

RECORD DRAWING

THESE DRAWINGS HAVE BEEN REVISED TO SERVE AS A GENERAL RECORD OF CONSTRUCTION, AND ARE BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE INFORMATION PROVIDED, AND DOES NOT GUARANTEE AND/OR ASSUME RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE RESULTING RECORD DRAWINGS.

RECORD DRAWINGS PRODUCED ON: 11/27/2019

KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

WAUKEE, IOWA

OWNER/APPLICANT

JERRY'S HOMES INC.
10430 NEW YORK AVE., SUITE C
URBANDALE, IOWA 50322
(515) 727-0356
ATTN: JAY COWAN

ENGINEER

McCLURE ENGINEERING
1360 NW 121ST STREET
CLIVE, IOWA 50325
(515) 964-1229
ATTN: JAKE BECKER
jbecker@mcclures.com

DEVELOPMENT SCHEDULE

GRADING: SPRING 2019
PRIVATE DETENTION & UTILITIES: SPRING 2019 - SUMMER 2019
PAVING: SUMMER 2019

LAND COVER

IMPERVIOUS AREA: 88,091 SF (8.73%)
OPEN AREA: 921,452 SF (91.27%)
TOTAL AREA: 1,009,543 SF (100.0%)

ZONING

R-2 (ONE & TWO-FAMILY RESIDENTIAL DISTRICT)

BULK REGULATIONS

- MINIMUM LOT AREA: 8,000 SF
- MINIMUM FLOOR AREA: 950 SF FOR SINGLE STORY
1,250 SF FOR TWO-STORY
(MIN 600 SF FIRST FLOOR)
350 SF PER LEVEL FOR SPLIT LEVEL
950 SF PER STORY FOR SPLIT FOYER
- MINIMUM LOT WIDTH: 65 FT
- MINIMUM FRONT YARD: 30 FT
- MINIMUM SIDE YARDS: TOTAL OF 15 FT, MIN. OF 7 FT PER SIDE
- MINIMUM REAR YARD: 30 FT
- MAXIMUM HEIGHT: 40 FT FOR PRINCIPAL BUILDING
14 FT FOR ACCESSORY BUILDINGS
3 STORIES FOR PRINCIPAL BUILDINGS
1 STORY FOR ACCESSORY BUILDINGS
- MAXIMUM STORIES: 3 STORIES FOR PRINCIPAL BUILDINGS
1 STORY FOR ACCESSORY BUILDINGS

PRINCIPAL USES

PRINCIPAL PERMITTED USES ARE FOR SINGLE FAMILY RESIDENTIAL DEVELOPMENT.

UTILITIES

WATER: CITY OF WAUKEE
SEWER: CITY OF WAUKEE
NATURAL GAS: CITY OF WAUKEE
ELECTRIC: MIDAMERICAN ENERGY COMPANY
PHONE/CABLE: CENTURYLINK LOCAL NETWORK
MEDIACOM COMMUNICATIONS CORP

BENCHMARK

BM #100 BURN BOLT ON HYDRANT, FIRST HYDRANT ON SOUTH SIDE OF TALLGRASS.
ELEV: 1025.61

SECTION, TOWNSHIP, RANGE

004 - 07B - 02E

PARKLAND DEDICATION

REQUIRED: (# OF LOTS * 3' * 6' / 1000) = (62 * 3' * 6' / 1000) = 1.116 AC
THIS PARKLAND WAS DEDICATED AS PART OF THE STONE PRAIRIE DEVELOPMENT.

PAVEMENT

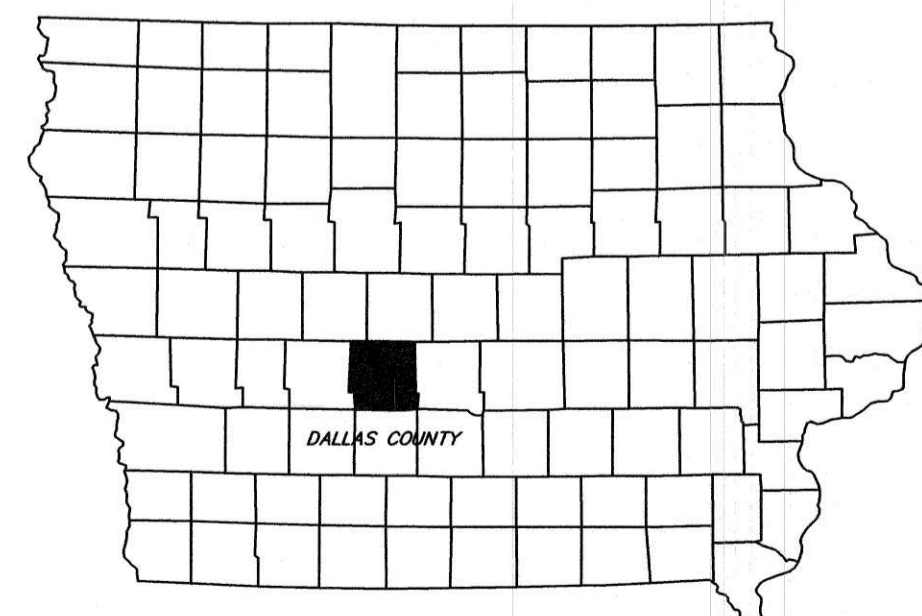
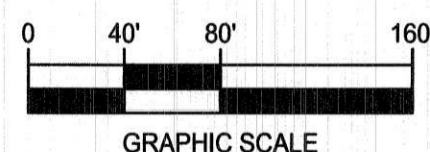
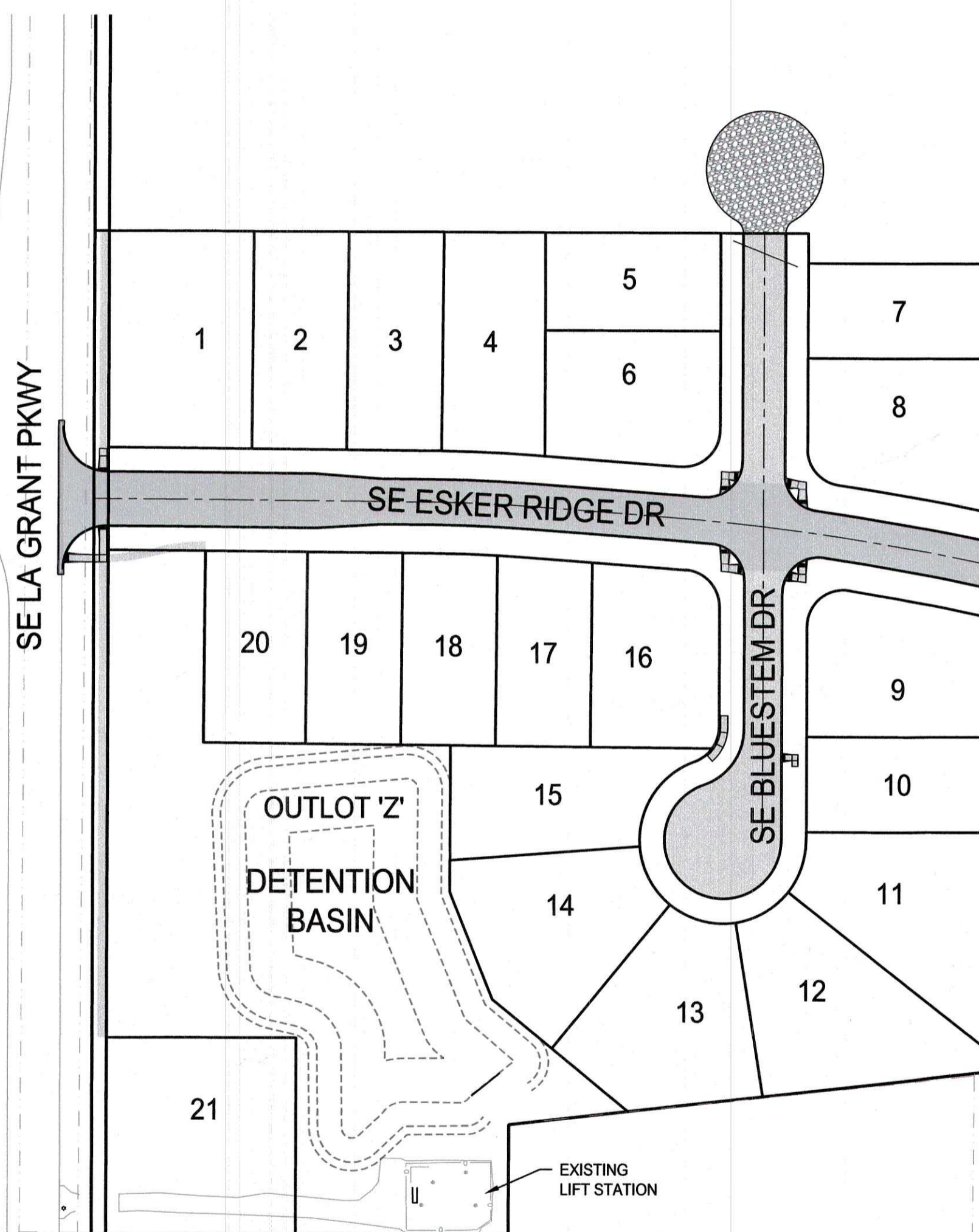
SE BLUESTEM DRIVE: 7" NON-REINFORCED PCC
SE ESKER RIDGE DRIVE: 8" PCC WITH CD BASKETS

LANDSCAPING

REQUIRED: 1 OVERSTORY, 2 EVERGREENS 2 ORNAMENTAL PER 50 LF OF BUFFER
1440 LF BUFFER = 29 OVERSTORY, 58 ORNAMENTAL, 58 EVERGREEN
PROVIDED: 29 OVERSTORY, 58 ORNAMENTAL, 58 EVERGREEN



VICINITY MAP - CITY OF WAUKEE
NOT TO SCALE



IOWA STATE MAP
NO SCALE

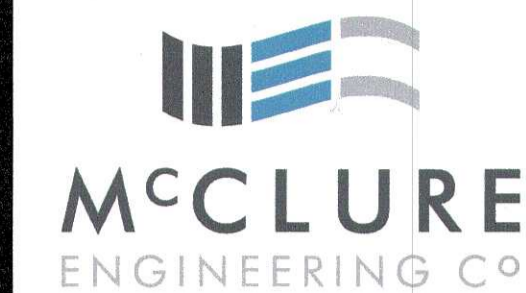
ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE IOWA STATEWIDE URBAN DESIGN STANDARDS.



1-800-292-8989
www.iowaonecall.com



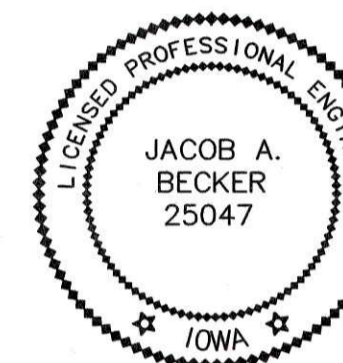
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3	GN-03	EXISTING CONDITIONS
4	GN-04	GENERAL LAYOUT AND DIMENSIONS
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6	GR-02	SEDIMENT & EROSION CONTROL SHEET
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24	DT-04	DETAILS
25	DT-05	DETAILS



building strong communities.

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515-964-1229
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NOTICE:
McClure Engineering Company waives any and all responsibility and liability for problems which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for problems which arise from failure to obtain and/or follow the engineers guidance with respect to any errors, omissions, inconsistencies, ambiguities, or conflicts which are alleged.



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.

JACOB A. BECKER, PE NO. 25047
DATE: 1/13/2020

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2021

PAGES OR SHEETS COVERED BY THIS SEAL:

SHEETS 1 - 25
"RECORD DRAWINGS"

KETTLESTONE RIDGE PLAT 4
CONSTRUCTION DRAWINGS

Waukee, Iowa
2211013-03
April 27, 2018

REVISIONS
12.3.18
12.18.18
12.28.18
1.15.19
1.23.19
3.20.19

ENGINEER: J. BECKER
DRAWN BY: J. BECKER
CHECKED BY: C. SMITH
FIELD BOOK NO.:

DRAWING NO. SHEET NO.

GN-01 1 / 25

McCLURE ENGINEERING COMPANY

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCEPTANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND IN ACCORDANCE OF THE 2018 STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS).

2. AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENT AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE WAUKEE ENGINEERING DEPARTMENT AND MCCLURE ENGINEERING.

3. ALL CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND WITH SUDAS CONSTRUCTION STANDARDS.

4. THE CONTRACTOR IS RESPONSIBLE FOR SETTING UP A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT AT LEAST ONE WEEK PRIOR TO THE START OF CONSTRUCTION.

5. THE CONTRACTOR SHALL VERIFY THE LOCATION AND PROTECT ALL UTILITIES AND STRUCTURES. DAMAGE TO UTILITIES AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE CITY AND THE OWNER.

6. AS-BUILT DRAWINGS SHALL BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT INCLUDING ALL UTILITIES AND AS-BUILT GRADES FOR DRAINAGE SWALES, OVERFLOWS, ACCESSIBLE RAMPS, AND DETENTION FACILITIES. THE CONTRACTOR SHALL PROVIDE INFORMATION TO THE DESIGN ENGINEER FOR INCLUSION ON THE RECORD AS-BUILT DRAWINGS.

7. ALL FIELD TILES ENCOUNTERED SHALL BE REPAIRED AND CONNECTED TO STORM SEWERS WHERE POSSIBLE. LOCATIONS SHALL BE PROVIDED TO THE ENGINEER FOR NOTATION ON AS-BUILT DRAWINGS.

8. ALL DIMENSIONS TO BACK-OF-CURB UNLESS NOTED OTHERWISE. ALL DIMENSIONS TO BE FIELD VERIFIED.

9. ALL ACCESSIBLE RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG), PROWAG, AND IOWA CODE. ACCESSIBLE RAMPS SHALL HAVE BRICK-RED DETECTABLE WARNING PANELS.

10. ALL PEDESTRIAN SLOPES SHALL CONFORM WITH PROWAG AND ADAAG STANDARDS.

11. STAKING BY CERTIFIED ENGINEER OR LAND SURVEYOR, VERIFICATION BY CONTRACTOR, AND OBSERVANCE BY WAUKEE ENGINEERING DEPARTMENT AT 515-978-7920 SHALL BE DONE PRIOR TO PLACEMENT OF ANY CONCRETE RAMPS.

12. CONTRACTOR SHALL PROVIDE SUBMITTALS OF ALL PROPOSED CONSTRUCTION MATERIALS PRIOR TO CONSTRUCTION.

13. ANY PROPOSED CHANGES TO PLAN SET DURING CONSTRUCTION ARE TO RECEIVE WRITTEN APPROVAL FROM THE CITY OF WAUKEE ENGINEERING DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGES THAT HAVE BEEN MADE THAT HAVE NOT RECEIVED WRITTEN PERMISSION.

14. ALL PROPOSED PEDESTRIAN CROSSINGS SHALL BE INSTALLED AS PART OF THE PLAT IMPROVEMENTS.

15. CONTRACTOR IS TO PROTECT EXISTING PAVEMENT UNLESS DESIGNATED FOR REMOVAL. DAMAGED PAVEMENT SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE AND SHALL BE IN COMPLIANCE WITH WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.

16. CONTRACTOR IS TO PROVIDE THE CITY OF WAUKEE 48-HOUR NOTICE PRIOR TO BEGINNING CONSTRUCTION AND BEFORE ANY PLANNED WEEKEND OR HOLIDAY WORK.

17. THIS SITE WILL HAVE SAWCUTTING OR CONCRETE GRINDING SO PROTECTION OF STORM SEWERS AND DRAINAGE WAYS WILL NEED TO BE PROTECTED FROM SLURRY FROM THE CONCRETE OPERATION TO DISCHARGE OFFSITE.

GRADING NOTES:

1. ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.

2. ALL DIMENSIONS TO BACK-OF-CURB UNLESS NOTED OTHERWISE. ALL DIMENSIONS TO BE FIELD VERIFIED.

3. CURB INTAKE RIM ELEVATIONS = PAVING TOP OF CURB ELEVATIONS.

4. CONTRACTOR TO ADJUST ALL TOP OF CASTING ELEVATIONS WITHIN THE PROJECT LIMITS TO THE FINAL ELEVATIONS SHOWN ON THE PLANS.

5. ALL SPOT ELEVATIONS ARE TO THE TOP OF FINISHED GRADE, UNLESS OTHERWISE NOTED.

6. ALL SLOPES IN UNPAVED AREAS SHALL BE GRADED TO DRAIN AT 2% MINIMUM.

7. THE GENERAL PERMIT NO. 2 HOLDER SHALL BE RESPONSIBLE FOR VERIFYING THAT TOPSOIL PRESERVATION REQUIREMENTS HAVE BEEN MET PRIOR TO ISSUANCE OF A CERTIFICATE OF COMPLETION.

8. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE CITY OF WAUKEE WITH A CERTIFIED GRADING PLAN PRIOR TO THE ACCEPTANCE OF SUBDIVISION IMPROVEMENTS.

UTILITY NOTES (CONT):

5. ALL STORM AND SANITARY SEWERS ARE TO BE CLEANED AND TELEVIEWED. ALL SANITARY SEWER MANHOLES ARE TO BE VACUUM TESTED. ALL CLEANING AND TELEVIEWING SHALL BE APPROVED AND WITNESSED BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO PAVING. A COPY OF THE VIDEOS AND REPORT SHALL BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT.

6. CONTRACTOR MUST NOTIFY THE CITY OF WAUKEE ENGINEERING DEPARTMENT TO COORDINATE THE TIE-IN TO EXISTING UTILITIES.

SANITARY SEWER:
1. ALL 4" AND 6" SANITARY SEWER SERVICES SHALL BE SDR 23.5 IN ACCORDANCE WITH SUDAS SPECIFICATIONS.

2. MANHOLE STEPS ARE REQUIRED IN ALL SANITARY SEWER MANHOLES.

3. MANHOLE COVERS SHALL HAVE RAISED DIAMOND ROUGHNESS PATTERN AND CONFORM WITH WAUKEE STANDARD SPECIFICATIONS.

STORM SEWER:
1. OWNER SHALL BE RESPONSIBLE FOR ALL ON-SITE PRIVATE STORM SEWER AND PRIVATE STORM WATER DETENTION / RETENTION AREAS.

2. ALL INTAKE CASTINGS SHALL HAVE PHASE 2 ENVIRONMENTAL SYMBOLGY OR TEXT.

WATER MAIN:
1. PIPE MATERIALS SHALL BE AWWA C900 CLASS 150 PVC.

2. HYDRANTS, MANHOLE COVERS, AND VALVE BOXES SHALL BE SET TO CONFORM TO FINISHED PAVEMENT ELEVATIONS.

3. HYDRANTS TO BE WATROUS WB-67-250 PRODUCTS.

4. WATER MAIN TO HAVE 5.5' BURY, TYP. EXCEPT AT CRITICAL CROSSINGS.

5. ALL VALVES SHALL HAVE A VALVE BOX ADAPTER INSTALLED TO MAINTAIN ALIGNMENT.

6. THE CONTRACTOR SHALL WORK WITH THE CITY OF WAUKEE WHEN OPERATING EXISTING VALVES. WATER SHALL NOT BE TURNED ON WITHOUT PRIOR APPROVAL.

7. WATER CAN NOT BE USED BY THE CONTRACTOR UNLESS IT IS PART OF THE PURIFICATION PROCESS OF THE NEW MAIN. WATER NEEDED FOR ANY REASON AFTER BACTERIA TESTING HAS BEEN COMPLETED AND PASSED WILL NEED PRIOR APPROVAL FROM THE CITY OF WAUKEE.

8. ALL WATER MAIN CONNECTIONS AND VALVING SHALL CONFORM TO WAUKEE STANDARD SPECIFICATIONS.

9. ALL WATER SERVICES SHALL CONFORM TO WAUKEE STANDARD SPECIFICATIONS.

10. CONTRACTOR SHALL NOTIFY WAUKEE ENGINEERING DEPARTMENT ONE (1) WEEK PRIOR TO CONSTRUCTION OF WATER MAIN.

11. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE WAUKEE STANDARD SPECIFICATIONS.

12. THE PROJECT MANAGER SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.

13. CONTACT WAUKEE ENGINEERING DEPARTMENT (515-978-7920) A MINIMUM OF 48 HOURS IN ADVANCE PRIOR TO ANY PLANNED WEEKEND OR HOLIDAY WORK.

14. ALL HYDRANTS SHALL UTILIZE A STORZ FITTING. HYDRANTS THAT ARE RELOCATED MUST ALSO UTILIZE A STORZ FITTING.

15. ALL UTILITIES SHALL BE TESTED BY CITY STANDARDS, AND ALL TESTING TO BE WITNESSED BY THE CITY.

16. WATER MAIN AND SEWER (SERVICE, SANITARY SEWER, STORM SEWER, OR DRAINAGE TILE) CROSSINGS SHALL HAVE A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION FROM THE TOP OF WATER MAIN TO THE BOTTOM OF SEWER. ALL STORM SEWER PIPE THAT CROSSES OVER WATERMAIN SHALL HAVE O-RING GASKETS INSTALLED.

UTILITY NOTES:

1. ALL UTILITIES ARE PUBLIC UNLESS NOTED OTHERWISE.

2. CONTRACTOR TO ADJUST ALL TOP OF CASTING ELEVATIONS WITHIN THE PROJECT LIMITS TO THE FINAL ELEVATIONS SHOWN ON THE PLANS.

3. ALL UTILITY SERVICES, INCLUDING ELECTRIC, TELEPHONE, AND CABLE TO BE UNDERGROUND.

4. ROAD CONNECTIONS TO EXISTING PUBLIC SEWER MANHOLES SHALL BE CORE DRILLED AND USE LINKSEAL.

PLANTING NOTES:

1. TYPE 2 EROSION CONTROL MIXTURE SHALL BE USED ALL DISTURBED AREAS WITHIN CONSTRUCTION LIMITS NOT COVERED BY PAVING, PLANTINGS OR OTHERWISE NOTED. PLANTING AND RIGHT OF WAY AREAS SHALL BE HYDRO-SEEDED. OUTLOT 2 SHALL USE TYPE 1 SEEDING.

2. REPAIR ALL EXISTING TURF AREAS WHICH ARE DISTURBED DURING CONSTRUCTION AT NO COST TO THE OWNER. REPAIR, GRADE AND SOD AREAS AS SPECIFIED FOR NEW SODDING. ANY ESTABLISHED LAWNS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED WITH SOD AND BE WATERED UNTIL ESTABLISHED.

3. PLANT QUANTITIES ARE FOR INFORMATION ONLY; DRAWING SHALL PREVAIL IF CONFLICT OCCURS.

4. CONTRACTOR SHALL PLACE SHREDDED HARDWOOD MULCH AROUND ALL TREES TO A MINIMUM DEPTH OF 3 INCHES.

5. BACKFILL TO TOP OF CURB. (MINUS 1 1/2" FOR SOD, IF REQUIRED)

6. FINAL GRADES TO BE APPROVED BY LANDSCAPE ARCHITECT.

7. ALL DEBRIS SPILLED ON THE PUBLIC R.O.W. OR ADJACENT PROPERTY SHALL BE PICKED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.

8. PROVIDE SHREDDED HARDWOOD MULCH IN ALL SHRUB BEDS. WALNUT PRODUCT PROHIBITED.

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RECORD DRAWINGS PRODUCED ON: 11/27/2019

NO AS-BUILT DATA FOR THIS SHEET

Kettlestone Ridge	
Waukee, Iowa	
Plat 4	
DESCRIPTION	QUANTITY
EARTHWORK	
CLEARING & GRUBBING	3 AC
STRIP, SALVAGE, AND SPREAD TOPSOIL	9300 CY
CLASS 13 ENCAVATION	28300 CY
SUBGRADE PREPARATION, 12"	4485 SY
SHOULDERING	11 STA
SANITARY SEWER	
PVC SANITARY SEWER (GRAVITY) 8"	1336 LF
PVC SANITARY SEWER SERVICE 4"	21 EA
48" TYPE SW-501 MANHOLE (SANITARY SEWER)	6 EA
CONNECTION TO EXISTING MANHOLE	1 EA
STORM SEWER	
18" RCP	228 LF
18" RCP	189 LF
24" RCP	114 LF
30" RCP	236 LF
36" RCP	151 LF
42" RCP	244 LF
48" RCP	203 LF
42" RCP FE2 W/ GUARD AND FOOTING	1 EA
48" RCP FE2 W/ GUARD AND FOOTING	1 EA
8" PVC FOOTING DRAIN (PERFORATED)	340 LF
SUBDRAIN	854 LF
4" PVC STORM SEWER SERVICE	21 EA
TYPE SW-401	3 EA
TYPE SW-403	1 EA
INTAKE, TYPE SW-501	1 EA
INTAKE, TYPE SW-503	1 EA
INTAKE, TYPE SW-505	2 EA
INTAKE, TYPE SW-506	4 EA
INTAKE, TYPE SW-512	1 EA
CLEANOUT	7 EA
WATERMAIN	
WATER MAIN 8" PVC	1084 LF
1" WATER SERVICE	21 EA
WATER MAIN CROSSINGS	1 EA
WATER MAIN BENCHES	7 EA
GATE VALVE W/ BOX 8"	3 EA
HYDRANT ASSEMBLY	6 EA
STREETS AND RELATED WORK	
STD. OR SUP FORM P.C.C., CLASS C, TYPE 1, 3"	1529 SY
STD. OR SUP FORM P.C.C., CLASS C, TYPE 1, 8"	2548 SY
PAVEMENT MARKINGS, PM-110, DCV4	225 LF
PAVEMENT MARKINGS, PM-110, SLV4	143 LF
PAVEMENT MARKINGS, PM-111, L7AW	2 EA
PAVEMENT MARKINGS, PM-111, CSRW	2 EA
TEMPORARY GRAVEL TURNAROUNDS	1 EA
CONCRETE SIDEWALKS (RAMPS)	86 SY
DETECTABLE WARNING RAMPS	11 EA
PCC MAILBOX PADS	1 EA
EROSION CONTROL	
EROSION CONTROL SEEDING	12 AC
SILT FENCE	5000 LF
INTAKE PROTECTION DROP IN DEVICE	8 EA

UTILITY COMPANIES

SERVICE	SUPPLIER	PHONE
GAS	WAUKEE PUBLIC WORKS DEPARTMENT 805 UNIVERSITY AVENUE WAUKEE, IA 50263 CONTACT: TIM ROYER	515-978-7920
TELEPHONE	CENTURYLINK 2103 EAST UNIVERSITY DES MOINES, IA 50312 CONTACT: TOM STURMER	303-664-8090
ELECTRIC	MID-AMERICAN ENERGY CO. 500 EAST COURT AVENUE DES MOINES, IA 50309 CONTACT: NORM TRENTMANN	515-252-6621
CABLE TV	MEDIACOM CABLE 2205 INGERSOL AVENUE DES MOINES, IA 50312 CONTACT: PAUL MAY	515-246-2252
WATER	WAUKEE PUBLIC WORKS DEPARTMENT 805 UNIVERSITY AVENUE WAUKEE, IA 50263 CONTACT: TIM ROYER	515-978-7920
	XENIA RURAL WATER DISTRICT 23998 141ST STREET BOUTON, IA 50039 CONTACT: MARK CARRAN	515-676-2117
SEWER	CITY OF WAUKEE PUBLIC WORKS DEPARTMENT 805 UNIVERSITY AVENUE WAUKEE, IA 50263 CONTACT: TIM ROYER	515-978-7920
ALL	IOWA ONE-CALL	800-292-8989

EXISTING UTILITIES NOTE

THESE EXISTING UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGING THEM. NO CLAIMS WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK. PAYMENT WILL BE ALLOWED FOR UNCHARTED UTILITIES PER THE SPECIFICATIONS.



THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THEREOF. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

GENERAL LEGEND

EXISTING / PROPOSED	EXISTING / PROPOSED	EXISTING / PROPOSED	EXISTING / PROPOSED
—	SANITARY SEWER MAIN	⊙	BOLLARD (BUMPER POST)
—	SANITARY SEWER SERVICE	⊙	ROADWAY SIGN
—	SANITARY SEWER FORCE MAIN	⊙	MAILBOX
—	STORM SEWER MAIN OR CULVERT	⊙	WELL
—	SECONDARY STORM SEWER MAIN	⊙	DECIDUOUS TREE
—	SECONDARY STORM SEWER SERVICE	⊙	EVERGREEN TREE
—	WATER MAIN	⊙	SHRUB OR BUSH
—	WATER SERVICE	>	TREE OR SHRUB LINE
—	UNDERGROUND ELECTRIC	⊙	STUMP
—	OVERHEAD ELECTRIC	⊙	MONITORING WELL
—	UNDERGROUND TELEPHONE	⊙	SOIL BORINGS
—	UNDERGROUND FIBER OPTIC	⊙	FLAG POLE
—	UNDERGROUND CABLE TV	⊙	SATELLITE DISH
—	GAS MAIN OR SERVICE	⊙	SLOPE INDICATORS
—	CONTOUR LINES INTERMEDIATE	⊙	CONTROL POINT
—	CONTOUR LINES INDEX	⊙	BENCH MARK
—	PROPERTY LINE / LOT LINE	⊙	SECTION CORNER
—	SECTION LINE	⊙	IRON PIN SET
—	EASEMENT	⊙	IRON PIN FOUND
—	GUARD RAIL	⊙	DRAWING NUMBER
—	FIELD FENCE	⊙	
—	CHAIN LINK FENCE	⊙	
—	WOODEN FENCE	⊙	
—	ROAD CENTERLINE	⊙	
—	GRADING LIMITS	⊙	
—	CONSTRUCTION LIMITS	⊙	
—	AG LINE	⊙	
—	WATERWAY FLOWLINE	⊙	
—	TOP OF SLOPE	⊙	
—	BOTTOM OF SLOPE	⊙	
—	SILT FENCE	⊙	
	SANITARY SEWER MANHOLE	⊙	
	SANITARY SEWER CLEANOUT	⊙	
	AIR RELEASE MANHOLE/DRAIN MANHOLE	⊙	
	STORM SEWER MANHOLE	⊙	
	STORM SEWER CLEANOUT	⊙	
	STORM SEWER INTAKE	⊙	
	STORM SEWER BEEHIVE INTAKE	⊙	
	FLARED END SECTION	⊙	
	FIRE HYDRANT	⊙	
	WATER VALVE	⊙	
	WATER VALVE MANHOLE	⊙	
	CURB STOP	⊙	
	WATER METER MANHOLE	⊙	
	YARD HYDRANT	⊙	
	ELECTRIC MANHOLE / VAULT	⊙	
	ELECTRIC PEDESTAL / TRANSFORMER	⊙	
	OUTDOOR ELECTRIC POWER OUTLET	⊙	
	POWER POLE	⊙	
	POWER POLE w/ STREET LIGHT	⊙	
	STREET LIGHT POLE	⊙	
	GUY WIRE	⊙	
	TRAFFIC SIGNAL	⊙	
	TRAFFIC SIGNAL BOX	⊙	
	TRAFFIC SIGNAL MANHOLE / VAULT	⊙	
	RAILROAD CROSSING SIGNAL	⊙	
	TELEPHONE MANHOLE / VAULT	⊙	
	TELEPHONE PEDESTAL	⊙	
	CABLE TV MANHOLE / VAULT	⊙	
	CABLE TV PEDESTAL	⊙	
	GAS VALVE	⊙	
	ABBREVIATIONS		
	T/S	⊙	TOP OF SLAB
	BC	⊙	BACK OF CURB
	TC	⊙	TOP OF CURB
	FL	⊙	FLOWLINE
	CL	⊙	CENTERLINE
	C	⊙	CUT
	F	⊙	FILL
	⊙	⊙	OFFSET
	TOP	⊙	TOP OF SLOPE
	BOT	⊙	BOTTOM OF SLOPE
	EP	⊙	EDGE OF PAVING

GENERAL NOTES AND LEGEND

KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

Waukee, Iowa
2211013-03
April 27, 2018

REVISIONS
12.3.18
12.18.18
12.28.18
1.15.19
1.23.19
3.20.19

ENGINEER
J. BECKER
DRAWN BY
J. BECKER
CHECKED BY
C. SMITH
FIELD BOOK NO.
-

DRAWING NO.
GN-02
SHEET NO.
2 / 25

NOTE:
 1) ALL EXISTING TREES WITHIN THIS PLAT BOUNDARY WILL NEED TO BE REMOVED. ALL TREES TO BE REMOVED SHALL BE MARKED TO ENSURE NO TREES ON NEIGHBORING PROPERTY ARE REMOVED.

