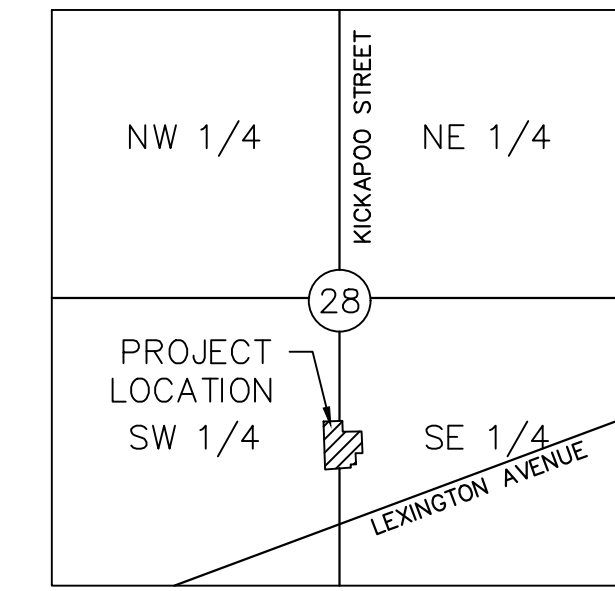


**LEGAL DESCRIPTION**

A tract of land being part of the Southeast Quarter of Section 28, Township 12 South, Range 22 East, in Johnson County, Kansas, being more particularly described as follows: Beginning at the Northeast corner of Lot 1, Medical Plaza Final Plat, a recorded subdivision in Book 79, Page 31 in the Johnson County recorder of deeds; Thence South 86°04'16" West, 235.56 feet along the North line of said subdivision, to the East line of Wyvoff View, a subdivision recorded in Book 28, Page 23, at the Johnson County Recorder of Deeds office; Thence North 01°49'13" East, 438.75 feet along said East line, to the South Right of Way line of West 85th St, as now established; Thence North 88°07'17" East, along said Right of Way, 171.64 feet; Thence South 01°49'17" East, 100.00 feet; Thence North 88°07'17" East, 172.75 feet; Thence South 01°49'17" East, 200 feet; Thence South 88°07'17" West, 62.50 feet; Thence South 01°49'17" East, 102.00'; Thence South 88°07'17" West, 46.49 feet; Thence South 01°49'17" East, 28.32 feet, to the Point of Beginning. Contains 1,222,454 square feet or 2.84 acres more or less.

# ANDERSON ESTATES STREET AND STORM SEWER PLANS 33475 W 85TH ST DE SOTO, KS 66018

Street & Storm Sewer Permit #202400114



VICINITY MAP  
SEC. 28-12-22  
N.T.S.



Milburn Civil Engineering, LLC  
33135 W 83RD ST  
DE SOTO, KS 66018  
913-583-0367



**UTILITY CONTACTS**

**ELECTRIC**  
EVERGY  
CONTACT MATT ROECKER  
(913)667-5116

**WATER**  
CITY OF DE SOTO  
32905 W. 84TH STREET  
DE SOTO, KS 66018  
(913) 238-0434

**NATURAL GAS**  
ATMOS ENERGY  
P.O. BOX 650205  
DALLAS, TEXAS 75265-0205  
(888) 286-6700

**STORMWATER**  
CITY OF DE SOTO  
32905 W. 84TH STREET  
DE SOTO, KS 66018  
(913) 238-0434

**SANITARY SEWER**  
CITY OF DE SOTO  
32905 W. 84TH STREET  
DE SOTO, KS 66018  
(913) 238-0434

**CABLE/COMMUNICATIONS**  
SPECTRUM CABLE  
6921 W. 119TH STREET  
(855)707-7328

**LEGEND**

- PROPOSED STREET
- PROPOSED SIDEWALK
- PROPOSED R/W
- PROPOSED EASEMENT
- EXISTING CONTOURS
- EXISTING CONTOURS
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING GAS
- EXISTING OVERHEAD POWER
- EXISTING FIBER OPTIC
- EXISTING TELEPHONE
- EXISTING UNDERGROUND POWER
- EXISTING UTILITY POLE

**SURVEY CONTROL POINTS**

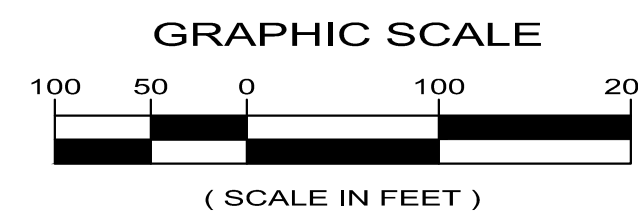
Point #	Northing	Easting	Elevation	Description
2	247522.47	2173039.71	819.88	BM790
40	248003.64	2172649.83	859.30	Square Cut in Top of Curb
50	248002.59	2172696.95	858.06	Plus Cut in Sidewalk
51	247992.86	2172502.82	855.55	Plus Cut in Top of Curb

**BENCHMARKS**

JOHNSON COUNTY VERTICAL CONTROL NETWORK BM 790  
BERNSTEIN ALUMINUM DISK STAMPED BM 790 LOCATED  
ON THE S/W CORNER OF CURB INLET LOCATED AT  
INTERSECTION OF OTTAWA STREET & LEXINGTON AVE.  
ON THE N/W CORNER OF INTERSECTION, ON 1ST CURB  
INLET ON WEST SIDE OF OTTAWA STREET.  
ELEVATION = 819.88



**LOCATION MAP**



Anderson Estates - Public Street and Storm			
No.	Description	Unit	Quantities Plan
1.00	Demo	LS	1
1.01	Excavation	CY	3,180
1.02	Embankment	CY	4,122
1.03	8" Asphalt Pavement (Surface+Base+Aggregate)	SY	1,189
1.04	Subgrade Stabilization	SY	1,189
1.05	Concrete Sidewalk (5' Wide)	LF	450
1.06	Concrete Curb and Gutter (CG-2)	LF	721
1.07	Landscape	LS	1
1.08	Stop Sign	EA	1
1.09	Street Name Sign	EA	2
Public Storm Sewer Improvements			
1.10	Standard Area Inlet (4x4' Inside)	EA	1
1.11	Standard Junction Box (4x4' Inside)	EA	6
1.12	Detention Structure (8x5') W/ Interior Weir Wall	EA	1
1.13	12" HDPE	LF	169
1.14	18" RCP	LF	215
1.15	18" HDPE	LF	113
1.16	24" RCP	LF	84
1.17	24" HDPE	LF	159
1.18	18" HDPE End Section	EA	2
1.19	24" HDPE End Section	EA	1
1.20	Storm Sewer Removal (15" CMP)	LF	34
1.21	Storm Sewer Removal (21" CMP)	LF	56

**CIVIL ENGINEER**

MILBURN CIVIL ENGINEERING, LLC  
33135 W. 83RD ST  
DE SOTO, KS 66018

PLANS PREPARED AND SUBMITTED BY:

04/05/2024

JUSTIN MILBURN, KANSAS PE #18836 \_\_\_\_\_ DATE

APPROVED BY: CITY OF DE SOTO, KANSAS

JOE JOHNSON  
CITY ENGINEER, DE SOTO, KS \_\_\_\_\_ DATE  
APPROVED FROM ONE YEAR FROM THIS DATE

**ANDERSON ESTATES**  
**STREET AND STORM SEWER PLANS**  
 33475 W 85TH ST  
 DE SOTO, KS 66018

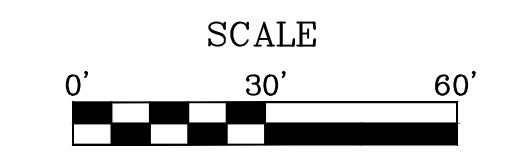
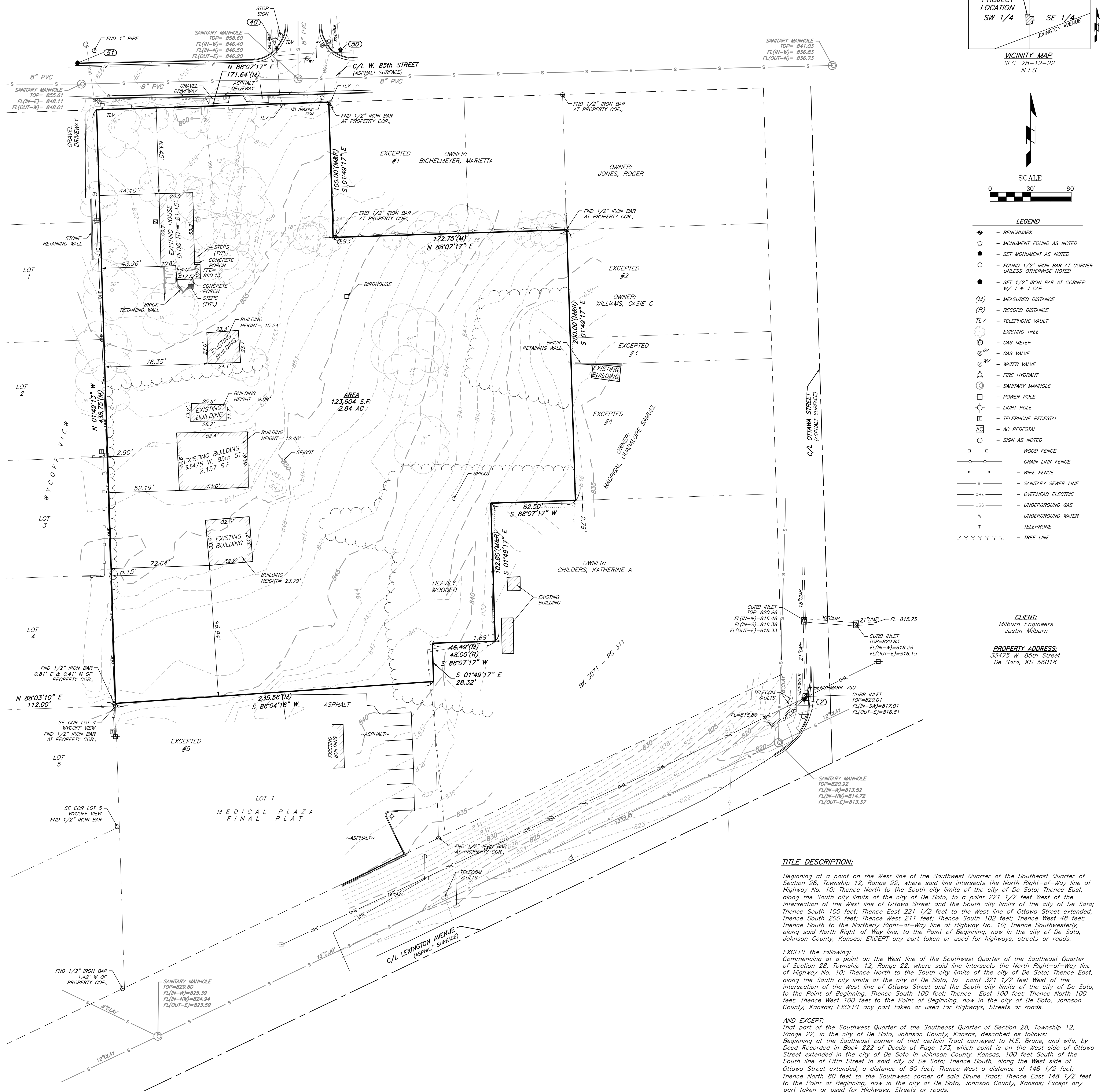
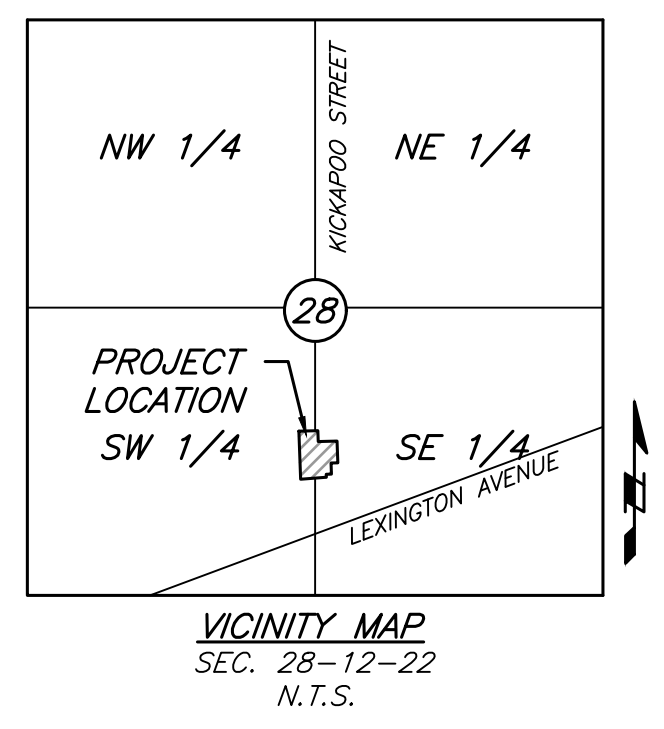
DATE 4/3/2024  
DESIGNED BY AJS  
CHECKED BY JPM

REVISIONS	DATE

COVER  
**C200**

# ALTA/NSPS LAND TITLE SURVEY

## SE & SW 1/4, SECTION 28, TOWNSHIP 12 SOUTH, RANGE 22 EAST CITY OF DE SOTO, JOHNSON COUNTY, KANSAS



- LEGEND**
- ◆ - BENCHMARK
  - - MONUMENT FOUND AS NOTED
  - - SET MONUMENT AS NOTED
  - - FOUND 1/2" IRON BAR AT CORNER UNLESS OTHERWISE NOTED
  - - SET 1/2" IRON BAR AT CORNER
  - (M) - MEASURED DISTANCE
  - (R) - RECORD DISTANCE
  - TLV - TELEPHONE VAULT
  - - EXISTING TREE
  - ⊕ - GAS METER
  - ⊕ - GAS VALVE
  - ⊕ - WATER VALVE
  - ⊕ - FIRE HYDRANT
  - ⊕ - SANITARY MANHOLE
  - ⊕ - POWER POLE
  - ⊕ - LIGHT POLE
  - ⊕ - TELEPHONE PEDESTAL
  - ⊕ - AC PEDESTAL
  - ⊕ - SIGN AS NOTED
  - - WOOD FENCE
  - - CHAIN LINK FENCE
  - - WIRE FENCE
  - S - SANITARY SEWER LINE
  - OHE - OVERHEAD ELECTRIC
  - UGG - UNDERGROUND GAS
  - W - UNDERGROUND WATER
  - T - TELEPHONE
  - - TREE LINE

**CLIENT:**  
Milburn Engineers  
Justin Milburn

**PROPERTY ADDRESS:**  
33475 W. 85th Street  
De Soto, KS 66018

**TITLE DESCRIPTION:**  
Beginning at a point on the West line of the Southwest Quarter of the Southeast Quarter of Section 28, Township 12, Range 22, where said line intersects the North Right-of-Way line of Highway No. 10; Thence North to the South city limits of the city of De Soto; Thence East, along the South city limits of the city of De Soto, to a point 221 1/2 feet West of the intersection of the West line of Ottawa Street and the South city limits of the city of De Soto; Thence South 100 feet; Thence East 221 1/2 feet to the West line of Ottawa Street extended; Thence South 200 feet; Thence West 211 feet; Thence South 102 feet; Thence West 48 feet; Thence South to the Northern Right-of-Way line of Highway No. 10; Thence Southwesterly, along said North Right-of-Way line, to the Point of Beginning, now in the city of De Soto, Johnson County, Kansas; EXCEPT any part taken or used for highways, streets or roads.

**EXCEPT the following:**  
Commencing at a point on the West line of the Southwest Quarter of the Southeast Quarter of Section 28, Township 12, Range 22, where said line intersects the North Right-of-Way line of Highway No. 10; Thence North to the South city limits of the city of De Soto; Thence East, along the South city limits of the city of De Soto, to a point 321 1/2 feet West of the intersection of the West line of Ottawa Street and the South city limits of the city of De Soto, to the Point of Beginning; Thence South 100 feet; Thence East 100 feet; Thence North 100 feet; Thence West 100 feet to the Point of Beginning, now in the city of De Soto, Johnson County, Kansas; EXCEPT any part taken or used for Highways, Streets or roads.

**AND EXCEPT:**  
That part of the Southwest Quarter of the Southeast Quarter of Section 28, Township 12, Range 22, in the city of De Soto, Johnson County, Kansas, described as follows:  
Beginning at the Southeast corner of that certain Tract conveyed to H.E. Brune, and wife, by Deed Recorded in Book 222 of Deeds at Page 173, which point is on the West side of Ottawa Street extended in the city of De Soto in Johnson County, Kansas, 100 feet South of the South line of Fifth Street in said city of De Soto; Thence South, along the West side of Ottawa Street extended, a distance of 80 feet; Thence West a distance of 148 1/2 feet; Thence North 80 feet to the Southwest corner of said Brune Tract; Thence East 148 1/2 feet to the Point of Beginning, now in the city of De Soto, Johnson County, Kansas; Except any part taken or used for Highways, Streets or roads.

**AND EXCEPT:**  
That part of the Southwest Quarter of the Southeast Quarter of Section 28, Township 12, Range 22, in the city of De Soto, Johnson County, Kansas, described as follows:  
Commencing at the Southeast corner of that certain Tract conveyed to H.E. Brune, and wife, by Deed Recorded in Book 222 of Deeds at Page 173, which point is on the West side of Ottawa Street extended in the city of De Soto in Johnson County, Kansas, 100 feet South of the South line of Fifth Street in said city of De Soto; Thence South, along the West side of Ottawa Street extended, a distance of 80 feet; Thence West a distance of 148 1/2 feet; Thence North 80 feet to the Southwest corner of said Brune Tract; Thence East 148 1/2 feet to the Point of Beginning, now in the city of De Soto, Johnson County, Kansas; Except any part taken or used for Highways, Streets or roads.

**AND EXCEPT:**  
Commencing at the Northwest corner of the Southwest Quarter of the Southeast Quarter of Section 28, Township 12 South, Range 22 East; Thence South 1'32"43" East 463.12 feet, along the West line of the Southwest Quarter of said Southeast Quarter Section, to the True Point of Beginning; Thence North 86°11'39" East 236.42 feet; Thence South 1'32"43" East 115.70 feet, along a line parallel to the West line of the Southwest Quarter of said Southeast Quarter Section, to a point on the North Right-of-Way line of old Kansas State Highway No. 10; Thence South 64°43'28" West 258.05 feet, along said North Right-of-Way line, to a point on the West line of the Southwest Quarter of said Southeast Quarter Section; Thence North 1'32"43" West 210.23 feet to the Point of Beginning. All in the city of De Soto, Johnson County, Kansas.

Point #	Northing	Eastng	Elevation	Description
2	247522.47	2173039.71	819.88	BM790
40	248003.64	2172649.83	859.30	SQUARE CUT IN TOP OF CURB
50	248002.59	2172696.95	858.06	PLUS CUT IN SIDEWALK
51	247992.86	2172502.82	855.55	PLUS CUT IN TOP OF CURB

**BENCHMARK:**  
BM790: Alum Disk Located at the intersection of Ottawa & Lexington, on the Northwest corner of the intersection, on 1st curb inlet on West side of Ottawa.  
Elevation = 819.88

**UTILITY NOTE:**  
The utilities on this survey are shown based on source information from plans and markings and were combined with observed evidence of utilities pursuant to Section 5.E.iv. to develop a view of the underground utilities. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, in some jurisdictions, 811 or other similar utility locate requests from surveyors may be ignored or result in an incomplete response, in which case the surveyor shall note on the plat or map how this affected the surveyor's assessment of the location of the utilities. Where additional or more detailed information is required, the client is advised that excavation and/or a private utility locate request may be necessary.

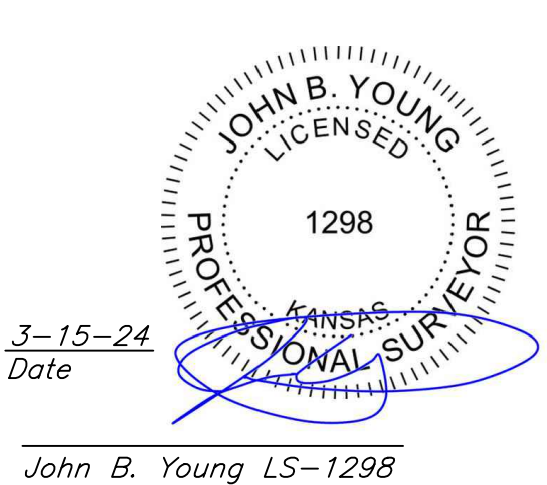
**SCHEDULE B - PART II NOTES:**  
Items 1 - 6 and 10 are non survey related items.  
7.) Easement granted to Willard O. Gordon recorded September 30, 1948 at Book 39 Page 325. Does not affect the subject property.  
8.) Easement granted to Greasy Gas Company recorded August 8, 1961 at misc. Book 120 Page 681. Does not affect the subject property.  
9.) Easement granted to William N. Mize and Goldmar Green for water line as referenced on the Deed recorded at Book 235 Page 471. Does not affect the subject property.

**GENERAL SURVEY NOTES:**  
1.) The plat of MEDICAL PLAZA is recorded in Plat Book 79 at Page 31 in the Register of Deeds Office in Johnson County, Kansas.  
2.) The plat of WYCOFF VIEW is recorded in Plat Book 28 at Page 23 in the Register of Deeds Office in Johnson County, Kansas.  
2.) Title Report # KC2202171, dated December 29, 2022 at 2:09 PM provided by Chicago Title Insurance Company was provide by client.  
3.) Basis of bearings were established by Kansas Sate Plane Coordinate System by GPS observations.  
4.) The subject property is located in Zone X, areas determined to be outside the 0.2% annual chance floodplain, as shown on Flood Insurance Rate Map (FIRM) 20091C0028G, effective August 3, 2009.  
5.) Underground utilities were located by Kansas one call ticket No: 23089805 dated February 23, 2023.

SHEET 1 OF 1

1	INITIAL SUBMITTAL	03-15-24
---	-------------------	----------

Location: S:\23.057B - Ottawa St & Lexington Ave\DRAWINGS\2024.03.12 COMBO\23.057- ALTA TOPO COMBO.dwg-Mar 15, 2024-2:14pm



**CERTIFICATION:**  
To Chicago Title Insurance Company and The Anderson Group LLC:  
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 7a, 7b, 7c, 8, 9, 11 and 13 of Table A, thereof. The field work was completed on the 14th day of March, 2023.



