ADDENDUM No. 2

ITB No. 4570 Street Resurfacing/Restoration - 2019

Bids Due: April 12, 2019 at 10:00 A.M. (Local Time)

The following changes, additions, and/or deletions shall be made to the Invitation to Bid for the Street Resurfacing/Restoration - 2019, ITB No. 4570, on which proposals will be received on/ or before April 12, 2019 at 10:00 A.M. (local time).

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. This Addendum includes 200 pages.

Bidder is to acknowledge receipt of this Addendum No. 2, including all attachments (if any) in its Bid by so indicating on page ITB-1 of the Invitation to Bid Form. Bids submitted without acknowledgment of receipt of this addendum may be considered nonconforming.

The following forms provided within the ITB document must be included in submitted bids:

- City of Ann Arbor Prevailing Wage Declaration of Compliance
- City of Ann Arbor Living Wage Ordinance Declaration of Compliance
- **Vendor Conflict of Interest Disclosure Form**
- City of Ann Arbor Non-Discrimination Ordinance Declaration of Compliance

Bids that fail to provide these completed forms listed above upon bid opening will be rejected as non-responsive and will not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the Bid document which are outlined below are referenced to a page or Section in which they appear conspicuously. The Bidder is to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

Section/Page(s)	<u>Change</u>
Pre-Bid Conference/NP-1	Pre-Bid Conference Summary and Attendance Record/ Sign-In Sheet pages ADD-2-5 thru ADD-2-9.
Bid Forms/BF-1 thru 10	Base Bid Forms; replace with pages ADD 2-10 thru 19. Revised to remove original line items 70, 290, 810, 820, 830, 1590 and 1730; add new pay items for Edge Trimming and Curb and Gutter, Conc, Det F4; and revised pay item description for original line items 20, 370, and 800.

Detailed Specifications/DS-11 thru 15 Detailed Specification for Project Schedule; replace with pages ADD 2-20 thru 24. Revised the requirements for allowable "active" project locations at any one time, the dates for furnishing of the contract and return of an executed copy, and the date for submittal of a detailed progress schedule. Revised "Schedule of Streets" to remove Geddes Ave and Granger Ave project locations, and also changed "Start of Work", "Completion of Work", and "Maximum Calendar Days for Completion" information related to several project locations. Detailed Specifications/DS-34 thru 36 Detailed Specification for Adjusting Structure Covers; replace with pages ADD 2-25 thru 27. Revised "Measurement and Payment: section regrading payment for additional depth of adjustment using standard MDOT pay item. Detailed Specifications/DS-50 thru 51 Detailed Specification for Geosynthetic Paving Layer; remove these pages. Detailed Specifications/DS-52 thru 53 Specification for HMA Application Detailed Estimate; replace with page ADD 2-28 thru 29. Revised to remove mentions of Geddes Ave and grange Ave, and show variable application rate and thickness HMA mix 4E1. Specification for Pavement Repair **Detailed Specifications** Detailed Removal; insert with page ADD 2-30. Included to address pavement removals associated with the S State St concrete pavement repair work. Detailed Specifications/DS-81 Detailed Specification for Pavement Markings; replace with page ADD 2-31. Revised the "Measurement and Payment" section to include the pay item, Pavt Mrkg, Thermopl, 4 inch, White Parking Sym. Detailed Specifications/DS-81thru 83

Detailed Specification for Wet Reflective Liquid Applied Pavement Markings; replace with page ADD 2-32 thru 33. Revised the "Measurement and Payment" section to include the pay item, Pavt Mrkg, Wet Retrflec Polyurea, Railroad Sym.

Detailed Specification for Maintenance of Traffic; replace with pages ADD 2-34 thru 38. Revised to include further information regarding maintenance of traffic for the S State St project location.

Detailed Specification for Slope Restoration; replace with pages ADD 2-39 thru 41. Revised to remove any references to watering requirements.

Detailed Specifications/DS-140 thru 142

Detailed Specifications/DS-84 thru 88

APPENDIX

Notice to Bidders - Project Coordination; replace

with page ADD 2-42. Remove reference to DTE Energy Conduit Duct Bank work on Granger Ave since this project location is no longer included in

the proposed work.

APPENDIX MDOT Standard Plans; insert with pages ADD 2-43

thru 44. Added to include the MDOT Standard Plan

for Concrete Curb and Curb & Gutter.

APPENDIX Geotechnical Information; insert with pages ADD 2-

45 thru 61. Added to include the soil boring data for

Platt Rd and W Liberty St.

Wage Decision Insert General Decision Number: MI190001

03/08/2019 MI1 pages ADD 2-62 thru 88.

Plans; replace originally issued Bid Set dated 03-

13-2019 with that issued for "Addendum 2" dated

04-09-2019. Revisions are as follows.

Sheet 1 Revised sheet index and vicinity maps.

Sheets 7, 9, 11, 13, 15, 18, 20, 23, 28, 31, 33, 35, 38, 40, 43, 46, 51,

57, 64, 77, 89, and 98

Revised these location/subset cover sheets to add quantity tables, change the Construction Scope and Sequencing notes to reflect the proposed work at each project location, and correct the Construction

Key.

Sheets 46 thru 50 Removed these originally numbered plan sheets

related to the proposed work for Geddes Avenue, as this work is no longer included in the project.

Sheets 51 thru 56 Removed these originally numbered plan sheets

related to the proposed work for Granger Avenue, as this work is no longer included in the project.

Sheet 50 Added this sheet related to construction of a mid

crosswalk pedestrian island on Fuller Rd west of

Huron Pkwy.

Sheets 52, 58,59, 78, 79, 90, 91,

99 and 100

Revised the detour and traffic control plans for the the Major Street project locations to correct signage

and quantity errors and omissions.

Sheets 60 and 61 Revised these sheets to remove a significant

amount of the concrete work on S Division St, which the City will address as part of a future more

substantial reconstruction project

Sheets 65 and 66 Added these sheets to depict existing and

proposed typical cross sections related the

concrete pavement repair work on S State St.

Revised these sheets to better depict the work associated with the concrete pavement repairs on S State St.

Respondents are responsible for any conclusions that they may draw from the information contained in the Addendum.

Street Resurfacing/Restoration Project – 2019 (ITB No. 4570; City File No. 2019-004)

March 28, 2019
1:00 p.m., 4th Floor Conference Room
Larcom Building - City Hall, 301 East Huron Street, Ann Arbor, MI

SUMMARY

I. Introductions -

The City's' meeting facilitator and assigned project manager for this project, David Dykman, (herein "the City") called the Pre-Bid Conference to order at 1:05 p.m. and proceeded asked for introductions of all in attendance. See meeting sign sheet (attached) for list of meeting attendees.

II. General

a. Project Overview

The City gave a brief description of the proposed work, which involves over seven miles of street and path resurfacing/restoration including six major streets, fifteen local/residential streets, and one shared use path. This year's project is larger in size and scope than that for 2018 although the City will be removing two of the locations presently in the bid, Geddes Avenue and Granger Avenue, due to funding constraints. The City noted the majority project work involves hot mix asphalt pavement resurfacing or rehabilitation together with concrete pavement repair component on S State Street. The project will utilize City and County Street/Road Millage funds together with other funding sources.

b. Schedule

The City gave attention to the Detailed Specification for Project Schedule and the dates therein including the following bid opening, start, and completion dates. It indicated that none of these would likely change due to being up against a City Council deadline for the approval of the contract award and so not to further delay the construction start. It also gave attention to the "Completion of Work" definition described therein.

- i. Bid Opening: April 9, 2019, 2:00 p.m.
- ii. Start Date: May 20, 2019
- iii. Completion Date: November 2, 2019
- iv. Project Phasing / "Schedule of Streets" / Liquidated Damages
 The City gave attention to the "Schedule of Streets" included as part of Detailed
 Specification for Project Schedule, and noted it will be revising this to remove the two
 aforementioned project locations. Other possible revisions to the information
 contained therein may also be forthcoming.

c. Bid Documents

 Standard Specifications - Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction The City noted the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction again apply to this project.

ii. Detailed Specifications

The City directed those in attendance to review the requirements of the Detailed Specifications (DS) for Certified Payroll Compliance, Project Supervision, and General Conditions included in the bid document. It directed attention the DS for Structure Covers, which includes requirements for new to covers to contain City artwork, and note EJ is the only foundry casting these covers for the City of Ann Arbor. The City also called attention to the DS for Geosythetic Paving Layer, which it

Street Resurfacing/Restoration Project – 2019 (ITB No. 4570; City File No. 2019-004)

will be removing and possibly replacing with a DS for Stress Absorbing Membrane Interlayer (SAMI). Lastly, it gave attention to the DS for Slope Restoration and the revised requirements related to it and that for Maintenance of Traffic, which it may revise to include additional detail.

iii. Notice(s) to Bidders

The City gave attention to the Notice to Bidders (NTB) related to Project Coordination and discussed the various construction projects planned adjacent to or in the vicinity of various locations included in this project. It also gave attention to the NTB for Utility Coordination and indicated DTE Energy's gas main renewal program will be working in the Water Hill neighborhood where most of the local/residential street work will be occurring. The City will require close and well planned corridor between the street resurfacing/restoration work that by DTE Energy.

iv. MDOT Special Provisions and Supplemental Specifications

The City directed those in attendance to review the MDOT Special Provisions and

Supplemental Specifications included in the bid document.

v. Other

The City noted geotechnical/soil boring information is missing from the bid document for several streets locations, and that the bid document did not include the Wage Decision applicable to the work. It will include this information in an addendum.

d. Plans

The City noted several plan revisions are in the works to address missing quantity tables on each of the subset cover sheets, corrections to construction method and sequencing notes, revisions to the Major Street maintenance of traffic/detour plans, and other minor corrections. An addendum will address these revisions.

III. Construction

a. Scope of Work and Construction Sequencing

The City noted that all work on Major Streets as part this year's project will require phased part width construction. Work on the local/residential will be full width unless otherwise directed by the Engineer. The plans note the requirements for the construction scope/methods and sequencing related to all locations.

b. Maintenance of Traffic

The City advised attendees to review the requirements of the Detailed Specification for Maintenance of Traffic including the accompanying MDOT Maintaining Traffic Typicals applicable to the project. It noted the work planned on the Major streets as part this year's project will require maintenance of traffic in one direction only with traffic in the opposite direction operating on posted detours.

c. Special Concerns (local traffic access, pedestrian and cyclist mobility, tree protection, structure cleaning...)

The City advised attendees review the requirements contained within the bid documents related to local traffic access, tree protection, structure cleaning, pedestrian and cyclist mobility and others. It noted stricter enforcement related to the "Completion of Work" will be given to this year's contract particularly related to the removal of temporary traffic control devices, no parking signs, and soil erosion and sedimentation control measures. Focus will also continue on non-motorized traffic mobility particularly in project areas with high pedestrian and cyclist activity such as the UM campus and Ann Arbor Public

Street Resurfacing/Restoration Project – 2019 (ITB No. 4570; City File No. 2019-004)

School areas, along shared use paths, and in residential areas near parks and along school walking routes.

d. City Idling Ordinance

The City advised attendees to review and understand the requirements of the Idling Reduction Ordinance, which became effective on July 1, 2017. Details regarding the ordinance are available at www.a2gov.org/idlefree

IV. Other Items

There was no discussion related to other items.

V. Addenda

The City has not issued any addenda to date for this project; however, Addendum 1 is expected to be released by Wednesday, April 3, or Thursday, April 4, 2019, unless other necessary revisions are encountered requiring its release be delayed further. Should such a delay occur, the City will most likely extend the bid due date. This addendum will address all of the necessary revisions and omissions mentioned during the Pre-Bid Conference as well as those discovered after it and/or received through inquiry.

VI. Questions

The City received the following questions in advance of the Pre-Bid Conference.

- 1. What is the maintaining traffic requirements for S. State St? Page 75 of 121 of the plans show signs for a full closure of Dexter Ave. S State Street will remain open to traffic with a minimum of one lane operating in both directions with intermittent lane closures in accordance with the various MDOT Maintaining Traffic Typicals included in the bid document.
- 2. Is there a typical cross-section available for S. State St? The City is working to finalize this and include it in the release of a future addendum.
- 3. The boring log on page 394 of 476 of the proposal shows pavement depths ranging from 8.75" to 14.75" on S. State St. The pay item setup in the project is only for 9" pavement. How will it pay for the additional depth of concrete? *In areas where the contractor encounters existing pavement greater than nine (9 inches) it will be necessary to place 21AA dense-graded aggregate material to fill the void. The City will pay for this material by the ton using the pay item, Aggregate Base, Modified.*
- 4. S. State St appears to be a concrete overlay. Will the existing joint pattern have to be put back with the new concrete patching? Will those joints need to be sealed? No, the City will not require replacement of the existing joint pattern. It is revising the plans to show the new joint pattern. These joints will require sawing and sealing in accordance with the applicable contract specifications and standard plans.
- 5. Will lane ties for CRG joints be required to tie the proposed patches to the existing road on the transverse joints? Can a separate pay item be setup to cover the cost of the CRG's if required? The City will not require the tying of the transverse joints between new concrete pavement and the existing composite pavement. Therefore, CRG joints will not be necessary. It will require doweled or load transfer devices with Cp joints in the transverse joints contained within the patched areas.

Street Resurfacing/Restoration Project – 2019 (ITB No. 4570; City File No. 2019-004)

- 6. Will lanes ties be required on the longitudinal joints to tie the proposed patch into the existing pavement on S. State St? Are these lane ties incidental to the patch? If not the quantity of lane ties setup in the contract is low. The City will not require the tying of the longitudinal joints between new concrete pavement and the existing composite pavement. Therefore, lane ties along these joints will not be necessary. It will require lane ties in the longitudinal joints contained within the patched areas.
- 7. What type of concrete will be required for the concrete patching on S. State St? P1 or P-NC. The City will likely require the use of Grade P-NC concrete in driveway areas or those requiring expedited access, and Grade P-1 concrete in all other areas.

Contact Information:

David Dykman Project Manager

Phone: (734) 794-6410 ext. 43685

Fax: (734) 994-1744

E-mail: ddykman@a2gov.org

PRE-BID CONFERENCE SIGN-IN SHEET

PROJECT: Street Resufacing/Restoration Project - 2019 (ITB No. 4570; City File No. 2019-004)

DATE: March 28, 2019

PLEASE PRINT

NAME REPRESENTING MAILING ADDRESS TELEPHONE EMAIL						
David Dykman City of Ann Arbor - Engineering Address: 301 E. Huron Street, P.O. Box 8647 Office: (734) 794-6410, x43655 Supervisor Cwil Engineering City of Ann Arbor - Engineering Specialists City of Ann Arbor - Address: 301 E. Huron Street, P.O. Box 8647 Office: (734) 794-6410, x43612 Carl Simple Engineering Specialists City of Ann Arbor - Engineering Specialists City of Ann Arbor - Address: 301 E. Huron Street, P.O. Box 8647 Office: (734) 794-6410, x43622 Carl Engineering Specialist City of Ann Arbor - Engineering Specialist City of Ann Arbor - Address: 301 E. Huron Street, P.O. Box 8647 Office: (734) 794-6410, x43622 Covil Engineering Specialist City of Ann Arbor - Engineering Covil Engineering Specialist City, State: Ann Arbor, IMI Zip: 48107-8647 Office: (734) 794-6410, x43644 Covil Engineering Specialist City of Ann Arbor, IMI Zip: 48107-8647 Office: (734) 794-6410, x43644 Covil Engineering Specialist Fax (Mobile: (*) O Bax 8647 Office: (734) 794-6410, x43644 Covil Engineering Specialist City, State: Ann Arbor, IMI Zip: 48107-8647 Office: (734) 794-6410, x43644 Covil Engineering Specialist Fax No. (*) Office: (734) 794-6410, x43644 Office: (734) 794-6410, x43644 Covil Engineering Specialist Fax N		NAME	REPRESENTING	MAILING ADDRESS	TELEPHONE	EMAIL
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Carl Engineering Specialist (Lead Project Inspector) City of Ann Arbor - Engineering Specialist Address: 301 E. Huron Street, P.O. Box 8647 (Lead Project Inspector) Office: (734) 794-6410, x43644 (Lead Project Inspector) Office: (734) 794-6410, x43644 (Lead Project Inspector) Carl Emmons City of Ann Arbor - Engineering Specialist City of Ann Arbor - Engineering Specialist Address: 301 E. Huron Street, P.O. Box 8647 (Pax: (734) 994-1744 (Pax: (734) 994-1744) (Pax: (734) 994-1744 (Pax: (734) 994-174		David Clemons Supervisor - Civil Engineering Specialists	City of Ann Arbor - Engineering	7-8647		dclemons@a2gov.org
City of Ann Arbor - Radiress: 301 E. Huron Street, P.O. Box 8647 Office: (734) 794-6410, x43644	ADI		City of Ann Arbor - Engineering	Address: 301 E. Huron Street, P.O. Box 8647 City, State: Ann Arbor, Ml Zip: 48107-8647	Office: (734) <u>794-6410, x43652</u> Mobile: Fax: (734) 994-1744	gshively@a2gov.org
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Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	<u>Total Price</u>
10	1047051	_Certified Payroll Compliance and Reporting	LSUM	1.00	\$	\$
20	1047051	_General Conditions, Max \$250,000.00	LSUM	1.00	\$	\$
30	1047051	_Project Supervision, Max \$75,000.00	LSUM	1.00	\$	\$
40	2030011	Dr Structure, Rem	Ea	108.00	\$	\$
50	2030015	Sewer, Rem, Less than 24 inch	Ft	1,080.00	\$	\$
60	2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	20,137.00	\$	\$
70	2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	4,155.00	\$	\$
80	2047050	_Exploratory Excavation, Vertical	Ft	5.00	\$	\$
90	2050023	Granular Material, Cl II	Cyd	80.00	\$	\$
100	2057011	_Grading, Driveway Approach	Syd	3,821.00	\$	\$
110	2057011	_Grading, Sidewalk	Syd	734.00	\$	\$
120	2057011	_Grading, Sidewalk Ramp	Syd	516.00	\$. \$
130	2057011	_Machine Grading, Special	Syd	109,986.00	\$	\$
140	2057021	_Subgrade Undercutting, Type IIA	Cyd	10,941.00	\$	\$
150	2057021	_Subgrade Undercutting, Type IIB	Cyd	250.00	\$	\$
160	2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	304.00	\$	\$
170	2080036	Erosion Control, Silt Fence	Ft	1,000.00	\$	\$
180	2090001	Project Cleanup	LSUM	1.00	\$	\$

Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	Total Price
190	3010002	Subbase, CIP	Cyd	50.00	\$	\$
200	3027011	_Aggregate Base, 8 inch, Modified	Syd	260.00	\$	\$
210	3027011	_Aggregate Base, 10 inch, Modified	Syd	250.00	\$	\$
220	3027031	_Aggregate Base, Modified	Ton	1,250.00	\$	\$
230	3060020	Maintenance Gravel	Ton	250.00	\$	\$
240	3070001	Approach, CI I	Ton	250.00	\$	\$
250	3070101	Shoulder, CI I	Ton	561.00	\$	\$
260	3070200	Trenching	Sta	24.00	\$	\$
270	3080010	Geotextile, Stabilization	Syd	100.00	\$	\$
280	3087011	_Structural Geogrid (Base)	Syd	250.00	\$	\$
290	4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	1,080.00	\$	\$
300	4021260	Trench Undercut and Backfill	Cyd	10.00	\$	\$
310	4030200	Dr Structure, 24 inch dia	Ea	108.00	\$	\$
320	4030210	Dr Structure, 48 inch dia	Ea	2.00	\$	\$
330	4030280	_Dr Structure, Adj, Add Depth	Ft	5.00	\$	\$
340	4030306	Dr Structure, Tap, 6 inch	Ea	5.00	\$	\$
350	4030312	Dr Structure, Tap, 12 inch	Ea	1.00	\$	\$
360	4037050	_Dr Structure Cover, Special	Ea	2.00	\$	\$
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Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	<u>Total Price</u>
370	4037050	_Dr Structure Cover, Type B, Modified	Ea	104.00	\$	\$
380	4037050	_Dr Structure Cover, Type C, Modified	Ea	2.00	\$	\$
390	4037050	_Dr Structure Cover, Type D, Modified	Ea	2.00	\$	\$
400	4037050	_Dr Structure Cover, Type E, Modified	Ea	2.00	\$	\$
410	4037050	_Dr Structure Cover, Type G, Modified	Ea	2.00	\$	\$
420	4037050	_Dr Structure Cover, Type K, Modified	Ea	142.00	\$	\$
430	4037050	_Dr Structure, Adj, Case 1, Modified	Ea	235.00	\$	\$
440	4037050	_Dr Structure, Adj, Case 2, Modified	Ea	2.00	\$	\$
450	4037050	_Dr Structure, Cleaning, Modified	Ea	25.00	\$	\$
460	4037050	_Dr Structure, Double Inlet	Ea	2.00	\$	\$
470	4037050	_Dr Structure, Point	Ea	4.00	\$	\$
480	4037050	_Dr Structure, Temp Lowering, Modified	Ea	259.00	\$	\$
490	4037050	_Structure, Reconstruct	Ea	11.00	\$	\$
500	4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	4,880.00	\$	\$
510	5010001	Pavt, Cleaning	LSUM	1.00	\$	\$
520	5010002	Cold Milling HMA Surface	Syd	109,421.00	\$	\$
530	5010005	HMA Surface, Rem	Syd	4,011.00	\$	\$
540	5010009	Edge Trimming	Ft	135.00	\$	\$
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Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	Total Price
550	5010015	Joint and Crack, Cleanout	Ft	1,500.00	\$	\$
560	5010025	Hand Patching	Ton	400.00	\$	\$
570	5010050	HMA, 4E1	Ton	1,150.00	\$	\$
580	5010051	HMA, 4E3	Ton	640.00	\$	\$
590	5010056	HMA, 5E1	Ton	1,860.00	\$	\$
600	5010057	HMA, 5E3	Ton	2,640.00	\$	\$
610	5010061	HMA, Approach	Ton	920.00	\$	\$
620	5010509	HMA, 4E3, High Stress	Ton	2,160.00	\$	\$
630	5010515	HMA, 5E3, High Stress	Ton	1,080.00	\$	\$
640	5010703	HMA, LVSP	Ton	14,310.00	\$	\$
650	5017011	_Cold Milling Conc Pavt	Syd	450.00	\$	\$
660	5017011	_Cold Milling HMA Surface, Modified	Syd	300.00	\$	\$
670	5017011	_HMA, Raised Crosswalk	Syd	60.00	\$	\$
680	5017011	_HMA, Raised Intersection	Syd	175.00	\$	\$
690	5017011	_HMA, Speed Hump	Syd	35.00	\$	\$
700	5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	54.00	\$	\$
710	5017031	_HMA, Wedging, 36A	Ton	104.00	\$	\$
720	5017031	Hand Patching, Modified	Ton	100.00	\$	\$
					TOTAL THE BASE	0

2018 Construction

Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	<u>Total Price</u>
730	5017050	_HMA Surface, Around Structure Cover, Rem	Ea	24.00	\$	\$
740	6020200	Joint, Cp	Ft	1,995.00	\$	\$
750	6027021	_Flowable Fill	Cyd	560.00	\$	\$
760	6030005	Cement	Ton	79.00	\$	\$
770	6030030	Lane Tie, Epoxy Anchored	Ea	787.00	\$	\$
780	6030046	Pavt Repr, Nonreinf Conc, 9 inch	Syd	4,269.00	\$	\$
790	6037011	_Pavt Repr, Rem, Modified	Syd	4,269.00	\$	\$
800	8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	2,585.00	\$	\$
810	8017011	_Driveway, Nonreinf Conc, 8 inch, Modified	Syd	215.00	\$	\$
820	8020038	Curb and Gutter, Conc, Det F4	Ft	972.00	\$	\$
830	8027001	_Curb and Gutter, Conc, Barrier	Ft	11,217.00	\$	\$
840	8027001	_Curb and Gutter, Conc, Mountable	Ft	181.00	\$	\$
850	8027001	_Driveway Opening, Conc, Det M, Modified	Ft	7,030.00	\$	\$
860	8030030	Curb Ramp Opening, Conc	Ft	378.00	\$	\$
870	8037001	_Detectable Warning Surface, Modified	Ft	405.00	\$	\$
880	8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	4,561.00	\$	\$
890	8037010	_Sidewalk Ramp, Conc, 8 inch, Modified	Sft	72.00	\$	\$
900	8037010	_Sidewalk Retaining Wall, Integral, 6 inch to 18 inch Height	Sft	350.00	\$	\$
					TOTAL THIS PAGE	\$

Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated <u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
910	8037010	_Sidewalk Retaining Wall, Integral, 18 inch to 30 inch Height	Sft	150.00	\$	\$
920	8037010	_Sidewalk, Conc or Clay Brick Pavers, Rem and Reinstall	Sft	95.00	\$	\$
930	8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	3,731.00	\$	\$
940	8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	1,743.00	\$	\$
950	8037010	_Sidewalk, Conc, 8 inch, Modified	Sft	516.00	\$	\$
960	8060040	Shared use Path, HMA	Ton	240.00	\$	\$
970	8067031	_Shared use Path, HMA, Wedging	Ton	72.00	\$	\$
980	8070095	Post, Mailbox	Ea	10.00	\$	\$
990	8087001	_Fence, Protective, Modified	Ft	250.00	\$	\$
1000	8110049	Pavt Mrkg, Ovly Cold Plastic, Direction Arrow Sym, Bike	Ea	42.00	\$	\$
1010	8110058	Pavt Mrkg, Ovly Cold Plastic, Bike, Small Sym	Ea	49.00	\$	\$
1020	8110079	Pavt Mrkg, Ovly Cold Plastic, Sharrow Symbol	Ea	7.00	\$	\$
1030	8110195	Pavt Mrkg, Thermopl, 4 inch, White	Ft	1,170.00	\$	\$
1040	8110196	Pavt Mrkg, Thermopl, 4 inch, Yellow	Ft	12,178.00	\$	\$
1050	8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	2,542.00	\$	\$
1060	8110198	Pavt Mrkg, Thermopl, 6 inch, White	Ft	8,790.00	\$	\$
1070	8110212	Pavt Mrkg, Thermopl, 12 inch, Cross Hatching, White	Ft	142.00	\$	\$
1080	8110213	Pavt Mrkg, Thermopl, 12 inch, Cross Hatching, Yellow	Ft	835.00	\$	\$
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2018 Construction

Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	Total Price
1090	8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	2,529.00	\$	\$
1100	8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	1,054.00	\$	\$
1110	8110332	Rem Raised Pavt Marker	Ea	152.00	\$	\$
1120	8110343	Rem Spec Mrkg	Sft	592.00	\$	\$
1130	8110450	Recessing Pavement Markings, Longit	Ft	11,098.00	\$	\$
1140	8110451	Recessing Pavement Markings, Transv	Sft	620.00	\$	\$
1150	8110500	Pavt Mrkg, Wet Retrflec Polyurea, 4 inch, White	Ft	416.00	\$	\$
1160	8110501	Pavt Mrkg, Wet Retrflec Polyurea, 6 inch, White	Ft	8,819.00	\$	\$
1170	8110504	Pavt Mrkg, Wet Retrflec Polyurea, 4 inch, Yellow	Ft	11,343.00	\$	\$
1180	8117001	_Pavt Mrkg, Thermopl, 4 inch, White Parking Sym	Ft	420.00	\$	\$
1190	8117001	_Pavt Mrkg, Wet Retrflec Polyurea, 12 inch, Crosswalk	Ft	184.00	\$	\$
1200	8117001	_Pavt Mrkg, Wet Retrflec Polyurea, 12 inch, Cross Hatching, Yellow	Ft	270.00	\$	\$
1210	8117001	_Pavt Mrkg, Wet Retrflec Polyurea, 24 inch, Stop Bar	Ft	76.00	\$	\$
1220	8117050	_Pavt Mrkg, Thermopl, Lt Turn Arrow Sym	Ea	12.00	\$	\$
1230	8117050	_Pavt Mrkg, Thermopl, Only	Ea	8.00	\$	\$
1240	8117050	_Pavt Mrkg, Thermopl, Rt Turn Arrow Sym	Ea	1.00	\$	\$
1250	8117050	_Pavt Mrkg, Thermopl, School	Ea	1.00	\$	\$
1260	8117050	_Pavt Mrkg, Thermopl, Speed Hump Chevron, White	Ea	5.00	\$	\$
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2018 Construction

Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	<u>Unit Price</u>	Total Price
1270	8117050	_Pavt Mrkg, Thermopl, Thru Arrow Sym	Ea	2.00	\$	\$
1280	8117050	_Pavt Mrkg, Wet Retrflec Polyurea, Lt Turn Arrow Sym	Ea	1.00	\$	\$
1290	8117050	_Pavt Mrkg, Wet Retrflec Polyurea, Only	Ea	3.00	\$	\$
1300	8117050	_Pavt Mrkg, Wet Retrflec Polyurea, Rt Turn Arrow Sym	Ea	2.00	\$	\$
1310	8117050	_Pavt Mrkg, Wet Retrflec Polyurea, Railroad Sym	Ea	2.00	\$	\$
1320	8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	146.00	\$	\$
1330	8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	146.00	\$	\$
1340	8120030	Channelizing Device, 42 inch, Furn	Ea	200.00	\$	\$
1350	8120031	Channelizing Device, 42 inch, Oper	Ea	200.00	\$	\$
1360	8120140	Lighted Arrow, Type C, Furn	Ea	4.00	\$	\$
1370	8120141	Lighted Arrow, Type C, Oper	Ea	4.00	\$	\$
1380	8120200	Pavt Mrkg Cover, Type R, Black	Ft	100.00	\$	\$
1390	8120210	Pavt Mrkg, Longit, 6 inch or Less Width, Rem	Ft	10,076.00	\$	\$
1400	8120235	Pavt Mrkg, Wet Retrflec, Type NR, Paint, 4 inch, White, Temp	Ft	2,500.00	\$	\$
1410	8120236	Pavt Mrkg, Wet Retrflec, Type NR, Paint, 4 inch, Yellow, Temp	Ft	7,500.00	\$	\$
1420	8120245	Pavt Mrkg, Wet Retrflec, Type R, Tape, 4 inch, White, Temp	Ft	490.00	\$	\$
1430	8120246	Pavt Mrkg, Wet Retrflec, Type R, Tape, 4 inch, Yellow, Temp	Ft	490.00	\$	\$
1440	8120250	Plastic Drum, High Intensity, Furn	Ea	1,790.00	\$	\$
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Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	<u>Total Price</u>
1450	8120251	Plastic Drum, High Intensity, Oper	Ea	1,790.00	\$	\$
1460	8120265	Pavt Mrkg, Wet Retrflec, Type R, Tape, 24 inch, Stop Bar	Ea	36.00	\$	\$
1470	8120310	Sign Cover	Ea	25.00	\$	\$
1480	8120330	Sign, Portable, Changeable Message, Furn	Ea	4.00	\$	\$
1490	8120331	Sign, Portable, Changeable Message, Oper	Ea	16.00	\$	\$
1500	8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	3,749.00	\$	\$
1510	8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	3,749.00	\$	\$
1520	8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	860.00	\$	\$
1530	8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	786.00	\$	\$
1540	8120370	Traf Regulator Control	LSUM	1.00	\$	\$
1550	8127050	_Temporary No Parking Sign	Ea	567.00	\$	\$
1560	8127050	_Pedestrian Type II Barricade, Temp	Ea	64.00	\$	\$
1570	8127050	_Pedestrian Type II Channelizer, Temp	Ea	10.00	\$	\$
1580	8127051	_Minor Traffic Control, Max \$100,000.00	LSUM	1.00	\$	\$
1590	8157060	_Irrigation System, Protection and Maintenance	Dlr	2,500.00	\$	\$
1600	8167011	_Slope Restoration	Syd	9,623.00	\$	\$
1610	8190159	Conduit, Schedule 80, 3 inch	Ft	100.00	\$	\$
1620	8190244	Hh, Adj	Ea	2.00	\$	\$

Section 1 - Schedule of Prices

Street Resurfacing/Restoration Project- 2019 File No. 2019-004 Bid No. 4570

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	<u>Unit Price</u>	Total Price
1630	8197050	_Handhole Assembly, 12 Inch x 18 Inch	Ea	1.00	\$	\$
1640	8197050	_Handhole Assembly, 17 Inch x 30 Inch	Ea	1.00	\$	\$
1650	8197050	_Handhole Assembly, 24 inch x 36 inch	Ea	1.00	\$	\$
1660	8217050	_Monument Box, Adj	Ea	8.00	\$	\$
1670	8230431	Gate Box, Adj, Case 1	Ea	55.00	\$	\$
1680	8230432	Gate Box, Adj, Case 2	Ea	5.00	\$	\$
					TOTAL THIS PAGE	\$
				TOTA	AL FROM PAGE BF-1	\$
				TOTA	AL FROM PAGE BF-2	\$
				TOTA	AL FROM PAGE BF-3	\$
				TOTA	AL FROM PAGE BF-4	\$
				TOTA	AL FROM PAGE BF-5	\$
				TOTA	AL FROM PAGE BF-6	\$
				TOTA	AL FROM PAGE BF-7	\$
				TOTA	AL FROM PAGE BF-8	\$
				TOTA	AL FROM PAGE BF-9	\$
2019 C	nstruction				TOTAL BASE BID	\$

FOR PROJECT SCHEDULE

AA:DAD 1 of 2 04/07/19

Complete the entirety of work under this Contract in accordance with, and subject to, the scheduling requirements as outlined below, and all other requirements of the Contract Documents.

Organize, coordinate and diligently execute the work at the locations shown on the Schedule of Streets included herein. This schedule details the requirements, if any, for the Start of Work (on or after dates specified), the Completion of Work (on or before dates specified), Restricted Dates, the Maximum Calendar Days for Completion, and the Liquidated Damages per Calendar Day for each street. For the purpose of this Contract, the "Start of Work" definition is the date when either the "No-Parking" signs or the temporary traffic control measures become effective, whichever occurs first. The definition of the "Completion of Work" is the point in time when all work designated for a project location is complete. This includes, but is not limited to, placement of permanent pavement markings, driveway wedging, slope restoration, clean-up, street cleaning, underground utility and utility structure cleaning, the removal of all temporary traffic control devices and "No Parking" signs, and other necessary work and as directed by the Engineer.

The Engineer will limit the Contractor's work operations to a number of streets that, in its opinion, is reasonable to allow for proper and thorough inspection, and to minimize temporary traffic control and/or safety related matters. In no case, unless otherwise approved by the Engineer, will the contractor have more than four (4) locations "active" at any given time with a maximum of two (2) of those locations being Major Streets. A location is "active" if work on the street has begun, and it is not yet complete in accordance with the above definitions for the "Start of Work" and "Completion of Work". Regard combined streets shown on the Schedule of Streets as one (1) location.

The City expects to furnish the Contractor with two (2) copies of the Contract, for its execution, on or before **April 17, 2019**. The Contractor will properly execute both copies of the Contract and return them, with the required Bonds and Insurance documentation, to the City by **May 8, 2019**. The Contractor will not begin the work before the applicable date(s) as described herein without approval from the Project Engineer, and in no case before the receipt of the fully executed Contract and Notice to Proceed.

By no later than **May 15, 2019**, the Contractor will submit a detailed schedule of work (progress schedule) for the Engineer's review and approval. The progress schedule must fully comply with the scheduling requirements contained on the Schedule of Streets. The schedule will clearly indicate, in detail, the start and the finish date of each work task on each street. The Contractor will update the approved progress schedule each week, and present it to the Engineer at the weekly progress meeting, and must consult with the Engineer for review and approval of any proposed deviations from the most current, approved, schedule.

The Contractor will begin the work of this project on or after **May 20, 2019**, and only upon receipt of the fully executed Contract, Notice to Proceed and approved Progress Schedule. The City will consider granting appropriate time extensions should delays outside the Contractor's control prevent work from starting on this date.

Start and complete work at each project location in accordance with the "Schedule of Streets". Complete the entire project on or before **November 2, 2019**. Completion of the project means

all locations shown on the Schedule of Streets are complete and ready for use in accordance with the "Completion of Work" as defined above.

Failure to complete all work as specified within the times specified, including time extensions granted thereto as determined by the Engineer, will entitle the City to deduct dollar amounts specified in the Schedule of Streets as "Liquidated Damages" from the payments due the Contractor. The City will access "Liquidated Damages" for delays in the completion of the work for each street, for each calendar day the work remains incomplete beyond the required contract completion date.

Time is of the essence in the performance of the work of this contract. The Contractor will mobilize sufficient personnel and equipment and work throughout all authorized hours to complete the project within the timeframes specified. Should the Contractor demonstrate that they must work on some Sundays in order to maintain the project schedule, they may do so between the hours of 9:00 a.m. and 5:00 p.m. with prior approval from the City. There will be no additional compensation due to the Contractor for work performed on Sundays.

The Engineer may delay or stop the work due to threatening weather conditions. No compensation will be due the Contractor for unused materials or downtime due to rain, or the threat of rain. The Contractor is solely responsible for repairing all damages to the work and to the site, including any City infrastructure, and any adjacent properties resulting from its decision to work in the rain.

The Contractor will not work in the dark except as approved by the Engineer and will provide lighting for night work as detailed elsewhere in this contract. The Engineer may stop the work, or may require the Contractor to defer certain work to another day, if, in the Engineer's opinion, the Contractor cannot be complete the work within the remaining daylight hours, or if inadequate daylight is present to properly perform or inspect the work. No compensation will be due to the Contractor for unused materials or downtime, when the Engineer directs work stoppage for reasons due to darkness and/or inadequate remaining daylight. The Contractor is solely responsible for repairing all damages to the work and to the site, including any City infrastructure, and any adjacent properties, which result from working in the dark.

Assessment of Liquidated Damages will occur until the required work is complete in the current construction season. If, with the Engineer's approval, work extends beyond seasonal limitations, the assessment of Liquidated Damages will discontinue until the work resumes in the following construction season.

If the construction contract is not complete within the specified period(s) including any extensions of time granted thereto, at the sole discretion of the City of Ann Arbor it may terminate the Contract. Should this occur no additional compensation will be due to the Contractor, and the Contractor may be forbidden to bid on future City of Ann Arbor projects for a period of at least three (3) years. If the Engineer elects to terminate the Contract, payment for contract items with a Lump Sum unit price will be up to a maximum amount equal to the percentage of the contract work that is complete at the time of termination.

The City's decision to delete streets, add streets, change the construction limits on streets, or, the City's contribution to a delay of the construction on <u>any one street</u> will not entitle the Contractor to receive additional compensation for work on any <u>other street(s)</u>, nor will it relieve the Contractor of any responsibilities for completion of work on any <u>other street(s)</u>.

Include any/all to organize, coordinate, and schedule all of the project work in the contract unit price bid for the pay item **General Conditions**, **Max \$___**.

Street Restoration Project- 2019 Schedule of Streets

Location (Street)	Limits of Work	Start of Work	Completion of Work	Restricted Dates	Maximum Calendar Days for Completion	Liquidated Damages per Calendar Day
	MA	MAJOR STREETS				
Platt Road	S Huron Pkwy to Washtenaw Ave/Glenwood Rd			MMRL, INDP, LABR	24	\$700
S Division Street	E Hoover Ave to E Madison St		08/29/2019	AAAF, CAA1, MMRL, INDP	18	\$700
South State Street	Oakbrook Dr to Stimson St		08/29/2019	AAAF, DTE, INDP	09	\$700
Stone School Road	I-94 to E Eisenhower Pkwy		07/17/2019	CAA2, MMRL, INDP	45	\$700
Traverwood Drive	Plymouth Rd to S Huron Pkwy			MMRL, INDP, LABR	35	\$950
West Liberty Street	W Stadium Blvd to Crest Ave			MMRL, INDP, LABR, UMFB	21	\$700
Fuller Road/Huron Parkway HMA Shared Use Path	Huron HS Drive to Huron Pkwy/Fuller Rd intersection to Huron HS Drive			AAPS, INDP, LABR	21	\$700
	MINOR	MINOR (LOCAL) STREETS	EETS			
Fountain Street	Miller Ave to Robin Rd			MMRL, INDP, LABR	45	\$950
Sheridan Drive	Washtenaw Ave to Londonderry Rd			MMRL, INDP, LABR	42	\$700
Brookridge Court	Brookridge Rd to Brookridge Rd					
Charles Street	Daniel St to Edward St/Brookridge Rd			MMRL, INDP,	Ç	08080
Daniel Street	Hiscock St to Sunset Rd			LABR	7)))
Edward Street	W Summit St to Charles St/Brookridge Rd					

Street Restoration Project- 2019

Schedule of Streets

Location (Street)	Limits of Work	Start of Work	Completion of Work	Restricted Dates	Maximum Calendar Days for Completion	Liquidated Damages per Calendar Day
	MINOR (LOCAL) STREETS - CONTINUED	-) STREETS - (CONTINUED			
Felch Street	Gott St to Fountain St					
Felch Street	Spring St to N Ashley St			MMRL, INDP, LABR	35	\$950
Hiscock Street	Spring St to W Summit St/Wildt St					
Hillcrest Drive	W Summit St to End of Cul-de-Sac					
W Summit Street	Brooks St to Gott St			MMRL, INDP, LABR	28	\$700
W Summit Street	Fountain St to Daniel St					
Bydding Road	Miner St/Cressfield St to Brooks St					
Cressfield Lane	Bydding Rd/Miner St to End of Culde-Sac			MMRL, INDP, LABR	49	\$950
Miner Street	Hiscock St to Cressfield St/Byddington Rd					
Gott Street	Miller Ave to Pearl St			MMRL, INDP,	7	\$200
Pearl Street	Brooks St to Miner St			LABR	Ç	9

AAPS - No work permitted when Ann Arbor Public Schools are in session (before June 17, 2019 or after September 2, 2019).

AAAF - No work permitted from July 18, 2019 thru July 21, 2019 due to the Ann Arbor Street Art Fairs.

CAA1 - Coordinate work and maintenance of traffic with City of Ann Arbor Hoover, Greene & Hill Improvement Project.

CAA2 - Coordinate work and maintenance of traffic with City of Ann Arbor Street Surface Treatment Project – FY2020 work planned for E Eisenhower Pkwy, E Stadium Blvd, and Packard St.

Street Restoration Project- 2019 Schedule of Streets

DTE - No work permitted until DTE Energy Conduit Duct Bank work on S State St is complete (anticipated by June 30, 2019).

INDP - No work during the Independence Day holiday period from 3:00 p.m. July 3 to 7:00 a.m. July 5, 2019.

LABR - No work during the Labor Day holiday period from 3:00 p.m. August 30 to 7:00 a.m. September 3, 2019.

MMRL - No work during the Memorial Day holiday period from 3:00 p.m. May 24 to 7:00 a.m. May 28, 2019.

UMFB - No work permitted during scheduled home game dates (8/31, 9/7, 9/28, 10/5, 10/26) for University of Michigan Football.

UMSM - No work permitted during University of Michigan Student Move-in (August 30 thru September 2, 2019).

Notes:

- . Construct Brookridge Court, Charles Street, Daniel Street, and Edward Street concurrently.
 - Construct Felch Street (both locations) and Hiscock Street concurrently.
- Construct Hillcrest Drive and W Summit Street (both locations) concurrently.
 - 4. Construct Bydding Road, Cressfield Lane, and Miner Street concurrently.
 - Construct Gott Street and Pearl Street concurrently.
- No simultaneous work permitted on Gott St and Miner St, or on Fountain St and Miner St.

DETAILED SPECIFICATION FOR ADJUSTING STRUCTURE COVERS

AA:DAD 1 of 3 04/09/19

a. Description. This work includes the final adjustment of all drainage and utility structure covers whether shown or not on the plans in accordance with section 403 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, applicable standard or special details, and as specified herein. Utility structures comprise gate valve wells/manholes, sanitary sewer manholes, gate valve boxes, monument boxes, and electrical/traffic signal handholes.

The Contractor will also coordinate with the private utility(s) any required adjustment(s) of structure covers to ensure performance of proper adjustments prior to placing any final paving materials.

b. Materials. Provide materials in accordance with those specified in subsection 403.02 of the MDOT Standard Specifications for Construction.

In hot mix asphalt (HMA) pavement areas, make adjustments using MDOT P-NC concrete (658 lbs/cyd) as specified in subsection 601.02 of the MDOT 2012 Standard Specifications for Construction. In areas of concrete (PCC) pavement, adjust structures at the time of paving and encase them with the grade of concrete used for the roadway.

c. Construction. Complete this work, as applicable, according to subsection 403.03 of the MDOT 2012 Standard Specifications for Construction, as described below, and as directed by the Engineer.

Adjust any/all structure covers, monument boxes, water valve boxes and other public utility underground access or control point covers to conform to the finished surface section and elevation. Perform the structure cover adjustments in lawn areas and those using a one-step process. Perform structure cover adjustments in HMA pavement areas in two steps: step one is the lowering of the structure cover to below the subgrade elevation and plating of the structure; step two is the final adjustment to finish grade made prior to placing the HMA top course. In areas of concrete pavement, make the final adjustment of structure covers to finish grade at the time of concrete pavement forming. The Engineer shall approve of all structure cover adjustments prior to the placement of any HMA and/or concrete pavement.

Any/all final structures cover adjustments are to be to the elevation that results in their top surface being flush with the finished grade. Accomplish and check this work using a 10-foot straight edge placed parallel, and then perpendicular to, the pavement centerline. Failure to meet these conditions will result in the readjustment of the structure and finish patching of the area, as directed by the Engineer, at the Contractor's expense.

All private utility (Electric, Gas, Telecommunications, etc.) structure and valve covers will be adjusted during this project by the Utility. It is the responsibility of the Contractor to coordinate with these private utilities by giving adequate notice and arranging for any adjustment of structures or valves by these utilities. The Contractor is solely responsibility for ensuring completion of this work in a timely manner.

The Contractor shall replace existing structures covers, top portions of valve boxes and monument boxes as shown on the plans and as directed by the Engineer.

The Contractor shall remove and stockpile on site at a location mutually agreed upon by the Contractor and Engineer any/all existing structure covers designated for salvage and within two days of their removal deliverer them to the City's W.R. Wheeler Service Center (4251 Stone School Rd, Ann Arbor, MI). Any structure covers not designated for salvage shall become the property of the Contractor, and disposed of, as required, by the Contractor.

Any/all adjustments in areas HMA pavement include backfilling with Grade P-NC concrete from the depth of excavation necessary for adjustment to an elevation flush with the HMA leveling course.

Adjust structure covers to be flush with or ¼ inch below final pavement surface.

d. Measurement and Payment. Measure and pay for the completed work, as described, at the respective contract unit prices using the following respective pay items:

Pay Item	<u>Pay Unit</u>
Dr Structure Cover, Adj, Case 1, Modified	Each
Dr Structure Cover, Adj, Case 2, Modified	Each
Monument Box, Adj	Each

Measure Dr Structure Cover, Adj, Case 1, Modified and Dr Structure Cover, Adj, Case 2, Modified and Monument Box, Adj individually in place by the unit each and pay for them at their respective contract unit prices, which prices include costs for all labor, equipment and materials necessary to complete the work.

Backfilling with Grade P-NC concrete is not a separate contract item, and payment for **Dr Structure Cover, Adj, Case 1, Modified** includes furnishing and placing this material.

Payment for transporting salvaged frames and covers from the project site to the W.R. Wheeler Center is included in the unit prices bid for the above structure cover adjustment items of work.

Where the required adjustment of a structure is more than 6 inches above/below the proposed finished grade of the structure, measure and pay for it as **Dr Structure Cover**, **Adj**, **Add Depth**. This also includes the repair of manholes and structures requiring less than the substantial rebuilding of the structure, as determined by the Engineer.

There is a possibility that the Contractor may find hidden utility structures during the work. It is the Contractor's responsibility to inform the respective utility owner(s) of the findings. In such instances, the City may direct the Contractor to adjust the structure(s) to grade. The Engineer will pay this work as either **Dr Structure Cover**, **Adj**, **Case 1**, **Modified** or **Dr Structure Cover**, **Adj**, **Case 2**, **Modified** depending on the location of the hidden structure(s).

The Engineer will pay for adjusting covers on new drainage or utility structures, monuments boxes, valve boxes, etc. in their respective items of work and not pay for them under these items of work. Perform this work in accordance with this detailed specification.

The Engineer will pay for the adjustment of gate valve boxes and electrical/traffic signal handholes as **Dr Structure Cover, Adj, Case** ____, **Modified** unless there are separate pay items in the contract to address this work.

DETAILED SPECIFICATION FOR HOT MIX ASPHALT (HMA) APPLICATION ESTIMATE

AA:DAD 1 of 2 04/09/19

a. Description. Perform this work in accordance with the requirements of section 501 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, and as herein specified.

b. Materials.

PAY ITEM	HMA MIX	APPLICATION RATE	ESTIMATED THICKNESS	PERFORMANCE GRADE	AWI (min)
	Platt Road, S	outh Division Stre	eet, and Traverw	ood Drive	
HMA, 5E1	5E1 (top)	220 lb/syd	2.0 inches	PG 64-28	260
HMA, 4E1	4E1 (leveling)	165-220 lb/syd	1.5-2.0 inches	PG 64-28	N/A
	Ful	ler Road and We	st Liberty Street		
HMA, 5E3	5E3 (top)	220 lb/syd	2.0 inches	PG 64-28	260
HMA, 4E3	4E3 (leveling)	220 lb/syd	2.0 inches	PG 64-28	N/A
Stone School Road					
HMA, 5E3, High Stress	5E3 (top)	220 lb/syd	2.0 inches	PG 70-28P	260
HMA, 4E3	4E3 (base & leveling)	Place in two courses/lifts at 220 lb/syd	2.0 inches per course/lift	PG 64-28P	N/A
	l	Minor (Local) Streets		
HMA, LVSP	LVSP (leveling & top)	220 lb/syd	2.0 inches	PG 58-28	220
	Fuller R	oad/Huron Parkw	ay Shared Use	Path	
Shared use Path, HMA	LVSP	250 lb/syd	2.25 inches	PG 58-28	220
Shared use Path, HMA, Wedging	LVSP	Yield may vary between 165 and 250 lb/syd	Thickness may vary between 1.5 and 2.25 inches	PG 58-28	N/A

PAY ITEM	нма міх	APPLICATION RATE	ESTIMATED THICKNESS	PERFORMANCE GRADE	AWI (min)
	N	Major and Minor (Local) Streets		
HMA, Approach	5E1 or 5E3 <u>Major Streets</u> LVSP <u>Minor Streets</u>	Place in two courses/lifts at 220 lb/syd	Thickness may vary with maximum per lift = 2.0 inches	PG 64-28 PG 58-28	260 220
HMA, Wedging, 36A	36A	Yield may vary between 110 and 330 lb/syd	Thickness may vary between 1.0 and 3.0 inches	PG 58-28	220
Hand Patching	5E1 or 5E3 <u>Major Streets</u> LVSP <u>Minor Streets</u>	Yield may vary with maximum = 330 lb/syd	Thickness may vary with maximum layer = 3.0 inches	PG 64-28 PG 58-28	N/A

Use the respective mixes indicated above on Major and Local streets unless the plans note otherwise, or directed otherwise by the Engineer. Submit mix designs and obtain approval from the Engineer for all HMA mixtures proposed for use. For approach and hand patching work on Major Streets, use the same HMA mixture respectively as specified for the top course unless otherwise approved by the Engineer.

Use 3.5% as target air void content of for leveling courses, top courses and shoulders paved in the same operation as the leveling and top courses. Use 3% as a target air void content of for base courses and shoulders not paved in the same operation as the leveling and top courses. Use 3% as a target air void content of for shared use paths.

The Performance Grade asphalt binder range for the HMA mixture shall be as noted above. Apply Bond Coat material accordance with the requirements of the Detailed Specification for HMA Paving.

Apply bond coat at a uniform rate between 0.05 and 0.10 gallons per square yard as directed and approved by the Engineer. Bond Coat is not a separate pay item; the HMA items of work for which it applies include payment for furnishing and placing bond coat.

c. Measurement and Payment. Measure and pay for this work as provided elsewhere in the contract documents.

DETAILED SPECIFICATION FOR PAVEMENT REPAIR REMOVAL

AA:DAD 1 of 1 04/08/19

- **a. Description.** This work consists of removing areas of full depth concrete and composite (concrete over asphalt) pavements, and partial or full depth hot mix asphalt (HMA) patches, as shown on the plans, directed by the Engineer, and described herein.
 - b. Materials. None specified.
- **c. Construction.** Perform removal of full depth concrete and composite (concrete over asphalt) pavements, and partial or full depth hot mix asphalt (HMA) patches in accordance with subsection 603.03 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction.
- **d. Measurement and Payment.** Measure and pay for the completed work, as described, at the respective contract unit prices using the following respective pay items:

Measure **Pavt Repr**, **Rem**, **Modified** area by the unit square yard and pay for it at the contract unit price, which price includes the cost for all labor, equipment and materials required to complete the removal work. The unit price also includes the following:

- 1. Moving from repair to repair;
- 2. Saw cutting including intermediate saw cuts;
- 3. Lifting the repair sections without disturbing the base;
- 4. Loading, hauling, and disposing of the removed materials.

DETAILED SPECIFICATION FOR PERMANENT PAVEMENT MARKINGS

AA:DAD 1 of 1 04/09/19

- **a. Description.** This work consists of providing and placing permanent pavement markings in accordance with the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). Provide pavement markings that conform to the plans, section 811 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, MDOT Pavement Marking Standard Plans, City of Ann Arbor Special Details, as directed by the Engineer, and as specified herein.
- **b. Materials.** Provide materials in accordance with sections 811 and 920 of the MDOT 2012 Standard Specifications for Construction. Provide the Material Safety Data Sheets to the Engineer for required materials and supplies. Dispose of unused material and containers in accordance with the Federal Resource Conservation Recovery Act (RCRA) of 1976 as amended, and 1994 PA 451, Part 111 Hazardous Waste Management. Provide samples of permanent pavement marking materials upon request.
- **c.** Construction Methods. The preparation and placement of permanent pavement markings shall conform to section 811 of the MDOT 2012 Standard Specifications, the plans, and as specified herein.
- **d. Measurement and Payment.** Measure and pay for the completed work, as described, at the respective contract unit prices using the following respective pay items:

Pay Item	Pay Unit
Pavt Mrkg, Thermopl, 4 inch, White Parking Sym	Ft
Pavt Mrkg, Thermopl, Lt Turn Arrow Sym	Each
Pavt Mrkg, Thermopl, Only	Each
Pavt Mrkg, Thermopl, Rt Turn Arrow Sym	Each
Pavt Mrkg, Thermopl, Speed Hump Chevron, White	Each
Pavt Mrkg, Thermopl, Thru Arrow Sym	Each

Measure **Pavt Mrkg, Thermopl, 4 inch, White Parking Sym** in place by the unit foot and pay for them at the contract unit price, which prices include the costs for all labor, equipment and materials to complete the work.

Measure Pavt Mrkg, Thermopl, Lt Turn Arrow Sym; Pavt Mrkg, Thermopl, Only; Pavt Mrkg, Thermopl, Rt Turn Arrow Sym; Pavt Mrkg, Thermopl, Speed Hump Chevron, White; and Pavt Mrkg, Thermopl, Thru Arrow Sym individually in place by the unit each and pay for them at their respective contract unit prices, which prices include the costs for all labor, equipment and materials to complete the work.

DETAILED SPECIFICATION FOR

WET REFLECTIVE LIQUID APPLIED PAVEMENT MARKINGS

AA:DAD 1 of 2 04/09/19

a. Description. This work consists of furnishing and installing wet night retroreflective (WR) beads and/or elements and liquid applied pavement marking materials in accordance with the Michigan Department of Transportation 2012 Standard Specifications for Construction, and as required herein.

b. Materials.

1. Wet Night Retroreflective Beads and/or Elements. Select WR beads and/or elements from one of the following Manufacturers or a Michigan Department of Transportation (MDOT) approved alternative that meets the requirements in Table 1:

3M Corporation Potter's Industries Swarco Flex-o-Lite

Table 1: WR Markings

Average Initial Retroreflectivity at 30 meter geometry in mcd/lux/m ²			
Test Method	White	Yellow	
Dry (ASTM E 1710)	700	500	
Wet Recovery (ASTM E 2177)	250	200	

Ship the material to the job site in sturdy containers marked in accordance with subsection 920.01.A of the MDOT 2012 Standard Specifications for Construction.

Submit to the Engineer prior to the start of work:

- A. The application rate of the beads/elements recommended by the manufacturer and the liquid applied pavement marking binder proposed for use on the project. If the application rate recommended by the manufacturer differs from the specified rate in Table 811-1 of the MDOT 2012 Standard Specifications for Construction, the rate recommended by the manufacturer supersedes the table values.
- B. Certification from the Manufacturer that when applied according to their application recommendations the beads and/or elements meet the requirements shown in Table 1 above.
- 2. Binder. Provide a liquid pavement marking product of the binder type specified in the contract documents from section 811 of the Qualified Products List or as specified by detailed specification or special provision, or use an alternative binder as approved by the Engineer.

- **c.** Construction. Place the binder and beads in accordance with the requirements and /or recommendations of the manufacturers and sections 811 and 920 of the MDOT 2012 Standard Specifications for Construction except as noted above.
- **d. Measurement and Payment.** Measure and pay for the completed work, as described, at the respective contract unit prices using the following respective pay items:

Pay item	Pay Unit
Pavt Mrkg, Wet Retrflec Polyurea, 12 inch, Crosswalk	Foot
Pavt Mrkg, Wet Retrflec Polyurea, 24 inch, Stop Bar	Foot
Pavt Mrkg, Wet Retrflec Polyurea, Lt Turn Arrow Sym	Each
Pavt Mrkg, Wet Retrflec Polyurea, Only	Each
Pavt Mrkg, Wet Retrflec Polyurea, Rt Turn Arrow Sym	Each
Pavt Mrkg, Wet Retrflec Polyurea, Railroad Sym	Each

Measure Pavt Mrkg, Wet Retrflec Polyurea, 12 inch, Crosswalk and Pavt Mrkg, Wet Retrflec Polyurea, 24 inch, Stop Bar length in place by the unit foot and pay for them at their respective contract unit prices, which prices include the costs for all labor, equipment and materials to complete the work.

Measure Pavt Mrkg, Wet Retrflec Polyurea, Lt Turn Arrow Sym; Pavt Mrkg, Wet Retrflec Polyurea, Only; Pavt Mrkg, Wet Retrflec Polyurea, Rt Turn Arrow Sym, and Pavt Mrkg, Wet Retrflec Polyurea, Railroad Sym individually in place by the unit each and pay for them at their respective contract unit prices, which prices include the costs for all labor, equipment and materials to complete the work.

DETAILED SPECIFICATION FOR MAINTENANCE OF TRAFFIC

AA:DAD 1 of 5 04/09/19

a. Description. The work consists of maintaining traffic at the locations identified on the "Schedule of Streets" for duration of the work. Maintain traffic in accordance with the plans, subsection 104.11 and section 812 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), applicable supplemental specifications, as directed by the Engineer, and as herein specified.

The following, and herein included, Michigan Department of Transportation (MDOT) Maintaining Traffic Typicals, and Work Zone Device Standard Plans and Special Details apply to the project: M0020a, M0040a, M0110a, M0120a, M0140a, M150a, M0232a, M250a, M350a, M380a, M410a, M440a, M470a, M500a, M730a, WZD-100-A, and WZD-125-E.

Note: There is not a maintenance of traffic plan for the proposed concrete pavement repair work associated with the S State Street project location. MDOT Maintaining Traffic Typicals M0232a, M250a, M350a, M380a, M410a, M440a, M470a, and M500a apply to this work.

These maintaining traffic provisions are subject to change in the event of special community activities.

Place permanent pavement marking items included in the contract per the MDOT 2012 Standard Specifications for Construction prior to the removal of any devices required to temporarily maintain traffic during construction, and also prior to opening the project to traffic.

b. Materials. Provide materials for all devices to temporarily control and maintain traffic meeting the requirements of section 812 of the MDOT 2012 Standard Specifications for Construction, the MMUTCD, and the applicable MDOT typicals and details included herein.

Use sign sizes shown on the plans, unless otherwise directed by the Engineer. Installed all temporary signs on driven posts, which are to remain in the same place for 14 days or more. Install all other temporary signs on portable supports. Install all signs to have a minimum bottom height of 7.0 feet.

Use only plastic drums for channelizing devices when implementing any/all lane closures. 42 inch channelizing devices are permissible at certain locations with approval from the Engineer.

Furnish paper bills of lading/delivery tickets to the Engineer on the jobsite for all temporary traffic control devices delivered to the various project locations.

c. Construction. Use construction methods meeting the requirements of section 812 of the MDOT 2012 Standard Specifications for Construction, and as described herein.

Furnish and place all necessary temporary traffic control devices to maintain traffic during construction. Keep all work, construction equipment, and material storage behind the curb, or behind barricades or channelizing devices, all in combination with protective fencing, if required to protect open excavations, and do not in any way hamper vehicle movement or impair traffic

vision. Provide protection to all uncured concrete sidewalk, driveways, and curb and gutter as needed until all traffic, foot or otherwise, can cross without damage. Install additional barricades and protective fencing at the end of each day to insure no disturbance to the work area.

Distances between warning, regulatory, and guide signs as shown on the typicals and details are approximate, and may require field adjustment, as directed by the Engineer.

Maintain two-way traffic as shown on the plans, access for local traffic on local streets, and keep all intersections open to traffic at all times, unless specifically authorized in writing by the Engineer.

Maintain traffic to prevent vehicles from driving into active work areas. Remove and replace patch areas that extend more than halfway across the roadway to provide a minimum of half the pavement width at all times for maintaining traffic.

Remove existing pavement markings and place temporary pavement markings as directed by the Engineer.

All temporary traffic/pedestrian control devices furnished by the Contractor remain the property of the Contractor. The City is not responsible for stolen or damaged signs, barricades, plastic drums and other traffic maintenance items. Replace missing and/or damaged traffic control devices immediately, at no additional cost to the City.

1. Construction Influence Area (CIA). The CIA at each location consists of the width of the right-of-way and easements, and the limits of any advance temporary construction signing shown on the plans and applicable maintaining traffic typicals along the street under construction and any/all cross streets. Posted detour routes are not part of the CIA.

Furnish, erect, maintain, and upon completion of the work, remove all traffic control devices within and around the CIA, and along posted detour routes, for the safety and protection of traffic. This includes, but is not limited to, regulatory and warning signs, barricades, channeling devices and other minor devices where required by the Engineer.

Coordinate operations with all subcontractors, utilities, and/or other contractors performing work on this and other projects within, or adjacent to, the Construction Influence Area (CIA). Avoid conflicts in maintaining traffic operations, signing, and orderly progress of other contract work.

Maintain traffic on S State St with a minimum of one lane operating in each direction directions utilizing intermittent lane closures in accordance with the various and aforementioned MDOT Maintaining Traffic Typicals referenced in this detailed specification.

2. Permits. Prior to the start of construction, obtain a "Right-of-Way" Permit from City of Ann Arbor Customer Services Unit. Notify the Project Engineer and obtain a "Traffic Detour or Lane Closure" Permit from Customer Services Unit a minimum of 72 business hours prior to the implementation of any traffic shifts, lane closures and street closures. There are no fees associated with these permits.

3. Work Times and Restrictions. Conduct all work on Monday through Saturday between 7:00am and 8:00pm unless, prior to commencement of construction, the City authorizes a plan identifying alternate days and hours of work. Should night work be required for any reason, notify the Project Engineer a minimum of three (3) working days (72 hours) in advance of such work, and the work must have the approval of the City prior to commencement.

Only perform work of an emergency nature or work required to insure traffic safety on Sunday and only with prior approval by the City.

Perform no road work nor permit any traffic interruptions, including lane closures, on Sundays, and during the Memorial Day, July 4th, and Labor Day holiday periods unless otherwise authorized by the Engineer. All streets and sidewalks that can be open will be open. Trucking on or off site will not be permitted.

During non-working periods, any area with uncompleted work will have plastic drums at specific locations and protective fencing, as directed by the Engineer, and at no additional cost to the project.

4. Traffic Restrictions. At all times conduct work to insure the least possible obstruction to traffic and inconvenience to the public, and property owners including businesses and residents proximate to the work.

Do not interfere with traffic on major streets between the hours of 7:00 a.m. to 9:00 a.m. and 3:30 p.m. to 6:00 p.m. unless otherwise approved by the Engineer or as specified on a Lane Closure Permit. Make all major changes in traffic control either between 9:00 a.m. and 3:30 p.m. or between 7:00 p.m. and 6:30 a.m. in order to minimize interference with rush hour traffic. All traffic controls must be in place and ready for traffic each day by 6:30 a.m. and 3:30 p.m. The City will permit temporary obstruction of traffic for loading and unloading of trucks only if the Contractor provides traffic regulators (flag persons) in conformance with Part VI of the MMUTCD. During temporary obstructions, a minimum of two traffic regulators are required. Include the cost of traffic regulators (flag control) in the unit price for the contract pay item "Minor Traffic Control, Modified, Max \$____".

Maintain access to businesses, residences, and side street(s) within the CIA for the duration of the project. The Contractor shall make every effort to coordinate its operations to minimize interruptions affecting this access. Notify the Project Engineer forty-eight (48) hours in advance of performing any work on or near business or residential driveways, and stage work so that it is part-width when it is necessary to work in these areas. The Engineer will not allow the Contractor to prohibit access to businesses and residences during any phase of construction, and may require flag control at its discretion.

Maintain 9 feet wide minimum lane widths and greater widths whenever feasbile. Schedule work so not to require any traffic stoppage under any circumstance unless otherwise approved by the Engineer. Suspend work within the CIA during peak traffic hours, and/or at the direction of the Engineer when construction activity(s) unduly hamper or delay traffic.

- 5. Emergency Services. Notify local police, fire departments and emergency response units a minimum of three business days (72 hours) prior to the closure of any lanes, or traffic shifts causing restricted movements of traffic or restricted access. Keep "live" fire hydrants in or adjacent to the work and fire fighting forces made aware of their availability at all times during construction.
- **d. Measurement and Payment.** Measure and pay for the completed work, as described, at the contract unit price using the following pay items in accordance with subsection 812.04 of the Standard Specifications for Construction.

Pay Item	<u>Pay Unit</u>
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Each
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Each
Channelizing Device, 42 inch, Furn	Each
Channelizing Device, 42 inch, Oper	Each
Pavt Mrkg, Longit, 6 inch or Less Width, Rem	Foot
Pavt Mrkg, Type NR, Paint, 4 inch, White, Temp	Foot
Pavt Mrkg, Type NR, Paint, 4 inch, Yellow, Temp	Foot
Pavt Mrkg, Type R, 4 inch, White, Temp	Foot
Pavt Mrkg, Type R, 4 inch, Yellow, Temp	Foot
Lighted Arrow, Type C, Furn	Each
Lighted Arrow, Type C, Oper	Each
Plastic Drum, High Intensity, Lighted, Furn	Each
Plastic Drum, High Intensity, Lighted, Oper	Each
Sign, Portable, Changeable Message, Furn	Each
Sign, Portable, Changeable Message, Oper	Each
Sign, Type B, Temp, Prismatic, Furn	Square Foot
Sign, Type B, Temp, Prismatic, Oper	Square Foot
Traf Regulator Control	Lump Sum
Minor Traffic Control, Modified, Max \$	Lump Sum

The quantities for maintaining traffic are estimates and based on the signing and related traffic control devices deemed necessary for this project as shown on the plans and applicable MDOT Maintaining Traffic Typicals, and include traffic regulators, lighted arrows and minor traffic devices.

Payment for furnishing and operating temporary traffic control devices shall be for the maximum quantity in use on each street at any one time with exception to lighted arrows and portable changeable message signs, which payment shall be for furnishing and operating the maximum quantity in use at any one time during the entire project (all streets).

Any additional signing or maintaining traffic devices required to expedite the construction is at the Contractor's expense unless approved by the Engineer.

Include any/all costs for transporting temporary traffic control devices in their respective contract unit prices bid for the individual traffic control items of work set up in the contract.

The Engineer will pay for temporary traffic control devices only once irrespective of the number of times moved. Include any/all costs for temporary traffic control devices not addressed by this detailed specification, or where there is no separate pay item in the contract, in the unit price for **Minor Traffic Control, Max \$___**.

CITY OF ANN ARBOR

DETAILED SPECIFICATION FOR SLOPE RESTORATION

AA:DAD 1 of 3 04/09/19

- **a. Description.** This work consists of preparing all manicured lawns and slopes on non-freeway projects designated for slope restoration on the plans or by the Engineer, and applying topsoil, fertilizer, seed, and mulch blankets to those areas. Turf establishment shall be in accordance with section 816 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction and Standard Plan Series R-100, except as modified herein or otherwise directed by the Engineer.
- **b. Materials.** The materials and application rates shall meet the requirements specified in subsection 816.02 and section 917 of the MDOT 2012 Standard Specifications for Construction and as specified herein unless otherwise directed by the Engineer.
 - 1. Topsoil Surface: Place 4 inches of topsoil in area disturbed areas designated for restoration. Topsoil shall be free of all stones one inch in diameter or greater.
 - 2. Turf Seed Mixture: Use seed mixture shown in table below. Seed shall be fresh, clean, dry, new-crop seed complying with the AOSA's "Rules for Testing Seed", tested for purity and germination tolerances.

Species/Variety	Mix Proportions	Purity	Germination
Species/ variety	(percent by weight)	(percent)	(percent)
Baron Kentucky Bluegrass	25	90	80
Kentucky Bluegrass 98/80	15	98	80
Park Kentucky Bluegrass	15	90	80
Omega III Perennial Ryegrass	20	98	90
Creeping Red Fescue	25	95	90

Maximum weed content shall be 0.30%.

- 3. Chemical Fertilizer Nutrient: Use Class A fertilizer.
- 4. 4. Mulch Blanket: Use excelsior mulch blanket free of chemical additives. The netting thread and anchoring devices must be 100 percent biodegradable. **Use no polypropylene or other non-biodegradable netting**. Provide wood or other biodegradable anchors, at least 6 inches in length, as approved by the Engineer. **Do not use steel wire staples or pins to anchor mulch blankets**.
- **c. Construction.** Construction methods shall be in accordance to subsections 816.03 and 817.03 of the MDOT 2012 Standard Specifications for Construction. Begin this work as soon as possible after final grading of the areas designated for slope restoration but no later than the maximum time limitations stated in subsection 208.03 of the Standard Specifications for Construction. It may be necessary, as directed by the Engineer, to place materials by hand.

Restore all areas as shown on the plans and others disturbed by the Contractor's activity(s) and as identified by the Engineer. Slope restoration includes furnishing and placing topsoil, applying seed and fertilizer, placing mulch blankets, and watering as necessary for the establishment of turf.

Prior to placing topsoil, grade, shape, compact and assure all areas to be seeded are weed free. Place topsoil to the minimum depth required, to meet proposed finished grade. Spread and rake topsoil to provide a uniform surface free of large clumps, rocks, brush, roots, or other

deleterious materials, as determined by the Engineer. Remove any stones greater than or equal to 1 inch in diameter. If the area designated for restoration requires more than the minimum depth of topsoil to meet finished grade, the additional depth must be filled using topsoil. Furnishing and placing this additional material is included in this item of work.

Place topsoil that is weed and weed seed free and friable prior to placing seed. Apply seed mixture and fertilizer to prepared soil surface. Incorporate seed into top ½ inch of topsoil.

Use mulch blanket on all areas designated for restoration unless otherwise directed by the Engineer. Install mulch blanket per the manufacturer's published instructions.

Protect and maintain restored areas to establish a uniform, dense, vigorous, and weed free turf without mounds and/or depressions. Begin maintenance immediately upon completion of restoration work and continue up to final acceptance. This includes, but is not limited to, deposition of additional topsoil, re-seeding, fertilizing, and placement of mulch blankets to address areas damaged by washouts and soil erosion, non-uniform germination and bare spots. It also includes any other work required to correct all settlement, erosion, germination, and establishment issues.

If areas washout and/or erode after completing the work and obtaining approval by the Engineer, make the required corrections to prevent future washouts and erosion and replace the topsoil, fertilizer, seed and mulch as required and directed by the Engineer.

Scattered bare spots in seeded areas will not be allowed over three (3) percent of the area nor greater than 6"x 6" in size.

If the Engineer determines weeds cover more than ten percent of the total area of slope restoration, the Contractor will provide weed control in accordance to subsection 816.03.J of the MDOT 2012 Standard Specifications for Construction.

Prior to acceptance, the Engineer will inspect the restored areas to ensure the turf is well established, weed free, in a vigorous growing condition, and contains the species called for in the seeding mixture. If areas do not promote growth, the Contractor will apply new seed, fertilizer and mulch blankets, and water as required.

Upon fulfillment of the above requirements, the Engineer will accept the slope restoration.

Unless otherwise approved by the Engineer, final acceptance will occur no sooner than October 10 of the same year for areas initially restored during the spring (April 15 - June 15) planting season; or, no sooner than June 15 of the following year for areas initially restored during the prior summer/fall (after June 15) planting season.

d. Measurement and Payment. Measure and pay for the completed work, as described, at the contract unit price using the following pay item:

Pay Item

Slope Restoration......Square Yard

Measure **Slope Restoration** area in place by the unit square yard and pay for it at the contract unit price, which price includes the costs for all labor, equipment and materials necessary to complete the work.

The Contractor will restore areas disturbed by its operations and not required by the Project at its own expense.

The Engineer will not pay for any labor, equipment and material costs for the Contractor to provide weed control.

The Contractor will repair and/or clean any damage or soiling to signs, fences, trees, pavements, structures, etc. at its own expense.

After initial placement of the slope restoration measures, the Engineer will certify for payment fifty (50) percent of the total quantity placed for each item. The Engineer will certify for payment the remaining fifty (50) percent of the total quantities upon full establishment and final acceptance of any restored area.

CITY OF ANN ARBOR

NOTICE TO BIDDERS

PROJECT COORDINATION

AA:DAD 1 of 1 04/09/19

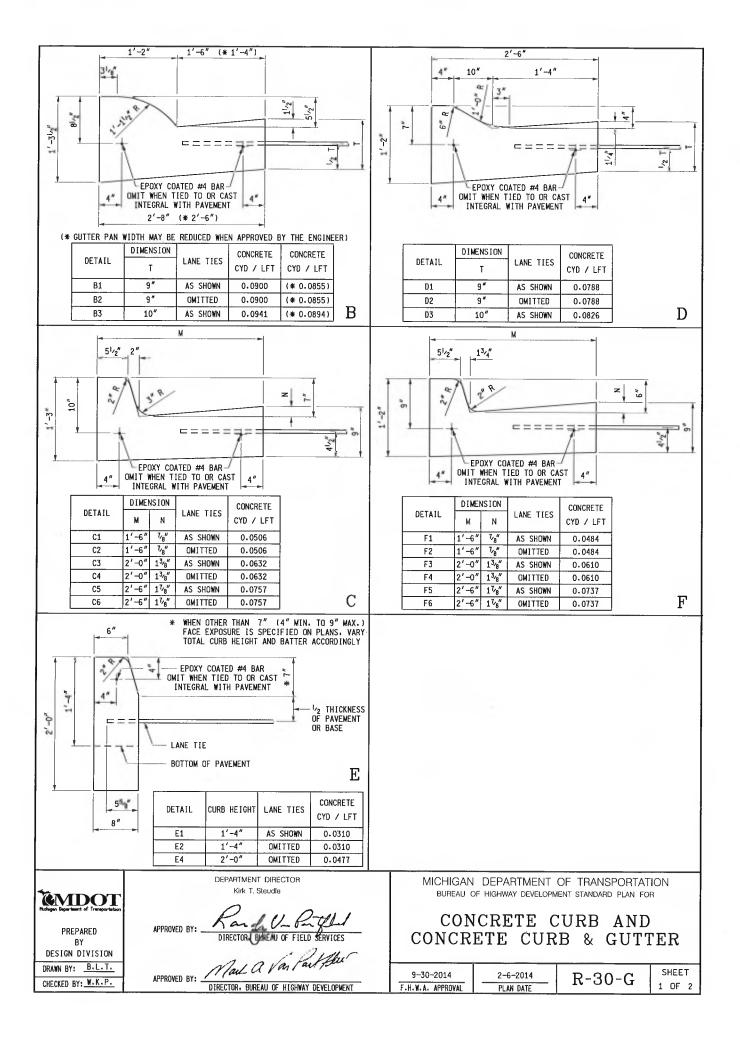
The City of Ann Arbor hereby notifies the Contractor there will be several construction projects directly adjacent to the Construction Influence Area (C.I.A.), or within the local vicinity, that may affect the various work activities, maintenance of traffic, and/or trucking operations involved with this project. These projects are as follows, and the City anticipates construction of these during the same timeframe as this project.