RECORD DRAWING

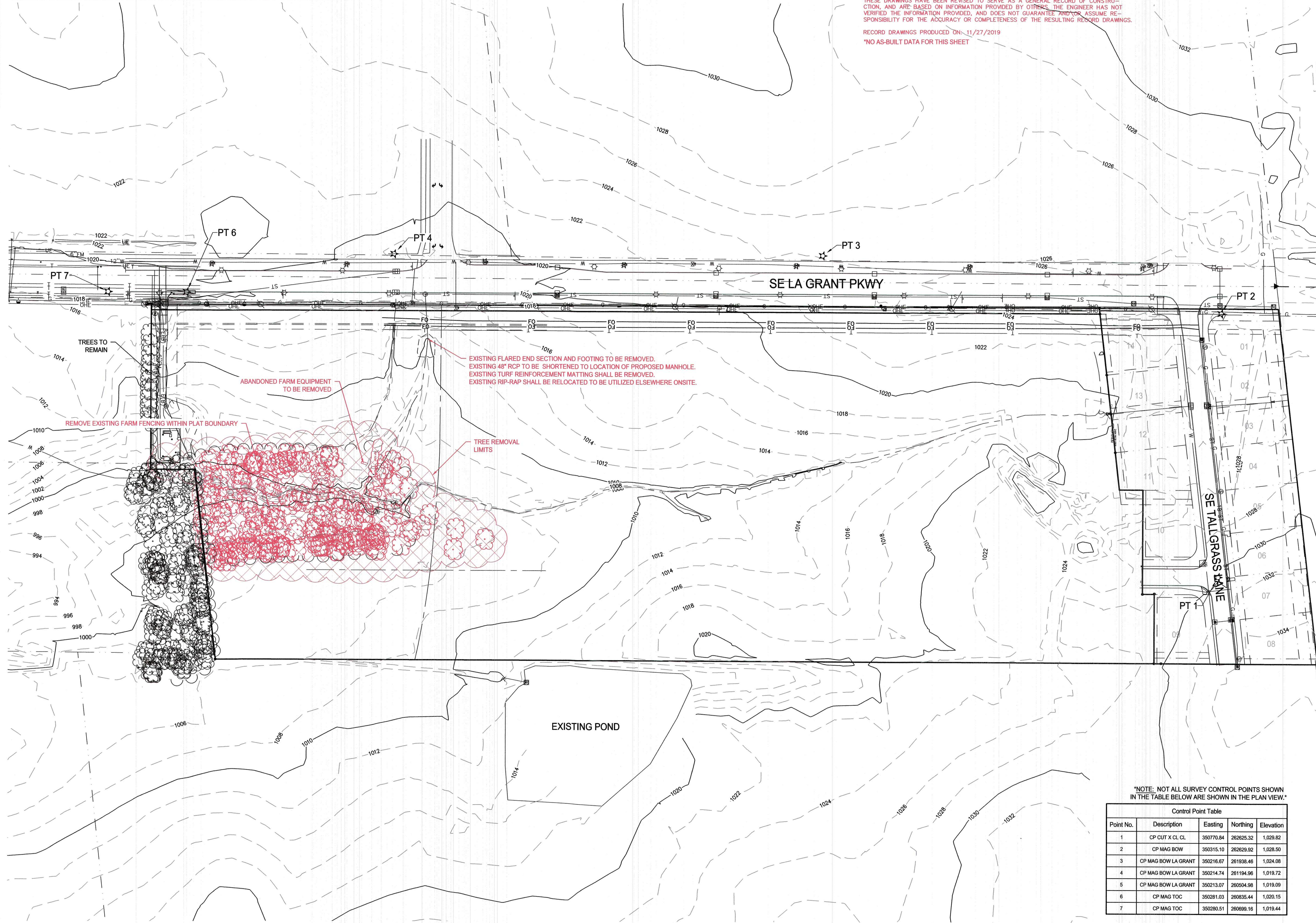
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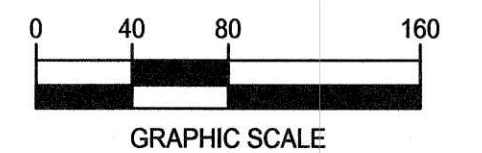
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EXISTING CONDITIONS AND SURVEY CONTROL



NORTH



KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

Waukee, Iowa
 2211013-03
 April 27, 2018

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ENGINEER
J. BECKER
 CHECKED BY
C. SMITH

DRAWN BY
J. BECKER
 FIELD BOOK NO.
 -

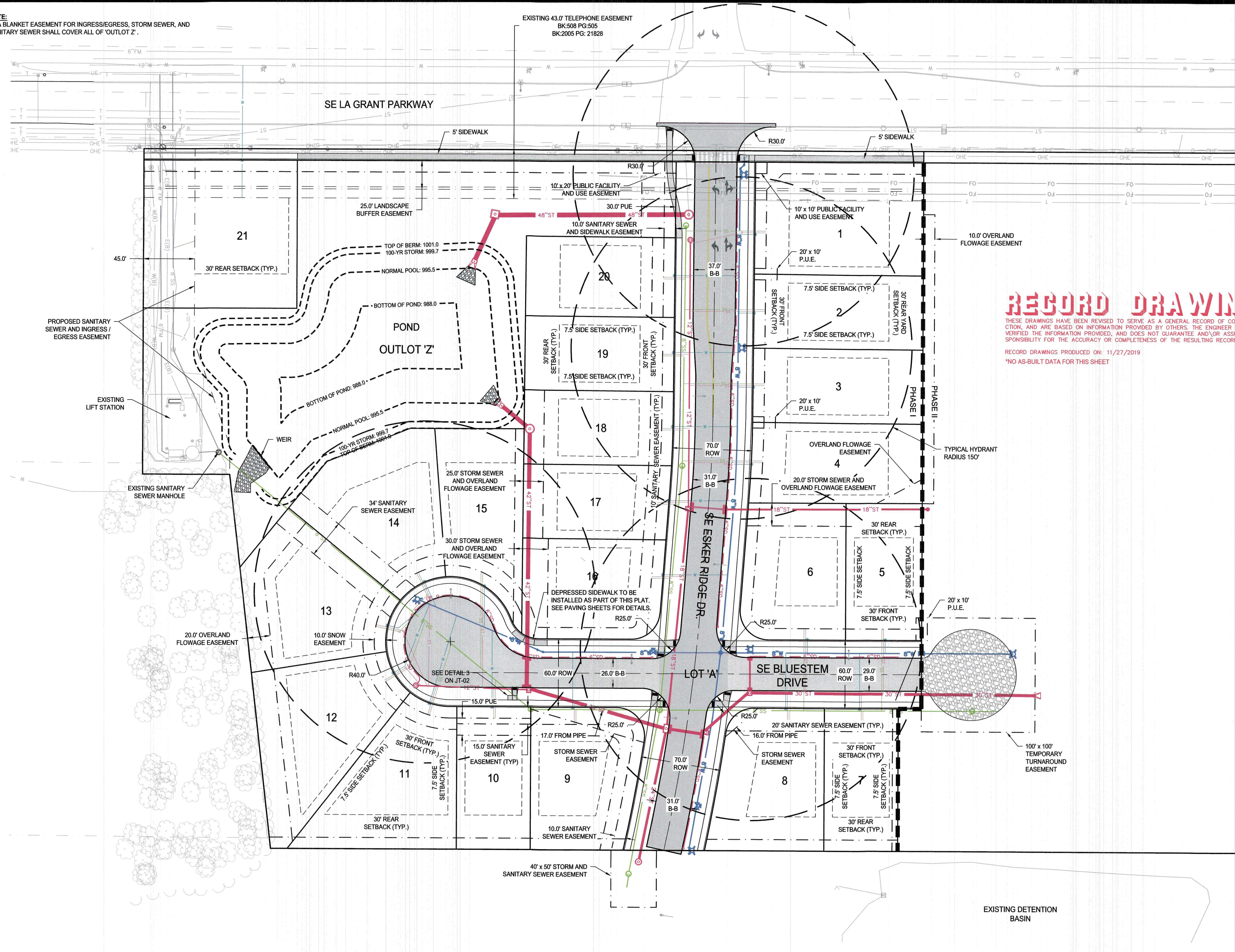
DRAWING NO.
GN-03
 SHEET NO.
3 / 25

NOTE: NOT ALL SURVEY CONTROL POINTS SHOWN IN THE TABLE BELOW ARE SHOWN IN THE PLAN VIEW.

Control Point Table				
Point No.	Description	Eastings	Northing	Elevation
1	CP CUT X CL CL	350770.84	262625.32	1,029.82
2	CP MAG BOW	350315.10	262629.92	1,028.50
3	CP MAG BOW LA GRANT	350216.67	261938.46	1,024.08
4	CP MAG BOW LA GRANT	350214.74	261194.96	1,019.72
5	CP MAG BOW LA GRANT	350213.07	260504.98	1,019.09
6	CP MAG TOC	350281.03	260835.44	1,020.15
7	CP MAG TOC	350280.51	260699.16	1,019.44

N:\CSD Projects\WAK 2211013\Design\Plan\Construction Documents\Plat 2\GN-03.dwg

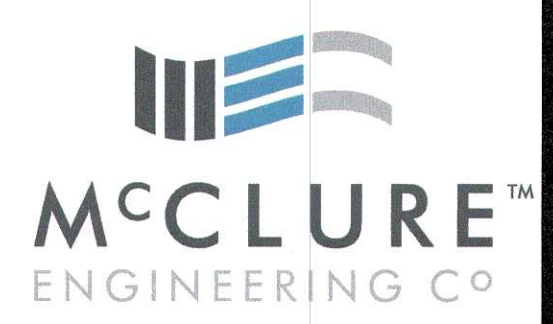
NOTE:
 1) A BLANKET EASEMENT FOR INGRESS/EGRESS, STORM SEWER, AND SANITARY SEWER SHALL COVER ALL OF 'OUTLOT Z'.



RECORD DRAWING

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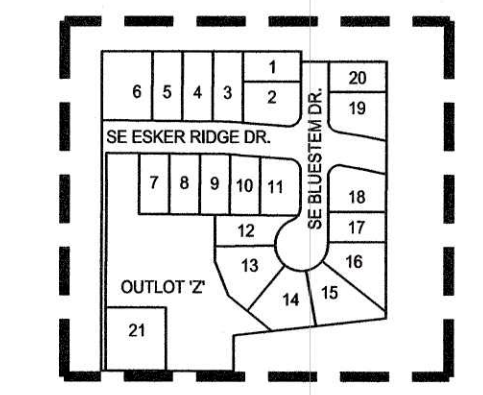
RECORD DRAWINGS PRODUCED ON: 11/27/2019
 *NO AS-BUILT DATA FOR THIS SHEET



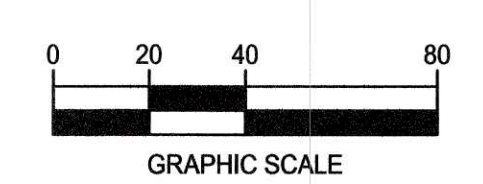
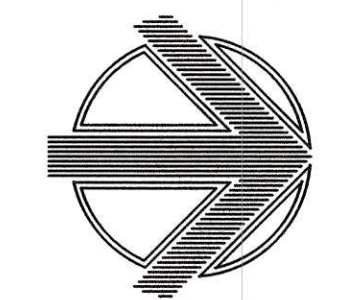
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GENERAL LAYOUT AND DIMENSION PLAN



KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

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ENGINEER: J. BECKER
 CHECKED BY: C. SMITH
 DRAWN BY: J. BECKER
 FIELD BOOK NO.: -

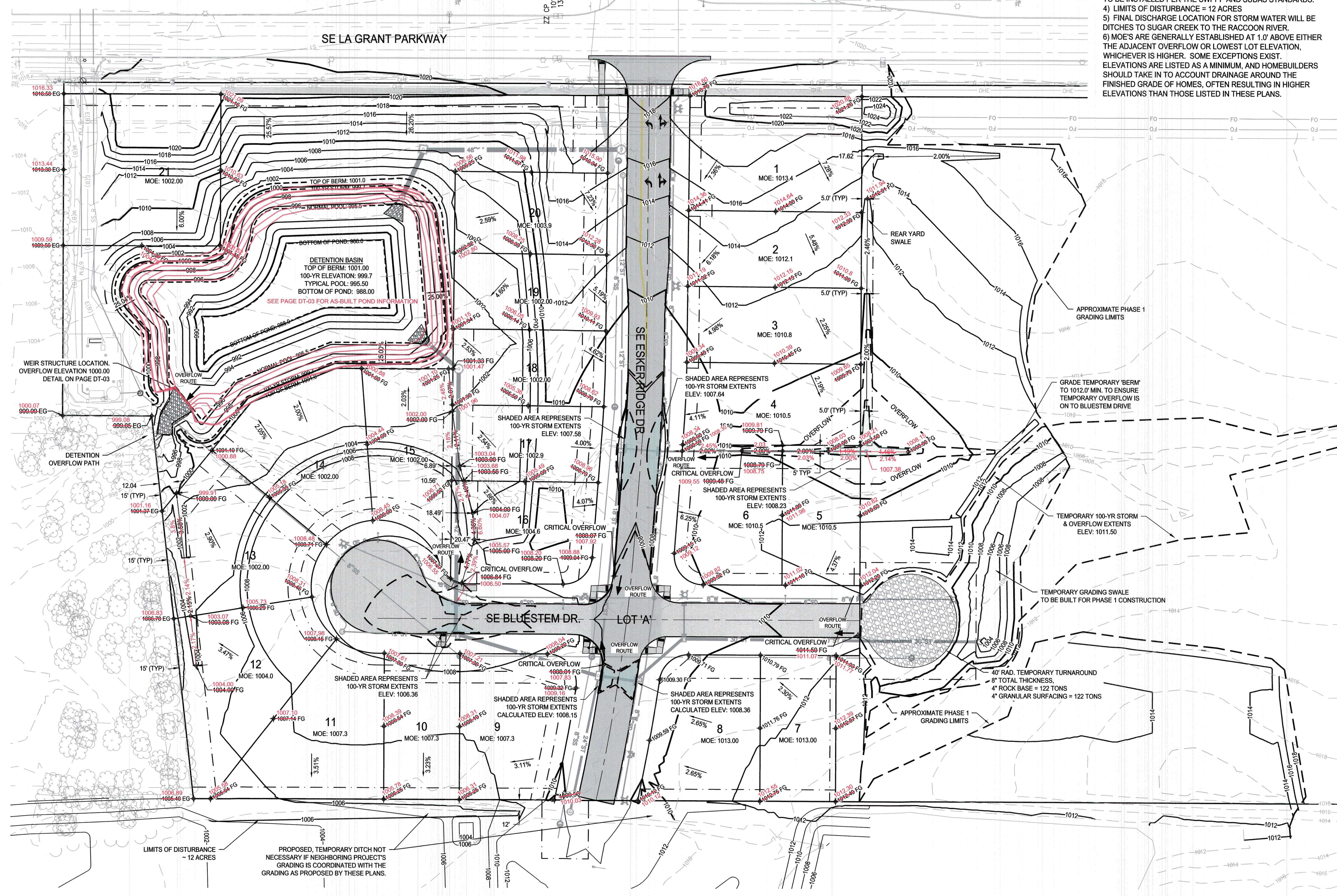
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 SHEET NO.: 4 / 25

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RECORD DRAWINGS PRODUCED ON: 11/27/2019



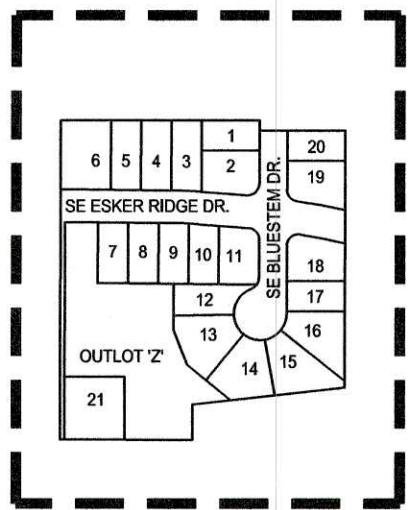
- GRADING NOTES:**
- 1) REAR YARD DRAINAGE SWALES SHALL BE 2.0% MINIMUM RUNNING SLOPE.
 - 2) SITE SHALL BE GRADED SO LOCALIZED PONDING DOES NOT OCCUR.
 - 3) SILT FENCE AND OTHER EROSION CONTROL METHODS ARE TO BE INSTALLED PER THE SWPPP AND SUDAS STANDARDS.
 - 4) LIMITS OF DISTURBANCE = 12 ACRES
 - 5) FINAL DISCHARGE LOCATION FOR STORM WATER WILL BE DITCHES TO SUGAR CREEK TO THE RACCOON RIVER.
 - 6) MOE'S ARE GENERALLY ESTABLISHED AT 1.0' ABOVE EITHER THE ADJACENT OVERFLOW OR LOWEST LOT ELEVATION, WHICHEVER IS HIGHER. SOME EXCEPTIONS EXIST. ELEVATIONS ARE LISTED AS A MINIMUM, AND HOMEBUILDERS SHOULD TAKE IN TO ACCOUNT DRAINAGE AROUND THE FINISHED GRADE OF HOMES, OFTEN RESULTING IN HIGHER ELEVATIONS THAN THOSE LISTED IN THESE PLANS.



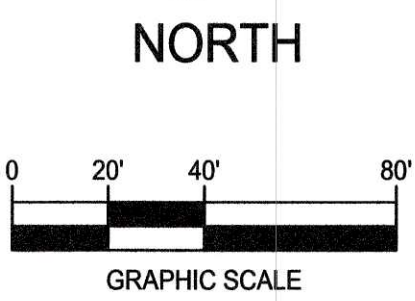
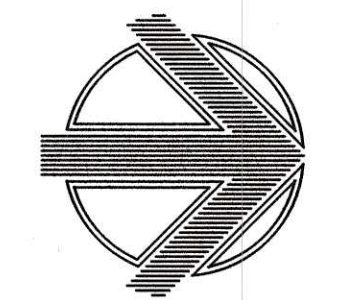
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GRADING PLAN



KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

Waukee, Iowa
2211013-03
April 27, 2018

- REVISIONS**
- 12.3.18
 - 12.18.18
 - 12.28.18
 - 1.15.19
 - 1.23.19
 - 3.20.19

ENGINEER
J. BECKER

DRAWN BY
J. BECKER

CHECKED BY
C. SMITH

FIELD BOOK NO.
-

DRAWING NO.
GR-01

SHEET NO.
5 / 25

K:\2018\Waukee\2211013\Eng\Grading\Plans\Construction\Plat 4\218.dwg

BEST MANAGEMENT PRACTICES NOTE
 BMPs ARE DISCUSSED IN MORE DETAIL IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND WILL INCLUDE: GOOD HOUSEKEEPING, PREVENTATIVE MAINTENANCE, VISUAL INSPECTIONS, SPILL PREVENTION AND RESPONSE, SEDIMENT AND EROSION PREVENTION, TRADITIONAL STORM WATER MANAGEMENT PRACTICES, BMPs TO ADDRESS PARTICULAR POLLUTANT SOURCES, EMPLOYEE TRAINING, AND RECORD KEEPING AND REPORTING.

RECORD DRAWING

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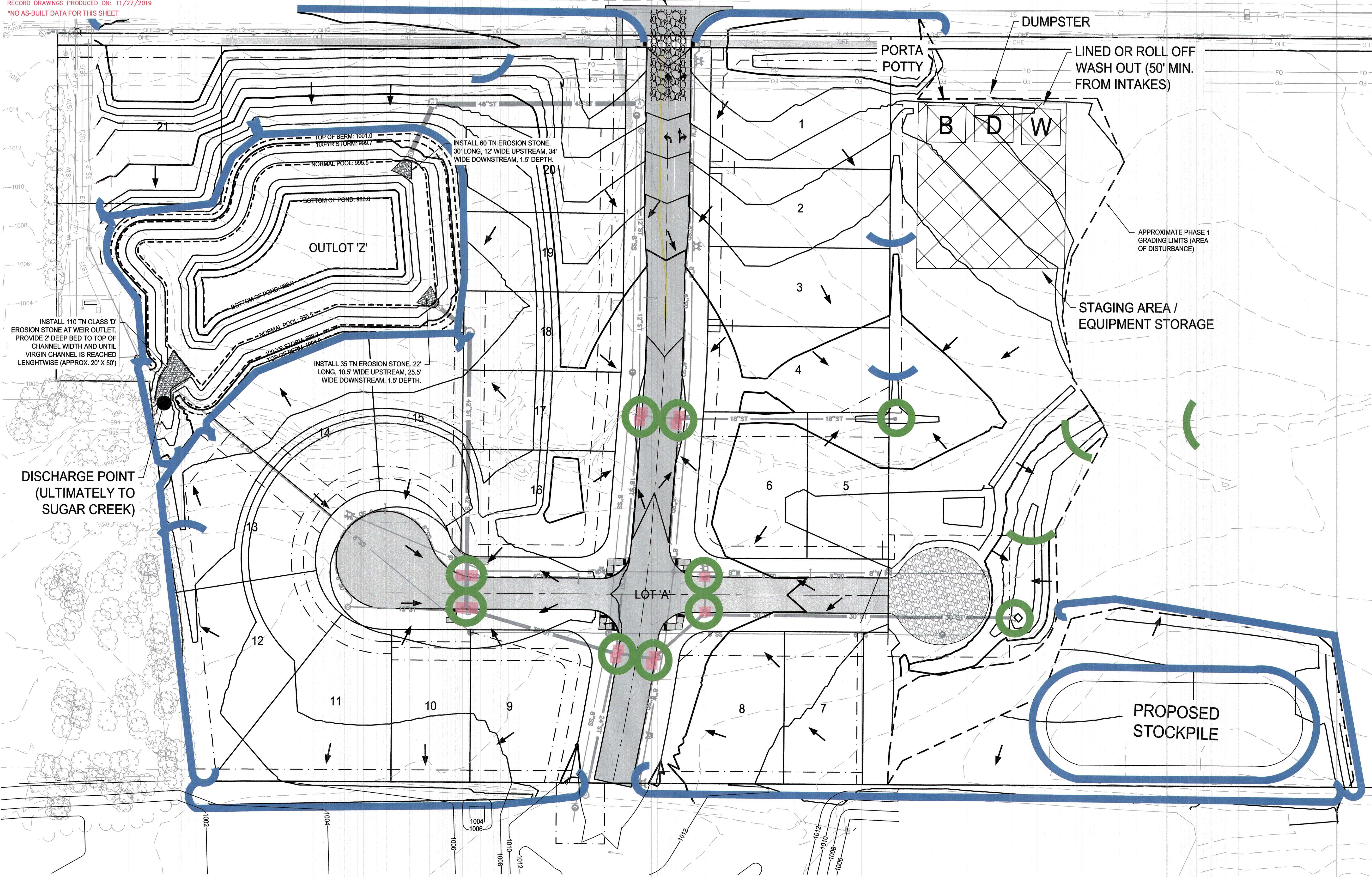
RECORD DRAWINGS PRODUCED ON: 11/27/2019
 *NO AS-BUILT DATA FOR THIS SHEET

EROSION CONTROL SEEDING	12	AC
SILT FENCE	5000	LF
INTAKE PROTECTION DROP IN DEVICE	14	EA
STABILIZED CONSTRUCTION ENTRANCE	1	EA
RIE RAP (INC. STORM & END OF STREETS)	205	TON

- NOTES:**
- 1) THIS SEDIMENT AND EROSION CONTROL SHEET IS FOR INFORMATIONAL PURPOSES ONLY AND IS SUPPLEMENTAL TO THE STORM WATER POLLUTION PREVENTION PLAN THAT IS NOT PREPARED AT THE TIME OF THIS WRITING. WHERE DISCREPANCIES OR OMISSIONS OCCUR, THE SWPPP AS PREPARED SHOULD GOVERN.
 - 2) STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
 - 3) UPON COMPLETION OF THE PROJECT, ALL REMAINING BARE SOIL AREAS WILL BE SEEDED WITH SUDAS SEED MIX TYPE 4 AND STRAW MULCHED UNTIL HOME CONSTRUCTION BEGINS.
 - 4) APPROXIMATE AREA OF DISTURBANCE IS 12 ACRES.

LEGEND:

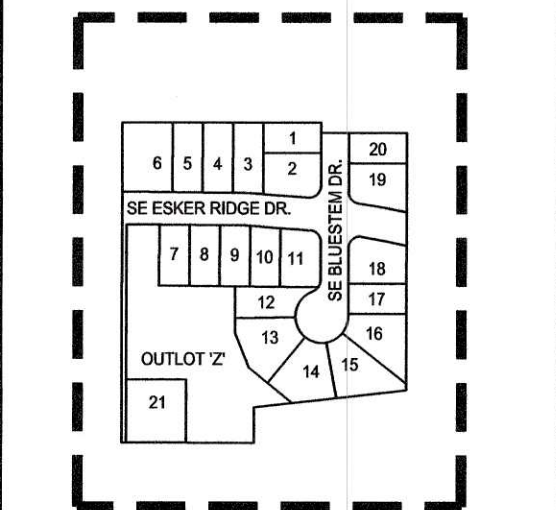
- SILT FENCE
- BELOW GRADE INTAKE PROTECTION (POST PAVING)
- SILT FENCE OR MULCH LOG



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SEDIMENT & EROSION CONTROL SHEET

NORTH

GRAPHIC SCALE

KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

Waukee, Iowa
 2211013-03
 April 27, 2018

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12.18.18
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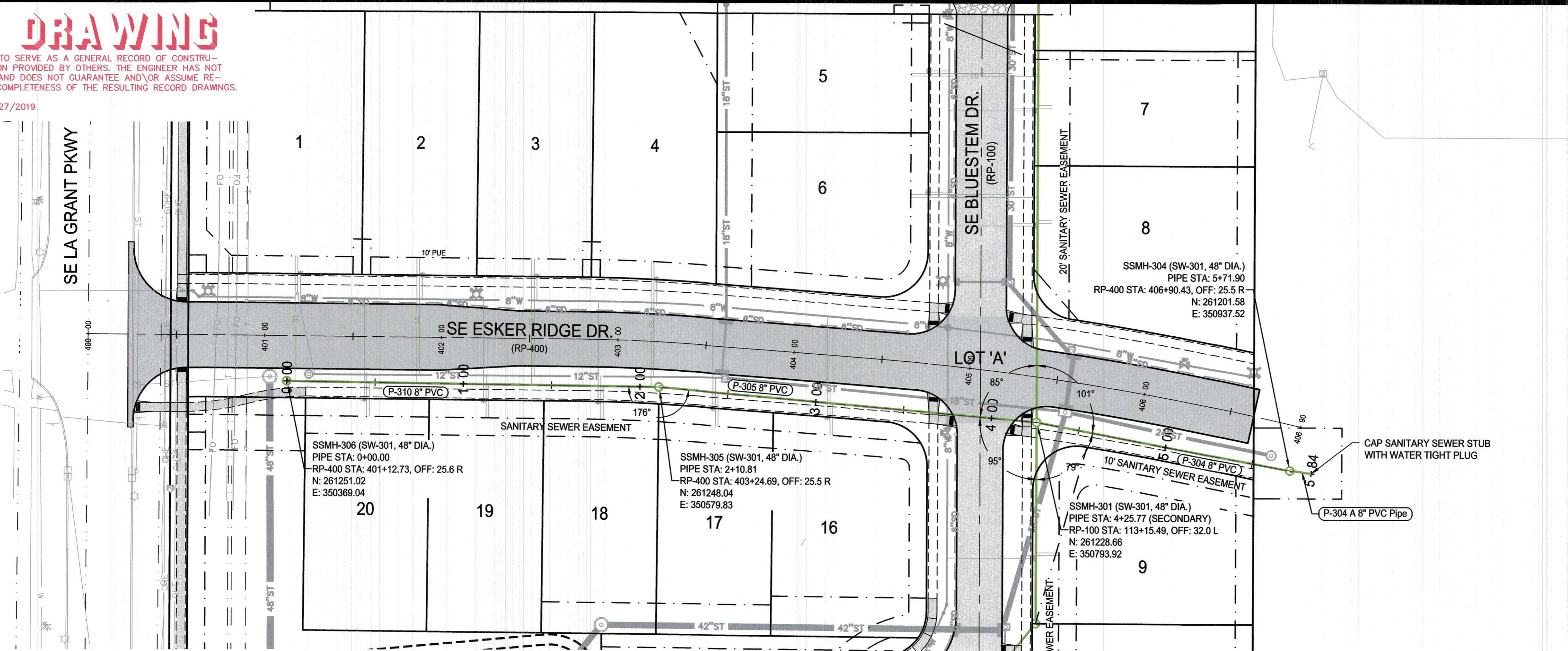
ENGINEER: J. BECKER
CHECKED BY: C. SMITH
DRAWN BY: J. BECKER
FIELD BOOK NO.: -
DRAWING NO.: GR-02
SHEET NO.: 6 / 25

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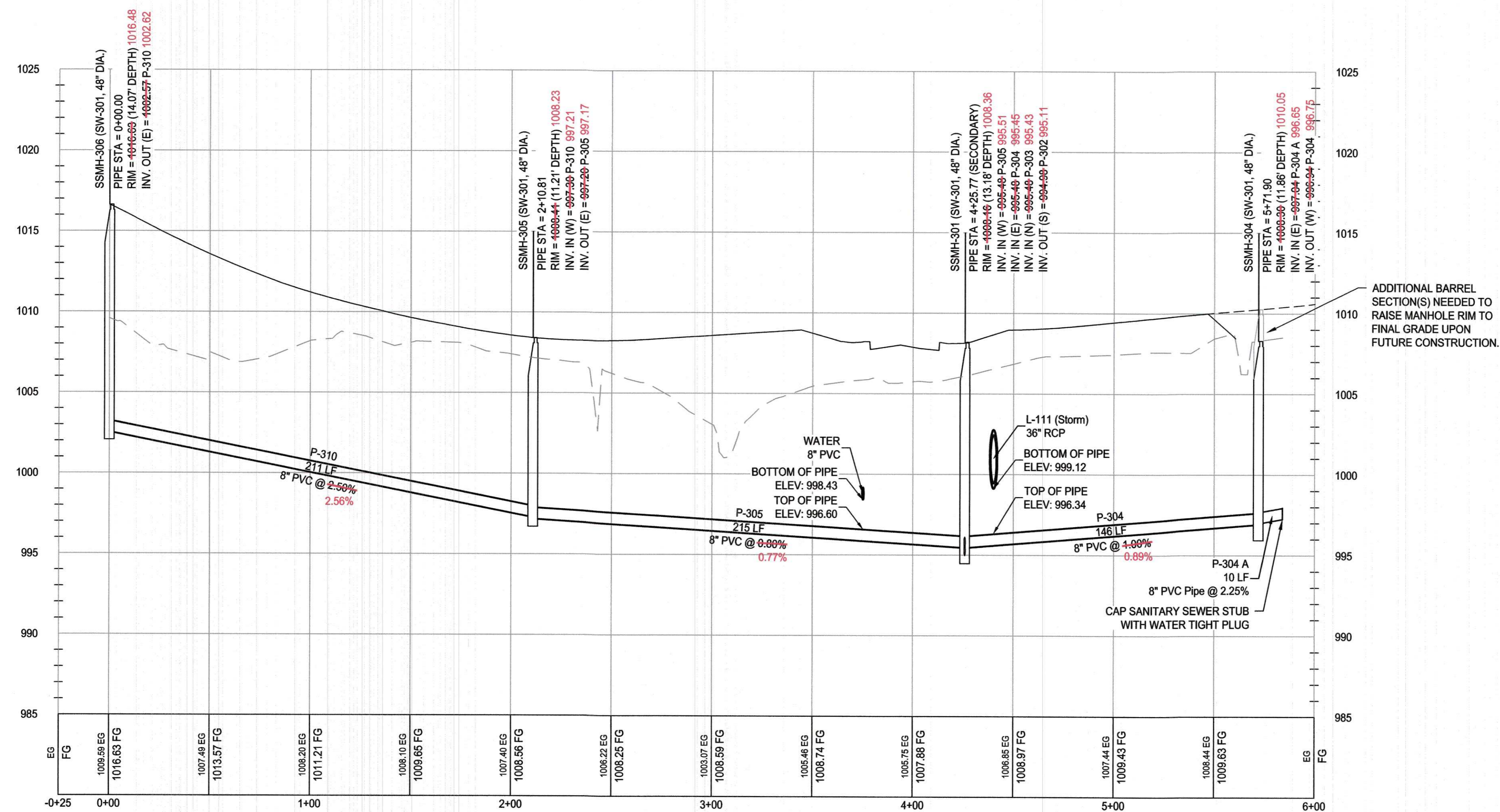
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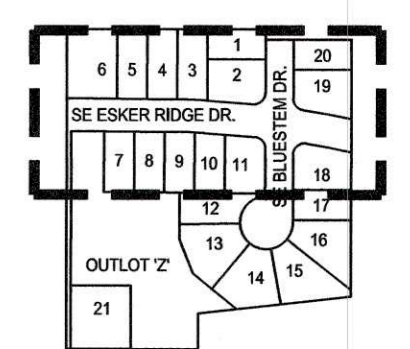
NOTES:
1) "DEPTH" INDICATOR IN MANHOLE LABELS ARE MEASURED FROM THE RIM ELEVATION TO THE LOWEST INVERT (OUT) ELEVATION AND SHOULD NOT BE USED FOR MANHOLE FABRICATION.



