ADDENDUM No. 1

ITB No. 4519

North Fifth Avenue Reconstruction

Bids Due: January 11, 2018 at 10:00 A.M. (local time)

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. **This Addendum includes 31 pages.**

Bidder is to acknowledge receipt of this Addendum No. 1, 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 will be considered nonconforming.

The following forms provided within the ITB Document must be included in submitted bids at bid opening.

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

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

I. CORRECTIONS/ADDITIONS/DELETIONS/CLARIFICATIONS

Changes to the Bid documents 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.

1. Pre-Bid Meeting Minutes and Sign-In Sheets pages ADD1- 5-8
2. Bid Forms, pages BF-1 thru BF-8; replace these pages with attached pages ADD1- 9 – 16
3. Detailed Specifications, pages DS-46 thru DS-49; replace with Special Provision for HMA Pavement Base Course/HMA Pavement Leveling/HMA Pavement Wearing ADD1- 17-20
4. Plan sheets C1.01 thru .03, C3.00, .01, .04, C6.01, C7.00, C8.01, and L1.0; replace with attached pages ADD1 21-30
5. Insert ADD1 – 31 into the plan sheet set as reference of existing and proposed conditions.
6. Clarification: The note regarding plant substitutes at the bottom of the Plant List on Drawing L1.0 has been deleted.
7. Clarification: The actual dimension of the new brick specified to be as follows:
    - Thickness: 4 inches (nominal)
    - Face Size: 3-3/8 inches by 9 inches (nominal)
8. Clarification and Addition: Relative to the Bid Alternate for Sidewalk Brick, the following Pay Items have been added to the Bid Form:
    - 238-2 “Concrete Pavement Base, 6 inch (under sidewalk pavers)”, and

- 241-2 “Brick Pavers, New (sidewalk)”. The specification for brick materials and installation will meet the requirements specified for Pay Item #241 “Brick Pavers, New”

9. Clarification: All concrete paving paid for as Pay Item #238 “Concrete Pavement Base, 8 inch (under pavers)” and #239 “Concrete Crosswalk, 12 inch” will be reinforced with steel mesh as noted in Detail 4, Drawing No. C10.1. Said reinforcement will be included in the unit price for the respective items.
10. Clarification: The drawings indicate work to be completed outside of the right of way on property owned by the Ann Arbor Public Schools. This work is an extension of the right of way work, and will be paid for based on the applicable unit prices. Machine Grading, Modified will be extended to the limits of grading where work includes property adjacent to the right of way.

II. REQUEST FOR INFORMATION

1. Please clarify if “Machine Grading, Modified” will be paid for twice, for each side of the road, by the station, as necessary. The description in measurement and payment could be read a variety of ways.
    - Response: It will be paid per side of the construction centerline for each station, or portion of, constructed.
2. Is the aggregate / sand sub-base or base material for the concrete curb, concrete ramps, concrete sidewalk, concrete drive approaches, concrete pavement base and concrete crosswalk incidental to the above pay items, or will it be paid for separately as sand sub-base / aggregate base course?
    - Response: Aggregate and sand will be paid for separately. Sand subbase quantities reflect replacing a majority of new sidewalk on existing, in-situ, sand base.
3. Does the pay item for “Temporary Line Stops” include the necessary items for surface restoration (pavement, aggregate, etc.), or will these items be paid for separately? The special provision makes reference to the removals, but does not directly address the restoration. Please clarify.
    - Response: Pavement cross section replacement will be paid for separately. A detail has been provided on C3.0, noting applicable pay items.
4. Please clarify if ANY of the proposed improvements that are scheduled to be performed OUTSIDE of the typical Machine Grading Limits (ROW to ROW) will be included in the stationing for the Machine Grading Pay Item and/or covered in the other typical pay items (pavement removal, agg base, HMA, concrete sidewalk, etc.). Specifically, the hydrant extension on Fifth Street (STA 7+22) appears to extend past the typical Machine Grading pay limits. How will removals and restoration be paid for outside of the typical Machine Grading pay limits?
    - Response: The work at station 7+22 has been revised; see #6 for further information. In other locations outside of the right of way, the pay item limits will extend to the grading limits.
5. It appears that there is no a traffic control plan/staging plan for the proposed water main work and interconnections at the various intersections, Kingsley Street and the southern leg of Detroit Street. Will the City be issuing staging/traffic control plans for these various stages of water main work?
    - Response: See attached plans.

6. Please clarify the water main abandonment limits for the existing main that runs parallel to the proposed hydrant at STA 07+22 on Fifth. The plans are not clear as to the intent of this work.
    - Response: This hydrant will not be replaced, but the lead up to the valve will be upsized per the revised, attached plan.
7. Do you intend on leaving unconnected legs of proposed water main (dead end “stubs”), as required, to allow for a traditional phased ROW improvements? We need to get an idea of what will be REQUIRED by the City in relation to the various water main improvements for each street so that we can marry the water main phasing and scheduling to the ROW improvement phasing.
    - Response: ‘Dead ends’ will not permitted, and therefore must be temporarily connected to the existing main to ensure continued looping in the system.
8. Could multiple crews install water main simultaneously between the various phases?
    - Response: Yes, as long as work is continuous, and traffic is maintained in accordance with the restrictions noted in the contract documents.
9. Will the road(s) require temporary surface(s) as we make the required interconnections in the intersections and between mainline testing stubs? If so, how will this work be paid for? Do you have a required temporary pavement cross section?
    - Response: It is likely that a temporary surface will be required to maintain traffic. A cross section detail and pay items for temporary pavement have been added to the plans.
11. Would it be possible to get a drawing showing the existing road configuration overlaid with the new road configuration?
    - Response: Included in the addendum.
12. For items 229-1 & 229-2 Brick, Rem/sort. Do these brick need to be palletized or sorted and dumped in a pile at the specified location?
    - Response: Store salvaged bricks on pallets to preserve their integrity.
13. On Sheet C8.02, item H "Replace damaged brick in this area as directed by the project engineer," what pay item does this go under?
    - Response: The intent of this note is to notify the contractor that the limits of brick road paving in this area of Detroit Street will be determined in the field by the Engineer, and paid for under Pay Item #229-1 “Brick Pavers, Rem, Sort and Salvage, Roadway”, and Pay Item #242 “Brick, Install Salvaged Brick”.
14. Is the intent to use pay item 242 Brick, Install Salvaged Brick for the repaired parts of Detroit Street from 5th Street to Catherine St?
    - Response: Yes
15. The specification for Item 246 Concrete Unit Retaining Wall, Rem, Salvage, and Re-install calls out to backfill the wall with sand; however, manufacturer's recommended installation is to have a minimum of 12" of 100% crushed stone (typically 6A) behind the wall for drainage to prevent hydrostatic pressure behind the wall.
    - Response: Backfill the wall as currently specified in the contract documents.
16. Please also verify what line item the granular material for the tree grates is included in.
    - Response: The granular material noted on Detail 5, Drawing No. C10.4 will be paid for as Pay Item #260- “Sand Subbase Course, Class II - C.I.P.” Excavation required to install the granular material, planting soil and plant material is incidental to the installation of the tree.
17. Do you have a source for the bike hoops?
    - Response: Bike hoops meeting the specifications are available from a number of manufacturers.

- Clarification: The bike hoop pipe itself is to be made of galvanized steel, not stainless steel as noted in the specifications; all mounting hardware is to be made of stainless steel.

18. Are we to include mulch? It is shown in the details, but not on the bid form.
    - Response: Mulching is not a separate pay item, but is to be included in the cost of the landscape plantings.
19. Are we to include (2) Quercus macrocarpa per the bid form or (2) Quercus rubra per the plans?
    - Response: The correct species is Quercus Macrocarpa, as noted on the revised plan sheet.
20. The (6) Calamagrostis x 'Karl Foerster' shown on L1.0 are missing on the bid form.
    - Response: Refer to revised bid form and plan sheet.
21. Will any lawn restoration be required? It is not included on the bid form.
    - Response: there is limited lawn restoration, and the work is included in 'Machine Grading, Modified"
22. The plans show (3) ADA benches & tables and (6) non-ADA benches & tables. Do these need to be separate on the bid form? The cost varies between the two.
    - Response: Refer to revised bid form.

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

North Fifth Avenue Reconstruction
PreBid Meeting Minutes
Friday, December 15, 2017

I. Introductions

II. General

A. Overview

Partnership with the DDA for construction in the area of North Fifth Avenue and Detroit Street, including water main replacement, roadway reconstruction and resurfacing, storm water improvements, streetscape, and lighting. Per the Bid Documents, questions regarding the construction should be directed to Jenn Nelson (JNelson@a2gov.org) and questions regarding the Bid Process and Compliance should be directed to Colin Spencer (Cspencer@a2gov.org). An Addendum will be issued.

B. Items of Work

1. Water main replacement – 5th Ave (Kingsley to Catherine), Detroit (5th to Kingsley), and Kingsley (5th to Detroit)
2. Reconstruction
   a) North Fifth full depth asphalt on aggregate base (Catherine to Kingsley)
   b) Detroit is salvaged bricks on concrete base, supplemented with new bricks. Goal is to salvage as many bricks as possible due to their unique historic character. The salvage rate was assumed to be about 20%. Supplemental new bricks are to be sourced as described in the specifications.
3. Resurfacing of Kingsley
4. Infiltration and minor storm improvements
5. Streetscape
   a) New sidewalk and ramps
   b) Plaza reconstruction with benches, planters, and rain garden
   c) Amenities include trees, tree grates, and plantings
6. Pedestrian lighting
   a) Conduit is also included for underground telecommunications and City IT fiber
7. Misc.
   a) Insurance –
      (1) Add DDA as additional insured
      (2) Submit endorsements with certificate to ensure timely approval
   b) Project coordination with merchants, farmers market, and CHS high school to maintain access to businesses at all times. Project requires balancing through traffic and local pedestrian access, so be prepared to need to adjust operations during construction.
   c) There will be no Farmers Market building construction
   d) Alternate bid for sidewalk pavers will be issued with first Addendum (Details are already included in plans)
   e) Items 207 & 284 – Bidders should visit the site to evaluate amenity removal and reinstallation items (e.g., benches, planter, historical marker, etc)

f) Item 295 Special Plaza Lighting – read spec carefully as City/DDA will be supplying poles and lights for most of project, but some lighting near Farmers Market to be supplied by Contractor.

III. Schedule

A. Deadline for Questions – 5:00 p.m., Thursday, December 28, 2017
B. Bid Opening – Thursday, January 11, 2018, 10:00 am
C. Start late-March or early April, 2018
D. Completion of November 9, 2018
E. Maintain one lane on North Fifth
    1. Until summer recess June 18, 2018
    2. During Art Fair July 18-22, 2018
    3. At school start September 4, 2018 through completion

IV. Questions

A. Area of non-hazardous contamination is near Teriyaki Time which was once a gas station
B. Engineer's Estimate is $5.373M
C. Staking and testing will be by City
D. Inspection will be by City

Contact Information:

Jennifer Nelson
Project Manager
Phone: (734) 794-6410 ext. 43672
E-mail: jnelson@a2gov.org

PREBID MEETING MEETING SIGN-IN SHEET

PROJECT: North Fifth Ave Reconstruction

File No. 2015-037
Date: 12/15/17

PLEASE PRINT

NAME	REPRESENTING	MAILING ADDRESS	TELEPHONE	EMAIL
Jennifer Nelson Project Engineer	City of Ann Arbor - Project Management	Address: 301 East Huron St, P.O. Box 8647 City, State: Ann Arbor, MI Zip: 48107-8647	Office: (734) 794-6410 x43672 Fax: (734) 994-1744	jnelson@a2gov.org
Bob Doyle	SGJJR	Address: 201 DEPOT ST. City, State: ANN ARBOR Zip: 48104	Office: (734) 669-2695 Mobile: (734) 546-0408	bob.doyle@smithgroupjjr.com
JOHN HEAVEY	FOUSON COMPANY	Address: 7644 WHITMORE LAKE RD City, State: BRIGHTON, MI Zip: 48116	Office: (810) 231-5188 Mobile: (810) 522-7965	ESTIMATING@FOUSONINC.COM
Mike Hoosier	Doyle & Higgins	Address: 3390 Town Court Rd City, State: Ann Arbor Zip: 48108	Office: (734) 996 8500 Mobile: ( )	mikeh@dhiggins.com
		Address: City, State: Zip:	Office: ( ) Mobile: ( )	
		Address: City, State: Zip:	Office: ( ) Mobile: ( )	
		Address: City, State: Zip:	Office: ( ) Mobile: ( )	
		Address: City, State: Zip:	Office: ( ) Mobile: ( )	

PREBID MEETING MEETING SIGN-IN SHEET

PROJECT: North Fifth Ave Reconstruction

File No. 2015-037
Date: 12/15/17

MEETING SIGN-IN SHEET PLEASE PRINT

NAME	REPRESENTING	MAILING ADDRESS	TELEPHONE	EMAIL
Liz Rolla	DDA	Address: _____ City, State: _____ Zip: _____	Office: ( ) _____ Mobile: (734) 323 7156	erolla@a2dda.org
Jacob Bailey	Bailey EX	Address: 1073 Toro Dr. City, State: Jackson Zip: 49201	Office: (517) 750-3536 Mobile: (517) 740-0371	Jacob Bailey@Bailey-Excavating.com
John Niemiec	E.T. MacKenzie Company	Address: 6400 Jackson Road City, State: Ann Arbor, MI Zip: 48103	Office: (734) 761.5050 Mobile: (734) 216.0995	jniemiec@mackenzieco.com
		Address: _____ City, State: _____ Zip: _____	Office: ( ) _____ Mobile: ( ) _____	
		Address: _____ City, State: _____ Zip: _____	Office: ( ) _____ Mobile: ( ) _____	
		Address: _____ City, State: _____ Zip: _____	Office: ( ) _____ Mobile: ( ) _____	
		Address: _____ City, State: _____ Zip: _____	Office: ( ) _____ Mobile: ( ) _____	
		Address: _____ City, State: _____ Zip: _____	Office: ( ) _____ Mobile: ( ) _____	

BID FORM
Section 1 - Schedule of Prices
Project ITB - 4519 - North Fifth Avenue Reconstruction

Item Number	Description	Unit	Quantity	Unit Price	Total Cost
101	General Conditions, Max $200,000	LS	1	$ _____	= $ _____
102	Audiovisual Tape Coverage	LS	1	$ _____	= $ _____
104	Certified Payroll Compliance and Reporting	LS	1	$ _____	= $ _____
120	Project Supervision, Max $100,000	LS	1	$ _____	= $ _____
135	Tree Removal (8" and Larger)	Ea	25	$ _____	= $ _____
140	Exploratory Excavation (0-10' deep)	Lft	400	$ _____	= $ _____
203	Minor Traf Devices	LS	1	$ _____	= $ _____
204	Non-hazardous Contaminated Material Handling and Disposal	Cyd	550	$ _____	= $ _____
205	Machine Grading, Modified,	Sta	27	$ _____	= $ _____
207	Plaza Amenities, Rem and Salvage	LS	1	$ _____	= $ _____
208	Geotextile	Syd	450	$ _____	= $ _____
209	Geogrid	Syd	200	$ _____	= $ _____
210	Stone Reservoir	Cyd	250	$ _____	= $ _____
215	Infiltration Inlet	Ea	4	$ _____	= $ _____
220	HMA Base Course	Ton	530	$ _____	= $ _____
221	HMA Leveling	Ton	360	$ _____	= $ _____
222	HMA Wearing	Ton	315	$ _____	= $ _____
223	Temporary Pavement/Pedestrian Access	Syd	1,200	$ _____	= $ _____
224	Hand Patching	Ton	100	$ _____	= $ _____
226	Recessing Pavt Mrkg, Transv	Sft	2,110	$ _____	= $ _____
227	Remove Concrete Sidewalk and Driveways - Any Thickness	Syd	2,529	$ _____	= $ _____