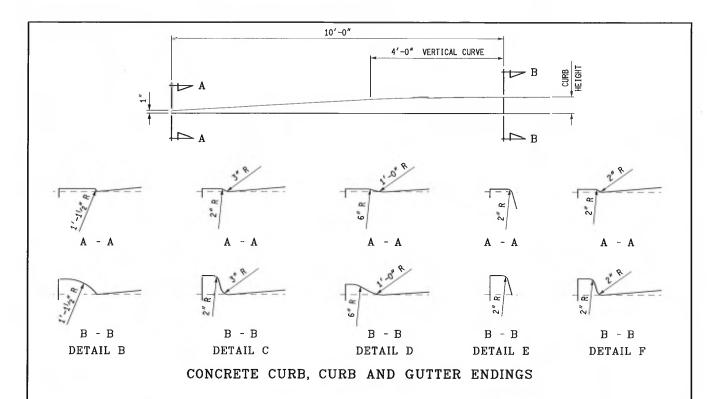
- City of Ann Arbor Hoover, Greene & Hill Improvement Project
- City of Ann Arbor Street Surface Treatment Project FY2020 work on E Eisenhower Pkwy, E Stadium Blvd, and Packard St.
- DTE Energy Conduit Duct Bank work on S State St

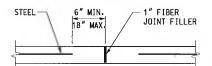
The above is not necessarily be a complete listing of all area projects that could potentially impact this one. Prior to commencing with any construction, the Contractor shall verify with the City the presence of any other concurrent public or permitted projects within the vicinity.

The Contractor shall coordinate its work on this project with that by Contractor(s) on all other projects within the local vicinity, as directed by the Engineer. The Engineer will make no additional compensation or adjustments to contract unit prices for costs incurred by the Contractor due to coordinating with or delays caused by other projects.

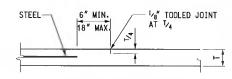
The Contractor will coordinate with the Stone School Road Sanitary Sewer Extension Project Prime Contractor to replace in kind any/all traffic control devices in place at the time of completion of the Sewer Extension Project in order to maintain traffic in the same manner and until such time that street resurfacing work commences. The replacement in kind of traffic control devices shall occur within three (3) calendar days after notification by the Engineer of the completion of the Sewer Extension Project.







1" FIBER JOINT FILLER



CONTRACTION JOINT

NOTES:

CURB AND GUTTER RADII SHALL BE DIMENSIONED TO THE FRONT EDGE OF THE GUTTER PAN OR EDGE OF PAVEMENT.

CONCRETE CURB AND GUTTER ENDINGS WILL BE PAID FOR IN LINEAR FEET OF THE ADJACENT CURB DETAIL.

JOINTS SHALL BE PLACED AT RIGHT ANGLES TO THE EDGE OF CONCRETE CURB AND GUTTER.

JOINTS DETAILED ON THE PLANS SHALL SUPERSEDE THOSE SPECIFIED ON THIS STANDARD PLAN.

BOTTOM SLOPE OF CURB AND GUTTER STRUCTURE MAY BE THE SAME SLOPE AS BOTTOM OF PAVEMENT. BACK OF CURB AND VERTICAL EDGE OF GUTTER PAN MAY HAVE A MAXIMUM $^{1}2_{2}^{\prime\prime}$ BATTER TO FACILITATE FORMING.

WHEN CURB AND GUTTER $\,$ IS CAST INTEGRALLY. SEE CURRENT STANDARD PLAN R-31-SERIES.

ALL JOINTS FOR CURB OR CURB AND GUTTER $\,$ ARE INCLUDED IN THE PAY ITEM FOR THE CURB OR CURB AND GUTTER.

JOINTS IN CURB OR CURB AND GUTTER NOT TIED TO CONCRETE PAVEMENT; ADJACENT TO CONCRETE BASE COURSE; OR ADJACENT TO HMA PAVEMENT:

- A. PLACE 1" FIBER JOINT FILLER AT 400' MAXIMUM INTERVALS.
- B. PLACE 1" FIBER JOINT FILLER AT SPRING POINTS OF INTERSECTING STREETS.
- C. PLACE 1/2" ISOLATION JOINT AT CATCH BASINS PER STANDARD PLAN R-37-SERIES.
- D. PLACE CONTRACTION JOINTS AT 40' MAXIMUM INTERVALS.

JOINTS IN CURB OR CURB AND GUTTER TIED TO JOINTED PAVEMENT

- A. PLACE 1" FIBER JOINT FILLER OPPOSITE ALL TRANSVERSE EXPANSION JOINTS IN PAVEMENT.
- B. PLACE $^{1}2''$ ISOLATION JOINT AT CATCH BASINS PER STANDARD PLAN R-37-SERIES.
- C. PLACE CONTRACTION JOINTS OPPOSITE ALL TRANSVERSE CONTRACTION JOINTS IN PAVEMENT.
- D. A SYMBOL (B) JOINT SHALL BE PLACED BETWEEN CURB OR CURB AND GUTTER AND ADJACENT CONCRETE PAVEMENT AS SPECIFIED ON STANDARD PLAN R-41-SERIES.

MICHIGAN DEPARTMENT OF TRANSPORTATION

CONCRETE CURB & GUTTER

F.H.W.A. APPROVAL PLAN DATE R-30-G 2 OF 2	9-30-2014 F.H.W.A. APPROVAL	2-6-2014 PLAN DATE	R-30-G	SHEET 2 OF 2
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Trade Talling Trade Trad	1 480 =

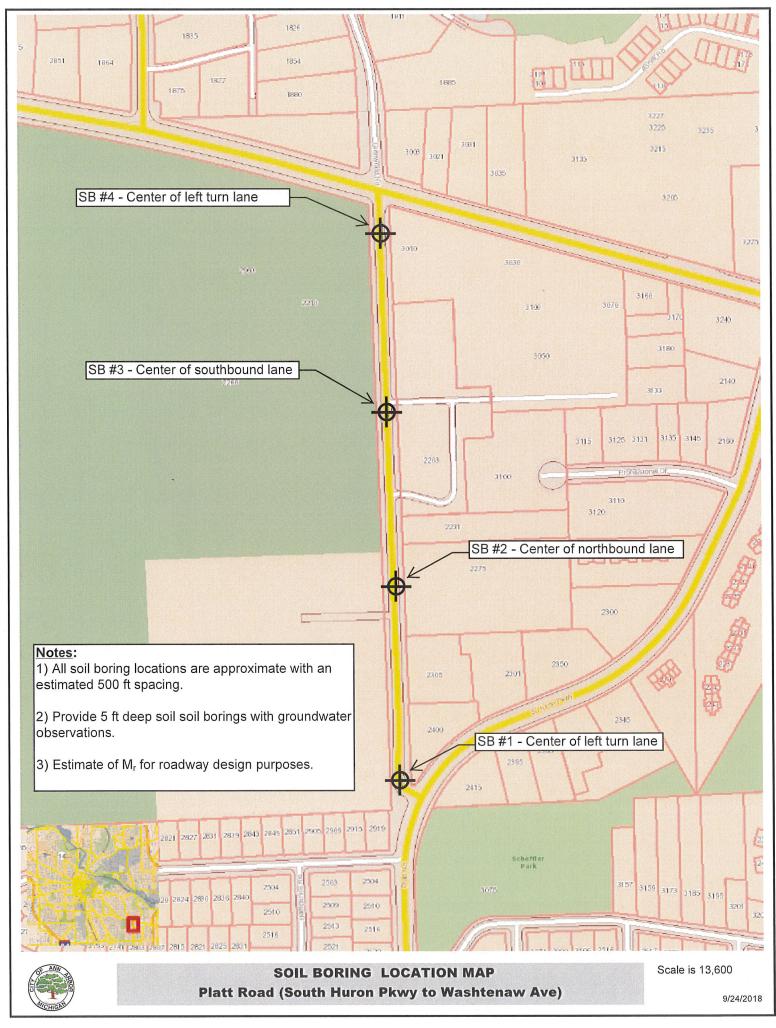
		Paveme	Pavement Thickness		D	
Nearest Address	Soil Boring Number	Asphalt (inches)	Crushed Stone (inches)	Subgrade AASHTO Lab Class	Recommended Resilient Modulus (psi)	
2400 Platt Road	Platt B-1	51/2	71/2	A-4		
2275 Platt Road	Platt B-2	5	9		8,050	
2203 Platt Road	Platt B-3	5	11		8,030	
3319 Platt Road	Platt B-4	43/4	121/4			
1444 South Boulevard	South B-5	43/4	61/2	A-2-4	12,550	
1706 Waverly	Waverly B-8	3¾	N.E.	A-6	8,050	
1732 Waverly	Waverly B-9	31/2	N.E.		8,030	
1814 Weldon	Weldon B-7	43/4	N.E.	A-6	8,050	
828 Gree	ne Street	5	N.E.	N.E.		
1008 Gree	ene Street	5	N.E.	N.E.		
200 Hil	l Street	7	N.E.	N.E.		
Eastbound	Hill Street	113/4	N.E.	N.E.	D	
142 Hoov	er Street	4	N.E.	N.E.	Pavement Core Only	
323 Hoov	er Street	41/2	N.E.	N.E.	Ollly	
500 Hoov	er Street	43/4	N.E.	N.E.		
319 Mosl	ey Street	4	N.E.	N.E.		
620 Thir	d Street	8	N.E.	N.E.		
1304 Geo	ldes B-1	81/2	4		12,550	
1335 Geo	ldes B-2	7	4	A-1-b	12,330	
2291 Dhu V	Varren B-1	3	N.E.	A-3	12,550	
712 Libe	erty B-1	61/4	33/4			
821 Libe	6	N.E.				
1832 Lib	erty B-3	6	4		8,050	
1484 Lib	erty B-4	5	5	A-6		
1213 Lib	1213 Liberty B-5					
Bird	B-1	Soil Borings Offroad				
Bird	B-2		3011 E	ornigs Onroa	u	

^{*}Indicates concrete pavement encountered instead of crushed stone aggregate base N.E. – Not Encountered

Photographs of the pavement cores from each of the borings are attached to this report.

Please let us know if you have any questions or comments at this time.





associates inc

GEOTECH STANDARD 1504703.GPJ GINT US LAB.GDT 3/22/19

TTL Associates, Inc. 1915 N 12th Street Toledo, Ohio 43624 Telephone: 419-324-2222 Fax: 419-241-1808

BORING NUMBER Liberty B-1

PAGE 1 OF 1

PROJECT NAME Geotechnical Bundle #2 **CLIENT** City of Ann Arbor PROJECT NUMBER 1504703 PROJECT LOCATION Ann Arbor, MI DRILLING CONTRACTOR TTL Associates TB MB **GROUND ELEVATION RIG NO.** 844 DRILLING METHOD Pavement Coring with 3 in. SSA **GROUND WATER LEVELS:** DATE STARTED 3/12/19 **COMPLETED** 3/12/19 AT TIME OF DRILLING None LOGGED BY KKC CHECKED BY KCH AT END OF DRILLING None NOTES 712 Liberty St. Ohrs AFTER DRILLING Backfilled w/Cuttings, Chips, and Patch SAMPLE TYPE NUMBER DRY UNIT WT. (pcf) UNCONF. COMP STR. (tsf) ELEVATION (ft) BLOW COUNTS (N VALUE) GRAPHIC LOG RECOVERY (RQD) DEPTH (ft) 40 60 MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ 0.0 80 ASPHALT - 6.25 Inches 0.5' CRUSHED STONE - 3.75 Inches 0.8' SS 16-16-14 89 NP Moist Medium Dense Brown POORLY GRADED SAND (30)w/Gravel and Trace Silt (SP) @2': w/Trace Gravel 2.5 SS 8-12-13 100 NP 3.0' (25)Moist Loose Black/Brown POORLY GRADED SAND w/Gravel, Rock Fragments, and Trace Silt (SP) SS 4-4-4 78 NP (8) 5.0' 5.0 Bottom of hole at 5.0 feet.

TTL associates inc

GEOTECH STANDARD 1504703.GPJ GINT US LAB.GDT 3/22/19

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BORING NUMBER Liberty B-2

PAGE 1 OF 1

PROJECT NAME Geotechnical Bundle #2 **CLIENT** City of Ann Arbor PROJECT NUMBER 1504703 PROJECT LOCATION Ann Arbor, MI DRILLING CONTRACTOR TTL Associates TB MB **GROUND ELEVATION RIG NO.** 844 DRILLING METHOD Pavement Coring with 3 in. SSA **GROUND WATER LEVELS:** DATE STARTED 3/12/19 **COMPLETED** 3/12/19 AT TIME OF DRILLING None LOGGED BY KKC CHECKED BY KCH AT END OF DRILLING None NOTES 821 Liberty St. Ohrs AFTER DRILLING Backfilled w/Cuttings, Chips, and Patch SAMPLE TYPE NUMBER DRY UNIT WT. (pcf) UNCONF. COMP STR. (tsf) ELEVATION (ft) GRAPHIC LOG BLOW COUNTS (N VALUE) RECOVERY (RQD) DEPTH (ft) 40 60 MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ 0.0 ASPHALT - 6 Inches Moist Very Dense Brown POORLY GRADED SAND w/Gravel and Trace Silt (SP) SS 28-26-24 89 NP (50)1 Moist Medium Dense Brown POORLY GRADED SAND 2.5 w/Trace Gravel and Silt (SP) 12-12-15 100 NP (27)18-13-9 SS 94 NP (22)5.0' 5.0 Bottom of hole at 5.0 feet.

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TTL Associates, Inc. 1915 N 12th Street Toledo, Ohio 43624 Telephone: 419-324-2222 Fax: 419-241-1808

BORING NUMBER Liberty B-3

PAGE 1 OF 1

PROJECT NAME Geotechnical Bundle #2 **CLIENT** City of Ann Arbor PROJECT NUMBER 1504703 PROJECT LOCATION Ann Arbor, MI DRILLING CONTRACTOR TTL Associates TB MB **GROUND ELEVATION RIG NO.** 844 DRILLING METHOD Pavement Coring with 3 in. SSA **GROUND WATER LEVELS:** DATE STARTED 3/12/19 **COMPLETED** 3/12/19 AT TIME OF DRILLING None LOGGED BY KKC CHECKED BY KCH AT END OF DRILLING None NOTES 1832 Liberty St. Ohrs AFTER DRILLING Backfilled w/Cuttings, Chips, and Patch SAMPLE TYPE NUMBER DRY UNIT WT. (pcf) UNCONF. COMP STR. (tsf) ELEVATION (ft) BLOW COUNTS (N VALUE) GRAPHIC LOG RECOVERY (RQD) DEPTH (ft) 40 60 MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ 0.0 80 ASPHALT - 6 Inches 0.5' CRUSHED STONE - 4 Inches SS 38-41-45 78 NP Moist Very Dense Brown POORLY GRADED SAND (86)w/Gravel and Trace Silt (SP) 2.0' Moist Hard Brown SANDY LEAN CLAY w/Trace Gravel 2.5 17-20-17 89 1.25 (37)Moist Dense Brown POORLY GRADED SAND w/Gravel and Trace Silt (SP) 3.5' Moist Loose Brown SILTY SAND w/Gravel (SM) 4-5-4 SS NP 94 (9) 5.0' 5.0 Bottom of hole at 5.0 feet.

TTL Associates, Inc.

GEOTECH STANDARD 1504703.GPJ GINT US LAB.GDT 3/22/19

1915 N 12th Street Toledo, Ohio 43624 Telephone: 419-324-2222 Fax: 419-241-1808

BORING NUMBER Liberty B-4

PAGE 1 OF 1

PROJECT NAME Geotechnical Bundle #2 **CLIENT** City of Ann Arbor PROJECT LOCATION Ann Arbor, MI PROJECT NUMBER 1504703 DRILLING CONTRACTOR TTL Associates TB MB **GROUND ELEVATION RIG NO.** 844 DRILLING METHOD Pavement Coring with 3 in. SSA **GROUND WATER LEVELS:** DATE STARTED 3/12/19 **COMPLETED** 3/12/19 AT TIME OF DRILLING None LOGGED BY KKC CHECKED BY KCH AT END OF DRILLING None NOTES 1484 Liberty St. Ohrs AFTER DRILLING Backfilled w/Cuttings, Chips, and Patch SAMPLE TYPE NUMBER DRY UNIT WT. (pcf) UNCONF. COMP STR. (tsf) ELEVATION (ft) GRAPHIC LOG BLOW COUNTS (N VALUE) RECOVERY (RQD) DEPTH (ft) 40 60 MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ 0.0 80 ASPHALT - 5 Inches 0.4' CRUSHED STONE - 5 Inches SS 22-24-34 78 NP Moist Very Dense Brown POORLY GRADED SAND (58)w/Trace Gravel and Silt (SP) 2.0' Moist Very Stiff to Hard Brown LEAN CLAY w/Sand and 2.5 Trace Gravel (CL) 9-8-12 100 2.75 (20)@3.5': w/Gravel 16 5-9-14 SS 100 4.50 (23)5.0' 5.0 Bottom of hole at 5.0 feet.

TTL Asso 1915 N 1 Toledo, C

GEOTECH STANDARD 1504703.GPJ GINT US LAB.GDT 3/22/19

TTL Associates, Inc. 1915 N 12th Street Toledo, Ohio 43624 Telephone: 419-324-2222 Fax: 419-241-1808

BORING NUMBER Liberty B-5

PAGE 1 OF 1

PROJECT NAME Geotechnical Bundle #2 **CLIENT** City of Ann Arbor PROJECT LOCATION Ann Arbor, MI PROJECT NUMBER 1504703 DRILLING CONTRACTOR TTL Associates TB MB **GROUND ELEVATION RIG NO.** 844 DRILLING METHOD Pavement Coring with 3 in. SSA **GROUND WATER LEVELS:** DATE STARTED 3/12/19 **COMPLETED** 3/12/19 AT TIME OF DRILLING None LOGGED BY KKC CHECKED BY KCH AT END OF DRILLING None NOTES 1213 Liberty St. Ohrs AFTER DRILLING Backfilled w/Cuttings, Chips, and Patch SAMPLE TYPE NUMBER DRY UNIT WT. (pcf) UNCONF. COMP STR. (tsf) ELEVATION (ft) GRAPHIC LOG BLOW COUNTS (N VALUE) RECOVERY (RQD) DEPTH (ft) 40 60 MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ 0.0 80 ASPHALT - 3.25 Inches 0.3' CONCRETE - 11 Inches Wet Very Stiff Brown SANDY LEAN CLAY w/Gravel (CL) (Free Water Noted in Jar) SS 14-10-6 89 NI (16)1 2.5 Moist Stiff Brown LEAN CLAY w/Sand and Trace Gravel SS 3-4-6 100 1.75 (10)5.0 SS 9-7-9 83 1.75 3 (16)@5.5': Stiff to Very Stiff 6.0' Bottom of hole at 6.0 feet.

PAGE 1 OF 1

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GEOTECH STANDARD 1504703.GPJ GINT US LAB.GDT 3/22/19

TTL Associates, Inc. 1915 N 12th Street Toledo, Ohio 43624 Telephone: 419-324-2222 Fax: 419-241-1808

PROJECT NAME Geotechnical Bundle #2 **CLIENT** City of Ann Arbor PROJECT LOCATION Ann Arbor, MI PROJECT NUMBER 1504703 **DRILLING CONTRACTOR** TTL Associates CW JP **GROUND ELEVATION RIG NO.** 844 DRILLING METHOD Pavement Coring with 3 in. SSA **GROUND WATER LEVELS:** DATE STARTED 12/27/18 **COMPLETED** 12/27/18 AT TIME OF DRILLING None LOGGED BY KKC CHECKED BY KCH AT END OF DRILLING None NOTES 2400 Platt Road **Ohrs AFTER DRILLING** Backfilled w/Cuttings and Patch SAMPLE TYPE NUMBER DRY UNIT WT. (pcf) UNCONF. COMP STR. (tsf) ELEVATION (ft) GRAPHIC LOG RECOVERY (RQD) DEPTH (ft) 40 60 MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ 0.0 80 ASPHALT - 5.5 Inches 0.5' CRUSHED STONE - 7.5 Inches 1.1' Moist Medium Dense Brown POORLY GRADED SAND SS 12-9-7 w/Trace Silt (SP) 89 NP (16)2.5 2.7' Moist Stiff Brown LEAN CLAY w/Trace Sand (CL) SS 4-6-7 100 1.25 (13)@4': Very Stiff 18 SS 6-15-15 100 0.50 • 5.0 (30)5.5' Bottom of hole at 5.5 feet.

PAGE 1 OF 1

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TTL Associates, Inc. 1915 N 12th Street Toledo, Ohio 43624 Telephone: 419-324-2222 Fax: 419-241-1808

NT Cit	y of An	n Arbor			PROJECT NAME Geotechnical Bundle #2											
ECT N	UMBEF	R _1504703			PROJECT LOCATION Ann Arbor, MI											
ING C	ONTRA	CTOR TTL As	sociates CW JP					١								
ING M	ETHOD	Pavement Co	oring with 3 in. SS	A												
STAR	TED <u>1</u>	2/27/18	COMPLETED	12/27/18												
SED BY	KKC		CHECKED BY	KCH KCH	_	AT I	END C)F DRI	LLING No	ne						
S 227	75 Platt	Road			_ (hrs	AFT	ER DR	ILLING B	ackfilled	d w/Cut	tings a	and Pa			
O DEPTH O (ft)	GRAPHIC LOG	40011417		SCRIPTION		L L	SAMPLE I YPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	UNCONF. COMP. STR. (tsf)	DRY UNIT WT. (pcf)	2	▲ SPT	N VA	LUE	80
	م ک ر				0.4'/									* * * * * * * * * * * * * * * * * * * *		
 		Moist Mediu			1.2' w/Gravel	\bigvee	ss	00	17-8-4	, ID				:		
2.5					2.8'	\bigwedge	1	89	(12)	NP						
 		Wet Loose I	Brown/Gray CLAY	EY SAND w/Grav	el (SC)		SS 2	100	4-4-4 (8)	NP		•				
5.0		Moist Mediu	ım Dense Brown S	SILTY SAND w/Gr	4.5' avel		SS 3	100	8-12-13 (25)	NP			A	:		
-			Dottom of holo	at E E fact	5.5'	<u>/ \</u>								:		:
	ECT N ING C ING M STAR GED BY S 227 0.0	ECT NUMBER LING CONTRA LING METHOD STARTED 1 GED BY KKC S 2275 Platt CHAPTER O.0 O.0 O.0 O.0 O.0 O.0 O.0 O.	ECT NUMBER 1504703 ING CONTRACTOR TTL AS ING METHOD Pavement Construction of the cons	LING CONTRACTOR TTL Associates CW JP LING METHOD Pavement Coring with 3 in. SS, STARTED 12/27/18 COMPLETED SED BY KKC CHECKED BY SET STARTED 12/27/18 CHECKED BY SED BY KKC CHECKED BY CHECKED BY CHECKED BY MATERIAL DESTRUCTION OF CRUSHED STONE - 9 Inches CRUSHED STONE - 9 Inches (SM) 2.5 Wet Loose Brown/Gray CLAY (SM) Moist Medium Dense Brown S (SM)	LING CONTRACTOR TTL Associates CW JP LING METHOD Pavement Coring with 3 in. SSA STARTED 12/27/18 COMPLETED 12/27/18 SED BY KKC CHECKED BY KCH SS 2275 Platt Road MATERIAL DESCRIPTION O.0 ASPHALT - 5 Inches CRUSHED STONE - 9 Inches Moist Medium Dense Red/Brown SILTY SAND (SM) 2.5 Wet Loose Brown/Gray CLAYEY SAND w/Grav	ECT NUMBER 1504703 PROJE LING CONTRACTOR TTL Associates CW JP RIG NO LING METHOD Pavement Coring with 3 in. SSA GROU STARTED 12/27/18 COMPLETED 12/27/18 SED BY KKC CHECKED BY KCH SS 2275 Platt Road MATERIAL DESCRIPTION O.0 ASPHALT - 5 Inches O.4' CRUSHED STONE - 9 Inches 1.2' Moist Medium Dense Red/Brown SILTY SAND w/Gravel (SM) Wet Loose Brown/Gray CLAYEY SAND w/Gravel (SC) Moist Medium Dense Brown SILTY SAND w/Gravel (SM) 4.5' Moist Medium Dense Brown SILTY SAND w/Gravel (SM) 5.0 Moist Medium Dense Brown SILTY SAND w/Gravel (SM) 5.5'	ECT NUMBER 1504703 PROJECT LING CONTRACTOR TTL Associates CW JP RIG NO LING METHOD Pavement Coring with 3 in. SSA GROUND STARTED 12/27/18 COMPLETED 12/27/18 SED BY KKC CHECKED BY KCH AT IT IS 2275 Platt Road MATERIAL DESCRIPTION ASPHALT - 5 Inches 0.4' CRUSHED STONE - 9 Inches 1.2' Moist Medium Dense Red/Brown SILTY SAND w/Gravel (SM) Wet Loose Brown/Gray CLAYEY SAND w/Gravel (SC) Moist Medium Dense Brown SILTY SAND w/Gravel (SM) S.5.5'	RIG NO. 844 RIG NO. 844	### PROJECT LOCATION ### PROJECT LOCATION	RECT NUMBER 1504703 PROJECT LOCATION Ann Arbord Ann Arbord	PROJECT LOCATION Ann Arbor, MI	CRUSHED STONE - 9 Inches	PROJECT LOCATION Ann Arbor, MI	PROJECT LOCATION	PROJECT LOCATION	PROJECT LOCATION Ann Arbor, MI

PAGE 1 OF 1

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NT Cit	y of An	n Arbor	PROJECT LOCATION Ann Arbor, MI											
ECT N	UMBER	R 1504703												
ING C	ONTRA	CTOR TTL Associates CW JP												
ING M	ETHOD	Pavement Coring with 3 in. SSA												
STAR	TED <u>1</u>	2/27/18												
SED BY	KKC	CHECKED BY KCH	A	T END C)F DRI	LLING No	ne							
S 220)3 Platt	Road	0	hrs AFT	ER DR	ILLING B	ackfilled	d w/Cut	tings a	and Pa	atch	<u>n</u>		
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	JNCONF. COMP. STR. (tsf)	DRY UNIT WT. (pcf)	2	0 4	N VA	LUE 4	<u>80</u>	
0.0		ASPHALT - 5 Inches							2	0 4 :	0 6	0 8	30 :	
		CRUSHED STONE - 11 Inches	0.4'	,										
 2.5		FILL - Moist Medium Dense Brown SILTY SAND w/Trace Gravel	1.3	SS 1	89	29-14-10 (24)	NP			A				
 		@2.9': w/Gravel and Trace Brick Fragments		SS 2	100	7-6-5 (11)	NP		•					
5.0		☑ Wet Loose Brown SILTY SAND w/Trace Gravel (SM	1)	SS 3	100	3-3-3 (6)	NP		A					
	64646	Bottom of hole at 5.5 feet.	3.3	1							:		:	
	ECT NI ING CO ING M STAR SED BY S 220 0.0	ECT NUMBER LING CONTRA LING METHOD STARTED 1 GED BY KKC S 2203 Platt C BY C B	ING CONTRACTOR TTL Associates CW JP LING METHOD Pavement Coring with 3 in. SSA STARTED 12/27/18 COMPLETED 12/27/18 SED BY KKC CHECKED BY KCH SS 2203 Platt Road MATERIAL DESCRIPTION O.0 ASPHALT - 5 Inches CRUSHED STONE - 11 Inches FILL - Moist Medium Dense Brown SILTY SAND w/Trace Gravel 2.5 Wet Loose Brown SILTY SAND w/Trace Gravel (SM 5.0) Wet Loose Brown SILTY SAND w/Trace Gravel (SM 5.0)	ECT NUMBER 1504703 PROJE LING CONTRACTOR _TTL Associates CW JP RIG NO LING METHOD _Pavement Coring with 3 in. SSA GROUN STARTED _12/27/18 COMPLETED _12/27/18 SED BY _KKC CHECKED BY _KCH A SS _2203 Platt Road 0 MATERIAL DESCRIPTION O.0 ASPHALT - 5 Inches 0.4' CRUSHED STONE - 11 Inches 1.3' FILL - Moist Medium Dense Brown SILTY SAND w/Trace Gravel 2.5 @2.9': w/Gravel and Trace Brick Fragments Wet Loose Brown SILTY SAND w/Trace Gravel (SM) 5.0 Wet Loose Brown SILTY SAND w/Trace Gravel (SM) 5.5'	ECT NUMBER 1504703 PROJECT LOCALING CONTRACTOR TTL Associates CW JP RIG NO. 844 LING METHOD Pavement Coring with 3 in. SSA GROUND WATE STARTED 12/27/18 COMPLETED 12/27/18 SED BY KKC CHECKED BY KCH AT END CO IS 2203 Platt Road Ohrs AFTI ASPHALT - 5 Inches CRUSHED STONE - 11 Inches CRUSHED STONE - 11 Inches FILL - Moist Medium Dense Brown SILTY SAND W/Trace Gravel Wet Loose Brown SILTY SAND w/Trace Gravel (SM) Wet Loose Brown SILTY SAND w/Trace Gravel (SM) SS 3 SS 3 SS 3	## PROJECT LOCATION ## RIG NO. 844 ## GROUND WATER LEVE ## AT TIME OF DR ## AT END OF DRI ## OF DRI ## PROJECT LOCATION ## PROJE	PROJECT LOCATION Ann Arbor Ann Arbo	STARTED 12/27/18 COMPLETED 12/27/18 STARTED 12/27/18 COMPLETED 12/27/18 AT TIME OF DRILLING None Start Start None Start None Start None Start None None	CRUSHED STONE - 11 Inches CRUSHED STONE - 11 Inches	PROJECT LOCATION Ann Arbor, MI	PROJECT LOCATION	PROJECT LOCATION	PROJECT LOCATION Ann Arbor, M	

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GEOTECH STANDARD 1504703.GPJ GINT US LAB.GDT 3/22/19

PAGE 1 OF 1

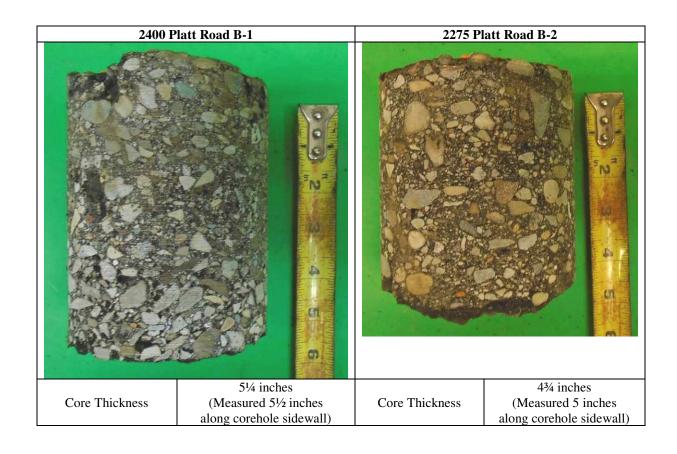
PROJECT NAME Geotechnical Bundle #2 **CLIENT** City of Ann Arbor PROJECT LOCATION Ann Arbor, MI PROJECT NUMBER 1504703 **DRILLING CONTRACTOR** TTL Associates CW JP **GROUND ELEVATION RIG NO.** 844 DRILLING METHOD Pavement Coring with 3 in. SSA **GROUND WATER LEVELS:** DATE STARTED 12/26/18 **COMPLETED** 12/27/18 AT TIME OF DRILLING None LOGGED BY KKC CHECKED BY KCH AT END OF DRILLING None NOTES 3319 Platt Road **Ohrs AFTER DRILLING** Backfilled w/Cuttings and Patch SAMPLE TYPE NUMBER DRY UNIT WT. (pcf) UNCONF. COMP STR. (tsf) ELEVATION (ft) GRAPHIC LOG RECOVERY (RQD) DEPTH (ft) 40 60 MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ 0.0 80 ASPHALT - 4.75 Inches 0.4' CRUSHED STONE - 12.25 Inches Moist Medium Dense Brown POORLY GRADED SAND SS 27-17-10 89 NP w/Clay and Gravel (SP/SC) (27)2.5 Moist Very Stiff Brown LEAN CLAY w/Sand and Trace Gravel (CL) 19 SS 5-7-10 100 2.00 (17)15: SS 8-9-10 100 >4.5 5.0 (19)5.5' Bottom of hole at 5.5 feet.



Project: Geotechnical Bundle #2

TTL Project No. 1504703

Core Dates: December 27, 2018 through January 7, 2019

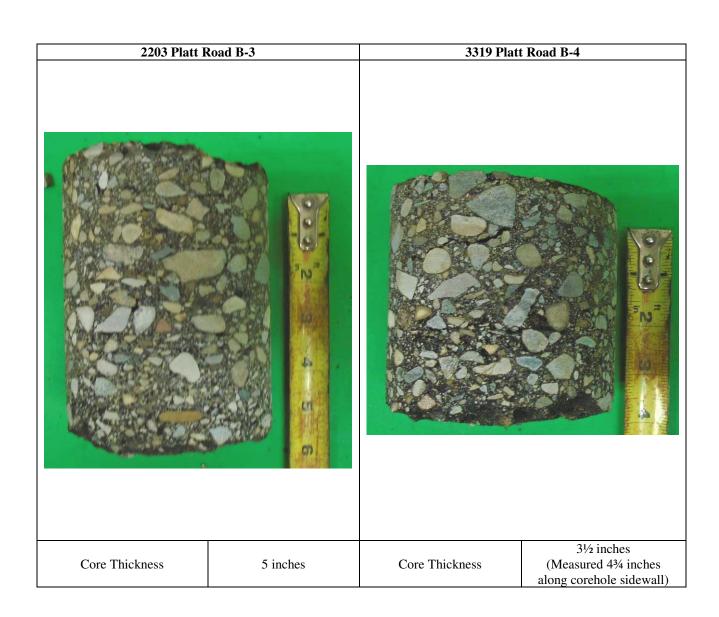






Project: Geotechnical Bundle #2 TTL Project No. 1504703

Core Dates: December 27, 2018 through January 7, 2019

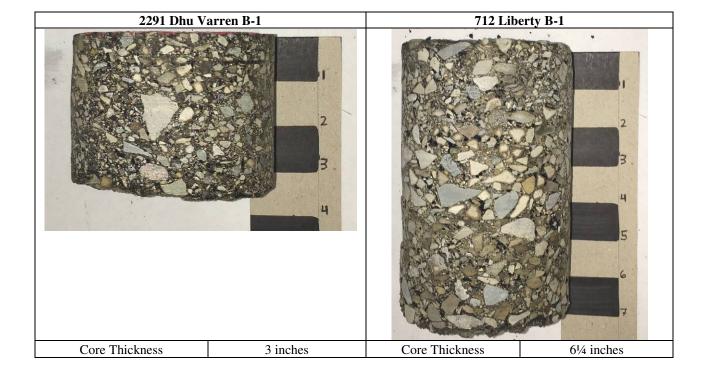




Project: Geotechnical Bundle #2

TTL Project No. 1504703

Core Date: March 11 and 12, 2019





Project: Geotechnical Bundle #2 TTL Project No. 1504703

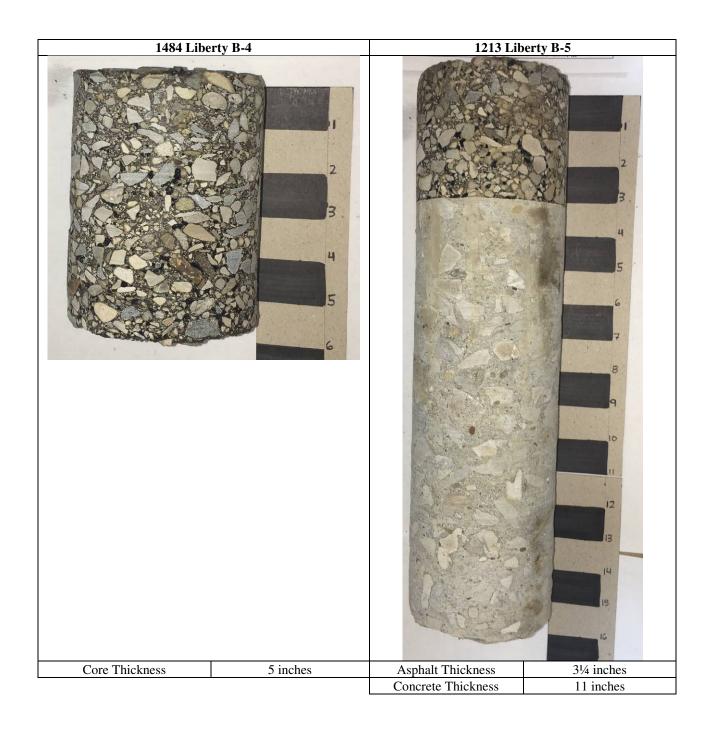
Core Date: March 11 and 12, 2019





Project: Geotechnical Bundle #2 TTL Project No. 1504703

Core Date: March 11 and 12, 2019



General Decision Number: MI190001 03/08/2019 MI1

Superseded General Decision Number: MI20180001

State: Michigan

Construction Types: Highway (Highway, Airport & Bridge xxxxx

and Sewer/Incid. to Hwy.)

Counties: Michigan Statewide.

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification	Number	Publication	Date
0		01/04/2010	

0 01/04/2019 1 01/25/2019 2 03/08/2019

CARP0004-004 06/01/2018

REMAINDER OF STATE

	Rates	Fringes
CARPENTER (Piledriver)	.\$ 27.12	20.19
CARP0004-005 06/01/2018		

LIVINGSTON (Townships of Brighton, Deerfield, Genoa, Hartland, Oceola & Tyrone), MACOMB, MONROE, OAKLAND, SANILAC, ST. CLAIR AND WAYNE COUNTIES

		Rates	Fringes
CARPENTER	(Piledriver)\$	30.50	27.28
	005 06/04/0010		

ELEC0017-005 06/04/2018

STATEWIDE

	F	Rates	Fringes
Line	Construction		
	Groundman/Driver\$	28.33	6.45+29%
	Journeyman Signal Tech,		
	Communications Tech, Tower		
	Tech & Fiber Optic Splicers.\$	39.31	6.45+29%
	Journeyman Specialist\$	45.21	6.45+29%
	Operator A\$	33.22	6.45+29%
	Operator B\$	31.02	6.45+29%

Classifications

Journeyman Specialist: Refers to a crew of only one person working alone.

Operator A: Shall be proficient in operating all power equipment including: Backhoe,

Excavator, Directional Bore and Boom/Digger truck.

Operator B: Shall be proficient in operating any 2 of the

above mentioned pieces of

equipment listed under Operator A.

ENGI0324-003 06/01/2018

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LENAWEE, LIVINGSTON, MACOMB, MIDLAND, MONROE, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLAIR, SANILAC, SHIAWASSEE, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

	I	Rates	Fringes
OPERATOR: (Steel Erec	Power Equipment		
GROUP	1\$	45.37	23.85
GROUP	2\$		23.85
GROUP	3\$		23.85
GROUP	4\$		23.85
GROUP	5\$		23.85
GROUP	6\$		23.85
GROUP	7\$	42.10	23.85
GROUP	8\$	43.10	23.85
GROUP	9\$	41.65	23.85
GROUP	10\$	42.65	23.85
GROUP	11\$	40.92	23.85
GROUP	12\$	41.92	23.85
GROUP	13\$	40.56	23.85
GROUP	14\$	41.56	23.85
GROUP	15\$	39.92	23.85
GROUP	16\$	37.82	23.85
GROUP	17\$	23.64	11.00
GROUP	18\$	27.08	11.00

FOOTNOTE:

Paid Holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Engineer when operating combination of boom and jib 400' or longer

- GROUP 2: Engineer when operating combination of boom and jib 400' or longer on a crane that requires an oiler
- GROUP 3: Engineer when operating combination of boom and jib 300' or longer
- GROUP 4: Engineer when operating combination of boom and jib 300' or longer on a crane that requires an oiler
- GROUP 5: Engineer when operating combination of boom and jib 220' or longer
- GROUP 6: Engineer when operating combination of boom and jib 220' or longer on a crane that requires an oiler
- GROUP 7: Engineer when operating combination of boom and jib 140' or longer
- GROUP 8: Engineer when operating combination of boom and jib 140' or longer on a crane that requires an oiler
- GROUP 9: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level)
- GROUP 10: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level) on a crane that requires an oiler
- GROUP 11: Engineer when operating combination of boom and jib $120\,\mathrm{^{\prime}}$ or longer
- GROUP 12: Engineer when operating combination of boom and jib 120' or longer on a crane that requires an oiler
- GROUP 13: Crane operator; job mechanic and 3 drum hoist and excavator
- GROUP 14: Crane operator on a crane that requires an oiler
 - GROUP 15: Hoisting operator; 2 drum hoist and rubber tired backhoe
- GROUP 16: Forklift and 1 drum hoist
- GROUP 17: Compressor or welder operator

GROUP 18: Oiler

ENGI0324-004 06/01/2018

AREA 1: ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, EATON, HILLSDALE, IONIA, KALAMAZOO, KENT, LAKE, MANISTEE, MASON, MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH, VAN BUREN

AREA 2: ANTRIM, BENZIE, CHARLEVOIX, EMMET, GRAND TRAVERSE, KALKASKA, LEELANAU, MISSAUKEE AND WEXFORD COUNTIES:

Rates Fringes

OPERATOR: Power Equipment (Steel Erection)

AREA 1

GROUP	1\$	45.37	23.85
GROUP	2\$	42.10	23.85
GROUP	3\$	40.56	23.85
GROUP	4\$	37.82	23.85
GROUP	5\$	23.64	11.00
GROUP	6\$	27.08	11.00
AREA 2			
GROUP	1\$	45.37	23.85
GROUP	2\$	42.10	23.85
GROUP	3\$	40.56	23.85
GROUP	4\$	37.82	23.85
GROUP	5\$	23.64	11.00
GROUP	6\$	27.08	11.00

FOOTNOTES:

Crane operator with main boom and jib 300' or longer: \$1.50 additional to the group 1 rate. Crane operator with main boom and jib 400' or longer: \$3.00 additional to the group 1 rate.

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

- GROUP 1: Crane Operator with main boom & jib 400', 300', or 220' or longer.
- GROUP 2: Crane Operator with main boom & jib 140' or longer, Tower Crane; Gantry Crane; Whirley Derrick.
- GROUP 3: Regular Equipment Operator, Crane, Dozer, Loader, Hoist, Straddle Wagon, Mechanic, Grader and Hydro Excavator.
- GROUP 4: Air Tugger (single drum), Material Hoist Pump 6" or over, Elevators, Brokk Concrete Breaker.
- GROUP 5: Air Compressor, Welder, Generators, Conveyors

GROUP 6: Oiler and fire tender

ENGI0324-005 09/01/2018

AREA 1: GENESEE, LAPEER, LIVINGSTON, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALCONA, ALLEGAN, ALGER, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KWEENAW, LAKE, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

Rates Fringes

OPERATOR: Power Equipment (Underground construction (including sewer))

AREA 1:		
GROUP 1\$ 32	.53 23	8.85
GROUP 2\$ 27	.80 23	8.85
GROUP 3\$ 27	.07 23	8.85
GROUP 4\$ 26	.50 23	8.85
AREA 2:		
GROUP 1\$ 30	.82 23	8.85
GROUP 2\$ 25	.93 23	8.85
GROUP 3\$ 25	.43 23	8.85
GROUP 4\$ 25	.15 23	8.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backfiller tamper; Backhoe; Batch plant operator (concrete); Clamshell; Concrete paver (2 drums or larger); Conveyor loader (Euclid type); Crane (crawler, truck type or pile driving); Dozer; Dragline; Elevating grader; Endloader; Gradall (and similar type machine); Grader; Mechanic; Power shovel; Roller (asphalt); Scraper (self-propelled or tractor drawn); Side boom tractor (type D-4 or equivalent and larger); Slip form paver; Slope paver; Trencher (over 8 ft. digging capacity); Well drilling rig; Concrete pump with boom operator; Hydro Excavator

GROUP 2: Boom truck (power swing type boom); Crusher; Hoist; Pump (1 or more - 6-in. discharge or larger - gas or diesel- powered or powered by generator of 300 amperes or more - inclusive of generator); Side boom tractor (smaller than type D-4 or equivalent); Tractor (pneu-tired, other than backhoe or front end loader); Trencher (8-ft. digging capacity and smaller); Vac Truck

GROUP 3: Air compressors (600 cfm or larger); Air compressors (2 or more-less than 600 cfm); Boom truck (non-swinging, non-powered type boom); Concrete breaker (self-propelled or truck mounted - includes compressor); Concrete paver (1 drum-1/2 yd. or larger); Elevator (other than passenger); Maintenance person; Pump (2 or more-4-in. up to 6-in. discharge-gas or diesel powered - excluding submersible pumps); Pumpcrete machine (and similar equipment); Wagon drill (multiple); Welding machine or generator (2 or more-300 amp. or larger - gas or diesel powered)

GROUP 4: Boiler; Concrete saw (40 hp or over); Curing machine (self-propelled); Farm tractor (with attachment); Finishing machine (concrete); Fire person; Hydraulic pipe pushing machine; Mulching equipment; Oiler; Pumps (2 or more up to 4-in. discharge, if used 3 hours or more a day, gas or diesel powered - excluding submersible pumps); Roller (other than asphalt); Stump remover; Trencher (service); Vibrating compaction equipment, self-propelled (6 ft. wide or over); End dump operator; Sweeper (Wayne type); Water wagon and Extend-a boom forklift

ENGI0324-006 06/01/2018

AREA 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW,

LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

	F	Rates	Fringes
Power equipment or (AIRPORT, BRIDGE & CONSTRUCTION)			
GROUP 2 GROUP 3 GROUP 4	\$ \$ \$ \$	26.63 27.93 25.90	23.90 23.90 23.90 23.90 11.00
GROUP 2 GROUP 3 GROUP 4	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26.63 27.93 25.90	23.90 23.90 23.90 23.90 11.00

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt plant operator; Crane operator (does not include work on bridge construction projects when the crane operator is erecting structural components); Dragline operator; Shovel operator; Locomotive operator; Paver operator (5 bags or more); Elevating grader operator; Pile driving operator; Roller operator (asphalt); Blade grader operator; Trenching machine operator (ladder or wheel type); Auto-grader; Slip form paver; Self-propelled or tractor-drawn scraper; Conveyor loader operator (Euclid type); Endloader operator (1 yd. capacity and over); Bulldozer; Hoisting engineer; Tractor operator; Finishing machine operator (asphalt); Mechanic; Pump operator (6-in. discharge or over, gas, diesel powered or generator of 300 amp. or larger); Shouldering or gravel distributing machine operator (self-propelled); Backhoe (with over 3/8 yd. bucket); Side boom tractor (type D-4 or equivalent or larger); Tube finisher (slip form paving); Gradall (and similar type machine); Asphalt paver (self- propelled); Asphalt planer (self-propelled); Batch plant (concrete-central mix); Slurry machine (asphalt); Concrete pump (3 in. and over); Roto-mill; Swinging boom truck (over 12 ton capacity); Hydro demolisher (water blaster); Farm-type tractor with attached pan

GROUP 2: Screening plant operator; Washing plant operator; Crusher operator; Backhoe (with 3/8 yd. bucket or less); Side boom tractor (smaller than D-4 type or equivalent); Sweeper (Wayne type and similar equipment); Vacuum truck operator; Batch plant (concrete dry batch)

GROUP 3: Grease Truck

GROUP 4: Air compressor operator (600 cu. ft. per min or more); Air compressor operator (two or more, less than 600 cfm); Wagon drill operator; Concrete breaker; Tractor operator (farm type with attachment)

GROUP 5: Boiler fire tender; Oiler; Fire tender; Trencher

(service); Flexplane operator; Cleftplane operator; Grader operator (self-propelled fine-grade or form (concrete)); Finishing machine operator (concrete); Boom or winch hoist truck operator; Endloader operator (under 1 yd. capacity); Roller operator (other than asphalt); Curing equipment operator (self-propelled); Concrete saw operator (40 h.p. or over); Power bin operator; Plant drier operator (asphalt); Vibratory compaction equipment operator (6 ft. wide or over); Guard post driver operator (power driven); All mulching equipment; Stump remover; Concrete pump (under 3-in.); Mesh installer (self- propelled); Tractor operator (farm type); End dump; Skid steer

ENGI0324-007 05/01/2018

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
Compressor, welder and		
forklift	\$ 29.58	23.60
Crane operator, main boom & jib 120' or longer	\$ 35.57	23.60
Crane operator, main boom & jib 140' or longer	\$ 35.85	23.60
Crane operator, main boom		
& jib 220' or longer Mechanic with truck and	\$ 36.39	23.60
tools		23.60
Oiler and fireman		23.60
Regular operator	33.12	23.60

ENGI0324-008 10/01/2015

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE, MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

	Rates	Fringes
OPERATOR: Power Equipment		
(Sewer Relining)		
GROUP 1	\$ 30.70	12.93
GROUP 2	\$ 29.17	12.93

SEWER RELINING CLASSIFICATIONS

GROUP 1: Operation of audio-visual closed circuit TV system, including remote in-ground cutter and other equipment used

GROUP 2: Operation of hot water heaters and circulation systems, water jetters and vacuum and mechanical debris removal systems

ENGI0325-012 05/01/2018

I	Rates	Fringes
Power equipment operators - gas distribution and duct installation work:		
GROUP 1\$	30.68	23.85
GROUP 2\$	30.56	23.85
GROUP 3\$	28.85	23.85

SCOPE OF WORK: The construction, installation, treating and reconditioning of pipelines transporting gas vapors within cities, towns, subdivisions, suburban areas, or within private property boundaries, up to and including private meter settings of private industrial, governmental or other premises, more commonly referred to as "distribution work," starting from the first metering station, connection, similar or related facility, of the main or cross country pipeline and including duct installation.

Group 1: Backhoe, crane, grader, mechanic, dozer (D-6 equivalent or larger), side boom (D-4 equivalent or larger), trencher(except service), endloader (2 yd. capacity or greater).

GROUP 2: Dozer (less than D-6 equivalent), endloader (under 2 yd. capacity), side boom (under D-4 capacity), backfiller, pumps (1 or 2 of 6-inch discharge or greater), boom truck (with powered boom), tractor (wheel type other than backhoe or front endloader). Tamper (self-propelled), boom truck (with non-powered boom), concrete saw (20 hp or larger), pumps (2 to 4 under 6-inch discharge), compressor (2 or more or when one is used continuously into the second day) and trencher(service).

GROUP 3: Oiler, hydraulic pipe pushing machine, grease person and hydrostatic testing operator.

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
<pre>Ironworker - pre-engineered metal building erector IRONWORKER</pre>	\$ 23.70	6.95
General contracts \$10,000,000 or greater General contracts less	\$ 30.92	26.97
than \$10,000,000	\$ 30.92	26.97

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

^{*} IRON0008-007 06/01/2018

IRON0025-002 06/01/2018

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LIVINGSTON, MACOMB, MIDLAND, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
Ironworker - pre-engineered metal building erector Alcona, Alpena, Arenac, Cheboygan, Clare, Clinton, Crawford, Gladwin, Gratiot, Huron, Ingham, Iosco, Isabella, Jackson, Lapeer, Livingston (west of Burkhardt Road), Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Sanilac, Shiawassee, Tuscola &		
Washtenaw (west of U.S. 23) Bay, Genesee, Lapeer, Livingston (east of Burkhardt Road), Macomb, Midland, Oakland, Saginaw, St. Clair, The University of Michigan, Washtenaw (east of U.S. 23) & Wayne IRONWORKER	.\$ 25.48	23.11
Ornamental and Structural Reinforcing		28.65 27.74
* TRON0055-005 07/01/2018		

^{*} IRON0055-005 07/01/2018

LENAWEE AND MONROE COUNTIES:

I	Rates	Fringes
IRONWORKER		
Pre-engineered metal		
buildings\$	23.59	19.35
All other work\$	30.13	23.25

^{*} IRON0292-003 06/01/2018

BERRIEN AND CASS COUNTIES:

	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector)	\$ 29.75	22.01
IRON0340-001 06/19/2017		

ALLEGAN, ANTRIM, BARRY, BENZIE, BRANCH, CALHOUN, CHARLEVOIX, EATON, EMMET, GRAND TRAVERSE, HILLSDALE, IONIA, KALAMAZOO, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA, MISSAUKEE, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA,

	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector)	·	24.67
LaB00005-006 10/01/2017		
	Rates	Fringes
Laborers - hazardous waste abatement: (ALCONA, ALPENA, ANTRIM, BENZIE, CHARLEVOIX, CHEBOYGAN, CRAWFORD, EMMET, GRAND TRAVERSE, IOSCO, KALKASKA, LEELANAU, MISSAUKEE, MONTMORENCY, OSCODA, OTSEGO, PRESQUE ISLE AND WEXFORD COUNTIES - Zone 10)		
Levels A, B or C		12.75 12.85
Also, Level D		12.75 12.85
Levels A, B or C Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	\$ 21.63	12.88
Also, Level D Laborers - hazardous waste abatement: (ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, IONIA COUNTY (except the city of Portland); KALAMAZOO, KENT, LAKE, MANISTEE, MASON, MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH AND VAN BUREN COUNTIES - Zone 9)		12.88
Levels A, B or C Work performed in conjunction with site preparation not requiring the use of personal	\$ 20.95	12.85
<pre>protective equipment; Also, Level D</pre>	\$ 19.95	12.85

Laborers - hazardous waste abatement: (ARENAC, BAY, CLARE, GLADWIN, GRATIOT, HURON, ISABELLA, MIDLAND, OGEMAW, ROSCOMMON, SAGINAW	
AND TUSCOLA COUNTIES - Zone 8) Levels A, B or C\$ 20.65 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	12.85
Also, Level D\$ 19.65 Laborers - hazardous waste abatement: (CLINTON, EATON AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); LIVINGSTON COUNTY (west of Oak Grove Rd., including the	12.85
City of Howell) - Zone 6) Levels A, B or C\$ 24.65 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	12.85
Also, Level D\$ 23.65 Laborers - hazardous waste abatement: (GENESEE, LAPEER AND SHIAWASSEE COUNTIES - Zone 7)	12.85
Levels A, B or C\$ 23.61 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	13.41
Also, Level D\$ 22.61 Laborers - hazardous waste abatement: (HILLSDALE, JACKSON AND LENAWEE COUNTIES - Zone 4)	13.41
Levels A, B or C\$ 24.19 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	12.85
Also, Level D\$ 23.19 Laborers - hazardous waste abatement: (LIVINGSTON COUNTY (east of Oak Grove Rd. and south of M-59, excluding the city of Howell); AND	12.85
WASHTENAW COUNTY - Zone 3) Levels A, B or C\$ 29.70 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	14.20
Also, Level D\$ 28.70 Laborers - hazardous waste abatement: (MACOMB AND WAYNE COUNTIES - Zone 1)	14.20
Levels A, B or C\$ 28.35	16.75

Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D	16.75
<pre>Levels A, B or C\$ 30.85 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;</pre>	14.45
Also, Level D\$ 29.84 Laborers - hazardous waste abatement: (OAKLAND COUNTY and the Northeast portion of LIVINGSTON COUNTY bordered by Oak Grove Road on the West and M-59 on the South - Zone 2)	14.45
Level A, B, C\$ 28.85 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	16.75
Also, Level D\$ 27.85 Laborers - hazardous waste abatement: (SANILAC AND ST. CLAIR COUNTIES - Zone 5)	16.75
Levels A, B or C\$ 25.19 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	15.86
Also, Level D\$ 24.19	15.86

LABO0259-001 09/01/2018

AREA 1: MACOMB, OAKLAND AND WAYNE COUNTIES
AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA,
BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,
CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND
TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA,
IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT,
KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE,
MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE,
MIDLAND, MISSAUKEE, MONROE, MONTCALM, MONTMORENCY, MUSKEGON,
NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO,
OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST.
JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN,
WASHTENAW AND WEXFORD COUNTIES

	Rates	Fringes
Laborers - tunnel, shaft and		
caisson:		
AREA 1		
GROUP 1	\$ 22.57	16.80
GROUP 2	\$ 22.68	16.80

GROUP	3\$ 4\$	22.92	16.80 16.80
GROUP	5\$	23.17	16.80
GROUP	6\$	23.50	16.80
GROUP	7\$	16.78	16.80
AREA 2			
GROUP	1\$	24.10	12.85
GROUP	2\$	24.19	12.85
GROUP	3\$	24.29	12.85
GROUP	4\$	24.45	12.85
GROUP	5\$	24.71	12.85
GROUP	6\$	25.02	12.85
GROUP	7\$	17.29	12.85

SCOPE OF WORK: Tunnel, shaft and caisson work of every type and description and all operations incidental thereto, including, but not limited to, shafts and tunnels for sewers, water, subways, transportation, diversion, sewerage, caverns, shelters, aquafers, reservoirs, missile silos and steel sheeting for underground construction.

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Tunnel, shaft and caisson laborer, dump, shanty, hog house tender, testing (on gas) and watchman

GROUP 2: Manhole, headwall, catch basin builder, bricklayer tender, mortar machine and material mixer

GROUP 3: Air tool operator (jackhammer, bush hammer and grinder), first bottom, second bottom, cage tender, car pusher, carrier, concrete, concrete form, concrete repair, cement invert laborer, cement finisher, concrete shoveler, conveyor, floor, gasoline and electric tool operator, gunite, grout operator, welder, heading dinky person, inside lock tender, pea gravel operator, pump, outside lock tender, scaffold, top signal person, switch person, track, tugger, utility person, vibrator, winch operator, pipe jacking, wagon drill and air track operator and concrete saw operator (under 40 h.p.)

GROUP 4: Tunnel, shaft and caisson mucker, bracer, liner plate, long haul dinky driver and well point

GROUP 5: Tunnel, shaft and caisson miner, drill runner, key board operator, power knife operator, reinforced steel or mesh (e.g. wire mesh, steel mats, dowel bars, etc.)

GROUP 6: Dynamite and powder

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

LABO0334-001 09/01/2018

	Rates	Fringes
Laborers - open cut: ZONE 1 - MACOMB, OAKLAND		
AND WAYNE COUNTIES:		
GROUP 1	\$ 22.42	16.80
GROUP 2	\$ 22.53	16.80
GROUP 3	\$ 22.58	16.80

GROUP 4\$ GROUP 5\$ GROUP 6\$ GROUP 7\$ ZONE 2 - LIVINGSTON COUNTY (east of M-151 (Oak Grove Rd.)); MONROE AND	22.72 20.17	16.80 16.80 16.80
WASHTENAW COUNTIES: GROUP 1	23.86 23.98 24.05 24.20 21.50	12.85 12.85 12.85 12.85 12.85 12.85 12.85
LIVINGSTON COUNTY (west of M-151 Oak Grove Rd.); SANILAC, ST. CLAIR AND		
SHIAWASSEE COUNTIES: GROUP 1	22.08 22.20 22.25 22.39 19.69	12.85 12.85 12.85 12.85 12.85 12.85
GROUP 1	21.10 21.21 21.28 21.40 18.62	12.85 12.85 12.85 12.85 12.85 12.85 12.85

HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

GROUP	1\$	21.19	12.85
GROUP	2\$	21.33	12.85
GROUP	3\$	21.46	12.85
GROUP	4\$	21.51	12.85
GROUP	5\$	21.56	12.85
GROUP	6\$	18.94	12.85
GROUP	7\$	17.05	12.85

SCOPE OF WORK:

Open cut construction work shall be construed to mean work which requires the excavation of earth including industrial, commercial and residential building site excavation and preparation, land balancing, demolition and removal of concrete and underground appurtenances, grading, paving, sewers, utilities and improvements; retention, oxidation, flocculation and irrigation facilities, and also including but not limited to underground piping, conduits, steel sheeting for underground construction, and all work incidental thereto, and general excavation. For all areas except the Upper Peninsula, open cut construction work shall also be construed to mean waterfront work, piers, docks, seawalls, breakwalls, marinas and all incidental Open cut construction work shall not include any structural modifications, alterations, additions and repairs to buildings, or highway work, including roads, streets, bridge construction and parking lots or steel erection work and excavation for the building itself and back filling inside of and within 5 ft. of the building and foundations, footings and piers for the building. Open cut construction work shall not include any work covered under Tunnel, Shaft and Caisson work.

OPEN CUT LABORER CLASSIFICATIONS

GROUP 1: Construction laborer

GROUP 2: Mortar and material mixer, concrete form person, signal person, well point person, manhole, headwall and catch basin builder, headwall, seawall, breakwall and dock builder

GROUP 3: Air, gasoline and electric tool operator, vibrator operator, driller, pump person, tar kettle operator, bracer, rodder, reinforced steel or mesh person (e.g., wire mesh, steel mats, dowel bars, etc.), welder, pipe jacking and boring person, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger person and directional boring person

GROUP 4: Trench or excavating grade person

GROUP 5: Pipe layer (including crock, metal pipe, multi-plate or other conduits)

GROUP 6: Grouting man, audio-visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work and the installation and repair of water service pipe and appurtenances

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

LABO0465-001 06/01/2018

LABORER: Highway, Bridge and Airport Construction

AREA 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALLEGAN, BARRY, BAY, BERRIEN, BRANCH, CALHOUN, CASS, CLINTON, EATON, GRATIOT, HILLSDALE, HURON, INGHAM, JACKSON, KALAMAZOO, LAPEER, LENAWEE, LIVINGSTON, MIDLAND, MUSKEGON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA AND VAN BUREN COUNTIES

AREA 3: ALCONA, ALPENA, ANTRIM, ARENAC, BENZIE, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, IONIA, IOSCO, ISABELLA, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA, MISSAUKEE, MONTCALM, MONTMORENCY, NEWAYGO, OCEANA, OGEMAW, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON AND WEXFORD COUNTIES

AREA 4: ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES

R	lates	Fringes
LABORER (AREA 1)		
GROUP 1	26.25 26.43 26.51	12.85 12.85 12.85 12.85 12.85
GROUP 6\$	27.02	12.85
LABORER (AREA 2)		
GROUP 1	24.22 24.46 24.81 24.68 25.02 23.27 23.48 23.77 24.21 23.83	12.85 12.85 12.85 12.85 12.85 12.85 12.85 12.85 12.85 12.85
GROUP 6\$ LABORER (AREA 4)	24.26	12.85
GROUP 1	23.53 23.82 24.26 23.88	12.85 12.85 12.85 12.85 12.85 12.85

LABORER CLASSIFICATIONS

GROUP 1: Asphalt shoveler or loader; asphalt plant misc.; burlap person; yard person; dumper (wagon, truck, etc.);

joint filling laborer; miscellaneous laborer; unskilled laborer; sprinkler laborer; form setting laborer; form stripper; pavement reinforcing; handling and placing (e.g., wire mesh, steel mats, dowel bars); mason's tender or bricklayer's tender on manholes; manhole builder; headwalls, etc.; waterproofing, (other than buildings) seal coating and slurry mix, shoring, underpinning; pressure grouting; bridge pin and hanger removal; material recycling laborer; horizontal paver laborer (brick, concrete, clay, stone and asphalt); ground stabilization and modification laborer; grouting; waterblasting; top person; railroad track and trestle laborer; carpenters' tender; guard rail builders' tender; earth retention barrier and wall and M.S.E. wall installer's tender; highway and median installer's tender(including sound, retaining, and crash barriers); fence erector's tender; asphalt raker tender; sign installer; remote control operated equipment.

GROUP 2: Mixer operator (less than 5 sacks); air or electric tool operator (jackhammer, etc.); spreader; boxperson (asphalt, stone, gravel); concrete paddler; power chain saw operator; paving batch truck dumper; tunnel mucker (highway work only); concrete saw (under 40 h.p.) and dry pack machine; roto-mill grounds person.

GROUP 3: Tunnel miner (highway work only); finishers tenders; guard rail builders; highway and median barrier installer; earth retention barrier and wall and M.S.E. wall installer's (including sound, retaining and crash barriers); fence erector; bottom person; powder person; wagon drill and air track operator; diamond and core drills; grade checker; certified welders; curb and side rail setter's tender.

GROUP 4: Asphalt raker

GROUP 5: Pipe layers, oxy-gun

GROUP 6: Line-form setter for curb or pavement; asphalt screed checker/screw man on asphalt paving machines.

LABO1076-005 04/01/2018

MICHIGAN STATEWIDE

	Rates	Fringes
LABORER (DISTRIBUTION WORK)		
Zone 1	\$ 20.27	12.85
Zone 2	\$ 18.59	12.85
Zone 3	\$ 16.76	12.85
Zone 4	\$ 16.12	12.85
Zone 5	\$ 16.12	12.85

DISTRIBUTION WORK - The construction, installation, treating and reconditioning of distribution pipelines transporting coal, oil, gas or other similar materials, vapors or liquids, including pipelines within private property boundaries, up to and including the meter settings on residential, commercial, industrial, institutional, private and public structures. All work covering pumping stations and tank farms not covered by the Building Trades Agreement. Other distribution lines with the exception of sewer, water and cable television are included.

Underground Duct Layer Pay: \$.40 per hour above the base pay rate.

Zone 1 - Macomb, Oakland and Wayne

Zone 2 - Monroe and Washtenaw

Zone 3 - Bay, Genesee, Lapeer, Midland, Saginaw, Sanilac, Shiawassee and St. Clair

Zone 4 - Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft

Zone 5 - Remaining Counties in Michigan

PAIN0022-002 07/01/2008

HILLSDALE, JACKSON AND LENAWEE COUNTIES; LIVINGSTON COUNTY (east of the eastern city limits of Howell, not including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
PAINTER	\$ 25.06	14.75

FOOTNOTES: For all spray work and journeyman rigging for spray work, also blowing off, \$0.80 per hour additional (applies only to workers doing rigging for spray work on off the floor work. Does not include setting up or moving rigging on floor surfaces, nor does it apply to workers engaged in covering up or tending spray equipment. For all sandblasting and spray work performed on highway bridges, overpasses, tanks or steel, \$0.80 per hour additional. For all brushing, cleaning and other preparatory work (other than spraying or steeplejack work) at scaffold heights of fifty (50) feet from the ground or higher, \$0.50 per hour additional. For all preparatorial work and painting performed on open steel under forty (40) feet when no scaffolding is involved, \$0.50 per hour additional. For all swing stage work-window jacks and window belts-exterior and interior, \$0.50 per hour additional. For all spray work and sandblaster work to a scaffold height of forty (40) feet above the floor level, \$0.80 per hour additional. For all preparatorial work and painting on all highway bridges or overpasses up to forty (40) feet in height, \$0.50 per hour additional. For all steeplejack work performed where the elevation is forty (40) feet or more, \$1.25 per hour additional.

PAIN0312-001 06/01/2018

EXCLUDES: ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); INCLUDES: Barry, Berrien, Branch, Calhoun, Cass, Hillsdale, Kalamazoo, St. Joseph, Van Buren

F	Rates	Fringes
PAINTER		
Brush and roller\$	23.74	13.35
Spray, Sandblast, Sign		
Painting\$	24.94	13.35

PAIN0845-003 05/10/2018

CLINTON COUNTY; EATON COUNTY (does not include the townships of Bellevue and Olivet); INGHAM COUNTY; IONIA COUNTY (east of Hwy. M 66); LIVINGSTON COUNTY (west of the eastern city limits of Howell, including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); AND SHIAWASSEE COUNTY (Townships of Bennington, Laingsbury and Perry):

	Rates	Fringes
PAINTER	\$ 25.49	13.74
PAIN0845-015 05/10/2018		

MUSKEGON COUNTY; NEWAYGO COUNTY (except the Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OCEANA COUNTY; OTTAWA COUNTY (except the townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER	\$ 25.49	13.74
D3 TX 0.045 0.10 0.5 /10 /0.010		

PAIN0845-018 05/10/2018

ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); IONIA COUNTY (west of Hwy. M-66); KENT, MECOSTA AND MONTCALM COUNTIES; NEWAYGO COUNTY (Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OSCEOLA COUNTY (south of Hwy. #10); OTTAWA COUNTY (Townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER	\$ 25.49	13.74
FOOTNOTES: Lead abatement work:	\$1.00 per hour a	additional.
PAIN1011-003 06/03/2018		

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
PAINTER	\$ 25.31	12.78

FOOTNOTES: High pay (bridges, overpasses, watertower): 30 to 80 ft.: \$.65 per hour additional. 80 ft. and over: \$1.30 per hour additional.

HURON COUNTY; LAPEER COUNTY (east of Hwy. M-53); ST. CLAIR, SANILAC AND TUSCOLA COUNTIES:

	Rates	Fringes
PAINTER	\$ 23.79	12.02

FOOTNOTES: Lead abatement work: \$1.00 per hour additional. Work with any hazardous material: \$1.00 per hour additional. Sandblasting, steam cleaning and acid cleaning: \$1.00 per hour additional. Ladder work at or above 40 ft., scaffold work at or above 40 ft., swing stage, boatswain chair, window jacks and all work performed over a falling height of 40 ft.: \$1.00 per hour additional. Spray gun work, pick pullers and those handling needles, blowing off by air pressure, and any person rigging (setting up and moving off the ground): \$1.00 per hour additional. Steeplejack, tanks, gas holders, stacks, flag poles, radio towers and beacons, power line towers, bridges, etc.: \$1.00 per hour additional, paid from the ground up.

PAIN1803-003 06/01/2018

ALCONA, ALPENA, ANTRIM, ARENAC, BAY, BENZIE, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, GRATIOT, IOSCO, ISABELLA, KALKASKA, LAKE, LEELANAU, MANISTEE, MASON, MIDLAND, MISSAUKEE, MONTMORENCY AND OGEMAW COUNTIES; OSCEOLA COUNTY (north of Hwy. #10); OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW AND WEXFORD COUNTIES:

Rates Fringes

PAINTER

Work performed on water, bridges over water or moving traffic, radio and powerline towers, elevated tanks, steeples, smoke stacks over 40 ft. of falling heights, recovery of lead-based paints and any work associated with industrial plants, except maintenance of industrial

plants\$	24.92	14.68
All other work, including		
maintenance of industrial		
plant\$	24.92	14.68

FOOTNOTES: Spray painting, sandblasting, blowdown associated with spraying and blasting, water blasting and work involving a swing stage, boatswain chair or spider: \$1.00 per hour additional. All work performed inside tanks, vessels, tank trailers, railroad cars, sewers, smoke stacks, boilers or other spaces having limited egress not including buildings, opentop tanks, pits, etc.: \$1.25 per hour additional.

ZONE 1: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, SAGINAW, WASHTENAW AND WAYNE COUNTIES

ZONE 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

Rates	Fringes	
\$ 31.47	13.81	
\$ 29.97	13.81	
	\$ 31.47	\$ 31.47 13.81

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE, MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

1	Rates	Fringes
Plumber/Pipefitter - gas distribution pipeline: Welding in conjunction with gas distribution		
pipeline work\$	33.03	20.19
All other work:\$	24.19	12.28

TEAM0007-004 06/01/2018

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

I	Rates	Fringes
TRUCK DRIVER		
AREA 1		
Euclids, double bottoms		
and lowboys\$	26.55	.50 + a+b
Trucks under 8 cu. yds\$	26.30	.50 + a+b
Trucks, 8 cu. yds. and		
over\$	26.40	.50 + a+b
AREA 2		
Euclids, double bottomms		
and lowboys\$	24.895	.50 + a+b
Euclids, double bottoms		
and lowboys\$	26.65	.50 + a+b
Trucks under 8 cu. yds\$	26.40	.50 + a+b
Trucks, 8 cu. yds. and		
over\$	26.50	.50 + a+b

Footnote:

a. \$446.70 per week

b. \$67.00 daily

TEAM0247-004 04/01/2013

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, SAGINAW, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

	1	Rates	Fringes
Sign Instal	ler		
AREA 1			
GROUP	1\$	21.78	11.83
GROUP	2\$	25.27	11.8375
AREA 2			
GROUP	1\$	22.03	11.83
GROUP	2\$	25.02	11.8375

FOOTNOTE:

a. \$132.70 per week, plus \$17.80 per day.

SIGN INSTALLER CLASSIFICATIONS:

GROUP 1: performs all necessary labor and uses all tools required to construct and set concrete forms required in the installation of highway and street signs

GROUP 2: performs all miscellaneous labor, uses all hand and power tools, and operates all other equipment, mobile or

otherwise, required for the installation of highway and street signs

TEAM0247-010 04/01/2018

AREA 1: LAPEER AND SHIAWASSEE COUNTIES

AREA 2: GENESEE, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

	I	Rates	Fringes
TRUCK DRIVER	R (Underground		
AREA 1			
GROUP	1\$	23.82	19.04
GROUP	2\$	23.91	19.04
GROUP	3\$	24.12	19.04
AREA 2			
GROUP	1\$	24.12	19.04
GROUP	2\$	24.26	19.04
GROUP	3\$	24.45	19.04

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

SCOPE OF WORK: Excavation, site preparation, land balancing, grading, sewers, utilities and improvements; also including but not limited to, tunnels, underground piping, retention, oxidation, flocculation facilities, conduits, general excavation and steel sheeting for underground construction. Underground construction work shall not include any structural modifications, alterations, additions and repairs to buildings or highway work, including roads, streets, bridge construction and parking lots or steel erection.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Truck driver on all trucks (EXCEPT dump trucks of 8 cubic yards capacity or over, pole trailers, semis, low boys, Euclid, double bottom and fuel trucks)

GROUP 2: Truck driver on dump trucks of 8 cubic yards capacity or over, pole trailers, semis and fuel trucks

GROUP 3: Truck driver on low boy, Euclid and double bottom

SUMI2002-001 05/01/2002

Rates	Fringes
\$ 10.10	0.00
\$ 18.98	12.85
č 17 1 <i>1</i>	12.85
	\$ 10.10

Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES)

Group 1.....\$ 25.74 12.85

Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)

Group 2.....\$ 23.17 12.85

Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES)

> Group 1.....\$ 23.67 12.85

Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)

Group 2.....\$ 21.30 12.85

WORK CLASSIFICATIONS:

PAVEMENT MARKER GROUP 1: Drives or operates a truck mounted striper, grinder, blaster, groover, or thermoplastic melter for the placement or removal of temporary or permanent pavement markings or markers.

PAVEMENT MARKER GROUP 2: Performs all functions involved for the placement or removal of temporary or permanent pavement markings or markers not covered by the classification of Pavement Marker Group 1 or Line Protector.

