE DEMOLITION OF EXISTING RID FACILITIES PRIOR TO THE COMPLETION OF THE NEW FACILITIES REQUIRES PRIOR APPROVAL FROM RID. RID MAY REQUIRE THE CONTRACTOR TO SUBMIT SEALED ENGINEERING PLANS FOR THE BY-PASS FACILITIES FOR REVIEW AND APPROVAL. THE ABANDONMENT AND DEMOLITION OF EXISTING RID FACILITIES REPLACED BY THE TEMPORARY BY-PASS SHALL PROCEED ONLY AFTER THE CONSTRUCTED BY-PASS HAS BEEN FIELD VERIFIED AND ACCEPTED AS ADEQUATE BY RID.
- 15. ALL EXISTING IRRIGATION FACILITIES DISTURBED BY NEW CONSTRUCTION SHALL BE RECONSTRUCTED TO CURRENT RID STANDARDS.
- 16. PRIOR TO THE ISSUANCE OF A ROOSEVELT IRRIGATION DISTRICT LETTER OF ACCEPTANCE, CONTRACTOR TO COLLECT AND PROVIDE AS-BUILT SURVEY, AT THE DIRECTION OF ROOSEVELT IRRIGATION DISTRICT'S CONSTRUCTION OBSERVER, TO THE OWNER'S ENGINEER FOR REVIEW AND APPROVAL.

### ROOSEVELT IRRIGATION DISTRICT (RID) **GENERAL NOTES (CON'T):**

- 17. UPON COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL CONTACT ROOSEVELT IRRIGATION DISTRICT'S CONSTRUCTION OBSERVER TO OBTAIN A LETTER OF ACCEPTANCE.
- 18. TRACER WIRE SHALL BE 12 AWG SOLID, PRO-TRACE HF-CCS PE30, SHALL BE COLOR PURPLE AND RATED FOR DIRECT BURIAL USE. NO SPLICING ALLOWED.

### ROOSEVELT IRRIGATION DISTRICT UTILITY LOCATION / RELOCATION NOTES:

- 1. ATTENTION IS CALLED TO THE EXISTENCE OF UTILITY LINES INCLUDING BUT NOT LIMITED TO BURIED GAS, WATER, TELEPHONE, AND ELECTRICAL LINES WITHIN THE PROJECT LIMITS. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE LOCATION AND PROTECTION OF ALL EXISTING FACILITIES, BURIED OR OVERHEAD, DURING THE CONSTRUCTION OPERATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES OR INJURY OF ANY NATURE DONE BY EXECUTION OF THE WORK AND SHALL RESTORE SUCH UTILITIES TO A CONDITION SIMILAR OR EQUAL TO THEIR CONDITION BEFORE SUCH DAMAGE OR INJURY WAS DONE BY REPAIR AND/OR REPLACEMENT IN AN ACCEPTABLE MANNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ANY AFFECTED UTILITY.
- 2. THE EXISTING UTILITIES IDENTIFIED ON THE PLANS MAY NOT REPRESENT ALL EXISTING AND/OR CONFLICTING UTILITIES WITHIN THE PROJECT LIMITS.
- 3. THE ROOSEVELT IRRIGATION DISTRICT DOES NOT GUARANTEE THE LOCATION OR ELEVATION OF UTILITIES AND WILL NOT BE RESPONSIBLE FOR THEIR RELOCATION.
- 4. THE CONTRACTOR SHALL CONTACT BLUE STAKE, (602) 263-1100, AND SUCH OTHER LOCATORS/UTILITIES AS NEEDED TO LOCATE AND FLAG ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE LOCATION AND ELEVATION OF ALL FLAGGED UTILITIES ARE TO BE FIELD VERIFIED PRIOR TO THE CONSTRUCTION OF RID FACILITIES.
- 5. ANY EXISTING UTILITY THAT IS IN CONFLICT WITH PROPOSED RID FACILITIES MUST BE RELOCATED TO PROVIDE A MINIMUM CLEARANCE OF ONE FOOT VERTICALLY AND TWO FEET HORIZONTALLY (OUTSIDE DIAMETER TO OUTSIDE DIAMETER) FROM THE RID FACILITY PRIOR TO CONSTRUCTION.
- 6. THE DEVELOPER IS SOLELY RESPONSIBLE FOR THE COORDINATION AND COST OF RELOCATION OF THE UTILITY AND SHALL CONTACT THE UTILITY OWNER DIRECTLY FOR INFORMATION REGARDING RELOCATION REQUIREMENTS.
- 7. ALL PROPOSED UTILITIES MUST PROVIDE A MINIMUM CLEARANCE OF ONE FOOT VERTICALLY AND TWO FEET HORIZONTALLY (OUTSIDE DIAMETER TO OUTSIDE DIAMETER) FROM PROPOSED RID FACILITIES.

### ROOSEVELT IRRIGATION DISTRICT **GRADING NOTES:**

- 1. THE CONTRACTOR SHALL PROVIDE SMOOTHLY AND EVENLY GRADED FINISHED GROUND SURFACES ABOUT ALL RID FACILITIES WITHIN THE PROJECT AREA.
- 2. ALL FINISHED GRADING ABOUT RID FACILITIES SHALL BE COMPLETED TO THE SATISFACTION OF THE OWNER'S ENGINEER. AT THE DIRECTION OF THE OWNER'S ENGINEER, THE CONTRACTOR SHALL REGRADE FINISHED SURFACES TO MEET THIS REQUIREMENT.
- 3. THE CONTRACTOR SHALL IMPORT ADDITIONAL FILL MATERIAL OR EXPORT EXCESS CUT MATERIAL AS REQUIRED TO PROVIDE SATISFACTORY FINISHED GRADING ABOUT THE RID FACILITIES AS DIRECTED BY THE OWNER'S ENGINEER.
- 4. FINISHED GRADING SHALL BLEND SMOOTHLY INTO EXISTING GRADES.
- 5. FINISHED SURFACES SHALL BE GRADED TO DIRECT DRAINAGE AWAY FROM RID FACILITIES
- 6. O&M ROADS SHALL BE CONSTRUCTED WITH A MINIMUM ELEVATION 6" ABOVE ADJACENT FIELDS AND A 2% CROSS SLOPE UNLESS OTHERWISE NOTED.
- 7. O&M ROADS ADJACENT TO CANAL PRISM SHALL BE CONSTRUCTED WITH A MINIMUM ELEVATION 6" ABOVE ADJACENT FIELD AND A 2% CROSS SLOPE AWAY FROM CANAL PRISM AREA UNLESS OTHERWISE NOTED.

### CITY OF GOODYEAR GENERAL NOTES FOR CONSTRUCTION:

- A. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION
- B. ALL CONSTRUCTION SHALL CONFORM TO THE CITY EDS&PM, CITY STANDARD DETAILS, AND CURRENT MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION.
- C. THIS SET OF PLANS HAS BEEN REVIEWED FOR COMPLIANCE WITH CITY REQUIREMENTS PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS. HOWEVER. SUCH REVIEW SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN PLANS FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE.
- D. THE CITY DOES NOT WARRANT ANY QUANTITIES SHOWN ON THESE PLANS.
- E. THE CITY APPROVAL IS FOR GENERAL LAYOUT IN THE RIGHT-OF-WAY ONLY. THIS APPROVAL IS VALID FOR A PERIOD OF ONE YEAR. CONSTRUCTION PERMITS SHALL BE OBTAINED DURING THIS PERIOD OR THE PLANS SHALL BE RESUBMITTED FOR REVIEW AND APPROVAL.
- F. AN APPROVED SET OF PLANS SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES.
- G. THE CITY CONSTRUCTION INSPECTOR SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY CONSTRUCTION WORK AND INSPECTIONS (623-882-7979). CONSTRUCTION WORK CONCEALED WITHOUT INSPECTION BY THE CITY CONSTRUCTION INSPECTOR SHALL BE SUBJECT TO EXPOSURE AT THE CONTRACTOR'S EXPENSE.
- H. ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE CITY ENGINEER, OR DESIGNEE, AND ANY WORK/MATERIAL NOT IN CONFORMANCE WITH CITY ENGINEERING STANDARDS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- RIGHT-OF-WAY IMPROVEMENTS SHALL NOT BE ACCEPTED UNTIL "AS-BUILT" PLANS HAVE BEEN SUBMITTED AND APPROVED BY THE CITY.(SEE AS-BUILT REQUIREMENTS)
- THE DEVELOPER IS RESPONSIBLE FOR THE REMOVAL OR RELOCATION OF ALL OBSTRUCTIONS WITHIN THE RIGHT-OF-WAY PRIOR TO STARTING NEW CONSTRUCTION.
- K. THE DEVELOPER IS RESPONSIBLE FOR ARRANGING THE RELOCATION AND ASSOCIATED COSTS OF ALL UTILITIES. A UTILITY RELOCATION SCHEDULE SHALL BE SUBMITTED PRIOR TO THE ISSUANCE OF PERMITS.
- L. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING OR DEDICATING ALL REQUIRED RIGHTS-OF-WAY AND EASEMENTS TO THE CITY PRIOR TO ISSUANCE OF PERMITS.
- M. THE CONTRACTOR SHALL CONTACT BLUE STAKE (602-263-1100) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL LOCATE ALL CONFLICTS PRIOR TO CONSTRUCTION.
- N. THE CONTRACTOR SHALL BARRICADE CONSTRUCTION SITES AT ALL TIMES PER THE CITY OF PHOENIX TRAFFIC BARRICADE MANUAL. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL IN ADVANCE OF CONSTRUCTION.
- O. POTABLE WATER IS NOT AVAILABLE FOR CONSTRUCTION USE OTHER THAN THE FILLING AND TESTING OF NEW LINES. THE UNLAWFUL REMOVAL OF WATER FROM A FIRE HYDRANT OR ANY OTHER SOURCE IS A VIOLATION OF THE MUNICIPAL CODE, PUNISHABLE BY FINE AND/OR IMPRISONMENT.
- P. PRIOR TO MOVING OR DESTROYING PROTECTED NATIVE PLANT SPECIES. THE CONTRACTOR SHALL FILE A FORMAL NOTICE OF INTENT WITH THE ARIZONA DEPARTMENT OF AGRICULTURE (602-542-6408).
- Q. THE CONTRACTOR SHALL COMPLY WITH THE ENVIRONMENTAL PROTECTION AGENCY NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER REQUIREMENTS ESTABLISHED FOR CONSTRUCTION SITES, ADEQ GENERAL PERMIT FOR DISCHARGE FROM CONSTRUCTION ACTIVITIES, AND THE CITY OF GOODYEAR STORM WATER MANAGEMENT PLAN.
- R. NO PERSON SHALL USE ANY MECHANICAL EQUIPMENT FOR LAND LEVELING OR CLEARING, ROAD CONSTRUCTION, TRENCHING, EXCAVATING, DEMOLITION, NOR ENGAGE IN ANY EARTHMOVING ACTIVITY WITHOUT FIRST OBTAINING A PERMIT FROM THE MARICOPA COUNTY AIR QUALITY DEPARTMENT (602-506-0666), 1001 N. CENTRAL AVENUE, SUITE 150. PHOENIX. AZ 85003. (THIS NOTICE IS ISSUED PURSUANT TO A.R.S. 36-779.07, NOTICE OF BUILDING AGENCIES.)
- S. THESE PLANS REFLECT CONDITIONS AS THEY EXIST AT THE TIME OF DESIGN. IF EXISTING CONDITIONS HAVE CHANGED BY THE TIME OF CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE CITY AND THESE PLANS MAY HAVE TO BE AMENDED PRIOR TO PROCEEDING WITH CONSTRUCTION ACTIVITIES

