

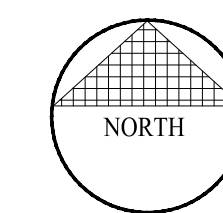
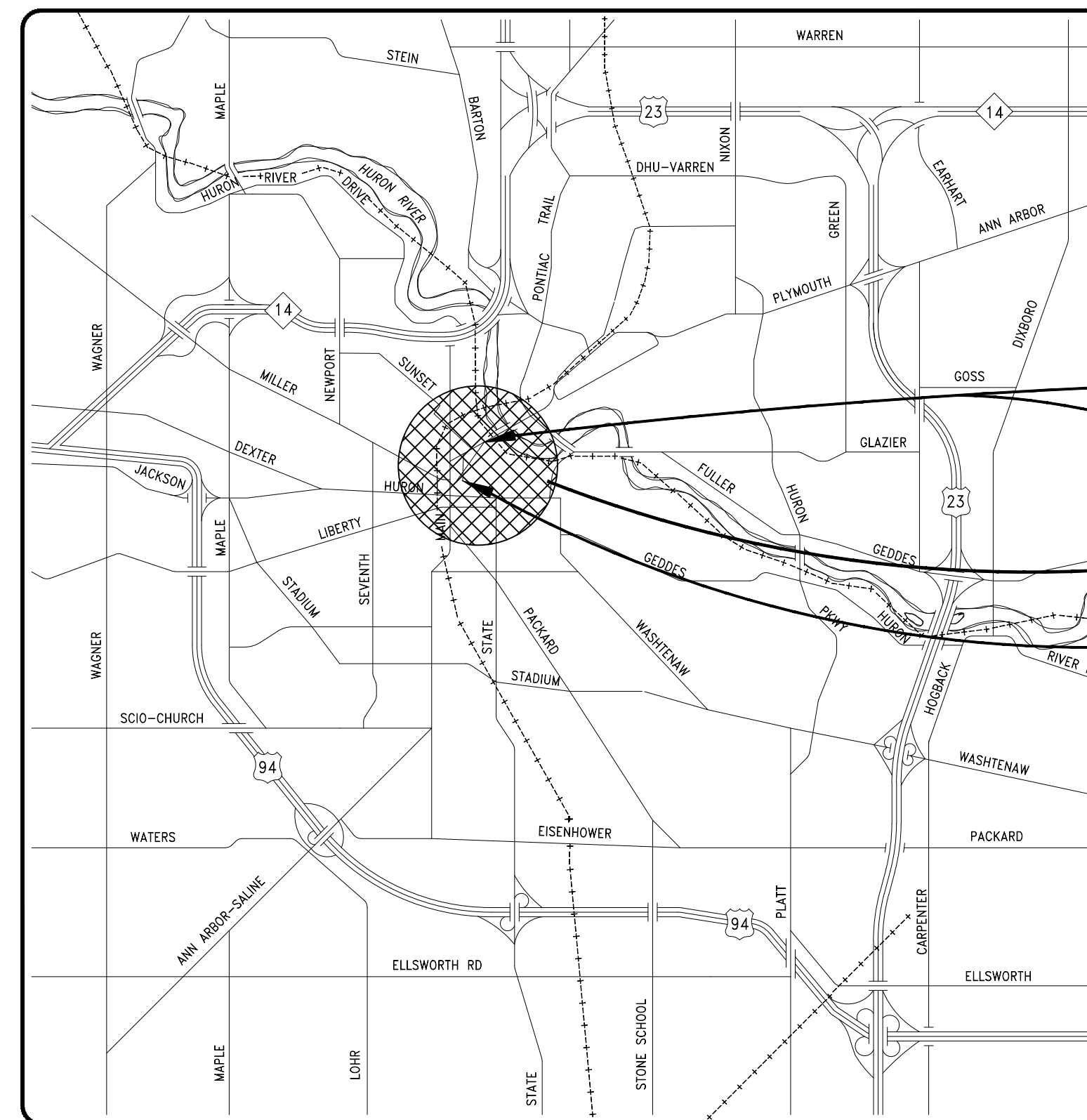
CITY OF ANN ARBOR DOWNTOWN DEVELOPMENT AUTHORITY North Fifth Avenue Street Reconstruction

DECEMBER 1, 2017
BID PLANS

BID NO. ITB #4519

NOTES:
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE DOWNTOWN DEVELOPMENT AUTHORITY, OR DDA, ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

SHEET INDEX			
SHEET #	SHEET TITLE	SHEET #	SHEET TITLE
G1.00	COVER SHEET	C8.00	OVERALL STREETScape LAYOUT & MATERIALS PLAN
G1.01	GENERAL NOTES	C8.01	STREETScape LAYOUT & MATERIALS PLAN - NORTH
V.1.0	COVER SHEET	C8.02	STREETScape LAYOUT & MATERIALS PLAN - SOUTH
V.1.1	TOPOGRAPHIC SURVEY	C9.00	OVERALL STREETScape GRADING PLAN
V.1.2	TOPOGRAPHIC SURVEY	C9.01	STREETScape GRADING PLAN - NORTH
V.1.3	TOPOGRAPHIC SURVEY	C9.02	STREETScape GRADING PLAN - SOUTH
V.1.4	UTILITY CONNECTIONS	C9.03	STREETScape GRADING PLAN - ENLARGEMENT AREAS
V.1.5	UTILITY CONNECTIONS	C9.04	STREETScape GRADING PLAN - ENLARGEMENT AREAS
V.1.6	UTILITY CONNECTIONS	C9.05	ROADWAY GRADING PLAN - NORTH
V.1.7	STRUCTURE TABLE	C9.06	ROADWAY GRADING PLAN - SOUTH
C1.00	CONSTRUCTION PHASING PLAN	C10.1	STREETScape DETAILS 1
C1.01	DETOUR PLAN	C10.2	STREETScape DETAILS 2
C1.02	DETOUR PLAN	C10.3	STREETScape DETAILS 3
C1.03	MAINTENANCE OF TRAFFIC PLAN	C10.4	STREETScape DETAILS 4
C1.04	PAVEMENT MARKING PLAN - FIFTH & CATHERINE	C10.5	STREETScape DETAILS 5
C1.05	PAVEMENT MARKING PLAN - DETROIT AND KINGSLEY	C10.6	STREETScape DETAILS 6
C2.00	REMOVAL AND SESC PLAN	E1.0	OVERALL ELECTRICAL PLAN
C2.01	SESC NOTES & DETAILS	E2.0	ELECTRICAL SCHEDULES, DETAILS, AND DIAGRAMS
C3.00	N FIFTH AVENUE TYPICAL SECTIONS	L1.0	OVERALL PLANTING PLAN
C3.01	N FIFTH AVENUE TYPICAL SECTIONS	L2.0	PLANTING DETAILS
C3.02	N FIFTH AVENUE TYPICAL SECTIONS		
C3.03	DETROIT STREET TYPICAL SECTIONS		
C3.04	KINGSLEY STREET TYPICAL SECTIONS		
C4.00	ROAD AND STORM PLAN AND PROFILE - FIFTH AVENUE STA 1+00 TO 5+50		
C4.01	ROAD AND STORM PLAN AND PROFILE - FIFTH AVENUE STA 5+50 TO 10+00		
C4.02	ROAD AND STORM PLAN AND PROFILE - DETROIT STREET		
C4.03	ROAD AND STORM PLAN & PROFILE - KINGSLEY ST		
C5.00	ROAD CROSS SECTIONS - FIFTH AVENUE STA 3+50 TO 5+50		
C5.01	ROAD CROSS SECTIONS - FIFTH AVENUE STA 6+00 TO 8+50		
C5.02	ROAD CROSS SECTIONS - DETROIT STREET		
C6.00	SANITARY & WATER MAIN PLAN AND PROFILE - FIFTH AVENUE STA 1+00 TO 5+50		
C6.01	SANITARY & WATER MAIN PLAN AND PROFILE - FIFTH AVENUE STA 5+50 TO 10+00		
C6.02	SANITARY & WATER MAIN PLAN AND PROFILE - DETROIT ST		
C6.03	SANITARY & WATER MAIN PLAN AND PROFILE - KINGSLEY ST		
C7.00	WATER MAIN PROFILES		
C7.01	UTILITY DETAILS		
C7.02	UTILITY DETAILS		



PROJECT LENGTH
0.225 MILES

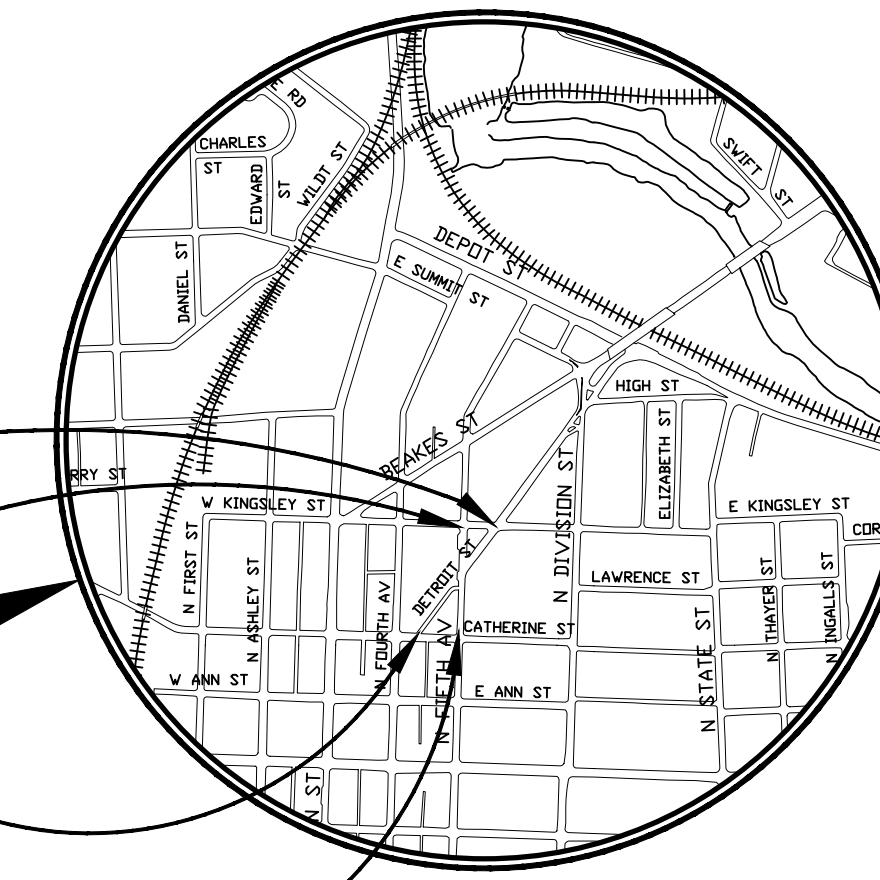
P.O.B. (Detroit St)
STA. 20+00

P.O.B. (5th Av)
STA. 1+00

P.O.E. (Detroit St)
STA. 28+06

P.O.E. (5th Av)
STA. 9+40

PROJECT
LOCATION



ftc&h

Fishbeck, Thompson, Carr & Huber, Inc.

Engineers • Scientists • Architects • Constructors
39500 MacKenzie Drive, Suite 100, Novi, Michigan 48377
(800) 456-3824 www.ftch.com

SMITHGROUP JJR

201 DEPOT STREET
ANN ARBOR, MI 48104
734.662.4457
www.smithgroupjir.com



Know what's below.
Call before you dig.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL DIAL 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THIS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

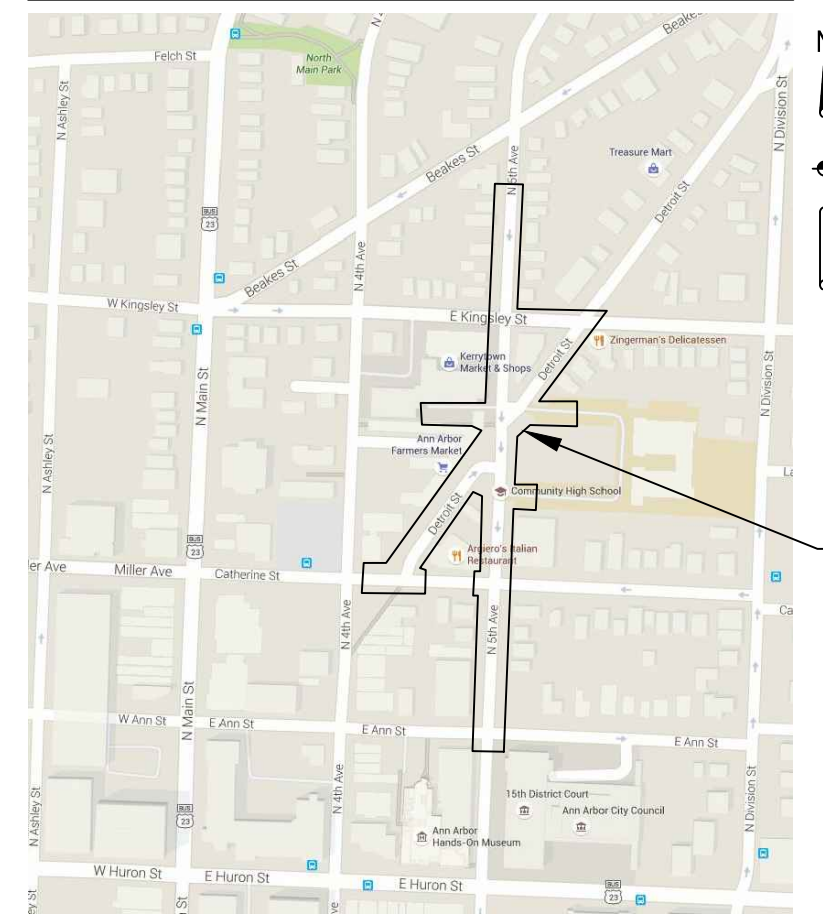
DRAWING NO.
G1.00
SHEET 1 OF 57

5TH AND DETROIT AVE.

ABBREVIATIONS			SURVEY SYMBOLS			GRADING SYMBOLS			CONSTRUCTION NOTES			PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.																																
<p>A MOD MODIFIED</p> <p>ABD ABANDONED N</p> <p>AC ACRES N NORTH, NORTHING COORDINATE</p> <p>APPROX APPROXIMATE NA NOT APPLICABLE</p> <p>ARCH ARCHITECT(URAL) NIC NOT IN CONTRACT</p> <p>ANSI AMERICAN NATIONAL STANDARDS INSTITUTE N.T.S. NOT TO SCALE</p> <p>ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS O</p> <p>B O.C. ON CENTER O.D. OUTER DIAMETER OFF OFFSET OPT OPTIONAL</p> <p>B.M. BENCHMARK BIT BITUMINOUS OPT BLDG BUILDING P</p> <p>B/F BOTTOM OF FOOTING PC POINT OF CURVATURE (POC)</p> <p>B/S BOTTOM OF SWALE PED PEDESTRIAN</p> <p>B/W BOTTOM OF WALL (FINISH GRADE) PERF PERFORATED</p> <p>C PERP PERPENDICULAR CB CATCH BASIN PLMB PLUMBING CI CURB INLET PREFAB PREFABRICATED CIP CAST IRON PIPE PREP PREPARATION CL CLASS PROJ PROJECTED CMP CORRUGATED METAL PIPE PROP PROPOSED CON CONDENSATE PSF POUNDS PER SQUARE FOOT CO CLEANOUT PSI POUNDS PER SQUARE INCH CONC CONCRETE PT POINT, POINT OF TANGENCY (POT) CONTR CONTRACTOR PVC POINT OF VERTICAL CURVATURE, POLYVINYL CHLORIDE CU FT CUBIC FOOT PVI POINT OF VERTICAL INTERSECTION CURV CURVATURE PWMT PAVEMENT CU YD CUBIC YARD PWR POWER</p> <p>D Q QUANTITY</p> <p>DEMO DEMOLISH RTY QUANTITY</p> <p>DEPT DEPARTMENT R</p> <p>DIA DIAMETER RAD RADIUS</p> <p>DIP DUCTILE IRON PIPE RCP REINFORCED CONCRETE PIPE DWG DRAWING RCP RECEPTACLE RD ROAD REF REFERENCE</p> <p>E EA EAST, EASTING COORDINATE REINF REINFORCED, REINFORCEMENT EG EXISTING GRADE REM REMOVE ELEV ELEVATION REQD REQUIRED E/M EDGE OF METAL (EDGE OF GUTTER) RIM: RIM ELEVATION EQ EQUAL ROW RIGHT OF WAY EX EXISTING S</p> <p>F S SOUTH FF: FINISH FLOOR ELEVATION SAN SANITARY SEWER FG FINISH GRADE SCH SCHEDULE FLASH FLASHING SECT SECTION FM FORCE MAIN SESC SOIL EROSION AND SEDIMENTATION CONTROL FT FOOT, FEET FURN FURNISHING SIM SIMILAR G SP SPACE, SPACED, SPACING</p> <p>G SQ FT SQUARE FEET GALV GALVANIZED SQ YD SQUARE YARD GAS NATURAL GAS ST STREET G/C: GUTTER OF CURB (FLOWLINE) ST LT STREET LIGHT GVL GRAVEL STA STATION</p> <p>H STAG STAGGER, STAGGERED H HIGH STD STANDARD HB HOSE BIBB STL STEEL HCAP ADA HANDICAP SSL STAINLESS STEEL HDPE HIGH-DENSITY POLYETHYLENE STM STORM SEWER HMA HOT MIX ASPHALT STRUCT STRUCTURAL HORZ HORIZONTAL SUBCONTR SUBCONTRACTOR HP HIGH POINT T HT HEIGHT T TELECOM</p> <p>I T/C TOP OF CURB I.D. INNER DIAMETER TEMP TEMPORARY IN INCH, INCHES T/F TOP OF FOOTING INCL INCLUDE, INCLUDING T/S TOP OF SWALE INL INLET T/W TOP OF WALL INV: PIPE INVERT ELEVATION TYP. TYPICAL IRR IRRIGATION U</p> <p>J UD UNDERDRAIN JT JOINT UTIL UTILITY</p> <p>L V VALVE L LENGTH V/B: VALVE BOX LF LINEAR FEET VERT VERTICAL LPT LOW POINT W LN LANE W WEST LT LIGHT WM WATER MAIN LTC LIGHTING W/O WITHOUT M WWF WELDED WIRE FABRIC</p> <p>M Y MAS MASONRY YD YARD DRAIN MATL MATERIAL SYMBO MAX MAXIMUM L M.E. MATCH EXISTING MED MEDIUM MFR MANUFACTURER Ø DIAMETER MH MANHOLE ± PLUS/MINUS MIN MINIMUM Δ DELTA MISC MISCELLANEOUS</p>			<p>* REFER TO THE PLAN V SERIES</p>			<p>* REFER TO THE PLAN C9. SERIES</p>			<p>1. The Construction covered by these plans shall conform to the 1994 edition of the City of Ann Arbor Public Services Department Standard Specifications and its details which are included by reference.</p> <p>2. The omission of any current Standard Detail does not relieve the Contractor from this requirement. The work shall be performed in complete conformance with the current Public Services Standard Specifications and Details.</p> <p>3. Driveways and entrances to buildings, real property, and the like shall not be blocked except for short durations and only when approved by the Engineer. Vehicular and pedestrian access shall be maintained at all times. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.</p> <p>4. The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.</p> <p>5. Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.</p> <p>6. The Contractor is to take special care to protect the existing water main and be responsible for maintaining consistent water service.</p> <p>7. During non-working hours no trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the item of work "General Conditions".</p> <p>8. Trenches for new water services shall be excavated to MIOSHA and City of Ann Arbor Field Services requirements. City of Ann Arbor Field Services will install the corporation and copper service lead(s) to transfer the connection(s). If an existing water service is found to be failing or is not copper, the lead will be replaced to the curb box by Field Services.</p> <p>9. For the installation of corporations, or any other related activities, the Contractor shall not receive additional compensation for delays due to the scheduling of or coordination with the City of Ann Arbor Field Services.</p> <p>10. The Contractor shall backfill trenches in accordance with Trench Detail specified on plans. This work shall be included in the item of work "Excavate and Backfill for Water Service Tap and Lead". All concrete removals and replacements required for this work will be paid for separately.</p> <p>11. All ductile iron pipe and fittings shall be polyethylene wrapped per ANSI/AWWA C105/A21.5.</p> <p>12. Cor-Blu bolts to be used at all mechanical water main joints at hydrants and Megalug fittings.</p> <p>13. The Contractor shall construct, flush, and bacteriologically test the water main per Detailed Specification "Water Main Installation and Testing" and as approved by the Engineer. All chlorinated water shall be discharged directly into an approved sanitary sewer. The Contractor shall supply all necessary hoses, fittings and the like to accomplish this work.</p> <p>14. Water main fittings, other than those specifically listed as separate pay items, which are required to complete the work, such as blow-off assemblies, concrete thrust blocks, solid sleeves and mechanical plugs, shall not be paid for separately, but shall be included in the pipe pay items.</p> <p>15. Line stops shall be installed where existing water mains cannot be sufficiently isolated to complete the work. The cost of any line stop is the responsibility of the contractor and/or the DDA.</p> <p>16. "No Parking" signs shall be installed by the Contractor at locations as approved or directed by the Engineer. All signs shall be installed in accordance with the detailed specifications.</p> <p>17. Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.</p> <p>18. All light poles, luminaires, signs, fittings, hydrants, valves and castings removed during construction are the property of the City of Ann Arbor. The Contractor within 48 hours shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.</p> <p>19. Where street curbs are undermined due to construction activities, they shall be removed and replaced as directed by the Engineer.</p> <p>20. The Contractor shall be responsible for the continuous maintenance of the temporary road surface and soil erosion control measures within the construction area until the full completion of the project. This work shall be included in the item of work "General Conditions".</p> <p>21. All new and existing storm inlets within the project shall have inlet filter protection for the duration construction.</p> <p>22. All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work is done.</p> <p>23. Sawed sewer pipe connections shall be coupled with a Fernco flexible coupling and a stainless steel shear ring.</p> <p>24. The location of material stock piles and on-site staging areas to be approved by the Engineer.</p> <p>25. For mainline paving, the width of the mat for each pass of the paver shall be not less than 10.5' or greater than 15', as directed by the Engineer. The Engineer will direct the layout of the longitudinal joints during construction.</p> <p>26. All structures shall receive new castings as directed by the Engineer, as specified on the standard casting schedule. The existing castings are the property of the City of Ann Arbor. The Contractor shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.</p> <p>27. Payment for drainage structure sumps, where specified, shall be included in the payment for the various drainage structure sizes and or types.</p> <p>28. Where sewer pipes of different sizes or materials are joined, Fernco flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid as an extra. Prior to payment for this item, the Contractor shall submit receipts for the Engineer's review and approval. All other costs associated with the installation of these devices shall be included in the payment for the sewer.</p> <p>29. Where sewer and water main are to be removed & replaced or added, all pipe shall be installed using Trench Detail detailed in the specifications or shown on Plans. Backfill for sewer and water construction shall be MDOT Granular Material, Class II, Modified.</p> <p>30. Existing street name, guide, and regulatory signs, and mailboxes which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re-set in locations as directed by the Engineer. This work will not be paid for separately, but shall be included in "Machine Grading, Modified"</p> <p>31. Pavement markings disturbed as a result of pavement cuts or construction activities shall be replaced as directed by Project Management. Replacement during construction of the project may be considered temporary, with final pavement marking restoration to occur at the end of the project.</p> <p>32. The contractor shall take all necessary precautions to protect the existing public road pavement. Damage to the public road pavement during the course of construction may necessitate milling and resurfacing of the damaged areas prior to acceptance.</p> <p>33. Detour signage that have two street name plaques under them must have a minimum bottom height of 6 feet. The minimum sign bottom height for signs in a curb/gutter area without plaques underneath is 7 feet.</p> <p>34. Access to all residential and commercial driveways must be maintained at all times.</p> <p>35. All traffic control devices and their usage must conform to the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), 2011 edition.</p> <p>36. During the lane closures access for emergency vehicles (fire, ambulance, police) must be maintained to adjacent homes, businesses, and subdivisions at all times.</p> <p>37. Temporary warning, regulatory, and guide signs not required for a particular lane or shoulder closure must be removed, covered, or laid down with the legs removed.</p> <p>38. All existing pavement markings that are removed for traffic control or obliterated during construction operations must be replaced with Waterborne markings. This includes the Special markings - Overlay Cold Plastic - (special emphasis crosswalk arrows, 24 inch stop bar).</p> <p>39. Any MDOT signs that are removed for traffic control or obliterated during construction operations must be replaced in kind on new supports.</p> <p>40. All sign materials and supports must meet NCHRP-350 crash worthy requirements.</p>			<p>* REFER TO THE PLAN C2. SERIES</p>			<p>* REFER TO THE PLAN C6. & C7. SERIES</p>			<p>* REFER TO THE PLAN C8. SERIES</p>			<p>* REFER TO THE PLAN L SERIES</p>																							
<p>SESC & DEMOLITION SYMBOLS</p>			<p>UTILITY SYMBOLS</p>			<p>LAYOUT & MATERIALS SYMBOLS</p>			<p>LANDSCAPE SYMBOLS</p>			<p>THE FOLLOWING UTILITIES ARE LOCATED IN OR NEAR THE RIGHT-OF-WAY FOR THIS PROJECT.</p> <table border="1"> <thead> <tr> <th colspan="3">PUBLIC UTILITIES</th> </tr> </thead> <tbody> <tr> <td colspan="3">CITY OF ANN ARBOR FIELD OPERATIONS SERVICES UNIT</td> </tr> <tr> <td>WATER, SEWER AND STORM</td> <td>W.R. WHEELER SVC. CTR 4251 STONE SCHOOL RD. ANN ARBOR, MI 48108</td> <td>DAN WOODEN 734-194-6350</td> </tr> <tr> <td>SIGNS/SIGNALS/STREETLIGHTS</td> <td>W.R. WHEELER SVC. CTR 4251 STONE SCHOOL RD. ANN ARBOR, MI 48108</td> <td>CHUCK FOJTIK 734-794-6361</td> </tr> <tr> <th colspan="3">PRIVATE UTILITIES</th> </tr> <tr> <td>AT&T-PHONE</td> <td>550 S. MAPLE ANN ARBOR, MI 48103</td> <td>BRIAN BERRY 734-995-2135</td> </tr> <tr> <td>DTE ENERGY-ELECTRIC</td> <td>WESTERN WAYNE SERVICE CTR 8001 HAGGERTY RD. BELVILLE, MI 48111</td> <td>CLAY COMBEE 734-397-4112</td> </tr> <tr> <td>COMCAST-CABLE</td> <td>27800 FRANKLIN RD. SOUTHFIELD, MI 48034</td> <td>RON SUTHERLAND 313-999-8300</td> </tr> <tr> <td>DTE ENERGY-GAS</td> <td>17150 ALLEN RD. MELVINDALE, MI 48122</td> <td>JACK WHYATT 313-701-1355</td> </tr> <tr> <td>MCI-PHONE</td> <td>2400 NORTH GLENFILLE RICHARDSON, TX 75082</td> <td>DEAN BOYERS 972-729-6016</td> </tr> </tbody> </table>			PUBLIC UTILITIES			CITY OF ANN ARBOR FIELD OPERATIONS SERVICES UNIT			WATER, SEWER AND STORM	W.R. WHEELER SVC. CTR 4251 STONE SCHOOL RD. ANN ARBOR, MI 48108	DAN WOODEN 734-194-6350	SIGNS/SIGNALS/STREETLIGHTS	W.R. WHEELER SVC. CTR 4251 STONE SCHOOL RD. ANN ARBOR, MI 48108	CHUCK FOJTIK 734-794-6361	PRIVATE UTILITIES			AT&T-PHONE	550 S. MAPLE ANN ARBOR, MI 48103	BRIAN BERRY 734-995-2135	DTE ENERGY-ELECTRIC	WESTERN WAYNE SERVICE CTR 8001 HAGGERTY RD. BELVILLE, MI 48111	CLAY COMBEE 734-397-4112	COMCAST-CABLE	27800 FRANKLIN RD. SOUTHFIELD, MI 48034	RON SUTHERLAND 313-999-8300	DTE ENERGY-GAS	17150 ALLEN RD. MELVINDALE, MI 48122	JACK WHYATT 313-701-1355	MCI-PHONE	2400 NORTH GLENFILLE RICHARDSON, TX 75082	DEAN BOYERS 972-729-6016
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<p>SIGNAGE & STRIPING SYMBOLS</p>			<p>LIGHTING SYMBOLS</p>			<p>BENCH MARK INFORMATION</p> <p>BENCHMARK 50: ELEVATION = 844.27 (NAVD 88) ATOP ARROW ON HYDRANT LOCATED AT THE SOUTHEAST CORNER OF N. FIFTH AVE. & E. ANN ST.</p> <p>BENCHMARK 51: ELEVATION = 836.18 (NAVD 88) ATOP THE NORTHEAST BOLT OF LIGHT POLE BASE LOCATED AT THE SOUTHWEST CORNER OF N. FIFTH AVE. & CATHERINE ST.</p> <p>BENCHMARK 52: ELEVATION = 829.63 (NAVD 88) ATOP RAILROAD SPIKE IN THE WEST FACE OF A UTILITY POLE LOCATED AT THE NORTHEAST CORNER OF N. FIFTH AVE. & DETROIT ST.</p> <p>BENCHMARK 53: ELEVATION = 833.87 (NAVD 88) ATOP ARROW ON HYDRANT LOCATED AT THE SOUTHEAST CORNER OF CATHERINE ST. & DETROIT ST.</p> <p>BENCHMARK 54: ELEVATION = 821.51 (NAVD 88) ATOP CUT SQUARE ON THE WEST SIDE OF A CROSS WALK SIGNAL BASE LOCATED AT THE NORTHEAST CORNER OF N. FIFTH AVE. & E. KINGSLEY ST.</p>																																						
<p>* REFER TO THE PLAN C1. SERIES</p>			<p>* REFER TO THE PLAN E SERIES</p>			<p>DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR</p>																																						
<p>GENERAL NOTES</p>			<p>SCALE 1"=40'</p> <p>DRAWING NO. G1.01</p> <p>SHEET NO. ____ OF ____</p>			<p>APPROVED BY: _____</p>																																						
<p>SEE ABOVE</p>			<p>XXX</p>			<p>BID PLANS 12-01-2017</p>																																						
<p>BENCH MARK</p>			<p>SURVEY BOOK</p>			<p>95% CD 11-17-2017</p>																																						
<p>REV. NO.</p>			<p>DESCRIPTION</p>			<p>DATE DR.BY CH.BY</p>																																						

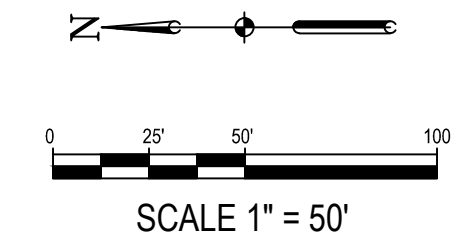


VICINITY SKETCH -
ANN ARBOR, MICHIGAN



TOPOGRAPHIC SURVEY

PORTIONS OF THE PUBLIC RIGHTS-OF-WAY OF NORTH FIFTH AVENUE,
DETROIT STREET & EAST KINGSLEY STREET, BEING PART OF THE NE 1/4,
SECTION 29, T2S, R6E, CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN

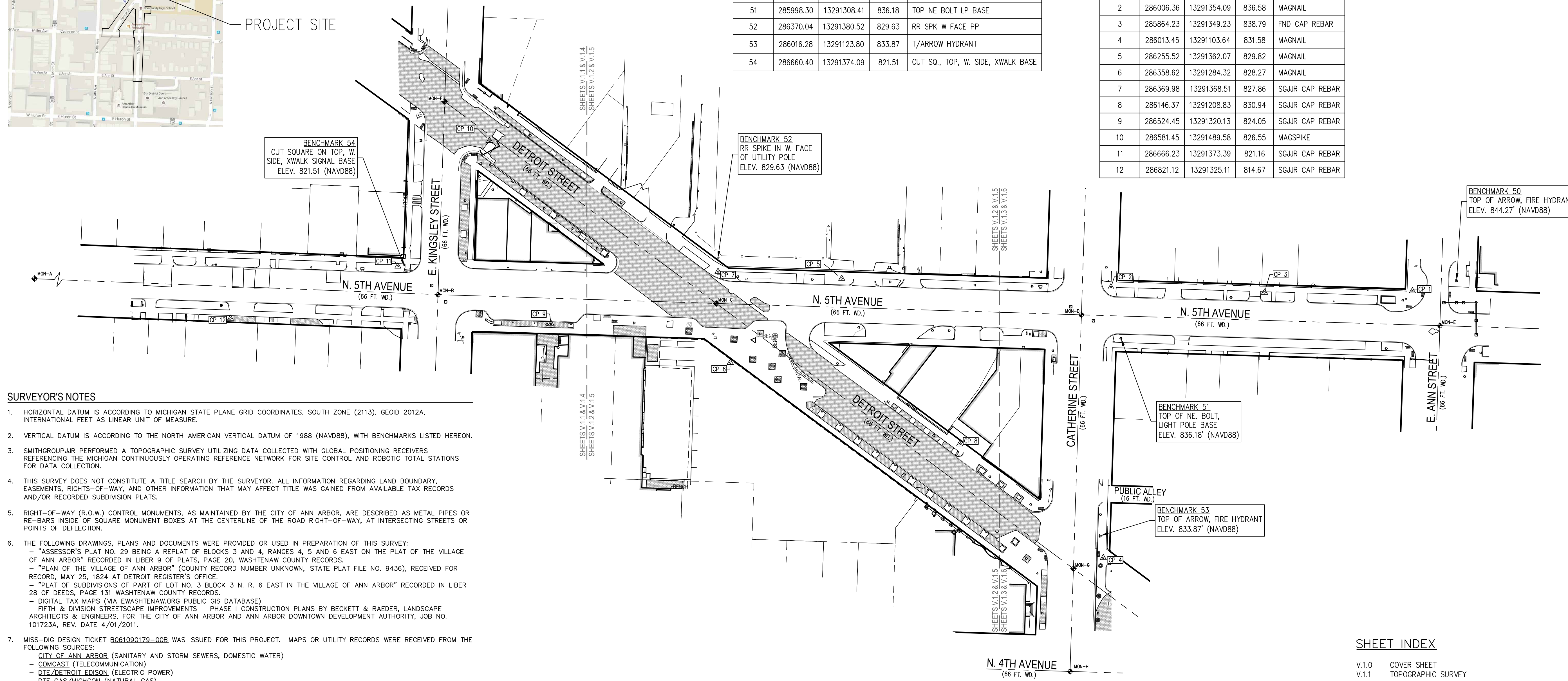


BENCHMARK TABLE

Point No.	Northing	Easting	Elevation	Description
50	285686.48	13291360.16	844.27	T/ARROW HYDRANT
51	285998.30	13291308.41	836.18	TOP NE BOLT LP BASE
52	286370.04	13291380.52	829.63	RR SPK W FACE PP
53	286016.28	13291123.80	833.87	T/ARROW HYDRANT
54	286660.40	13291374.09	821.51	CUT SQ., TOP, W. SIDE, XWALK BASE

CONTROL POINT TABLE

Point No.	Northing	Easting	Elevation	Description
1	285727.38	13291350.51	841.16	MAGNAIL
2	286006.36	13291354.09	836.58	MAGNAIL
3	285864.23	13291349.23	838.79	FND CAP REBAR
4	286013.45	13291103.64	831.58	MAGNAIL
5	286255.52	13291362.07	829.82	MAGNAIL
6	286358.62	13291284.32	828.27	MAGNAIL
7	286369.98	13291368.51	827.86	SGJR CAP REBAR
8	286146.37	13291208.83	830.94	SGJR CAP REBAR
9	286524.45	13291320.13	824.05	SGJR CAP REBAR
10	286581.45	13291489.58	826.55	MAGSPIKE
11	286666.23	13291373.39	821.16	SGJR CAP REBAR
12	286821.12	13291325.11	814.67	SGJR CAP REBAR



SURVEYOR'S NOTES

- HORIZONTAL DATUM IS ACCORDING TO MICHIGAN STATE PLANE GRID COORDINATES, SOUTH ZONE (2113), GEOID 2012A, INTERNATIONAL FEET AS LINEAR UNIT OF MEASURE.
- VERTICAL DATUM IS ACCORDING TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), WITH BENCHMARKS LISTED HEREON.
- SMITHGROUPJJR PERFORMED A TOPOGRAPHIC SURVEY UTILIZING DATA COLLECTED WITH GLOBAL POSITIONING RECEIVERS REFERENCING THE MICHIGAN CONTINUOUSLY OPERATING REFERENCE NETWORK FOR SITE CONTROL AND ROBOTIC TOTAL STATIONS FOR DATA COLLECTION.
- THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION REGARDING LAND BOUNDARY, EASEMENTS, RIGHTS-OF-WAY, AND OTHER INFORMATION THAT MAY AFFECT TITLE WAS GAINED FROM AVAILABLE TAX RECORDS AND/OR RECORDED SUBDIVISION PLATS.
- RIGHT-OF-WAY (R.O.W.) CONTROL MONUMENTS, AS MAINTAINED BY THE CITY OF ANN ARBOR, ARE DESCRIBED AS METAL PIPES OR RE-BARS INSIDE OF SQUARE MONUMENT BOXES AT THE CENTERLINE OF THE ROAD RIGHT-OF-WAY, AT INTERSECTING STREETS OR POINTS OF DEFLECTION.
- THE FOLLOWING DRAWINGS, PLANS AND DOCUMENTS WERE PROVIDED OR USED IN PREPARATION OF THIS SURVEY:
 - "ASSESSOR'S PLAT NO. 29 BEING A REPLAT OF BLOCKS 3 AND 4, RANGES 4, 5 AND 6 EAST ON THE PLAT OF THE VILLAGE OF ANN ARBOR" RECORDED IN LIBER 9 OF PLATS, PAGE 20, WASHTENAW COUNTY RECORDS.
 - "PLAN OF THE VILLAGE OF ANN ARBOR" (COUNTY RECORD NUMBER UNKNOWN, STATE PLAT FILE NO. 9436), RECEIVED FOR RECORD, MAY 25, 1824 AT DETROIT REGISTER'S OFFICE.
 - "PLAT OF SUBDIVISIONS OF PART OF LOT NO. 3 BLOCK 3 N. R. 6 EAST IN THE VILLAGE OF ANN ARBOR" RECORDED IN LIBER 28 OF DEEDS, PAGE 131 WASHTENAW COUNTY RECORDS.
 - DIGITAL TAX MAPS (VIA EWASHTENAW.ORG PUBLIC GIS DATABASE).
 - FIFTH & DIVISION STREETSCAPE IMPROVEMENTS - PHASE I CONSTRUCTION PLANS BY BECKETT & RAEDER, LANDSCAPE ARCHITECTS & ENGINEERS, FOR THE CITY OF ANN ARBOR AND ANN ARBOR DOWNTOWN DEVELOPMENT AUTHORITY, JOB NO. 101723A, REV. DATE 4/01/2011.
- MISS-DIG DESIGN TICKET **B061090179-008** WAS ISSUED FOR THIS PROJECT. MAPS OR UTILITY RECORDS WERE RECEIVED FROM THE FOLLOWING SOURCES:
 - CITY OF ANN ARBOR (SANITARY AND STORM SEWERS, DOMESTIC WATER)
 - COMCAST (TELECOMMUNICATION)
 - DTE/DETROIT EDISON (ELECTRIC POWER)
 - DTE GAS/MICHIGAN (NATURAL GAS)
 - MCI/VERIZON BUSINESS (TELECOMMUNICATION)
 - WINDSTREAM (TELECOMMUNICATION-FIBER OPTICS)
 - COMLINK (TELECOMMUNICATION)
 - AT&T (TELECOMMUNICATION)
- UTILITY NOTE: PUBLIC LIGHTING AND TRAFFIC SIGNAL LINE MAPS WERE NOT RECEIVED FROM THE CITY OF ANN ARBOR AS OF THE DATE OF THIS SURVEY.
- UNDERGROUND UTILITY LOCATIONS WERE DERIVED FROM ACTUAL MEASUREMENTS ON VISIBLE UTILITIES, MISS DIG FLAGS/MARKINGS, AND/OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS, NOR SHOULD THEY BE ASSUMED THAT THEY ARE THE ONLY UNDERGROUND UTILITIES IN THE AREA. ALL UTILITIES SHOULD BE APPROACHED WITH CAUTION. ADDITIONAL DETAILS REGARDING THE INDIVIDUAL UTILITIES ARE NOTED BELOW.

GAS AND WATER UTILITIES SHOWN HEREON WERE DRAFTED USING A COMBINATION OF RECORD MAPS AND EXISTING FEATURES MAPPED IN THE FIELD (I.E. SHUT-OFFS/VALVES). IN MANY INSTANCES, THERE WAS NO PHYSICAL EVIDENCE TO SUPPORT THE LOCATION AND RECORD MAPS ALONE WERE USED TO PLOT THESE UTILITIES.

SANITARY LEADS SHOWN HEREON WERE DRAFTED USING RECORD MAPS EXCLUSIVELY AND COULD NOT BE CONFIRMED WITH PHYSICAL EVIDENCE.

OVERHEAD FIBER OPTIC LINES ARE SHOWN ACCORDING TO RECORD MAPS PROVIDED BY: COMCAST, COMLINK AND WINDSTREAM. OVERHEAD ELECTRIC LINES ARE SHOWN PER PROVIDED DTE RECORD MAPS. UNDERGROUND ELECTRIC UTILITIES ARE SHOWN ACCORDING TO PROVIDED DTE RECORD MAPS. THE UNDERGROUND ELECTRIC MAPS LACK CRITICAL DETAIL NECESSARY TO FULLY RESOLVE THE ENTIRETY OF THE ELECTRIC ASSETS.

EXISTING TRAFFIC LIGHTING FEATURES ARE SHOWN HEREON HOWEVER THERE ARE NO AVAILABLE ASSETS AT THE CITY OF ANN ARBOR TO SHOW THE CONNECTIVITY (CONDUIT) BETWEEN THE TRAFFIC FEATURES.

EXISTING UNDERGROUND COMMUNICATION LINES SHOWN HEREON (VERIZON & AT&T) ARE ACCORDING TO A COMBINATION OF PROVIDED RECORD MAPS AND PHYSICAL EVIDENCE. THERE ARE NOTABLE INCONSISTENCIES BETWEEN RECORD MAPS AND PHYSICAL EVIDENCE.
- THIS SURVEY DRAWING SET HAS BEEN SEPERATED INTO SHEETS V.1.1-V.1.3 FOR TOPOGRAPHIC DETAILS/SITE GRADING AND SHEETS V.1.4-V.1.6 FOR UTILITY CONNECTIONS AND DETAILS.
- SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED AND ARE NOT CONSIDERED A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE AND OR DEVELOPMENT OF THIS SITE.
- ADDITIONAL SPOT ELEVATIONS MAY BE CONTAINED IN THE PROJECT DATABASE, AND ALTHOUGH NOT APPEARING IN THE RECORD PLAN DOCUMENT DUE TO SCALE AND VISIBILITY, WERE UTILIZED IN THE DIGITAL TERRAIN MODEL FOR CREATION OF THE ONE-FOOT CONTOURS. THE ADDITIONAL SPOT ELEVATION DATA IS AVAILABLE FOR FUTURE DESIGN ANALYSIS, BEING LOCATED ON A FROZEN LAYER WITHIN THE PROJECT DATABASE.

SURVEY LEGEND

	R.O.W. CONTROL MONUMENT		STORM MANHOLE		EX. TOPO CONTOUR
	BENCHMARK		SANITARY MANHOLE		BUILDING PERIMETER
	CONTROL POINT		ELECTRIC MANHOLE		BUILDING/ROOF OVERHANG
	FOUND IRON PIPE		GAS MANHOLE		EX. BRUSH/WOODED LIMITS
	EX. SPOT ELEV.		WATER MANHOLE		EX. FENCE LINE
	EX. TOP OF CONC. CURB ELEV.		STEAM TUNNEL MANHOLE		EX. GUARD RAIL
	EX. GUTTER ELEV.		HANDHOLE - ELECTRIC		EX. COMMUNICATION
	EX. EDGE OF METAL ELEV.		HANDHOLE - LIGHTING/SIGNAL		EX. UNDERGROUND ELECTRIC
	EX. CURB CUT ELEV.		BRICK PAVERS		EX. ELECTRIC
	EX. TOP OF WALL ELEV.		ADA DETECTABLE WARNING MAT		EX. FIBER OPTIC
	EX. BOTTOM OF WALL ELEV.		ADA PAD (STAMPED CONCRETE)		EX. NATURAL GAS
	ELECTRIC TRANSFORMER		PARKING METER		EX. OVERHEAD UTILITY
	CABLE RISER		CROSSWALK SIGNAL POST		EX. SANITARY SEWER
	UTILITY POLE		EX. FIRE DEPT. CONNECTION		EX. STORM SEWER
	GUY WIRE		EX. DOWNSPOUT		EX. WATER MAIN
	LIGHT POLE		EX. BOLLARD/POST		EX. ELECTRIC STREET LIGHTING
	FIRE HYDRANT		SIGN		EX. HANDRAIL
	SHUT OFF VALVE		EX. BIKE LOOP		CENTERLINE OF RIGHT-OF-WAY
	CATCH BASIN (ROUND)		TREE - DECIDUOUS		RIGHT-OF-WAY (R.O.W.) LINE
	CATCH BASIN (SQUARE)		TREE - CONIFEROUS		EX. PARCEL LINE
	COMMUNICATIONS MANHOLE		TREE GRATE		EX. PLAT LOT LINES

SHEET INDEX

V.1.0	COVER SHEET
V.1.1	TOPOGRAPHIC SURVEY
V.1.2	TOPOGRAPHIC SURVEY
V.1.3	TOPOGRAPHIC SURVEY
V.1.4	UTILITY CONNECTIONS
V.1.5	UTILITY CONNECTIONS
V.1.6	UTILITY CONNECTIONS
V.1.7	STRUCTURE TABLE

CERTIFICATE

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH LOCAL AND STATE JURISDICTIONAL REQUIREMENTS REGULATING MAPPING STANDARDS. THE UNDERSIGNED STATES THAT PROPER FIELD PROCEDURES, INSTRUMENTATION AND ADEQUATE STAFF WERE EMPLOYED TO ACHIEVE THE RESULTS INDICATED HEREIN.

SMITHGROUPJJR, INC.

Charles A. Langolf
CHARLES A. LANGOLF, P.S. 56210,
PROFESSIONAL SURVEYOR
STATE OF MICHIGAN
charles.langolf@smithgroupjir.com



NORTH FIFTH AVENUE STREET RECONSTRUCTION

N. FIFTH AVE. & DETROIT ST.
ANN ARBOR, MICHIGAN

Owner:

CITY OF ANN ARBOR &
DOWNTOWN
DEVELOPMENT
AUTHORITY

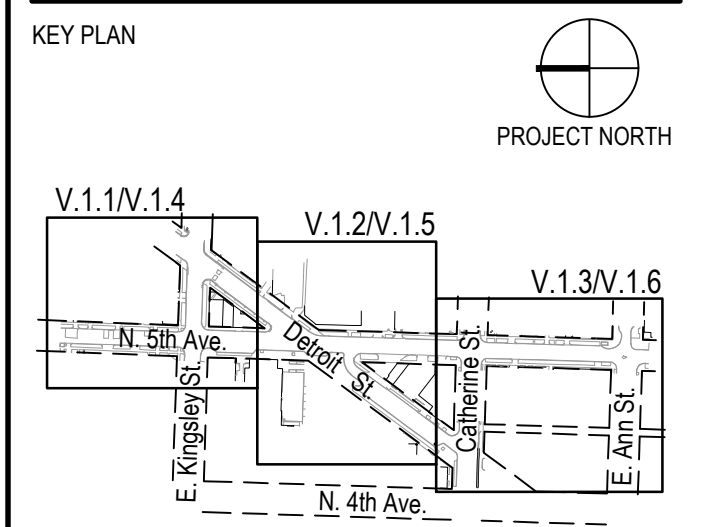
SMITHGROUP JJR

201 DEPOT STREET
SECOND FLOOR
ANN ARBOR, MI 48104
734.662.4457
www.smithgroupjir.com

ISSUED FOR	REV	DATE
CLIENT ISSUE	0	6/02/2016

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION



DRAWING TITLE
COVER SHEET

SCALE 1" = 50'
PROJECT NUMBER 21282.000
DRAWING NUMBER **V.1.0**

NORTH FIFTH AVENUE STREET RECONSTRUCTION

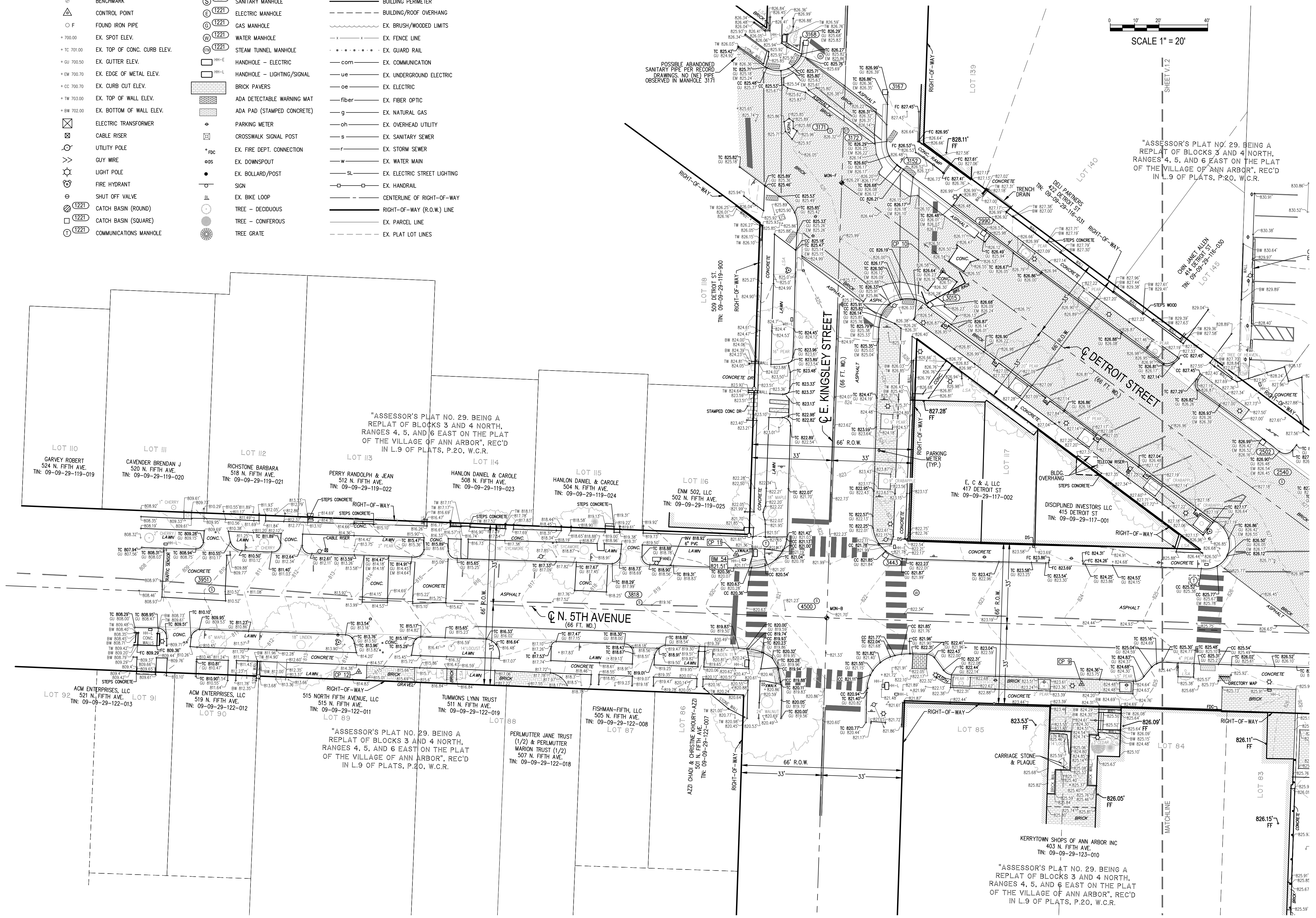
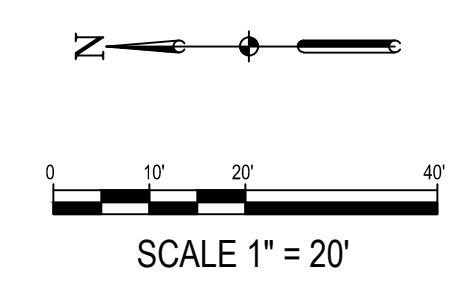
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SURVEY LEGEND

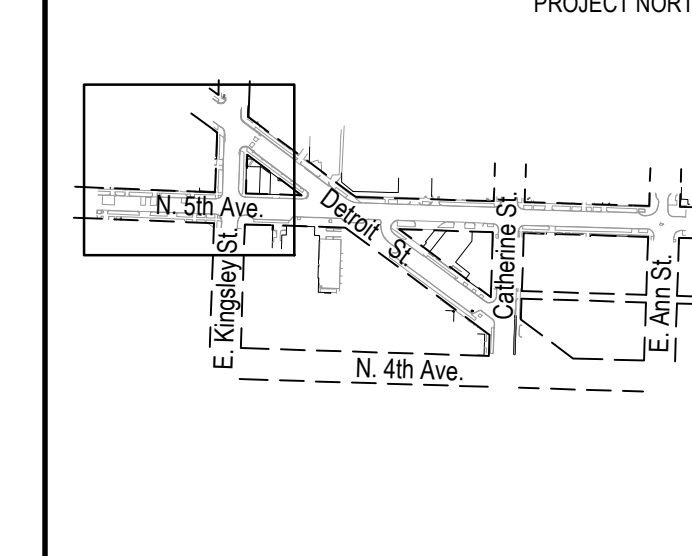
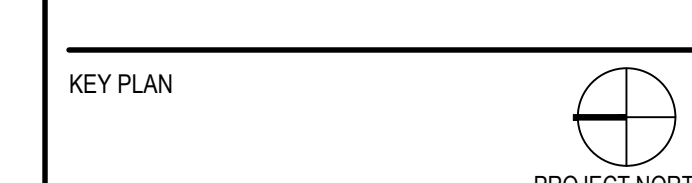
- | | | |
|---|--|---|
| <ul style="list-style-type: none"> ⊕ R.O.W. CONTROL MONUMENT ⊙ BENCHMARK △ CONTROL POINT ○ FOUND IRON PIPE + 700.00 EX. SPOT ELEV. + TC 701.00 EX. TOP OF CONC. CURB ELEV. + GU 700.50 EX. GUTTER ELEV. + EM 700.70 EX. EDGE OF METAL ELEV. + CC 700.70 EX. CURB OUT ELEV. + TW 703.00 EX. TOP OF WALL ELEV. + BW 702.00 EX. BOTTOM OF WALL ELEV. ⊠ ELECTRIC TRANSFORMER ⊞ CABLE RISER ○ UTILITY POLE ⊞ GUY WIRE ⊞ LIGHT POLE ⊞ FIRE HYDRANT ⊞ SHUT OFF VALVE ⊞ (1221) CATCH BASIN (ROUND) ⊞ (1221) CATCH BASIN (SQUARE) ⊞ (1221) COMMUNICATIONS MANHOLE | <ul style="list-style-type: none"> ⊞ (1221) STORM MANHOLE ⊞ (1221) SANITARY MANHOLE ⊞ (1221) ELECTRIC MANHOLE ⊞ (1221) GAS MANHOLE ⊞ (1221) WATER MANHOLE ⊞ (1221) STEAM TUNNEL MANHOLE ⊞ (1221) HANDHOLE - ELECTRIC ⊞ (1221) HANDHOLE - LIGHTING/SIGNAL BRICK PAVERS ADA DETECTABLE WARNING MAT ADA PAD (STAMPED CONCRETE) PARKING METER CROSSWALK SIGNAL POST EX. FIRE DEPT. CONNECTION EX. DOWNSPOUT EX. BOLLARD/POST SIGN EX. BIKE LOOP TREE - DECIDUOUS TREE - CONIFEROUS TREE GRATE | <ul style="list-style-type: none"> --- EX. TOPO CONTOUR --- BUILDING PERIMETER --- BUILDING/ROOF OVERHANG --- EX. BRUSH/WOODED LIMITS --- EX. FENCE LINE --- EX. GUARD RAIL --- EX. COMMUNICATION --- EX. UNDERGROUND ELECTRIC --- EX. ELECTRIC --- EX. FIBER OPTIC --- EX. NATURAL GAS --- EX. OVERHEAD UTILITY --- EX. SANITARY SEWER --- EX. WATER MAIN --- EX. ELECTRIC STREET LIGHTING --- EX. HANDRAIL --- CENTERLINE OF RIGHT-OF-WAY --- RIGHT-OF-WAY (R.O.W.) LINE --- EX. PARCEL LINE --- EX. PLAT LOT LINES |
|---|--|---|



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CLIENT ISSUE	0	6/02/2016

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION



DRAWING TITLE
TOPOGRAPHIC SURVEY

SCALE	1" = 20'
PROJECT NUMBER	21282.000
DRAWING NUMBER	V.1.1

NOTE: FOR UTILITY DETAILS AND CONNECTIONS, SEE SHEET V.1.4

NORTH FIFTH AVENUE STREET RECONSTRUCTION

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SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEY PLAN

PROJECT NORTH

DRAWING TITLE
TOPOGRAPHIC SURVEY

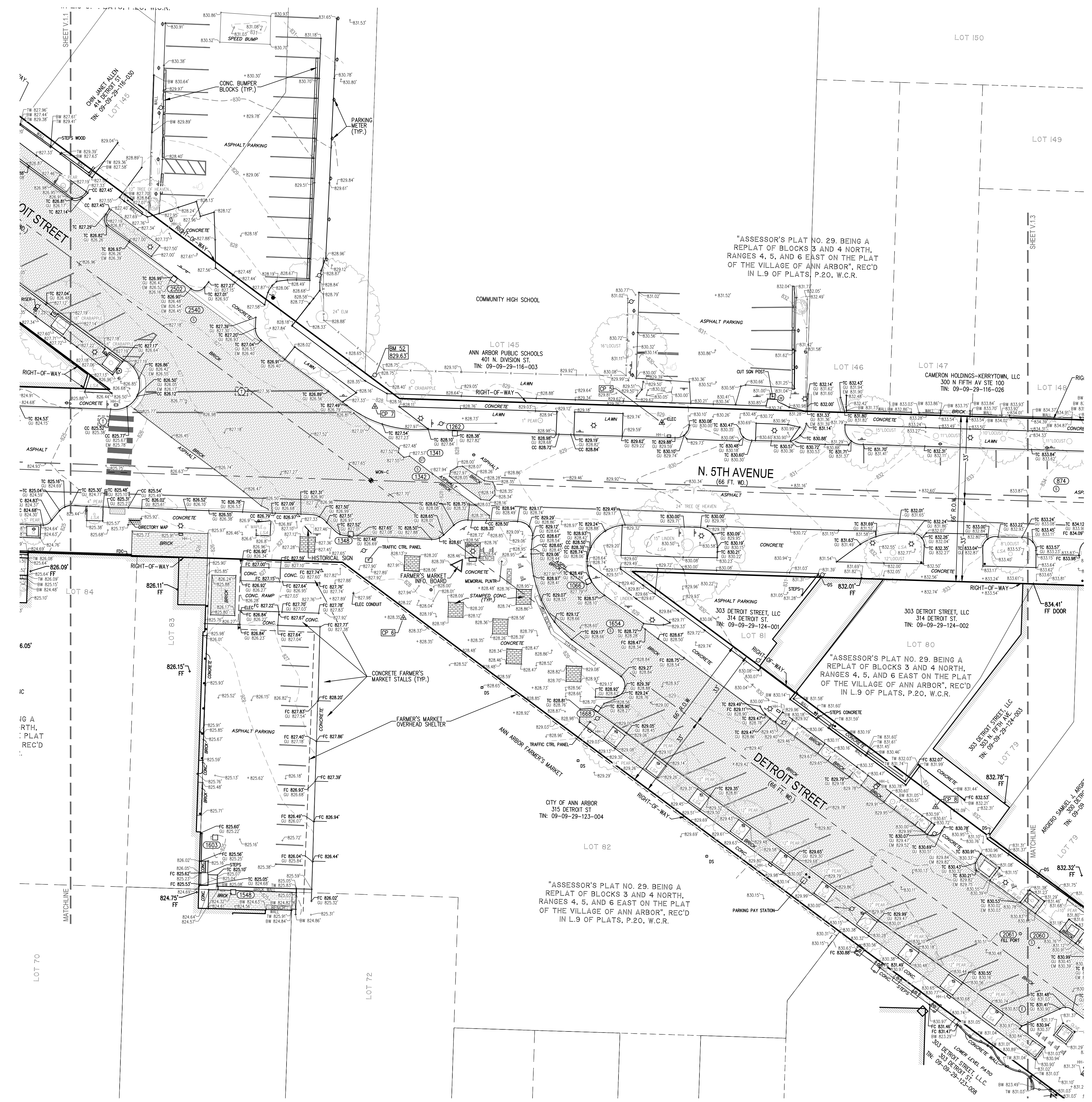
SCALE
1" = 20'

PROJECT NUMBER
21282.000

DRAWING NUMBER
V.1.2

SURVEY LEGEND

- R.O.W. CONTROL MONUMENT
- BENCHMARK
- CONTROL POINT
- FOUND IRON PIPE
- 700.00 EX. SPOT ELEV.
- 701.00 EX. TOP OF CONC. CURB ELEV.
- 700.50 EX. GUTTER ELEV.
- 700.75 EX. EDGE OF METAL ELEV.
- 700.70 EX. CURB OUT ELEV.
- 703.00 EX. TOP OF WALL ELEV.
- 702.00 EX. BOTTOM OF WALL ELEV.
- ELECTRIC TRANSFORMER
- CABLE RISER
- UTILITY POLE
- GUY WIRE
- LIGHT POLE
- FIRE HYDRANT
- SHUT OFF VALVE
- CATCH BASIN (ROUND)
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- COMMUNICATIONS MANHOLE
- STORM MANHOLE
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- STEAM TUNNEL MANHOLE
- HANDHOLE - ELECTRIC
- HANDHOLE - LIGHTING/SIGNAL
- BRICK PAVERS
- ADA DETECTABLE WARNING MAT
- ADA PAD (STAMPED CONCRETE)
- PARKING METER
- CROSSWALK SIGNAL POST
- EX. FIRE DEPT. CONNECTION
- EX. DOWNSPOUT
- EX. BOLLARD/POST
- SIGN
- EX. BIKE LOOP
- TREE - DECIDUOUS
- TREE - CONIFEROUS
- TREE GRATE
- EX. TOPO CONTOUR
- BUILDING PERMETER
- BUILDING/ROOF OVERHANG
- EX. BRUSH/WOODED LIMITS
- EX. FENCE LINE
- EX. GUARD RAIL
- EX. COMMUNICATION
- EX. UNDERGROUND ELECTRIC
- EX. ELECTRIC
- EX. FIBER OPTIC
- EX. NATURAL GAS
- EX. OVERHEAD UTILITY
- EX. SANITARY SEWER
- EX. STORM SEWER
- EX. WATER MAIN
- EX. ELECTRIC STREET LIGHTING
- EX. HANDRAIL
- CENTERLINE OF RIGHT-OF-WAY
- RIGHT-OF-WAY (R.O.W.) LINE
- EX. PARCEL LINE
- EX. PLAT LOT LINES



NOTE: FOR UTILITY DETAILS AND CONNECTIONS, SEE SHEET V.1.5

NORTH FIFTH AVENUE STREET RECONSTRUCTION

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Owner:
CITY OF ANN ARBOR & DOWNTOWN DEVELOPMENT AUTHORITY

SMITHGROUP JJR

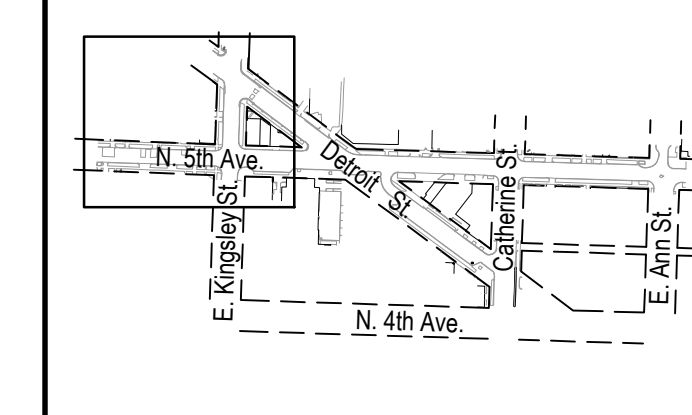
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SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEY PLAN



DRAWING TITLE
UTILITY CONNECTIONS

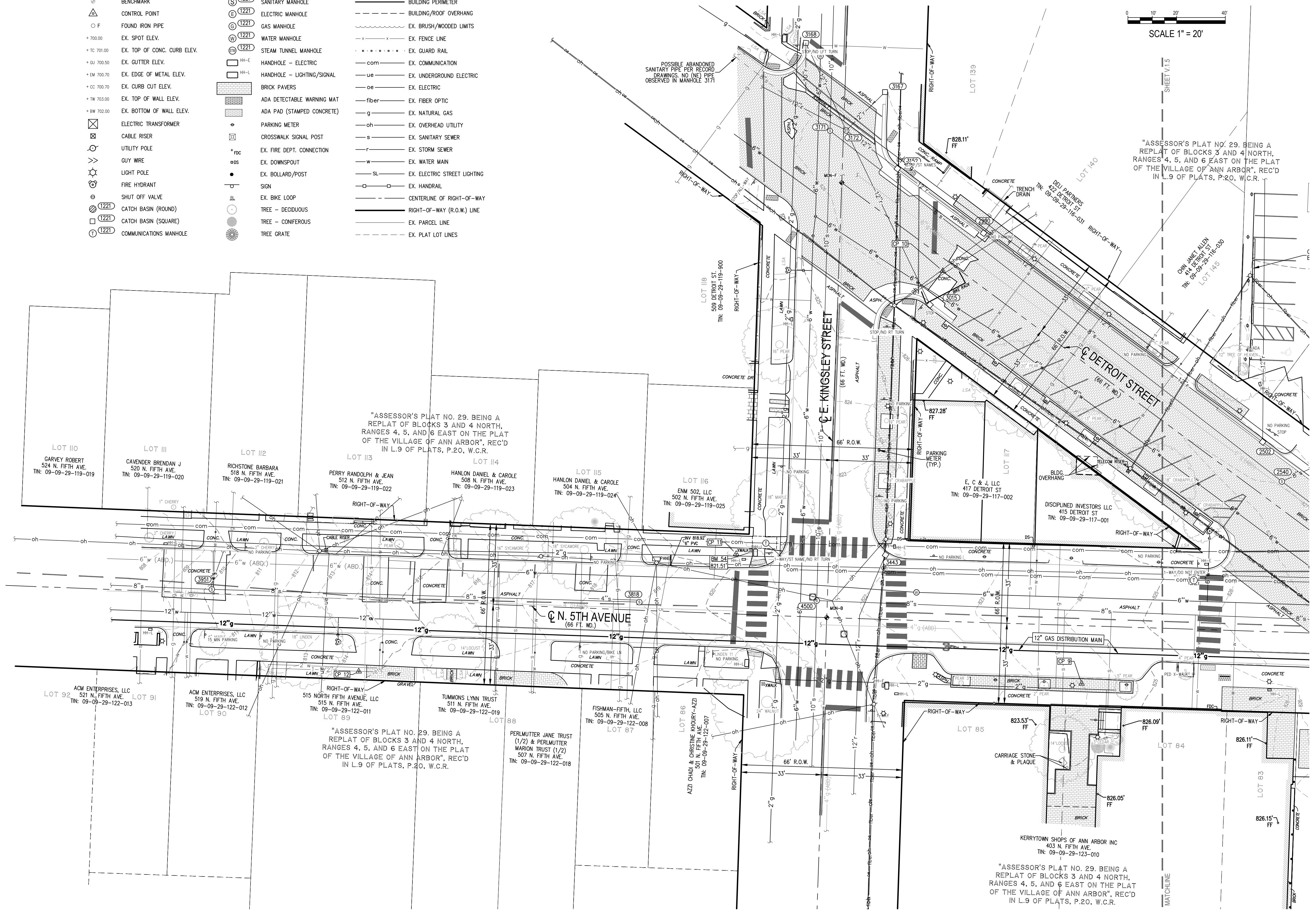
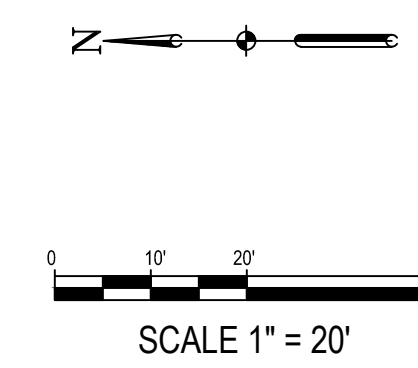
SCALE
1" = 20'

PROJECT NUMBER
21282.000

DRAWING NUMBER
V.1.4

SURVEY LEGEND

- | | | | | | |
|--|-----------------------------|--|----------------------------|--|------------------------------|
| | R.O.W. CONTROL MONUMENT | | STORM MANHOLE | | EX. TOPO CONTOUR |
| | BENCHMARK | | SANITARY MANHOLE | | BUILDING PERIMETER |
| | CONTROL POINT | | ELECTRIC MANHOLE | | BUILDING/ROOF OVERHANG |
| | FOUND IRON PIPE | | GAS MANHOLE | | EX. BRUSH/WOODED LIMITS |
| | EX. SPOT ELEV. | | WATER MANHOLE | | EX. FENCE LINE |
| | EX. TOP OF CONC. CURB ELEV. | | STEAM TUNNEL MANHOLE | | EX. GUARD RAIL |
| | EX. GUTTER ELEV. | | HANDHOLE - ELECTRIC | | EX. COMMUNICATION |
| | EX. EDGE OF METAL ELEV. | | HANDHOLE - LIGHTING/SIGNAL | | EX. UNDERGROUND ELECTRIC |
| | EX. TOP OF WALL ELEV. | | BRICK PAVERS | | EX. ELECTRIC |
| | EX. BOTTOM OF WALL ELEV. | | ADA DETECTABLE WARNING MAT | | EX. ELECTRIC |
| | ELECTRIC TRANSFORMER | | ADA PAD (STAMPED CONCRETE) | | EX. FIBER OPTIC |
| | CABLE RISER | | PARKING METER | | EX. NATURAL GAS |
| | UTILITY POLE | | CROSSWALK SIGNAL POST | | EX. OVERHEAD UTILITY |
| | GUY WIRE | | EX. FIRE DEPT. CONNECTION | | EX. SANITARY SEWER |
| | LIGHT POLE | | EX. DOWNSPOUT | | EX. STORM SEWER |
| | FIRE HYDRANT | | EX. WATER MAIN | | EX. ELECTRIC STREET LIGHTING |
| | SHUT OFF VALVE | | SIGN | | EX. HANDRAIL |
| | CATCH BASIN (ROUND) | | EX. BIKE LOOP | | CENTERLINE OF RIGHT-OF-WAY |
| | CATCH BASIN (SQUARE) | | TREE - DECIDUOUS | | RIGHT-OF-WAY (R.O.W.) LINE |
| | COMMUNICATIONS MANHOLE | | TREE - CONIFEROUS | | EX. PARCEL LINE |
| | | | TREE GRATE | | EX. PLAT LOT LINES |



FILE: P:\21282.000\CAD\Resource\SURVEY\21282_SURV.dwg USER: clongif DATE: Nov. 29, 2017 TIME: 03:03 pm

NOTE: FOR MANHOLE DEPTHS & INVERTS, SEE STRUCTURE TABLE, SHEET V.1.7

NORTH FIFTH AVENUE STREET RECONSTRUCTION

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ANN ARBOR, MICHIGAN

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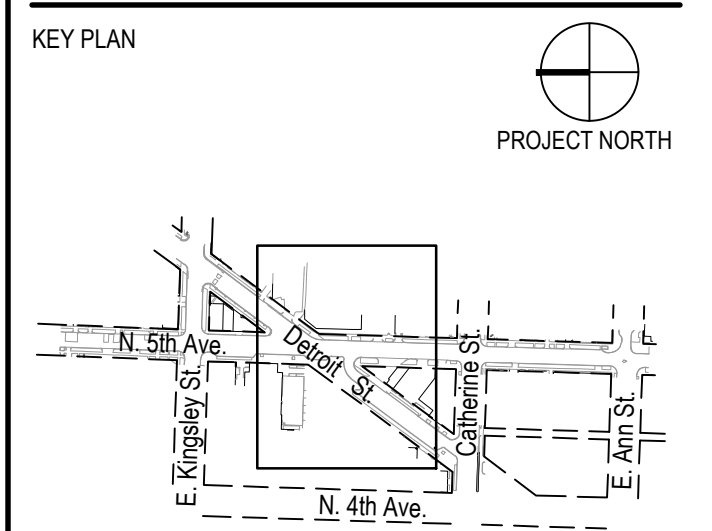
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SEALS AND SIGNATURES

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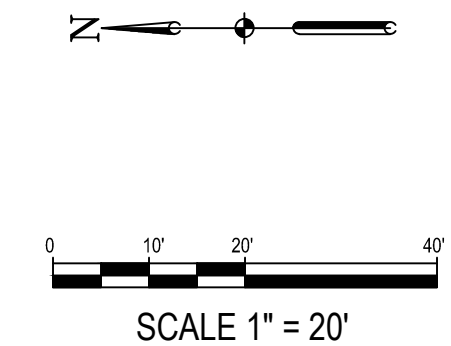


DRAWING TITLE
UTILITY CONNECTIONS

SCALE
1" = 20'
21282.000

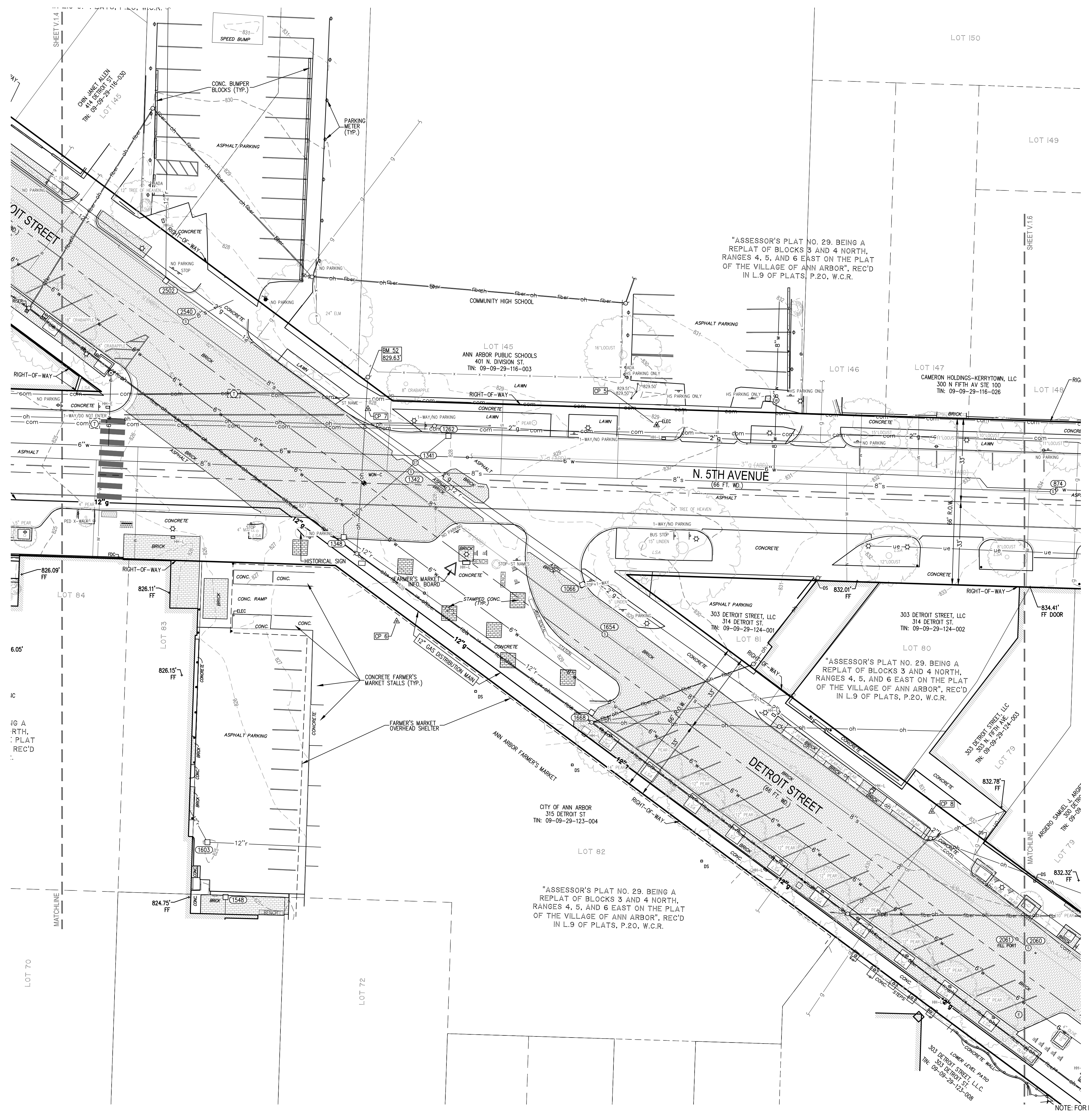
PROJECT NUMBER
V.1.5

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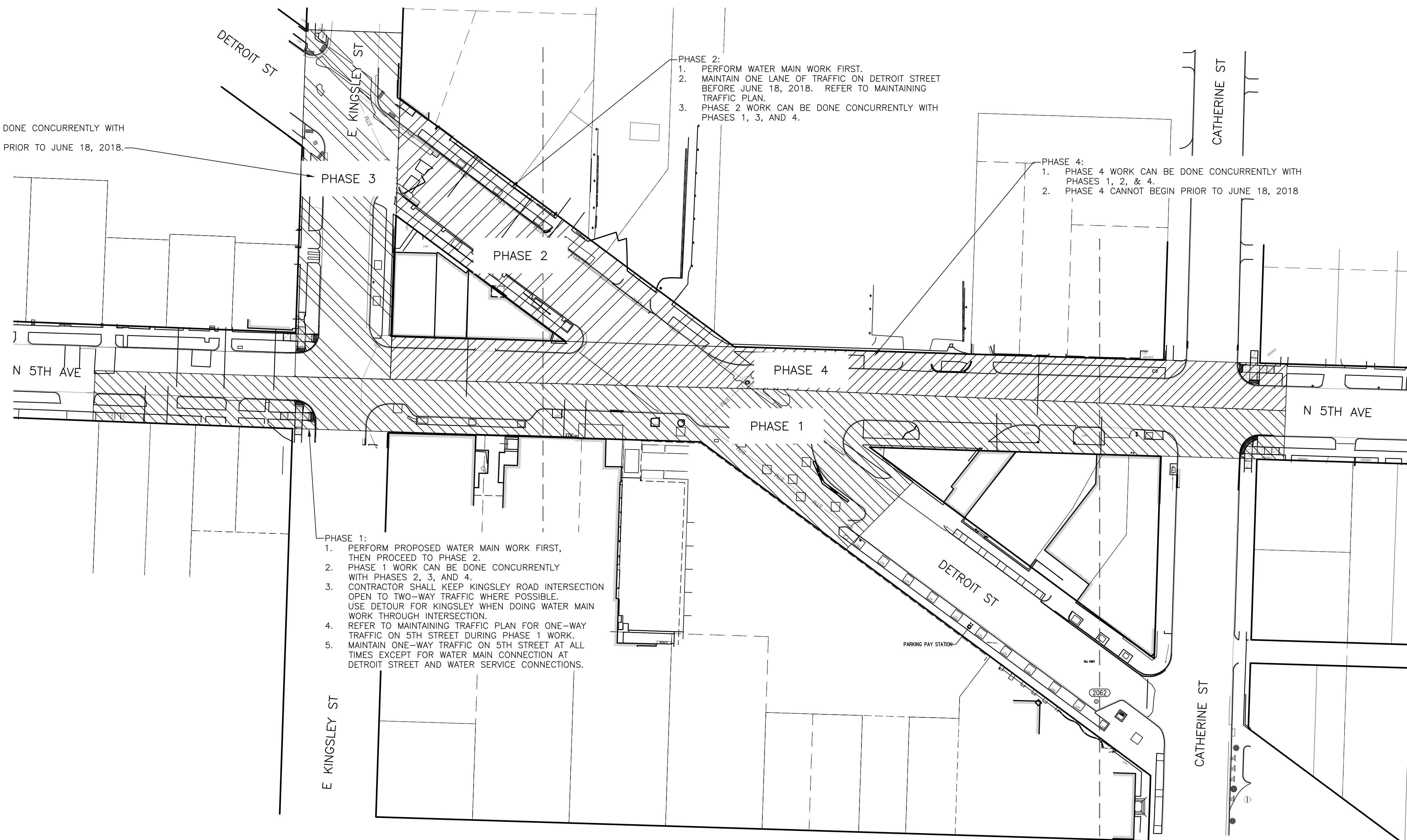
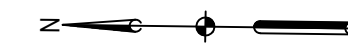


SURVEY LEGEND

- R.O.W. CONTROL MONUMENT
- BENCHMARK
- CONTROL POINT
- FOUND IRON PIPE
- EX. SPOT ELEV.
- EX. TOP OF CONC. CURB ELEV.
- EX. CUTTER ELEV.
- EX. EDGE OF METAL ELEV.
- EX. CURB CUT ELEV.
- EX. TOP OF WALL ELEV.
- EX. BOTTOM OF WALL ELEV.
- ELECTRIC TRANSFORMER
- CABLE RISER
- UTILITY POLE
- GUY WIRE
- LIGHT POLE
- FIRE HYDRANT
- SHUT OFF VALVE
- CATCH BASIN (ROUND)
- CATCH BASIN (SQUARE)
- COMMUNICATIONS MANHOLE
- STORM MANHOLE
- SANITARY MANHOLE
- ELECTRIC MANHOLE
- GAS MANHOLE
- WATER MANHOLE
- STEAM TUNNEL MANHOLE
- HANDHOLE - ELECTRIC
- HANDHOLE - LIGHTING/SIGNAL
- BRICK PAVERS
- ADA DETECTABLE WARNING MAT
- ADA PAD (STAMPED CONCRETE)
- PARKING METER
- CROSSWALK SIGNAL POST
- EX. FIRE DEPT. CONNECTION
- EX. DOWNSPOUT
- EX. BOLLARD/POST
- SIGN
- EX. BIKE LOOP
- TREE - DECIDUOUS
- TREE - CONIFEROUS
- TREE GRATE
- EX. TOPO CONTOUR
- BUILDING PERIMETER
- BUILDING/ROOF OVERHANG
- EX. BRUSH/WOODED LIMITS
- EX. FENCE LINE
- EX. GUARD RAIL
- EX. COMMUNICATION
- EX. UNDERGROUND ELECTRIC
- EX. ELECTRIC
- EX. FIBER OPTIC
- EX. NATURAL GAS
- EX. OVERHEAD UTILITY
- EX. SANITARY SEWER
- EX. STORM SEWER
- EX. WATER MAIN
- EX. ELECTRIC STREET LIGHTING
- EX. HANDRAIL
- CENTERLINE OF RIGHT-OF-WAY
- RIGHT-OF-WAY (R.O.W.) LINE
- EX. PARCEL LINE
- EX. PLAT LOT LINES



NOTE: FOR MANHOLE DEPTHS & INVERTS, SEE STRUCTURE TABLE, SHEET V.1.7



PHASE 3:
 1. PHASE 3 WORK CAN BE DONE CONCURRENTLY WITH PHASES 1, 2, & 4.
 2. PHASE 3 CANNOT BEGIN PRIOR TO JUNE 18, 2018.

