ADDENDUM No. 3

ITB No. 4667

Street Resurfacing Project - 2021

Bids Due: March 30, 2021 at 2:00 P.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 one hundred forty (140) pages.**

Bidder is to acknowledge receipt of this Addendum No. 3, 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 should 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 forms listed above upon bid opening may be rejected as non-responsive and may 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)

Bid Forms/BF-1 to 8

Change

Base Bid Forms; replace with pages Addendum-3-8 to 15. Revised to add line numbers to all pay items; added pay items _HMA Curb, Rem, HMA, 4E3, Shared use Path, Aggregate, Rem Curing Compound, for Spec Mrkg, Rem Raised Pavt Marker, and _Pavt Mrkg, Thermopl, Yield Triangle Sym, respective new line items 40, 300, 460, 515, 520 and 540; revised item number and units for _Trenching, Modified pay item; removed pay item _Pavt Mrkg, Ovly Cold Plastic, Speed Hump Chevron, White; and revised estimated quantities to pay items with new line item numbers 20, 25, 30, 35, 40, 50, 60, 65, 70, 75, 80, 95, 120, 150, 165,

Bid Forms/BF-1 to 8 (continued)

170, 175, 185, 205, 225, 230, 235, 255, 265, 270, 275, 285, 290, 295, 305, 310, 315, 325, 330, 345, 355, 360, 370, 375, 380, 385, 390, 400, 405, 415, 420, 440, 445, 450, 485, 490,495, 500, 545, 550, 555, 560, 570, 575, 580, 600, 605, 610, 615, 625, 635, 650, 690 and 700 due the elimination of several streets from the project.

Detailed Specifications/DS-3 and 4

Detailed Specification for General Conditions; replace with pages Addendum-3-16 and 17. Revised the "Measurement and Payment" section to address placement and removal of maintenance gravel.

Detailed Specifications/DS-11 to 16

Detailed Specification for Project Schedule; replace with pages Addendum-3-18 to 22. Revised limitations related to Contractor's work operations. Revised the milestone dates including that for the completion of work. Revised "Schedule of Streets" to include South Industrial Highway; eliminate streets from Phase 1; consolidate Phases 2A and 2B into Phase 2 and eliminate several streets; eliminate streets from Phase 3; revised Open to Traffic or Completion of Work, Date Restrictions and Project Coordination, Maximum Calendar Days, and Liquidated Damages for various project locations; revised Date Restrictions and Project Coordination section to include the South Industrial Highway Concrete Pavement Repair Project, and Manchester Rd and Yost Blvd/Eli Rd sidewalk work.

Detailed Specifications/DS-18 and 19

Detailed Specification for Removing Concrete Items; replace with pages Addendum-3-23 and 24. Revised to correct various minor grammatical errors and inconsistencies.

Detailed Specifications

Insert new Detailed Specification for Hot Mix Asphalt (HMA) Curb Removal pages Addendum-3-25 and 26.

Detailed Specifications/DS-20 and 21

Detailed Specification for Vertical Exploratory Excavation; replace with pages Addendum-3-27 and 28. Revised to correct various minor grammatical errors and inconsistencies.

Detailed Specifications/DS-32

Detailed Specification for Soil Erosion and Sedimentation Control – Inlet Filter; replace with page Addendum-3-29. Revised all sections.

Detailed Specifications

Insert new Detailed Specification for Shared use Path, HMA Base Crushing and Shaping page Addendum-3-30.

Detailed Specifications Insert new Detailed Specification for Trenching, Modified page Addendum-3-31. Detailed Specifications/DS-38 to 40 Detailed Specification for Adjusting Structure Covers; replace with pages Addendum-3-38 to 40. Revised to clarify requirements for salvaging structure covers. Detailed Specifications/DS-46 to 50 Detailed Specification for Structure Covers; replace with pages Addendum-3-32 to 37. Revised table to include ADA cover and revised the "Measurement and Payment" section to show relevant pay items. Added detail for new water manhole cover. **Detailed Specifications** Insert new Detailed Specification for Yard Drain Outlet Pipe and Endings pages Addendum-3-41 and 42. Detailed Specifications/DS-54 and 55 Detailed Specification for Hot Mix Asphalt (HMA) Application Estimate; replace with Addendum-3-43 and 44. Revised to include South Huron Parkway and South Industrial Highway project locations. Revised performance graded binder for Shared use Path, HMA, Wedging pay item related to the Packard Street shared use path. Detailed Specifications/DS-60 and 61 Detailed Specification for HMA Traffic Calming Measures; replace with pages Addendum-3-45 and 46. Revised the "Construction" section to address cold milling work. Revised the "Measurement and Payment" section to address cold milling and slope restoration work. **Detailed Specifications** Insert new Detailed Specification for Concrete Traffic Calming Measures pages Addendum-3-47 and 48. Detailed Specifications/DS-68 and 69 Detailed Specification for Concrete Curb and Gutter, and Driveway Openings; replace with pages Addendum-3-49 and 50. Revised the "Construction" section to address use of the slip form method to place concrete curb and gutter. Revised the "Measurement and Payment" section to add pay item Curb and Gutter, Conc, Barrier or Mountable, Slip Form. Detailed Specifications/DS-86 Detailed Specification for Permanent Pavement Markings; replace with page Addendum-3-51. Revised the "Measurement and Payment" section to include relevant pay items.

Pavement Markings.

Remove Detailed Specification for Temporary

Detailed Specifications/DS-131

APPENDIX Notice to Bidders - Project Coordination; replace with page Addendum-3-52. **APPENDIX** Remove Michigan Department of Transportation (MDOT) Special Provision for Vertical Exploratory Investigation. **APPENDIX** Remove Michigan Department of Transportation (MDOT) Special Provision for Erosion Control, Inlet Protection, Fabric Drop. **APPENDIX** Remove Michigan Department of Transportation (MDOT) Special Provision for Cold Milling Concrete Pavement. **APPENDIX** Remove Michigan Department of Transportation Special Provision for Pavement (MDOT)

Acceptance for Jointed Plain Concrete Pavement. Remove Michigan Department of Transportation **APPENDIX** (MDOT) Special Provision for Curing Concrete

Pavement Surfaces.

APPENDIX Remove Michigan Department of Transportation

(MDOT) Special Provision for Recessed Pavement

Markings.

APPENDIX Remove Michigan Department of Transportation

(MDOT) Special Provision for Work Zone Signing

on Local Agency Projects.

APPENDIX General Number: MI20210001 Decision

> 01/01/2021; replace with pages General Decision Number: MI20210001 03/12/2021 pages

Addendum-3-53 to 87.

ATTACHMENTS City of Ann Arbor Living Wage Forms; replace with

pages Addendum-3-88 and 89.

Plans Plans; replace originally issued Bid Set dated

> 02/20/2021 with that issued for "Addendum 3" dated 03/25/2021. Revisions are as follows.

Sheet 1 Revised sheet index and vicinity maps to address

streets added to and removed from project.

Sheet 2 Revised General Notes.

Added Tree Protection detail. Sheet 3

Sheet 4 Added Asphalt Curb Removal & Replace and

Trenching Modified detail and Shared Use Path

Trenching detail.

Sheets 13 and 14 Revised map to reflect removal of several streets from project. Revised construction notes.

Sheet 15	Revised Quantities table and Construction Scope and Sequencing notes.
Sheet 23	Revised Construction Scope and Sequencing notes.
Sheet 26	Revised Quantities table and Construction Scope
Sheets 31and 32	and Sequencing Notes. Replaced with new South Industrial Highway plan sheets
Sheet 33	Replaced with Phase 1 cover sheet.
Sheet 34	Replaced with Baldwin Avenue cover sheet. Revised Construction Scope and Sequencing notes.
Sheet 35	Replaced with Brockman Boulevard cover sheet. Revised Construction Scope and Sequencing notes.
Sheet 36	Replaced with Crestland Street cover sheet. Revised Construction Scope and Sequencing notes.
Sheet 37	Replaced with Eastover Place cover sheet. Revised Construction Scope and Sequencing notes.
Sheet 38	Revised Construction Scope and Sequencing notes.
Sheet 39	Replaced with Phase 2 cover sheet.
Sheet 40	Revised Quantities table and Construction Scope and Sequencing notes.
Sheet 41	Replaced with Chesterfield Street cover sheet. Revised Construction Scope and Sequencing notes.
Sheet 42	Replaced with Cranbrook Road cover sheet. Revised Construction Scope and Sequencing notes.
Sheet 43	Replaced with Dorchester Road cover sheet. Revised Quantities table and Construction Scope and Sequencing notes.
Sheet 44	Replaced with Manchester Road cover sheet. Revised Quantities table and Construction Scope and Sequencing notes.

Revised Construction Scope and Sequencing

notes.

Sheet 46 Replaced with Phase 3 cover sheet.

Sheet 47 Replaced with Eddy Street cover sheet. Revised

and Construction Scope and Sequencing notes.

Sheet 48 Replaced with Marshall Street cover sheet.

Revised Construction Scope and Sequencing

notes.

Sheet 49 Replaced with Saint Aubin Avenue cover sheet.

Revised Construction Scope and Sequencing

notes.

Sheet 50 Replaced with Verle Avenue cover sheet.

Revised Construction Scope and Sequencing

notes.

Sheet 51 Replaced with Yost Boulevard and Eli Road

Sidewalk cover sheet.

Sheets 52 to 58 Removed due to various streets being eliminated

from project.

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the ITB. Offerors are directed to take note in their review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

Question 1: The specifications include recessing of markings, but there are not pay items associated with this work. Are the markings to be recessed or is that just a rogue

specification that got inserted into the project?

Answer 1: The Michigan Department of Transportation (MDOT) Special Provision for

Recessed Pavement Markings was included in the ITB No. 4667 document erroneously. Addendum No.3 directs that it be removed as there are no plans to

recess any of the proposed pavement markings planned for the project.

Question 2: There appears to be some concrete work on this project for the raised crosswalk

areas. These areas include pavement markings but there isn't any cure removal set up for the pavement markings. Are we to assume this was missed or is this

incidental to the marking installation?

Answer 2: Failure to include the curing compound removal work in the ITB No. 4667

document was an oversight. The pay item "Rem Curing Compound, for Spec Mrkg" together with estimated quantities has been to the revised Bid Forms

Addendum-3-6

being issued as part of Addendum No.3.

Question 3: Is there Engineer's Estimate for this year's project?

Answer 3: Yes, the estimated construction cost for the project is \$6,575,000.

Question 4: Is the HMA mix (5E1) and the binder performance grade (PG 64-28) for the

Shared use Path, HMA, Wedging pay item shown in Detailed Specification for

Hot Mix Asphalt (HMA) Application Estimate correct?

Answer 4: Yes, the HMA mix is correct; however, the binder performance grade is incorrect.

It should be PG 58-28. The revised Detailed Specification for Hot Mix Asphalt (HMA) Application Estimate being issued as part of Addendum No.3 addresses

this error.

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

Section 1 - Schedule of Prices

City of Ann Arbor Street Resurfacing Project - 2021

File No. 2021-004 Bid No. 4667

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	Total Price
5	1047051	_Certified Payroll Compliance and Reporting	LS	1.00	\$	\$
10	1047051	_General Conditions, Max \$275,000.00	LS	1.00	\$	\$
15	1047051	_Project Supervision, Max \$50,000.00	LS	1.00	\$	\$
20	2030011	Dr Structure, Rem	Ea	87.00	\$	\$
25	2030015	Sewer, Rem, Less than 24 inch	Ft	870.00	\$	\$
30	2040005	Pavt, Rem	Syd	26.00	\$	\$
35	2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	13,691.00	\$	\$
40	2047001	_HMA Curb, Rem	Ft	5,281.00	\$	\$
45	2047001	_Exploratory Excavation, Vertical	Ft	5.00	\$	\$
50	2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	4,500.00	\$	\$
55	2050023	Granular Material, Cl II	Cyd	50.00	\$	\$
60	2057011	_Grading, Driveway Approach	Syd	2,650.00	\$	\$
65	2057011	_Grading, Sidewalk	Syd	789.00	\$	\$
70	2057011	_Grading, Sidewalk Ramp	Syd	401.00	\$	\$
75	2057011	_Machine Grading, Special	Syd	61,493.00	\$	\$
80	2057021	_Undercutting, Type IIA	Cyd	2,117.00	\$	\$
85	2057021	_Undercutting, Type IIB	Cyd	50.00	\$	\$
90	2057021	_Undercutting, Type IIC	Cyd	150.00	\$	\$
					TOTAL THIS PAGE	\$

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	Total Price
95	2087050	Erosion Control, Inlet Protection, Fabric Drop	Ea	228.00	\$	\$
100	2080036	Erosion Control, Silt Fence	Ft	794.00	\$	\$
105	2090001	Project Cleanup	LS	1.00	\$	\$
110	3010002	Subbase, CIP	Cyd	50.00	\$	\$
115	3027011	_Aggregate Base, 6 inch, Modified	Syd	250.00	\$	\$
120	3027011	_Aggregate Base, 8 inch, Modified	Syd	3,280.00	\$	\$
125	3027031	_Aggregate Base, Modified	Ton	250.00	\$	\$
130	3050010	Material, Surplus and Unsuitable, Rem, LM	Cyd	15.00	\$	\$
135	3050015	Salv Crushed Material, LM	Cyd	25.00	\$	\$
140	3057011	_Shared use Path, HMA Base Crushing and Shaping	Syd	2,630.00	\$	\$
145	3060020	Maintenance Gravel	Ton	150.00	\$	\$
150	3077021	_Trenching, Modified	Cyd	1,093.00	\$	\$
155	3080010	Geotextile, Stabilization	Syd	100.00	\$	\$
160	3087011	_Structural Geogrid (Base)	Syd	250.00	\$	\$
165	4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	870.00	\$	\$
170	4021260	Trench Undercut and Backfill	Cyd	258.00	\$	\$
175	4030200	Dr Structure, 24 inch dia	Ea	87.00	\$	\$
180	4030210	Dr Structure, 48 inch dia	Ea	1.00	\$	\$
185	4030280	Dr Structure, Adj, Add Depth	Ft	2.00	\$	\$
					TOTAL THIS PAGE	\$

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	Total Price
190	4030306	Dr Structure, Tap, 6 inch	Ea	5.00	\$	\$
195	4030312	Dr Structure, Tap, 12 inch	Ea	2.00	\$	\$
200	4037050	_Dr Structure Cover, Special	Ea	2.00	\$	\$
205	4037050	_Dr Structure Cover, Type B, Modified	Ea	110.00	\$	\$
210	4037050	_Dr Structure Cover, Type C, Modified	Ea	2.00	\$	\$
215	4037050	_Dr Structure Cover, Type D, Modified	Ea	2.00	\$	\$
220	4037050	_Dr Structure Cover, Type D, Modified (ADA Cover/Grate)	Ea	1.00	\$	\$
225	4037050	_Dr Structure Cover, Type K, Modified	Ea	106.00	\$	\$
230	4037050	_Dr Structure, Adj, Case 1, Modified	Ea	189.00	\$	\$
235	4037050	_Dr Structure, Adj, Case 2, Modified	Ea	2.00	\$	\$
240	4037050	_Dr Structure, Cleaning, Modified	Ea	27.00	\$	\$
245	4037050	_Dr Structure, Double Inlet	Ea	2.00	\$	\$
250	4037050	_Dr Structure, Point	Ea	15.00	\$	\$
255	4037050	_Dr Structure, Temp Lowering, Modified	Ea	171.00	\$	\$
260	4037050	_Structure, Reconstruct	Ea	2.00	\$	\$
265	4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	880.00	\$	\$
270	4047001	_Yard Drain, Outlet Ending, Plastic Pipe	Ft	7.00	\$	\$
275	4047050	_Yard Drain, Outlet Ending, Pop-up Apparatus	Ea	3.00	\$	\$
280	5010001	Pavt, Cleaning	LS	1.00	\$	\$
					TOTAL THIS PAGE	\$

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	Total Price
285	5010002	Cold Milling HMA Surface	Syd	71,751.00	\$	\$
290	5010005	HMA Surface, Rem	Syd	2,571.00	\$	\$
295	5010025	Hand Patching	Ton	275.00	\$	\$
300	5010051	HMA, 4E3	Ton	592.00	\$	\$
305	5010061	HMA Approach	Ton	363.00	\$	\$
310	5010703	HMA, LVSP	Ton	13,535.00	\$	\$
315	5017011	_Cold Milling for Concrete Curb and Gutter Reveal	Syd	1,408.00	\$	\$
320	5017011	_Raised Crosswalk, HMA	Syd	61.00	\$	\$
325	5017011	_Raised Intersection, HMA	Syd	1,317.00	\$	\$
330	5017011	_Speed Hump, HMA	Syd	250.00	\$	\$
335	5017011	_Speed Table, HMA	Syd	35.00	\$	\$
340	5017031	_Hand Patching, Modified	Ton	100.00	\$	\$
345	5017031	_HMA, Wedging, 36A	Ton	12.00	\$	\$
350	6027011	_Raised Crosswalk, Conc	Syd	61.00	\$	\$
355	6027011	_Raised Intersection, Conc	Syd	1,317.00	\$	\$
360	6027011	_Speed Hump, Conc	Syd	250.00	\$	\$
365	6027011	_Speed Table, Conc	Syd	35.00	\$	\$
370	6027021	_Flowable Fill	Cyd	310.00	\$	\$
375	6030005	Cement	Ton	54.00	\$	\$
					TOTAL THIS PAGE	\$

Line <u>No.</u>	Item <u>No.</u>	<u>Item Description</u>	<u>Unit</u>	Estimated Quantity	Unit Price	Total Price
380	8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	2,461.00	\$	\$
385	8017011	_Driveway, Nonreinf Conc, 8 inch, Modified	Syd	163.00	\$	\$
390	8027001	_Curb and Gutter, Conc, Barrier	Ft	6,290.00	\$	\$
395	8027001	_Curb and Gutter, Conc, Barrier or Mountable, Slip Form	Ft	5,767.00	\$	\$
400	8027001	_Curb and Gutter, Conc, Mountable	Ft	214.00	\$	\$
405	8027001	_Driveway Opening, Conc, Det M, Modified	Ft	6,484.00	\$	\$
410	8030030	Curb Ramp Opening, Conc	Ft	439.00	\$	\$
415	8037001	_Detectable Warning Surface, Modified	Ft	335.00	\$	\$
420	8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	3,614.00	\$	\$
425	8037010	_Sidewalk Ramp, Conc, 8 inch, Modified	Sft	50.00	\$	\$
430	8037010	_Sidewalk Retaining Wall, Integral, 6 inch to 18 inch Height	Sft	350.00	\$	\$
435	8037010	_Sidewalk Retaining Wall, Integral, 18 inch to 30 inch Height	Sft	150.00	\$	\$
440	8037010	_Sidewalk, Conc or Clay Brick Pavers, Rem and Reinstall	Sft	36.00	\$	\$
445	8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	4,358.00	\$	\$
450	8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	877.00	\$	\$
455	8037010	_Sidewalk, Conc, 8 inch, Modified	Sft	310.00	\$	\$
460	8060010	Shared use Path, Aggregate	Ton	25.00	\$	\$
465	8060040	Shared use Path, HMA	Ton	1,138.00	\$	\$
470	8067011	_Shared use Path, Grading, Modified	Syd	26.00	\$	\$
					TOTAL THIS PAGE	\$

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	Unit Price	Total Price
475	8067031	_Shared use Path, HMA, Wedging	Ton	50.00	\$	\$
480	8087001	_Fence, Protective, Modified	Ft	1,500.00	\$	\$
485	8110092	Pavt Mrkg, Polyurea, 4 inch, Yellow	Ft	1,406.00	\$	\$
490	8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	2,455.00	\$	\$
495	8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	728.00	\$	\$
500	8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	453.00	\$	\$
505	8110293	Pavt Mrkg, Waterborne, for Rest Areas, Parks, & Lots, 4 inch, Blue	Ft	140.00	\$	\$
510	8110294	Pavt Mrkg, Waterborne, for Rest Areas, Parks, & Lots, 4 inch, White	Ft	1,764.00	\$	\$
515	8110321	Rem Curing Compound, for Spec Mrkg	Sft	2,860.00	\$	\$
520	8110332	Rem Raised Pavt Marker	Ea	4.00	\$	\$
525	8117050	_Pavt Mrkg, Polyurea, Speed Hump Chevron, White	Ea	66.00	\$	\$
530	8117050	_Pavt Mrkg, Thermopl, School	Ea	4.00	\$	\$
535	8117050	_Pavt Mrkg, Thermopl, Speed Hump Chevron, White	Ea	66.00	\$	\$
540	8117050	_Pavt Mrkg, Thermopl, Yield Triangle Sym	Ea	12.00	\$	\$
545	8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	75.00	\$	\$
550	8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	75.00	\$	\$
555	8120035	Channelizing Device, 42 inch, Fluorescent, Furn	Ea	233.00	\$	\$
560	8120036	Channelizing Device, 42 inch, Fluorescent, Oper	Ea	233.00	\$	\$
565	8120140	Lighted Arrow, Type C, Furn	Ea	3.00	\$	\$
					TOTAL THIS PAGE	\$

Section 1 - Schedule of Prices

Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity		<u>Unit Price</u>	Total Price
570	8120141	Lighted Arrow, Type C, Oper	Ea	12.00	\$		\$
575	8120252	Plastic Drum, Fluorescent, Furn	Ea	993.00	\$_		\$
580	8120253	Plastic Drum, Fluorescent, Oper	Ea	993.00	\$_		\$
585	8120310	Sign Cover	Ea	2.00	\$_		\$
590	8120330	Sign, Portable, Changeable Message, Furn	Ea	8.00	\$_		\$
595	8120331	Sign, Portable, Changeable Message, Oper	Ea	10.00	\$_		\$
600	8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	2,828.00	\$		\$
605	8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	2,828.00	\$_		\$
610	8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	364.00	\$		\$
615	8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	364.00	\$_		\$
620	8120370	Traf Regulator Control	LS	1.00	\$_		\$
625	8127050	_Pedestrian Type II Barricade, Temp	Ea	57.00	\$_		\$
630	8127050	_Pedestrian Type II Channelizer, Temp	Ea	8.00	\$_		\$
635	8127050	_Temporary No Parking Sign	Ea	616.00	\$_		\$
640	8127051	_Minor Traffic Control, Max \$100,000.00	LS	1.00	\$_		\$
645	8157060	_Irrigation System, Protection and Maintenance	Dlr	2,500.00	\$_		\$
650	8167011	_Slope Restoration	Syd	6,700.00	\$_		\$
655	8190159	Conduit, Schedule 80 PVC, 3 inch	Ft	50.00	\$_	_	\$
660	8190244	Hh, Adj	Ea	2.00	\$_	_	\$
						T. I. T. II.O. D. O. O.	

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Line <u>No.</u>	Item <u>No.</u>	Item Description	<u>Unit</u>	Estimated Quantity	<u>Unit Price</u>	Total Price
665	8197050	_Handhole Assembly, 12 Inch x 18 Inch	Ea	1.00	\$	\$
670	8197050	_Handhole Assembly, 17 Inch x 30 Inch	Ea	1.00	\$	\$
675	8197050	_Handhole Assembly, 24 inch x 36 inch	Ea	1.00	\$	\$
680	8217050	_Monument Box, Adj	Ea	5.00	\$	\$
685	8230421	Water Shutoff, Adj, Case 1	Ea	5.00	\$	\$
690	8230431	Gate Box, Adj, Case 1	Ea	30.00	\$	\$
695	8230432	Gate Box, Adj, Case 2	Ea	5.00	\$	\$
700	8507050	_HMA Surface, Around Structure Cover, Rem	Ea	78.00	\$	\$
					TOTAL THIS PAGE	\$
				TOTAL FROM F	PAGE Addendum-3-8	\$
				TOTAL FROM	PAGE Addendum-3-9	\$
				TOTAL FROM P	AGE Addendum-3-10	\$
			-	TOTAL FROM PA	AGE Addendum-3-11	\$
			-	TOTAL FROM PA	AGE Addendum-3-12	\$
			-	TOTAL FROM P	AGE Addendum-3-13	\$
				TOTAL FROM P	AGE Addendum-3-14	\$
					TOTAL BASE BID	\$

DETAILED SPECIFICATION FOR GENERAL CONDITIONS

AA:DAD 1 of 2 03/09/21

- **a. Description.** This item comprises all work described and required by the plans and specifications at each project location for which the contract contains no item(s) of work, including but not limited to the following:
 - Scheduling, coordination, and organization of all work, subcontractors, suppliers, quality control testing, inspection, surveying, and staking.
 - Coordination of, and cooperation with, other contractors, agencies, departments, and utilities.
 - Protection and maintenance of utilities.
 - Maintaining drainage.
 - Furnishing, placement, and grading of maintenance gravel to construct any temporary driveways, sidewalks and/or sidewalk ramps necessary for construction of the proposed work.
 - Maintaining driveways and driveway openings, sidewalks, bike paths, mail deliveries, and solid waste/recycle/compost pick-ups. This includes maintenance of temporary gravel as required and directed by the Engineer.
 - Storing all materials and equipment off lawn areas.
 - Temporary relocation and final replacement/re-setting of mailboxes.
 - Coordination efforts to furnish various HMA mixtures as directed by the Engineer
 - Coordination efforts to furnish and operate various-size vehicles/equipment as directed by the Engineer
 - Furnishing and operating vacuum-type street cleaning equipment a minimum of once per week or more frequently as directed by the Engineer
 - Protecting all sewers, and drainage and utility structures including manholes, gate
 wells, valve boxes, inlet structures, roadside ditches, and culverts from damage and
 contamination by debris and construction materials. Keeping structures and culverts
 clean of construction debris and properly covered/protected at all times during the
 construction. Immediately cleaning any structures, sewers, culverts and/or roadside
 ditches contaminated with construction debris resulting from Contractor operations
 and/or work activities.
 - Disposing of excavated materials and debris The Contractor shall dispose of, at the Contractor's expense, all excavated material. The Engineer will not pay for any costs associated with this work separately.
 - Furnishing and operating vacuum-type utility structure cleaning equipment
 - Furnishing and operating both vibratory plate and pneumatic-type ("pogo-stick") compactors
 - Furnishing and operating a backhoe during all work activities

- Furnishing and operating a jackhammer and air compressor during all work activities
- Noise and dust control
- Mobilization(s) and demobilization(s).
- Furnishing submittals and certifications for materials and supplies.
- All miscellaneous and incidental items such as overhead, insurance, and permit fees.
- Meeting all requirements relating to Debarment Certification, Davis Bacon Act, and Disadvantaged Business Enterprise, and providing the necessary documentation.

The Appendix of the contract documents provides data pertaining to existing soil borings to assist the Engineer and Contractor with determining the soil conditions within the construction area. The City in no way guarantees existing conditions to be the same as shown in the data. The Contractor is solely responsible for any/all conclusions it may draw from the data.

Quantities as given are approximate and are estimates for bidding purposes. The City does not guarantee their totals and they may vary by any amount. While it is the City's intent to complete the project substantially as drawn and specified herein, quantities may be changed or reduced to zero for cost savings or other reasons. The City reserves the right to change the quantities; however, the City will not allow the Contractor to adjust unit price(s) due to such change.

- b. Materials. None Specified.
- c. Construction. Not specified.
- **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

General Conditions, Max \$Lump Sum

Measure **General Conditions, Max \$___** by the unit lump sum and pay for it at the contract unit price, which price includes costs for all labor, equipment and materials necessary to complete the work.

The Contractor is fully responsible for all direct and/or indirect damages to property caused by unclean or damaged sewers or structures resulting from its operations and/or work activities including any/all cost associated with such damages.

Measurement will be on a pro rata basis at the time of each progress payment and based on the ratio of work completed during the payment period and the total contract amount. When all of the work of this Contract is complete, the measurement of this item shall be 1.0 Lump Sum, less any deductions incurred for inadequate performance as described herein. This amount will not increase for any reason, including extensions of time, extras, and/or additional work.

Placement and removal of temporary gravel necessary to maintain driveways and driveway openings, sidewalks, bike paths, mail deliveries, and solid waste/recycle/compost pick-ups will be paid separately at the contract unit price for **Maintenance Gravel**.

DETAILED SPECIFICATION FOR PROJECT SCHEDULE

AA:DAD 1 of 3 03/23/21

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 Open to Traffic, and the Liquidated Damages per Calendar Day for each street or phase of work. For the purpose of this Contract, the "Start of Work" definition is the date when the temporary "No-Parking" signs become effective and all required temporary traffic control and SESC measures are in place and ready for use. The City will consider individual major street locations and local street phases to be open to traffic once they have met the "Approved for Traffic" requirements defined in subsection 107.21 of the Michigan Department of Transportation 2012 Standard Specifications for Construction. Within 10 days of opening to traffic an individual major street location or local street phase the Contractor shall complete all work, which includes, but is not limited to, placement of permanent pavement markings, minor slope restoration, clean-up, street cleaning, underground utility and utility structure cleaning (minor street phases), the removal of all temporary traffic control and SESC devices and temporary "No Parking" signs, and other necessary work and as directed by the Engineer. Failure to complete work in a timely manner may result in the suspension of active project work or a delay in starting subsequently planned project work.

The Engineer shall limit the Contractor's work operations to the number of streets that, in its opinion, is reasonable to allow for proper and thorough inspection, and to limit traffic control and/or safety concerns. The Contractor shall not have more than one (1) major street or shared use path locations and one (1) local phase "active" simultaneously at any given time throughout the project unless otherwise noted in the Schedule of Streets or approved by the Engineer. In addition, no more than four (4) operations shall occur simultaneously at all locations during any work day. A location is "active" if work has begun and it has not yet been completed.

Conduct the local street phased work as shown on the Schedule of Streets beginning with one phase and opening it to traffic before progressing to the next and continue in this manner until all phases are complete. Begin work on Phase 1 and continue in order through Phase 3 unless otherwise directed or approved by the Engineer. The Engineer will allow preparation of subsequent project phase work up to five (5) days in advance of the planned open to traffic date for the phase on which the Contractor is currently working. This work includes placement/installation of temporary "No-Parking" signs and temporary traffic control and SESC devices. In no case will work be allowed to progress on a subsequent project phase beyond that considered preparational until the current phase is open to traffic or the Engineer directs otherwise. During this five (5) day period the Contractor will cover all temporary "No-Parking" and temporary traffic control signs by methods approved by the Engineer until such time they become effective and are needed for use.

The City expects to furnish the Contractor with two (2) copies of the Contract, for its execution, on or before **April 2, 2021**. The Contractor shall properly execute both copies of the Contract and return them, with the required Bonds and Insurance documentation, to the City by **April 30, 2021**. The Contractor shall 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 3, 2021**, the Contractor shall 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 shall clearly indicate, in detail, the start and the finish date of each work task on each street. The Contractor shall 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 shall begin the work of this project on or after **May 10, 2021**, 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 prevent the Contractor from starting work on this date.

Complete the entire project on or before **November 8, 2021**. 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 open to traffic or complete all work as specified within the times specified, including time extensions granted thereto as determined by the Engineer, shall 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 opening to traffic and/or the completion of work for each street or phase, for each calendar day the street or phase remains unopen and/or the work remains incomplete beyond the required contract completion date or timeframe.

Time is of the essence in the performance of the work of this contract. The Contractor is expected to mobilize sufficient personnel and equipment and work throughout all authorized hours to complete the project by the intermediate (location specific) and final completion dates. 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 shall 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 shall not work in the dark except as approved by the Engineer and shall 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 shall 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 or phases, 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> shall not entitle the Contractor to receive additional compensation for work on any <u>other street(s)</u> or <u>phase(s)</u>, nor shall it relieve the Contractor of any responsibilities for completion of work on any other street(s) or phase(s).

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

Street Resurfacing Project – 2021 Schedule of Streets

Location (Street)	Limits of Work	Start of Work	Open to Traffic or *Completion of Work	Date Restrictions and Project Coordination	**Maximum Calendar Days	Liquidated Damages per Calendar Day
	MA	JOR STREET	rs			
Packard Street Shared Use Path	Independence Blvd to Platt Rd			AAATA, INDP, MMRL, UMFB	28	\$750
Huron Parkway approach to Lindsay Lane	Deceleration/right turn lane approach to Lindsay Ln		05/28/2021	AAATA	10	\$200
South Industrial Highway	HMA pavement north of E Eisenhower Pkwy and south of E Stadium Blvd		07/31/2021	AAATA, INDP INDST, MMRL	7	\$500
	MINOR	(LOCAL) STF	REETS			
		Phase 1				
Baldwin Avenue	Packard St to E Stadium Blvd					
Brockman Boulevard	Packard St to E Stadium Blvd				49	
Crestland Street	Packard St to Amelia Pl			AAPS1, MMRL		\$750
Eastover Place/ Ferdon Road	Packard St to Crestland St			AAFSI, WIWIKL		\$750
Saint Francis Drive	Amelia PI to Nature Cove Ct					
	-	Phase 2	-	•	-	-
Canterbury Road	Towner Blvd to Platt Rd					
Chesterfield Street	Packard St to Cranbrook Rd/ Hampshire Rd					
Cranbrook Road	Chesterfield St/Hampshire Rd to Towner Blvd			AAPS1, AAPS2, INDP	87	\$750
Dorchester Road	Manchester Rd to Towner Blvd			LABR, SDWLK		
***Manchester Road	End of Concrete Pavement to Washtenaw Ave					
Towner Boulevard	Dorchester Rd to Hampshire Rd					

Street Resurfacing Project - 2021

Schedule of Streets

Location (Street)	Limits of Work	Start of Work	Open to Traffic or *Completion of Work	Date Restrictions and Project Coordination	**Maximum Calendar Days	Liquidated Damages per Calendar Day				
	MINOR (LOCAL) STREETS - CONTINUED									
		Phase 3								
Eddy Street	Verle Ave to Southerly End									
Marshall Street	Verle Ave to Verle Ave				40					
Saint Aubin Avenue	La Salle St to Creek Dr			SDWLK		Ф7 БО				
Verle Avenue	Westerly End to Platt Rd			SDWLK	49	\$750				
***Yost Boulevard & Eli Road Sidewalk	East and north sides fronting Forestbrooke Athletic Club									
		Traffic Calming								
Glenwood Road	Washtenaw Ave to Overridge Dr	07/01/2021		INDP, LABR	28	\$250				

^{*}Complete all work required for this project location by the date shown.

Date Restrictions and Project Coordination

- AAATA Coordinate work and maintenance of traffic with that of the Ann Arbor Area Transportation Authority for bus route service.
- AAPS1 No work permitted when Ann Arbor Public Schools are in session (before June 14, 2021 or after August 28, 2021).
- AAPS2 Coordinate work and maintenance of traffic with City of Ann Arbor Public Schools Allen Elementary School site work.
- INDP No work during the Independence Day holiday period from 3:00 p.m. July 2 to 7:00 a.m. July 6, 2021.
- INDST Coordinate work and maintenance of traffic with South Industrial Highway Concrete Pavement Repair Project.
- MMRL No work during the Memorial Day holiday period from 3:00 p.m. May 28 to 7:00 a.m. June 1, 2021.
- LABR No work during the Labor Day holiday period from 3:00 p.m. September 3 to 7:00 a.m. September 7, 2021.
- SDWLK Manchester Road & Yost Boulevard/Eli Road sidewalk work to start on or after July 1, 2021.
- UMFB No work permitted during scheduled home game dates (TBD) for University of Michigan Football.

Notes

- 1. Date Restrictions shown above are based on a preliminary project construction schedule developed by the City for planning purposes. These may change for project locations with no specific required start and/or open to traffic or completion of work dates.
- 2. Work operations on the Huron Parkway and Glenwood Avenue locations are not included in the limitations specified in the Project Schedule and may occur in conjunction with one (1) major street or shared use path location and one (1) local phase; however, the Contractor will not be permitted to work on any of these locations simultaneously unless approved by the Engineer.

^{**}Maximum calendar days allowed to open project location or phase to traffic, or to complete all required work if so designated in the above table.

DETAILED SPECIFICATION FOR REMOVING CONCRETE ITEMS

AA:DAD 1 of 2 03/17/21

- **a. Description.** This work consists of removing concrete items including curb, gutter, curb and gutter, integral curb, sidewalk, sidewalk ramps, driveway openings, and driveway approach pavements as shown on the plans, in accordance with section 204 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, except as specified herein, and as directed by the Engineer.
- **b. Materials.** Provide materials in accordance with those specified in section 204 of the MDOT Standard Specifications for Construction.
- **c. Construction.** Complete this work, as applicable, according to in section 204 of the MDOT 2012 Standard Specifications for Construction, as described below, and as directed by the Engineer.

Replace concrete curb, gutter, curb and gutter, sidewalk, sidewalk ramps, drive openings, and driveway approaches within 24 hours of their removal.

Prior to the start of work, the Engineer and Contractor together will identify, and field measure all concrete removal items. The Engineer will approve of all removal limits prior to the Contractor performing any concrete removal work.

Perform full-depth saw cutting at removal limits, including those necessary to construct 2-foot wide "Det M" driveway openings, and including those necessary to provide for the partial removal of existing drive approaches as shown on the plans, as directed by the Engineer, and as marked for removal. The Contractor shall cut steel reinforcement bars as directed by the Engineer at all areas of removal. Perform any/all saw cutting under wet conditions to prevent excessive airborne dust. Clean up any/all resulting slurry and debris to the satisfaction of the Engineer immediately after performing saw cutting work.

The work includes excavation of any/all concrete designated for removal; stump and brush removal, as required; disposal of removed materials; and backfilling and compaction, as required.

The Contractor will coordinate with the City Forester prior to the removal of any tree roots.

At various times throughout the work, the Engineer may direct the Contractor to use smaller and/or lighter equipment, and to defer certain work tasks, in order to protect the grade and/or adjacent areas. The Contractor shall not be entitled to any additional compensation for the use of smaller equipment, lighter equipment, or work task deferral.

Use blade graders, maintainers, vibratory rollers, and/or other equipment as necessary, and as directed by the Engineer. The use of each specific piece of equipment is subject to the approval of the Engineer.

Where replacing existing concrete curb or curb and gutter on a street with a concrete (or brick) base, the Engineer may direct the Contractor to remove a one (1) foot wide, full-depth section of pavement and pavement base immediately in front of the curb and gutter. As part of this pavement/base removal, the Contractor will perform additional (double) full-depth saw-cutting along the entire removal limits and take sufficient care so as not to damage and/or disturb any adjacent pavement, pavement base, and/or any other site feature, all as directed by the Engineer. The removals will be to a sufficient width and depth to allow for the placement and removal of the curb and gutter formwork. After the removal of the formwork, the Contractor will replace the concrete base to its original thickness and elevation(s).

At all times protect all excavated/removal areas with barricades and/or fencing.

Removed or excavated materials not incorporated into the work will become the property of the Contractor and be immediately removed and properly disposed of off-site. DO NOT stockpile overnight on site, or adjacent to it, any removed or excavated materials.

Replace and compact any/all base, subbase, or subgrade materials removed without authorization with materials specified by the Engineer. The Contractor will perform this work at its expense.

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

Curb, Gutter, and Curb and Gutter, Any Type, RemFoot
Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, RemSquare Yard

Measure **Curb**, **Gutter**, **and Curb and Gutter**, **Any Type**, **Rem** lengths in place by the unit foot 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.

