

BIRMINGHAM CITY COMMISSION AGENDA
MARCH 4, 2024
MUNICIPAL BUILDING, 151 MARTIN
7:30 P.M.

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Elaine McLain, Mayor

II. ROLL CALL

Alexandria Bingham, City Clerk

III. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS.

ANNOUNCEMENTS

- Happy Birthday Commissioner Baller

APPOINTMENTS

- A. Multi-Modal Transportation Board
1. Paul A. Eddleston
 2. Patrick Hillberg
 3. Gordon Davies

To appoint _____ as a regular member to the Multi-Modal Transportation Board to serve a three-year term to expire March 24, 2027.

To appoint _____ as a regular member to the Multi-Modal Transportation Board to serve a three-year term to expire March 24, 2027.

IV. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

V. CONSENT AGENDA

All items listed on the consent agenda are considered to be routine and will be enacted by one motion and approved by a roll call vote. There will be no separate discussion of the items unless a Commissioner or citizen so requests, in which event the item will be removed from the general order of business and considered under the last item of new business.

- A. Resolution to approve the City Commission Workshop meeting minutes of February 5, 2024.
- B. Resolution to approve the City Commission regular meeting minutes of February 5, 2024.
- C. Resolution to approve the City Commission regular meeting minutes of February 12, 2024.
- D. Resolution to approve the warrant list, including Automated Clearing House payments, dated February 15, 2024 in the amount of \$3,273,834.74.

March 4, 2024

- E. Resolution to approve the warrant list, including Automated Clearing House payments, dated February 23, 2024 in the amount of \$1,544,386.34.
- F. Resolution to approve the warrant list, including Automated Clearing House payments, dated February 28, 2024 in the amount of \$6,148,060.15.
- G. Resolution to approve a special event permit as requested by the Birmingham Shopping District to hold the Day on the Town event on July 27, 2024 contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event, or event cancellation that may be deemed necessary by administrative staff, leading up to or at the time of the event.
- H. Resolution to approve a special event permit as requested by the Birmingham Shopping District to hold the Birmingham Farmers Market on Sundays from May 5 – October 27, 2024 contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event, or event cancellation that may be deemed necessary by administrative staff, leading up to or at the time of the event.
- I. Resolution to approve a special event permit as requested by the Birmingham Shopping District to hold Birmingham Movie Nights on Friday June 7, July 19, August 9, and September 6, 2024 contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event, or event cancellation that may be deemed necessary by administrative staff, leading up to or at the time of the event.
- J. Resolution to award the Edgewood Road Project #6-24(S) to Eminent Excavating LLC in the amount of \$2,225,421.50 and a 5% construction contingency for a total of \$2,336,692.58. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City contingent upon execution of the agreement and meeting all insurance and bond requirements by Eminent Excavating LLC. Funding for this project has been budgeted in the following accounts:

Fund Account	Fund ID Number	Project Award	5% Contingencies	Total
Local Street Fund	203.0-449.001-981.0100	\$1,306,002.78	\$65,300.14	\$1,371,302.92
Sewer Fund	590.0-537.000-981.0100	\$703,716.92	\$35,185.85	\$738,902.76
Water Fund	591.0-544.000-981.0100	\$245,701.80	\$12,285.09	\$257,986.89

AND

To approve the appropriation and amendment of the fiscal year 2023/2024 budget as follows:

Local Street Fund:		
Revenues:		
203.0-000.000-400.0000	Draw from Fund Balance	<u>\$691,310</u>
Total Revenue		<u>\$691,310</u>
Expenditures:		
203.0-449.001-981.0100	Public Improvements	<u>\$691,310</u>
Total Expenses		<u>\$691,310</u>
Sewer Fund:		
Revenues:		
590.0-000.000-400.0000	Draw from Net Position	<u>\$528,910</u>
Total Revenue		<u>\$528,910</u>
Expenditures:		
590.0-537.000-981.0100	Public Improvements	<u>\$528,910</u>
Total Expenses		<u>\$528,910</u>
Water Fund:		
Revenues:		
591.0-000.000-400.0000	Draw from Net Position	<u>\$127,990</u>
Total Revenue		<u>\$127,990</u>
Expenditures:		
591.0-544.000-981.0100	Public Improvements	<u>\$127,990</u>
Total Expenses		<u>\$127,990</u>

VI. CITY MANAGER'S REPORT

VII. UNFINISHED BUSINESS

VIII. NEW BUSINESS

- A. Resolution to direct the Engineering Department to proceed with the final design of the North Adams Road Project from Madison Street to the northern City limits to reduce the existing 4 lanes to 3 lanes.
- B. Resolution to convert all one (1) hour parking meters to two (2) hour meters, except those on Maple between Old Woodward and Chester, and those on Old Woodward between Willits and Brown St., and to expand the 15-minute short-term pilot program through downtown, between Brown St. and Harmon, and Woodward and Chester.
- C. Resolution to establish the Ad Hoc Senior/Recreation Center Committee for a term of 3 years, and to direct the City Manager to serve as an ex-officio member of the committee to facilitate the oversight and provision of input on the planning and development of a senior/recreation center at 400 E. Lincoln.

- D. Commission Items for Future Discussion. A motion is required to bring up the item for future discussion at the next reasonable agenda, no discussion on the topic will happen tonight.
- E. Commission discussion on items from a prior meeting.
 - 1. Cameras on vehicles
 - 2. City run events and sponsors

IX. REMOVED FROM CONSENT AGENDA

X. COMMUNICATIONS

- A. Advisory Parking Committee Letter
- B. Shirley Arlington Letters

XI. REPORTS

- A. Commissioner Reports
 - 1. Notice of intention to appoint to the Martha Baldwin Park Board
 - 2. Notice of intention to appoint to the Housing Board of Appeals
- B. Commissioner Comments
- C. Advisory Boards, Committees, Commissions' Reports and Agendas
- D. Legislation
- E. City Staff
 - 1. 2nd Quarter Budget
 - 2. 2nd Quarter Investment
 - 3. Southeastern Oakland County Water Authority Quarterly Report
 - 4. Torry and Haynes Yield Sign Review

INFORMATION ONLY

XI!. ADJOURN

Should you wish to participate in this meeting, you are invited to attend the meeting in person or virtually through ZOOM: <https://zoom.us/j/655079760> Meeting ID: 655 079 760
You may also present your written statement to the City Commission, City of Birmingham, 151 Martin Street, P.O. Box 3001, Birmingham, Michigan 48012-3001 prior to the hearing.

NOTICE: Individuals requiring accommodations, such as mobility, visual, hearing, interpreter or other assistance, for effective participation in this meeting should contact the City Clerk's Office at (248) 530-1880 (voice), or (248) 644-5115 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

Las personas que requieren alojamiento, tales como servicios de interpretación, la participación efectiva en esta reunión deben ponerse en contacto con la Oficina del Secretario Municipal al (248) 530-1880 por lo menos el día antes de la reunión pública. (Title VI of the Civil Rights Act of 1964).



**NOTICE OF INTENTION TO APPOINT TO THE
MULTI-MODAL TRANSPORTATION BOARD**

At the regular meeting of Monday, March 4, 2024, the Birmingham City Commission intends to appoint to the Multi-Modal Transportation Board two regular members with terms expiring March 24, 2027.

Interested citizens may submit an application available at the City Clerk’s office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk’s office on or before noon on Wednesday, February 28, 2024. These documents will appear in the public agenda for the regular meeting at which time the City Commission will discuss recommendations, and may make nominations and vote on appointments.

In so far as possible, the seven-member committee shall be composed of the following: one pedestrian advocate member; one member with a mobility or vision impairment; one member with traffic-focused education and/or experience; one bicycle advocate member; one member with urban planning, architecture or design education and/or experience; and two members at large living in different geographical areas of the City. Applicants for this position do not have to be a qualified elector or property owner in Birmingham.

Duties of the Multi-Modal Transportation Board

The purpose of the Multi-Modal Transportation Board shall be to assist in maintaining the safe and efficient movement of motorized and non-motorized vehicles and pedestrians on the streets and walkways of the city and to advise the City Commission on the implementation of the Multi-Modal Transportation Plan, including reviewing project phasing and budgeting.

Applicant(s) Presented For City Commission Consideration:

All members of boards and commissions are subject to the provisions of the City of Birmingham City Code Chapter 2, Article IX, Ethics and Filing the Affidavit and Disclosure Statement.

	Criteria/Qualifications
	Traffic-focused education/experience, mobility/vision impairment, urban planning, architecture or design education/experience. In addition, 2 members at large living in different geographical areas of the City.
Paul A. Eddleston	Member of the League of Michigan Bicyclists and Strong Towns
Patrick Hillberg	Sustainable transportation professor currently serving the board as an alternate
Gordon Davies	Automotive engineer currently serving the board as an alternate member

SUGGESTED COMMISSION ACTION:

To appoint _____ as a regular member to the Multi-Modal Transportation Board to serve a three-year term to expire March 24, 2027.

To appoint _____ as a regular member to the Multi-Modal Transportation Board to serve a three-year term to expire March 24, 2027.

OFFICE USE ONLY
Meets Requirements? Yes No
Will Attend / Unable to Attend

APPLICATION FOR CITY BOARD OR COMMITTEE

Thank you for your interest in serving on a Board or Committee. The purpose of this form is to provide the City Commission with basic information about applicants considered for appointment. NOTE: Completed applications are included in the City Commission agenda packets. The information included on this form is open to the public. All Board and Committee members are subject to the provisions of the Ethics Ordinance (Chapter 2, Article IX of the City Code).

Information on various Boards and Committees and a list of current openings can be found on the City website at www.bhamgov.org/boardopportunities.

(Please print clearly)

Board/Committee of Interest Multi-Modal Transportation Board

Specific Category/Vacancy on Board: Bicycle/pedestrian advocate or General/alternate member

Name: Paul A. Eddleston

Phone: 248.207.0894

Residential Address: 1542 Washington Blvd.

Email: paueddleston7@gmail.com

Residential City, Zip: Birmingham, MI 48009

Length of Residence: 20 years

Business Address: 2384 Franklin Rd.

Occupation: Motorsport Business owner

Business City, Zip: Bloomfield Twp. MI 48302

Reason for Interest: Explain how your background and skills will enhance the board to which you have applied:

While I don't have any professional experience I have spent 50+ years moving through the built environment in multiple countries as a cyclist, pedestrian, runner and driver. In recent years I have become aware of the dearth of pedestrian and bicycle infrastructure and the prioritization of driving in this area and hope being a member of this board I can contribute my experience towards improving this situation.


List your related community activities: I am a member of the League of Michigan Bicyclists and Strong Towns

List your related educational experience: None

To the best of your knowledge, do you or a member of your immediate family have any direct financial or business relationships with any supplier, service provider or contractor of the City of Birmingham from which you or they derive direct compensation or financial benefit? If yes, please explain: NO

Do you currently have a relative serving on the board/committee to which you have applied? No

Are you an elector (registered voter) in the City of Birmingham? No


Signature of Applicant

2/18/2024
Date

Return the completed and signed application form to: City of Birmingham, City Clerk's Office, 151 Martin, Birmingham, MI 48009 or by email to clerk@bhamgov.org or fax to 248.530.1080. Updated 11/18/2020

**By providing your email to the City, you agree to receive news & notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.*



OFFICE USE ONLY
Meets Requirements? Yes No
Will Attend / Unable to Attend

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Information on various Boards and Committees and a list of current openings can be found on the City website at www.bhamgov.org/boardopportunities.

(Please print clearly)

Board/Committee of Interest _____

Specific Category/Vacancy on Board _____ (see back of this form for information)

Name _____

Phone _____

Residential Address _____

Email * _____

Residential City, Zip _____

Length of Residence _____

Business Address _____

Occupation _____

Business City, Zip _____

Reason for Interest: Explain how your background and skills will enhance the board to which you have applied _____

List your related employment experience _____

List your related community activities _____

List your related educational experience _____

To the best of your knowledge, do you or a member of your immediate family have any direct financial or business relationships with any supplier, service provider or contractor of the City of Birmingham from which you or they derive direct compensation or financial benefit? If yes, please explain: _____

Do you currently have a relative serving on the board/committee to which you have applied? _____

Are you an elector (registered voter) in the City of Birmingham? _____

PA Jim

Signature of Applicant _____

Date _____

Return the completed and signed application form to: City of Birmingham, City Clerk's Office, 151 Martin, Birmingham, MI 48009 or by email to clerksoffice@bhamgov.org or by fax to 248.530.1080. Updated 3/24/2021

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OFFICE USE ONLY
Meets Requirements? Yes (No)
RECEIVED
11:00 AM
Will Attend / Unable to Attend

APPLICATION FOR CITY BOARD OR COMMITTEE

Thank you for your interest in serving on a Board or Committee. The purpose of this form is to provide the City Commission with basic information about applicants considered for appointment. NOTE: Completed applications are included in the City Commission agenda packets. The information included on this form is open to the public. All Board and Committee members are subject to the provisions of the Ethics Ordinance (Chapter 2, Article IX of the City Code).

Information on various Boards and Committees and a list of current openings can be found on the City website at www.bhamgov.org/boardopportunities.

(Please print clearly)

Board/Committee of Interest MMTB

Specific Category/Vacancy on Board PEDESTRIAN ADVOCATE (see back of this form for information)

Name GORDON DAVIES

Phone 248 701 5462

Residential Address 969 BENNAVILLE

Email * gordonhdavies@yahoo.com

Residential City, Zip BIRMINGHAM, 48009

Length of Residence 22 years

Business Address

Occupation ENGINEER

Business City, Zip

Reason for Interest: Explain how your background and skills will enhance the board to which you have applied

MMTB ALTERNATE MEMBER SINCE OCTOBER 2022, CYCLIST, RUNNER AND BUS USER IN BIRMINGHAM.

List your related employment experience AUTOMOTIVE ENGINEER PLUS

SEAHOLM HIGH SCHOOL CROSS COUNTRY AND TRACK COACH

List your related community activities

SEAHOLM HIGH SCHOOL CROSS COUNTRY AND TRACK COACH

List your related educational experience BEM, MBA, MSc ALL DEVELOPED

COMMUNICATION AND PROBLEM SOLVING SKILLS.

To the best of your knowledge, do you or a member of your immediate family have any direct financial or business relationships with any supplier, service provider or contractor of the City of Birmingham from which you or they derive direct compensation or financial benefit? If yes, please explain:

NO

Do you currently have a relative serving on the board/committee to which you have applied? NO

Are you an elector (registered voter) in the City of Birmingham? YES

Signature of Applicant [Signature] Date 2/28/2024

Return the completed and signed application form to: City of Birmingham, City Clerk's Office, 151 Martin, Birmingham, MI 48009 or by email to clerksoffice@bhamgov.org or by fax to 248.530.1080. Updated 3/24/2021

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MULTI-MODAL TRANSPORTATION BOARD

Chapter 110, Sections 110-26 & 110-27

The purpose of the Multi-Modal Transportation Board shall be to assist in maintaining the safe and efficient movement of motorized and non-motorized vehicles and pedestrians on the streets and walkways of the city and to advise the city commission on the implementation of the Multi-Modal Transportation Plan, including reviewing project phasing and budgeting.

In so far as possible, the seven member committee shall be composed of the following: one pedestrian advocate member; one member with a mobility or vision impairment; one member with traffic-focused education and/or experience; one bicycle advocate member; one member with urban planning, architecture or design education and/or experience; and two members at large living in different geographical areas of the city. At least five Board members shall be electors or property owners in the city. The remaining Board members may or may not be electors or property owners in the City.

Term: Three years.

Last Name	First Name	Home Address	Home Business E-Mail	Appointed	Term Expires	
Davies	Gordon	969 Bennaville Birmingham	48009 <i>gordonhdavies@yahoo.com</i>	(248)701-5462	10/24/2022 Alternate	10/27/2025
Doolittle	Mark	1305 S. Bates St Birmingham	48009 <i>mark.j.doolittle@gmail.com</i>	(248) 535-0632	10/24/2022 Regular Member at large from a different geographical area of city	3/24/2026
Hanawalt	Sophie				2/27/2023 Student representative	12/31/2023

Last Name	First Name	Home Business	Appointed	Term Expires
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Hillberg 1853 Fairview Birmingham	Patrick 48009	(248)797-1804 <i>patrick_hillberg@hotmail.com</i>	10/24/2022 Alternate	10/27/2025
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Hocker 898 Pilgrim Birmingham	David 48009	(313) 917-4718 <i>dhocker@globalfacilitiesinc.com</i>	11/23/2020 Regular member at large/plan experience	3/24/2025
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Koul 662 Purdy #103 Birmingham	Z. Rosie 48009	(248) 420-0906	12/18/2023 Regular member-at-large from different geographical areas of the city	3/24/2025
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Peard 645 Suffield Birmingham	Thomas 48009	(248) 770-7761 <i>thomaspeard@yahoo.com</i>	1/13/2020 Urban planning /architecture /design	3/24/2025
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Vacated	2/1/2024			3/24/2024
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Sharma	Angie		2/27/2023 Student representative	12/31/2023
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Last Name	First Name	Home Business	Appointed	Term Expires
White 1342 Holland St. Birmingham	Doug 48009	(248) 825-2223 <i>dwhite10@peoplepc.com</i>	5/14/2018 Bicycle/pedestrian advocate	3/24/2024
Zane 1014 Chestnut St. Birmingham	Joseph 48009	(248) 563-3381 <i>Joseph.Michael.Zane@gmail.com</i>	12/10/2018 Regular Member	3/24/2025

CITY BOARD/COMMITTEE ATTENDANCE RECORD

Name of Board: **MULTI-MODAL TRANSPORTATION BOARD** Year: **2024**
 Members Required for Quorum: **4**

MEMBER NAME											SPECIAL MEETING			Total Mtgs. Att.	Total Absent	Percent Attend ed
REGULAR MEMBERS	1/4	2/1	3/7	4/4	5/2	6/6	8/1	9/5	11/7	12/5	2/15					
VACANT	CM	CM									P			1	0	100%
Joe Zane	CM	CM									A			0	1	0%
Z. Rosie Koul	CM	CM									A			0	1	0%
David Hocker	CM	CM									P			1	0	100%
Tom Peard	CM	CM									A			0	1	0%
Doug White	CM	CM									A			0	1	0%
Mark Doolittle	CM	CM									P			1	0	100%
ALTERNATES																
Gordon Davies	CM	CM									P			1	0	100%
Patrick Hillberg	CM	CM									P			1	0	100%
Jack Lassen (Student)	NA	NA									NA			0	0	#DIV/0!
Owen Reibschied (Student)	NA	NA									NA			0	0	#DIV/0!
TOTAL	0	0	0	0	0	0	0	0	0	0	5	0	0			

- KEY:**
- A** = Member absent
 - P** = Member present or available
 - CP** = Member available, but meeting canceled for lack of quorum
 - CA** = Member not available and meeting was canceled for lack of quorum
 - NA** = Member not appointed at that time
 - NM** = No meeting scheduled that month
 - CM** = Meeting canceled for lack of business items

 Department Head Signature

CITY BOARD/COMMITTEE ATTENDANCE RECORD

Name of Board: **MULTI-MODAL TRANSPORTATION BOARD** Year: **2023**
 Members Required for Quorum: **4**

MEMBER NAME	1/5	1/12	2/2	3/2	4/13	5/4	6/1	7/6	8/3	9/7	10/5	11/2	12/5	Total Mtgs. Att.	Total Absent	Percent Attend ed
REGULAR MEMBERS																
Anthony Long	CM	CM	P	A	CM	P	A	CM	CM	A	P	P	P	5	3	63%
Joe Zane	CM	CM	P	P	CM	A	A	CM	CM	A	P	P	P	5	3	63%
Victoria Policicchio	CM	CM	P	P	CM	P	A	CM	CM	P	P	A	A	5	3	63%
David Hocker	CM	CM	A	P	CM	P	P	CM	CM	P	A	A	P	5	3	63%
Tom Peard	CM	CM	P	P	CM	P	P	CM	CM	P	P	P	A	7	1	88%
Doug White	CM	CM	P	P	CM	P	P	CM	CM	A	P	P	P	7	1	88%
Mark Doolittle	CM	CM	P	P	CM	A	A	CM	CM	A	P	P	P	5	3	63%
ALTERNATES																
Gordon Davies	CM	CM	P	P	CM	A	P	CM	CM	P	P	P	P	7	1	88%
Patrick Hillberg	CM	CM	P	P	CM	A	P	CM	CM	P	P	P	P	7	1	88%
Angie Sharma (Student)	NA	NA	NA	P	CM	P	A	CM	CM	A	A	A	A	2	5	29%
Sophie Hanawalt (Student)	NA	NA	NA	P	CM	P	A	CM	CM	A	A	A	A	2	5	29%
TOTAL	0	0	8	10	0	7	5	0	0	5	8	7	7			

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 NA = Member not appointed at that time
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 Department Head Signature

CITY BOARD/COMMITTEE ATTENDANCE RECORD

Name of Board: **MULTI-MODAL TRANSPORTATION BOARD** Year: **2022**

Members Required for Quorum: 4

MEMBER NAME	2/3	3/3	4/7	5/5	6/2	SPEC MTG	7/7	8/4	9/1	10/6	11/3	12/1	SPEC MTG	Total Mtgs. Att.	Total Absent	Percent Attended Available
REGULAR MEMBERS						5/19										
Anthony Long	P	p	P	P	P	A	P	P	A	P	p	A		9	3	75%
Joe Zane	P	P	A	A	P	P	P	P	P	P	A	P		9	3	75%
Victoria Policicchio	P	P	P	P	P	A	A	P	P	A	P	P		9	3	75%
David Hocker	P	P	P	P	P	P	P	P	P	P	P	P		12	0	100%
Tom Peard	P	P	P	P	P	P	A	A	P	P	P	P		10	2	83%
Doug White	P	P	P	P	P	P	P	P	P	A	p	A		10	2	83%
Michael St. Germaine	NA	NA	P	P	A	A	A	A	NA	NA	NA	NA		2	4	33%
Mark Doolittle	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	P	P				
ALTERNATES																
Amanda Fishburn	A	A	A	P	A	A	A	A	A	A	NA	NA		1	9	10%
Mark Doolittle	NA	NA	P	A	P	A	P	A	P	P	NA	NA		5	3	63%
Gordon Davies	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	P	A				
Patrick Hillberg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	P	P				
														0	0	#DIV/0!
TOTAL	6	6	7	7	7	4	5	5	6	5	8	6	0			

- KEY:**
- A = Member absent**
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Department Head Signature

ARTICLE II. - MULTI-MODAL TRANSPORTATION BOARD

Footnotes:

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Editor's note— *Ord. No. 2138, adopted February 10, 2014, amended article II in its entirety to read as herein set out. Formerly, article II pertained to the traffic and safety board, and derived from the Code of 1963, §§ 10.91—10.96.*

Sec. 110-26. - Composition.

- (a) The multi-modal transportation board shall consist of nonvoting ex officio members and seven members appointed by the city commission. The nonvoting ex officio members shall be appointed by the city manager. They may include the city engineer, city planner, police chief, or their designated representative, or other representatives as the city manager deems appropriate. Insofar as possible, the city commission shall appoint members as follows:
- (1) One pedestrian advocate member;
 - (2) One member with a mobility or vision impairment;
 - (3) One member with traffic-focused education and/or experience;
 - (4) One bicycle advocate member;
 - (5) One member with urban planning, architecture or design education and/or experience; and
 - (6) Two members at large living in different geographical areas of the city.

At least five board members shall be electors or property owners in the city. The remaining board members may or may not be electors or property owners in the city.

- (b) The city commission may appoint two alternate members to serve as needed on the multi-modal transportation board during their term of appointment. An alternate member may be called on a rotating basis to sit as a regular member of the multi-modal transportation board in the absence of a regular member. An alternate member may also be called to service in the place of a regular member for the purpose of reaching a decision on a case in which the regular member has abstained for reasons of conflict of interest. An alternate member having been appointed shall serve in the case until a final decision has been made. An alternate member shall have the same voting rights as a regular member of the multi-modal transportation board.

(Ord. No. 2138, 2-10-14; Ord. No. 2200, 9-12-16; Ord. No. 2203, 10-10-16)

Sec. 110-27. - Terms of members.

Initial members of the multi-modal transportation board shall serve for the following terms: two members shall be appointed for one-year terms, two members shall be appointed for two-year terms, and three members shall be appointed for three-year terms. Thereafter, all appointments, except to fill vacancies, shall be for a term of three years. All appointments for the purpose of filling vacancies occurring otherwise than by expiration of term of office shall be for the unexpired term.

(Ord. No. 2138, 2-10-14)

Sec. 110-28. - Compensation.

All members of the multi-modal transportation board shall serve without compensation.

(Ord. No. 2138, 2-10-14)

Sec. 110-29. - Organization.

The multi-modal transportation board shall, from its appointed members, elect a chair who shall be the presiding officer of the board, and a vice-chair who shall serve in the absence of the chair. A secretary, who shall keep and maintain the proceedings of the board, shall be appointed by the board. The secretary need not be a member of the board. The terms of office for such officers shall be one year and until their successors have been elected. The ex officio members of the board may not act as the chair or vice-chair but may serve as secretary.

(Ord. No. 2138, 2-10-14)

Sec. 110-30. - Meetings and quorum.

The multi-modal transportation board shall hold meetings at such time and place as may be established by the board. Special meetings may be called by the secretary at the written request of the chair or any three members of the board on at least two days' notice. A quorum for the transaction of business at the regular and special meetings shall be four appointed members and at least one ex officio member or their designated representative.

(Ord. No. 2138, 2-10-14)

Sec. 110-31. - Scope of authority.

The multi-modal transportation board is a non-administrative board serving solely in an advisory capacity. In that capacity the board may make recommendations to the city commission but may not assume any legislative or administrative authority of the city commission or any department or board

established by the city commission except as specifically provided in this chapter. The multi-modal transportation board is not authorized to expend city funds.

(Ord. No. 2138, 2-10-14)

Sec. 110-32. - Purpose and duties.

The purpose of the multi-modal transportation board shall be to assist in maintaining the safe and efficient movement of motorized and non-motorized vehicles and pedestrians on the streets and walkways of the city and to advise the city commission on the implementation of the multi-modal transportation plan, including reviewing project phasing and budgeting. In furtherance of its purpose, the board shall endeavor to provide the following:

- (1) Advice on the implementation of the city's multi-modal transportation plan to the city commission.
- (2) Review of the multi-modal transportation plan to assure that it remains current with citywide multi-modal transportation movements and regional transportation plans and initiatives.
- (3) An objective and technical multi-modal evaluation of plans for all road reconstruction and road resurfacing projects, sidewalk and pedestrian crossing projects, intersection or bridge projects, bicycle and transit facility improvement projects.
- (4) An objective and technical evaluation of transportation issues brought to the attention of or identified by the board.
- (5) An objective and technical evaluation of the transportation plan submitted for proposed development or redevelopment, as referred to the board by the planning board.
- (6) An objective and technical multi-modal evaluation of site plans submitted for proposed development or redevelopment, as referred to the board by the planning board.
- (7) An objective and technical multi-modal evaluation of any ordinance amendments related to transportation issues, as referred to the board by the planning board or city commission.
- (8) The application of accepted transportation engineering practices, multi-modal transportation planning and complete streets practices and national standards, including those published by the American Association of State Highway and Transportation Officials, in solving and preventing transportation problems.
- (9) Objective and technical recommendations regarding transportation engineering safety issues to the city commission.
- (10) A forum for the voluntary coordination of groups interested in transportation issues.
- (11) A forum to review and decide appeals of administrative decisions made by the police department on transportation-related regulatory requests under article VII of this chapter.

(Ord. No. 2138, 2-10-14)

Secs. 110-33—110-55. - Reserved.

Birmingham City Commission Special Meeting Minutes - Workshop
February 5, 2024
Municipal Building, 151 Martin
6:30 p.m.

Vimeo Link: <https://vimeo.com/905430821>

This will be considered a workshop session of the City Commission. No formal actions will be taken. The purpose of this workshop is to engage in a presentation regarding Parliamentary Procedure and Robert’s Rules of Order.

I. Call to Order

Elaine McLain, Mayor

II. Roll Call

City Clerk Bingham called the roll.

Present: Mayor McLain
MPT Schafer
Commissioner Baller
Commissioner Haig
Commissioner Host
Commissioner Long
Commissioner Longe

Absent: None

Staff: City Manager Ecker; City Clerk Bingham, IT Manager Brunk, Assistant City Manager Clemence, City Engineer Coatta, Planning Director Dupuis, Police Chief Grewe, City Attorney Kucharek, Department of Public Services Director Zielinski

III. Presentation & Discussion

CM Ecker introduced Eleanor “Coco” Siewert, a Registered and Certified Parliamentarian.

Ms. Siewert made a presentation to the Commission. Ms. Siewert and staff answered informational questions from the Commission.

Staff provided information regarding a potential presentation from the Ethics Board.

Commissioners made the following comments:

- Minutes should be treated as a summary of a meeting, and further detail, if needed, can be sought via the linked recordings of the meetings.

02-028-24 Determining the Content of an Ethics Board Presentation

MOTION: Motion by Commissioner Longe, seconded by Commissioner Host:
To have Ms. Kucharek or Ms. Ecker provide the Ethics Board's questions to the Commission in a written format and provide the Commission with a requested deadline for any replies to be considered, and then to accept the replies and to allow the City Manager to direct the Ethics Board and to schedule a presentation to the Commission.

Commissioner Baller recommended that the questionnaire be structured so as to allow for easier data compilation.

The Mayor voiced support for the motion.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Mayor McLain
Commissioner Baller

Nays, None

IV. Public Comment

David Bloom made a comment about the minutes.

V. Adjourn

The Commission motioned to adjourn the meeting at 7:34 p.m.

Alexandria Bingham, City Clerk



Laura Eichenhorn, City Transcriptionist

Birmingham City Commission Minutes
February 5, 2024
Municipal Building, 151 Martin
7:30 p.m.
Vimeo Link: <https://vimeo.com/905430821>

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Elaine McLain, Mayor, opened the meeting with the Pledge of Allegiance.

II. ROLL CALL

City Clerk Bingham called the roll.

Present: Mayor McLain
MPT Schafer
Commissioner Baller
Commissioner Haig
Commissioner Host
Commissioner Long
Commissioner Longe

Absent: None

Staff: City Manager Ecker; City Clerk Bingham, Assistant City Manager Clemence, City Engineer Coatta, Senior Planner Cowan, Police Chief Grewe, Building Official Johnson, Police Captain Kearney, City Attorney Kucharek, Public Services Manager Markus

02-029-24 Change to the Agenda

MOTION: Motion by Commissioner Longe, seconded by MPT Schafer:
To move the closed session to occur after the consent agenda and prior to the City Manager's report.

In reply to Commissioner Host, Commissioner Longe said she believed the change would contribute to efficient conduct of the meeting.

Commissioner Host and the Mayor voiced support for the motion.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Mayor McLain
Commissioner Baller

Nays, None

III. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS

Announcements

- The City of Birmingham, along with the nation, recognizes Black History Month in February. We celebrate the legacy of Black Americans whose power to lead, to overcome and to expand the meaning and practice of American democracy has helped our nation become a more fair and just society. The City continues to make significant progress in understanding the important history of Black families in early Birmingham, and remains committed to seeking opportunities to share the whole story of our community in the future.

02-030-24 Public Arts Board

The Commission interviewed Monica Neville for the appointment.

MOTION: Nomination by Commissioner Host:
To appoint Monica Neville to the Public Arts Board as a regular member for a three-year term to expire January 28, 2027.

VOICE VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Mayor McLain
Commissioner Baller

Nays, None

02-031-24 Public Arts Board

The Commission interviewed Shabnam Hosseini for the appointment.

MOTION: Nomination by Commissioner Longe:
To appoint Shabnam Hosseini to the Public Arts Board as an alternate member for the remainder of a three-year term to expire January 28, 2025.

VOICE VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Mayor McLain
Commissioner Baller

Nays, None

02-032-24 Historic District Study Committee

The Commission interviewed Katherine Barta for the appointment. After a clarification from Ms. Barta’s interview, the Commission noted that Ms. Barta had a personal, and not a financial, interest in historic preservation.

MOTION: Nomination by Commissioner Haig:
To appoint Katherine Barta as a regular member to the Historic District Study Committee to serve the remainder of a three-year term to expire June 25, 2026.

VOICE VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Mayor McLain
Commissioner Baller

Nays, None

CC Bingham swore in the present appointees.

IV. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

David Bloom commented regarding free speech.

V. CONSENT AGENDA

02-033-24 Consent Agenda

MOTION: Motion by Commissioner Longe, seconded by MPT Schafer:
To move the Consent Agenda with the exception of Items H and I.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Host
Commissioner Longe
Commissioner Long
Commissioner Haig
Mayor McLain
Commissioner Baller

Nays, None

- A. Resolution to approve the City Commission Long Range Planning meeting minutes of January 20, 2024.

- B. Resolution to approve the City Commission regular meeting minutes of January 22, 2024.
- C. Resolution to approve the warrant list, including Automated Clearing House payments, dated January 25, 2024 in the amount of \$2,377,776.27.
- D. Resolution to approve the warrant list, including Automated Clearing House payments, dated January 31, 2024 in the amount of \$396,739.34.
- E. Resolution to approve the Memorandum of Understanding and the Cost Reimbursement Agreement with the FBI and to authorize the Chief of Police to sign the agreements on behalf of the City.
- F. Resolution to approve an extension of the public services and minor home repair contract with NEXT for the purpose of expending remaining program year 2021-2022 Community Development Block Grant funds for Yard Services and Minor Home Repair Services administered by NEXT through December 31, 2024; and further, to authorize the Mayor and the City Clerk to sign the amendment on behalf of the City.
- G. Resolution to approve the purchase of root control services, as quoted by Duke's Root Control, Inc. for the 2024 Sewer Root Control Program, in the amount not to exceed \$125,085.30. Funding for this project has been budgeted in the following account: Fund

Account	Fund ID Number	Project Award
Sewer Fund	590.0-538.000-811.0000	\$125,085.30

AND

To approve the appropriation and amendment of the fiscal year 2023/2024 budget as follows:

Sewer Fund:

Revenues:

590.0-00.00-400.0	Draw from Net Position	\$25,085.30
Total Revenue		<u>\$25,085.30</u>

Expenditures:

590.0-537.000-811.0000	Other Contractual Services	\$25,085.30
Total Expenses		<u>\$25,085.30</u>

02-034-24 Award of the Bid for Truck Transport and Tank Wagon Deliveries (Item I)

Commissioner Haig pulled Item I. DPSD Zielinski answered informational questions from the Commission.

MOTION:

Motion by Commissioner Haig, seconded by Commissioner Host:

To split the award of the bid for truck transport and tank wagon deliveries of unleaded gasoline and diesel fuel to the following vendors, to enable a backup supply source to be available to the

City should the need arise, based on bid factors included in their respective bids for a two-year period beginning February 1, 2024, with the option to extend terms and conditions an additional two years upon mutual consent:

Truck Transport deliveries:

1. RKA Petroleum Companies, 28340 Wick Rd., Romulus, MI, 48174 and
2. Marathon Flint Company, 1919 S Dort Highway, Flint, MI 48503

Tank Wagon deliveries:

1. RKA Petroleum Companies, 28340 Wick Rd., Romulus, MI, 48174 and
2. Gen Oil Company, 1238 Anderson Rd., Clawson, MI 48017

Funds for this purchase of gasoline and diesel fuels are budgeted in Auto Equipment Fund - Fuel Expense account #661-441.006-737.0000.

ROLL CALL VOTE: Ayes, MPT Schafer
 Commissioner Host
 Commissioner Longe
 Commissioner Long
 Commissioner Haig
 Mayor McLain
 Commissioner Baller

Nays, None

02-035-24 Amendment to Chapter 2 – Administration, Article IX. – Ethics, Sec. 2-325(a)(4) (Item H)

Paul Reagan, a member of the public, pulled Item H. He opposed the proposed change to the Ethics Ordinance.

Public Comment

Jim Mirro supported Mr. Reagan.

MOTION: Motion by Commissioner Baller, seconded by Commissioner Long:
To amend Chapter 2 – Administration, Article IX. – Ethics, Sec. 2-325(a) Board of ethics (4) allowing for a business or property owner in the City of Birmingham to serve on the Ethics Board as appointed by the City Commission.

Staff answered informational questions from the Commission.

Individual Commissioner comments were as follows:

- The change would not eliminate residents from the Board of Ethics. It would expand eligibility to allow for property- or business-owning non-residents to serve on the Board of Ethics. Board of Ethics opinions are thorough and considered, and there is likely a small pool of applicants who have both the capacity and availability to serve on the Board. Having two alternate positions on the Board is wise, given that succession planning for

the Board is necessary. The Commission would have to use its discretion to determine appropriate appointees;

- The change was being proposed because too few residents were volunteering their time. Any interested residents would be encouraged to apply for volunteer boards and committees in order to ensure there are enough members to conduct City business;
- The proposed language was not an attempt to obscure any outcome, and it was disappointing that the Board of Ethics has seen an increase in its utilization recently;
- The Commission should not make the recommended changes because the Board of Ethics can judge Commissioners, which could have the outcome of non-residents impacting voter-elected officials. If applications to the Board of Ethics remain an issue, the matter should be revisited in a year's time; and,
- The City strives to ensure that its boards and committees are devoid of conflicts-of-interest. Many municipalities do not have formal Boards of Ethics, and it is valuable that the City has one.

Public Comment

Mr. Bloom commented on how the independence of the Board of Ethics members could potentially be increased.

Irene Hathaway opposed the proposed change to the Ethics Ordinance, and supported the City increasing its efforts to publicize Board of Ethics positions to residents first.

Suzanne Faber also supported the City increasing its efforts to publicize Board of Ethics positions to residents first.

It was noted in reply to Brooke Reiter that residential renters are able to serve on the City's boards and committees.

Judy Doyle, alternate on the Board of Ethics, commented that the preceding discussion might serve to recruit additional resident applications to serve on the Board of Ethics.

Mr. Mirro reiterated his support for Mr. Reagan, and commented on the increased frequency of the Board of Ethics' utilization.

ROLL CALL VOTE: Ayes, None

 Nays, MPT Schafer
 Commissioner Host
 Commissioner Longe
 Commissioner Long
 Commissioner Haig
 Mayor McLain
 Commissioner Baller

02-036-24 Amendment to Chapter 2 – Administration, Article IX. – Ethics, Sec. 2-325(a)(4) (Item H) (Part II)

MOTION: Motion by Commissioner Long, seconded by Commissioner Baller:

To table this issue for 60 days, and then to bring it back.

Commissioner comments were as follows:

- This conversation hopefully will generate enough resident awareness and interest that there will be no shortage of applications for the Board of Ethics. Residents should sign up for the City's emails and other communications, and should encourage others to do the same. Residents can also note open board and committee positions at the end of each Commission agenda; and,
- City information is available via multiple different sources, and now that residents are aware of it they should seek it out.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Mayor McLain
Commissioner Baller

Nays, Commissioner Host

02-037-24 Closed Session Pursuant to MCL § 15.268 Sec. 8(h) of the Open Meetings Act

MOTION: Motion by Commissioner Longe:
To meet in closed session to discuss a written attorney/client privilege communication pursuant to MCL § 15.268 Sec. 8(h) of the Open Meetings Act.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Mayor McLain
Commissioner Baller
Commissioner Host

Nays, None

The Commission went into closed session at 8:48 p.m.

The Commission returned from closed session at 9:02 p.m.

VI. CITY MANAGER'S REPORT

VII. UNFINISHED BUSINESS

02-038-24 Staff Update – Shirley Rd. & Arlington St. Interim Report for City-Initiated Unimproved Street Project

Commissioner Baller recused himself from the discussion citing his residence within the project area and left the room at 9:02 p.m.

Individual Commissioner comments were as follows:

- Members of the Commission are residents. These changes would represent improvements to the project area's health and safety by improving the water and sewer infrastructure. The Commission has an obligation to ensure that the roadway is safe. The Fire Chief has said that the hydrants likely have insufficient water pressure due to the current infrastructure. Road improvements in the project area would increase accessibility and safety. The focus of this conversation should be the failing infrastructure. All of the Commission deliberation on the matter has occurred in public, and can be reviewed via the minutes, the agendas, and/or video recordings online. Members of the public can reach the Mayor on her City-provided cell phone at 248-490-7188. Collaboration and safety should be the priority of these proceedings;
- There has been limited but vocal public conjecture that the Commission made its decision prior to hearing from the public, and/or that the Commission does not listen to the public. In contrast to those accusations, the Commission has participated in a number of conversations on the matter in public as well as a publicly-accessible walk in the neighborhood. Individual Commissioners declined to engage with residents who wanted to speak privately to Commissioners in order to avoid the appearance of prematurely reaching a decision. Accusing the Commission of enacting a foregone conclusion or ignoring public input when the evidence is to the contrary does damage to the community and the process. The Commission will make the best decision it possibly can;
- Misinformation and bullying have been present among some members of the public's reactions to the proposed project. These reactions have intimidated some other members of the public into not participating publicly. While the Commission has been described by some members of the public as inflexible, the Commissioners have repeatedly stated their commitment to weighing all of the information available. Sidewalks are safer than a lack of sidewalks, and advocating for children requires that to be recognized;
- The vitriol of the public discourse regarding this matter is relatively unprecedented within Birmingham. Some members of the public have engaged in threats, name calling, insulting staff, and misinformation. Residents should be aware that when certain parties attempt to generate suspicion of the Commission, it may be an attempt to pressure the Commission into voting a certain way. While those attempting to generate suspicion of the Commission are within their rights, they should also consider their impact on the members of the Commission, and should consider whether their actions are based in truth;
- Thanks were due to all City staff and Commissioners that enabled the walk of the project area to occur; and,
- Government exists to serve the residents. Some members of the public have been described as being part of a lobbyist group or a special interest group. These members of the public are also residents, and the Commission should listen intently to their opinions.

A number of Commissioners also noted that:

- All correspondence that came to the Commission regarding the matter was reviewed;
- While the tone of some of the correspondence was inappropriate, the extent of the correspondence was valuable and appreciated;
- The Commissioners did not respond directly to the correspondence so that the

- Commission could deliberate as a body;
- The Commission would hear information from all parties, and that said information would be considered with an open mind;
- It would be challenging to make a decision on this matter given the heightened atmosphere;
- Members of the public should not endeavor to threaten, insult, or intimidate members of the Commission;
- The discussion should proceed civilly and respectfully; and,
- Staff deserved thanks for their work on the item.

SP Cowan and CE Coatta presented the item.

Commissioners continued their discussion. Individual Commissioner comments were as follows:

- The discussion could be separated into three separate sections: water and sewer, street type, and sidewalks. It might be appropriate to approve the replacement of water and sewer infrastructure within the project area, and then to send the road surface, design, and reconstruction back for further board review. The unimproved streets funding methodology should also be reviewed, because the City's Insurance Services Office rating (ISO) was reduced in part due to its older water infrastructure;
- While staff recommendations are guided by City plans, neither those recommendations or those plans are binding on the Commission. The Commission should improve the water and sewer, but should otherwise return the street to its present condition. One member of the public supplied an alternate proposal for sidewalks and street design which should be considered;
- Staff deserved thanks for their presentation of the item. The City's street width and sidewalk goals were adopted before any of the present Commissioners were elected. The Ad Hoc Unimproved Street Study Committee (AHUSSC) recommended that the City adopt a City-initiated process for improving streets for a number of reasons. It would behoove the City to re-evaluate the way it selects projects. The present project area has never been assessed for improvement. While a 26 foot width may be the street standard, it may not be appropriate in every location. Residents have requested that the City propose creative alternatives for this project. It may be most appropriate to table the item or to return it to the Multi-Modal Transportation Board (MMTB) for the generation of creative alternatives. A compromise solution may be a bit wider, may have partial, complementary sidewalks on each side of the street, may generally take the conditions more into consideration, and/or may include a bicycle lane;
- The City's plans are advisory, and cannot be appropriately applied to each circumstance. Shirley and Arlington is a unique neighborhood within the City. Westwood was another somewhat unique circumstance, and the width of that street was maintained rather than reduced. The water and sewer improvements in the project area are a necessity. It would then be appropriate to improve the road surface by adding curbs and using either concrete or asphalt. The sidewalk aspect of the project should not be proceeded with. The project should not be tabled because the project area needs new sewer and water lines as soon as possible;
- Collaboration between the City, Commissioners, and residents should focus on promoting safety within the project area for both present and future residents. It may be appropriate to send this back to the MMTB for expedited review, asking for a creative design that integrates water, sewer, road, pedestrian, and young children's safety needs;

- There was significant agreement on the importance of the water and sewer improvements, and on the value of improving the road. Once the road is improved, maintenance of the road surface would be paid for by the City rather than the project area's residents; and,
- The AHUSSC considered alternative funding methods for road improvements and did not recommend any, in part because other Birmingham streets have been improved using the present funding method. Westwood, a street that recently chose to remain unimproved, is now being noted for its poor surface quality by some residents.

MOTION: Motion by Commissioner Long, seconded by Commissioner Longe:
We approve to go forward with the water and sewer, that the City replaces the roadway and the curbs, and the roadway is asphalt and remains the same width that it is right now, and no sidewalks.

Commissioner comments were:

- The project area residents did not request asphalt;
- Everyone should look at the October 2, 2023 Commission workshop on unimproved roads to understand the cost structure for unimproved versus improved and the payback period;
- If the water and sewer is improved, it is possible that the manhole covers, grates, and curbs would need to be replaced; and,
- One Commissioner would not support the project without road improvement, citing the issues with Westwood's road surface. Additionally, sidewalks are safer than walking in the road.

Staff provided guidance regarding the process and answered informational questions from the Commission.

Public Comment

Fremont Scott supported replacing only the necessary curbs.

Jenny Shebib supported saving as much of the curb as possible.

Mike Minelli supported the water and sewer improvements, more attention for sidewalk repair, and breaking future projects into smaller portions for review purposes.

Richard Silbergleit, Cary Miliron, Lisa Drake, Ms. Shebib, Renee Billmeyer, Pam Minelli, and Creagh Milford supported the motion.

Ms. Hathaway supported each street being evaluated individually when improvement is under consideration.

Mr. Mirro commented on whether Arlington and Shirley are improved roads, on horizontal drilling, and on the coverage of this item in the news media.

Scott Allen supported narrowing the streets and adding sidewalks in the project area.

Vanessa Durham supported the addition of sidewalks.

Ms. Billmeyer supported the addition of sidewalks in the City in general, though not in the project area.

Mr. Bloom commented on the horizontal drilling process and read excerpts from another resident's letter which was previously provided to the Commission.

Mark Lakin asked about the timeframe of the project as proposed by the motion.

Lauren Buttazoni asked how the motion would impact potential future street width or sidewalk changes in the project area.

Madeline Kleitch commented on how projects impact the water level in the project areas.

Ms. Faber commented on road narrowing in the City.

Rosie Koul thanked the Commission, residents, and City staff for their participation in the process.

A number of residents thanked the Commission for their process and expressed remorse for the behavior of some members of the public.

ROLL CALL VOTE: Ayes, MPT Schafer
 Commissioner Longe
 Commissioner Long
 Commissioner Haig
 Mayor McLain

 Nays, Commissioner Host

The Commissioner entered a brief recess, and returned from recess. Commissioner Baller rejoined the meeting at 11:34 p.m.

VIII. NEW BUSINESS

02-039-24 Brandon Street – Shirley Road to Linden Road – Adding to Arlington Road and Shirley Road Project

CE Coatta presented the item and answered informational questions from the Commission.

Commission discussed road surface improvements, better parking for the park, and the width of the road. There was discussion that a sidewalk on one or both sides of the street might also be beneficial.

MOTION: Motion by Commissioner Baller, seconded by Commissioner Longe:
To direct the Engineering Department to add Brandon Street to the Arlington Street and Shirley Street project and proceed with the final design to include construction of the street within the project area that will meet the City standards for an improved street with a five foot wide sidewalk on at least one side of the road, accommodating parking and entrance to the park, as well as a gate for pump house road.

Commissioner comment was as follows:

- It might be prudent to have Engineering return with design based on the setbacks and rights of way before this motion is advanced;

Public Comment

Mr. Mirro commented on potential sidewalk and parking locations.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Host
Commissioner Longe
Commissioner Long
Commissioner Haig
Mayor McLain
Commissioner Baller

Nays, None

02-040-24 Speed Mitigation Report

Chief Grewe summarized the report and answered informational questions from the Commission.

Commissioner comment was as follows:

- Speed signs and other speed mitigation measures should be standardized;
- Other speed mitigation measures should be considered; and,
- Given the lateness of the hour, this conversation should perhaps be continued in the future.

MOTION: Motion by Commissioner Long, seconded by Commissioner Baller:
To move this to an agenda item for further discussion and a decision process on another day.

Commissioner comment was as follows:

- There was a worthwhile question about whether to continue with the status quo.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Host
Commissioner Longe
Commissioner Long
Commissioner Haig
Mayor McLain
Commissioner Baller

Nays, None

Commission Items for Future Discussion

02-041-24 Cameras on City Vehicles

MOTION: Motion by Commissioner Haig, seconded by Commissioner Host:
To consider the addition of front and rear facing cameras to all City vehicles.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Host
Commissioner Longe
Commissioner Long
Commissioner Haig
Mayor McLain
Commissioner Baller

Nays, None

Commission Discussion On Items From A Prior Meeting

VIII. REMOVED FROM CONSENT AGENDA

IX. COMMUNICATIONS

X. REPORTS

- A. Commissioner Reports
 - 1. Notice of intention to appoint to the Architectural Review Committee
 - 2. Notice of intention to appoint to the Planning Board
- B. Commissioner Comments

The Mayor encourages unhoused individuals to request co-response support from the social worker who works with the City's police.

The Mayor noted that the Birmingham Youth Assistance Dog Show was a success.

The Mayor reiterated that credible threats to elected officials affect discourse, that the Attorney General's office has been informed of recent threats, and that the Attorney General's office would be informed again if threats recur.

- C. Advisory Boards, Committees, Commissions' Reports and Agendas
 - 1. Ethics Opinion 2023-03
 - 2. Ethics Opinion 2023-04
- D. Legislation
- E. City Staff

INFORMATION ONLY

XI. ADJOURN

The Commission motioned to adjourn at 12:29 a.m.



Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

DRAFT

Birmingham City Commission Minutes
February 12, 2024
Municipal Building, 151 Martin
7:30 p.m.
Vimeo Link: <https://vimeo.com/910298478>

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Elaine McLain, Mayor, opened the meeting with the Pledge of Allegiance.

II. ROLL CALL

City Clerk Bingham called the roll.

Present: Mayor McLain
MPT Schafer
Commissioner Baller
Commissioner Haig
Commissioner Host
Commissioner Long
Commissioner Longe

Absent: None

Staff: City Manager Ecker; Marketing and Public Relations Specialist Bassett, City Clerk Bingham, Assistant City Manager Clemence, Senior Planner Cowan, Planning Director Dupuis, Assistant City Manager Fairbairn, Police Chief Grewe, Building Official Johnson, City Attorney Kucharek, Department of Public Services Director Zielinski

III. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS

Announcements

- The City's Ad Hoc Aging in Place Committee is still accepting the Community Survey from the public. The Community Survey is for residents of all ages and available in both print form as well as online at engage.bhamgov.org/aginginplace. In an effort to reach as many residents as possible, the City will be mailing a print copy of the Community Survey in every resident's water bill. Respondents may complete the survey in print form and mail it back to the City or drop it off at City Hall, the Baldwin Public Library, The Birmingham Museum or Next. Printed copies of the Community Survey are also available at all of these locations.
- On February 28, 2024, 2023, the Ad Hoc Aging in Place Committee will hold their regular meeting at 1:00 p.m. at Next (2121 Midvale St, Birmingham, MI 48009) to receive public input from residents as it relates to aging in place. The committee welcomes anyone who wishes to have input into developing a Citywide Aging in Place Action Plan to attend and be heard.

- The Oakland County Treasurer’s Office is in the final stretch of their Foreclosure Prevention efforts. The tax foreclosure deadline for the 2021 or prior year taxes is on April 1, 2024. That means if these taxes aren’t paid off by April 1st or any interested party hasn’t entered into a repayment schedule with the Treasurer’s office by then, the property will be foreclosed.
- The Oakland County Treasurer’s Office is here to help and strongly encourages taxpayers to contact their office before the tax foreclosure deadline if they have delinquent taxes for 2021 or prior tax years. Taxpayers interested in scheduling a Taxpayer Assistance Meeting may call us at 248-858-0611 or they may visit www.oakgov.com/treasurer. An informational page from the Oakland County Treasurer’s Office is available at the end of tonight’s agenda packet.

Appointments

02-042-24 2024 Student Board Representatives to City Boards and Committees

MOTION: Nomination by Commissioner Longe, seconded by Commissioner Long:
To approve the appointments of those students as non-voting student members for the calendar year 2024 for the boards as enumerated by the Mayor.