PHASE 2:
 1. PERFORM WATER MAIN WORK FIRST.
 2. MAINTAIN ONE LANE OF TRAFFIC ON DETROIT STREET BEFORE JUNE 18, 2018. REFER TO MAINTAINING TRAFFIC PLAN.
 3. PHASE 2 WORK CAN BE DONE CONCURRENTLY WITH PHASES 1, 3, AND 4.

PHASE 4:
 1. PHASE 4 WORK CAN BE DONE CONCURRENTLY WITH PHASES 1, 2, & 4.
 2. PHASE 4 CANNOT BEGIN PRIOR TO JUNE 18, 2018

PHASE 1:
 1. PERFORM PROPOSED WATER MAIN WORK FIRST, THEN PROCEED TO PHASE 2.
 2. PHASE 1 WORK CAN BE DONE CONCURRENTLY WITH PHASES 2, 3, AND 4.
 3. CONTRACTOR SHALL KEEP KINGSLEY ROAD INTERSECTION OPEN TO TWO-WAY TRAFFIC WHERE POSSIBLE. USE DETOUR FOR KINGSLEY WHEN DOING WATER MAIN WORK THROUGH INTERSECTION.
 4. REFER TO MAINTAINING TRAFFIC PLAN FOR ONE-WAY TRAFFIC ON 5TH STREET DURING PHASE 1 WORK.
 5. MAINTAIN ONE-WAY TRAFFIC ON 5TH STREET AT ALL TIMES EXCEPT FOR WATER MAIN CONNECTION AT DETROIT STREET AND WATER SERVICE CONNECTIONS.

NOTES

- PROGRESS DATES:
 1. THE CONTRACTOR MAY PROPOSE ALTERNATIVES TO THE PHASING AND MAINTAINING TRAFFIC PLAN FOR THE CITY AND DDA APPROVAL. NO COST TO THE CITY AND DDA, OR EXTENSION OF TIME WILL BE GRANTED FOR PHASING ALTERNATIVES.
 2. ONE-LANE OF TRAFFIC MUST BE MAINTAINED AT ALL TIMES THROUGHOUT THE PROJECT DURING THE FOLLOWING DATES:
 - PROJECT START DATE THROUGH JUNE 18, 2018
 - ANNI ARBOR ART FAIR JULY 18, 2018 THROUGH JULY 22, 2018.
 - SEPTEMBER 4, 2018 THROUGH PROJECT COMPLETION.

LEGEND

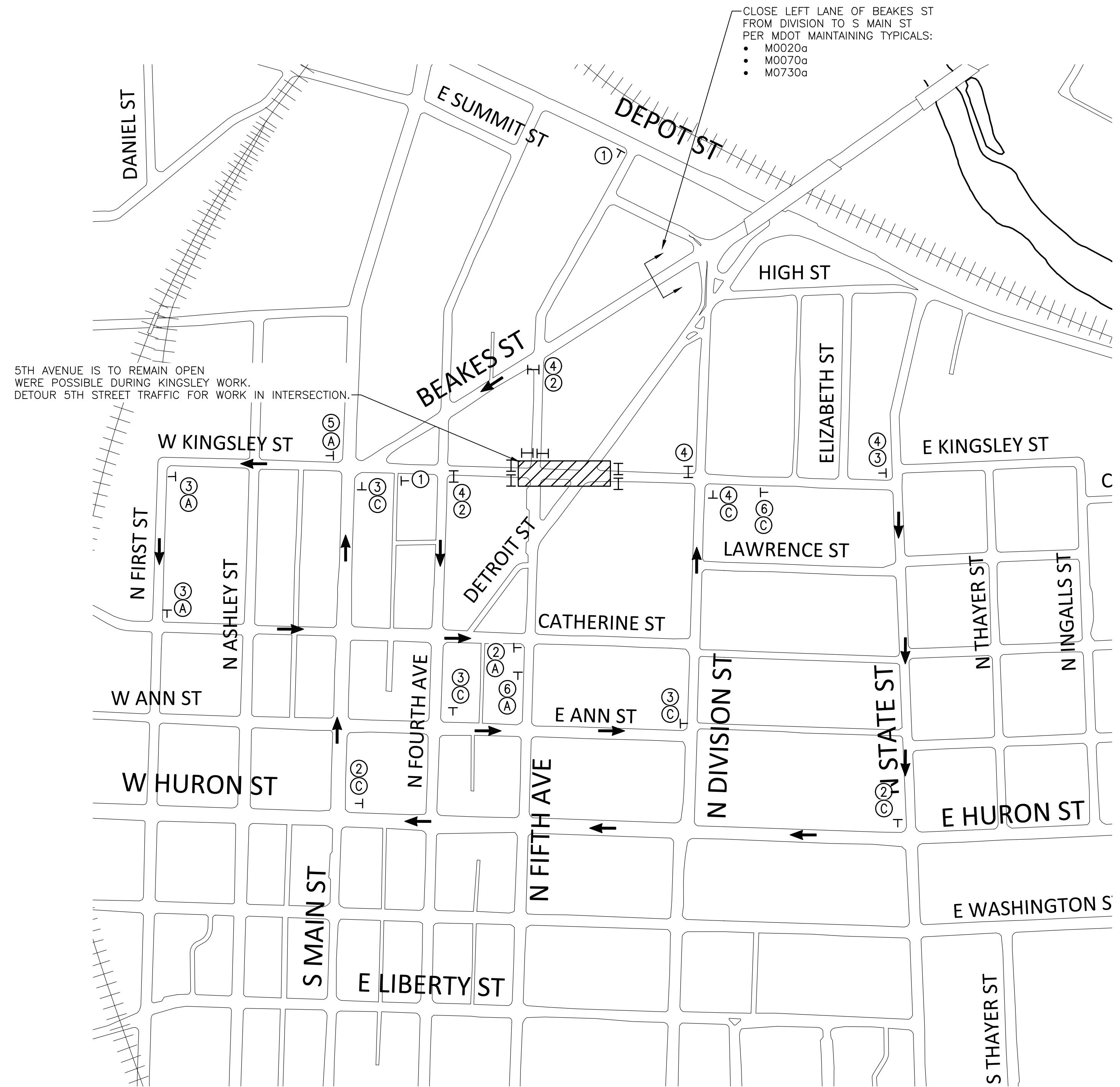
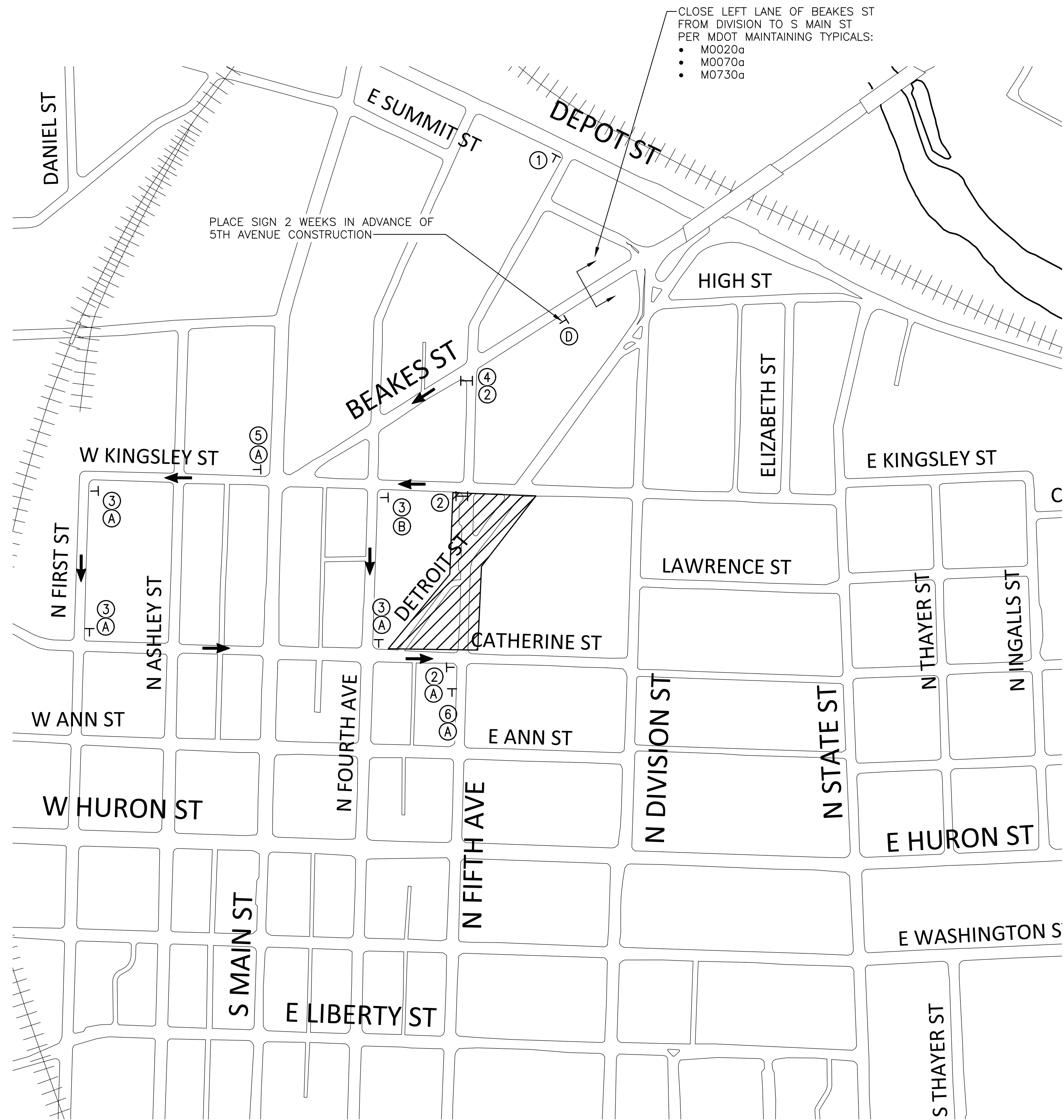
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

CONSTRUCTION PHASING PLAN

SCALE	INCH
NONE	
DRAWING NO. C1.00	
SHEET NO. ___ OF ___	

APPROVED BY _____



DETOUR PLAN - 5TH AVENUE CLOSURE
 SCALE: 1" = 100'
 NORTH

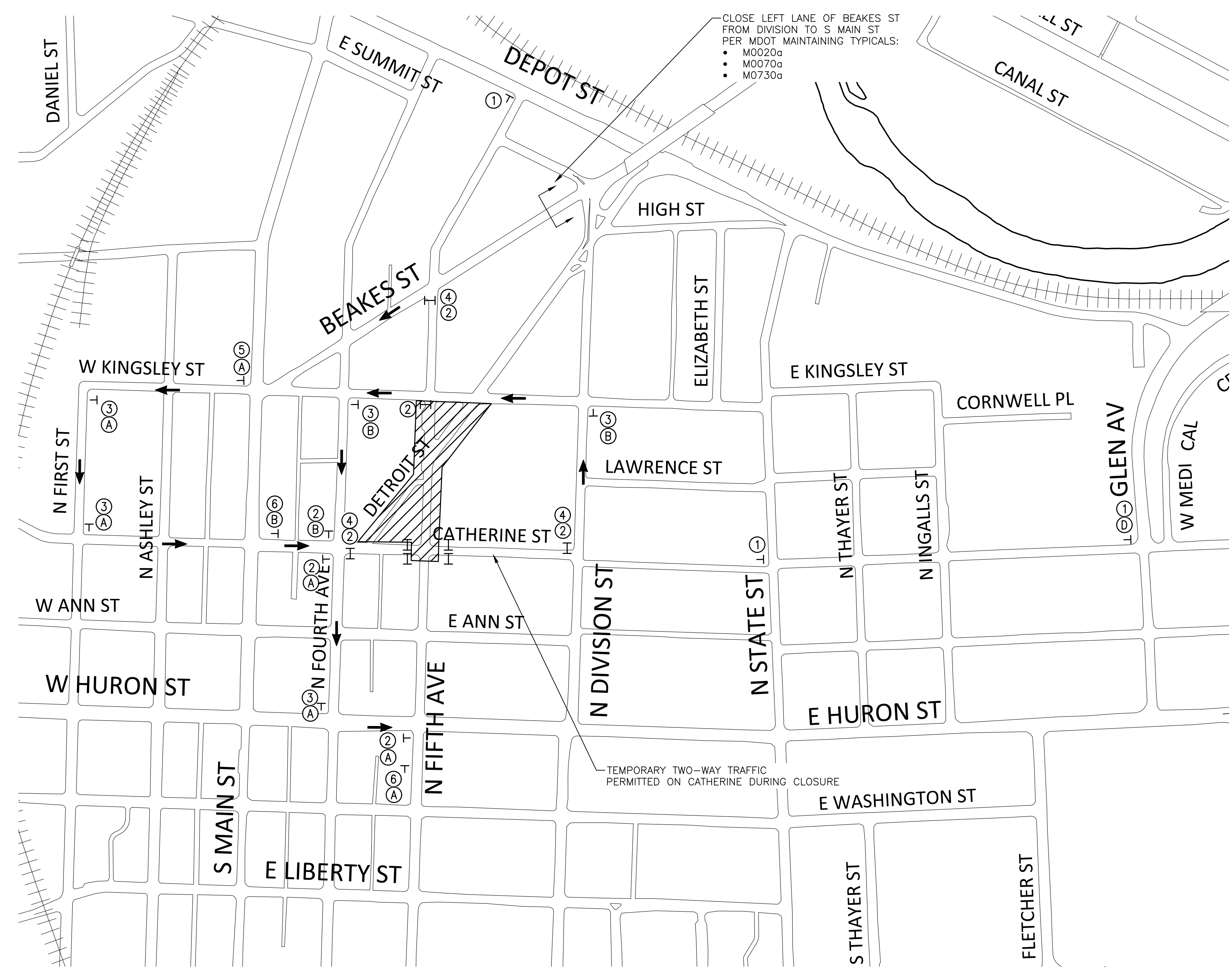
DETOUR PLAN - KINGSLEY STREET CLOSURE
 SCALE: 1" = 100'
 NORTH

- LEGEND**
- WORK ZONE
 - DIRECTION OF TRAFFIC
 - TYPE III BARRICADE
 - TEMP CONSTRUCTION SIGN
 - PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
 - PEDESTRIAN DETOUR
 - TEMPORARY CONSTRUCTION FENCING (6' TALL CHAIN LINK, MOVABLE)

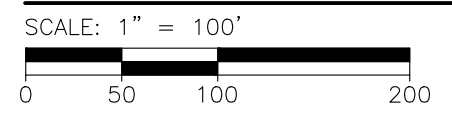
LEGEND

	①		③		⑤		
	②		④		⑥		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR				
DETOUR PLAN	SCALE: NOT TO SCALE INCH			
DRAWING NO. C1.01	SHEET NO. ___ OF ___			
APPROVED BY _____	SEE ABOVE			
BENCH MARK	SURVEY BOOK			
REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
	BID PLANS	12-01-2017		
	95% CD	11-17-2017		

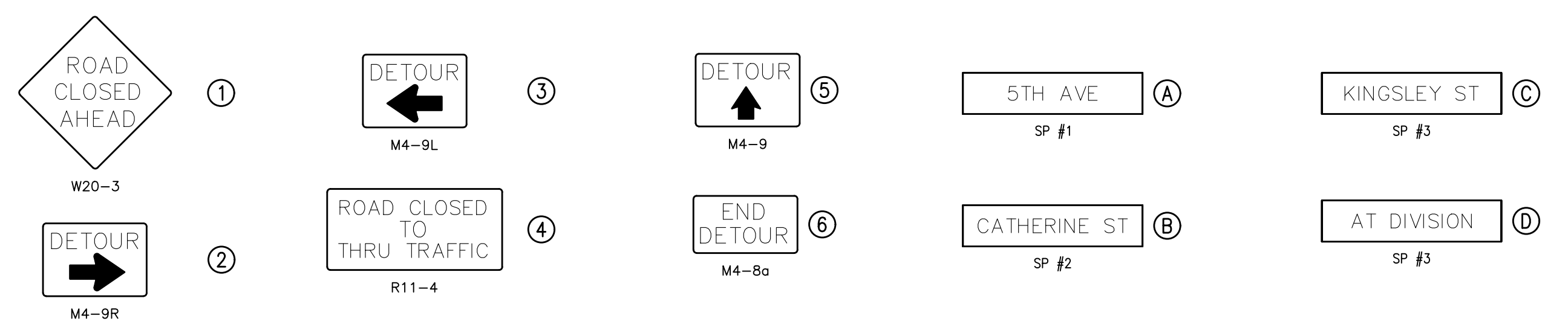


DETOUR PLAN - 5TH & CATHERINE STREETS CLOSURE



LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE
- TEMP CONSTRUCTION SIGN
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- PEDESTRIAN DETOUR
- TEMPORARY CONSTRUCTION FENCING (6' TALL CHAIN LINK, MOVABLE)



LEGEND

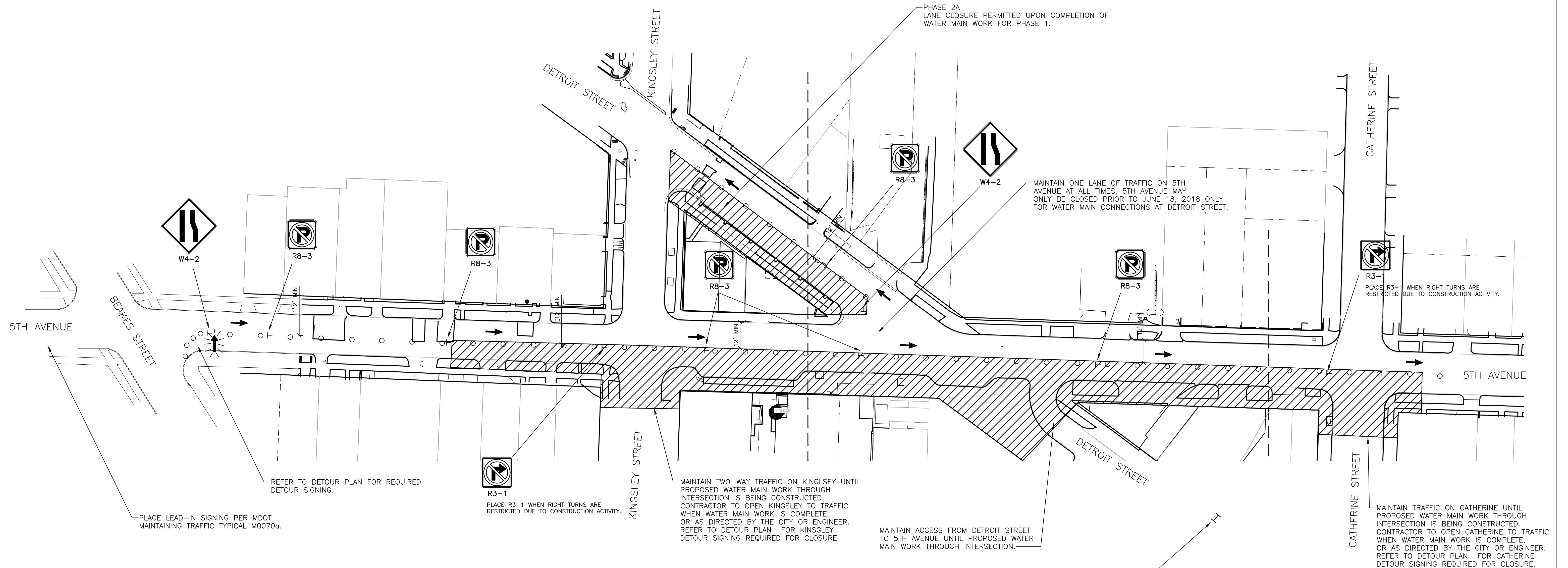
DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

DETOUR PLAN

SEE ABOVE	BID PLANS	DATE	DR.BY	CH.BY
		12-01-2017		
BENCH MARK	SURVEY BOOK	95% CD		
REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY
		11-17-2017		

SCALE	INCH
NOT TO SCALE	
DRAWING NO.	C1.02
SHEET NO.	OF

APPROVED BY _____



PHASE 1 & 2A - MAINTAINING TRAFFIC PLAN

SCALE: 1" = 100'
0 50 100 200

LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE
- TEMP CONSTRUCTION SIGN
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- PEDESTRIAN DETOUR
- TEMPORARY CONSTRUCTION FENCING (6' TALL CHAIN LINK, MOVABLE)
- LIGHTED ARROW, TYPE C

NOTES

1. LOCATIONS OF THE SIGNS AND PORTABLE CHANGEABLE MESSAGE SIGNS TO BE APPROVED BY THE ENGINEER.

LEGEND

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

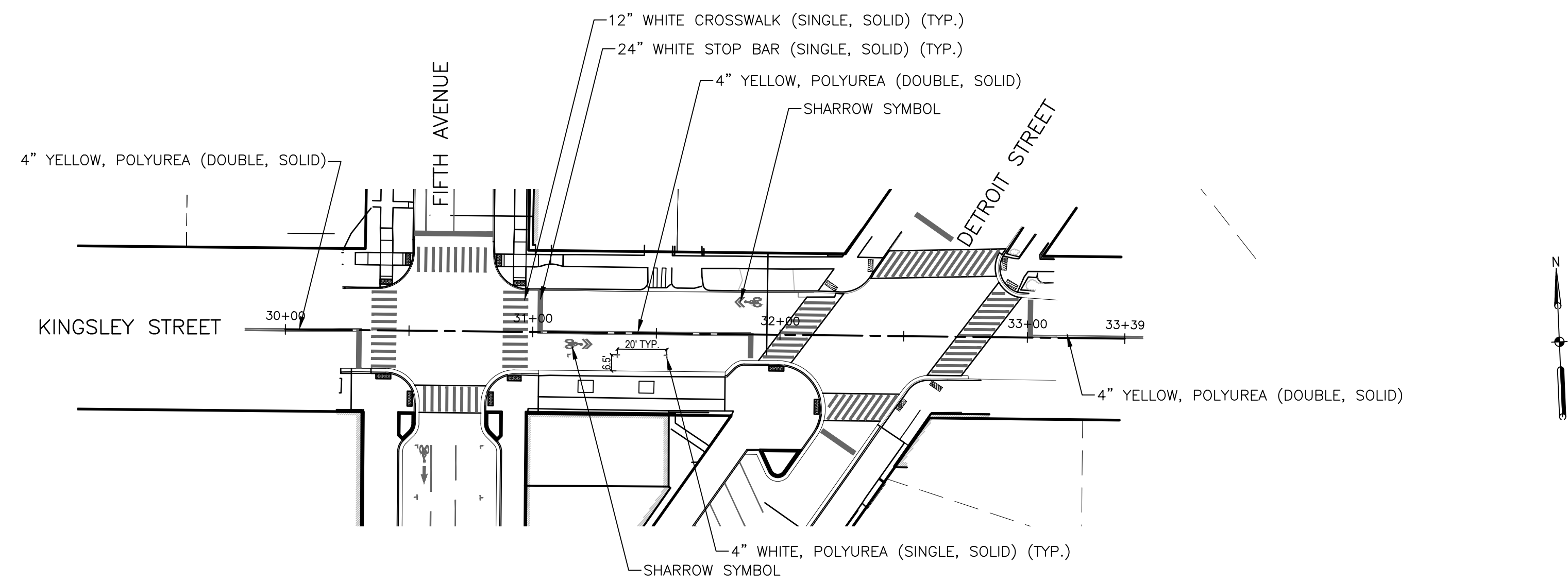
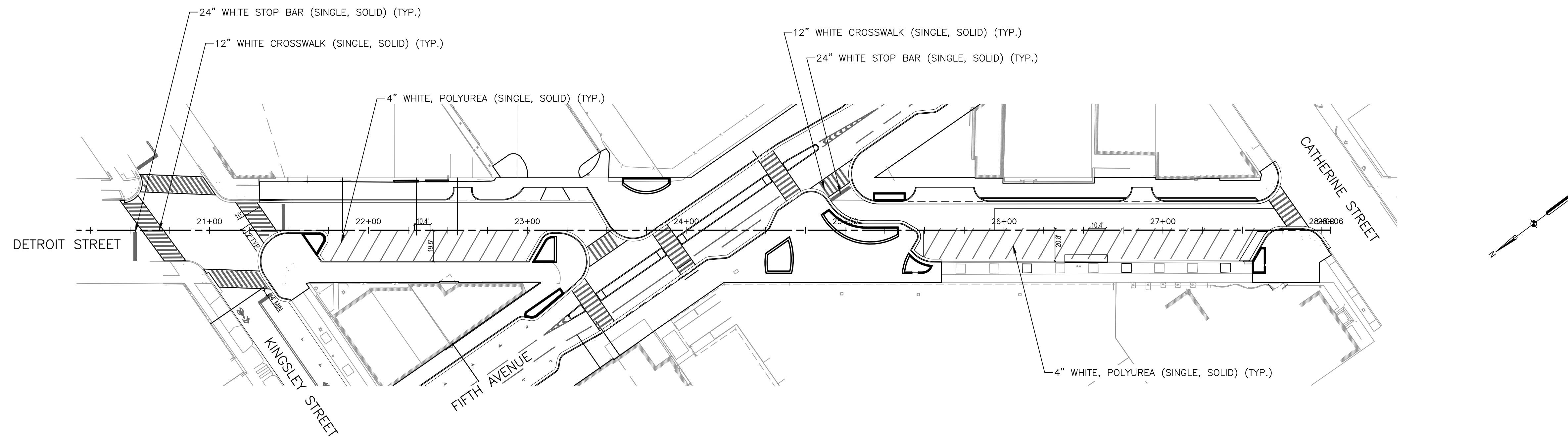
MAINTENANCE OF TRAFFIC PLAN

SCALE	INCH
NOT TO SCALE	
DRAWING NO.	C1.03
SHEET NO.	OF

SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

APPROVED BY _____

REMOVE UTILITY



NOTES

1. LONGITUDINAL PAVEMENT MARKINGS SHALL BE RECESSED.
2. LONGITUDINAL PAVEMENT MARKINGS ARE POLYUREA, SYMBOLS, CROSSWALK, AND STOP BARS ARE THERMOPLASTIC.

LEGEND

- CROSSWALK PAVEMENT MARKING
- STOP BAR PAVEMENT MARKING
- SOLID PAVEMENT MARKING
- SHARROW PAVEMENT MARKING
- BIKE LANE PAVEMENT MARKING

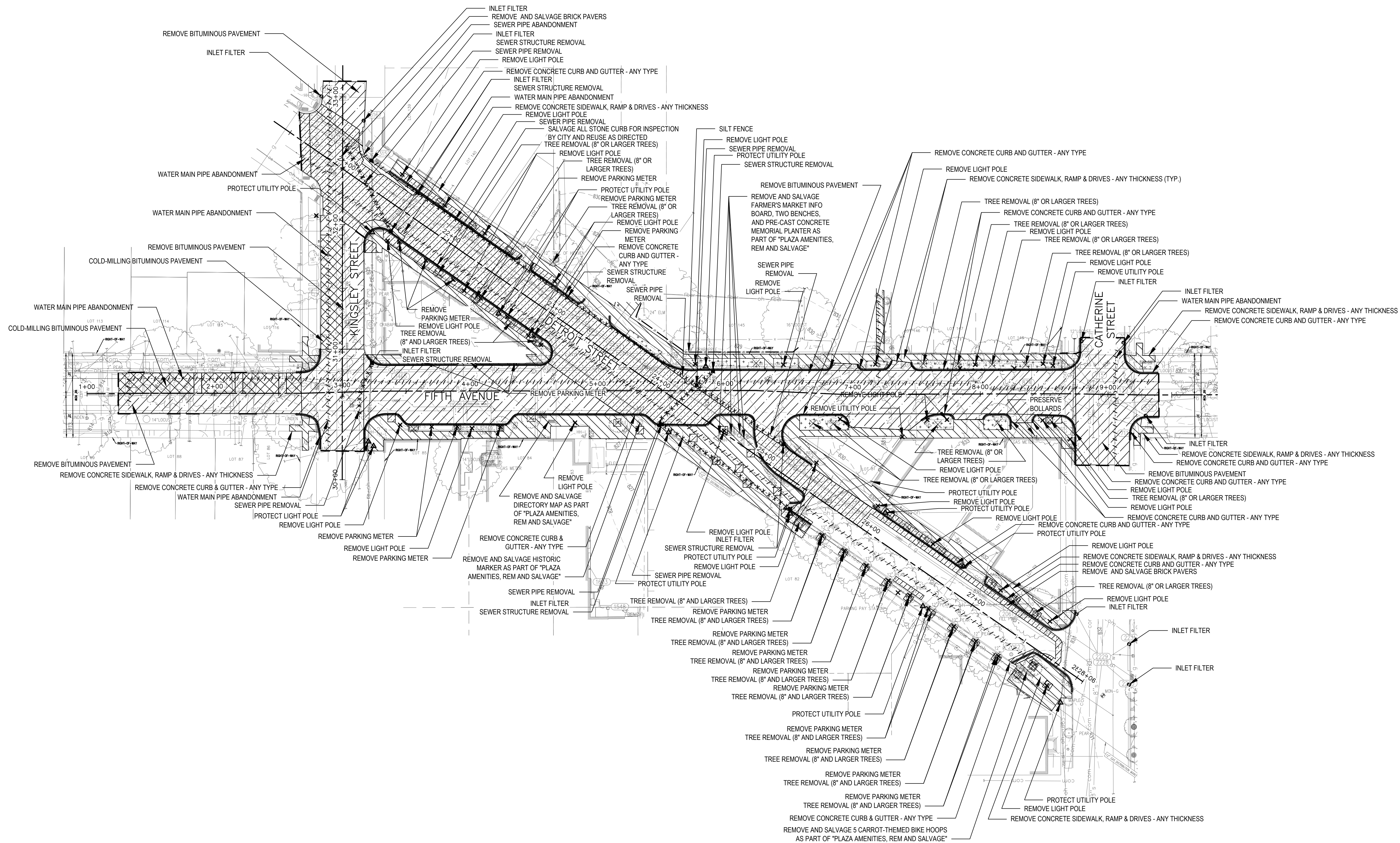
DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

**PAVEMENT MARKING PLAN -
DETROIT AND KINGSLEY**

SCALE 1" = 40'	INCH 0' 20' 40'
DRAWING NO. C1.05	
SHEET NO. ___ OF ___	

SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

APPROVED BY _____



LEGEND

	TREE REMOVAL (8" AND LARGER TREES)		PROTECT ITEM		INLET FILTER
	REMOVE OR SALVAGE ITEM		SEWER STRUCTURE REMOVAL		SILT FENCE
	UTILITY REMOVAL		REMOVE CONCRETE CURB & GUTTER - ANY TYPE		LIMITS OF CONSTRUCTION
	UTILITY ABANDONMENT		COLD MILLING BITUMINOUS PAVEMENT		
			REMOVE BITUMINOUS PAVEMENT		
			REMOVE CONCRETE SIDEWALK, RAMP & DRIVE - ANY THICKNESS		
			REMOVE AND SALVAGE BRICK		

SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

REMOVAL AND SESC PLAN

SCALE 1" = 40'	INCH 0' 20' 40'
DRAWING NO. C2.00	
SHEET NO. ___ OF ___	

APPROVED BY _____

GENERAL

NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.

- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
- ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CITY ORDINANCE CHAPTER 63, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
- ALL MUD/SOIL TRACKED ONTO ADJACENT ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE DDA, WITHIN FOUR (4) HOURS OF BEING SO ORDERED.
- RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
- CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
- SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLIATIVE AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
- THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.

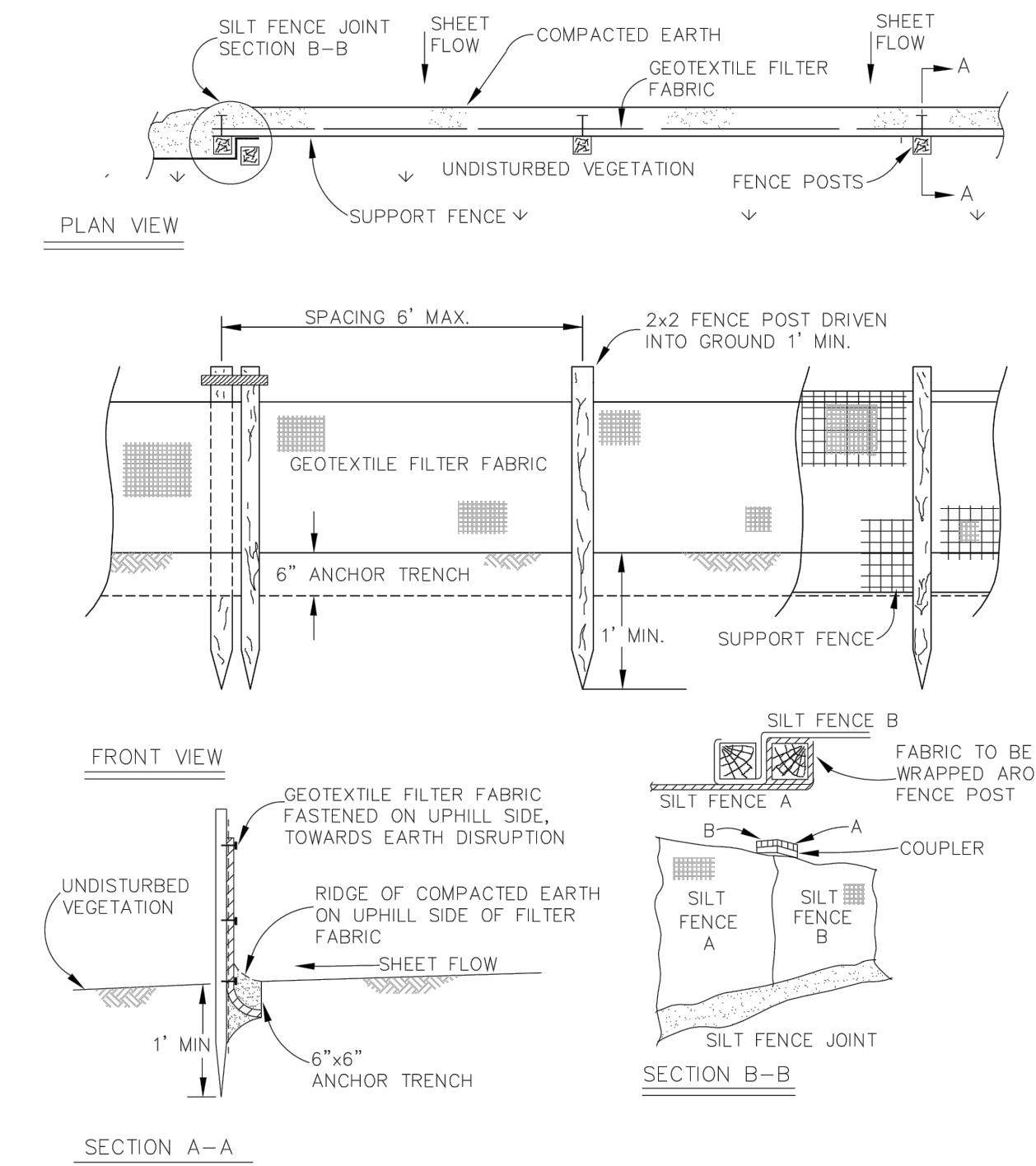
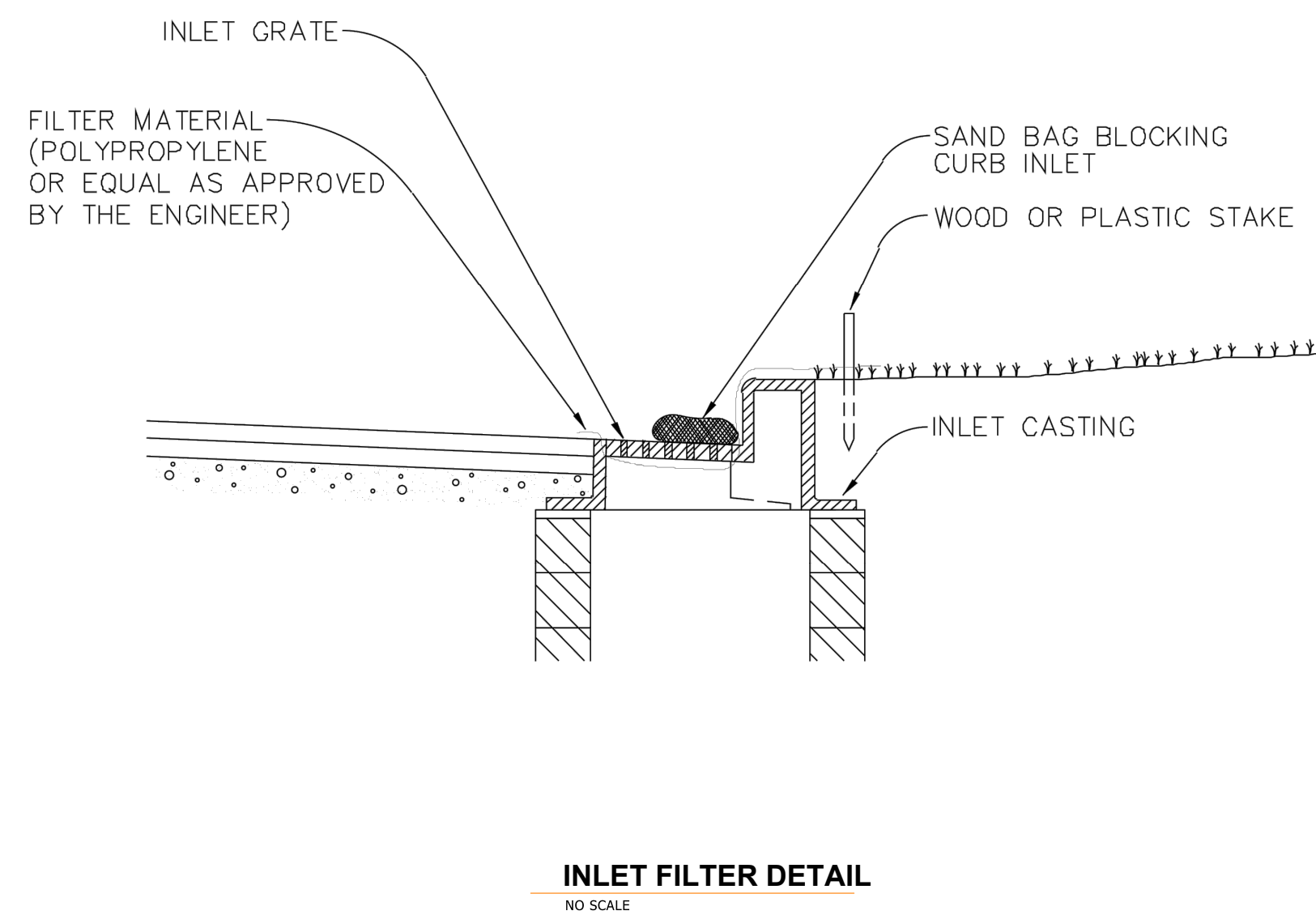
SEQUENCE OF EROSION CONTROL MEASURES:

- THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.

SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:

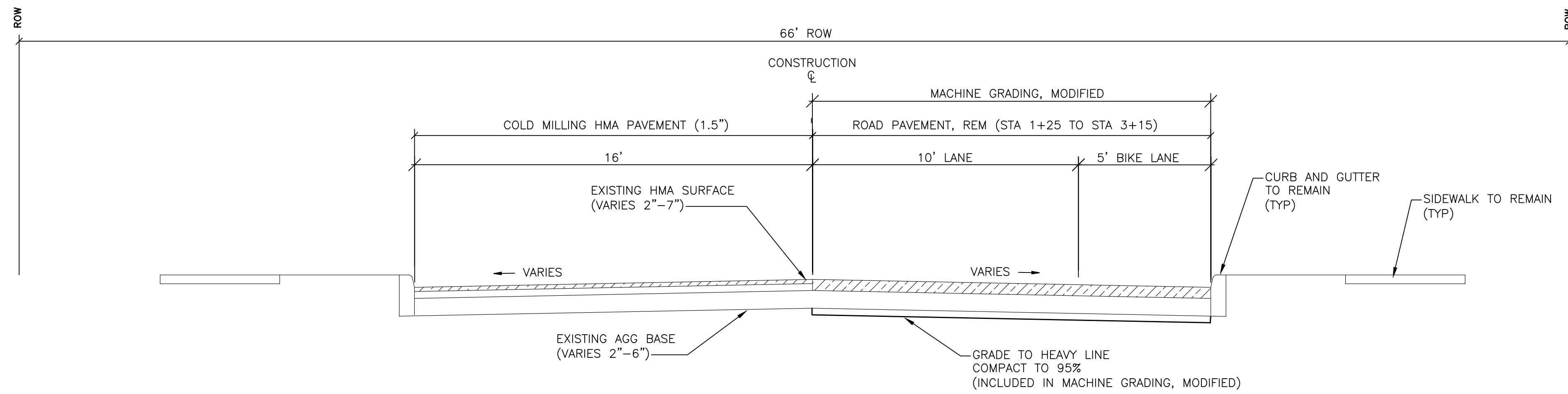
- INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.
- PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- COMPLETE ALL BIORETENTION GRADING AND FINE GRADING.
- REFER TO LANDSCAPE PLANTING PLANS FOR PERMANENT SITE STABILIZATION.
- CLEAN OUT STORM SEWER SYSTEMS.
- REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION

NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.



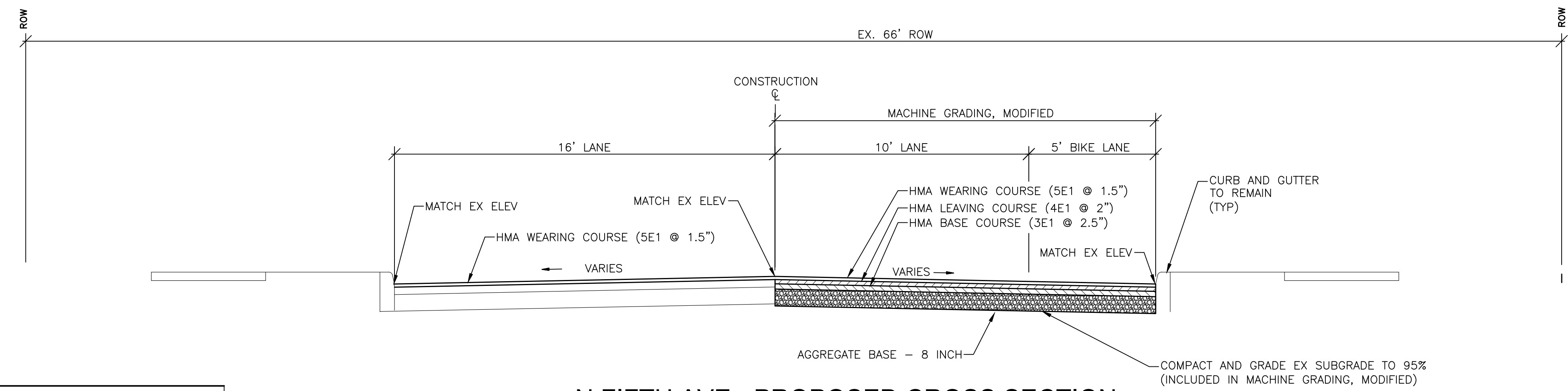
LEGEND

							DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR	
							SESC NOTES & DETAILS	
							SCALE NONE	INCH []
							DRAWING NO. C2.01	
							SHEET NO. _____	OF _____
SEE ABOVE							APPROVED BY _____	
BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY		
			BID PLANS	12-01-2017				
			95% CD	11-17-2017				



N FIFTH AVE - EXISTING CROSS SECTION

APPLY TO STATIONS 1+25 TO 3+00
NO SCALE



N FIFTH AVE - PROPOSED CROSS SECTION

APPLY TO STATIONS 1+25 TO 3+00
NO SCALE

HMA APPLICATION CHART			
PAY ITEM	EST RATE OF APPLICATION PER SYD	PERFORMANCE GRADE	AWI
HMA WEARING COURSE (5E1)	165 LBS	64-28	260 (TOP)
HMA LEVELING COURSE (4E1)	220 LBS	64-28	260 (TOP)
HMA BASE COURSE (3E1)	330 LBS	64-28	260 (TOP)
* BOND COAT	.05-.15 GAL		

* FOR INFORMATION ONLY

LEGEND

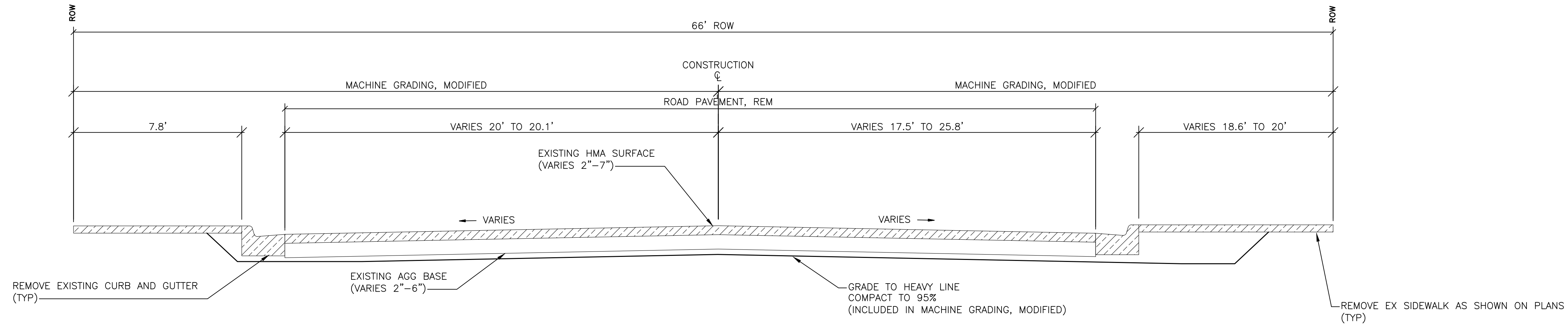
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

**N FIFTH AVENUE
TYPICAL SECTIONS**

SCALE NONE	INCH 1" = 1'
DRAWING NO. C3.00	
SHEET NO. ___ OF ___	

APPROVED BY _____

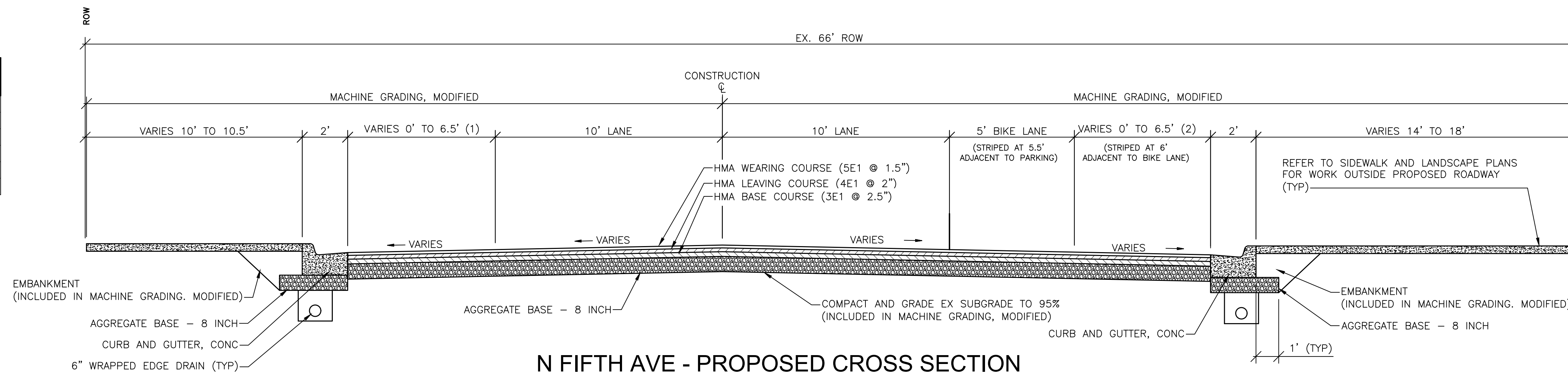


N FIFTH AVE - EXISTING CROSS SECTION

APPLY TO STATIONS 3+00 TO 4+77, 6+09 TO 8+72
NO SCALE

(1) PARKING LANE TABLE

STATION	PARKING WIDTH
3+37 TO 3+49	VARIES 0' TO 6.5'
3+49 TO 4+28	6.5'
4+28 TO 4+36	VARIES 6.5' TO 0'
7+55 TO 7+67	VARIES 0' TO 6.5'
7+67 TO 8+39	6.5'
8+39 TO 8+51	VARIES 6.5' TO 0'



N FIFTH AVE - PROPOSED CROSS SECTION

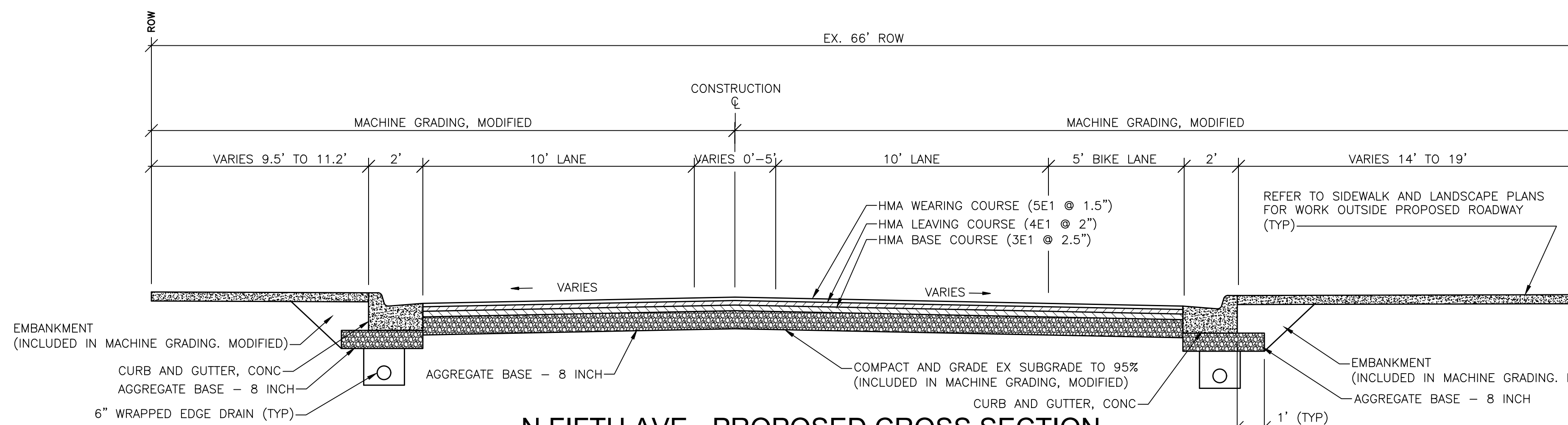
APPLY TO STATIONS 3+38 TO 4+35, 7+06 TO 8+72
NO SCALE

(2) PARKING LANE TABLE

STATION	PARKING WIDTH
3+37 TO 3+49	VARIES 0' TO 6.5'
3+49 TO 4+28	6.5'
4+28 TO 4+36	VARIES 6.5' TO 0'
7+06 TO 7+20	VARIES 0' TO 6.5'
7+20 TO 7+36	6.5'
7+36 TO 7+50	VARIES 6.5' TO 0'

CROSS-SLOPE TABLE

STATION	LEFT SIDE CROSS-SLOPE	RIGHT SIDE CROSS-SLOPE
3+30 TO 3+80	TRANSITION FROM -2.57% TO 2%	TRANSITION FROM -3.41% TO -2%
3+80 TO 4+42	2%	-2%
6+33 TO 7+20	-2%	-2%
7+20 TO 7+70	TRANSITION FROM -2% TO 2%	-2%
7+70 TO 8+38	2%	-2%
8+38 TO 8+63	TRANSITION FROM 2% TO -2.02%	TRANSITION FROM -2% TO -5.08%



N FIFTH AVE - PROPOSED CROSS SECTION

APPLY TO STATIONS 3+00 TO 3+38, 4+35 TO 4+77, 6+09 TO 7+06
NO SCALE

LEGEND

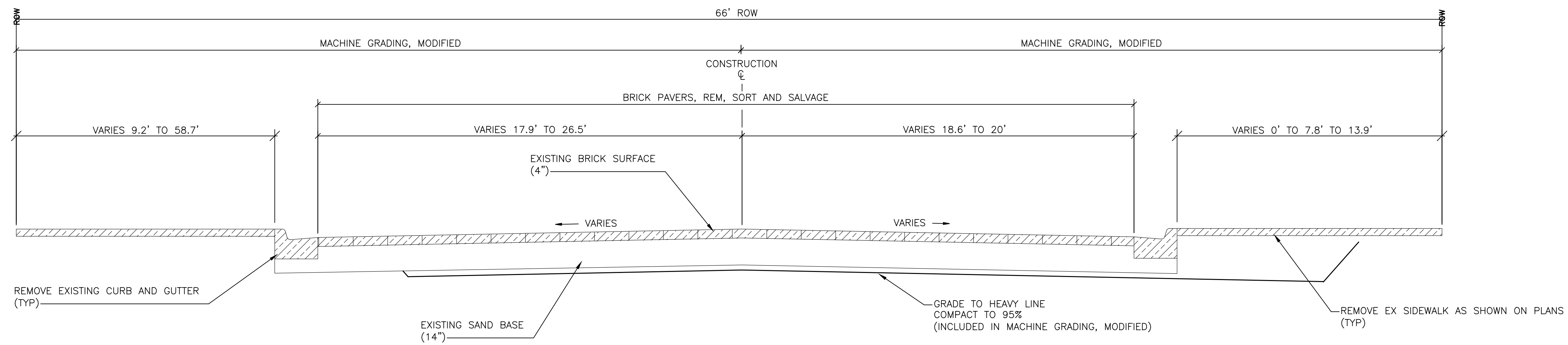
SEE ABOVE	BID PLANS	12-01-2017			
BENCH MARK	SURVEY BOOK	95% CD	11-17-2017		
REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY	

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

**N FIFTH AVENUE
TYPICAL CROSS SECTIONS**

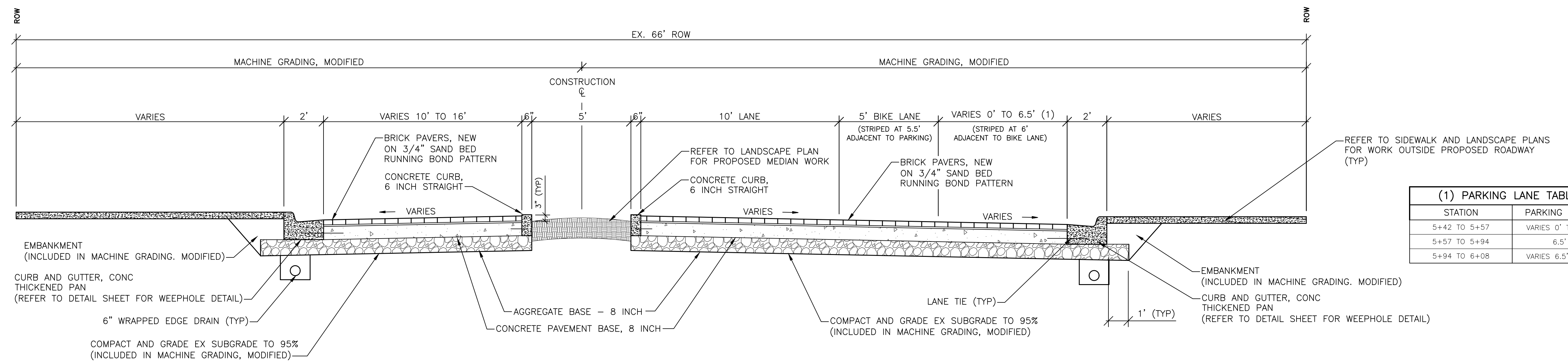
SCALE NONE	INCH 1" = 1'
DRAWING NO. C3.01	
SHEET NO. _____	OF _____

APPROVED BY _____



N FIFTH AVE - EXISTING CROSS SECTION

APPLY TO STATIONS 4+77 TO 6+09
NO SCALE



N FIFTH AVE - PROPOSED CROSS SECTION

APPLY TO STATIONS 4+77 TO 6+09
NO SCALE

CROSS-SLOPE TABLE		
STATION	LEFT SIDE CROSS-SLOPE	RIGHT SIDE CROSS-SLOPE
4+42 TO 4+68	TRANSITION FROM 2% TO 1.5%	TRANSITION FROM -2% TO -1.5%
4+68 TO 4+76	1.5%	-1.5%
4+76 TO 5+01	TRANSITION FROM 1.5% TO 3%	TRANSITION FROM -1.5% TO -3%
5+01 TO 5+30	TRANSITION FROM 3% TO 1%	TRANSITION FROM -3% TO -1%
5+30 TO 5+38	1%	-1%
5+38 TO 5+63	TRANSITION FROM 1% TO -2%	TRANSITION FROM -1% TO -2%
5+63 TO 5+86	-2%	-2%
5+86 TO 6+11	TRANSITION FROM -2% TO -1%	TRANSITION FROM -2% TO -1%
6+11 TO 6+19	-1%	-1%
6+19 TO 6+33	TRANSITION FROM -1% TO -2%	TRANSITION FROM -1% TO -2%

(1) PARKING LANE TABLE	
STATION	PARKING WIDTH
5+42 TO 5+57	VARIES 0' TO 6.5'
5+57 TO 5+94	6.5'
5+94 TO 6+08	VARIES 6.5' TO 0'

LEGEND

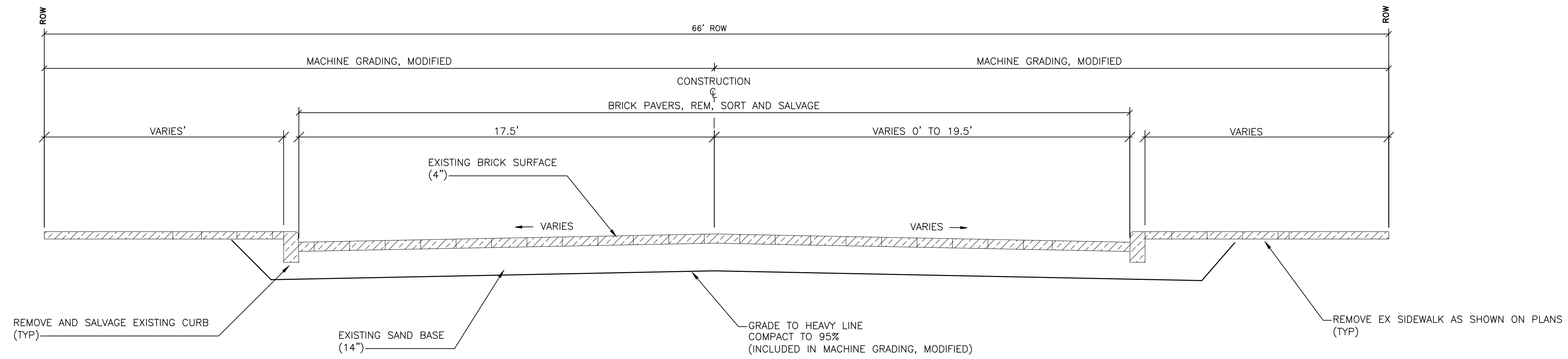
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

**N FIFTH AVENUE
TYPICAL CROSS SECTIONS**

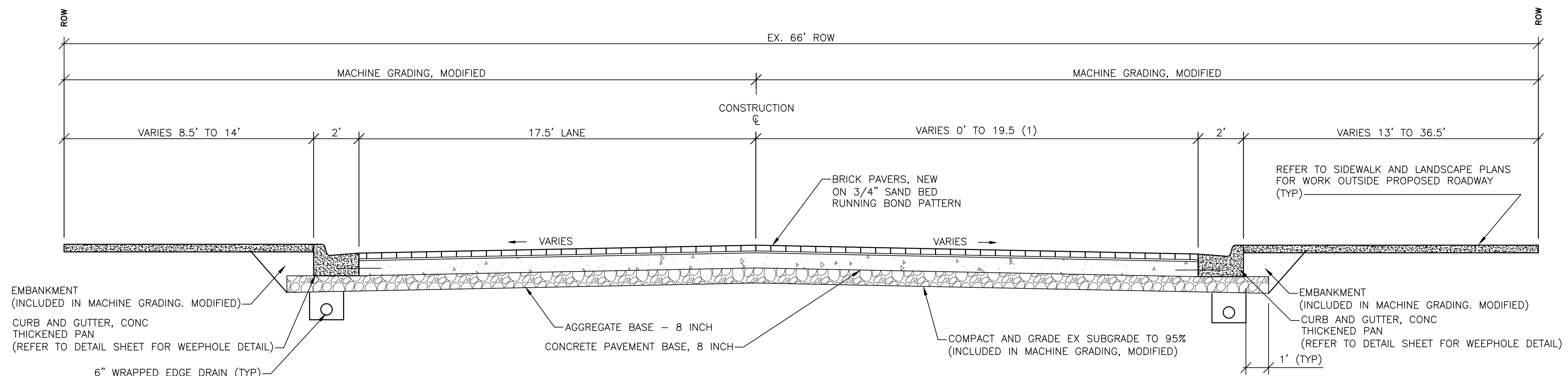
SCALE NONE	INCH 1" = 1'
DRAWING NO. C3.02	
SHEET NO. _____ OF _____	

APPROVED BY _____



DETROIT ST - EXISTING CROSS SECTION

APPLY TO STATIONS 21+36 TO 23+50, 25+00 TO 27+70
NO SCALE

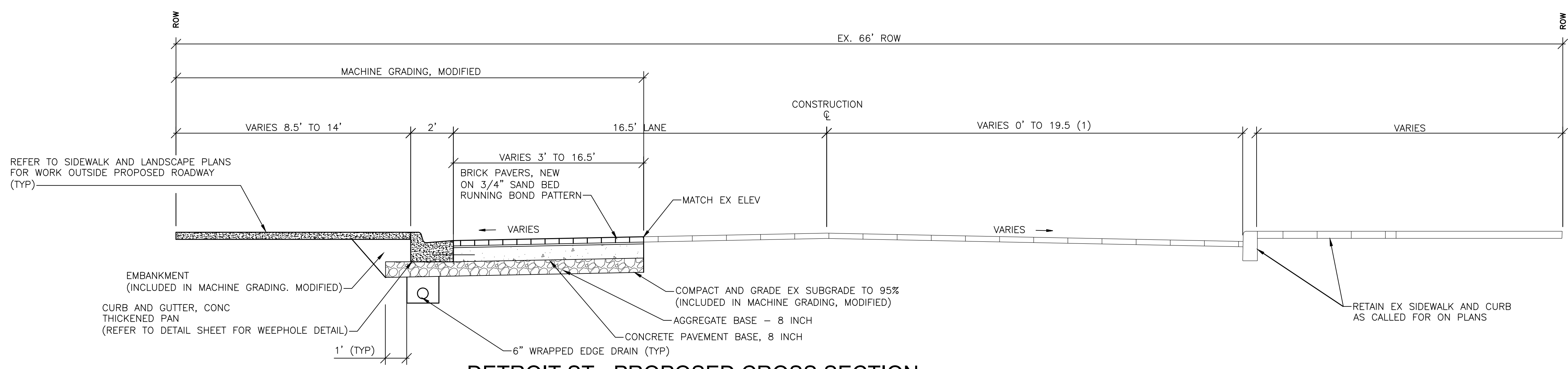


DETROIT ST - PROPOSED CROSS SECTION

APPLY TO STATIONS 21+36 TO 23+41
NO SCALE

STATION	PARKING WIDTH
21+69 TO 21+72	VARIES 0' TO 19.5'
21+72 TO 22+99	19.5'
22+99 TO 23+16	19.5' TO 0'

STATION	LEFT SIDE CROSS-SLOPE	RIGHT SIDE CROSS-SLOPE
21+40 TO 21+70	TRANSITION FROM 1.80% TO 1%	N/A
21+70 TO 23+00	1%	-1%
23+00 TO 23+20	1%	N/A

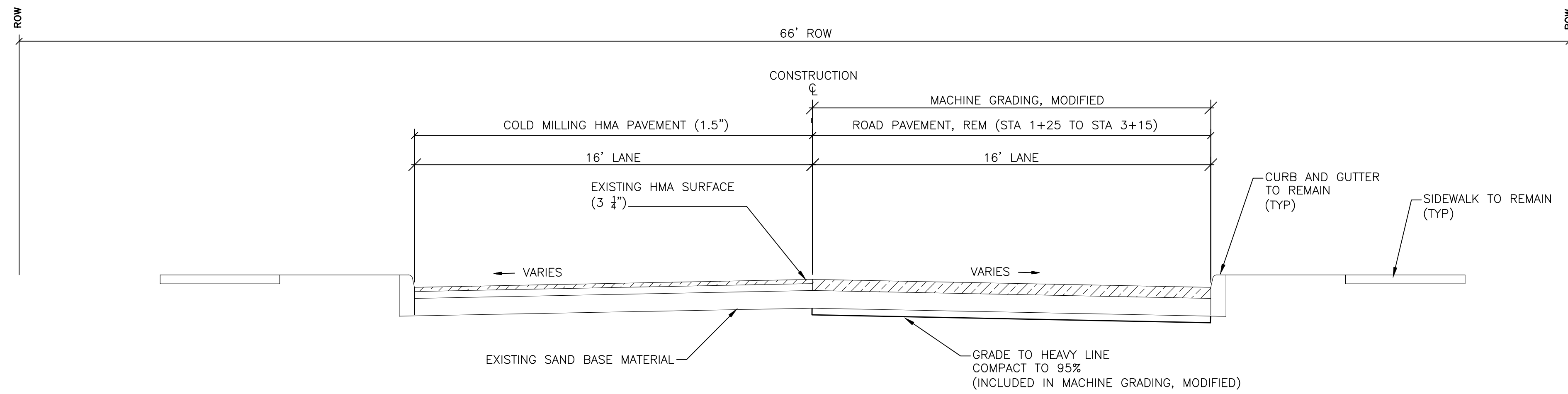


DETROIT ST - PROPOSED CROSS SECTION

APPLY TO STATIONS 25+00 TO 27+70
NO SCALE

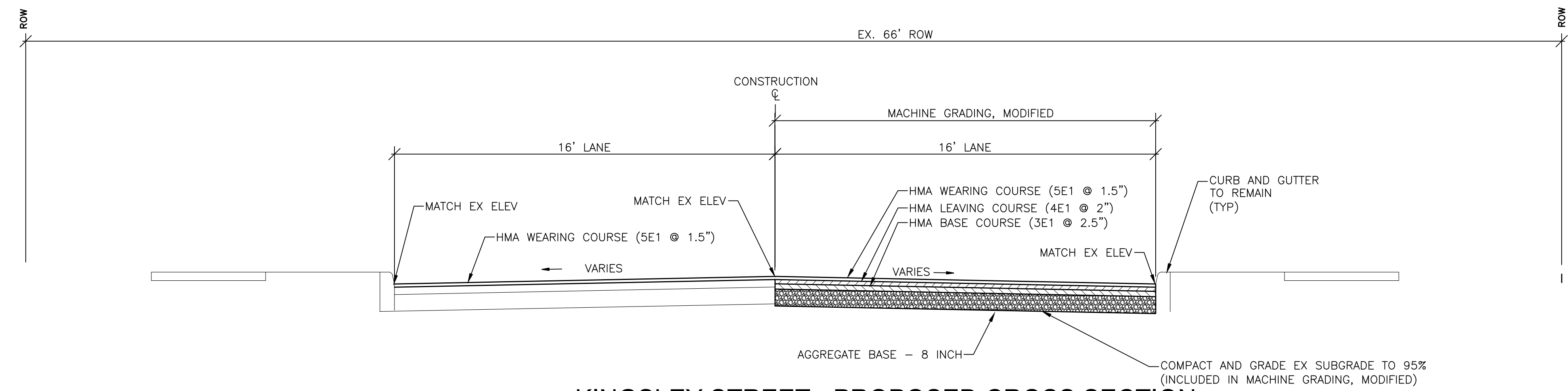
LEGEND

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR						
DETROIT STREET TYPICAL CROSS SECTIONS				SCALE NONE	INCH	
DRAWING NO. C3.03				SHEET NO. ___ OF ___		
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		
APPROVED BY _____						



KINGSLEY STREET - EXISTING CROSS SECTION

APPLY TO STATIONS 30+23 TO 33+12
NO SCALE



KINGSLEY STREET - PROPOSED CROSS SECTION

APPLY TO STATIONS 30+23 TO 33+12
NO SCALE

LEGEND

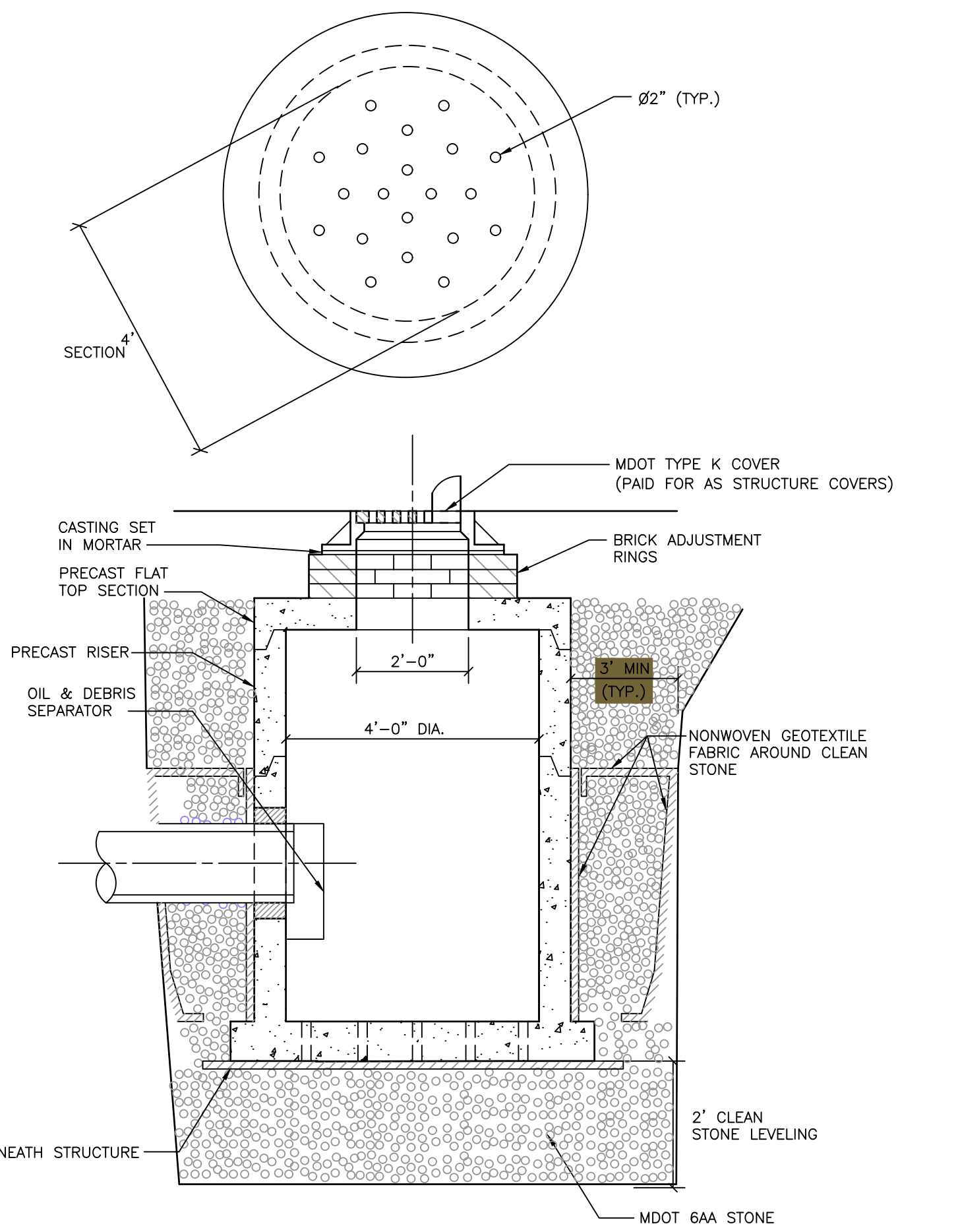
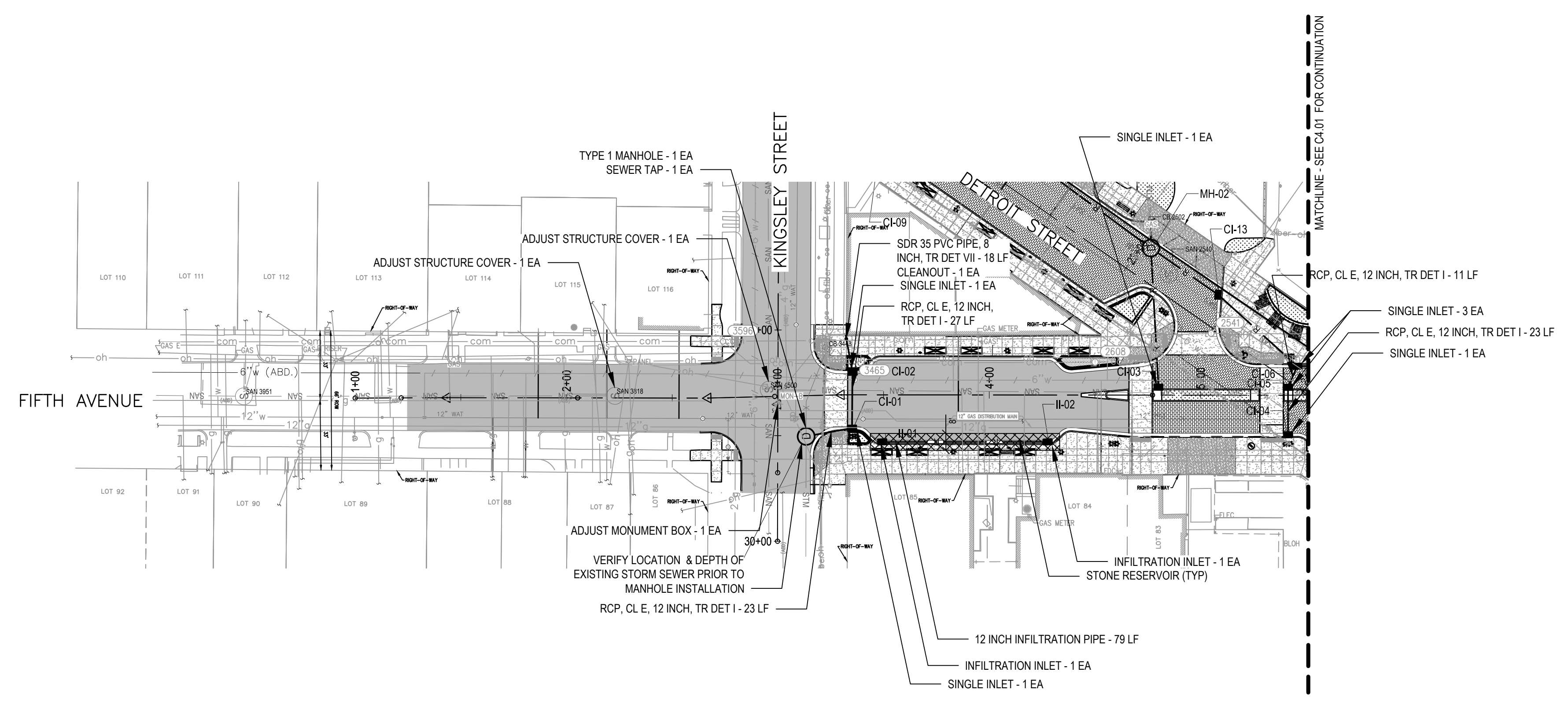
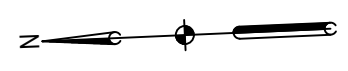
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