Measure Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem areas in place by the square yard and pay for it at the contract unit price, which price includes the costs for all labor, equipment and materials to complete the work.

Saw cutting is not a separate contract pay item. Include payment for this work in the appropriate item of work for which it applies. The Contractor shall include any/all costs for saw cutting to remove concrete items including curb, gutter, curb and gutter, integral curb, sidewalk, sidewalk ramps, driveway openings, and driveway approach pavements in the respective contract unit prices bid for Curb, Gutter, and Curb and Gutter, Any Type, Rem and Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem.

DETAILED SPECIFICATION FOR HOT MIX ASHALT (HMA) CURB REMOVAL

AA:DAD 1 of 2 03/25/21

- **a. Description.** This work consists of removing hot mix asphalt (HMA) curb as shown on the plans, in accordance with section 204 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, as specified herein, and as directed by the Engineer.
- **b. Materials.** Provide materials in accordance with those specified in section 204 of the MDOT Standard Specifications for Construction.
- **c.** Construction. Complete this work, as applicable, according to in section 204 of the MDOT 2012 Standard Specifications for Construction, as described below, and as directed by the Engineer.

Prior to the start of work, the Engineer and Contractor together will identify, and field measure the HMA curb removal work. The Engineer will approve of all removal limits prior to the Contractor performing any work.

The Contractor will coordinate with the City Forester prior to the removal of any tree roots.

At various times throughout the work, the Engineer may direct the Contractor to use smaller and/or lighter equipment, and to defer certain work tasks, in order to protect the grade and/or adjacent areas. The Contractor shall not be entitled to any additional compensation for the use of smaller equipment, lighter equipment, or work task deferral.

Use blade graders, maintainers, vibratory rollers, and/or other equipment as necessary, and as directed by the Engineer. The use of each specific piece of equipment is subject to the approval of the Engineer.

Excavated/removal areas shall be adequately protected with barricades and/or fencing at all times.

Removed or excavated materials not incorporated into the work will become the property of the Contractor and be immediately removed and properly disposed of off-site. DO NOT stockpile overnight on site, or adjacent to it, any removed or excavated materials.

Replace and compact any/all base, subbase, or subgrade materials removed without authorization with materials specified by the Engineer. The Contractor will perform this work at its expense.

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

Pay Item	<u>Pay Unit</u>
HMA Curb, Rem	Foot

Measure **HMA Curb**, **Rem** length in place by the unit foot 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.

DETAILED SPECIFICATION FOR VERTICAL EXPLORATORY EXCAVATION

AA:DAD 1 of 2 03/17/21

a. Description. The use of this detailed specification is to compensate the Contractor to locate underground infrastructure, such as culverts, sewers, utilities, and/or to expose the existing pavement section. Use must only be as directed and approved by the Engineer. This detailed specification is not to compensate the Contractor for the responsibilities in subsection 107.12 of the Standard Specifications for Construction.

This work consists of conducting a vertical exploratory investigation to expose an existing culvert, sewer, utility/utility service, or the existing pavement section in order to verify the location, condition, size, material, alignment and/or composition; allowing the Engineer to document the necessary information; and backfilling the excavation. It includes providing necessary lane, shoulder and/or sidewalk closures required to perform the work.

The intent of "Exploratory Excavation" is <u>not</u> to provide a means for the Contractor to locate each existing utility throughout the project, but for those that appear to be in conflict with the proposed work and their location is unclear or unknown. The Contractor is responsible for "using reasonable care to establish the precise location of the underground facilities in advance of construction" (Public Act 174 of 2013 - Miss Dig Law) as a part of the overall project contract.

- **b. Materials.** Use Granular Material Class III in accordance with section 902 of the Standard Specifications for Construction for backfill. Use material removed during exploratory investigation for backfill only if approved by of the Engineer.
- **c.** Construction. The owner of any sewer or utility to be exposed will not take the facilities out of service during the exploratory investigation. Contact utility owners in accordance with subsection 107.12 of the Standard Specifications for Construction.

Establish necessary lane, shoulder and/or sidewalk closures required to perform work.

Advance the exploratory excavation using vacuum excavation, hand digging, conventional machine excavation, or a combination thereof subject to approval of the Engineer. Allow the Engineer access to document the necessary information. If the technique used to advance the excavation causes any damage to the existing facilities, immediately contact the utility owner and cease all work until Engineer approves of an alternate method.

Take care to protect the exposed culvert, sewer or utility from damage during construction. Repair or replace culvert, sewer or utility, damaged during exploratory excavation, in accordance with the standard specifications and as approved by the Engineer.

Obtain the Engineer's approval before backfilling the excavation. Complete backfilling no later than 24 hours after approval. Backfill in accordance with subsection 204.03.C of the Standard Specifications for Construction. Dispose of excess material in accordance with the standard specifications.

The Contractor is responsible for all costs associated with the repair work and out of service time of all broken or damaged existing culverts, sewers or utilities resulting from any action by the Contractor. If the exploratory investigation results in damage to utilities, contact the owner of such utility to coordinate the repair.

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

Pay Item	<u>Pay Unit</u>
Exploratory Excavation, Vertical	Foot

Measure **Exploratory Investigation, Vertical** by the foot from top of existing grade vertically to the bottom of the excavation for a 4-foot maximum diameter hole, or as approved by the Engineer. Measure and pay for the excavated depth of each 4-foot maximum diameter hole separately. One paid excavation may include multiple utility verifications if the utilities are close in proximity.

Exploratory Investigation, Vertical includes all cost for labor, equipment and materials necessary to complete the work, including all costs associated with repair or replacement resulting from the Contractor's activities.

DETAILED SPECIFICATION FOR

SOIL EROSION AND SEDIMENTATION CONTROL - INLET FILTER

AA:DAD 1 of 1 03/24/21

- **a. Description.** This work consists of furnishing, installing, maintaining and removing inlet filters at the locations shown on the plans or as directed by the Engineer in accordance with section 208 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction.
 - **b. Materials.** The following devices are approved for use as acceptable alternatives:
 - 1. Siltsack Type B, Regular Flow, by ACF Environmental, Inc.
 - 2. Inlet Pro Sediment Bag, Standard Flow, with optional foam deflector by Hanes GeoComponents.
 - 3. Dandy Curb Bag, Dandy Bag, Dandy Curb Sack, Dandy Sack, or Dandy Pop by Dandy Products, Inc.
 - 4. Basin Bag, Regular Flow by CSI Geoturf.
 - 5. Flexstorm Catch-It and Flexstorm Pure used with filter bag types FX, FX+, FXO, PC, PC+ or IL.

Ensure provided devices are sized appropriately for the drainage structures/inlets in which they will be installed. Submit product data sheets for device(s) proposed for use to the Engineer for approval prior to ordering materials.

c. Construction. Install, maintain and remove the devices according with the manufacturer's guidelines. Remove material collected by the devices according to the manufacturer's guidelines or as directed by the Engineer.

Install filters in existing and proposed drainage structures/inlets to restrict and minimize amounts of sediment entering into the storm sewer system and water courses. Maintain devices for the duration of the project as required and directed by the Engineer. Remove accumulated sediment, clean and reinstall devices to provide for properly working devices and a well-drained site. Dispose of collected material in accordance with subsection 205.03.P of the MDOT 2012 Standard Specifications for Construction. Replace damaged devices if required or directed by the Engineer.

Those devices that are no longer needed and have been removed may be reused elsewhere on the project as approved by the Engineer.

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

Measure **Erosion Control, Inlet Filter** individually in place by unit each and pay for it at the contract unit price, which price includes all costs for labor, equipment and materials necessary to furnish, install, maintain, dispose of collected material, replace and remove the inlet filter.

DETAILED SPECIFICATION FOR SHARED USE PATH, HMA BASE CRUSHING AND SHAPING

AA:DADCAE 1 of 1 03/25/2021

- **a. Description.** This work consists of constructing new aggregate base from an existing shared use path flexible pavement in accordance with section 305 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, as specified herein, and as directed by the Engineer.
- **b. Materials.** Use materials meeting the requirements specified in subsection 305.02 of the MDOT 2012 Standard Specifications for Construction.
- **c. Construction**. Use construction methods meeting the requirements specified in subsection 305.03 of the MDOT 2012 Standard Specifications for Construction.

Coordinate any/all trimming and pruning of trees, shrubs, or other vegetation necessary to complete this work with the City of Ann Arbor Public Works or an authorized subcontractor. Schedule trimming and pruning work to be complete in advance of performing any other work on site.

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 Pay Unit

Shared use Path, HMA Base Crushing and Shaping......Square Yard

Measure **Shared use Path, HMA Base Crushing and Shaping** area by the unit square yard and pay for it at the contract unit price, which price includes costs for all labor, equipment and materials necessary to complete the work.

Measure and pay for separately **Material**, **Surplus and Unsuitable**, **Rem**, **LM** at the contract unit price.

Measure and pay for separately Salv Crushed Material, LM at the contract unit price.

The Contractor, at its sole expense, will remedy, as directed by the Engineer, any damage to the foundation, pathway, or roadway embankment or subgrade caused by traffic or its operations.

The Engineer will not pay additional compensation or allow extensions of contract time for additional measures required to protect the grade as specified.

The Engineer will not pay additional compensation or allow extensions of contract time for tree trimming measures and coordination of this work with City forces.

The Engineer will pay for the trimming and pruning of trees by an authorized subcontractor, if necessary, as extra work.

DETAILED SPECIFICATION FOR TRENCHING, MODIFIED

AA:DAD 1 of 1 03/25/21

- **a. Description.** This work consists of excavation necessary to construct concrete curb and gutter on streets with HMA curb and to widen the base grade to construct a uniform width shared use path in accordance with the plans as described herein and as directed by the Engineer. It includes providing all materials, labor and equipment necessary to remove the existing hot mix asphalt (HMA) or topsoil surface and excavating the underlying base or subgrade material to the grade, shape, width and depth specified on the plans.
 - **b.** Materials. None specified.
- **c. Construction.** Complete this work according to sections 307 and 501 of the Standard Specifications for Construction, as shown on the plans and as specified herein.
 - 1. Use a cold milling machine or other Engineer approved method for all removal and excavation.
 - Perform full-depth saw cutting at the limits marked for removal on streets with HMA curb unless using cold milling method to remove the existing pavement. Perform any/all saw cutting under wet conditions to prevent excessive airborne dust. Clean up any/all resulting slurry and debris to the satisfaction of the Engineer immediately after performing saw cutting work.
 - 3. Remove the existing HMA surface and excavate underlying base or subgrade material.
 - 4. Shape, grade and compact trench to the width and depth required as directed by the Engineer or as shown in the plans.
 - 5. Remove trenched material from the project immediately.
- **d. Measurement and Payment.** Measure and pay for the completed work, as described, at the respective contract unit prices using the following pay item:

Measure **Trenching, Modified** in place by length, width and depth to calculate the unit cubic yard volume 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.

Removal of the existing HMA surface will not be paid for separately, but will be included in the payment for **Trenching**, **Modified**.

Saw cutting required to remove the existing pavement is not a separate contract pay item. The Contractor shall include any/all costs for it in the unit price for **Trenching**, **Modified**.

DETAILED SPECIFICATION FOR STRUCTURE COVERS

AA:DAD 1 of 2 03/25/21

- **a. Description.** This work shall consist of replacing and furnishing frames and covers for utility (storm, sanitary, and water) structures as shown on the plans and as directed by the Engineer, in accordance with section 403 of the edition of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, except as specified herein.
- **b. Materials.** Provide materials meeting the requirements of subsection 403.02 and section 908 of the MDOT 2012 Standard Specifications. Provide frames and covers conforming to the model(s) shown in the table below, or equivalent approved by the Engineer.

Type of Casting	Associated Pay Item (MDOT Designation)	EJ No.	NEENAH No.
Manhole Frame and Cover (sanitary sewer)	Dr Structure Cover, Special	1040AGS	
Manhole Frame and Cover (storm sewer and water)	Dr Structure Cover, Type B, Modified (Cover B)	1040 w/ Type A Cover Type M1	
Curb Inlet/Catch Basin Frame and Cover (mountable curb & gutter)	Dr Structure Cover, Type C, Modified (Cover C)	7045Z w/ 7045M1 Sinusoidal Grate	R-3249F
Flat Inlet Frame and Cover	Dr Structure Cover, Type D, Modified (Cover D)	5000 w/ Type M2 Sinusoidal Grate	
Flat Inlet Frame and Cover	Dr Structure Cover, Type D, Modified (ADA Cover/Grate) (Cover D)	5000 w/ Type M3 ADA Grate	
Curb Inlet/Catch Basin Frame and Cover (barrier curb & gutter)	Dr Structure Cover, Type K, Modified (Cover K)	7045Z w/ 7045M1 Sinusoidal Grate	R-3249F

Provide frames and covers with machined bearing surfaces.

Provide manhole covers labeled with "CITY OF ANN ARBOR" and "WATER", "STORM", or "SANITARY" whichever is applicable. Use the City's custom logo in use at the time of the project (see drawings attached).

Use Dr Structure Cover, Special for all sanitary sewer manhole covers unless otherwise directed by the Engineer.

Frames and covers for monument and gate (water-valve) boxes will be provided by the City of Ann Arbor. The Contractor shall transport these to the site from the City's W.R. Wheeler Service Center located at 4251 Stone School Road.

c. Construction. The Contractor shall store materials on site and/or at locations arranged by the Contractor, subject to the approval of the Engineer. The Contractor shall not store materials or equipment, including metal castings and steel plates, on any lawn areas.

The Contractor shall deliver all salvaged city owned utility structure covers and castings to the W.R. Wheeler Service Center within two days of their removal.

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
Dr Structure Cover, Special	Each
Dr Structure Cover, Type B, Modified	Each
Dr Structure Cover, Type D, Modified	Each
Dr Structure Cover, Type D, Modified (ADA Cover/Grate)	Each
Dr Structure Cover, Type K, Modified	Each

Measure **Dr Structure Cover**, **Type** ____, **Modified**; **Dr Structure Cover**, **Type** ____, **Modified** (**ADA Cover/Grate**); and **Dr Structure Cover**, **Special** individually in place by their respective units each and pay for them at their respective contract unit prices, which prices include all cost for labor, equipment and materials necessary to complete the work.

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

1040A Cover





Product Number

Design Features 001040325

1 1/2" SHARP FACE GOTHIC

CUSTOM LOGO

-Materials

Gray Iron (CL35B) -Design Load

Heavy Duty -Open Area

n/a -Coating

1040A ASTM A48 CL35B PROD. NO. MO/DY/YR X

US PATENT 7,905,679

Dipped

√ Designates Machined Surface

Certification - ASTM A48

-Country of Origin: USA



1 1/2" SHARP FACE GOTHIC

MADE IN USA

-(2) EPIC® PICKHOLES



26" DIA

2 3/16"

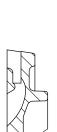
SECTION

Designer: DAE Revised By: DAE

8/29/2018

5/4/2018

Drawing Revision



EPIC® DETAIL

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1040A Cover

CUSTOM LOGO





Product Number 001040324

Design Features

Gray Iron (CL35B) -Design Load -Materials

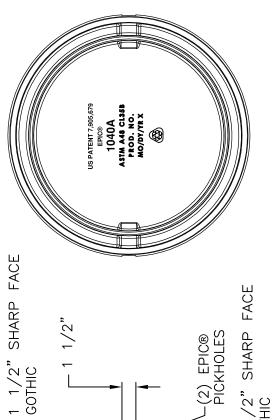
Heavy Duty -Open Area

n/a -Coating

√ Designates Machined Surface Dipped

Certification - ASTM A48

-Country of Origin: USA



BOTTOM VIEW

1 1/2" SHARP FACE GOTHIC

MADE IN USA

-(2) EPIC® PICKHOLES

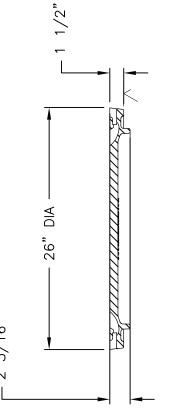
Drawing Revision

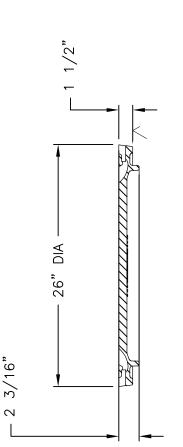
Designer: DAE Revised By: DAE 8/29/2018 5/4/2018

Weights (lbs./kg) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice. Disclaimer

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SECTION



Product Number 001040570

CUSTOM LOGO

Design Features

Gray Iron (CL35B) -Design Load -Materials

Heavy Duty -Open Area

n/a -Coating

✓ Designates Machined Surface Undipped

Certification - ASTM A48

-Country of Origin: USA



1040A ASTM A48 CL35B PROD. NO. MO/DY/YR X US PATENT 7,905,679

BOTTOM VIEW

-1 1/2" SHARP FACE GOTHIC TYP

-(2) EPIC® PICKHOLES



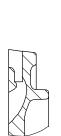
EPIC® DETAIL

SECTION

26" DIA

3/16"

7



Drawing Revision 3/15/2018 Designer: MAH Revised By: MAH 1/8/2021

Weights (Ibs./kg) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice. Disclaimer

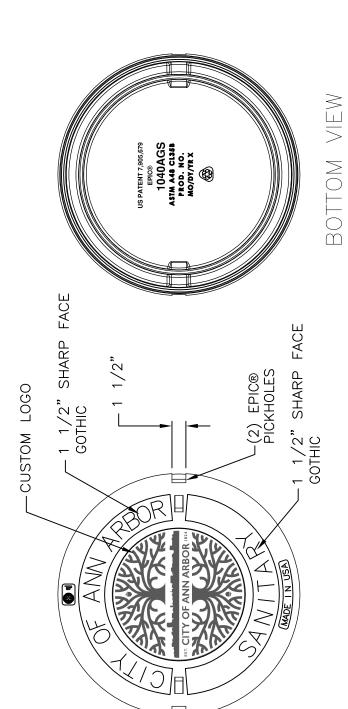
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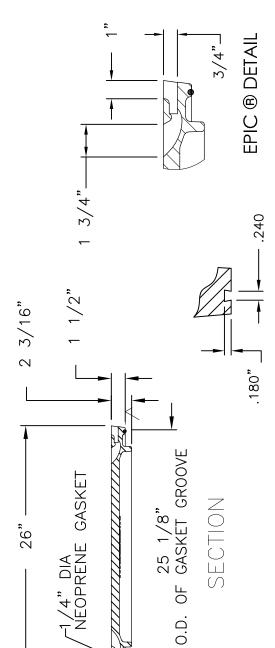
Contact

MADE IN USA

1040AGS Cover







GROOVE DETAIL

Product Number

001040326

Design Features

Gray Iron (CL35B) -Design Load -Materials

Heavy Duty -Open Area

n/a -Coating

Dipped

√ Designates Machined Surface

Certification - ASTM A48

-Country of Origin: USA

Designer: DAE Revised By: DAE **Drawing Revision** 5/11/2018 Designer: 8/29/2018

Weights (lbs./kg) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice. Disclaimer

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Contact

26"

DETAILED SPECIFICATION FOR ADJUSTING STRUCTURE COVERS

AA:DAD 1 of 3 03/24/21

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 city owned structure covers designated for salvage, and within two days of their removal deliverer them to the 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 of 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	Pay Unit
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 YARD DRAIN, OUTLET PIPE AND ENDINGS

AA:DAD 1 of 2 03/25/21

- **a. Description.** This work includes removing existing yard drain piping and outlet endings and furnishing and installing new yard drain outlet piping and endings as directed by the Engineer.
- b. Materials. Provide 4 inch underdrain outlet pipe in accordance with ASTM D1785, Schedule 80 polyvinyl chloride (PVC). Ensure all fittings, couplings, joints, cement and other associated appurtenances are compatible with Schedule 80 PVC pipe. Use Fernco[™] Flexible coupling with stainless steel shear rings; Indiana Seal Flexible Couplings; or an Engineer approved equal when connecting pipes of dissimilar materials. Submit product data sheet for pop-up ending apparatus proposed for use to the Engineer for approval prior to ordering materials. Use Granular Material Class II for backfill meeting the requirements of section 902 of the Michigan Department of Transportation 2012 Standard Specifications for Construction.
- **c.** Construction. Remove and replace existing yard drains and outlet endings encountered during construction as required and in accordance with the manufacturer's guidelines and as directed by the Engineer.

For existing installations through the concrete curb head, excavate and remove existing yard drain pipe to a sufficient distance behind the curb and place new 4 inch PVC piping and connect it to the existing drain pipe. Use PVC fittings when connecting existing and new PVC pipes and FerncoTM Flexible couplings when connecting pipes of different materials or diameters. Run pipe through new curb head to allow for drainage into the flow line of the gutter and sufficient concrete cover above the pipe. Place and compact 3 inches of bedding and backfill beneath and around pipe using Granular Material Class II. Restore disturbed areas resulting from this work in accordance with the Detailed Specification for Slope Restoration.

For existing installations through the concrete curb head where similar replacement is not feasible or desired, excavate and remove existing yard drain pipe to a sufficient distance behind the curb and place an approved yard drain pop-up apparatus. Use PVC fittings when connecting existing and new PVC pipes and Fernco couplings when connecting pipes of different materials or diameters. Install pop-up apparatus after curb installation to ensure positive drainage over top of curb. Place and compact 3 inches of bedding and backfill beneath and around apparatus using Granular Material Class II. Restore disturbed areas resulting from this work in accordance with the Detailed Specification for Slope Restoration.

Properly dispose of any/all excess excavated material off-site.

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 Uni
Yard Drain, Outlet Ending, Plastic Pipe	Foo
Yard Drain, Outlet Ending, Pop-up Apparatus	

Measure Yard Drain, Outlet Ending, Plastic Pipe; and Yard Drain, Outlet Ending, Pop-up Apparatus in place by their respective units of foot and 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.

Work required to restore disturbed areas will be measured and paid for separately at the contract unit price for **Slope Restoration**.

DETAILED SPECIFICATION FOR HOT MIX ASPHALT (HMA) APPLICATION ESTIMATE

AA:DAD 1 of 2 03/24/21

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	BINDER PERFORMANCE GRADE	AWI (min)
	Р	ackard Street Sh	ared Use Path		
Shared use Path, HMA	LVSP	385 lb/syd	3.5 inches	PG 58-28	220
Shared use Path, HMA, Wedging	5E1	Varies between 55 and 250 lb/syd	Varies between 0.5 and 2.25 inches	PG 58-28	N/A
		South Huron	Parkway		
⁽¹⁾ HMA,	LVSP (top)	220 lb/syd	2.0 inches	PG 58-28	220
LVSP	LVSP (leveling)	220 lb/syd	2.0 inches	PG 58-28	N/A
		South Industria	al Highway		
HMA, 4E3	4E3 (top)	220 lb/syd	2.0 inches	PG 64-28	220
, -	4E3 (leveling)	220 lb/syd	2.0 inches	PG 64-28	N/A
		Minor (Local) Streets		
⁽¹⁾ HMA,	LVSP (top)	220 lb/syd	2.0 inches	PG 58-28	220
LVSP	LVSP (leveling)	220 lb/syd	2.0 inches	PG 58-28	N/A
⁽²⁾ HMA, LVSP	LVSP (top)	165 lb/syd or 220 lb/syd	1.5 inches or 2.0 inches	PG 58-28	220
⁽³⁾ Hand Patching	LVSP	Varies maximum = 330 lb/syd	Varies - maximum = 3.0 inches	PG 58-28	N/A
⁽⁴⁾ HMA Approach	LVSP	Place in two courses/lifts at 220 lb/syd	Varies maximum = 2.0 inches/lift	PG 58-28	220
HMA, Wedging, 36A	36A	Varies between 110 and 330 lb/syd	Varies between 1.0 and 3.0 inches	PG 58-28	220

⁽¹⁾ Applies to streets where asphalt pavement removal and replacement is full depth.

⁽²⁾ Applies to streets where asphalt pavement removal and replacement is only partial depth. See construction scope and sequencing notes on subset cover sheets for removal and replacement depth/thickness on these streets.

- (3) The Contractor may use alternative top course E mixes for Hand Patching with approval by the Engineer. LVSP is approved for use only on minor (local) streets.
- (4) HMA Approach mix shall match that used for mainline paving (top course) on the street for which the adjacent side street approaches are being paved unless otherwise approved or directed by the Engineer.

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.

DETIALED SPECIFICATION FOR HMA TRAFFIC CALMING MEASURES

AA:DAD 1 of 2 03/25/21

- **a. Description.** This work consists of constructing hot mix asphalt (HMA) traffic calming devices at locations directed by the Engineer, in accordance with the special details shown on the plans, and as described herein.
- **b. Materials.** Provide materials in accordance with section 501 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction. Use MDOT mixture HMA, LVSP for this work, or an acceptable substitute approved by the Engineer.
- **c. Construction**. Perform work in accordance with section 501 of the MDOT 2012 Standard Specifications for Construction, and as directed by the Engineer.

Furnish and operate all temporary traffic control devices and provide traffic regulator control necessary to complete traffic calming device construction.

Submit a temporary traffic control plan to the Engineer for approval a minimum of 48 hours in advance of this work.

Cold mill existing pavement to depth and dimensions as shown on the plans.

Clean the existing surface with compressed air and/or vacuum type street cleaning equipment to remove dirt and debris prior to placement of HMA material. Provide compressed air from a source capable of supplying air at a minimum pressure of 90 psi and at a rate 150 cubic feet per minute of at the nozzle.

Apply MDOT SS-1h bond coat on all asphalt and concrete surfaces within the area where installing the traffic calming measure. Apply at a rate between 0.05 and 0.10 gallons/square yard using a power distributor hand sprayer. Do not place bond coat material on pavement and concrete curb and gutter surfaces adjacent to the traffic calming measures being placed that are not approved for paving.

Placing traffic calming devices using an asphalt paving machine or, where approved by the Engineer, place HMA material directly by hand. Do not place HMA materials on pavement and concrete curb and gutter surfaces adjacent to the traffic calming measures being placed that are not approved for paving.

Use City of Ann Arbor provided template when constructing traffic calming devices unless otherwise directed by the Engineer.

Construct traffic calming devices using one (1) lifts/layers of HMA material. Compact HMA mixture to between 92 and 96 percent (or as determined acceptable by the Engineer) of the theoretical maximum density, as listed on the approved Job Mix Formula.

Provide a 10-foot long straight-edge and a 10-foot long level during all paving operations.

Place temporary pavement markings to delineate and differentiate the traffic calming devices for traffic as directed by the Engineer.

Place permanent pavement markings as required and in accordance with the special details on the plans and as directed by the Engineer.

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

<u>Pay item</u>	<u>Pay Unit</u>
Raised Crosswalk, HMA	Square Yard
Raised Intersection, HMA	
Speed Hump, HMA	Square Yard
Speed Table, HMA	

Measure Raised Crosswalk, HMA; Raised Intersection, HMA; Speed Hump, HMA; and Speed Table, HMA areas in place by the unit square yard and pay for them at their respective contract unit prices, which prices include the costs for all labor, equipment and materials necessary to complete the work including providing, placing and compacting the HMA mixture.

Measure and pay for separately temporary traffic control devices and traffic regulator control.

Measure and pay for separately temporary and permanent pavement markings.

Measure and pay for separately **Cold Milling**.

Measure and pay for separately any necessary restoration work as **Slope Restoration**.

DETIALED SPECIFICATION FOR CONCRETE TRAFFIC CALMING MEASURES

AA:DAD 1 of 2 03/25/21

- **a. Description.** This work consists of constructing concrete traffic calming devices at locations directed by the Engineer, in accordance with the special details shown on the plans, and as described herein.
- **b. Materials.** Provide materials in accordance with section 602.02 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction except as herein modified.

Use concrete mixture Grade P1 or an acceptable substitute approved by the Engineer.

c. Construction. Perform work in accordance with section 602.03 of the MDOT 2012 Standard Specifications for Construction, and as directed by the Engineer.

Submit a temporary traffic control plan to the Engineer for approval a minimum of 48 hours in advance of this work.

Furnish and operate all temporary traffic control devices and provide traffic regulator control necessary to complete traffic calming device construction.

Maintain access to/from properties at all times during construction.

Perform full-depth saw cutting at removal limits, including those necessary to provide for the partial removal of existing pavement to complete part width construction as directed by the Engineer. Perform any/all saw cutting under wet conditions to prevent excessive airborne dust. Clean up any/all resulting slurry and debris to the satisfaction of the Engineer immediately after performing saw cutting work. Take sufficient care so as not to damage and/or disturb any adjacent pavement, pavement base, and/or any other site feature, all as directed by the Engineer.

Remove existing pavement and base material as required to a depth 6 inches below the existing road surface.

At all times protect excavated/removal areas with barricades and/or fencing.

Construct the concrete traffic calming devices using clean, straight uniformed forms to the grade, shape and thickness of the devices as called out in the plans or as directed by the Engineer. Do not place concrete materials on pavement and concrete curb and gutter surfaces adjacent to the traffic calming measures being placed that are not approved for removal and replacement.

Use City of Ann Arbor provided template when constructing traffic calming devices unless otherwise directed by the Engineer.

Provide a 10-foot long straight-edge and a 10-foot long level during all operations.

At various times throughout the work, the Engineer may direct the Contractor to use smaller and/or lighter equipment, and to defer certain work tasks, in order to protect the grade and/or adjacent areas. The Contractor shall not be entitled to any additional compensation for the use of smaller equipment, lighter equipment, or work task deferral.

Place temporary pavement markings to delineate and differentiate the traffic calming devices for traffic as directed by the Engineer.

Place permanent pavement markings as required and in accordance with the special details on the plans and as directed by the Engineer.

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

Pay Item	Pay Unit
Raised Crosswalk, Conc	Square Yard
Raised Intersection, Conc	Square Yard
Speed Hump, Conc	Square Yard
Speed Table, Conc	Square Yard

Measure Raised Crosswalk, Conc; Raised Intersection, Conc; Speed Hump, Conc; and Speed **Table, Conc** areas in place by the unit square yard and pay for them at their respective contract unit prices, which prices include the costs for all labor, equipment and materials necessary to complete the work including providing, placing and finishing the Concrete mixture.

Saw cutting required to concrete construct traffic calming devices is not a separate contract pay item. The Contractor shall include any/all costs for it in the unit price for traffic calming device being constructed.

Measure and pay for separately temporary traffic control devices and traffic regulator control.

Measure and pay for separately temporary and permanent pavement markings.

Measure and pay for separately removal of the existing pavement as **Pavt**, **Rem** or **HMA Surface**, **Rem** depending on thickness.

Measure and pay for separately removal of any base course material as Trenching, Modified.

Measure and pay for separately any necessary restoration work as Slope Restoration.

DETAILED SPECIFICATION FOR CONCRETE CURB AND GUTTER, AND DRIVEWAY OPENINGS

AA:DAD:CAE 1 of 2 03/25/21

- **a. Description.** This work consists of constructing concrete curb and gutter, furnishing and placing Slipform Concrete Curb and gutter and concrete driveway openings as directed by the Engineer or at the locations shown on the plans in accordance with section 802 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, applicable standard or special details, as directed by the Engineer, and as specified herein.
- **b. Materials.** Provide materials meeting the requirements specified in subsection 802.02 of the MDOT 2012 Standard Specifications for Construction and as specified herein.

Use concrete mixture Grade P-NC (658 pounds/cubic yard cement content) for Driveway Opening, Conc, Det M, Modified as specified in subsection 601.02 of the MDOT 2012 Standard Specifications.

Use either Grade P1 or S2 concrete for all other concrete curb and gutter specified herein. The Contractor may elect to add GGBFS to P1 mixtures in accordance with the requirements of the contract documents. The Engineer will not pay any additional amount for concrete mixtures containing GGBFS.

Provide concrete mixtures containing 6AA coarse aggregates that are either natural or limestone and meet the requirements of section 902 the MDOT 2012 Standard Specifications for Construction.

The Contractor is solely responsibility for providing specific concrete mix designs that meet the requirements of this detailed specification.

c. Construction. Use construction methods in accordance with subsection 802.03 of the MDOT 2012 Standard Specifications for Construction.

If using slip forming methods, match the dimensions of the form to the dimensions of the curb and gutter shown on the plans. Place concrete with an approved slip form machine that produces a finished product according to the plans. Place curb and gutter on a firm, uniform bearing surface, that conforms to the section profile specified in the plans and matches the appropriate grade. Place expansion joints at ends of curve radii, and at intervals no greater than 300' spacing. Place contraction joints at 10 foot intervals. Construct joints perpendicular to the subgrade and match other joints in roadways, sidewalks or other structures when applicable.

Adequately protect concrete curb and gutter after placement and allow the concrete to cure for at least 72 hours. During cold weather conditions, provide protection using concrete blankets or a combination of plastic sheeting and straw. After any placement, regardless of weather conditions, adequately protect concrete curb and gutter using traffic control devices as necessary. The Contractor will remove and replace any/all damaged curb and gutter at its expense.

Place expansion joints of the thickness shown on the details or as directed by the Engineer.

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>
Curb and Gutter, Conc, Barrier	Foot
Curb and Gutter, Conc, Mountable	Foot
Curb and Gutter, Conc, Barrier or Mountable, Slip Form	Foot
Driveway Opening, Conc, Det M, Modified	Foot

Measure Curb and Gutter, Conc, Barrier; Curb and Gutter, Conc, Mountable; Curb and Gutter, Conc, Barrier or Mountable, Slip Form; and Driveway Opening, Conc, Det M, Modified lengths 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.

Measurement in place by the unit foot and payment for concrete curb and gutter (without the curb face) at curb openings for sidewalk ramps will be at the contact unit price for **Curb Ramp Opening, Conc**.

Where the Engineer directs the use of high early strength concrete for pay items not specifically designated to use Grade P-NC concrete, it will pay separately for the additional cement. The Engineer will not pay for cement separately for pay items that designated to use Grade P-NC concrete.

DETAILED SPECIFICATION FOR PERMANENT PAVEMENT MARKINGS

AA:DAD:CAE 1 of 1 03/25/21

- **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, Polyurea, Speed Hump Chevron, White	Each
Pavt Mrkg, Thermopl, School	
Pavt Mrkg, Thermopl, Speed Hump Chevron, White	
Pavt Mrkg, Thermopl, Yield Triangle Sym	Each

Measure Pavt Mrkg, Polyurea, Speed Hump Chevron, White, Pavt Mrkg; Thermopl, School; Pavt Mrkg, Thermopl, Speed Hump Chevron, White; and Pavt Mrkg, Thermopl, Yield Triangle 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.

NOTICE TO BIDDERS

PROJECT COORDINATION

AA:DAD 1 of 1 03/25/21

The City of Ann Arbor hereby notifies the Contractor of several independent construction projects within the local vicinity of, or directly adjacent to, the Construction Influence Area (CIA) of the project locations listed below. These projects may affect various work activities, maintenance of traffic (MOT), and/or trucking operations involved with these locations. The City anticipates construction of these independent projects during the same timeframe as this project.

- South Industrial Highway CIA & MOT: Coordinate with City of Ann Arbor South Industrial Highway Concrete Pavement Repair Project.
- Towner Boulevard CIA & MOT: Coordinate with Ann Arbor Public Schools Allen Elementary School site work.

The above is not necessarily 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.

"General Decision Number: MI20210001 03/12/2021

Superseded General Decision Number: MI20200001

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 \$10.95 for calendar year 2021 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 \$10.95 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 2021. 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 01/01/2021 1 03/12/2021

CARP0004-004 06/01/2019

REMAINDER OF STATE

Rates Fringes

CARPENTER (Piledriver)......\$ 27.62 20.59

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
ELEC0017-005 06/01/2020		

STATEWIDE

	Rates	Fringes
Journeyman Si	9	16.03
	s Tech, Tower Optic Splicers.\$ 41.44	20.00
	ecialist\$ 47.66	
Operator A	\$ 35.02	17.99
Operator B	\$ 32.69	17.25

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 06/01/2020

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:

Rates Fringes

OPERATOR: Power Equipment (Steel Erection) GROUP 1.....\$ 47.02 24.85 GROUP 2.....\$ 48.02 24.85 GROUP 3.....\$ 45.52 24.85 GROUP 4.....\$ 46.52 24.85 GROUP 5.....\$ 44.02 24.85 GROUP 6.....\$ 45.02 24.85 GROUP 7.....\$ 43.75 24.85 GROUP 8.....\$ 44.75 24.85 GROUP 9.....\$ 43.30 24.85 GROUP 10.....\$ 44.30 24.85 GROUP 11.....\$ 42.57 24.85 GROUP 12.....\$ 43.57 24.85 GROUP 13.....\$ 42.21 24.85 GROUP 14.....\$ 43.21 24.85 GROUP 15.....\$ 41.57 24.85 GROUP 16.....\$ 38.62 24.85 GROUP 17.....\$ 24.14 12.00 GROUP 18.....\$ 27.63 12.00

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' 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 06/01/2020

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	\$ 47.02	24.85
GROUP 2	\$ 43.75	24.85
GROUP 3	\$ 42.21	24.85
GROUP 4	\$ 38.62	24.85

GROUP	5\$	24.14	12.00
GROUP	6\$	27.63	12.00
AREA 2			
GROUP	1\$	47.02	24.85
GROUP	2\$	43.75	24.85
GROUP	3\$	42.21	24.85
GROUP	4\$	38.62	24.85
GROUP	5\$	24.14	12.00
GROUP	6\$	27.63	12.00

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 09/01/2020

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\$ 35.88	24.85
GROUP 2\$ 31.15	24.85
GROUP 3\$ 30.42	24.85
GROUP 4\$ 29.85	24.85
GROUP 5\$ 21.40	12.05
AREA 2:	
GROUP 1\$ 34.17	24.85
GROUP 2\$ 29.28	24.85
GROUP 3\$ 28.78	24.85
GROUP 4\$ 28.50	24.85
GROUP 5\$ 21.40	12.05

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 and End dump operator;

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); Hydraulic pipe pushing machine; Mulching equipment; 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); Sweeper (Wayne type); Water wagon and Extend-a boom forklift

Group 5: Fire Person, Oiler

* ENGI0324-006 06/01/2020

GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW, WAYNE, 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

	Rates	Fringes
Power equipment operators:		
(AIRPORT, BRIDGE & HIGHWAY		
CONSTRUCTION)		
GROUP 1	\$ 34.91	24.85
GROUP 2	\$ 28.18	24.85
GROUP 3	\$ 27.62	24.85
GROUP 4	\$ 27.45	24.85

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; Vacuum truck operator; Batch Plant (concrete dry batch); Concrete Saw Operator (40h.p. or over; Tractor Operator (farm type); Finishing Machine Operator (concrete); Grader Operator (self-propelled fine grade or form (concrete)).

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); Greese Truck; Air Compressor Operator (600 cu.ft. per min or more); Air Compressor Operator (two or more, less than 600 cfm);

GROUP 3: Boiler fire tender; Tractor operator (farm type with attachment); Concrete Breaker; Wagon Drill Operator;

GROUP 4: Oiler; Fire tender; Trencher (service); Flexplane operator; Cleftplane operator; Boom or winch hoist truck operator; Endloader operator *under 1 yd. capacity); Roller Operator (other than asphalt); Curing equipment operator (self-propelled); Power bin operator; Plant drier (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); End dump; Skid Steer.