The student representatives introduced themselves, and the Commissioners imparted encouragement and advice.

VOICE VOTE: Ayes, MPT Schafer
 Commissioner Host
 Commissioner Longe
 Commissioner Long
 Commissioner Haig
 Mayor McLain
 Commissioner Baller

Nays, None

IV. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

Paul Reagan and David Bloom commented on interactions between the Commission and the public.

Diane Cancro made comments about sewage and water issues in her yard.

Jim Mirro commented about future improvements to Shirley and Arlington.

V. CONSENT AGENDA

02-043-24 Consent Agenda

MOTION: Motion by Commissioner Longe, seconded by Commissioner Haig:
To move the Consent Agenda with the exception of Items A, C, D, H, I.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Host
Commissioner Longe
Commissioner Long
Commissioner Haig
Mayor McLain
Commissioner Baller

Nays, None

- B. Resolution to approve the warrant list, including Automated Clearing House payments, dated February 7, 2024 in the amount of \$561,604.79.
- E. Resolution to set a public hearing date of March 18, 2024 to consider the Special Land Use Permit Amendment for 115 Willits – Mare Mediterranean – to transfer ownership and update the Special Land Use Permit with the new owner, Birmingham Prime Hospitality, LLC.
- F. Resolution to accept the resignation of Victoria Policicchio from the Multi-Modal Transportation board, to thank her for her service, and to direct the City Clerk to begin the process of filling the vacancy.
- G. Resolution to recognize the following seven student representatives for their service in 2023 on Birmingham boards and committees and award each student a certificate in appreciation for their civic involvement:

Ian Weinberg	Historic District Committee/ Design Review Board
Alex Motea	Museum Board
Kate Glasier	Parks and Recreation Board
Asher Kaftan	Planning Board
Matthew Weigand	Planning Board
Luke DeSanto	Public Arts Board
Andrew McLean	Public Arts Board

02-044-24 Special City Commission Meeting Minutes — January 30, 2024 (Item A)

The item was pulled by staff in order to note spelling corrections.

MOTION: Motion by Commissioner Longe, seconded by Commissioner Long:
To approve the special City Commission meeting minutes of Tuesday, January 30, 2024 with the corrections outlined by the City Clerk.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long

Commissioner Haig
Commissioner Host
Mayor McLain
Commissioner Baller

Nays, None

02-045-24 \$1 Green Fee Increase for Golf Rounds (Item C)

The item was pulled by Commissioner Baller. Staff answered informational questions from the Commissioners.

Individual Commissioner comment was as follows:

- Given planned improvements, it might be more appropriate to raise the green fees by a greater amount than presently proposed;
- If the green fees are increased too much at once, it may deter golfers from using Birmingham's courses;
- Communicating the planned improvements with the public would likely increase acceptance of increased fees;
- City administration should review the courses' finances to determine whether the proposed increase would generate enough revenue to perform the planned improvements;
- Staff deserved commendation for planning ahead on this item; and,
- Enacting a greater increase in green fees presently would help limit the extent to which the City's general fund will need to be used to subsidize the golf courses in the future.

MOTION: Motion by Commissioner Haig, seconded by Commissioner Host:
To approve a \$1 Green Fee increase to the golf round fees as described, presented, detailed, and documented.

Public Comment

Ms. Cancro supported a \$2 green fee increase.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Mayor McLain

Nays, Commissioner Baller

02-046-24 Local Approval Notice — Churchill's Cigar Shop, Inc. (Item D)

Mr. Reagan pulled the item and asked at what point a transfer of shares meets the threshold for being a sale.

MOTION: Motion by Commissioner Baller, seconded by Commissioner Long:

To authorize the City Clerk to complete the Local Approval Notice at the request of Churchill's Cigar Shop, Inc. to approve the request for a transfer of shares for a business which holds a Class C and SDM License with Sunday Sales (PM) and Outdoor Service Area located at 116-118 S Old Woodward Ave., Birmingham, Oakland County, MI to now include .007652 shares to Jeffery Samona, .007652 Shares to Lance Samona, .007652 Shares to Justin Samona, .007652 Shares to Dominic Samona, .007652 Shares to Travis Samona, .002547 Shares to Mario Samona, .002547 Shares to Andrew Samona and .002547 Shares to Armani Samona.

Commissioner comment was as follows:

- One of the owners is transferring shares, as a gift, to eight other applicants within a family; and,
- This is not a transfer of ownership from one entity to another. It is the transfer of shares within the existing entity.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Commissioner Baller
Mayor McLain

Nays, None

02-047-24 Sculpture Donation — "Connection" by James Kaye (Item H)

Commissioner Haig pulled the item and said he wanted staff to have the opportunity to present the miniatures of the pieces provided by the artists.

Staff presented the item. Artist James Kaye spoke about the item.

The Commission thanked Mr. Kaye.

MOTION: Motion by Commissioner Haig, seconded by Commissioner Long:
To approve the sculpture donation of "Connection" by James Kaye at the location off of W. Maple just west of the museum.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Commissioner Baller
Mayor McLain

Nays, None

02-048-24 Sculpture Donation — "Mulligan" by Martin Van Almen (Item I)

Commissioner Haig pulled the item and said he wanted staff to have the opportunity to present the miniatures of the pieces provided by the artists.

Staff presented the item.

MOTION: Motion by Commissioner Haig, seconded by Commissioner Long:
To approve the sculpture donation of "Mulligan" by Martin Van Almen to be installed at Lincoln Hills Golf Course behind the first tee box on the existing concrete pad.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Commissioner Baller
Mayor McLain

Nays, None

VI. CITY MANAGER'S REPORT

CM Ecker presented the report.

VII. UNFINISHED BUSINESS

02-049-24 Speed Mitigation Report

PC Grewe summarized the item.

Individual Commissioner comment was as follows:

- The costs of additional speed boards and enforcement should be determined, and additional speed boards and enforcement should be considered;
- Speed limit enforcement is done to preserve the community's health, safety, and welfare; and,
- The Multi-Modal Transportation Board has evaluated the potential use of speed bumps in the past and noted that they would be inappropriate in many Birmingham contexts.

MOTION: Motion by Commissioner Baller, seconded by Commissioner Host:
To have the City administration come back to us with more information about speed boards - placement, how many, how much they cost - and, a report on stepped up enforcement - what it would cost, what would be proposed in the neighborhoods, targeting streets that have high traffic, cut-throughs, and high speeds - and engaging the City's Communications Director to communicate that the City likes people to go the speed limit and whatever the City will eventually end up doing.

Commissioner comment was as follows:

- It is important to go the speed limit in the neighborhoods and to avoid tailgating other drivers.

ROLL CALL VOTE: Ayes, MPT Schafer
 Commissioner Longe
 Commissioner Long
 Commissioner Haig
 Commissioner Host
 Commissioner Baller
 Mayor McLain

Nays, None

VIII. NEW BUSINESS

02-050-24 Public Hearing to Consider Annual Liquor License Renewals

The Mayor opened the public hearing at 8:59 p.m. and introduced the item.

CC Bingham and PD Dupuis presented the item.

Seeing no public comment, the Mayor closed the public hearing at 9:06 p.m.

MOTION: Motion by Commissioner Host, seconded by Commissioner Long:
 To approve the renewal of liquor licenses for the 2024 licensing period for the following establishments holding a Class B, Class C, or Microbrewery Liquor License that are in compliance with Chapter 10, Alcoholic Liquors of the City Code:

- All Seasons Senior Living
- Bella Piatti
- Birmingham Pub
- Birmingham Theater
- Brooklyn Pizza
- Churchills Bistro
- Community House
- Dick O’Dows
- Elie’s Mediterranean
- Emagine Palladium
- Fleming’s Prime Steakhouse
- Forest Grill 2
- Griffin Claw Brewing Company
- Hazel Ravines & Downtown
- Hyde Park Steak House
- La Strada Italian Kitchen and Bar
- Lincoln Hills Golf Course
- Luxe Bar and Grille
- Mare Mediterranean
- Perno
- Phoenicia Restaurant
- Salvatore Scallopini
- Springdale Golf Course
- Streetside Seafood
- Sushi Japan
- Tallulah Wine Bar and Bistro
- The Daxton Hotel
- The Morrie Birmingham
- Townsend Hotel
- Townhouse Kitchen & Bar
- Whistlestop

And

To make a motion adopting a resolution to set public hearings on Monday, March 18, 2024 to consider whether the City Commission shall file objections with the Michigan Liquor Control Commission for the renewal of licenses held by the following establishments that are in violation of Chapter 10, Alcoholic Liquors of the City Code:

- 220 Restaurant
- Adachi Restaurant
- Employee Meal
- Market North End
- Papa Joe's/Bistro Joe's
- Sidecar/Slice/Shift
- Social Kitchen and Bar
- Toast
- Zana

And

Further, to direct the City Manager to notify the owners and operators of licensed establishments for which a public hearing is set via first class certified mail, to inform them of the public hearing date set for the March 18, 2024 7:30 p.m. City Commission meeting, and inform them that they may submit any written material for consideration by the City Commission prior to or at the public hearing, that the licensee or counsel of licensee may appear at the hearing in person or via zoom, and that the licensee or counsel of licensee may present witnesses or written evidence for City Commission consideration at the public hearing.

The Commission briefly noted that a number of the establishments on the list for the March 18, 2024 hearing had also violated Chapter 10, Alcoholic Liquors of the City Code in years prior.

ROLL CALL VOTE: Ayes, MPT Schafer
Commissioner Longe
Commissioner Long
Commissioner Haig
Commissioner Host
Commissioner Baller
Mayor McLain

Nays, None

02-051-24 400 E. Lincoln - Senior/Recreation Assessment and Conceptual Design Award

CM Ecker provided an overview of the item.

The teams from Krieger Klatt Architects and NORR, LLC each presented to the Commission while the other team waited outside the Commission room. Krieger Klatt Architects presented first. Between the presentations the meeting entered a brief recess, and then returned from recess.

City staff and each team answered informational questions from the Commission.

Commissioner comments were as follows:

- This project will overlap in part with the YMCA's tenancy at the project site, and the City will need to determine how to best manage that overlap;

- It will be important to define the stakeholders clearly and to maintain open lines of communication;
- This compressed timeline was not the same as an expedited or premium timeline;
- Six Commissioners said they would have preferred to be more included in the process leading up to this point. In the future, the Commission should be included in the process from an earlier point, including potential reviews of requests for proposal and selection criteria;
- Staff should provide the Commissioners with the scoring sheets and any other information used to recommend these two teams for the Commissioners' reference;
- NORR, LLC provided an estimate \$25,000 lower than Krieger Klatt Architects, which needed to be considered;
- While Krieger Klatt Architects' local experience was valuable, NORR, LLC demonstrated care about community work;
- The cost difference may or may not end up being statistically significant in terms of the entire project;
- Both bidders were excellent candidates;
- Given the time constraints of the process, it would be appropriate to move forward this evening with one of the two teams;
- The NORR, LLC bid would involve working with one firm, whereas Krieger Klatt Architects' bid would involve working with two firms;
- NORR, LLC's use of A.M. Higley as a cost consultant would be preferable to a construction company's estimator; and,
- NORR, LLC proposed one more public engagement meeting than Krieger Klatt Architects proposed.

MOTION:

Motion by Commissioner Long, seconded by Commissioner Haig:

To adopt a resolution to approve the 2024-bid proposal with NORR, LLC to furnish all labor, equipment, material and supervision necessary for the "Birmingham Senior/Recreation Building" facility assessment and conceptual designs for a renovation/expansion project of the City-owned building at 400 East Lincoln St., Birmingham MI 48009, in the amount not to exceed \$133,694.00. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City. No City funding is necessary for this project.

Public Comment

George Dilgard and Gordon Rinschler commented on the motion.

Commissioner comments were as follows:

- One Commissioner had been more inclined to vote for Krieger Klatt Architects due to prior positive experience with Krieger Klatt Architects, and due to the firm's local experience, but would not vote against NORR, LLC.

ROLL CALL VOTE: Ayes, MPT Schafer
 Commissioner Longe
 Commissioner Long
 Commissioner Haig
 Commissioner Host
 Commissioner Baller

Mayor McLain

Nays, None

The Mayor thanked both teams.

Commission Items for Future Discussion

02-052-24 City Events

MOTION: Motion by Commissioner Baller, seconded by Mayor McLain:
To talk about the City's willingness and ability to run and sponsor events.

VOICE VOTE: Ayes, MPT Schafer
Commissioner Host
Commissioner Longe
Commissioner Long
Commissioner Haig
Mayor McLain
Commissioner Baller

Nays, None

02-053-24 Horizontal Directional Drilling

MOTION: Motion by Commissioner Host, seconded by Commissioner Haig:
To determine the possibility of having directional drilling companies be invited to bid on the City's residential water and sewer replacements.

VOICE VOTE: Ayes, Commissioner Haig
Commissioner Host

Nays, MPT Schafer
Commissioner Longe
Commissioner Long
Mayor McLain
Commissioner Baller

Commission Discussion On Items From A Prior Meeting

VIII. REMOVED FROM CONSENT AGENDA

IX. COMMUNICATIONS

A. Communications regarding Arlington and Shirley

Staff noted that two further pieces of correspondence regarding the topic would be included in the next Commission agenda.

X. REPORTS

A. Commissioner Reports

1. Notice of intention to appoint to the Multi-Modal Transportation Board

The Mayor reported back from the MML's Live at the League and the Women Officials' Network Board Meeting. She noted her upcoming participation in a call with State Senator McMorrow and a conversation with the Lathrup Village Police.

MPT Schafer provided information about Birmingham Youth Assistance's Youth in Service Awards program.

B. Commissioner Comments

C. Advisory Boards, Committees, Commissions' Reports and Agendas

D. Legislation

The Mayor noted legislation regarding the prevention of robocalls.

E. City Staff

1. Report from City Attorney

CA Kucharek summarized the report.

INFORMATION ONLY

XI. ADJOURN

The Commission motioned to adjourn at 11:36 p.m.

Alexandria Bingham, City Clerk



Laura Eichenhorn, City Transcriptionist

City of Birmingham

Warrant List Dated 02/15/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
<u>PAPER CHECK</u>				
296465	*	005430	21ST CENTURY MEDIA- MICHIGAN	1,080.25
296466		009699	ADVANCED VETERINARY MEDICAL CENTER	177.30
296467	*	007266	AETNA BEHAVIORAL HEALTH LLC	579.09
296468		MISC	ANN ARBOR DISTRICT LIBRARY	13.99
296469	*	009202	AQUARIUM DESIGN INC	240.00
296470	*	000500	ARTECH PRINTING INC	540.00
296471		001122	BOB BARKER CO INC	20.80
296472		002231	BILLINGS LAWN EQUIPMENT INC.	89.99
296473		003526	BOUND TREE MEDICAL, LLC	2,555.51
296474		005717	BSB COMMUNICATIONS, INC.	131.25
296475	*	009078	CANON SOLUTIONS AMERICA INC	69.23
296476		007732	CAPITAL TIRE, INC.	1,192.00
296477		009597	CAROL BACAK-EGBO	300.00
296478	*	009809	CAROLINE ROBINSON	116.00
296479		009562	EGL	3,000.00
296480		007134	CERTIFIED POWER, INC	235.14
296481		000979	COMERICA BANK	20,370.71
296482	*	005074	COMFORT INN & SUITES	178.50
296483	*	000627	CONSUMERS ENERGY	10,132.63
296484		003923	CUMMINS BRIDGEWAY LLC	2,289.51
296485		009024	THE D.M. BURR GROUP	4,711.20
296486	*	006852	DAKTRONICS, INC	1,905.00
296487		000190	DOWNRIVER REFRIGERATION	47.64
296488	*	000179	DTE ENERGY	111.52
296489	*	000179	DTE ENERGY	188.04
296490	*	000179	DTE ENERGY	2,463.29
296491	*	000179	DTE ENERGY	131.35
296492	*	000179	DTE ENERGY	90.94
296493	*	000179	DTE ENERGY	2,951.88
296494	*	000179	DTE ENERGY	21.18
296495	*	000179	DTE ENERGY	451.39
296496	*	000179	DTE ENERGY	176.69
296497	*	000179	DTE ENERGY	33.38
296498	*	000179	DTE ENERGY	1,076.05
296499	*	000179	DTE ENERGY	518.18
296500	*	000179	DTE ENERGY	455.06
296501	*	000180	DTE ENERGY	54,994.88
296502		009340	DVM UTILITIES	18,880.00
296503		MISC	ERIN COLETTI	10.99
296504		001495	ETNA SUPPLY	2,340.00
296505	*	004604	GORDON FOOD	357.94
296506	*	000249	GA BUSINESS PURCHASER LLC	50.00

City of Birmingham
Warrant List Dated 02/15/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
296507		UBREFUND	HEINZ, JOAN	2,218.92
296508		MISC	HERO INDUSTRIES, INC	1,780.00
296509	*	001956	HOME DEPOT CREDIT SERVICES	772.55
296510	*	009029	HORIZON COMMUNICATIONS CO. INC	10,493.00
296511		009551	INTERMEDIA. NET INC	769.49
296512		000342	INTERSTATE BATTERIES OF SE MICH	2,605.37
296513	*	009559	JENETTE MAITZ	2,484.25
296514		009821	JOY YOUNG	500.00
296515	*	009133	KIMBERLY FENCE & SUPPLY INC	6,370.68
296516	*	000362	KROGER COMPANY	31.26
296517		006817	LEXISNEXIS RISK DATA MANAGEMENT INC	100.00
296518		009375	LITHIA MOTORS, INC SUPPORT SERVICES	83.10
296519		009351	MERRITT CIESLAK DESIGN PLC	2,000.00
296520		003099	MICHIGAN POLICE EQUIP.	775.00
296521		001497	MICHIGAN STATE POLICE	900.00
296522		000230	MIKE SAVOIE CHEVROLET INC	706.67
296523		001950	MILLER CANFIELD PADDOCK AND	2,835.00
296524		008319	MKSK INC	8,854.77
296525	*	000649	MML WORKERS' COMP FUND	79,307.00
296526		000668	NATIONAL TIME & SIGNAL CORP	886.20
296527	*	004827	NICK'S MAINTENANCE SERVICE	8,820.00
296528		009704	NOAR TECHNOLOGIES	1,400.00
296529		009749	DAVID DECKER	1,050.00
296530	*	000477	OAKLAND COUNTY	2,886.00
296531	*	000675	OAKLAND SCHOOLS	5,102.21
296532	*	004370	OCCUPATIONAL HEALTH CENTERS	477.00
296533		001626	OXFORD OVERHEAD DOOR SALES CO.	340.00
296534	*	000801	POSTMASTER	1,000.00
296535		003629	PREMIUM AIR SYSTEMS INC	256.42
296536		000218	ROYAL OAK P.D.Q. LLC	570.75
296537		009548	SHARE CORPORATION	403.17
296538		007142	SHERWIN-WILLIAMS COMPANY	227.02
296539		009798	STALKER RADAR	5,190.00
296540	*	007408	T-MOBILE	629.48
296541	*	001076	TAYLOR FREEZER OF MICH INC	325.00
296542		000275	TIRE WHOLESALERS CO INC	247.60
296543	*	008941	UPTOWN MARKET OF BIRMINGHAM	61.68
296544	*	001279	US FIGURE SKATING ASSOC.	17.50
296545	*	000293	VAN DYKE GAS CO.	221.20
296546	*	000158	VERIZON WIRELESS	1,279.67
296547	*	000158	VERIZON WIRELESS	149.64
296548	*	000158	VERIZON WIRELESS	152.14
296549		009806	VFP FIRE SYSTEMS	2,485.00

City of Birmingham
Warrant List Dated 02/15/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
296550		000299	WEINGARTZ SUPPLY CO.	254.07
296551	*	002171	WEISSMAN'S COSTUMES	969.22
296552		005112	WOLVERINE	801.86
296553	*	008391	XEROX CORPORATION	106.08
SUBTOTAL PAPER CHECK				\$295,174.47
<u>ACH TRANSACTION</u>				
10050	*	001357	ART/DESIGN GROUP LTD	130.00
10051	*	000517	BEIER HOWLETT P.C.	181.50
10052	*	007345	BEVERLY HILLS ACE	146.27
10053	*	008840	BIRMINGHAM PUBLIC SCHOOLS-TAXES	2,131,709.41
10054	*	000542	BLUE WATER INDUSTRIAL PRODUCTS INC	118.50
10055		000605	CINTAS CORPORATION	405.90
10056		000605	CINTAS CORPORATION	28.65
10057	*	009540	CIVICPLUS, LLC	407.07
10058	*	008044	CLUB PROPHET	554.00
10059		002668	CONTRACTORS CLOTHING CO	1,220.71
10060	*	009557	ZECO, LLC	630.00
10061		009181	DELTA TEMP SERVICES INC	450.35
10061	*	009181	DELTA TEMP SERVICES INC	423.00
10062	*	006999	CHRISTOPHER DEMAN	764.00
10063	*	000565	DORNBOS SIGN & SAFETY INC	2,353.72
10064	*	001077	DUNCAN PARKING TECH INC	6,393.15
10065		000213	FIRE DEFENSE EQUIP CO INC	62.18
10066	*	001230	FIRE SYSTEMS OF MICHIGAN LLC	152.50
10067	*	000243	GRAINGER	472.77
10068		008293	GRAINGER, INC	201.93
10069		000331	HUBBELL ROTH & CLARK INC	33,281.07
10070		000261	J.H. HART URBAN FORESTRY	22,529.27
10071	*	003458	JOE'S AUTO PARTS, INC.	922.59
10072		004085	KONE INC	621.84
10072	*	004085	KONE INC	2,086.45
10073	*	005876	KROPF MECHANICAL SERVICE COMPANY	1,419.72
10074	*	004362	LEATHERS & ASSOCIATES INC	314.70
10075	*	005550	LEE & ASSOCIATES CO., INC.	1,383.00
10076	*	003527	LOWER HURON SUPPLY CO INC	803.46
10077		002013	MIDWEST TAPE	1,011.66
10078		001194	NELSON BROTHERS SEWER	205.00
10079	*	007755	NETWORK SERVICES COMPANY	1,301.14
10080	*	007856	NEXT	970.20
10081	*	008843	OAKLAND COUNTY TREASURER- TAX PYMNT	720,541.80
10082	*	002767	OSCAR W. LARSON CO.	911.25
10083	*	000897	PRINTING SYSTEMS INC	4,772.66
10084	*	009666	RAM CONSTRUCTION SERVICES OF MICHIG	21,146.40

City of Birmingham
Warrant List Dated 02/15/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
10085	*	003554	RKA PETROLEUM	6,901.83
10086		009266	US SIGNAL COMPANY LLC	8,621.12
10087	*	000969	VIGILANTE SECURITY INC	220.50
10088		009687	WAGEWORKS, INC.	169.00
10089	*	009783	WINDCAVE INC	1,720.00
SUBTOTAL ACH TRANSACTION				\$2,978,660.27
GRAND TOTAL				\$3,273,834.74

All bills, invoices and other evidences of claim have been audited and approved for payment.



Mark Gerber
Finance Director/ Treasurer

*-Indicates checks released in advance and prior to commission approval in order to avoid penalty or to meet contractual agreement/obligation.

City of Birmingham
Warrant List Dated 02/22/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
<u>PAPER CHECK</u>				
296554	*	005430	21ST CENTURY MEDIA- MICHIGAN	383.34
296555		009346	ACCUFORM PRINTING & GRAPHICS, INC	2,581.47
296556		006638	ACTION MAT & TOWEL RENTAL, INC	40.00
296557	*	009393	AMANDA MCBRIDE	360.00
296558		BDREFUND	AMSON CUSTOM HOMES LLC	1,000.00
296559		000167	ANDERSON ECKSTEIN WESTRICK INC	1,927.00
296560	*	TAXMISC	ANDREW & GILLIAN RIFKIN	20,439.00
296561		000500	ARTECH PRINTING INC	354.00
296562		BDREFUND	ATESIAN PROPERTIES, INC	200.00
296563		BDREFUND	AVRIPAS CONSTRUCTION	300.00
296564		BDREFUND	AXIOM CONSTRUCTION	100.00
296565		009609	BALIAN LEGAL, PLC	2,508.00
296566	*	009568	BEDROCK EXPRESS LTD	1,455.74
296567	*	002482	CITY OF BERKLEY	347.74
296568		BDREFUND	BILLY WHITE ROOFING LLC	100.00
296569		BDREFUND	BLOOMFIELD CONSTRUCTION CO	200.00
296570		BDREFUND	BLOOMINGDALE HOMES INC	1,000.00
296571		BDREFUND	BLUMKE INSTALLATIONS	100.00
296572		BDREFUND	BOJI GROUP	500.00
296573		003526	BOUND TREE MEDICAL, LLC	25.80
296574	*	TAXMISC	BRADFORD & ANNA COULTER	1,031.36
296575	*	007919	BRUCE WHITE GALLERY	279.60
296576		BDREFUND	C & G CEMENT CEMENT CONTRACTORS INC	100.00
296577		003907	CADILLAC ASPHALT, LLC	7,594.50
296578		BDREFUND	CASA VILLA HOMES	200.00
296579	*	001086	RYAN KATZ	853.06
296580		BDREFUND	CLEMENT CONSTRUCTION COMPANY LLC	500.00
296581	*	TAXMISC	CLISBY & JESSICA JARRARD	871.76
296582		009167	COL'S FAMILY RESTAURANT	578.16
296583		008512	COOL THREADS EMBROIDERY	723.95
296584		BDREFUND	CRAIG RYAN FINE CLOTHING	100.00
296585		004386	CYNERGY PRODUCTS	2,282.67
296586		BDREFUND	David J. Barrett, Jr	100.00
296587	*	UBREFUND	DJL3 LLC	221.78
296588	*	000179	DTE ENERGY	179.12
296589		004493	ELITE IMAGING SYSTEMS, INC	819.64
296590		BDREFUND	ERIE CONSTRUCTION	100.00
296591		000585	FARMINGTON COMM. LIBRARY	9,234.67
296592		BDREFUND	FOUNDATION SYSTEMS OF MICHIGAN INC.	100.00
296593	*	009387	FRAIBERG & PERNIE PLLC	1,860.00
296594	*	UBREFUND	FRANK DUSHAJ	428.74
296595		BDREFUND	GREAT LAKES LANDSCAPE DESIGN, INC	100.00

City of Birmingham
Warrant List Dated 02/22/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
296596		BDREFUND	GRENNAN CONSTRUCTION	200.00
296597	*	000249	GA BUSINESS PURCHASER LLC	284.64
296598		001531	GUNNERS METER & PARTS INC	1,200.00
296599		001447	HALT FIRE INC	646.58
296600	*	001956	HOME DEPOT CREDIT SERVICES	1,743.71
296601		BDREFUND	HOME PRO ROOFING	100.00
296602		BDREFUND	HORIZON RETAIL CONSTRUCTION	5,000.00
296603		001090	INGRAM LIBRARY SERVICES	6,824.68
296605	*	009401	IRENE S WASSEL	360.00
296606		BDREFUND	JOHN LINDSAY MAYER LANDSCAPE ARCHIT	200.00
296607		BDREFUND	JOHN MCCARTER CONSTRUCTION LLC	200.00
296608	*	009403	JUSTIN ZAYID	1,080.00
296609		BDREFUND	KELLY BUILDING & DEVELOPMENT CO LLC	400.00
296610		BDREFUND	KENDALL DESIGN AND BUILD	700.00
296611	*	002659	CHRISTOPHER KOCH	543.01
296612		004904	KONICA MINOLTA BUSINESS SOLUTIONS	2,047.70
296613	*	000362	KROGER COMPANY	79.80
296614		BDREFUND	LAKES DEVELOPMENT GROUP	1,000.00
296615	*	009386	LAW OFFICE OF BRIAN P. FENECH	2,976.00
296616	*	009422	ALEX LINKE	270.30
296617		009375	LITHIA MOTORS, INC SUPPORT SERVICES	1,477.48
296618		BDREFUND	MAINSTREET DESIGN & BUILD	200.00
296619		BDREFUND	Maple Willits, LLC	300.00
296620		BDREFUND	MAPLEWOOD 720 LLC	200.00
296621		BDREFUND	MARTIN SPORTS & ENTERTAINMENT	100.00
296622	*	009085	MGSE SECURITY LLC	500.00
296623		MISC	MICHIGAN STATE INDUSTRIES	100.00
296624	*	002089	MICHIGAN-SHIGA SISTER STATE BOARD	100.00
296625		007163	MOBILE HEALTH RESOURCES	2,031.80
296626		BDREFUND	NAGLE PAVING CO	100.00
296627	*	000477	OAKLAND COUNTY	834,346.68
296628		006785	OVERDRIVE, INC.	27,456.74
296629		BDREFUND	PELLA WINDOWS & DOORS, INC.	500.00
296630		BDREFUND	PHILLIPS SIGN & LIGHTING INC	100.00
296631		009612	PLAYAWAY PRODUCTS LLC	56.99
296632	*	009394	RABAA & NACHAWATI PLLC	360.00
296633		BDREFUND	RENEWAL BY ANDERSEN	500.00
296634	*	000218	ROYAL OAK P.D.Q. LLC	40.84
296635		000221	RUSSELL HARDWARE COMPANY	39.33
296636	*	002806	SAM'S CLUB/SYNCHRONY BANK	383.70
296637		BDREFUND	SAS SERVICES INC	100.00
296638		BDREFUND	SCOTT PATRICK MCDONALD	200.00
296639		BDREFUND	SCOTT QUALITY HOMES II LLC	7,160.00

City of Birmingham
Warrant List Dated 02/22/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
296640		007114	SHERWIN WILLIAMS COMPANY	174.70
296641		007142	SHERWIN-WILLIAMS COMPANY	89.12
296642		BDREFUND	SIGNGRAPHIX, INC.	100.00
296643	*	003743	STANLEY STEEMER	1,312.00
296644	*	TAXMISC	STEPHANIE ZEKELMAN	7,361.37
296645		BDREFUND	STERLING DEVELOPMENT CORP	2,000.00
296646		004544	STRYKER SALES CORPORATION	7,556.40
296647		009819	SUCCESS 911, LLC	1,690.00
296648		009810	SYSTEMATIC FIRE PROTECTION INC	969.99
296649	*	009384	THE EDITH BLAKNEY LAW FIRM, PLLC	360.00
296650		000275	TIRE WHOLESALERS CO INC	250.98
296651	*	004379	TURNER SANITATION, INC	315.00
296652	*	001279	US FIGURE SKATING ASSOC.	17.50
296653		BDREFUND	USZTAN LLC	1,000.00
296654	*	000293	VAN DYKE GAS CO.	129.60
296655	*	000158	VERIZON WIRELESS	308.16
296656	*	000158	VERIZON WIRELESS	89.89
296657		BDREFUND	VITAL SIGNS	100.00
296658		BDREFUND	WALLSIDE INC	2,000.00
296659		BDREFUND	WARBY PARKER, INC.	100.00
296660	*	002171	WEISSMAN'S COSTUMES	58.10
296661	*	009026	WELLS FARGO VENDOR FIN SERV	768.47
296662		BDREFUND	WHITE WOLF LANDSCAPING	100.00
296663		BDREFUND	WILLOUGHBY, MICHAEL L	100.00
296664		BDREFUND	WINDOW PRO HOLDINGS LLC	500.00
296665	*	009460	BRANDON WYNN	77.25
296666	*	008391	XEROX CORPORATION	44.49
296667	*	009463	ZOOBEAN	1,547.15
SUBTOTAL PAPER CHECK				\$993,511.25

ACH TRANSACTION

10097		003708	AIRGAS USA, LLC	366.53
10098	*	009383	BATTI LAW PLLC	360.00
10099	*	000517	BEIER HOWLETT PC	43,231.98
10100	*	000517	BEIER HOWLETT PC	18,136.48
10101	*	007345	BEVERLY HILLS ACE	7.19
10102	*	009122	CLAIRE CHUNG	546.25
10103		000605	CINTAS CORPORATION	199.21
10104	*	000605	CINTAS CORPORATION	178.02
10105		000605	CINTAS CORPORATION	29.56
10106	*	000605	CINTAS CORPORATION	146.89
10107		002234	CMP DISTRIBUTORS INC	1,004.00
10108		001750	COMERICA BANK	1,470.58
10108		001750	COMERICA BANK	303,995.09

City of Birmingham
Warrant List Dated 02/22/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
10109		003176	COMERICA BANK - RHC	739.83
10109		003176	COMERICA BANK - RHC	98,930.19
10110		002668	CONTRACTORS CLOTHING CO	180.00
10111	*	009557	ZECO, LLC	250.00
10112	*	009181	DELTA TEMP SERVICES INC	2,000.00
10113	*	000565	DORNBOS SIGN & SAFETY INC	583.31
10114		000196	EJ USA, INC.	1,075.08
10115		001230	FIRE SYSTEMS OF MICHIGAN LLC	1,242.00
10116	*	000243	GRAINGER	10.48
10117	*	001663	SCOTT GREWE	132.65
10118		007927	MICHELLE HOLLO	402.50
10119		000331	HUBBELL ROTH & CLARK INC	7,902.48
10120	*	009390	IDUMESARO LAW FIRM, PLLC	720.00
10121	*	007870	J.C. EHRLICH CO. INC.	65.88
10122		000261	J.H. HART URBAN FORESTRY	32,277.72
10123	*	002576	JAX KAR WASH	52.00
10124		009249	JCC CREATIVE LLC	525.00
10125	*	003458	JOE'S AUTO PARTS, INC.	702.45
10126	*	008827	KANOPY, INC	487.90
10127	*	007827	HAILEY R KASPER	1,162.00
10128	*	005465	RYAN KEARNEY	123.79
10129	*	000891	KELLER THOMA	660.00
10130	*	005876	KROPF MECHANICAL SERVICE COMPANY	4,963.46
10131	*	009392	LAMB LEGAL CONSULTING SERVICES	360.00
10132	*	009385	LAW OFFICE OF MICHAEL J. DICK	396.00
10133	*	005550	LEE & ASSOCIATES CO., INC.	1,818.64
10134	*	009398	MARCIA C ROSS PC	1,476.00
10135		002013	MIDWEST TAPE	9,513.53
10136		008336	NBS COMMERCIAL INTERIORS	792.00
10137		009276	NEWTONS SOLUTIONS LLC	2,050.00
10138	*	006359	NYE UNIFORM COMPANY	589.60
10139	*	009395	ORLANDO LAW PRACTICE PC	408.00
10140	*	002767	OSCAR W. LARSON CO.	239.00
10141	*	001753	PEPSI COLA	1,150.52
10142	*	001181	ROSE PEST SOLUTIONS	175.00
10143	*	003785	SIGNS-N-DESIGNS INC	225.00
10144		005861	UNIQUE MGMT SERVICE, INC	113.30
10145	*	000969	VIGILANTE SECURITY INC	528.00
10146	*	009379	YELLOW DOOR LAW	6,180.00
SUBTOTAL ACH TRANSACTION				\$550,875.09

City of Birmingham
Warrant List Dated 02/22/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
GRAND TOTAL				\$1,544,386.34

All bills, invoices and other evidences of claim have been audited and approved for payment.



Mark Gerber
Finance Director/ Treasurer

*-Indicates checks released in advance and prior to commission approval in order to avoid penalty or to meet contractual agreement/obligation.

City of Birmingham

Warrant List Dated 02/28/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
<u>PAPER CHECK</u>				
296668	*	005430	21ST CENTURY MEDIA- MICHIGAN	936.50
296669		006324	ALTA CONSTRUCTION EQUIPMENT LLC	1,468.31
296670	*	009823	ANTHONY PAREDES	39.00
296671	*	006759	AT&T	39.38
296672	*	008708	DAVID BARTLEY	362.62
296673		BDREFUND	BASEMENT CRACKS & LEAKS/METRO	200.00
296674		BDREFUND	BRIXNSTONE LLC	200.00
296677		BDREFUND	COASTAL DESIGN & BUILD	500.00
296679		BDREFUND	CONSTRUCTEAM	200.00
296680	*	000627	CONSUMERS ENERGY	14,741.90
296681		008582	CORE & MAIN LP	1,350.21
296682		BDREFUND	DEBI CHUN HABIGER	15,000.00
296684		BDREFUND	DEVONCE CUSTOM CONSTRUCTION	200.00
296685		BDREFUND	DOBI	500.00
296686		BDREFUND	DROBOT CUSTOM BUILDING INC	500.00
296687	*	000179	DTE ENERGY	19.56
296689	*	000180	DTE ENERGY	9,273.33
296690		BDREFUND	EDWARD J STENGER JR REVOC TRUST	100.00
296691	*	007366	FIRST ADVANTAGE OCCUPATIONAL CORP	38.33
296692	*	004604	GORDON FOOD	691.87
296693	*	000245	GREAT LAKES POPCORN CO	211.85
296694	*	008007	GREAT LAKES WATER AUTHORITY	5,820.36
296696		009782	HERSCH'S INC.	1,128.18
296697		BDREFUND	HOLCOMB CONTRACTING	500.00
296698	*	001956	HOME DEPOT CREDIT SERVICES	149.15
296699	*	009563	HOWIES HOCKEY INC	353.56
296700		BDREFUND	HRH CONSTRUCTION LLC	5,700.00
296701		BDREFUND	HUNTER ROBERTS HOMES	150.00
296703		BDREFUND	JOHN MCCARTER CONSTRUCTION LLC	200.00
296705		BDREFUND	KELLY BUILDING & DEVELOPMENT CO LLC	500.00
296706		BDREFUND	KENNEDY, ANNE	1,000.00
296707	*	004088	KGM DISTRIBUTORS INC	443.00
296708		001406	KIPLINGER LETTER	199.00
296709	*	009822	LAW OFFICES OF JOSHUA L. HADLEY, PL	1,668.00
296711	*	000888	MCKENNA ASSOCIATES INC	44,225.63
296712	*	MISC	MELISSA WANGLER	39.00
296713		004687	MICHIGAN DEPT. OF TRANSPORATION	21,699.31
296714	*	001715	MICHIGAN NOTARY SERVICE	66.85
296715		000230	MIKE SAVOIE CHEVROLET INC	16.36
296716		BDREFUND	MOSHER & ASSOCIATES LANDSCAPE DESIG	200.00
296717		BDREFUND	OAK ELECTRIC SERVICE INC	200.00
296718	*	009787	OAKLAND COUNTY CLERKS OFFICE	846.00

City of Birmingham
Warrant List Dated 02/28/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
296719	*	004370	OCCUPATIONAL HEALTH CENTERS	522.00
296720	*	009478	ODP BUSINESS SOLUTIONS, LLC	666.18
296721		BDREFUND	OLDE WORLD HOMES LLC	1,000.00
296722		BDREFUND	PAT BATTAGLIA	1,100.00
296724		BDREFUND	PETRONA CO	500.00
296727	*	006691	SCOT POUNDERS	78.00
296729		BDREFUND	PRM CUSTOM BUILDERS LLC	2,500.00
296730	*	006625	PTS COMMUNICATIONS, INC	78.00
296731		BDREFUND	PYTIK DESIGN & BUILD	500.00
296732		BDREFUND	Rapid Roofing	100.00
296733		BDREFUND	ROMA CEMENT CO INC	100.00
296734		BDREFUND	RONNISCH CONSTRUCTION GROUP	500.00
296735		BDREFUND	SACHSE CONSTRUCTION	1,000.00
296736		BDREFUND	SCHOENHERR HOMES LLC	100.00
296737		006590	SECURE DOOR, LLC	2,471.00
296738	*	009178	SERVICE GLASS COMPANY INC	497.41
296739	*	003743	STANLEY STEEMER	1,312.00
296740	*	003743	STANLEY STEEMER	374.00
296741		000275	TIRE WHOLESALERS CO INC	387.20
296742		BDREFUND	TITTLE BROTHERS CONSTRUCTION LLC	300.00
296743	*	008941	UPTOWN MARKET OF BIRMINGHAM	255.73
296744	*	000293	VAN DYKE GAS CO.	226.80
296745	*	000158	VERIZON WIRELESS	365.98
296746	*	000158	VERIZON WIRELESS	1,339.57
296747	*	000158	VERIZON WIRELESS	98.38
296748		006491	VILLAGE AUTOMOTIVE INC	1,271.28
296749	*	UBREFUND	VITAL TITLE LLC	91.88
296750		000299	WEINGARTZ SUPPLY CO.	409.70
296751	*	009147	SCOTT ZIELINSKI	100.68
SUBTOTAL PAPER CHECK				\$149,923.05
<u>EFT TRANSFER</u>				
" "	*	009593	BLUE CROSS BLUE SHIELD OF MICHIGAN	71,583.83
SUBTOTAL EFT TRANSFER				\$71,583.83
<u>ACH TRANSACTION</u>				
10151	*	001357	ART/DESIGN GROUP LTD	65.00
10152	*	003839	MATTHEW J. BARTALINO	39.00
10153	*	007624	BIRMINGHAM OIL CHANGE CENTER, LLC	114.44
10154	*	008840	BIRMINGHAM PUBLIC SCHOOLS-TAXES	4,136,512.71
10155		009352	CHRISTINA WOODS	39.00
10156		000605	CINTAS CORPORATION	186.84
10157	*	009195	CROWN CASTLE FIBER LLC	4,721.02
10158	*	009181	DELTA T EL SERVICES INC	2,350.21

City of Birmingham
Warrant List Dated 02/28/2024

Meeting of 03/04/2024

Check Number	Early Release	Vendor #	Vendor	Amount
10159	*	007359	DETROIT CHEMICAL & PAPER SUPPLY	131.43
10160	*	000565	DORNBOS SIGN & SAFETY INC	1,077.67
10161		000196	EJ USA, INC.	657.32
10162		009517	AARON D FORD	39.00
10163	*	000243	GRAINGER	358.05
10164	*	009824	H&H POWDERCOATING	2,700.00
10165	*	001672	HAYES PRECISION INC	90.00
10166	*	003824	THOMAS I. HUGHES	195.00
10167		000261	J.H. HART URBAN FORESTRY	40,809.68
10168	*	003458	JOE'S AUTO PARTS, INC.	439.04
10169		004085	KONE INC	122.41
10170		005550	LEE & ASSOCIATES CO., INC.	1,558.87
10170	*	005550	LEE & ASSOCIATES CO., INC.	1,397.60
10172		001864	NOWAK & FRAUS ENGINEERS	46,604.00
10173	*	008843	OAKLAND COUNTY TREASURER- TAX PYMNT	1,555,916.17
10174	*	002767	OSCAR W. LARSON CO.	295.00
10175	*	005344	RESERVE ACCOUNT	8,000.00
10176	*	001181	ROSE PEST SOLUTIONS	175.00
10177		000254	SOCRRA	76,801.00
10178	*	009625	STANTEC CONSULTING SERVICES	45,118.81
10179	*	000301	PAUL WELLS	39.00
SUBTOTAL ACH TRANSACTION				\$5,926,553.27
GRAND TOTAL				\$6,148,060.15

All bills, invoices and other evidences of claim have been audited and approved for payment.



Mark Gerber
 Finance Director/ Treasurer

*-Indicates checks released in advance and prior to commission approval in order to avoid penalty or to meet contractual agreement/obligation.



MEMORANDUM

City Clerk's Office

DATE: February 19, 2024
TO: Jana L. Ecker, City Manager
FROM: Alexandria Bingham, City Clerk
SUBJECT: Special Event Application: Day on the Town

INTRODUCTION:

The Birmingham Shopping District has submitted a special event application to hold the Day on the Town event on July 27, 2024. Set up for the event is scheduled for from 7:00 a.m. until 9:00 a.m. The event begins at 9:00 a.m. and concludes at 6:00 p.m. Teardown is scheduled for 6:00 p.m. until 8:00 p.m.

BACKGROUND:

The necessary departments reviewed the proposed event details submitted in the application, and departments provided feedback on requirements and estimated costs. DPS, Planning, Building, Engineering, Police and Fire have indicated their approval.

This all day shopping event in the heart of Downtown Birmingham has proven to be the largest sale day of the year for many local merchants. The event may also include music and family friendly activities. They are also working with the Birmingham Police Department who will be holding their open house during the event.

The following events occur in July in Birmingham and do not pose a conflict for this event:

Farmers Market	Sundays	Lot #6
Movie Nights	7/19/24	Booth Park

LEGAL REVIEW:

The City Attorney has reviewed the application and has no objection as to form or content.

FISCAL IMPACT:

All costs associated with this event will be paid by the applicant.

SUSTAINABILITY:

The Birmingham Shopping District will provide recycling containers in addition to the trash receptacles.

PUBLIC COMMUNICATIONS:

The Birmingham Shopping District notified residents and businesses about the details of this event by letter mailed at least two weeks prior to the City Commission meeting. The addresses that were notified were within 300 feet of the event space.

SUMMARY:

The City Commission is being asked to approve a special event permit for the Day on the Town event to be held July 27, 2024 from 9:00 a.m. to 6:00 p.m., with set up July 27, 2024 from 7:00 a.m. until 9:00 a.m. Teardown will begin July 27, 2024 at 6:00 p.m.

ATTACHMENTS:

- Special event application
- Notification letter with map of event area distributed to residents/businesses within 300 feet of the event area dated 02/09/2024. Notification addresses are on file in the Clerk's Office.
- Department approval page with comments and estimated costs

SUGGESTED COMMISSION ACTION:

To make a motion adopting a resolution to approve a special event permit as requested by the Birmingham Shopping District to hold the Day on the Town event on July 27, 2024 contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event, or event cancellation that may be deemed necessary by administrative staff, leading up to or at the time of the event.

24-00012451

Clerk's Office
City of Birmingham, MI

**CITY OF BIRMINGHAM
APPLICATION FOR SPECIAL EVENT PERMIT
PARKS AND PUBLIC SPACES**

JAN 25 2024

IMPORTANT: EVENTS UTILIZING CITY SIDEWALKS AND/OR STREETS MUST MEET WITH POLICE DEPARTMENT SPECIAL EVENT OFFICE TO REVIEW PROPOSED EVENT DETAILS PRIOR TO SUBMITTING APPLICATION.

RECEIVED

Police Department acknowledgement: [Signature]

I. EVENT DETAILS

- **Incomplete applications will not be accepted.**
- **Changes in this information must be submitted to the City Clerk, in writing, at least three weeks prior to the event**

FEES:	FIRST TIME EVENT:	\$200.00
	ANNUAL APPLICATION FEE:	\$165.00

(Please print clearly or type)

Date of Application January 24, 2024

Name of Event Day on the Town

Detailed Description of Event (attach additional sheet if necessary) This all day shopping event in the heart of Downtown Birmingham has proven to be the largest sale day of the year for many local merchants. The event may also include music and family friendly activities. We are also working with the Birmingham Police Department who will be holding their open house during our event.

Location Old Woodward, Maple, Merrill, Pierce, Hamilton, City Hall parking lot, and a portion of Martin St.

Date(s) of Event July 27, 2024 Hours of Event 9 a.m. - 6 p.m.

Date(s) of Set-up day of event Hours of Set-up 7-9 a.m.

NOTE: No set-up to begin before 7:00 AM, per city ordinance.

Date(s) of Tear-down day of event Hours of Tear-down 6-8 p.m. (port-a-potties will be picked-up on Sunday morning)

Organization Sponsoring Event Birmingham Shopping District

Organization Address 151 Martin St., Birmingham, MI 48009

Organization Phone 248-530-1200

Contact Person Jaimi Brook

Contact Phone 248-530-1254 office, 248-508-5518 cell

Contact Email jbrook@bhamgov.org

II. EVENT INFORMATION

1. Organization Type city - Birmingham Shopping District

(city, non-profit, community group, etc.)

2. Additional sponsors or participants (Provide name, address, contact person, status, etc. for all additional organizations sponsoring your event.) Birmingham Police Department - Officer Moody

Police Open House will run concurrently with Day on the Town, occupying Martin, between Pierce & Henrietta, the police/city hall parking lot, and bagged meters on Henrietta for police vehicle parking.

3. The city encourages collaboration among nonprofit organizations to bring the greatest benefit to the community. Please explain your efforts to do so _____

We will offer organizations like the Birmingham Bloomfield Community Coalition and the City of Birmingham's Arts Council space to share information with attendees.

4. Are there any sustainability initiatives associated with this event? Please explain.
We will have recycle bins in addition to trash receptacles.

5. Is the event a fundraiser? YES NO

List beneficiary _____

List expected income _____ Attach information about the beneficiary.

6. First time event in Birmingham? YES NO

If no, describe This is an annual event.

7. Total number of people expected to attend per day 10,000-15,000

8. The event will be held on the following city property: (Please list)

Street(s) Old Woodward, Maple, Merrill, Pierce, Hamilton, Martin (see attached map)

City Hall parking lot

Sidewalk(s) N. Old Woodward & S. Old Woodward (see attached map)

Park(s) _____

9. Will street closures be required? YES NO

(Police Department acknowledgement prior to submission of application is required) (initial here) RK

What parking arrangements will be necessary to accommodate attendance?

Describe We would like to offer free parking in all structures and at meters from 9 a.m. - 7 p.m.
We would like to have the meters on both sides of Henrietta bagged between Martin and Merrill for police vehicles.

10. Will staff be provided to assist with safety, security and maintenance? YES NO

If yes, please provide number of staff to be provided and any specialized training received.

Describe BSD staff will be on-site during the event

11. Will the event require safety personnel (police, fire, paramedics)? YES NO

(Police Department acknowledgement prior to submission of application is required.) (initial here) RK

Describe police presence to help with crowds
2 officers assigned to the event, drone/overwatch, and barricades.

12. Will alcoholic beverages be served? YES NO

If yes, additional approval by the City Commission is required, as well as the Michigan Liquor Control Commission.

13. Will music be provided? YES NO

Live Amplification Loudspeakers

Recorded Time music will begin 9 a.m.

Time music will end 6 p.m.

Location of live band, DJ, loudspeakers, equipment must be shown on the layout map.

14. Will there be signage in the area of the event? YES NO

Number of signs/banners 2 banners

Size of signs/banners 14'x5' (sample attached)

Submit a photo/drawing of the sign(s). **A sign permit may be required.**

15. Will food/beverages/merchandise be sold? YES NO

- Peddler/vendor permits must be submitted to the Clerk's Office, **at least two weeks prior to the event.**
- You must obtain approval from the Oakland County Health Department for all food/beverage sales/donations. Contact ehclerk@oakgov.com or 248-535-9612 to obtain Health Department approval.
- There is a \$50.00 application fee for all vendors and peddlers, in addition to the \$10.00 daily fee, per location.

LIST OF VENDORS/PEDDLERS
(attach additional sheet if necessary)

VENDOR NAME	GOODS TO BE SOLD	WATER HOOK-UP REQUIRED?	ELECTRIC REQUIRED?
TBD			

Food Vendors must place some type of protection material under their food trucks to catch oil and food spills.

III. EVENT LAYOUT

- Include a map showing the park set up, street closures, and location of each item listed in this section.
- Include a map and written description of run/walk route and the start/finish area

1. Will the event require the use of any of the following municipal equipment?
(show location of each on map)

EQUIPMENT	QUANTITY	COST	NOTES
Picnic Tables		6 for \$800.00	A request for more than six tables will be evaluated based on availability.
Trash Receptacles		\$10.00 each includes 1 bag For additional bags, the cost is \$45 per case, 100 bags per case	Trash box placement and removal of trash is the responsibility of the event. Additional cost could occur if DPS is to perform this work.
Dumpsters		\$400.00/per dumpster per day	Includes emptying the dumpster one time per day. The City may determine the need for additional dumpsters based on event requirements.
Utilities (electric)	# of vendors requiring utilities	Varies	Charges according to final requirements of event.
Water/Fire Hydrant		\$224.75/per hydrant Includes the use of 5,000 gallons of water. Any additional water usage will be billed.	Applicant must supply their own means of disposal for all sanitary waste water. Waste water is NOT allowed to be poured into the street or on the grass.
Meter Bags / Traffic Cones / Barricades	# to be determined by the Police Department.		

2. Will the following be constructed or located in the area of the event? YES NO
 (show location of each on map) NOTE: Stakes are not allowed.

TYPE	QUANTITY	SIZE
Tents/Canopies/Awnings (A permit is required for tents over 400 square feet)	80	10'x10' and 10'x20'
Portable Toilets	12	7 reg & 5 handicap
Rides		
Displays	TBD	
Vendors	TBD	
Temporary Structure (must attach a photo)		
Other (describe)		

3. Do you want the Fountain on? YES NO
The fountain in on weather permitting June 1st through mid-October.
4. Umbrellas should be removed? YES NO
Umbrellas are available June 1st through mid-October.
5. Bistro tables/chairs should be removed? YES NO
Bistro tables/chairs are available June 1st through mid-October

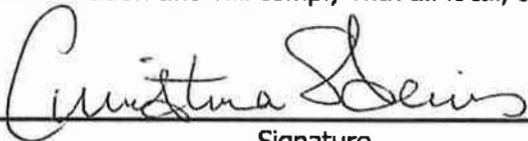
SIGNATURE OF APPLICANT REQUIRED

EVENT NAME Day on the Town

EVENT DATE July 27, 2024

The Birmingham City Commission shall have sole and complete discretion in deciding whether to issue a permit. Nothing contained in the City Code shall be construed to require the City Commission to issue a permit to an applicant and no applicant shall have any interest or right to receive a permit merely because the applicant has received a permit in the past.

