

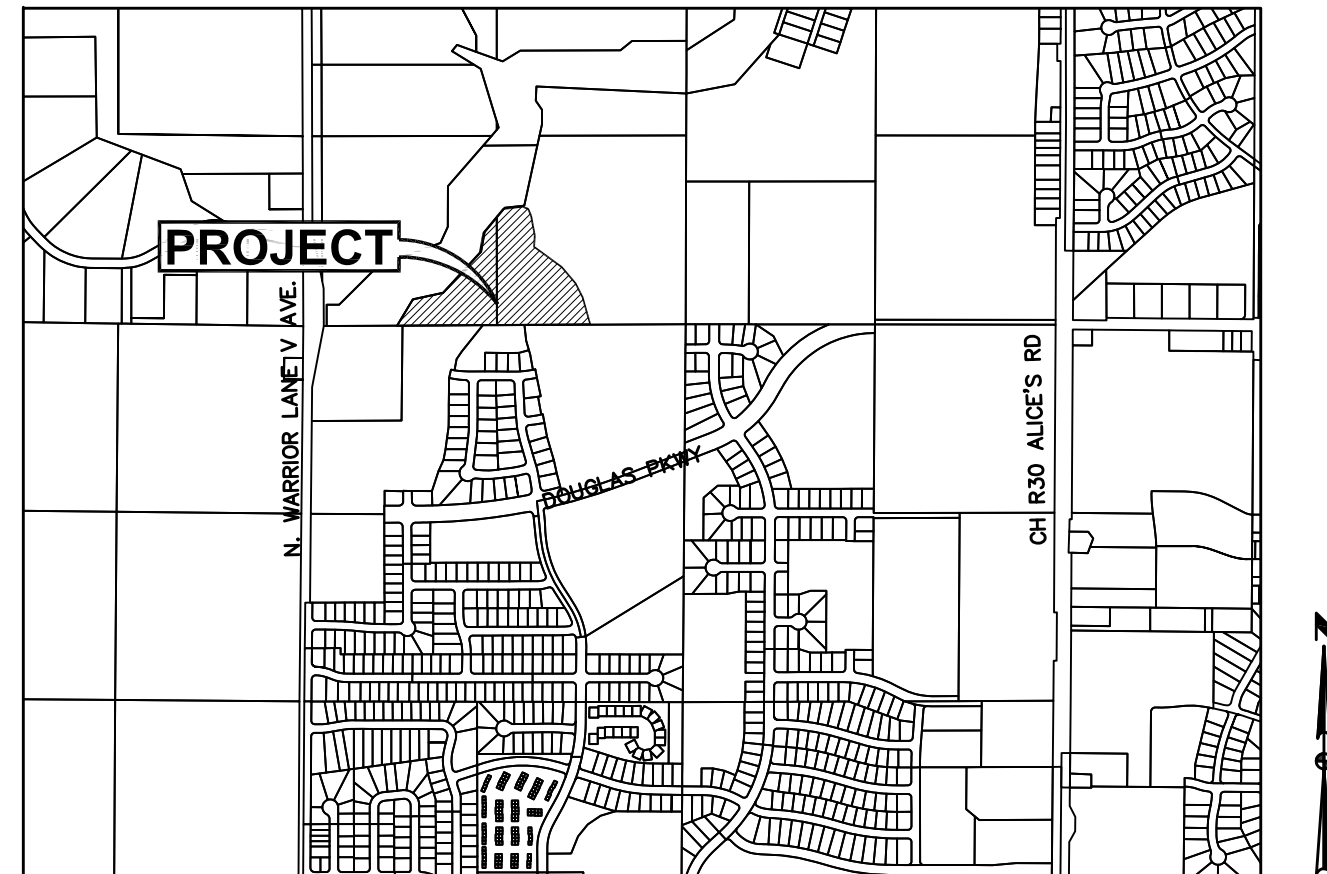
CONSTRUCTION PLANS FOR:

FOX CREEK ESTATES PLAT 10

WAUKEE, IOWA

VICINITY MAP

NOT TO SCALE



WAUKEE, IOWA

INDEX OF SHEETS

NO.	DESCRIPTION
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13	INTERSECTION DETAILS

GENERAL LEGEND

PROPOSED	EXISTING
SECTION LINE	SANITARY MANHOLE
CENTER LINE	WATER VALVE BOX
RIGHT OF WAY	FIRE HYDRANT
PERMANENT EASEMENT	WATER CURB STOP
TEMPORARY EASEMENT	WELL
TYPE SW-501 STORM INTAKE	STORM SEWER MANHOLE
TYPE SW-503 STORM INTAKE	STORM SEWER SINGLE INTAKE
TYPE SW-505 STORM INTAKE	STORM SEWER DOUBLE INTAKE
TYPE SW-506 STORM INTAKE	FLARED END SECTION
TYPE SW-513 STORM INTAKE	DECIDUOUS TREE
TYPE SW-401 STORM MANHOLE	CONIFEROUS TREE
TYPE SW-402 STORM MANHOLE	DECIDUOUS SHRUB
TYPE SW-301 SANITARY MANHOLE	CONIFEROUS SHRUB
STORM/SANITARY CLEANOUT	ELECTRIC POWER POLE
WATER VALVE	GUY ANCHOR
FIRE HYDRANT ASSEMBLY	STREET LIGHT
SIGN	POWER POLE W/ TRANSFORMER
DETECTABLE WARNING PANEL	UTILITY POLE W/ LIGHT
WATER CURB STOP	ELECTRIC BOX
STORM SEWER STRUCTURE NO.	ELECTRIC TRANSFORMER
STORM SEWER PIPE NO.	ELECTRIC MANHOLE OR VAULT
SANITARY SEWER STRUCTURE NO.	TRAFFIC SIGN
SANITARY SEWER PIPE NO.	TELEPHONE JUNCTION BOX
SANITARY SEWER WITH SIZE	TELEPHONE MANHOLE/VAULT
SANITARY SERVICE	TELEPHONE POLE
STORM SEWER	GAS VALVE BOX
STORM SERVICE	CABLE TV JUNCTION BOX
WATERMAIN WITH SIZE	CABLE TV MANHOLE/VAULT
WATER SERVICE	MAIL BOX
SAWCUT (FULL DEPTH)	BENCHMARK
SILT FENCE	SOIL BORING
USE AS CONSTRUCTED	UNDERGROUND TV CABLE
MINIMUM OPENING ELEVATION	GAS MAIN
MINIMUM GRADE AT STRUCTURE	FIBER OPTIC
TOP OF PROPOSED GROUND	UNDERGROUND TELEPHONE
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	FIELD TILE
	SANITARY SEWER W/ SIZE
	STORM SEWER W/ SIZE
	WATER MAIN W/ SIZE

LEGAL DESCRIPTION

A PART OF PARCEL '17-4' AS SHOWN ON THE PLAT OF SURVEY RECORDED IN BOOK 2016 PAGE 1983 IN THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 79 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 22; THENCE NORTH 89°32'02" EAST ALONG THE SOUTH LINE OF SAID SOUTHWEST QUARTER, 619.55 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL '17-4'; THENCE NORTH 30°55'55" EAST ALONG THE NORTHERLY LINE OF SAID PARCEL '17-4', A DISTANCE OF 213.36 FEET; THENCE NORTH 77°35'40" EAST ALONG SAID NORTHERLY LINE, 216.74 FEET; THENCE NORTH 42°28'06" EAST ALONG SAID NORTHERLY LINE, 53.85 FEET TO THE POINT OF BEGINNING; THENCE NORTH 42°28'06" EAST ALONG SAID NORTHERLY LINE, 333.32 FEET; THENCE NORTH 10°12'05" EAST ALONG SAID NORTHERLY LINE, 139.76 FEET; THENCE NORTH 39°31'21" EAST ALONG SAID NORTHERLY LINE, 219.48 FEET; THENCE NORTH 83°38'13" EAST ALONG SAID NORTHERLY LINE, 137.00 FEET; THENCE SOUTH 70°50'25" EAST ALONG SAID NORTHERLY LINE, 42.37 FEET; THENCE SOUTH 22°49'28" EAST ALONG SAID NORTHERLY LINE, 52.40 FEET; THENCE SOUTH 10°18'51" EAST ALONG SAID NORTHERLY LINE, 142.43 FEET; THENCE SOUTH 03°03'28" WEST ALONG SAID NORTHERLY LINE, 80.02 FEET; THENCE SOUTH 53°53'36" EAST ALONG SAID NORTHERLY LINE, 238.63 FEET; THENCE SOUTH 40°33'49" EAST ALONG SAID NORTHERLY LINE, 151.09 FEET; THENCE SOUTH 27°06'29" EAST ALONG SAID NORTHERLY LINE, 110.01 FEET; THENCE SOUTH 15°47'28" EAST ALONG SAID NORTHERLY LINE, 198.06 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL '17-4'; THENCE SOUTH 89°32'02" WEST ALONG THE SOUTH LINE OF SAID PARCEL '17-4, A DISTANCE OF 759.55 FEET; THENCE NORTH 48°49'30" WEST, 133.83 FEET; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE SOUTHEASTERLY WHOSE RADIUS IS 970.00 FEET, WHOSE ARC LENGTH IS 7.87 FEET AND WHOSE CHORD BEARS NORTH 41°24'27" EAST, 7.87 FEET; THENCE NORTH 41°38'24" EAST, 29.52 FEET; THENCE NORTH 48°21'36" WEST, 223.27 FEET TO THE POINT OF BEGINNING AND CONTAINING 11.24 ACRES (489,511 SQUARE FEET). THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

OWNER / DEVELOPER

WAUKEE LOTS, LLC
2400 86TH STREET, SUITE 24
URBANDALE, IA 50322

ENGINEER/ SURVEYOR

CIVIL DESIGN ADVANTAGE
CONTACT: EMILY HARDING
3405 SE CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PH. (515) 369-4400
FX. (515) 369-4410

ZONING

R-2 ONE AND TWO FAMILY RESIDENTIAL DISTRICT

BENCHMARKS

- STORM SEWER MANHOLE RIM LOCATED AT THE N.E. CORNER OF WARRIOR LANE AND FOX RUN TRAIL INTERSECTION. MANHOLE IS LOCATED 4' FROM THE EAST BACK OF CURB LINE OF WARRIOR LANE AND 46' NORTH OF FOX RUN TRAIL CENTERLINE. ELEVATION = 1014.23
- SANITARY SEWER MANHOLE RIM LOCATED ON THE WEST SIDE OF NE DARTMOOR DRIVE, 121' +/- NORTH OF THE CENTERLINE OF NE BOWMAN DRIVE. MANHOLE IS LOCATED 9' FROM THE WEST BACK OF CURB LINE OF NE DARTMOOR DRIVE. ELEVATION = 1020.12

UTILITY NOTE

ANY UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.

NOTES

- ANY CHANGES PROPOSED TO THE CONSTRUCTION DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED IN WRITING BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT BEEN GRANTED APPROVAL IN WRITING BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- THE RESULTS OF THE GEOTECHNICAL REPORT ARE TO BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT. THE CONSTRUCTION DRAWINGS ARE SUBJECT TO ANY CHANGES REQUIRED BY THE REPORT.

SUBMITTAL DATES

FIRST SUBMITTAL: 1/04/17
SECOND SUBMITTAL: 2/16/17
THIRD SUBMITTAL: 3/08/17
FIRST AS-BUILT SUBMITTAL: 6/30/17

AS-BUILT DRAWINGS

AS-BUILT PLANS ARE BASED ON SURVEYED INVERT ELEVATIONS AND INFORMATION SUPPLIED BY THE CONTRACTOR. CIVIL DESIGN ADVANTAGE TAKES NO RESPONSIBILITY FOR UNAUTHORIZED CHANGES TO THE PLANS WITHOUT CITY/OWNER KNOWLEDGE. FIELD VERIFICATION OF UTILITIES OR OTHER PLAN ELEMENTS IS ALWAYS RECOMMENDED.



3405 SE CROSSROADS DR. SUITE G GRIMES, IOWA 50111
PH: (515) 369-4400 Fax: (515) 369-4410
PROJECT NO. 1608.424



REFER TO CONSTRUCTION MATERIALS TESTING GEOTECHNICAL ENGINEERING REPORT FOR FOX CREEK ESTATES PLAT 10 FOR GEOTECHNICAL REQUIREMENTS.

THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTAL SPECIFICATIONS SHALL APPLY TO ALL WORK ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.

EMILY N. HARDING
19972

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.

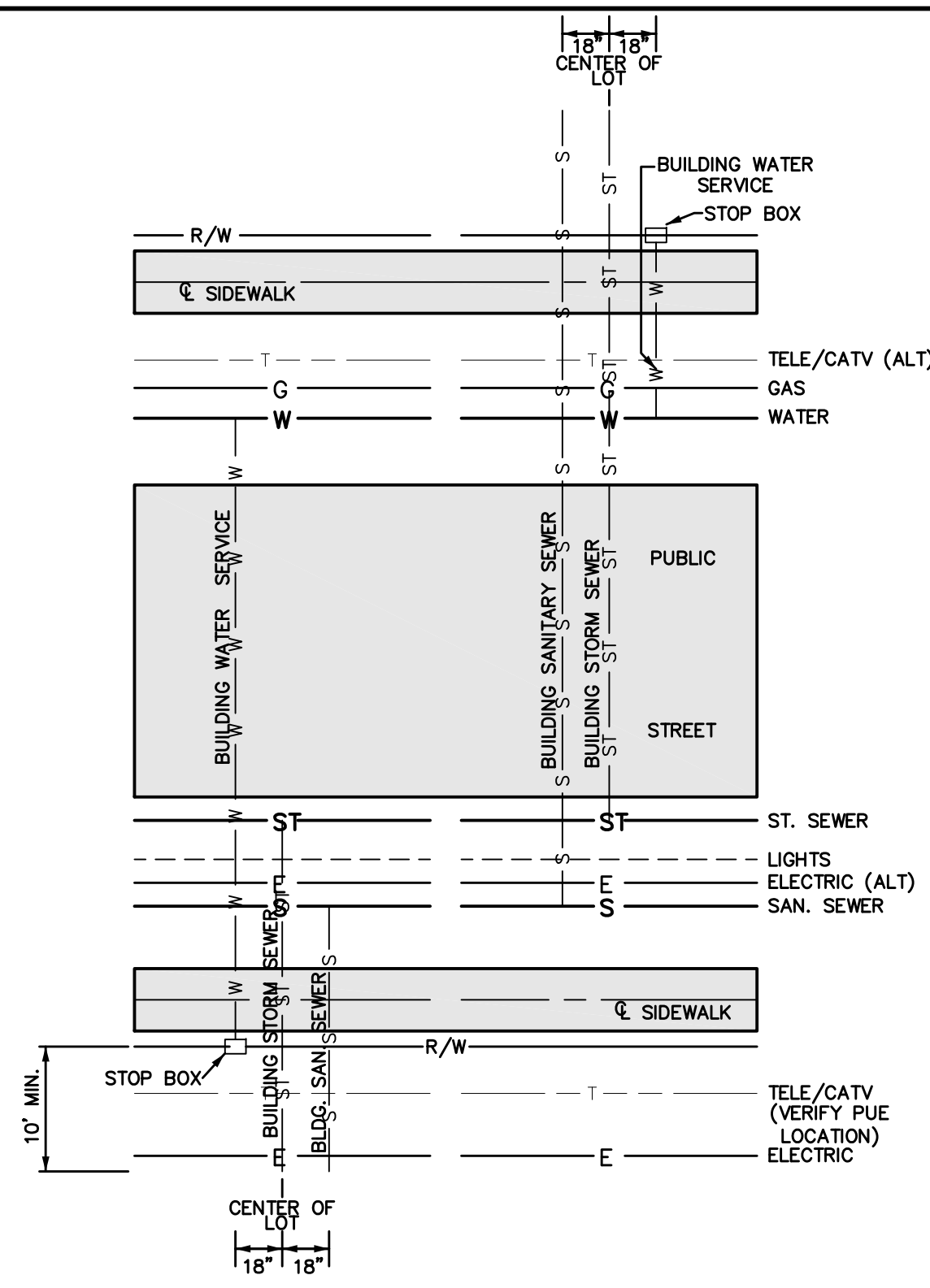
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EMILY N. HARDING, P.E.