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Milburn Civil Engineering, LLC

MILBURN CIVIL ENGINEERING, LLC  
33135 W 83RD ST  
DE SOTO, KS 66018  
913-583-0367



### GENERAL NOTES

1. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS AND ONE (1) COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT ALL TIMES.
2. ALL EXISTING UTILITIES INDICATED ON THE DRAWINGS ARE ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER; HOWEVER, ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR TO OBTAIN THE LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
3. PRIOR TO THE LAYING OF PIPE OR SETTING OR MANHOLES, INLETS THE CONTRACTOR SHALL EXPOSE ALL UTILITIES AT PIPE CROSSINGS AND VERIFY ELEVATIONS TO DETERMINE ANY CONFLICTS THAT MAY EXIST. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER OF ANY SUCH CONFLICTS.
4. THE CONTRACTOR MUST SUPPORT ALL UTILITIES DURING THIS CONSTRUCTION TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANY. ALL SHORING AND TEMPORARY SUPPORTS ARE TO BE INCLUDED IN THE CONTRACT PRICE.
5. THE PIPE SHALL BE STORED AT THE SITE TO AVOID ANY DAMAGE TO THE PIPE, PIPE COATINGS, AND JOINT SYSTEM. WHEN THE PIPE IS LAID OUT ALONG THE TRENCH, THE SAME PRECAUTIONS SHALL BE TAKEN TO PREVENT DAMAGE TO THE PIPE OR JOINT SYSTEMS.
6. THE INTERIOR OF ALL PIPE SHALL BE THOROUGHLY CLEANED OF ALL FOREIGN MATTER BEFORE BEING LOWERED INTO THE TRENCH, AND SHALL BE KEPT CLEAN DURING THE LAYING OPERATION BY MEANS OF PLUGS, PIGS, SWABS OR OTHER APPROVED METHODS.
7. EACH SECTION OF PIPE SHALL BE LAID TO LINE AND GRADE PROCEEDING UPWARD WITH THE SPIGOT ENDS POINTING IN THE DIRECTION OF FLOW. THE TRENCH BED SHALL SUPPORT THE FULL LENGTH OF PIPE, EXCEPT FOR JOINT RECESSES, OVER THE BOTTOM QUADRANT OF THE PIPE CIRCUMFERENCE, UNLESS SHOWN OTHERWISE IN THE DETAILS. WHERE SHOWN ON THE PLANS, SPECIFIED, OR WHEN DIRECTED BY THE DIRECTOR OF PUBLIC WORKS THE PIPE SHALL BE SUPPORTED ON SPECIAL BEDDING MATERIAL, CONCRETE CRADLE, OR CONCRETE ENCASUREMENT.
8. TRENCH BACKFILL FOR STORM SEWERS WITHIN PUBLIC STREET RIGHTS OF WAY SHALL CONFORM TO THE FLOWABLE FILL REQUIREMENTS PER THE REVISED APWA SECTION 2602.3.C DATED MARCH 2020.
9. STREET NAME SIGNS ARE TO BE INSTALLED AT ALL INTERSECTIONS IN ACCORDANCE WITH CURRENT STANDARDS AND SPECIFICATIONS OF THE STREET AND TRAFFIC DIVISION PUBLIC WORKS PRIOR TO FINAL ACCEPTANCE OF THE CONSTRUCTION PERMIT BY THE STREET PAVING DEVELOPER.
10. DEVELOPER IS TO NOTIFY PUBLIC WORKS STREETS AND TRAFFIC DIVISION AT LEAST 48 HOURS PRIOR TO PLACEMENT OF PAVEMENT MARKINGS FOR INSPECTION OF STRIPING LAYOUT AND THE DATE OF STOP AND YIELD SIGN INSTALLATION.
11. STREET SIGNS AND POSTS TO BE INSTALLED PER THE CURRENT KC METRO/APWA GUIDELINES.
12. LINEAR FOOT MEASUREMENTS SHOWN ON THE PLANS ARE TO HORIZONTAL MEASUREMENTS FROM CENTER OF STRUCTURE TO CENTER STRUCTURE OR END OF END SECTION, UNLESS OTHERWISE NOTED.
13. THE DEVELOPER MUST REMOVE AT HIS COST ANY BAD SUBSURFACE SOIL WHICH WOULD NOT BE ABLE TO SUPPORT ANY PROPOSED PUBLIC IMPROVEMENTS. BACKFILL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTIONS 2100 AND 2201 ENTITLED "GRADING AND SITE PREPARATION" AND "SUBGRADE PREPARATION".
14. DEVELOPER TO INSTALL ALL SIDEWALK RAMPS PER CURRENT CITY STANDARDS.
15. HDPE PIPE SHALL BE ASSEMBLED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. FOR HDPE PIPE SIZES 48" AND LARGER, DURING PIPE INSTALLATION, INCLUDING PLACEMENT AND CONSOLIDATION OF ROCK BEDDING AND BACKFILL TO A POINT 4" ABOVE THE TOP OF PIPE. FULL TIME INSPECTION SHALL BE PROVIDED BY A QUALIFIED INSPECTOR WORKING UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER. AFTER INSTALLATION AND PRIOR TO ACCEPTANCE, CERTIFICATION BY A KANSAS REGISTERED ENGINEER IS REQUIRED AND SHALL STATE THAT THE INSTALLATION AND BACKFILL CONFORMS TO THE PIPE MANUFACTURER'S RECOMMENDATIONS AND THE STANDARD SPECIFICATIONS AND DESIGN CRITERIA OF THE CITY OF DE SOTO, KANSAS. COST OF THE INSPECTION SHALL BE PAID FOR BY THE DEVELOPER.
16. HIGH DENSITY POLYETHYLENE PIPE (HDPE) SHALL CONFORM TO AASHTO M295 TYPE S. ACCEPTABLE PIPE MUST COME FROM A PLASTIC PIPE INSTITUTE (PPI) CERTIFIED MANUFACTURER AND HAVE PASSED THE PPI 3RD PARTY CERTIFICATION TESTING. EACH INDIVIDUAL SECTION OF PIPE SHALL BE MARKED IN ACCORDANCE WITH AASHTO M295 AND SHALL BE AFFIXED WITH THE PPI CERTIFICATION LABEL. HDPE PIPE SHALL BE JOINED WITH WATER TIGHT JOINTS MEETING THE REQUIREMENTS OF AASHTO M294 PARAGRAPH 7.9.3
17. ALL CONSTRUCTION SHALL CONFORM TO APWA 5200 FOR DESIGN STANDARDS AND ALL CONSTRUCTION IS TO FOLLOW APWA 2200.
18. PRIOR TO ORDERING PRE-CAST STRUCTURES, SHOP DRAWINGS ARE TO BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL. THE DESIGN ENGINEER SHALL MAKE SURE THE PERMIT TYPE AND NUMBER ARE INCLUDED ON ALL SHOP DRAWINGS. THE DESIGN ENGINEER SHALL SUBMIT A LETTER OF APPROVAL CERTIFYING THE SHOP DRAWINGS ARE IN COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
19. FEMA FLOOD PLAN FOR THIS PROJECT AREA IS ZONE X - AREAS OF 1.0% ANNUAL CHANCE OF FLOOD. FLOOD MAP 20091C00286. EFF. 8/3/2009

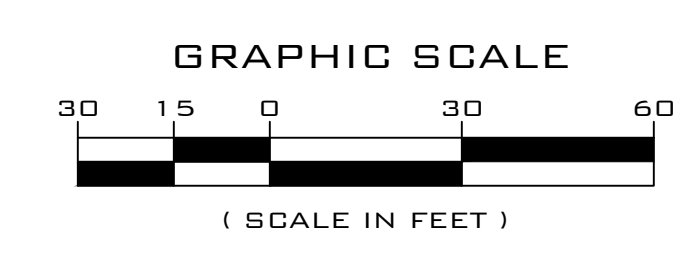
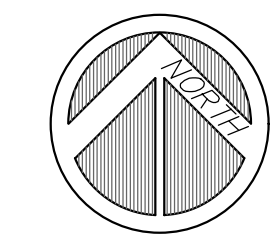
# ANDERSON ESTATES

## STREET AND STORM SEWER PLANS

33475 W 85TH ST  
DE SOTO, KS 66018

DATE	4/3/2024
DESIGNED BY	AJS
CHECKED BY	JPM

REVISIONS	DATE



GENERAL LAYOUT  
**C202**

Apr 04, 2024 - 7:42am - USER: galtmann  
F:\Civil\_3D\Projects\Done\Anderson Estates\1804-251\CAD\Sheets\CDL - Street & Storm.dwg



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Milburn Civil Engineering, LLC

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33135 W 83RD ST  
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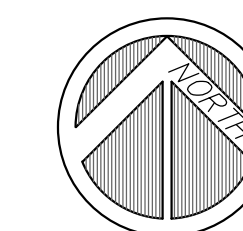


### GENERAL NOTES

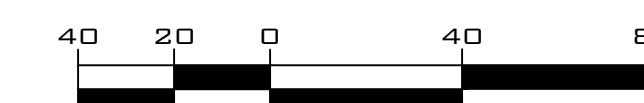
1. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS AND ONE (1) COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
2. ALL EXISTING UTILITIES INDICATED ON THE DRAWINGS ARE ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER; HOWEVER, ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. ALL EXISTING FACILITIES SHALL BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO SUPPORT, MAINTAIN, OR OTHERWISE PROTECT EXISTING UTILITIES AND OTHER FACILITIES AT ALL TIMES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR TO OBTAIN THE LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
3. PRIOR TO THE LAYING OF PIPE OR SETTING OF MANHOLES/INLETS, THE CONTRACTOR SHALL EXPOSE ALL UTILITIES AT PIPE CROSSINGS AND VERIFY THE ELEVATIONS TO DETERMINE ANY CONFLICTS THAT MAY EXIST. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER OF ANY SUCH CONFLICTS.
4. THE CONTRACTOR MUST SUPPORT ALL UTILITIES DURING THE CONSTRUCTION TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANY. ALL SHORING AND TEMPORARY SUPPORTS ARE TO BE INCLUDED IN THE CONTRACT PRICE.
5. THE DEVELOPER MUST REMOVE AT HIS COST ANY BAD SUBSURFACE SOIL WHICH WOULD NOT BE ABLE TO SUPPORT ANY PROPOSED IMPROVEMENTS. BACKFILL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTIONS 2100 AND 2201 ENTITLED "GRADING AND SITE PREPARATION" AND "SUBGRADE PREPARATION".
6. ALL CONSTRUCTION SHALL CONFORM TO APWA 5200 FOR DESIGN STANDARDS AND ALL CONSTRUCTION IS TO FOLLOW APWA 2200.

### DEMOLITION NOTES

- 1 - EXISTING TREE TO REMAIN
- 2 - EXISTING BUILDING/STRUCTURE TO BE REMOVED
- 3 - EXISTING BRUSH/HEAVILY WOODED AREA TO BE REMOVED
- 4 - EXISTING FENCE TO REMAIN
- 5 - EXISTING TREE TO BE REMOVED
- 6 - EXISTING UNDERGROUND GAS TO BE REMOVED
- 7 - EXISTING RETAINING WALL TO REMAIN
- 8 - EXISTING BUILDINGS TO REMAIN
- 9 - EXISTING ZOOM FIBER VAULT TO BE RELOCATED
- 10 - EXISTING CURB TO BE DEMOLISHED
- 11 - EXISTING PAVEMENT TO BE REPLACED TO EXTENTS SHOWN (FOR ZOOM FIBER RELOCATION)
- 12 - EXISTING STORM SEWER TO BE DEMOLISHED AND REPLACED (SEE SHEET C210)
- 13 - EXISTING DRIVEWAY AND SIDEWALK TO BE DEMOLISHED AND REPLACED (SEE SHEET C210)
- 14 - CONTRACTOR TO COORDINATE RELOCATION OF FIBER OPTIC (IF NEEDED) FOR SANITARY MANHOLE A0 INSTALL (SEE SANITARY SEWER PLANS SHEET C402)
- 15 - CONTRACTOR TO COORDINATE RELOCATION OF GUY WIRE WITH EVERGY FOR SANITARY SEWER MANHOLE A1 INSTALL (SEE SANITARY SEWER PLANS SHEET C402)



GRAPHIC SCALE



(SCALE IN FEET)

**ANDERSON ESTATES**  
**STREET AND STORM SEWER PLANS**  
 33475 W 85TH ST  
 DE SOTO, KS 66018

DATE 4/3/2024  
 DESIGNED BY AJS  
 CHECKED BY JPM

REVISIONS DATE


DEMO PLAN  
**C203**

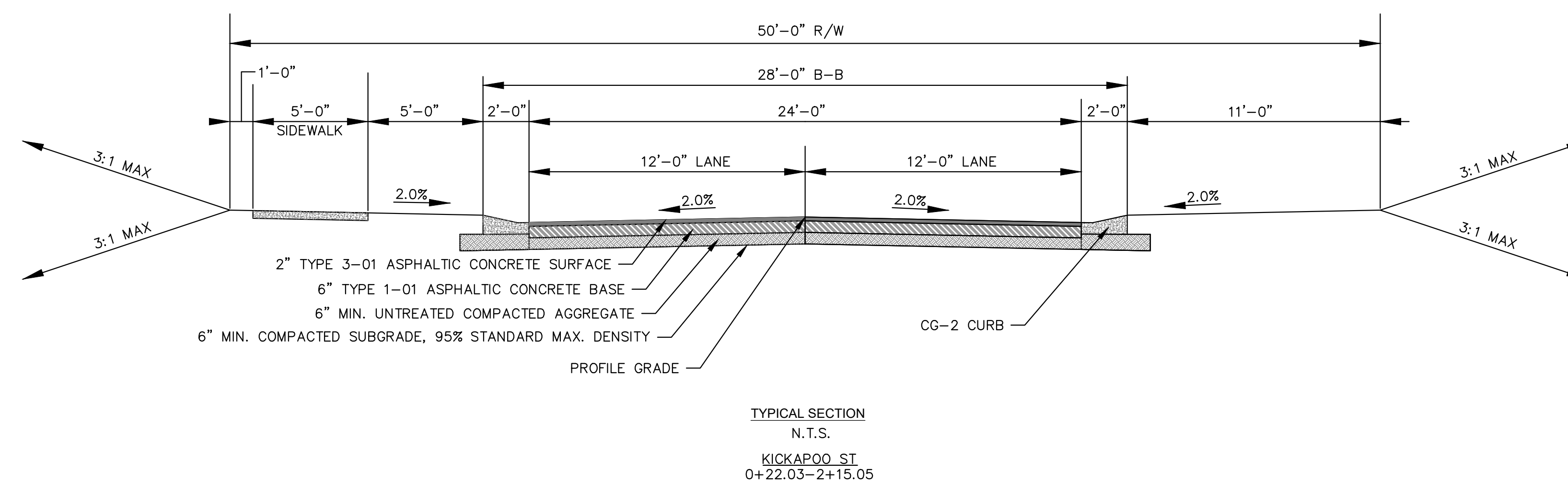


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913-583-0367



### PAVEMENT SUBGRADE PREPARATION: (PER APWA SECTION 2201)

#### REFERENCED STANDARDS:

THE FOLLOWING STANDARDS ARE REFERENCED DIRECTLY IN THIS SECTION. THE LATEST VERSION OF THESE STANDARDS SHALL BE USED. IF CONFLICTING STANDARDS ARE REFERENCED, THE MORE STRINGENT STANDARD SHALL APPLY

ASTM D 698 - TEST METHOD FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT (12,400 FT-LBF/FT<sup>3</sup>)

#### 2201.1 SCOPE:

THIS SECTION INCLUDES SUBGRADE PREPARATION AT LOCATIONS WHICH HAVE BEEN PREVIOUSLY GRADED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 2100 ENTITLED "GRADING AND SITE PREPARATION".

#### 2201.3 DEFINITIONS:

- A. **SUBGRADE:** SUBGRADE IS DEFINED AS A WELL GRADED AND COMPACTED LAYER ON WHICH THE BASE AND SUBSEQUENT COURSES ARE PLACED.
- B. **SUBGRADE PREPARATION:** SUBGRADE PREPARATION IS THE REPEATED OPERATION OF FINE-GRADING AND COMPACTING THE SUBGRADE UNTIL THE SPECIFIED LINES, GRADES, AND CROSS-SECTION, AS INDICATED ON THE PLANS ARE OBTAINED AND THE MATERIALS ARE COMPACTED TO THE SPECIFIED DEPTH AND DENSITY.

#### 2201.4 CONSTRUCTION:

- A. **GENERAL:** THE SUBGRADE SURFACE SHALL BE BROUGHT TO THE SPECIFIED LINES, GRADES AND CROSS-SECTION BY ADDING OR REMOVING MATERIAL AND COMPACTING TO THE SPECIFIED DENSITY. TOLERANCE ALLOWED ON ALL LINES, GRADES, AND CROSS-SECTIONS SHALL BE NO MORE THAN 1/4 INCH.
- B. **COMPACTING THE SUBGRADE:** UNLESS OTHERWISE SPECIFIED, THE TOP 6 INCHES OF SUBGRADE FOR PAVEMENTS SHALL BE COMPACTED TO 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY FOR THE MATERIAL USED AS DETERMINED BY ASTM D698 AND WITHIN A TOLERANCE OF PLUS 3% AND MINUS 3% OF THE OPTIMUM MOISTURE CONTENT. THE TOLERANCE APPLIES ONLY TO THE TOP 6 INCHES.
- C. **PROTECTION AND MAINTENANCE OF SUBGRADE:** THE SUBGRADE SHALL BE PROTECTED FROM ACTION OF THE ELEMENTS OR OTHERS. ANY ACTION (EG. SETTLEMENT OR EROSION) THAT DAMAGES THE SUBGRADE PRIOR TO PLACING THE PAVEMENT THEREON, SHALL BE REPAIRED AND THE SPECIFIC LINES, GRADES, CROSS-SECTION, TOLERANCE, DENSITY, AND MOISTURE CONTENT RANGE REESTABLISHED.  
THE CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS FROM DAMAGE RESULTING FROM HIS SUBGRADE OPERATION. ANY IMPROVEMENT DAMAGED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- D. **CLEANUP:** SUBGRADE CLEANUP SHALL FOLLOW THE WORK PROGRESSIVELY. THE CONTRACTOR SHALL REMOVE FROM THE PROJECT SITE ALL RUBBISH, SURPLUS OR DISCARDED MATERIAL, UNSUITABLE MATERIAL, AND ANY EQUIPMENT, TOOLS AND TEMPORARY CONSTRUCTION ITEMS USED FOR THE PREPARATION OF THE SUBGRADE.
- E. **ROLL TESTING:** ONCE THE SUBGRADE HAS BEEN BROUGHT TO THE FINAL PLAN ELEVATION, BUT PRIOR TO APPROVAL OF THE SUBGRADE FOR PAVING, ALL AREAS SHALL BE ROLL TESTED OVER THEIR ENTIRE LENGTH. THE SUBGRADE WILL NOT BE ACCEPTABLE IF RUTTING, PUMPING, OR DEFORMATION OF THE SUBGRADE RESULTS FROM THE ROLL TEST. THIS TESTING WILL BE DONE BY THE CONTRACTOR, AND WILL BE IN ADDITION TO THE APPLICABLE MOISTURE AND DENSITY TESTING.

EQUIPMENT FOR ROLL TESTING SHALL BE A TANDEM DUMP TRUCK (ONE FRONT AND TWO REAR AXLES) CARRYING A MINIMUM LOAD OF TWENTY (20) TONS. THE TRUCK SHALL PROCEED SLOWLY ALONG EACH TRAFFIC LANE, ALLOWING THE ENGINEER TO WALK ALONGSIDE AND OBSERVE THE RESULTS. AREAS FAILING THE ROLL TEST WILL BE REWORKED AND RETESTED PRIOR TO APPROVAL OF THE SUBGRADE FOR PAVING.

ANDERSON ESTATES  
STREET AND STORM SEWER PLANS  
33475 W 85TH ST  
DE SOTO, KS 66018

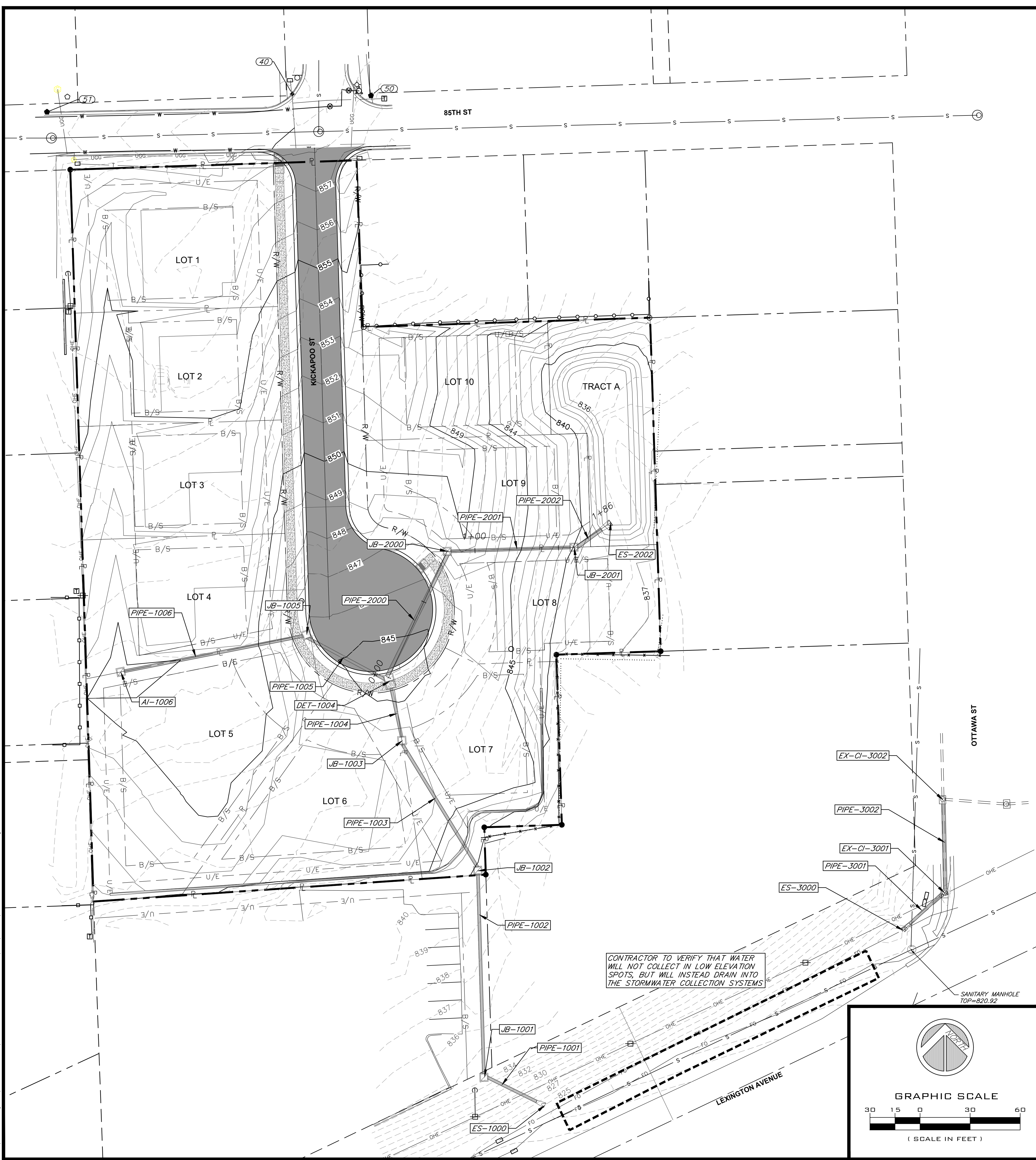
DATE 4/3/2024  
DESIGNED BY AJS  
CHECKED BY JPM