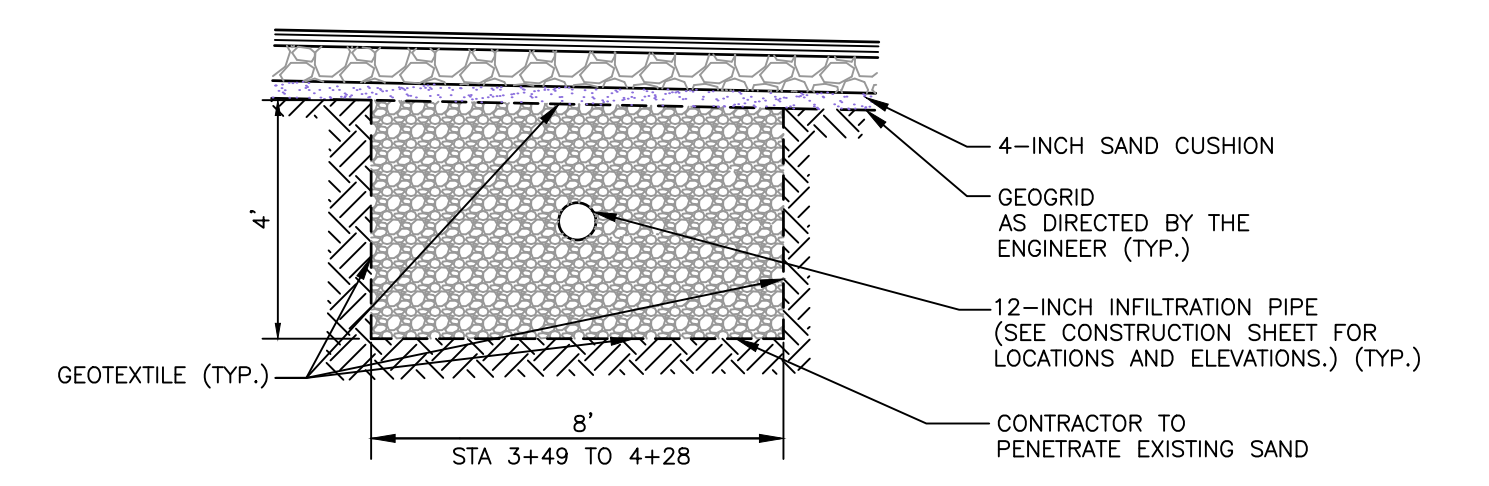
**KINGSLEY STREET
TYPICAL SECTIONS**

SCALE NONE	INCH [Scale Bar]
DRAWING NO. C3.04	
SHEET NO. ___ OF ___	

APPROVED BY _____



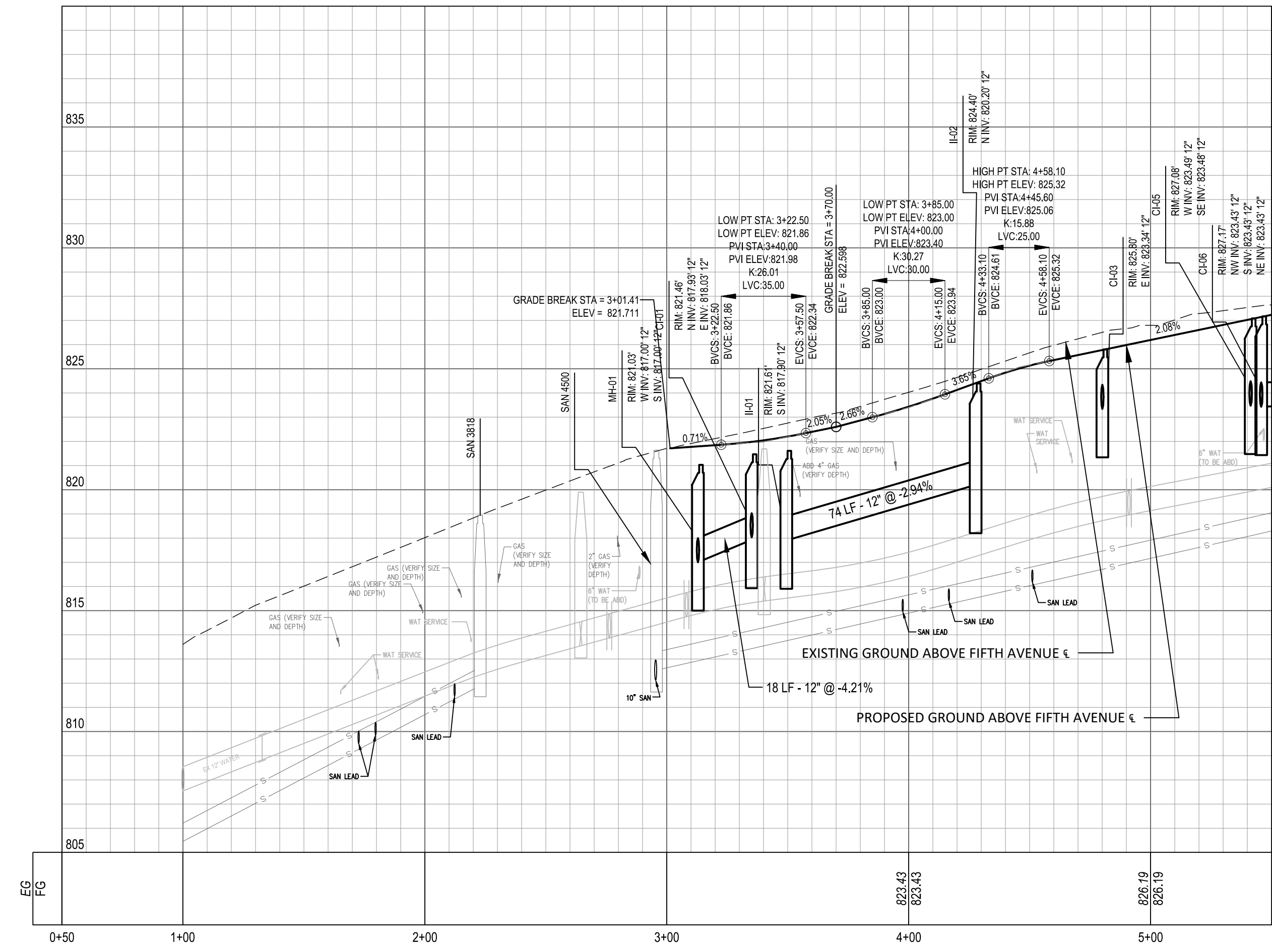
INFILTRATION INLET DETAIL
NO SCALE



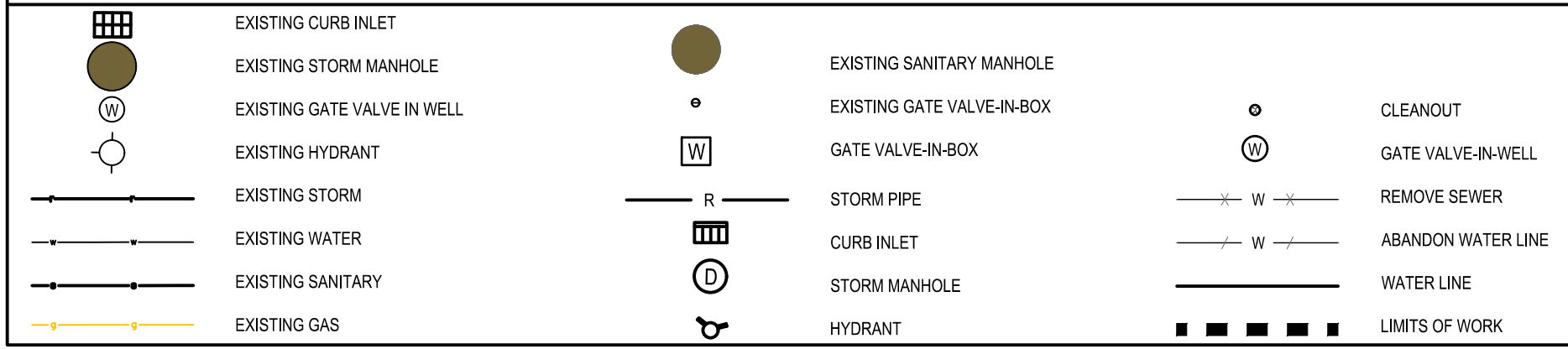
STONE RESERVOIR DETAIL
NO SCALE

PROPOSED PIPE TABLE			
CONNECTION	SIZE	LENGTH	SLOPE
MH-01->CI-01	12.0"	22.1 LF	-4.21%
II-01->II-02	12.0"	78.3 LF	-2.94%
CI-05->CI-04	12.0"	22.4 LF	-0.35%
CI-01->CI-02	12.0"	26.5 LF	-0.45%
CI-05->CI-06	12.0"	10.9 LF	0.42%
CI-06->CI-13	12.0"	50.5 LF	0.40%
CI-03->MH-02	12.0"	65.9 LF	0.40%

PROPOSED STRUCTURE TABLE				
STRUCTURE:	STATION:	OFFSET:	DIA.:	DETAILS:
CI-01	2+02.29	4.3	4	RIM: 821.46 12" INV N: 817.93 12" INV E: 818.03
CI-02	2+02.45	-22.1	4	RIM: 821.76 12" INV W: 818.15 8" INV E: 819.76
CI-03	3+47.25	-15.2	2	RIM: 825.80 12" INV E: 823.34
CI-04	4+08.61	7.2	4	RIM: 826.90 12" INV E: 823.56
CI-05	4+08.43	-15.3	4	RIM: 827.08 12" INV W: 823.49 12" INV SE: 823.48
CI-06	4+12.74	-25.3	4	RIM: 827.17 12" INV NW: 823.43 12" INV S: 823.43 12" INV NE: 823.43
II-01	2+16.60	10.9	4	RIM: 821.61 12" INV S: 817.90
II-02	2+94.85	10.8	4	RIM: 824.40 12" INV N: 820.20
MH-01	1+80.58	8.3	4	RIM: 821.03 12" INV W: 817.00 12" INV S: 817.00



LEGEND



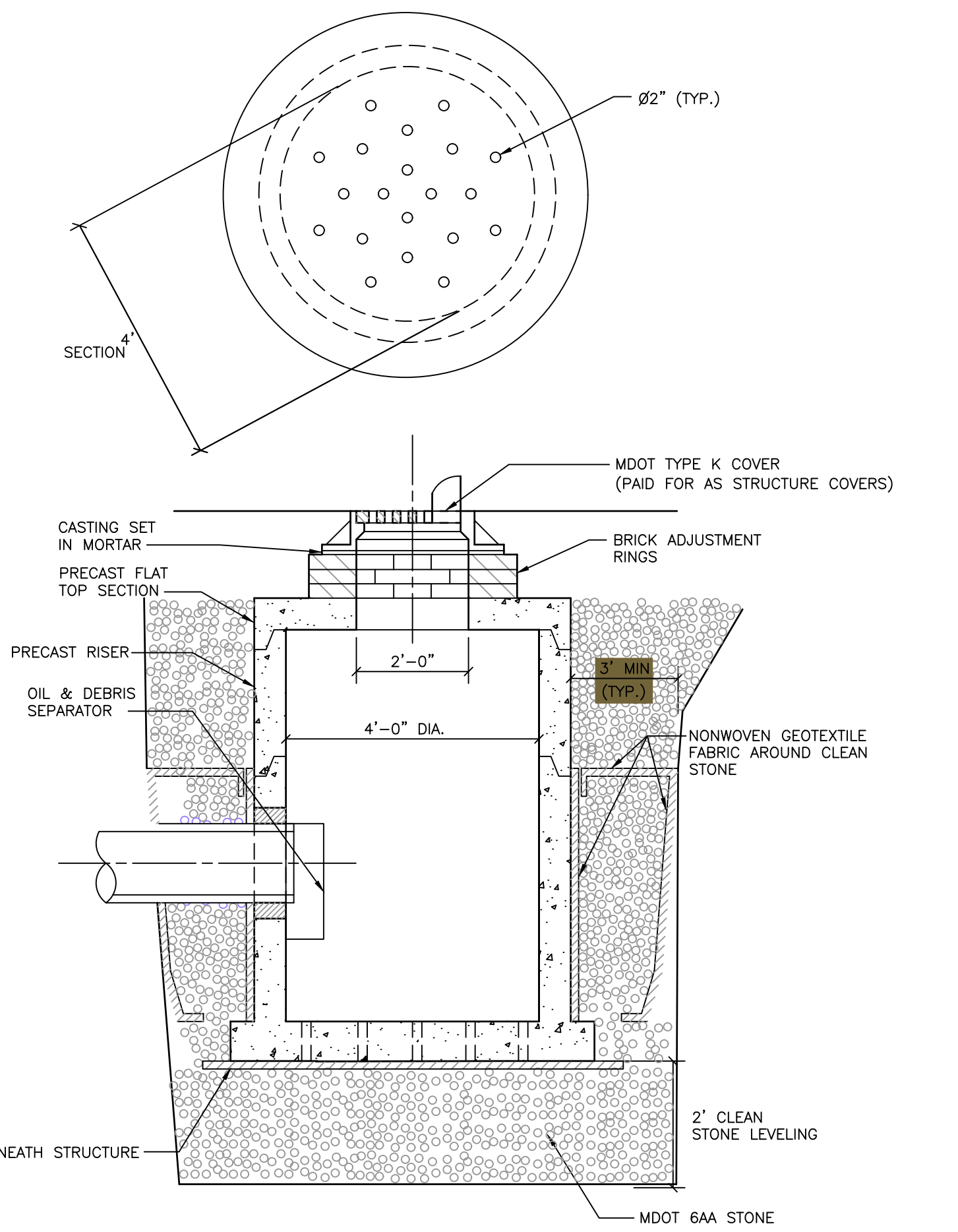
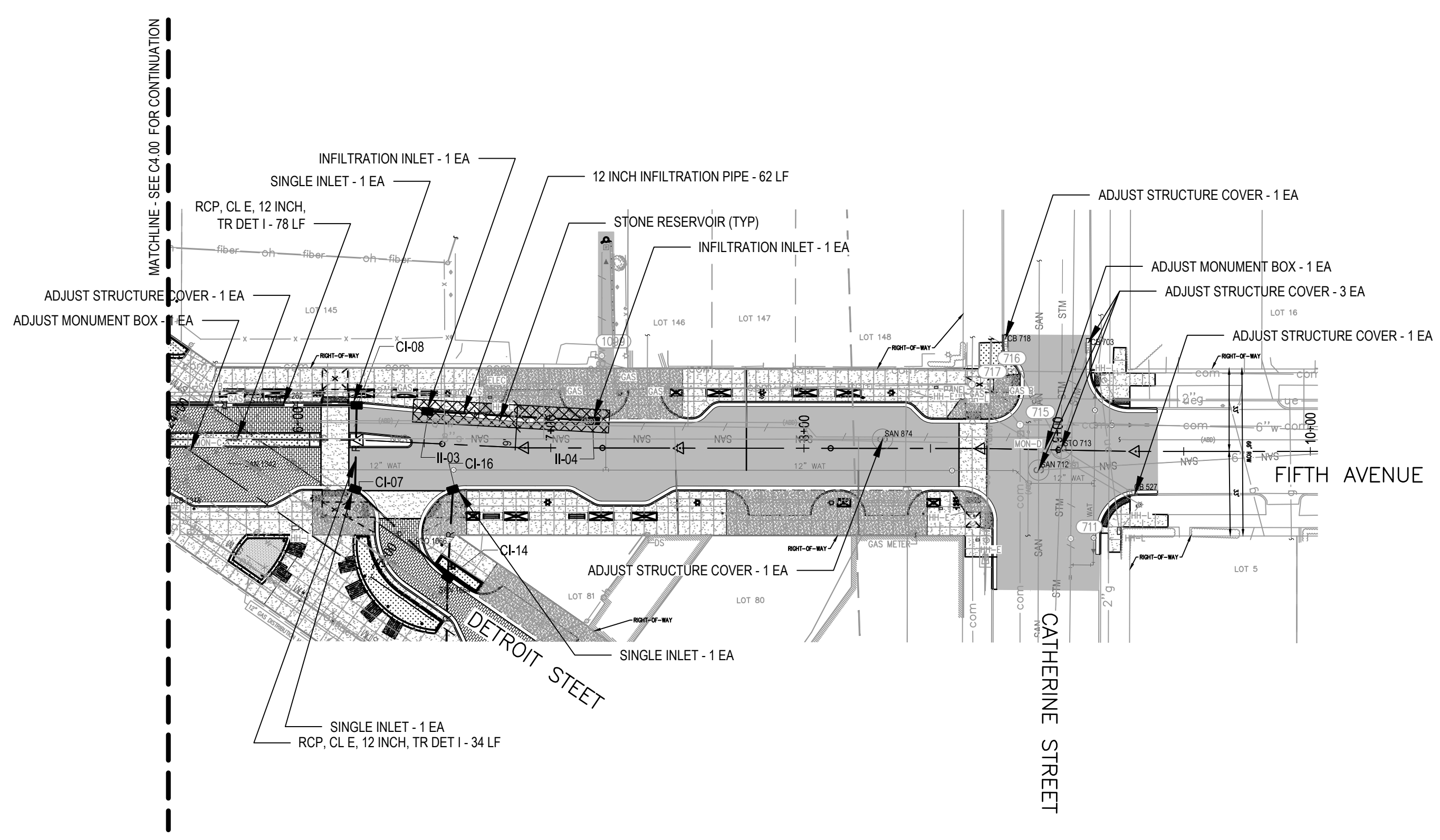
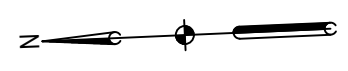
SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

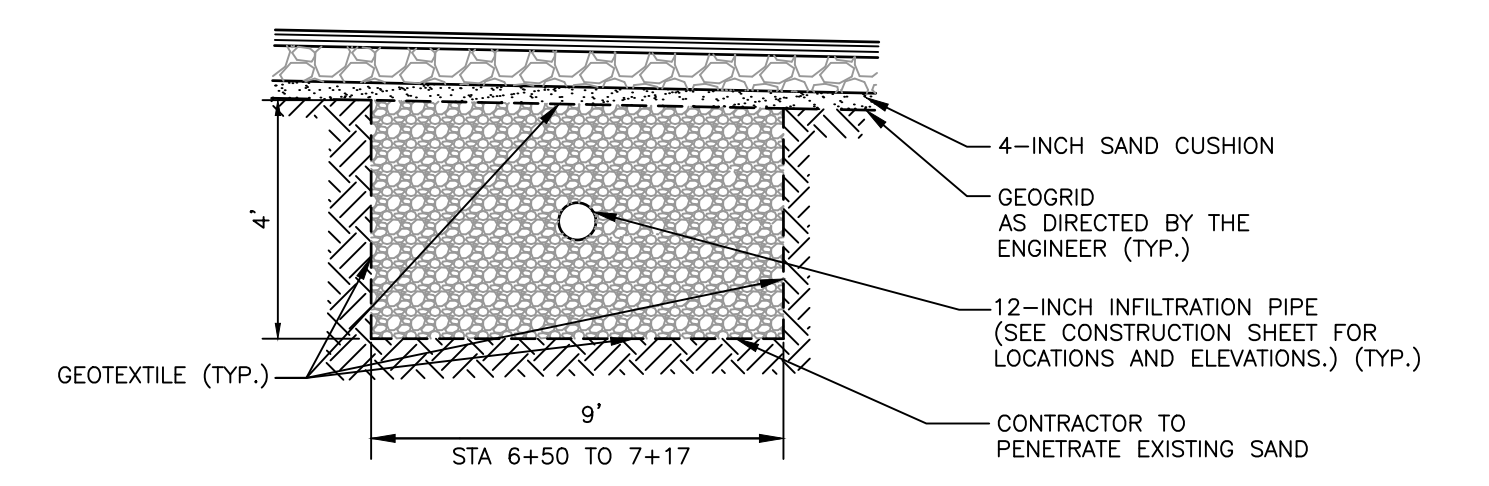
ROAD AND STORM PLAN & PROFILE - FIFTH AVENUE STA 1+00 TO 5+50

SCALE 1" = 40'	INCH 0' 20' 40'
DRAWING NO. C4.00	
SHEET NO. ___ OF ___	

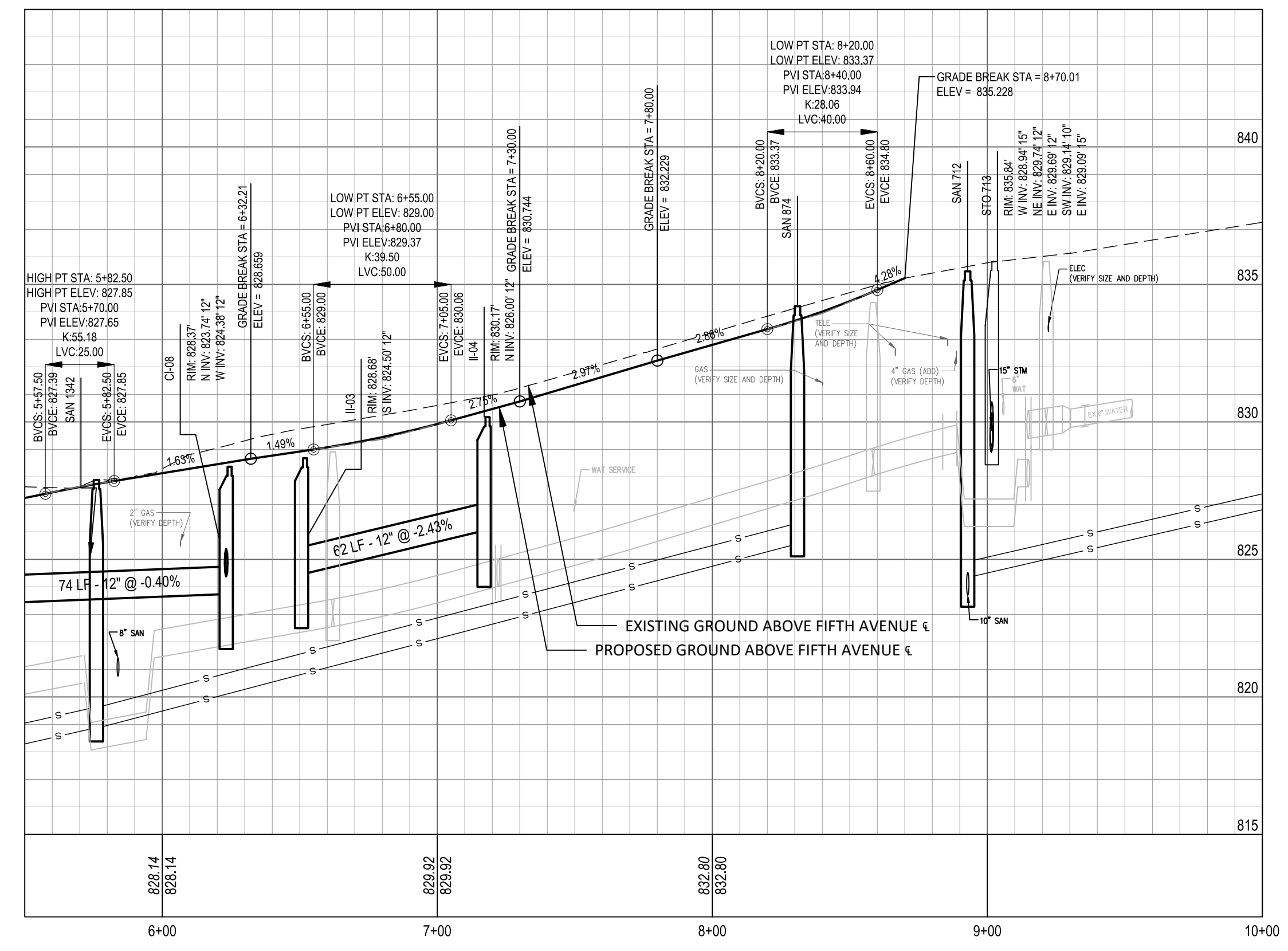
APPROVED BY _____



INFILTRATION INLET DETAIL
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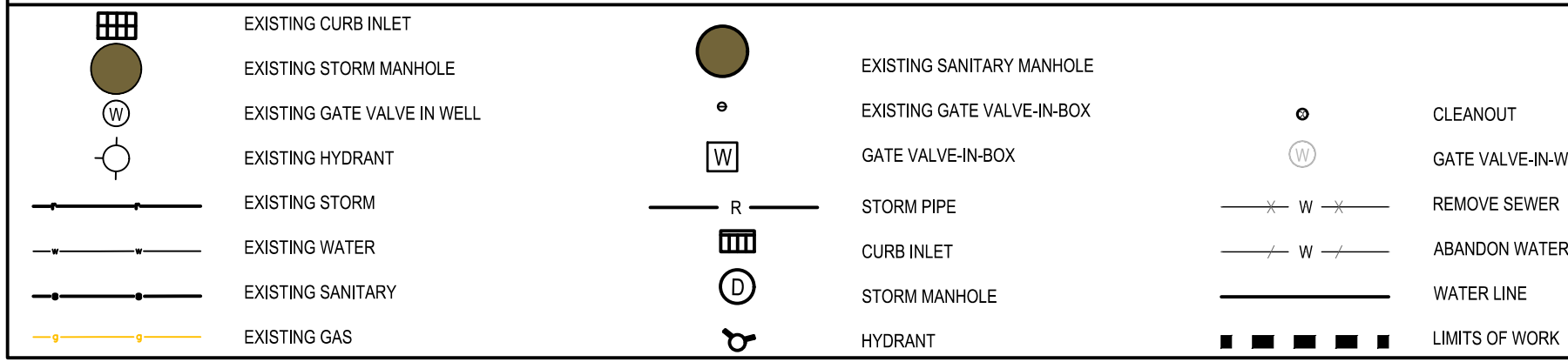
STONE RESERVOIR DETAIL
NO SCALE



PROPOSED PIPE TABLE			
CONNECTION	SIZE	LENGTH	SLOPE
CI-16->CI-14	12.0"	34.7 LF	0.52%
CI-14->CI-07	12.0"	50.6 LF	0.40%
CI-06->CI-08	12.0"	77.5 LF	-0.40%
II-03->II-04	12.0"	61.9 LF	-2.43%
CI-08->CI-07	12.0"	33.2 LF	0.54%

PROPOSED STRUCTURE TABLE				
STRUCTURE	STATION	OFFSET	DIA.	DETAILS
CI-07	4+89.88	7.7	4	RIM: 828.57 12" INV E: 824.20 12" INV SW: 824.48
CI-08	4+90.45	-25.5	4	RIM: 828.37 12" INV N: 823.74 12" INV W: 824.38
CI-16	5+28.49	7.8	4	RIM: 829.26 12" INV N: 824.96
II-03	5+18.41	-23.1	4	RIM: 828.68 12" INV S: 824.50
II-04	5+84.16	-19.5	4	RIM: 830.17 12" INV N: 826.00

LEGEND



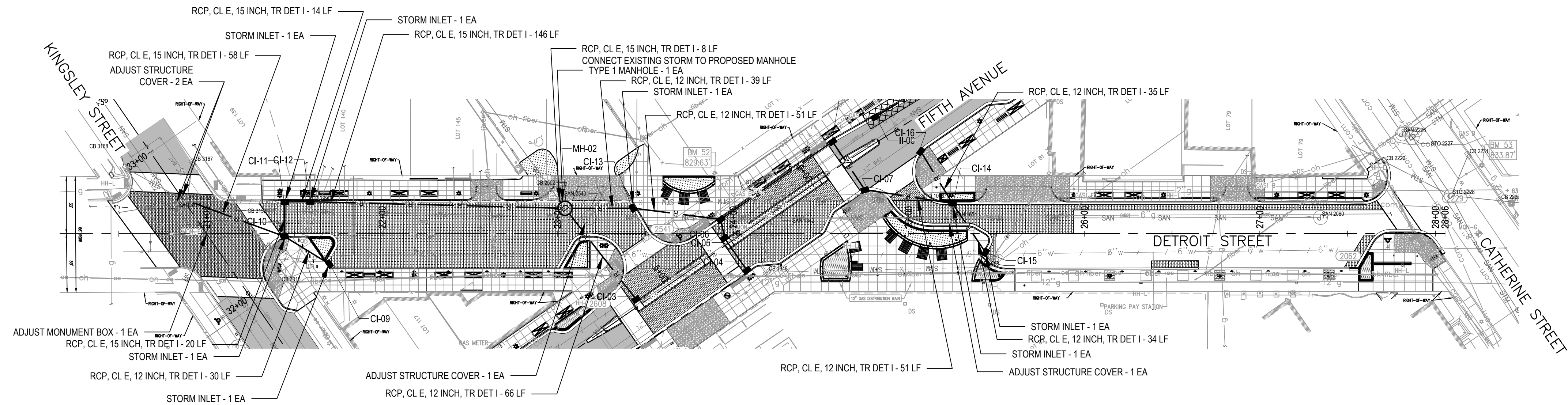
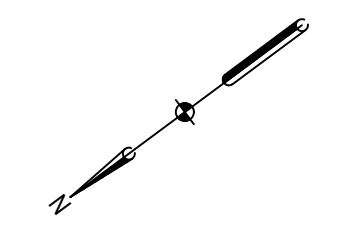
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			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

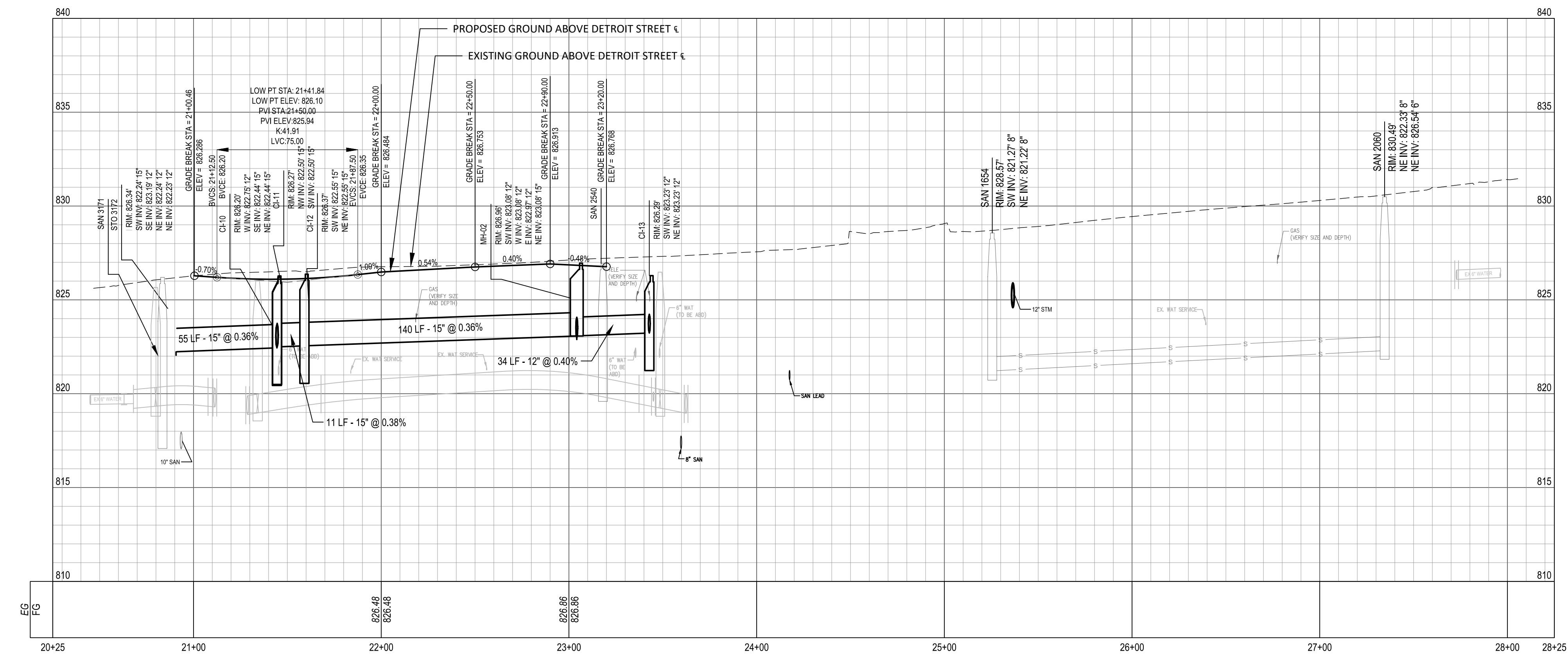
ROAD AND STORM PLAN & PROFILE - FIFTH AVENUE STA 5+50 TO 10+00

SCALE 1" = 40'	INCH 0' 20' 40'
DRAWING NO. C4.01	
SHEET NO. ___ OF ___	

APPROVED BY _____



PROPOSED PIPE TABLE			
CONNECTION	SIZE	LENGTH	SLOPE
CI-09->CI-10	12.0"	29.9 LF	0.50%
CI-10->CI-11	15.0"	19.7 LF	-0.30%
CI-10->STO 3172	15.0"	57.3 LF	0.36%
CI-14->CI-07	12.0"	50.6 LF	0.40%
CI-15->CI-14	12.0"	33.6 LF	0.33%
CI-16->CI-14	12.0"	34.7 LF	0.52%
CI-12->CI-11	15.0"	14.5 LF	0.38%
CI-03->MH-02	12.0"	65.9 LF	0.40%
CI-06->CI-13	12.0"	50.5 LF	0.40%
CI-13->MH-02	12.0"	38.6 LF	0.40%
MH-02->CI-12	15.0"	145.2 LF	0.36%



PROPOSED STRUCTURE TABLE				
STRUCTURE:	STATION:	OFFSET:	DIA.:	DETAILS:
CI-09	2+15.23	-131.6	4	RIM: 826.44 12" INV E: 822.90
CI-10	2+03.22	-159.0	4	RIM: 826.20 12" INV W: 822.75 15" INV SE: 822.44 15" INV NE: 822.44
CI-11	2+14.59	-175.1	4	RIM: 826.27 15" INV NW: 822.50 15" INV SW: 822.50
CI-12	2+26.58	-166.9	4	RIM: 826.37 15" INV SW: 822.55 15" INV NE: 822.55
CI-13	3+75.38	-59.0	4	RIM: 826.29 12" INV SW: 823.23 12" INV NE: 823.23
CI-14	5+26.46	42.5	6	RIM: 828.23 12" INV E: 824.78 12" INV W: 824.68 12" INV NE: 824.68
CI-15	5+25.91	76.1	4	RIM: 828.79 12" INV E: 824.79
MH-02	3+43.60	-81.0	6	RIM: 826.96 12" INV SW: 823.08 12" INV W: 823.08 12" INV E: 822.97 15" INV NE: 823.08

LEGEND

	EXISTING CURB INLET		EXISTING SANITARY MANHOLE		CLEANOUT
	EXISTING STORM MANHOLE		EXISTING GATE VALVE-IN-BOX		GATE VALVE-IN-WELL
	EXISTING GATE VALVE-IN-WELL		EXISTING HYDRANT		REMOVE SEWER
	EXISTING STORM PIPE		ABANDON WATER LINE		WATER LINE
	EXISTING WATER		LIMITS OF WORK		
	EXISTING SANITARY				
	EXISTING GAS				

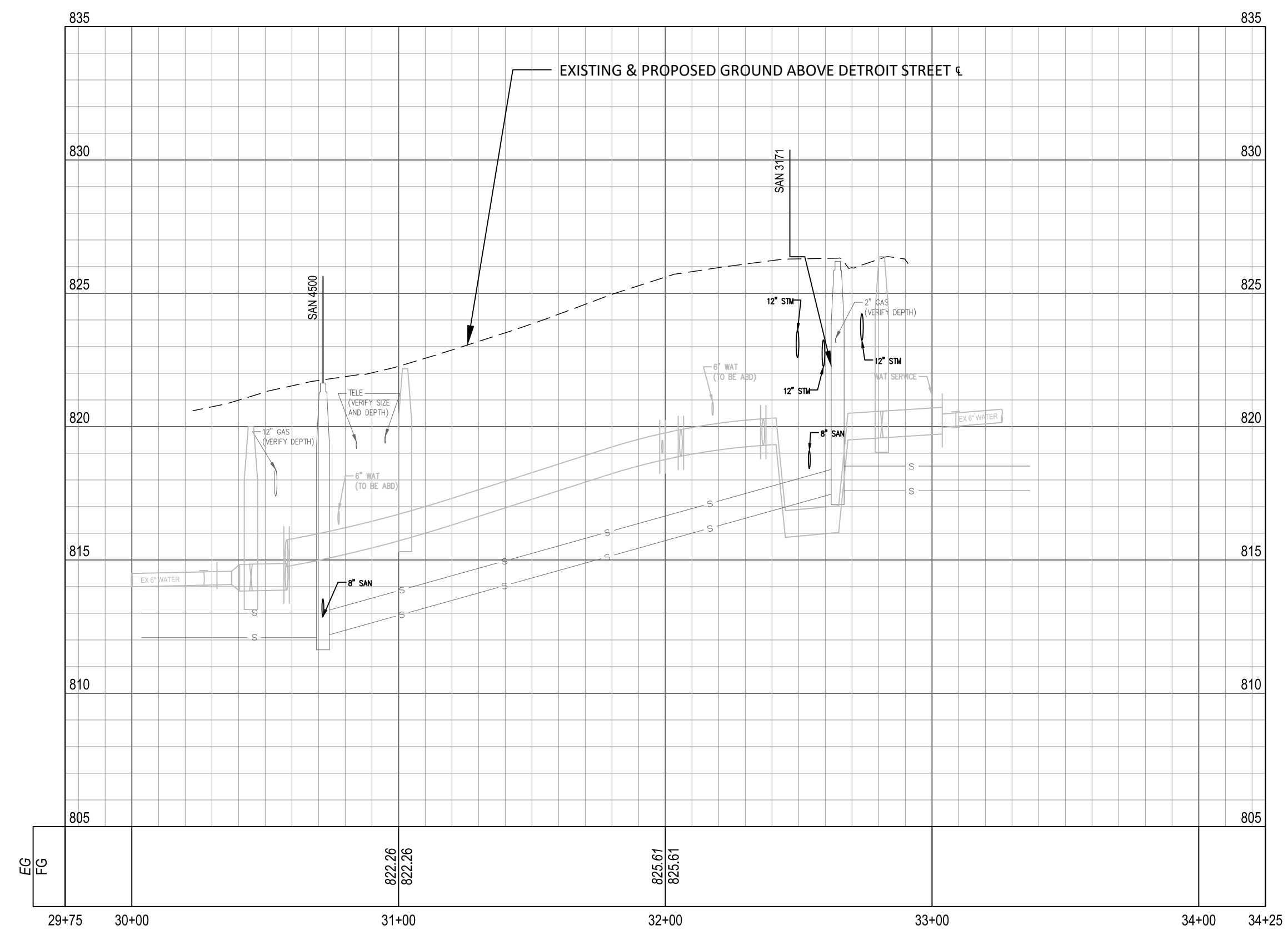
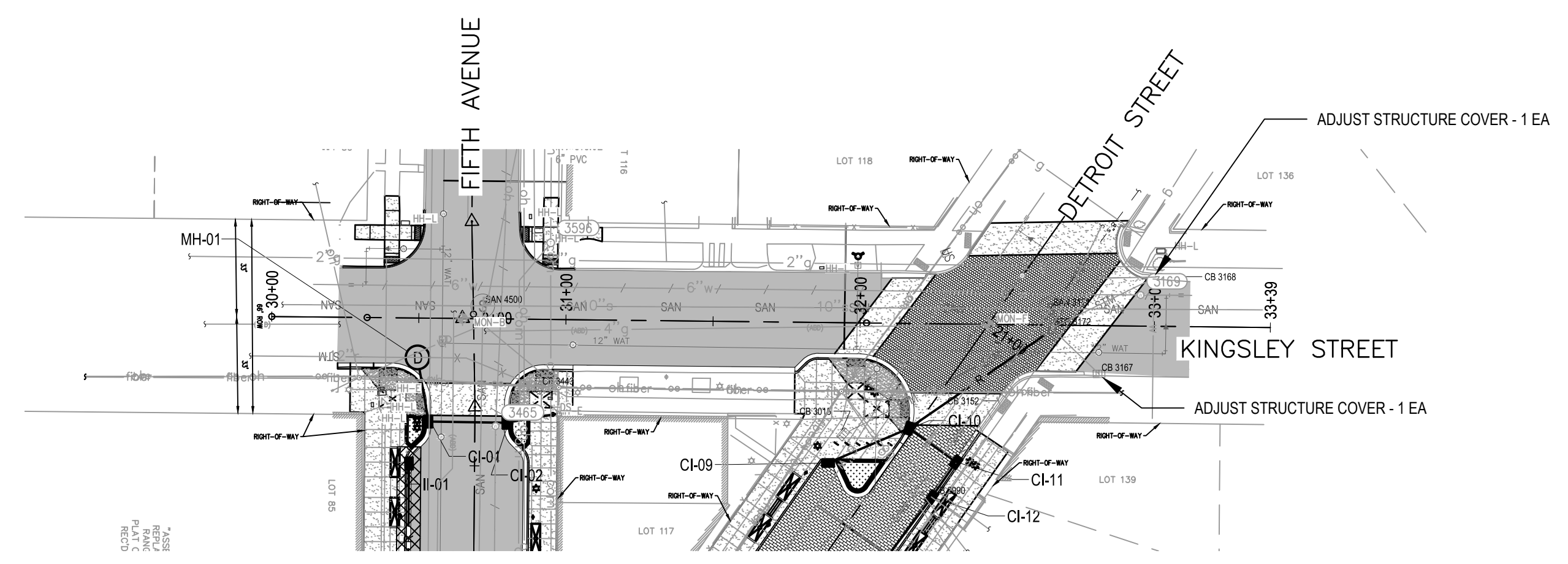
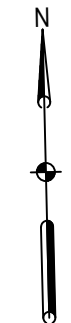
SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

ROAD AND STORM PLAN & PROFILE - DETROIT STREET

SCALE 1" = 40'	INCH 0' 20' 40'
DRAWING NO. C4.02	
SHEET NO. ____ OF ____	

APPROVED BY _____



LEGEND

	EXISTING CURB INLET		EXISTING SANITARY MANHOLE		CLEANOUT
	EXISTING STORM MANHOLE		EXISTING GATE VALVE-IN-WELL		GATE VALVE-IN-WELL
	EXISTING HYDRANT		GATE VALVE-IN-BOX		REMOVE SEWER
	EXISTING STORM		STORM PIPE		ABANDON WATER LINE
	EXISTING WATER		CURB INLET		WATER LINE
	EXISTING SANITARY		STORM MANHOLE		LIMITS OF WORK
	EXISTING GAS		HYDRANT		

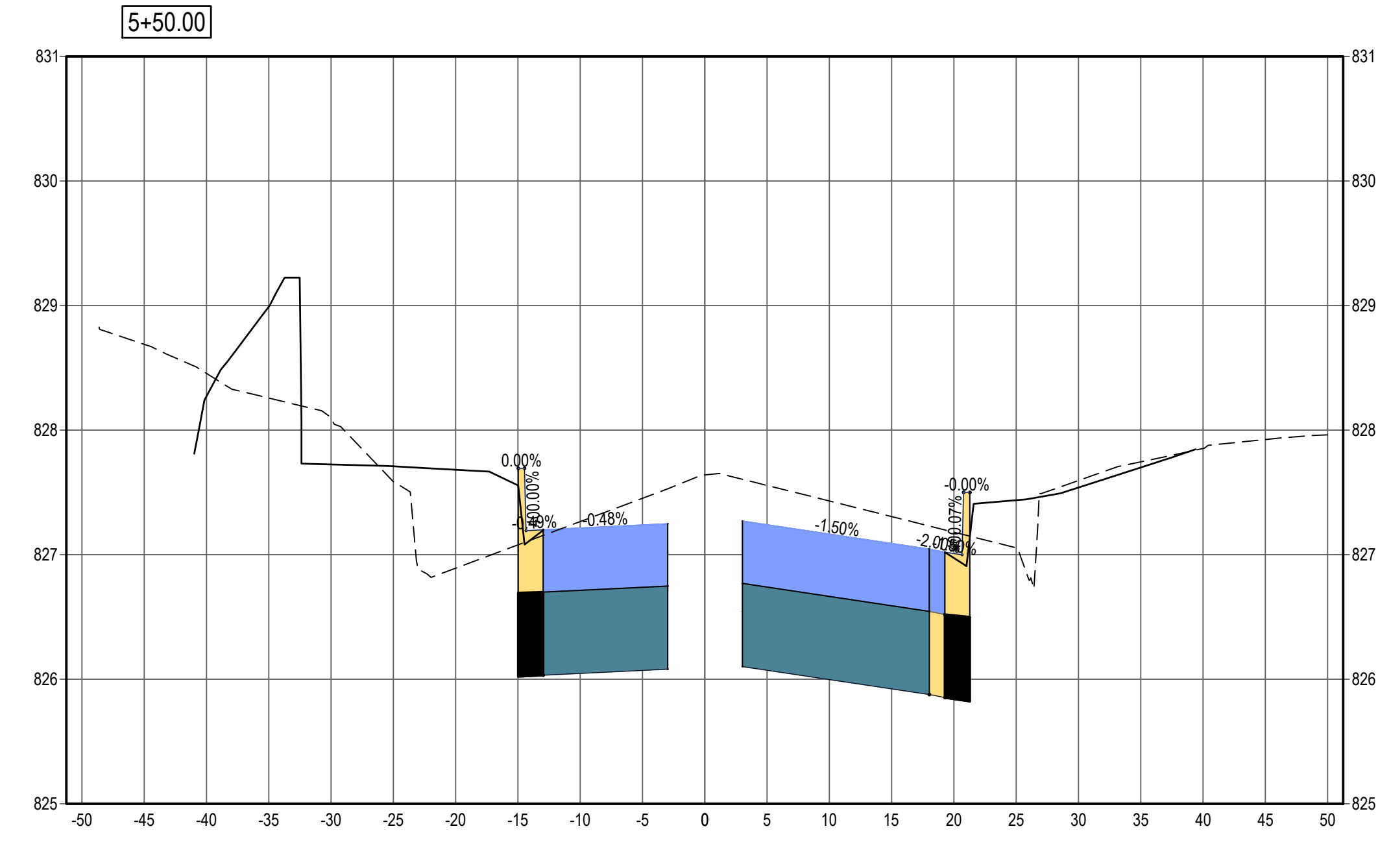
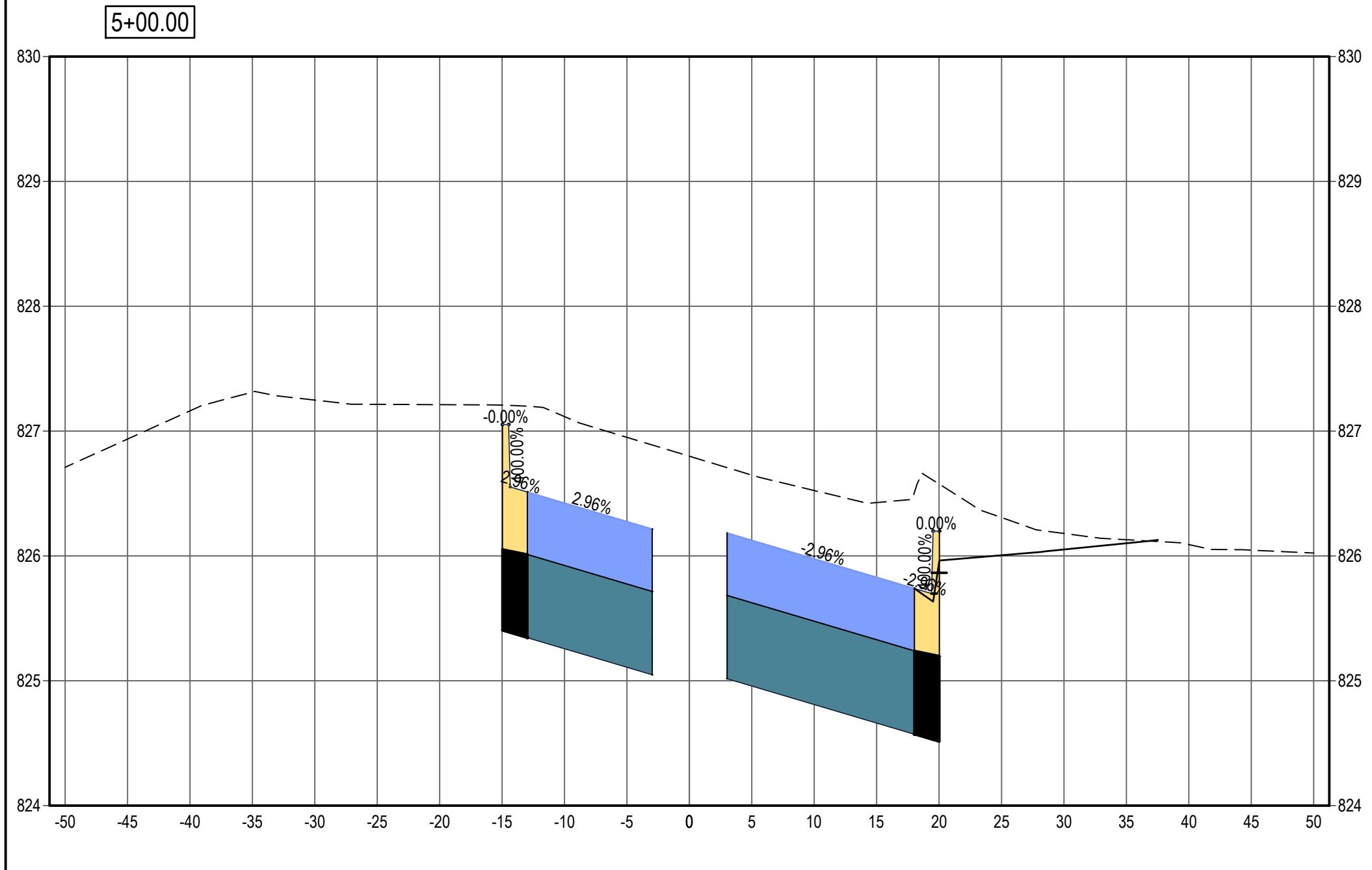
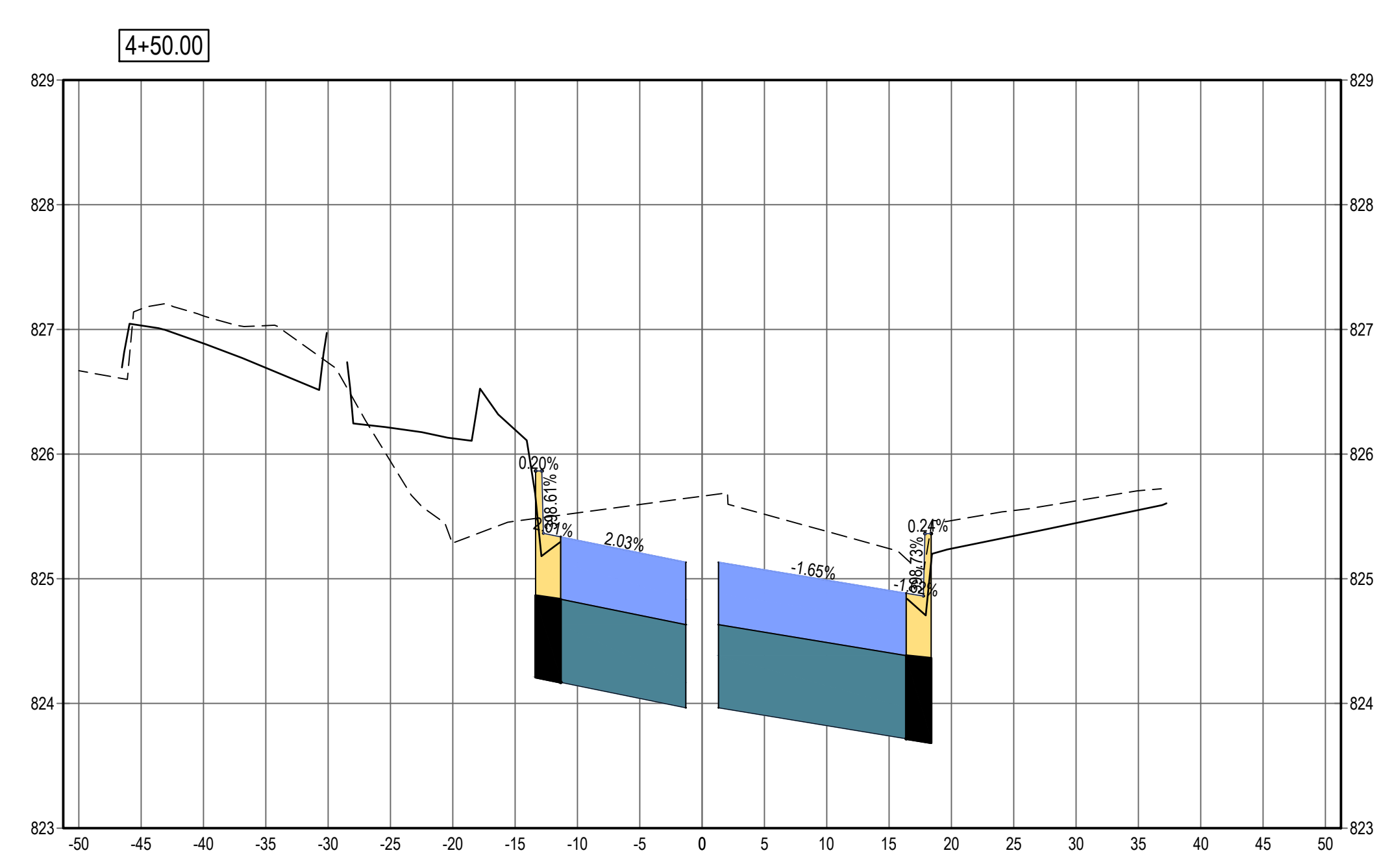
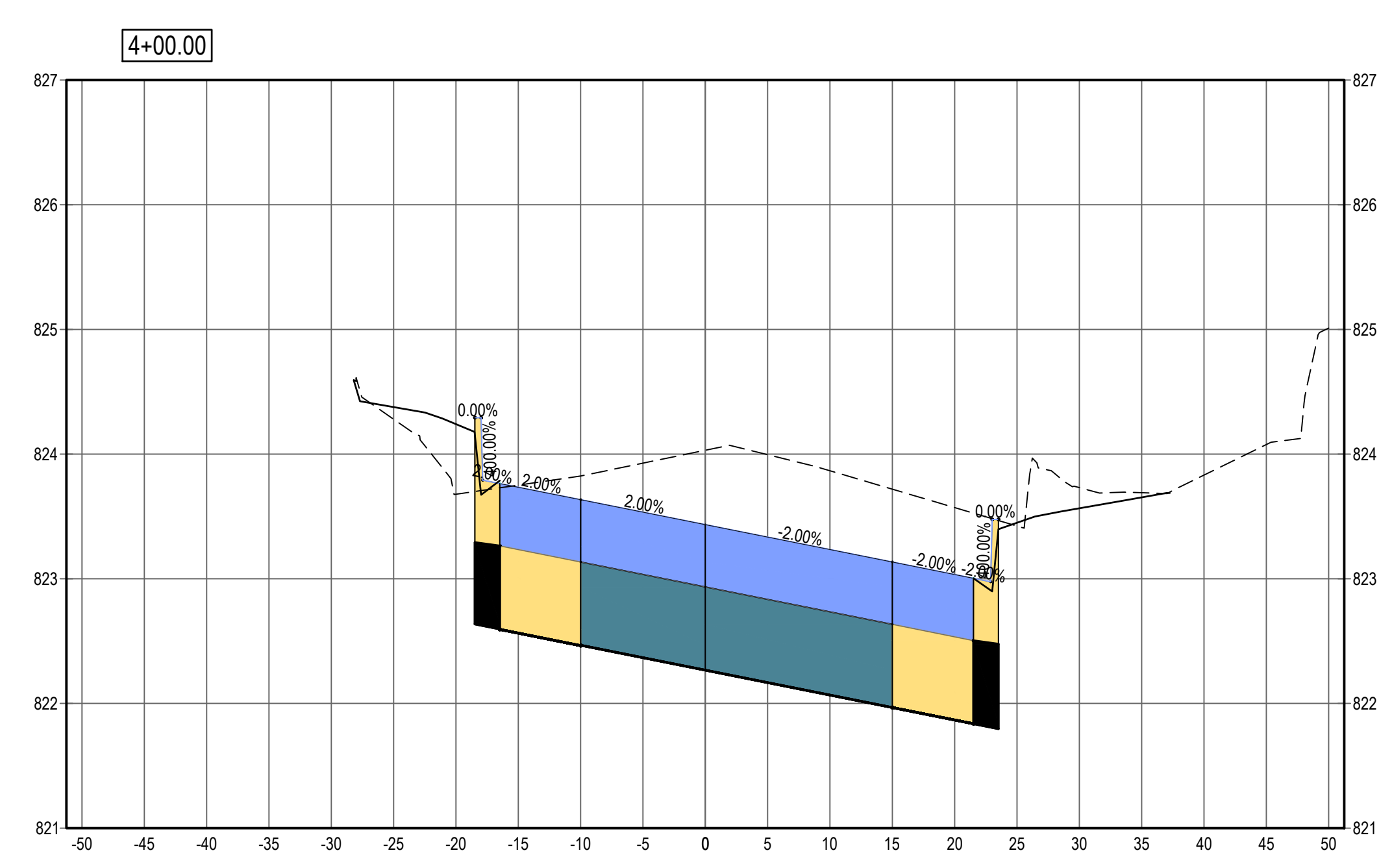
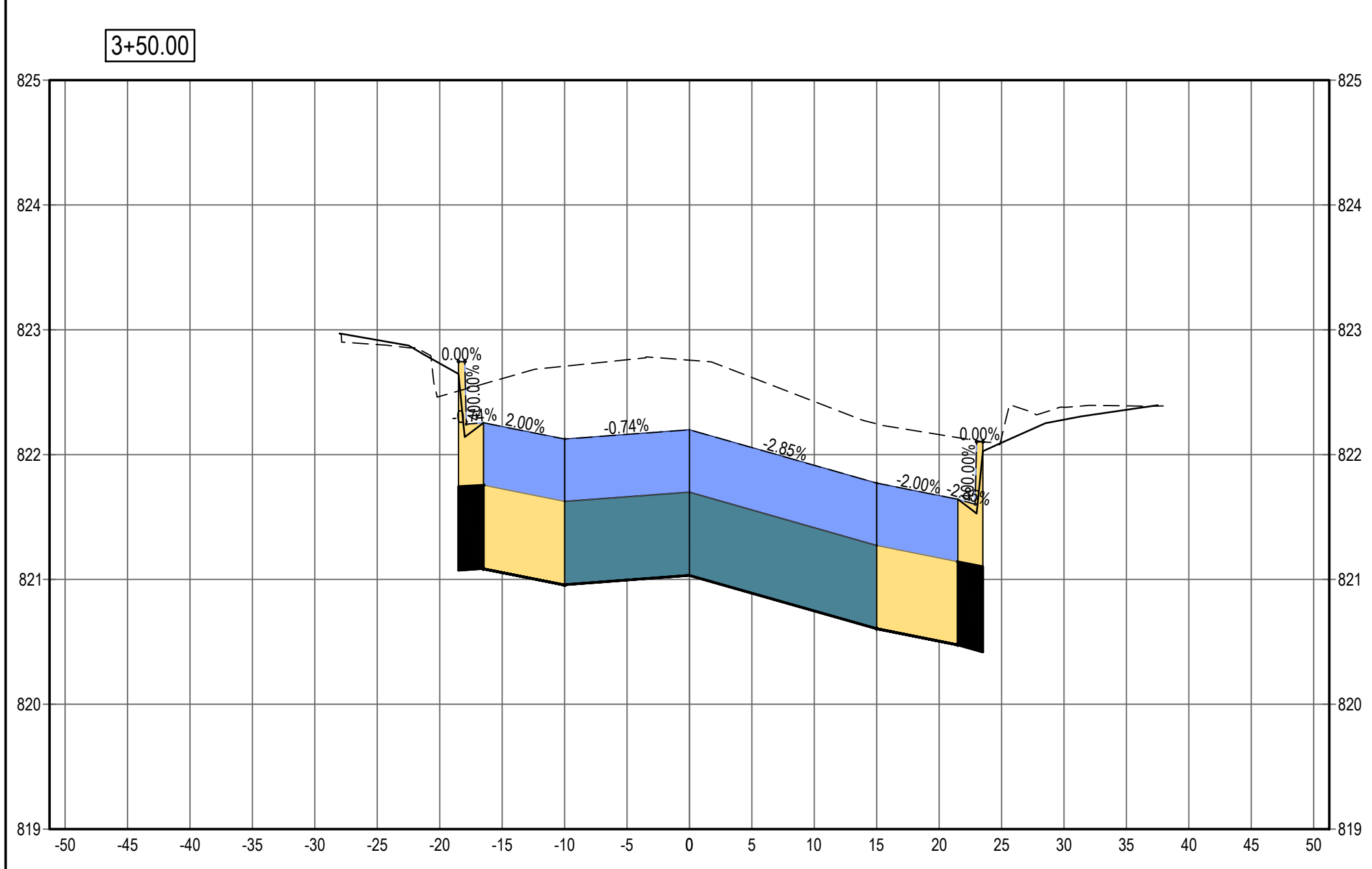
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

ROAD AND STORM PLAN & PROFILE - KINGSLEY STREET

SCALE 1" = 40'	INCH 0' 20' 40'
DRAWING NO. C4.03	
SHEET NO. ___ OF ___	

APPROVED BY _____



NOTE:
REFER TO SIDEWALK PLANS FOR MORE
DETAILED GRADES.

LEGEND

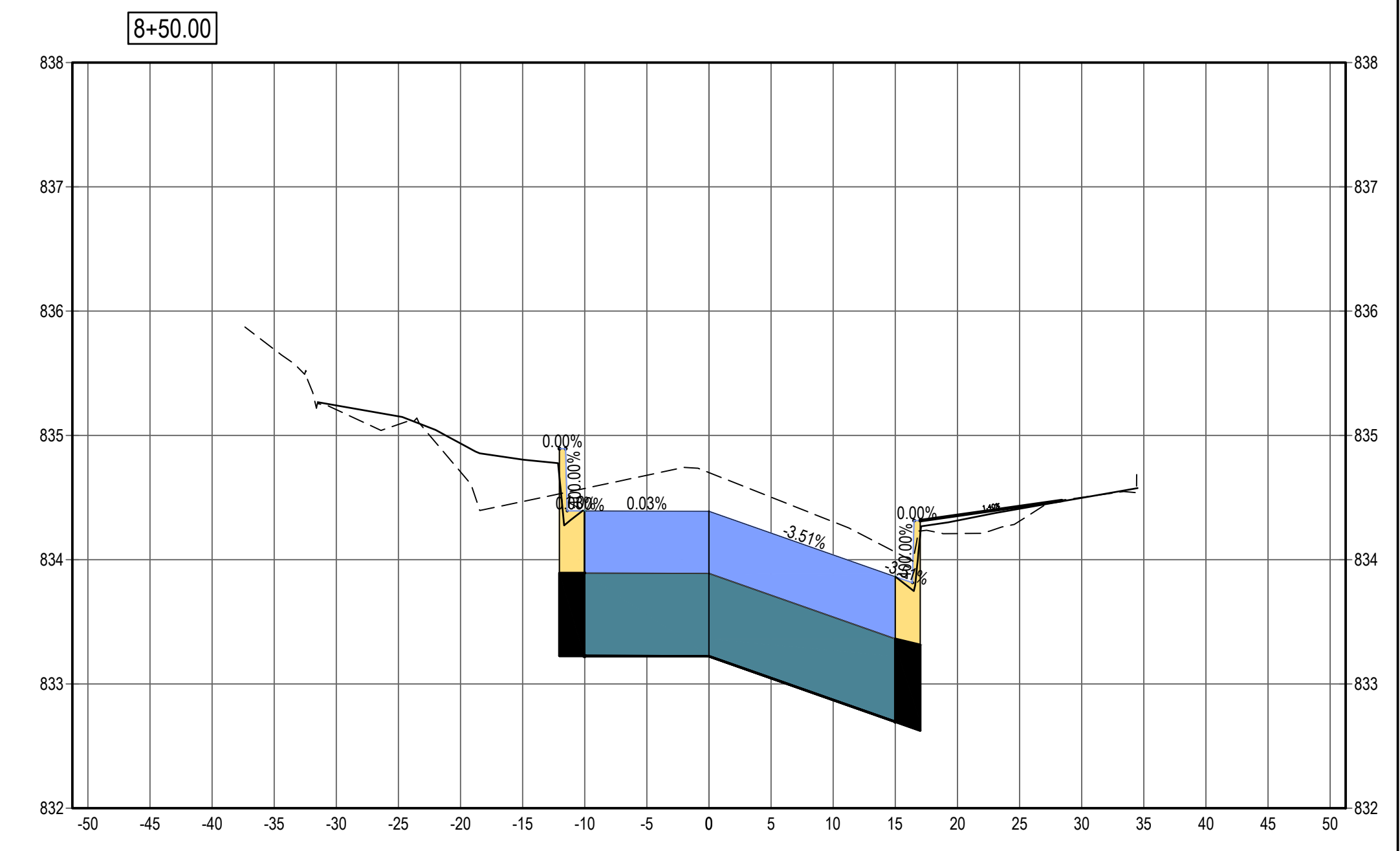
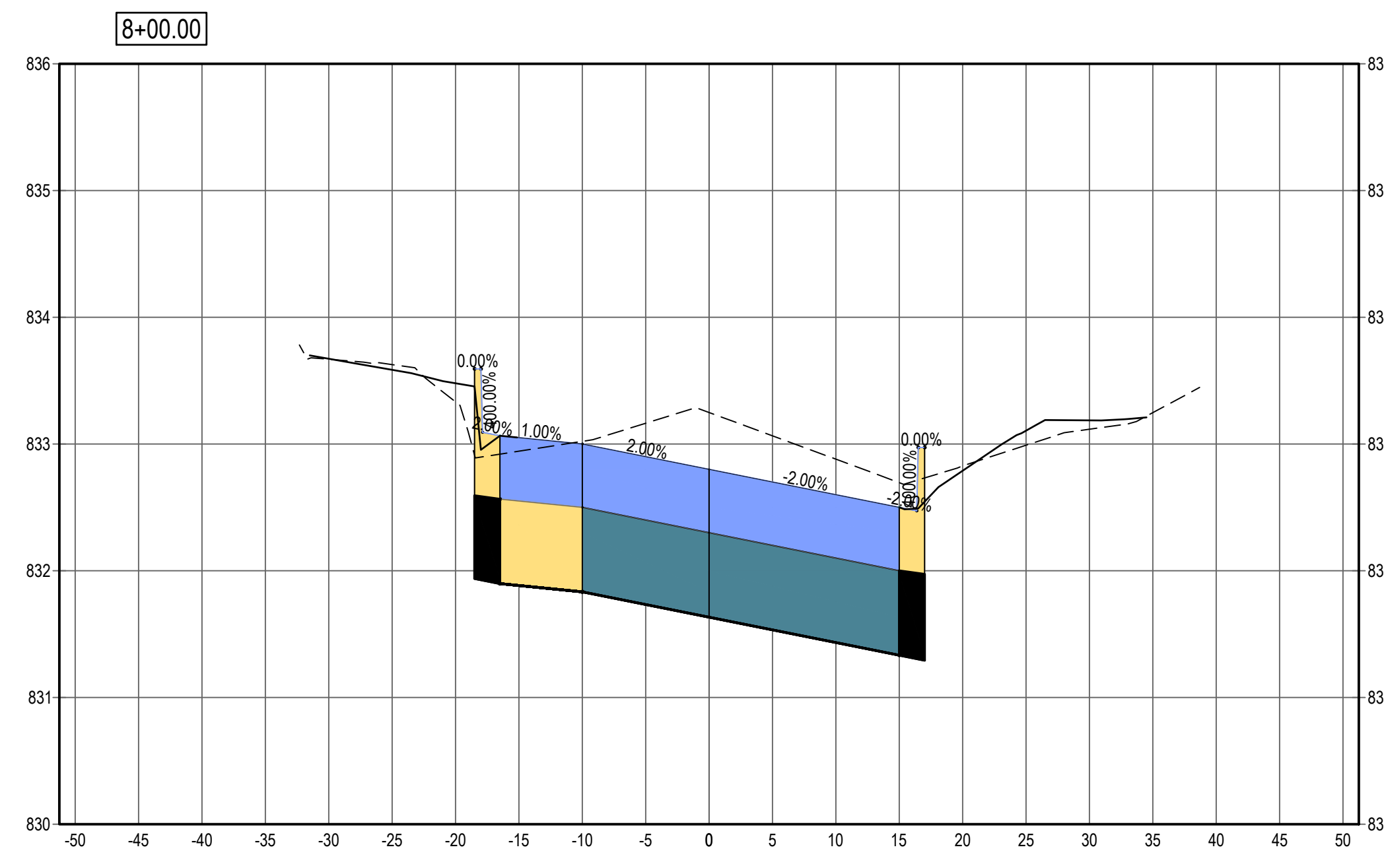
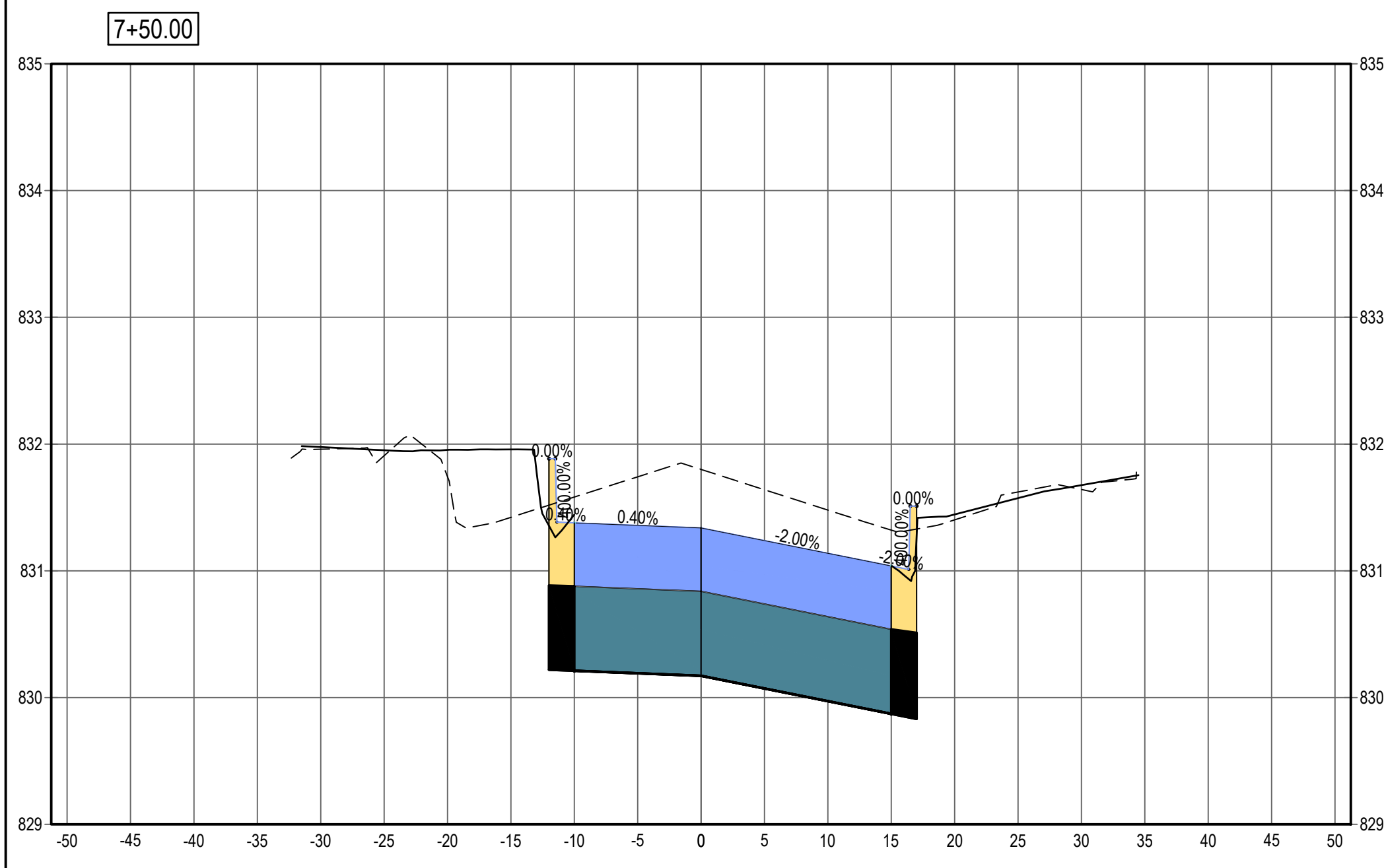
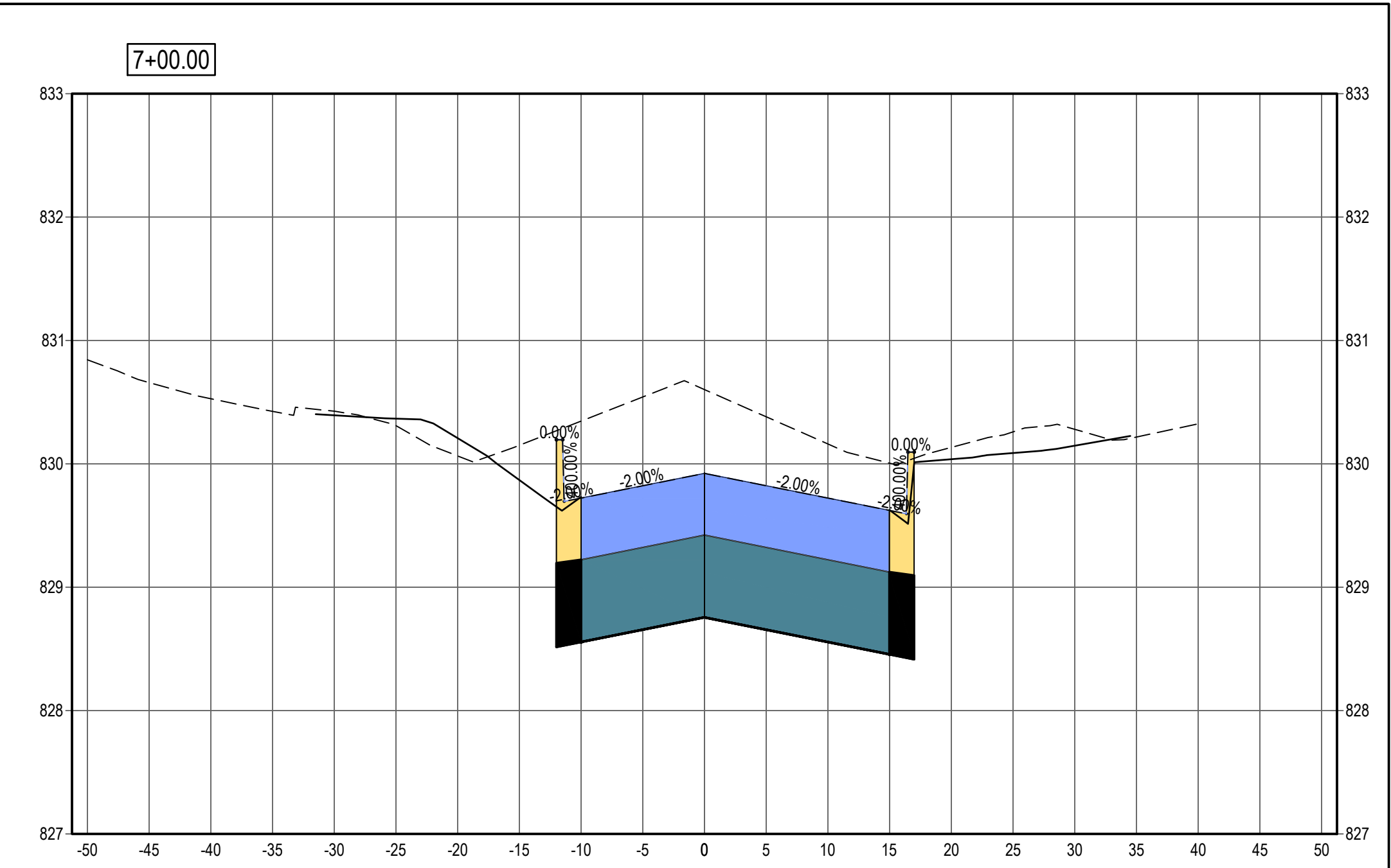
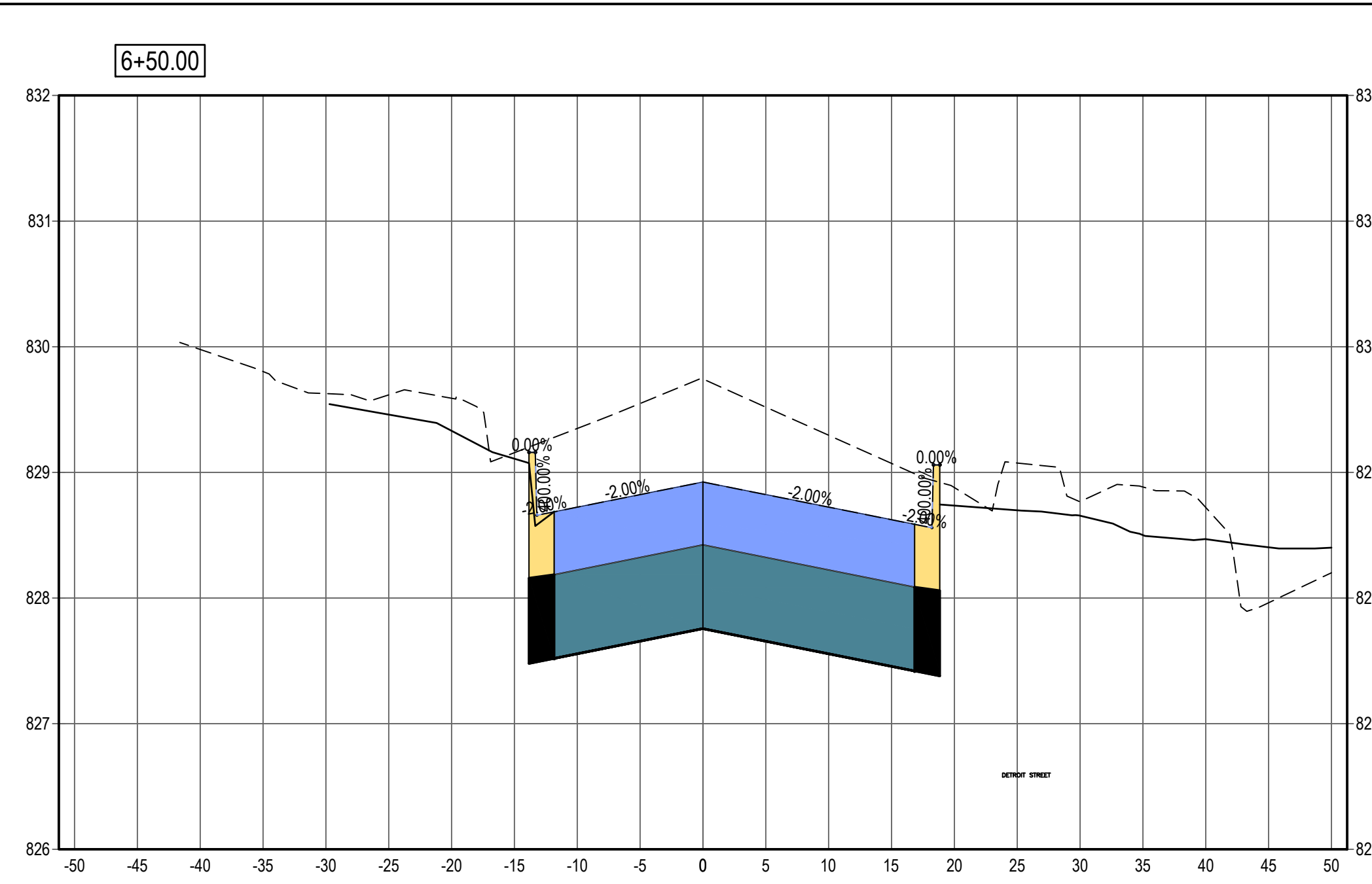
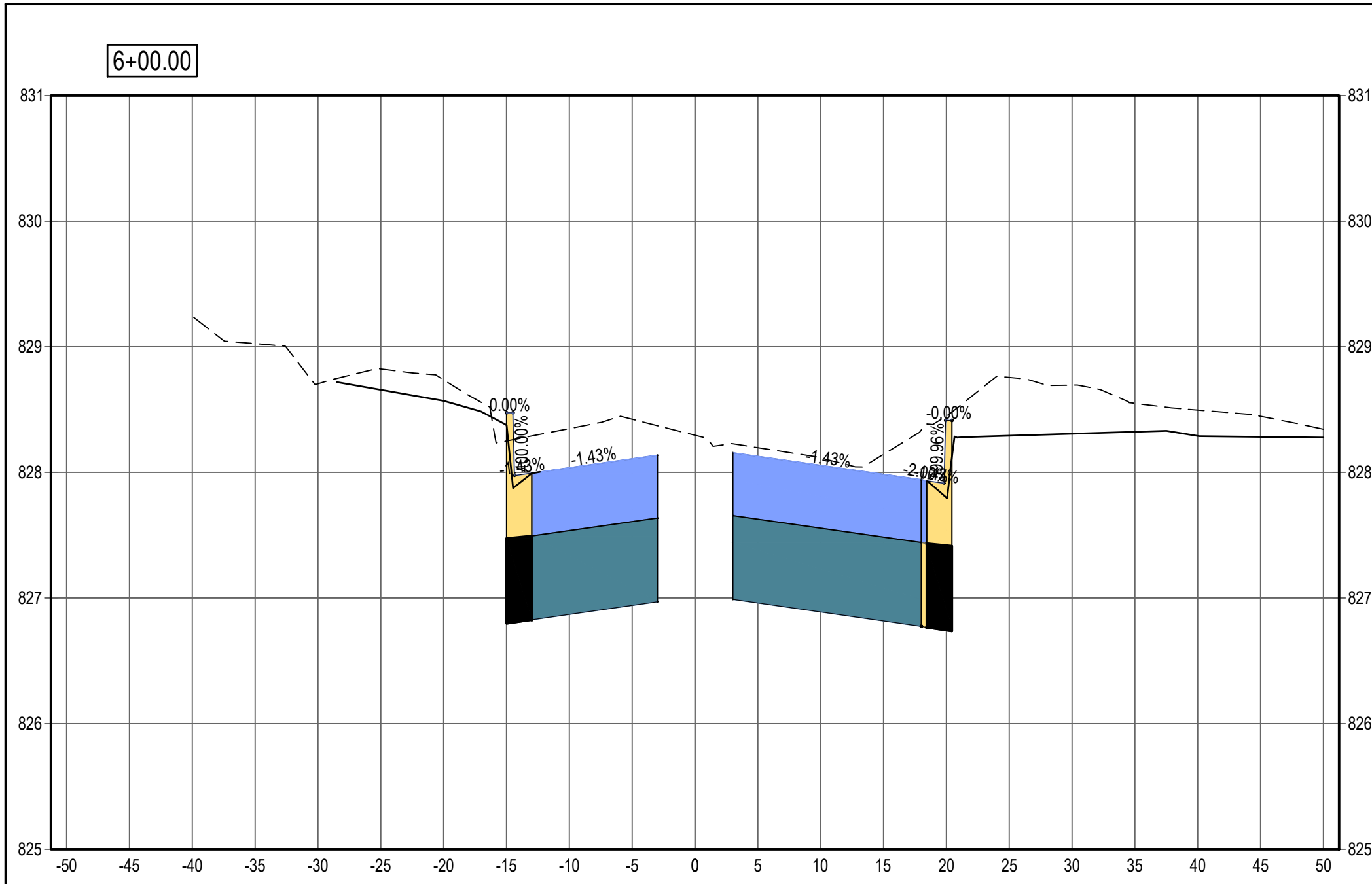
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

**ROAD CROSS SECTIONS -
FIFTH AVENUE STA 3+50 TO 5+50**

SCALE HOR: 1" = 10' VER: 1" = 1'	INCH 0 1
DRAWING NO. C5.00	
SHEET NO. ____ OF ____	

APPROVED BY _____



NOTE:
REFER TO SIDEWALK PLANS FOR MORE
DETAILED GRADES.

