

THE COMMONS AT GREENWAY PARK PLAT 1 CONSTRUCTION DOCUMENTS

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PROPERTY DESCRIPTION:

PARCEL 18-147 AND PARCEL 18-148 DALLAS COUNTY IOWA

ADDRESS:

NW CORNER OF HICKMAN AND WARRIOR LANE

OWNER/PREPARED FOR:

SIGNATURE DEVELOPMENT OF IOWA, LLC
4800 E 57TH ST SUITE A
SIOUX FALLS, SD 57108

ENGINEER/PROJECT MANAGER:

JOEL JACKSON, PE
BISHOP ENGINEERING
3501 104TH STREET
URBANDALE, IA 50322
PH: 515-276-0467

ZONING:

R-4 WITH PLANNED DEV. OVERLAY

SITE CONTROL AND BENCHMARKS:

BASIS OF BEARING OBTAINED FROM GPS OBSERVATIONS
DATUM = NAD 83, IOWA SOUTH
BENCHMARK DATUM = NAVD83, GEOID 12A

SITE CONTROL:

NORTHING = 589154.36
EASTING = 1538314.92
ELEVATION = 1019.20
DESCRIPTION: BURY BOLT IN HYDRANT LOCATED SOUTH OF NW VENTURE DRIVE, SE OF YMCA BUILDING

POINT #9110

NORTHING = 589945.84
EASTING = 1538625.18
ELEVATION = 1020.97
CP NAIL

POINT #9111

NORTHING = 589925.80
EASTING = 1537935.10
ELEVATION = 1014.45
CP NAIL

FLOOD HAZARD CERTIFICATION:

ACCORDING TO THE FIRM (FLOOD INSURANCE RATE MAP) ISSUED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ON FLOOD INSURANCE RATE MAP 19049C035F, WITH AN EFFECTIVE DATE OF 12/27/2018, A PORTION OF THIS SITE IS LOCATED IN A ZONE "A". THIS CERTIFICATION IS BASED ON THE LATEST KNOWN MAP FOR THIS PARCEL.

UTILITY MAPS PROVIDED BY:

- ELECTRIC (MIDAMERICAN ENERGY; CRAIG RANFELD CWRANFELD@MIDAMERICAN.COM)
- STORM AND SANITARY (CITY OF WAUKEE; EVAN KOESTER EKOESTER@WAUKEE.ORG)
- FIBER OPTIC (AUREON NETWORK SERVICES; JEFF KLOCKO 515-830-0445)
- CABLE (MEDIACOM; MICHAEL PROBST MPROBST@MEDIACOMCC.COM)
- GAS (CITY OF WAUKEE; EVAN KOESTER EKOESTER@WAUKEE.ORG)
- WATER (CITY OF WAUKEE; EVAN KOESTER EKOESTER@WAUKEE.ORG)
- WATER (KENIA RURAL WATER DISTRICT; LAIRD VAN DEE LVANDEE@KENIAWATER.COM)
- TELEPHONE (CENTURYLINK; MINDI BURGETT MINDI.BURGETT@CENTURYLINK.COM)
- FIBER OPTIC (CONSOLIDATED COMMUNICATIONS; WESTON GROW WESTON.GROW@CONSOLIDATED.COM)

UTILITY NOTE:

THE LOCATION OF THE UTILITIES INDICATED ON THE PLANS HAVE BEEN TAKEN FROM THE FIELD SURVEY, EXISTING PUBLIC RECORDS, AND PLANS PROVIDED BY OTHERS. SURFACE UTILITY LOCATIONS HAVE BEEN FIELD LOCATED BY BISHOP ENGINEERING, UNLESS OTHERWISE NOTED. ALL UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE LOCATIONS ONLY. BISHOP ENGINEERING DOES NOT GUARANTEE THE UNDERGROUND LOCATION OF ANY UTILITIES SHOWN. IT SHALL BE THE DUTY OF THE CONTRACTOR TO DETERMINE THE LOCATION AND DEPTH OF ANY UNDERGROUND UTILITIES SHOWN AND IF ANY ADDITIONAL UTILITIES, OTHER THAN THOSE SHOWN ON THE PLANS, MAY BE PRESENT. A REQUEST WAS MADE TO IOWA ONE CALL FOR UTILITY PROVIDERS TO VERIFY, LOCATE, AND MARK THEIR UTILITIES IN THE FIELD.



GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE CURRENT EDITION OF SUDAS.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH WAUKEE PUBLIC WORKS DEPARTMENT ONE WEEK PRIOR TO COMMENCING CONSTRUCTION ACTIVITY.
- IN EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES. ANY DAMAGE TO SAID UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT O.S.H.A. CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE APPROPRIATE SAFETY REGULATIONS.
- ALL NECESSARY CONSTRUCTION SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES REQUIRED DURING CONSTRUCTION WILL BE FURNISHED BY THE CONTRACTOR. SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES MUST BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
- BISHOP ENGINEERING SHALL NOT BE LIABLE FOR ANY INJURIES THAT HAPPEN ON SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO TRENCH COLLAPSES FROM VARYING SOIL CONDITIONS OR INJURIES CAUSED BY UNDERGROUND UTILITIES INCLUDING UTILITIES THAT ARE NOT SHOWN ON PLAN.
- THE CONTRACTOR IS LIABLE FOR ALL DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY THEIR ACTION OR INACTION IN PROVIDING FOR STORM WATER FLOW DURING CONSTRUCTION. DO NOT RESTRICT FLOWS IN EXISTING DRAINAGE CHANNELS, STORM SEWER, OR FACILITIES.
- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCHEDULE FOR PERFORMANCE OF WORK ITEMS. THIS SCHEDULE SHALL BE PROVIDED BY THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. NO WORK SHALL BEGIN UNTIL A SCHEDULE HAS BEEN SUBMITTED AND ACCEPTED. THE CONTRACTOR SHALL THEN PERFORM WORK TO CONFORM TO THE ACCEPTED SCHEDULE.
- LABORATORY TESTS SHALL BE PERFORMED BY THE OWNER UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE SAMPLES OF MATERIAL REQUIRED FOR LABORATORY TESTS AND TESTING IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- SOIL IMPORT OR EXPORT ON THIS PROJECT SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL PROTECT ALL STRUCTURES NOT SHOWN AS REMOVALS ON THE PLANS.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL WORK WITH OWNER OR OWNERS REPRESENTATIVE ON ALL REQUIRED STORM WATER DISCHARGE PERMITS FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES AND THE CITY OF WAUKEE.
- GRADING AND EROSION CONTROL SHALL BE DONE IN ACCORDANCE WITH THE APPROVED GRADING PLAN, SWPPP, NPDES DOCUMENTS, AND IOWA DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS.
- THE CONTRACTOR SHALL PICK UP ANY DEBRIS SPILLED ONTO THE ADJACENT RIGHT OF WAY OR ABUTTING PROPERTIES AS THE RESULT OF CONSTRUCTION, AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REMOVAL OF ALL MUD THAT HAS BEEN TRACKED OR WASHED UNTO ADJACENT PROPERTY OR RIGHT OF WAY UNTIL SUCH TIME THAT PERMANENT VEGETATION HAS BEEN ESTABLISHED.
- DISPOSE OF ALL EXCESS MATERIALS AND TRASH IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIALS NOT DESIRABLE FOR INCORPORATION INTO THE PROJECT.
- CONTRACTOR IS TO PROVIDE SUBMITTALS OF ALL CONSTRUCTION MATERIALS PRIOR TO CONSTRUCTION.
- CHANGES TO THE PLAN SET DURING CONSTRUCTION ARE TO RECEIVE WRITTEN APPROVAL FROM THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO EXECUTING THE CHANGES. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES EXECUTED THAT HAVE NOT RECEIVED SAID WRITTEN APPROVAL.

PAVING NOTES:

- THE PAVING/GRADING CONTRACTOR SHALL BACKFILL THE PAVING SLAB AND FINE GRADE THE RIGHT OF WAY AS SOON AFTER THE PAVING AS POSSIBLE. ALL AREAS SHALL BE SEEDED IN ACCORDANCE WITH CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE CURRENT VERSION OF SUDAS.
- SUBGRADE PREPARATION AND PAVEMENTS WILL BE CONSTRUCTED FOLLOWING RECOMMENDATIONS IN THE SOILS REPORT. APPROVED SOILS ENGINEER MUST SIGN OFF ON SUBBASE PRIOR TO ANY PAVEMENT BEING PLACED.
- SEE DETAILS FOR ALL PAVEMENT THICKNESS.
- DETECTABLE WARNING PANEL(S) CALLED OUT ON PLANS SHALL BE PER A.D.A. REGULATIONS. PANEL TYPE & COLOR SHALL BE PER CITY STANDARD.
- ALL WALKS, PARKING LOTS, HANDICAP PARKING, RAMPS, ETC. SHALL COMPLY WITH ALL A.D.A. AND CITY CODES. HANDICAP PARKING SIGNAGE IS REQUIRED FOR ALL HANDICAP STALLS AND SHALL BE CONSIDERED INCIDENTAL. IN EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE A.D.A./CITY CODES THE A.D.A./CITY CODES SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING A.D.A. CODES ARE MET.
- ALL SIDEWALKS AND PEDESTRIAN RAMPS ARE TO BE INSTALLED PER THE LATEST PROWAG AND ADA REQUIREMENTS.

UTILITY NOTES:

- ALL UTILITIES ARE TO BE CONSTRUCTED TO THE REQUIREMENTS OF THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- ALL UTILITIES ARE TO BE TESTED TO THE REQUIREMENTS OF THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS. THE CITY OF WAUKEE SHALL WITNESS ALL TESTING AND OPERATE ALL VALVES.
- QUANTITY CALLOUTS ON PIPE LENGTHS ARE APPROXIMATE AND SHOULD BE USED FOR REFERENCE ONLY.
- THE CONTRACTOR SHALL PROVIDE AS-BUILTS OF ALL UTILITIES, INCLUDING DEPTH AND LOCATION OF ALL SERVICES.
- THE CONTRACTOR SHALL COORDINATE THE ADJUSTMENT OF ANY AND ALL EXISTING AND PROPOSED UTILITIES TO PROPOSED GRADES. EXISTING UTILITIES SHALL BE RAISED OR LOWERED IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS. ANY NECESSARY ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- ACTIVE EXISTING FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED, REROUTED, OR CONNECTED TO PUBLIC OR PRIVATE STORM SEWER TO REMAIN IN SERVICE.
- ALL PROPOSED RCP STORM SEWER PIPE JOINTS SHALL BE FABRIC WRAPPED AND THE LAST 3 PIPE SECTIONS ON THE APRON SHALL BE TIED WITH RF-14 TYPE II CONNECTORS. ALL APRONS SHALL HAVE A STANDARD FOOTING AND TRASH GUARD.
- ALL RIP RAP CALLED OUT ON PLANS SHALL BE UNDERLAIN WITH ENGINEERING FABRIC.
- ALL STRUCTURE SIZES CALLED OUT ON PLANS ARE MINIMUM INSIDE WALL DIMENSIONS.
- ALL STRUCTURES CALLED OUT AS "MODIFIED" OR "SPECIAL" SHALL BE ENGINEERED BY THE PRECASTER TO ENSURE STRUCTURE STABILITY. MODIFICATIONS INCLUDE ADDITIONAL WALL LENGTH TO ACCOUNT FOR LARGE PIPE DIAMETERS AND ADDITIONAL WALL WIDTH & BASE DEPTH TO ACCOUNT FOR DEEPER STRUCTURES. ANY AND ALL MODIFICATIONS TO STANDARD STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO BID
- SANITARY SEWER SERVICE CONNECTIONS SHALL BE PLACED AT A SLOPE OF NO LESS THAN 2%. SERVICES SHALL MAINTAIN 18" OF VERTICAL SEPARATION FROM THE WATERMAIN WITH 18" OF COMPACTED LOW PERMEABILITY SOIL BETWEEN THE UTILITIES WITHIN 10' OF THE CROSSING.
- MANDREL AND PRESSURE TESTS SHALL BE REQUIRED FOR ALL PROPOSED SANITARY LINES. TELEVISION OF THE SANITARY SEWER SYSTEM SHALL BE COMPLETED PRIOR TO PAVING UNLESS OTHERWISE APPROVED BY JURISDICTION.
- ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.
- ALL CONNECTIONS TO EXISTING MANHOLES ARE TO BE CORE DRILLED AND USE A LINK SEAL.
- WATERMANS SHALL BE C-900. SIZE OF WATERMAIN AS SHOWN ON PLANS.
- THRUST BLOCKS SHALL BE INSTALLED AS REQUIRED AND SHALL BE CONSIDERED INCIDENTAL TO WATERMAIN CONSTRUCTION.
- PROPOSED WATERMAIN SHALL BE PRESSURE TESTED, BACTERIA TESTED AND CHLORINATED. THE FILLING OF THE WATER MAIN SHALL BE DONE BY THE CITY OF WAUKEE.
- TRACER WIRE SHALL BE ADDED TO ALL WATER MAIN, AND BROUGHT TO THE SURFACE AT EVERY HYDRANT.
- ALL HYDRANTS WILL IMMEDIATELY BE COVERED WITH A BLACK PLASTIC BAG (OR EQUIVALENT) ONCE THE HYDRANT IS INSTALLED. THE CITY OF WAUKEE WILL NOTIFY THE CONTRACTOR WHEN THE BAGS CAN BE REMOVED.
- THE MINIMUM HYDRANT LEAD SHALL BE 3.5 FEET.
- ANY AND ALL HYDRANT AND VALVE EXTENSIONS, TOGETHER WITH VERTICAL BENDS, SHALL BE CONSIDERED INCIDENTAL TO WATER MAIN CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR INCIDENTAL ITEMS.
- FIRE HYDRANT ASSEMBLY SHALL INCLUDE TEE, BRANCH, VALVE, HYDRANT AND A 4" STORZ CONNECTION.

YMCA DRIVE ACCESS NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS FROM THE EXISTING END OF NW VENTURE DRIVE TO THE EXISTING YMCA DRIVE AT ALL TIMES DURING CONSTRUCTION. AT NO POINT DURING CONSTRUCTION WILL ACCESS BE ALLOWED TO BE CLOSED.
- CONTRACTOR SHALL KEEP EXISTING GRAVEL DRIVE IN PLACE AND PAVE EASTBOUND NW VENTURE DRIVE LANE.
- CONTRACTOR SHALL INSTALL TEMPORARY 12" WIDE GRAVEL DRIVE TO MAINTAIN ACCESS DURING PAVING OF NW VENTURE DR AND YMCA DRIVE LANE INTERSECTION.
- ONCE A CONTINUOUS PAVED LANE IS OPEN FROM YMCA DRIVE TO EXISTING NW VENTURE DR PAVEMENT, THE EXISTING GRAVEL DRIVE AND ANY TEMPORARY GRAVEL SHALL BE REMOVED AND THE WESTBOUND NW VENTURE DR LANE MAY BE PAVED.
- CONTRACTOR SHALL NOT DISTURB YMCA PROPERTY UNTIL TEMPORARY CONSTRUCTION EASEMENT ON YMCA PROPERTY HAS BEEN EXECUTED.

WETLAND NOTES:

- A WETLAND INVESTIGATION REPORT WAS COMPLETED BY EOR IOWA, LLC WHICH FOUND AN INTERMITTENT TRIBUTARY OF LITTLE WALNUT CREEK AND AN ADJACENT AND ASSOCIATED POOR-QUALITY WETLAND, BOTH OF WHICH ARE POTENTIALLY JURISDICTIONAL WATER OF THE U.S. AND REGULATED UNDER THE CLEAN WATER ACT.
- THE WETLAND INVESTIGATION WAS SUBMITTED TO THE ARMY CORPS OF ENGINEERS AND THE PROJECT HAS BEEN AUTHORIZED UNDER NATIONWIDE PERMIT NO 14, PERMIT NUMBER CEMVR-OD-P-2019-0459. NO SPECIAL CONDITIONS WERE INCLUDED WITH THE PERMIT.

SURVEY NOTES:

- SURVEY WORK WAS COMPLETED BY BISHOP ENGINEERING ON 11-26-2018. SEE SITE SURVEY PROVIDED AS PART OF THIS SET OF PLANS FOR EXISTING SITE CONDITIONS AND BOUNDARY INFORMATION.

SOILS REPORT:

- REFERENCE ALLENDER BUTZKE SOILS REPORT (PN 191125) FOR ADDITIONAL SOILS INFORMATION INCLUDING BUT NOT LIMITED TO SUBGRADE INFORMATION, FOOTING DESIGN, AND ANY POSSIBLE OVER EXCAVATION DUE TO POOR SOILS. PAVEMENT SECTIONS ON THE PLANS GOVERN OVER PAVEMENT THICKNESS IN THE SOILS REPORT.

UTILITY CONFLICT NOTES:

- UTILITY CONFLICTS MAY EXIST ACROSS THE SITE WITH NEW UTILITIES, GRADING, PAVING ETC. MOST UTILITY CONFLICTS HAVE BEEN CALLED OUT FOR CONTRACTOR CONVENIENCE.
- CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONFLICTS THAT ARE EITHER CALLED OUT ON THE PLANS OR THAT CAN BE SEEN ON THE PLANS BETWEEN AN EXISTING UTILITY AND PROPOSED CONSTRUCTION.
- CONTRACTOR SHALL COMPLY WITH ALL DNR REQUIREMENTS FOR PIPE MATERIAL, PIPE JOINTS, AND ANY OTHER APPLICABLE REQUIREMENTS ANY TIME A STORM SEWER OR SANITARY SEWER CROSSES OVER OR LESS THAN 18" BELOW A WATER MAIN.
- FOR ALL CRITICAL CROSSINGS WITH EXISTING UTILITIES, THE ELEVATION OF THE EXISTING UTILITY SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. NOTIFY BISHOP ENGINEERING PRIOR TO CONSTRUCTION IF A CONFLICT EXISTS.

STAKING NOTES:

- CONTRACTOR IS REQUIRED TO HAVE ALL STAKING, INCLUDING ALL PEDESTRIAN FACILITIES, DONE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR AND IN COORDINATION WITH THE PROJECT ENGINEER.
- CONTRACTOR IS REQUIRED TO HAVE ALL STAKING DONE DIRECTLY UNDER THE GENERAL CONTRACTOR BY A SINGLE COMPANY.
- STAKING DOES NOT RELIEVE CONTRACTOR OF ULTIMATE RESPONSIBILITY TO CONSTRUCT THE PROJECT PER PLAN.

REQUIRED AS-BUILT NOTES:

- AS-BUILTS ARE REQUIRED FOR ALL DETENTION BASINS AND DETENTION BASIN STORM SEWER.

EARTHWORK BALANCE NOTES:

- SOIL IMPORT OR EXPORT ON THIS PROJECT SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY. CONTRACTOR RESPONSIBLE FOR MAKING THE SITE EARTHWORK BALANCE.
- THIS INCLUDES BUT IS NOT LIMITED TO TOPSOIL, POOR SOILS AND STRUCTURAL FILL NECESSARY TO MEET PROJECT PLANS AND SPECIFICATIONS.

STORM & SANITARY TELEVISION NOTES:

- CONTRACTOR IS REQUIRED TO TELEVISION ALL SANITARY AND STORM SEWER SYSTEMS (INCLUDING THE TILE LINES) PRIOR TO PAVING OPERATIONS.
- CONTRACTOR SHALL SEND VIDEO INSPECTION TO THE ENGINEER FOR APPROVAL PRIOR TO PAVING.
- CONTRACTOR SHALL PROVIDE COPIES OF THE REPORTS AND VIDEOS TO THE WAUKEE ENGINEERING DEPARTMENT FOR APPROVAL PRIOR TO PAVING.

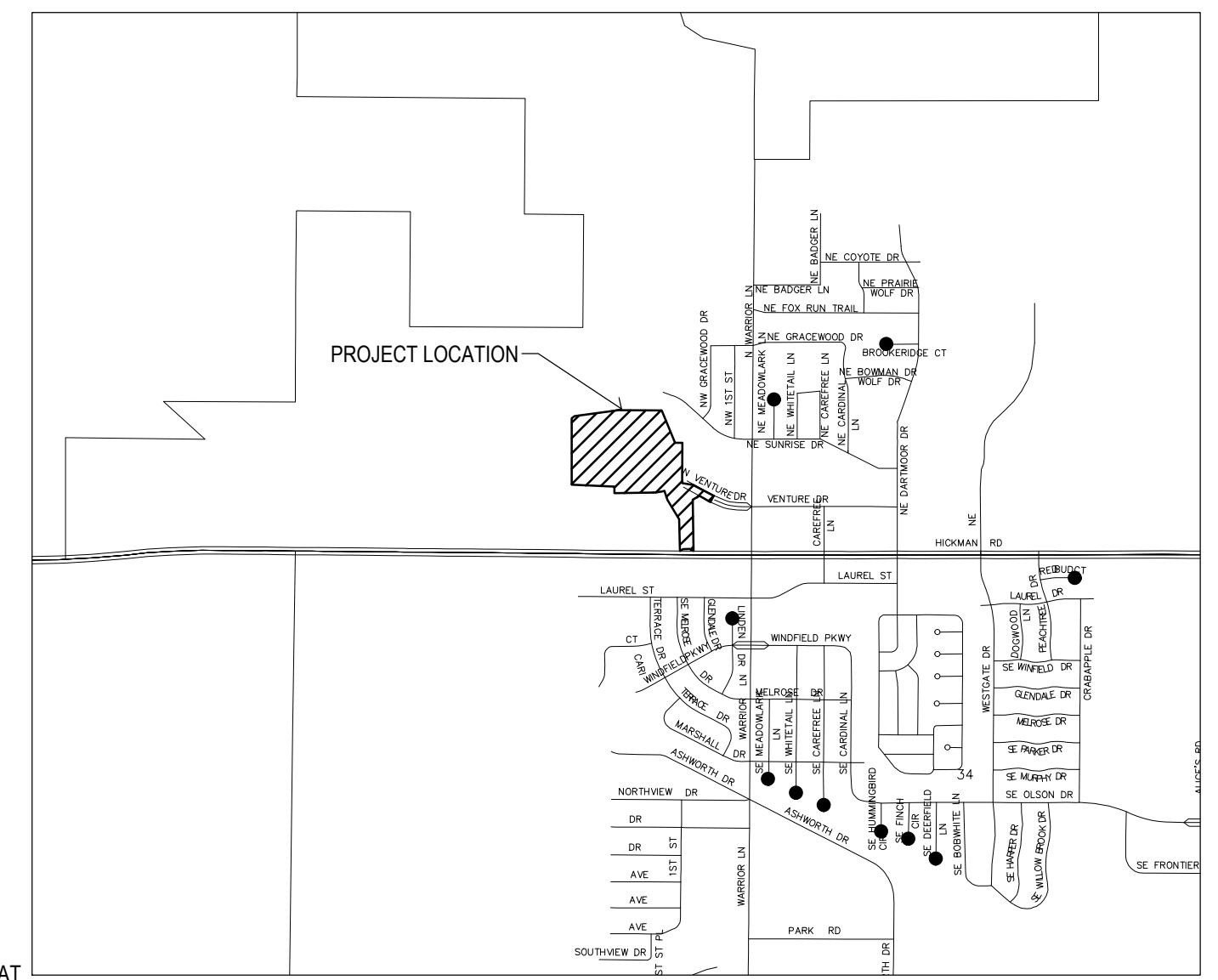
STREAM CLEANING NOTES:

- CONTRACTOR IS REQUIRED TO REMOVE ALL OVERGROWTH AND DEBRIS FROM OUTLOT 'X' AND OUTLOT 'Z'. IN ADDITION, THE CONTRACTOR IS REQUIRED TO LOCATE THE EXISTING INTAKES WITHIN OUTLOT 'Y' LOCATED JUST NORTH OF HICKMAN ROAD AND CLEAN DEBRIS AND OVERGROWTH FROM THE SURROUNDING AREA.
- CONTRACTOR SHALL CUT ALL OVERGROWTH AT GROUND LEVEL AND REMOVE ALL DEBRIS BY HAND. NO HEAVY EQUIPMENT IS ALLOWED AS IT IS ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLAND AND STREAM.

ESTIMATED PROJECT QUANTITIES			
ITEM NO.	ITEM	UNITS	QUANTITY
1	DEMOLITION	LS	1
2	TOPSOIL, STRIP & RE-SPREAD, ON SITE	LS	1
3	EXCAVATION, CLASS 10	LS	1
4	EXCAVATION, CLASS 20	LS	1
5	TEMPORARY CREEK CROSSING	LS	1
6	SUBGRADE PREPARATION	SY	5400
7	SANITARY SEWER, GRAVITY MAIN, 8"	LF	586
8	SANITARY SEWER, GRAVITY MAIN, 12"	LF	973
9	STORM SEWER, TRENCHED, RCP, 15"	LF	525
10	STORM SEWER, TRENCHED, RCP, 30"	LF	55
11	STORM SEWER, TRENCHED, CMP, 24"	LF	105
12	PIPE CULVERT, TRENCHED, RCP, TWIN 10x5'	LS	1
13	PIPE APRON, RCP, 15"	EA	2
14	PIPE APRON, RCP, 30"	EA	2
15	SUBDRAIN, 5"	LF	2062
16	SUBDRAIN CLEANOUT, TYPE A-1, 6"	EA	2
17	WATER MAIN, TRENCHED, C900, 8"	LF	140
18	WATER MAIN, TRENCHED, C900, 12"	LF	927
19	FITTING, TEE, 12"x8"	EA	2
20	VALVE, 8"	EA	2
21	VALVE, 12"	EA	2
22	FIRE HYDRANT ASSEMBLY, 6"	EA	3
23	BLOWOFF HYDRANT	EA	3
24	VALVE BOX ADJUSTMENT	EA	1
25	HYDRANT ADJUSTMENT	EA	1
26	MANHOLE, SANITARY SEWER, SW-301, 48"	EA	7
27	MANHOLE, STORM SEWER, SW-401, 48"	EA	2
28	MANHOLE, STORM SEWER, SW-402, 4x4'	EA	1
29	INTAKE, SW-501	EA	1
30	INTAKE, SW-505	EA	2
31	INTAKE, SW-505	EA	2
32	CONNECTION TO BOX CULVERT	EA	1
33	PAVEMENT, PCC, 8"	SY	4200
34	PAVEMENT, PCC, 6"	SY	50
35	PAVEMENT, PCC, 5"	SY	480
36	DETECTABLE WARNING PANELS	SF	80
37	PAVEMENT STRIPING	LS	1
38	SEEDING	AC	9
39	EROSION CONTROL	LS	1
40	TRAFFIC CONTROL	LS	1
41	TESTING	LS	1
42	TEMPORARY ROCK TURNAROUND	LS	1

QUANTITY ESTIMATE PROVIDED FOR INFORMATION PURPOSES ONLY. FOR ANY DISCREPANCY, DETAILED CONSTRUCTION PLANS SHALL GOVERN

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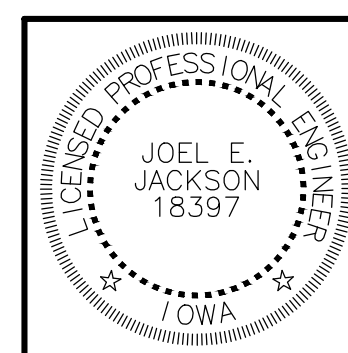
VICINITY MAP
NOT TO SCALE

LEGEND:

- SAN — SANITARY SEWER
- ST — STORM SEWER
- W — WATER LINE
- G — GAS LINE
- U/E — UNDERGROUND ELECTRIC
- O/E — OVERHEAD ELECTRIC
- TELE — TELEPHONE LINE
- F/O — FIBER OPTIC
- CATV — CABLE TV
- ⊙ STORM MANHOLE
- ⊠ CURB INTAKE
- ⊙ SURFACE INTAKE
- ⊠ FLARED END SECTION
- ⊙ SANITARY MANHOLE
- ⊙ CLEANOUT
- ⊙ FIRE HYDRANT
- ⊙ SPRINKLER
- ⊙ IRRIGATION CONTROL VALVE
- ⊙ WATER MANHOLE
- ⊙ WELL
- ⊙ WATER VALVE
- ⊙ WATER SHUT OFF
- ⊙ YARD HYDRANT
- ⊙ ELECTRIC MANHOLE
- ⊙ ELECTRIC METER
- ⊙ ELECTRIC RISER
- ⊙ ELECTRIC VAULT
- ⊙ POWER POLE
- ⊙ TRANSFORMER POLE
- ⊙ LIGHT POLE
- ⊙ ELECTRIC JUNCTION BOX
- ⊙ ELECTRIC PANEL
- ⊙ TRANSFORMER
- ⊙ GROUND LIGHT
- ⊙ GUY WIRE
- ⊙ ELECTRIC HANDHOLE
- ⊙ GAS METER
- ⊙ GAS VALVE
- ⊙ AIR CONDITIONING UNIT
- ⊙ TELEPHONE RISER
- ⊙ TELEPHONE VAULT
- ⊙ TELEPHONE MANHOLE
- ⊙ TRAFFIC SIGNAL MANHOLE
- ⊙ FIBER OPTIC RISER
- ⊙ FIBER OPTIC FAULT
- ⊙ CABLE TV RISER
- ⊙ SIGN
- ⑦ DENOTES NUMBER OF PARKING STALLS
- PROPERTY CORNER - FOUND AS NOTED
- PROPERTY CORNER - PLACED 3/4" IRON PIPE WITH YELLOW PLASTIC CAP ID #14775
- ⊙ SECTION CORNER - FOUND AS NOTED