SUPPLEMENTAL ABBREVIATIONS						
AB BOT B/C BCHH BWCDD C/C C/G	AS-BUILT BOTTOM BACK OF CURB BRASS CAP IN HAND HOLE BUCKEYE WATER CONSERVATION AND DRAINAGE DISTRICT CENTER TO CENTER CURB AND GUTTER					
CLD CLDM COBCOP CORT DE D/S D/W E/P EXP	CENTERLINE CLEAR CONCRETE LINED DITCH CONTROLLED LOW—STRENGTH MATERIAL CITY OF BUCKEYE CITY OF GOODYEAR CITY OF PHOENIX CORNER CONSTRUCTION DETAILS DIAMETER DOWELS DOWNSTREAM DRIVEWAY EDGE OF PAVEMENT EACH WAY EXPANSION					
FG f FLG GR GB	FINISHED GRADE FLOW LINE FLANGE GRADE GRADE GRADE BREAK					

GRADE BREAK HYDRAULIC HYD IRR LG IRRIGATION LONG

LITCHFIELD PARK SERVICE COMPANY MARICOPA COUNTY HIGHWAY DEPARTMENT MCHD MEANDERING MEAND

MANUFACTURER МІ MINER'S INCHES ΜJ MECHANICAL JOINT MANNING'S N MONUMENT LINE N/A NOT APPLICABLE OR APPROVED EQUAL ON CENTER EACH WAY ocew OVERHEAD ELECTRIC OPERATIONS AND MAINTENANCE 0&M OHW OPERATING HIGH WATER **POTHOLE** РΗ

STEEL PLATE, BAR, OR PROPERTY LINE PLTO PIPE LINE TURNOUT STRUCTURE PROPOSED PVT PRIVATE

RUBBER GASKETED REINFORCED CONCRETE ROOSEVELT IRRIGATION DISTRICT

R/W RIGHT-OF-WAY SEWER SCHEDULE SLIP FORM SPACE(S)

SALT RIVER VALLEY WATER USERS

STRUCTURE S/W SIDEWALK TĆE TEMPORARY CONSTRUCTION EASEMENT TO TURNOUT

TOC

UNC

TOP OF CURB UNIFIED NATIONAL COARSE-THREAD SERIES

UPSTREAM WATER

Stantec Consulting Services Inc.

8211 South 48th Street Phoenix AZ 85044 USA Tel. 602.438.2200

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 File Name: G2\_483.DWG Permit-Seal 43811 ARIZONA 811
Arizona Blue Stake, Inc. APRIL S. VICTORINO MARICOPA COUNTY: (602) 263-EXPIRES 03/31/2018 Client/Proiect Roosevelt Irrigation District WELL No. 25 AND LATERAL 5.5 HUDSON COMMONS (VAN BUREN ST IMPROVEMENTS) Goodyear, Arizona

GENERAL NOTES

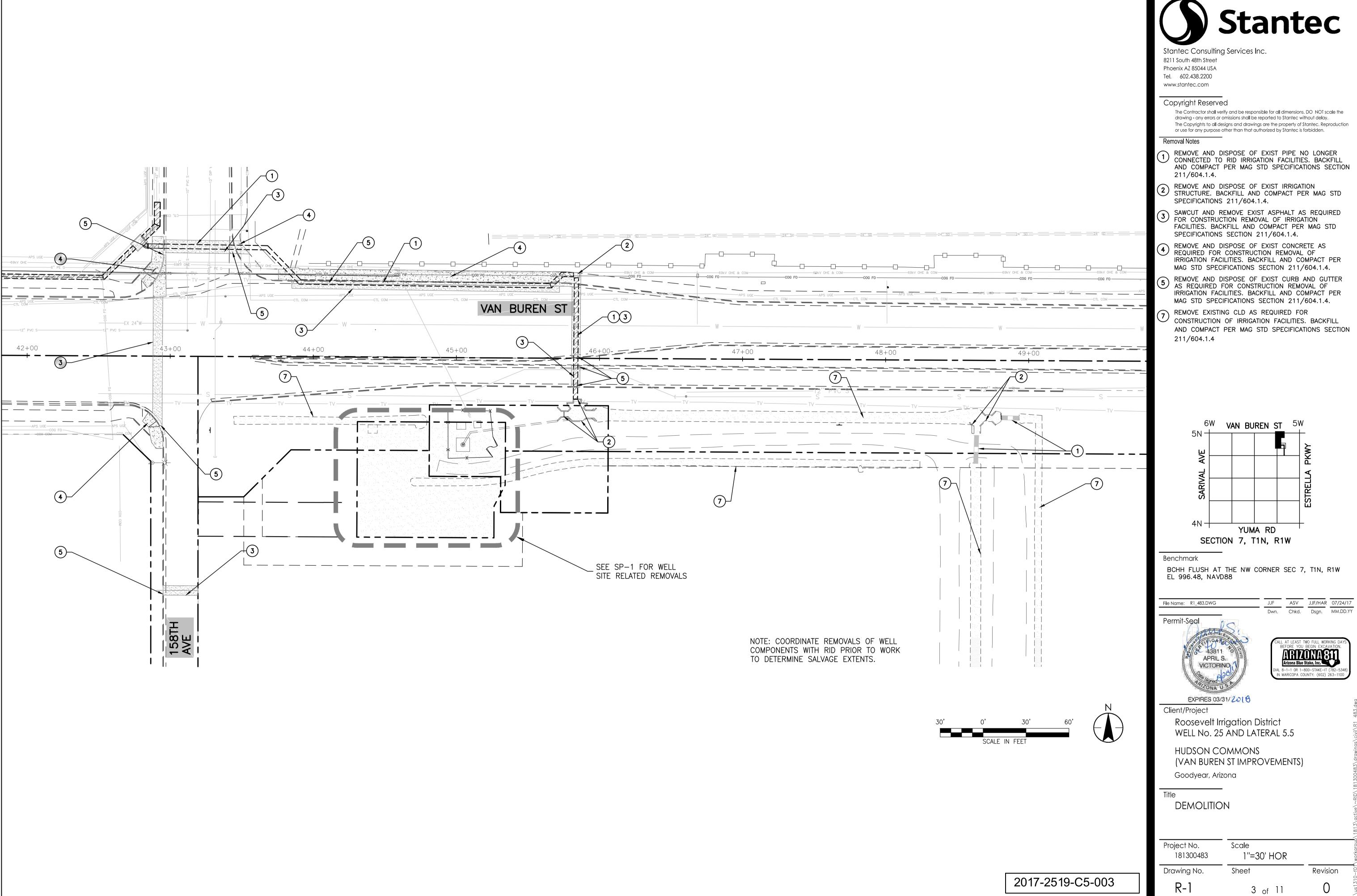
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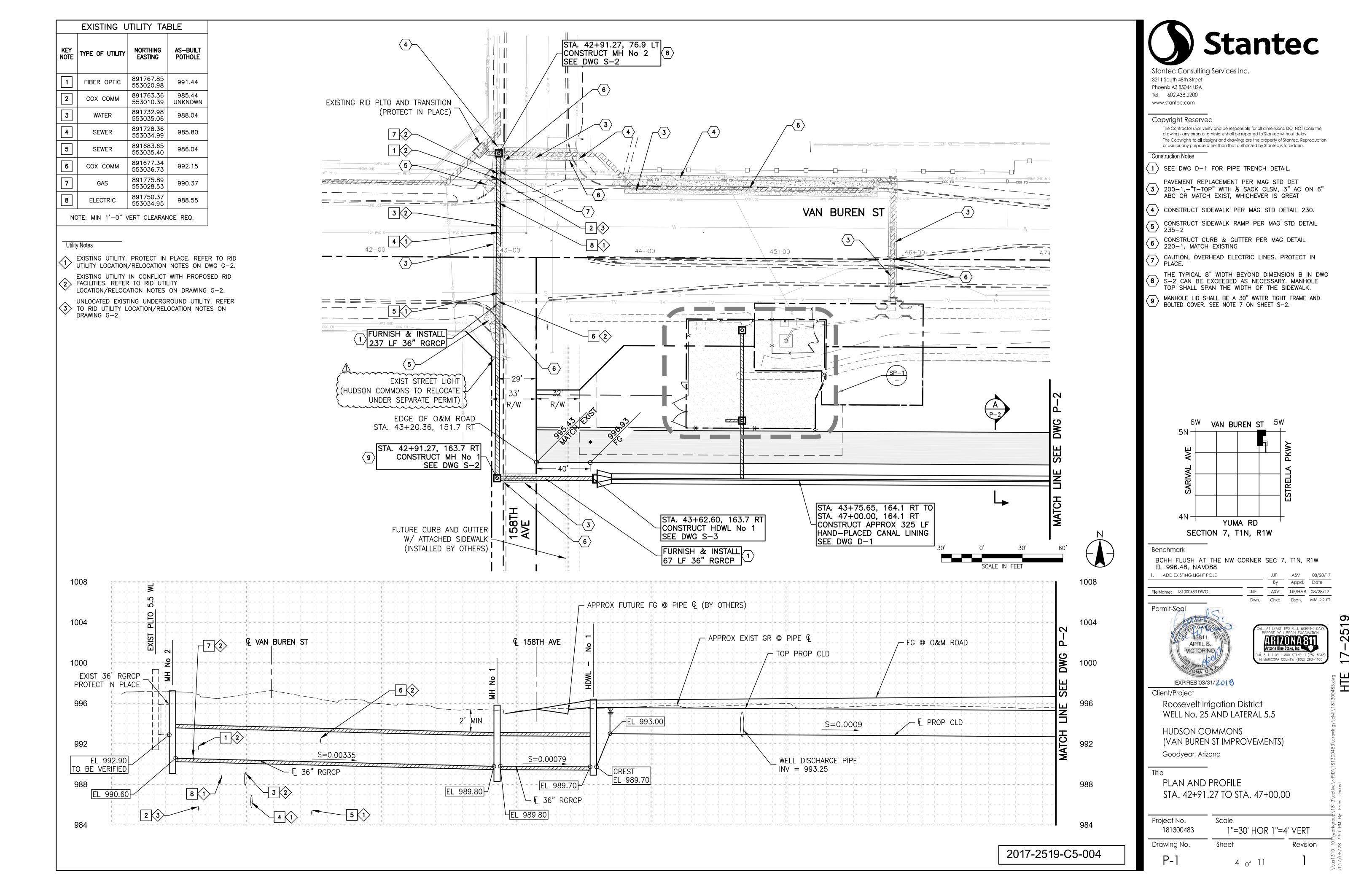
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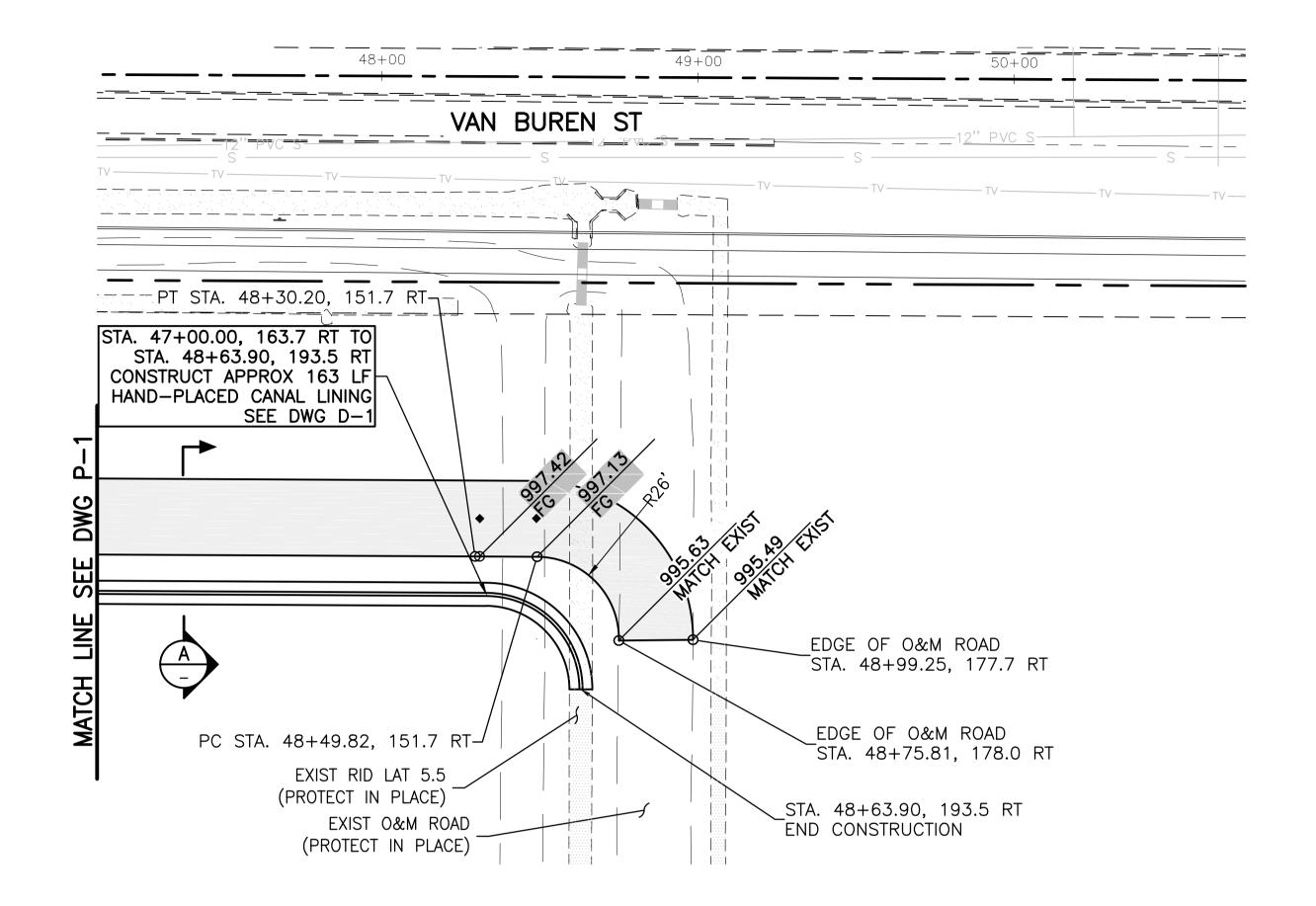
Revision

