

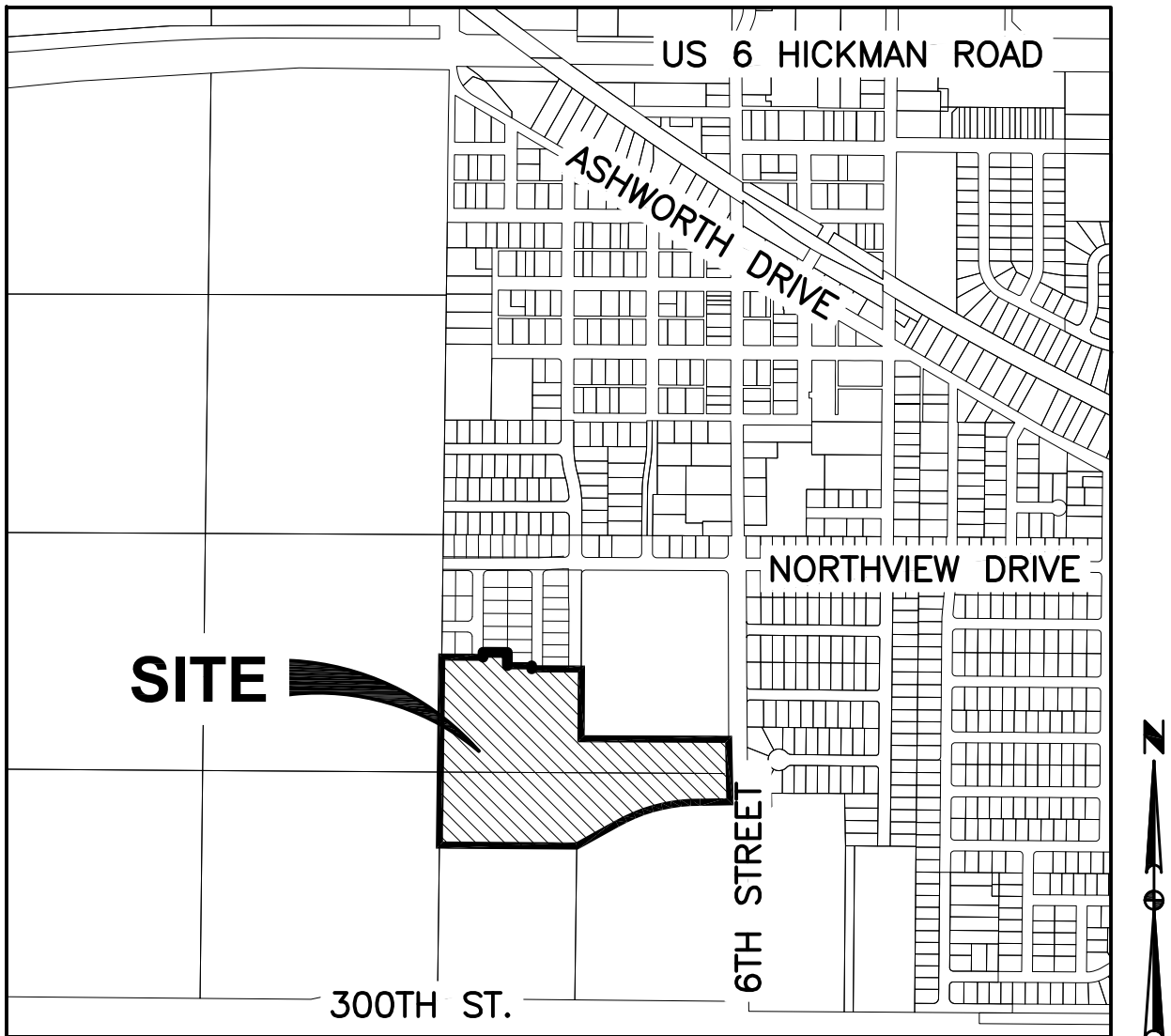
CONSTRUCTION PLANS FOR:

# CLAYTON ESTATES PLAT 2

WAUKEE, IOWA

VICINITY MAP

NOT TO SCALE



WAUKEE, IOWA

INDEX OF SHEETS

| NO.   | DESCRIPTION                               |
|-------|-------------------------------------------|
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| 5     | QUANTITIES AND REFERENCE NOTES            |
| 6     | HYDRANT COVERAGE AND LANDSCAPE PLAN       |
| 7     | GRADING PLAN                              |
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| 23-31 | WATERMAIN PLAN AND PROFILE                |
| 32-34 | INTERSECTION DETAILS                      |

## 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.

LEGAL DESCRIPTION

A PART OF PARCEL 17-68 AS SHOWN ON THE PLAT OF SURVEY RECORDED IN BOOK 2016 PAGE 9295 OF THE SOUTHWEST QUARTER OF SECTION 33, 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 33; THENCE NORTH 00°19'44" EAST ALONG THE WEST LINE OF SAID SOUTHWEST QUARTER, 910.00 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL 17-68 AND ALSO THE POINT OF BEGINNING; THENCE NORTH 00°19'44" EAST ALONG THE WEST LINE OF SAID PARCEL 17-68, A DISTANCE OF 1041.74 FEET; THENCE SOUTH 89°40'36" EAST, 227.87 FEET; THENCE NORTH 00°19'24" EAST, 27.47 FEET; THENCE SOUTH 89°40'36" EAST, 134.99 FEET; THENCE SOUTH 00°19'24" WEST, 73.22 FEET; THENCE SOUTH 89°40'36" EAST, 135.01 FEET; THENCE SOUTH 00°19'24" WEST, 16.30 FEET; THENCE SOUTH 89°40'36" EAST, 275.37 FEET TO THE EASTERLY LINE OF SAID PARCEL 17-68; THENCE SOUTH 00°11'38" EAST ALONG SAID EASTERLY LINE, 380.49 FEET; THENCE NORTH 89°48'25" EAST ALONG SAID EASTERLY LINE, 818.02 FEET; THENCE SOUTH 00°31'59" EAST ALONG SAID EASTERLY LINE, 356.85 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL 17-68; THENCE SOUTH 88°59'10" WEST ALONG THE SOUTHERLY LINE OF SAID PARCEL 17-68, A DISTANCE OF 165.51 FEET; THENCE WESTERLY ALONG SAID SOUTHERLY LINE AND A CURVE CONCAVE SOUTHERLY WHOSE RADIUS IS 918.55 FEET, WHOSE ARC LENGTH IS 479.71 FEET AND WHOSE CHORD BEARS SOUTH 75°32'57" WEST, 474.28 FEET; THENCE SOUTH 60°35'17" WEST ALONG SAID SOUTHERLY LINE, 248.60 FEET; THENCE NORTH 89°48'10" WEST ALONG SAID SOUTHERLY LINE, 760.17 FEET TO THE POINT OF BEGINNING AND CONTAINING 26.03 ACRES (1,133,935 SQUARE FEET). THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

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 PROTECTION ELEVATION | GAS MAIN                  |
| TOP OF PROPOSED GROUND       | FIBER OPTIC               |
| MINIMUM OPENING ELEVATION    | UNDERGROUND TELEPHONE     |
| MINIMUM GRADE AT STRUCTURE   | OVERHEAD ELECTRIC         |
|                              | UNDERGROUND ELECTRIC      |
|                              | FIELD TILE                |
|                              | SANITARY SEWER W/ SIZE    |
|                              | STORM SEWER W/ SIZE       |
|                              | WATER MAIN W/ SIZE        |

OWNER/DEVELOPER

RMCA, LLC  
10430 NEW YORK AVE., SUITE C  
URBANDALE, IOWA 50322  
PH: (515) 727-0356  
CONTACT: JAY COWAN

ENGINEER/ SURVEYOR

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

BENCHMARKS

1. ARROW ON HYDRANT NE CORNER OF SE DARTMOOR DRIVE & LAUREL STREET. ELEVATION=1039.78

DATE OF SURVEY

AUGUST 15, 2016

BULK REGULATIONS

R-2 ONE AND TWO FAMILY RESIDENTIAL DISTRICT  
- MIN. LOT AREA = 8,000 SF (SINGLE FAMILY)  
- 30' FRONT YARD SETBACK  
- 30' REAR YARD SETBACK  
- 15' SIDE YARD SETBACK  
(TOTAL=15', MIN. SIDE=7')

SUBMITTAL DATES

FIRST SUBMITTAL: 05/05/2017  
SECOND SUBMITTAL: 06/30/2017  
THIRD SUBMITTAL: 07/25/2017  
FOURTH SUBMITTAL: 08/15/2017  
FINAL SUBMITTAL: 08/31/2017

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.

ZONING

R-2 ONE AND TWO FAMILY RESIDENTIAL DISTRICT

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.



3405 SE CROSSROADS DR. SUITE G GRIMES, IOWA 50111  
PH: (515) 369-4400 Fax: (515) 369-4410  
PROJECT NO. 1703.109



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.

ERIN K. OLLENDIKE, P.E. DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2017  
PAGES OR SHEETS COVERED BY THIS SEAL:

SHEETS 1-34

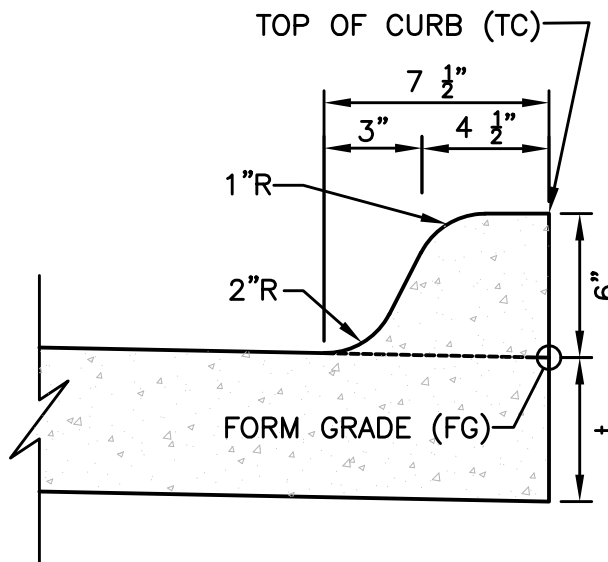
THIS PROJECT REQUIRES AN IOWA NPDES PERMIT #2. CIVIL DESIGN ADVANTAGE WILL PROVIDE THE PERMITS AND THE INITIAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE CONTRACTORS USE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING THE SWPPP THROUGHOUT CONSTRUCTION AND MEETING LOCAL, STATE AND FEDERAL REQUIREMENTS.

THIS DESIGN SPECIFICALLY PREPARED FOR USE AT THE LOCATION SHOWN. USE IN ANY OTHER MANNER EXCEEDS THE INTENDED PURPOSE OF THESE DRAWINGS AND ANY ACCOMPANYING SPECIFICATIONS.

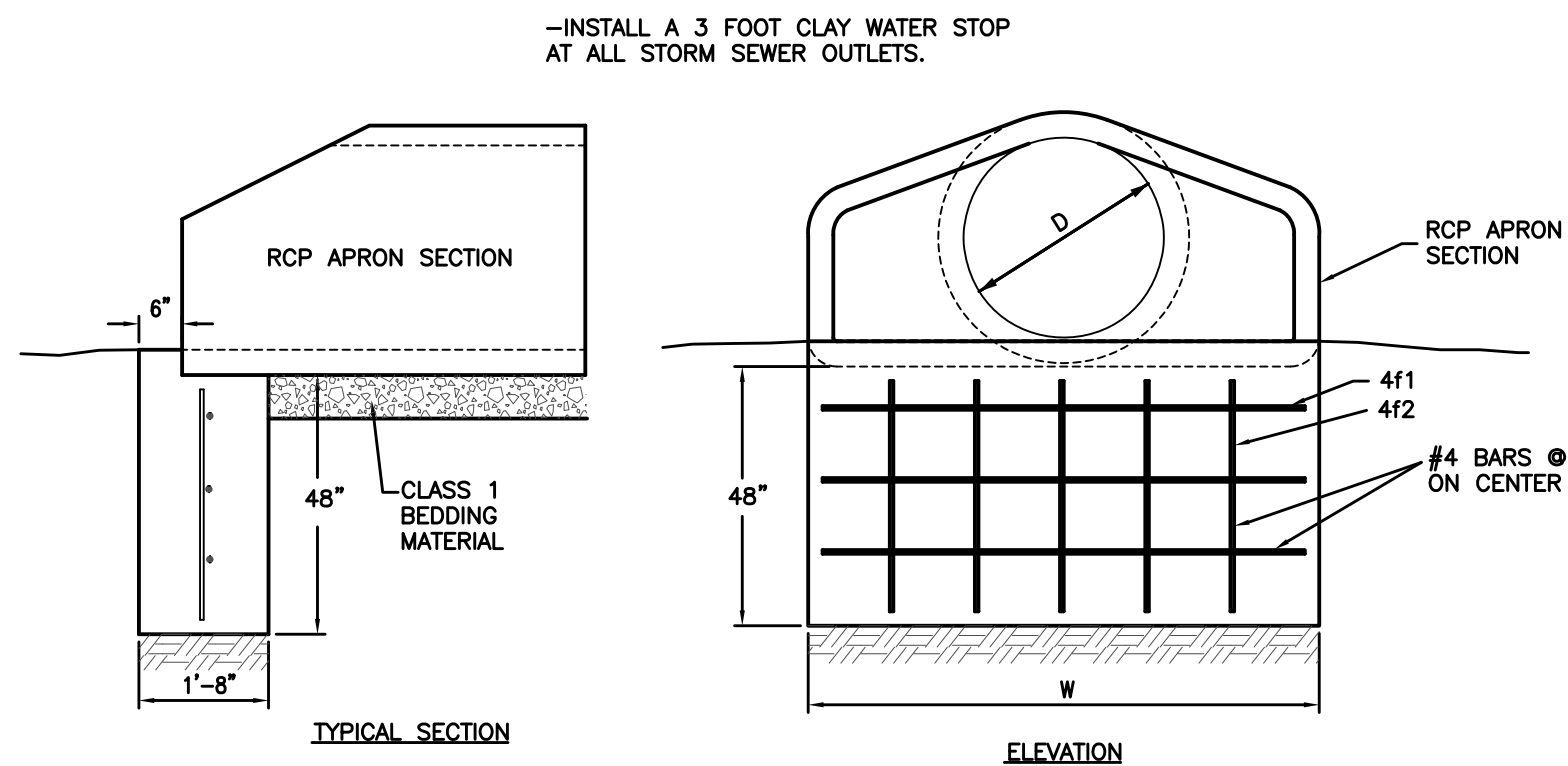
THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2017 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.



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PLOT BY: ADAMSON MCDONALD

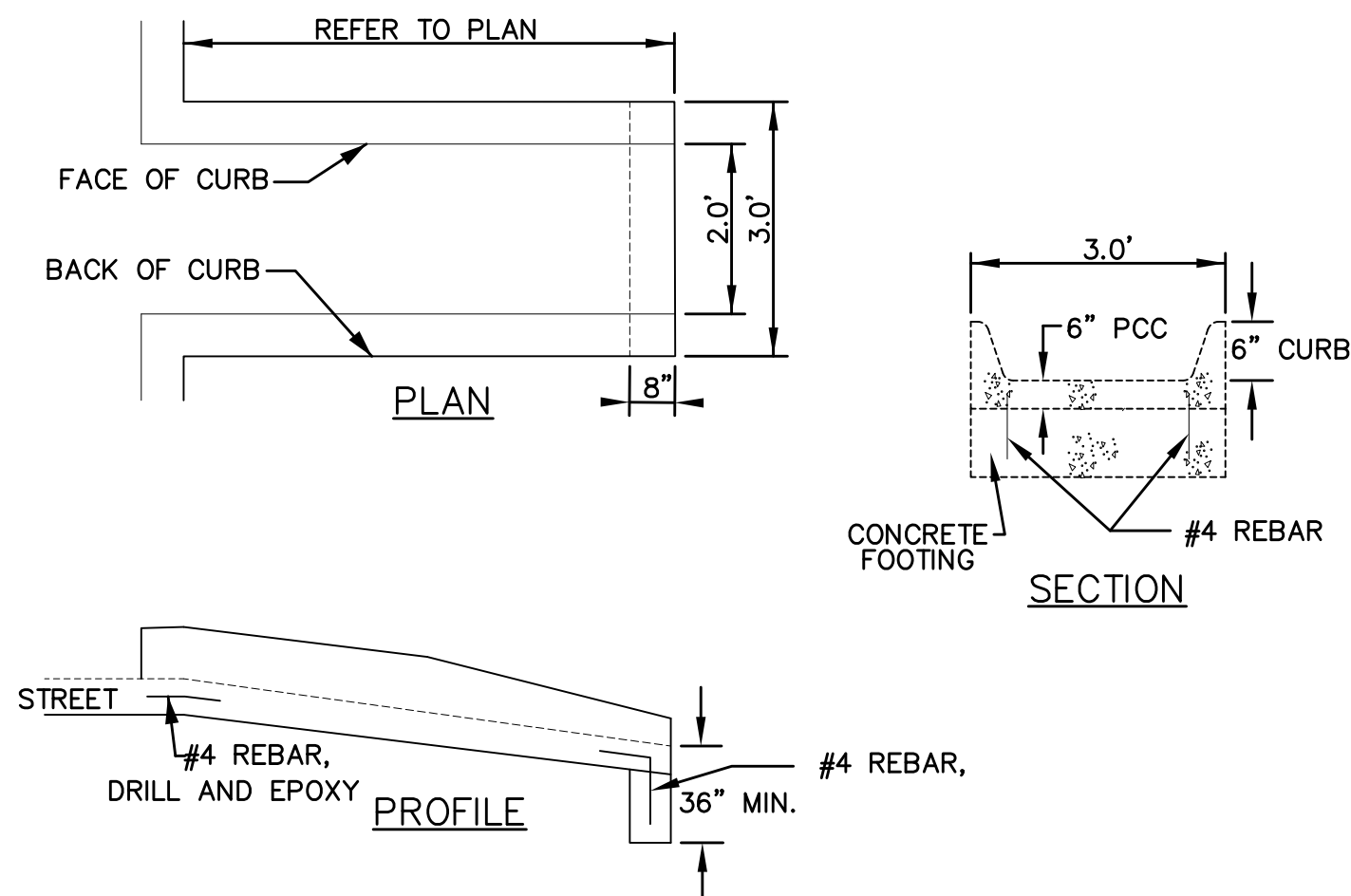


**INTEGRAL 6" STANDARD  
SPOT ELEVATION REFERENCE  
DETAIL**  
NOT TO SCALE

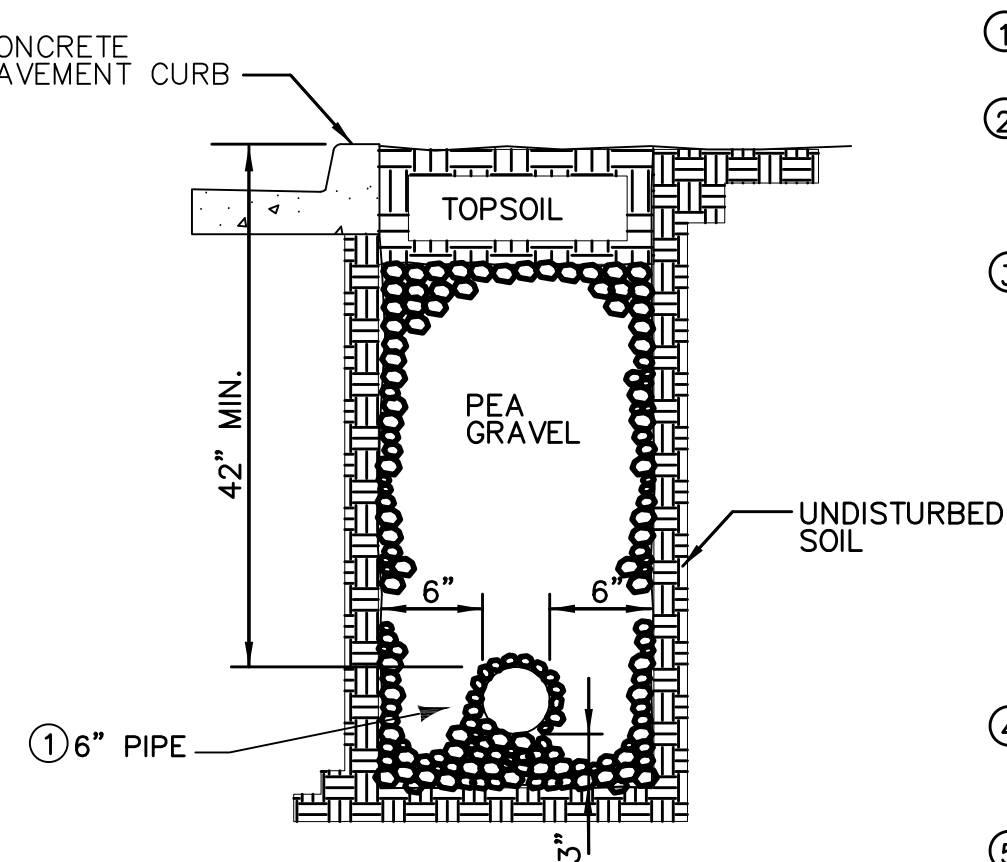


| REINFORCING BAR LIST |        |      |      |        |       |     |        |      |      |        |       |
|----------------------|--------|------|------|--------|-------|-----|--------|------|------|--------|-------|
| D                    | W      | Mark | Size | Length | Count | D   | W      | Mark | Size | Length | Count |
| 12"                  | 2'-4"  | 4f1  | 4    | 2'-0"  | 3     | 48" | 7'-10" | 4f1  | 4    | 7'-6"  | 3     |
|                      |        | 4f2  | 4    | 3'-8"  | 2     |     |        | 4f2  | 4    | 3'-8"  | 6     |
| 15"                  | 2'-10" | 4f1  | 4    | 2'-6"  | 3     | 54" | 8'-5"  | 4f1  | 4    | 8'-1"  | 3     |
|                      |        | 4f2  | 4    | 3'-8"  | 2     |     |        | 4f2  | 4    | 3'-8"  | 6     |
| 18"                  | 3'-5"  | 4f1  | 4    | 3'-1"  | 3     | 60" | 8'-11" | 4f1  | 4    | 8'-7"  | 3     |
|                      |        | 4f2  | 4    | 3'-8"  | 3     |     |        | 4f2  | 4    | 3'-8"  | 6     |
| 24"                  | 4'-6"  | 4f1  | 4    | 4'-2"  | 3     | 66" | 8'-11" | 4f1  | 4    | 8'-7"  | 3     |
|                      |        | 4f2  | 4    | 3'-8"  | 3     |     |        | 4f2  | 4    | 3'-8"  | 6     |
| 30"                  | 5'-7"  | 4f1  | 4    | 5'-3"  | 3     | 72" | 10'-0" | 4f1  | 4    | 9'-8"  | 3     |
|                      |        | 4f2  | 4    | 3'-8"  | 4     |     |        | 4f2  | 4    | 3'-8"  | 7     |
| 36"                  | 6'-8"  | 4f1  | 4    | 6'-4"  | 3     | 78" | 10'-7" | 4f1  | 4    | 10'-3" | 3     |
|                      |        | 4f2  | 4    | 3'-8"  | 5     |     |        | 4f2  | 4    | 3'-8"  | 7     |
| 42"                  | 7'-3"  | 4f1  | 4    | 6'-11" | 3     | 84" | 11'-1" | 4f1  | 4    | 10'-9" | 3     |
|                      |        | 4f2  | 4    | 3'-8"  | 5     |     |        | 4f2  | 4    | 3'-8"  | 8     |