REVISIONS DATE

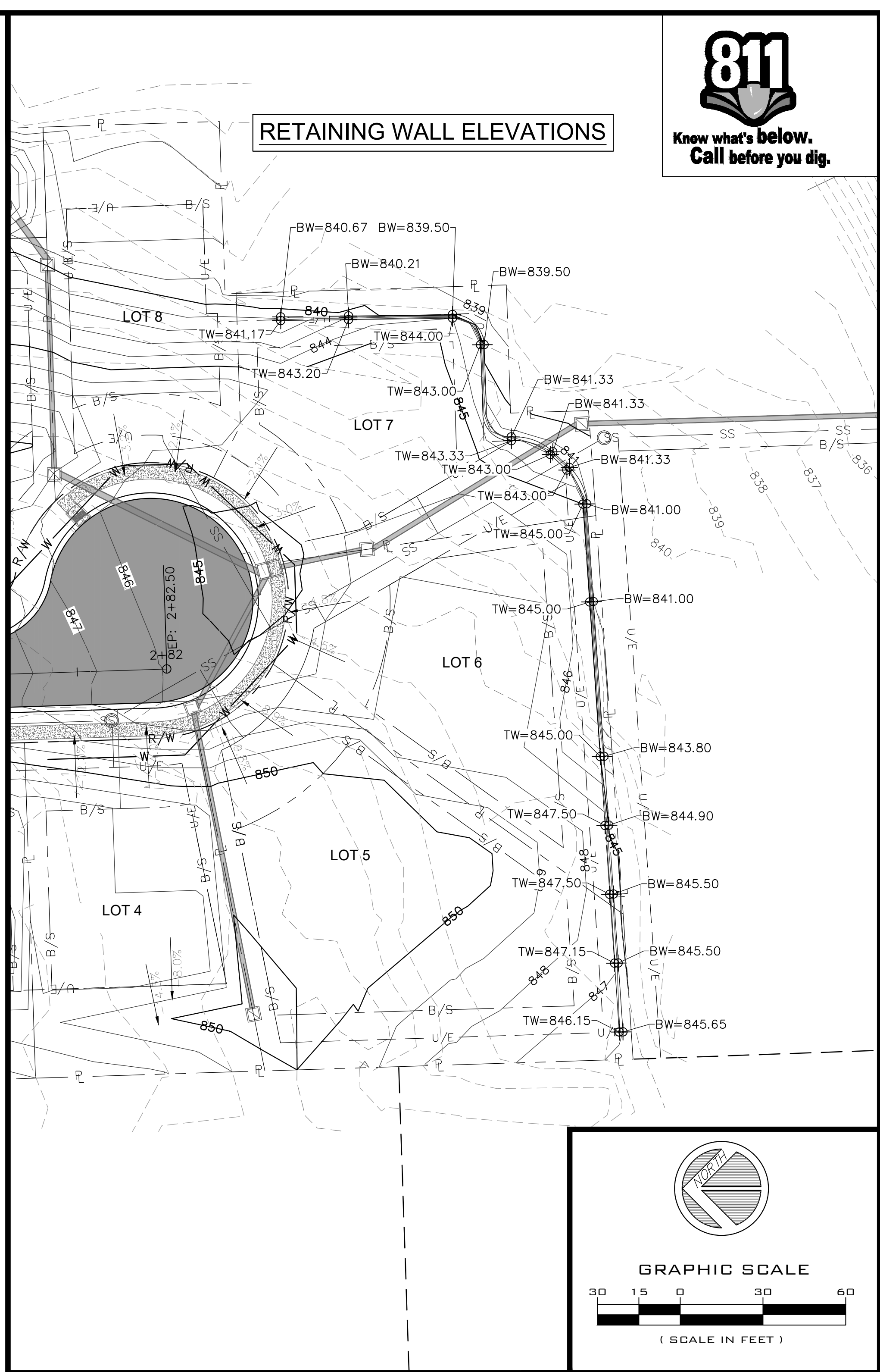
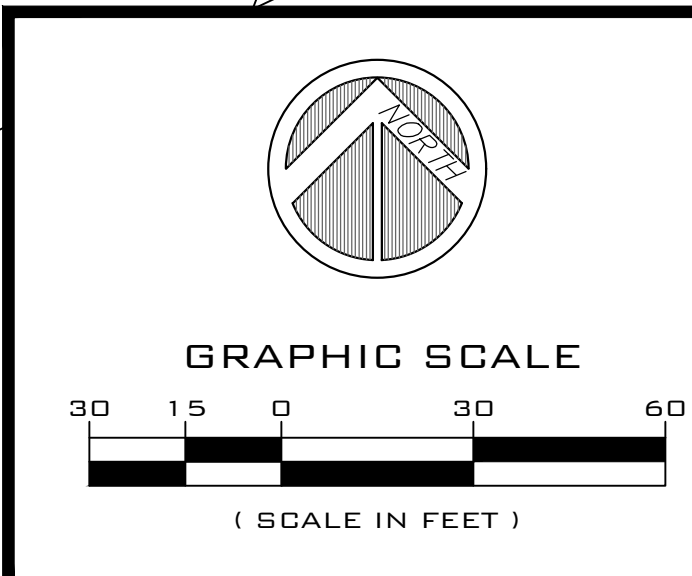
REVISIONS	DATE

TYPICAL SECTION  
C204

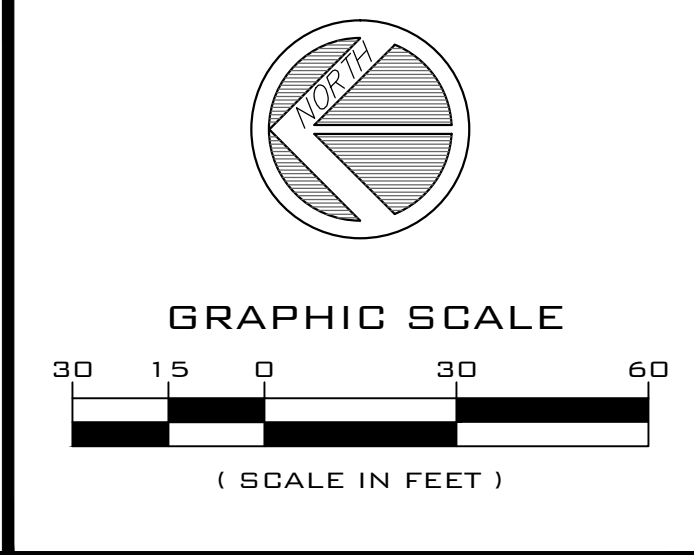
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CONTRACTOR TO VERIFY THAT WATER WILL NOT COLLECT IN LOW ELEVATION SPOTS, BUT WILL INSTEAD DRAIN INTO THE STORMWATER COLLECTION SYSTEMS



RETAINING WALL ELEVATIONS



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 33475 W 85TH ST  
 DE SOTO, KS 66018

DATE 4/3/2024  
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REVISIONS	DATE

GRADING PLAN  
**C205**

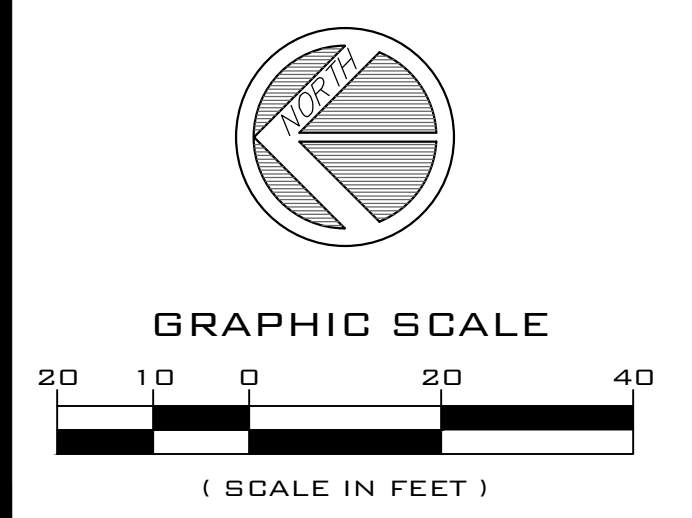
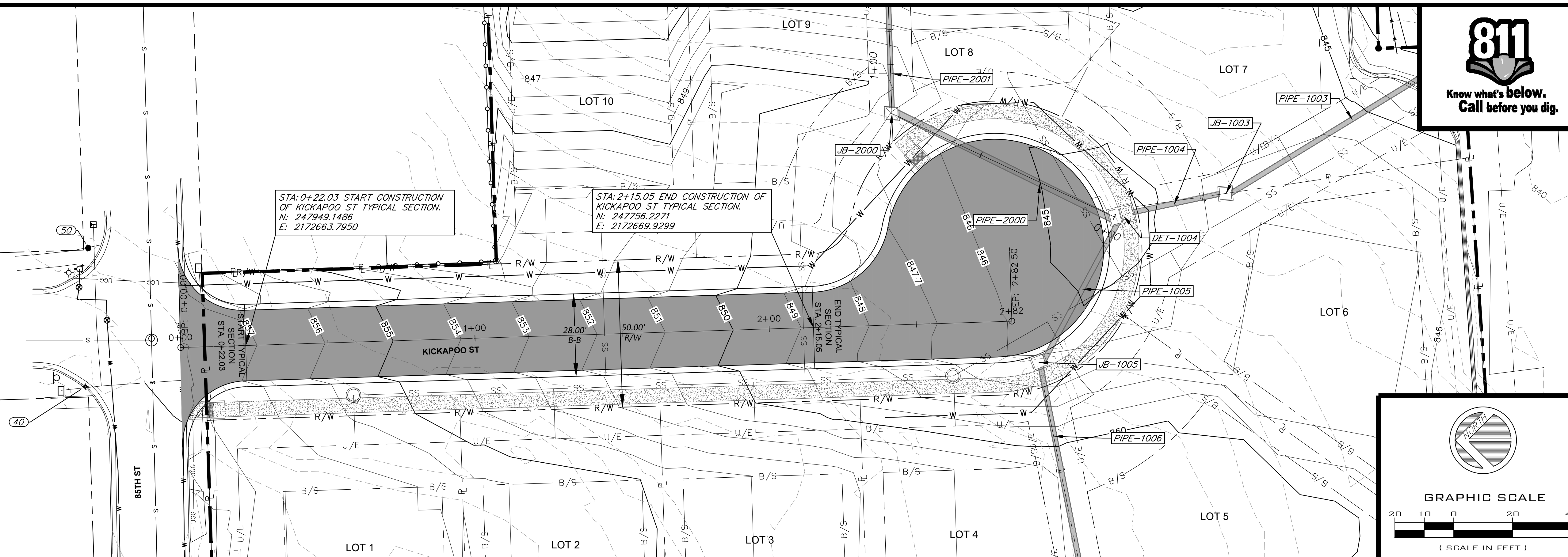


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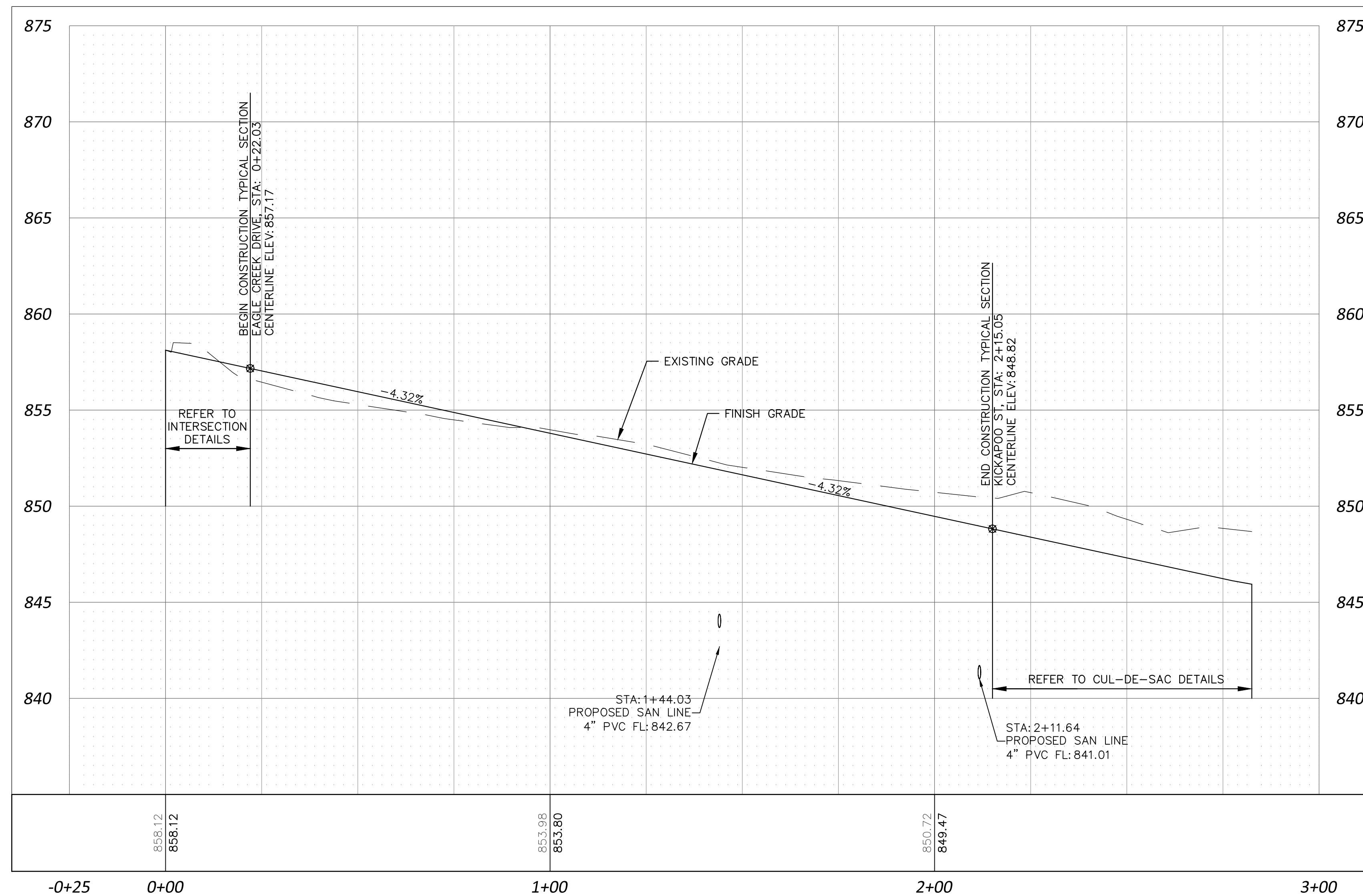


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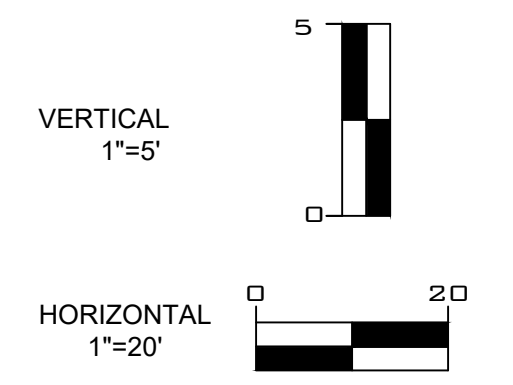
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Kickapoo Street PROFILE



GRAPHIC SCALES



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STREET AND STORM SEWER PLANS  
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KICKAPOO ST  
PLAN & PROFILE  
C206

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ADA RAMP				
POINT	ELEVATION, FT	CHORD	LENGTH, FT	SLOPE, %
A	846.66	AB	5.00	1.00
B	846.61	BC	5.00	7.60
C	846.23	CD	1.59	6.92
D	846.12	DE	5.00	3.00
E	846.27	EF	1.59	1.89
F	846.30	FG	5.00	7.00
G	846.65	GH	5.00	1.60
H	846.73	AH	5.00	1.40
		BG	5.00	0.80
		CF	5.00	1.40

ADA RAMP				
POINT	ELEVATION, FT	CHORD	LENGTH, FT	SLOPE, %
A	857.59	AB	5.00	0.80
B	857.63	BC	6.00	7.00
C	858.05	CD	5.89	1.53
D	857.96	DE	6.19	1.45
E	857.87	EF	2.29	5.68
F	858.00	FG	6.00	7.00
G	857.58	GH	5.00	1.40
H	857.51	AH	5.00	1.60
		BG	5.00	1.00
		CF	5.00	1.00



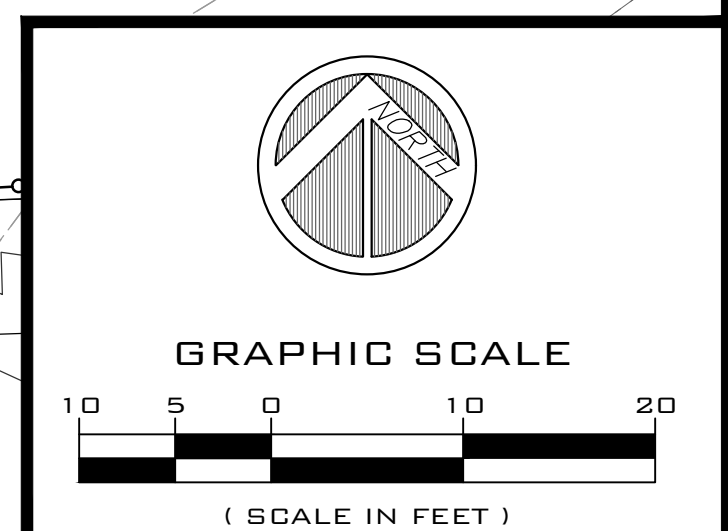
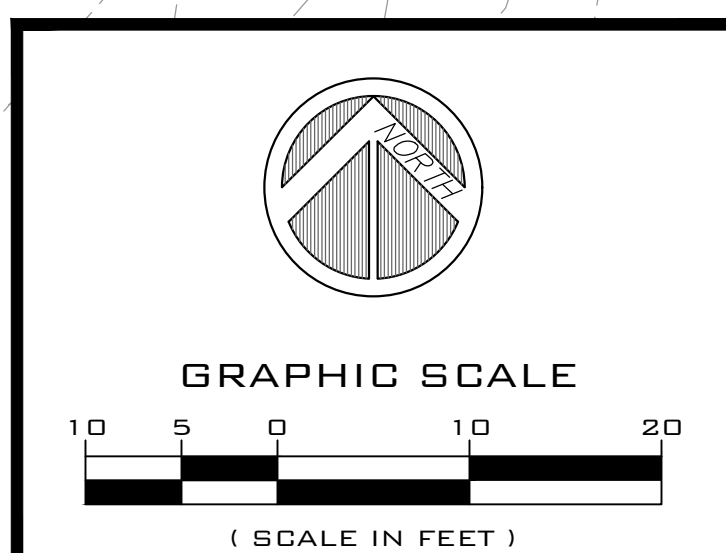
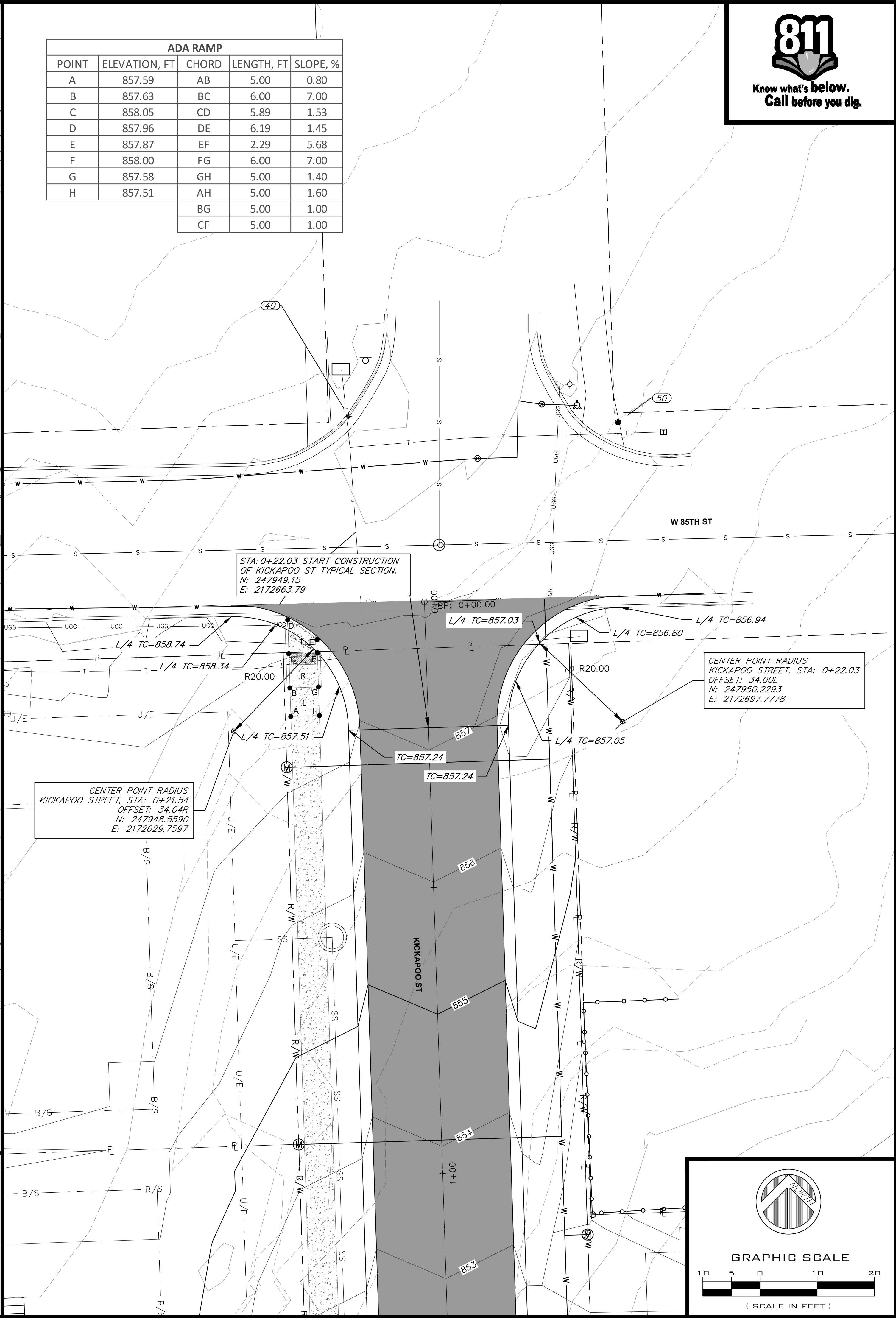
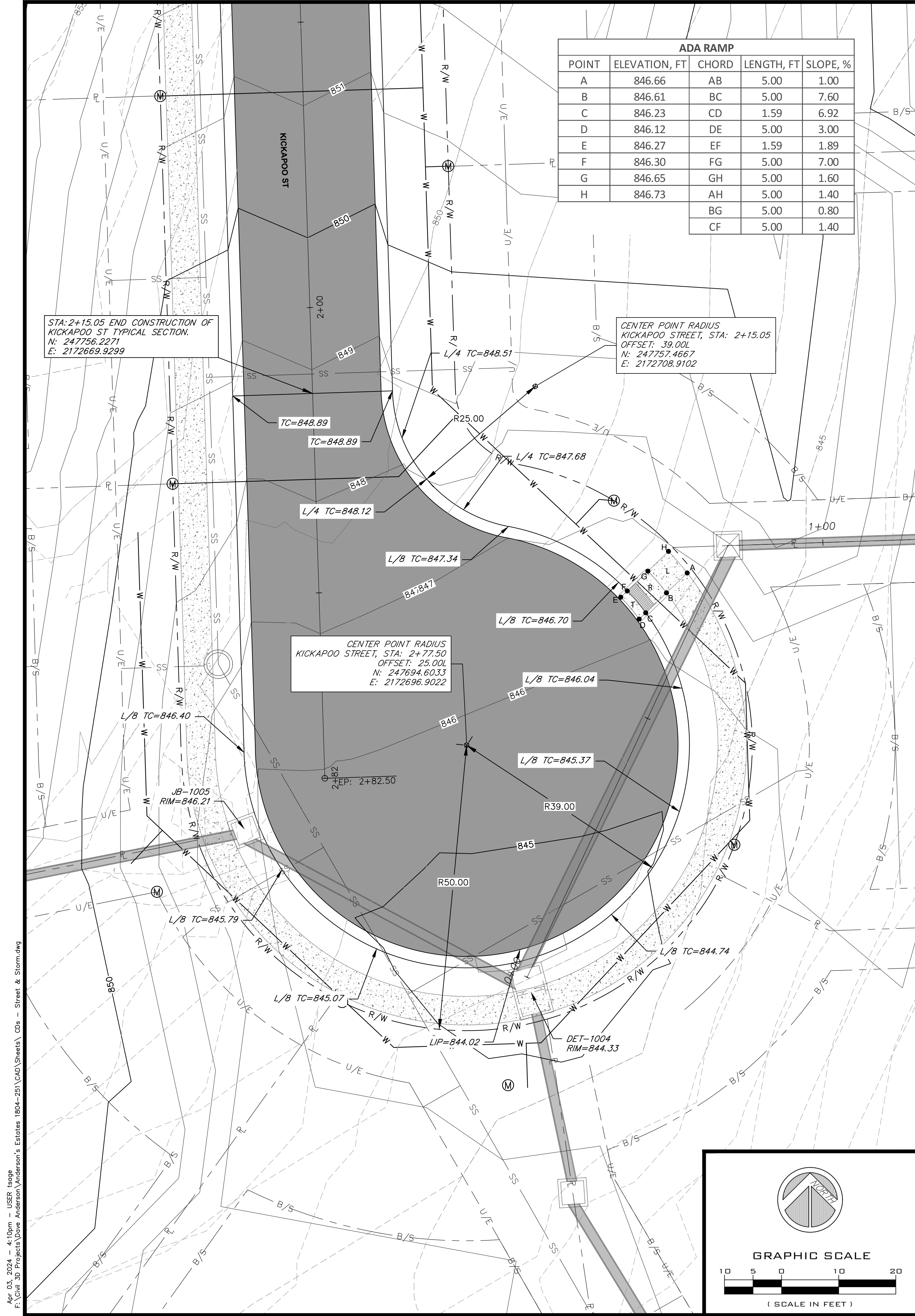
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**ANDERSON ESTATES**  
 STREET AND STORM SEWER PLANS  
 33475 W 85TH ST  
 DE SOTO, KS 66018