As the authorized agent of the sponsoring organization, I hereby agree that this organization shall abide by all conditions and restrictions specific to this special event as determined by the City administration and will comply with all local, state and federal rules, regulations and laws.


Signature

1-24-24
Date

By providing your e-mail to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

IV. SAMPLE LETTER TO NOTIFY ANY AFFECTED PROPERTY/BUSINESS OWNERS

- V. Organizer must notify all potentially affected residential property and business owners of the date and time this application will be considered by the City Commission. (Sample letter attached to this application.)
- VI. Attach a copy of the proposed letter to this application. The letter will be reviewed and approved by the Clerk’s Office. The letter must be distributed at least two weeks prior to the commission meeting.
- VII. A copy of the letter and the distribution list must be submitted to the Clerk’s Office at least two weeks prior to the commission meeting.
- VIII. If street closures are necessary, a map must be included with the letter to the affected property/business owners.

DAY ON THE TOWN 2024 EVENT FOOTPRINT

Event Area A – (green) streets closed, tents in streets

Maple from Bates to Peabody

Old Woodward from Brown to Willits

Hamilton from N. Old Woodward to Ferndale

Pierce from W. Maple to Merrill

Merrill from Pierce to S. Old Woodward

Martin St. from Pierce to Henrietta (for Police Department Open House)

Event Area B – (yellow) streets open, tents on sidewalk/right of way leaving walking path at least 5 feet wide

N. Old Woodward from 526 N. Old Woodward to 588 N. Old Woodward

Event Area C – (pink) streets open, only tables on sidewalks leaving walking path at least 5 feet wide

N. Old Woodward from Oak to 474 N. Old Woodward (Market North End)

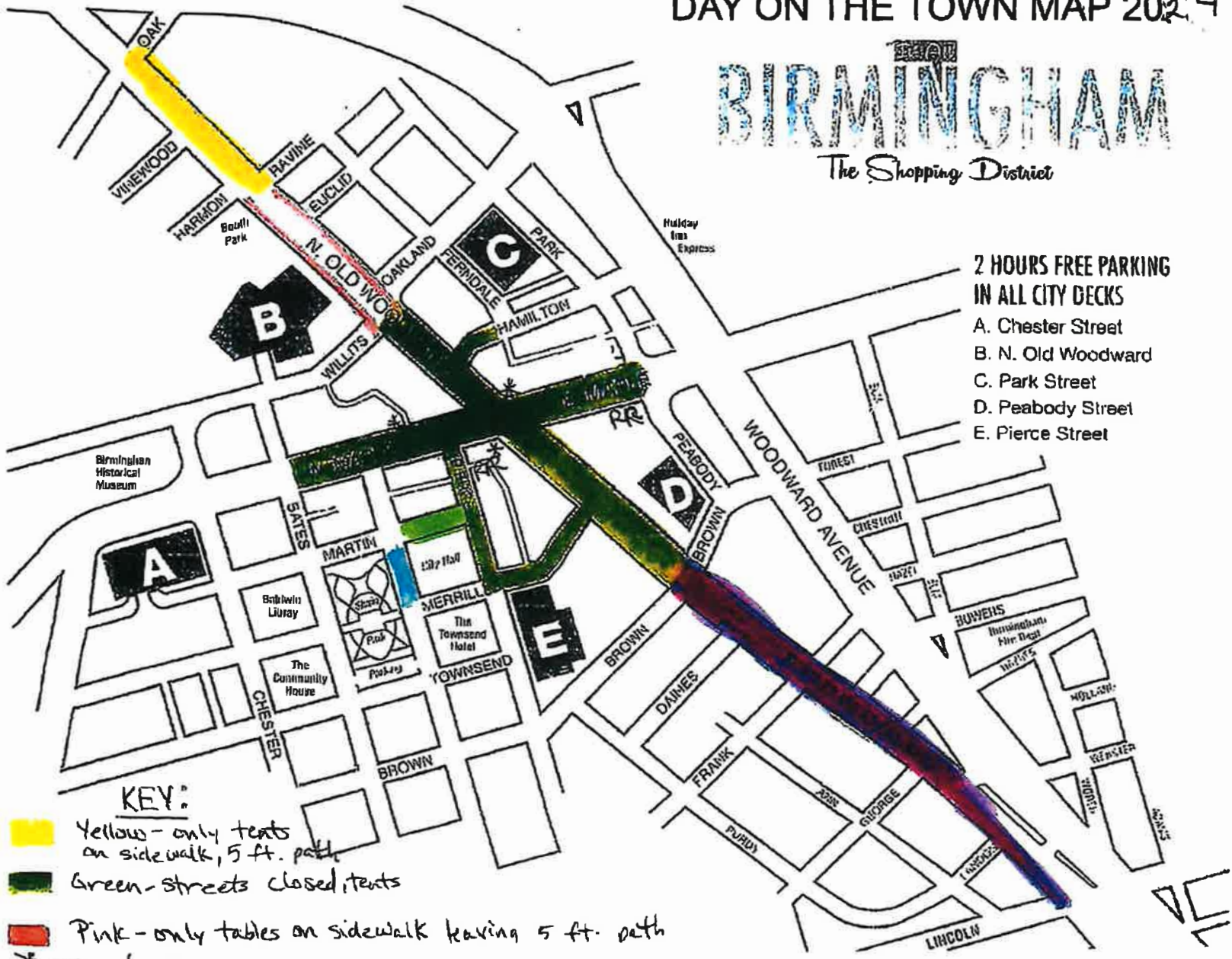
Event Area D – (purple) no tables on sidewalks, stores may have in-store sales and be promoted as participating

S. Old Woodward from Brown to Lincoln

Henrietta – (blue) between Martin & Merrill – bagged parking meters for police vehicles

DAY ON THE TOWN MAP 2024

BIRMINGHAM The Shopping District



**2 HOURS FREE PARKING
IN ALL CITY DECKS**

- A. Chester Street
- B. N. Old Woodward
- C. Park Street
- D. Peabody Street
- E. Pierce Street

- KEY:**
- Yellow - only tents on sidewalk, 5 ft. path
 - Green - streets closed, tents
 - Pink - only tables on sidewalk leaving 5 ft. path
 - * -speakers
 - Purple - no tables on sidewalk, stores may have in-store sales
 - RR - port-a-potties

Sample


DAY ON THE TOWN



SATURDAY • JULY 29 • 9 A.M. - 6 P.M.
FREE PARKING DURING THE EVENT

**WHEN
UPSCALE
GOES ON
SALE**

BIRMINGHAM
Day on the Town!

WWW.WALKBIRMINGHAM.COM

 [BIRMINGHAM DAY ON THE TOWN](#)

  [BIRMINGHAM](#)

14' x 5'

DATE: February 9, 2024
TO: Downtown Birmingham Business/Property Owner

The Birmingham City Code requires that we receive approval from the Birmingham City Commission to hold the following special event. The code further requires that we notify any property owners or business owners that may be affected by the special event of the date and time that the City Commission will consider our request so that an opportunity exists for comments prior to this approval.

NAME OF EVENT: Day On The Town

LOCATION: Old Woodward from Oakland/Willits to Brown
Hamilton from Old Woodward to Ferndale, City Hall parking lot;
Pierce from Maple to Merrill: Merrill from Pierce to Old Woodward
Maple from Bates to Peabody, Martin from Pierce to Henrietta
526 N, Old Woodward to 588 N, Old Woodward (no street closures)
S. Old Woodward from Brown to Lincoln (no street closures)
N. Old Woodward from Oak to 474 N, Old Woodward (no street closures)

DATES/TIMES: Saturday, July 27, 2024 from 9 a.m. until 6 p.m.

DATE/TIME OF CITY COMMISSION MEETING: March 4, 2024 at 7:30pm

The City Commission will meet in the Municipal Building. Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: <https://zoom.us/j/655079760> Meeting ID: 655079760. You may also present your written statement to the City Commission, City of Birmingham, 151 Martin Street, P.O. Box 3001, Birmingham, Michigan 48012-3001 prior to the hearing.

EVENT ORGANIZER: Birmingham Shopping District
ADDRESS: 151 Martin
PHONE: 248-530-1200

For questions on day of event, contact BSD Operations & Events Manager, Jaimi Brook at 248-508-5518

METROPLEX MI 480
Birmingham Shopping District
151 Martin Street
Birmingham, MI 48009

FIRST-CLASS



US POSTAGE ^{IMP}PITNEY BOWES



ZIP 48009 \$ 000.53⁰
02 7W
0008029208 FEB 09 2024



PNUM: 1936126016
CITY OF BIRMINGHAM
151 MARTIN ST
BIRMINGHAM, MI 48009



michigan municipal league

Liability & Property Pool

CERTIFICATE OF COVERAGE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED AS LISTED BELOW.

Name and Address of Participant:

City of Birmingham
151 Martin St., PO Box 3001
Birmingham, MI 48012-3001

Coverage Afforded:

Michigan Municipal League Liability and Property Pool
1675 Green Road
Ann Arbor, MI 48105-2530

Name and Address of Service Provider:

Meadowbrook, Inc.
P.O. Box 2054
Southfield, MI 48037-2054

This is to certify that the coverage listed below has been issued to the participant named above and is in-force at this time. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the coverage afforded herein is subject to all the terms, exclusions and conditions of the Pool contract.

Coverage	Contract Number	Expiration Date	Limits of Liability
<u>General Liability</u>	MML001444022	7/1/2024	\$10,000,000
<u>Automobile Liability</u>			Bodily Injury & Property Damage Combined Single Limit
<u>Other</u>			

Description of Operations/Locations/Vehicles:

Certificate Holder Additional Insured solely with respect to: Services provided on behalf of the City of Birmingham.

CANCELLATION: Should any of the above described coverages be canceled before the expiration date thereof, the administrator will endeavor to mail 60 days' written notice to the certificate holder named below, but failure to mail such notice shall impose no obligation or liability of any kind upon the Pool.

Name and Address of Certificate Holder:

Birmingham Principal Shopping District
151 Martin St.
Birmingham, MI 48009

Date Issued: 6/2/2023

By: *[Signature]*
Authorized Representative

RECEIVED JUN 13 2023

DEPARTMENT APPROVALS

EVENT NAME: Day on the Town

COMMISSION HEARING DATE: 03/04/24

DATE OF EVENT: 07/27/24

LICENSE NUMBER #34-00012451

NOTE TO STAFF: Please submit approval by 2/19/24

DEPARTMENT	APPROVED	COMMENTS	PERMITS REQUIRED (Must be obtained directly from individual departments)	ESTIMATED COSTS (Must be paid two weeks prior to the event. License will not be issued if unpaid.)	ACTUAL COSTS (Event will be invoiced by the Clerk's office after the event)
PLANNING 101.0-000.000-636.0005 248.530.1855	TBC	No Cost No Comment		0	
BUILDING 101.0-000.000.636.0005 248.530.1850	MJM	<ol style="list-style-type: none"> 1. All exits, exit accesses, and exit discharges must be maintained 2. Tents that require permits need a tent layout plan for review 3. All tents are required to have flame certification 4. Tents and canopies must be stabilized with weights 5. Electrical cords or water lines must be taped or matted to prevent trip hazards 	Tents over 400 SQFT.	\$262.35	
FIRE 101.0-000.000-636.0004 248.530.1900	JS	<ol style="list-style-type: none"> 1. Crown manager required for event 1/250 ratio 2. Maintain proper clearance around fire hydrants and fire dept. connections to buildings 3. Maintain fire lanes 4. Fire extinguishers required for tents. ABC 5lb. 5. Food trucks and all tents require inspection prior to event. 6. See attached 2024 City Event Bulletin 7. Fire/ EMS response from respective fire stations. 		\$0.00	

POLICE 101.0-000.000.636.0003 248.530.1870	RK	2 detail Ofcs, 1 drone/Overwatch, and barricades.		\$3,183.30	
PUBLIC SERVICES 101.0-000.000-636.0002 248.530.1642	CL	Set up and Clean up costs including Barricades. ADDITIONAL COST COULD OCCUR for any items added to the typical set up scope or if clean up is more extensive than previous years.		\$5,000	
ENGINEERING 101.0-000.000.636.0002 248.530.1839	MC	An obstruction permit for closing the road will be required. Oakland and Haynes might be under construction. The project documents will include this event for no work, and make sure sidewalks on Old Woodward are clear for this event.	Obstruction Permit	\$100.00	
PARKING		Free parking in all City parking garages	None	0	0
INSURANCE 248.530.1807		Need to submit COI no less than 2 weeks prior to event Need to submit Hold Harmless Agreement	None	0	0
CLERK 101.0-000.000-614.0000 248.530.1803		Notification letters to be mailed by applicant no later than ____. Notification addresses on file in the Clerk's Office.	Applications for vendors license must be submitted no later than ____.	0	0
			TOTALS: Estimated and Actual Costs	\$8,545.65	

FOR CLERK'S OFFICE USE

Deposit paid _____

Actual Cost _____

Due/Refund_____

Rev. 2/21/24

h:\shared\special events\general information\approval page.doc



MEMORANDUM

City Clerk's Office

DATE: February 19, 2024

TO: Jana L. Ecker, City Manager

FROM: Alexandria Bingham, City Clerk

SUBJECT: Special Event Application: Birmingham Farmers Market

INTRODUCTION:

The Birmingham Shopping District has submitted a special event application to hold the Birmingham Farmers Market Sundays from May 5 - October 27, 2024. Set up for the event is scheduled for Sundays 7:00 a.m. – 9:00 a.m. The event begins at 9:00 a.m. and concludes at 2:00 p.m. Teardown is scheduled for 2:00 p.m. – 3:30 p.m.

BACKGROUND:

The necessary departments reviewed the proposed event details submitted in the application, and departments provided feedback on requirements and estimated costs. DPS, Planning, Building, Engineering, Police and Fire have indicated their approval.

This will be the 22nd season of the Birmingham Farmers Market. The market offers the community access to fresh produce directly from growers. Throughout the season, more than 75 booths will feature a diverse array of Michigan-grown produce, plants, flowers, baked goods, prepared foods, soaps and miscellaneous items.

The following events occur in May - October in Birmingham and do not pose a conflict for this event:

- | | | |
|-------------------------------------|-------------------------|---------------------------|
| • Celebrate Birmingham Parade/Party | 5/18 | Shain Park & City Streets |
| • Art Birmingham | 5/10 - 5/11 | Shain Park & City Streets |
| • Memorial Day Ceremony | 5/27 | Shain Park |
| • Movie Nights | 6/7, 7/19,
8/9, 9/86 | Booth Park |
| • Village Fair | 5/29 - 6/2 | Shain Park & City Streets |
| • Day on the Town | 7/27 | City Streets |
| • In the Park Concert Series | 6/12 – 8/14 | Shain Park |
| • Common Ground Art Fair | 9/28 – 9/29 | Shain Park & City Streets |
| • Yoga in the Park | 6/15 | Shain Park |

LEGAL REVIEW:

The City Attorney has reviewed the application and has no objection as to form or content.

FISCAL IMPACT:

All costs associated with this event will be paid by the applicant.

SUSTAINABILITY:

The Birmingham Shopping District will place recycling containers in addition to the trash receptacles.

PUBLIC COMMUNICATIONS:

The Birmingham Shopping District notified residents and businesses about the details of this event by letter mailed at least two weeks prior to the City Commission meeting. The addresses that were notified were within 300 feet of the event space.

SUMMARY:

The City Commission is being asked to approve a special event permit for the Birmingham Farmers Market to be held Sundays from May 5 - October 27, 2024 from 9:00 a.m. to 2:00 p.m., with set up 7:00 a.m. - 9:00 a.m. Teardown will begin 2:00 p.m. – 3:30 p.m.

ATTACHMENTS:

- Special event application
- Notification letter with map of event area distributed to residents/businesses within 300 feet of the event area dated 02/09/2024. Notification addresses are on file in the Clerk's Office.
- Department approval page with comments and estimated costs

SUGGESTED COMMISSION ACTION:

To make a motion adopting a resolution to approve a special event permit as requested by the Birmingham Shopping District to hold the Birmingham Farmers Market on Sundays from May 5 – October 27, 2024 contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event, or event cancellation that may be deemed necessary by administrative staff, leading up to or at the time of the event.

24-00012452

Clerk's Office
City of Birmingham, MI

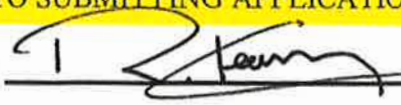
CITY OF BIRMINGHAM
APPLICATION FOR SPECIAL EVENT PERMIT
PARKS AND PUBLIC SPACES

JAN 25 2024

IMPORTANT: EVENTS UTILIZING CITY SIDEWALKS AND/OR STREETS MUST MEET WITH POLICE DEPARTMENT SPECIAL EVENT OFFICE TO REVIEW PROPOSED EVENT DETAILS PRIOR TO SUBMITTING APPLICATION.

RECEIVED

Police Department acknowledgement:



I. EVENT DETAILS

- **Incomplete applications will not be accepted.**
- **Changes in this information must be submitted to the City Clerk, in writing, at least three weeks prior to the event**

FEES: **FIRST TIME EVENT:** **\$200.00**
 ANNUAL APPLICATION FEE: **\$165.00**

(Please print clearly or type)

Date of Application January 24, 2024

Name of Event Birmingham Farmers Market

Detailed Description of Event (attach additional sheet if necessary) This will be the 22nd season of the Farmers Market.

The Market offers the community access to fresh produce directly from growers. Throughout the season, more than 75 booths will feature a diverse array of Michigan-grown produce, plants, flowers, baked goods, prepared foods, soaps and miscellaneous items.

Location Municipal Parking Lot #6 on N. Old Woodward

Date(s) of Event Sundays, May 5 - October 27, 2024 Hours of Event 9 a.m. - 2 p.m.

Date(s) of Set-up day of event Hours of Set-up 7 - 9 a.m.

NOTE: No set-up to begin before 7:00 AM, per city ordinance.

Date(s) of Tear-down day of event Hours of Tear-down 2 - 3:30 p.m.

Organization Sponsoring Event Birmingham Shopping District

Organization Address 151 Martin St., Birmingham, MI 48009

Organization Phone 248-530-1200

Contact Person Jaimi Brook

Contact Phone 248-530-1254 - office / 248-508-5518 - cell

Contact Email jbrook@bhamgov.org

II. EVENT INFORMATION

1. Organization Type city - Birmingham Shopping District
(city, non-profit, community group, etc.)

2. Additional sponsors or participants (Provide name, address, contact person, status, etc. for all additional organizations sponsoring your event.) TBD

3. The city encourages collaboration among nonprofit organizations to bring the greatest benefit to the community. Please explain your efforts to do so _____
We invite nonprofit organizations and other community groups to host the kids' zone to gain exposure.

4. Are there any sustainability initiatives associated with this event? Please explain.
We give complimentary reusable totes to attendees on the first day of the Market

5. Is the event a fundraiser? YES NO
List beneficiary _____
List expected income _____ Attach information about the beneficiary.

6. First time event in Birmingham? YES NO
If no, describe This will be the 22nd season of the Birmingham Farmers Market.

7. Total number of people expected to attend per day 1,000 - 4,500

8. The event will be held on the following city property: (Please list)
 Street(s) Municipal Parking Lot #6 on N. Old Woodward

 Sidewalk(s) _____

 Park(s) _____

9. Will street closures be required? YES NO

(Police Department acknowledgement prior to submission of application is required) (initial here) RK

What parking arrangements will be necessary to accommodate attendance?

Describe nearby parking deck and street parking will be sufficient

10. Will staff be provided to assist with safety, security and maintenance? YES NO

If yes, please provide number of staff to be provided and any specialized training received.

Describe Typically, 3 BSD event staff will be on-site during the Market. We will also have community volunteers (when available).

11. Will the event require safety personnel (police, fire, paramedics)? YES NO

(Police Department acknowledgement prior to submission of application is required.) (initial here) RK

Describe On-duty personnel to provide extra patrols.

12. Will alcoholic beverages be served? YES NO

If yes, additional approval by the City Commission is required, as well as the Michigan Liquor Control Commission.

13. Will music be provided? YES NO

Live Amplification Loudspeakers

Recorded Time music will begin 9 a.m.

Time music will end 2 p.m.

Location of live band, DJ, loudspeakers, equipment must be shown on the layout map.

14. Will there be signage in the area of the event? YES NO

Number of signs/banners one large sign on south end of parking lot, 5-6 A-frame signs, 2 banners

Size of signs/banners 20'x8' sign on south end of parking lot, a-frame signs are 2'x3', banners are 14'x5'

Submit a photo/drawing of the sign(s). **A sign permit may be required.**

15. Will food/beverages/merchandise be sold? YES NO

- Peddler/vendor permits must be submitted to the Clerk's Office, **at least two weeks prior to the event.**
- You must obtain approval from the Oakland County Health Department for all food/beverage sales/donations. Contact ehclerk@oakgov.com or 248-535-9612 to obtain Health Department approval.
- There is a \$50.00 application fee for all vendors and peddlers, in addition to the \$10.00 daily fee, per location.

LIST OF VENDORS/PEDDLERS
(attach additional sheet if necessary)

VENDOR NAME	GOODS TO BE SOLD	WATER HOOK-UP REQUIRED?	ELECTRIC REQUIRED?
TBD			

Food Vendors must place some type of protection material under their food trucks to catch oil and food spills.

III. EVENT LAYOUT

- Include a map showing the park set up, street closures, and location of each item listed in this section.
- Include a map and written description of run/walk route and the start/finish area

1. Will the event require the use of any of the following municipal equipment?
(show location of each on map)

EQUIPMENT	QUANTITY	COST	NOTES
Picnic Tables		6 for \$800.00	A request for more than six tables will be evaluated based on availability.
Trash Receptacles		\$10.00 each includes 1 bag For additional bags, the cost is \$45 per case, 100 bags per case	Trash box placement and removal of trash is the responsibility of the event. Additional cost could occur if DPS is to perform this work.
Dumpsters		\$400.00/per dumpster per day	Includes emptying the dumpster one time per day. The City may determine the need for additional dumpsters based on event requirements.
Utilities (electric)	# of vendors requiring utilities	Varies	Charges according to final requirements of event.
Water/Fire Hydrant		\$224.75/per hydrant Includes the use of 5,000 gallons of water. Any additional water usage will be billed.	Applicant must supply their own means of disposal for all sanitary waste water. Waste water is NOT allowed to be poured into the street or on the grass.
Meter Bags / Traffic Cones / Barricades	# to be determined by the Police Department.		

2. Will the following be constructed or located in the area of the event? YES NO
(show location of each on map) NOTE: Stakes are not allowed.

TYPE	QUANTITY	SIZE
Tents/Canopies/Awnings (A permit is required for tents over 400 square feet)	1-70	10'x10' and 10'x20'
Portable Toilets	3	2 reg & 1 handicap
Rides		
Displays		
Vendors	1-70	
Temporary Structure (must attach a photo)		
Other (describe)		

3. Do you want the Fountain on? YES NO N/A
 The fountain in on weather permitting June 1st through mid-October.
4. Umbrellas should be removed? YES NO N/A
 Umbrellas are available June 1st through mid-October.
5. Bistro tables/chairs should be removed? YES NO N/A
 Bistro tables/chairs are available June 1st through mid-October

SIGNATURE OF APPLICANT REQUIRED

EVENT NAME *Birmingham Farmers Market*
 EVENT DATE *Sundays, May 5 - October 27, 2024*

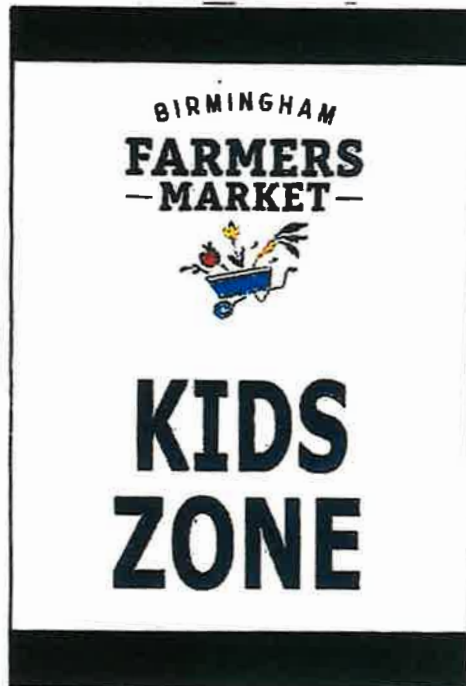
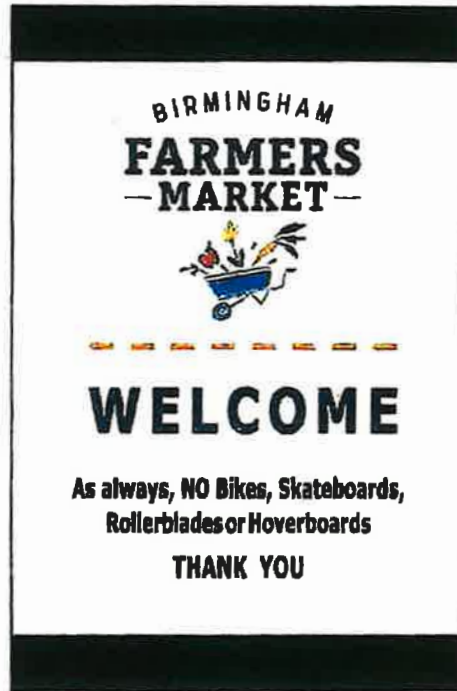
The Birmingham City Commission shall have sole and complete discretion in deciding whether to issue a permit. Nothing contained in the City Code shall be construed to require the City Commission to issue a permit to an applicant and no applicant shall have any interest or right to receive a permit merely because the applicant has received a permit in the past.

As the authorized agent of the sponsoring organization, I hereby agree that this organization shall abide by all conditions and restrictions specific to this special event as determined by the City administration and will comply with all local, state and federal rules, regulations and laws.

Cristina Davis 1-24-24
 Signature Date

By providing your e-mail to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

FM signage
4-14-21
2x3 ft. Coroplast



Sample
A-frame
Signs

Sample of previous sign

BIRMINGHAM
**FARMERS
MARKET**

20th SEASON



EVERY SUNDAY

9 A.M. - 2 P.M.

MAY 1 - OCT 30

660 N. OLD WOODWARD

ALLINBIRMINGHAM.COM/FARMERSMARKET



left side
of sign

MICHIGAN-GROWN PRODUCE & PLANTS
ARTISAN BAKED GOODS • ORGANIC OPTIONS
FRESH FOOD • AND MORE!

PROUDLY OFFERING



SPONSORS

May 1:
Opening Day Celebration

June 26:
Super Farmer Day

August 7:
20th Season Celebration

September 11:
Harvest Festival

October 30:
End of Season Celebration

EVENTS

right side
of sign



michigan municipal league

Liability & Property Pool

CERTIFICATE OF COVERAGE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED AS LISTED BELOW.

Name and Address of Participant:

City of Birmingham

151 Martin St., PO Box 3001
Birmingham, MI 48012-3001

Coverage Afforded:

Michigan Municipal League Liability and Property Pool
1675 Green Road
Ann Arbor, MI 48105-2530

Name and Address of Service Provider:

Meadowbrook, Inc.
P.O. Box 2054
Southfield, MI 48037-2054

This is to certify that the coverage listed below has been issued to the participant named above and is in-force at this time. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the coverage afforded herein is subject to all the terms, exclusions and conditions of the Pool contract.

Coverage	Contract Number	Expiration Date	Limits of Liability
<u>General Liability</u>	MML001444022	7/1/2024	\$10,000,000
<u>Automobile Liability</u>			Bodily Injury & Property Damage Combined Single Limit
<u>Other</u>			

Description of Operations/Locations/Vehicles:

Certificate Holder Additional Insured solely with respect to: Services provided on behalf of the City of Birmingham.

CANCELLATION: Should any of the above described coverages be canceled before the expiration date thereof, the administrator will endeavor to mail 60 days' written notice to the certificate holder named below, but failure to mail such notice shall impose no obligation or liability of any kind upon the Pool.

Name and Address of Certificate Holder:

Birmingham Principal Shopping District
151 Martin St.
Birmingham, MI 48009

Date Issued: 6/2/2023

By: *[Signature]*
Authorized Representative

RECEIVED JUN 13 2023

DEPARTMENT APPROVALS

EVENT NAME: Farmers Market

COMMISSION HEARING DATE: 03/04/24

DATE OF EVENT: 05/05/24-10-27/24

LICENSE NUMBER #24-00012452

NOTE TO STAFF: Please submit approval by 02/19/24

DEPARTMENT	APPROVED	COMMENTS	PERMITS REQUIRED (Must be obtained directly from individual departments)	ESTIMATED COSTS (Must be paid two weeks prior to the event. License will not be issued if unpaid.)	ACTUAL COSTS (Event will be invoiced by the Clerk's office after the event)
PLANNING 101.0-000.000-636.0005 248.530.1855	TBC	No Cost No Comment		0	
BUILDING 101.0-000.000.636.0005 248.530.1850	MJM	All tents are required to be weighted down.	Tents over 400 SQFT.	\$1399.20	
FIRE 101.0-000.000-636.0004 248.530.1900	JS	Please review attached City Event Bulleting issued by the Fire Marshal's Office. Fire Inspectors to walk through weekly. Fire/ EMS response from respective fire stations.		\$0.00	
POLICE 101.0-000.000.636.0003 248.530.1870	RK	On-duty officers will place barricades to secure lot #6 for set-up before each Sunday and provide extra patrols during the events. Two additional officers will work at the Super-Hero event.		\$707.40	
PUBLIC SERVICES 101.0-000.000-636.0002 248.530.1642	CL	Estimate based on actual costs of DPS services requested by BSD for this event in previous years. Additional costs may apply should scope of work change.		\$7,000	
ENGINEERING 101.0-000.000.636.0002 248.530.1839	MC	No permits are required	None	\$0	
PARKING	AF	None	None	0	0

<p>INSURANCE 248.530.1807</p>		<p>Need to submit COI no less than 2 weeks prior to event Need to submit Hold Harmless Agreement</p>	<p>None</p>	<p>0</p>	<p>0</p>
<p>CLERK 101.0-000.000-614.0000 248.530.1803</p>		<p>Notification letters to be mailed by applicant no later than ____. Notification addresses on file in the Clerk's Office.</p>	<p>Applications for vendors license must be submitted no later than ____.</p>	<p>0</p>	<p>0</p>
			<p>TOTALS: Estimated and Actual Costs</p>	<p>\$9,106.60</p>	

FOR CLERK'S OFFICE USE

Deposit paid _____

Actual Cost _____

Due/Refund _____



MEMORANDUM

City Clerk's Office

DATE: February 19, 2024
TO: Jana L. Ecker, City Manager
FROM: Alexandria Bingham, City Clerk
SUBJECT: Special Event Application: Birmingham Movie Nights

INTRODUCTION:

The Birmingham Shopping District has submitted a special event application to hold Birmingham Movie Nights on Friday June 7, July 19, August 9, and September 6, 2024. Set up for the event is scheduled for 12:00 p.m. until 6:30 p.m. The event begins at 6:30 p.m. and concludes at 10:00 p.m. Teardown is scheduled for 10:00 p.m. until 11:00 p.m.

BACKGROUND:

The necessary departments reviewed the proposed event details submitted in the application, and departments provided feedback on requirements and estimated costs. DPS, Planning, Building, Engineering, Police and Fire have indicated their approval.

The Birmingham Shopping District will hold four movie nights. They plan to have pre-movie entertainment and sponsor booths.

The following events occur in June, July, August and September in Birmingham and do not pose a conflict for this event:

Village Fair	05/29/24 - 06/02/24	Shain Park
Yoga in the Park	06/15/24	Shain Park
Common Ground Art Fair	09/28/24 - 09/29/24	Shain Park
Day on the Town	07/27/24	City Streets
Farmers Market	Sundays	Lot #6

LEGAL REVIEW:

The City Attorney has reviewed the application and has no objection as to form or content.

FISCAL IMPACT:

All costs associated with this event will be paid by the applicant.

SUSTAINABILITY:

The Birmingham Shopping District will provide recycling containers in addition to the trash receptacles.

PUBLIC COMMUNICATIONS:

The Birmingham Shopping District notified residents and businesses about the details of this event by letter mailed at least two weeks prior to the City Commission meeting. The addresses that were notified were within 300 feet of the event space.

SUMMARY:

The City Commission is being asked to approve a special event permit for Birmingham Movie Nights to be held Friday June 7, July 19, August 9, and September 6, 2024 from 6:30 p.m. to 10:00 p.m., with set up from 12:00 p.m. until 6:30 p.m. Teardown will begin at 10:00 p.m.

ATTACHMENTS:

- Special event application
- Notification letter with map of event area distributed to residents/businesses within 300 feet of the event area dated 02/09/2024. Notification addresses are on file in the Clerk's Office.
- Department approval page with comments and estimated costs

SUGGESTED COMMISSION ACTION:

To make a motion adopting a resolution to approve a special event permit as requested by the Birmingham Shopping District to hold Birmingham Movie Nights on Friday June 7, July 19, August 9, and September 6, 2024 contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event, or event cancellation that may be deemed necessary by administrative staff, leading up to or at the time of the event.

**CITY OF BIRMINGHAM
APPLICATION FOR SPECIAL EVENT PERMIT
PARKS AND PUBLIC SPACES**

JAN 25 2024

IMPORTANT: EVENTS UTILIZING CITY SIDEWALKS AND/OR STREETS MUST MEET WITH POLICE DEPARTMENT SPECIAL EVENT OFFICE TO REVIEW PROPOSED EVENT DETAILS PRIOR TO SUBMITTING APPLICATION.

Police Department acknowledgement: _____



I. EVENT DETAILS

- **Incomplete applications will not be accepted.**
- **Changes in this information must be submitted to the City Clerk, in writing, at least three weeks prior to the event**

FEES: **FIRST TIME EVENT:** **\$200.00**
 ANNUAL APPLICATION FEE: **\$165.00**

(Please print clearly or type)

Date of Application January 24, 2024

Name of Event Birmingham Movie Nights

Detailed Description of Event (attach additional sheet if necessary) _____

We will be holding 4 outdoor Moive Nights. We plan to have pre-movie entertainment and sponsor booths.

Location Booth Park

Date(s) of Event June 7, July 19, August 9, Sept. 6, 2024 Hours of Event 6:30 - 10 p.m.
rain dates 6/8, 7/20, 8/10, 9/7/2024

Date(s) of Set-up day of events Hours of Set-up 12-6:30 p.m. (port-a-potty may be earlier in the day)

NOTE: No set-up to begin before 7:00 AM, per city ordinance.

Date(s) of Tear-down day of events Hours of Tear-down end of movie - 11 p.m. (port-a-potty pick-up Monday morning)

Organization Sponsoring Event Birmingham Shopping District

Organization Address 151 Martin St., Birmingham, MI 48009

Organization Phone 248-530-1200

Contact Person Jaimi Brook

Contact Phone 248-530-1200 office 248-508-5518 cell

Contact Email jbrook@bhamgov.org

II. EVENT INFORMATION

1. Organization Type City - Birmingham Shopping District
(city, non-profit, community group, etc.)

2. Additional sponsors or participants (Provide name, address, contact person, status, etc. for all additional organizations sponsoring your event.) TBD

3. The city encourages collaboration among nonprofit organizations to bring the greatest benefit to the community. Please explain your efforts to do so _____
We have invited non-profits like the Birmingham Bloomfield Community Coalition to have informational tables at the event in the past and plan to do so again this year.

4. Are there any sustainability initiatives associated with this event? Please explain.
We will have recycling containers in addition to the trash receptacles

5. Is the event a fundraiser? YES NO
List beneficiary _____
List expected income _____ Attach information about the beneficiary.

6. First time event in Birmingham? YES NO
If no, describe This is the 18th year for the event.

7. Total number of people expected to attend per day 400

8. The event will be held on the following city property: (Please list)
 Street(s) _____
 Sidewalk(s) _____
 Park(s) Booth Park

14. Will there be signage in the area of the event? YES NO

Number of signs/banners 1

Size of signs/banners 2'x3' a-frame

Submit a photo/drawing of the sign(s). **A sign permit may be required.**

15. Will food/beverages/merchandise be sold? YES NO

- Peddler/vendor permits must be submitted to the Clerk's Office, **at least two weeks prior to the event.**
- You must obtain approval from the Oakland County Health Department for all food/beverage sales/donations. Contact ehclerk@oakgov.com or 248-535-9612 to obtain Health Department approval.
- There is a \$50.00 application fee for all vendors and peddlers, in addition to the \$10.00 daily fee, per location.

LIST OF VENDORS/PEDDLERS
(attach additional sheet if necessary)

VENDOR NAME	GOODS TO BE SOLD	WATER HOOK-UP REQUIRED?	ELECTRIC REQUIRED?
TBD			

Food Vendors must place some type of protection material under their food trucks to catch oil and food spills.

III. EVENT LAYOUT

- Include a map showing the park set up, street closures, and location of each item listed in this section.
- Include a map and written description of run/walk route and the start/finish area

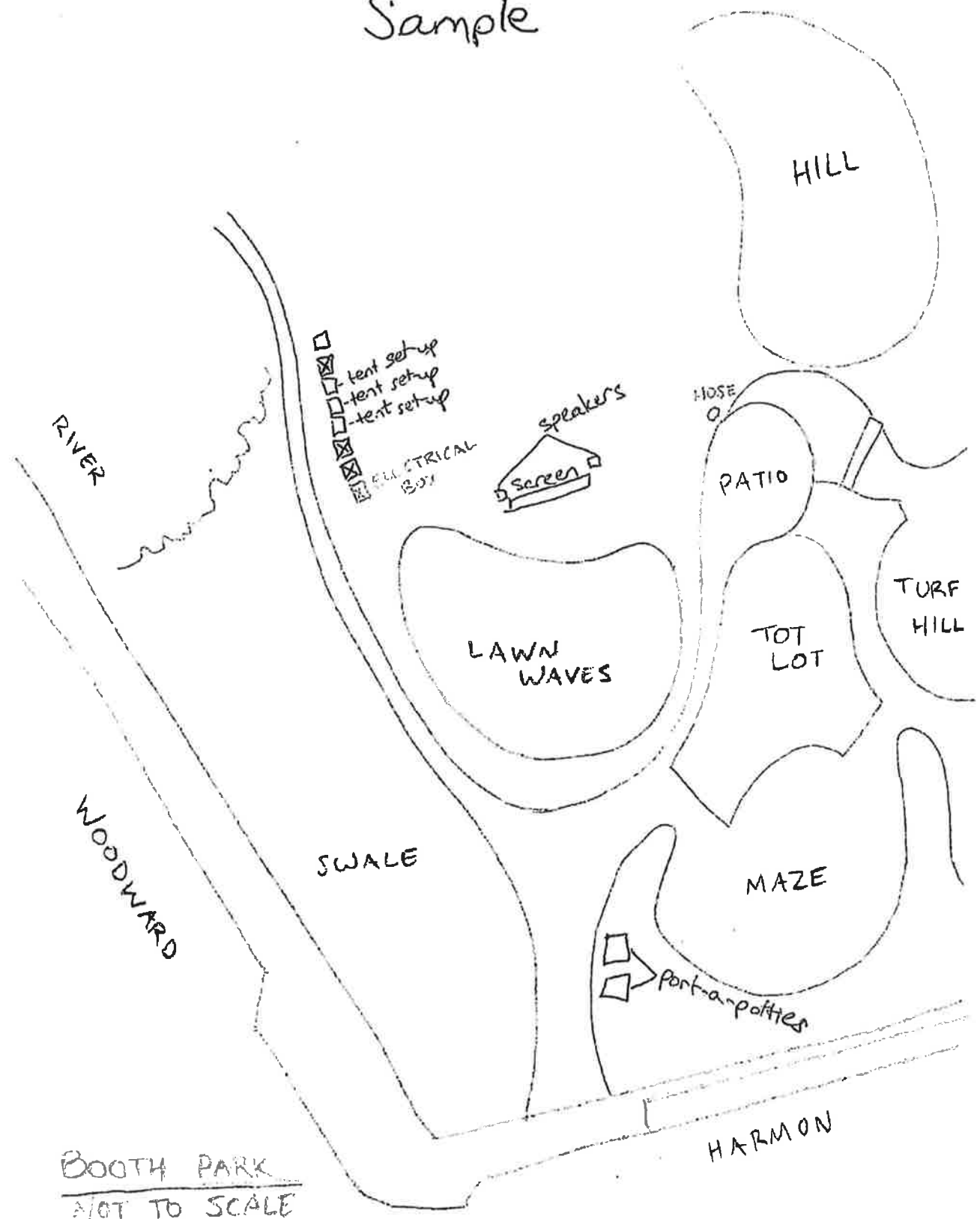
1. Will the event require the use of any of the following municipal equipment?
(show location of each on map)

EQUIPMENT	QUANTITY	COST	NOTES
Picnic Tables		6 for \$800.00	A request for more than six tables will be evaluated based on availability.
Trash Receptacles		\$10.00 each includes 1 bag For additional bags, the cost is \$45 per case, 100 bags per case	Trash box placement and removal of trash is the responsibility of the event. Additional cost could occur if DPS is to perform this work.
Dumpsters		\$400.00/per dumpster per day	Includes emptying the dumpster one time per day. The City may determine the need for additional dumpsters based on event requirements.
Utilities (electric)	# of vendors requiring utilities	Varies	Charges according to final requirements of event.
Water/Fire Hydrant		\$224.75/per hydrant Includes the use of 5,000 gallons of water. Any additional water usage will be billed.	Applicant must supply their own means of disposal for all sanitary waste water. Waste water is NOT allowed to be poured into the street or on the grass.
Meter Bags / Traffic Cones / Barricades	# to be determined by the Police Department.		

2. Will the following be constructed or located in the area of the event? YES NO
(show location of each on map) NOTE: Stakes are not allowed.

TYPE	QUANTITY	SIZE
Tents/Canopies/Awnings (A permit is required for tents over 400 square feet)	8	10'x10'
Portable Toilets	2	1 - reg, 1-handicap
Rides		
Displays		
Vendors		
Temporary Structure (must attach a photo)		
Other (describe)	10 tables	6' each

Movie Night Sample



BOOTH PARK
NOT TO SCALE

Sample 2' x 3' sign



BIRMINGHAM

Movie Night

Thank You To Our Sponsors



BANK OF ANN ARBOR - BIRMINGHAM • TDR ORTHODONTICS
KW DOMAIN • SAAD DENTAL

2021 SCHEDULE

July 16: Elf ("Christmas in July")

August 13: CARS

Activities begin at 7:30 p.m. • Movie at dusk


BIRMINGHAM
The Shopping District

www.ALINBirmingham.com

DATE: February 9, 2024
TO: Downtown Birmingham Business/Property Owner

The Birmingham City Code requires that we receive approval from the Birmingham City Commission to hold the following special event. The code further requires that we notify any property owners or business owners that may be affected by the special event of the date and time that the city commission will consider our request so that an opportunity exists for comments prior to this approval.

NAME OF EVENT: Birmingham Movie Nights
LOCATION: Booth Park
DATES/TIMES: Fridays—June 7, 2024; July 19, 2024; August 9, 2024, Sept. 6, 2024
Rain dates--Saturdays--June 8, July 20, August 10, Sept. 7, 2024
6:30 p.m.

DATE/TIME OF CITY COMMISSION MEETING: Monday, March 4, 2024 at 7:30 p.m.

The City Commission will meet in the Municipal Building. Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: <https://zoom.us/j/655079760> Meeting ID: 655079760. You may also present your written statement to the City Commission, City of Birmingham, 151 Martin Street, P.O. Box 3001, Birmingham, Michigan 48012-3001 prior to the hearing.

EVENT ORGANIZER: Birmingham Shopping District
ADDRESS: 151 Martin, Birmingham, MI 48009
PHONE: 248-530-1200 day of event—248-508-5518

Birmingham Shopping District
151 Martin Street
Birmingham, MI 48009

FIRST-CLASS



US POSTAGE™ PITNEY BOWES
ZIP 48009 \$ 000.53⁰
02 7W
0008029208 FEB 09 2024



PNUM: 1925328062
ARNOLD KRIEGER
511 BROOKSIDE AVE
BIRMINGHAM, MI 48009



michigan municipal league

Liability & Property Pool

CERTIFICATE OF COVERAGE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED AS LISTED BELOW.

Name and Address of Participant:

City of Birmingham

151 Martin St., PO Box 3001
Birmingham, MI 48012-3001

Coverage Afforded:

Michigan Municipal League Liability and Property Pool
1675 Green Road
Ann Arbor, MI 48105-2530

Name and Address of Service Provider:

Meadowbrook, Inc.
P.O. Box 2054
Southfield, MI 48037-2054

This is to certify that the coverage listed below has been issued to the participant named above and is in-force at this time. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the coverage afforded herein is subject to all the terms, exclusions and conditions of the Pool contract.

Coverage	Contract Number	Expiration Date	Limits of Liability
<u>General Liability</u>	MML001444022	7/1/2024	\$10,000,000
<u>Automobile Liability</u>			Bodily Injury & Property Damage Combined Single Limit
<u>Other</u>			

Description of Operations/Locations/Vehicles:

Certificate Holder Additional Insured solely with respect to: Services provided on behalf of the City of Birmingham.

CANCELLATION: Should any of the above described coverages be canceled before the expiration date thereof, the administrator will endeavor to mail 60 days' written notice to the certificate holder named below, but failure to mail such notice shall impose no obligation or liability of any kind upon the Pool.

<p><u>Name and Address of Certificate Holder:</u> Birmingham Principal Shopping District 151 Martin St. Birmingham, MI 48009</p>

Date Issued: 6/2/2023

By: *[Signature]*
Authorized Representative

RECEIVED JUN 13 2023

DEPARTMENT APPROVALS

EVENT NAME: Movie Nights

COMMISSION HEARING DATE: 03/04/24

DATE OF EVENT: 06/07/24-09/06/24

LICENSE NUMBER #24-00012453

NOTE TO STAFF: Please submit approval by 02/19/24

DEPARTMENT	APPROVED	COMMENTS	PERMITS REQUIRED (Must be obtained directly from individual departments)	ESTIMATED COSTS (Must be paid two weeks prior to the event. License will not be issued if unpaid.)	ACTUAL COSTS (Event will be invoiced by the Clerk's office after the event)
PLANNING 101.0-000.000-636.0005 248.530.1855	TBC	No Cost No Comment		0	
BUILDING 101.0-000.000.636.0005 248.530.1850	MJM	No department involvement.	Tents over 400 SQFT.	\$0	
FIRE 101.0-000.000-636.0004 248.530.1900	JS	Fire/ EMS to respond from respective stations. Cooking areas and food trucks will require inspection. Fire extinguisher required for cooking areas Crow managers required 1/250 people ratio Provide wire bridges for extension cords as necessary Tents will require flame retardant cert.		\$0.00	
POLICE 101.0-000.000.636.0003 248.530.1870	RK	2 officers will be dedicated to each of the 4 movie nights. Parking Enforcement will place barricades and meter bags before each event. On-duty officers will give extra patrols.		\$2,829.60	
PUBLIC SERVICES 101.0-000.000-636.0002 248.530.1642	CL	No stakes driven in the ground. Estimated costs include: Banner placement and removal. Barricade placement and removal for each event. Set up/clean up for each event.		\$3,000	

ENGINEERING 101.0-000.000.636.0002 248.530.1839	MC	No permits required	None	\$0	
PARKING	AF	Guests pay the going rate at all garages and meters	None	0	0
INSURANCE 248.530.1807		Need to submit COI no less than 2 weeks prior to event Need to submit Hold Harmless Agreement	None		
CLERK 101.0-000.000-614.0000 248.530.1803		Notification letters to be mailed by applicant no later than ____. Notification addresses on file in the Clerk's Office.	Applications for vendors license must be submitted no later than ____.	0	0
			TOTALS: Estimated and Actual Costs	\$5829.60	

FOR CLERK'S OFFICE USE

Deposit paid _____

Actual Cost _____

Due/Refund_____



MEMORANDUM

Engineering Department

DATE: February 28, 2024

TO: Jana L. Ecker, City Manager

FROM: Melissa A. Coatta, City Engineer

SUBJECT: Edgewood Road Project
Contract #6-24(S) Contract Award

INTRODUCTION:

The City received and opened bids for the Edgewood Road Project Contract #6-24(S) on December 21, 2024, and received six (6) bids. The Engineering Department recommends awarding this contract to Eminent Excavating LLC.

BACKGROUND:

The Edgewood Road Project includes the removal of the existing road that was mostly installed in the late 1950s and installing a new concrete pavement with the following underground improvements:

Edgewood Road – E. Lincoln St. to Catalpa Dr.:

Replacing the existing sewer ranging in size from 10" to 18" diameter, and installing separated storm sewer on the northern portion of Edgewood Road. The separate storm will be temporarily directed to St. James Park and will incorporate a future rain garden in the master plan for this park. The existing sewer ranks towards the top of the infrastructure ratings for sewer and road. These sewers were reviewed for trenchless repair, such as cured-in-place lining. It is not recommended due to the pipe offsets, and existing pipe conditions.

Edgewood Road – Catalpa Dr. to E. Southlawn Blvd.:

A new 8" diameter water main will connect to an existing stub left on E. Southlawn Blvd. in 2006 and to an existing stub on Catalpa in 2014. The water model currently recommends an 8" diameter water main in this section of Edgewood to improve water pressure and flow in this area.

This project also includes replacing an existing 6" diameter water main on Grant Street between Humphrey and Bennaville Road. This work was bid in the 2022-2023 Asphalt Resurfacing Program and the City received a cost of over \$500.00 per foot for the watermain only. The Engineering Department elected not to award that portion and wait until a nearby project was

being constructed. The approximate cost per foot for the watermain only by Eminent Excavating LLC is approximately \$335.00. After the water main installation, this section of the road will be milled and a 1.5" asphalt overlay will be installed.

A water and sewer lateral special assessment district (SAD) along Edgewood Road was presented to the City Commission on January 8, 2024, and on January 22, 2024, for a confirmation of roll. The SAD was approved by the City Commission.

The Engineering Department opened bids on December 21, 2023, and six (6) bids were received as listed in the attached summary. The lowest and most responsive bidder was Eminent Excavating LLC of \$2,225,421.50 for Paving Alternate #1 (concrete road) and \$2,079,694.50 for Paving Alternate #2 (asphalt road with concrete curb and gutter). Eminent Excavating LLC's price of \$2,225,421.50 (for concrete road) was approximately \$237,024.75 (10.6%) more than the engineer's estimate. Factors that influence bid pricing include rising labor and material costs. The Engineering Department recommends proceeding with concrete pavement on this project due to the minor increase in price for a material that has a longer lifespan.

Eminent Excavating LLC has previously worked in the City of Birmingham as a subcontractor on the Maple Road Project. The Engineering Department also contacted references provided in their bid, and we are fully confident that they are qualified to perform the type of work.

As required for all City construction projects, Eminent Excavating LLC has submitted a 5% bid security with their bid which will be forfeited if they do not provide signed contracts, bonds, and insurance required by the contract.

LEGAL REVIEW:

The City's standard RFP and contract language was used for bidding this project which the City Attorney has reviewed and approved. No legal issues existed nor objections by the City Attorney.

FISCAL IMPACT:

This project is budgeted for the 23/24 fiscal year, however, the road, sewer, and water portions are over the budget amounts. Budget amendments are required for the water and sewer costs over the budget amounts. The total construction cost for the project is estimated to be \$2,368,192.58 which includes Eminent Excavating LLC bid amount of \$2,225,421.50 and a 5% construction contingency. The project award will be funded by the following accounts:

Fund Account	Fund ID Number	Project Award	5% Contingencies	Total
Local Street Fund	203.0-449.001-981.0100	\$1,306,002.78	\$65,300.14	\$1,371,302.92
Sewer Fund	590.0-537.000-981.0100	\$703,716.92	\$35,185.85	\$738,902.76
Water Fund	591.0-544.000-981.0100	\$245,701.80	\$12,285.09	\$257,986.89

SUSTAINABILITY:

This project will install a portion of the separated storm sewer and drain towards St. James Park and outlet to Edgewood sewer. A bio-swale will be incorporated during the upcoming renovation at St. James Park.

PUBLIC COMMUNICATIONS:

Property owners received notification during the water and sewer lateral special assessment district. A property owner meeting was held on February 29, 2024 and communication with property owners in the project will be included in the general project announcement.