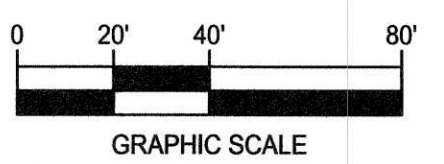
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SANITARY SEWER PLAN AND PROFILE



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ENGINEER: J. BECKER
DRAWN BY: J. BECKER
CHECKED BY: C. SMITH
FIELD BOOK NO.:

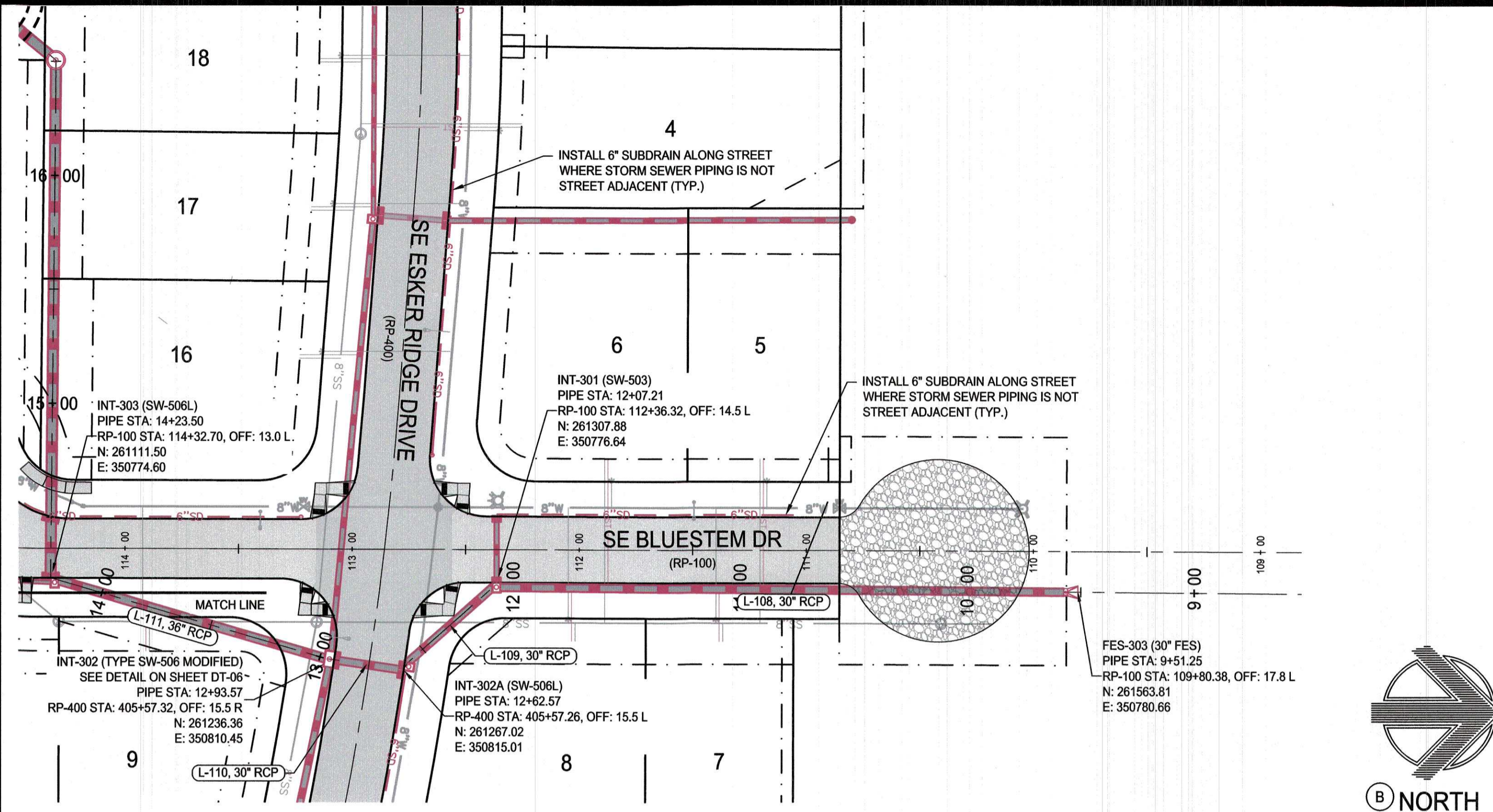
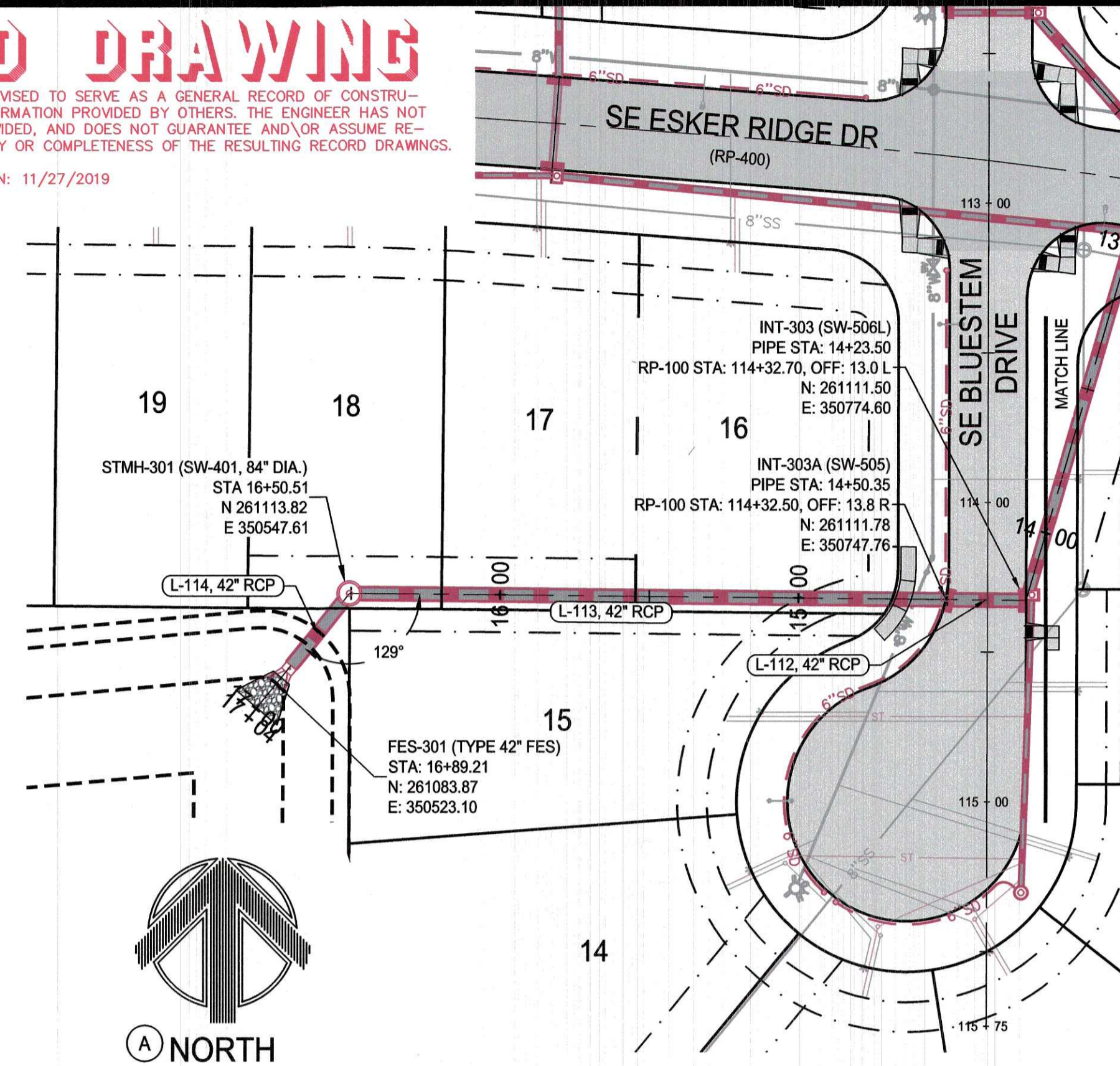
DRAWING NO.: SA-02
SHEET NO.: 8 / 25

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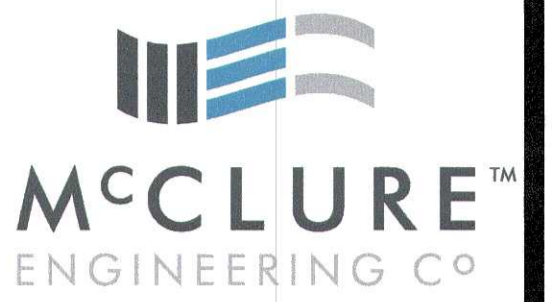
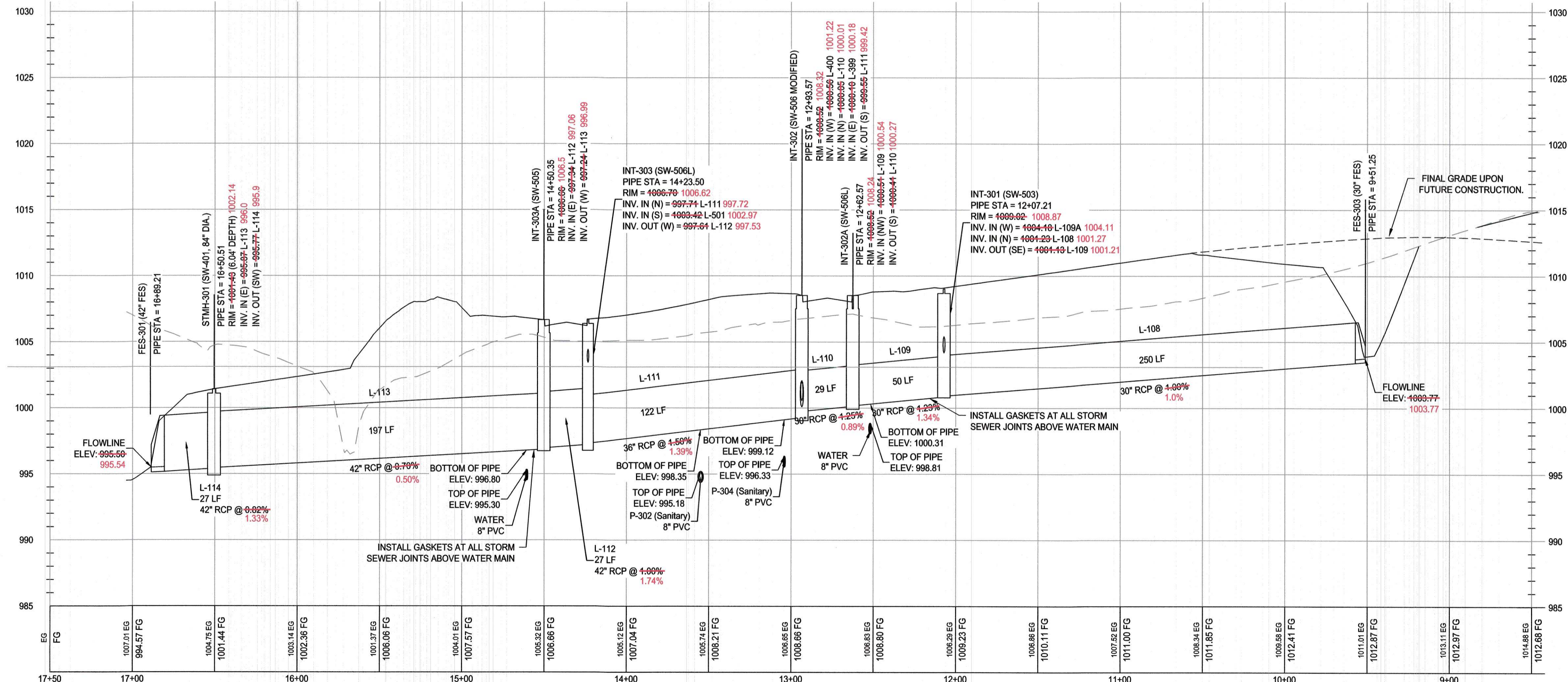
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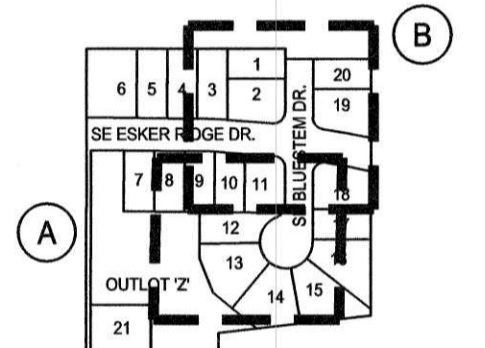
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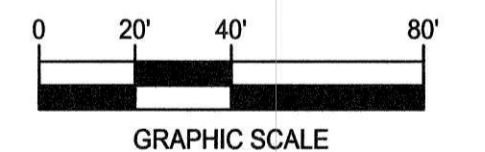
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STORM SEWER PLAN AND PROFILE



KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

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2211013-03
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1.23.19
3.20.19

ENGINEER
J. BECKER
DRAWN BY
J. BECKER

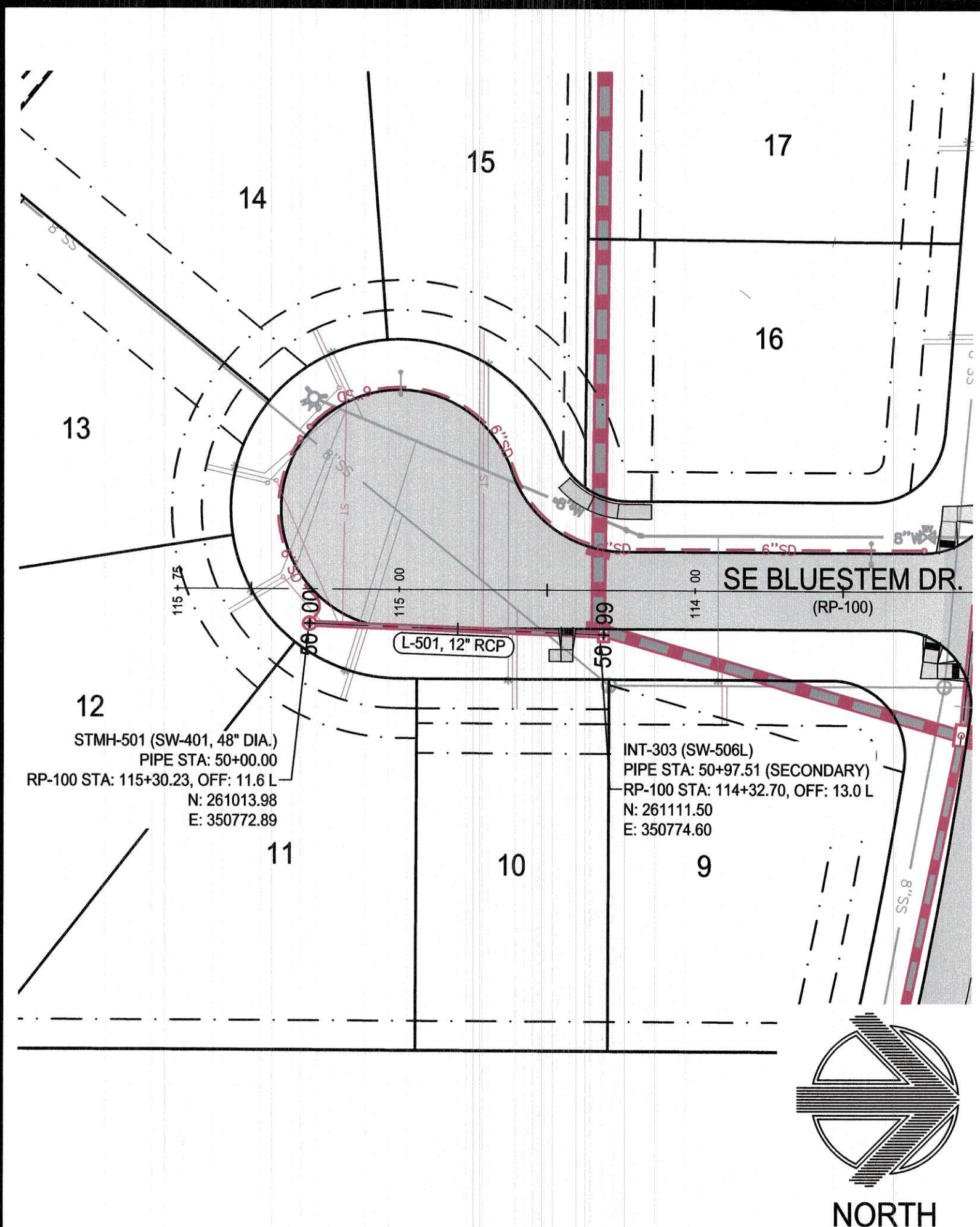
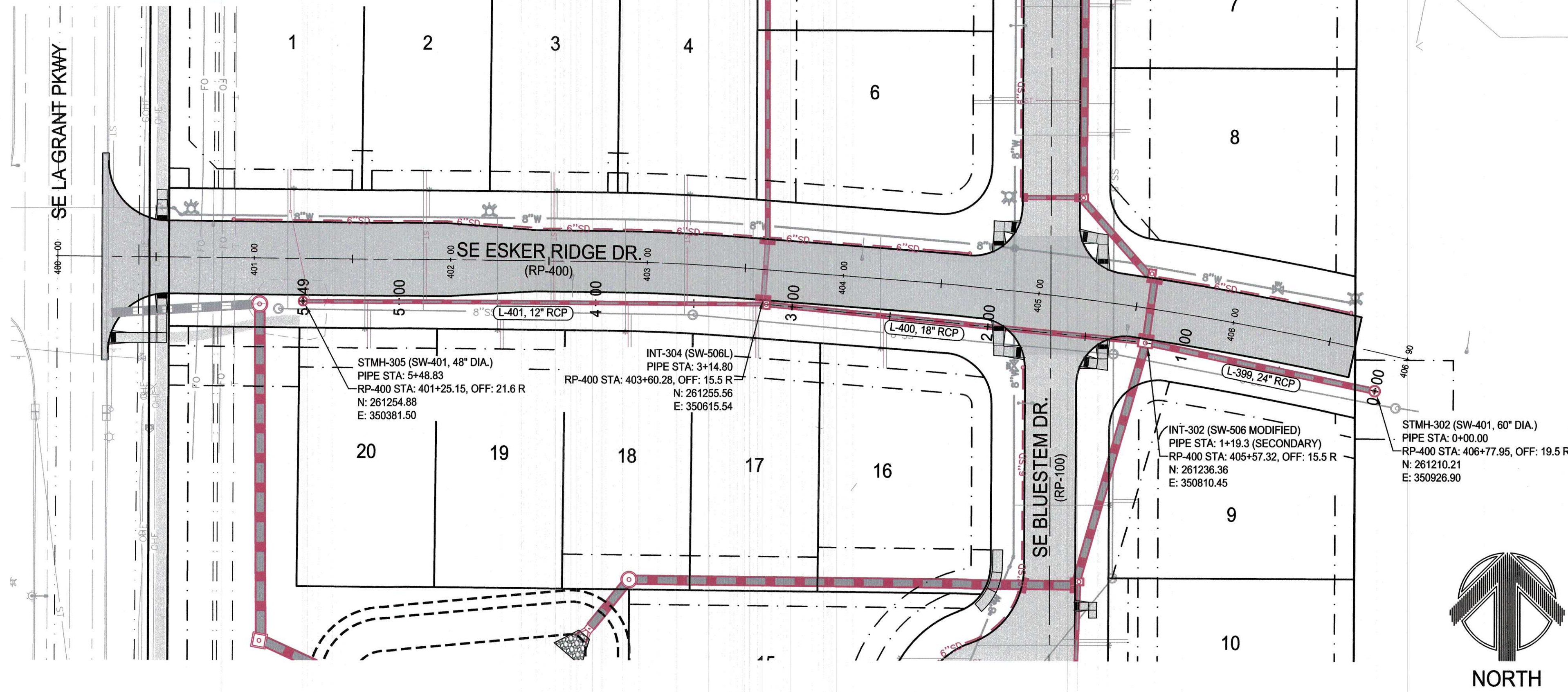
CHECKED BY
C. SMITH
FIELD BOOK NO.
-

DRAWING NO.
ST-01
SHEET NO.
9 / 25

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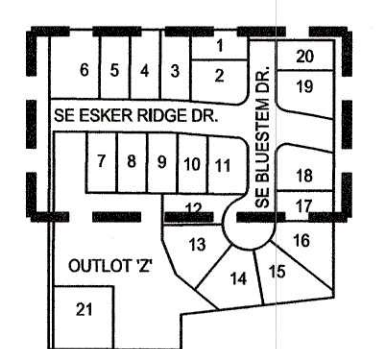
RECORD DRAWINGS PRODUCED ON: 11/27/2019



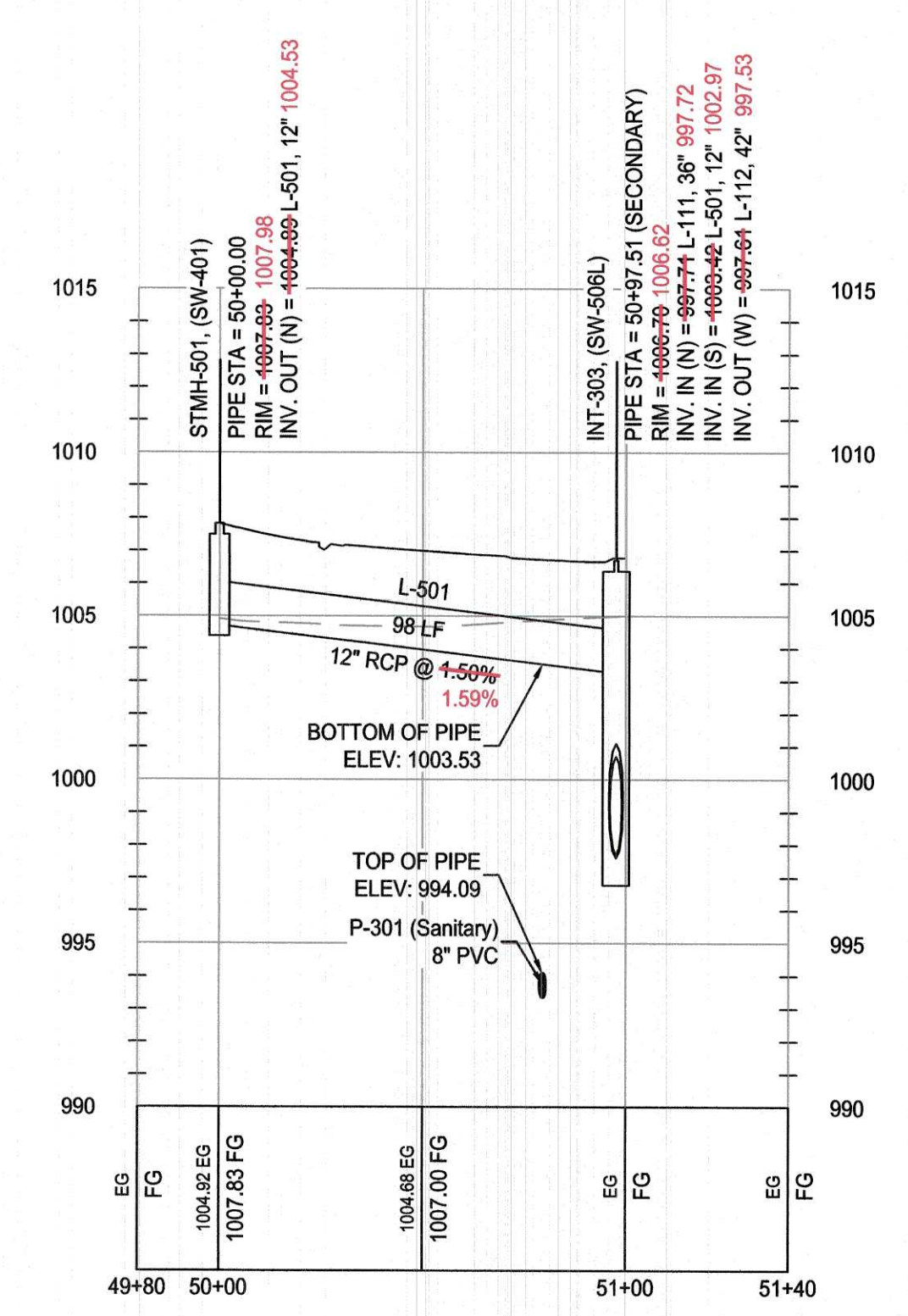
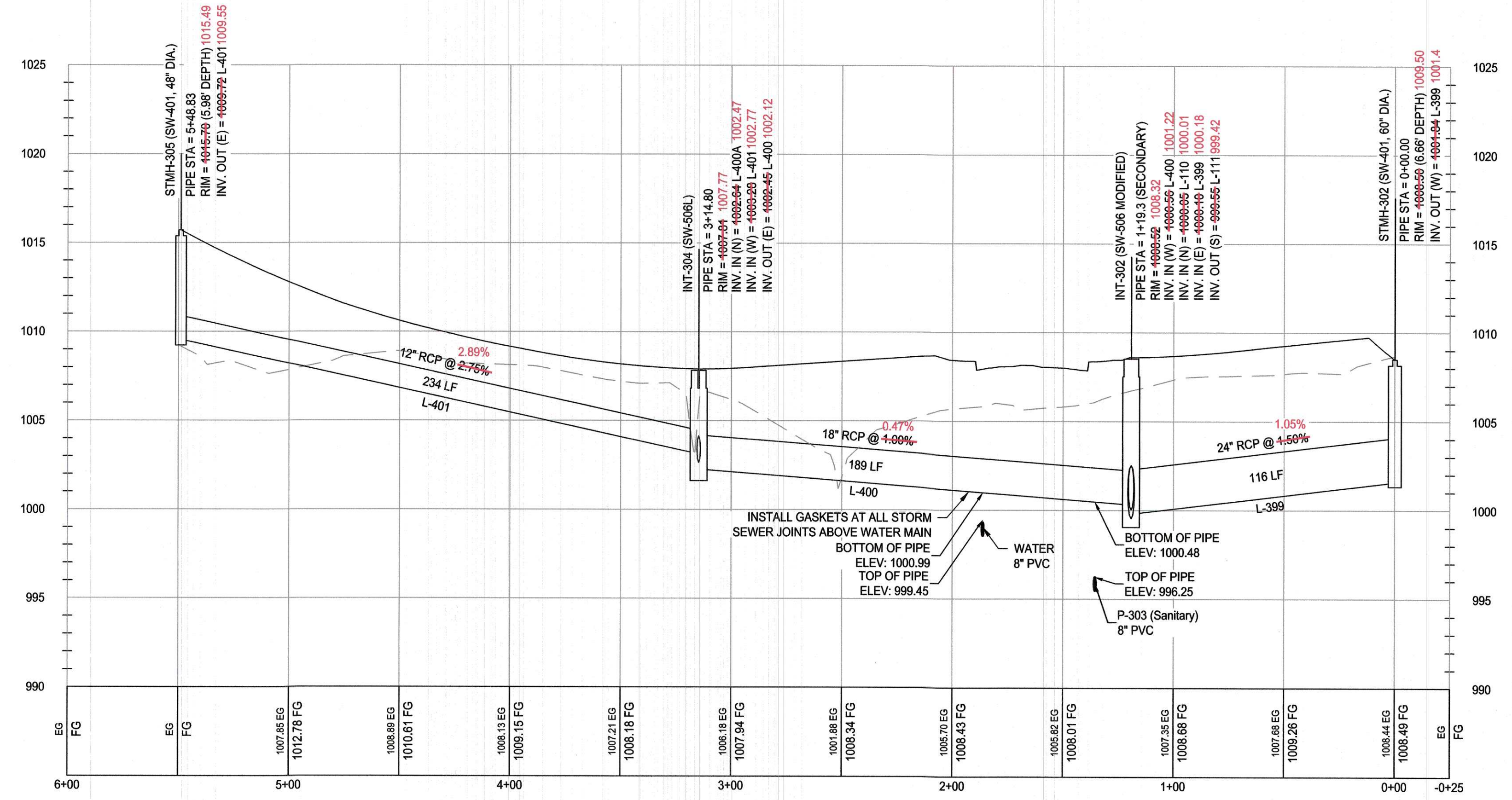
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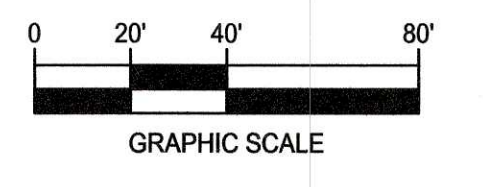
STORM SEWER PLAN AND PROFILE



ST-03 PIPE L-401 & L-501 CHANGED TO 12" RCP

STMH-305 & STMH-501 CHANGED FROM CLEANOUTS TO MANHOLES

SUBDRAIN ADDED TO LOTS 12 & 13



KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

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ENGINEER: J. BECKER
DRAWN BY: J. BECKER
CHECKED BY: C. SMITH
FIELD BOOK NO: -

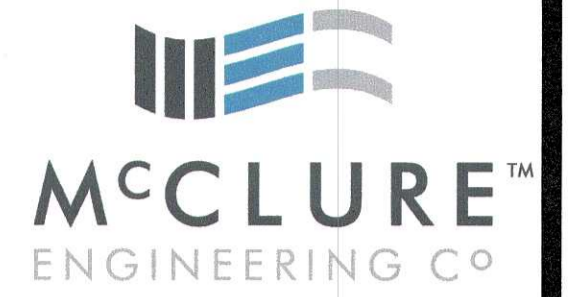
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SHEET NO: 11 / 25

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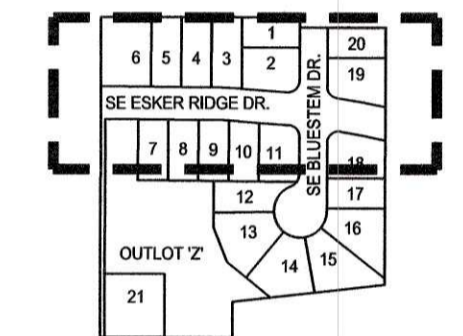
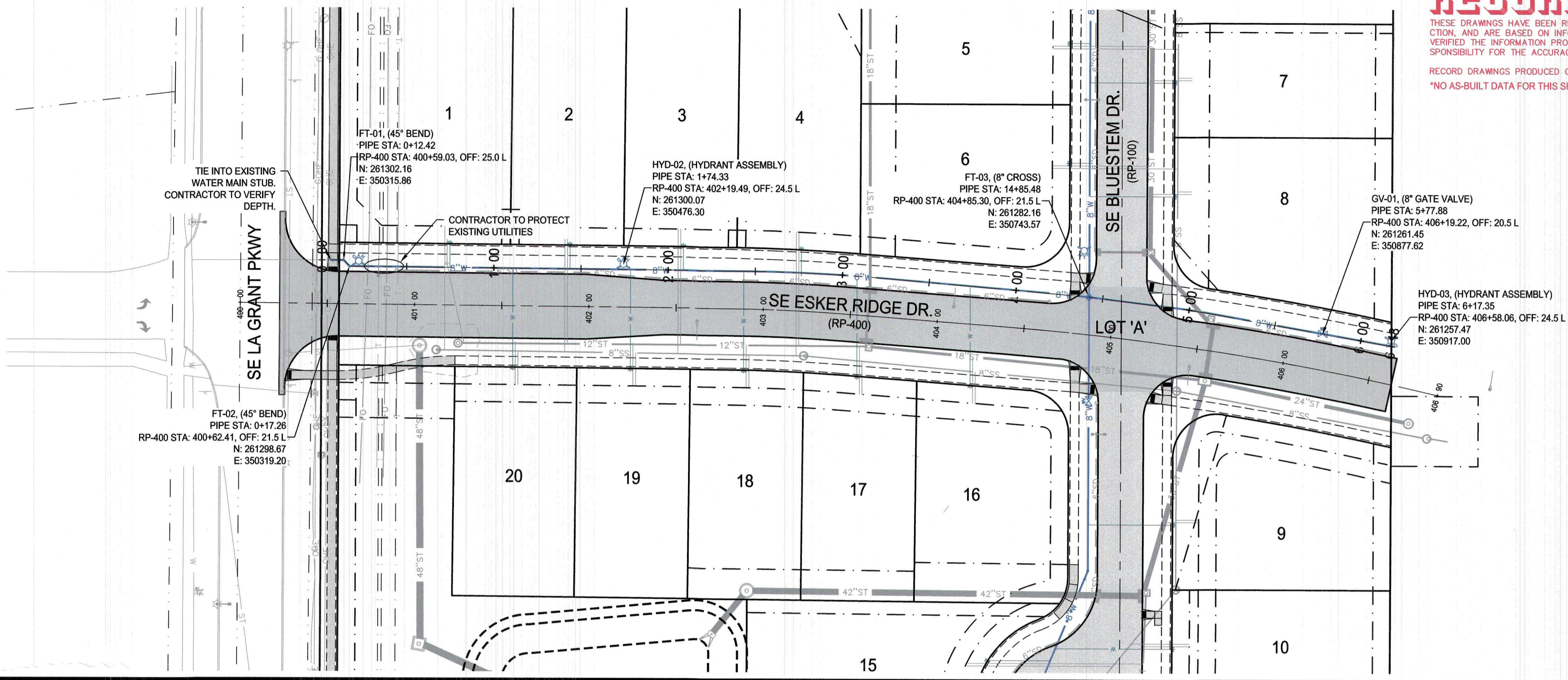
RECORD DRAWINGS PRODUCED ON: 11/27/2019
 *NO AS-BUILT DATA FOR THIS SHEET



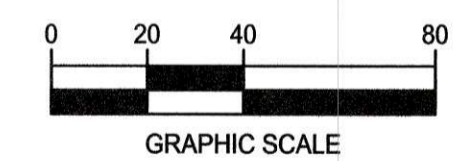
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WATER MAIN PLAN AND PROFILE



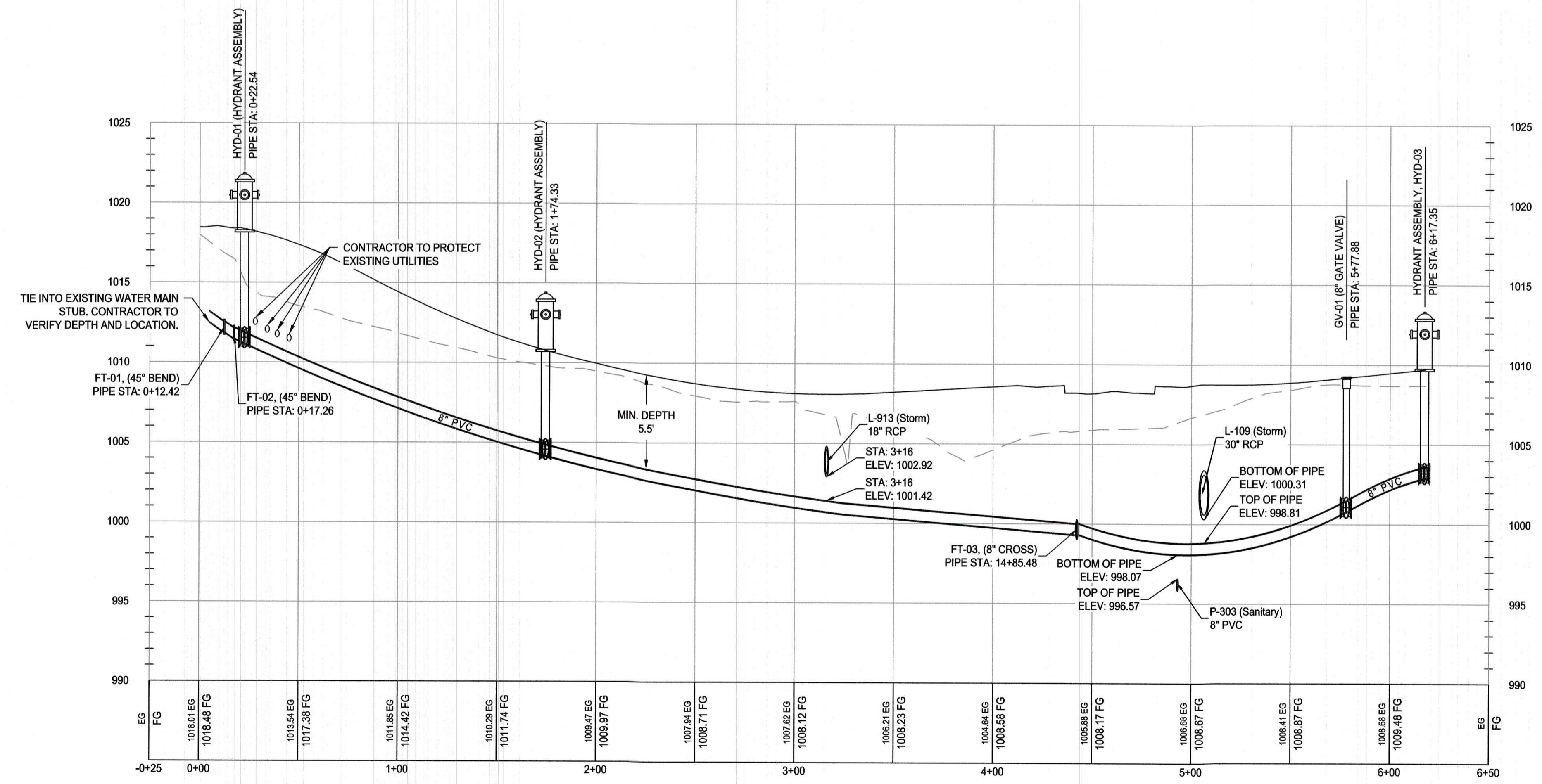
KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