Total This Page $_____

Include on BF-8

BID FORM
Section 1 - Schedule of Prices
Project ITB - 4519 - North Fifth Avenue Reconstruction

Item Number	Description	Unit	Quantity	Unit Price	Total Cost
228	Road Pavement, Rem	Syd	4,347	$ _____	= $ _____
229-1	Brick Pavers, Rem, Sort and Salvage, Roadway	Syd	2,168	$ _____	= $ _____
229-2	Brick Pavers, Rem, Sort and Salvage, Sidewalk	Syd	343	$ _____	= $ _____
230	Remove Concrete Curb or Curb & Gutter - Any Type	Lft	2,160	$ _____	= $ _____
231	Concrete Curb, 6 inch Straight	Lft	795	$ _____	= $ _____
232	Concrete Planter Curb	Lft	409	$ _____	= $ _____
233	Salvage and Reset Stone Curb	Lft	60	$ _____	= $ _____
234	Concrete Curb & Gutter - Any Type	Lft	2,162	$ _____	= $ _____
235	8 inch Concrete Ramp	Sft	2,716	$ _____	= $ _____
236	6-Inch Concrete Sidewalk	Sft	20,224	$ _____	= $ _____
237	8-Inch Concrete Drive Approach (TYPE L or M)	Sft	5,595	$ _____	= $ _____
238-1	Concrete Pavement Base, 8 inch (under pavers)	Sft	14,851	$ _____	= $ _____
239	Concrete Crosswalk, 12 inch	Sft	3,764	$ _____	= $ _____
240	Detectable Warning Surface	Sft	322	$ _____	= $ _____
241-1	Brick Pavers, New	Sft	11,881	$ _____	= $ _____
242	Brick, Install Salvaged Brick	Sft	2,970	$ _____	= $ _____
245	Concrete Seat Wall	Lft	179	$ _____	= $ _____
246	Concrete Unit Retaining Wall, Rem, Salvage, and Re-install	Lft	30	$ _____	= $ _____
249	Hydrant Assembly Abandonment	Ea	3	$ _____	= $ _____
250	Drain Pipe, 6 Inch	Lft	60	$ _____	= $ _____
251	Landscape Inlet	Ea	2	$ _____	= $ _____

Total This Page $_____

Include on BF-8

BID FORM
Section 1 - Schedule of Prices
Project ITB - 4519 - North Fifth Avenue Reconstruction

Item Number	Description	Unit	Quantity	Unit Price	Total Cost
252	Sewer Bulkhead, 4-inch Through 18 inch diameter	Ea	4	$ _____	= $ _____
255	Temporary 6 Inch Water Main Line Stop	Ea	2	$ _____	= $ _____
256	Temporary 8 Inch Water Main Line Stop	Ea	2	$ _____	= $ _____
257	Temporary 12 Inch Water Main Line Stop	Ea	2	$ _____	= $ _____
260	Sand Subbase Course, Class II - C.I.P.	Cyd	350	$ _____	= $ _____
261	Planting Soil	Cyd	150	$ _____	= $ _____
262	Composite Planting Mix	Cyd	20	$ _____	= $ _____
263	Riprap, Fieldstone	Cyd	2	$ _____	= $ _____
264	Landscape Maintenance	Month	14	$ _____	= $ _____
266	Tree Grate, 3 ft. X 5 ft.	Ea	4	$ _____	= $ _____
267	Tree Grate, 3 ft. X 10 ft.	Ea	32	$ _____	= $ _____
270	No Parking Sign	Ea	20	$ _____	= $ _____
271	Sign, Portable Changeable Message	Ea	1	$ _____	= $ _____
272	Channelizing Device, 42 Inch	Ea	80	$ _____	= $ _____
273	Barricade Type III - Lighted	Ea	40	$ _____	= $ _____
275	Temporary Sign - Type B	Ea	80	$ _____	= $ _____
276	Temporary Sign - Type A	Ea	10	$ _____	= $ _____
278	Lighted Arrow, Type C, Furnish & Operate	Ea	2	$ _____	= $ _____
279	Temporary Pedestrian Type II Barricade	Ea	20	$ _____	= $ _____
280	Temporary Pedestrian Type II Channelizer	Ea	1,200	$ _____	= $ _____
281	Urban Bench	Ea	8	$ _____	= $ _____

Total This Page $_____

Include on BF-8

BID FORM
Section 1 - Schedule of Prices
Project ITB - 4519 - North Fifth Avenue Reconstruction

Item Number	Description	Unit	Quantity	Unit Price	Total Cost
282-1	Urban Table and Benches, Standard	Ea	6	$ _____	= $ _____
282-1	Urban Table and Benches, ADA	Ea	3	$ _____	= $ _____
283	Bike Hoops, Surface Mount	Ea	6	$ _____	= $ _____
284	Reinstall Plaza Amenities	LS	1	$ _____	= $ _____
285	Remove Parking Meter	Ea	25	$ _____	= $ _____
286	Install Parking Meter	Ea	24	$ _____	= $ _____
287	2" Schedule 80 PVC Electrical Conduit	Lft	1,296	$ _____	= $ _____
288	3" Schedule 80 PVC Electrical Conduit	Lft	6,631	$ _____	= $ _____
289	4" Schedule 80 PVC Electrical Conduit	Lft	648	$ _____	= $ _____
290	Street Light, Rem	Ea	28	$ _____	= $ _____
291	Special Trench Detail	Lft	215	$ _____	= $ _____
292	Luminaire Installation	Ea	51	$ _____	= $ _____
293	Pole Installation	Ea	39	$ _____	= $ _____
295	Special Plaza Lighting	LS	1	$ _____	= $ _____
296.10	Electrical Wiring - 10 Gauge	Lft	4800	$ _____	= $ _____
296.8	Electrical Wiring - 8 Gauge	Lft	4000	$ _____	= $ _____
297	Handhole Assembly, 12 inch x 18 inch	Ea	46	$ _____	= $ _____
298	Handhole Assembly, 17 inch x 30 inch	Ea	14	$ _____	= $ _____
305	SDR 35 PVC Pipe, 8 inch, Tr Det VII	Lft	18	$ _____	= $ _____
305	SDR 35 PVC Sanitary Service Pipe, (4-8 inch, Tr Det I)	Lft	160	$ _____	= $ _____
320	RCP, 12 inch, Cl E, Tr Det I	Lft	505	$ _____	= $ _____

Total This Page $_____

Include on BF-8

BID FORM
Section 1 - Schedule of Prices
Project ITB - 4519 - North Fifth Avenue Reconstruction

Item Number	Description	Unit	Quantity	Unit Price	Total Cost
321	RCP, 15 inch, Cl E, Tr Det I	Lft	240	$ _____	= $ _____
322	12 inch Infiltration Pipe	Lft	145	$ _____	= $ _____
360	Type 1 Manholes	Ea	2	$ _____	= $ _____
367	Single Inlet, 4 ft. dia.	Ea	14	$ _____	= $ _____
368	Single Inlet, 5 ft. dia.	Ea	1	$ _____	= $ _____
369	Single Inlet, 6 ft. dia.	Ea	1	$ _____	= $ _____
385	Sewer Pipe Abandonment	Lft	730	$ _____	= $ _____
386	Sewer Structure Abandonment	Ea	10	$ _____	= $ _____
392	Pipe Undercut & Refill	Cyd	70	$ _____	= $ _____
481	Water Main Pipe Abandonment	Lft	1,970	$ _____	= $ _____
482	Gate Valve-in-Box, Remove or Abandon	Ea	3	$ _____	= $ _____
483	Gate Valve-in-Well, Remove or Abandon	Ea	3	$ _____	= $ _____
510	Cold Milling Bituminous Pavement	Syd	450	$ _____	= $ _____
516	6" Wrapped Edge Drain	Lft	2,100	$ _____	= $ _____
522	Subgrade Undercutting, Type II	Cyd	200	$ _____	= $ _____
527	Aggregate Base Course - 21AA - C.I.P.	Syd	6,000	$ _____	= $ _____
563	Structure Covers	lbs	1,600	$ _____	= $ _____
564	Reconstruct Structure	Ea	2	$ _____	= $ _____
566	Adjust Structure Cover	Ea	16	$ _____	= $ _____
567	Adjust Monument Box or Gate Valve Box	Ea	4	$ _____	= $ _____
582	Temporary Pavement Marking (Type R)-In Place	Lft	500	$ _____	= $ _____

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BID FORM
Section 1 - Schedule of Prices
Project ITB - 4519 - North Fifth Avenue Reconstruction

Item Number	Description	Unit	Quantity	Unit Price	Total Cost
630-1	Street Light Foundation, Type 1	Ea	39	$ _____	= $ _____
630-2	Street Light Foundation, Type 2	Ea	10	$ _____	= $ _____
702	Inlet Filter	Ea	40	$ _____	= $ _____
703	Silt Fence	Lft	1,200	$ _____	= $ _____
810	Acer Griseum	Ea	10	$ _____	= $ _____
811	Amelanchier Canadensis 'Autumn Brilliance'	Ea	5	$ _____	= $ _____
812	Cercis canadensis	Ea	3	$ _____	= $ _____
813	Celtis Occidentalis	Ea	2	$ _____	= $ _____
814	Quercus Macrocarpa	Ea	2	$ _____	= $ _____
815	Syringa reticula 'Ivory Silk'	Ea	10	$ _____	= $ _____
816	Ulmus Japonica 'Discovery'	Ea	14	$ _____	= $ _____
817	Ulmus x. 'Prospector'	Ea	8	$ _____	= $ _____
818	Arctostaphylos uva-ursi	Ea	61	$ _____	= $ _____
819	Hemerocallis 'Stella d'Oro'	Ea	169	$ _____	= $ _____
820	Iris siberica 'Baby Sister'	Ea	73	$ _____	= $ _____
821	Liriope Muscari 'Variegata'	Ea	416	$ _____	= $ _____
822	Narciuss x' Dutch Master'	Ea	455	$ _____	= $ _____
823	Sesleria Autumnalis	Ea	304	$ _____	= $ _____
824	Carex Vulpinoidea	Ea	49	$ _____	= $ _____
825	Panicum Virgatum 'Shenandoah'	Ea	175	$ _____	= $ _____
826	Pachysandra Terminalis	Ea	213	$ _____	= $ _____

Total This Page $_____

Include on BF-8

Item Number	Description	Unit	Quantity	Unit Price	Total Cost
827	Calamagrostis X 'Karl Foerster'	Ea	6	$ _____	= $ _____
901	Class 50 DIP w/Polyethylene Wrap, 12 inch, Tr Det I	Lft	1,560	$ _____	= $ _____
902	Class 50 DIP w/Polyethylene Wrap, 8 inch, Tr Det I	Lft	50	$ _____	= $ _____
903	Class 50 DIP w/Polyethylene Wrap, 6 inch, Tr Det I	Lft	115	$ _____	= $ _____
904	Bends and Reducers, 12 inch	Ea	40	$ _____	= $ _____
905	Bends and Reducers, 8 inch	Ea	10	$ _____	= $ _____
906	Bends and Reducers, 6 inch	Ea	10	$ _____	= $ _____
907	Tees & Crosses	Ea	13	$ _____	= $ _____
908	Gate Valve-in-Well, 12 inch	Ea	11	$ _____	= $ _____
910	Fire Hydrant Assembly	Ea	4	$ _____	= $ _____
915	Excavate and Backfill Water Service Trench Tap and Lead	Lft	140	$ _____	= $ _____
920	Pavt Mrkg, Wet Retrflec Polyurea, 4 inch, White	LFt	1,000	$ _____	= $ _____
921	Pavt Mrkg, Wet Retrflec Polyurea, 6 inch, White	LFt	810	$ _____	= $ _____
922	Pavt Mrkg, Wet Retrflec Polyurea, 4 inch, Yellow	LFt	300	$ _____	= $ _____
923	Pavt Mrkg, Wet Retrflec Thermopl, 12 inch, Crosswalk	LFt	1,850	$ _____	= $ _____
924	Pavt Mrkg, Wet Retrflec Thermopl, 12 inch, Cross Hatching, White	Lft	40	$ _____	= $ _____
925	Pavt Mrkg, Wet Retrflec Thermopl, 24 inch, Stop Bar	LFt	210	$ _____	= $ _____
926	Pavt Mrkg, Wet Retrflec Thermopl, Symbol	LFt	5	$ _____	= $ _____
927	Pavt Mtkg, Type R, 4 inch, Black	LFt	200	$ _____	= $ _____

Total This Page $_____

Include on BF-8

Total From BF-1 $ _____

Total From BF-2 $ _____

Total From BF-3 $ _____

Total From BF-4 $ _____

Total From BF-5 $ _____

Total From BF-6 $ _____

Total From BF-7 $ _____

Total Base Bid $ _____

Alternate Bid Items for Sidewalk Pavers

The following alternate bid prices for installing sidewalk pavers would replace comperable quantities of concrete sidewalk. The City is requesting alternate bid prices for these items.

Item Number	Description	Unit	Quantity	Unit Price	Total Cost
238-2	Concrete Pavement Base, 6 inch (under sidewalk pavers)	Sft	3,200	$ _____	= $ _____
241-2	Brick Pavers, New (sidewalk)	Sft	3,200	$ _____	= $ _____

Total of Alternate Bid $ _____

Contractor: _____

DETAILED SPECIFICATION
FOR
ITEM #220 – HMA PAVEMENT BASE COURSE
ITEM #221 - HMA PAVEMENT LEVELING
ITEM #222 - HMA PAVEMENT WEARING
ITEM #224 – HAND PATCHING

DESCRIPTION

This work shall consist of constructing HMA pavement base, leveling, and wearing courses, and hand patching, in accordance with Division 5 and Section 501 of the 2012 MDOT Standard Specifications, current supplemental MDOT specifications, and the City Standard Specifications, except as modified herein, and as directed by the Engineer.

MATERIALS

General

The HMA mixtures to be used for this work shall be as follows:

WORK ITEM	THICKNESS	MDOT HMA MIXTURE #
HMA Pavement Wearing	1.5”	5E1
HMA Pavement Leveling	2”	4E1
HMA Pavement Base Course	3”	3E1
Hand Patching (Permanent)	2”/3”	4E1/3E1
Hand Patching (Temporary)	as directed	see note

Binders for the bituminous mixes shall be PG 64-28 or as directed by the Engineer, and shall meet the requirements specified in Section 904 of the 2012 MDOT Standard Specifications, and any current supplemental MDOT specifications.

Bond coat shall be an emulsified asphalt Type SS-1h and shall meet the requirements specified in Section 904 of the 2012 MDOT Standard Specifications, and any current supplemental MDOT specifications.