LINE PROTECTOR: Performs all operations for the protection or removal of temporary or permanent pavement markings or markers in a moving convoy operation not performed by the classification of Pavement Marker Group 1. A moving convoy operation is comprised of only Pavement Markers Group 1 and Line Protectors.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information

on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the

classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor

200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION



CITY OF ANN ARBOR ENGINEERING

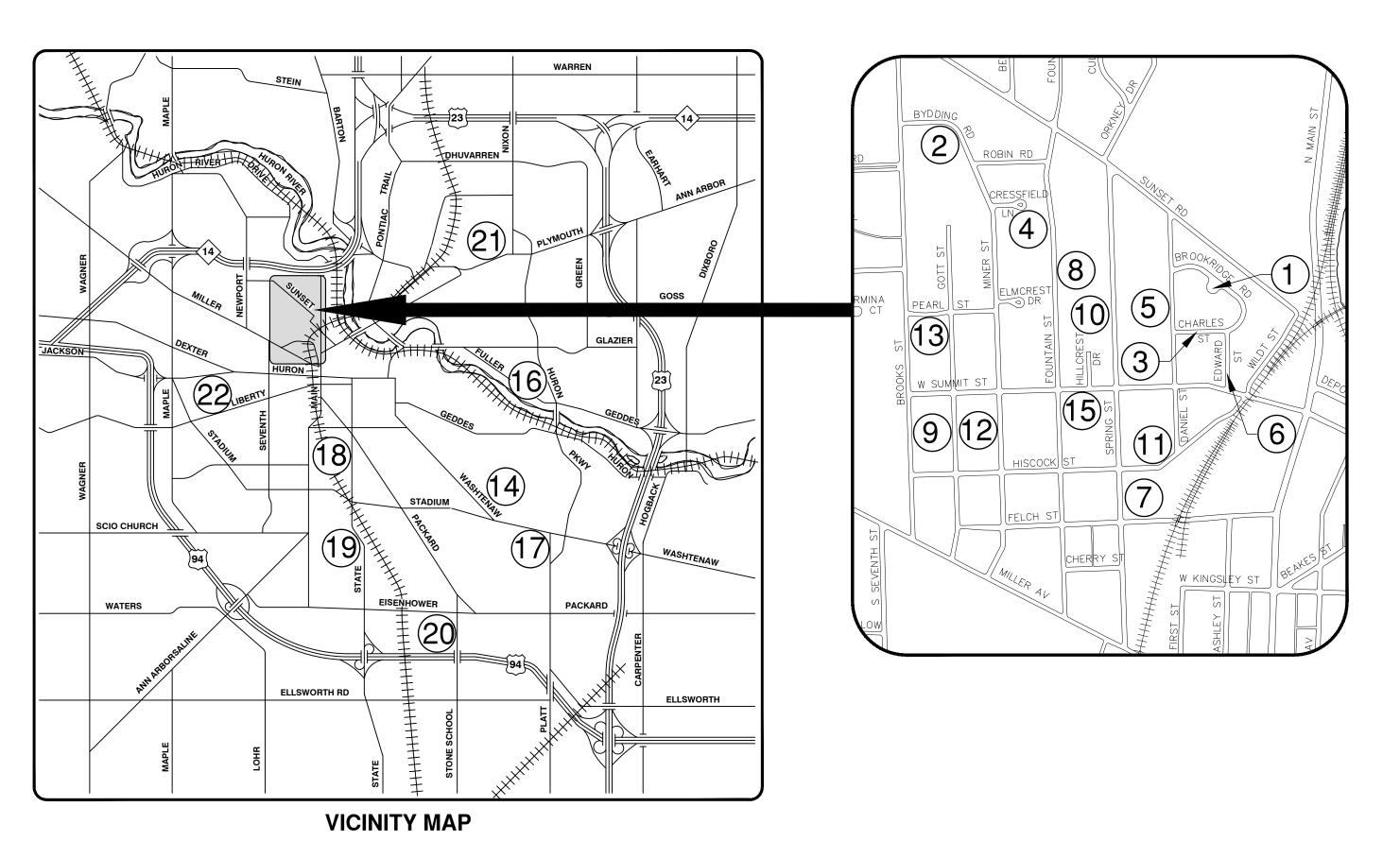
STREET RESURFACING/RESTORATION PROJECT - 2019

ITB No. 4570 FILE No. 2019004

SHEET INDEX

SHEET NO.	TITLE	MAP INDEX NO (THIS SHEET)
1	COVER SHEET	
2	NOTES AND MISCELLANEOUS QUANTITIES	
3	SOIL EROSION AND SEDIMENTATION CONTROL (SESC) NOTES AND DETAILS	
4	DETAILS	
5	TRAFFIC CALMING DETAIL	
6	LOCAL STREET TRAFFIC CONTROL	
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31-32	HILLCREST DRIVE	10
33-34	HISCOCK STREET	11
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DAVID ARTHUR DYKMAN, P.E. - MI LICENSE No. 52912

03 / 13 / 2018





GENERAL NOTES:

- 1. 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.
- 2. The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
- 3. During non-working hours no more than ten (10) feet of trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the items of work being undertaken and will not be paid for separately.
- 4. The location of material stock piles and on—site staging areas shall be approved by the Engineer.
- 5. For mainline HMA Paving, the width of the mat for each pass of the paver shall be not less than 10.5', nor greater than 16', except as noted in the plans and as directed by the Engineer. The Engineer will direct the layout of all HMA Longitudinal Joints during construction.
- 6. All excavation required to construct sidewalk and sidewalk ramps shall be included in the contract pay item "Grading, Sidewalk and Sidewalk Ramps".
- 7. Some storm sewer may unavoidably become damaged during construction, or it may be determined by the Engineer that existing storm sewer needs to be replaced. In either case the Engineer may direct the sewer to be removed and replaced. The removal of existing sewer and drainage structures, as required, shall be included in the respective contract pay items "Sewer, Rem, Less than 24 inch" and Dr Structure, Rem". The replacement sewer shall be installed and paid for at the corresponding contract unit price, if contained within the contract, for the various types and sizes of sewer to be replaced.
- 8. Where existing drainage or utility structures, whether shown or not on the plans, are designated or directed by the Engineer to receive new castings (cover and frame) the existing castings shall be neatly stacked on—site in a single location so that City of Ann Arbor forces can retrieve them at a later date. The Contractor shall assist City forces by loading them into City trucks. All costs associated with storing, stockpiling, and loading castings into City vehicles shall be included in the contract pay item "Dr Structure Cover, Type_, Modified".
- 9. Payment for drainage structure sumps where specified shall be included in the payment for the various drainage structures sizes and/or types.
- 10. Where 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.

- 11. Where storm sewer is to be removed and replaced or added, all pipe shall be installed using the utility trench details shown elsewhere in the plan sheets and/or detailed in the specifications. Trench Details I and V require the use of MDOT Class II Granular Material.
- 12. If the Contractor encounters existing edge drain(s) during construction of the proposed edge drains, inlet leads, or catch basins, it shall be capped at each end to prevent material from entering the pipe. The cost of this work will not be paid for separately, but shall be included in the particular item of work being performed when existing edge drain(s) are encountered.
- 13. In areas where edge drain cannot be installed in accordance with the details, the edge drain shall be installed at the depth as indicated on the plans, or as directed by the Engineer. In no case shall the edge drain be installed at a grade less than 0.50% or at a depth less than 3.25' below the top of pavement.
- 14. Existing street name signs, guide, bus stop, and regulatory signs 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 the contract pay item "Minor Traf Devices."
- 15. All curb, sidewalk, driveway approach removals shall be approved by the Engineer before the work is performed.
- 16. Place 4" (minimum) thickness Granular Material Class II compacted to 95% of its max. dry density under concrete sidewalk as shown on the details. This work shall be included in the contract item "Subbase, CIP."
- 17. Place 6" (minimum) Granular Material Class II compacted to 95% of its max. dry density under concrete driveway approaches, and 6" (minimum) Dense—Graded Aggregate 21AA compacted to 98% of its max. dry density under HMA driveway approaches. This work shall be included in the respective contract pay items "Subbase, CIP" and "Aggregate Base, 6 inch, Modified".
- 18. A uniform coat(s) of curing compound shall be applied according to the Standard Specifications and Special Provisions regardless of the difficulty involved. The Contractor shall take care to prevent overspray when applying curing compound. Several different methods may need to be developed to protect various situations, but all methods used to prevent overspray of the curing compound shall be completely effective. Methods used shall be approved by the Engineer prior to use, however approval of a method does not guarantee success or acceptability. No additional compensation shall be made for complying with these requirements.

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT	CITY OF ANN ARBOR ENGINEERING
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT	CITY OF ANN ARBOR CUSTOMER SERVICE

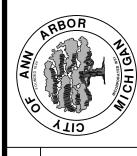
* NO COST TO CONTRACTOR

PUBLIC UTILITIES	OWNER	CONTACT
WATER		
SANITARY		
STORM	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER	(734) 794-6350
FORESTRY	4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	
SIGNS SIGNALS STREET LIGHTS		(734) 794–6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSK (734) 544-7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	ANTHONY IGNASIAK (734) 397-4447
STREET LIGHTING	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	BRANDON FARON (734) 397-4017
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016



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s <u>H</u>					
647	10	01 ADDENDUM 2	04-09-2019	AH,GS,CE	DAD
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	REV.	DESCRIPTION	DATE	DRAWN CHECKE	CHECK





VICES - ENGINEERING
TT RESURFACING/RESTORATION
PROJECT - 2019
OTES & MISCELLANEOUS QUANTITIES

STREET RESURFA
PROJE

CALE: NTS

SHEET No.

- 1. 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.
- 2. 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.
- 3. 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
- 4. 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.
- 5. ALL MUD/SOIL TRACKED ONTO 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 CITY OF ANN ARBOR, WITHIN FOUR (4) HOURS OF BEING SO ORDERED.
- 6. 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.
- 7. 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.

- 8. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- 9. PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLATIVE AS REQUIRED.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME 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.
- 11. 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.
- 12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

1. 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.

SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM

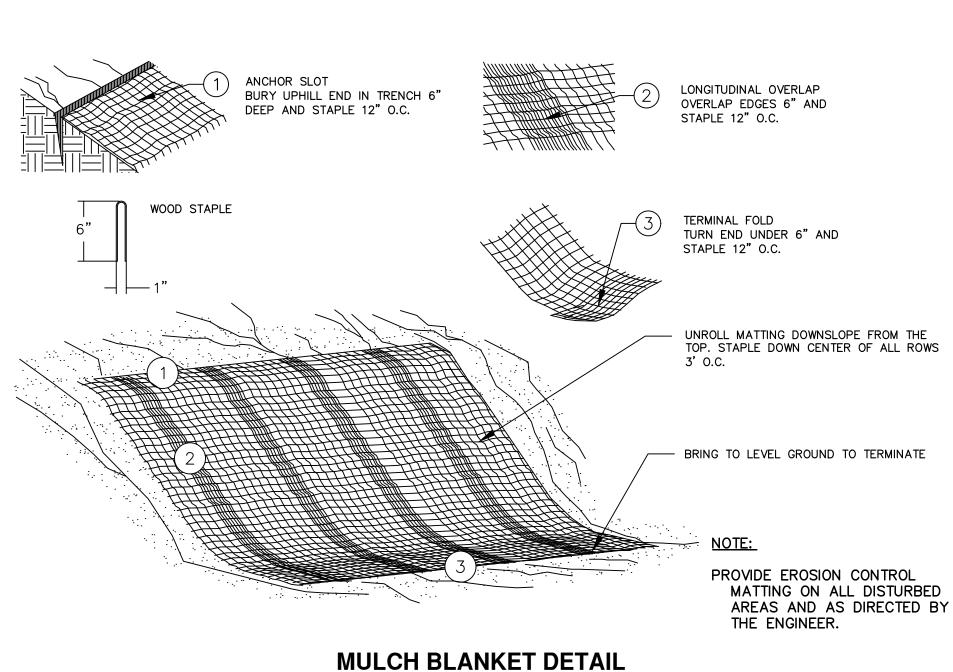
- **REQUIREMENTS:** 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.

- 1.4. PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- 1.5. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.6. COMPLETE ALL BIORETENTION GRADING AND FINE GRADING.
- 1.7. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- 1.8. REFER TO LANDSCAPE PLANTING PLANS FOR PERMANENT SITE STABILIZATION.
- 1.9. CLEAN OUT STORM SEWER SYSTEMS.
- 1.10. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- 1.11. ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION

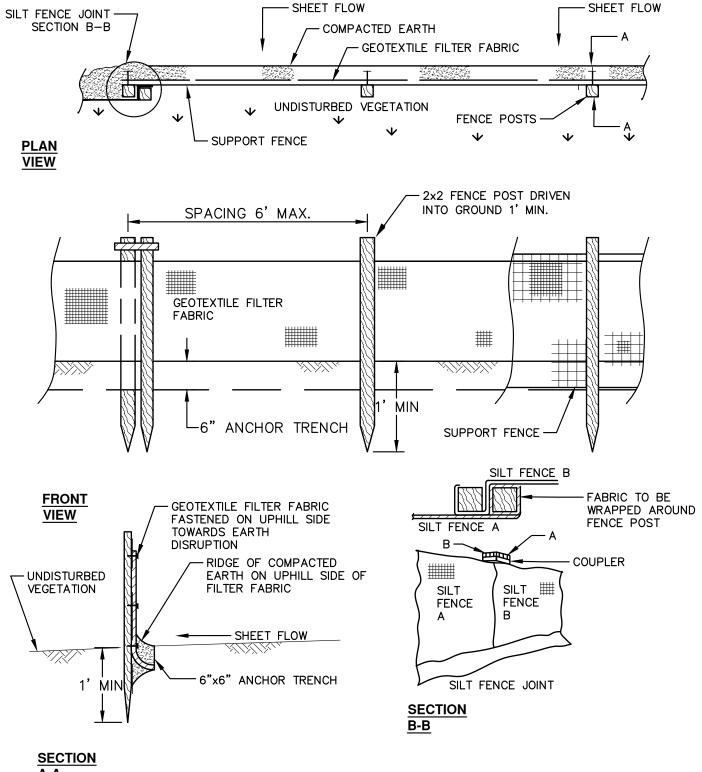
NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT,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

TEMPORARY SEEDING:

- 1. SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- 2. ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.



APPLIES TO ALL AREAS TO BE PERMANENTLY RESTORED WITH GRASS. SEE LANDSCAPE PLANS FOR MORE DETAILS.



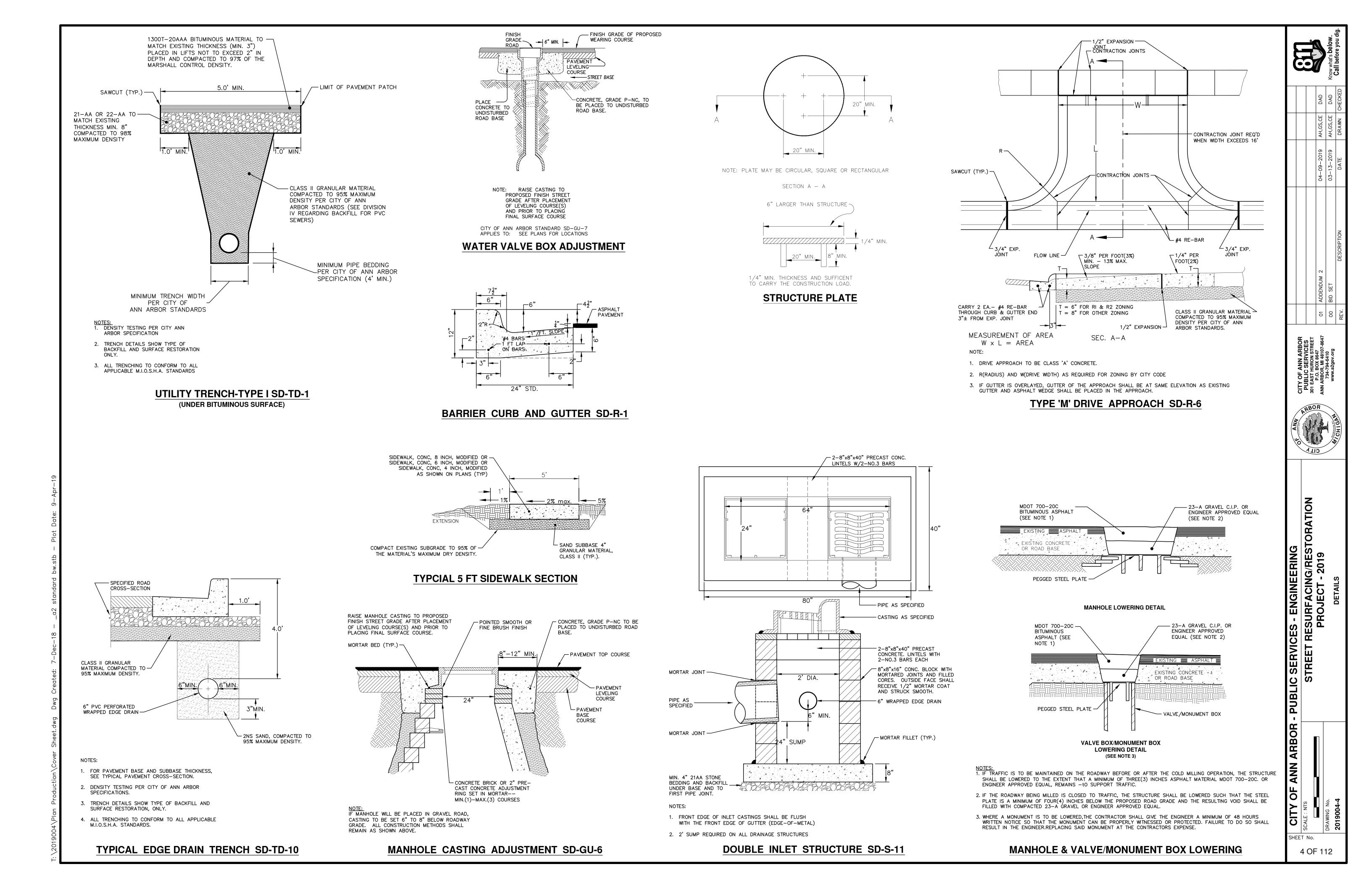
SILT FENCE SD-EC-3

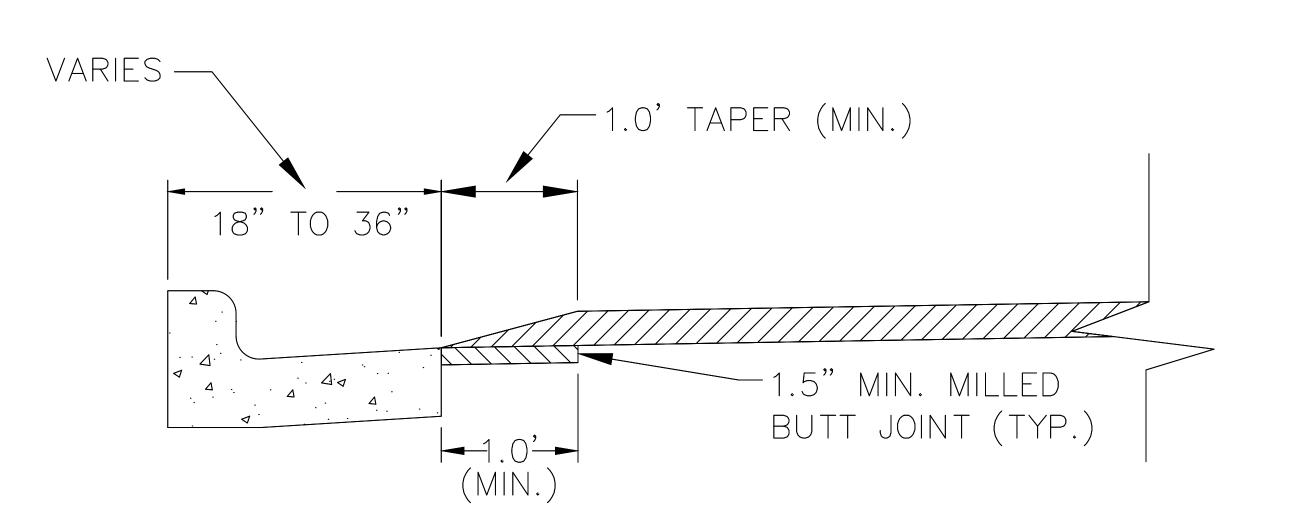


F RESURFACING/RESTC PROJECT - 2019
SESC NOTES & DETAILS

ANN ARBOR

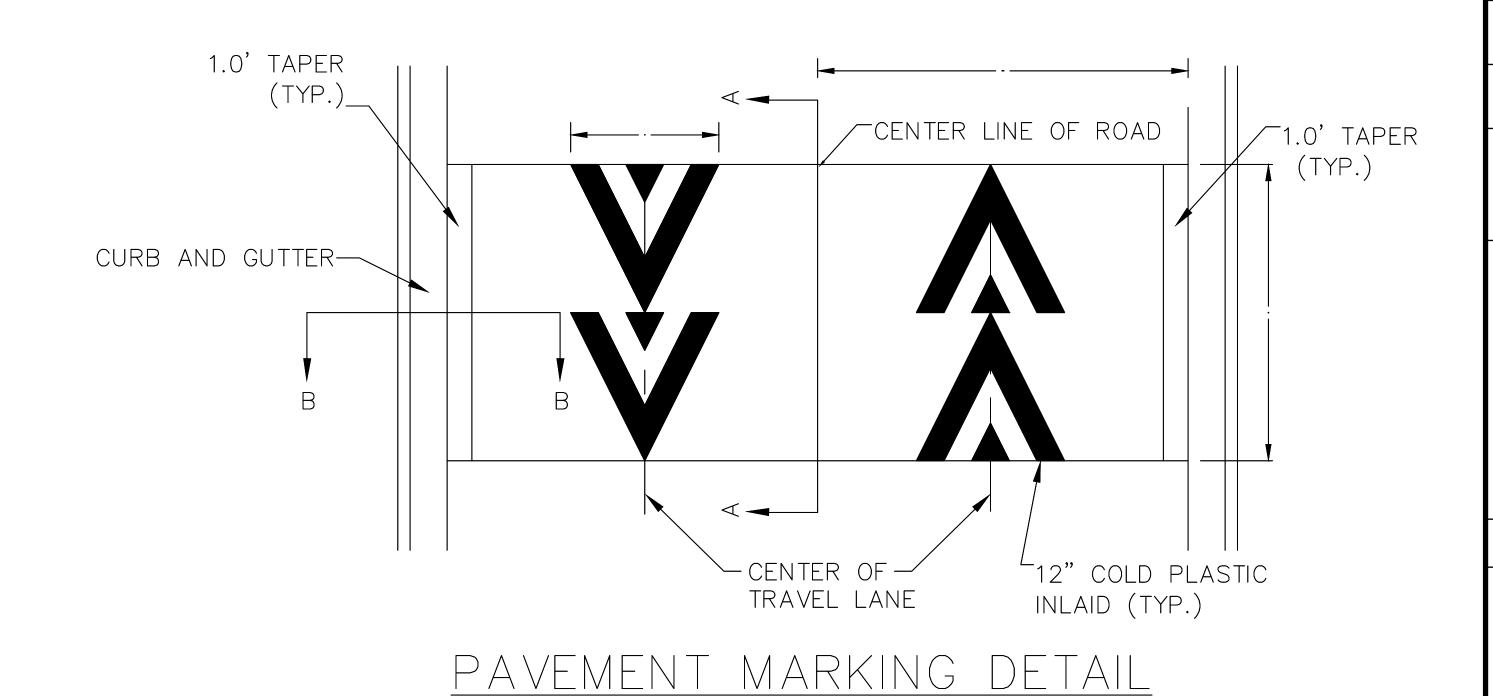
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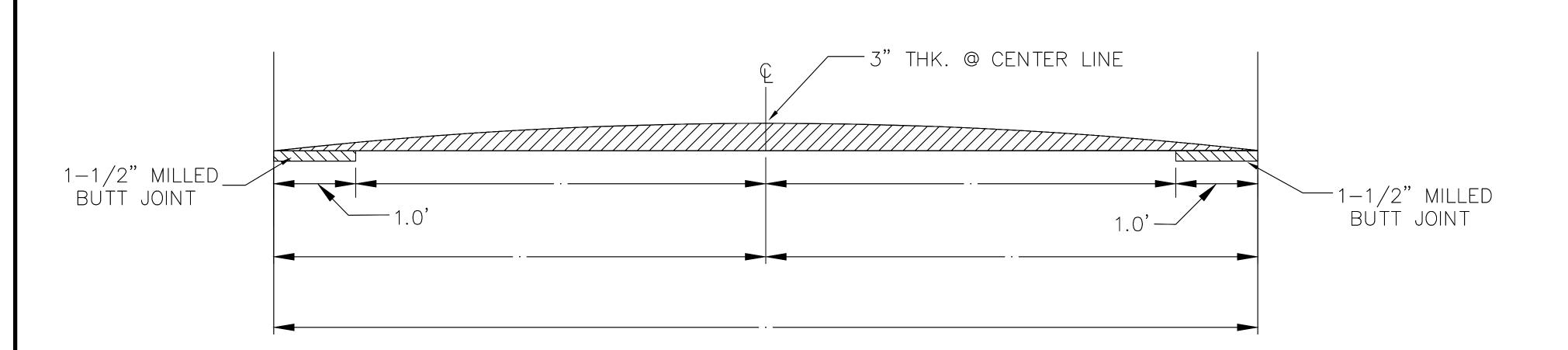




SPEED HUMP CROSS SECTION

SECTION B-B





GENERAL NOTES

- 1. RAISED INTERSECTIONS SHALL FOLLOW THE SAME TAPER REQUIREMENT AS THE SPEED HUMPS DETAILED HEREIN.
- 2. PAYMENT FOR PAVEMENT MARKINGS FOR SPEED HUMPS AND RAISED INTERSECTIONS SHALL BE INCLUDED IN THE RESPECTIVE BID ITEMS AND SHALL NOT BE PAID FOR SEPARATELY.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CALE PLAN: NTS

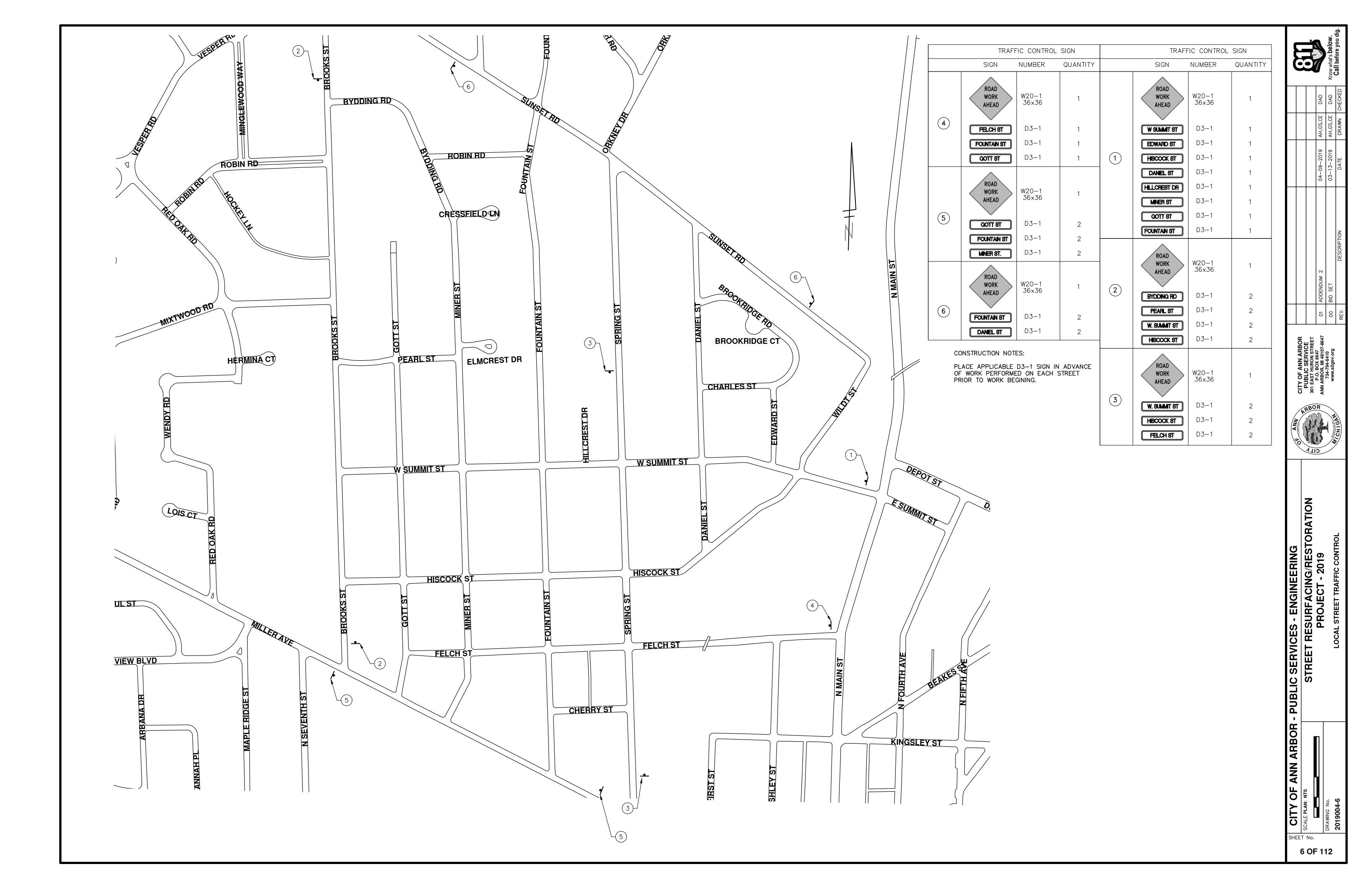
STREET RESURFACING/RESTORA

PROJECT - 2019

5 OF 112

SPEED HUMP CROSS SECTION

SECTION A-A





CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: BROOKRIDGE COURT

ITB No. 4570 FILE No. 2019004

		QUANTITIES		
	;	Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
2.0	*D3-1	Street Name Sign	4.0	8
2.0	R11-3a	Road Closed Local Traffic Only	12.5	25
	_		TOTAL	33

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	2
2030015	Sewer, Rem, Less than 24 inch	Ft	20
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	196
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	34
2057011	_Grading, Driveway Approach	Syd	34
2057011	_Machine Grading, Special	Syd	680
2057021	_Subgrade Undercutting, Type IIA	Cyd	68
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	
4020987	Sewer, CI IV, 12 inch, Tr Det B	Ft	2
4030200	Dr Structure, 24 inch dia	Ea	
4037050	_Dr Structure Cover, Type K, Modified	Ea	
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	4
5010002	Cold Milling HMA Surface	Syd	68
5010005	HMA Surface, Rem	Syd	2
5010703	HMA, LVSP	Ton	16
6027021	_Flowable Fill	Cyd	
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	3
8027001	_Curb and Gutter, Conc, Barrier	Ft	13
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	5
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	
8120250	Plastic Drum, High Intensity, Furn	Ea	1
8120251	Plastic Drum, High Intensity, Oper	Ea	1
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	2
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	2
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	
8127050	_Temporary No Parking Sign	Ea	
8167011	Slope Restoration	Syd	7

KEY	CONSTRUCTION KEY ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified Dr Structure, Temp Lowering, Modified
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	_Curb, Gutter, and Curb and Gutter, Any Type, RemCement_Driveway Opening, Conc, Det M, Modified
СР	_Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	 Dr Structure, Rem Sewer, Rem, Less than 24 inch Dr Structure, 24 inch dia
DSDI	Dr Structure, RemSewer, Rem, Less than 24 inch_Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K_Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, FurnPlastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
MMA/APR	_HMA ApproachGrading, Driveway Approach

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

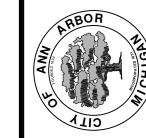
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

Know what's below.

	DAD	DAD	CHECKED	
	AH,GS,CE	AH,GS,CE	DRAWN CHECKED	
	04-09-2019	03-13-2019	DATE	
	01 ADDENDUM 2	00 BID SET	DESCRIPTION	
	01	00	REV.	

CITY OF ANN ARBO PUBLIC SERVICES 301 EAST HURON STREE P.O. BOX 8647 ANN ARBOR, MI 48107-86 734-794-6410 www.a2gov.org



NO

ICES - ENGINEERING

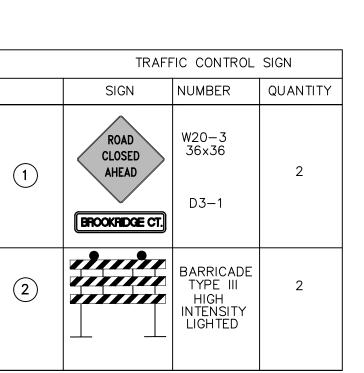
FROJECT - 2019

SUBSET COVER SHEET

N ARBOR - PUBLIC SER

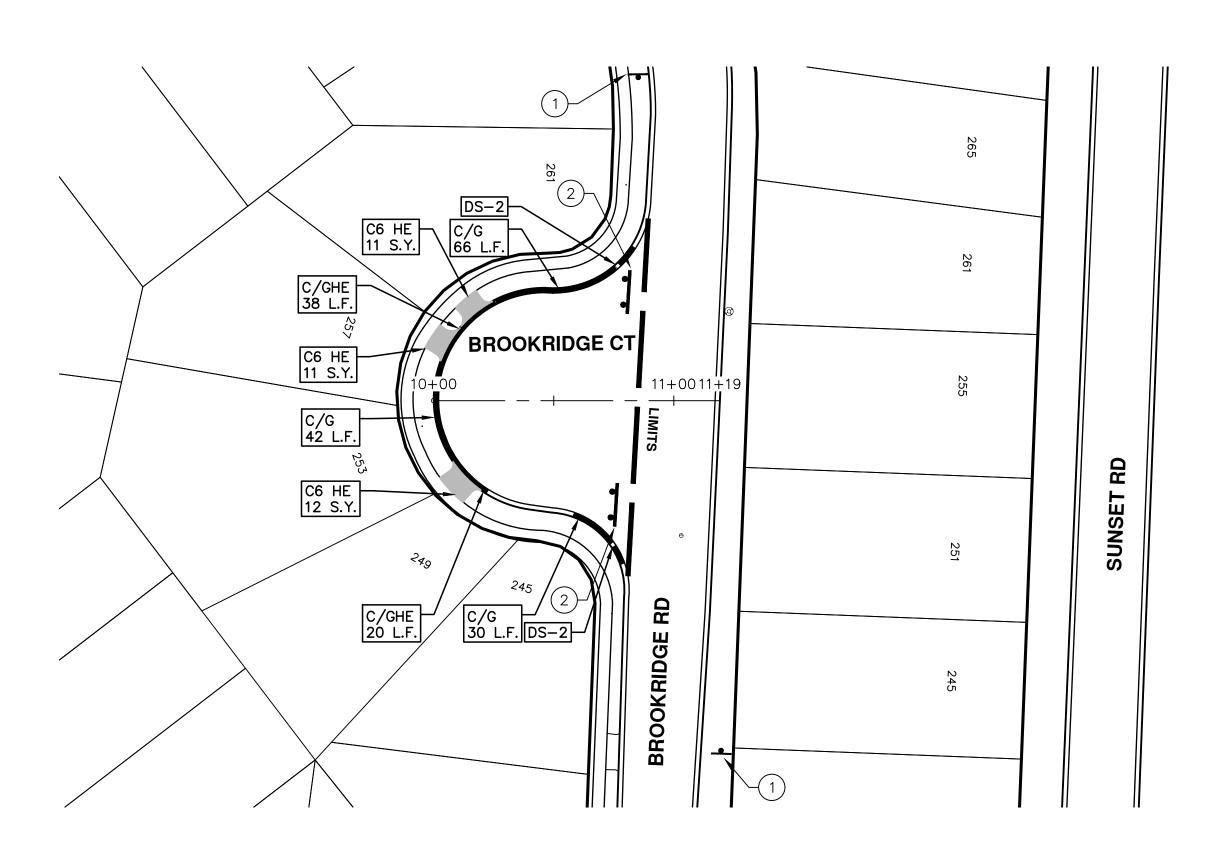
CITY OF ANN ARBOR

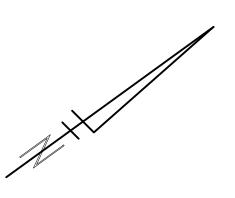
SHEET No.



CONSTRUCTION NOTES: PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET.

	TRAFF	FIC CONTROL	SIGN
	SIGN	NUMBER	QUANTITY
1)	ROAD CLOSED AHEAD BROOKRIDGE CT.	W20-3 36×36 D3-1	2
2		BARRICADE TYPE III HIGH INTENSITY LIGHTED	2







CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: BYDDING ROAD

ITB No. 4570 FILE No. 2019004

		QUANTITIES		
		Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
10.0	*D3-1	Street Name Sign	4.0	40
7.0	R11-3a	Road Closed Local Traffic Only	12.5	88
10.0	W20-3	Road Closed Ahead	9.0	90
			TOTAL	218

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	S
2030015	Sewer, Rem, Less than 24 inch	Ft	90
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,006
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	391
2057011	_Grading, Driveway Approach	Syd	176
2057011	_Grading, Sidewalk	Syd	26
2057011	_Grading, Sidewalk Ramp	Syd	15
2057011	_Machine Grading, Special	Syd	3,689
2057021	_Subgrade Undercutting, Type IIA	Cyd	369
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	12
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	90
4030200	Dr Structure, 24 inch dia	Ea	9
4037050	_Dr Structure Cover, Type B, Modified	Ea	9
4037050	_Dr Structure Cover, Type K, Modified	Ea	10
4037050	Dr Structure, Adj, Case 1, Modified	Ea	10
4037050		Ea	12
4037050	Structure, Reconstruct	Ea	,
4047001	Underdrain, Subgrade, 6 inch, Special	Ft	200
5010002	Cold Milling HMA Surface	Syd	3,689
5010005	HMA Surface, Rem	Syd	120
5010025	Hand Patching	Ton	10
5010061	HMA, Approach	Ton	30
5010703	HMA, LVSP	Ton	860
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	2
5017031	HMA, Wedging, 36A	Ton	8
6027021	Flowable Fill	Cyd	28
8017011		Syd	168
8027001	Curb and Gutter, Conc, Barrier	Ft	628
8027001	Driveway Opening, Conc, Det M, Modified	Ft	378
8030030	Curb Ramp Opening, Conc	Ft	14
8037001	Detectable Warning Surface, Modified	Ft	10
	<u> </u>		
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	129
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	105
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	125
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	62
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	15
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	4
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	4
8120250	Plastic Drum, High Intensity, Furn	Ea	60
8120251	Plastic Drum, High Intensity, Oper	Ea	60
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	178
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	178
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	40
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	40
8127050	_Temporary No Parking Sign	Ea	30
8127050	_Pedestrian Type II Barricade, Temp	Ea	2
8167011	_Slope Restoration	Syd	402
8230431	Gate Box, Adj, Case 1	Ea	3

KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	_Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem _Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	Grading, Sidewalk Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified
RS	_Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
TYPE III	 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
	HMA Approach

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO
- INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013. THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

01	01 ADDENDUM 2	04-09-2019	AH,GS,CE	/O
00	00 BID SET	03-13-2019	AH,GS,CE	/Q
REV.	DESCRIPTION	DATE	DRAWN CHEC	CHE(

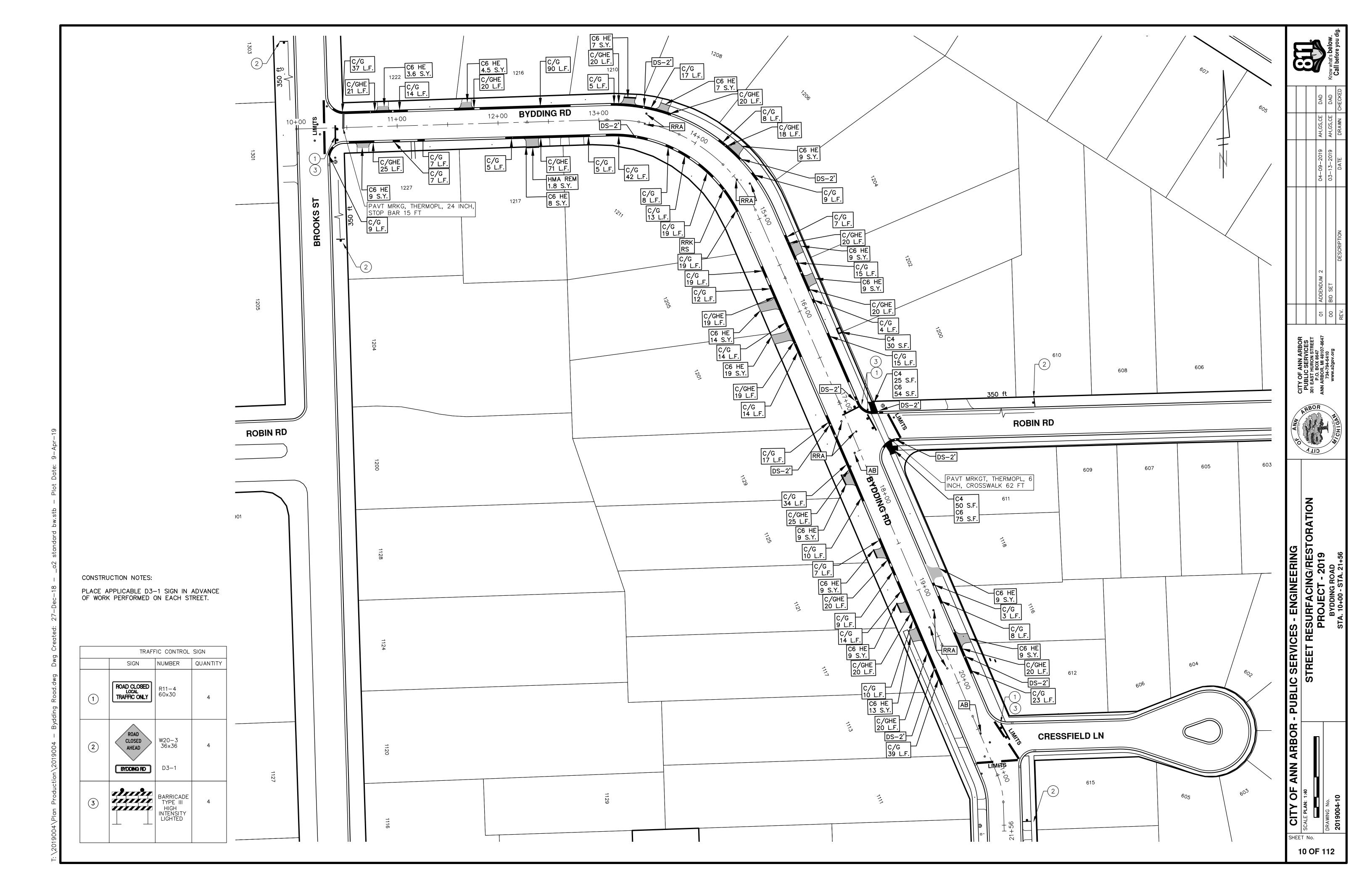




F RESURFACING/RESTOR PROJECT - 2019
SUBSET COVER SHEET

ARB

SHEET No.





CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: CHARLES STREET

ITB No. 4570 FILE No. 2019004

		QUANTITIES		
		Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
9.0	*D3-1	Street Name Sign	4.0	36
10.0	R11-3a	Road Closed Local Traffic Only	12.5	125
9.0	W20-3	Road Closed Ahead	9.0	81
			TOTAL	242

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	
2030015	Sewer, Rem, Less than 24 inch	Ft	9
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,00
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	39
2057011	_Grading, Driveway Approach	Syd	17
2057011	_Grading, Sidewalk	Syd	2
2057011	_Grading, Sidewalk Ramp	Syd	1
2057011	_Machine Grading, Special	Syd	3,68
2057021	_Subgrade Undercutting, Type IIA	Cyd	36
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	1
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	9
4030200	Dr Structure, 24 inch dia	Ea	
4037050	_Dr Structure Cover, Type B, Modified	Ea	
4037050	_Dr Structure Cover, Type K, Modified	Ea	1
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	1
4037050	_Dr Structure, Temp Lowering, Modified	Ea	1
4037050	_Structure, Reconstruct	Ea	
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	20
5010002	Cold Milling HMA Surface	Syd	3,68
5010005	HMA Surface, Rem	Syd	12
5010025	Hand Patching	Ton	1
5010061	HMA, Approach	Ton	3
5010703	HMA, LVSP	Ton	86
5017031	Cold Milling for Concrete Curb and Gutter Reveal	Ton	
5017031	HMA, Wedging, 36A	Ton	
6027021	Flowable Fill	Cyd	2
8017011	Driveway, Nonreinf Conc, 6 inch, Modified	Syd	16
8027001	Curb and Gutter, Conc, Barrier	Ft	62
8027001		Ft	37
8030030	Curb Ramp Opening, Conc	Ft	1
8037001	Detectable Warning Surface, Modified	Ft	1
8037010	Sidewalk Ramp, Conc, 6 inch, Modified	Sft	12
8037010	Sidewalk, Conc, 4 inch, Modified	Sft	10
8037010	Sidewalk, Conc, 6 inch, Modified	Sft	12
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	6
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	1
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	
8120250	Plastic Drum, High Intensity, Furn	Ea	6
8120251	Plastic Drum, High Intensity, Oper	Ea	6
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	17
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	17
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	4
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	4
8127050	Temporary No Parking Sign	Ea	3
8127050	Pedestrian Type II Barricade, Temp	Ea	
8167011	Slope Restoration	Syd	40
8230431	Gate Box, Adj, Case 1	Ea	40

KEA	CONSTRUCTION KEY ASSOCIATED PAY ITEM(S)
KEY	Dr Structure, Adj, Case 1, Modified
AA	Dr Structure, Adj, Case 2, Modified Dr Structure, Temp Lowering, Modified
AB	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 Monument Box Adjust
ADST	Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem _Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	_Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified
RS	_Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, FurnPlastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
MMA/APR	_HMA Approach _Grading, Driveway Approach

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

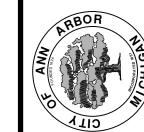
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

Know what's below.

		CE DAD	CE DAD	DRAWN CHECKED
		AH,GS,CE	AH,GS,CE	DRAW
		04-09-2019	03-13-2019	DATE
		ADDENDUM 2	BID SET	DESCRIPTION





ESURFACING/RESTORATION
PROJECT - 2019
SUBSET COVER SHEET

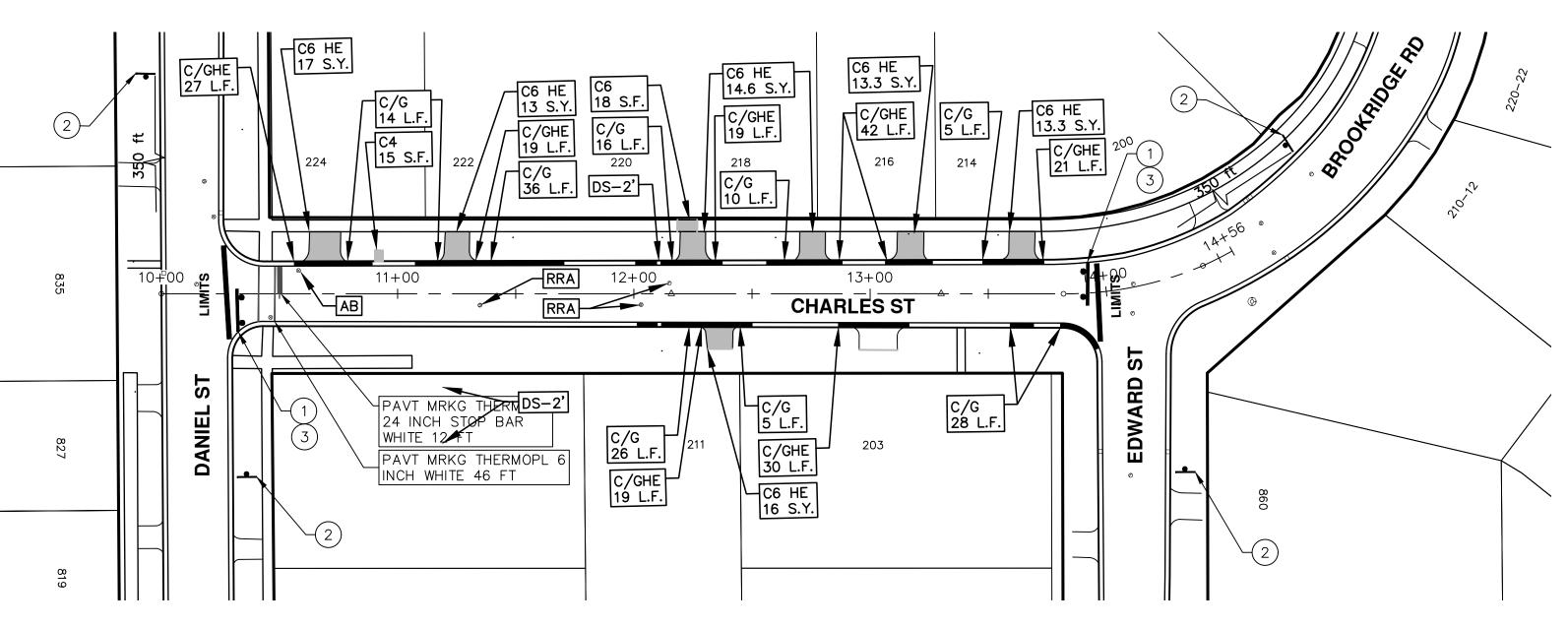
R - PUBLIC SERVICES - ENG STREET RESURFA

COF ANN ARBOR - PI

SCALE: NTS

ORAWING No.

SHEET No.



CONSTRUCTION NOTES:

PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET.

	TRAF	FIC CONTROL	SIGN
	SIGN	NUMBER	QUANTITY
1)	ROAD CLOSED LOCAL TRAFFIC ONLY	R11-4 60x30	2
2	ROAD CLOSED AHEAD	W20-3 36×36 D3-1	4
3		BARRICADE TYPE III HIGH INTENSITY LIGHTED	2

CONSTRUCTION NOTES:

PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET PRIOR TO WORK BEGINING.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1:40

DRAWING NO.

CHARLES STREET

STA. 10+00 - STA. 14+56

Z

SHEET No. **12 OF 112**



CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: CRESSFIELD LANE

ITB No. 4570 FILE No. 2019004

		QUANTITIES		
		Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
2.0	*D3-1	Street Name Sign	4.0	8
1.0	R11-3a	Road Closed Local Traffic Only	12.5	13
2.0	W20-3	Road Closed Ahead	9.0	18
	•		TOTAL	30

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	
2030015	Sewer, Rem, Less than 24 inch	Ft	2
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	18
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	4
2057011	_Grading, Sidewalk	Syd	2
2057011	_Grading, Sidewalk Ramp	Syd	1
2057011	_Machine Grading, Special	Syd	88
2057021	_Subgrade Undercutting, Type IIA	Cyd	8
4020987	Sewer, CI IV, 12 inch, Tr Det B	Ft	2
4030200	Dr Structure, 24 inch dia	Ea	
4037050	_Dr Structure Cover, Type B, Modified	Ea	
4037050	_Dr Structure Cover, Type K, Modified	Ea	
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	
4037050	_Dr Structure, Temp Lowering, Modified	Ea	
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	4
5010002	Cold Milling HMA Surface	Syd	88
5010005	HMA Surface, Rem	Syd	2
5010703	HMA, LVSP	Ton	2
6027021	_Flowable Fill	Cyd	
8027001	_Curb and Gutter, Conc, Mountable	Ft	18
8037001	_Detectable Warning Surface, Modified	Ft	
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	12
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	2
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	(
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	
8120250	Plastic Drum, High Intensity, Furn	Ea	,
8120251	Plastic Drum, High Intensity, Oper	Ea	
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	;
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	;
8127050	_Temporary No Parking Sign	Ea	
8127050	_Pedestrian Type II Barricade, Temp	Ea	
8167011	_Slope Restoration	Syd	-
8230431	Gate Box, Adj, Case 1	Ea	

	CONSTRUCTION KEY
KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
AB	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	_Curb, Gutter, and Curb and Gutter, Any Type, RemCement_Driveway Opening, Conc, Det M, Modified
СР	Grading, Sidewalk Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, Rem Sewer, Rem, Less than 24 inch Dr Structure, 24 inch dia
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K_Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
MMA/APR	_HMA Approach Grading, Driveway Approach

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

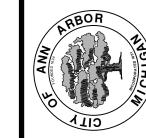
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

Know what's below.

01 ADDENDUM 2 04-09-2019 AH,GS,CE DAD 00 BID SET 03-13-2019 AH,GS,CE DAD REV. DATE DRAWN CHECKED					
ADDENDUM 2 04-09-2019 ABID SET 03-13-2019 ABID SET DESCRIPTION DATE			DAD	CHECKED	
ADDENDUM 2 BID SET DESCRIPTION		AH,GS,CE	AH,GS,CE	DRAWN	
ADDENDUM 2 BID SET		04-09-2019	03-13-2019	DATE	
00 REV.		ADDENDUM 2	BID SET	DESCRIPTION	
		10	00	REV.	

CITY OF ANN A
PUBLIC SERV
301 EAST HURON S
P.O. BOX 864
ANN ARBOR, MI 481
734-794-6410
www.a2gov.o



STREET RESURFACING/RESTORATION
PROJECT - 2019
CRESSFIELD LANE
SLIBSET COVER SHEET

SCALE: NTS
DRAWING No.

ARI

_____|び ____ SHEET No.

TRAFFIC CONTROL SIGN

SIGN NUMBER QUANTITY

ROAD CLOSED R11-4 60x30 1

ROAD CLOSED AND ANEAD W20-3 36x36 2

CHESSFELD LN D3-1

BARRICADE TYPE III HIGH INTENSITY LIGHTED

PAVT MERC INCRMOPL 6
NCH WHITE 65 FT

104-00 CRESSFIELD LN 12+00

11+00 CRESSFIELD LN 12+00

12+65

100 S.F.

100 S.

CONSTRUCTION NOTES:

PLACE APPLICABLE D3—1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET.

			AC	B	
			10	00	REV.
AM	CITY OF ANN ARBOR	TOBLIC SENVICES 301 EAST HURON STREET	O BOX 8647 ANN ARBOR, MI 48107-8647	734-794-6410 Www.a2gov.org	CHIGHT
JN ARBOR - PUBLIC SERVICES - ENGINFERING		STREET RESURFACING/RESTORATION	PROJECT - 2019	CRESSFIELD LANE	STA. 10+00 - STA. 12+85
NN ARBC					

14 OF 112

AH,GS,CE DAD Know what's below DRAWN CHECKED



CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: DANIEL STREET

ITB No. 4570 FILE No. 2019004

ı			OHANTITIES		
			QUANTITIES Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
	Quantity	Sign Code		Area (sft)	Total Area (Sft)
	8.0	*D3-1	Street Name Sign	4.0	32
	6.0	R11-3a	Road Closed Local Traffic Only	12.5	75
	8.0	W20-3	Road Closed Ahead	9.0	72
				TOTAL	170

4.0	32	
12.5	75	
9.0	72	
TOTAL	179	
TOTAL	179	
TOTAL	179	

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	16
2030015	Sewer, Rem, Less than 24 inch	Ft	160
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,388
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	420
2057011	_Grading, Driveway Approach	Syd	310
2057011	_Grading, Sidewalk	Syd	61
2057011	_Grading, Sidewalk Ramp	Syd	49
2057011	_Machine Grading, Special	Syd	5,733
2057021	_Subgrade Undercutting, Type IIA	Cyd	573
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	17
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	160
4030200	Dr Structure, 24 inch dia	Ea	16
4037050	_Dr Structure Cover, Type B, Modified	Ea	15
4037050	_Dr Structure Cover, Type K, Modified	Ea	16
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	15
4037050	_Dr Structure, Temp Lowering, Modified	Ea	20
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	320
5010002	Cold Milling HMA Surface	Syd	5,733
5010005	HMA Surface, Rem	Syd	154
5010061	HMA, Approach	Ton	20
5010703	HMA, LVSP	Ton	1,330
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	4
5017031	_HMA, Wedging, 36A	Ton	8
6027021	_Flowable Fill	Cyd	39
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	310
8027001	_Curb and Gutter, Conc, Barrier	Ft	899
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	489
8037001	_Detectable Warning Surface, Modified	Ft	35
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	445
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	550
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	372
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	73
8120250	Plastic Drum, High Intensity, Furn	Ea	83
8120251	Plastic Drum, High Intensity, Oper	Ea	83
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	147
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	147
8127050	_Temporary No Parking Sign	Ea	48
8127050	_Pedestrian Type II Barricade, Temp	Ea	7
8167011	_Slope Restoration	Syd	555

KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified Dr Structure, Temp Lowering, Modified
AB	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 Monument Box Adjust
ADST	Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	_Grading, Driveway Approach_Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	_Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
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DS	Dr Structure, Rem Sewer, Rem, Less than 24 inch Dr Structure, 24 inch dia
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PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K_Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
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MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
	HMA Approach

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

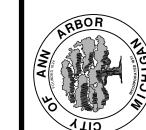
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10	01 ADDENDUM 2	04-09-2019	AH,GS,CE	DAD
8	00 BID SET	03-13-2019	AH,GS,CE DAD	DAD
REV.	DESCRIPTION	DATE	DRAWN CHECKE	CHECKE

CITY OF ANN ARBO PUBLIC SERVICES 301 EAST HURON STREE P.O. BOX 8647 ANN ARBOR, MI 48107-86 734-794-6410 www.a2gov.org



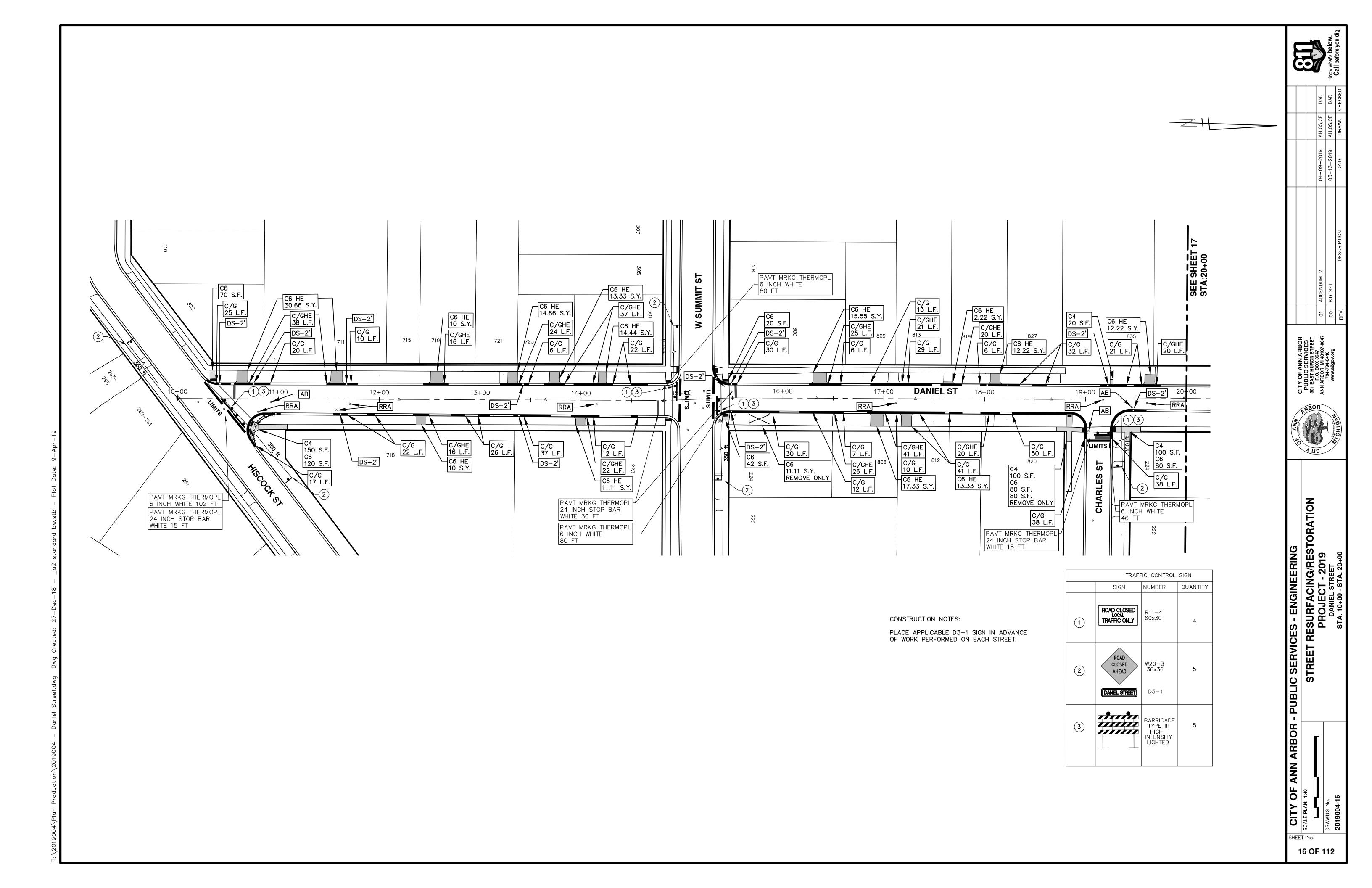
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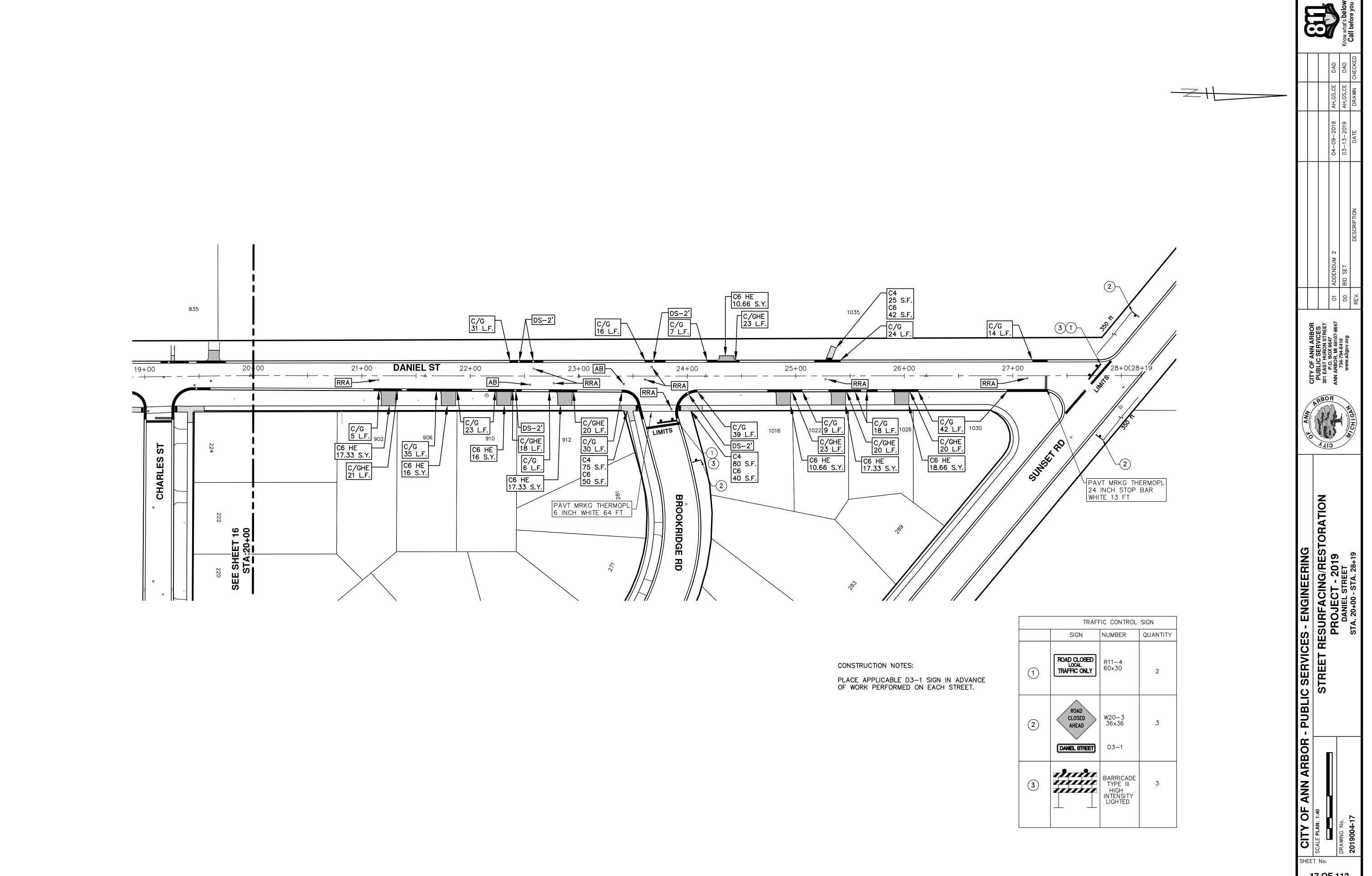
IC SERVICES - ENGINEERING
STREET RESURFACING/RESTORATIC
PROJECT - 2019
DANIEL STREET
SUBSET COVER SHEET

OF ANN ARBOR - PU

CALE: NTS

SHEET No.







CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: EDWARD STREET

ITB No. 4570 FILE No. 2019004

I		QUANTITIES		
		Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
4.0	*D3-1	Street Name Sign	4.0	16
2.0	R11-3a	Road Closed Local Traffic Only	12.5	25
4.0	W20-3	Road Closed Ahead	9.0	36
		<u> </u>	TOTAL	77

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	16
2030015	Sewer, Rem, Less than 24 inch	Ft	160
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,388
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	420
2057011	_Grading, Driveway Approach	Syd	310
2057011	_Grading, Sidewalk	Syd	61
2057011	_Grading, Sidewalk Ramp	Syd	49
2057011	_Machine Grading, Special	Syd	5,733
2057021	_Subgrade Undercutting, Type IIA	Cyd	573
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	17
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	160
4030200	Dr Structure, 24 inch dia	Ea	16
4037050	_Dr Structure Cover, Type B, Modified	Ea	15
4037050	_Dr Structure Cover, Type K, Modified	Ea	16
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	15
4037050	_Dr Structure, Temp Lowering, Modified	Ea	20
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	320
5010002	Cold Milling HMA Surface	Syd	5,733
5010005	HMA Surface, Rem	Syd	154
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5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	4
5017031	_HMA, Wedging, 36A	Ton	8
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8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	310
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8027001	_Driveway Opening, Conc, Det M, Modified	Ft	489
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8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	73
8120250	Plastic Drum, High Intensity, Furn	Ea	83
8120251	Plastic Drum, High Intensity, Oper	Ea	83
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	147
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	147
8127050	_Temporary No Parking Sign	Ea	48
8127050	_Pedestrian Type II Barricade, Temp	Ea	7
	•		

Syd

555

8167011 Slope Restoration

ASSOCIATED PAY ITEM(S)
 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
• _Dr Structure, Adj, Add Depth, Modified
• _Dr Structure, Adj, Case 1, Modified
 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
_Grading, Driveway Approach_Driveway, Nonreinf Conc, 8 inch, Modified
 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
_Curb, Gutter, and Curb and Gutter, Any Type, RemCement_Driveway Opening, Conc, Det M, Modified
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Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia
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 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
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_Dr Structure, Reconstruct
Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
Post, Mailbox
HMA Surface, Rem

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

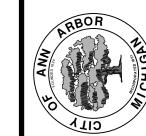
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

Know what's below.

	1			ı
	AH,GS,CE	AH,GS,CE	DRAWN CHECKE	
	04-09-2019	03-13-2019	DATE	
	01 ADDENDUM 2	00 BID SET	DESCRIPTION	
	01	00	REV.	

CITY OF ANN ARBO PUBLIC SERVICES 301 EAST HURON STREE P.O. BOX 8647 ANN ARBOR, MI 48107-86 734-794-6410 www.a2gov.org

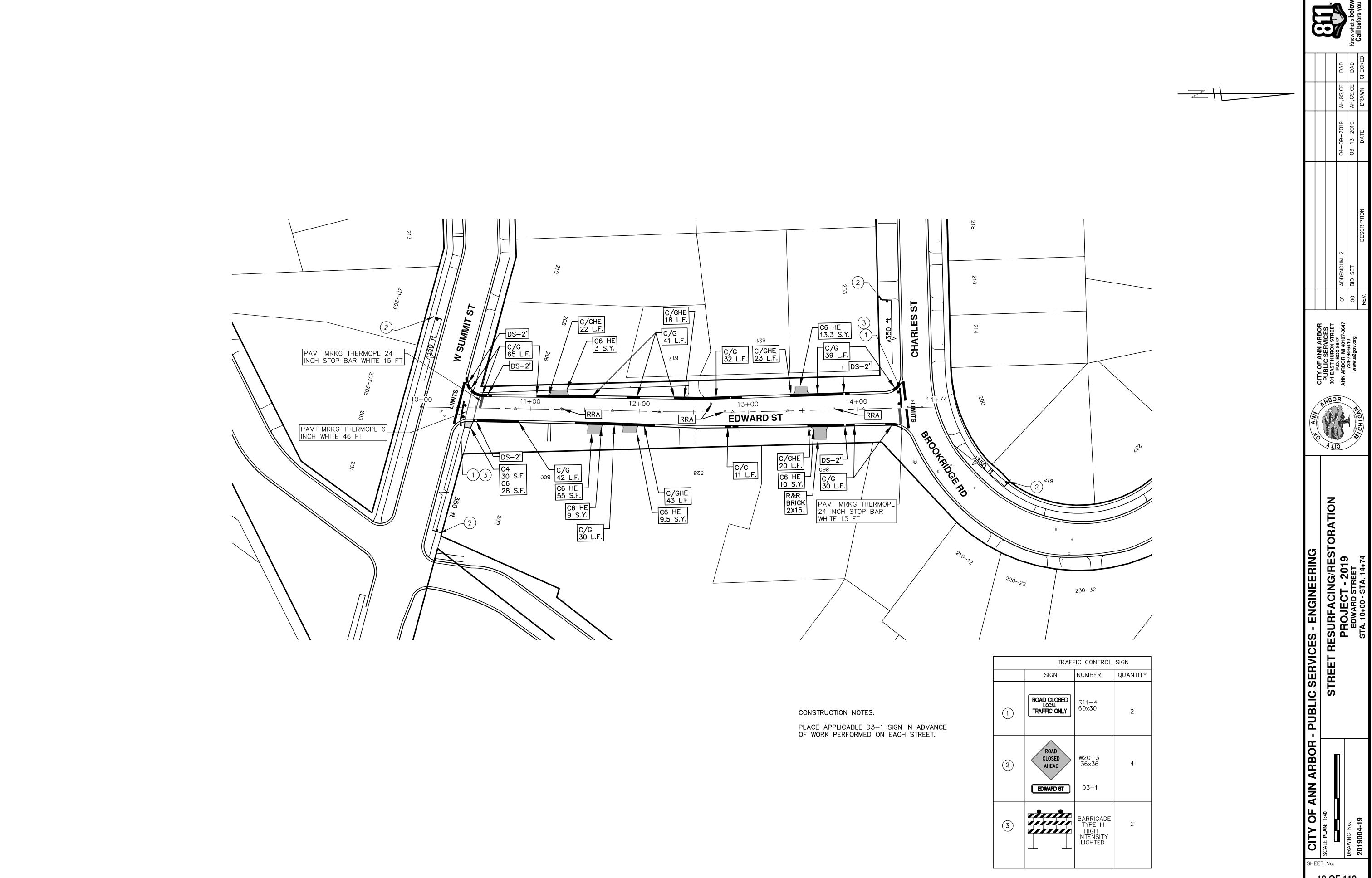


ESURFACING/RESTORATION
PROJECT - 2019
EDWARD STREET
SUBSET COVER SHEET

N ARBOR - PUBLIC SERVIC
STREET F

CALE: NTS

_____|び _____ SHEET No.





CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: FELCH STREET

ITB No. 4570 FILE No. 2019004

		QUANTITIES		
		Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
Quantity	Sign Code	Description	Area (sft)	Total
42.0	*D2.4	Chest Name Circ	1 10	Area (Sft)
12.0	*D3-1	Street Name Sign	4.0	48
6.0	R11-3a	Road Closed Local Traffic Only	12.5	75
12.0	W20-3	Road Closed Ahead	9.0	108
			TOTAL	231

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	6.000
2030015	Sewer, Rem, Less than 24 inch	Ft	60.000
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,389.000
2047011	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	345.500
2057011		Syd	219.700
2057011	Grading, Sidewalk	Syd	70.556
2057011	_Grading, Sidewalk Ramp	Syd	2,906.556
2057011	Machine Grading, Special	Syd	5,695.556
2057021	Subgrade Undercutting, Type IIA	Cyd	569.499
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	16.000
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	60.000
4030200	Dr Structure, 24 inch dia	Ea	6.000
4030200	Dr Structure, 24 mch dia Dr Structure Cover, Type B, Modified	Еа	13.000
4037050			9.000
	Dr Structure Cover, Type K, Modified	Ea	
4037050	Dr Structure, Adj, Case 1, Modified	Ea	18.000
4037050	Dr Structure, Temp Lowering, Modified	Ea	21.000
4037050	_Structure, Reconstruct	Ea	1.000
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	140.000
5010002	Cold Milling HMA Surface	Syd	5,696.000
5010005	HMA Surface, Rem	Syd	160.533
5010025	Hand Patching	Ton	10.000
5010061	HMA, Approach	Ton	80.000
5010703	HMA, LVSP	Ton	1,330.000
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	3.467
5017031	_HMA, Wedging, 36A	Ton	16.000
6027021	_Flowable Fill	Cyd	38.583
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	213.500
8027001	_Curb and Gutter, Conc, Barrier	Ft	915.000
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	474.000
8037001	_Detectable Warning Surface, Modified	Ft	40.000
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	392.000
8037010	_Sidewalk, Conc or Clay Brick Pavers, Rem and Reinstall	Sft	20.000
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	350.000
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	300.000
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	506.000
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	101.000
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	6.000
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	6.000
8120250	Plastic Drum, High Intensity, Furn	Ea	83.340
8120251	Plastic Drum, High Intensity, Oper	Ea	83.340
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	183.000
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	183.000
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	48.000
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	48.000
8127050	_Temporary No Parking Sign	Ea	43.229
8127050	_Pedestrian Type II Barricade, Temp	Ea	4.000
8167011	_Slope Restoration	Syd	555.600
8217050	_Monument Box, Adj Gate Box, Adj, Case 1	Ea	2.000

KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem _Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	Grading, Sidewalk Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K_Dr Structure, Adj, Case 1, Modified
RS	_Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
MMA/APR	• _HMA Approach

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

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- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13 ADJUST ALL STRUCTURE COVERS INCLUDING GATE AND MONUMENT ROXES TO THEIR FINISHED FLEVAT
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

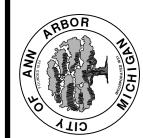
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

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CHEC	DRAWN CHEC	DATE	DESCRIPTION	REV.
√O	AH,GS,CE	03-13-2019	00 BID SET	00
√O	AH,GS,CE	04-09-2019	01 ADDENDUM 2	10

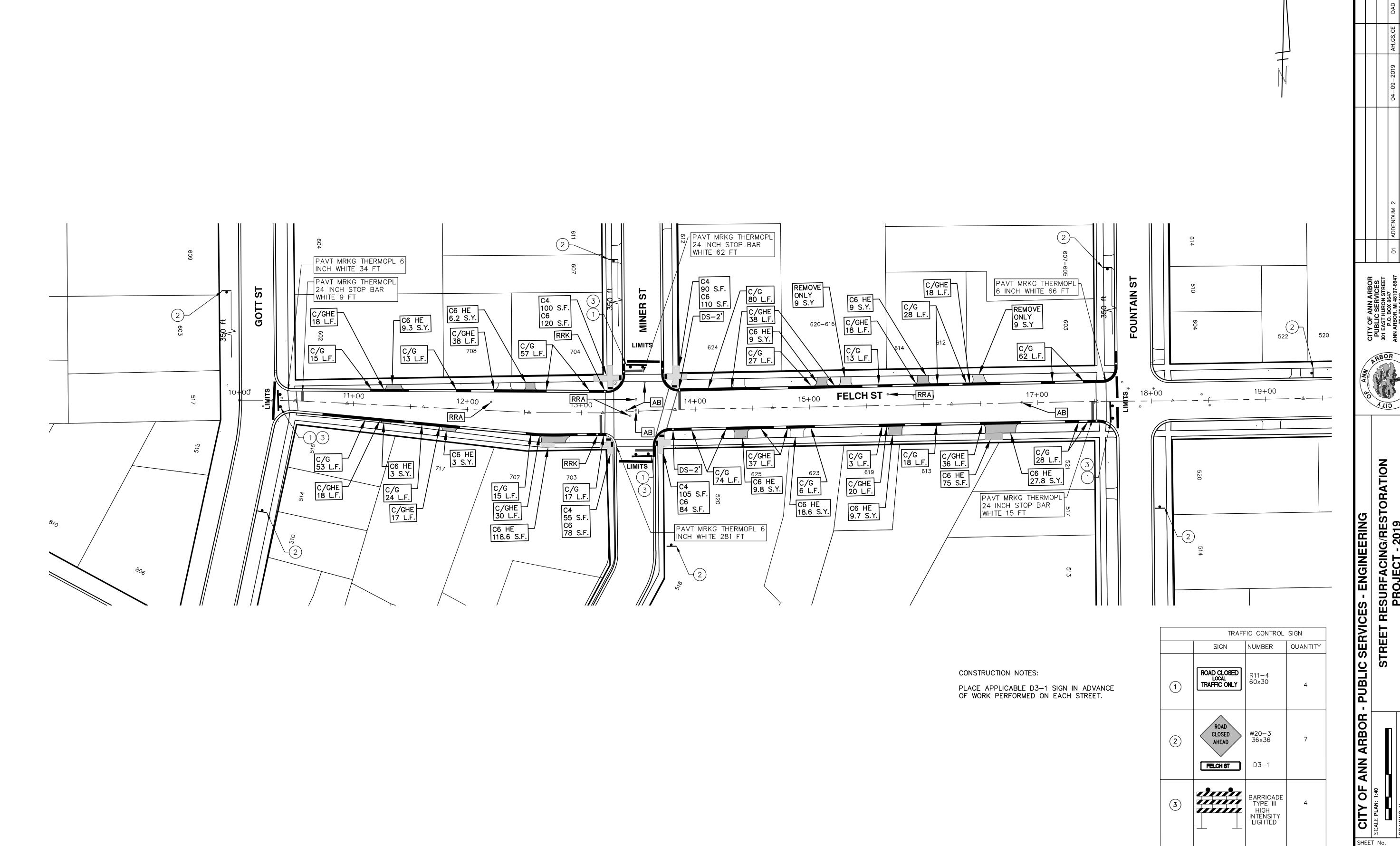




ET RESURFACING/RESTORATION
PROJECT - 2019
FELCH STREET
SUBSET COVER SHEET

SITY OF ANN ARB

SHEET No.