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3.20.19

ENGINEER: J. BECKER
 CHECKED BY: C. SMITH
 DRAWING NO.: WA-01

DRAWN BY: J. BECKER
 FIELD BOOK NO.: -
 SHEET NO.: 12 / 25

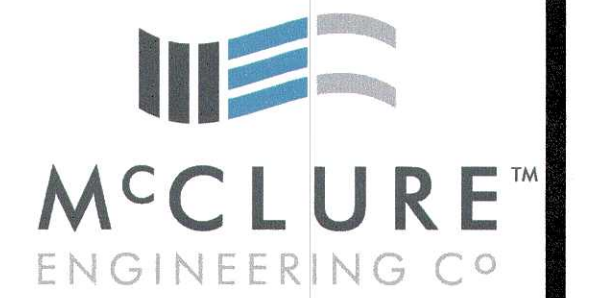


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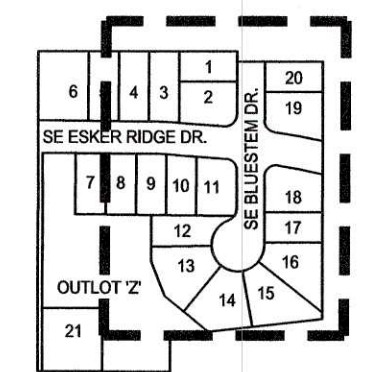
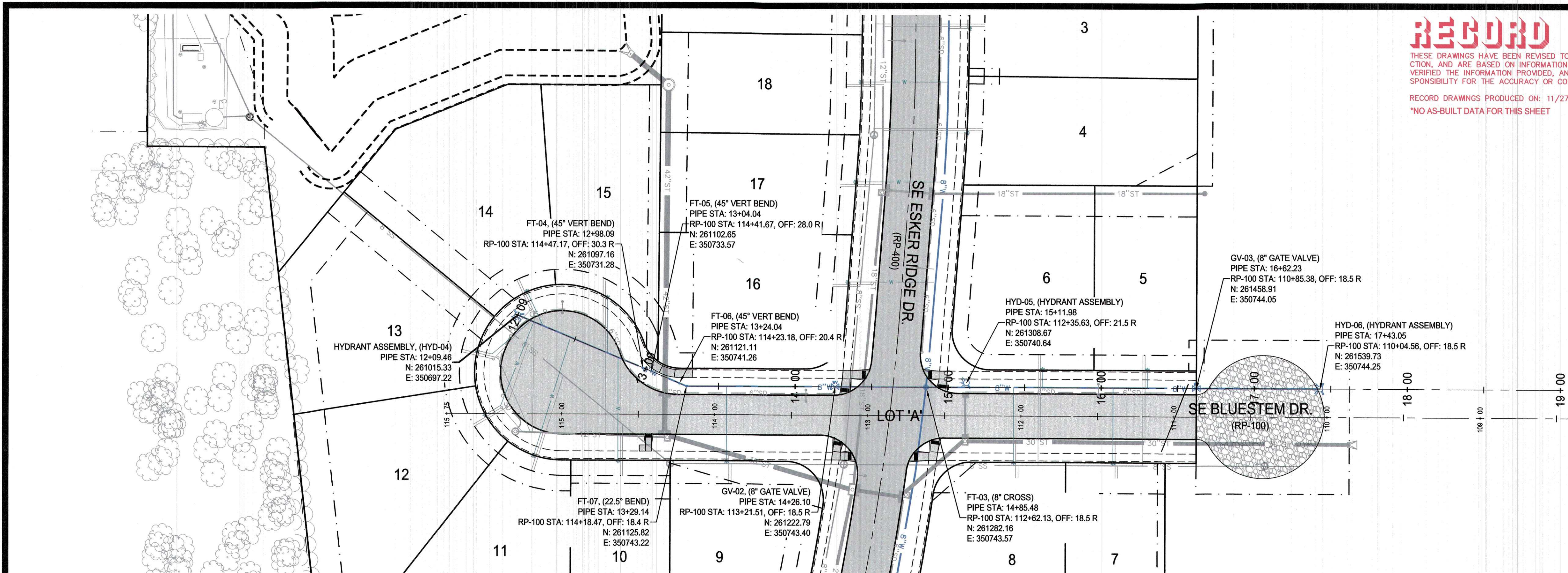
RECORD DRAWINGS PRODUCED ON: 11/27/2019
 *NO AS-BUILT DATA FOR THIS SHEET



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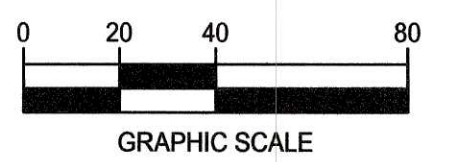
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WATER MAIN PLAN AND PROFILE



NORTH



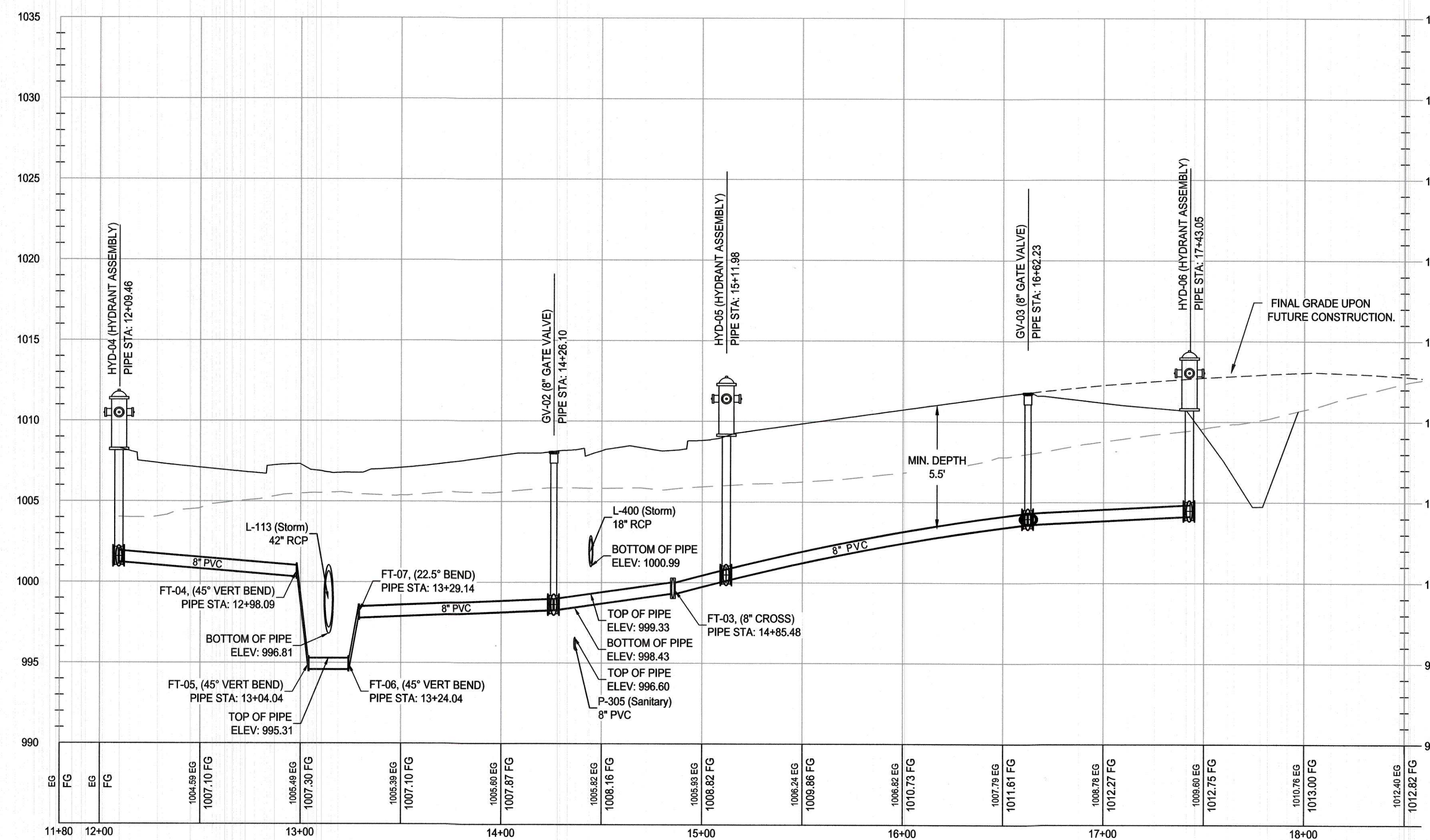
KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

Waukee, Iowa
 2211013-03
 April 27, 2018

REVISIONS
 12.3.18
 12.18.18
 12.28.18
 1.15.19
 1.23.19
 3.20.19

ENGINEER
J. BECKER
 CHECKED BY
C. SMITH

DRAWING NO. **WA-02** SHEET NO. **13 / 25**



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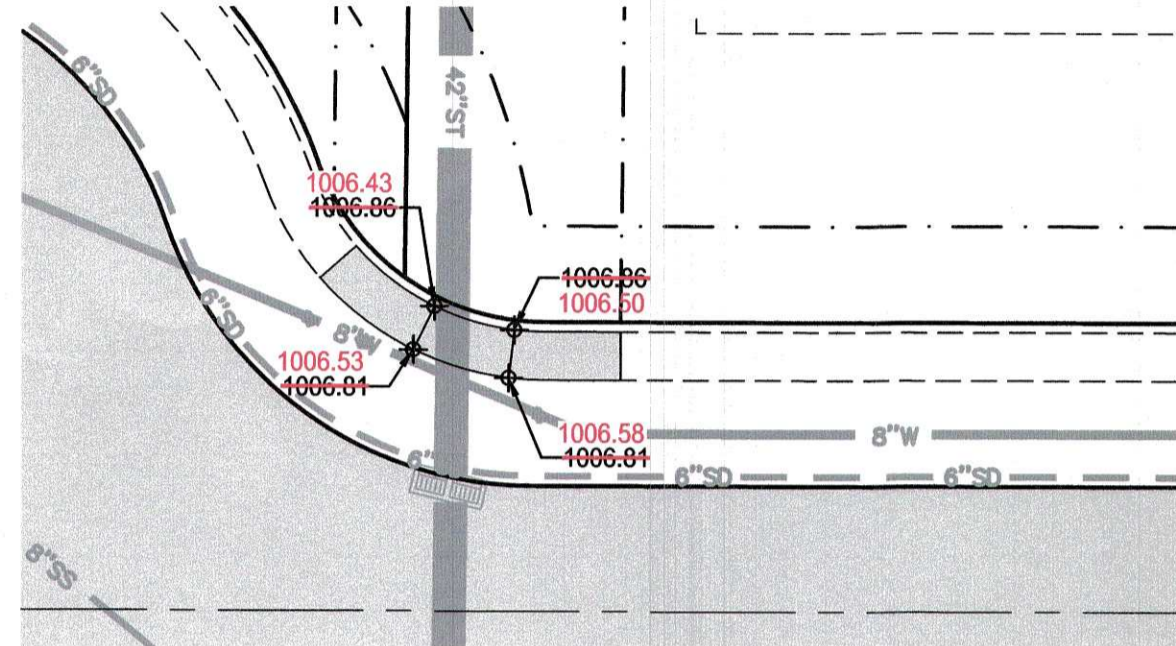
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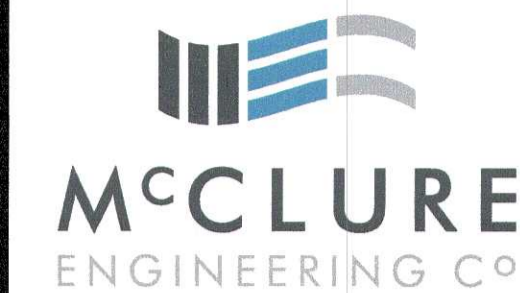
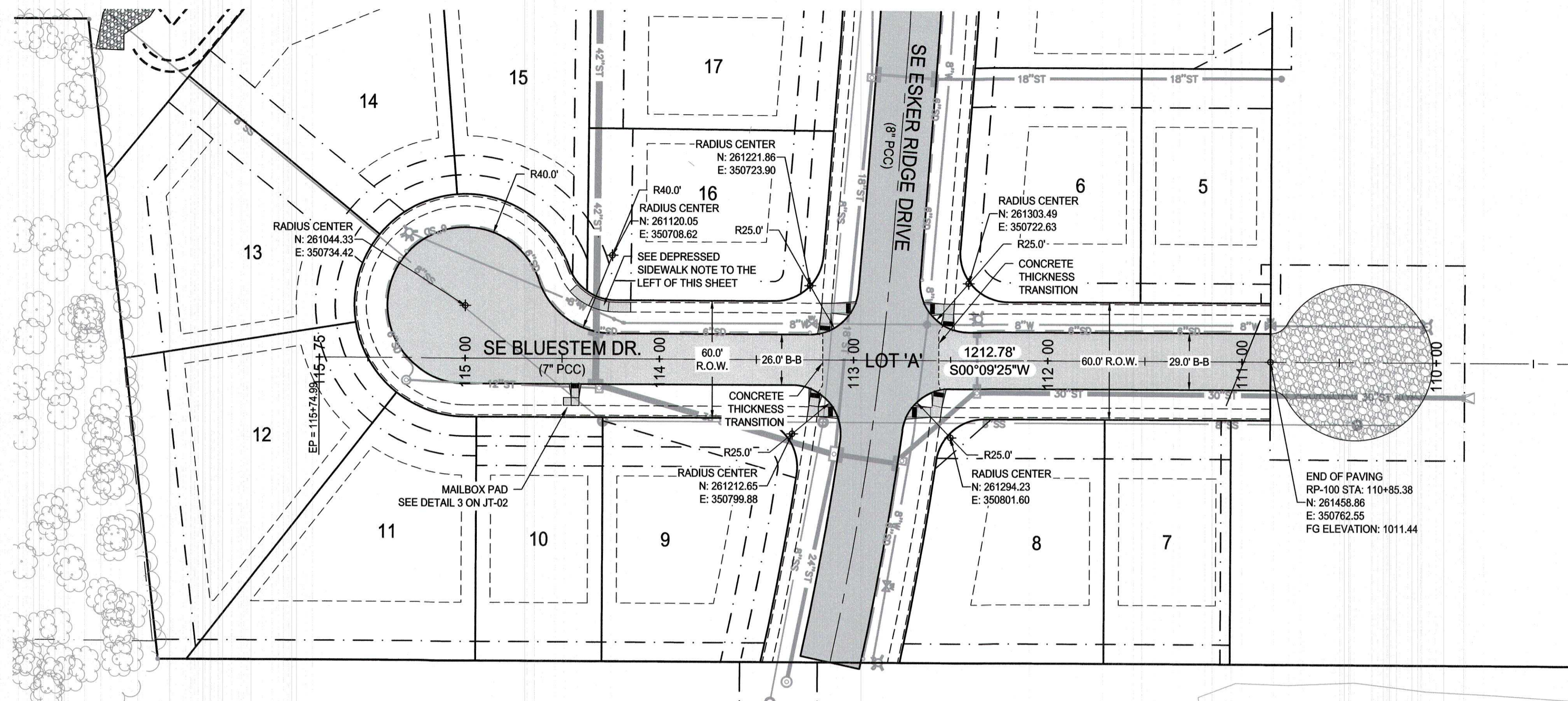
DEPRESSED SIDEWALK NOTE:

- 1) DEPRESSED SIDEWALK (HATCHED AREA) SHALL BE INSTALLED BY THE CONTRACTOR AS PART OF THE SUBDIVISION CONSTRUCTION.
- 2) ROW AT LOWEST SECTION OF DEPRESSED SIDEWALK AREA DESIGNED AS 1% FROM BACK OF CURB (VS. 4% STANDARD).
- 3) SEE DETAIL 5 ON DT-05
- 4) ELEVATIONS SHOWN BELOW ARE ILLUSTRATIVE. FINAL ELEVATIONS SHOULD BE BASED ON AS-BUILT CURB ELEVATIONS AND IN ACCORDANCE WITH DETAIL 5 ON DT-05.



NOTE:

- 1) ALL PEDESTRIAN CROSSINGS SHALL BE INSTALLED AS PART OF THE PUBLIC IMPROVEMENTS.
- 2) ALL PEDESTRIAN RAMPS SHALL BE INSTALLED WITH TRUNCATED DOMES.



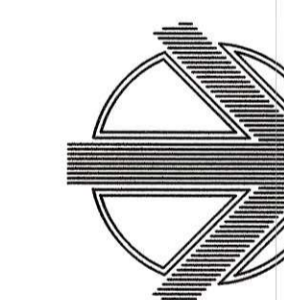
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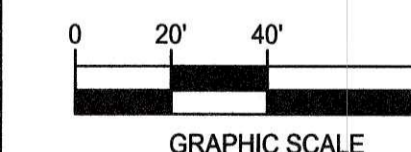
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PAVING PLAN AND PROFILE



NORTH



KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

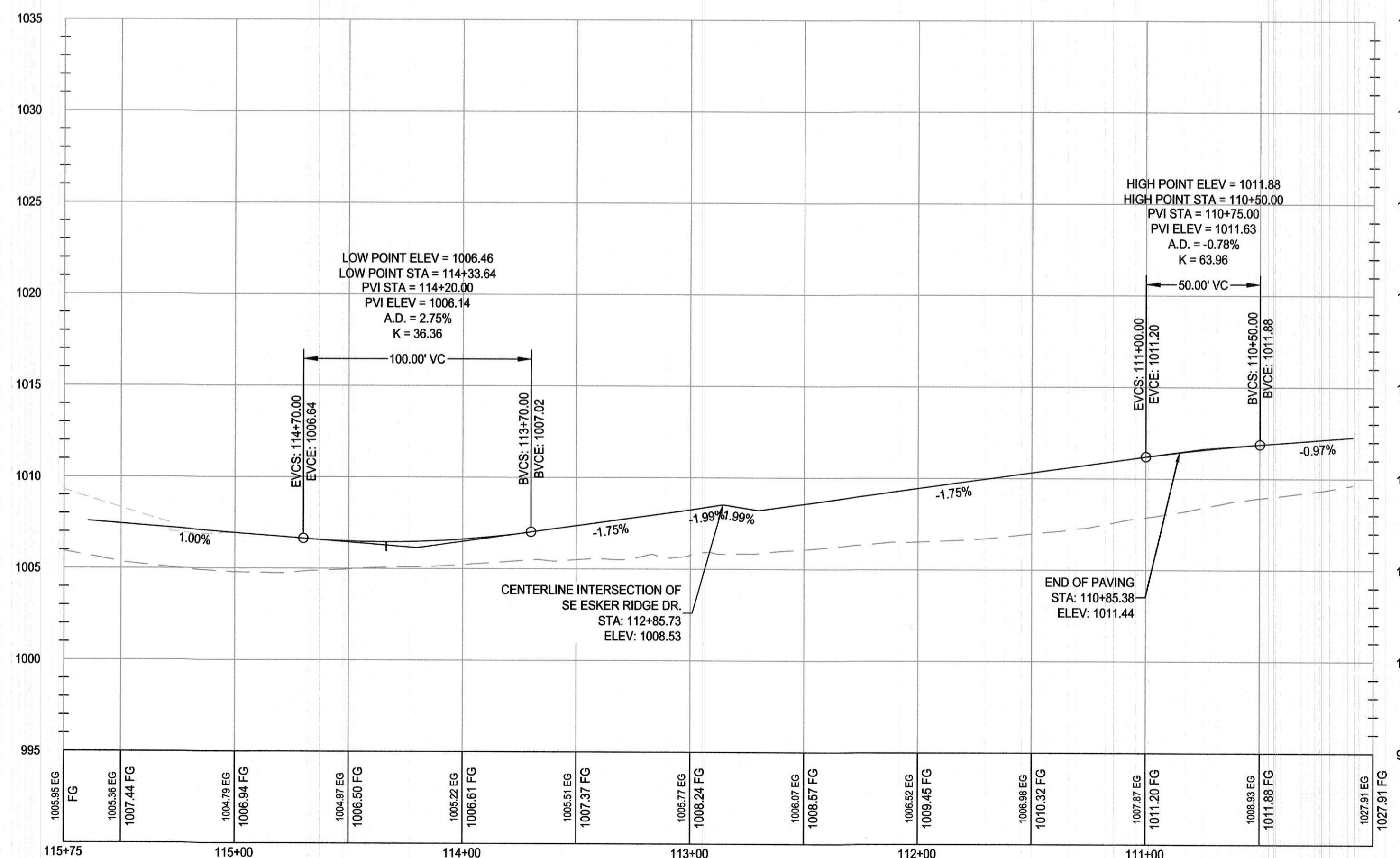
Waukee, Iowa
2211013-03
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3.20.19

ENGINEER: J. BECKER
CHECKED BY: C. SMITH

DRAWN BY: J. BECKER
FIELD BOOK NO.:

DRAWING NO. PA-01
SHEET NO. 14 / 25



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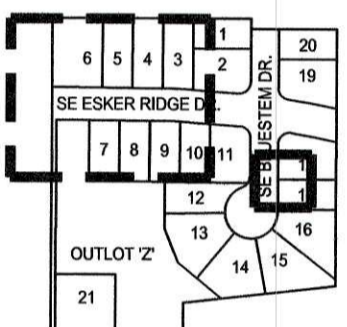
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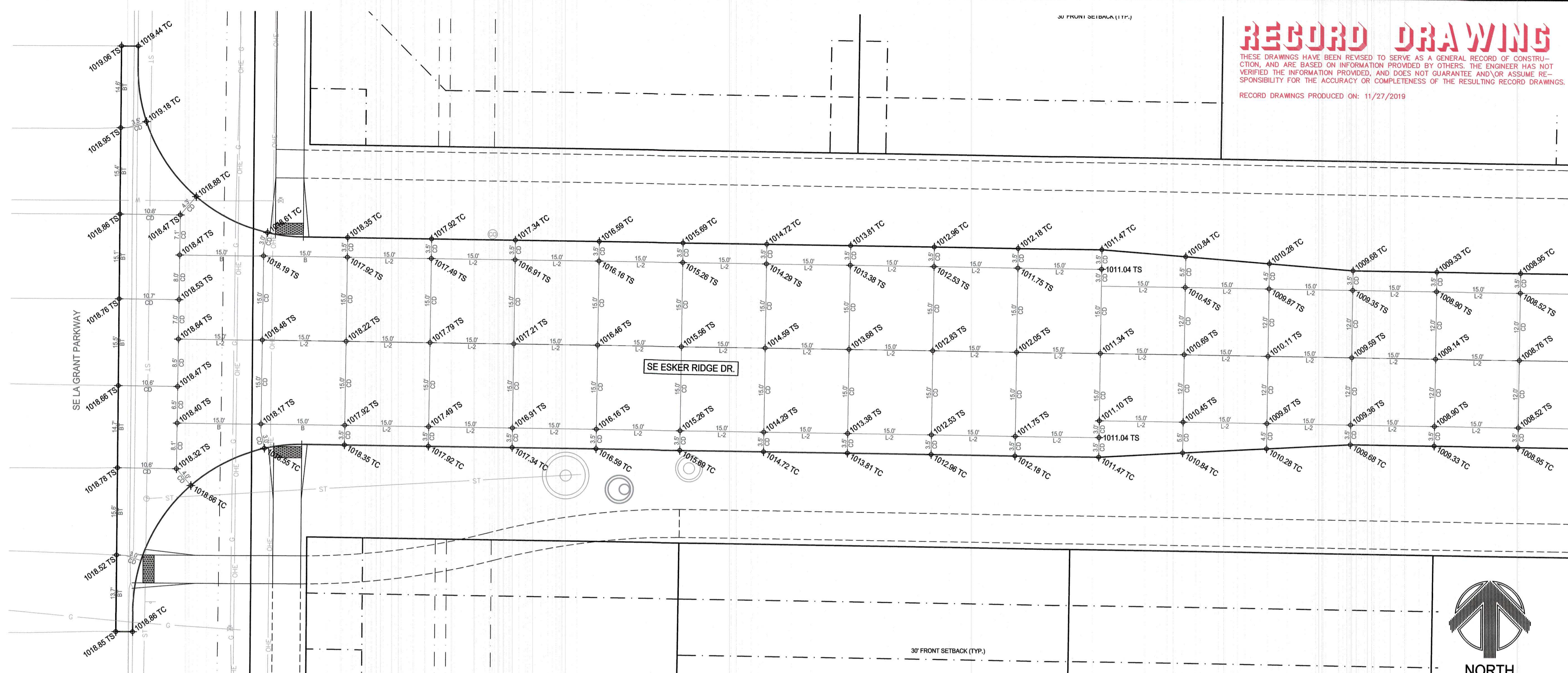
JOINTING DETAILS AND ADA DESIGN

KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

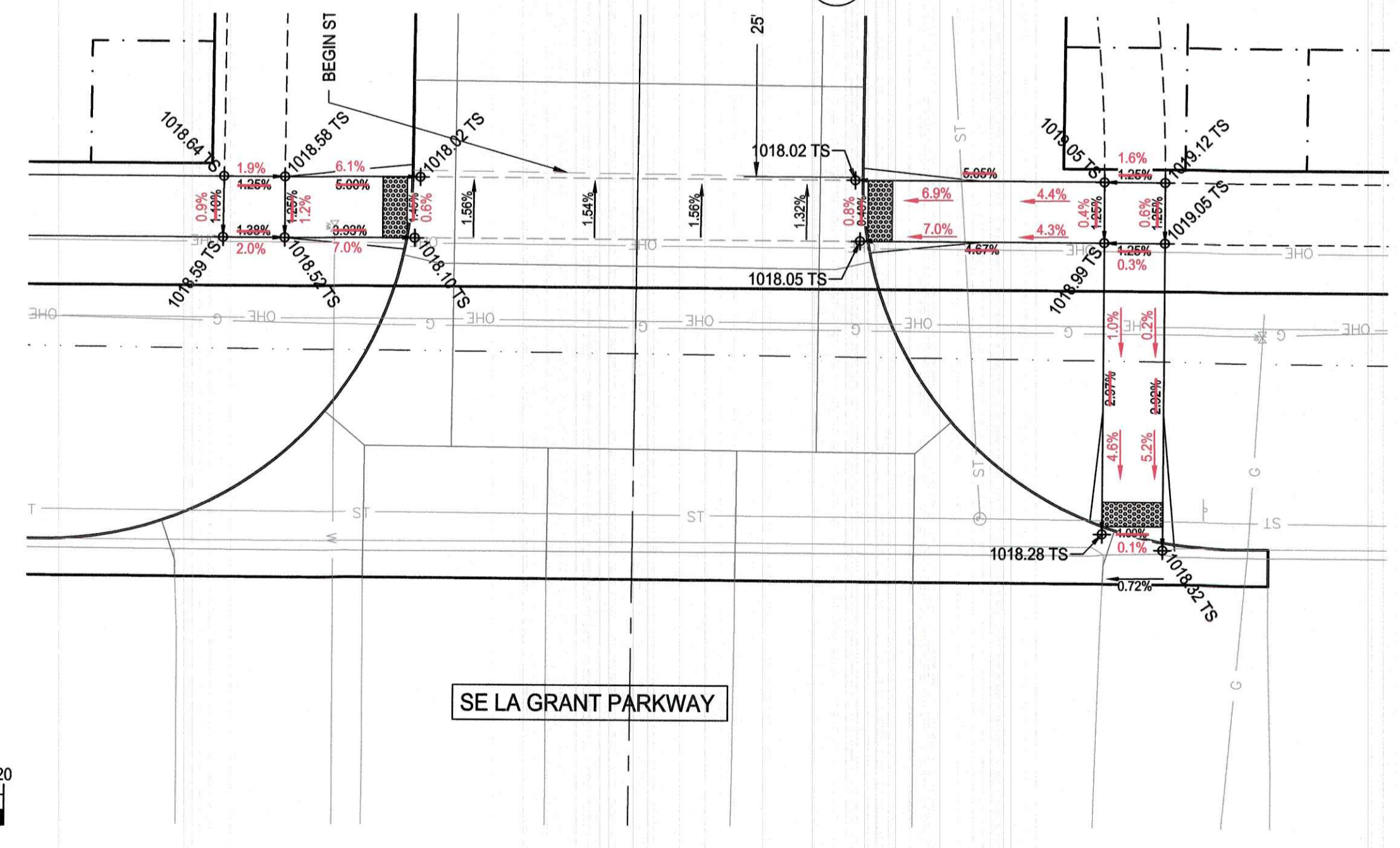
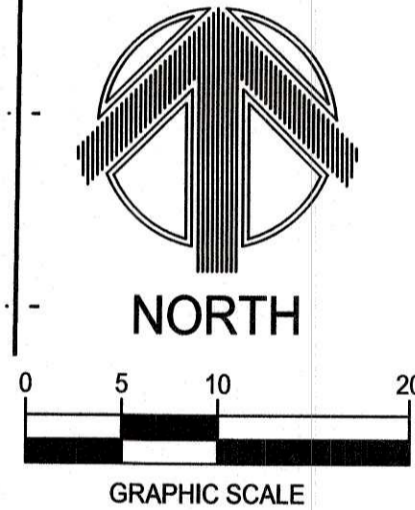
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2211013-03
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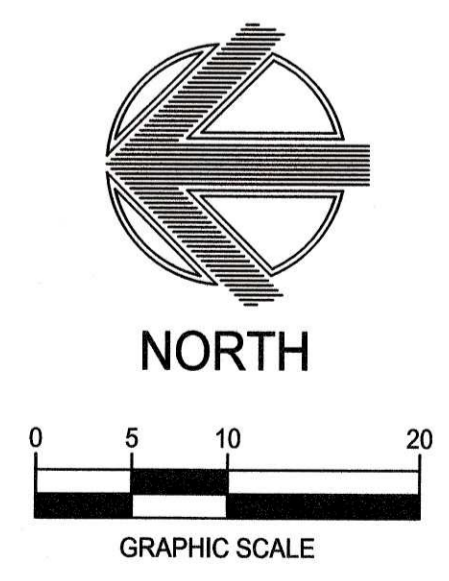
ENGINEER: J. BECKER
DRAWN BY: J. BECKER
CHECKED BY: C. SMITH
FIELD BOOK NO.:
DRAWING NO.: JT-02
SHEET NO.: 17 / 25



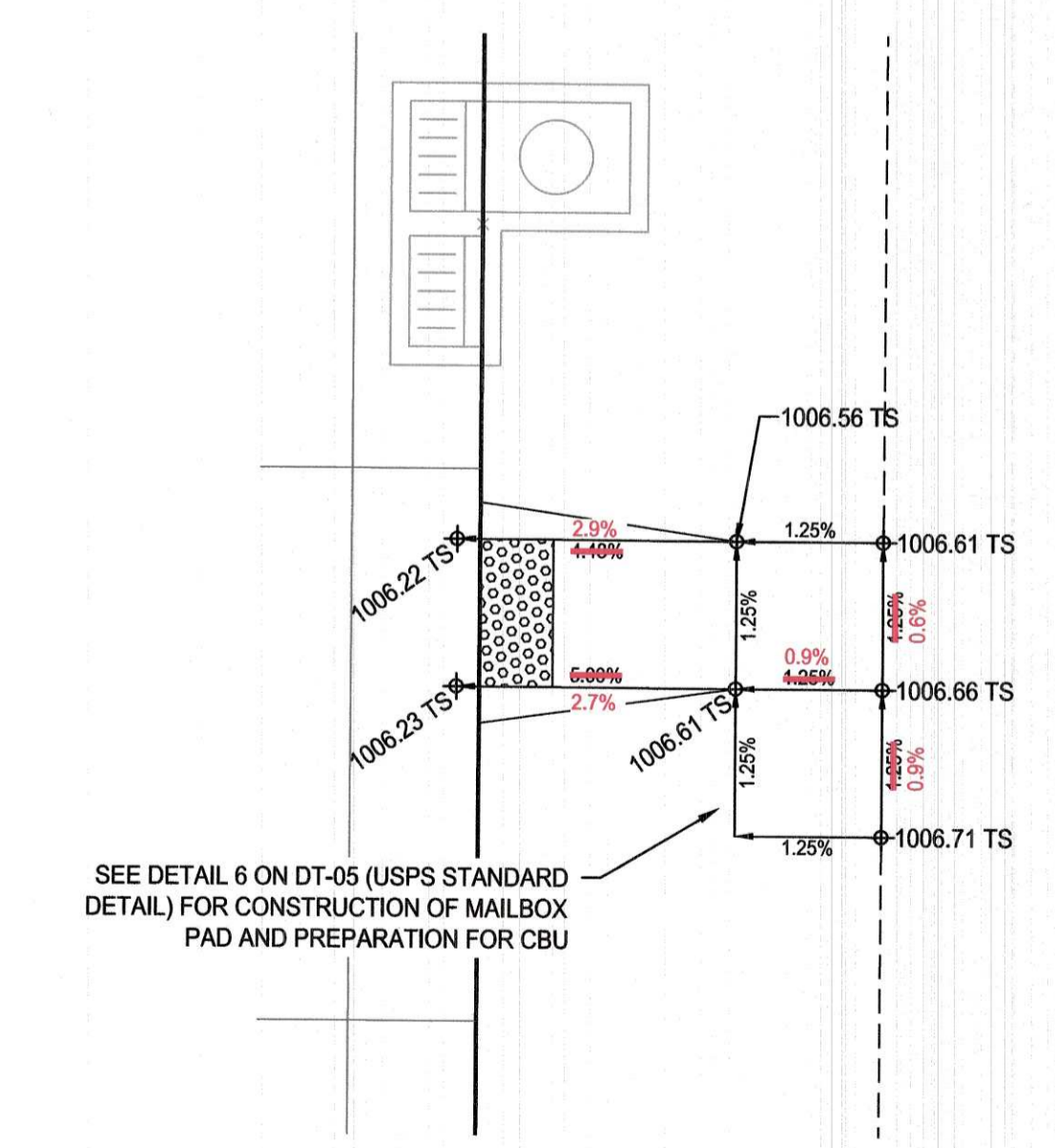
1 JOINT DETAIL - SE LA GRANT PARKWAY & SE ESKER RIDGE DR.



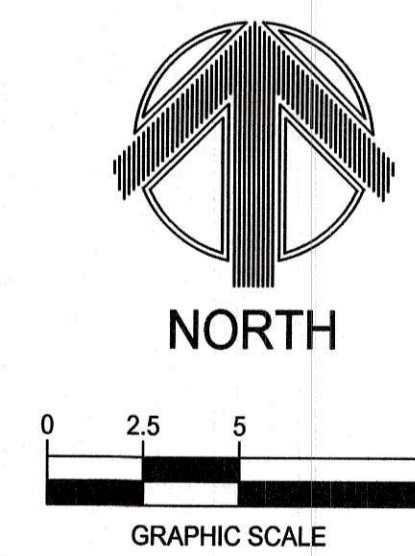
2 ADA DETAIL - SE LA GRANT PARKWAY & SE ESKER RIDGE DR.



NOTE: SLOPES, THUS COMMON SQUARE ELEVATIONS, ARE BASED ON DESIGN ELEVATIONS OF PROPOSED PAVEMENT. GRADES AND ELEVATIONS SHOWN MAY NEED ADJUSTED BASED ON CURB/GUTTER AS-BUILT ELEVATIONS TO MAINTAIN ADA COMPLIANCE.