**RCP APRON FOOTING DETAIL**  
NOT TO SCALE

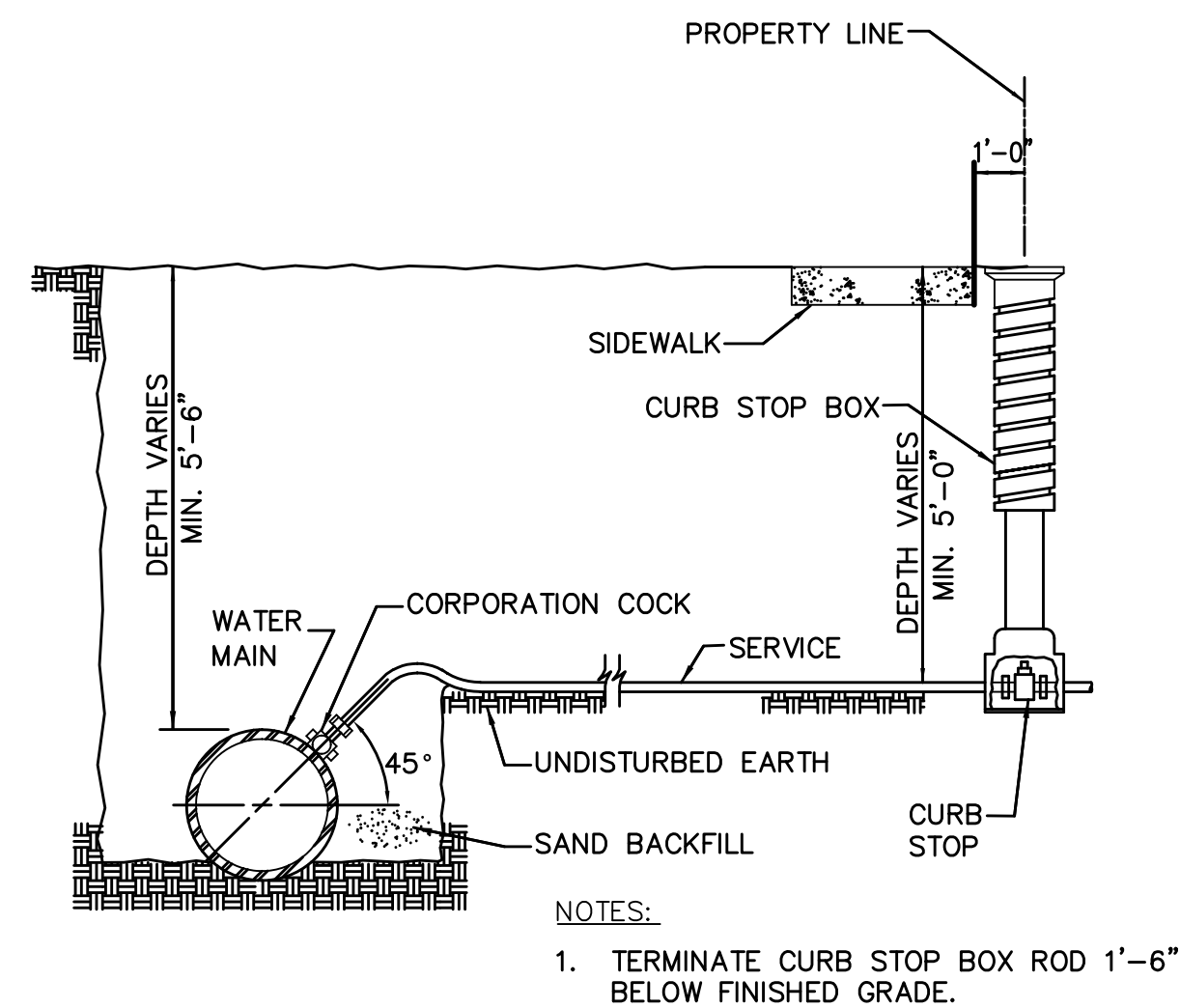


**CONCRETE LETDOWN FLUME DETAIL**  
NOT TO SCALE

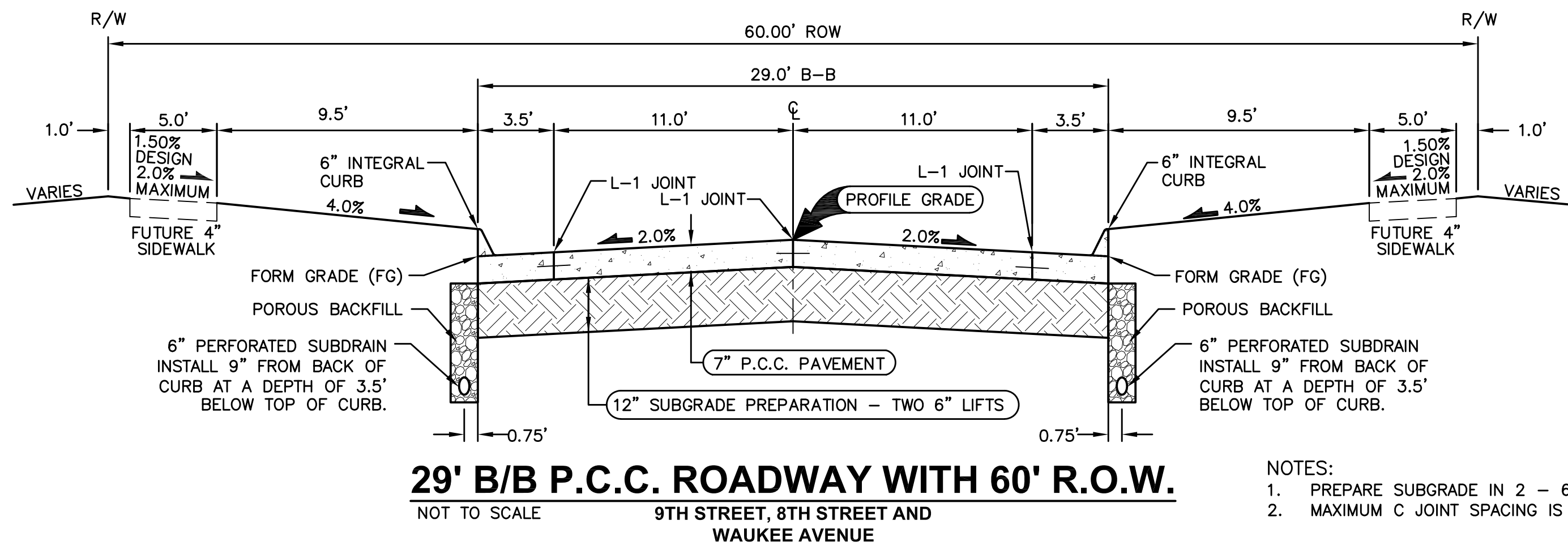


**6" PERFORATED SUBDRAIN**  
NOT TO SCALE

1. PLACE PERFORATIONS DOWN FOR ALL INSTALLATIONS.
2. ALL SUBDRAINS ARE TO BE TIED INTO STORM SEWER STRUCTURES AND THEIR LOCATIONS ARE TO BE INCLUDED IN THE AS-BUILTS FOR THE SUBDIVISION.
3. THE GEOTECHNICAL ENGINEER SHALL BE PRESENT ONSITE DURING SUBGRADE PREPARATION AND PROOF ROLL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE GEOTECHNICAL ENGINEER IS PRESENT ONSITE AND A COPY OF ALL REPORTS AND FINDINGS REQUIRING ALTERATION FROM THE APPROVED PLAN SET BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT FOR REVIEW AND DISCUSSION PRIOR TO COMMENCING WITH PAVING WITHIN THE PROJECT.
4. CORE DRILL ALL STORM SEWER AND PLACE NON-SHRINK GROUT COLLAR AT CONNECTION.
5. RODENT GUARDS ARE TO BE INSTALLED WHERE THE PIPE TIES INTO THE STRUCTURE.

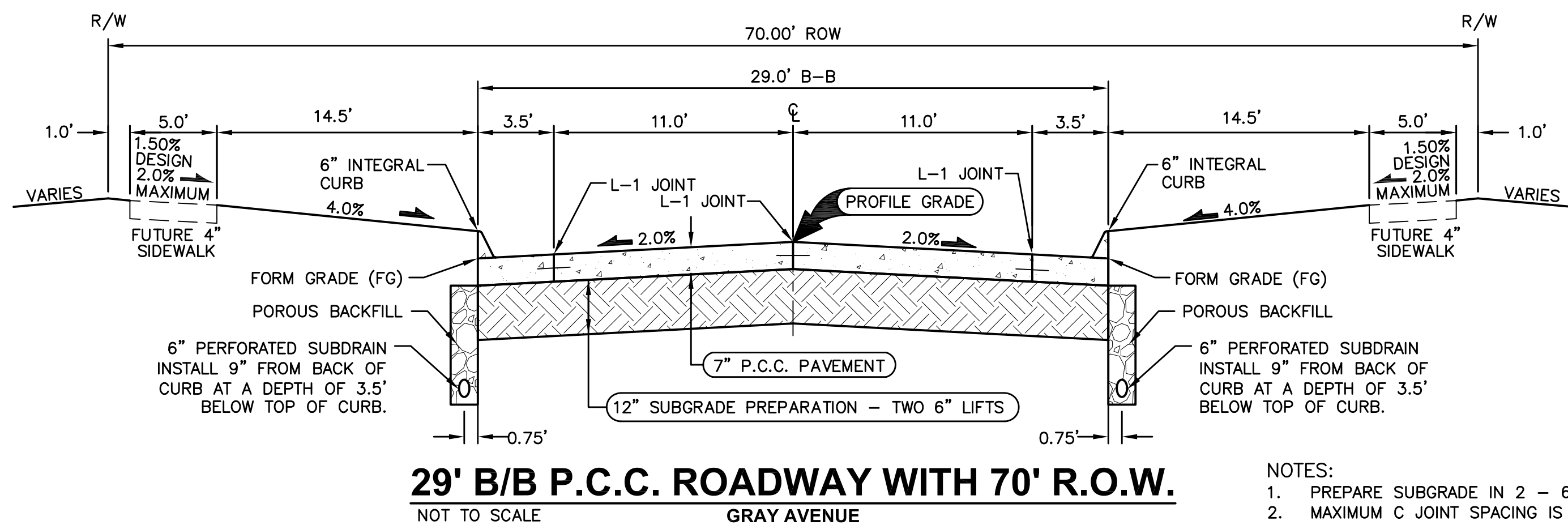


**WATER SERVICE CONNECTION**  
NOT TO SCALE



**29' B/B P.C.C. ROADWAY WITH 60' R.O.W.**  
NOT TO SCALE  
9TH STREET, 8TH STREET AND  
WAUKEE AVENUE

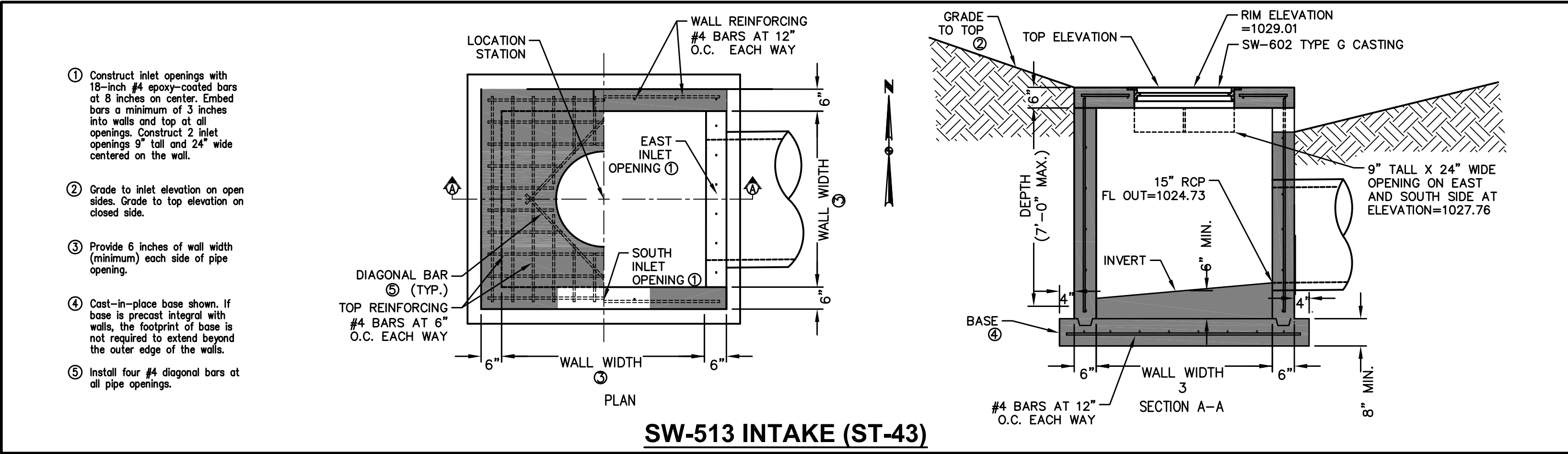
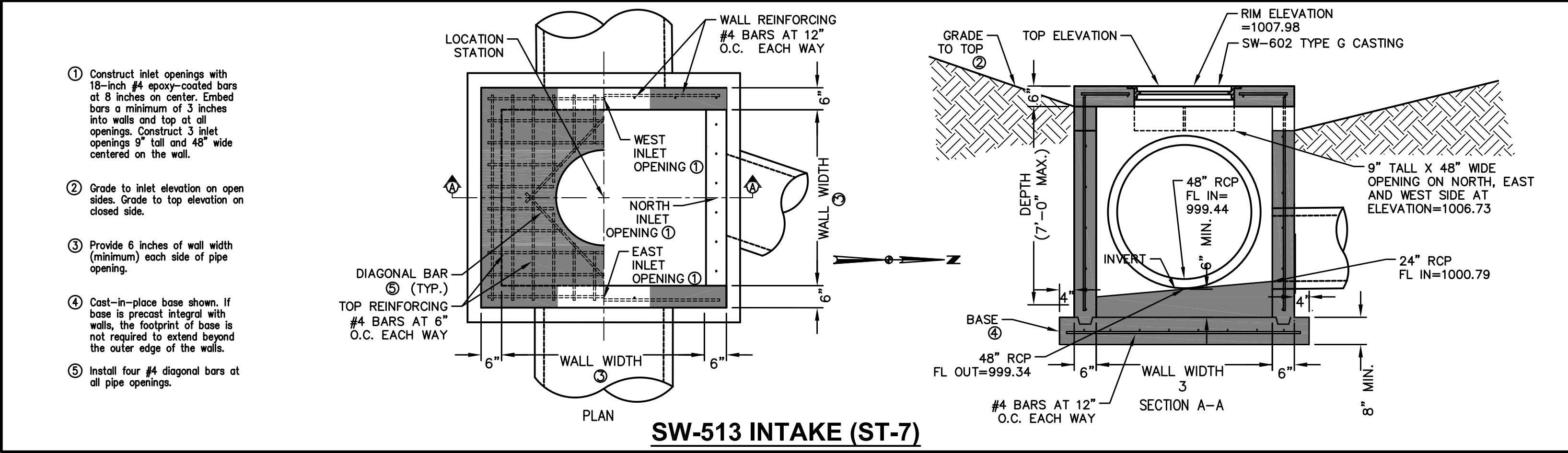
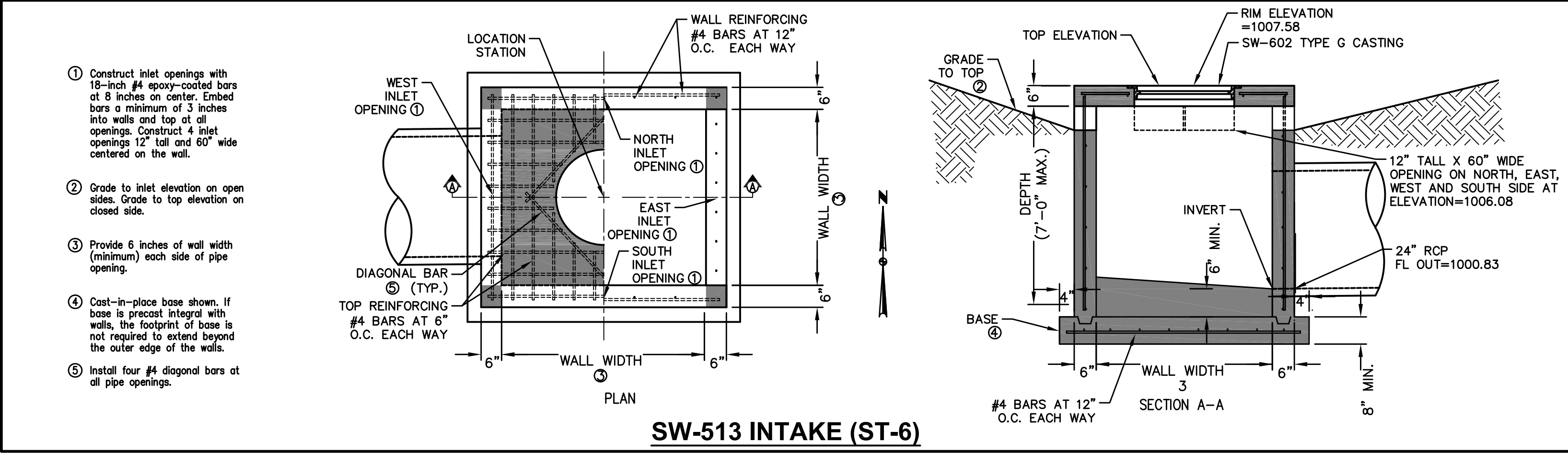
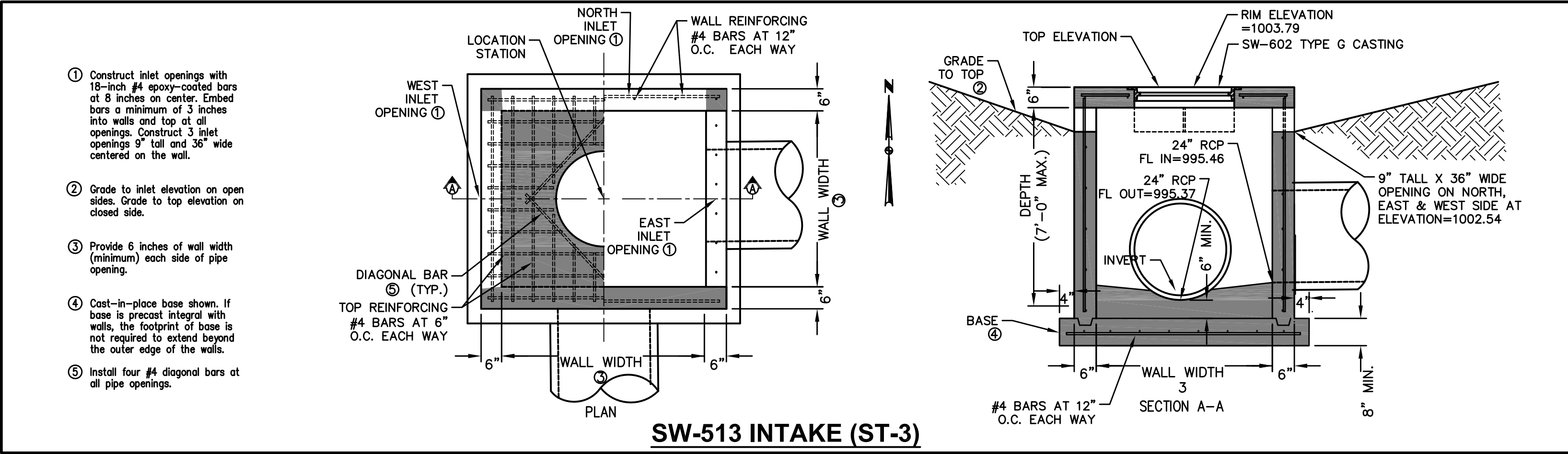
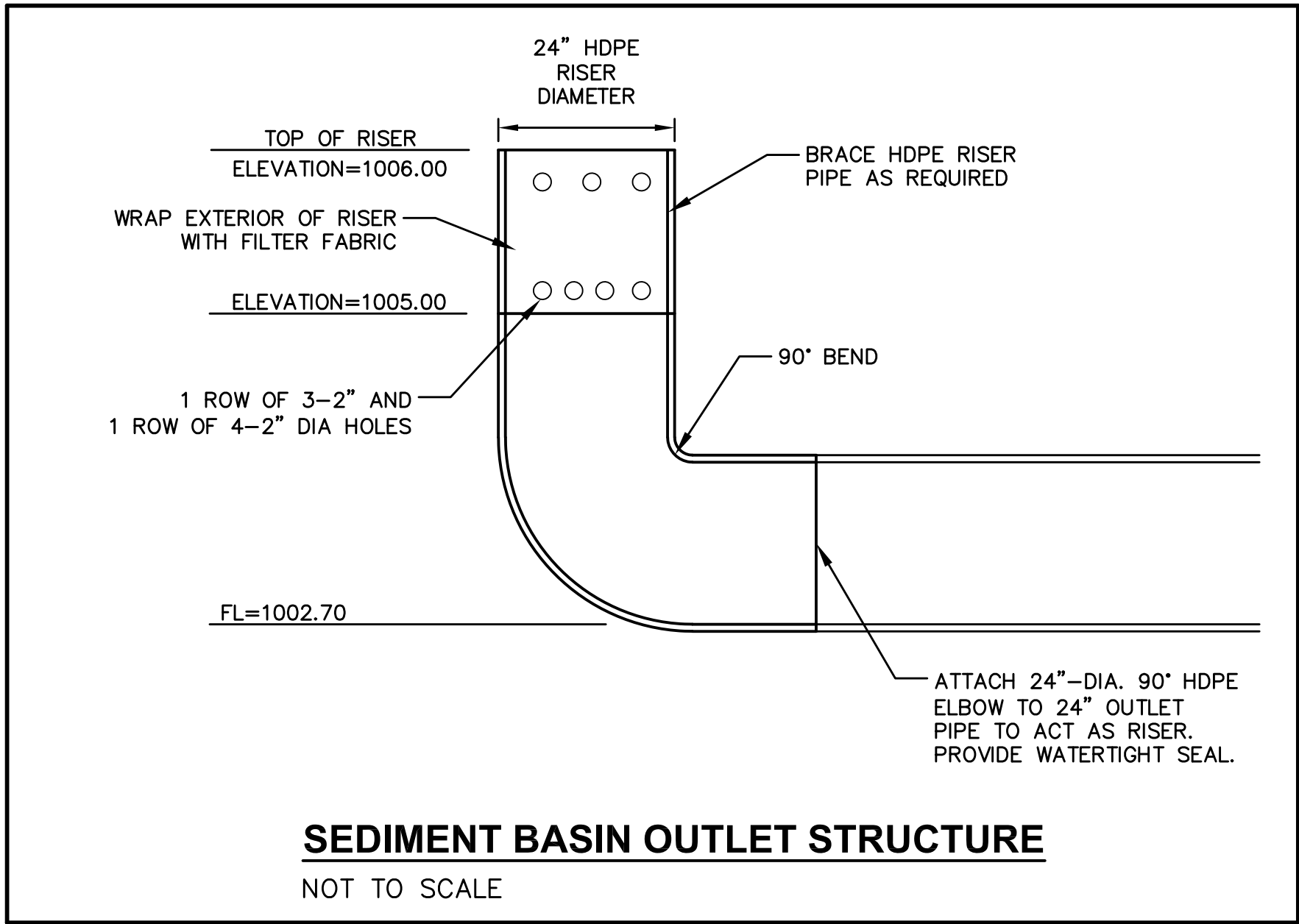
- NOTES:
1. PREPARE SUBGRADE IN 2 - 6" LIFTS.
  2. MAXIMUM C JOINT SPACING IS 15'.



**29' B/B P.C.C. ROADWAY WITH 70' R.O.W.**  
NOT TO SCALE  
GRAY AVENUE

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

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PLOTTED BY: JACOBSON, MICHAEL

| ESTIMATED PROJECT QUANTITIES |                                                     |               |        |
|------------------------------|-----------------------------------------------------|---------------|--------|
| ITEM NO.                     | ITEM DESCRIPTION                                    | UNIT QUANTITY |        |
| 1                            | COMBINED CLEARING AND GRUBBING                      | AC            | 26.23  |
| 2                            | STRIPPING, SALVAGING AND SPREAD TOPSOIL             | LS            | 1      |
| 3                            | CLASS 10 EXCAVATION                                 | LS            | 1      |
| 4                            | SUBGRADE PREPARATION                                | SY            | 14,591 |
| 5                            | SANITARY SEWER GRAVITY MAIN, 8" DIA                 | LF            | 3,406  |
| 6                            | SANITARY SEWER SERVICE STUB, 4" DIA                 | EA            | 73     |
| 7                            | SUBDRAIN, 6" PERFORATED PVC                         | LF            | 3,489  |
| 8                            | STORM SEWER, TRENCHED, 8" PERFORATED PVC            | LF            | 349    |
| 9                            | STORM SEWER, TRENCHED, 24" PERFORATED HDPE          | LF            | 27     |
| 10                           | STORM SEWER, TRENCHED, 15" RCP                      | LF            | 1,230  |
| 11                           | STORM SEWER, TRENCHED, 18" RCP                      | LF            | 144    |
| 12                           | STORM SEWER, TRENCHED, 24" RCP                      | LF            | 1,012  |
| 13                           | STORM SEWER, TRENCHED, 30" RCP                      | LF            | 961    |
| 14                           | STORM SEWER, TRENCHED, 36" RCP                      | LF            | 985    |
| 15                           | STORM SEWER, TRENCHED, 48" RCP                      | LF            | 466    |
| 16                           | STORM SEWER, TRENCHED, 60" RCP                      | LF            | 145    |
| 17                           | STORM SEWER SERVICE STUB, 4" DIA                    | EA            | 73     |
| 18                           | STORM SEWER, 24" HDPE END SECTION WITH APRON GUARD  | EA            | 2      |
| 19                           | STORM SEWER, 15" RCP APRON W/ FOOTING & APRON GUARD | EA            | 6      |
| 20                           | STORM SEWER, 18" RCP APRON W/ FOOTING & APRON GUARD | EA            | 1      |
| 21                           | STORM SEWER, 48" RCP APRON W/ FOOTING & APRON GUARD | EA            | 1      |
| 22                           | WATER MAIN, 8" DIA                                  | LF            | 3,662  |
| 23                           | WATER SERVICE STUB, 1" DIA                          | EA            | 73     |
| 24                           | VALVE, 8" DIA                                       | EA            | 10     |
| 25                           | TAPPING SLEEVE WITH VALVE, 8" DIA                   | EA            | 1      |
| 26                           | FIRE HYDRANT ASSEMBLY                               | EA            | 12     |
| 27                           | TEMPORARY FIRE HYDRANT ASSEMBLY (RELOCATE)          | EA            | 2      |
| 28                           | MANHOLE, SW-301, 48" (SANITARY SEWER)               | EA            | 17     |
| 29                           | MANHOLE, SW-401, 48" (STORM SEWER)                  | EA            | 5      |
| 30                           | MANHOLE, SW-401, 60" (STORM SEWER)                  | EA            | 5      |
| 31                           | MANHOLE, SW-401, 72" (STORM SEWER)                  | EA            | 3      |
| 32                           | MANHOLE, SW-401, 96" (STORM SEWER)                  | EA            | 4      |
| 33                           | INTAKE, SW-501                                      | EA            | 7      |
| 34                           | INTAKE, SW-503                                      | EA            | 6      |
| 35                           | INTAKE, SW-505                                      | EA            | 7      |
| 36                           | INTAKE, SW-506                                      | EA            | 5      |
| 37                           | INTAKE, SW-513                                      | EA            | 4      |
| 38                           | PAVEMENT, 7" P.C.C.                                 | SY            | 12,922 |
| 39                           | PAVEMENT, 4" P.C.C. SIDEWALK                        | SY            | 25     |
| 40                           | PAVEMENT, 6" P.C.C. SIDEWALK RAMPS                  | SY            | 160    |
| 41                           | DETECTABLE WARNING PANELS                           | SF            | 220    |
| 42                           | SEEDING, FERTILIZING, AND MULCHING                  | AC            | 23.57  |
| 43                           | PERMANENT ROAD CLOSURE, URBAN, SI-182 (RELOCATE)    | EA            | 10     |
| 44                           | TRAFFIC CONTROL                                     | LS            | 1      |
| 45                           | EROSION CONTROL                                     | LS            | 1      |
| 46                           | ROCK OUTLET PROTECTION, CLASS 'E' RIP RAP           | TONS          | 45     |
| 47                           | STORM SEWER CLEANOUT                                | EA            | 10     |
| 48                           | MAILBOX PAD                                         | EA            | 5      |
| 49                           | LANDSCAPING                                         | LS            | 1      |

GENERAL NOTES

1.

ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND TO THE 2017 EDITION OF SUDAS STANDARD SPECIFICATIONS. THE WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IF ANY DISCREPANCIES.
2.

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 CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.
3.

THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT 800-292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
4.

THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING HIS EQUIPMENT ON THE PAVEMENT OR SIDEWALK. PAVEMENT REPLACEMENT SHALL COMPLY WITH THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
5.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN ALL SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT. INCLUDING STAGING OF CONSTRUCTION DETAILS.
6.

THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE PROPOSED AND EXISTING RIGHT OF WAY, CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7.

PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY (48 HRS NOTICE) THE FOLLOWING:

A. CITY OF WAUKEE ENGINEERING DEPARTMENT

B. APPROPRIATE UTILITY COMPANIES

C. OWNER

D. CIVIL DESIGN ADVANTAGE
- \*

48 HOUR NOTICE SHALL BE GIVEN TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO WEEKEND AND HOLIDAY WORK.
8.

PRIOR TO CONSTRUCTION, THE PROJECT MANAGER SHALL CONTACT THE WAUKEE ENGINEERING DEPARTMENT AND SCHEDULE A PRE-CONSTRUCTION MEETING AT LEAST ONE WEEK PRIOR TO THE ANTICIPATED START OF CONSTRUCTION.

| ESTIMATE REFERENCE INFORMATION                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data listed below is for informational purpose only and shall not constitute a basis for any extra work orders. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| ITEM NO.                                                                                                        | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                 | THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2017 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                 | ALL REFERENCES TO SECTIONS AND FIGURES ARE TO THE SUDAS STANDARD SPECIFICATIONS. CITY OF WAUKEE STANDARD DETAILS SHALL GOVERN IF ANY DISCREPANCIES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 1                                                                                                               | CLEAR AND GRUB ALL AREAS AFFECTED BY GRADING OPERATIONS. THE CONTRACTOR SHALL FIELD VERIFY CLEARING AND GRUBBING NEEDS PRIOR TO BIDDING. INCLUDES REMOVAL OF ANY EXISTING FIELD FENCE. ALL MATERIAL THAT IS REMOVED FROM THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR. INCLUDED REMOVAL OF EXISTING CROPS FOR CONSTRUCTION OF TEMPORARY ACCESS. DO NOT DISTURB CROPS OUTSIDE OF THE PROJECT LIMITS. AREA SHOWN FOR REFERENCE ONLY. CLAYTON ESTATES PLAT 2 HAS BEEN MASS GRADED WITH PLAT 1 GRADING OPERATIONS.                                                                                                                                                                                |
| 2                                                                                                               | STRIP, SALVAGE AND RE-SPREAD TOPSOIL PER SECTION 2010 OF SUDAS STANDARD SPECIFICATIONS OR PROVIDE THE CITY WITH A TOPSOIL PRESERVATION PLAN. TOPSOIL TO BE RESPREAD SHALL BE FREE OF ROCK AND DEBRIS AND BE SUITABLE FOR THE GROWTH OF GRASS. COORDINATE LOCATION OF STOCKPILE WITH OWNER.                                                                                                                                                                                                                                                                                                                                                                                                               |
| 3                                                                                                               | EXCAVATION INCLUDES ALL WORK NECESSARY TO ACHIEVE PROPER GRADES AS SHOWN IN THE PLANS. NO PAYMENT FOR OVERHAUL SHALL BE ALLOWED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 4                                                                                                               | REFER TO SHEET 3 FOR TYPICAL LOCATIONS AND THICKNESS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 5                                                                                                               | SANITARY SEWER FOR 8" SHALL BE PVC TRUSS PIPE. ANY CONNECTIONS TO EXISTING SANITARY SEWER SHALL BE CONSIDERED INCIDENTAL. REFER TO FIG. 3010.101 AND 3010.103 FOR PIPE EMBEDMENT DETAILS. GRANULAR PIPE BEDDING SHALL BE CONSIDERED INCIDENTAL. EXISTING SANITARY SEWER WILL NEED TO BE RETESTED AFTER SADDLE WYE INSTALLATION.                                                                                                                                                                                                                                                                                                                                                                          |
| 5-17                                                                                                            | REFER TO FIGURE 3010.102 FOR TRENCH BEDDING AND BACKFILL ZONE DETAILS. GRANULAR PIPE BEDDING SHALL BE CONSIDERED INCIDENTAL. CONNECTIONS TO EXISTING STORM SEWER PIPE AND STRUCTURES SHALL BE CONSIDERED INCIDENTAL. WRAP ALL PIPE JOINTS IN ENGINEERING FABRIC. CLEAN AND TELEVISE SANITARY AND STORM SEWER PRIOR TO PAVING AND PROVIDE TELEVISING REPORT TO CITY IN HARD COPY AND DISC FORMAT. TELEVISING SHALL BE CONSIDERED INCIDENTAL. ALL STORM SEWER PIPE THAT CROSSES OVER WATERMAIN SHALL HAVE O-RING GASKETS JOINT RATED AT 13 PSI OR GREATER. O-RING GASKET JOINTS SHALL BE INSTALLED ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATER TO THE SEWER IS AT LEAST 10 FEET. |
| 6, 17, 23                                                                                                       | REFER TO DETAIL ON SHEET 2 AND PLAN AND PROFILE SHEETS FOR LOCATION AND DEPTH. STORM SEWER SERVICES TYING INTO EXISTING RCP PIPE ARE TO BE CORE DRILLED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 9, 18                                                                                                           | REFER TO SHEET 8 FOR LOCATION AND FLOWLINES AND SHEET 4 FOR STANDPIPE DETAIL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 19-21                                                                                                           | THE LAST THREE SECTIONS AND APRON SHALL BE CONNECTED WITH PIPE CONNECTORS. REFER TO FIG. 4030.221 - RCP APRON SECTION FOOTING FOR FOOTING CONSTRUCTION DETAILS. APRON GUARD REQUIRED ON ALL APRONS. RCP APRON FOOTING, PIPE APRON GUARD AND PIPE CONNECTORS TO BE CONSIDERED INCIDENTAL. INSTALL CLAY WATERSTOPS AT ALL RCP APRONS, MIN. 3' LONG.                                                                                                                                                                                                                                                                                                                                                        |
| 22-25                                                                                                           | REFER TO FIG. 3010.101 AND FIG. 3010.104 FOR TRENCH BEDDING AND BACKFILL ZONE DETAILS. GRANULAR PIPE BEDDING SHALL BE CONSIDERED INCIDENTAL. REFER TO FIG. 5010.101 FOR THRUST BLOCK DETAILS. REFER TO FIG. 5010.102 FOR TRACER SYSTEM DETAILS. ALL FITTINGS, POLYETHYLENE WRAP, THRUST BLOCKS, AND TRACER WIRE SYSTEM SHALL BE CONSIDERED INCIDENTAL.                                                                                                                                                                                                                                                                                                                                                   |
| 26                                                                                                              | REFER TO FIG. 5020.201 - FIRE HYDRANT ASSEMBLY FOR FIRE HYDRANT CONSTRUCTION DETAILS. INCLUDES ANCHORING TEE, ANCHORING ELBOW, GATE VALVE, VALVE BOX, ANCHORING PIPE, ANCHORING COUPLING, ELBOWS, STORZ FITTINGS, POLYETHYLENE WRAP, THRUST BLOCK AND TRACER WIRE SYSTEM AND FIRE HYDRANT.                                                                                                                                                                                                                                                                                                                                                                                                               |
| 27                                                                                                              | REFER TO WATERMAIN PLAN AND PROFILE SHEETS FOR LOCATIONS OF HYDRANTS. ANY RELOCATED FIRE HYDRANTS ARE TO INCLUDE STORZ FITTINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 28                                                                                                              | REFER TO FIG.6010.301 - CIRCULAR SANITARY SEWER MANHOLE (SW-301) FOR CONSTRUCTION DETAILS. CASTINGS IN PAVEMENT SHALL BE TYPE B RING AND COVER. WHEN CASTINGS ARE NOT IN PAVEMENT, INSTALL MANHOLE CONE SECTION, MANHOLE STEPS, AND RING/COVER CASTING SUCH THAT SEPARATION IS MAINTAINED BETWEEN MANHOLE COVERS AND PAVED AREAS (BACK OF CURB, SIDEWALK PAVEMENT, SIDEWALK APPROACHES/RAMPS). ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.                                                                                                                                                                                                                                                       |

9.

SPECIAL CARE SHALL BE TAKEN WHEN FORMING AT INTERSECTIONS SO THE PROFILES SHOWN ON THE PLANS AND THE ELEVATIONS SHOWN ON THE INTERSECTION DETAILS ARE OBTAINED. SHORT LENGTHS OF FORMS OR FLEXIBLE FORMS MAY BE NECESSARY AT THESE LOCATIONS.
10.

TO OBTAIN THE CORRECT FORM GRADES AT LOW POINTS WHERE INTAKES ARE LOCATED, THE CONTRACTOR MUST EXERCISE ADDITIONAL CARE WHEN PAVING FULL WIDTH PAVEMENTS. THIS MAY REQUIRE POURING ONE HALF OF THE PAVEMENT AT A TIME OR OTHER METHODS APPROVED BY THE ENGINEER.
11.

THE CONTRACTOR MAY BE REQUIRED AS DIRECTED BY THE ENGINEER OR THE CITY, TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY. THE IS BE INCIDENTAL TO THE BID ITEM TRAFFIC CONTROL. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ROAD BARRICADES AT END OF EXISTING PAVEMENTS UNTIL THE PROJECT IS ACCEPTED.
12.

PLAN AND PROFILE SHEETS INCLUDED IN THE PROJECT ARE FOR THE PURPOSE OF ALIGNMENT, LOCATION AND SPECIFIC DIRECTIONS FOR WORK TO BE PERFORMED UNDER THIS CONTRACT. IRRELEVANT DATA ON THESE SHEETS IS NOT TO BE CONSIDERED A PART OF THIS CONTRACT.
13.

THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
14.

THE CONTRACTOR IS REQUIRED TO BE FAMILIAR WITH AND COMPLY WITH OSHA STANDARDS. NOTHING WITHIN THESE PLANS SHALL RELIEVE THE CONTRACTOR OF THIS REQUIREMENT.
15.

ALL MATERIAL TESTING SHALL BE CONSIDERED INCIDENTAL TO OTHER CONSTRUCTION.
16.

PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER, ENGINEER, AND/OR ARCHITECT, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
17.

ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD)
18.

ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
19.

SIDEWALKS, ACCESSIBLE CURB RAMPS AND SIDEWALK RAMPS INCLUDING RAISED TRUNCATED DOME AND DETECTABLE WARNINGS AND WARNING PANELS SHALL BE DESIGNED AND INSTALLED TO THE LATEST P.R.O.W.A.G. AND A.D.A. REQUIREMENTS.
20.

PLACE 3/4" EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDINGS. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C PAVEMENT. THE PCC RAMP JOINT LOCATED AT THE BACK OF CURB AND ALL EXPANSION JOINTS SHALL BE SEALED.
21.

REMOVE DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY AND BEFORE RAIN EVENTS.
22.

DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE R.O.W.
23.

ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.

| ESTIMATE REFERENCE INFORMATION                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data listed below is for informational purpose only and shall not constitute a basis for any extra work orders. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| ITEM NO.                                                                                                        | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 29-32                                                                                                           | REFER TO FIG. 6010.401 - CIRCULAR STORM SEWER MANHOLE (SW-401) FOR CONSTRUCTION DETAILS. MANHOLE INSIDE DIAMETERS GREATER THAN 48" SHALL BE CONSIDERED INCIDENTAL.                                                                                                                                                                                                                                                                                                                                                                     |
| 33-37                                                                                                           | REFER TO FIG. 6010.514 - BOXOUTS FOR GRATE INTAKES. REFER TO FIG. 6010.603 - CASTINGS FOR GRATE INTAKES FOR TYPE R GRATE DETAILS AND FIG. 6010.602 - CASTINGS FOR STORM SEWER MANHOLES FOR TYPE E CASTING DETAILS. THE MAXIMUM HEIGHT OF ADJUSTING RINGS ALLOWED FOR INTAKE CASTINGS IS 6". THE MAXIMUM HEIGHT OF ADJUSTING RINGS ALLOWED FOR MANHOLE CASTINGS IS 12".                                                                                                                                                                 |
| 33                                                                                                              | REFER TO FIG. 6010.501 - SINGLE GRATE INTAKE (SW-501) FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 34                                                                                                              | REFER TO FIG. 6010.503 - SINGLE GRATE INTAKE WITH MANHOLE (SW-503) FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 35                                                                                                              | REFER TO FIG. 6010.505 - DOUBLE GRATE INTAKE (SW-505) FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 36                                                                                                              | REFER TO FIG. 6010.506 - DOUBLE GRATE INTAKE WITH MANHOLE (SW-506) FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 37                                                                                                              | REFER TO SHEET 4 FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 38                                                                                                              | REFER TO FIG. 7010.101 - JOINTS (PV-101) FOR JOINT DETAILS. MAXIMUM C AND CD JOINT SPACING IS 15 FEET.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 39                                                                                                              | REFER TO SHEET 12 AND 17 FOR LOCATION OF SIDEWALKS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40                                                                                                              | REFER TO FIG. 7030.204 - GENERAL SIDEWALK AND ACCESSIBLE RAMP DETAILS AND FIG. 7030.208 - CURB RAMPS WITHIN INTERSECTION RADIUS FOR CLASS B OR C SIDEWALK FOR CONSTRUCTION DETAILS. DETECTABLE WARNING PANELS TO BE ARMOR TILE, ADA SOLUTIONS OR APPROVED EQUAL, BRICK RED IN COLOR. ACCESSIBLE CURB RAMPS INCLUDING TURNING SPACES SHALL BE 6" THICK P.C.C.                                                                                                                                                                           |
| 41                                                                                                              | REFER TO SHEET 2 FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 42                                                                                                              | THE SITE SEEDING SHALL CONFORM TO THE SPECIFICATION FOR TYPE (1) PERMANENT LAWN MIXTURE AND TYPE (4) URBAN TEMPORARY EROSION CONTROL SEED MIXTURE. <div>SEEDING QUANTITIES</div> <div>- TYPE 1 PERMANENT LAWN MIXTURE = 2.91 AC</div> <div>- TYPE 4 URBAN TEMPORARY EROSION CONTROL MIXTURE = 20.66 AC</div>                                                                                                                                                                                                                           |
| 43                                                                                                              | REFER TO PLAN AND PROFILE SHEETS FOR LOCATIONS. REFER TO IDOT STANDARD ROAD PLAN SI-182 FOR CONSTRUCTION DETAILS. EACH LOCATION CONSISTS OF FIVE SIGNS WITH POSTS PER SI-182.                                                                                                                                                                                                                                                                                                                                                          |
| 44                                                                                                              | ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ROAD BARRICADES AT END OF EXISTING PAVEMENTS UNTIL THE PROJECT IS ACCEPTED.                                                                                                                                                                                                                                                                                                     |
| 45                                                                                                              | REFER TO SHEET 8 OF THE CONSTRUCTION DRAWINGS FOR EROSION AND SEDIMENT CONTROLS AND GRADING OF TEMPORARY SEDIMENT BASIN ON LOTS 4 AND 5. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR SPECIFIC DETAILS. <div>EROSION CONTROL QUANTITIES</div> <div>- 1 CONCRETE WASH PIT</div> <div>- 7,296 LF OF SILT FENCE</div> <div>- 23.57 ACRES OF SEEDING, FERTILIZING AND MULCHING.</div> <div>- 25 INLET PROTECTION DEVICES</div> <div>- 1-24" HDPE TEMPORARY STANDPIPE AND 24" HDPE END SECTION W/ RODENT GUARD</div> |
| 46                                                                                                              | INSTALL ENGINEERING FABRIC UNDER ALL RIP RAP. ENGINEERING FABRIC SHALL BE CONSIDERED INCIDENTAL. REFER TO SHEET 20 FOR LOCATION.                                                                                                                                                                                                                                                                                                                                                                                                       |
| 47                                                                                                              | REFER TO FIG. 4040.232 - SUBDRAIN CLEANOUTS FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 48                                                                                                              | REFER TO SHEET 2 FOR CONSTRUCTION DETAILS. MAILBOX PADS ARE LOCATED BETWEEN LOTS 42/43, 56/57, 62/63, 66/67 AND 71/72.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 49                                                                                                              | REFER TO SHEET 6 FOR DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

24.

IN THE EVENT OF A DISCREPANCY BETWEEN DETAILED PLANS AND QUANTITIES, THE DETAILED PLANS SHALL GOVERN.
25.

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-BUILTS.
26.

ALL CONSTRUCTION STAKING TO BE COMPLETED UNDER THE DIRECTION OF A LICENSED ENGINEER OR LAND SURVEYOR. ALL CURB DROPS AND SIDEWALK/SHARED USE PATH SHALL ALSO BE STAKED UNDER THE DIRECTION OF A LICENSED ENGINEER OR LAND SURVEYOR
27.

THE CONTRACTOR SHALL SUBMIT A LIST OF CONSTRUCTION MATERIALS TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
28.

A GEOTECHNICAL ENGINEER SHALL BE ONSITE DURING CONSTRUCTION AND FOR PROOF ROLLING TO INSPECT SOILS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE GEOTECHNICAL ENGINEER IS PRESENT. A COPY OF ALL REPORTS AND FINDING REQUIRING ALTERATION FROM THE APPROVED PLAN SET IS TO BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT FOR REVIEW AND DISCUSSION PRIOR TO COMMENCING WITH PAVING WITHIN THE PROJECT.
29.

THE CONTRACTOR SHALL COORDINATE ALL EXISTING PUBLIC UTILITY CONNECTIONS WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
30.

ALL TESTING SHALL BE COMPLETED ACCORDING TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE WAUKEE ENGINEERING DEPARTMENT SHALL BE PRESENT TO WITNESS ALL TESTING.
31.

AS-BUILTS 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.
32.

THE CONTRACTOR IS RESPONSIBLE FOR CLEANING AND TELEVISING ALL STORM AND SANITARY SEWERS. THE CITY OF WAUKEE ENGINEERING DEPARTMENT SHALL WITNESS AND APPROVE ALL CLEANING AND TELEVISING PRIOR TO PAVING. A COPY OF THE VIDEOS AND A HARD COPY OF THE INSPECTION REPORT SHALL BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT. ALL SANITARY SEWER MANHOLES ARE TO BE VACUUM TESTED.
33.

ALL FIRE HYDRANTS INCLUDING ANY RELOCATED HYDRANTS SHALL HAVE STORZ FITTINGS.
34.

ALL PROPOSED PEDESTRIAN CROSSINGS SHALL BE INSTALLED AS PART OF THE PLAT IMPROVEMENTS.
35.

ALL CONNECTIONS TO EXISTING MANHOLES ARE TO BE CORE DRILLED AND USE A LINK SEAL.
36.

ANY FIELD FENCE LOCATED WITHIN THE PROPERTY IS TO BE REMOVED. ANY TREES OR BRUSH ALONG THE NORTH PROPERTY BOUNDARY IS ALSO TO BE REMOVED.
37.

VERIFY THAT ALL EXISTING MANHOLES WITHIN THE PLAT BOUNDARY HAVE A MINIMUM OF ONE 4-INCH ADJUSTING RING TO ALLOW FOR FUTURE ADJUSTMENT.
38.

ALL MANHOLES SHALL HAVE A MINIMUM OF 1 - 4" ADJUSTING RING TO ALLOW FOR FUTURE ADJUSTMENT SHOULD THE STRUCTURE END UP IN A DRIVEWAY.

CLAYTON ESTATES PLAT 2

QUANTITIES AND REFERENCE NOTES

534

1703.109

WAUKEE, IOWA

CIVIL DESIGN ADVANTAGE

EI: GH

ENGINEER: EKO

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

REVISIONS

| DATE     |                 |  |  |
|----------|-----------------|--|--|
| 08/31/17 | FINAL SUBMITTAL |  |  |
| 08/15/17 | 4TH SUBMITTAL   |  |  |
| 07/25/17 | 3RD SUBMITTAL   |  |  |
| 06/30/17 | 2ND SUBMITTAL   |  |  |
| 05/05/17 | 1ST SUBMITTAL   |  |  |

NE 1/4 SE 1/4  
SEC 32-79-26  
PHILLIPS-HAMILTON  
INC.

CLAYTON ESTATES  
PLAT 1

CLAYTON ESTATES  
PLAT 1

EX 150' HYDRANT  
RADIUS (TYP)

## BUFFER REQUIREMENTS

1 OVERSTORY TREE, 2 EVERGREEN TREES AND 2 ORNAMENTAL TREES PER 50 LF

## LANDSCAPE NOTES

1. LOCATE ALL UTILITIES BEFORE ANY PLANTING BEGINS.
2. THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS, AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
3. TYPE, SIZE, AND QUALITY OF PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1
4. ALL PLANT MATERIAL SHALL BE HEALTHY SPECIMENS WITHOUT DEFORMITIES, VOIDS AND OPEN SPACES, WITH WELL DEVELOPED BRANCH AND ROOT SYSTEMS; TRUE TO HEIGHT, SHAPE AND CHARACTER OF GROWTH OF THE SPECIES OR VARIETY.
5. WEED PREVENTER (PRE-EMERGENT) SHALL BE SPREAD OVER SOIL AFTER PLANTING AND BEFORE MULCHING
6. SHREDDED HARDWOOD MULCH SHALL BE PLACED AROUND ALL TREES TO A (MIN) DEPTH OF 3".
7. PLANT QUANTITIES ARE SHOWN FOR INFORMATION ONLY, THE DRAWING SHALL PREVAIL IF ANY CONFLICTS ARISE.
8. ALL DEBRIS SPILLED IN THE PUBLIC R.O.W. SHALL BE PICKED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY.
9. CONTRACTOR SHALL WARRANTY ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.

## PLANT SCHEDULE

| CODE |  | OVERSTORY TREES            | SIZE     | COND |
|------|--|----------------------------|----------|------|
| AM   |  | AUTUMN BLAZE MAPLE         | 2" CAL   | B&B  |
| RO   |  | RED OAK                    | 2" CAL   | B&B  |
|      |  | ACER RUBRUM 'AUTUMN BLAZE' |          |      |
|      |  | QUERCUS RUBRA              |          |      |
| CODE |  | ORNAMENTAL TREES           | SIZE     | COND |
| PC   |  | PRAIRIE FIRE CRAB          | 1.5" CAL | B&B  |
| SC   |  | SPRING SNOW CRAB           | 1.5" CAL | B&B  |
|      |  | MALUS X 'PRAIRIE FIRE'     |          |      |
|      |  | MALUS X 'SPRING SNOW'      |          |      |
| CODE |  | EVERGREEN TREES            | SIZE     | COND |
| DF   |  | DOUGLAS FIR                | 6" HT.   | B&B  |
| BS   |  | COLORADO BLUE SPRUCE       | 6' HT.   | B&B  |
|      |  | PSEUDOTSUGA MENZIESII      |          |      |
|      |  | PICEA PUNGENS              |          |      |

EXISTING 150' —  
HYDRANT RADIUS

WAUKEE COMMUNITY  
SCHOOL DISTRICT

150' HYDRANT  
RADIUS (TYP)

**OUTLOT 'Z'**

EXISTING 150' HYDRANT RADIUS

WAUKEE COMMUNITY  
SCHOOL DISTRICT

A north arrow pointing upwards with the letter 'N' at the top. Below the arrow is a scale bar with markings at 0', 30', 60', and 120'. The word 'SCALE' is written above the bar.