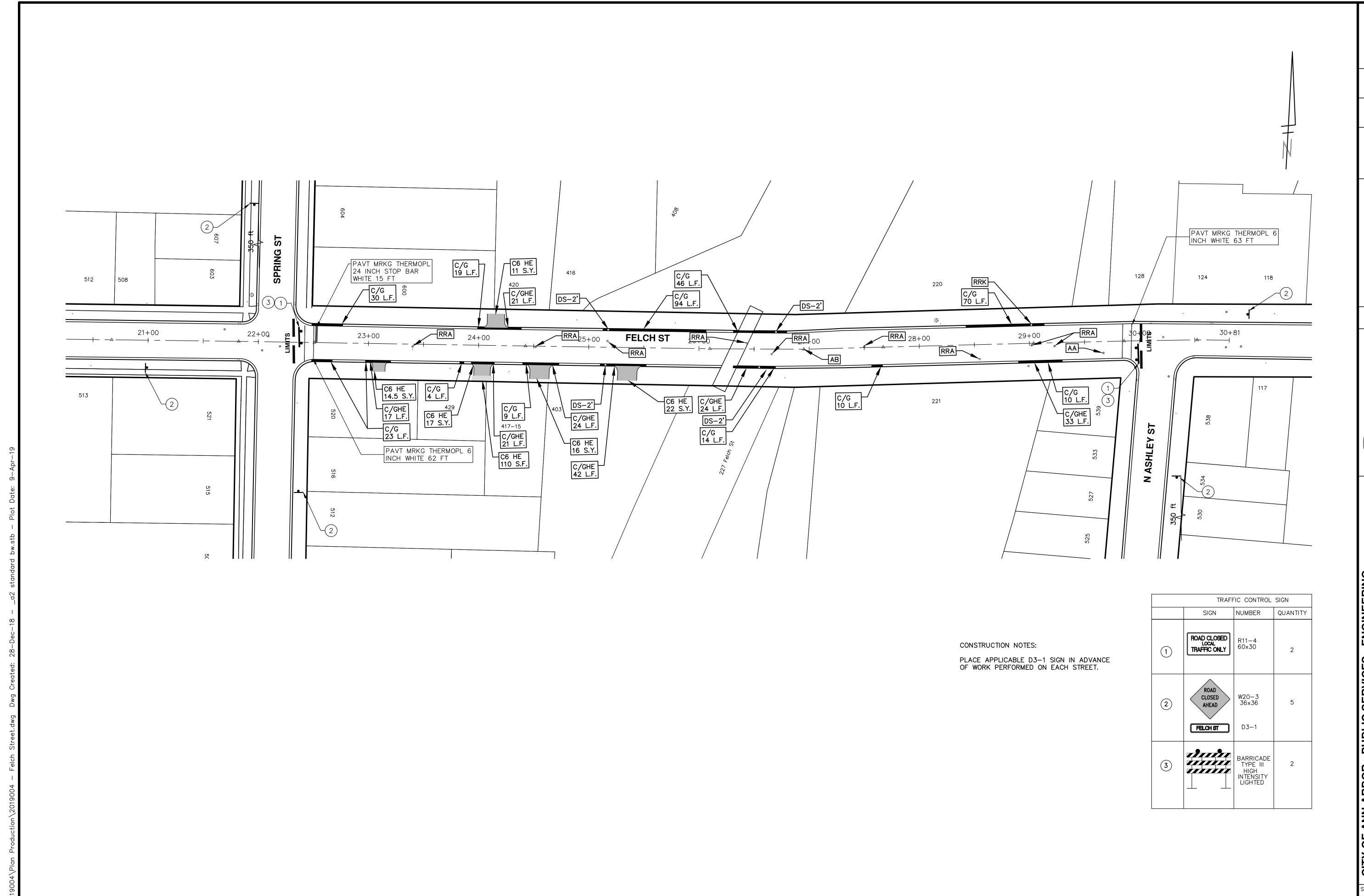


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1:40

DRAWING NO.

PROJECT - 2019
FELCH STREET
STA. 10+00 - STA. 18+50



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1:40

DRAWING NO.

PROJECT - 2019

FELCH STREET

STA. 21+50 - STA. 30+81

22 OF 112

DAD

Know what's **below.**Call before you d



CITY OF ANN ARBOR ENGINEERING

PROJECT LOCATION: FOUNTAIN STREET

ITB No. 4570 FILE No. 2019004

		QUANTITIES				
	Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special					
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)		
9.0	*D3-1	Street Name Sign	4.0	36		
10.0	R11-3a	Road Closed Local Traffic Only	12.5	125		
9.0	W20-3	Road Closed Ahead	9.0	81		
			TOTAL	242		

Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	1
2030015	Sewer, Rem, Less than 24 inch	Ft	18
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	3,40
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	90
2057011	Grading, Driveway Approach	Syd	85
2057011	_Grading, Sidewalk	Syd	2
2057011	_Grading, Sidewalk Ramp	Syd	8
2057011	_Machine Grading, Special	Syd	12,17
2057021	_Subgrade Undercutting, Type IIA	Cyd	1,21
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	2
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	18
4030200	Dr Structure, 24 inch dia	Ea	1
4037050	Dr Structure Cover, Type B, Modified	Ea	
4037050	Dr Structure Cover, Type K, Modified	Ea	2
4037050	Dr Structure, Adj, Case 1, Modified	Ea	3
4037050	Dr Structure, Temp Lowering, Modified	Ea	4
4037050	Structure, Reconstruct	Ea	
4047001	Underdrain, Subgrade, 6 inch, Special	Ft	44
5010002	Cold Milling HMA Surface	Syd	12,17
5010005	HMA Surface, Rem	Syd	43
5010025	Hand Patching	Ton	2
5010061	HMA, Approach	Ton	4
5010703	HMA, LVSP	Ton	2,82
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	2,02
5017031	HMA, Wedging, 36A	Ton	
6027021	Flowable Fill	Cyd	g
8017011		Syd	79
8027001	Curb and Gutter, Conc, Barrier	Ft	1,75
8027001	Driveway Opening, Conc, Det M, Modified	Ft	1,65
8030030	Curb Ramp Opening, Conc	Ft	10
8037001	Detectable Warning Surface, Modified	Ft	7
8037010	Sidewalk Ramp, Conc, 6 inch, Modified	Sft	76
8037010	Sidewalk, Conc, 4 inch, Modified	Sft	6
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	11
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	30
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	25
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	1
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	
8120250	Plastic Drum, High Intensity, Furn	Ea	20
8120251	Plastic Drum, High Intensity, Oper	Ea	20
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	20
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	20
8120352	Sign, Type B, Temp, Prismatic, Oper	Sft	3
8120353	Sign, Type B, Temp, Prismatic, Special, Pulli	Sft	3
8127050	Temporary No Parking Sign	Ea	
8127050	Pedestrian Type II Barricade, Temp	Ea	10 1
	·		
8167011	_Slope Restoration	Syd	1,36
8217050	_Monument Box, Adj	Ea	

KEY	ASSOCIATED PAY ITEM(S)
	• _Dr Structure, Adj, Case 1, Modified
AA	• Dr Structure, Adj, Case 2, Modified
	Dr Structure, Temp Lowering, Modified
	Dr Structure, Temp Lowering, Modified
A D	• Gate Box, Adj, Case 1
AB	Gate Box, Adj, Case 2
	Monument Box Adjust
ADST	Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4	• _Grading, Sidewalk
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4HE	• _Grading, Sidewalk
OHIL	Cement
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	• _Grading, Sidewalk
C6	• _Grading, Sidewalk Ramp
- -	• _Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C8	• _Grading, Driveway Approach
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	• _Grading, Driveway Approach
	• _Grading, Sidewalk
	Grading, Sidewalk RampCement
C HE	Driveway, Nonreinf Conc, 6 inch, Modified
	Driveway, Nonreinf Conc, 8 inch, Modified
	Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified
	Sidewalk, Conc, 6 inch, Modified Sidewalk, Conc, 6 inch, Modified
	Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/G	• Curb and Gutter, Conc
	Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	• Cement
	Driveway Opening, Conc, Det M, Modified
CD	• Grading, Sidewalk
CP	Sidewalk, Conc, 4 inch, Modified Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch
	Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	Sewer, Rem, Less than 24 inch
	• _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
	Dr Structure Cover, Type B
RRA	• _Dr Structure Cover, Type B, Special
	• _Dr Structure, Adj, Case 1, Modified
	• _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K
	• _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn
	Plastic Drum, High Intensity, Lighted, Oper
YPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper

CONSTRUCTION SCOPE AND SEQUENCING

ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES. BUT IS NOT LIMITED TO. THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE

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- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO
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- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

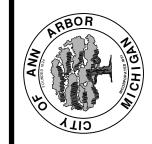
FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS 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.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

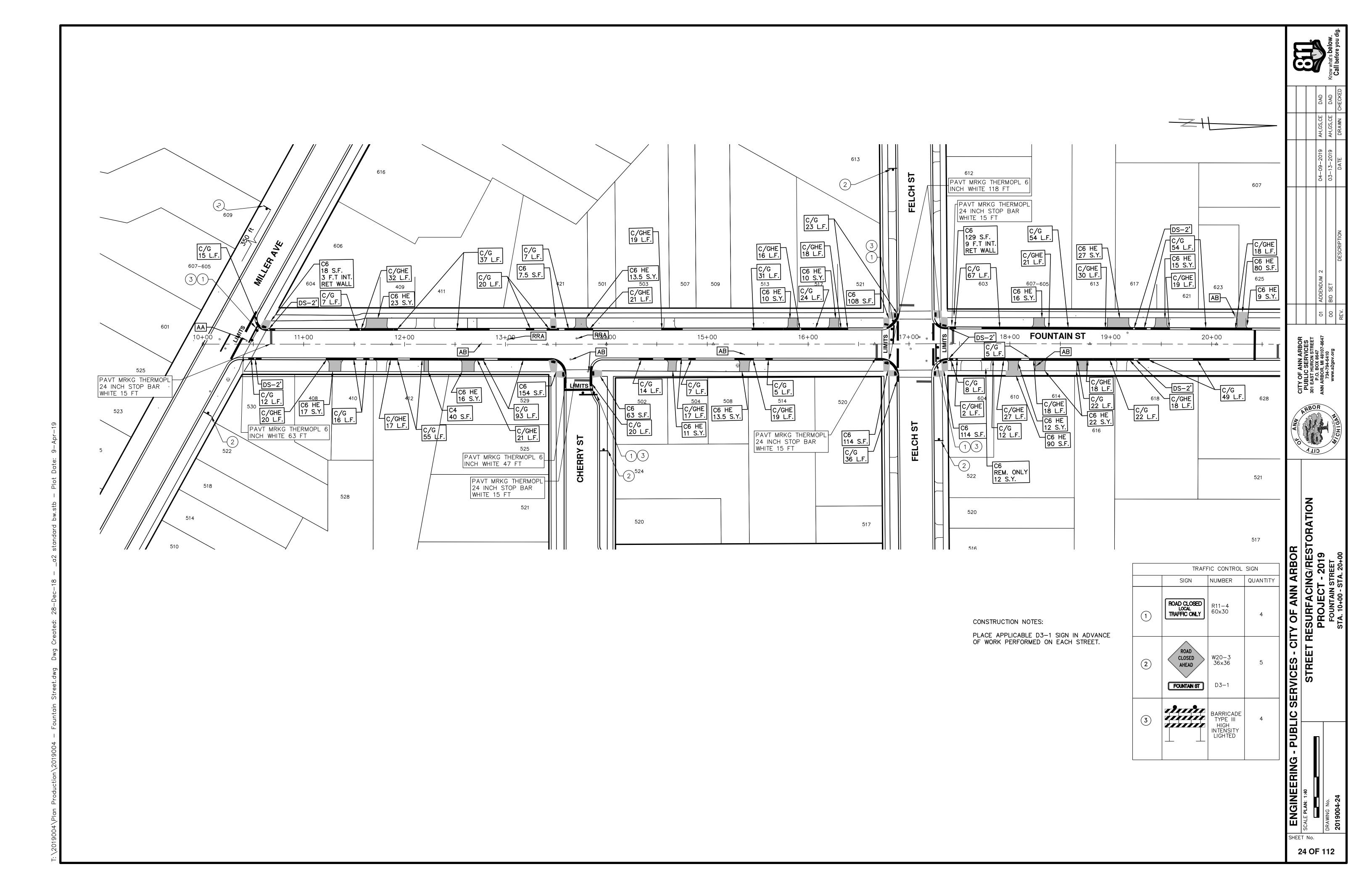


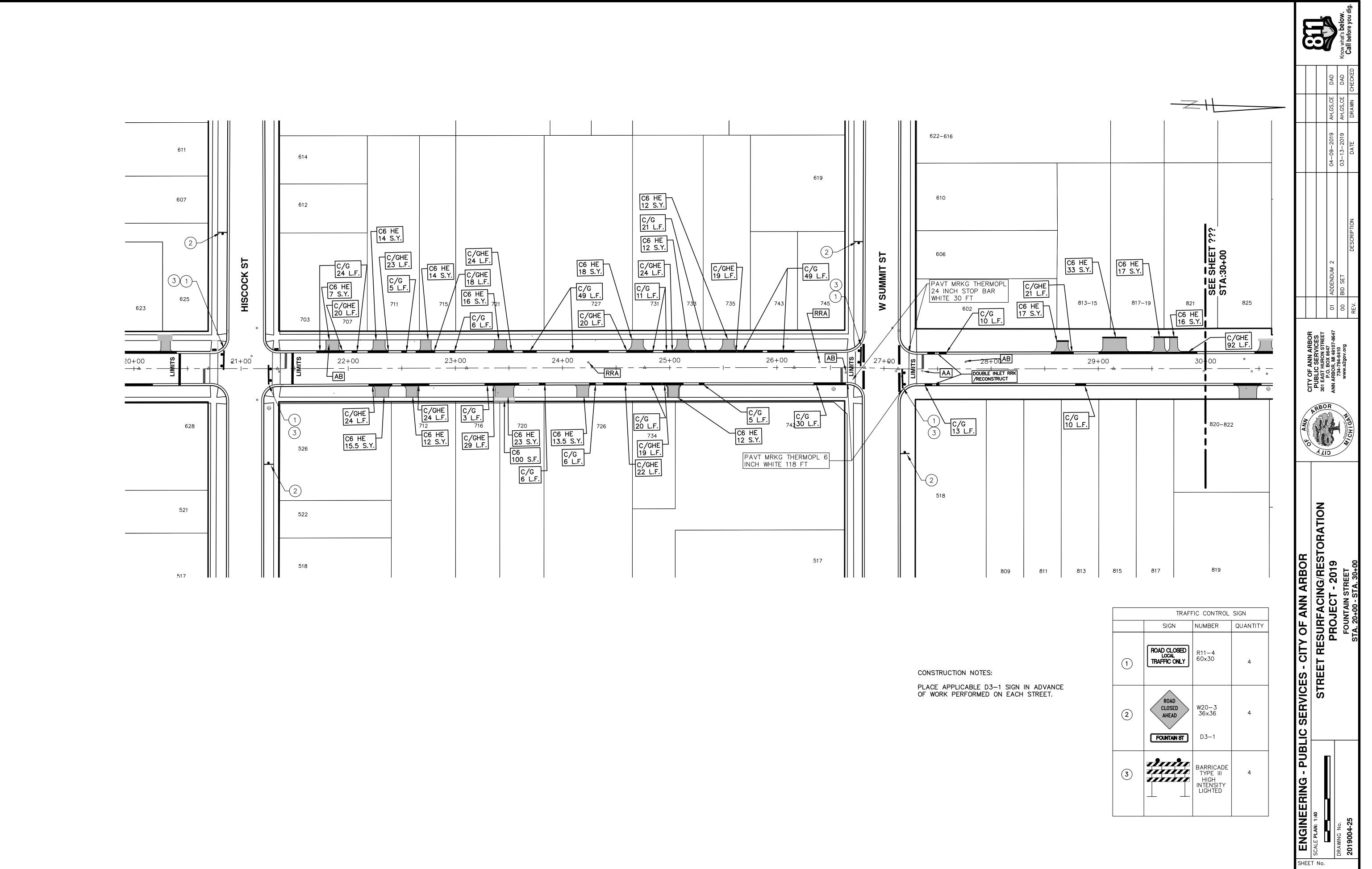
CHECK	DRAWN CHECK	DATE	DESCRIPTION	REV.
DAC	AH,GS,CE	03-13-2019	00 BID SET	00
DAC	AH,GS,CE	04-09-2019	01 ADDENDUM 2	10

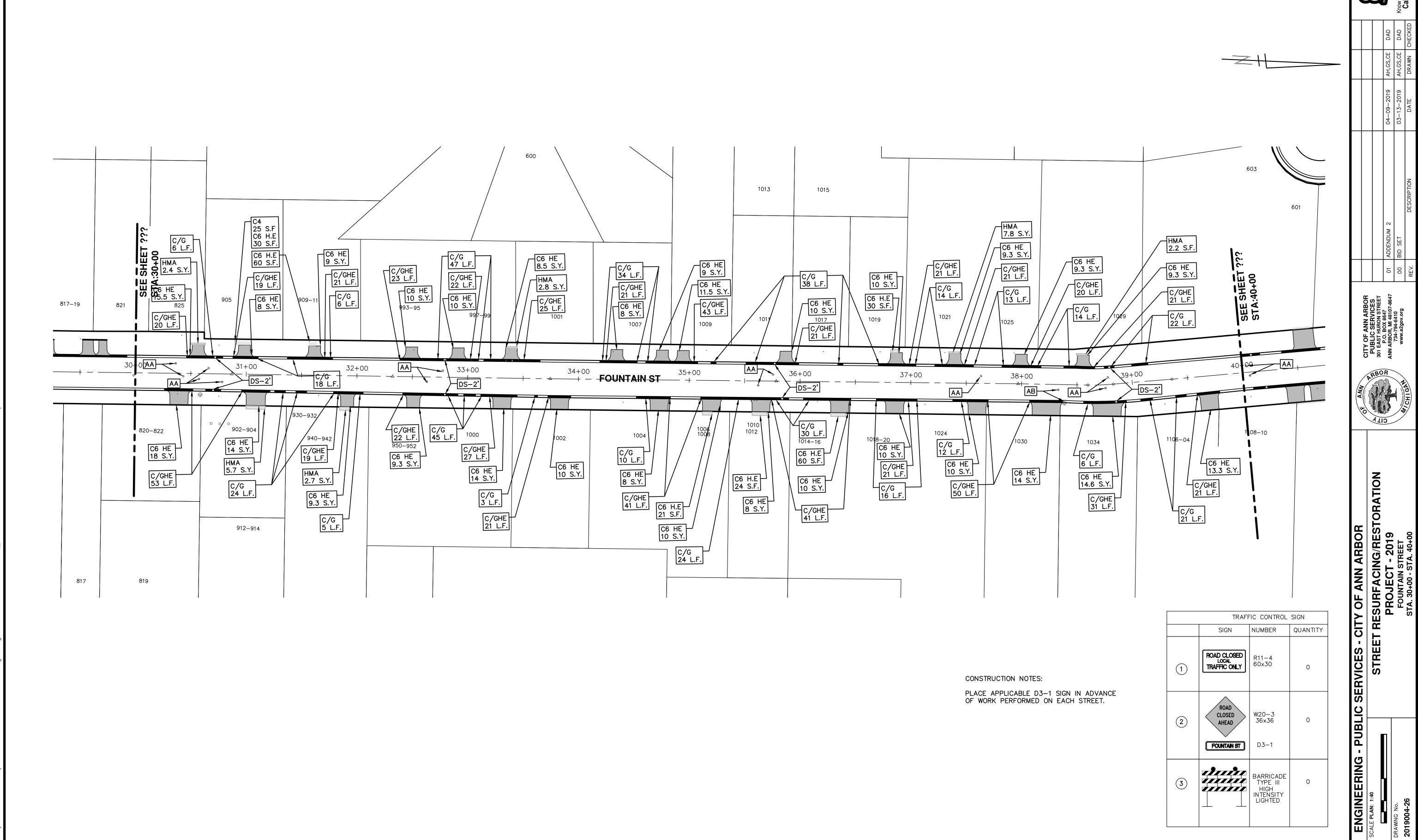


JE ANN ARBOR
JRFACING/REST
ROJECT - 2019
COUNTAIN STREET
BEST COVER SHEET

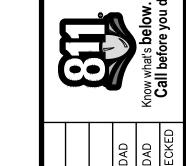
SHEET No.

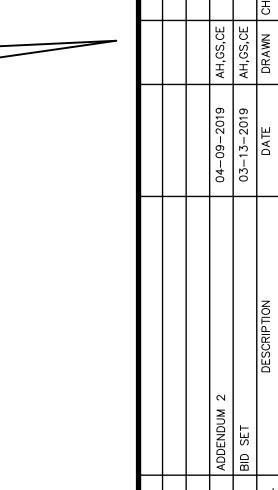


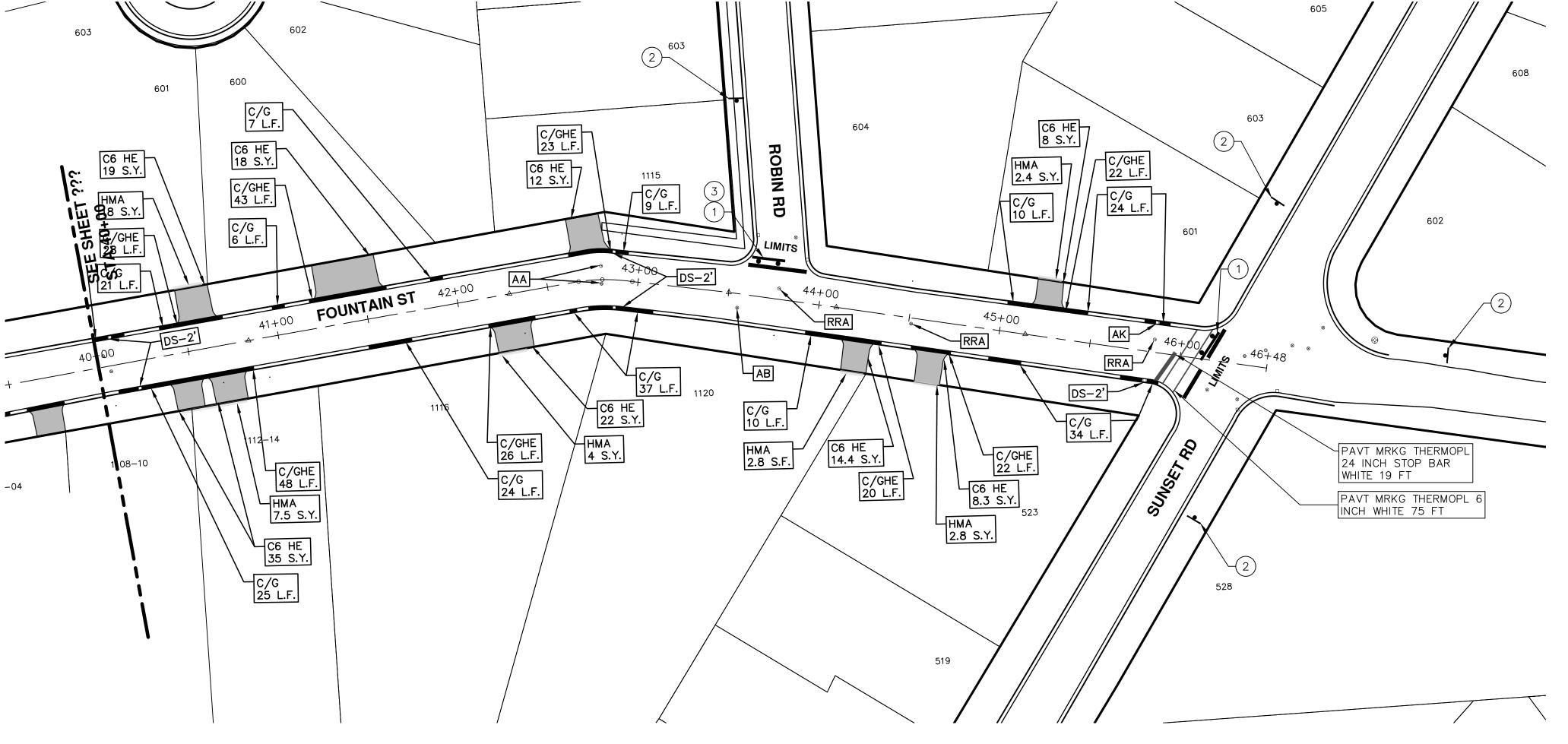




SHEET No. 26 OF 112







	TRAFF	TIC CONTROL	SIGN	
	SIGN	NUMBER	QUANTITY	
1	ROAD CLOSED LOCAL TRAFFIC ONLY	R11-4 60x30	2	
2	ROAD CLOSED AHEAD FOUNTAIN ST	W20-3 36×36 D3-1	4	
3		BARRICADE TYPE III HIGH INTENSITY LIGHTED	4	

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

DRAWING NO.

PROJECT - 2019

FOUNTAIN STREET

STA. 40+00 - STA. 46+48

Z



CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: GOTT STREET

ITB No. 4570 FILE No. 2019004

	QUANTITIES						
Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special							
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)			
10.0	*D3-1	Street Name Sign	4.0	40			
7.0	R11-3a	Road Closed Local Traffic Only	12.5	88			
10.0	W20-3	Road Closed Ahead	9.0	90			
			ΤΟΤΔΙ	218			

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	9
2030015	Sewer, Rem, Less than 24 inch	Ft	90
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	2,202
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	143
2057011	_Grading, Driveway Approach	Syd	18
2057011	_Grading, Sidewalk	Syd	95
2057011	_Grading, Sidewalk Ramp	Syd	22
2057011	_Machine Grading, Special	Syd	5,908
2057021	_Subgrade Undercutting, Type IIA	Cyd	591
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	24
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	90
4030200	Dr Structure, 24 inch dia	Ea	9
4037050	_Dr Structure Cover, Type B, Modified	Ea	5
4037050	_Dr Structure Cover, Type K, Modified	Ea	9
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	7
4037050	_Dr Structure, Point	Ea	1
4037050	_Dr Structure, Temp Lowering, Modified	Ea	17
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	180
5010002	Cold Milling HMA Surface	Syd	5,908
5010005	HMA Surface, Rem	Syd	246
5010025	Hand Patching	Ton	10
5010061	HMA, Approach	Ton	80
5010703	HMA, LVSP	Ton	1,370
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	4
5017031	_HMA, Wedging, 36A	Ton	8
6027021	_Flowable Fill	Cyd	61
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	16
8027001	_Curb and Gutter, Conc, Barrier	Ft	1,462
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	740
8030030	Curb Ramp Opening, Conc	Ft	28
8037001	_Detectable Warning Surface, Modified	Ft	20
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	200
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	381
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	474
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	178
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	59
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	7
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	7
8120250	Plastic Drum, High Intensity, Furn	Ea	132
8120251	Plastic Drum, High Intensity, Oper	Ea	132
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	178
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	178
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	40
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	40
8127050	_Temporary No Parking Sign	Ea	48
8127050	_Pedestrian Type II Barricade, Temp	Ea	2
8167011	_Slope Restoration	Syd	881
8230/31	Cate Box Adi Case 1	Fa	10

Ea

8230431 Gate Box, Adj, Case 1

KEY	ASSOCIATED PAY ITEM(S)	
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified 	
АВ	• _Gate Box, Adj, Case 2 • _Monument Box Adjust	
ADST	• _Dr Structure, Adj, Add Depth, Modified	
AK	• _Dr Structure, Adj, Case 1, Modified	
C4	• _Sidewalk, Conc, 4 inch, Modified	
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified 	
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified 	
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified	
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified 	
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem _Curb and Gutter, Conc	
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified 	
СР	_Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified	
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia	
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet	
PT	• _Dr Structure, Point	
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified 	
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified	
RS	Dr Structure, Reconstruct	
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper	
TYPE III	 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper 	
MBX	Post, Mailbox	
HMA/SR	• _HMA Surface, Rem	
MMA/APR	_HMA ApproachGrading, Driveway Approach	

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO
- INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
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- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

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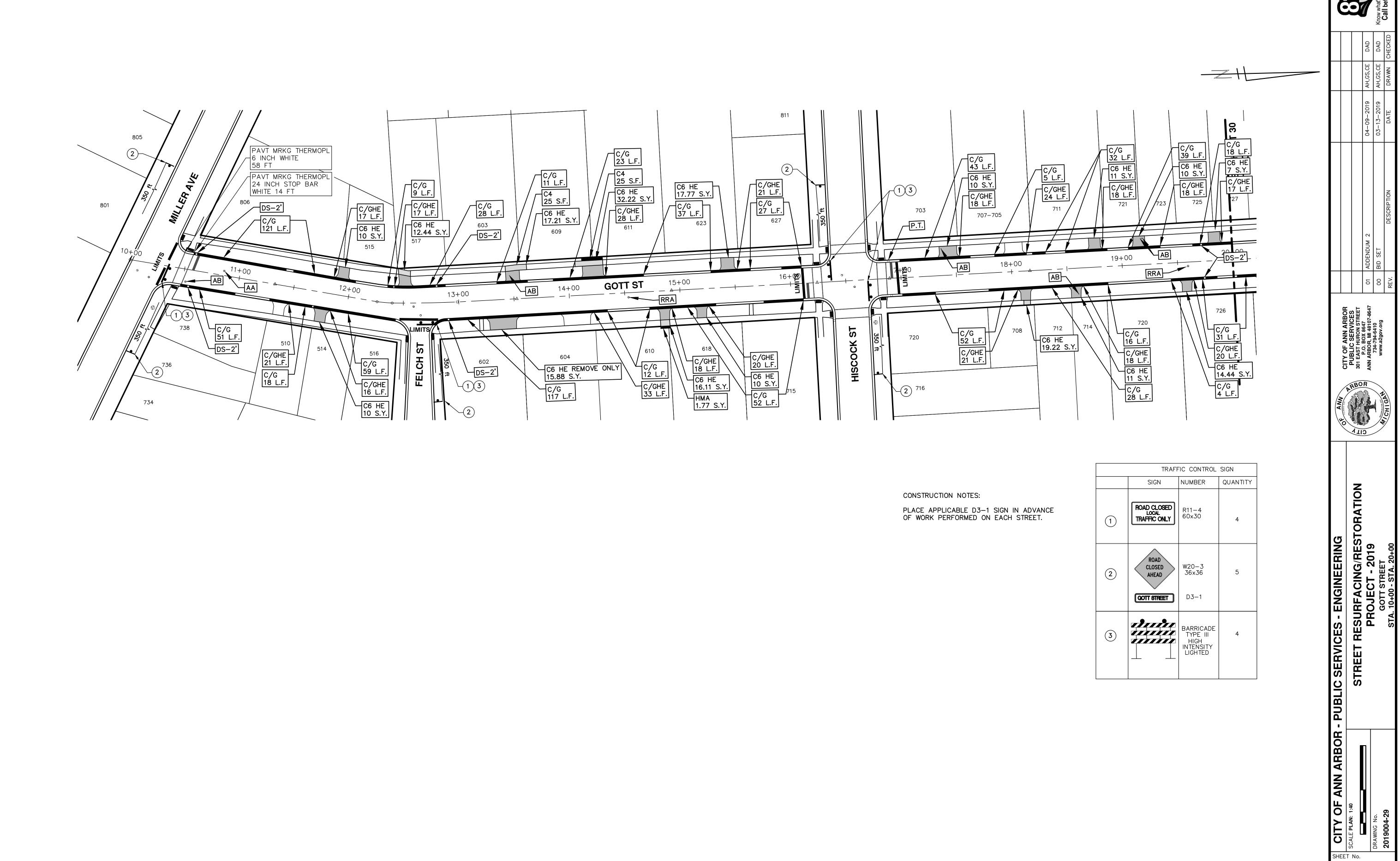
CHECKI	DRAWN CHECKI	DATE	DESCRIPTION	REV.
DAD	AH,GS,CE	03-13-2019	00 BID SET	00
DAD	AH,GS,CE	04-09-2019	01 ADDENDUM 2	10

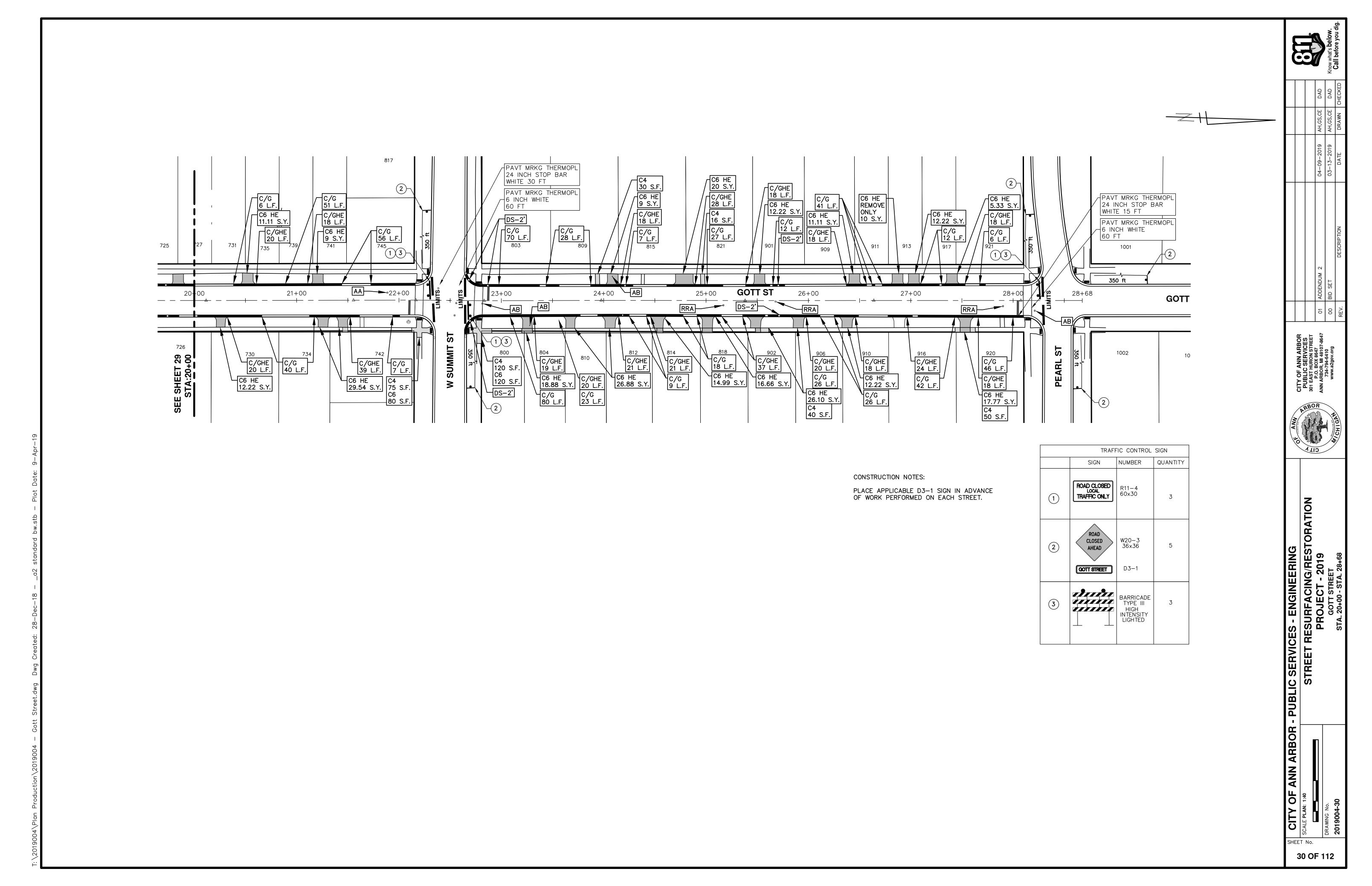


ESURFACING/REST
PROJECT - 2019
GOTT STREET
SUBSET COVER SHEET

ARBO

SHEET No.







CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: HILLCREST DRIVE

ITB No. 4570 FILE No. 2019004

		QUANTITIES				
	Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special					
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)		
2.0	*D3-1	Street Name Sign	4.0	8		
1.0	R11-3a	Road Closed Local Traffic Only	12.5	13		
2.0	W20-3	Road Closed Ahead	9.0	18		
			TOTAL	39		

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	1
2030015	Sewer, Rem, Less than 24 inch	Ft	10
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	202
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	54
2057011	_Grading, Driveway Approach	Syd	41
2057011	_Grading, Sidewalk	Syd	13
2057011	_Machine Grading, Special	Syd	812
2057021	_Subgrade Undercutting, Type IIA	Cyd	81
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	2
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	10
4030200	Dr Structure, 24 inch dia	Ea	1
4037050	_Dr Structure Cover, Type K, Modified	Ea	1
4037050	_Dr Structure, Temp Lowering, Modified	Ea	1
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	20
5010002	Cold Milling HMA Surface	Syd	812
5010005	HMA Surface, Rem	Syd	22
5010703	HMA, LVSP	Ton	190
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	1
5017031	_HMA, Wedging, 36A	Ton	8
6027021	_Flowable Fill	Cyd	6
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	41
8027001	_Curb and Gutter, Conc, Barrier	Ft	36
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	166
8030030	Curb Ramp Opening, Conc	Ft	7
8037001	_Detectable Warning Surface, Modified	Ft	5
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	96
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	18
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	53
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	2
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	2
8120250	Plastic Drum, High Intensity, Furn	Ea	12
8120251	Plastic Drum, High Intensity, Oper	Ea	12
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	31
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	31
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	8
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	8
8127050	_Temporary No Parking Sign	Ea	7
8127050	_Pedestrian Type II Barricade, Temp	Ea	2
8167011	_Slope Restoration	Syd	81
8230431	Gate Box, Adj, Case 1	Ea	1

VEV	CONSTRUCTION KEY	
KEY	ASSOCIATED PAY ITEM(S)	
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified 	
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust 	
ADST	_Dr Structure, Adj, Add Depth, Modified	
AK	• _Dr Structure, Adj, Case 1, Modified	
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified 	
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified 	
C6	 _Sidewalk, Conc, 4 inch, Modified _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified 	
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified	
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified 	
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem _Curb and Gutter, Conc	
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified 	
СР	_Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified	
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia	
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet	
PT	• _Dr Structure, Point	
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified 	
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified	
RS	• _Dr Structure, Reconstruct	
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper	
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	
MBX	Post, Mailbox	
HMA/SR	• _HMA Surface, Rem	
MMA/APR	• _HMA Approach	

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
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- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

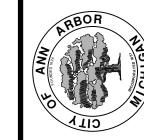
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Know what's below.

	04-09-2019 AH,GS,CE DAD	03-13-2019 AH,GS,CE DAD	TION DATE DRAWN CHECKE	
	04-09-2	03–13–2	DATE	
	01 ADDENDUM 2	00 BID SET	DESCRIPTION	
5	5	00	REV.	

CITY OF ANN ARBC PUBLIC SERVICE: 301 EAST HURON STRE P.O. BOX 8647 ANN ARBOR, MI 48107-8 734-794-6410 www.a2gov.org



S - ENGINEERING

SURFACING/RESTORATION

PROJECT - 2019

HILLCREST DRIVE

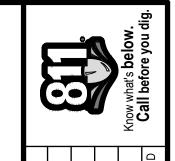
SUBSET COVER SHEET

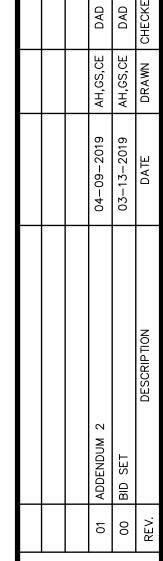
R - PUBLIC SERVICES - ENG STREET RESURFA PROJE

OF ANN ARBOR - PUBI

SCALE: NTS
DRAWING NO

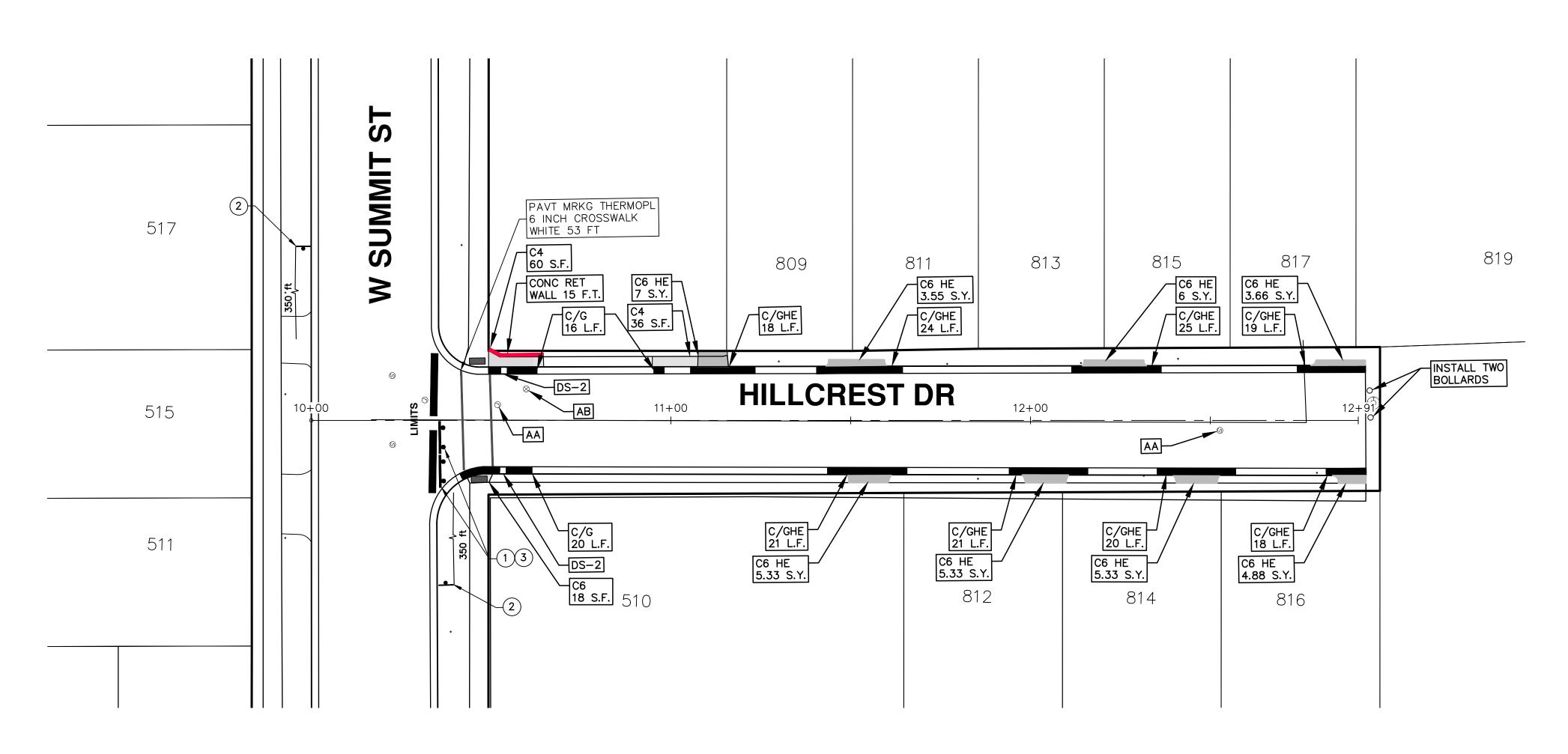
SHEET No.







CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERINGSCALE PLAN: 1" = 20'STREET RESURFACING/RESTORATIODRAWING No.PROJECT - 20192019004-32STA. 10+00 - STA. 12+91



CONSTRUCTION NOTES:

PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET.

	TRAFF	TIC CONTROL	SIGN
	SIGN	NUMBER	QUANTITY
1)	ROAD CLOSED LOCAL TRAFFIC ONLY	R11-4 60x30	1
2	ROAD CLOSED AHEAD HILLCREST DR	W20-3 36x36 D3-1	2
3		BARRICADE TYPE III HIGH INTENSITY LIGHTED	2



CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: HISCOCK STREET

ITB No. 4570 FILE No. 2019004

	QUANTITIES Sign Type P. Temp Prismatic 2 *Sign Type P. Temp Prismatic Special				
Quantity	Sign Code	Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special Description	Area (sft)	Total Area (Sft)	
7.0	*D3-1	Street Name Sign	4.0	28	
3.0	R11-3a	Road Closed Local Traffic Only	12.5	38	
7.0	W20-3	Road Closed Ahead	9.0	63	
			TOTAL	129	

	QUANTITIES				
Item Code	Item Description	Unit	Quantity		
2030011	Dr Structure, Rem	Ea	7		
2030015	Sewer, Rem, Less than 24 inch	Ft	70		
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	779		
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	107		
2057011	_Grading, Driveway Approach	Syd	94		
2057011	_Grading, Sidewalk	Syd	16		
2057011	_Grading, Sidewalk Ramp	Syd	6		
2057011	_Machine Grading, Special	Syd	4,070		
2057021	_Subgrade Undercutting, Type IIA	Cyd	407		
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	7		
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	70		
4030200	Dr Structure, 24 inch dia	Ea	7		
4037050	Dr Structure Cover, Type B, Modified	Ea	11		
4037050		Ea	7		
4037050	Dr Structure, Adj, Case 1, Modified	Ea	11		
4037050	Dr Structure, Temp Lowering, Modified	Ea	14		
4047001	Underdrain, Subgrade, 6 inch, Special	Ft	140		
5010002	Cold Milling HMA Surface	Syd	4,070		
5010005	HMA Surface, Rem	Syd	96		
5010025	Hand Patching	Ton	10		
5010061	HMA, Approach	Ton	20		
5010703	HMA, LVSP	Ton	950		
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	2		
5017031	HMA, Wedging, 36A	Ton	8		
6027021	Flowable Fill	Cyd	22		
8017011	Driveway, Nonreinf Conc, 6 inch, Modified	Syd	85		
8027001	_Curb and Gutter, Conc, Barrier	Ft	380		
8027001	Driveway Opening, Conc, Det M, Modified	Ft	399		
8030030	Curb Ramp Opening, Conc	Ft	7		
8037001	Detectable Warning Surface, Modified	Ft	5		
8037010	Sidewalk Ramp, Conc, 6 inch, Modified	Sft	50		
8037010	Sidewalk, Conc, 4 inch, Modified	Sft	145		
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	64		
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	12		
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	4		
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Puri	Ea	4		
8120250	Plastic Drum, High Intensity, Furn	Ea	47		
8120251	Plastic Drum, High Intensity, Puri	Ea	47		
8120251	Sign, Type B, Temp, Prismatic, Furn	Sft	101		
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	101		
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	28		
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	28		
8127050	_Temporary No Parking Sign	Ea	30		
8127050	Pedestrian Type II Barricade, Temp	Ea	2		
8167011	_Slope Restoration	Syd	312		
8230431	Gate Box, Adj, Case 1	Ea	3		

KEY	CONSTRUCTION KEY ASSOCIATED PAY ITEM(S)
KEY	· ,
AA	_Dr Structure, Adj, Case 1, Modified_Dr Structure, Adj, Case 2, Modified_Dr Structure, Temp Lowering, Modified
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 Monument Box Adjust
ADST	Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	_Curb, Gutter, and Curb and Gutter, Any Type, RemCement_Driveway Opening, Conc, Det M, Modified
СР	Grading, Sidewalk Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, Rem Sewer, Rem, Less than 24 inch Dr Structure, 24 inch dia
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified
RS	_Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, FurnPlastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
MMA/APR	_HMA Approach _Grading, Driveway Approach

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

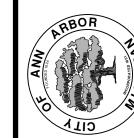
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

Know what's below.

01	01 ADDENDUM 2	04-09-2019	AH,GS,CE	DAD
00	00 BID SET	03-13-2019	AH,GS,CE	DAD
REV.	DESCRIPTION	DATE	DRAWN CHECKI	CHECKI

CITY OF ANN ARBC PUBLIC SERVICES 301 EAST HURON STRE P.O. BOX 8647 ANN ARBOR, MI 48107-86 734-794-6410 www.a2gov.org



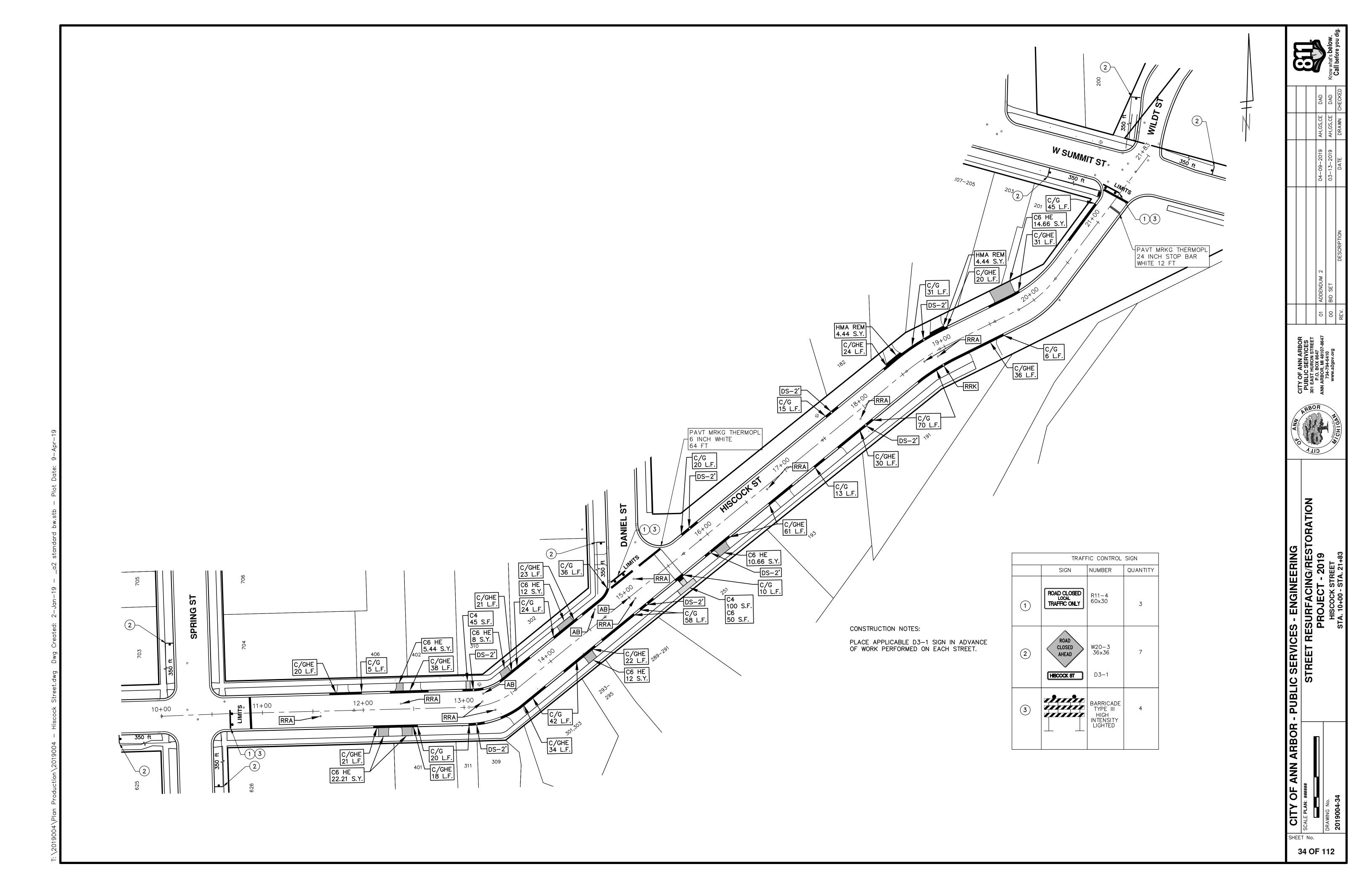
ES - ENGINEERING
ESURFACING/RESTORATION
PROJECT - 2019
HISCOCK STREET
SUBSET COVER SHEET

ARBOR - PUBLIC SERVICES
STREET RES
P

CITY OF ANN AF

SCA

SHEET No.





CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: MINER STREET

ITB No. 4570 FILE No. 2019004

	QUANTITIES Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special				
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)	
9.0	*D3-1	Street Name Sign	4.0	36	
7.0	R11-3a	Road Closed Local Traffic Only	12.5	88	
9.0	W20-3	Road Closed Ahead	9.0	81	
			TOTAL	205	

QUANTITIES				
Item Code	Item Description	Unit	Quantity	
2030011	Dr Structure, Rem	Ea	3	
2030015	Sewer, Rem, Less than 24 inch	Ft	30	
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	2,306	
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	725	
2057011	_Grading, Driveway Approach	Syd	569	
2057011	_Grading, Sidewalk	Syd	72	
2057011	_Grading, Sidewalk Ramp	Syd	27	
2057011	_Machine Grading, Special	Syd	6,607	
2057021	_Subgrade Undercutting, Type IIA	Cyd	661	
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	8	
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	30	
4030200	Dr Structure, 24 inch dia	Ea	3	
4037050	Dr Structure Cover, Type B, Modified	Ea	8	
4037050	Dr Structure Cover, Type K, Modified	Ea	3	
4037050	Dr Structure, Adj, Case 1, Modified	Ea	14	
4037050	Dr Structure, Temp Lowering, Modified	Ea	20	
4047001	Underdrain, Subgrade, 6 inch, Special	Ft	60	
5010002	Cold Milling HMA Surface	Syd	6,607	
5010005	HMA Surface, Rem	Syd	258	
5010025	Hand Patching	Ton	10	
5010061	HMA, Approach	Ton	10	
5010703	HMA, LVSP	Ton		
5017031	Cold Milling for Concrete Curb and Gutter Reveal	Ton	1,530 5	
5017031	HMA, Wedging, 36A	Ton	8	
6027021	Flowable Fill		64	
8017011	Driveway, Nonreinf Conc, 6 inch, Modified	Cyd	566	
	Driveway, Norment Conc, 6 inch, Modified	Syd Ft	1,353	
8027001			93	
8027001	Driveway Opening, Conc, Det M, Modified	Ft		
8030030	Curb Ramp Opening, Conc	Ft	35	
8037001	Detectable Warning Surface, Modified	Ft	25	
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	245	
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	400	
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	245	
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	136	
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	28	
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	7	
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	7	
8120250	Plastic Drum, High Intensity, Furn	Ea	138	
8120251	Plastic Drum, High Intensity, Oper	Ea	138	
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	169	
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	169	
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	36	
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	36	
8127050	_Temporary No Parking Sign	Ea	57	
8127050	_Pedestrian Type II Barricade, Temp	Ea	3	
8167011	_Slope Restoration	Syd	922	
8217050	_Monument Box, Adj	Ea	1	
8230431	Gate Box, Adj, Case 1	Ea	5	

KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
AB	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
СНЕ	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	Grading, Sidewalk Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K_Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
	HMA Approach

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

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- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO
- INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
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- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

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0	01 ADDENDUM 2	04-09-2019	AH,GS,CE	DAD
8	00 BID SET	03-13-2019	AH,GS,CE DAD	DAD
REV.	DESCRIPTION	DATE	DRAWN CHECKE	CHECKE

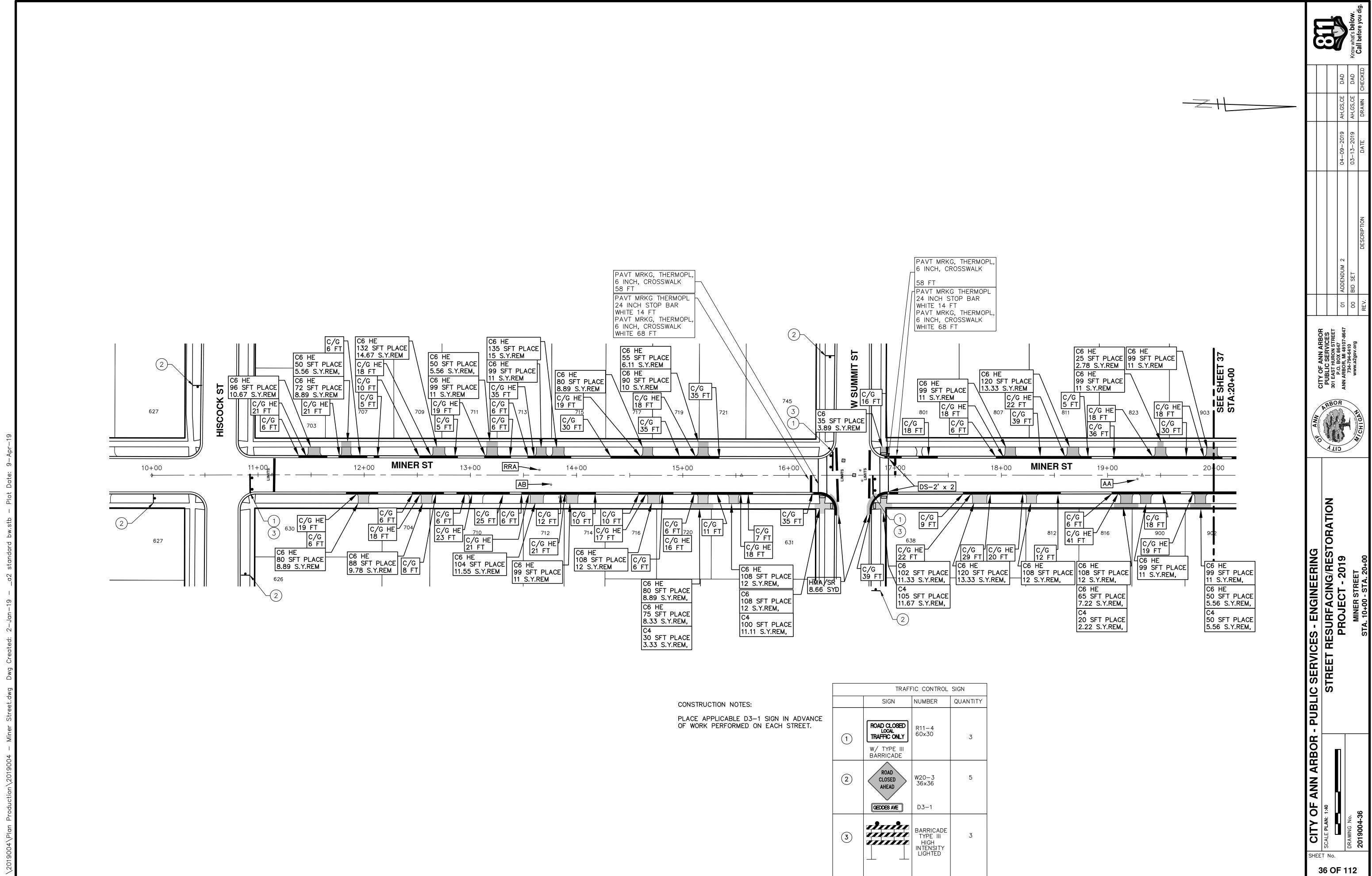


ESURFACING/REST PROJECT - 2019

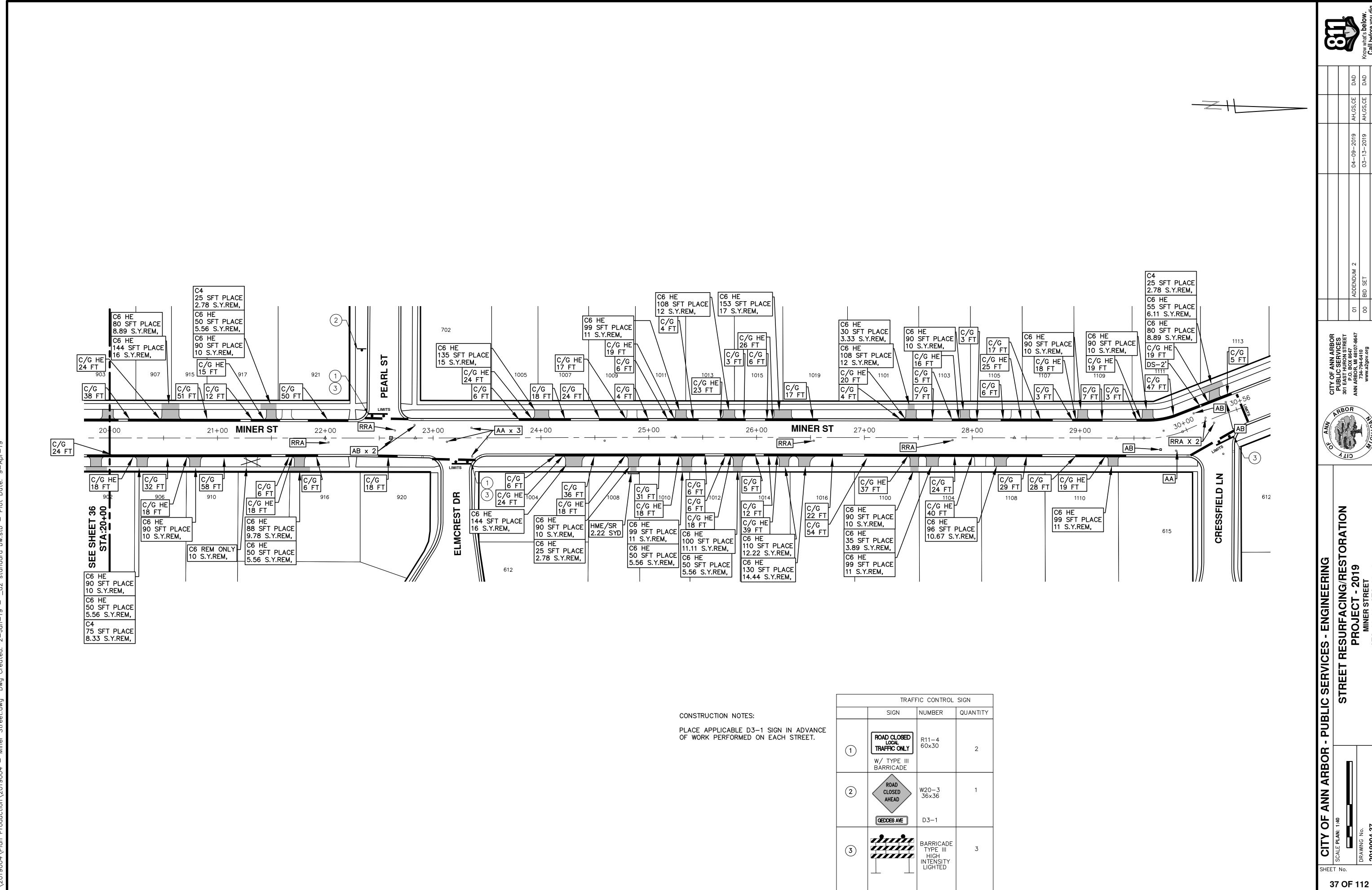
MINER STREET SUBSET COVER SHEET

ARBO

SHEET No.



SHEET No.



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1:40

DRAWING NO.

MINER STREET

STA. 20+00 - STA. 30+56



CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: PEARL STREET

ITB No. 4570 FILE No. 2019004

	QUANTITIES Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special					
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)		
6.0	*D3-1	Street Name Sign	4.0	24		
4.0	R11-3a	Road Closed Local Traffic Only	12.5	50		
6.0	W20-3	Road Closed Ahead	9.0	54		
	_		TOTAL	128		

QUANTITIES				
Item Code	Item Description	Unit	Quantity	
2030011	Dr Structure, Rem	Ea	•	
2030015	Sewer, Rem, Less than 24 inch	Ft	4	
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	46	
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	5	
2057011	_Grading, Driveway Approach	Syd	4	
2057011	_Grading, Sidewalk Ramp	Syd		
2057011	_Machine Grading, Special	Syd	1,97	
2057021	_Subgrade Undercutting, Type IIA	Cyd	19	
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea		
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	4	
4030200	Dr Structure, 24 inch dia	Ea		
4037050	_Dr Structure Cover, Type K, Modified	Ea		
4037050	_Dr Structure, Adj, Case 1, Modified	Ea		
4037050	_Dr Structure, Temp Lowering, Modified	Ea		
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	8	
5010002	Cold Milling HMA Surface	Syd	1,97	
5010005	HMA Surface, Rem	Syd	5	
5010061	HMA, Approach	Ton	2	
5010703	HMA, LVSP	Ton	46	
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton		
5017031	_HMA, Wedging, 36A	Ton		
6027021	_Flowable Fill	Cyd	1	
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	4	
8027001	_Curb and Gutter, Conc, Barrier	Ft	28	
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	17	
8030030	Curb Ramp Opening, Conc	Ft	1	
8037001	_Detectable Warning Surface, Modified	Ft	1	
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	7	
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	21	
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	5	
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea		
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea		
8120250	Plastic Drum, High Intensity, Furn	Ea	2	
8120251	Plastic Drum, High Intensity, Oper	Ea	2	
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	10	
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	10	
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	2	
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	2	
8127050	_Temporary No Parking Sign	Ea	1	
8127050	_Pedestrian Type II Barricade, Temp	Ea		
8167011	_Slope Restoration	Syd	18	
8230431	Gate Box, Adj, Case 1	Ea		

KEY	ASSOCIATED PAY ITEM(S)
	Dr Structure, Adj, Case 1, Modified
AA	Dr Structure, Adj, Case 2, Modified Dr Structure, Temp Lowering, Modified
AB	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Manufact Box Adjust
	Monument Box Adjust De Otherstone Adjust Booth Madified
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	_Curb, Gutter, and Curb and Gutter, Any Type, RemCement_Driveway Opening, Conc, Det M, Modified
СР	_Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia
DSDI	Dr Structure, RemSewer, Rem, Less than 24 inch_Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified
RS	_Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, FurnPlastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

Know what's below.

	DAD	DAD	DRAWN CHECKED	
	AH,GS,CE	AH,GS,CE DAD	DRAWN	
	04-09-2019	03-13-2019	DATE	
	ADDENDUM 2	BID SET	DESCRIPTION	
	=	0	>	

CITY OF ANN PUBLIC SEI 301 EAST HURO P.O. BOX ANN ARBOR, MI 734-794-6 www.a2go



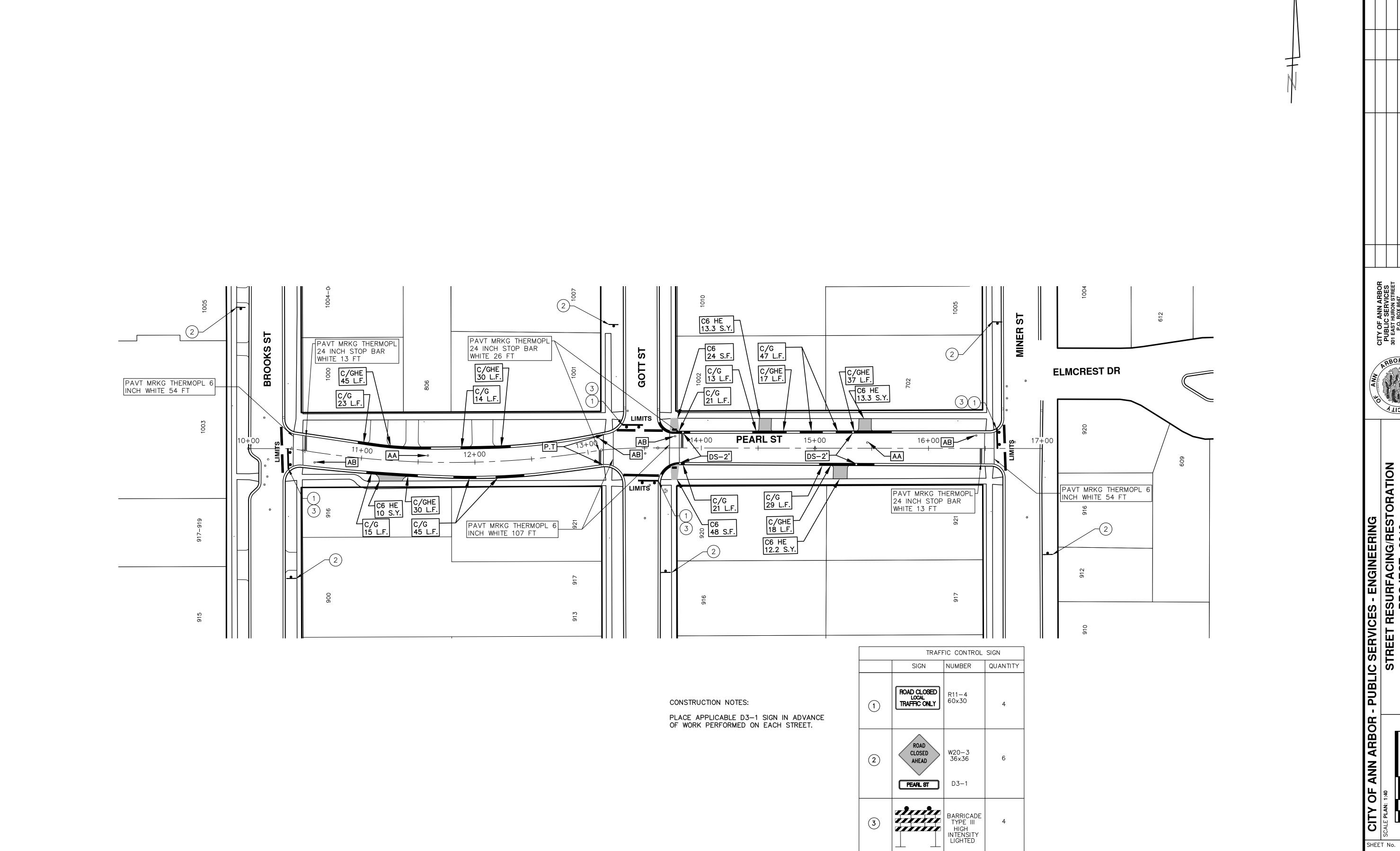
ES - ENGINEERING
RESURFACING/RESTORATIC
PROJECT - 2019
PEARL STREET
SUBSET COVER SHEET

ARBOR - PUBLIC SI

ALE: NTS

AWING No.

SHEET No.



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1:40

DRAWING NO.