ABBREVIATIONS:

- AC ACRES
- ASPH ASPHALT
- BK BOOK
- CONC CONCRETE
- ED DEEDED DISTANCE
- EX EXISTING
- ENCL ENCLOSURE
- FF FINISHED FLOOR
- FL FLOW LINE
- FRAC FRACTIONAL
- M MEASURED DISTANCE
- MH MANHOLE
- OPC ORANGE PLASTIC CAP
- P PLATTED DISTANCE
- PG PAGE
- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- PRA PREVIOUSLY RECORDED AS
- PUE PUBLIC UTILITY EASEMENT
- R/W RIGHT OF WAY
- RCP RED PLASTIC CAP
- SF SQUARE FEET
- SF SANITARY
- SAN SANITARY
- TYP TYPICAL
- YPC YELLOW PLASTIC CAP
- N NORTH
- S SOUTH
- E EAST
- W WEST



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNED: *Joel E. Jackson* DATE: 9/1/2020
JOEL E. JACKSON, P.E. 18397
LICENSE RENEWAL DATE: DEC. 31, 2020
PAGES OR SHEETS COVERED BY THIS SEAL: C0.1 - C7.2

THE COMMONS AT GREENWAY PARK PLAT 1
WAUKEE, IOWA

AS-BUILTS 7/17/2020

REFERENCE NUMBER:
070600

DRAWN BY:
JMR

CHECKED BY:
JEJ

REVISION DATE:
3/12/19 1ST SUBMITTAL
4/8/19 2ND SUBMITTAL
4/30/19 3RD SUBMITTAL
5/14/19 4TH SUBMITTAL
6/13/19 5TH SUBMITTAL
6/21/19 FINAL PLANS
9/9/19 REV ALIGNMENT
9/23/19 REV PER CITY
7/17/20 AS-BUILTS

PROJECT NUMBER:
180300

SHEET NUMBER:
C0.1

Bishop Engineering
"Planning Your Successful Development"

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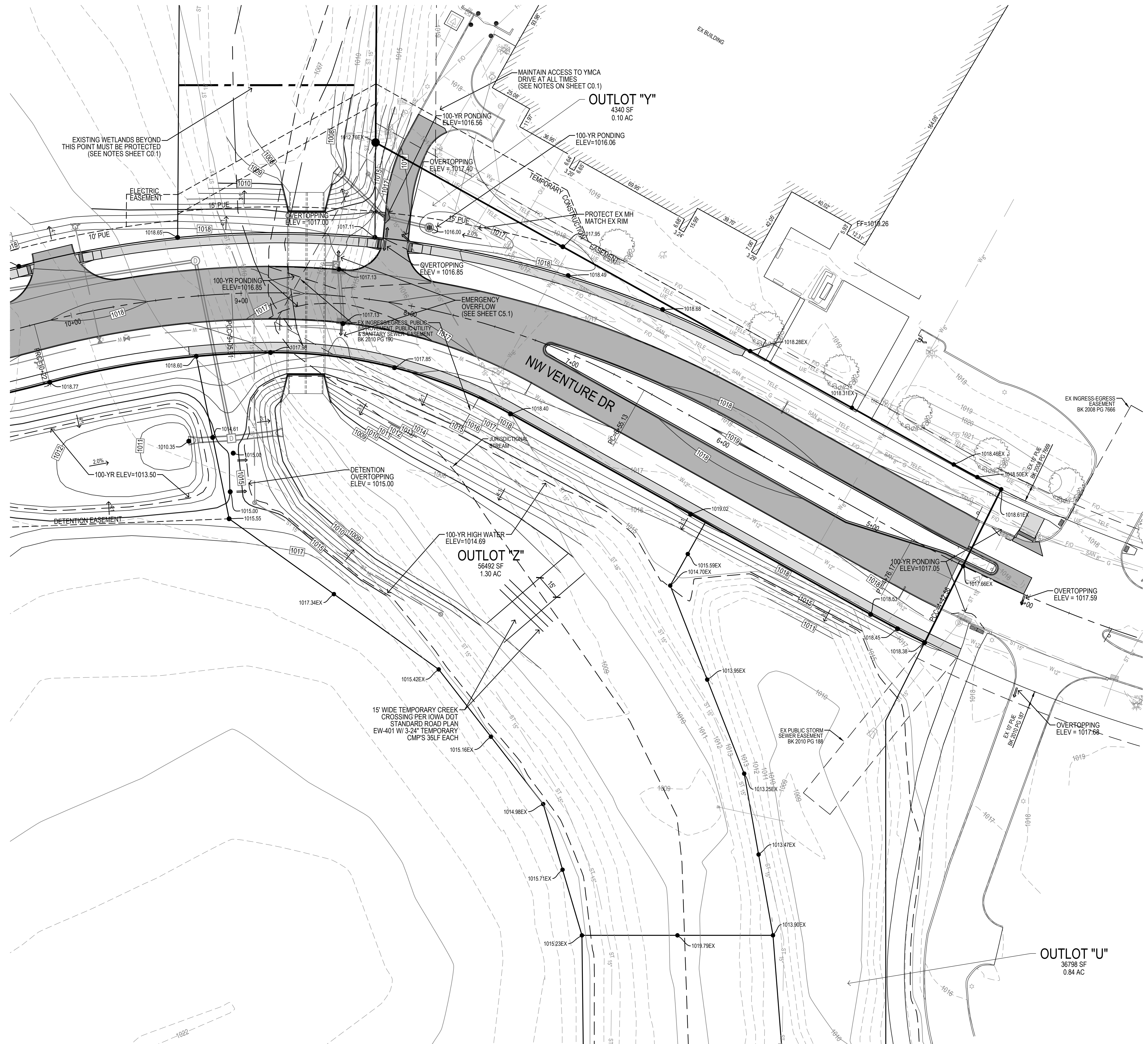
COVER SHEET

TOPSOIL NOTES:

1. STRIP AND STOCKPILE THE TOP 8" OF SOIL ON ALL DISTURBED AREAS.
2. RESPREAD TOPSOIL TO A MINIMUM DEPTH OF 8" ON ALL GREEN (NON PAVED) AREAS. IMPORT TOPSOIL AS NECESSARY TO ACHIEVE A MINIMUM DEPTH OF 8".
3. **TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.**
4. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS, REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER, ACIDITY RANGE (PH) OF 5.5 TO 7.5, CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.

TEMPORARY DIVERSION DITCH NOTES:

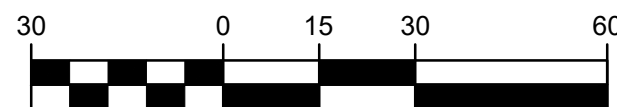
1. CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING A TEMPORARY DIVERSION DITCH FOR THE CONSTRUCTION OF THE CULVERT.
2. TEMPORARY DITCH SHALL HAVE A MINIMUM OF 10 FEET WIDE BOTTOM AND SHALL BE AT LEAST 3 FEET DEEP WITH A MAXIMUM OF 2:1 SIDE SLOPES.



GRADING LEGEND:

- EXISTING CONTOUR ——— 150 ———
 - PROPOSED CONTOUR ——— 150 ———
 - FINISHED GROUND ELEVATION ● 150.50
 - TOP OF CURB ELEVATION ● 150.50T/C
 - GUTTER ELEVATION ● 150.50G
 - TOP OF WALL ELEVATION ● 150.50T/W
 - BOTTOM OF WALL ELEVATION ● 150.50B/W
 - EDGE OF WALK ELEVATION ● 150.50E/W
 - TOP OF STAIR ELEVATION ● 150.50T/S
 - BOTTOM OF STAIR ELEVATION ● 150.50B/S
- NOTE: WALL ELEVATIONS SHOWN ON PLAN ARE FINISHED GROUND GRADES AT THE TOP AND BOTTOM OF THE WALL.

GRAPHIC SCALE



7/17/2020 9:28:09 AM M:\LAND PROJECTS\2018\180330\PLAT 1\DWG\C2 GRADING.DWG

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THE COMMONS AT GREENWAY PARK PLAT 1
WAUKEE, IOWA

GRADING PLAN

REFERENCE NUMBER:
070600

DRAWN BY:
JMR

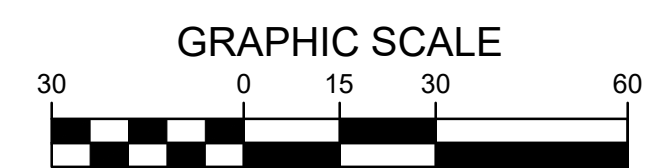
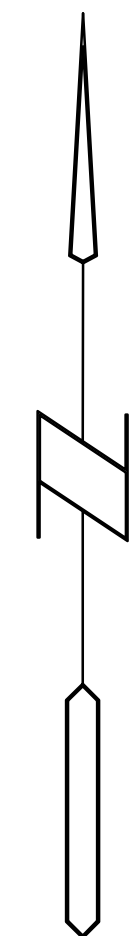
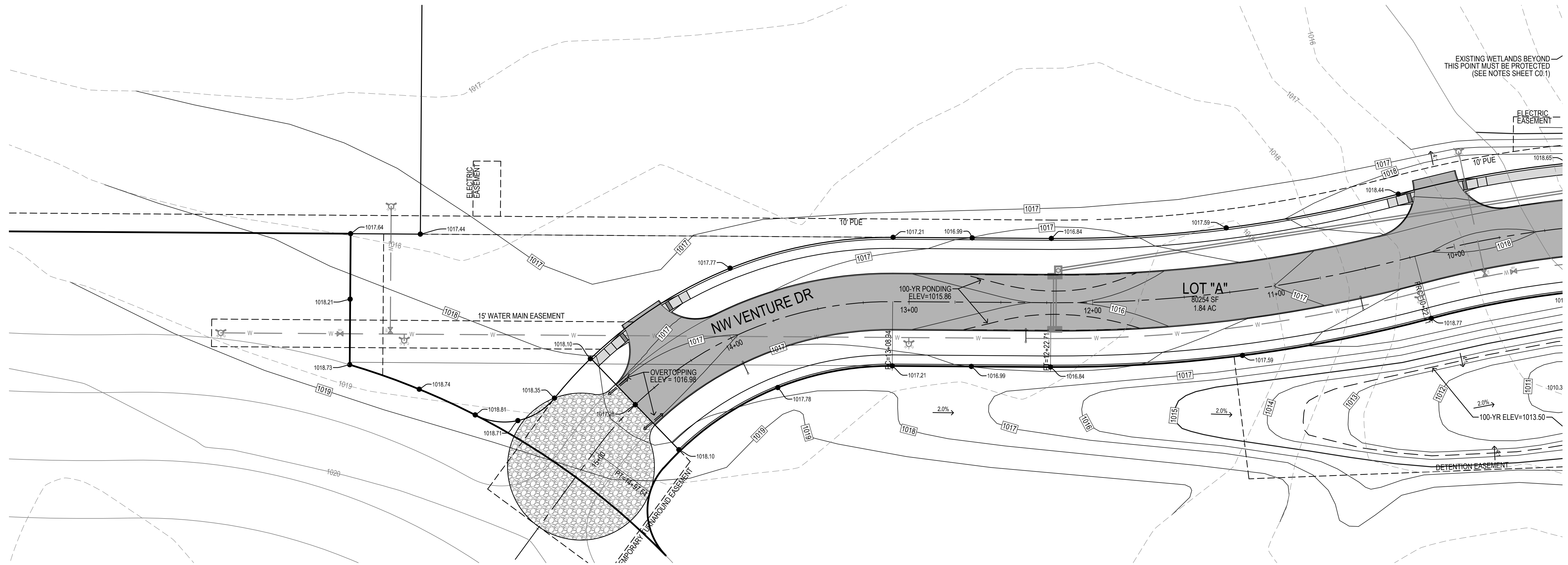
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JEJ

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4/8/19 2ND SUBMITTAL
4/30/19 3RD SUBMITTAL
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6/13/19 5TH SUBMITTAL
6/21/19 FINAL PLANS
9/9/19 REV ALIGNMENT
9/23/19 REV PER CITY
7/17/20 AS-BUILTS

PROJECT NUMBER:
180300

SHEET NUMBER:
C2.1

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THE COMMONS AT GREENWAY PARK PLAT 1
WAUKEE, IOWA

GRADING PLAN

REFERENCE NUMBER:
070600

DRAWN BY:
JMR

CHECKED BY:
JEJ

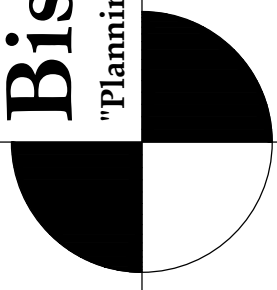
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7/17/20 AS-BUILTS

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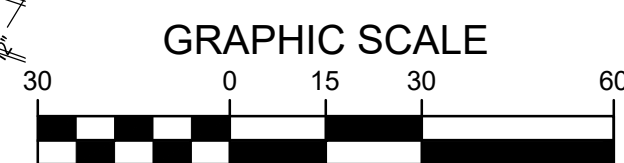
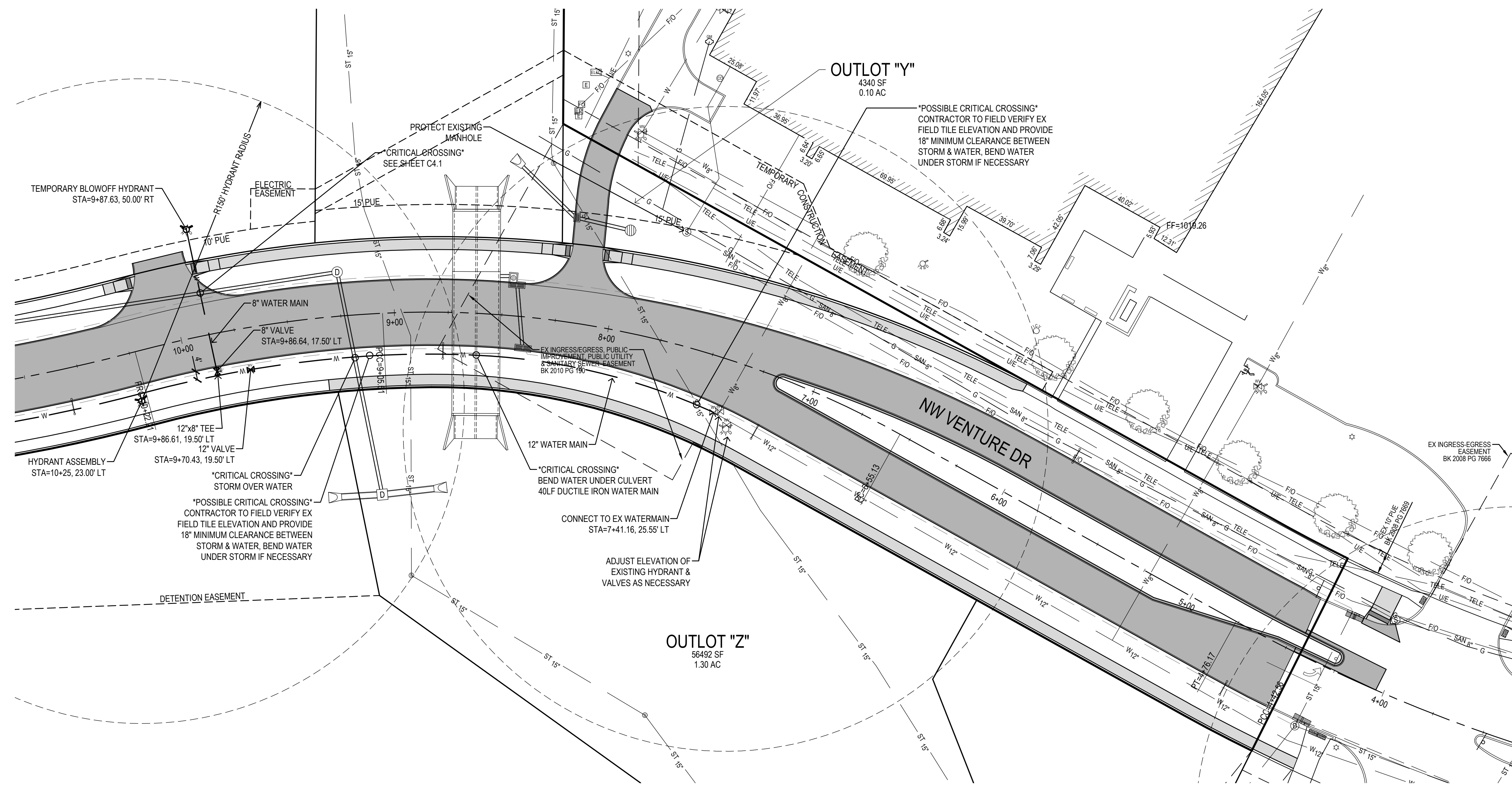
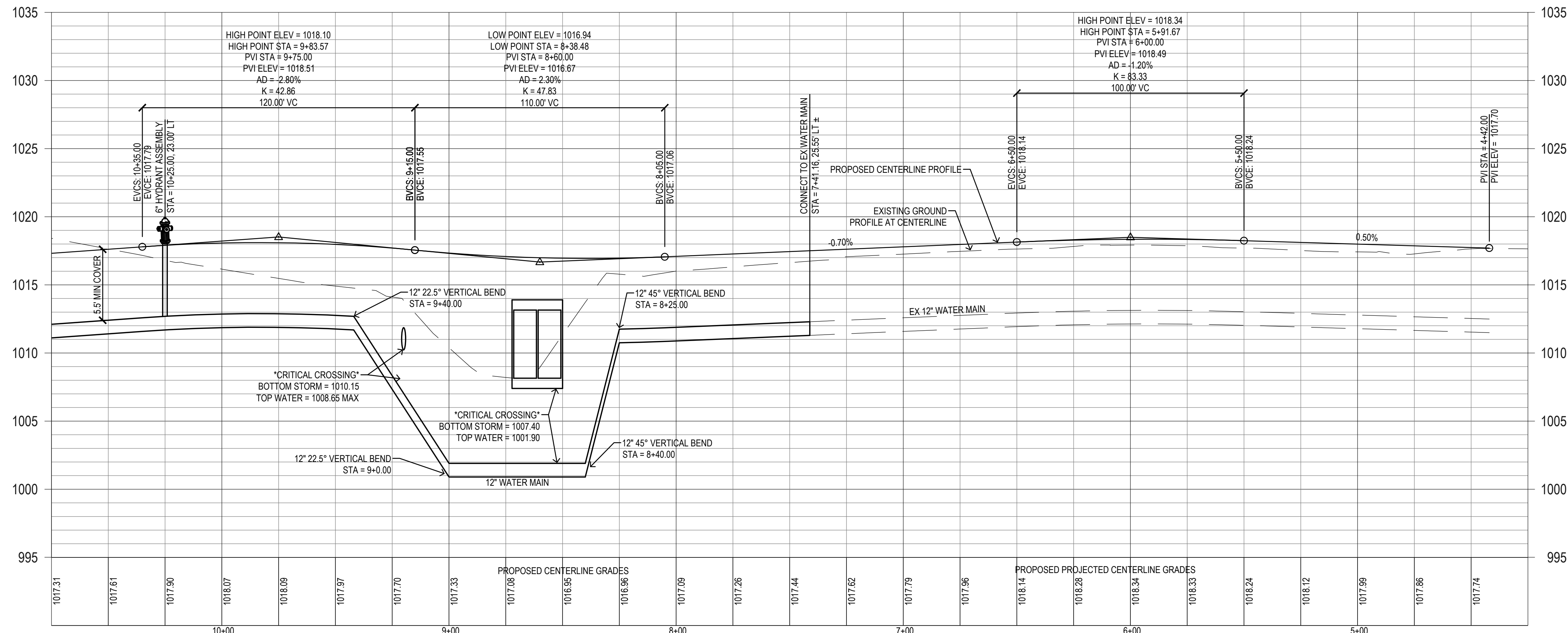
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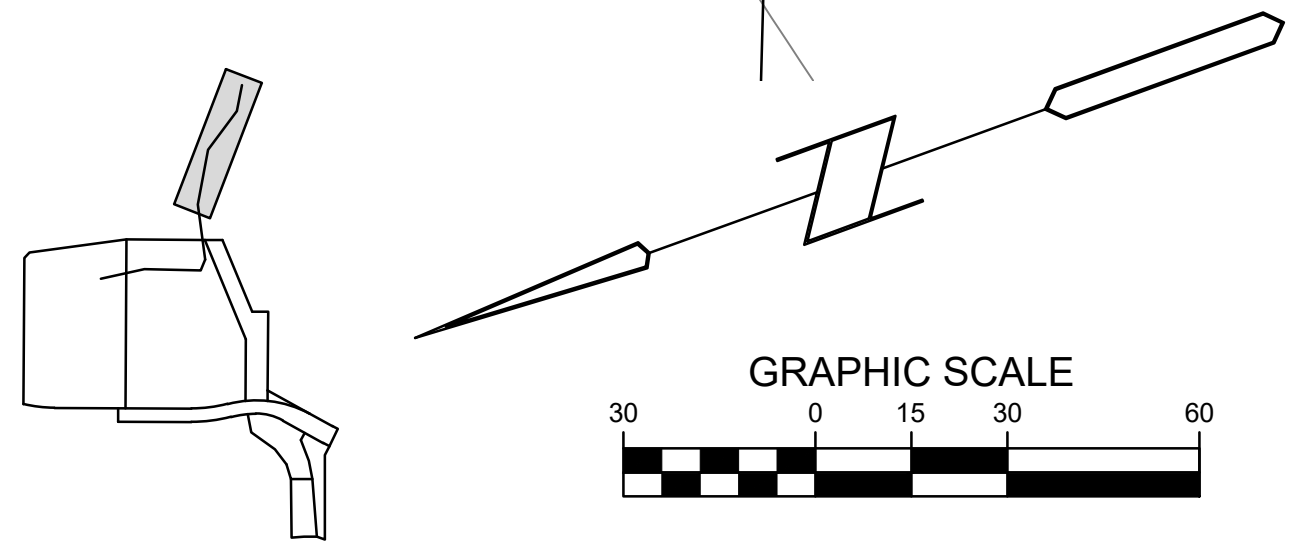
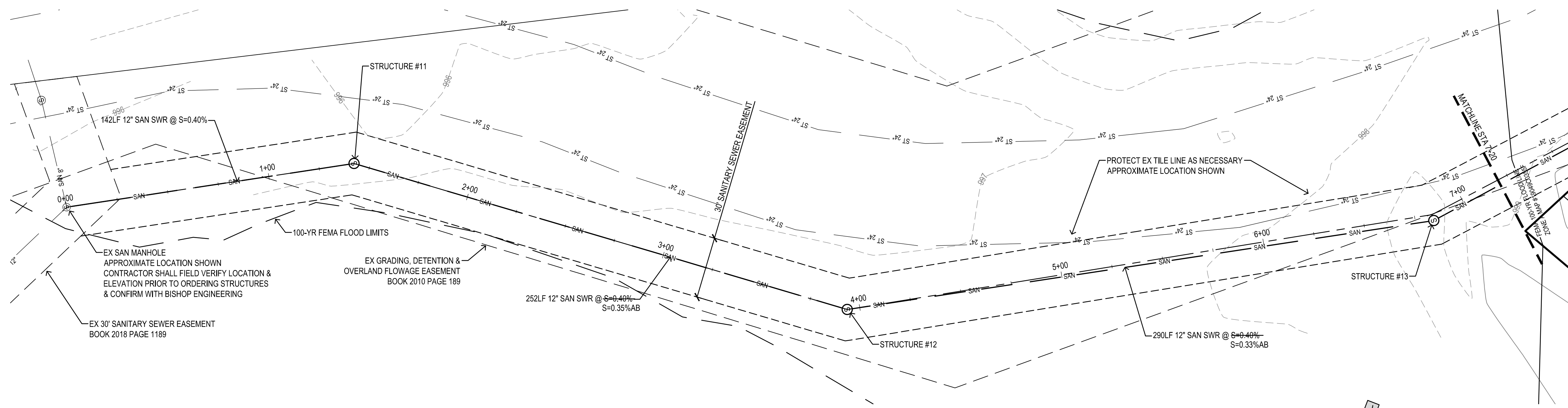
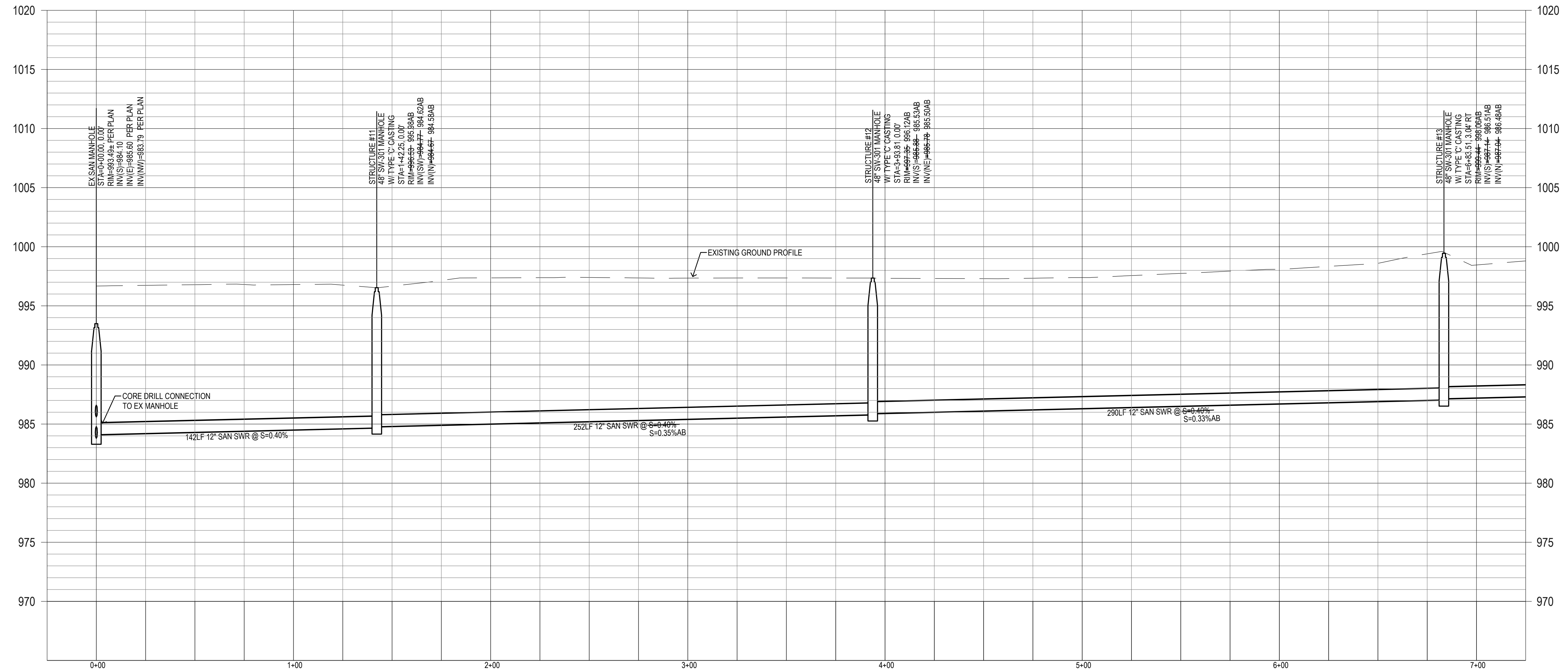
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REFERENCE NUMBER:	070600
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CHECKED BY:	JEJ
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PROJECT NUMBER:	180300
SHEET NUMBER:	C3.1