The use of Marshall Mixes and Cold Patch will be acceptable for use in Hand Patching for areas identified as temporary pavement, at the approval of the Engineer.

The Aggregate Wear Index (AWI) number for this project is 260. This AWI number applies to all aggregates used in all top course mixtures. Blending aggregates to achieve this AWI requirement is permitted in accordance with current MDOT Standards, and Supplemental Specifications.Reclaimed Asphalt Pavement (RAP) in HMA Mixtures

The use of Reclaimed Asphalt Pavement (RAP) in HMA mixtures shall be in accordance with Section 501. 02. A. 2 of the 2012 MDOT Standard Specifications, and the City of Ann Arbor Standard Specifications.

CONSTRUCTION METHODS

All concrete work shall be completed prior to placing HMA mixtures.

The Contractor shall have a 10-foot long straight-edge, backhoe, air-compressor and jackhammer available during all paving operations.

Prior to placing the bond coat, the Contractor shall kill all vegetation (within the area to be paved) by applying an approved weed killer ("Round-Up" by Monsanto, or equal), shall thoroughly clean all joints & cracks in the existing pavement (and any gutter to be overlaid) with compressed air and/or vacuum-type street cleaning equipment to remove all dirt and debris to a depth of at least 1-inch, and shall thoroughly clean the entire surface to be paved, with a Vac-All or similar vacuum-type street cleaning equipment.

MDOT SS-1h bond coat shall be applied at a uniform rate of 0.10 gallons/square yard, on all exposed, existing HMA and concrete surfaces which will come in contact with the new HMA material. The Contractor shall take extra care to avoid covering surfaces which are not to be paved. After September 15, SS-1h bond coat shall not be diluted by more than 25%.

The Contractor shall place HMA wedges using the base, leveling, and wearing mixtures specified herein, as directed by the Engineer, prior to placing the wearing course. Such wedging shall be measured and paid for at the respective unit price of the appropriate HMA Pavement item.

Construction of butt joints, where directed by the Engineer, shall be measured and paid for as "Machine Grading Modified."

The Contractor shall construct the pavement courses to provide the final cross-slopes (crowns) specified by the Engineer.

The Contractor shall construct feather joints, and shall feather the leveling and wearing courses at structures, in drive approaches, and at intersection joints, as directed by the Engineer. Feather joints shall vary the thickness of the asphalt from 0.0-inches to the required full paving thickness (approximately 1½-inches) over a 5-foot to 15-foot distance, or as directed by the Engineer. The Contractor shall rake all large aggregates out of the HMA mixture in feather joints, prior to compaction.

The Contractor shall provide a minimum of two rakers during the placement of all wearing and leveling courses. Further, the Contractor shall provide, when directed by the Engineer, a second "Break-Down" roller in order to achieve the specified asphalt densities.

The Contractor shall provide a minimum of 24-hours' notice to the Engineer prior to paving, and shall obtain a "Permit To Pave" from the Engineer in advance of scheduling paving.

The Contractor and Engineer shall carefully observe the paving operation for signs of faulty mixtures. Points of weakness in the surface shall be removed or corrected by the Contractor, at his/her expense, prior to paving subsequent lifts of HMA material. Such corrective action may include the removal and replacement of thin or contaminated sections of pavement, including sections that are weak or unstable. Once the Contractor or his representative is notified by the Engineer that the material being placed is out of allowable tolerances, or there is a problem with the paving operation, the Contractor shall stop the paving operation at once, and shall not be permitted to continue placing HMA material until again authorized by the Engineer. Substandard work that, in the Engineer's opinion, requires removal and replacement, shall be completed as follows:

1. Remove and replace leveling and/or wearing course areas mixed with foreign materials and defective areas.
2. Sawcut full depth of existing pavement in perpendicular and parallel directions to adjoining surfaces to ensure a quality and aesthetically pleasing repair.

3. Replacement may need to extend beyond the area of repair. Cut out such areas and fill with fresh, hot mix asphalt.
4. Compact by rolling to specified density and smoothness.
5. Sawcut or route new joint and fill with specified Hot Poured Rubber Joint Sealer product.

During the placement of leveling and wearing courses, the speed of the paving machine(s) shall not exceed 50-feet per minute.

The Contractor shall furnish and operate enough materials and equipment so as to keep the paving machine(s) moving continuously at all times. Failure to do so shall be cause for the suspension of the paving operation until the Contractor can demonstrate to the satisfaction of the Engineer, that sufficient resources have been dedicated to perform the work in accordance with the specifications.

Each layer of HMA mixture shall be compacted to between 92 to 96 percent (or as determined acceptable by the Engineer) of the theoretical maximum density, as listed on the approved Job Mix Formula.

MEASUREMENT AND PAYMENT

Measurement of these HMA paving items shall be by the ton, in place. Unused portions of material loads shall be returned to the plant and re-weighed, and the corrected weight slip shall be provided to the Engineer. All weight slips must include the type of mixture (codes are not acceptable), as well as vehicle number, gross weight, tare weight and net weight.

The bond coat is included in the cost of the HMA Pavement Item.

Corrective action shall be enforced as described at Division 5 of the 2012 MDOT Standard Specifications and will be based on the City's or DDA's testing reports.

All costs for furnishing and operating vacuum-type street cleaning equipment, backhoes, jackhammers, and air compressors shall be included in the bid prices for these items of work or in the item of work "General Conditions."

The completed work as measured for these items of work will be paid for at the Contract Unit Prices for the following Contract (Pay) Items:

PAY ITEM	PAY UNIT
All HMA Pavement Items	Ton

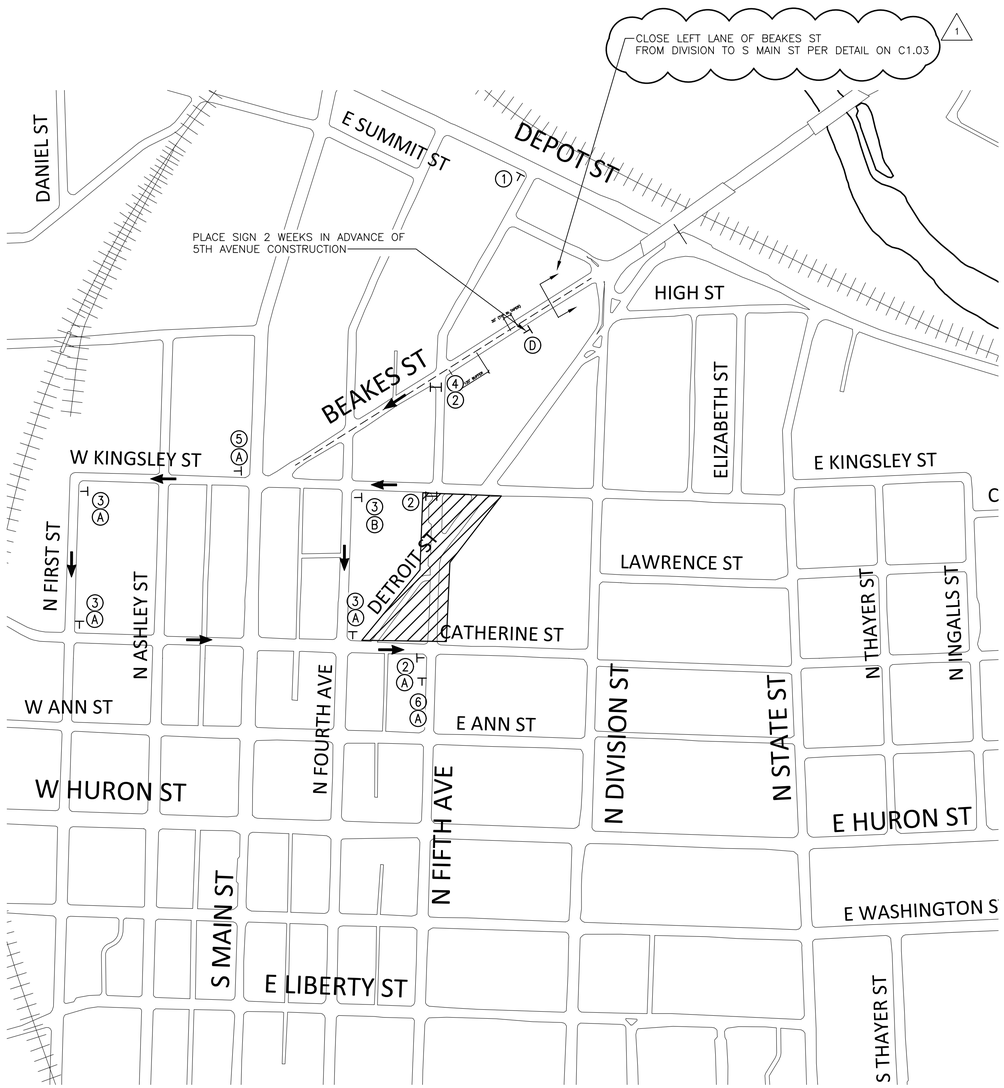
The unit prices for these items of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this detailed Specification.

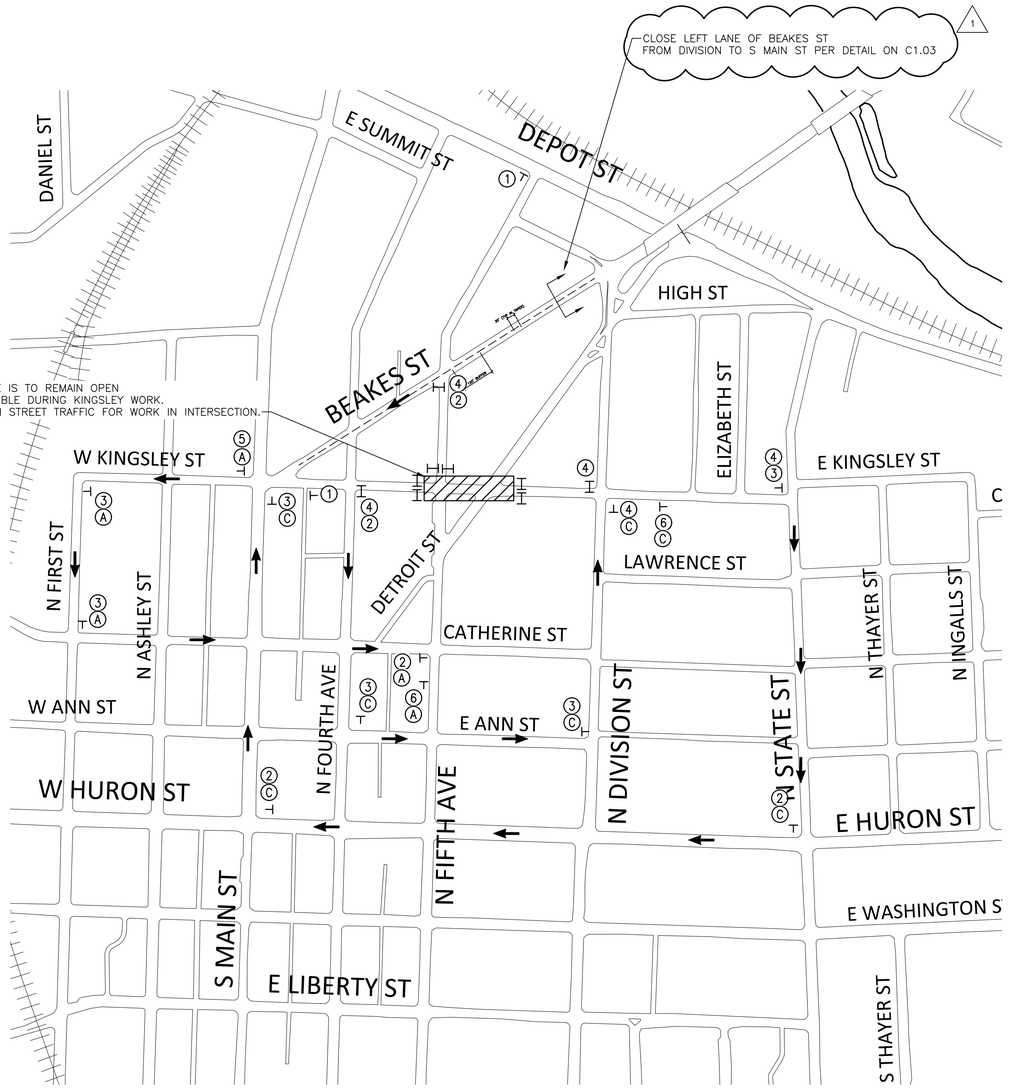
Payment Adjustment In Lieu Of Repair/Replacement

In the case that the work that is installed does not meet the specified quality of materials or installation, the DDA may opt to require the full removal and replacement of the substandard work, or, at their discretion, use the formulas listed below to reduce payment for the work.

A. Pavement Compaction:
    1. Pavement

a. If the daily average in place density is less than 94%, but greater than 93% of the mixture theoretical maximum density (TMD) the paving will be evaluated by the Engineer and Owner and at Owner's discretion, the unit price of that days paving will be reduced to 90% of full payment.
b. If the daily average in place density is less than 93% but greater than 92% of the mixture TMD the paving will be evaluated by the Engineer and Owner and at Owner's discretion may either be removed or the unit price of that days paving will be reduced to 75% of full payment.
c. If the daily average in place density is less than 92% of the mixture TMD the paving will be removed and replaced at no cost to Owner.