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

Rates	Fringes
4	
\$ 33.90	24.60
\$ 40.37	24.60
\$ 40.67	24.60
\$ 41.26	24.60
\$ 39.50	24.60
\$ 32.36	24.60
\$ 37.72	24.60
	\$ 33.90 \$ 40.37 \$ 40.67 \$ 41.26 \$ 39.50 \$ 32.36

^{*} ENGI0324-008 10/01/2020

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 Equipmen	t	
(Sewer Relining)		
GROUP 1	\$ 34.62	13.92
GROUP 2	\$ 32.83	13.92

SEWER RELINING CLASSIFICATIONS

GROUP 1: Operation of audio-visual closed circuit TV system,

including remote in-ground cutter and other equipment used in connection with the CCTV system

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

ENGI0325-012 05/01/2020

	Rates	Fringes
Power equipment operators - gas distribution and duct installation work:		
GROUP 1	\$ 32.18	24.85
GROUP 2	\$ 32.06	24.85
GROUP 3	\$ 30.35	24.85

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.

IRON0008-007 06/01/2020

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

ŀ	Rates	Fringes
<pre>Ironworker - pre-engineered metal building erector\$</pre>	23.70	6.95
IRONWORKER		0,120
General contracts		
\$10,000,000 or greater\$	34.99	27.12
General contracts less		
than \$10,000,000\$	34.99	27.12

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

IRON0025-002 06/01/2019

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).\$ 24.26 22.11 Bay, Genesee, Lapeer, Livingston (east of Burkhardt Road), Macomb, Midland, Oakland, Saginaw, St. Clair, The University

of Michigan, Washtenaw	4 05 40	00.44
(east of U.S. 23) & Wayne IRONWORKER	\$ 25.48	23.11
Ornamental and Structural Reinforcing	\$ 30.98	
IRON0055-005 07/01/2020		
LENAWEE AND MONROE COUNTIES:		
	Rates	Fringes
IRONWORKER Pre-engineered metal		
buildingsAll other work		
IRON0292-003 06/01/2020		
BERRIEN AND CASS COUNTIES:		
	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector)	\$ 31.75	22.84
IRON0340-001 06/19/2017		
ALLEGAN, ANTRIM, BARRY, BENZIE, EATON, EMMET, GRAND TRAVERSE, HI KALKASKA, KENT, LAKE, LEELANAU, MISSAUKEE, MONTCALM, MUSKEGON, N OTTAWA, ST. JOSEPH, VAN BUREN AN	ILLSDALE, IO MANISTEE, M NEWAYGO, OCE	NIA, KALAMAZOO, ASON, MECOSTA, ANA, OSCEOLA,
	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector)	\$ 24.43	24.67
LAB00005-006 10/01/2020		
	Rates	Fringes
Laborers - hazardous waste abatement: (ALCONA, ALPENA,		

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\$ 17.45 class b\$ 18.64 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	12.75 12.90
Also, Level D\$ 16.45 class a\$ 17.64	12.75 12.90
Zone 10 Laborers - hazardous waste abatement: (ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES - Zone 11)	
Levels A, B or C\$ 23.58 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	12.90
Also, Level D\$ 22.58 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)	12.90
Levels A, B or C\$ 21.80 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	12.90
Also, Level D\$ 20.80 Laborers - hazardous waste	12.90