DATE	4/3/2024
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REVISIONS	DATE

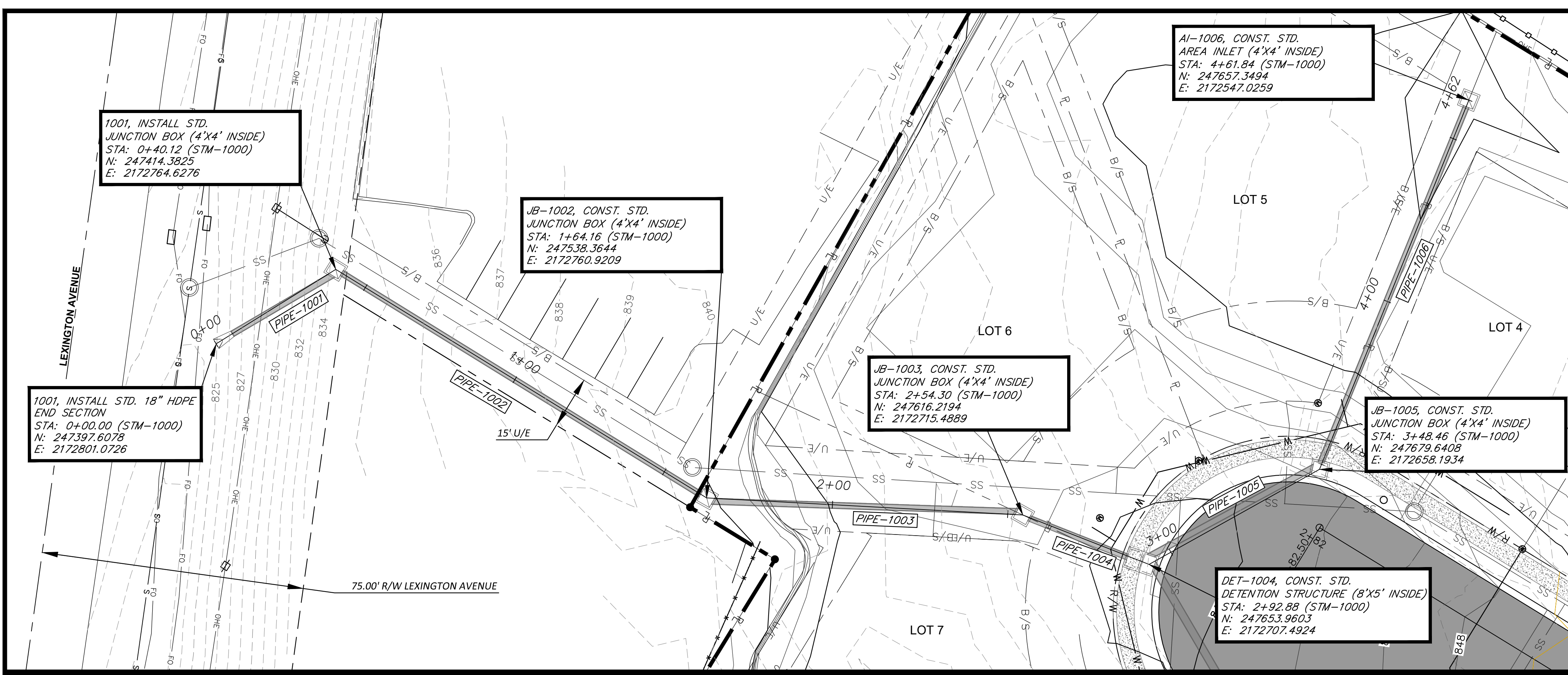
CUL-DE-SAC DETAILS & INTERSECTION DETAILS  
**C207**



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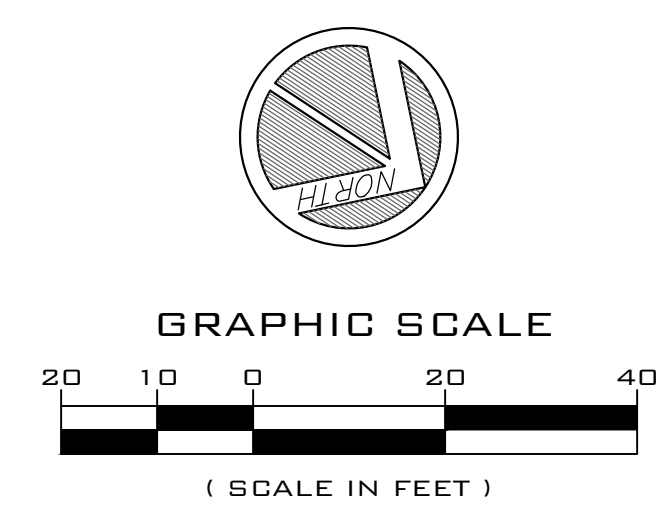


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**STORM SEWER NOTES**

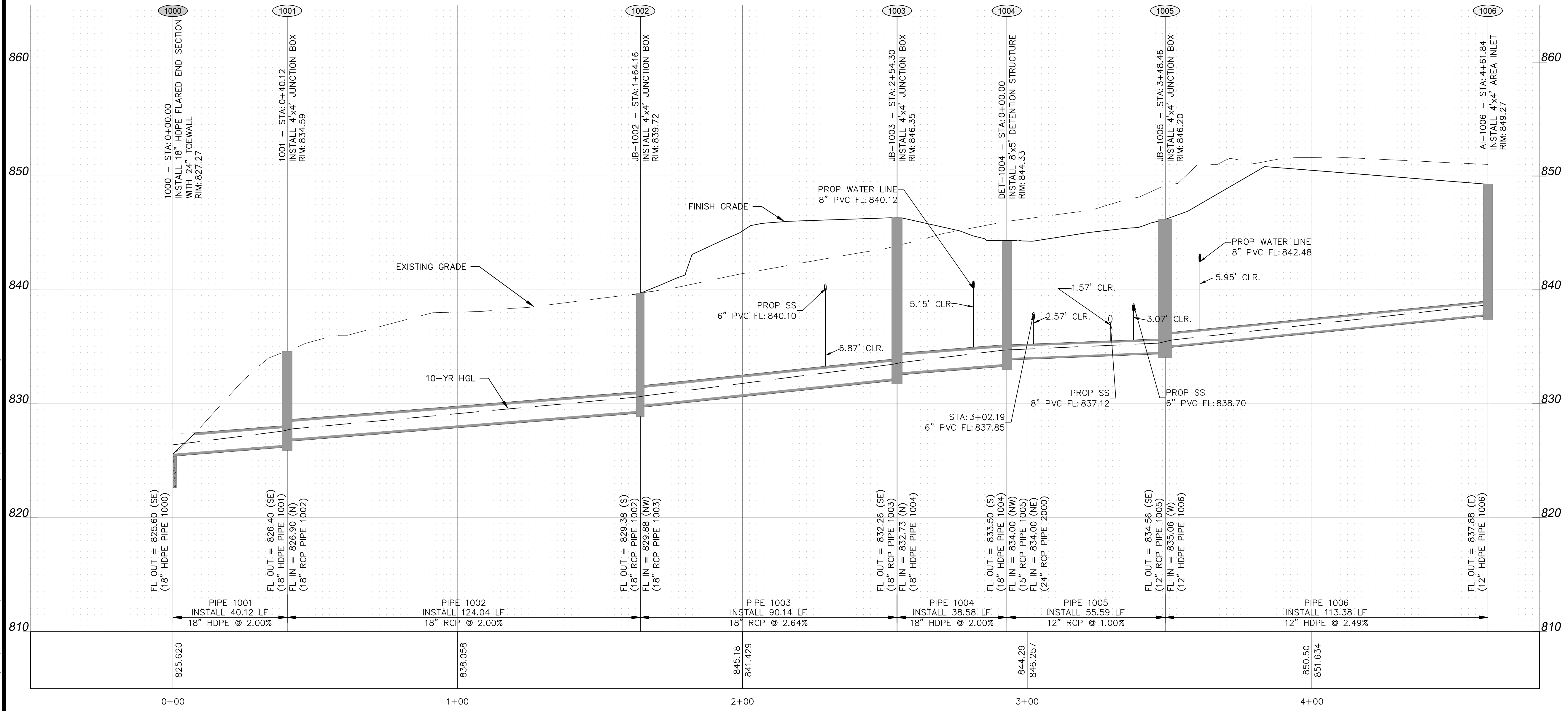
1. THE CONSTRUCTION OF THE STORM SEWER SYSTEM SHALL FOLLOW THE LATEST ADOPTED SPECIFICATIONS OF APWA SECTION 2600 (STORM SEWER).
2. CONTRACTOR SHALL CONSTRUCT ALL STORM SEWERS IN TRENCH CONDITION; ALL FILL SHALL BE PLACED AND COMPACTED (PERP REQUIREMENT ON GRADING SHEET TO A MINIMUM OF 2 FEET ABOVE THE TOP OF THE PROPOSED PIPE PRIOR TO INSTALLATION.)
3. STATION/OFFSET LOCATIONS ARE MEASURED FROM INSIDE WALL FACE OF THE STRUCTURE. NORTHING AND EASTING LOCATIONS ARE MEASURED FROM THE CENTER OF CURB INLETS. NORTHING AND EASTINGS AT AN END SECTION ARE MEASURED FROM OUTLET END OF THE END SECTION.
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8. THE LIDS OF ALL PRECAST STRUCTURES SHALL BE GROUTED TO THE TOP OF THE WALLS.
9. CONTRACTOR TO FOLLOW APWA 2100 SECTION 2102.4 EXCAVATION, TRENCHING, AND BACKFILLING FOR PIPES AND STRUCTURES.



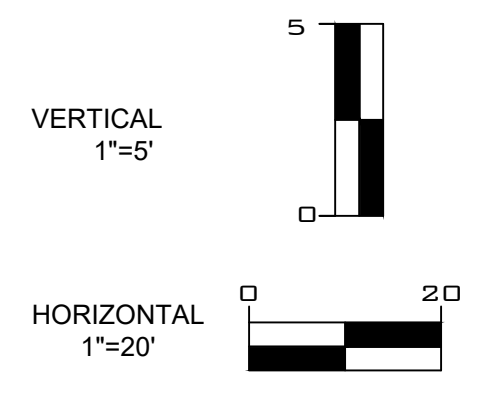
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**STM LINE 1000**



**GRAPHIC SCALES**



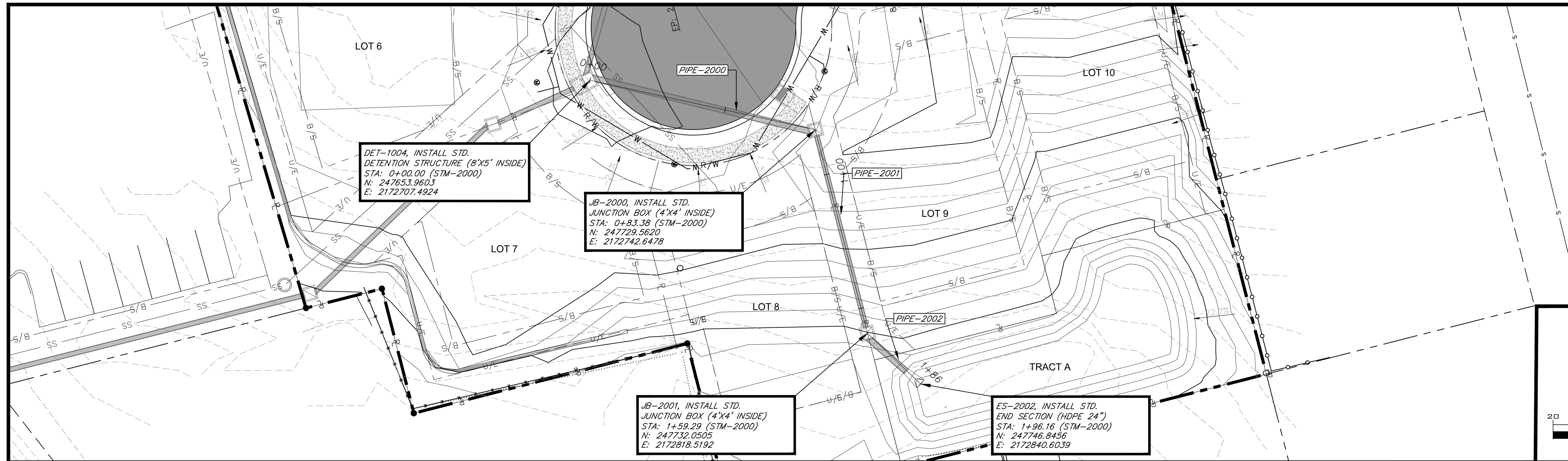
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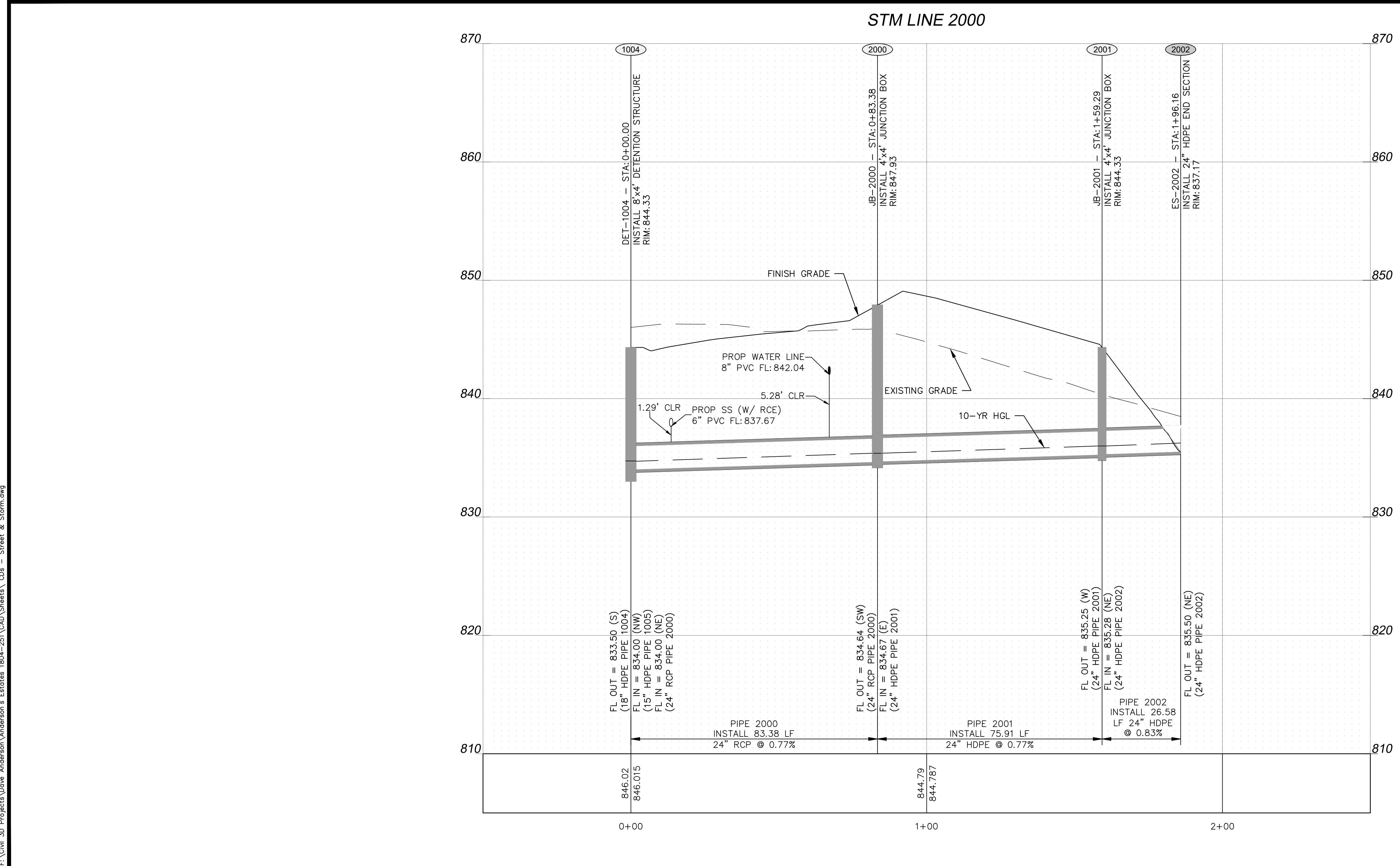
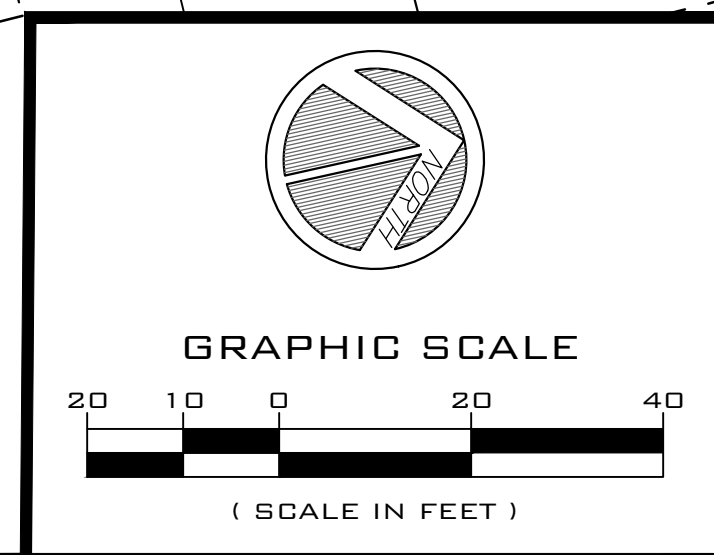
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PLAN & PROFILE -  
 STM '1000'  
**C208**

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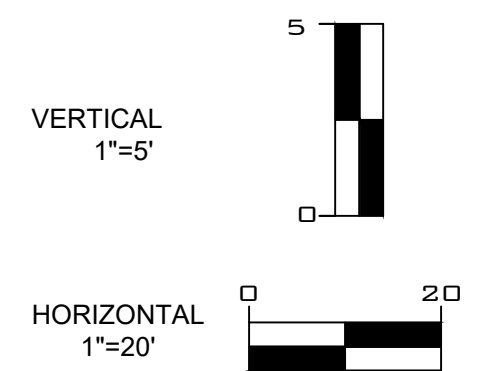
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**STORM SEWER NOTES**

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**GRAPHIC SCALES**



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PLAN & PROFILE -  
 STM '2000'  
**C209**

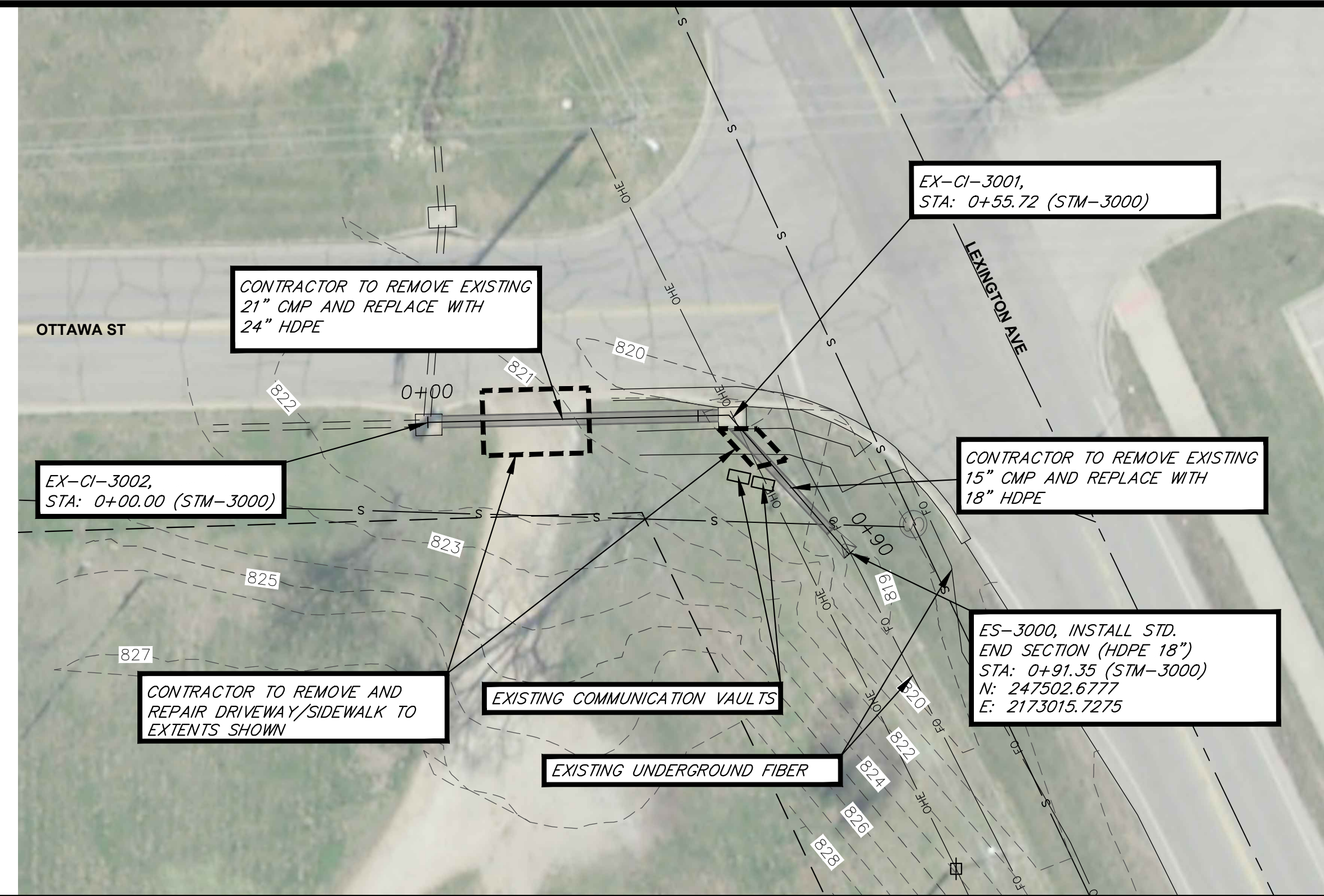
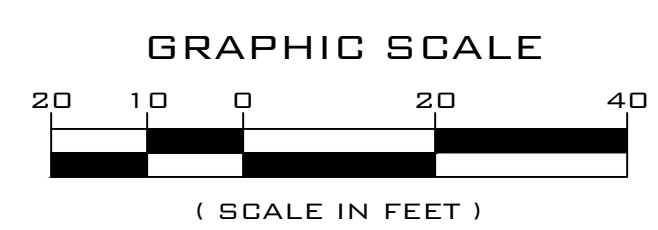
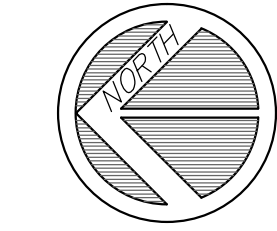