FILE: H:\2017\1703109\DWG\1703109-COV-DET-TAB.DWG  
 FILE DATE: 7/27/18 DATE PLOTTED: 7/27/2018 2:56 PM  
 PLOTTED BY: JONATHON MCDONALD  
 COMMENT:  
 TECH: ENG:

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

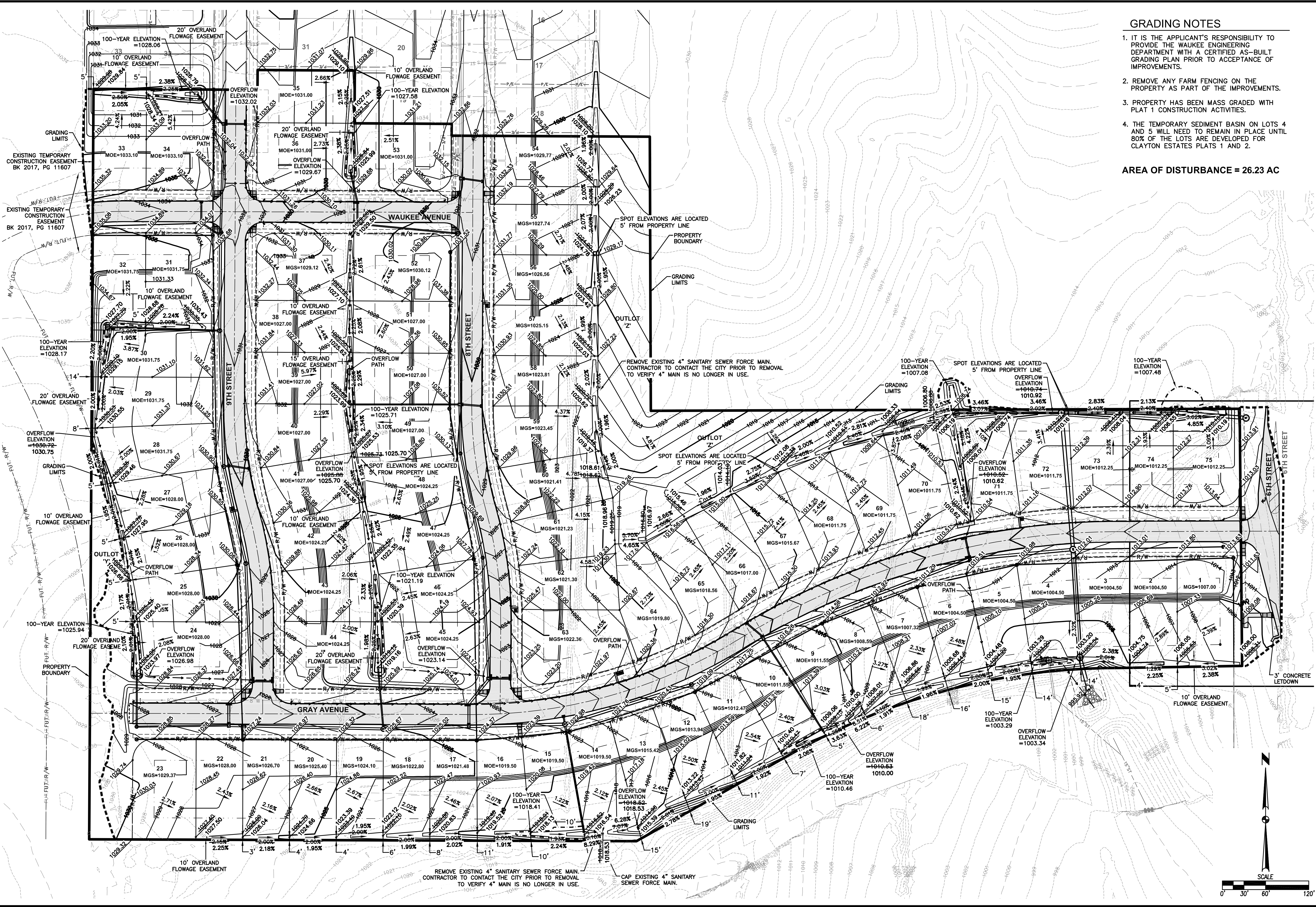
ENGINEER: EKO

# CLAYTON ESTATES PLAT 2

# EPLAN

**6**  
**34**  
1703.109  
**GA**

FILE: H:\2017\1703\1703-GRADING-ASBUILTS.DWG  
DRAWN BY: J. GLENN  
CHECKED BY: J. GLENN  
DATE: 6/12/2018 9:32 AM



# GRADING NOTES

1. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE THE WAUKEE ENGINEERING DEPARTMENT WITH A CERTIFIED AS-BUILT GRADING PLAN PRIOR TO ACCEPTANCE OF IMPROVEMENTS.
2. REMOVE ANY FARM FENCING ON THE PROPERTY AS PART OF THE IMPROVEMENTS.
3. PROPERTY HAS BEEN MASS GRADED WITH PLAT 1 CONSTRUCTION ACTIVITIES.
4. THE TEMPORARY SEDIMENT BASIN ON LOTS 4 AND 5 WILL NEED TO REMAIN IN PLACE UNTIL 80% OF THE LOTS ARE DEVELOPED FOR CLAYTON ESTATES PLATS 1 AND 2.

AREA OF DISTURBANCE = 26.23 AC

CLAYTON ESTATES PLAT 2  
GRADING PLAN

7  
34  
1703.109

WUKEE, IOWA

CIVIL DESIGN ADVANTAGE

ENGINEER: EKO

EI: GH

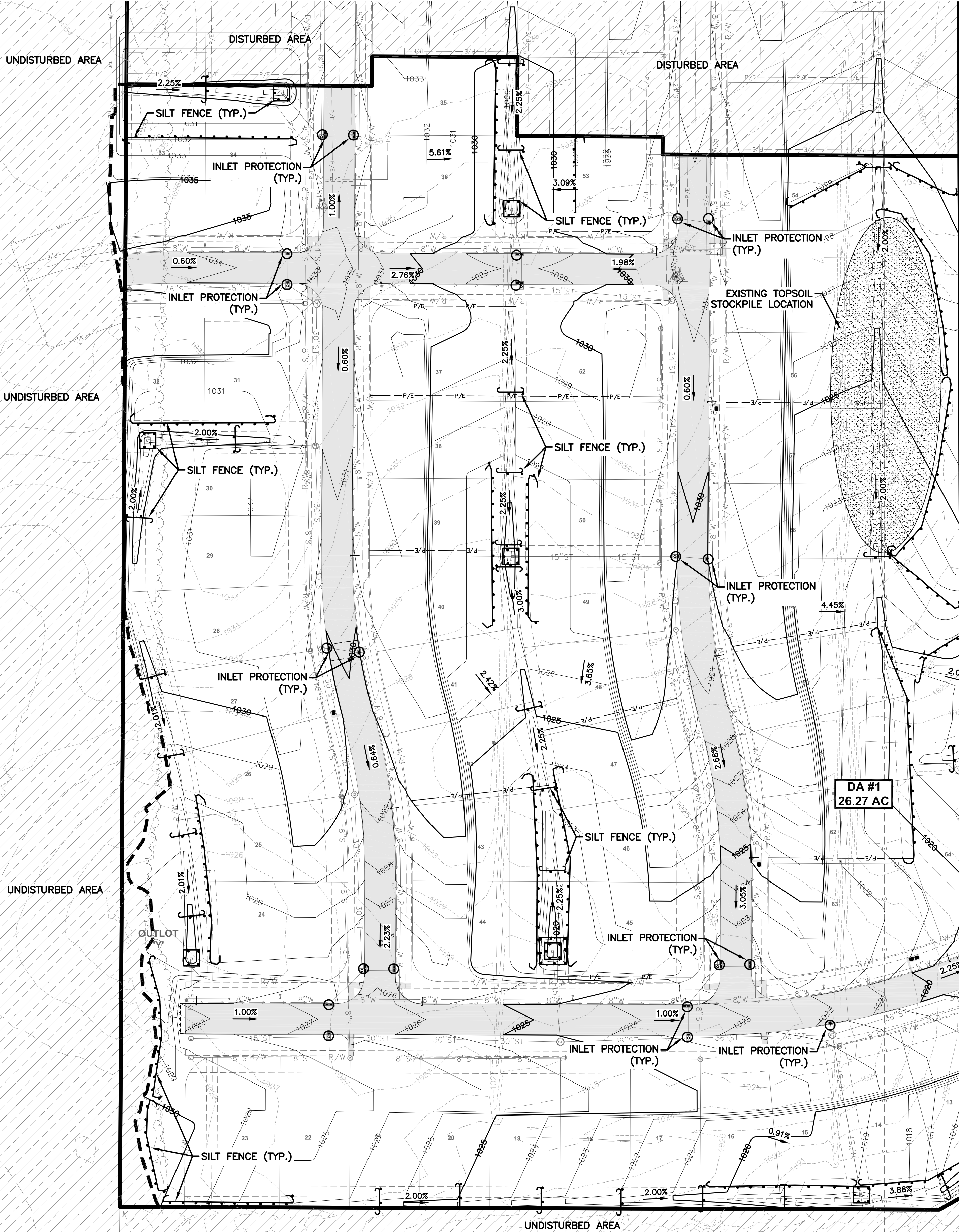
3405 S.E. CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PHONE: (515) 369-4400 FAX: (515) 369-4410

REVISIONS

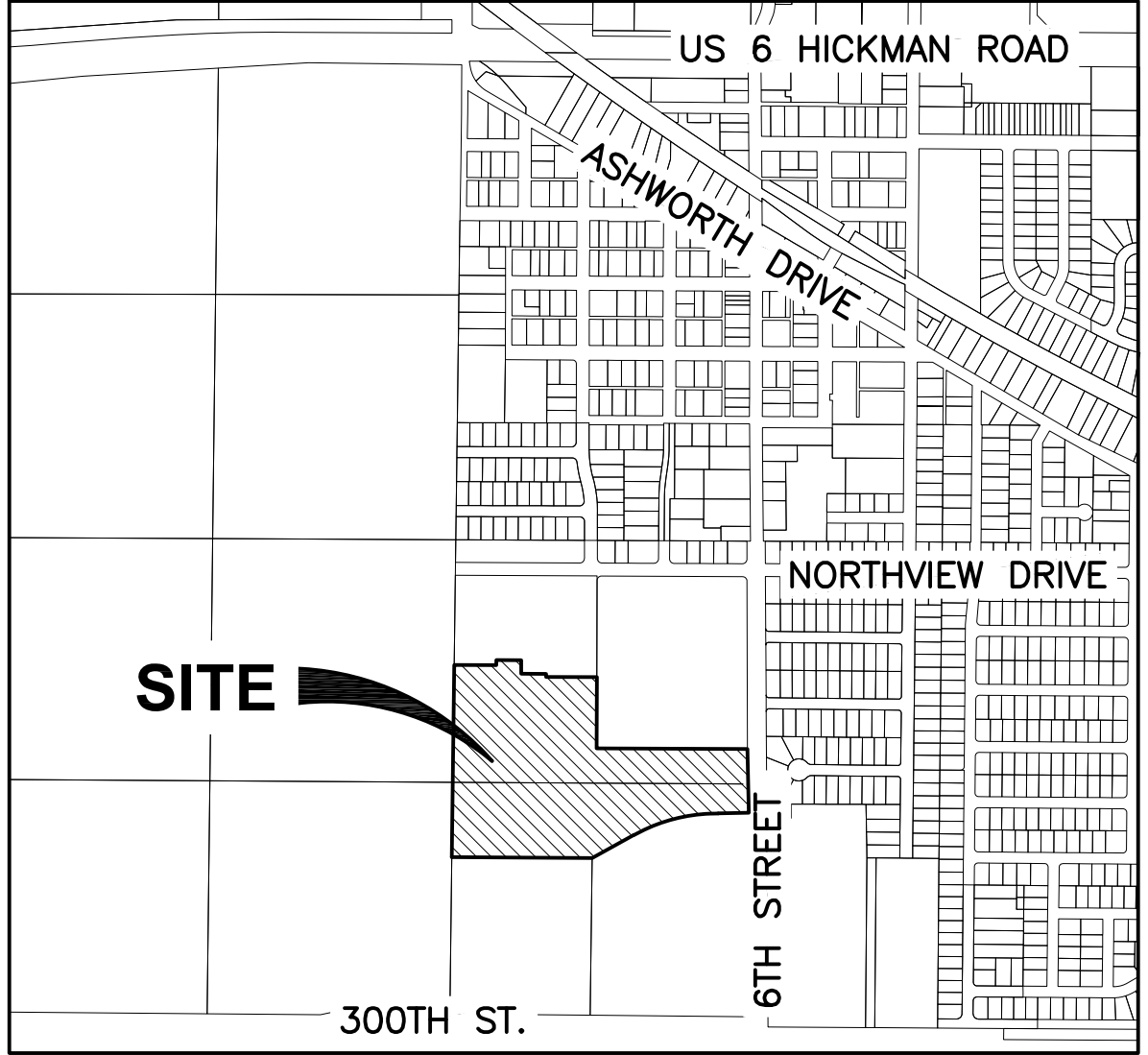
| DATE     | REVISIONS       |
|----------|-----------------|
| 08/01/17 | FINAL SUBMITTAL |
| 08/15/17 | 4TH SUBMITTAL   |
| 07/25/17 | 3RD SUBMITTAL   |
| 06/30/17 | 2ND SUBMITTAL   |
| 05/05/17 | 1ST SUBMITTAL   |

CLAYTON ESTATES PLAT 2

EROSION AND SEDIMENT CONTROL PLAN



VICINITY MAP  
NOT TO SCALE



STABILIZATION QUANTITIES

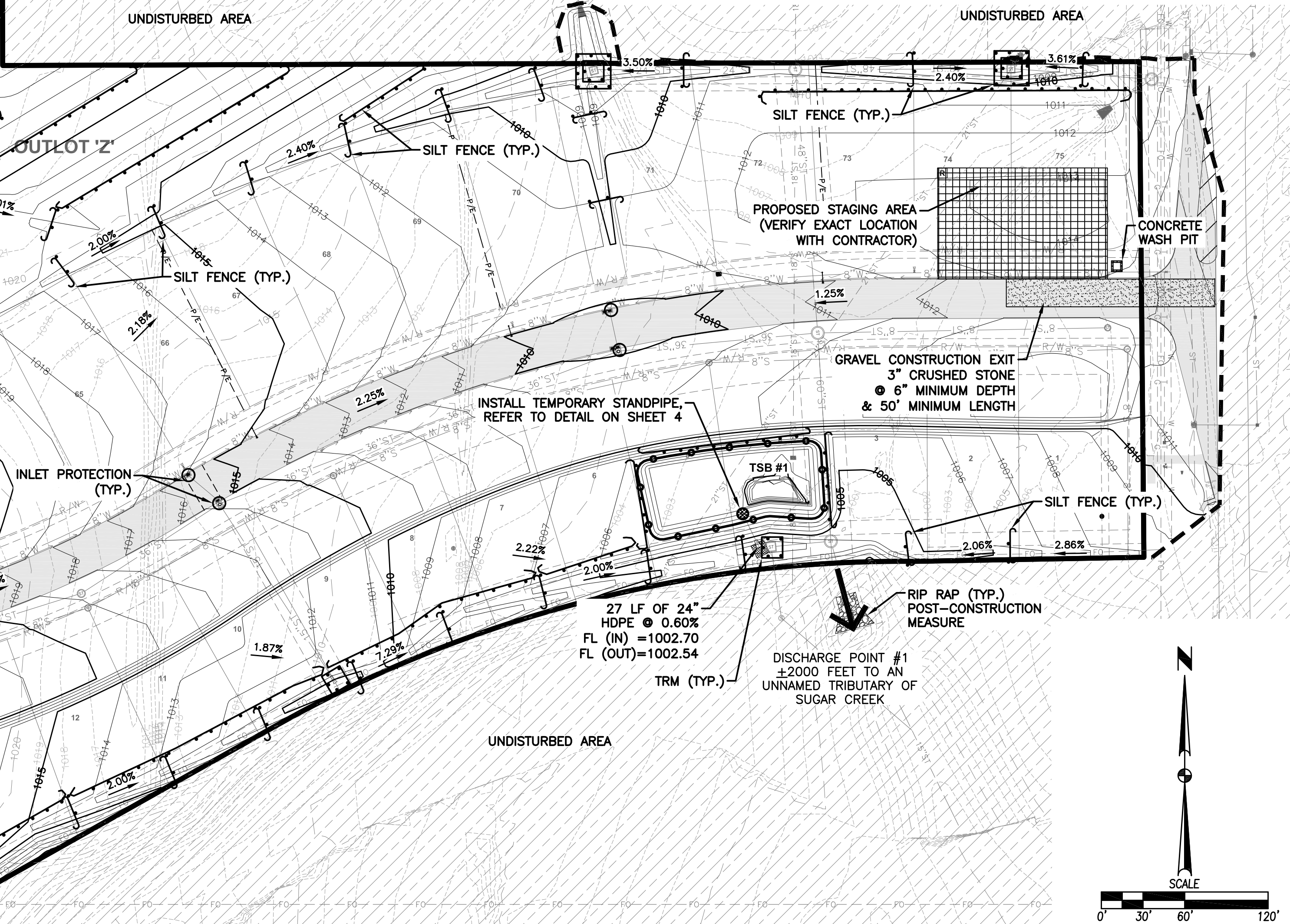
| ITEM NO. | ITEM                               | UNIT | TOTAL |
|----------|------------------------------------|------|-------|
| 1        | SILT FENCE                         | LF   | 7,296 |
| 2        | SEEDING, FERTILIZING, AND MULCHING | AC   | 23.57 |
| 3        | INLET PROTECTION DEVICES           | EA   | 25    |
| 4        | CONCRETE WASHOUT PIT               | EA   | 1     |
| 5        | CLASS 'E' RIP RAP                  | TON  | 45    |
| 6        | 24" HDPE TEMPORARY STANDPIPE       | EA   | 1     |

DISCHARGE POINT SUMMARY

|                                                                              |              |
|------------------------------------------------------------------------------|--------------|
| DISCHARGE POINT #1 TO AN UNNAMED TRIBUTARY OF SUGAR CREEK ±2000 FT           |              |
| TOTAL AREA DISTURBED TO DISCHARGE POINT                                      | 26.27 ACRES  |
| STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)                              | 94,572 CU FT |
| VOLUME PROVIDED IN TSB #1                                                    | 14,641 CU FT |
| VOLUME PROVIDED IN SILT FENCE (7,296 LF @ CALC. AVG. 11.3 CU FT/LF OF FENCE) | 82,445 CU FT |
| TOTAL VOLUME PROVIDED                                                        | 97,086 CU FT |

NOTES

1. THE TEMPORARY SEDIMENT BASIN ON LOTS 4 AND 5 WILL NEED TO REMAIN IN PLACE UNTIL 80% OF THE LOTS ARE DEVELOPED FOR CLAYTON ESTATES PLATS 1 AND 2.



SWPPP LEGEND

- DRAINAGE ARROW
- GRADING LIMITS
- FILTER SOCK
- SILT FENCE
- INLET PROTECTION
- PORTABLE RESTROOM
- CONCRETE WASHOUT PIT
- TEMPORARY STANDPIPE
- UNDISTURBED AREA
- RIPRAP
- GRAVEL ENTRANCE
- STAGING AREA

DATE  
08/31/17  
08/15/17  
07/25/17  
06/30/17  
05/05/17

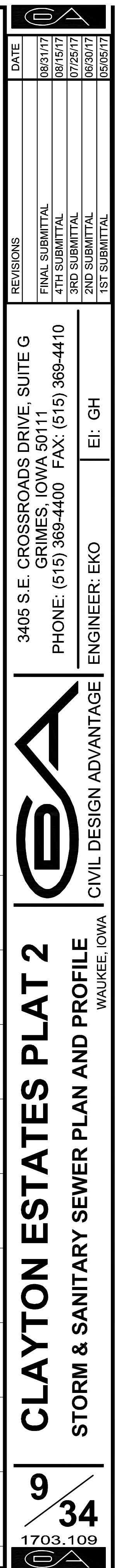
REVISIONS  
FINAL SUBMITTAL  
4TH SUBMITTAL  
3RD SUBMITTAL  
2ND SUBMITTAL  
1ST SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PHONE: (515) 369-4400 FAX: (515) 369-4410  
ENGINEER: EKO  
EII: GH

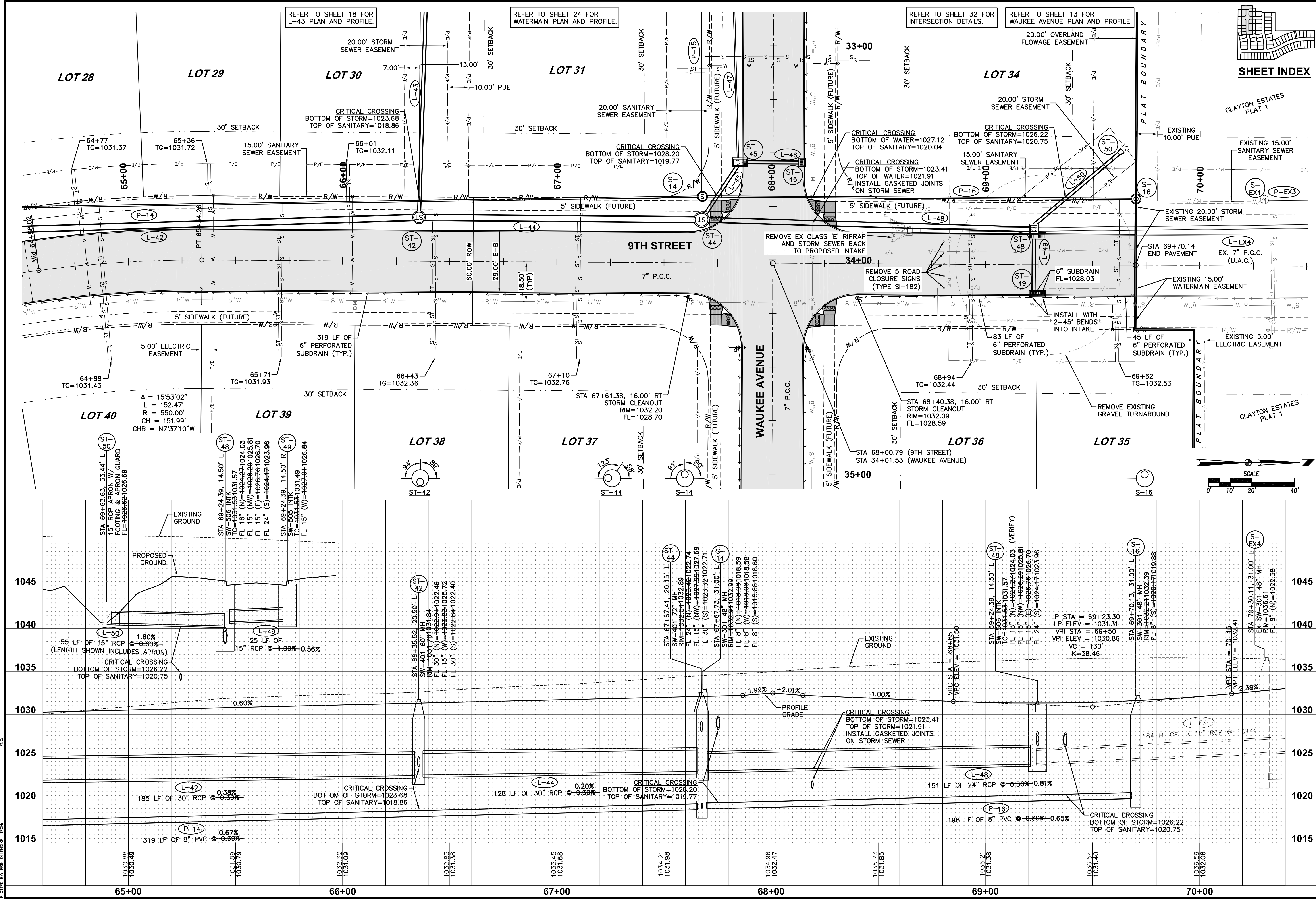
CIVIL DESIGN ADVANTAGE  
WAUKEE, IOWA

CLAYTON ESTATES PLAT 2  
EROSION AND SEDIMENT CONTROL PLAN

8  
34  
1703.109



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DATE: 8/12/2016 12:13 PM  
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PLOT: 1703109-RIP - STORM AND SANITARY - ASBUILT.DWG