3 ADA DETAIL - MAILBOX RAMP & PAD DETAIL

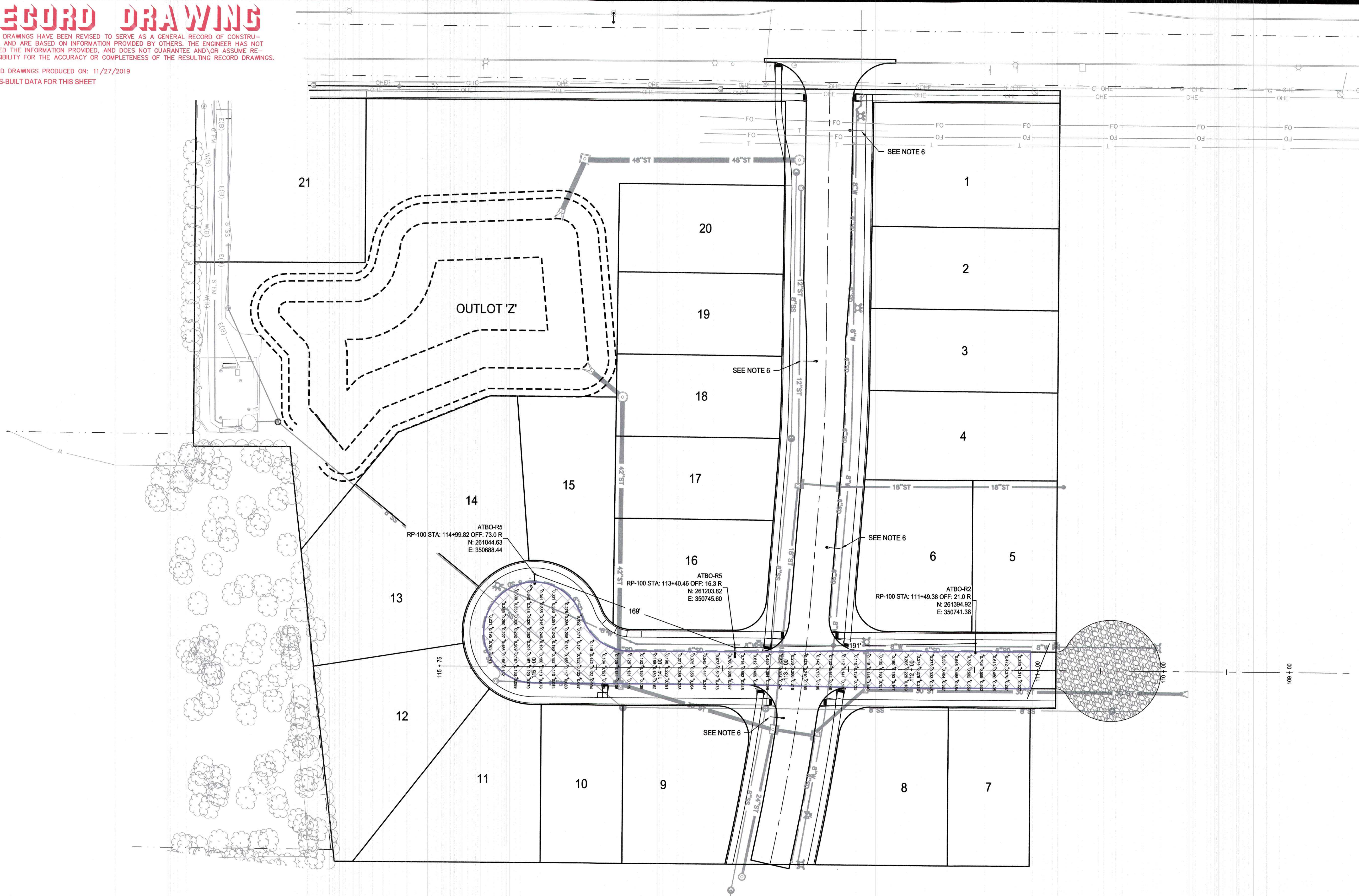


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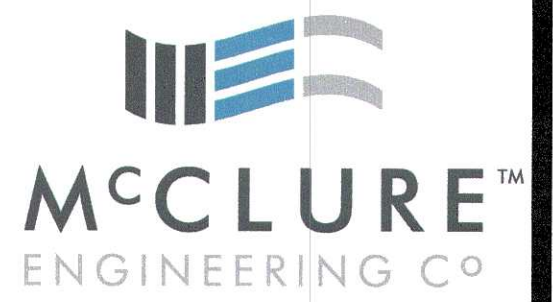


Statistics			
Description	Avg	Min	Avg/Min
SE Bluestem Dr.	0.269 fc	0.074 fc	3.6:1

CALCULATION ZONE LEGEND	
	SE BLUESTEM DR.

Schedule									
Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
ATBO-R2	2	American Electric Lighting	ATBO 20BLEDE53 R2	ATBO SERIES 37W LED 525MA TYPE 2 4000K CCT	LED Array	1	3807	0.85	37
ATBO-R5	1	American Electric Lighting	ATBO 20BLEDE53 R5	ATBO SERIES LED 525MA TYPE 5 4000K / 5000K CCT	LED	1	4869	0.85	36

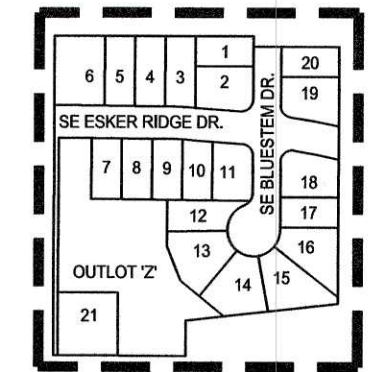
- NOTES:**
- ALL LIGHT POLES SHALL BE AS FOLLOWS:
 - MIDAMERICAN CODE 211-1738 POLE w/6' MAST ARM.
 - 28.0' MOUNTING HEIGHT ABOVE FINISHED GRADE.
 - POLE AND MAST ARM SHALL BE GALVANIZED.
 - ALL LIGHTS SHALL BE LED FIXTURES.
 - TOTAL NUMBER OF LIGHTS PROPOSED = 3 LIGHTS SPACED AT 143' MIN AND 205' MAX.
 - CALCULATION ZONES ARE REPRESENTED BY COLOR.
 - LIGHT POLES TYPICALLY PLACED FROM 3' TO 6' FROM BACK OF CURB, ADJUST AS NECESSARY TO AVOID CONFLICTS WITH UTILITIES.
 - SEE SE ESKER RIDGE DRIVE LIGHTING PLAN BY OTHERS FOR LIGHTING PLAN AND DETAILS ALONG SE ESKER RIDGE DRIVE. LOCATIONS SHOWN BY THESE PLANS IS GRAPHICAL AND BASED ON DATA PROVIDED BY OTHERS.



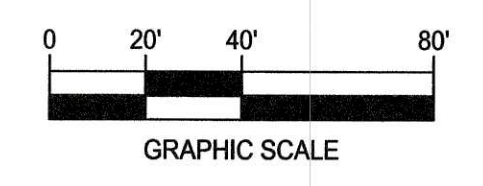
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OVERALL LIGHTING PLAN



KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

Waukee, Iowa
 2211013-03
 April 27, 2018

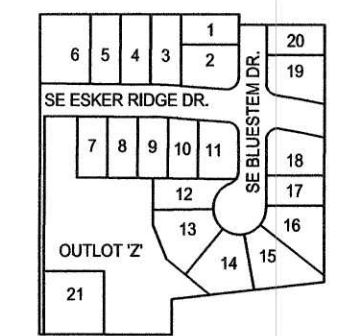
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 1.23.19
 3.20.19

ENGINEER: J. BECKER
 CHECKED BY: C. SMITH
 DRAWN BY: J. BECKER
 FIELD BOOK NO.:

DRAWING NO. LI-01
 SHEET NO. 18 / 25

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LIGHTING CUT SHEETS

**KETTLESTONE RIDGE PLAT 4
CONSTRUCTION DRAWINGS**

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2211013-03
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ENGINEER: J. BECKER
CHECKED BY: C. SMITH
DRAWING NO: LI-02

DRAWN BY: J. BECKER
FIELD BOOK NO: -
SHEET NO: 19 / 25

Autobahn Series ATB0 Roadway Lighting

ORDERING INFORMATION

Example: ATB0 20BLEDE53 MVOLT R2

Series	Performance Packages	Voltage	Optics
ATB0 Autobahn LED Roadway, Small	20BLEDE53 20B Chips, 525mA Driver	MVOLT Multi-volt,120-277V	R2 Roadway Type II

BK / XL

MISC

BK Black

XL Not CSA listed

RFD200704

RFD Description

RFD200704 100W HPS NEMA label, "I" decal mounted below NEMA label and Mark Carton: MEC Item ID 323-332791

DIMENSIONS

Performance Package	Drive Current	Input Watts	Optic	4000K CCT Delivered Lumens	Efficacy (LPW)
10B	1050mA	38	R2	3895	102.5

Effective Projected Area (EPA): The EPA for the ATB0 is 0.76 sq. ft. Approx. Wx = 14 ft.

Polar Candela Distribution

Isolfootcandle Plot

Note: Specifications subject to change without notice. Actual performance may differ as a result

AEL American Electric Lighting
Acuity Brands Company

American Electric Lighting
Acuity Brands Lighting, Inc.
3825 Columbus Rd. S.W., Granville, OH 43023
Phone: 800-533-5710 Fax: 740-587-6114
www.americanelectricalighting.com

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Autobahn Series ATB0 Roadway Lighting

ORDERING INFORMATION

Example: ATB0 20BLEDE53 MVOLT R5

Series	Performance Packages	Voltage	Optics
ATB0 Autobahn LED Roadway, Small	20BLEDE53 20B Chips, 525mA Driver	MVOLT Multi-volt,120-277V	R5 Roadway Type V

BK / XL

MISC

BK BLACK

XL Not CSA listed

RFD200705

RFD Description

RFD200705 100W HPS NEMA label, "I" decal mounted below NEMA label and Mark Carton: MEC Item ID 323-332794

DIMENSIONS

Performance Package	Drive Current	Input Watts	Optic	4000K CCT Delivered Lumens	Efficacy (LPW)
10B	1050	38	R5	4063	107

Effective Projected Area (EPA): The EPA for the ATB0 is 0.76 sq. ft. Approx. Wx = 14 ft.

Polar Candela Distribution

Isolfootcandle Plot

Note: Specifications subject to change without notice. Actual performance may differ as a result

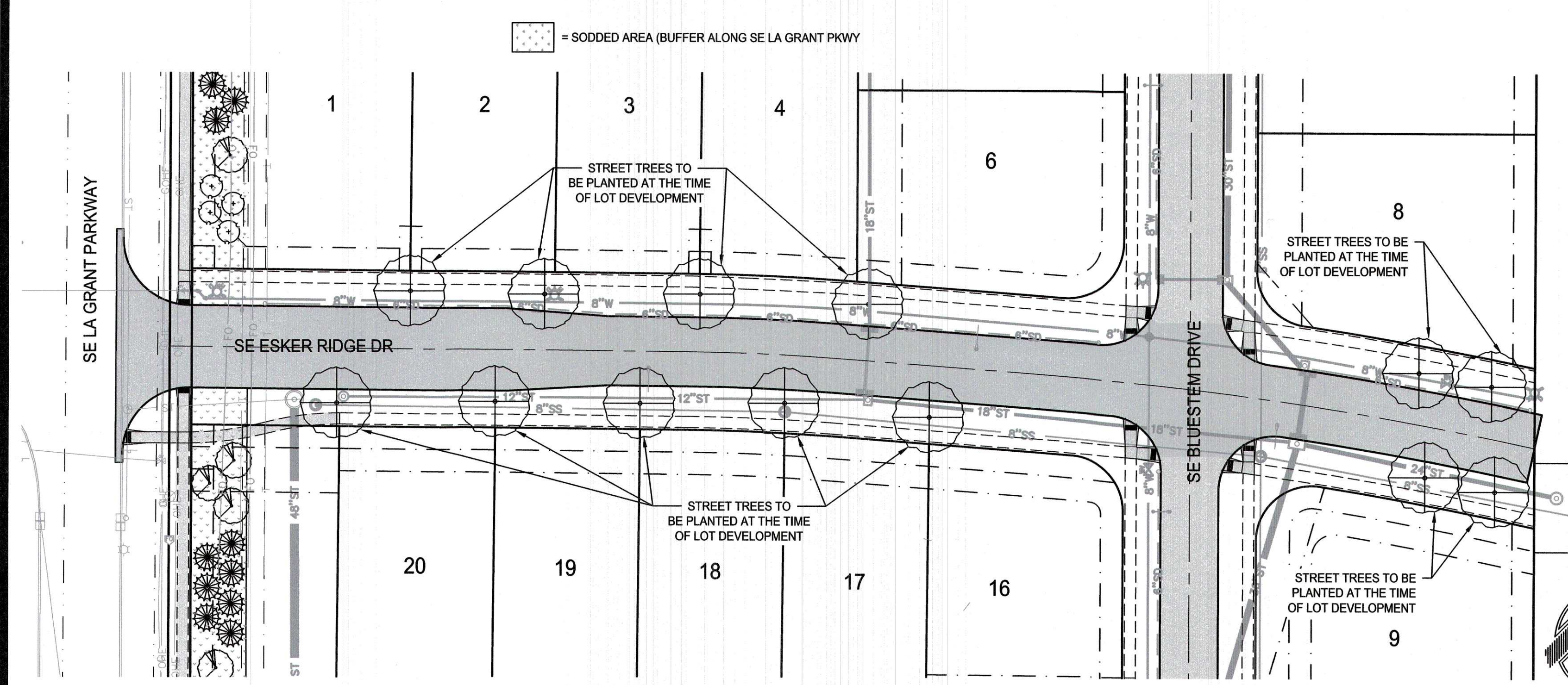
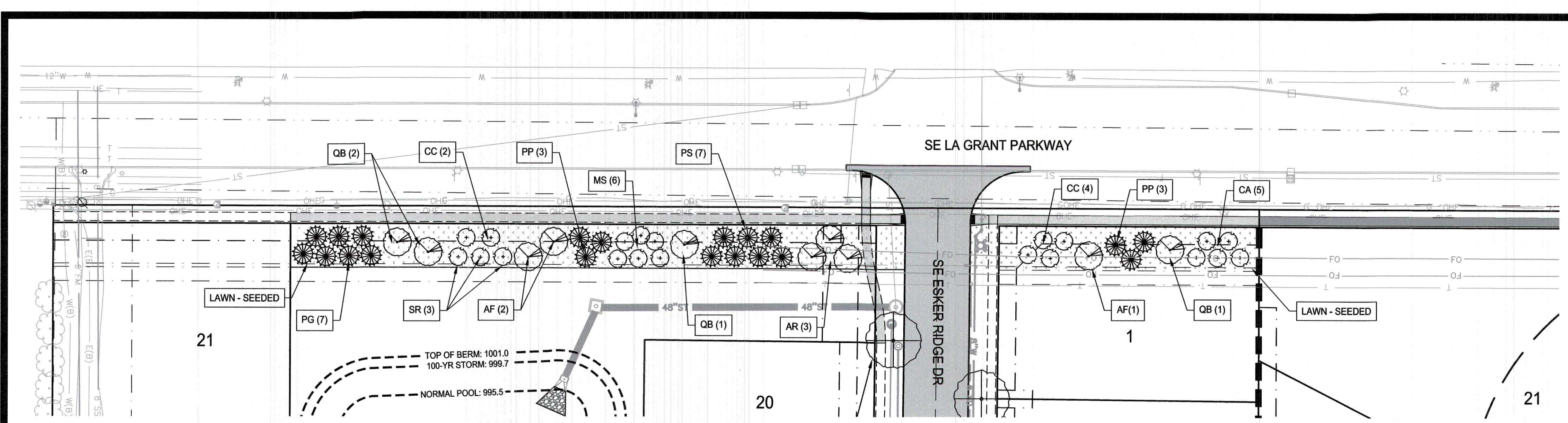
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LANDSCAPE PLAN NOTES:

1. PLANT QUANTITIES ARE FOR INFORMATION ONLY; DRAWING SHALL PREVAIL IF CONFLICT OCCURS. CONTRACTOR IS RESPONSIBLE FOR CALCULATING OWN QUANTITIES AND BASING BID ACCORDINGLY.
2. CONTRACTOR SHALL PLACE SHREDDED HARDWOOD BARK MULCH AROUND ALL TREES AND IN ALL PLANTING BEDS TO A DEPTH OF 3". WALNUT PRODUCTS ARE PROHIBITED.
3. KIND, SIZE AND QUALITY OF PLANT MATERIAL SHALL CONFORM TO AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z-60.1-2004, OR MOST RECENT EDITION.
4. THE CONTRACTOR SHALL REPORT SUBSURFACE SOIL OR DRAINAGE PROBLEMS TO THE LANDSCAPE ARCHITECT.
5. THE CONTRACTOR SHALL SHOW PROOF OF PROCUREMENT, SOURCES, QUANTITIES AND VARIETIES FOR ALL TREES WITHIN 21 DAYS FOLLOWING THE AWARD OF CONTRACT. TIMELY PROCUREMENT OF ALL PLANT MATERIAL IS ESSENTIAL TO THE SUCCESSFUL COMPLETION AND INITIAL ACCEPTANCE OF THE PROJECT.
6. SUBSTITUTIONS SHALL ONLY BE ALLOWED WHEN THE CONTRACTOR HAS EXHAUSTED ALL SOURCES FOR THE SPECIFIED MATERIAL, AND HAS PROVEN THAT THE SPECIFIED MATERIAL IS NOT AVAILABLE. THE CONTRACTOR MUST PROVIDE NAME AND VARIETY OF SUBSTITUTION TO THE LANDSCAPE ARCHITECT AND CITY FOR APPROVAL PRIOR TO TAGGING OR PLANTING.
7. ALL PLANT MATERIAL SHALL BE NURSERY GROWN, SOUND, HEALTHY, VIGOROUS AND FREE FROM INSECTS, DISEASE AND INJURIES, WITH HABIT OF GROWTH THAT IS NORMAL FOR THE SPECIES. SIZES SHALL BE EQUAL TO OR EXCEEDING SIZES INDICATED ON THE PLANT SCHEDULE. THE CONTRACTOR SHALL SUPPLY PLANTS IN QUANTITY AS SHOWN ON DRAWINGS.
8. STAKE OR PLACE ALL PLANTS IN FIELD AS INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT FOR APPROVAL BY THE OWNER PRIOR TO PLANTING.
9. ALL OF "OUTLOT 2" SHALL BE SEEDED WITH TYPE 1 MIX.
10. ALL DISTURBED AREAS NOT OTHERWISE COVERED BY BUILDING, PAVEMENT, AND LANDSCAPE BEDS SHALL BE SEEDED WITH SUDAS TYPE 4 EROSION CONTROL SEED MIX.
11. ALL STREET TREES ARE TO BE PLANTED AT THE TIME OF LOT DEVELOPMENT. ALL STREET TREES ARE TO BE PLANTED WITHIN THE KETTLESTONE LANDSCAPING DESIGN GUIDE AS PROVIDED BY THE CITY OF WAUKEE.

BUFFER REQUIREMENTS

OVERSTORY TREES PER 50 LF OF BUFFER	EVERGREEN TREES PER 50 LF OF BUFFER	ORNAMENTAL TREES PER 50 LF OF BUFFER	BUFFER LENGTH	TREES REQUIRED
1	2	3	(480 / 50) = 10 (10 x 1) =	10 OVERSTORY
			(480 / 50) = 10 (10 x 2) =	20 EVERGREEN
			(480 / 50) = 10 (10 x 2) =	20 ORNAMENTAL

BUFFER PLANTING PROPOSED

OVERSTORY TREES	= 10
EVERGREEN	= 20
ORNAMENTAL	= 20

STREET TREE REQUIREMENTS (SE ESKER RIDGE DR)

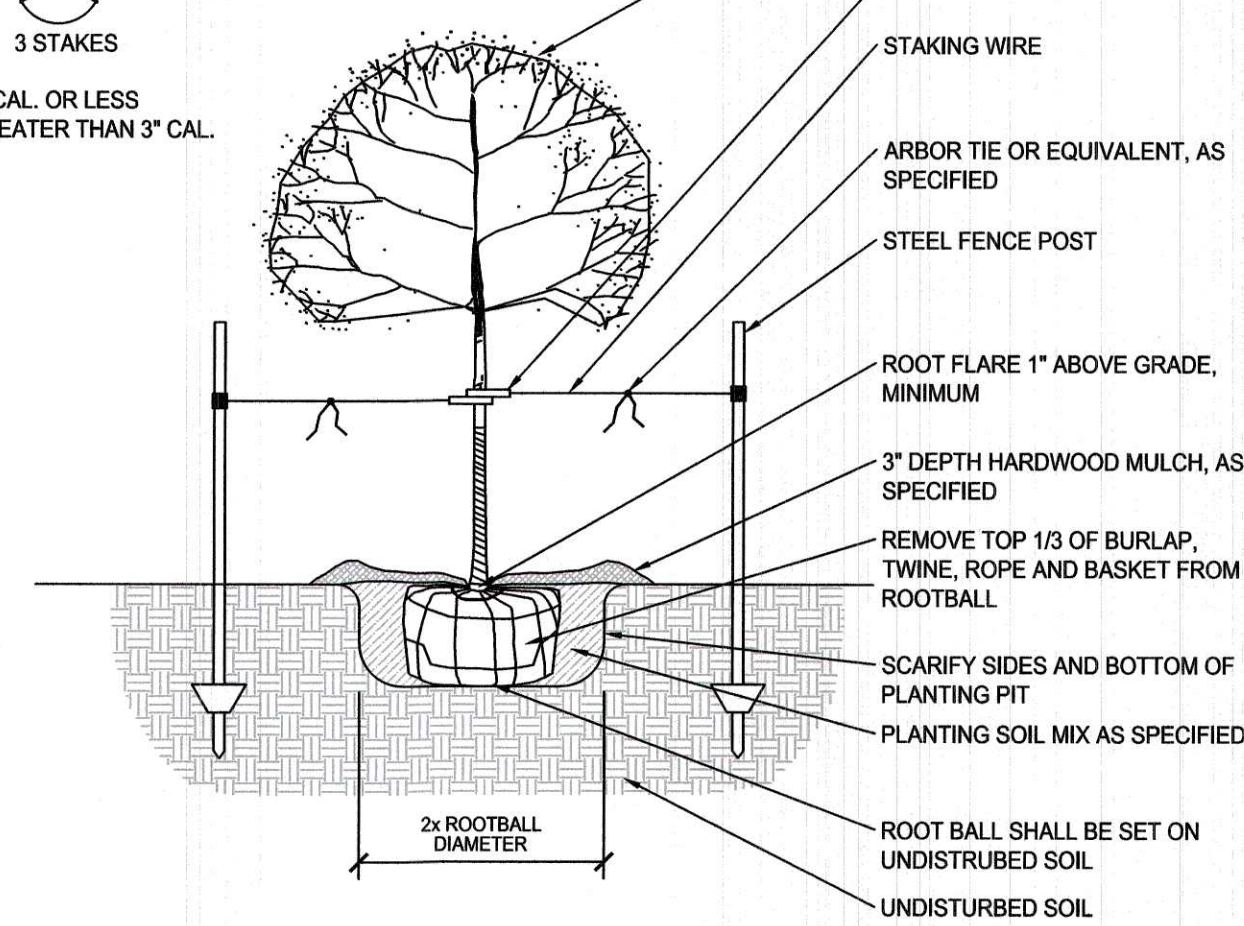
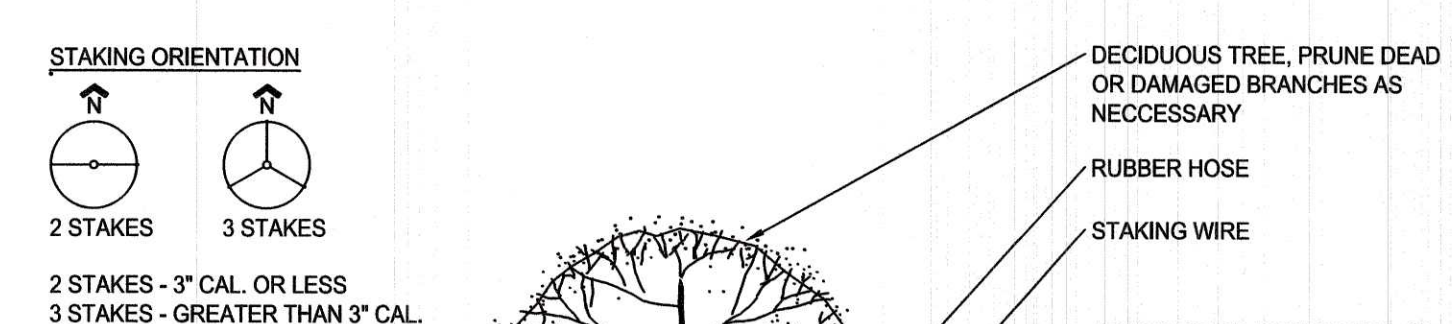
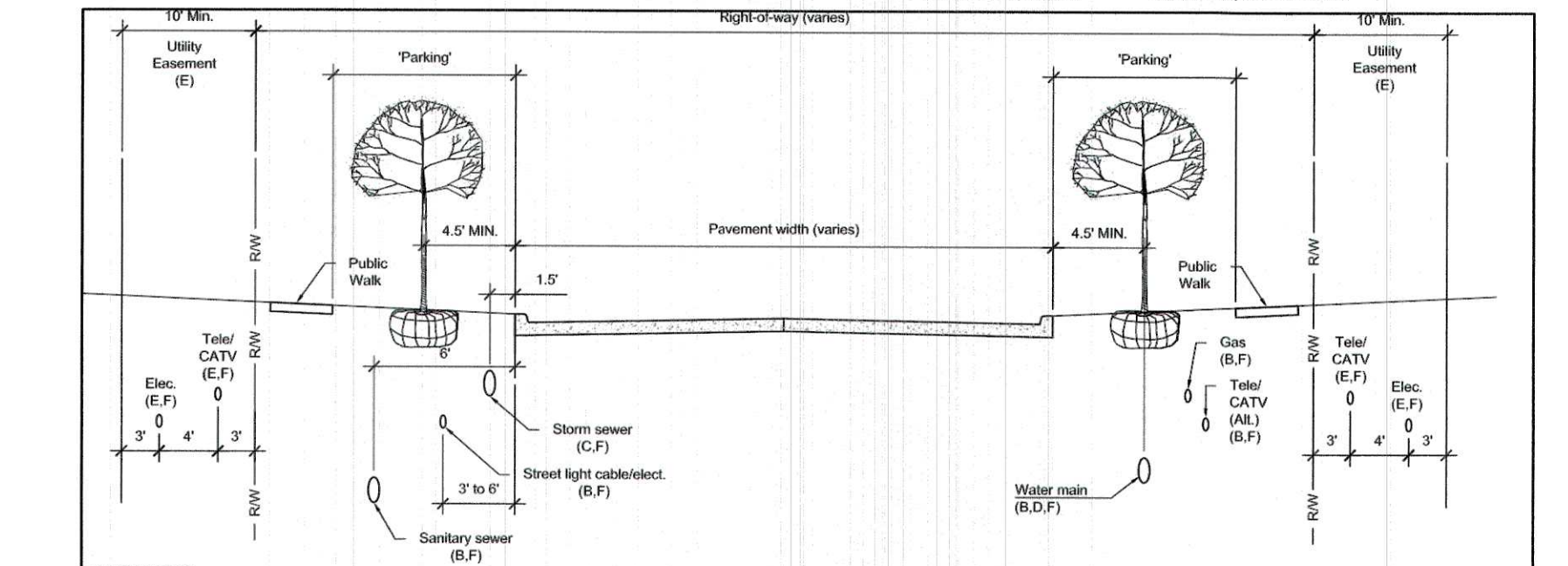
1 OVERSTORY TREES PER 40 LF OF STREET EXCLUDING DRIVEWAY

ASSUMING A DRIVEWAY IS 24' WIDE x 7 DRIVEWAYS = 144 LF OF DRIVEWAY
 637 LF (LF OF STREET) - 144 (LF OF DRIVEWAY) = 493 LF
 493 LF / 40 = 12.3 OR 13 STREET TREES REQUIRED

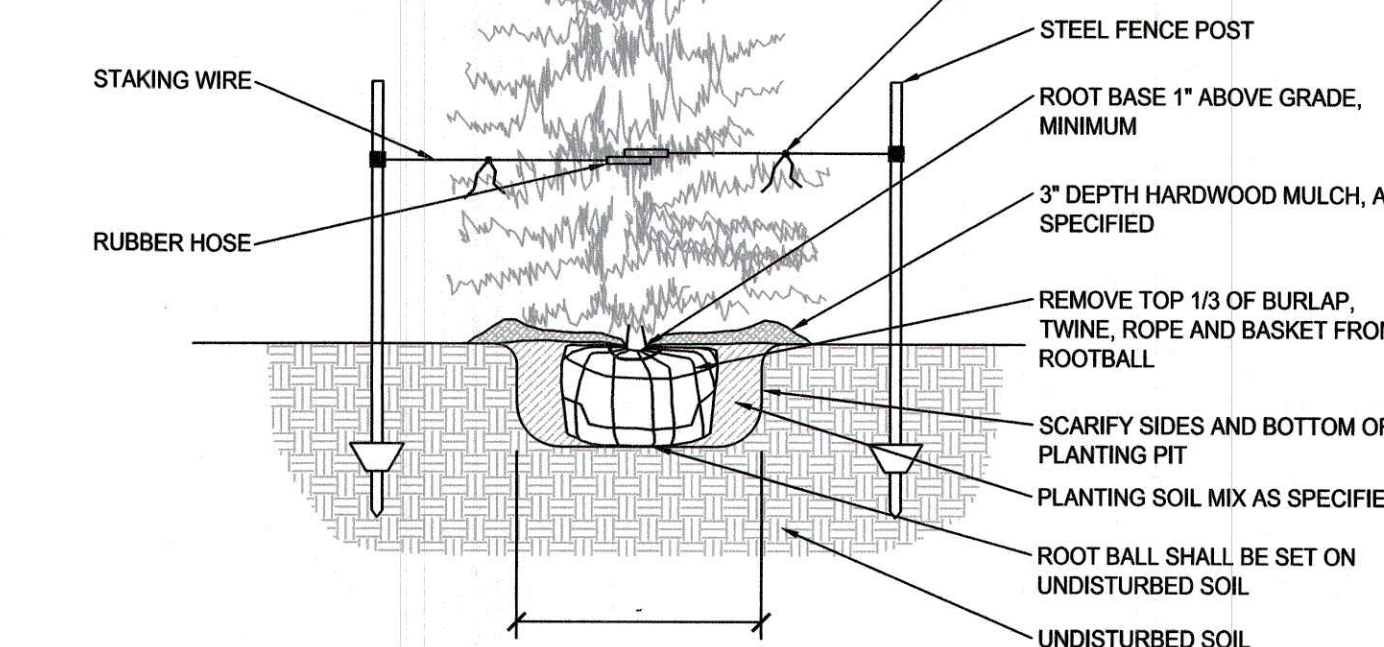
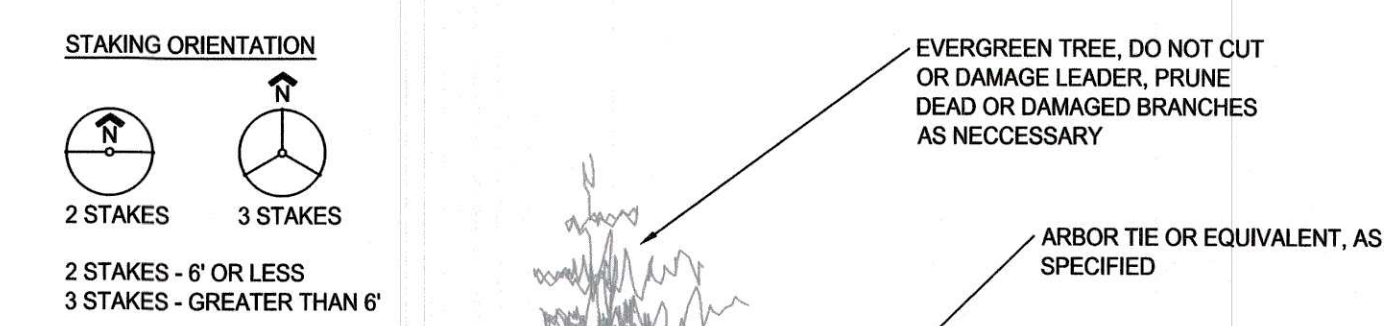
TREES MUST BE A MINIMUM OF 12' IN HEIGHT AT TIME OF PLANTING

AREA AND SOD CALCULATIONS

AREA TO BE SODED: 12,838 / 43,560 = 0.29 A.C.
 PERVIOUS AREA = 386,033 / 43,560 = 8.86 A.C.
 IMPERVIOUS AREA = 39,523 / 43,560 = .91 A.C.



1 DETAIL: DECIDUOUS TREE / ORNAMENTAL TREE PLANTING
 1/2" = 1'-0"

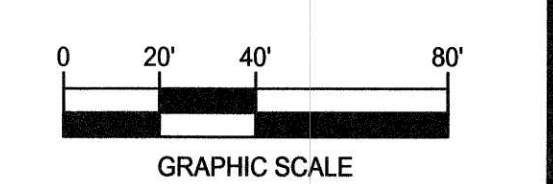


2 DETAIL: EVERGREEN TREE PLANTING
 1/2" = 1'-0"

Bluestem Plat 2 Buffer Plant Schedule

Abbreviation	Botanical Name	Common Name	Condition	Min. Height	Quantity
Overstory Trees					
AF	Acer x freemanii 'Jeffersd'	Autumn Blaze Maple	1.5" Caliper	8 feet	3
AR	Acer rubrum 'Red Sunset'	Red Sunset Maple	1.5" Caliper	8 feet	3
QB	Quercus bicolor	Swamp White Oak	1.5" Caliper	8 feet	4
					TOTAL = 10
Evergreen Trees					
PG	Picea glauca	Black Hills Spruce	6'	6 feet	7
PP	Picea pungens	Blue Spruce	6'	6 feet	6
PS	Pinus strobus	White Pine	6'	6 feet	7
					TOTAL = 20
Ornamental Trees					
CA	Crataegus ambigua	Russian Hawthorne	6' Clump	6 feet	5
CC	Cercis canadensis	Redbud	6' Clump	6 feet	6
MS	Malus 'Spring Snow'	Spring Snow Crabapple	1.5" Caliper	6 feet	6
SR	Syringa reticulata	Japanese Tree Lilac	6' Clump	6 feet	3
					TOTAL = 20

LANDSCAPE PLAN



KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

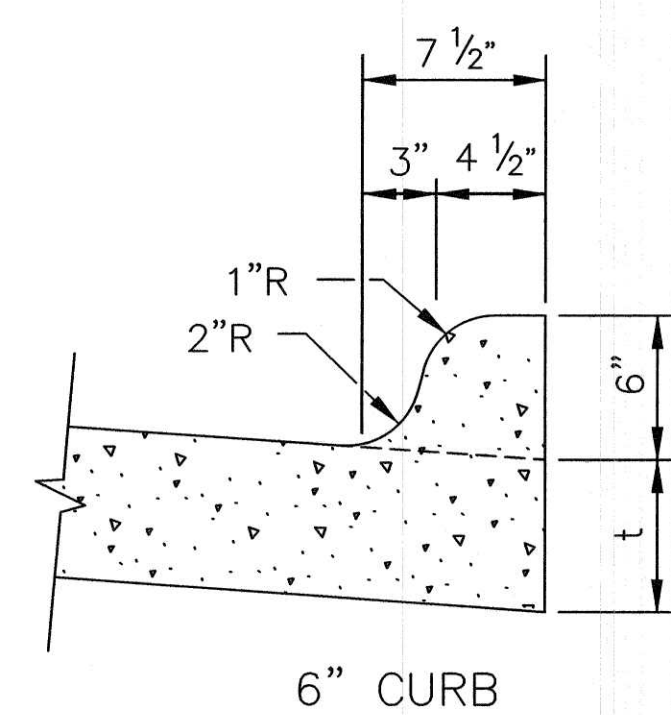
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 C. SMITH

DRAWN BY
 J. BECKER
 FIELD BOOK NO.
 -

DRAWING NO.
 LA-01
 SHEET NO.
 20 / 25



6" CURB

6" STANDARD CURB (STD.DWG.NO.23)

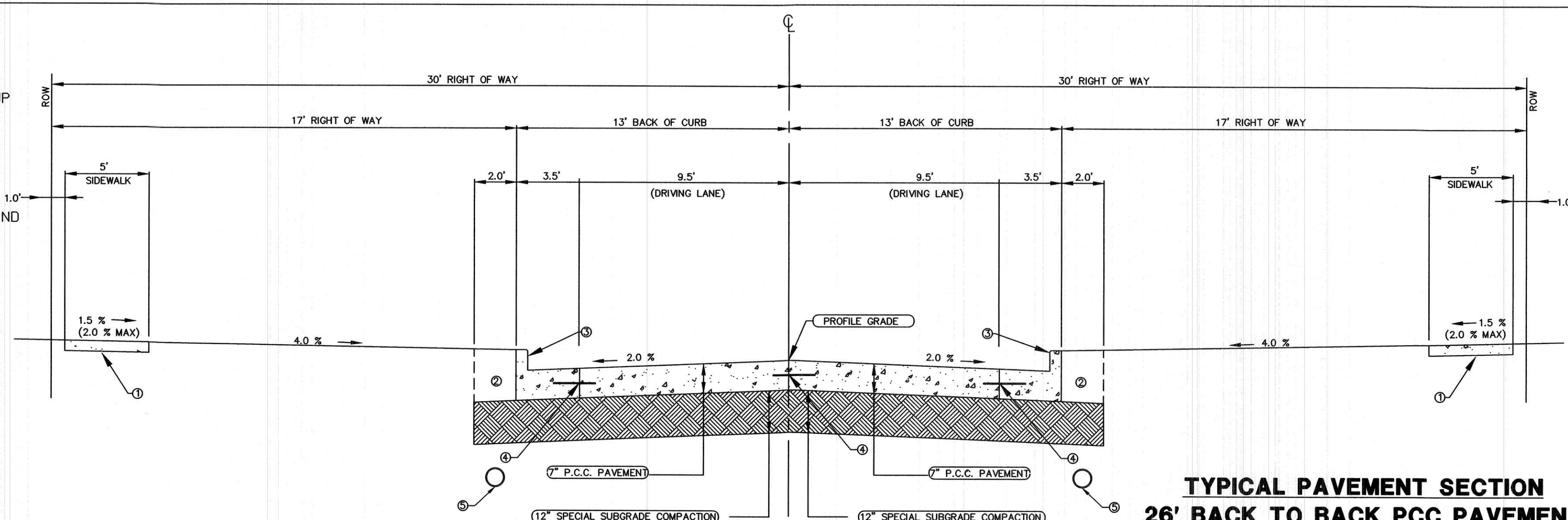
1 NOT TO SCALE

- ① CONTRACTOR RESPONSIBLE FOR SIDEWALK RAMP UP TO AND INCLUDING THE 'COMMON SQUARE'.
- ② EXCAVATE AND BACKFILL 2.0'.
- ③ 6" STANDARD CURB
- ④ L OR L-1 JOINT
- ⑤ 6" PERFORATED SUBDRAIN TO BE INSTALLED BEHIND BACK OF CURB WHERE THERE IS NO STORM SEWER.