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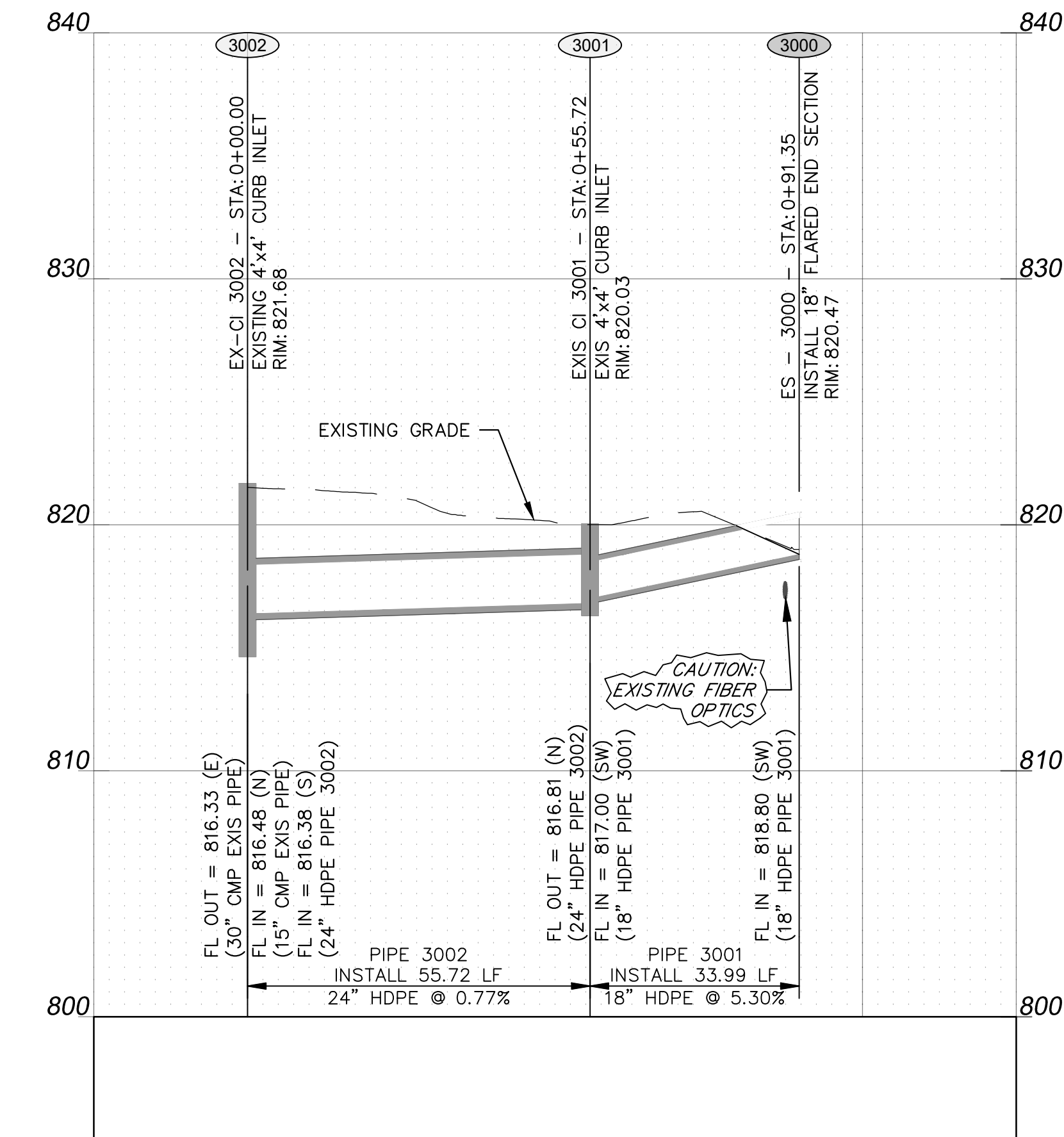


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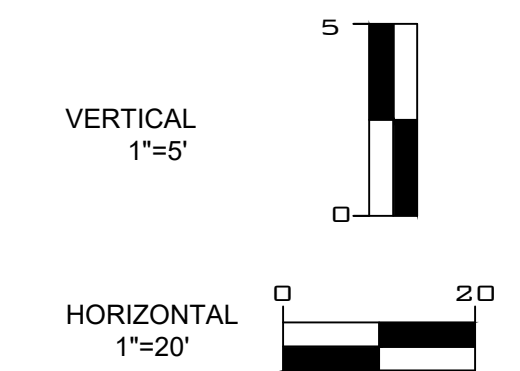
STM Line 3000



**STORM SEWER NOTES**

1. THE CONSTRUCTION OF THE STORM SEWER SYSTEM SHALL FOLLOW THE LATEST ADOPTED SPECIFICATIONS OF APWA SECTION 2600 (STORM SEWER).
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**GRAPHIC SCALES**



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DE SOTO, KS 66018

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PLAN & PROFILE -  
STM '3000'

**C210**

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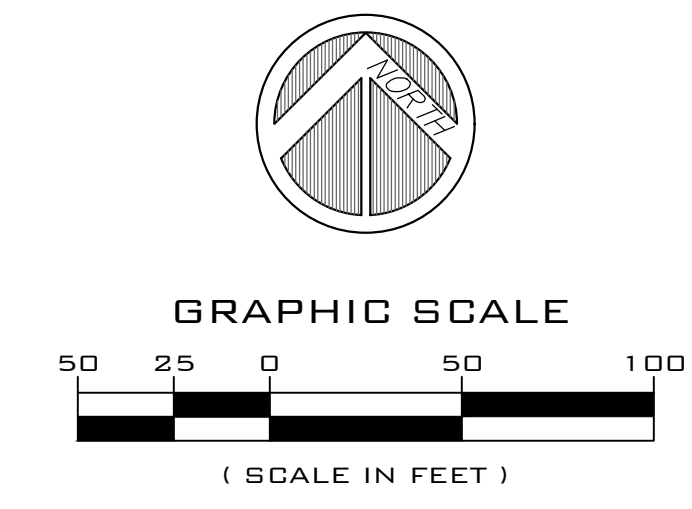
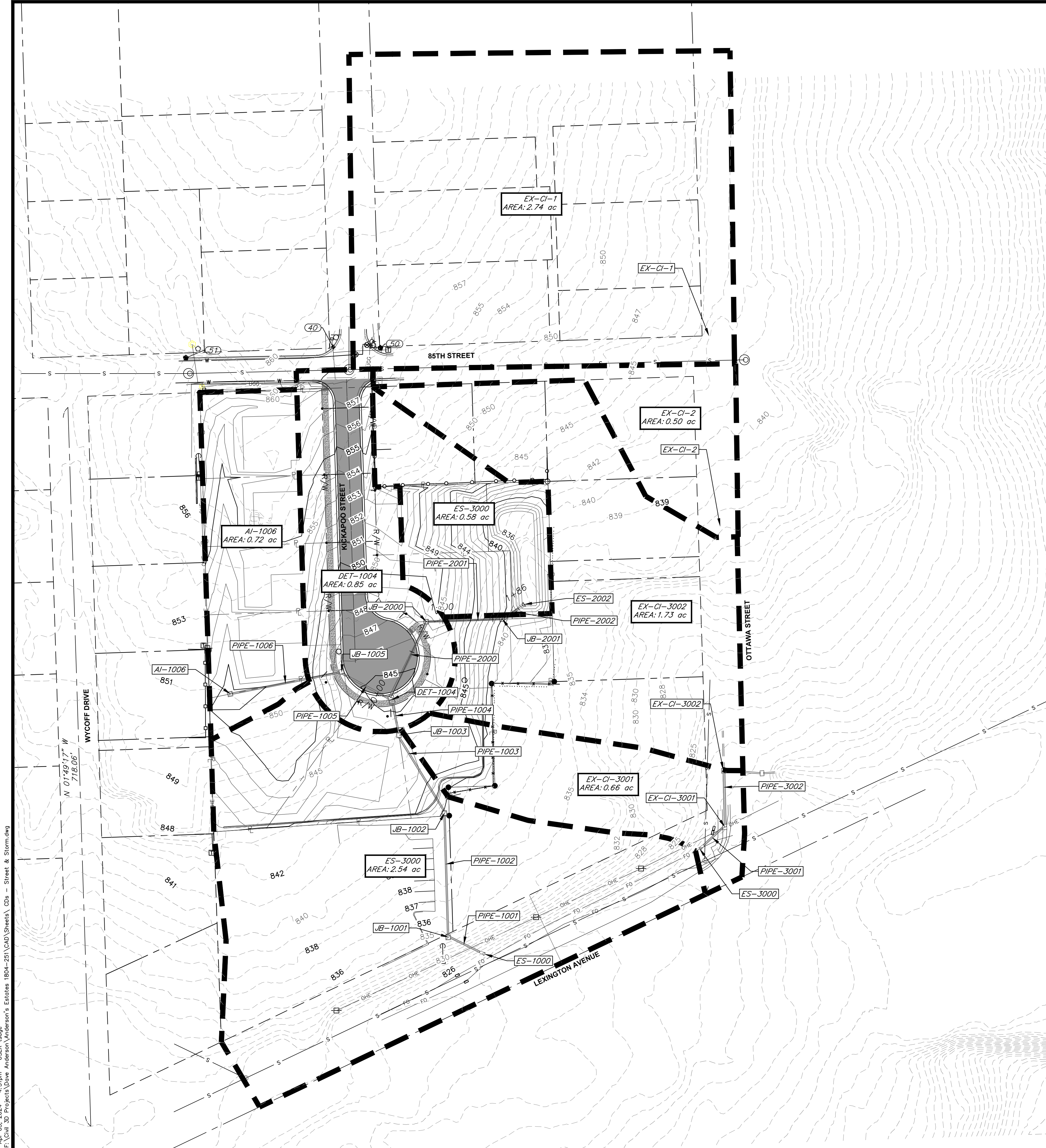


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STREET AND STORM SEWER PLANS  
33475 W 85TH ST  
DE SOTO, KS 66018

DATE 4/3/2024  
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REVISIONS	DATE

DRAINAGE AREA MAP  
**C211**



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33475 W 85TH ST  
DE SOTO, KS 66018

DATE 4/3/2024  
DESIGNED BY AJS  
CHECKED BY JPM

REVISIONS DATE

REVISIONS	DATE

STORM SEWER  
CALCULATIONS

C212

HYDROLOGY

Structure	Local Inlet Area (ac)	Local C	Local CA (ac)	System CA (ac)	Local Tc (min)	System Tc (min)	Local Intensity 10 yr (in/hr)	Local Intensity 100yr (in/hr)	System Intensity 10 yr (in/hr)	System Intensity 100 yr (in/hr)	Antecedent Precip Factor (10 yr)	Antecedent Precip Factor (100 yr)	Local Flow 10 Yr (cfs)	System Flow 10 Yr (cfs)	Local Flow 100 Yr (cfs)	System Flow 100 Yr (cfs)
AI-1006	0.72	0.61	0.44	0.44	5.00	5.00	7.35	10.32	7.35	10.32	1.00	1.25	3.22	3.22	5.65	5.65
JB-1005	0.00	0.00	0.00	0.44	5.00	5.25	7.35	10.32	7.28	10.22	1.00	1.25	0.00	3.18	0.00	5.59
DET-1004	0.85	0.77	0.66	1.43	5.00	5.38	7.35	10.32	7.24	10.17	1.00	1.25	4.83	10.34	8.47	18.15
JB-1003	0.00	0.00	0.00	1.43	5.00	5.45	7.35	10.32	7.22	10.14	1.00	1.25	0.00	10.30	0.00	18.10
JB-1002	0.00	0.00	0.00	1.43	5.00	5.61	7.35	10.32	7.17	10.08	1.00	1.25	0.00	10.24	0.00	17.99
JB-1001	0.00	0.00	0.00	1.43	5.00	5.85	7.35	10.32	7.10	9.98	1.00	1.25	0.00	10.14	0.00	17.81
ES-1000	0.00	0.00	0.00	1.43	5.00	5.93	7.35	10.32	7.08	9.95	1.00	1.25	0.00	10.10	0.00	17.76
																4.31
ES-2002	0.58	0.58	0.33	0.33	5.00	5.00	7.35	10.32	7.35	10.32	1.00	1.25	2.45	2.45	4.31	4.31
JB-2001	0.00	0.00	0.00	0.33	5.00	5.07	7.35	10.32	7.33	10.29	1.00	1.25	0.00	2.45	0.00	4.29
JB-2000	0.00	0.00	0.00	0.33	5.00	5.27	7.35	10.32	7.27	10.21	1.00	1.25	0.00	2.43	0.00	4.26
EX-CI-1	2.74	0.60	1.64	1.64	5.00	5.00	7.35	10.32	7.35	10.32	1.00	1.25	12.09	12.09	21.21	21.21
EX-CI-2	0.50	0.62	0.31	1.95	5.00	5.00	7.35	10.32	7.35	10.32	1.00	1.25	2.27	14.36	3.99	25.20
EX-CI-3002	1.73	0.50	0.87	2.82	5.00	5.00	7.35	10.32	7.35	10.32	1.00	1.25	6.39	20.75	11.22	36.42
EX-CI-3001	0.66	0.51	0.34	3.16	5.00	5.00	7.35	10.32	7.35	10.32	1.00	1.25	2.51	23.26	4.40	40.82
ES-3000	2.54	0.64	1.62	3.05	5.00	5.00	7.35	10.32	7.35	10.32	1.00	1.25	11.94	22.44	20.96	39.39

INLET DESIGN

Structure	Local Flow (cfs)	Upstream Bypass (cfs)	Total Flow (cfs)	Street Slope (%)	Cross Slope (%)	Pavement Spread (ft) *	Flow Depth (ft) **	Inlet Length (ft)	Structure Type	Rim Elevation (ft)	Intercepted Flow (cfs)	Interception Efficiency (%)	Bypassed Flow (cfs)	Bypass Inlet
AI-1006	3.22	0.00	3.22	NA	NA	NA	NA	NA	Area Inlet	849.27	3.22	100%	0.00	NA
JB-1005	NA	NA	NA	NA	NA	NA	NA	NA	Junction Box	846.14	NA	NA	NA	NA
DET-1004	4.83	0.00	4.83	4.30	2.00	7.60	0.15	5	Curb Inlet/Detention Structure	845.12	4.83	100%	0.00	NA
JB-1003	0.00	NA	NA	NA	NA	NA	NA	5	Junction Box	845.44	NA	NA	NA	NA
JB-1002	0.00	NA	NA	NA	NA	NA	NA	5	Junction Box	839.72	NA	NA	NA	NA
JB-1001	0.00	NA	NA	NA	NA	NA	NA	5	Junction Box	834.59	NA	NA	NA	NA
ES-1000	0.00	NA	NA	NA	NA	NA	NA	5	End Section	827.69	NA	NA	NA	NA
ES-2002	2.45	NA	NA	NA	NA	NA	NA	NA	End Section	837.17	2.45	100%	0.00	NA
JB-2001	NA	NA	NA	NA	NA	NA	NA	NA	Junction Box	839.93	NA	NA	NA	NA
JB-2000	NA	NA	NA	NA	NA	NA	NA	NA	Junction Box	848.42	NA	NA	NA	NA
EX-CI-1	12.09	NA	12.09	1.00	2.00	NA	NA	4	Existing Curb Inlet	NA	7.37	61%	4.72	EX-CI-2
EX-CI-2	2.27	EX-CI-1	6.99	6.50	2.00	NA	NA	4	Existing Curb Inlet	NA	3.38	149%	3.61	EX-CI-3002
EX-CI-3002	6.39	EX-CI-2	10.00	2.50	2.00	NA	NA	4	Existing Curb Inlet	821.68	5.22	82%	4.78	EX-CI-3001
EX-CI-3001	2.51	EX-CI-3002	7.29	NA	2.00	NA	NA	4	Existing Curb Inlet	820.03	7.29	291%	NA	NA
ES-3000	11.94	NA	22.44	NA	NA	NA	NA	NA	End Section	820.97	22.44	100%	NA	EX-CI-3001

PIPE DESIGN

U/S Structure	D/S Structure	U/S Invert	D/S Invert	Pipe Length (ft)	Pipe Slope (ft/ft)	Pipe Diameter (in)	Manning's n	Inlet Capacity (cfs)	Full Capacity (cfs)	System Flow (cfs)	Average Velocity (ft/s)
AI-1006	JB-1005	837.88	835.06	113.38	0.0249	12	0.013	4.37	5.63	3.22	7.17
JB-1005	CI-1004	834.56	834.00	55.59	0.0101	12	0.013	4.37	3.58	3.18	4.57
DET-1004	JB-1003	833.50	832.73	38.58	0.0200	18	0.013	12.03	14.87	10.30	8.42
JB-1003	JB-1002	832.26	829.88	90.14	0.0264	18	0.013	12.03	17.11	10.27	9.68
JB-1002	JB-1001	829.38	826.90	124.04	0.0200	18	0.013	12.03	14.89	10.20	8.43
JB-1001	ES-1000	826.40	825.60	40.12	0.0199	18	0.013	12.03	14.87	10.10	8.42
ES-2002	JB-2001	835.5	835.28	26.58	0.0083	24	0.013	24.69	20.63	2.45	6.57
JB-2001	JB-2000	835.25	834.67	75.91	0.0076	24	0.013	24.69	19.82	2.45	6.31
JB-2000	DET-1004	834.64	834.00	83.38	0.0077	24	0.013	24.69	19.86	2.43	6.33
ES-2002	EX-CI-3001	818.8	817	33.99	0.0530	18	0.013	12.03	24.23	22.44	13.72
EX-CI-3001	EX-CI-3002	816.81	816.38	55.72	0.0077	24	0.013	24.69	19.92	29.73	6.34

REV	DATE	COMMENTS

**SHEET REFERENCE**

DIGITAL I.D.: SS-DETAILS

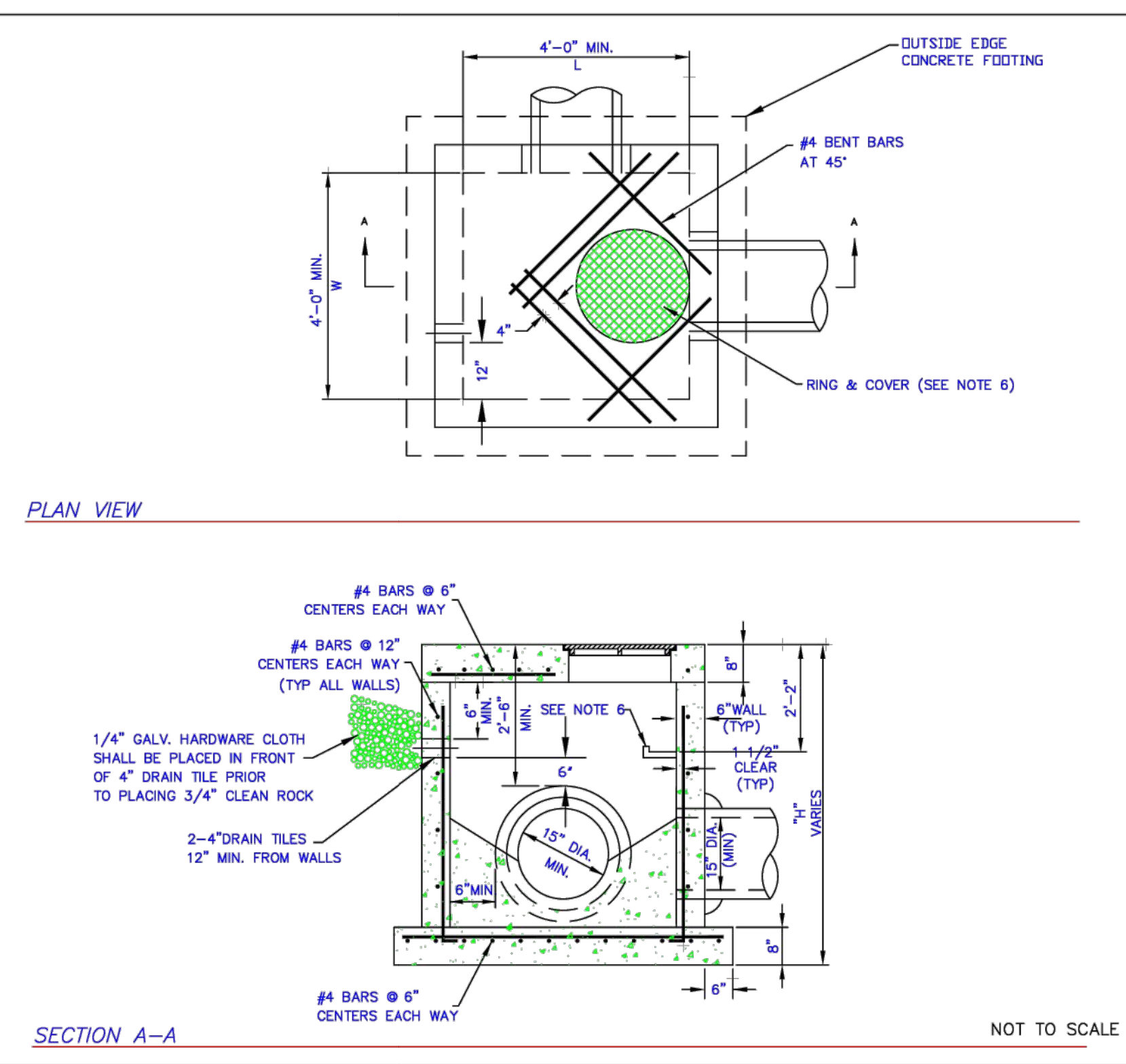
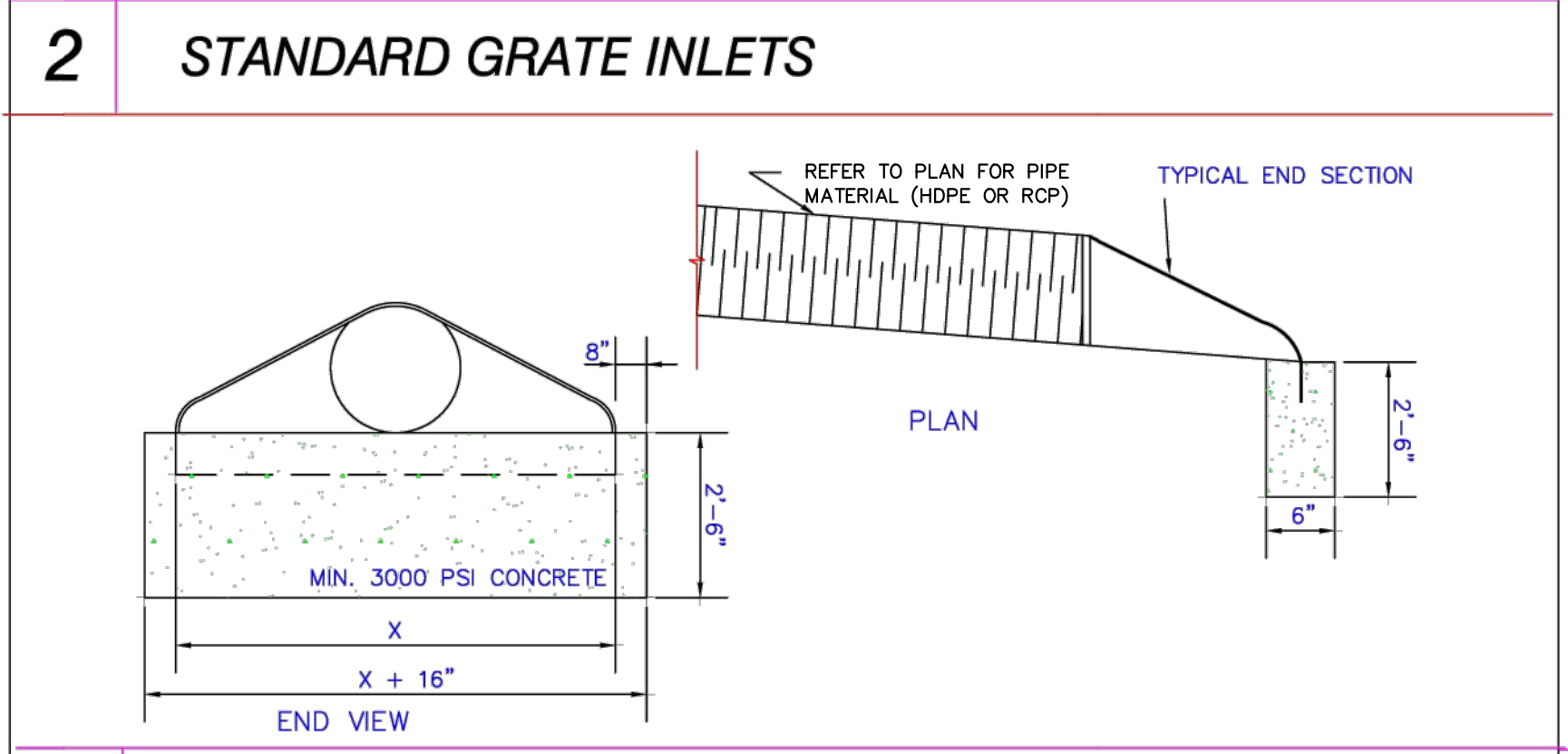
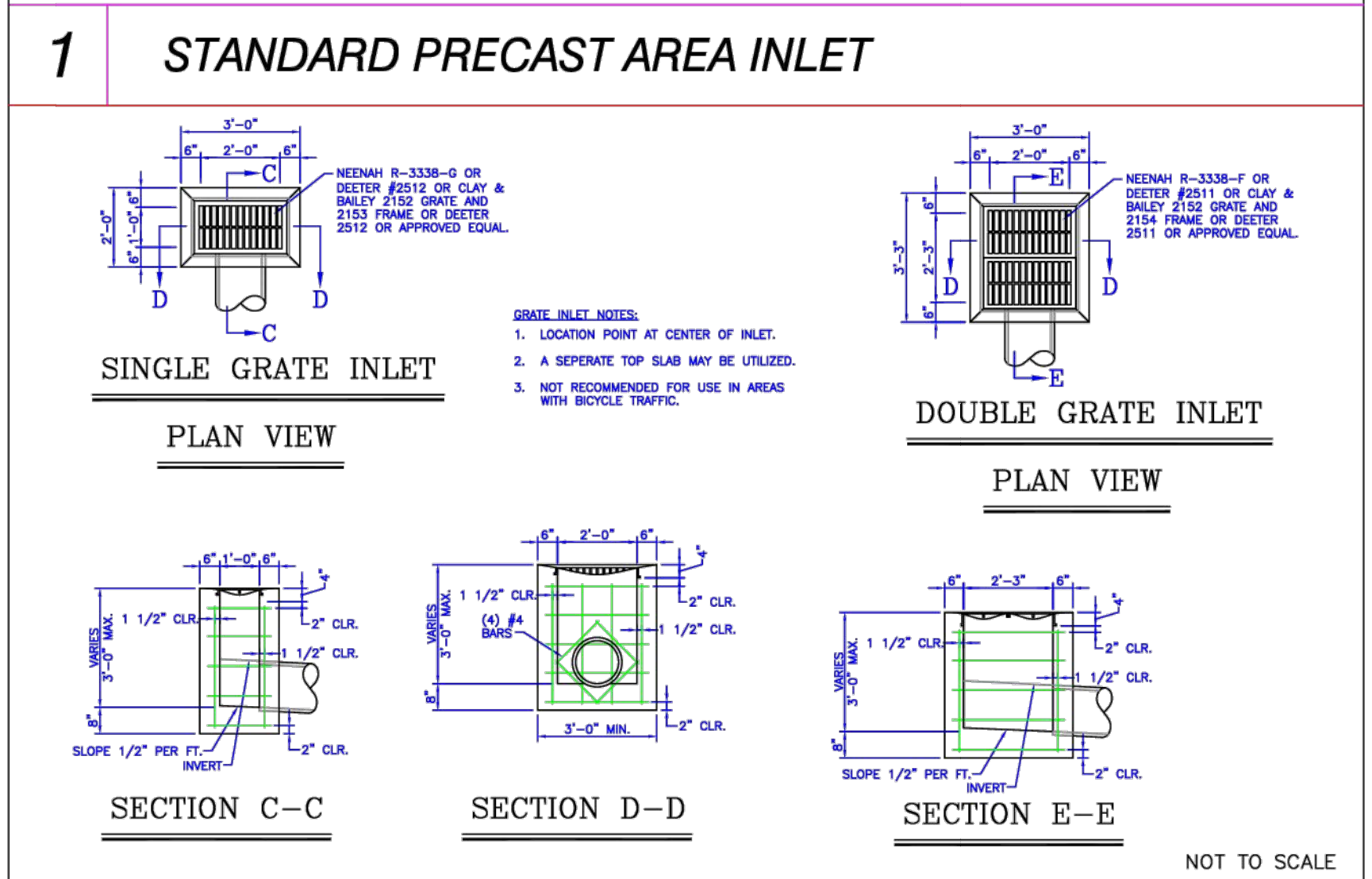
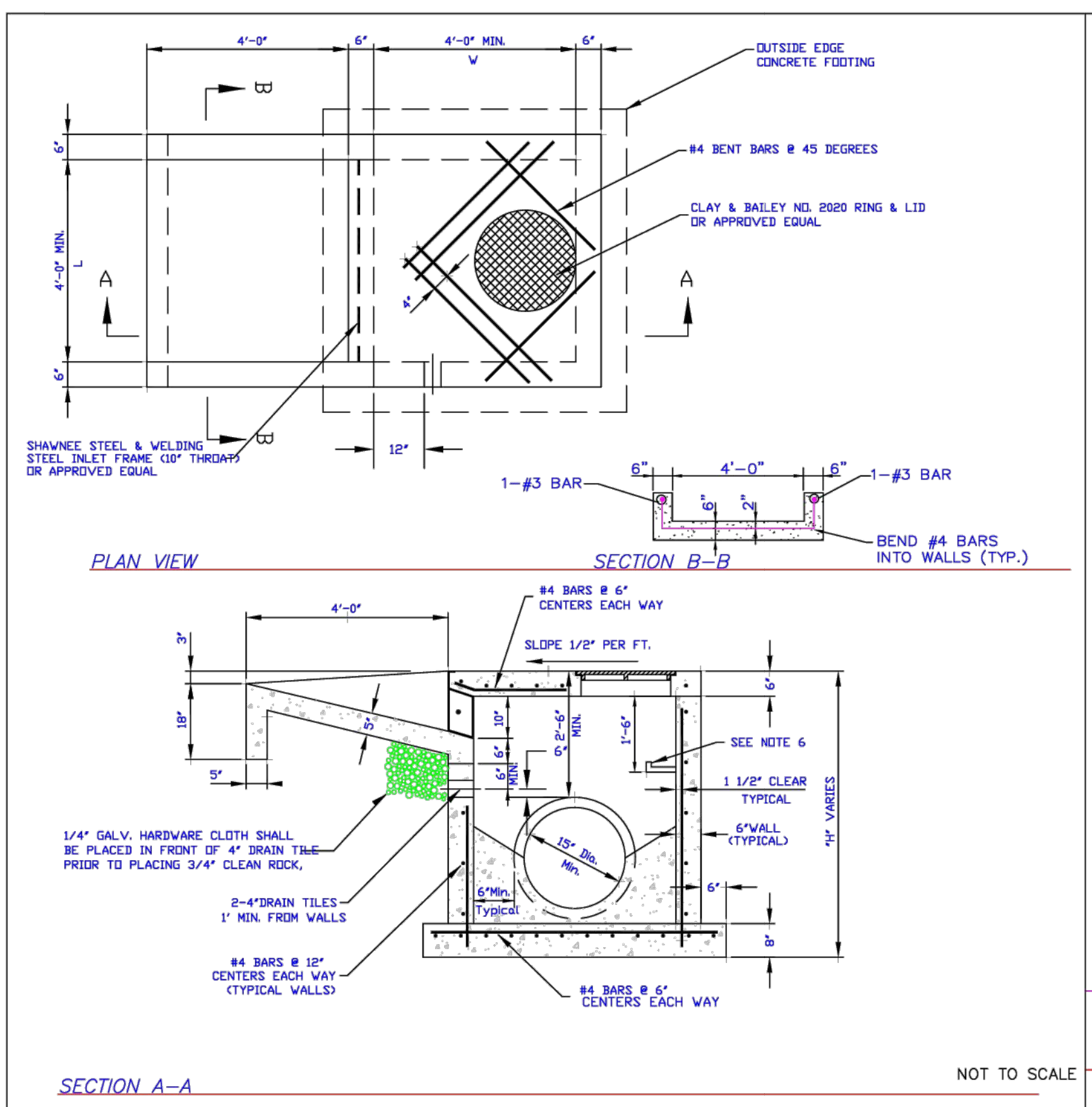
PROJECT NO.: \_\_\_\_\_