PEARL STREET

PEARL STREET

PEARL STREET

PEARL STREET

S019004-39

STA. 10+00 - STA. 17+00



CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: SHERIDAN DRIVE

ITB No. 4570 FILE No. 2019004

CONSTRUCTION KEY

		QUANTITIES		
		Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
10.0	*D3-1	Street Name Sign	4.0	40
7.0	R11-3a	Road Closed Local Traffic Only	12.5	88
10.0	W20-3	Road Closed Ahead	9.0	90
			TOTAL	218

QUANTITIES								
Item Code	Item Description	Unit	Quantity					
2030011	Dr Structure, Rem	Ea	11					
2030015	Sewer, Rem, Less than 24 inch	Ft	110					
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,303					
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	178					
2057011	_Grading, Driveway Approach	Syd	222					
2057011	_Machine Grading, Special	Syd	6,865					
2057021	_Subgrade Undercutting, Type IIA	Cyd	686					
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	25					
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	110					
4030200	Dr Structure, 24 inch dia	Ea	11					
4037050	_Dr Structure Cover, Type B, Modified	Ea	18					
4037050	_Dr Structure Cover, Type K, Modified	Ea	21					
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	32					
4037050	_Dr Structure, Temp Lowering, Modified	Ea	27					
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	220					
5010002	Cold Milling HMA Surface	Syd	6,865					
5010005	HMA Surface, Rem	Syd	189					
5010025	Hand Patching	Ton	10					
5010061	HMA, Approach	Ton	50					
5010703	HMA, LVSP	Ton	1,590					
6027021	Flowable Fill	Cyd	36					
8017011	Driveway, Nonreinf Conc, 6 inch, Modified	Syd	178					
8027001	Curb and Gutter, Conc, Barrier	Ft	856					
8027001	Driveway Opening, Conc, Det M, Modified	Ft	447					
8037010	Sidewalk, Conc or Clay Brick Pavers, Rem and Reinstall	Sft	45					
8110195	Pavt Mrkg, Thermopl, 4 inch, White	Ft	204					
8110196	Pavt Mrkg, Thermopl, 4 inch, Yellow	Ft	408					
8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	96					
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	34					
8117050	Pavt Mrkg, Thermopl, Lt Turn Arrow Sym	Ea	2					
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	6					
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	6					
8120250	Plastic Drum, High Intensity, Furn	Ea	78					
8120251	Plastic Drum, High Intensity, Oper	Ea	78					
8120331	Sign, Portable, Changeable Message, Oper	Ea	2					
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	178					
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	178					
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	40					
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	40					
8127050	Temporary No Parking Sign	Ea	57					
8167011	Slope Restoration	Syd	521					
8230431	Gate Box, Adj, Case 1	Ea	521					

KEY	ASSOCIATED PAY ITEM(S)
A A	• _Dr Structure, Adj, Case 1, Modified
AA	• _Dr Structure, Adj, Case 2, Modified
	• _Dr Structure, Temp Lowering, Modified
	• _Dr Structure, Temp Lowering, Modified
AB	• _Gate Box, Adj, Case 1
	• _Gate Box, Adj, Case 2
	• _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4	• _Grading, Sidewalk
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4HE	• _Grading, Sidewalk
	• Cement
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	• _Grading, Sidewalk
C6	• _Grading, Sidewalk Ramp
	Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C8	• _Grading, Driveway Approach
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	• _Grading, Driveway Approach
	• _Grading, Sidewalk
	• _Grading, Sidewalk Ramp
C HE	• Cement
	• _Driveway, Nonreinf Conc, 6 inch, Modified
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C/G	• _Curb, Gutter, and Curb and Gutter, Any Type, Rem
	• _Curb and Gutter, Conc
0/0/-	- Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	• Cement
	Driveway Opening, Conc, Det M, Modified
CP	• _Grading, Sidewalk
	- Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
5.0	• Dr Structure, Rem
DS	• Sewer, Rem, Less than 24 inch
	Dr Structure, 24 inch dia
D05:	• Dr Structure, Rem
DSDI	• Sewer, Rem, Less than 24 inch
	Dr Structure, Double Inlet
PT	• _Dr Structure, Point
	• Dr Structure Cover, Type B
RRA	• _Dr Structure Cover, Type B, Special
-	• _Dr Structure, Adj, Case 1, Modified
	• _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K
	• _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn
	Plastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
11	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO. THE WORK ITEMS LISTED BELOW, PERFORM THE WORK IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO
- INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

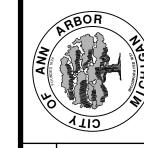
FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS 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.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

0	01 ADDENDUM 2	04-09-2019	AH,GS,CE	DAD
00	00 BID SET	03-13-2019	AH,GS,CE	DAD
EV.	DESCRIPTION	DATE	DRAWN CHECKE	CHECKEI

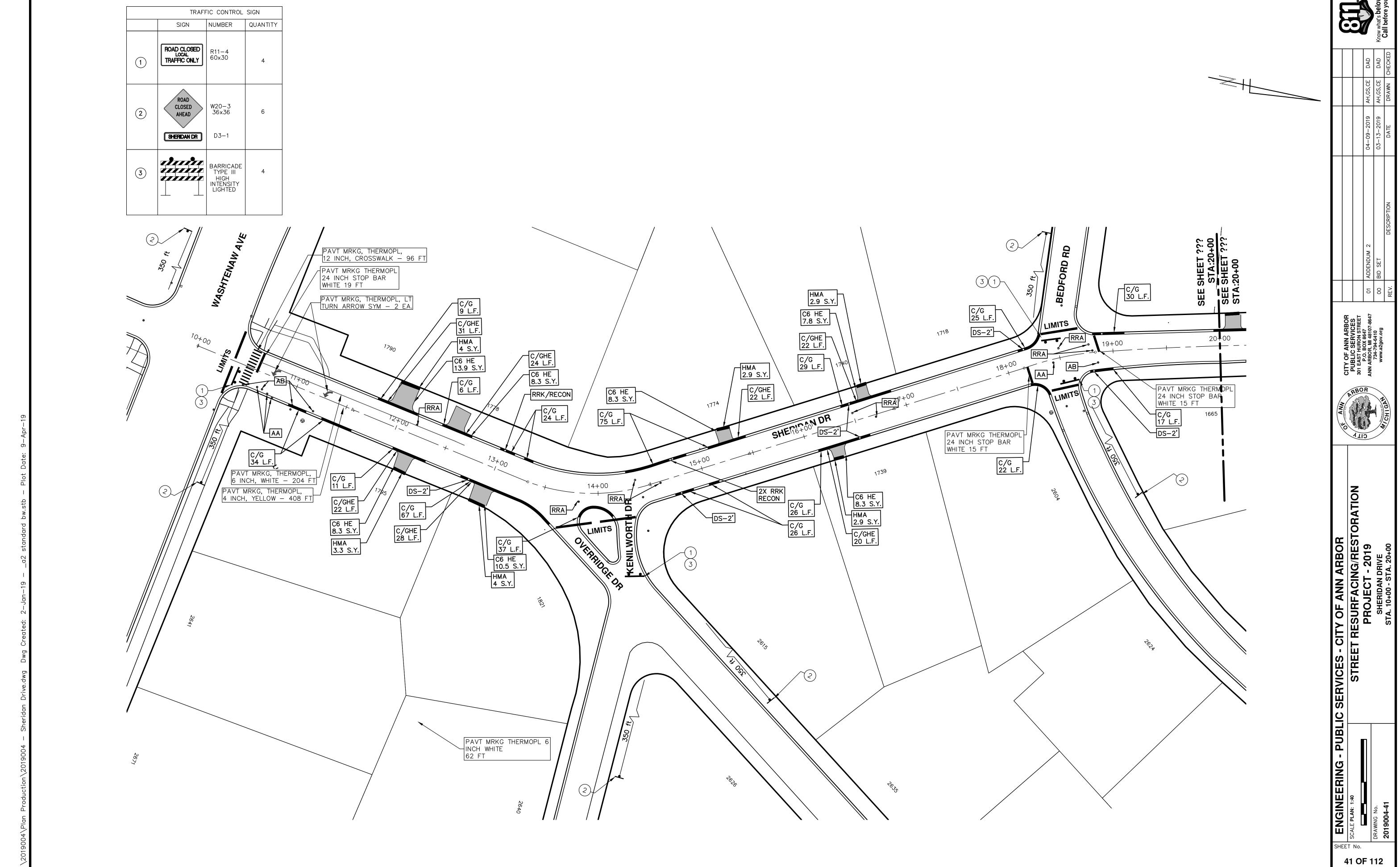


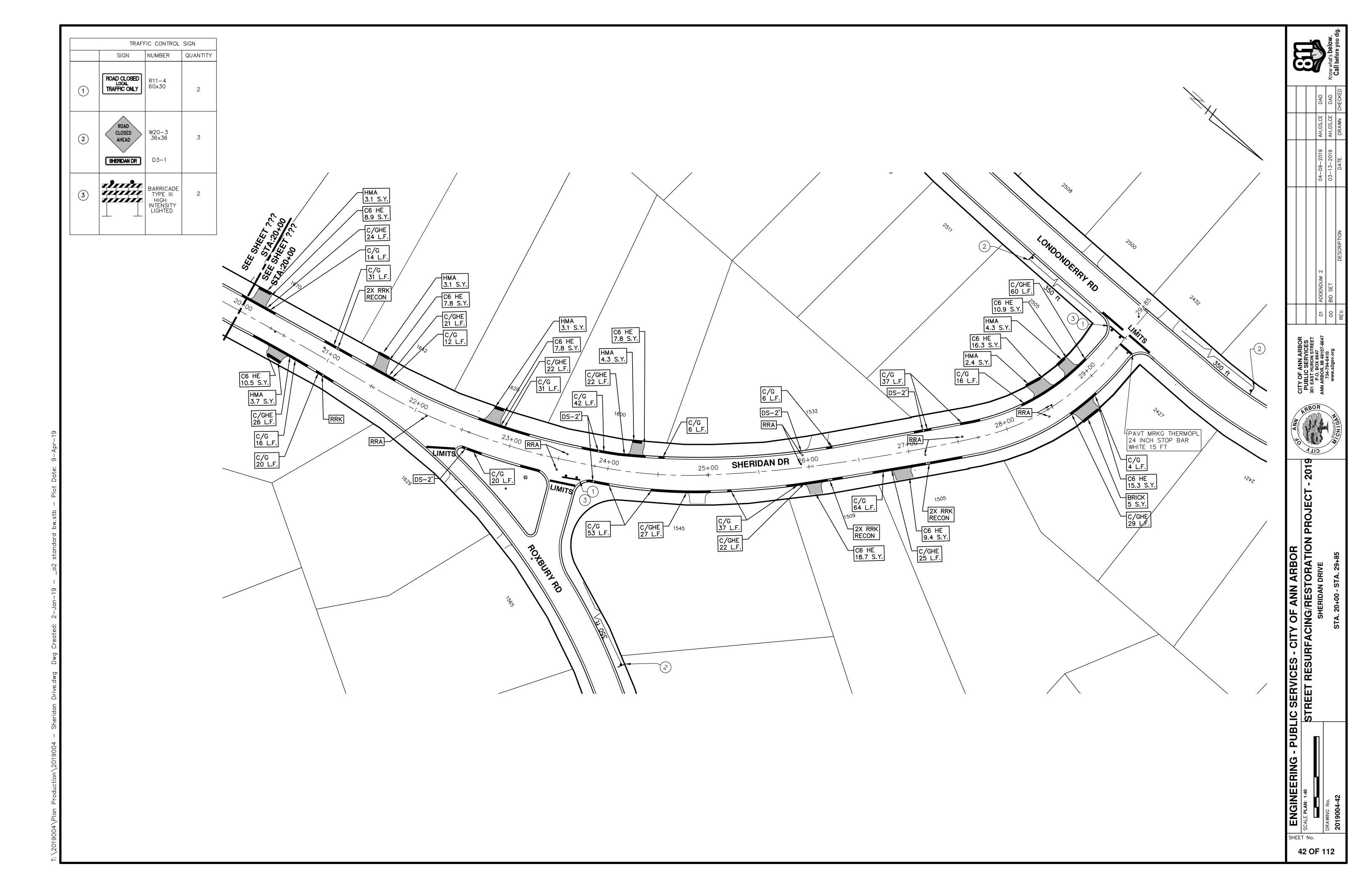


JE ANN ARBOR
JRFACING/REST
ROJECT - 2019
SHERIDAN DRIVE
BSET COVER SHEET

SU

SHEET No.







CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: W SUMMIT STREET

ITB No. 4570 FILE No. 2019004

		QUANTITIES		
		Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
14.0	*D3-1	Street Name Sign	4.0	56
7.0	R11-3a	Road Closed Local Traffic Only	12.5	88
14.0	W20-3	Road Closed Ahead	9.0	126
			TOTAL	270

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	8
2030015	Sewer, Rem, Less than 24 inch	Ft	80
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	39
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	;
2057011	_Grading, Sidewalk Ramp	Syd	
2057011	_Machine Grading, Special	Syd	4,09
2057021	_Subgrade Undercutting, Type IIA	Cyd	40
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	8
4030200	Dr Structure, 24 inch dia	Ea	
4037050	_Dr Structure Cover, Type B, Modified	Ea	
4037050	_Dr Structure Cover, Type K, Modified	Ea	
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	1
4037050	_Dr Structure, Temp Lowering, Modified	Ea	1
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	16
5010002	Cold Milling HMA Surface	Syd	4,09
5010005	HMA Surface, Rem	Syd	4
5010703	HMA, LVSP	Ton	95
6027021	_Flowable Fill	Cyd	1
8027001	_Curb and Gutter, Conc, Barrier	Ft	39
8030030	Curb Ramp Opening, Conc	Ft	2
8037001	_Detectable Warning Surface, Modified	Ft	2
8037010	Sidewalk Ramp, Conc, 8 inch, Modified	Sft	7
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	30
8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	8
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	7
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	
8120250	Plastic Drum, High Intensity, Furn	Ea	2
8120251	Plastic Drum, High Intensity, Oper	Ea	2
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	21
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	21
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	5
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	5
8127050	_Temporary No Parking Sign	Ea	3
8127050	Pedestrian Type II Barricade, Temp	Ea	
8167011	Slope Restoration	Syd	15
8217050	Monument Box, Adj	Ea	
8230431	Gate Box, Adj, Case 1	Ea	

KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
AB	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	_Grading, Driveway Approach_Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	 _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, Rem Sewer, Rem, Less than 24 inch Dr Structure, 24 inch dia
DSDI	 Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, FurnPlastic Drum, High Intensity, Lighted, Oper
TYPE III	 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
	Post, Mailbox
MBX	- Cot, Maileon
MBX HMA/SR	• _HMA Surface, Rem

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THE ORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 7. PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 8. PLACE AGGREGATE BASE MATERIAL AS REQUIRED AND DIRECTED BY THE ENGINEER.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING/PLACED BASE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. UPON APPROVAL FROM THE ENGINEER PLACE 2.0 INCH LEVELING COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (LEVELING COURSE) AS REQUIRED.
- 13. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 14. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 11. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 13. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 14. REMOVE SESC MEASURES.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 17. OPEN STREET TO ALL TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

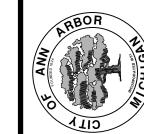
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.



	04-09-2019 AH,GS,CE DAD	03-13-2019 AH,GS,CE DAD	TION DATE DRAWN CHECKE	
	04-09-2	03–13–2	DATE	
	01 ADDENDUM 2	00 BID SET	DESCRIPTION	
5	5	00	REV.	

CITY OF ANN ARBO PUBLIC SERVICES 301 EAST HURON STREE P.O. BOX 8647 ANN ARBOR, MI 48107-86 734-794-6410 www.a2gov.org



S - ENGINEERING
SURFACING/RESTORATION
PROJECT - 2019
W SUMMIT STREET
SUBSET COVER SHEET

NN ARBOR - PUBLIC SERVI

SCALE: NTS

SHEET No.



Z

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1:40

DRAWING No.

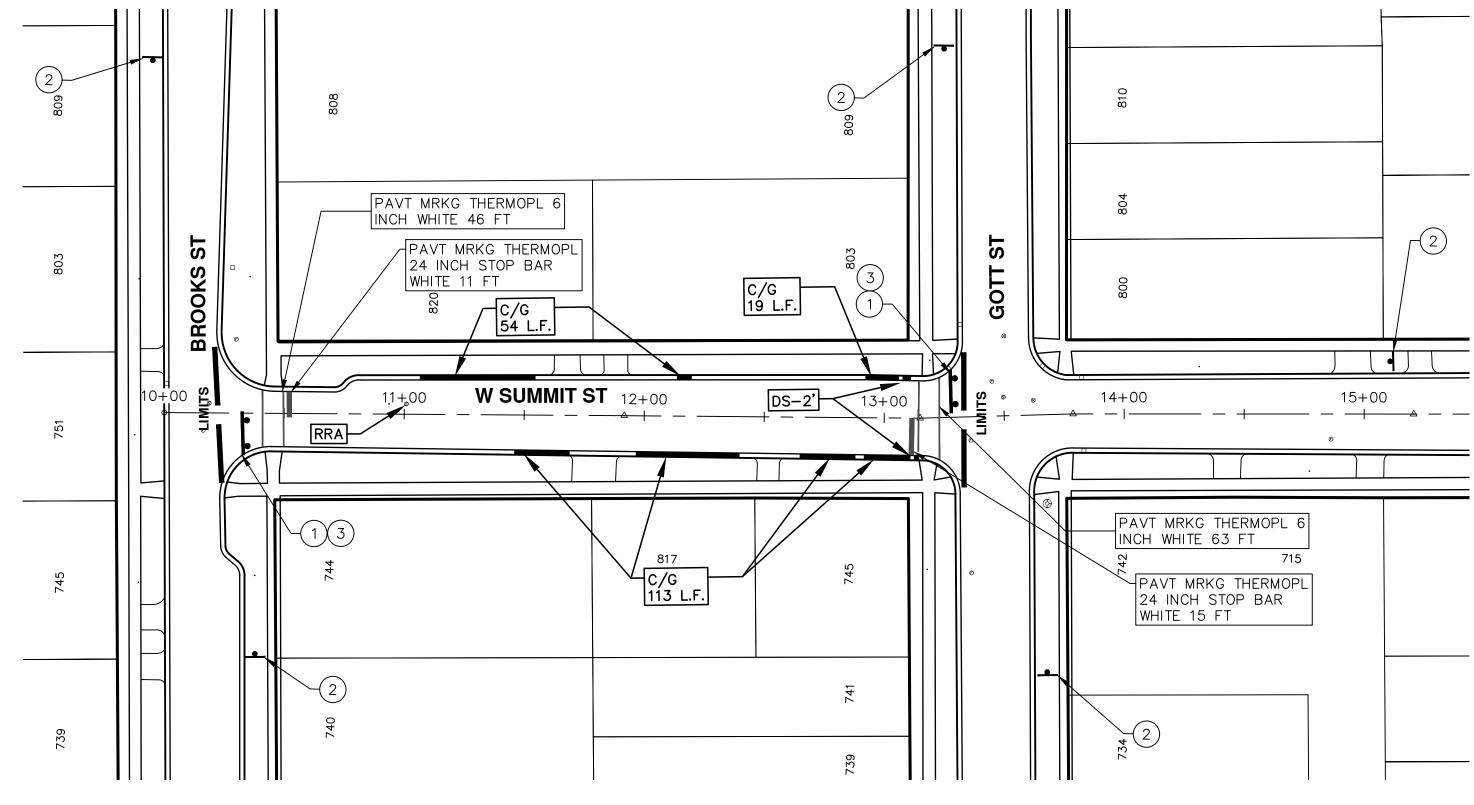
W SUMMIT STREET

W SUMMIT STREET

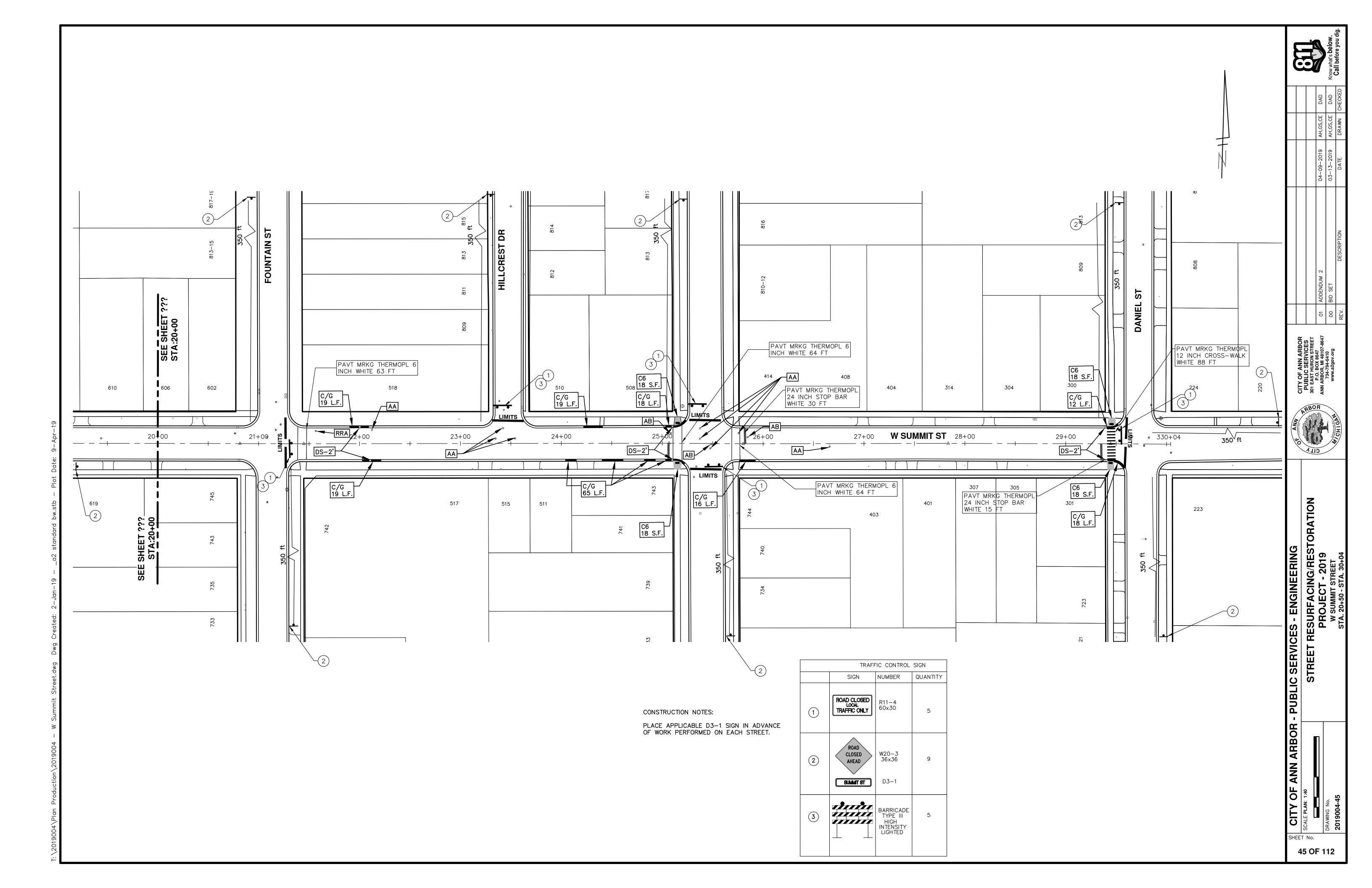
STA. 10+00 - STA. 14+00

44 OF 112

BARRICADE TYPE III HIGH INTENSITY LIGHTED



	740			739			734
					TRAF	FIC CONTROL	SIGN
					SIGN	NUMBER	QUANTITY
		CONSTRUCTION NOTES: PLACE APPLICABLE D3 OF WORK PERFORMED	-1 SIGN IN ADVANCE	1)	ROAD CLOSED LOCAL TRAFFIC ONLY	R11-4 60x30	2
				2	ROAD CLOSED AHEAD	W20-3 36x36	5
					W SUMMIT ST	D3-1	





CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: FULLER RD - HURON PKWY

HMA PATH

ITB No. 4570 FILE No. 2019004

	QUANTITIES Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special							
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)				
2.0	G20-2	End Road Work	4.5	9				
2.0	W1-6	One-Direction Large Arrow	8.0	16				
2.0	W3-5B	Reduce Speed Zone	9.0	18				
2.0	W9-3	Center Lane Closed Ahead	9.0	18				
2.0	W4-2	Lane Ends	9.0	18				
3.0	W20-1	Road Work Ahead Sign	9.0	27				
1.0	W20-5R	Right Lane Closed Ahead	9.0	9				
2.0	R2-1	Speed Limit	7.5	15				
2.0	R5-18C	Work Zone Begins	16.0	32				
			TOTAL	162				

QUANTITIES Item Code Item Description Unit | Quantity 2047001 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem 2050023 Granular Material, Cl II Cyd 2057011 Grading, Sidewalk 153 Syd _Grading, Sidewalk Ramp Syd Syd _Machine Grading, Special 2080020 Erosion Control, Inlet Protection, Fabric Drop Ea 3027011 _Aggregate Base, 8 inch, Modified Syd 260 3070101 Shoulder, Cl I Ton 111 5010005 HMA Surface, Rem Syd 135 5010009 Edge Trimming Ft 5010051 HMA, 4E3 Ton 5010057 HMA, 5E3 Ton | Flowable Fill Cyd 8027001 Curb and Gutter, Conc, Barrier Ft 186 8030030 Curb Ramp Opening, Conc Detectable Warning Surface, Modified Ft _Sidewalk Ramp, Conc, 6 inch, Modified Sft Sidewalk, Conc, 4 inch, Modified Sft 565 206 Sidewalk, Conc, 6 inch, Modified 8060040 | Shared use Path, HMA Ton 240 8067031 Shared use Path, HMA, Wedging Ton 72 835 8110196 Pavt Mrkg, Thermopl, 4 inch, Yellow 8110213 Pavt Mrkg, Thermopl, 12 inch, Cross Hatching, Yellow 8110214 Pavt Mrkg, Thermopl, 12 inch, Crosswalk 8110218 Pavt Mrkg, Thermopl, 24 inch, Stop Bar 8120012 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn 8120013 Barricade, Type III, High Intensity, Double Sided, Lighted, Oper 8120250 | Plastic Drum, High Intensity, Furn 8120251 Plastic Drum, High Intensity, Oper 8120331 Sign, Portable, Changeable Message, Oper Ea 8120350 Sign, Type B, Temp, Prismatic, Furn 162 Sft Sft 8120351 | Sign, Type B, Temp, Prismatic, Oper 8127050 _Temporary No Parking Sign Ea

CONSTRUCTION METHOD AND SEQUENCING

WORK ON THIS HMA PATH INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS. COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AS DIRECTED BY THE ENGINEER, AND UTILIZING PART WIDTH TWO (2) PHASE CONSTRUCTION. PERFORM THE WORK IN THE ORDER INDICATED BELOW UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- 1. IMPLEMENT MAINTENANCE OF TRAFFIC (M.O.T.) PLAN, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.
- 2. CONDUCT PAVEMENT REMOVAL WORK.
- 3. PLACE, GRADE, SHAPE AND COMPACT BASE MATERIAL AS REQUIRED
- 4. PERFORM ALL JOINT AND CRACK CLEANOUT. HMA/HAND PATCHING, UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED.
- 5. CLEAN PAVEMENT AND PLACE 3 INCH TOP COURSE HMA MIX (LVSP).
- 6. COMPLETE ALL SLOPE RESTORATION.
- 7. COMPLETE ANY MISCELLANEOUS WORK AND ALL CLEAN UP.
- 8. REMOVE ALL TRAFFIC CONTROL DEVICES, AND MISS DIG FLAGS.
- 9. OPEN PATH TO TRAFFIC.
- 15. REMOVE SESC MEASURES AFTER ESTABLISHMENT OF TURF IS SATISFACTORY.
- 16. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

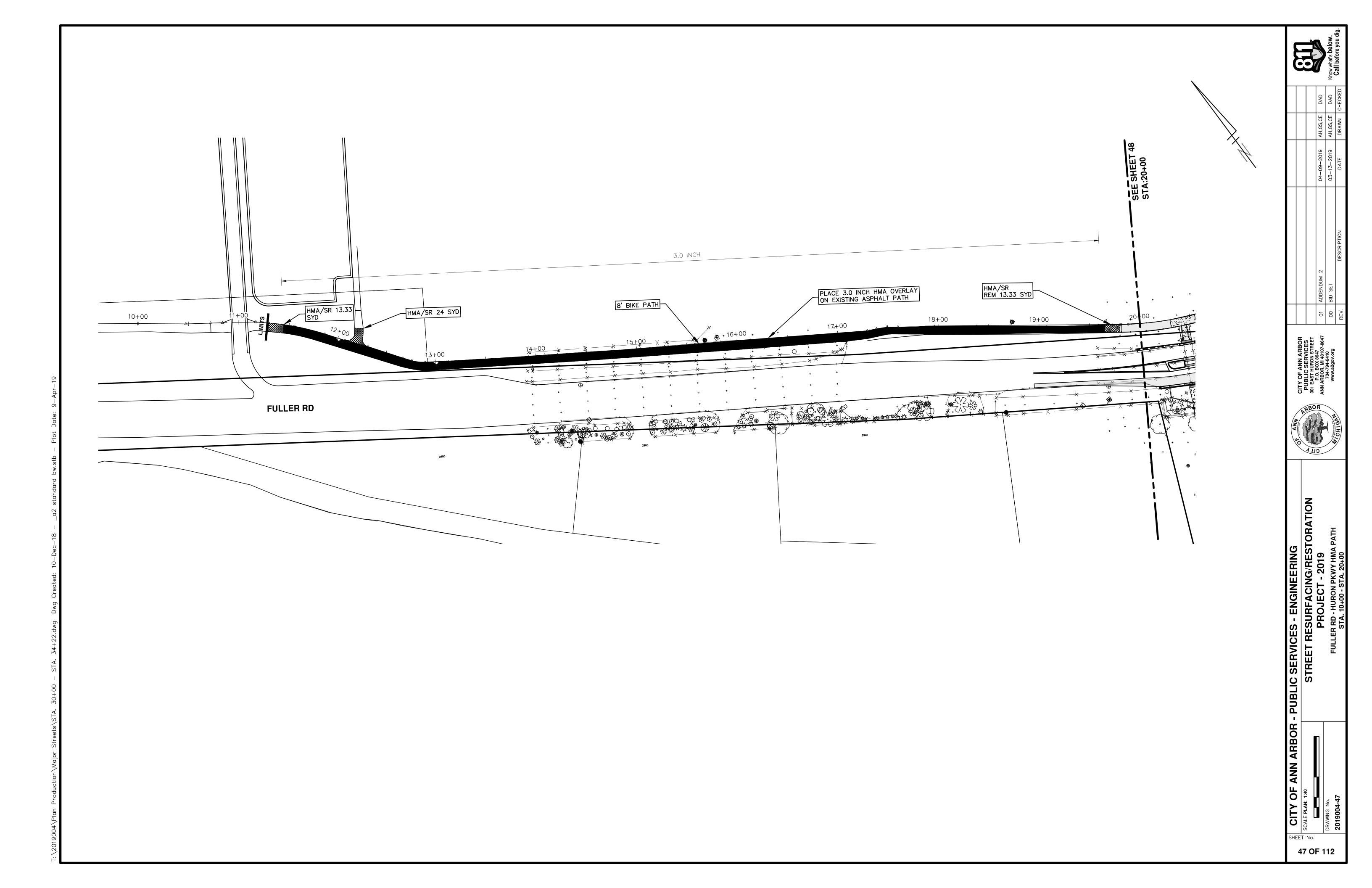
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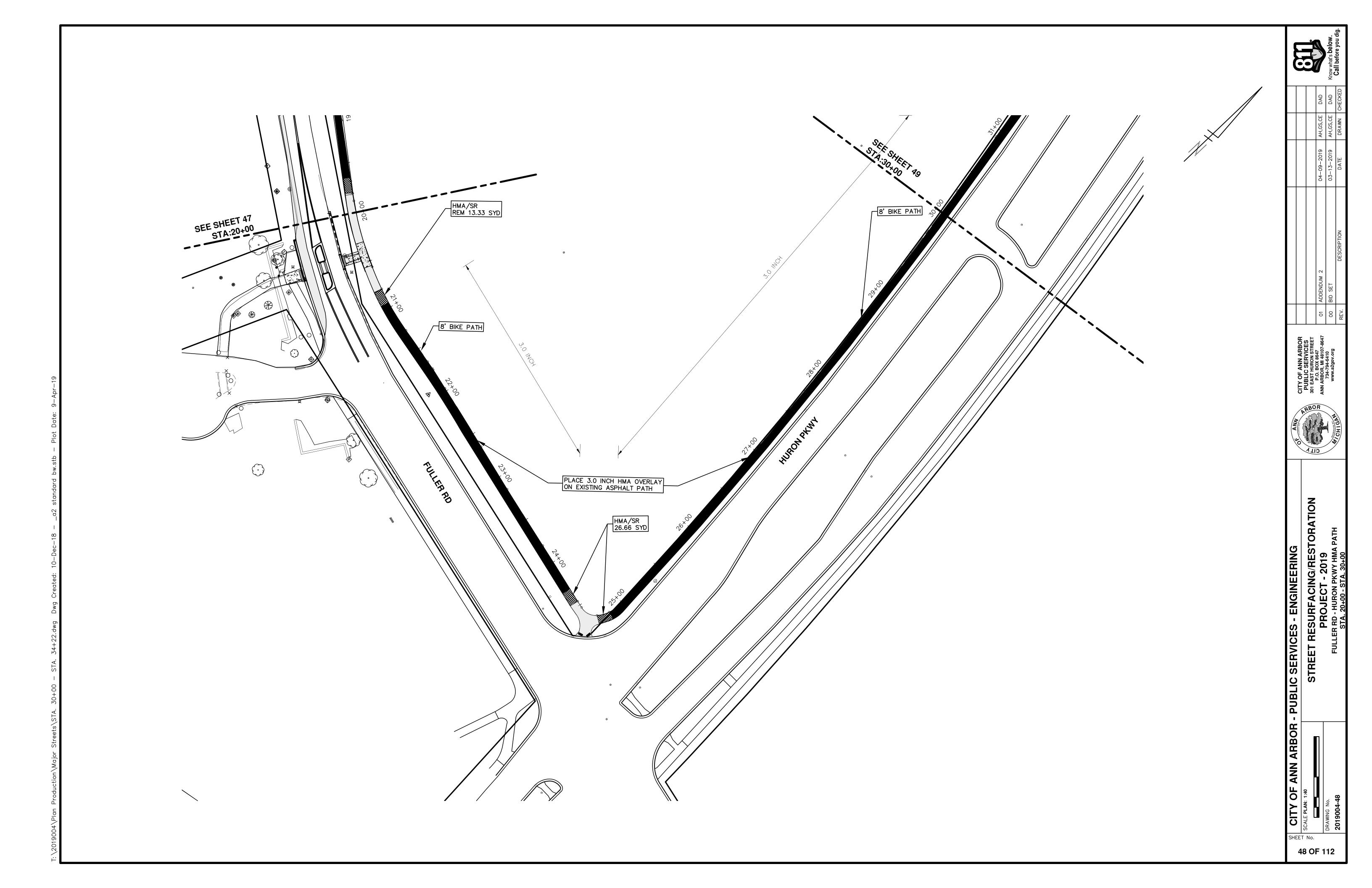
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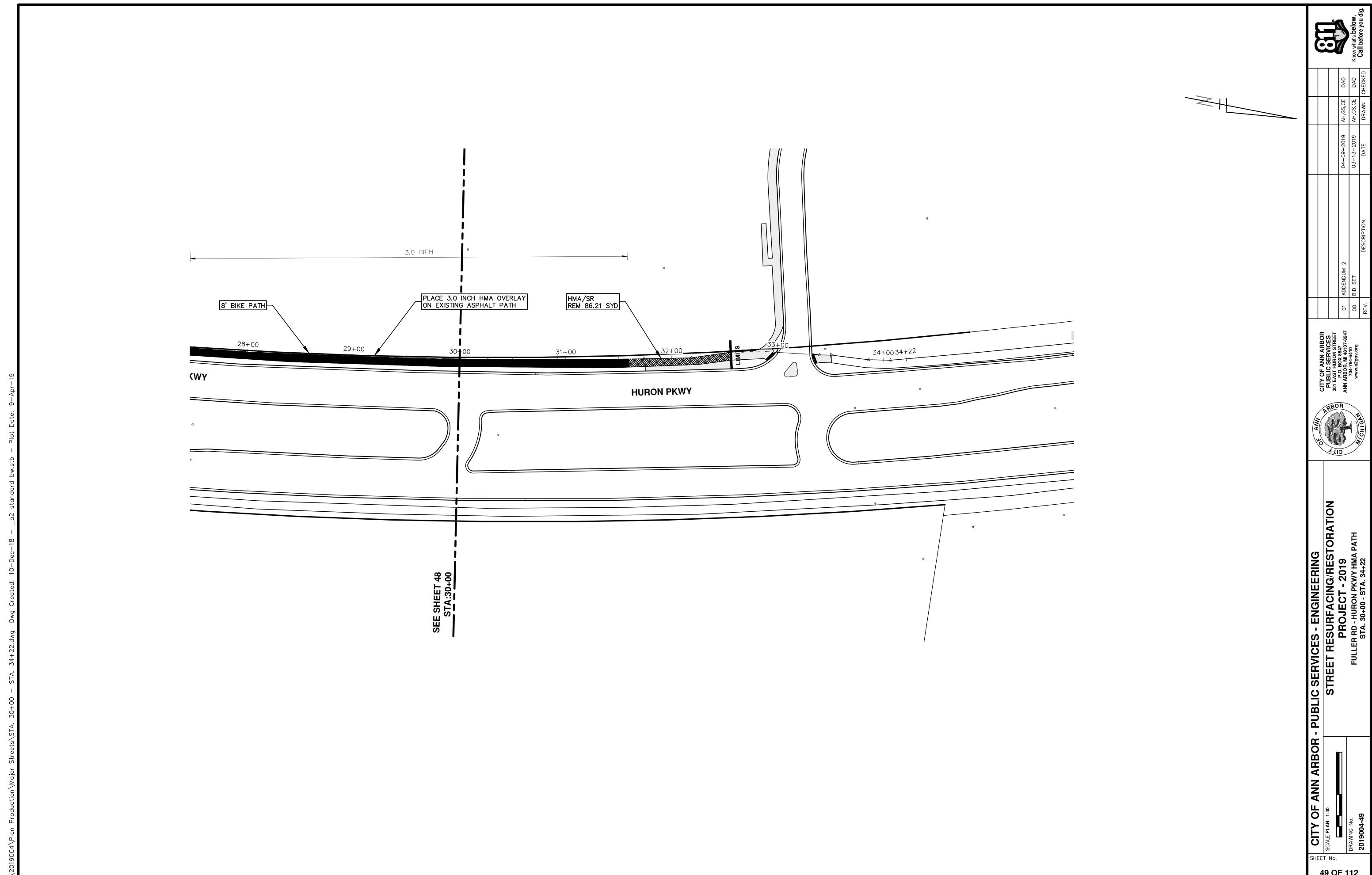
KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
AB	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	_Grading, Driveway Approach_Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	_Grading, Sidewalk_Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K _ Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
/IMA/APR	HMA Approach

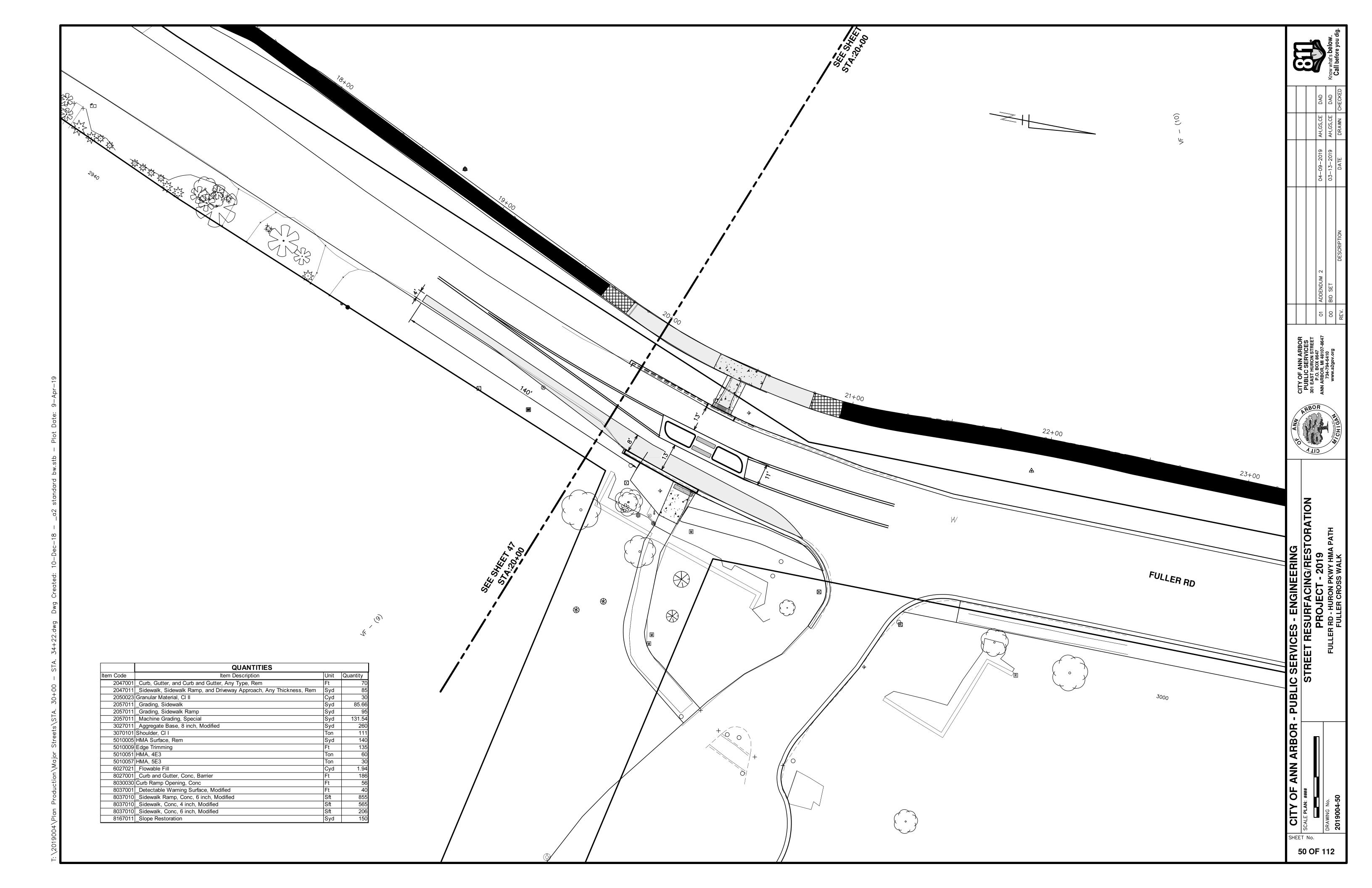
SURFACING/RESPROJECT - 2019

RD - HURON PKWY HMA RESI ARB SHEET No. 46 OF 112











CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: PLATT ROAD

		QUANTITIES		
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
22.0	*D3-1	Street Name Sign	4.0	88
3.0	G20-2	End Road Work	4.5	14
1.0	W4-2R	Lane Ends / Right	9.0	9
4.0	W20-1	Road Work Ahead Sign	9.0	36
4.0	W20-2	Detour Ahead	9.0	36
2.0	W20-3	Road Closed Ahead	9.0	18
1.0	W20-5R	Right Lane Closed Ahead	9.0	9
1.0	M4-8a	Detour Ends	3.0	3
7.0	M4-9S	Detour Arrow (Thru/Straight)	5.0	35
1.0	M4-9R	Detour Arrow (Right)	5.0	5
3.0	M4-9L	Detour Arrow (Left - MOD)	5.0	15
1.0	R3-1	No Right Turn	4.0	4
1.0	R3-2	No Left Turn	4.0	4
5.0	R5-1	Do Not Enter	9.0	45
2.0	R5-18C	Work Zone Begins	16.0	32
9.0	R6-1R	One Way / Right	3.0	27
3.0	R6-1L	One Way / Left	3.0	9
2.0	R11-2	Road Closed	10.0	20
			TOTAL	409

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	1
2030015	Sewer, Rem, Less than 24 inch	Ft	10
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	936
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	199
2057011	_Grading, Driveway Approach	Syd	236
2057011	_Grading, Sidewalk	Syd	12
2057011	_Machine Grading, Special	Syd	6,681
2057021	_Subgrade Undercutting, Type IIA	Cyd	668
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	21
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	10
4030200	Dr Structure, 24 inch dia	Ea	1
4037050	_Dr Structure Cover, Type B, Modified	Ea	2
4037050	_Dr Structure Cover, Type K, Modified	Ea	13
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	41
4037050	_Dr Structure, Temp Lowering, Modified	Ea	34
4037050	_Structure, Reconstruct	Ea	3
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	80
5010002	Cold Milling HMA Surface	Syd	6,681
5010005	HMA Surface, Rem	Syd	161
5010025	Hand Patching	Ton	10
5010051	HMA, 4E3	Ton	580
5010057	HMA, 5E3	Ton	780
5010061	HMA, Approach	Ton	20
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	18
5017031	_HMA, Wedging, 36A	Ton	8
6027021	_Flowable Fill	Cyd	26
8017011	_Driveway, Nonreinf Conc, 8 inch, Modified	Syd	179
8027001	_Curb and Gutter, Conc, Barrier	Ft	492
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	444
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	98
8037010	_Sidewalk, Conc, 8 inch, Modified	Sft	12
8110049	Pavt Mrkg, Ovly Cold Plastic, Direction Arrow Sym, Bike	Ea	4
8110058	Pavt Mrkg, Ovly Cold Plastic, Bike, Small Sym	Ea	4
8110195	Pavt Mrkg, Thermopl, 4 inch, White	Ft	176
8110196	Pavt Mrkg, Thermopl, 4 inch, Yellow	Ft	36
8110198	Pavt Mrkg, Thermopl, 6 inch, White	Ft	34
8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	377
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	60
8117050	_Pavt Mrkg, Thermopl, Lt Turn Arrow Sym	Ea	2
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	8
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	8
8120250	Plastic Drum, High Intensity, Furn	Ea	120
8120251	Plastic Drum, High Intensity, Oper	Ea	120
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	321
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	321
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	88
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	14
8167011	_Slope Restoration	Syd	374
8230431	Gate Box, Adj, Case 1	Ea	2

ITB No. 4570 FILE No. 2019004

KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	_Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, Rem Sewer, Rem, Less than 24 inch Dr Structure, 24 inch dia
DSDI	Dr Structure, RemSewer, Rem, Less than 24 inch_Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K_Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
MMA/APR	• _HMA Approach
	Grading, Driveway Approach Grading, Driveway Approach

CONSTRUCTION SCOPE AND SEQUENCING

WORK ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS. COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AS DIRECTED BY THE ENGINEER, AND UTILIZING PART WIDTH TWO (2) PHASE CONSTRUCTION. PERFORM THE WORK IN THE ORDER INDICATED BELOW UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

<u>PHASE</u>

- IMPLEMENT MAINTENANCE OF TRAFFIC (M.O.T.) PLAN, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL SESC MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLDMILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION.
- 5. TEMPORARY LOWER ALL UTILITY STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT AREA, INCLUDING GATE AND MONUMENT BOXES.
- 6. REMOVE EXISTING HMA SURFACE BY COLDMILLING 3.5 INCHES. THIS MAY INCLUDE GRANULAR BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL AS REQUIRED.
- 7. PERFORM ANY APPLICABLE JOINT AND CRACK CLEANOUT, HMA/HAND PATCHING, UNDERCUTS AND/OR BASE
- 8. GRADE, SHAPE, AND COMPACT THE EXISTING BASE MATERIAL AS REQUIRED.
- 9. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISH ELEVATION
- 10. PLACE 1.5 INCH LEVELING COURSE HMA MIX 4E1.
- 11. PLACE HMA SIDE STREET APPROACHES AS REQUIRED.
- 12. CLEAN PAVEMENT AND PLACE 2 INCH TOP COURSE HMA MIX 5E1.
- 13. CLEAN PAVEMENT AND PLACE HMA DRIVEWAY APPROACHES AS REQUIRED.

<u>PHASE II</u>

- 14. REPEAT ITEMS 1 THRU 13 IN THE ORDER SHOWN SHOWN ABOVE.
- 15. REMOVE SESC MEASURES.
- 16. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS.
- 17. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING CLEANING OF STRUCTURES, FINAL RESTORATION AND ALL OTHER NECESSARY CLEANUP.
- 18. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES AND NO PARKING SIGNS, AND MISS DIG FLAGS.
- 19. OPEN STREET TO TRAFFIC.

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.



CHE	DRAWN CHE	DATE	DESCRIPTION	REV.
a	AH,GS,CE	03-13-2019	00 BID SET	00
D	AH,GS,CE	04-09-2019	01 ADDENDUM 2	10

CITY OF ANN ARBC PUBLIC SERVICES 301 EAST HURON STRE P.O. BOX 8647 ANN ARBOR, MI 48107-88 734-794-6410 www.a2gov.org



NEERING SING/RESTORATION ST - 2019

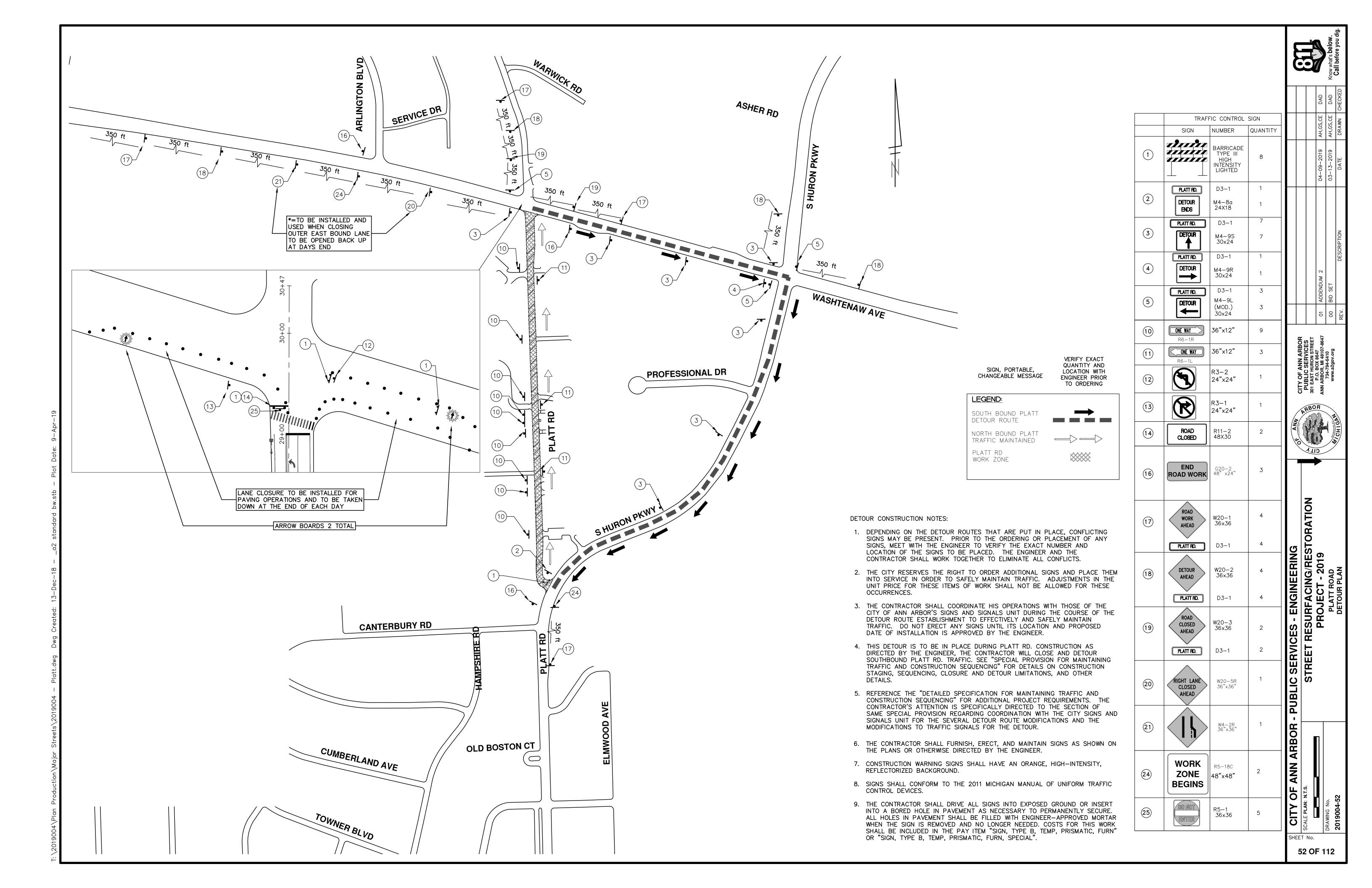
REET RESURFACING/REST
PROJECT - 2019
PLATT ROAD
SUBSET COVER

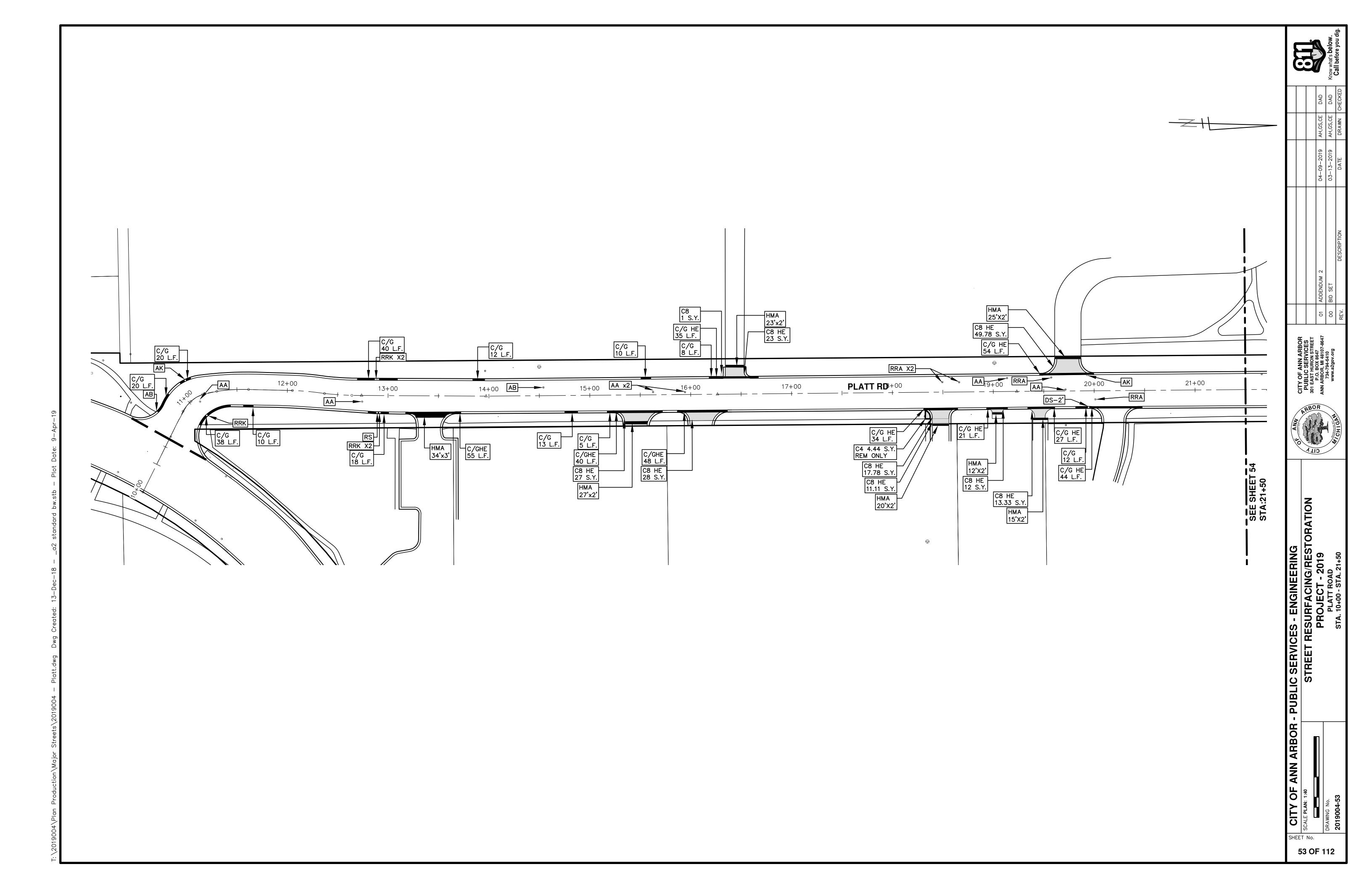
RBOR - PUBLIC S

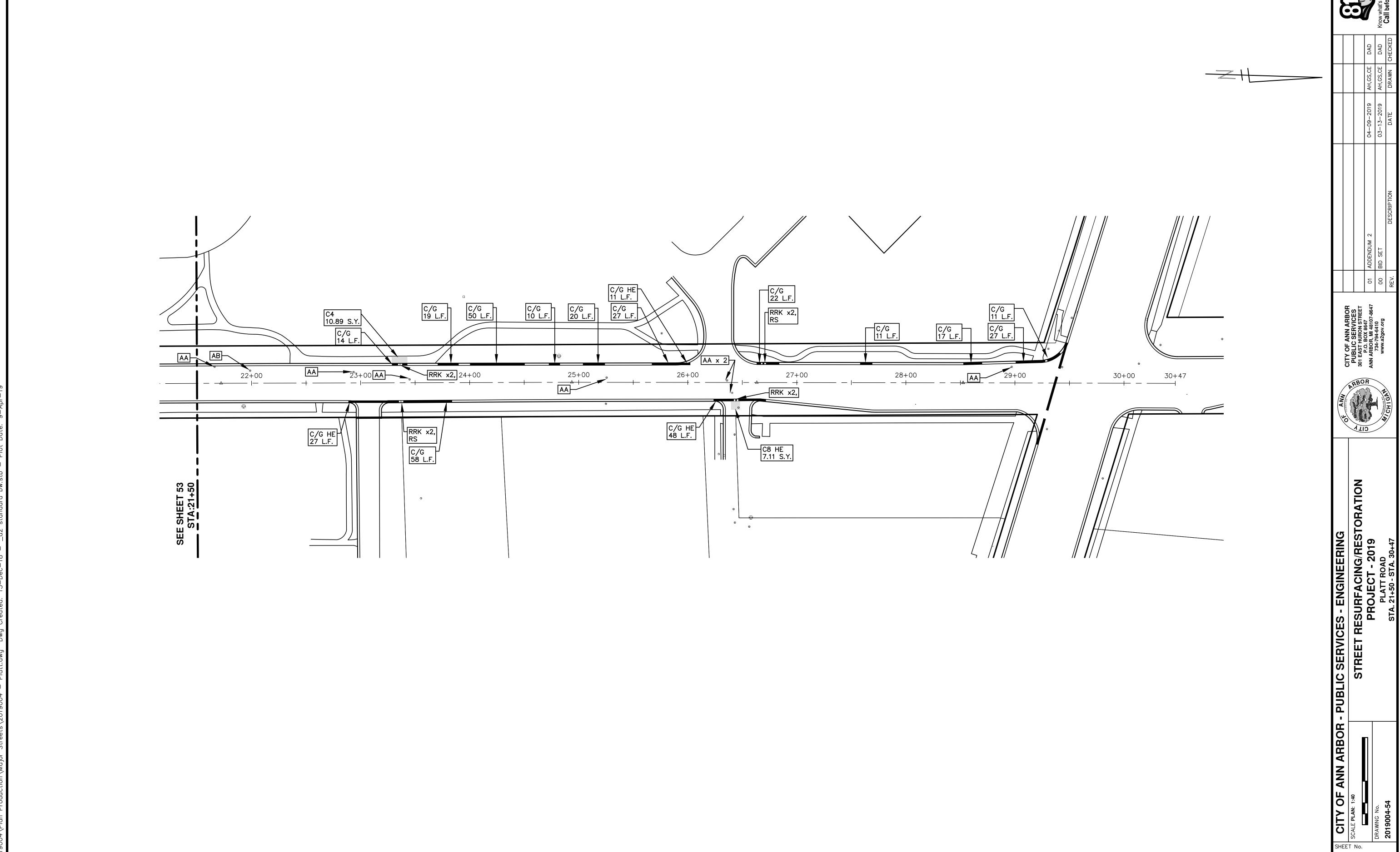
FY OF ANN ARBOR: NTS

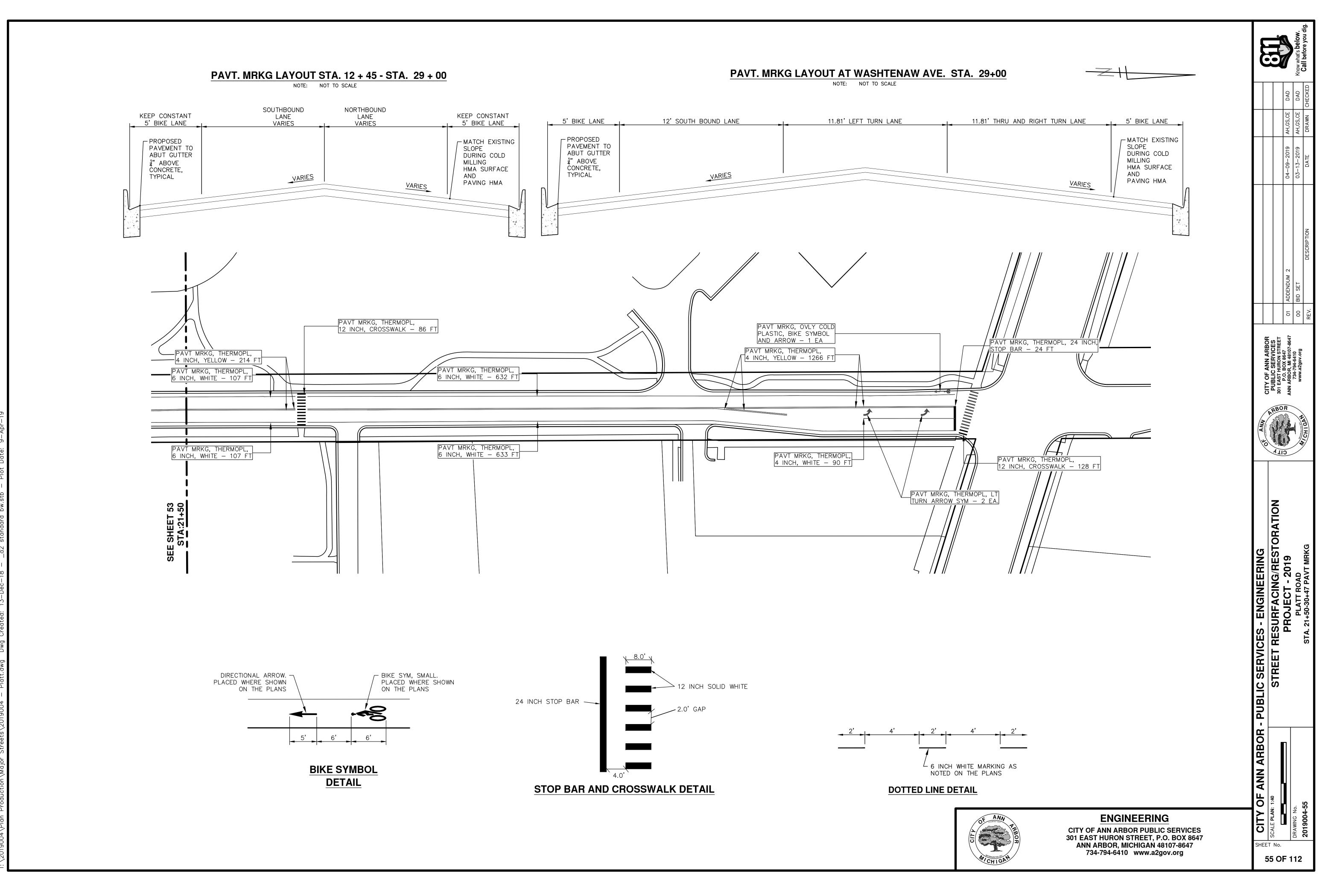
SCALE

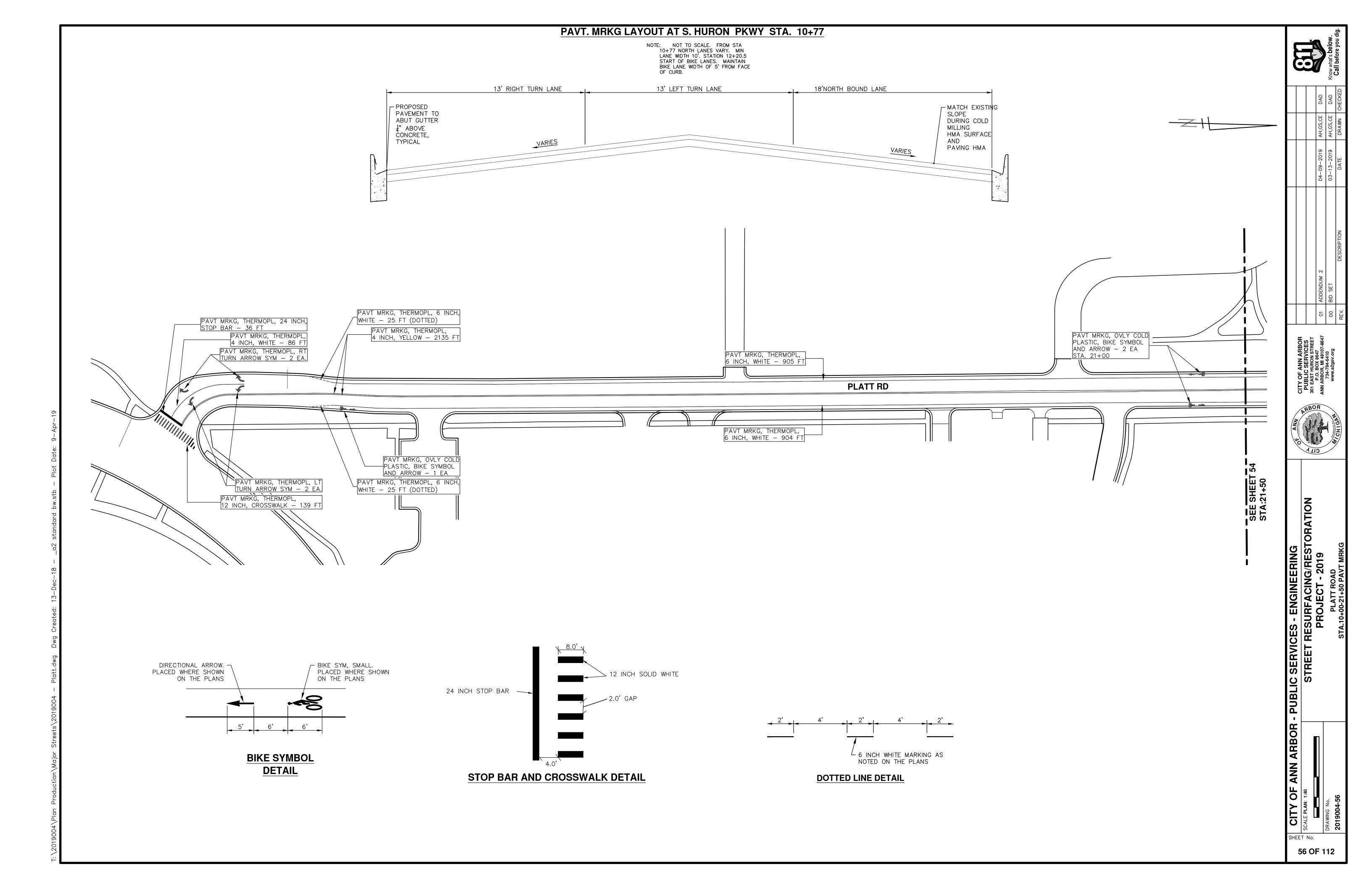
HEET NO.













CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: S. DIVISION STREET

ITB No. 4570 FILE No. 2019004

		QUANTITIES	Duiamatia Spacial	
Quantity	Sign Code	Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Description	Area (sft)	Total Area (Sft)
26.0	*D3-1	Street Name Sign	4.0	104
1.0	W9-3	Center Lane Closed Ahead	9.0	9
7.0	W20-1	Road Work Ahead Sign	9.0	63
2.0	W20-2	Detour Ahead	9.0	18
3.0	W20-3	Road Closed Ahead	9.0	27
1.0	M4-8a	Detour Ends	3.0	3
7.0	M4-9S	Detour Arrow (Thru/Straight)	5.0	35
2.0	M4-9L	Detour Arrow (Left - MOD)	5.0	10
1.0	M4-10R	Detour / Right	6.0	6
1.0	R3-2	No Left Turn	4.0	4
1.0	R5-1	Do Not Enter	9.0	9
5.0	R6-1R	One Way / Right	3.0	15
1.0	R11-2	Road Closed	10.0	10
			TOTAL	313

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	64
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	46
2057011	_Grading, Sidewalk	Syd	26
2057011	_Grading, Sidewalk Ramp	Syd	20
2057011	_Machine Grading, Special	Syd	6,117
2057021	_Subgrade Undercutting, Type IIA	Cyd	612
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	15
5010002	Cold Milling HMA Surface	Syd	6,117
5010005	HMA Surface, Rem	Syd	7
5010056	HMA, 5E1	Ton	710
5010061	HMA, Approach	Ton	20
5017031	_Cold Milling for Concrete Curb and Gutter Reveal	Ton	4
5017031	_HMA, Wedging, 36A	Ton	8
5017050	_HMA Surface, Around Structure Cover, Rem	Ea	24
6027021	_Flowable Fill	Cyd	2
8037001	_Detectable Warning Surface, Modified	Ft	15
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	184
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	230
8110049	Pavt Mrkg, Ovly Cold Plastic, Direction Arrow Sym, Bike	Ea	4
8110058	Pavt Mrkg, Ovly Cold Plastic, Bike, Small Sym	Ea	4
8110196	Pavt Mrkg, Thermopl, 4 inch, Yellow	Ft	1,445
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	154
8110198	Pavt Mrkg, Thermopl, 6 inch, White	Ft	2,286
8110212	Pavt Mrkg, Thermopl, 12 inch, Cross Hatching, White	Ft	142
8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	370
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	87
8117001	_Pavt Mrkg, Thermopl, 4 inch, White Parking Sym	Ft	420
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	9
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	9
8120250	Plastic Drum, High Intensity, Furn	Ea	30
8120251	Plastic Drum, High Intensity, Oper	Ea	30
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	209
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	209
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	104
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	104
8120370	_Temporary No Parking Sign	LSUM	47
8127050	_Pedestrian Type II Barricade, Temp	Ea	2
8167011	Slope Restoration	Syd	26

KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified Dr Structure, Temp Lowering, Modified
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem _Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	Grading, Sidewalk Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, Rem Sewer, Rem, Less than 24 inch Dr Structure, 24 inch dia
DSDI	Dr Structure, RemSewer, Rem, Less than 24 inch_Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
	LIMA Confess Dam
HMA/SR	• _HMA Surface, Rem

CONSTRUCTION SCOPE AND SEQUENCING

PERFORM WORK ON THIS STREET IN ACCORDANCE WITH THE "SCHEDULE OF STREETS". COMPLETE THE WORK I ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION O THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE WORK ITEMS LISTED BELOW. PERFORM THE WORK IN THORDER INDICATED UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATIN ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

- 1. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- 3. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED
- 4. REMOVE EXISTING HMA SURFACE (APPROXIMATELY 2 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE REMOVAL OF THE ROAD BASE MATERIAL TO A DEPTH DETERMINED BY THE ENGINEER.
- 5. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA, 5E1 MIX.
- 8. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES AS REQUIRED.
- 9. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 10. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 11. REMOVE SESC MEASURES.
- 12. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
- 13. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.
- 14. OPEN STREET TO ALL TRAFFIC.

NOTES

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

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01	01 ADDENDUM 2	04-09-2019	AH,GS,CE	DAD
00	00 BID SET	03-13-2019	AH,GS,CE	DAD
REV.	DESCRIPTION	DATE	DRAWN CHECK	CHECK

PUBLIC SERVICES
OI EAST HURON STREET
P.O. BOX 8647
NN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org



ICES - ENGINEERING

F RESURFACING/RESTORATION

PROJECT - 2019
S. DIVISION STREET
SUBSET COVER SHEET

OBLIC SERVICES - EI STREET RESUR

F ANN ARBOR - PUB

ALE: NTS
AWING No.

ー | ਲ HFFT No.

	TRAFF	FIC CONTROL	SIGN
	SIGN	NUMBER	QUANTITY
1		BARRICADE TYPE III HIGH INTENSITY LIGHTED	0
	S. DIVISION ST	D3-1	1
2	DETOUR ENDS	M4-8a 24X18	1
	8. DIMISION ST	D3-1	7
3	DETOUR	M4-9S 30x24	7
	S. DWISION ST	D3-1	2
(4)	DETOUR	M4-9L (MOD.) 30x24	2
5	DETOUR	M4-10R 48x18	1
6		R3-2 24"x24"	1
7	ROAD WORK AHEAD	W20-1 36x36	4
	8. DWISION ST	D3-1	4
8	DETOUR AHEAD	W20-2 36×36	2
	S. DIVISION ST	D3-1	2
9	ROAD CLOSED AHEAD	W20-3 36x36	2
	S. DIMISION ST	D3-1	2
10	CENTER LANE CLOSED AHEAD	W9-3 36"x36"	1
	PORTABLE, BLE MESSAGE	VERIFY E QUANTITY LOCATION ENGINEER	AND WITH PRIOR

LEGEND:

SOUTH BOUND S. DIVISION ST. DETOUR ROUTE

NORTH BOUND S. DIVISION ST. TRAFFIC MAINTAINED

S. DIVISION ST. WORK ZONE



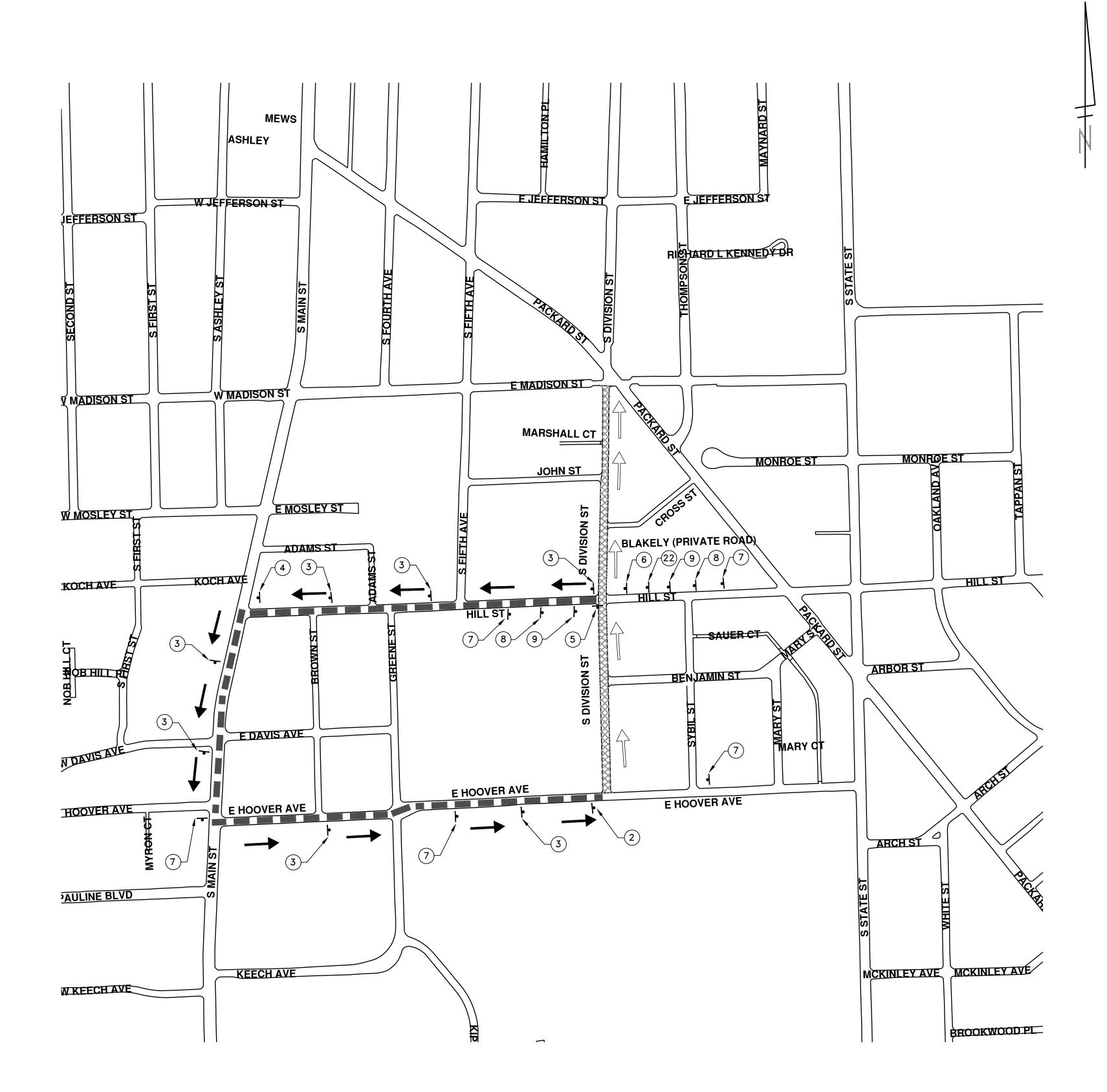
LOCATION WITH ENGINEER PRIOR TO ORDERING

DETOUR CONSTRUCTION NOTES:

- 1. DEPENDING ON THE DETOUR ROUTES THAT ARE PUT IN PLACE, CONFLICTING SIGNS MAY BE PRESENT. PRIOR TO THE ORDERING OR PLACEMENT OF ANY SIGNS. MEET WITH THE ENGINEER TO VERIFY THE EXACT NUMBER AND LOCATION OF THE SIGNS TO BE PLACED. THE ENGINEER AND THE CONTRACTOR SHALL WORK TOGETHER TO ELIMINATE ALL CONFLICTS.
- 2. THE CITY RESERVES THE RIGHT TO ORDER ADDITIONAL SIGNS AND PLACE THEM INTO SERVICE IN ORDER TO SAFELY MAINTAIN TRAFFIC. ADJUSTMENTS IN THE UNIT PRICE FOR THESE ITEMS OF WORK SHALL NOT BE ALLOWED FOR THESE OCCURRENCES.
- 3. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THOSE OF THE CITY OF ANN ARBOR'S SIGNS AND SIGNALS UNIT DURING THE COURSE OF THE DETOUR ROUTE ESTABLISHMENT TO EFFECTIVELY AND SAFELY MAINTAIN TRAFFIC. DO NOT ERECT ANY SIGNS UNTIL ITS LOCATION AND PROPOSED DATE OF INSTALLATION IS APPROVED BY THE ENGINEER.
- 4. THIS DETOUR IS TO BE IN PLACE DURING S. DIVISION ST. CONSTRUCTION AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR SOUTH BOUND S.DIVISION ST. TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR LIMITATIONS, AND OTHER DETAILS.
- 5. REFERENCE THE "DETAILED SPECIFICATION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR ADDITIONAL PROJECT REQUIREMENTS. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO THE SECTION OF SAME SPECIAL PROVISION REGARDING COORDINATION WITH THE CITY SIGNS AND SIGNALS UNIT FOR THE SEVERAL DETOUR ROUTE MODIFICATIONS AND THE MODIFICATIONS TO TRAFFIC SIGNALS FOR THE DETOUR.
- 6. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SIGNS AS SHOWN ON THE PLANS OR OTHERWISE DIRECTED BY THE ENGINEER.
- 7. CONSTRUCTION WARNING SIGNS SHALL HAVE AN ORANGE, HIGH-INTENSITY, REFLECTORIZED BACKGROUND.
- 8. SIGNS SHALL CONFORM TO THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 9. THE CONTRACTOR SHALL DRIVE ALL SIGNS INTO EXPOSED GROUND OR INSERT INTO A BORED HOLE IN PAVEMENT AS NECESSARY TO PERMANENTLY SECURE. ALL HOLES IN PAVEMENT SHALL BE FILLED WITH ENGINEER-APPROVED MORTAR WHEN THE SIGN IS REMOVED AND NO LONGER NEEDED. COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "SIGN, TYPE B, TEMP, PRISMATIC, FURN" OR "SIGN, TYPE B, TEMP, PRISMATIC, FURN, SPECIAL".

CONSTRUCTION NOTES:

PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET PRIOR TO WORK BEGINING.