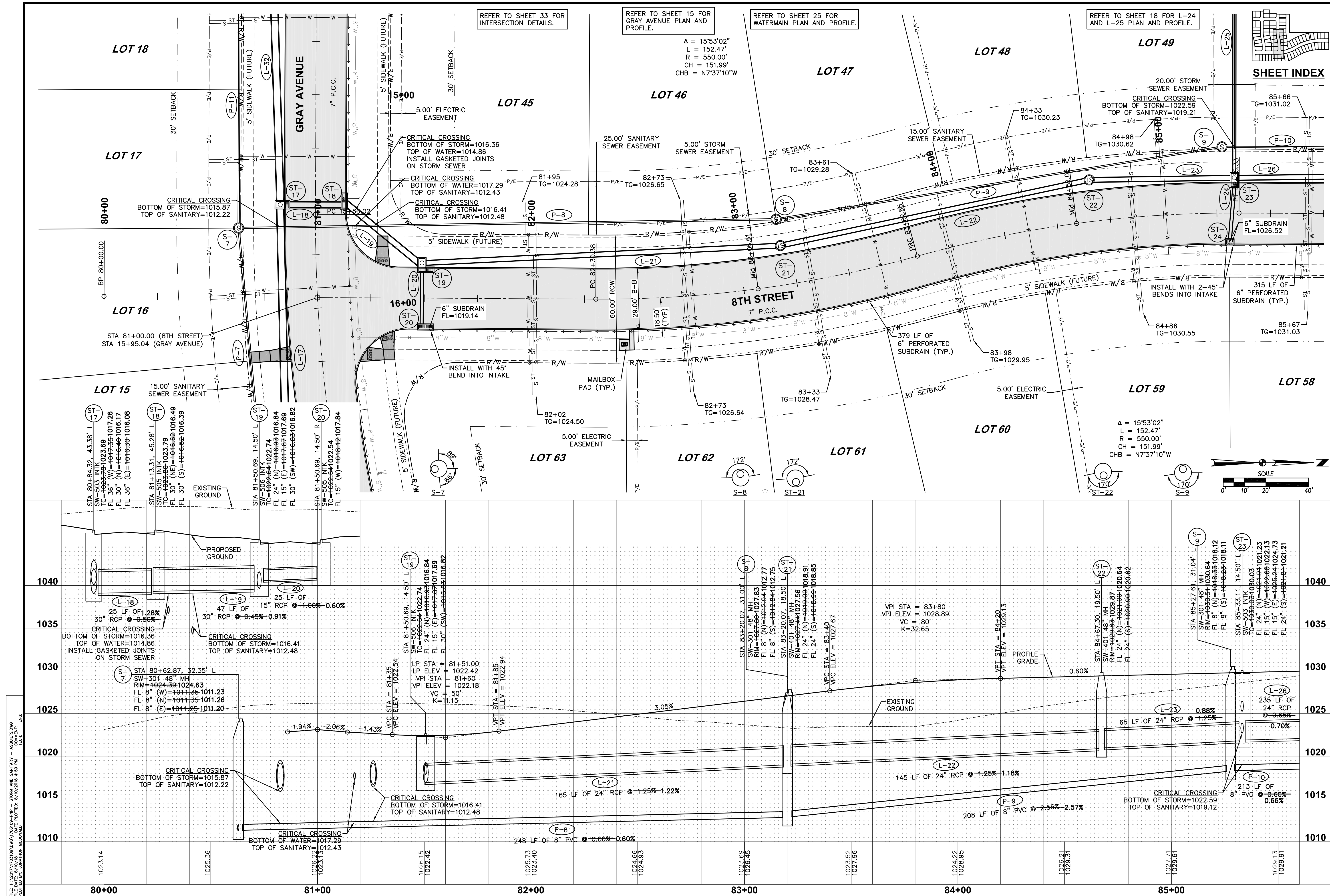


| DATE     | REVISIONS       | ENGINEER |
|----------|-----------------|----------|
| 08/11/17 | FINAL SUBMITTAL | EI: GH   |
| 08/15/17 | 4TH SUBMITTAL   |          |
| 07/25/17 | 3RD SUBMITTAL   |          |
| 06/30/17 | 2ND SUBMITTAL   |          |
| 05/05/17 | 1ST SUBMITTAL   |          |

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

**CLAYTON ESTATES PLAT 2**  
STORM & SANITARY SEWER PLAN AND PROFILE  
WAUKEE, IOWA

10/34  
34  
1703.109





**11/34**  
1703.109

**CLAYTON ESTATES PLAT 2**

**STORM & SANITARY SEWER PLAN AND PROFILE**

WAUKEE, IOWA



**CIVIL DESIGN ADVANTAGE**

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

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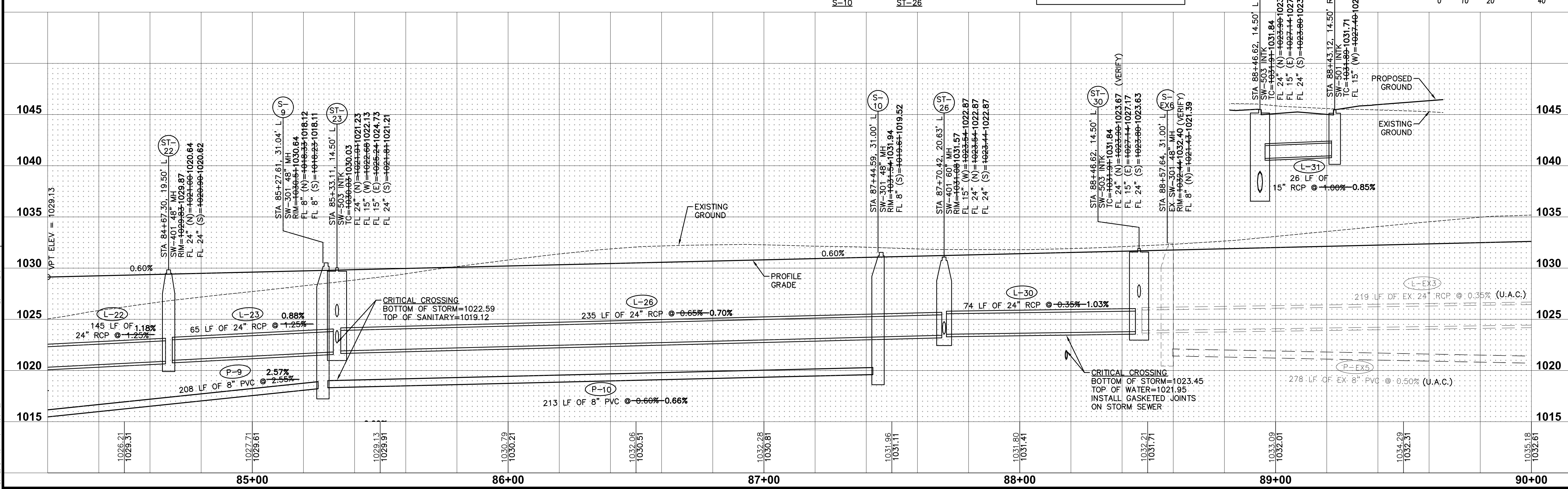
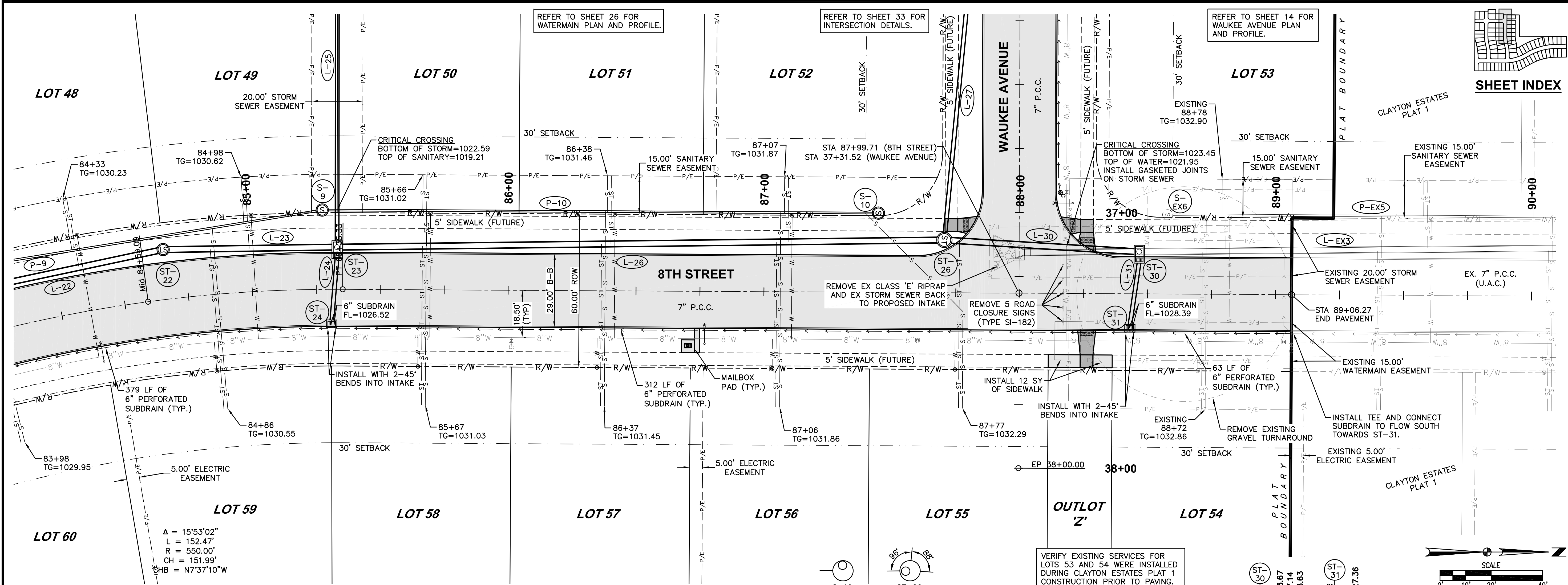
ENGINEER: EKO

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EI: GH

| REVISIONS       |  | DATE     |
|-----------------|--|----------|
| FINAL SUBMITTAL |  | 08/31/17 |
| 4TH SUBMITTAL   |  | 09/15/17 |
| 3RD SUBMITTAL   |  | 07/25/17 |
| 2ND SUBMITTAL   |  | 06/30/17 |
| 1ST SUBMITTAL   |  | 05/05/17 |

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| REVISIONS |                 |
|-----------|-----------------|
| DATE      | DESCRIPTION     |
| 08/01/17  | FINAL SUBMITTAL |
| 08/15/17  | 4TH SUBMITTAL   |
| 07/25/17  | 3RD SUBMITTAL   |
| 06/30/17  | 2ND SUBMITTAL   |
| 05/05/17  | 1ST SUBMITTAL   |

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

ENGINEER: EKO  
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**CLAYTON ESTATES PLAT 2**  
STORM & SANITARY SEWER PLAN AND PROFILE  
WAUKEE, IOWA

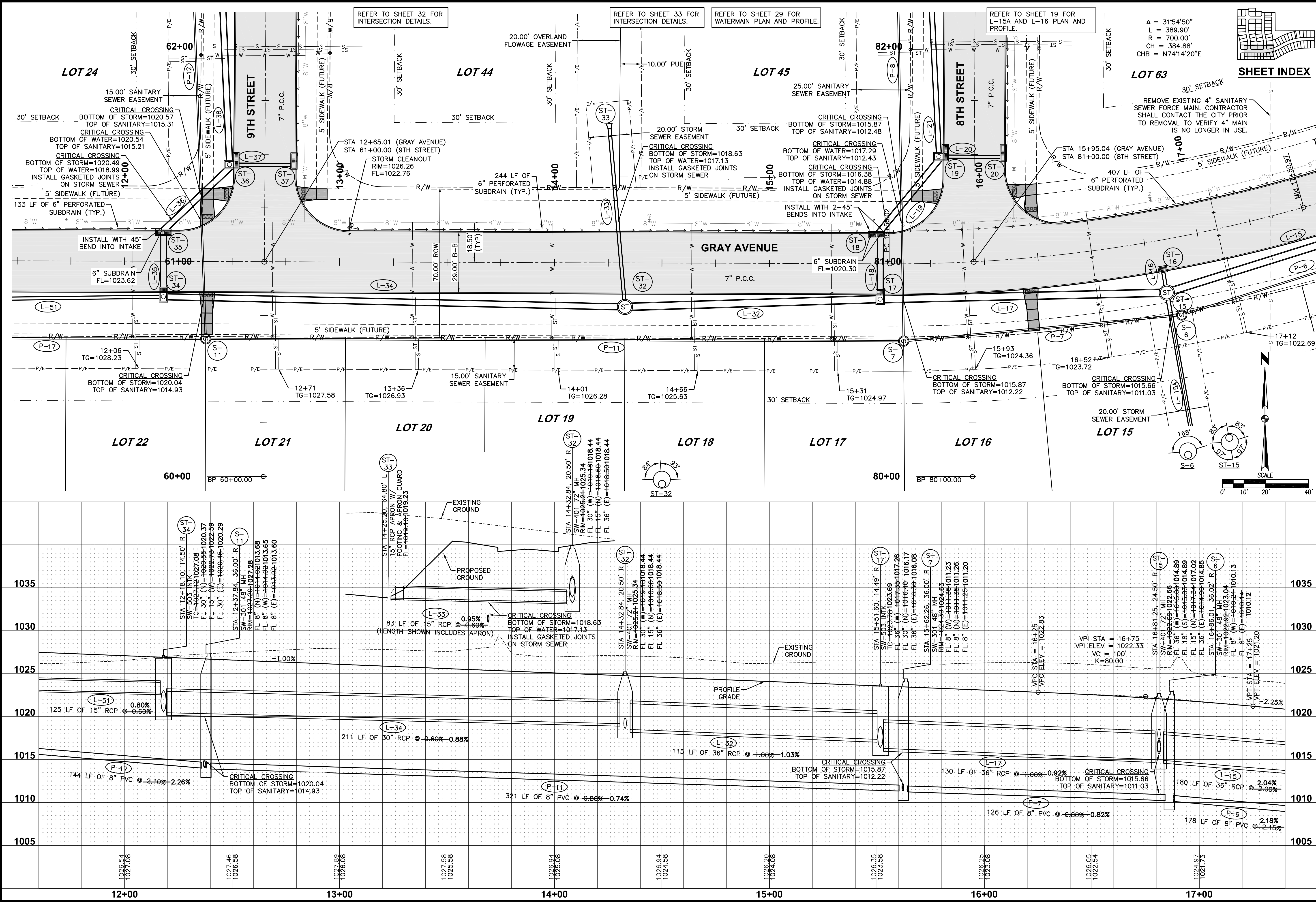
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 $L = 389.90'$   
 $R = 700.00'$   
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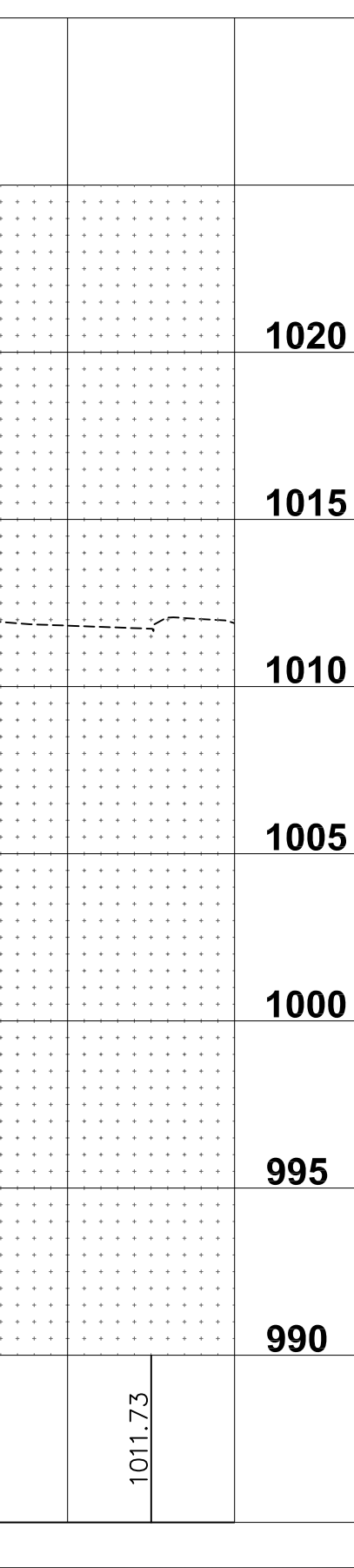
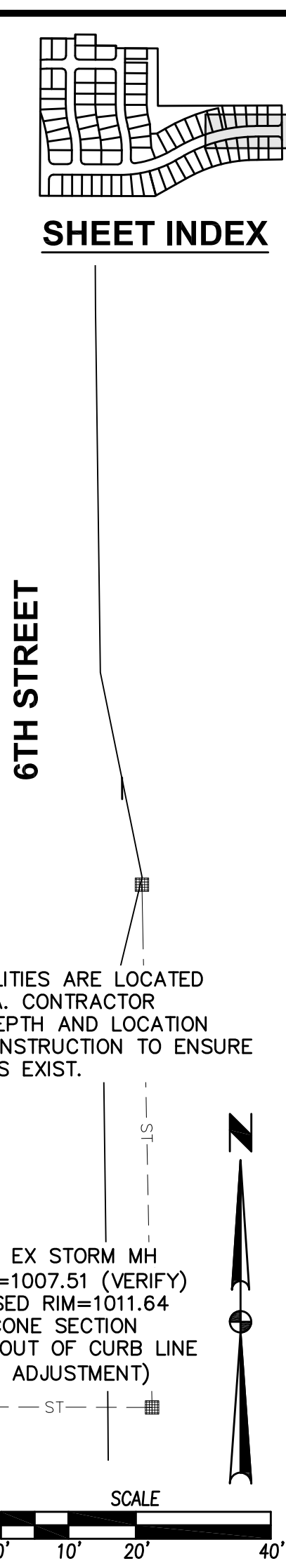
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| 07/25/17  | 2ND SUBMITTAL   |
| 06/30/17  | 3RD SUBMITTAL   |
| 05/05/17  | 1ST SUBMITTAL   |

3405 S.E. CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PHONE: (515) 369-4400 FAX: (515) 369-4410  
ENGINEER: EKO  
EI: GH