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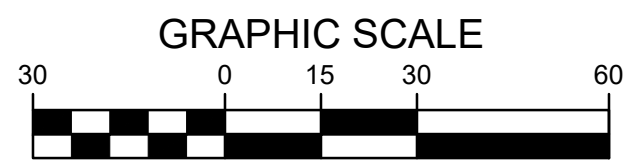
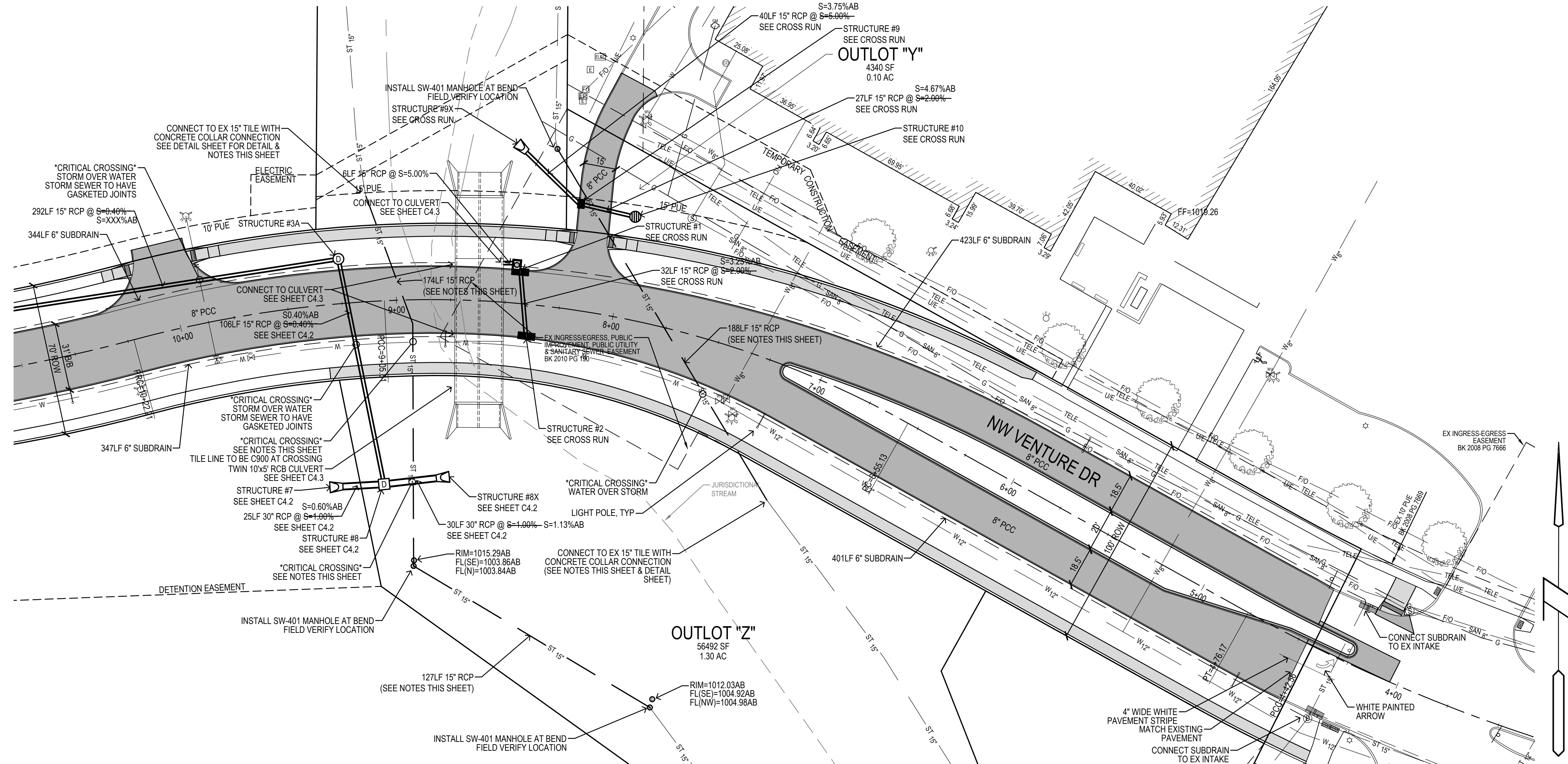
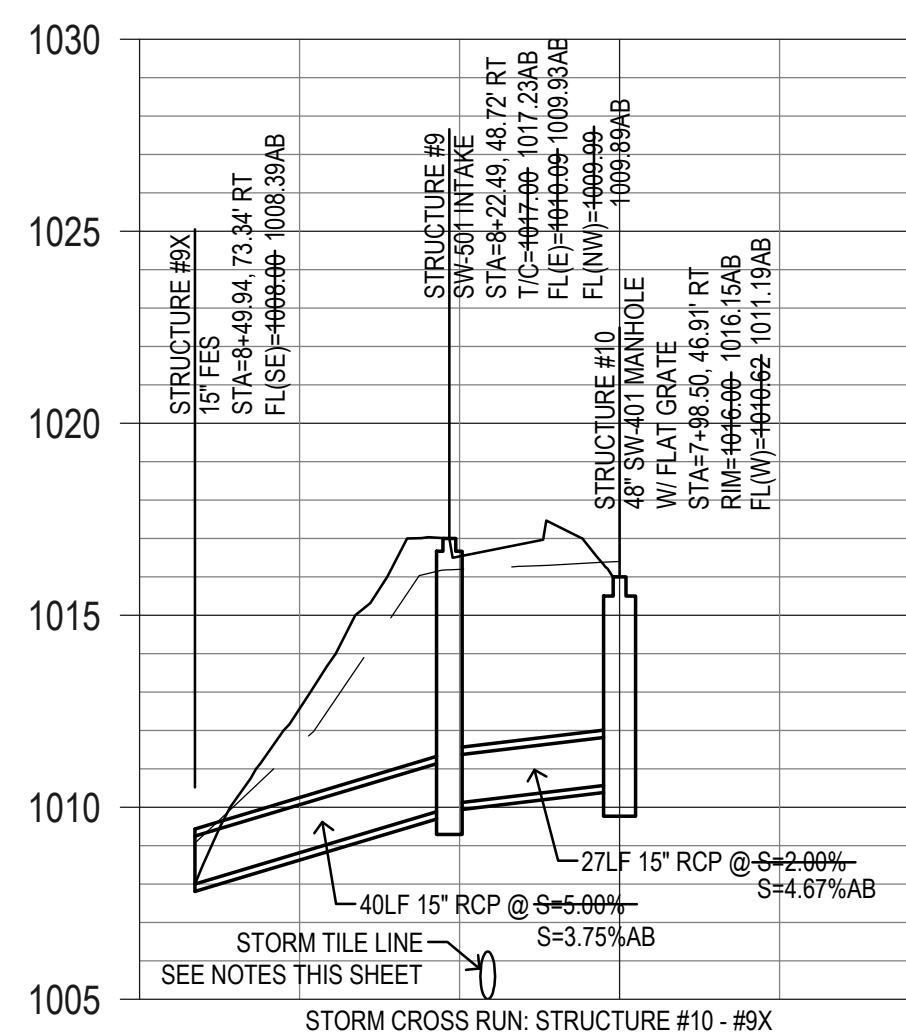
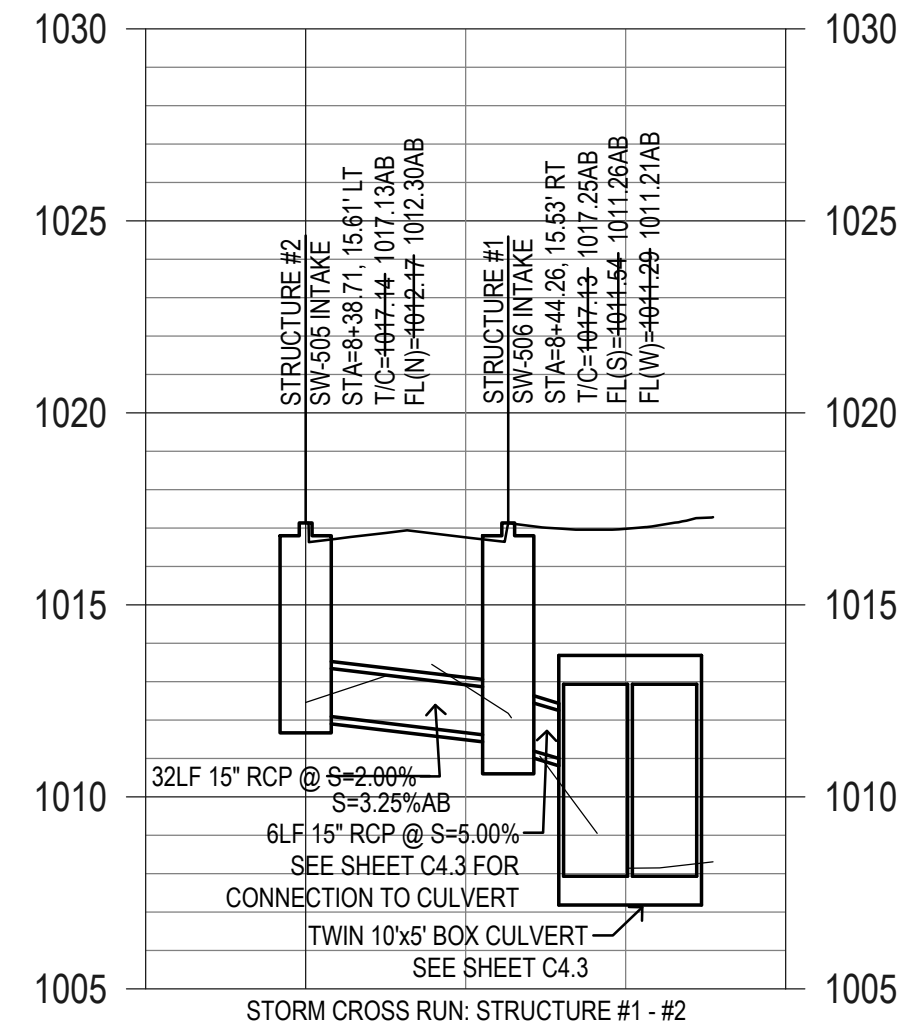
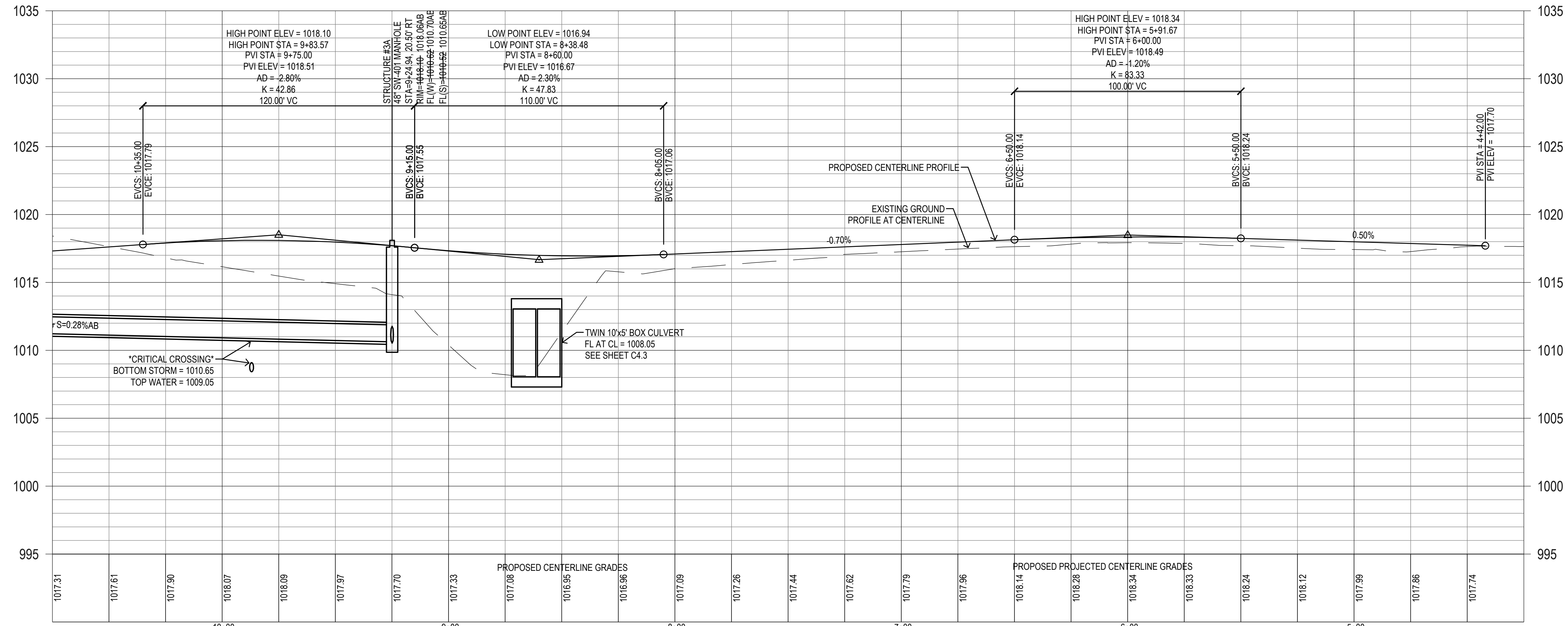
**THE COMMONS AT GREENWAY PARK PLAT 1
 WAUKEE, IOWA**

SANITARY

REFERENCE NUMBER: 070600
DRAWN BY: JMR
CHECKED BY: JEJ
REVISION DATE: 3/12/19 1ST SUBMITTAL 4/8/19 2ND SUBMITTAL 4/30/19 3RD SUBMITTAL 5/14/19 4TH SUBMITTAL 6/13/19 5TH SUBMITTAL 6/21/19 FINAL PLANS 9/9/19 REV ALIGNMENT 9/23/19 REV PER CITY 7/17/20 AS-BUILTS
PROJECT NUMBER: 180300
SHEET NUMBER: C3.3

PLASTIC TILE LINE REPLACEMENT NOTES:

- CONTRACTOR SHALL FIELD VERIFY EXISTING LOCATION AND ELEVATION OF EXISTING 15" TILE LINE PRIOR TO CONSTRUCTION. APPROXIMATE LOCATION IS SHOWN ON PLAN.
- CONTRACTOR SHALL REMOVE EXISTING TILE BETWEEN LOCATIONS SHOWN ON PLAN.
- CONTRACTOR SHALL CONNECT NEW 15" RCP TO EXISTING CLAY TILE WITH CONCRETE COLLAR CONNECTION. SEE DETAIL SHEET FOR CONSTRUCTION DETAIL. IF A CHANGE IN ALIGNMENT IS NEEDED, INSTALL AN SW-401 MANHOLE AT THE CONNECTION POINT.
- CONTRACTOR SHALL INSTALL NEW 15" RCP AT A CONSTANT SLOPE BETWEEN THE TWO TIE IN POINTS.
- THE NEW PIPE WILL CROSS PROPOSED STORM SEWER AND WATER MAIN AT MULTIPLE LOCATIONS. IT IS UNKNOWN WHETHER OR NOT THE TILE LINE WILL CONFLICT WITH PROPOSED UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXISTING TILE LINE ELEVATIONS AND ENSURING THERE WILL BE NO CONFLICTS. FOR POTENTIAL CONFLICT WITH WATER MAIN, MAINTAIN 18" OF VERTICAL CLEARANCE. BEND THE WATER MAIN 18" UNDER THE TILE LINE IF NECESSARY. IF A CONFLICT EXISTS WITH THE PROPOSED STORM SEWER, REMOVE AND REPLACE ADDITIONAL TILE LENGTH AS NECESSARY TO ROUTE TILE LINE BELOW PROPOSED STORM SEWER.
- EXISTING TILE LINE IS **NOT ALLOWED** TO BE DISCHARGED INTO THE EXISTING STREAM AT ANY POINT DURING CONSTRUCTION.



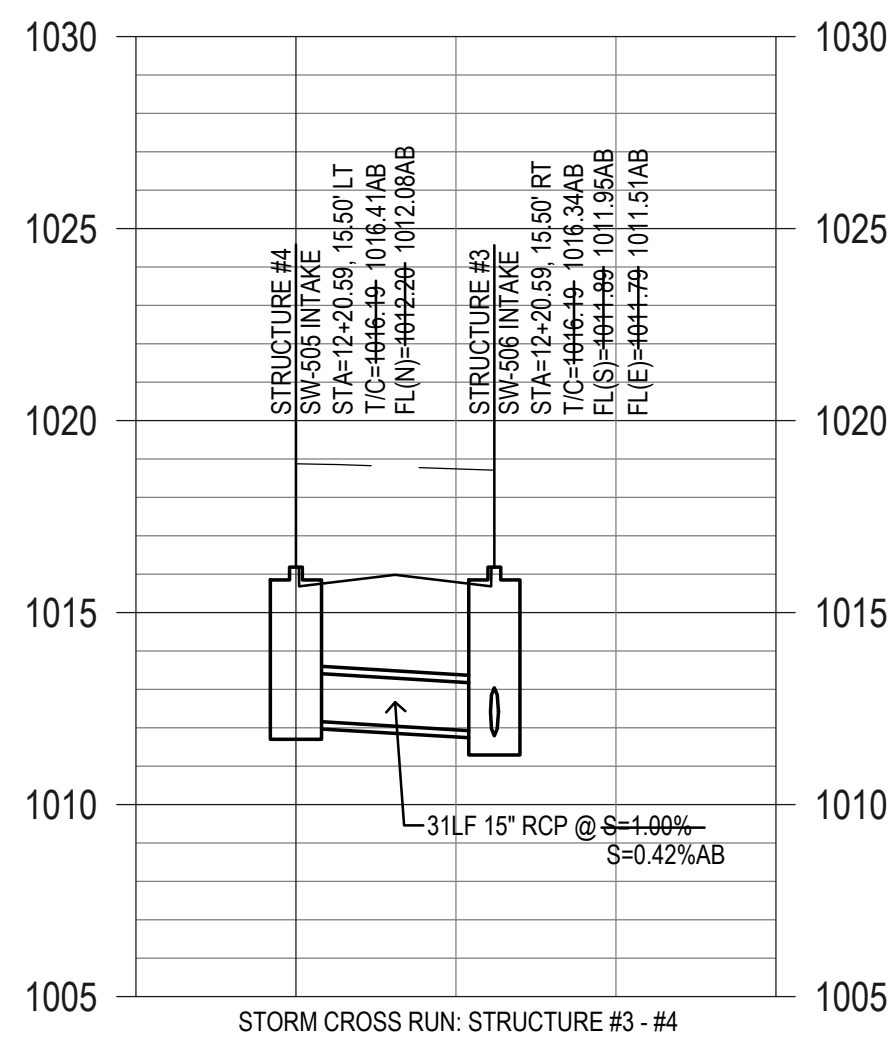
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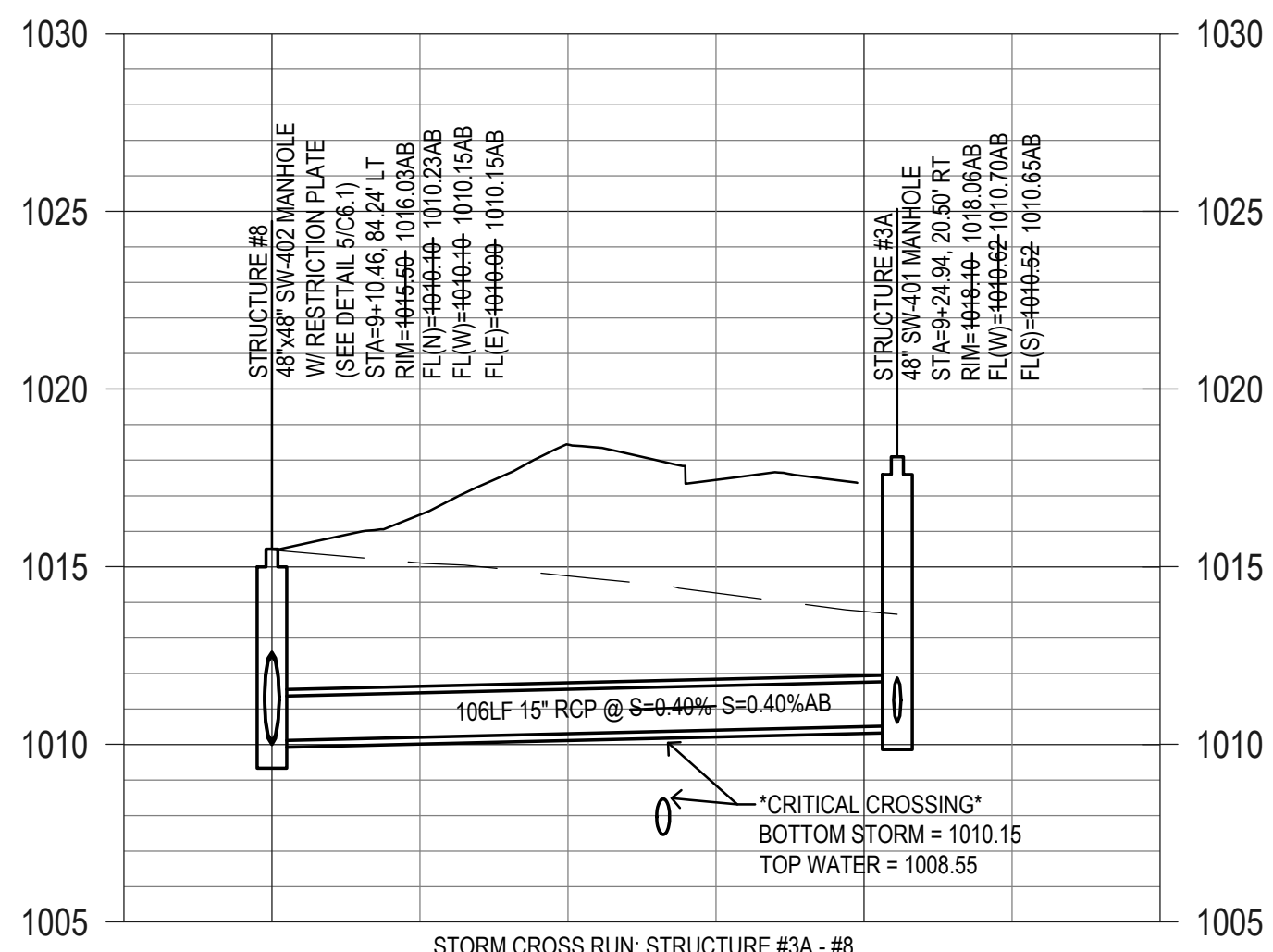
THE COMMONS AT GREENWAY PARK PLAT 1
WAUKEE, IOWA
STORM & PAVING

REFERENCE NUMBER:	070600
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PROJECT NUMBER:	1803300
SHEET NUMBER:	C4.1

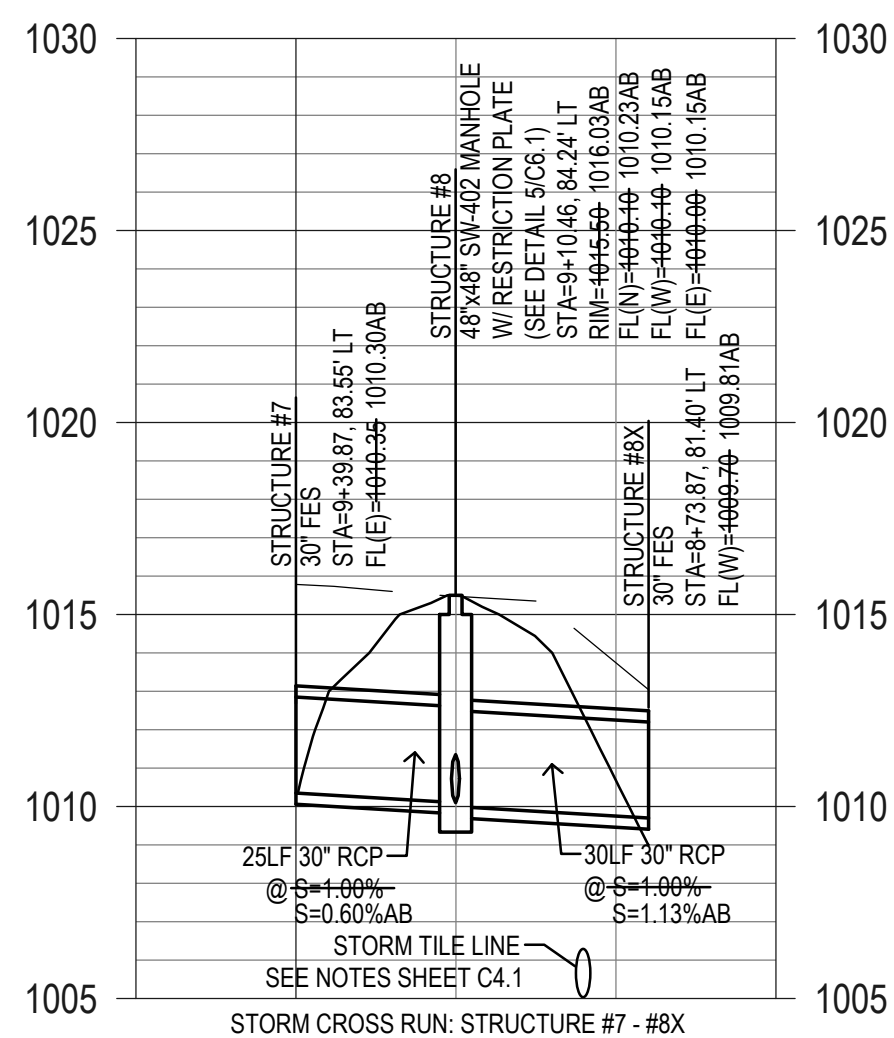
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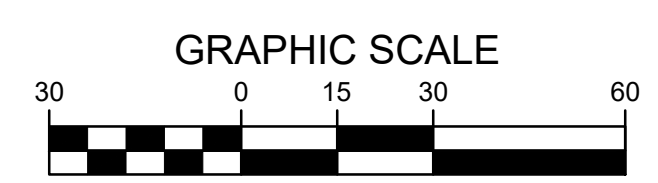
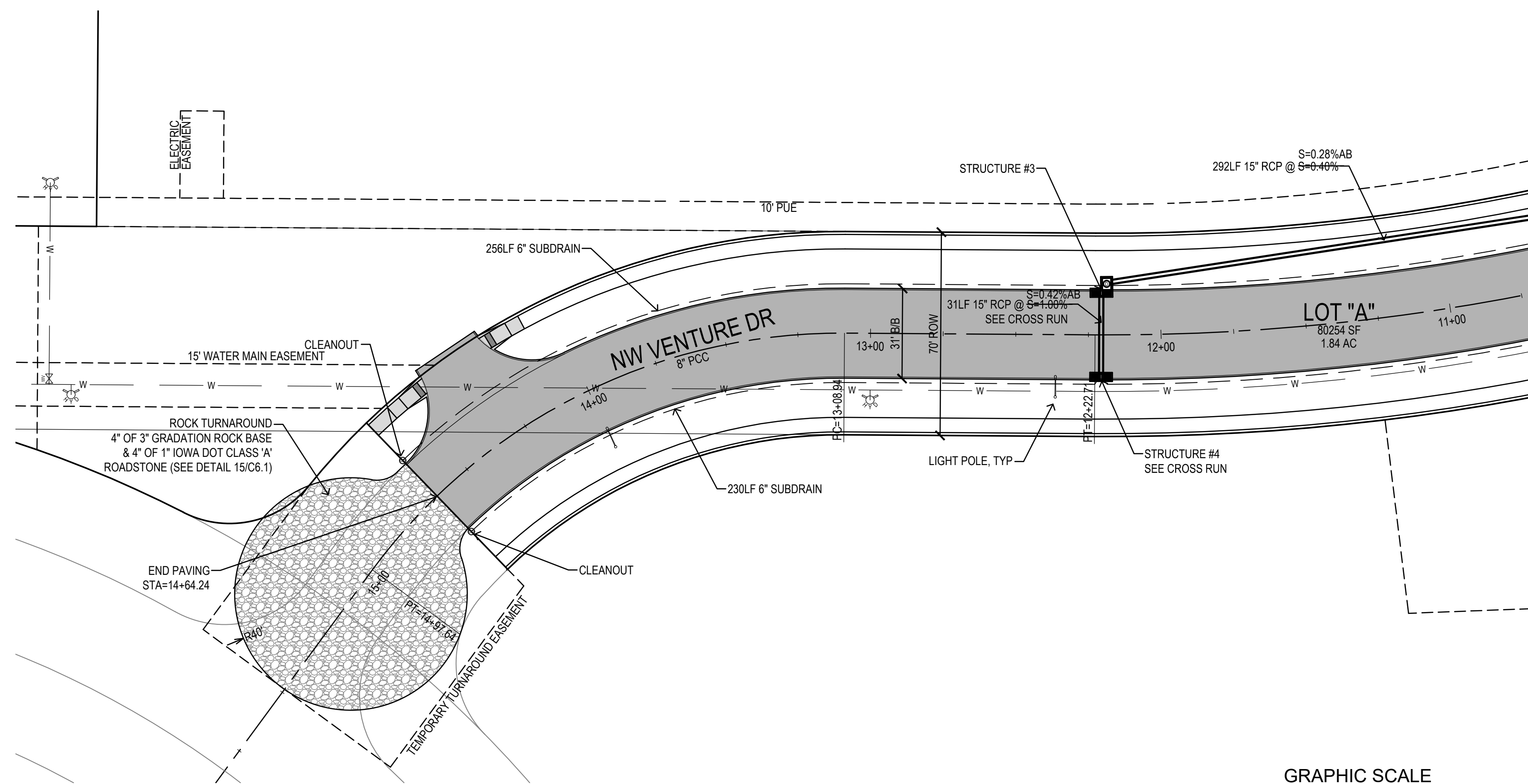
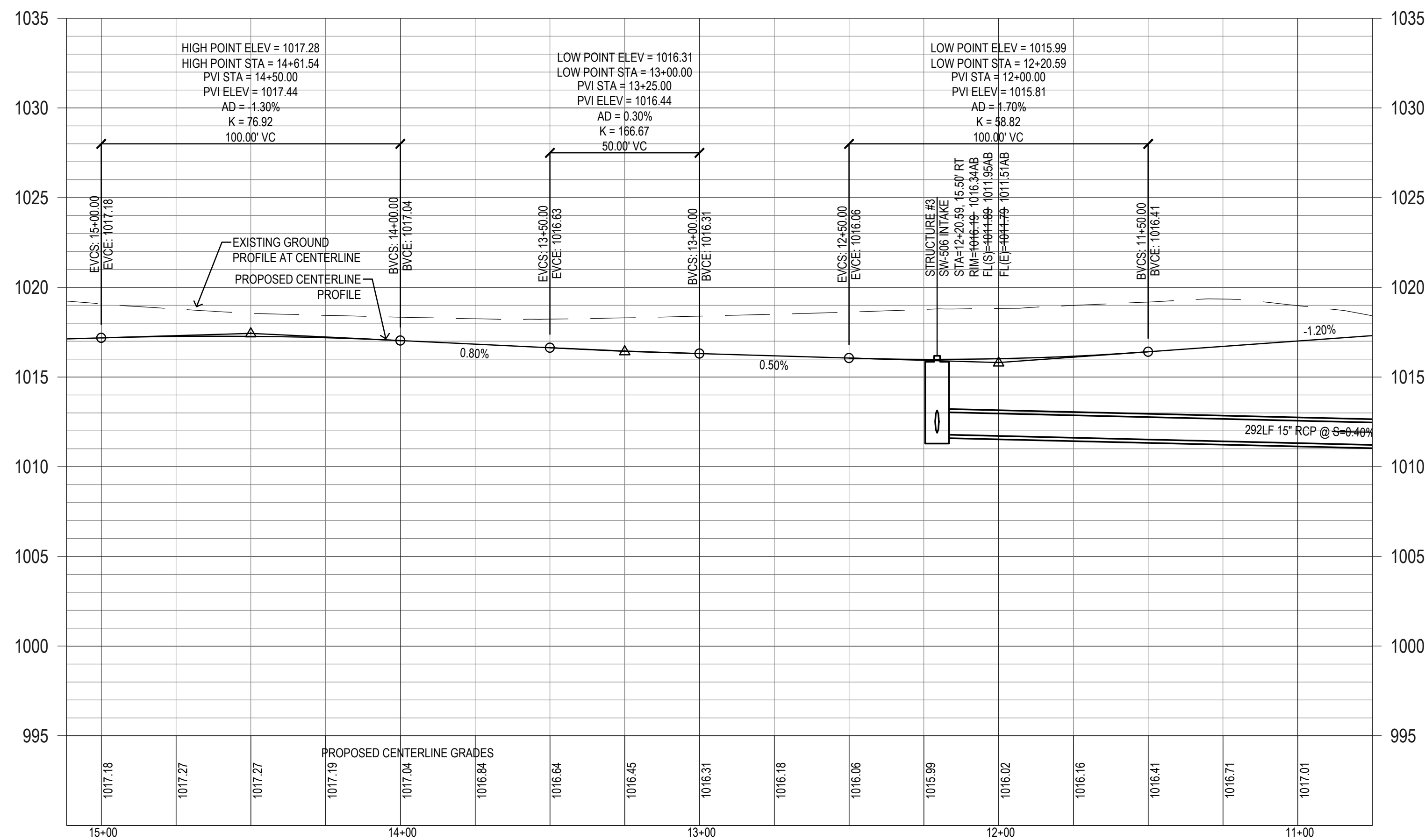
STORM CROSS RUN: STRUCTURE #3 - #4