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abatement: (ARENAC, BAY,
CLARE, GLADWIN, GRATIOT,
HURON, ISABELLA, MIDLAND,
OGEMAW, ROSCOMMON, SAGINAW
AND TUSCOLA COUNTIES - Zone 8)
    Levels A, B or C.....$ 21.39
                                                  12.90
    Work performed in
    conjunction with site
    preparation not requiring
    the use of personal
    protective equipment;
    Also, Level D.....$ 20.80
                                                  12.90
Laborers - hazardous waste
abatement: (CLINTON, EATON
AND INGHAM COUNTIES; IONIA
COUNTY (City of Portland);
LIVINGSTON COUNTY (west of
Oak Grove Rd., including the
City of Howell) - Zone 6)
    Levels A, B or C.....$ 25.64
                                                  12.90
    Work performed in
    conjunction with site
    preparation not requiring
    the use of personal
    protective equipment;
    Also, Level D.....$ 24.64
                                                  12.90
Laborers - hazardous waste
abatement: (GENESEE, LAPEER
AND SHIAWASSEE COUNTIES -
Zone 7)
    Levels A, B or C.....$ 24.20
                                                  13.80
    Work performed in
    conjunction with site
    preparation not requiring
    the use of personal
    protective equipment;
    Also, Level D.....$ 23.20
                                                  13.80
Laborers - hazardous waste
abatement: (HILLSDALE,
JACKSON AND LENAWEE COUNTIES
- Zone 4)
    Levels A, B or C.....$ 25.17
                                                  12.90
    Work performed in
    conjunction with site
    preparation not requiring
    the use of personal
    protective equipment;
    Also, Level D.....$ 24.17
                                                  12.90
Laborers - hazardous waste
abatement: (LIVINGSTON COUNTY
```

<pre>(east of Oak Grove Rd. and south of M-59, excluding the city of Howell); AND WASHTENAW COUNTY - Zone 3)</pre>	
Levels A, B or C\$ 29.93 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	14.20
Also, Level D\$ 28.93 Laborers - hazardous waste abatement: (MACOMB AND WAYNE COUNTIES - Zone 1)	14.20
Levels A, B or C\$ 29.93 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	16.90
Also, Level D\$ 28.93 Laborers - hazardous waste abatement: (MONROE COUNTY - Zone 4)	16.90
Levels A, B or C\$ 31.75 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	14.90
Also, Level D\$ 31.75 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)	14.90
Level A, B, C\$ 29.93 Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	16.90
Also, Level D\$ 28.93 Laborers - hazardous waste abatement: (SANILAC AND ST. CLAIR COUNTIES - Zone 5)	16.90
Levels A, B or C\$ 25.75 Work performed in	16.35

conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D......\$ 24.75

LAB00259-001 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 - t	unnel, shaft and		
caisson:			
AREA 1			
GROUP	1	.\$ 22.57	16.80
GROUP	2	.\$ 22.68	16.80
GROUP	3	.\$ 22.74	16.80
GROUP	4	.\$ 22.92	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.

LAB00334-001 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	.\$ 22.66	16.80
GROUP 5	.\$ 22.72	16.80
GROUP 6	.\$ 20.17	16.80

GROUP 7\$ ZONE 2 - LIVINGSTON COUNTY	16.79	16.80
(east of M-151 (Oak Grove		
Rd.)); MONROE AND		
WASHTENAW COUNTIES:		
GROUP 1\$		12.85
GROUP 2\$		12.85
GROUP 3\$		12.85
GROUP 4\$		12.85
GROUP 5\$		12.85
GROUP 6\$		12.85
GROUP 7\$	18.14	12.85
ZONE 3 - CLINTON, EATON,		
GENESEE, HILLSDALE AND		
INGHAM COUNTIES; IONIA		
COUNTY (City of Portland);		
JACKSON, LAPEER AND		
LENAWEE COUNTIES;		
LIVINGSTON COUNTY (west of		
M-151 Oak Grove Rd.);		
SANILAC, ST. CLAIR AND		
SHIAWASSEE COUNTIES:		
GROUP 1\$		12.85
GROUP 2\$		12.85
GROUP 3\$		12.85
GROUP 4\$		12.85
GROUP 5\$		12.85
GROUP 6\$		12.85
GROUP 7\$	16.84	12.85
ZONE 4 - ALCONA, ALLEGAN,		
ALPENA, ANTRIM, ARENAC,		
BARRY, BAY, BENZIE,		
BERRIEN, BRANCH,		
CALHOUN, CASS, CHARLEVOIX,		
CHEBOYGAN, CLARE,		
CRAWFORD, EMMET,		
GLADWIN, GRAND TRAVERSE,		
GRATIOT AND HURON		
COUNTIES; IONIA COUNTY		
(EXCEPT THE CITY OF		
PORTLAND); IOSCO,		
ISABELLA, KALAMAZOO,		
KALKASKA, KENT,		
LAKE, LEELANAU, MANISTEE,		
MASON, MECOSTA, MIDLAND,		
MISSAUKEE, MONTCALM,		
MONTMORENCY, MUSKEGON,		
NEWAYGO, OCEANA, OGEMAW,		
OSCEOLA, OSCODA, OTSEGO,		
OTTAWA, PRESQUE ISLE,		

ROSCOMMON, SAGINAW, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES: GROUP 1.....\$ 20.97 12.85 GROUP 2.....\$ 21.10 12.85 GROUP 3.....\$ 21.21 12.85 GROUP 4.....\$ 21.28 12.85 GROUP 5.....\$ 21.40 12.85 GROUP 6.....\$ 18.62 12.85 GROUP 7.....\$ 16.96 12.85 ZONE 5 - ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, 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.

LAB00465-001 06/01/2020

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

	Rates	Fringes
LABORER (AREA 1)		
GROUP 1	26.22	12.90
GROUP 2		12.90
GROUP 3		12.90
GROUP 4		12.90
GROUP 5		12.90
GROUP 6		12.90
LABORER (AREA 2)		
GROUP 1	26.92	12.90
GROUP 2	27.12	12.90
GROUP 3	27.36	12.90
GROUP 4	27.71	12.90
GROUP 5	27.58	12.90
GROUP 6	5 27.92	12.90
LABORER (AREA 3)		
GROUP 1		12.90
GROUP 2	26.43	12.90
GROUP 3	26.72	12.90
GROUP 4	27.16	12.90
GROUP 5		12.90
GROUP 6	3 27.21	12.90
LABORER (AREA 4)		
GROUP 1		12.90
GROUP 2		12.90
GROUP 3		12.90
GROUP 4		12.90
GROUP 5		12.90
GROUP 6	5 27.21	12.90

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.

LAB01076-005 04/01/2019

MICHIGAN STATEWIDE

	Rates	Fringes
LABORER (DISTRIBUTION WORK)		
Zone 1	\$ 21.47	12.90
Zone 2	\$ 19.77	12.90
Zone 3	\$ 17.95	12.90
Zone 4	\$ 17.32	12.90
Zone 5	\$ 17.30	12.90

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

	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):

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 additional.

PAIN1011-003 06/02/2019

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

Rates Fringes

PAINTER.....\$ 25.76 13.33

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

PAIN1474-002 06/01/2010

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 06/01/2019

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\$	25.39	14.68
All other work, including		
maintenance of industrial		
plant\$	25.39	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.

PLAS0514-001 06/01/2018

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
CEMENT MASON/CONCRETE FINISHER		
ZONE 1	\$ 31.47	13.81
ZONE 2	\$ 29.97	13.81
PLUM0190-003 05/01/2015		

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

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 06/01/2020

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

	Rates	Fringes
TRUCK DRIVER		
AREA 1		
Euclids, double bottoms		
and lowboys\$	28.05	.50 + a+b
Trucks under 8 cu. yds\$.50 + a+b
Trucks, 8 cu. yds. and		
over\$	27.90	.50 + a+b
AREA 2		
Euclids, double bottomms		
and lowboys\$	24.895	.50 + a+b
Euclids, double bottoms		
and lowboys\$	28.15	.50 + a+b
Trucks under 8 cu. yds\$	27.90	.50 + a+b
Trucks, 8 cu. yds. and		
over\$	28.00	.50 + a+b
Footnote:		
a. \$47.70 per week		

a. \$47.70 per week

b. \$68.70 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

	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
	R (Underground		
construction	1)		
AREA 1			
GROUP	1\$	23.82	19.04
	2\$		19.04
GROUP	3\$	24.12	19.04
AREA 2			
	1\$		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
Flag Person	\$ 10.10	0.00

LINE PROTECTOR (ZONE 1: GENESEE, MACOMB, MONROE,

OAKLAND, WASHTENAW AND WAYNE)\$ 20.30	12.90
LINE PROTECTOR (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)\$ 18.02	12.90
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES)	
Group 1\$ 27.07	12.90
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)	12.00
Group 2\$ 24.36	12.90
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES)	
Group 1\$ 24.02	12.90
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)	
Group 2\$ 21.62	12.90

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.

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 LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelvemonth contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the

Living wage	ordinance. If this exemption applies to your company/	non-pront agency please check here No. or employees		
The Contrac	ctor or Grantee agrees:			
(a)	To pay each of its employees whose wage level is not required to comply with federal, state or loca prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as \$14.05/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than \$15.66/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).			
	Check the applicable box b	elow which applies to your workforce		
	Employees who are assigned to any applicable living wage without health be	covered City contract/grant will be paid at or above the enefits		
	Employees who are assigned to any applicable living wage with health bene	covered City contract/grant will be paid at or above the fits		
(b)	To post a notice approved by the City regardin work place or other location in which employees	g the applicability of the Living Wage Ordinance in every or other persons contracting for employment are working.		
(c)	To provide to the City payroll records or othe receipt of a request by the City.	r documentation within ten (10) business days from the		
(d)	To permit access to work sites to City represe investigating complaints or non-compliance.	entatives for the purposes of monitoring compliance, and		
(e)	To take no action that would reduce the compensation, wages, fringe benefits, or leave available to an employee covered by the Living Wage Ordinance or any person contracted for employment and covere by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.			
has offered to Wage Ordin Ordinance, of	to provide the services or agrees to accept finan ance. The undersigned certifies that he/she ha obligates the Employer/Grantee to those terms a	y to act on behalf of his/her employer in these matters and cial assistance in accordance with the terms of the Living is read and is familiar with the terms of the Living Wage and acknowledges that if his/her employer is found to be in the termination of the awarded contract or grant of financial		
Company Nar	me	Street Address		
Signature of A	Authorized Representative Date	City, State, Zip		
Print Name ar	nd Title	Phone/Email address		

City of Ann Arbor Procurement Office, 734/794-6500, procurement@a2gov.org

Rev. 3/9/21

CITY OF ANN ARBOR LIVING WAGE ORDINANCE

RATE EFFECTIVE APRIL 30, 2021 - ENDING APRIL 29, 2022

\$14.05 per hour

If the employer provides health care benefits*

\$15.66 per hour

If the employer does **NOT** provide health care benefits*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

ENFORCEMENT

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

For Additional Information or to File a Complaint contact Colin Spencer at 734/794-6500 or cspencer@a2gov.org

Revised 2/4/2021



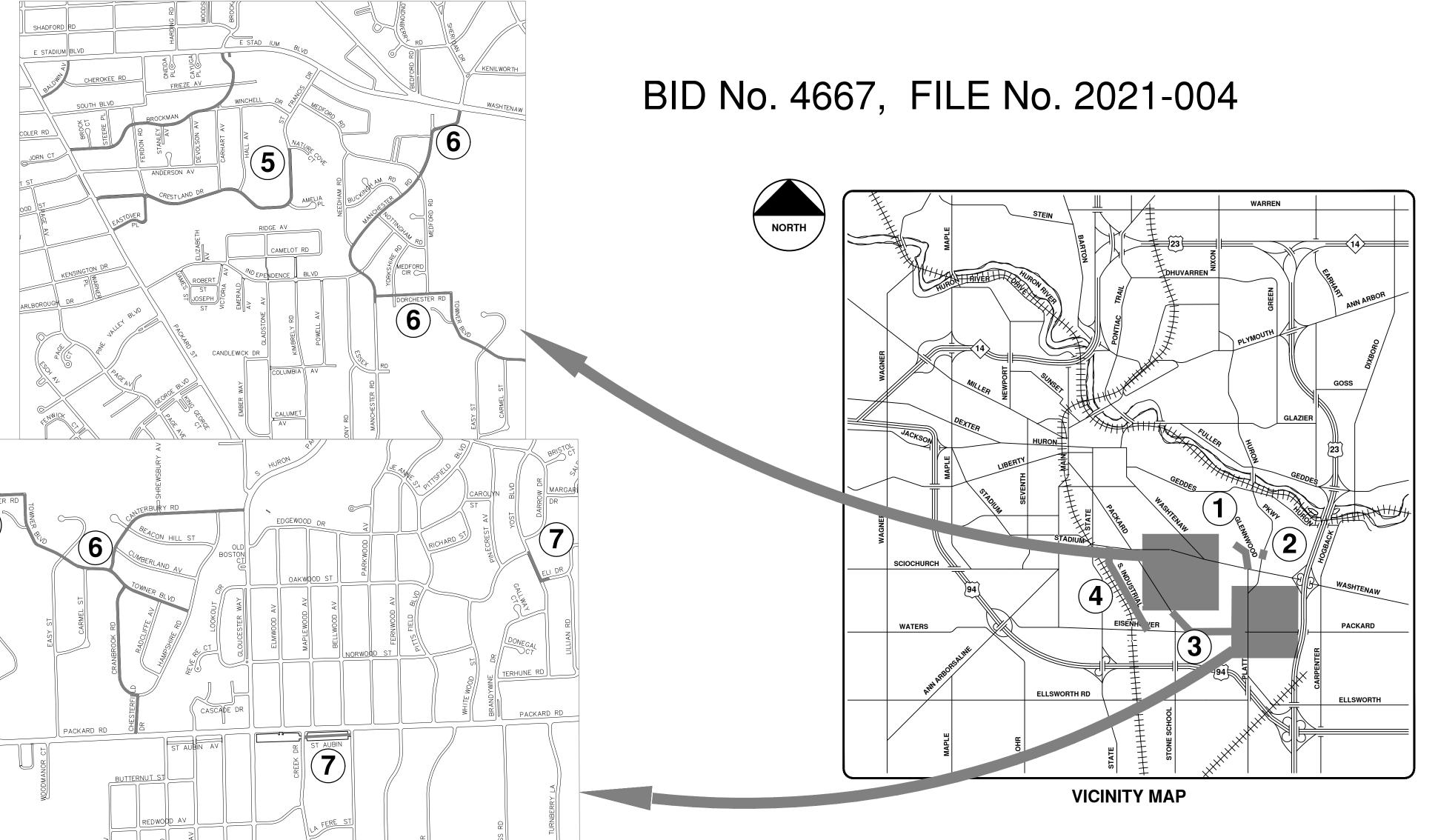
CITY OF ANN ARBOR ENGINEERING

PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR

ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE

STANDARD SPECIFICATIONS, IT'S DETAILS, WHICH ARE INCLUDED BY REFERENCE, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR

STREET RESURFACING PROJECT - 2021



	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			
5-14	TRAFFIC CALMING DETAIL			
13-14	LOCAL STREET TRAFFIC CONTROL			
15-22	PACKARD STREET HMA PATH	1		
23-25	HURON PKWY APPROACH TO LINDSAY LANE	2		
26-30	GLENWOOD ROAD	3		
31-32	S. INDUSTRIAL HMA	4		
33-38	PHASE 1 - BALDWIN AVE, BROCKMAN BLVD, CRESTLAND ST, EASTOVER PLACE, SAINT FRANCIS DR	5		
39-45	PHASE 2A - CANTERBURY RD, CHESTERFIELD ST, CRANBROOK RD, DORCHESTER RD, MANCHESTER RD, TOWNER BLVD	6		
46-51	PHASE 3 - EDDY ST, MARSHALL ST, SAINT AUBIN AVE, VERLE AVE, YOST BLVD AND ELI RD SIDEWALK	7		

DAVID ARTHUR DYKMAN, P.E. - MI LICENSE No. 52912 **PROJECT MANAGER**

02/20 /2021



- 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. The Contractor shall remove and stockpile on site at a location mutually agreed upon by the Contractor and Engineer any/all existing City owned structure covers designated for salvage, and within two days of their removal deliverer them to the 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.
- 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 6 inches above the invert of the lowest outlet pipe.
- 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 inches (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 inches (minimum) Granular Material Class Il compacted to 95% of its max. dry density under concrete driveway approaches, and 6 inches (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 REGINNING 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
*RIGHT-OF-WAY CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF TRANSPORTATION

PUBLIC UTILITIES	OWNER	CONTACT	
WATER		DAN WOODEN (734) 794-6350 DWOODEN@A2GOV.ORG	
SANITARY		TRAVIS CONLEY (734) 794-6350 TCONLEY@A2GOV.ORG	
STORM	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD	KEVIN SCHNEIDER (734) 794-6350 KSCHNEIDER@A2GOV.OR	
FORESTRY	ANN ARBOR, MI 48108	MATT WALDSMITH (734) 794-6350 MWALDSMITH@A2GOV.OR	
SIGNS SIGNALS STREET LIGHTS		CHUCK FOJTIK (734) 794-6361 CFOJTIK@A2GOV.ORG	
PRIVATE UTILITIES	OWNER	CONTACT	
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSKI (734) 544–7818	
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	ANTHONY IGNASIAK (734) 397-4447	
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300	
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	JEFF LEHMAN SR (734) 996-5334	
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016	
FIBER OPTIC	WNDSTREAM 1295 S LINDEN ROAD, SUITE B FLINT, MI 48532	GREG SERICH (810) 244-3500	
STREET LIGHTING	DTE ENERGY 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	LANCE ALLEY (734) 397-4188	



CITY OF ANN ARBOR

SHEET No. 2 OF 51 NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.

- 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:

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:**

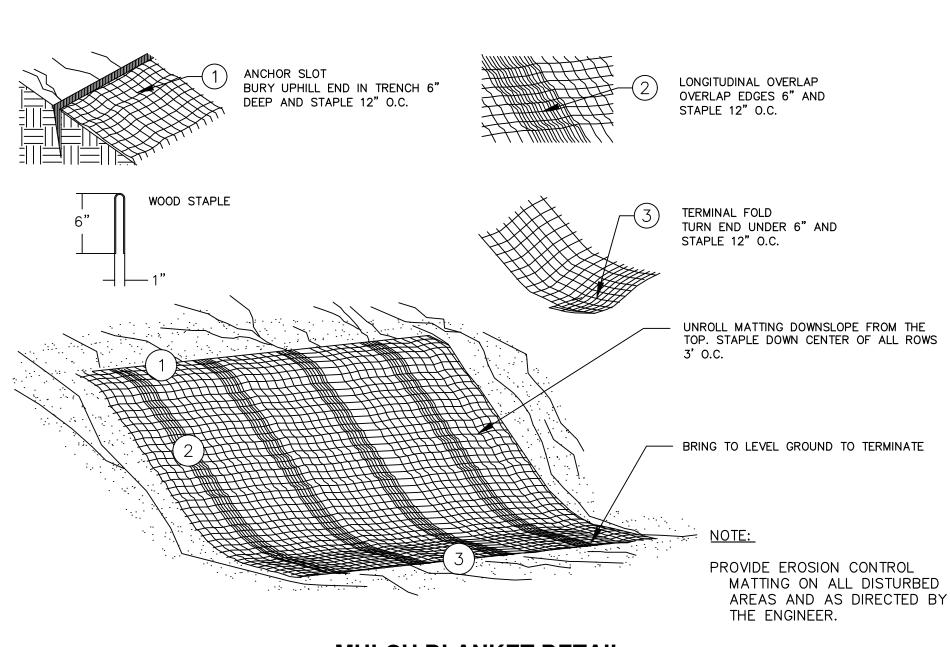
- 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. INSTALL WATER MAINS, STORM 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.

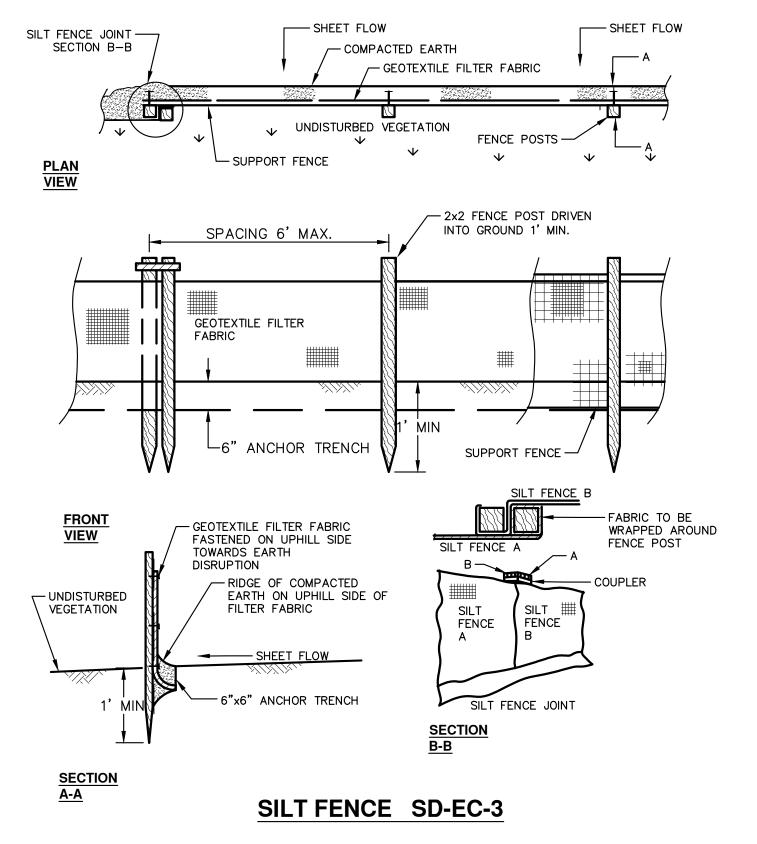
TEMPORARY SEEDING:

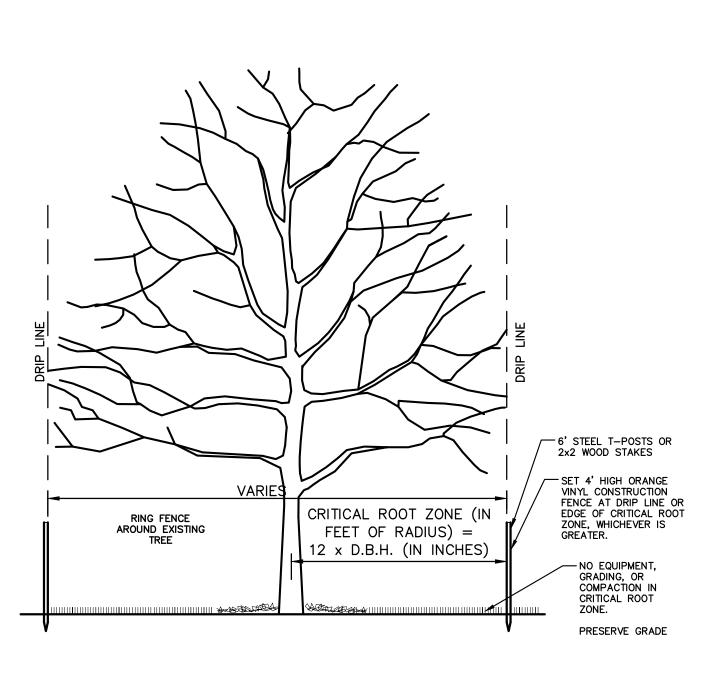
- 1. SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- 2. ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.



MULCH BLANKET DETAIL

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



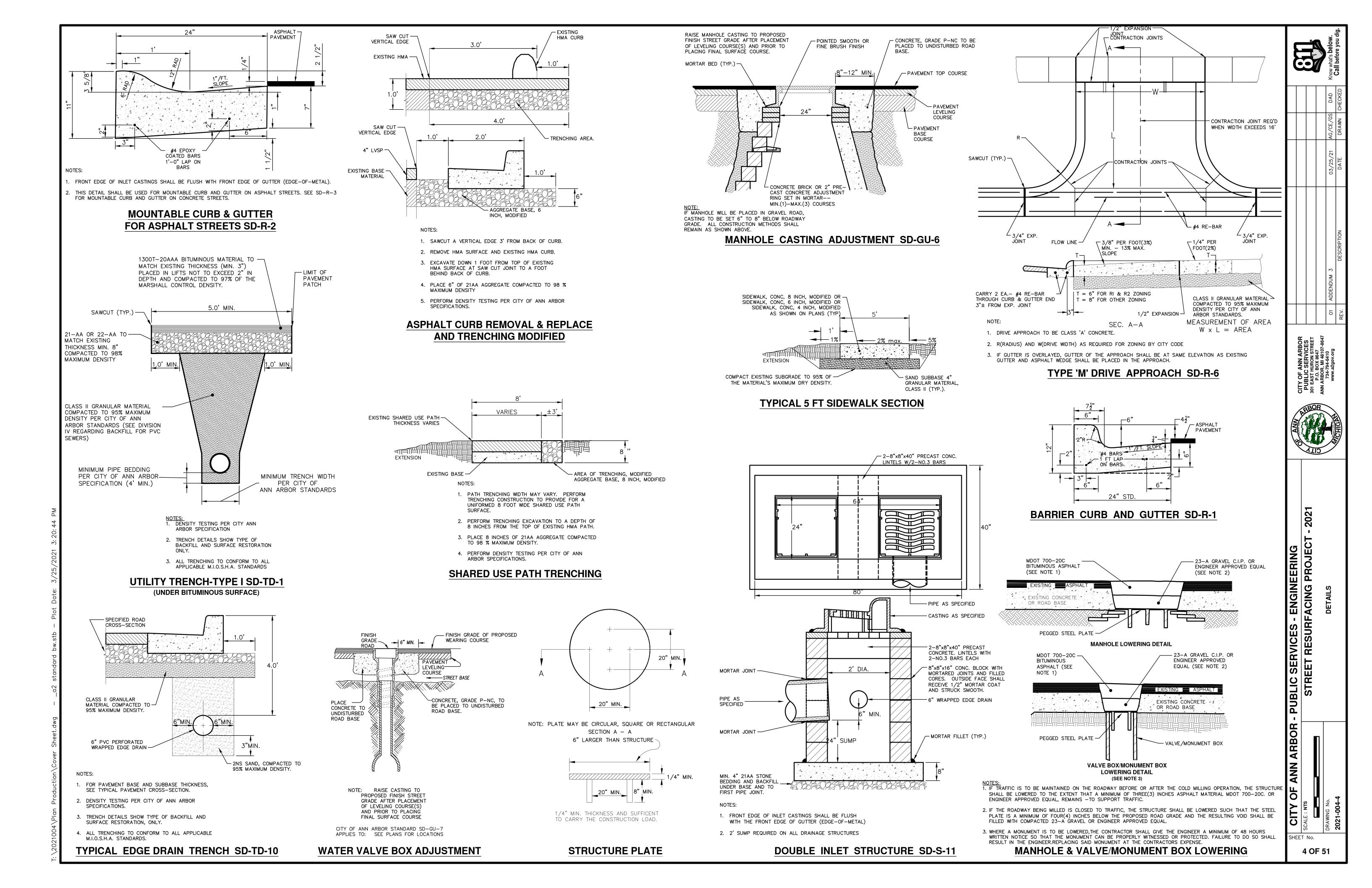


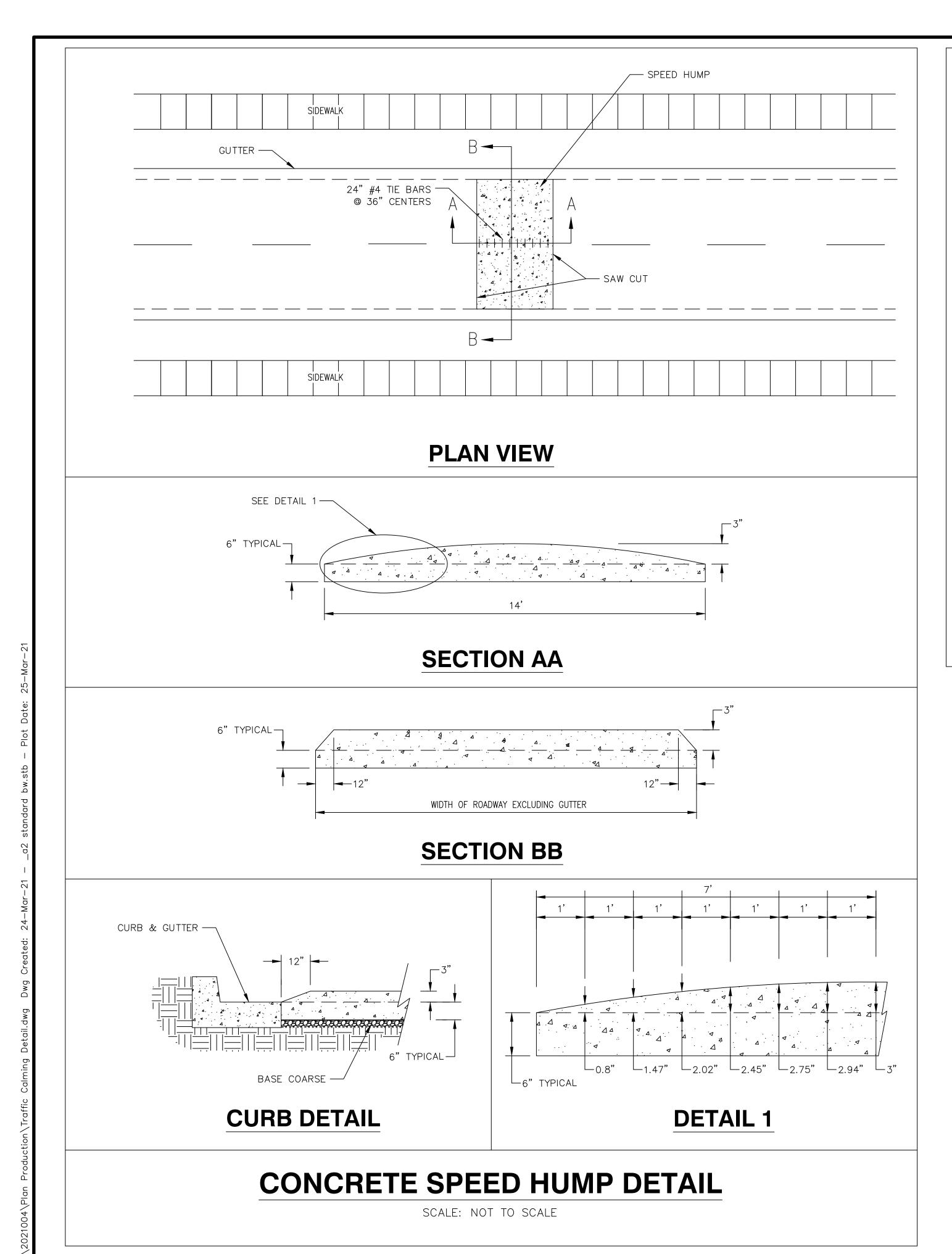
TREE PROTECTION SD-L-3

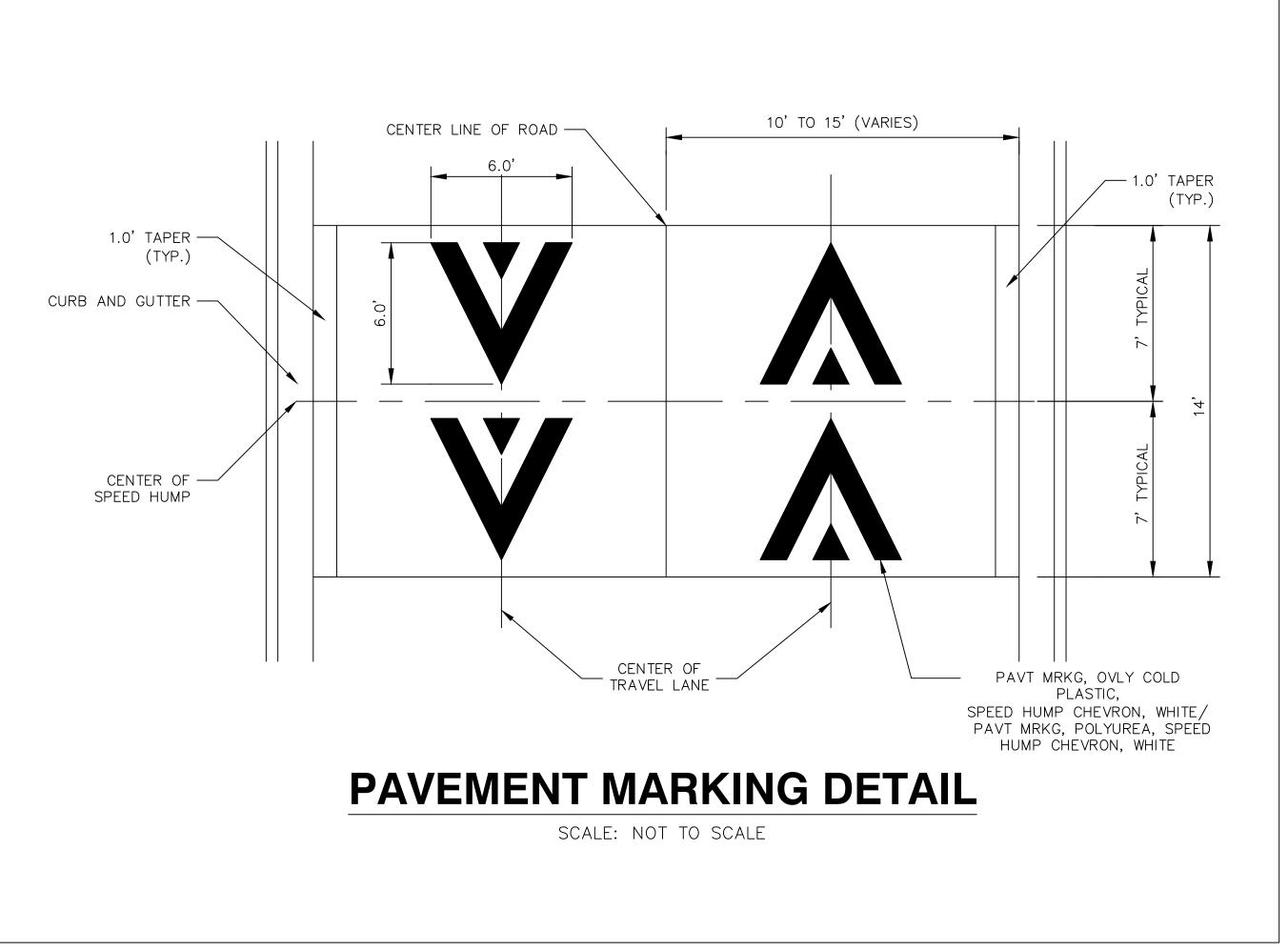


OF ANN ARBOR - PUBLIC

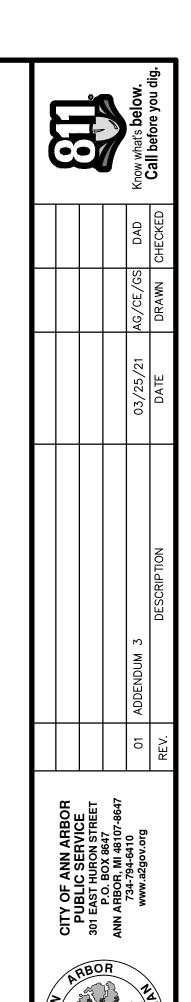
SHEET No. 3 OF 51







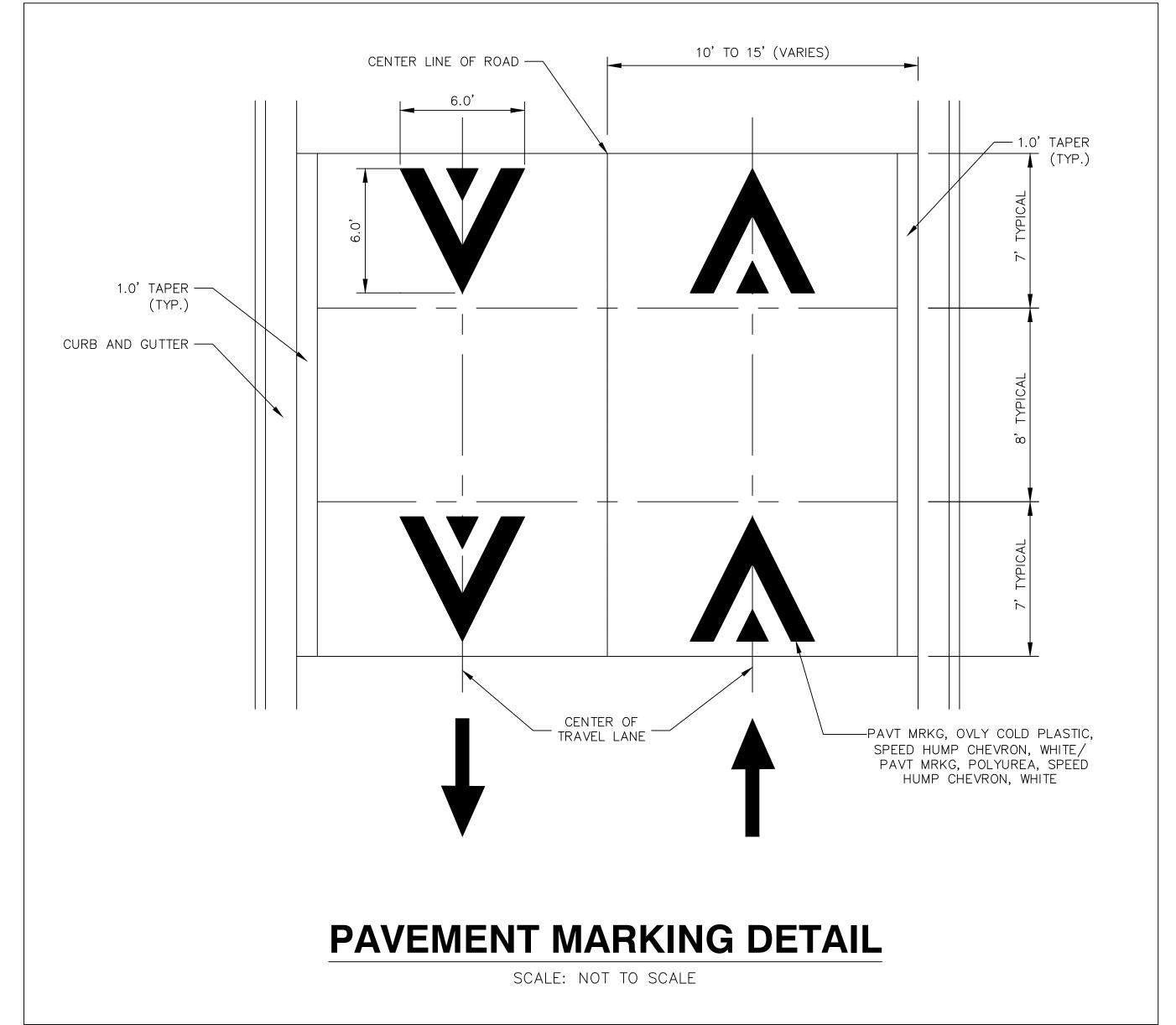
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- 2. PAYMENT FOR PAVEMENT MARKINGS FOR SPEED HUMPS AND RAISED INTERSECTIONS SHALL BE INCLUDED IN THE RESPECTIVE BID ITEMS AND SHALL NOT BE PAID FOR SEPARATELY.





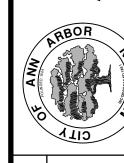
2021

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

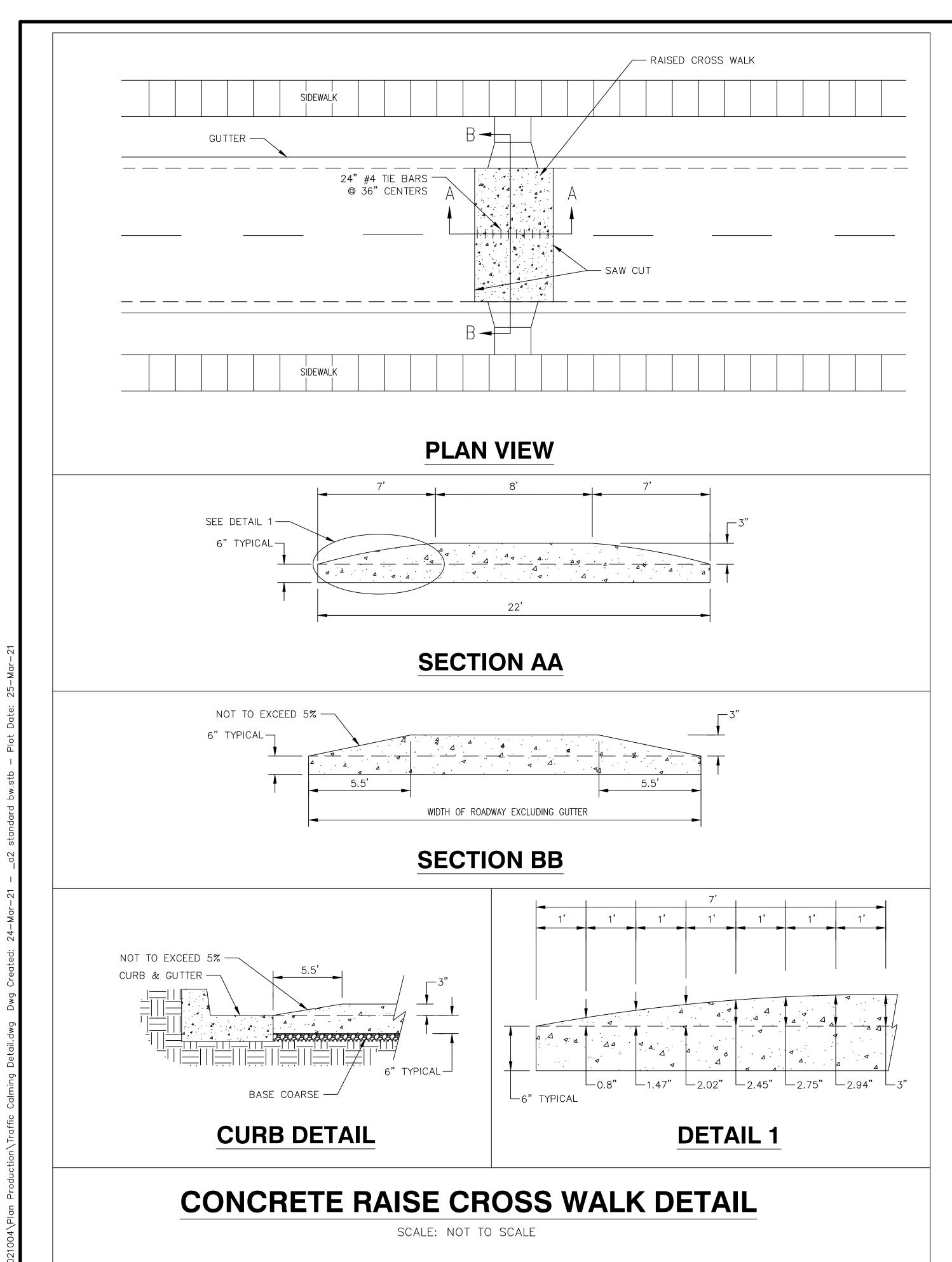


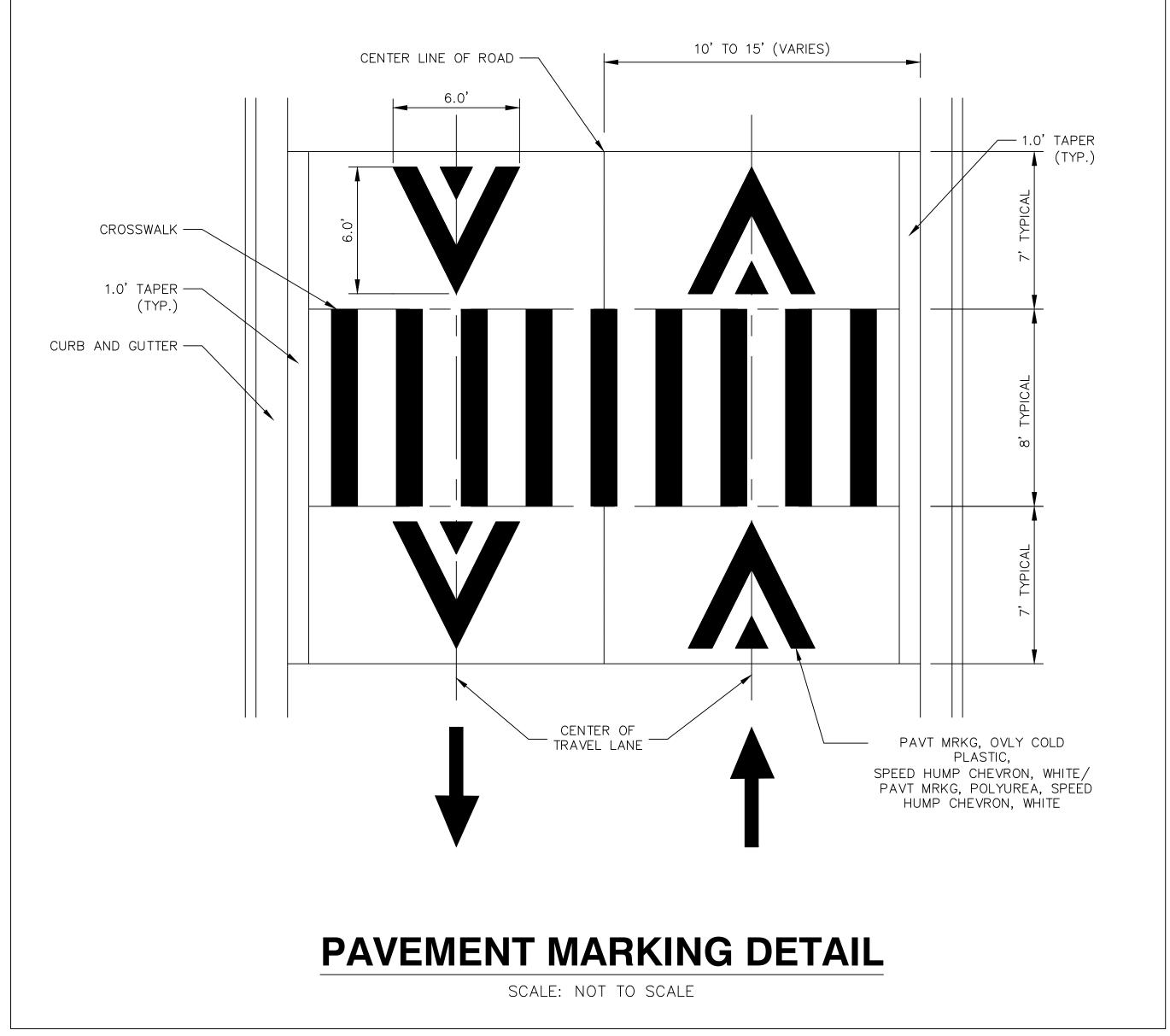
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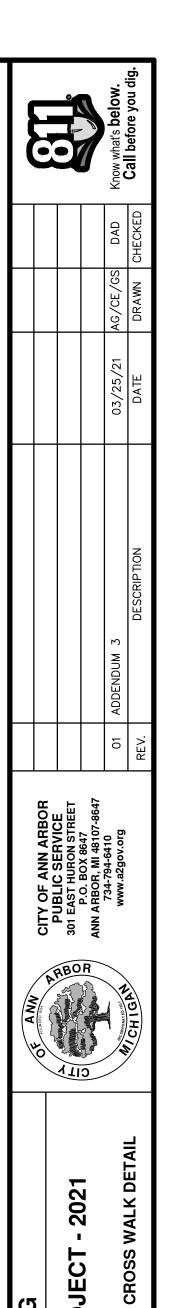


2021





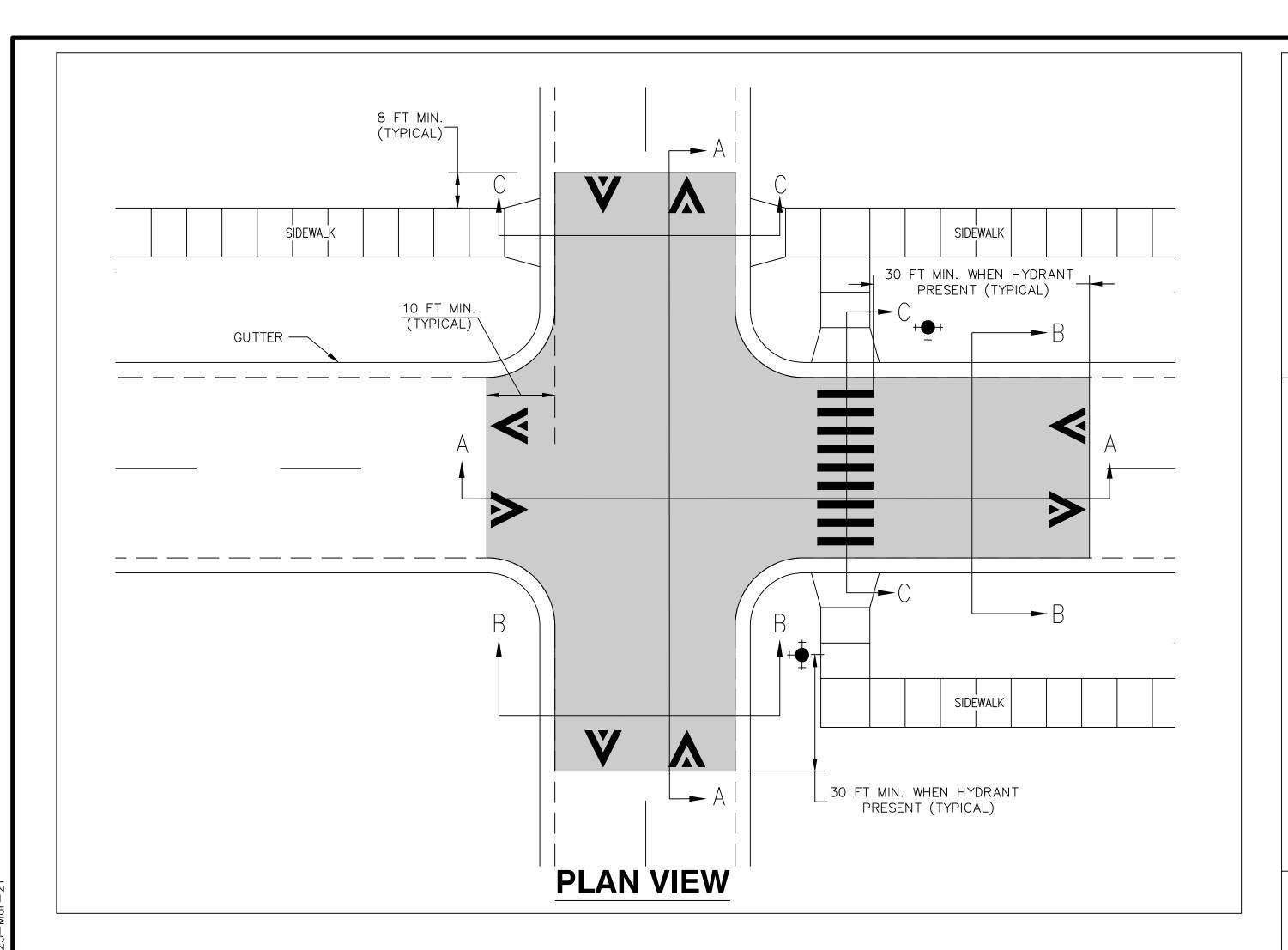
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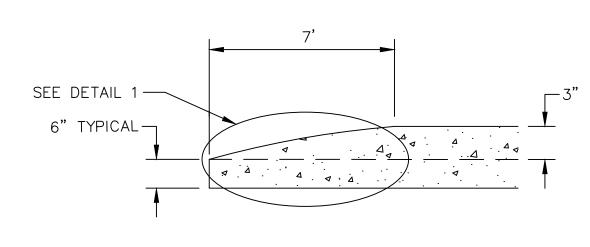
ESURFACING PROJECT - 2021
DETAIL - CONCRETE RAISE CROSS WALK DETAIL

UBLIC SERVICES - ENGINE
STREET RESURFACING

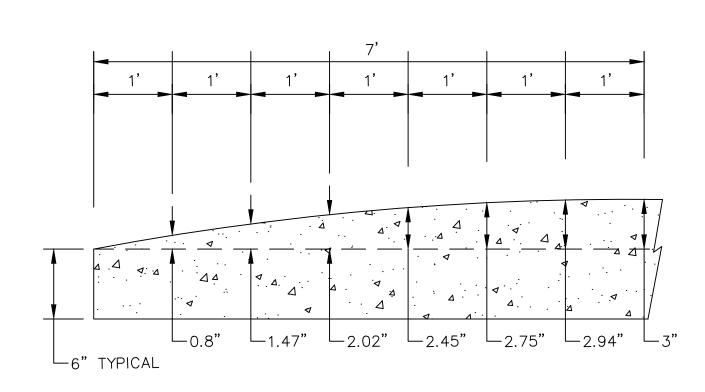
E PLAN: NTS



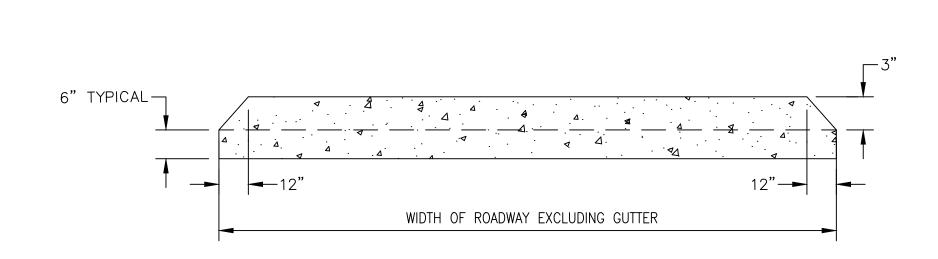
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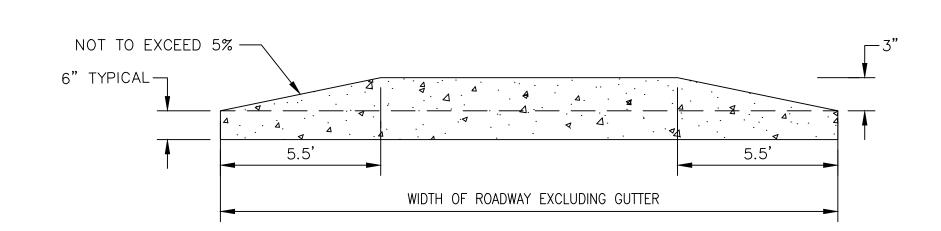
SECTION AA



DETAIL 1



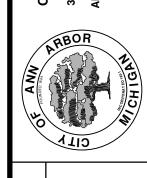
SECTION BB



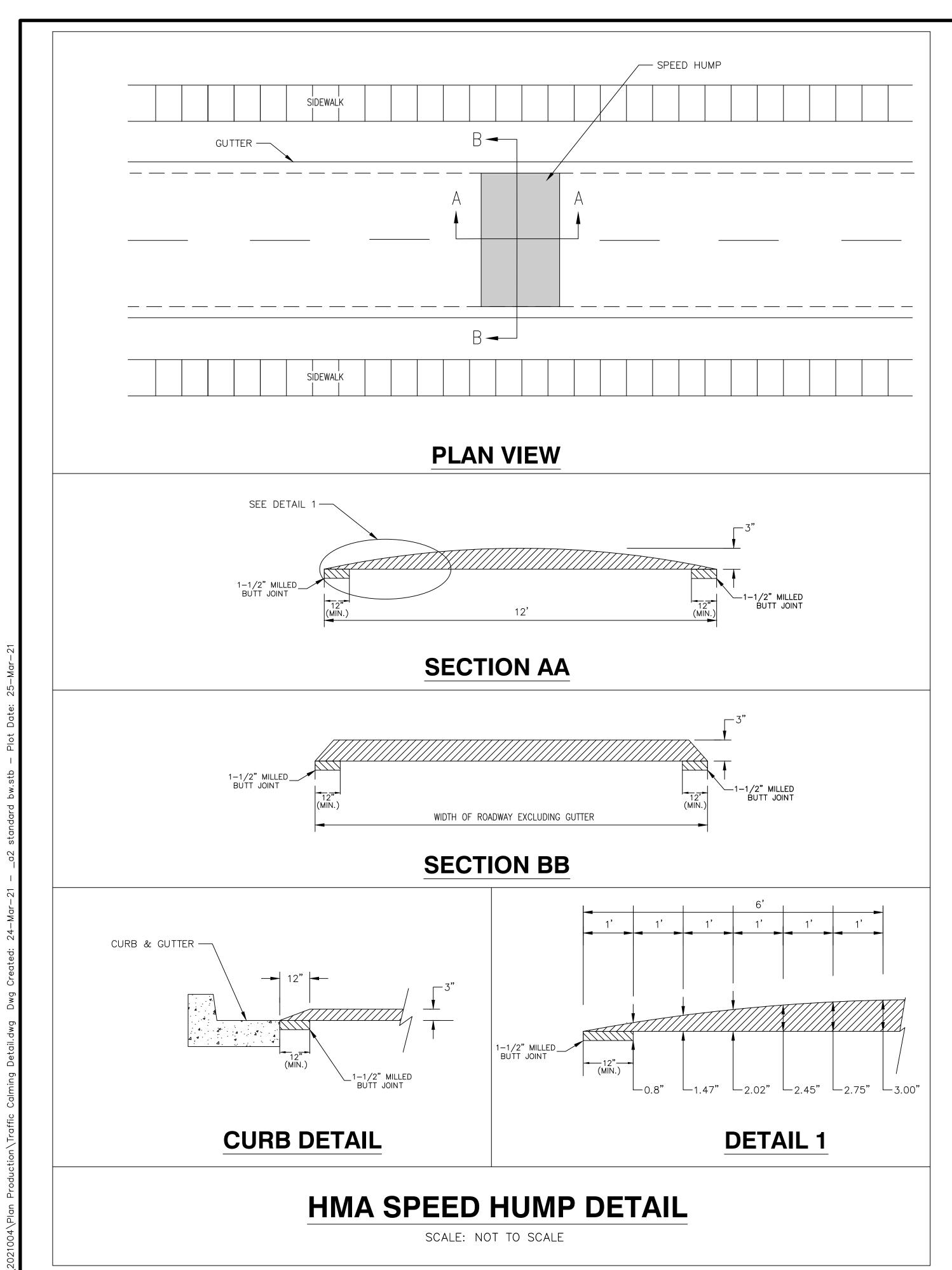
SECTION CC

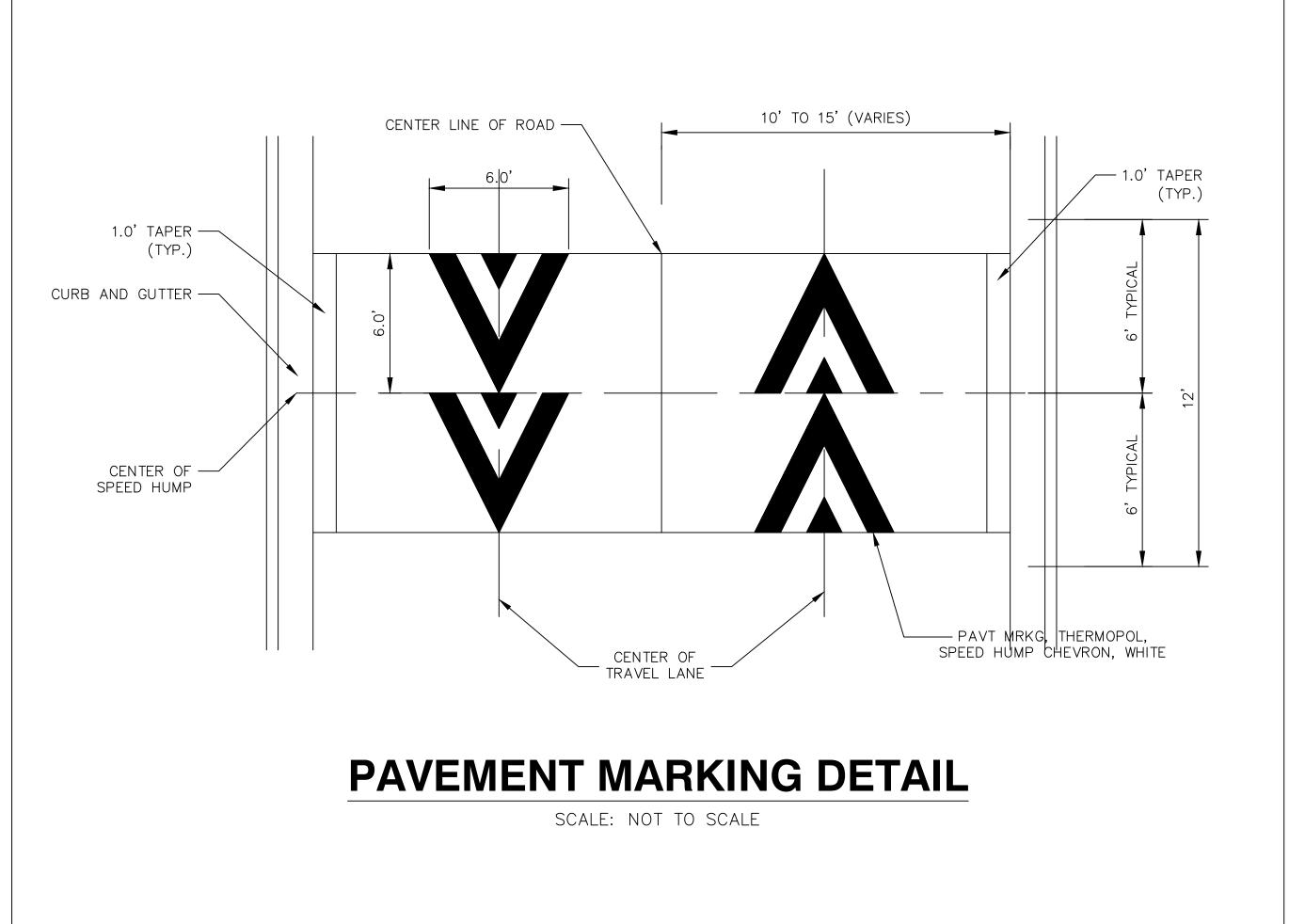
CONCRETE RAISE INTERSECTION DETAIL

SCALE: NOT TO SCALE



2021



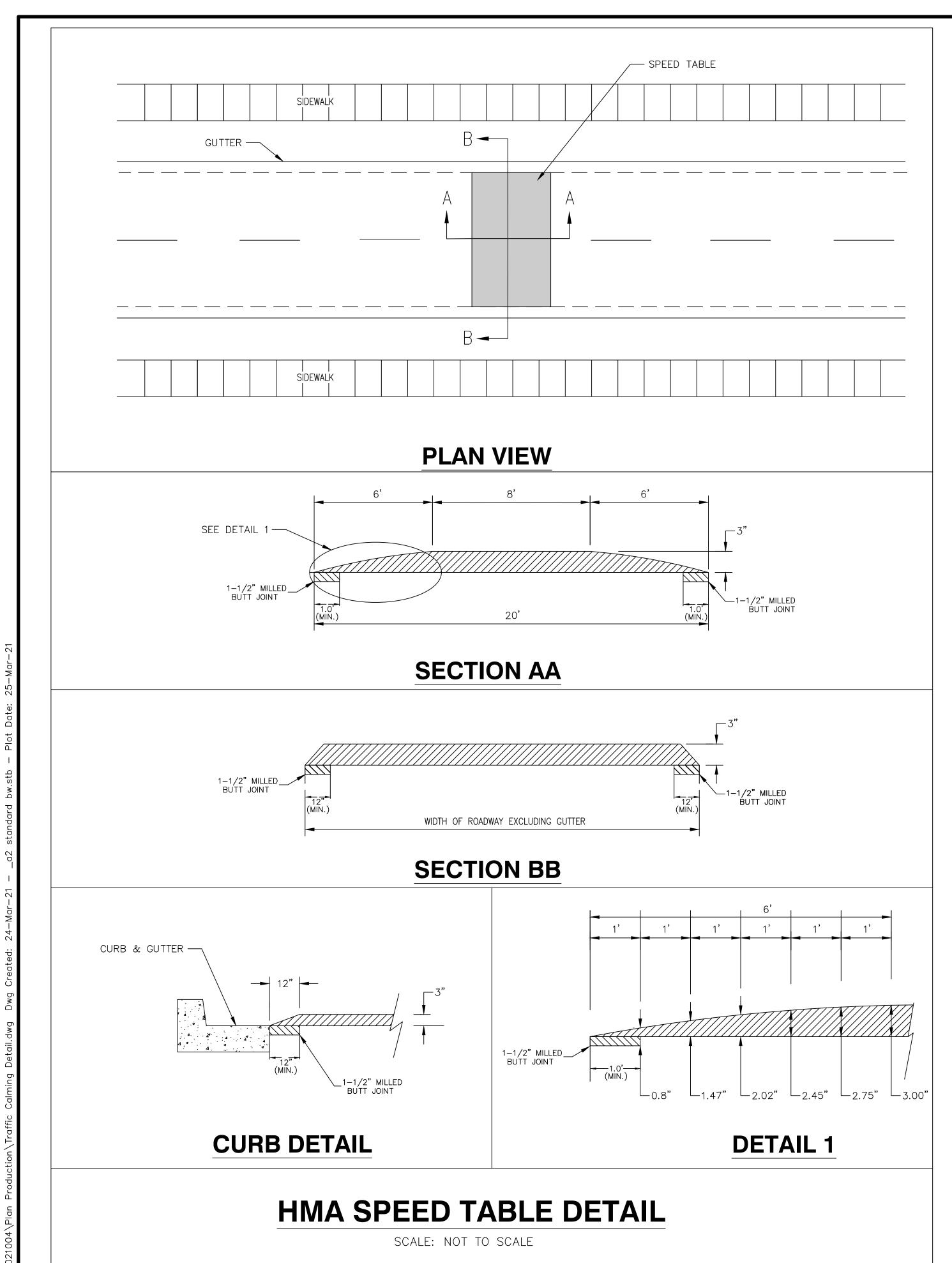


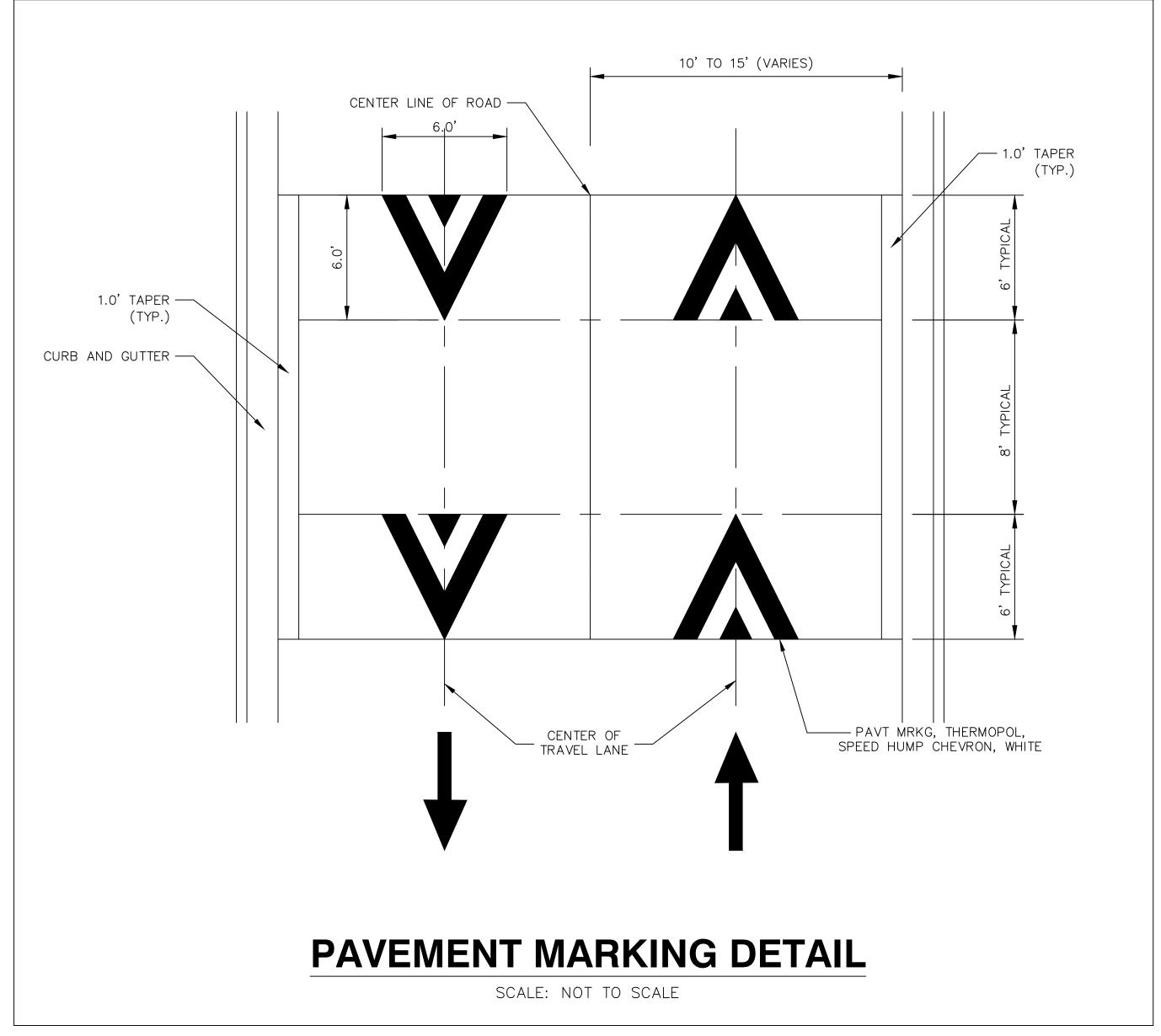
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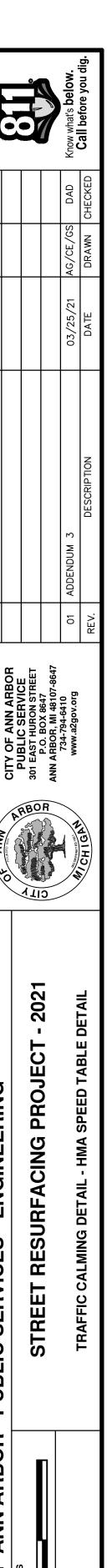
2021

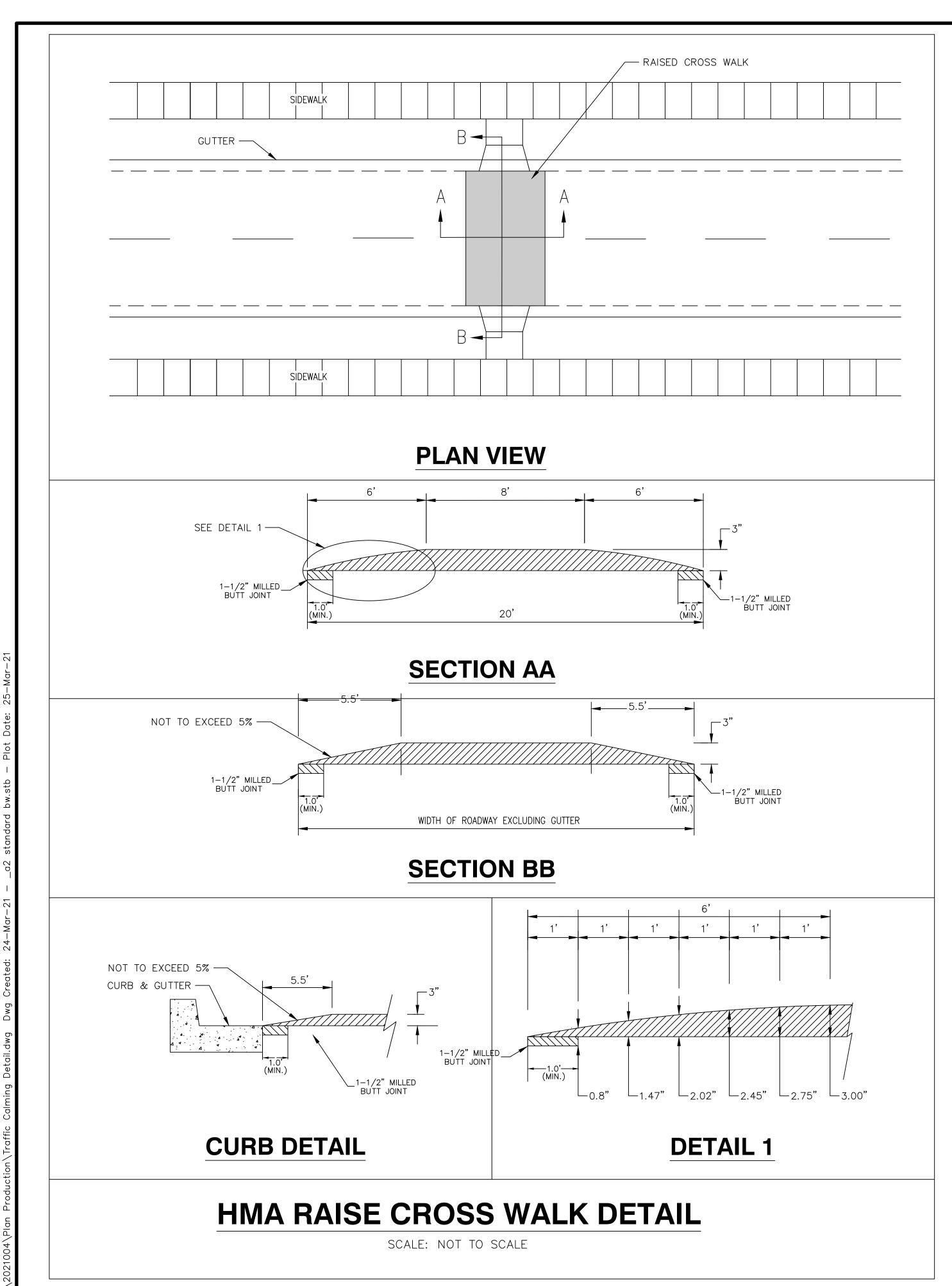
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

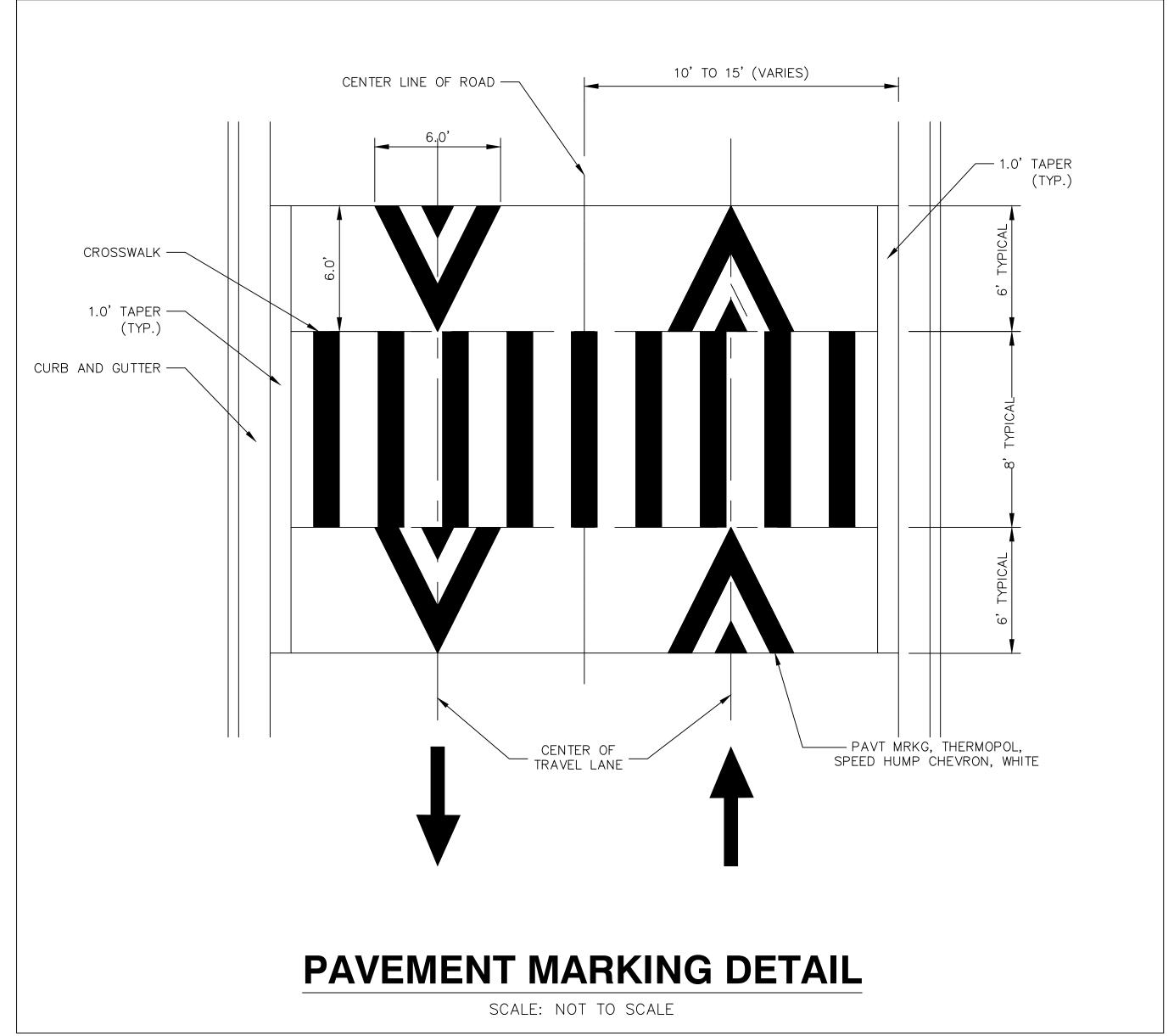




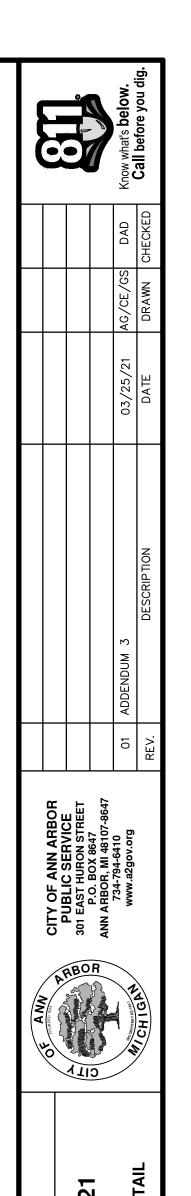
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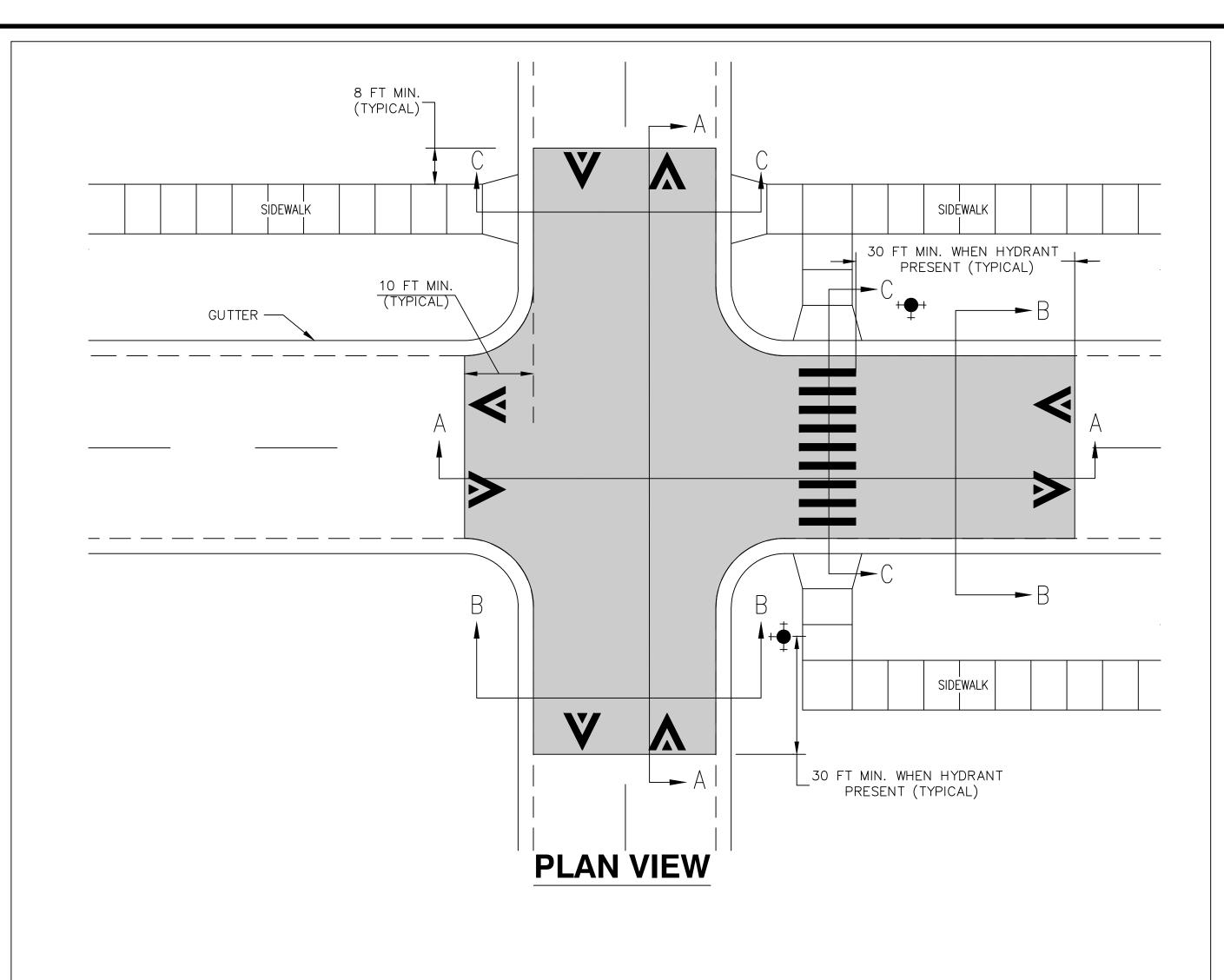




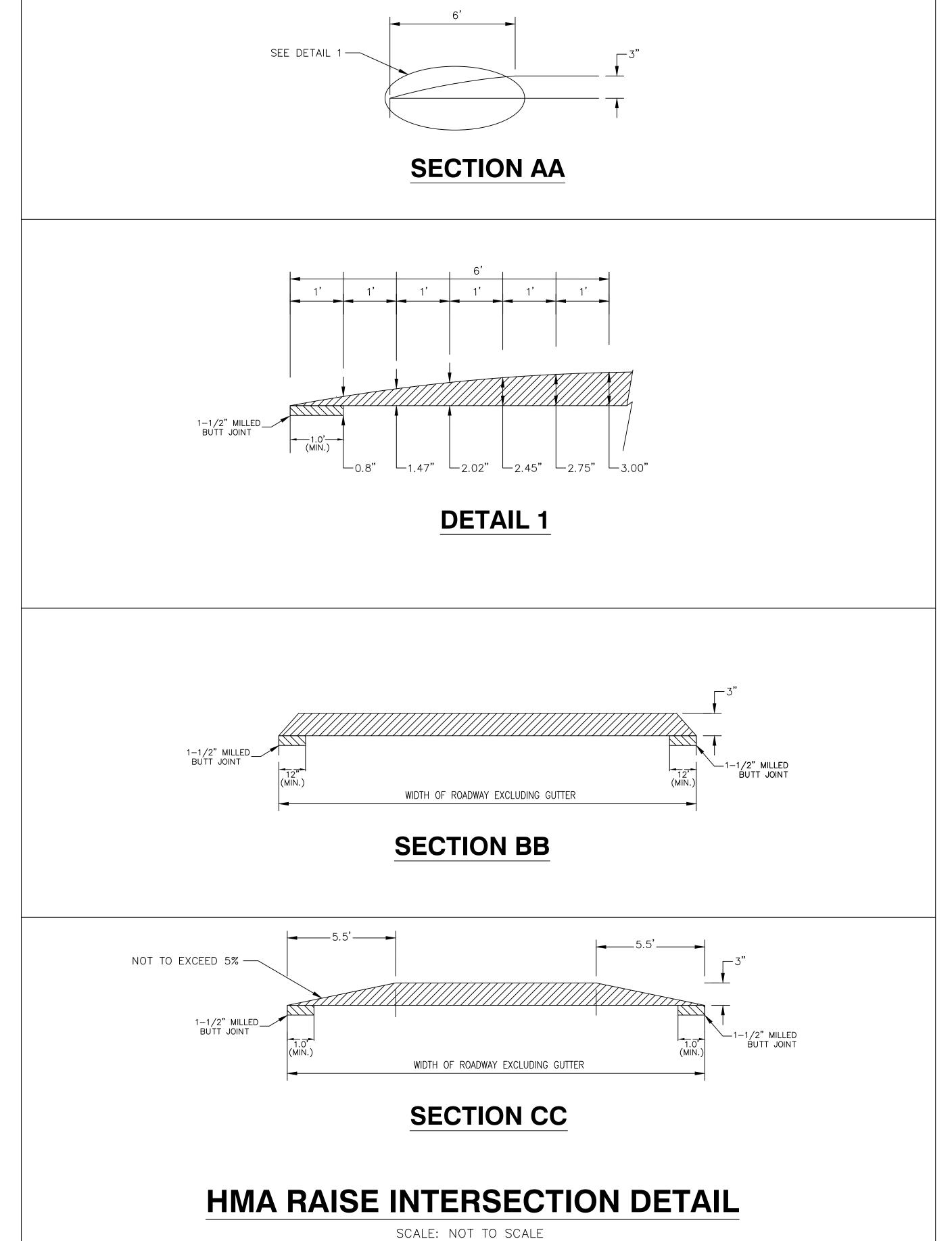
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2021



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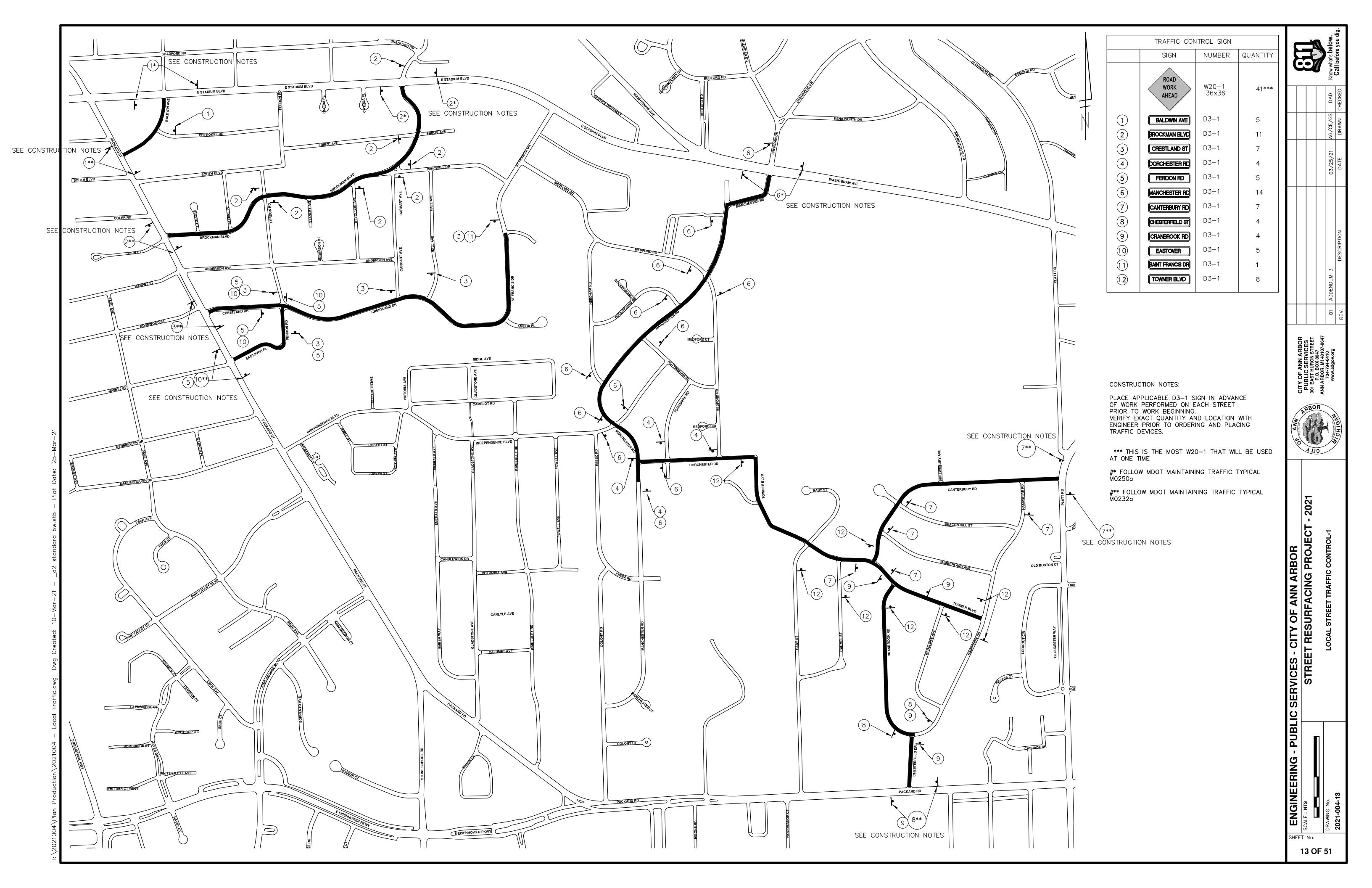
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: NTS

12 OF 51

T:\2021004\Plan Production\Traffic Calming Detail.dwg Dwg Created: 24—Mar—21 — _a2 standard bw.stb — Plot Date:





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			AG/CE/GS	DRAWN		
			03/25/21	DATE		

	/52/20	DATE	
	ADDENDUM 3	DESCRIPTION	
	10	REV.	

CITY OF ANN ARBOR PUBLIC SERVICES	301 EAST HURON STREET P.O. BOX 8647	ANN ARBOR, MI 48107-8647 734-794-6410	www.a2gov.org
CITY OF ANN A PUBLIC SERV	301 EAST HURON 9 P.O. BOX 864	ANN ARBOR, MI 48- 734-794-641(www.a2gov.o