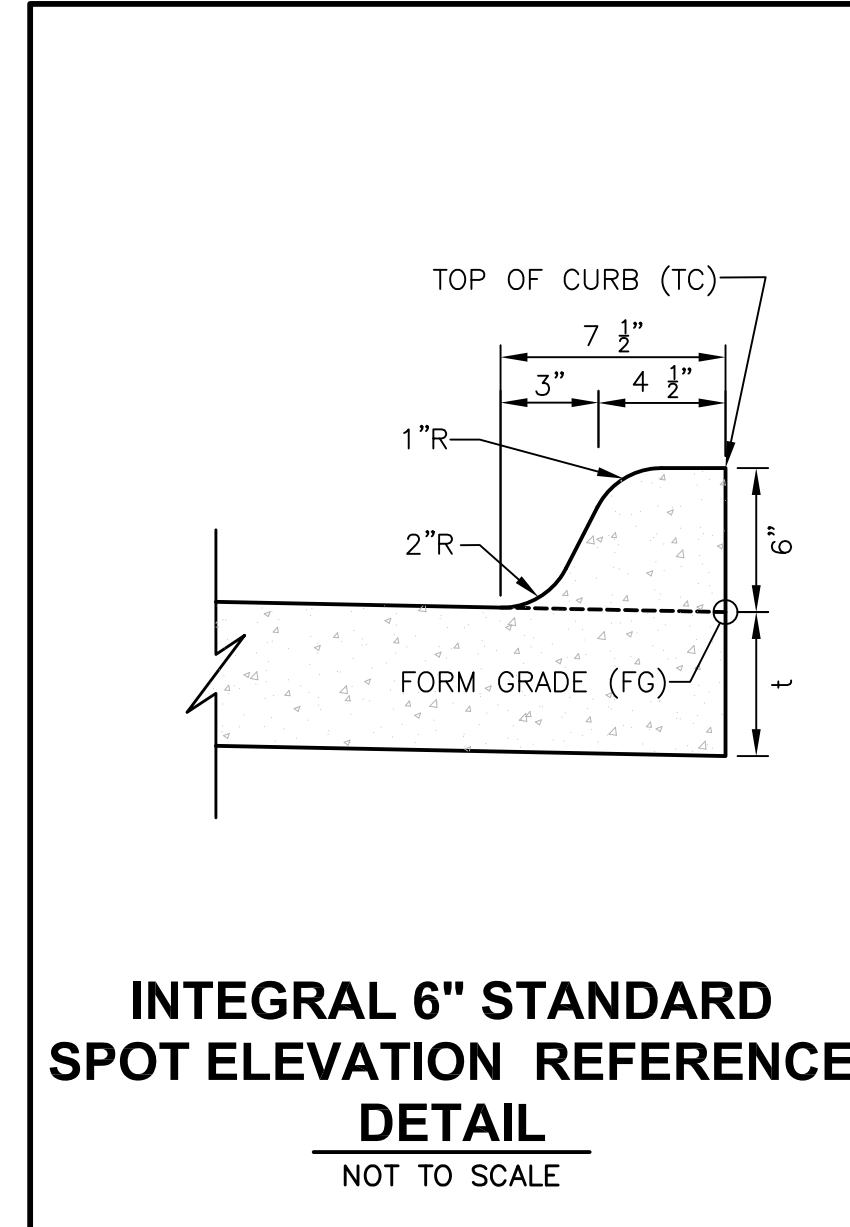
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ALL SHEETS

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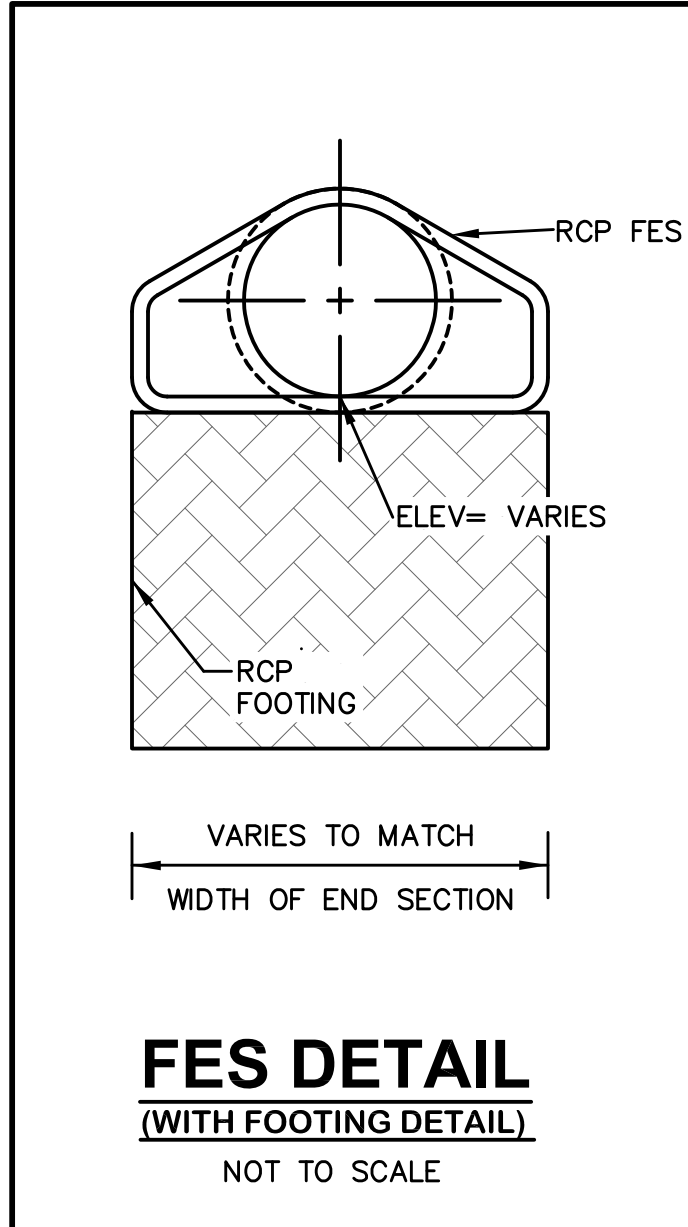
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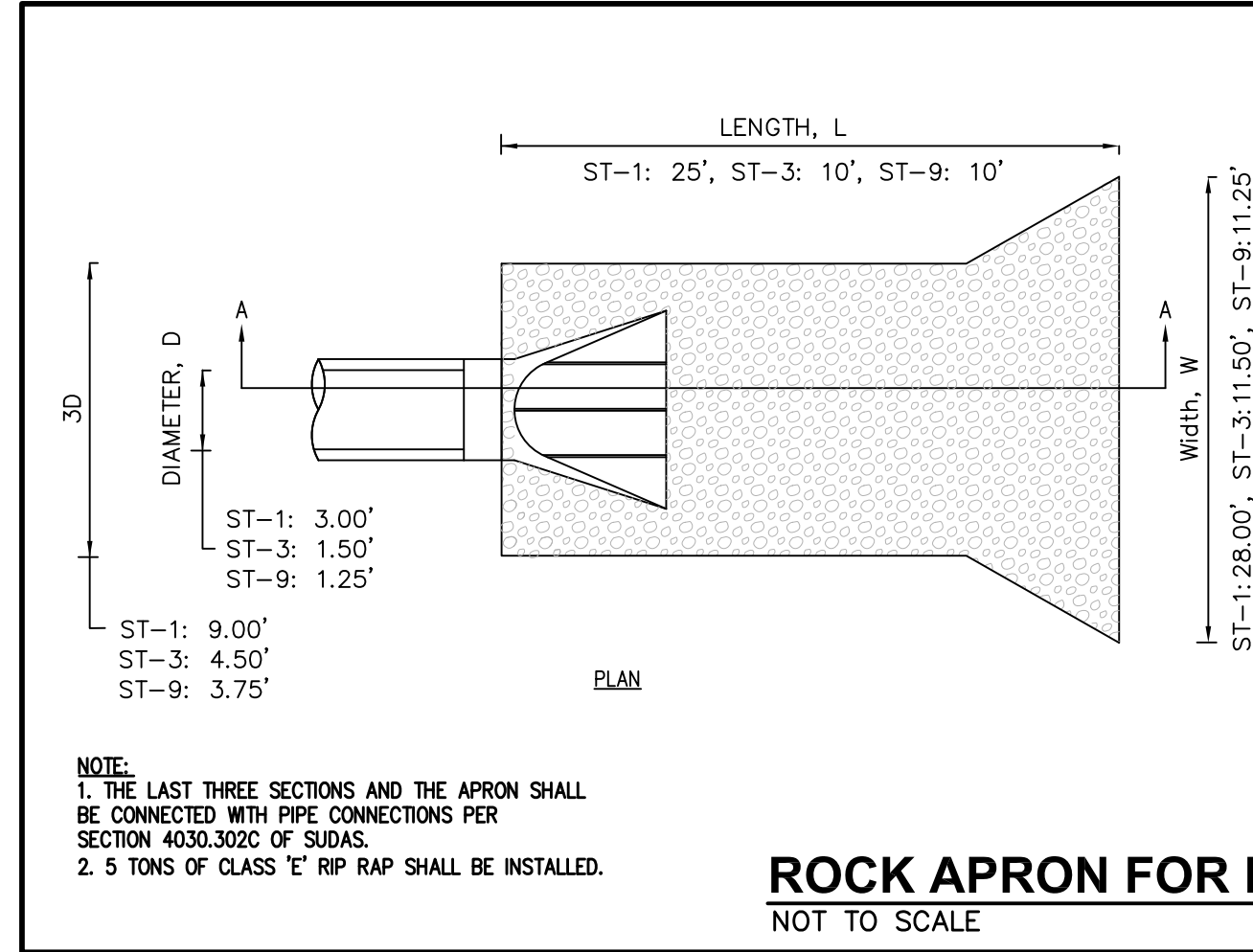
CITY OF WAUKEE UTILITY SERVICE LOCATIONS
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INTEGRAL 6" STANDARD SPOT ELEVATION REFERENCE DETAIL
 NOT TO SCALE

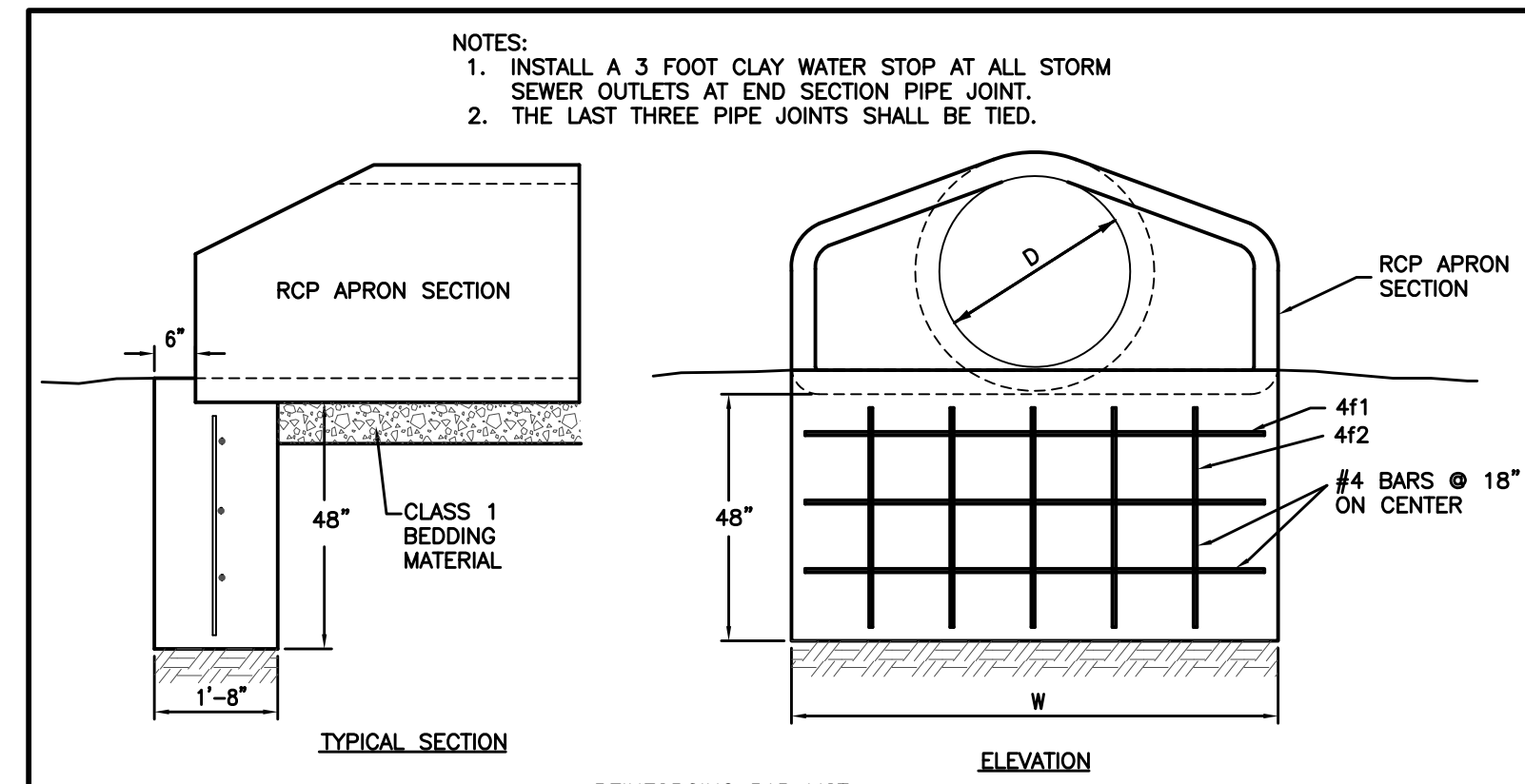
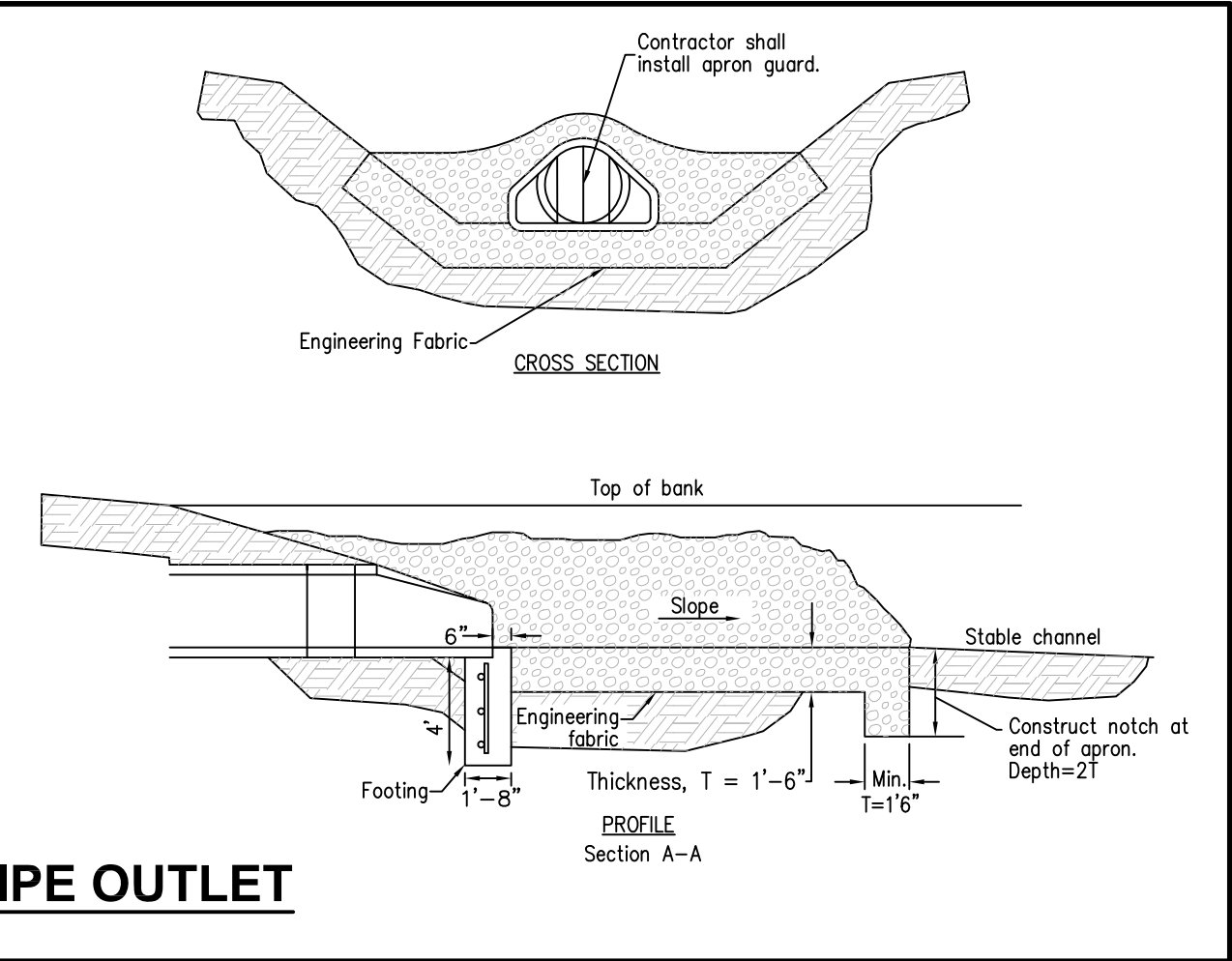


FES DETAIL (WITH FOOTING DETAIL)
 NOT TO SCALE



NOTE:
 1. THE LAST THREE SECTIONS AND THE APRON SHALL BE CONNECTED WITH PIPE CONNECTIONS PER SECTION 4030.302C OF SUDAS.
 2. 5 TONS OF CLASS "E" RIP RAP SHALL BE INSTALLED.

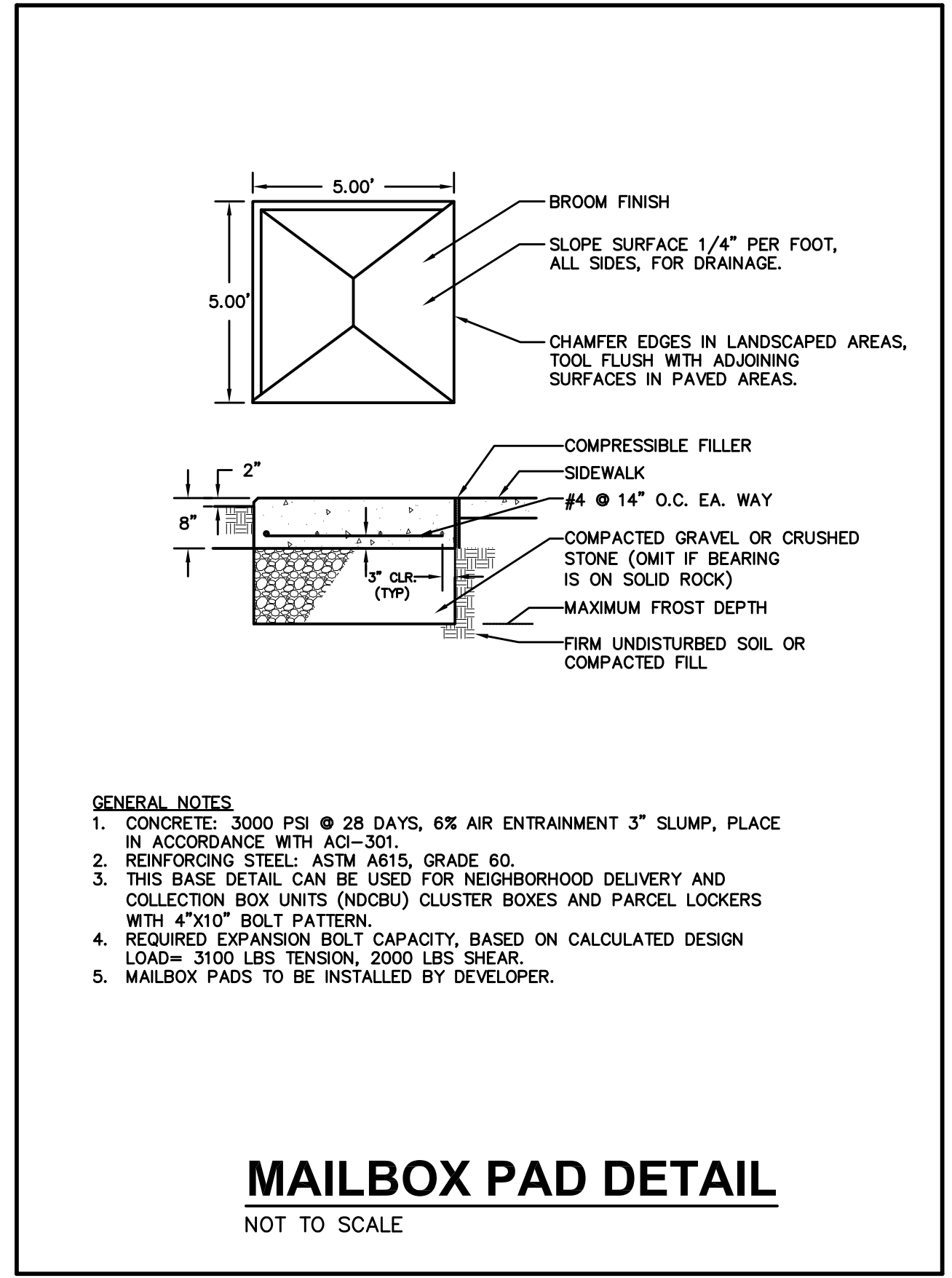
ROCK APRON FOR PIPE OUTLET
 NOT TO SCALE