ES - ENGINEERING
RESURFACING/RESTC
PROJECT - 2019
S. DIVISION STREET
DETOUR PLAN

58 OF 112

OF ANN ARBOR

- 1. DEPENDING ON THE DETOUR ROUTES THAT ARE PUT IN PLACE, CONFLICTING SIGNS MAY BE PRESENT. PRIOR TO THE ORDERING OR PLACEMENT OF ANY SIGNS, MEET WITH THE ENGINEER TO VERIFY THE EXACT NUMBER AND LOCATION OF THE SIGNS TO BE PLACED. THE ENGINEER AND THE CONTRACTOR SHALL WORK TOGETHER TO ELIMINATE ALL CONFLICTS.
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- 3. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THOSE OF THE CITY OF ANN ARBOR'S SIGNS AND SIGNALS UNIT DURING THE COURSE OF THE DETOUR ROUTE ESTABLISHMENT TO EFFECTIVELY AND SAFELY MAINTAIN TRAFFIC. DO NOT ERECT ANY SIGNS UNTIL ITS LOCATION AND PROPOSED DATE OF INSTALLATION IS APPROVED BY THE ENGINEER.
- 4. THIS DETOUR IS TO BE IN PLACE DURING S. DIVISION ST. CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL CLOSE AND DETOUR SOUTH BOUND S.DIVISION ST. TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR LIMITATIONS, AND OTHER DETAILS.
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- 8. SIGNS SHALL CONFORM TO THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 9. THE CONTRACTOR SHALL DRIVE ALL SIGNS INTO EXPOSED GROUND OR INSERT INTO A BORED HOLE IN PAVEMENT AS NECESSARY TO PERMANENTLY SECURE. ALL HOLES IN PAVEMENT SHALL BE FILLED WITH ENGINEER-APPROVED MORTAR WHEN THE SIGN IS REMOVED AND NO LONGER NEEDED. COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "SIGN, TYPE B, TEMP, PRISMATIC, FURN" OR "SIGN, TYPE B, TEMP, PRISMATIC, FURN, SPECIAL".

CONSTRUCTION NOTES:

PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET PRIOR TO WORK BEGINING.

	TRAFF	TIC CONTROL	SIGN
	SIGN	NUMBER	QUANTITY
1		BARRICADE TYPE III HIGH INTENSITY LIGHTED	9
2	ONE WAY R6-1R	36"x12"	5
3		R3-2 24"x24"	1
4	ROAD CLOSED	R11-2 48X30	1
5	ROAD WORK AHEAD	W20-1 36x36	3
	8. DIVISION ST	D3-1	3
6	ROAD CLOSED AHEAD	W20-3 36×36	1
	S. DMSION ST	D3-1	1
7	DO NOT ENTER	R5-1 36×36	1

SIGN, PORTABLE,

CHANGEABLE MESSAGE

VERIFY EXACT QUANTITY AND

LOCATION WITH

ENGINEER PRIOR TO ORDERING

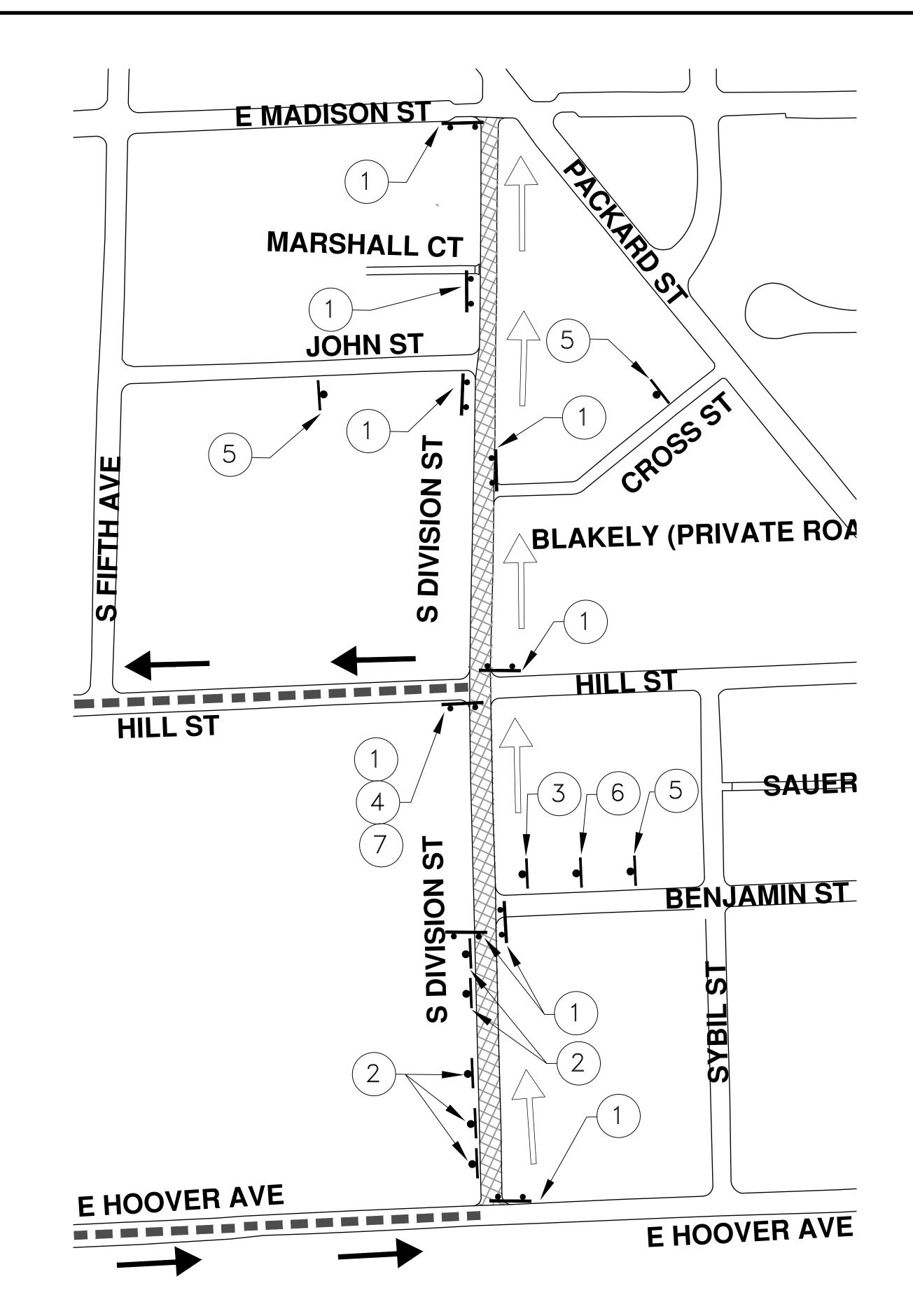


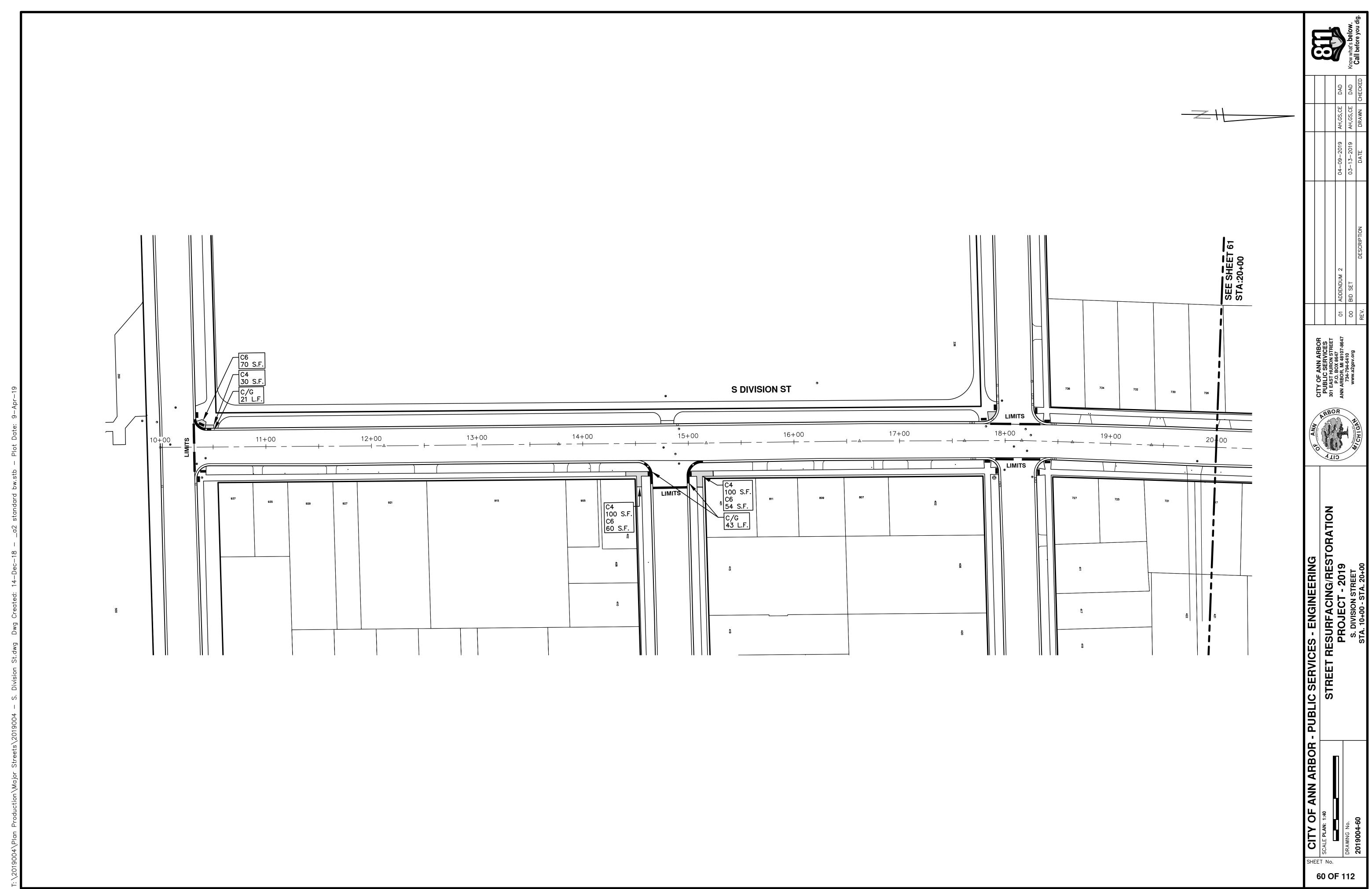
SOUTH BOUND S. DIVISION ST. DETOUR ROUTE

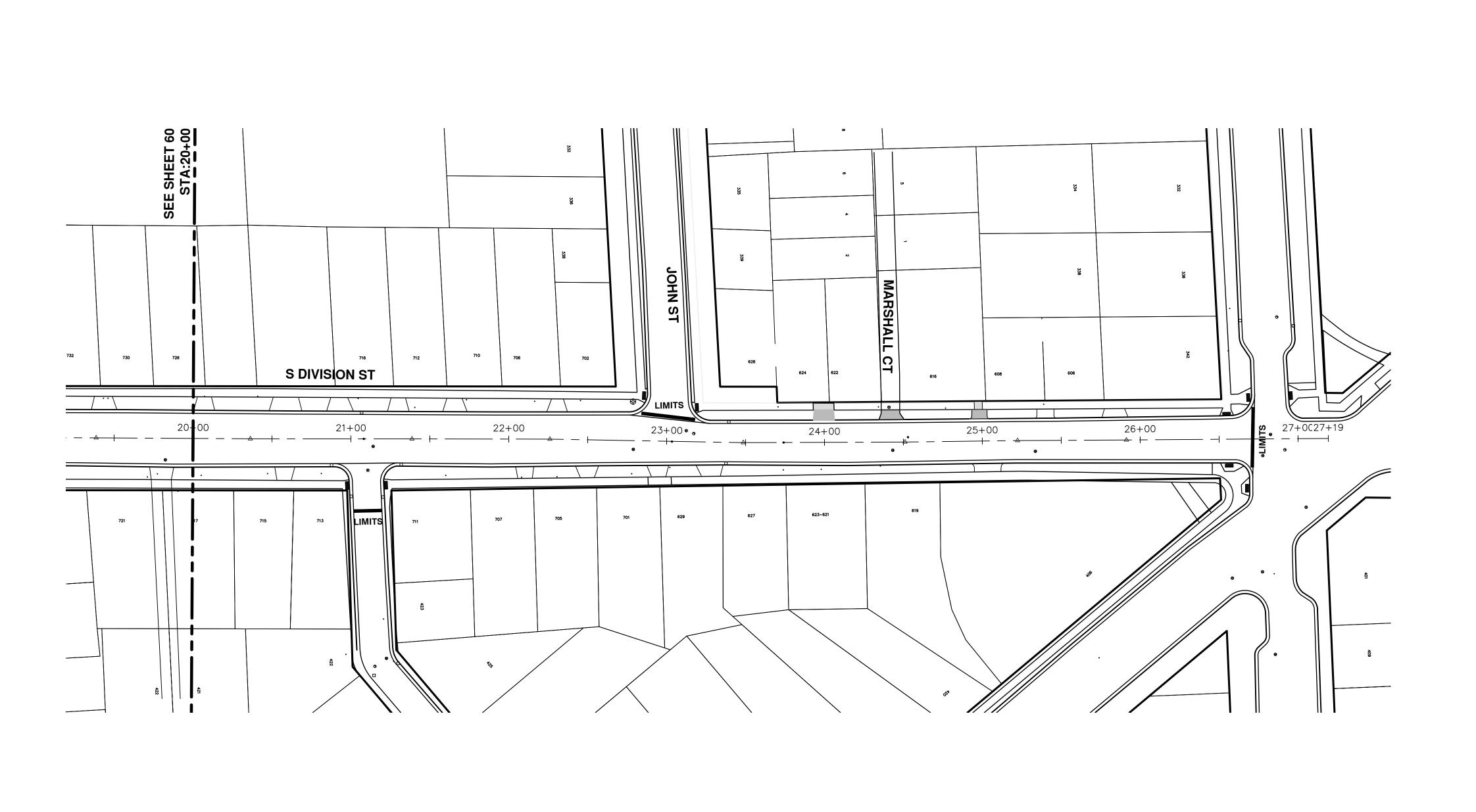
NORTH BOUND S. DIVISION ST. TRAFFIC MAINTAINED

S. DIVISION ST. WORK ZONE









SCALE PLAN: 1:40

SCALE PLAN: 1:40

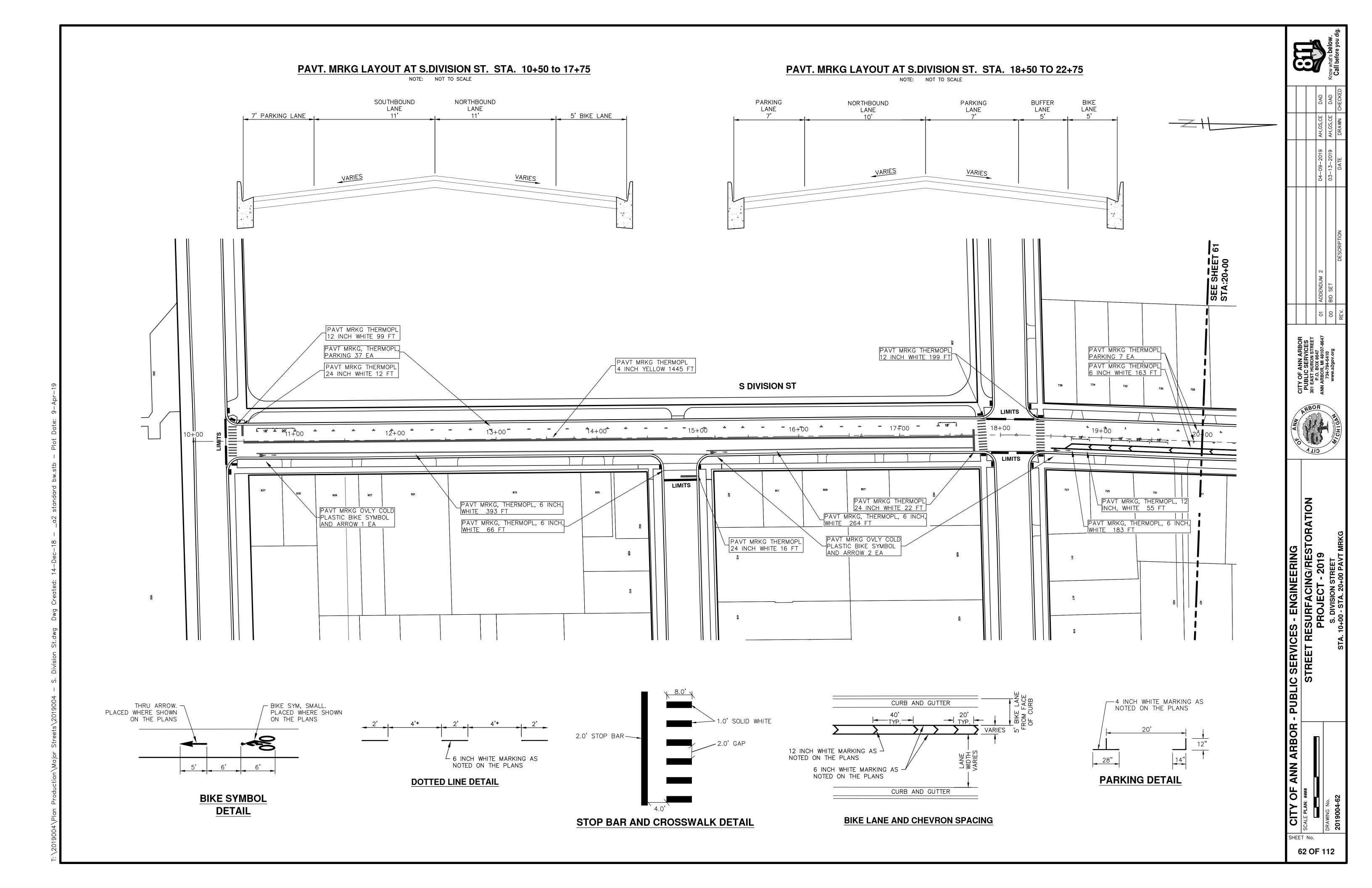
DRAWING No.

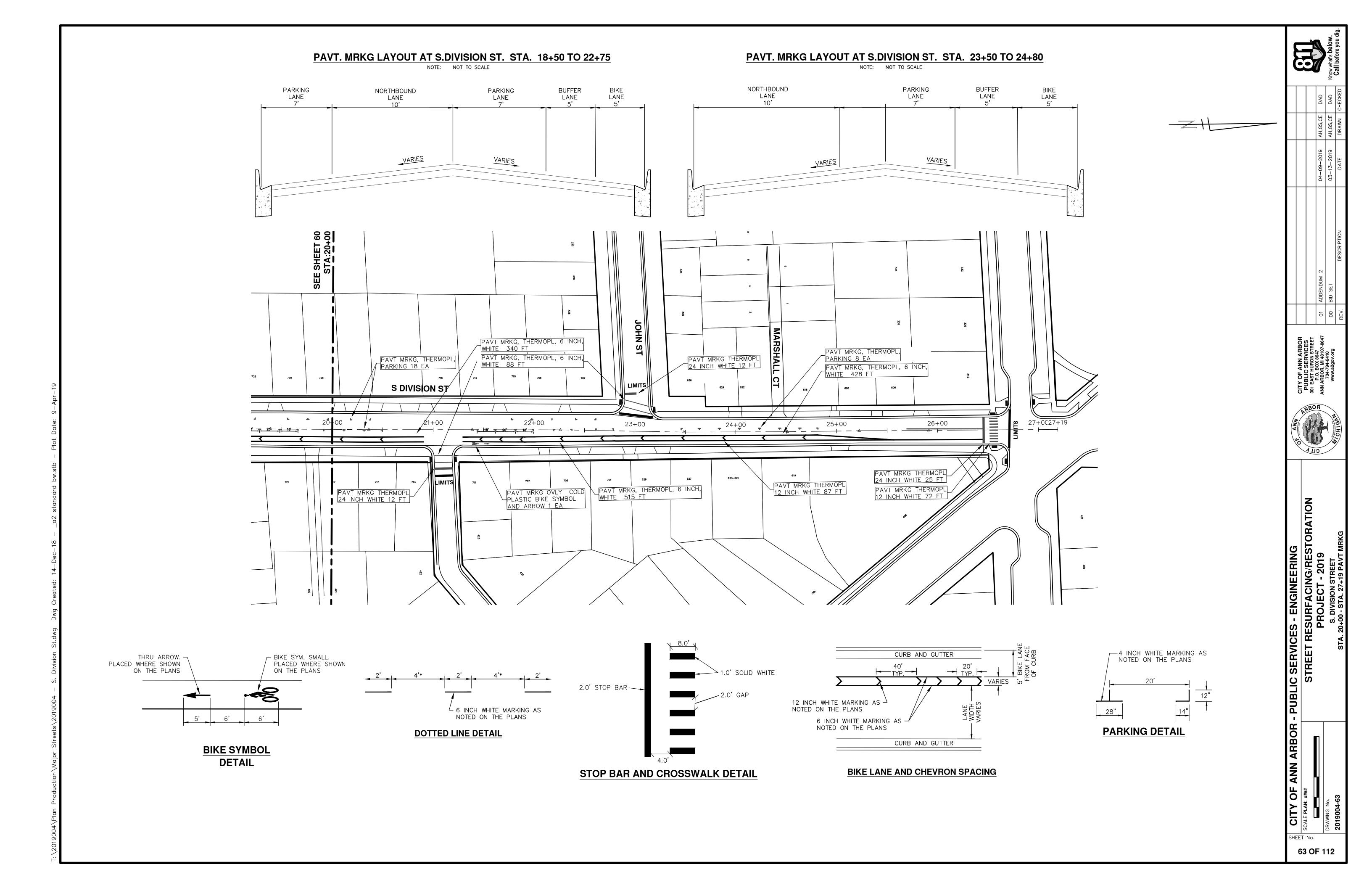
SOURCE S - ENGINEERING

STREET RESURFACING/RESTORATION

PROJECT - 2019

STA. 20+00 - STA. 27+19







CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: S STATE STREET

ITB No. 4570 FILE No. 2019004

		QUANTITIES		
		Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special		
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
2.0	G20-2	End Road Work	4.5	9
1.0	W1-4R	Traffic Shift (Right)	9.0	9
1.0	W1-4L	Traffc Shift (Left)	9.0	9
4.0	W1-6	One-Direction Large Arrow	8.0	32
2.0	W3-5B	Reduce Speed Zone	9.0	18
2.0	W9-3	Center Lane Closed Ahead	9.0	18
4.0	W4-2	Lane Ends	9.0	36
2.0	W20-1	Road Work Ahead Sign	9.0	18
2.0	W20-5R	Right Lane Closed Ahead	9.0	18
4.0	R2-1	Speed Limit	7.5	30
2.0	R5-18C	Work Zone Begins	16.0	32

TOTAL

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,956
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	30
5010005	HMA Surface, Rem	Syd	217
6020200	Joint, Cp	Ft	1,995
6027021	_Flowable Fill	Cyd	54
6030030	Lane Tie, Epoxy Anchored	Ea	787
6030046	Pavt Repr, Nonreinf Conc, 9 inch	Syd	4,268
6037011	_Pavt Repr, Rem, Modified	Syd	4,268
8020038	Curb and Gutter, Conc, Det F4	Ft	972
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	984
8110049	Pavt Mrkg, Ovly Cold Plastic, Direction Arrow Sym, Bike	Ea	14
8110058	Pavt Mrkg, Ovly Cold Plastic, Bike, Small Sym	Ea	14
8110343	Rem Spec Mrkg	Sft	592
8110450	Recessing Pavement Markings, Longit	Ft	11,098
8110451	Recessing Pavement Markings, Transv	Sft	620
8110500	Pavt Mrkg, Wet Retrflec Polyurea, 4 inch, White	Ft	416
8110501	Pavt Mrkg, Wet Retrflec Polyurea, 6 inch, White	Ft	8,819
8110504	Pavt Mrkg, Wet Retrflec Polyurea, 4 inch, Yellow	Ft	11,343
8117001	_Pavt Mrkg, Wet Retrflec Polyurea, 12 inch, Crosswalk	Ft	184
8117001	_Pavt Mrkg, Wet Retrflec Polyurea, 12 inch, Cross Hatching, Yellow	Ft	270
8117001	_Pavt Mrkg, Wet Retrflec Polyurea, 24 inch, Stop Bar	Ft	76
8117050	_Pavt Mrkg, Wet Retrflec Polyurea, Lt Turn Arrow Sym	Ea	1
8117050	_Pavt Mrkg, Wet Retrflec Polyurea, Only	Ea	3
8117050	_Pavt Mrkg, Wet Retrflec Polyurea, Rt Turn Arrow Sym	Ea	2
8117050	_Pavt Mrkg, Wet Retrflec Polyurea, Railroad Sym	Ea	2
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	22
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	22
8120140	Lighted Arrow, Type C, Furn	Ea	2
8120141	Lighted Arrow, Type C, Oper	Ea	2
8120210	Pavt Mrkg, Longit, 6 inch or Less Width, Rem	Ft	10,076
8120245	Pavt Mrkg, Wet Retrflec, Type R, Tape, 4 inch, White, Temp	Ft	490
8120246	Pavt Mrkg, Wet Retrflec, Type R, Tape, 4 inch, Yellow, Temp	Ft	490
8120250	Plastic Drum, High Intensity, Furn	Ea	210
8120251	Plastic Drum, High Intensity, Oper	Ea	210
8120265	Pavt Mrkg, Wet Retrflec, Type R, Tape, 24 inch, Stop Bar	Ea	36
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	205
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	205
8167011	Slope Restoration	Syd	782

KEA	CONSTRUCTION KEY ASSOCIATED PAY ITEM(S)
KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
	• _Dr Structure, Temp Lowering, Modified
AB	 Gate Box, Adj, Case 1 Gate Box, Adj, Case 2
	• _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement
	Sidewalk, Conc, 4 inch, Modified Sidewalk, Sidewalk Ramp, and Driveway Approach, Apy Thickness, Rom.
	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem_Grading, Sidewalk
C6	 _Grading, Sidewalk Ramp Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	Sidewalk, Conc, 6 inch, Modified Grading, Driveway Approach
C8	_Grading, Driveway Approach_Driveway, Nonreinf Conc, 8 inch, Modified
	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach Grading, Sidewalk
	• _Grading, Sidewalk Ramp
C HE	CementDriveway, Nonreinf Conc, 6 inch, Modified
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	_Detectable Warning Surface, ModifiedSidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement Driveway Opening, Conc, Det M, Modified
СР	Grading, Sidewalk Sidewalk, Conc, 4 inch, Modified
CR	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
OIX	Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch Dr Structure, 24 inch dia
רטטו	Dr Structure, Rem Sewer, Rem, Less than 24 inch
DSDI	Dr Structure, Double Inlet
PT	• _Dr Structure, Point
	Dr Structure Cover, Type B Dr Structure Cover Type B Special
RRA	_Dr Structure Cover, Type B, Special_Dr Structure, Adj, Case 1, Modified_Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified
RS	_Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, FurnPlastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	• _HMA Surface, Rem
MMA/APR	• _HMA Approach

CONSTRUCTION SCOPE AND SEQUENCING

WORK ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS. COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AS DIRECTED BY THE ENGINEER, AND UTILIZING PART WIDTH TWO (2) PHASE CONSTRUCTION. PERFORM THE WORK IN THE ORDER INDICATED BELOW UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

PHASE I

- 1. IMPLEMENT MAINTENANCE OF TRAFFIC (M.O.T.) PLAN TO CLOSE RIGHT (CURB) LANES, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL SESC MEASURES.
- 2. CONDUCT PAVEMENT SAW CUTTING AND REMOVAL WORK.
- 3. PERFORM ALL NECESSARY CONCRETE PAVEMENT REPAIR WORK AND ANY NECESSARY RESTORATION

PHASE II

- 4. REPEAT ITEMS 1 THRU 3 IN THE ORDER SHOWN SHOWN ABOVE TO PERFORM WORK IN CENTER AND ADJACENT THROUGH LANE (5-LANE SECTION).
- 5. REMOVE SESC MEASURES.
- 6. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS.
- 7. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING CLEANING OF STRUCTURES, FINAL RESTORATION AND ALL OTHER NECESSARY CLEANUP.
- 8. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES, AND MISS DIG FLAG, NO PARKING SIGNS AND MISS DIG

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

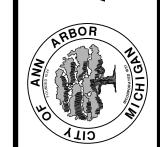
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.



01	01 ADDENDUM 2	04-09-2019	AH,GS,CE	DAD
00	00 BID SET	03-13-2019	AH,GS,CE	DAD
REV.	DESCRIPTION	DATE	DRAWN CHECKE	CHECKE

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET P.O. BOX 8647 ANN ARBOR, MI 48107-864 734-794-6410 www.a2gov.org



TCES - ENGINEERING

T RESURFACING/RESTORATION

PROJECT - 2019

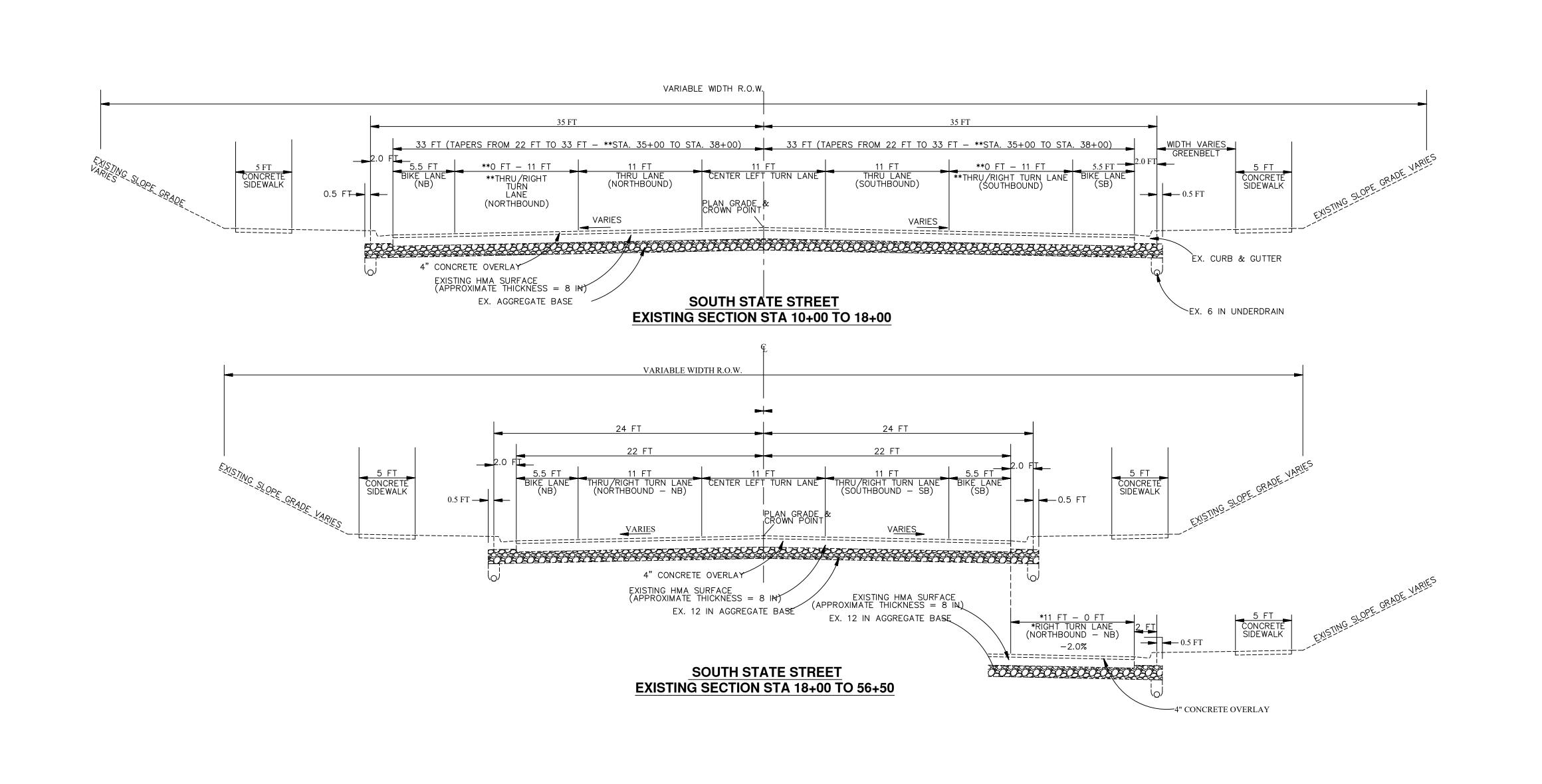
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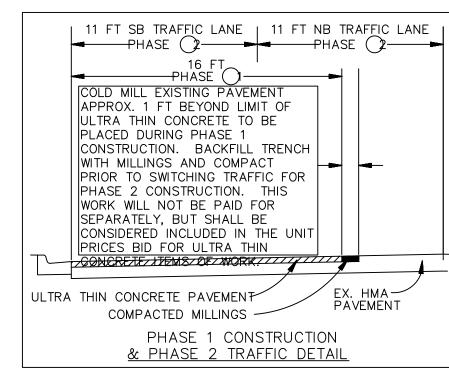
SUBSET COVER SHEET

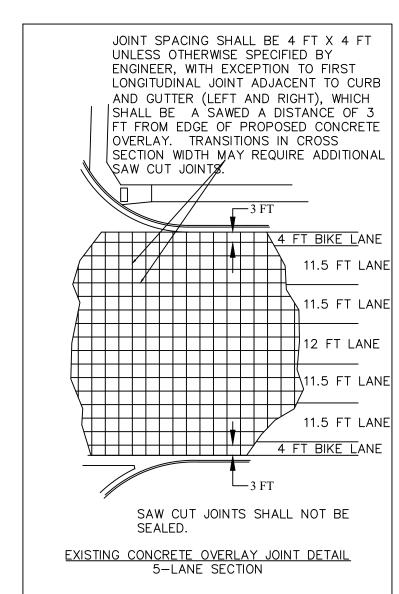
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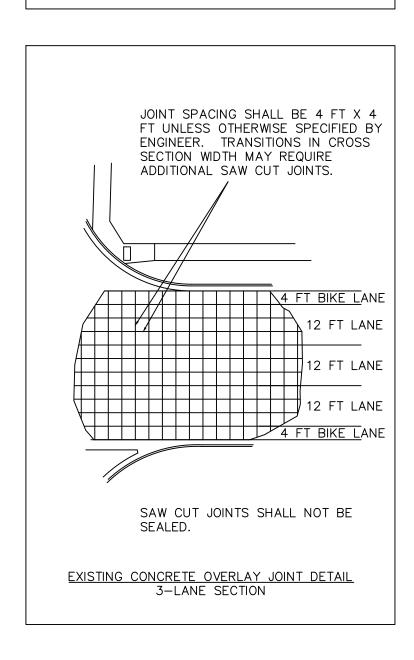
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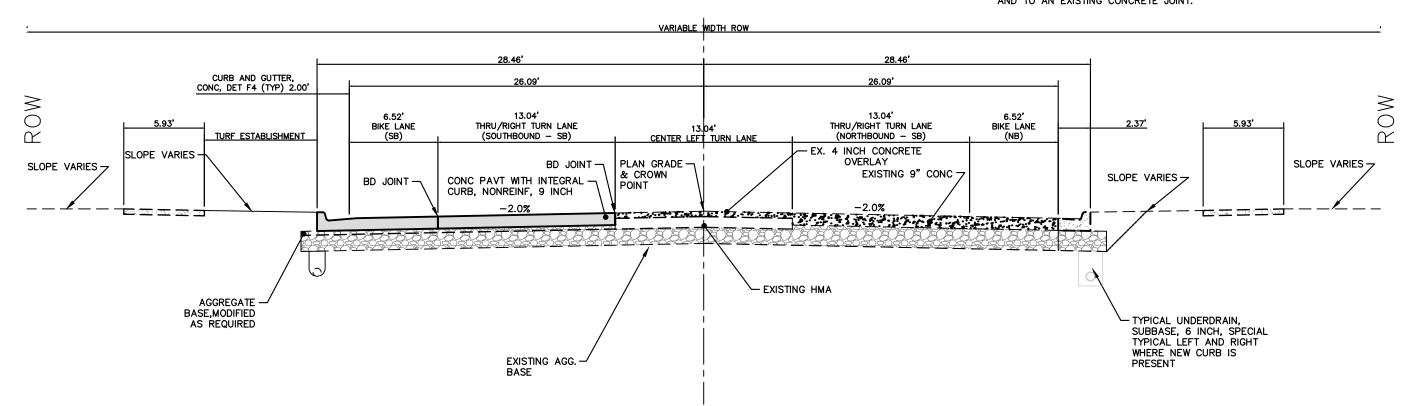
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RESURFACING/RESTORATION	TOBLIC SERVICES 301 EAST HURON STREET						
PROJECT - 2019	P.O. BOX 8647 ANN ARBOR, MI 48107-8647	10	ADDENDUM 2	04-09-2019	AH,GS,CE	DAD	
S STATE STREET	734-794-6410 Www.a2gov.org	8	O BID SET	03-13-2019 AH,GS,CE	AH,GS,CE	DAD	Know wh
STING CROSSECTION TYPICALS	CHIGH	REV.	DESCRIPTION	DATE	DRAWN CHECKED	СНЕСКЕР	

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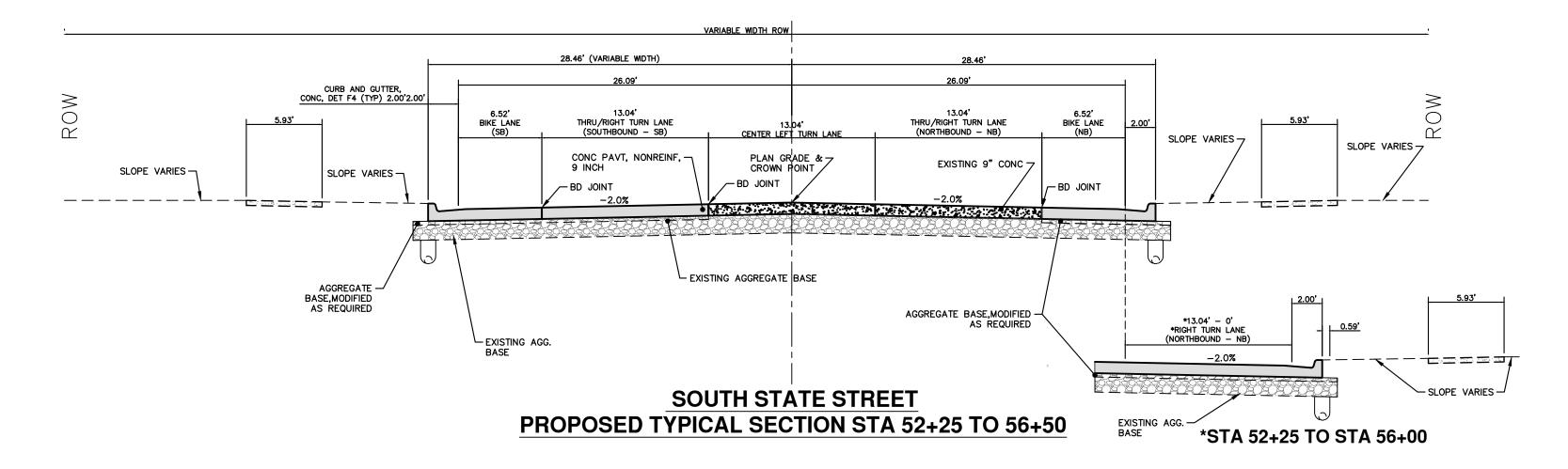
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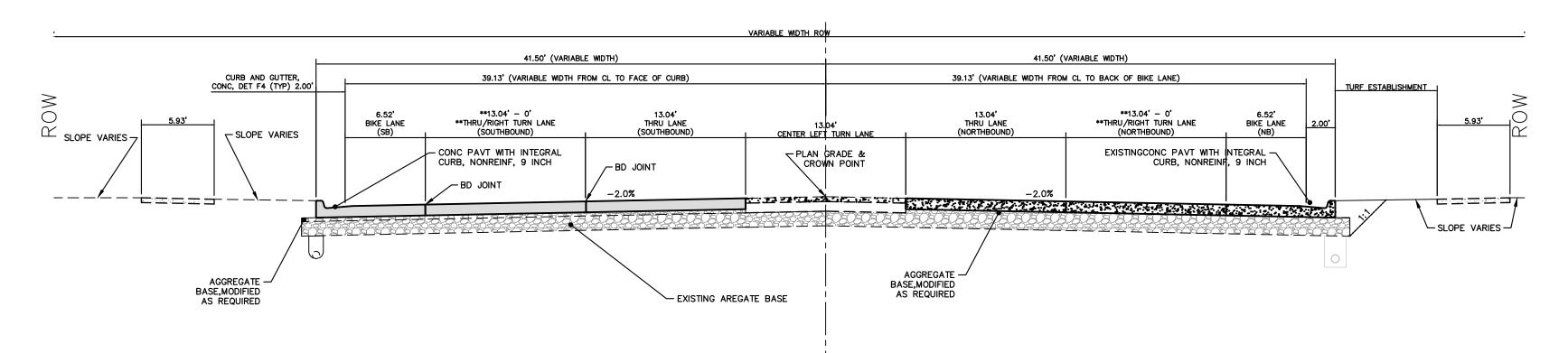
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FOR PAVEMENT REMOVALS, SAWCUT EXISTING MATERIAL FULL-DEPTH AT REMOVAL LIMITS, AS DIRECTED BY THE ENGINEER. PAVEMENT REMOVALS SHALL BE TO THE FULL LANE WIDTH AND TO AN EXISTING CONCRETE JOINT.



SOUTH STATE STREET PROPOSED TYPICAL SECTION STA 21+50 TO 52+25





SOUTH STATE STREET PROPOSED TYPICAL SECTION STA 10+00 TO 21+50

NOTES

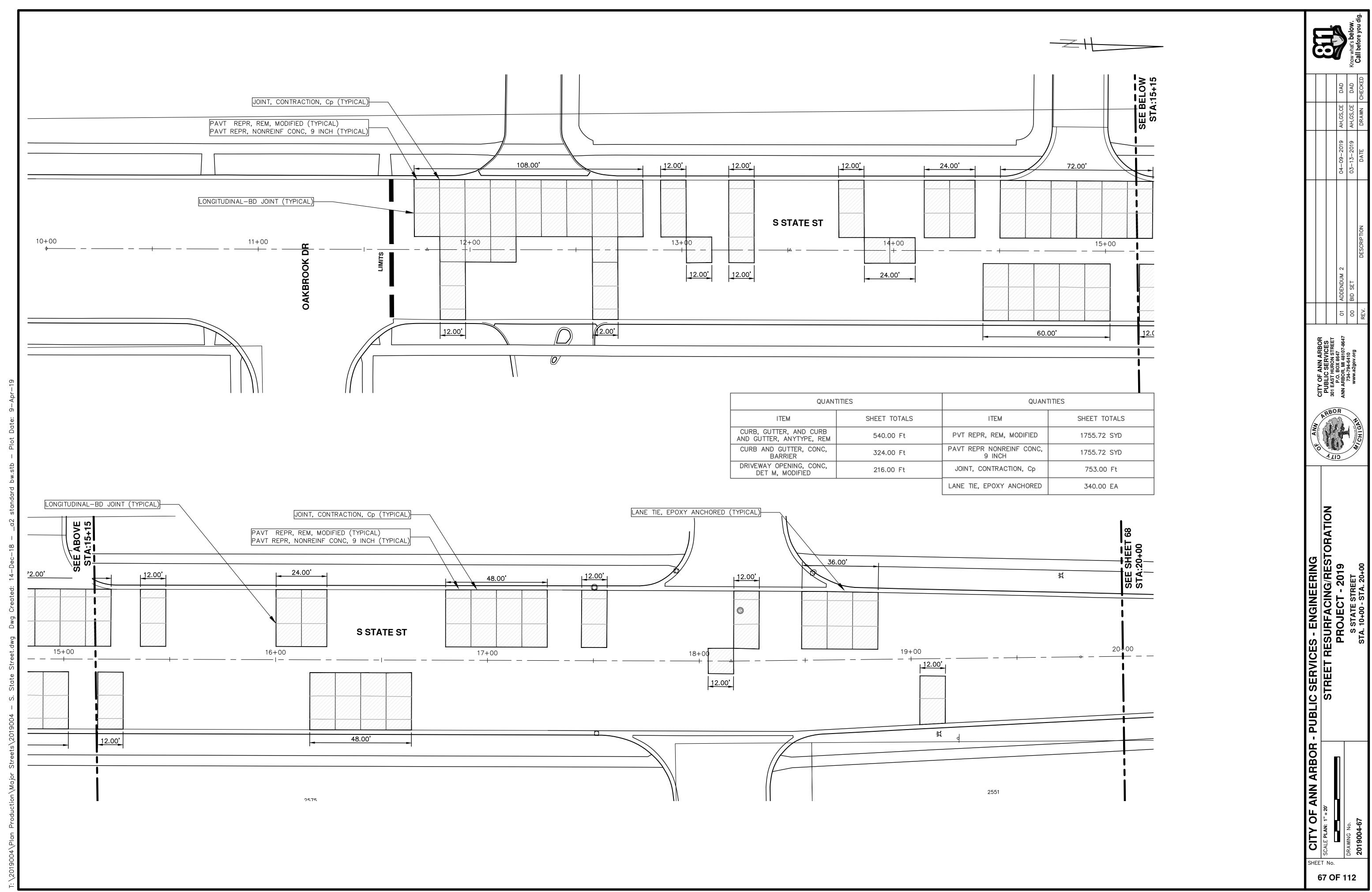
- 1. THESE PLANS DO NOT ASSURE THE PRESENCE OR LOCATION OF UTILITIES. THE CONTRACTOR SHALL NOTIFY "MISS DIG" TOLL FREE AT 1-800-482-7171 THREE (3) DAYS BEFORE THE START OF CONSTRUCTION, EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS.
- 2. IN NO INSTANCE WILL ANY ACTION OR OMISSION ON THE PART OF THE INSPECTOR RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF COMPLETING THE WORK ACCORDING TO THE PLANS AND SPECIFICATIONS, IN ACCORDANCE WITH SECTION 104.01C OF THE MDOT 2003 STANDARD SPECIFICATIONS.
- 3. CONTRACTOR TO OBTAIN WRITTEN PERMISSION BEFORE WASTING DIRT OR OTHER MATERIAL ON PRIVATE PROPERTY. SIGNED RELEASES MUST BE OBTAINED BEFORE THE PROJECT WILL BE FINALED
- 4. CONTRACTOR TO REMOVE, RELOCATE AS NECESSARY, AND RESET MAILBOXES, INCLUDED IN ITEM "POST, MAILBOX".
- 5. DURING CONSTRUCTION, ADEQUATE DUST CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER. DUST CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR AND WILL NOT BE PAID FOR SEPARATELY, PER MDOT STANDARD SPECIFICATIONS SECTION 107.15, SUBSECTION A.1.
- 6. THE STAGING SHOWN ON THESE PLANS IS A SUGGESTED METHOD. THE CONTRACTOR MAY SUBMIT AN ALTERNATE METHOD FOR REVIEW AND APPROVAL BY THE ENGINEER. SUBMITTAL SHALL BE A MINIMUM OF SEVEN (7) DAYS PRIOR TO BEGINNING CONSTRUCTION.
- 7. CURB AND GUTTER TO BE POURED INTEGRALLY DURING PLACEMENT OF PAVEMENT REPAIR CONCRETE WILL BE PAID AS CURB AND GUTTER, CONC, DET F4.

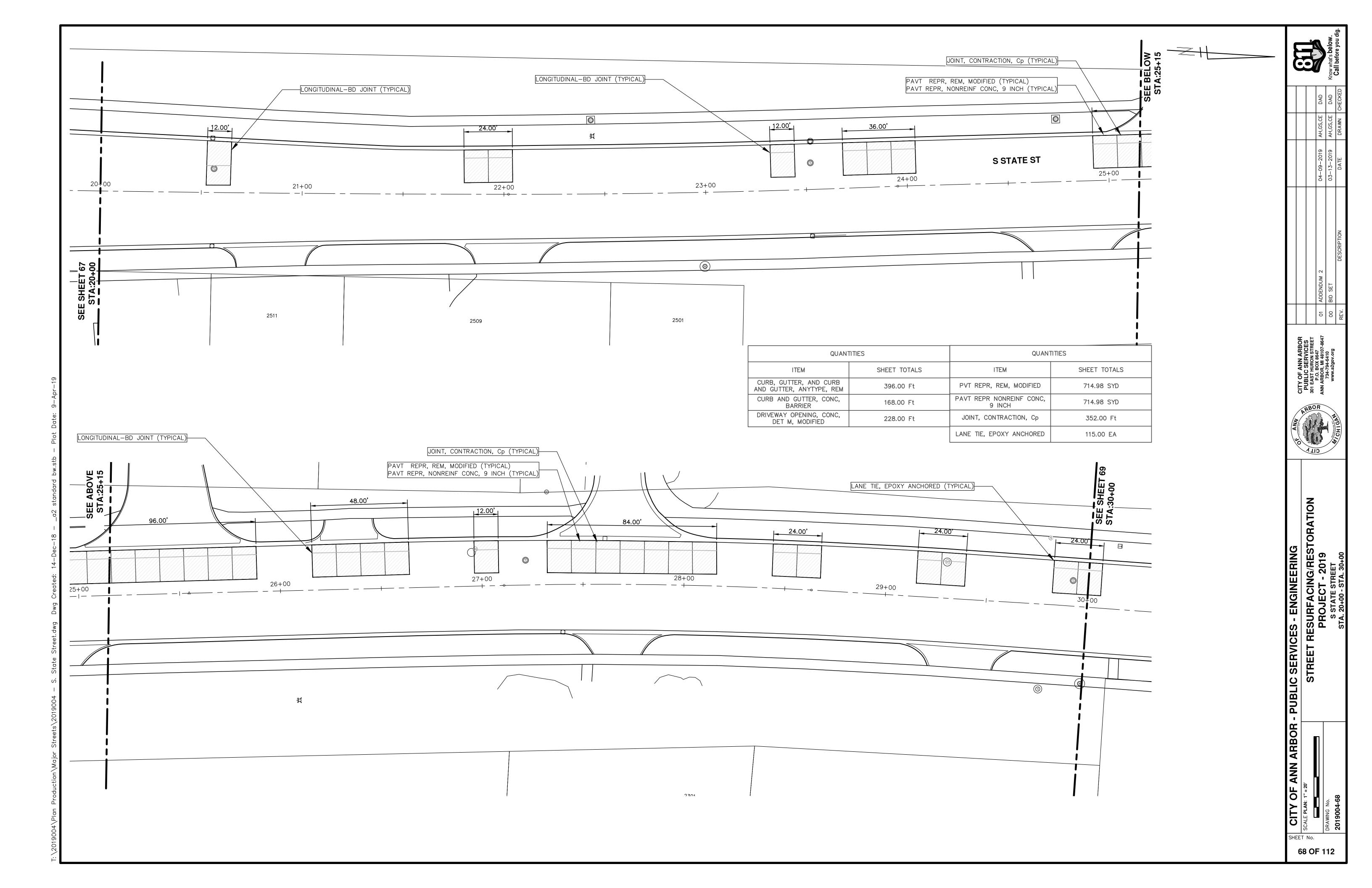
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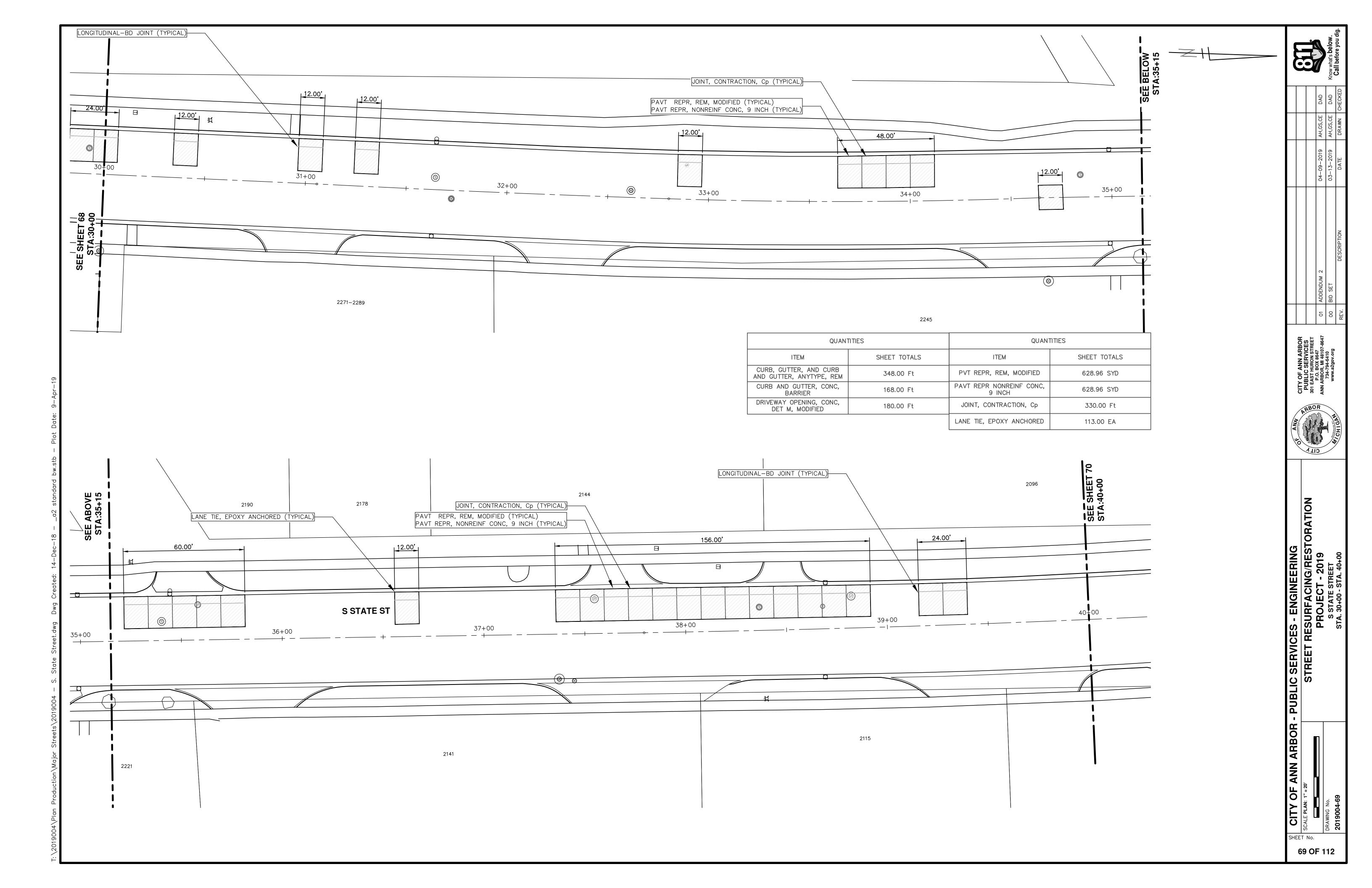


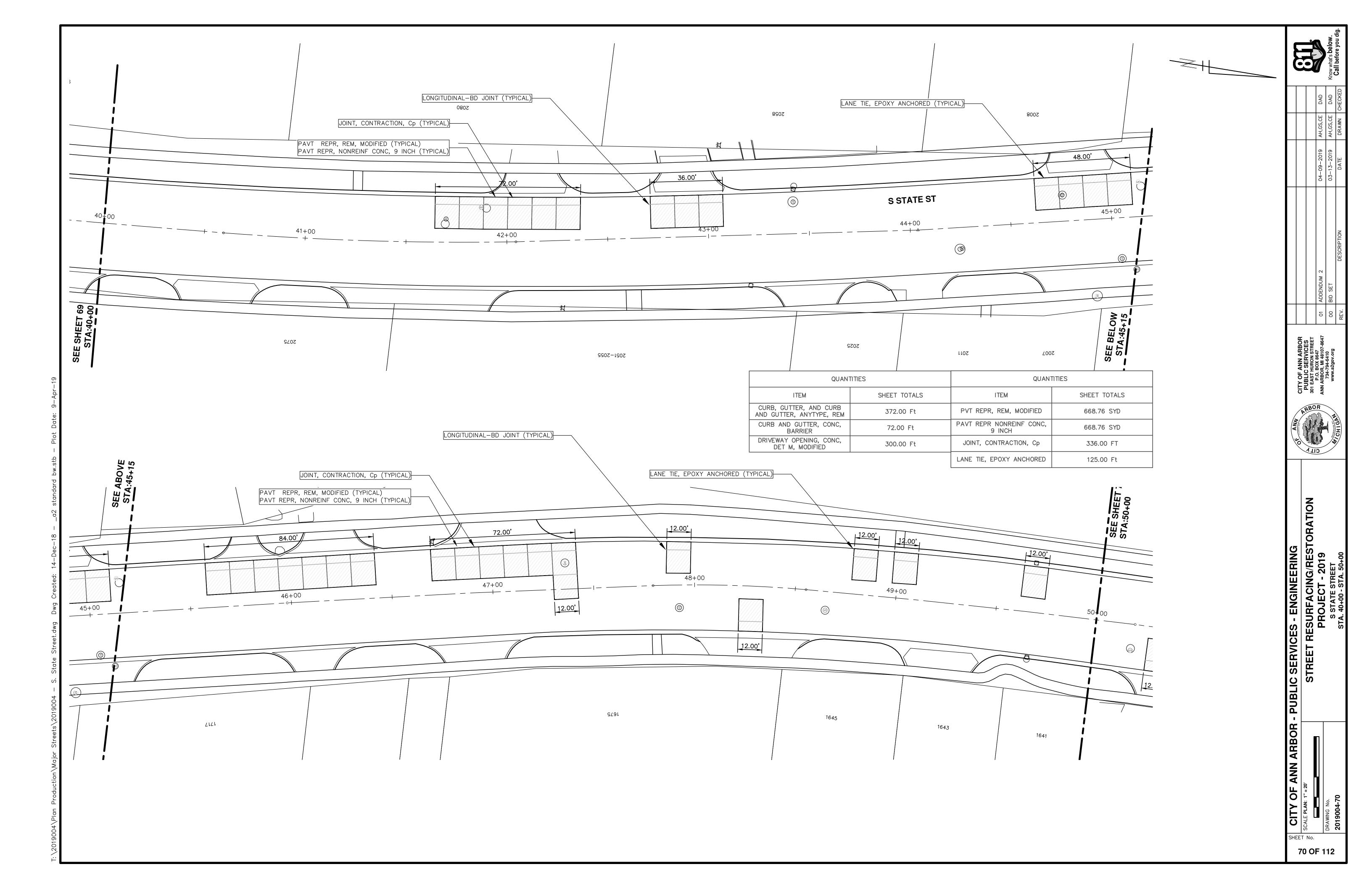
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINI

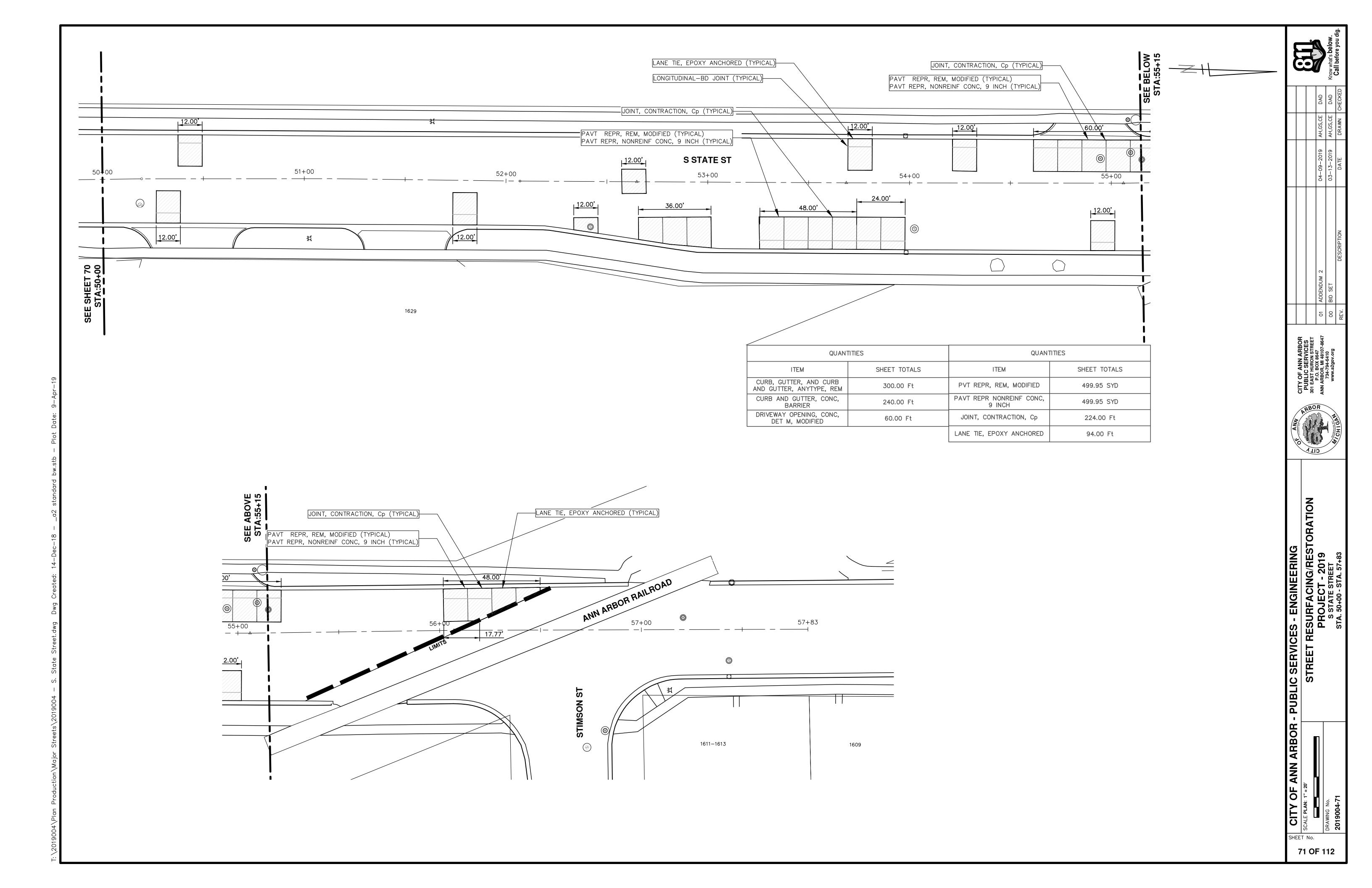
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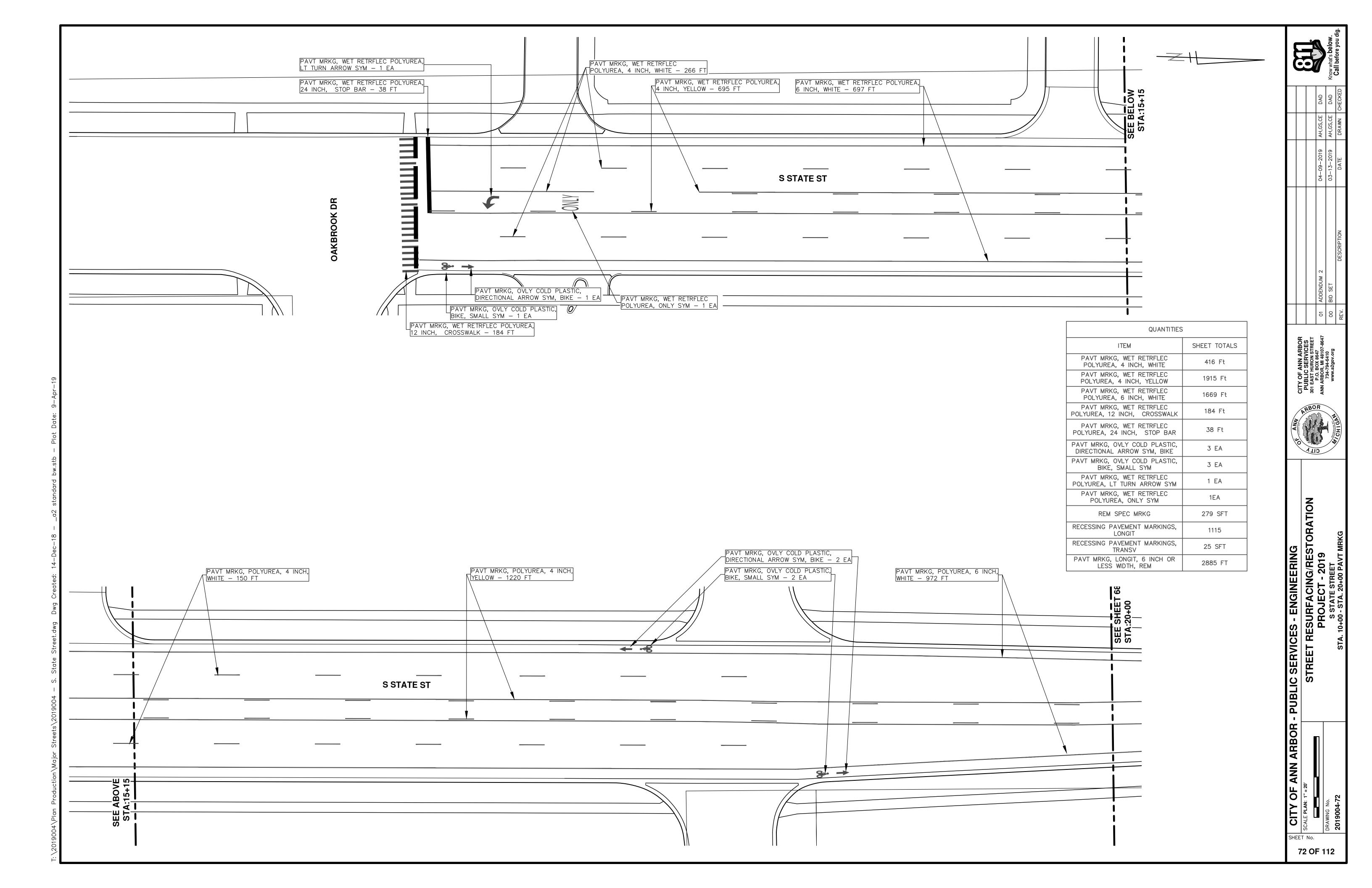


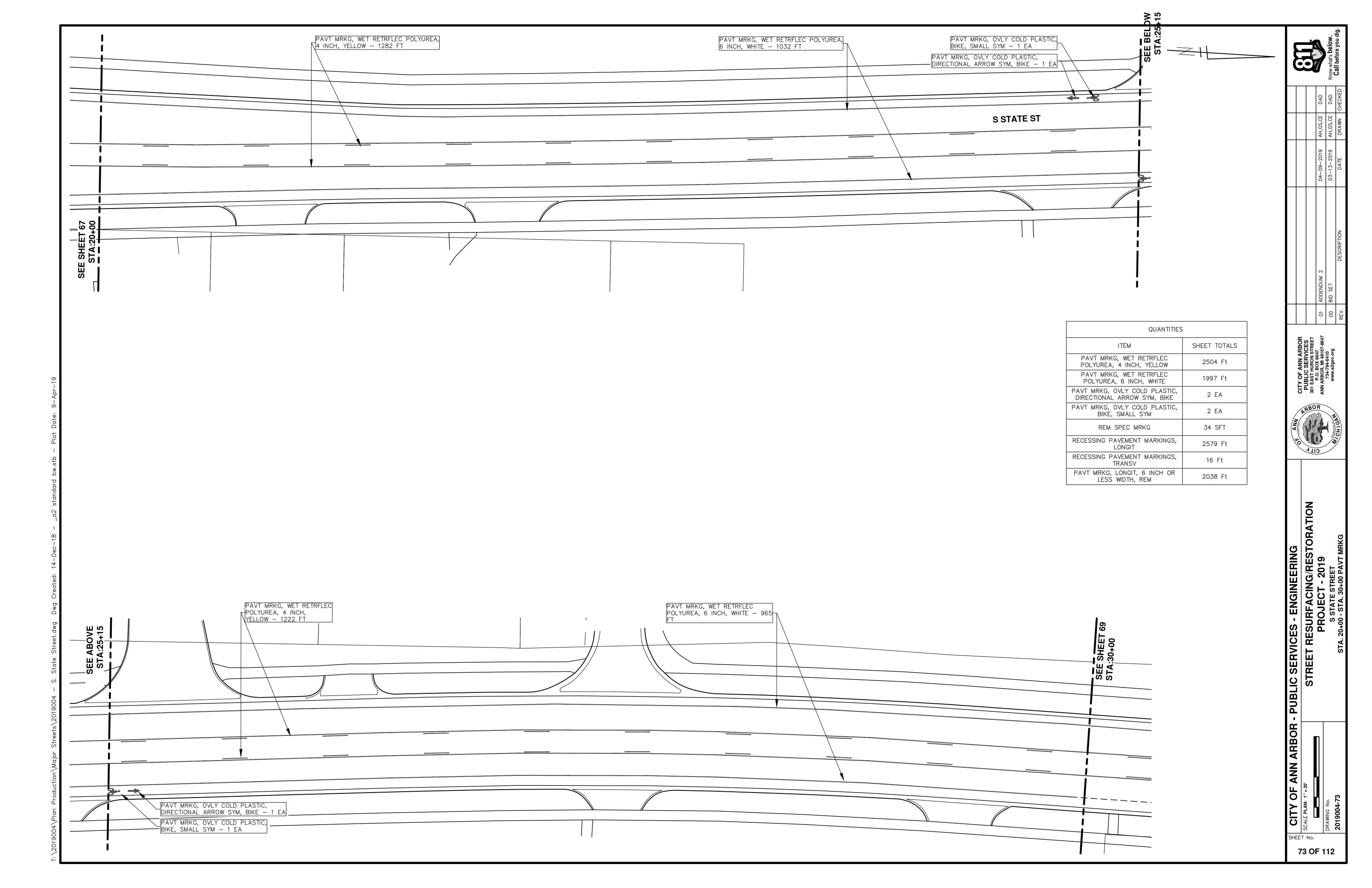


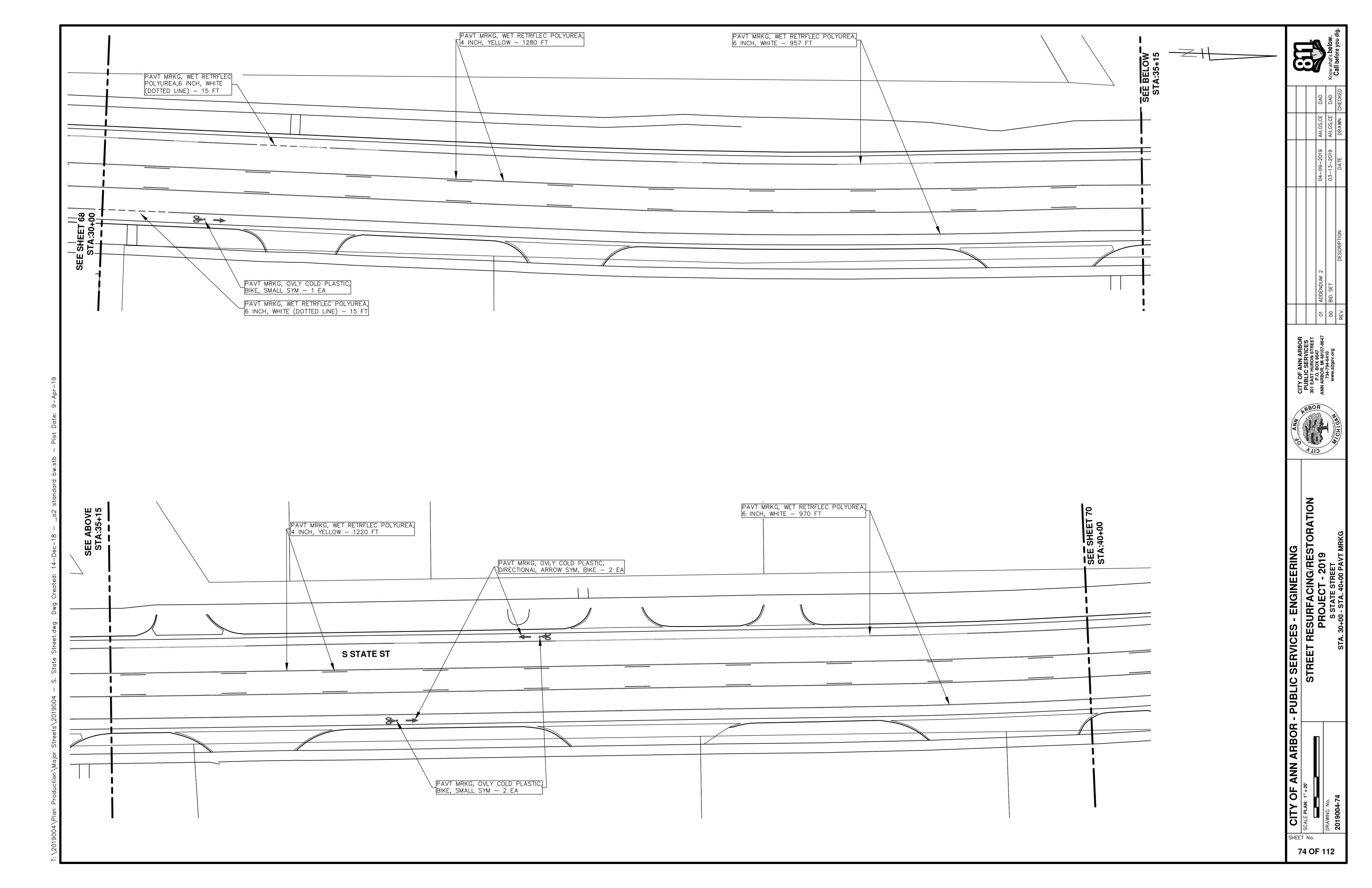


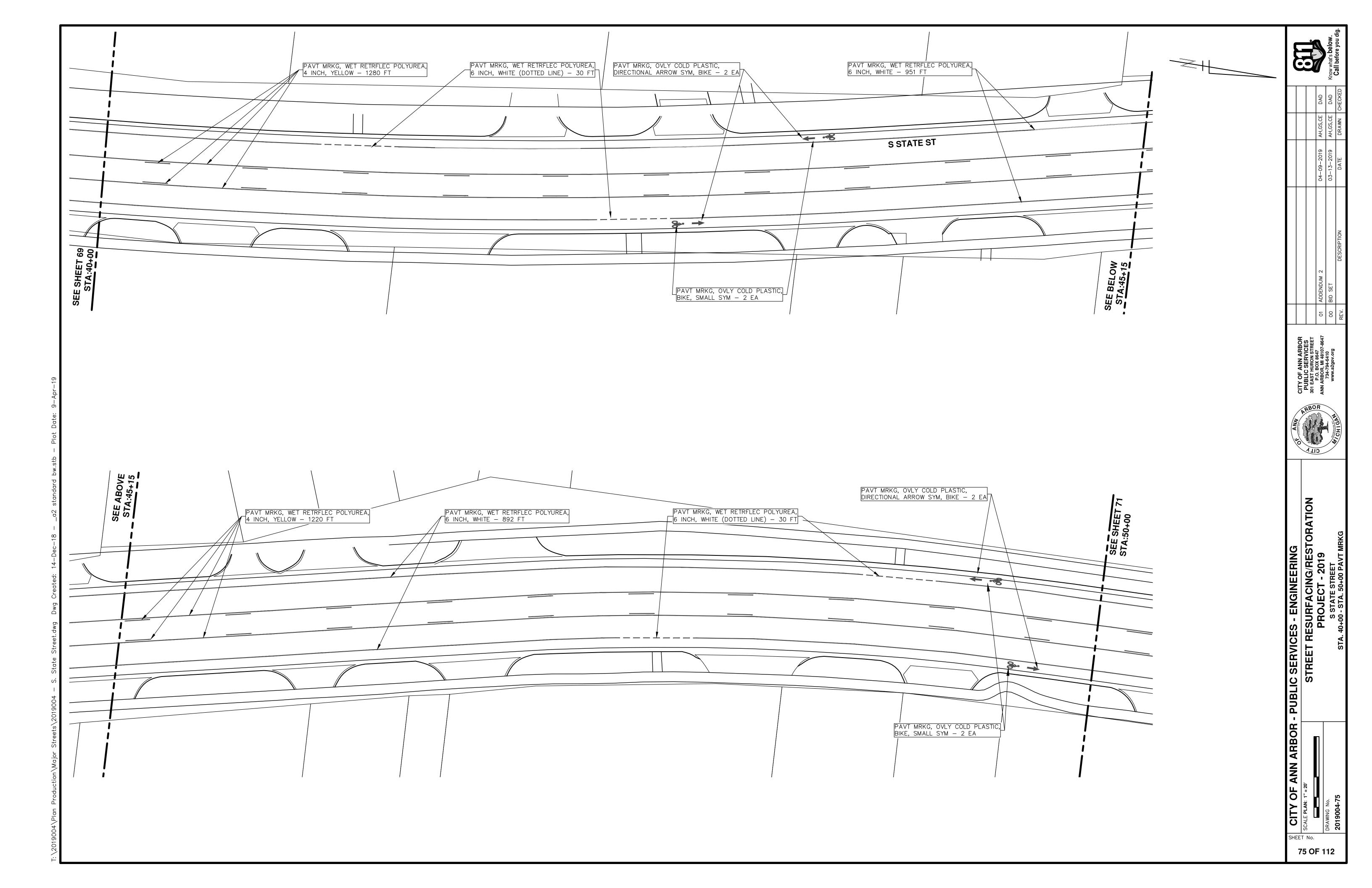


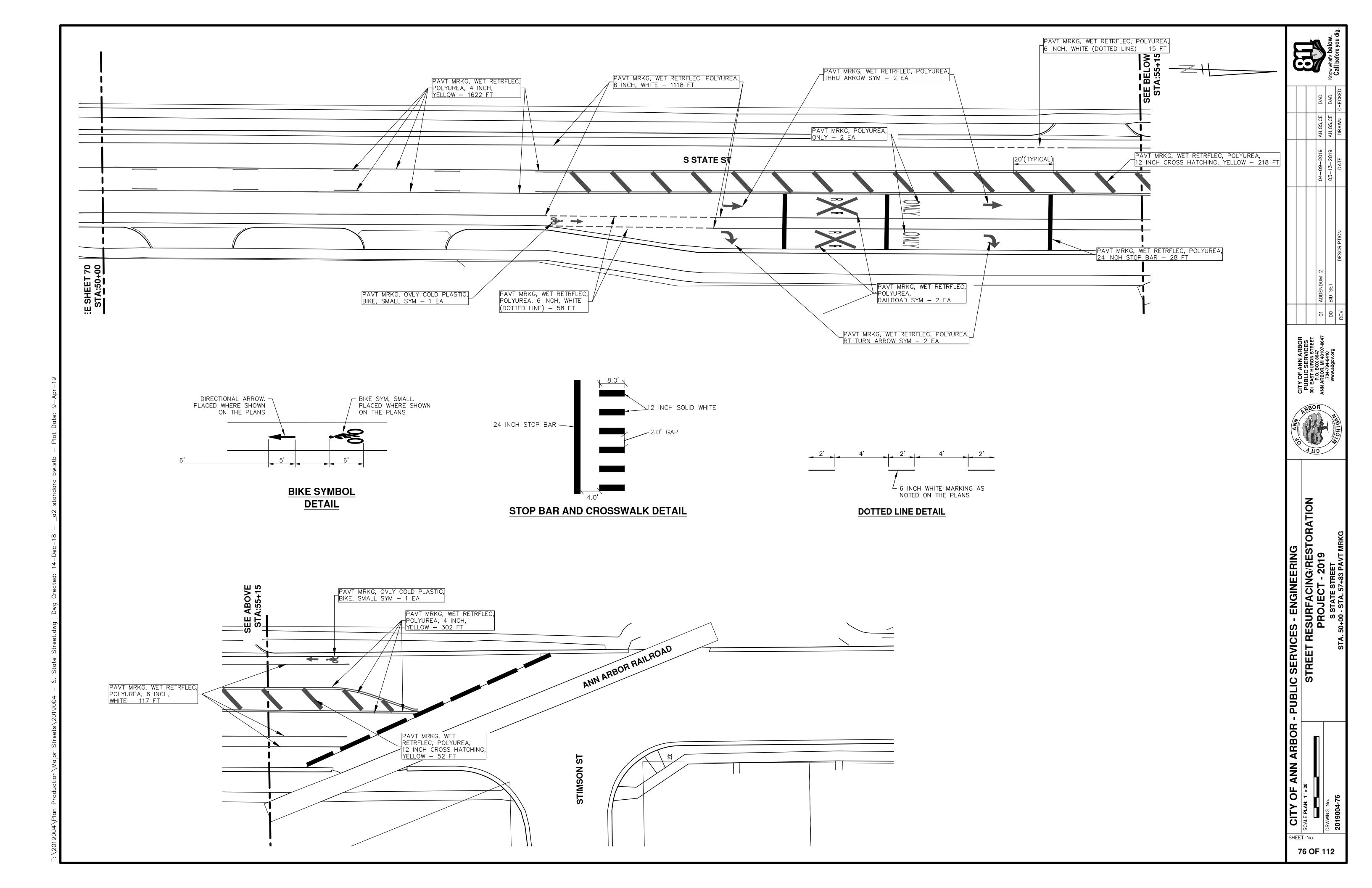














CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: STONE SCHOOL ROAD

ITB No. 4570 FILE No. 2019004

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	
2030015	Sewer, Rem, Less than 24 inch	Ft	2
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	41
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	5
2057011	_Grading, Driveway Approach	Syd	68
2057011	_Grading, Sidewalk	Syd	(3)
2057011	_Grading, Sidewalk Ramp	Syd	1
2057011	_Machine Grading, Special	Syd	9,31
2057021	_Subgrade Undercutting, Type IIA	Cyd	93
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	1
2080036	Erosion Control, Silt Fence	Ft	1,00
3070001	Approach, CI I	Ton	25
3070101	Shoulder, Cl I	Ton	45
3070200	Trenching	Sta	2
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	2
4030200	Dr Structure, 24 inch dia	Ea	
4037050	Dr Structure Cover, Type B, Modified	Ea	
4037050	Dr Structure Cover, Type K, Modified	Ea	
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	2
4037050	Dr Structure, Temp Lowering, Modified	Ea	1
4037050	Structure, Reconstruct	Ea	
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	8
5010002	Cold Milling HMA Surface	Syd	9,31
5010005	HMA Surface, Rem	Syd	73
5010005	Hand Patching	Ton	12
5010023	HMA, Approach	Ton	48
5010509	HMA, 4E3, High Stress	Ton	2,16
5010505	HMA, 5E3, High Stress	Ton	1,08
6027021	Flowable Fill		1,00
8027021	Curb and Gutter, Conc, Barrier	Cyd Ft	42
8027001		Ft	5
8030030	_Driveway Opening, Conc, Det M, Modified Curb Ramp Opening, Conc	Ft	2
8030030	_Detectable Warning Surface, Modified	Ft	2
8037001		Sft	16
	_Sidewalk Ramp, Conc, 6 inch, Modified		
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	S
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	20
8070095	Post, Mailbox	Ea	1
8110058	Pavt Mrkg, Ovly Cold Plastic, Bike, Small Sym	Ea	
8110079	Pavt Mrkg, Ovly Cold Plastic, Sharrow Symbol	Ea	0.4
8110195	Pavt Mrkg, Thermopl, 4 inch, White	Ft	21
8110196	Pavt Mrkg, Thermopl, 4 inch, Yellow	Ft	3,56
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	4
8110198	Pavt Mrkg, Thermopl, 6 inch, White	Ft	3,70
8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	67
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	6
8110332	Rem Raised Pavt Marker	Ea	5
8117050	_Pavt Mrkg, Thermopl, Lt Turn Arrow Sym	Ea	
8117050	_Pavt Mrkg, Thermopl, Only	Ea	
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	1
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	1
8120250	Plastic Drum, High Intensity, Furn	Ea	10
8120251	Plastic Drum, High Intensity, Oper	Ea	10
8127050	_Pedestrian Type II Barricade, Temp	Ea	
8167011	_Slope Restoration	Syd	16
8197050	_Monument Box, Adj	Ea	
8230431	Gate Box, Adj, Case 1	Ea	

	CONSTRUCTION KEY
KEY	ASSOCIATED PAY ITEM(S)
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust
ADST	_Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified
СР	_Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia
DSDI	Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
MBX	Post, Mailbox
HMA/SR	_HMA Surface, RemHMA Approach

CONSTRUCTION SCOPE AND SEQUENCING

WORK ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS. COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AS DIRECTED BY THE ENGINEER, AND UTILIZING PART WIDTH TWO (2) PHASE CONSTRUCTION. PERFORM THE WORK IN THE ORDER INDICATED BELOW UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS.