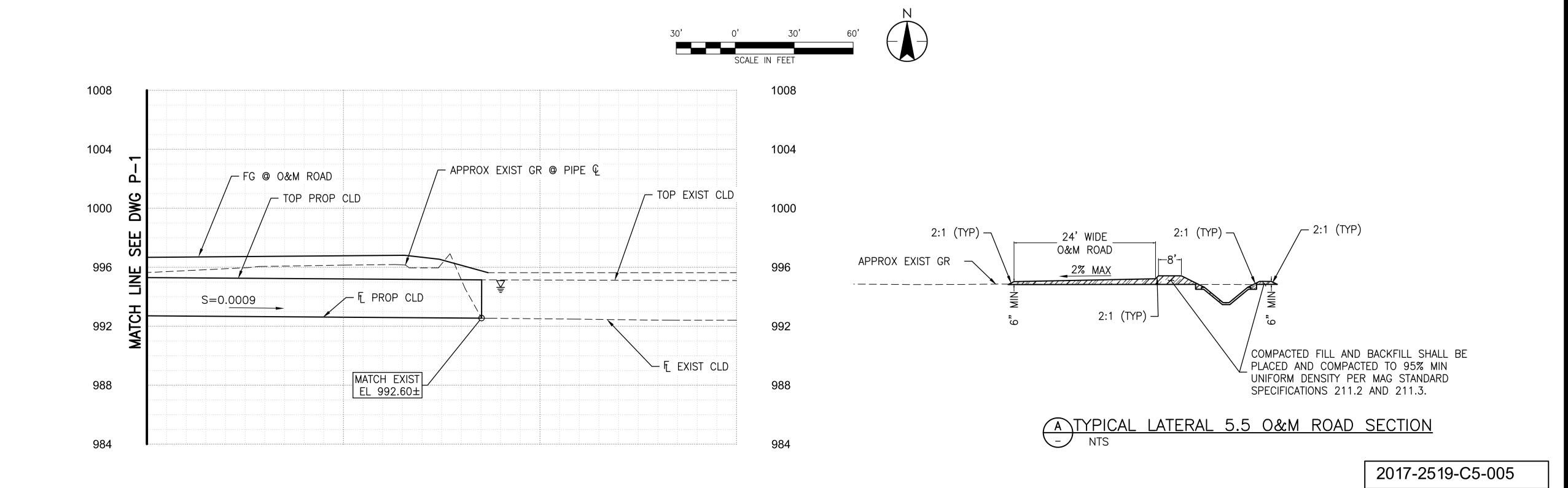
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Stantec Consulting Services Inc.

8211 South 48th Street Phoenix AZ 85044 USA

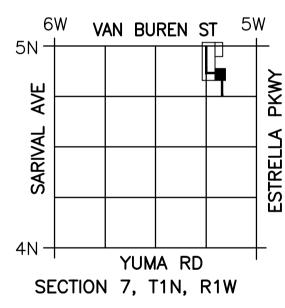
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Construction Notes



Benchmark

BCHH FLUSH AT THE NW CORNER SEC 7, T1N, R1W EL 996.48, NAVD88

File Name: 181300483.DWG

JJF ASV JJF/HAR 08/28/17

Dwn. Chkd. Dsgn. MM.DD.YY

Permit-Seal

CALL AT LEAST TWO FULL WORKING DAYS
BEFORE YOU BEGIN EXCAVATION.

ARBIZONASII
APRIL S.
VICTORINO
DIAL 8-1-1 OR 1-800-STAKE-IT (782-5348)
IN MARICOPA COUNTY: (602) 263-1100

Roosevelt Irrigation District

WELL NO. 25 AND LATERAL 5.5
HUDSON COMMONS
(VAN BUREN ST IMPROVEMENTS)

Goodyear, Arizona

Title PI

PLAN AND PROFILE STA. 47+00.00 TO STA 48+99.25

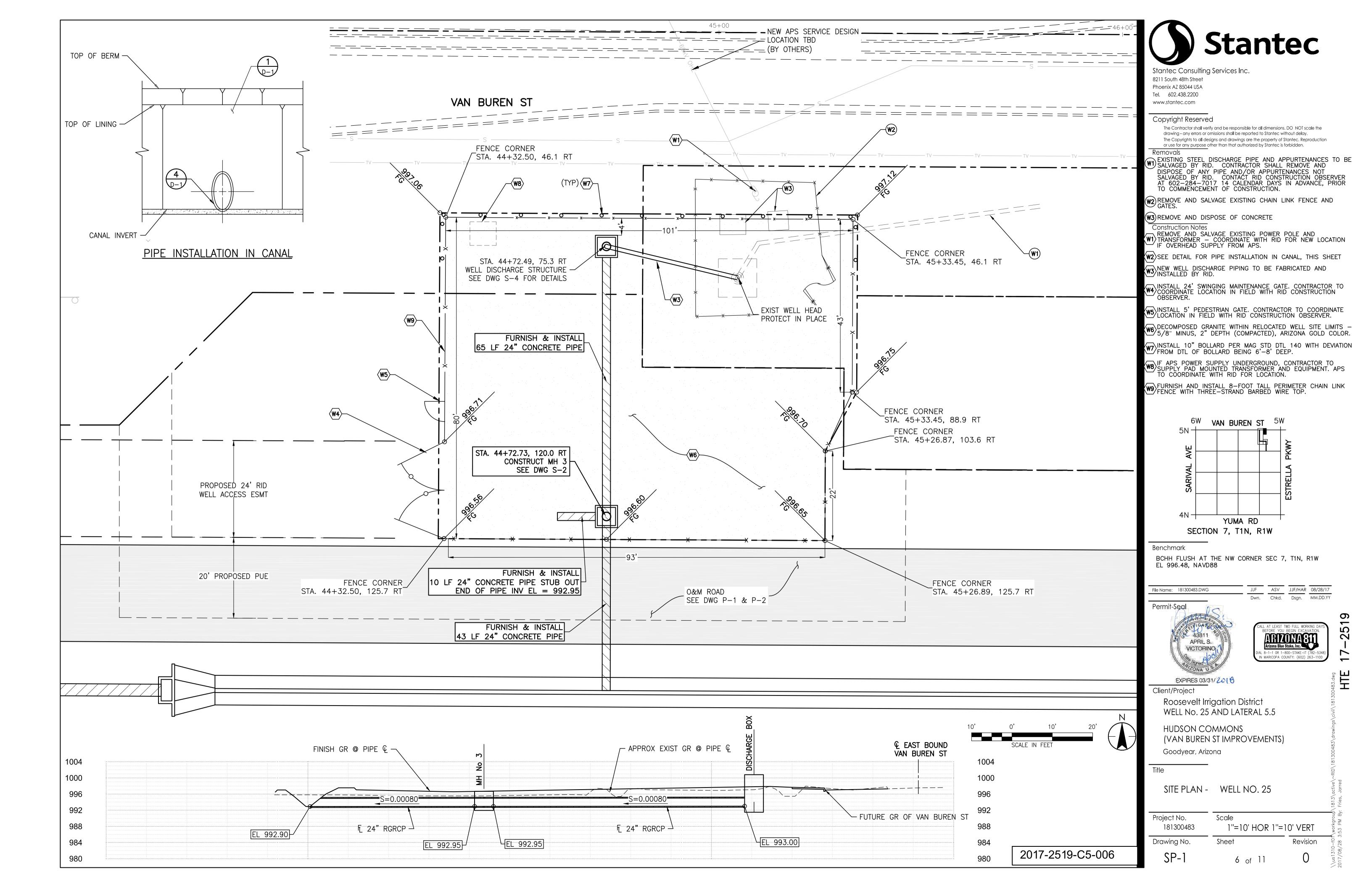
Project No. Scale 1"=30' HOR 1"=4' VERT

Drawing No. Sheet Revision

5 of 11

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C



### **DIMENSIONS:**

DIMENSIONS ARE TO THE CENTER LINES OF THE BARS UNLESS OTHERWISE SHOWN. CLEAR COVER DIMENSIONS ARE MARKED "CLR".