REINFORCING BAR LIST

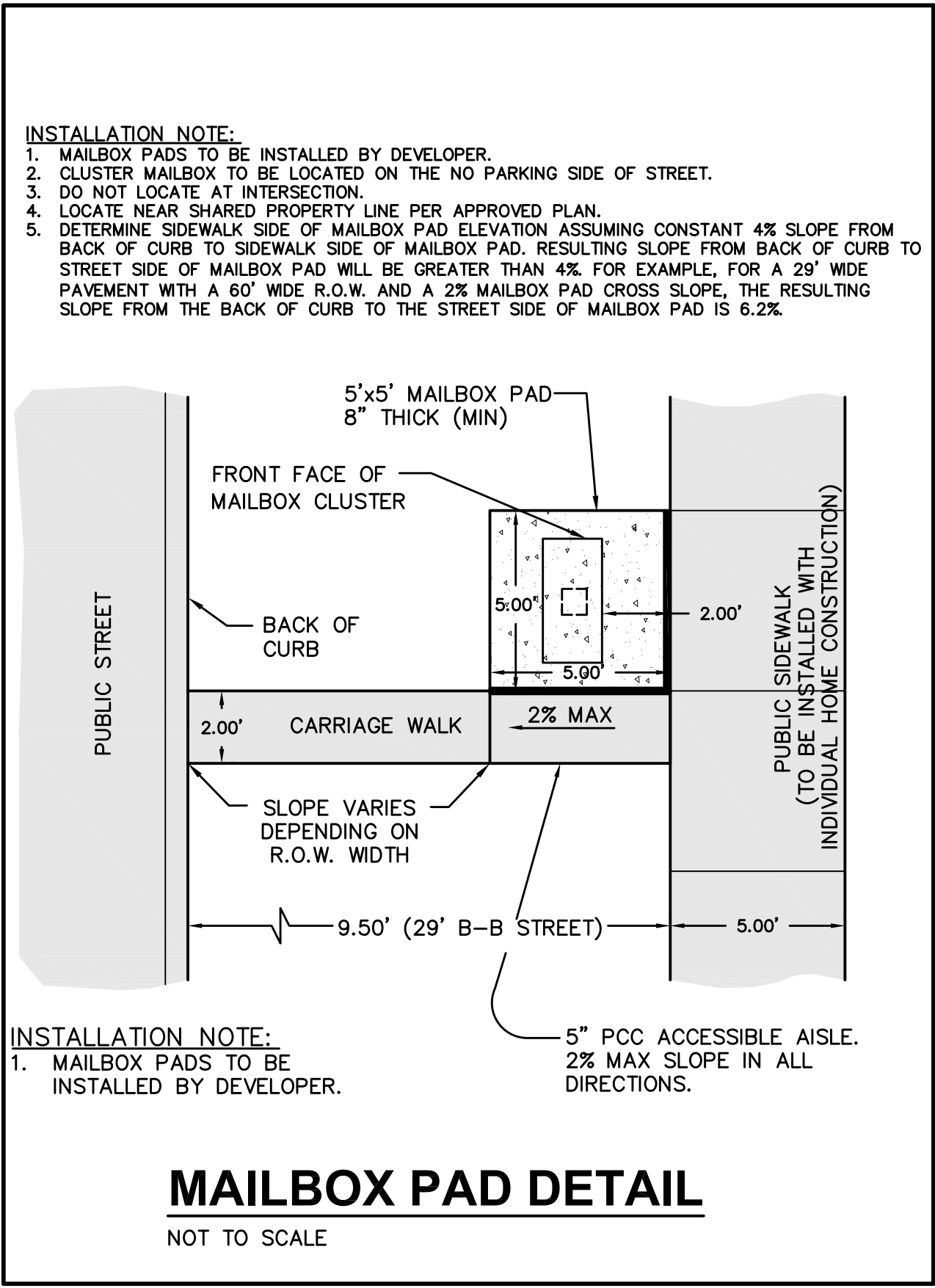
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12"	2'-4"	4f1	4	2'-0"	3
		4f2	4	3'-8"	2
15"	2'-10"	4f1	4	2'-0"	3
		4f2	4	3'-8"	2
18"	3'-5"	4f1	4	3'-1"	3
		4f2	4	3'-8"	3
24"	4'-6"	4f1	4	4'-2"	3
		4f2	4	3'-8"	3
30"	5'-7"	4f1	4	5'-3"	3
		4f2	4	3'-8"	4
36"	6'-8"	4f1	4	6'-4"	3
		4f2	4	3'-8"	5
42"	7'-3"	4f1	4	6'-11"	3
		4f2	4	3'-8"	5

RCP APRON FOOTING DETAIL
 NOT TO SCALE



GENERAL NOTES:
 1. CONCRETE: 3000 PSI @ 28 DAYS, 6% AIR ENTRAINMENT 3" SLUMP, PLACE IN ACCORDANCE WITH ACI-301.
 2. REINFORCING STEEL: ASTM A615, GRADE 60.
 3. THIS BASE DETAIL CAN BE USED FOR NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS (NDCBU) CLUSTER BOXES AND PARCEL LOCKERS WITH 4"x10" BOLT PATTERN.
 4. REQUIRED EXPANSION BOLT CAPACITY, BASED ON CALCULATED DESIGN LOAD= 3100 LBS TENSION, 2000 LBS SHEAR.
 5. MAILBOX PADS TO BE INSTALLED BY DEVELOPER.

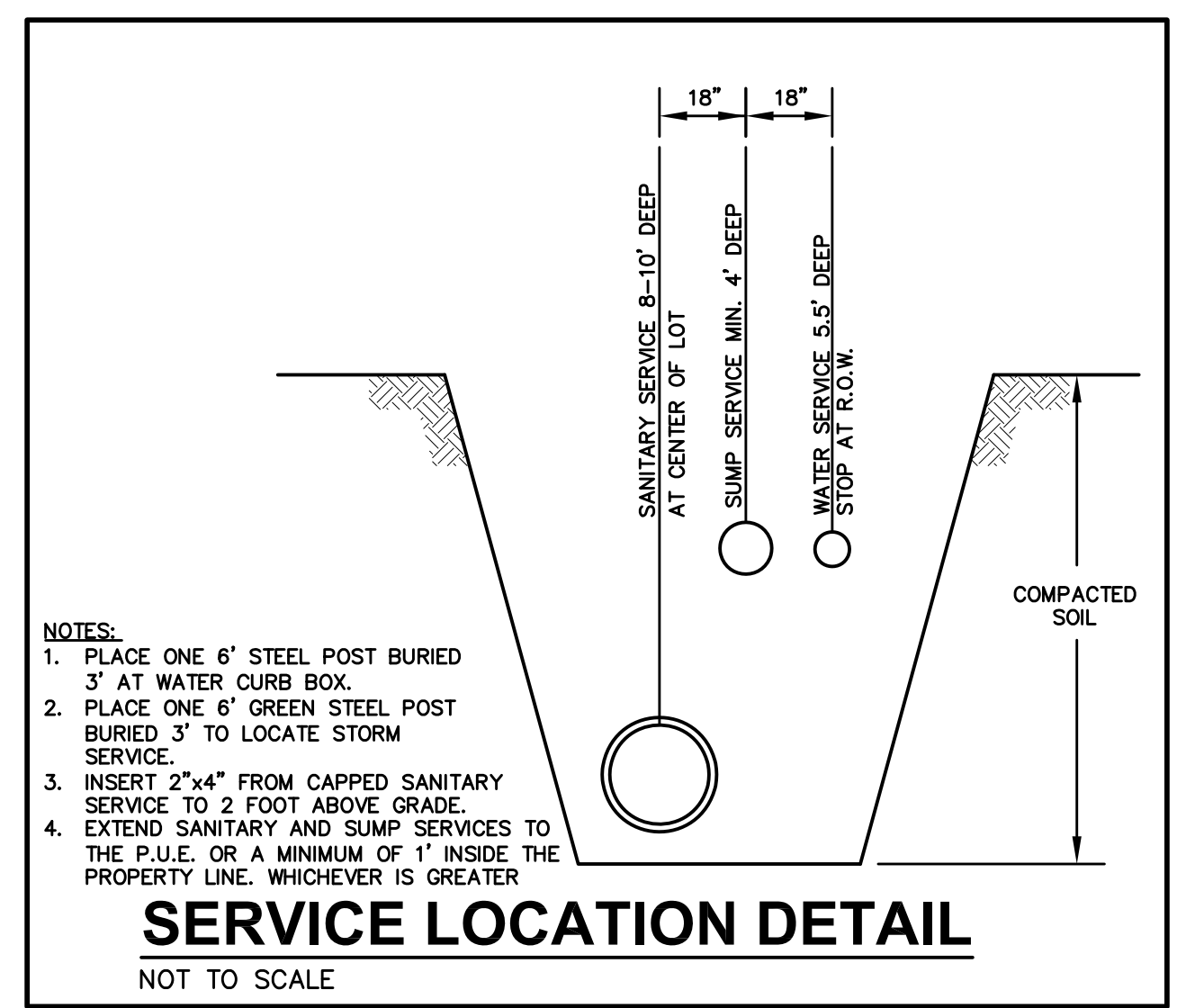
MAILBOX PAD DETAIL
 NOT TO SCALE



INSTALLATION NOTE:
 1. MAILBOX PADS TO BE INSTALLED BY DEVELOPER.
 2. CLUSTER MAILBOX TO BE LOCATED ON THE NO PARKING SIDE OF STREET.
 3. DO NOT LOCATE AT INTERSECTION.
 4. LOCATE NEAR SHARED PROPERTY LINE PER APPROVED PLAN.
 5. DETERMINE SIDEWALK SIDE OF MAILBOX PAD ELEVATION ASSUMING CONSTANT 4% SLOPE FROM BACK OF CURB TO SIDEWALK SIDE OF MAILBOX PAD. RESULTING SLOPE FROM BACK OF CURB TO STREET SIDE OF MAILBOX PAD WILL BE GREATER THAN 4%. FOR EXAMPLE, FOR A 29' WIDE PAVEMENT WITH A 60' WIDE R.O.W. AND A 2% MAILBOX PAD CROSS SLOPE, THE RESULTING SLOPE FROM THE BACK OF CURB TO THE STREET SIDE OF MAILBOX PAD IS 6.2%.

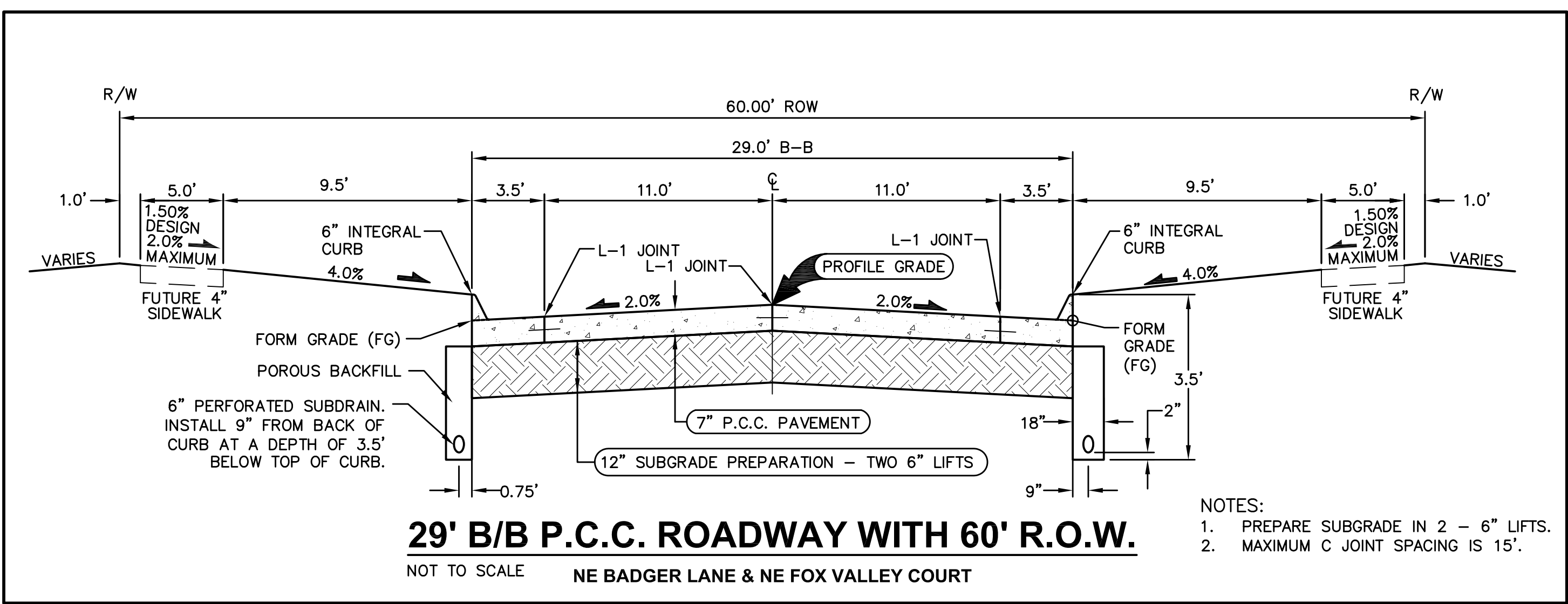
INSTALLATION NOTE:
 1. MAILBOX PADS TO BE INSTALLED BY DEVELOPER.

MAILBOX PAD DETAIL
 NOT TO SCALE



NOTES:
 1. PLACE ONE 6" STEEL POST BURIED 3' AT WATER CURB BOX.
 2. PLACE ONE 6" GREEN STEEL POST BURIED 3' TO LOCATE STORM SERVICE.
 3. INSERT 2"x4" FROM CAPPED SANITARY SERVICE TO 2 FOOT ABOVE GRADE.
 4. EXTEND SANITARY AND SUMP SERVICES TO THE P.U.E. OR A MINIMUM OF 1' INSIDE THE PROPERTY LINE, WHICHEVER IS GREATER

SERVICE LOCATION DETAIL
 NOT TO SCALE



6" PERFORATED SUBDRAIN. INSTALL 9" FROM BACK OF CURB AT A DEPTH OF 3.5' BELOW TOP OF CURB.

29' B/B P.C.C. ROADWAY WITH 60' R.O.W.
 NOT TO SCALE
 NE BADGER LANE & NE FOX VALLEY COURT

NOTES:
 1. PREPARE SUBGRADE IN 2 - 6" LIFTS.
 2. MAXIMUM C JOINT SPACING IS 15'.

FOX CREEK ESTATES PLAT 10
 TYPICAL SECTIONS AND DETAILS
 WAUKEE, IOWA

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 GRIMES, IOWA 50111
 PHONE: (515) 369-4400 FAX: (515) 369-4410