DETOUR PLAN - 5TH AVENUE CLOSURE

NORTH

SCALE: 1" = 100'

0 50 100 200

DETOUR PLAN - KINGSLEY STREET CLOSURE

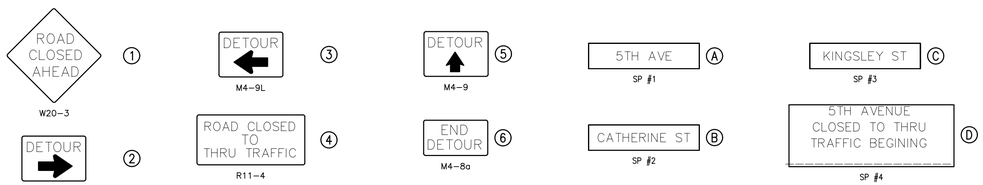
NORTH

SCALE: 1" = 100'

0 50 100 200

LEGEND

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



LEGEND

ADD1 - 21

BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY
SEE ABOVE		1	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

DETOUR PLAN

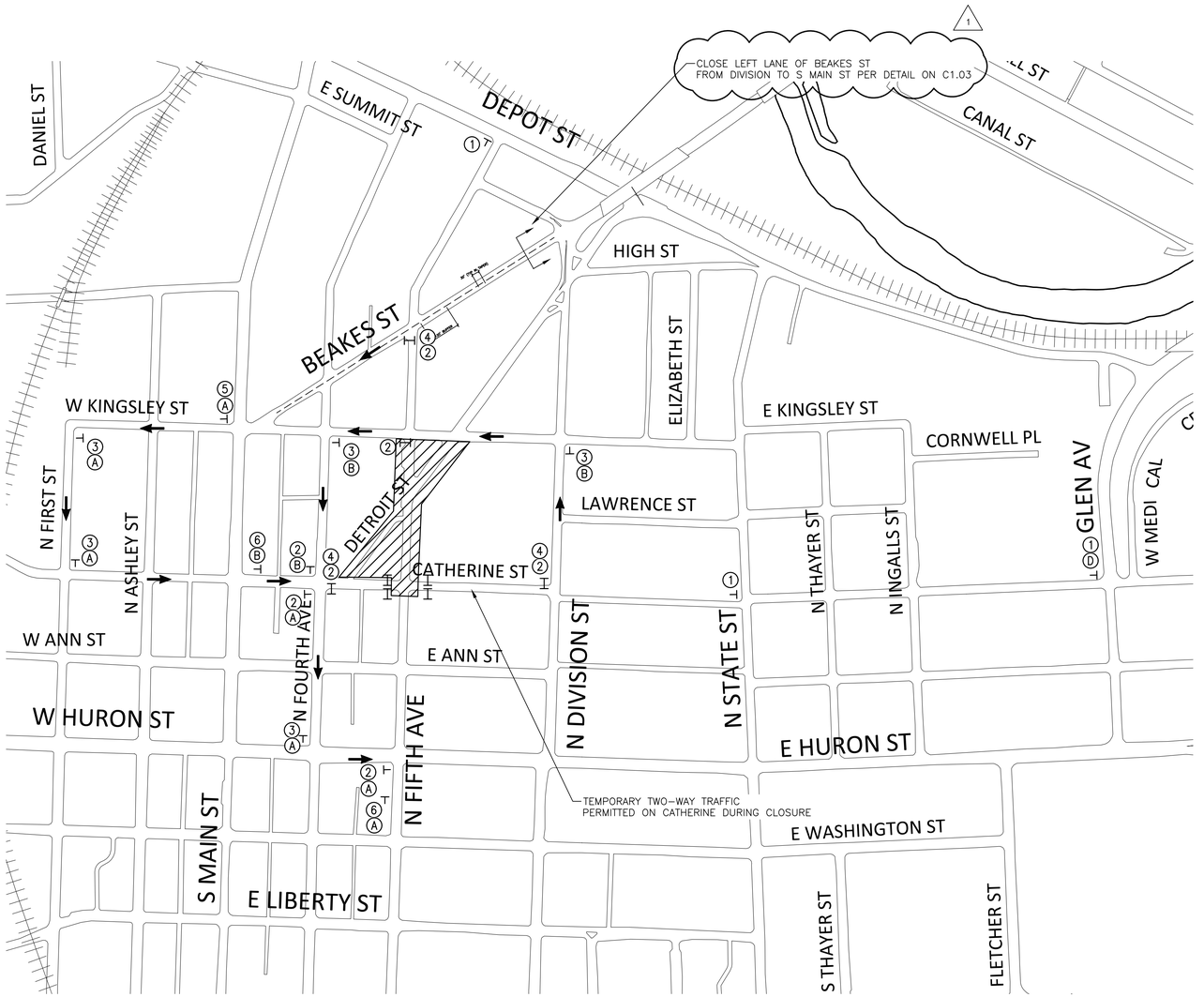
APPROVED BY _____

SCALE NOT TO SCALE

INCH

DRAWING NO. C1.01

SHEET NO. ____ OF ____



DETOUR PLAN - 5TH & CATHERINE STREETS CLOSURE

NORTH

SCALE: 1" = 100'
0 50 100 200

ROAD CLOSED AHEAD ① W20-3

DETOUR ② M4-9R

DETOUR ③ M4-9L

ROAD CLOSED TO THRU TRAFFIC ④ R11-4

DETOUR ⑤ M4-9

END DETOUR ⑥ M4-8a

5TH AVE Ⓐ SP #1

CATHERINE ST Ⓑ SP #2

KINGSLEY ST Ⓒ SP #3

AT DIVISION Ⓓ SP #3

LEGEND

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

LEGEND

SEE ABOVE		REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY
		1	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		
BENCH MARK	SURVEY BOOK					

ADD1 - 22

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

DETOUR PLAN

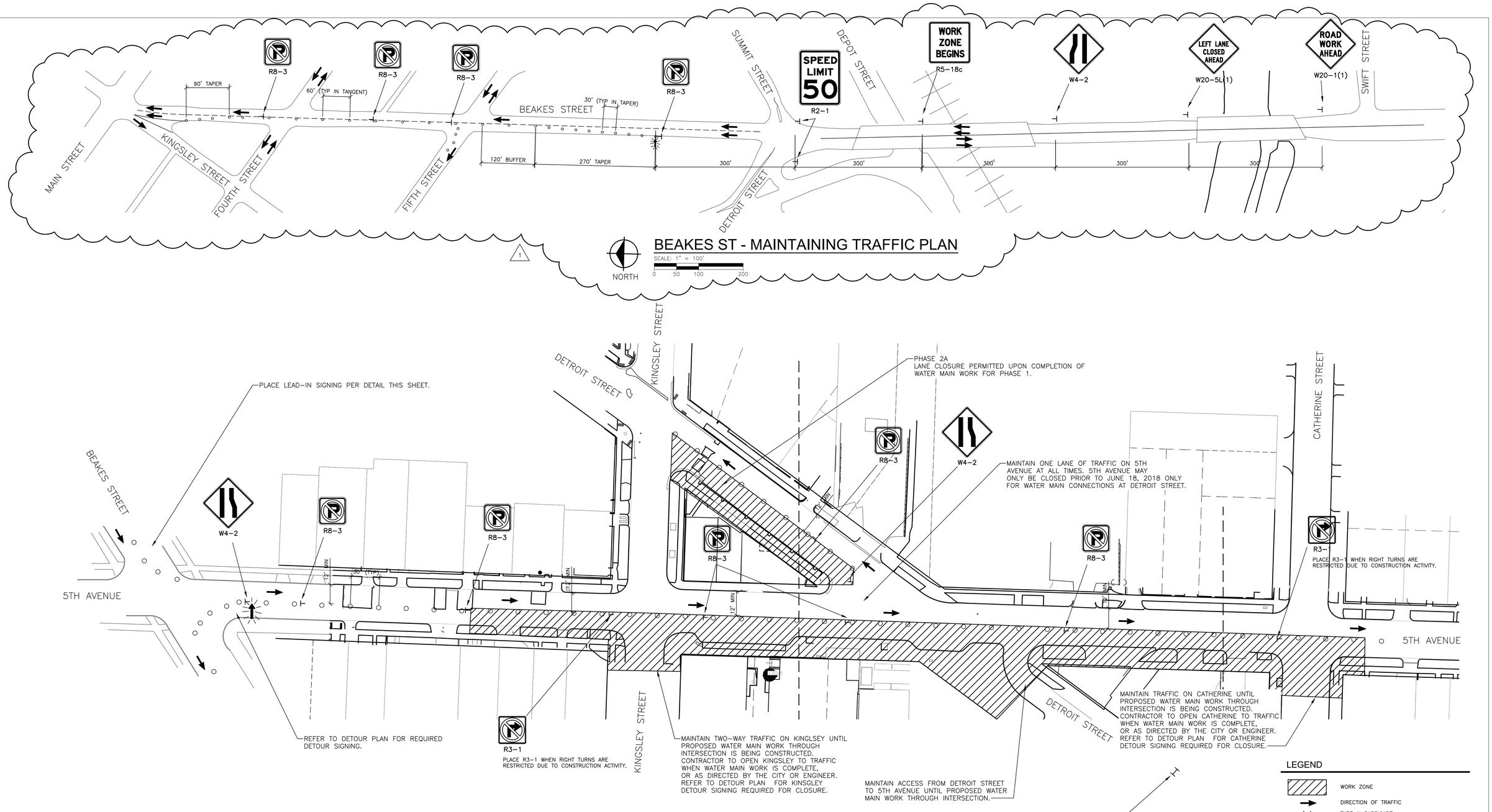
APPROVED BY _____

SCALE NOT TO SCALE

INCH

DRAWING NO. C1.02

SHEET NO. ____ OF ____



BEAKES ST - MAINTAINING TRAFFIC PLAN

PHASE 1 & 2A - MAINTAINING TRAFFIC PLAN

LEGEND

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

NOTES

1. LOCATIONS OF THE SIGNS AND PORTABLE CHANGEABLE MESSAGE SIGNS TO BE APPROVED BY THE ENGINEER.
2. PERFORM WATER MAIN TIE-INS UTILIZING FLAG CONTROL INCLUDED IN PAYMENT FOR MINOR TRAFFIC DEVICES.

LEGEND

SEE ABOVE		△	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
BENCH MARK	SURVEY BOOK	REV. NO.	95% CD	11-17-2017	DR.BY	CH.BY

ADD1 - 23

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

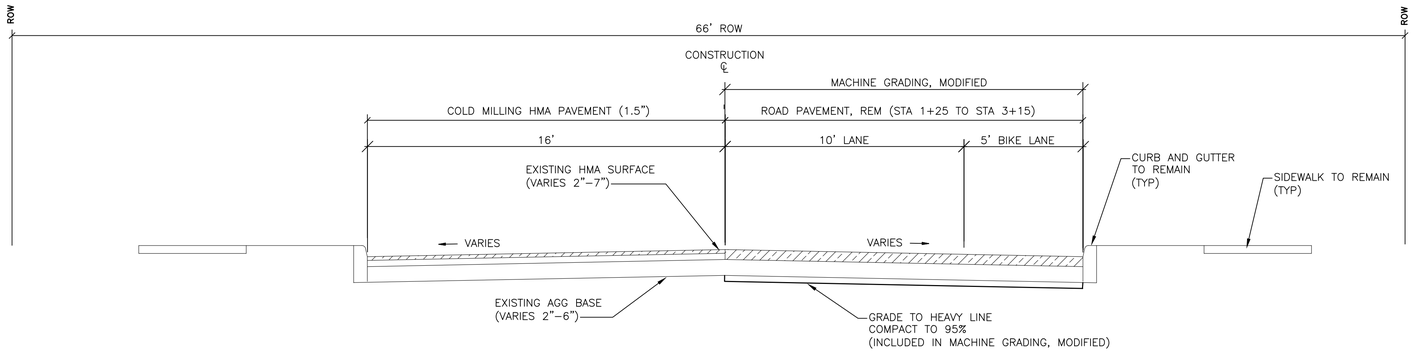
MAINTENANCE OF TRAFFIC PLAN

APPROVED BY _____

SCALE NOT TO SCALE | INCH

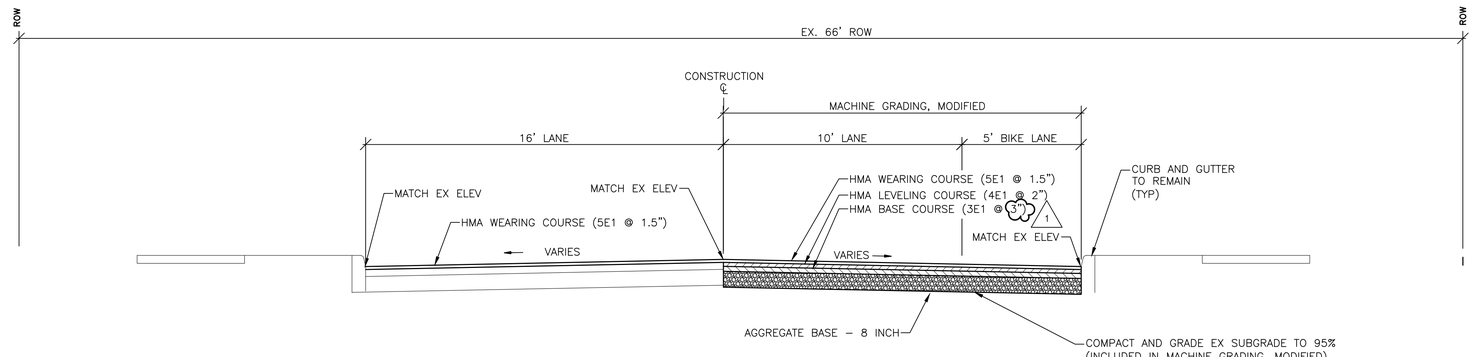
DRAWING NO. C1.03

SHEET NO. ____ OF ____



N FIFTH AVE - EXISTING CROSS SECTION

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

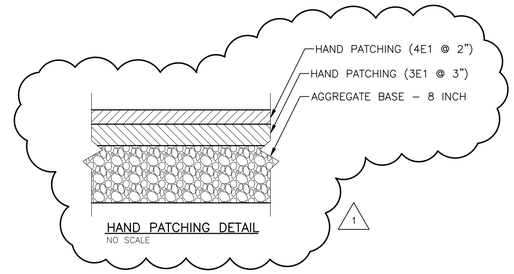


N FIFTH AVE - PROPOSED CROSS SECTION

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

HMA APPLICATION CHART			
PAY ITEM	EST RATE OF APPLICATION PER SYD	PERFORMANCE GRADE	AWI
HMA WEARING COURSE (5E1)	165 LBS	64–28	260 (TOP)
HMA LEVELING COURSE (4E1)	220 LBS	64–28	
HMA BASE COURSE (3E1)	330 LBS	64–28	
1 HAND PATCHING (4E1, 3E1)	550 LBS	64–28	
* BOND COAT	.05–.15 GAL		

* FOR INFORMATION ONLY



HAND PATCHING DETAIL
NO SCALE

LEGEND

SEE ABOVE		△	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
BENCH MARK	SURVEY BOOK		95% CD	11-17-2017		
		REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