NOTE:

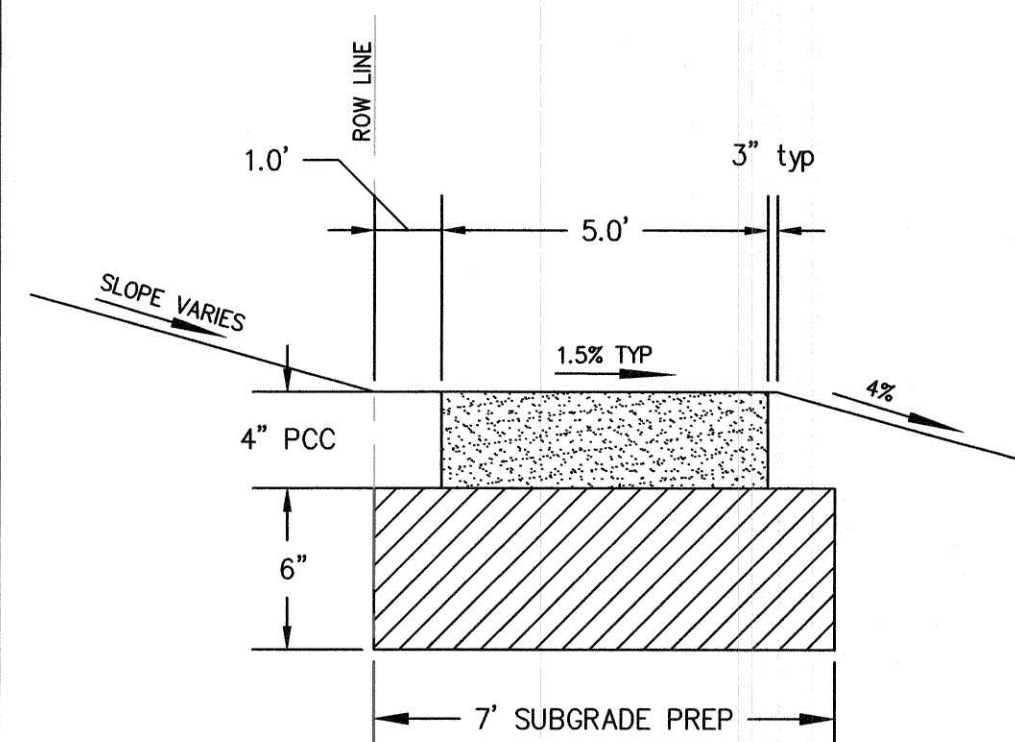
1. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS. REFER TO OTHER DRAWINGS FOR DETAILS.

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SE BLUESTEM DRIVE	113+31.48 115+29.50



TYPICAL PAVEMENT SECTION 26' BACK TO BACK PCC PAVEMENT
NO SCALE

NOTE: SEE 'CITY OF WAUKEE ROW UTILITY DETAIL' ON DT-04 FOR UTILITY LOCATIONS AND NOTES



5' SIDEWALK CROSS SECTION

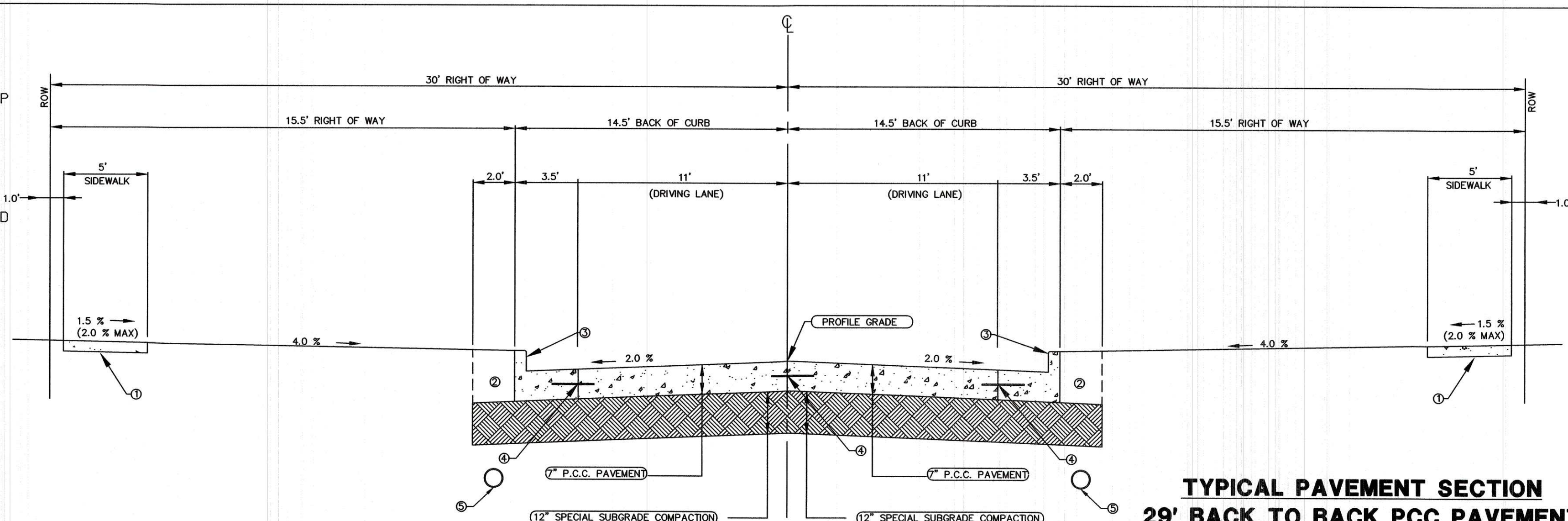
2 NO SCALE

- ① CONTRACTOR RESPONSIBLE FOR SIDEWALK RAMP UP TO AND INCLUDING THE 'COMMON SQUARE'.
- ② EXCAVATE AND BACKFILL 2.0'.
- ③ 6" STANDARD CURB
- ④ L OR L-1 JOINT
- ⑤ 6" PERFORATED SUBDRAIN TO BE INSTALLED BEHIND BACK OF CURB WHERE THERE IS NO STORM SEWER.

NOTE:

1. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS. REFER TO OTHER DRAWINGS FOR DETAILS.

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SE BLUESTEM DRIVE	112+56.13 110+85.38



TYPICAL PAVEMENT SECTION 29' BACK TO BACK PCC PAVEMENT
NO SCALE

NOTE: SEE 'CITY OF WAUKEE ROW UTILITY DETAIL' ON DT-04 FOR UTILITY LOCATIONS AND NOTES

RECORD DRAWING

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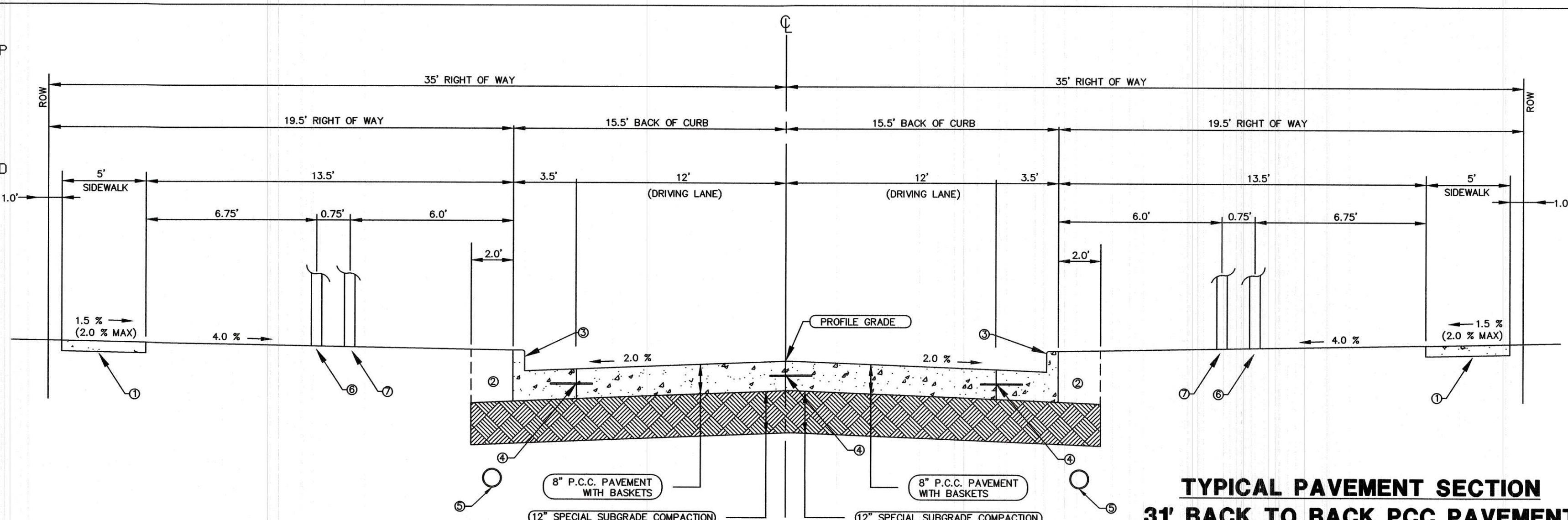
RECORD DRAWINGS PRODUCED ON: 11/27/2019
*NO AS-BUILT DATA FOR THIS SHEET

- ① CONTRACTOR RESPONSIBLE FOR SIDEWALK RAMP UP TO AND INCLUDING THE 'COMMON SQUARE'.
- ② EXCAVATE AND BACKFILL 2.0'.
- ③ 6" STANDARD CURB
- ④ L OR L-1 JOINT
- ⑤ 6" PERFORATED SUBDRAIN TO BE INSTALLED BEHIND BACK OF CURB WHERE THERE IS NO STORM SEWER.
- ⑥ STREET TREE LOCATION
- ⑦ LIGHT POLE LOCATION

NOTE:

1. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS. REFER TO OTHER DRAWINGS FOR DETAILS.

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SE ESKER RIDGE DRIVE	402+43.44 406+63.28



TYPICAL PAVEMENT SECTION 31' BACK TO BACK PCC PAVEMENT
NO SCALE

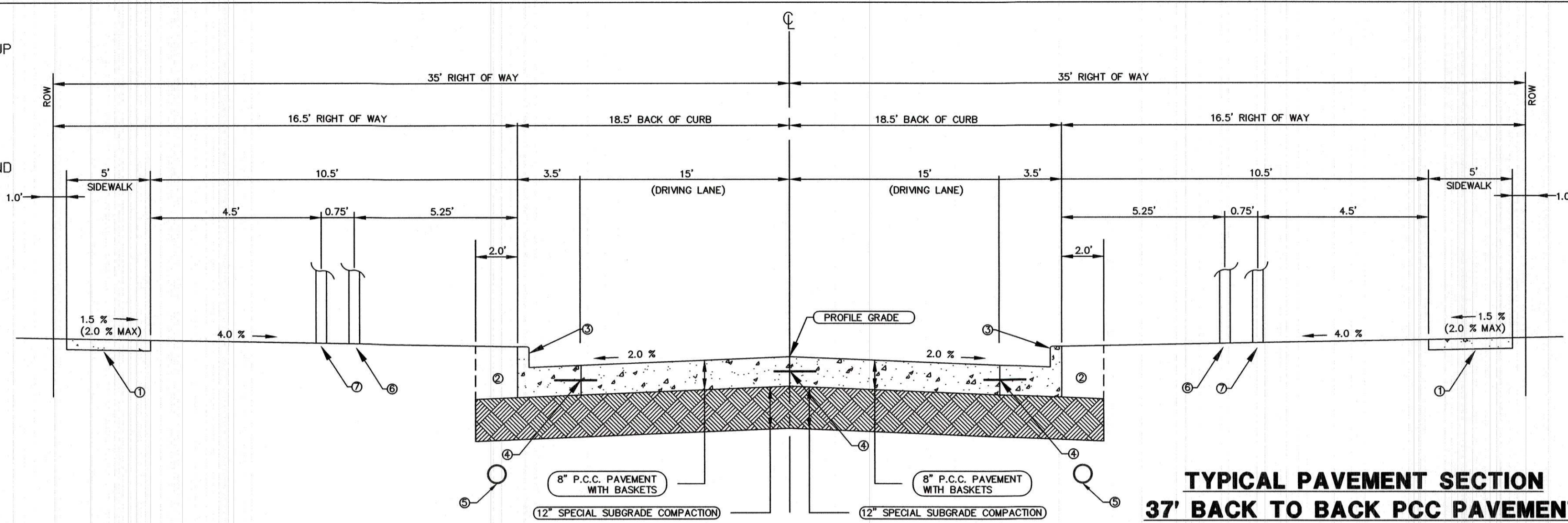
NOTE: SEE 'CITY OF WAUKEE ROW UTILITY DETAIL' ON DT-04 FOR UTILITY LOCATIONS AND NOTES

- ① CONTRACTOR RESPONSIBLE FOR SIDEWALK RAMPS UP TO AND INCLUDING THE "COMMON SQUARE".
- ② EXCAVATE AND BACKFILL 2.0'.
- ③ 6" STANDARD CURB
- ④ L OR L-1 JOINT
- ⑤ 6" PERFORATED SUBDRAIN TO BE INSTALLED BEHIND BACK OF CURB WHERE THERE IS NO STORM SEWER.
- ⑥ STREET TREE LOCATION
- ⑦ LIGHT POLE LOCATION

NOTE:

1. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS. REFER TO OTHER DRAWINGS FOR DETAILS.

LOCATION
ROAD IDENTIFICATION STATION TO STATION
SE ESKER RIDGE DR. 400+56.64 401+98.44



NOTE: SEE "CITY OF WAUKEE ROW UTILITY DETAIL" ON DT-04 FOR UTILITY LOCATIONS AND NOTES

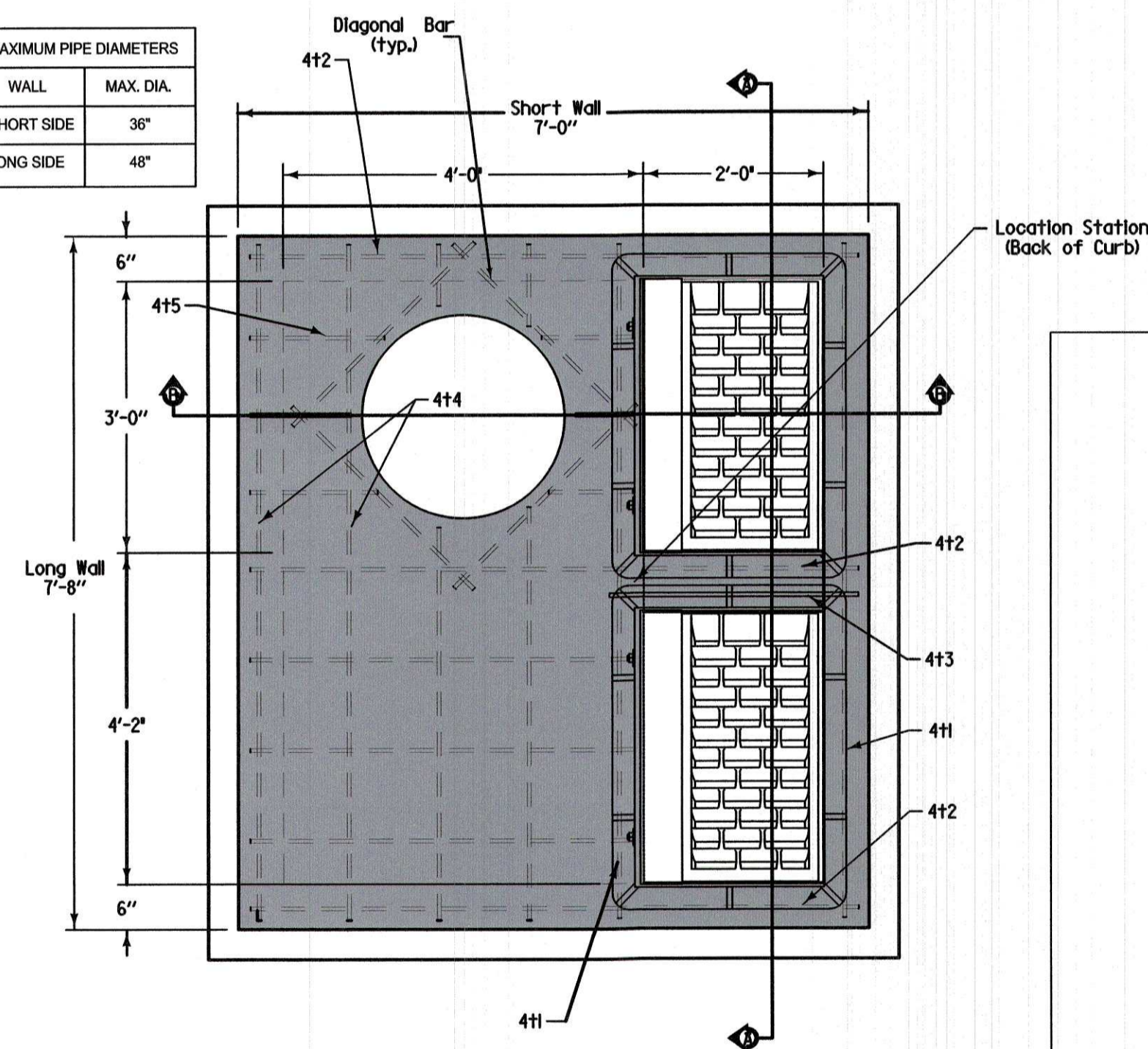
TYPICAL PAVEMENT SECTION
37' BACK TO BACK PCC PAVEMENT
NO SCALE

RECORD DRAWING

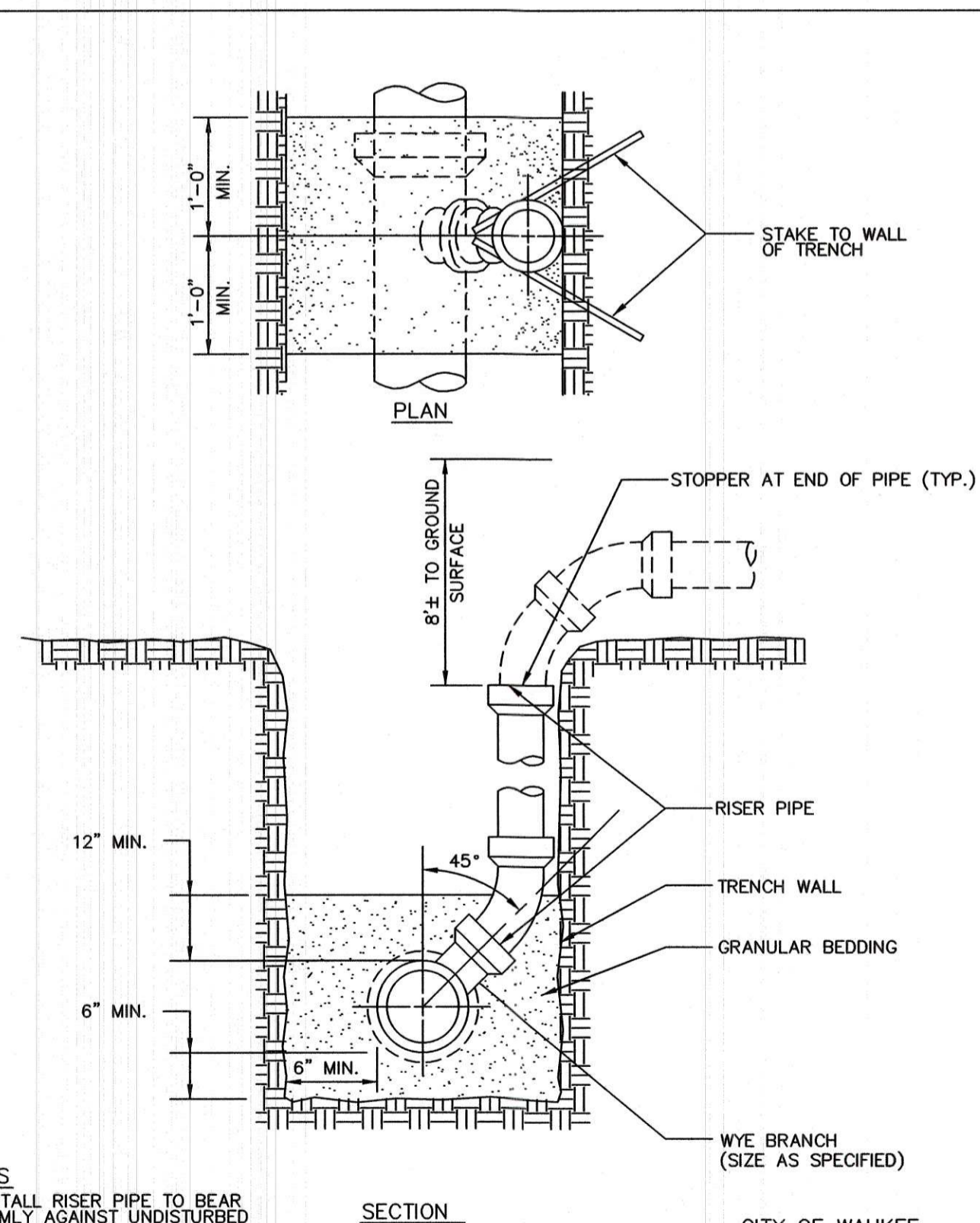
THESE DRAWINGS HAVE BEEN REVISED TO SERVE AS A GENERAL RECORD OF CONSTRUCTION, AND ARE BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE INFORMATION PROVIDED, AND DOES NOT GUARANTEE AND/OR ASSUME RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE RESULTING RECORD DRAWINGS.

RECORD DRAWINGS PRODUCED ON: 11/27/2019
*NO AS-BUILT DATA FOR THIS SHEET

MAXIMUM PIPE DIAMETERS	
WALL	MAX. DIA.
SHORT SIDE	36"
LONG SIDE	48"



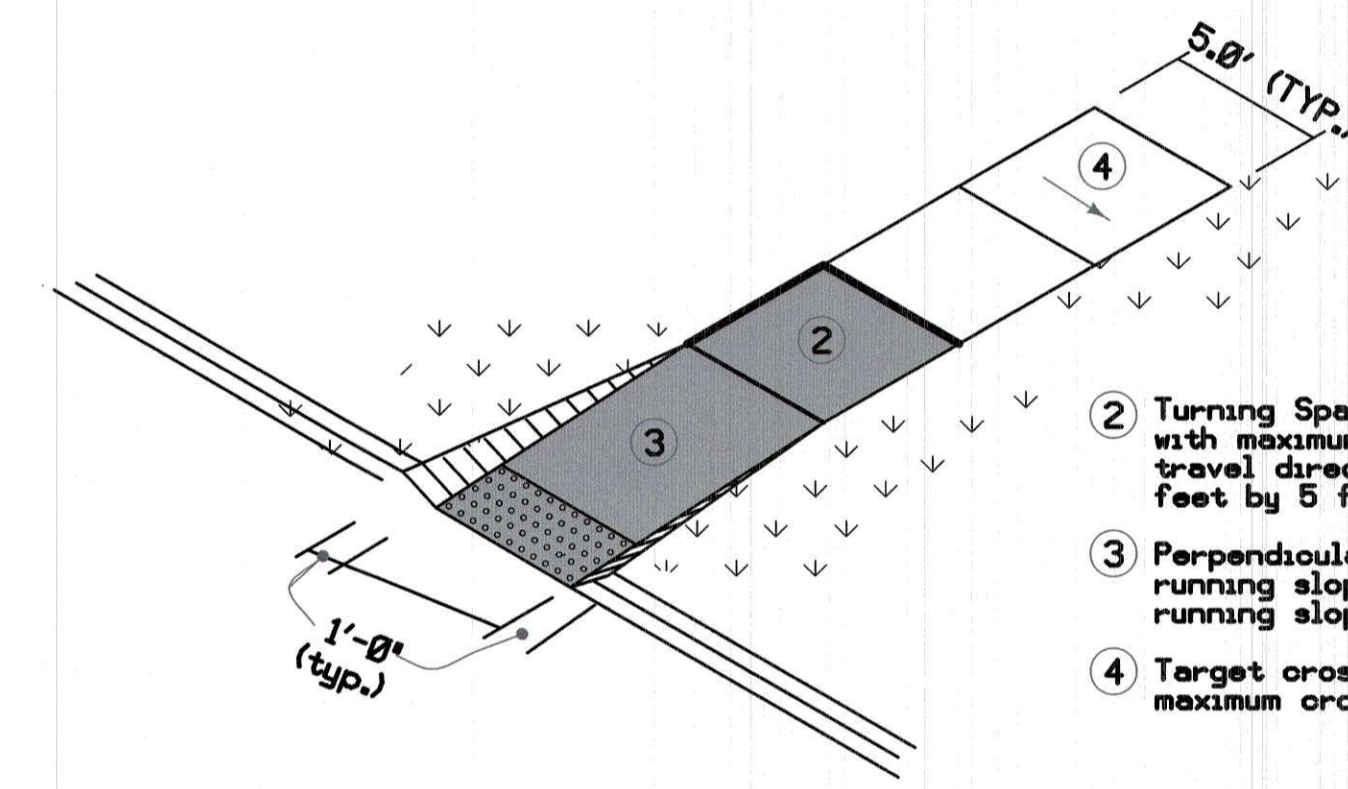
1 SW-506 MODIFIED
NOT TO SCALE, PLAN VIEW



NOTES

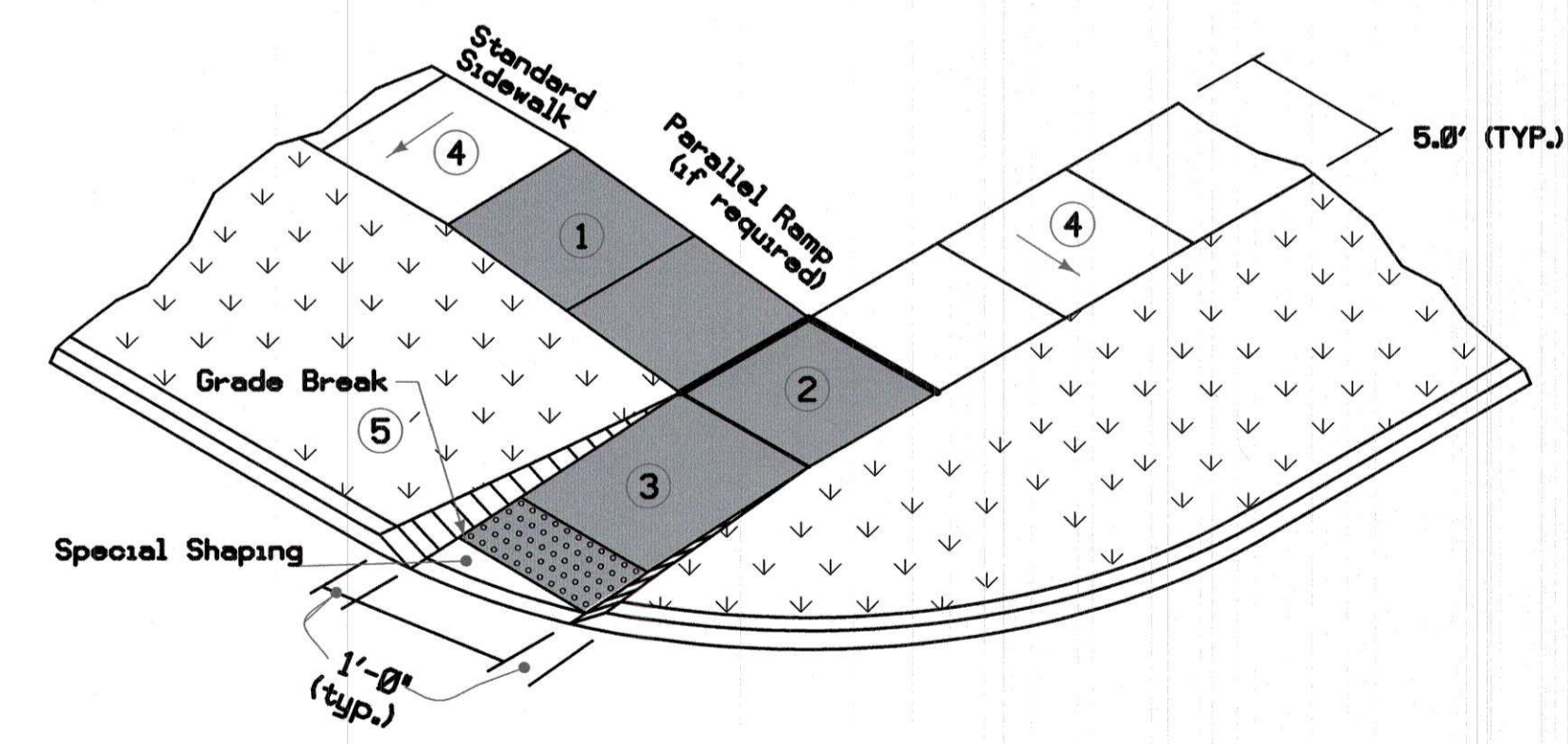
1. INSTALL RISER PIPE TO BEAR FIRMLY AGAINST UNDISTURBED WALL OF TRENCH. STAKE RISER PIPE IN PLACE PRIOR TO BACK-FILLING TO PREVENT MOVEMENT OF PIPE.
2. NOTCH WALL OF TRENCH TO RECEIVE PIPE WHERE POSSIBLE.

CITY OF WAUKEE
RISER
STD.DWG.NO.15



2 SIDEWALK DETAIL
NOT TO SCALE, PLAN VIEW

- ② Turning Spaces Target slope of 1.5% with maximum slope perpendicular to the travel directions of 2.0%. Minimum 5 feet by 5 feet.
- ③ Perpendicular Curb Ramps Target running slope of 6.25% with maximum running slope of 8.3%.
- ④ Target cross slope of 1.5% with a maximum cross slope of 2.0%.



3 RIGHT OF WAY SIDEWALK DETAIL
NOT TO SCALE, PLAN VIEW

- ① Parallel Curb Ramps If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.
 - ② The length of the parallel ramp is not required to exceed 15 feet, regardless of the resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.
 - ③ Turning Spaces Target slope of 1.5% with maximum slope perpendicular to the travel directions of 2.0%. Minimum 5 feet by 5 feet.
 - ④ Perpendicular Curb Ramps Target running slope of 6.25% with maximum running slope of 8.3%.
 - ⑤ Target cross slope of 1.5% with a maximum cross slope of 2.0%.
- Match pedestrian street crossing cross slope or flatter.