SUMMARY:

The Engineering Department recommends the Edgewood Road Project Contract #6-24(S) be awarded to Eminent Excavating LLC.

ATTACHMENTS:

- Project Area Map
- Bid Summary
- Nowak and Fraus Recommendation Letter
- Existing Sewer Conditions
- Plans
- Contract Book

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution to award the Edgewood Road Project #6-24(S) to Eminent Excavating LLC in the amount of \$2,225,421.50 and a 5% construction contingency for a total of \$2,336,692.58. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City contingent upon execution of the agreement and meeting all insurance and bond requirements by Eminent Excavating LLC. Funding for this project has been budgeted in the following accounts:

Fund Account	Fund ID Number	Project Award	5% Contingencies	Total
Local Street Fund	203.0-449.001-981.0100	\$1,306,002.78	\$65,300.14	\$1,371,302.92
Sewer Fund	590.0-537.000-981.0100	\$703,716.92	\$35,185.85	\$738,902.76
Water Fund	591.0-544.000-981.0100	\$245,701.80	\$12,285.09	\$257,986.89

AND

To approve the appropriation and amendment of the fiscal year 2023/2024 budget as follows:

Local Street Fund:

Revenues:

203.0-000.000-400.0000	Draw from Fund Balance	<u>\$691,310</u>
Total Revenue		<u>\$691,310</u>

Expenditures:

203.0-449.001-981.0100	Public Improvements	<u>\$691,310</u>
Total Expenses		<u>\$691,310</u>

Sewer Fund:

Revenues:

590.0-000.000-400.0000	Draw from Net Position	<u>\$528,910</u>
Total Revenue		<u>\$528,910</u>

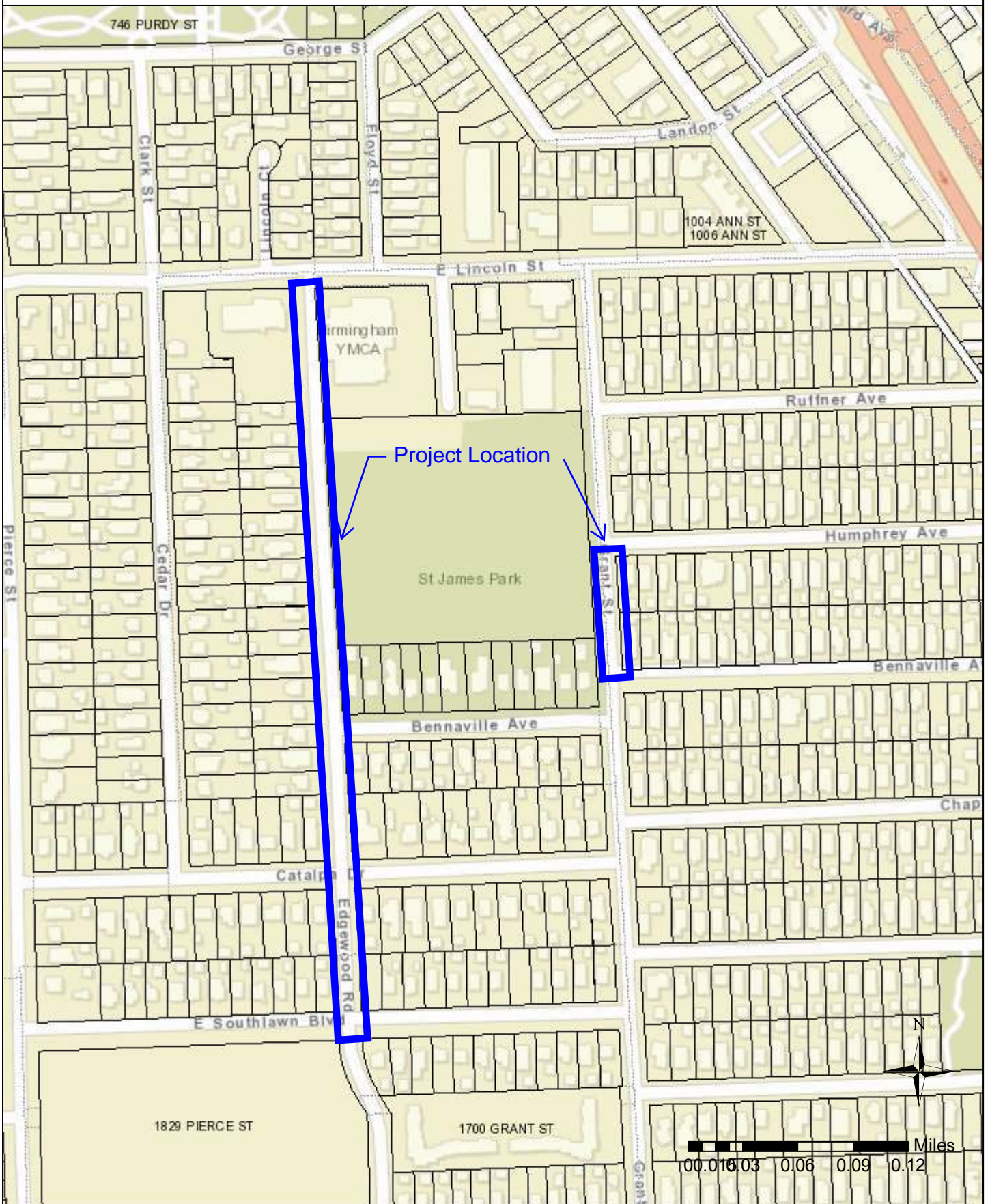
Expenditures:		
590.0-537.000-981.0100	Public Improvements	<u>\$528,910</u>
Total Expenses		<u>\$528,910</u>

Water Fund:

Revenues:		
591.0-000.000-400.0000	Draw from Net Position	<u>\$127,990</u>
Total Revenue		<u>\$127,990</u>

Expenditures:		
591.0-544.000-981.0100	Public Improvements	<u>\$127,990</u>
Total Expenses		<u>\$127,990</u>

Edgewood Road and Grant Street



Eminent Excavating LLC
 514 S. Fort Street
 Detroit, Michigan 48217

Gibraltar Construction Co.
 2650 Van Horn Rd.
 Trenton, Michigan 48183

F.D.M Contracting, Inc.
 49156 Van Dyke
 Shelby Twp., Michigan 48317

Item	Quantity	Unit	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
EDGEWOOD RD. SEWER PAY ITEMS								
1. 24" Combined Sewer, C76, CL-IV, Trench A	21	LF	\$ 250.00	\$ 5,250.00	\$ 553.00	\$ 11,613.00	\$ 300.00	\$ 6,300.00
2. 21" Combined Sewer, C76, CL-IV, Trench A	521	LF	\$ 200.00	\$ 104,200.00	\$ 274.00	\$ 142,754.00	\$ 260.00	\$ 135,460.00
3. 18" Combined Sewer, C76, CL-IV, Trench A	114	LF	\$ 170.00	\$ 19,380.00	\$ 164.00	\$ 18,696.00	\$ 250.00	\$ 28,500.00
4. 15" Combined Sewer, C76, CL-IV, Trench A	239	LF	\$ 160.00	\$ 38,240.00	\$ 126.00	\$ 30,114.00	\$ 230.00	\$ 54,970.00
5. 12" Combined Sewer, C76, CL-IV, Trench A	52	LF	\$ 155.00	\$ 8,060.00	\$ 110.00	\$ 5,720.00	\$ 220.00	\$ 11,440.00
6. 10" Combined Sewer, PVC SDR 26, Trench A	134	LF	\$ 145.00	\$ 19,430.00	\$ 187.00	\$ 25,058.00	\$ 230.00	\$ 30,820.00
7. 8" Combined Sewer, PVC SDR 26, Trench A	28	LF	\$ 135.00	\$ 3,780.00	\$ 160.00	\$ 4,480.00	\$ 190.00	\$ 5,320.00
8. 15" Storm Sewer, C76, CL-IV, Trench A	195	LF	\$ 140.00	\$ 27,300.00	\$ 120.00	\$ 23,400.00	\$ 150.00	\$ 29,250.00
9. 12" Storm Sewer, C76, CL-IV, Trench A	393	LF	\$ 125.00	\$ 49,125.00	\$ 116.00	\$ 45,588.00	\$ 130.00	\$ 51,090.00
10. 10" Storm Sewer, PVC SDR 26, Trench A	10	LF	\$ 115.00	\$ 1,150.00	\$ 200.00	\$ 2,000.00	\$ 150.00	\$ 1,500.00
11. Sewer Service, 8" PVC SDR 26	31	LF	\$ 100.00	\$ 3,100.00	\$ 104.00	\$ 3,224.00	\$ 200.00	\$ 6,200.00
12. Sewer Service, 6" PVC SDR 23.5	635	LF	\$ 90.00	\$ 57,150.00	\$ 102.00	\$ 64,770.00	\$ 170.00	\$ 107,950.00
13. New 5'-0" Diameter Combined Manhole w/ Drop Connection (Construct Online)	1	EA	\$ 7,500.00	\$ 7,500.00	\$ 8,445.00	\$ 8,445.00	\$ 12,500.00	\$ 12,500.00
14. New 5'-0" Diameter Combined Manhole	4	EA	\$ 6,500.00	\$ 26,000.00	\$ 10,400.00	\$ 41,600.00	\$ 7,500.00	\$ 30,000.00
15. New 4'-0" Diameter Combined Manhole	4	EA	\$ 4,200.00	\$ 16,800.00	\$ 5,520.00	\$ 22,080.00	\$ 6,500.00	\$ 26,000.00
16. New 5'-0" Diameter Storm Catch Basin w/ 2' Sump	1	EA	\$ 5,200.00	\$ 5,200.00	\$ 7,500.00	\$ 7,500.00	\$ 7,000.00	\$ 7,000.00
17. New 4'-0" Diameter Storm Catch Basin w/ 2' Sump	5	EA	\$ 3,500.00	\$ 17,500.00	\$ 4,700.00	\$ 23,500.00	\$ 5,500.00	\$ 27,500.00
18. New 4'-0" Diameter Storm Catch Basin w/ 2' Sump	6	EA	\$ 3,300.00	\$ 19,800.00	\$ 4,400.00	\$ 26,400.00	\$ 5,000.00	\$ 30,000.00
19. New 2'-0" Diameter Inlet	5	EA	\$ 2,600.00	\$ 13,000.00	\$ 2,080.00	\$ 10,400.00	\$ 3,500.00	\$ 17,500.00
20. 6" Perforated Pipe Underdrain (No Sock)	3,022	LF	\$ 20.00	\$ 60,440.00	\$ 21.40	\$ 64,670.80	\$ 22.00	\$ 66,484.00
21. Sewer Investigation, Laterals	6	EA	\$ 2,500.00	\$ 15,000.00	\$ 1,040.00	\$ 6,240.00	\$ 700.00	\$ 4,200.00
22. Sewer Service Tap, 8"	2	EA	\$ 900.00	\$ 1,800.00	\$ 450.00	\$ 900.00	\$ 1,250.00	\$ 2,500.00
23. Sewer Service Tap, 6"	21	EA	\$ 750.00	\$ 15,750.00	\$ 400.00	\$ 8,400.00	\$ 1,000.00	\$ 21,000.00
24. Sewer Service Tap, 24"	1	EA	\$ 2,200.00	\$ 2,200.00	\$ 750.00	\$ 750.00	\$ 2,500.00	\$ 2,500.00
25. Sewer Service Tap, 21"	1	EA	\$ 2,000.00	\$ 2,000.00	\$ 750.00	\$ 750.00	\$ 2,300.00	\$ 2,300.00
26. Sewer Service Tap, 15"	1	EA	\$ 1,500.00	\$ 1,500.00	\$ 600.00	\$ 600.00	\$ 1,700.00	\$ 1,700.00
27. Sewer Service Tap, 12"	2	EA	\$ 1,000.00	\$ 2,000.00	\$ 600.00	\$ 1,200.00 *	\$ 1,500.00	\$ 3,000.00
28. Sewer Service Tap, 10"	1	EA	\$ 900.00	\$ 900.00	\$ 500.00	\$ 500.00	\$ 1,250.00	\$ 1,250.00
29. Sewer Tap, 6", Underdrain	2	EA	\$ 750.00	\$ 1,500.00	\$ 200.00	\$ 400.00	\$ 500.00	\$ 1,000.00
30. Reconstruct Manhole (if and where needed)	20	VF	\$ 300.00	\$ 6,000.00	\$ 450.00	\$ 9,000.00	\$ 150.00	\$ 3,000.00
31. Remove & Replace Structure Cover (as directed by City)	1,650	LB	\$ 8.00	\$ 13,200.00	\$ 5.00	\$ 8,250.00	\$ 3.00	\$ 4,950.00

Eminent Excavating LLC
 514 S. Fort Street
 Detroit, Michigan 48217

Gibraltar Construction Co.
 2650 Van Horn Rd.
 Trenton, Michigan 48183

F.D.M Contracting, Inc.
 49156 Van Dyke
 Shelby Twp., Michigan 48317

Item	Quantity	Unit	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	
32. Remove Ex. Sewer Manhole	4	EA	\$ 1,000.00	\$ 4,000.00	\$ 1,080.00	\$ 4,320.00	\$ 800.00	\$ 3,200.00	
33. Remove Ex. Drainage Structure	6	EA	\$ 600.00	\$ 3,600.00	\$ 1,000.00	\$ 6,000.00 *	\$ 800.00	\$ 4,800.00	
34. Remove Ex. 18" Combined Sewer	668	LF	\$ 40.00	\$ 26,720.00	\$ 41.00	\$ 27,388.00	\$ 15.00	\$ 10,020.00	
35. Remove Ex. 15" Combined Sewer	106	LF	\$ 40.00	\$ 4,240.00	\$ 41.00	\$ 4,346.00	\$ 15.00	\$ 1,590.00	
36. Remove Ex. 12" Combined Sewer	170	LF	\$ 40.00	\$ 6,800.00	\$ 41.00	\$ 6,970.00	\$ 15.00	\$ 2,550.00	
37. Remove Ex. 10" Combined Sewer	133	LF	\$ 40.00	\$ 5,320.00	\$ 41.00	\$ 5,453.00	\$ 15.00	\$ 1,995.00	
38. Remove Ex. 8" Combined Sewer	29	LF	\$ 40.00	\$ 1,160.00	\$ 41.00	\$ 1,189.00	\$ 15.00	\$ 435.00	
39. Remove Ex. 12" Storm Sewer	88	LF	\$ 40.00	\$ 3,520.00	\$ 41.00	\$ 3,608.00	\$ 35.00	\$ 3,080.00	
40. Remove Ex. 10" Storm Sewer	34	LF	\$ 40.00	\$ 1,360.00	\$ 41.00	\$ 1,394.00	\$ 35.00	\$ 1,190.00	
41. Bulkhead Pipe, Larger than 8"	3	EA	\$ 1,000.00	\$ 3,000.00	\$ 450.00	\$ 1,350.00	\$ 300.00	\$ 900.00	
42. CCTV Sewer Acceptance Inspection	1	LS	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	
SUBTOTAL - EDGEWOOD RD. SEWER PAY ITEMS				\$ 633,975.00	\$ 691,020.80	\$ 772,944.00			
EDGEWOOD RD. WATER MAIN PAY ITEMS									
43. 8" Gate Valve & Well	1	EA	\$ 6,500.00	\$ 6,500.00	\$ 9,870.00	\$ 9,870.00	\$ 8,500.00	\$ 8,500.00	
44. 8" D.I. CL 52 Water Main w/ Polywrap, Trench A	278	LF	\$ 210.00	\$ 58,380.00	\$ 304.00	\$ 84,512.00	\$ 250.00	\$ 69,500.00	
45. 8" Water Main Connection to Ex. 8" Water Main	2	EA	\$ 7,500.00	\$ 15,000.00	\$ 2,800.00	\$ 5,600.00	\$ 6,500.00	\$ 13,000.00	
46. New Water Service, 1", Trench A, Copper	184	LF	\$ 80.00	\$ 14,720.00	\$ 111.00	\$ 20,424.00	\$ 60.00	\$ 11,040.00	
47. Water Service Connection, 1"	9	EA	\$ 2,500.00	\$ 22,500.00	\$ 600.00	\$ 5,400.00	\$ 1,000.00	\$ 9,000.00	
48. Install Curb Stop & Box, 1"	9	EA	\$ 1,500.00	\$ 13,500.00	\$ 1,214.00	\$ 10,926.00	\$ 600.00	\$ 5,400.00	
49. Hydra-Stop, Insta-Valve 250, 8"	1	EA	\$ 9,000.00	\$ 9,000.00	\$ 9,000.00	\$ 9,000.00	\$ 1,000.00	\$ 1,000.00	
50. Hydra-Stop, Line-Stop, 8"	2	EA	\$ 5,000.00	\$ 10,000.00	\$ 6,000.00	\$ 12,000.00	\$ 100.00	\$ 200.00	
SUBTOTAL - EDGEWOOD RD. WATER MAIN PAY ITEMS				\$ 149,600.00	\$ 157,732.00	\$ 117,640.00			
EDGEWOOD RD. PAVING PAY ITEMS									
51. SEE ALTERNATES BELOW									
52. Subgrade Undercutting, 21AA Limestone	850	CY	\$ 65.00	\$ 55,250.00	\$ 89.00	\$ 75,650.00	\$ 35.00	\$ 29,750.00	
53. Subgrade Undercutting, 1"x3" Limestone	850	CY	\$ 65.00	\$ 55,250.00	\$ 89.00	\$ 75,650.00	\$ 25.00	\$ 21,250.00	
54. Subgrade Geogrid Fabric, Tensar Triax TX130S	2,600	SY	\$ 3.00	\$ 7,800.00	\$ 8.00	\$ 20,800.00	\$ 4.00	\$ 10,400.00	
55. Remove and Salvage Brick Pavers	300	SF	\$ 10.00	\$ 3,000.00	\$ 10.00	\$ 3,000.00	\$ 5.00	\$ 1,500.00	
56. Removing Concrete Drive Approach	249	SY	\$ 10.00	\$ 2,490.00	\$ 10.00	\$ 2,490.00	\$ 12.00	\$ 2,988.00	
57. Removing Concrete Sidewalk & Ramp (sawcutting included)	302	SY	\$ 15.00	\$ 4,530.00	\$ 11.00	\$ 3,322.00	\$ 10.00	\$ 3,020.00	

BID TABULATION
 CITY OF BIRMINGHAM
 2024 EDGEWOOD ROAD PAVING PROJECT
 CONTRACT #6-24(S)

Bids Due: December 21, 2023

Eminent Excavating LLC
 514 S. Fort Street
 Detroit, Michigan 48217

Gibraltar Construction Co.
 2650 Van Horn Rd.
 Trenton, Michigan 48183

F.D.M Contracting, Inc.
 49156 Van Dyke
 Shelby Twp., Michigan 48317

Item	Quantity	Unit	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
58. Removing Pavement Full Depth (Curb & Gutter included)	5,420	SY	\$ 18.00	\$ 97,560.00	\$ 6.85	\$ 37,127.00	\$ 12.00	\$ 65,040.00
59. Aggregate Base, MDOT 21AA Limestone, 8"	5,592	SY	\$ 30.00	\$ 167,760.00	\$ 16.44	\$ 91,932.48	\$ 22.00	\$ 123,024.00
60. Replace Lincoln Avenue Composite Pavement (Per Detail)	1	LS	\$ 40,000.00	\$ 40,000.00	\$ 24,000.00	\$ 24,000.00	\$ 20,000.00	\$ 20,000.00
61. SEE ALTERNATES BELOW								
62. SEE ALTERNATES BELOW								
63. SEE ALTERNATES BELOW								
64. SEE ALTERNATES BELOW								
65. SEE ALTERNATES BELOW								
66. SEE ALTERNATES BELOW								
67. Concrete Drive Approach, 6", Incl. integral 6" Curb	21	SY	\$ 65.00	\$ 1,365.00	\$ 65.00	\$ 1,365.00	\$ 65.00	\$ 1,365.00
68. Concrete Drive Approach, 6"	292	SY	\$ 60.00	\$ 17,520.00	\$ 70.00	\$ 20,440.00	\$ 65.00	\$ 18,980.00
69. Concrete Sidewalk, 6" (Includes Ramps)	910	SF	\$ 8.00	\$ 7,280.00	\$ 11.00	\$ 10,010.00	\$ 9.00	\$ 8,190.00
70. Concrete Sidewalk, 4"	1,825	SF	\$ 6.50	\$ 11,862.50	\$ 8.00	\$ 14,600.00	\$ 7.50	\$ 13,687.50
71. Handicap Ramp Truncated Domes	110	SF	\$ 32.50	\$ 3,575.00	\$ 40.00	\$ 4,400.00	\$ 160.00	\$ 17,600.00
72. Adjust Structure Cover	11	EA	\$ 600.00	\$ 6,600.00	\$ 750.00	\$ 8,250.00	\$ 1,000.00	\$ 11,000.00
73. Maintenance Aggregate for Entire Project	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00
SUBTOTAL - EDGEWOOD RD. PAVING PAY ITEMS				\$ 531,842.50		\$ 413,036.48		\$ 367,794.50 *
EDGEWOOD RD. GENERAL PAY ITEMS								
74. Mobilization (Max. 5% of Total Bid)	1	LS	\$ 100,000.00	\$ 100,000.00	\$ 80,000.00	\$ 80,000.00	\$ 90,000.00	\$ 90,000.00
75. Pavement Marking, Polyurea, 24 inch Stop Bar, White	104	LF	\$ 15.00	\$ 1,560.00	\$ 20.00	\$ 2,080.00	\$ 15.00	\$ 1,560.00
76. Pavement Marking, Polyurea, 24 inch Crosshatching, White	342	LF	\$ 15.00	\$ 5,130.00	\$ 20.00	\$ 6,840.00	\$ 15.00	\$ 5,130.00
77. Recessing Pavt Mkrng, Transv	892	SF	\$ 5.00	\$ 4,460.00	\$ 10.00	\$ 8,920.00	\$ 7.00	\$ 6,244.00
78. Remove Pavt Mkrng, Transv (Catalpa Intersection)	80	SF	\$ 10.00	\$ 800.00	\$ 6.00	\$ 480.00	\$ 7.00	\$ 560.00
79. Water and Sewer Allowance	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
80. Salvage Existing Signs	1	LS	\$ 5,000.00	\$ 5,000.00	\$ 500.00	\$ 500.00	\$ 10,000.00	\$ 1,000.00
81. New Signs	20	SF	\$ 30.00	\$ 600.00	\$ 25.00	\$ 500.00	\$ 40.00	\$ 800.00
82. Sign Post, U-Channel	48	LF	\$ 20.00	\$ 960.00	\$ 15.00	\$ 720.00	\$ 18.00	\$ 864.00
83. Tree Protection, 3" Dia. Or Greater	37	EA	\$ 25.00	\$ 925.00	\$ 250.00	\$ 9,250.00	\$ 125.00	\$ 4,625.00

BID TABULATION
 CITY OF BIRMINGHAM
 2024 EDGEWOOD ROAD PAVING PROJECT
 CONTRACT #6-24(S)

Bids Due: December 21, 2023

Eminent Excavating LLC
 514 S. Fort Street
 Detroit, Michigan 48217

Gibraltar Construction Co.
 2650 Van Horn Rd.
 Trenton, Michigan 48183

F.D.M Contracting, Inc.
 49156 Van Dyke
 Shelby Twp., Michigan 48317

Item	Quantity	Unit	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
84. Restoration - St. James Park	1	LS	\$ 10,000.00	\$ 10,000.00	\$ 13,600.00	\$ 13,600.00	\$ 30,000.00	\$ 30,000.00
85. Mulch, 3"	100	SY	\$ 20.00	\$ 2,000.00	\$ 5.00	\$ 500.00 *	\$ 20.00	\$ 2,000.00
86. Topsoil, 3"	1,500	SY	\$ 5.00	\$ 7,500.00	\$ 10.00	\$ 15,000.00	\$ 10.00	\$ 15,000.00
87. Sod, Class A	1,500	SY	\$ 7.00	\$ 10,500.00	\$ 6.00	\$ 9,000.00	\$ 10.00	\$ 15,000.00
88. Inlet Filter	22	EA	\$ 150.00	\$ 3,300.00	\$ 200.00	\$ 4,400.00	\$ 150.00	\$ 3,300.00
89. Inlet Sediment Pit	22	EA	\$ 150.00	\$ 3,300.00	\$ 250.00	\$ 5,500.00	\$ 1.00	\$ 22.00
90. SEE ALTERNATES BELOW								
91. SEE ALTERNATES BELOW								

SUBTOTAL - EDGEWOOD RD. GENERAL PAY ITEMS

\$ 106,035.00

\$ 127,290.00

\$ 136,105.00

PAVING ALTERNATIVE #1 - EDGEWOOD RD. PAVING PAY ITEMS (CONCRETE)

51. Earth Excavation	1,485	CY	\$ 50.00	\$ 72,250.00	\$ 35.00	\$ 50,575.00	\$ 37.00	\$ 53,465.00
61. Concrete Pavement, Non-reinforced, 7", Incl. integral 6" curb	4,875	SY	\$ 63.00	\$ 307,125.00	\$ 65.00	\$ 316,875.00	\$ 63.00	\$ 307,125.00
62. Bituminous Mixture No. 5EML (2.0" Wearing Course)	50	TON	\$ 270.00	\$ 13,500.00	\$ 252.00	\$ 12,600.00	\$ 300.00	\$ 15,000.00
63. Bituminous Mixture No. 4EML (2.0" Leveling Course)	50	TON	\$ 270.00	\$ 13,500.00	\$ 204.00	\$ 10,200.00	\$ 300.00	\$ 15,000.00
64. Concrete Curb & Gutter (18" Wide, "Birmingham Roll")	215	LF	\$ 33.00	\$ 7,095.00	\$ 50.00	\$ 10,750.00	\$ 40.00	\$ 8,600.00
65. MDOT "M" Approach Gutter Detail, 18" Wd. Curb & Gutter	0	LF	\$ -	\$ -	\$ 60.00	\$ -	\$ 100.00	\$ -
66. MDOT "M" Approach Gutter Detail (Formed in Conc. Pavt. w/ int. curb)	65	LF	\$ 35.00	\$ 2,275.00	\$ 60.00	\$ 3,900.00	\$ 40.00	\$ 2,600.00

ALTERNATIVE #1 - GENERAL PAY ITEMS

\$ -

90. Traffic Maintenance & Control	1	LS	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$	\$ 30,000.00
91. Inspector Crew Days	\$650.00	/DAY	40	\$ 26,000.00	90	\$ 58,500.00	90	\$ 58,500.00

SUBTOTAL - PAVING ALTERNATIVE #1 - PAY ITEMS

\$ 571,745.00

\$ 573,400.00

\$ 580,290.00

PAVING ALTERNATIVE #2 - EDGEWOOD RD. PAVING PAY ITEMS (ASHPALT)

51. Earth Excavation	1,045	CY	\$ 50.00	\$ 52,250.00	\$ 35.00	\$ 36,575.00	\$ 37.00	\$ 38,665.00
61. Concrete Pavement, Non-reinforced, 7", Incl. integral 6" curb	310	SY	\$ 94.00	\$ 29,140.00	\$ 75.00	\$ 23,250.00	\$ 75.00	\$ 23,250.00

BID TABULATION
 CITY OF BIRMINGHAM
 2024 EDGEWOOD ROAD PAVING PROJECT
 CONTRACT #6-24(S)

Bids Due: December 21, 2023

Eminent Excavating LLC
 514 S. Fort Street
 Detroit, Michigan 48217

Gibraltar Construction Co.
 2650 Van Horn Rd.
 Trenton, Michigan 48183

F.D.M Contracting, Inc.
 49156 Van Dyke
 Shelby Twp., Michigan 48317

Item	Quantity	Unit	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
62. Bituminous Mixture No. 5EML (2.0" Wearing Course)	503	TON	\$ 140.00	\$ 70,420.00	\$ 176.00	\$ 88,528.00	\$ 160.00	\$ 80,480.00
63. Bituminous Mixture No. 4EML (2.0" Leveling Course)	503	TON	\$ 131.00	\$ 65,893.00	\$ 150.00	\$ 75,450.00	\$ 150.00	\$ 75,450.00
64. Concrete Curb & Gutter (18" Wide, "Birmingham Roll")	3,002	LF	\$ 20.00	\$ 60,040.00	\$ 45.00	\$ 135,090.00	\$ 35.00	\$ 105,070.00
65. MDOT "M" Approach Gutter Detail, 18" Wd. Curb & Gutter	65	LF	\$ 35.00	\$ 2,275.00	\$ 45.00	\$ 2,925.00	\$ 50.00	\$ 3,250.00
66. MDOT "M" Approach Gutter Detail (Formed in Conc. Pavt. w/ int. curb)	0	LF	-	-	\$ 50.00	-	\$ 100.00	-
ALTERNATIVE #2 - GENERAL PAY ITEMS								
74. Mobilization (Max. 5% of Total Bid)	1	LS	\$ 90,000.00	\$ 90,000.00			\$ 90,000.00	\$ 90,000.00
90. Traffic Maintenance & Control	1	LS	\$ 30,000.00	\$ 30,000.00	\$ 22,000.00	\$ 22,000.00	\$ 30,000.00	\$ 30,000.00
91. Inspector Crew Days	\$650.00	/DAY	40	\$ 26,000.00	90	\$ 58,500.00	90	\$ 58,500.00
SUBTOTAL - PAVING ALTERNATIVE #2 - PAY ITEMS				\$ 426,018.00		\$ 522,318.00		\$ 504,665.00 *
GRANT STREET WATER MAIN REPLACEMENT PAY ITEMS								
92. Erosion Control, Inlet Protection Fabric Drop	8	EA	\$ 150.00	\$ 1,200.00	\$ 200.00	\$ 1,600.00	\$ 150.00	\$ 1,200.00
93. Curb and Gutter, Remove	6	LF	\$ 100.00	\$ 600.00	\$ 50.00	\$ 300.00	\$ 30.00	\$ 180.00
94. Cold Milling HMA 1.5"	1,571	SY	\$ 5.00	\$ 7,855.00	\$ 7.00	\$ 10,997.00	\$ 10.00	\$ 15,710.00
95. HMA Surface Removal	345	SY	\$ 9.00	\$ 3,105.00	\$ 19.00	\$ 6,555.00	\$ 10.00	\$ 3,450.00
96. Subgrade Undercut & Backfill	35	CY	\$ 65.00	\$ 2,275.00	\$ 90.00	\$ 3,150.00	\$ 50.00	\$ 1,750.00
97. Agg Base, 21AA LS, 8 inch	345	SY	\$ 45.00	\$ 15,525.00	\$ 26.00	\$ 8,970.00	\$ 25.00	\$ 8,625.00
98. Curb and Gutter, Concrete	6	LF	\$ 40.00	\$ 240.00	\$ 100.00	\$ 600.00	\$ 110.00	\$ 660.00
99. HMA 4EML	68	TON	\$ 278.00	\$ 18,904.00	\$ 163.00	\$ 11,084.00	\$ 300.00	\$ 20,400.00
100. HMA 5EML	200	TON	\$ 190.00	\$ 38,000.00	\$ 191.00	\$ 38,200.00	\$ 210.00	\$ 42,000.00
101. Water Main, 8 inch DI CL 54 w/ Polywrap, Tr A	428	LF	\$ 210.00	\$ 89,880.00	\$ 238.00	\$ 101,864.00	\$ 275.00	\$ 117,700.00
102. Gate Valve & Well, 8 inch	2	EA	\$ 6,000.00	\$ 12,000.00	\$ 10,000.00	\$ 20,000.00	\$ 8,500.00	\$ 17,000.00
103. Water Main Connection, 8 inch to ex 8 inch	4	EA	\$ 7,000.00	\$ 28,000.00	\$ 7,000.00	\$ 28,000.00	\$ 8,000.00	\$ 32,000.00
104. Temp Hydra-Stop, 8 inch	2	EA	\$ 5,000.00	\$ 10,000.00	\$ 6,000.00	\$ 12,000.00	\$ 100.00	\$ 200.00
105. Water Main, Abandon	414	LF	\$ 10.00	\$ 4,140.00	\$ 30.00	\$ 12,420.00	\$ 12.00	\$ 4,968.00
106. Turf Establishment	10	SY	\$ 50.00	\$ 500.00	\$ 60.00	\$ 600.00	\$ 50.00	\$ 500.00
EDGEWOOD ROAD TOTAL BID W/PAVING ALTERNATE #1 (CONCRETE):				\$ 1,993,197.50		\$ 1,962,479.28		\$ 1,974,773.50

BID TABULATION
 CITY OF BIRMINGHAM
 2024 EDGEWOOD ROAD PAVING PROJECT
 CONTRACT #6-24(S)

Bids Due: December 21, 2023

Eminent Excavating LLC
 514 S. Fort Street
 Detroit, Michigan 48217

Gibraltar Construction Co.
 2650 Van Horn Rd.
 Trenton, Michigan 48183

F.D.M Contracting, Inc.
 49156 Van Dyke
 Shelby Twp., Michigan 48317

Item	Quantity	Unit	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
EDGEWOOD ROAD TOTAL BID W/PAVING ALTERNATE #2 (ASHPALT):				<u>\$ 1,847,470.50</u>		<u>\$ 1,911,397.28</u>		<u>\$ 1,899,148.50</u> *
GRANT STREET WATER MAIN TOTAL BID:				<u>\$ 232,224.00</u>		<u>\$ 256,340.00</u>		<u>\$ 266,343.00</u>
OVERAL CONTRACT TOTAL BID W/PAVING ALTERNATE #1 (CONCRETE):				<u>\$ 2,225,421.50</u>		<u>\$ 2,218,819.28</u>		<u>\$ 2,241,116.50</u>
OVERAL CONTRACT TOTAL BID W/ PAVING ALTERNATE #2 (ASHPALT):				<u>\$ 2,079,694.50</u>		<u>\$ 2,167,737.28</u>		<u>\$ 2,165,491.50</u> *

Other Bids Received:

Diponio Contracting

Bid Alternate #1 \$ 2,064,514.10
 Bid Alternate #2 \$ 1,986,658.10

V.I.L. Construction, Inc.

Bid Alternate #1 \$ 2,558,179.35
 Bid Alternate #2 \$ 2,470,557.65

Angelo Iafrate Construction Co.

Bid Alternate #1 \$ 2,558,861.00
 Bid Alternate #2 \$ 2,440,387.00

Corrected By Engineer*



CIVIL ENGINEERS

LAND SURVEYORS

LAND PLANNERS

January 25, 2024

City of Birmingham
151 Martin Street
Birmingham, MI 48012

Attn: Ms. Melissa A. Coatta, P.E.
City Engineer

Re: Recommendation for Bid Award
Edgewood Road Paving Project - Contract #6-24S
NFE Job #M516

Dear Ms. Coatta,

Bids for the subject project were received, opened, and read on Thursday, December 21st, 2023, at 2:00 p.m. at City Hall. A total of six (6) bids were received and read. The bids have been tabulated, checked, and are in order. There were two paving alternates that were included in the bid, and each resulted in a different low bidder: Alternate #1 includes primarily concrete pavement, and Alternate #2 includes primarily asphalt pavement. For Alternate #1 ("concrete"), Gibraltar Construction Company (Gibraltar) was the low bidder with a total bid for the overall contract of \$2,218,819.28, and the 2nd low bidder was Eminent Excavating LLC (Eminent) with a total bid of \$2,225,421.50. For Alternate #2 ("asphalt"), Eminent was the low bidder with a total bid of \$2,079,694.50, and the 2nd low bidder was FDM Contracting Inc. (FDM) with a total bid of \$2,165,491.50.

Since Gibraltar Construction Company was a competitive bidder and has not previously completed work for the city, Nowak and Fraus Engineers (NFE) conducted a thorough review of their references to obtain background information on this company. Upon discussions with the various references listed in their bidding documents, the feedback that was received by NFE generally ranged from fair to poor. References stated that their experience with Gibraltar included poor communication & response, requests for numerous and substantial cost extras, and issues with meeting schedule deadlines.

NFE also reviewed references as a background check for Eminent, and found that the feedback was generally good to excellent. Furthermore, Eminent was a subcontractor for the 2020 Maple Road Reconstruction project that successfully completed a large amount of new sidewalk for this downtown project. Based on references, we do not have any concerns about their capability to perform the work.

NOWAK & FRAUS ENGINEERS

46777 WOODWARD
AVENUE
PONTIAC, MI 48342-5032

WWW.NOWAKFRAUS.COM

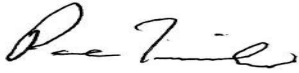
VOICE: 248.332.7931

FAX: 248.332.8257

We understand that the City is planning to select the Alternate #1 ("concrete") option for this contract. Due to the relatively close total bid values between the two low bidders (less that \$7,000), and the aforementioned concerns with low bidder, we therefore recommend that Contract #6-24S for the Edgewood Road Paving Project be awarded to Eminent Excavating, LLC in the amount of **\$2,225,421.50**.

Please do not hesitate to contact our office if you have any questions or comments.

Sincerely,

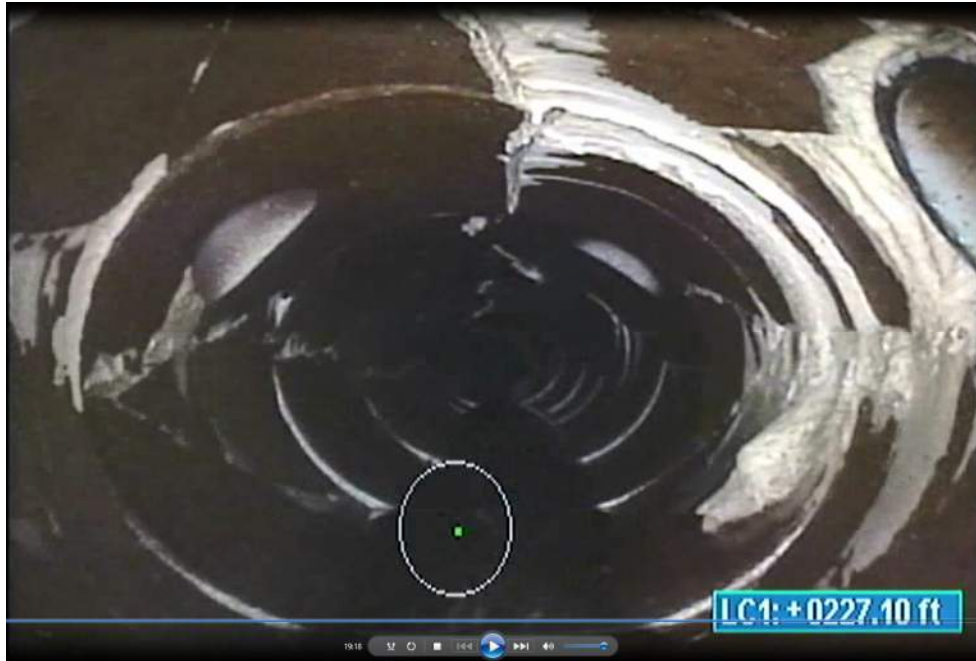


Paul Tulikangas, P.E.
Associate / Engineering Manager



Brett Buchholz, P.E.,
Principal











BIRMINGHAM

A WALKABLE CITY

ENGINEERING DEPARTMENT

EDGEWOOD ROAD PAVING PROJECT CONTRACT#6-24(S)

SHEET INDEX

COVER SHEET (EDGEWOOD ROAD PAVING PROJECT)

- C1 - Paving and Utility Plan Sta P.O.B. to 5+00
- C2 - Paving and Utility Plan Sta 5+00 to 10+00
- C3 - Paving and Utility Plan Sta 10+00 to 15+00
- C4 - Paving and Utility Plan Sta 15+00 to P.O.E.
- C5 - Utility Service Plan Sta P.O.B. to 10+00
- C6 - Utility Service Plan Sta 10+00 to P.O.E.
- C8 - Supplemental Sewer Profile Plan (2 of 2)
- C7 - Supplemental Sewer Profile Plan (1 of 2)
- C9 - Grading Plan Sta. P.O.B. to 5+00
- C10 - Grading Plan Sta. 05+00 to 10+00
- C11 - Grading Plan Sta. 10+00 to 15+00
- C12 - Grading Plan Sta. 15+00 to P.O.E.
- C13 - Intersection Grading Details
- C14 - Existing and Proposed Road Cross-Sections
- C15 - Detour Plan
- C16 - Notes and Details (of 3)
- C17 - Notes and Details (2 of 3)
- C18 - Notes and Details (3 of 3)
- C1 - Quantities

COVER SHEET (GRANT STREET WATER MAIN REPLACEMENT)

- 2 of 14 Project Notes
- 11 of 14 Grant Street Water Main Plan

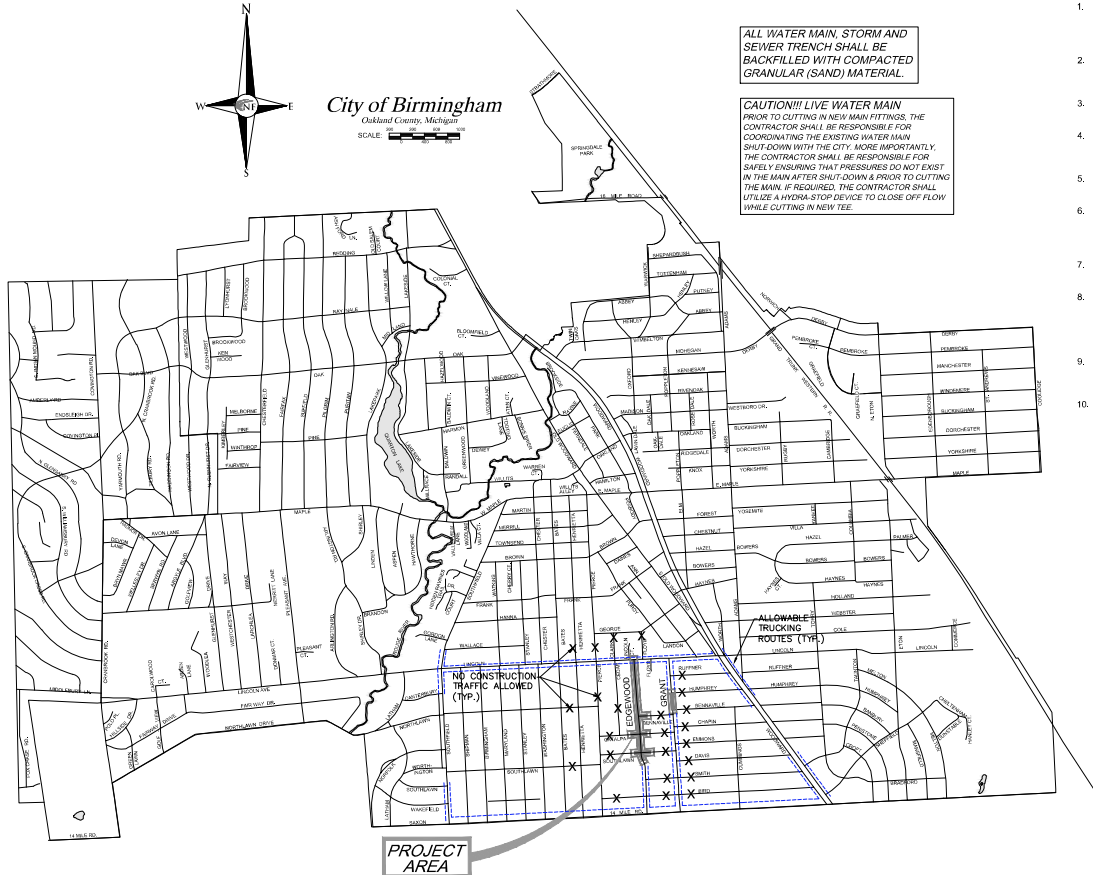
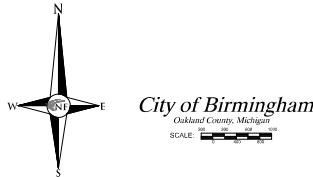
CITY OF BIRMINGHAM - WATER MAIN STANDARD DETAILS
CITY OF BIRMINGHAM - SEWER STANDARD DETAILS

WATER / SEWER SERVICE NOTE

ALL WATER AND SEWER SERVICE LATERALS INFORMATION IS SHOWN PRELIMINARY. VERIFY THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL COORDINATE WITH CITY FOR ALL INFORMATION WATER AND SEWER LATERAL INFORMATION AS REQUIRED TO CONSTRUCT THE PROJECT IN ITS.

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SHEET DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS GIVEN FOR ACCURACY OR COMPLETENESS OF ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CONSTRUCTION NOTES

These notes shall apply for all work within this contract:

1. The contractor shall notify MISS DIG 1-800-482-7171 at least 3 working days excluding Saturday, Sunday, and Holidays before making any excavations and notify the City of Birmingham Engineering Department a minimum of 24 hours prior to the start of construction (248-530-1850).
2. See the City of Birmingham drawings "Sewer Standard Details" and "Water Main Standard Details" for details of manholes, catch basins, inlets, and related sewer and water main work.
3. All excavation under or within three feet of pavement, public or private, shall be backfilled and compacted with sand.
4. The joints at the edges of all excavations in the pavement shall be sawcut, or pavement will be removed to existing joints, as directed by the Engineer. There is no separate pay item for saw cutting pavements.
5. The contractor shall be responsible for damage to existing utilities, pavement, trees, landscaping, gravel, etc., whether located on public or private property.
6. Catch basin and inlet castings scheduled for replacement, or new construction shall be EJIW 500024 DI / 5000M4 DI Hinged Assembly unless specified otherwise. Manhole castings shall be EJIW 1040-A cover as noted on the detail sheets and plans, unless otherwise specified.
7. Storm, sewer and water main trench shall be backfilled with MDOT Class II sand and properly compacted to 95% of modified proctor density.
8. A permit from the Michigan Department of Environment, Great Lakes & Energy (EGLE) is required for all new water main installations. Also, no work shall be allowed on the combined sewer system until appropriate permits have been received by the Michigan Department of Environment, Great Lakes & Energy (EGLE).
9. The contractor shall coordinate and cooperate with all other utility companies working in the same area, project related or not, during the same allotted construction period.
10. All proposed Public Water Main for this project shall be Pressure Class 52 Double Inlet Pipe (D.I.P.) in conformance with City of Birmingham specifications, unless otherwise noted.

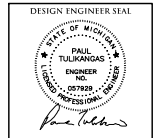
EDGEWOOD ROAD PAVING PROJECT
CONTRACT 6-24(S)



Know what's below
Call before you dig.

BENCHMARK NOTE

BENCHMARKS SET AND SHOWN PER SHEET WERE ESTABLISHED OFF OF THE CITY OF BIRMINGHAM BENCHMARK DATUM.



APPROVED DATE

DECEMBER 13, 2023 ADDENDUM 1

PR. COMBINED SEWER STRUCTURE SCHEDULE	
Structure Name	Structure Details
#37A	PR. 5" DIA. COMB. SEWER MANHOLE
#37B	PR. 18" S. INV. 750.63 PR. 12" N. INV. 749.15 PR. 12" N. INV. 752.65 PR. 15" N. INV. 749.25
#37C	PR. RIM 750.63
#37D	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37E	PR. RIM 750.63
#37F	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37G	PR. RIM 750.63
#37H	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37I	PR. RIM 750.63
#37J	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37K	PR. RIM 750.63
#37L	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37M	PR. RIM 750.63
#37N	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37O	PR. RIM 750.63
#37P	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37Q	PR. RIM 750.63
#37R	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37S	PR. RIM 750.63
#37T	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37U	PR. RIM 750.63
#37V	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37W	PR. RIM 750.63
#37X	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76
#37Y	PR. RIM 750.63
#37Z	PR. 18" S. INV. 749.66 PR. 12" N. INV. 753.50 PR. 15" N. INV. 749.76

PR. STORM SEWER STRUCTURE SCHEDULE	
Structure Name	Structure Details
#37A	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37B	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37C	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37D	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37E	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37F	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37G	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37H	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37I	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37J	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37K	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37L	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37M	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37N	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37O	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37P	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37Q	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37R	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37S	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37T	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37U	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37V	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37W	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37X	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85
#37Y	PR. 4" DIA. CATCH BASIN W/ 2 SUMP (INSTALL GAS TRAP ON S.W. PIPE OUTLET)
#37Z	PR. RIM 756.43 PR. 12" S. INV. 752.85 PR. 12" S.W. INV. 752.85

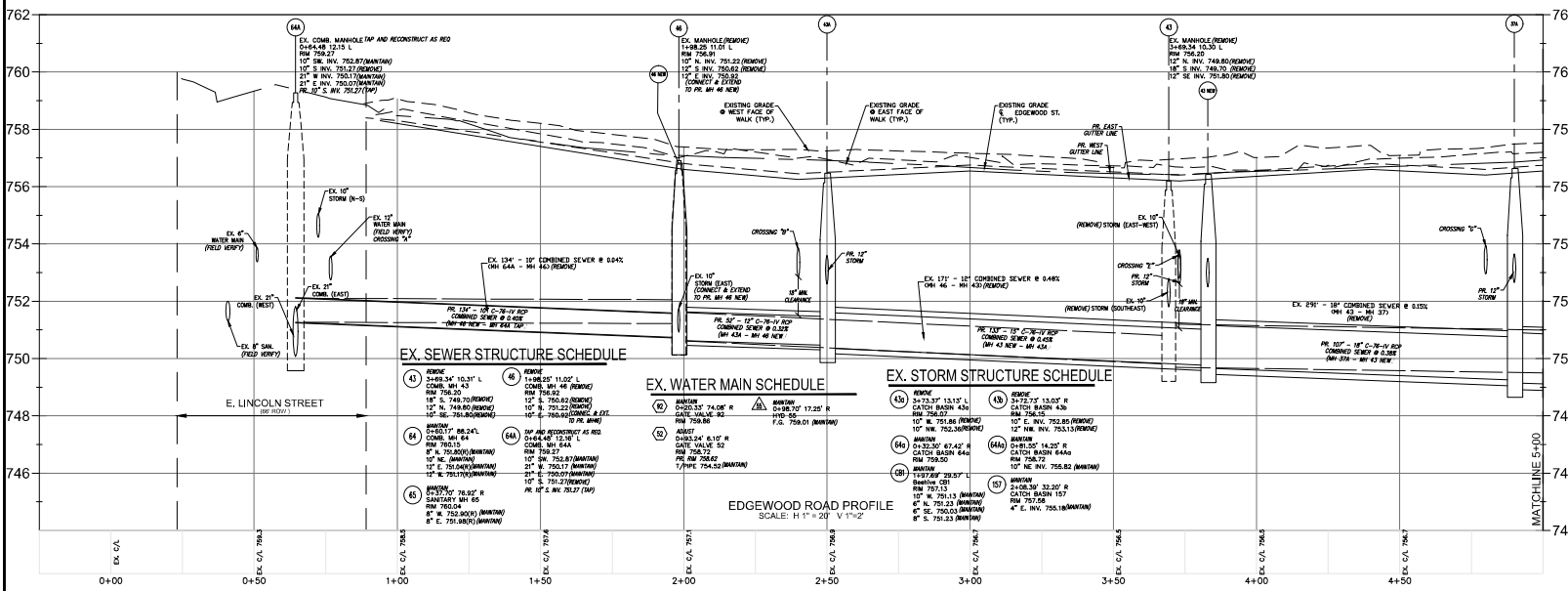
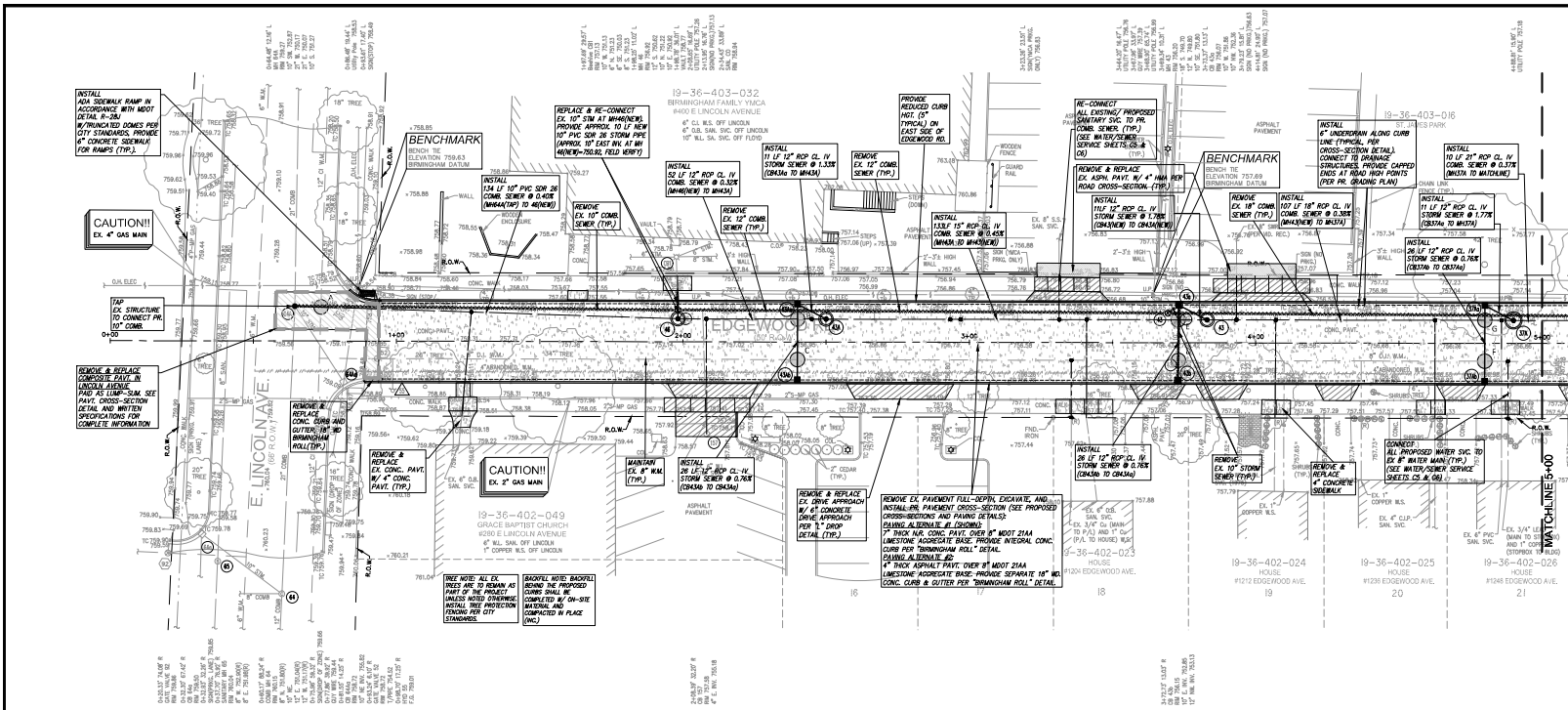
UTILITY CROSSING SCHEDULE	
Structure Name	Structure Details
A	EX. 12" W.M. B/P VAL. PR. 6" W. T/P 750.08 PROVIDE 1' CLEARANCE MIN
B	PR. 12" STW. B/P 752.00 PROVIDE 1.5' CLEARANCE MIN
C	PR. 12" COMB. B/P 751.50 PROVIDE 1.5' CLEARANCE MIN
D	EX. 8" W. T/P 752.00 PROVIDE 1.5' CLEARANCE MIN
E	PR. 12" STW. B/P 752.72 PROVIDE 1.5' CLEARANCE MIN
F	EX. 8" W. T/P VAL. PROVIDE 1.5' CLEARANCE
G	PR. 12" STW. B/P 753.00 PROVIDE 1.5' CLEARANCE
H	PR. 12" COMB. B/P 752.00 PROVIDE 2.1' CLEARANCE

UTILITY NOTE:
 THE LOCATION, DEPTH, AND ELEVATION OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE BASED ON THE SURVEY RECORDS OF THE CITY OF BIRMINGHAM AND THE UTILITIES COMPANIES RECORDS AND MAPS. THE USER OF THIS PLAN SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF UTILITIES SHOWN ON THIS PLAN PRIOR TO CONSTRUCTION.