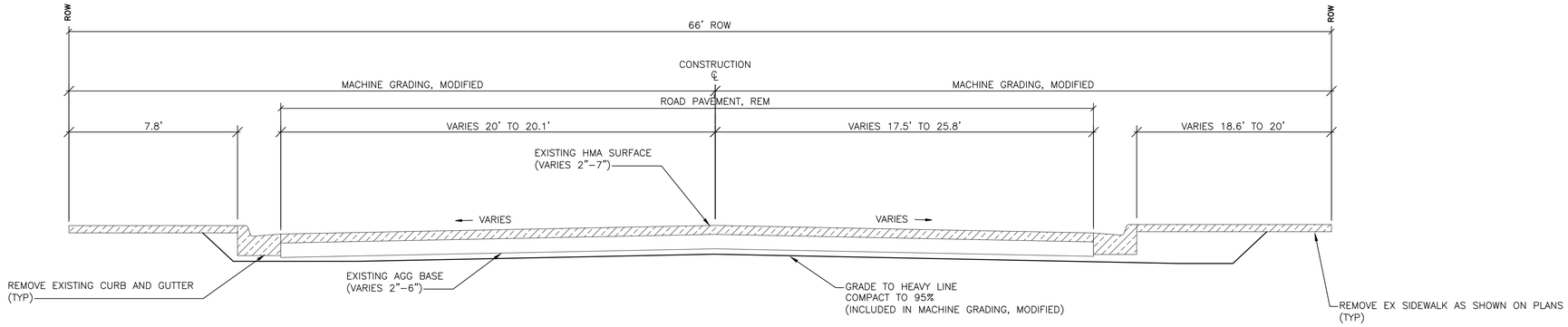
N FIFTH AVENUE
TYPICAL SECTIONS

APPROVED BY _____

SCALE NONE | INCH

DRAWING NO. **C3.00**

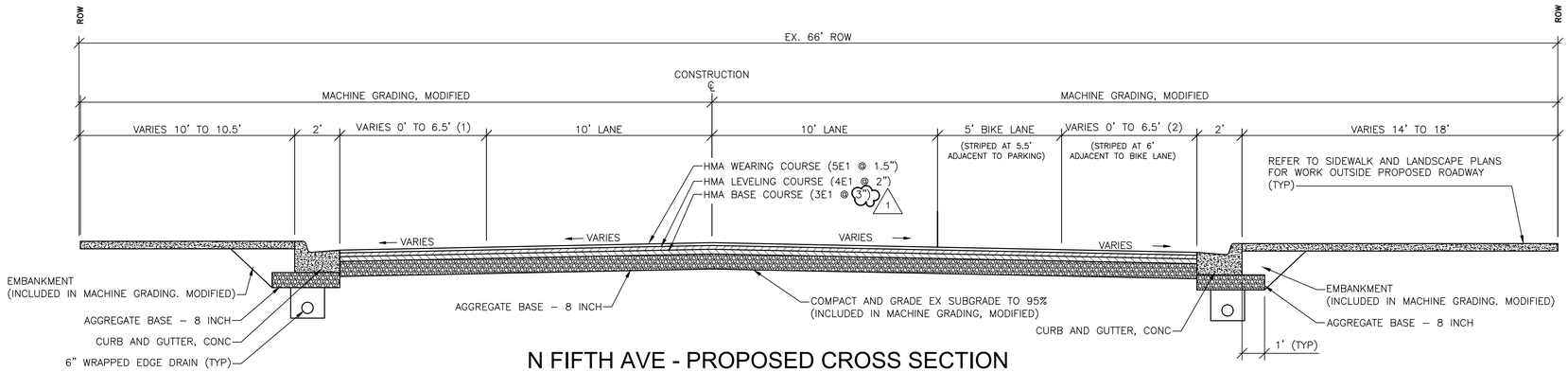
SHEET NO. ____ OF ____



N FIFTH AVE - EXISTING CROSS SECTION

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

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

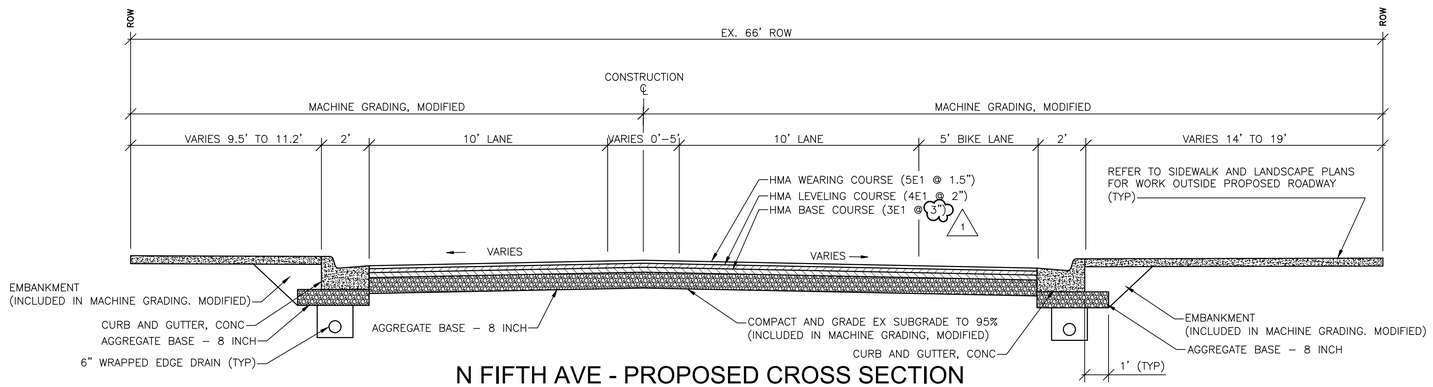


N FIFTH AVE - PROPOSED CROSS SECTION

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

(2) PARKING LANE TABLE	
STATION	PARKING WIDTH
3+37 TO 3+49	VARIES 0' TO 6.5'
3+49 TO 4+28	6.5'
4+28 TO 4+36	VARIES 6.5' TO 0'
7+06 TO 7+20	VARIES 0' TO 6.5'
7+20 TO 7+36	6.5'
7+36 TO 7+50	VARIES 6.5' TO 0'

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



N FIFTH AVE - PROPOSED CROSS SECTION

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

LEGEND

SEE ABOVE							
		1	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		
BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY

ADD1 - 25

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

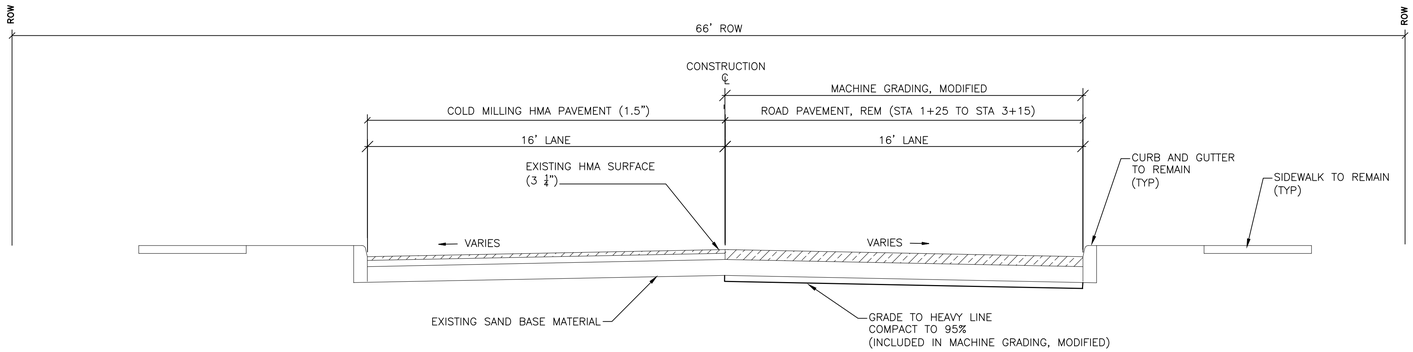
N FIFTH AVENUE
TYPICAL CROSS SECTIONS

APPROVED BY _____

SCALE NONE | INCH

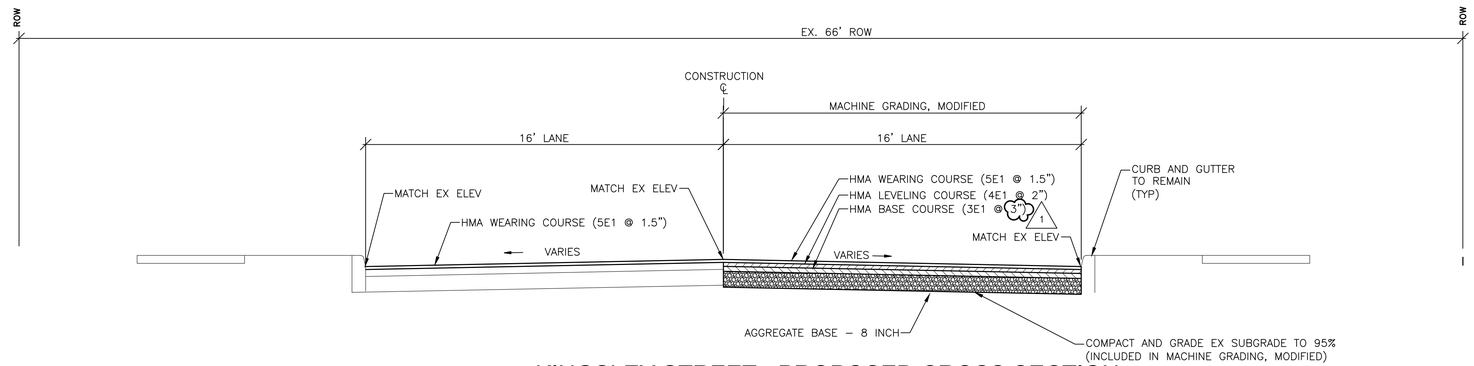
DRAWING NO. **C3.01**

SHEET NO. ____ OF ____



KINGSLEY STREET - EXISTING CROSS SECTION

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



KINGSLEY STREET - PROPOSED CROSS SECTION

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

LEGEND

SEE ABOVE		REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY
		1	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
BENCH MARK	SURVEY BOOK		95% CD	11-17-2017		

ADD1 - 26

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

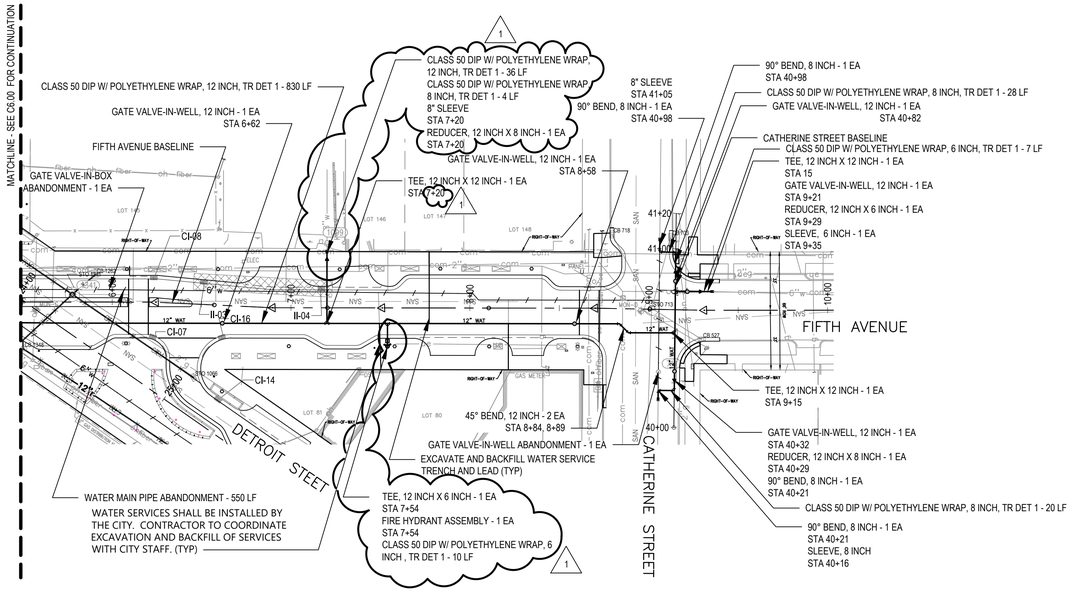
KINGSLEY STREET
TYPICAL SECTIONS

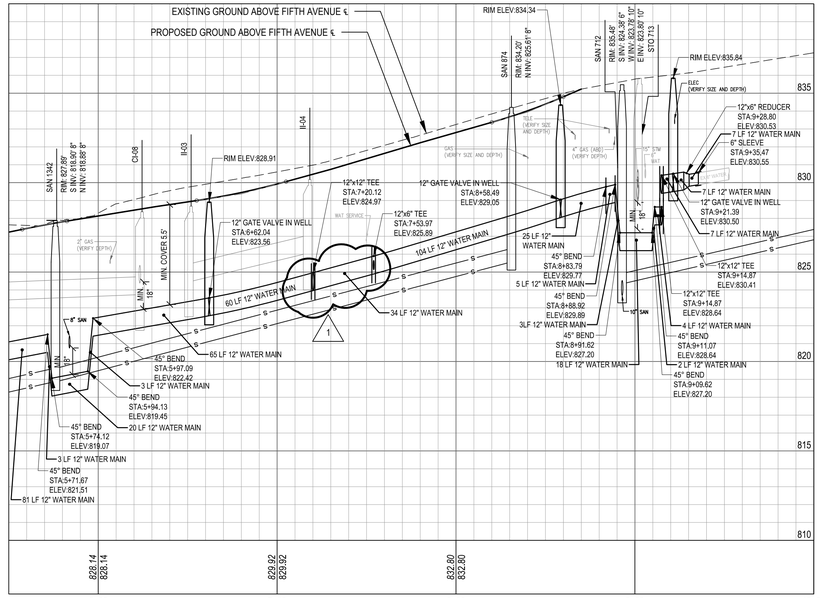
APPROVED BY _____

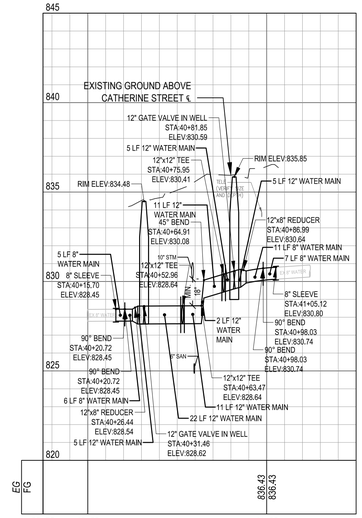
SCALE NONE | INCH

DRAWING NO. C3.04

SHEET NO. ____ OF ____







NOTES

1. STATION REFERENCES FOR WATER MAIN FITTINGS AND APPURTENANCES ARE IN REFERENCE TO FIFTH AVENUE OR CATHERINE STREET BASELINES.
2. ALL MATERIALS, EQUIPMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF ANN ARBOR STANDARD SPECIFICATIONS AND DETAILS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.
3. DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 50 WITH POLYETHYLENE WRAP AND PUSH-ON JOINTS, UNLESS OTHERWISE NOTED.
4. GATE VALVES SHALL BE RESILIENT-SEATED MECHANICAL JOINT GATE VALVE, WITH 2" SQUARE OPERATING NUT, OPENING RIGHT, COMPLETE WITH ACCESSORIES. GATE VALVE SHALL MEET AWWA SPECIFICATION C509. PLEASE QUOTE ONLY: AMERICAN FLOW CONTROL SERIES 2500 SINGLE RESILIENT WEDGE, CLOW MODEL 2638 (4" THROUGH 16") F-6112, EJIW FLOWMASTER RESILIENT WEDGE VALVE, TYTON X TYTON, MUELLER SERIES 4"-12" A-2361-61 RESILIENT WEDGE - SL X SL, U.S. PIPE A-USP1-61 RESILIENT WEDGE VALVE SLxSL FOR FIELD LOK GASKETS.
4. MECHANICAL JOINTS MUST MEET AWWA SPECIFICATION C111 AND SHALL INCLUDE PLAIN RUBBER MECHANICAL JOINT GASKETS. PLEASE QUOTE ONLY: AMERICAN PIPE "FAST GRIP" GASKET SYSTEM, GRIFFIN PIPE "FIELD LOK 350" GASKET SYSTEM, OR U.S. PIPE "FIELD LOK 350" GASKET SYSTEM.
5. ALL HORIZONTAL BENDS, TEES AND FITTINGS SHALL INCLUDE THRUST BLOCKS. RESTRAINED JOINTS ARE REQUIRED FOR VERTICAL BENDS. (TR-FLEX RESTRAINED JOINT PIPE BY U.S. PIPE, LOK-RING JOINT PIPE BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL). RESTRAINED JOINT GASKET SYSTEMS MAY ALSO BE USED (FIELD-LOK 350 BY U.S. PIPE, FAST-GRIP BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL).
6. CONTRACTOR TO FOLLOW CITY REQUIREMENTS FOR WATER MAIN TESTING. WATER MAIN PRESSURE/BACTERIA TESTING MATERIAL AND FEES WILL BE PAID BY THE CONTRACTOR.
7. ALL WATER MAIN TO HAVE A TYPICAL 5.5' COVER, MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE FOR STORM AND SANITARY CROSSINGS AND A MINIMUM OF 12" VERTICAL CLEARANCE WITH ALL OTHER UTILITIES.
8. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL UTILIZE STANDARD PIPE DEFLECTIONS FOR FOLLOWING THE PROPOSED ALIGNMENT.
9. NEW FIRE HYDRANTS SHALL BE EJW 5BR-250 WITH 4" STORZ QUICK CONNECT. VALVE SHALL BE EJIW FLOWMASTER RESILIENT SEATED GATE VALVES.
10. FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY THRUST BLOCKS, BENDS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE STOP BOX. FIRE HYDRANT ASSEMBLY INCLUDES 6" STOP BOX LOCATED 3' FROM HYDRANT.
11. LINE STOPS SHALL BE INSTALLED WHERE EXISTING WATER MAINS CANNOT BE SUFFICIENTLY ISOLATED TO COMPLETE THE WORK.
12. CONNECTIONS TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE NEW WATER MAIN HAS BEEN SUCCESSFULLY PRESSURE TESTED AND HAS PASSED BACTERIOLOGICAL TESTING. FINAL CONNECTIONS SHALL BE COORDINATED WITH THE ENGINEER. THE CONTRACTOR SHALL PERFORM ALL WATER SYSTEM SHUT DOWNS AFTER APPROPRIATE NOTIFICATION TO THOSE AFFECTED.
13. ALL HYDRANTS REMOVED BY THE CONTRACTOR SHALL BE DELIVERED TO THE CITY OF ANN ARBOR FIELD OPERATIONS FACILITY LOCATED AT 4251 STONE SCHOOOL ROAD, ANN ARBOR, MI 48108 BY THE CONTRACTOR AND WILL BECOME THE PROPERTY OF THE CITY OF ANN ARBOR.
14. ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II MATERIAL.
15. ABANDONMENT OF WATER STRUCTURES SHALL FOLLOW CITY OF ANN ARBOR STANDARDS.
16. FITTINGS OTHER THAN THOSE SPECIFICALLY LISTED AS SEPARATE PAY ITEMS, BLOW-OFF ASSEMBLIES, CONCRETE THRUST BLOCKS, SOLID SLEEVES AND MECHANICAL PLUGS, WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.