ADOPTED DATE: 9/04/07

SHEET NO. \_\_\_\_ OF \_\_\_\_ SHEETS

REVISIONS

NO.	DATE	DESCRIPTION

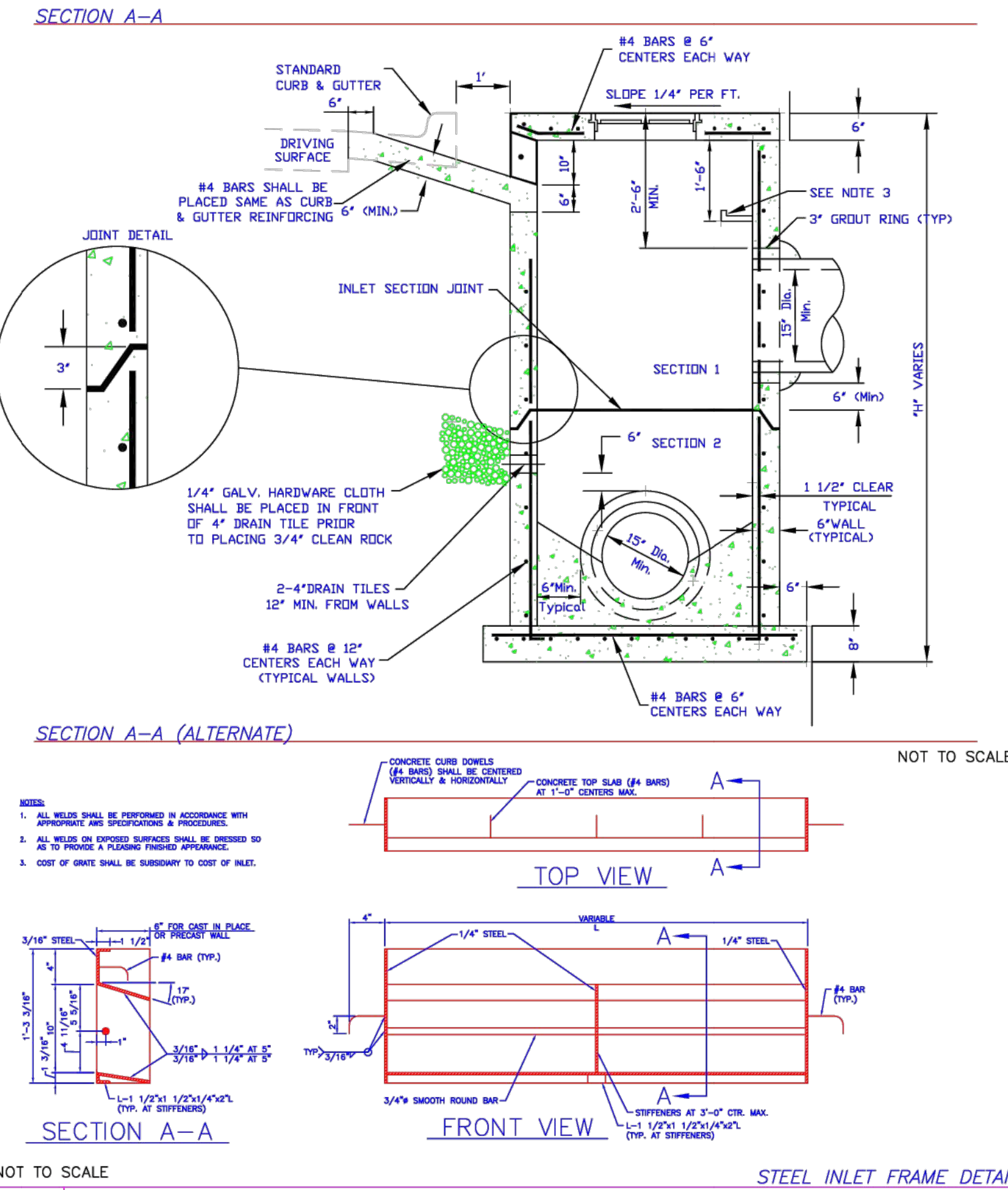
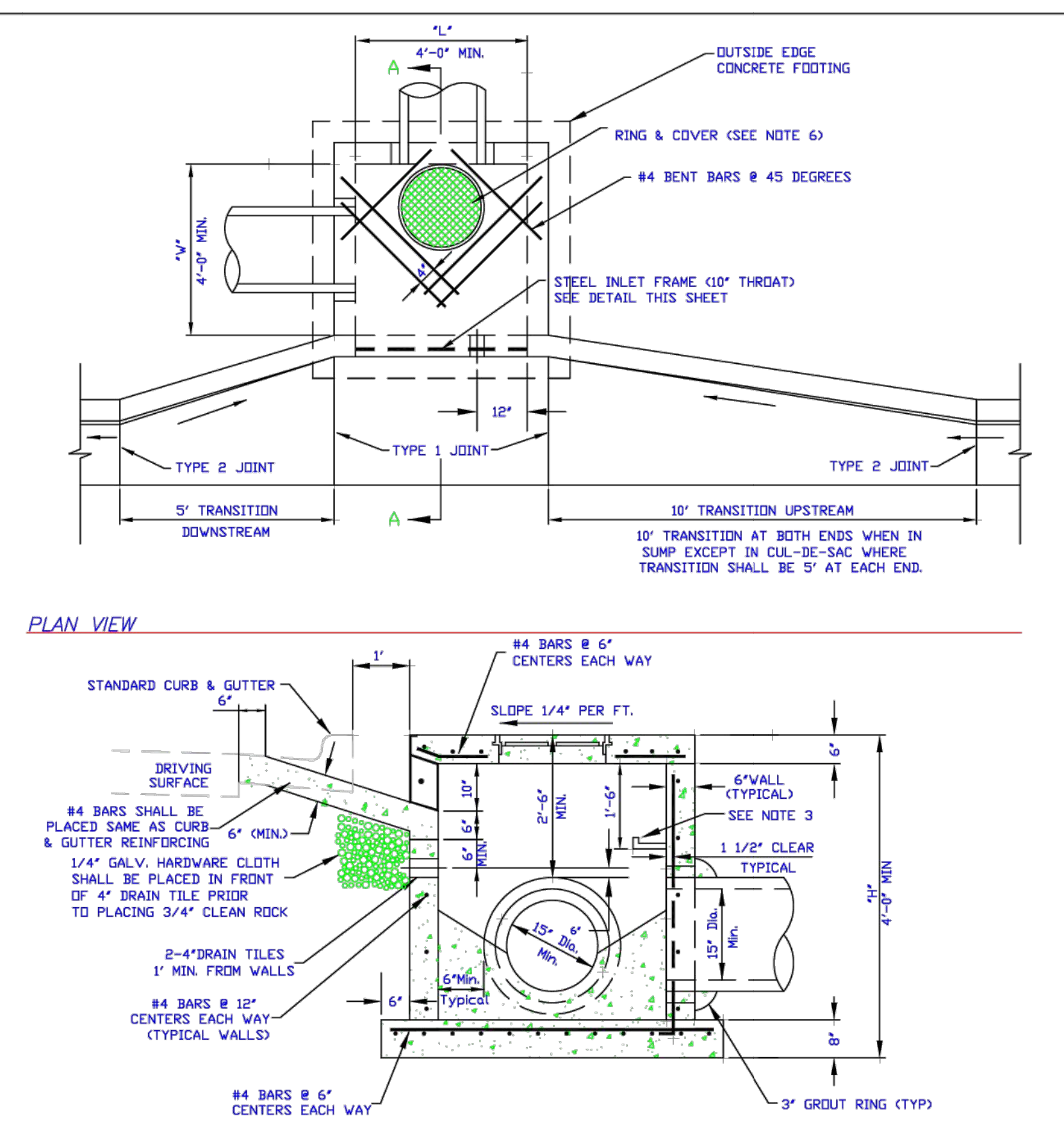


**4 STANDARD PRECAST JUNCTION BOX**

- Standard drawings shall apply only to structures within the following limits:  
A. Inside plan dimensions shall not exceed 40 square feet.  
B. Wall height shall not exceed 10 vertical feet.  
Structures which exceed these limits shall be considered non-standard and must be designed and detailed by a licensed professional engineer.
- All work and materials shall conform to Section 2600 of the Kansas City Metropolitan chapter of the American Public Works Association (KCAPWA).
- Steps are required in all structures with wall height greater than 4 feet. Steps shall be Clay & Bailey 2102, MA Industries PS2-PF or approved equal.
- Frames, lids, castings, steps, invert, subsurface drains, pipe connections and other items shown shall be considered subsidiary to each standard structure.
- Subsurface drains are required in all structures in the public right-of-way with wall height greater than 3 feet. One drain per wall shall be installed only in walls which are perpendicular to the street centerline.
- Ring and Cover for all curb inlets and field inlets shall be Neenah R-1537, Clay & Bailey #2020, Deeter #2016 or approved equal. Ring and Cover for junction boxes shall be Neenah R-1736, Clay & Bailey #2008, Deeter #1315 or approved equal.
- Reinforcing bars shall be deformed, grade 60 and shall meet ASTM A 615 specifications.
- Welded wire fabric shall meet ASTM A 185 specifications.
- Placement of reinforcement shall comply with ACI 318, including embedment, lap lengths, bar supports and minimum concrete cover.
- All precast and cast-in-place concrete shall conform to MCIB Specification Section 4 entitled "Materials", except that total shale, coal, and lignite content shall not exceed 0.5 percent by weight, and clay content shall be zero. Concrete mix shall conform to MCIB Specification Section 5 entitled "Concrete Mix Design Tables", and the compressive strength of each mixture shall be as designated therein.
- Ready-mix concrete shall comply with ASTM C 94 specifications.
- Floor of all structures shall be shaped with invert to provide smooth flow.
- Transport, placement and curing of concrete shall comply with ACI 318, including hot weather and cold weather protection.
- Bevel all exposed edges with 3/4" chamfer or 1/2" toolled edge.
- All reinforced concrete shall be mechanically vibrated during placement. Proper methods shall be applied to avoid aggregate segregation.
- Joints between structure sections shall be made with plastic joint compound or as specified in Section 2602 of the KCAPWA.
- All exposed concrete shall have a light broom finish.
- Where sidewalks must adjoin storm sewer structures, #4 dowels shall be placed at 18" O.C. through 1/2" premoiled expansion joints. Dowels shall be 18" long with 6" greased ends in the structure top.
- Curb inlet dimensions shall be stated as 'length' x 'width' on all construction notes.
- The minimum length of curb inlet opening shall be 4 feet.
- Curb inlet frame top channel shall be fabricated from 0.15 max. carbon, forming quality, or A36 hot rolled steel plate.
- All flat plate and rods shall be M1020 merchant quality or A36 hot rolled steel.
- All curb inlet frame materials shall be free from rust and mill scale.
- All welding shall conform to the provisions of the AWS "Structural Welding Code."
- Curb inlet frames shall be hot-dip galvanized after fabrication per ASTM A 123.
- Curb inlet frames shall be sloped to match the street centerline grade.
- Pipe for storm sewer shall be either reinforced concrete or corrugated steel and shall meet KDOT standard specifications for "Cross Road" use.
- Granular embedment for pipe shall meet CA-5 or CA-7 gradation requirement, and shall be cleaned crushed rock or cleaned crushed concrete.
- Consigulated steel pipe gage shall comply with the table below.
- All backfill under existing or proposed pavement shall be flowable fill.



**5 GENERAL NOTES**



**6 STANDARD PRECAST CURB INLET**

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PUBLIC IMPROVEMENT  
STANDARD DETAILS  
STREETS AND  
SIDEWALKS

SHEET I. D.

SR - 01

PROFESSIONAL ENGINEER

Table with columns for REVISIONS, COMMENTS, and SHEET REFERENCE.

SHEET REFERENCE

DIGITAL I.D.: SS-DETAILS

PROJECT NO.:

ADOPTED DATE: 09/04/07

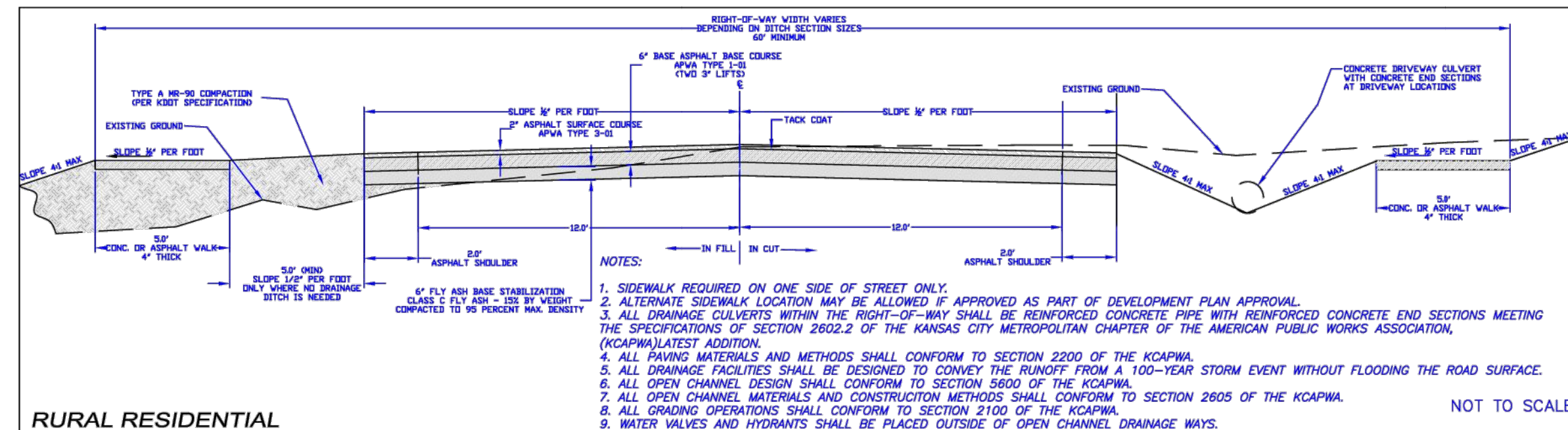
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ANDERSON ESTATES  
STREET AND STORM SEWER PLANS  
33475 W 85TH ST  
DE SOTO, KS 66018

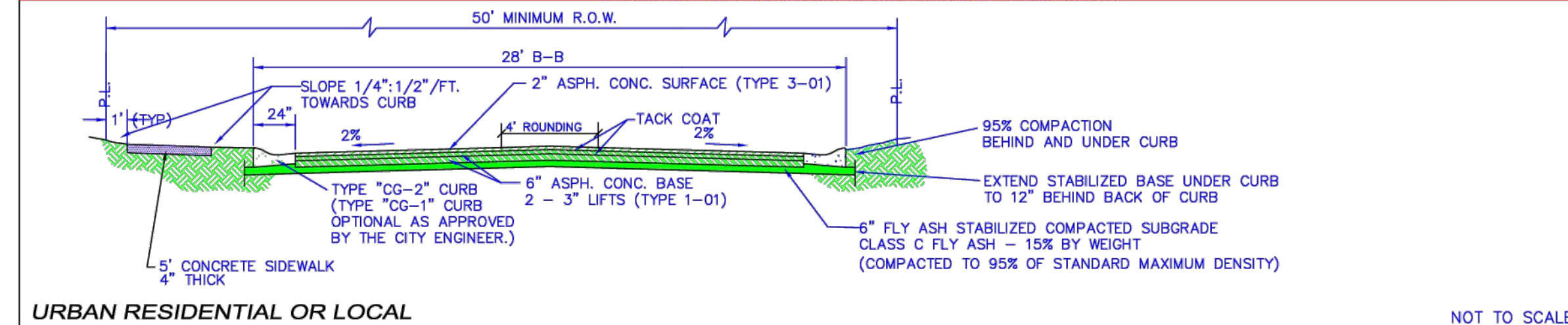
DATE 4/3/2024  
DESIGNED BY AJS  
CHECKED BY JPM