CITY OF ANN ARBOR ENGINEERING

PROJECT LOCATION: PACKARD ST HMA PATH

ITB No. 4667 FILE No. 2021-004

QUANTITIES				
Item Code	Item Description	Unit	Quantity	
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	118.00	
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	82.00	
2057011	_Grading, Driveway Approach	Syd	15.00	
2057011	_Grading, Sidewalk	Syd	62.0	
2057011	_Grading, Sidewalk Ramp	Syd	6.0	
2057021	_Undercutting, Type IIA	Cyd	188.0	
2087050	Erosion Control, Inlet Protection, Fabric Drop	Ea	21.0	
2080036	Erosion Control, Silt Fence	Ft	324.0	
3027011	_Aggregate Base, 8 inch, Modified	Syd	933.0	
3057011	_Shared use Path, HMA Base Crushing and Shaping	Syd	2,630.0	
3077001	_Trenching, Modified	Cyd	311.0	
5010005	HMA Surface, Rem	Syd	26.0	
5010025	Hand Patching	Ton	5.0	
8017011	_Driveway, Nonreinf Conc, 8 inch, Modified	Syd	15.0	
8027001	_Curb and Gutter, Conc, Barrier	Ft	67.	
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	22.	
8030030	Curb Ramp Opening, Conc	Ft	51.	
8037001	_Detectable Warning Surface, Modified	Ft	5.	
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	53.	
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	54.	
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	500.	
8060040	Shared use Path, HMA	Ton	1,138.	
8067011	_Shared use Path, Grading, Modified	Syd	26.	
8120035	Channelizing Device, 42 inch, Fluorescent, Furn	Ea	68.	
8120036	Channelizing Device, 42 inch, Fluorescent, Oper	Ea	68.	
8120140	Lighted Arrow, Type C, Furn	Ea	2.	
8120141	Lighted Arrow, Type C, Oper	Ea	2.	
8120252	Plastic Drum, Fluorescent, Furn	Ea	2.	
8120253	Plastic Drum, Fluorescent, Oper	Ea	2.	
8120330	Sign, Portable, Changeable Message, Furn	Ea	4.	
8120331	Sign, Portable, Changeable Message, Oper	Ea	4.	
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	316.	
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	316.	
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	40.	
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	40.	
8127050	_Pedestrian Type II Barricade, Temp	Ea	8.	
8167011	_Slope Restoration	Syd	2,501.0	
8190244	Hh, Adj	Ea	1.0	
8230431	Gate Box, Adj, Case 1	Ea	2.0	

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	4.000	40.000		
4.0	G20-2	End Road Work	4.500	18.000		
2.0	W1-4L	Reverse Curve (Left)	9.000	18.000		
2.0	W1-4L	Reverse Curve (Right)	9.000	18.000		
2.0	W1-6L	Shift arrow Left	9.000	18.000		
2.0	W1-6R	Shift arrow Right	9.000	18.000		
5.0	W3-5B	Reduce Speed Zone	9.000	45.000		
5.0	W20-1	Road Work Ahead Sign	9.000	45.000		
1.0	W20-5A	Center Lane Closed Ahead	9.000	9.000		
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000		
5.0	R2-1	Speed Limit	7.500	38.000		
5.0	R5-18C	Work Zone Begins	16.000	80.000		

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.

CONSTRUCTION SCOPE AND SEQUENCING

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 1 (NORTH/EAST SIDE: INDEPENDENCE BLVD TO STONE SCHOOL RD

- 1. IMPLEMENT MAINTENANCE OF TRAFFIC (M.O.T.) PLAN TO CLOSE WEST/NORTH BOUND TRAFFIC LANE AND SHIFT TRAFFIC INTO THE CENTER TURN LANE. INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FROM ROADWAY AND OPEN IT TO NORMAL TRAFFIC OPERATIONS AT THE END OF EACH WORK DAY UNLESS
- PERFORM CRUSHING AND SHAPING OF THE EXISTING PATH. COMPACT AND PROOF ROLL CRUSHED MATERIAL TO IDENTIFY AREAS
- COMPLETE NECESSARY PAVEMENT REMOVAL, EARTHWORK AND GRADING TO WIDEN THE PATH AS REQUIRED TO ACHIEVE A CONSISTENT ±8 FOOT WIDTH FOR ITS ENTIRE LENGTH AND TO MATCH GRADES OF EXISTING FACILITIES ADJACENT TO THE PATH (I.E., SIDEWALKS, RAMPS, CURB CUTS, DRIVEWAYS, ETC.) ALL AS DIRECTED BY THE ENGINEER
- 5. UPON APPROVAL FROM THE ENGINEER PLACE 3.5 INCH PAVEMENT COURSE HMA MIX (LVSP).
- 6. PERFORM ALL CONCRETE REMOVAL AND REPLACEMENT WORK AS DIRECTED BY THE ENGINEER.
- 7. ADJUST ANY/ALL UTILITY STRUCTURES WITHIN THE EXISTING PATH SURFACE TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 8. COMPLETE ALL SLOPE RESTORATION WORK.
- 9. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES AND SESC MEASURES AND OPEN PATH AND ROADWAY TO NORMAL OPERATIONAL USE UPON APPROVAL OF THE ENGINEER.

PHASE 2 (NORTH SIDE: COLONY RD TO JUST WEST OF EASY STREET)

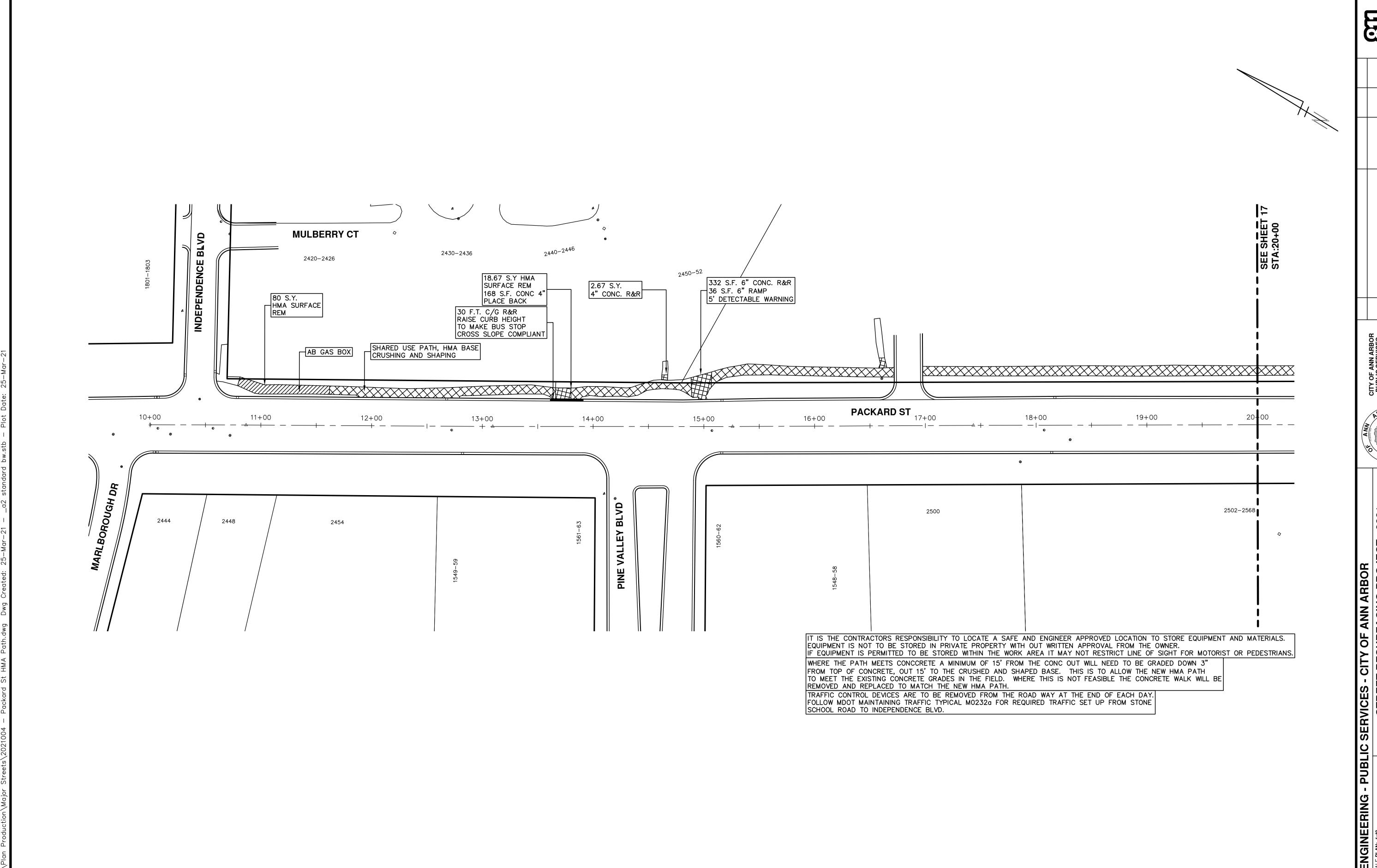
- 10. IMPLEMENT MAINTENANCE OF TRAFFIC (M.O.T.) PLAN TO CLOSE THE RIGHT MOST TRAFFIC LANE IN THE WESTBOUND DIRECTION AND SHIFT TRAFFIC INTO LEFT LANE. INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FROM ROADWAY AND OPEN IT TO NORMAL TRAFFIC OPERATIONS AT THE END OF EACH WORK DAY UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 11. REMOVE OVERBURDEN OF VEGETATION AND SOILS ALONG EACH SIDE OF THE PATH, ADJUST ANY/ALL UTILITY STRUCTURES WITHIN THE EXISTING PATH SURFACE.
- 12. COMPLETE NECESSARY PAVEMENT REMOVAL, EARTHWORK AND GRADING TO WIDEN THE PATH AS REQUIRED TO ACHIEVE A CONSISTENT ±8 FOOT WIDTH FOR ITS ENTIRE LENGTH AND TO MATCH GRADES OF EXISTING FACILITIES ADJACENT TO THE PATH (E.I., SIDEWALKS, RAMPS, CURB CUTS, DRIVEWAYS, ETC.) ALL AS DIRECTED BY THE ENGINEER
- 13. REPEAT ITEMS 5 THRU 9 IN THE ORDER SHOWN ABOVE.

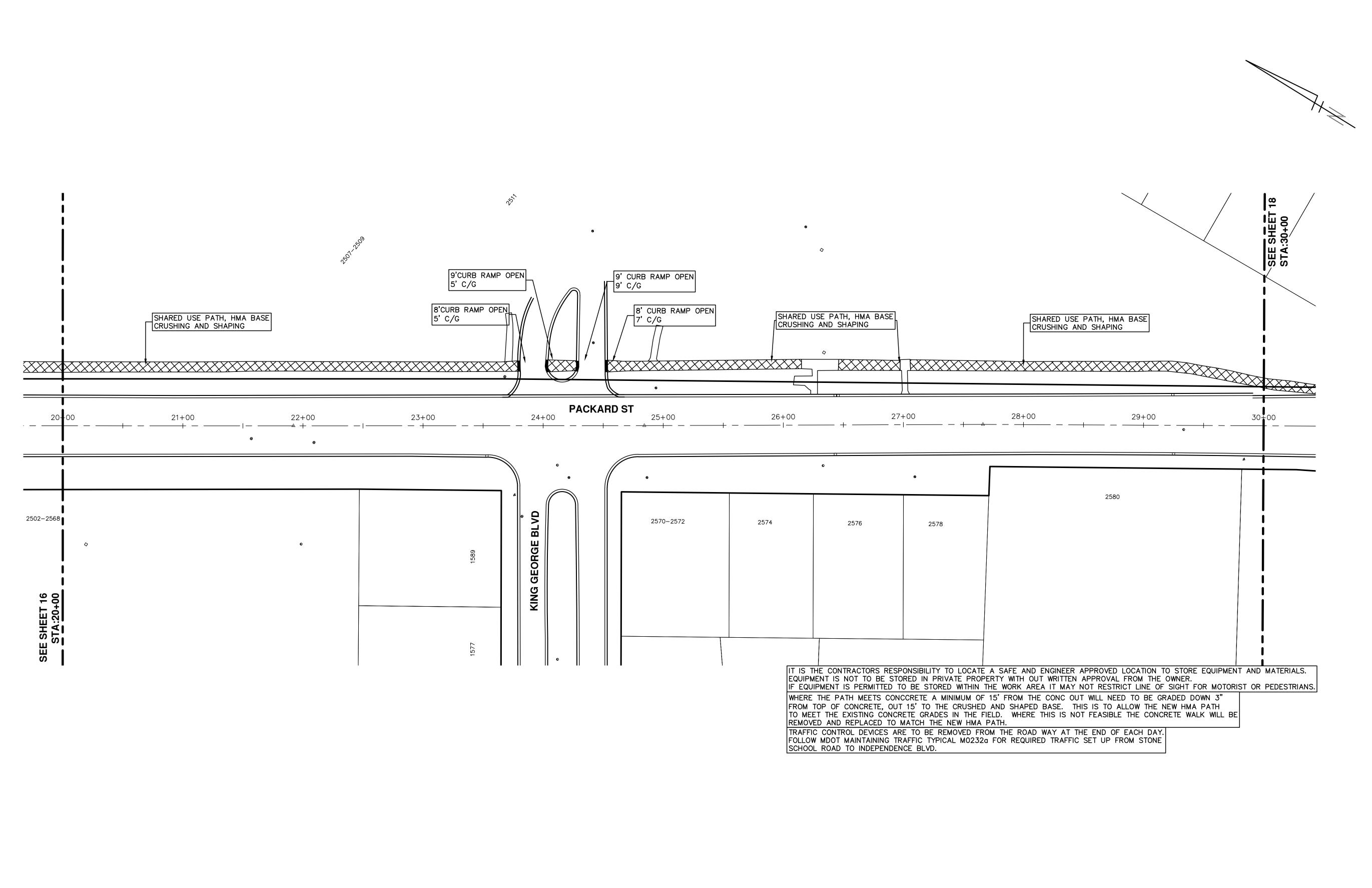
PHASE 3 (SOUTH SIDE: WOODMANOR COURT TO ROSEDALE ST)

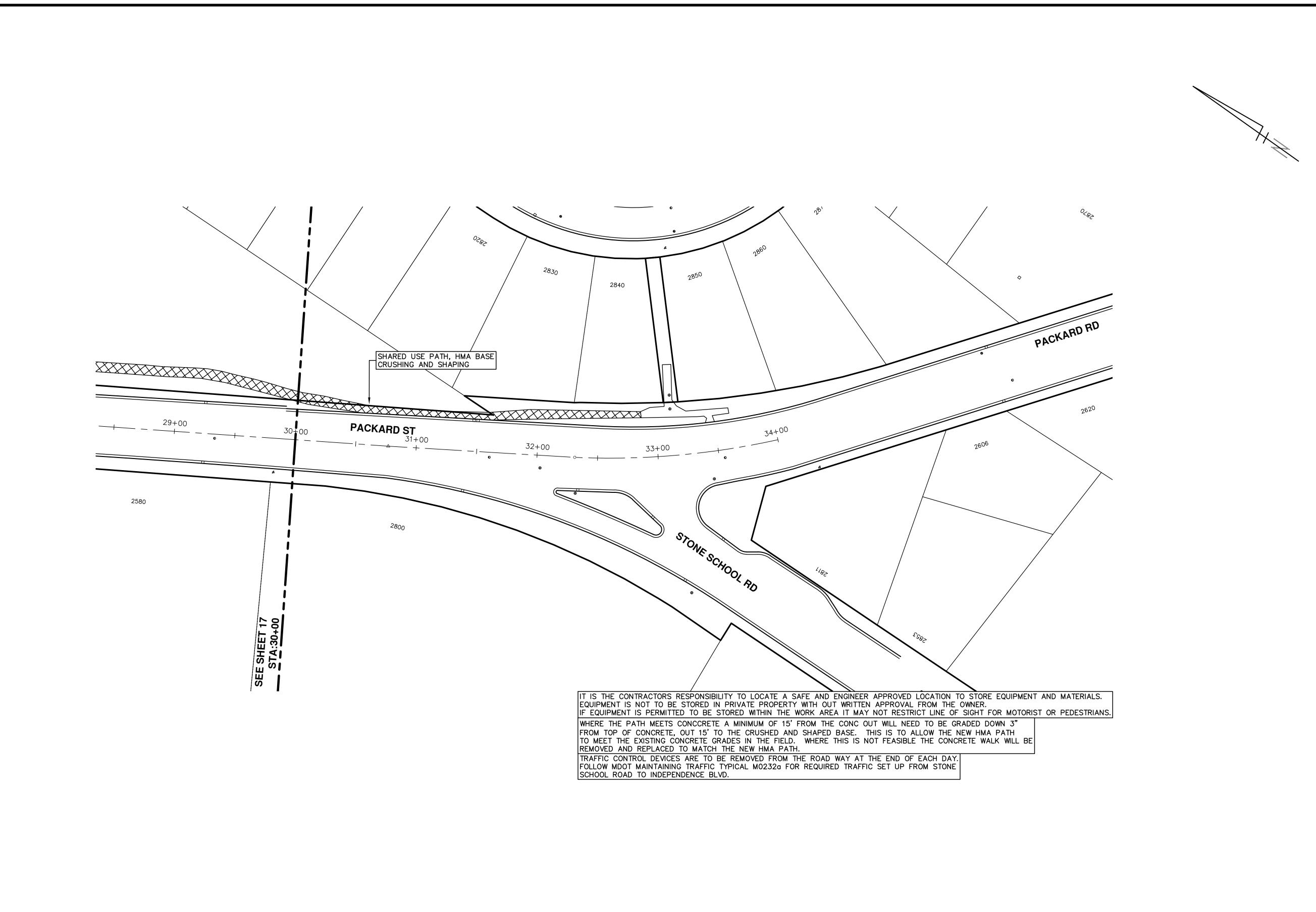
- 14. IMPLEMENT MAINTENANCE OF TRAFFIC (M.O.T.) PLAN TO CLOSE THE RIGHT MOST TRAFFIC LANE IN THE EASTBOUND DIRECTION AND SHIFT TRAFFIC INTO LEFT LANE. INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FROM ROADWAY AND OPEN IT TO NORMAL TRAFFIC OPERATIONS AT THE END OF EACH WORK DAY UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 15. REPEAT ITEMS 2 THRU 9 IN THE ORDER SHOWN ABOVE.
- 16. COMPLETE ALL MISCELLANEOUS CONSTRUCTION FOR ALL PHASES INCLUDING ALL CLEAN UP, FINAL RESTORATION, REMOVAL OF SESC MEASURES, MISS DIG MARKERS, ETC.
- 17. REMOVE FROM SITE ANY/ALL TEMPORARY TRAFFIC CONTROL DEVICES NOT PREVIOUSLY ADDRESSED.



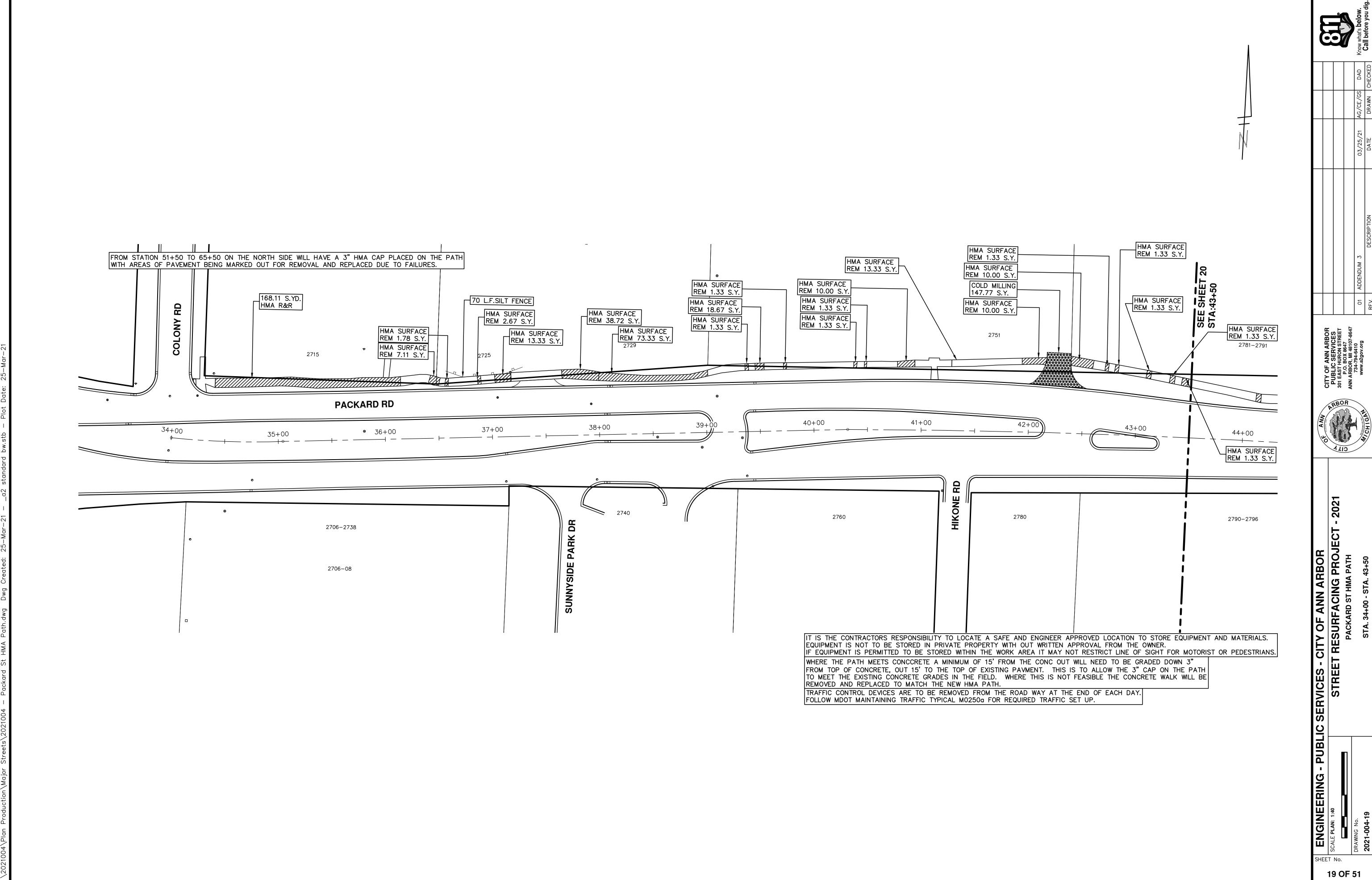
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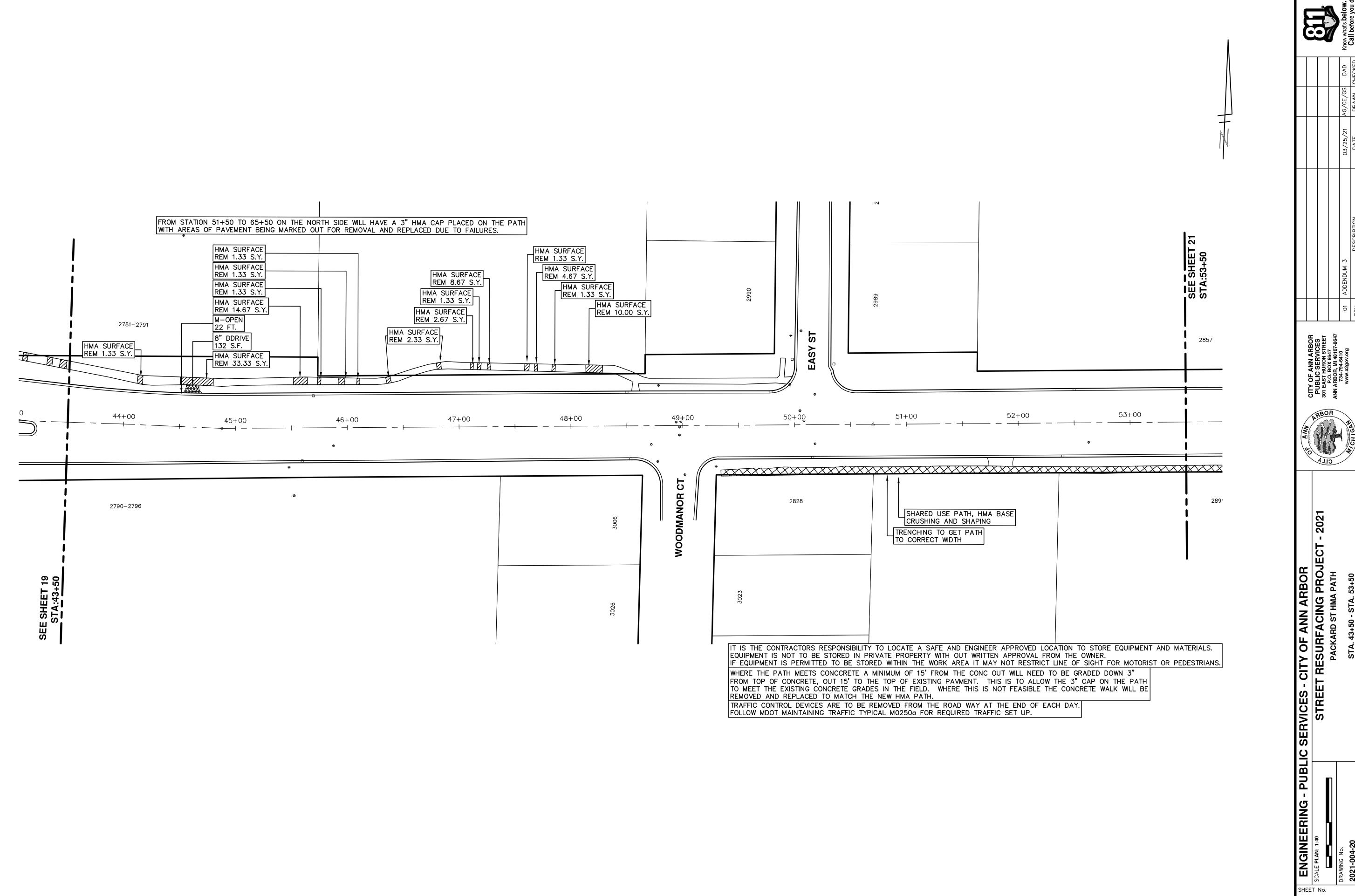


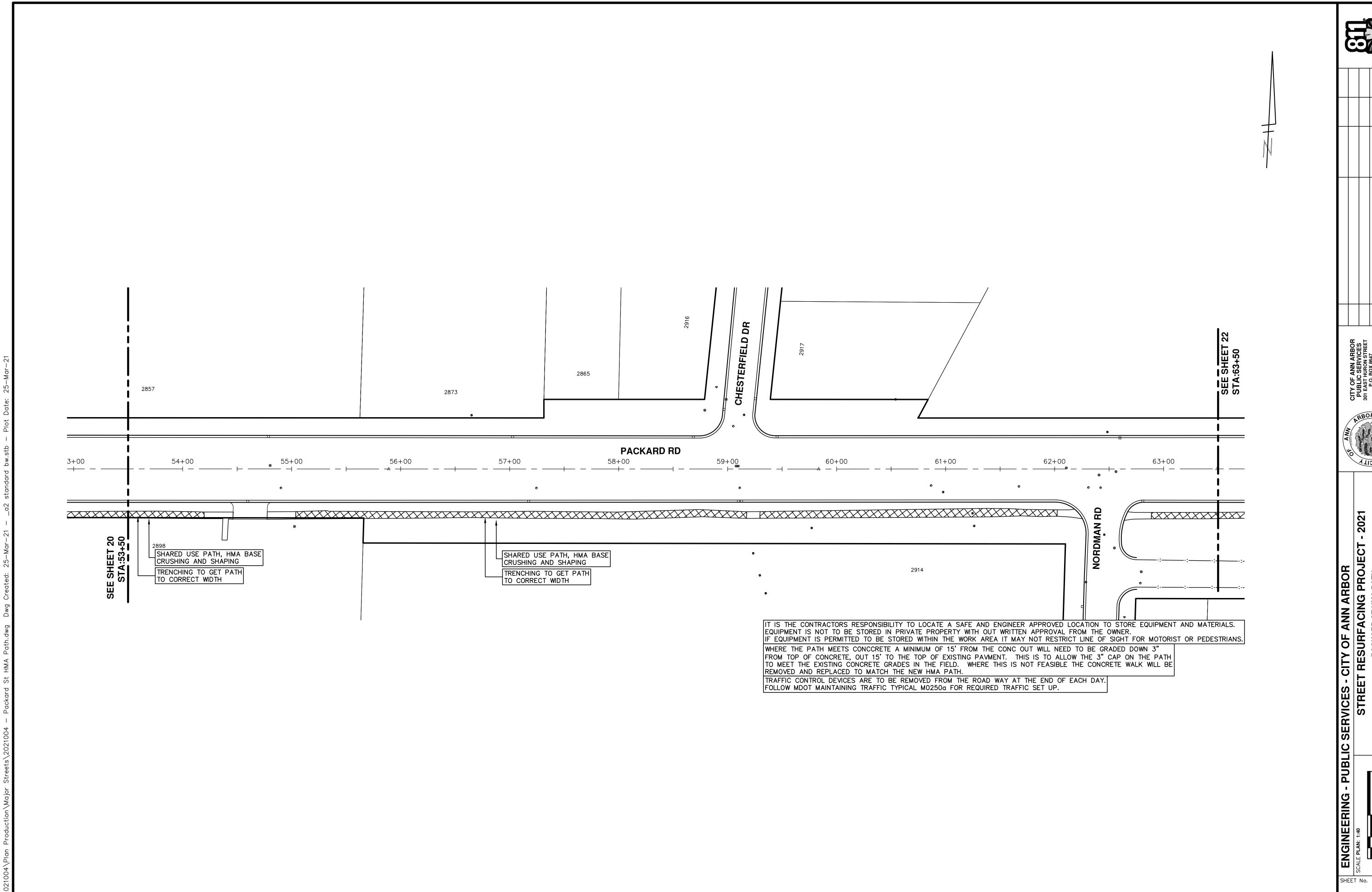


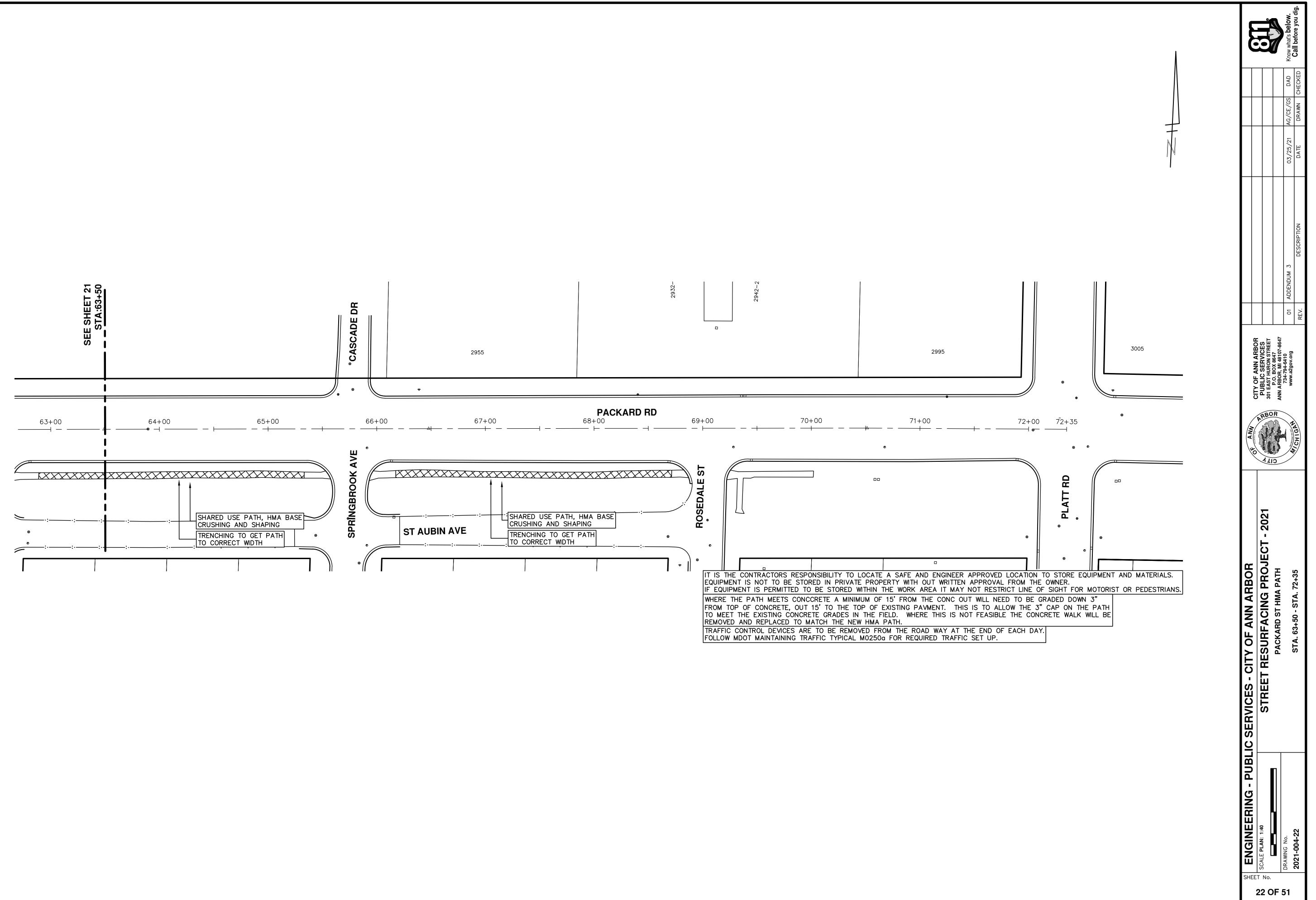














PROJECT LOCATION: HURON PKWY APPROACH TO LINDSAY LANE

ITB No. 4667 FILE No. 2021-004

QUANTITIES				
Item Code	Item Description	Unit	Quantity	
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	60.00	
2057011	_Machine Grading, Special	Syd	237.00	
2057021	_Undercutting, Type IIA	Cyd	8.00	
2087050	Erosion Control, Inlet Protection, Fabric Drop	Ea	2.00	
5010002	Cold Milling HMA Surface	Syd	237.00	
5010005	HMA Surface, Rem	Syd	7.00	
5010025	Hand Patching	Ton	1.00	
5010703	HMA, LVSP	Ton	55.00	
6027021	_Flowable Fill	Cyd	1.00	
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	60.00	
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	2.00	
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	2.00	
8120035	Channelizing Device, 42 inch, Fluorescent, Furn	Ea	28.00	
8120036	Channelizing Device, 42 inch, Fluorescent, Oper	Ea	28.00	
8120140	Lighted Arrow, Type C, Furn	Ea	1.00	
8120141	Lighted Arrow, Type C, Oper	Ea	1.00	
8120252	Plastic Drum, Fluorescent, Furn	Ea	3.00	
8120253	Plastic Drum, Fluorescent, Oper	Ea	3.00	
8120330	Sign, Portable, Changeable Message, Furn	Ea	2.00	
8120331	Sign, Portable, Changeable Message, Oper	Ea	2.00	
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	110.00	
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	110.00	
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	8.00	
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	8.00	
8127050	_Pedestrian Type II Barricade, Temp	Ea	5.00	
8167011	_Slope Restoration	Syd	3.00	
8190244	Hh, Adj	Ea	1.00	

	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	4.000	8.000		
2.0	G20-2	End Road Work	4.500	9.000		
2.0	W3-5B	Reduce Speed Zone	9.000	18.000		
1.0	W4-2R	Lane Ends / Right	9.000	9.000		
2.0	W20-1	Road Work Ahead Sign	9.000	18.000		
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000		
2.0	R2-1	Speed Limit	7.500	15.000		
2.0	R5-18C	Work Zone Begins	16.000	32.000		
			TOTAL	118.000		

CONSTRUCTION SCOPE AND SEQUENCING

- IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES.
- INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED
- TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT, INCLUDING GATE AND MONUMENT BOXES
- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 15. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 16. REMOVE ALL SESC MEASURES.
- 17. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 18. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

NOTES:

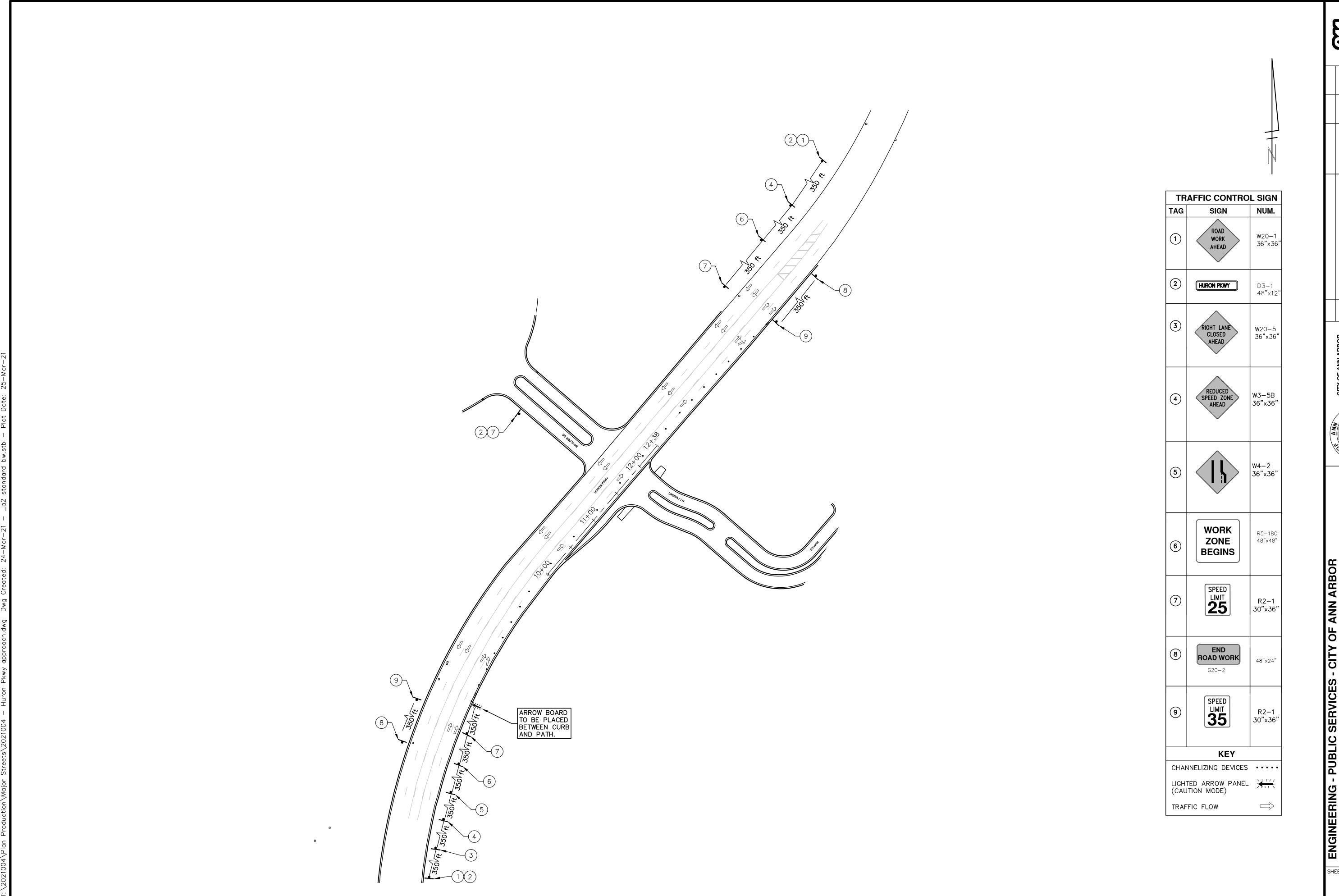
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THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED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

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SHEET No.



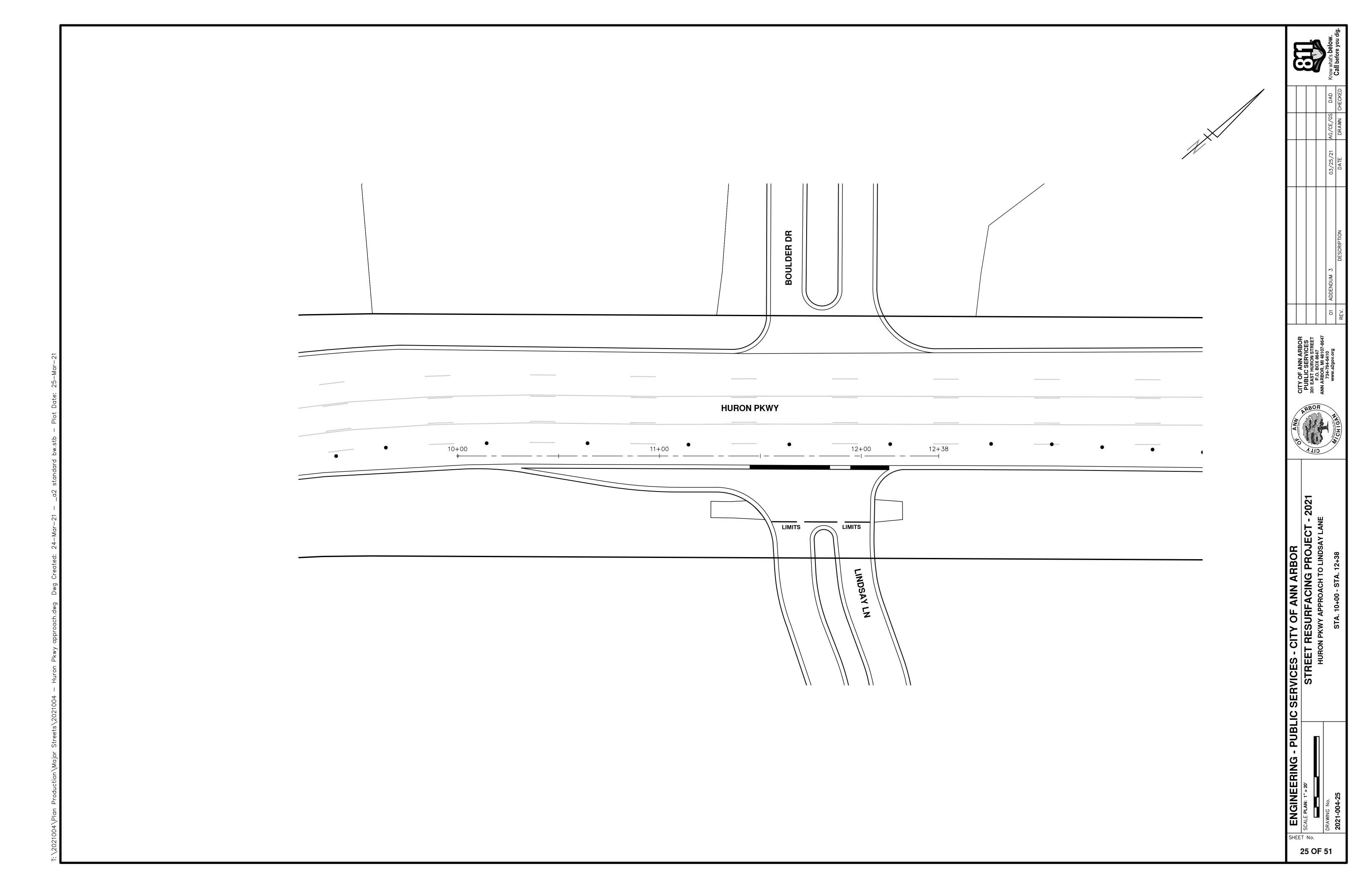
ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: Custom

SCALE PLAN: Custom

SCALE PLAN: Custom

STREET RESURFACING PROJECT - STREET PROJET - STREET PROJECT - STREET PROJECT - STREET PROJECT - STREET





PROJECT LOCATION: GLENWOOD ROAD

ITB No. 4667 FILE No. 2021-004

QUANTITIES				
Item Code	Item Description	Unit	Quantity	
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	4.000	
4037050	_Dr Structure, Temp Lowering, Modified	Ea	5.000	
5017011	_Raised Intersection, HMA	Syd	448.000	
5017011	_Speed Hump, HMA	Syd	210.000	
6027011	_Raised Intersection, Conc	Syd	448.000	
6027011	_Speed Hump, Conc	Syd	210.000	
8117050	_Pavt Mrkg, Polyurea, Speed Hump Chevron, White	Ea	24.000	
8117050	_Pavt Mrkg, Thermopl, Speed Hump Chevron, White	Ea	24.000	
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	7.000	
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	7.000	
8120252	Plastic Drum, Fluorescent, Furn	Ea	100.000	
8120253	Plastic Drum, Fluorescent, Oper	Ea	100.000	
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	302.000	
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	302.000	
8167011	_Slope Restoration	Syd	200.000	
8230431	Gate Box, Adj, Case 1	Ea	1.000	

	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	4.500	9.000		
5.0	W3-2	Yield Ahead	9.000	45.000		
5.0	W1-4L	Reverse Curve (Right)	9.000	45.000		
2.0	W20-1	Road Work Ahead Sign	9.000	18.000		
10.0	W20-4	One Lane Road Ahead	9.000	90.000		
5.0	R1-2	Yield	16.000	80.000		
5.0	R1-2A	To Oncoming Traffic	3.000	15.000		

	CASTING TABLE	
		FACILITY ID'S
WATER	NA	NA
SANITARY	NA	NA
STORM	NA	NA
WATER BOX	NA	NA

CONSTRUCTION SCOPE AND SEQUENCING

PHASE 1/STAGE 1 (EAST SIDE OF STREET):

- INSTALL TRAFFIC CALMING DEVICES AS SHOWN ON THE PLANS.

PHASE 1/STAGE 2 (EAST SIDE OF STREET):

- INSTALL REMAINING TRAFFIC CALMING DEVICES AS SHOWN ON THE PLANS
- COMPLETE ALL PHASE 1 RESTORATION WORK AS REQUIRED AND REMOVE NO PARKING SIGNS

PHASE 2 (WEST SIDE OF STREET):

- 7. INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC
- 8. CONDUCT REMOVAL WORK RELATED TO TRAFFIC CALMING DEVICES.
- 9. INSTALL TRAFFIC CALMING DEVICES AS SHOWN ON THE PLANS.
- 10. COMPLETE RESTORATION AS REQUIRED. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 11. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 12. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP. REMOVE SESC MEASURES.
- 13. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

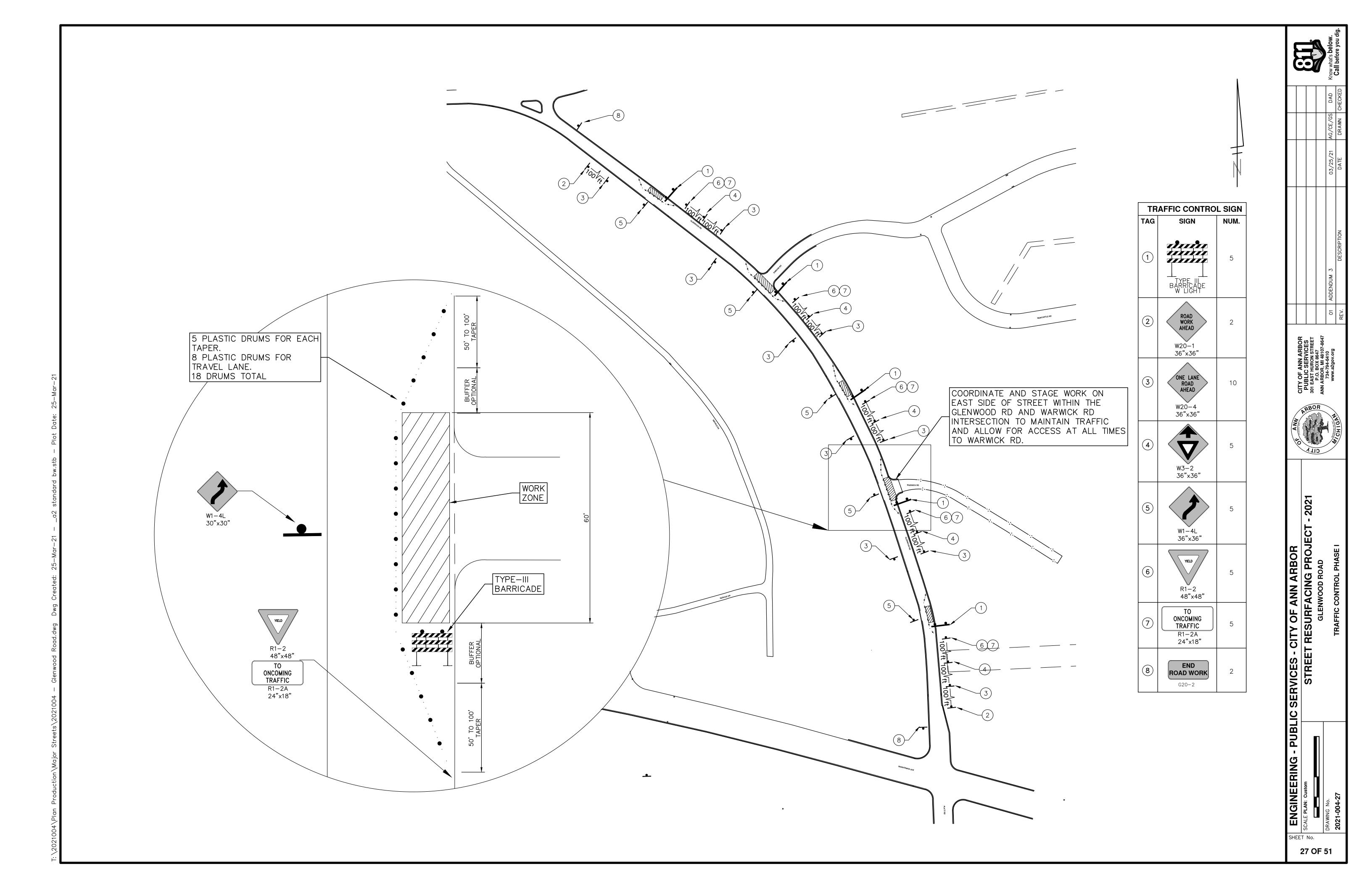
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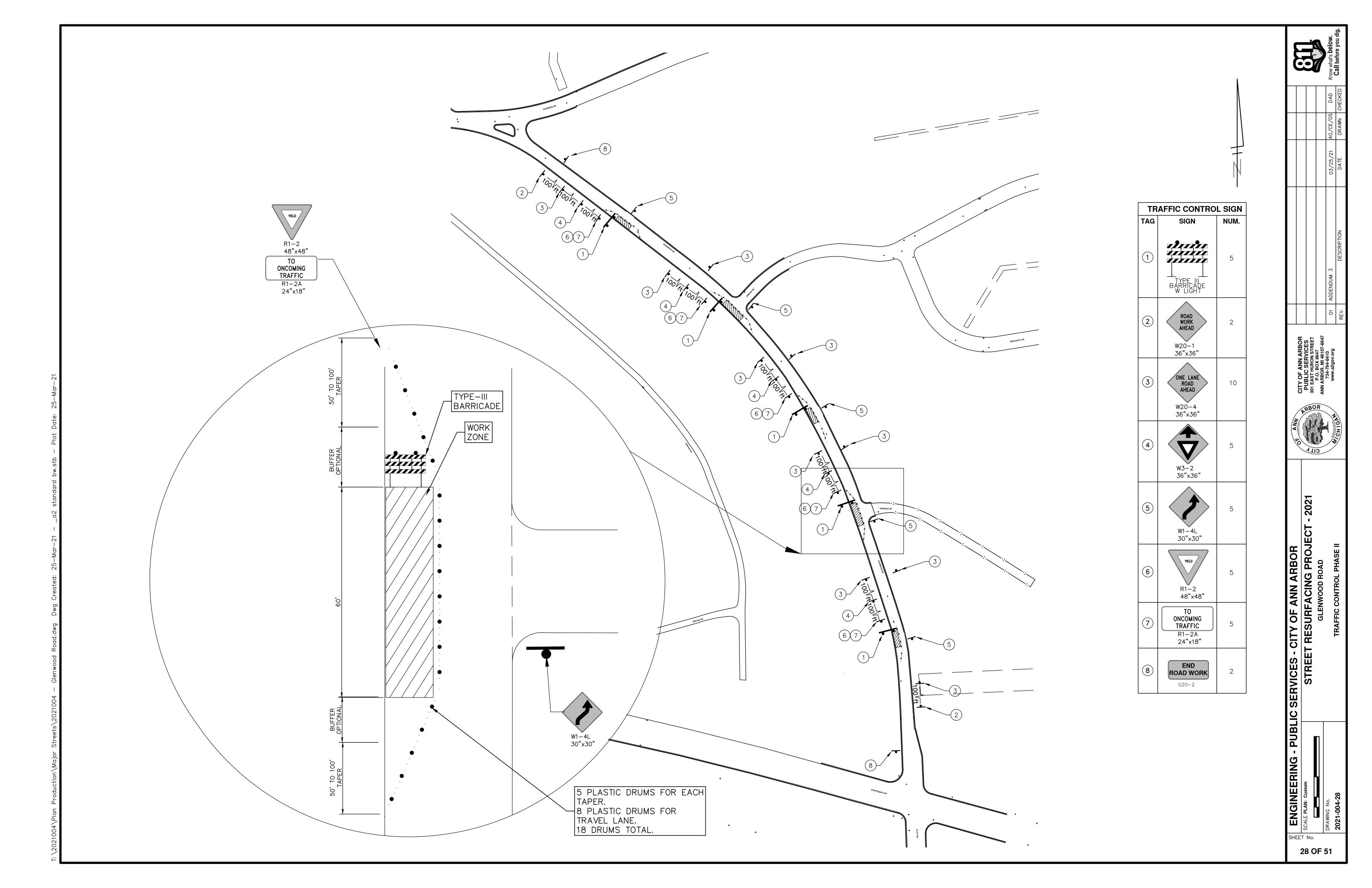
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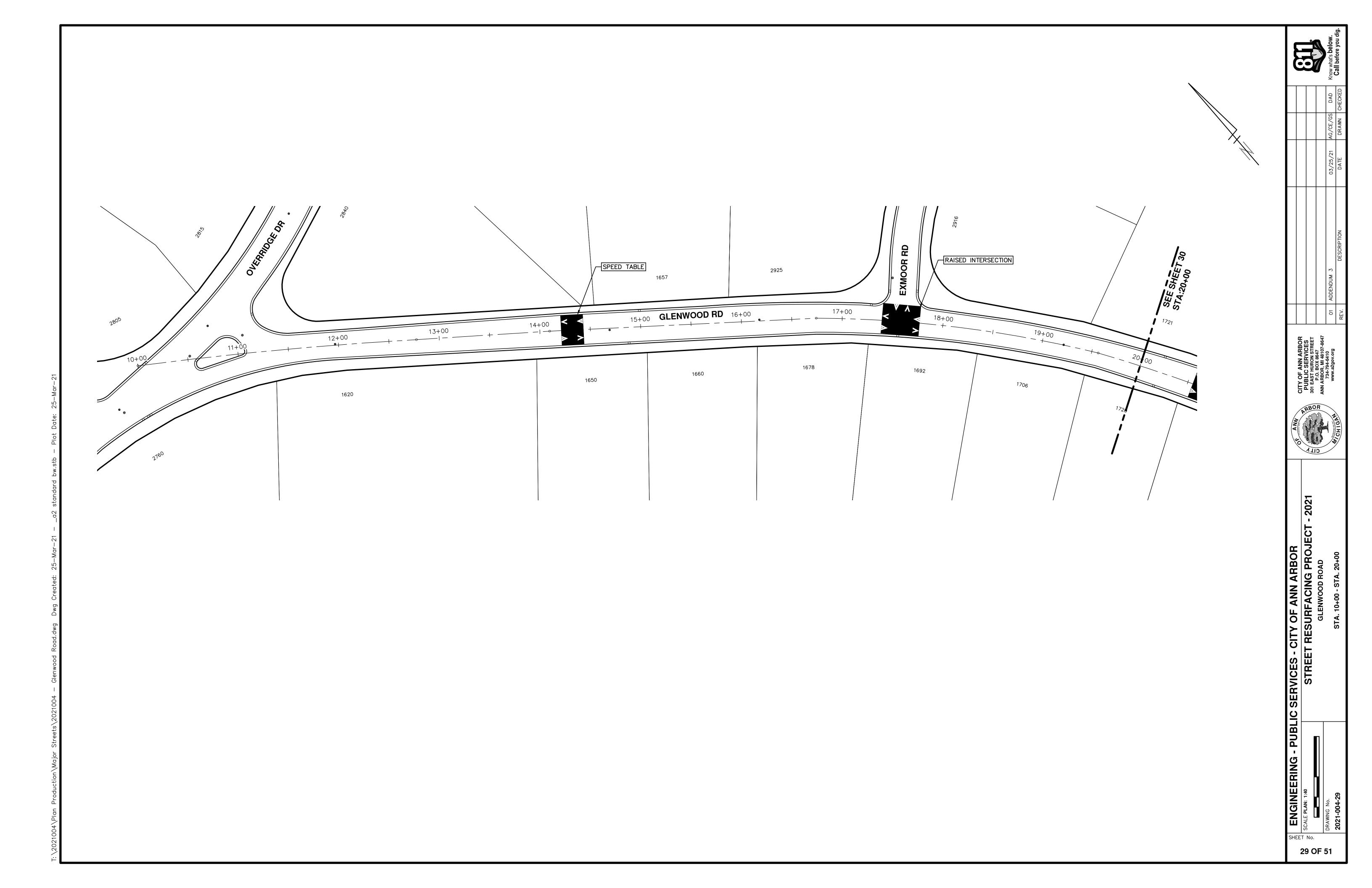
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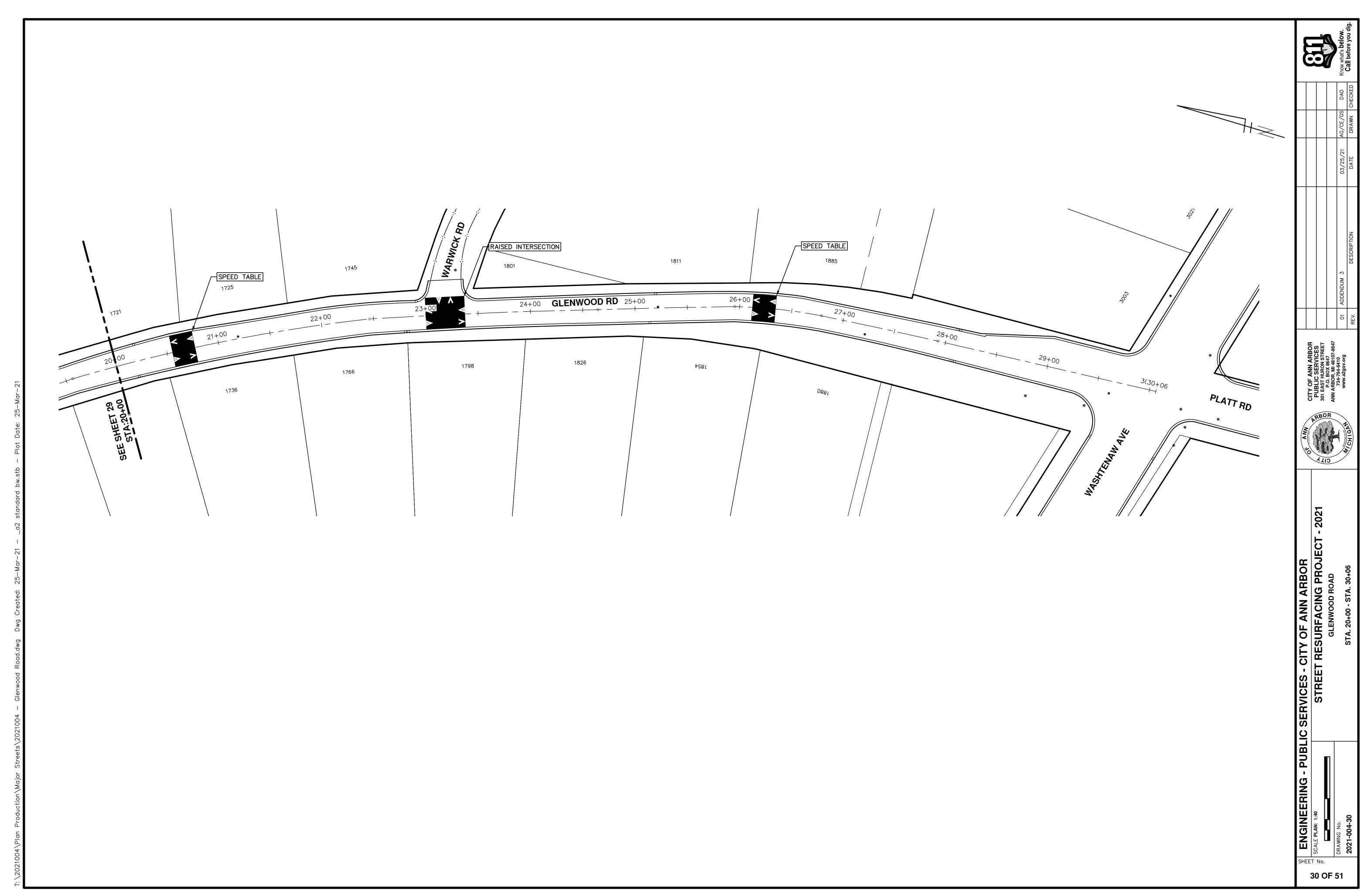
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PROJECT LOCATION: S INDUSTRIAL HWY

ITB No. 4667 FILE No. 2021-004

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	1.000
2030015	Sewer, Rem, Less than 24 inch	Ft	10.000
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	20.000
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	7.000
2057011	_Grading, Sidewalk Ramp	Syd	1.000
2057011	_Machine Grading, Special	Syd	2,561.000
2057021	_Undercutting, Type IIA	Cyd	85.00
4020987	Sewer, CI IV, 12 inch, Tr Det B	Ft	10.000
4021260	Trench Undercut and Backfill	Cyd	3.00
4030200	Dr Structure, 24 inch dia	Ea	1.00
4037050	_Dr Structure Cover, Type K, Modified	Ea	1.00
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	5.00
4037050	_Dr Structure, Temp Lowering, Modified	Ea	6.00
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	10.00
5010002	Cold Milling HMA Surface	Syd	2,561.00
5010005	HMA Surface, Rem	Syd	2.00
5010051	HMA, 4E3	Ton	592.00
8027001	_Curb and Gutter, Conc, Barrier	Ft	20.000
8037001	_Detectable Warning Surface, Modified	Ft	5.00
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	7.00
8110332	Rem Raised Pavt Marker	Ea	4.00
8120141	Lighted Arrow, Type C, Oper	Ea	2.00
8120252	Plastic Drum, Fluorescent, Furn	Ea	43.00
8120253	Plastic Drum, Fluorescent, Oper	Ea	43.00
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	110.00
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	110.00
8230431	Gate Box, Adj, Case 1	Ea	1.000

	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	4.500	9.000		
2.0	W3-5B	Reduce Speed Zone	9.000	18.000		
2.0	W4-2R	Lane Ends / Right	9.000	18.000		
2.0	W20-5R	Right Lane Closed Ahead	9.000	18.000		
2.0	R2-1	Speed Limit	7.500	15.000		
2.0	R5-18C	Work Zone Begins	16.000	32.000		

CASTING TABLE					
	FACILITY ID'S				
WATER	NA	NA			
SANITARY	NA	NA			
STORM	NA	NA			
WATER BOX	NA	NA			

CONSTRUCTION SCOPE AND SEQUENCE

- IN PLACE FOR THE SOUTH INDUSTRIAL HIGHWAY CONCRETE PAVEMENT REPAIRS PROJECT WITH THOSE NECESSARY TO ACCOMPLISH HMA PAVING WORK UP TO LEVELING COURSE

- IN PLACE FOR THE SOUTH INDUSTRIAL HIGHWAY CONCRETE PAVEMENT REPAIRS PROJECT WITH THOSE NECESSARY TO WITH THE CITY S SIGN AND SIGNAL UNIT.
- 7. REPEAT ITEMS 2 THRU 5 IN THE ORDER SHOWN ABOVE.

PHASE 3 (BOTH SIDES OF ROAD):

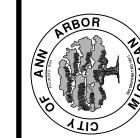
- 8. IMPLEMENT A MAINTENANCE OF TRAFFIC (M.O.T.) PLAN THAT ACCOMPLISHES HMA TOP COURSE PAVING WORK BY MAINTAINING A MINIMUM OF ONE TRAFFIC LANE IN EACH DIRECTION. COMPLETE TOP COURSE PAVING BY WORKING FROM OUTSIDE LANES INWARD TO CENTER LANES. COORDINATE NECESSARY TRAFFIC SIGNAL MODIFICATIONS WITH THE CITY S SIGN AND SIGNAL UNIT.
- 9. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (4E3). PLACE HMA MATERIAL IN A MANNER THAT KEEPS ALL PAVING EQUIPMENT AND TRUCKS OFF THE CONCRETE PAVEMENT.
- 10. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 11. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 12. REMOVE ALL MISS DIG MARKERS, AND TEMPORARY TRAFFIC CONTROL DEVICES.

NOTES:

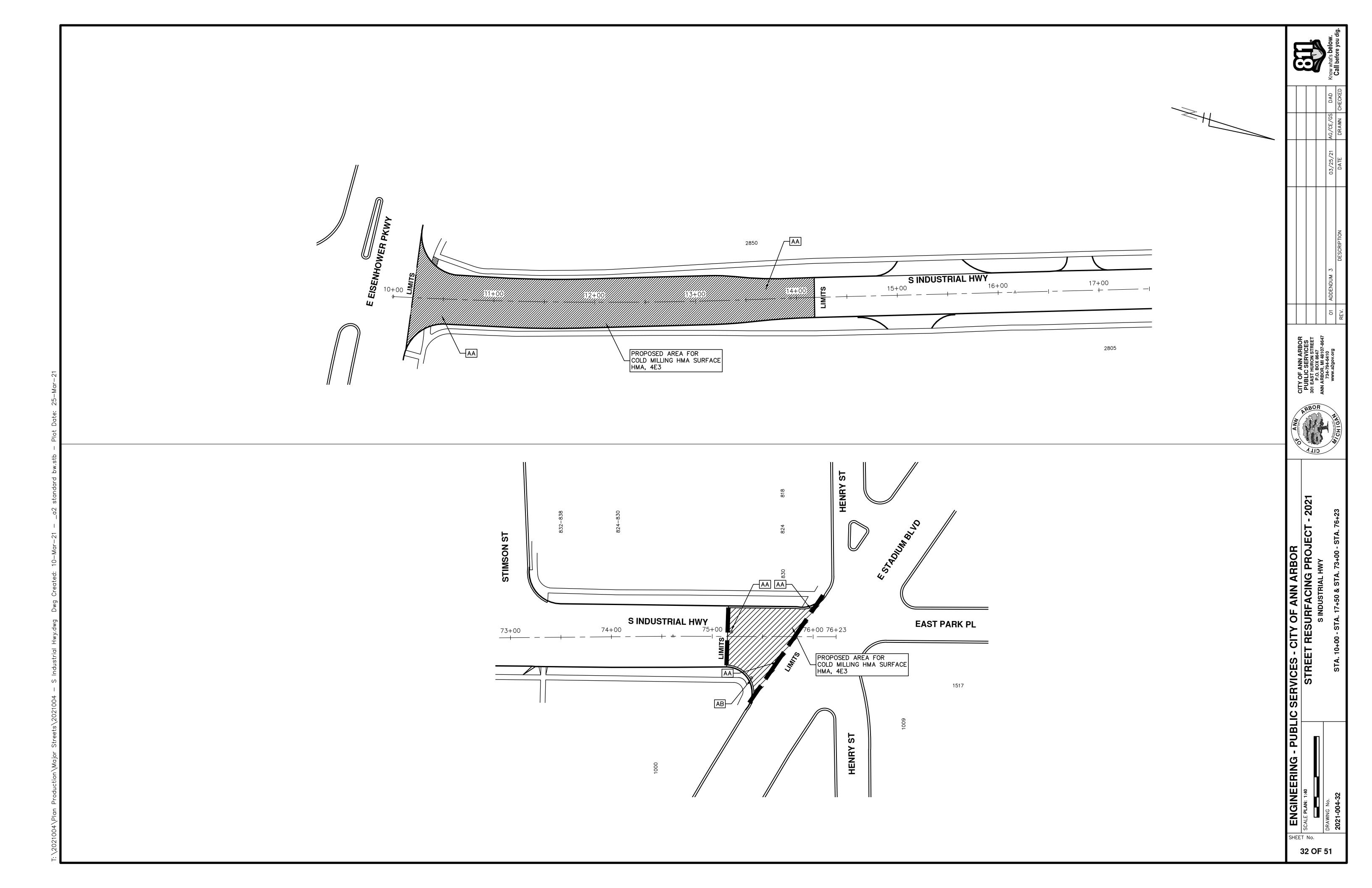
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SHEET No.

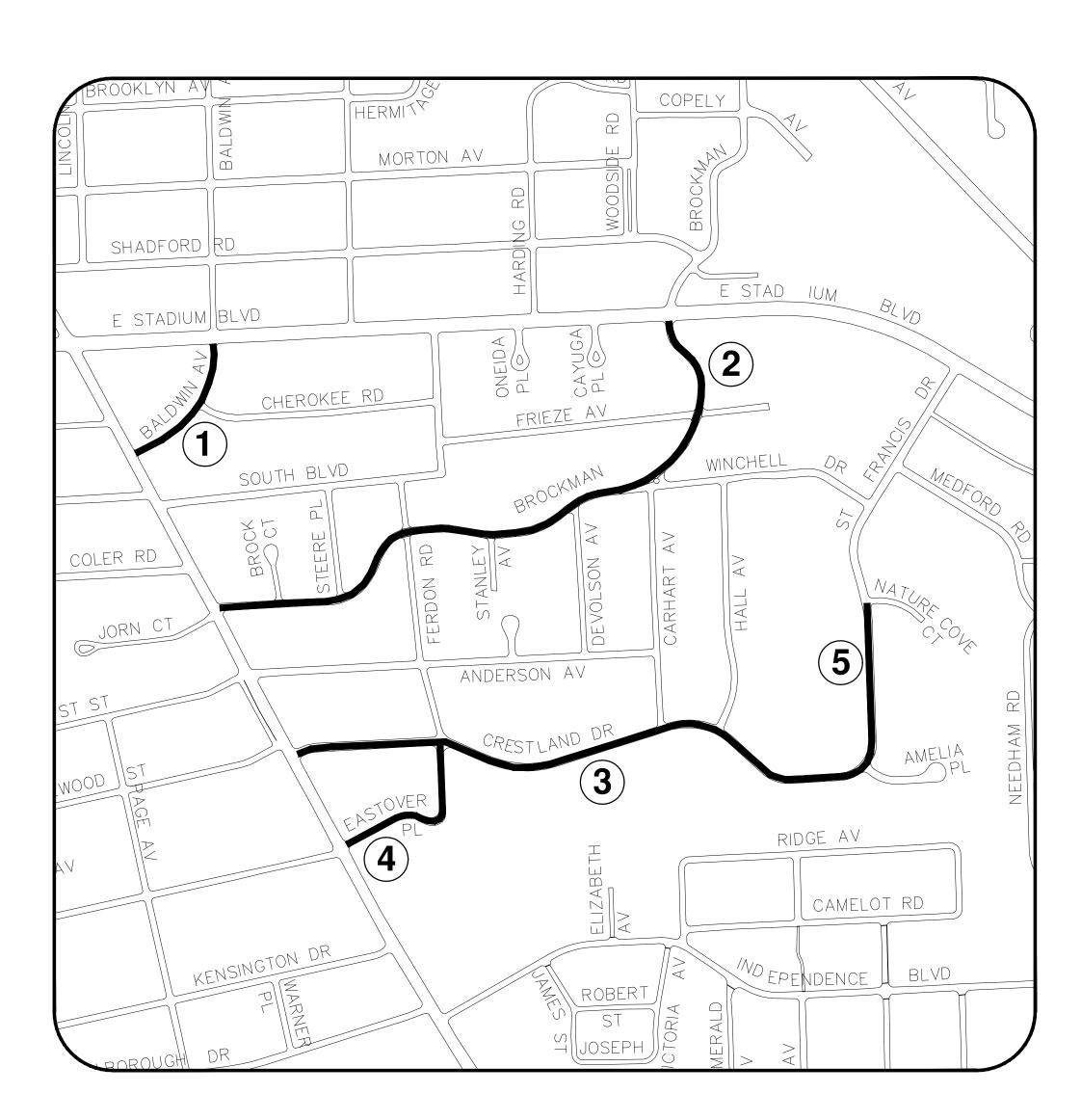




STREET RESURFACING PROJECT - 2021 PHASE 1

ITB No. 4667 FILE No. 2021-004





SHEET INDEX

SHEET NO.	TITLE	MAP INDEX NO. (THIS SHEET)
32	BALDWIN AVENUE	1
33	BROCKMAN BOULEVARD	2
35	CRESTLAND STREET	3
36	EASTOVER PLACE	4
38	SAINT FRANCIS DRIVE	5

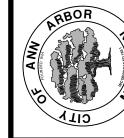
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		DAD	CHECKE
		AG/CE/GS	DRAWN CHECKE
		03/25/21	DATE
		DDENDUM 3	DESCRIPTION





PROJECT LOCATION: BALDWIN AVENUE

ITB No. 4667 FILE No. 2021-004

	QUANTITIES		
tem Code	Item Description	Unit	Quantity
2040005	Pavt, Rem	Syd	26.00
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	236.00
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	85.00
2057011	_Grading, Driveway Approach	Syd	95.00
2057011	_Machine Grading, Special	Syd	1,552.00
2057021	_Undercutting, Type IIA	Cyd	52.00
2087050	Erosion Control, Inlet Protection, Fabric Drop	Ea	6.00
4037050	_Dr Structure Cover, Type B, Modified	Ea	7.00
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	9.00
4037050	_Dr Structure, Temp Lowering, Modified	Ea	10.00
5010002	Cold Milling HMA Surface	Syd	1,552.00
5010005	HMA Surface, Rem	Syd	26.00
5010025	Hand Patching	Ton	3.00
5010061	HMA Approach	Ton	5.00
5010703	HMA, LVSP	Ton	359.00
5017011	_Cold Milling for Concrete Curb and Gutter Reveal	Syd	163.00
6027021	_Flowable Fill	Cyd	4.00
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	68.00
8027001	_Curb and Gutter, Conc, Barrier	Ft	91.00
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	145.00
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	110.00
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	12.00
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	3.00
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	3.00
8120035	Channelizing Device, 42 inch, Fluorescent, Furn	Ea	56.00
8120036	Channelizing Device, 42 inch, Fluorescent, Oper	Ea	56.00
8120141	Lighted Arrow, Type C, Oper	Ea	2.00
8120252	Plastic Drum, Fluorescent, Furn	Ea	9.00
8120253	Plastic Drum, Fluorescent, Oper	Ea	9.00
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	312.00
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	312.00
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	20.00
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	20.00
8127050	Temporary No Parking Sign	Ea	18.00
8167011	Slope Restoration	Syd	25.00
8230431	Gate Box, Adj, Case 1	Ea	1.00
8507050	HMA Surface, Around Structure Cover, Rem	Ea	2.00