**CLAYTON ESTATES PLAT 2**  
STORM & SANITARY SEWER PLAN AND PROFILE  
WAUKEE, IOWA

**15/34**  
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# CLAYTON ESTATES PLAT 2

## STORM & SANITARY SEWER PLAN AND PROFILE

WAUKEE, IOWA

### CIVIL DESIGN ADVANTAGE

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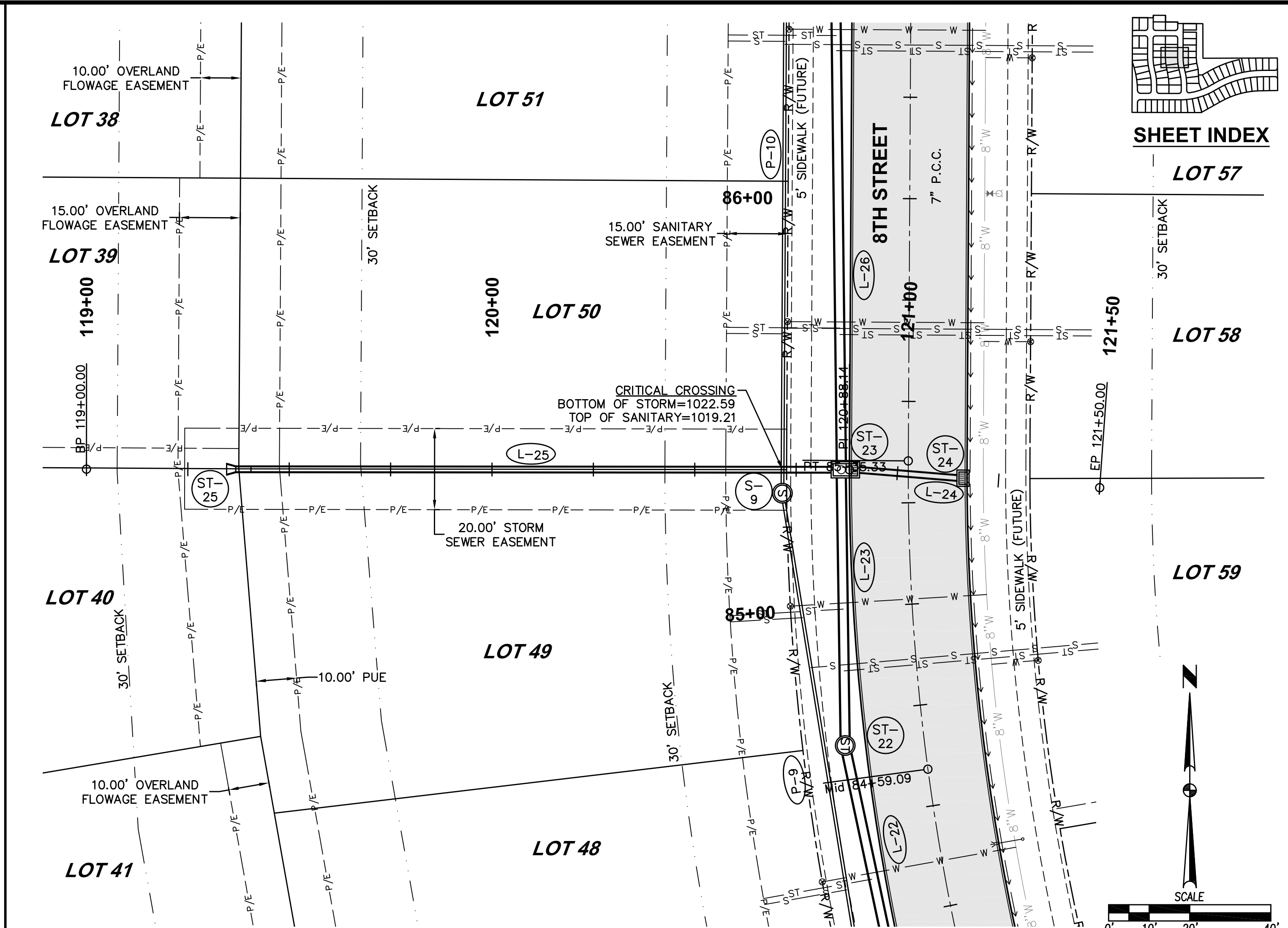
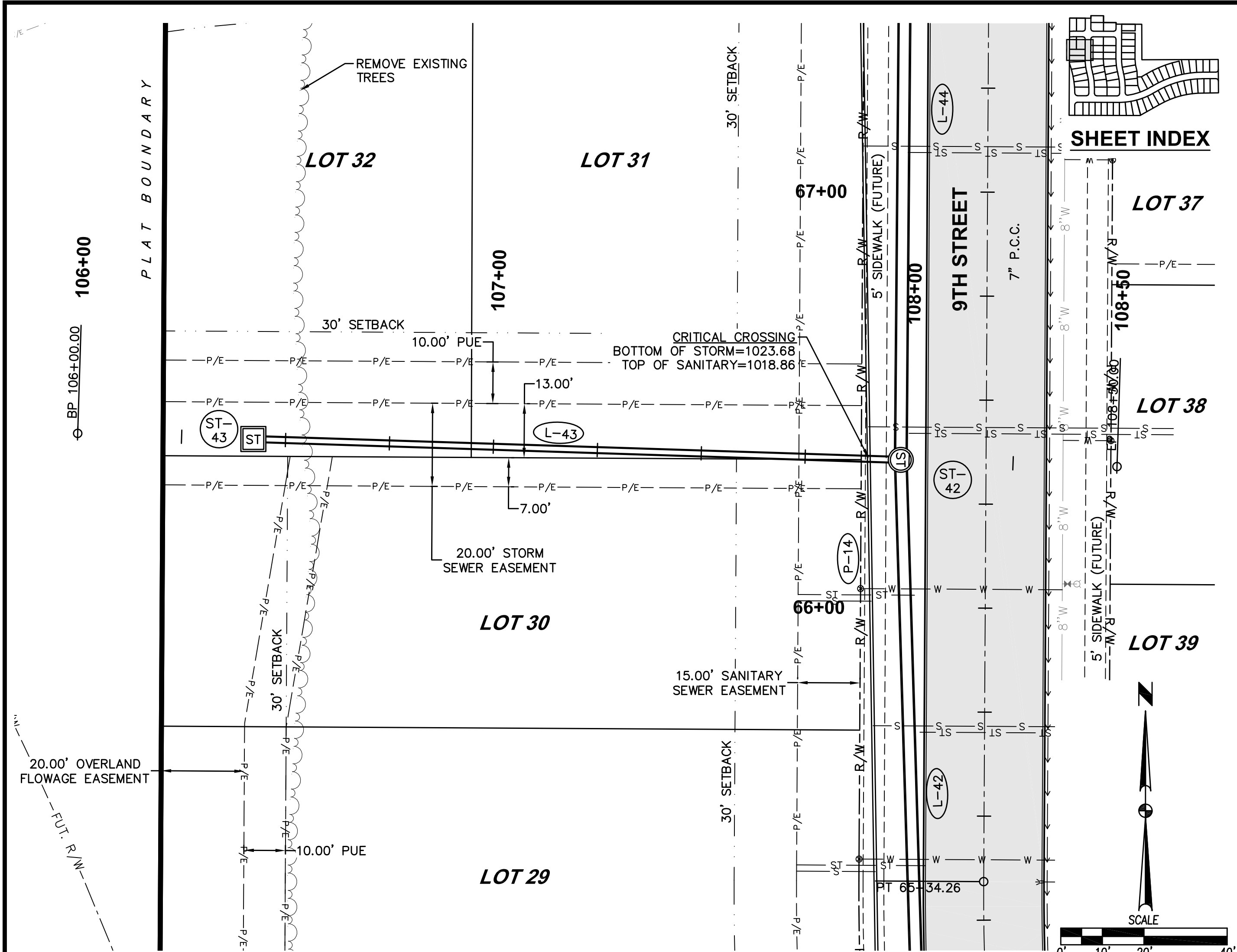
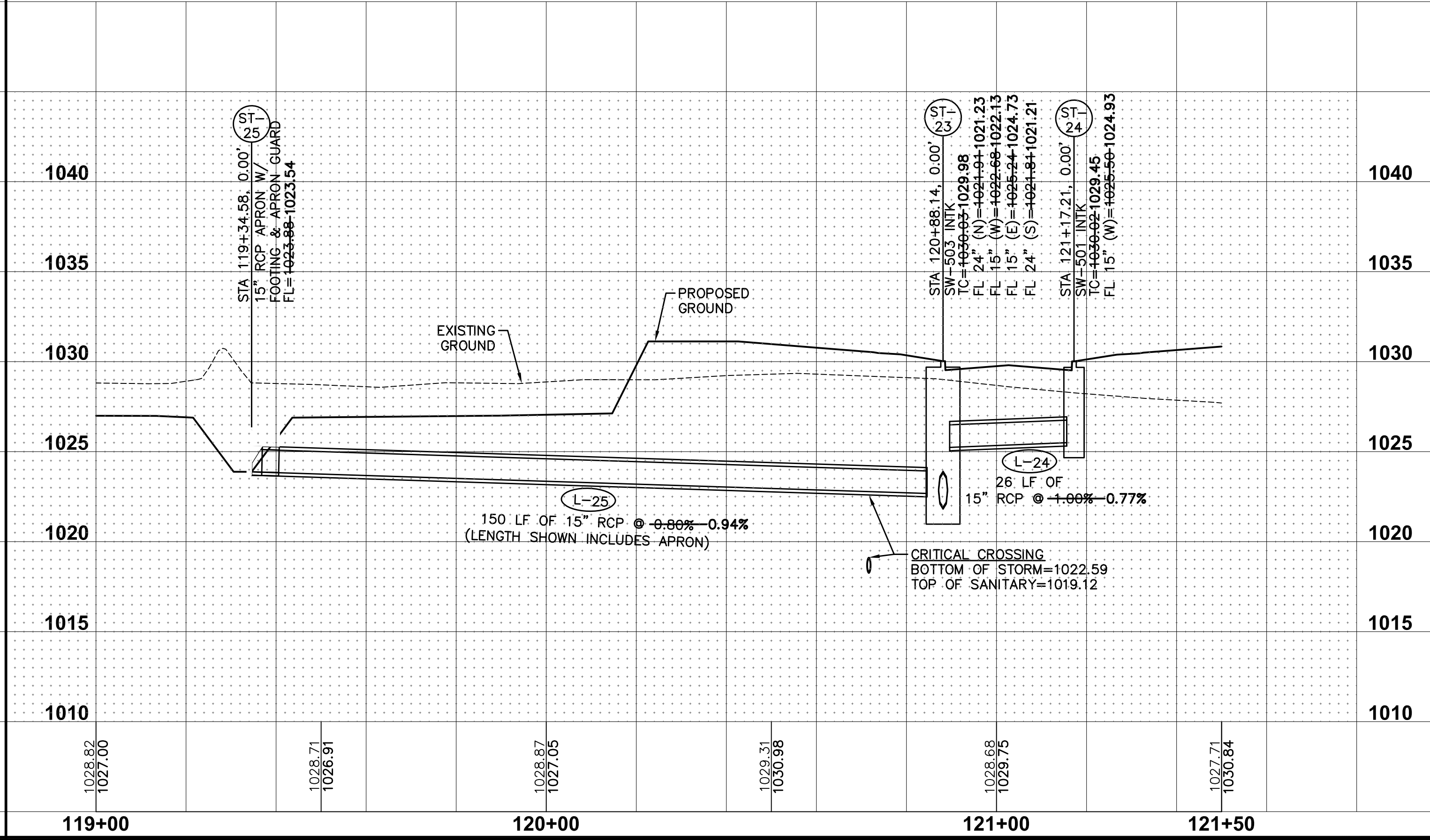
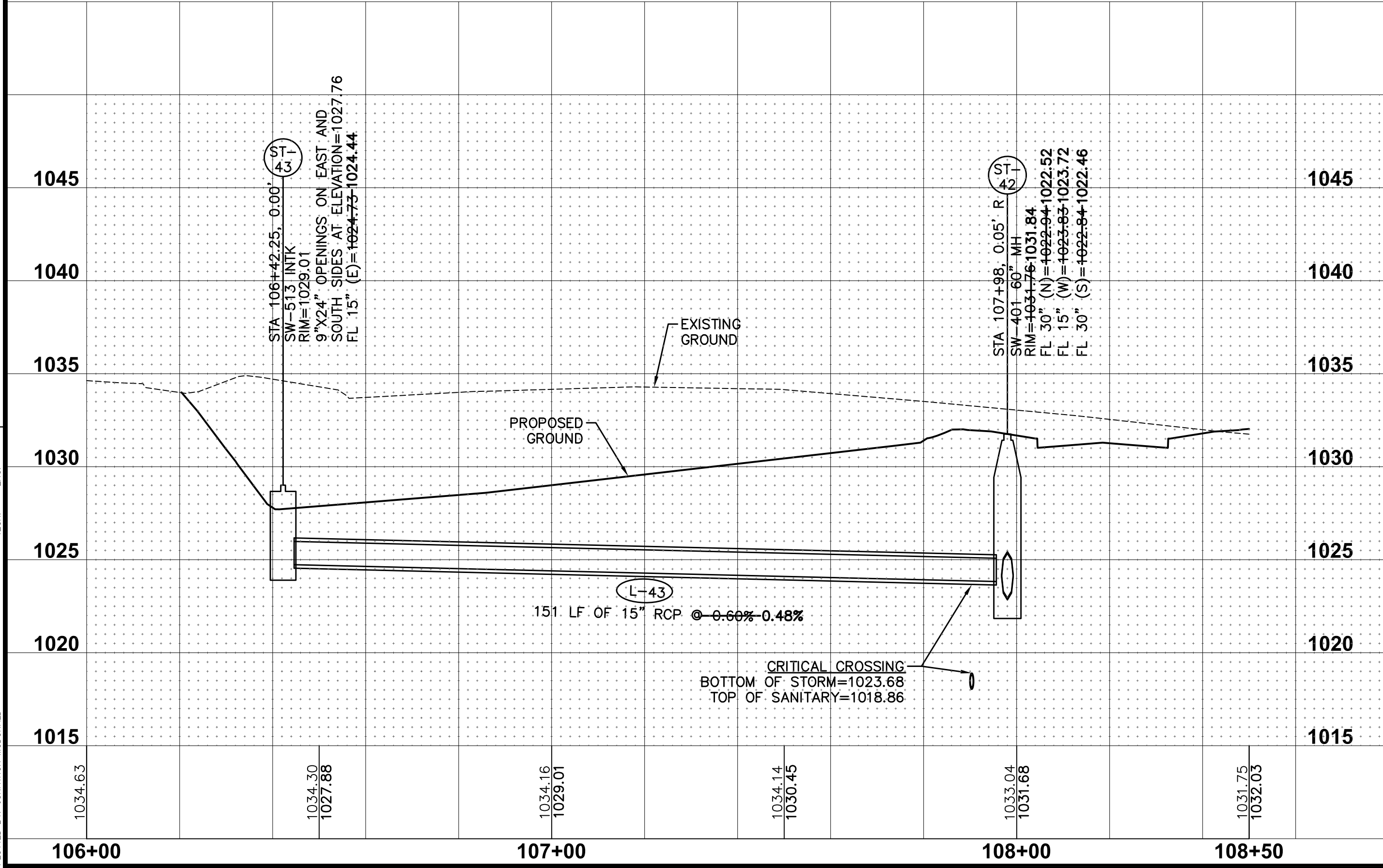
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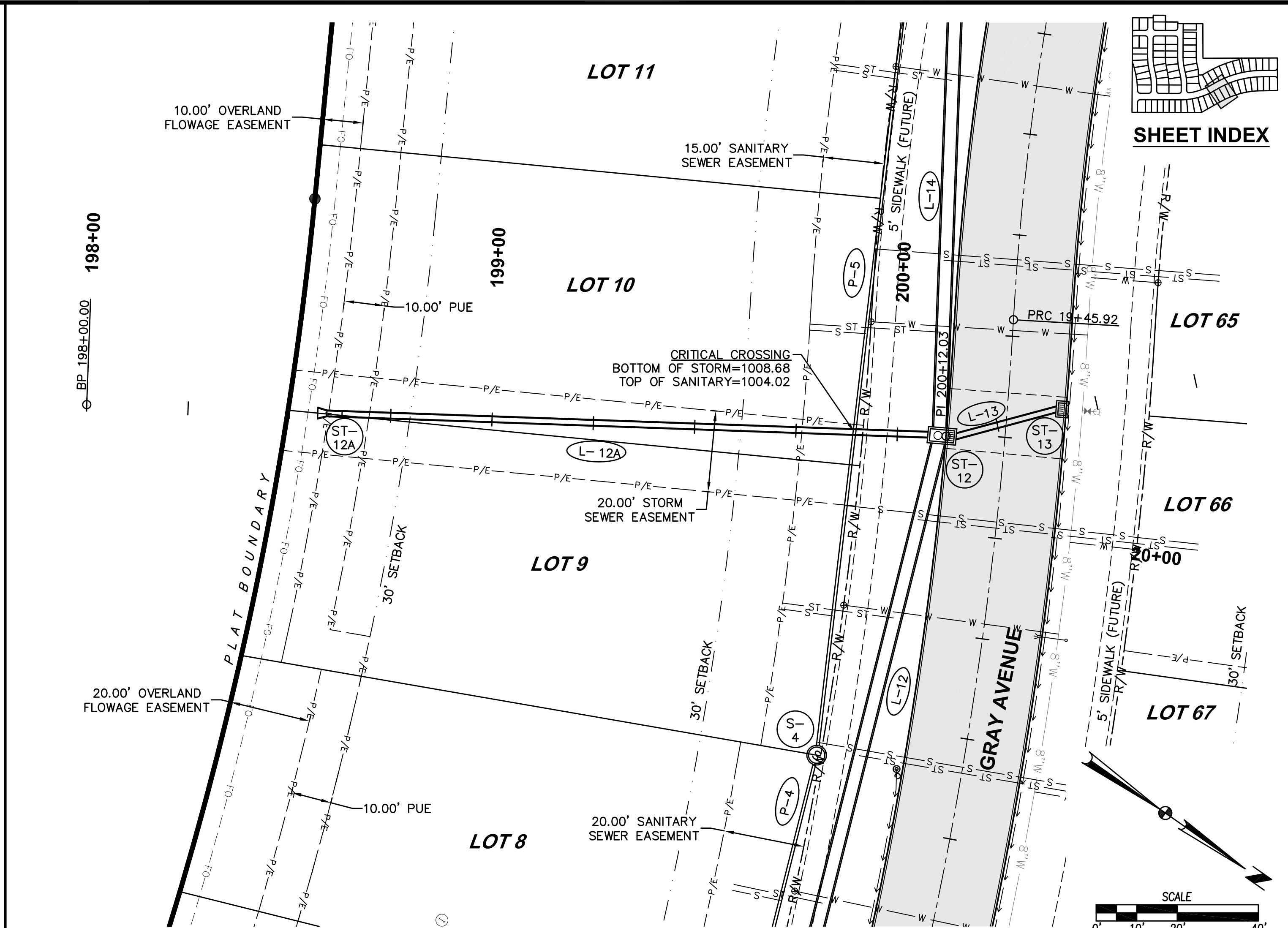
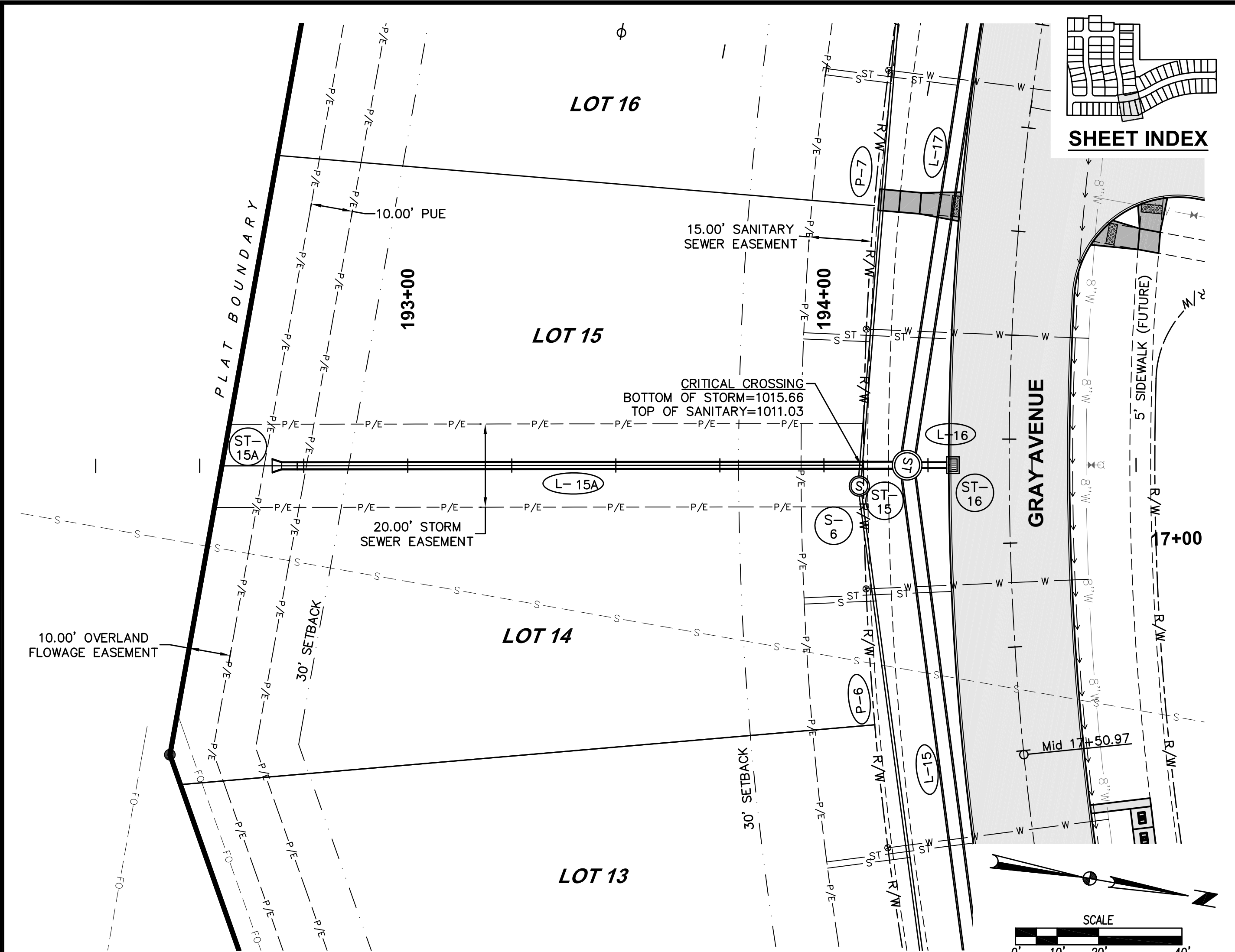
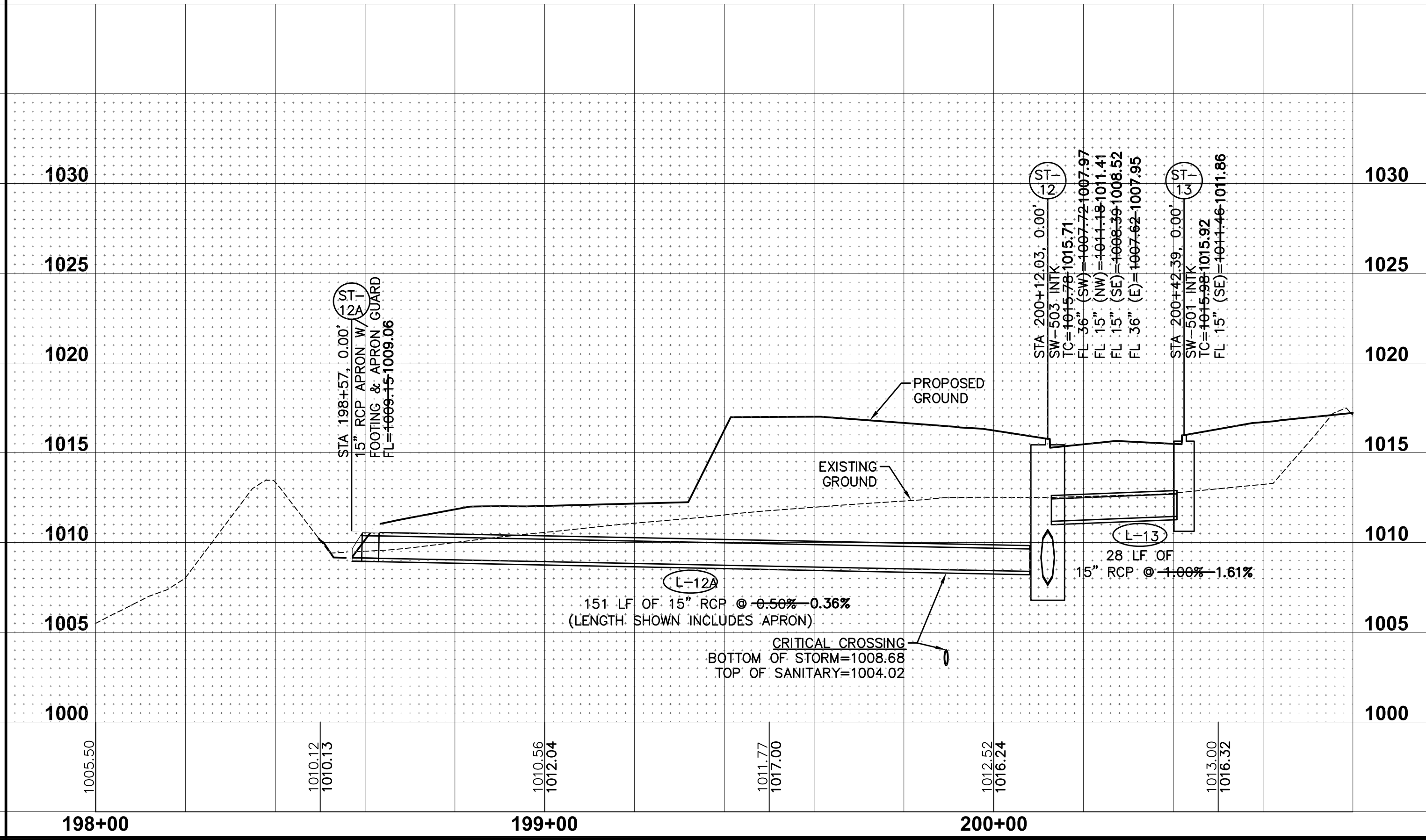
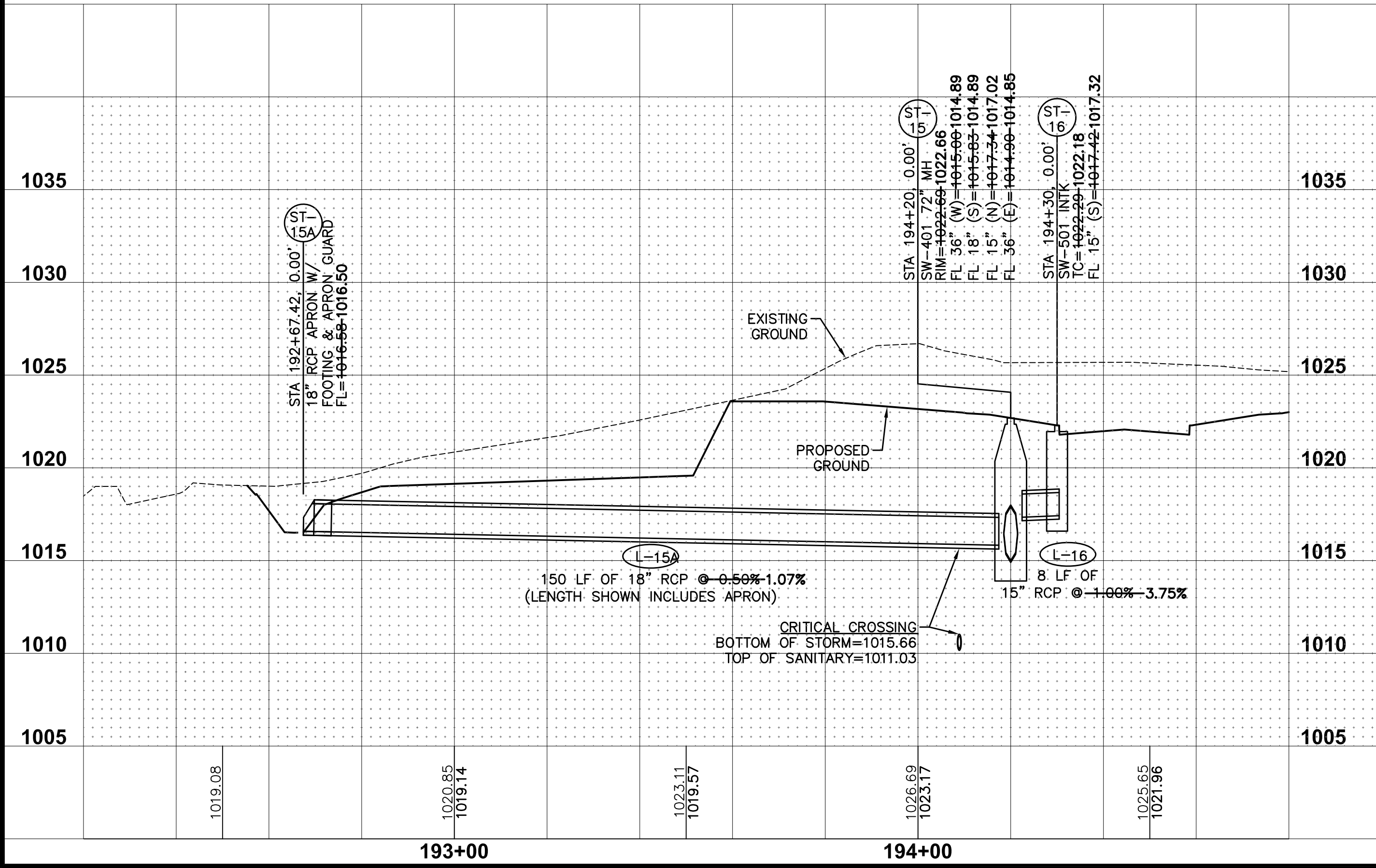
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| 08/15/17 | 4TH SUBMITTAL   |
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| 05/05/17 | 1ST SUBMITTAL   |

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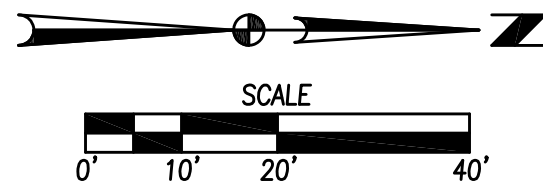
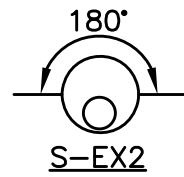


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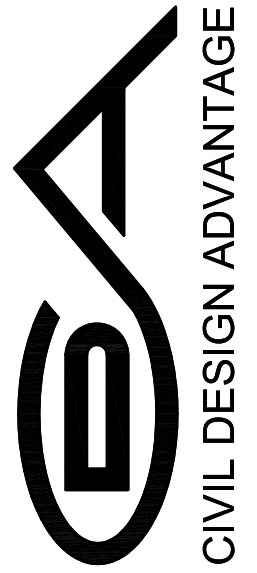




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| 1ST SUBMITTAL   | 05/05/17 |

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| ENGINEER: EKO | EI: GH |
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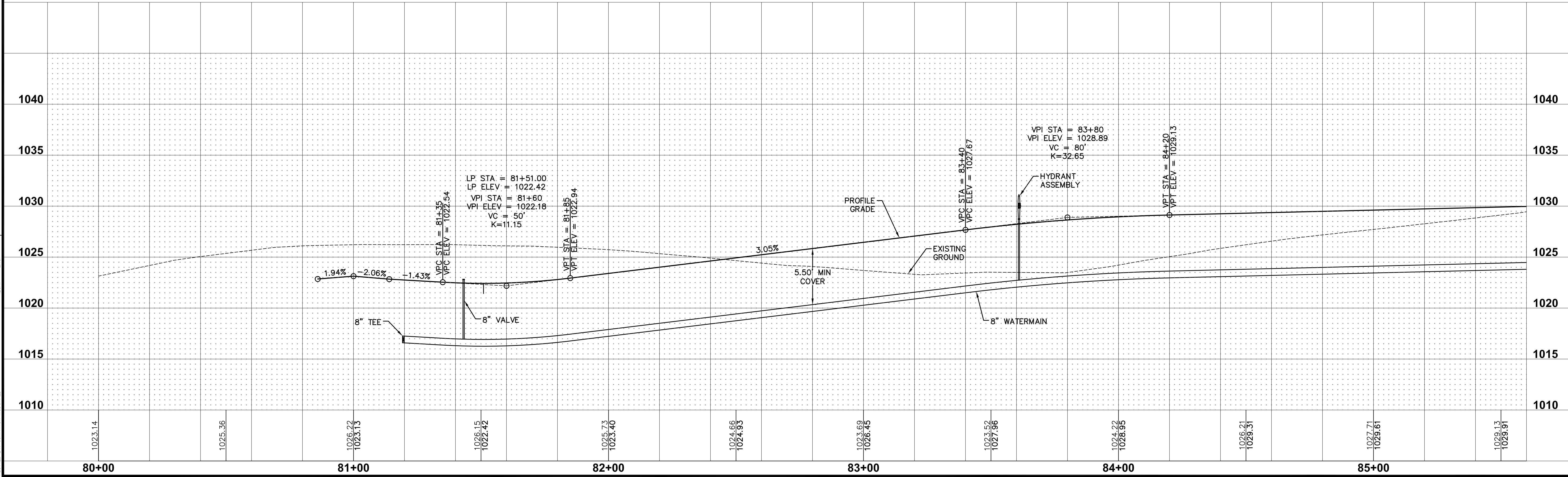