DETAILS

KETTLESTONE RIDGE PLAT 4
CONSTRUCTION DRAWINGS

Waukee, Iowa
2211013-03
April 27, 2018

REVISIONS
12.3.18
12.18.18
12.28.18
1.15.19
1.23.19
3.20.19

ENGINEER
J. BECKER
DRAWN BY
J. BECKER
CHECKED BY
C. SMITH
FIELD BOOK NO.
-

DRAWING NO.
DT-02
SHEET NO.
22 / 25

RECORD DRAWING

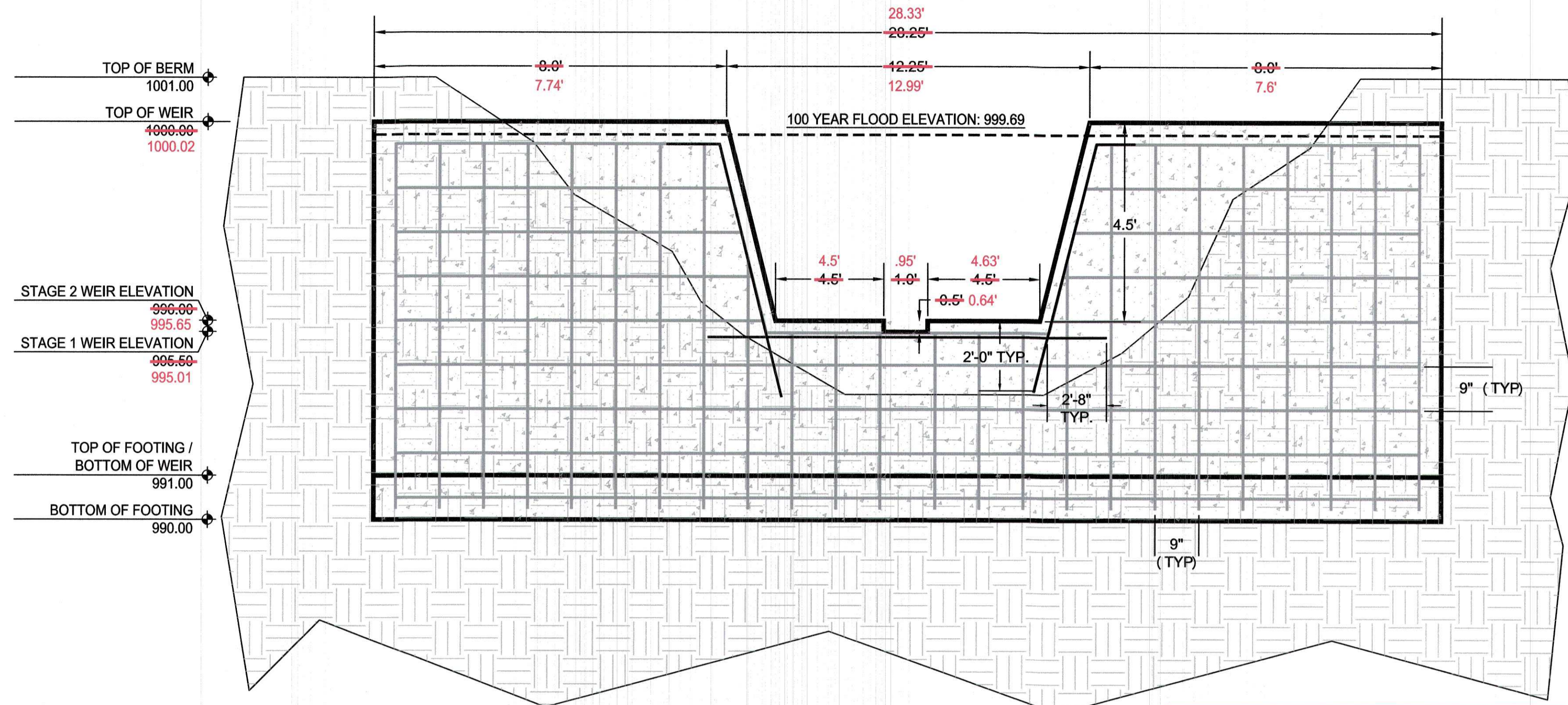
THESE DRAWINGS HAVE BEEN REVISED TO SERVE AS A GENERAL RECORD OF CONSTRUCTION, AND ARE BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE INFORMATION PROVIDED, AND DOES NOT GUARANTEE AND/OR ASSUME RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE RESULTING RECORD DRAWINGS.
RECORD DRAWINGS PRODUCED ON: 11/27/2019



building strong communities.

1360 NW 121ST. Street
Clive, Iowa 50325
515-964-1229
fax 515-964-2370

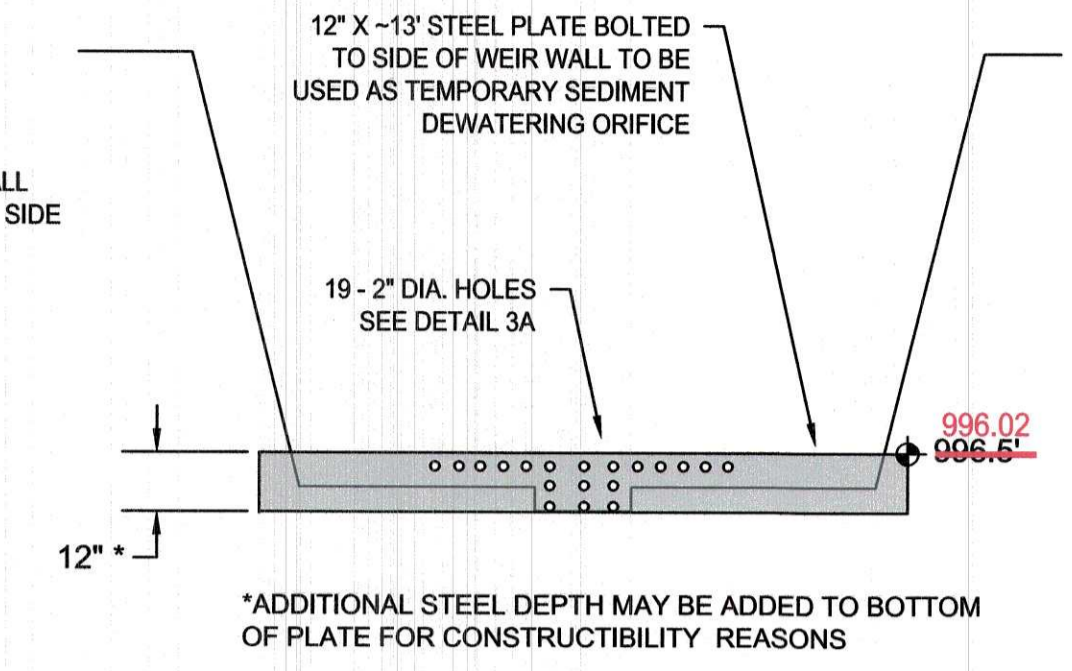
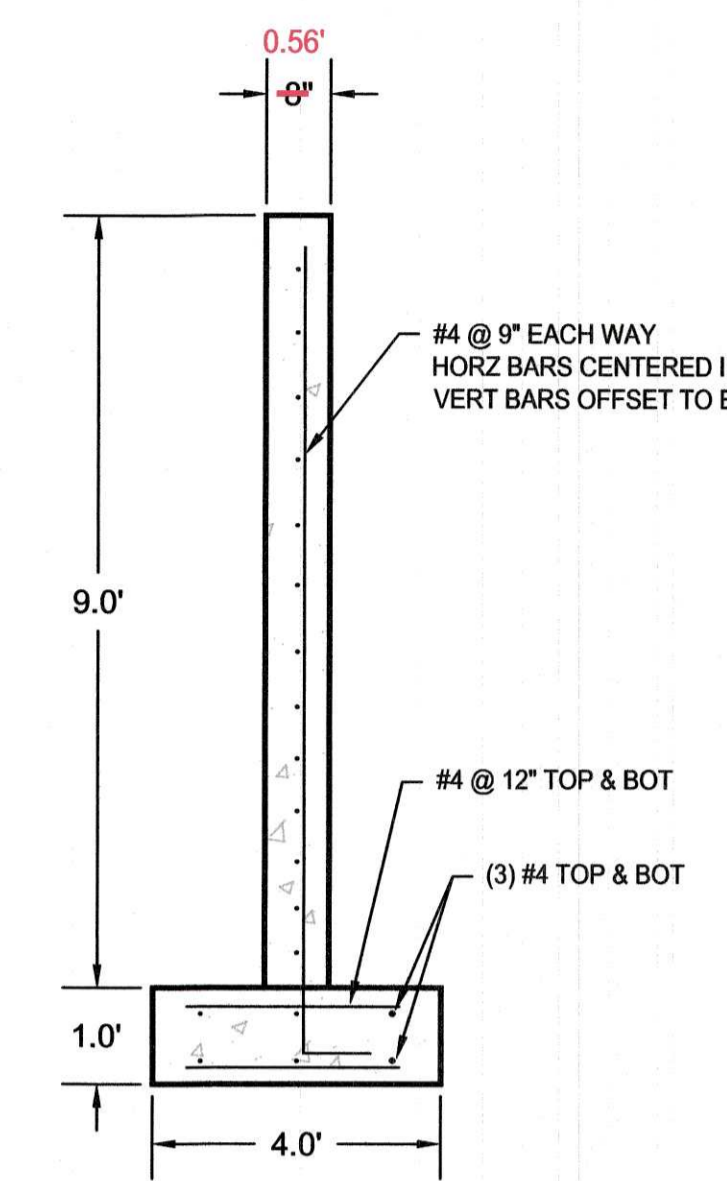
NOTICE:
McClure Engineering Company waives any and all responsibility and liability for problems which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for problems which arise from failure to obtain and/or follow the engineers guidance with respect to any errors, omissions, inconsistencies, ambiguities, or conflicts which are alleged.



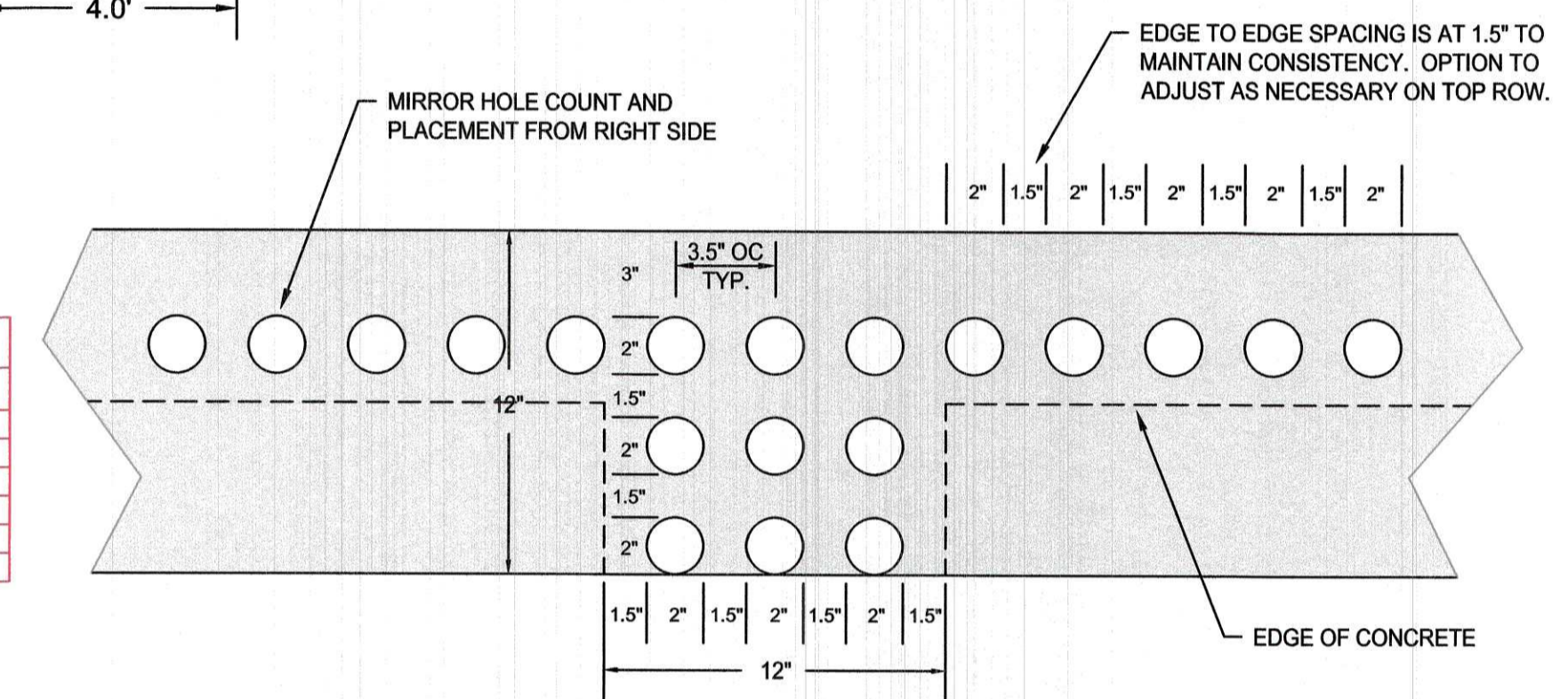
1 WEIR STRUCTURE DETAIL
NOT TO SCALE

AS-BUILT POND INFORMATION ¹		
STATISTIC	DESIGN	AS-BUILT
STORAGE VOLUME	184,174 CF	187,087 CF
100-YR WATER ELEVATION	999.69'	999.34'
NORMAL POOL WATER ELEVATION	995.50'	995.01'
INLET AND OUTLET ELEVATIONS	VARIABLES, SEE WEIR DETAIL ABOVE	VARIABLES, SEE WEIR DETAIL ABOVE
OVERTOPPING ELEVATION ²	1000.00'	1000.02'
FREEBOARD ELEVATION	0.31'	0.68'

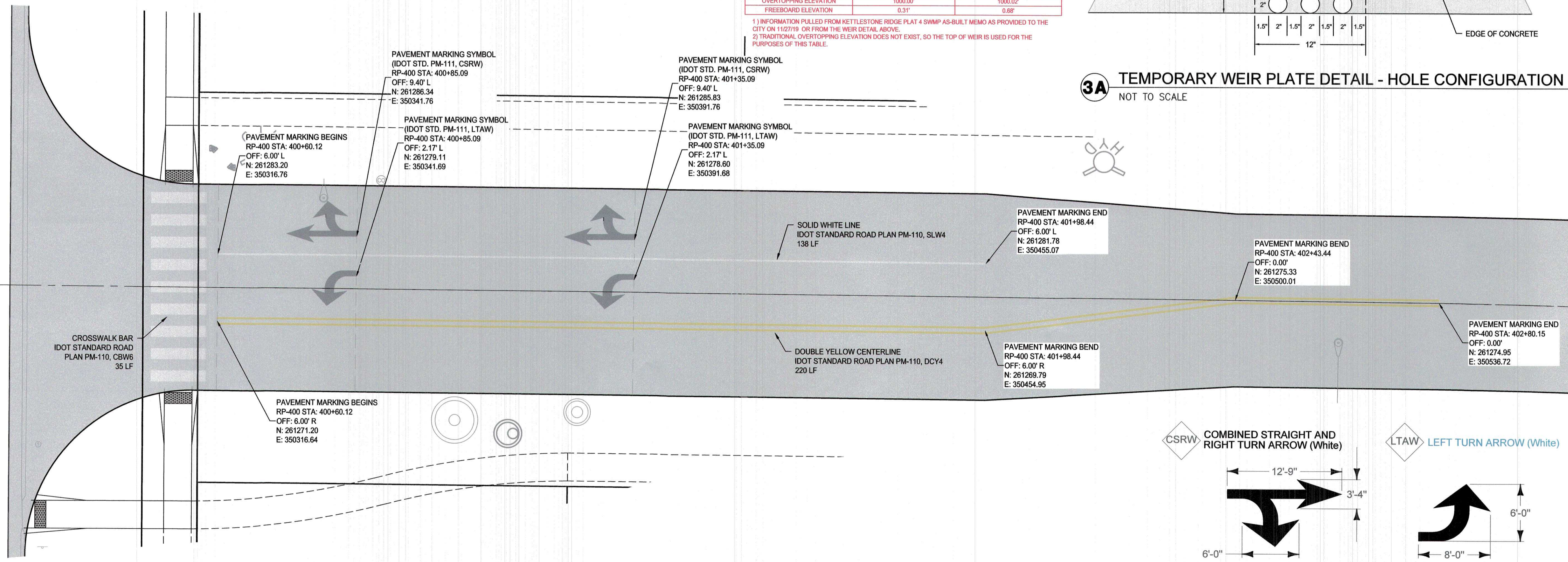
1) INFORMATION PULLED FROM KETTLESTONE RIDGE PLAT 4 SWMP AS-BUILT MEMO AS PROVIDED TO THE CITY ON 11/27/19 OR FROM THE WEIR DETAIL ABOVE.
2) TRADITIONAL OVERTOPPING ELEVATION DOES NOT EXIST, SO THE TOP OF WEIR IS USED FOR THE PURPOSES OF THIS TABLE.



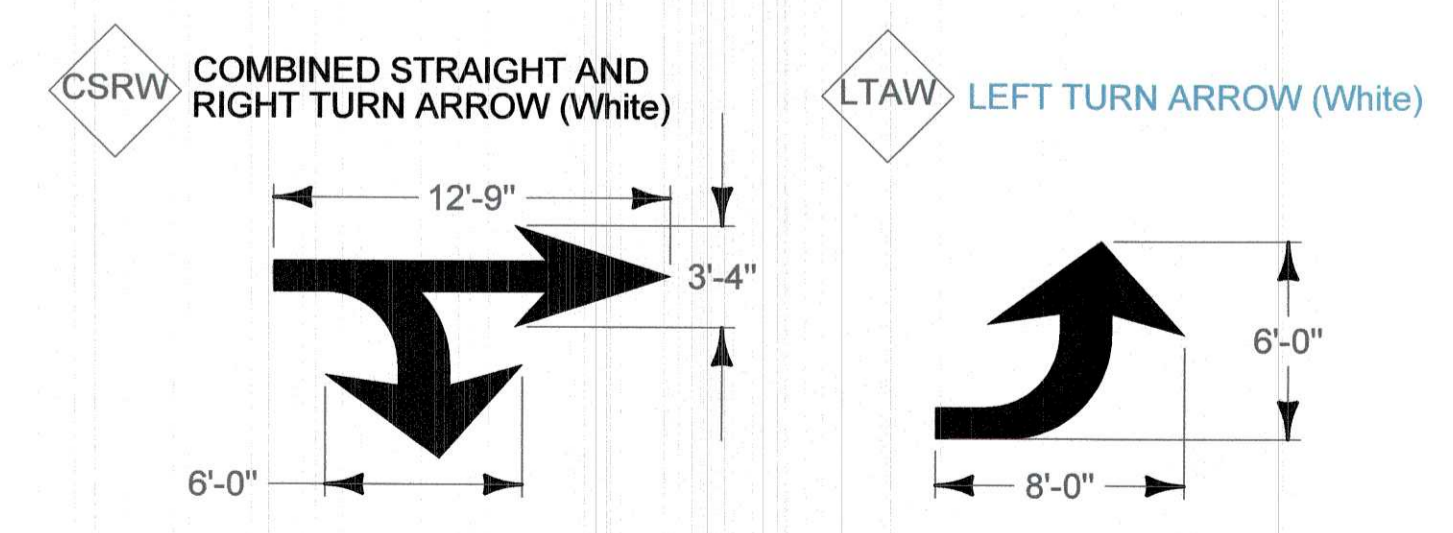
3 TEMPORARY WEIR PLATE DETAIL
NOT TO SCALE



3A TEMPORARY WEIR PLATE DETAIL - HOLE CONFIGURATION
NOT TO SCALE



2 PAVEMENT MARKING DETAIL
NOT TO SCALE



4 PAVEMENT MARKING DIMENSIONS
NOT TO SCALE

DETAILS

KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

Waukee, Iowa
2211013-03
April 27, 2018

REVISIONS
12.3.18
12.18.18
12.28.18
1.15.19
1.23.19
3.20.19

ENGINEER: J. BECKER
CHECKED BY: C. SMITH
DRAWN BY: J. BECKER
FIELD BOOK NO.: -

DRAWING NO.: DT-03
SHEET NO.: 23 / 25

K:\CD\Projects\Waukee\2211013\Design\Plan\Construction Documents\Plat 4\Details.dwg

NOTICE:
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DETAILS

KETTLESTONE RIDGE PLAT 4
CONSTRUCTION DRAWINGS

Waukee, Iowa
2211013-03
April 27, 2018

REVISIONS	DATE
12.3.18	
12.18.18	
12.28.18	
1.15.19	
1.23.19	
3.20.19	

ENGINEER
J. BECKER

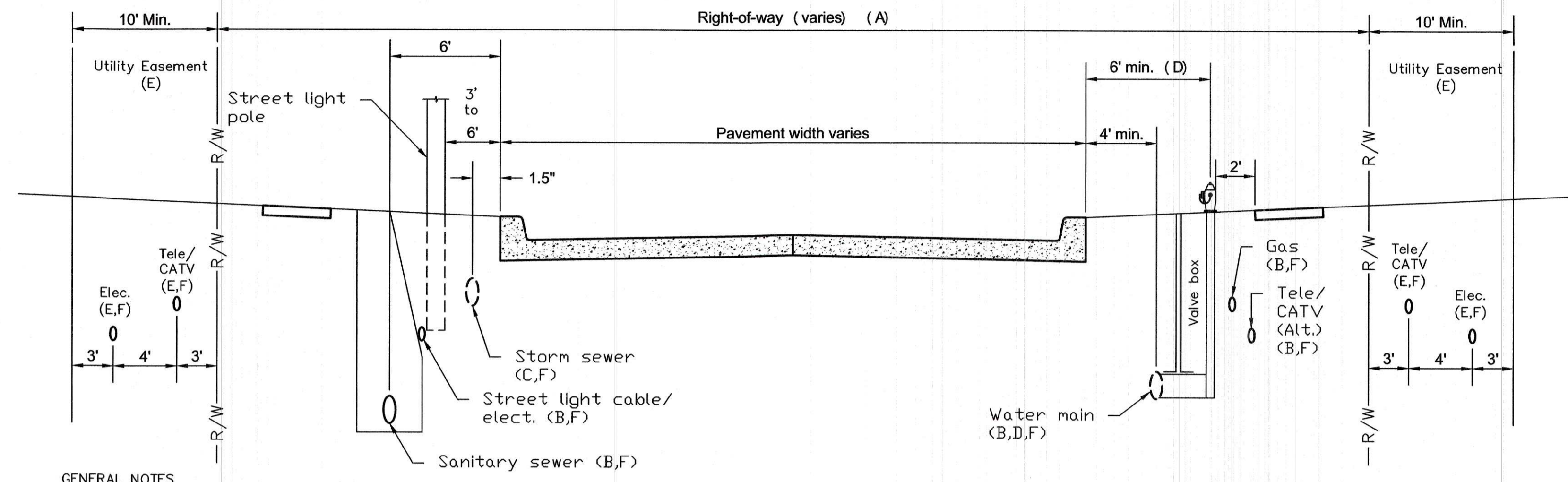
DRAWN BY
J. BECKER

CHECKED BY
C. SMITH

FIELD BOOK NO.
-

DRAWING NO.
ST-04

SHEET NO.
24 / 25



GENERAL NOTES

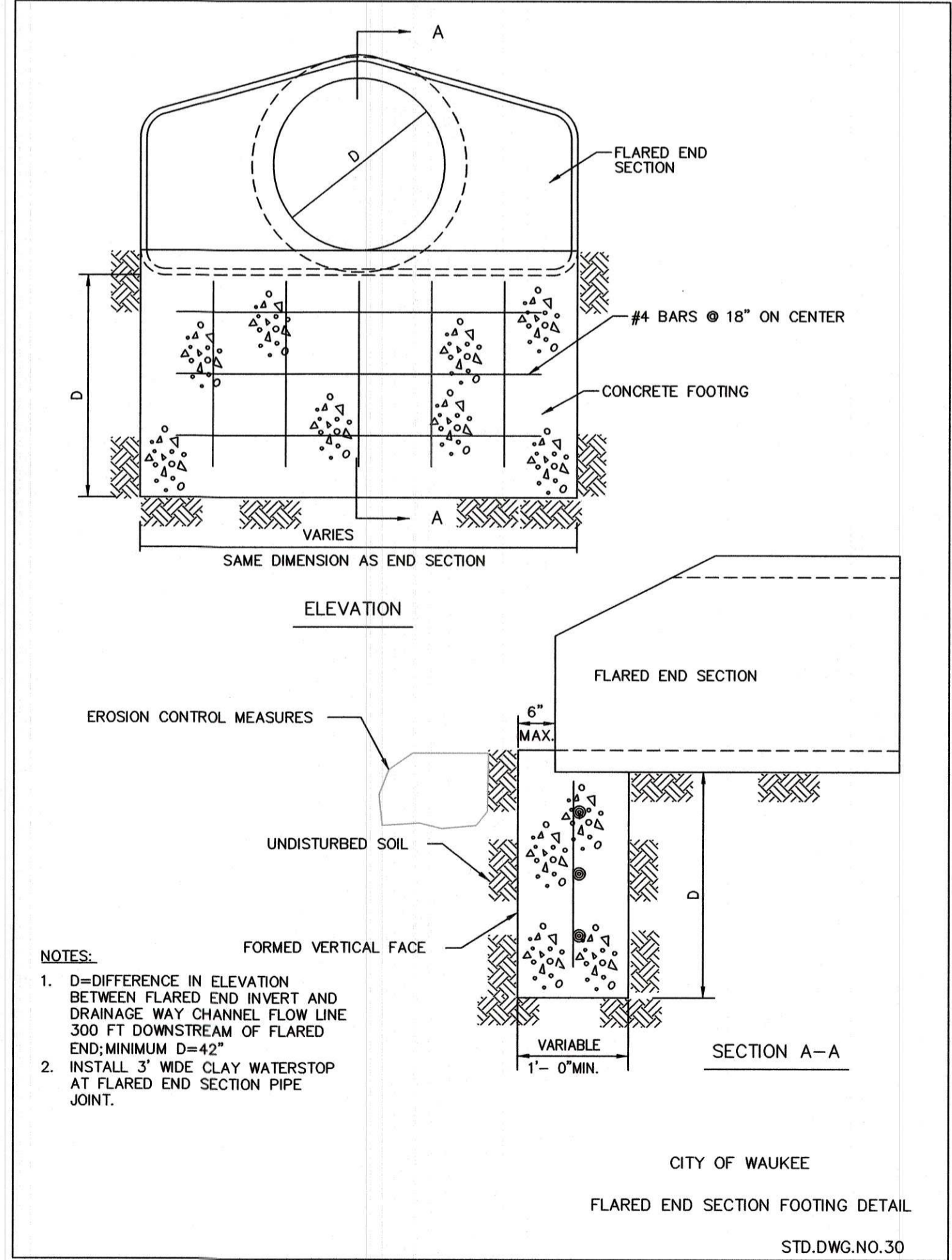
- A. ROW width varies.
- B. When utilities are in the ROW, the following should be adhered to utilities otherwise provided/approved:
 1. All utilities should be buried. When overhead utilities are allowed to cross the roadway, then minimum vertical clearances are 20 feet for the main cable, and 18 feet for services.
 2. Telephone, cable TV, and water: install on the east and south side of the road.
 3. Gas and electric: install on the west and north side of the road.
 4. Sanitary sewer: install on the west and south side of the road.
- C. Storm Sewers: The normal location for a storm sewer is 1.5 feet from back of curb. When combination manholes and intakes are used, the location increases to 5 feet.
- D. Water mains, Valves, and Hydrants:
 1. The normal water main location is 5.5 feet behind the back of curb. In areas of combination manholes and intakes, this distance is increased to a minimum of 6 feet.
 2. For local streets and minor collectors with limited ROW, use a 90° anchoring elbow between the hydrant tee and the valve. For maintenance purpose, the minimum distance between the centerline of the valve box and the face of the hydrant is 18 inches.
- E. Utility Easement: Telephone, fiber optic, cable TV, electric, and gas lines should be located in front or rear yard easements. Normally telephone and cable TV lines are placed in rear yard easements and fiber optic, electric, and gas lines in front yard easements. Upon approval of the jurisdiction, these utilities may be placed in the right of way at the alternative location when easements do not exist.
- F. Depth of bury:
 - Cable TV (CATV): 3 feet minimum.
 - Electric (Elec.): The recommended depth of bury for electric cable is 4 feet. The minimum depth of bury for electric lines as per the National Electric Safety Code is:
 - 8kV to 5kV cable - 30 inches minimum.
 - Up to 600-volt cable - 24 inches minimum.
 - Street light cable - 18 inches minimum.
 - Gas: 3 feet minimum.
 - Water: varies
 - Sanitary Sewer: Varies
 - Storm sewer: Varies. Approximately 4 feet.
 - Telephone (Tele.)/Fiber optic (F.O.): 3 feet minimum.

CITY OF WAUKEE UTILITY ROW DETAIL

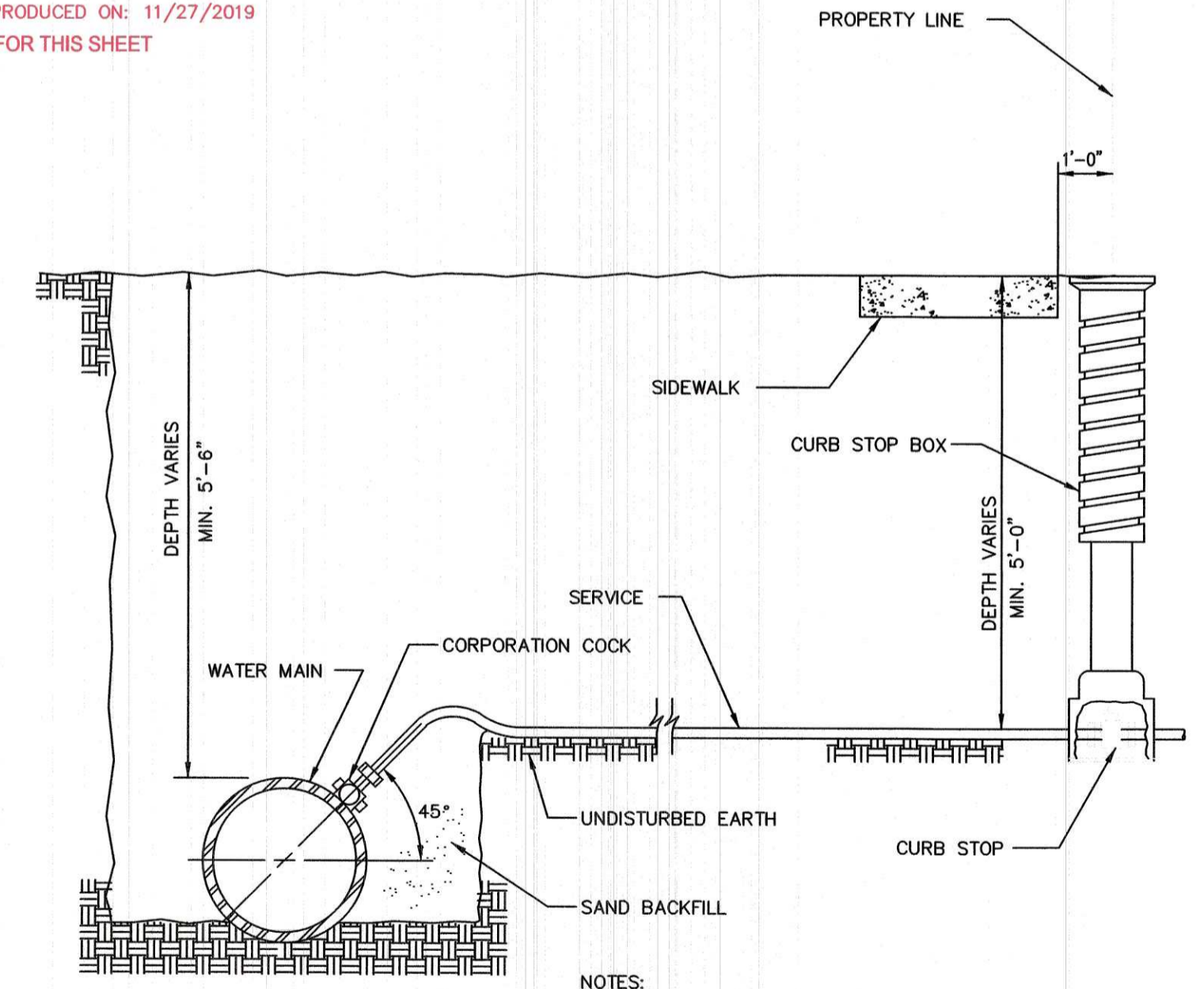
RECORD DRAWING

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RECORD DRAWINGS PRODUCED ON: 11/27/2019
*NO AS-BUILT DATA FOR THIS SHEET

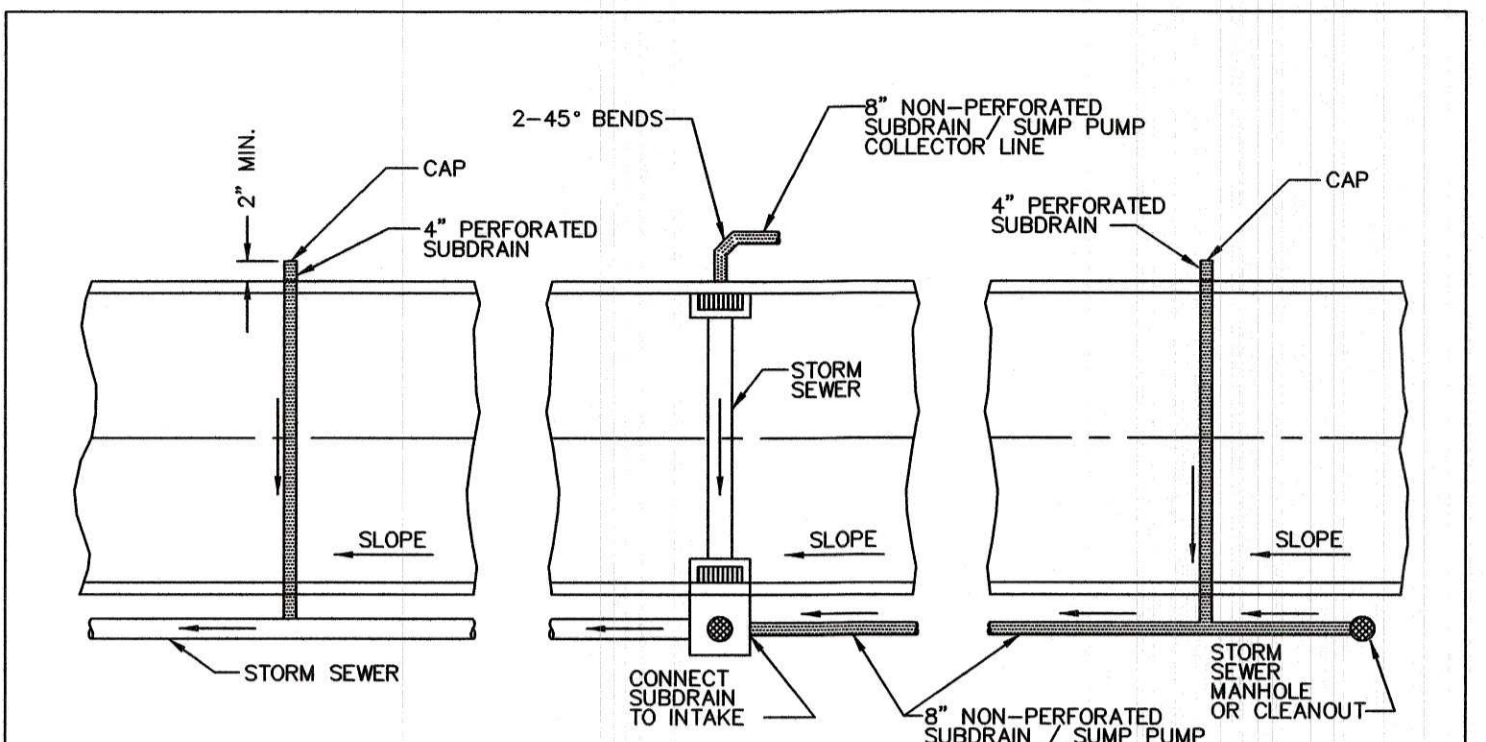


CITY OF WAUKEE
FLARED END SECTION FOOTING DETAIL
STD.DWG.NO.30

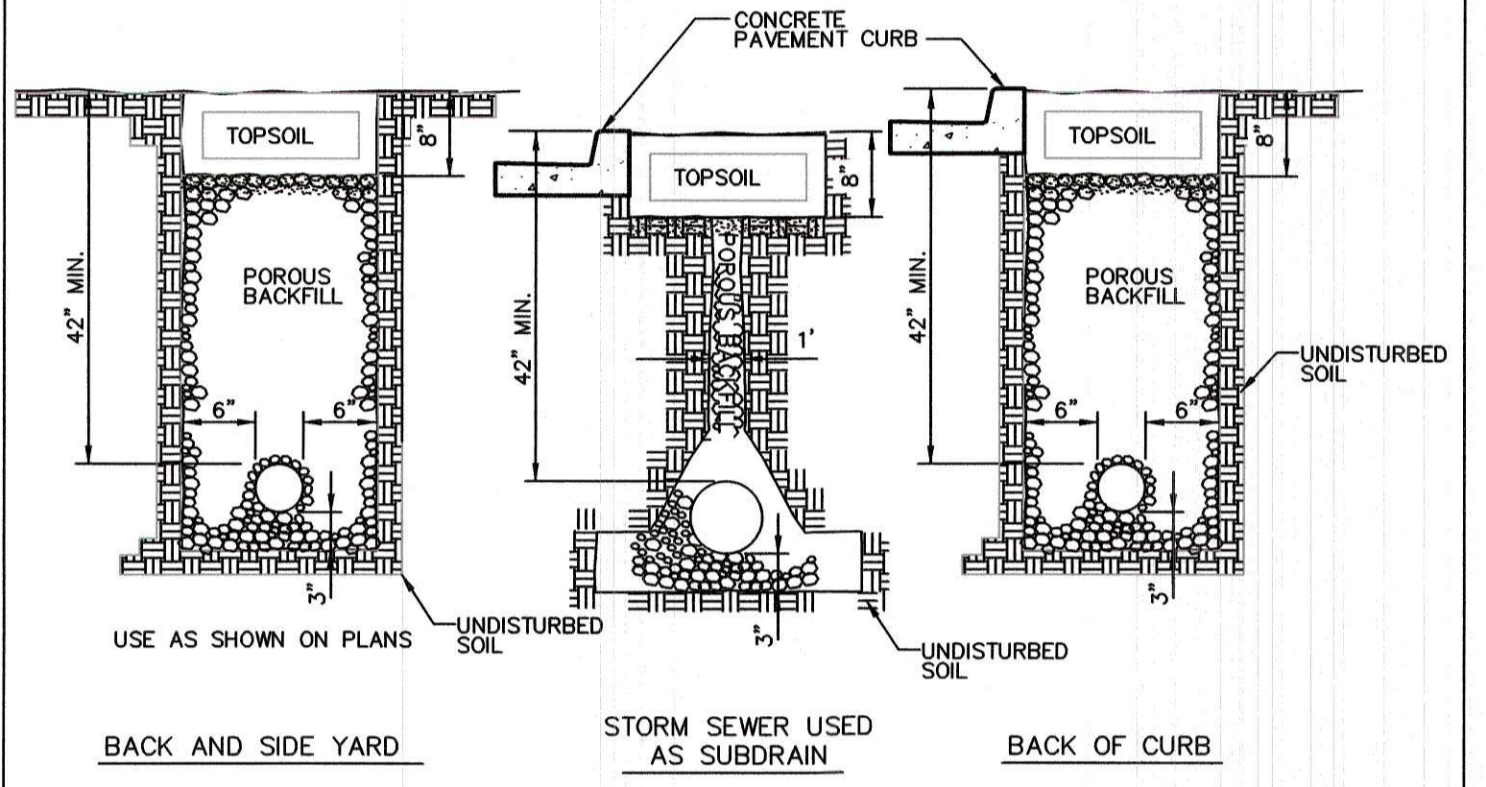


NOTES:
1. TERMINATE CURB STOP BOX ROD 1'-6" BELOW FINISHED GRADE.