### PLACING:

REINFORCEMENT AT SMALL OPENINGS (MAX 18") IN WALLS AND SLABS MAY BE SPREAD APART NOT MORE THAN 1 1/2 TIMES THE BAR SPACING. REINFORCEMENT MAY BE ADJUSTED LATERALLY TO MAINTAIN A CLEAR DISTANCE OF AT LEAST 1" BETWEEN THE REINFORCEMENT AND KEYS, WATERSTOPS, ANCHOR BOLTS, FORM TIES, CONDUITS, AND OTHER EMBEDDED MATERIAL. IN HEAVILY REINFORCED AREAS RELOCATION OF THE EMBEDDED MATERIAL MUST BE CONSIDERED. IN NO CASE SHOULD BARS BE BENT TO GREATER THAN 6 TO 1 SLOPE. REINFORCEMENT PARALLEL TO ANCHOR BOLTS OR OTHER EMBEDDED MATERIAL SHALL BE PLACED TO MAINTAIN A CLEAR DISTANCE OF AT LEAST 1 1/3 TIMES THE MAXIMUM SIZE AGGREGATE. PLACE ADDITIONAL REINFORCING IN THE SAME PLANE AS THE REINFORCING INDICATED IN THE DETAIL PLANS.

### **SPACING:**

THE FIRST AND LAST BARS IN WALLS AND SLABS, STIRRUPS IN BEAMS, AND TIES IN COLUMNS ARE TO START AND END AT A MAXIMUM OF ONE HALF OF THE ADJACENT BAR SPACING.

### PLAIN DOWELS:

PLAIN DOWELS ACROSS CONTRACTION JOINTS SHALL BE SMOOTH BARS UNIFORMLY COATED WITH A FILM OF OIL BEFORE CONCRETE PLACEMENT. VISCOSITY OF THE OIL SHALL HAVE A SAE RATING OF NOT LESS THAN 250.

BAR SUPPORTS, SPACERS, AND OTHER ACCESSORIES ARE NOT SHOWN ON THE DESIGN DRAWINGS. THE RECOMMENDATIONS OF ACI 315 OR OTHER APPROVED SUPPORTING SYSTEMS MAY BE USED.

UNLESS OTHERWISE SHOWN THE MINIMUM LENGTH OF LAP FOR SPLICING PARALLEL BARS SHALL BE GIVEN IN THE TABLE OF SPLICE AND EMBEDMENT LENGTHS. SPLICES SHALL BE STAGGERED TO GIVE 12" CLEAR BETWEEN END OF ADJACENT SPLICES, IF BARS ARE SPACED CLOSER THAN 6" OR 6 BAR DIAMETERS. NONCONTACT LAP SPLICES SHALL NOT BE SPACED FARTHER APART THAN ONE-FIFTH THE REQUIRED LENGTH OF LAP OR 6". WHEN REINFORCING BARS OF DIFFERENT SIZES ARE TO BE SPLICED, THE LENGTH OF LAP SHALL BE GOVERNED BY THE SMALLER DIAMETER BAR. SPLICES ARE TO BE MADE SO THAT THE GIVEN DISTANCES TO FACE OF CONCRETE WILL BE MAINTAINED. SPLICE LENGTHS SHOWN ON THE TABLE OF SPLICE AND EMBEDMENT LENGTHS ARE FOR CLASS B SPLICES. SPACED AT LEST 6" ON CENTERS. IN ACCORDANCE WITH ACI 318-02. SPLICES REQUIRING LAP LENGTHS OTHER THAN THOSE FOR CLASS B MUST BE DETAILED ON THE REINFORCEMENT DESIGN DRAWINGS.

HOOKS SHALL HAVE 180° BENDS AND EXTENSIONS OF 4-BAR DIAMETERS BUT NOT LESS THAN 2 1/2" PARALLEL TO THE MAIN LEG OF THE BAR OF 90° BENDS AND EXTENSIONS OF AT LEAST 12-BAR DIAMETERS. HOOKS FOR STIRRUP AND TIE ANCHORAGE ONLY SHALL HAVE EITHER A 90° OR 135° BEND PLUS AN EXTENSION OF AT LEAST 6-BAR DIAMETERS BUT NOT LESS THAN 2 1/2" AT THE FREE END OF THE BAR. RADIUS OF BEND TO BE AS SPECIFIED IN THE TABLE OF PIN DIAMETERS. PROVIDE STANDARD ACI HOOK IF STRAIGHT EXTENSION PART OPENING CANNOT BE OBTAINED.

ONLY BILLET STEEL OR AXLE STEEL SHALL BE USED FOR BARS TO BE BENT. UNLESS OTHER RADIUS BENDS ARE INDICATED ON THE DESIGN DRAWINGS, ALL REINFORCEMENT REQUIRING BENDING SHALL BE BENT AROUND A PIN HAVING THE DIAMETER SHOWN IN THE TABLE OF PIN DIAMETERS. AREA OF ADDITIONAL BARS OF EACH DIRECTIONAL SHALL MATCH 1/2 THE CROSS SECTIONAL AREA OF INTERRUPTED BARS.

### STRESS CLASS:

CONCRETE FOR CLASS AA 4000 PSI SHALL MEET THE FOLLOWING TERTIARY REQUIREMENTS:

CONCRETE fc = 4000 PSI AT 28 DAYS. STEEL REINFORCEMENT (CONFORM TO ASTM A-615). BAR fs= 24,000 PSI (GRADE 60)

CONCRETE FOR CLASS AA 6000 PSI SHALL MEET THE FOLLOWING TERTIARY REQUIREMENTS:

CONCRETE Fc = 1800 PSI AT SETTING PRECAST, Fc = 3000 PSI AT WATER LOADING. Fc = 6000 AT 28 DAYS. STEEL REINFORCEMENT (CONFORM TO ASTM A-615). BAR FS= 24,000 PSI (GRADE 60)

### **CONCRETE NOTES:**

CHAMFER EDGES OF PERMANENTLY EXPOSED CONCRETE SURFACES OF ALL STRUCTURES WITH A 45° BEVEL, 3/4"x3/4".

### **DIMENSIONS:**

ALL DIMENSIONS TO A JOINT ARE TO THE CENTERLINE OF THE JOINT. BEAM AND SLAB DEPTHS SHALL BE MEASURED FROM THE TOP OF THE STRUCTURAL SLAB. DIMENSIONS GIVEN FOR THE DEPTH OF RECESSES ARE FROM THE SURFACE OF THE STRUCTURAL CONCRETE. THICKNESS SHOWN FOR WALLS AND SLABS ADJACENT TO UNDISTURBED SOIL OR ROCK ARE MINIMUM DIMENSIONS.

### **EMBEDDED MATERIALS:**

BEFORE PLACING CONCRETE, CARE SHALL BE TAKEN THAT ALL EMBEDDED ITEMS ARE IN POSITION AND SECURELY FASTENED IN PLACE.

FINISHES:
FOR LOCATION AND CLASSES OF FINISHES FOR FORMED AND UNFORMED CONCRETE SURFACES, SEE SPECIFICATION.

ALL CONSTRUCTION JOINTS SPECIFICALLY SHOWN ON THE DRAWINGS SHALL BE PROVIDED. ADDITIONAL CONSTRUCTION JOINTS MAY BE USED SUBJECT TO APPROVAL.

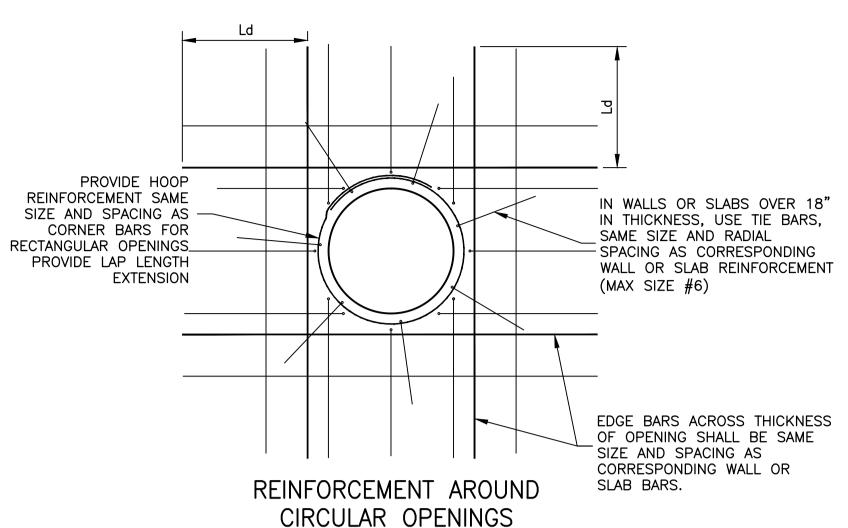


TABLE OF SPLICE AND EMBEDMENT LENGTHS

OTHER BARS

25

31

37

54

62

70

TABLE OF SPLICE AND EMBEDMENT LENGTHS

OTHER BARS

20

25

31

44

51

57

FOR CONCRETE WITH

fc = 6000 PSI

MIN CENTER TO CENTER | LENGTH Le OF LAPPED SPLICE (INCHES) | DEVELOPMENT LENGTH Ld (INCHES)

DEVELOPMENT LENGTH Ld (INCHES)

OTHER BARS

15

19

24

29

42

54

OTHER BARS

16

20

24

34

39

TOP BARS\*

25

31

37

54

62

70

TOP BARS\*

20

25

31

51

FOR CONCRETE WITH

fc = 4000 PSI

**ADDITIONAL REINFORCEMENT NOTE:** 

4. PROVIDE MINIMUM 2" CLEAR COVER AROUND OPENING.

USE CORNER BARS IN FACE ON RECESS SIDE.