REVISIONS DATE

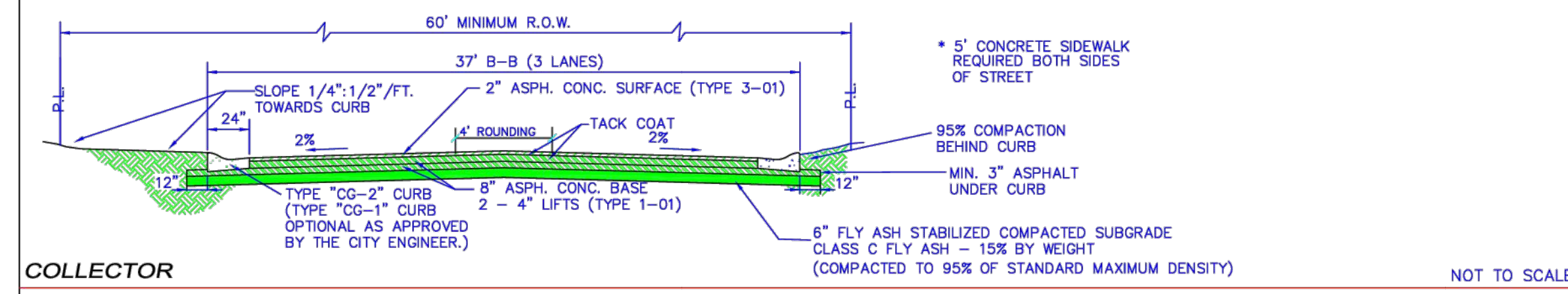
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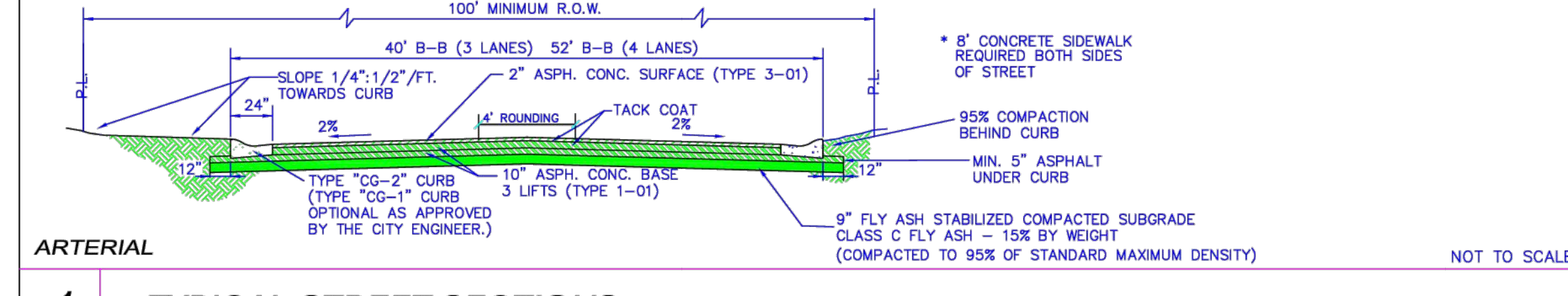
RURAL RESIDENTIAL



URBAN RESIDENTIAL OR LOCAL

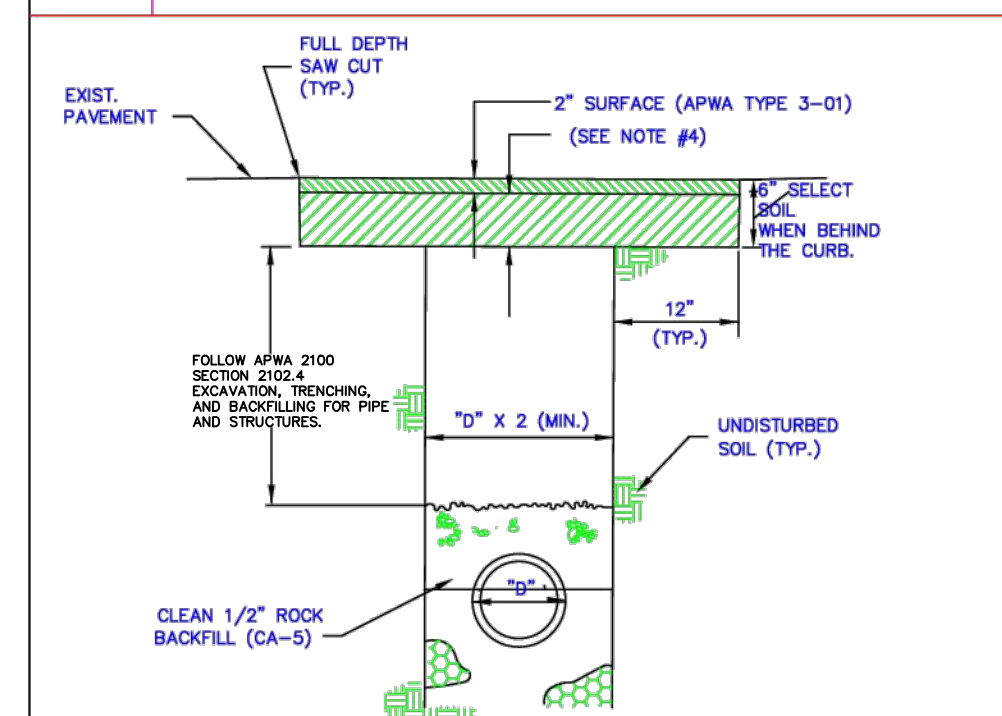


COLLECTOR



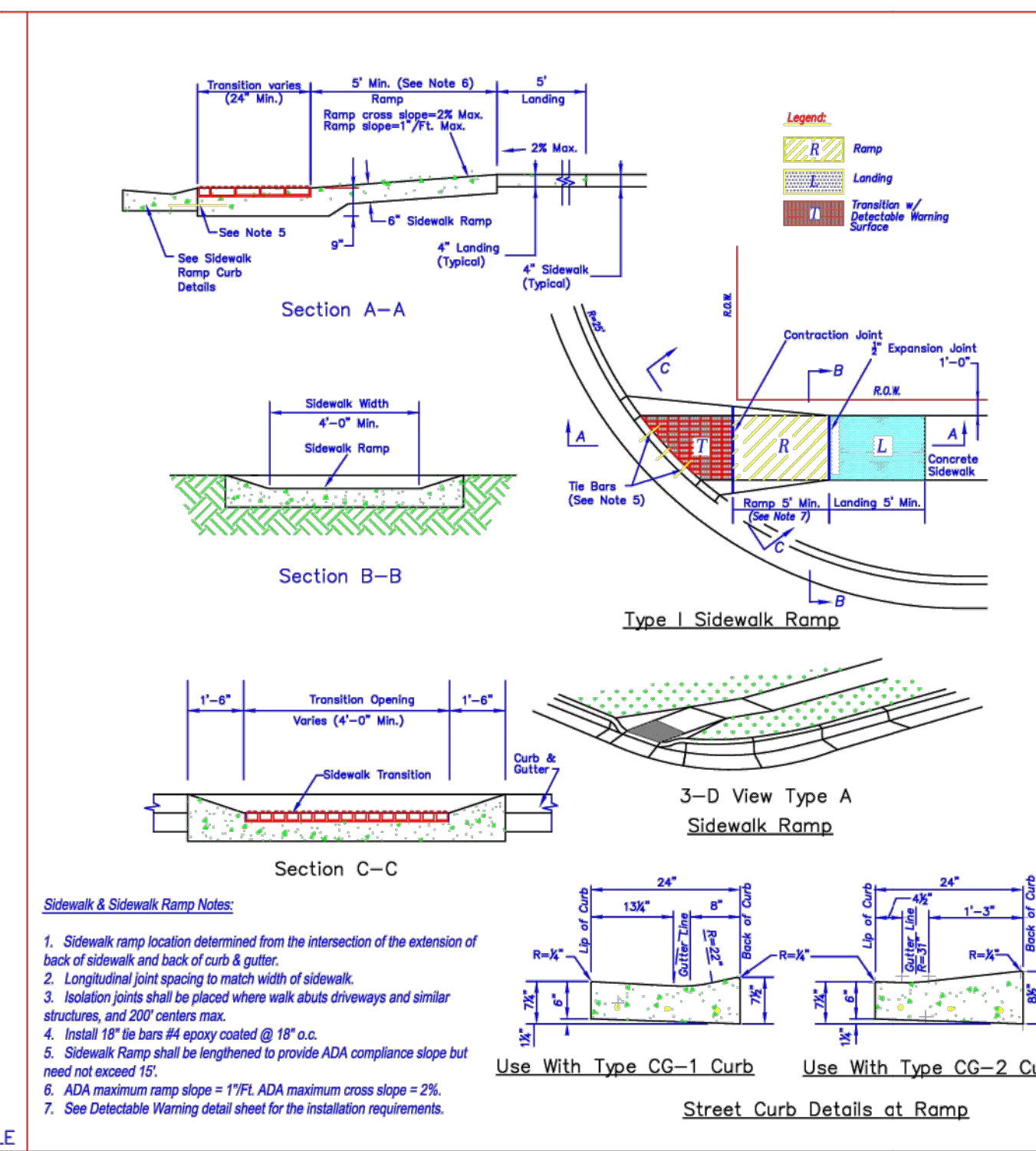
ARTERIAL

1 TYPICAL STREET SECTIONS

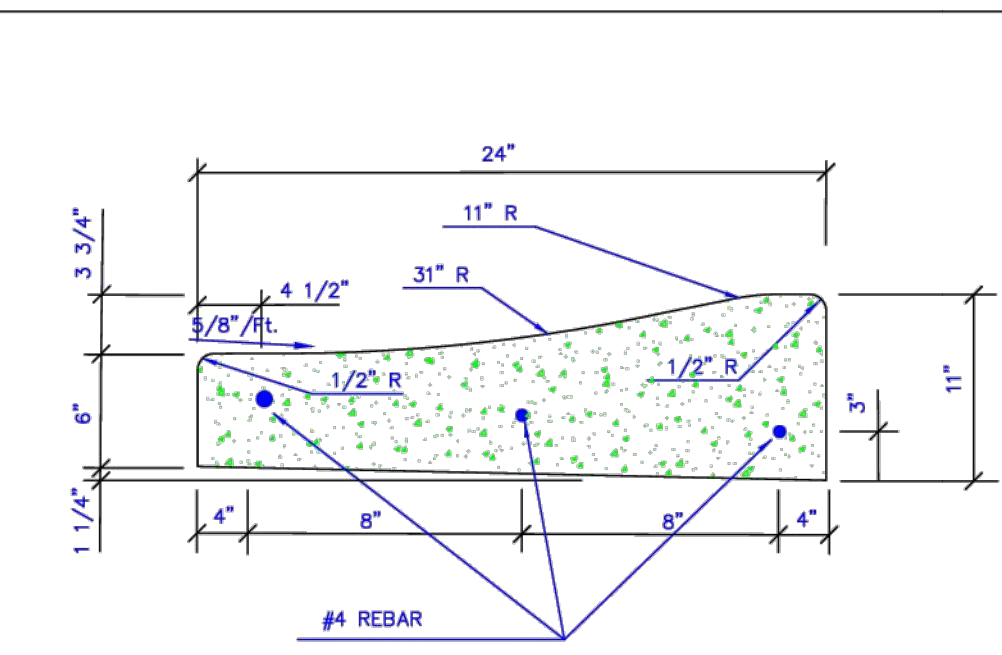


NOTES:  
1. THIS DETAIL APPLIES TO ALL UTILITY INSTALLATIONS UNDER EXISTING STREETS. A UTILITY CUT PERMIT IS REQUIRED.  
2. THE 1.0' EITHER SIDE OF ORIGINAL TRENCH SHALL NOT BE REMOVED UNTIL BACKFILL HAS BEEN PLACED AND COMPACTED.  
3. ASPHALT SHALL COMPLY WITH CITY SPECIFICATIONS AS FOLLOWS:  
SURFACE COURSE - APWA TYPE 3-01  
BASE COURSE - APWA TYPE 1-01  
4. BASE THICKNESS:  
8" RESIDENTIAL OR EXISTING DEPTH, WHICHEVER IS GREATER  
10" ARTERIAL  
10" PRIMARY ARTERIAL  
5. ALL PIPES SHALL BE INSPECTED PRIOR TO BACKFILL. ALL PIPE COVERED PRIOR TO INSPECTION SHALL BE UNCOVERED AT THE CONTRACTOR'S EXPENSE.  
6. UNLESS OTHERWISE AUTHORIZED BY THE CITY ENGINEER, TRENCH BACKFILL IN AREAS OF FUTURE STREET CONSTRUCTION SHALL CONFORM TO THIS DETAIL. BACKFILL LIMITS FOR THIS DETAIL SHALL EXTEND TO THE TOP OF TRENCH AND 3 FT. BACK OF ALL CURBS, AND UNDER ANY SIDEWALKS, EXISTING OR PROPOSED.  
7. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO APWA TECHNICAL SPECIFICATIONS.  
8. ANY EXCAVATION LEFT OPEN OVERNIGHT ON ANY THROUGHFARE OR COLLECTOR TYPE STREET SHALL BE SECURELY PLATED.  
NOTE: CONTRACTOR TO FOLLOW APWA 2100 SECTION 2102.4 EXCAVATION, TRENCHING, AND BACKFILLING FOR PIPE AND STRUCTURES.

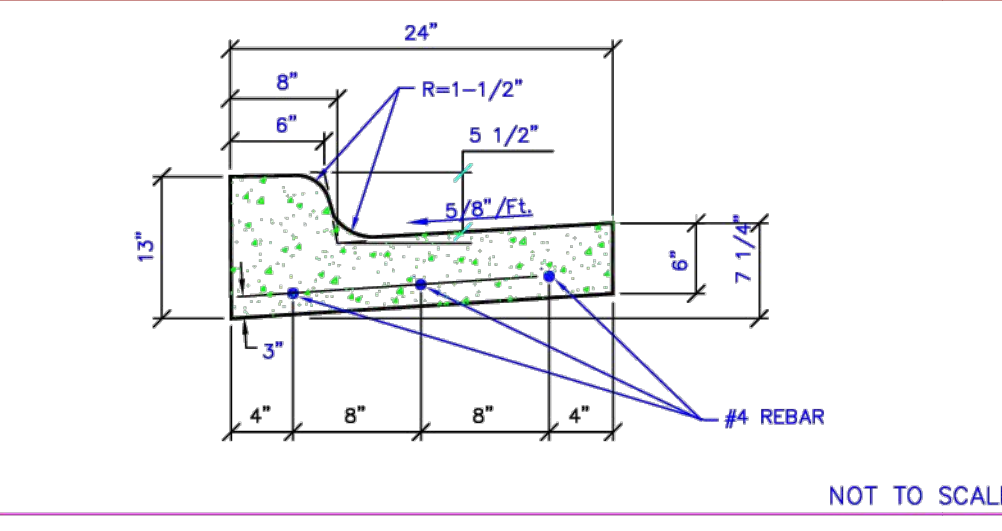
5 TRENCHING IN PAVED AREA



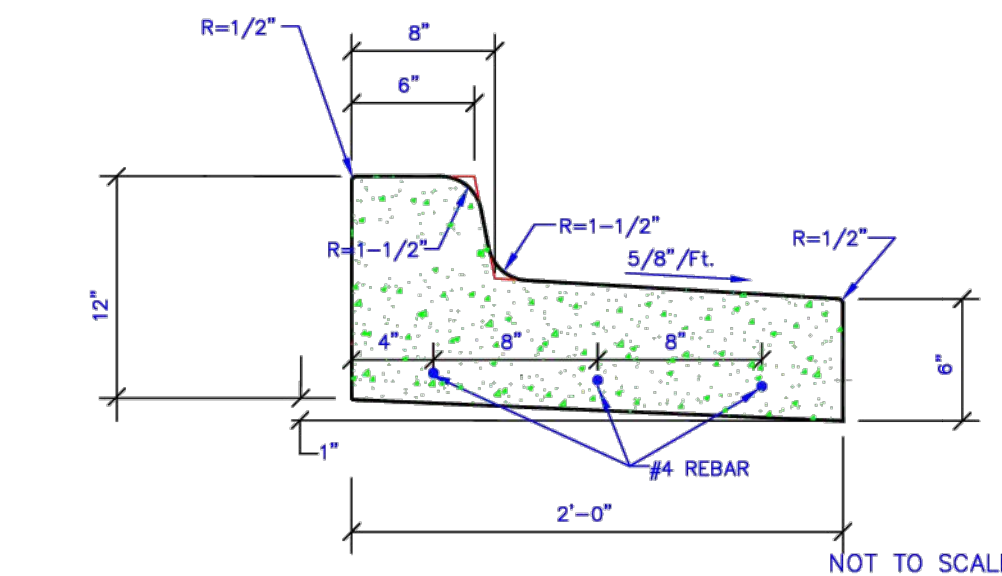
6 SIDEWALK RAMP DETAILS



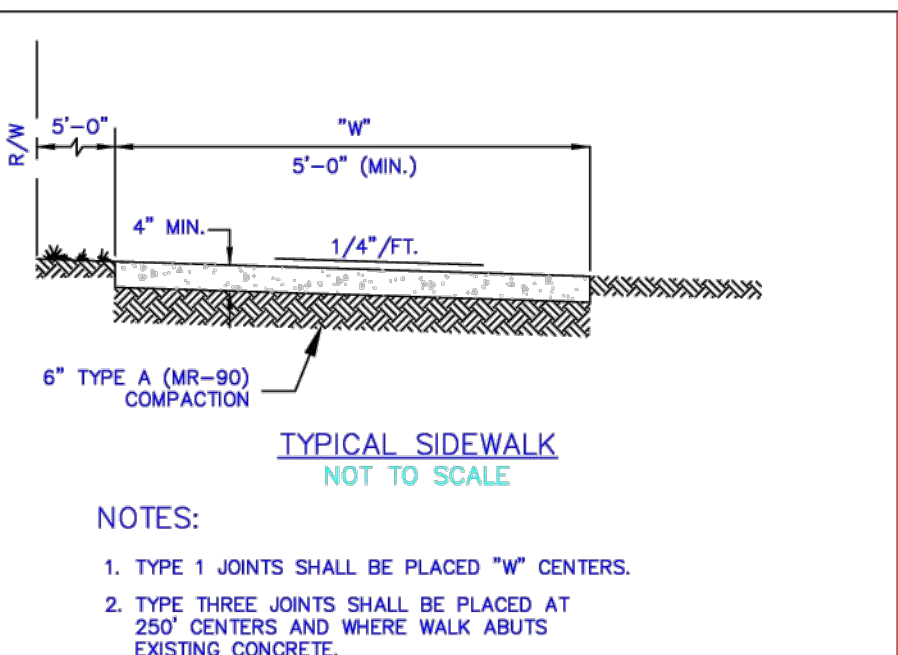
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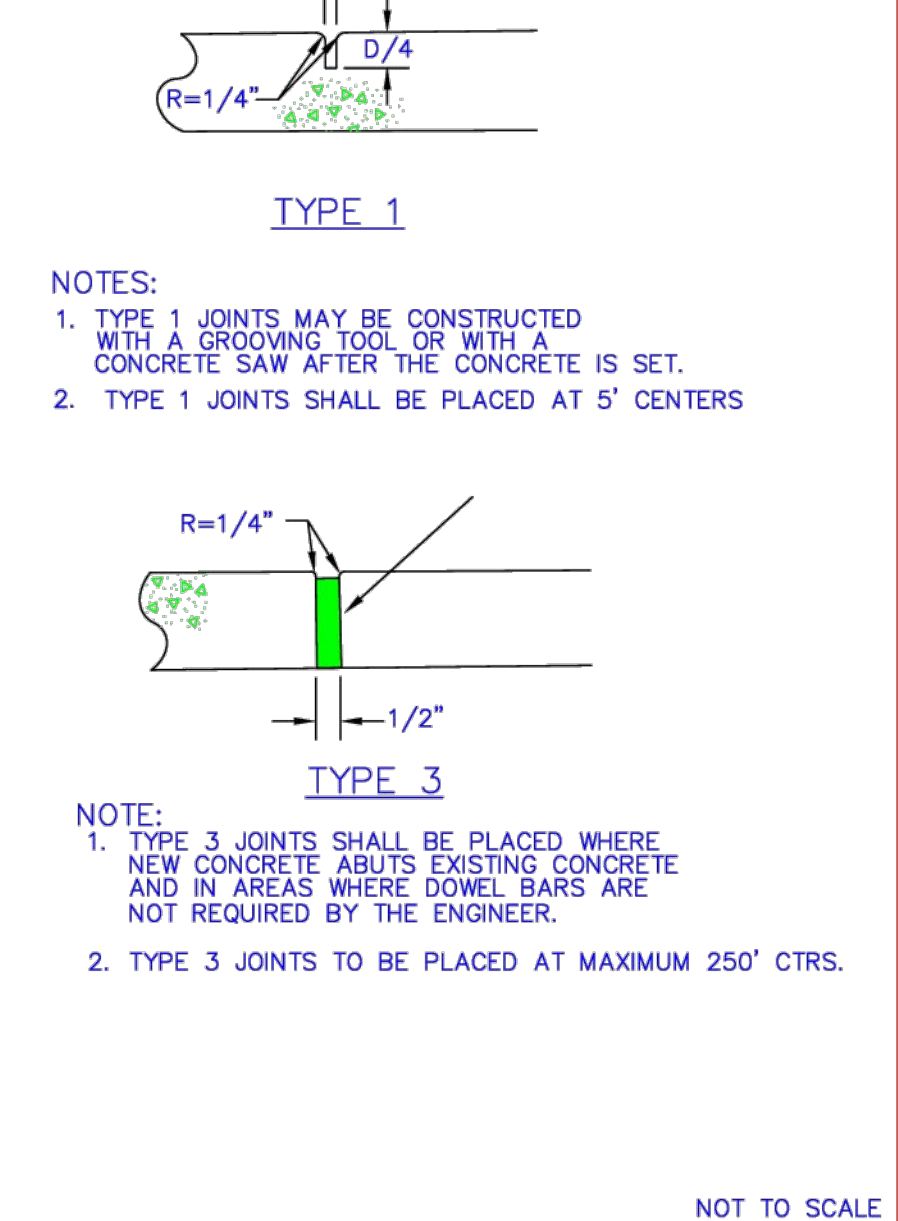
TYPE "CG-1" CURB & GUTTER