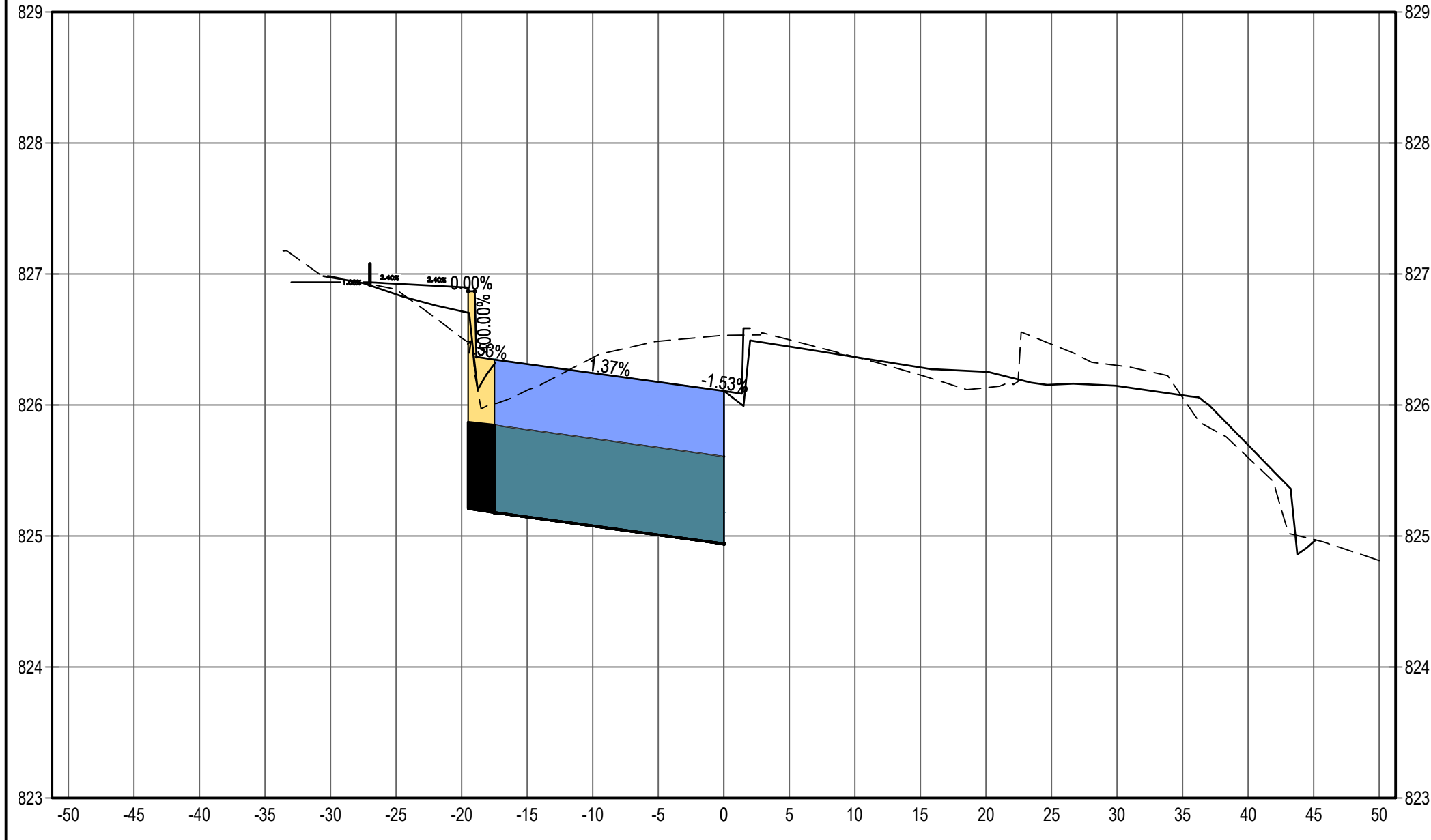
LEGEND

SEE ABOVE					
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			BID PLANS	12-01-2017	
			95% CD	11-17-2017	

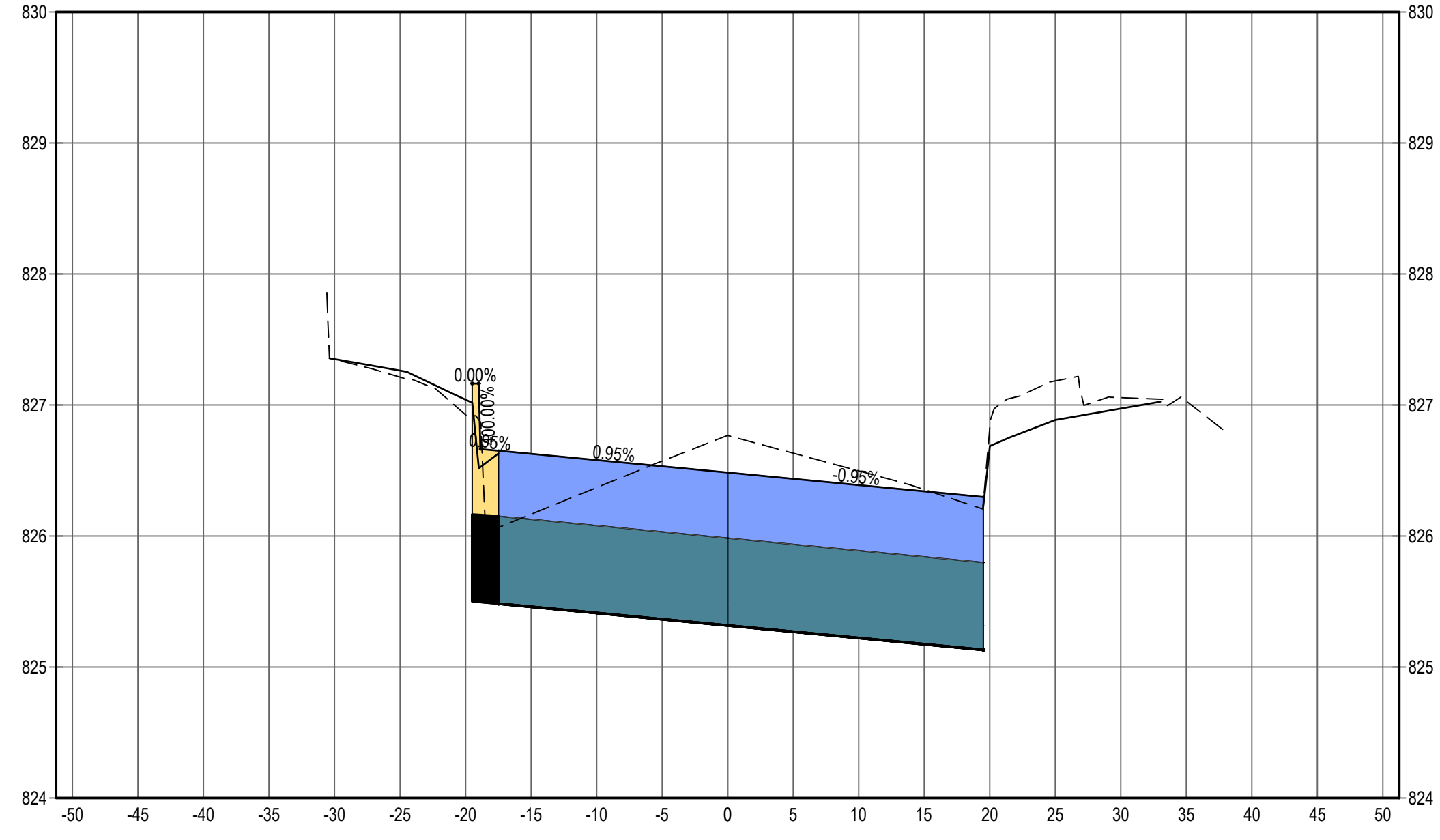
DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR	
ROAD CROSS SECTIONS - FIFTH AVENUE STA 6+00 TO 8+50	
SCALE HOR: 1" = 10' VER: 1" = 1'	INCH 0 1
DRAWING NO. C5.01	
SHEET NO. ___ OF ___	

APPROVED BY _____

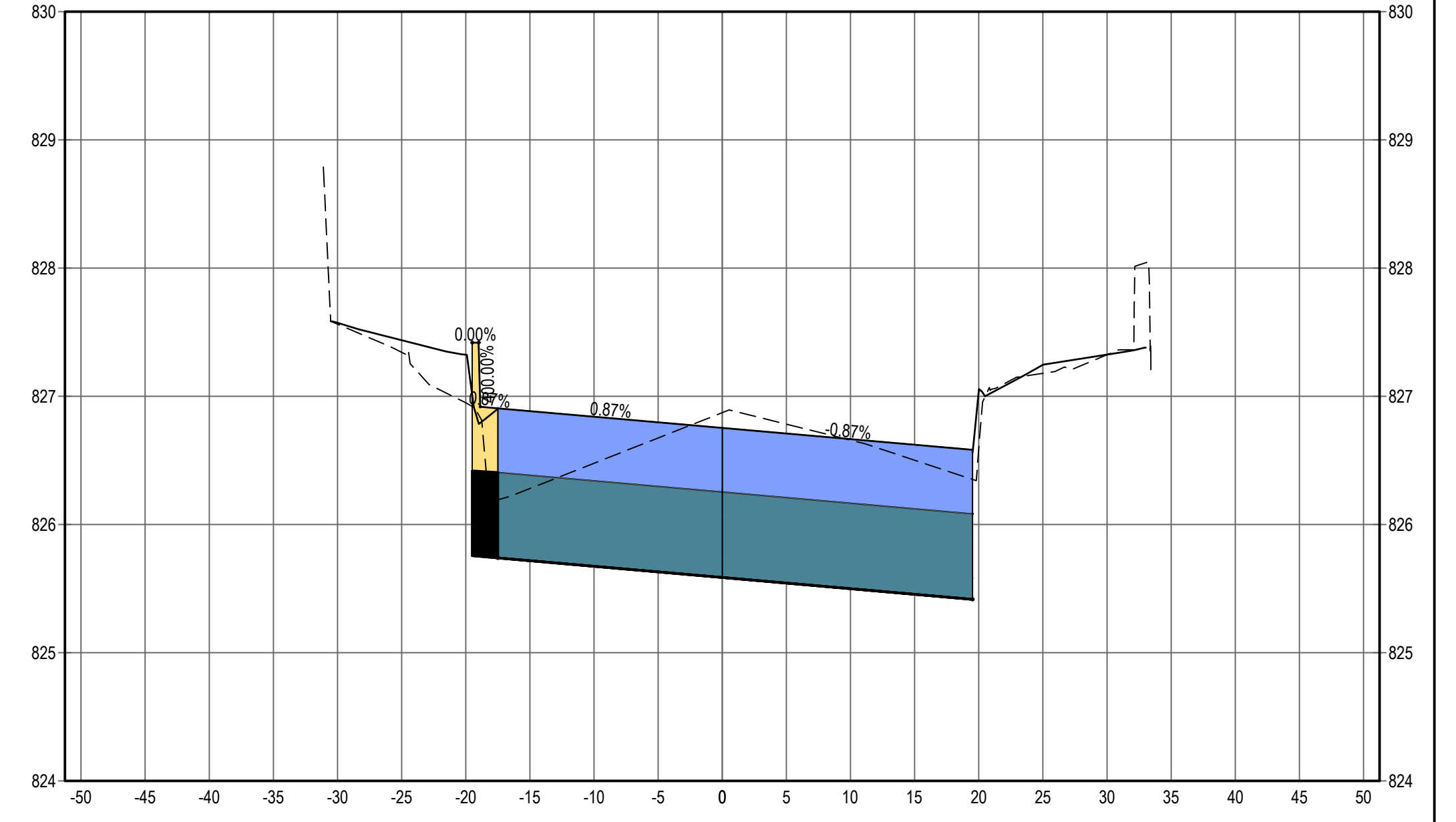
21+50.00



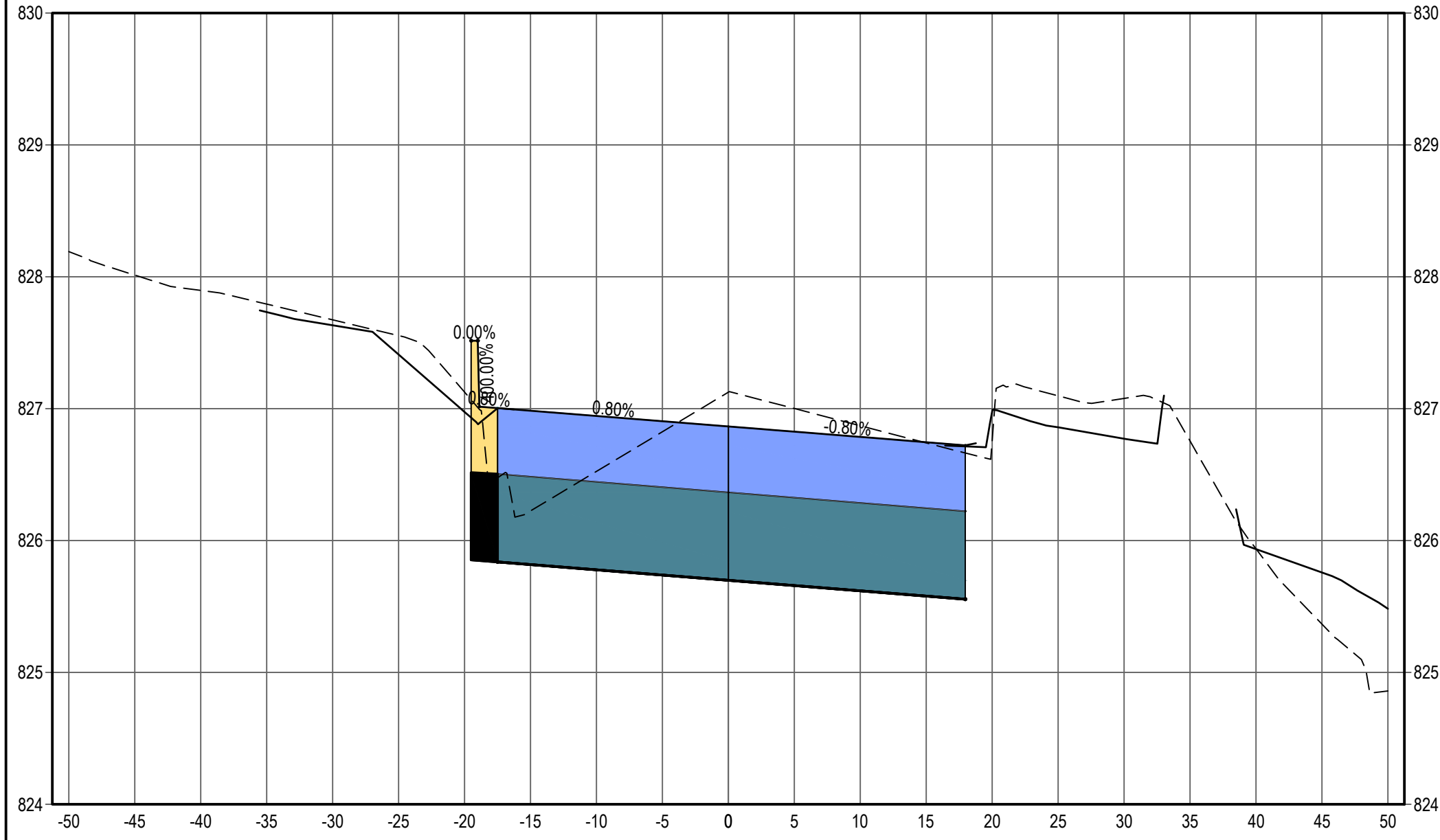
22+00.00



22+50.00



23+00.00



NOTE:
REFER TO SIDEWALK PLANS FOR MORE
DETAILED GRADES.

LEGEND

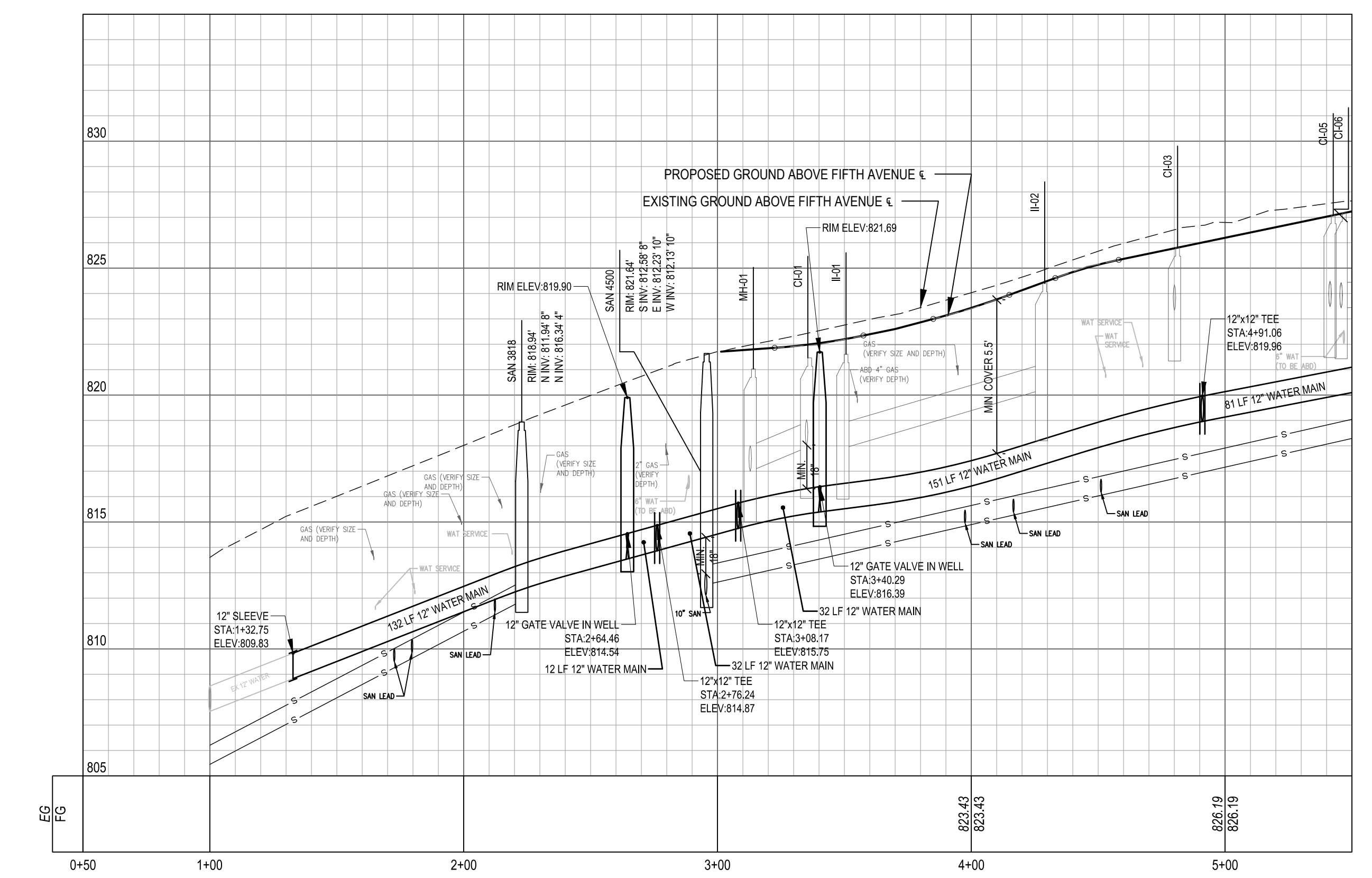
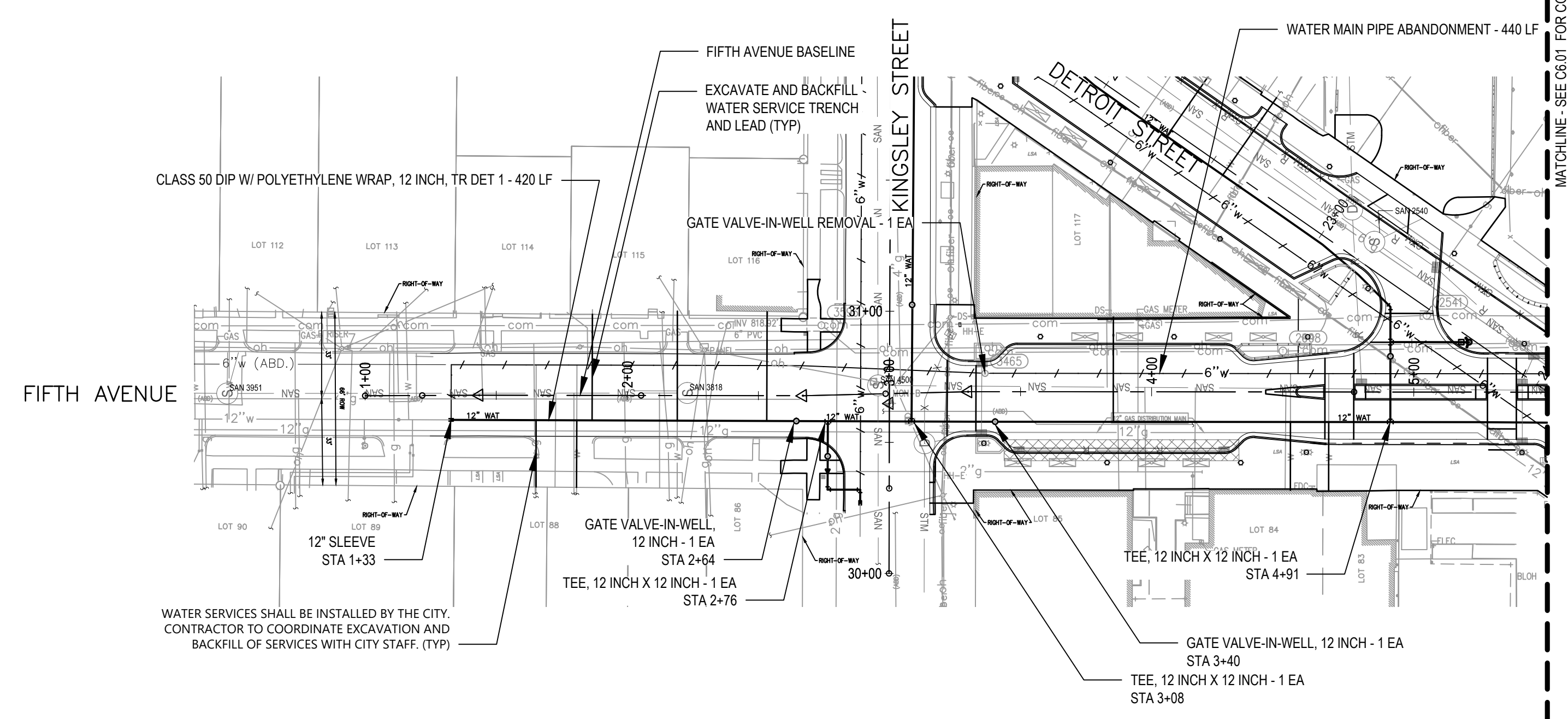
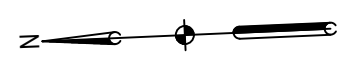
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

**ROAD CROSS SECTIONS -
DETROIT STREET**

SCALE HOR: 1" = 10' VER: 1" = 1'	INCH 0 1
DRAWING NO. C5.02	
SHEET NO. ___ OF ___	

APPROVED BY _____



- NOTES**
1. STATION REFERENCES FOR WATER MAIN FITTINGS AND APPURTENANCES ARE IN REFERENCE TO FIFTH AVENUE BASELINE.
 2. ALL MATERIALS, EQUIPMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF ANN ARBOR STANDARD SPECIFICATIONS AND DETAILS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.
 3. DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 50 WITH POLYETHYLENE WRAP AND PUSH-ON JOINTS, UNLESS OTHERWISE NOTED.
 4. GATE VALVES SHALL BE RESILIENT-SEATED MECHANICAL JOINT GATE VALVE, WITH 2" SQUARE OPERATING NUT, OPENING RIGHT, COMPLETE WITH ACCESSORIES. GATE VALVE SHALL MEET AWWA SPECIFICATION C509. PLEASE QUOTE ONLY: AMERICAN FLOW CONTROL SERIES 2500 SINGLE RESILIENT WEDGE, GLOW MODEL 2538 (4" THROUGH 16") F-6112, EIJW FLOWMASTER RESILIENT WEDGE VALVE, TYTON X TYTON, MUELLER SERIES 4"-12" A-2361-61 RESILIENT WEDGE - SL X SL, U.S. PIPE A-USPT-61 RESILIENT WEDGE VALVE SLxSL FOR FIELD LOK GASKETS.
 4. MECHANICAL JOINTS MUST MEET AWWA SPECIFICATION C111 AND SHALL INCLUDE PLAIN RUBBER MECHANICAL JOINT GASKETS. PLEASE QUOTE ONLY: AMERICAN PIPE "FAST GRIP" GASKET SYSTEM, GRIFFIN PIPE "FIELD LOK 350" GASKET SYSTEM, OR U.S. PIPE "FIELD LOK 350" GASKET SYSTEM.
 5. ALL HORIZONTAL BENDS, TEES AND FITTINGS SHALL INCLUDE THRUST BLOCKS. RESTRAINED JOINTS ARE REQUIRED FOR VERTICAL BENDS. (TR-FLEX RESTRAINED JOINT PIPE BY U.S. PIPE, LOK-RING JOINT PIPE BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL). RESTRAINED JOINT GASKET SYSTEMS MAY ALSO BE USED (FIELD-LOK 350 BY U.S. PIPE, FAST-GRIP BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL).
 6. CONTRACTOR TO FOLLOW CITY REQUIREMENTS FOR WATER MAIN TESTING, WATER MAIN PRESSURE/BACTERIA TESTING MATERIAL AND FEES WILL BE PAID BY THE CONTRACTOR.
 7. ALL WATER MAINS TO HAVE A TYPICAL 5:5' COVER. MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE FOR STORM AND SANITARY CROSSINGS AND A MINIMUM OF 12" VERTICAL CLEARANCE WITH ALL OTHER UTILITIES.
 8. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL UTILIZE STANDARD PIPE DEFLECTIONS FOR FOLLOWING THE PROPOSED ALIGNMENT.
 9. NEW FIRE HYDRANTS SHALL BE EIJW 5BR-250 WITH 4" STORZ QUICK CONNECT. VALVE SHALL BE EIJW FLOWMASTER RESILIENT SEATED GATE VALVES.
 10. FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY THRUST BLOCKS, BENDS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE STOP BOX. FIRE HYDRANT ASSEMBLY INCLUDES 6" STOP BOX LOCATED 3' FROM HYDRANT.
 11. LINE STOPS SHALL BE INSTALLED WHERE EXISTING WATER MAINS CANNOT BE SUFFICIENTLY ISOLATED TO COMPLETE THE WORK.
 12. CONNECTIONS TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE NEW WATER MAIN HAS BEEN SUCCESSFULLY PRESSURE TESTED AND HAS PASSED BACTERIOLOGICAL TESTING. FINAL CONNECTIONS SHALL BE COORDINATED WITH THE ENGINEER. THE CONTRACTOR SHALL PERFORM ALL WATER SYSTEM SHUT DOWNS AFTER APPROPRIATE NOTIFICATION TO THOSE AFFECTED.
 13. ALL HYDRANTS REMOVED BY THE CONTRACTOR SHALL BE DELIVERED TO THE CITY OF ANN ARBOR FIELD OPERATIONS FACILITY LOCATED AT 4251 STONE SCHOOL ROAD, ANN ARBOR, MI 48108 BY THE CONTRACTOR AND WILL BECOME THE PROPERTY OF THE CITY OF ANN ARBOR.
 14. ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II MATERIAL.
 15. ABANDONMENT OF WATER STRUCTURES SHALL FOLLOW CITY OF ANN ARBOR STANDARDS.
 16. FITTINGS OTHER THAN THOSE SPECIFICALLY LISTED AS SEPARATE PAY ITEMS, BLOW-OFF ASSEMBLIES, CONCRETE THRUST BLOCKS, SOLID SLEEVES AND MECHANICAL PLUGS, WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.

LEGEND

	EXISTING CURB INLET		EXISTING SANITARY MANHOLE		CLEANOUT
	EXISTING STORM MANHOLE		EXISTING GATE VALVE-IN-WELL		GATE VALVE-IN-WELL
	EXISTING HYDRANT		GATE VALVE-IN-BOX		REMOVE SEWER
	EXISTING STORM		STORM PIPE		ABANDON WATER LINE
	EXISTING WATER		CURB INLET		WATER LINE
	EXISTING SANITARY		STORM MANHOLE		LIMITS OF WORK
	EXISTING GAS		HYDRANT		

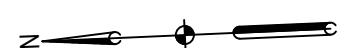
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

SANITARY AND WATER MAIN PLAN & PROFILE - FIFTH AVENUE STA 1+00 TO 5+00

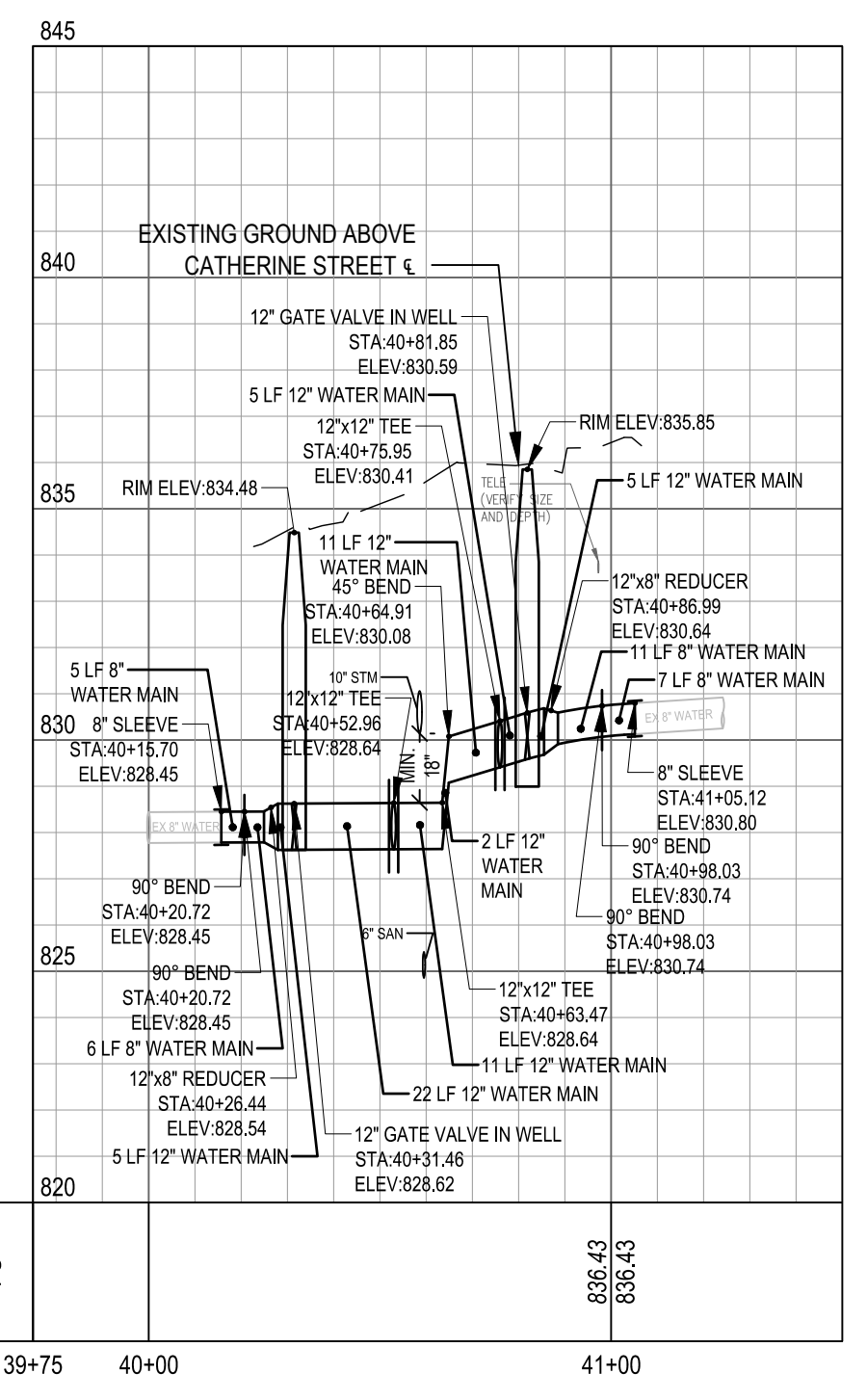
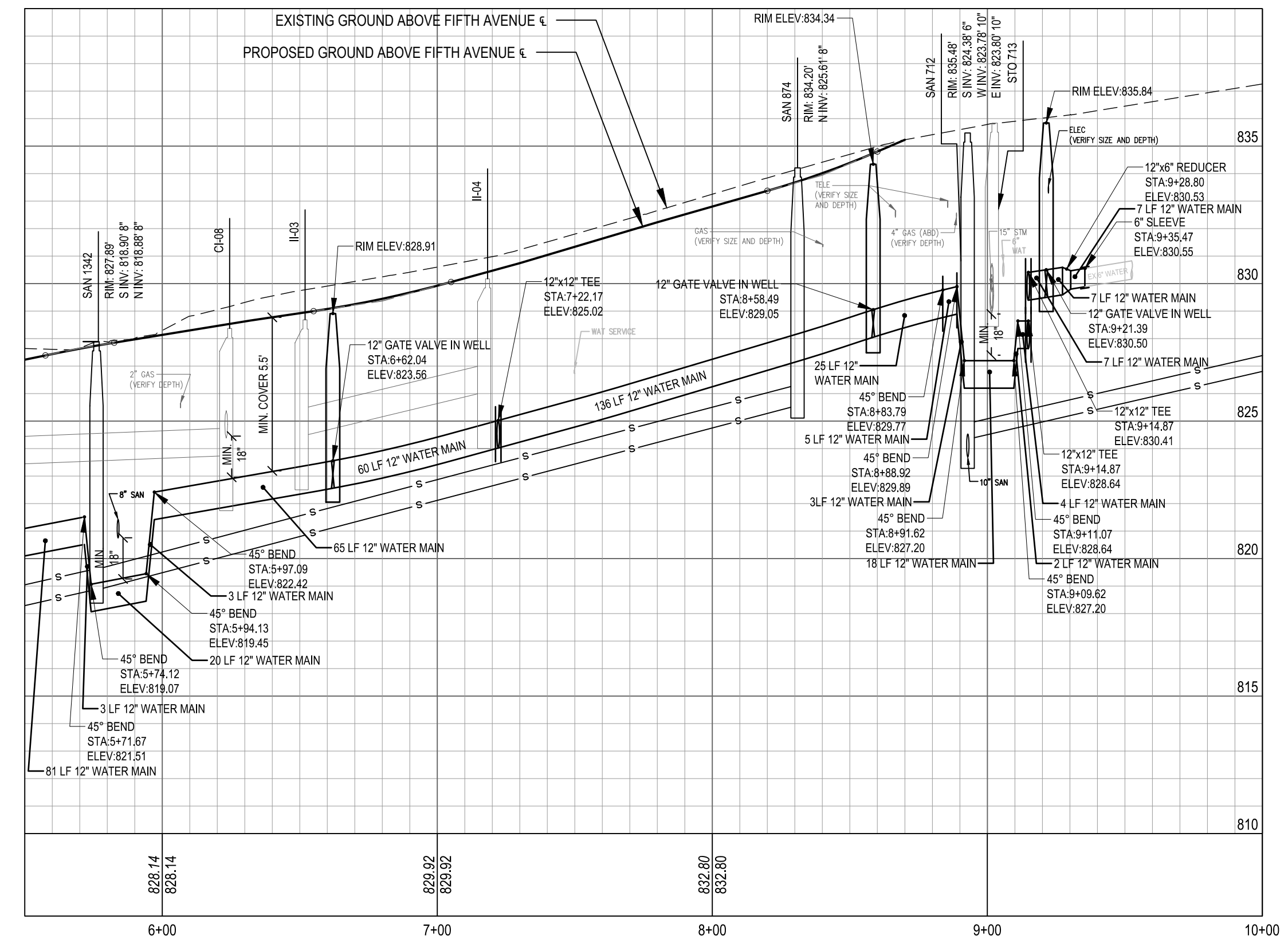
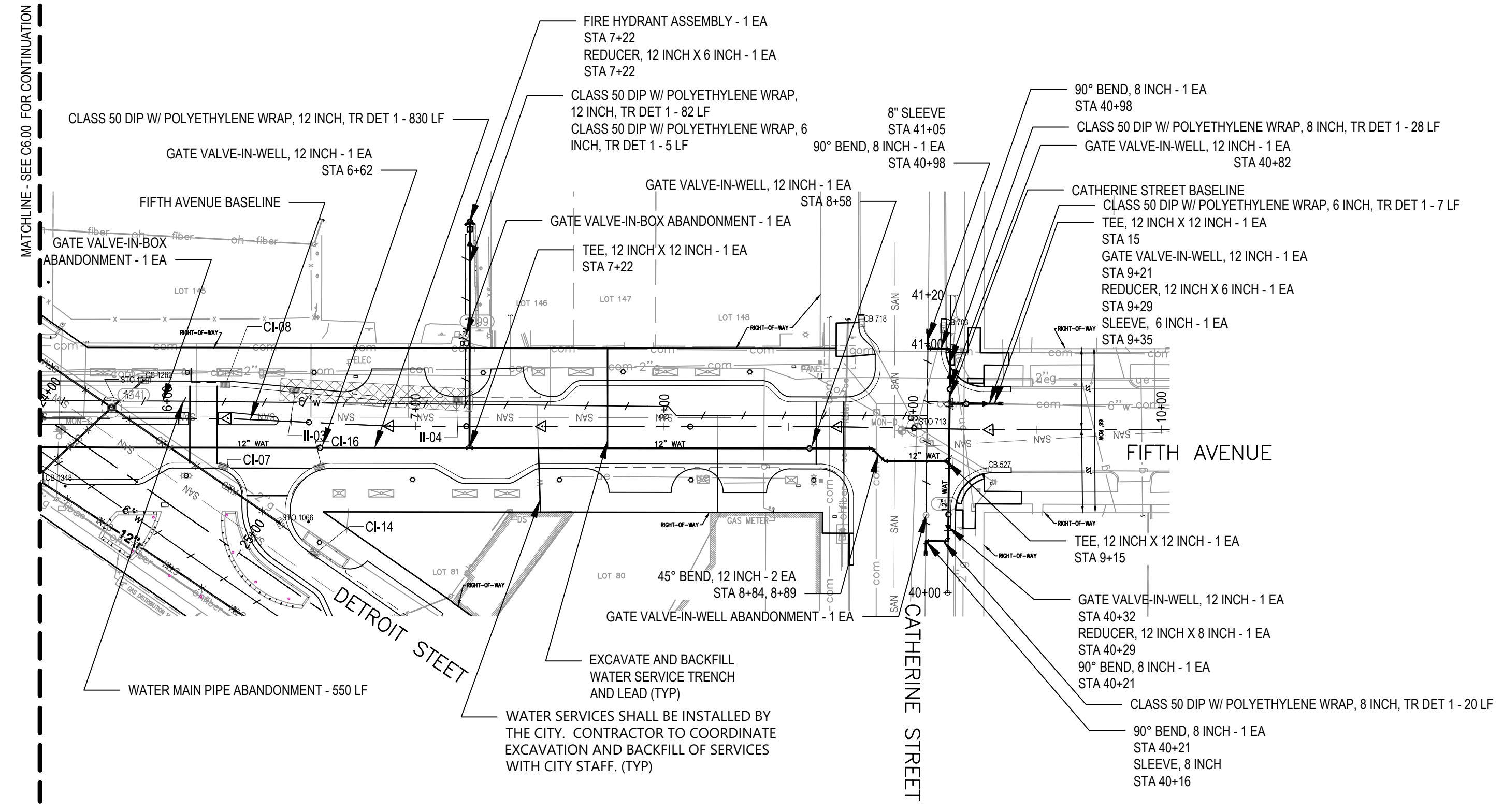
SCALE 1" = 40'	INCH 0" 20" 40"
DRAWING NO. C6.00	SHEET NO. _____ OF _____

APPROVED BY _____



NOTES

1. STATION REFERENCES FOR WATER MAIN FITTINGS AND APPURTENANCES ARE IN REFERENCE TO FIFTH AVENUE OR CATHERINE STREET BASELINES.
2. ALL MATERIALS, EQUIPMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF ANN ARBOR STANDARD SPECIFICATIONS AND DETAILS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.
3. DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 50 WITH POLYETHYLENE WRAP AND PUSH-ON JOINTS, UNLESS OTHERWISE NOTED.
4. GATE VALVES SHALL BE RESILIENT-SEATED MECHANICAL JOINT GATE VALVE, WITH 2" SQUARE OPERATING NUT, OPENING RIGHT, COMPLETE WITH ACCESSORIES. GATE VALVE SHALL MEET AWWA SPECIFICATION C509. PLEASE QUOTE ONLY: AMERICAN FLOW CONTROL SERIES 2500 SINGLE RESILIENT WEDGE, GLOW MODEL 2538 (4" THROUGH 16") F-6112, EJM FLOWMASTER RESILIENT WEDGE VALVE, TYTON X TYTON, MUELLER SERIES 4"-12" A-2361-61 RESILIENT WEDGE - SL X SL, U.S. PIPE A-USPT-61 RESILIENT WEDGE VALVE SLXSL FOR FIELD LOK GASKETS.
4. MECHANICAL JOINTS MUST MEET AWWA SPECIFICATION C111 AND SHALL INCLUDE PLAIN RUBBER MECHANICAL JOINT GASKETS. PLEASE QUOTE ONLY: AMERICAN PIPE "FAST GRIP" GASKET SYSTEM, GRIFFIN PIPE "FIELD LOK 350" GASKET SYSTEM, OR U.S. PIPE "FIELD LOK 350" GASKET SYSTEM.
5. ALL HORIZONTAL BENDS, TEES AND FITTINGS SHALL INCLUDE THRUST BLOCKS. RESTRAINED JOINTS ARE REQUIRED FOR VERTICAL BENDS. (TR-FLEX RESTRAINED JOINT PIPE BY U.S. PIPE, LOK-RING JOINT PIPE BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL). RESTRAINED JOINT GASKET SYSTEMS MAY ALSO BE USED (FIELD-LOK 350 BY U.S. PIPE, FAST-GRIP BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL).
6. CONTRACTOR TO FOLLOW CITY REQUIREMENTS FOR WATER MAIN TESTING, WATER MAIN PRESSURE/BACTERIA TESTING MATERIAL, AND FEES WILL BE PAID BY THE CONTRACTOR.
7. ALL WATER MAIN TO HAVE A TYPICAL 5:5' COVER. MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE FOR STORM AND SANITARY CROSSINGS AND A MINIMUM OF 12" VERTICAL CLEARANCE WITH ALL OTHER UTILITIES.
8. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL UTILIZE STANDARD PIPE DEFLECTIONS FOR FOLLOWING THE PROPOSED ALIGNMENT.
9. NEW FIRE HYDRANTS SHALL BE EJM 5BR-250 WITH 4" STORZ QUICK CONNECT. VALVE SHALL BE EJM FLOWMASTER RESILIENT SEATED GATE VALVES.
10. FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY THRUST BLOCKS, BENDS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE STOP BOX. FIRE HYDRANT ASSEMBLY INCLUDES 6" STOP BOX LOCATED 3' FROM HYDRANT.
11. LINE STOPS SHALL BE INSTALLED WHERE EXISTING WATER MAINS CANNOT BE SUFFICIENTLY ISOLATED TO COMPLETE THE WORK.
12. CONNECTIONS TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE NEW WATER MAIN HAS BEEN SUCCESSFULLY PRESSURE TESTED AND HAS PASSED BACTERIOLOGICAL TESTING. FINAL CONNECTIONS SHALL BE COORDINATED WITH THE ENGINEER. THE CONTRACTOR SHALL PERFORM ALL WATER SYSTEM SHUT DOWNS AFTER APPROPRIATE NOTIFICATION TO THOSE AFFECTED.
13. ALL HYDRANTS REMOVED BY THE CONTRACTOR SHALL BE DELIVERED TO THE CITY OF ANN ARBOR FIELD OPERATIONS FACILITY LOCATED AT 4251 STONE SCHOOL ROAD, ANN ARBOR, MI 48108 BY THE CONTRACTOR AND WILL BECOME THE PROPERTY OF THE CITY OF ANN ARBOR.
14. ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II MATERIAL.
15. ABANDONMENT OF WATER STRUCTURES SHALL FOLLOW CITY OF ANN ARBOR STANDARDS.
16. FITTINGS OTHER THAN THOSE SPECIFICALLY LISTED AS SEPARATE PAY ITEMS, BLOW-OFF ASSEMBLIES, CONCRETE THRUST BLOCKS, SOLID SLEEVES AND MECHANICAL PLUGS, WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.



LEGEND

	EXISTING CURB INLET		EXISTING SANITARY MANHOLE		CLEANOUT
	EXISTING STORM MANHOLE		EXISTING GATE VALVE-IN-BOX		GATE VALVE-IN-WELL
	EXISTING HYDRANT		GATE VALVE-IN-BOX		REMOVE SEWER
	EXISTING STORM		STORM PIPE		ABANDON WATER LINE
	EXISTING WATER		CURB INLET		WATER LINE
	EXISTING SANITARY		STORM MANHOLE		LIMITS OF WORK
	EXISTING GAS		HYDRANT		

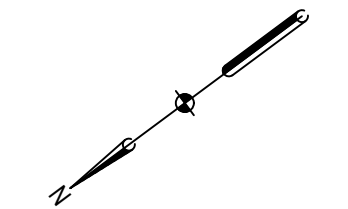
SEE ABOVE	BID PLANS	DATE	DR. BY	CH. BY
		12-01-2017		
	95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

SANITARY AND WATER MAIN PLAN & PROFILE - FIFTH AVENUE STA 5+50 TO 10+00

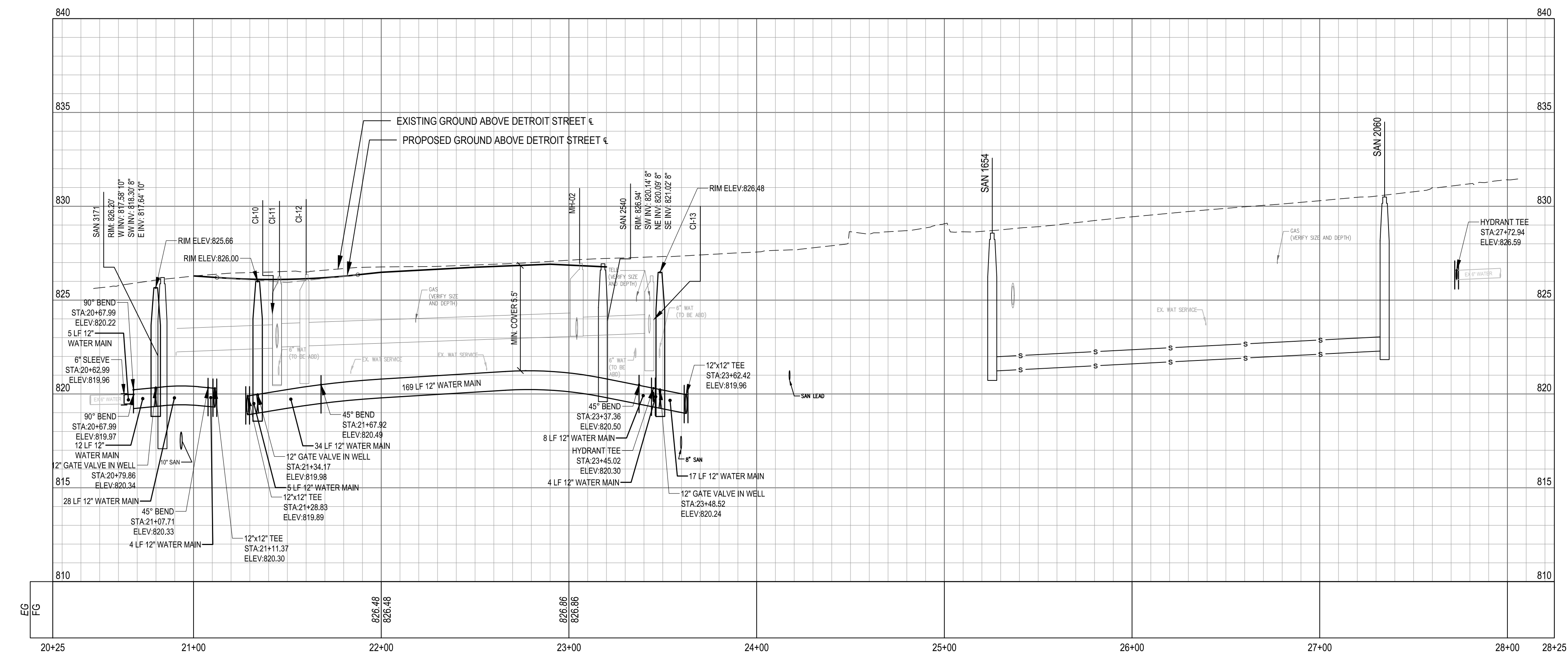
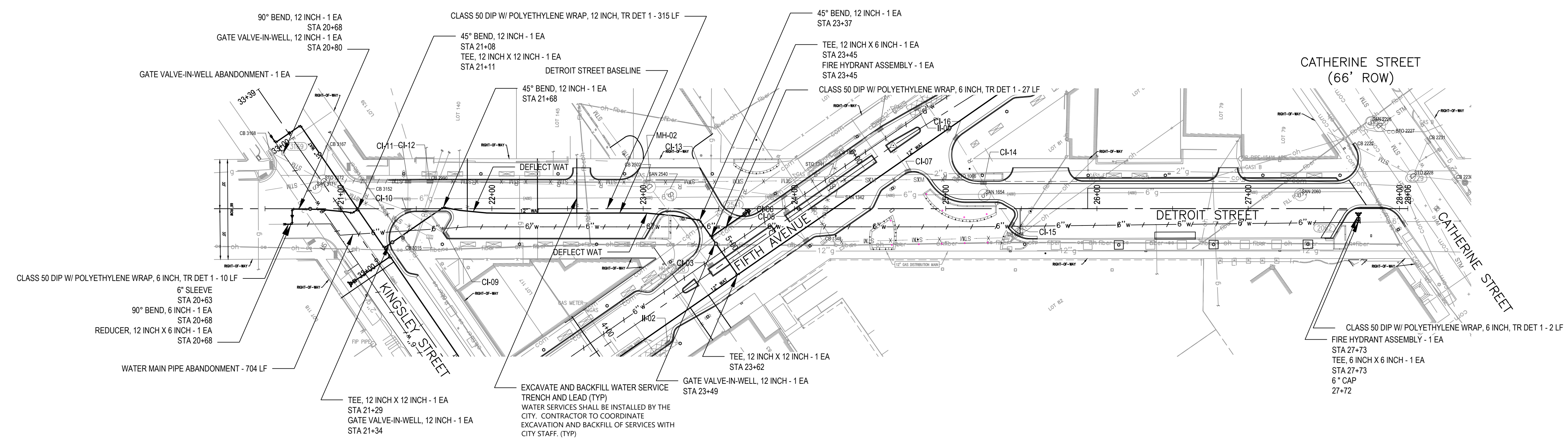
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DRAWING NO. C6.01	SHEET NO. ____ OF ____

APPROVED BY _____

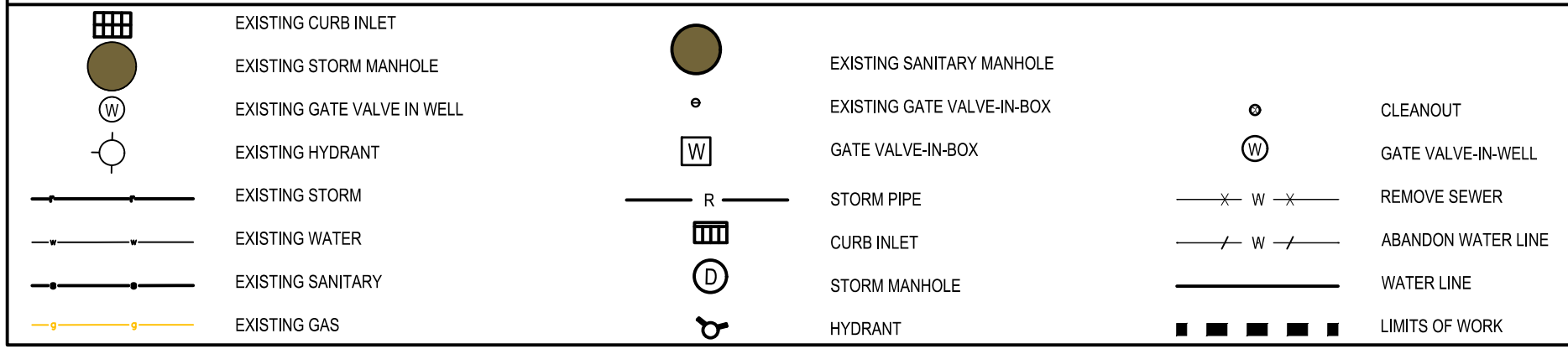


NOTES

- STATION REFERENCES FOR WATER MAIN FITTINGS AND APPURTENANCES ARE IN REFERENCE TO DETROIT STREET BASELINE.
- ALL MATERIALS, EQUIPMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF ANN ARBOR STANDARD SPECIFICATIONS AND DETAILS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.
- DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 50 WITH POLYETHYLENE WRAP AND PUSH-ON JOINTS, UNLESS OTHERWISE NOTED.
- GATE VALVES SHALL BE RESILIENT-SEATED MECHANICAL JOINT GATE VALVE, WITH 2" SQUARE OPERATING NUT, OPENING RIGHT, COMPLETE WITH ACCESSORIES. GATE VALVE SHALL MEET AWWA SPECIFICATION C509. PLEASE QUOTE ONLY: AMERICAN PIPE, "FAST GRIP" GASKET SYSTEM, GRIFFIN PIPE "FIELD LOK 350" GASKET SYSTEM, OR U.S. PIPE "FIELD LOK 350" GASKET SYSTEM.
- ALL HORIZONTAL BENDS, TEES AND FITTINGS SHALL INCLUDE THRUST BLOCKS. RESTRAINED JOINTS ARE REQUIRED FOR VERTICAL BENDS. (TR-FLEX RESTRAINED JOINT PIPE BY U.S. PIPE, LOK-RING JOINT PIPE BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL). RESTRAINED JOINT GASKET SYSTEMS MAY ALSO BE USED (FIELD-LOK 350 BY U.S. PIPE, FAST-GRIP BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL).
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- ALL WATER MAIN TO HAVE A TYPICAL 5' COVER. MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE FOR STORM AND SANITARY CROSSINGS AND A MINIMUM OF 12" VERTICAL CLEARANCE WITH ALL OTHER UTILITIES.
- UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL UTILIZE STANDARD PIPE DEFLECTIONS FOR FOLLOWING THE PROPOSED ALIGNMENT.
- NEW FIRE HYDRANTS SHALL BE EJW 5BR-250 WITH 4" STORZ QUICK CONNECT. VALVE SHALL BE EJW FLOWMASTER RESILIENT SEATED GATE VALVES.
- FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY THRUST BLOCKS, BENDS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE STOP BOX. FIRE HYDRANT ASSEMBLY INCLUDES 6" STOP BOX LOCATED 3' FROM HYDRANT.
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- ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II MATERIAL.
- ABANDONMENT OF WATER STRUCTURES SHALL FOLLOW CITY OF ANN ARBOR STANDARDS.
- FITTINGS OTHER THAN THOSE SPECIFICALLY LISTED AS SEPARATE PAY ITEMS, BLOW-OFF ASSEMBLIES, CONCRETE THRUST BLOCKS, SOLID SLEEVES AND MECHANICAL PLUGS, WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.



LEGEND



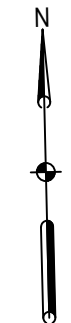
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

SANITARY AND WATER MAIN PLAN & PROFILE - DETROIT STREET

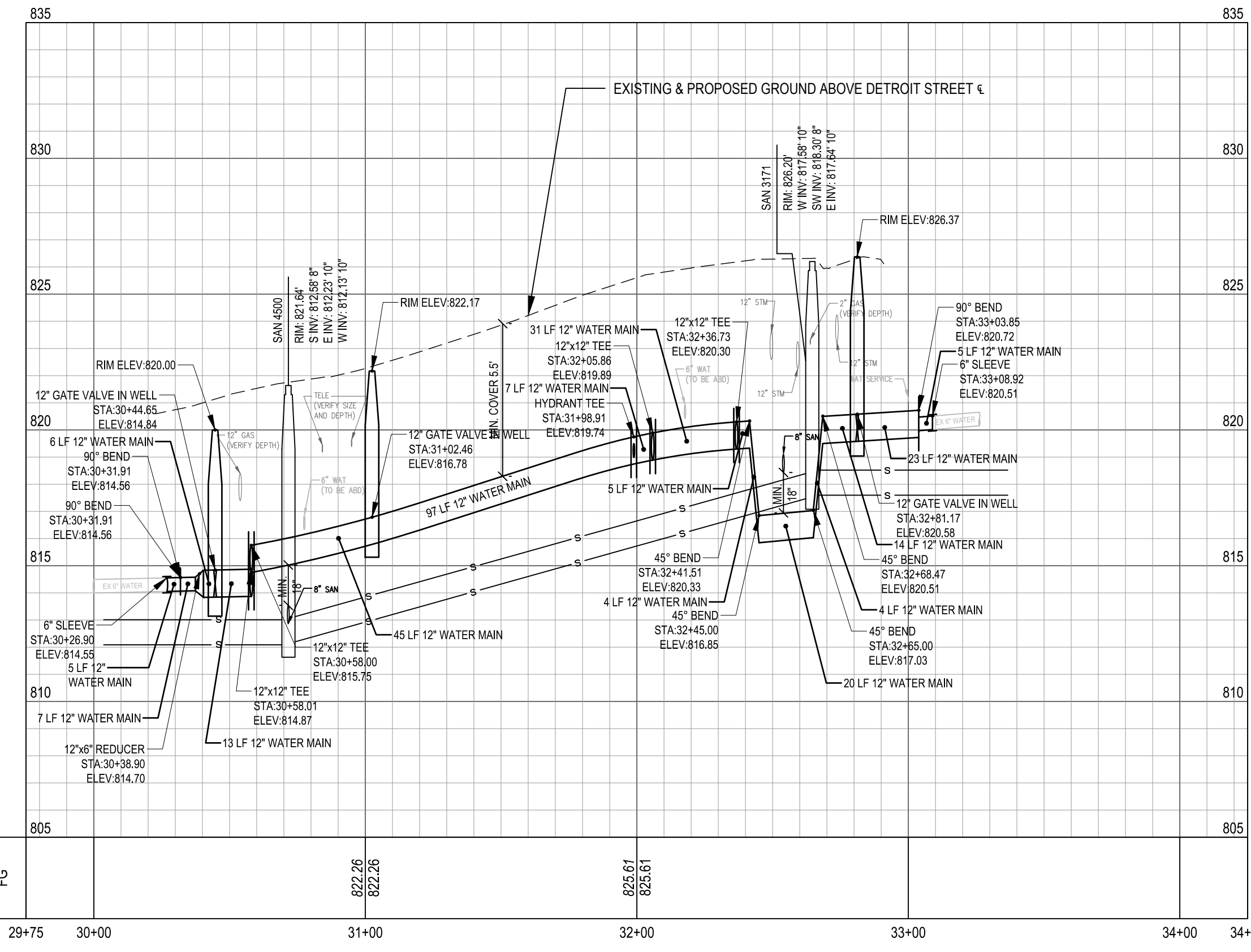
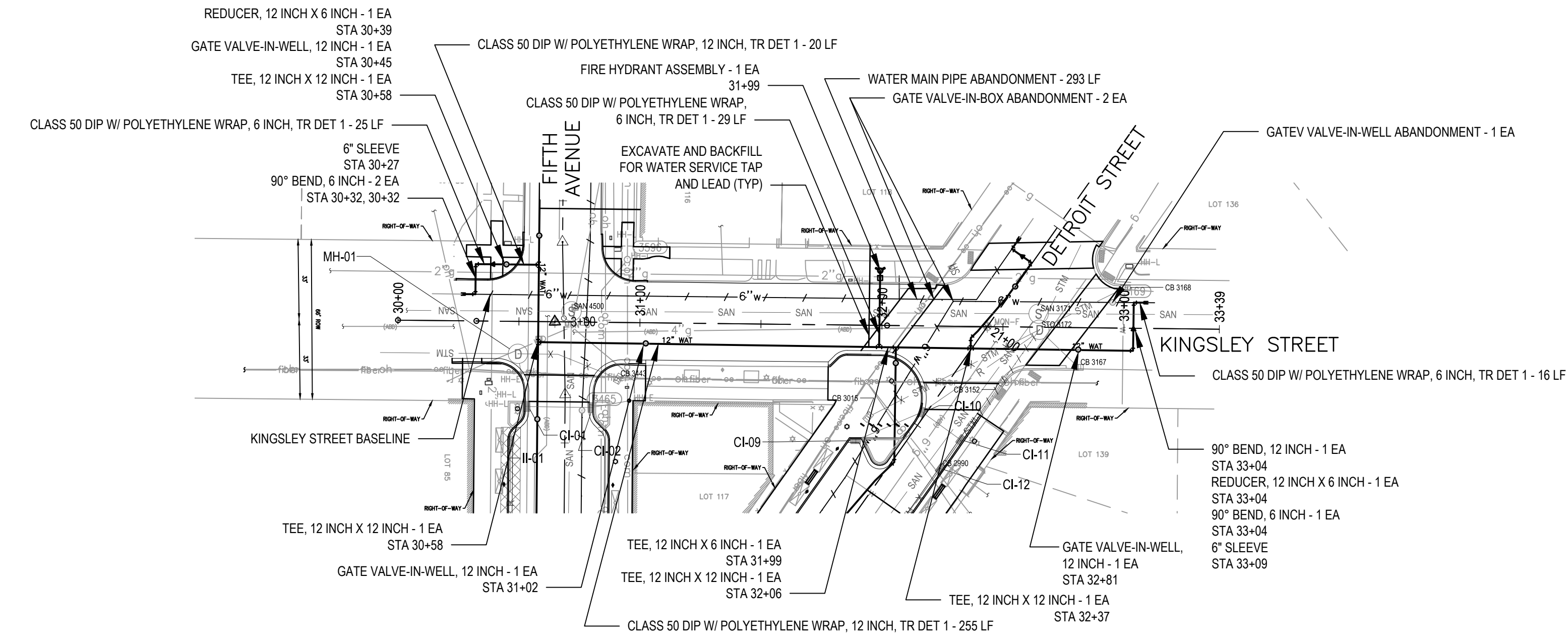
SCALE	1" = 40'	INCH	0" 20" 40"
DRAWING NO.	C6.02		
SHEET NO.	OF		

APPROVED BY _____



NOTES

1. STATION REFERENCES FOR WATER MAIN FITTINGS AND APPURTENANCES ARE ALONG LENGTH OF PROPOSED WATER MAIN.
2. ALL MATERIALS, EQUIPMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF ANN ARBOR STANDARD SPECIFICATIONS AND DETAILS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.
3. DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 52 WITH POLYETHYLENE WRAP AND PUSH-ON JOINTS, UNLESS OTHERWISE NOTED.
4. GATE VALVES SHALL BE DOUBLE DISC OR RESILIENT SEAT, NON-RISING STEM MECHANICAL JOINT GATE VALVE, WITH 2" SQUARE OPERATING NUT, OPENING RIGHT, COMPLETE WITH ACCESSORIES. GATE VALVE SHALL MEET AWWA SPECIFICATION C500 OR C509. PLEASE QUOTE ONLY: AMERICAN FLOW CONTROL SERIES 2500 SINGLE RESILIENT WEDGE, CLOW MODEL 2639/2640 (2" THROUGH 12") F-6112, EJIW FLOWMASTER RESILIENT WEDGE VALVE (PG. 279), MUELLER SERIES 4"-12" A-2360-38 RESILIENT WEDGE - SL X SL, TYLER SERIES DRS 250-22 DOUBLE RESILIENT WEDGE, U.S. PIPE METROSEAL SERIES 250-5460 SINGLE RESILIENT WEDGE (W/O LOCK NUTS ON BONNET BOLTS), OR U.S. PIPE & FOUNDRY TYTON JOINT, RESILIENT WEDGE SEATED GATE VALVE, MEETING AWWA C509, AWWA C550 & ASTM D2794.
5. MECHANICAL JOINTS MUST MEET AWWA SPECIFICATION C111 AND SHALL INCLUDE PLAIN RUBBER MECHANICAL JOINT GASKETS. PLEASE QUOTE ONLY: AMERICAN PIPE "FAST GRIP" GASKET SYSTEM, GRIFFIN PIPE "FIELD LOK 350" GASKET SYSTEM, OR U.S. PIPE "FIELD LOK 350" GASKET SYSTEM.
6. ALL HORIZONTAL BENDS, TEES AND FITTINGS SHALL INCLUDE THRUST BLOCKS. RESTRAINED JOINTS ARE REQUIRED FOR VERTICAL BENDS. (TR-FLEX RESTRAINED JOINT PIPE BY U.S. PIPE, LOK-RING JOINT PIPE BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL). RESTRAINED JOINT GASKET SYSTEMS MAY ALSO BE USED (FIELD LOK 350 BY U.S. PIPE, FAST-GRIP BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL).
7. CITY CONNECTION CHARGES/METER FEES AND CITY CONSTRUCTION INSPECTION ESCROW FEE WILL BE PAID BY THE UNIVERSITY OF MICHIGAN. ANY INSPECTION REWORK WILL BE BACKCHARGED TO THE CONTRACTOR BY THE UNIVERSITY. CONTRACTOR TO FOLLOW CITY REQUIREMENTS FOR WATER MAIN TESTING, WATER MAIN PRESSURE/BACTERIA TESTING MATERIAL AND FEES WILL BE PAID BY THE CONTRACTOR.
8. ALL WATER MAIN TO HAVE A TYPICAL 5.5' COVER. MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE FOR STORM AND SANITARY CROSSINGS AND A MINIMUM OF 12" VERTICAL CLEARANCE WITH ALL OTHER UTILITIES.
9. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL UTILIZE STANDARD PIPE DEFLECTIONS FOR FOLLOWING THE PROPOSED ALIGNMENT.
10. NEW FIRE HYDRANTS SHALL BE EIW 5BR-250 WITH 4" STORZ QUICK CONNECT VALVE SHALL BE EJIW FLOWMASTER RESILIENT SEATED GATE VALVES.
11. FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY THRUST BLOCKS, BENDS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE STOP BOX. FIRE HYDRANT ASSEMBLY INCLUDES 6" STOP BOX LOCATED 3' FROM HYDRANT.
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15. ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II MATERIAL.
16. ABANDONMENT OF WATER STRUCTURES SHALL FOLLOW CITY OF ANN ARBOR STANDARDS.



LEGEND

	EXISTING CURB INLET		EXISTING SANITARY MANHOLE		CLEANOUT
	EXISTING STORM MANHOLE		EXISTING GATE VALVE-IN-WELL		GATE VALVE-IN-WELL
	EXISTING HYDRANT		GATE VALVE-IN-BOX		REMOVE SEWER
	EXISTING STORM		STORM PIPE		ABANDON WATER LINE
	EXISTING WATER		CURB INLET		WATER LINE
	EXISTING SANITARY		STORM MANHOLE		LIMITS OF WORK
	EXISTING GAS		HYDRANT		

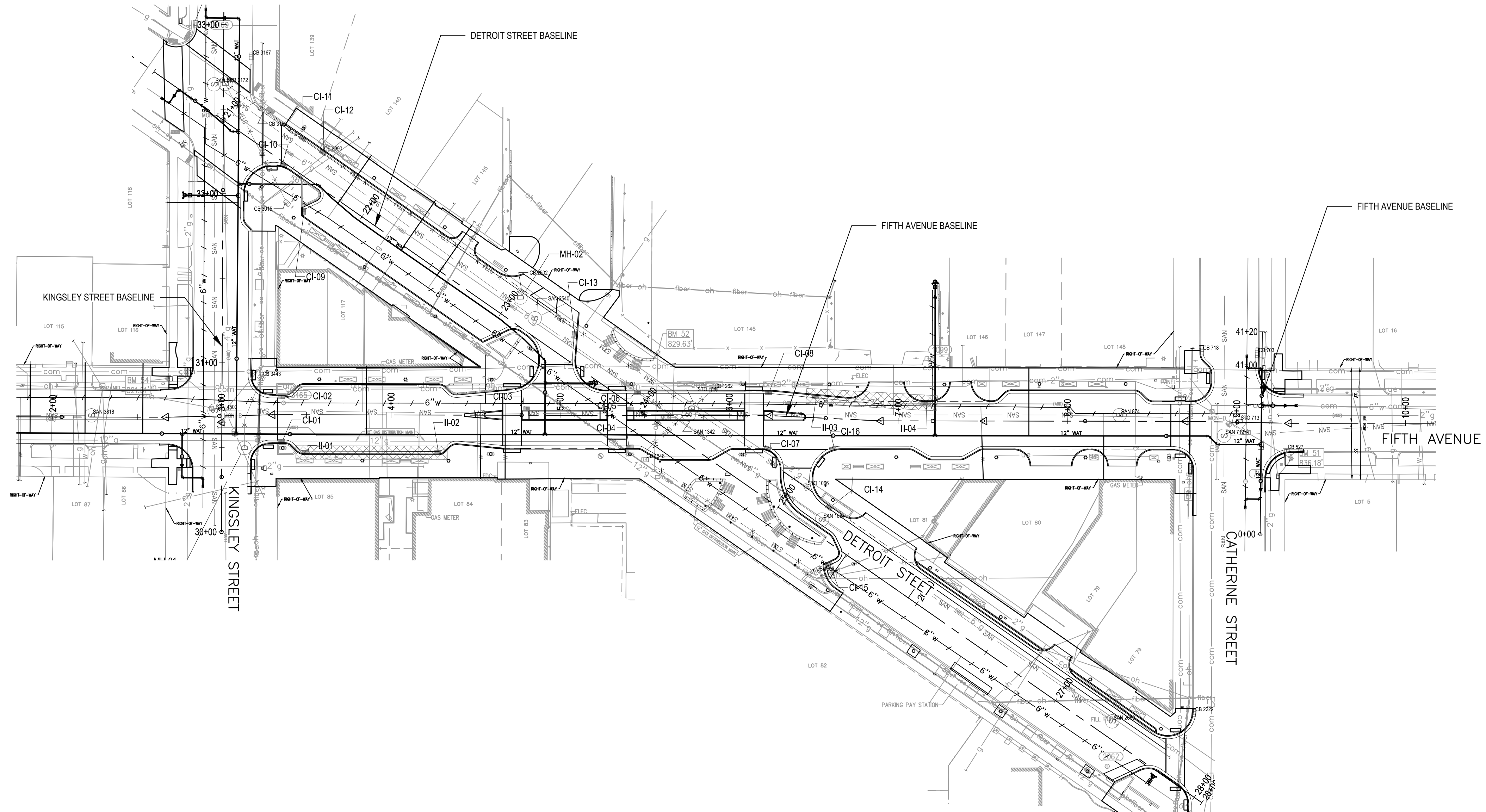
SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

SANITARY AND WATER MAIN PLAN & PROFILE - KINGSLEY STREET

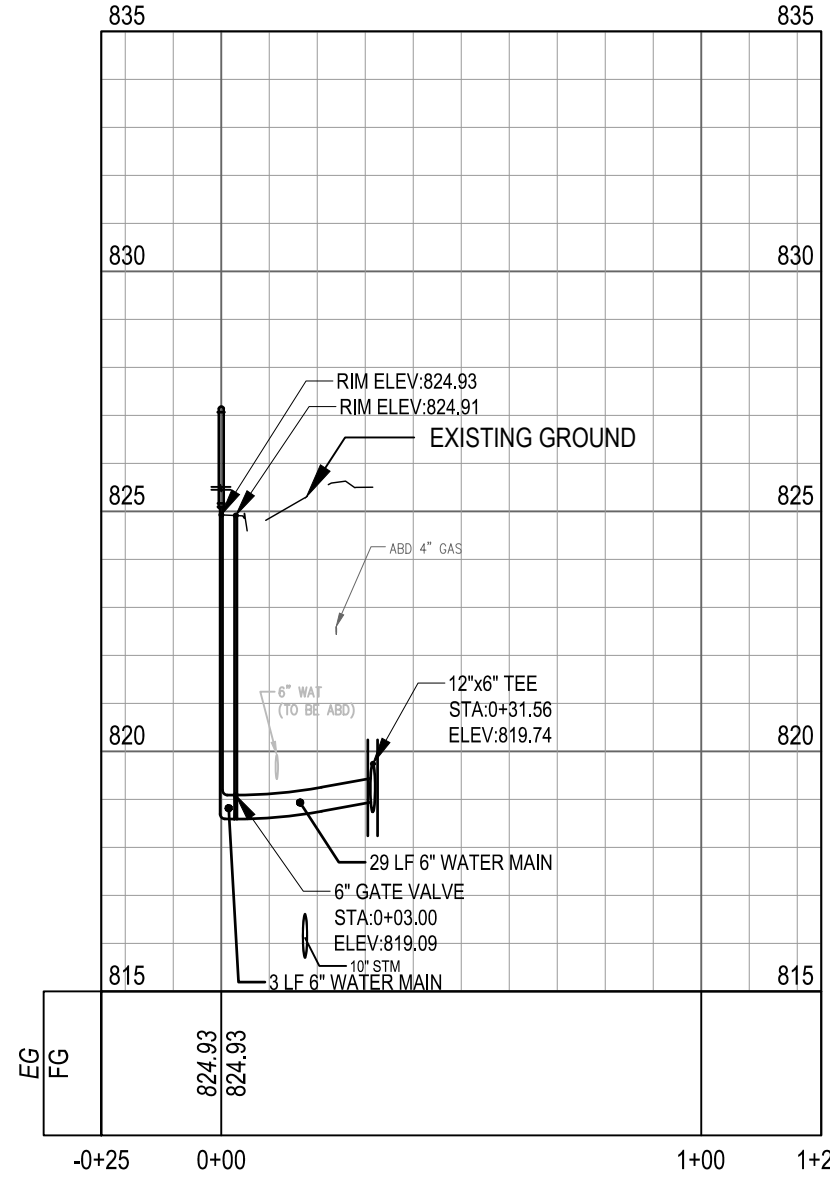
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SHEET NO. ____ OF ____	

APPROVED BY _____

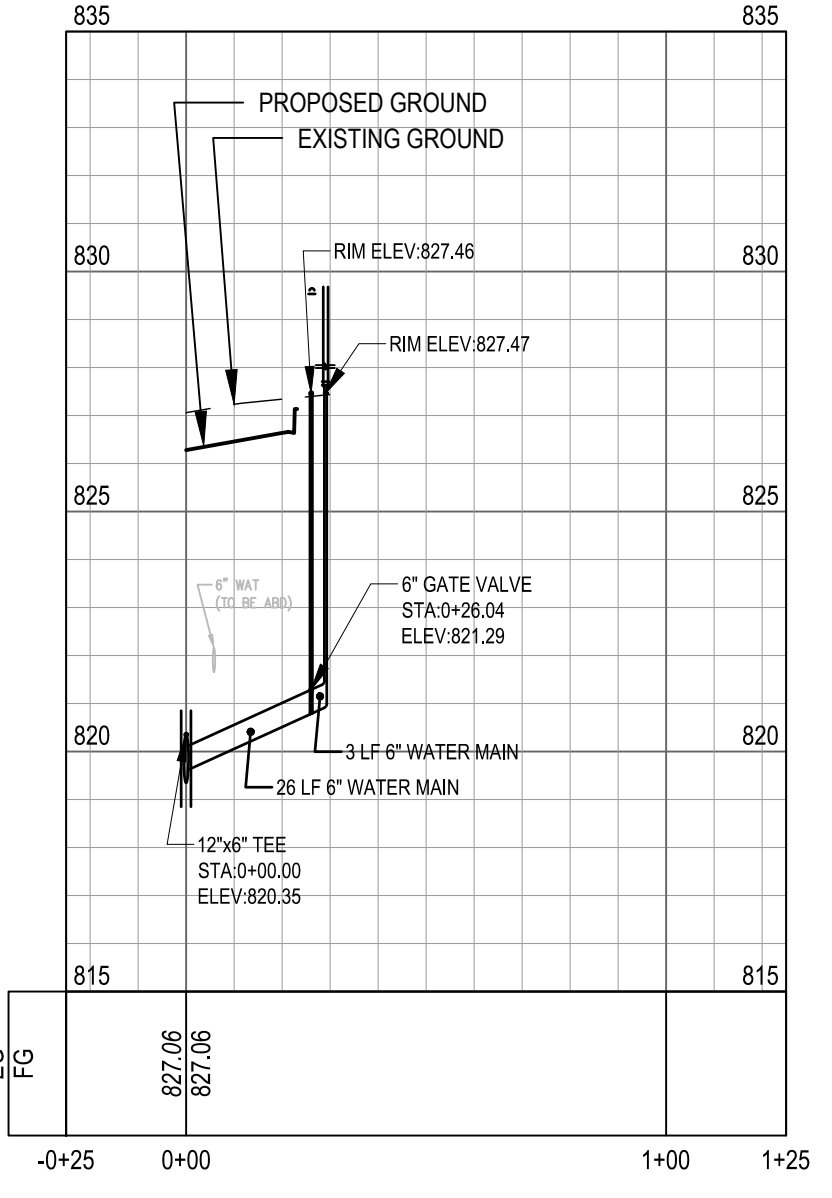


- NOTES**
- STATION REFERENCES FOR WATER MAIN FITTINGS AND APPURTENANCES ARE IN REFERENCE TO BASELINES.
 - ALL MATERIALS, EQUIPMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF ANN ARBOR STANDARD SPECIFICATIONS AND DETAILS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.
 - DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 50 WITH POLYETHYLENE WRAP AND PUSH-ON JOINTS, UNLESS OTHERWISE NOTED.
 - GATE VALVES SHALL BE RESILIENT-SEATED MECHANICAL JOINT GATE VALVE, WITH 2" SQUARE OPERATING NUT. OPENING RIGHT, COMPLETE WITH ACCESSORIES. GATE VALVE SHALL MEET AWWA SPECIFICATION C509. PLEASE QUOTE ONLY: AMERICAN FLOW CONTROL SERIES 2500 SINGLE RESILIENT WEDGE, CLOW MODEL 2638 (4" THROUGH 16") F-6112, EJM FLOWMASTER RESILIENT WEDGE VALVE, TYTON X TYTON, MUELLER SERIES 4"-12" A-2361-61 RESILIENT WEDGE SL X SL, U.S. PIPE A-USP1-61 RESILIENT WEDGE VALVE SLXSL FOR FIELD LOK GASKETS.
 - MECHANICAL JOINTS MUST MEET AWWA SPECIFICATION C111 AND SHALL INCLUDE PLAIN RUBBER MECHANICAL JOINT GASKETS. PLEASE QUOTE ONLY: AMERICAN PIPE "FAST GRIP" GASKET SYSTEM, GRIFFIN PIPE "FIELD LOK 350" GASKET SYSTEM, OR U.S. PIPE "FIELD LOK 350" GASKET SYSTEM.
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 - FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY THRUST BLOCKS, BENDS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE STOP BOX. FIRE HYDRANT ASSEMBLY INCLUDES 6" STOP BOX LOCATED 3' FROM HYDRANT.
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 - ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II MATERIAL.
 - ABANDONMENT OF WATER STRUCTURES SHALL FOLLOW CITY OF ANN ARBOR STANDARDS.
 - FITTINGS OTHER THAN THOSE SPECIFICALLY LISTED AS SEPARATE PAY ITEMS, BLOW-OFF ASSEMBLIES, CONCRETE THRUST BLOCKS, SOLID SLEEVES AND MECHANICAL PLUGS, WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.