LEGEND:
 EX. 12" W.M. B/P VAL. (REMOVED)
 EX. 8" W. T/P VAL. (REMOVED)
 EX. 12" STW. B/P 752.00 (REMOVED)
 EX. 12" COMB. B/P 751.50 (REMOVED)
 EX. 8" W. T/P VAL. (REMOVED)
 EX. 12" STW. B/P 752.72 (REMOVED)
 EX. 8" W. T/P VAL. (REMOVED)
 EX. 12" STW. B/P 753.00 (REMOVED)
 EX. 12" COMB. B/P 752.00 (REMOVED)

DATE ISSUED/REVISED:
 02-20-2010
 02-23-2010 ADDendum 1

DRAWN BY: G. Viju
DESIGNED BY: G. Viju
APPROVED BY: B. Buchholz
DATE: December 08, 2021
SCALE: 1" = 20' / 1" = 2'
NEE JOB NO.: M516
SHEET NO.: C1



EX. SEWER STRUCTURE SCHEDULE		EX. WATER MAIN SCHEDULE		EX. STORM STRUCTURE SCHEDULE	
Structure Name	Structure Details	Structure Name	Structure Details	Structure Name	Structure Details
#1	REPLACE 12" DIA. COMB. SEWER AS R/O	#1	REPLACE 12" DIA. WATER MAIN AS R/O	#1	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#2	REPLACE 12" DIA. COMB. SEWER AS R/O	#2	REPLACE 12" DIA. WATER MAIN AS R/O	#2	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#3	REPLACE 12" DIA. COMB. SEWER AS R/O	#3	REPLACE 12" DIA. WATER MAIN AS R/O	#3	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#4	REPLACE 12" DIA. COMB. SEWER AS R/O	#4	REPLACE 12" DIA. WATER MAIN AS R/O	#4	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#5	REPLACE 12" DIA. COMB. SEWER AS R/O	#5	REPLACE 12" DIA. WATER MAIN AS R/O	#5	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#6	REPLACE 12" DIA. COMB. SEWER AS R/O	#6	REPLACE 12" DIA. WATER MAIN AS R/O	#6	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#7	REPLACE 12" DIA. COMB. SEWER AS R/O	#7	REPLACE 12" DIA. WATER MAIN AS R/O	#7	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#8	REPLACE 12" DIA. COMB. SEWER AS R/O	#8	REPLACE 12" DIA. WATER MAIN AS R/O	#8	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#9	REPLACE 12" DIA. COMB. SEWER AS R/O	#9	REPLACE 12" DIA. WATER MAIN AS R/O	#9	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#10	REPLACE 12" DIA. COMB. SEWER AS R/O	#10	REPLACE 12" DIA. WATER MAIN AS R/O	#10	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#11	REPLACE 12" DIA. COMB. SEWER AS R/O	#11	REPLACE 12" DIA. WATER MAIN AS R/O	#11	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#12	REPLACE 12" DIA. COMB. SEWER AS R/O	#12	REPLACE 12" DIA. WATER MAIN AS R/O	#12	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#13	REPLACE 12" DIA. COMB. SEWER AS R/O	#13	REPLACE 12" DIA. WATER MAIN AS R/O	#13	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#14	REPLACE 12" DIA. COMB. SEWER AS R/O	#14	REPLACE 12" DIA. WATER MAIN AS R/O	#14	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#15	REPLACE 12" DIA. COMB. SEWER AS R/O	#15	REPLACE 12" DIA. WATER MAIN AS R/O	#15	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#16	REPLACE 12" DIA. COMB. SEWER AS R/O	#16	REPLACE 12" DIA. WATER MAIN AS R/O	#16	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#17	REPLACE 12" DIA. COMB. SEWER AS R/O	#17	REPLACE 12" DIA. WATER MAIN AS R/O	#17	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#18	REPLACE 12" DIA. COMB. SEWER AS R/O	#18	REPLACE 12" DIA. WATER MAIN AS R/O	#18	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#19	REPLACE 12" DIA. COMB. SEWER AS R/O	#19	REPLACE 12" DIA. WATER MAIN AS R/O	#19	REPLACE 12" DIA. STORM STRUCTURE AS R/O
#20	REPLACE 12" DIA. COMB. SEWER AS R/O	#20	REPLACE 12" DIA. WATER MAIN AS R/O	#20	REPLACE 12" DIA. STORM STRUCTURE AS R/O

SCALE

PROJECT
 Edgewood Road Paving
 Project
 Contract# 6-24(S)

CLIENT



Engineering Department
 151 Martin Street
 Birmingham, MI 48012

PROJECT LOCATION
 Part of the Southeast 1/4
 of Section 36, Town 2 North,
 Range 10 East, City of
 Birmingham, Oakland
 County, Michigan

SHEET
 Paving and Utility Plan
 Sta 5+00 to 10+00

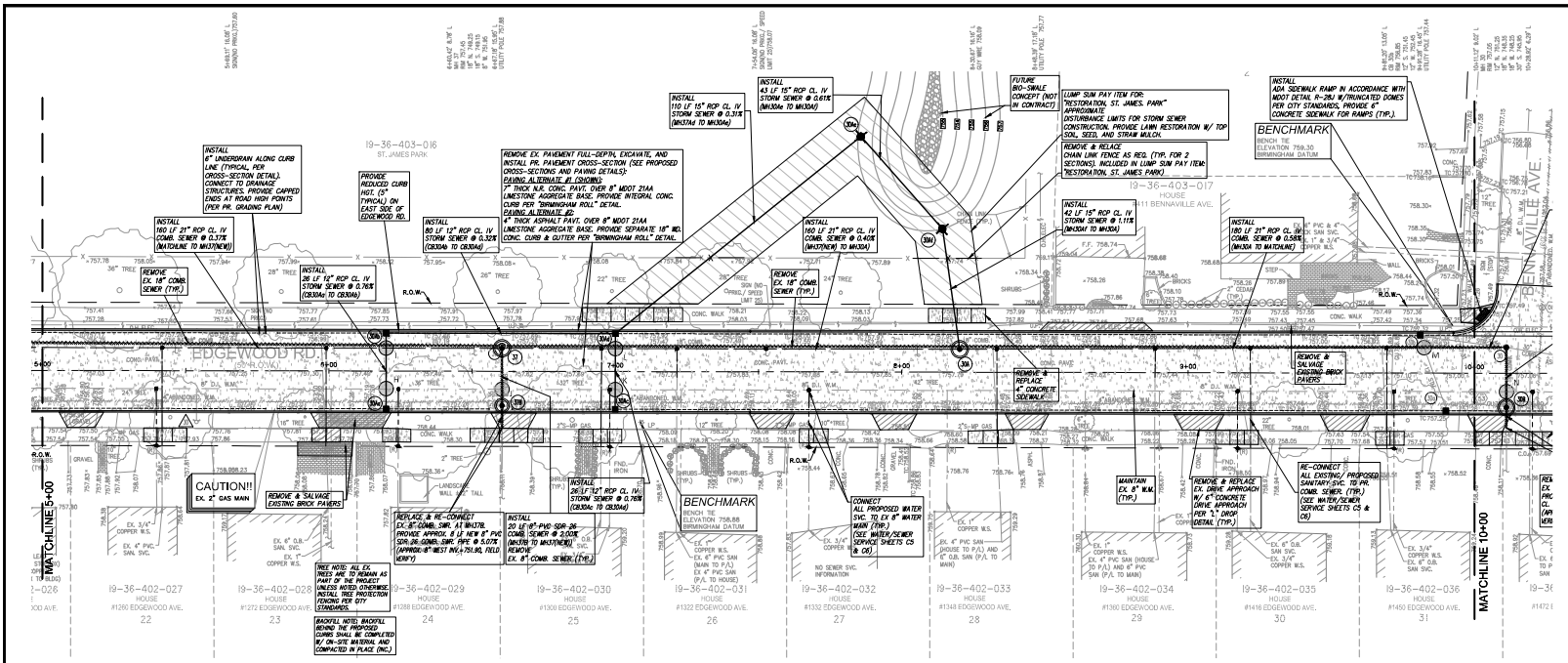


Know what's below
 Call before you dig.

DATE ISSUED/REVISED
 02-01-2010
 02-03-2010 ADDENDUM 1

DRAWN BY:
 G. Viju
 DESIGNED BY:
 G. Viju
 APPROVED BY:
 B. Buchholz
 DATE
 December 08, 2021

SCALE: 1" = 20' / 1" = 2'
 SHEET NO.
 M516 C2

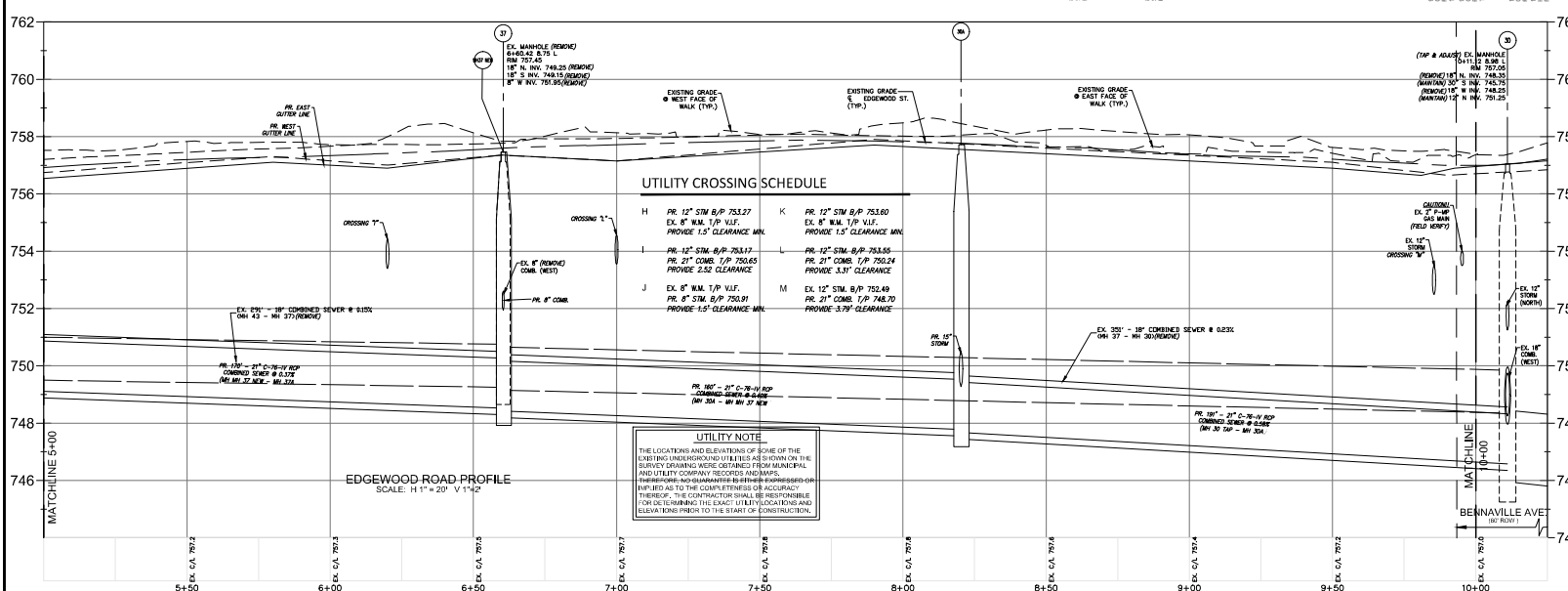


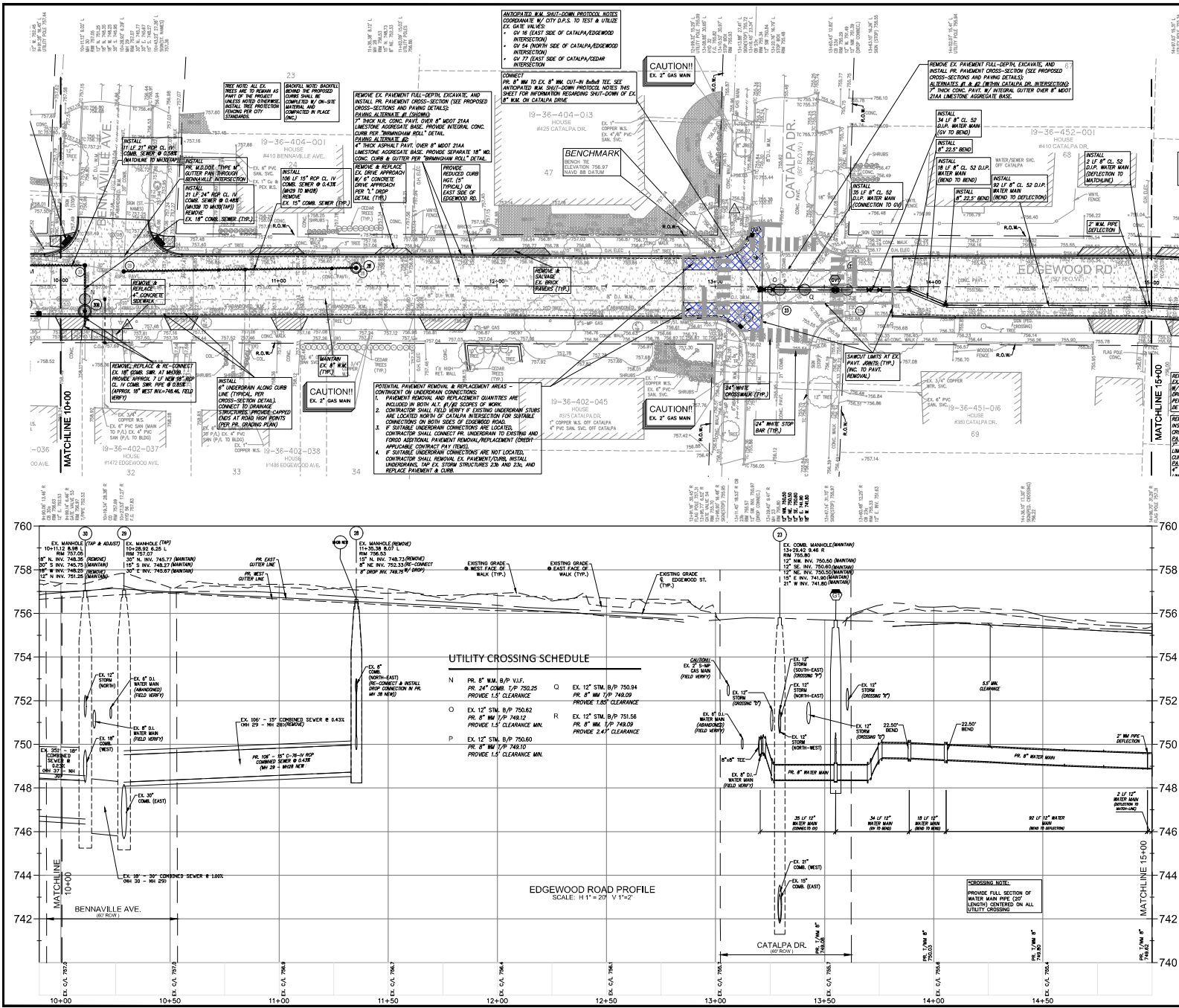
PR. COMBINED SEWER STRUCTURE SCHEDULE

Structure Name	Structure Details
#30A PR. 5' DIA. COMB. SEWER MANHOLE	PR. RIM 752.73 PR. 21" S. INV. 747.68 PR. 15" E. INV. 748.27 PR. 21" N. INV. 747.78
#37B PR. 4' DIA. COMB. SEWER MANHOLE	PR. RIM 752.39 PR. 8" E. INV. 750.32 PR. 8" W. INV. 751.50
#37H PR. 3' DIA. COMB. SEWER MANHOLE	PR. RIM 752.47 PR. 21" S. INV. 748.42 PR. 15" E. INV. 748.52 PR. 8" W. INV. 749.22

PR. STORM SEWER STRUCTURE SCHEDULE

Structure Name	Structure Details
#30A PR. 2' DIA. INLET	PR. RIM 752.03 PR. 12" E. INV. 753.50
#30AB PR. 4' DIA. CATCH BASIN W/ 2' SUMP	PR. RIM 756.93 PR. 12" W. INV. 753.30 PR. 12" E. INV. 753.30
#30AA PR. 2' DIA. INLET	PR. RIM 752.18 PR. 12" E. INV. 753.65
#30AD PR. 4' DIA. CATCH BASIN W/ 2' SUMP	PR. RIM 752.18 PR. 12" W. INV. 753.45 PR. 15" SE. INV. 753.04
#30AM PR. 4' DIA. CATCH BASIN W/ 2' SUMP FRAME AND COVER	PR. RIM 752.00 PR. 15" NW. INV. 752.70 PR. 15" SW. INV. 750.00
#30AL PR. 5' DIA. CATCH BASIN W/ 2' SUMP AND TRAP	PR. RIM 752.00 PR. 15" NW. INV. 749.74 PR. 15" E. INV. 749.74





SEWER STRUCTURE SCHEDULE

21	MANHOLE 10' DIA. R/W COMB. MH 29 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)	28	ADJUST 8' DIA. R/W COMB. MH 30 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)
22	ADJUST 8' DIA. R/W COMB. MH 29 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)	30	ADJUST 8' DIA. R/W COMB. MH 30 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)

STORM STRUCTURE SCHEDULE

23A	MANHOLE 18" DIA. R/W COMB. MH 33 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)	23B	ADJUST 18" DIA. R/W COMB. MH 33 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)
23C	ADJUST 18" DIA. R/W COMB. MH 33 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)	23D	ADJUST 18" DIA. R/W COMB. MH 33 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)

WATER MAIN SCHEDULE

24	ADJUST 18" DIA. R/W COMB. MH 33 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)	25	ADJUST 18" DIA. R/W COMB. MH 33 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)
26	ADJUST 18" DIA. R/W COMB. MH 33 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)	27	ADJUST 18" DIA. R/W COMB. MH 33 RM 750.50 12' IN. 750.50(MANTAIN) 12' IN. 750.50(MANTAIN) 15' C. 741.50(MANTAIN) 21' W. 741.50(MANTAIN)

UTILITY CROSSING SCHEDULE

N	PR. 8" W.M. R/W V.L.F. PR. 24" COMB. T/P 750.25 PROVIDE 1.5' CLEARANCE	Q	EX. 12" STM. R/W 750.94 PR. 8" W.M. T/P 748.00 PROVIDE 1.85' CLEARANCE
O	EX. 12" STM. R/W 750.82 PR. 8" W.M. T/P 748.12 PROVIDE 1.5' CLEARANCE	R	EX. 12" STM. R/W 751.56 PR. 8" W.M. T/P 748.00 PROVIDE 2.41' CLEARANCE
P	EX. 12" STM. R/W 750.60 PR. 8" W.M. T/P 748.10 PROVIDE 1.5' CLEARANCE MIN.		

EDGEWOOD ROAD PROFILE

SCALE: H₁" = 20' V₁" = 2'

PR. COMBINED SEWER STRUCTURE SCHEDULE	
Structure Name	Structure Details
#1808 PR. 24" DIA. COMB. SEWER MANHOLE	PR. RIM 756.82 PR. 24" INV. 748.02 PR. 18" W. INV. 748.40
#1808B NEW PR. 5" DIA. COMB. SEWER MANHOLE W/ DROP CONNECTION (CONSTRUCT ONLINE)	PR. RIM 756.65 PR. 15" N. INV. 748.73 PR. 8" W. INV. 750.33

UTILITY NOTE

THE LOCATION AND DEPTHS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY MAPS WERE OBTAINED FROM UTILITY AND UTILITY COMPANY RECORDS AND MARKS THEREON. NO GUARANTEE IS BEING EXPRESSED ON MAP REFS AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND DEPTHS PRIOR TO THE START OF CONSTRUCTION.

LEGEND

EXISTING 36" COMB. SEWER	EXISTING 36" COMB. SEWER
EXISTING 18" COMB. SEWER	EXISTING 18" COMB. SEWER
EXISTING WATER MAIN	EXISTING WATER MAIN
EXISTING STORM SEWER	EXISTING STORM SEWER
EXISTING BURIED CABLES	EXISTING BURIED CABLES
EXISTING GAS MAIN	EXISTING GAS MAIN
EXISTING SANITATION	EXISTING SANITATION
EXISTING 12" WATER MAIN	EXISTING 12" WATER MAIN
EXISTING 8" WATER MAIN	EXISTING 8" WATER MAIN
EXISTING 6" WATER MAIN	EXISTING 6" WATER MAIN
EXISTING 4" WATER MAIN	EXISTING 4" WATER MAIN
EXISTING 3" WATER MAIN	EXISTING 3" WATER MAIN
EXISTING 2" WATER MAIN	EXISTING 2" WATER MAIN
EXISTING 1.5" WATER MAIN	EXISTING 1.5" WATER MAIN
EXISTING 1" WATER MAIN	EXISTING 1" WATER MAIN
EXISTING 0.75" WATER MAIN	EXISTING 0.75" WATER MAIN
EXISTING 0.5" WATER MAIN	EXISTING 0.5" WATER MAIN
EXISTING 0.25" WATER MAIN	EXISTING 0.25" WATER MAIN



**CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS**

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8331
WWW.NOWAKFRAUS.COM

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT
BIRMINGHAM
A WALSH CITY
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4 of Section 36, Town 2 North, Range 10 East, City of Birmingham, Oakland County, Michigan

SHEET
Paving and Utility Plan
Sta 10+00 to 15+00

DATE ISSUED-REVISED
02-20-2018
02-20-2018 ADDENDUM 1

DRAWN BY:
G. Viju

DESIGNED BY:
G. Viju

APPROVED BY:
B. Buchholz

DATE
December 08, 2021

SCALE 1" = 20' / 1" = 20'

NEE JOB NO. M516 **SHEET NO.** C3

SCALE

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT

BIRMINGHAM
A WALSH GROUP COMPANY
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

SHEET
Paving and Utility Plan
Sta 15+00 to P.O.E.



Know what's below
Call before you dig.

DATE ISSUED/REVISED
02-01-21 BHD
02-03-23 ADDENDUM 1

DRAWN BY:
G. Viju
DESIGNED BY:
G. Viju
APPROVED BY:
B. Buchholz
DATE
December 08, 2021

SCALE 1" = 20' / 1" = 2'
0 10 20 30 40 50
SEE JOB NO. SHEET NO.
M516 C4

SEWER STRUCTURE SCHEDULE

- 16. ASBEST 18" DIA. 24.4' L
GATE VALVE 22"
RIM 754.69
CATCH BASIN 160
12" S.W. 750.25 (REWORK)
12" S.W. 750.25 (REWORK)
- 17. ASBEST 18" DIA. 24.4' L
GATE VALVE 22"
RIM 754.69
CATCH BASIN 160
12" S.W. 750.25 (REWORK)
12" S.W. 750.25 (REWORK)
- 18. ASBEST 18" DIA. 24.4' L
GATE VALVE 22"
RIM 754.69
CATCH BASIN 160
12" S.W. 750.25 (REWORK)
12" S.W. 750.25 (REWORK)

STORM STRUCTURE SCHEDULE

- 19. ASBEST 18" DIA. 24.4' L
GATE VALVE 22"
RIM 754.69
CATCH BASIN 160
12" S.W. 750.25 (REWORK)
12" S.W. 750.25 (REWORK)
- 20. ASBEST 18" DIA. 24.4' L
GATE VALVE 22"
RIM 754.69
CATCH BASIN 160
12" S.W. 750.25 (REWORK)
12" S.W. 750.25 (REWORK)

WATER MAIN SCHEDULE

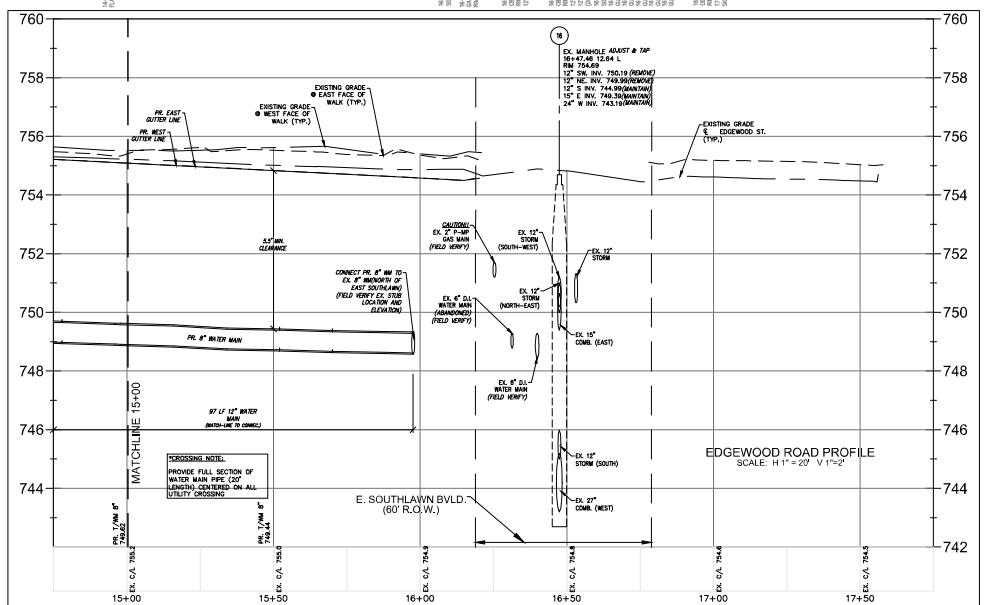
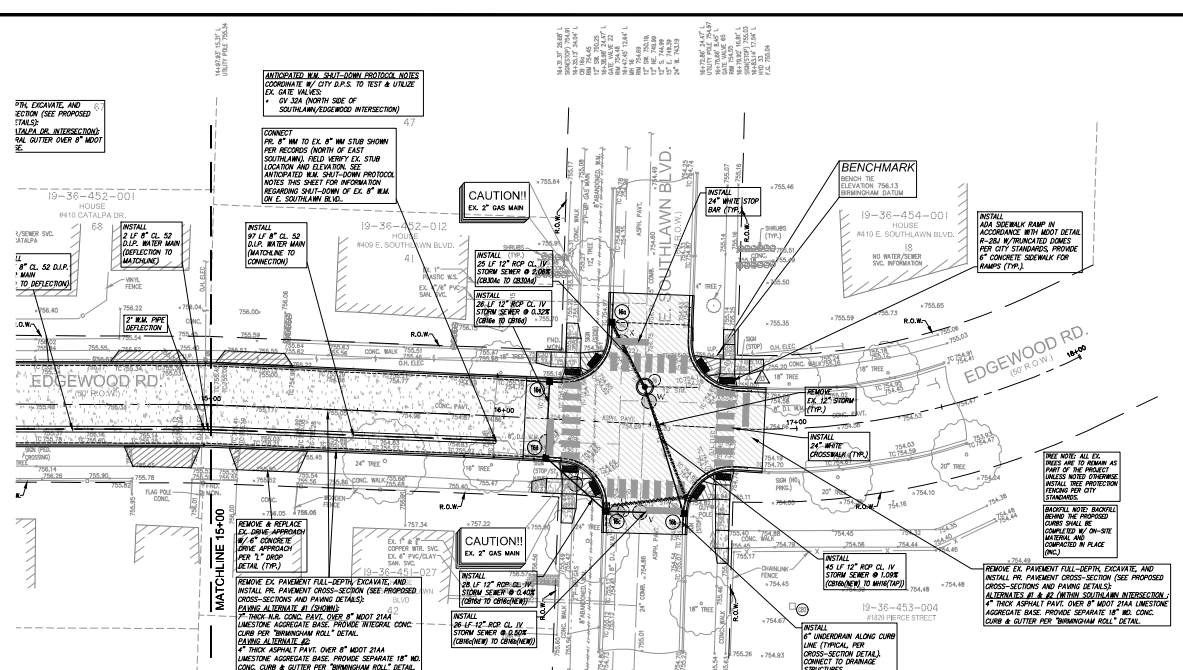
- 21. ASBEST 18" DIA. 24.4' L
GATE VALVE 22"
RIM 754.69
CATCH BASIN 160
12" S.W. 750.25 (REWORK)
12" S.W. 750.25 (REWORK)
- 22. ASBEST 18" DIA. 24.4' L
GATE VALVE 22"
RIM 754.69
CATCH BASIN 160
12" S.W. 750.25 (REWORK)
12" S.W. 750.25 (REWORK)

UTILITY CROSSING SCHEDULE

- S PR 12" STM 8/P 750.77
EX. 8" WAL TYP VLF.
PROVIDE 1.5' CLEARANCE W/L.
- T EX. 2" GAS MAIN 8/P VLF.
PR 12" STM 8/P 750.63
PROVIDE 1.5' CLEARANCE W/L
- U PR 12" STM 8/P 750.57
EX. 8" WAL TYP VLF.
PROVIDE 1.5' CLEARANCE W/L
- V PR 12" STM 8/P 750.59
EX. 24" COMB. 1/P 745.19
PROVIDE 5.4' CLEARANCE
- W PR 12" STM 8/P 750.00
EX. 8" WAL TYP VLF.
PROVIDE 1.5' CLEARANCE W/L
- X PR 12" STM 8/P 750.17
EX. 8" WAL TYP VLF.
PROVIDE 1.5' CLEARANCE W/L

PR. STORM SEWER STRUCTURE SCHEDULE

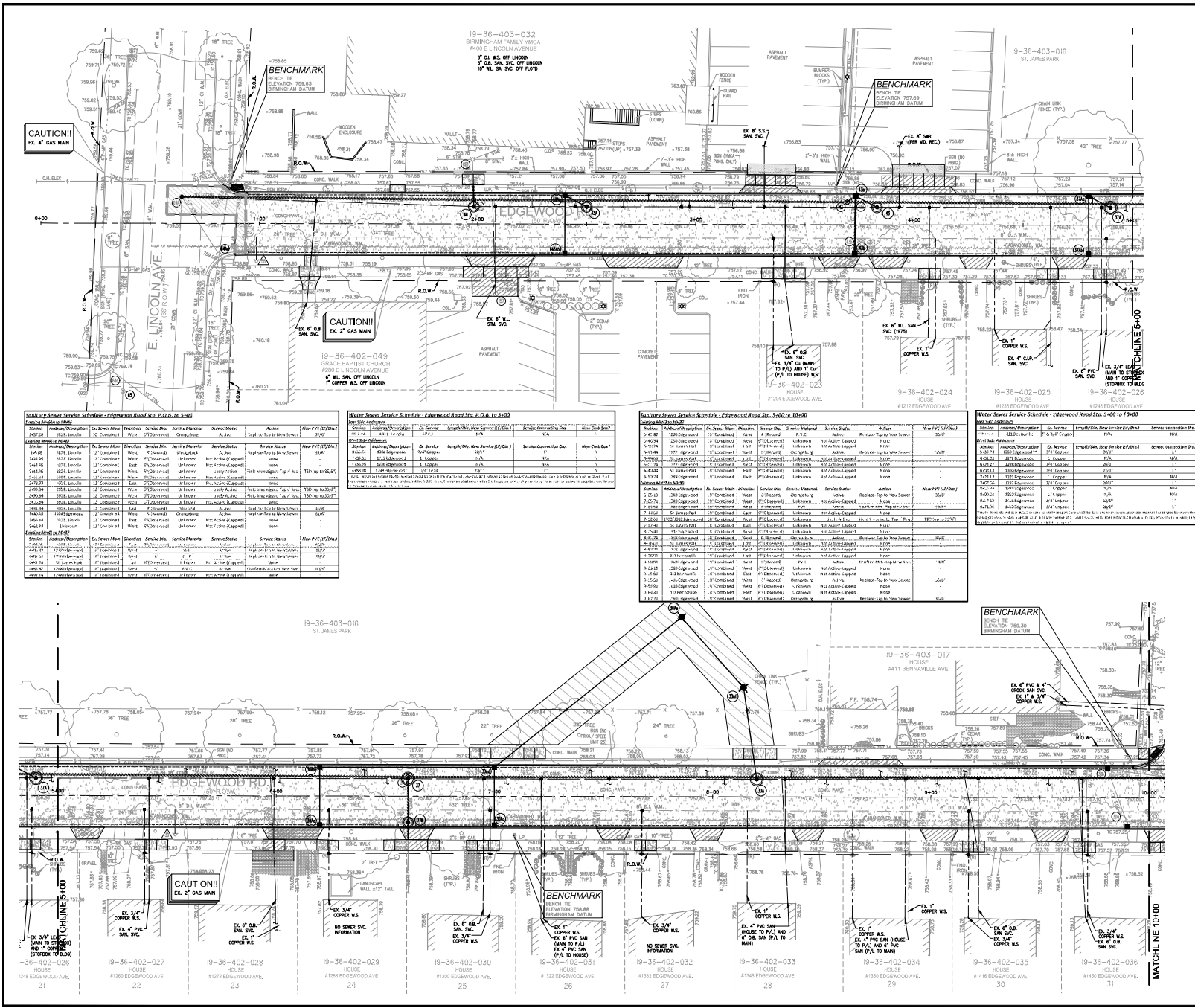
Structure Name	Structure Details
#16A NEW PR. 8" DIA. CATCH BASIN W/ 2' SUMP (INSTALL GAS TRAF ON S.W. PIPE OUTLET)	PR. RIM 754.50 PR. 12" SW. INV. 750.50
#16B NEW PR. 4" DIA. CATCH BASIN W/ 2' SUMP (INSTALL GAS TRAF ON N.E. PIPE OUTLET)	PR. RIM 754.35 PR. 12" N. INV. 750.68 PR. 12" E. INV. 750.68
#16C NEW PR. 4" DIA. CATCH BASIN W/ 2' SUMP (INSTALL GAS TRAF ON N.E. PIPE OUTLET)	PR. RIM 754.50 PR. 12" NE. INV. 750.81 PR. 12" S. INV. 750.81
#16D PR. 8" DIA. CATCH BASIN W/ 2' SUMP	PR. RIM 754.50 PR. 12" E. INV. 750.92 PR. 12" SW. INV. 750.92
#16E PR. 2" DIA. INLET	PR. RIM 754.50 PR. 12" W. INV. 751.00



UTILITY NOTE
THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE SURVEY DRAWING. THESE UTILITIES ARE SHOWN FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY OF THESE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
(Symbol)	EXISTING SAN/COMB SEWER	(Symbol)	EXISTING WATER MAIN
(Symbol)	EXISTING STORM SEWER	(Symbol)	EXISTING BURIED CABLES
(Symbol)	EXISTING GAS MAIN	(Symbol)	EXISTING UTILITY MARKER
(Symbol)	EXISTING WATER MAIN	(Symbol)	EXISTING UTILITY MARKER
(Symbol)	EXISTING STORM SEWER	(Symbol)	EXISTING UTILITY MARKER
(Symbol)	EXISTING GAS MAIN	(Symbol)	EXISTING UTILITY MARKER
(Symbol)	EXISTING UTILITY MARKER	(Symbol)	EXISTING UTILITY MARKER



UTILITY NOTE
 THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UTILITIES AND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND WAYS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

WATER SERVICE LEGEND
 EX. WATER SERVICE (PER RECORD - "ACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "ACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "INACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "INACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "INACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "INACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "INACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "INACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "INACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "INACTIVE")
 EX. WATER SERVICE AT MAIN (SHOWN PER RECORD - "INACTIVE")

SANITARY SERVICE LEGEND
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")
 EX. SANITARY SERVICE (PER RECORD - "ACTIVE")

LEGEND
 EX. 1/2\"/>

Sanitary Sewer Service Schedule - Edgewood Road Sta. P.O.B. to 3+00

Station	Length (ft)	Material	Notes	Depth (ft)	Flow (MGD)
19-36-402-016	100	12\"/>			

Water Sewer Service Schedule - Edgewood Road Sta. P.O.B. to 3+00

Station	Length (ft)	Material	Notes	Depth (ft)	Flow (MGD)
19-36-402-016	100	12\"/>			

Sanitary Sewer Service Schedule - Edgewood Road Sta. 3+00 to 10+00

Station	Length (ft)	Material	Notes	Depth (ft)	Flow (MGD)
19-36-402-026	100	12\"/>			

Water Sewer Service Schedule - Edgewood Road Sta. 3+00 to 10+00

Station	Length (ft)	Material	Notes	Depth (ft)	Flow (MGD)
19-36-402-026	100	12\"/>			

DATE ISSUED/REVISED
 12-01-21 RHD
 12-01-23 ADDENDUM 1

DRAWN BY:
G. Viju

DESIGNED BY:
G. Viju

APPROVED BY:
B. Buchholz

DATE:
December 08, 2021

SCALE: 1" = 20'

N/E JOB NO. SHEET NO.
M516 C5

NF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOVAK & FRAUS ENGINEERS
 4677 WOODWARD AVE.
 PONTIAC, MI 48342-5032
 TEL. (248) 532-7934
 FAX. (248) 332-8337
 WWW.NOVAKFRAS.COM

PROJECT
 Edgewood Road Paving Project
 Contract # 6-24(S)

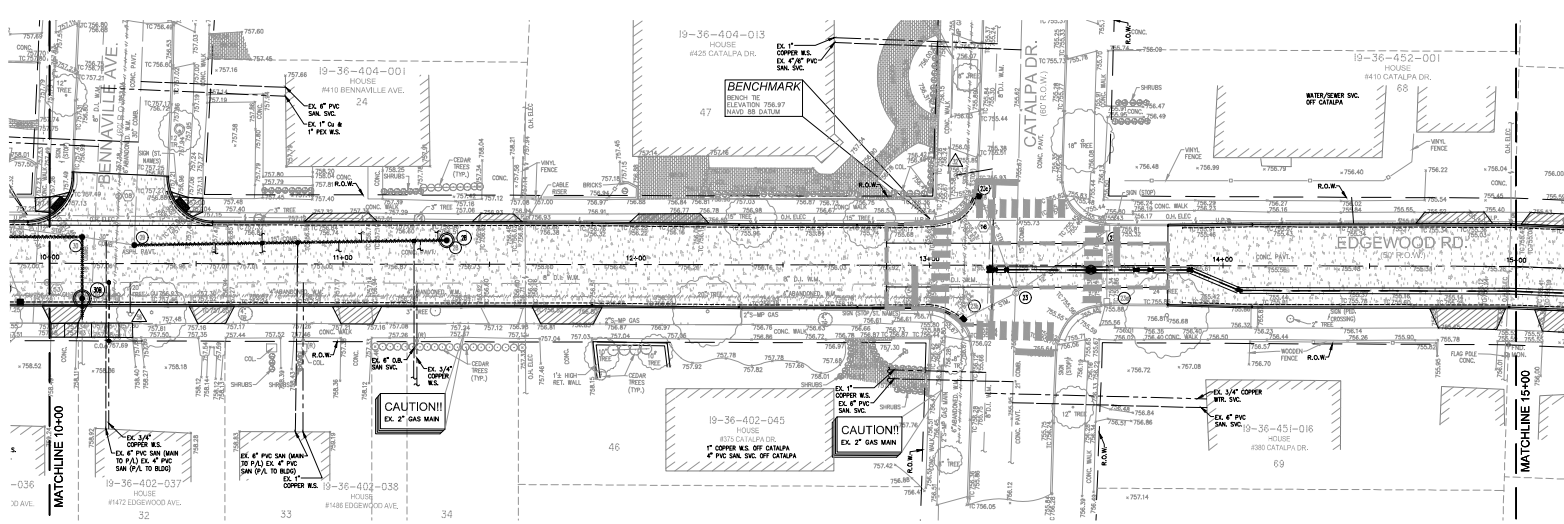
CLIENT
 BIRMINGHAM A MAJORITY CITY

Engineering Department
 151 Martin Street
 Birmingham, MI 48012

Part of the Southeast 1/4 of Section 36, Town 2 North, Range 10 East, City of Birmingham, Oakland County, Michigan

811
 Know what's below
 Call before you dig.

5J

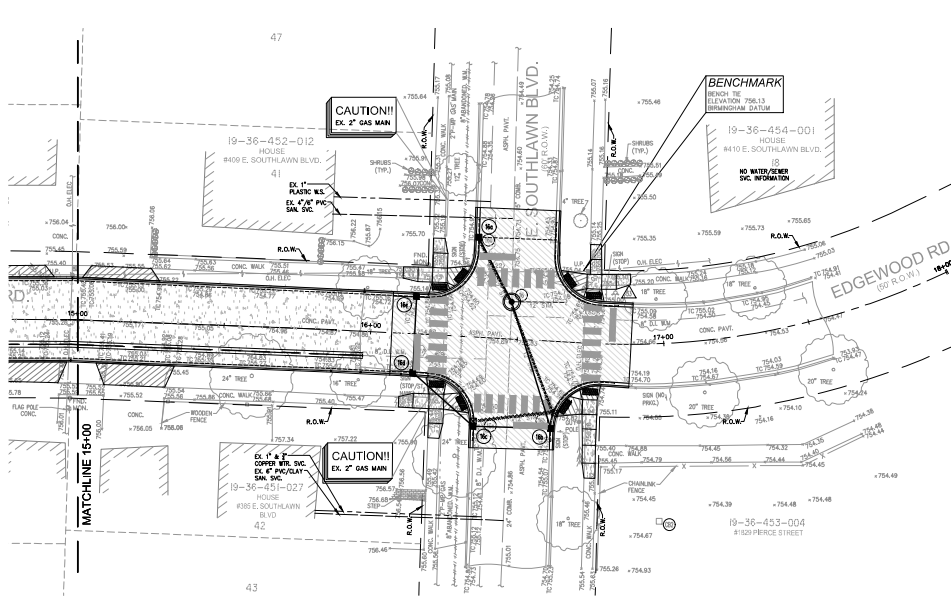


Sanitary Sewer Service Schedule - Edgewood Road Sta. 10+00 to 15+00

Station	Address/Description	Ex. Sewer	Min. Depth	Overhead	Service Size	Service Material	Service Status	Active	ADDD	New P.C. (F.T./D.I.)
10+00	4425 CATALPA DR.	4"	30"	CONCRETE	4"	4"	ACTIVE	N		
10+50	4410 BURNHAMME AVE.	4"	30"	CONCRETE	4"	4"	ACTIVE	N		
11+00	4410 CATALPA DR.	4"	30"	CONCRETE	4"	4"	ACTIVE	N		
11+50	4410 SOUTHAWN BLVD.	4"	30"	CONCRETE	4"	4"	ACTIVE	N		
12+00	4388 CATALPA DR.	4"	30"	CONCRETE	4"	4"	ACTIVE	N		

Water Sewer Service Schedule - Edgewood Road Sta. 10+00 to 15+00

Station	Address/Description	Ex. Water	Min. Depth	Overhead	Service Size	Service Material	Service Status	Active	ADDD	New P.C. (F.T./D.I.)
10+00	4425 CATALPA DR.	1/2"	30"	CONCRETE	1/2"	1/2"	ACTIVE	N		
10+50	4410 BURNHAMME AVE.	1/2"	30"	CONCRETE	1/2"	1/2"	ACTIVE	N		
11+00	4410 CATALPA DR.	1/2"	30"	CONCRETE	1/2"	1/2"	ACTIVE	N		
11+50	4410 SOUTHAWN BLVD.	1/2"	30"	CONCRETE	1/2"	1/2"	ACTIVE	N		
12+00	4388 CATALPA DR.	1/2"	30"	CONCRETE	1/2"	1/2"	ACTIVE	N		



Sanitary Sewer Service Schedule - Edgewood Road Sta. 15+00 to 20+00

Station	Address/Description	Ex. Sewer	Min. Depth	Overhead	Service Size	Service Material	Service Status	Active	ADDD	New P.C. (F.T./D.I.)
15+00	4410 SOUTHAWN BLVD.	4"	30"	CONCRETE	4"	4"	ACTIVE	N		
15+50	4410 E. SOUTHAWN BLVD.	4"	30"	CONCRETE	4"	4"	ACTIVE	N		
16+00	4410 CATALPA DR.	4"	30"	CONCRETE	4"	4"	ACTIVE	N		
16+50	4388 E. SOUTHAWN BLVD.	4"	30"	CONCRETE	4"	4"	ACTIVE	N		

UTILITY NOTE
 THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UTILITIES AS SHOWN ON THE SURVEY DRAWINGS WERE OBTAINED FROM MUNICIPAL AND UTILITY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

WATER SERVICE LEGEND
 EX. WATER SERVICE (PER RECORD) - "EX. OR PR. WATER MAIN"
 EX. WATER SERVICE TAP AT MAIN (SHOWN PER RECORD, SIZE & MATERIAL VARIES - SEE SCHEDULE)
 EX. STOP-BOB NEAR- (WHERE REPAIR PER RECORD IS)
 EX. STOP-BOB NEAR- (WHERE REPAIR PER RECORD IS)
 EX. SANITARY SERVICE TAP AT MAIN (SEE WSEI INSPECTION)
 EX. SANITARY SERVICE TAP AT MAIN (SEE WSEI INSPECTION)
 EX. SANITARY SERVICE TAP AT MAIN (SEE WSEI INSPECTION)
 EX. SANITARY SERVICE TAP AT MAIN (SEE WSEI INSPECTION)

SANITARY SERVICE LEGEND
 EX. SANITARY SERVICE (PER RECORD) - "EX. OR PR. SEWER MAIN"
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)

LEGEND
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)
 EX. SANITARY SERVICE TAP AT NEW MAIN OR CONNECTION TO EX. MAIN (SEE SCHEDULE)

PROJECT
 Edgewood Road Paving
 Project
 Contract# 6-24(S)

CLIENT
 BIRMINGHAM
 A WALSH CITY

Engineering Department
 151 Martin Street
 Birmingham, MI 48012

PART OF THE SOUTHWEST 1/4 OF SECTION 36, TOWN 2 NORTH, RANGE 10 EAST, CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

SHEET
 Utility Service Plan
 Sta 10+00 to P.O.E.

DATE ISSUED/REVISED
 02-20-2010
 02-23-2010 ADDENDUM 1

DRAWN BY:
 G. Viju

DESIGNED BY:
 G. Viju

APPROVED BY:
 B. Buchholz

DATE
 December 08, 2021

SCALE 1" = 20'

SEE JOB NO. SHEET NO.
 M516 C6

SEAL

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT

BIRMINGHAM
A WALSH GROUP COMPANY
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

SHEET
Supplemental Sewer
Profile Plan (1 of 2)



Know what's below
Call before you dig.