	QUANTITIES						
	Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special						
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)			
5.0	*D3-1	Street Name Sign	4.000	20.000			
4.0	G20-2	End Road Work	4.500	18.000			
1.0	W1-4L	Reverse Curve (Left)	9.000	9.000			
1.0	W1-4L	Reverse Curve (Right)	9.000	9.000			
2.0	W1-6L	Shift arrow Left	9.000	18.000			
2.0	W1-6R	Shift arrow Right	9.000	18.000			
4.0	W3-5B	Reduce Speed Zone	9.000	36.000			
1.0	W4-2R	Lane Ends / Right	9.000	9.000			
5.0	W20-1	Road Work Ahead Sign	9.000	45.000			
1.0	W20-5A	Center Lane Closed Ahead	9.000	9.000			
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000			
4.0	R2-1	Speed Limit	7.500	30.000			
4.0	R5-18C	Work Zone Begins	16.000	64.000			
3.0	R11-3a	Road Closed Local Traffic Only	12.500	38.000			

CASTING TABLE		
		FACILITY ID'S
WATER	1	01-03716
SANITARY	2	71-69175/ 71-69176
STORM	4	92-58367/ 92-58366/ 92-58365/ 92-58364
WATER BOX	NA	NA

CONSTRUCTION SCOPE AND SEQUENCING

- 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
- 3. INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 6. REMOVE ALL OF THE EXISTING HMA SURFACE (APPROXIMATELY 4 INCHES) BY COLD MILLING. THIS MAY ALSO

- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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SHEET No.



PROJECT LOCATION: BROCKMAN BOULEVARD

Quantity **Item Description** Item Code Unit Dr Structure, Rem Ea 10.000 Sewer, Rem, Less than 24 inch Ft 100.000 _Curb, Gutter, and Curb and Gutter, Any Type, Rem 1,400.000 Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem 1,021.000 2047011 Grading, Driveway Approach 2057011 514.000 2057011 Grading, Sidewalk Syd 28.000 _Grading, Sidewalk Ramp Syd 32.000 _Machine Grading, Specia 10,233.000 Undercutting, Type IIA 319.000 Erosion Control, Inlet Protection, Fabric Drop 25.000 Sewer, CI IV, 12 inch, Tr Det B Ft 100.000 4021260 Trench Undercut and Backfill 30.000 Dr Structure, 24 inch dia 10.000 Dr Structure, Adj, Add Depth 4030280 1.000 _Dr Structure Cover, Type B, Modified 20.000 4037050 _Dr Structure Cover, Type K, Modified Ea 12.000 _Dr Structure, Adj, Case 1, Modified Ea 27.000 _Dr Structure, Adj, Case 2, Modified Ea 1.000 _Dr Structure, Cleaning, Modified 1.000 _Dr Structure, Temp Lowering, Modified 35.000 Structure, Reconstruct 1.000 _Underdrain, Subgrade, 6 inch, Special Ft 110.000 _Yard Drain, Outlet Ending, Plastic Pipe 1.000 _Yard Drain, Outlet Ending, Pop-up Apparatus 1.000 Cold Milling HMA Surface Syd 10,233.000 5010002 Syd 5010005 HMA Surface, Rem 310.000 Hand Patching 5010025 Ton 18.000 HMA Approach 5010061 Ton 76.000 HMA, LVSP 2,213.000 Ton _Cold Milling for Concrete Curb and Gutter Reveal Syd 5017011 725.000 _HMA, Wedging, 36A Ton 9.000 Flowable Fill Cyd 6027021 26.000 _Driveway, Nonreinf Conc, 6 inch, Modified Syd 514.000 _Curb and Gutter, Conc, Barrier 825.000 _Driveway Opening, Conc, Det M, Modified 575.000 Curb Ramp Opening, Conc 8030030 Ft 48.000 _Detectable Warning Surface, Modified 40.000 _Sidewalk Ramp, Conc, 6 inch, Modified 287.000 _Sidewalk, Conc or Clay Brick Pavers, Rem and Reinstall Sft 30.000 8037010 Sidewalk, Conc, 4 inch, Modified Sft 250.000 Pavt Mrkg, Polyurea, 4 inch, Yellow 8110092 360.000 Pavt Mrkg, Thermopl, 6 inch, Crosswalk 8110197 Ft 310.000 Pavt Mrkg, Thermopl, 24 inch, Stop Bar 45.000 8110218 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn 11.000 Barricade, Type III, High Intensity, Double Sided, Lighted, Oper 8120013 Ea 11.000 Lighted Arrow, Type C, Oper 2.000 8120141 Ea Plastic Drum, Fluorescent, Furn 8120252 Ea 75.000 Plastic Drum, Fluorescent, Oper 8120253 75.000 Sign, Type B, Temp, Prismatic, Furn Sft 78.000 Sign, Type B, Temp, Prismatic, Oper 8120351 Sft 78.000 Sign, Type B, Temp, Prismatic, Special, Furn Sft 8120352 60.000 Sign, Type B, Temp, Prismatic, Special, Oper 8120353 Sft 60.000 _Temporary No Parking Sign 8127050 83.000 _Slope Restoration Syd 8167011 25.000 Gate Box, Adj, Case 1 10.000

_HMA Surface, Around Structure Cover, Rem

6.000

Ea

ITB No. 4667 FILE No. 2021-004

	QUANTITIES				
	_	Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismati	ic, Special		
Quantity	Sign Code	Area (sft)	Total Area (Sft)		
15.0	*D3-1	Street Name Sign	4.000	60.000	
2.0	G20-2	End Road Work	4.500	9.000	
1.0	W1-4L	Reverse Curve (Left)	9.000	9.000	
1.0	W1-4L	Reverse Curve (Right)	9.000	9.000	
2.0	W1-6L	Shift arrow Left	9.000	18.000	
2.0	W1-6R	Shift arrow Right	9.000	18.000	
2.0	W3-5B	Reduce Speed Zone	9.000	18.000	
1.0	W4-2R	Lane Ends / Right	9.000	9.000	
15.0	W20-1	Road Work Ahead Sign	9.000	135.000	
1.0	W20-5A	Center Lane Closed Ahead	9.000	9.000	
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000	
4.0	R2-1	Speed Limit	7.500	30.000	
4.0	R5-18C	Work Zone Begins	16.000	64.000	
11.0	R11-3a	Road Closed Local Traffic Only	12.500	138.000	
			TOTAL	535.000	

	CASTING TABLE	
		FACILITY ID'S
WATER	3	HV-00002/01-07549/01-007 32
SANITARY	11	71-69166/ 71-69167/ 71-69884/ 71-69786/ 71-69787/ 71-69788/ 71-69750/71-69507/ 71-69502/ 71-69501/ 71-62379
STORM	4	92-58386/ 92-59060/ 92-59002/ 92-50727
WATER BOX	11	01-07589/ 01-07587/ 01-07588/ 01-01946/ 01-07582/01-06989/ 01-01907/ 01-07581/ 01-07583/ 01-08447/ 01-01875

CONSTRUCTION SCOPE AND SEQUENCING

- 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.
- 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.
- PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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.



SHEET No.



PROJECT LOCATION: CRESTLAND STREET

Item Description Quantity Item Code Unit Dr Structure, Rem 12.000 Ea 2030011 Sewer, Rem, Less than 24 inch Ft 120.000 _Curb, Gutter, and Curb and Gutter, Any Type, Rem 1,266.000 Ft 2047001 3.000 Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem 2047011 484.000 2057011 _Grading, Driveway Approach 73.000 _Grading, Sidewalk 42.000 2057011 _Grading, Sidewalk Ramp 29.000 9,356.000 _Machine Grading, Specia 2057021 278.000 Erosion Control, Inlet Protection, Fabric Drop Ea 20.000 Sewer, CI IV, 12 inch, Tr Det B 4020987 Ft 120.000 Cyd Trench Undercut and Backfill 36.000 4030200 Dr Structure. 24 inch dia 12.000 Dr Structure Cover, Type B, Modified 29.000 4037050 Dr Structure Cover, Type K, Modified Ea 13.000 Dr Structure, Adj, Case 1, Modified 4037050 Ea 32.000 _Dr Structure, Temp Lowering, Modified 4037050 Ea 34.000 Underdrain, Subgrade, 6 inch, Special Ft 120.000 Yard Drain, Outlet Ending, Plastic Pipe 2.000 Cold Milling HMA Surface Syd 9,356.000 5010005 HMA Surface, Rem Syd 141.000 Hand Patching 5010025 16.000 HMA Approach 5010061 117.000 HMA, LVSP 1,929.000 Cyd 6027021 Flowable Fill 23.000 _Driveway, Nonreinf Conc, 6 inch, Modified Syd 8017011 72.000 _Driveway, Nonreinf Conc, 8 inch, Modified Syd 8017011 2.000 Curb and Gutter, Conc, Barrier Ft 601.000 _Curb and Gutter, Conc, Mountable 8027001 122.000 _Driveway Opening, Conc, Det M, Modified Ft 519.000 Curb Ramp Opening, Conc 8030030 Ft 24.000 _Detectable Warning Surface, Modified Ft 20.000 _Sidewalk Ramp, Conc, 6 inch, Modified 8037010 264.000 Sidewalk, Conc or Clay Brick Pavers, Rem and Reinstall 6.000 Sidewalk, Conc, 4 inch, Modified Sft 381.000 Pavt Mrkg, Thermopl, 6 inch, Crosswalk 282.000 8110197 Pavt Mrkg, Thermopl, 12 inch, Crosswalk 8110214 208.000 Pavt Mrkg, Thermopl, 24 inch, Stop Bar 104.000 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn 8120012 6.000 Barricade, Type III, High Intensity, Double Sided, Lighted, Oper 6.000 Channelizing Device, 42 inch, Fluorescent, Furn 25.000 8120035 Channelizing Device, 42 inch, Fluorescent, Oper 25.000 Lighted Arrow, Type C, Oper 1.000 8120141 Plastic Drum, Fluorescent, Furn 74.000 Plastic Drum, Fluorescent, Oper 8120253 74.000 Sign, Type B, Temp, Prismatic, Furn Sft 67.000 Sign, Type B, Temp, Prismatic, Oper 8120351 Sft 67.000 Sign, Type B, Temp, Prismatic, Special, Furn Sft 8.000 Sign, Type B, Temp, Prismatic, Special, Oper 8.000 8120353 _Temporary No Parking Sign 75.000 Syd _Slope Restoration 8167011 25.000 Gate Box, Adj, Case 1 3.000

ITB No. 4667 FILE No. 2021-004

QUANTITIES Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special					
2.0	*D3-1	Street Name Sign	4.000	8.000	
2.0	G20-2	End Road Work	4.500	9.000	
1.0	W1-4L	Reverse Curve (Left)	9.000	9.000	
1.0	W1-4L	Reverse Curve (Right)	9.000	9.000	
2.0	W1-6L	Shift arrow Left	9.000	18.000	
2.0	W1-6R	Shift arrow Right	9.000	18.000	
2.0	W3-5B	Reduce Speed Zone	9.000	18.000	
6.0	W20-1	Road Work Ahead Sign	9.000	54.000	
0.0	W20-2	Detour Ahead	9.000	0.000	
1.0	W20-5A	Center Lane Closed Ahead	9.000	9.000	
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000	
2.0	R2-1	Speed Limit	7.500	15.000	
2.0	R5-18C	Work Zone Begins	16.000	32.000	
6.0	R11-3a	Road Closed Local Traffic Only	12.500	75.000	
			TOTAL	283.000	

	CASTING TABLE	
		FACILITY ID'S
WATER	1	01-00449
SANITARY	16	71-69096/ 71-69862/ 71-69864/ 71-69760/ 71-69749/ 71-69748/ 71-69747/ 71-69746/ 71-69456/ 71-69457/ 71-62246/ 71-62324/ 71-62323/ 71-62321/ 71-62322/ 71-62320
STORM	11	92-58978/ 92-58979/ 92-58968/ 92-58980/ 92-58969/ 92-58960/ 92-50617/ 92-50629/ 92-50618/ 92-50633/ 92-50635/
WATER BOX	3	01-07575/ 01-07572/ 01-07573

CONSTRUCTION SCOPE AND SEQUENCING

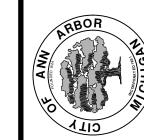
- INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO
- INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 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.
- PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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.



SHEET No.



PROJECT LOCATION: EASTOVER PLACE

ITB No. 4667 FILE No. 2021-004

QUANTITIES			
Item Code	Item Description	Unit	Quantity
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	104.00
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	18.00
2057011	_Grading, Driveway Approach	Syd	18.00
2057011	_Machine Grading, Special	Syd	1,040.00
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	5.00
5010002	Cold Milling HMA Surface	Syd	1,040.00
5010005	HMA Surface, Rem	Syd	12.00
5010025	Hand Patching	Ton	1.00
5010703	HMA, LVSP	Ton	91.00
6027021	_Flowable Fill	Cyd	2.00
8017011	_Driveway, Nonreinf Conc, 8 inch, Modified	Syd	18.00
8027001	_Curb and Gutter, Conc, Barrier	Ft	20.00
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	84.00
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	2.00
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	2.00
8120035	Channelizing Device, 42 inch, Fluorescent, Furn	Ea	28.00
8120036	Channelizing Device, 42 inch, Fluorescent, Oper	Ea	28.00
8120141	Lighted Arrow, Type C, Oper	Ea	1.00
8120252	Plastic Drum, Fluorescent, Furn	Ea	5.00
8120253	Plastic Drum, Fluorescent, Oper	Ea	5.00
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	148.00
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	148.00
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	8.00
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	8.00
8127050	_Temporary No Parking Sign	Ea	12.00
8167011	_Slope Restoration	Syd	42.00
8507050	_HMA Surface, Around Structure Cover, Rem	Ea	1.00

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	4.000	8.000	
2.0	G20-2	End Road Work	4.500	9.000	
1.0	W1-4L	Reverse Curve (Left)	9.000	9.000	
1.0	W1-4L	Reverse Curve (Right)	9.000	9.000	
2.0	W1-6L	Shift arrow Left	9.000	18.000	
2.0	W1-6R	Shift arrow Right	9.000	18.000	
2.0	W3-5B	Reduce Speed Zone	9.000	18.000	
2.0	W20-1	Road Work Ahead Sign	9.000	18.000	
1.0	W20-5A	Center Lane Closed Ahead	9.000	9.000	
2.0	R2-1	Speed Limit	7.500	15.000	
2.0	R11-3a	Road Closed Local Traffic Only	12.500	25.000	
			TOTAL	156.000	

CASTING TABLE			
FACILITY ID'S			
WATER	NA	NA	
SANITARY	NA	NA	
STORM	NA	NA	
WATER BOX	NA	NA	

CONSTRUCTION SCOPE AND SEQUENCING

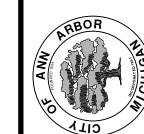
- INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED
- REMOVE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

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.



SHEET No.



PROJECT LOCATION: SAINT FRANCIS DRIVE

ITB No. 4667 FILE No. 2021-004

QUANTITIES			
Item Code	Item Description	Unit	Quantity
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	92.00
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	5.00
2057011	_Grading, Driveway Approach	Syd	5.00
2057011	_Machine Grading, Special	Syd	1,611.00
2057021	_Undercutting, Type IIA	Cyd	54.00
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	2.00
4037050	_Dr Structure Cover, Type C, Modified	Ea	2.00
4037050	_Dr Structure Cover, Type D, Modified	Ea	2.00
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	4.00
4037050	_Dr Structure, Temp Lowering, Modified	Ea	2.00
5010002	Cold Milling HMA Surface	Syd	1,611.00
5010005	HMA Surface, Rem	Syd	10.00
5010025	Hand Patching	Ton	1.00
5010703	HMA, LVSP	Ton	373.00
6027021	_Flowable Fill	Cyd	2.00
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	5.00
8027001	_Curb and Gutter, Conc, Mountable	Ft	92.00
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	2.00
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	2.00
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	43.00
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	43.00
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	8.00
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	8.00
8127050	_Temporary No Parking Sign	Ea	15.00
8167011	Slope Restoration	Syd	30.00

	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	4.000	8.000	
2.0	W20-1	Road Work Ahead Sign	9.000	18.000	
2.0	R11-3a	Road Closed Local Traffic Only	12.500	25.000	
			TOTAL	51.000	

CASTING TABLE		
FACILITY ID'S		
WATER	NA	NA
SANITARY	NA	NA
STORM	NA	NA
WATER BOX	NA	NA

CONSTRUCTION SCOPE AND SEQUENCING

- 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
- 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
- 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.

- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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.



SHEET No.

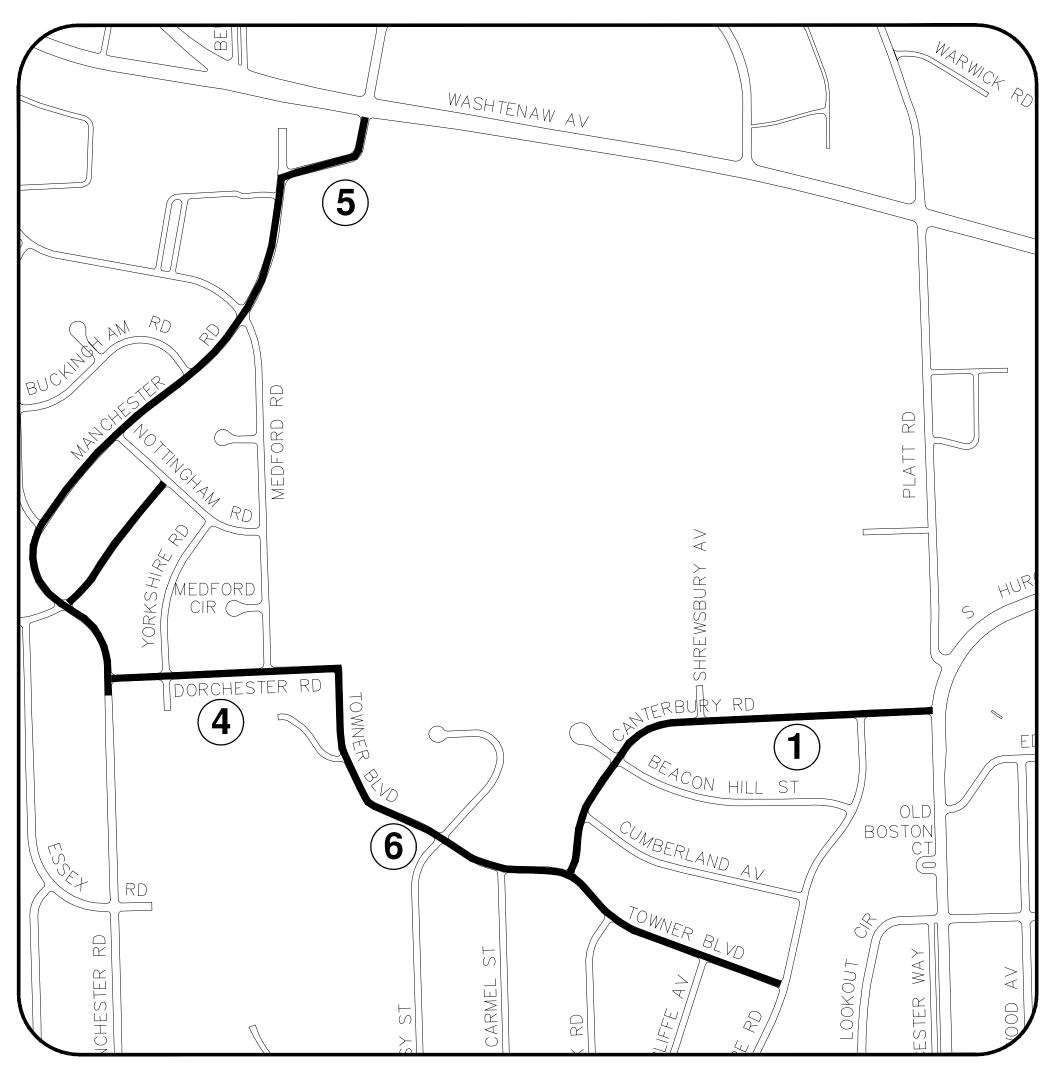


STREET RESURFACING PROJECT - 2021 PHASE 2



ITB No. 4667 FILE No. 2021-004

PACKARD RD



SHEET INDEX

SHEET NO.	TITLE	MAP INDEX NO. (THIS SHEET)
40	CANTERBURY ROAD	1
41	CHESTERFIELD	2
42	CRANBROOK	3
43	DORCHESTER ROAD	4
44	MANCHESTER ROAD	5
45	TOWNER BLVD	6

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PROJECT LOCATION: CANTERBURY ROAD

QUANTITIES Item Description Quantity Item Code Dr Structure, Rem 10.000 Sewer, Rem, Less than 24 inch Ft 100.000 1,317.000 _Curb, Gutter, and Curb and Gutter, Any Type, Rem _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem Syd 385.000 Syd _Grading, Driveway Approach 299.000 Syd _Grading, Sidewalk 11.000 _Grading, Sidewalk Ramp Syd 51.000 Erosion Control, Inlet Protection, Fabric Drop Ea 21.000 Sewer, CI IV, 12 inch, Tr Det B 4020987 100.000 Cyd Trench Undercut and Backfill 30.000 Dr Structure, 24 inch dia 10.000 _Dr Structure Cover, Type K, Modified 11.000 Dr Structure, Adj, Case 1, Modified Ea 10.000 Underdrain, Subgrade, 6 inch, Special 100.000 Yard Drain, Outlet Ending, Plastic Pipe 1.000 Yard Drain, Outlet Ending, Pop-up Apparatus 1.000 Cold Milling HMA Surface Syd 5,870.000 5010002 Syd HMA Surface, Rem 293.000 Hand Patching 5010025 34.000 **HMA Approach** 21.000 HMA, LVSP 658.000 Raised Crosswalk, HMA Syd 5017011 61.000 Syd Raised Intersection, HMA 5017011 654.000 _Speed Hump, HMA Syd 40.000 Raised Crosswalk, Conc Syd 6027011 61.000 Syd Raised Intersection, Conc 654.000 _Speed Hump, Conc Syd 6027011 40.000 Syd _Driveway, Nonreinf Conc, 6 inch, Modified 299.000 Curb and Gutter, Conc, Barrier 8027001 561.000 _Driveway Opening, Conc, Det M, Modified 727.000 Curb Ramp Opening, Conc 8030030 Ft 60.000 _Detectable Warning Surface, Modified 50.000 Sidewalk Ramp, Conc, 6 inch, Modified Sft 455.000 Sidewalk, Conc, 4 inch, Modified Sft 8037010 50.000 Sidewalk, Conc, 6 inch, Modified Sft 8037010 50.000 _Pavt Mrkg, Polyurea, Speed Hump Chevron, White 8117050 18.000 _Pavt Mrkg, Thermopl, Speed Hump Chevron, White Ea 8117050 18.000 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn 8120012 Ea 5.000 Barricade, Type III, High Intensity, Double Sided, Lighted, Oper 8120013 Ea 5.000 Plastic Drum, Fluorescent, Furn Ea 78.000 8120252 Plastic Drum, Fluorescent, Oper 8120253 Ea 78.000 Sign, Type B, Temp, Prismatic, Furn Sft 227.000 Sign, Type B, Temp, Prismatic, Oper Sft 227.000 8120351 Sign, Type B, Temp, Prismatic, Special, Furn Sft 8120352 24.000 Sign, Type B, Temp, Prismatic, Special, Oper 8120353 Sft 24.000 Pedestrian Type II Barricade, Temp 4.000 8127050 Temporary No Parking Sign 8127050 59.000 Ea Slope Restoration Syd 360.000 8167011 Gate Box, Adj, Case 1 3.000 8230431 Ea _HMA Surface, Around Structure Cover, Rem Ea 29.000

ITB No. 4667 FILE No. 2021-004

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	4.000	24.000		
2.0	G20-2	End Road Work	4.500	9.000		
2.0	W3-5B	Reduce Speed Zone	9.000	18.000		
1.0	W4-2R	Lane Ends / Right	9.000	9.000		
1.0	W1-6L	Shift arrow Left	9.000	9.000		
1.0	W1-6R	Shift arrow Right	9.000	9.000		
6.0	W20-1	Road Work Ahead Sign	9.000	54.000		
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000		
2.0	R2-1	Speed Limit	7.500	15.000		
2.0	R5-18C	Work Zone Begins	16.000	32.000		