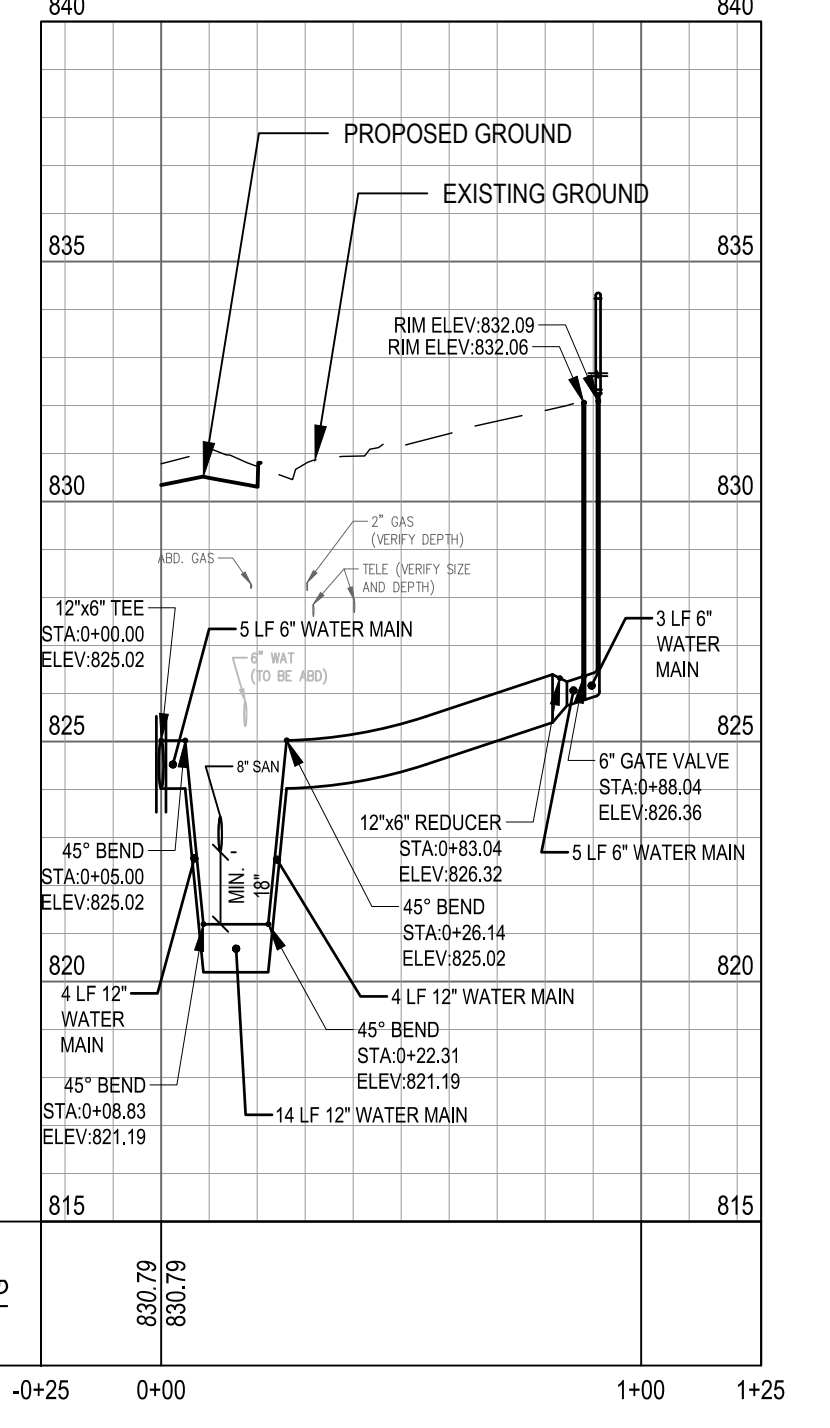
KINGSLEY STA. 31+99 HYDRANT



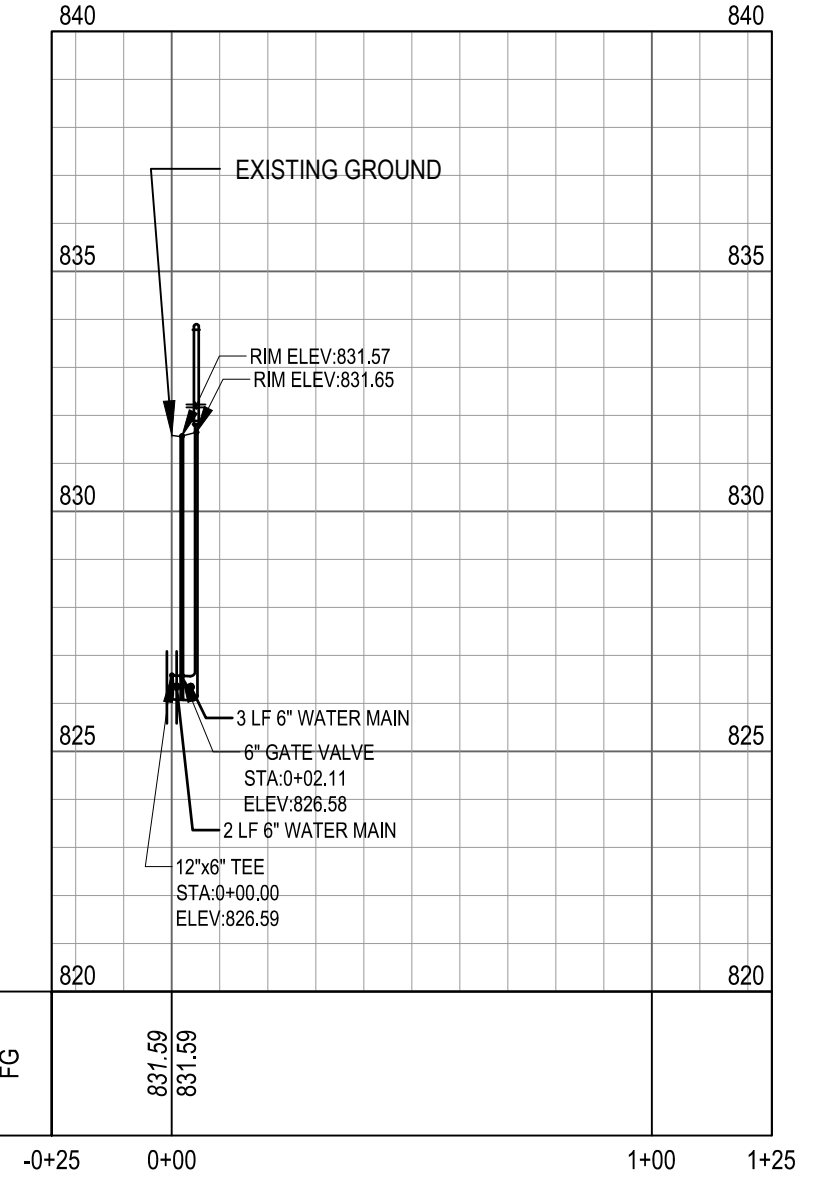
DETROIT STA. 23+45 HYDRANT



FIFTH STA. 07+22 HYDRANT



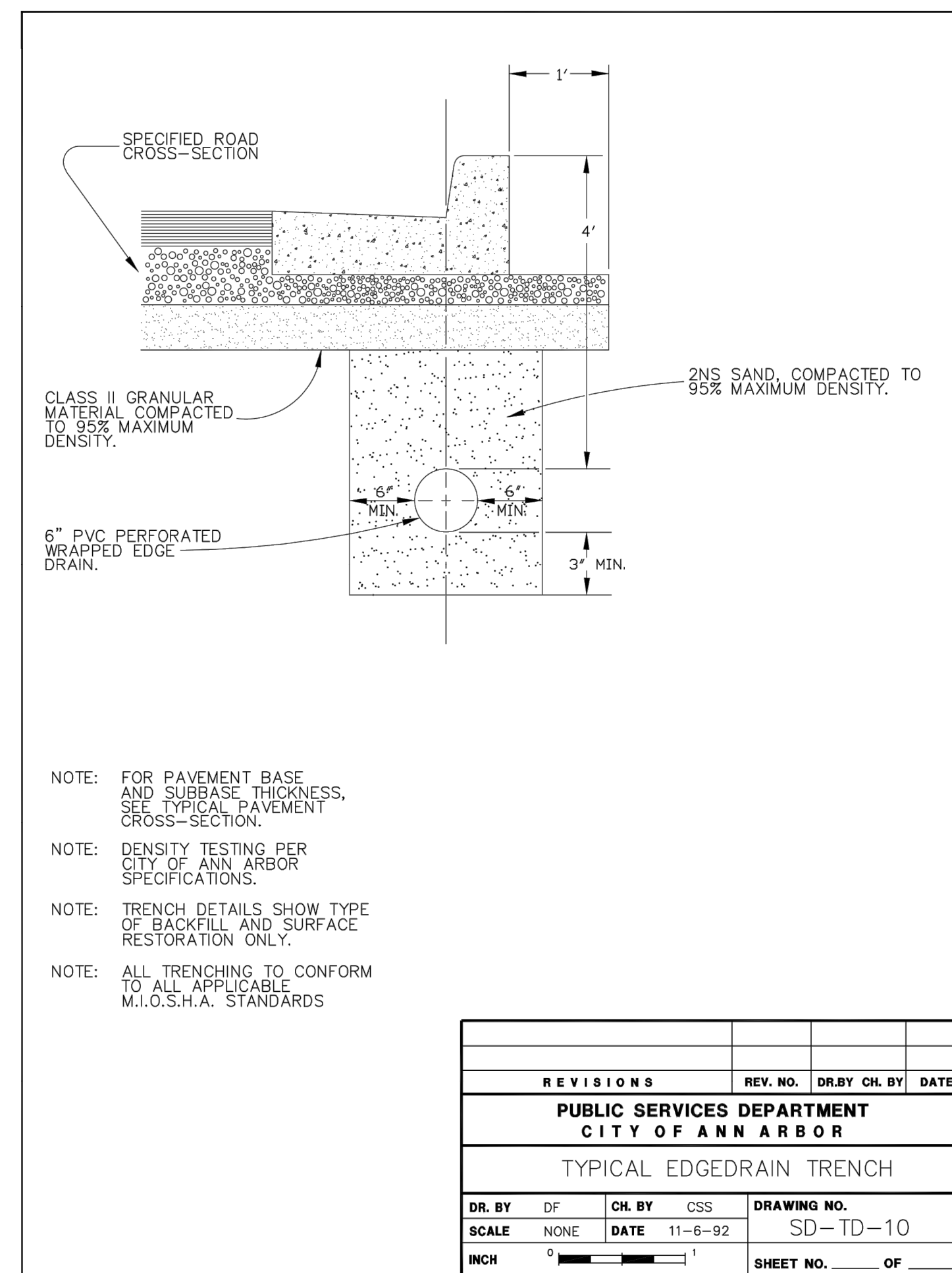
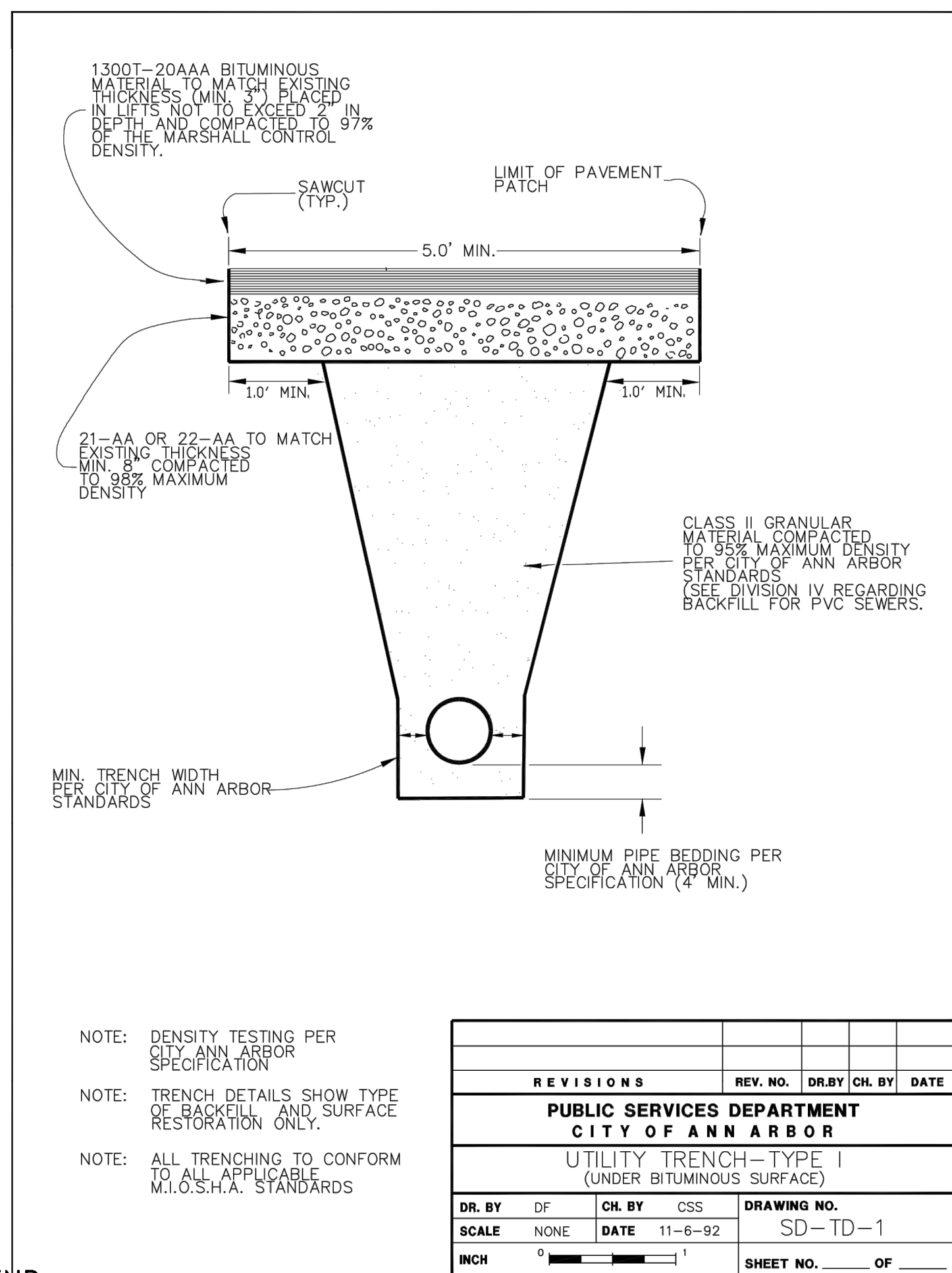
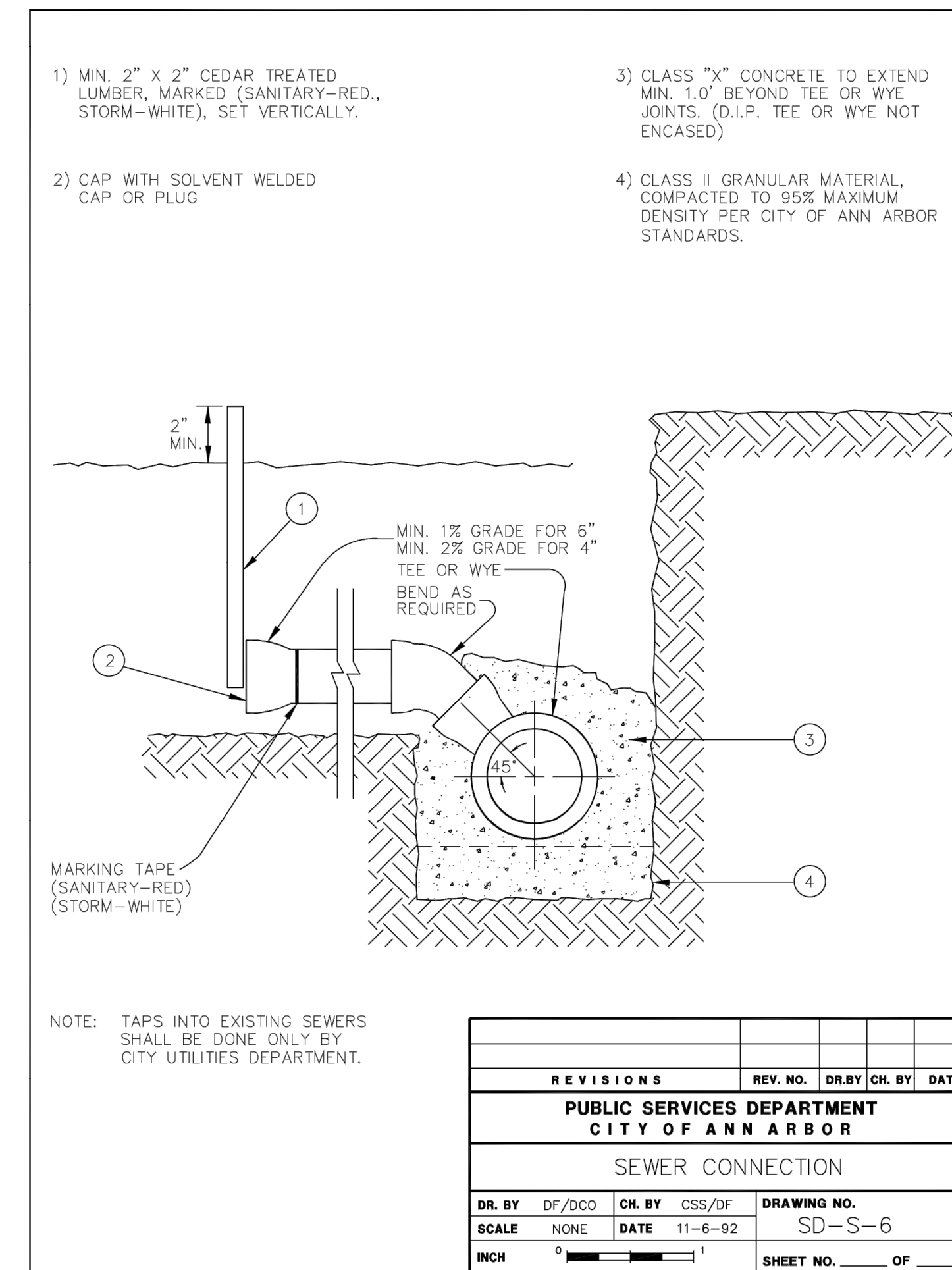
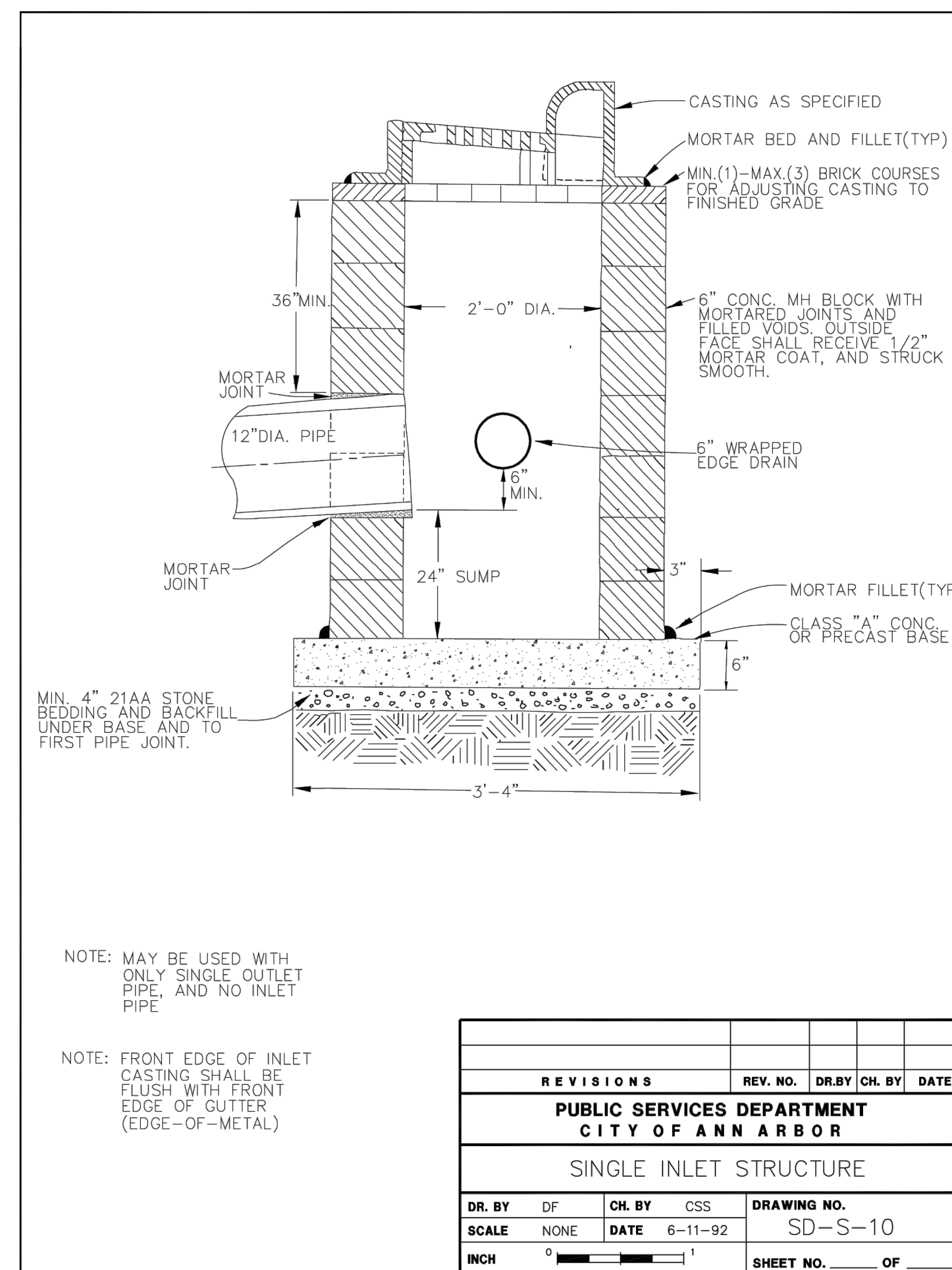
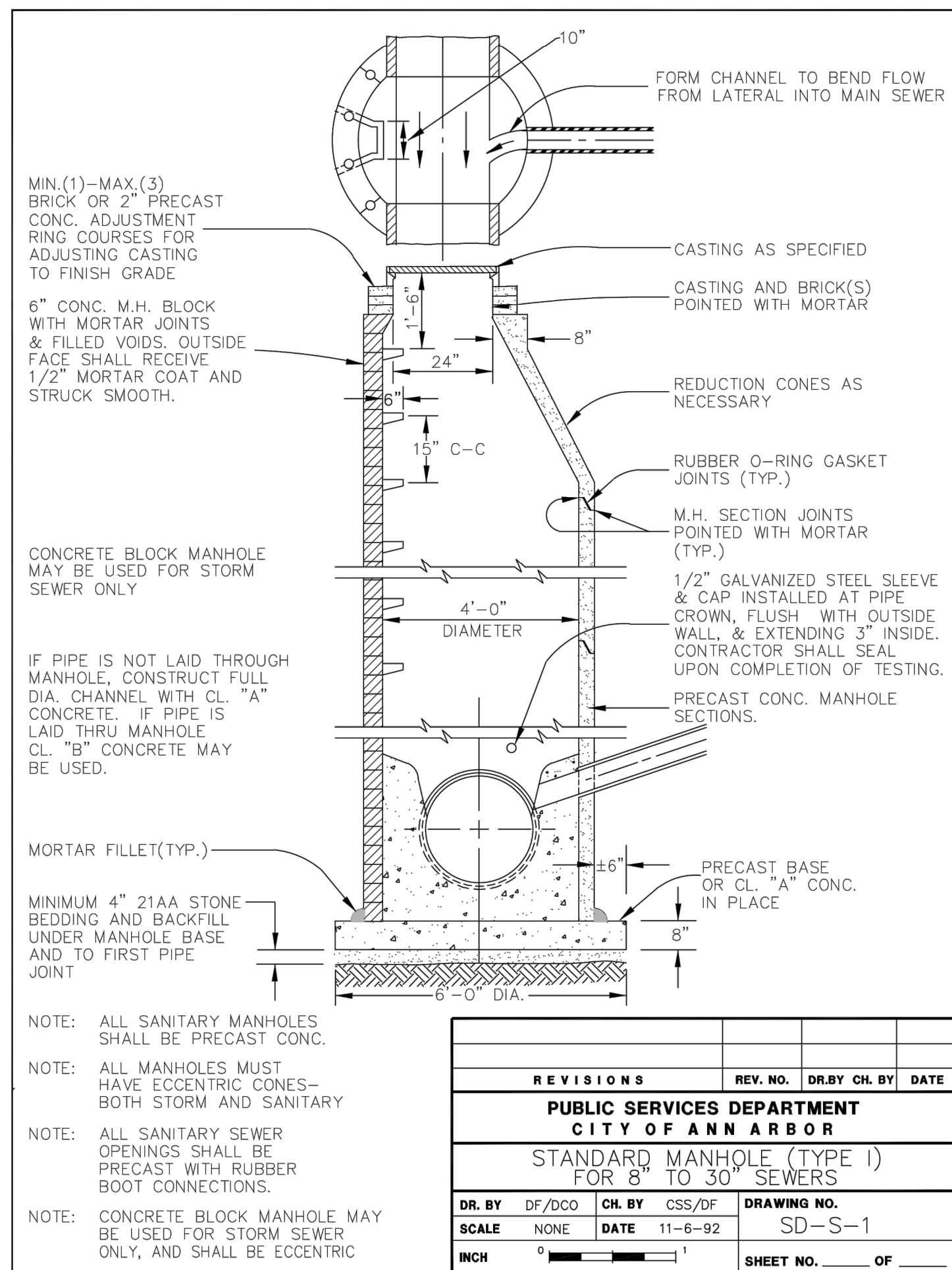
DETROIT STA. 27+73 HYDRANT



LEGEND

	EXISTING CURB INLET		EXISTING SANITARY MANHOLE		CLEANOUT
	EXISTING STORM MANHOLE		EXISTING GATE VALVE-IN-BOX		GATE VALVE-IN-WELL
	EXISTING HYDRANT		STORM PIPE		REMOVE SEWER
	EXISTING STORM		CURB INLET		ABANDON WATER LINE
	EXISTING WATER		STORM MANHOLE		WATER LINE
	EXISTING SANITARY		HYDRANT		LIMITS OF WORK
	EXISTING GAS				

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR					
WATER MAIN PROFILES					
SCALE		INCH			
1" = 40'		0" 20' 40'			
DRAWING NO.		C7.00			
SHEET NO.		OF			
SEE ABOVE	BID PLANS	12-01-2017			
BENCH MARK	SURVEY BOOK	95% CD	11-17-2017		
REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY	APPROVED BY



LEGEND

SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

UTILITY DETAILS

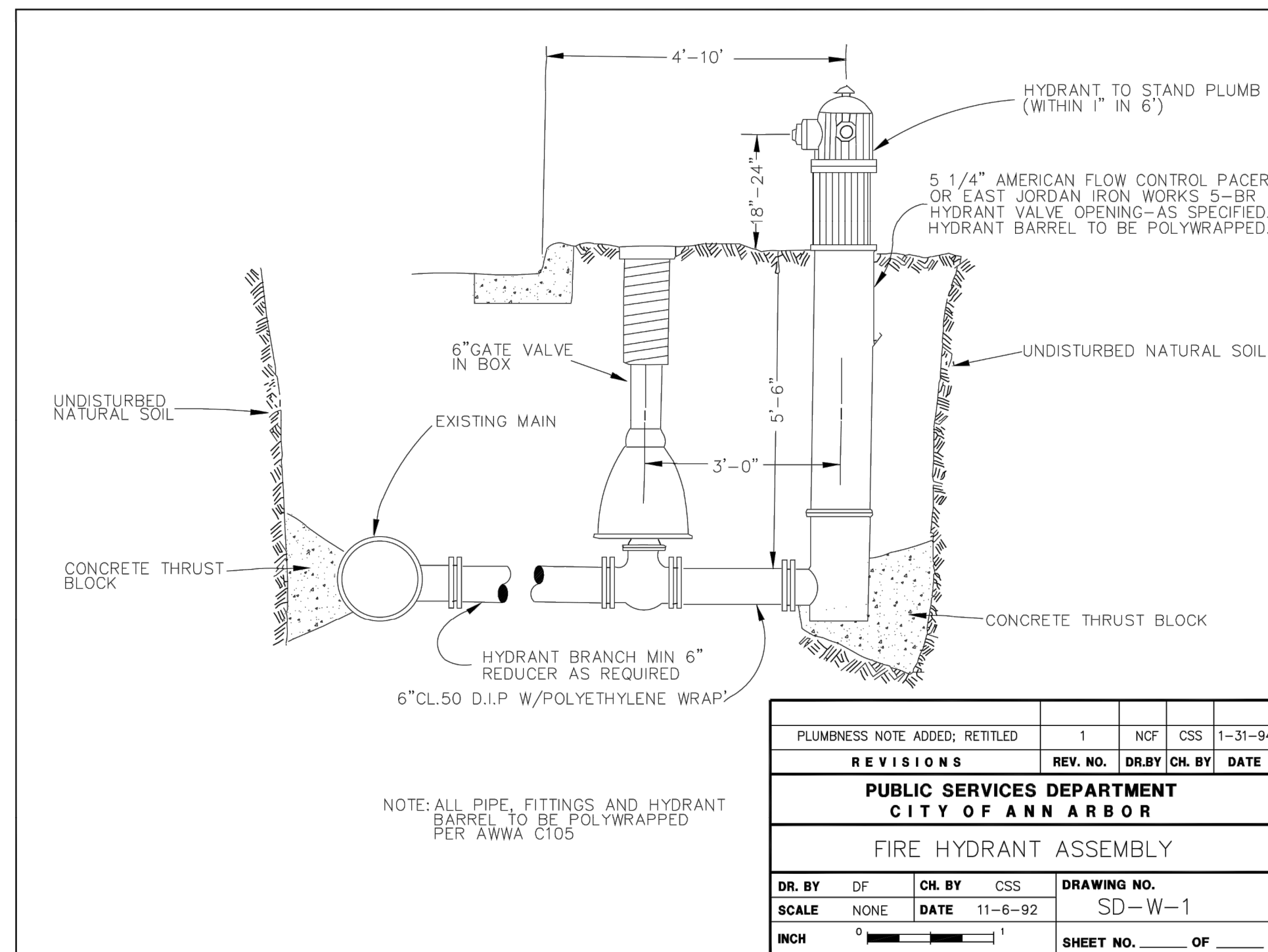
SCALE 1" = 40'

INCH 0' 20' 40'

DRAWING NO. **C7.01**

SHEET NO. _____ OF _____

APPROVED BY _____



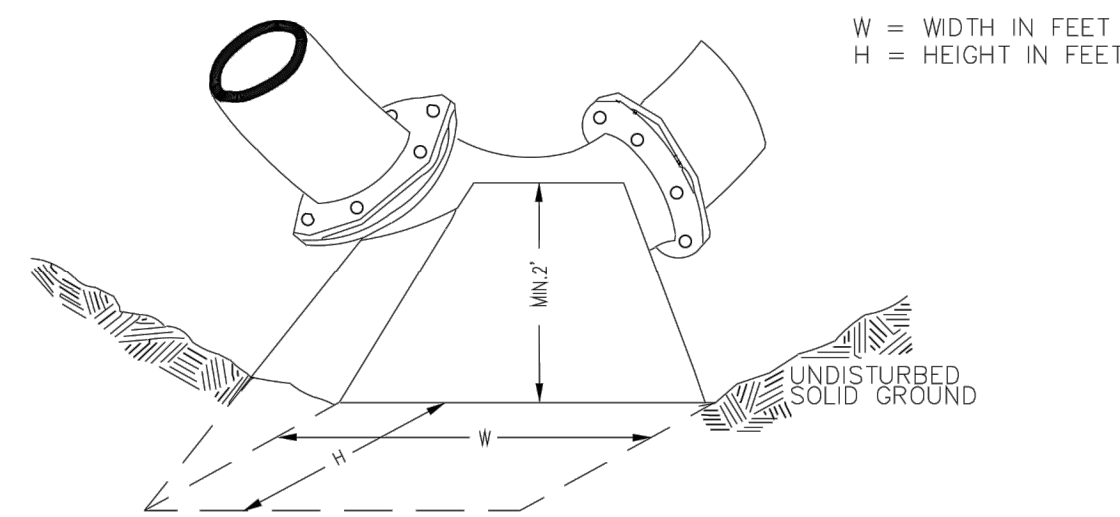
PLUMBING NOTE ADDED; RETITLED	1	NCF	CSS	1-31-94
REVISIONS	REV. NO.	DR. BY	CH. BY	DATE
PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR				
FIRE HYDRANT ASSEMBLY				
DR. BY	D.F.	CH. BY	C.S.S.	DRAWING NO.
NONE				SD-W-1
SCALE	NONE	DATE	11-6-92	SHEET NO. 1 OF 1
INCH	$\frac{1}{4}$	1		SHEET NO. 1 OF 1

NOTE: ALL PIPE, FITTINGS AND HYDRANT BARREL TO BE POLYWRAPPED PER AWWA C105

MINIMUM STANDARDS

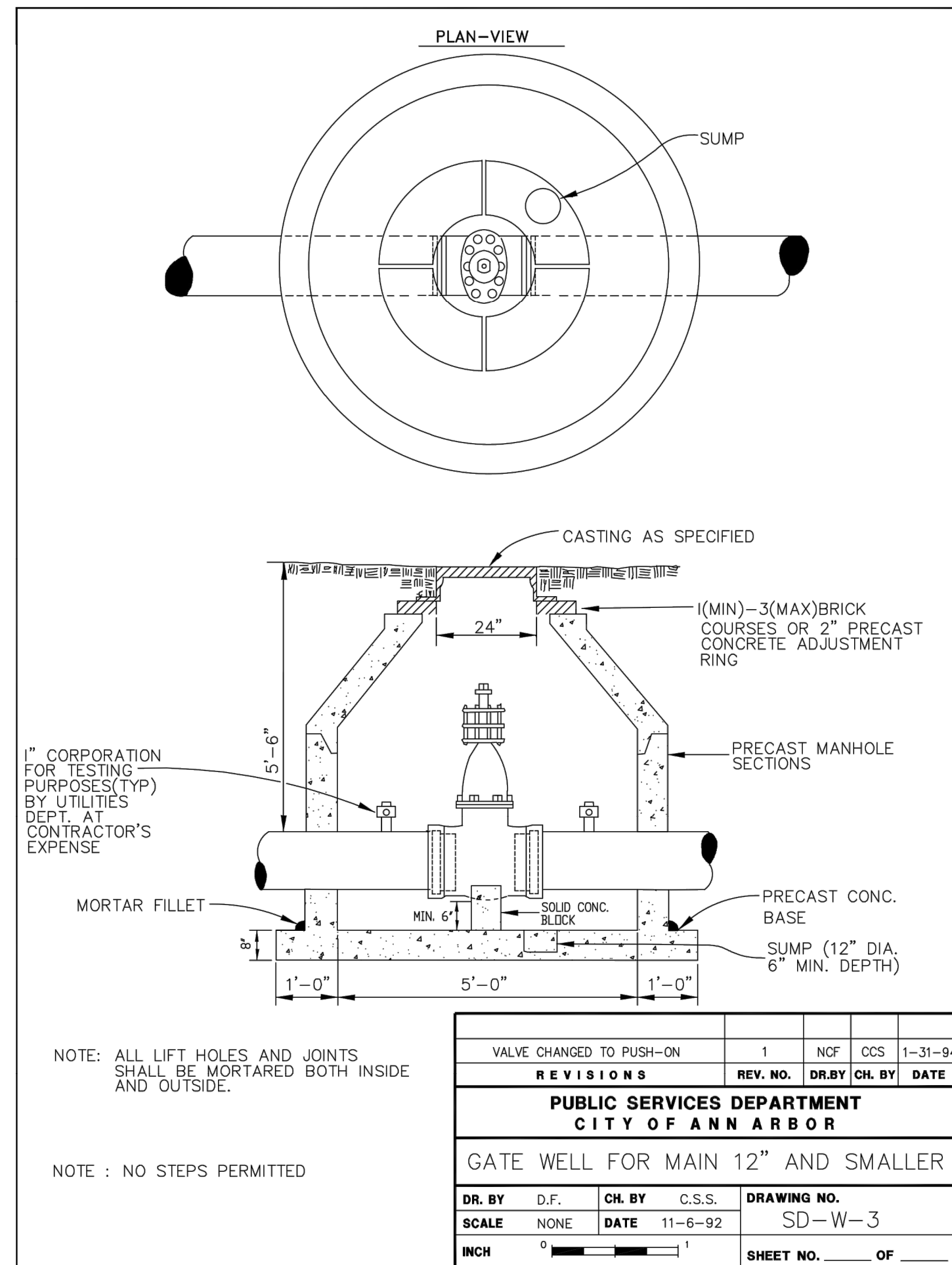
REACTION BACKING: The Class "A" concrete at the Fitting face shall extend to within (2) inches of the bell and shall extend from the fitting face a minimum of (2) feet to the UNDISTURBED SOLID GROUND. The dimensions of the reaction backing (thrust block) at the face of the undisturbed solid ground shall be as shown in the Table below. If there isn't sufficient space for the installation of the "thrust block" without interference with other services, another arrangement satisfactory to the engineer shall be used, i.e. encasement.

Fittings I.D. Inches	Plug Tee Cross		Bends				Hydrant	
	W	H	90°	45°	22 1/2°	11 1/4°	W	H
2.5	1	1	1	1	1	1		
4	1	1	1	1	1			
6	2	1.5	2	2	2	1	1	2 1.5
8	2.5	2	3.5	2	2	2	1	1 1 2.5 2
12	3.5	3	5.5	3	3.5	2.5	2	2 1
16	6	3.5	6	4	5	3	3.5	2.5 2 2
20	8	4	12	4	6	4	4	3 3 2
24	11	4	17	4	9	4	6	4 3.5 2



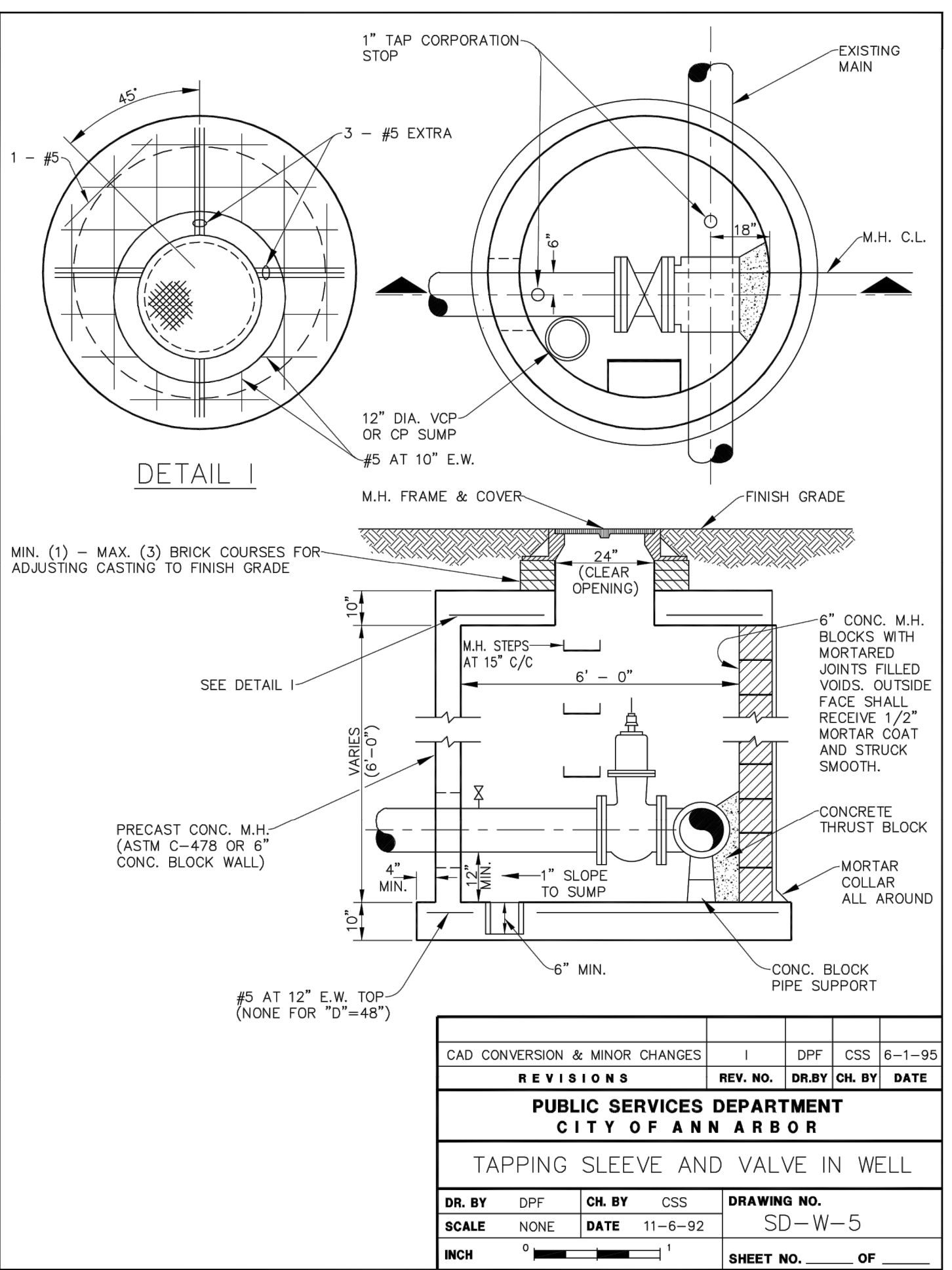
NOTE: THESE ARE MINIMUM STANDARDS. WHERE SOIL CONDITIONS DICTATE, ADJUSTMENTS IN SIZE SHALL BE MADE BY THE PUBLIC SERVICES DIRECTOR.

REVISIONS	REV. NO.	DR. BY	CH. BY	DATE
PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR				
THRUST BLOCK				
DR. BY	D.F.	CH. BY	C.S.S.	DRAWING NO.
NONE				SD-W-2
SCALE	NONE	DATE	11-6-92	SHEET NO. 1 OF 1
INCH	$\frac{1}{4}$	1		SHEET NO. 1 OF 1

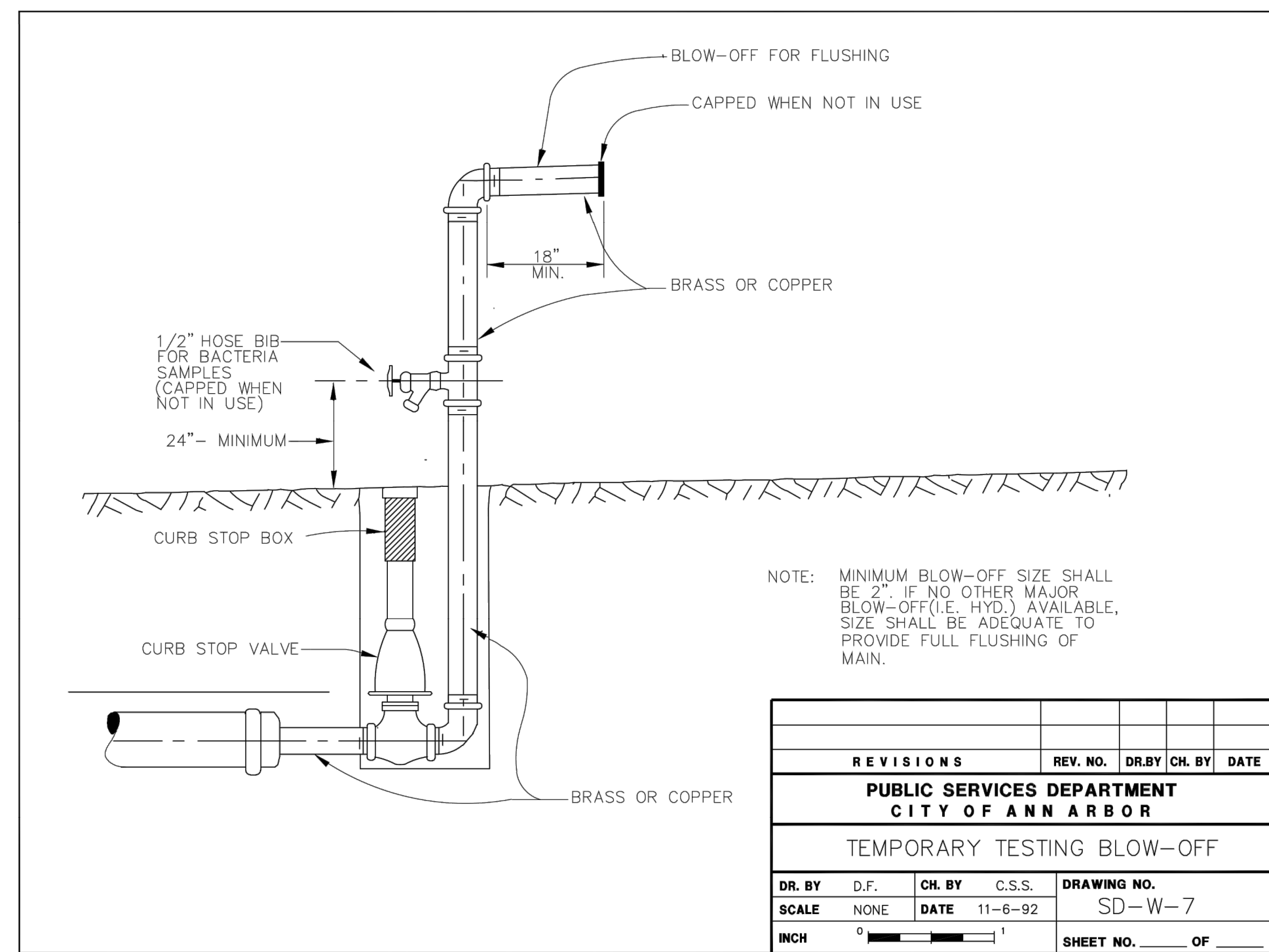


NOTE: ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.

NOTE: NO STEPS PERMITTED

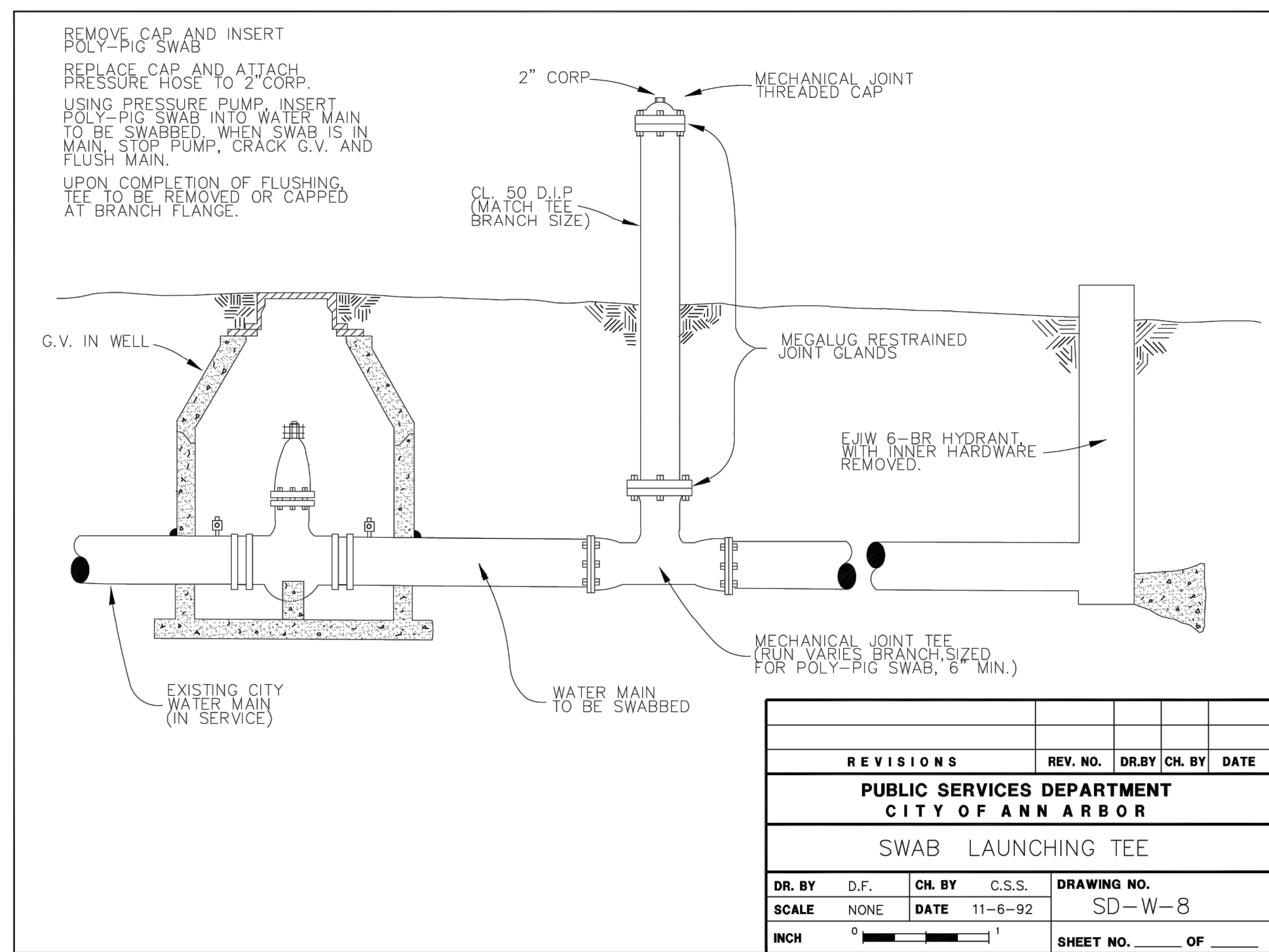


CAD CONVERSION & MINOR CHANGES	1	DPF	CSS	6-1-95
REVISIONS	REV. NO.	DR. BY	CH. BY	DATE
PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR				
TAPPING SLEEVE AND VALVE IN WELL				
DR. BY	D.F.	CH. BY	C.S.S.	DRAWING NO.
NONE				SD-W-5
SCALE	NONE	DATE	11-6-92	SHEET NO. 1 OF 1
INCH	$\frac{1}{4}$	1		SHEET NO. 1 OF 1



NOTE: MINIMUM BLOW-OFF SIZE SHALL BE 2". IF NO OTHER MAJOR BLOW-OFF (I.E. HYD.) AVAILABLE, SIZE SHALL BE ADEQUATE TO PROVIDE FULL FLUSHING OF MAIN.

REVISIONS	REV. NO.	DR. BY	CH. BY	DATE
PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR				
TEMPORARY TESTING BLOW-OFF				
DR. BY	D.F.	CH. BY	C.S.S.	DRAWING NO.
NONE				SD-W-7
SCALE	NONE	DATE	11-6-92	SHEET NO. 1 OF 1
INCH	$\frac{1}{4}$	1		SHEET NO. 1 OF 1



REVISIONS	REV. NO.	DR. BY	CH. BY	DATE
PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR				
SWAB LAUNCHING TEE				
DR. BY	D.F.	CH. BY	C.S.S.	DRAWING NO.
NONE				SD-W-8
SCALE	NONE	DATE	11-6-92	SHEET NO. 1 OF 1
INCH	$\frac{1}{4}$	1		SHEET NO. 1 OF 1

LEGEND

SEE ABOVE					
BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY CH. BY
			BID PLANS	12-01-2017	
			95% CD	11-17-2017	

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

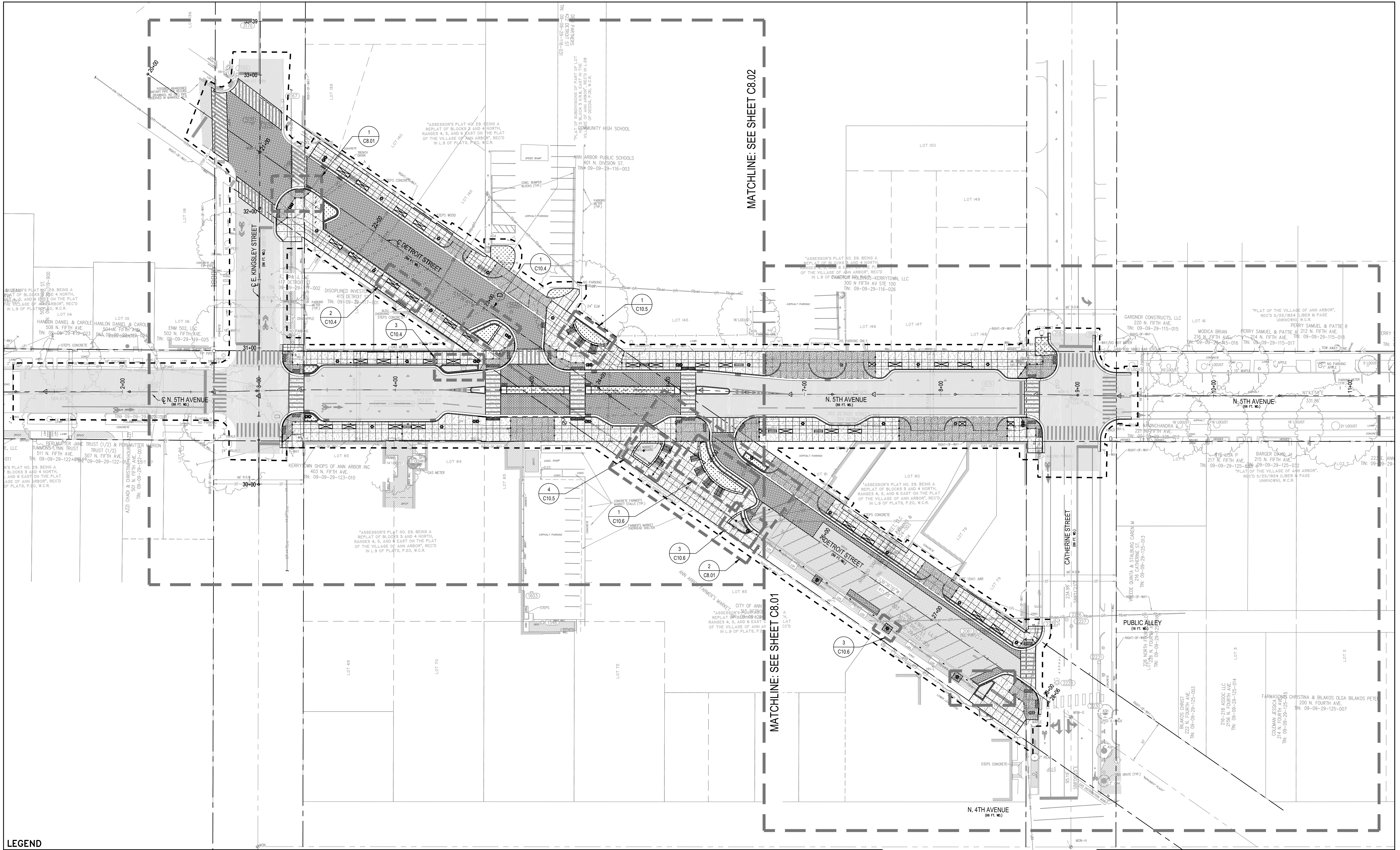
UTILITY DETAILS

SCALE
1" = 40'

INCH
0' 20' 40'

DRAWING NO.
C7.02

SHEET NO. ___ OF ___



LEGEND

MATCHLINE: SEE SHEET C8.02

MATCHLINE: SEE SHEET C8.01

SEE ABOVE

BENCH MARK

SURVEY BOOK



REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
	BID PLANS	12-01-2017		
	95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

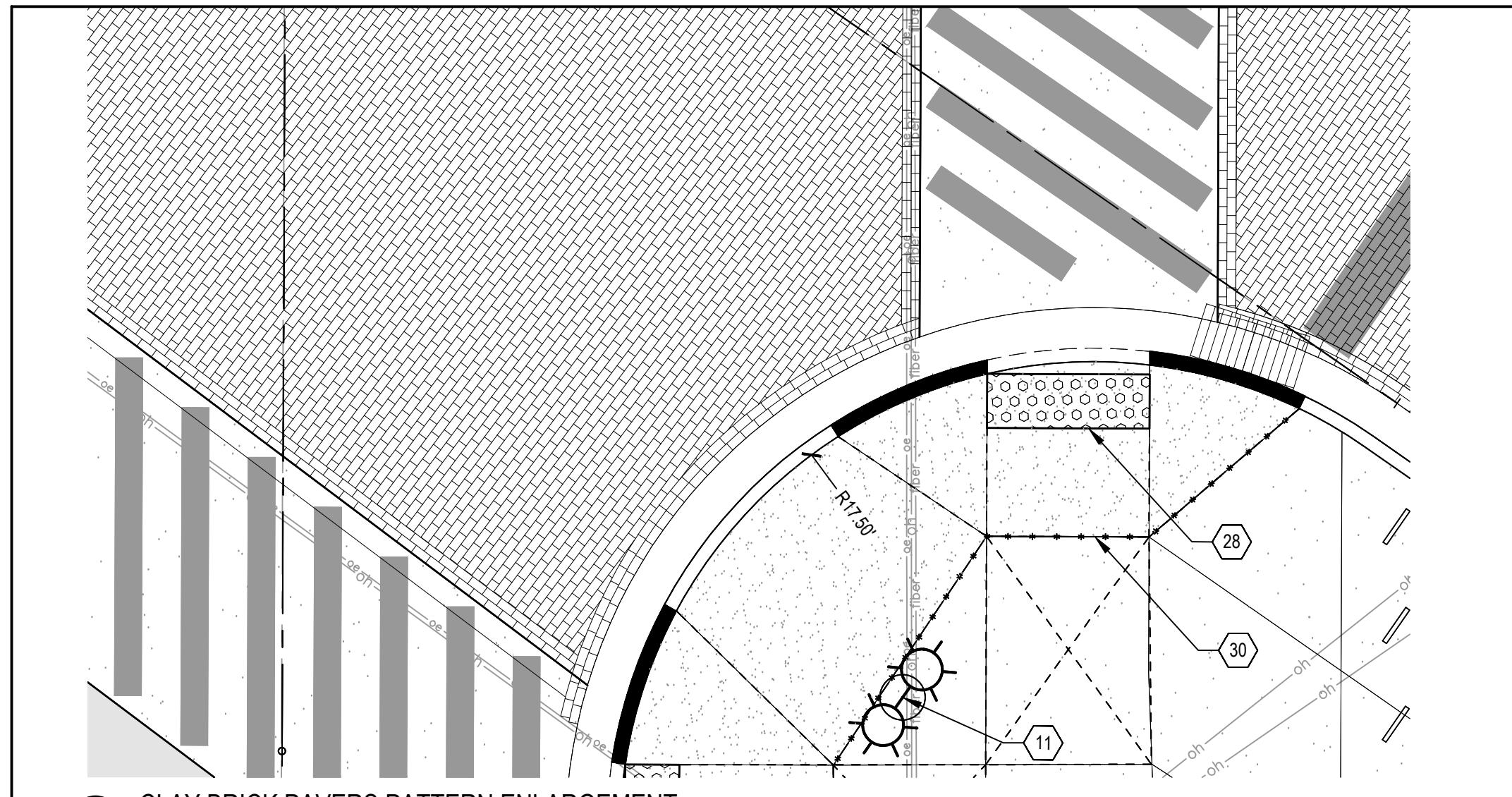
OVERALL STREETScape LAYOUT & MATERIALS PLAN

SCALE: 1"=30'

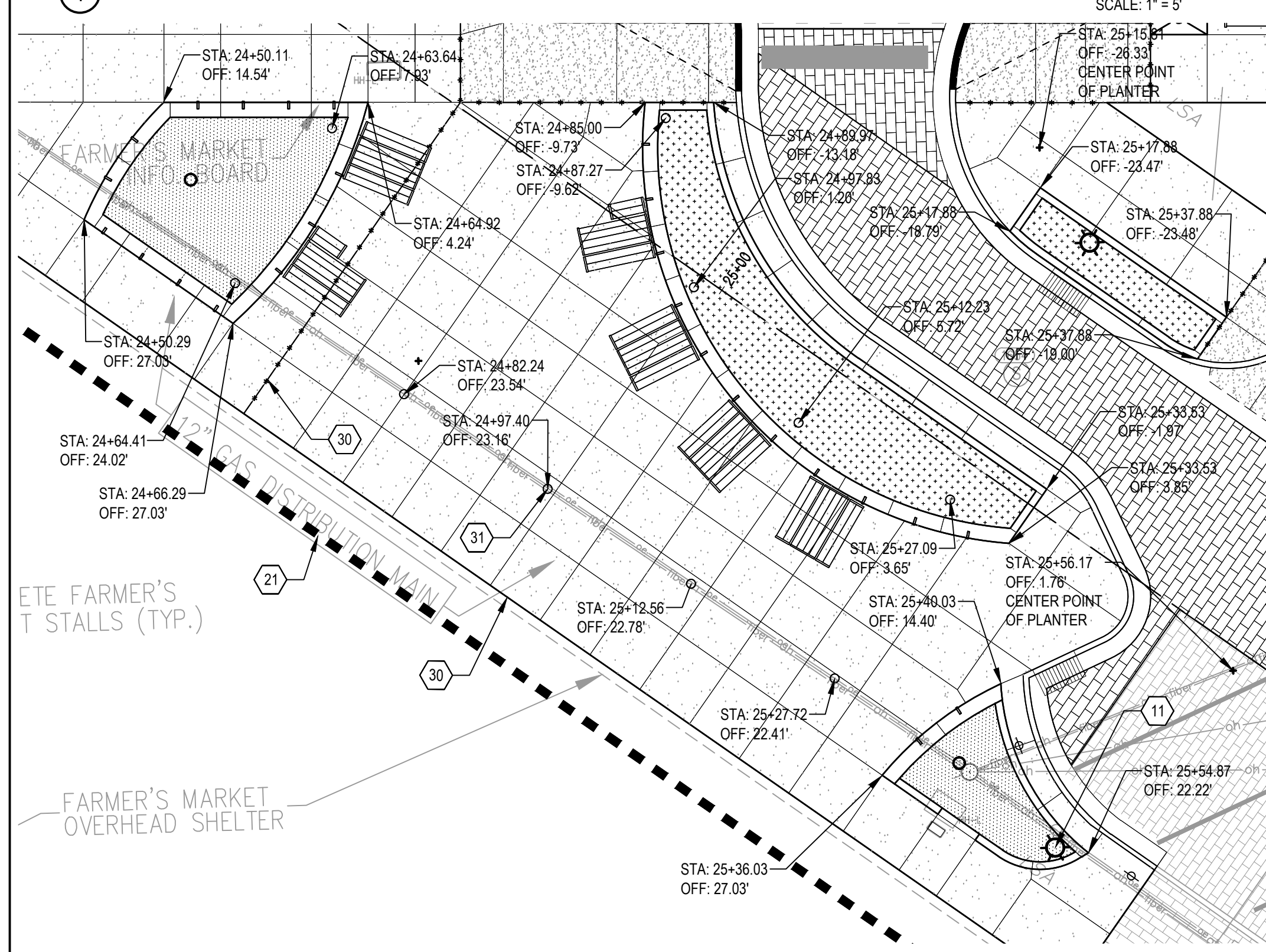
DRAWING NO. C8.00

SHEET NO. ___ OF ___

APPROVED BY: _____



1 CLAY BRICK PAVERS PATTERN ENLARGEMENT



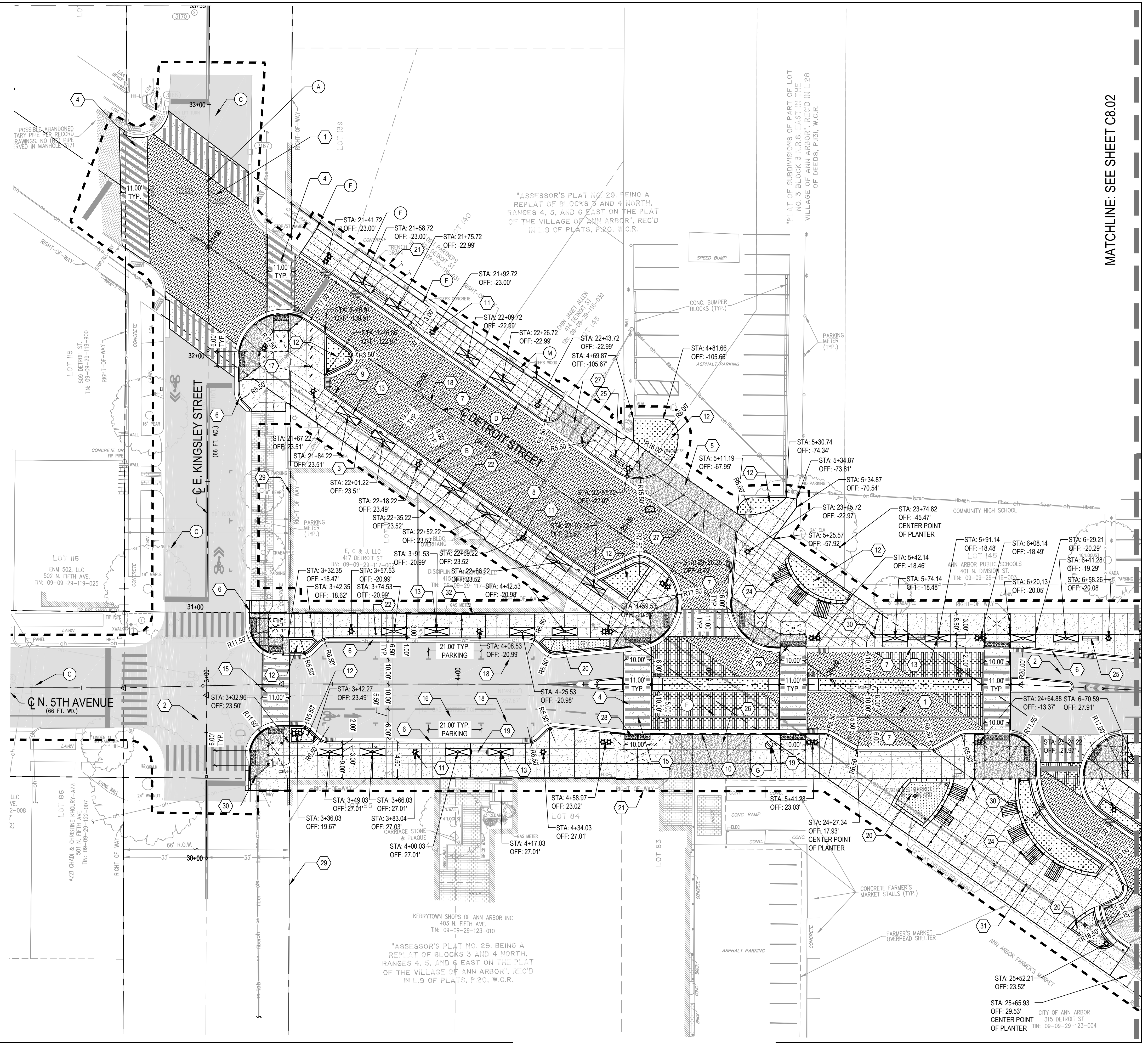
2 FARMER MARKET PLAZA ENLARGEMENT

DESCRIPTIVE KEYED NOTES:

- A CLAY BRICK PAVERS SET IN RUNNING BOND PATTERN PERPENDICULAR TO THE LENGTH OF DETROIT STREET
- B USE SALVAGE STONE CURB (PREFERRED) OR 6-INCH STRAIGHT CONCRETE CURB (AS NEEDED).
- C PROJECT ALSO INCLUDED ASPHALT STREET RESURFACING AS NOTED ON PLANS.
- D REMOVE AND REPLACE CONCRETE CURB ON THIS SIDE OF THIS BLOCK. SALVAGE EXISTING SECTIONS OF STONE CURB AND REINSTALL ON THE WEST SIDE OF THIS BLOCK.
- E CLAY BRICK PAVERS SET IN RUNNING BOND PATTERN PERPENDICULAR TO THE LENGTH OF FIFTH AVENUE.
- F ALIGN EDGE OF PAVEMENT WITH NEAREST EXISTING CONCRETE JOINT. COORDINATE WITH DEMOLITION PLANS FOR SAWCUT LOCATION.
- G CONFIRM LOCATION WITH ENGINEER PRIOR INSTALLATION.
- H REPLACE DAMAGED PAVERS IN THIS AREA AS DIRECTED BY THE PROJECT ENGINEER.
- I PROJECT ALSO INCLUDED ASPHALT STREET RESURFACING OF FIFTH AVENUE FROM CATHERINE STREET TO ANN STREET.
- J EXISTING CURB TO REMAIN.
- K EXISTING BRICKS TO REMAIN.
- L EXISTING CURB ON THIS BLOCK IS POURED CONCRETE AND IN GOOD CONDITION. DAMAGED AREAS WILL BE REPLACED WITH MATCHING CURB AS DIRECTED BY PROJECT ENGINEER.
- M REBUILD THE RETAINING WALL AS DIRECTED BY PROJECT ENGINEER.
- N AT EACH CURB OF WALL OPENING INTO A RAIN GARDEN, INSTALL A SMALL BED OF RIP-RAP 18" WIDE, 12" DEEP, AND THE WIDTH OF THE OPENING PLUS 6" AT EACH END.
- O PROVIDE 24" LONG BY 5" DEEP SPILLWAY NOTCH IN PLATING EDGE, TOP OF SPILLWAY TO BE FLUSH WITH SIDEWALK AND TOP OF CURB.

LEGEND

1	CLAY BRICK PAVERS, TYP.	6	CONCRETE CURB AND GUTTER, TYP.	11	STREET LIGHT, TYP.	17	BIKE HOOP, SURFACE MOUNT, TYP.	23	BIKE SHARE PARKING BY THE CITY OF ANN ARBOR, TYP.	29	RIGHT OF WAY, TYP.
2	HEAVY DUTY HMA PAVEMENT, TYP.	7	CONCRETE CURB & GUTTER - THICKENED PAN, TYP.	12	LANDSCAPE PLANTER, TYP.	18	PARKING STRIPPING, TYP.	24	URBAN TABLE AND BENCHES, TYP.	30	EXPANSION JOINT, TYP.
3	6-INCH CONCRETE, TYP.	8	CONCRETE CURB, 6-INCH STRAIGHT, TYP.	13	TREE GRATE, 3FT X 10FT, TYP.	19	RELOCATED HISTORIC MARKER, TYP.	25	URBAN BENCH, TYP.	31	FESTOON LIGHTING POLE, TYP.
4	CONCRETE CROSSWALK, 12-INCH, TYP.	9	RESET STONE CURB, TYP.	14	TREE GRATE, 3FT X 5FT, TYP.	20	RAIN GARDEN, TYP.	26	8-INCH DRIVE APPROACH TYPE L, TYP.	32	INTEGRAL CURB
5	8-INCH CONCRETE, TYP.	10	CONCRETE CURB AND GUTTER - MOUNTABLE, TYP.	15	PEDESTRIAN CROSSWALK, TYP.	21	LIMIT OF WORK, TYP.	27	8-INCH DRIVE APPROACH TYPE M, TYP.		
				16	5' BICYCLE LANE, TYP.	22	PARKING METER, TYP.	28	DETECTABLE WARNING SURFACE, TYP.		



MATCHLINE: SEE SHEET C8.02

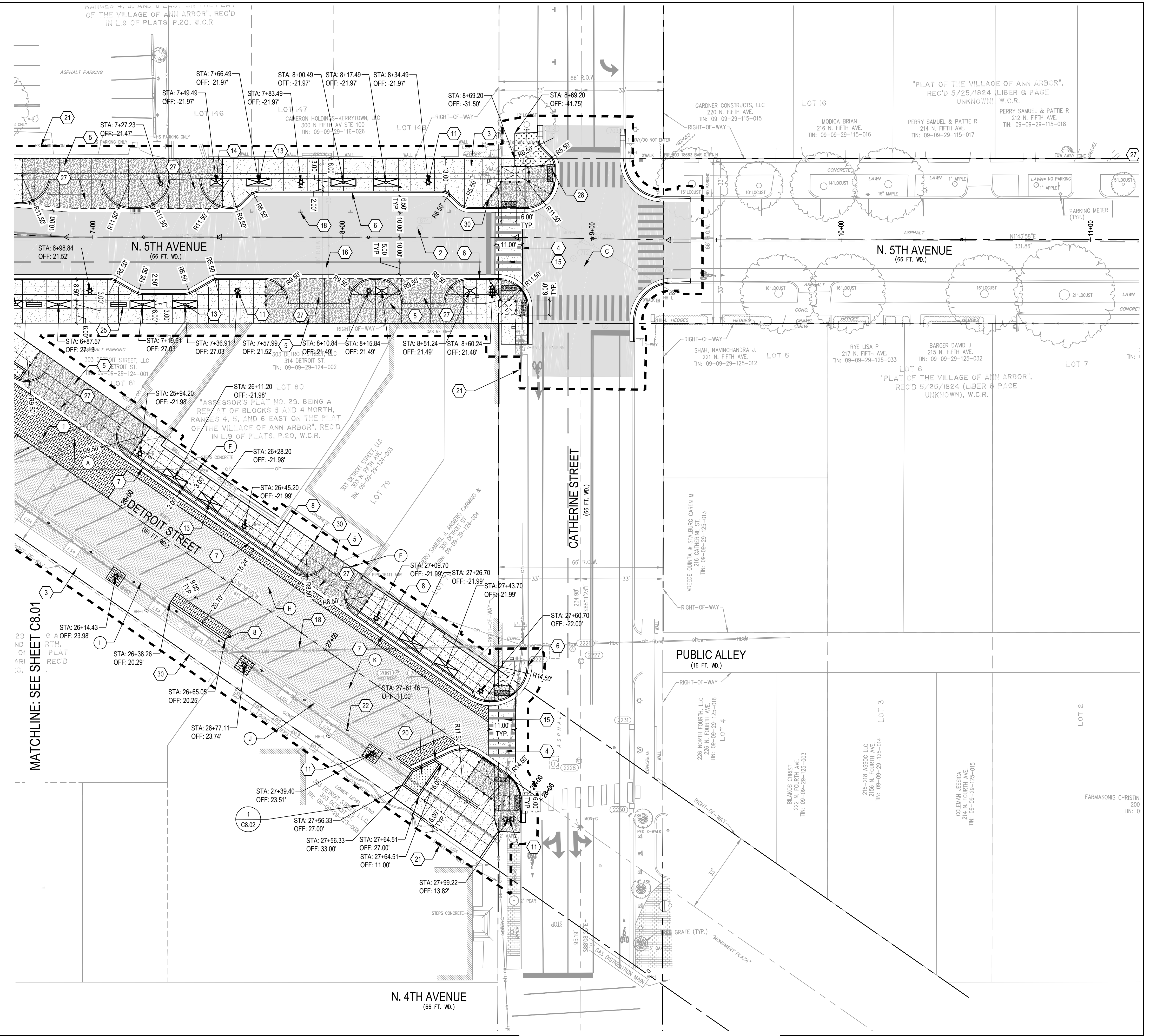
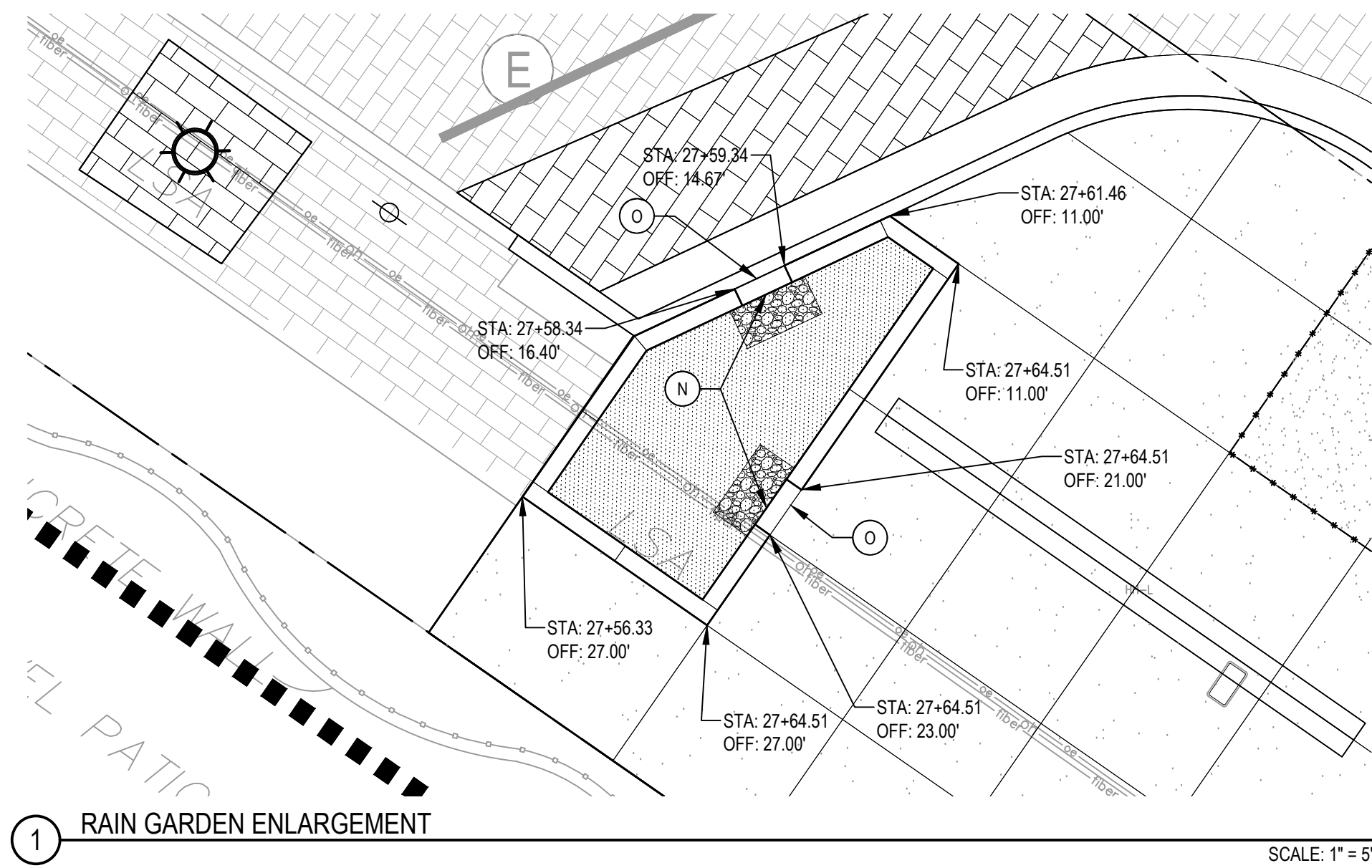
DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

STREETSCAPE LAYOUT & MATERIALS
PLAN - NORTH

SCALE	INCH
1"=20'	
DRAWING NO.	C8.01
SHEET NO.	___ OF ___

REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY

APPROVED BY: _____



- DESCRIPTIVE KEYED NOTES:**
- (A) CLAY BRICK PAVERS SET IN RUNNING BOND PATTERN PERPENDICULAR TO THE LENGTH OF DETROIT STREET
 - (B) USE SALVAGE STONE CURB (PREFERRED) OR 6-INCH STRAIGHT CONCRETE CURB (AS NEEDED).
 - (C) PROJECT ALSO INCLUDED ASPHALT STREET RESURFACING AS NOTED ON PLANS.
 - (D) REMOVE AND REPLACE CONCRETE CURB ON THIS SIDE OF THIS BLOCK. SALVAGE EXISTING SECTIONS OF STONE CURB AND REINSTALL ON THE WEST SIDE OF THIS BLOCK.
 - (E) CLAY BRICK PAVERS SET IN RUNNING BOND PATTERN PERPENDICULAR TO THE LENGTH OF FIFTH AVENUE.
 - (F) ALIGN EDGE OF PAVEMENT WITH NEAREST EXISTING CONCRETE JOINT. COORDINATE WITH DEMOLITION PLANS FOR SAWCUT LOCATION.
 - (G) CONFIRM LOCATION WITH ENGINEER PRIOR INSTALLATION.
 - (H) REPLACE DAMAGED PAVERS IN THIS AREA AS DIRECTED BY THE PROJECT ENGINEER.
 - (I) PROJECT ALSO INCLUDED ASPHALT STREET RESURFACING OF FIFTH AVENUE FROM CATHERINE STREET TO ANN STREET.
 - (J) EXISTING CURB TO REMAIN.
 - (K) EXISTING BRICKS TO REMAIN.
 - (L) EXISTING CURB ON THIS BLOCK IS POURED CONCRETE AND IN GOOD CONDITION. DAMAGED AREAS WILL BE REPLACED WITH MATCHING CURB AS DIRECTED BY PROJECT ENGINEER.
 - (M) REBUILD THE RETAINING WALL AS DIRECTED BY PROJECT ENGINEER.
 - (N) AT EACH CURB OF WALL OPENING INTO A RAIN GARDEN, INSTALL A SMALL BED OF RIP-RAP 18" WIDE, 12" DEEP, AND THE WIDTH OF THE OPENING PLUS 6" AT EACH END.
 - (O) PROVIDE 24" LONG BY 5" DEEP SPILLWAY NOTCH IN PLATING EDGE, TOP OF SPILLWAY TO BE FLUSH WITH SIDEWALK AND TOP OF CURB.

LEGEND

1	CLAY BRICK PAVERS, TYP.	6	CONCRETE CURB AND GUTTER, TYP.	11	STREET LIGHT, TYP.	17	BIKE HOOP, SURFACE MOUNT, TYP.	23	BIKE SHARE PARKING BY THE CITY OF ANN ARBOR, TYP.	29	RIGHT OF WAY, TYP.
2	HEAVY DUTY HMA PAVEMENT, TYP.	7	CONCRETE CURB & GUTTER - THICKENED PAN, TYP.	12	LANDSCAPE PLANTER, TYP.	18	PARKING STRIPPING, TYP.	24	URBAN TABLE AND BENCHES, TYP.	30	EXPANSION JOINT, TYP.
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5	8-INCH CONCRETE, TYP.	10	CONCRETE CURB AND GUTTER - MOUNTABLE, TYP.	15	PEDESTRIAN CROSSWALK, TYP.	21	LIMIT OF WORK, TYP.	27	8-INCH DRIVE APPROACH TYPE M, TYP.		
				16	5 BICYCLE LANE, TYP.	22	PARKING METER, TYP.	28	DETECTABLE WARNING SURFACE, TYP.		