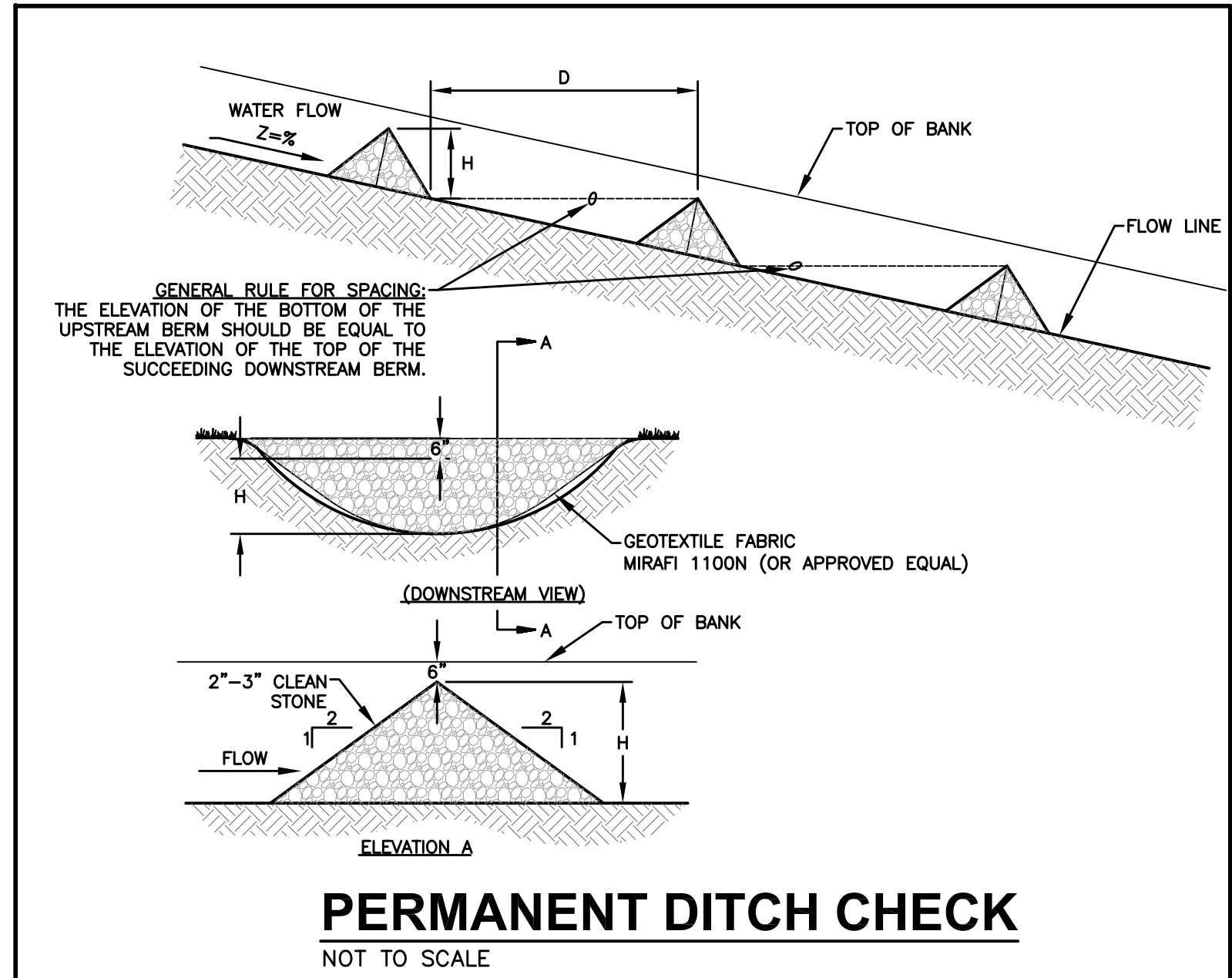
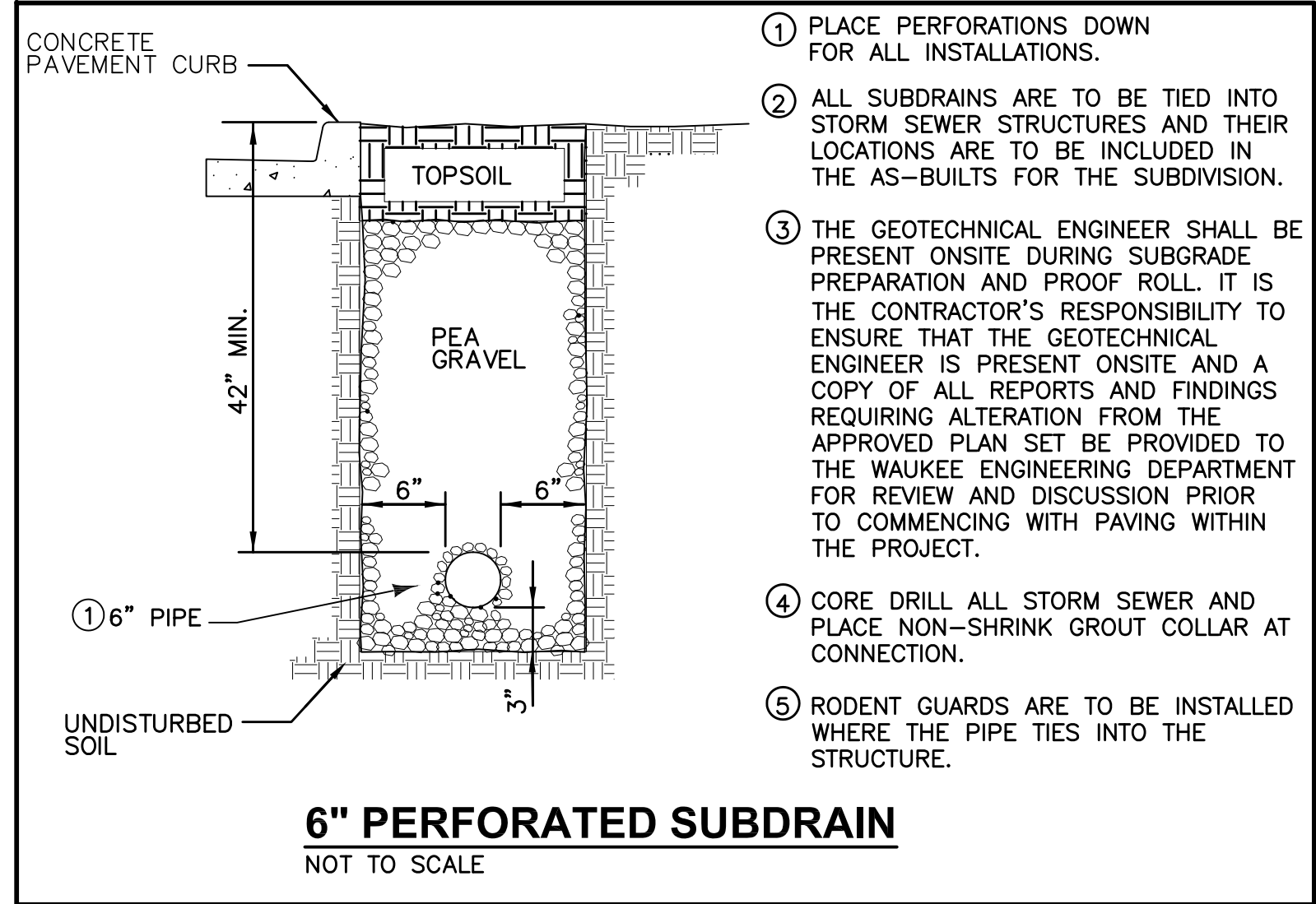
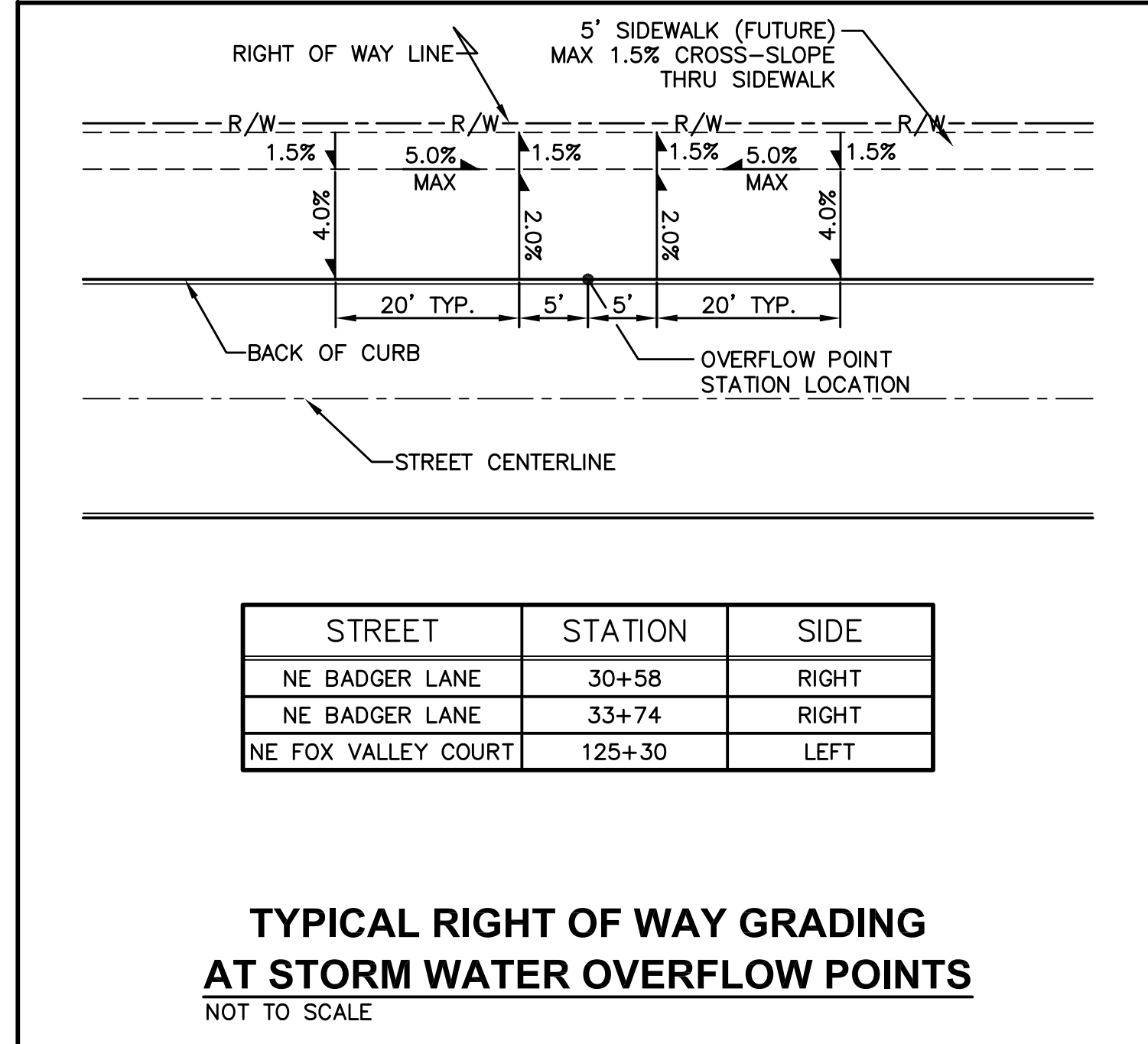
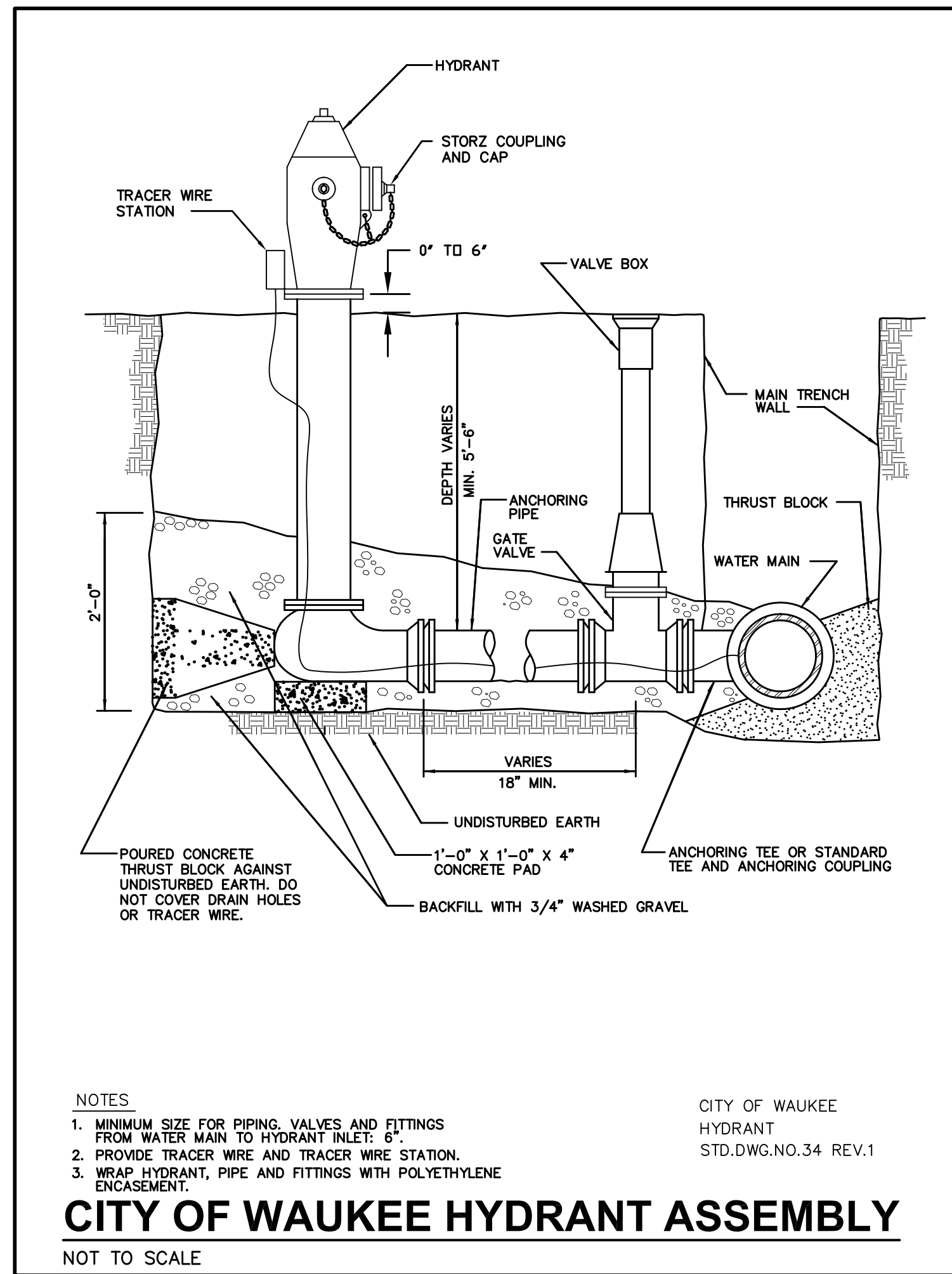
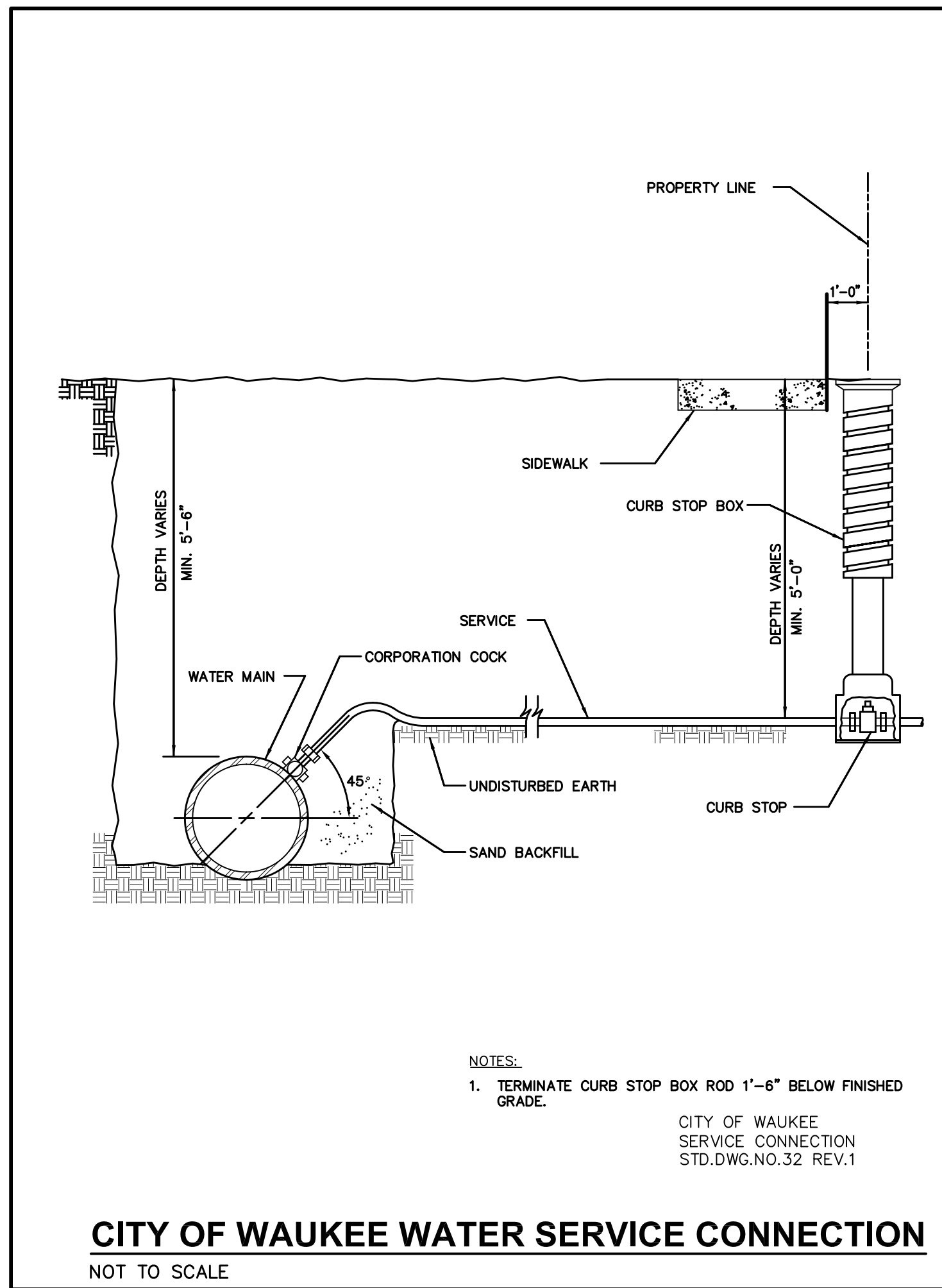
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 ENGINEER: ENH

REVISIONS

DATE	DESCRIPTION
06/20/17	FIRST AS-BUILT SUBMITTAL
03/08/17	THIRD SUBMITTAL
02/16/17	SECOND SUBMITTAL
01/04/17	FIRST SUBMITTAL

2/13
 1608.424

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DATE: 06/20/17
 03/08/17
 02/16/17
 01/04/17

REVISIONS:
 FIRST AS-BUILT SUBMITTAL
 THIRD SUBMITTAL
 SECOND SUBMITTAL
 FIRST SUBMITTAL

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 GRIMES, IOWA 50111
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TECH: CGW
 ENGINEER: ENH

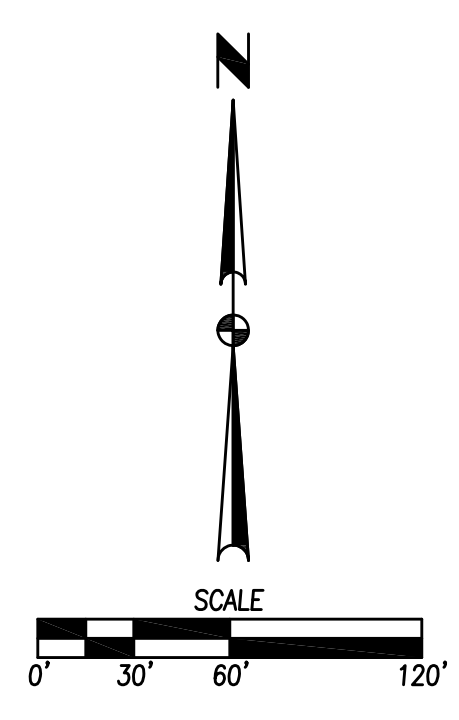
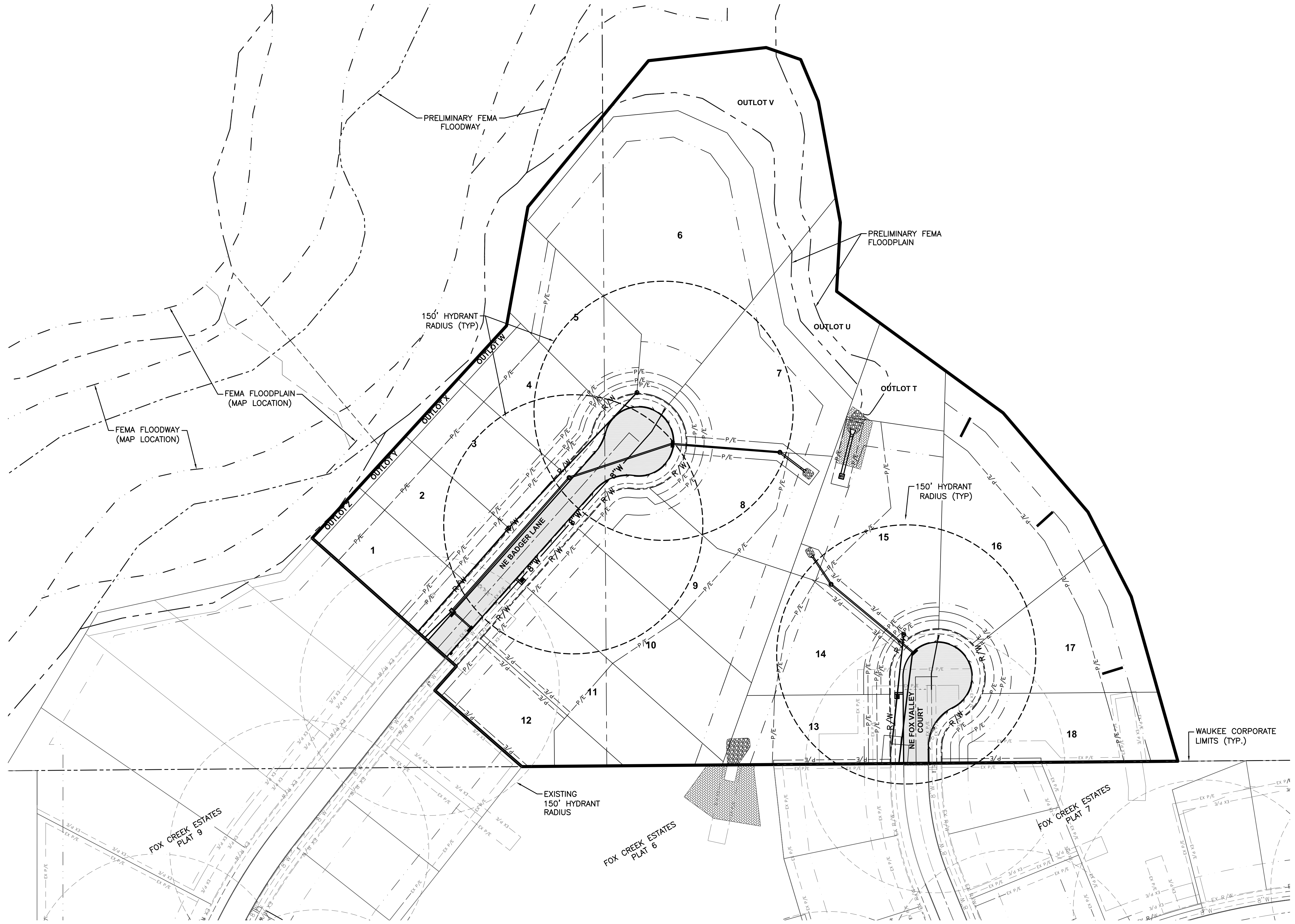
ESA
 CIVIL DESIGN ADVANTAGE