BAR SPACING (INCHES)

1 1/2

1 7/8

2 1/4

2 5/8

3 3/8

BAR SPACING (INCHES)

6

ADDITIONAL REINFORCEMENT AT

OPENING IN CONCRETE SLAB OR WALL

MIN CENTER TO CENTER | LENGTH Le OF LAPPED SPLICE (INCHES)

TOP BARS \*

48

70

80

91

TOP BARS \*

26

33

40

66

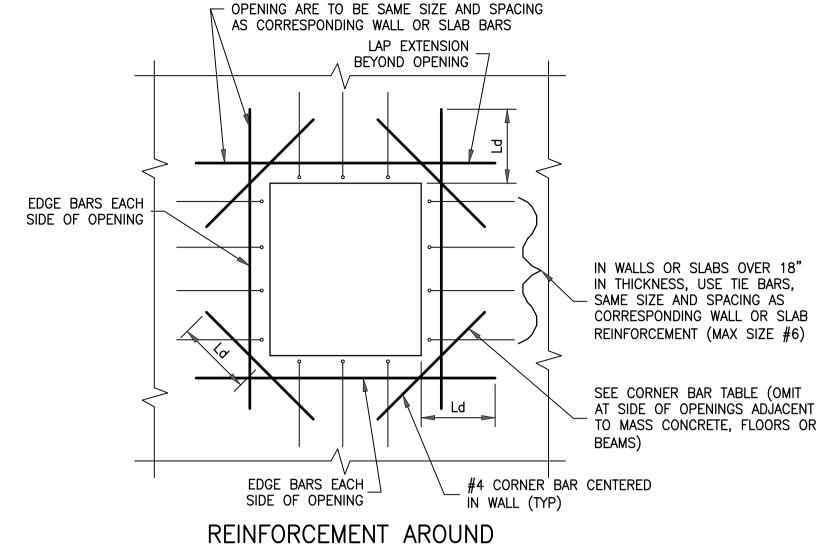
\* TOP BARS ARE HORIZONTAL BARS IN BEAMS AND SLABS SO PLACED THAT MORE

THAN 1 FOOT OF CONCRETE IS IN THE MEMBER BELOW THE BAR.

OBTAINED.

IN THE DETAIL PLANS.

INTERRUPTED BARS.

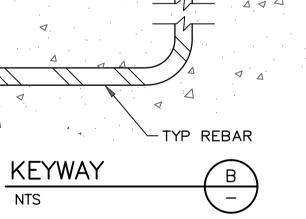


RECTANGULAR OPENINGS

FOR WALLS LESS THAN 10" THICK

THE EDGE BARS ACROSS THICKNESS OF

## NON-BENTONITE HYDROPHILIC WATERSTOP SEE BELOW NOTE 2 AREA OF ADDITIONAL BARS AT EACH EDGE OF OPENING IN EACH DIRECTION SHALL MATCH 1/2 THE CROSS SECTIONAL AREA OF THE INTERRUPTED BARS. 2. PROVIDE STANDARD ACI HOOK IF STRAIGHT EXTENSION PART OPENING CANNOT BE 3. PLACE ADDITIONAL REINFORCING IN THE SAME PLANE AS THE REINFORCING INDICATED 5. DIAMETER OF ADDITIONAL BAR SHALL BE (AT A MINIMUM) THE SAME DIAMETER AS 6. TIES, EDGE, AND CORNER BARS NOT REQUIRED FOR OPENINGS 18" OR LESS. FOR A RECESS DEEPER THAN 4", BUT NOT GREATER THAN 1/2 WALL OR SLAB THICKNESS,



NOTE: KEYWAY NOT REQUIRED FOR MONOLITHIC

REBAR

PSI

24,000

(GRADE 60)

REBAR

fs

PSI

24,000

(GRADE 60)

# **KEYWAY NOTES:**

NTS

CHAMFER

- 1. KEYWAY NOT REQUIRED FOR MONOLITHIC SECTIONS.
- 2. WATERSTOP SHALL BE ADEKA ULTRA SEAL KBA-1510FP OR APPROVED EQUIVALENT (OAE), INSTALL PER MANUFACTURER'S INSTRUCTIONS. CLEAN SURFACE OF PIPE AND ADHERE WITH 3M 2141 RUBBER ADHESIVE (OAE). LAP ENDS 2", AND SEAL WITH P-201 (OAE).

TABLE FOR ADDITIONAL REINFORCEMENT						
MEMBER THICKNESS	TIE BARS	EDGE BARS	CORNER BARS			
LESS THAN 10"	NONE	1- @ CENTER	2- #4 @ CTR.			
10" THRU 18"	NONE	2- (1 EACH FACE)	4- #4 (2 EACH FACE)			
19" THRU 36"	#4 @ 12 <b>"</b>	3- EQUALLY SPACED	4- #4 (2 EACH FACE)			
OVER 36"	#6 <b>©</b> 12"	SPACED @ 12"	4- #5 (2 EACH FACE)			

FILLET 12" OR GREATER

TYPICAL CORNER DETAILS

OMIT EDGE AND TIE BARS ALONG SIDES OF OPENINGS LESS THAN 18". OMIT CORNER BARS AT SIDES OF OPENINGS ADJACENT TO FLOORS, WALLS, OR BEAMS, OMIT CORNER BARS IF BOTH DIMENSIONS OF OPENINGS ARE LESS THAN 18". RECESSES: USE CORNER BARS IN FACE OF RECESSES DEEPER THAN 4" IF EITHER DIMENSION OF RECESS IS EQUAL TO OR GREATER THAN 18".

TABLE OF PIN DIAMETERS (IN INCHES)									
BAR #	3	4	5	6	7	8	9	10	11
STANDARD BENDS	2-1/2	3	3-3/4	4-1/2	5-1/4	6	9-1/2	10-3/4	12
STIRRUP & TIE BENDS	1-1/2	2	2-1/2	4-1/2	5-1/4	6	_	_	_

2017-2519-C5-007

RESTRICTED MEMBER

**THICKNESS** 

FILLET LESS THAN 12"