DATE ISSUED/REVISED
02-10-21 BHD
02-10-23 ADDENDUM 1

DRAWN BY:
G. Viju

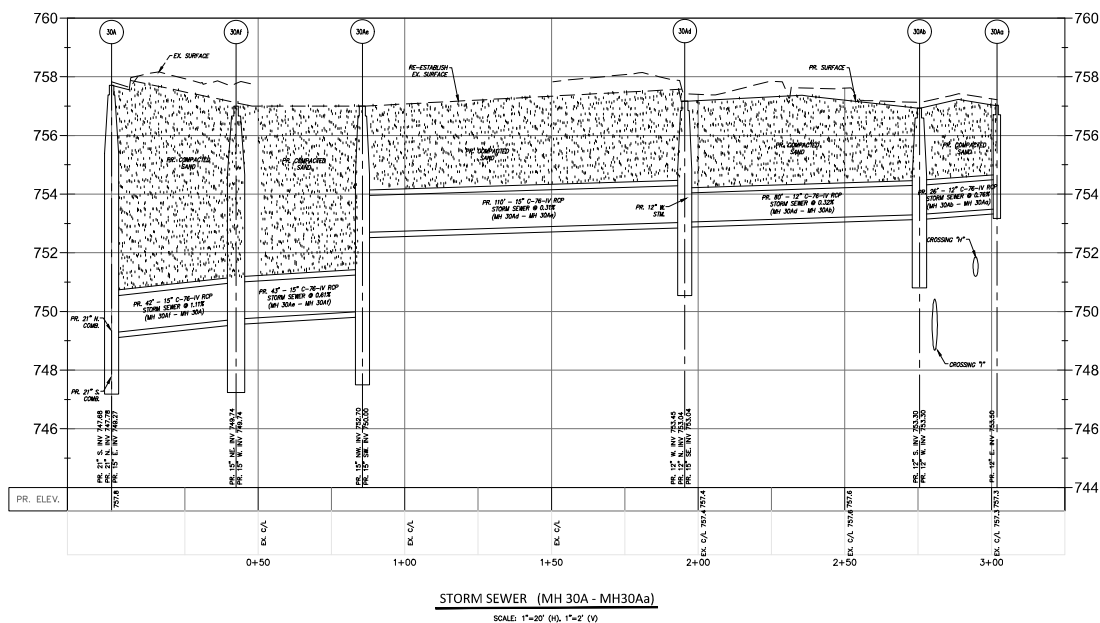
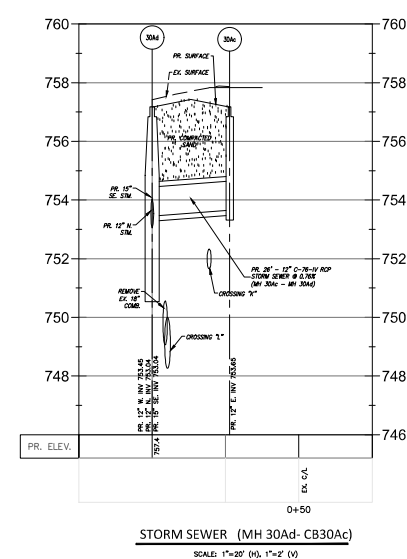
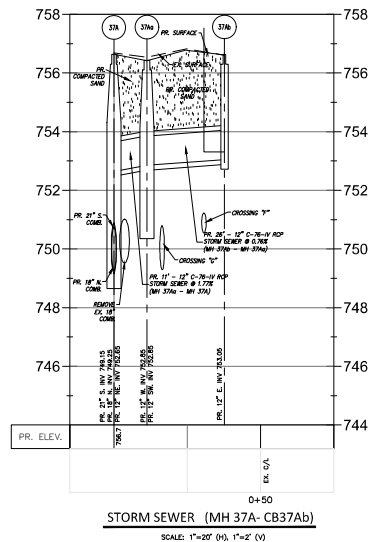
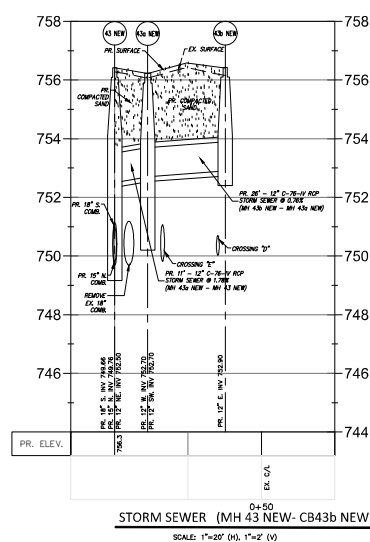
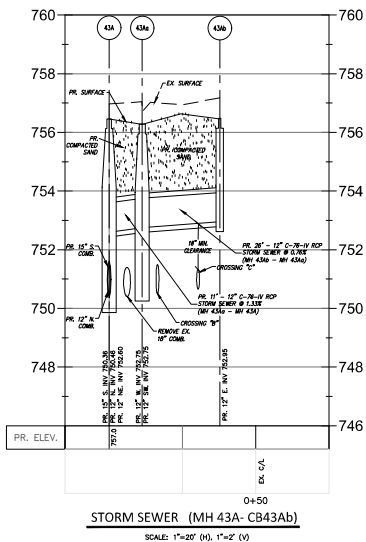
DESIGNED BY:
G. Viju

APPROVED BY:
B. Buchholz

DATE
December 08, 2021

SCALE: 1" = 20'

SEE JOB NO. SHEET NO.
M516 C7



UTILITY NOTE
THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

UTILITY CROSSING SCHEDULE

A	EX. 12" W.M. 8/P. V.I.F. PR. 6" W.M. 1/P. 752.08 PROVIDE 1.5' CLEARANCE MIN.	I	PR. 12" STM. 8/P. 753.17 PR. 21" COMB. 1/P. 750.85 PROVIDE 1.5' CLEARANCE	Q	EX. 12" STM. 8/P. 750.94 PR. 8" W.M. 1/P. 748.09 PROVIDE 1.85' CLEARANCE
B	PR. 12" STM. 8/P. 752.80 PR. 12" COMB. 1/P. 751.50 PROVIDE 1.50' CLEARANCE MIN.	J	EX. 8" W.M. 1/P. V.I.F. PR. 8" STM. 8/P. 750.91 PROVIDE 1.5' CLEARANCE MIN.	R	EX. 12" STM. 8/P. 751.56 PR. 8" W.M. 1/P. 748.09 PROVIDE 2.47' CLEARANCE
C	PR. 12" COMB. 8/P. 752.89 PR. 12" STM. 8/P. 752.89 PROVIDE 1.50' CLEARANCE MIN.	K	PR. 12" STM. 8/P. 753.60 PR. 21" COMB. 1/P. 748.70 PROVIDE 1.5' CLEARANCE MIN.	S	PR. 12" STM. 8/P. 750.77 EX. 8" W.M. 1/P. V.I.F. PROVIDE 1.5' CLEARANCE MIN.
D	PR. 12" STM. 8/P. 752.72 EX. 8" W.M. 1/P. V.I.F. PROVIDE 1.50' CLEARANCE MIN.	L	PR. 12" STM. 8/P. 753.55 PR. 21" COMB. 1/P. 750.24 PROVIDE 3.19' CLEARANCE	T	EX. 2" GAS MAIN 8/P. V.I.F. PR. 12" STM. 1/P. 752.03 PROVIDE 1.5' CLEARANCE MIN.
E	PR. 12" STM. 8/P. 752.56 PR. 12" COMB. 1/P. 751.08 PROVIDE 1.50' CLEARANCE	M	EX. 12" STM. 8/P. 752.49 PR. 21" COMB. 1/P. 748.70 PROVIDE 3.79' CLEARANCE	U	PR. 12" STM. 8/P. 750.57 EX. 8" W.M. 1/P. V.I.F. PROVIDE 1.5' CLEARANCE MIN.
F	PR. 12" STM. 8/P. 753.00 EX. 8" W.M. 1/P. V.I.F. PROVIDE 1.50' CLEARANCE	N	PR. 8" W.M. 8/P. V.I.F. EX. 24" COMB. 1/P. 750.25 PROVIDE 1.5' CLEARANCE	V	PR. 12" STM. 8/P. 750.59 EX. 24" COMB. 1/P. 745.19 PROVIDE 3.4' CLEARANCE
G	PR. 12" STM. 8/P. 752.89 PR. 18" COMB. 1/P. 752.79 PROVIDE 2.1' CLEARANCE	O	EX. 12" STM. 8/P. 750.62 PR. 18" W.M. 1/P. 748.12 PROVIDE 1.5' CLEARANCE MIN.	W	PR. 12" STM. 8/P. 750.08 EX. 8" W.M. 1/P. V.I.F. PROVIDE 1.5' CLEARANCE MIN.
H	PR. 12" STM. 8/P. 753.27 EX. 8" W.M. 1/P. V.I.F. PROVIDE 1.5' CLEARANCE MIN.	P	EX. 12" STM. 8/P. 750.60 PR. 8" W.M. 1/P. 748.10 PROVIDE 1.5' CLEARANCE MIN.	X	PR. 12" STM. 8/P. 750.17 EX. 8" W.M. 1/P. V.I.F. PROVIDE 1.5' CLEARANCE MIN.

SEAL

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT

BIRMINGHAM
A WALSH GROUP COMPANY
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

SHEET
Supplemental Sewer
Profile Plan (2 of 2)



DATE ISSUED/REVISED
02-20-2010
02-23-2010 ADDendum 1

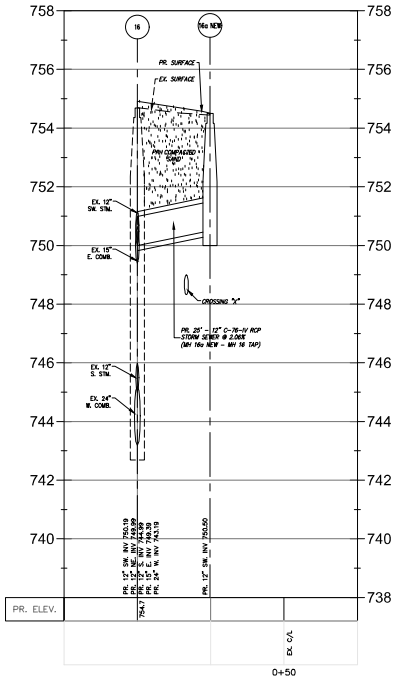
DRAWN BY:
G. Viju

DESIGNED BY:
B. Buchholz

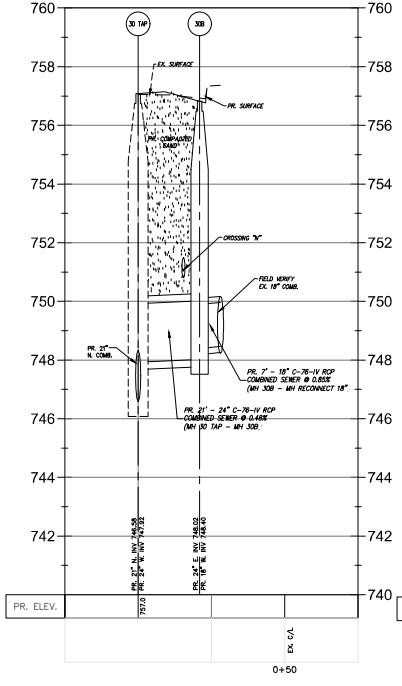
DATE
December 08, 2021

SCALE 1" = 20' / 1" = 2'
30 10 0 10 20 30

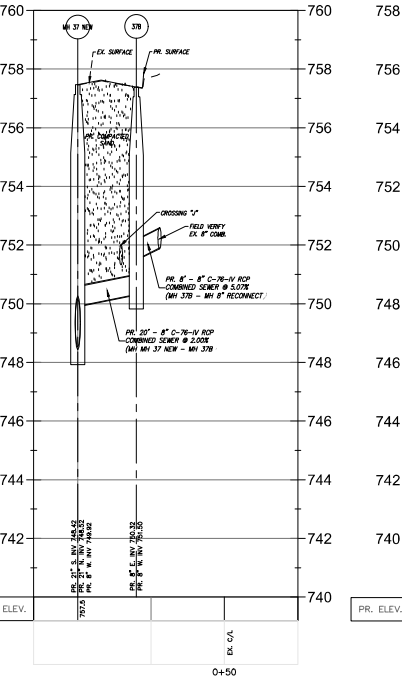
NEE JOB NO. SHEET NO.
M516 C8



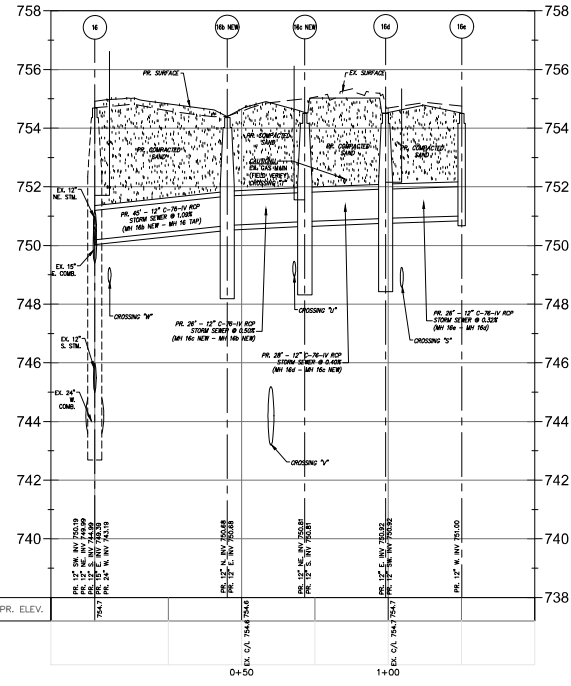
COMB. SEWER (MH 16-CB16a NEW)
SCALE: 1"=20' (H), 1"=2' (V)



COMB. SEWER (MH 30-MH 30B)
SCALE: 1"=20' (H), 1"=2' (V)



STORM SEWER (MH 37-NEW-MH 37B)
SCALE: 1"=20' (H), 1"=2' (V)

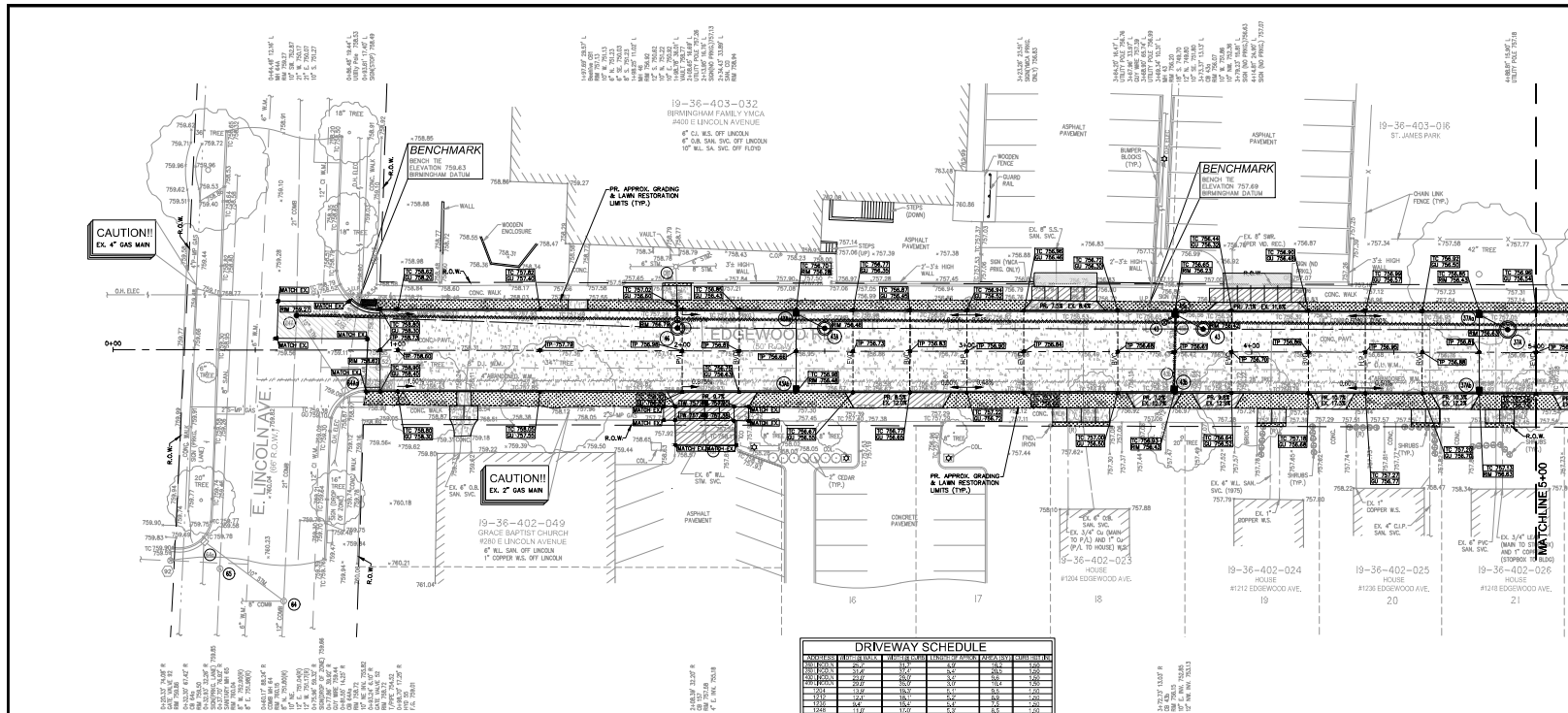


STORM SEWER (MH 16-CB16c)
SCALE: 1"=20' (H), 1"=2' (V)

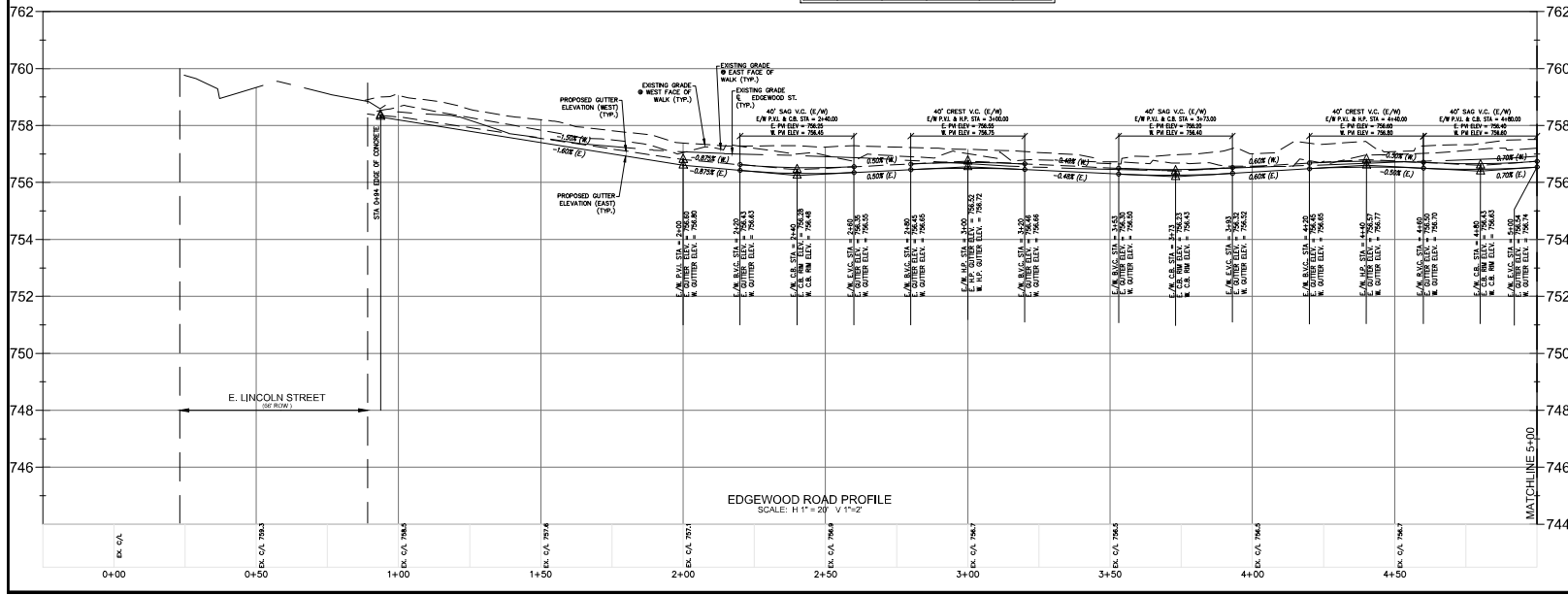
UTILITY NOTE.
THE LOCATIONS AND DEPTHS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWINGS WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS IMPLIED OR EXPRESSED ON IMPULSED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND RELATIONS PRIOR TO THE START OF CONSTRUCTION.

UTILITY CROSSING SCHEDULE

A	EX. 12" W.M. B/P V.I.F. PR. 6" M/T/P 752.08 PROVIDE 1.5' CLEARANCE MIN.	I	PR. 12" STM. B/P 753.17 PR. 21" COMB. T/P 750.65 PROVIDE 2.52' CLEARANCE	Q	EX. 12" STM. B/P 750.94 PR. 8" M/T/P 749.09 PROVIDE 1.85' CLEARANCE
B	PR. 12" STM. B/P 752.80 PR. 12" COMB. T/P 751.50 PROVIDE 1.30' CLEARANCE MIN.	J	EX. 8" W.M. T/P V.I.F. PR. 8" STM. B/P 750.81 PROVIDE 1.5' CLEARANCE MIN.	R	EX. 12" STM. B/P 751.56 PR. 8" M/T/P 749.09 PROVIDE 2.47' CLEARANCE
C	PR. 12" COMB. B/P 752.89 EX. 8" W.M. T/P V.I.F. PROVIDE 1.50' CLEARANCE MIN.	K	PR. 12" STM. B/P 753.60 EX. 8" W.M. T/P V.I.F. PROVIDE 1.5' CLEARANCE MIN.	S	PR. 12" STM. B/P 750.77 EX. 8" W.M. T/P V.I.F. PROVIDE 1.5' CLEARANCE MIN.
D	PR. 12" STM. B/P 752.72 EX. 8" M/T/P V.I.F. PROVIDE 1.50' CLEARANCE MIN.	L	PR. 12" STM. B/P 753.55 PR. 21" COMB. T/P 750.44 PROVIDE 3.31' CLEARANCE	T	EX. 2" GAS MAIN B/P V.I.F. PR. 12" STM. T/P 750.03 PROVIDE 1.5' CLEARANCE MIN.
E	PR. 12" STM. B/P 752.56 PR. 12" COMB. T/P 751.06 PROVIDE 1.50' CLEARANCE	M	EX. 12" STM. B/P 752.49 PR. 12" COMB. T/P 748.70 PROVIDE 1.2' CLEARANCE	U	PR. 12" STM. B/P 750.57 EX. 8" W.M. T/P V.I.F. PROVIDE 1.5' CLEARANCE MIN.
F	PR. 12" STM. B/P 753.00 EX. 8" W.M. T/P V.I.F. PROVIDE 1.50' CLEARANCE MIN.	N	PR. 8" W.M. B/P V.I.F. PR. 24" COMB. T/P 750.25 PROVIDE 1.5' CLEARANCE	V	PR. 12" STM. B/P 750.59 EX. 24" COMB. T/P 745.18 PROVIDE 5.4' CLEARANCE
G	PR. 12" STM. B/P 752.89 PR. 12" COMB. T/P 750.79 PROVIDE 2.1' CLEARANCE	O	EX. 12" STM. B/P 750.82 PR. 8" M/T/P 749.12 PROVIDE 1.5' CLEARANCE MIN.	W	PR. 12" STM. B/P 750.08 EX. 6" W.M. T/P V.I.F. PROVIDE 1.5' CLEARANCE MIN.
H	PR. 12" STM. B/P 752.7 EX. 8" W.M. T/P V.I.F. PROVIDE 1.5' CLEARANCE MIN.	P	EX. 12" STM. B/P 750.60 PR. 8" M/T/P 749.10 PROVIDE 1.5' CLEARANCE MIN.	X	PR. 12" STM. B/P 750.57 EX. 6" W.M. T/P V.I.F. PROVIDE 1.5' CLEARANCE MIN.



DRIVEWAY SCHEDULE			
NO.	TYPE	DATE	REVISION
1	ADD	12/12/2011	1.00
2	ADD	12/12/2011	1.00
3	ADD	12/12/2011	1.00
4	ADD	12/12/2011	1.00
5	ADD	12/12/2011	1.00
6	ADD	12/12/2011	1.00
7	ADD	12/12/2011	1.00
8	ADD	12/12/2011	1.00
9	ADD	12/12/2011	1.00
10	ADD	12/12/2011	1.00
11	ADD	12/12/2011	1.00
12	ADD	12/12/2011	1.00
13	ADD	12/12/2011	1.00
14	ADD	12/12/2011	1.00
15	ADD	12/12/2011	1.00
16	ADD	12/12/2011	1.00
17	ADD	12/12/2011	1.00
18	ADD	12/12/2011	1.00
19	ADD	12/12/2011	1.00
20	ADD	12/12/2011	1.00
21	ADD	12/12/2011	1.00
22	ADD	12/12/2011	1.00
23	ADD	12/12/2011	1.00
24	ADD	12/12/2011	1.00
25	ADD	12/12/2011	1.00
26	ADD	12/12/2011	1.00
27	ADD	12/12/2011	1.00
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29	ADD	12/12/2011	1.00
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95	ADD	12/12/2011	1.00
96	ADD	12/12/2011	1.00
97	ADD	12/12/2011	1.00
98	ADD	12/12/2011	1.00
99	ADD	12/12/2011	1.00
100	ADD	12/12/2011	1.00



LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EXISTING CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- FUMP
- POST ROLLER
- PARKING METER
- ROCK ROLLER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- GROUND ELEVATION

SEAL

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT
BIRMINGHAM
A WALWORTH CITY
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

SHEET
Grading Plan Sta.
P.O.B. to 5+00

811
Know what's below
Call before you dig.

DATE ISSUED/REVISED
12-12-2011
12-12-2011 (ADD) (M)

DRAWN BY:
G. Viju

DESIGNED BY:
G. Viju

APPROVED BY:
B. Buchholz

DATE:
December 08, 2021

SCALE: 1" = 20' / 1" = 2'

NFE JOB NO. SHEET NO.
M516 C9

SEAL

PROJECT
Edgewood Road Paving
Project
Contract # 6-24(S)

CLIENT

BIRMINGHAM
A WALSH GROUP COMPANY
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

SHEET
Grading Plan Sta.
05+00 to 10+00



Know what's below
Call before you dig.

DATE ISSUED/REVISED
12-01-21 811S
12-12-23 ADDENDUM 1

DRAWN BY:

G. Viju

DESIGNED BY:

G. Viju

APPROVED BY:

B. Buchholz

DATE:

December 08, 2021

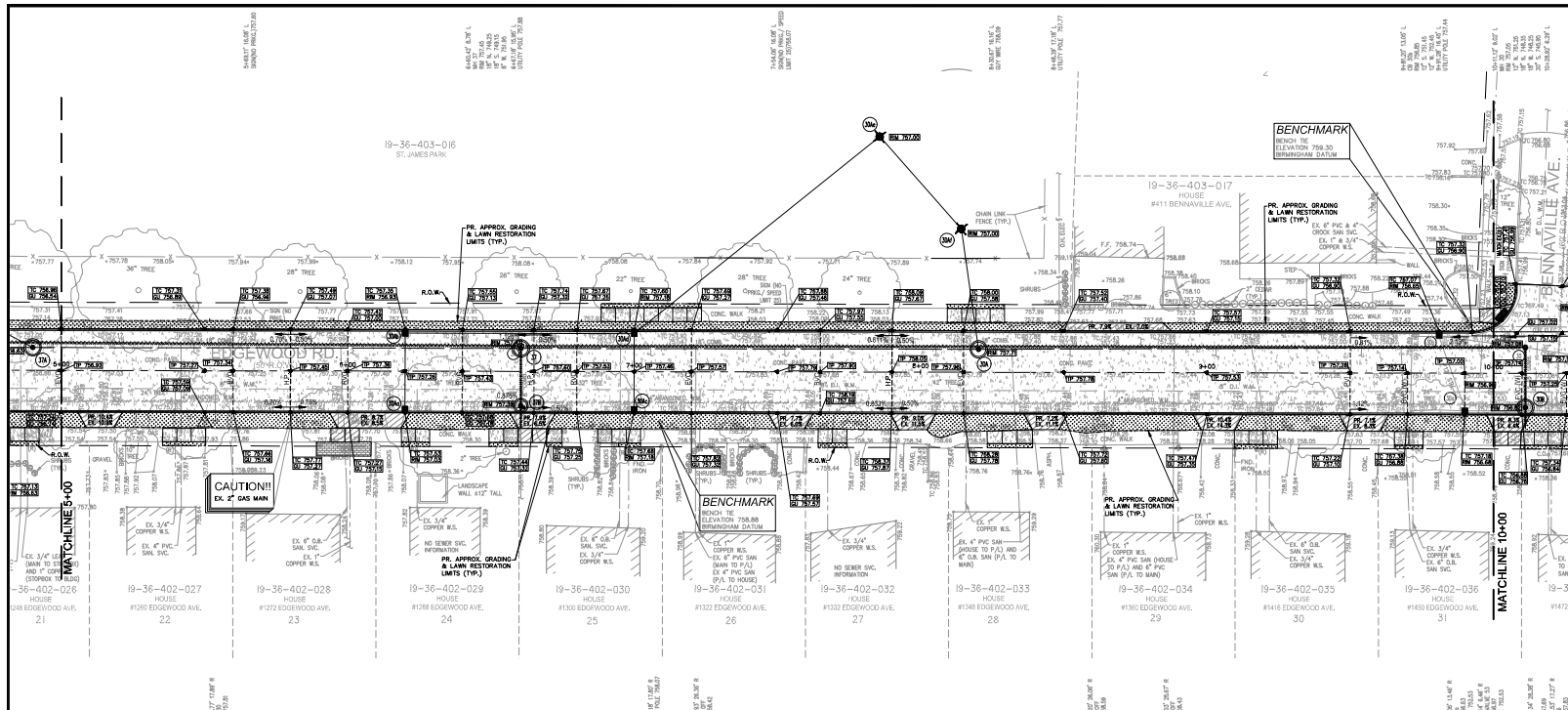
SCALE: 1" = 20' / 1" = 2'

NEL JOB NO.

M516

SHEET NO.

C10



LEGEND

SHOW NOT

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN

OVERHEAD LINES

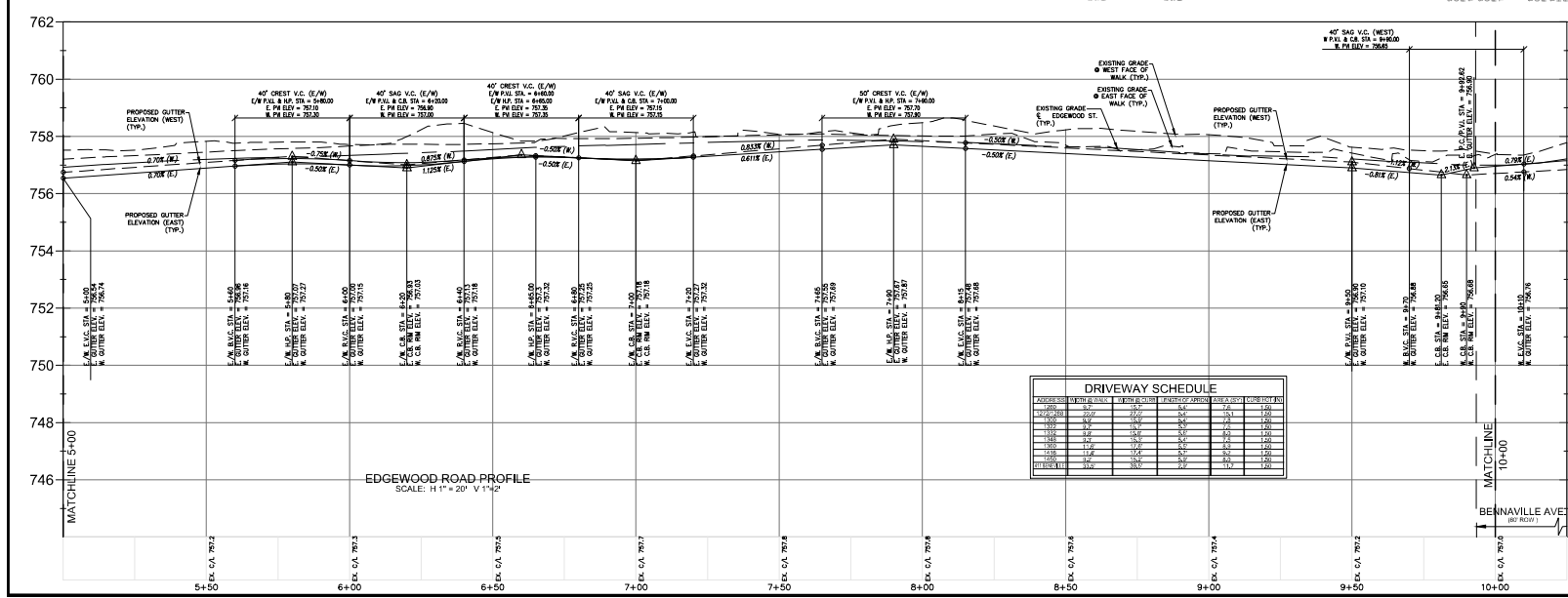
- EX. PAVES
- EX. 4\"/>

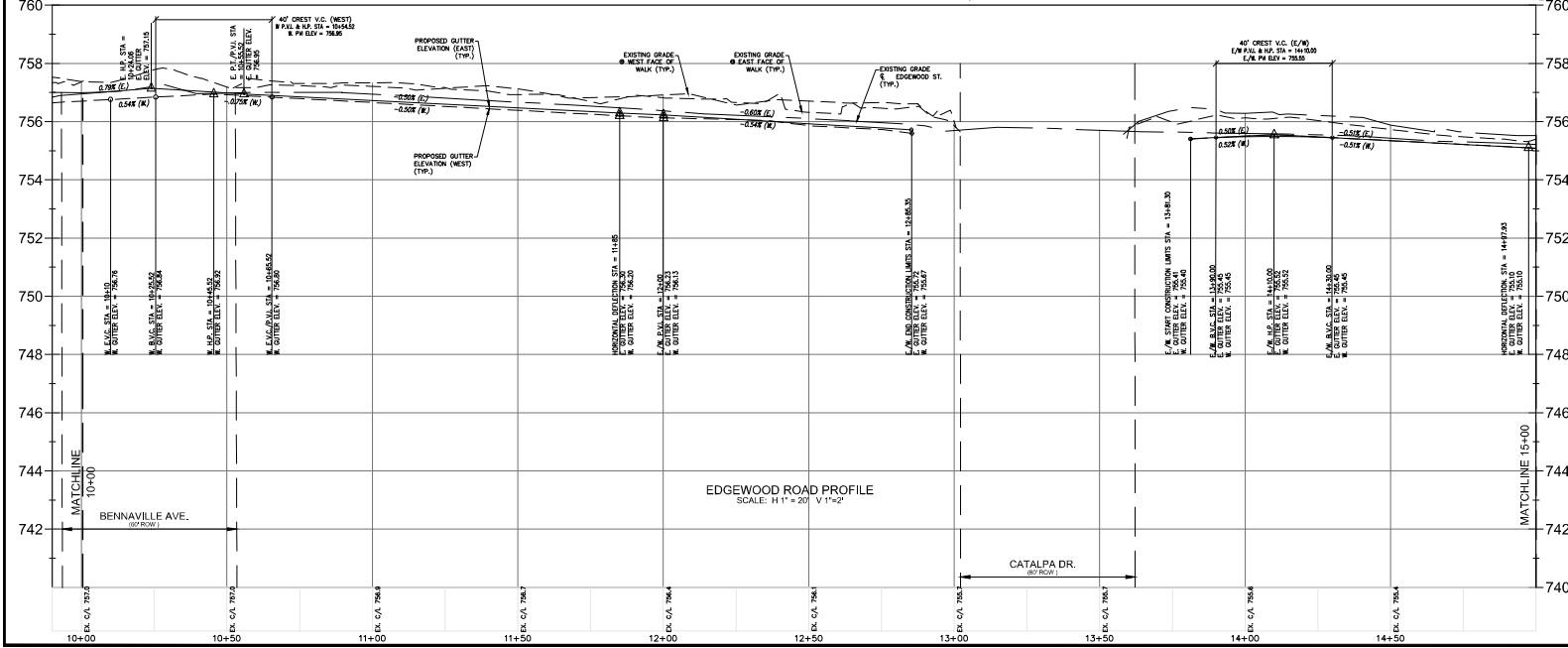
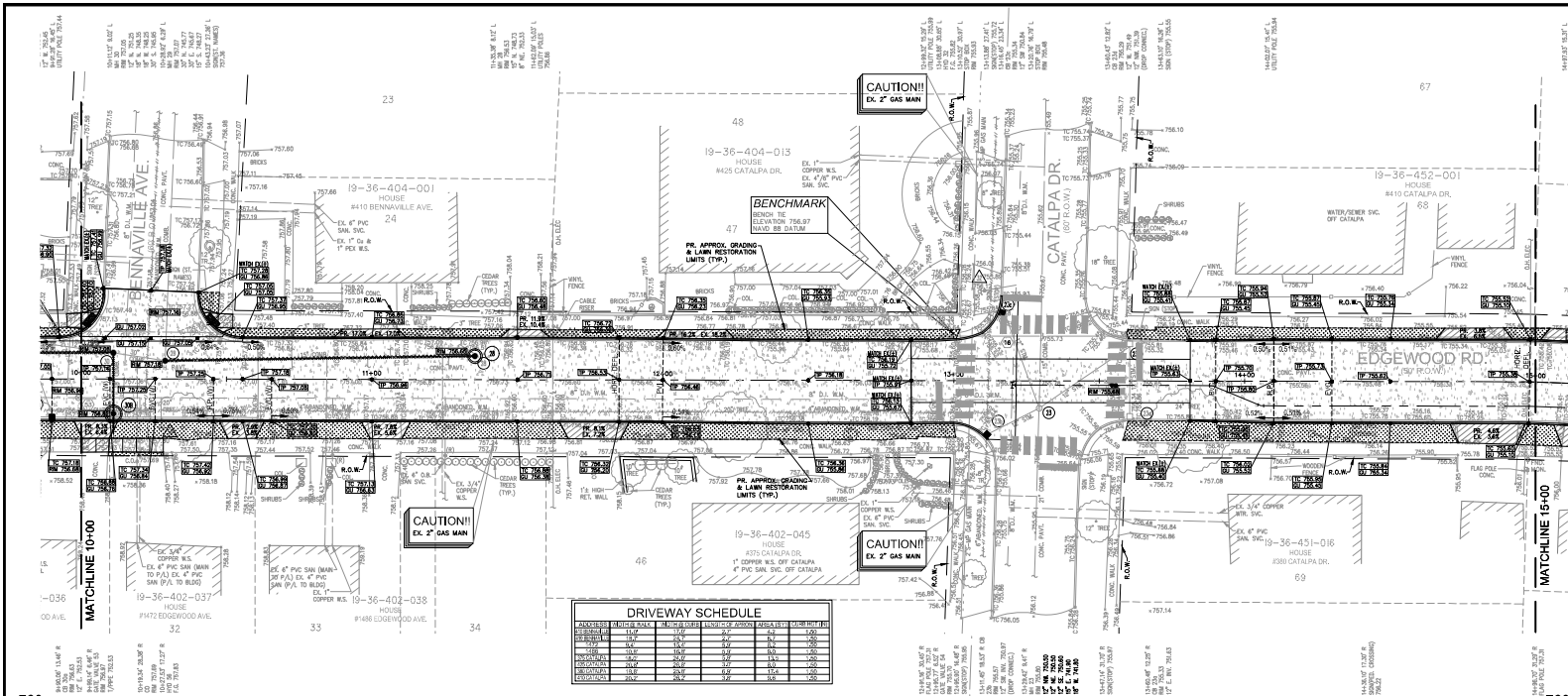
EX. POLE

- EX. 4\"/>

EX. STRUCTURE

- EX. 4\"/>





NF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRAUS ENGINEERS
 4677 WOODWARD AVE.
 PONTIAC, MI 48342-5032
 TEL: (248) 332-7931
 FAX: (248) 332-8257
 WWW.NOWAKFRAUS.COM

SEAL

PROJECT
 Edgewood Road Paving
 Project
 Contract# 6-24(S)

CLIENT

 Engineering Department
 151 Martin Street
 Birmingham, MI 48012

PROJECT LOCATION
 Part of the Southeast 1/4
 of Section 36, Town 2 North,
 Range 10 East, City of
 Birmingham, Oakland
 County, Michigan

SHEET
 Grading Plan Sta.
 10+00 to 15+00

811
 Know what's below
 Call before you dig.

DATE ISSUED/REVISED
 12-21-2019
 12-22-2019 (M) 1

DRAWN BY:
 G. Viju
 DESIGNED BY:
 G. Viju
 APPROVED BY:
 B. Buchholz

DATE:
 December 08, 2021
 SCALE: 1" = 20' / 1" = 2'
 SHEET NO. C11

SEAL

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT

BIRMINGHAM
A WALSH GROUP COMPANY
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

SHEET
Grading Plan Sta.
15+00 to P.O.E.



Know what's below
Call before you dig.

DATE ISSUED/REVISED
12-21-2019

12-12-23 ADDRESS/REVISED

DRAWN BY:
G. Viju

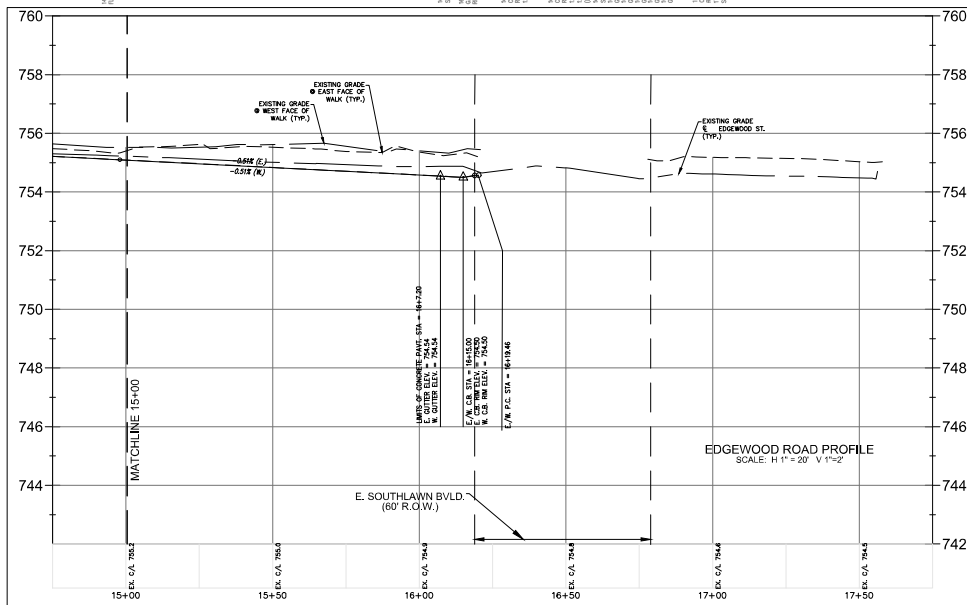
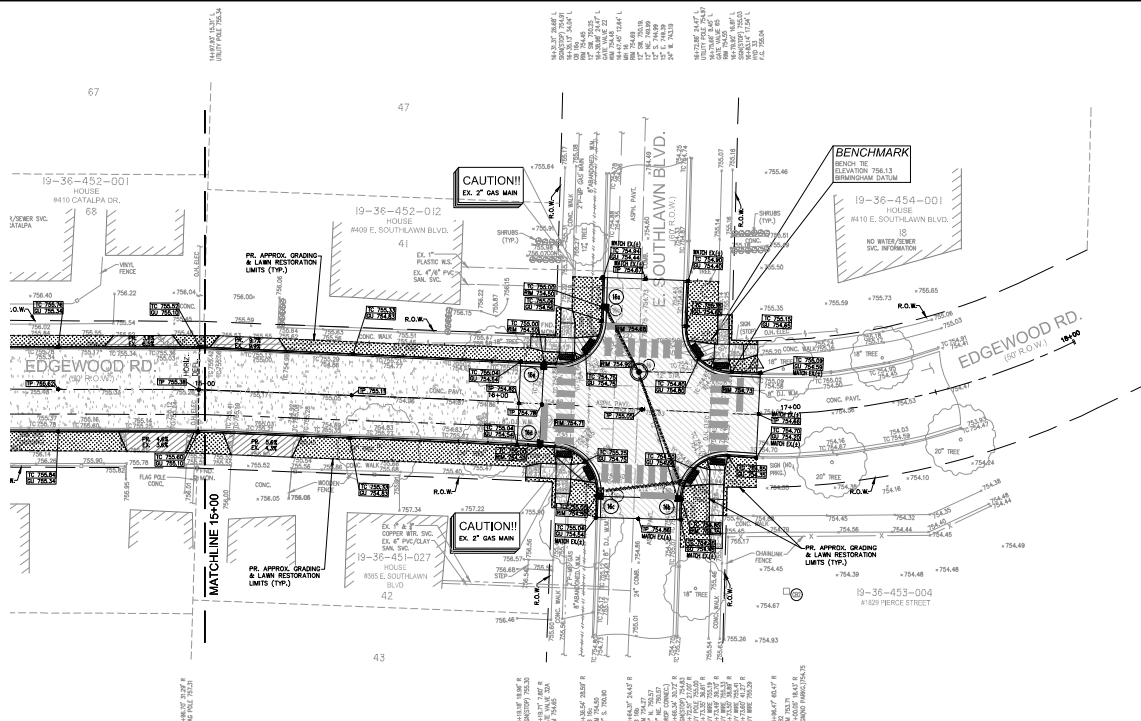
DESIGNED BY:
G. Viju

APPROVED BY:
B. Buchholz

DATE:
December 08, 2021

SCALE: 1" = 20' / 1" = 2'

NFE JOB NO. SHEET NO.
M516 C12

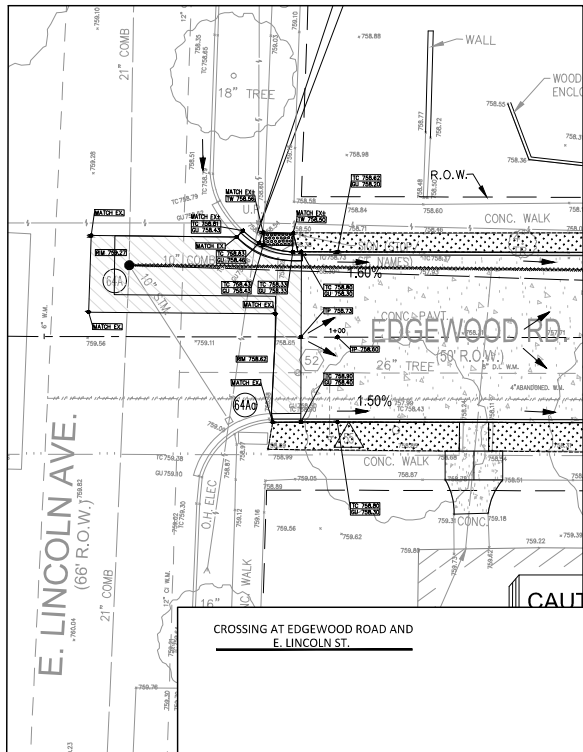


DRIVEWAY SCHEDULE	
APPROVED IN FIELD BOOK	IN FIELD BOOK
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10

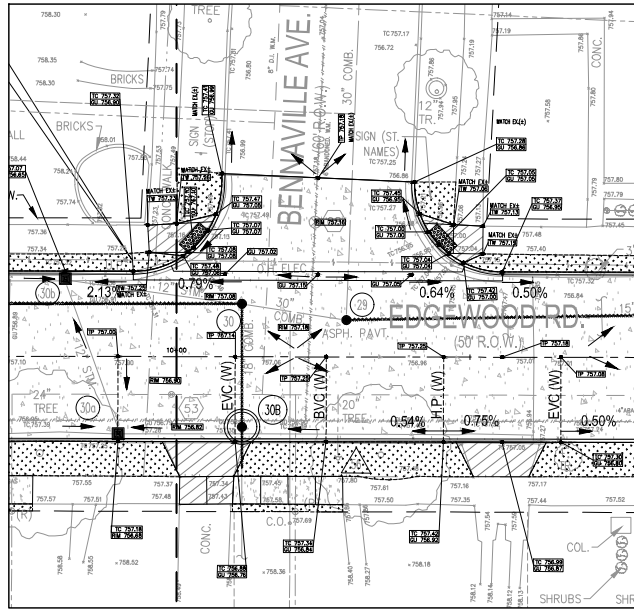
UTILITY NOTE
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LEGEND

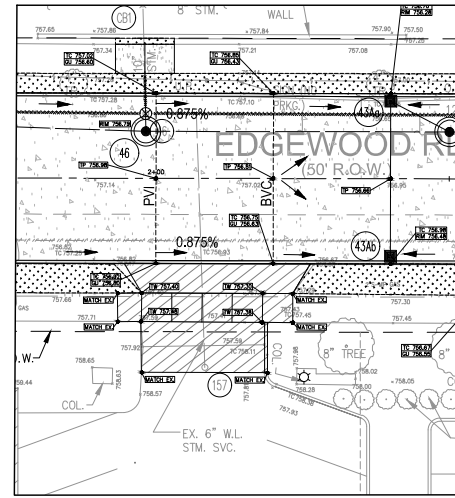
EXISTING SAN/COMB SEWER	EXISTING WATER MAIN	EXISTING STORM SEWER	EXISTING BURIED CABLES	EXISTING GAS MAIN	OVERHEAD LINES
EXISTING CURB STOP LOCATION (APPROX.)	LANDSCAPE BED	EX. SOL. BORING	PUBLIC PHONE WELL	SON POST/BOLLARD	PARKING METER
EX. SOL. BORING	PUBLIC PHONE WELL	SON POST/BOLLARD	PARKING METER	MAIL BOX	TRUCK/BOILER
PUBLIC PHONE WELL	SON POST/BOLLARD	PARKING METER	MAIL BOX	TRUCK/BOILER	SPRINKLER VALVE BOX
SON POST/BOLLARD	PARKING METER	MAIL BOX	TRUCK/BOILER	SPRINKLER VALVE BOX	FOUND PROPERTY MARKER
PARKING METER	MAIL BOX	TRUCK/BOILER	SPRINKLER VALVE BOX	FOUND PROPERTY MARKER	GROUND ELEVATION



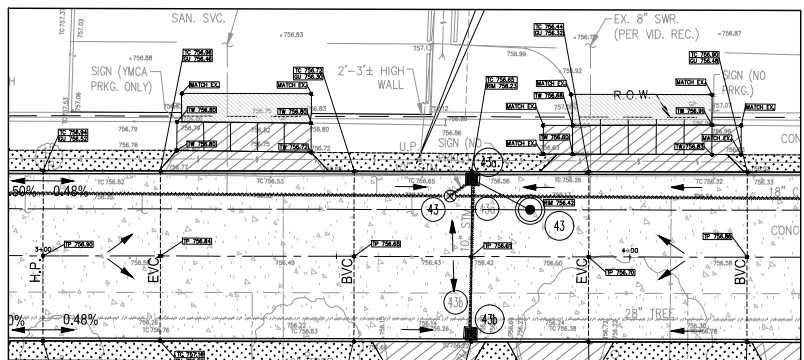
CROSSING AT EDGEWOOD ROAD AND
E. LINCOLN ST.



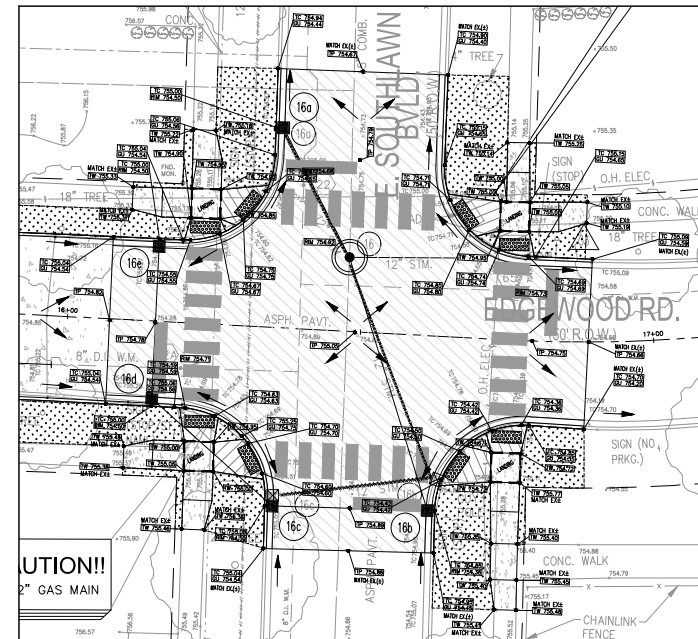
CROSSING AT EDGEWOOD ROAD AND
BENNVILLE AVE.



280 EAST LINCOLN AVE. DRIVE
APPROACH GRADING DETAIL



400 EAST LINCOLN AVE. DRIVE
APPROACH GRADING DETAIL



CROSSING AT EDGEWOOD ROAD AND
E. SOUTHLAWN



NF
ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
4677 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL: (248) 332-7931
FAX: (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT

BIRMINGHAM
A Wal-Mart City
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

SHEET
Intersection Grading
Details



DATE ISSUED/REVISED
12-10-21 0109
12-12-23 ADDITION 1

DRAWN BY:

G. Viju

DESIGNED BY:

G. Viju

APPROVED BY:

B. Buchholz

DATE:

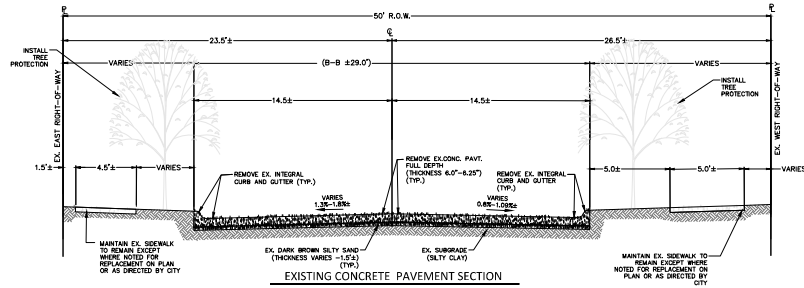
December 08, 2021

SCALE: 1" = 20'

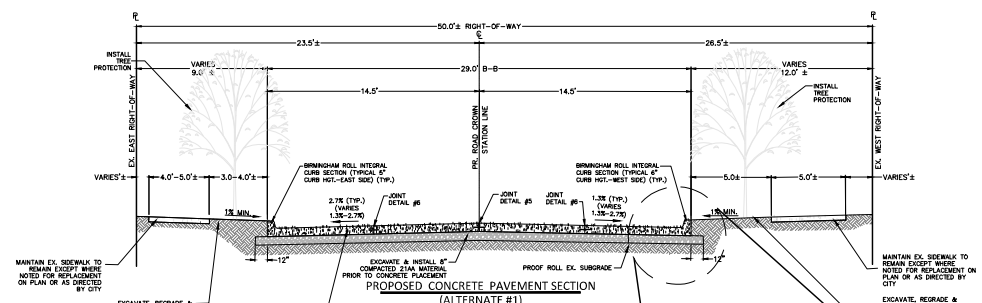
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NFL JOB NO. SHEET NO.