WAUKEE, IOWA

FOX CREEK ESTATES PLAT 10
 TYPICAL SECTIONS AND DETAILS

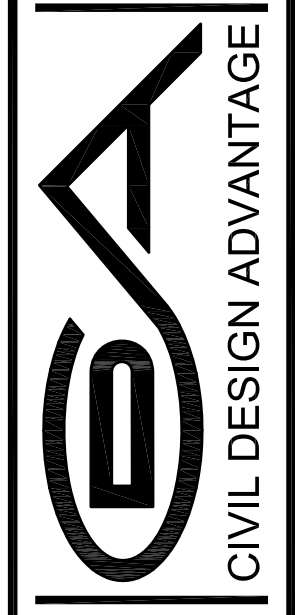
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REVISIONS	DATE
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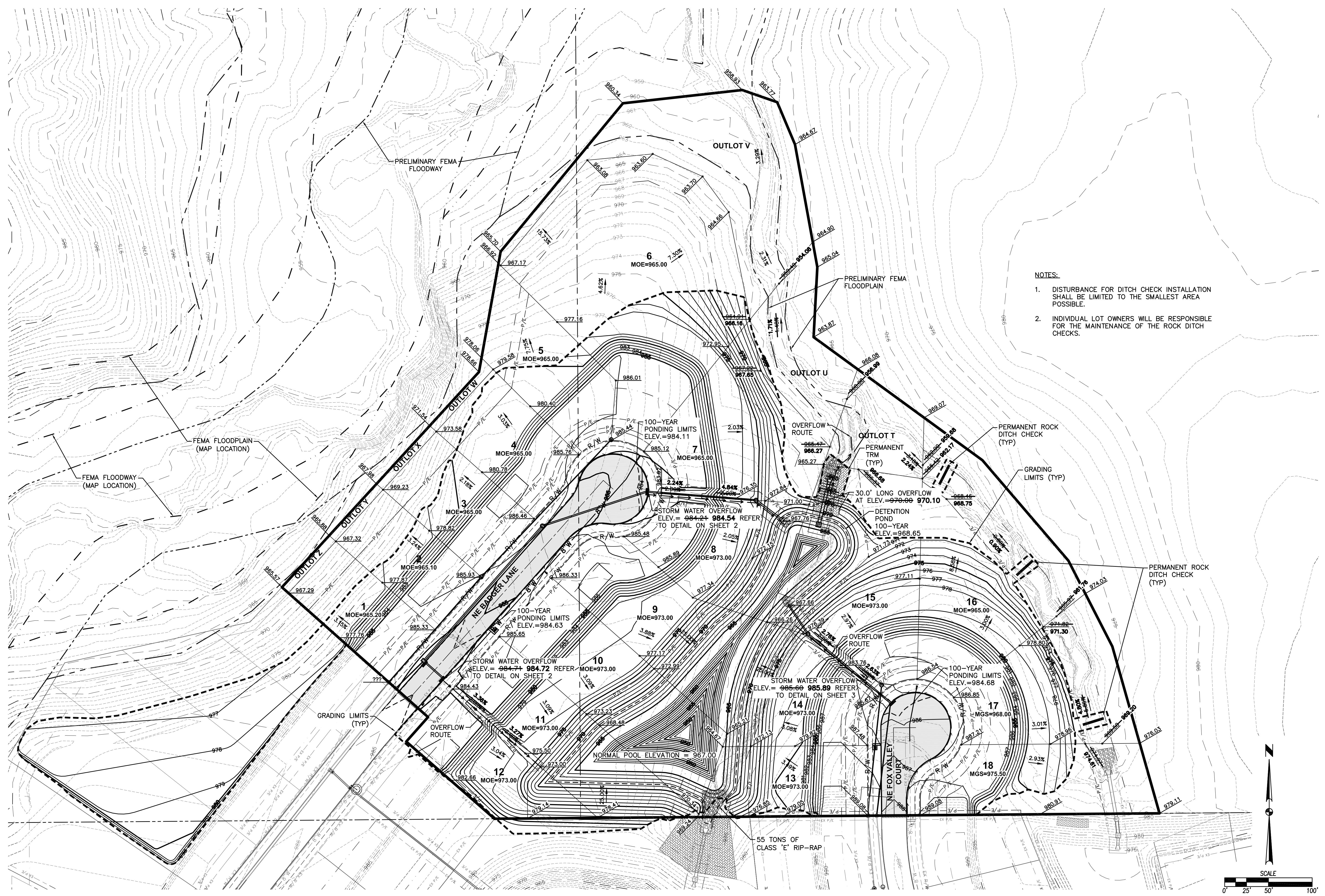


WAUKEE, IOWA

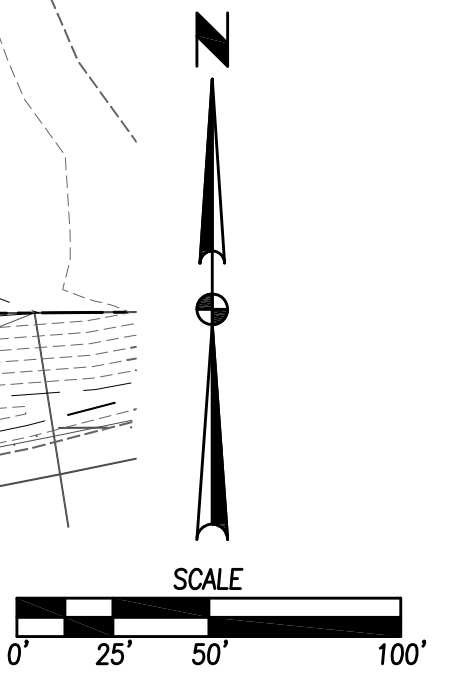
FOX CREEK ESTATES PLAT 10

HYDRANT COVERAGE

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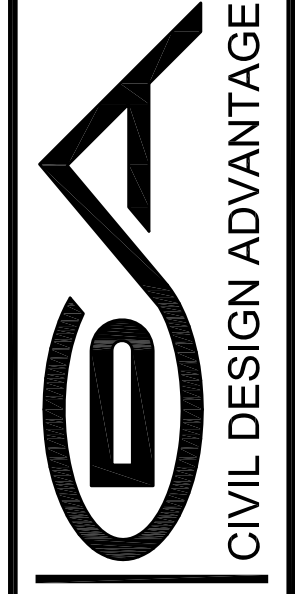


- NOTES:**
1. DISTURBANCE FOR DITCH CHECK INSTALLATION SHALL BE LIMITED TO THE SMALLEST AREA POSSIBLE.
 2. INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE ROCK DITCH CHECKS.



REVISIONS	DATE
FIRST AS-BUILT SUBMITTAL	06/20/17
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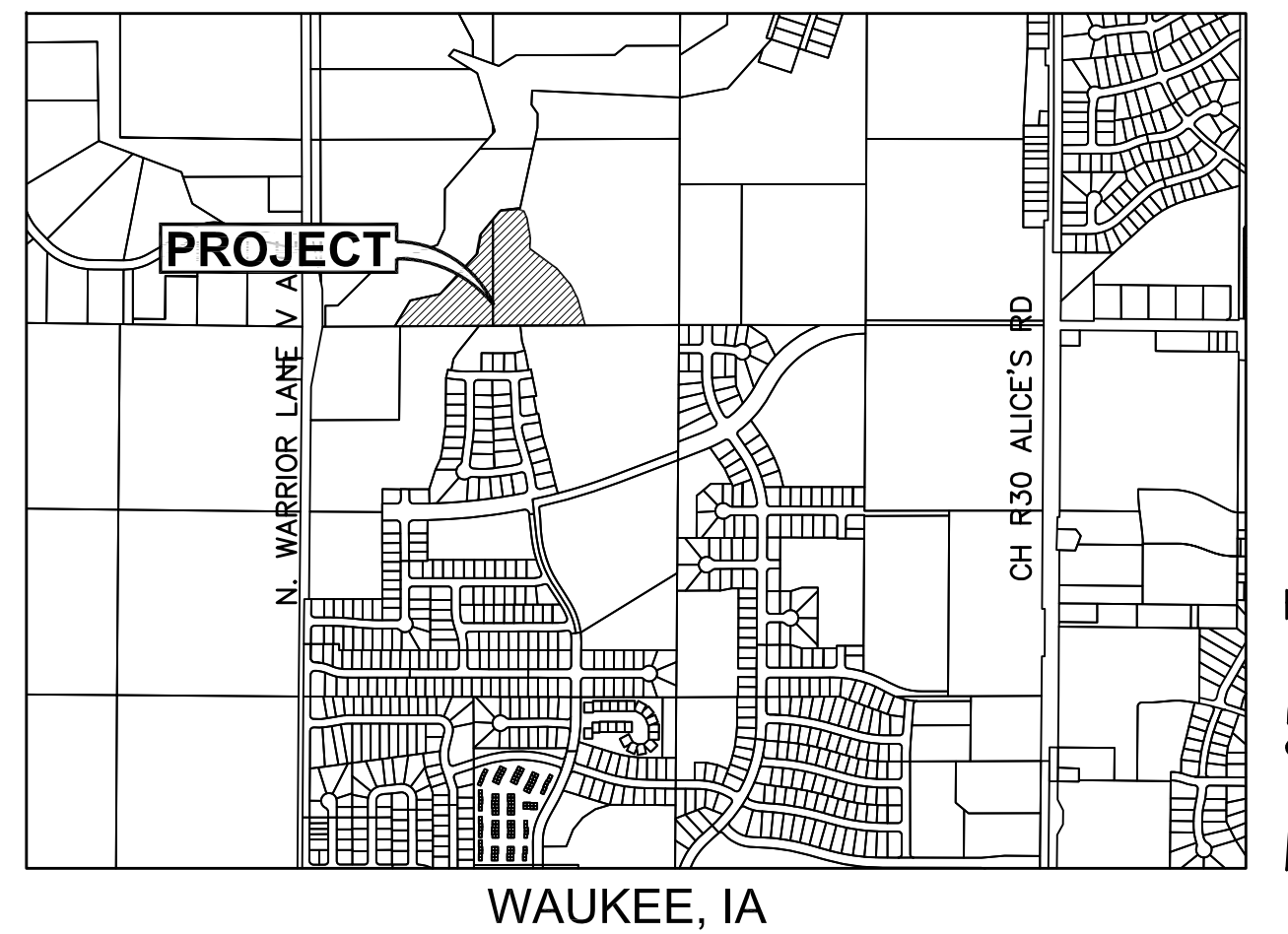
WAUKEE, IOWA

FOX CREEK ESTATES PLAT 10
GRADING PLAN

FOX CREEK ESTATES PLAT 10

EROSION AND SEDIMENT CONTROL PLAN

VICINITY MAP



WAUKEE, IA

STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	2,867
2	SEEDING, FERTILIZING, AND MULCHING	AC	7.4
3	INLET PROTECTION DEVICES	EA	4
4	CONCRETE WASHOUT PIT	EA	1
5	TREE PROTECTION MEASURE	EA	1
6	TEMPORARY GROUDED PLYWOOD FOR TSB	EA	3
7	PERMANENT ROCK DITCH CHECK	EA	3

SWPPP LEGEND

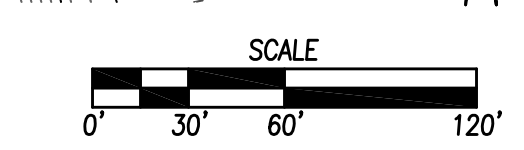
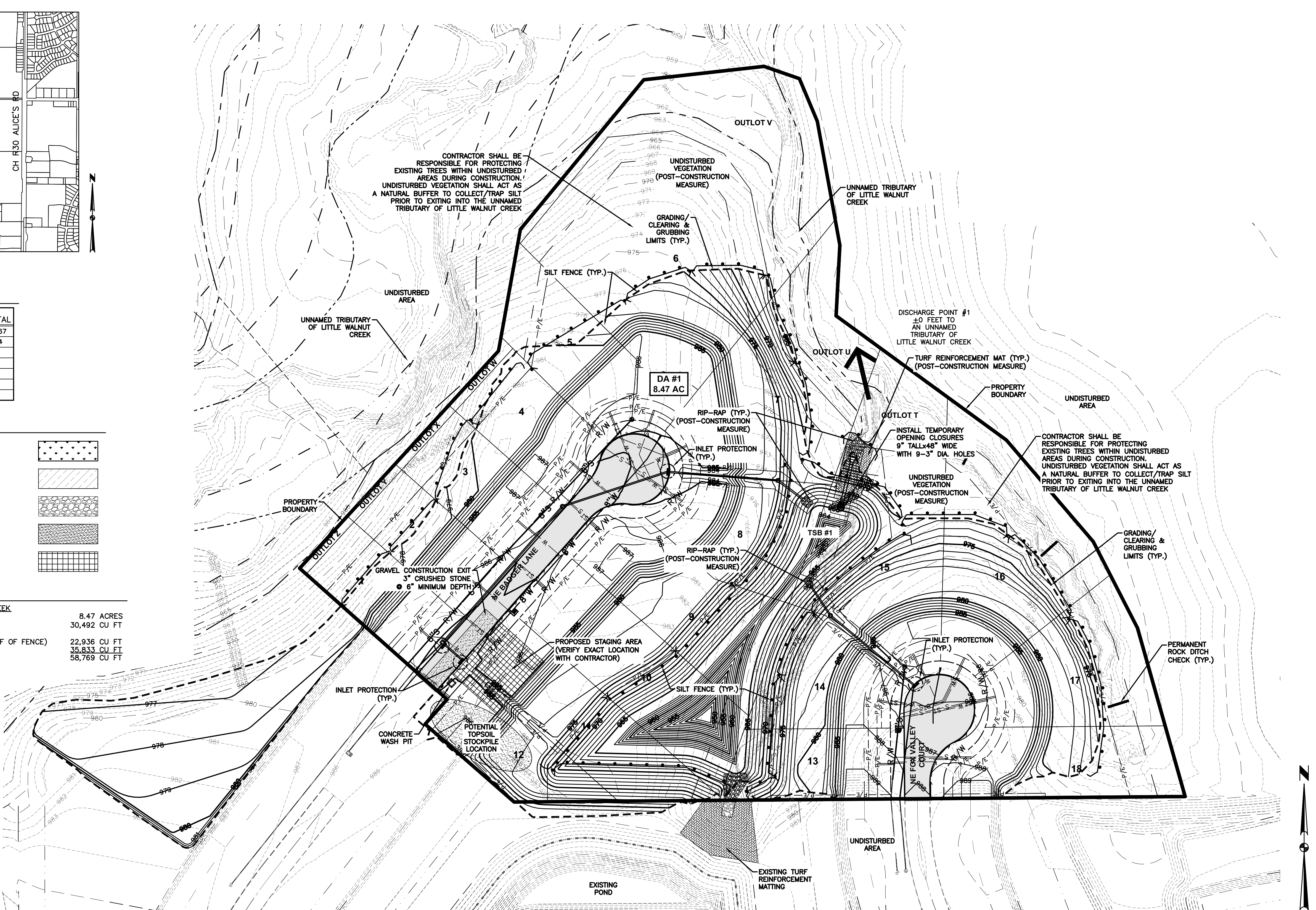
DRAINAGE ARROW		AREA TO BE SEEDED	
GRADING LIMITS		UNDISTURBED AREA	
SILT FENCE		RIPRAP	
INLET PROTECTION		GRAVEL ENTRANCE	
PORTABLE RESTROOM		STAGING AREA	
CONCRETE WASHOUT PIT			

DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 TO UNNAMED TRIBUTARY AND LITTLE WALNUT CREEK	
TOTAL AREA DISTURBED TO DISCHARGE POINT	8.47 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	30,492 CU FT
VOLUME PROVIDED IN SILT FENCE (2,867 LF @ AVG OF 8 CU FT/LF OF FENCE)	22,936 CU FT
VOLUME PROVIDED IN TSB #1	35,633 CU FT
TOTAL VOLUME PROVIDED	58,769 CU FT

NOTES

- SEED AND MULCH ALL DISTURBED AREAS ONCE THEY ARE AT FINAL GRADE WITH TYPE 1 (PERMANENT SEEDING MIXTURE). IF TEMPORARY SEEDING IS NECESSARY, USE TYPE 4 (TEMPORARY SEEDING MIXTURE).
- FOR THE TEMPORARY SEDIMENT BASIN, TEMPORARILY CLOSE THE LOWER 9" OF ALL THREE OPENINGS WITH PLYWOOD GROUDED TO THE OUTLET STRUCTURE AND INSTALL 9- 3" DIAMETER HOLES, EVENLY SPACED IN THE PLYWOOD ON THE SOUTH SIDE OF THE STRUCTURE. THE UPPER 6" OF THE OPENINGS SHALL REMAIN OPEN.