STORM CROSS RUN: STRUCTURE #3A - #8



STORM CROSS RUN: STRUCTURE #7 - #8X



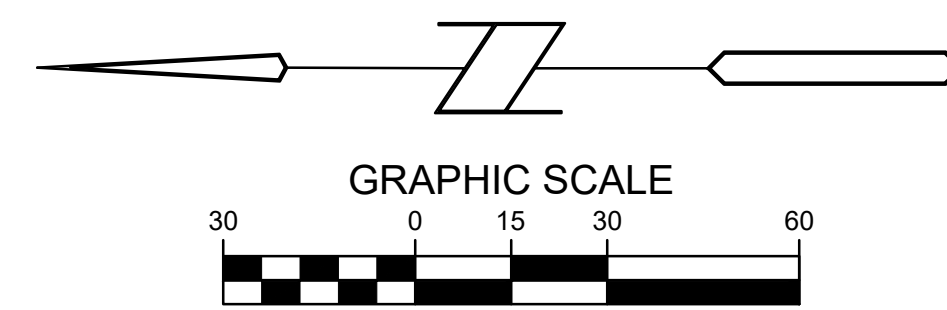
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PROJECT NUMBER: 1803300
SHEET NUMBER: C4.2

GENERAL NOTES :

- IT IS THE INTENT OF THIS DESIGN TO CONSTRUCT A CAST IN PLACE TWIN 10' x 5' x 96' REINFORCED CONCRETE BOX CULVERT ON A 0° SKEW AT STATION 8+61.93
- THIS CULVERT SHALL BE CONSTRUCTED ACCORDING TO THE IOWA DEPARTMENT OF TRANSPORTATION TWIN REINFORCED CONCRETE BOX CULVERT STANDARDS, DATED APRIL 2012. SEE TABULATION FOR STANDARD CULVERT PLANS THAT APPLY.
- EXCESS CLASS 20 EXCAVATION MATERIAL SUITABLE FOR BACKFILLING SHALL BE STOCKPILED AT THE CONSTRUCTION SITE, AS DIRECTED BY THE ENGINEER.
- CLASS 20 EXCAVATION MATERIAL UNSUITABLE FOR BACKFILLING SHALL BE PLACED ELSEWHERE ON SITE.
- ALL REINFORCING BARS AND BARS NOTED AS DOWELS SUPPLIED FOR THIS STRUCTURE SHALL BE DEFORMED REINFORCEMENT UNLESS OTHERWISE NOTED OR SHOWN.
- ALL REINFORCING STEEL SHALL BE SECURELY WIRED IN PLACE BEFORE CONCRETE IS PLACED. BAR CHAIRS SPACED AT NOT MORE THAN 3'-0" CENTERS IN EITHER DIRECTION SHALL BE USED TO SUPPORT ALL REINFORCING IN ACCORDANCE WITH SECTION 2404 OF THE STANDARD SPECIFICATIONS.
- ALL REINFORCING STEEL LOCATED IN AND EXTENDING INTO THE SLAB SHALL BE EPOXY COATED.
- BARREL FLOOR AND HEADWALL APRONS SHALL HAVE A BURLAP DRAG FINISH. ALL OTHER SURFACES EXPOSED IN THE COMPLETED STRUCTURE SHALL HAVE A SURFACE FINISH PER SECTION 2403.03P OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR IS TO VISIT THE SITE TO ENSURE THAT HE IS FAMILIAR WITH THE EXISTING SITE CONDITIONS. UTILITIES ARE INDICATED ON THE DRAWINGS TO PROVIDE GENERAL LOCATION INFORMATION ONLY. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. SHOULD ANY UNDERGROUND UTILITIES BE FOUND DIFFERENT THAN SHOWN ON DRAWINGS, THEY SHALL BE PROTECTED IN PLACE AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT (800) 292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
- THE CONTRACTOR SHALL COORDINATE UTILITY RELOCATIONS WITH HIS WORK. BOTH REMOVAL AND RELOCATION WILL REQUIRE HIS ASSISTANCE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER WORK ON THE PROJECT. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.
- THE CONTRACTOR SHALL BACKFILL THE PROPOSED STRUCTURE AS SHOWN ON THE PLANS, WITH GRANULAR MATERIAL PER IDOT STANDARD ROAD PLAN DR-111.
- ESTIMATED CONSTRUCTION ITEMS AND QUANTITIES ARE FOR REFERENCE ONLY. ANY DISCREPANCY BETWEEN THE QUANTITY ESTIMATE AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN. ALL ITEMS, LISTED AND NOT LISTED, REQUIRED TO CONSTRUCT THE CULVERT AS SHOWN SHALL BE INCLUDED WITH THIS LUMP SUM PROJECT.
- ANY AND ALL DEWATERING SHALL BE CONSIDERED INCIDENTAL TO CULVERT CONSTRUCTION.
- FOLLOW RECOMMENDATIONS IN SOILS REPORT. THE BOTTOM OF CULVERT EXCAVATION SHALL BE PROBED AND TESTED BY SOILS ENGINEER DURING CONSTRUCTION TO DETECT UNSUITABLE ZONES. IF ZONES OF SOFT, EXCESSIVELY ORGANIC OR OTHERWISE UNSUITABLE SOILS ARE IDENTIFIED, DEEPER OVER-EXCAVATION AND CRUSHED ROCK BACKFILL MAY BE REQUIRED AS EXTRA WORK.

SPECIFICATIONS FOR CULVERT:

CONSTRUCTION: IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES 2015, PLUS APPLICABLE GENERAL SUPPLEMENTAL SPECIFICATIONS, DEVELOPMENTAL SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY TO CONSTRUCTION WORK ON SHEET C4.3



ELIGIBILITY FOR BIDDING ON CULVERT:

THE SUB-CONTRACTOR BIDDING ON THIS CULVERT WILL BE REQUIRED TO SUBMIT A LIST OF 3 SUCCESSFUL INSTALLATIONS OF CAST-IN-PLACE BOX CULVERTS PERFORMED FOR EITHER THE IOWA DOT OR A PUBLIC MUNICIPALITY IN THE PAST 6 YEARS.

IDOT STANDARD CULVERT PLANS

STANDARD	ISSUED	REVISED
TWRCB G1-12	APRIL 2012	07-16
TWRCB G2-12	APRIL 2012	12-16
TWRCB 10-5-12	APRIL 2012	---
TWH 0-1-12	APRIL 2012	07-16
TWH 0-2-12	APRIL 2012	12-16
TWH 0-3-12	APRIL 2012	07-16
TWH 0-5-12	APRIL 2012	---

POLLUTION PREVENTION PLAN:

POLLUTION PREVENTION PLAN INCLUDED WITH PROJECT GRADING PLANS, SEE SHEET C-701.

TRAFFIC CONTROL PLAN NOTE:

THE ROADWAY WILL BE CLOSED TO THRU TRAFFIC.

CULVERT STAKING NOTES:

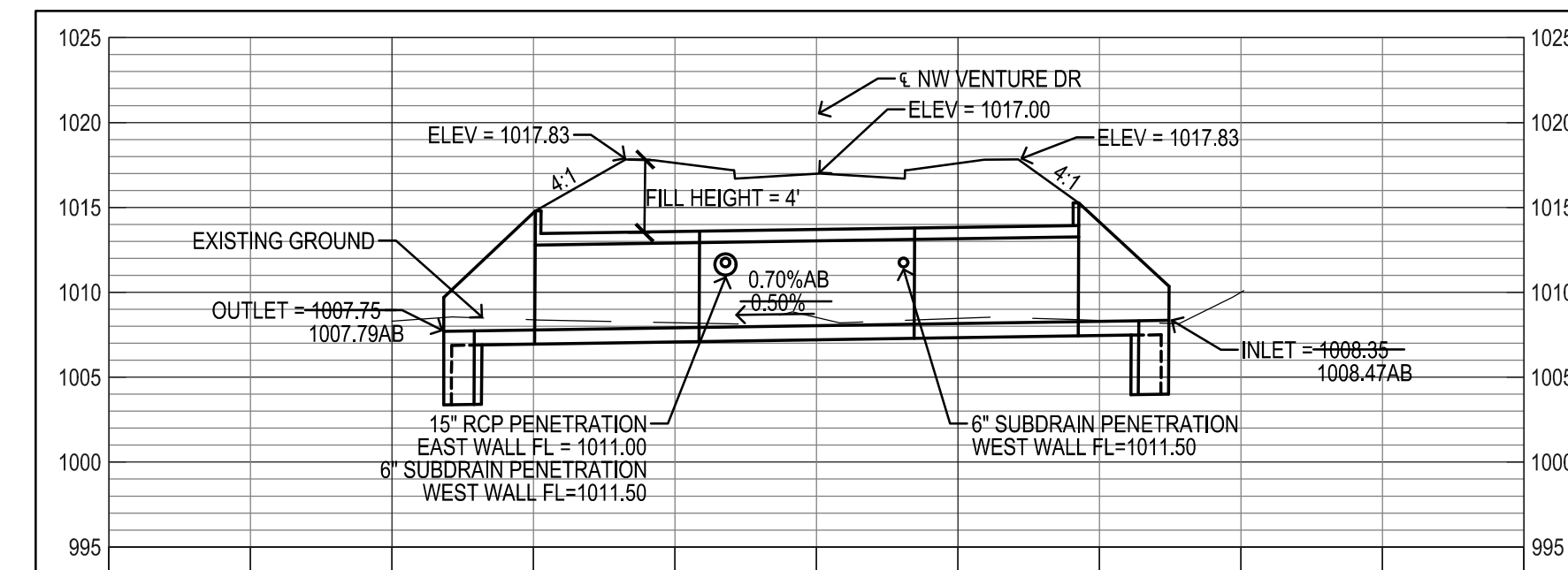
THE CULVERT MUST BE STAKED UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR.

CHAIN LINK FENCE AND PIPE RAILINGS:

- CHAIN LINK FENCE SHALL BE PLACED AT THE INLET AND OUTLET ENDS OF THE CULVERT ON THE HEADWALLS & WING WALLS.
- ALL POSTS ARE TO BE SET VERTICAL. SELECT THE BASE PLATE DETAIL SO THAT THE POSTS CAN BE REPLACED EASILY.
- THE FENCE AND POST SHALL BE BLACK VINYL COATED.
- THE HEIGHT OF THE FENCE SHALL BE 42" TALL.
- APPROXIMATELY 54 LINEAR FEET OF FENCE AT EACH LOCATION.

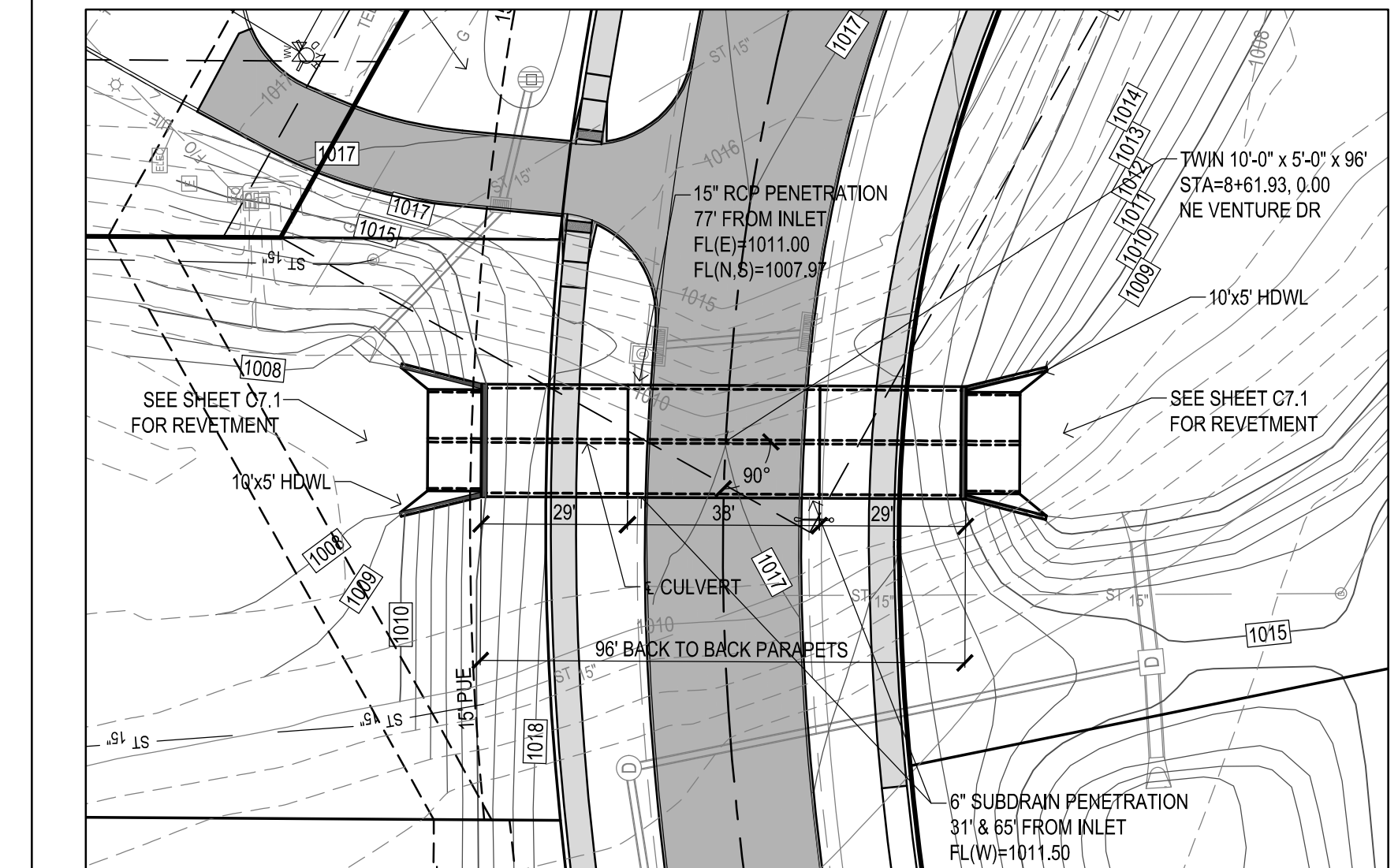
TEMPORARY DIVERSION DITCH NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING A TEMPORARY DIVERSION DITCH FOR THE CONSTRUCTION OF THE CULVERT.
- TEMPORARY DITCH SHALL HAVE A MINIMUM OF 10 FEET WIDE BOTTOM AND SHALL BE AT LEAST 3 FEET DEEP WITH A MAXIMUM OF 2:1 SIDE SLOPES.
- TEMPORARY DIVERSION DITCH MUST BE STABILIZED TO MEET GENERAL PERMIT #2 REQUIREMENTS.

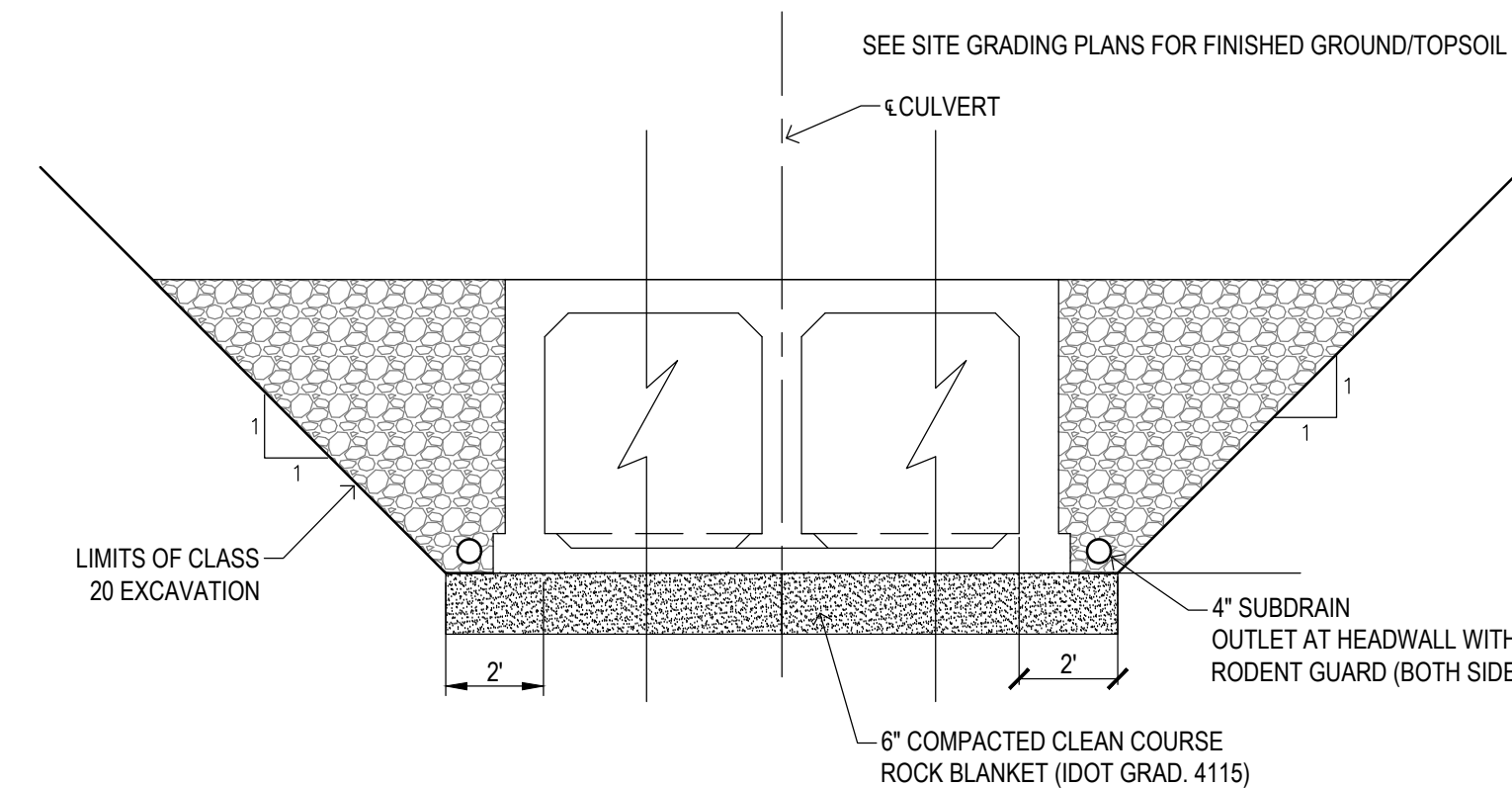


LONGITUDINAL SECTION ALONG ϵ CULVERT

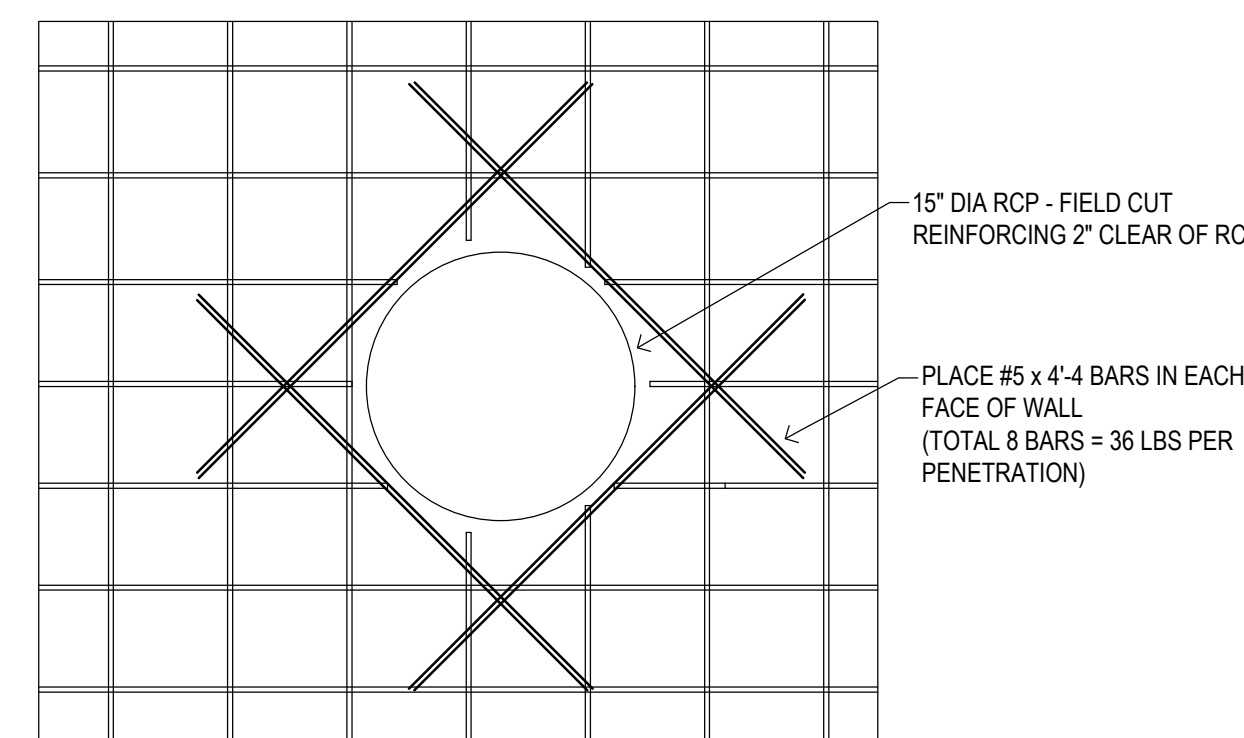
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DESIGN FILL = 4'



SITUATION PLAN



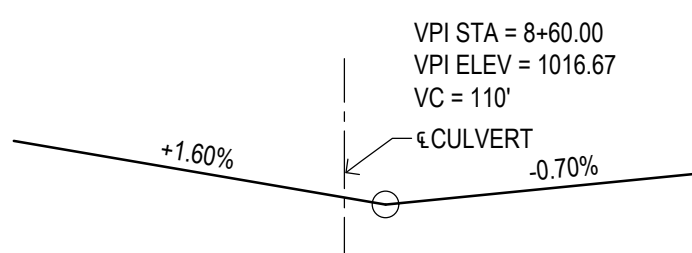
BACKFILL & GRANULAR BEDDING DETAIL



PIPE PENETRATION DETAIL

SCALE = NONE

BENCHMARK: SEE SHEET C0.1



PROPOSED PROFILE GRADE ON NW VENTURE DR

LOCATION

NW VENTURE DR
SEC 28, T79N, R26W
CITY OF WAUKEE
DALLAS COUNTY

ESTIMATED CULVERT QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1.	EXCAVATION, CLASS 20	CY	120
2.	CLEAN COARSE ROCK BLANKET	CY	65
3.	GRANULAR BACKFILL	CY	250
4.	STRUCTURAL CONCRETE	CY	218
5.	REINFORCING STEEL	LB	34,595
6.	SUBDRAIN, 4" SLOTTED	LF	220
7.	CHAIN LINK FENCE	LF	108
* QUANTITIES FOR INFORMATION ONLY, BID LUMP SUM.			

ESTIMATE REFERENCE INFORMATION

ITEM NO.	DESCRIPTION
1.	---
2.	IDOT GRADATION 4115
3.	IN-PLACE QUANTITY: IDOT GRADATION 4133, COMPLY WITH IOWA DOT STANDARD ROAD PLAN DR-111
4.	---
5.	---
6.	---
7.	---

SUMMARY OF REINFORCING STEEL

LOCATION	QUANTITY	TOTAL
TWIN 10' X 5' HEADWALLS 0° SKEW (2 REQ'D)	2 @ 3,347 LB	6,694 LB
38' BARREL SECTION (1 REQ'D)	1 @ 10,949 LB	10,949 LB
29' END SECTION (2 REQ'D)	2 @ 8,356 LB	16,712 LB
5r1 x 3'-6" DOWEL BARS	3 @ 80 LB	240 LB
TOTAL (LB)		34,595 LB

CONCRETE PLACEMENT QUANTITIES

LOCATION	FLOOR	WALLS	SLAB	TOTAL
TWIN 10' X 5' HEADWALLS 0° SKEW (2 REQ'D)	2 @ 18.3 = 36.6	2 @ 4.5 = 9.0	*2 @ 2.2 = 4.4	50.0
38' BARREL SECTION (1 REQ'D)	1 @ 28.9 = 28.9	1 @ 14.5 = 14.5	1 @ 23.0 = 23.0	66.4
29' END SECTION (2 REQ'D)	2 @ 22.1 = 44.2	2 @ 11.1 = 22.2	2 @ 17.6 = 35.2	101.6
TOTAL (CY)	109.7	45.7	62.6	218

* INCLUDES PARAPET AND TOP OF WINGWALL.