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 07/24/17

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 File Name: \$1\_483.DWG





EXPIRES 03/31/2018 Client/Proiect

Roosevelt Irrigation District

WELL No. 25 AND LATERAL 5.5 HUDSON COMMONS

(VAN BUREN ST IMPROVEMENTS) Goodyear, Arizona

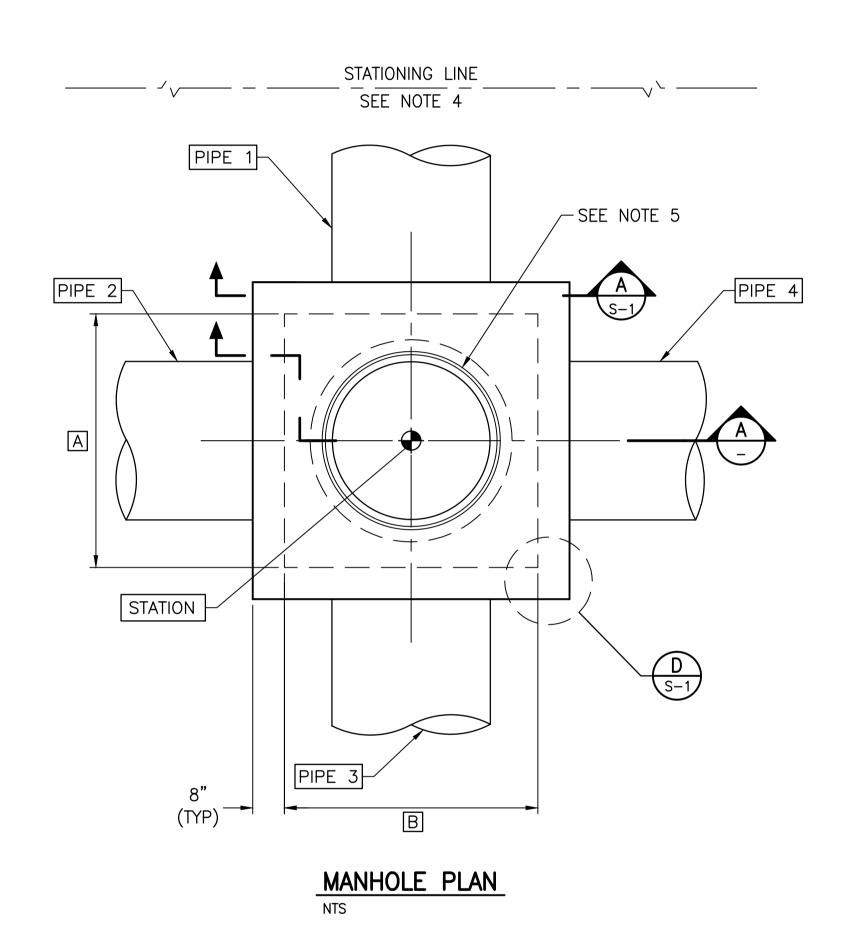
GENERAL CONCRETE REINFORCEMENT

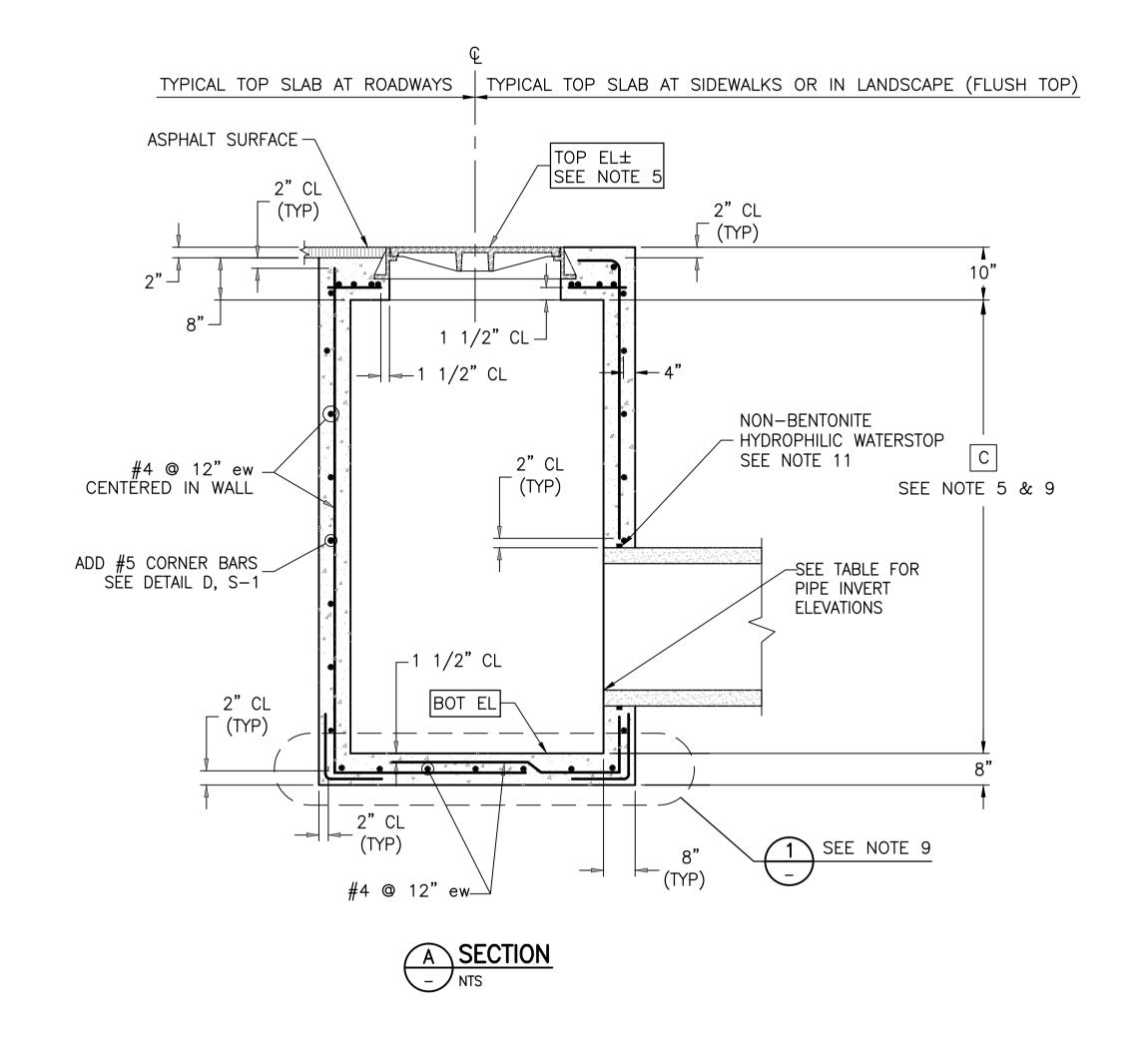
NOTES & DETAILS Project No. Scale

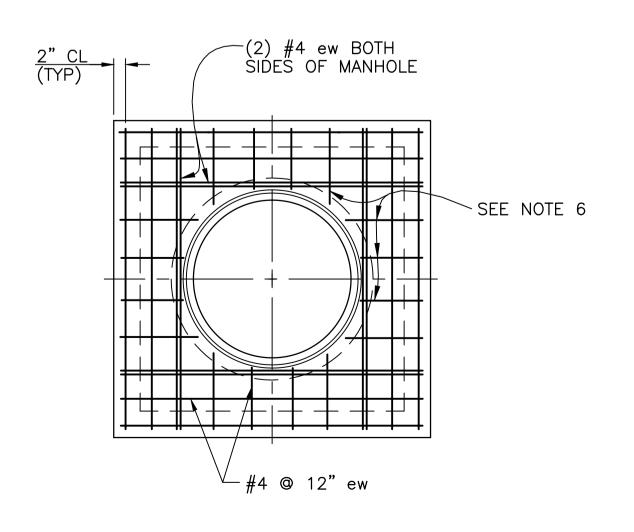
AS SHOWN 181300483 Drawing No. Sheet

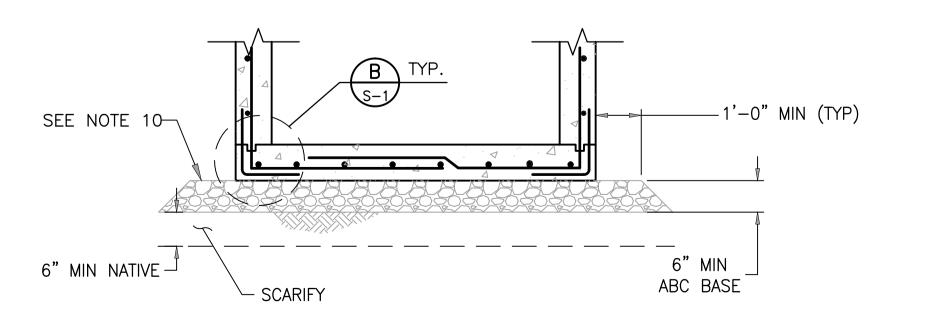
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Revision









2017-2519-C5-008



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- ALL STRUCTURAL CONCRETE SHALL BE CLASS AA (4,000 PSI) PER MAG SPECIFICATION SECTION 725.
- REINFORCING STEEL BARS SHALL CONFORM TO ASTM A615 GRD 60.
- CONCRETE SHALL BE PLACED WITH NO COLD JOINTS. ALL CONCRETE SHALL BE VIBRATED DURING PLACEMENT.
- SEE PLAN AND PROFILE DRAWING FOR CORRECT ORIENTATION OF MANHOLE.
- THE NOTED TOP ELEVATION AT THE CENTER OF THE MANHOLE COVER HAS BEEN DETERMINED FROM THE DEVELOPER'S PAVING AND/OR GRADING PLANS. THE EXACT TOP ELEVATION OF THE MANHOLE SHALL BE ESTABLISHED AND STAKED IN THE FIELD BY THE DEVELOPER'S ENGINEER AND/OR CONTRACTOR TO CONFORM TO FINAL ROADWAY, SIDEWALK OR FINISHED GROUND SURFACE ELEVATIONS. ADJUST DIMENSION [C] AS REQUIRED TO MATCH THE APPROPRIATE ADJACENT FINISHED GRADE.
- FIELD CUT REBAR AT MANHOLE.
- 30" WATER TIGHT FRAME AND BOLTED COVER SHALL BE DEETER STOCK No. 1296-B AS MANUFACTURED BY DEETER FOUNDRY INCORPORATED. NO SUBSTITUTIONS ALLOWED. COVER LETTERING SHALL READ: "ROOSEVELT IRRIGATION DISTRICT" PER MAG STD DETAIL
- 30" MANHOLE FRAME AND COVER SHALL BE SUPPLIED BY ROOSEVELT IRRIGATION DISTRICT FOR INSTALLATION BY THE CONTRACTOR. THE CONTRACTOR SHALL REIMBURSE THE DISTRICT FOR THE TOTAL INVOICED COST OF THE FRAME AND COVER.
- IF DIMENSION C EXCEEDS 10'-0", SUB-BASE PER DETAIL 1 REQUIRED.
- 10. MINIMUM COMPACTION FOR ABC BASE AND NATIVE SUB-BASE SHALL BE 95% OF MAX DENSITY PER ASTM D698 AT +2% TO -4% OF OPTIMUM MOISTURE CONTENT.
- WATERSTOP SHALL BE ADEKA ULTRA SEAL KBA-1510FP OR APPROVED EQUIVALENT (OAE), INSTALL PER MANUFACTURER'S INSTRUCTIONS. CLEAN SURFACE OF PIPE AND ADHERE WITH 3M 2141 RUBBER ADHESIVE (OAE). LAP ENDS 2", AND SEAL WITH P-201 (OAE).

Permit-Seal ANTA VAONAVASSE APRIL S. **VICTORINO** AL 8-1-1 OR 1-800-STAKE-IT (782-5 IN MARICOPA COUNTY: (602) 263-11

EXPIRES 03/31/2018

Roosevelt Irrigation District

WELL No. 25 AND LATERAL 5.5 HUDSON COMMONS (VAN BUREN ST IMPROVEMENTS)

Goodyear, Arizona

MANHOLES

Project No. Scale 181300483

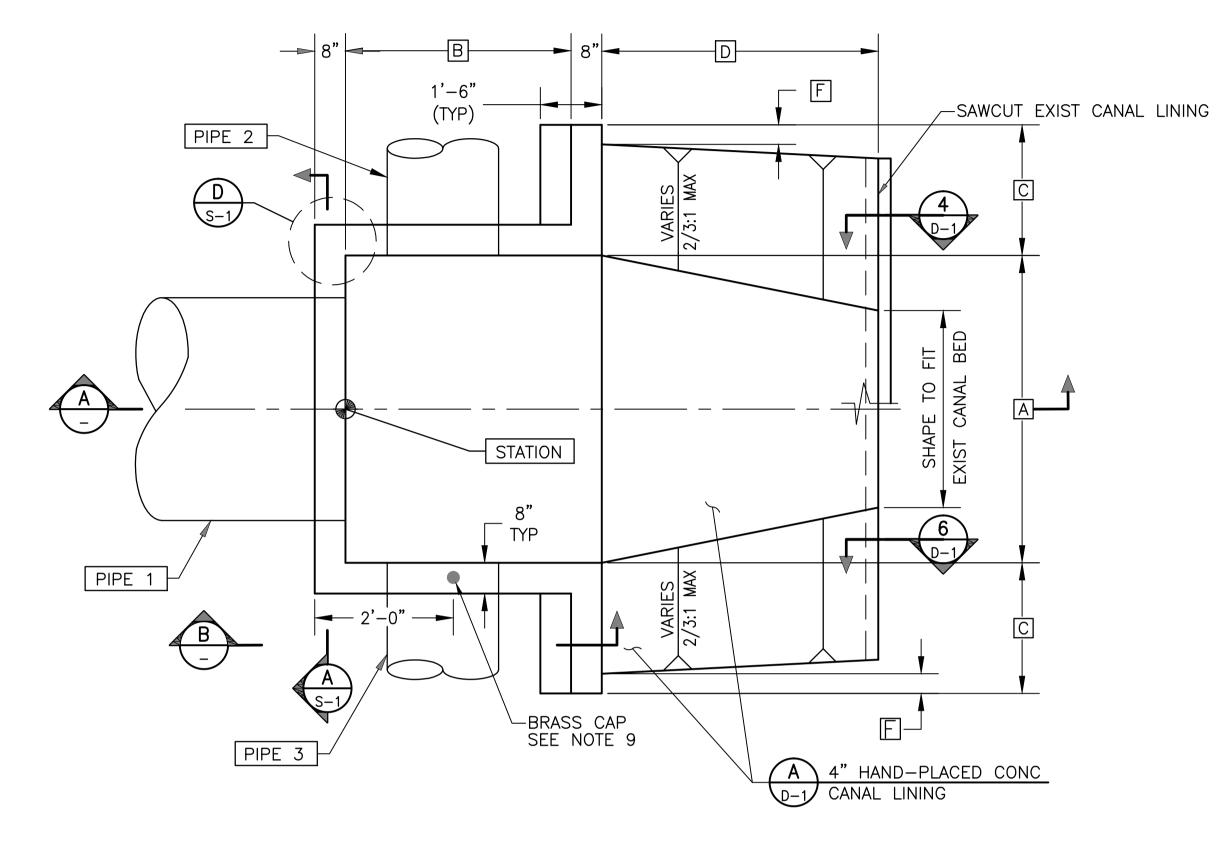
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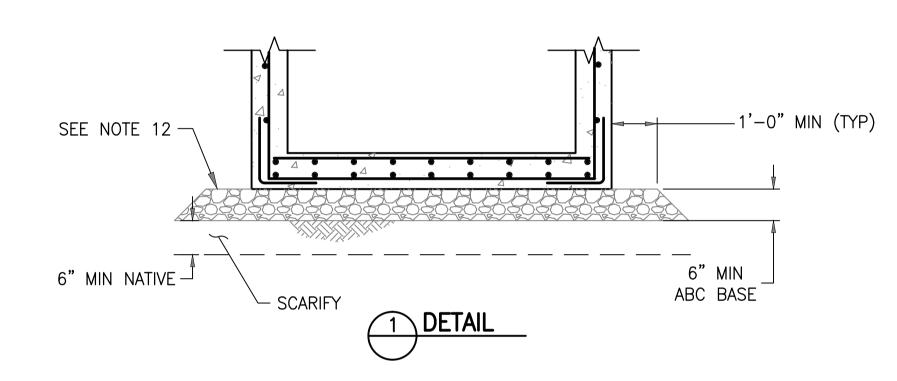
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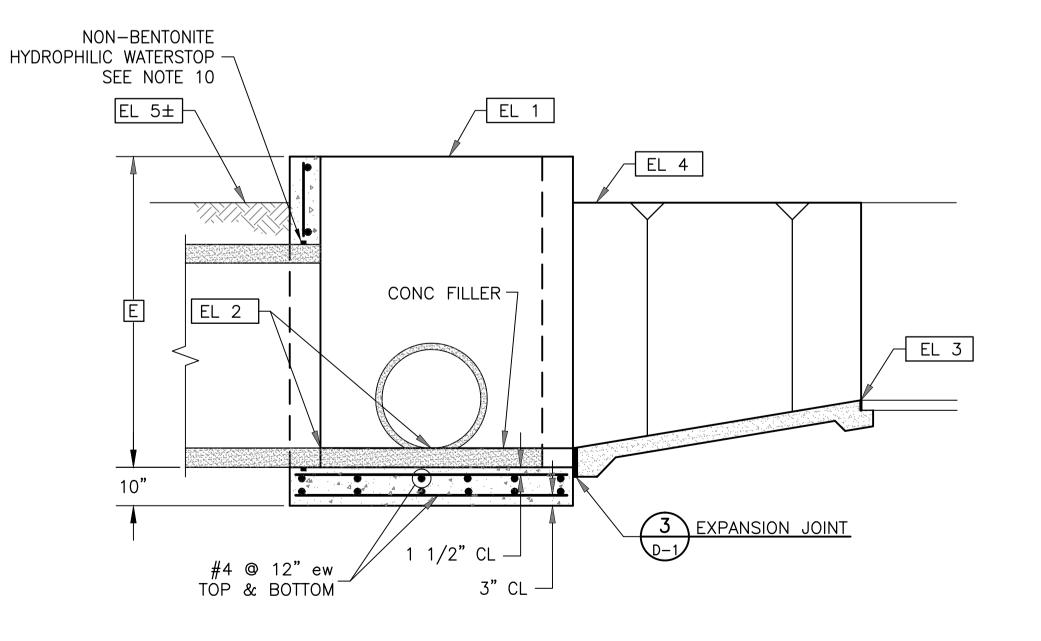
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TOP SLAB REINFORCING PLAN