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DESIGN ADVANTAGE
CIVIL DESIGN ADVANTAGE

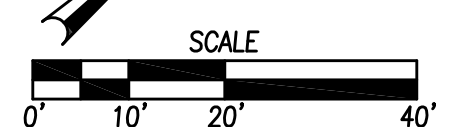
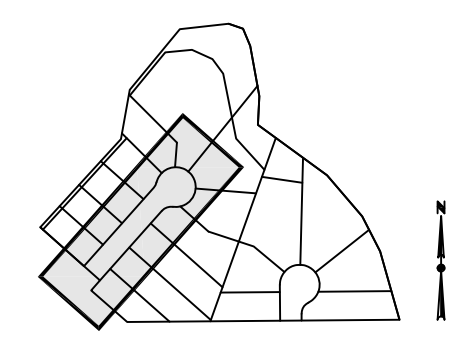
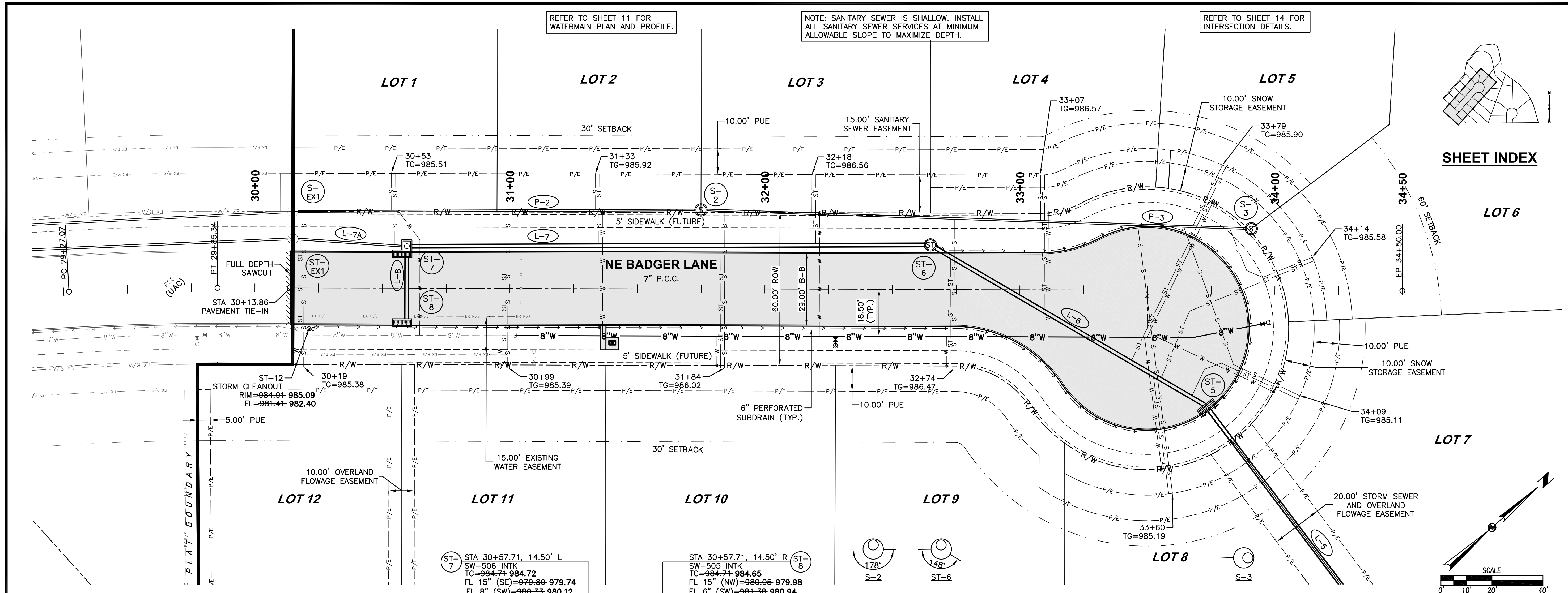
FOX CREEK ESTATES PLAT 10
EROSION & SEDIMENT CONTROL PLAN

WAUKEE, IOWA

7

13

1608.424

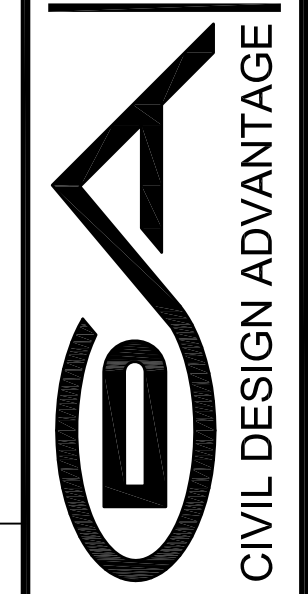


995	STA 30+14.86, 30.00' L EX. SW-301.48" MH. R/W=22.00' FL 8" (NE)=977.80 977.56 FL 8" (SW)=981.31 981.31	STA 30+57.71, 14.50' L SW-506 INTK W/8" WALLS VC=75' K=51.72 L=14.50' FL 15" (SE)=979.80 979.74 FL 8" (SW)=980.33 980.12 FL 15" (NE)=976.77 976.81	STA 31+74.86, 31.00' L SW-301.48" MH RIM=985.05 985.91 FL 8" (NE)=978.52 978.30 FL 8" (SW)=978.42 978.30	STA 32+64.86, 17.50' L SW-401.48" MH RIM=985.65 985.65 FL 15" (SW)=982.24 973.58 FL 15" (E)=985.64 973.46 FL 6" (E)=985.64 982.56	STA 33+90.87, 24.18' L SW-301.48" MH RIM=985.38 985.38 FL 8" (SW)=980.33 979.17	STA 33+74.15, 46.85' R SW-505 INTK W/8" WALLS TC=984.24 984.34 FL 15" (W)=971.78 971.64 FL 15" (E)=971.68 971.54 FL 6" (NE)=980.88 980.99 FL 6" (SE)=980.88 981.07	995
990	STA 30+14.86, 19.29' L EX. SW-401.48" MH. R/W=22.00' FL 8" (NE)=985.28 FL 8" (SW)=981.31	STA 30+57.71, 14.50' L SW-506 INTK W/8" WALLS VC=75' K=51.72 L=14.50' FL 15" (SE)=979.80 979.74 FL 8" (SW)=980.33 980.12 FL 15" (NE)=976.77 976.81	STA 31+74.86, 31.00' L SW-301.48" MH RIM=985.05 985.91 FL 8" (NE)=978.52 978.30 FL 8" (SW)=978.42 978.30	STA 32+64.86, 17.50' L SW-401.48" MH RIM=985.65 985.65 FL 15" (SW)=982.24 973.58 FL 15" (E)=985.64 973.46 FL 6" (E)=985.64 982.56	STA 33+90.87, 24.18' L SW-301.48" MH RIM=985.38 985.38 FL 8" (SW)=980.33 979.17	STA 33+74.15, 46.85' R SW-505 INTK W/8" WALLS TC=984.24 984.34 FL 15" (W)=971.78 971.64 FL 15" (E)=971.68 971.54 FL 6" (NE)=980.88 980.99 FL 6" (SE)=980.88 981.07	990
985	-0.70%	0.75%	0.75%	0.75%	-0.80%	985	
980	CORE DRILL AND INSTALL SOILTIGHT SEAL 42 LF OF 8" HDPE @ 2.31% 2.83%	158 LF OF 8" PVC @ 0.40% 0.47%	202 LF OF 15" RCP @ +1.50% 1.60%	212 LF OF 8" PVC @ 0.40% 0.41%	124 LF OF 15" RCP @ -1.80% 1.47%	122 LF OF 15" RCP @ 3.00% 2.99%	980
975	CORE DRILL AND INSTALL WATERTIGHT FLEXIBLE CONNECTOR						975
970							970
965	985.13 985.13	984.39 984.50	983.39 985.03	978.68 985.73	978.26 985.61	975.64	965
	30+00	31+00	32+00	33+00	34+00		

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DATE: 6/20/2017 3:02 PM
PLOTTER: HP PLOTTER
PLOTTER: WATE MEYER

DATE	REVISIONS
06/20/17	FIRST AS-BUILT SUBMITTAL
03/08/17	THIRD SUBMITTAL
02/16/17	SECOND SUBMITTAL
01/04/17	FIRST SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
TECH: CGW
ENGINEER: ENH



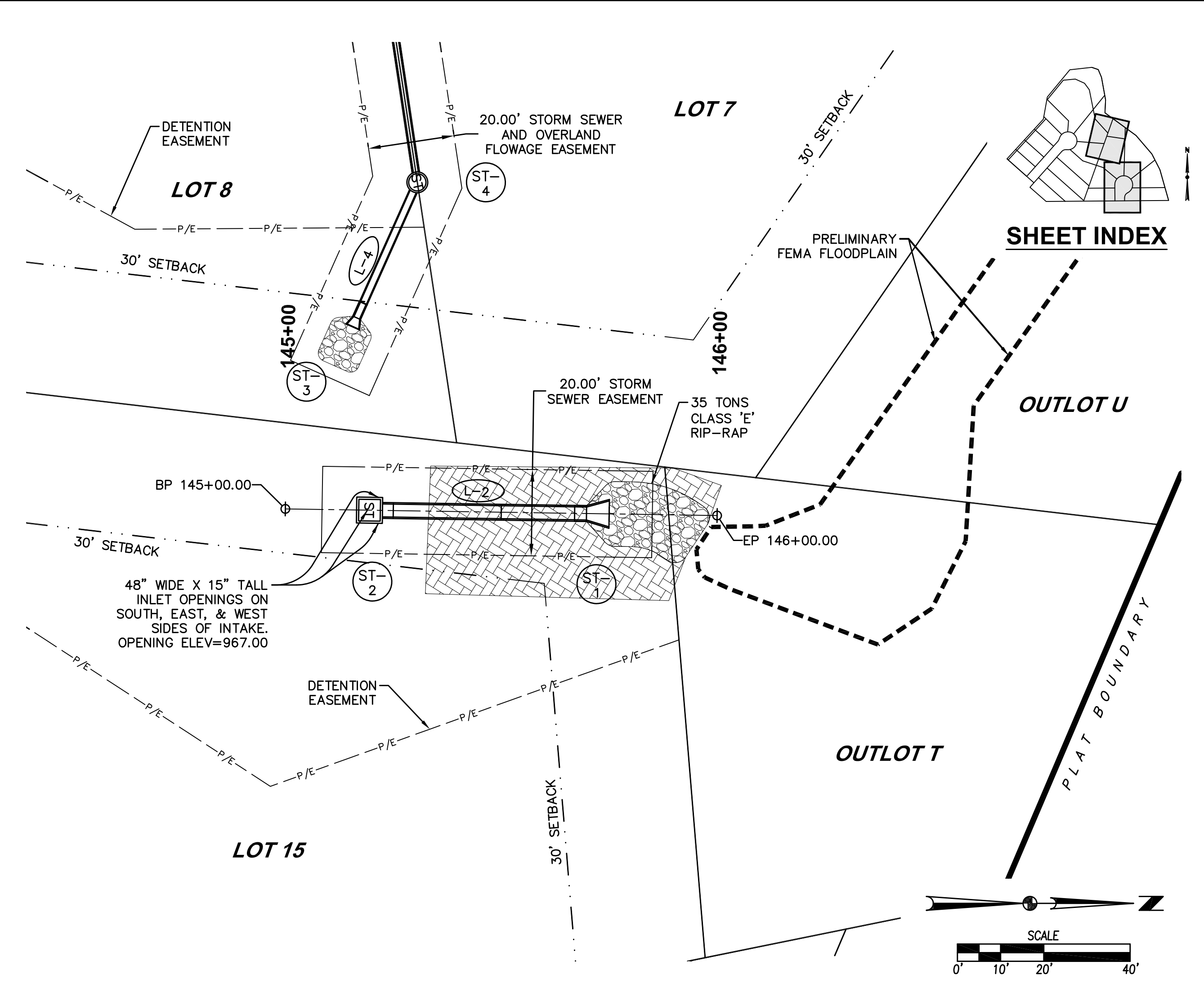
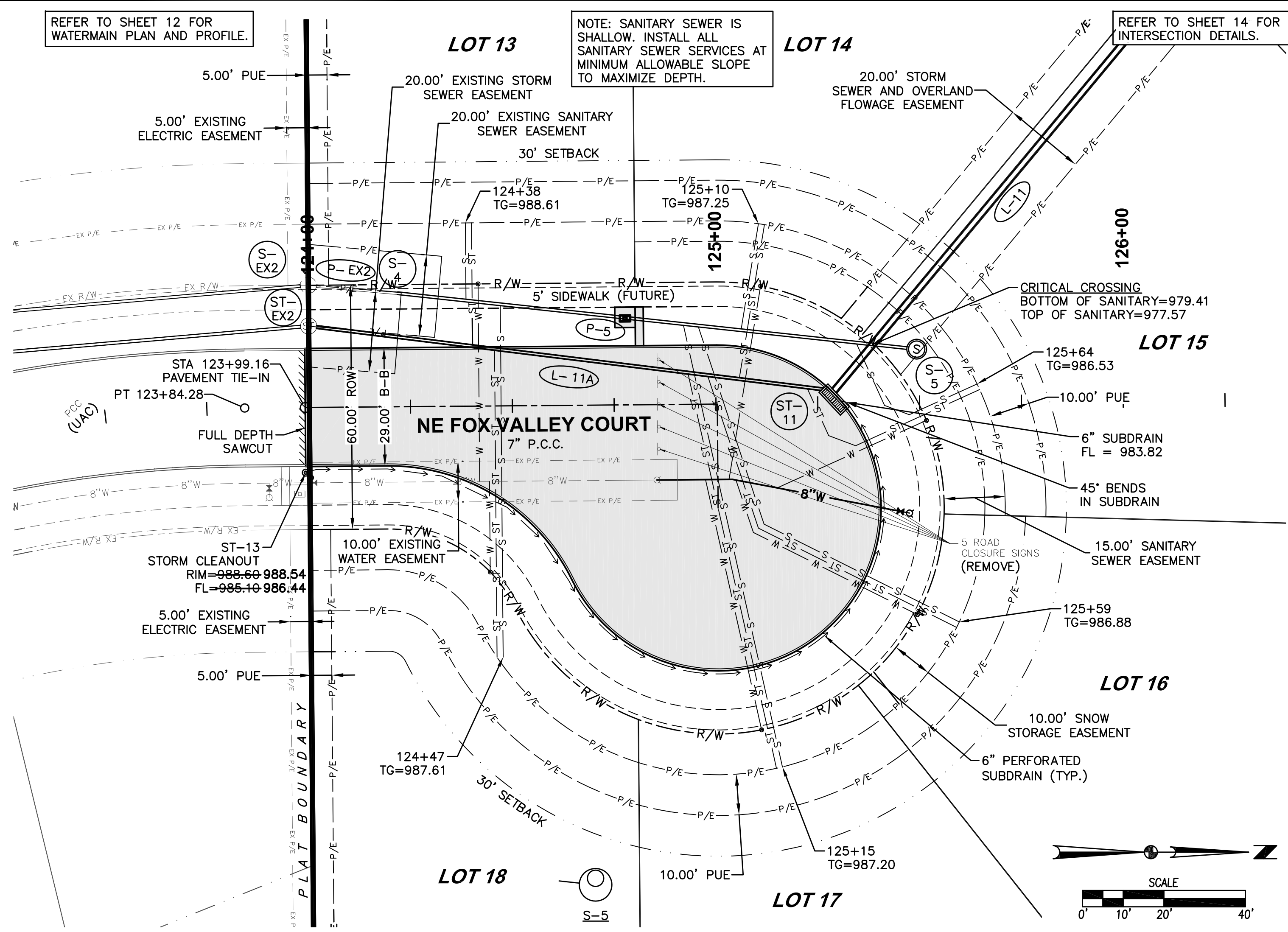
WAUKEE, IOWA

FOX CREEK ESTATES PLAT 10
STORM & SANITARY SEWER PLAN AND PROFILE

REFER TO SHEET 12 FOR WATERMAIN PLAN AND PROFILE.

NOTE: SANITARY SEWER IS SHALLOW. INSTALL ALL SANITARY SEWER SERVICES AT MINIMUM ALLOWABLE SLOPE TO MAXIMIZE DEPTH.