# CLAYTON ESTATES PLAT 2





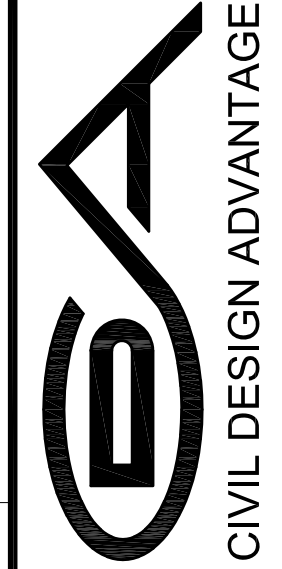
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| 08/15/17 | 4TH SUBMITTAL   |
| 07/25/17 | 3RD SUBMITTAL   |
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EI: GH



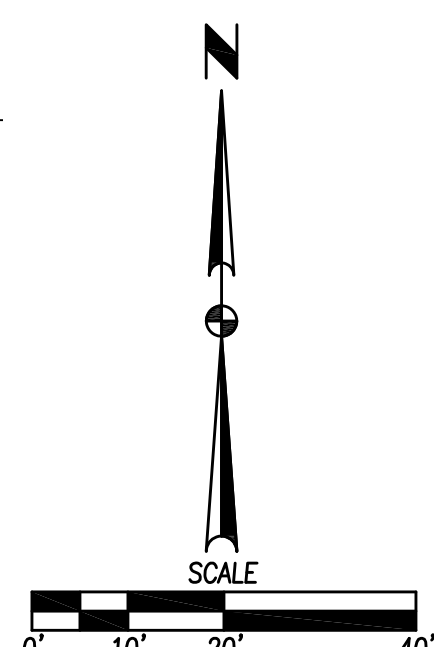
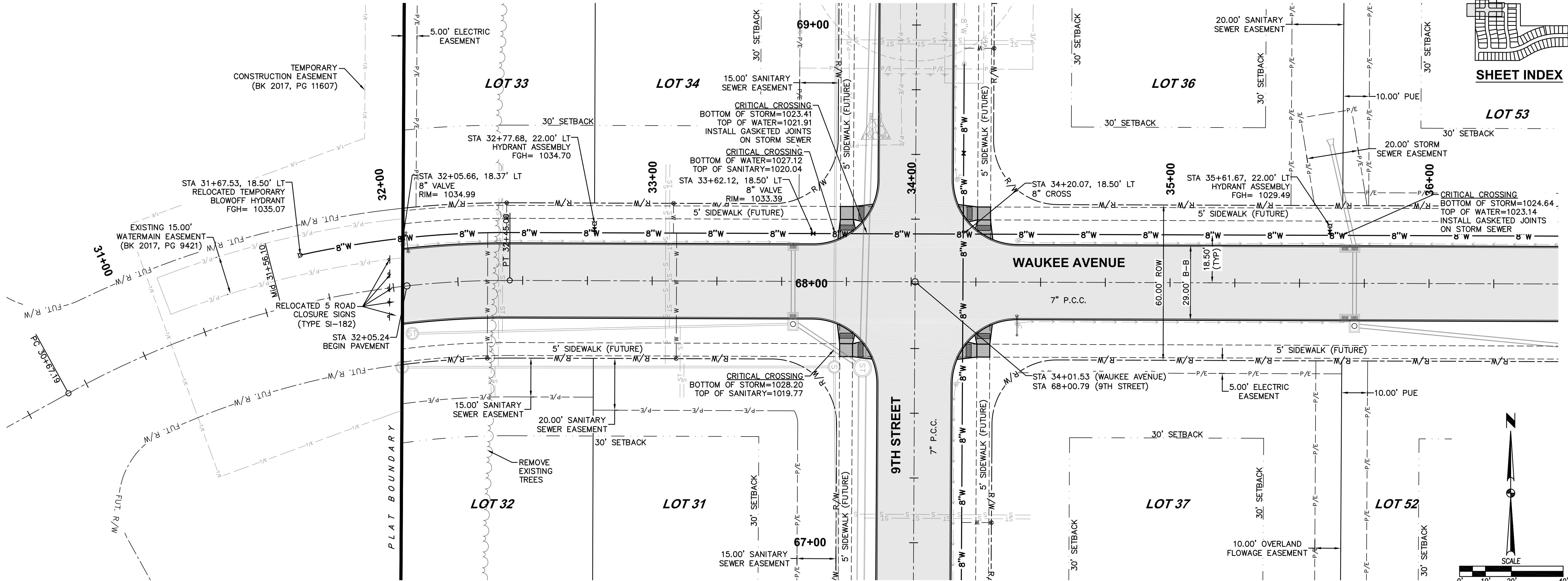
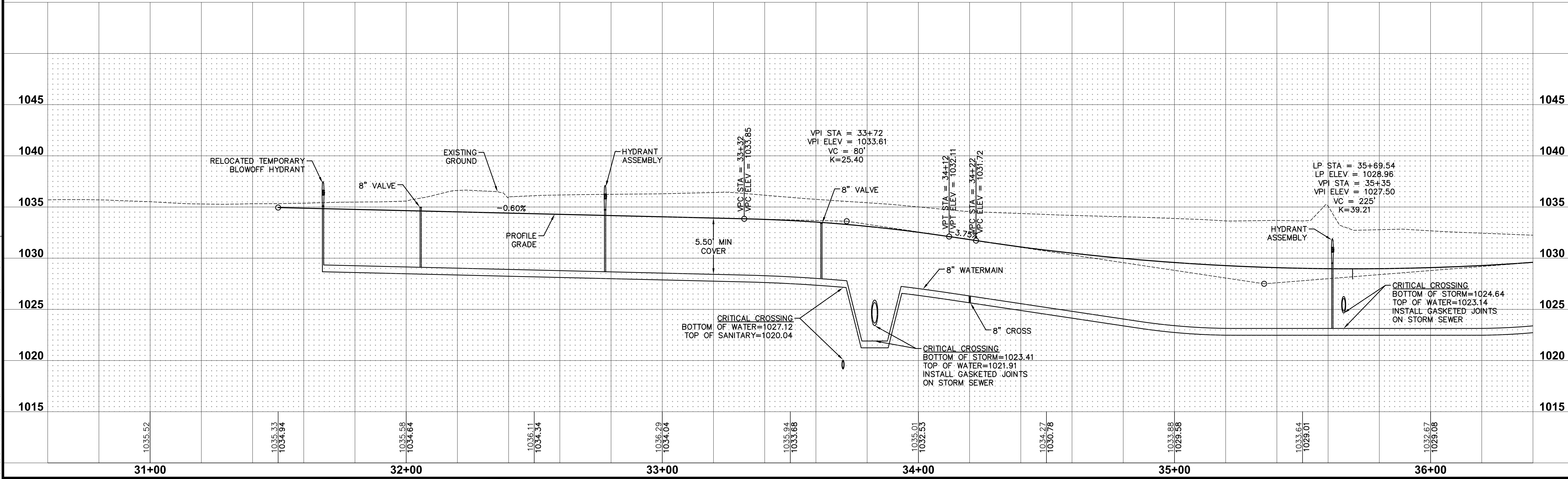
WAUKEE, IOWA

## CLAYTON ESTATES PLAT 2

### WATERMAIN PLAN AND PROFILE



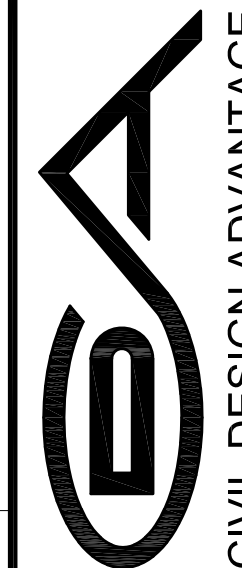
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PLOTED BY: JAVANTION MCDONALD  
DATE: 08/01/17  
08/15/17  
07/25/17  
06/30/17  
05/05/17



# CLAYTON ESTATES PLAT 2

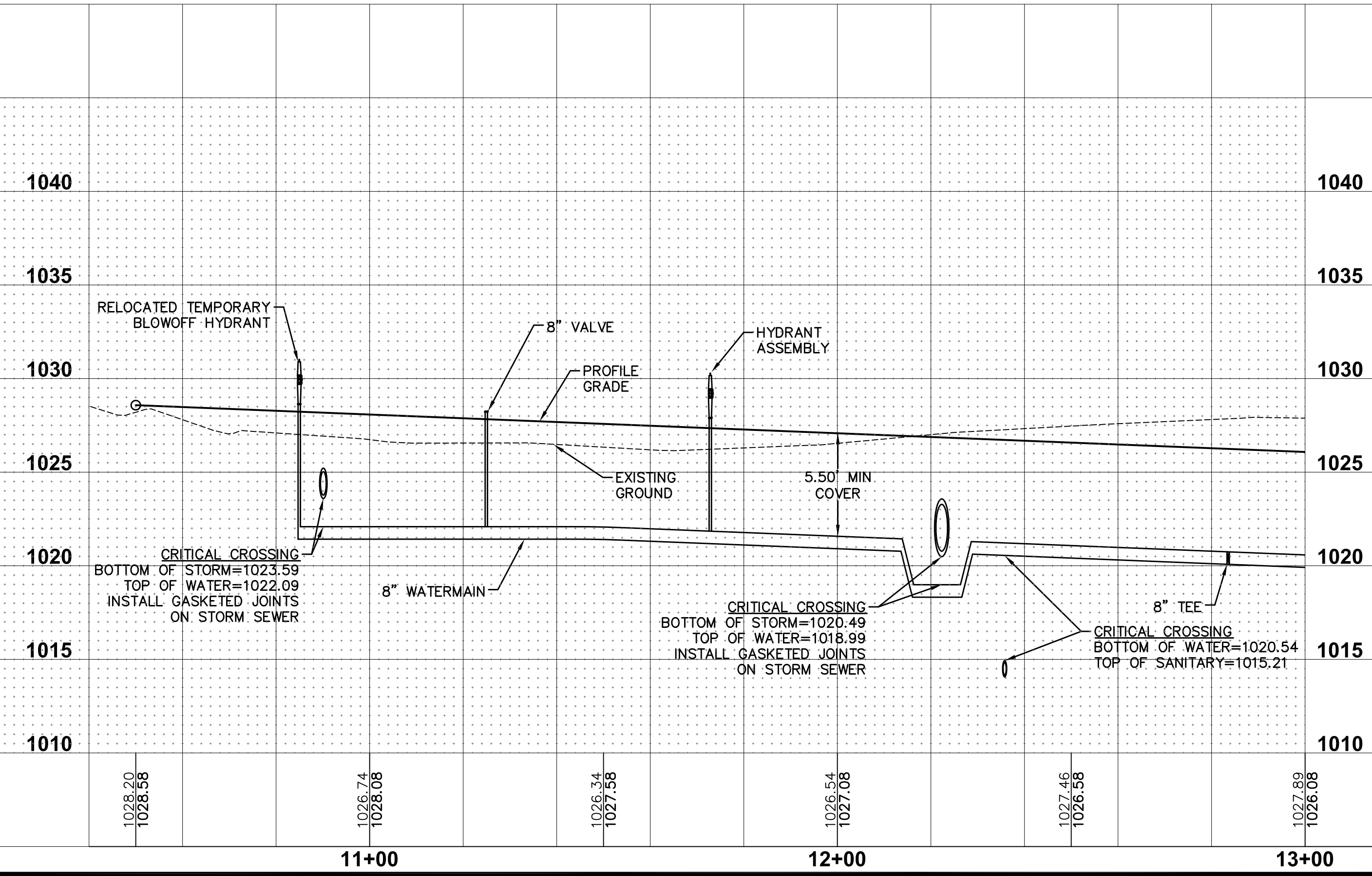
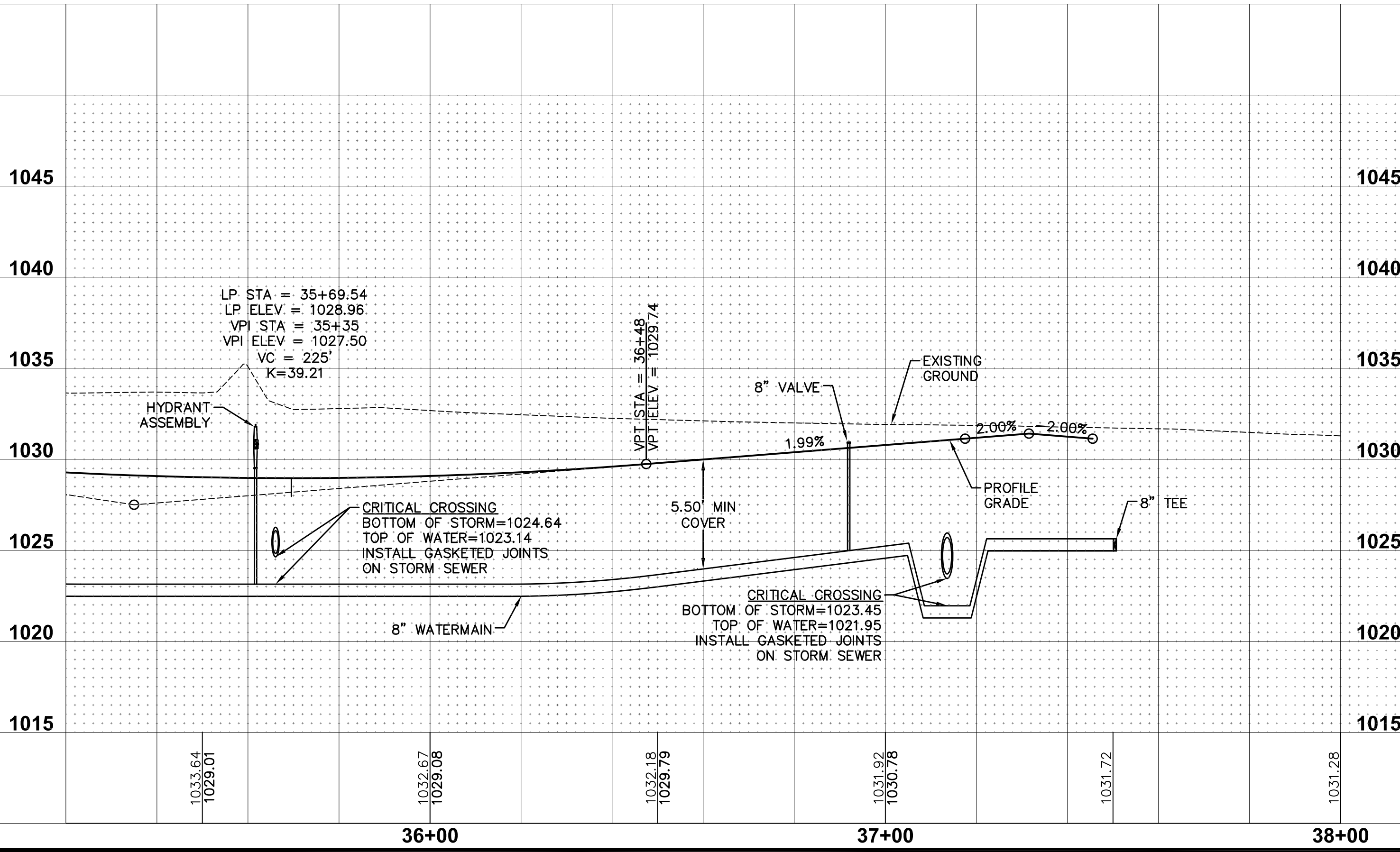
## WATERMAIN PLAN AND PROFILE

3405 S.E. CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PHONE: (515) 369-4400 FAX: (515) 369-4410  
ENGINEER: EKO  
EII: GH



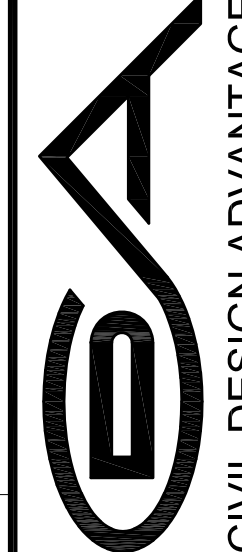
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|----------|-----------------|
| 08/01/17 | FINAL SUBMITTAL |
| 08/15/17 | 4TH SUBMITTAL   |
| 07/25/17 | 3RD SUBMITTAL   |
| 06/30/17 | 2ND SUBMITTAL   |
| 05/05/17 | 1ST SUBMITTAL   |

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PLotted BY: JAVANION MCDONALD  
DATE: 08/15/17  
3RD SUBMITTAL  
06/30/17  
1ST SUBMITTAL  
05/05/17



CLAYTON ESTATES PLAT 2  
WATERMAIN PLAN AND PROFILE

WATERMAIN DWS  
PLotted BY: JAVANION MCDONALD  
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3RD SUBMITTAL  
06/30/17  
1ST SUBMITTAL  
05/05/17

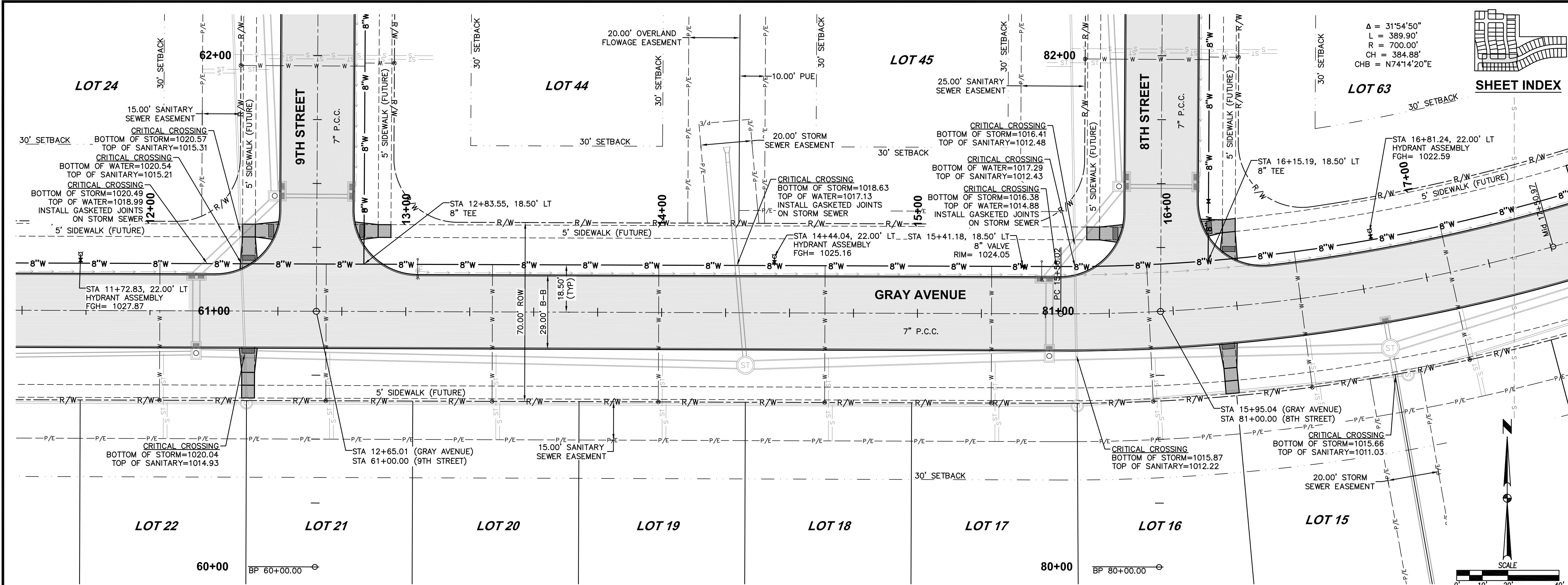


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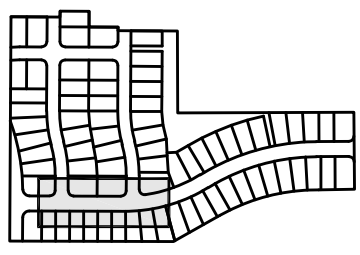
REVISIONS  
FINAL SUBMITTAL  
4TH SUBMITTAL  
3RD SUBMITTAL  
2ND SUBMITTAL  
1ST SUBMITTAL

DATE  
08/15/17  
08/15/17  
07/25/17  
06/30/17  
05/05/17

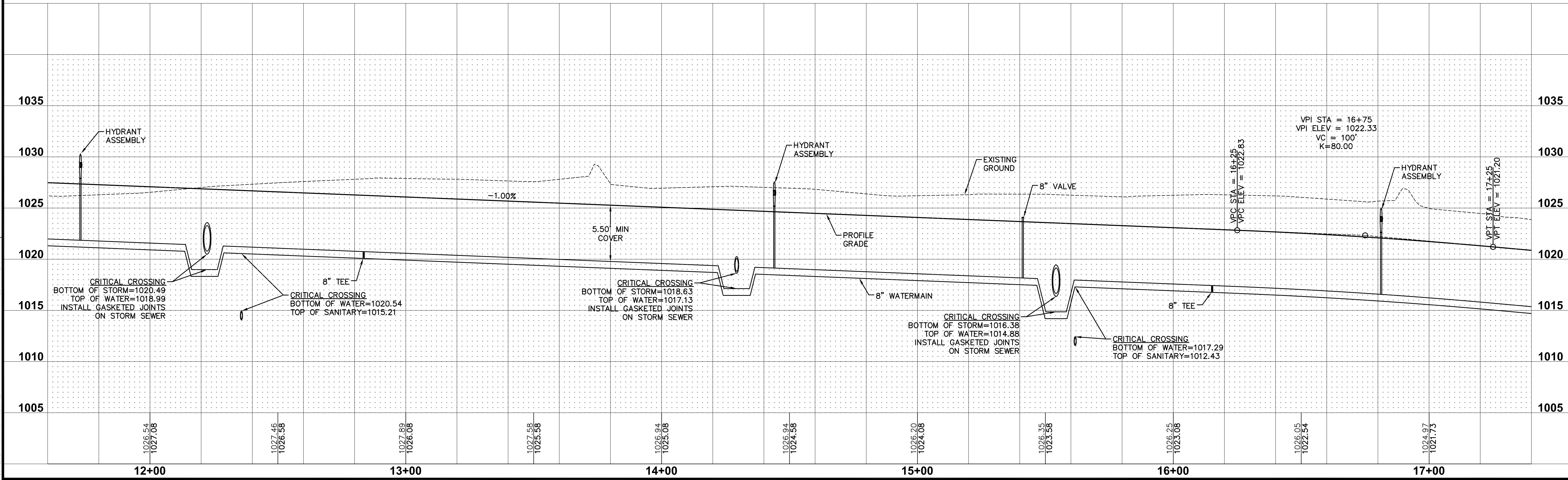
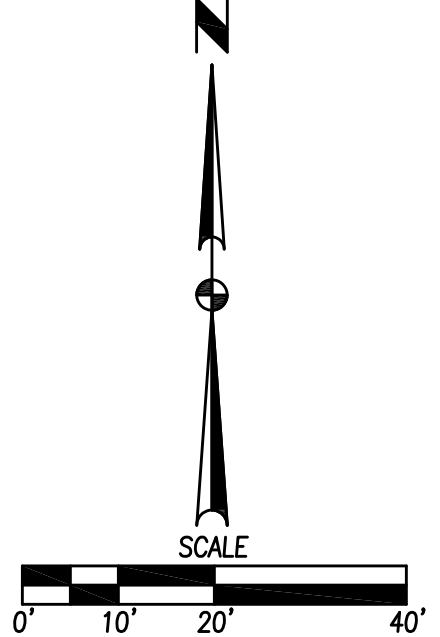
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PLOTED BY: JAVANION MCDONALD



$\Delta = 31^{\circ}54'50''$   
 $L = 389.90'$   
 $R = 700.00'$   
 $CH = 384.88'$   
 $CHB = N74^{\circ}14'20''E$



SHEET INDEX



| DATE     |                 |
|----------|-----------------|
| 08/31/17 | FINAL SUBMITTAL |
| 08/15/17 | 4TH SUBMITTAL   |
| 07/25/17 | 3RD SUBMITTAL   |
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E.I.: GH