DESIGN FOR 0° SKEW
TWIN 10'-0" X 5'-0" X 96'-0" REINFORCED CONCRETE BOX CULVERT
NW VENTURE DR, W. OF WARRIOR LN

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THE COMMONS AT GREENWAY PARK PLAT 1
WAUKEE, IOWA

CULVERT SITUATION PLAN & NOTES

REFERENCE NUMBER:
070600

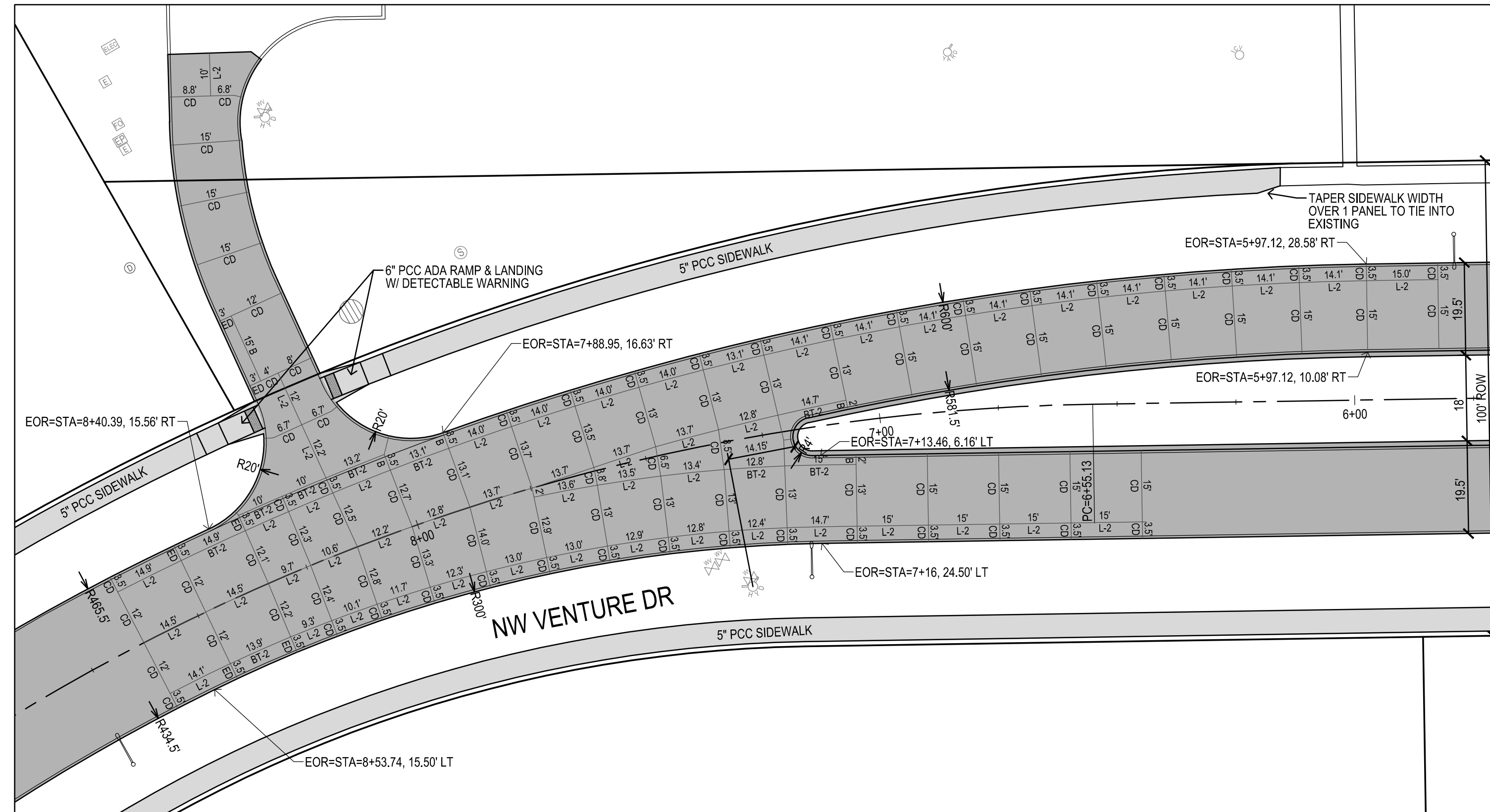
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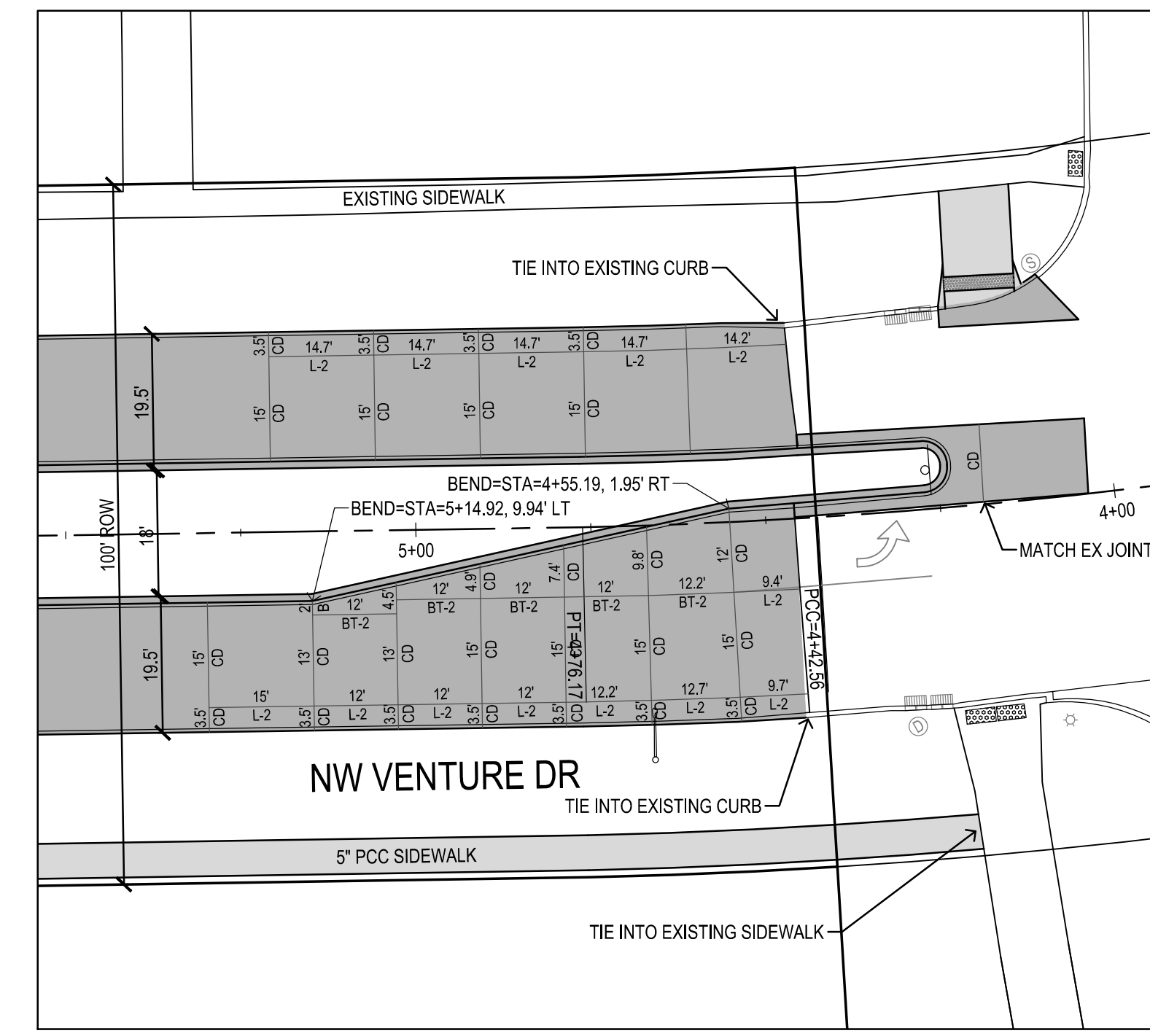
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PROJECT NUMBER:
180300

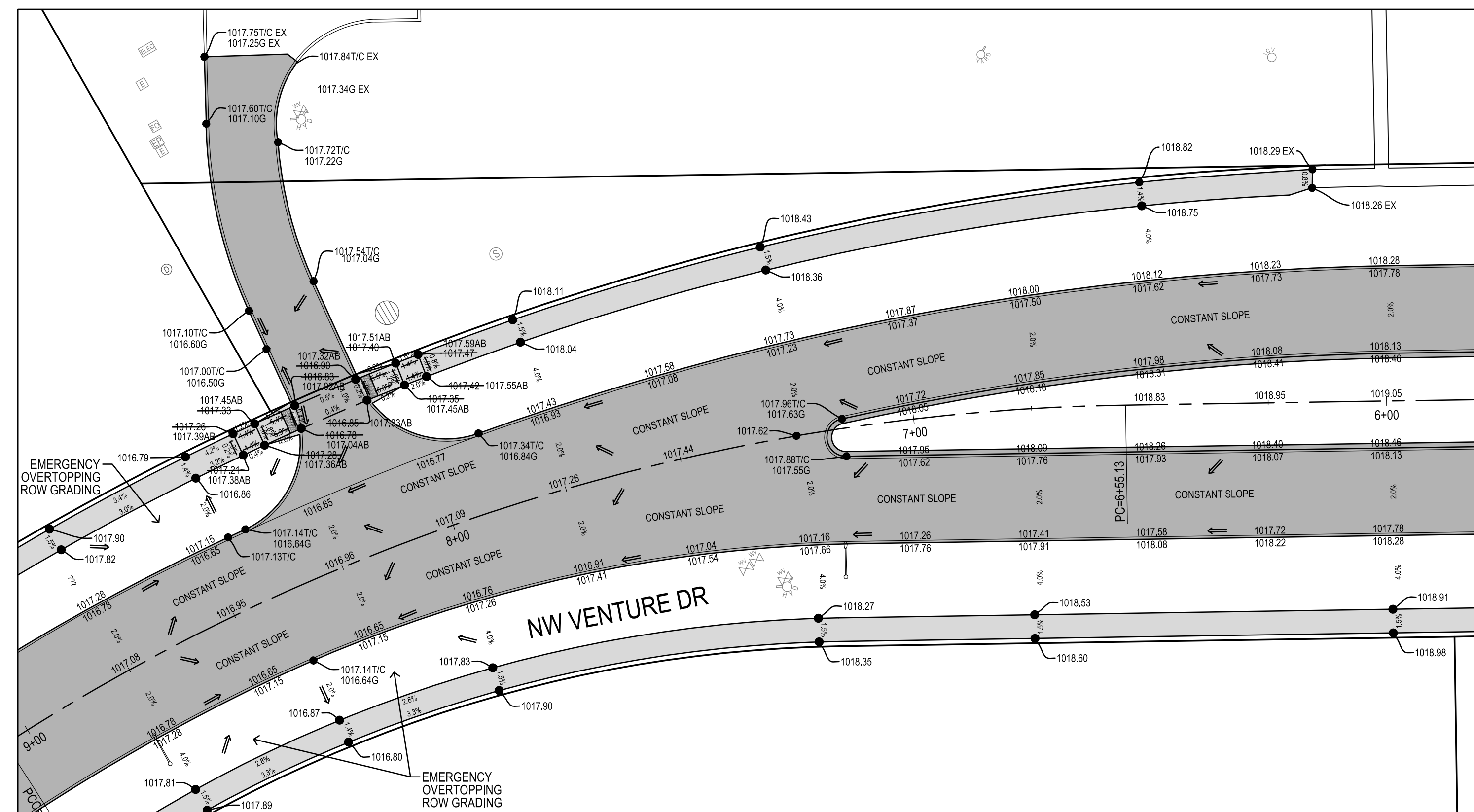
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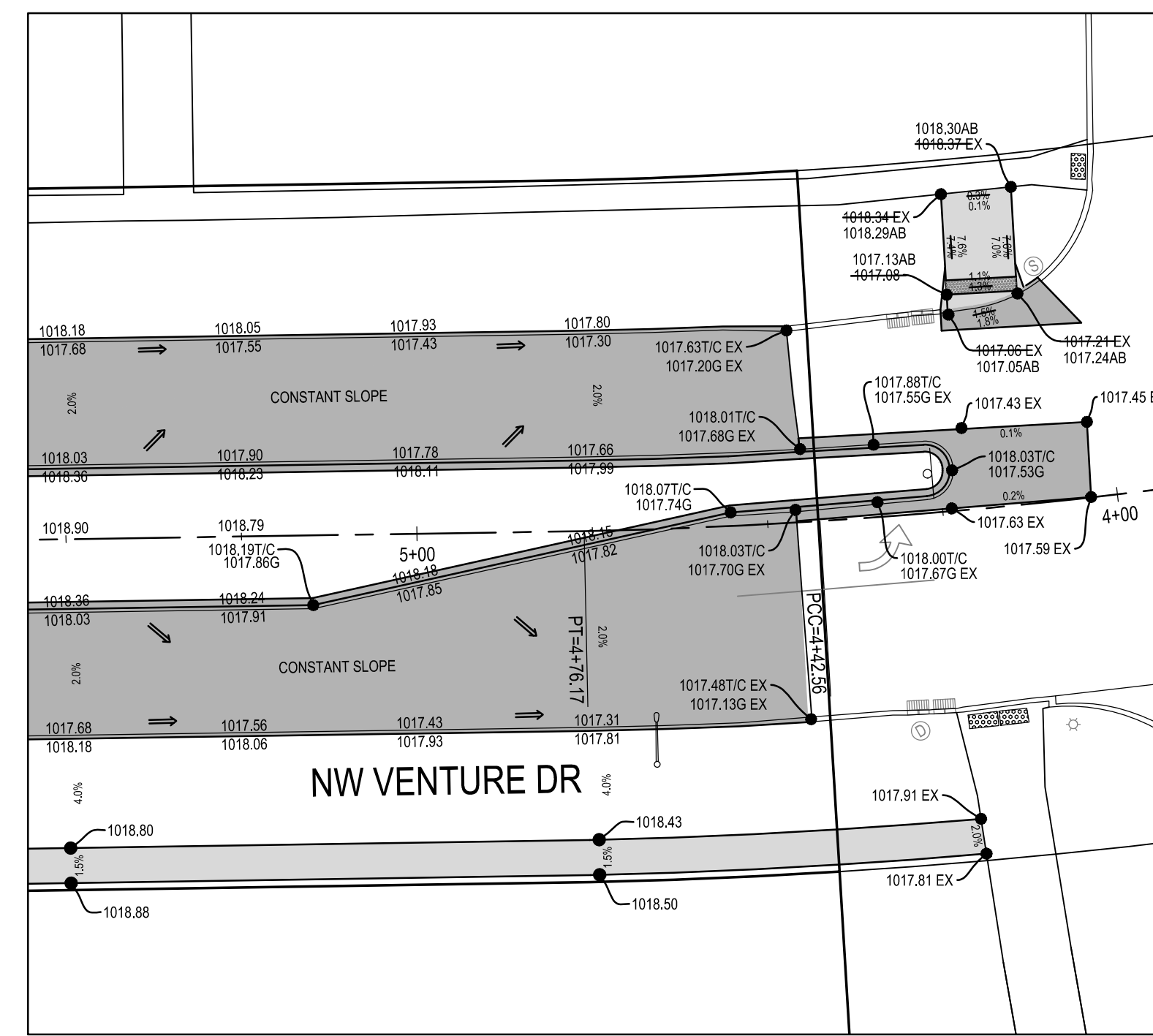
NW VENTURE DR & YMCA DRIVE JOINTING LAYOUT



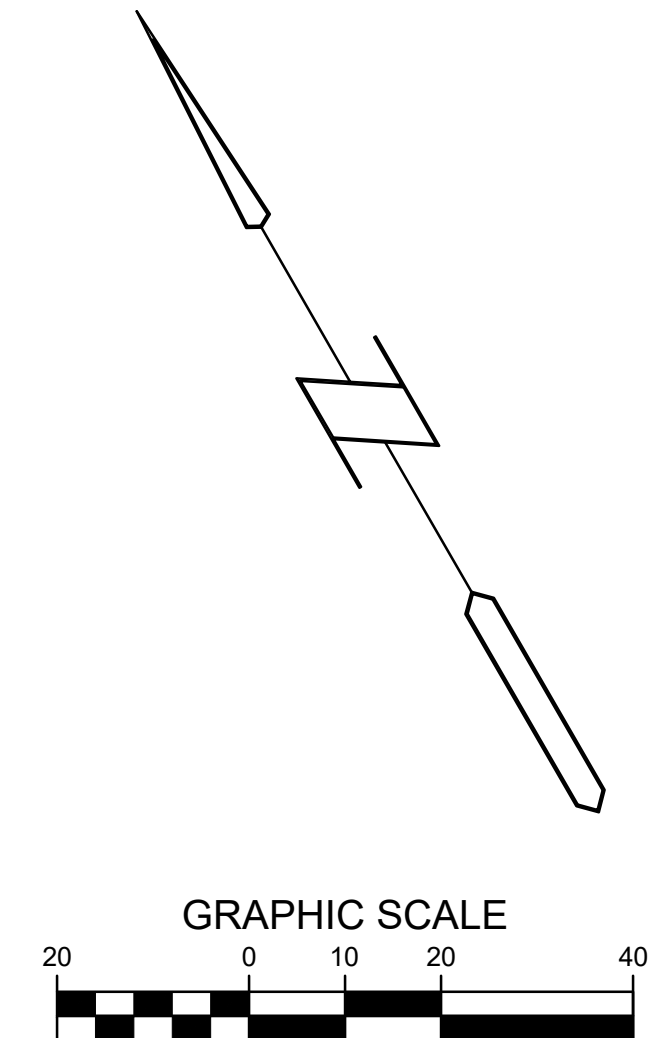
NW VENTURE DR TURN LANE JOINTING LAYOUT



NW VENTURE DR & YMCA DRIVE GRADING PLAN



NW VENTURE DR TURN LANE GRADING PLAN



7/17/2020 9:36:05 AM M:\LAND PROJECTS 2018\180300 PLAT 1\DWG\C5 INTERSECTIONS DETAILS.DWG

REFERENCE NUMBER:
 070600

DRAWN BY:
 JMR

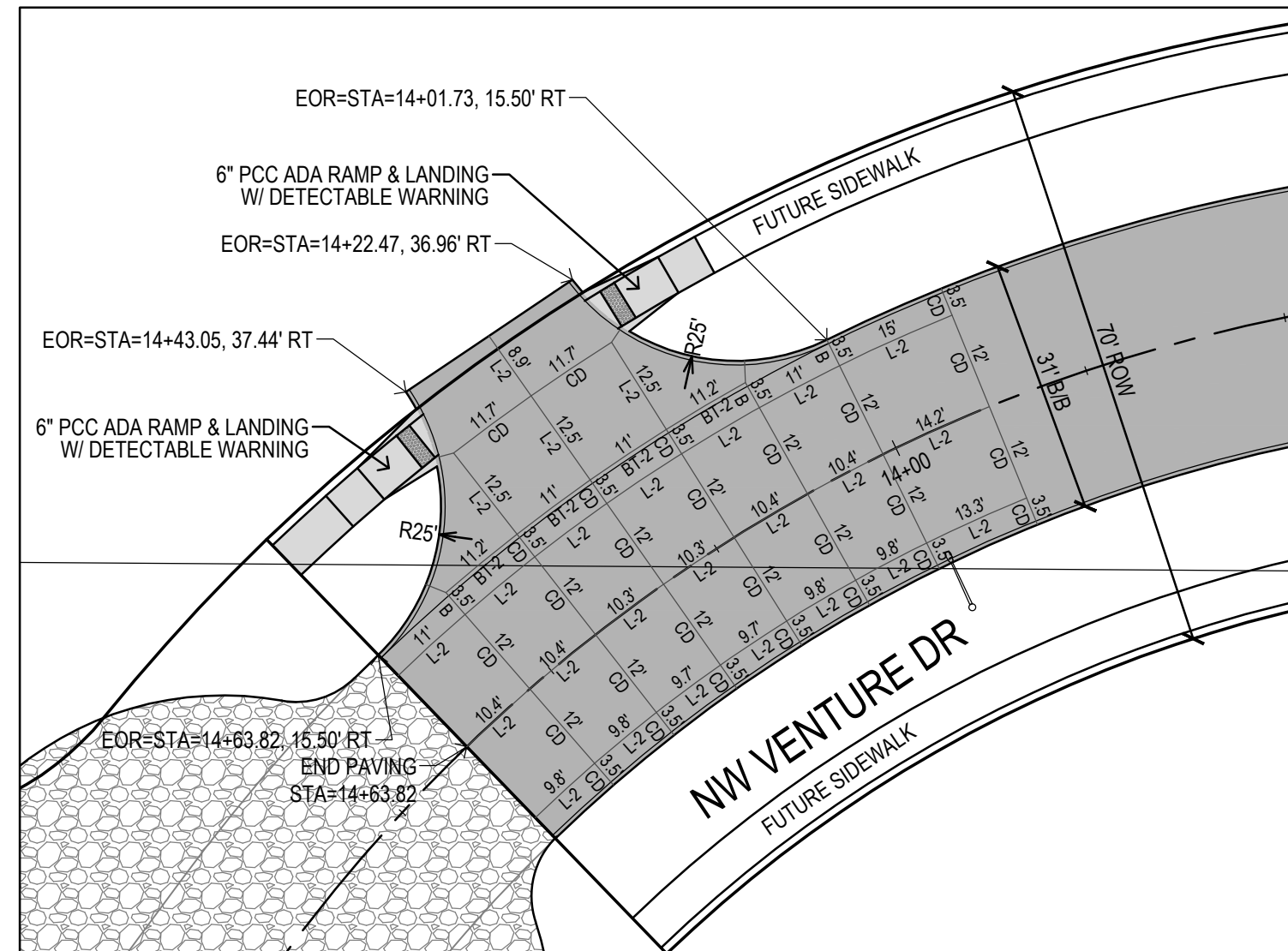
CHECKED BY:
 JEJ

REVISION DATE:
 3/12/19 1ST SUBMITTAL
 4/8/19 2ND SUBMITTAL
 4/30/19 3RD SUBMITTAL
 5/14/19 4TH SUBMITTAL
 6/13/19 5TH SUBMITTAL
 6/21/19 FINAL PLANS
 9/9/19 REV ALIGNMENT
 9/23/19 REV PER CITY
 7/17/20 AS-BUILTS

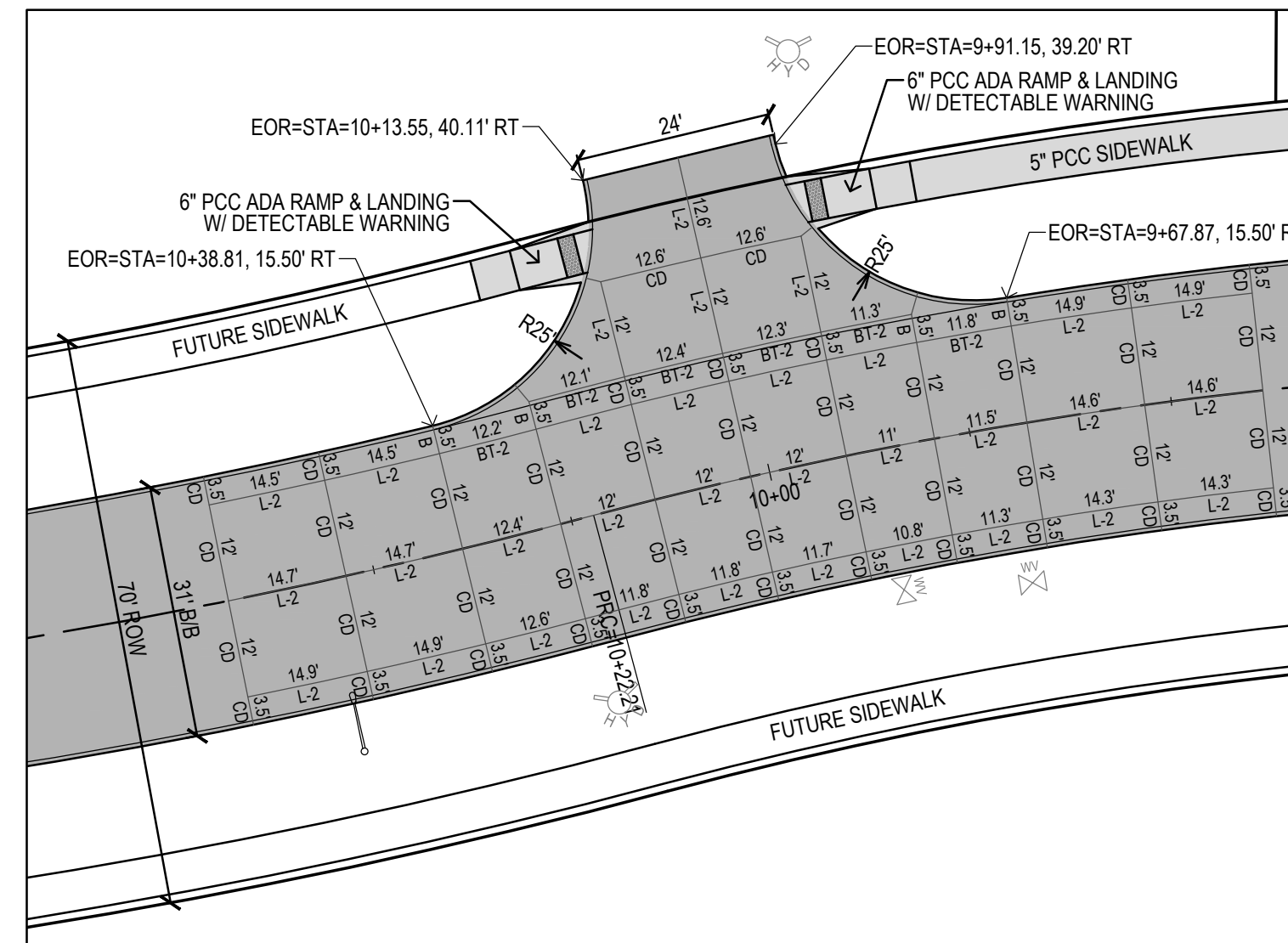
PROJECT NUMBER:
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SHEET NUMBER:
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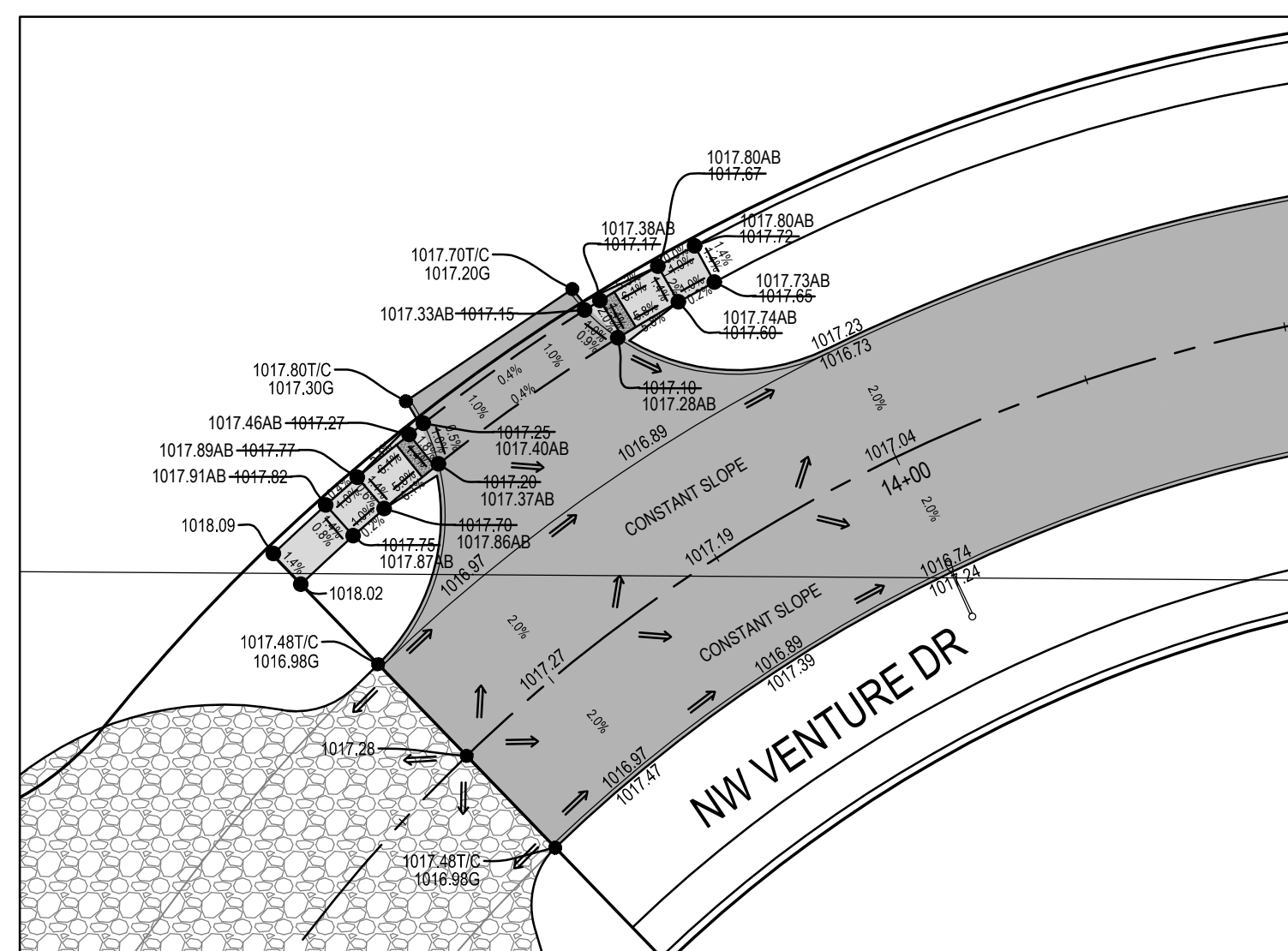
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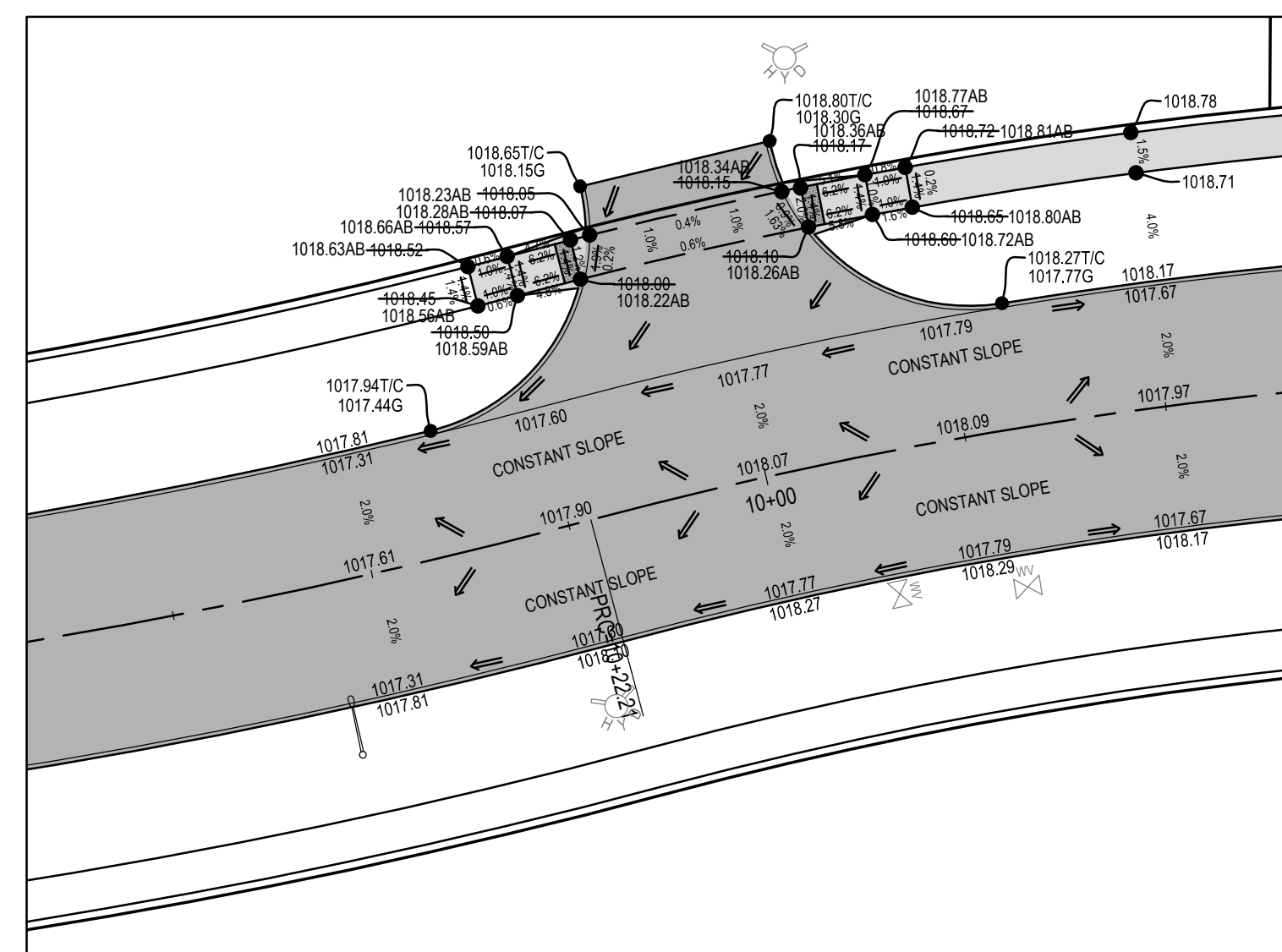
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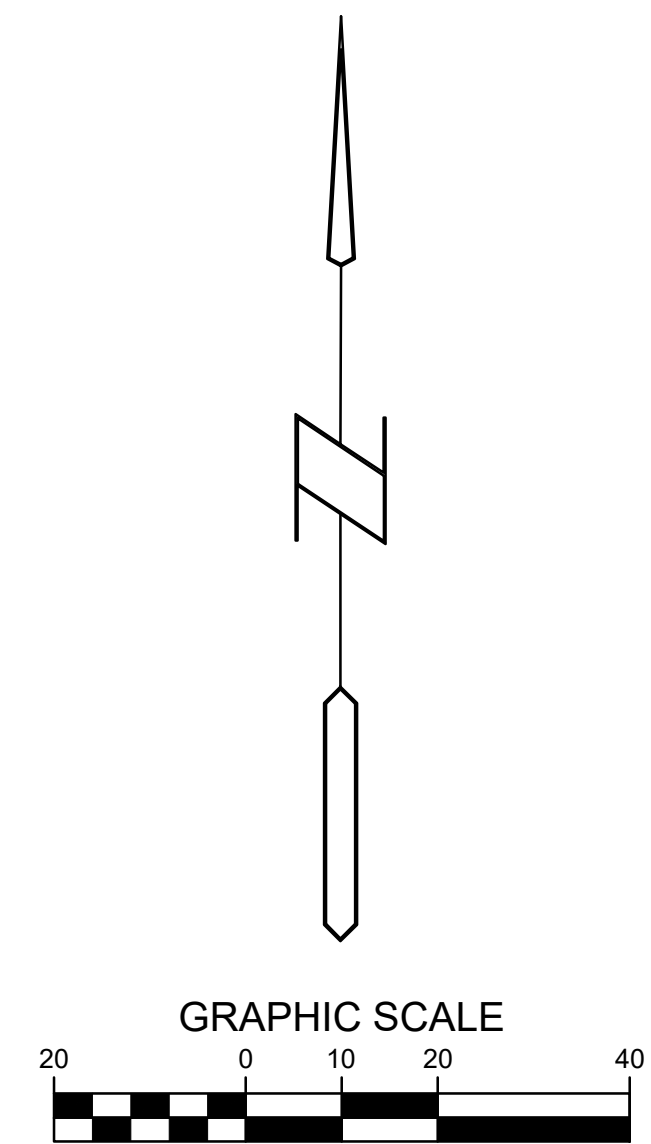
NW VENTURE DR TO EAST DRIVE JOINTING LAYOUT