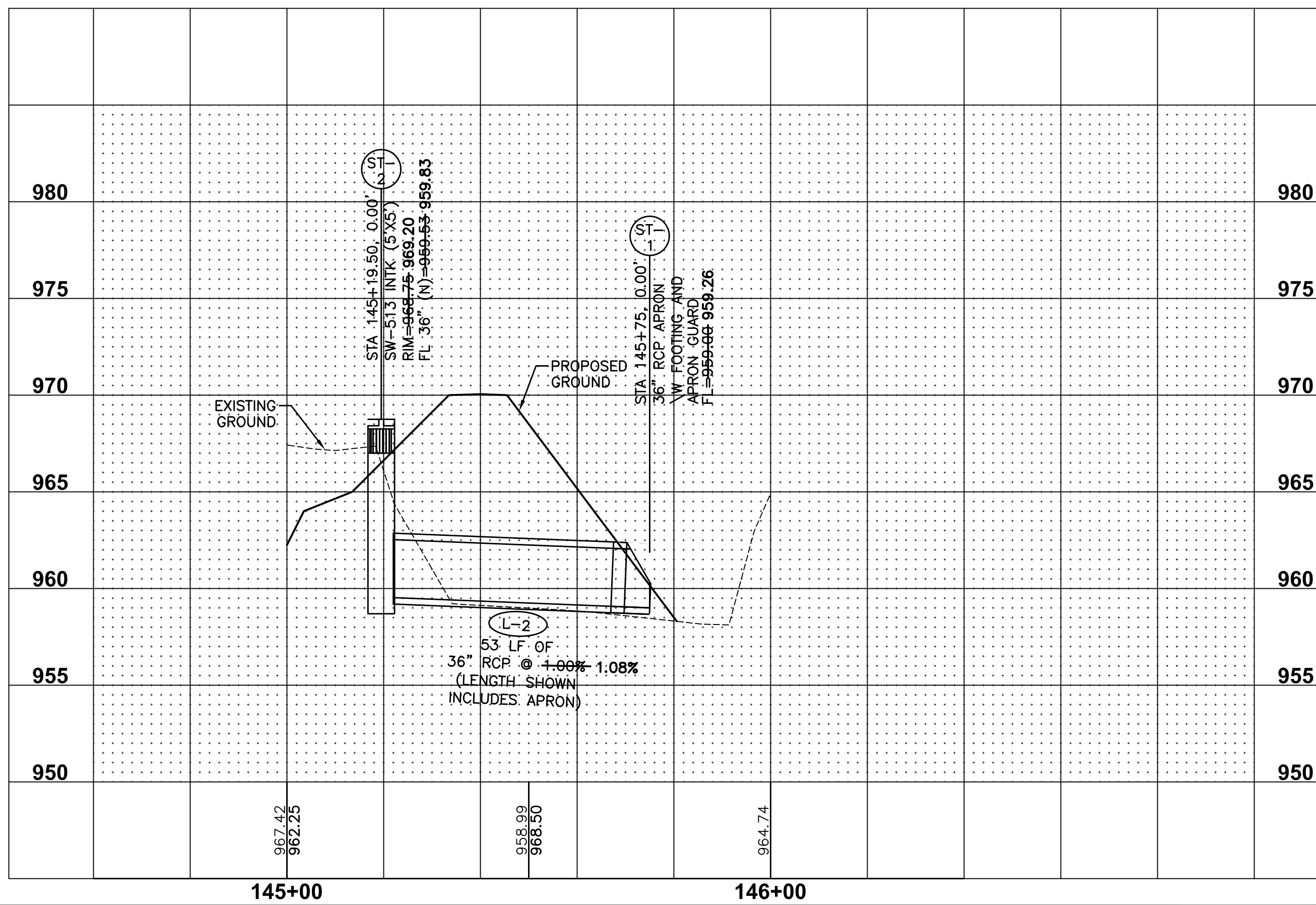
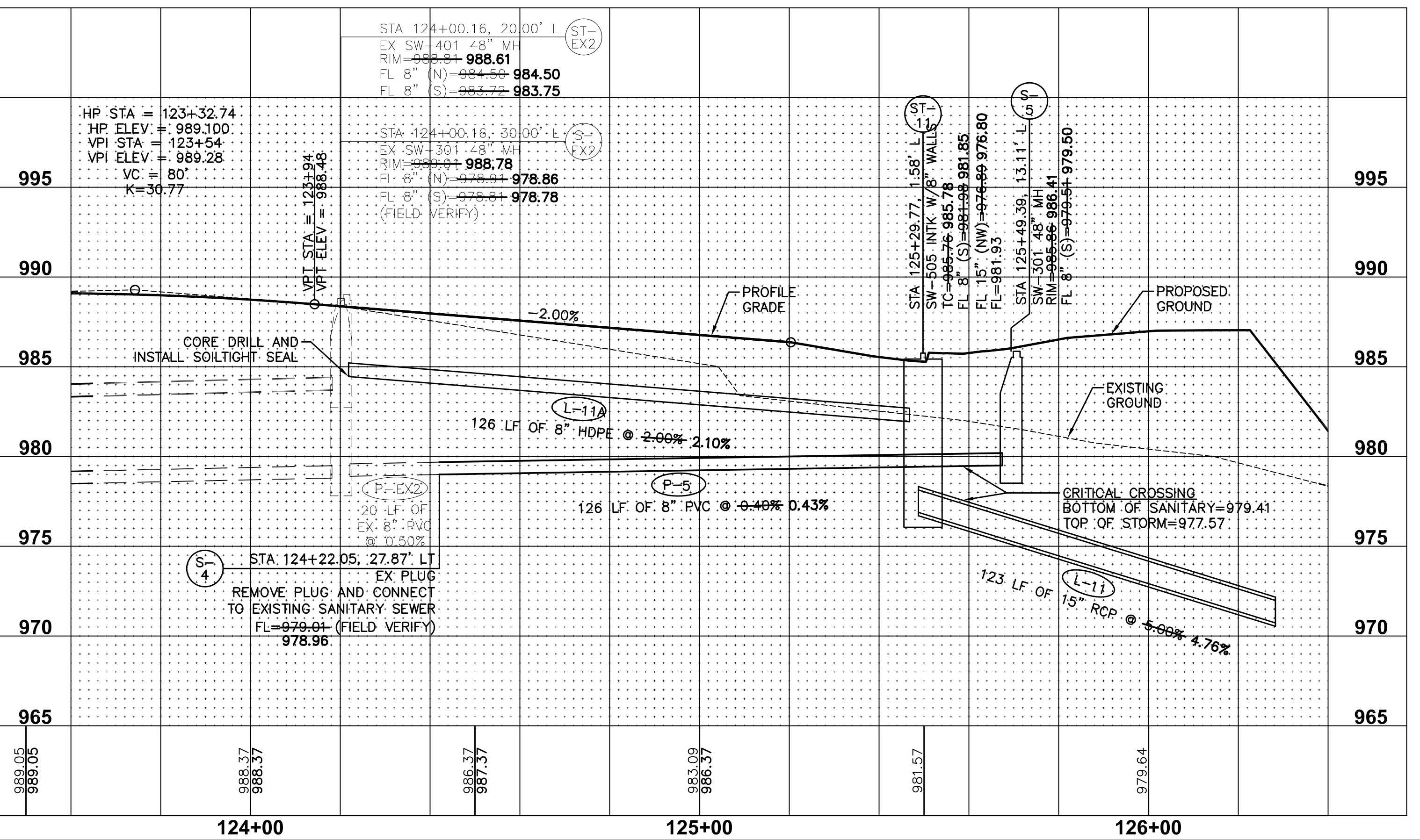
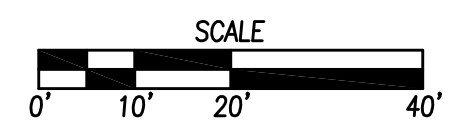
REFER TO SHEET 14 FOR INTERSECTION DETAILS.



SHEET INDEX

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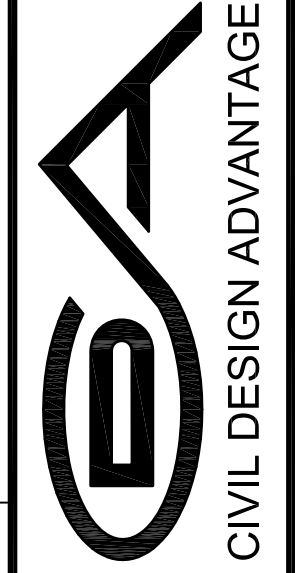
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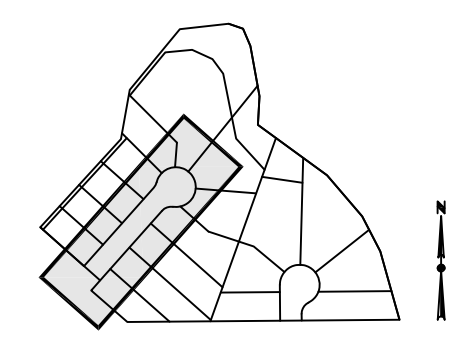
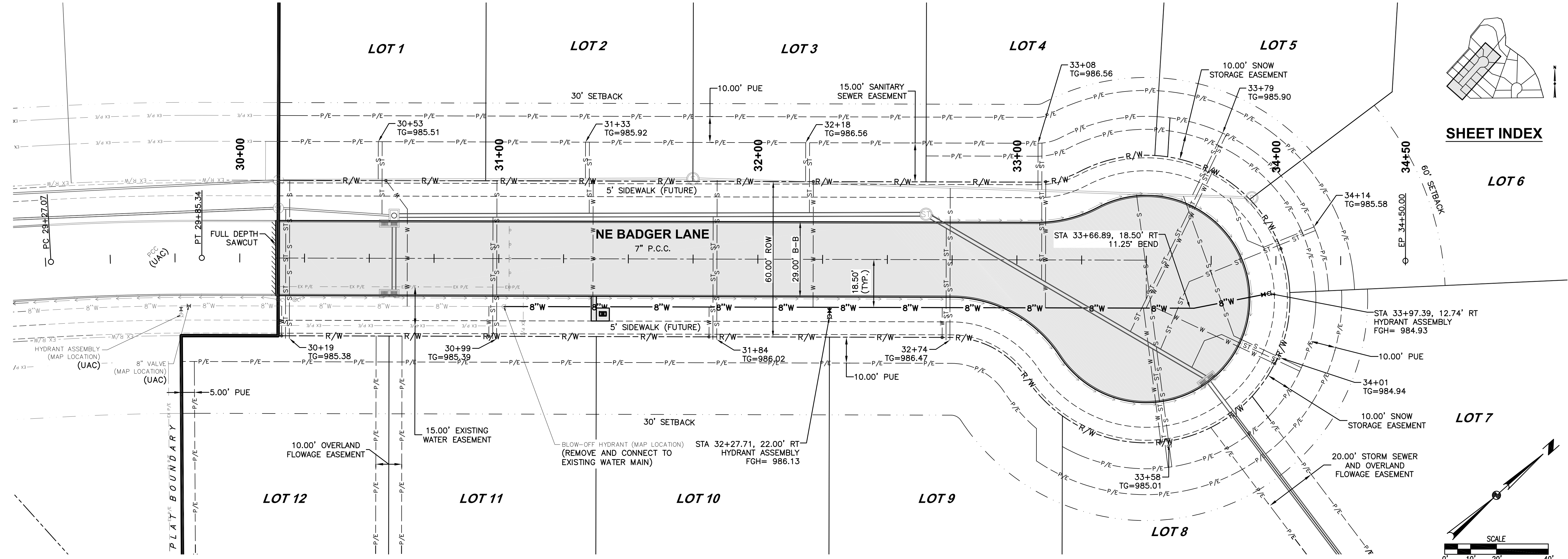
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DATE	REVISIONS
06/20/17	FIRST AS-BUILT SUBMITTAL
03/08/17	THIRD SUBMITTAL
02/16/17	SECOND SUBMITTAL
01/04/17	FIRST SUBMITTAL

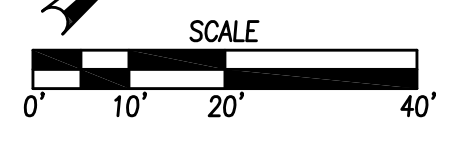
3405 S.E. CROSSROADS DRIVE, SUITE G
 GRIMES, IOWA 50111
 PHONE: (515) 369-4400 FAX: (515) 369-4410
 ENGINEER: ENH
 TECH: CGW



FOX CREEK ESTATES PLAT 10
STORM & SANITARY SEWER PLAN AND PROFILE
 WAUKEE, IOWA

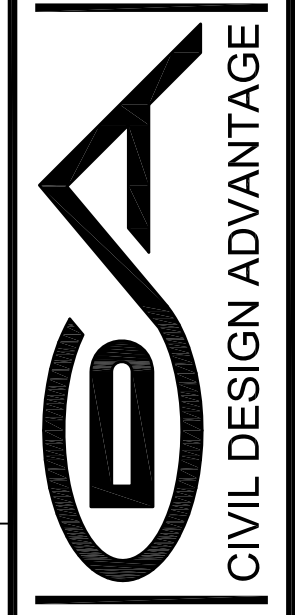


SHEET INDEX



DATE	REVISIONS
06/04/17	FIRST AS-BUILT SUBMITTAL
03/08/17	THIRD SUBMITTAL
02/16/17	SECOND SUBMITTAL
01/04/17	FIRST SUBMITTAL

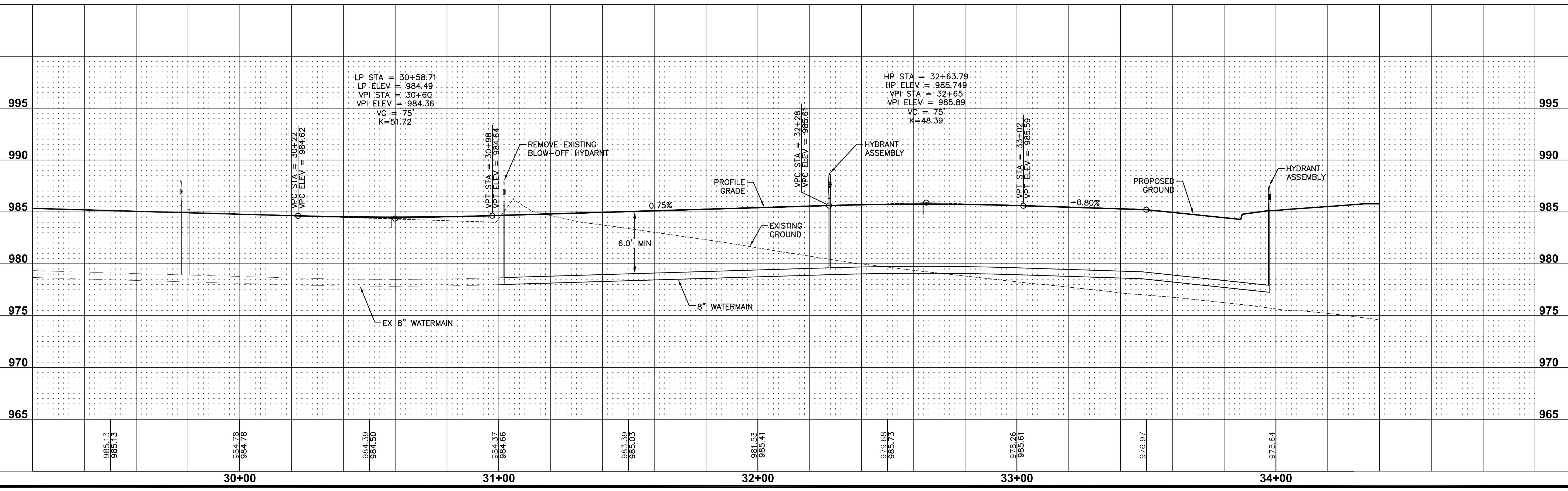
3405 S.E. CROSSROADS DRIVE, SUITE G
 GRIMES, IOWA 50111
 PHONE: (515) 369-4400 FAX: (515) 369-4410
 TECH: CGW



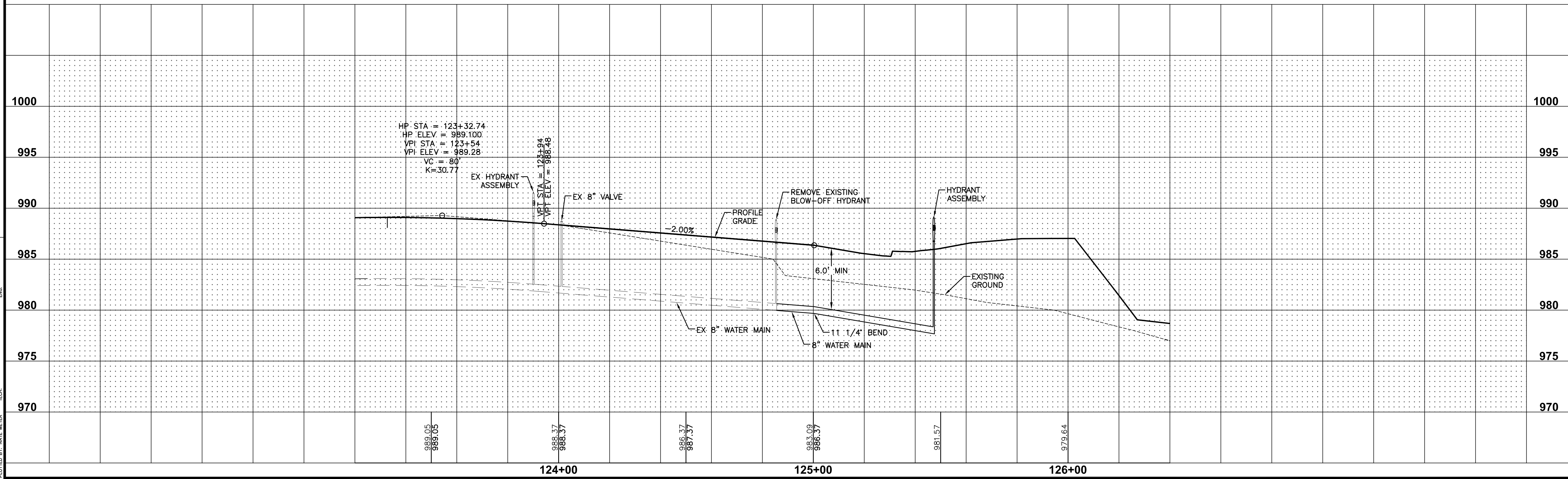
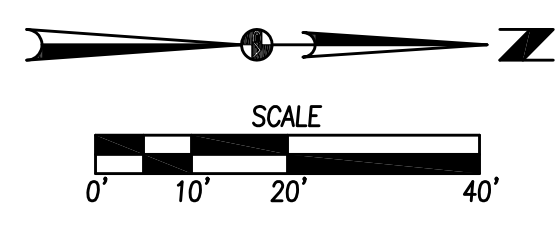
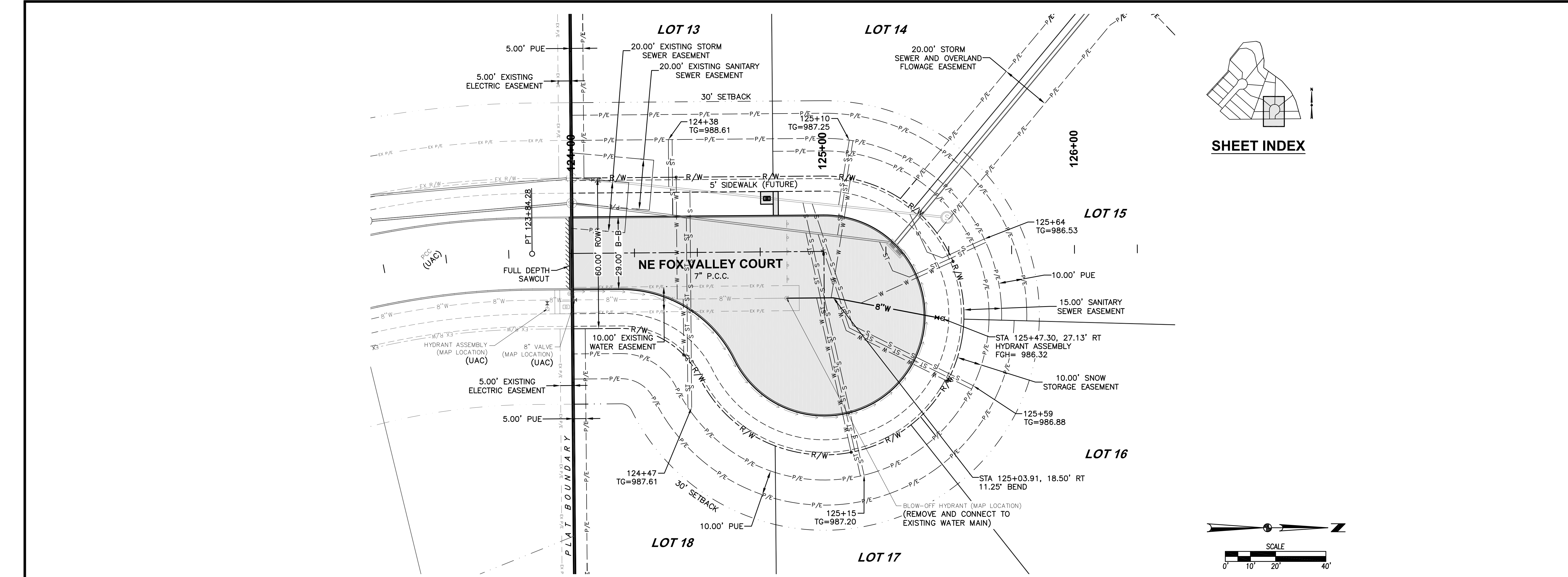
WAUKEE, IOWA