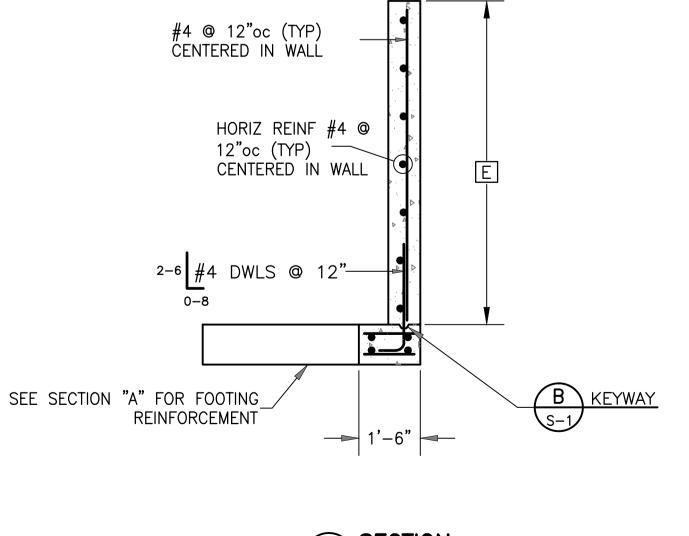




# OUTLET HEADWALL PLAN







B SECTION NTS

2017-2519-C5-009



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- SEE PLAN AND PROFILE DRAWING(S) FOR ORIENTATION OF HEADWALL(S).
- 2. ALL STRUCTURAL CONCRETE SHALL BE CLASS AA (4,000 PSI) PER MAG SPECIFICATION SECTION
- . REINFORCING STEEL TO BE ASTM A615 GRADE 60.
- CONCRETE FILLER TO MATCH INVERT ELEVATION AT **EL 2** AND MATCH SLOPE OF PIPE.
- MATCH HAND-PLACED LINING TRANSITION TO WIDTH, ELEVATION & SLOPE OF EXIST DITCH.
- . SHAPE AND COMPACT TRANSITION SUBGRADE FROM HEADWALL TO 36" PAST UNDISTURBED UNLINED DITCH OR TO UPSTREAM END OF TRANSITION, WHICHEVER IS GREATER.
- EXTEND TRANSITION LINING FROM **EL 4** TO EXIST DITCH OR CONCRETE LINING BY LENGTH D AND MATCH FINISH WITH EXIST SLIPFORM LINING (IF APPLICABLE).
- CHAMFER EDGES OF PERMANENTLY EXPOSED CONCRETE SURFACES WITH A 45° BEVEL, 3/4" X
- 9. 3" DIA BRASS CAP SURVEY MARKER, SOKKIA PART NUMBER 8134-08 OR APPROVED EQUIVALENT. CENTERED IN WALL. INSTALL PER MFG INSTRUCTIONS.
- 10. WATERSTOP SHALL BE ADEKA ULTRA SEAL KBA-1510FP OR APPROVED EQUIVALENT (OAE), INSTALL PER MANUFACTURER'S INSTRUCTIONS. CLEAN SURFACE OF PIPE AND ADHERE WITH 3M 2141 RUBBER ADHESIVE (OAE). LAP ENDS 2", AND SEAL WITH P-201 (OAE).
- 11. IF DIMENSION E EXCEEDS 10'-0", SUB-BASE PER DETAIL 1 REQUIRED.
- 2. MINIMUM COMPACTION FOR ABC BASE AND NATIVE SUB-BASE SHALL BE 95% OF MAX DENSITY PER ASTM D698 AT +2% TO -4% OF OPTIMUM MOISTURE CONTENT.

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### EXPIRES 03/31/2018

Roosevelt Irrigation District WELL No. 25 AND LATERAL 5.5

HUDSON COMMONS (VAN BUREN ST IMPROVEMENTS)

Goodyear, Arizona

HEADWALLS

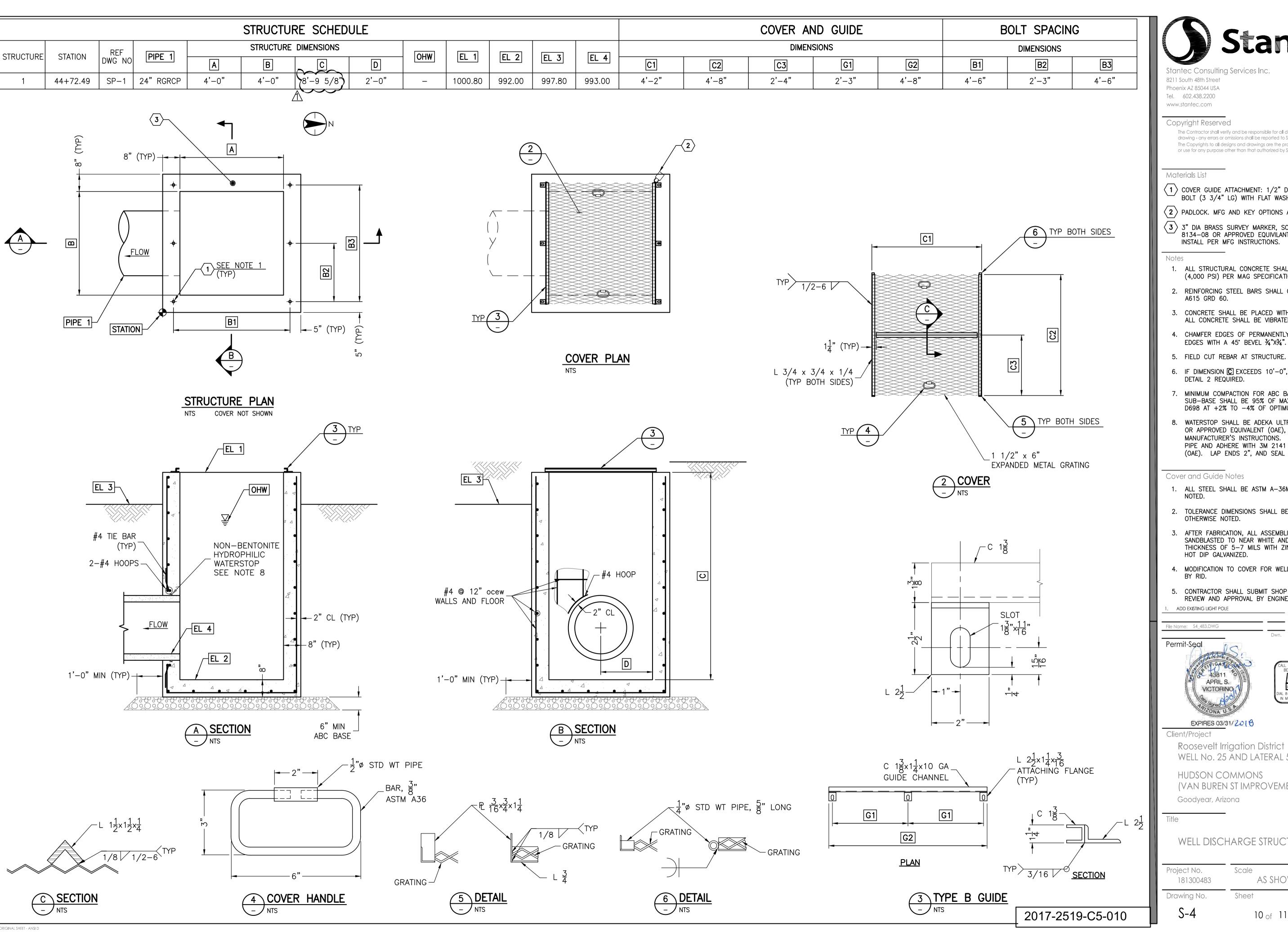
Project No. Scale 181300483

Drawing No. Sheet

S-3

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Revision





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### Materials List

- 1 COVER GUIDE ATTACHMENT: 1/2" DIA HEX HEAD EXP BOLT (3 3/4" LG) WITH FLAT WASHER.
- (2) PADLOCK. MFG AND KEY OPTIONS AS SPECIFIED BY RID.
- 3 3" DIA BRASS SURVEY MARKER, SOKKIA PART NO 8134-08 OR APPROVED EQUIVILANT, CENTERED IN WALL. INSTALL PER MFG INSTRUCTIONS.
- 1. ALL STRUCTURAL CONCRETE SHALL BE CLASS AA (4,000 PSI) PER MAG SPECIFICATION SECTION 725.
- 2. REINFORCING STEEL BARS SHALL CONFORM TO ASTM A615 GRD 60.
- 3. CONCRETE SHALL BE PLACED WITH NO COLD JOINTS. ALL CONCRETE SHALL BE VIBRATED DURING PLACEMENT.
- 4. CHAMFER EDGES OF PERMANENTLY EXPOSED CONC
- 5. FIELD CUT REBAR AT STRUCTURE.
- 6. IF DIMENSION C EXCEEDS 10'-0", SUB-BASE PER
- MINIMUM COMPACTION FOR ABC BASE AND NATIVE SUB-BASE SHALL BE 95% OF MAX DENSITY PER ASTM D698 AT +2% TO -4% OF OPTIMUM MOISTURE CONTENT.
- WATERSTOP SHALL BE ADEKA ULTRA SEAL KBA-1510FP OR APPROVED EQUIVALENT (OAE), INSTALL PER MANUFACTURER'S INSTRUCTIONS. CLEAN SURFACE OF PIPE AND ADHERE WITH 3M 2141 RUBBER ADHESIVE (OAE). LAP ENDS 2", AND SEAL WITH P-201 (OAE).