NW VENTURE DR TO WEST DRIVE GRADING PLAN

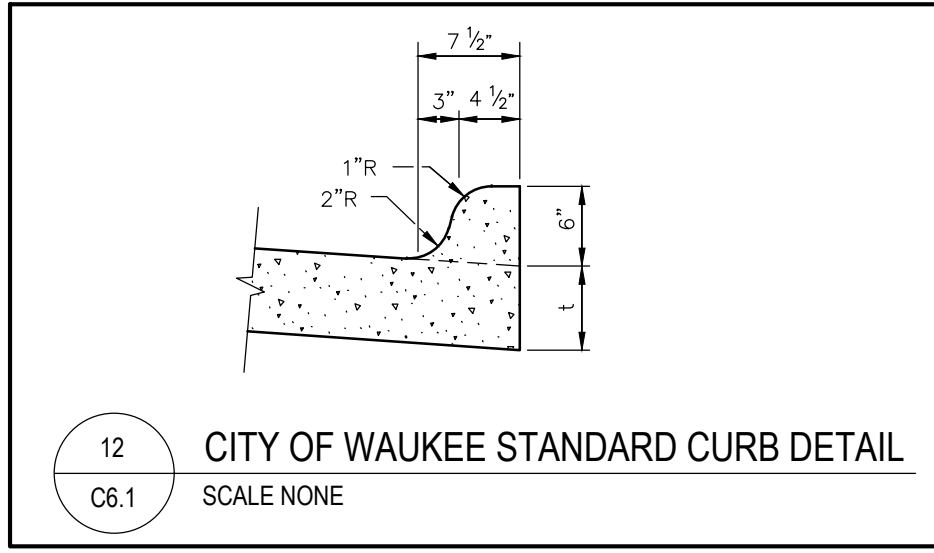


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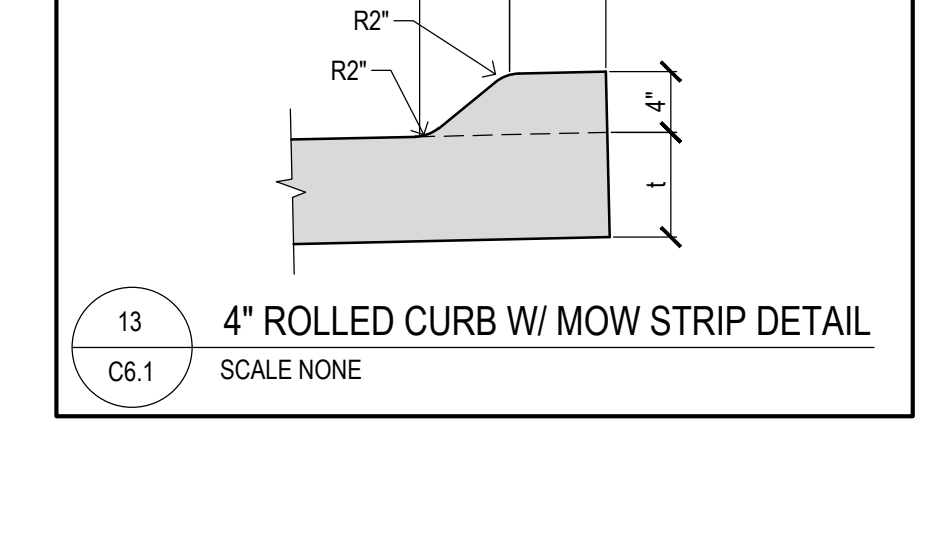


THE COMMONS AT GREENWAY PARK PLAT 1
WAUKEE, IOWA
INTERSECTION DETAILS

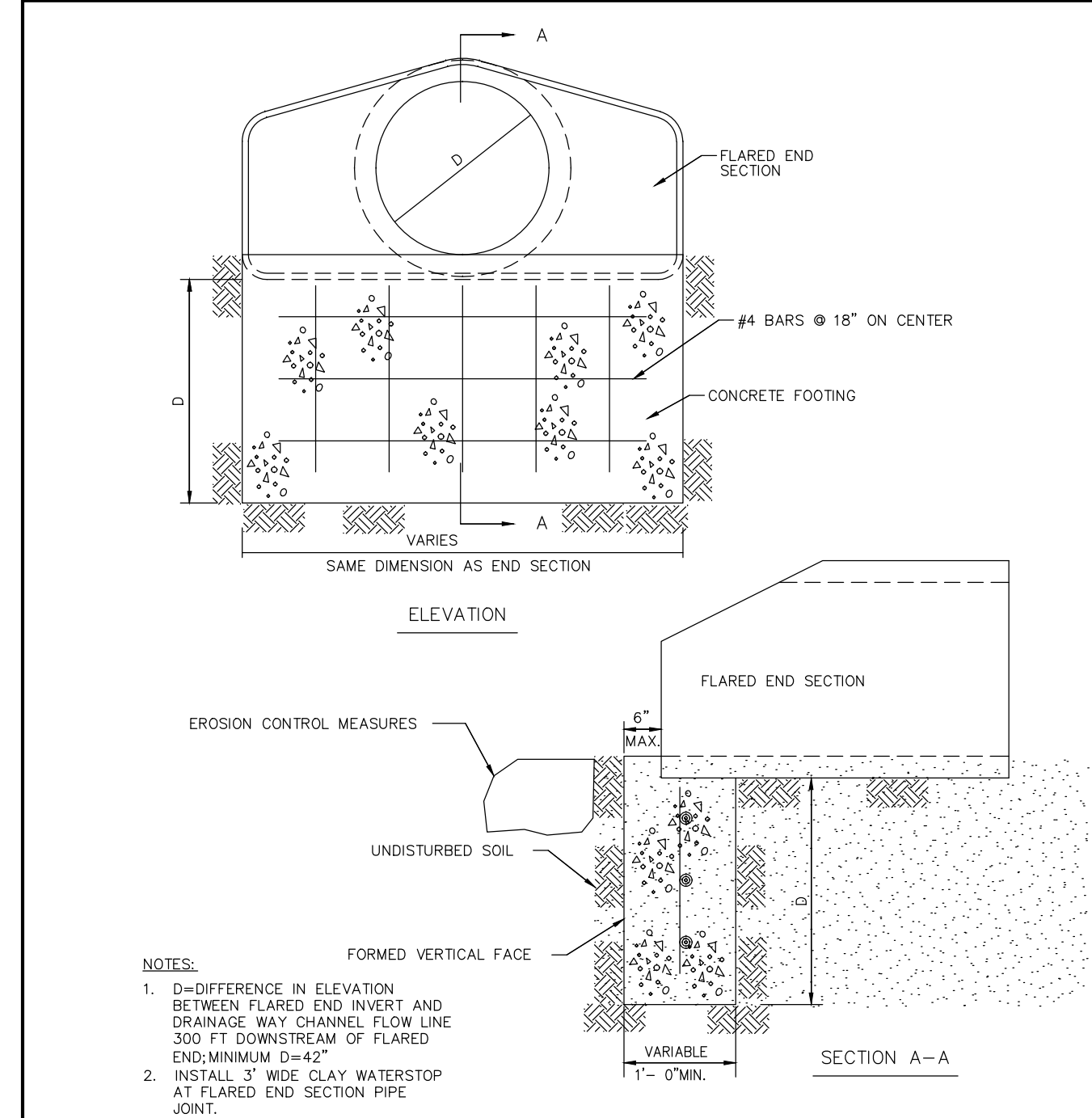
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DRAWN BY:	JMR
CHECKED BY:	JEJ
REVISION DATE:	3/12/19 1ST SUBMITTAL 4/8/19 2ND SUBMITTAL 4/30/19 3RD SUBMITTAL 5/14/19 4TH SUBMITTAL 6/13/19 5TH SUBMITTAL 6/21/19 FINAL PLANS 9/9/19 REV ALIGNMENT 9/23/19 REV PER CITY 7/17/20 AS-BUILTS
PROJECT NUMBER:	180300
SHEET NUMBER:	C5.2



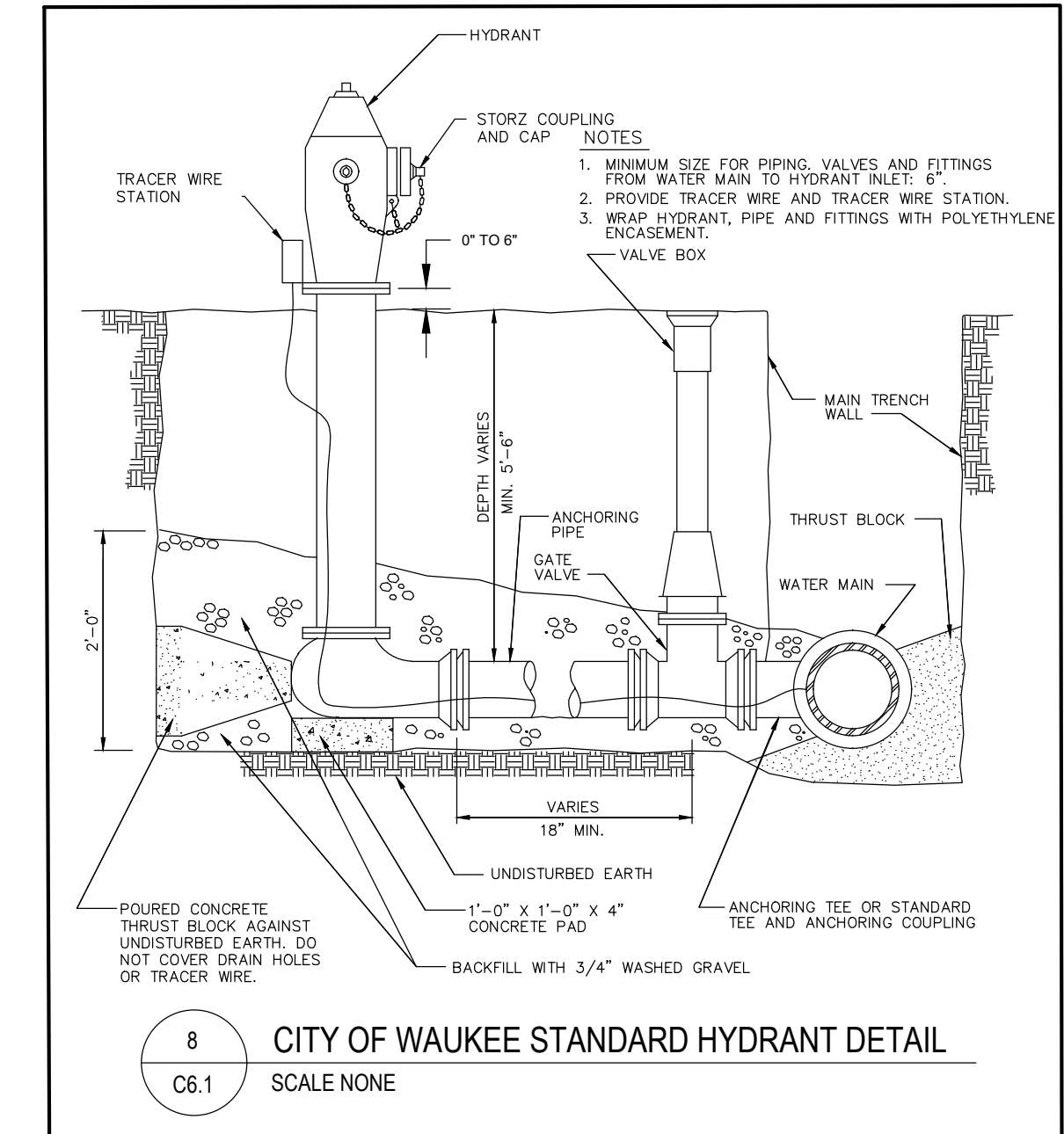
12 CITY OF WAUKEE STANDARD CURB DETAIL
SCALE NONE
C6.1



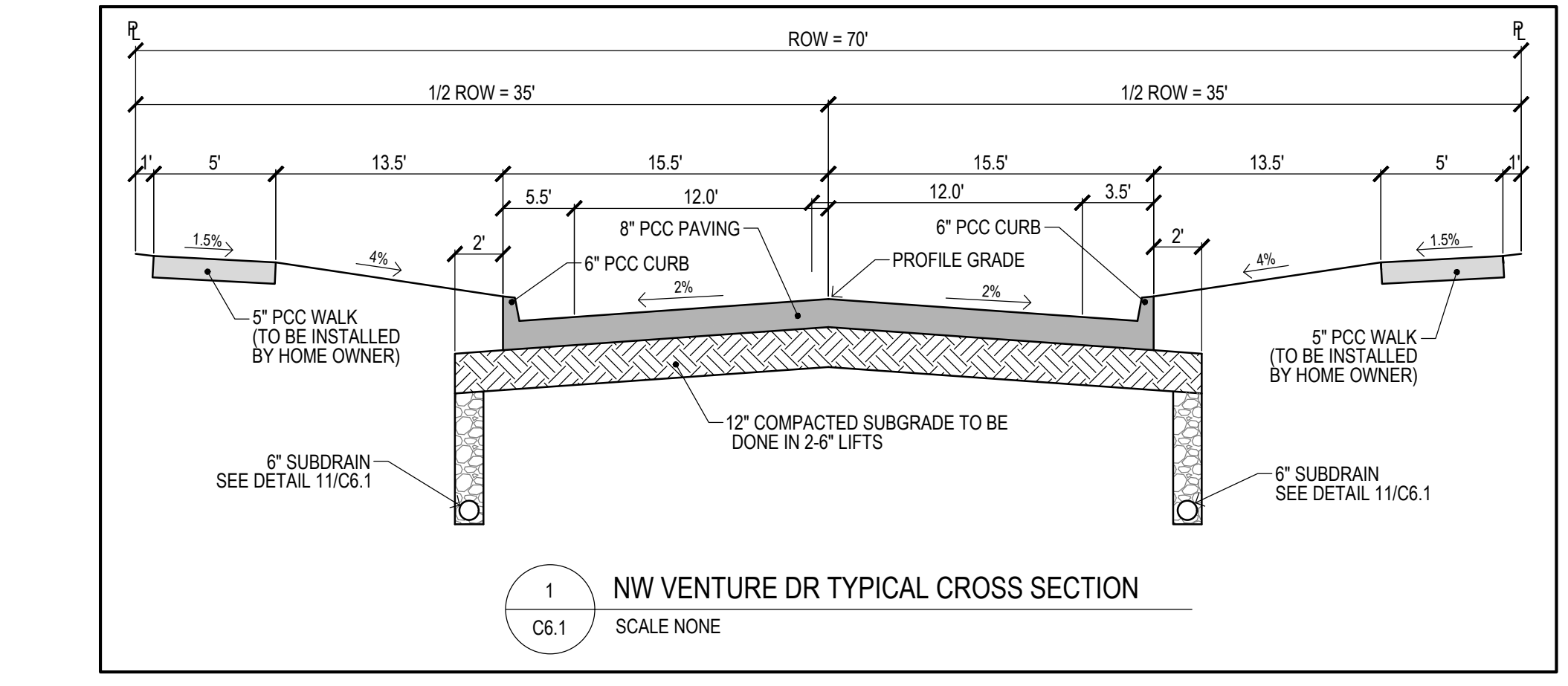
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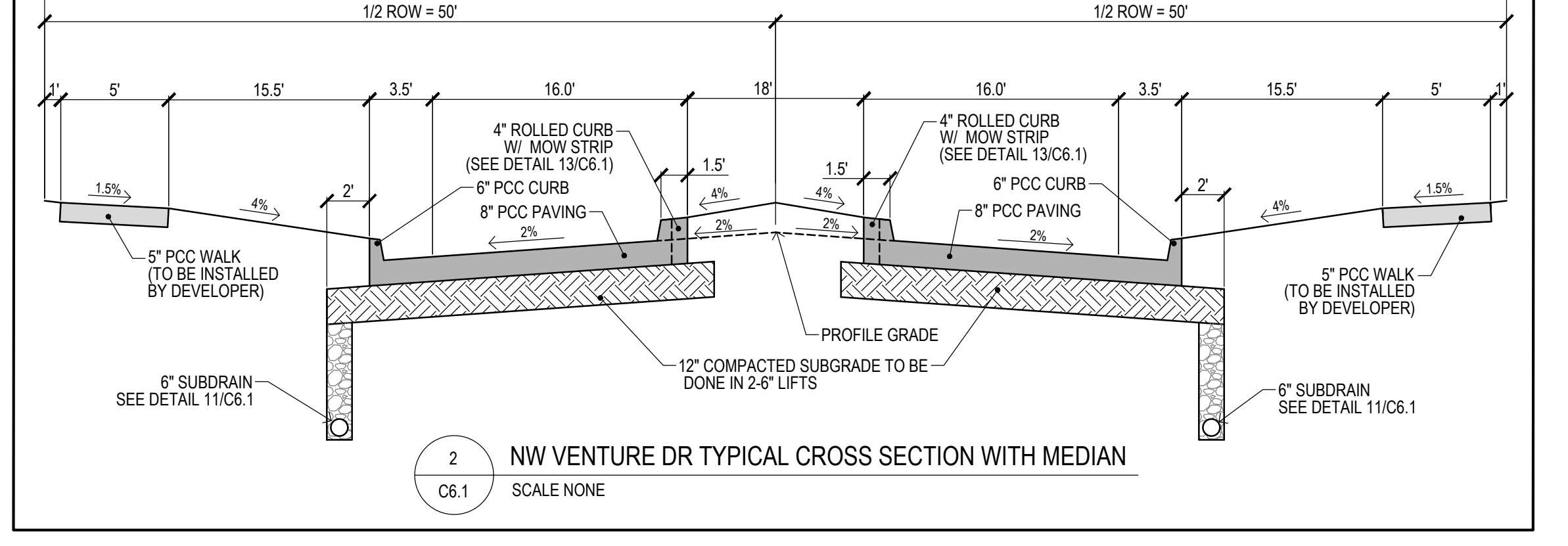
9 CITY OF WAUKEE FLARED END SECTION DETAIL
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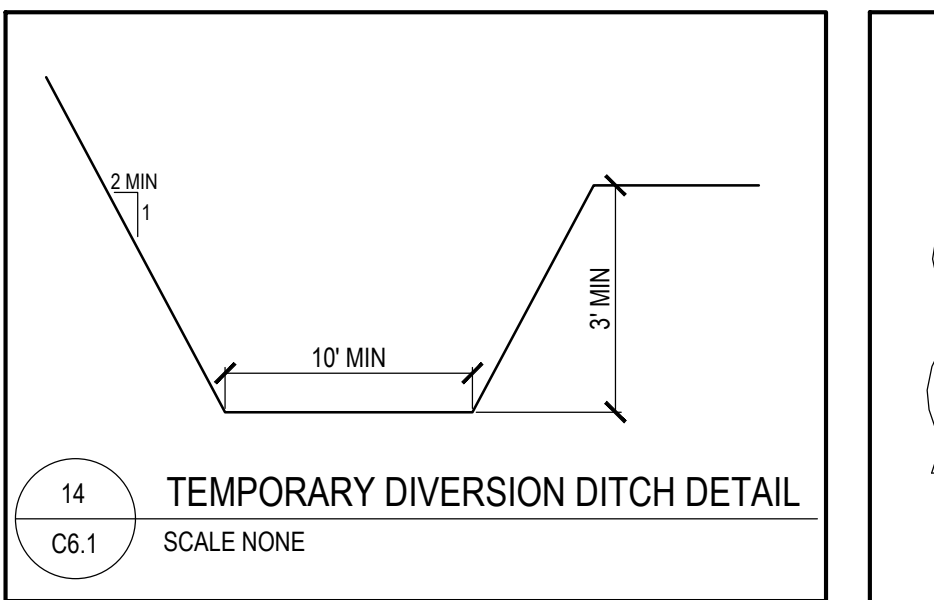
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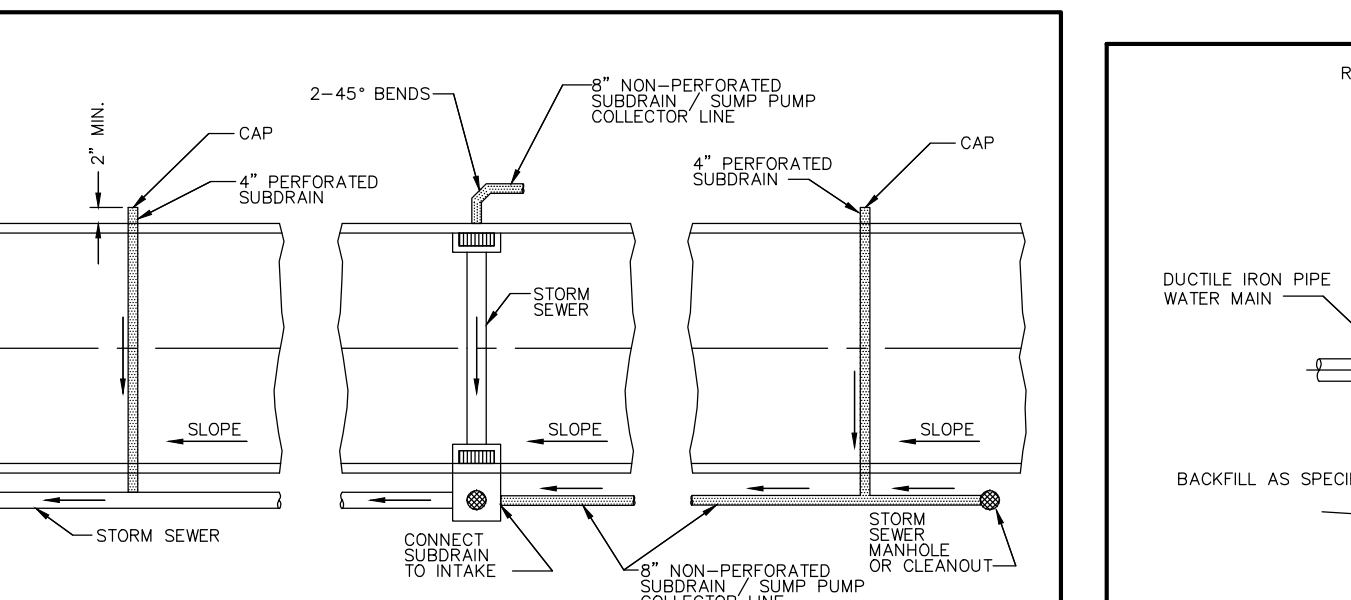
1 NW VENTURE DR TYPICAL CROSS SECTION
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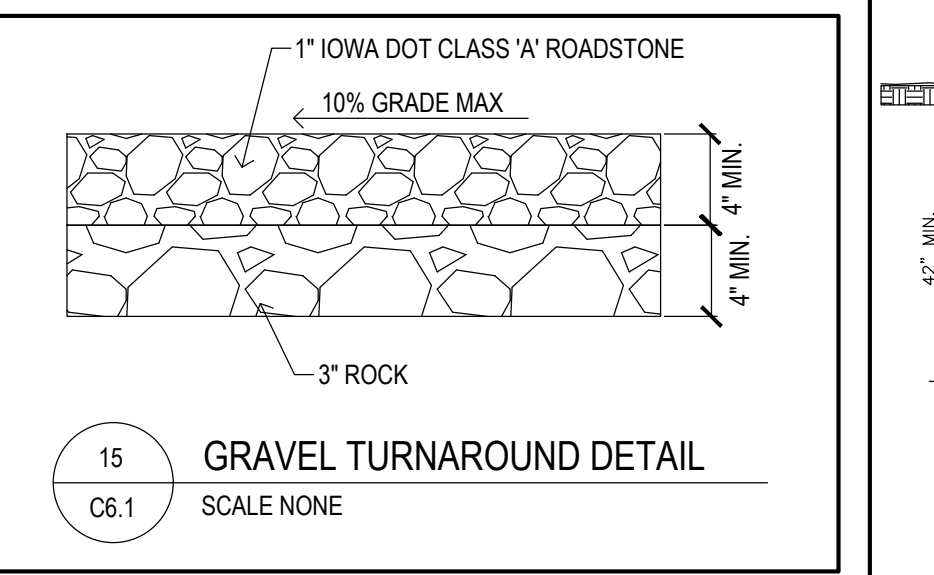
2 NW VENTURE DR TYPICAL CROSS SECTION WITH MEDIAN
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C6.1