LEGEND

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

ADD1 - 27

SEE ABOVE							
BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY
		1	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

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

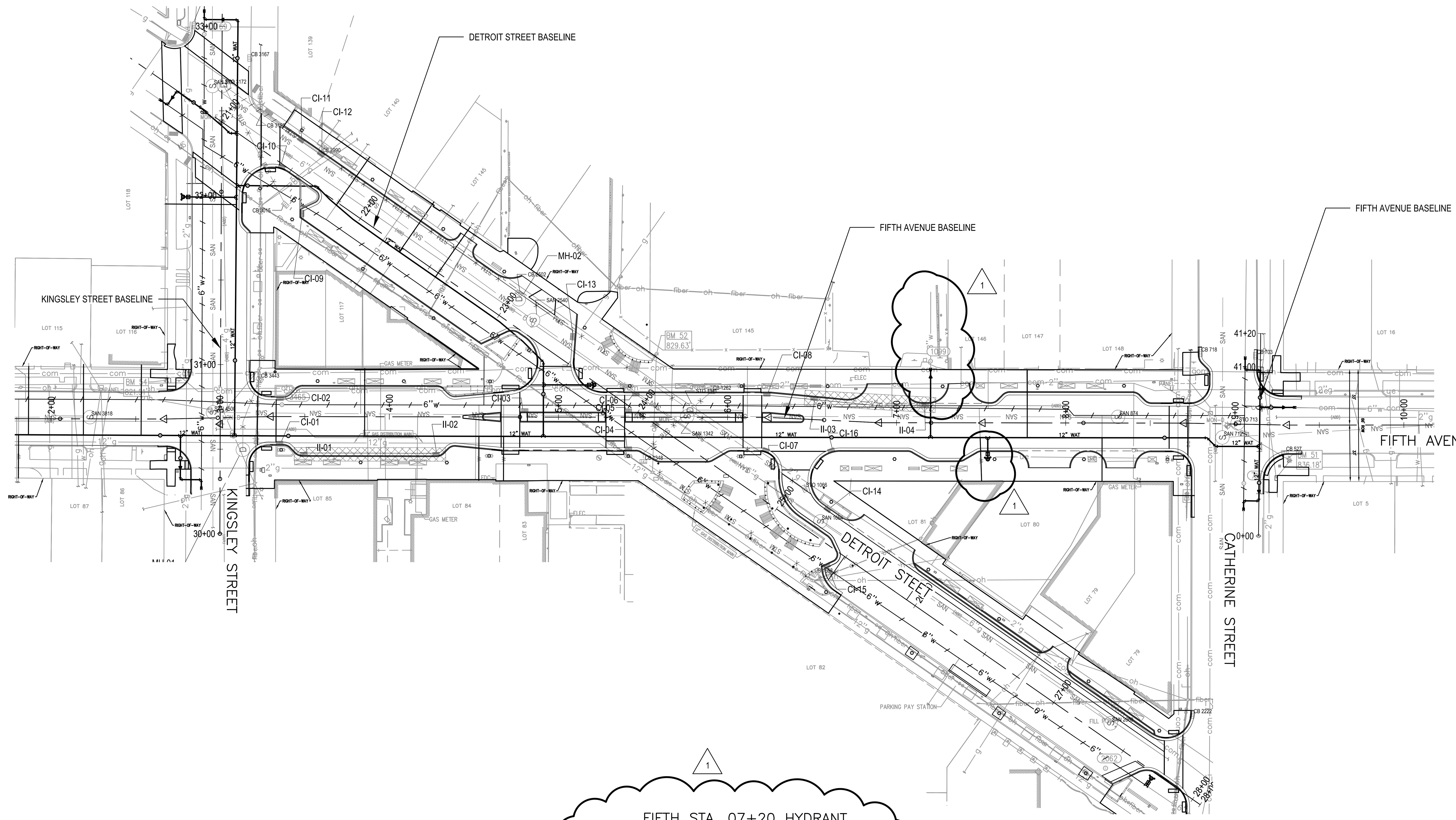
APPROVED BY _____

SCALE 1" = 40'

INCH 0' 20' 40'