CITY OF WAUKEE
SERVICE CONNECTION
STD.DWG.NO.32 REV.1

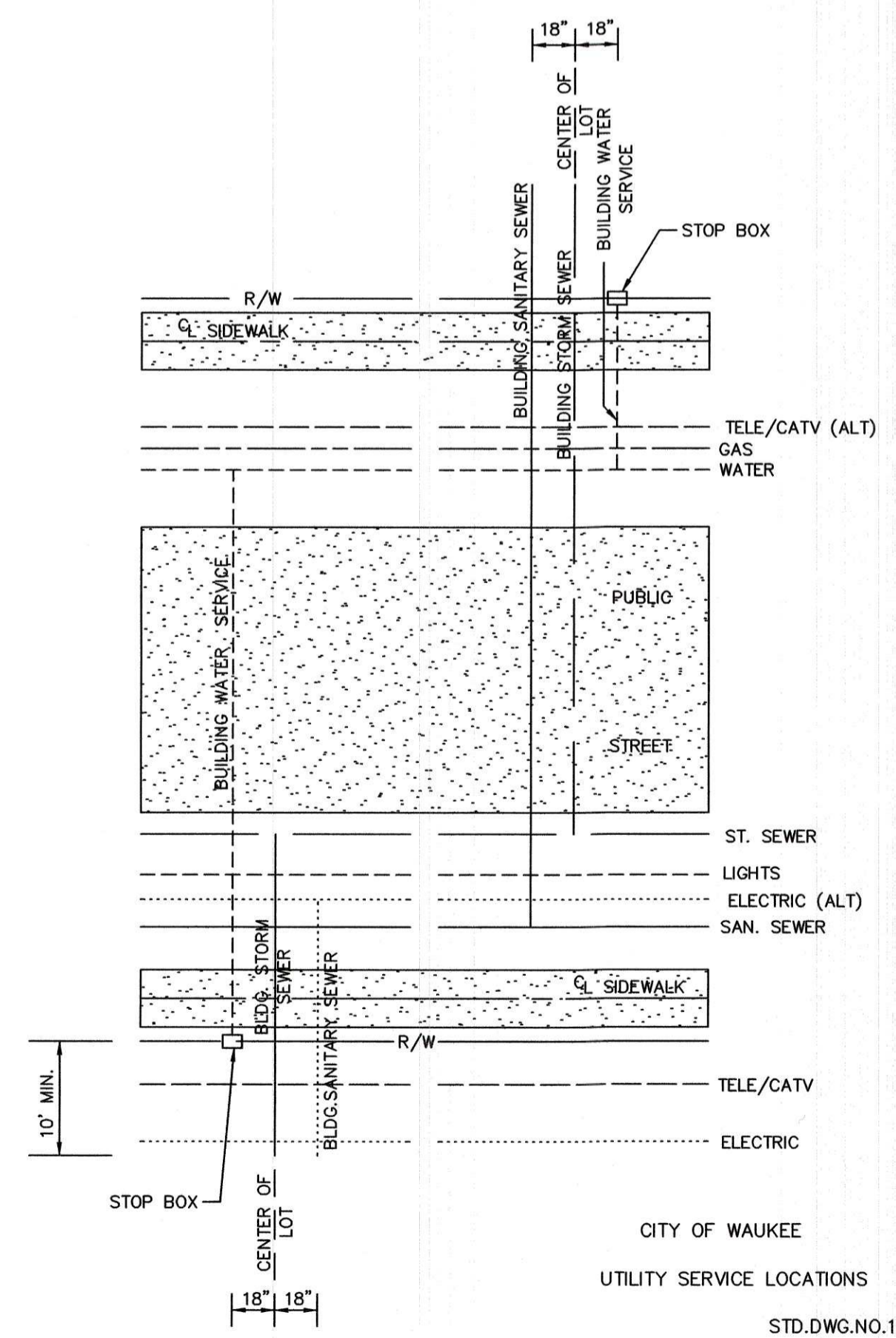


NOTE
CORE DRILL ALL STORM SEWER AND PLACE NON-SHRINK GROUT COLLAR AT CONNECTION.



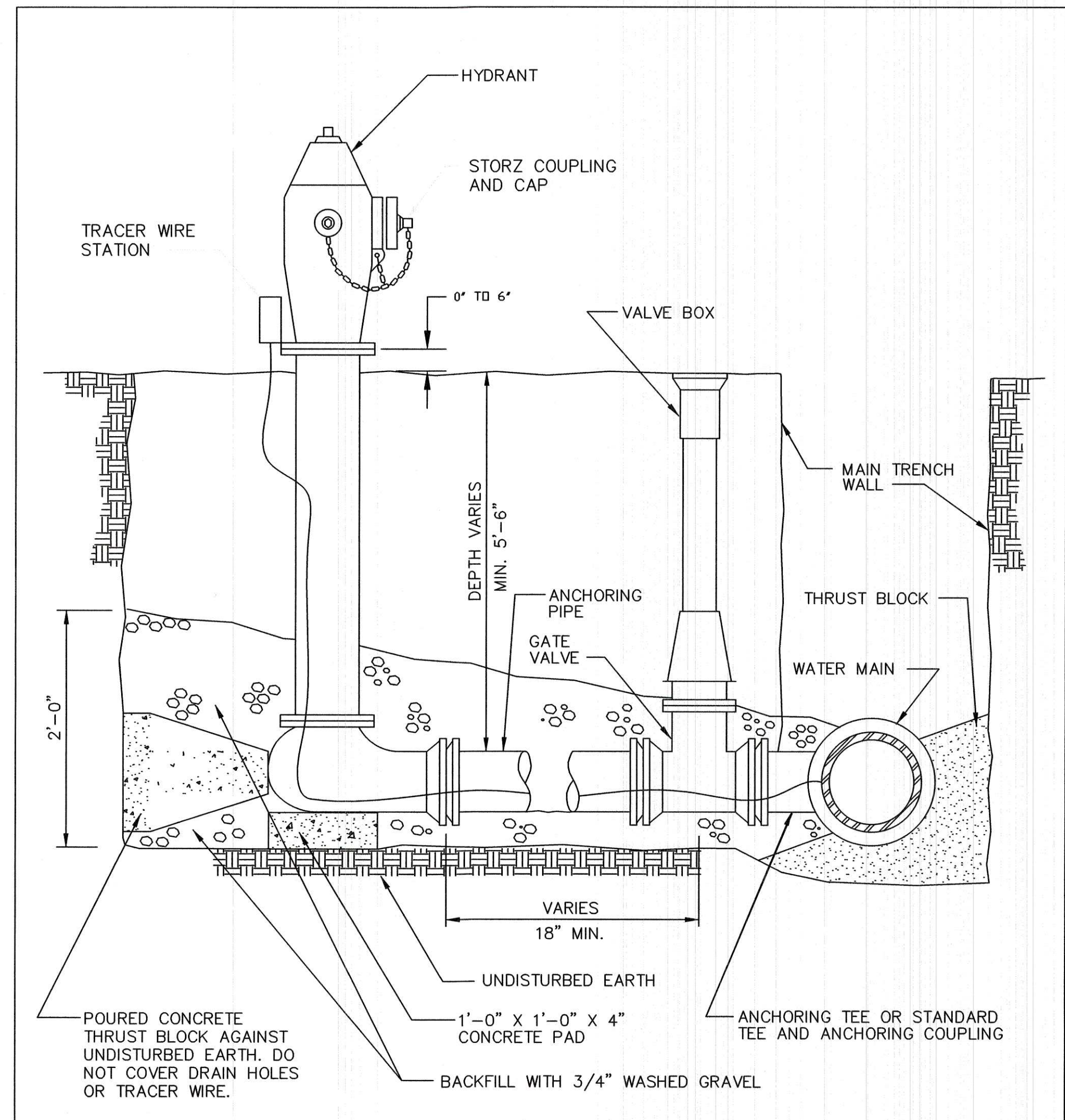
NOTES
1. SLOPE SUBDRAINS TO DRAIN.
2. 4" AND 6" BACK OF CURB SUBDRAINS AND ALL BACK AND SIDE YARD SUBDRAINS: USE PEA GRAVEL FOR POROUS BACKFILL.

CITY OF WAUKEE
SUBDRAINS
STD.DWG.NO.37 REV. 2



CITY OF WAUKEE
UTILITY SERVICE LOCATIONS
STD.DWG.NO.1A

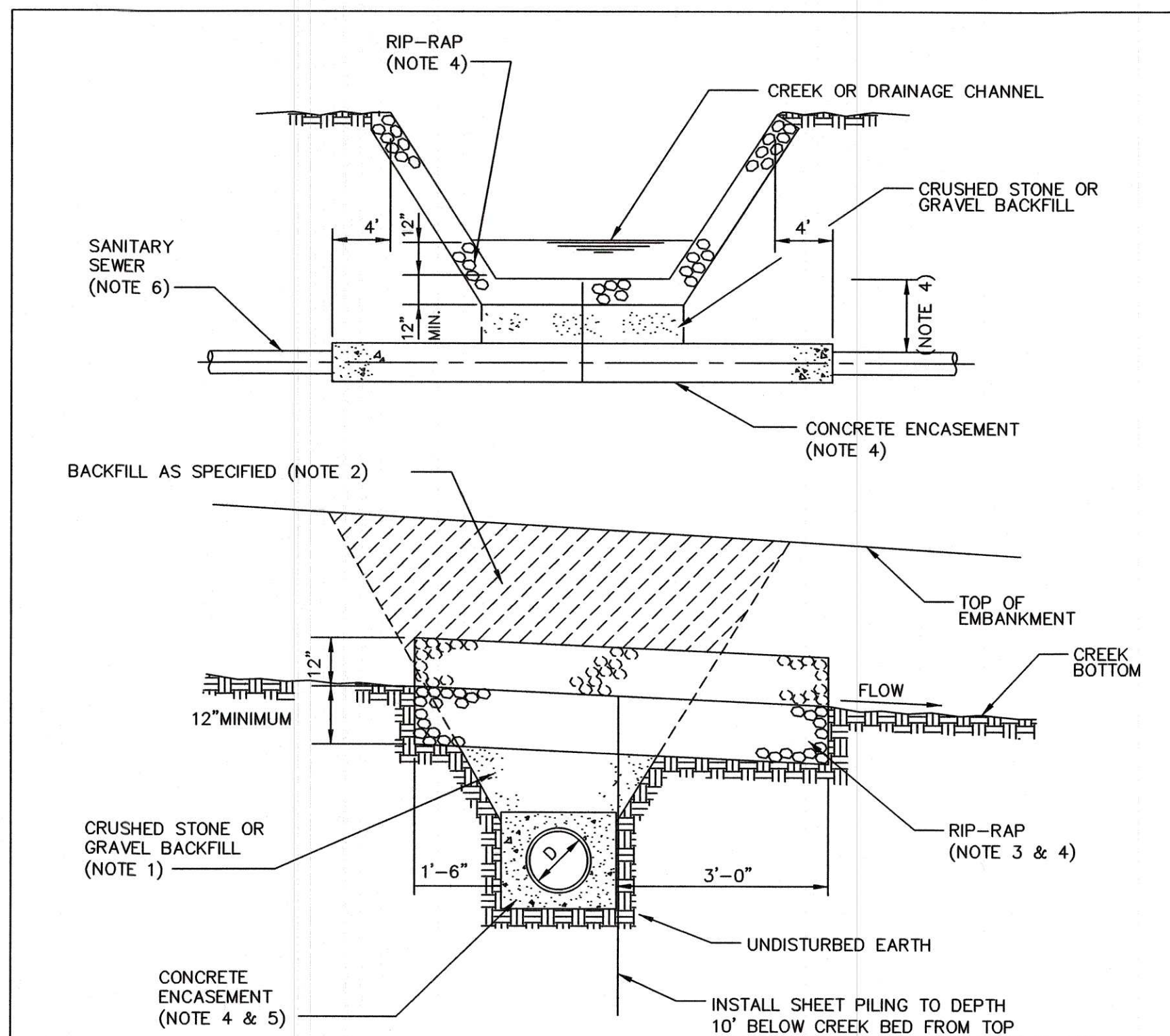
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NOTES
1. MINIMUM SIZE FOR PIPING, VALVES AND FITTINGS FROM WATER MAIN TO HYDRANT INLET: 6".
2. PROVIDE TRACER WIRE AND TRACER WIRE STATION.
3. WRAP HYDRANT, PIPE AND FITTINGS WITH POLYETHYLENE ENCASEMENT.

CITY OF WAUKEE
HYDRANT
STD.DWG.NO.34 REV.1

1 CITY OF WAUKEE HYDRANT DETAIL
NOT TO SCALE



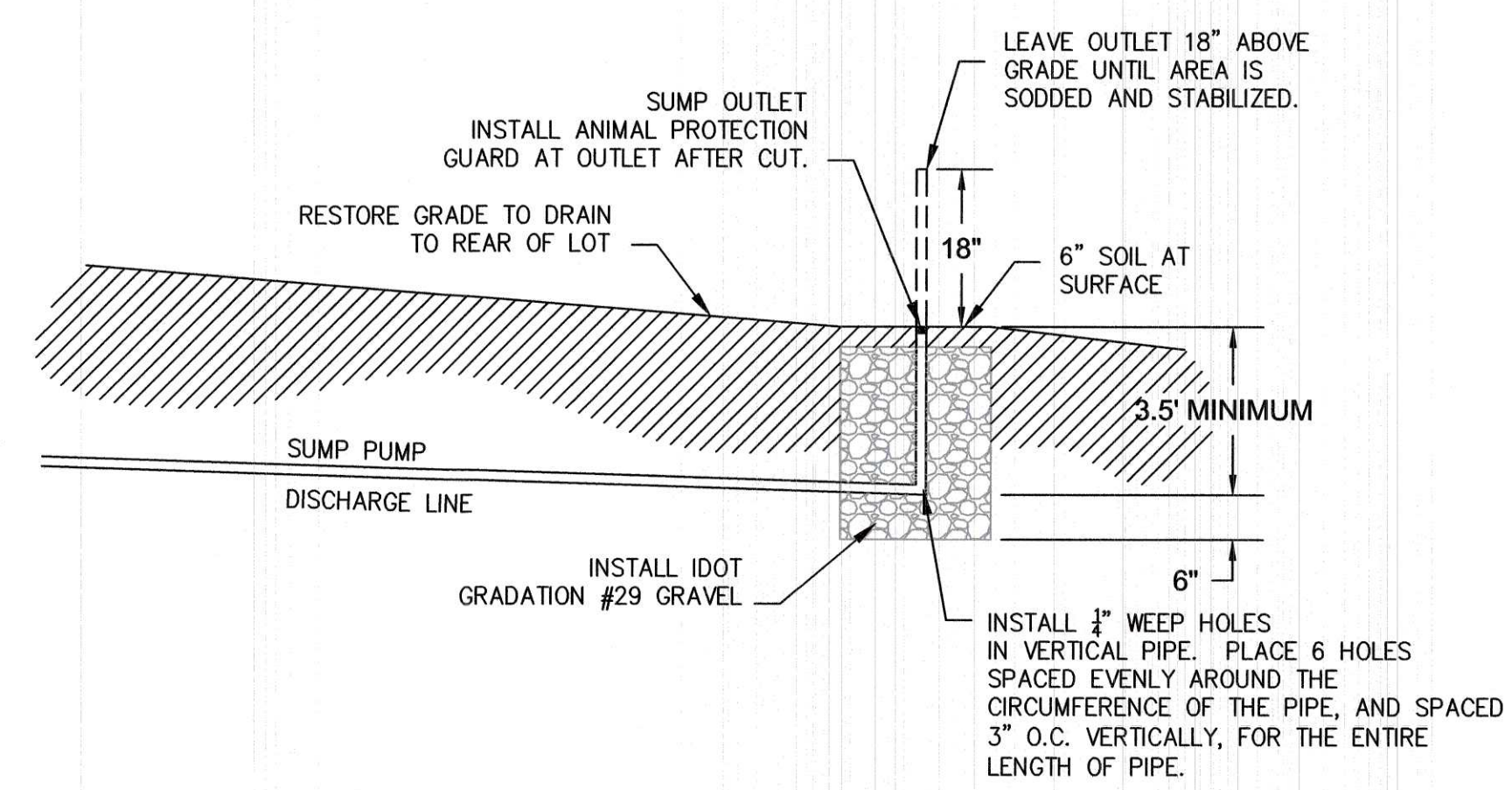
NOTES
1. BACKFILL ONE FOOT BELOW CREEK OR DRAINAGE CHANNEL BED: CRUSHED STONE OR GRAVEL.
2. BACKFILL ABOVE CREEK OR DRAINAGE CHANNEL BED: FINELY DIVIDED EXCAVATED MATERIAL: FREE FROM DEBRIS, STONES, ORGANIC MATTER OR FROZEN LUMPS.
3. BACKFILL BELOW CREEK OR DRAINAGE CHANNEL BED; RIP-RAP USING FOLLOWING MIXTURE:

% OF TOTAL WEIGHT	WEIGHT OF PIECES IN POUNDS
45	200 TO 400
40	15 TO 125
15	LESS THAN 15

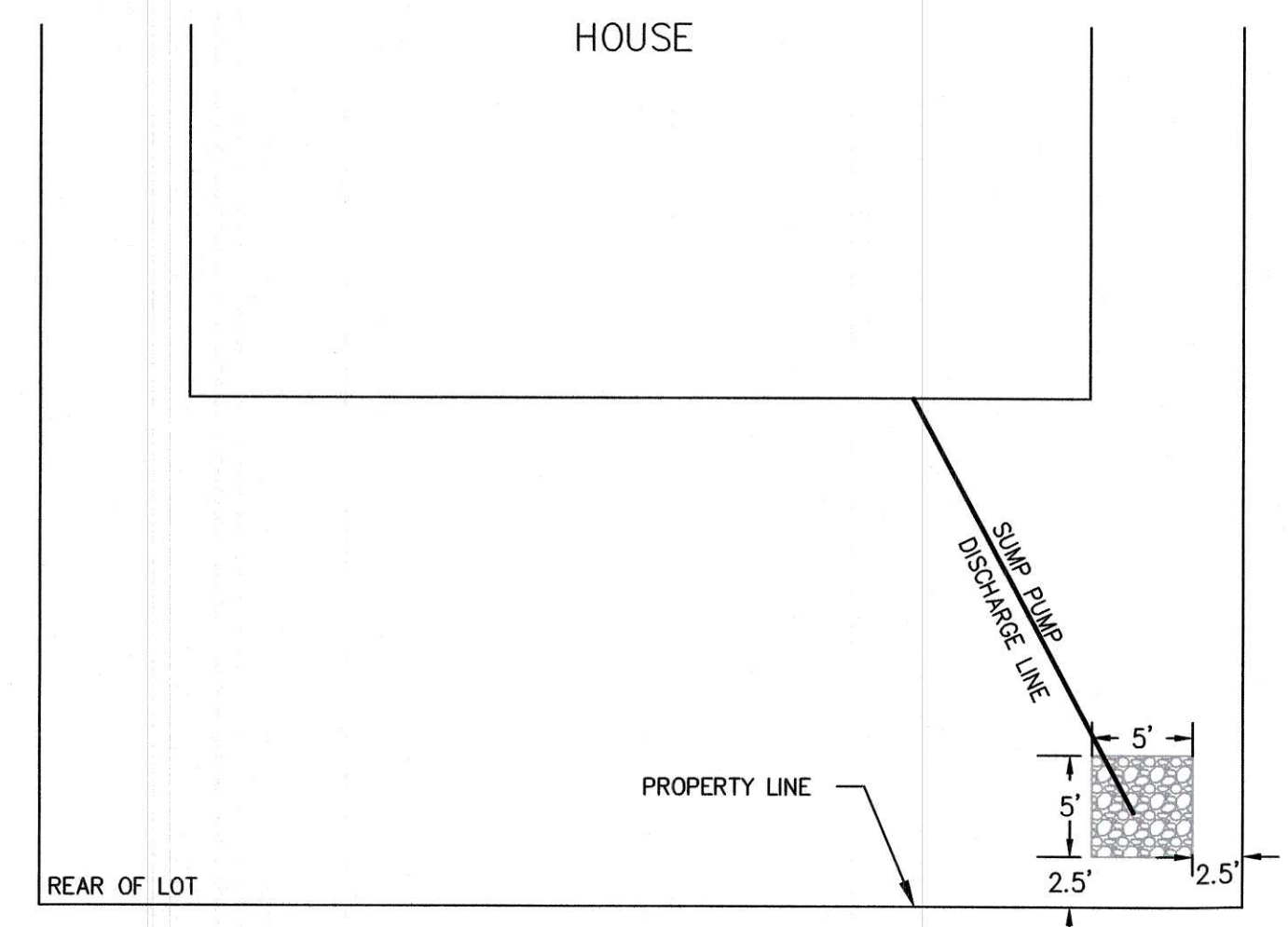
4. 1' MINIMUM FROM CREEK OR DRAINAGE CHANNEL BED TO TOP OF CONCRETE IF CONCRETE ENCASEMENT SHEETING AND RIP-RAP ARE USED. 4" MINIMUM FROM CREEK OR DRAINAGE CHANNEL BED TO TOP OF PIPE IF CONCRETE ENCASEMENT IS NOT USED. 10" MINIMUM FROM CREEK OR DRAINAGE CHANNEL BED TO TOP OF PIPE IF SHEETING AND RIP-RAP ARE NOT USED.
5. FOR CONCRETE ENCASEMENT SEE STD. DWG. FOR CLASS A BEDDING-CONCRETE ENCASEMENT TYPE VIII.
6. USE DUCTILE IRON PIPE WHERE PIPE ENCASED IN CONCRETE OR WHERE SEWER CROSSES STREAM. DUCTILE IRON PIPE NOT REQUIRED WHERE SEWER CROSSES DRAINAGE CHANNEL AND WHERE SEWER DEPTH PRECLUDES CONCRETE ENCASEMENT REQUIREMENT.
7. INSTALL COMPACTED CLAY WATERSTOP DOWNSTREAM OF CREEK OR DRAINAGE CHANNEL. SEE SUDAS STANDARD SPECIFICATIONS FIGURE SW-105.

CITY OF WAUKEE
CREEK CROSSING FOR SANITARY SEWER
STD.DWG.NO.10B REV. 2

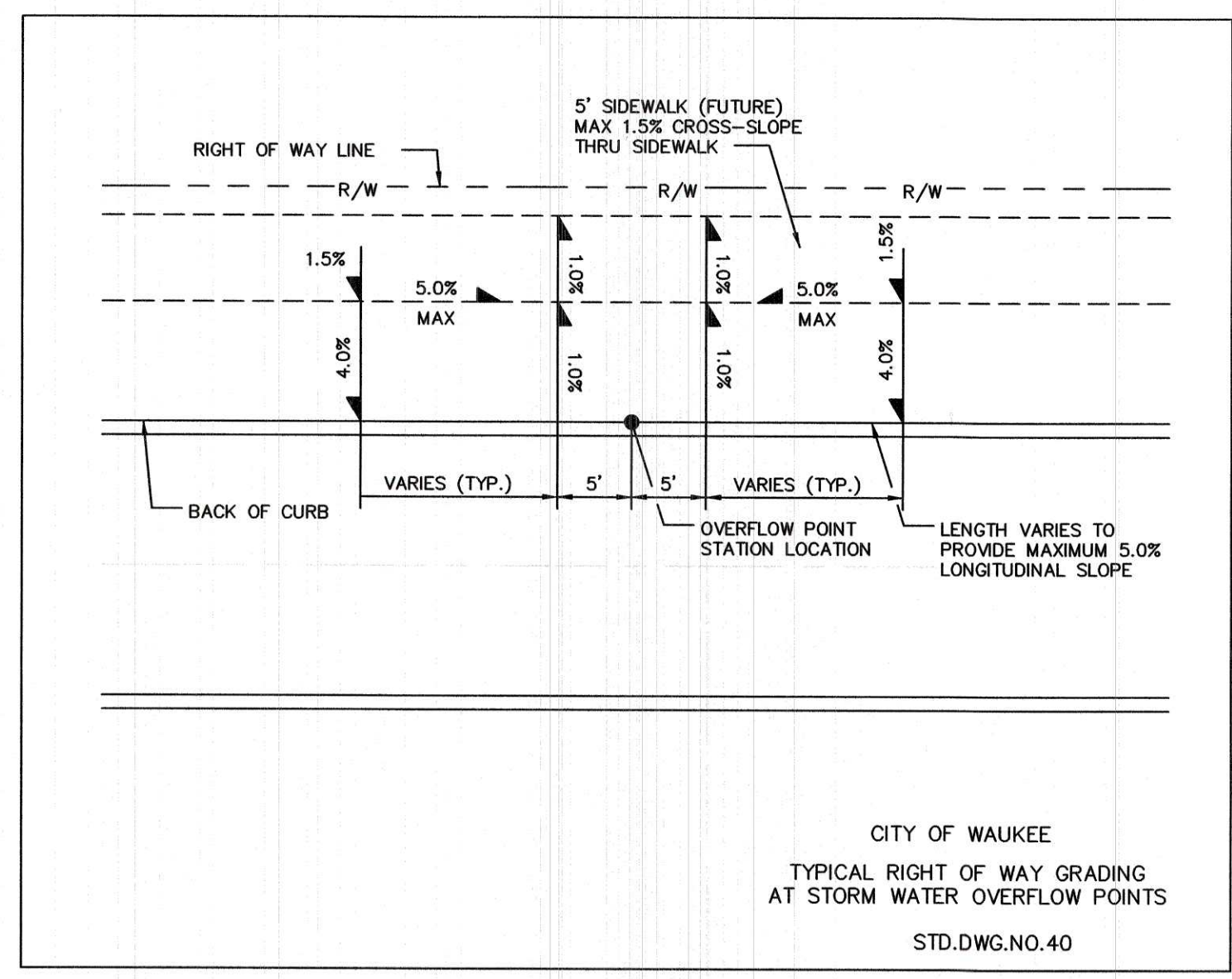
2 CITY OF WAUKEE CREEK CROSSING DETAIL
NOT TO SCALE



3 LOT 29 SUMP SERVICE PROFILE DETAIL
NOT TO SCALE



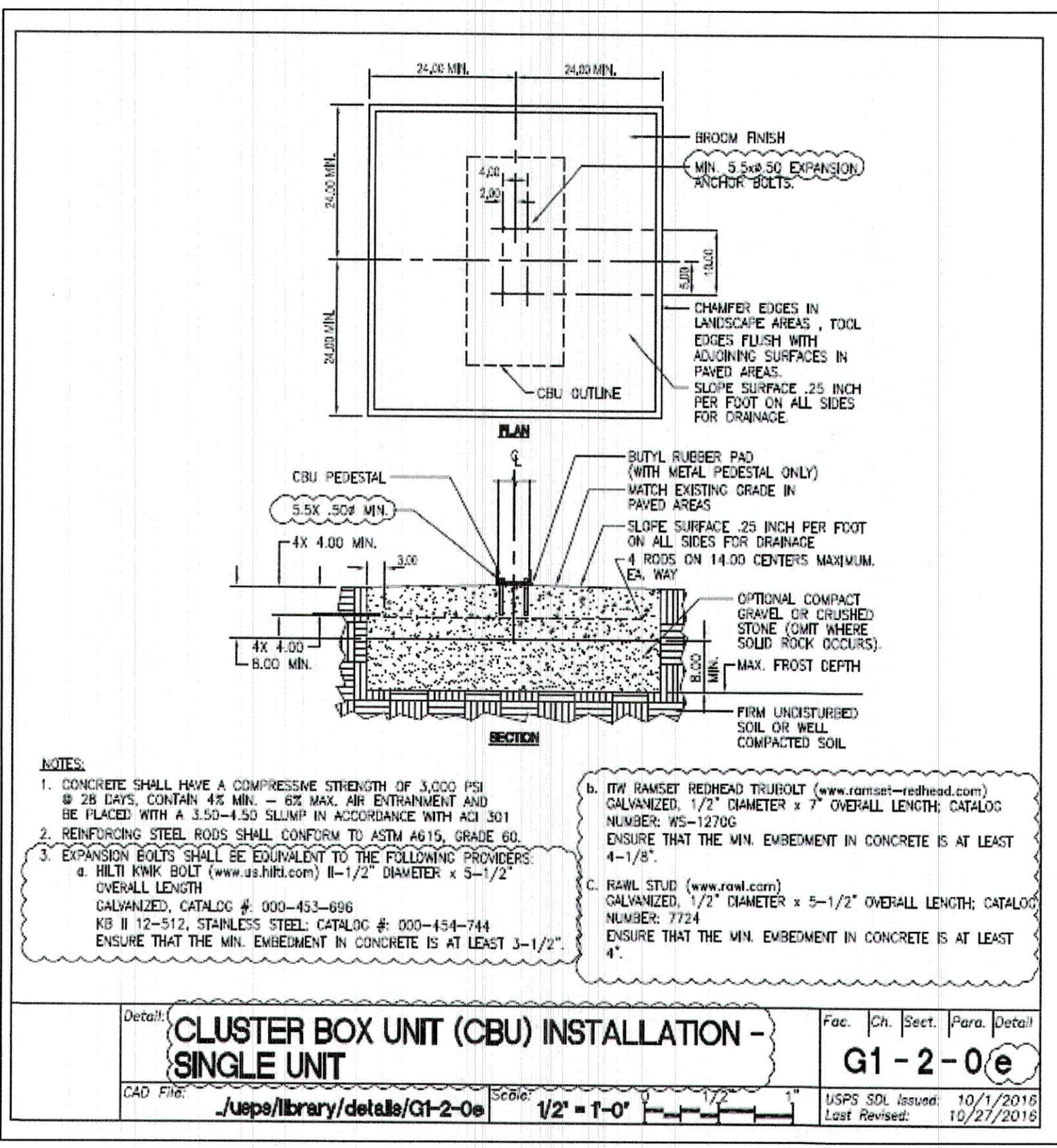
4 LOT 21 SUMP SERVICE PLAN DETAIL
NOT TO SCALE



5 CITY OF WAUKEE DEPRESSED SIDEWALK DETAIL
NOT TO SCALE

RECORD DRAWING

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RECORD DRAWINGS PRODUCED ON: 11/27/2019
NO AS-BUILT DATA FOR THIS SHEET



NOTES
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI @ 28 DAYS. CONCRETE 42 MIN. - 62 MAX. AIR ENTRAINMENT AND BE PLACED WITH A 3.50-4.50 SLUMP IN ACCORDANCE WITH ACI 301
2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM #615, GRADE 60.
3. EXPANSION BOLTS SHALL BE EQUIVALENT TO THE FOLLOWING PROVIDERS:
a. MULTI RING BOLT (www.dalhart.com) 1-1/2" DIAMETER x 3-1/2" OVERALL LENGTH
b. ITW RAMSEY REDHEAD TRUBOLT (www.ramsey-redhead.com) CALIBRATED, 1/2" DIAMETER x 7" OVERALL LENGTH; CATALOG NUMBER: WS-12700. ENSURE THAT THE MIN. EMBEDMENT IN CONCRETE IS AT LEAST 4-1/8".
c. RAWL STUD (www.rawl.com) CALIBRATED, 1/2" DIAMETER x 5-1/2" OVERALL LENGTH; CATALOG NUMBER: 7724. ENSURE THAT THE MIN. EMBEDMENT IN CONCRETE IS AT LEAST 4".

DETAIL: CLUSTER BOX UNIT (CBU) INSTALLATION - SINGLE UNIT
Scale: 1/2" = 1'-0"
USPS Std. Issued: 10/1/2018
Last Revised: 10/27/2018

6 MAILBOX PAD INSTALLATION

KETTLESTONE RIDGE PLAT 4 CONSTRUCTION DRAWINGS

Waukee, Iowa
2211013-03
April 27, 2018

REVISIONS
12.3.18
12.18.18
12.28.18
1.15.19
1.23.19
3.20.19

ENGINEER: J. BECKER
CHECKED BY: C. SMITH
DRAWN BY: J. BECKER
FIELD BOOK NO.: -

DRAWING NO.: DT-05
SHEET NO.: 25 / 25