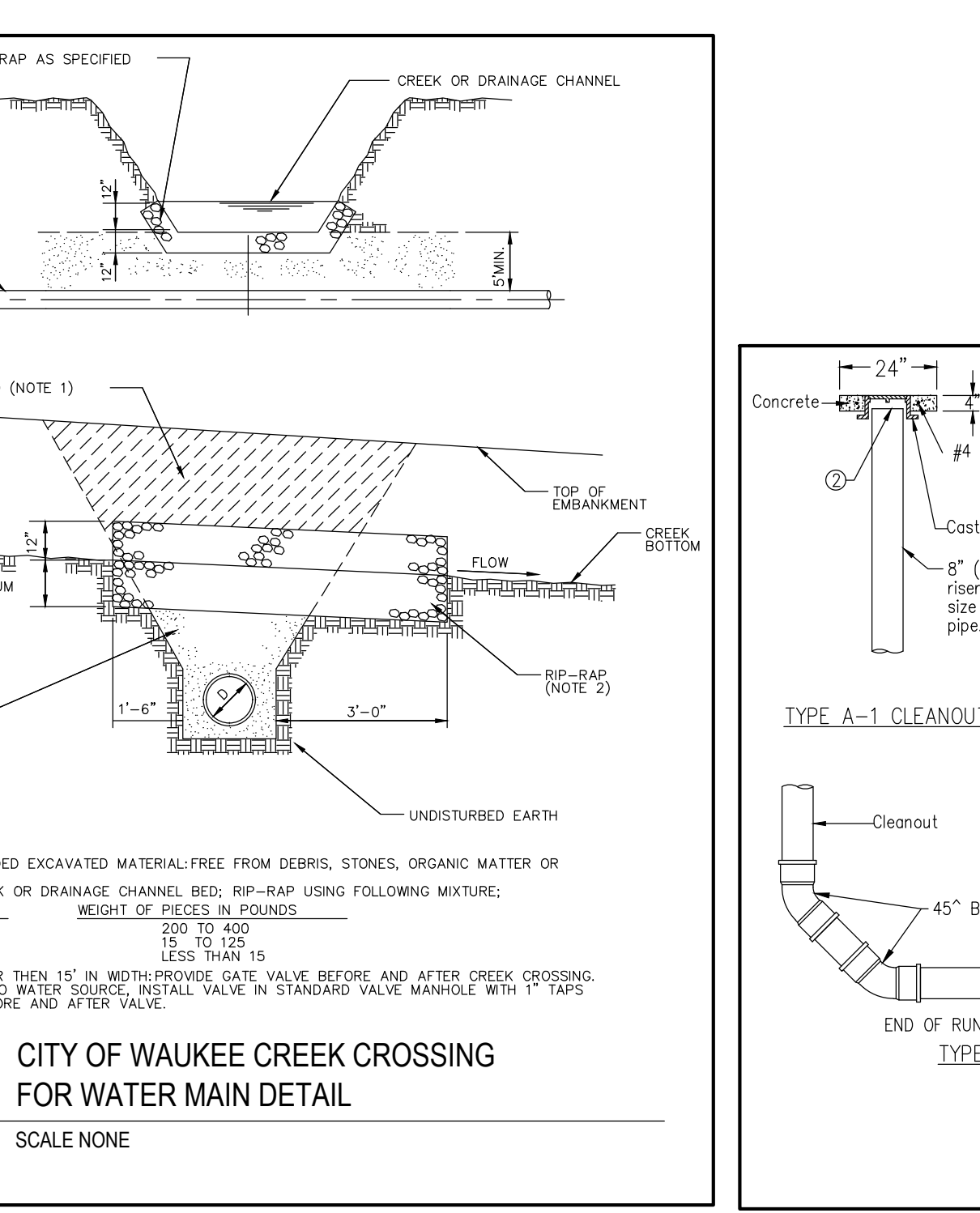
14 TEMPORARY DIVERSION DITCH DETAIL
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C6.1



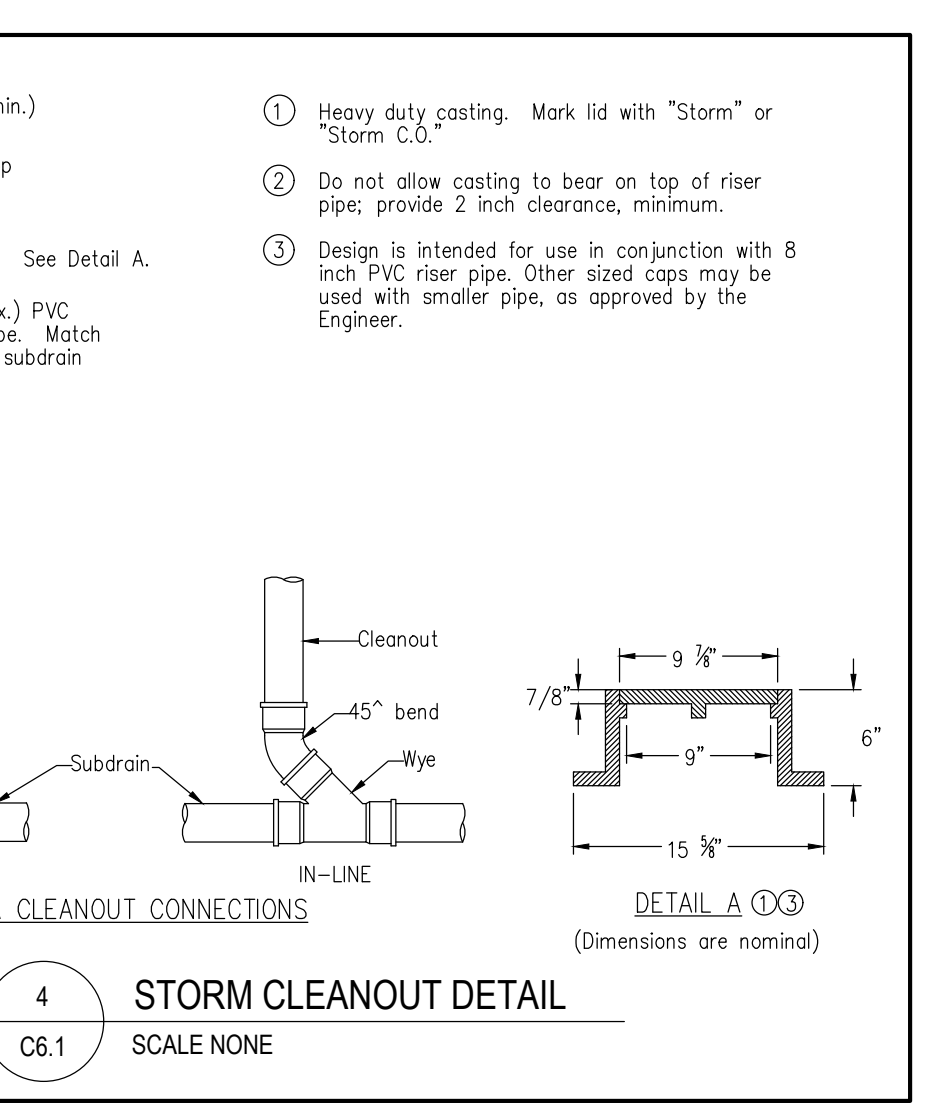
11 CITY OF WAUKEE STANDARD SUBDRAIN DETAIL
SCALE NONE
C6.1



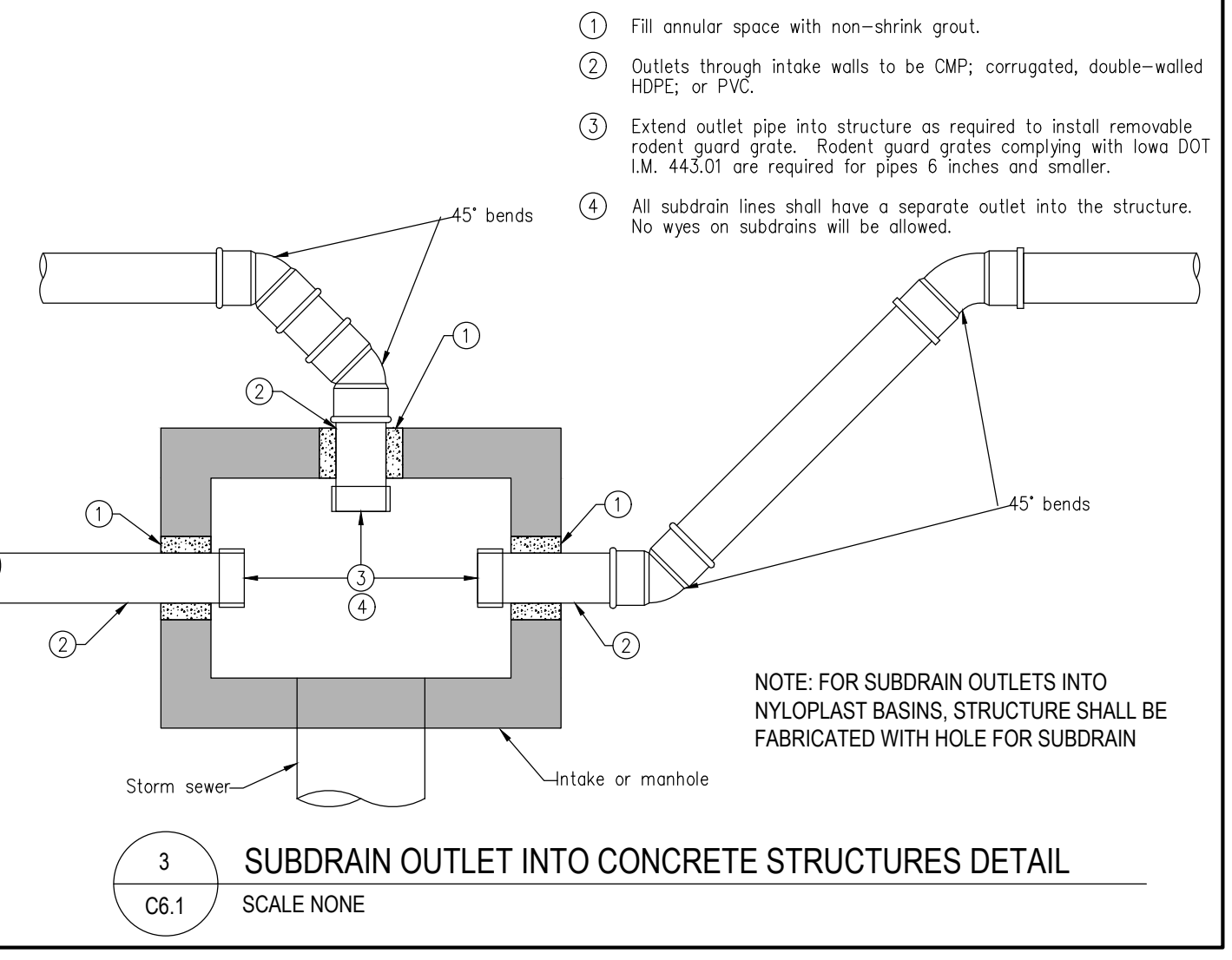
15 GRAVEL TURNAROUND DETAIL
SCALE NONE
C6.1



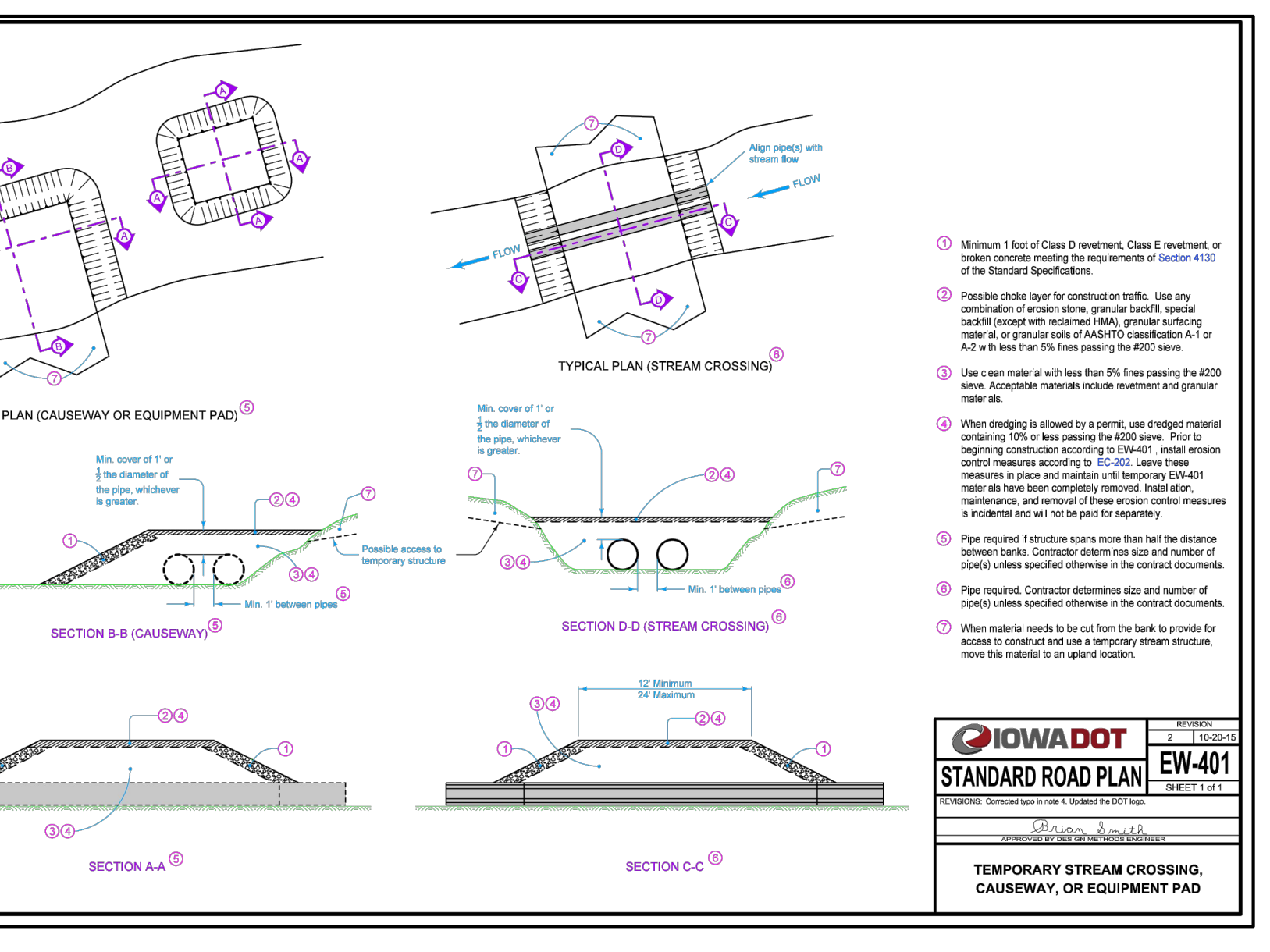
10 CITY OF WAUKEE CREEK CROSSING FOR WATER MAIN DETAIL
SCALE NONE
C6.1



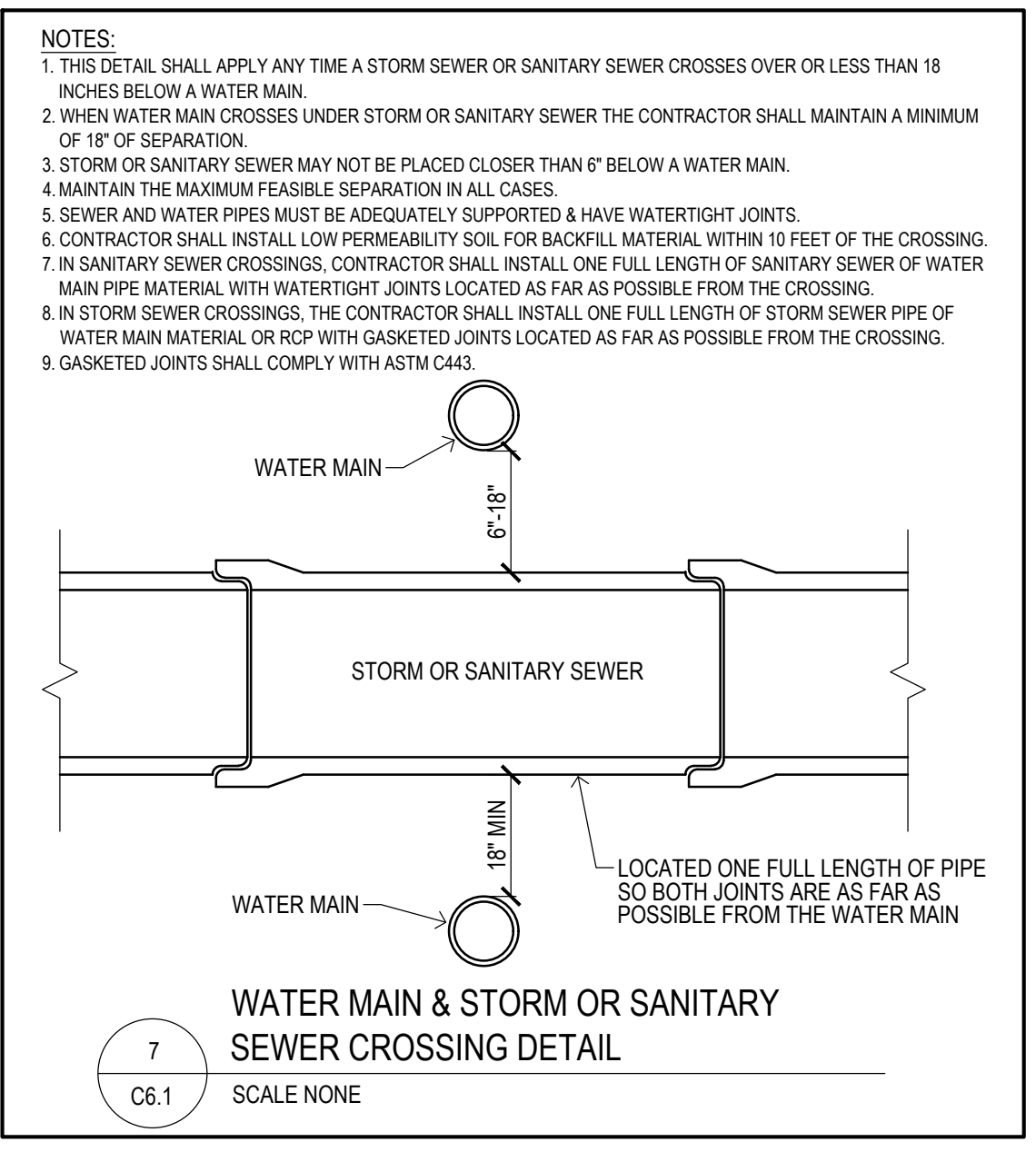
4 STORM CLEANOUT DETAIL
SCALE NONE
C6.1



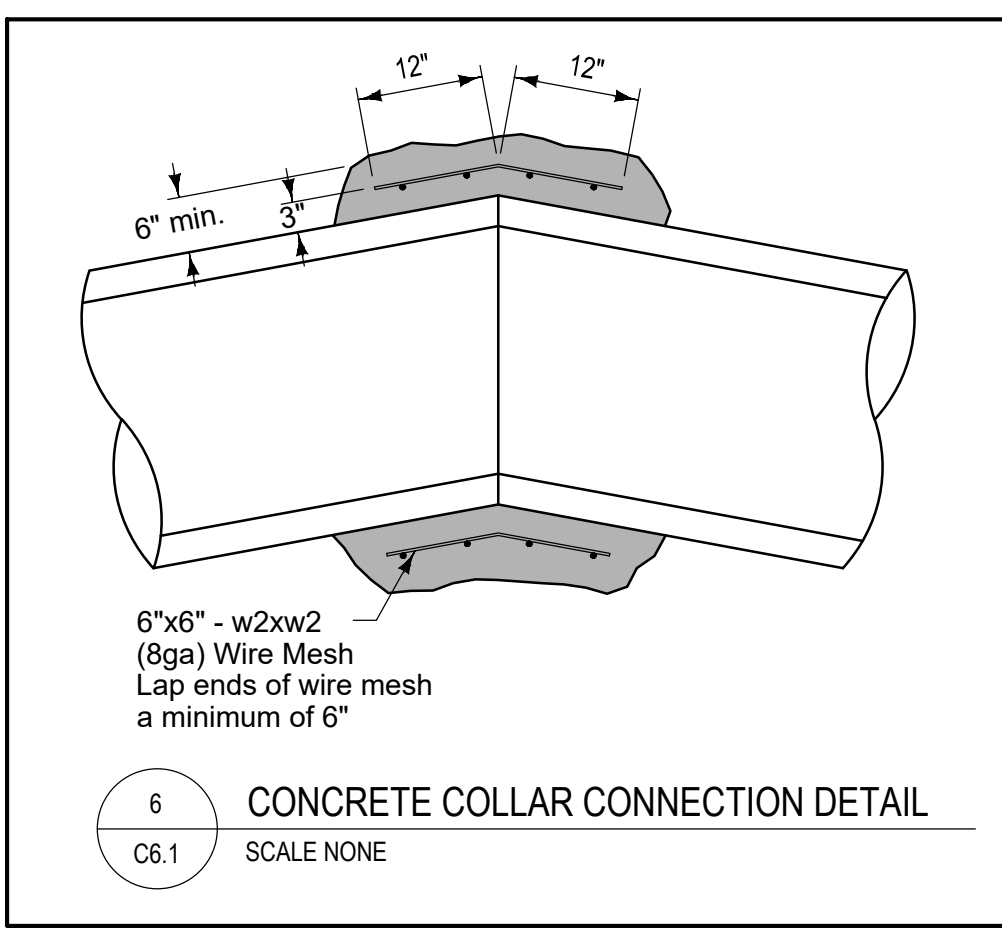
3 SUBDRAIN OUTLET INTO CONCRETE STRUCTURES DETAIL
SCALE NONE
C6.1



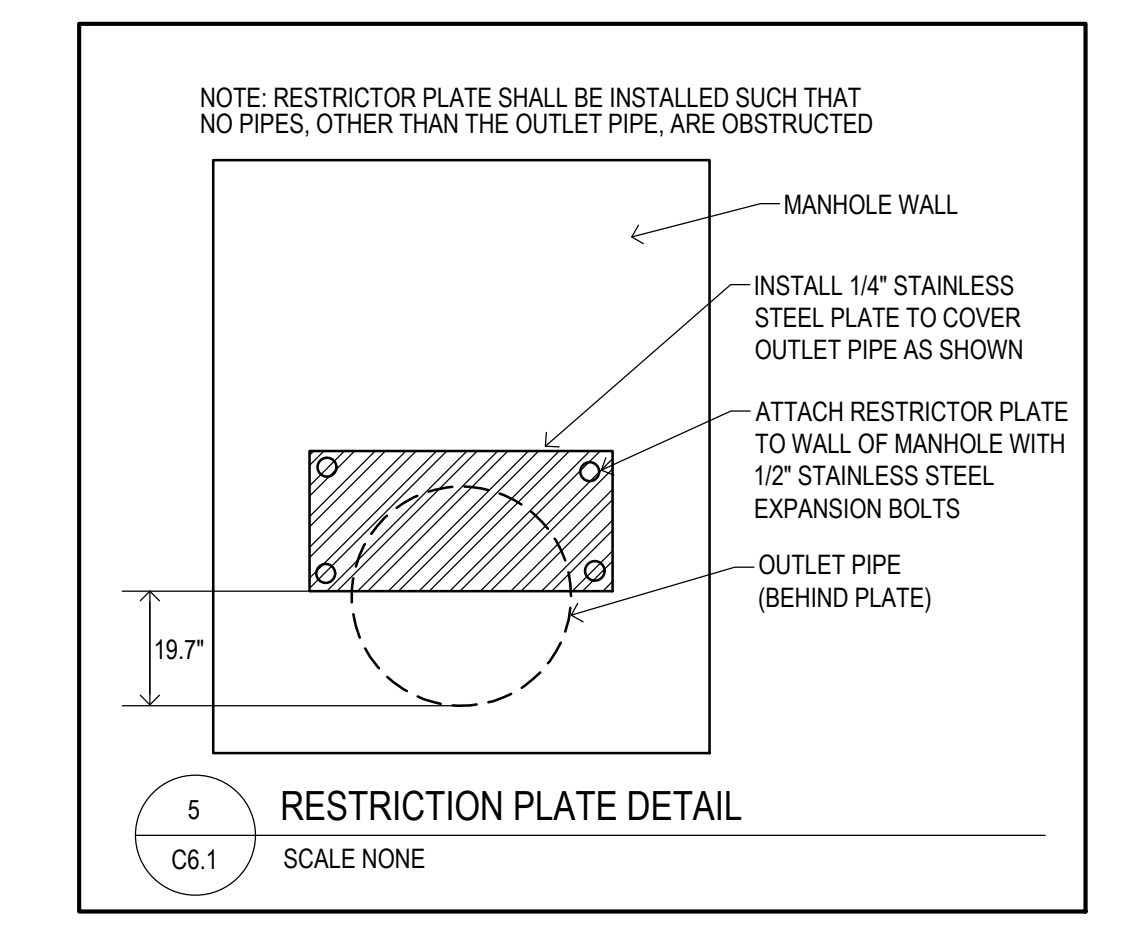
7 TEMPORARY STREAM CROSSING, CAUSEWAY, OR EQUIPMENT PAD
SCALE NONE
C6.1



7 WATER MAIN & STORM OR SANITARY SEWER CROSSING DETAIL
SCALE NONE
C6.1



6 CONCRETE COLLAR CONNECTION DETAIL
SCALE NONE
C6.1



5 RESTRICTION PLATE DETAIL
SCALE NONE
C6.1

MILAND PROJECTS 20181003000 PLAT 10WGS/C6 DETAILS.DWG 7/17/2020 9:36:50 AM

REFERENCE NUMBER:	070600
DRAWN BY:	JMR
CHECKED BY:	JEJ
REVISION DATE:	3/12/19 1ST SUBMITTAL 4/8/19 2ND SUBMITTAL 4/30/19 3RD SUBMITTAL 5/1/19 4TH SUBMITTAL 6/13/19 5TH SUBMITTAL 6/21/19 FINAL PLANS 9/9/19 REV ALIGNMENT 9/23/19 REV PER CITY 7/17/20 AS-BUILTS
PROJECT NUMBER:	180300
SHEET NUMBER:	C6.1

EROSION CONTROL NOTES:

- SEE SUPPLEMENTAL DETAIL STORM WATER POLLUTION PLAN NARRATIVE FOR ALL EROSION CONTROL MEASURES. ADDITIONAL DETAILS AND NOTE. ADDITIONAL NOTES AND MEASURES IN NARRATIVE SHALL BE CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE ORIGINAL BID.
- SWPPP PLAN AND NARRATIVE ARE CONSIDERED A LIVING DOCUMENT AND WILL NEED PERIODIC UPDATES AND ADJUSTMENTS AS NECESSARY DEPENDING ON SITE CONDITIONS TO ASSURE COMPLIANCE WITH NPDES GENERAL PERMIT NO. 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UPDATE THE SWPPP AND IMPLEMENT ANY AND ALL MEASURES NECESSARY TO COMPLY WITH SAID PERMIT NO. 2.
- INSTALL PERIMETER SILT FENCE AS SHOWN ON PLANS PRIOR TO CONSTRUCTION.
- INSTALL INTAKE PROTECTION WITH SILT FENCE IMMEDIATELY AFTER STORM SEWER CONSTRUCTION.
- INSTALL FINISHED PAVING INLET PROTECTION IMMEDIATELY AFTER PAVING IS COMPLETED AROUND INTAKE.
- OTHER EROSION CONTROL TYPES MAY NOT BE SUBSTITUTED FOR SILT FENCE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A CONCRETE WASHOUT IN ACCORDANCE WITH NPDES GENERAL PERMIT NO. 2 DURING ALL CONCRETE WORK. CONCRETE WASHOUT SHALL MEET SUDAS SPEC 11050.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING TEMPORARY RESTROOM FACILITIES. SANITARY WASTE SHALL BE DISPOSED OF PER ALL FEDERAL, STATE AND LOCAL REGULATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.
- THIS SITE WILL HAVE SAWCUTTING OR GRINDING. CONTRACTOR SHALL PROTECT STORM SEWERS AND DRAINAGE WAYS FROM SLURRY FROM CONCRETE OPERATION FROM DISCHARGING OFFSITE.
- CONTRACTOR SHALL PROVIDE APPROPRIATE CONTROLS TO PREVENT DISCHARGES FROM ANY AND ALL DEWATERING ACTIVITIES.

EROSION CONTROL REMOVAL NOTES:

- AFTER FINAL STABILIZATION HAS OCCURRED, AS DEFINED IN NPDES GENERAL PERMIT NO. 2, CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY EROSION CONTROL DEVICES INCLUDING, BUT NOT LIMITED TO: SILT FENCE, INLET PROTECTION, AND TEMPORARY STANDPIPES.