FOX CREEK ESTATES PLAT 10
WATERMAIN PLAN AND PROFILE

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 PLOTTED BY: WATE MEYER
 DATE: 6/20/2017 3:07 PM

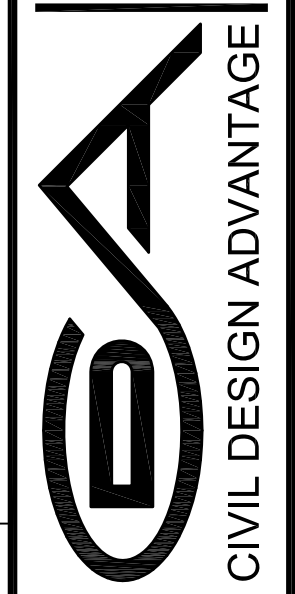


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 TECH

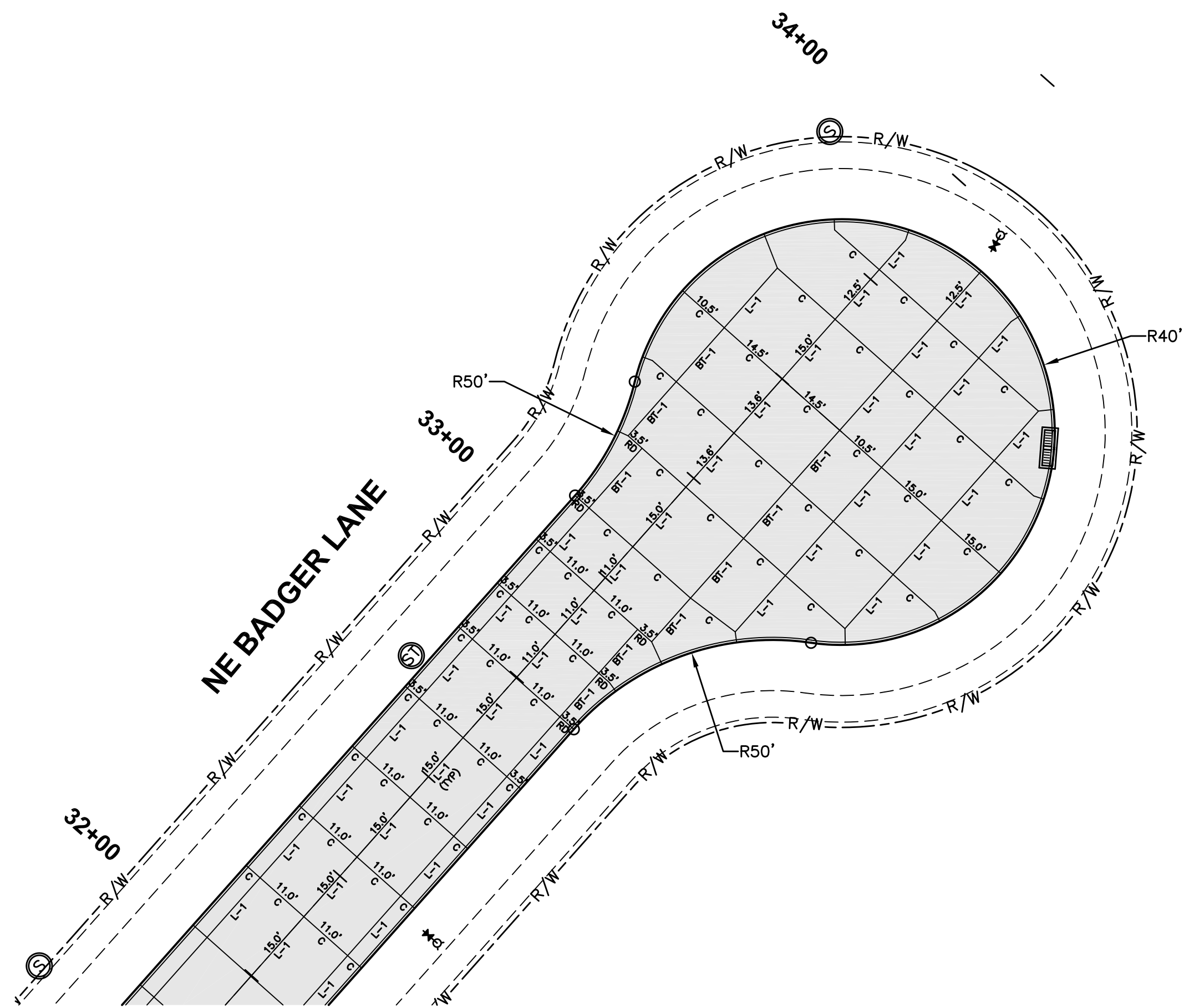


REVISIONS	DATE
FIRST AS-BUILT SUBMITTAL	06/30/17
THIRD SUBMITTAL	03/08/17
SECOND SUBMITTAL	02/16/17
FIRST SUBMITTAL	01/04/17

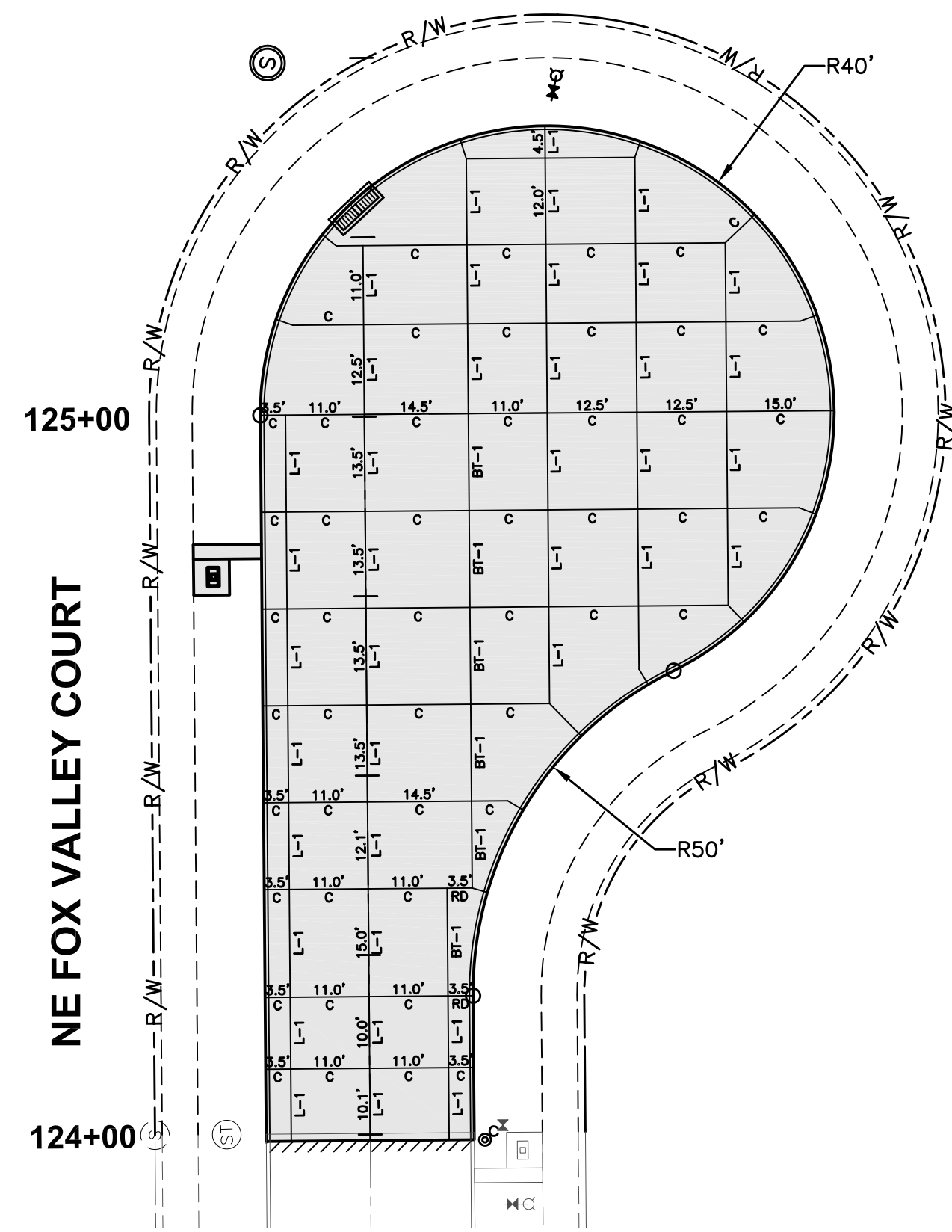
3405 S.E. CROSSROADS DRIVE, SUITE G
 GRIMES, IOWA 50111
 PHONE: (515) 369-4400 FAX: (515) 369-4410
 ENGINEER: ENH
 TECH: CGW



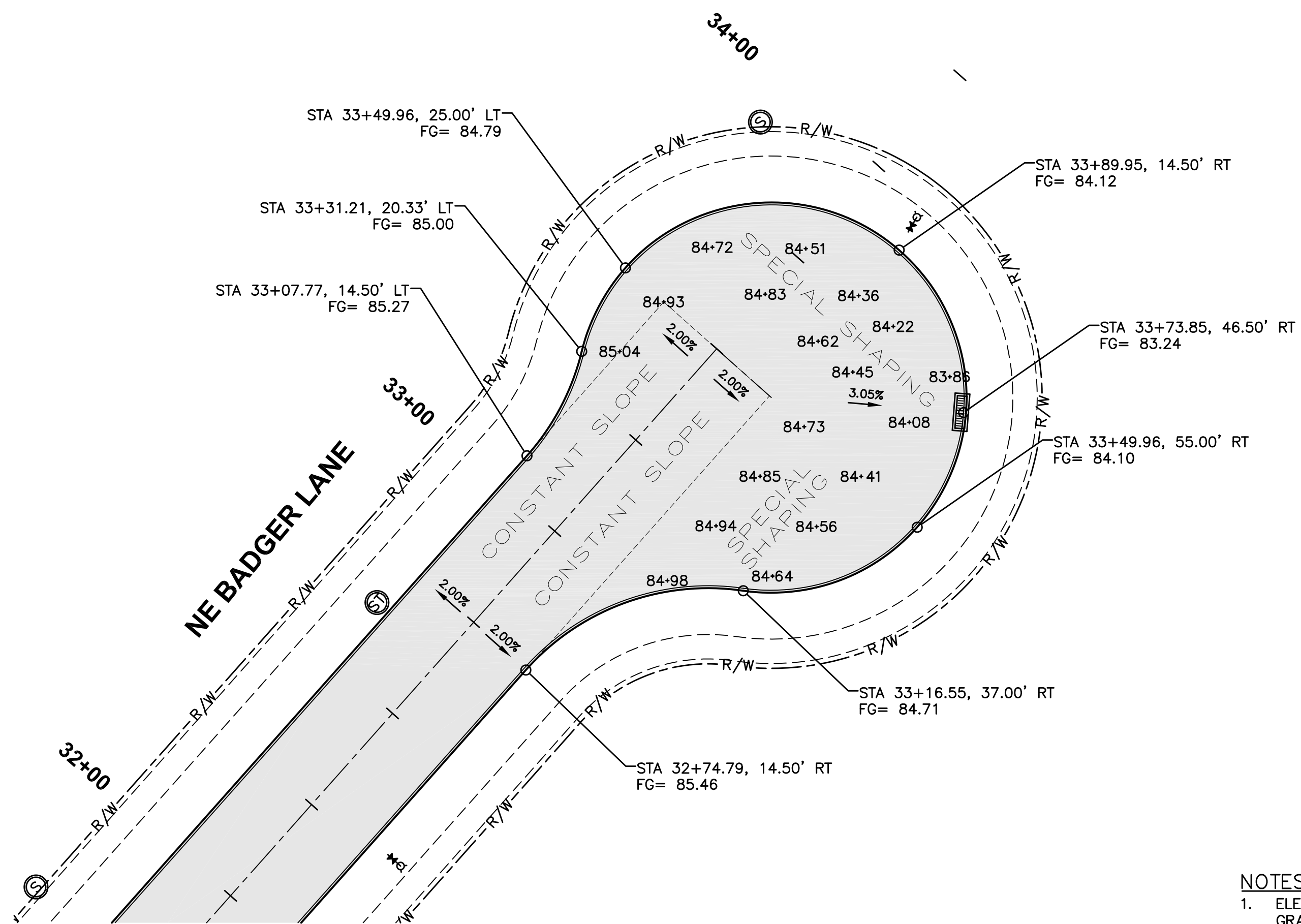
FOX CREEK ESTATES PLAT 10
 WATERMAIN PLAN AND PROFILE



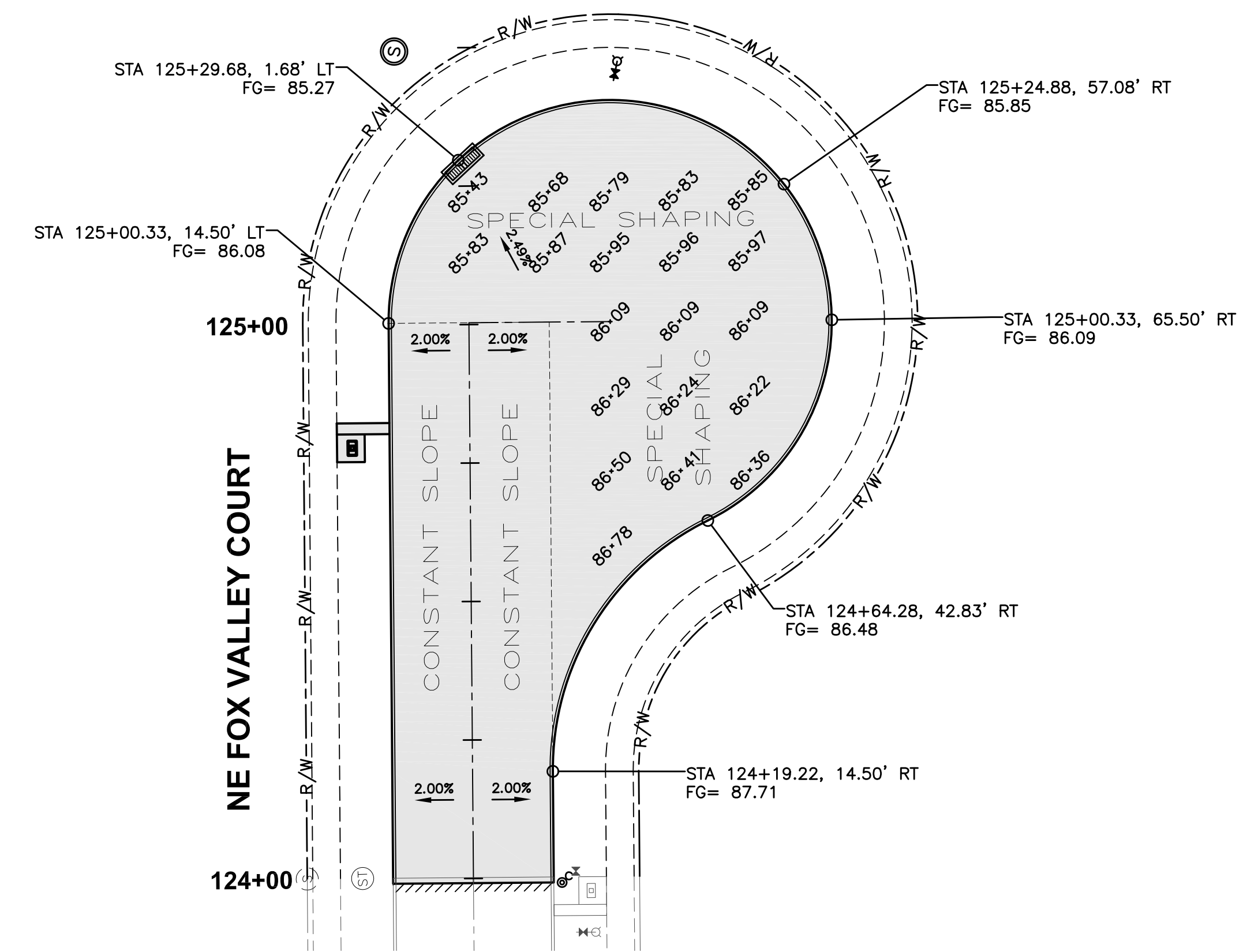
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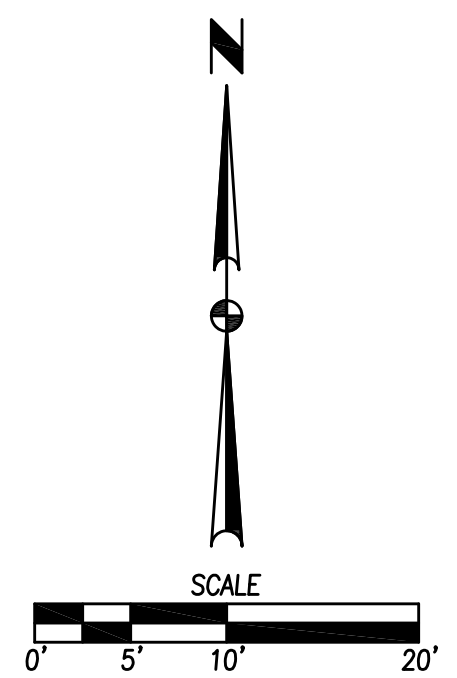
JOINTING LAYOUT



GEOMETRICS AND STAKING LAYOUT



GEOMETRICS AND STAKING LAYOUT

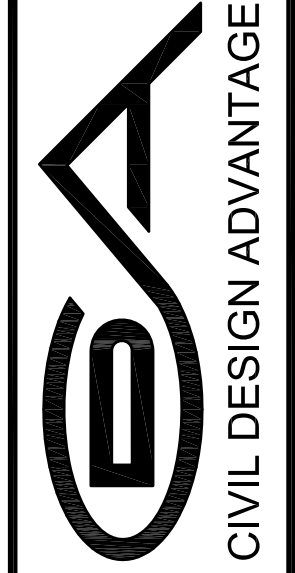


- NOTES:
- ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
 - REFER TO FIGURE 6010.514 FOR GRATE INTAKE BOXOUT FOR PCC PAVEMENT DETAILS.

FILE: H:\2016\1608424\1608424-INTERSECTION.DWG
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 PLOTTED BY: WATE MEYER
 DATE: 6/26/2017 3:09 PM

REVISIONS	DATE
FIRST AS-BUILT SUBMITTAL	06/30/17
THIRD SUBMITTAL	03/08/17
SECOND SUBMITTAL	02/16/17
FIRST SUBMITTAL	01/04/17

3405 S.E. CROSSROADS DRIVE, SUITE G
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WAUKEE, IOWA

FOX CREEK ESTATES PLAT 10
INTERSECTION DETAILS