5.0	R11-3a	Road Closed Local Traffic Only	12.500	63.000		
			TOTAL	251.000		

CASTING TABLE			
		FACILITY ID'S	
WATER	NA	NA	
SANITARY	NA	NA	
STORM	NA	NA	
WATER BOX	NA	NA	

CONSTRUCTION SCOPE AND SEQUENCING

ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. CONSTRUCTION ON

- 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.
- PROOF ROLL AND PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DETERMINED BY THE ENGINEER,
- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER. 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

NOTES:

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SHEET No.



PROJECT LOCATION: CHESTERFIELD STREET

ITB No. 4667 FILE No. 2021-004

QUANTITIES			
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	1.000
2030015	Sewer, Rem, Less than 24 inch	Ft	10.000
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	140.000
2047001	_Exploratory Excavation, Vertical	Ft	2.000
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	31.000
2057011	_Grading, Sidewalk	Syd	19.000
2057011	_Grading, Sidewalk Ramp	Syd	12.000
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	3.000
4020987	Sewer, CI IV, 12 inch, Tr Det B	Ft	10.000
4021260	Trench Undercut and Backfill	Cyd	3.000
4030200	Dr Structure, 24 inch dia	Ea	1.000
4037050	_Dr Structure Cover, Type K, Modified	Ea	1.000
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	10.000
5010002	Cold Milling HMA Surface	Syd	1,228.000
5010005	HMA Surface, Rem	Syd	31.000
5010025	Hand Patching	Ton	4.000
5010703	HMA, LVSP	Ton	107.000
8027001	_Curb and Gutter, Conc, Barrier	Ft	123.000
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	5.000
8030030	Curb Ramp Opening, Conc	Ft	12.000
8037001	_Detectable Warning Surface, Modified	Ft	10.000
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	107.000
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	175.000
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	105.000
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	13.000
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	2.000
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	2.000
8120252	Plastic Drum, Fluorescent, Furn	Ea	6.000
8120253	Plastic Drum, Fluorescent, Oper	Ea	6.000
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	153.000
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	153.000
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	16.000
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	16.000
8127050	_Temporary No Parking Sign	Ea	13.000
8167011	_Slope Restoration	Syd	25.000
8230431	Gate Box, Adj, Case 1	Ea	1.000

	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	4.000	16.000		
2.0	G20-2	End Road Work	4.500	9.000		
2.0	W3-5B	Reduce Speed Zone	9.000	18.000		
1.0	W4-2R	Lane Ends / Right	9.000	9.000		
4.0	W20-1	Road Work Ahead Sign	9.000	36.000		
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000		
2.0	R2-1	Speed Limit	7.500	15.000		
2.0	R5-18C	Work Zone Begins	16.000	32.000		
2.0	R11-3a	Road Closed Local Traffic Only	12.500	25.000		
			TOTAL	169.000		

CASTING TABLE				
		FACILITY ID'S		
WATER	NA	NA		
SANITARY	NA	NA		
STORM	NA	NA		
WATER BOX	NA	NA		

CONSTRUCTION SCOPE AND SEQUENCING

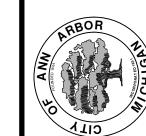
- INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED
- REMOVE EXISTING HMA SURFACE (APPROXIMATELY 2 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE ADDITIONAL HMA REMOVAL AND/OR BASE REPAIRS TO A DEPTH DETERMINED BY THE ENGINEER.
- 5. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES AS REQUIRED.
- 7. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 8. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 9. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 10. REMOVE SESC MEASURES.
- 11. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
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SHEET No.



PROJECT LOCATION: CRANBROOK ROAD

ITB No. 4667 FILE No. 2021-004

Itom Cada	QUANTITIES Item Description	l lmis	Quantity
Item Code		Unit _	
2030011	Dr Structure, Rem	Ea _	6.0
2030015	Sewer, Rem, Less than 24 inch	Ft	60.0
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,719.0
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	474.0
2057011	_Grading, Driveway Approach	Syd	432.0
2057011	_Grading, Sidewalk	Syd	28.0
2057011	_Grading, Sidewalk Ramp	Syd	12.0
2057011	_Machine Grading, Special	Syd	3,755.0
2057021	_Undercutting, Type IIA	Cyd	125.0
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	11.0
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	60.0
4021260	Trench Undercut and Backfill	Cyd	18.0
4030200	Dr Structure, 24 inch dia	Ea	6.0
4037050	_Dr Structure Cover, Type B, Modified	Ea	12.0
4037050	_Dr Structure Cover, Type D, Modified (ADA Cover/Grate)	Ea	1.0
4037050	_Dr Structure Cover, Type K, Modified	Ea	6.0
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	14.
4037050	_Dr Structure, Temp Lowering, Modified	Ea	14.
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	60.
5010002	Cold Milling HMA Surface	Syd	3,755.
5010005	HMA Surface, Rem	Syd	191.
5010025	Hand Patching	Ton	22.
5010703	HMA, LVSP	Ton	434.
6027021	_Flowable Fill	Cyd	32.
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	432.
8027001	_Curb and Gutter, Conc, Barrier	Ft	954.
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	759.
8030030	Curb Ramp Opening, Conc	Ft	12.
8037001	_Detectable Warning Surface, Modified	Ft	10.
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	110.
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	131.
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	125.
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	58.
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	3.
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	3.
8120252	Plastic Drum, Fluorescent, Furn	Ea	75.
8120253	Plastic Drum, Fluorescent, Oper	Ea	75.
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	74.
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	74.
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	16.
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	16.
8127050	_Pedestrian Type II Barricade, Temp	Ea	4.
8127050	_Temporary No Parking Sign	Ea	39.
8167011	Slope Restoration	Syd	696.
8230431	Gate Box, Adj, Case 1	Ea	1.0
2_00.01	HMA Surface, Around Structure Cover, Rem		1.

	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	4.000	16.000		
4.0	W20-1	Road Work Ahead Sign	9.000	36.000		
3.0	R11-3a	Road Closed Local Traffic Only	12.500	38.000		
			TOTAL	90.000		

	CASTING TABLE	EAGUITA IRIO
		FACILITY ID'S
WATER	NA	NA
SANITARY	8	71-62512/71-62511/ 71-62510/ 71-62509, 71-62508/ 71-62507 71-62538/ 71-6250
STORM	4	92-50882/ 92-50881 92-50880/ 92-50879
WATER BOX	1	01-08873

CONSTRUCTION SCOPE AND SEQUENCING

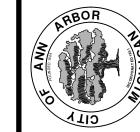
- INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES
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- REMOVE EXISTING HMA SURFACE (APPROXIMATELY 2 INCHES) BY COLD MILLING. THIS MAY ALSO INCLUDE ADDITIONAL HMA REMOVAL AND/OR BASE REPAIRS TO A DEPTH DETERMINED BY THE ENGINEER.
- 5. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES AS REQUIRED.
- 7. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 8. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 10. REMOVE SESC MEASURES.
- 11. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP, FINAL RESTORATION.
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SHEET No.



PROJECT LOCATION: DORCHESTER ROAD

QUANTITIES Item Description Quantity Item Code Dr Structure, Rem 3.000 Sewer, Rem. Less than 24 inch Ft 30.000 Curb, Gutter, and Curb and Gutter, Any Type, Rem 494.000 1,040.000 HMA Curb, Rem Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem Syd 90.000 _Grading, Driveway Approach Syd 55.000 Syd _Grading, Sidewalk Ramp 4.000 Machine Grading, Special Syd 2,569.000 Cyd _Undercutting, Type IIA 86.000 Erosion Control, Inlet Protection, Fabric Drop 8.000 _Aggregate Base, 8 inch, Modified Syd 462.000 Trenching, Modified 1,040.000 3077001 Sewer, CI IV, 12 inch, Tr Det B 30.000 Cyd Trench Undercut and Backfill 9.000 Dr Structure, 24 inch dia 3.000 _Dr Structure Cover, Type B, Modified 1.000 Dr Structure Cover, Type K, Modified Ea 1.000 Dr Structure, Adj, Case 1, Modified 5.000 4037050 Ea _Dr Structure, Temp Lowering, Modified 5.000 _Underdrain, Subgrade, 6 inch, Special 30.000 Yard Drain, Outlet Ending, Plastic Pipe Yard Drain, Outlet Ending, Pop-up Apparatus 4047050 Ea 1.000 Cold Milling HMA Surface Syd 2,569.000 Syd HMA Surface, Rem 5010005 167.000 Hand Patching 5010025 Ton 19.000 HMA, LVSP 5010703 Ton 594.000 Cyd Flowable Fill 6027021 28.000 Driveway, Nonreinf Conc, 6 inch, Modified Syd 55.000 8017011 Curb and Gutter, Conc. Barrier or Mountable, Slip Form 1,127.000 Ft _Driveway Opening, Conc, Det M, Modified 8027001 Ft 371.000 Curb Ramp Opening, Conc 6.000 _Detectable Warning Surface, Modified 8037001 5.000 Sidewalk Ramp, Conc, 6 inch, Modified Sft 8037010 35.000 Pavt Mrkg, Thermopl, 6 inch, Crosswalk 8110197 Ft 107.000 Pavt Mrkg, Thermopl, 12 inch, Crosswalk 8110214 264.000 Pavt Mrkg, Thermopl, 24 inch, Stop Bar 8110218 24.000 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn 8120012 Ea 4.000 Barricade, Type III, High Intensity, Double Sided, Lighted, Oper 8120013 Ea 4.000 Plastic Drum, Fluorescent, Furn 8120252 Ea 50.000 Plastic Drum, Fluorescent, Oper 50.000 8120253 Ea Sign, Type B, Temp, Prismatic, Furn Sft 8120350 43.000 Sign, Type B, Temp, Prismatic, Oper Sft 8120351 43.000 Sign, Type B, Temp, Prismatic, Special, Furn Sft 8120352 8.000 Sign, Type B, Temp, Prismatic, Special, Oper 8120353 Sft 8.000 Pedestrian Type II Barricade, Temp 3.000 8127050 Ea _Temporary No Parking Sign 8127050 Ea 27.000 Slope Restoration Syd 8167011 433.000 Gate Box, Adj, Case 1 8230431 1.000 Ea HMA Surface, Around Structure Cover, Rem 8507050 Ea 1.000

ITB No. 4667 FILE No. 2021-004

	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	4.000	8.000		
2.0	W20-1	Road Work Ahead Sign	9.000	18.000		
2.0	R11-3a	Road Closed Local Traffic Only	12.500	25.000		
			TOTAL	51.000		

CASTING TABLE				
		FACILITY ID'S		
WATER	1	01-03034		
SANITARY	1	71–62693		
STORM	NA	NA		
WATER BOX	NA	NA		

CONSTRUCTION SCOPE AND SEQUENCING

- 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, HMA CURB, DRAINAGE, AND CONCRETE ITEMS WITH EXCEPTION TO COLD MILLING.
- INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED.
- 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,
- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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.



SHEET No.



PROJECT LOCATION: MANCHESTER ROAD

ITB No. 4667 FILE No. 2021-004

	QUANTITIES		
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	11.000
2030015	Sewer, Rem, Less than 24 inch	Ft	110.00
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,701.000
2047001	_HMA Curb, Rem	Ft	4,241.00
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	862.00
2057011	_Grading, Driveway Approach	Syd	570.00
2057011	_Grading, Sidewalk	Syd	289.00
2057011	_Grading, Sidewalk Ramp	Syd	125.00
2057011	_Machine Grading, Special	Syd	11,194.00
2057021	_Undercutting, Type IIA	Cyd	349.00
2087050	Erosion Control, Inlet Protection, Fabric Drop	Ea	32.00
2080036	Erosion Control, Silt Fence	Ft	470.00
3027011	_Aggregate Base, 8 inch, Modified	Syd	1,885.00
3077001	_Trenching, Modified	Ft	4,241.00
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	110.00
4021260	Trench Undercut and Backfill	Cyd	33.00
4030200	Dr Structure, 24 inch dia	Ea	11.00
4030280	Dr Structure, Adj, Add Depth	Ft	1.00
4037050	_Dr Structure Cover, Type B, Modified	Ea	9.00
4037050	Dr Structure Cover, Type K, Modified	Ea	28.00
4037050	Dr Structure, Adj, Case 1, Modified	Ea	31.00
4037050	Dr Structure, Adj, Case 2, Modified	Ea	1.00
4037050	Dr Structure, Cleaning, Modified	Ea	1.00
4037050	Dr Structure, Temp Lowering, Modified		14.00
4047001	Underdrain, Subgrade, 6 inch, Special	Ea	
	_Yard Drain, Outlet Ending, Plastic Pipe	Ft	110.00
4047001	Cold Milling HMA Surface	Ft Syd	2.00 11,194.00
5010002	HMA Surface, Rem	Syd	
5010005	Hand Patching	•	667.00
5010025	-	Ton	76.00
5010061	HMA Approach	Ton	83.00
5010703	HMA, LVSP	Ton	2,422.00
5017011	_Cold Milling for Concrete Curb and Gutter Reveal	Syd	142.00
6027021	_Flowable Fill	Cyd	110.00
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	459.00
8017011	_Driveway, Nonreinf Conc, 8 inch, Modified	Syd	111.00
8027001	_Curb and Gutter, Conc, Barrier or Mountable, Slip Form	Ft	4,640.00
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	1,302.00
8030030	Curb Ramp Opening, Conc	Ft	102.00
8037001	_Detectable Warning Surface, Modified	Ft	85.00
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	1,127.00
8037010	_Sidewalk, Conc, 4 inch, Modified	Sft	2,410.00
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	195.00
8110092	Pavt Mrkg, Polyurea, 4 inch, Yellow	Ft	826.00
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	702.00
8110214	Pavt Mrkg, Thermopl, 12 inch, Crosswalk	Ft	80.00
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	116.00
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	10.00
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	10.00
8120035	Channelizing Device, 42 inch, Fluorescent, Furn	Ea	28.00

	QUANTITIES				
Item Code	Item Description	Unit	Quantity		
8120036	Channelizing Device, 42 inch, Fluorescent, Oper	Ea	28.000		
8120141	Lighted Arrow, Type C, Oper	Ea	1.000		
8120252	Plastic Drum, Fluorescent, Furn	Ea	191.000		
8120253	Plastic Drum, Fluorescent, Oper	Ea	191.00		
8120310	Sign Cover	Ea	2.00		
8120330	Sign, Portable, Changeable Message, Furn	Ea	2.00		
8120331	Sign, Portable, Changeable Message, Oper	Ea	2.00		
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	185.00		
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	185.00		
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	48.00		
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	48.00		
8127050	_Pedestrian Type II Barricade, Temp	Ea	13.00		
8127050	_Temporary No Parking Sign	Ea	99.00		
8167011	_Slope Restoration	Syd	939.00		
8230431	Gate Box, Adj, Case 1	Ea	1.00		
8507050	_HMA Surface, Around Structure Cover, Rem	Ea	4.00		

	QUANTITIES						
Sign, Type B, Temp, Prismatic & *Sign, Type B, Temp, Prismatic, Special							
Quantity	Sign Code	Description	Area (sft)	Total Area (Sft)			
12.0	*D3-1	Street Name Sign	4.000	48.000			
2.0	G20-2	End Road Work	4.500	9.000			
2.0	W3-5B	Reduce Speed Zone	9.000	18.000			
1.0	W4-2R	Lane Ends / Right	9.000	9.000			
12.0	W20-1	Road Work Ahead Sign	9.000	108.000			
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000			
2.0	R5-18C	Work Zone Begins	16.000	32.000			
			TOTAL	233.000			

CASTING TABLE				
FACILITY ID'S				
WATER	5	01-01225/ 01-01229/ 01-01230/ 01-01234/ 01-01233		
SANITARY	4	71-61083/ 71-61696/ 71-61704/ 71-61671		
STORM	1	92-50696		
WATER BOX	NA	NA		

CONSTRUCTION SCOPE AND SEQUENCING

- 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, HMA CURB, DRAINAGE, AND CONCRETE ITEMS WITH
- 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
- 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.

- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER. 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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.



SHEET No.



PROJECT LOCATION: TOWNER BLVD

ITB No. 4667 FILE No. 2021-004

Item Code	QUANTITIES Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	11.000
2030015	Sewer, Rem, Less than 24 inch	Ft	110.000
2047001	Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	590.000
2047001	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	77.000
2057011	Grading, Driveway Approach	Syd	22.000
2057011	_Grading, Sidewalk Ramp	Syd	47.000
2087050	Erosion Control, Inlet Protection, Fabric Drop	Ea	33.000
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	110.000
4021260	Trench Undercut and Backfill	Cyd	33.000
4030200	Dr Structure, 24 inch dia	Ea	11.000
4037050	_Dr Structure Cover, Type K, Modified	Ea	15.000
4037050	Dr Structure, Adj, Case 1, Modified	Ea	4.000
4047001	Underdrain, Subgrade, 6 inch, Special	Ft	110.000
5010002	Cold Milling HMA Surface	Syd	3,160.000
5010005	HMA Surface, Rem	Syd	131.000
5010025	Hand Patching	Ton	15.000
5010061	HMA Approach	Ton	38.000
5010703	HMA, LVSP	Ton	328.000
5017011	Raised Intersection, HMA	Syd	215.000
6027011	Raised Intersection, Conc	Syd	215.000
8017011	Driveway, Nonreinf Conc, 6 inch, Modified	Syd	22.000
8027001	Curb and Gutter, Conc, Barrier	Ft	414.000
8027001	Driveway Opening, Conc, Det M, Modified	Ft	152.000
8030030	Curb Ramp Opening, Conc	Ft	42.000
8037001	_Detectable Warning Surface, Modified	Ft	35.000
8037010	Sidewalk Ramp, Conc, 6 inch, Modified	Sft	426.000
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	260.000
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	50.000
8117050	_Pavt Mrkg, Polyurea, Speed Hump Chevron, White	Ea	24.000
8117050	_Pavt Mrkg, Thermopl, Speed Hump Chevron, White	Ea	24.000
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	8.000
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	8.000
8120252	Plastic Drum, Fluorescent, Furn	Ea	49.000
8120253	Plastic Drum, Fluorescent, Oper	Ea	49.000