### Cover and Guide Notes

- 1. ALL STEEL SHALL BE ASTM A-36M UNLESS OTHERWISE
- 2. TOLERANCE DIMENSIONS SHALL BE 1/32"± UNLESS OTHERWISE NOTED.
- 3. AFTER FABRICATION, ALL ASSEMBLIES SHALL BE SANDBLASTED TO NEAR WHITE AND COATED TO A THICKNESS OF 5-7 MILS WITH ZINC METAL SPRAY OR HOT DIP GALVANIZED.
- MODIFICATION TO COVER FOR WELL DISCHARGE PIPING
- CONTRACTOR SHALL SUBMIT SHOP DRAWING(S) FOR REVIEW AND APPROVAL BY ENGINEER.







Chkd. Dsgn. MM.DD.YY

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### EXPIRES 03/31/2018

Roosevelt Irrigation District WELL No. 25 AND LATERAL 5.5

HUDSON COMMONS (VAN BUREN ST IMPROVEMENTS)

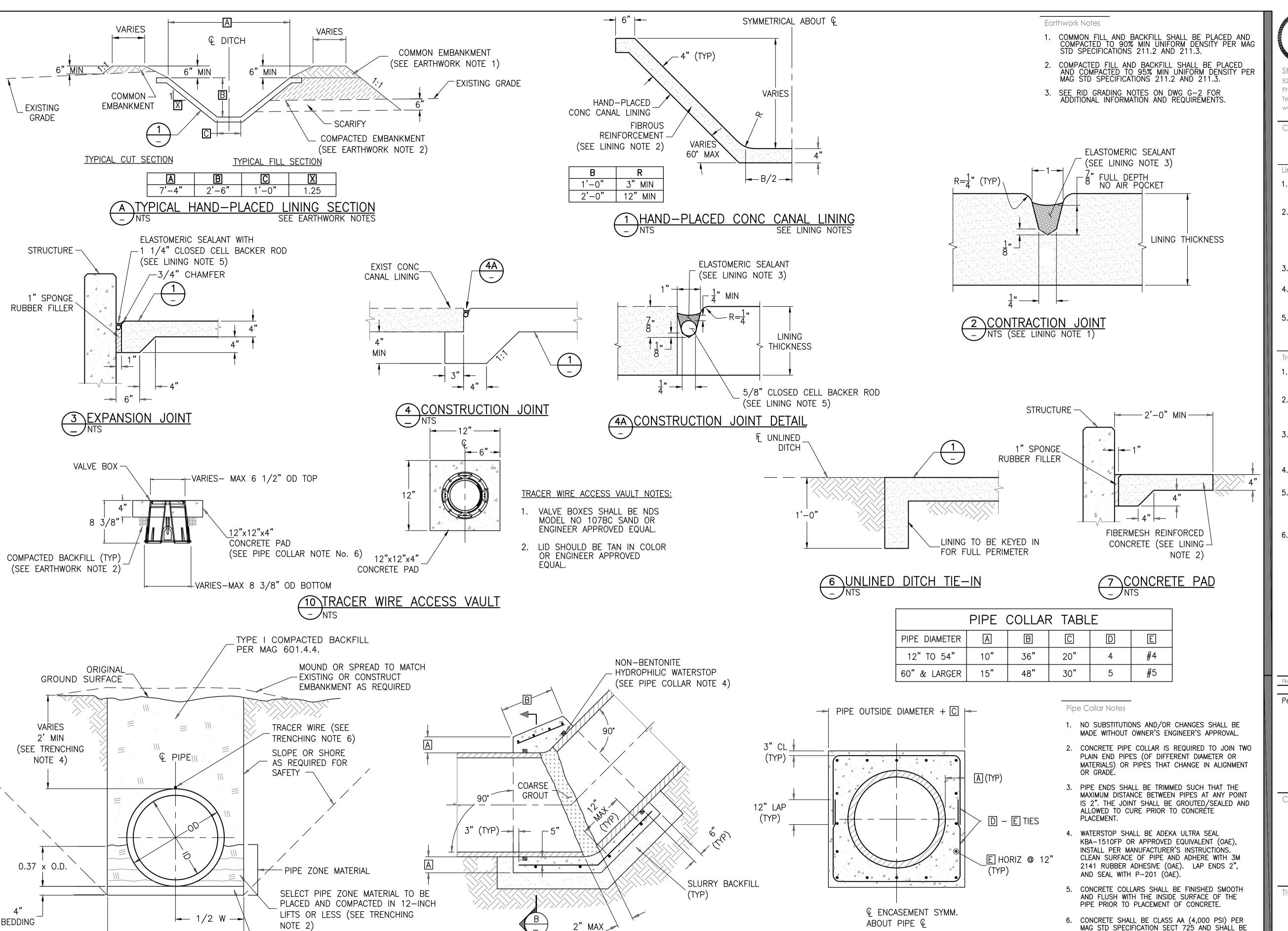
Goodyear, Arizona

WELL DISCHARGE STRUCTURE

Project No. 181300483	Scale AS SHOWN	
Drawing No.	Sheet	Revision

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SEE NOTE 3

SEE PIPE COLLAR NOTES

PIPE COLLAR DETAIL

(PIPE OD" + 36")

SEE TRENCHING NOTES

9 PIPE TRENCH DETAIL

BEDDING MATERIAL SHALL BE AN

UNCOMPACTED LAYER OF SELECT

3 FOR MATERIAL REQUIREMENT)

MATERIAL. PIPE IS LAID DIRECTLY ON

THE BEDDING (SEE TRENCHING NOTE

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CONTRACTION JOINTS IN CONCRETE LINING SHALL BE CONSTRUCTED VERTICALLY AT A MINIMUM OF 10 FOOT INTERVALS PER DETAIL 2.

- FIBROUS REINFORCEMENT SHALL HAVE THE FOLLOWING CHARACTERISTICS:

  a. SPECIFIC GRAVITY

  O TENSILE STRENGTH FIBER LENGTH GRADED 1/4" TO 3/4"
  THE APPLICATION RATE FOR THE FIBERS IS 1.5
  POUNDS PER CUBIC YARD.
- THE ELASTOMERIC SEALANT SHALL BE SIKAFLEX 2C OR APPROVED EQUIVALENT.
- 4. ALL CONCRETE FOR CANAL LINING SHALL BE CLASS A (3000 PSI) PER MAG STD SPECIFICATION SECT
- BACKER ROD SHALL BE HIGHWAY BACKER ROD BY NOMACO, ZEBULON, NORTH CAROLINA OR APPROVED EQUIVALENT. INSTALL BACKER ROD IN JOINT PER MANUFACTURER'S INSTRUCTIONS.

### Trenching Notes

- IF COMPACTED BACKFILL TO PIPE ZONE IS COMPACTED BY WATER CONSOLIDATION SEE MAG STD SPECIFICATION 601.4.5.
- PIPE ZONE MATERIAL SHALL BE PLACED IN LIFTS AS DESIGNATED IN THE PIPE TRENCH DETAIL AND COMPACTED PER THE DENSITY REQUIREMENTS OF BACKFILL TYPE I SHOWN ON MAG TABLE 601-2.
- BEDDING MATERIAL SHALL BE SAND OR SELECTED SANDY SOIL ALL OF WHICH PASSES A 3/8 INCH SIEVE AND NOT MORE THAN 10 PERCENT OF WHICH PASSES A NO. 200 SIEVE.
- THE MINIMUM COVER OVER THE PIPE SHALL BE 2'-0" PER MAG STANDARD SPECIFICATION 618.3.
- TRENCHING BENEATH EXISTING, PROPOSED AND/OR FUTURE PAVEMENT:
  a. FULL DEPTH ABC BACKFILL b. 6" MIN PIPE BEDDING c. COMPACT PER MAG STD SPEC 601.4-TYPE 1
- TRACER WIRE SHALL BE 12 AWG SOLID, PRO-TRACE HF-CCS PE30. TRACER WIRE SHALL BE RATED FOR DIRECT BURIAL USE AND INSTALLED ON OUTSIDE TOP OF PIPE BETWEEN ALL IRRIGATION STRUCTURES. INSTALL ACCESS VAULT PER DETAIL 10 AT ALL IRRIGATION STRUCTURES. TRACER WIRE SHALL BE COLOR PURPLE. NO SPLICING ALLOWED. IF LENGTH PRETWEEN STRUCTURES EXCEEDS 500' ADD AN BETWEEN STRUCTURES EXCEEDS 500', ADD AN ACCESS VAILT AT LOCATION WHERE SPLICE WOULD HAVE BEEN REQUIRED.

le Name: D1\_483.DWG Dwn. Chkd. Dsgn. MM.DD.YY Permit-Seal



ARZOWA 31 N MARICOPA COUNTY: (602) 263-11

EXPIRES 03/31/2018

Client/Project Roosevelt Irrigation District WELL No. 25 AND LATERAL 5.5

HUDSON COMMONS (VAN BUREN ST IMPROVEMENTS)

CONSOLIDATED BY MECHANICAL VIBRATOR OR

7. REINFORCING STEEL SHALL BE ASTM A615 GRADE

ALL FORMS SHALL BE REMOVED PRIOR TO

EQUIVALENT.

BACKFILLING.

B SECTION - PIPE COLLAR DETAIL

2017-2519-C5-011

Goodyear, Arizona

TYPICAL SECTIONS & DETAILS

Project No. Scale 181300483

Drawing No. Sheet

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Revision