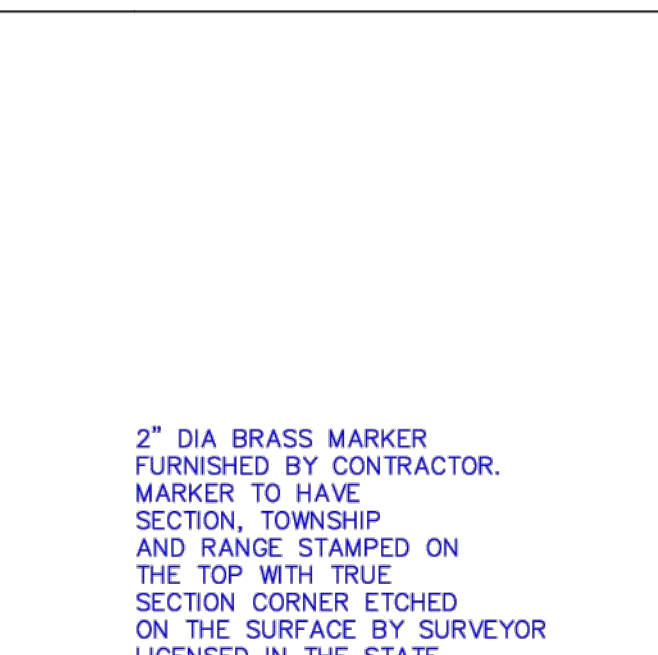
2 CONCRETE CURB & GUTTER



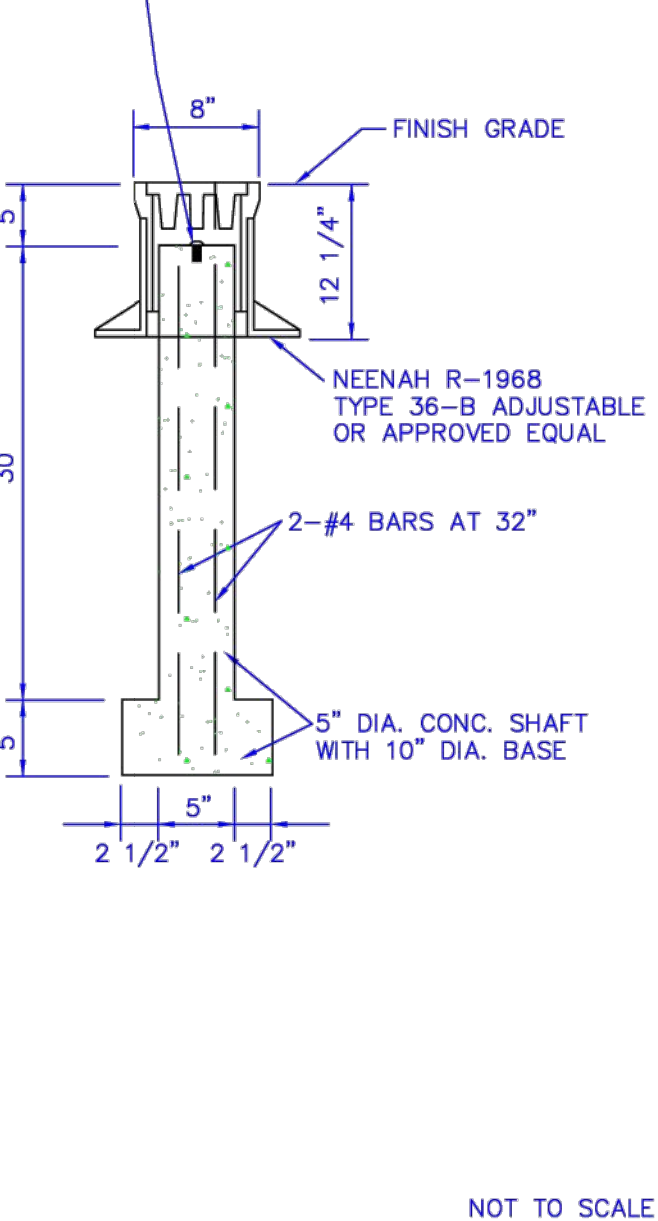
3 CONCRETE SIDEWALK



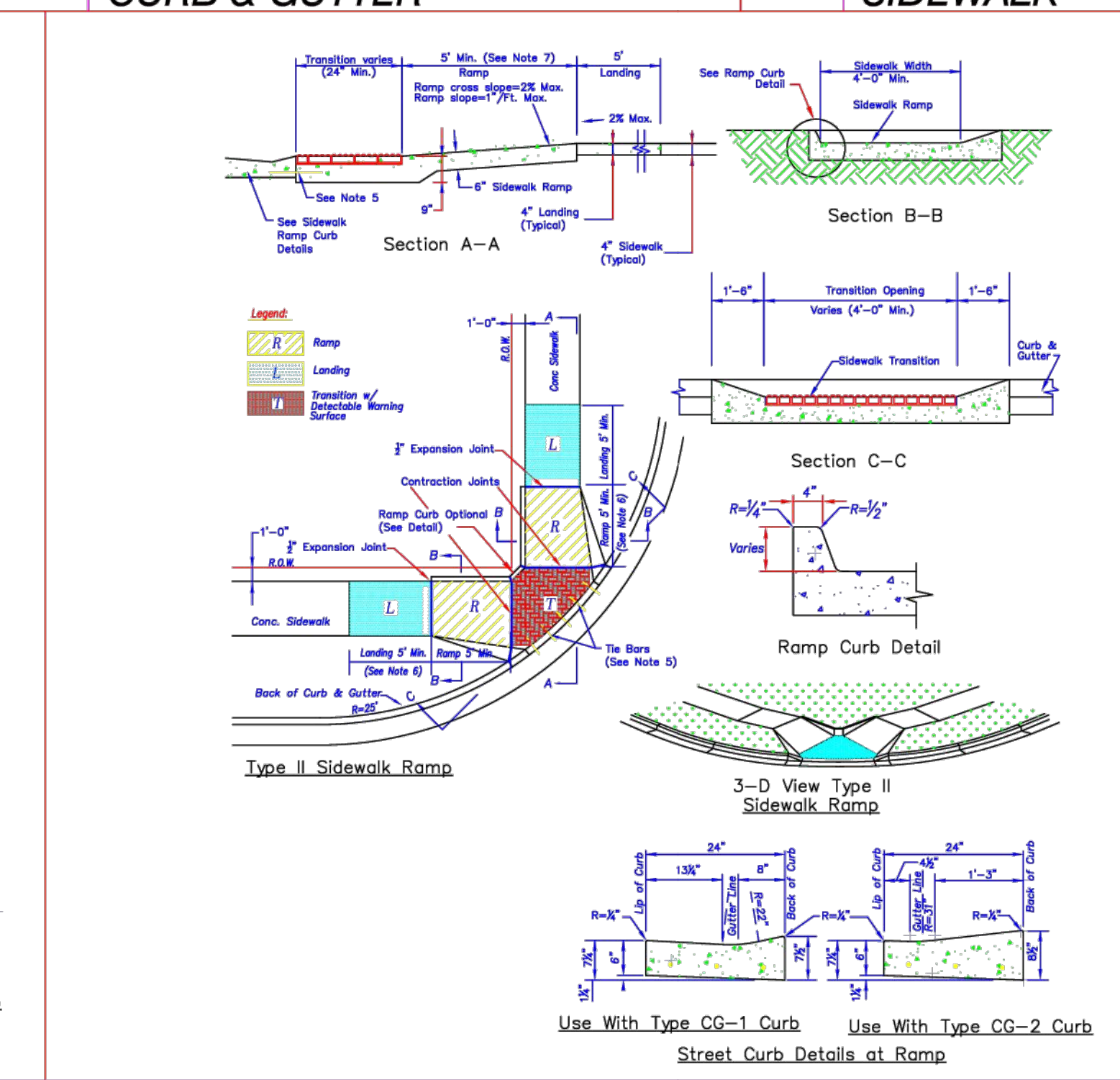
3 CONCRETE SIDEWALK



4 MONUMENT BOX



4 MONUMENT BOX



Street Curb Details at Ramp

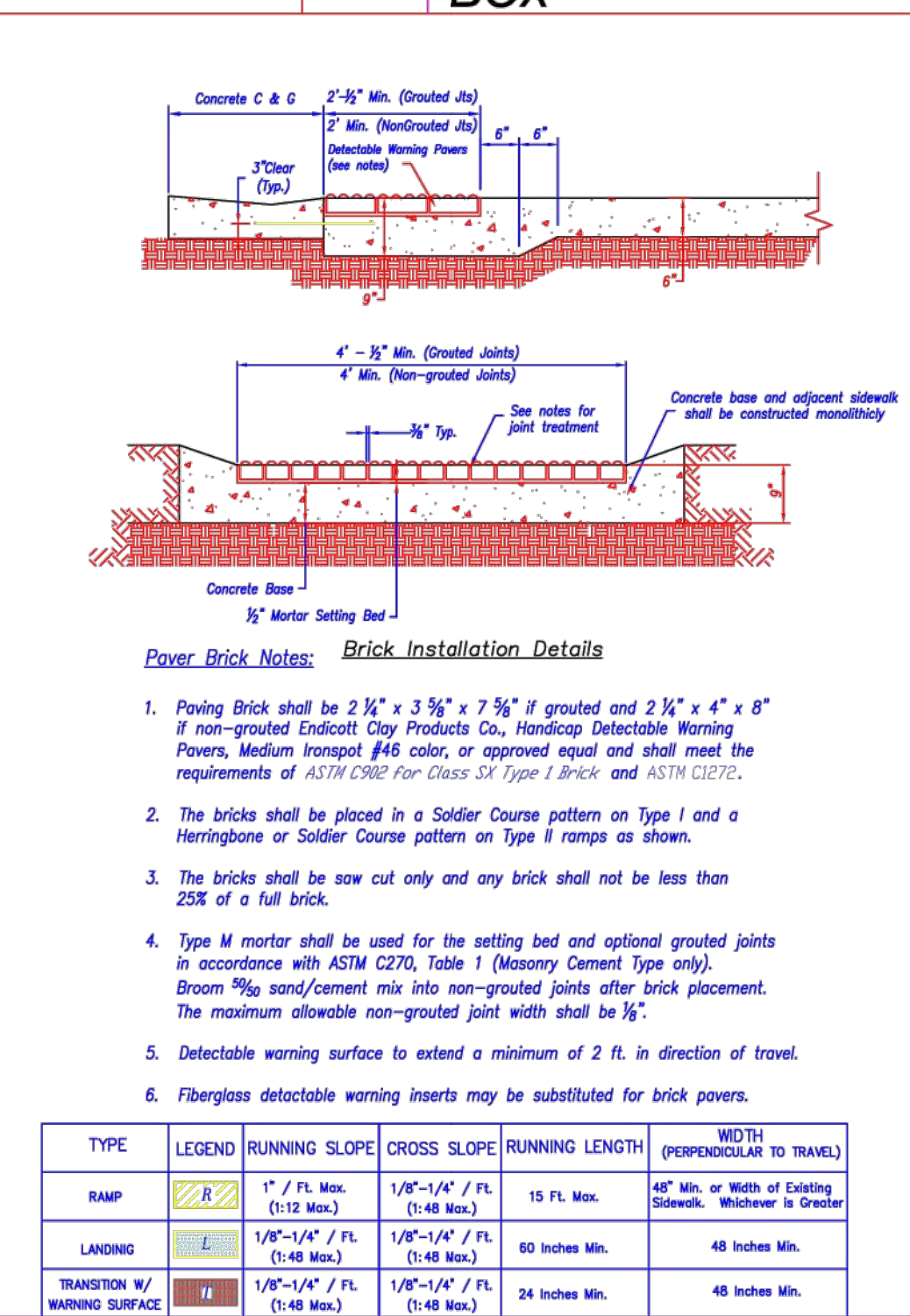


Table with columns: TYPE, LEGEND, RUNNING SLOPE, CROSS SLOPE, RUNNING LENGTH, WIDTH (PERPENDICULAR TO TRAVEL).

Apr 05, 2024 - 9:26am - USER: galtmann  
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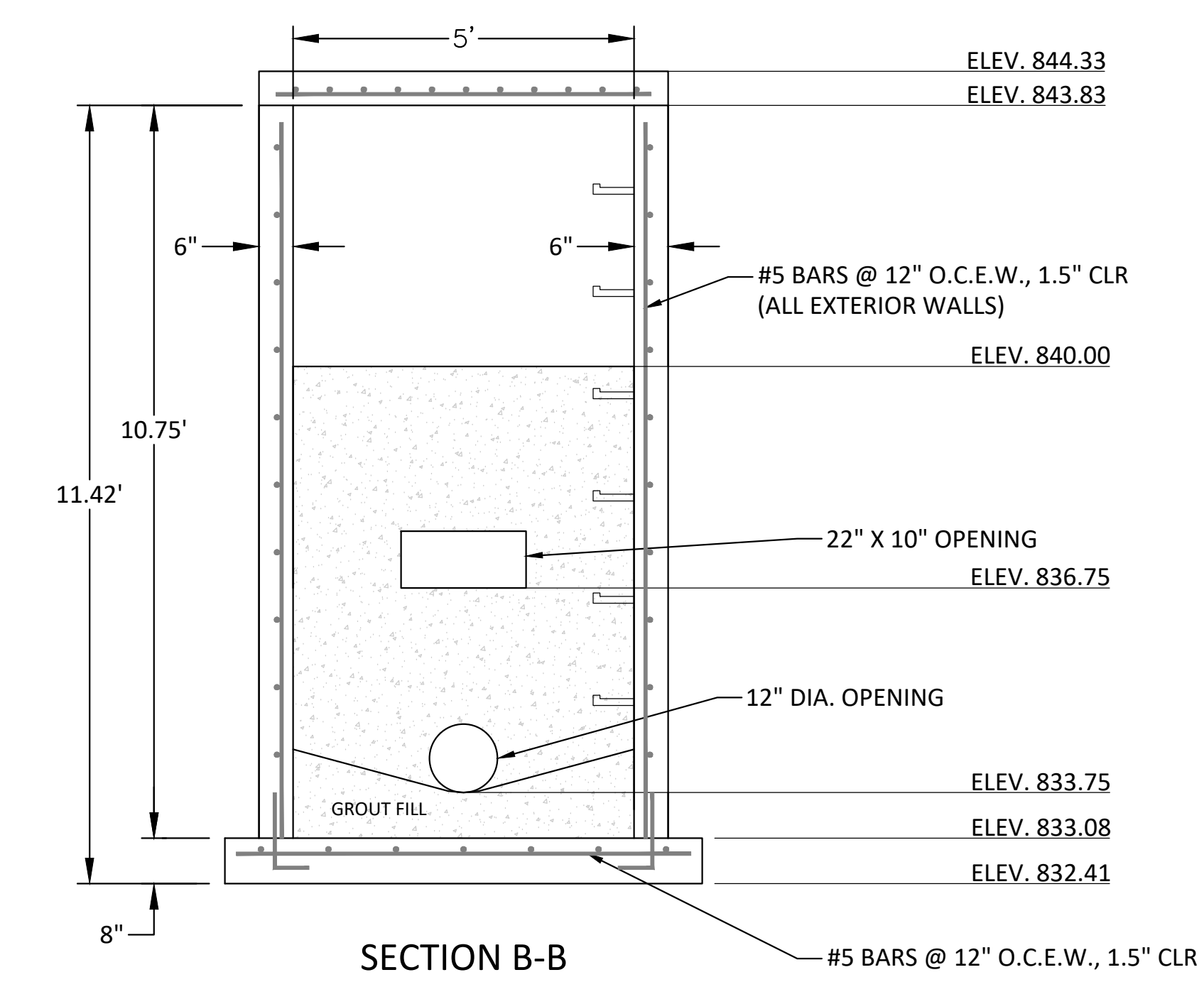
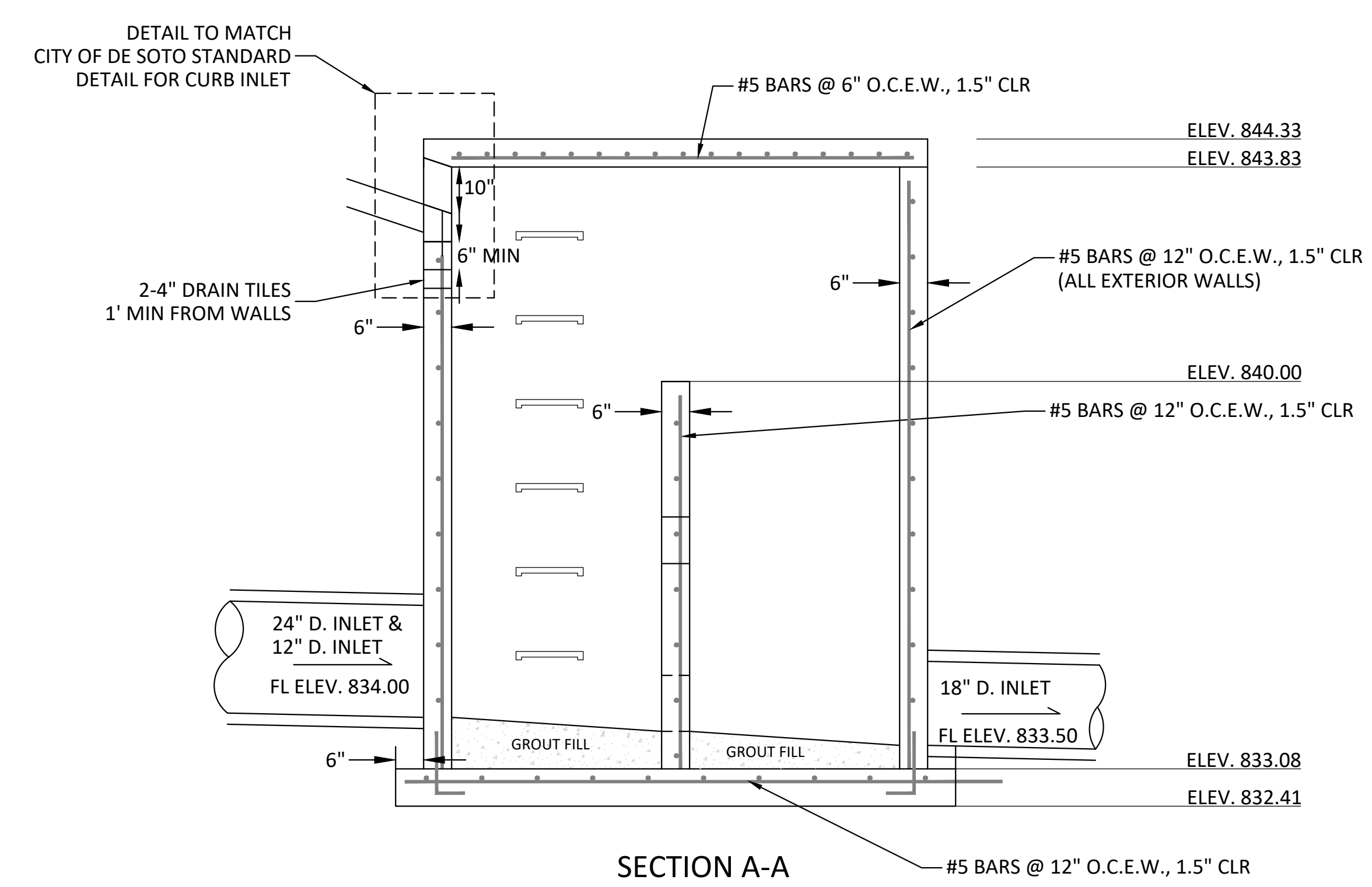
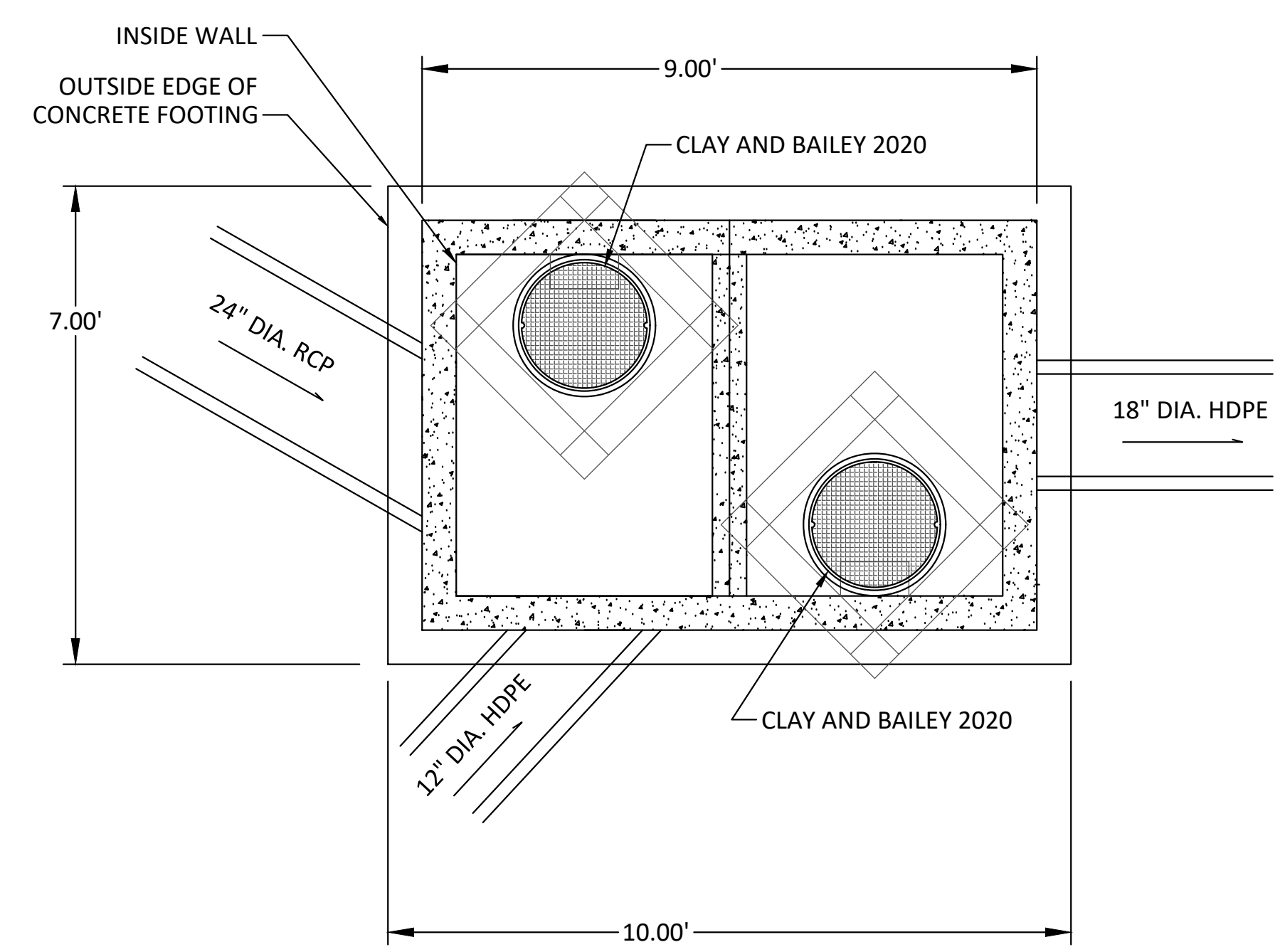
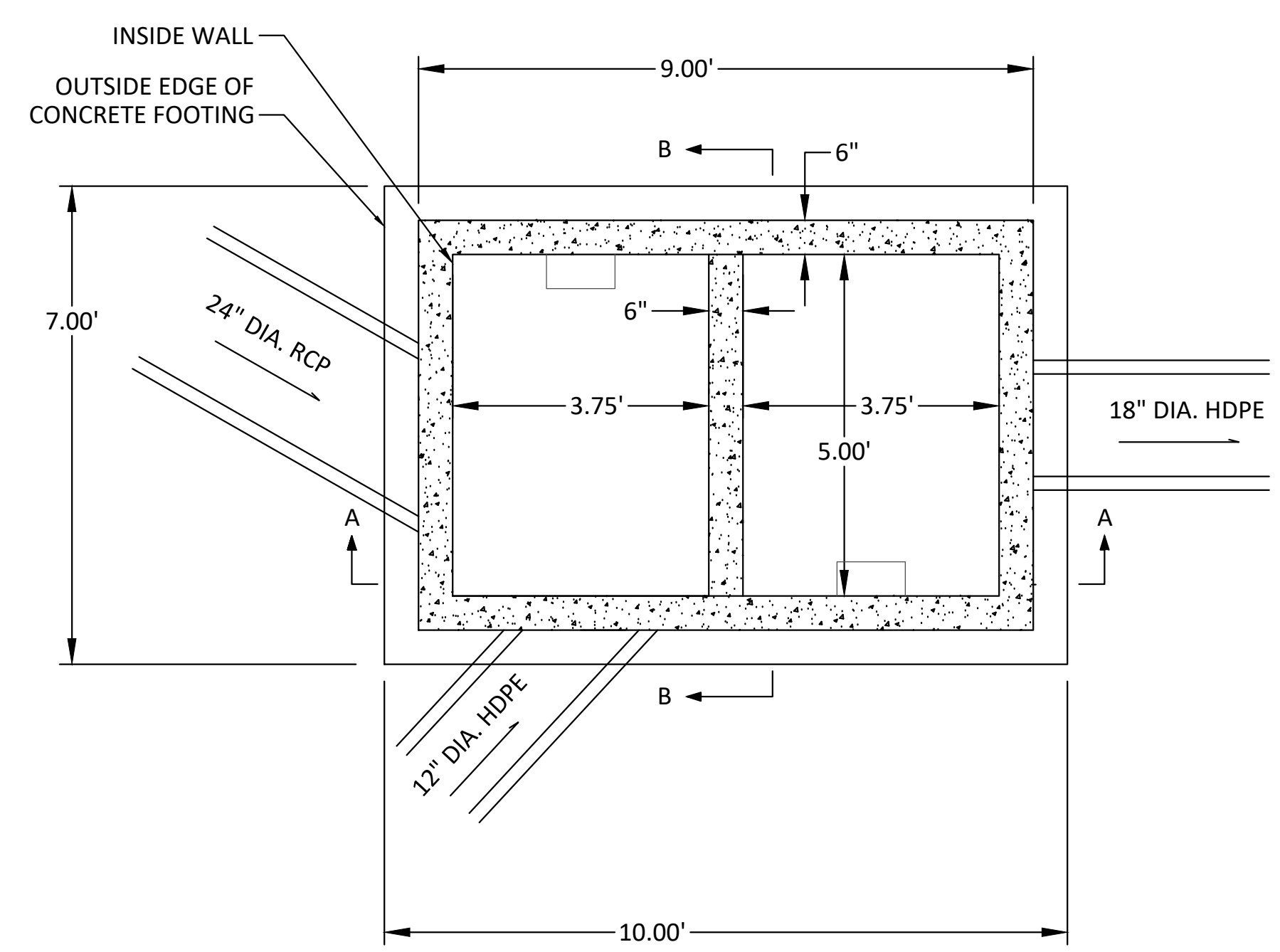


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DATE 4/3/2024  
DESIGNED BY AJS  
CHECKED BY JPM

REVISIONS	DATE

DETENTION  
STRUCTURE  
DETAILS  
C215

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