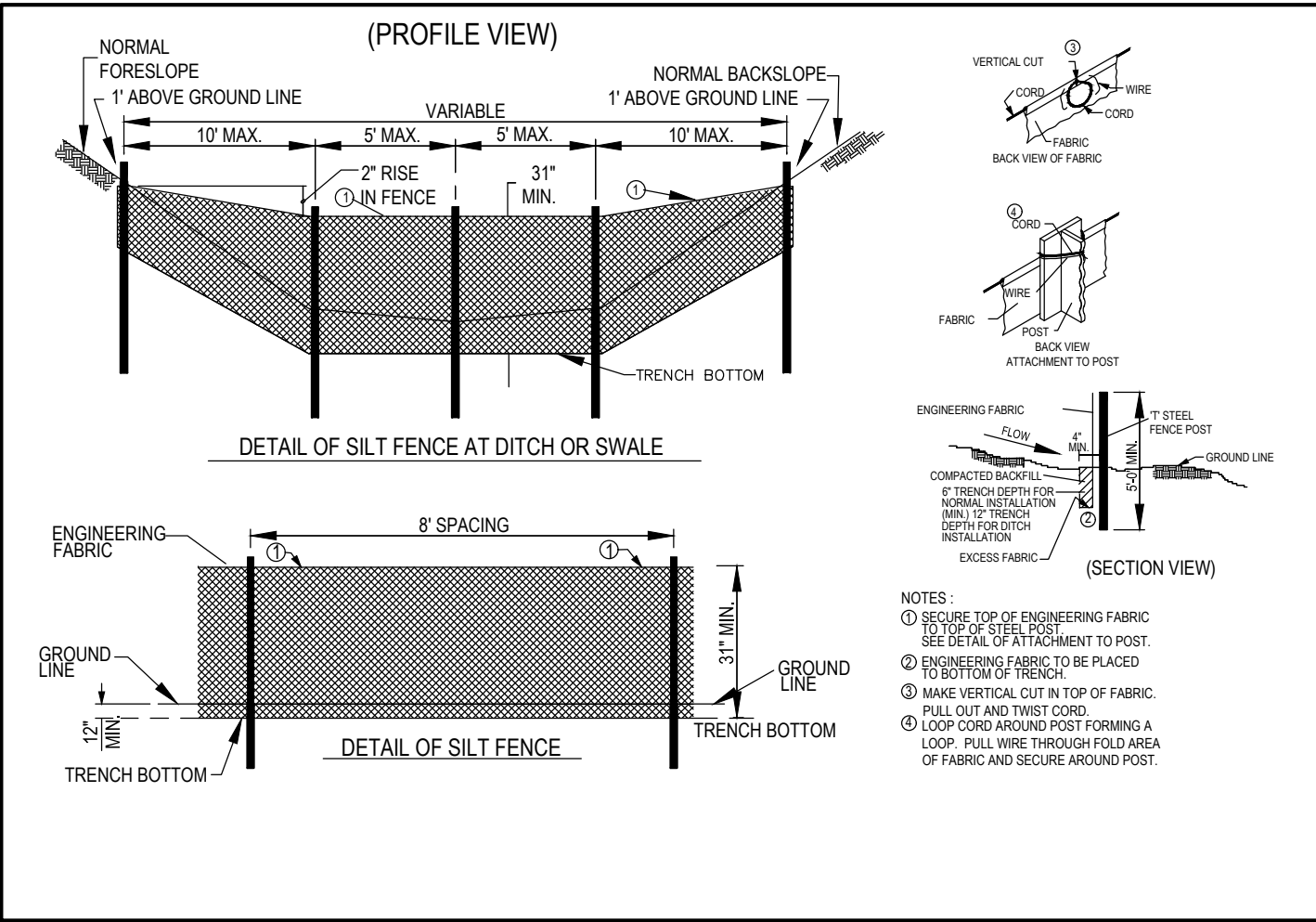
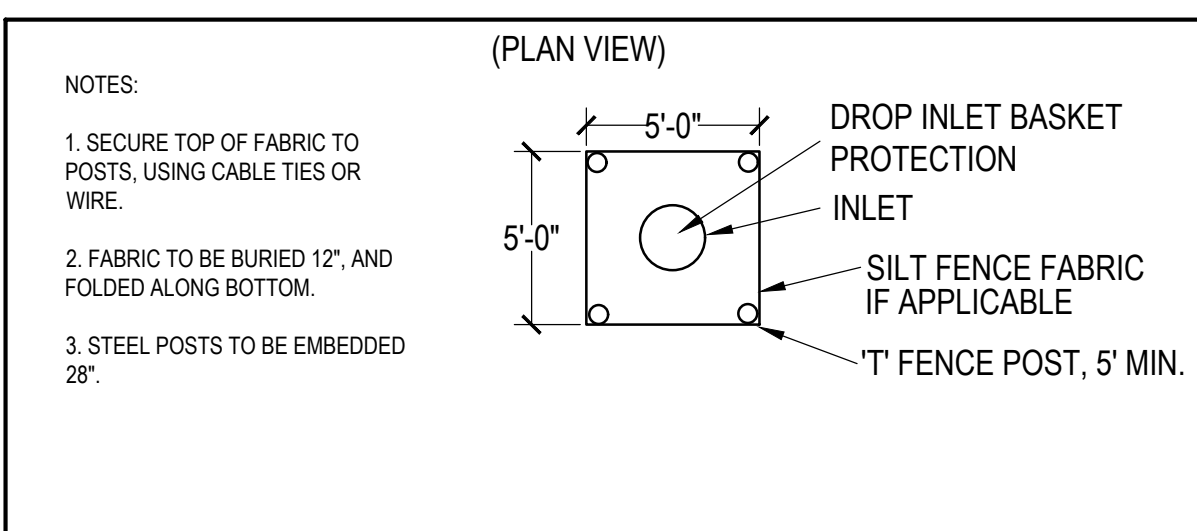
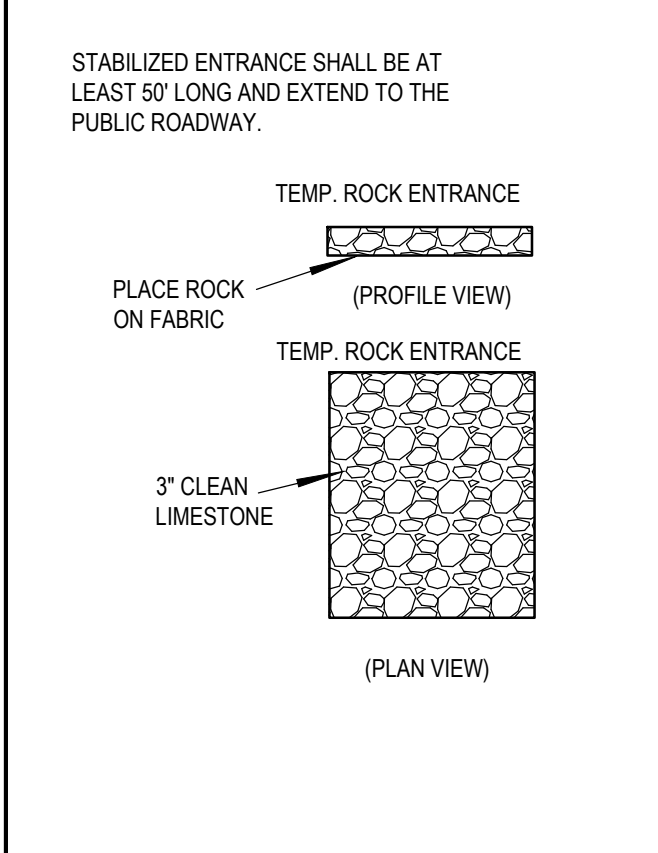
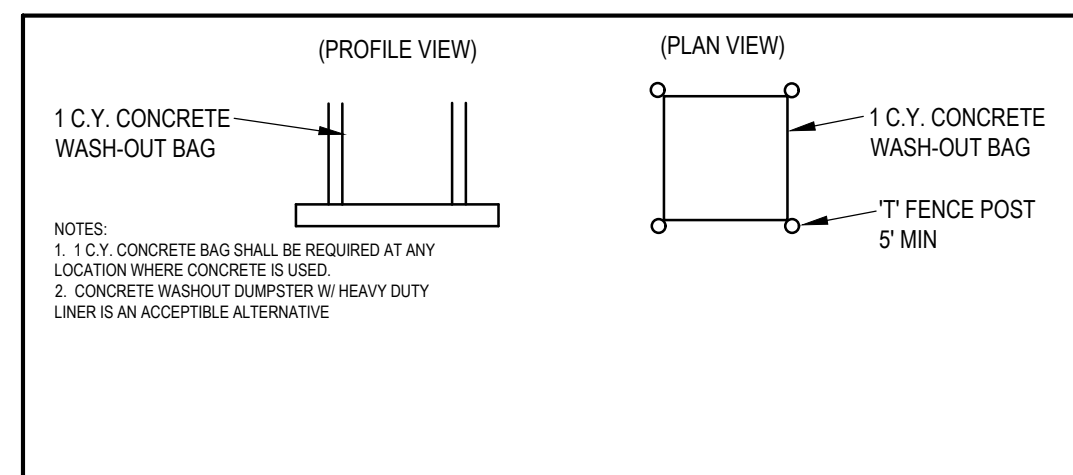
STABILIZATION NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR STABILIZING THE SITE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY SEEDING IN ORDER TO COMPLY WITH NPDES GENERAL PERMIT NO. 2 OR CITY OF WAUKEE REQUIREMENTS. TEMPORARY SEED SHALL MEET SUDAS TYPE 4 SEED MIXTURE.

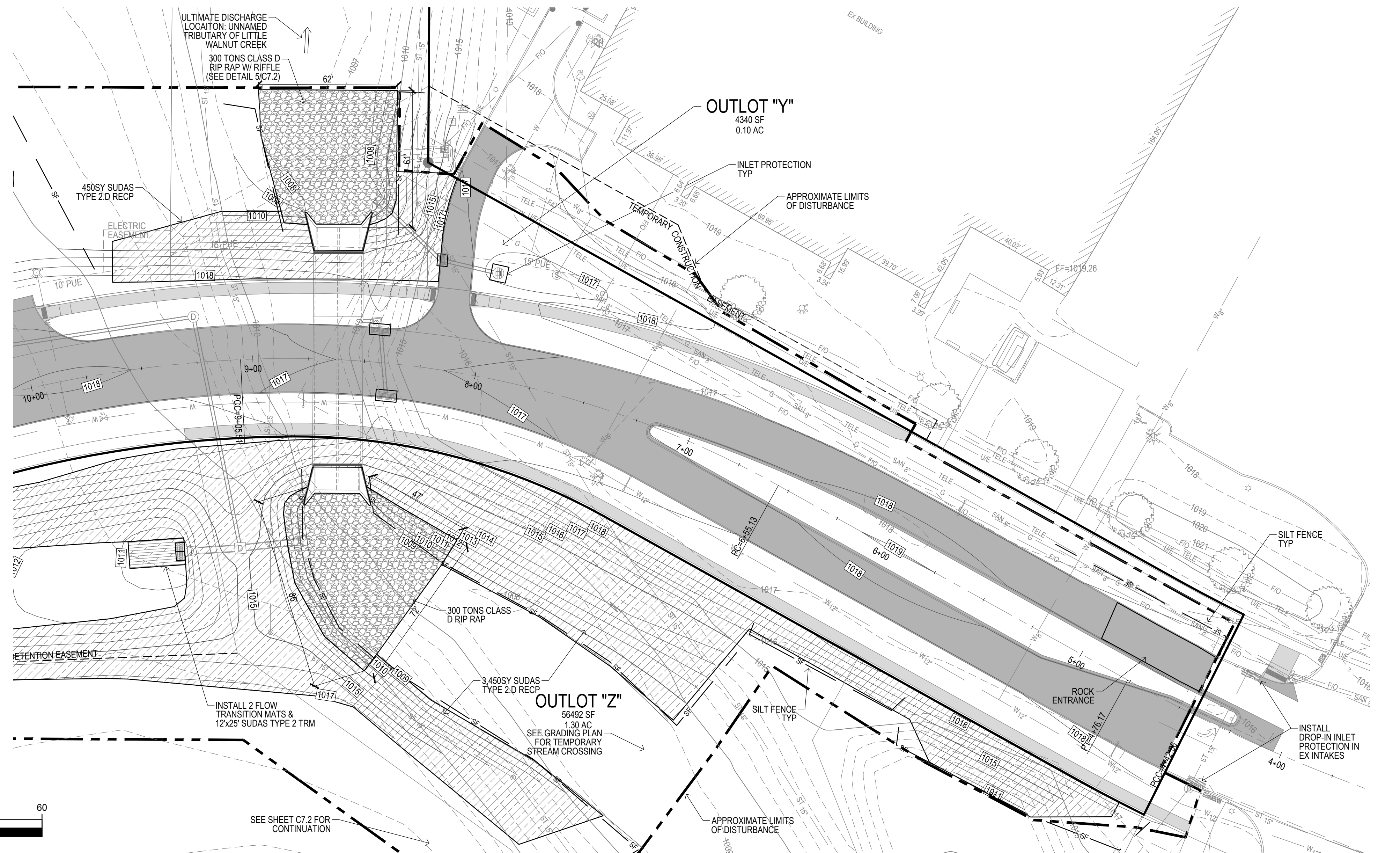
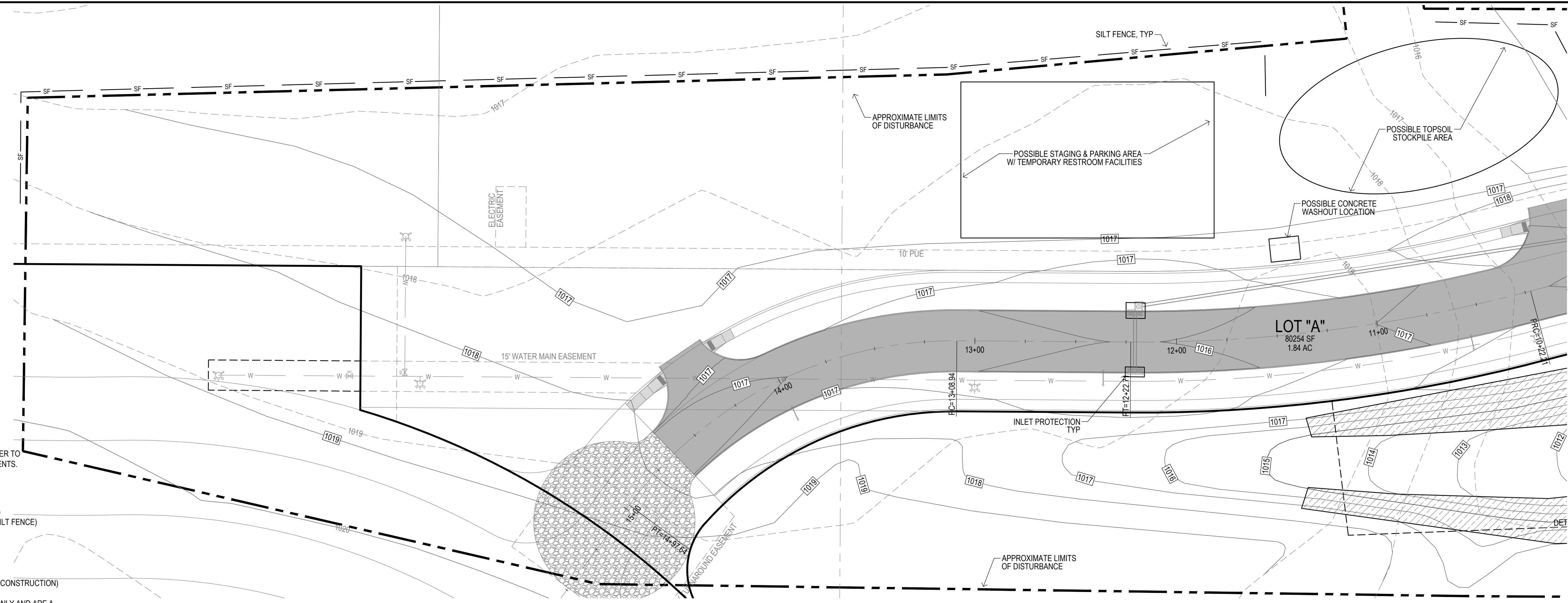
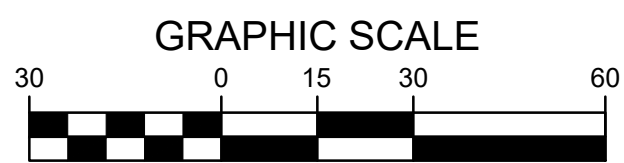
EROSION CONTROL QUANTITIES:

DISTURBED AREA	9.0 ACRES (NPDES PERMIT IS REQUIRED)
SILT FENCE	3,100 LF (EXCLUDES REQ'D STOCKPILE SILT FENCE)
INLET PROTECTION	11 EA
CLASS 'D' RIP RAP	600 TONS
TYPE 2 TRM	35 SY
TYPE 2 D RECP	3,900 SF
FLOW TRANSITION MATS	2 EA
PERMANENT SEEDING (SUDAS TYPE 1)	8.0 ACRES (VERIFY LIMITS WITH FUTURE CONSTRUCTION)
TEMPORARY SEEDING (SUDAS TYPE 4)	NONE INTENDED

*NOTE: EROSION CONTROL QUANTITIES ARE PROVIDED FOR CITY REQUIREMENT ONLY AND ARE A ROUGH ESTIMATE. CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES AS NECESSARY TO MEET SITE CONDITIONS.



UTILITY NOTE:
THE LOCATION OF THE UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS AND ARE APPROXIMATE LOCATIONS. THE EXACT LOCATIONS OF ALL UTILITIES MUST BE ASCERTAINED IN THE FIELD. IT SHALL BE THE DUTY OF THE CONTRACTOR TO DETERMINE WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



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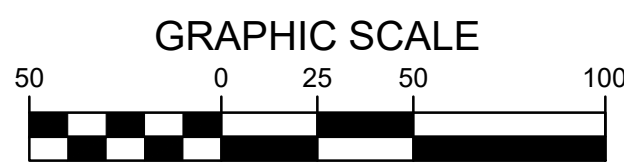
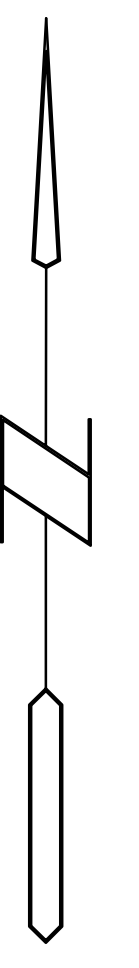
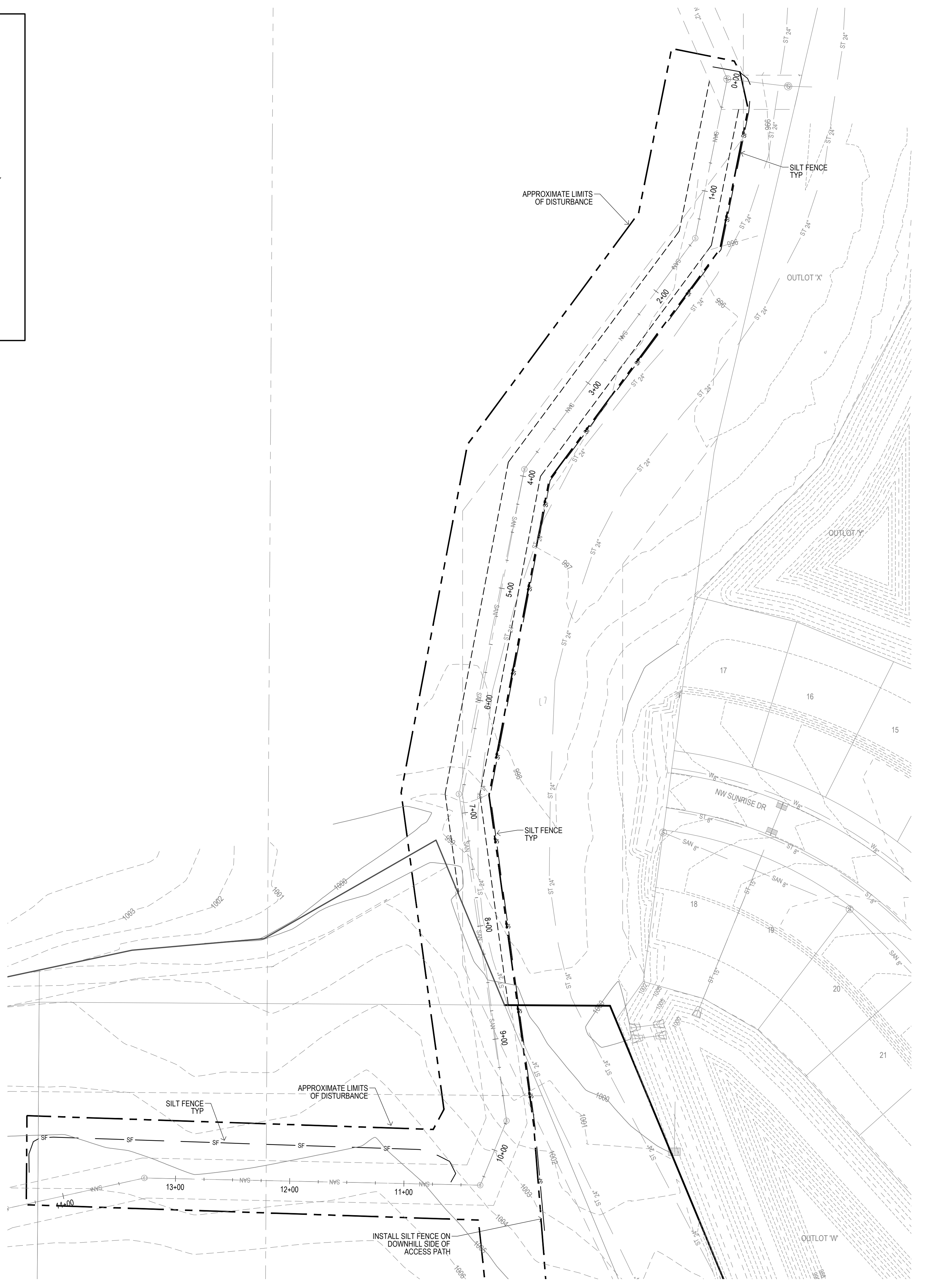
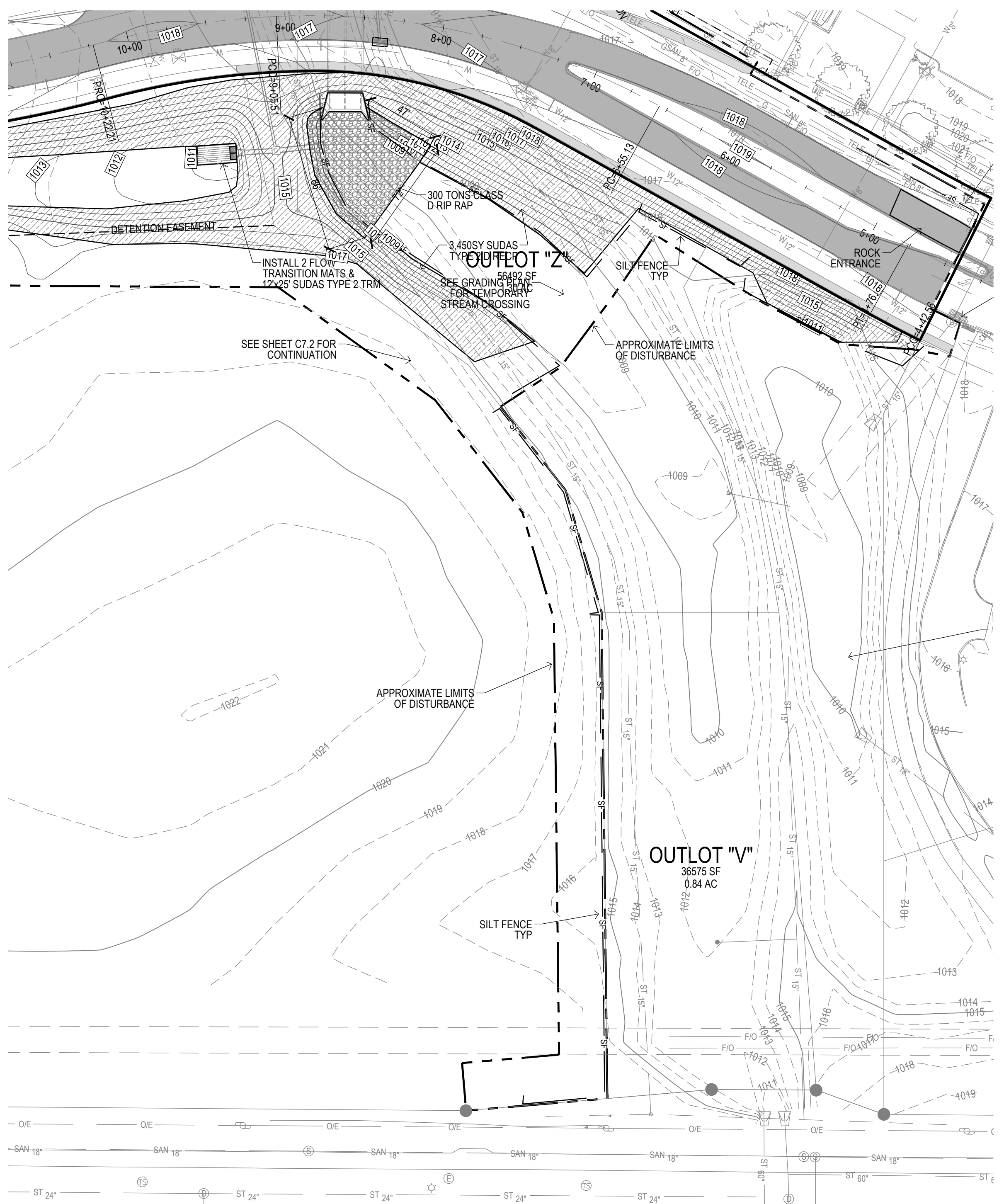
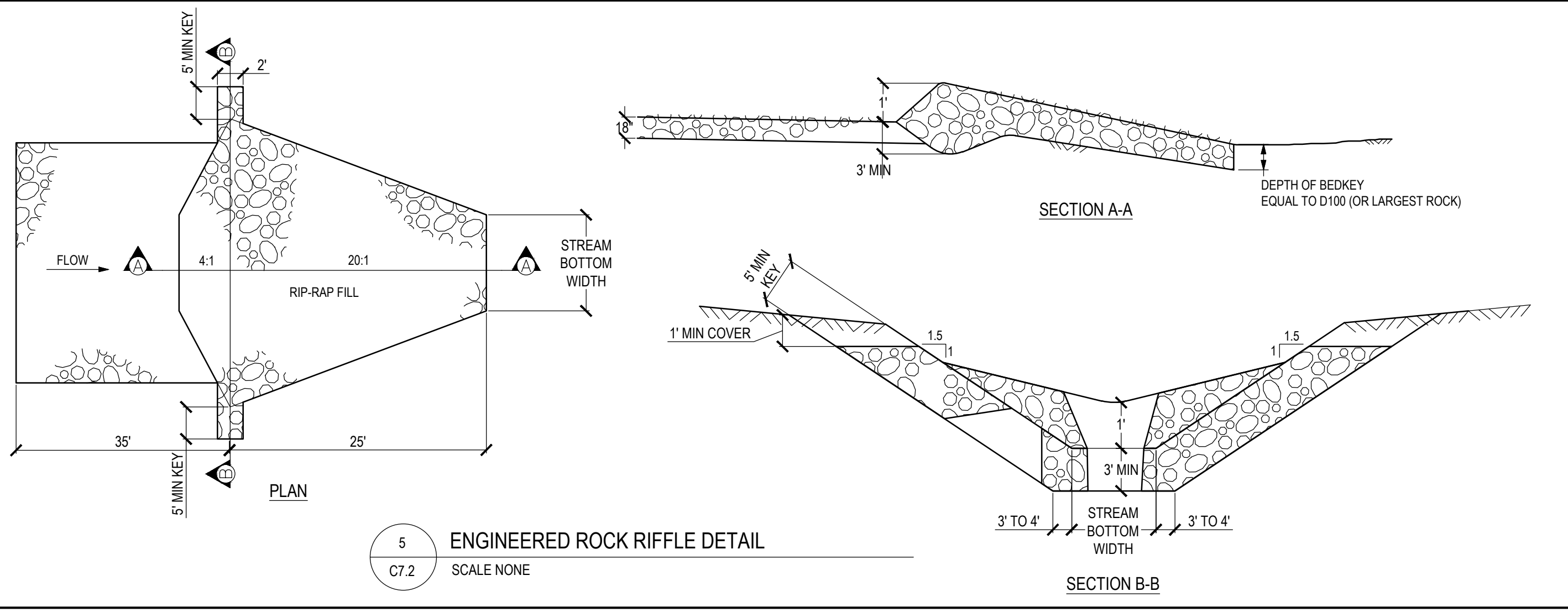


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Civil Engineering & Land Surveying
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**THE COMMONS AT GREENWAY PARK PLAT 1
WAUKEE, IOWA**

REFERENCE NUMBER:	070600
DRAWN BY:	JMR
CHECKED BY:	JEJ
REVISION DATE:	3/12/19 1ST SUBMITTAL 4/8/19 2ND SUBMITTAL 4/30/19 3RD SUBMITTAL 5/14/19 4TH SUBMITTAL 6/13/19 5TH SUBMITTAL 6/21/19 FINAL PLANS 9/9/19 REV ALIGNMENT 9/23/19 REV PER CITY 7/17/20 AS-BUILTS
PROJECT NUMBER:	1803300
SHEET NUMBER:	C7.1

SWPPP



UTILITY NOTE:
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7/17/2020 9:39:06 AM M:\LAND PROJECTS 2018\180300 PLAT 1\DWG\C7 SWPPP.DWG

REFERENCE NUMBER: 070600
DRAWN BY: JMR
CHECKED BY: JEJ
REVISION DATE: 3/12/19 1ST SUBMITTAL 4/8/19 2ND SUBMITTAL 4/30/19 3RD SUBMITTAL 5/14/19 4TH SUBMITTAL 6/13/19 5TH SUBMITTAL 6/21/19 FINAL PLANS 9/9/19 REV ALIGNMENT 9/23/19 REV PER CITY 7/17/20 AS-BUILTS
PROJECT NUMBER: 180300
SHEET NUMBER: C7.2