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	181.000
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	181.000
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	36.000
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	36.000
8127050	_Pedestrian Type II Barricade, Temp	Ea	6.000
8127050	_Temporary No Parking Sign	Ea	30.000
8167011	_Slope Restoration	Syd	180.000
8230431	Gate Box, Adj, Case 1	Ea	2.000
8507050	HMA Surface, Around Structure Cover, Rem	Ea	35.000

	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	4.000	36.000			
9.0	W20-1	Road Work Ahead Sign	9.000	81.000			
8.0	R11-3a	Road Closed Local Traffic Only	12.500	100.000			
			TOTAL	217.000			

		FACILITY ID'S
WATER	NA	NA
SANITARY	NA	NA
STORM	NA	NA
WATER BOX	NA	NA

CONSTRUCTION SCOPE AND SEQUENCING

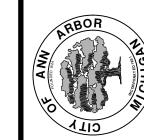
- INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES
- 2. CONDUCT REMOVAL WORK RELATED TO PAVEMENT, DRAINAGE, AND CONCRETE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

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.



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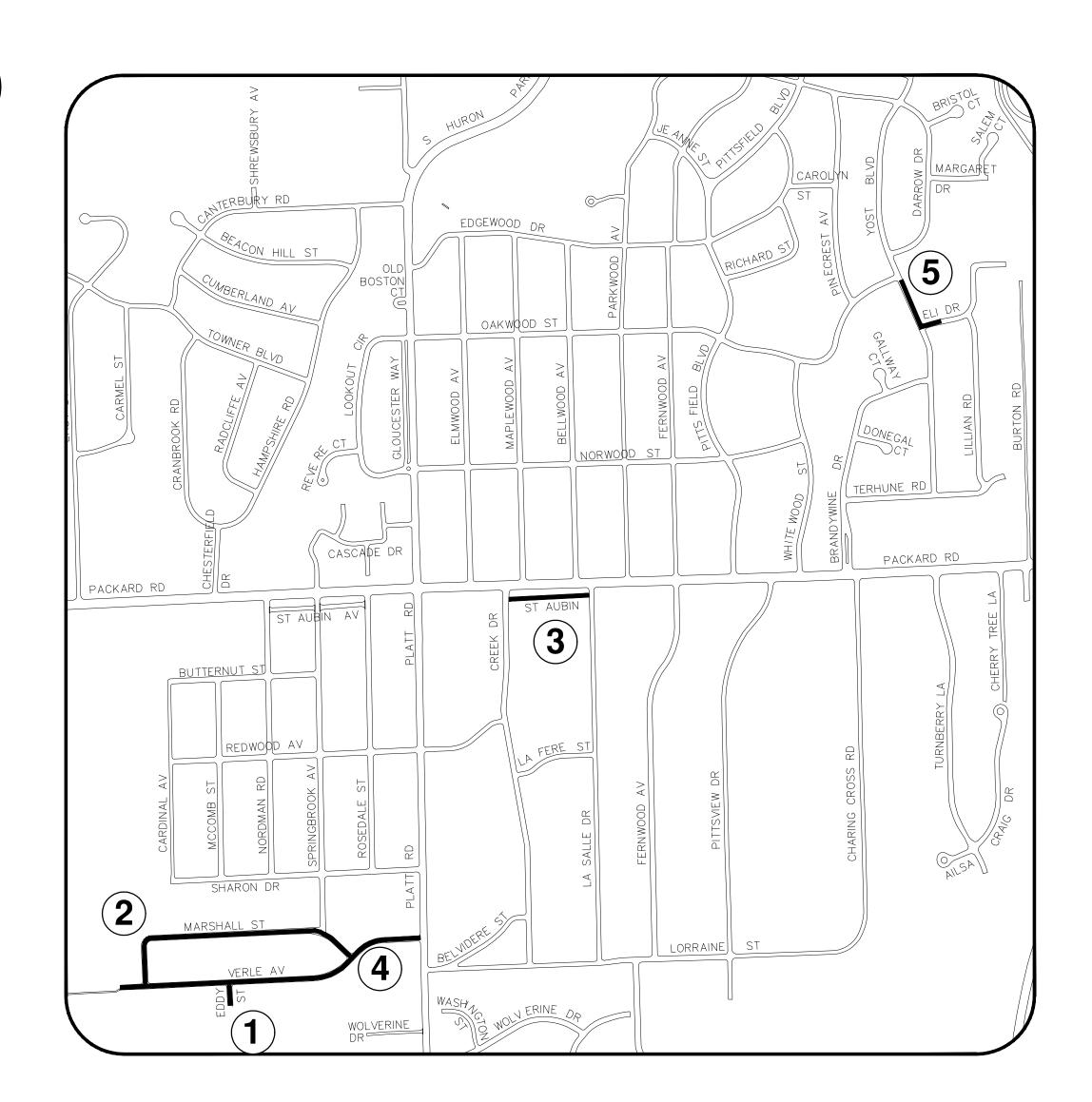
SHEET No.



STREET RESURFACING PROJECT - 2021 PHASE 3

ITB No. 4667 FILE No. 2021-004





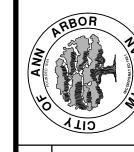
SHEET INDEX

SHEET NO.	TITLE	MAP INDEX NO. (THIS SHEET)
47	EDDY STREET	1
48	MARSHALL STREET	2
49	SAINT AUBIN AVE	3
50	VERLE AVE	4
51	YOST BLVD AND ELI ROAD SIDEWALK GAP	5

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.





PROJECT LOCATION: EDDY STREET

ITB No. 4667 FILE No. 2021-004

tem Code	Item Description	Unit	Quantity
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	191.00
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	22.00
2057011	_Grading, Driveway Approach	Syd	22.00
2057011	_Machine Grading, Special	Syd	475.00
2057021	_Undercutting, Type IIA	Cyd	16.00
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	2.00
4037050	_Dr Structure Cover, Type B, Modified	Ea	1.00
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	1.00
4037050	_Dr Structure, Temp Lowering, Modified	Ea	1.00
5010002	Cold Milling HMA Surface	Syd	475.00
5010005	HMA Surface, Rem	Syd	21.00
5010025	Hand Patching	Ton	2.00
5010703	HMA, LVSP	Ton	110.00
6027021	_Flowable Fill	Cyd	4.00
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	22.00
8027001	_Curb and Gutter, Conc, Barrier	Ft	144.00
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	50.00
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	63.00
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	1.00
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	1.00
8120252	Plastic Drum, Fluorescent, Furn	Ea	5.00
8120253	Plastic Drum, Fluorescent, Oper	Ea	5.00
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	43.00
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	43.00
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	8.00
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	8.00
8127050	_Temporary No Parking Sign	Ea	5.00
8167011	_Slope Restoration	Syd	25.00

	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	4.000	8.000			
2.0	W20-1	Road Work Ahead Sign	9.000	18.000			
2.0	R11-3a	Road Closed Local Traffic Only	12.500	25.000			
			TOTAL	51.000			

CASTING TABLE				
	FACILITY ID'S			
WATER	NA	NA		
SANITARY	NA	NA		
STORM	NA	NA		
WATER BOX	1	01-00552		

CONSTRUCTION SCOPE AND SEQUENCING

- 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
- 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
- 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.

- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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.



SHEET No.



PROJECT LOCATION: MARSHALL STREET

QUANTITIES Item Description Quantity Item Code Unit Dr Structure, Rem 6.000 Sewer, Rem, Less than 24 inch Ft 60.000 1,487.000 _Curb, Gutter, and Curb and Gutter, Any Type, Rem Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem Syd 379.000 _Grading, Driveway Approach Syd 303.000 _Grading, Sidewalk Syd 36.000 Syd _Grading, Sidewalk Ramp 40.000 Syd 6,371.000 _Machine Grading, Special Cyd _Undercutting, Type IIA 206.000 Erosion Control, Inlet Protection, Fabric Drop 10.000 Sewer, CI IV, 12 inch, Tr Det B 60.000 Cyd Trench Undercut and Backfill 18.000 Dr Structure, 24 inch dia 6.000 _Dr Structure Cover, Type B, Modified 17.000 _Dr Structure Cover, Type K, Modified Ea 4.000 Dr Structure, Adj, Case 1, Modified Ea 19.000 Dr Structure, Temp Lowering, Modified Ea 19.000 Structure, Reconstruct 1.000 4037050 Ea Underdrain, Subgrade, 6 inch, Special 70.000 Cold Milling HMA Surface Syd 6,371.000 HMA Surface, Rem Syd 216.000 Hand Patching 5010025 Ton 19.000 HMA Approach 5010061 Ton 23.000 1,427.000 HMA, LVSP 5010703 Ton _Cold Milling for Concrete Curb and Gutter Reveal Syd 5017011 343.000 _HMA, Wedging, 36A 5017031 Ton 3.000 Flowable Fill Cyd 6027021 28.000 Driveway, Nonreinf Conc, 6 inch, Modified Syd 303.000 8017011 Curb and Gutter, Conc, Barrier 8027001 790.000 _Driveway Opening, Conc, Det M, Modified 8027001 Ft 671.000 Curb Ramp Opening, Conc 36.000 _Detectable Warning Surface, Modified 8037001 30.000 Sidewalk Ramp, Conc, 6 inch, Modified Sft 8037010 364.000 Sidewalk, Conc, 4 inch, Modified Sft 8037010 325.000 Pavt Mrkg, Thermopl, 6 inch, Crosswalk 8110197 128.000 Pavt Mrkg, Thermopl, 24 inch, Stop Bar 50.000 8110218 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn 8120012 Ea 3.000 Barricade, Type III, High Intensity, Double Sided, Lighted, Oper 3.000 8120013 Ea Plastic Drum, Fluorescent, Furn 8120252 Ea 67.000 Plastic Drum, Fluorescent, Oper 8120253 67.000 Ea Sign, Type B, Temp, Prismatic, Furn Sft 8120350 43.000 Sign, Type B, Temp, Prismatic, Oper Sft 8120351 43.000 Sign, Type B, Temp, Prismatic, Special, Furn Sft 8.000 8120352 Sign, Type B, Temp, Prismatic, Special, Oper Sft 8.000 8120353 Pedestrian Type II Barricade, Temp 4.000 8127050 Ea _Temporary No Parking Sign 51.000 8127050 Ea _Slope Restoration Syd 8167011 430.000 Gate Box, Adj, Case 1 1.000 8230431 Ea

ITB No. 4667 FILE No. 2021-004

	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	4.000	8.000			
2.0	W20-1	Road Work Ahead Sign	9.000	18.000			
2.0	R11-3a	Road Closed Local Traffic Only	12.500	25.000			
			TOTAL	51.000			

CASTING TABLE			
		FACILITY ID'S	
WATER	4	01-01269/ 01-01267/ 01-01265 01-01268/	
SANITARY	7	71-69757/ 71-69758/ 71-69759/ 71-69727/ 71-69728/ 71-69729/ 71-69730	
STORM	5	92-58974/ 92-58909/ 92-58908/ 92-58907/ 92-58906/ 92-58905	
WATER BOX	NA	NA	

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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS AS REQUIRED.
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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.

ADDENDUM 3
DESCRIPTION
DATE
DRAWN CHECKED

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



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N ARBOR ING PROJECT - 20 L STREET

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ENGINEER

SCALE: NTS

OMAING NO.



PROJECT LOCATION: SAINT AUBIN AVENUE

QUANTITIES Item Description Quantity Item Code Unit Dr Structure, Rem 3.000 Sewer, Rem, Less than 24 inch Ft 30.000 Curb, Gutter, and Curb and Gutter, Any Type, Rem 274.000 Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem Syd 80.000 Syd _Grading, Driveway Approach 17.000 _Grading, Sidewalk Syd 56.000 Syd _Grading, Sidewalk Ramp 12.000 Machine Grading, Special Syd 3,614.000 Cyd _Undercutting, Type IIA 120.000 Erosion Control, Inlet Protection, Fabric Drop 4.000 Sewer, CI IV, 12 inch, Tr Det B 30.000 Cyd Trench Undercut and Backfill 9.000 Dr Structure, 24 inch dia 3.000 _Dr Structure Cover, Type B, Modified 1.000 _Dr Structure Cover, Type K, Modified Ea 3.000 Dr Structure, Adj, Case 1, Modified 2.000 Dr Structure, Temp Lowering, Modified 4.000 Underdrain, Subgrade, 6 inch, Special 4047001 30.000 Cold Milling HMA Surface Syd 3,614.000 Syd HMA Surface, Rem 30.000 Hand Patching HMA, LVSP 5010703 Ton 835.000 Syd _Cold Milling for Concrete Curb and Gutter Reveal 35.000 Cyd Flowable Fill 6027021 5.000 Driveway, Nonreinf Conc, 8 inch, Modified Syd 17.000 _Curb and Gutter, Conc, Barrier 8027001 236.000 _Driveway Opening, Conc, Det M, Modified 38.000 Curb Ramp Opening, Conc 12.000 8030030 Ft _Detectable Warning Surface, Modified 10.000 Sidewalk Ramp, Conc, 6 inch, Modified Sft 108.000 Sidewalk, Conc, 4 inch, Modified Sft 190.000 Sidewalk, Conc, 8 inch, Modified 8037010 Sft 310.000 Pavt Mrkg, Thermopl, 6 inch, Crosswalk 8110197 84.000 Pavt Mrkg, Thermopl, 24 inch, Stop Bar 8110218 Ft 24.000 Pavt Mrkg, Waterborne, for Rest Areas, Parks, & Lots, 4 inch, Blue 8110293 140.000 Pavt Mrkg, Waterborne, for Rest Areas, Parks, & Lots, 4 inch, White 1,764.000 8110293 Barricade, Type III, High Intensity, Double Sided, Lighted, Furn 8120012 Ea 2.000 Barricade, Type III, High Intensity, Double Sided, Lighted, Oper 2.000 8120013 Ea Plastic Drum, Fluorescent, Furn 8120252 Ea 16.000 Plastic Drum, Fluorescent, Oper 16.000 8120253 Ea Sign, Portable, Changeable Message, Oper Ea 2.000 Sign, Type B, Temp, Prismatic, Furn Sft 8120350 159.000 Sign, Type B, Temp, Prismatic, Oper Sft 159.000 8120351 Sign, Type B, Temp, Prismatic, Special, Furn Sft 8120352 16.000 Sign, Type B, Temp, Prismatic, Special, Oper Sft 8120353 16.000 Pedestrian Type II Barricade, Temp 8127050 Ea 4.000 Pedestrian Type II Channelizer, Temp 8127050 Ea 8.000 Temporary No Parking Sign 15.000 8127050 Ea Slope Restoration Syd 8167011 79.000 Gate Box, Adj, Case 1 8230431 Ea 2.000

ITB No. 4667 FILE No. 2021-004

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	4.000	16.000	
2.0	G20-2	End Road Work	4.500	9.000	
2.0	W3-5B	Reduce Speed Zone	9.000	18.000	
1.0	W4-2R	Lane Ends / Right	9.000	9.000	
4.0	W20-1	Road Work Ahead Sign	9.000	36.000	
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000	
2.0	R2-1	Speed Limit	7.500	15.000	
2.0	R5-18C	Work Zone Begins	16.000	32.000	
2.0	R6-1L	One Way / Left	3.000	6.000	
2.0	R11-3a	Road Closed Local Traffic Only	12.500	25.000	
			TOTAL	175.000	

CASTING TABLE			
	FACILITY ID'S		
WATER	NA	NA	
SANITARY	1	71-62417	
STORM	NA	NA	
WATER BOX	NA	NA	

CONSTRUCTION SCOPE AND SEQUENCING

- 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.
- 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,
- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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.



SHEET No.



PROJECT LOCATION: VERLE AVENUE

ITB No. 4667 FILE No. 2021-004

Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	12.00
2030011	Sewer, Rem, Less than 24 inch	Ft Ft	120.00
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	2,448.00
2047001	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	218.00
2057011	Grading, Driveway Approach	Syd	210.00
2057011	Grading, Sidewalk	Syd	1.00
2057011		Syd	2.00
2057011		Syd	6,925.00
2057021	_Undercutting, Type IIA	Cyd	231.00
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	16.00
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	120.00
4021260	Trench Undercut and Backfill	Cyd	36.00
4030200	Dr Structure, 24 inch dia	Ea	12.00
4037050	_Dr Structure Cover, Type B, Modified	Ea	13.00
4037050	_Dr Structure Cover, Type K, Modified	Ea	10.00
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	22.00
4037050	_Dr Structure, Temp Lowering, Modified	Ea	22.00
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	120.00
5010002	Cold Milling HMA Surface	Syd	6,925.00
5010005	HMA Surface, Rem	Syd	272.00
5010025	Hand Patching	Ton	31.00
5010703	HMA, LVSP	Ton	1,600.00
6027021	_Flowable Fill	Cyd	45.00
8017011	_Driveway, Nonreinf Conc, 6 inch, Modified	Syd	210.00
8027001	_Curb and Gutter, Conc, Barrier	Ft	1,438.00
8027001	_Driveway Opening, Conc, Det M, Modified	Ft	1,004.00
8030030	Curb Ramp Opening, Conc	Ft	6.00
8037001	_Detectable Warning Surface, Modified	Ft	5.00
8037010	_Sidewalk Ramp, Conc, 6 inch, Modified	Sft	21.00
8037010	_Sidewalk, Conc, 6 inch, Modified	Sft	7.00
8110197	Pavt Mrkg, Thermopl, 6 inch, Crosswalk	Ft	246.00
8110218	Pavt Mrkg, Thermopl, 24 inch, Stop Bar	Ft	15.00
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	2.00
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	2.00
8120252	Plastic Drum, Fluorescent, Furn	Ea	115.00
8120253	Plastic Drum, Fluorescent, Oper	Ea	115.00
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	198.00
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	198.00
8120352	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	8.00
8120353	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	8.00
8127050	_Temporary No Parking Sign	Ea	62.00
8167011	Slope Restoration	Syd	500.00

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	4.000	8.000
2.0	G20-2	End Road Work	4.500	9.000
1.0	W1-4L	Reverse Curve (Left)	9.000	9.000
1.0	W1-4L	Reverse Curve (Right)	9.000	9.000
2.0	W1-6L	Shift arrow Left	9.000	18.000
2.0	W1-6R	Shift arrow Right	9.000	18.000
2.0	W3-5B	Reduce Speed Zone	9.000	18.000
2.0	W20-1	Road Work Ahead Sign	9.000	18.000
2.0	W20-5A	Center Lane Closed Ahead	9.000	18.000
1.0	W20-5R	Right Lane Closed Ahead	9.000	9.000
2.0	R2-1	Speed Limit	7.500	15.000
2.0	R5-18C	Work Zone Begins	16.000	32.000
2.0	R11-3a	Road Closed Local Traffic Only	12.500	25.000
			TOTAL	206.000

	CASTING TABLE			
WATER	2	01-02087/ 01-02088/		
SANITARY	9	71-69721/ 71-69722/ 71-69723/ 71-69724/ 71-69725/ 71-69726/ 71-69731/ 71-69735/ 71-69736/		
STORM	7	92-58898/ 92-58899/ 92-58900/ 92-58901/ 92-58902/ 92-58904/ 92-58896/		
WATER BOX	NA	NA		

CONSTRUCTION SCOPE AND SEQUENCING

- 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
- INSTALL PROPOSED DRAINAGE STRUCTURES, STORM SEWER, AND UNDERDRAIN AS REQUIRED.
- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, 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.

- 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.
- 12. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISHED ELEVATIONS
- 13. CLEAN PAVEMENT AND WITH APPROVAL FROM THE ENGINEER PLACE 2.0 INCH TOP COURSE HMA MIX (LVSP).
- 14. CLEAN PAVEMENT AND PLACE SIDE STREET HMA APPROACHES (TOP COURSE) AS REQUIRED.
- 15. CLEAN PAVEMENT AND PLACE HMA APPROACHES OR WEDGING (DRIVEWAYS) AS REQUIRED.
- 16. OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- 17. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED.
- 18. REMOVE ALL SESC MEASURES.
- 19. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES, ALL OTHER NECESSARY CLEAN UP, AND FINAL RESTORATION.
- 20. REMOVE ALL TRAFFIC CONTROL DEVICES, NO PARKING SIGNS, AND MISS DIG FLAGS.

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.



SHEET No.



CITY OF ANN ARBOR ENGINEERING PROJECT LOCATION:

YOST BOULEVARD AND ELI ROAD SIDEWALK

ITB No. 4667 FILE No. 2021-004

QUANTITIES			
Item Code	Item Description	Unit	Quantity
2030011	Dr Structure, Rem	Ea	10.000
2030015	Sewer, Rem, Less than 24 inch	Ft	100.000
2047001	_Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	1,539.000
2047011	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Syd	561.000
2057011	_Grading, Driveway Approach	Syd	441.000
2057011	_Grading, Sidewalk	Syd	191.000
2057011	_Grading, Sidewalk Ramp	Syd	45.000
2057011	_Machine Grading, Special	Syd	9,000.000
2057021	_Undercutting, Type IIA	Cyd	300.000
2087050	Erosion Control, Inlet Protection, Fabric Drop	Ea	17.000
4020987	Sewer, Cl IV, 12 inch, Tr Det B	Ft	100.000
4021260	Trench Undercut and Backfill	Cyd	30.000
4030200	Dr Structure, 24 inch dia	Ea	10.000
4030280	Dr Structure, Adj, Add Depth	Ft	1.000
4037050	_Dr Structure Cover, Type B, Modified	Ea	18.000
4037050	_Dr Structure Cover, Type K, Modified	Ea	10.000
4037050	_Dr Structure, Adj, Case 1, Modified	Ea	31.000
4037050	_Dr Structure, Adj, Case 2, Modified	Ea	1.000
4037050	_Dr Structure, Cleaning, Modified	Ea	1.000
4037050	_Dr Structure, Temp Lowering, Modified	Ea	28.000
4047001	_Underdrain, Subgrade, 6 inch, Special	Ft	100.000
4047001	_Yard Drain, Outlet Ending, Plastic Pipe	Ft	1.000
4047050	_Yard Drain, Outlet Ending, Pop-up Apparatus	Ea	1.000
5010002	Cold Milling HMA Surface	Syd	9,000.000
5010005	HMA Surface, Rem	Syd	262.000
5010025	Hand Patching	Ton	20.000
5010703	HMA, LVSP	Ton	2,079.000
5017011	_Cold Milling for Concrete Curb and Gutter Reveal	Syd	614.000

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	4.000	24.000
4.0	W20-1	Road Work Ahead Sign	9.000	36.000
			TOTAL	60.000

CASTING TABLE			
	FACILITY ID'S		
WATER	NA	NA	
SANITARY	NA	NA	
STORM	NA	NA	
WATER BOX	NA	NA	

CONSTRUCTION SCOPE AND SEQUENCING

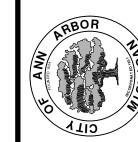
- INSTALL NO PARKING SIGNS (AS REQUIRED), AND ONCE THE SIGNS ARE ENFORCEABLE IMPLEMENT THE MAINTENANCE OF TRAFFIC (M.O.T.) PLAN AND PERMISSIBLE TRAFFIC RESTRICTIONS, AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, AS REQUIRED
- CLEAN PAVEMENT AND COMPLETE ANY HMA PAVEMENT PATCHING AS REQUIRED.
- OPEN STREET TO ALL TRAFFIC UPON APPROVAL OF THE ENGINEER.
- CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS AS REQUIRED
- 7. REMOVE SESC MEASURES.
- 8. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING TEMPORARY CLEANING OF STRUCTURES AND ALL OTHER NECESSARY CLEAN UP. FINAL RESTORATION.
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