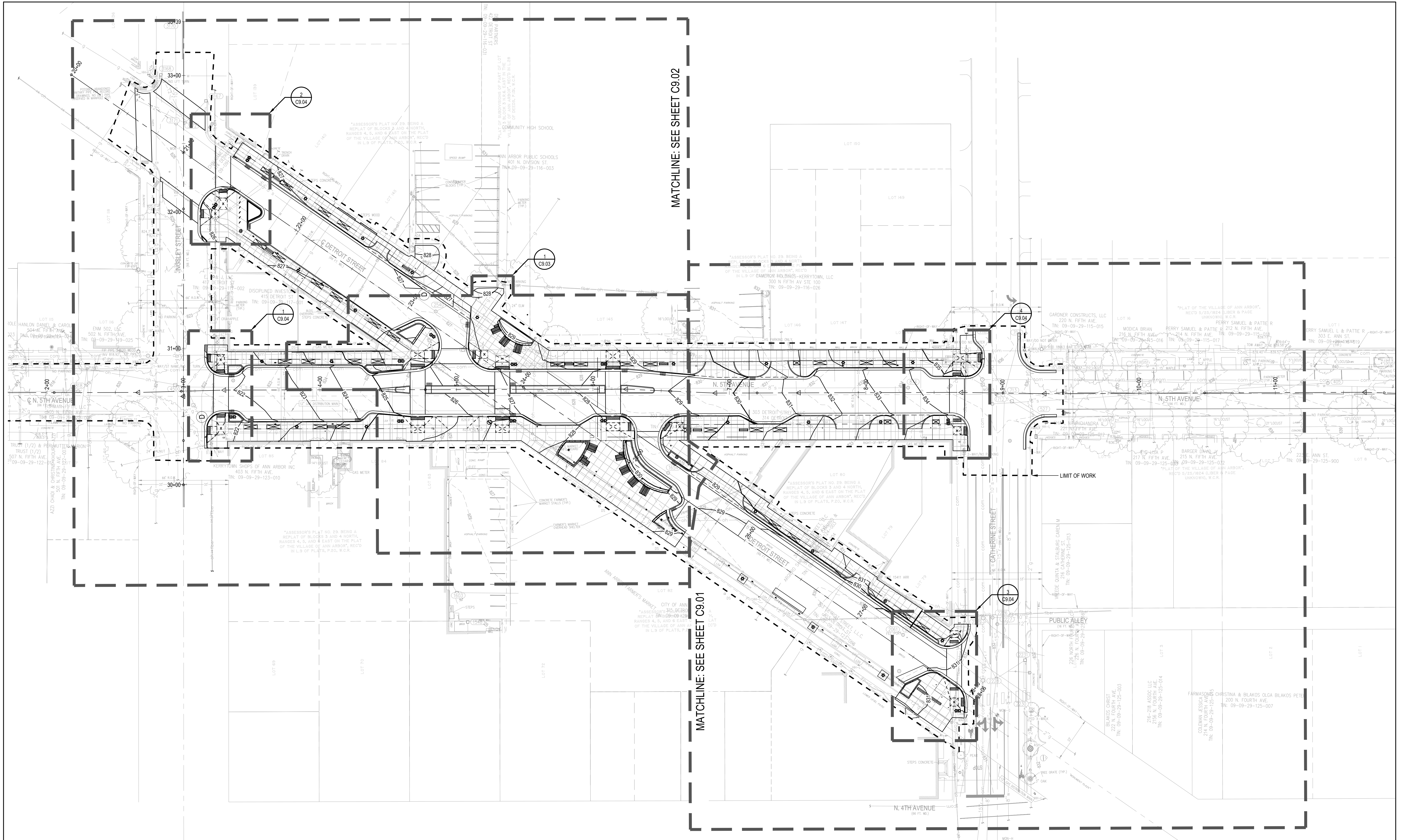
SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

STREETScape LAYOUT & MATERIALS
PLAN - SOUTH

SCALE	INCH
1" = 20'	
DRAWING NO.	C8.02
SHEET NO.	___ OF ___

APPROVED BY: _____



LEGEND

EXISTING MAJOR CONTOUR	865	DRAINAGE SLOPE	→	TOP OF WALL ELEVATION	T/S 861.50	NOTES	REFER TO SHEETS C9.05 AND C9.06 FOR ROADWAY GRADES.
EXISTING MINOR CONTOUR	864	PROPOSED SPOT ELEVATION	861.50	BOTTOM OF WALL ELEVATION	B/S 861.50		
EXISTING SPOT ELEVATION	861.50	APPROX. SPOT ELEVATION: MATCH EXISTING GRADE	861.50 M.E.±	LEVEL LANDING	□		
PROPOSED MAJOR CONTOUR	865	TOP OF CURB ELEVATION	T/C 861.50	6 INCH RAIN GARDEN DRAIN	— —		
PROPOSED MINOR CONTOUR	864	EDGE OF METAL ELEVATION	E/M 861.50				
GRADING LIMITS	---						
GRADE BREAK LINE	- - - -						



SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

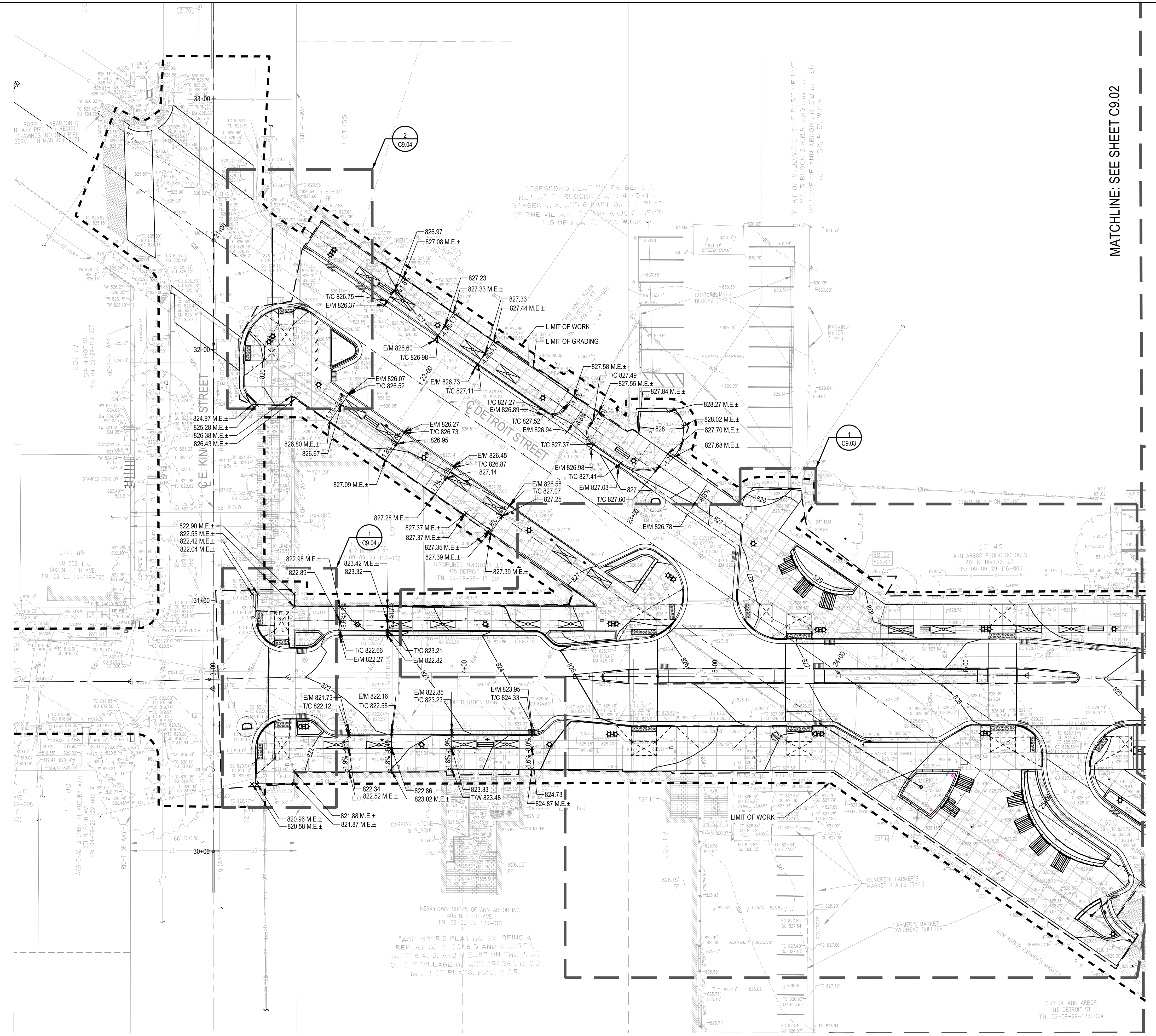
DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

OVERALL STREETScape GRADING PLAN

SCALE	INCH
1"=30'	
DRAWING NO.	C9.00
SHEET NO.	___ OF ___

APPROVED BY: _____

MATCHLINE: SEE SHEET C9.02



LEGEND

EXISTING MAJOR CONTOUR	865	DRAINAGE SLOPE	→	TOP OF WALL ELEVATION	T/S 861.50
EXISTING MINOR CONTOUR	864	PROPOSED SPOT ELEVATION	861.50	BOTTOM OF WALL ELEVATION	B/S 861.50
EXISTING SPOT ELEVATION	861.50	APPROX. SPOT ELEVATION: MATCH EXISTING GRADE	861.50 M.E.±	LEVEL LANDING	□
PROPOSED MAJOR CONTOUR	865	TOP OF CURB ELEVATION	T/C 861.50	6 INCH RAIN GARDEN DRAIN	— —
PROPOSED MINOR CONTOUR	864	EDGE OF METAL ELEVATION	E/M 861.50		
GRADING LIMITS	---				
GRADE BREAK LINE	- - - -				

NOTES:
REFER TO SHEETS C9.05 AND C9.06 FOR ROADWAY GRADES.



SEE ABOVE					
BENCH MARK					
SURVEY BOOK					
REV. NO.					
DESCRIPTION					
DATE					
DR. BY					
CH. BY					

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

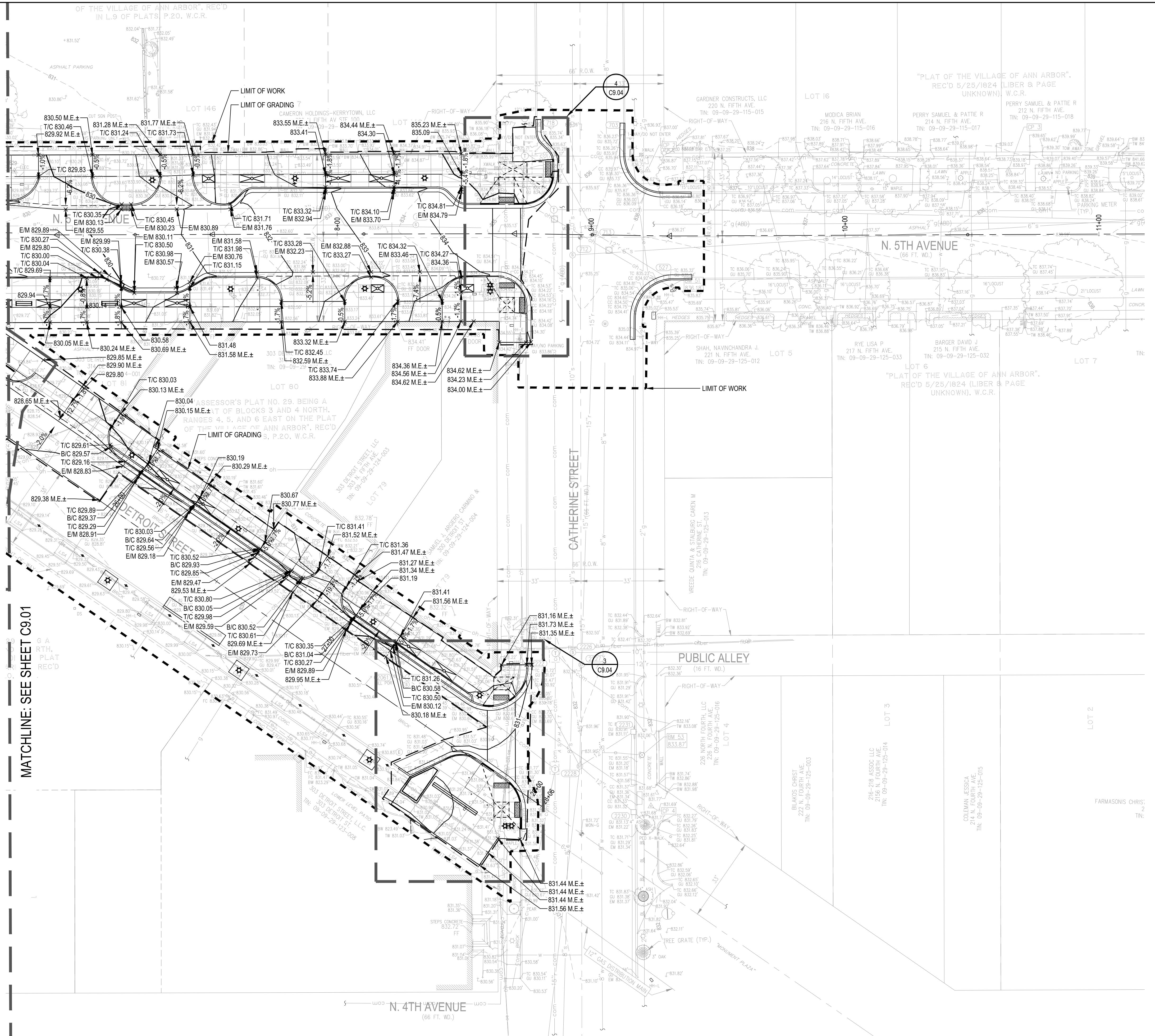
STREETSCAPE GRADING PLAN - NORTH

SCALE: 1"=20'

DRAWING NO. **C9.01**

SHEET NO. ___ OF ___

APPROVED BY: _____



LEGEND

EXISTING MAJOR CONTOUR	865	DRAINAGE SLOPE	→	TOP OF WALL ELEVATION	T/S 861.50	NOTES: REFER TO SHEETS C9.05 AND C9.06 FOR ROADWAY GRADES.
EXISTING MINOR CONTOUR	864	PROPOSED SPOT ELEVATION	861.50	BOTTOM OF WALL ELEVATION	B/S 861.50	
EXISTING SPOT ELEVATION	861.50	APPROX. SPOT ELEVATION: MATCH EXISTING GRADE	861.50 M.E.±	LEVEL LANDING	□	
PROPOSED MAJOR CONTOUR	865	TOP OF CURB ELEVATION	T/C 861.50	6 INCH RAIN GARDEN DRAIN	→	
PROPOSED MINOR CONTOUR	864	EDGE OF METAL ELEVATION	E/M 861.50			
GRADING LIMITS	---					
GRADE BREAK LINE	- - - -					



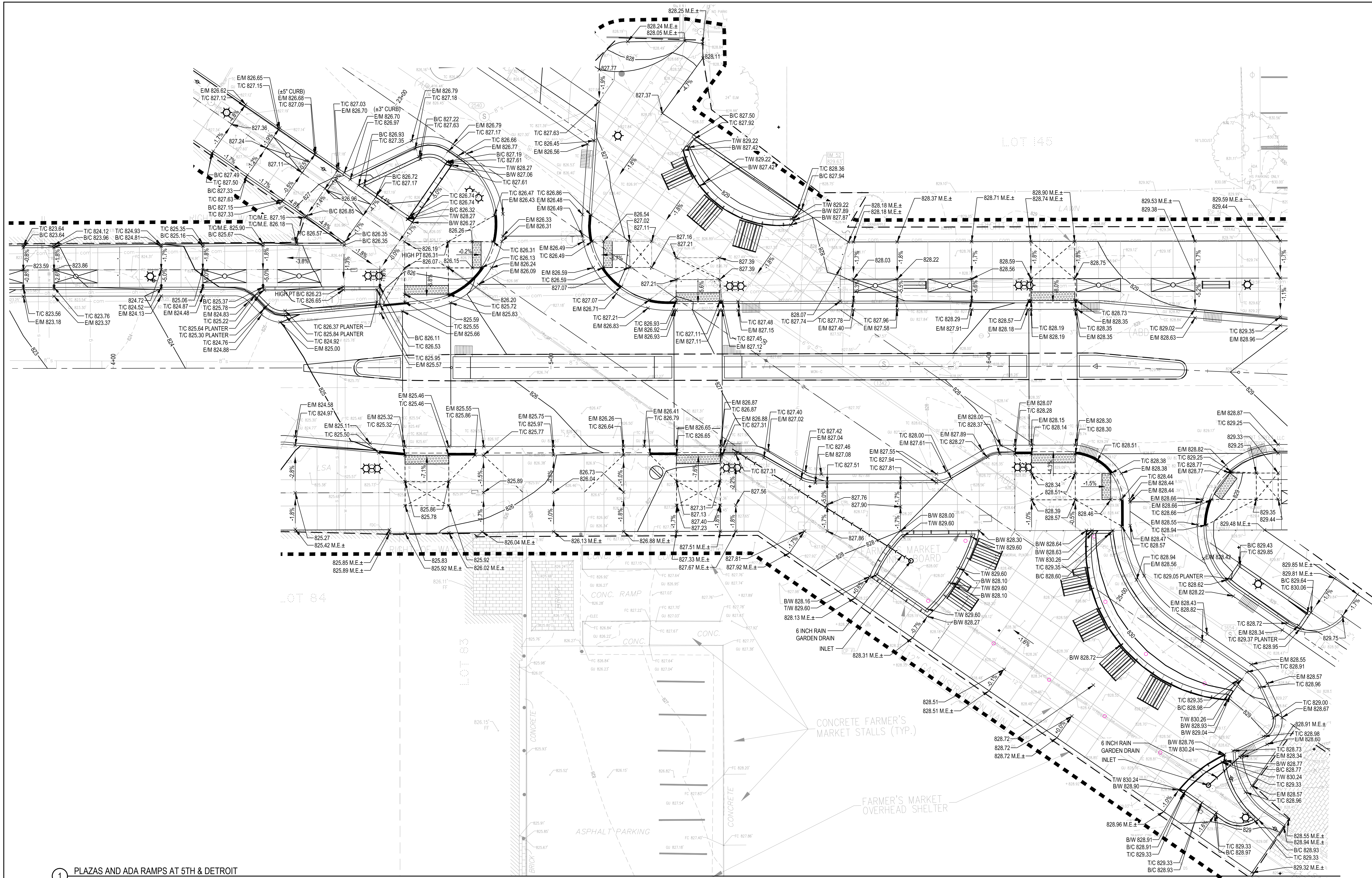
SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

STREETScape GRADING PLAN - SOUTH

SCALE	INCH
1"=20'	
DRAWING NO.	C9.02
SHEET NO.	___ OF ___

APPROVED BY: _____



1 PLAZAS AND ADA RAMPS AT 5TH & DETROIT

LEGEND

EXISTING MAJOR CONTOUR	— 865 —	DRAINAGE SLOPE	→	TOP OF WALL ELEVATION	T/S 861.50	NOTES:
EXISTING MINOR CONTOUR	— 864 —	PROPOSED SPOT ELEVATION	861.50	BOTTOM OF WALL ELEVATION	B/S 861.50	REFER TO SHEETS C9.05 AND C9.06 FOR ROADWAY GRADES.
EXISTING SPOT ELEVATION	861.50	APPROX. SPOT ELEVATION: MATCH EXISTING GRADE	861.50 M.E.±	LEVEL LANDING	□	
PROPOSED MAJOR CONTOUR	— 865 —	TOP OF CURB ELEVATION	T/C 861.50	6 INCH RAIN GARDEN DRAIN	—	
PROPOSED MINOR CONTOUR	— 864 —	EDGE OF METAL ELEVATION	E/M 861.50			
GRADING LIMITS	---					
GRADE BREAK LINE	- - - -					

SEE ABOVE

BENCH MARK SURVEY BOOK

REV. NO. DESCRIPTION DATE DR. BY CH. BY

BID PLANS 12-01-2017

95% CD 11-17-2017



DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

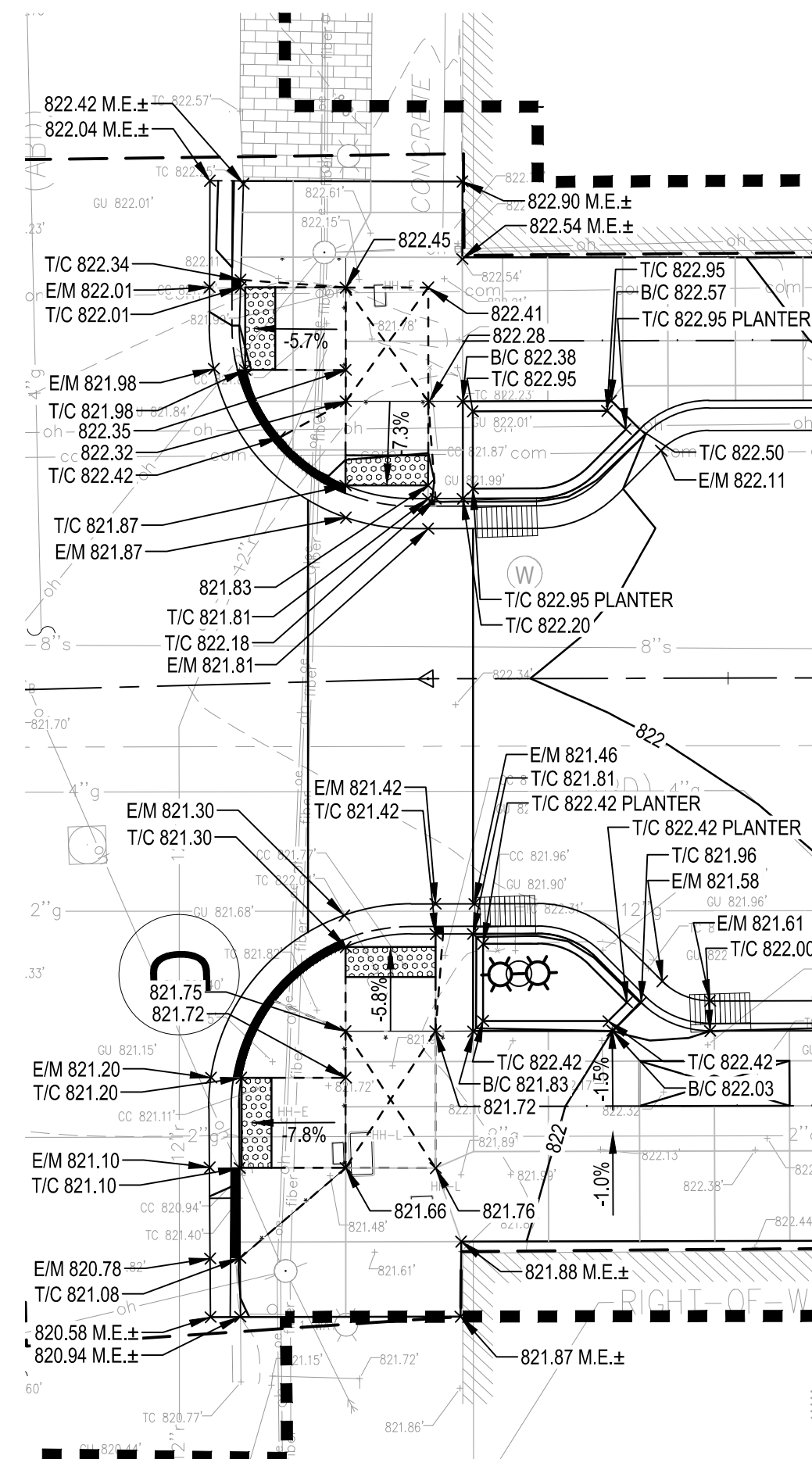
SCALE 1" = 10'

DRAWING NO. C9.03

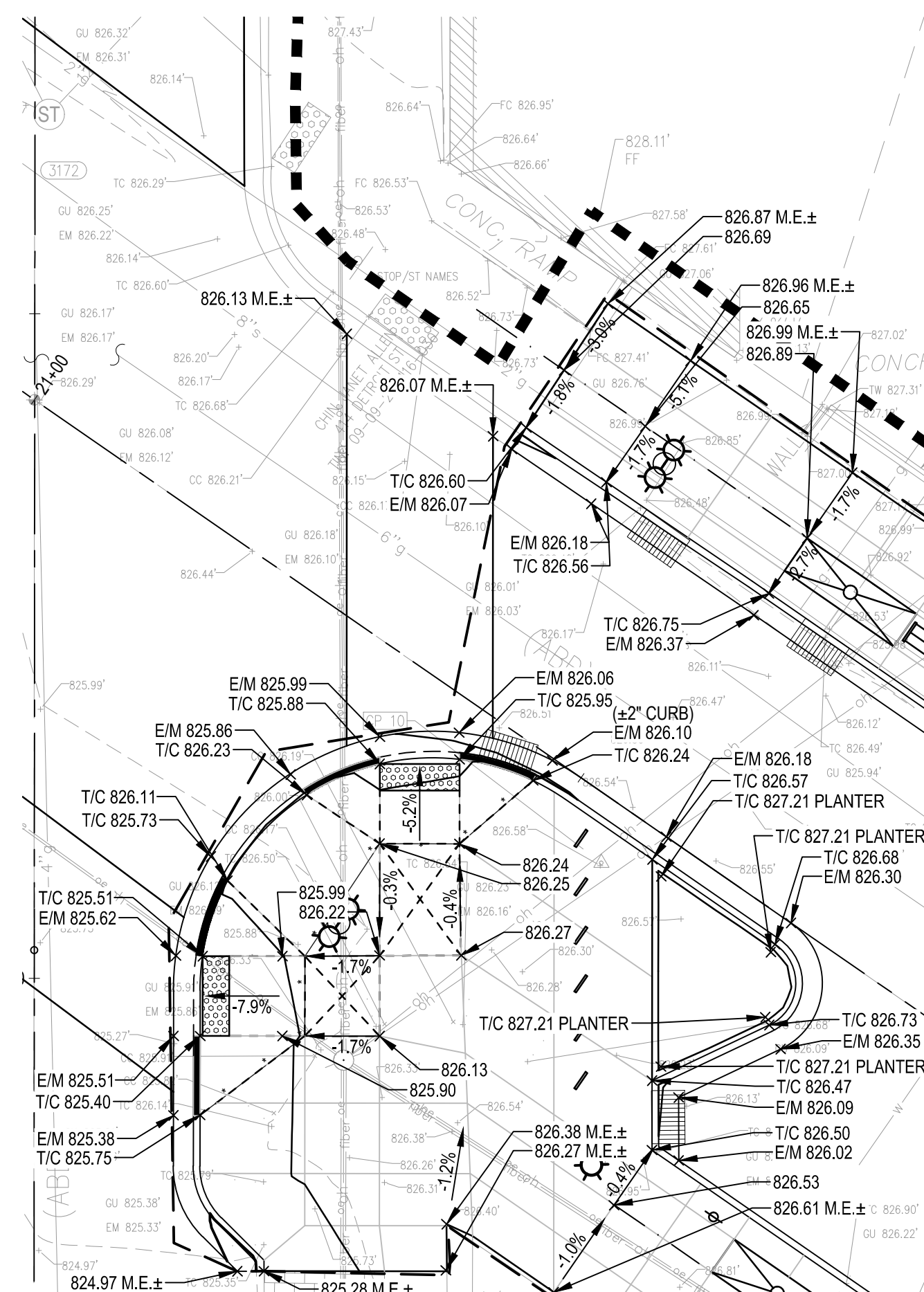
SHEET NO. OF

APPROVED BY

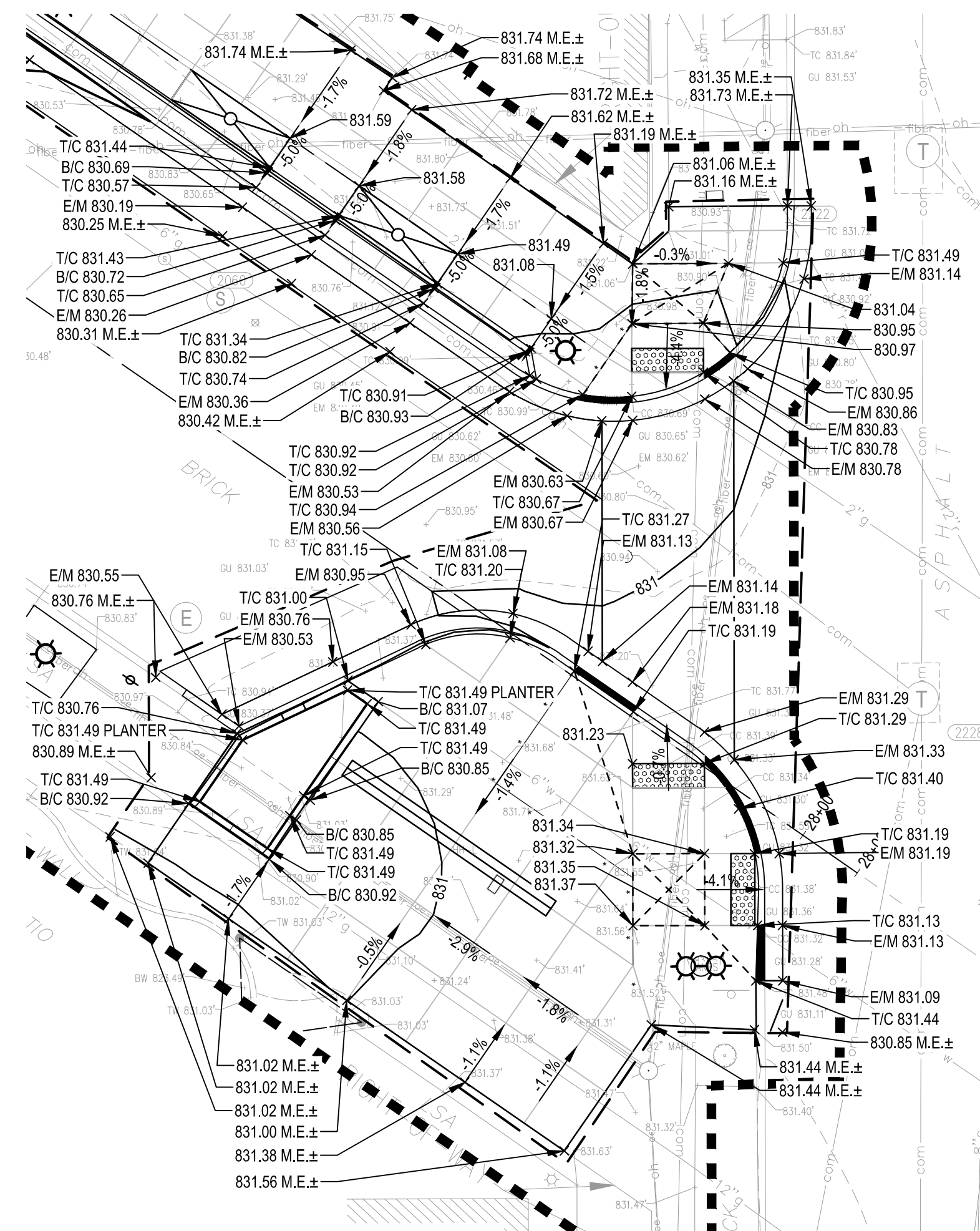
STREETSCAPE GRADING PLAN - ENLARGEMENT AREAS



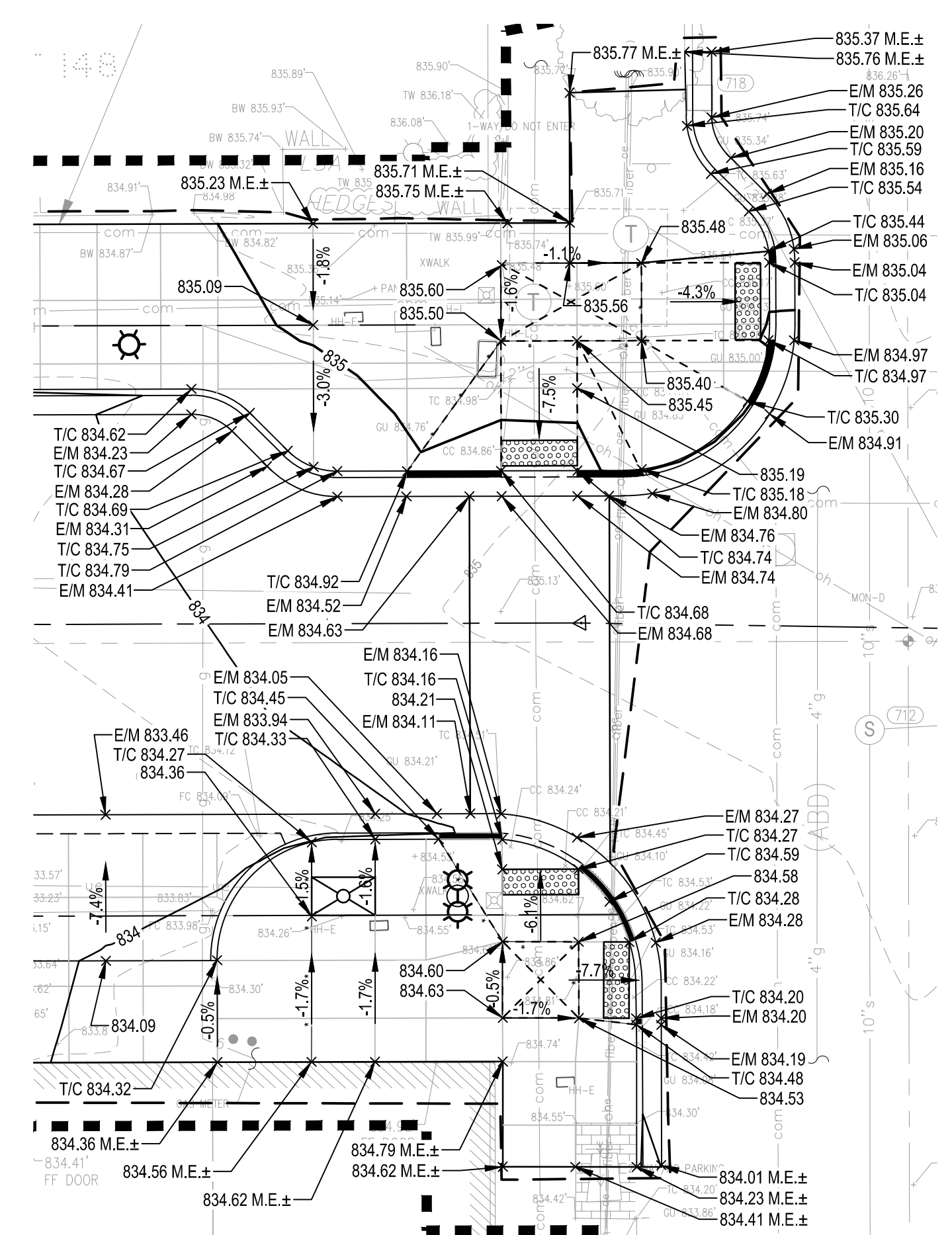
1 ADA RAMPS AT 5TH AVE & KINGSLEY ST
SCALE: 1" = 10'



2 ADA RAMPS AT DETROIT ST & KINGSLEY ST
SCALE: 1" = 10'



3 ADA RAMPS AT DETROIT ST & CATHERINE ST
SCALE: 1" = 10'



4 ADA RAMPS AT 5TH AVE & CATHERINE ST
SCALE: 1" = 10'

LEGEND

EXISTING MAJOR CONTOUR	865	DRAINAGE SLOPE	→	TOP OF WALL ELEVATION	T/S 861.50	NOTES:
EXISTING MINOR CONTOUR	864	PROPOSED SPOT ELEVATION	861.50	BOTTOM OF WALL ELEVATION	B/S 861.50	REFER TO SHEETS C9.05 AND C9.06 FOR ROADWAY GRADES.
EXISTING SPOT ELEVATION	861.50	APPROX. SPOT ELEVATION: MATCH EXISTING GRADE	861.50 M.E.±	LEVEL LANDING	□	
PROPOSED MAJOR CONTOUR	865	TOP OF CURB ELEVATION	T/C 861.50	6 INCH RAIN GARDEN DRAIN	—	
PROPOSED MINOR CONTOUR	864	EDGE OF METAL ELEVATION	E/M 861.50			
GRADING LIMITS	---					
GRADE BREAK LINE	---					

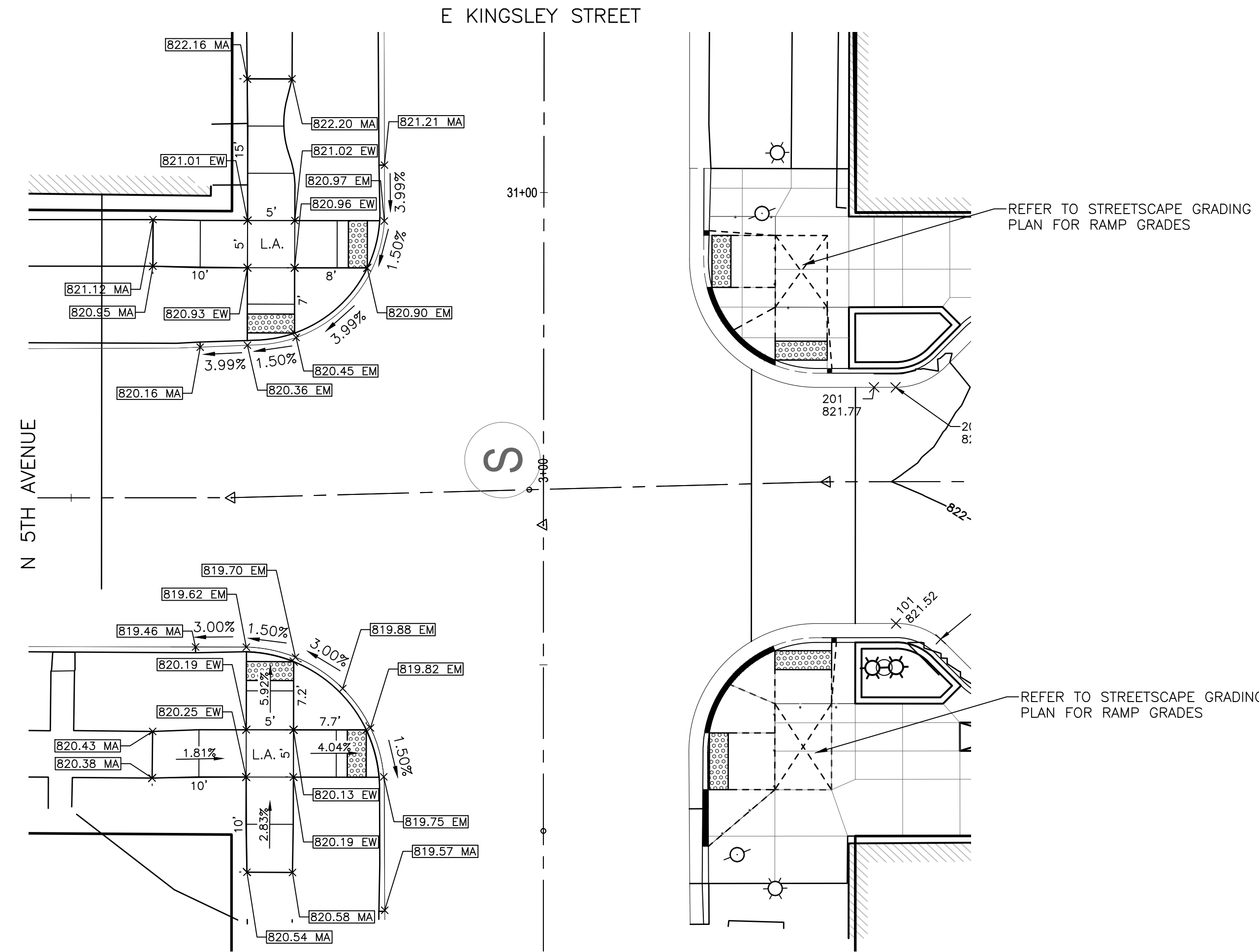


SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

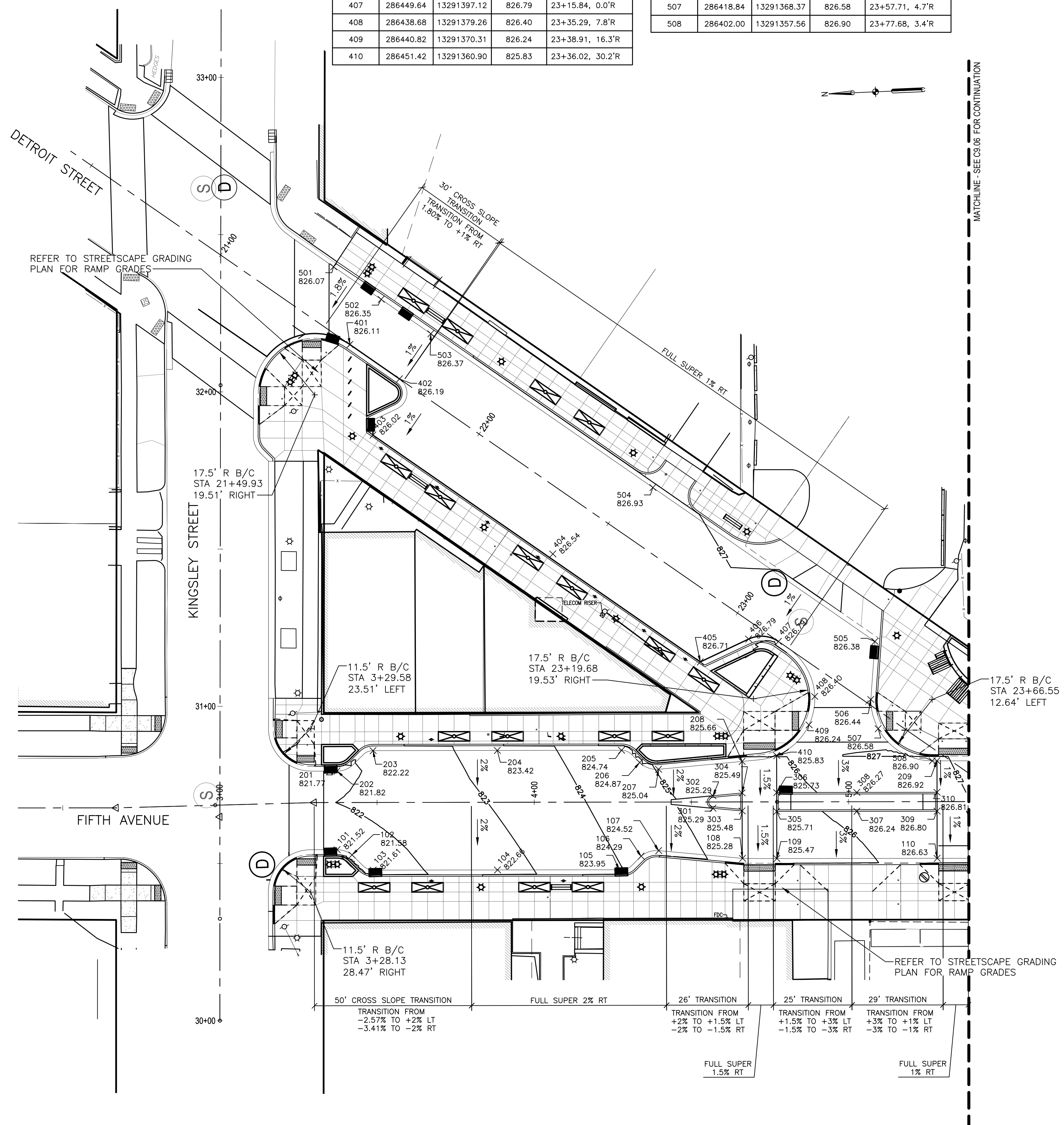
DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR	
STREETSCAPE GRADING PLAN - ENLARGEMENT AREAS	
SCALE	INCH
1" = 10'	
DRAWING NO. C9.04	
SHEET NO. ___ OF ___	
APPROVED BY: _____	

DETROIT ST. NORTHWEST EDGE OF METAL				
NUMBER	NORTHING	EASTING	ELEVATION	STATION/OFFSET
401	286582.75	13291496.03	826.11	21+50.00, 0.0'R
402	286567.35	13291484.58	826.19	21+69.19, 0.0'R
403	286576.39	13291467.00	826.02	21+72.42, 19.5'R
404	286520.44	13291427.32	826.54	22+41.00, 18.0'R
405	286474.71	13291391.46	826.71	22+99.10, 19.5'R
406	286459.07	13291398.22	826.79	23+07.61, 4.8'R
407	286449.64	13291397.12	826.79	23+15.84, 0.0'R
408	286438.68	13291379.26	826.40	23+35.29, 7.8'R
409	286440.82	13291370.31	826.24	23+38.91, 16.3'R
410	286451.42	13291360.90	825.83	23+36.02, 30.2'R

DETROIT ST. SOUTHEAST EDGE OF METAL				
NUMBER	NORTHING	EASTING	ELEVATION	STATION/OFFSET
501	286587.12	13291520.92	826.07	21+31.66, -17.4'L
502	286572.32	13291510.08	826.35	21+50.00, -17.5'L
503	286556.91	13291498.63	826.37	21+69.20, -17.5'L
504	286487.93	13291447.38	826.93	22+55.13, -17.5'L
505	286418.96	13291396.13	826.38	23+41.07, -17.5'L
506	286420.87	13291377.72	826.44	23+50.51, -1.6'L
507	286418.84	13291368.37	826.58	23+57.71, 4.7'R
508	286402.00	13291357.56	826.90	23+77.68, 3.4'R



FIFTH AVE AND KINGSLEY ST
SCALE: 1" = 10'



5TH AVE. WEST EDGE OF METAL - NORTH				
NUMBER	NORTHING	EASTING	ELEVATION	STATION/OFFSET
101	286592.12	13291335.58	821.52	3+37.28, 15.0'R
102	286587.45	13291333.76	821.58	3+42.00, 16.7'R
103	286580.86	13291328.72	821.61	3+48.75, 21.5'R
104	286541.37	13291327.47	822.66	3+88.26, 21.5'R
105	286502.65	13291326.23	823.95	4+27.00, 21.5'R
106	286495.57	13291330.32	824.29	4+33.94, 17.2'R
107	286489.92	13291331.90	824.52	4+39.55, 15.5'R
108	286463.35	13291328.56	825.28	4+66.21, 18.0'R
109	286452.45	13291328.14	825.47	4+77.11, 18.0'R
110	286401.48	13291326.53	826.63	5+28.11, 18.0'R

5TH AVE. EAST EDGE OF METAL - NORTH				
NUMBER	NORTHING	EASTING	ELEVATION	STATION/OFFSET
201	286593.60	13291360.64	821.77	3+35.00, -10.0'L
202	286591.33	13291360.57	821.82	3+37.28, -10.0'L
203	286579.66	13291366.70	822.22	3+48.75, -16.5'L
204	286540.16	13291365.45	823.42	3+88.27, -16.5'L
205	286500.67	13291364.19	824.74	4+27.78, -16.5'L
206	286495.03	13291360.11	824.87	4+33.54, -12.6'L
207	286489.10	13291357.75	825.04	4+39.55, -10.4'L
208	286462.47	13291359.38	825.66	4+66.11, -12.9'L
209	286400.49	13291357.51	826.92	5+28.12, -13.0'L

5TH AVE. MEDIAN - NORTH				
NUMBER	NORTHING	EASTING	ELEVATION	STATION/OFFSET
301	286472.24	13291344.79	825.29	4+56.81, 2.0'R
302	286472.11	13291348.77	825.29	4+56.81, -2.0'L
303	286462.97	13291343.63	825.48	4+66.11, 2.9'R
304	286462.79	13291349.34	825.49	4+66.11, -2.8'L
305	286451.98	13291343.14	825.71	4+77.11, 3.0'R
306	286451.79	13291349.13	825.73	4+77.11, -3.0'L
307	286426.49	13291342.33	826.24	5+02.61, 3.0'R
308	286426.30	13291348.32	826.27	5+02.61, -3.0'L
309	286401.00	13291341.52	826.80	5+28.11, 3.0'R
310	286400.81	13291347.51	826.81	5+28.11, -3.0'L

LEGEND

- L.A. LANDING AREA
- 815.00 EM PROPOSED EDGE OF METAL ELEVATION
- 815.00 EW PROPOSED EDGE OF WALK ELEVATION
- 815.00 MA MATCH EXISTING GRADE ELEVATION

SEE ABOVE	BID PLANS	DATE	DR. BY	CH. BY
	95% CD	11-17-2017		
REVISION	DESCRIPTION	DATE	DR. BY	CH. BY

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

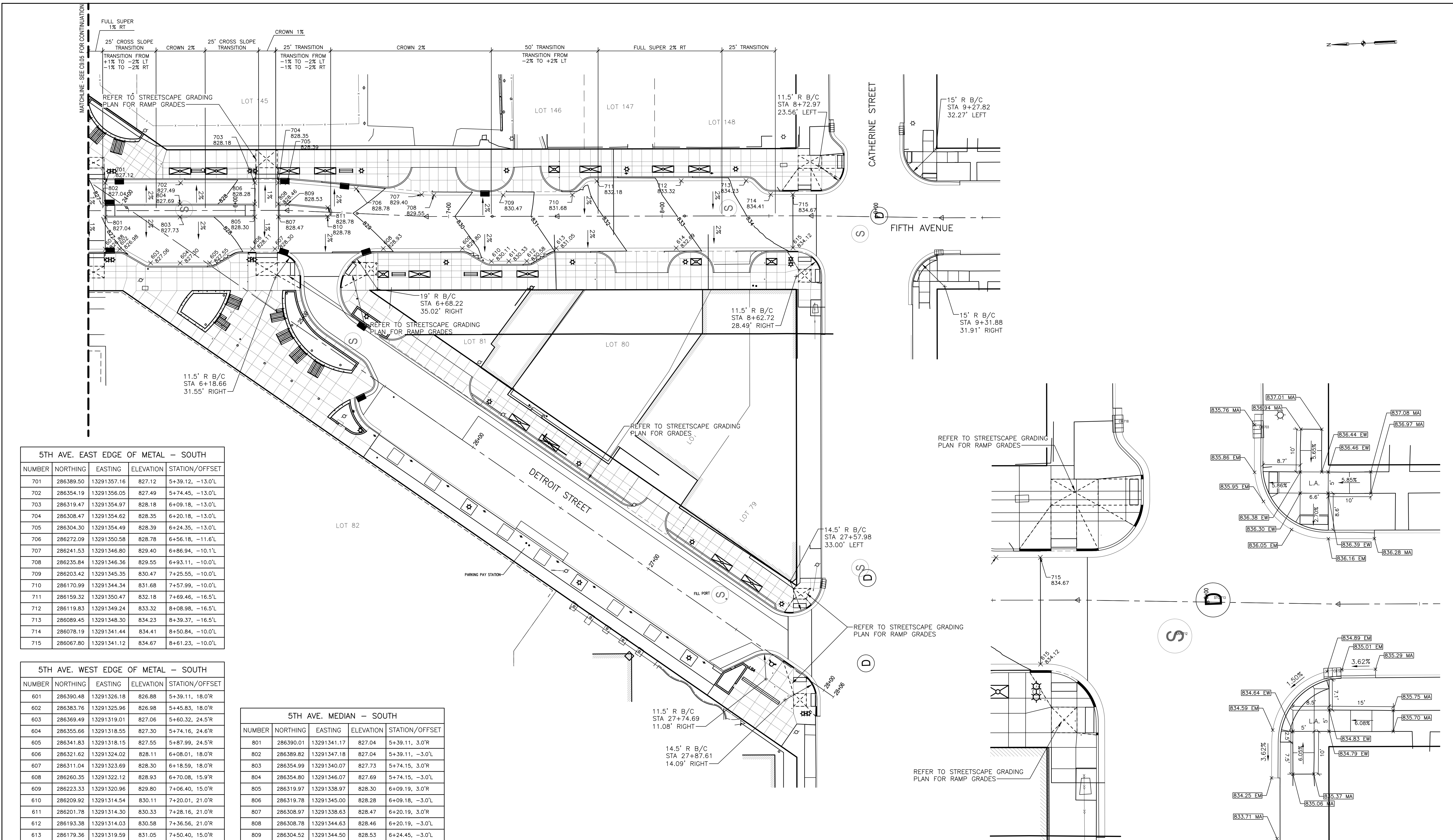
ROADWAY GRADING PLAN - NORTH

SCALE: 1" = 20'

DRAWING NO. **C9.05**

SHEET NO. ___ OF ___

APPROVED BY: _____



5TH AVE. EAST EDGE OF METAL - SOUTH

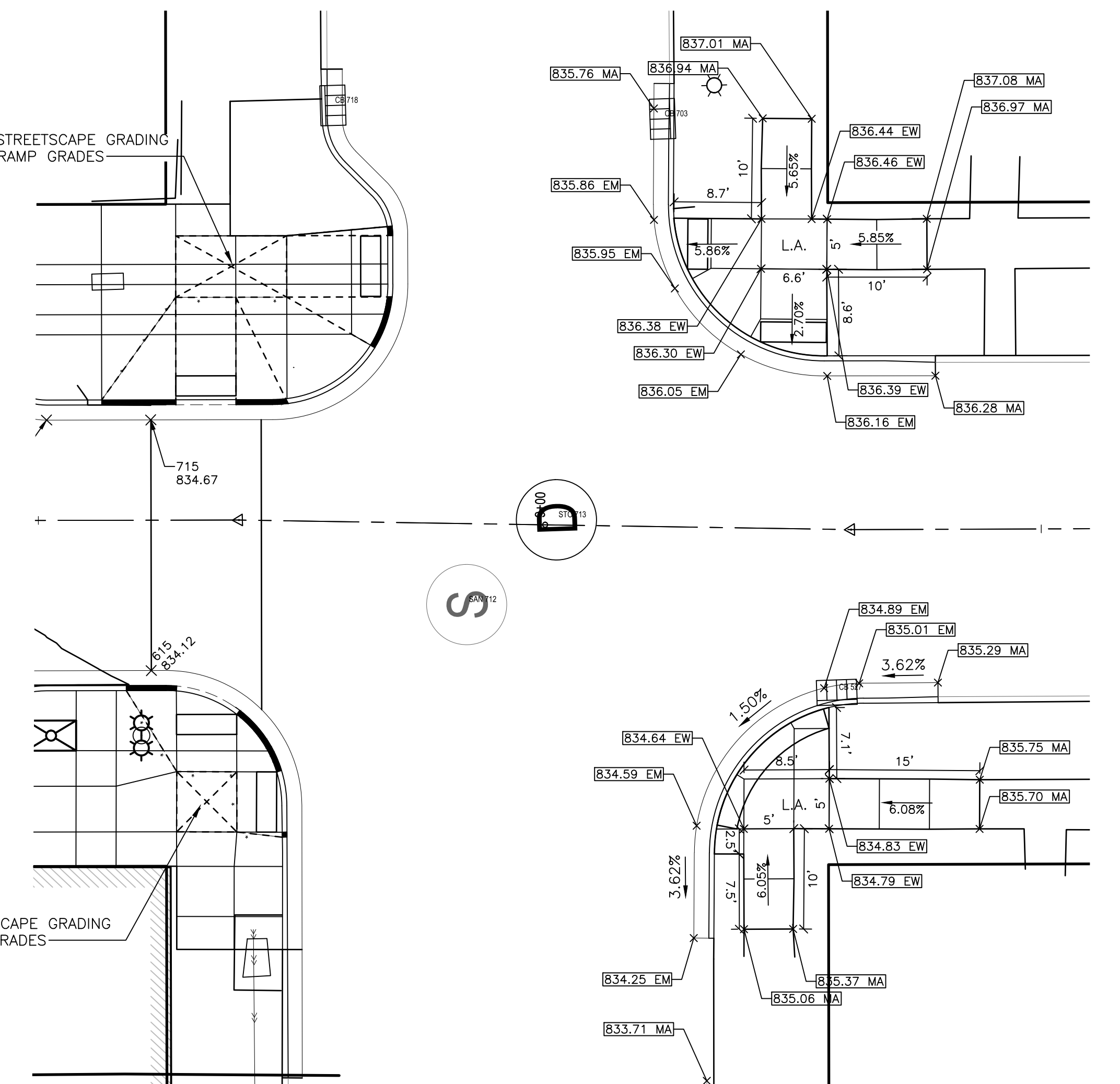
NUMBER	NORTHING	EASTING	ELEVATION	STATION/OFFSET
701	286389.50	13291357.16	827.12	5+39.12, -13.0'L
702	286354.19	13291356.05	827.49	5+74.45, -13.0'L
703	286319.47	13291354.97	828.18	6+09.18, -13.0'L
704	286308.47	13291354.62	828.35	6+20.18, -13.0'L
705	286304.30	13291354.49	828.39	6+24.35, -13.0'L
706	286272.09	13291350.58	828.78	6+56.18, -11.6'L
707	286241.53	13291346.80	829.40	6+86.94, -10.1'L
708	286235.84	13291346.36	829.55	6+93.11, -10.0'L
709	286203.42	13291345.35	830.47	7+25.55, -10.0'L
710	286170.99	13291344.34	831.68	7+57.99, -10.0'L
711	286159.32	13291350.47	832.18	7+69.46, -16.5'L
712	286119.83	13291349.24	833.32	8+08.98, -16.5'L
713	286089.45	13291348.30	834.23	8+39.37, -16.5'L
714	286078.19	13291341.44	834.41	8+50.84, -10.0'L
715	286067.80	13291341.12	834.67	8+61.23, -10.0'L

5TH AVE. WEST EDGE OF METAL - SOUTH

NUMBER	NORTHING	EASTING	ELEVATION	STATION/OFFSET
601	286390.48	13291326.18	826.88	5+39.11, 18.0'R
602	286383.76	13291325.96	826.98	5+45.83, 18.0'R
603	286369.49	13291319.01	827.06	5+60.32, 24.5'R
604	286355.66	13291318.55	827.30	5+74.16, 24.6'R
605	286341.83	13291318.15	827.55	5+87.99, 24.5'R
606	286321.62	13291324.02	828.11	6+08.01, 18.0'R
607	286311.04	13291323.69	828.30	6+18.59, 18.0'R
608	286260.35	13291322.12	828.93	6+70.08, 15.9'R
609	286223.33	13291320.96	829.80	7+06.40, 15.0'R
610	286209.92	13291314.54	830.11	7+20.01, 21.0'R
611	286201.78	13291314.30	830.33	7+28.16, 21.0'R
612	286193.38	13291314.03	830.58	7+36.56, 21.0'R
613	286179.36	13291319.59	831.05	7+50.40, 15.0'R
614	286123.23	13291317.85	832.69	8+06.56, 15.0'R
615	286068.58	13291316.14	834.12	8+61.23, 15.0'R

5TH AVE. MEDIAN - SOUTH

NUMBER	NORTHING	EASTING	ELEVATION	STATION/OFFSET
801	286390.01	13291341.17	827.04	5+39.11, 3.0'R
802	286389.82	13291347.18	827.04	5+39.11, -3.0'L
803	286354.99	13291340.07	827.73	5+74.15, 3.0'R
804	286354.80	13291346.07	827.69	5+74.15, -3.0'L
805	286319.97	13291338.97	828.30	6+09.19, 3.0'R
806	286319.78	13291345.00	828.28	6+09.18, -3.0'L
807	286308.97	13291338.63	828.47	6+20.19, 3.0'R
808	286308.78	13291344.63	828.46	6+20.19, -3.0'L
809	286304.52	13291344.50	828.53	6+24.45, -3.0'L
810	286285.92	13291337.91	828.78	6+43.37, 2.1'R
811	286285.67	13291342.19	828.78	6+43.29, -2.1'L



FIFTH AVE AND CATHERINE ST
SCALE: 1" = 10'

LEGEND

- L.A. LANDING AREA
- 815.00 EM PROPOSED EDGE OF METAL ELEVATION
- 815.00 EW PROPOSED EDGE OF WALK ELEVATION
- 815.00 MA MATCH EXISTING GRADE ELEVATION

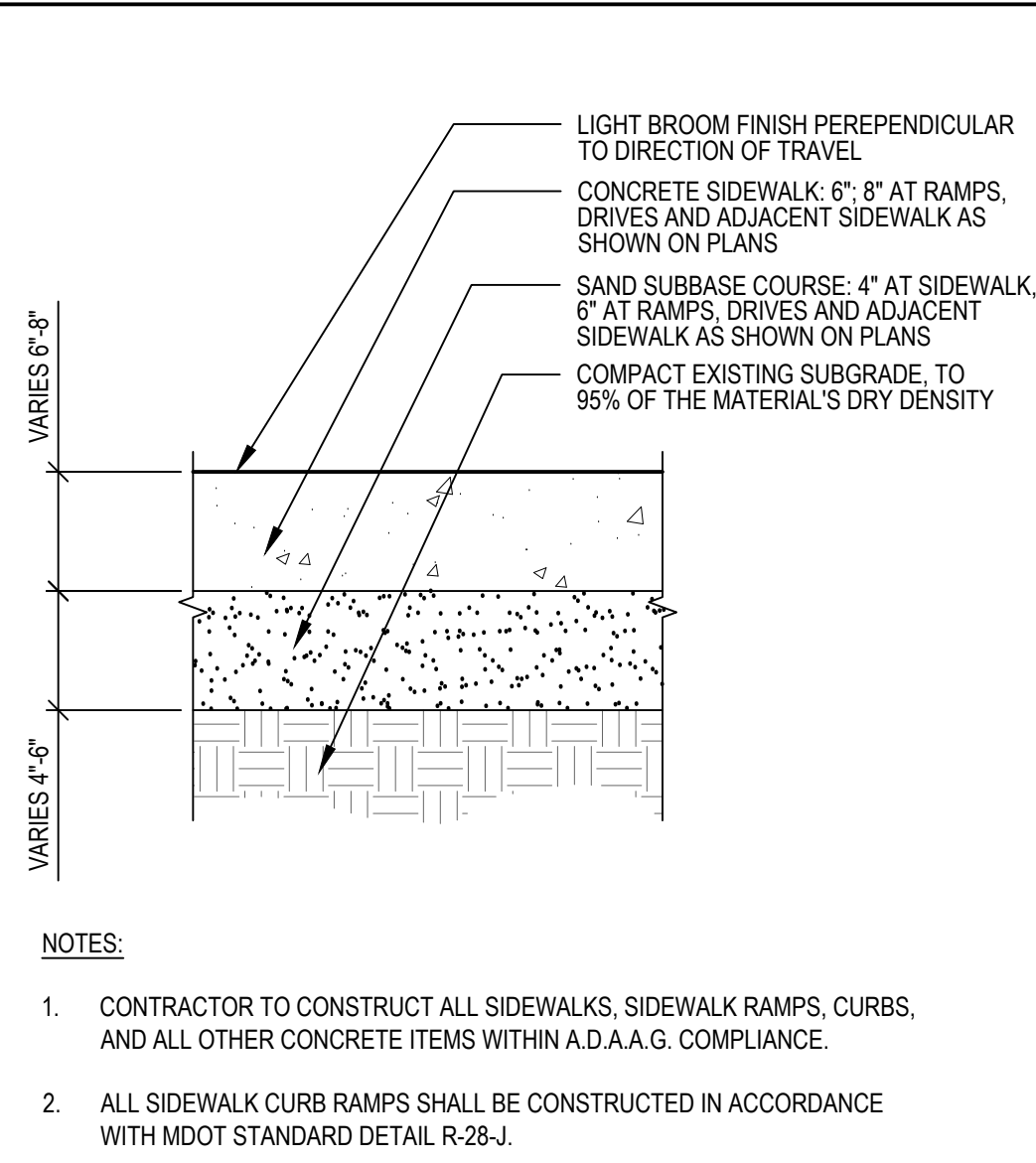
SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

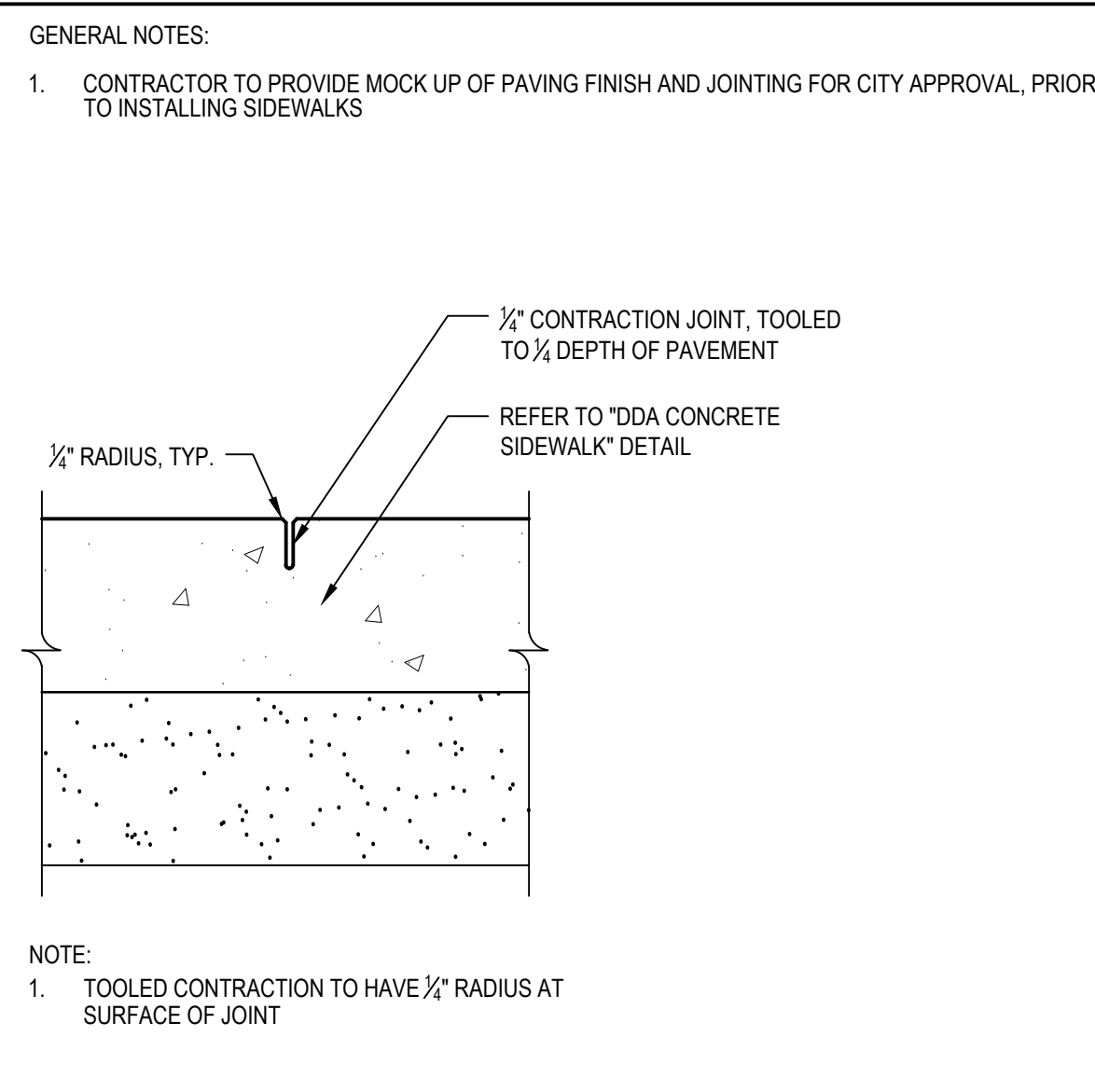
ROADWAY GRADING PLAN - SOUTH

SCALE 1" = 20'	INCH 0' 10' 20'
DRAWING NO. C9.06	
SHEET NO. ___ OF ___	

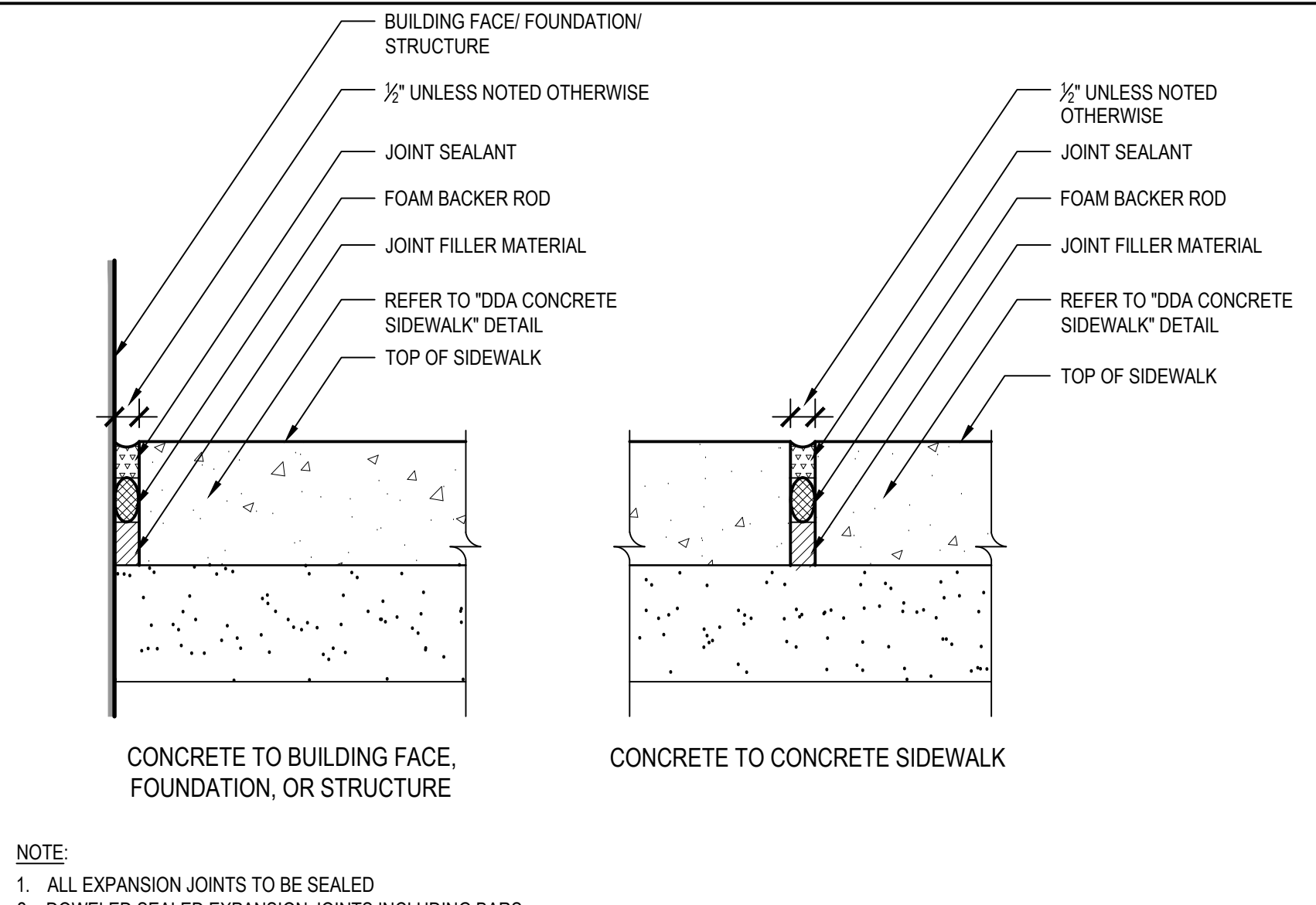
APPROVED BY _____



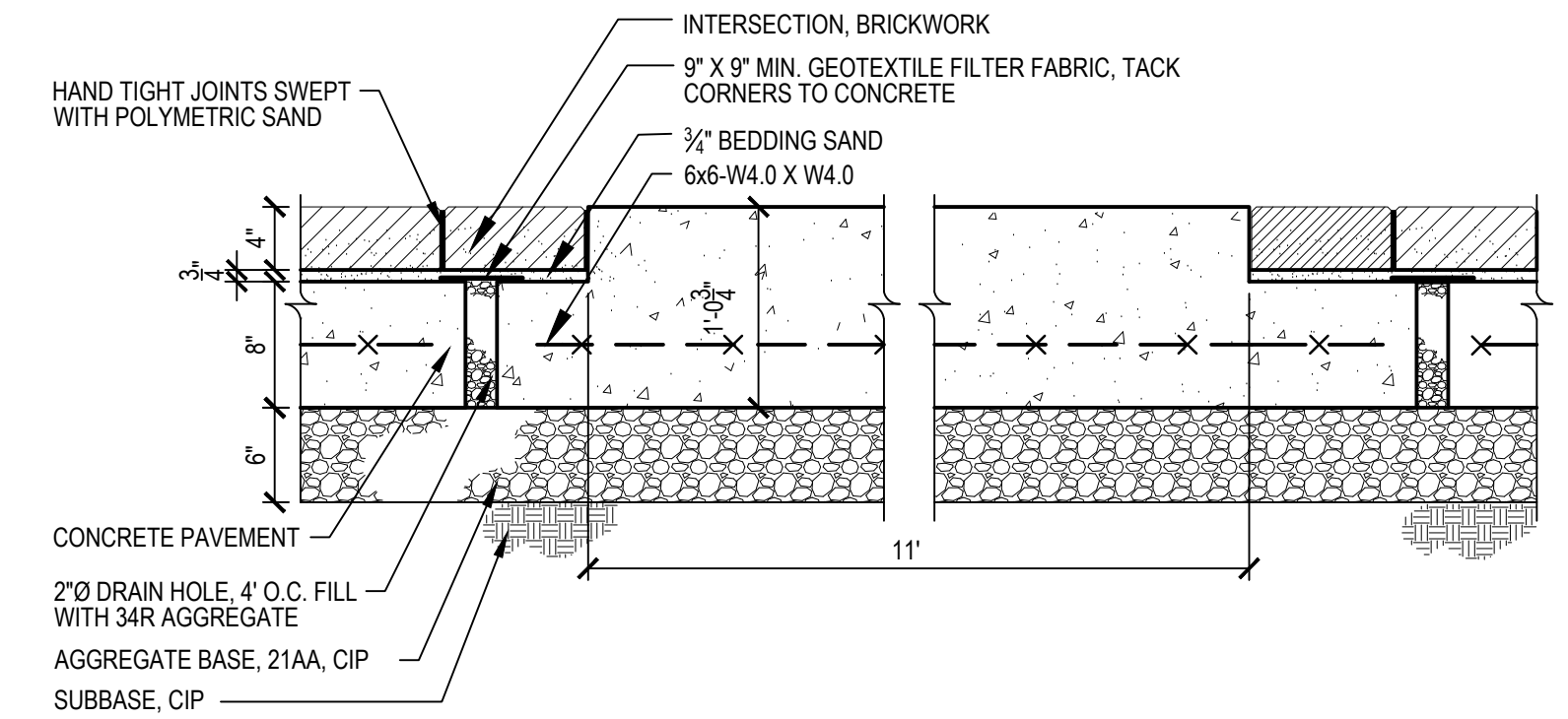
- NOTES:
- CONTRACTOR TO CONSTRUCT ALL SIDEWALKS, SIDEWALK RAMPS, CURBS, AND ALL OTHER CONCRETE ITEMS WITHIN A.D.A.A.G. COMPLIANCE.
 - ALL SIDEWALK CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MDT STANDARD DETAIL R-28-J.



- NOTE:
- TOOLED CONTRACTION TO HAVE 1/4\"/>



- NOTE:
- ALL EXPANSION JOINTS TO BE SEALED
 - DOWELED SEALED EXPANSION JOINTS INCLUDING BARS AND SLEEVES ARE INCIDENTAL TO PAVEMENT PAY ITEMS.