DRAWING NO. C6.01

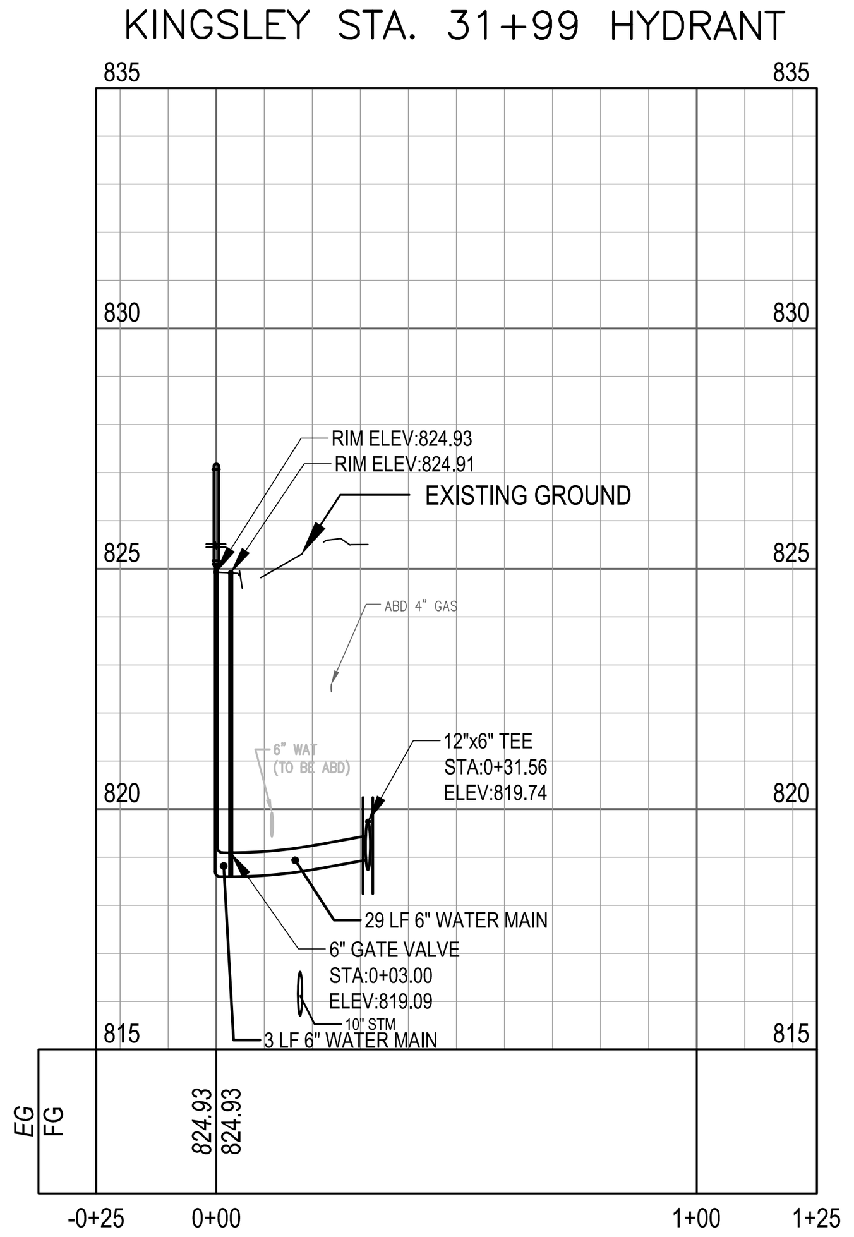
SHEET NO. ____ OF ____



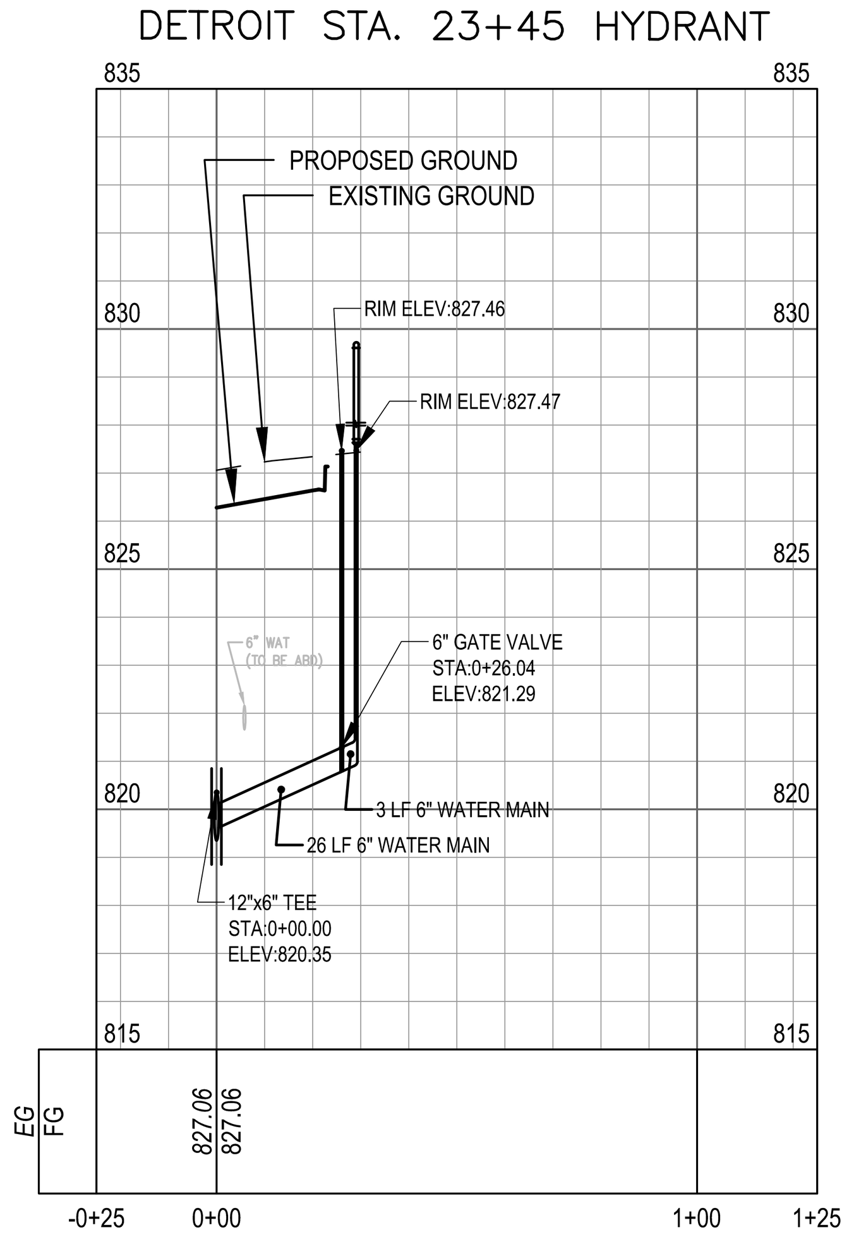
NOTES

1. STATION REFERENCES FOR WATER MAIN FITTINGS AND APPURTENANCES ARE IN REFERENCE TO BASELINES.
2. ALL MATERIALS, EQUIPMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF ANN ARBOR STANDARD SPECIFICATIONS AND DETAILS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.
3. DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 50 WITH POLYETHYLENE WRAP AND PUSH-ON JOINTS, UNLESS OTHERWISE NOTED.
4. GATE VALVES SHALL BE RESILIENT-SEATED MECHANICAL JOINT GATE VALVE, WITH 2" SQUARE OPERATING NUT, OPENING RIGHT, COMPLETE WITH ACCESSORIES. GATE VALVE SHALL MEET AWWA SPECIFICATION C509. PLEASE QUOTE ONLY: AMERICAN FLOW CONTROL SERIES 2500 SINGLE RESILIENT WEDGE, CLOW MODEL 2638 (4" THROUGH 16") F-6112, EJIW FLOWMASTER RESILIENT WEDGE VALVE, TYTON X TYTON, MUELLER SERIES 4"-12" A-2361-61 RESILIENT WEDGE – SL. X SL., U.S. PIPE A-USP1-61 RESILIENT WEDGE VALVE SLxSL FOR FIELD LOK GASKETS.
4. MECHANICAL JOINTS MUST MEET AWWA SPECIFICATION C111 AND SHALL INCLUDE PLAIN RUBBER MECHANICAL JOINT GASKETS. PLEASE QUOTE ONLY: AMERICAN PIPE "FAST GRIP" GASKET SYSTEM, GRIFFIN PIPE "FIELD LOK 350" GASKET SYSTEM, OR U.S. PIPE "FIELD LOK 350" GASKET SYSTEM.
5. ALL HORIZONTAL BENDS, TEES AND FITTINGS SHALL INCLUDE THRUST BLOCKS. RESTRAINED JOINTS ARE REQUIRED FOR VERTICAL BENDS. (TR-FLEX RESTRAINED JOINT PIPE BY U.S. PIPE, LOK-RING JOINT PIPE BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL). RESTRAINED JOINT GASKET SYSTEMS MAY ALSO BE USED (FIELD-LOK 350 BY U.S. PIPE, FAST-GRIP BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL).
6. CONTRACTOR TO FOLLOW CITY REQUIREMENTS FOR WATER MAIN TESTING. WATER MAIN PRESSURE/BACTERIA TESTING MATERIAL AND FEES WILL BE PAID BY THE CONTRACTOR.
7. ALL WATER MAIN TO HAVE A TYPICAL 5.5' COVER, MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE FOR STORM AND SANITARY CROSSINGS AND A MINIMUM OF 12" VERTICAL CLEARANCE WITH ALL OTHER UTILITIES.
8. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL UTILIZE STANDARD PIPE DEFLECTIONS FOR FOLLOWING THE PROPOSED ALIGNMENT.
9. NEW FIRE HYDRANTS SHALL BE EJW 5BR-250 WITH 4" STORZ QUICK CONNECT. VALVE SHALL BE EJIW FLOWMASTER RESILIENT SEATED GATE VALVES.
10. FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY THRUST BLOCKS, BENDS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE STOP BOX. FIRE HYDRANT ASSEMBLY INCLUDES 6" STOP BOX LOCATED 3' FROM HYDRANT.
11. LINE STOPS SHALL BE INSTALLED WHERE EXISTING WATER MAINS CANNOT BE SUFFICIENTLY ISOLATED TO COMPLETE THE WORK.
12. CONNECTIONS TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE NEW WATER MAIN HAS BEEN SUCCESSFULLY PRESSURE TESTED AND HAS PASSED BACTERIOLOGICAL TESTING. FINAL CONNECTIONS SHALL BE COORDINATED WITH THE ENGINEER. THE CONTRACTOR SHALL PERFORM ALL WATER SYSTEM SHUT DOWNS AFTER APPROPRIATE NOTIFICATION TO THOSE AFFECTED.
13. ALL HYDRANTS REMOVED BY THE CONTRACTOR SHALL BE DELIVERED TO THE CITY OF ANN ARBOR FIELD OPERATIONS FACILITY LOCATED AT 4251 STONE SCHOOOL ROAD, ANN ARBOR, MI 48108 BY THE CONTRACTOR AND WILL BECOME THE PROPERTY OF THE CITY OF ANN ARBOR.
14. ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II MATERIAL.
15. ABANDONMENT OF WATER STRUCTURES SHALL FOLLOW CITY OF ANN ARBOR STANDARDS.
16. FITTINGS OTHER THAN THOSE SPECIFICALLY LISTED AS SEPARATE PAY ITEMS, BLOW-OFF ASSEMBLIES, CONCRETE THRUST BLOCKS, SOLID SLEEVES AND MECHANICAL PLUGS, WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.

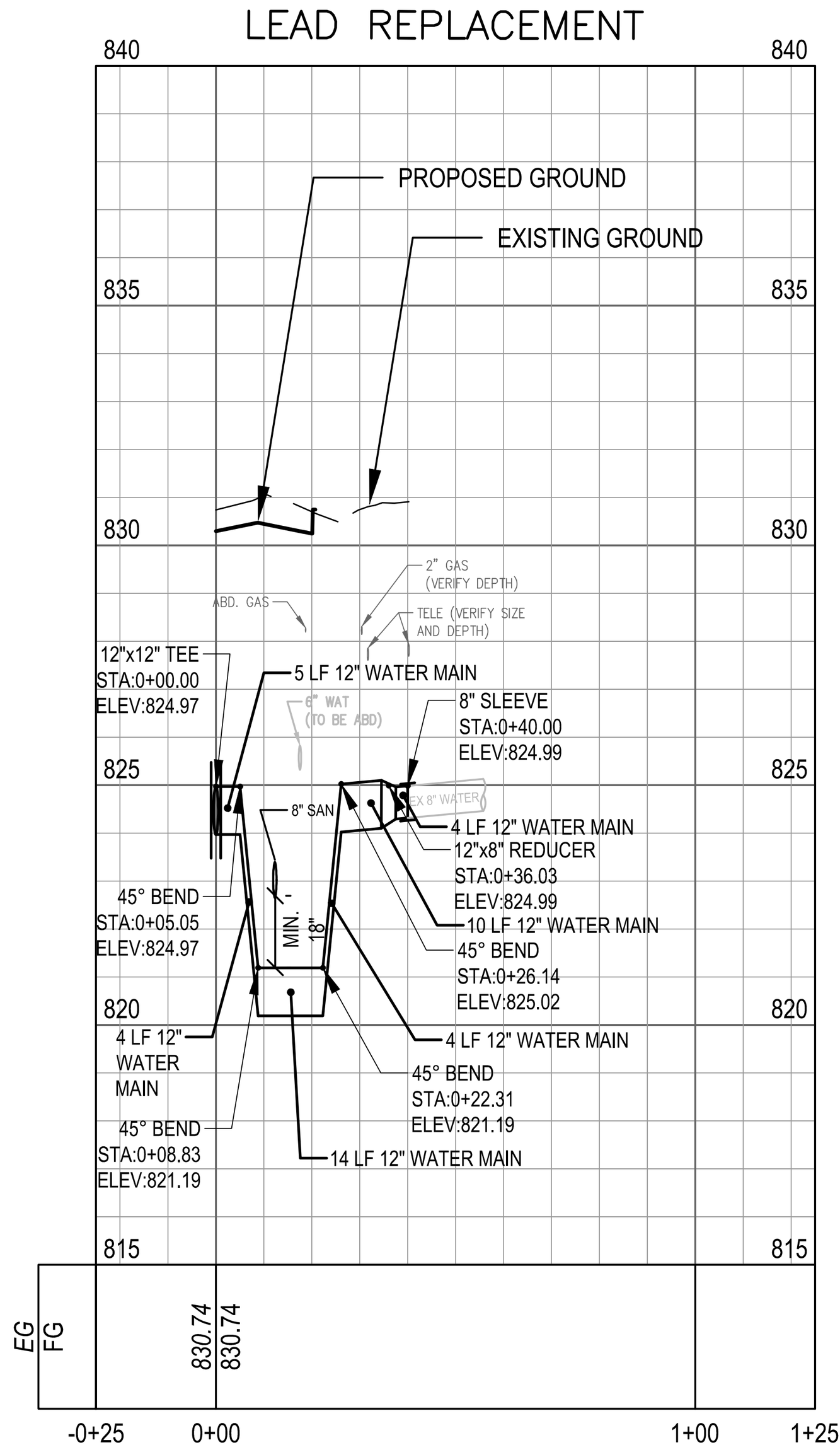
KINGSLEY STA. 31+99 HYDRANT



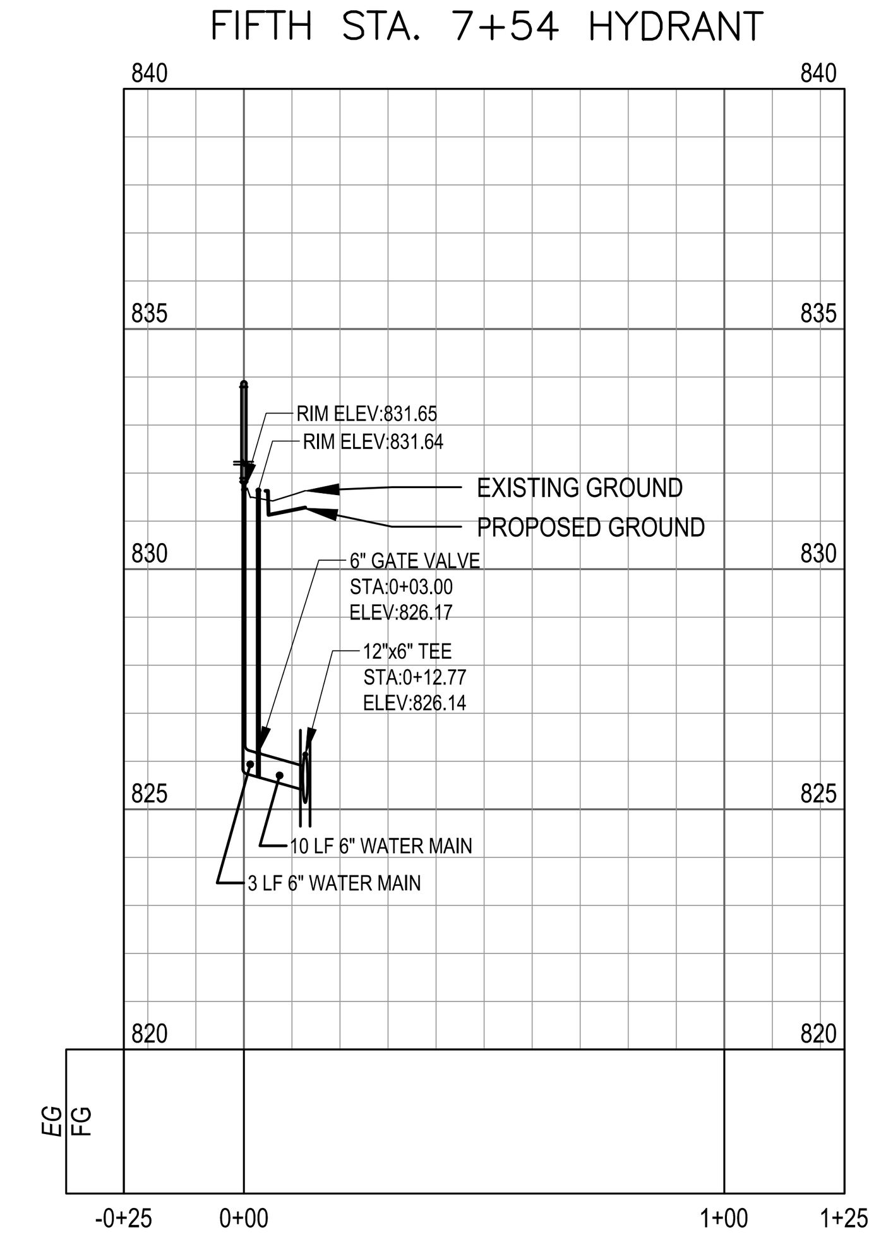
DETROIT STA. 23+45 HYDRANT



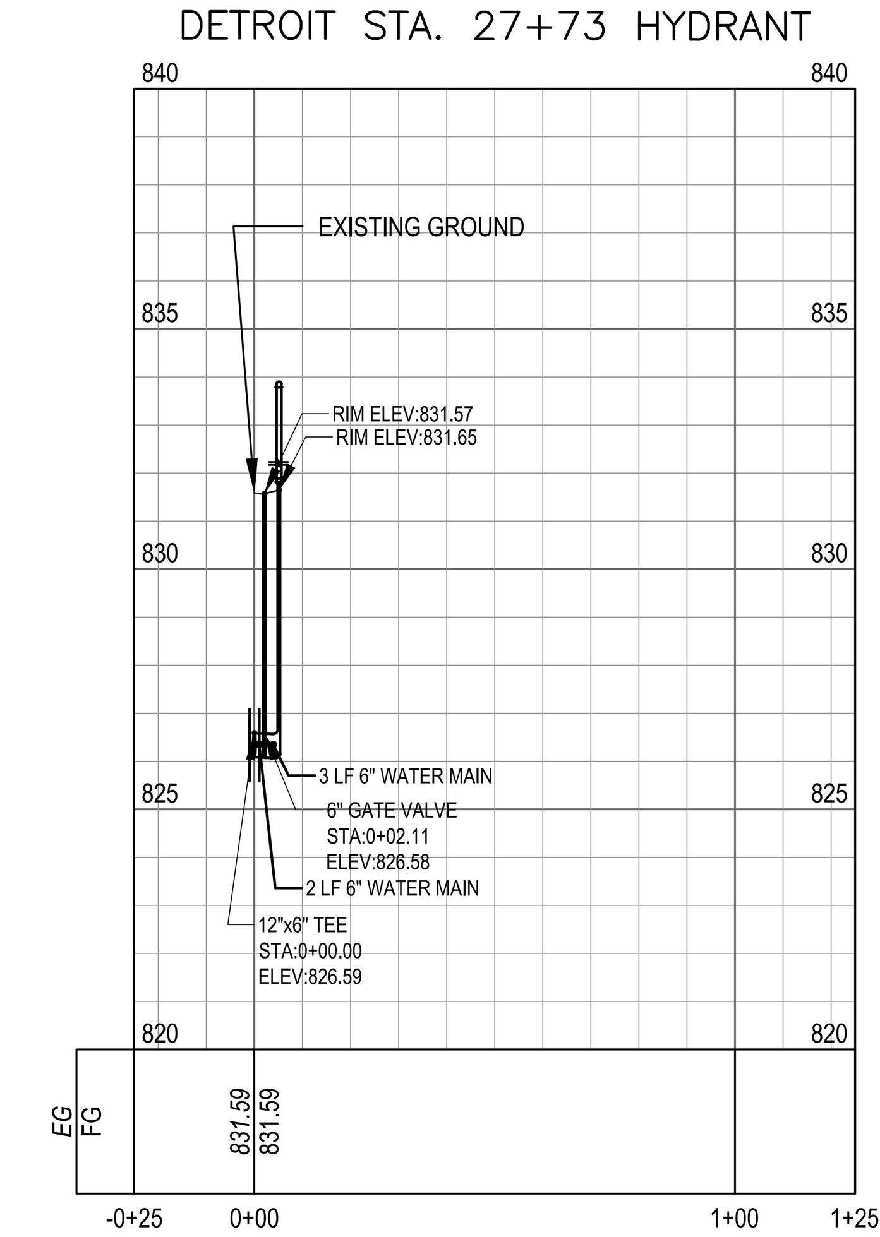
FIFTH STA. 07+20 HYDRANT LEAD REPLACEMENT



FIFTH STA. 7+54 HYDRANT



DETROIT STA. 27+73 HYDRANT



LEGEND

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

SEE ABOVE		1	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
BENCH MARK	SURVEY BOOK		95% CD	11-17-2017		
		REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

WATER MAIN PROFILES

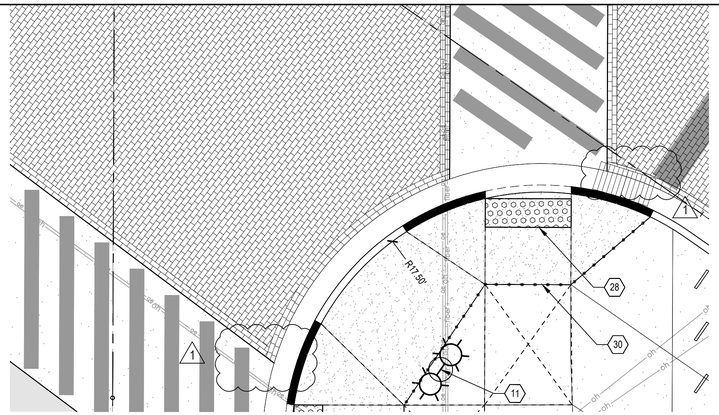
APPROVED BY ____

SCALE 1" = 40'

INCH 0' 20' 40'