PHASE I

- 1. IMPLEMENT MAINTENANCE OF TRAFFIC (M.O.T.) PLAN, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL SESC MEASURES
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLDMILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION.
- 5. TEMPORARY LOWER ALL UTILITY STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT AREA, INCLUDING GATE AND MONUMENT BOXES.
- 6. PERFORM REMOVAL OF HMA MATERIAL AND TRENCHING ALONG EXISTING PAVEMENT EDGE TO CONSTRUCT SHOULDER
- 7. PLACE, GRADE, AND COMPACT AGGREGATE BASE MATERIAL UP TO 3 INCHES BELOW THE EXISTING PAVEMENT SURFACE ELEVATION.
- 8. REMOVE PORTION OF EXISTING HMA PAVEMENT BY COLDMILLING 2-3 INCHES. PROOF ROLL AS REQUIRED.
- 9. PERFORM ANY APPLICABLE JOINT AND CRACK CLEANOUT, HMA/HAND PATCHING, UNDERCUTS AND/OR BASE REPAIRS AS REQUIRED..
- 11. PLACE 2.0 INCH LEVELING COURSE HMA MIX (4E3).
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISH ELEVATION.
- 13. PLACE HMA APPROACHES (LEVELING COURSE) ON SIDE STREETS AS REQUIRED.
- 14. CLEAN PAVEMENT AND PLACE 1.5 INCH TOP COURSE HMA MIX (5E3 HIGH STRESS).
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES (TOP COURSE) ON SIDE STREETS AND DRIVEWAYS AS REQUIRED.

PHASE II

- 16. REPEAT ITEMS 1 THRU 15 IN THE ORDER SHOWN SHOWN ABOVE.
- 17. REMOVE SESC MEASURES.
- 18. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING CLEANING OF STRUCTURES, FINAL RESTORATION AND ALL OTHER NECESSARY CLEANUP.
- 20. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES, AND MISS DIG FLAG, NO PARKING SIGNS AND MISS DIG FLAGS.

		QUANTITIES Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp,	Prismatic, Special	
Quantity	Sign Code	Description	Area (sft)	Total Area (Sf
51.0	*D3-1	Street Name Sign	4.0	20
1.0	G20-2	End Road Work	4.5	
10.0	W20-1	Road Work Ahead Sign	9.0	S
5.0	W20-2	Detoure Ahead	9.0	4
1.0	W20-3	Road Closed Ahead	9.0	
1.0	M4-8a	Detour Ends	3.0	
17.0	M4-9S	Detour Arrow (Thru/Straight)	5.0	8
3.0	M4-9R	Detour Arrow (Right)	5.0	1
4.0	M4-9L	Detour Arrow (Left)	6.0	2
7.0	M4-9L	Detour Arrow (Left - MOD)	5.0	3
3.0	M4-9R	Detour Arrow (Right - MOD)	5.0	1
1.0	R3-1	No Right Turn	4.0	
1.0	R5-1	Do Not Enter	9.0	
1.0	R5-18C	Work Zone Begins	16.0	1
5.0	R6-1R	One Way / Right	3.0	,
3.0	R6-1L	One Way / Left	3.0	
1.0	R11-2	Road Closed	10.0	,
			TOTAL	59



DAD	AH,GS,CE DAD AH,GS,CE DAD DRAWN CHECKE	04-09-2019 03-13-2019 DATE	01 ADDENDUM 2 00 BID SET REV. DESCRIPTION	00 REV.
DAD	AH,GS,CE		BID SET	00
	AH,GS,CE		ADDENDUM 2	01

CITY OF ANN ARBO PUBLIC SERVICES 301 EAST HURON STREE P.O. BOX 8647 ANN ARBOR, MI 48107-86 734-794-6410 www.a2gov.org



SURFACING/RESTORATION PROJECT - 2019
STONE SCHOOL ROAD

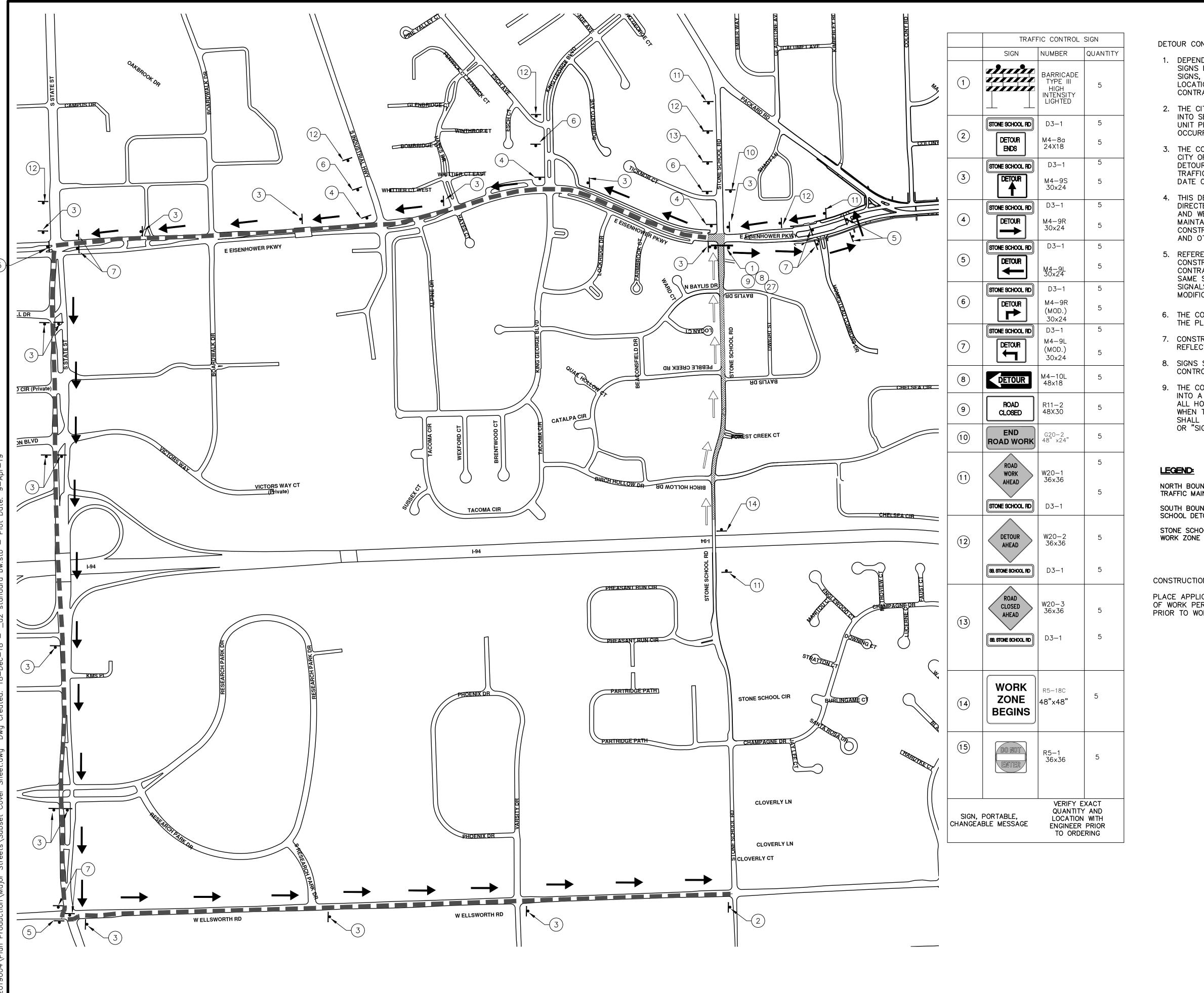
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F ANN ARBOR - PUBLIC

SCALE: NTS

DRAWING No.

HEET No.



DETOUR CONSTRUCTION NOTES:

- 1. DEPENDING ON THE DETOUR ROUTES THAT ARE PUT IN PLACE, CONFLICTING SIGNS MAY BE PRESENT. PRIOR TO THE ORDERING OR PLACEMENT OF ANY SIGNS, MEET WITH THE ENGINEER TO VERIFY THE EXACT NUMBER AND LOCATION OF THE SIGNS TO BE PLACED. THE ENGINEER AND THE CONTRACTOR SHALL WORK TOGETHER TO ELIMINATE ALL CONFLICTS.
- 2. THE CITY RESERVES THE RIGHT TO ORDER ADDITIONAL SIGNS AND PLACE THE INTO SERVICE IN ORDER TO SAFELY MAINTAIN TRAFFIC. ADJUSTMENTS IN THE UNIT PRICE FOR THESE ITEMS OF WORK SHALL NOT BE ALLOWED FOR THESE
- 3. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THOSE OF THE CITY OF ANN ARBOR'S SIGNS AND SIGNALS UNIT DURING THE COURSE OF THE DETOUR ROUTE ESTABLISHMENT TO EFFECTIVELY AND SAFELY MAINTAIN TRAFFIC. DO NOT ERECT ANY SIGNS UNTIL ITS LOCATION AND PROPOSED DATE OF INSTALLATION IS APPROVED BY THE ENGINEER.
- 4. THIS DETOUR IS TO BE IN PLACE DURING GEDDES AVE. CONSTRUCTION AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR EAST AND WEST BOUND GEDDES AVE. TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR LIMITATIONS, AND OTHER DETAILS.
- 5. REFERENCE THE "DETAILED SPECIFICATION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR ADDITIONAL PROJECT REQUIREMENTS. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO THE SECTION OF SAME SPECIAL PROVISION REGARDING COORDINATION WITH THE CITY SIGNS AN SIGNALS UNIT FOR THE SEVERAL DETOUR ROUTE MODIFICATIONS AND THE MODIFICATIONS TO TRAFFIC SIGNALS FOR THE DETOUR.
- 6. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SIGNS AS SHOWN ON THE PLANS OR OTHERWISE DIRECTED BY THE ENGINEER.
- 7. CONSTRUCTION WARNING SIGNS SHALL HAVE AN ORANGE, HIGH-INTENSITY, REFLECTORIZED BACKGROUND.
- 8. SIGNS SHALL CONFORM TO THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 9. THE CONTRACTOR SHALL DRIVE ALL SIGNS INTO EXPOSED GROUND OR INSERT INTO A BORED HOLE IN PAVEMENT AS NECESSARY TO PERMANENTLY SECURE. ALL HOLES IN PAVEMENT SHALL BE FILLED WITH ENGINEER-APPROVED MORTAR WHEN THE SIGN IS REMOVED AND NO LONGER NEEDED. COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "SIGN, TYPE B, TEMP, PRISMATIC, FURN" OR "SIGN, TYPE B, TEMP, PRISMATIC, FURN, SPECIAL"

NORTH BOUND STONE SCHOOL TRAFFIC MAINTAINED SOUTH BOUND STONE SCHOOL DETOUR ROUTE

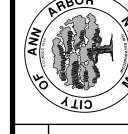
STONE SCHOOL

CONSTRUCTION NOTES:

PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET PRIOR TO WORK BEGINING.

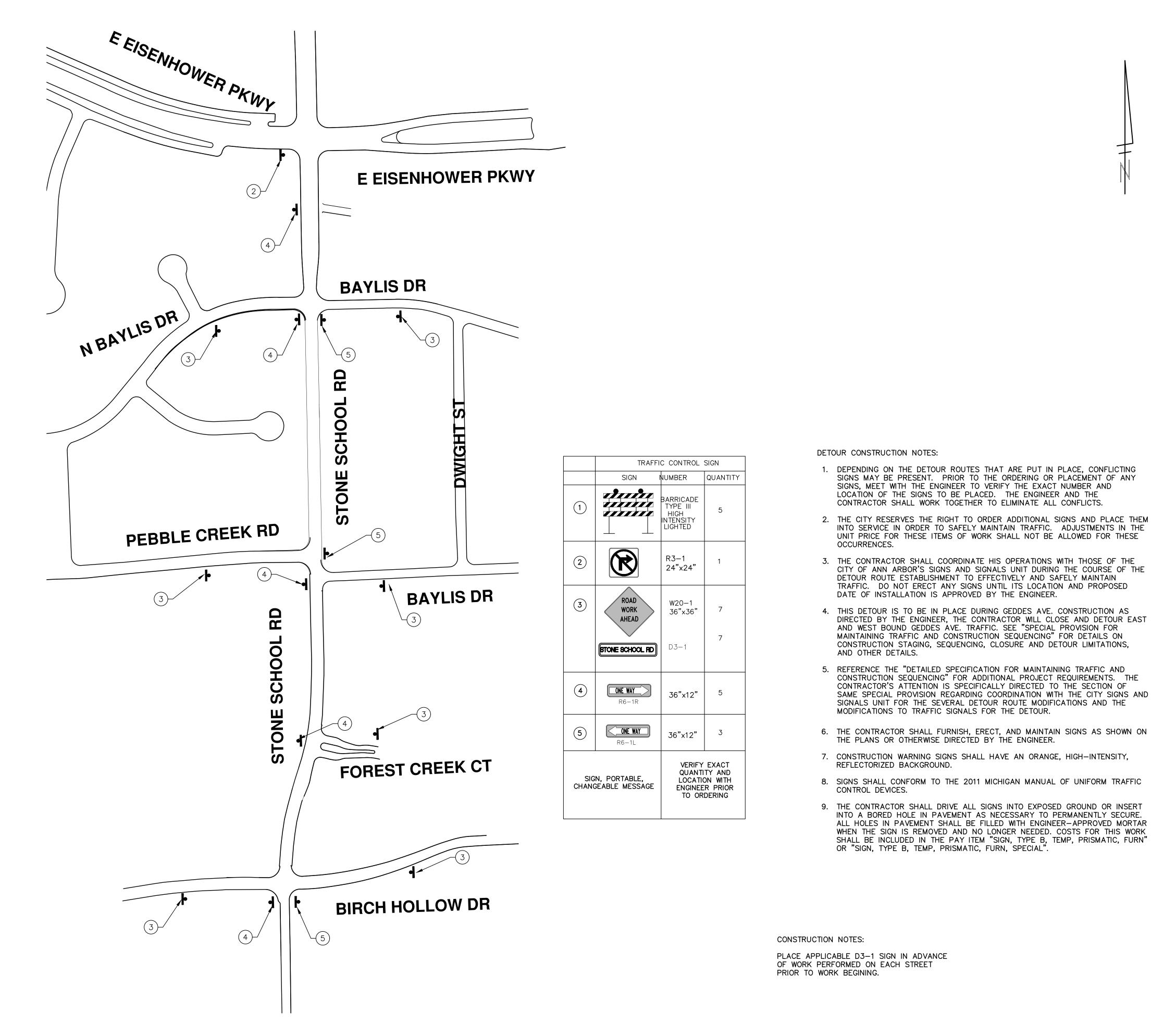


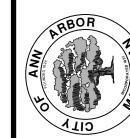
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Ш		04-09-2019	03-13-2019	DATE
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OF ANN ARBOR

SHEET No.

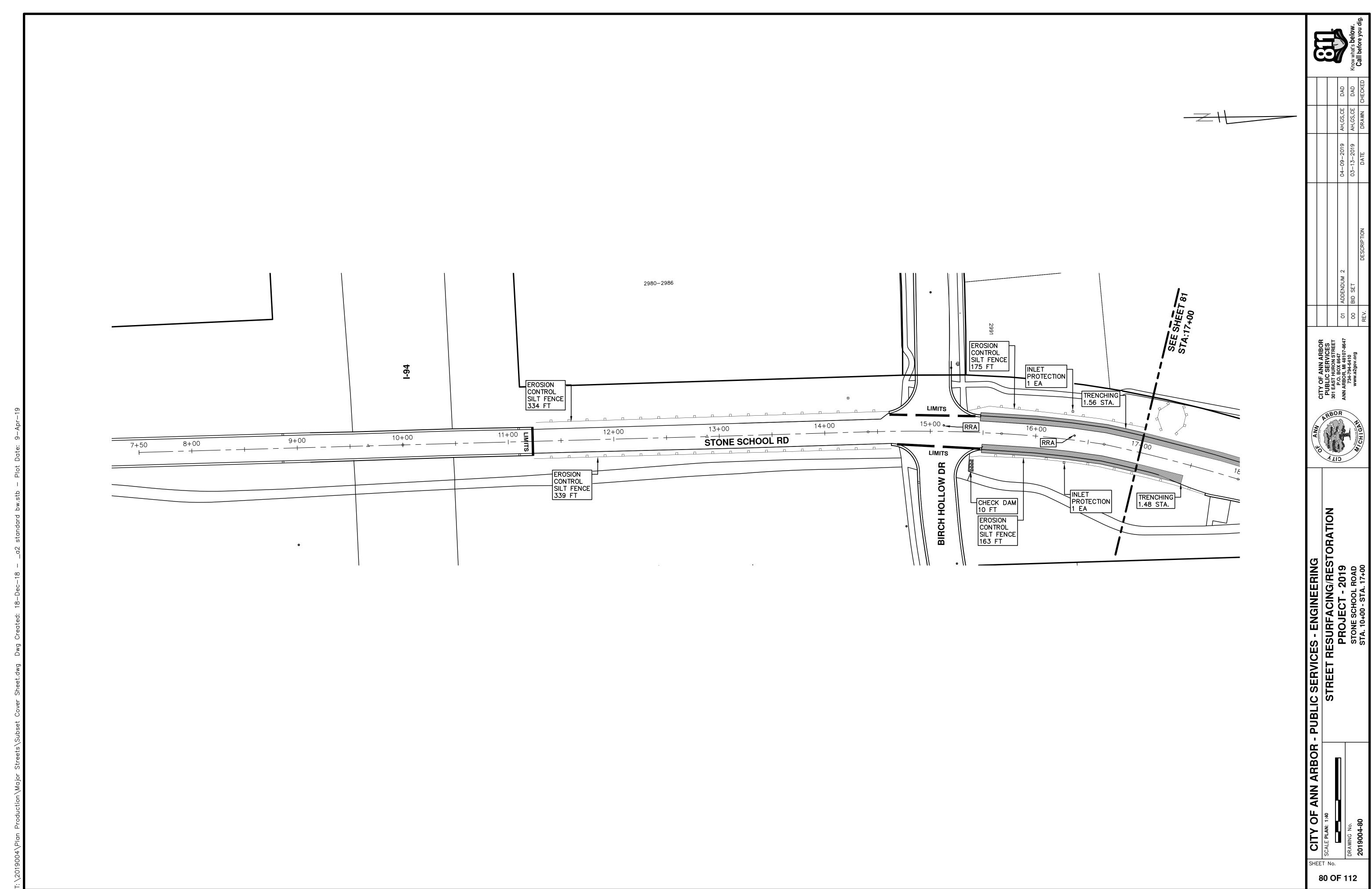


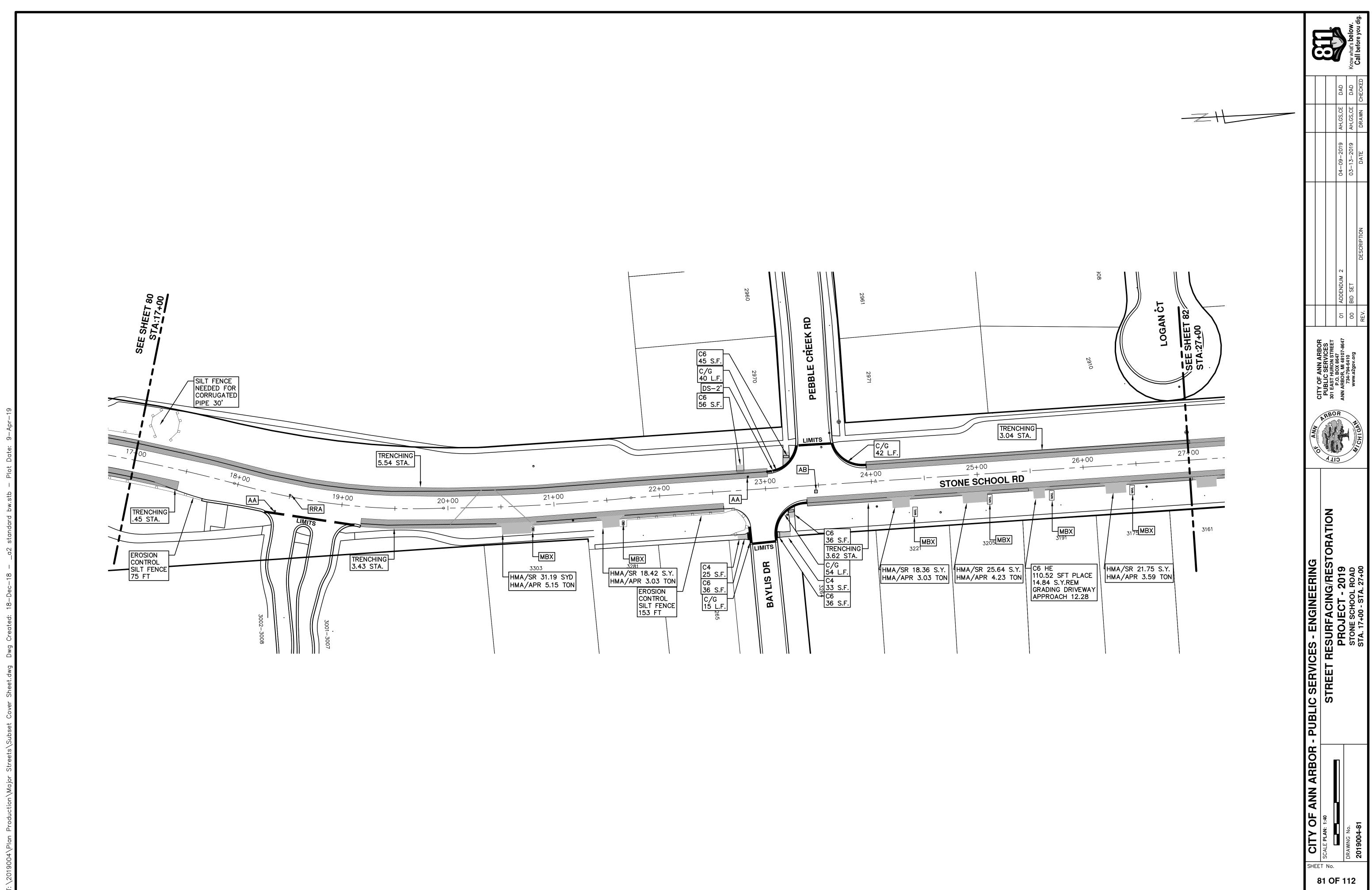


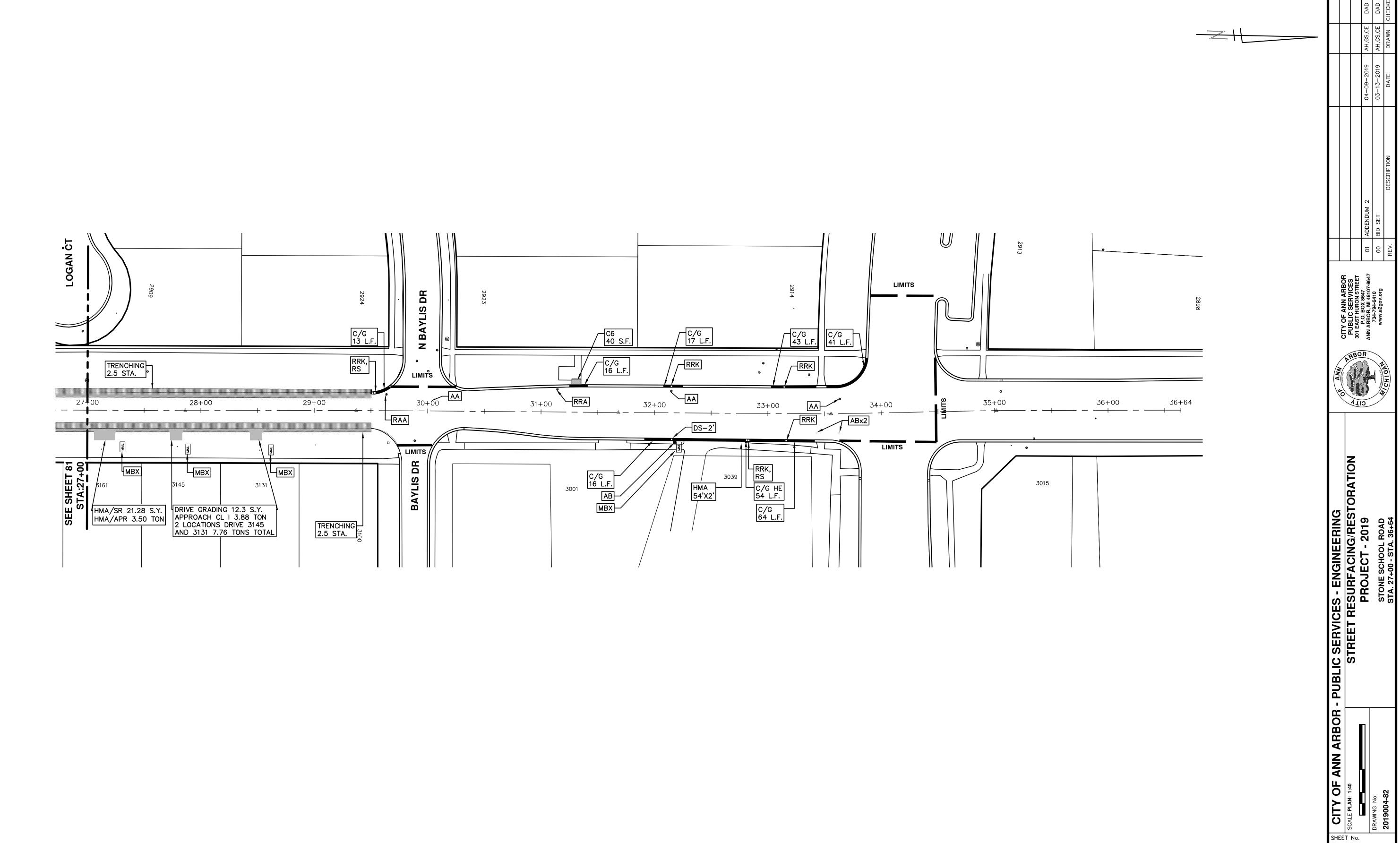
STREET RESURFACING/RESTO
PROJECT - 2019
STONE SCHOOL ROAD
TRAFFIC CONTROL

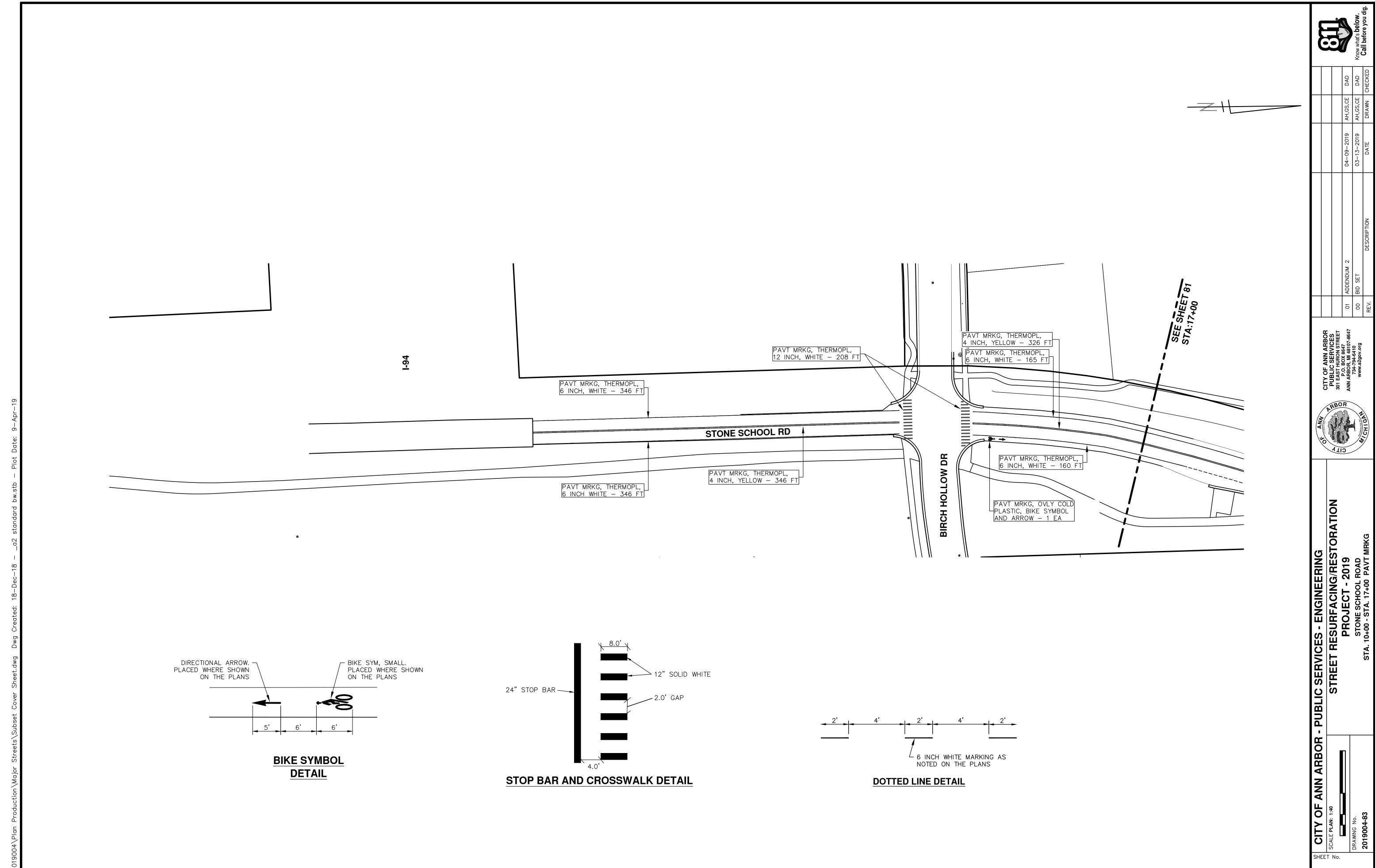
ANN ARBOR

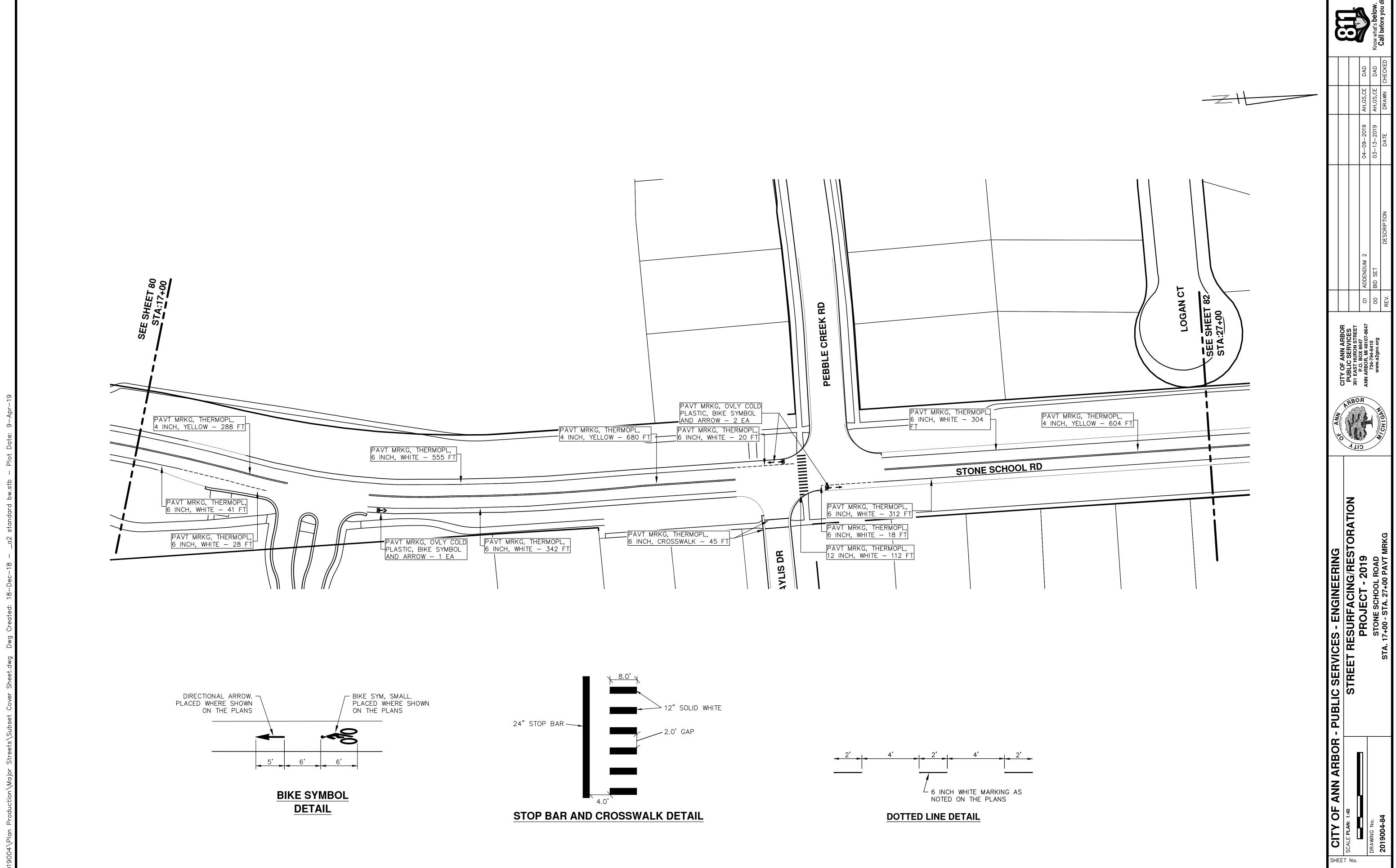
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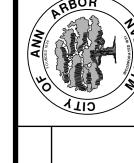


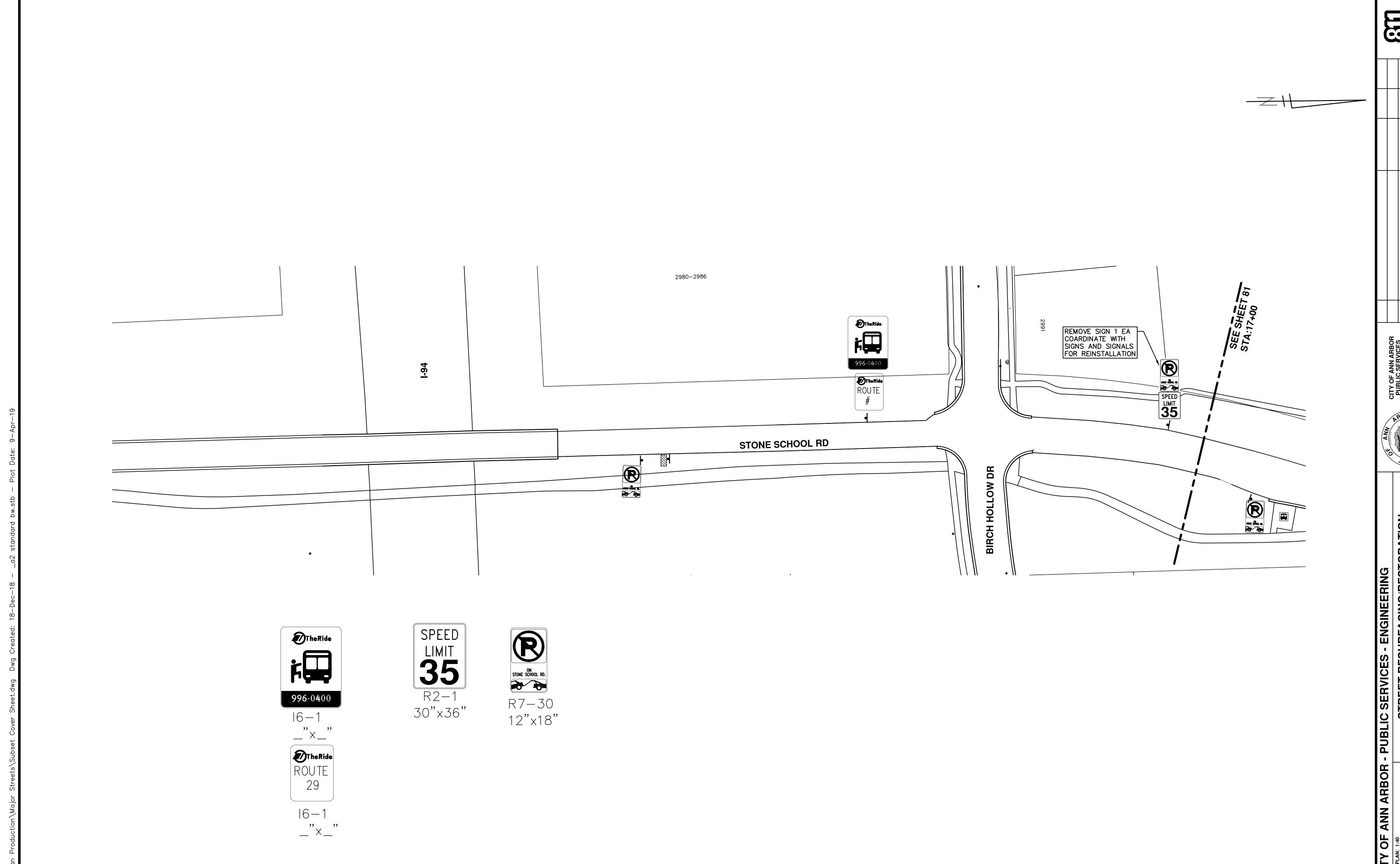












Anow what's below.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1:40

DRAWING No.

DRAWING No.

2019004-86

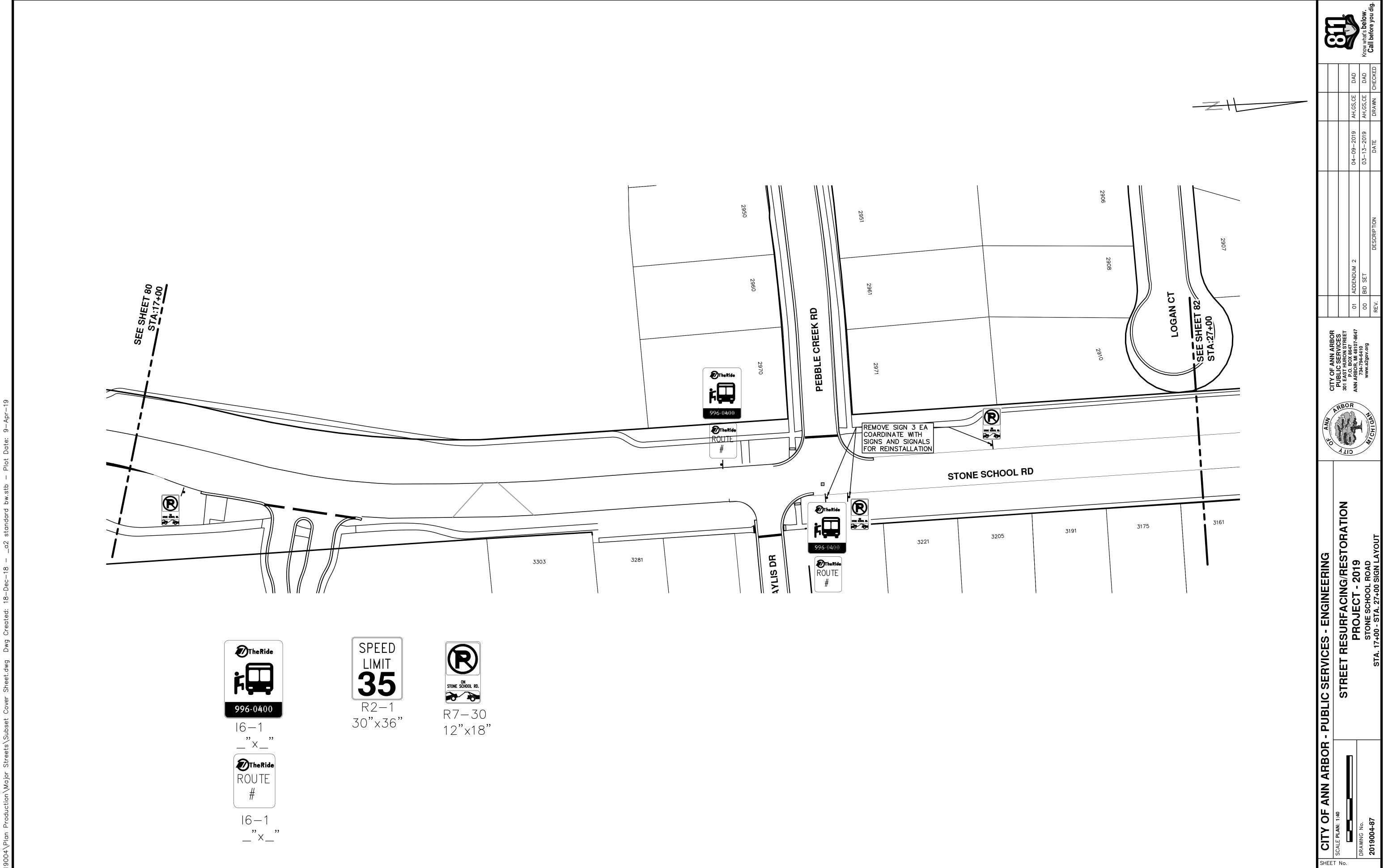
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

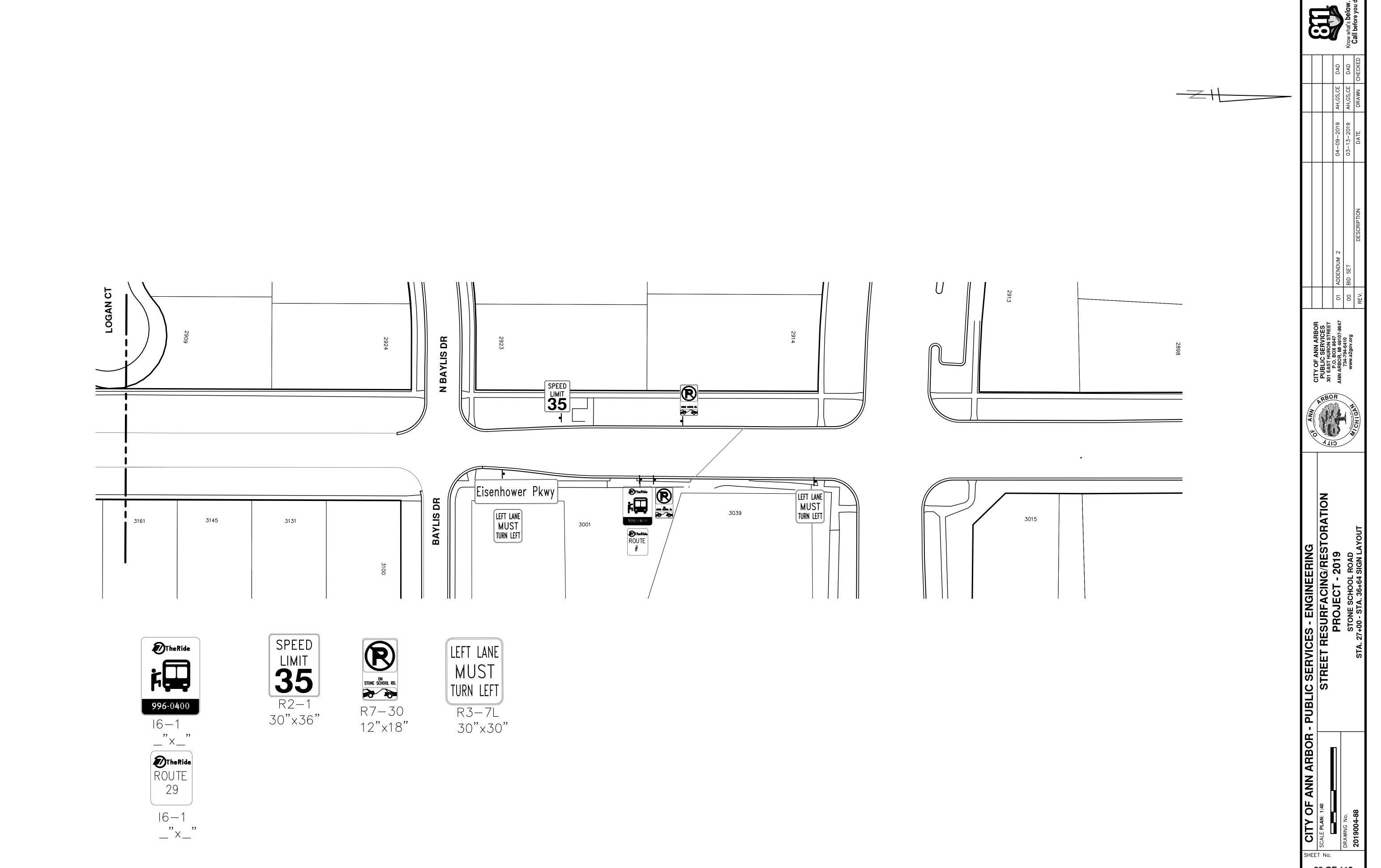
STAR EET RESURFACING/RESTORATION

PROJECT - 2019

STONE SCHOOL ROAD

STA. 10+00 - STA. 17+00 SIGN LAYOUT







CITY OF ANN ARBOR ENGINEERING

PROJECT LOCATION: TRAVERWOOD DRIVE

ITB No. 4570 FILE No. 2019004

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 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 THUS 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.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE LITTLES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	68
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	20
2057011	_Grading, Driveway Approach	Syd	9
2057011	_Grading, Sidewalk	Syd	9
2057011	_Grading, Sidewalk Ramp	Syd	7
2057011	_Machine Grading, Special	Syd	10,34
2057021	_Subgrade Undercutting, Type IIA	Cyd	99
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	1
4037050	_Dr Structure Cover, Type B, Modified	Ea	
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	
4037050	_Dr Structure, Point	Ea	
4037050	_Dr Structure, Temp Lowering, Modified	Ea	;
5010002	Cold Milling HMA Surface	Syd	9,90
5010005	HMA Surface, Rem	Syd	58
5010025	Hand Patching	Ton	2
5010050	HMA, 4E1	Ton	1,15
5010056	HMA, 5E1	Ton	1,15
5010061	HMA, Approach	Ton	2
6027021	_Flowable Fill	Cyd	1
8017011	Driveway, Nonreinf Conc, 8 inch, Modified	Syd	3
8027001	Curb and Gutter, Conc, Barrier	Ft	53
8027001	Driveway Opening, Conc, Det M, Modified	Ft	15
8030030	Curb Ramp Opening, Conc	Ft	5
8037001	Detectable Warning Surface, Modified	Ft	4
8037010	Sidewalk Ramp, Conc, 6 inch, Modified	Sft	66
8037010	Sidewalk, Conc, 4 inch, Modified	Sft	36
8037010	Sidewalk, Conc, 8 inch, Modified	Sft	50
8110049	Pavt Mrkg, Ovy Cold Plastic, Direction Arrow Sym, Bike	Ea	
8110058	Pavt Mrkg, Ovly Cold Plastic, Bike, Small Sym	Ea	
8110195	Pavt Mrkg, Thermopl, 4 inch, White	Ft	10
8110196	Pavt Mrkg, Thermopl, 4 inch, Yellow	Ft	5,80
8110198	Pavt Mrkg, Thermopl, 6 inch, White	Ft	2,69
8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	24
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	4
8110332	Rem Raised Pavt Marker	Ea	10
8117050	Pavt Mrkg, Thermopl, Lt Turn Arrow Sym	Ea	10
8117050	Pavt Mrkg, Thermopl, Only	Ea	
8117050	Pavt Mrkg, Thermopl, Rt Turn Arrow Sym	Ea	
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	1
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	1
8120140	Lighted Arrow, Type C, Furn	Ea	
8120141	Lighted Arrow, Type C, 1 diff	Ea	
8120250	Plastic Drum, High Intensity, Furn	Ea	16
8120250	Plastic Drum, High Intensity, Oper	Ea	16
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	28
8120351	Sign, Type B, Temp, Prismatic, Puri	Sft	28
8120351	Sign, Type B, Temp, Prismatic, Oper Sign, Type B, Temp, Prismatic, Special, Furn	Sft	8
	· · · · · · · · · · · · · · · · · · ·		
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	8
8127050	_Pedestrian Type II Barricade, Temp	Ea	70
8167011 8190244	_Slope Restoration	Syd	72
	Hh, Adj	Ea	

	CONSTRUCTION KEY					
KEY	ASSOCIATED PAY ITEM(S)					
AA	 _Dr Structure, Adj, Case 1, Modified _Dr Structure, Adj, Case 2, Modified _Dr Structure, Temp Lowering, Modified 					
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust 					
ADST	• _Dr Structure, Adj, Add Depth, Modified					
AK	• _Dr Structure, Adj, Case 1, Modified					
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified 					
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified 					
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified 					
C8	 _Grading, Driveway Approach _Driveway, Nonreinf Conc, 8 inch, Modified					
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified 					
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem _Curb and Gutter, Conc					
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified 					
СР	_Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified					
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem					
DS	Dr Structure, RemSewer, Rem, Less than 24 inchDr Structure, 24 inch dia					
DSDI	Dr Structure, RemSewer, Rem, Less than 24 inch_Dr Structure, Double Inlet					
PT	• _Dr Structure, Point					
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified 					
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified					
RS	_Dr Structure, Reconstruct					
TYPE II	Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper					
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper					
MBX	Post, Mailbox					
HMA/SR	• _HMA Surface, Rem					
MMA/APR	_HMA Approach _Grading, Driveway Approach					

CONSTRUCTION SCOPE AND SEQUENCING

WORK ON THIS STREET INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS. COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AS DIRECTED BY THE ENGINEER, AND UTILIZING PART WIDTH TWO (2) PHASE CONSTRUCTION. PERFORM THE WORK IN THE ORDER INDICATED BELOW UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS. NOTIFY THE MISS DIG SYSTEM THREE (3) FULL WORKING DAYS PRIOR TO BEGINNING ANY WORK.

<u>PHASE I</u>

- 1. IMPLEMENT MAINTENANCE OF TRAFFIC (M.O.T.) PLAN, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL SESC MEASURES.
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLDMILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION.
- 5. TEMPORARY LOWER ALL UTILITY STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT AREA, INCLUDING GATE AND MONUMENT BOXES.
- 6. REMOVE EXISTING HMA SURFACE BY COLDMILLING 4 INCHES. THIS MAY INCLUDE GRANULAR BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL AS REQUIRED.
- 7. PERFORM ANY APPLICABLE JOINT AND CRACK CLEANOUT, HMA/HAND PATCHING, UNDERCUTS AND/OR BASE REPAIRS AS
- 8. GRADE, SHAPE, AND COMPACT THE EXISTING BASE MATERIAL AS REQUIRED.
- 9. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISH ELEVATION.
- 10. PLACE 2.0 INCH LEVELING COURSE HMA MIX 4E1.
- 11. PLACE HMA APPROACHES AS REQUIRED
- 12. CLEAN PAVEMENT AND PLACE 2 INCH TOP COURSE HMA MIX 5E1.
- 13. CLEAN PAVEMENT AND PLACE HMA APPROACHES AS REQUIRED.

<u>PHASE II</u>

- 14. REPEAT ITEMS 1 THRU 13 IN THE ORDER SHOWN SHOWN ABOVE.
- 15. REMOVE SESC MEASURES.
- 16. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS.
- 17. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING CLEANING OF STRUCTURES, FINAL RESTORATION AND ALL OTHER NECESSARY CLEANUP.
- 18. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES, AND MISS DIG FLAG, NO PARKING SIGNS AND MISS DIG FLAGS.

		QUANTITIES Sign, Type B, Temp, Prismatic & *Sign, Type B, Ter	mp. Prismatic. Special	
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)
20.0	*D3-1	Street Name Sign	4.0	80
1.0	W9-3	СРВ	9.0	9
4.0	W20-1	Road Work Ahead Sign	9.0	36
3.0	W20-2	Detour Ahead	9.0	27
2.0	W20-3	Road Closed Ahead	9.0	18
1.0	W20-5L	Lane Ends / Left	9.0	9
1.0	M4-8a	Detour Ends	3.0	3
6.0	M4-9S	Detour Arrow (Thru/Straight)	5.0	30
2.0	M4-9R	Detour Arrow (Right)	5.0	10
1.0	M4-9L	Detour Arrow (Left)	6.0	6
1.0	M4-9L	Detour Arrow (Left - MOD)	5.0	5
2.0	M4-9R	Detour Arrow (Right - MOD)	5.0	10
1.0	M4-10L	Detour / Left	6.0	6
6.0	R3-1	No Right Turn	4.0	24
4.0	R3-2	No Left Turn	4.0	16
1.0	R5-1	Do Not Enter	9.0	9
1.0	R5-18C	Work Zone Begins	16.0	16
4.0	R6-1R	One Way / Right	3.0	12
6.0	R6-1L	One Way / Left	3.0	18
2.0	R11-2	Road Closed	10.0	20
			TOTAL	364



DAD	AH,GS,CE DAD DRAWN CHECKE	03-13-2019 DATE	DESCRIPTION
	AH,GS,CE AH,GS,CE	04-09-2019	

CITY OF ANN ARBC
PUBLIC SERVICE:
301 EAST HURON STRE
P.O. BOX 8647
ANN ARBOR, MI 48107-8
734-794-6410
www.a2gov.org



INEERING CING/RESTORATION CT - 2019

ERVICES - ENGINEER
RET RESURFACING/
PROJECT - 20
TRAVERWOOD DE

BOR - PUBLIC SERVICI

FY OF ANN ARBOR - PI

SHEET No.

	TRAFF	FIC CONTROL	SIGN
	SIGN	NUMBER	QUANTITY
1		BARRICADE TYPE III HIGH INTENSITY LIGHTED	2
	TRAVERWOOD DR	D3-1	1
(2)	DETOUR ENDS	M4-8a 24X18	1
\bigcirc	TRAVERWOOD DR	D3-1	6
(3)	DETOUR	M4-9S 30x24	6
	TRAVERWOOD DR	D3-1	2
4	DETOUR	M4-9R 30x24	2
	TRAVERWOOD DR	D3-1	1
(5)	DETOUR	M4-9L 30x24	1
		D3-1	2
6	DETOUR	M4-9R (MOD.) 30x24	2
	TRAVERWOOD DR	D3-1	1
7	DETOUR	M4-9L (MOD.) 30x24	1
8)	DETOUR	M4-10L 48x18	1
9)		R3-2 24"x24"	
10)		R3-1 24"x24"	1
(11)	ROAD CLOSED	R11-2 48X30	1
12	ROAD WORK AHEAD	W20-1 36×36	4
	TRAVERWOOD DR	D3-1	4
(13)	DETOUR AHEAD	W20-2 36x36	3
	TRAVERWOOD DR	D3-1	3
14)	CENTER LANE CLOSED AHEAD	W9-3 36"x36"	1
(15)	DO NOT ENTER	R5-1 36×36	1
SIGN, CHANGEA	PORTABLE, BLE MESSAGE	VERIFY E QUANTITY LOCATION ENGINEER TO ORDE	Y AND I WITH PRIOR

LEGEND:

SOUTH BOUND TRAVERWOOD DRIVE DETOUR ROUTE

NORTH BOUND TRAVERWOOD DRIVE TRAFFIC MAINTAINED

TRAVERWOOD DRIVE WORK ZONE

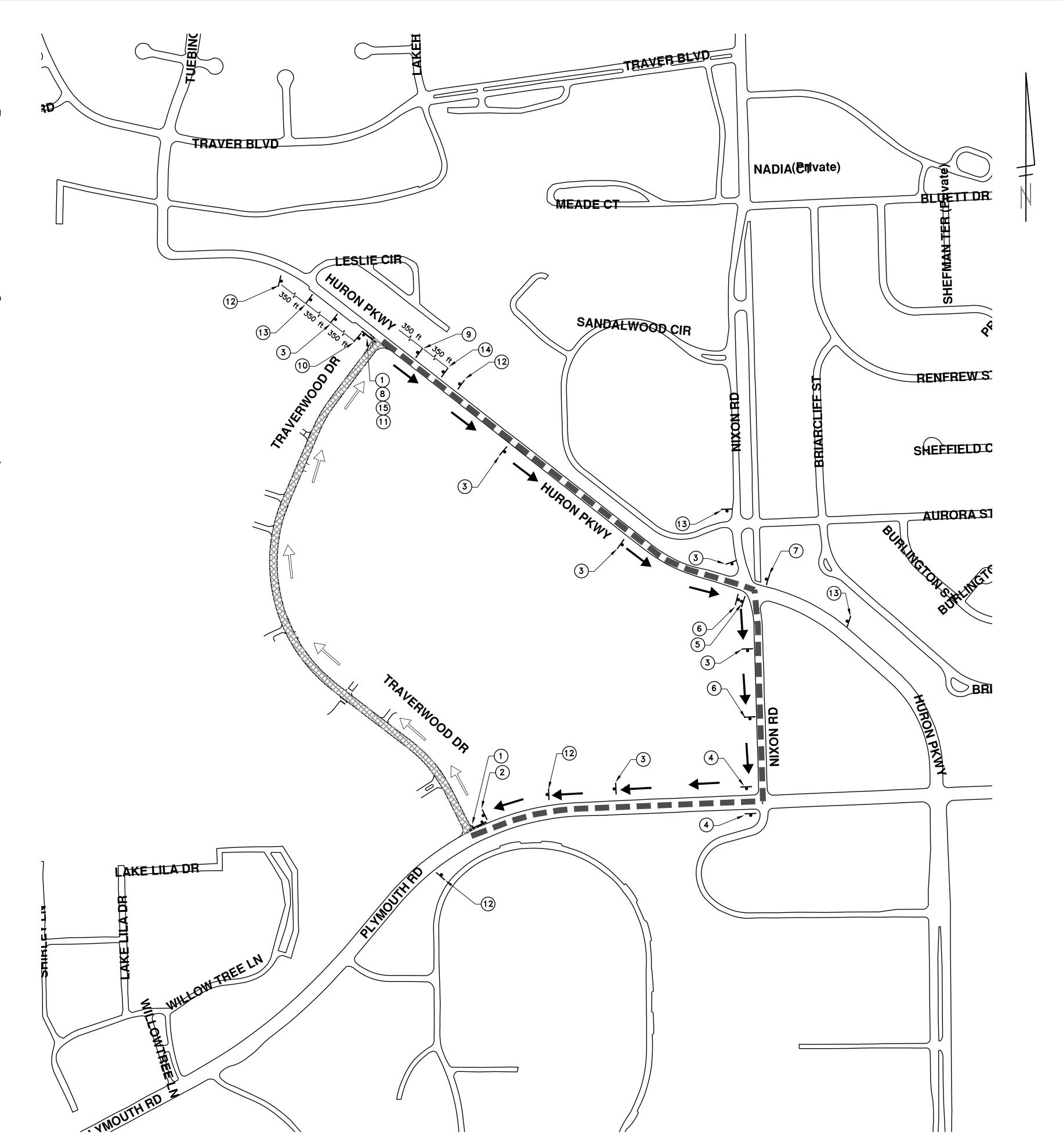
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CONSTRUCTION NOTES:

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- 4. THIS DETOUR IS TO BE IN PLACE AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR SOUTH BOUND TRAVERWOOD DRIVE TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR LIMITATIONS, AND OTHER DETAILS.
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- 6. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SIGNS AS SHOWN ON THE PLANS OR OTHERWISE DIRECTED BY THE ENGINEER.
- 7. CONSTRUCTION WARNING SIGNS SHALL HAVE AN ORANGE, HIGH-INTENSITY, REFLECTORIZED BACKGROUND.
- 8. SIGNS SHALL CONFORM TO THE 201 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 9. THE CONTRACTOR SHALL DRIVE ALL SIGNS INTO EXPOSED GROUND OR INSERT INTO A BORED HOLE IN PAVEMENT AS NECESSARY TO PERMANENTLY SECURE. ALL HOLES IN PAVEMENT SHALL BE FILLED WITH ENGINEER—APPROVED MORTAR WHEN THE SIGN IS REMOVED AND NO LONGER NEEDED. COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "SIGN, TYPE B, TEMP, PRISMATIC, FURN" OR "SIGN, TYPE B, TEMP, PRISMATIC, FURN, SPECIAL".