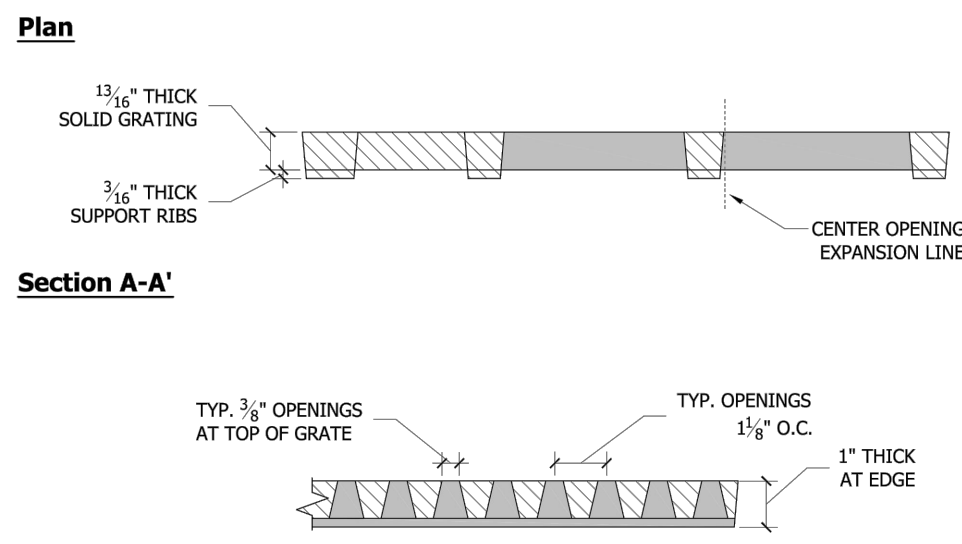
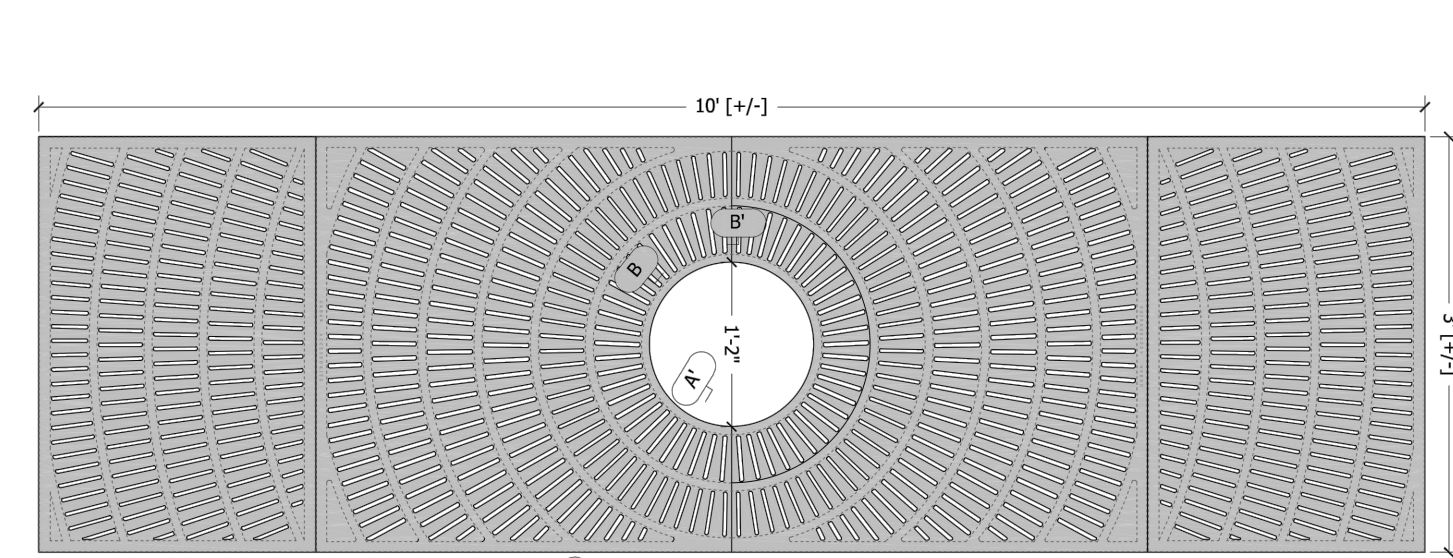


4 ROAD BRICK PAVEMENT AND CONCRETE CROSSWALK SECTION NTS

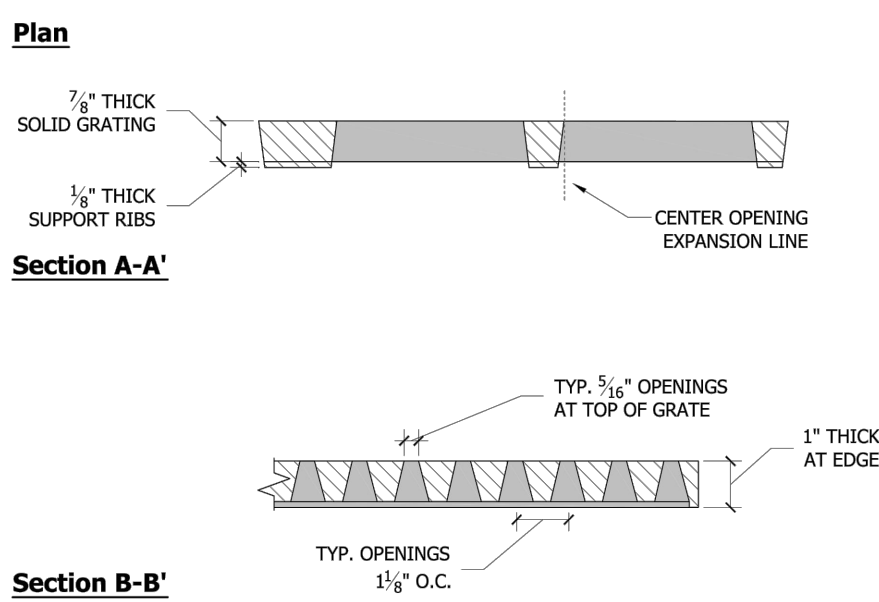
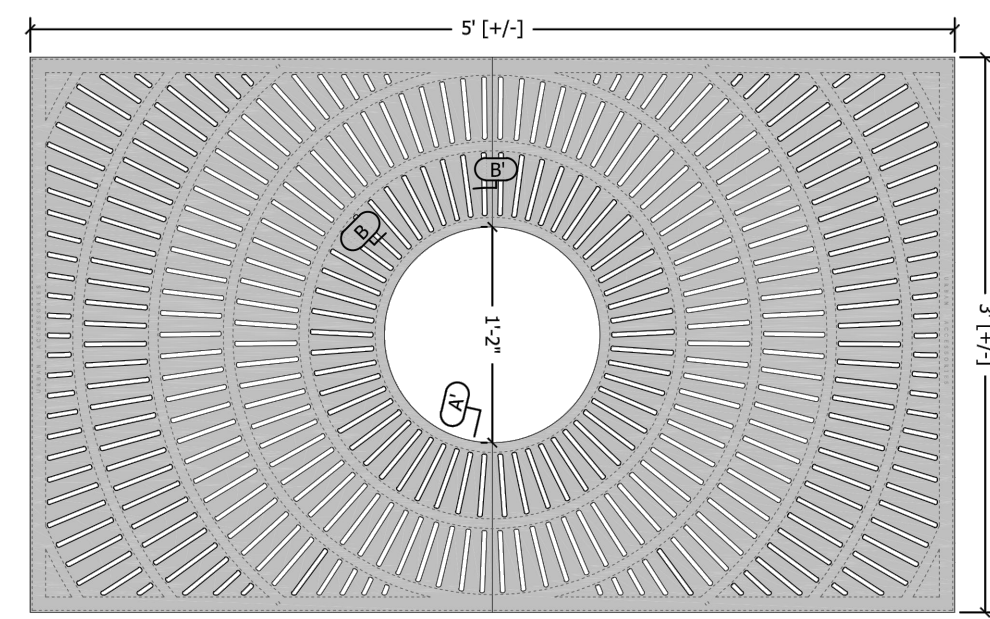
1 DDA CONCRETE SIDEWALK SECTION NTS

2 CONTROL JOINT SECTION NTS

3 EXPANSION JOINT SECTION NTS

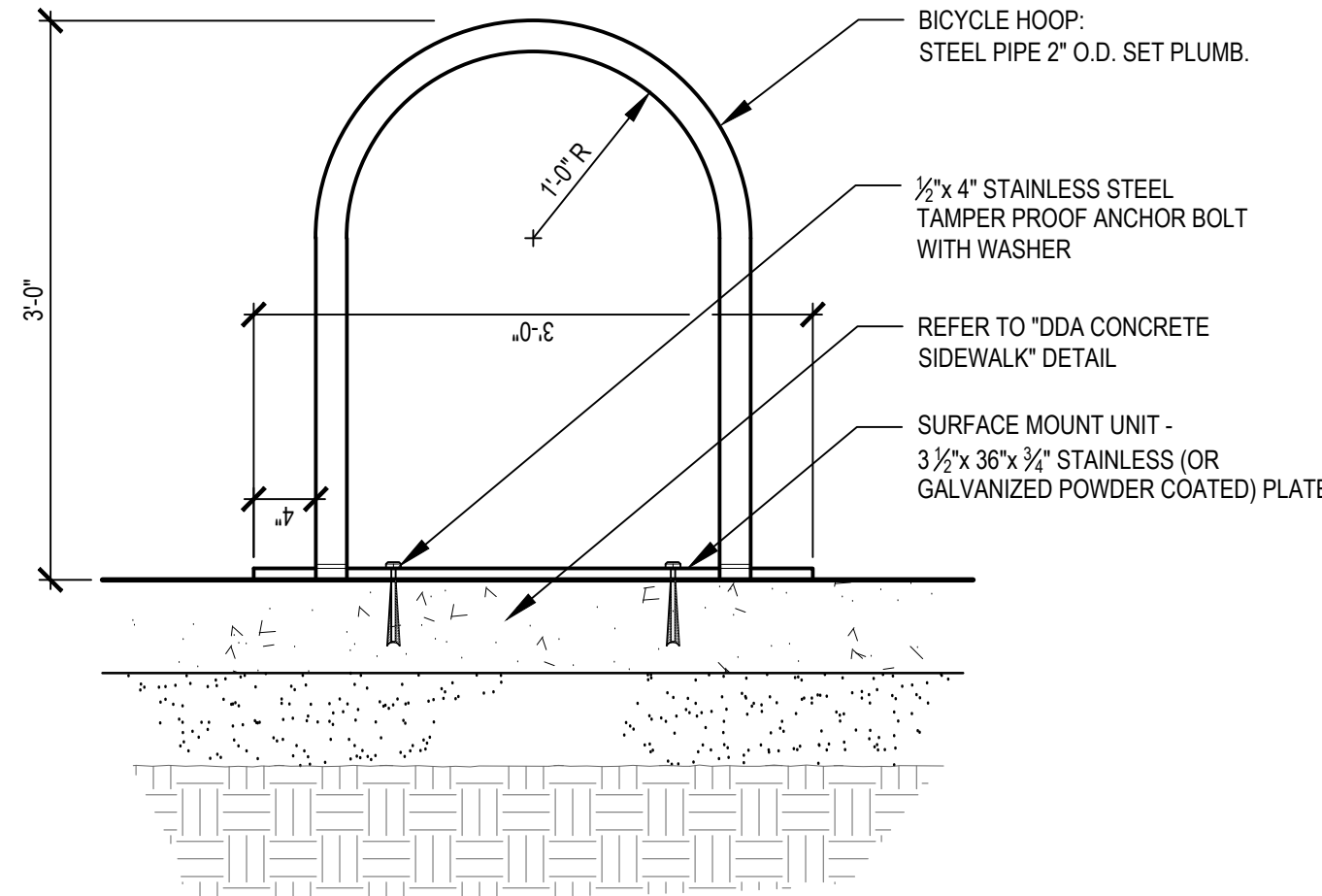


5 TREE GRATE, 3FT x 10FT SECTION NTS

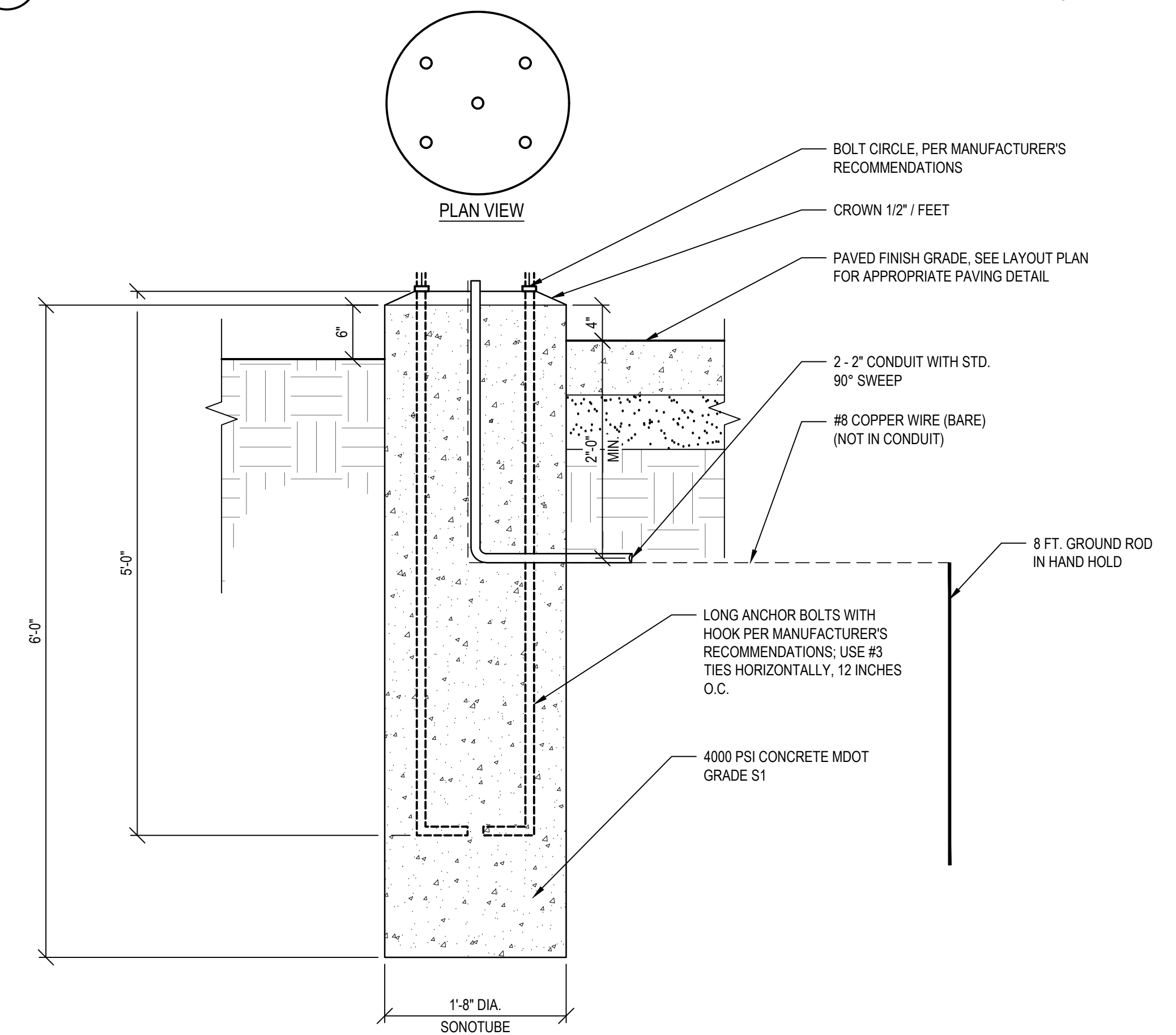


6 TREE GRATE, 3FT x 5FT SECTION NTS

- BICYCLE HOOP NOTES:
- TO BE USED ONLY FOR DDA CONCRETE SIDEWALK SURFACES
 - LOCATE AND GROUP BICYCLE HOOPS IN THE AMENITY ZONE.
 - BIKE HOOPS TO BE MINIMUM OF 2'-10\"/>
 - REFER TO ANN ARBOR DOWNTOWN STREET DESIGN MANUAL FOR ADDITIONAL LAYOUT GUIDELINES.
 - POWDER-COATED GALVANIZED STEEL, BLACK.



7 BIKE HOOP (SURFACE MOUNTED) SECTION NTS



- NOTES:
- THIS DETAIL IS RELATED TO TYPE 1 STREET LIGHT FOUNDATION. FOR TYPE 2 STREET LIGHT FOUNDATION, USE A 16\"/>
 - HOLE TO BE AUGERED. MINIMIZE DISTURBANCE OF IN-SITU SOILS DURING AUGERING
 - CONTRACTOR TO PROVIDE PREFABRICATED ANCHOR BOLT BUILD-UP
 - THE CITY WILL INSPECT THE AUGERED HOLE AND THE ANCHOR BOLT BUILD-UP AND PROVIDE WRITTEN APPROVAL PRIOR TO THE PLACEMENT OF CONCRETE
 - NO WATER IS TO BE IN HOLE AT TIME OF CONCRETE PLACEMENT
 - CONCRETE SHALL BE VIBRATED DURING PLACEMENT
 - CONTRACTOR WILL PROVIDE NECESSARY CONDUIT FOR ENTRY. PAID FOR AT THE CONTRACT UNIT PRICE FOR 2\"/>
 - COPPER CLAD GROUND ROD (1 REQUIRED) TO BE 5/8\"/>
 - CONDUIT TO EXTEND 1'-2\"/>
 - SHIMS TO BE 1/2\"/>
 - GROUND CABLE SHALL BE #6 SOFT BARE COPPER WIRE WELDED TO GROUND ROD WITH 24\"/>

* UNLESS OTHERWISE NOTED ON THE PLANS OR CONTRACT DOCUMENTS

8 BRICK SIDEWALK (ADD ALTERNATE 1) SECTION NTS

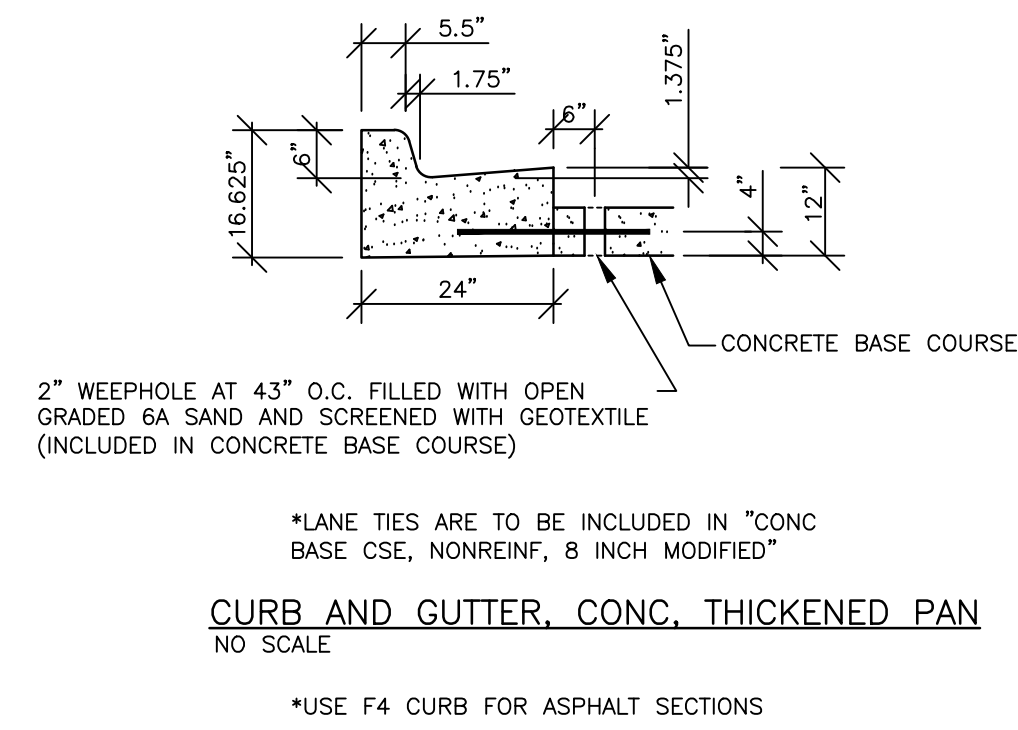
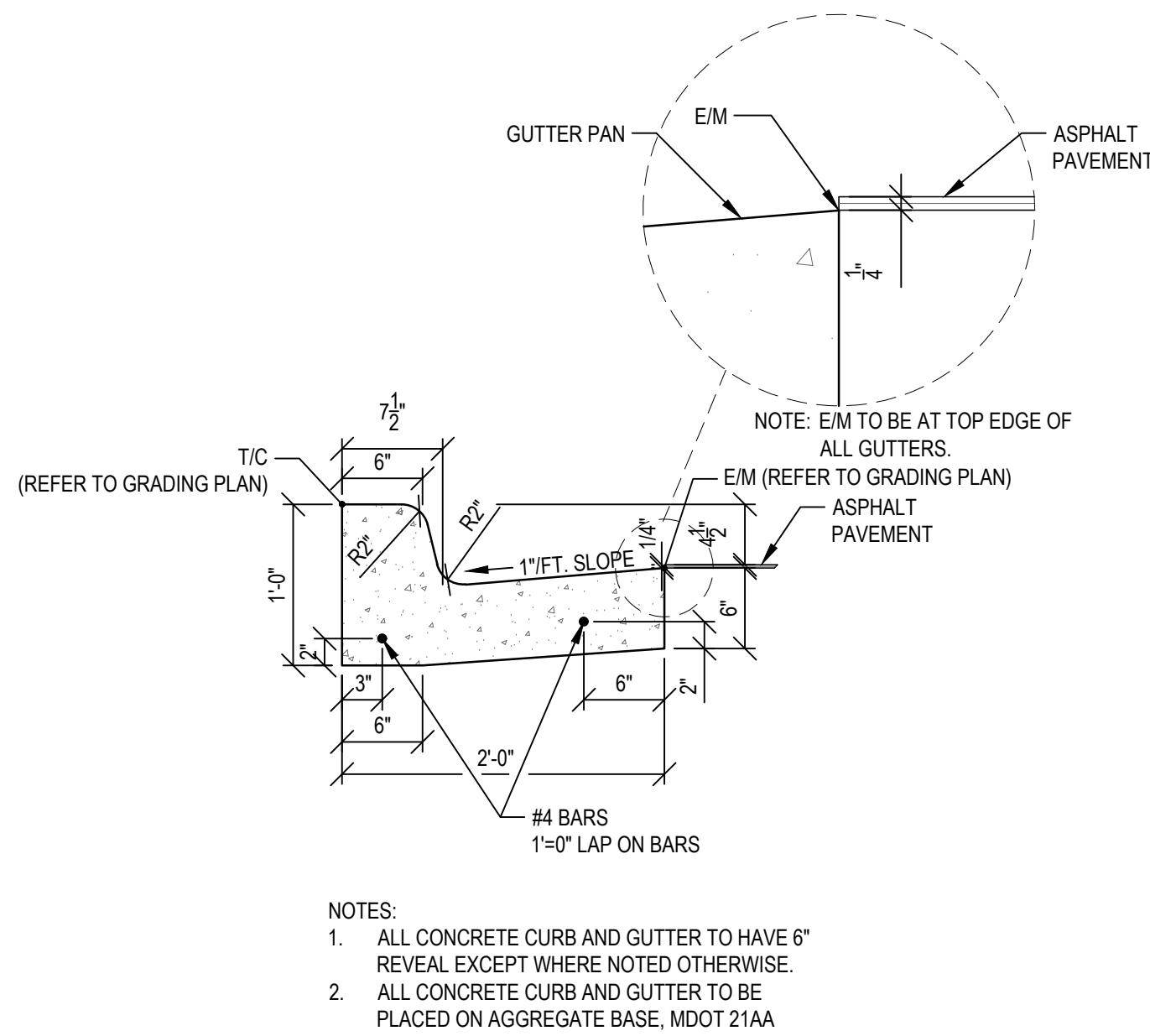
8 BRICK SIDEWALK (ADD ALTERNATE 1) SECTION NTS

LEGEND

SEE ABOVE	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

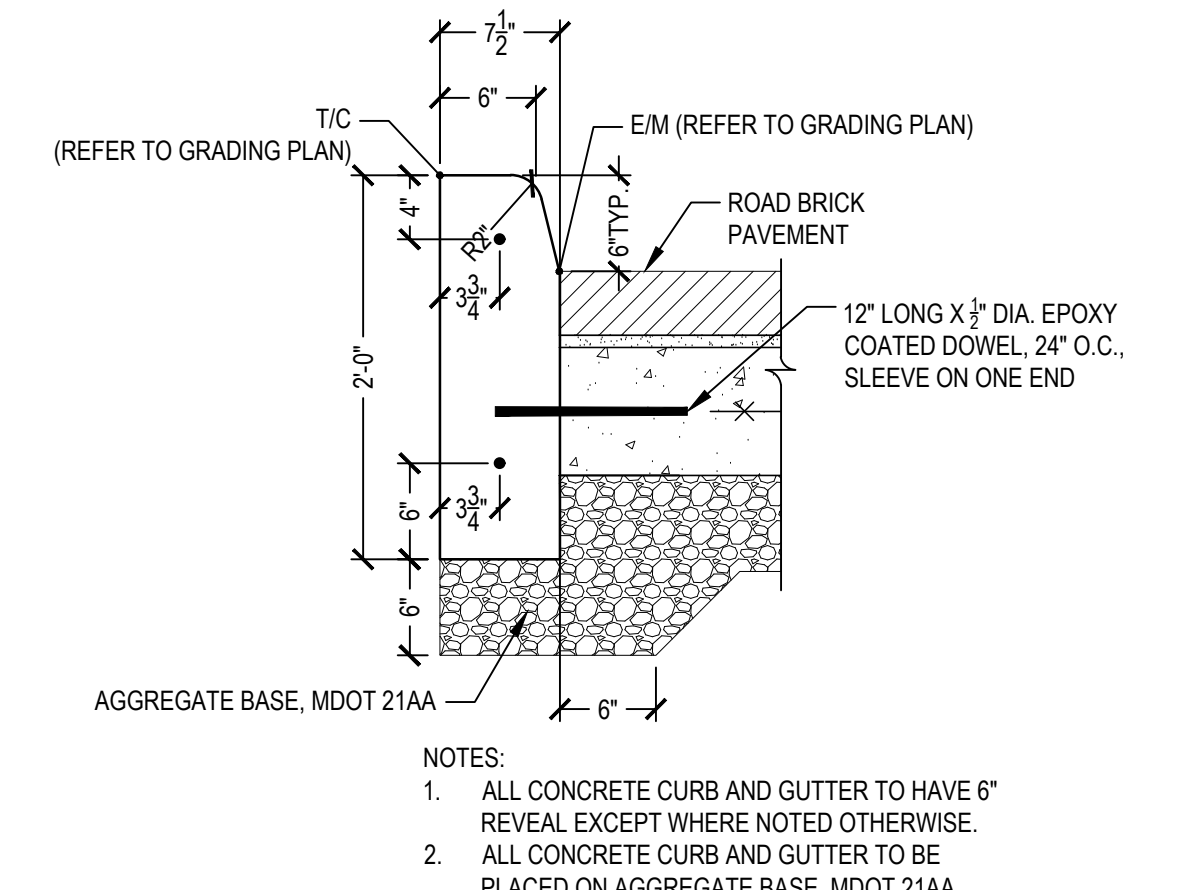
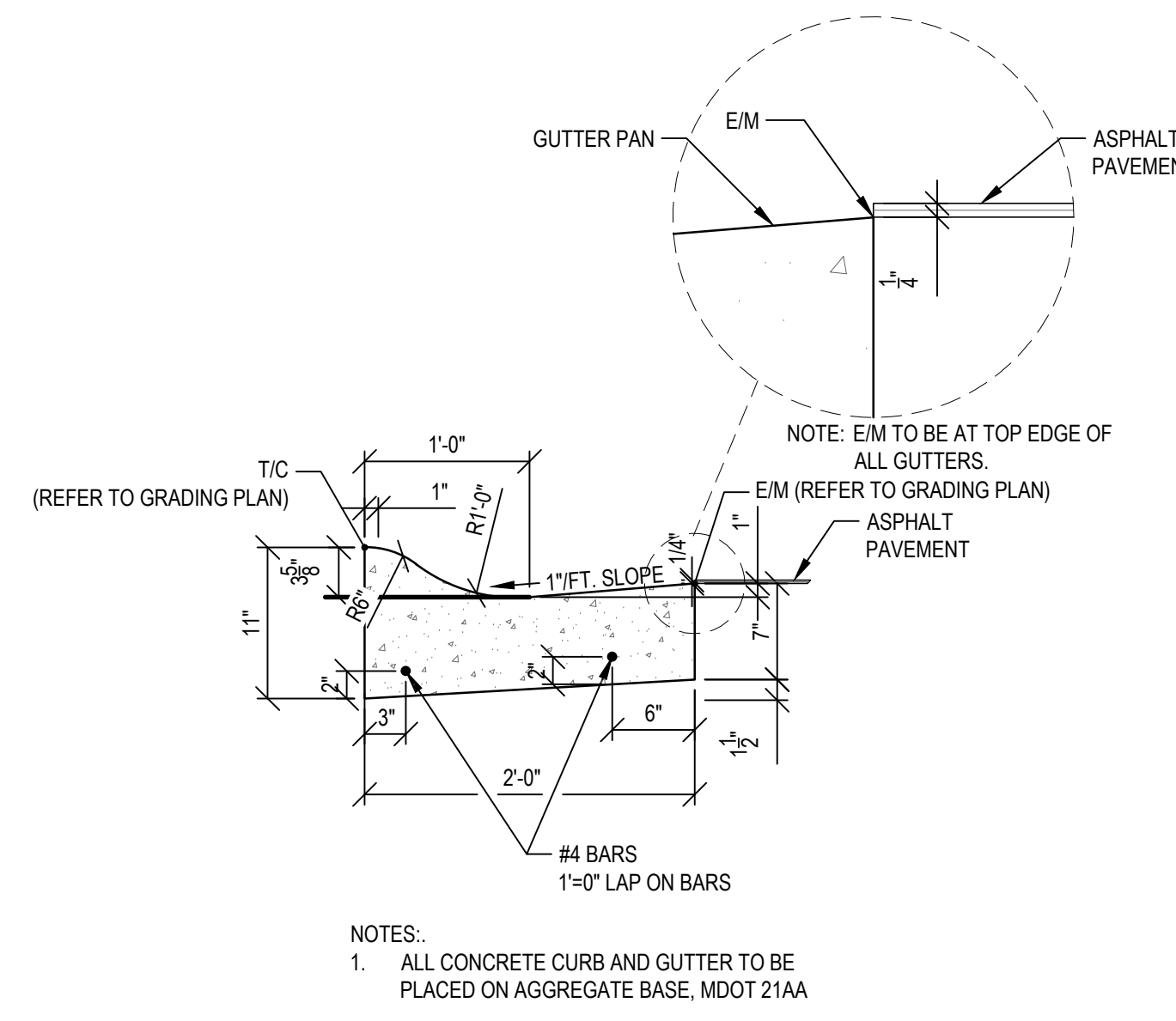
DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR	
STREETSCAPE DETAILS 1	
SCALE 1"=20'	INCH [Scale bar]
DRAWING NO. C10.1	
SHEET NO. ___ OF ___	

APPROVED BY: _____



- (B) LONGITUDINAL BULKHEAD JOINT PER MDOT STANDARD PLAN R-41-G
- (BD) EITHER LONGITUDINAL JOINT B OR D PER MDOT STANDARD PLAN R-41-G
- (H) TRANSVERSE END OF POUR JOINT PER MDOT STANDARD PLAN R-39-1
- (CD) TRANSVERSE CONTRACTION JOINT PER MDOT STANDARD DETAIL R-39-1 WITH LOAD TRANSFER ASSEMBLY.

PAYMENT FOR ALL JOINTS, INCLUDING PAYMENT FOR JOINT SEALING AS DETAILED IN THE MDOT STANDARD PLANS, SHALL BE CONSIDERED INCLUDED IN ITEMS "CONC BASE CSE, NONREINF, 8 INCH". TRANSVERSE CONTRACTION JOINT PLACED EVERY 14'.



1 CONCRETE CURB AND GUTTER

DETAIL NTS

2 CONCRETE CURB & GUTTER - THICKENED PAN

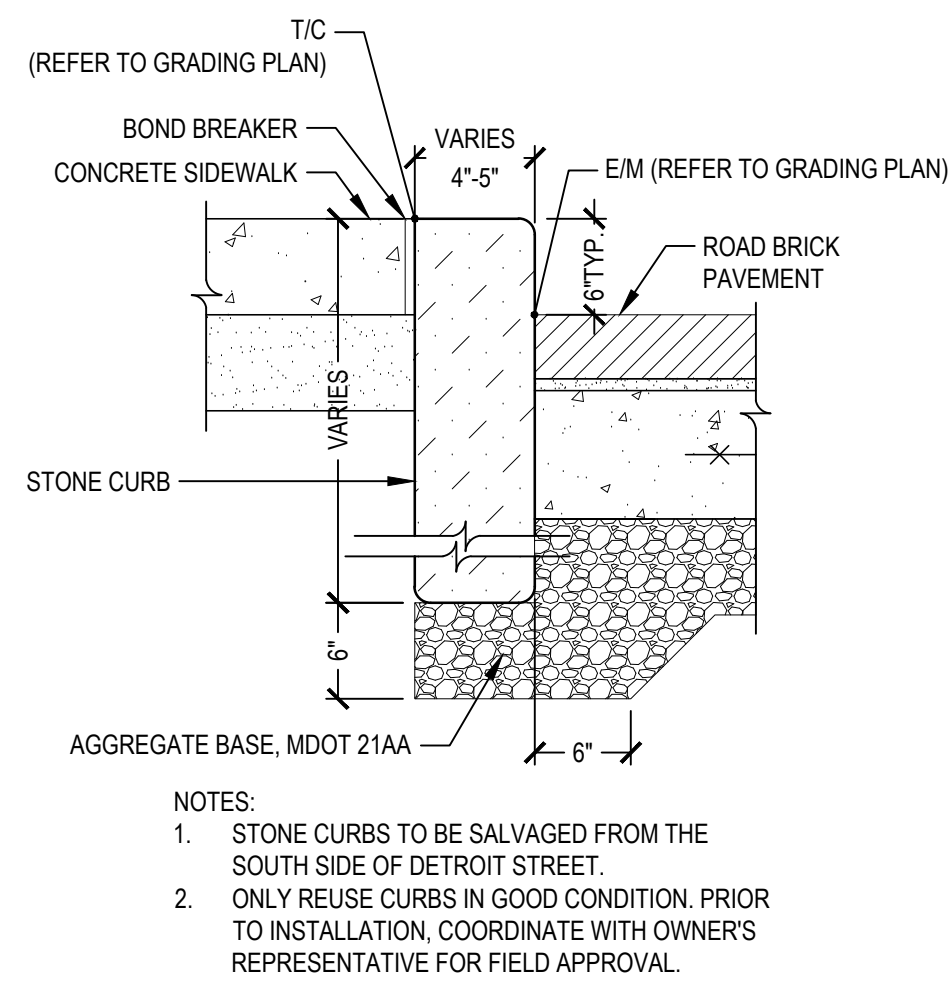
DETAIL NTS

3 CONCRETE CURB AND GUTTER - MOUNTABLE

SECTION NTS

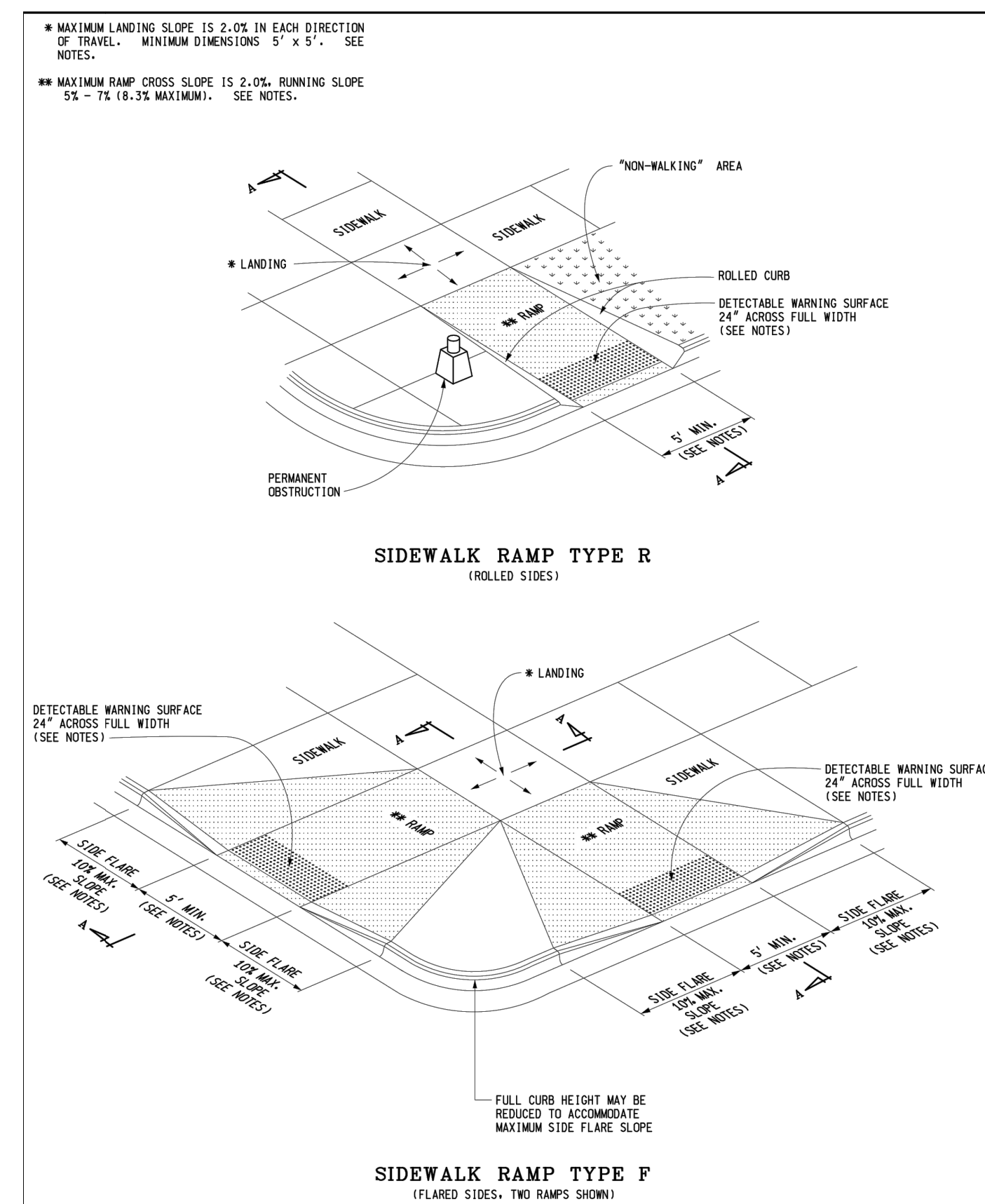
4 CONCRETE CURB, 6-INCH STRAIGHT

SECTION NTS

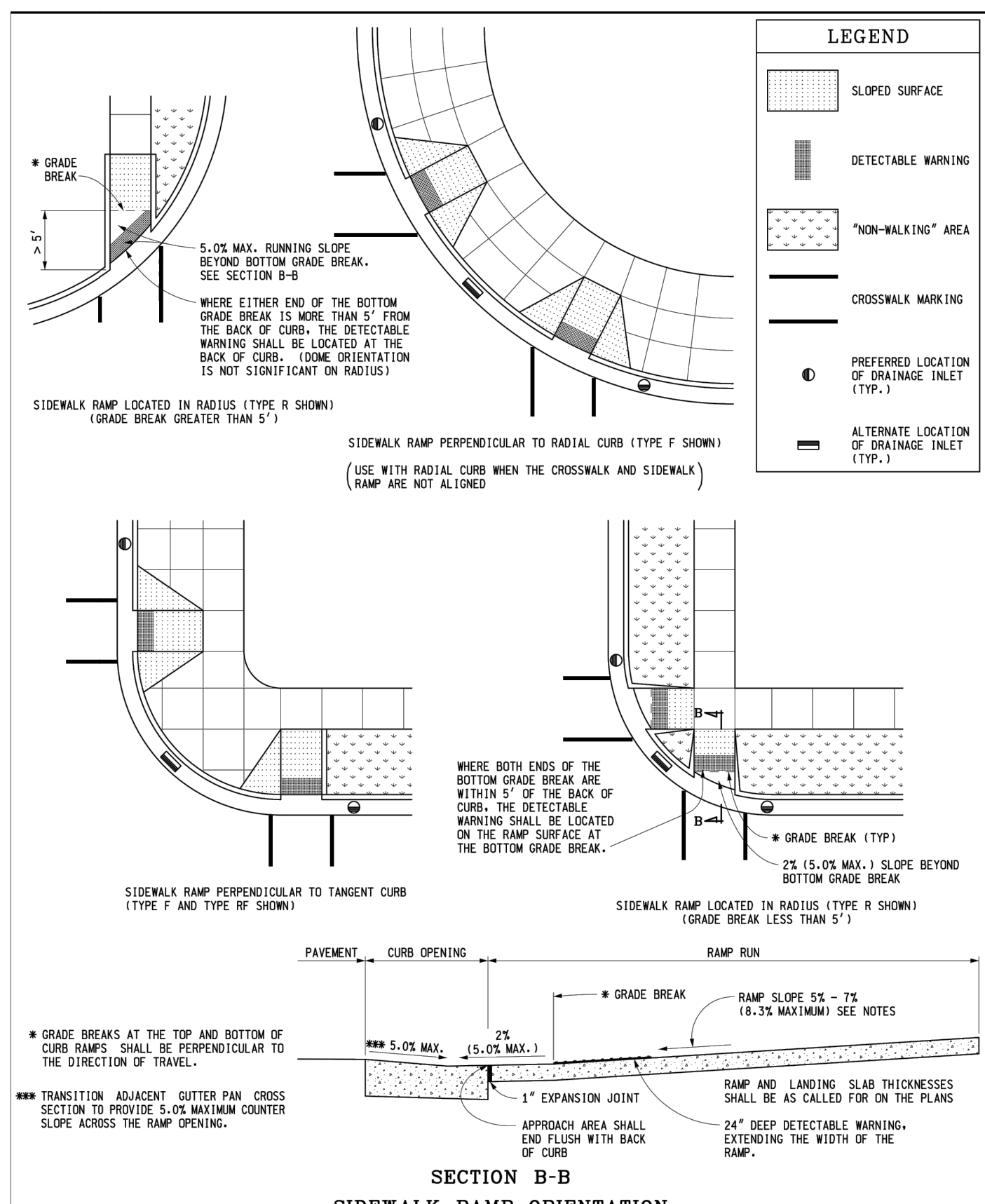


5 RESET STONE CURB

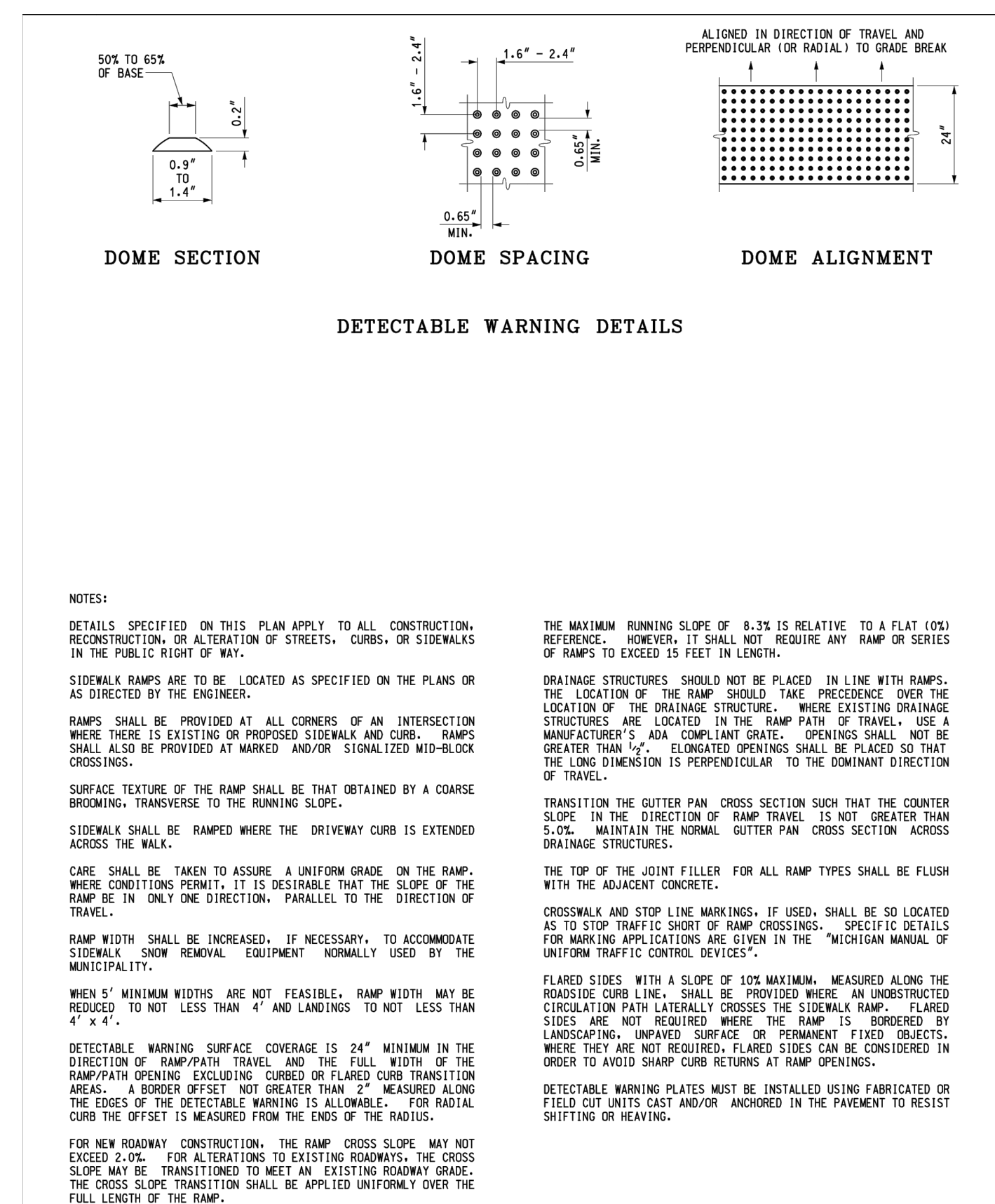
SECTION NTS



DEPARTMENT DIRECTOR MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS PREPARED BY: [Name] APPROVED BY: [Name] CHECKED BY: [Name]	MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS F.H.W.A. APPROVAL 3-15-2016 PLAN DATE R-28-J SHEET 1 OF 7
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MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS T.H.W.A. APPROVAL 3-15-2016 PLAN DATE R-28-J SHEET 6 OF 7



MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS T.H.W.A. APPROVAL 3-15-2016 PLAN DATE R-28-J SHEET 7 OF 7

7 INTEGRAL CURB

DETAIL NTS

8 MDOT ADA RAMP

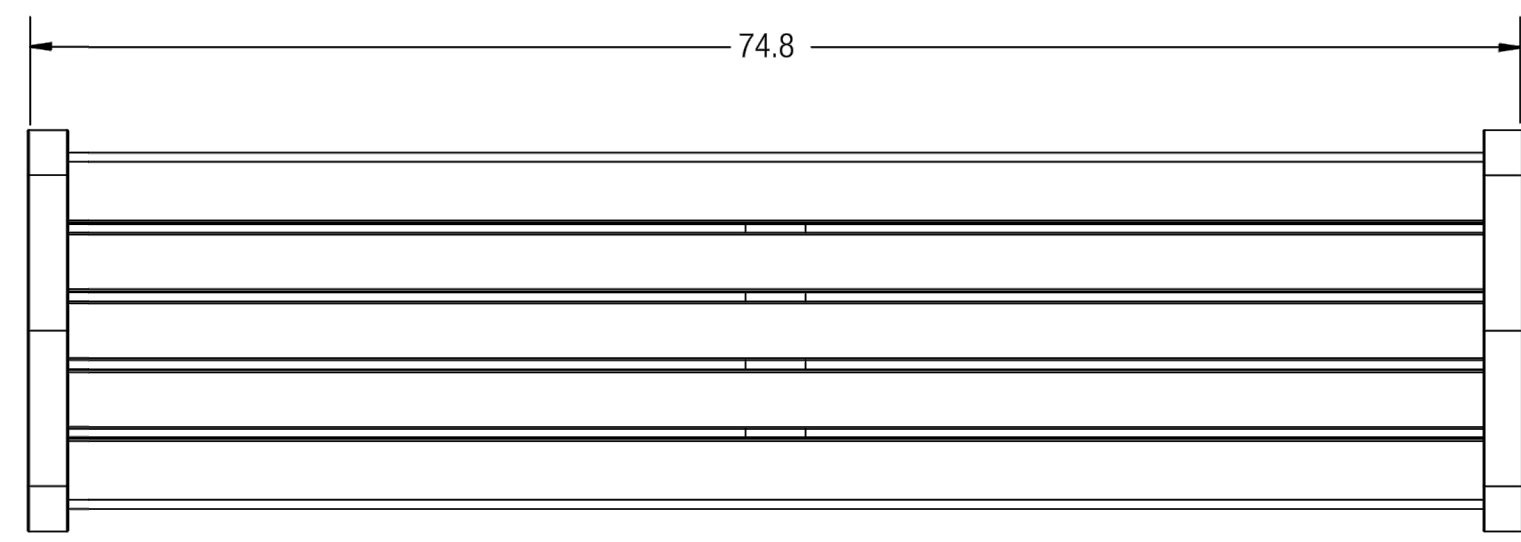
DETAIL NTS

LEGEND

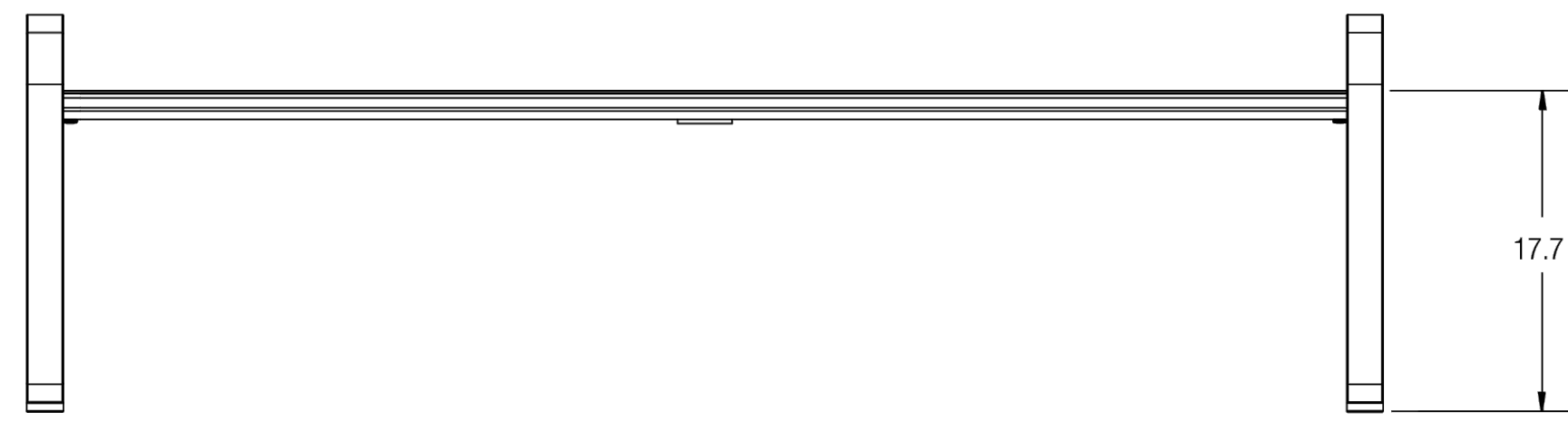
SEE ABOVE					
BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY
			BID PLANS	12-01-2017	
			95% CD	11-17-2017	

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR	
SCALE	INCH
STREETSCAPE DETAILS 2	
DRAWING NO.	C10.2
SHEET NO.	OF

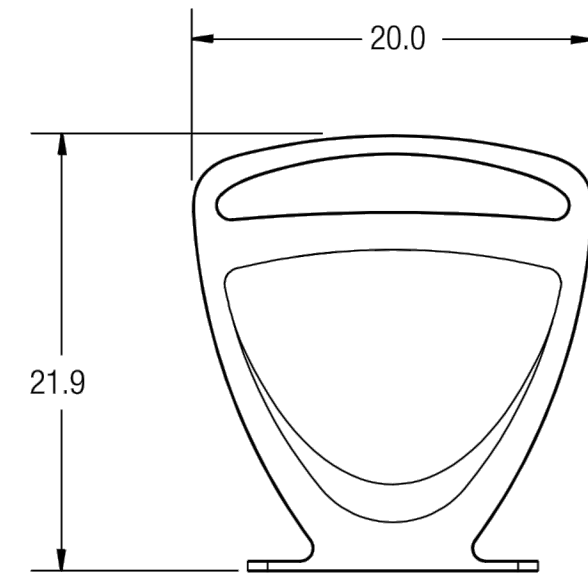
APPROVED BY: _____



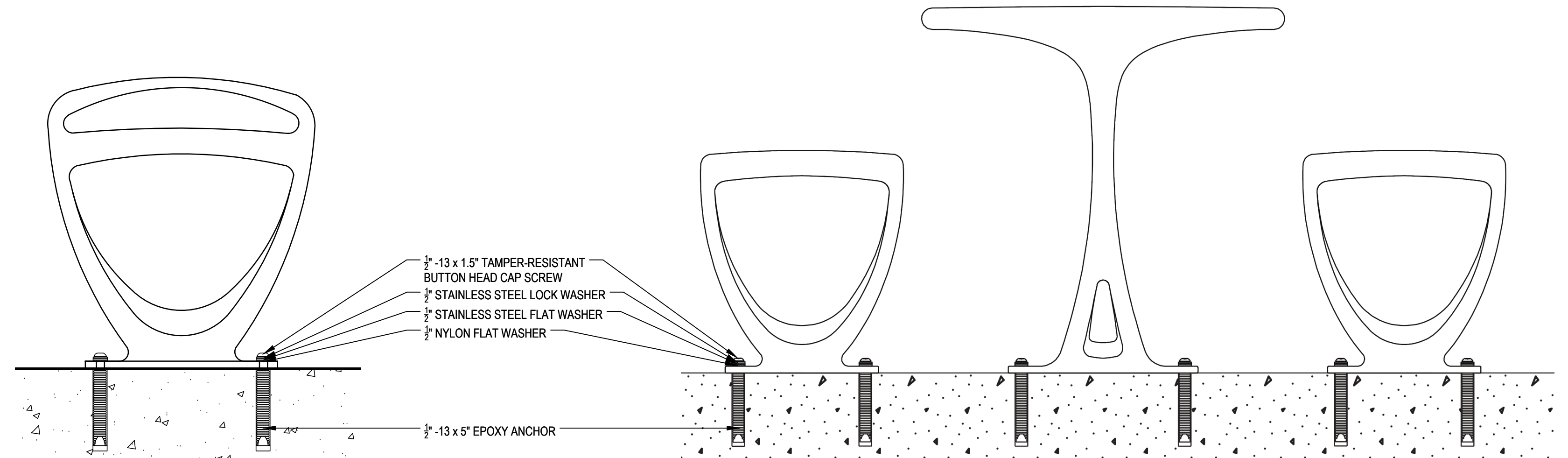
PLAN



ELEVATION



SECTION

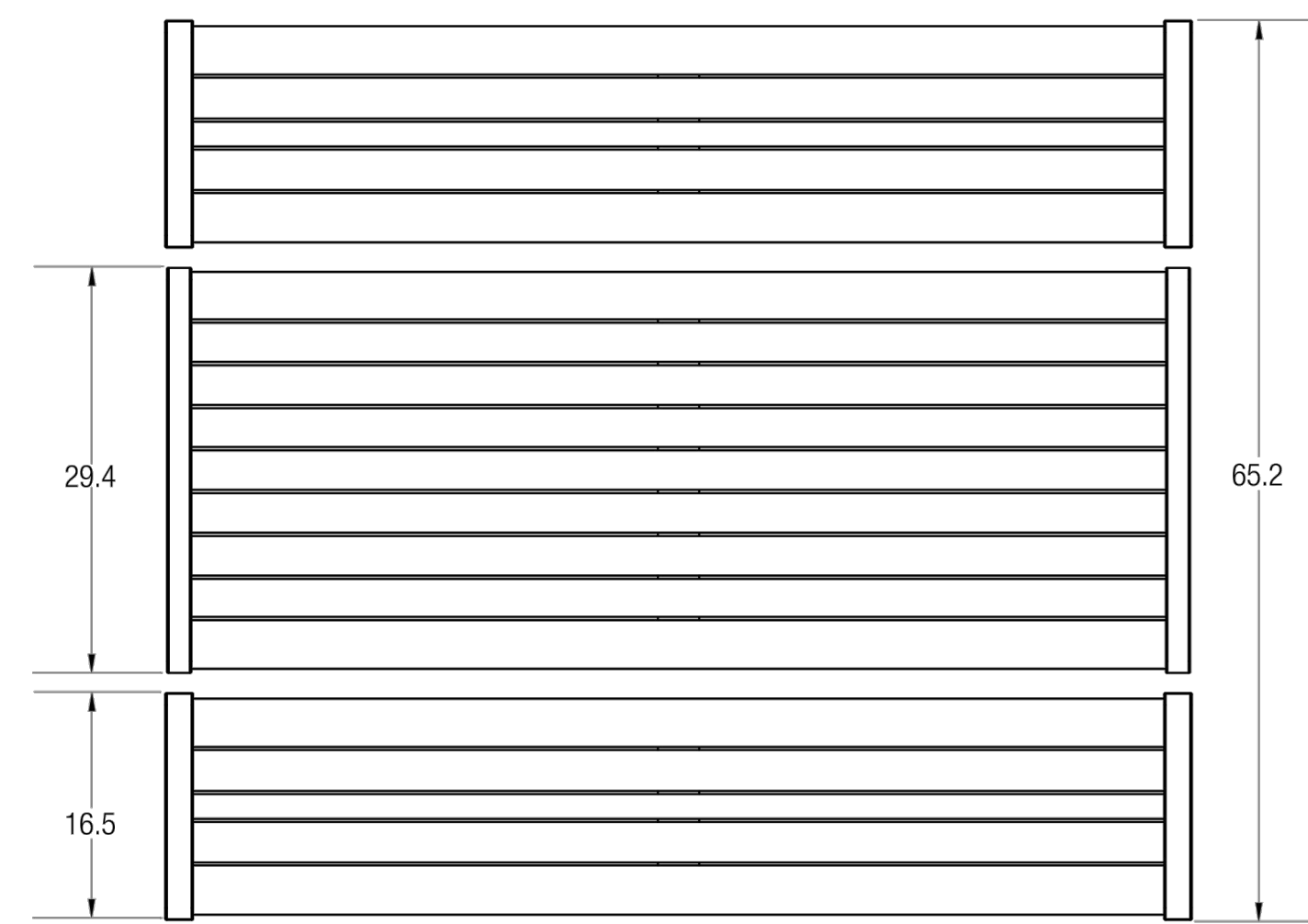


URBAN BENCH INSTALLATION DETAIL

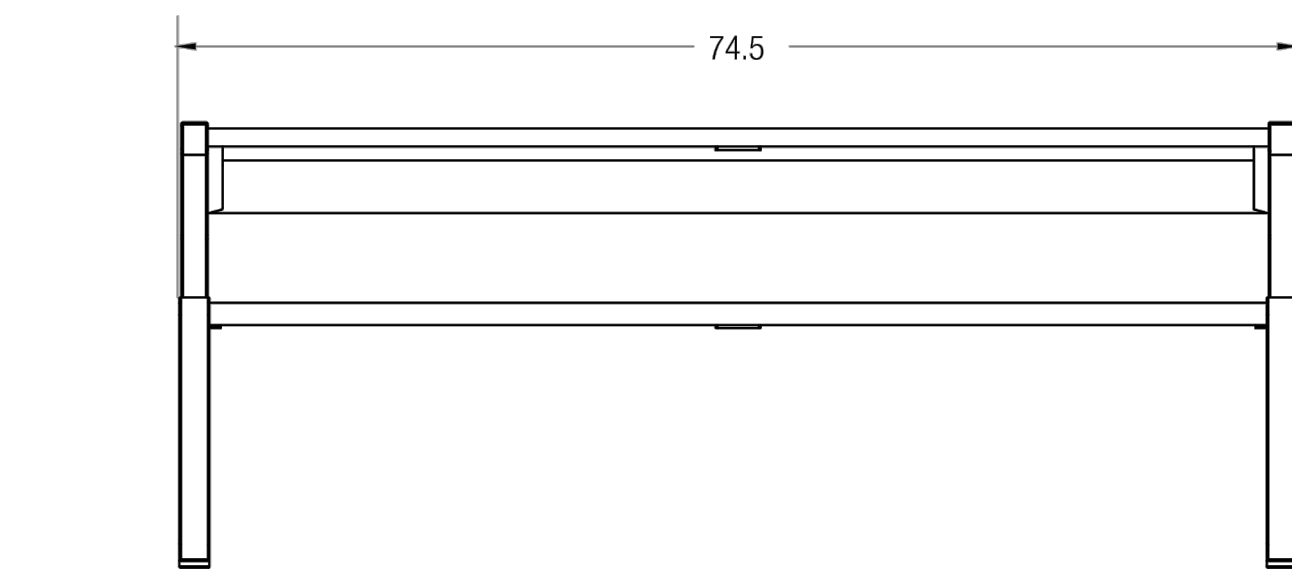
URBAN TABLE AND BENCHES INSTALLATION DETAIL

1 URBAN BENCH

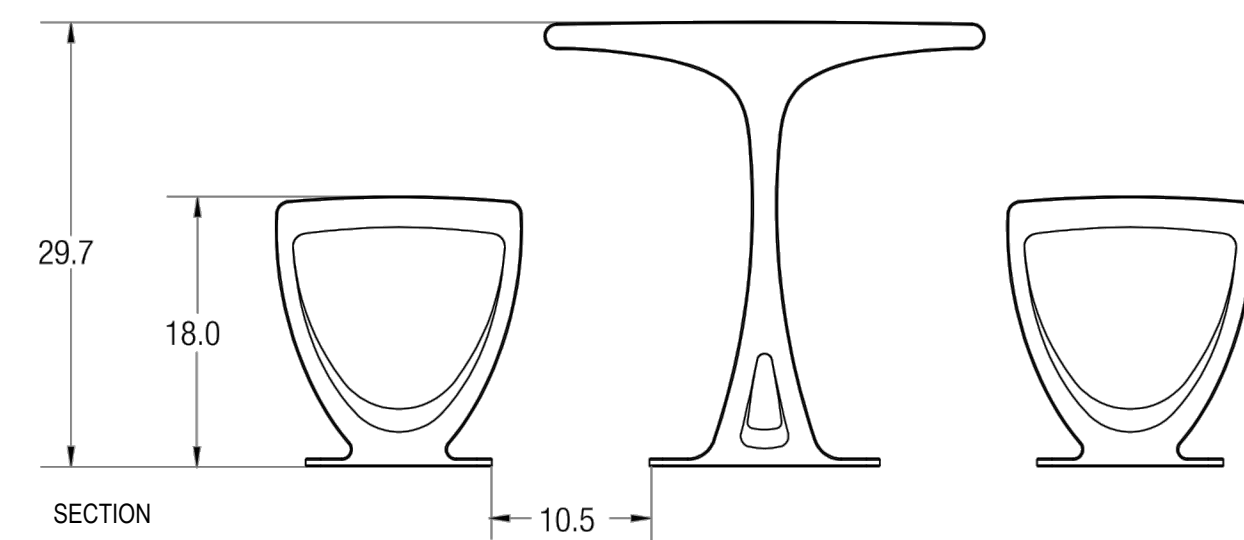
NTS



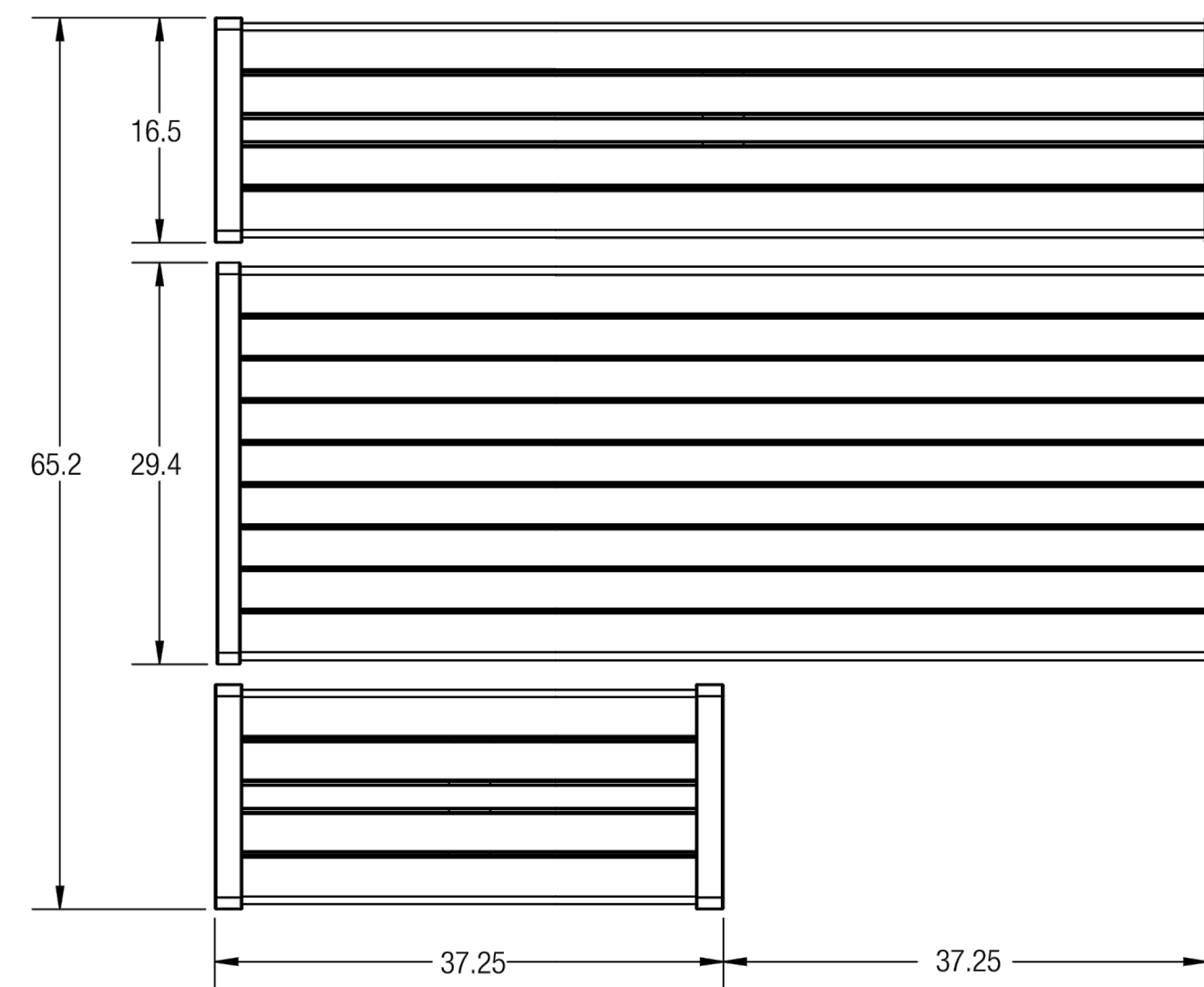
PLAN



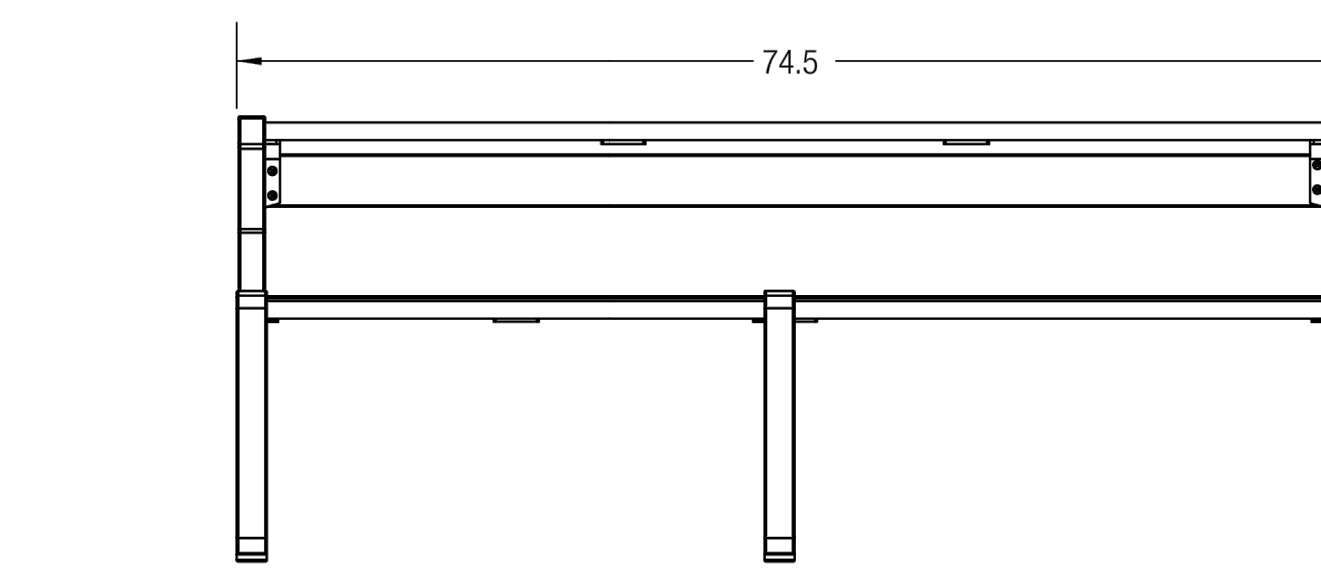
ELEVATION



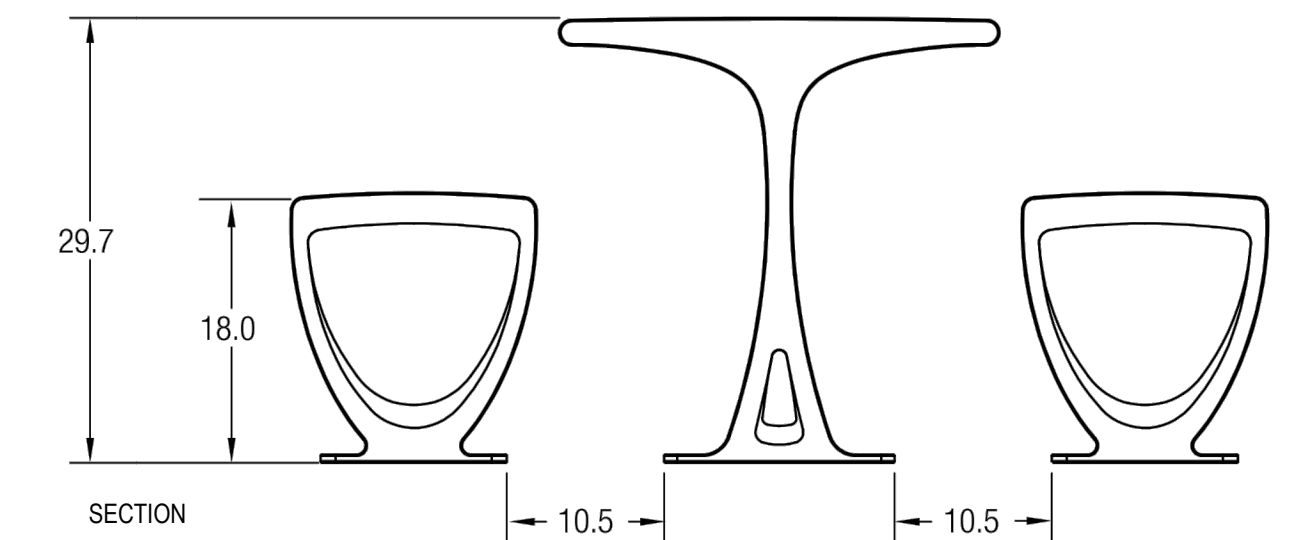
SECTION



PLAN



ELEVATION



SECTION

2 URBAN TABLE AND BENCHES (NON-ADA MODEL)

NTS

3 URBAN TABLE AND BENCHES

NTS

LEGEND

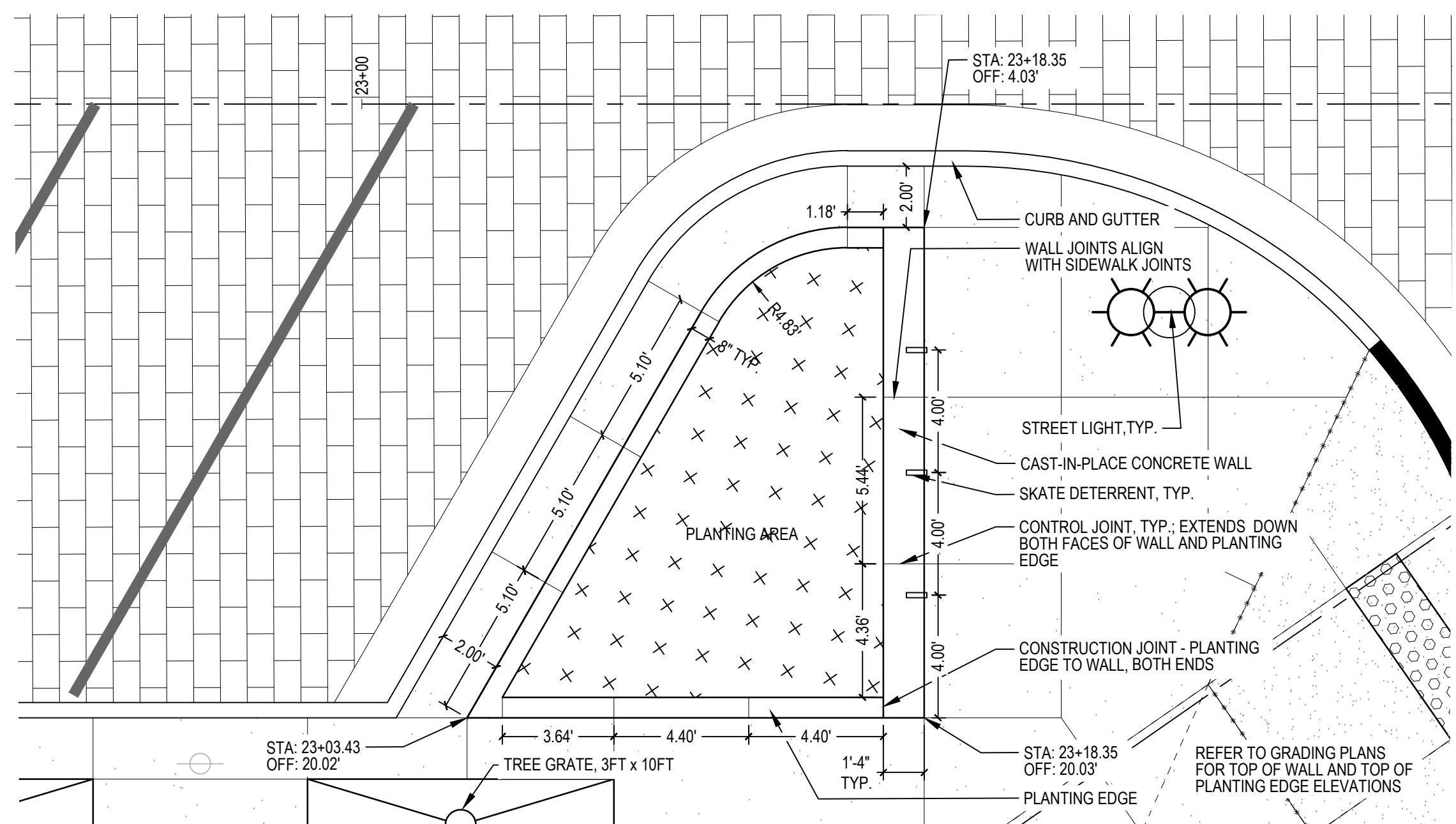
* NOTE: ALL DIMENSION ARE IN INCHES IF APPLICABLE



SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				HDC SUBMITTAL	11-14-2017		

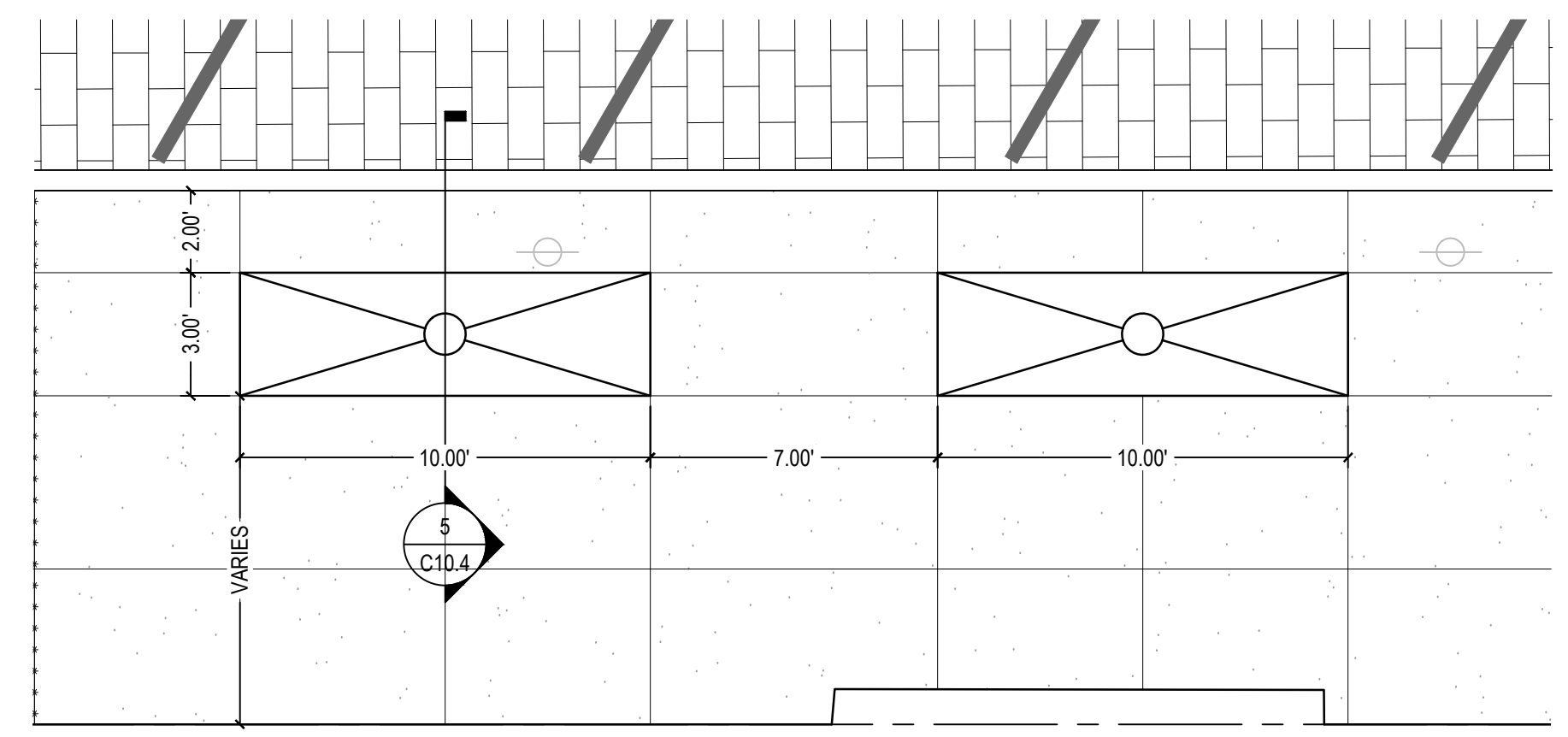
DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR	
SCALE NTS	INCH
DRAWING NO. C10.3	
SHEET NO. ____ OF ____	

APPROVED BY: _____



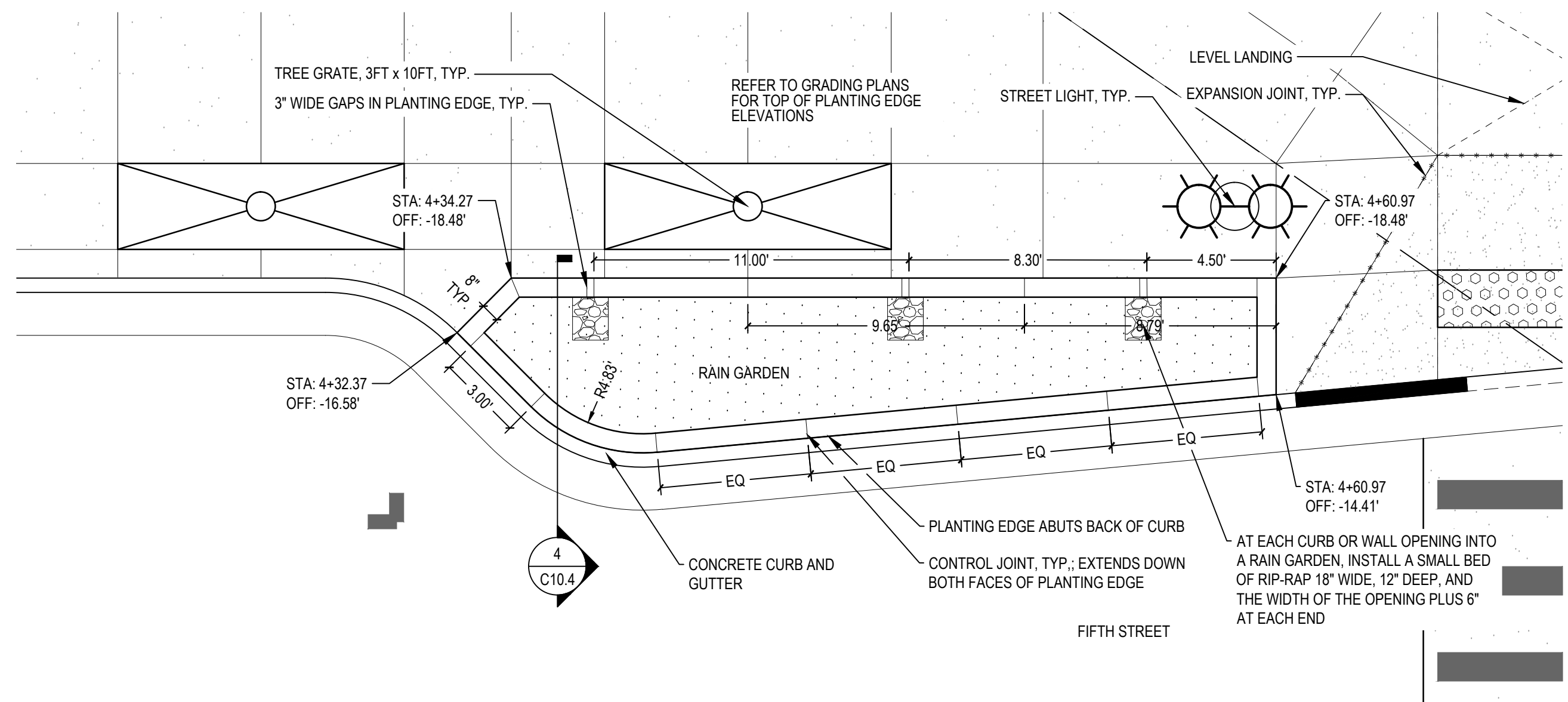
1 ENLARGEMENT PLAN 1
PLAN

1/4" = 1'-0"



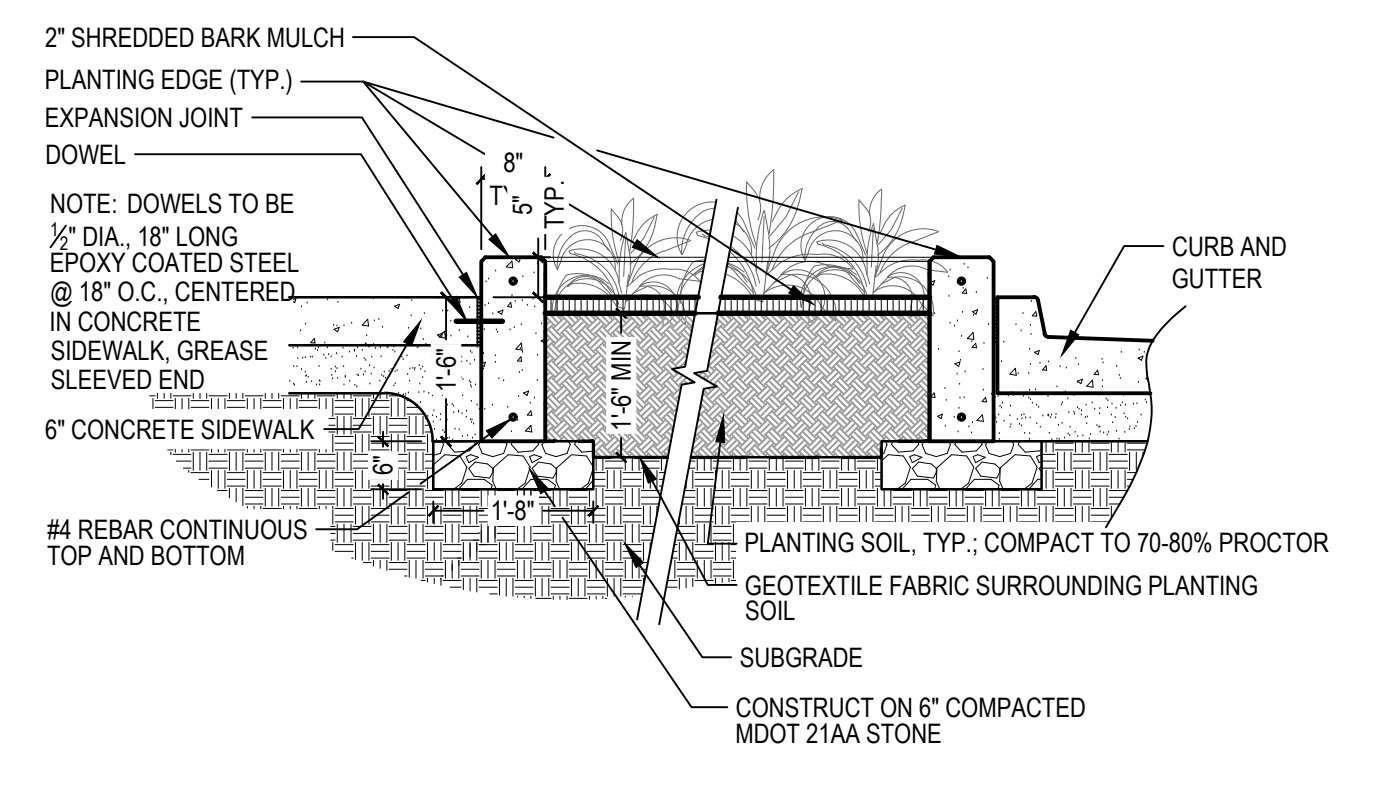
2 TYPICAL TREE GRATE
SECTION

1/4" = 1'-0"