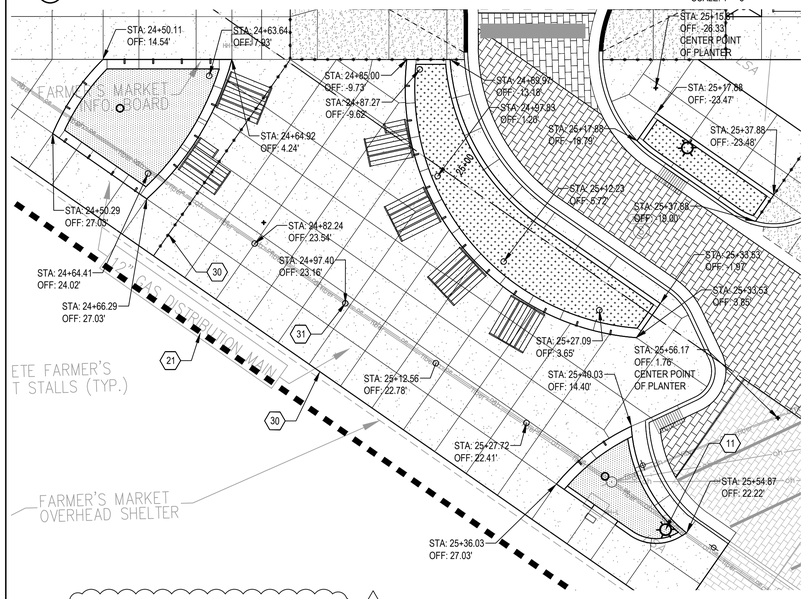
DRAWING NO. C7.00

SHEET NO. ____ OF ____



1 CLAY BRICK PAVERS PATTERN ENLARGEMENT

SCALE: 1" = 5'



2 FARMER' S MARKET PLAZA ENLARGEMENT 1

SCALE: 1" = 5'

DESCRIPTIVE KEYED NOTES:

- (A) CLAY BRICK PAVERS SET IN RUNNING BOND PATTERN PERPENDICULAR TO THE LENGTH OF DETROIT STREET
- (B) USE SALVAGE STONE CURB (PREFERRED) OR 6-INCH STRAIGHT CONCRETE CURB (AS NEEDED).
- (C) PROJECT ALSO INCLUDED ASPHALT STREET RESURFACING AS NOTED ON PLANS.
- (D) REMOVE AND REPLACE CONCRETE CURB ON THIS SIDE OF THIS BLOCK. SALVAGE EXISTING SECTIONS OF STONE CURB AND REINSTALL ON THE WEST SIDE OF THIS BLOCK.
- (E) CLAY BRICK PAVERS SET IN RUNNING BOND PATTERN PERPENDICULAR TO THE LENGTH OF FIFTH AVENUE.
- (F) ALIGN EDGE OF PAVEMENT WITH NEAREST EXISTING CONCRETE JOINT. COORDINATE WITH DEMOLITION PLANS FOR SAWCUT LOCATION.
- (G) CONFIRM LOCATION WITH ENGINEER PRIOR INSTALLATION.
- (H) REPLACE DAMAGED PAVERS IN THIS AREA AS DIRECTED BY THE PROJECT ENGINEER.
- (I) PROJECT ALSO INCLUDED ASPHALT STREET RESURFACING OF FIFTH AVENUE FROM CATHERINE STREET TO ANN STREET.
- (J) EXISTING CURB TO REMAIN.
- (K) EXISTING BRICKS TO REMAIN.
- (L) EXISTING CURB ON THIS BLOCK IS POURED CONCRETE AND IN GOOD CONDITION. DAMAGED AREAS WILL BE REPLACED WITH MATCHING CURB AS DIRECTED BY PROJECT ENGINEER.
- (M) CONCRETE UNIT RETAINING WALL, REM, SALVAGE, AND RE-INSTALL. 1
- (N) AT EACH CURB OF WALL OPENING INTO A RAIN GARDEN, INSTALL A SMALL BED OF RIP-RAP 18" WIDE, 12" DEEP, AND THE WIDTH OF THE OPENING PLUS 6" AT EACH END.
- (O) PROVIDE 24" LONG BY 5" DEEP SPILLWAY NOTCH IN PLATING EDGE, TOP OF SPILLWAY TO BE FLUSH WITH SIDEWALK AND TOP OF CURB.

LEGEND

1. CLAY BRICK PAVERS, TYP.
2. HEAVY DUTY HMA PAVEMENT, TYP.
3. 6-INCH CONCRETE, TYP. (1 C10.1)
4. CONCRETE CROSSWALK, 12-INCH, TYP. (4 C10.1)
5. 8-INCH CONCRETE, TYP. (1 C10.1)
6. CONCRETE CURB AND GUTTER, TYP. (1 C10.2)
7. CONCRETE CURB & GUTTER - THICKENED PAN, TYP. (2 C10.2)
8. CONCRETE CURB, 6-INCH STRAIGHT, TYP. (4 C10.2)
9. RESET STONE CURB, TYP. (5 C10.2)
10. CONCRETE CURB AND GUTTER - MOUNTABLE, TYP. (3 C10.2)
11. STREET LIGHT, TYP.
12. LANDSCAPE PLANTER, TYP.
13. TREE GRATE, 3FT X 10FT, TYP. (5 C10.1)
14. TREE GRATE, 3FT X 5FT, TYP. (6 C10.1)
15. PEDESTRIAN CROSSWALK, TYP.
16. 5' BICYCLE LANE, TYP.
17. BIKE HOOP, SURFACE MOUNT, TYP. (7 C10.1)
18. PARKING STRIPPING, TYP.
19. RELOCATED HISTORIC MARKER, TYP.
20. RAIN GARDEN, TYP.
21. LIMIT OF WORK, TYP.
22. PARKING METER, TYP.
23. BIKE SHARE PARKING BY THE CITY OF ANN ARBOR, TYP.
24. URBAN TABLE AND BENCHES, TYP. (2,3 C10.3)
25. URBAN BENCH, TYP. (1 C10.3)
26. 8-INCH DRIVE APPROACH TYPE L, TYP.
27. 8-INCH DRIVE APPROACH TYPE M, TYP.
28. DETECTABLE WARNING SURFACE, TYP. ADD1 - 29 (8 C10.2)
29. RIGHT OF WAY, TYP.
30. EXPANSION JOINT, TYP. (2 C10.1)
31. FESTOON LIGHTING POLE, TYP.
32. INTEGRAL CURB

PROJECT NORTH

MATCHLINE: SEE SHEET C8.02

SEE ABOVE						
BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY
		1	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
			95% CD	11-17-2017		

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

STREETSCAPE LAYOUT & MATERIALS PLAN - NORTH

SCALE 1"=20' | INCH

DRAWING NO. C8.01

SHEET NO. ____ OF ____

APPROVED BY _____

PLANT LIST

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

4 ACER GRISEUM (2.5" CAL.)

AMELANCHIER CANADENSIS 'AUTUMN BRILLIANCE' (2" CAL.)
41 NARCISSUS 'DUTCH MASTER' 4"- 6" O.C. IN GROUPS
15 HEMEROCALLIS 'STELLA D'ORO' 18" O.C.
50 LIRIOPE M. 'VARIEGATA' 12" O.C.

6 ACER GRISEUM (2.5" CAL.)

57 LIRIOPE M. 'VARIEGATA' 12" O.C.
112 NARCISSUS 'DUTCH MASTER' 4"- 6" O.C. IN GROUPS
42 HEMEROCALLIS 'STELLA D'ORO' 18" O.C.
99 PACHYSANDRA T. 8" O.C.
57 SESLERIA AUTUMNALIS 12" O.C.

2 CELTIS OCCIDENTALIS (3" CAL.)
114 PACHYSANDRA T. 8" O.C.
42 SESLERIA AUTUMNALIS 12" O.C.

124 NARCISSUS 'DUTCH MASTER' 4"- 6" O.C. IN GROUPS
47 HEMEROCALLIS 'STELLA D'ORO' 18" O.C.
76 LIRIOPE M. 'VARIEGATA' 12" O.C.
2 CERCIS CANADENSIS (2" CAL.)

AMELANCHIER CANADENSIS 'AUTUMN BRILLIANCE' (2" CAL.)
65 LIRIOPE M. 'VARIEGATA' 12" O.C.
78 NARCISSUS 'DUTCH MASTER' 4"- 6" O.C. IN GROUPS
29 HEMEROCALLIS 'STELLA D'ORO' 18" O.C.

AMELANCHIER CANADENSIS 'AUTUMN BRILLIANCE' (2" CAL.)
50 NARCISSUS 'DUTCH MASTER' 4"- 6" O.C. IN GROUPS
18 HEMEROCALLIS 'STELLA D'ORO' 18" O.C.

56 SESLERIA AUTUMNALIS 12" O.C.
23 CAREX VULPINOIDEA 18" O.C.

4 ULMUS X 'PROSPECTOR' (3" CAL.)

4 ULMUS JAPONICA 'DISCOVERY'(3" CAL.)

61 ARCTOSTAPHYLOS UVA-URSI 24" O.C.

50 NARCISSUS 'DUTCH MASTER' 4"- 6" O.C. IN GROUPS
18 HEMEROCALLIS 'STELLA D'ORO' 18" O.C.

8 ULMUS JAPONICA 'DISCOVERY' (3" CAL.)

58 SESLERIA AUTUMNALIS 12" O.C.
CERCIS CANADENSIS (2" CAL.)
15 CAREX VULPINOIDEA 18" O.C.
55 IRIS SIBIRICA 'BABY SISTER' 12" O.C.
71 PANICUM VIRGATUM 'SHENANDOAH' 12" O.C.

1 2 QUERCUS MACROCARPA (3" CAL.)
91 SESLERIA AUTUMNALIS 12" O.C.
100 LIRIOPE M. 'VARIEGATA' 12" O.C.
MULCHED BED AREA FOR FUTURE ANNUAL PLANTINGS
(BY OTHERS)
6 CALAMAGROSTIS X 'KARL FOERSTER' 18" O.C.
18 IRIS SIBIRICA 'BABY SISTER' 12" O.C.
23 PANICUM VIRGATUM 'SHENANDOAH' 12" O.C.
11 CAREX VULPINOIDEA 18" O.C.

2 ULMUS JAPONICA 'DISCOVERY' (3" CAL.)

4 ULMUS X 'PROSPECTOR' (3" CAL.)

• AMELANCHIER CANADENSIS 'AUTUMN BRILLIANCE' (2" CAL.)
68 LIRIOPE M. 'VARIEGATA' 12" O.C.

4 SYRINGA RETICULA 'IVORY SILK' (2.5" CAL.)

6 SYRINGA RETICULA 'IVORY SILK' (2.5" CAL.)

AMELANCHIER CANADENSIS 'AUTUMN BRILLIANCE' (2" CAL.)
81 PANICUM VIRGATUM 'SHENANDOAH' 12" O.C.

LEGEND

PROJECT NORTH

SEE ABOVE		REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY
		1	ADDENDUM NO 1	01-04-2018		
			BID PLANS	12-01-2017		
BENCH MARK	SURVEY BOOK		95% CD	11-17-2017		

ADD1 - 30

DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

OVERALL PLANTING PLAN

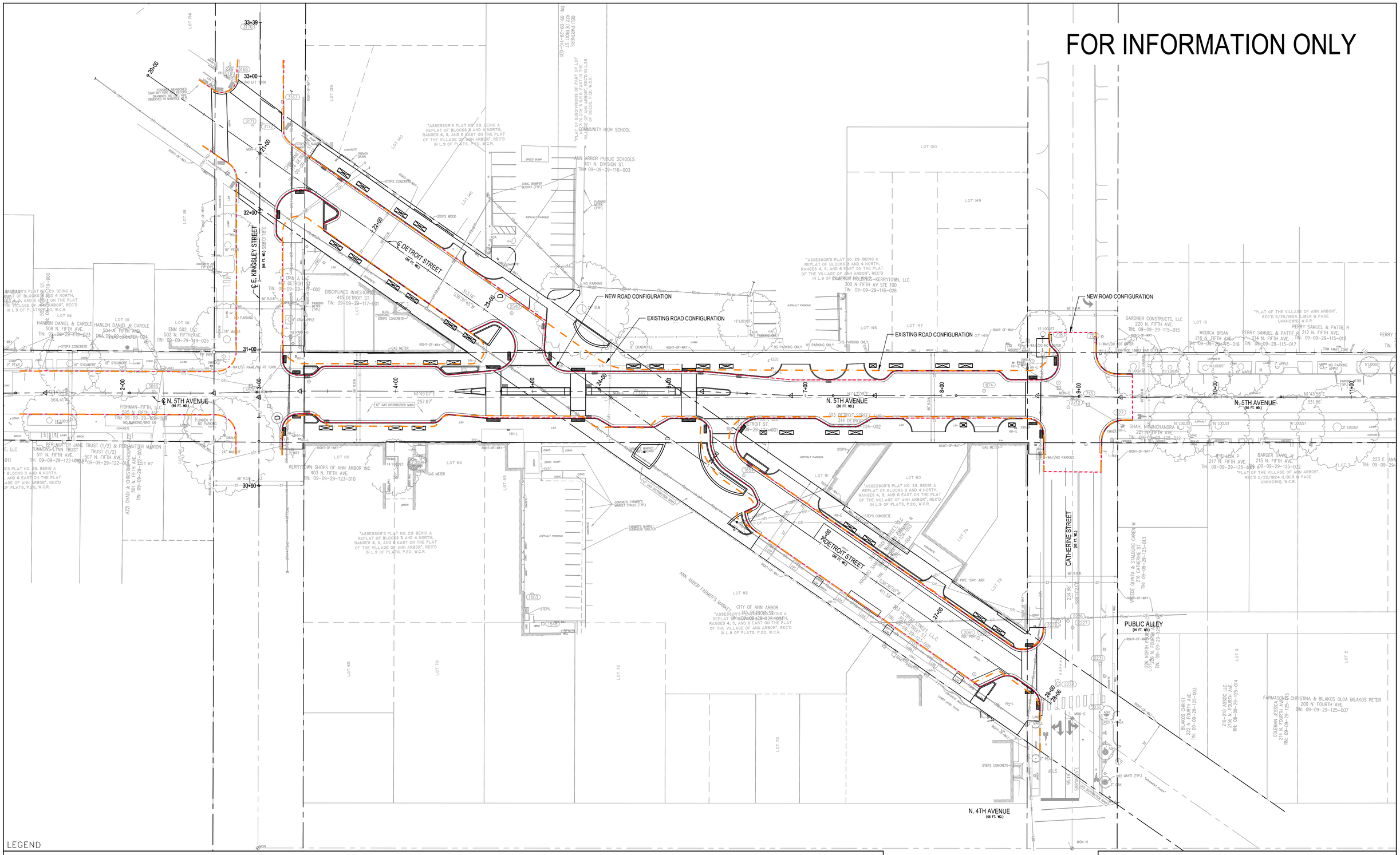
SCALE 1"=30' | INCH

DRAWING NO. L1.0

SHEET NO. ____ OF ____

APPROVED BY _____

FOR INFORMATION ONLY



DOWNTOWN DEVELOPMENT AUTHORITY - CITY OF ANN ARBOR

COMPARISON BETWEEN
EXISTING AND PROPOSED ROAD
CONFIGURATIONS

SCALE 1"=30'
INCH
DRAWING NO.
SHEET NO. ____ OF ____

BENCH MARK	SURVEY BOOK	REV. NO.	DESCRIPTION	DATE	DR.BY	CH.BY
SEE ABOVE		△	ADDENDUM NO 1	01-04-2018		

APPROVED BY

PROJECT NORTH