R - PUBLIC SERVICES - ENGINEERING
STREET RESURFACING/RESTOI
PROJECT - 2019
TRAVERWOOD DRIVE
DETOUR PLAN

OF ANN ARBOR

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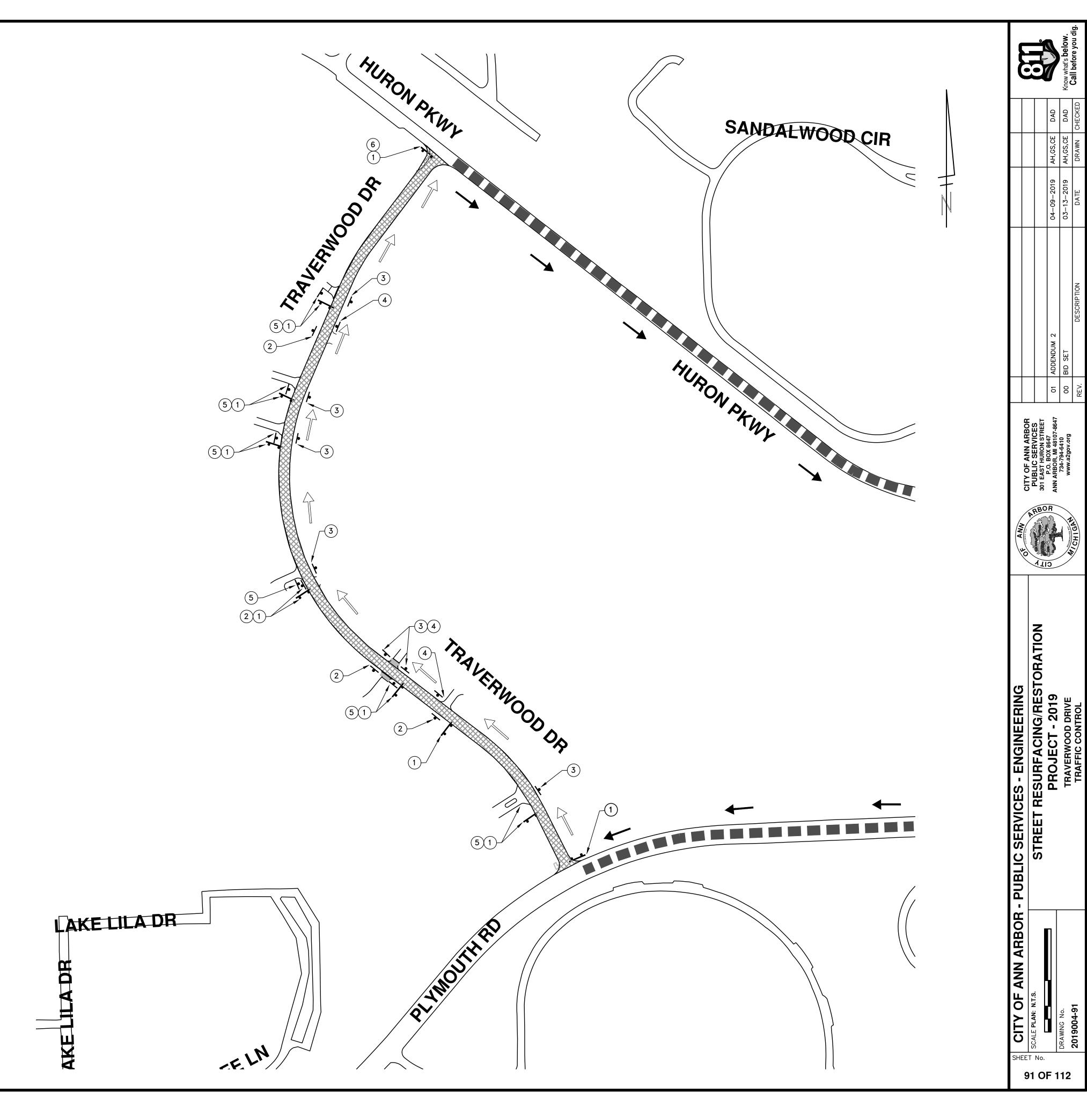
LEGEND:

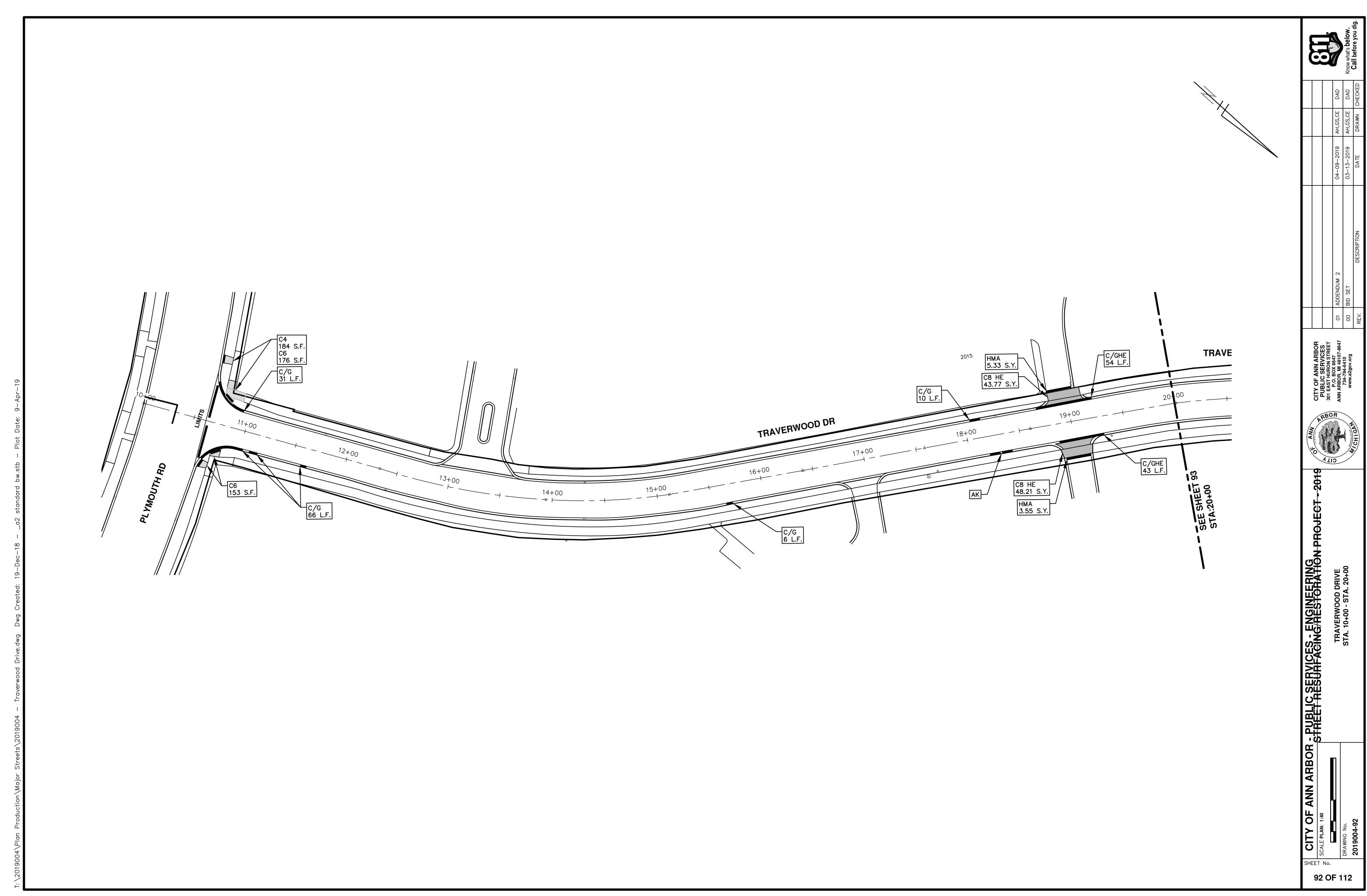
SOUTH BOUND TRAVERWOOD DRIVE DETOUR ROUTE NORTH BOUND TRAVERWOOD DRIVE TRAFFIC MAINTAINED TRAVERWOOD DRIVE WORK ZONE

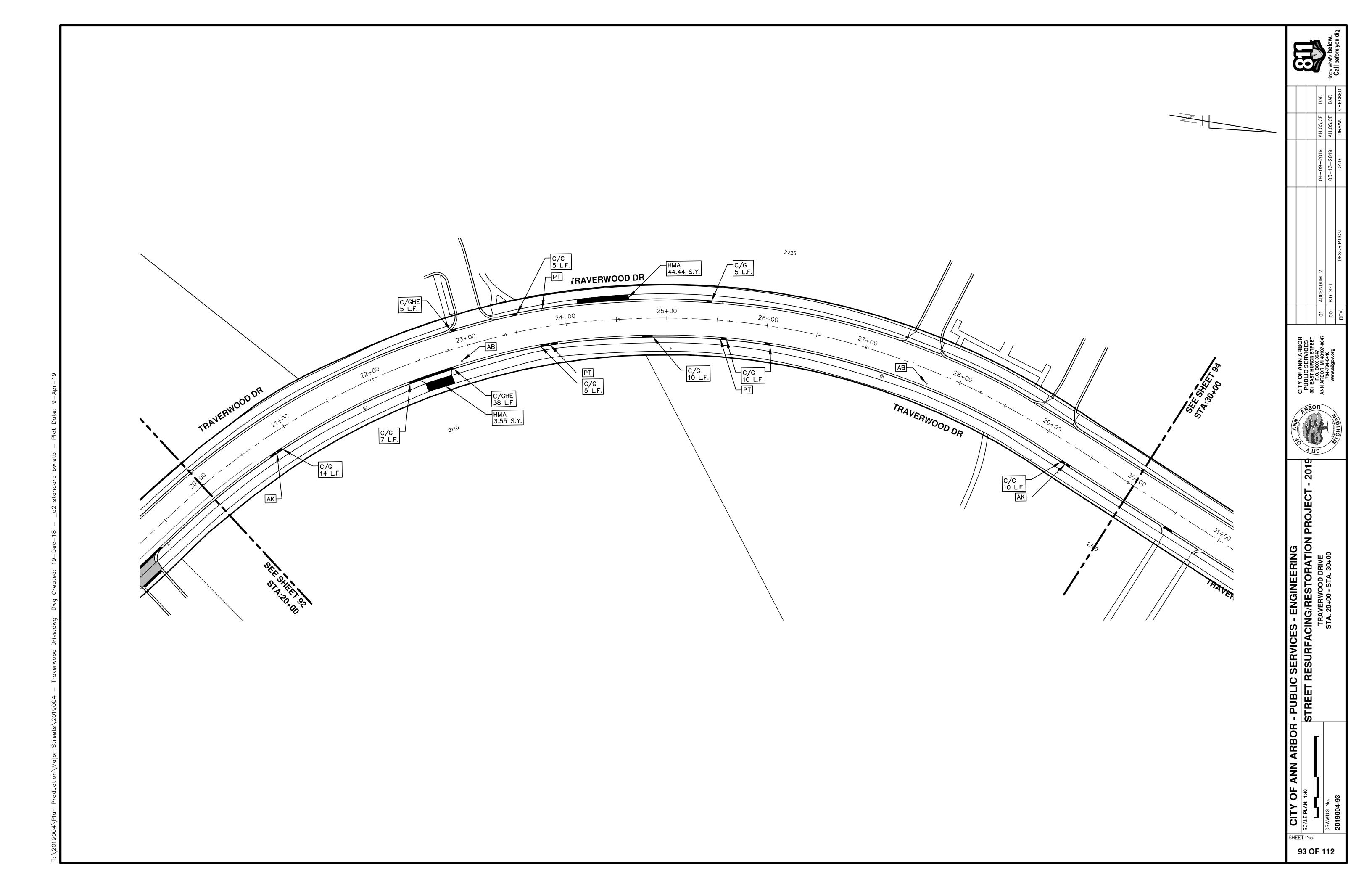
CONSTRUCTION NOTES:

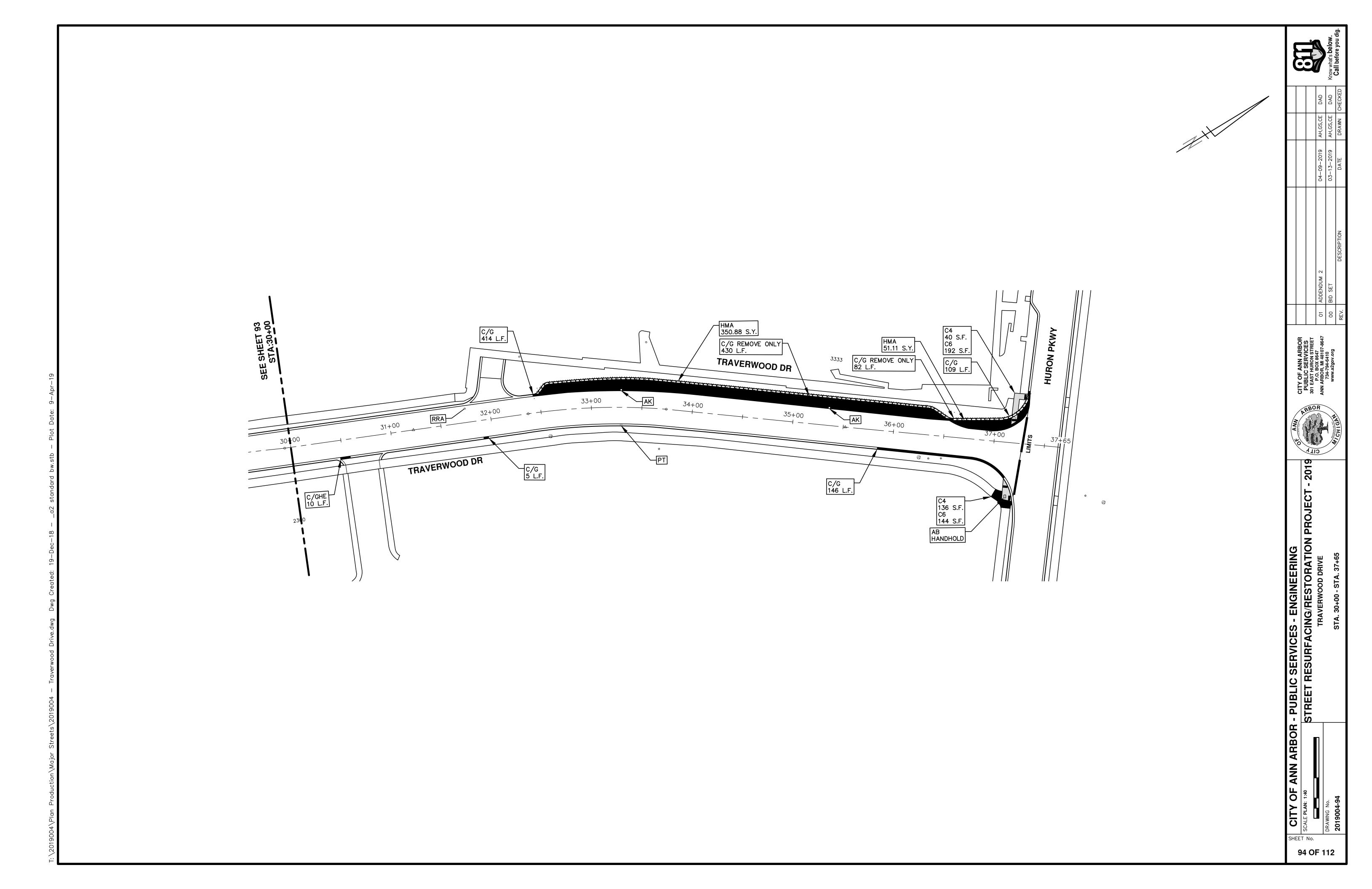
PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET PRIOR TO WORK BEGINING.

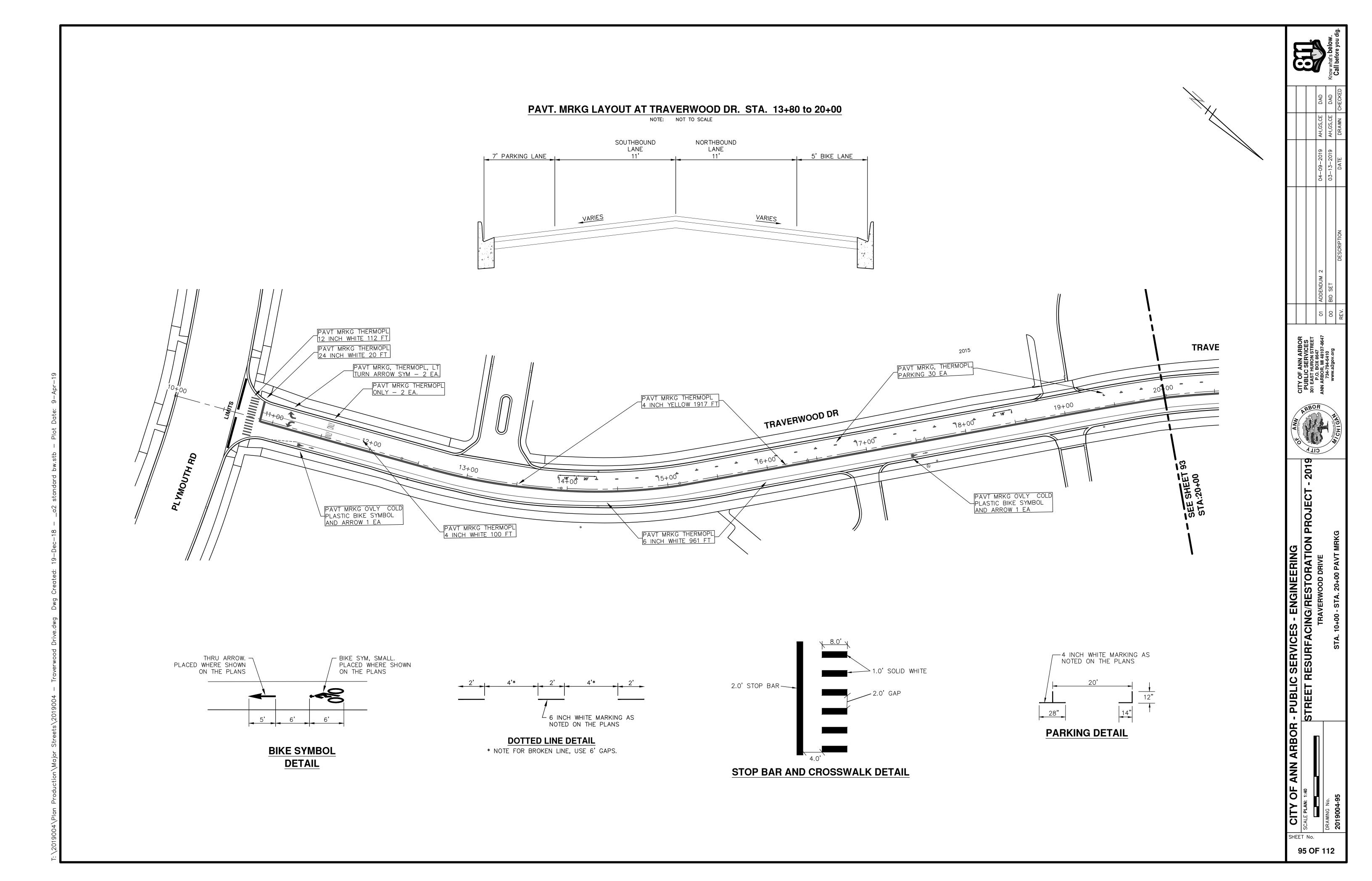
	TRAFF	FIC CONTROL	SIGN
	SIGN	NUMBER	QUANTITY
1		BARRICADE TYPE III HIGH INTENSITY LIGHTED	9
2	ONE WAY R6-1R	36"x12"	4
3	ONE WAY R6-1L	36"x12"	6
4		R3-2 24"x24"	3
5	R	R3-1 24"x24"	5
6	ROAD CLOSED	R11-2 48X30	1

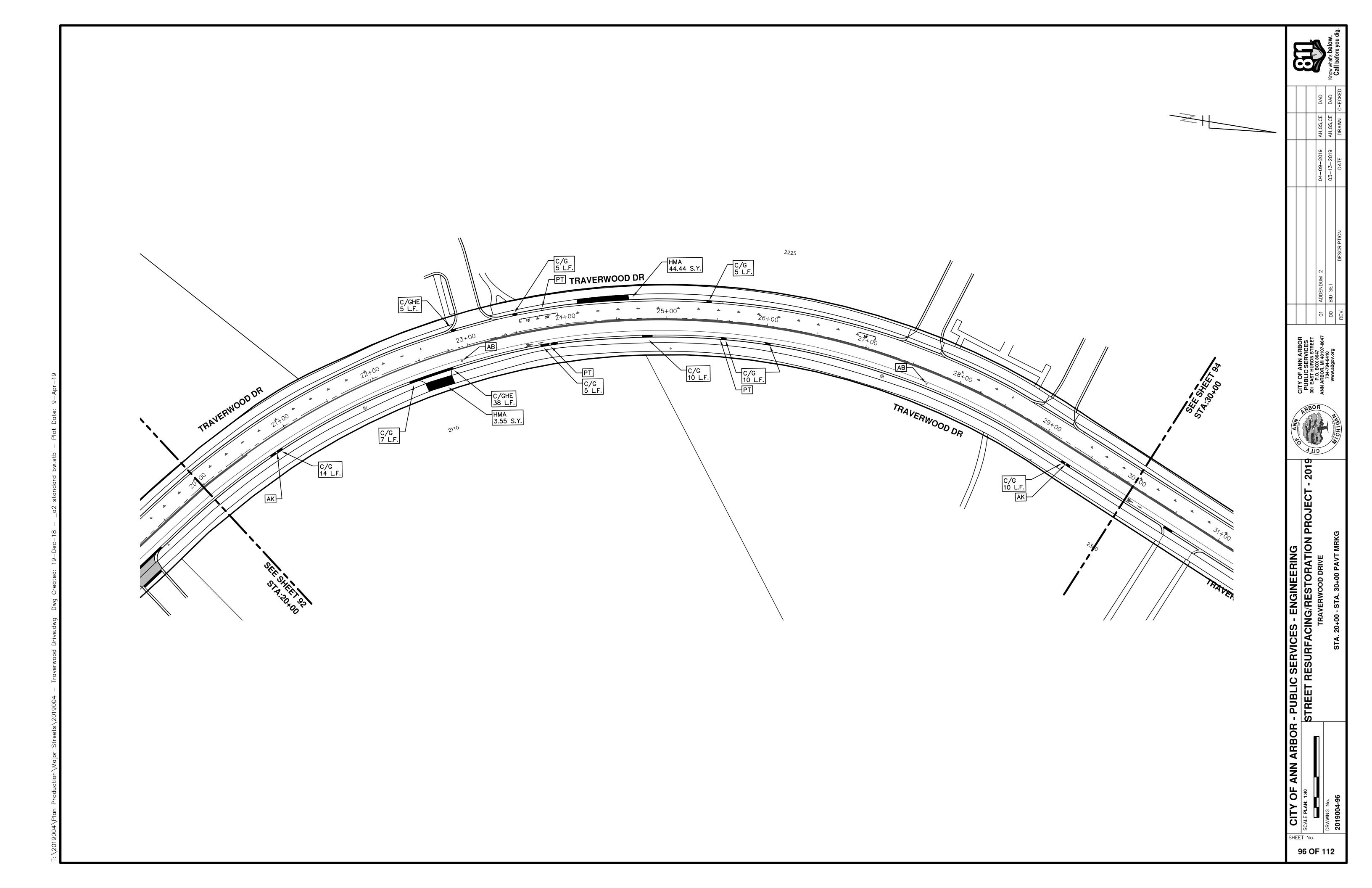


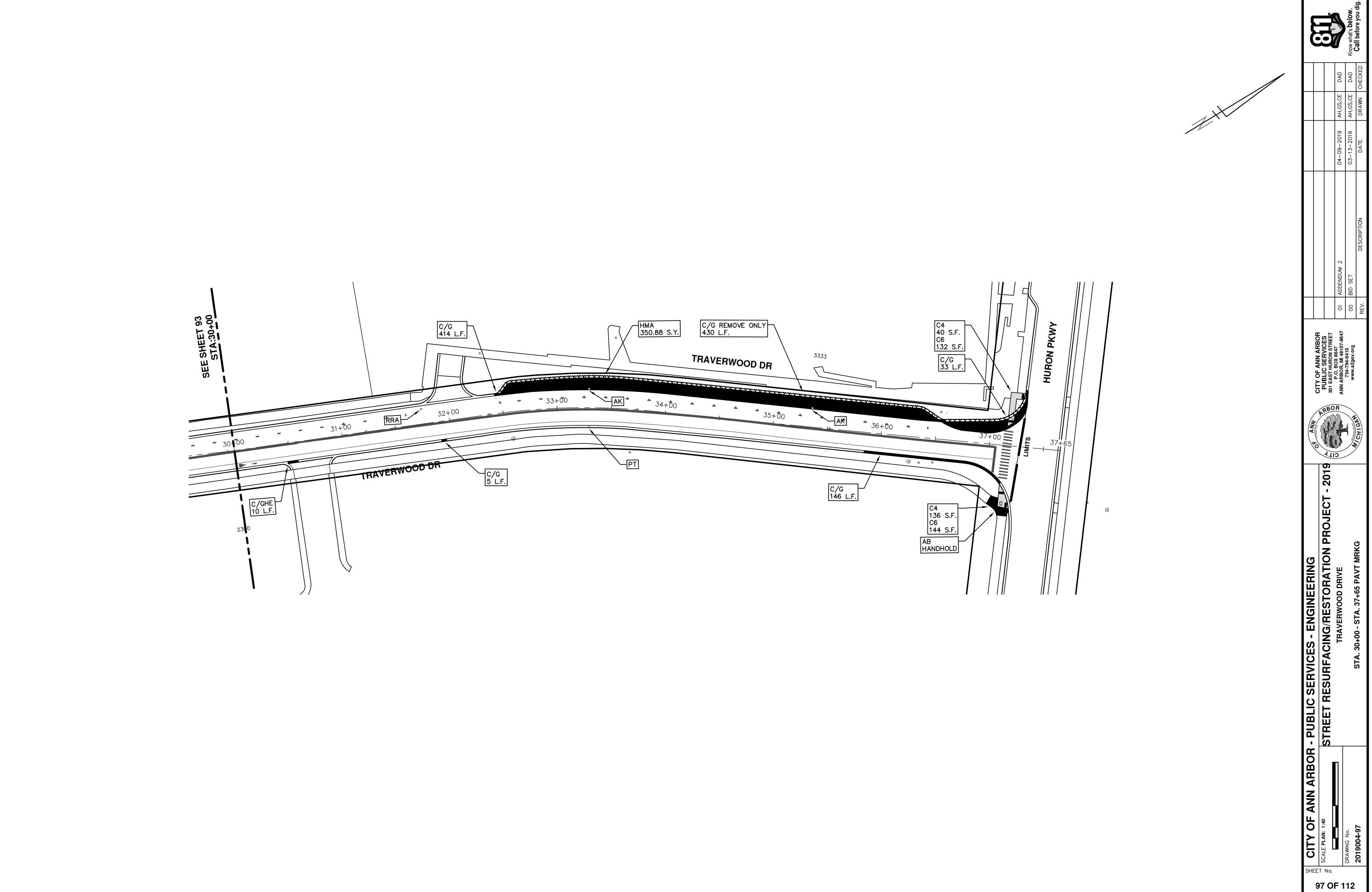














CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION: WEST LIBERTY STREET

ITB No.4570 FILE No. 2019004

QUANTITIES					
Quantity	Sign Code	Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special Description	Area (sft)	Total Area (Sft	
48.0	*D3-1	Street Name Sign	4.0	192	
2.0	G20-2	End Road Work	4.5	!	
10.0	W20-1	Road Work Ahead Sign	9.0	90	
13.0	W20-2	Detour Ahead	9.0	11	
13.0	W20-3	Road Closed Ahead	9.0	11	
1.0	M4-8a	Detour Ends	3.0		
12.0	M4-9S	Detour Arrow (Thru/Straight)	5.0	6	
8.0	M4-9R	Detour Arrow (Right - MOD)	5.0	4	
1.0	M4-10L	Detour / Left	6.0	(
6.0	R3-1	No Right Turn	4.0	24	
5.0	R3-2	No Left Turn	4.0	20	
1.0	R5-1	Do Not Enter	9.0	,	
2.0	R5-18C	Work Zone Begins	16.0	3:	
6.0	R6-1R	One Way / Right	3.0	1	
11.0	R6-1L	One Way / Left	3.0	3	
11.0	R11-2	Road Closed	10.0	11	
1.0	R11-4	Road Closed To Thru Traffic	12.5	1:	

QUANTITIES					
Item Code	Item Description	Unit	Quantity		
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	60		
2057011	_Grading, Sidewalk Ramp	Syd	28		
2057011	_Machine Grading, Special	Syd	15,825		
2057021	_Subgrade Undercutting, Type IIA	Cyd	1,582		
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	43		
5010002	Cold Milling HMA Surface	Syd	15,826		
5010005	HMA Surface, Rem	Syd	7		
5010057	HMA, 5E3	Ton	1,830		
6027021	_Flowable Fill	Cyd	2		
8027001	_Curb and Gutter, Conc, Barrier	Ft	60		
8037001	_Detectable Warning Surface, Modified	Ft	30		
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	255		
8110049	Pavt Mrkg, Ovly Cold Plastic, Direction Arrow Sym, Bike	Ea	17		
8110058	Pavt Mrkg, Ovly Cold Plastic, Bike, Small Sym	Ea	17		
8110195	Pavt Mrkg, Thermopl, 4 inch, White	Ft	479		
8110196	Pavt Mrkg, Thermopl, 4 inch, Yellow	Ft	79		
8110198	Pavt Mrkg, Thermopl, 6 inch, White	Ft	72		
8110213	Pavt Mrkg, Thermopl, 12 inch, Cross Hatching, Yellow	Ft	759		
8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	600		
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	54		
8117050	_Pavt Mrkg, Thermopl, Lt Turn Arrow Sym	Ea	4		
8117050	_Pavt Mrkg, Thermopl, Only	Ea	5		
8117050	_Pavt Mrkg, Thermopl, School	Ea	1		
8117050	_Pavt Mrkg, Thermopl, Thru Arrow Sym	Ea	2		
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	14		
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	14		
8120140	Lighted Arrow, Type C, Furn	Ea	1		
8120141	Lighted Arrow, Type C, Oper	Ea	1		
8120250	Plastic Drum, High Intensity, Furn	Ea	170		
8120251	Plastic Drum, High Intensity, Oper	Ea	170		
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	701		
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	701		
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	192		
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	192		
8127050	_Pedestrian Type II Barricade, Temp	Ea	4		
8167011	Slope Restoration	Syd	24		

KEY ASSOCIATED PAY ITEM(S)				
AA	_Dr Structure, Adj, Case 1, Modified_Dr Structure, Adj, Case 2, Modified_Dr Structure, Temp Lowering, Modified			
АВ	 _Dr Structure, Temp Lowering, Modified _Gate Box, Adj, Case 1 _Gate Box, Adj, Case 2 _Monument Box Adjust 			
ADST	• _Dr Structure, Adj, Add Depth, Modified			
AK	• _Dr Structure, Adj, Case 1, Modified			
C4	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Sidewalk, Conc, 4 inch, Modified 			
C4HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk Cement _Sidewalk, Conc, 4 inch, Modified 			
C6	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Sidewalk _Grading, Sidewalk Ramp _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified 			
C8	_Grading, Driveway Approach_Driveway, Nonreinf Conc, 8 inch, Modified			
C HE	 _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem _Grading, Driveway Approach _Grading, Sidewalk _Grading, Sidewalk Ramp Cement _Driveway, Nonreinf Conc, 6 inch, Modified _Driveway, Nonreinf Conc, 8 inch, Modified _Detectable Warning Surface, Modified _Sidewalk Ramp, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified _Sidewalk, Conc, 6 inch, Modified 			
C/G	_Curb, Gutter, and Curb and Gutter, Any Type, Rem_Curb and Gutter, Conc			
C/GHE	 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Cement _Driveway Opening, Conc, Det M, Modified 			
СР	• _Grading, Sidewalk • _Sidewalk, Conc, 4 inch, Modified			
CR	•_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem			
DS	Dr Structure, Rem Sewer, Rem, Less than 24 inch Dr Structure, 24 inch dia			
DSDI	 Dr Structure, Rem Sewer, Rem, Less than 24 inch _Dr Structure, Double Inlet 			
PT	• _Dr Structure, Point			
RRA	 Dr Structure Cover, Type B _Dr Structure Cover, Type B, Special _Dr Structure, Adj, Case 1, Modified _Dr Structure, Temp Lowering, Modified 			
RRK	Dr Structure Cover, Type K _Dr Structure, Adj, Case 1, Modified			
RS	• _Dr Structure, Reconstruct			
TYPE II	Plastic Drum, High Intensity, Lighted, FurnPlastic Drum, High Intensity, Lighted, Oper			
TYPE III	 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn Barricade, Type III, High Intensity, Double Sided, Lighted, Oper 			
MBX	Post, Mailbox			
HMA/SR	• _HMA Surface, Rem			
	HMA Approach			

CONSTRUCTION SCOPE AND SEQUENCING

ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AS DIRECTED BY THE ENGINEER, AND UTILIZING PART WIDTH TWO (2) PHASE CONSTRUCTION. PERFORM THE WORK IN THE ORDER INDICATED BELOW UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER AND NOT UNTIL LOCATING ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THE PLANS AND IN THE CONTRACT SPECIFICATIONS. NOTIFY THE MISS DIG SYSTEM THREE (3) FULL WORKING DAYS PRIOR TO BEGINNING ANY

PHASE I

- 1. IMPLEMENT MAINTENANCE OF TRAFFIC (M.O.T.) PLAN, AND INSTALL SOIL EROSION AND SEDIMENTATION
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLDMILLING.
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION
- 5. REMOVE EXISTING HMA SURFACE BY COLDMILLING 2 INCHES. THIS MAY INCLUDE GRANULAR BASE MATERIAL DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL AS REQUIRED.
- 6. PERFORM ANY APPLICABLE JOINT AND CRACK CLEANOUT, HMA/HAND PATCHING, UNDERCUTS AND/OR BASE REPAIRS AS REQUIRED.
- 7. CLEAN PAVEMENT AND PLACE 2 INCH TOP COURSE HMA MIX 5E3.

PHASE II

- 8. REPEAT ITEMS 1 THRU 7 IN THE ORDER SHOWN SHOWN ABOVE.
- 9. REMOVE SESC MEASURES.
- 11. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING CLEANING OF STRUCTURES, FINAL RESTORATION AND ALL OTHER NECESSARY CLEANUP.
- 12. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES, AND MISS DIG FLAG, NO PARKING SIGNS AND MISS DIG

NOTES:

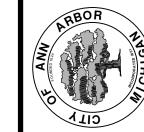
FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013. THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS 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.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MOOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.



9	01 ADDENDUM 2	04-09-2019	AH,GS,CE	DAD
8	00 BID SET	03-13-2019	AH,GS,CE DAD	DAD
REV.	DESCRIPTION	DATE	DRAWN CHECKI	CHECKI



Y OF ANN ARBOR ESURFACING/REST PROJECT - 2019

SHEET No.

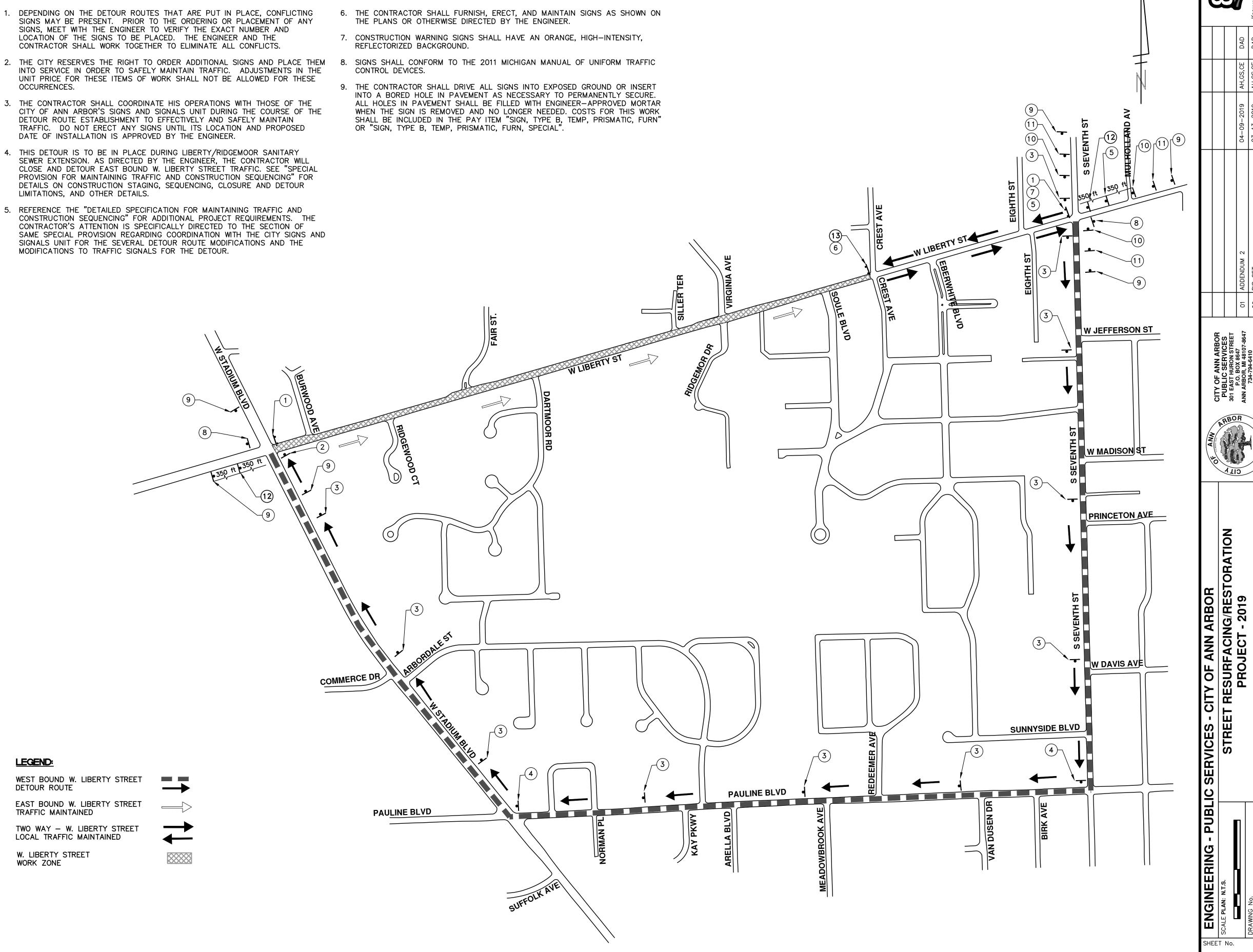
CONSTRUCTION NOTES:

PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET PRIOR TO WORK BEGINING.

	TRAFF	TC CONTROL	SIGN
	SIGN	NUMBER	QUANTITY
1)		BARRICADE TYPE III HIGH INTENSITY LIGHTED	2
	W. Liberty Street	D3-1	1
(2)	DETOUR ENDS	M4-8a 24X18	1
(3)	W. Liberty Street	D3-1	12
3)	DETOUR	M4-9S 30x24	12
	W. Liberty Street	D3-1	2
(4)	DETOUR	M4-9R (MOD.) 30x24	2
5	DETOUR	M4-10L 48x18	1
6	ROAD CLOSED	R11-2 48X30	1
7	ROAD CLOSED TO THRU TRAFFIC	R11-4 60x30	1
8	END ROAD WORK	G20-2 48" x24"	2
9	ROAD WORK AHEAD	W20-1 36x36	6
	W. Liberty Street	D3-1	6
10	DETOUR AHEAD	W20-2 36×36	3
	W. Liberty Street	D3-1	3
11)	ROAD CLOSED AHEAD	W20-3 36×36	3
	W. Liberty Street	D3-1	3
(12)	WORK ZONE BEGINS	R5–18C 48"x48"	2
13)	DO NOT ENTER	R5–1 36x36	1
	PORTABLE, BLE MESSAGE	VERIFY E QUANTITY LOCATION ENGINEER TO ORDE	/ AND I WITH PRIOR

DETOUR CONSTRUCTION NOTES:

- 1. DEPENDING ON THE DETOUR ROUTES THAT ARE PUT IN PLACE, CONFLICTING SIGNS MAY BE PRESENT. PRIOR TO THE ORDERING OR PLACEMENT OF ANY SIGNS, MEET WITH THE ENGINEER TO VERIFY THE EXACT NUMBER AND LOCATION OF THE SIGNS TO BE PLACED. THE ENGINEER AND THE
- INTO SERVICE IN ORDER TO SAFELY MAINTAIN TRAFFIC. ADJUSTMENTS IN THE UNIT PRICE FOR THESE ITEMS OF WORK SHALL NOT BE ALLOWED FOR THESE
- 3. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THOSE OF THE CITY OF ANN ARBOR'S SIGNS AND SIGNALS UNIT DURING THE COURSE OF THE DETOUR ROUTE ESTABLISHMENT TO EFFECTIVELY AND SAFELY MAINTAIN TRAFFIC. DO NOT ERECT ANY SIGNS UNTIL ITS LOCATION AND PROPOSED
- 4. THIS DETOUR IS TO BE IN PLACE DURING LIBERTY/RIDGEMOOR SANITARY SEWER EXTENSION. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR EAST BOUND W. LIBERTY STREET TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR
- CONSTRUCTION SEQUENCING" FOR ADDITIONAL PROJECT REQUIREMENTS. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO THE SECTION OF SAME SPECIAL PROVISION REGARDING COORDINATION WITH THE CITY SIGNS AND SIGNALS UNIT FOR THE SEVERAL DETOUR ROUTE MODIFICATIONS AND THE MODIFICATIONS TO TRAFFIC SIGNALS FOR THE DETOUR.



CONSTRUCTION NOTES:

PLACE APPLICABLE D3-1 SIGN IN ADVANCE OF WORK PERFORMED ON EACH STREET PRIOR TO WORK BEGINING.

	TRAFFIC CONTROL SIGN			
	SIGN	NUMBER	QUANTITY	
1		BARRICADE TYPE III HIGH INTENSITY LIGHTED	11	
2	DETOUR	M4-10L 48x18	1	
3	ONE WAY R6-1R	36"x12"	10	
4	ONE WAY R6-1L	36"x12"	6	
5		R3-2 24"x24"	5	
6	R	R3-1 24"x24"	6	
7)	ROAD WORK AHEAD W. Liberty Street	W20-1 36×36 D3-1	4	
8	DETOUR AHEAD W. Liberty Street	W20-2 36x36 D3-1	10	
9	ROAD CLOSED AHEAD W. Liberty Street	W20-3 36×36 D3-1	10	

SIGN, PORTABLE,

CHANGEABLE MESSAGE

VERIFY EXACT QUANTITY AND

LOCATION WITH

ENGINEER PRIOR TO ORDERING

LEGEND:

WEST BOUND W. LIBERTY STREET DETOUR ROUTE

EAST BOUND W. LIBERTY STREET TRAFFIC MAINTAINED TWO WAY - W. LIBERTY STREET

LOCAL TRAFFIC MAINTAINED

W. LIBERTY STREET

WORK ZONE



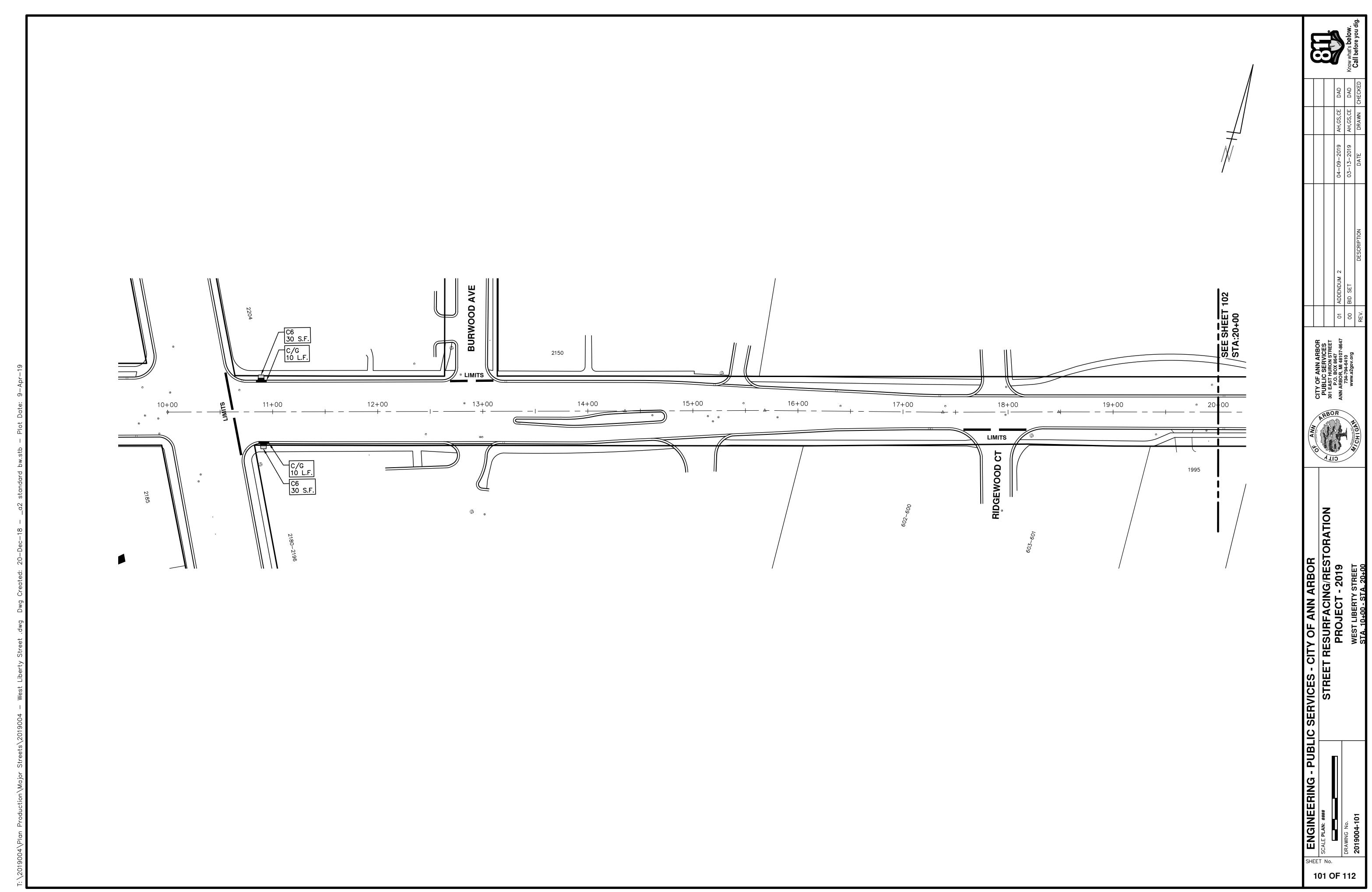
DETOUR CONSTRUCTION NOTES:

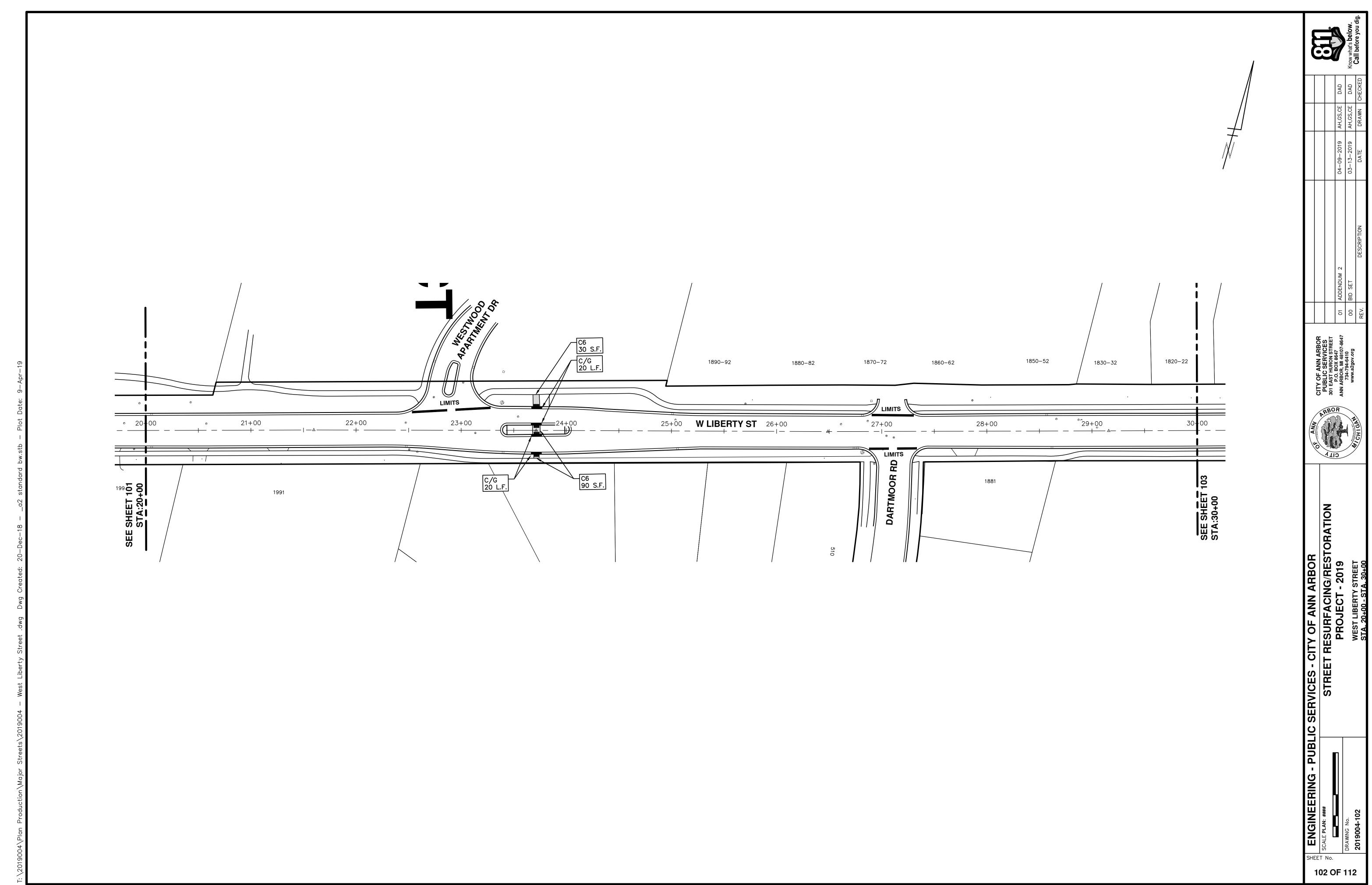
- 1. DEPENDING ON THE DETOUR ROUTES THAT ARE PUT IN PLACE, CONFLICTING SIGNS MAY BE PRESENT. PRIOR TO THE ORDERING OR PLACEMENT OF ANY SIGNS, MEET WITH THE ENGINEER TO VERIFY THE EXACT NUMBER AND LOCATION OF THE SIGNS TO BE PLACED. THE ENGINEER AND THE CONTRACTOR SHALL WORK TOGETHER TO ELIMINATE ALL CONFLICTS.
- 2. THE CITY RESERVES THE RIGHT TO ORDER ADDITIONAL SIGNS AND PLACE THEM 8. SIGNS SHALL CONFORM TO THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC INTO SERVICE IN ORDER TO SAFELY MAINTAIN TRAFFIC. ADJUSTMENTS IN THE UNIT PRICE FOR THESE ITEMS OF WORK SHALL NOT BE ALLOWED FOR THESE OCCURRENCES.
- 3. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THOSE OF THE CITY OF ANN ARBOR'S SIGNS AND SIGNALS UNIT DURING THE COURSE OF THE DETOUR ROUTE ESTABLISHMENT TO EFFECTIVELY AND SAFELY MAINTAIN TRAFFIC. DO NOT ERECT ANY SIGNS UNTIL ITS LOCATION AND PROPOSED DATE OF INSTALLATION IS APPROVED BY THE ENGINEER.
- 4. THIS DETOUR IS TO BE IN PLACE DURING LIBERTY/RIDGEMOOR SANITARY SEWER EXTENSION. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR EAST BOUND W. LIBERTY STREET TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR LIMITATIONS, AND OTHER DETAILS.
- 5. REFERENCE THE "DETAILED SPECIFICATION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR ADDITIONAL PROJECT REQUIREMENTS. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO THE SECTION OF SAME SPECIAL PROVISION REGARDING COORDINATION WITH THE CITY SIGNS AND SIGNALS UNIT FOR THE SEVERAL DETOUR ROUTE MODIFICATIONS AND THE MODIFICATIONS TO TRAFFIC SIGNALS FOR THE DETOUR.

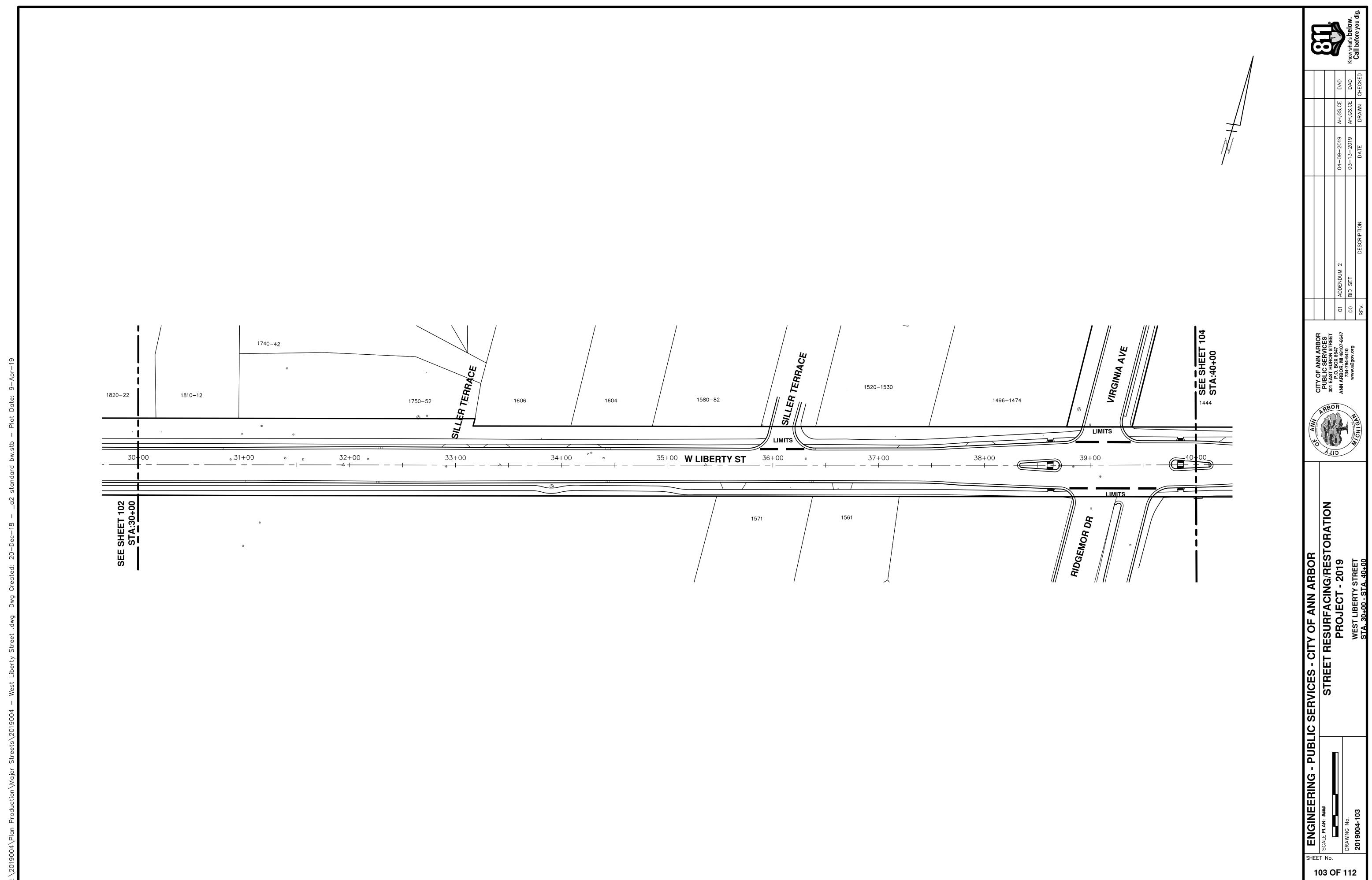
- 6. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SIGNS AS SHOWN ON THE PLANS OR OTHERWISE DIRECTED BY THE ENGINEER.
- 7. CONSTRUCTION WARNING SIGNS SHALL HAVE AN ORANGE, HIGH-INTENSITY, REFLECTORIZED BACKGROUND.
- CONTROL DEVICES.
- 9. THE CONTRACTOR SHALL DRIVE ALL SIGNS INTO EXPOSED GROUND OR INSERT INTO A BORED HOLE IN PAVEMENT AS NECESSARY TO PERMANENTLY SECURE. ALL HOLES IN PAVEMENT SHALL BE FILLED WITH ENGINEER-APPROVED MORTAR WHEN THE SIGN IS REMOVED AND NO LONGER NEEDED. COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "SIGN, TYPE B, TEMP, PRISMATIC, FURN" OR "SIGN, TYPE B, TEMP, PRISMATIC, FURN, SPECIAL".

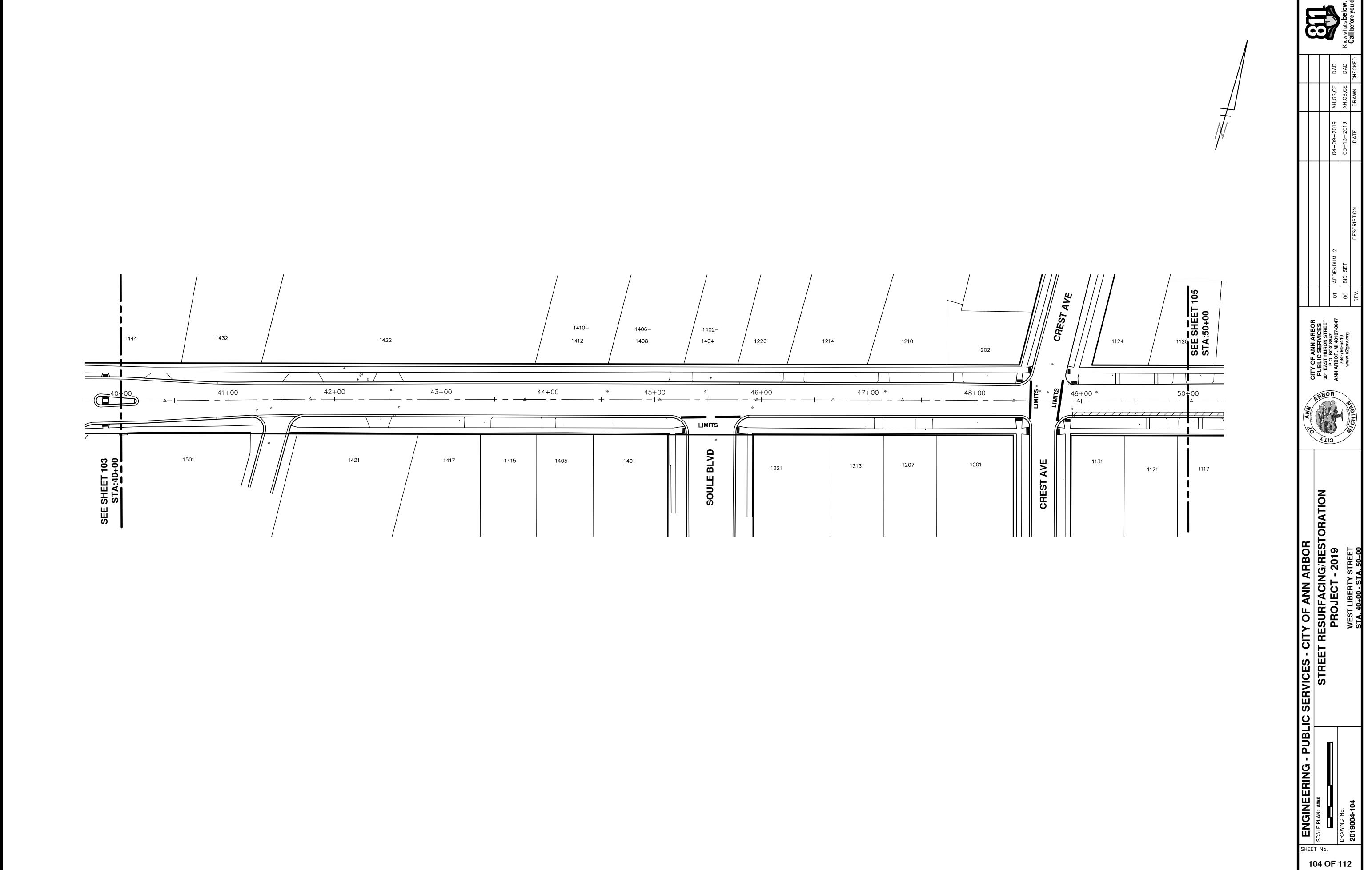
Y OF ANN ARBOR
ESURFACING/RESTC
PROJECT - 2019
WEST LIBERTY STREET
TRAFFIC CONTROL

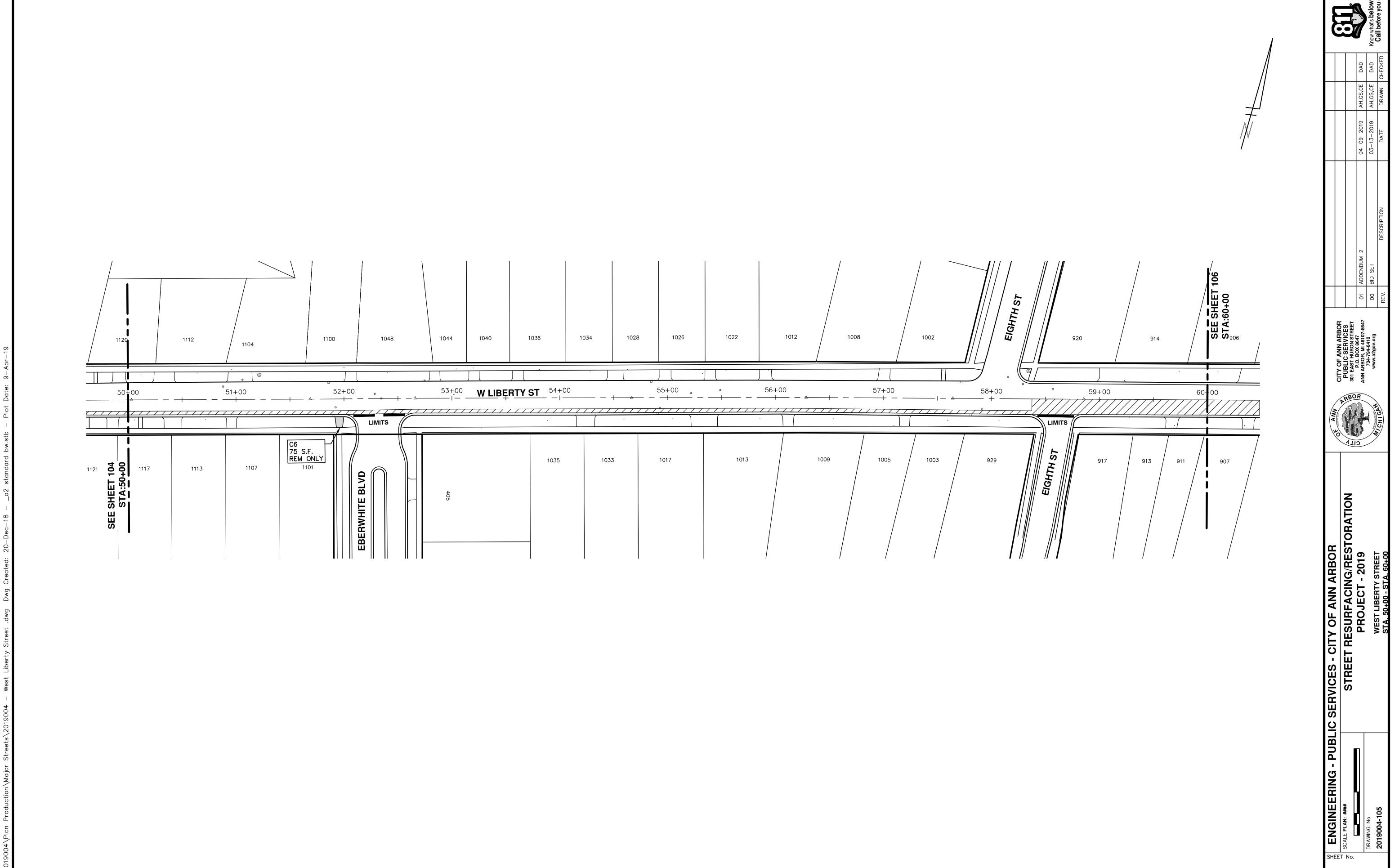
SHEET No. 100 OF 112

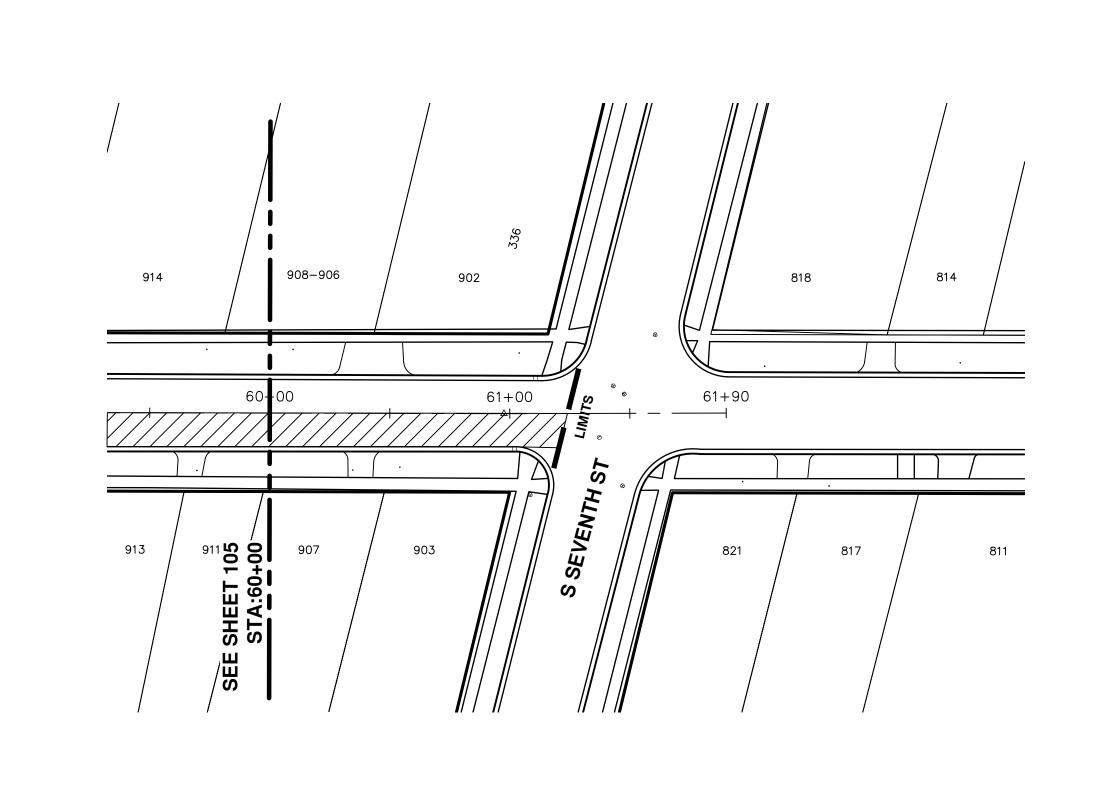


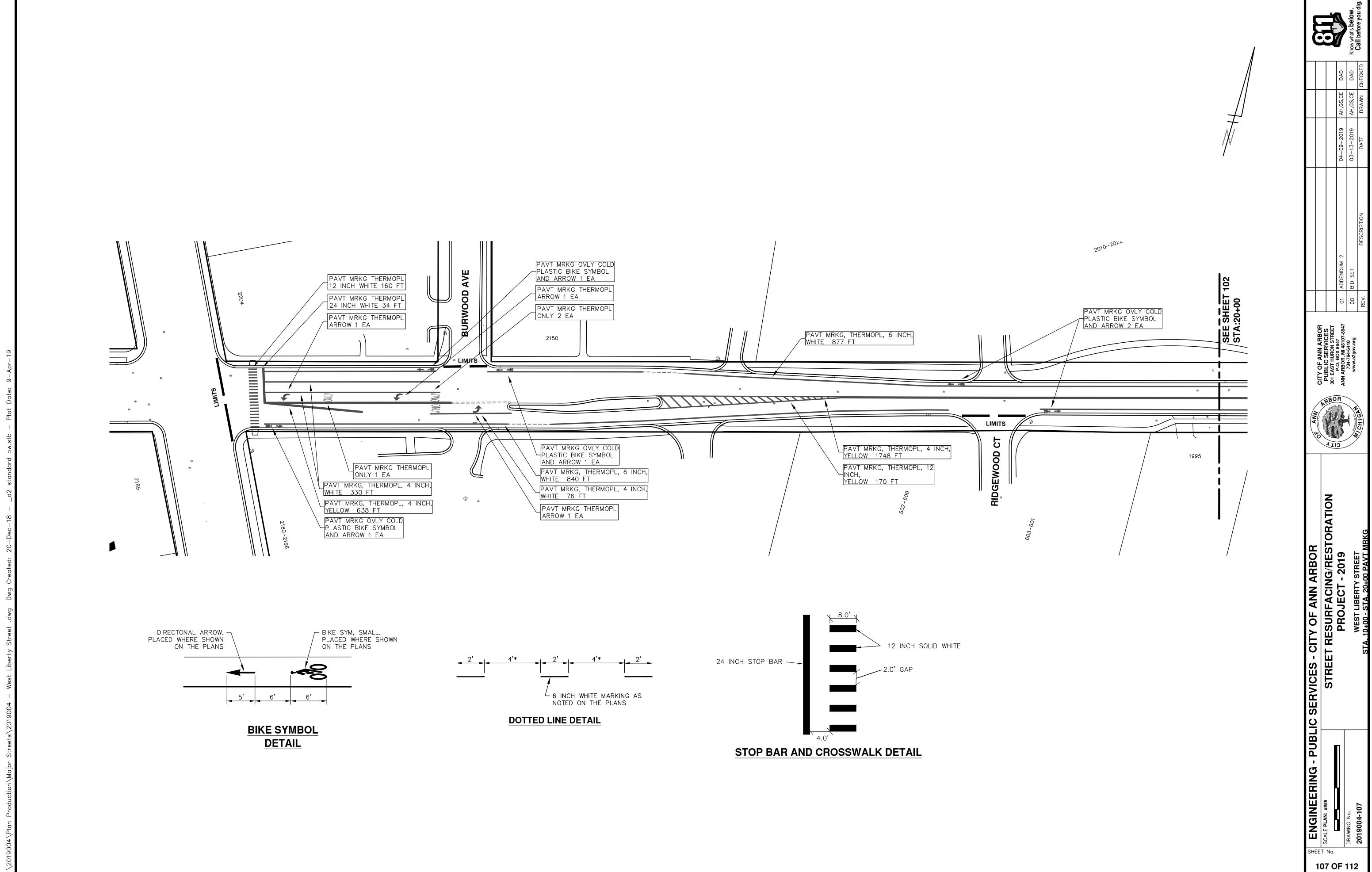


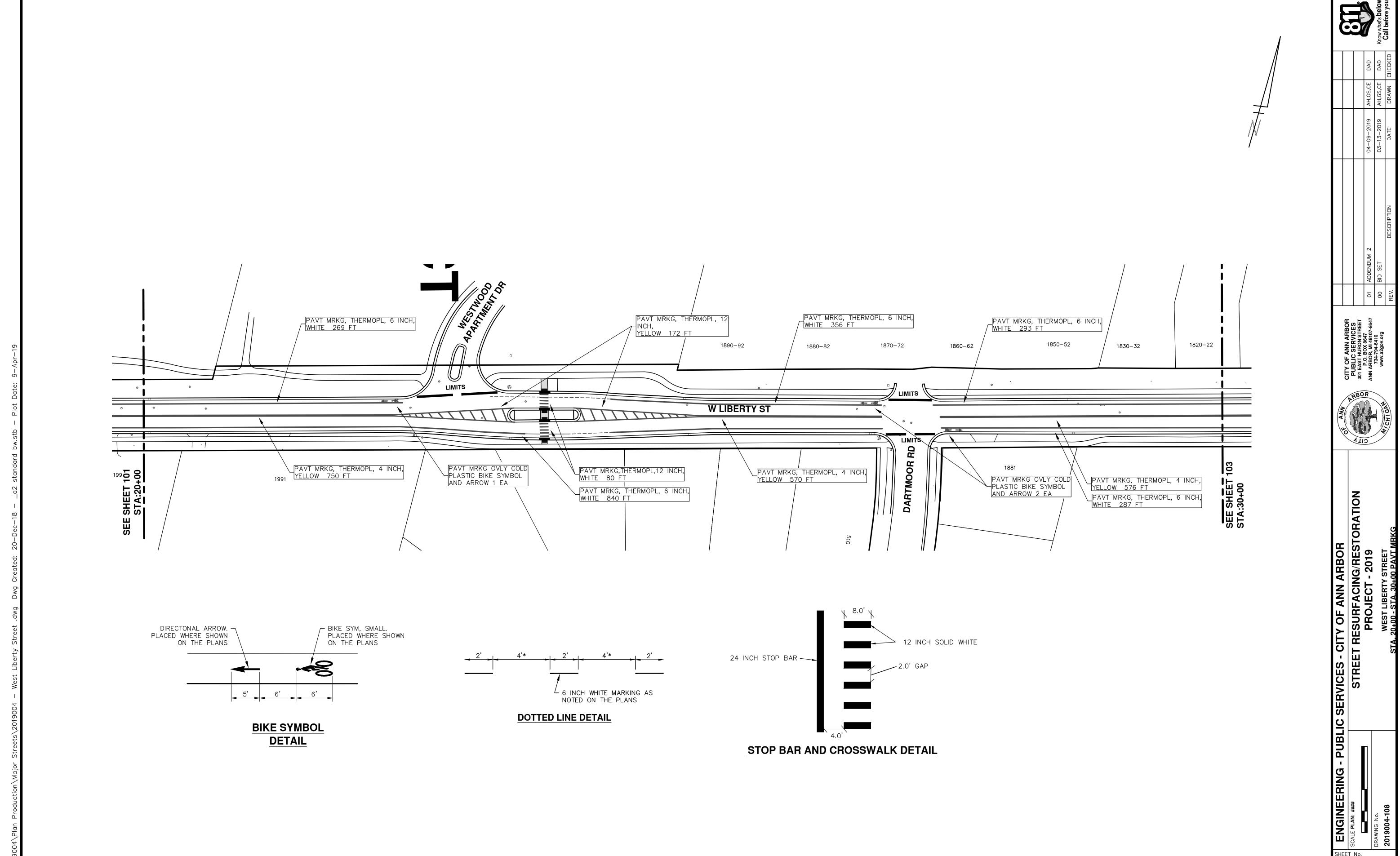




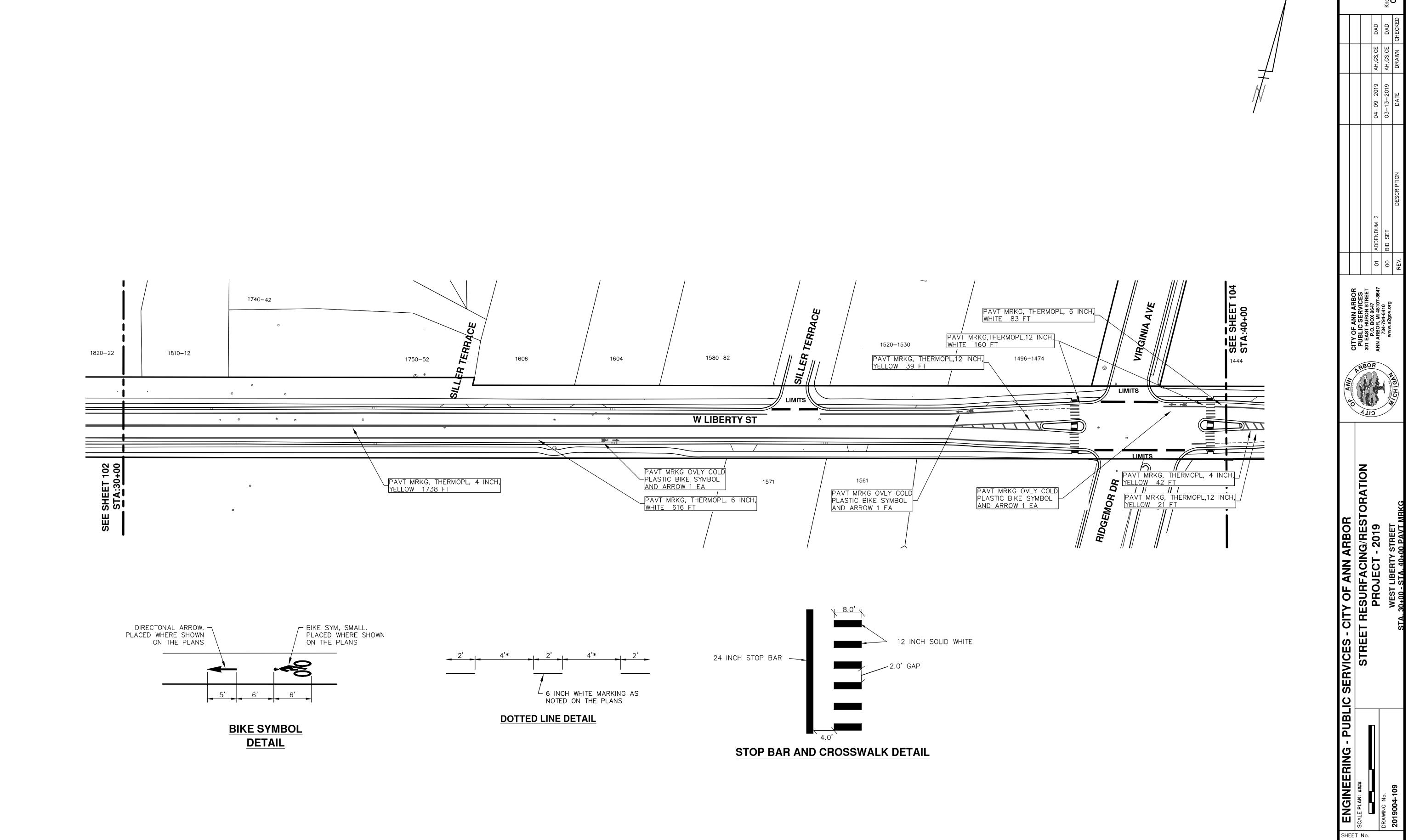


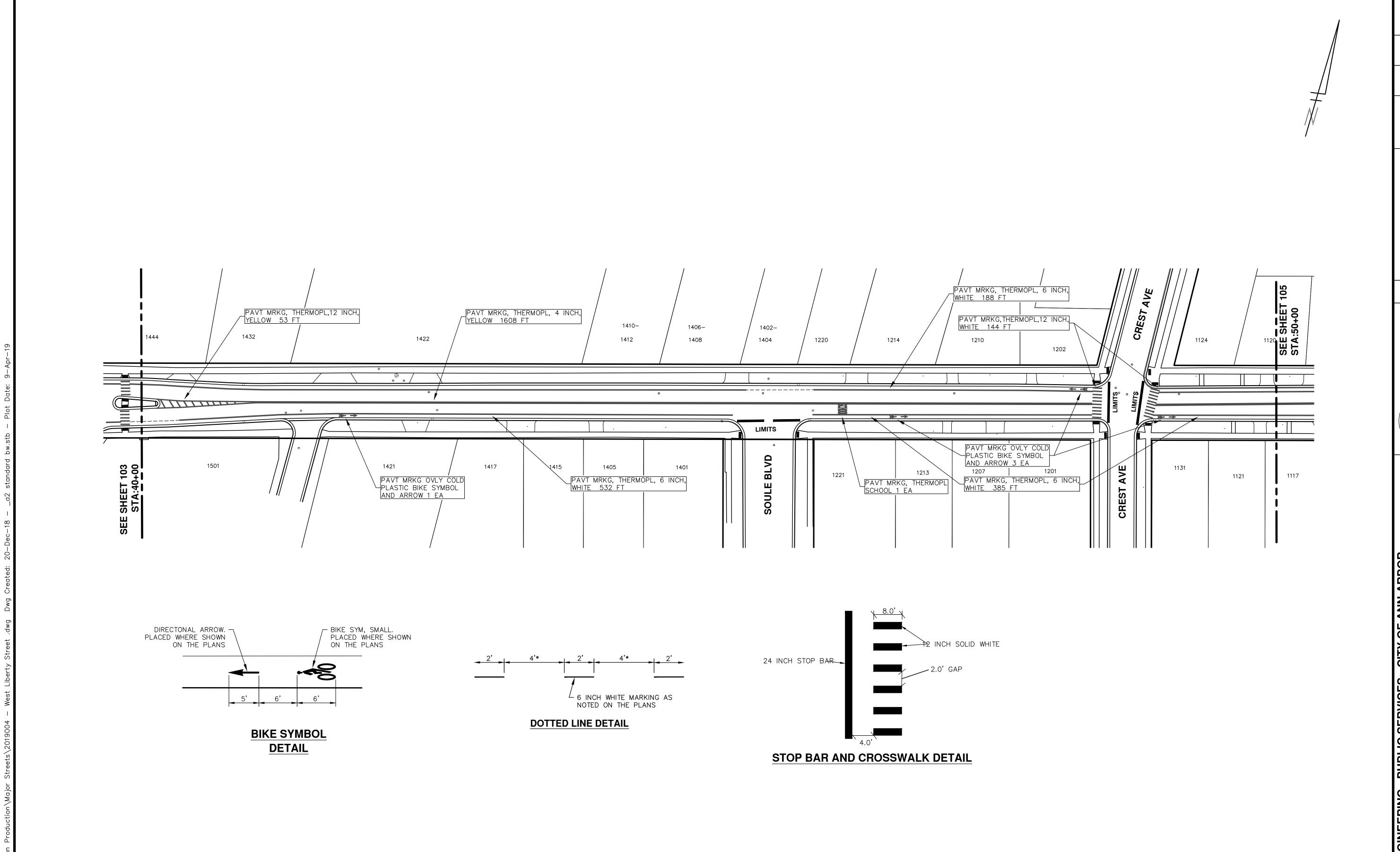






SHEET No. 108 OF 112





2019 AH,GS,CE DAD
2019 AH,GS,CE DAD
Know what's below.
Call before you dig.

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: ###

DRAWING No.

WEST LIBERTY STREET

WEST LIBERTY STREET

WEST LIBERTY STREET

STA. 40+00 - STA. 50+00 PAVT MBKG

SHEET No.