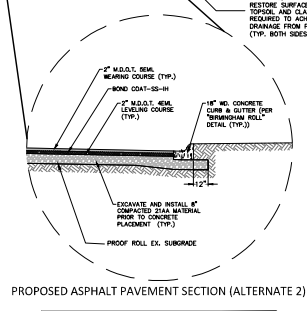
M516 C13



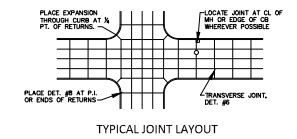
N.T.S.
PIERCE STREET
APPLIES TO: STA. P.O.B. TO 9+71
STA 9+71 TO 10+60 & 15+96 TO
P.O.E. HAS ASPHALT PAVT.



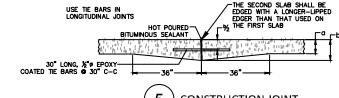
N.T.S.
EDGEWOOD ROAD
APPLIES TO: STA. P.O.B. TO P.O.E.
THE ROAD WIDTH IS 28.0' EXCEPT WHERE THE
PROPOSED PAVEMENTS MEETS THE EXISTING
PAVEMENTS



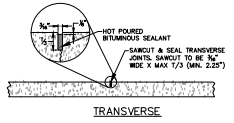
N.T.S.
PROPOSED ASPHALT PAVEMENT SECTION (ALTERNATE 2)



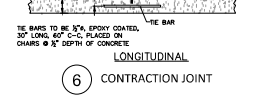
SLAB DESIGNATION	1\"/>	
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2"	7"	9"
3"	7-3/4"	10"
4"	8"	11"
5"	9"	12"



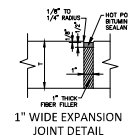
5 CONSTRUCTION JOINT



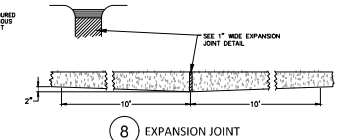
TRANSVERSE CONSTRUCTION JOINT



6 LONGITUDINAL CONSTRUCTION JOINT



1" WIDE EXPANSION JOINT DETAIL



8 EXPANSION JOINT

SEAL

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT
BIRMINGHAM
A WALSH GROUP COMPANY
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

SHEET
Existing and Proposed
Road Cross-Sections



DATE ISSUED/REVISED
12-08-21 0108
12-12-21 00000001

DRAWN BY:
G. Viju
DESIGNED BY:
G. Viju
APPROVED BY:
B. Buchholz
DATE:
December 08, 2021
SCALE:

NFL JOB NO. SHEET NO.
M516 C14

GRANT ST. CLOSED FROM HUMPHREY TO BENNAVILLE SEEK ALT ROUTE

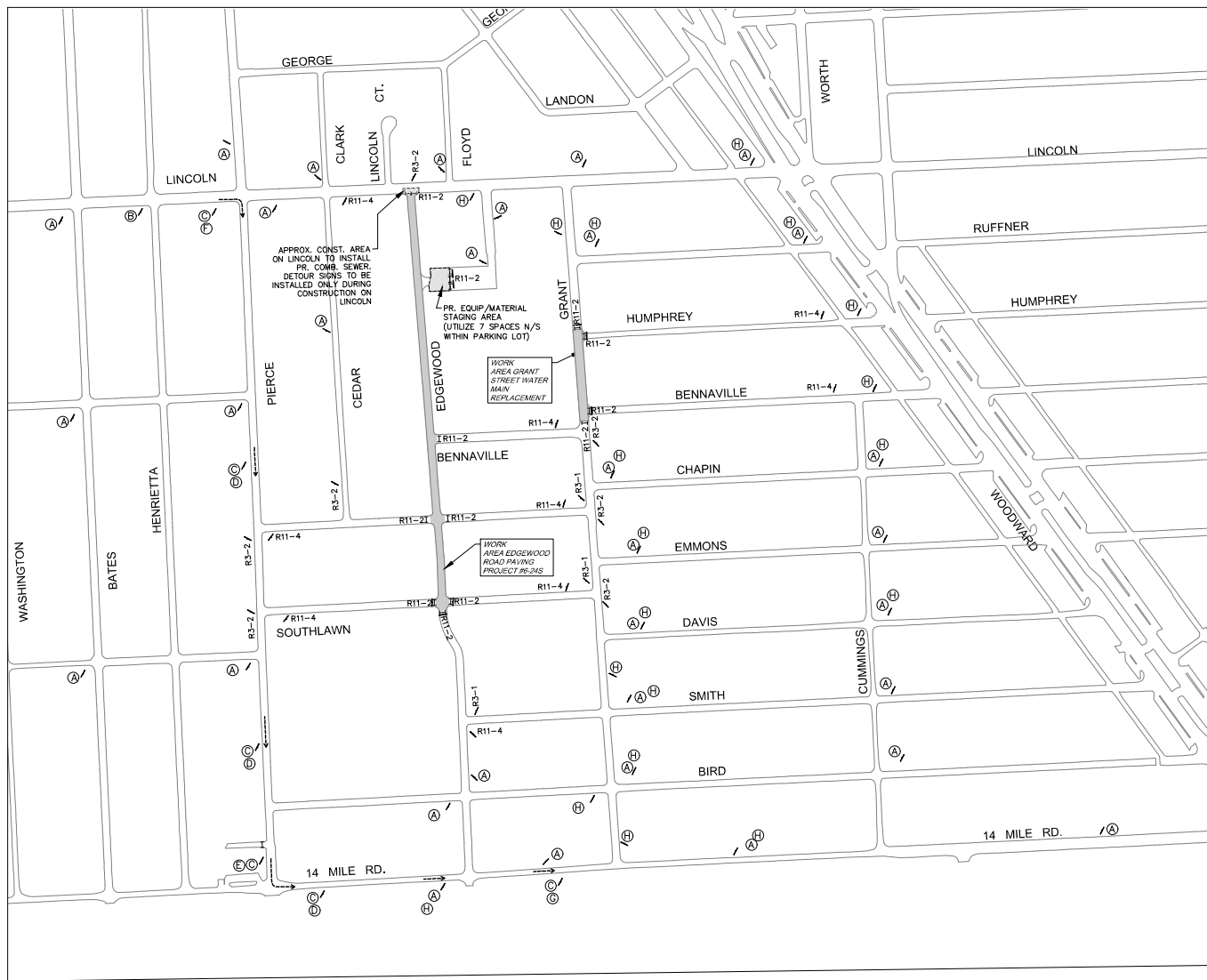
36"x72" ADVANCE WARNING SIGN "H"
BLACK LEGEND ON ORANGE BACKGROUND

EDGEWOOD ROAD CLOSED FROM LINCOLN TO SOUTH LAWN BVD SEEK ALT ROUTE

36"x72" ADVANCE WARNING SIGN "A"
BLACK LEGEND ON ORANGE BACKGROUND

LINCOLN AVENUE CLOSED AT EDGEWOOD FOLLOW DETOUR TO WOODWARD

36"x72" ADVANCE WARNING SIGN "B"
BLACK LEGEND ON ORANGE BACKGROUND



ADVANCED WARNING SIGNAGE & DETOUR PLAN: EDGEWOOD ROAD & GRANT STREET

10" x 30"
ADVANCED WARNING SIGN "C"
BLACK LEGEND ON ORANGE BACKGROUND

WOODWARD AVE.



30" x 30"
ADVANCED WARNING SIGN "D"
BLACK LEGEND ON ORANGE BACKGROUND
(MOUNT BELOW WARNING SIGN "H" WHERE INDICATED)

10" x 30"
ADVANCED WARNING SIGN "C"
BLACK LEGEND ON ORANGE BACKGROUND

WOODWARD AVE.

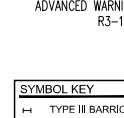


30" x 30"
ADVANCED WARNING SIGN "F"
BLACK LEGEND ON ORANGE BACKGROUND
(MOUNT BELOW WARNING SIGN "H" WHERE INDICATED)

10" x 30"
ADVANCED WARNING SIGN "L"
R3-1



10" x 30"
ADVANCED WARNING SIGN "M"
R3-2



SYMBOL KEY
H TYPE III BARRICADES
- ADVANCED WARNING SIGN
-> DETOUR

SPECIAL ADVANCED WARNING SIGN QUANTITIES

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
SIGN "A"	EDGEWOOD CLOSED FROM LINCOLN TO SOUTHLAWN BVD SEEK ALT ROUTE	36"x72"	32
SIGN "B"	LINCOLN AVE. CLOSED AT EDGEWOOD FOLLOW DETOUR TO WOODWARD	36"x72"	1
SIGN "C"	LINCOLN AVE.	10"x18"	6
SIGN "D"	DETOUR-STRAIGHT ARROW	30"x30"	3
SIGN "E"	DETOUR-LEFT ARROW	30"x30"	1
SIGN "F"	DETOUR-RIGHT ARROW	30"x30"	1
SIGN "G"	NO DETOUR	24"x18"	1
SIGN "H"	GRANT ST. CLOSED FROM HUMPHREY TO BENNAVILLE SEEK ALT ROUTE	36"x72"	17

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
R11-2	ROAD CLOSED	60"x30"	12
R11-4	ROAD CLOSED FOR THRU TRAFFIC	60"x30"	8
R3-1	NO RIGHT TURN	24"x24"	3
R3-2	NO LEFT TURN	24"x24"	6

10" x 30"
ADVANCED WARNING SIGN "C"
BLACK LEGEND ON ORANGE BACKGROUND

WOODWARD AVE.

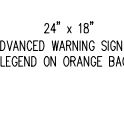


30" x 30"
ADVANCED WARNING SIGN "E"
BLACK LEGEND ON ORANGE BACKGROUND
(MOUNT BELOW WARNING SIGN "H" WHERE INDICATED)

24" x 18"
ADVANCED WARNING SIGN "G"
BLACK LEGEND ON ORANGE BACKGROUND

END
DETOUR

WOODWARD AVE.

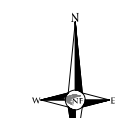


30" x 30"
ADVANCED WARNING SIGN "F"
BLACK LEGEND ON ORANGE BACKGROUND
(MOUNT BELOW WARNING SIGN "H" WHERE INDICATED)

10" x 30"
ADVANCED WARNING SIGN "L"
R3-1



10" x 30"
ADVANCED WARNING SIGN "M"
R3-2



SYMBOL KEY
H TYPE III BARRICADES
- ADVANCED WARNING SIGN
-> DETOUR

SPECIAL ADVANCED WARNING SIGN QUANTITIES

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
SIGN "A"	EDGEWOOD CLOSED FROM LINCOLN TO SOUTHLAWN BVD SEEK ALT ROUTE	36"x72"	32
SIGN "B"	LINCOLN AVE. CLOSED AT EDGEWOOD FOLLOW DETOUR TO WOODWARD	36"x72"	1
SIGN "C"	LINCOLN AVE.	10"x18"	6
SIGN "D"	DETOUR-STRAIGHT ARROW	30"x30"	3
SIGN "E"	DETOUR-LEFT ARROW	30"x30"	1
SIGN "F"	DETOUR-RIGHT ARROW	30"x30"	1
SIGN "G"	NO DETOUR	24"x18"	1
SIGN "H"	GRANT ST. CLOSED FROM HUMPHREY TO BENNAVILLE SEEK ALT ROUTE	36"x72"	17

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
R11-2	ROAD CLOSED	60"x30"	12
R11-4	ROAD CLOSED FOR THRU TRAFFIC	60"x30"	8
R3-1	NO RIGHT TURN	24"x24"	3
R3-2	NO LEFT TURN	24"x24"	6

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
4677 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL: (248) 332-7931
FAX: (248) 333-8257
WWW.NOWAKFRAUS.COM

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT

BIRMINGHAM
A WALDO CITY

Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

SHEET
Advanced Warning
Signage & Traffic Detour
Plan

811
Know what's below
Call before you dig.

DATE ISSUED/REVISED
12-12-21 811S
12-12-21 ADDRESS/REV 1

DRAWN BY:
G. Viju

DESIGNED BY:
E. Mikulungas

APPROVED BY:
B. Buchholz

DATE:
December 08, 2021

SCALE: N.T.S.

NFL JOB NO. SHEET NO.
M516 C15

SCALE

PROJECT
Edgewood Road Paving
Project
Contract# 6-24(S)

CLIENT



Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Southeast 1/4
of Section 36, Town 2 North,
Range 10 East, City of
Birmingham, Oakland
County, Michigan

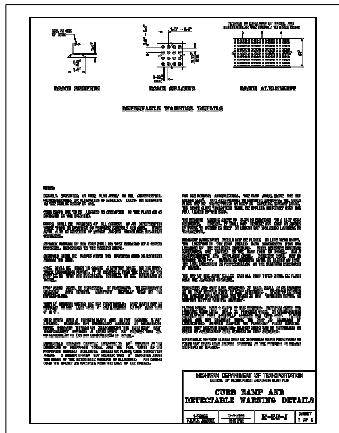
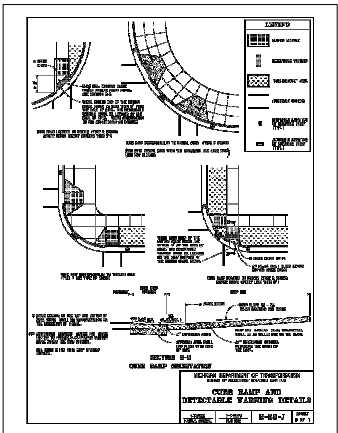
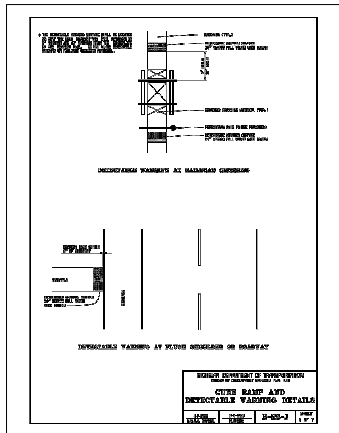
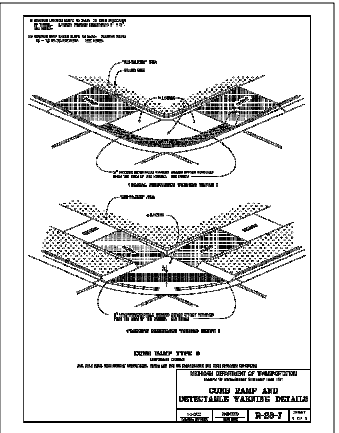
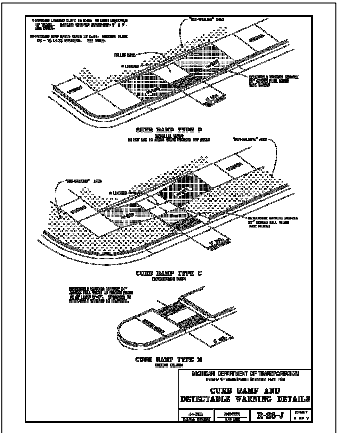
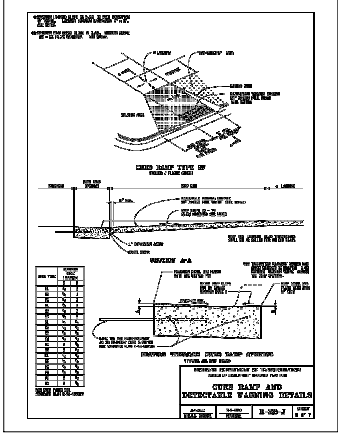
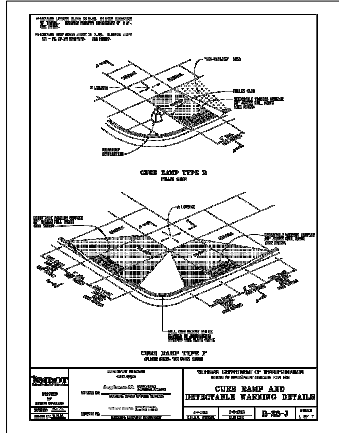
SHEET
Notes and Details (of 3)



Know what's below
Call before you dig.

DATE	ISSUED/REVISED
12-08-21 8:08	
12-12-23 08:00:00:01	

DRAWN BY:
G. Viju
DESIGNED BY:
G. Viju
APPROVED BY:
B. Buchholz
DATE:
December 08, 2021
SCALE:



GENERAL NOTES

- BRICK PAVEMENT SHALL BE REMOVED BY MEANS WHICH CAUSE NO DAMAGE TO THE BRICKS. BRICKS SHALL BE DELIVERED TO CITY OF BIRMINGHAM DEPARTMENT OF SERVICES AS DIRECTED BY THE ENGINEER.
- ALL PAVEMENT TO BE REMOVED SHALL BE SAVED CUT DEPTH.
- ANY GRAVEL REPLACEMENT FOR REPAIRING DRIVEWAYS SHALL BE CONSIDERED INCLUDED IN THE COST OF CONCRETE REPAIRS.
- ALL TREES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. WHERE NECESSARY, TREE ROOTS SHALL BE CUT CLEANLY, AT NO TIME WILL RIPPING OR TEARING OF TREE ROOTS BE ACCEPTABLE.
- ALL DRIVEWAYS (BEHIND THE SIDEWALK) SHALL BE REPAIRED WITH A CROSS SECTION WHICH MATCHES THE EXISTING THICKNESS, OR A MINIMUM 4" THICKNESS UNLESS NOTED. IF THE EXISTING DRIVEWAY IS GREATER THAN 4" IN DEPTH, THE THICKNESS OF THE REPAIRING COURSE NO. 13A SHALL BE GREATER THAN 4" IN DEPTH.
- UNLESS OTHERWISE SHOWN, PROPOSED GRADES IN PROFILE ARE AT TOP OF CURB GRADES.
- ROCKS OR OTHER MISC. DEBRIS WHICH ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, UNLESS DIRECTED OTHERWISE BY THE CITY.
- THE PAY ITEM "ASBESTOS STRUCTURE COVER" APPLIES ONLY TO PRE-EXISTING STRUCTURES TO BE ADJUSTED TO PROPOSED GRADES AS PART OF CONSTRUCTION.
- IF THE CONTRACTOR HAS MULTIPLE ORDERS WORKING THAT REQUIRES MULTIPLE CITY INSPECTORS ON A GIVEN WORK DAY, THE PAY ITEM INSPECTOR COVER DAILY SHALL BE MULTIPLIED BY THE CORRESPONDING NUMBER OF INSPECTORS REQUIRED DURING SAID WORK DAY.

PAVING NOTES

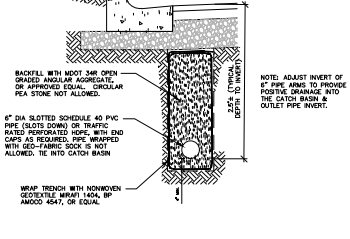
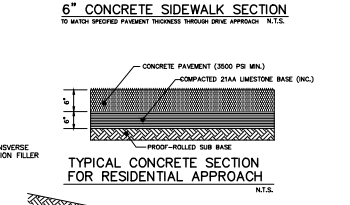
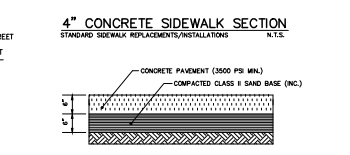
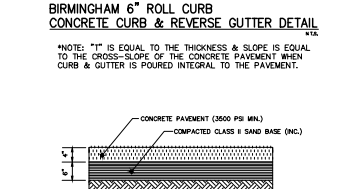
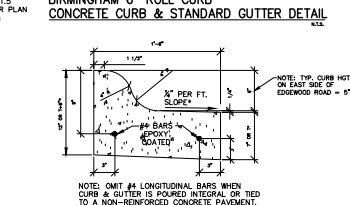
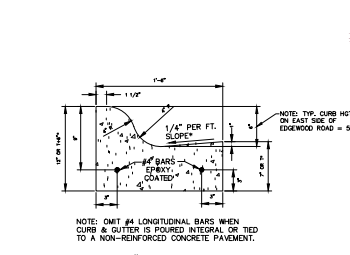
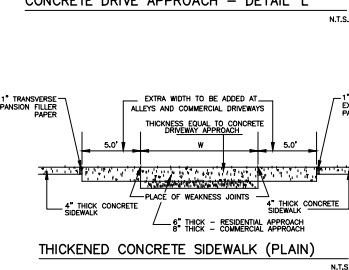
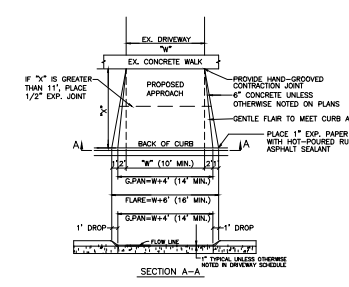
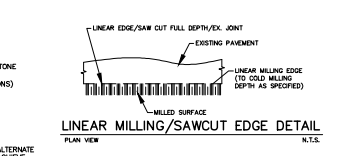
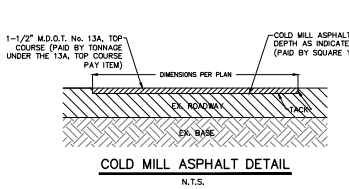
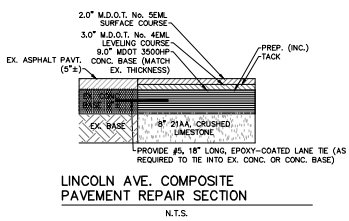
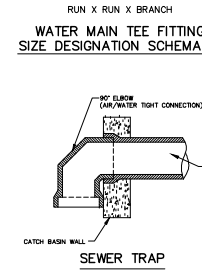
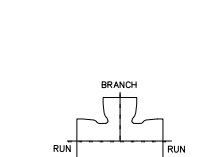
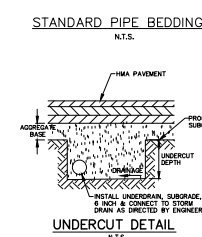
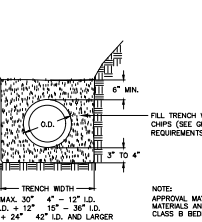
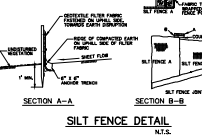
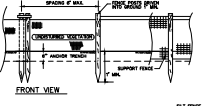
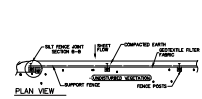
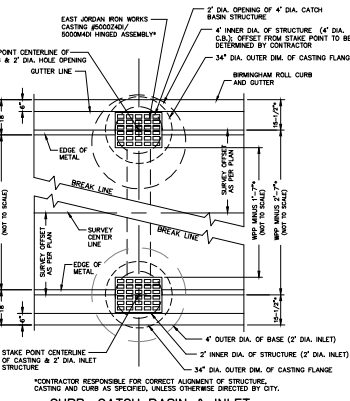
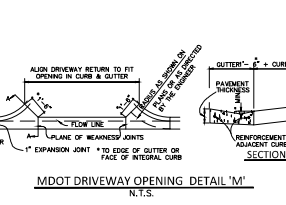
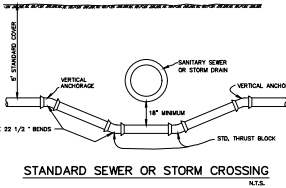
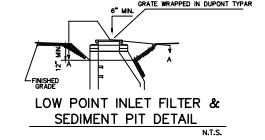
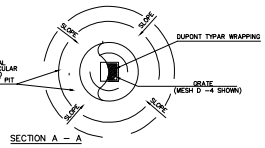
- PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:
CONCRETE ROAD: BASE COURSE - 2 1/4" CRUSHED LIMESTONE AGGREGATE (8" THICK)
 PORTLAND CEMENT TYPE I(A) (AIR-ENTRAINED), TO COMPLY WITH MDOT 3500AP REQUIREMENTS.
- CONCRETE FLATWORK:** PORTLAND CEMENT TYPE I(A) (AIR-ENTRAINED), WITH A MINIMUM CEMENT CONTENT OF SIX BAGS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI AND A SLUMP OF 1.5 TO 3 INCHES. COMPLY WITH MDOT 3000 REQUIREMENTS.
 ALL CONCRETE PAVEMENT AND FLATWORK MIXES USED ON THIS PROJECT SHALL COMPLY WITH A MINIMUM GRAIND GRADATION TO MEET FINISHES SLAB GRADATION. ALL MIXTURES SHALL BE PROPORTIONED SUBJECT TO SEASONAL LIMITATIONS FOR THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2003 EDITION.
- ASPHALT:** BASE COURSE - 2 1/4" CRUSHED LIMESTONE AGGREGATE (8" THICK)
SURFACE COURSES: ASPHALT ROAD - MDOT HMA MIXTURE NO. 50M (MAX. APPLICATION RATE 220 POUNDS PER SQUARE YARD)
 ASPHALT ROAD - MDOT HMA MIXTURE NO. 45M (MAX. APPLICATION RATE 330 POUNDS PER SQUARE YARD)
LEVELING COURSES: ASPHALT ROAD - MDOT HMA MIXTURE NO. 45M (MAX. APPLICATION RATE 330 POUNDS PER SQUARE YARD)
REPAIR AREAS: BOND COAT - MDOT 55-IN EMULSION AT 0.10 GALLON PER SQUARE YARD
- PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (ADJUSTED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE ADEQUACY.
- ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC. SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.
- CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POLYMERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-318.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MINORITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2003 EDITION.
- ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.
- ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.
- CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN OBTAINED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.
- FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LICENSES ARRANGE FOR ALL INSPECTION.
- EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS UNLESS OTHERWISE NOTED.
- EXPANSION JOINTS SHALL BE INSTALLED AT THE END OF ALL INTERSECTION RAILS.
- SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARBER TREE INTERSECTIONS AS INDICATED ON THE PLANS.
- ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.
- ALL FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 95% OF THE MAXIMUM DENSITY (ADJUSTED PROCTOR) PRIOR TO PLACEMENT OF FINISHING PAVEMENT.
- R.A.P. NOT ALLOWED IN SURFACE / TOP COURSE OF ASPHALT.

WATER MAIN NOTES

- ALL WATER MAINS 4" AND LARGER SHALL BE DUCTILE IRON PIPE THICKNESS CLASS 52, WITH PUSH ON JOINT TYPES PER CITY REQUIREMENTS.
- NEW WATER MAINS SHALL BE INSTALLED WITH A MINIMUM 5.5 FEET OF COVER. EXCEPTIONS WILL BE ALLOWED WHEN NECESSARY TO CONNECT TO EXISTING MAIN OR WHEN AUTHORIZED BY THE ENGINEER.
- KNOWN WATER VARIATIONS OR CITY RECORDS OR CITY RECORDS ARE SHOWN ON THE PLANS AS FOLLOWS: "C" = COPPER, "L" = LEAD AND "W.S." = WATER SERVICE TYPE UNKNOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING ALL EXISTING SERVICES TO THE NEW MAIN AFTER IT HAS BEEN APPROVED FOR USE.
- COAT ALL BOLTS ON MECHANICAL FITTINGS WITH SR.
- HYDRANT CONNECTION TO CONSIST OF 6" DUCTILE IRON PIPE, 6" GATE VALVE AND BOX, AND HYDRANT. HYDRANT SHALL BE EAR MODEL, 588 WITH 6" MECHANICAL JOINT INLET, TWO PIPER INLETS, ALL OPENING 5" 4" TRENCH, FLOODED DRAIN AND BLOCK BOLTS.
- INSTALL GATE VALVE AS CLOSE TO HYDRANT AS PRACTICABLE.
- GATE VALVES 4" AND LARGER WILL BE WHEELER BRAND SPECIFIED, OR APPROVED EQUIVALENT. ALL MATERIALS RELATIVE TO WATER SERVICE CONNECTIONS SHALL BE WHEELER BRAND.
- IN BRANCHING MAINS, THE FOLLOWING SHALL BE DONE: PLUG ALL OPEN PIPE ENDS WITH MASONRY, DISCONNECT MAINS WHICH ARE TO BE ABANDONED FROM FITTINGS OF LINE MANS AND PLUG AND BLOCK THOSE FITTINGS. FITTINGS WILL TO BE ABANDONED WITH GREAT OR HYDRANT BLOCK.
- WORK INDICATED BY (A) SHALL BE PERFORMED AFTER THE NEW MAINS ARE PLACED IN SERVICE.
- THE LOCATIONS AND TYPES OF SERVICE LEADS IS BASED ON THE BEST AVAILABLE INFORMATION. THE EXACT LOCATION OF SERVICE LEADS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- WHERE APPLICABLE, THE APPROPRIATE SECTIONS OF EXISTING WATERMAIN SHALL BE SHUTDOWN AND DEPRESSURIZED PRIOR TO A) CUTTING AND REMOVING, B) CUTTING AND INSTALLING PROTECTED THE CONNECTIONS, C) PERFORMING ANY AND ALL OTHER WORK AND/OR CONNECTIONS AND ALL OTHER CONNECTIONS, WHILE WEATHER AND/OR EXCEEDING APPLICABLE INDUSTRY SAFETY PRECAUTIONS AND MISHA STANDARDS.

STORM SEWER NOTES (where applicable)

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MINORITY, THE MICHIGAN DEPARTMENT OF SERVICES, LOCALS AND SPECIFICATIONS SHALL BE INCORPORATED AS PART OF THESE PLANS.
- ALL STORM SEWER TRENCHES UNDER OR WITHIN THREE (3) FEET OF EXISTING OR PROPOSED PAVEMENT SHALL BE BRICK FILLED WITH MDOT CLASS II MATERIAL (SAND) AND BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S MAXIMUM DENSITY. PAVEMENT SHALL INCLUDE PARKING LOTS, DRIVE APPROACHES, 95 CURB & GUTTER AND ADJACENT WALKS.
- ALL STORM SEWER PIPE SHALL BE INSTALLED ON CLASS "B" BEDDING OR BETTER UNLESS OTHERWISE INCLUDED ON THE PLANS.
- STORM SEWER SHALL BE OF THE TYPE, SIZE & CLASS DESIGNATION INDICATED ON THE PLANS AND LICENSE BE INSTALLED AT THE PROPOSED LINE & GRADE INDICATED.
- ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM SPECIFICATION C-76 CL. IV.
- ALL MAN HOLE, CATCH BASIN, INLET MAN HOOD, DRAINAGE STRUCTURES COVERS SHALL BE AS INDICATED ON THE PLANS AND CONFORM TO MICHIGAN DEPARTMENT OF SERVICES STANDARDS.
- INSTALL TRAPS ON THE FIRST CATCH BASIN (TYPICALLY A 4" DIAMETER STRUCTURE WITH "S" TRAP) THAT IS UPSTREAM OF ITS CONNECTION TO A MAINLINE STORM OR SEWER MAINLINE, TO CAPTURE FLOES AND TO MINIMIZE ESCAPE OF ODOUR.
- THE CONTRACTOR SHALL NOTIFY MSHS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
- EXACT GRADES AND INVERTS OF PROPOSED STORM SEWER ARE TO BE CHECKED WITH THE FIELD ENGINEER PRIOR AND DURING INSTALLATION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGNER OF ANY PLAN INCONSISTENCY AND/OR UTILITY CONFLICTS.
- ALL STORM SEWER PIPE JOINTS SHALL BE "PREMIUM JOINT" MODIFIED BROOVED TORQUE (M.B.T.) WITH SYNTHETIC RUBBER GASKETS CONFORMING TO ASTM SPECIFICATION C-443 & C-361, UNLESS OTHERWISE INDICATED ON THE PLANS.
- FACILITY MANUFACTURED PRECAST SECTIONS SHALL BE FOR ROOF DRAINS AND/OR STUMP PUMP LEADS AND LATERALS WHERE INDICATED ON THE PLANS. BLIND TOP CONNECTIONS INTO STORM SEWER WILL NOT BE PERMITTED BY BREAKING PIPE WALL.
- THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LICENSE ARRANGE FOR ALL SITE INSPECTIONS.



NF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRANS ENGINEERS
 4677 WOODWARD AVE.
 PONTIAC, MI 48342-5032
 TEL: (248) 332-7931
 FAX: (248) 332-8257
 WWW.NOWAKFRANS.COM

PROJECT
 Edgewood Road Paving
 Project
 Contract# 6-24(S)

CLIENT
BIRMINGHAM
 A WALSH GROUP COMPANY
 Engineering Department
 151 Martin Street
 Birmingham, MI 48012

PROJECT LOCATION
 Part of the Southeast 1/4 of Section 36, Town 2 North, Range 10 East, City of Birmingham, Oakland County, Michigan

SHEET
 Notes and Details (3 of 3)

811
 Know what's below
 Call before you dig.

DATE ISSUED/REVISED
 12-21-09
 12-12-21-09 (ADDENDUM 1)

DRAWN BY:
 G. Viju

DESIGNED BY:
 G. Viju

APPROVED BY:
 B. Buchholz

DATE:
 December 08, 2021

SCALE:

NFL JOB NO. SHEET NO.
M516 C18



CITY OF BIRMINGHAM ENGINEERING DEPARTMENT

2023 ASPHALT REHABILITATION PROJECT GRANT ST WATER MAIN REPLACEMENT CITY CONTRACT No. 7-23 (P)

PLAN SHEET INDEX	SHEET No.
COVER	1
PROJECT NOTES/LEGEND	2
PROJECT DETAILS	*
TYPICAL SECTIONS	*
MAINTENANCE OF TRAFFIC	*
BIRMINGHAM BLVD	*
SMITH AVE	*
HOLLAND ST	*
GRANT ST	11
S OLD WOODWARD	*
SEWER STANDARD DETAILS	*
WATER MAIN STANDARD DETAILS	14

PARTIAL PLAN SET DATED 9/18/2023 PREPARED FOR:
EGLE PERMIT APPLICATION FOR WATER SUPPLY SYSTEMS
*NOT INCLUDED IN THIS PLAN SET

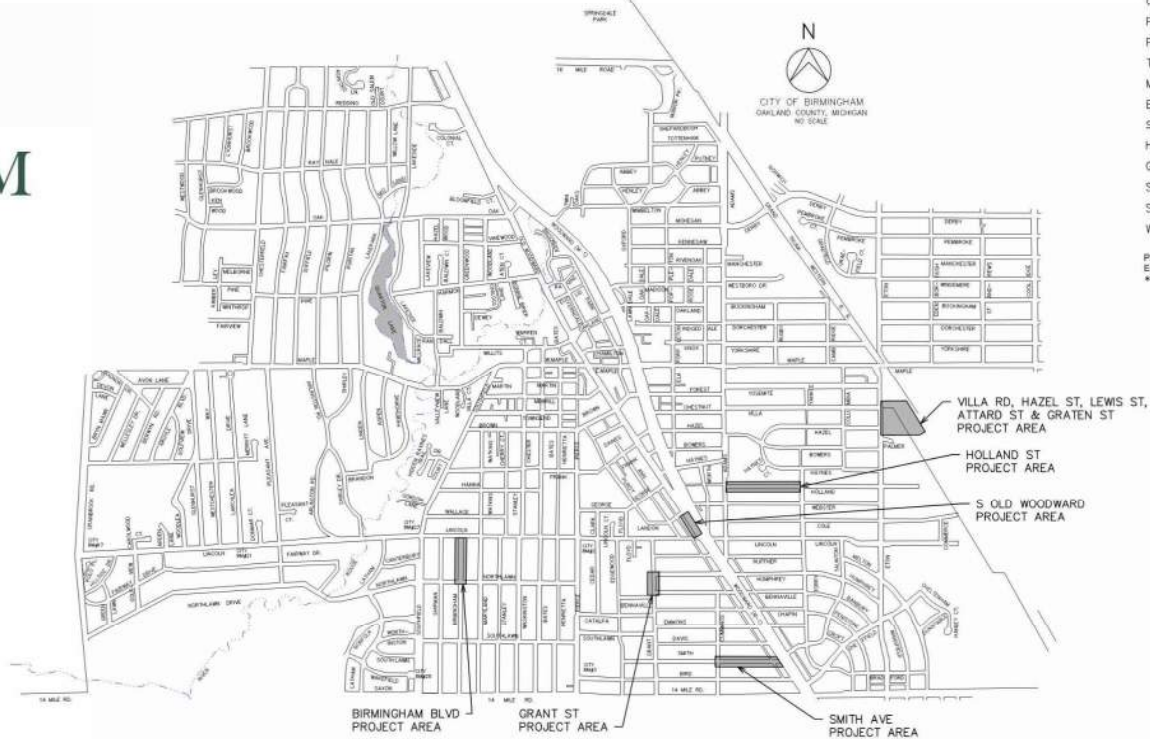


STANDARD PLANS		
CONSTRUCTION OF THE FOLLOWING ITEMS, WHERE CALLED FOR ON THE PLANS, WILL BE CONSTRUCTED ACCORDING TO MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD PLANS AS INDICATED.		
REQUIRED ON THIS PROJECT	ITEMS OF WORK	STANDARD PLAN NUMBERS
X	DRAINAGE STRUCTURES	R-1-G
X	COVER C	R-8-D
X	COVER G	R-12-E
X	CURB RAMP AND DETECTABLE WARNING DETAILS	R-28-J
X	DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALKS	R-29-I
X	CONCRETE CURB AND CONCRETE CURB AND GUTTER	R-30-G
X	UTILITY TRENCHES	R-B3-C
X	SOIL EROSION & SEDIMENTATION CONTROL MEASURES	R-96-E
X	SEEDING AND TREE PLANTING	R-100-H
X	GRADING CROSS-SECTIONS	R-105-D

* SEE MDOT SPECIAL DETAIL

TRAFFIC AND SAFETY STANDARD PLANS		
CONSTRUCTION OF THE FOLLOWING ITEMS, WHERE CALLED FOR ON THE PLANS, WILL BE CONSTRUCTED ACCORDING TO MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD PLANS AS INDICATED.		
REQUIRED ON THIS PROJECT	ITEMS OF WORK	STANDARD PLAN NUMBERS
X	GROUND DRIVEN SIGN SUPPORTS FOR TEMP. SIGNS	WZD-100-A
X	TEMPORARY TRAFFIC CONTROL DEVICES	WZD-125-E

* SEE MDOT SPECIAL DETAIL



HRC
HUBBELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1915

555 HULET DRIVE P.O. BOX 824
BLOOMFIELD HILLS, MICH. 48303 - 0824

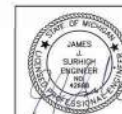
PHONE: (248) 454-6300
FAX (1st Floor): (248) 454-6312
FAX (2nd Floor): (248) 338-2592
WEB SITE: <http://www.hrc-enr.com>

NOTICE
ALL EXISTING UTILITIES SHOWN ON THIS TOPOGRAPHIC SURVEY HAVE BEEN TAKEN FROM VISUAL OBSERVATION AND RECORD MAPS WHERE AVAILABLE. NO GUARANTEE IS MADE OR SHOULD BE ASSUMED AS TO THE COMPLETENESS OR ACCURACY OF THE UTILITIES SHOWN ON THIS DRAWING. PARTIES UTILIZING THIS INFORMATION SHALL YIELD VERIFY THE ACCURACY AND COMPLETENESS PRIOR TO CONSTRUCTION.



CALL MBS DIG 72 HOURS (3 WORKING DAYS) BEFORE YOU DIG
1-800-482-7174 or 811
CALL BEFORE YOU DIG

CALL 811.COM (TOLL FREE)



DATE	REVISION
01/16/2023	REVISED PER EGLE REVIEW
01/16/2023	ISSUED FOR BID PLANS
03/20/23	PRELIMINARY PLANS TO CITY

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CITY OF BIRMINGHAM - 2023 ASPHALT REHABILITATION PROGRAM - HRC JOB No. 20231161

5/1/2023 2:27 PM

GENERAL PROVISIONS

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE M.D.C.T. 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION EXCEPT AS NOTED HEREIN AND IN THE PROPOSAL BOOK.

THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE LOCAL FIRE AND POLICE DEPARTMENTS 24 HOURS IN ADVANCE OF PROPOSED ROAD CLOSURES.

THE CONTRACTOR AND/OR HIS SUBCONTRACTOR SHALL NOTIFY MISS DIG: (1-800-482-7171 OR 811) AND THE CITY OF BIRMINGHAM WATER, SEWER, FIRE AND POLICE DEPARTMENTS 3 WORKING DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

CONTRACTOR TO PROTECT EXISTING ABOVE GROUND AND BELOW GROUND FACILITIES INCLUDING: UTILITIES, POLES, TREES, SHRUBS AND OTHER VEGETATION UNLESS NOTED FOR REMOVAL ON THE PLANS; AND SHALL REPAIR OR REPLACE DAMAGED FACILITIES AT NO COST TO THE OWNER. TREES SHALL BE NEATLY TRIMMED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT AND MAINTAIN EXISTING SERVICES TO EXISTING HOMES, INCLUDING SANITARY, WATER, GAS, CABLE AND OTHER UTILITIES.

CONTRACTOR SHALL PROTECT ALL OTHER SITE FEATURES SUCH AS PLANTERS, MAILBOXES, FENCES, LANDSCAPING, WALLS, WALKS, PORCHES, ETC. AND RESTORE TO ORIGINAL CONDITION IF DAMAGED EXCEPT AS NOTED. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR THIS WORK.

ALL CONSTRUCTION STAGING AREAS SHALL BE APPROVED BY THE PROJECT ENGINEER, CITY OF BIRMINGHAM, AND LANDOWNERS PRIOR TO START OF CONSTRUCTION. ANY AREAS BEYOND CONSTRUCTION RIGHT-OF-WAY SECURED BY THE CONTRACTOR FOR USE AS CONSTRUCTION STAGING SHALL BE AT HIS OWN EXPENSE. THE RESTORATION OF ALL STAGING AREAS SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE OF THE WORK OF THIS PROJECT. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR THIS WORK.

HMA BOND COAT WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF HMA CONSTRUCTED FOR THE PROJECT.

UNDER CONSTRUCTION

WHEN EXCAVATING FOR CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES.

FINAL ADJUSTMENTS OF ALL STRUCTURES BOTH NEW AND EXISTING SHALL BE MADE PRIOR TO PLACING THE FINAL SURFACE COURSE OF HMA.

DRAINAGE STRUCTURE LOCATIONS ARE REFERENCED TO CONSTRUCTION CENTERLINE. VERIFY LAYOUT OF CURB INLETS FROM PAVEMENT ALIGNMENT PRIOR TO CONSTRUCTION.

ALL SEWER TRENCHES SHALL BE BACKFILLED OR OTHERWISE PROTECTED OVERNIGHT AS DIRECTED BY THE ENGINEER. PAYMENT IS INCLUDED IN THE PAY ITEM FOR UTILITY CONSTRUCTION.

SIDEWALK IS SUSCEPTIBLE TO CRACKING THEREFORE, ONCE IT HAS BEEN POURED, OR IF IT IS EXISTING SIDEWALK, THE CONTRACTOR SHALL NOT PUT ANY EQUIPMENT OF ANY KIND ON IT, FOR ANY REASON, EVEN FOR TURF ESTABLISHMENT OR RESTORATION WORK OUTSIDE THE SIDEWALK. THE CONTRACTOR SHALL PLAN AND STAGE NECESSARY WORK OUTSIDE THE SIDEWALK TO PREVENT THE PLACEMENT OF ANY EQUIPMENT ON THE SIDEWALK. EXISTING OR NEW, CRACKED, CHIPPED, SPALLED, OR DAMAGED SIDEWALK, NEW OR EXISTING, SHALL NOT BE ACCEPTED AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

RESTORE AND STABILIZE ALL SLOPES IN ACCORDANCE WITH THE PLANS AND AS DESCRIBED IN THE SPECIAL PROVISION FOR TURF ESTABLISHMENT.

ALL AREAS DISTURBED BY THE CONTRACTOR AND/OR HIS SUBCONTRACTOR BEYOND THE SLOPE STAKE LINE (SSL) LIMITS OF THE PROJECT SHALL BE RESTORED IN ACCORDANCE WITH SPECIAL PROVISION FOR TURF ESTABLISHMENT. NO ADDITIONAL PAYMENT OR COMPENSATION WILL BE MADE FOR THIS ACTIVITY.

ALL FINAL GRADES SHALL SLOPE TO DRAIN TOWARD CATCH BASINS, DITCHES, SWALES, CURBS, AND DRAINAGEWAYS UNLESS OTHERWISE NOTED.

THE CONTRACTOR SHALL NOT PERFORM ANY SIDE WORK CONTRACTED PRIVATELY WITHIN THE CONSTRUCTION AREA.

OFFSET SHOWN IN PLAN/PROFILE IS TO EDGE OF METAL WHEN STRUCTURE IS LOCATED IN ROADWAY CURB AND GUTTER. RIM GRADIES IN ROADWAY ARE GIVEN AS EDGE OF PAVEMENT. OFFSET IS TO CENTER OF CASTING WHEN STRUCTURE IS LOCATED IN GREENBELT.

SUMP DEPTHS FROM LOWEST PROPOSED INVERT, CATCH BASIN (CB) MEANS 2 FT SUMP INCLUDED IN DRAINAGE STRUCTURE PAY.

ITEM INLETS (INL) AND MANHOLES (MH) DO NOT HAVE A SUMP UNLESS SPECIFICALLY CALLED OUT ON PLANS.

THE SOIL BORING LOGS DEPICT POINT LOCATIONS AND DO NOT INFER THAT THE SURFACE CONDITIONS ARE THE SAME IN OTHER AREAS. BORINGS AND PAVEMENT CORE LOCATIONS ARE SHOWN ON THE PLANS. SOIL BORINGS AND THE GEOTECHNICAL INVESTIGATION IS BY: G2 CONSULTING GROUP, TROY MI.

PLAN DIMENSIONS AND MEASUREMENTS ARE BASED ON FIELD TOPOGRAPHIC SURVEY BY: HUBBELL, ROTH & CLARK, INC. PROPERTY OWNER'S NAMES, WHERE SHOWN, ARE FOR INFORMATION ONLY, AND THEIR ACCURACY IS NOT GUARANTEED.

UTILITIES

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED FROM SURVEYS AND FROM UTILITY RECORD MAPS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO NOTIFY THE PROPER UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING UTILITIES AND THEIR LOCATIONS AS PART OF THE CONSTRUCTION OF THIS PROJECT. ANY OMISSION OR VARIATION FROM THE LOCATIONS SHOWN, PURSUANT TO ACT 174 OF THE PA OF 2013 AS A CONDITION OF THIS CONTRACT, NOTICE SHALL BE GIVEN TO MISS DIG PRIOR TO UNDERGROUND WORK TO BE PERFORMED.

THE FOLLOWING UTILITY COMPANIES HAVE FACILITIES WITHIN THE PROJECT LIMITS:

NAME & ADDRESS OF UTILITIES TYPE OF UTILITY

AT&T TELECOMMA
ATTN: MATT SLIWA FIBER OPTIC
54 N. MILL STREET
BOX 32
PONTIAC, MI 48342
O: (313) 263-9030
C: (248) 877-0762
E: MSB13@ATT.COM

CITY OF BIRMINGHAM WTR. MAIN,
ATTN: MELISSA COATTA STM SWR &
151 MARTIN ST SAN SWR.
BIRMINGHAM, MI 48009
O: (205)550-1850

CONSUMERS ENERGY GAS
LUVIONA SERVICE CENTER
ATTN: CHERI PAYNE
11801 FARRINGTON ROAD
LUVIONA, MI 48150
O: (248) 799-0704
C: (248) 497-0771
E: CHERI.PAYNE@CMSENERGY.COM

DEL ELECTRIC
ATTN: CARL FORD
8001 HAGGERTY ROAD
BELLEVILLE, MI 48111
O: (248) 492-2357

THE CONTRACTOR SHALL, BEFORE EACH DAYS WORK, OR WHEN MOVING TO A NEW AREA OF WORK, DETERMINE AND EVALUATE THE LOCATION OF ALL UNDERGROUND FACILITIES IN THE AREA. IF THE LOCATION STAKES HAVE BEEN MOVED OR DO NOT APPEAR CORRECT, THE CONTRACTOR SHALL NOT EXCAVATE UNTIL ALL UTILITIES HAVE HAD AN OPPORTUNITY TO CHECK OR RESTAKE THEIR LOCATIONS. ANY DELAYS INCURRED DUE TO CHECKING OR RESTAKING OF UTILITIES SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION.

ALL GAS FACILITIES SHALL BE PROTECTED AND SUPPORTED PER DISTRIBUTION STANDARDS AND REQUIREMENTS.

THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL NECESSARY PERMITS PRIOR TO WORK ON THE FOLLOWING UTILITIES:

ROAD COMMISSION FOR OAKLAND COUNTY CONSTRUCTION SIGNING

PRIOR TO WORK ON FACILITIES BELONGING TO THE ABOVE AGENCIES, A MINIMUM OF 72 HOURS NOTICE MUST BE GIVEN IN ORDER TO INSURE PROPER INSPECTION BY THE RESPECTIVE AGENCIES.

THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK, AND SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO INSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL DIAL (800) 482-7171, OR A MINIMUM OF 3 FULL WORKING DAYS, EXCLUDING SATURDAY, SUNDAY AND HOLIDAYS, PRIOR TO EXCAVATING IN THE VICINITY OF UTILITY LINES. ALL "MISS DIG" PARTICIPATING MEMBERS WILL THERE 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.

EARTHWORK AND GRADING

ALL STRIPPED TOPSOIL SHALL BE THE PROPERTY OF THE CONTRACTOR. ONSITE STORAGE WILL NOT BE PERMITTED WITHOUT APPROVAL BY THE ENGINEER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL REMOVAL, HAULING AND STORAGE OR DISPOSAL OFFSITE.

THROUGHOUT THE PROJECT, NO UNDERCUTS WILL BE LEFT OVERNIGHT NEXT TO THE EDGE OF THE TRAVELED ROADWAY.

ALL SLOPES SHALL BE FINISHED AS CLASS 'A' SLOPES.

SAWING FOR PAVEMENT REMOVAL AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, TO THE DEPTH REQUIRED FOR CLEAN REMOVAL OF PAVEMENTS OR CURBS, SHALL BE INCLUDED IN THE ITEM OF "Pave, Rm" OR "HMA Surface, Rm" OR "Curb and Subst, Rm". SAWING DEPTHS SHALL BE ADEQUATE TO PREVENT SPALLING, CHIPPING, OR DAMAGE TO EXISTING PAVEMENT EDGES LEFT IN PLACE.

SOIL EROSION AND SEDIMENTATION CONTROL, IN ADDITION TO THE GENERAL SOIL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS IN THE PROPOSAL THE FOLLOWING MEASURES SHALL BE INCORPORATED INTO THIS PROJECT:

1. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO MINIMIZE THE AREAS LEFT BARREN DURING CONSTRUCTION AND TO DISTURB ONLY THOSE AREAS ABSOLUTELY REQUIRED FOR THE CONSTRUCTION OF THE PROJECT.

2. EROSION CONTROL ITEMS (CB INSERTS, SILT FENCE, ETC.) AS CALLED OUT ON PLAN AND/OR AS DIRECTED BY THE ENGINEER SHALL BE INSTALLED AND MAINTAINED ACCORDING TO THE SPECIFICATIONS, AND SHALL BE REMOVED WHEN THEY ARE NO LONGER EFFECTIVE AS DETERMINED BY THE ENGINEER. NO SEPARATE PAYMENT SHALL BE ALLOWED FOR EITHER MAINTENANCE OR REMOVAL OF THE EROSION CONTROL ITEMS.

3. THE CONTRACTOR SHALL REMOVE SEDIMENT COLLECTED IN CULVERTS, SEDIMENT TRAPS, & SUMPS OF ALL DRAINAGE STRUCTURES. THE ENGINEER WILL INSPECT SUMPS AND CULVERTS AFTER STORMS AND DIRECT THE CONTRACTOR TO CLEANOUT SUMPS AND CULVERTS TO PROVIDE FOR SEDIMENT COLLECTIONS CLEARING SUMPS AND CULVERTS FOR SEDIMENTATION CONTROL SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE S.E.C.P. PAY ITEM.

4. THE CONTRACTOR SHALL FOLLOW LOCAL RULES AND REGULATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL FOR ALL MATERIALS THAT ARE DISPOSED OF OFF THE PROJECT SITE.

TRAFFIC SHALL BE MAINTAINED AS SHOWN ON THE PLANS AND AS DETAILED IN THE MOT SPECIFICATION. ALL WORK THAT HAS NOT BEEN ACCOUNTED FOR IN A PARTICULAR BID ITEM SHALL BE INCLUDED IN LUMP SUM AMOUNT BID FOR Misc. Traffic Devices.

ALL EXCAVATED AREAS SHALL BE DELINEATED BY PLASTIC DRUMS AT THE CLOSE OF EACH DAY ALONG THE ENTIRE LENGTH OF ANY EXCAVATION. PLASTIC DRUMS TO BE PLACED OVER ALL EXPOSED CASTINGS IN ROADWAY AT CLOSE OF EACH DAY. TYPE IS ON THE PROJECT TO BE PLASTIC DRUMS, HIGH INTENSITY FURNISHED AND MAINTAINED BY THE CONTRACTOR.