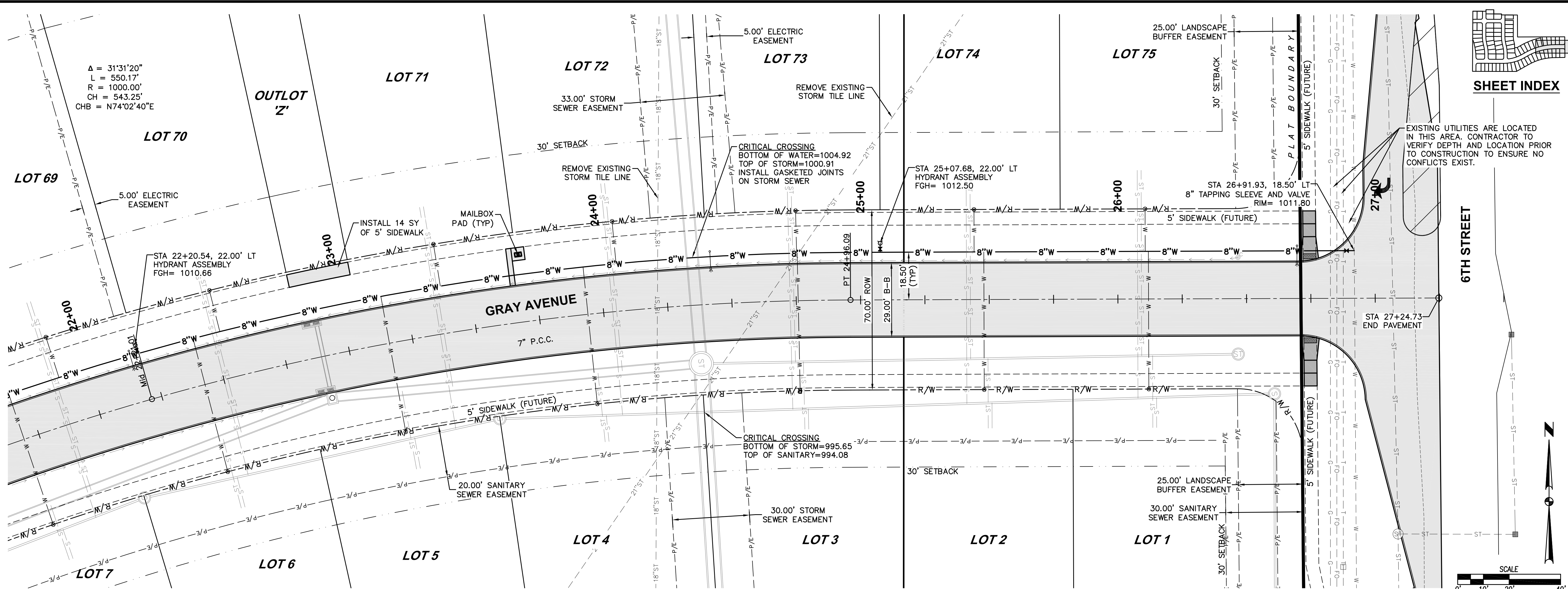
**CLAYTON ESTATES PLAT 2**  
WATERMAIN PLAN AND PROFILE

WAUKEE, IOWA

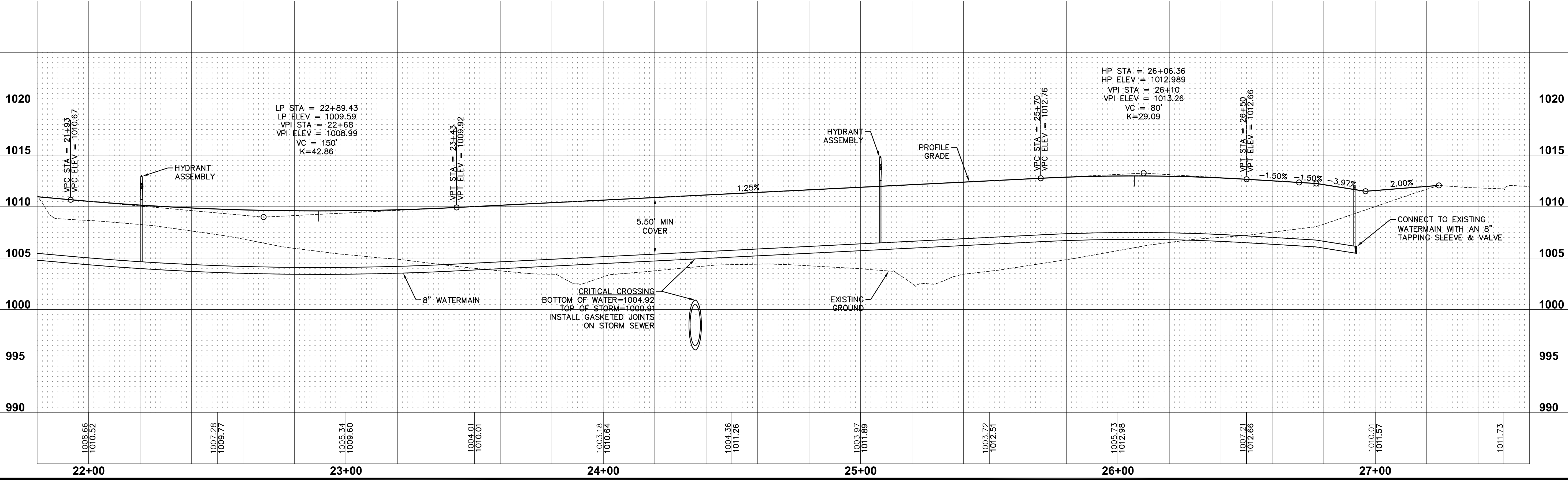
29/34  
1703.109



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6TH STREET



| REVISIONS |                 |
|-----------|-----------------|
| DATE      | REVISIONS       |
| 08/31/17  | FINAL SUBMITTAL |
| 08/15/17  | 4TH SUBMITTAL   |
| 07/25/17  | 3RD SUBMITTAL   |
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ENGINEER: EKO  
Ei: GH

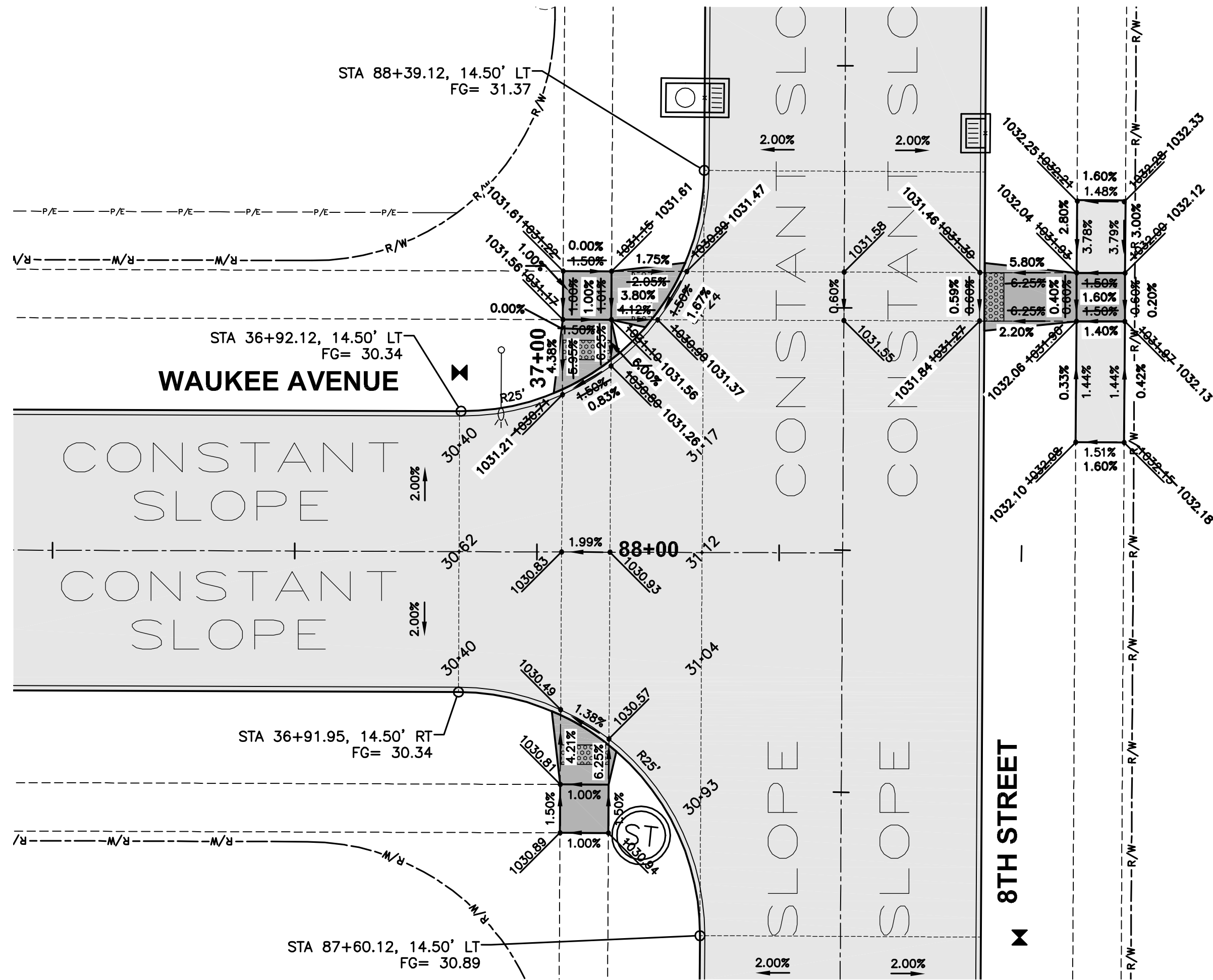
**CLAYTON ESTATES PLAT 2**  
WATERMAIN PLAN AND PROFILE  
WAUKEE, IOWA

31/34  
1703.109

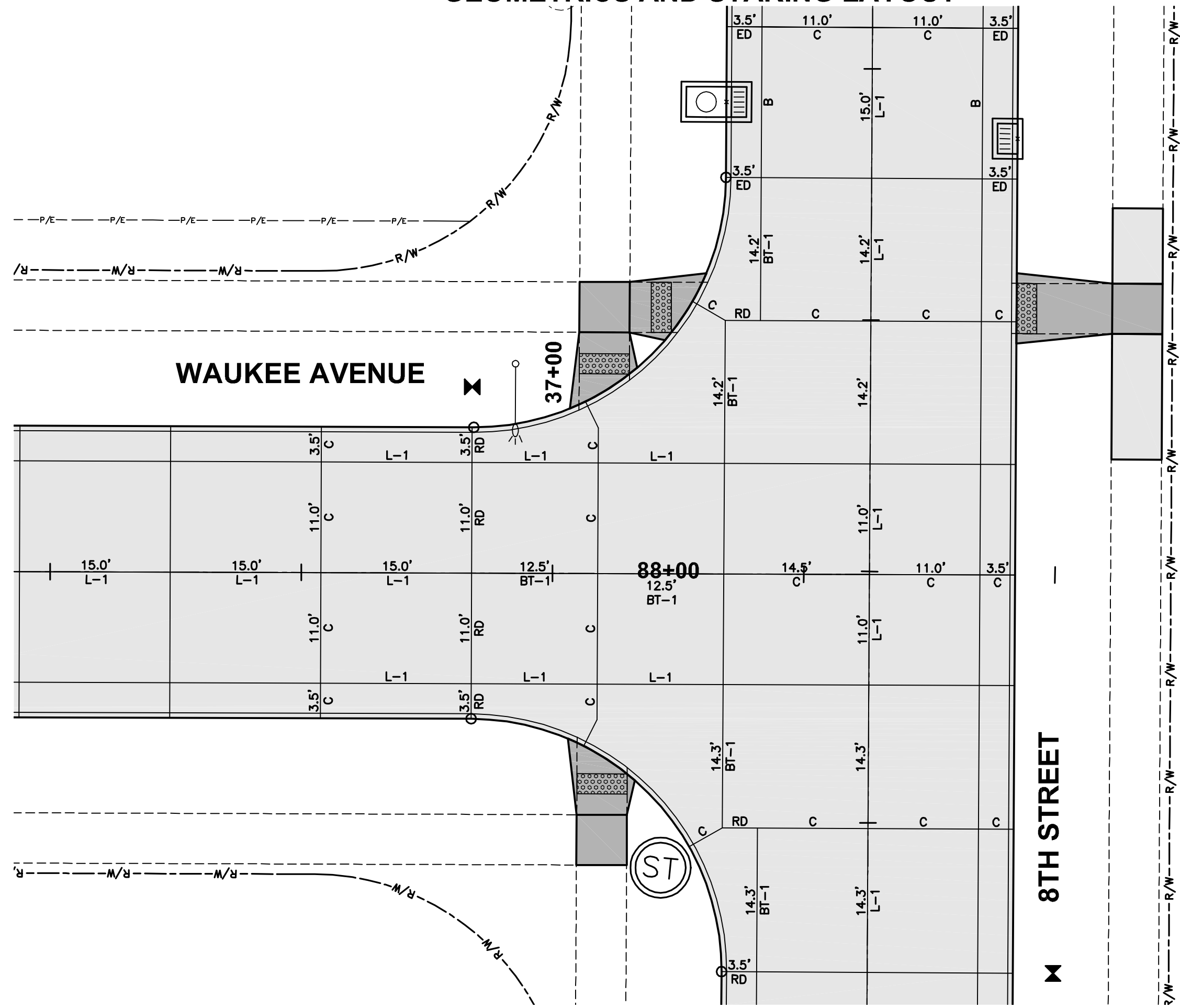


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COMMENTS:  
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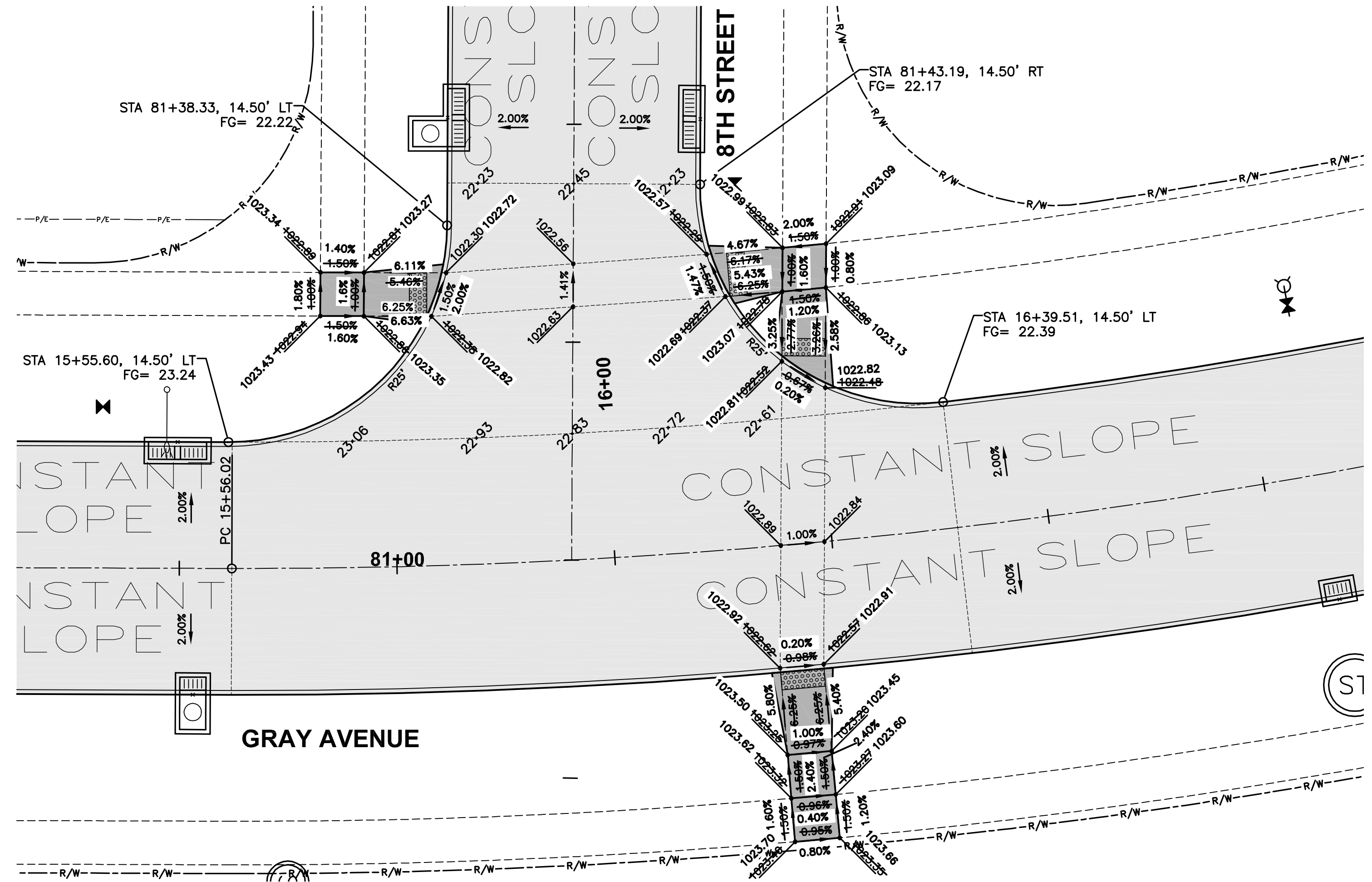
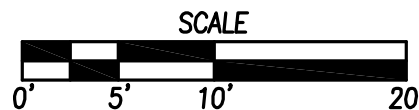
GEOMETRICS AND STAKING LAYOUT



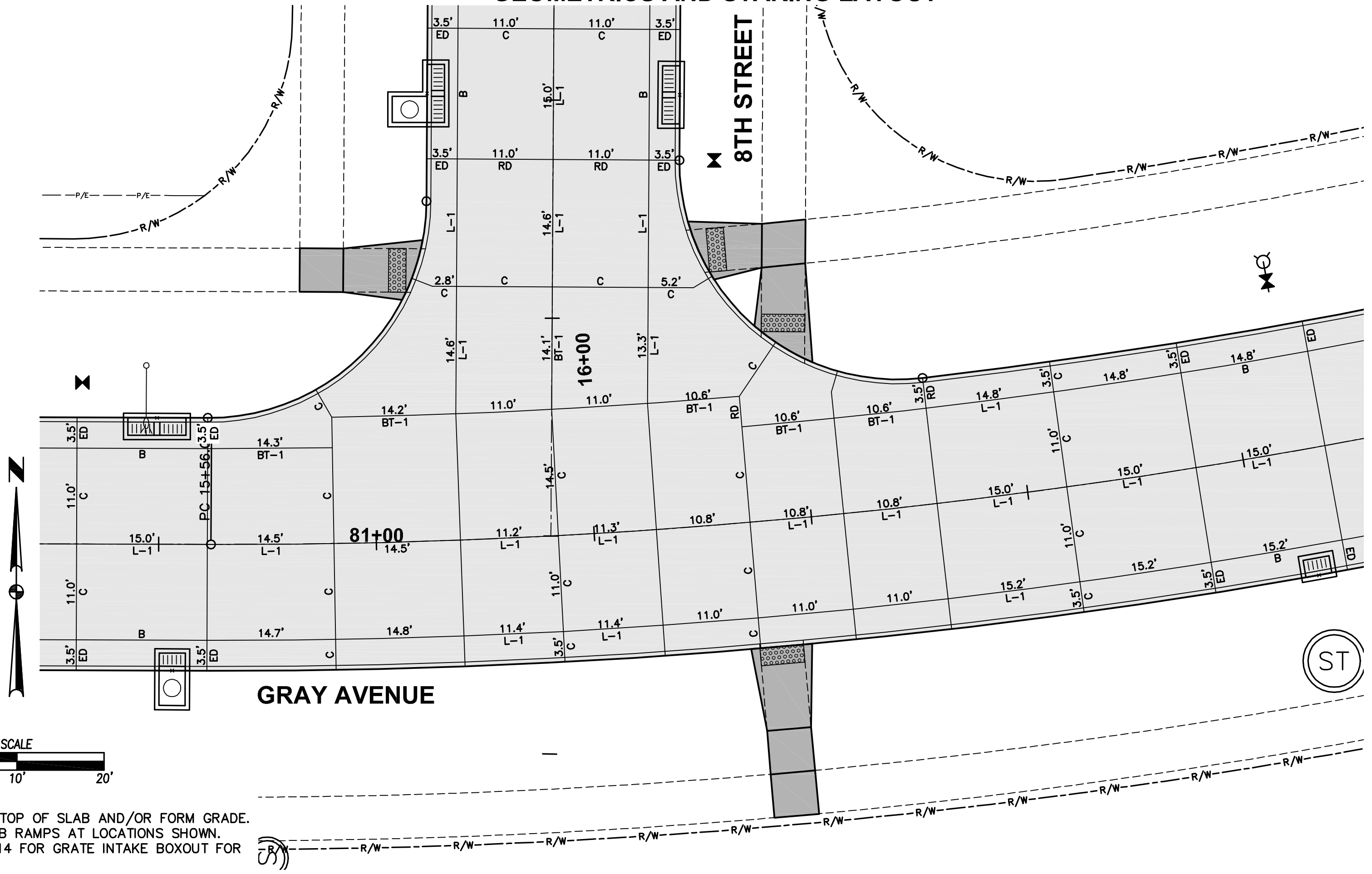
JOINTING LAYOUT

NOTES:

1. ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
2. INSTALL ACCESSIBLE CURB RAMPS AT LOCATIONS SHOWN.
3. REFER TO FIGURE 6010.514 FOR GRATE INTAKE BOXOUT FOR PCC PAVEMENT DETAILS.

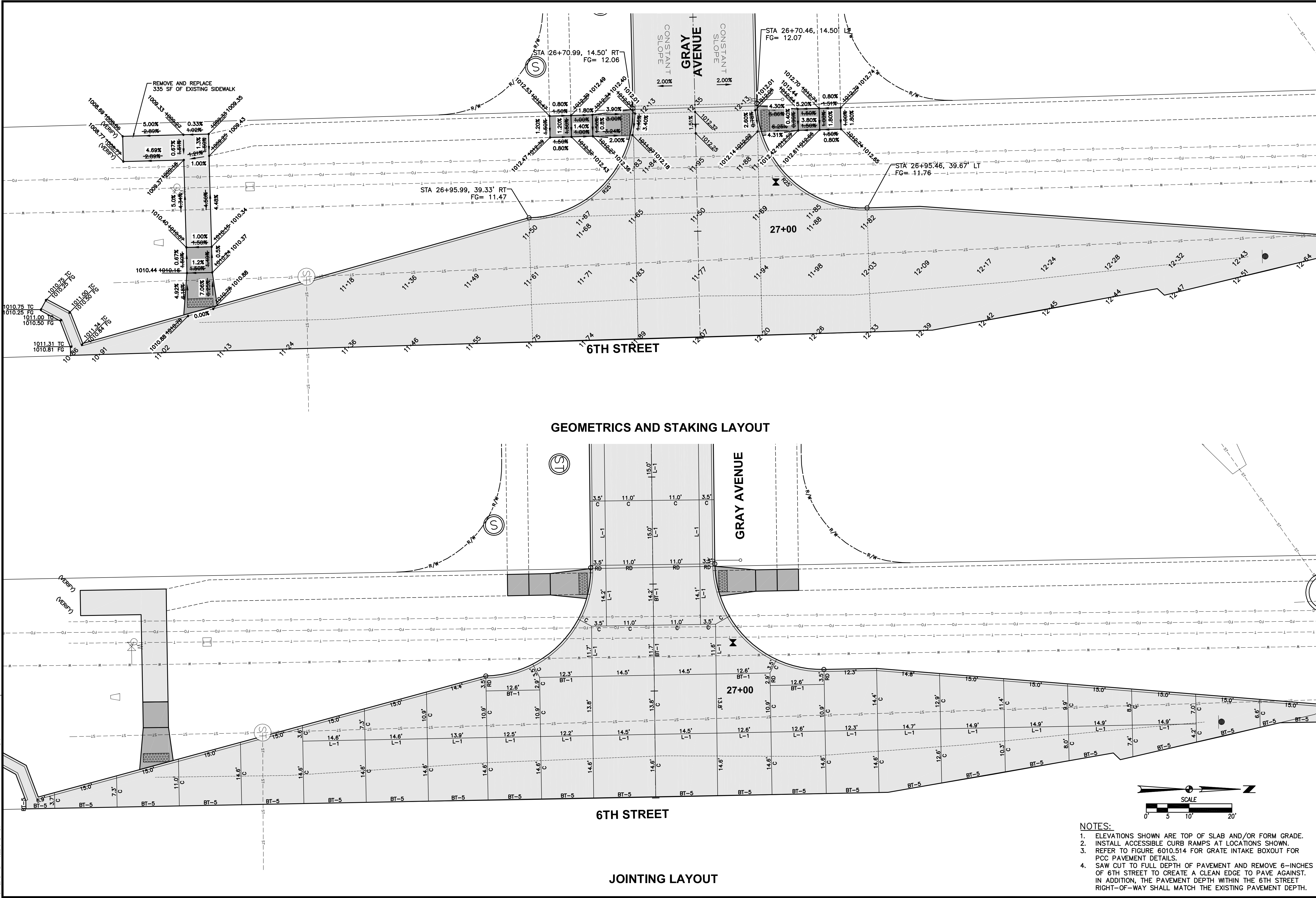


GEOMETRICS AND STAKING LAYOUT



JOINTING LAYOUT

FILE: H:\2017\170309\170309-INTERSECTION-ASB\170309-INTERSECTION-ASB.DWG  
DRAWN BY: J. OLESEN  
CHECKED BY: J. OLESEN  
PLOT DATE: 8/12/2018 1:05 PM  
PLOT BY: J. OLESEN



| REVISIONS |                 |
|-----------|-----------------|
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| 08/17/17  | FINAL SUBMITTAL |
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**CLAYTON ESTATES PLAT 2**  
**INTERSECTION DETAILS**

WAUKEE, IOWA

**34/34**  
1703.109