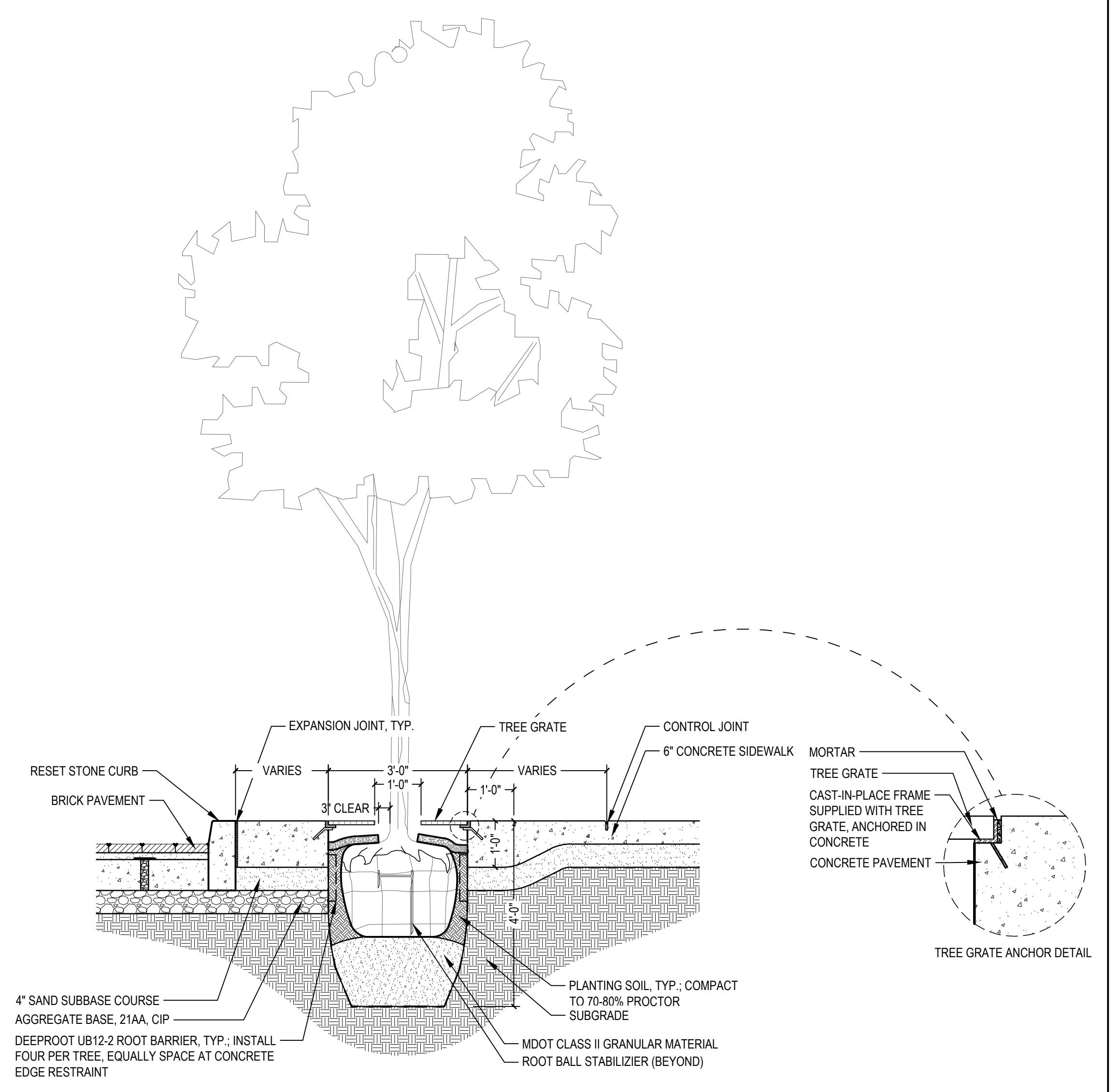
3 ENLARGEMENT PLAN 2
PLAN

1/4" = 1'-0"



4 RAIN GARDEN SECTION
SECTION

1/2" = 1'-0"



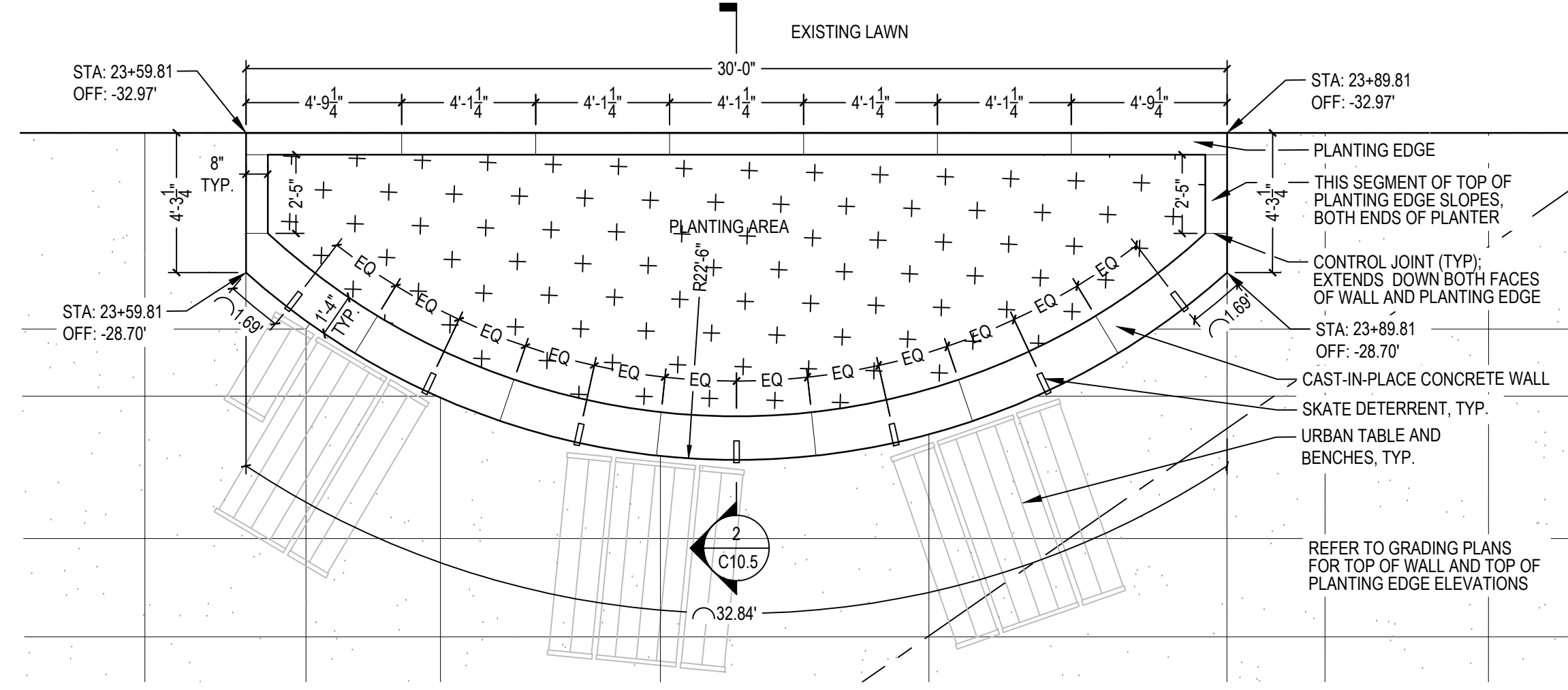
5 TREE GRATE DETAIL
SECTION

1/2" = 1'-0"

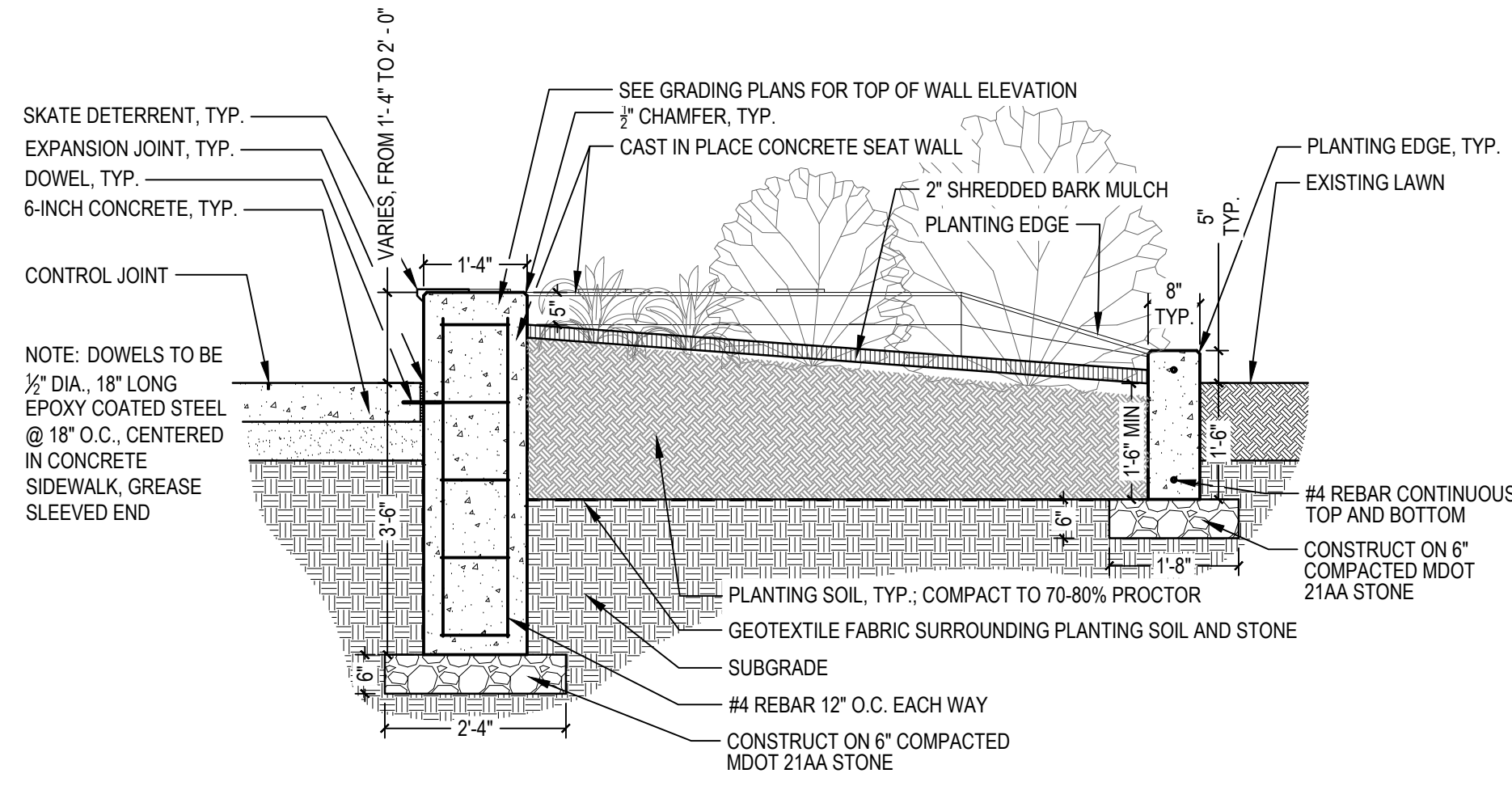
LEGEND

							DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR	
							STREETScape DETAILS 4	
							SCALE AS NOTED	INCH
							DRAWING NO. C10.4	
							SHEET NO. ____ OF ____	
SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY	APPROVED BY: _____
				BID PLANS	12-01-2017			
				95% CD	11-17-2017			

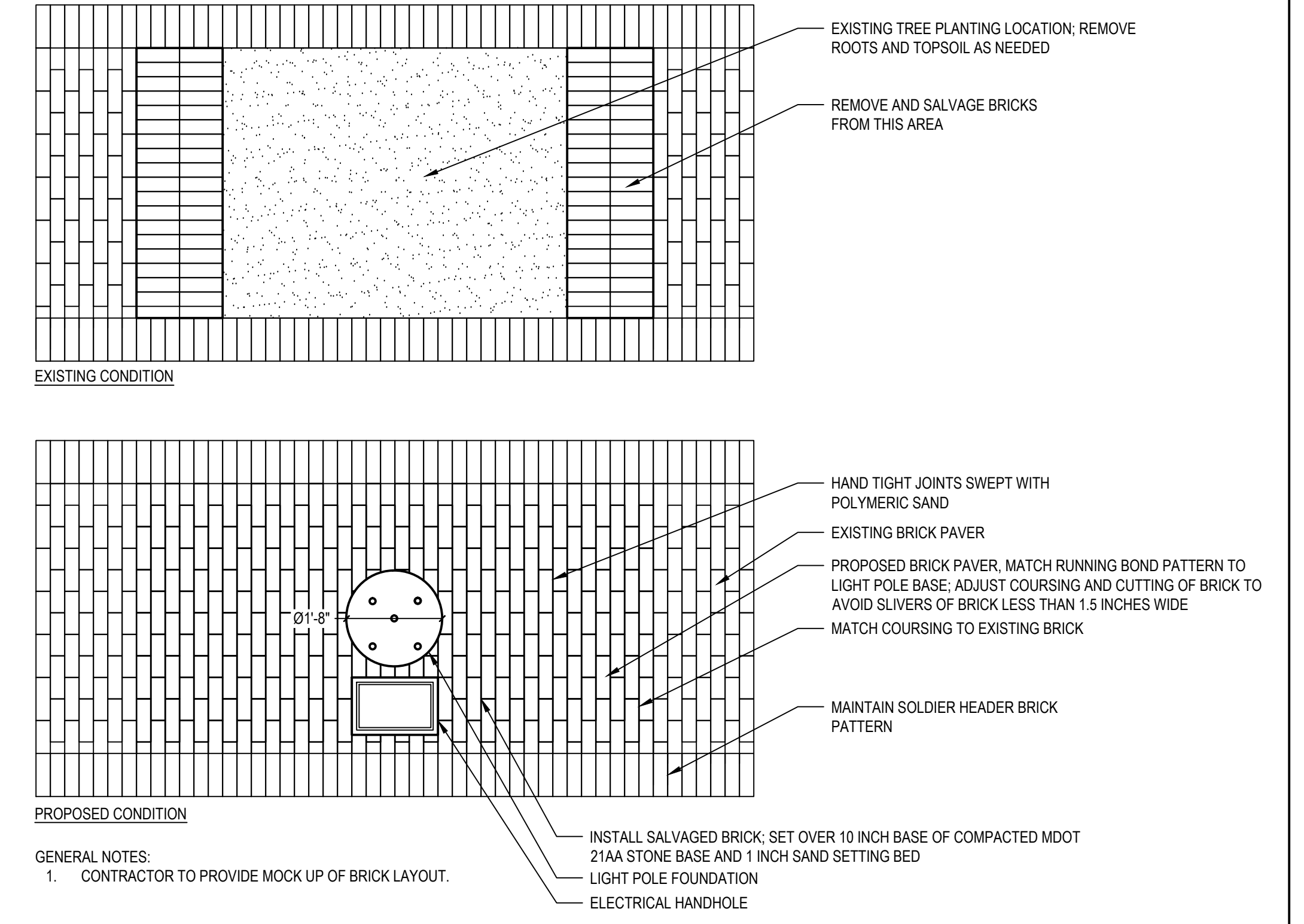




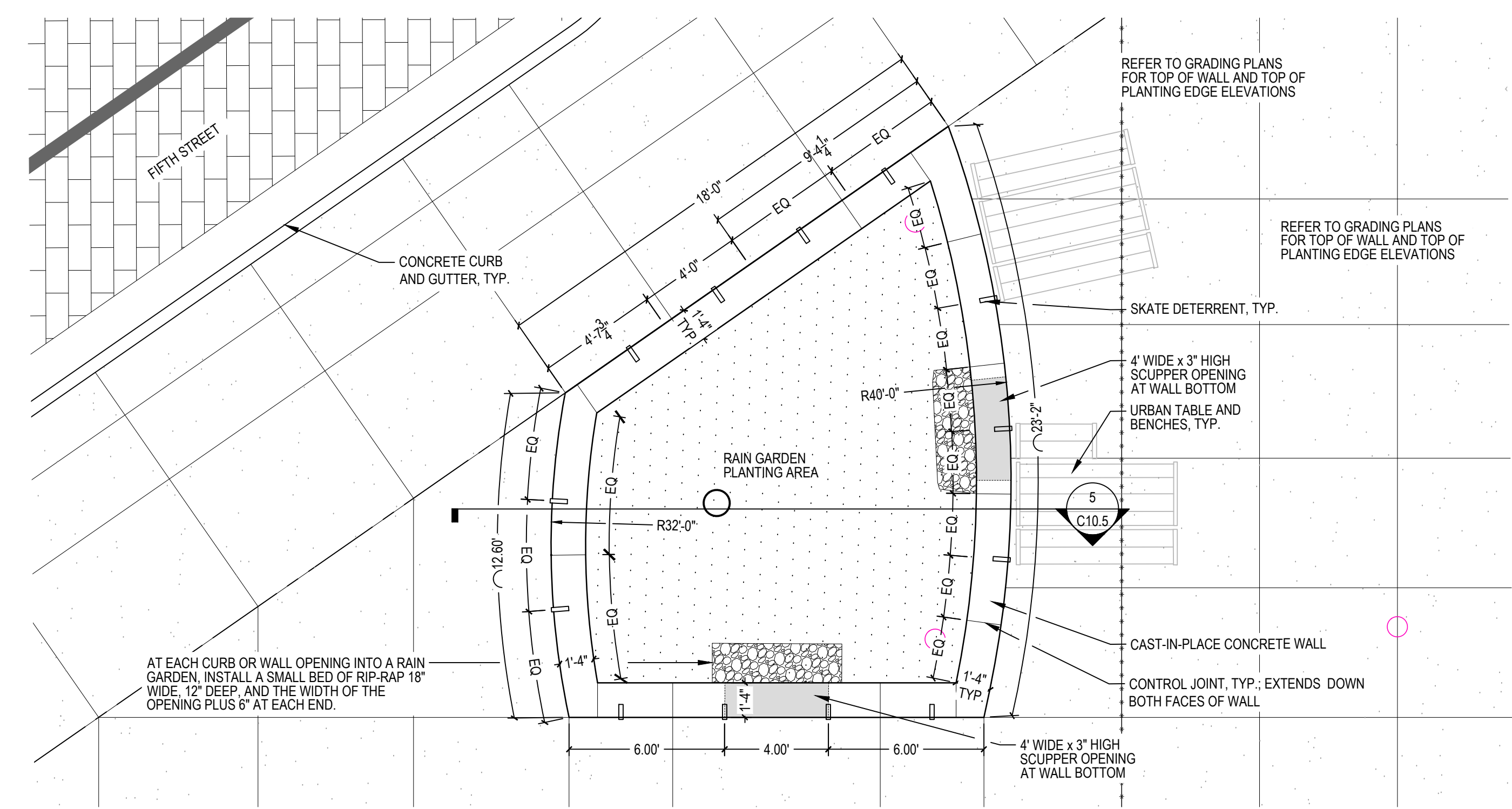
1 ENLARGEMENT PLAN 3
PLAN
1/4" = 1'-0"



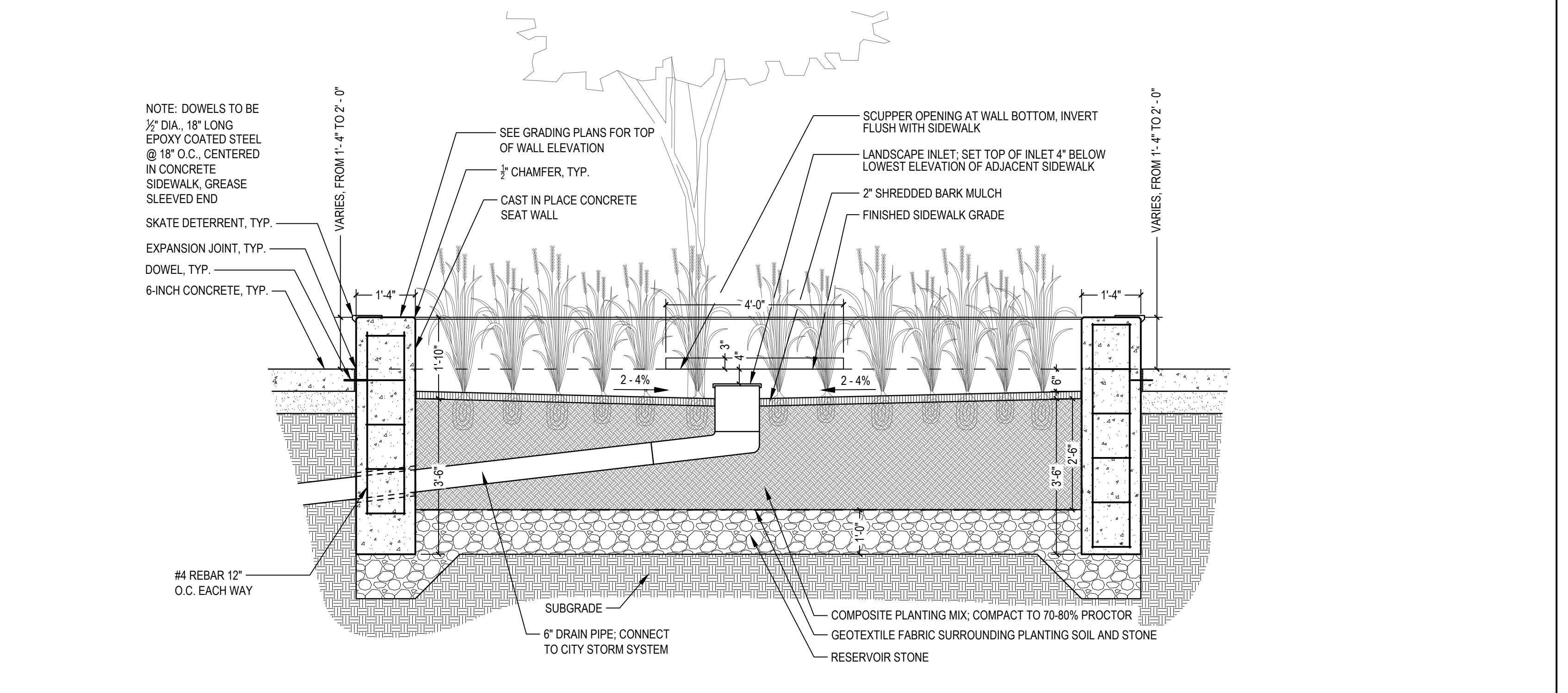
2 PLANTER SECTION
SECTION
1/2" = 1'-0"



3 SIDEWALK BRICK ENLARGEMENT DETAIL
SECTION
1/2" = 1'-0"



4 ENLARGEMENT PLAN 4
PLAN
1/4" = 1'-0"



5 RAIN GARDEN SECTION 2
SECTION
1/2" = 1'-0"

LEGEND



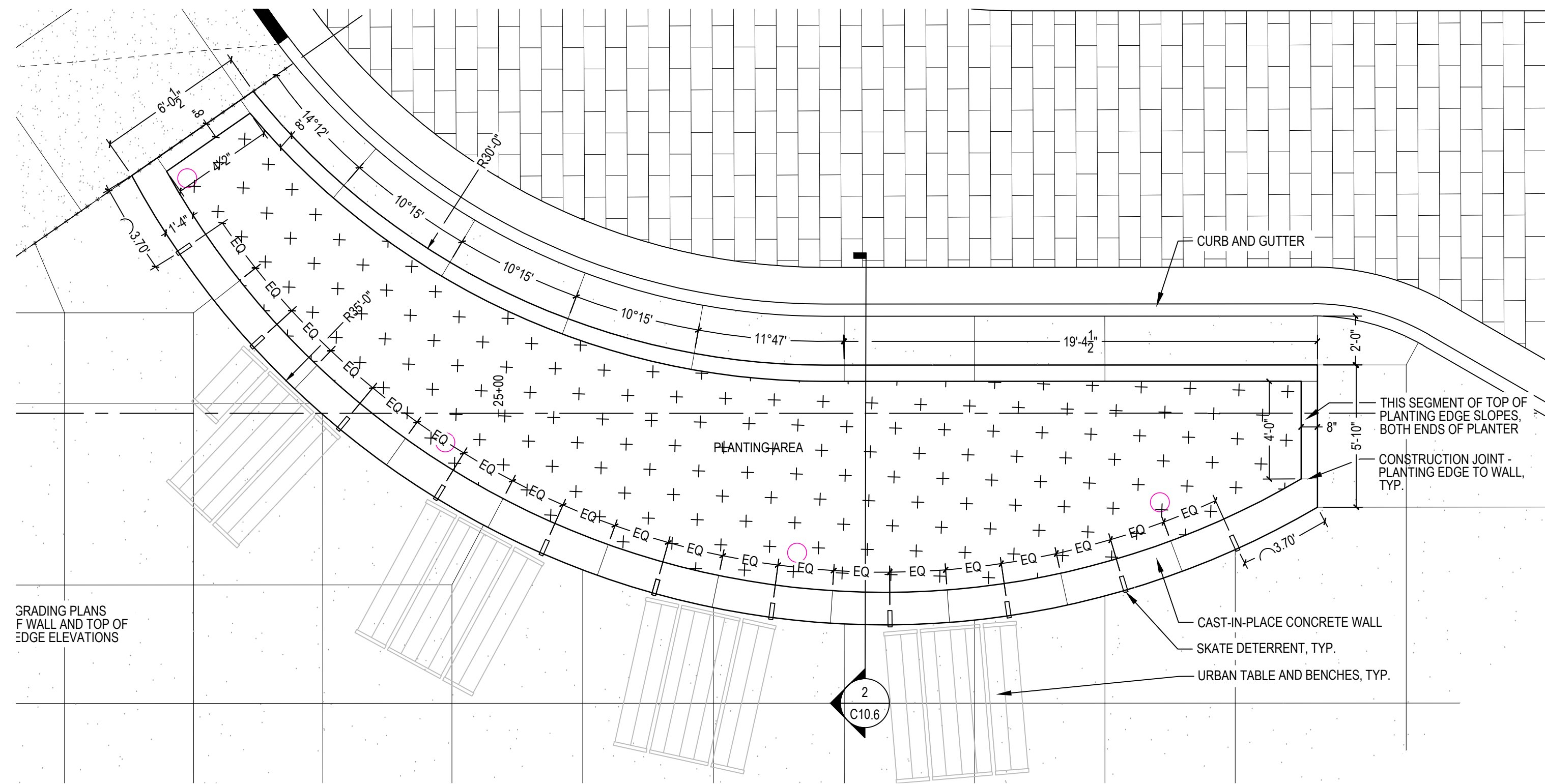
SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

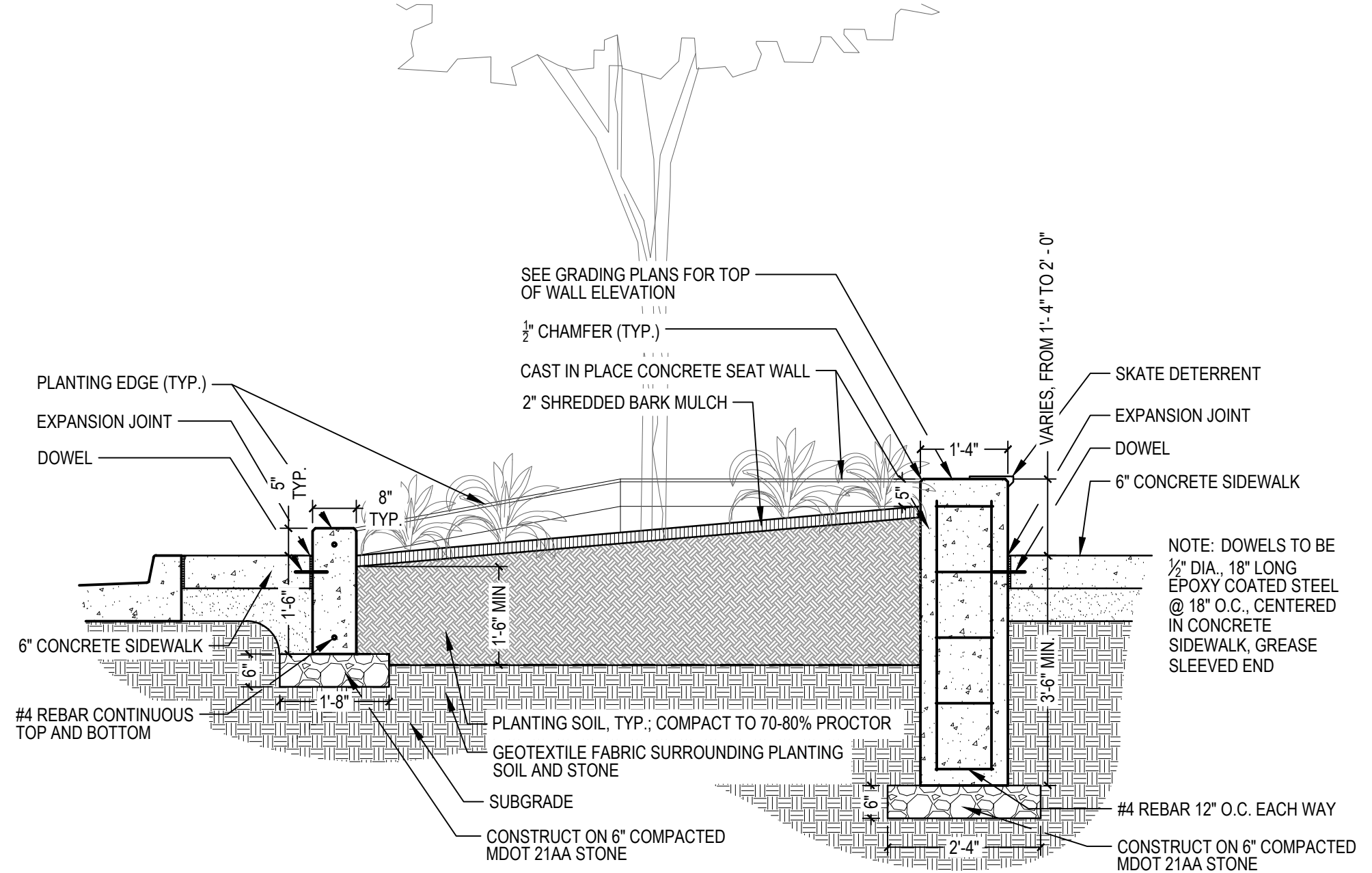
STREETSCAPE DETAILS 5

SCALE AS NOTED	INCH
DRAWING NO. C10.5	
SHEET NO. ____ OF ____	

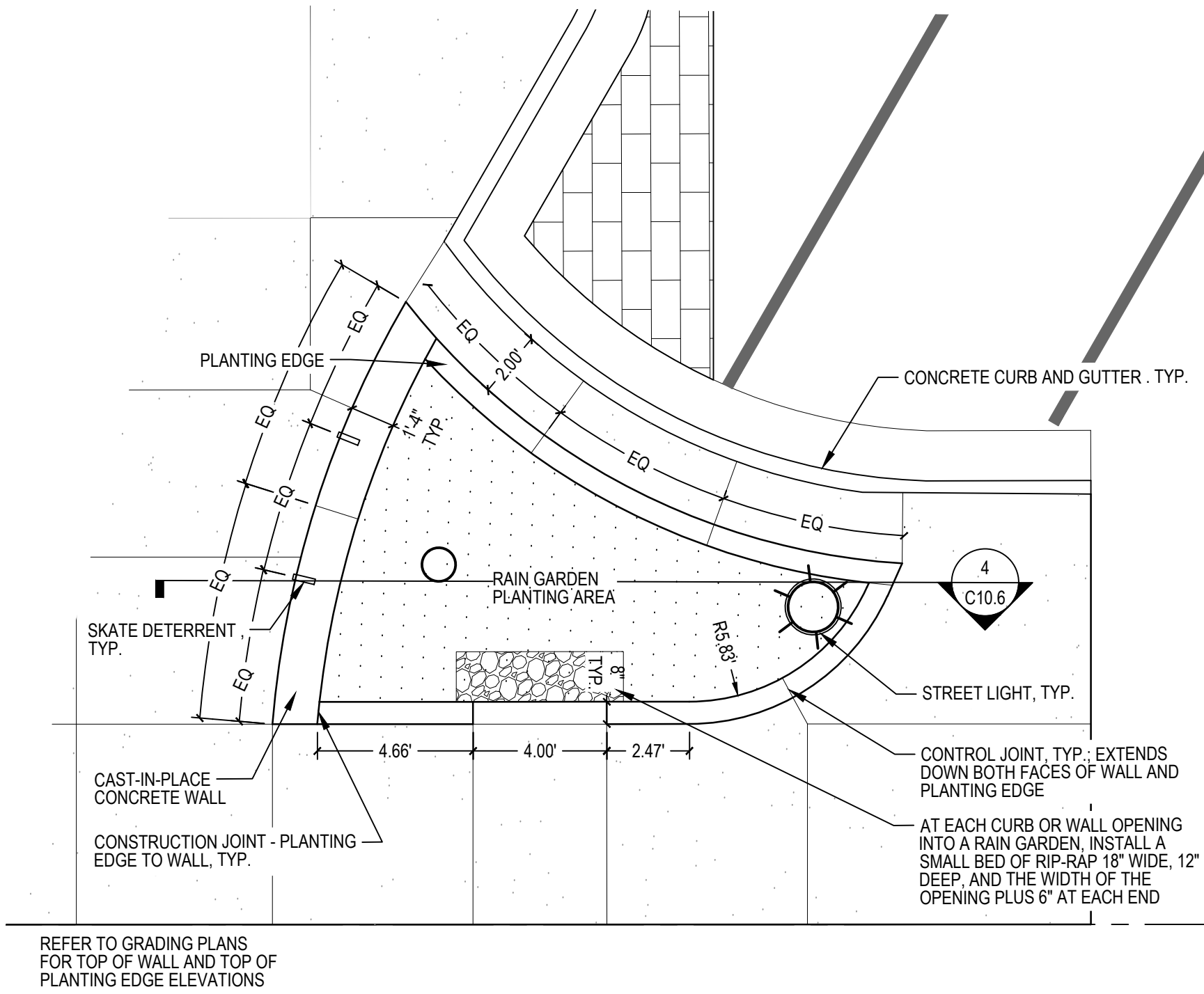
APPROVED BY: _____



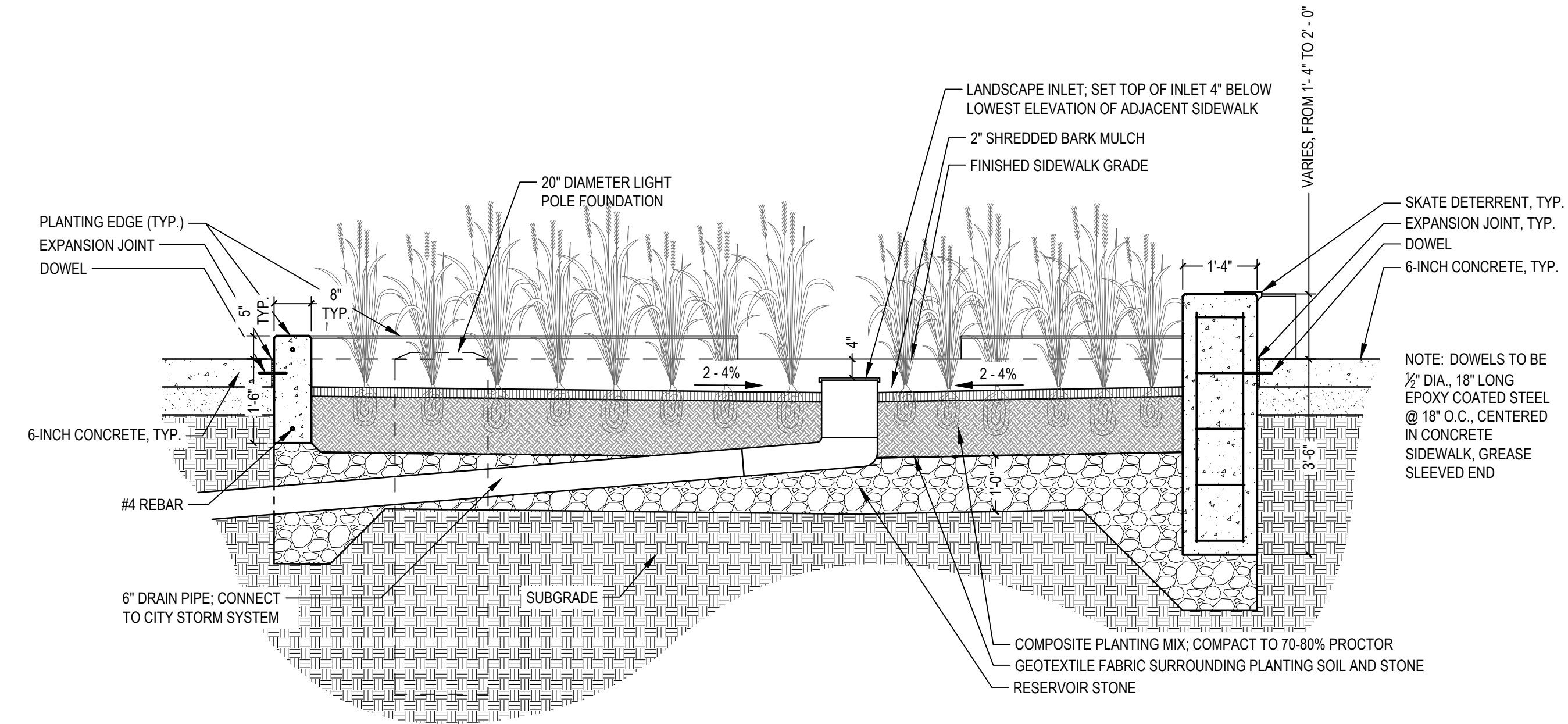
1 ENLARGEMENT PLAN 5
PLAN
1/4" = 1'-0"



2 PLANTER SECTION 2
SECTION
1/2" = 1'-0"



3 ENLARGEMENT PLAN 6
PLAN
1/4" = 1'-0"



4 RAIN GARDEN SECTION 3
SECTION
1/2" = 1'-0"

LEGEND



SEE ABOVE	BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
				BID PLANS	12-01-2017		
				95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

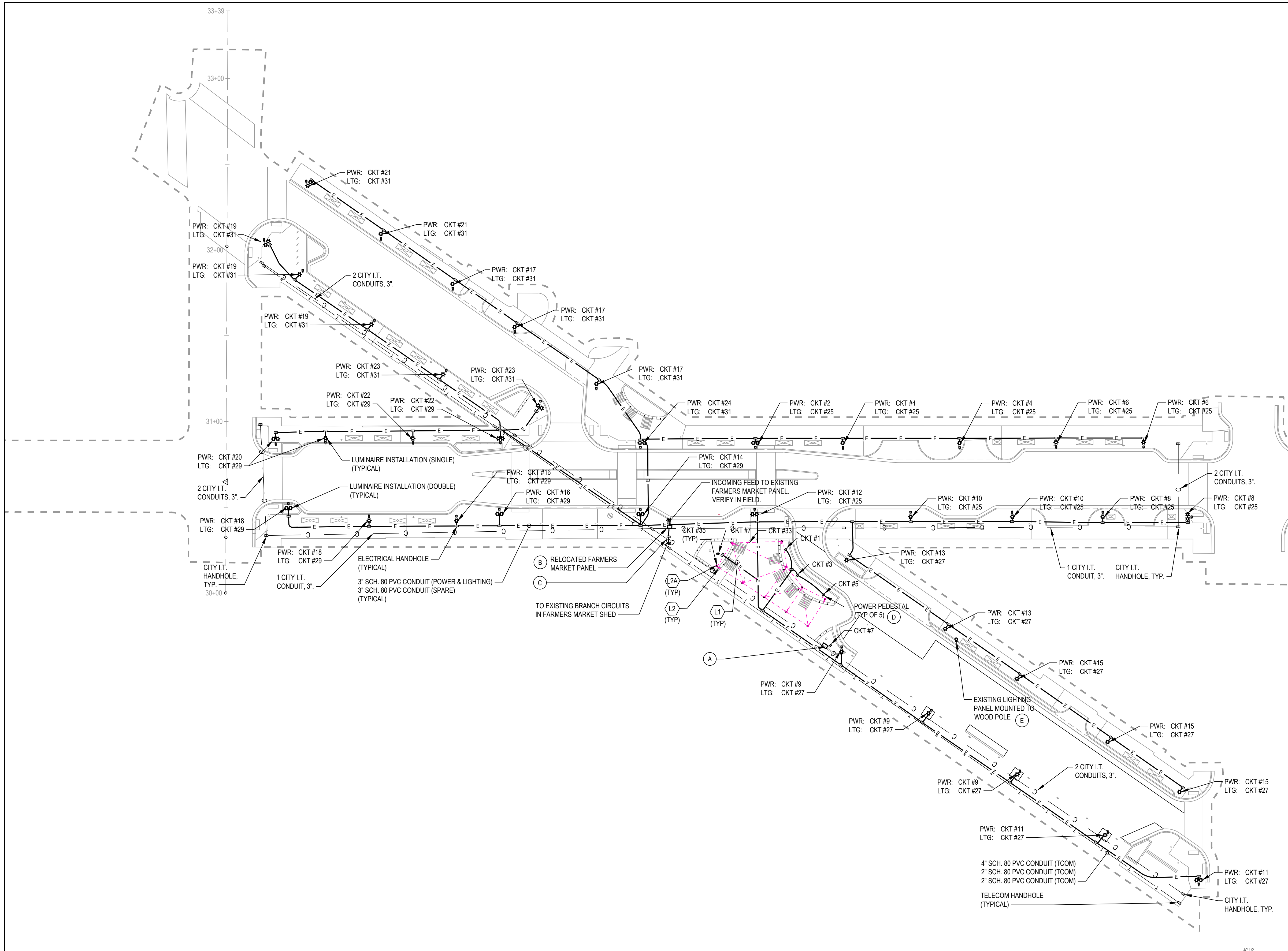
STREETSCAPE DETAILS 6

SCALE AS NOTED

DRAWING NO. **C10.6**

SHEET NO. ____ OF ____

APPROVED BY: _____



GENERAL DEMOLITION NOTES

1. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION WORK. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT-ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN FIELD CONDITIONS AND CONTRACT DOCUMENTS PRIOR TO BID AND CONSTRUCTION.
2. EXAMINE THE DRAWINGS OF OTHER TRADES AND BE FAMILIAR WITH THE DEMOLITION REQUIRED BY OTHER TRADES. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION REQUIRED TO FACILITATE THE DEMOLITION WORK OF OTHER TRADES, WHETHER OR NOT SPECIFICALLY INDICATED.
3. REMOVE LIGHTING FIXTURES AND ELECTRICAL DEVICES AS INDICATED DEMOLITION DRAWINGS BY OTHERS. DEMOLITION SHALL INCLUDE, BUT NOT BE LIMITED TO, THOSE DEVICES SHOWN. TURN OFF AND LABEL CIRCUITS AS SPARES FOR NEW WORK AS REQUIRED.
4. COORDINATE WITH NEW WORK PLANS FOR EXTENT OF DEMOLITION WORK.
5. REMOVE ALL CONDUIT AND WIRE BACK TO SOURCE OR NEAREST UPSTREAM DEVICE REMAINING IN SERVICE, UNLESS NOTED OTHERWISE.
6. MAINTAIN ELECTRICAL SERVICE TO ALL LIGHTING FIXTURES AND DEVICES THAT ARE TO REMAIN. EXTEND CONDUIT AND WIRE AS REQUIRED WHERE DEMOLITION WORK ELECTRICAL SERVICE TO DOWNSTREAM DEVICES ARE TO REMAIN.
7. CONTRACTOR SHALL PROVIDE UPDATED TYPED DIRECTORIES FOR ALL PANELS AFFECTED BY THIS ALTERATION.
8. COORDINATE ANY SHUT DOWN OF EXISTING SERVICES AND EQUIPMENT THAT ARE REMAINING IN USE WITH THE OWNER'S REPRESENTATIVE WHERE EXISTING BUILDING/CITY SERVICE IS REQUIRED TO BE SHUT DOWN. INCLUDE ALL ASSOCIATED OVERTIME COSTS TO PERFORM THIS WORK DURING WEEKENDS AND EVENINGS. INCLUDE ALL COSTS FOR PROVIDING TEMPORARY POWER WHERE SHUT DOWN MUST OCCUR FOR PERIODS LONGER THAN THESE HOURS.
9. COORDINATE ELECTRICAL SHUT DOWNS WITH THE OWNER ONE WEEK PRIOR TO SHUT DOWN.
10. RECYCLE OR DISPOSE MATERIALS OFF SITE AND INCLUDE ALL COSTS IN BID. HANDLE ALL MATERIALS IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

GENERAL NOTES

1. THE DRAWINGS REPRESENT ELECTRICAL DESIGN INTENT AND ARE SCHEMATIC AND DIAGRAMMATIC. THE SPECIFICATIONS ESTABLISH MINIMUM PERFORMANCE AND PRODUCT INSTALLATION REQUIREMENTS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE PRODUCTS AND INSTALLATION METHODS CONSISTENT WITH THE DESIGN INTENT AND ALL LOCAL CODES AND REGULATIONS NECESSARY FOR COMPLETE AND OPERATIONAL ELECTRICAL SYSTEMS.
2. INSTALL ELECTRICAL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, LOCAL CODES AND CITY OF ANN ARBOR ORDINANCES, IN A NEAT AND WORKMANLIKE MANNER.
3. REFER TO THE DOWNTOWN DEVELOPMENT AUTHORITY (DDA) AND THE CITY OF ANN ARBOR FOR STANDARDS, MATERIALS, SPECIFICATIONS, DETAILS AND GENERAL CONSTRUCTION PROJECT REQUIREMENTS. ALL WORK SHALL BE IN ACCORDANCE WITH CITY STANDARDS, UNLESS NOTED OTHERWISE IN PROJECT SPECIFICATIONS.
4. THE EXISTING CONDITIONS SHOWN ON PLANS ARE FROM THE BEST AVAILABLE INFORMATION AND NOT DEEMED COMPLETELY ACCURATE. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID AND CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM FIELD INVESTIGATIONS AND/OR RESEARCH AND TO INCORPORATE INTO BID ALL NECESSARY COSTS TO COMPLETE THE WORK. NEITHER EXTRA PAYMENTS NOR ADJUSTMENTS TO UNIT PRICES WILL BE MADE IN EXCESS OF THE BID PRICE FOR ADDITIONAL CLAIMS.
5. IDENTIFY ALL EXISTING UNDERGROUND UTILITIES AND COORDINATE NEW ELECTRICAL WORK WITH ALL LOCAL UTILITIES AND TRADES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS FULLY RESPONSIBLE TO AVOID INTERFERENCE WITH (AND DAMAGE TO) EXISTING UNDERGROUND UTILITIES. CALL MISS DIG BEFORE COMMENCING CONSTRUCTION.
6. ESTABLISH AND PERFORM A DETAILED SCHEDULE OF WORK AS SOON AS POSSIBLE AFTER AWARD OF CONTRACT. PREPARE SCHEDULE IN CONJUNCTION WITH CITY OF ANN ARBOR REPRESENTATIVE AND UTILITY COMPANY REPRESENTATIVE. COORDINATE ANY SHUTDOWNS WITH CITY REPRESENTATIVE TWO WEEKS IN ADVANCE OF SCHEDULED SHUTDOWN. INTERFERENCE OF ELECTRICAL SERVICE SHALL NOT BE ALLOWED WITHOUT WRITTEN PERMISSION FROM THE CITY OF ANN ARBOR. PERFORM THE COMPLETE TESTING FOR THE SATISFACTORY OPERATION OF ALL LIGHTING, POWER, AND CONTROL SYSTEMS WITH REFERENCE TO INDUSTRY STANDARD PRACTICES AND MANUFACTURER RECOMMENDATIONS.
7. INCREASE CONDUCTOR SIZES TO LIMIT VOLTAGE DROP, AS REQUIRED. PERFORM CALCULATIONS AND INCLUDE DERATING FACTORS TO ENSURE PROPER CONDUCTOR SIZING PRIOR TO CONSTRUCTION. USE COPPER CONDUCTORS ONLY, MINIMUM SIZE SHALL BE #10 AWG.
8. ALL CIRCUITS SHALL BE RUN WITH AN INSULATED GROUND WIRE.
9. SPLICES SHALL BE MADE IN POLE BASES OR HANDHOLES AND SHALL BE ACCESSIBLE. MINIMIZE SPLICES AS MUCH AS POSSIBLE. WHEN USED, SPLICES SHALL BE WATERTIGHT.
10. ALL UNDERGROUND CABLES AND CONDUITS SHALL BE DETECTABLE.
11. PROVIDE PULL STRINGS FOR ALL SPARE CONDUITS. MARK, CAP AND WATERTIGHT SEAL SPARE CONDUITS.
12. CABLING FOR TELECOMMUNICATIONS SHALL BE PROVIDED BY TELECOMMUNICATIONS UTILITIES (OTHERS).
13. UNLESS NOTED OTHERWISE, MINIMUM CONDUIT SIZE SHALL BE 1".

KEYED NOTES

- (A) EXISTING ENCLOSURE TO REMAIN. DISCONNECT AND REMOVE EXISTING DEVICES (WHICH INCLUDES, BUT NOT LIMITED TO, DISCONNECT SWITCHES, CIRCUIT BREAKERS, CONTACTORS) INTERNAL TO ENCLOSURE. ALL LIGHTING AND POWER WITHIN SCOPE LIMITS SHALL BE FED FROM PANELBOARD AS INDICATED. REFER TO SHEET E2.0 FOR MORE INFORMATION.
- (B) RELOCATED FARMERS MARKET PANEL AND NEW CONCRETE PAD. COORDINATE FINAL LOCATION WITH THE OWNER.
- (C) EXTEND BRANCH CIRCUITS AND REWORK INCOMING FEEDER FOR EXISTING PANEL TO NEW LOCATION. PROVIDE NEW ELECTRICAL HANDHOLE.
- (D) PROVIDE PEDOC DOUBLE-GANG, 24" HIGH, NEMA 3R, PEDESTAL WITH BLACK FINISH. INSTALL POWER PEDESTALS IN PLANTER AREAS PER MANUFACTURER RECOMMENDATIONS.
- (E) EXISTING LIGHTING PANEL AND WOOD POLE TO REMAIN. REFEED ANY DEVICES AFFECTED BY DEMOLITION THAT ARE EXISTING TO REMAIN. NEW LIGHT FIXTURES WITHIN SCOPE BOUNDARY SHALL BE FED FROM NEW LIGHTING PANEL ON GRADE AS INDICATED.

LEGEND

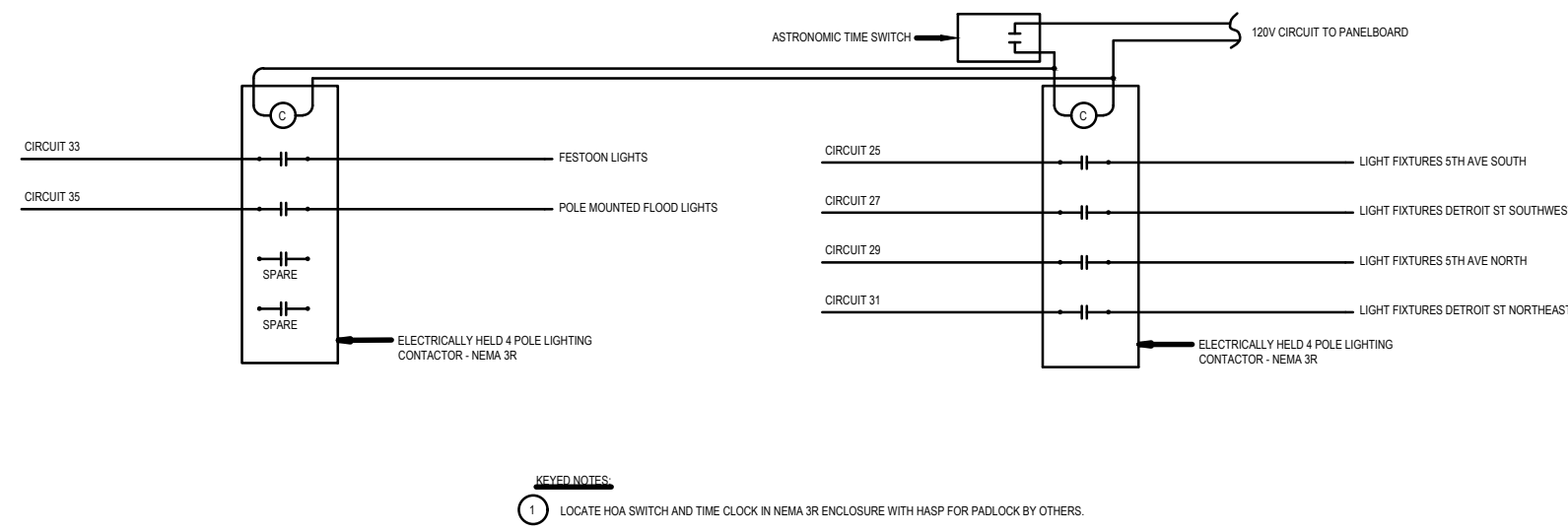
	LIMIT OF WORK		ELECTRICAL CONDUIT		ELECTRICAL PANEL
	SINGLE LIGHT POLE (BY OWNER)		TELECOMMUNICATIONS CONDUIT		CITY I.T. CONDUIT
	DOUBLE LIGHT POLE (BY OWNER)		ELECTRICAL HANDHOLE		CITY I.T. HANDHOLE
	LIGHT FIXTURE TAG		TELECOMMUNICATIONS HANDHOLE		

CKT	CIRCUIT
TCOM	TELECOMMUNICATIONS
PNL	PANEL
UNO	UNLESS NOTED OTHERWISE
LTG	LIGHTING
PWR	POWER
TYP	TYPICAL

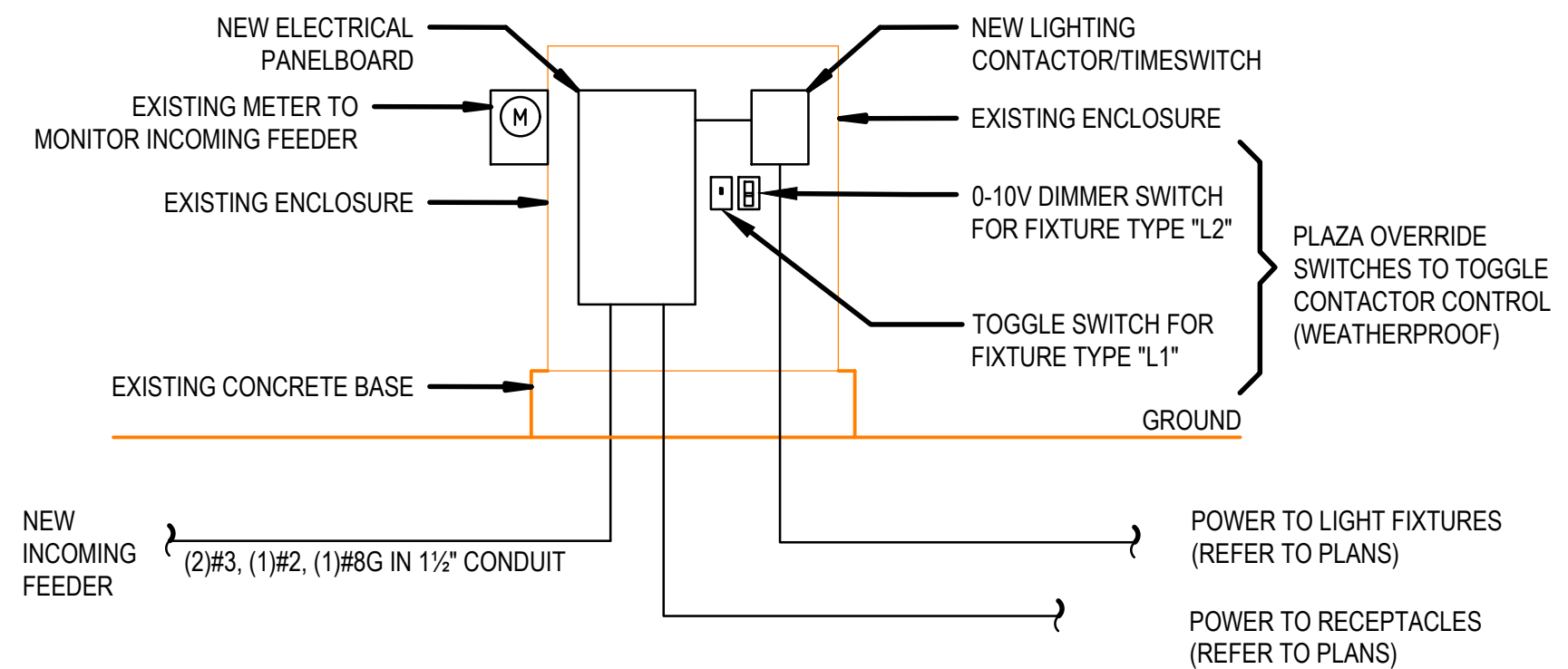


SEE ABOVE					
BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR. BY
			BID PLANS	12-01-2017	
			95% CD	11-17-2017	

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR	
OVERALL ELECTRICAL PLAN	SCALE 1"=30'
DRAWING NO. E1.0	INCH
SHEET NO. ____ OF ____	APPROVED BY: _____



1 EXTERIOR LIGHTING CONTACT DIAGRAM SCALE: NONE



2 EXISTING ELECTRICAL ENCLOSURE RISER DIAGRAM SCALE: NONE

120V. SINGLE PHASE CIRCUIT LENGTH TABLE

BREAKER AMPACITY (AMPS)	MAX. CIRCUIT CURRENT (AMPS)	MAX. CIRCUIT LOAD (VA)	MAXIMUM LENGTH IN FEET			
			NO.10	NO.8	NO.6	NO.4
20	4	480	349	556	882	-
	8	960	174	278	441	701
	12	1440	116	185	294	467
	16	1920	87	139	221	350

- NOTES:**
- CIRCUIT MAXIMUM DISTANCE IS BASED ON NEC CHAPTER 9, TABLE 8 CONDUCTOR PROPERTIES FOR COATED COPPER CONDUCTORS AT 75 DEGREES CELSIUS.
 - MAXIMUM CIRCUIT LOAD FOR DISTANCE IS BASED ON NEC 220-10(b).

PANELBOARD: LP-5DET		AIC: 10,000						
VOLTAGE: 120/240V, 1 PHASE, 3 WIRE + G		IG BUS: NO						
MAIN: 100A MCB		NEUTRAL BUS: 100%						
TYPE: NEMA 3R		TVSS EQUIPPED: NO						
Circ No	Breaker Pole	Trips	Load Description	Load Location	Notes	Connected Watts		
1	1	20	(1) RECEPTACLE			180		
3	1	20	(1) RECEPTACLE			180		
5	1	20	(1) RECEPTACLE			180		
7	1	20	(2) RECEPTACLE			360		
9	1	20	(3) POLE MOUNTED RECEPTACLE			540		
11	1	20	(2) POLE MOUNTED RECEPTACLE			360		
13	1	20	(2) POLE MOUNTED RECEPTACLE			360		
15	1	20	(3) POLE MOUNTED RECEPTACLE			540		
17	1	20	(3) POLE MOUNTED RECEPTACLE			540		
19	1	20	(3) POLE MOUNTED RECEPTACLE			540		
21	1	20	(2) POLE MOUNTED RECEPTACLE			360		
23	1	20	(2) POLE MOUNTED RECEPTACLE			360		
25	1	20	LIGHT FIXTURES 5TH AVE SOUTH			1,097		
27	1	20	LIGHT FIXTURES DETROIT ST SOUTH WEST			928		
29	1	20	LIGHT FIXTURES 5TH AVE NORTH			1,182		
31	1	20	LIGHT FIXTURES DETROIT ST NORTH EAST			1,266		
33	1	20	FESTOON LIGHTS			200		
35	1	20	PLAZA FLOOD LIGHTS			80		
37	1	20	SPARE			0		
39	1	20	SPARE			0		
41	1	20	SPARE			0		
2	1	20	(1) POLE MOUNTED RECEPTACLE			180		
4	1	20	(2) POLE MOUNTED RECEPTACLE			360		
6	1	20	(2) POLE MOUNTED RECEPTACLE			360		
8	1	20	(2) POLE MOUNTED RECEPTACLE			360		
10	1	20	(2) POLE MOUNTED RECEPTACLE			360		
12	1	20	(1) POLE MOUNTED RECEPTACLE			180		
14	1	20	(1) POLE MOUNTED RECEPTACLE			180		
16	1	20	(2) POLE MOUNTED RECEPTACLE			360		
18	1	20	(2) POLE MOUNTED RECEPTACLE			360		
20	1	20	(2) POLE MOUNTED RECEPTACLE			360		
22	1	20	(2) POLE MOUNTED RECEPTACLE			360		
24	1	20	(1) POLE MOUNTED RECEPTACLE			180		
26	1	20	TIME SWITCH			500		
28	1	20	SPARE			0		
30	1	20	SPARE			0		
32	1	20	SPARE			0		
34	1	20	SPARE			0		
36	1	20	SPARE			0		
38	1	20	SPARE			0		
40	1	20	SPARE			0		
42	1	20	SPARE			0		
CONNECTED KW:		13	DEMAND KW:		13	Phase Watts:	6,939	6,414
CONNECTED AMPS:		56	DEMAND AMPS:		56			

LIGHTING FIXTURE SCHEDULE									
TYPE	DESCRIPTION	LAMP TYPE	VOLTS	DIMMING	FINISH	ACCESSORIES	MANUFACTURER & SERIES	COMMENTS	MOUNTING HEIGHT AFF U.N.O.
L1	COMMERCIAL GRADE OUTDOOR RATED FESTOON LIGHTING WITH BLACK CABLE AND UL WEATHERPROOF MEDIUM BASE SOCKETS, 24" ON-CENTER CONFIGURATION, DE-RATED MAXIMUM WATTAGE LABEL FOR LED RETROFIT LAMPING, 1/16" STAINLESS STEEL SUPPORT CABLE AND WIRE ATTACHMENTS, LED	LED; 1W; 100LM; MED BASE; PRIMUS™ PLED-S14F-27K-100*	120	ELV	BLACK	PROVIDE ALL WIRE TIE WRAPS, SUPPORT HOOKS/EYELETS, AND HARDWARE FOR WORKING SYSTEM.	PRIMUS™ DECOSTRING WET*	CONTRACTOR TO DETERMINE NUMBER OF POWER FEEDS.	TOP OF 12" POLE WITH 18" MAXIMUM SAG AT MIDPOINT
L2	5-1/2" DIAMETER X 5-1/2" TALL COMPACT LED FLOOD LIGHT WITH DIE-CAST ALUMINUM HOUSING, CONTINUOUS SILICONE GASKETING, STAINLESS STEEL CAPTIVE SCREWS, GLASS LENS, 1/2" I.P.S. STAINLESS STEEL NIPPLE FOR DIRECT ATTACHMENT TO MOUNTING BLOCK - SEE ACCESSORIES.	16W; 1335LM; 3000K CCT; 90 CRI	120	0-10V	BLACK	MOUNTING BLOCK TO POLE: *79511* GLARE LOUVER: *70760*	BEGA *77684-K3*		2'-0" FROM TOP OF POLE
L2A	5" DIAMETER STRAIGHT ROUND POLE CONSTRUCTED OF EXTRUDED SEAMLESS 6063 ALUMINUM ALLOY TUBING, HEAT TREATED TO A T-6 CONDITION, 3" DIAMETER TOP TENON, 12-5/8" DIAMETER ROUND CAST ALUMINUM A356 ALLOY BASE CONTINUOUSLY WELDED AT OUTSIDE TOP AND INSIDE BOTTOM O	NA	NA	NA	BLACK	PROVIDE MODIFIED POLE CAP TO ALLOW TYPE L1 FESTOON LIGHTING ANCHORS AND GASKETED HOLE FOR FESTOON LIGHTING LEADER CABLE ROUTING THROUGH THE POLE.	BEGA *906HR* + HANDHOLE + MODIFIED CAP		TOP OF FOOTING 3" ABOVE GROUND.

LEGEND



REV. NO.	DESCRIPTION	DATE	DR. BY	CH. BY
SEE ABOVE	BID PLANS	12-01-2017		
BENCH MARK	95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

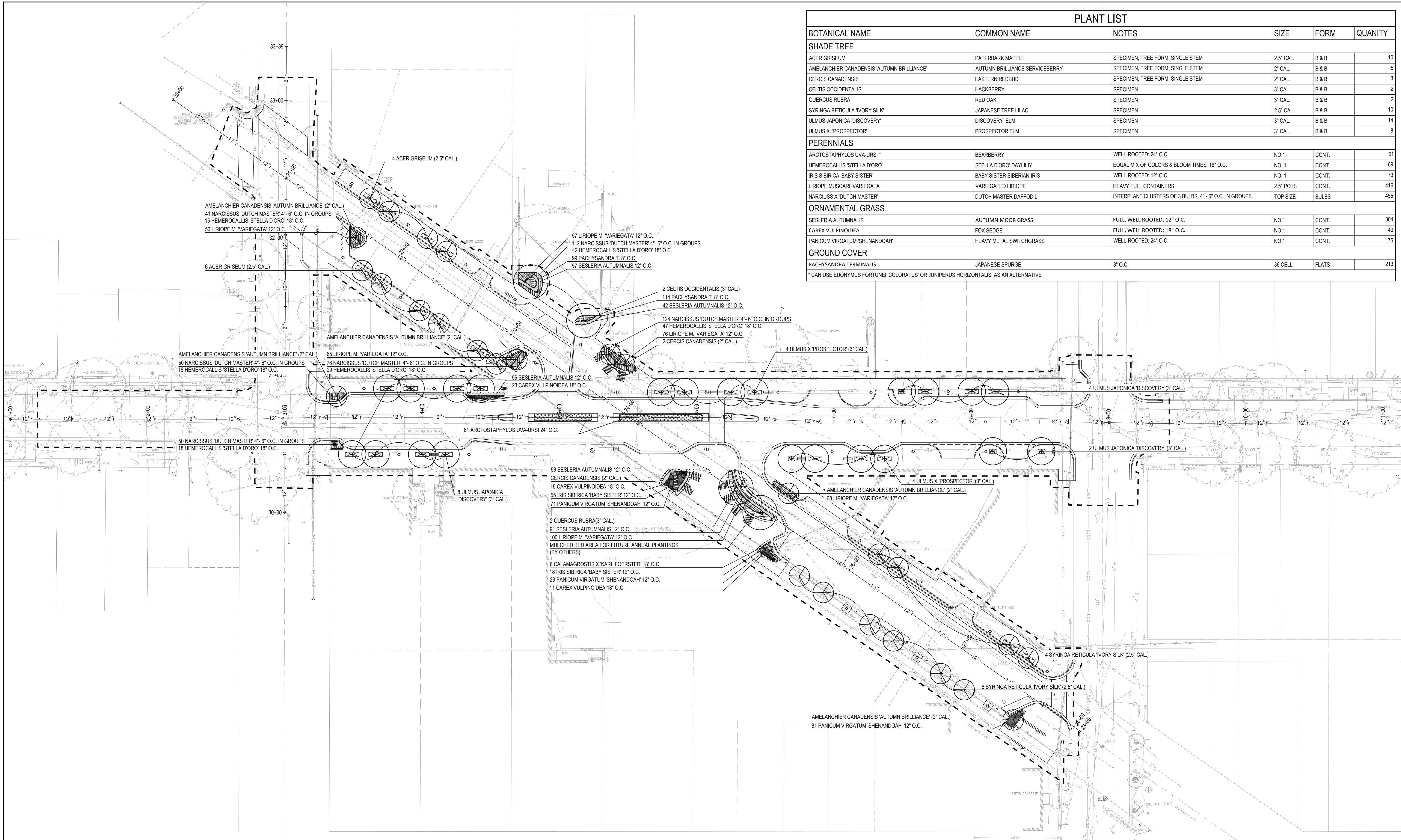
ELECTRICAL SCHEDULES, DETAILS, AND DIAGRAMS

SCALE: NTS

DRAWING NO. **E2.0**

SHEET NO. ____ OF ____

APPROVED BY: _____



PLANT LIST

BOTANICAL NAME	COMMON NAME	NOTES	SIZE	FORM	QUANTITY
SHADE TREE					
ACER GRISEUM	PAPERBARK MAPPLE	SPECIMEN, TREE FORM, SINGLE STEM	2.5" CAL.	B & B	10
AMELANCHIER CANADENSIS 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	SPECIMEN, TREE FORM, SINGLE STEM	2" CAL.	B & B	5
CERCIS CANADENSIS	EASTERN REDBUD	SPECIMEN, TREE FORM, SINGLE STEM	2" CAL.	B & B	3
CELTIS OCCIDENTALIS	HACKBERRY	SPECIMEN	3" CAL.	B & B	2
QUERCUS RUBRA	RED OAK	SPECIMEN	3" CAL.	B & B	2
SYRINGA RETICULA 'IVORY SILK'	JAPANESE TREE LILAC	SPECIMEN	2.5" CAL.	B & B	10
ULMUS JAPONICA 'DISCOVERY'	DISCOVERY ELM	SPECIMEN	3" CAL.	B & B	14
ULMUS X 'PROSPECTOR'	PROSPECTOR ELM	SPECIMEN	3" CAL.	B & B	8
PERENNIALS					
ARCTOSTAPHYLOS UVA-URSI *	BEARBERRY	WELL-ROOTED; 24" O.C.	NO.1	CONT.	61
HEMEROCALLIS 'STELLA D'ORO'	STELLA D'ORO DAYLILY	EQUAL MIX OF COLORS & BLOOM TIMES; 18" O.C.	NO. 1	CONT.	169
IRIS SIBIRICA 'BABY SISTER'	BABY SISTER SIBERIAN IRIS	WELL-ROOTED; 12" O.C.	NO. 1	CONT.	73
LIRIOPE MUSCARI 'VARIEGATA'	VARIEGATED LIRIOPE	HEAVY FULL CONTAINERS	2.5" POTS	CONT.	416
NARCISSUS X 'DUTCH MASTER'	DUTCH MASTER DAFFODIL	INTERPLANT CLUSTERS OF 3 BULBS; 4" - 6" O.C. IN GROUPS	TOP SIZE	BULBS	455
ORNAMENTAL GRASS					
SESLERIA AUTUMNALIS	AUTUMN MOOR GRASS	FULL, WELL ROOTED; 12" O.C.	NO.1	CONT.	304
CAREX VULPINOIDEA	FOX SEDGE	FULL, WELL ROOTED; 18" O.C.	NO.1	CONT.	49
PANICUM VIRGATUM 'SHENANDOAH'	HEAVY METAL SWITCHGRASS	WELL-ROOTED; 24" O.C.	NO.1	CONT.	175
GROUND COVER					
PACHYSANDRA TERMINALIS	JAPANESE SPURGE	8" O.C.	36 CELL	FLATS	213

* CAN USE EUONYMUS FORTUNEI 'COLORATUS' OR JUNIPERUS HORIZONTALIS AS AN ALTERNATIVE

LEGEND

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		BENCH MARK				

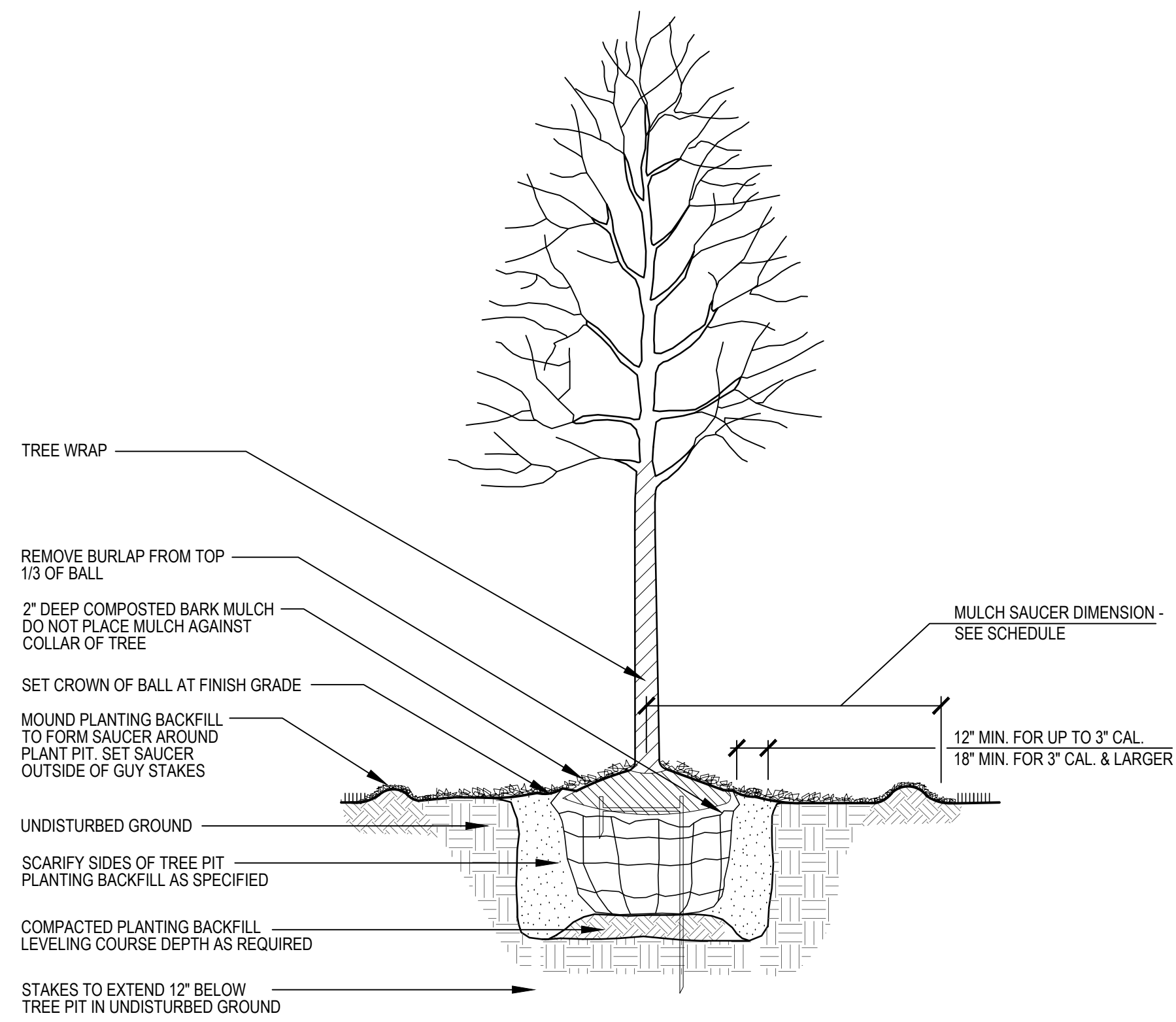


DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

OVERALL PLANTING PLAN

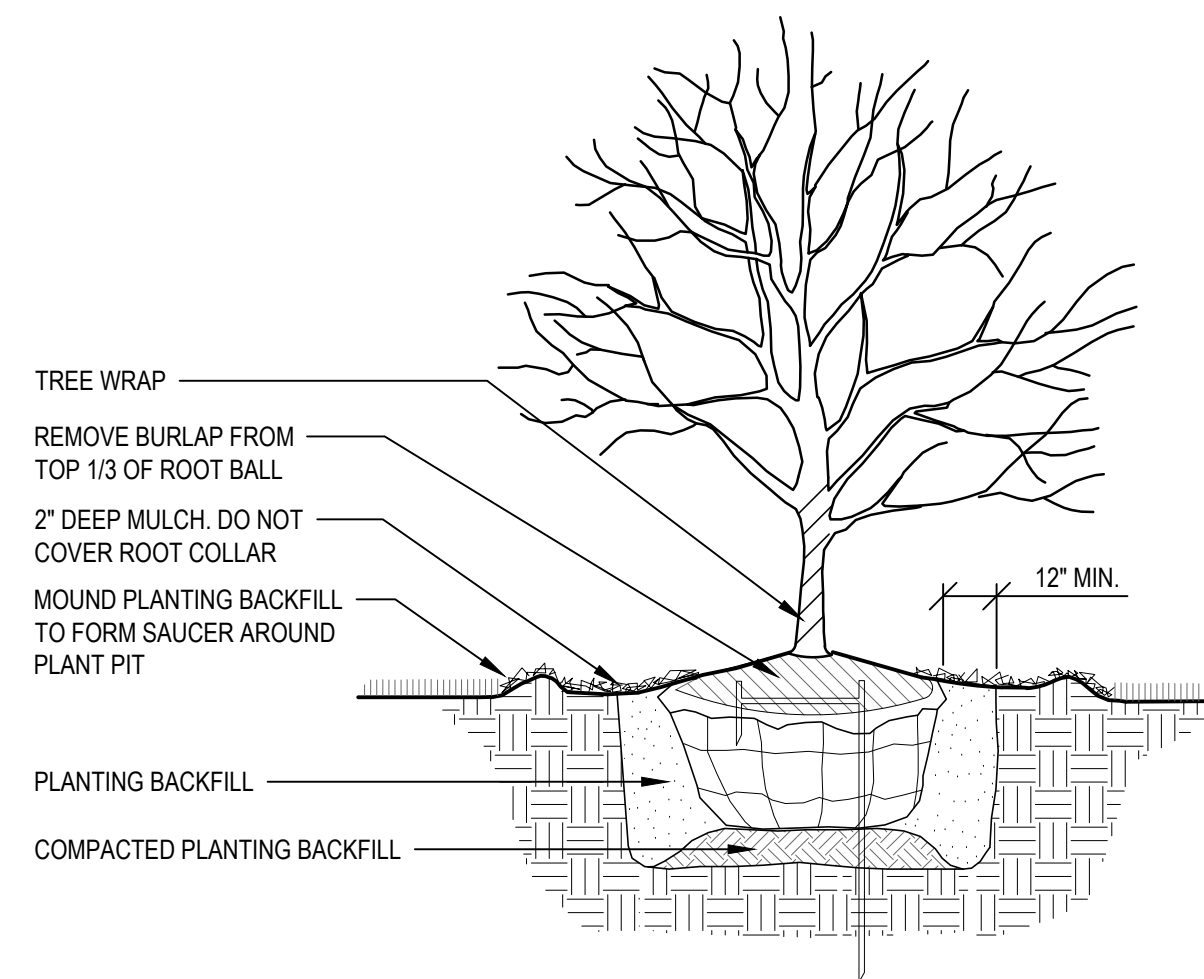
SCALE	INCH
1" = 30'	
DRAWING NO.	L1.0
SHEET NO.	___ OF ___

APPROVED BY: _____



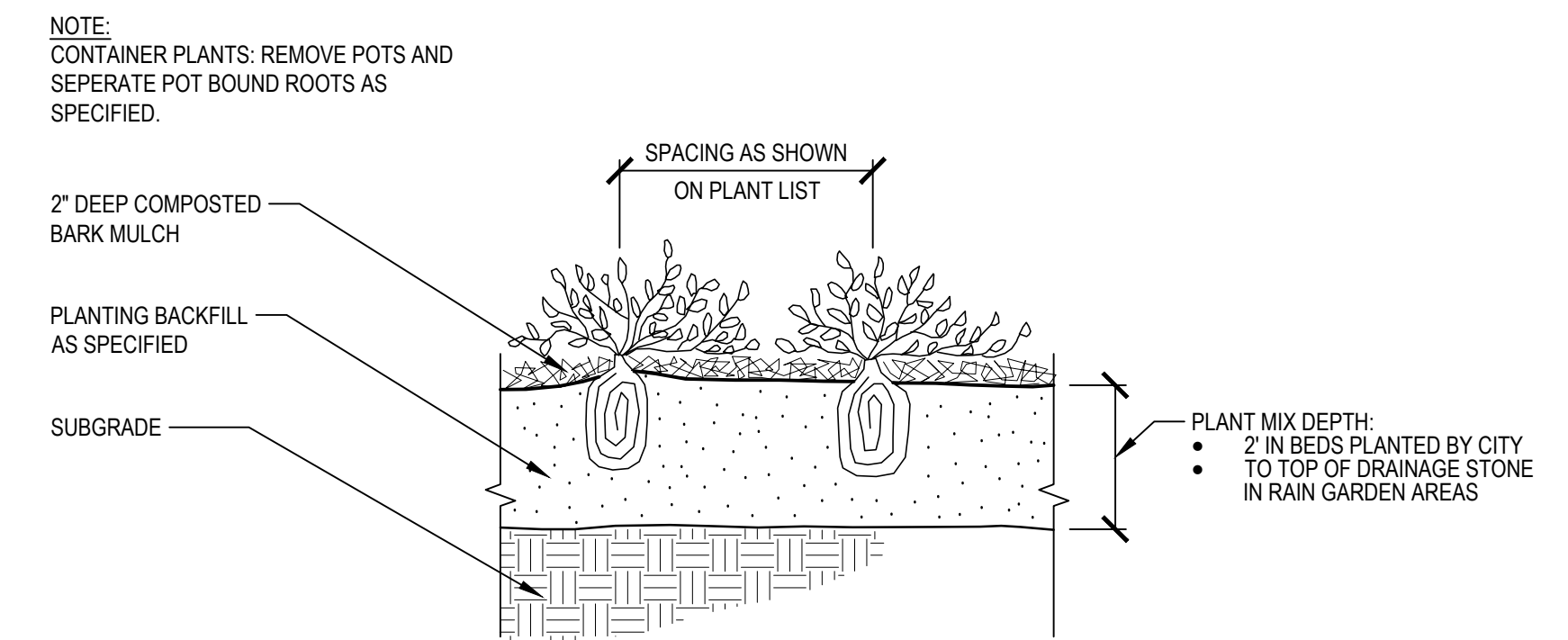
1 DECIDUOUS TREE PLANTING
SECTION

N.T.S.



2 FLOWERING TREE PLANTING - SINGLE STEM
SECTION

N.T.S.



3 GROUND COVER OR PERENNIAL PLANTING
SECTION

N.T.S.

LEGEND



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			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR	
PLANTING DETAILS	SCALE NTS
DRAWING NO. L2.0	
SHEET NO. ____ OF ____	

APPROVED BY: _____