CONTRACTOR SHALL MAINTAIN SAFE, DUST FREE CONDITIONS ON EXISTING STREETS WHICH SHALL REQUIRE DAILY REMOVAL OF EARTH TRACKED OR SPILLED ON ROAD SURFACE, AND OTHER DUST CONTROL MEASURES AS REQUIRED BY THE PROJECT ENGINEER. EXCESSIVE DUST WILL NOT BE TOLERATED AT ANY TIME DURING CONSTRUCTION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN OTHER ITEMS OF WORK.

MISCELLANEOUS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE SLOPE STAKE LINE, INCLUDING EXISTING FENCING, LAWN, TREES AND SHRUBS.

THE CONTRACTOR MUST REPAIR OR REPLACE ANY SPRINKLER HEADS, LINES, ETC. THAT MAY BE DAMAGED DURING THE COURSE OF CONSTRUCTION. PAYMENT FOR SPRINKLER REPAIR WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

WHEN THE FOLLOWING ITEMS OF WORK ARE SPECIFIED ON THE PLANS OR REQUIRED BY THE ENGINEER IN THE CONSTRUCTION OF THE PROJECT, THE ITEM WILL NOT BE PAID FOR SEPARATELY, UNLESS A PAY ITEM FOR THESE ITEMS IS PROVIDED.

- RELOCATING ORNAMENTAL ROCKS AND BouldERS TO THE RIGHT-OF-WAY LINE
- HMA BOND COAT
- ROCK EXCAVATION
- SWEEPING PAVEMENT
- DUST PALLIATIVE
- SAWING FOR PAVEMENT AND CURB REMOVAL
- CONCRETE ADMIXTURES
- REMOVING EDGE DRAIN, UNDER DRAIN, FRENCH DRAINS, OR DRAIN TILE
- PROJECT CLEANUP

THE FOLLOWING ITEMS OF WORK SHALL BE DONE AS THEY APPLY THROUGHOUT THE PROJECT OR AS DIRECTED BY THE ENGINEER. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN AND PROFILE SHEETS:

MISCELLANEOUS AS DIRECTED QUANTITIES		
PAY ITEM	QTY	UNIT
Mobilization, Max 25,000	1	LS
Color Audio Visual Survey	1	LS
Maintenance Aggregate	125	ton
Subgrade Undercut & Backfill	200	CY
Pave Joint and Crack Repair, Detail 7	400	Lt
HMA Hand Patching	360	ton



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HUBBELL, ROTH & CLARK, INC
 CONSULTING ENGINEERS SINCE 1915
 508 HOLEY DRIVE BIRMINGHAM HALL, MICH. 48031-9824
 PHONE: (248) 454-6300
 FAX (1st. Floor): (248) 454-6312
 FAX (2nd. Floor): (248) 454-8999
 WWW SITE: www.hrceng.com

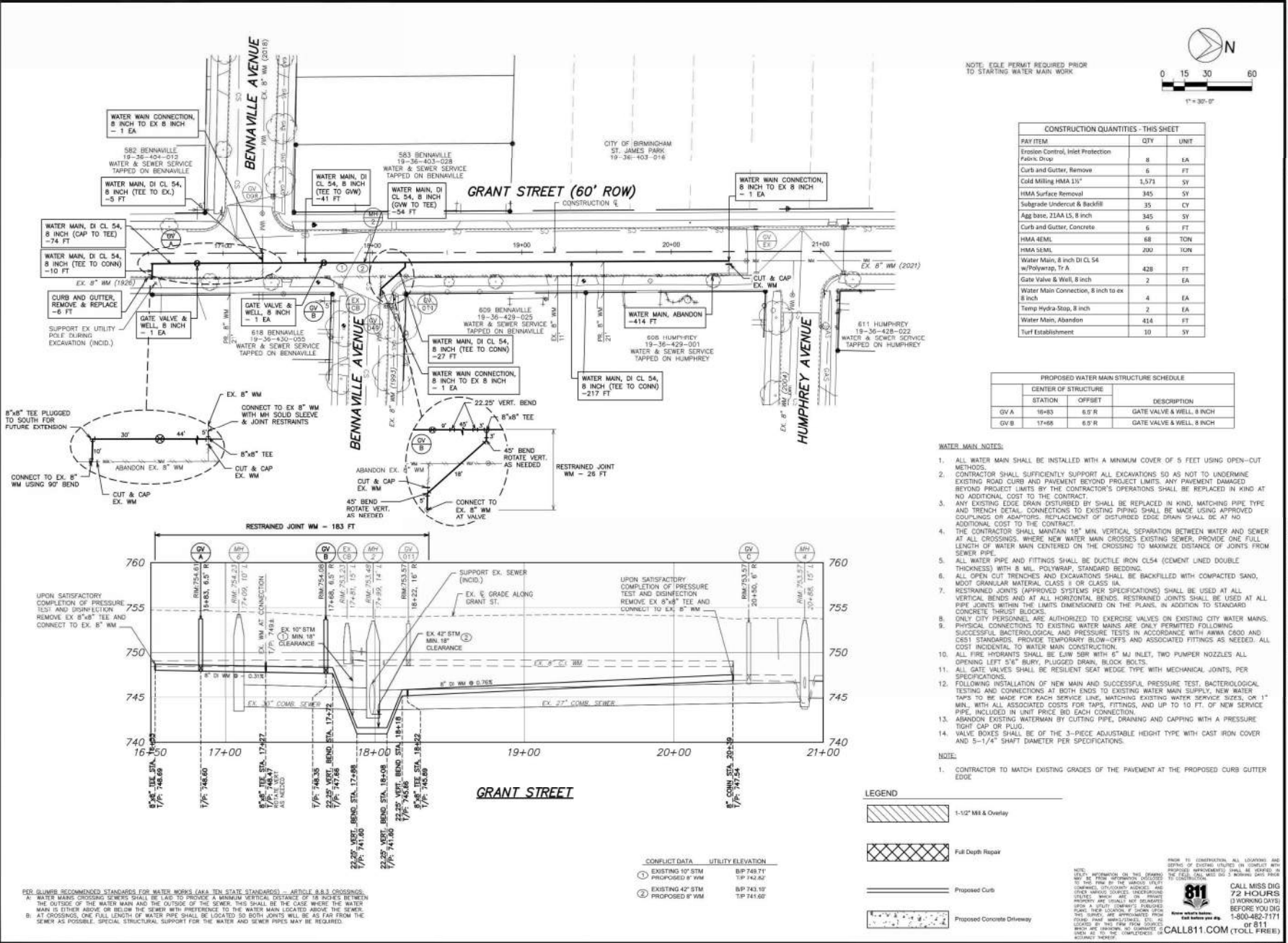
NO.	DATE	DESCRIPTION
1	5/1/2023	REVISED FOR E&E REVIEW
2	5/1/2023	ISOLATED FOR BID PLANS
3	5/1/2023	PRELIMINARY PLANS TO CITY
DATE	ADDITIONS AND/OR REVISIONS	
DESIGNED	RHM	
DRAWN	DMB	
CHECKED	JAB	
APPROVED	MCM	



CITY OF BIRMINGHAM
2023 ASPHALT
REHABILITATION PROJECT
CITY CONTRACT #7-23(P)

PROJECT NOTES

HRC JOB NO.	20221161	SCALE	NO SCALE
DATE	May 2023	SHEET NO.	2 OF 14



NOTE: EOLE PERMIT REQUIRED PRIOR TO STARTING WATER MAIN WORK

N

0 15 30 60
1" = 30'-0"

CONSTRUCTION QUANTITIES - THIS SHEET

PAY ITEM	QTY	UNIT
Erosion Control, Inlet Protection	8	EA
Curb and Gutter, Remove	6	FT
Cold Milling HMA 1 1/2"	1,573	SY
HMA Surface Removal	345	SY
Subgrade Undercut & Backfill	35	CY
Agg base, 2 1/2" x 1.5, 8 inch	345	SY
Curb and Gutter, Concrete	6	FT
HMA SEMI	68	TON
HMA SEMI	200	TON
Water Main, 8 inch DI CL 54 w/Polywrap, Tr A	428	FT
Gate Valve & Well, 8 inch	2	EA
Water Main Connection, 8 inch to ex 8 inch	4	EA
Temp Hydro-Stop, 8 inch	2	EA
Water Main, Abandon	414	FT
Turf Establishment	10	SY

PROPOSED WATER MAIN STRUCTURE SCHEDULE

STATION	OFFSET	DESCRIPTION	
		STATION	DESCRIPTION
GV A	16+83	8'D R	GATE VALVE & WELL, 8 INCH
GV B	17+85	8'D R	GATE VALVE & WELL, 8 INCH

- WATER MAIN NOTES:**
- ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 5 FEET USING OPEN-CUT METHODS.
 - CONTRACTOR SHALL SUFFICIENTLY SUPPORT ALL EXCAVATIONS SO AS NOT TO UNDERMINE EXISTING ROAD CURB AND PAVEMENT BEYOND PROJECT LIMITS. ANY PAVEMENT DAMAGED BEYOND PROJECT LIMITS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN KIND AT NO ADDITIONAL COST TO THE CONTRACTOR.
 - ANY EXISTING LEGAL DRAIN DISTURBED BY SHALL BE REPLACED IN KIND, MATCHING PIPE TYPE AND TRENCH DETAIL. CONNECTIONS TO EXISTING PIPING SHALL BE MADE USING APPROVED COUPLINGS OR ADAPTORS. REPLACEMENT OF DISTURBED LEGAL DRAIN SHALL BE AT NO ADDITIONAL COST TO THE CONTRACTOR.
 - THE CONTRACTOR SHALL MAINTAIN 10' MIN. VERTICAL SEPARATION BETWEEN WATER AND SEWER AT ALL CROSSINGS. WHERE NEW WATER MAIN CROSSES EXISTING SEWER, PROVIDE ONE FULL LENGTH OF WATER MAIN CENTERED ON THE CROSSING TO MAXIMIZE DISTANCE OF JOINTS FROM SEWER PIPE.
 - ALL WATER PIPE AND FITTINGS SHALL BE DUCTILE IRON CL54 (CEMENT LINED DOUBLE THICKNESS) WITH 8 MIL. POLYWRAP, STANDARD BEDDING.
 - ALL OPEN CUT TRENCHES AND EXCAVATIONS SHALL BE BACKFILLED WITH COMPACTED SAND, MOIST GRANULAR MATERIAL, CLASS II OR CLASS III.
 - RESTRAINED JOINTS (APPROVED SYSTEMS PER SPECIFICATIONS) SHALL BE USED AT ALL VERTICAL BENDS AND AT ALL HORIZONTAL BENDS. RESTRAINED JOINTS SHALL BE USED AT ALL PIPE JOINTS WITHIN THE LIMITS DIMENSIONED ON THE PLANS. IN ADDITION TO STANDARD CONCRETE THROST BLOCKS.
 - ONLY CITY PERSONNEL ARE AUTHORIZED TO EXERCISE VALVES ON EXISTING CITY WATER MAINS.
 - PHYSICAL CONNECTIONS TO EXISTING WATER MAINS ARE ONLY PERMITTED FOLLOWING SUCCESSFUL BACTERIOLOGICAL AND PRESSURE TESTS IN ACCORDANCE WITH AWWA C600 AND C651 STANDARDS. PROVIDE TEMPORARY BLOW-OFFS AND ASSOCIATED FITTINGS AS NEEDED. ALL COST INCIDENTAL TO WATER MAIN CONSTRUCTION.
 - ALL FIRE HYDRANTS SHALL BE LOW SOB WITH 8" MJ INLET, TWO PUMPER NOZZLES ALL OPENING LEFT 5/8" BURY, PLUGGED DRAIN, BLOCK BOLTS.
 - ALL GATE VALVES SHALL BE RESILIENT SEAT WEDGE TYPE WITH MECHANICAL JOINTS, PER SPECIFICATION.
 - FOLLOWING INSTALLATION OF NEW MAIN AND SUCCESSFUL PRESSURE TEST, BACTERIOLOGICAL TESTING AND CONNECTIONS AT BOTH ENDS TO EXISTING WATER MAIN SUPPLY, NEW WATER TAPS TO BE MADE FOR EACH SERVICE LINE, MATCHING EXISTING WATER SERVICE SIZES, OR 1" MIN., WITH ALL ASSOCIATED COSTS FOR TAPS, FITTINGS, AND UP TO 10 FT. OF NEW SERVICE PIPE, INCLUDED IN UNIT PRICE, BID EACH CONNECTION.
 - ABANDON EXISTING WATER MAIN BY CUTTING PIPE, DRAINING AND CAPPING WITH A PRESSURE TIGHT CAP OR PLUG.
 - VALVE BOXES SHALL BE OF THE 3-PIECE ADJUSTABLE HEIGHT TYPE WITH CAST IRON COVER AND 5-1/4" SHAFT DIAMETER PER SPECIFICATIONS.

LEGEND

- 1-1/2" Mill & Overlay
- Full Depth Repair
- Proposed Curb
- Proposed Concrete Driveway

CONFLICT DATA UTILITY ELEVATION

1. EXISTING 10" STM PROPOSED 8" WM BP 748.71 TP 742.62

2. EXISTING 42" STM PROPOSED 8" WM BP 743.10 TP 741.69

NOTE: PER CONSTRUCTION ALL LOCATIONS ARE SHOWN BY EXISTING UTILITIES IN CONCORDANCE WITH APPROVED APPROXIMATIONS SHALL BE SHOWN IN THE FIELD. ALL MEASUREMENTS SHALL BE TO CENTERLINE OF CURB UNLESS OTHERWISE NOTED.

811
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1-800-482-7171

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CONTRACTOR TO MATCH EXISTING GRADES OF THE PAVEMENT AT THE PROPOSED CURB GUTTER EDGE

BIRMINGHAM
A WALKABLE CITY

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CONSULTING ENGINEERS SINCE 1915

CITY OF BIRMINGHAM
2023 ASPHALT REHABILITATION PROJECT CITY CONTRACT #7-23(P)

GRANT ST WATER MAIN PLAN

CONTRACTOR TO MATCH EXISTING GRADES OF THE PAVEMENT AT THE PROPOSED CURB GUTTER EDGE

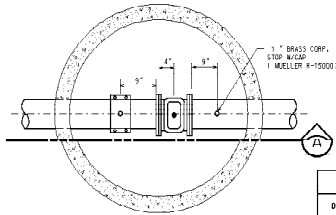
2023 ASPHALT REHABILITATION PROJECT CITY CONTRACT #7-23(P)

GRANT ST WATER MAIN PLAN

CONTRACTOR TO MATCH EXISTING GRADES OF THE PAVEMENT AT THE PROPOSED CURB GUTTER EDGE

2023 ASPHALT REHABILITATION PROJECT CITY CONTRACT #7-23(P)

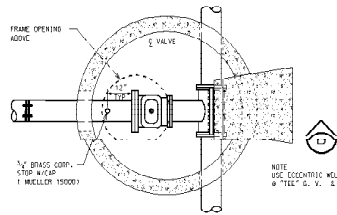
DATE: September 2023
SHEET NO: 11 OF 14



GATE WELL PLAN

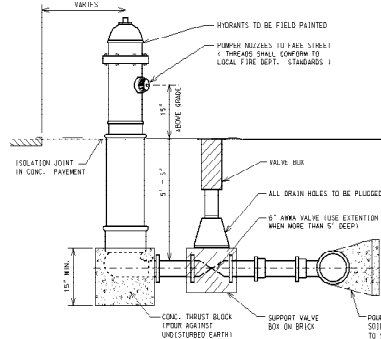
NO SCALE

GATE WELL SCHEDULE			
DESCRIPTION	DIM.	PIPE DIA.	INCHES
INSIDE DIA.	A	6"	12"
INSIDE DIA.	A	6"	12"
WALL THICK.	B	3"	7"
WALL THICK.	C	4"	4"

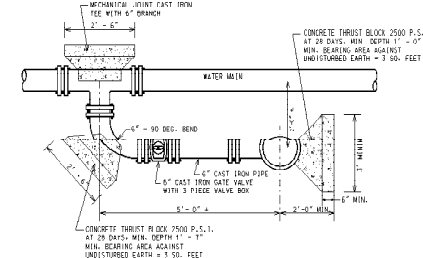


TAPPING SLEEVE, VALVE & WELL PLAN

NO SCALE

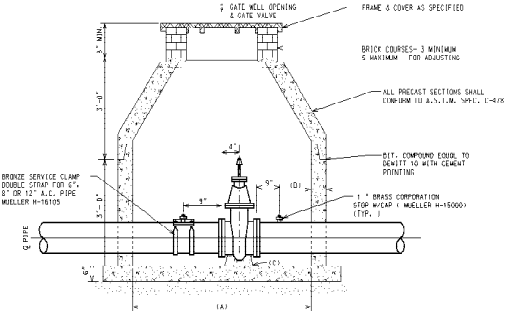


FIRE HYDRANT GUARD POSTS DETAIL



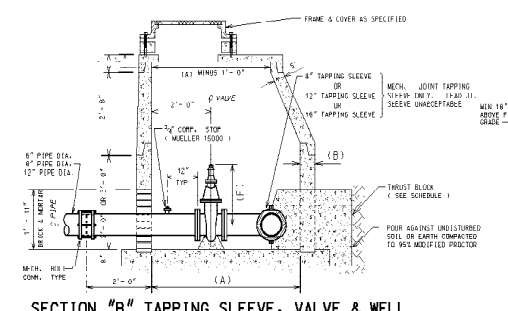
"L" HYDRANT CONNECTION

NO SCALE



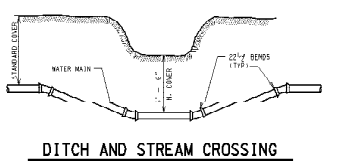
SECTION "A" GATE WELL

NO SCALE



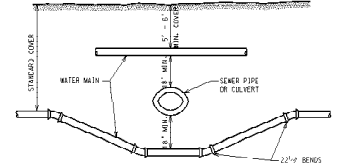
SECTION "B" TAPPING SLEEVE, VALVE & WELL

NO SCALE



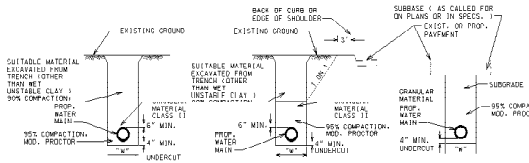
DITCH AND STREAM CROSSING

NO SCALE

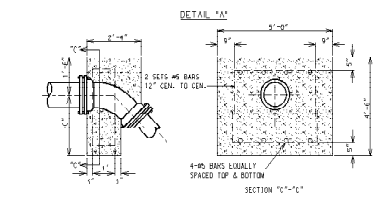


SEWER OR CULVERT CROSSING

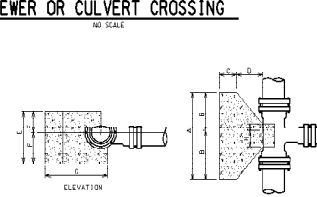
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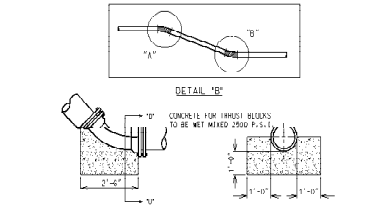
BEDDING DETAILS



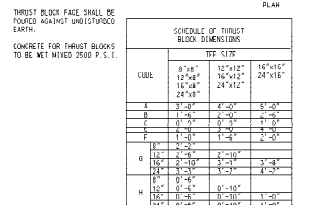
DETAIL "A"



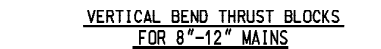
DETAIL "B"



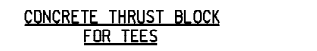
DETAIL "C"



DETAIL "D"

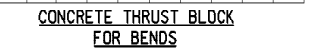


VERTICAL BEND THRUST BLOCKS FOR 8"-12" MAINS



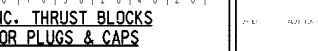
CONCRETE THRUST BLOCK FOR TEES

N. T. S.



CONCRETE THRUST BLOCK FOR BENDS

N. I. S.



CONC. THRUST BLOCKS FOR PLUGS & CAPS

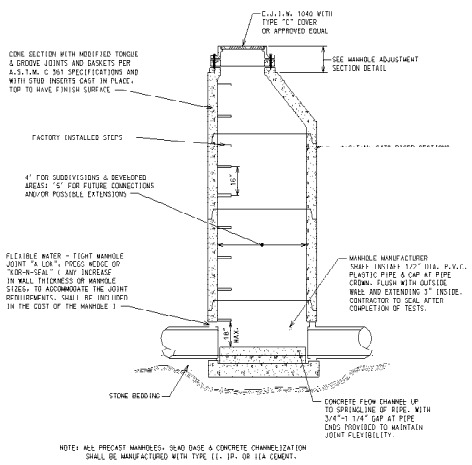
SIZE	A	B	C	D	E	F	G
8"	11-1/2"	11-1/2"	11-1/2"	11-1/2"	11-1/2"	11-1/2"	11-1/2"
10"	13-1/2"	13-1/2"	13-1/2"	13-1/2"	13-1/2"	13-1/2"	13-1/2"
12"	15-1/2"	15-1/2"	15-1/2"	15-1/2"	15-1/2"	15-1/2"	15-1/2"
14"	17-1/2"	17-1/2"	17-1/2"	17-1/2"	17-1/2"	17-1/2"	17-1/2"
16"	19-1/2"	19-1/2"	19-1/2"	19-1/2"	19-1/2"	19-1/2"	19-1/2"
18"	21-1/2"	21-1/2"	21-1/2"	21-1/2"	21-1/2"	21-1/2"	21-1/2"
20"	23-1/2"	23-1/2"	23-1/2"	23-1/2"	23-1/2"	23-1/2"	23-1/2"
24"	27-1/2"	27-1/2"	27-1/2"	27-1/2"	27-1/2"	27-1/2"	27-1/2"

City of Birmingham

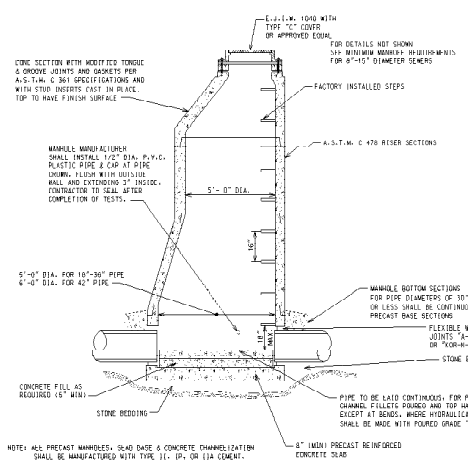
131 MAKIN STREET, BIRMINGHAM, MICHIGAN 48102

WATER MAIN STANDARD DETAILS

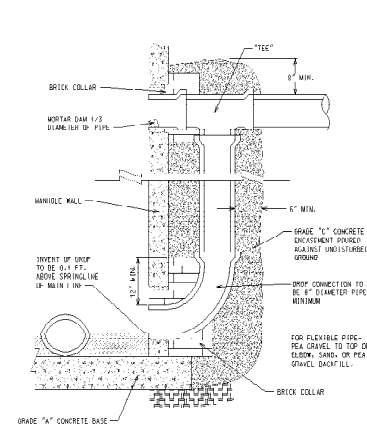
SCALE: AS SHOWN
DATE: 11/11/11
DWG. NO.: WM-1



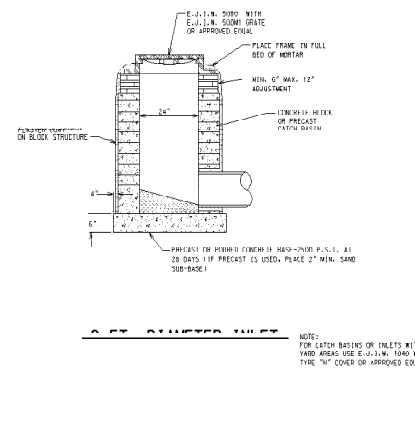
SEWER MANHOLE
1 8" THRU 15" DIA. SEWERS



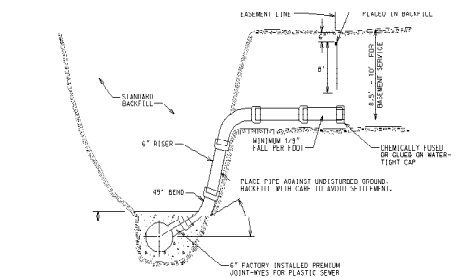
SEWER MANHOLE
1 18" THRU 42" DIA. SEWERS



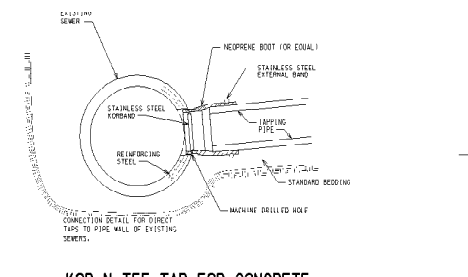
EXTERNAL DROP CONNECTION



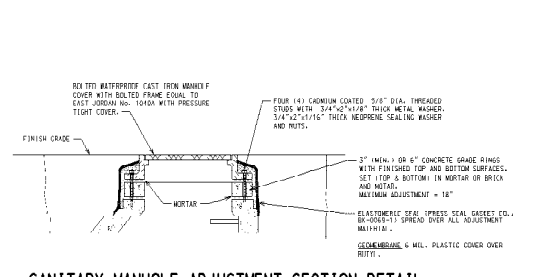
4 FT. DIAMETER CATCH BASIN



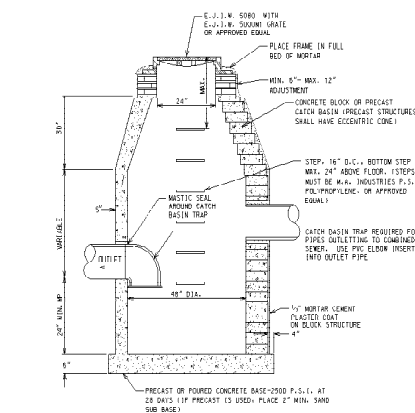
BUILDING LEAD DETAIL
9" - 15" COVER



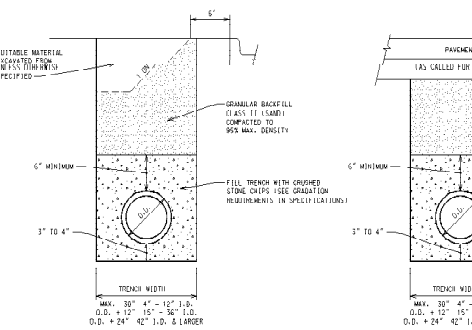
KOR-N-TEE TAP FOR CONCRETE
NO SCALE



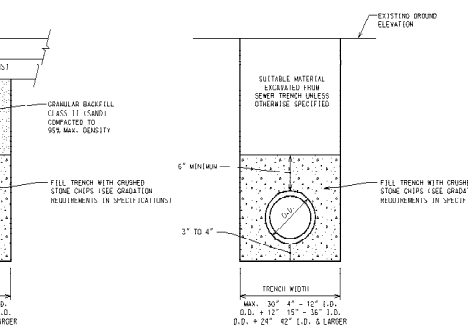
SANITARY MANHOLE ADJUSTMENT SECTION DETAIL



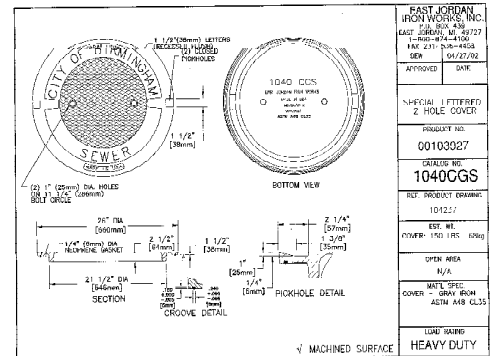
4 FT. DIAMETER CATCH BASIN



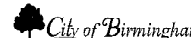
TRENCH DETAIL "A"
SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED
NOT TO SCALE



TRENCH DETAIL "B"
SEWER NOT UNDER ROAD BED
NOT TO SCALE



EAST JORDAN IRON WORKS, INC.	
1311 1/2 N. 4TH ST. BIRMINGHAM, AL. 35207	
TEL: 205-332-2400 FAX: 205-332-4604	
SER: 01/27/02	
APPROVED	DATE
PRODUCT NO: 00103027	
CATALOG NO: 1040CGS	
REF. PRODUCT OR DRAWING: 101227	
EST. NO: 150 1/8 1500	
OPEN AREA: N/A	
MATERIAL SPEC: COVER - GRAY IRON ASTM A48 B 15.5	
LOAD RATING: HEAVY DUTY	



City of Birmingham

131 1/2 NORTH STREET, BIRMINGHAM, MICHIGAN 48102

SEWER STANDARD DETAILS

**EDGEWOOD ROAD PAVING PROJECT
CONTRACT #6-24(S)**



**CITY OF BIRMINGHAM
ENGINEERING DEPARTMENT**

Contractor's Name: Eminent Excavating, LLC

Copy # 1

EDGEWOOD ROAD PAVING PROJECT
CONTRACT # 6-24(S)
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711	Concrete Durability Requirements _____	5 Pages
712	Concrete Sidewalk Construction _____	8 Pages
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Appendices:

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Addenda:

Addendum No. 1:	_____	2 Pages
Addendum No. 2:	_____	2 Pages
Addendum No. 3:	_____	1 Page

EDGEWOOD ROAD PAVING PROJECT CONTRACT#6-24(S)

SWORN STATEMENT OF QUALIFICATIONS

In order to provide the City of Birmingham with Contractors and Subcontractors who will carry out the work in a timely and satisfactory manner, a Sworn Statement of Qualifications must be submitted to the Engineering Division, City of Birmingham, prior to the bid opening by close of business, **5:00 p.m., Thursday, December 14, 2023**. The qualifications of the General Contractor and Subcontractors to be used on the project will be reviewed on the basis of the proposed bidder's past performance on sewer, water main, and/or paving work of a similar nature for the City of Birmingham and other owners. Those bidders and bidders' subcontractors who are determined not to be suitable to bid on any work shall be notified in writing of the determination before the bids are opened.

The Bidder must answer all questions. If more space is needed to complete a question, attach a separate sheet.

Name: Eminent Excavating LLC

Address: 514 S Fort St, Detroit MI 48217

Telephone: (313) 398-9368 Fax: _____ Email: _____

mguzman@eminentexcavating.com Website: _____

Number of Years Operating Under Your Present Name: 2019

General Nature of Work Performed: We specialize in Sanitary, Storm, Water Main, Grading, Clearing and Pavement Restoration.

Number of construction crews **employed by your company** relating to the type of work under this contract: Six

Number of construction personnel that constitutes a crew (foreman, pipe layers, excavator, and loader operators, etc.): Foreman, Pipe Layer, Top Man, Excavator Operator, Loader Operator, and Truck Driver

Number of construction crews the company **will place on site full-time** in order to complete this project, in its entirety, within the designated time frame: 2

The undersigned states that he/she has performed sewer and/or paving work similar in character and condition to that described in the Proposal. List three (3) projects that have been completed over the last three (3) years, including all work performed for the City of Birmingham. The contract amount must be, at minimum, within 50% of the engineer's estimate, except for work that was performed for the City of Birmingham. References provided below the 50% minimum will not be accepted.

REFERENCE PROJECT #1:

Project Name: Inkster Sewer Rehabilitation Phase 2

Owner: City of Inkster

Contact Person: Jerome Bivins Telephone No.: (313)563-9774

Contract Amount: \$ 1.9 Million

Final Contract Price: \$ 1.7 Million

Date Completed: 04/2023

Description of Work Performed:
Project consisted of Sewer, Storm, Watermain Construction and Pavement Restoration.

REFERENCE PROJECT#2:

Project Name: Maple Rd Pavement Restoration

Owner: Mdot/ City of Birmingham

Contact Person: Francis Brzezinski Telephone No.: 734.899.0298

Contract Amount: \$ 450,000

Final Contract Price: \$ 450,000

Date Completed: 12/2020

Description of Work Performed:
Pavement and Sidewalk Restoration on Maple Rd from Old Woodward to Southfield Rd.

REFERENCE PROJECT #3:

Project Name: City of Ecorse As Needed Repairs

Owner: City of Ecorse

Contact Person: Brent Kraft Telephone No.: (586)781-8950

Contract Amount: \$ TBD

Final Contract Price: \$ 1,000,000

Date Completed: 11/2023

Description of Work Performed:
Watermain Repairs throughout the City of Ecorse that varied from Main Repairs, Fire Hydrant
Installs, Gate Well Installs, Gate Valve Installs, Water Service Installs, Sewer Repairs, and
Storm Drainage Repairs.

List major work presently under contract:

<u>Name of Project</u>	<u>Percent Complete</u>	<u>Owner</u>	<u>Engineer</u>	<u>Contract Amount</u>
<u>BNA Gordie Howe</u>	<u>75 %</u>	<u>BNA</u>	<u>Rodrigo Paredes</u>	<u>\$ 5.7 Million</u>
<u>Inkster Sewer Rehabilitation Phase 3</u>	<u>15 %</u>	<u>City of Inkster</u>	<u>Brent Kraft</u>	<u>\$ 900,000</u>
<u>RSVSD Manhole Rehab</u>	<u>80 %</u>	<u>Wayne County</u>	<u>Nathan Zgnilec</u>	<u>\$ 1.2 Million</u>
<u>_____</u>	<u>_____ %</u>	<u>_____</u>	<u>_____</u>	<u>\$ _____</u>
<u>_____</u>	<u>_____ %</u>	<u>_____</u>	<u>_____</u>	<u>\$ _____</u>

SUBCONTRACTOR INFORMATION:

The Bidder agrees to use the following subcontractors for the performance of the work of their respective trades for this project, unless otherwise approved in writing by the Owner prior to signing of the contract. Contractor shall include, at a minimum, the subcontractor that will perform any work with a total value of 25% or more of the contract total value.

<u>Name, Address & Telephone Number of Subcontractor</u>	<u>Type of Work By Subcontractor</u>	<u>Percentage of Contract Value by Subcontractor</u>
N/A		

CONTRACTOR QUESTIONNAIRE:

Have you, at any time, failed to complete a contract?

___ Yes No

Are there any judgements, claims or suits pending by or outstanding against you?

___ Yes No

If the answer to either question is Yes, submit details on separate sheet.

List all judgments against your firm due to construction contracts in the last three (3) years. Include separate pages if necessary.

CERTIFICATION

I hereby certify that the above information is true and correct this 13 day of December, 2023.

By: Eminent Excavating LLC

Signature and Title: [Signature] OPM

Written Name: Francisco Guardado

Address: 514 S Fort St, Detroit MI 48217

STATE OF MICHIGAN)
County of Wayne) SS

Subscribed and Sworn to before me, a Notary Public, in and for Wayne County, Michigan,
on this 13th day of December, 2023.

[Signature]
Notary Public

In and for the County of Wayne, MI.

My commission Expires: 8/27/2025

Notary Public
NOTARY PUBLIC - STATE OF MICHIGAN
County of Wayne
My Commission Expires August 27, 2025
Signed in the County of Wayne.

INSTRUCTIONS

Complete all requested information on this form and submit it to the City of Birmingham at the information shown below before the close of business **5:00 p.m., Thursday December 14, 2023.**

Attention: Mr. Cory Borton, Assistant Director of Engineering

Email: cborton@bhamgov.org

Receipt of the form may be confirmed by calling (248) 530-1850.

Copies of this Sworn Statement form will be sent by email to prospective bidders upon request.

PROPOSAL
EDGEWOOD ROAD PAVING PROJECT
CONTRACT #6-24(S)

TO THE CITY OF BIRMINGHAM, MICHIGAN:

The undersigned, being familiarized with the local conditions affecting the cost of the work and the Contract Documents including all those sections listed in the Index, hereby proposes to perform everything noted herein and to provide and furnish all labor, materials, except as otherwise specified, necessary to construct and complete in a workmanlike manner all of the work required to be performed for **2024 Edgewood Road Paving Project, Contract #6-24(S)** in conformance with the requirements shown or implied in the above contract documents all of which are hereby made a part of this contract at the following unit prices as here stated and further defined in the specifications.

Bidder has examined copies of all Contract Documents and of following addenda:

<u>Date</u>	<u>Addendum Number</u>
12-13-23	1
12-15-23	2
12-20-2023	3

Bidder must write out in words the unit price of each item on the line provided under each pay item.

EDGEWOOD RD. - SEWER PAY ITEMS					
No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
1.	24" Combined Sewer, C76, CL-IV, Trench A @ <u>Two hundred fifty dollars</u>	21	LF	\$250.00	\$5,250.00
2.	21" Combined Sewer, C76, CL-IV, Trench A @ <u>Two hundred dollars</u>	521	LF	\$200.00	\$104,200.00
3.	18" Combined Sewer, C76, CL-IV, Trench A @ <u>One hundred seventy dollars</u>	114	LF	\$170.00	\$19,380.00
4.	15" Combined Sewer, C76, CL-IV, Trench A @ <u>One hundred sixty dollars</u>	239	LF	\$160.00	\$38,240.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
5.	12" Combined Sewer, C76, CL-IV, Trench A @ One Hundred Fifty Five Dollars	52	LF	\$155.00	\$8,060.00
6.	10" Combined Sewer, PVC SDR 26, Trench A @ one Hundred forty five Dollars	134	LF	\$145.00	\$19,430.00
7.	8" Combined Sewer, PVC SDR 26, Trench A @ One Hundred thirty five Dollars	28	LF	\$135.00	\$3,780.00
8.	15" Storm Sewer, C76, CL-IV, Trench A @ one Hundred forty Dollars	195	LF	\$140.00	\$27,300.00
9.	12" Storm Sewer, C76, CL-IV, Trench A @ One Hundred twenty five Dollars	393	LF	\$125.00	\$49,125.00
10.	10" Storm Sewer, PVC SDR 26, Trench A @ one Hundred fifteen Dollars	10	LF	\$115.00	\$1,150.00
11.	Sewer Service, 8" PVC SDR 26 @ One hundred dollars	31	LF	\$100.00	\$3,100.00
12.	Sewer Service, 6" PVC SDR 23.5 @ Ninety dollars	635	EA	\$90.00	\$57,150.00
13.	New 5'-0" Diameter Combined Manhole w/ Drop Connection (Construct Online) dollars @ Seven thousand five hundred	1	EA	\$7,500.00	\$7,500.00
14.	New 5'-0" Diameter Combined Manhole @ Six thousand five hundred dollars	4	EA	\$6,500.00	\$26,000.00
15.	New 4'-0" Diameter Combined Manhole @ four thousand two hundred dollars	4	EA	\$4,200.00	\$16,800.00
16.	New 5'-0" Diameter Storm Catch Basin w/ 2' Sump & Trap @ Five thousand two hundred dollars	1	EA	\$5,200.00	\$5,200.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
17.	New 4'-0" Diameter Storm Catch Basin w/ 2' Sump & Trap <i>@ three thousand and Five hundred</i>	5	EA	\$3,500.00	\$17,500.00
18.	New 4'-0" Diameter Storm Catch Basin w/ 2' Sump <i>@ three thousand and three hundred</i>	6	EA	\$3,300.00	\$19,800.00
19.	New 2'-0" Diameter Storm Inlet <i>@ two hundred six hundred</i>	5	EA	\$2,600.00	\$13,000.00
20.	6" Perforated Pipe Underdrain (No sock) <i>@ twenty Dollars</i>	3022	LF	\$20.00	\$60,440.00
21.	Sewer Investigation, Laterals <i>@ two thousand Five Hundred</i>	6	EA	\$2,500.00	\$15,000.00
22.	Sewer Service Tap, 8" <i>@ nine hundred Dollars</i>	2	EA	\$900.00	\$1,800.00
23.	Sewer Service Tap, 6" <i>@ seven Hundred fifty Dollars</i>	21	EA	\$750.00	\$15,750.00
24.	Sewer Tap, 24" <i>@ two thousand two Hundred</i>	1	EA	\$2,200.00	\$2,200.00
25.	Sewer Tap, 21" <i>@ two thousand</i>	1	EA	\$2,000.00	\$2,000.00
26.	Sewer Tap, 15" <i>one thousand Five hundred</i> <i>@ two thousand - FG -</i>	1	EA	\$1500.00	\$1,500.00
27.	Sewer Tap, 12" <i>@ one thousand Dollars</i>	2	EA	\$1,000.00	\$1,000.00
28.	Sewer Tap, 10" <i>@ nine Hundred Dollars</i>	1	EA	\$900.00	\$900.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
29.	Sewer Tap, 6", Underdrain <i>@ Seven Hundred and Fifty Dollars</i>	2	EA	\$750.00	\$1,500.00
30.	Reconstruct Manhole (if and where needed) <i>@ Three Hundred Dollars</i>	20	VF	\$300.00	\$6,000.00
31.	Remove & Replace Structure Cover (as directed by City) <i>@ eight Dollars</i>	1650	LB	\$8.00	\$13,200.00
32.	Remove Ex. Sewer Manhole <i>@ One Thousand Dollars</i>	4	EA	\$1,000.00	\$4,000.00
33.	Remove Ex. Drainage Structure <i>@ Six hundred Dollars</i>	6	EA	\$600.00	\$600.00
34.	Remove Ex. 18" Combined Sewer <i>@ Forty Dollars</i>	668	LF	\$40.00	\$26,720.00
35.	Remove Ex. 15" Combined Sewer <i>@ Forty Dollars</i>	106	LF	\$40.00	\$4,240.00
36.	Remove Ex. 12" Combined Sewer <i>@ Forty Dollars</i>	170	LF	\$40.00	\$6,800.00
37.	Remove Ex. 10" Combined Sewer <i>@ Forty Dollars</i>	133	LF	\$40.00	\$5,320.00
38.	Remove Ex. 8" Combined Sewer <i>@ Forty Dollars</i>	29	LF	\$40.00	\$1,160.00
39.	Remove Ex. 12" Storm Sewer <i>@ Forty Dollars</i>	88	LF	\$40.00	\$3,520.00
40.	Remove Ex. 10" Storm Sewer <i>@ Forty Dollars</i>	34	LF	\$40.00	\$1,360.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
41.	Bulkhead Pipe, Larger than 8" <i>@ one Thousand Dollars</i>	3	EA	\$1,000.00	\$3,000.00
42.	CCTV Sewer Acceptance Inspection <i>@ Ten-Thousand Dollars</i>	1	LS	\$10,000.00	\$10,000.00
SUBTOTAL - EDGEWOOD RD. SEWER PAY ITEMS				\$	<u>\$633,975.00</u>

EDGEWOOD RD. - WATER MAIN PAY ITEMS					
No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
43.	8" Gate Valve & Well <i>@ Six Thousand Five Hundred</i>	1	EA	\$6,500.00	\$6,500.00
44.	8" D.I. CL 52 Water Main w/ Polywrap, Trench A <i>@ Two hundred ten Dollars</i>	278	LF	\$210.00	\$58,380.00
45.	8" Water Main Connection to Ex. 8" Water Main <i>@ Seven thousand Five Hundred</i>	2	EA	\$7,500.00	\$15,000.00
46.	New Water Service, 1", Trench A, Copper <i>@ eighty Dollars</i>	184	LF	\$80.00	\$14,720.00
47.	Water Service Connection, 1" <i>@ Two thousand and Five Hundred</i>	9	EA	\$2,500.00	\$22,500.00
48.	Install Curb Stop & Box, 1" <i>@ one thousand and Five Hundred</i>	9	EA	\$1,500.00	\$13,500.00
49.	Hydra-Stop, Insta-Valve 250, 8" <i>@ nine Thousand Dollars</i>	1	EA	\$9,000.00	\$9,000.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
50.	Hydra-Stop, Line-Stop, 8" <i>@ Five Thousand Dollars</i>	2	EA	\$5,000.00	\$10,000.00
SUBTOTAL - EDGEWOOD RD. WATER MAIN PAY ITEMS				\$	\$149,600.00

EDGEWOOD RD. - PAVING PAY ITEMS					
No.	ITEMS FOR BID	QTY	UNITS		
51.	SEE ALTERNATES BELOW FOR: Earth Excavation				
52.	Subgrade Undercutting, 21AA Limestone <i>@ Sixty-Five Dollars</i>	850	CY	\$65.00	\$55,250.00
53.	Subgrade Undercutting, 1"x3" Limestone <i>@ Sixty-Five Dollars</i>	850	CY	\$65.00	\$55,250.00
54.	Subgrade Geogrid Fabric, Tensar Triax TX130S <i>@ Three Dollars</i>	2600	SY	\$3.00	\$7,800.00
55.	Remove and Salvage Brick Pavers <i>@ Ten Dollars</i>	300	SF	\$10.00	\$3,000.00
56.	Removing Concrete Drive Approach <i>@ Ten Dollars</i>	249	SY	\$10.00	\$2,490.00
57.	Removing Concrete Sidewalk & Ramp (sawcutting included) <i>@ Fifteen Dollars</i>	302	SY	\$15.00	\$4,530.00
58.	Removing Pavement Full Depth (Curb & Gutter included) <i>@ eighteen Dollars</i>	5420	SY	\$18.00	\$97,560.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
59.	Aggregate Base, MDOT 21AA Limestone, 8" <i>@ Thirty Dollars</i>	5592	SY	\$30.00	\$167,760.00
60.	Remove and Replace Lincoln Avenue Composite Pavement (Per Detail) <i>@ Forty-Thousand Dollars</i>	1	LS	\$40,000.00	\$40,000.00
61.	SEE ALTERNATES BELOW FOR: Concrete Pavement, Non-reinforced, 7", Incl. integral 6" curb				
62.	SEE ALTERNATES BELOW FOR: Bituminous Mixture No. 5EML (2.0" Wearing Course)				
63.	SEE ALTERNATES BELOW FOR: Bituminous Mixture No. 4EML (2.0" Leveling Course)				
64.	SEE ALTERNATES BELOW FOR: Concrete Curb & Gutter (18" Wide, "Birmingham Roll")				
65.	SEE ALTERNATES BELOW FOR: MDOT "M" Approach Gutter Detail, 18" Wd. Curb & Gutter				
66.	SEE ALTERNATES BELOW FOR: MDOT "M" Approach Gutter Detail (Formed in Conc. Pavt. w/ int. curb)				
67.	Concrete Drive Approach, 6", Incl. integral 6" curb <i>@ Sixty-Five Dollars</i>	21	SY	\$65.00	\$1,365.00
68.	Concrete Drive Approach, 6" <i>@ Sixty-Dollars</i>	292	SY	\$60.00	\$17,520.00
69.	Concrete Sidewalk, 6" (Includes Ramps) <i>@ eight Dollars</i>	910	SF	\$8.00	\$7,280.00
70.	Concrete Sidewalk, 4" <i>@ Six Dollars & Fifty cents</i>	1825	SF	\$6.50	\$11,862.5

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
71.	Handicap Ramp Truncated Domes @ <u>Thirty-Two Dollars ³/₄ Fifty cents</u>	110	SF	\$32.50	\$3,575.00
72.	Adjust Structure Cover @ <u>Six Hundred Dollars</u>	11	EA	\$600.00	\$6,600.00
73.	Maintenance Aggregate for Entire Project @ <u>Fifty-Thousand Dollars</u>	1	LS	\$50,000.00	\$50,000.00
SUBTOTAL - EDGEWOOD RD. PAVING PAY ITEMS				\$	<u>\$531,842.50</u>

EDGEWOOD RD. - GENERAL PAY ITEMS					
No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
74.	SEE ALTERNATES BELOW FOR: Mobilization (Max. 5% of Total Bid)				
75.	Pavement Marking, Polyurea, 24 inch Stop Bar, White @ <u>Fifteen Dollars</u>	104	LF	\$15.00	\$1,560.00
76.	Pavement Marking, Polyurea, 24 inch Crosshatching, White @ <u>Fifteen Dollars</u>	342	LF	\$15.00	\$5,130.00
77.	Recessing Pavt Mkrng, Transv @ <u>Five Dollars</u>	892	SF	\$5.00	\$4,460.00
78.	Remove Pavt Mkrng, Transv (Catalpa Intersection) @ <u>Ten Dollars</u>	80	SF	\$10.00	\$800.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
79.	Water and Sewer Allowance @ <u>fifty thousand Dollars</u>	1	LS	\$50,000.00	\$50,000.00
80.	Salvage Existing Signs @ <u>five thousand Dollars</u>	1	LS	\$5,000.00	\$5,000.00
81.	New Signs @ <u>Thirty Dollars</u>	20	SF	\$30.00	\$600.00
82.	Sign Post, U-Channel @ <u>Twenty Dollars</u>	48	LF	\$20.00	\$960.00
83.	Tree Protection, 3" Dia. Or Greater @ <u>Twenty-Five Dollars</u>	37	EA	\$25.00	\$925.00
84.	Restoration - St. James Park @ <u>Ten Thousand Dollars</u>	1	LS	\$10,000.00	\$10,000.00
85.	Mulch, 3" @ <u>Twenty Dollars</u>	100	SY	\$20.00	\$960.00
86.	Topsoil, 3" @ <u>Five Dollars</u>	1500	SY	\$5.00	\$7,500.00
87.	Sod, Class A @ <u>Seven Dollars</u>	1500	SY	\$7.00	\$10,500.00
88.	Inlet Filter @ <u>one Hundred - Fifty Dollars</u>	22	EA	\$150.00	\$3,300.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
89.	Inlet Sediment Pit @ <u>one hundred fifty Dollars</u>	22	EA	\$150.00	\$3,300.00
90.	SEE ALTERNATES BELOW FOR: Traffic Maintenance & Control				
91.	SEE ALTERNATES BELOW FOR: Inspector Crew Days				
SUBTOTAL - EDGEWOOD RD. GENERAL PAY ITEMS				\$	<u>\$106,035.00</u>

PAVING ALTERNATE #1 - EDGEWOOD RD. PAVING PAY ITEMS					
No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
51.	Earth Excavation @ <u>Fifty Dollars</u>	1445	CY	\$50.00	\$72,250.00
61.	Concrete Pavement, Non-reinforced, 7", Incl. integral 6" curb @ <u>Sixty-three Dollars</u>	4875	SY	\$63.00	\$307,125.00
62.	Bituminous Mixture No. 5EML (2.0" Wearing Course) @ <u>Two Hundred Seventy Dollars</u>	50	TON	\$270.00	\$13,500.00
63.	Bituminous Mixture No. 4EML (2.0" Leveling Course) @ <u>Two Hundred Seventy Dollars</u>	50	TON	\$270.00	\$13,500.00
64.	Concrete Curb & Gutter (18" Wide, "Birmingham Roll") @ <u>Thirty-three Dollars</u>	215	LF	\$33.00	\$7,095.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
65.	MDOT "M" Approach Gutter Detail, 18" Wd. Curb & Gutter @ <u>zero dollars</u>	0	LF	N/A	\$0
66.	MDOT "M" Approach Gutter Detail (Formed in Conc. Pavt. w/ int. curb) @ <u>Thirty five dollars</u>	65	LF	\$35.00	\$2,275.00

ALTERNATE #1 - GENERAL PAY ITEMS

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
74.	Mobilization (Max. 5% of Total Bid) @ <u>One hundred thousand dollars</u>	1	LS	\$100,000.00	\$100,000.00
90.	Traffic Maintenance & Control @ <u>Thirty thousand dollars</u>	1	LS	\$30,000.00	\$30,000.00
91.	Inspector Crew Days @ <u>Six-Hundred and Fifty Dollars</u>	<u>40</u>	DAYS	\$650.00	\$26,000.00
SUBTOTAL - PAVING ALTERNATE #1 PAY ITEMS				\$ <u>\$571,745.00</u>	

PAVING ALTERNATE #2 - EDGEWOOD RD. PAVING PAY ITEMS

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
51.	Earth Excavation @ <u>Fifty dollars</u>	1045	CY	\$50.00	\$52,250.00
61.	Concrete Pavement, Non-reinforced, 7", Incl. integral 6" curb @ <u>Ninety four dollars</u>	310	SY	\$94.00	\$29,140.00
62.	Bituminous Mixture No. 5BML (2.0" Wearing Course) @ <u>One hundred forty dollars</u>	503	TON	\$140.00	\$70,420.00

63.	Bituminous Mixture No. 4EML (2.0" Leveling Course) @ <u>One Hundred thirty one Dollars</u>	503	TON	\$131.00	\$65,893.00
No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
64.	Concrete Curb & Gutter (18" Wide, "Birmingham Roll") @ <u>Twenty Dollars</u>	3002	LF	\$20.00	\$60,040.00
65.	MDOT "M" Approach Gutter Detail, 18" Wd. Curb & Gutter @ <u>Thirty five dollars</u>	65	LF	\$35.00	\$2,275.00
66.	MDOT "M" Approach Gutter Detail (Formed in Conc. Pavt. w/ int. curb) @ _____	0	LF		
ALTERNATE #2 - GENERAL PAY ITEMS					
No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
74.	Mobilization (Max. 5% of Total Bid) @ <u>Ninety thousand dollars</u>	1	LS	\$90,000.00	\$90,000.00
90.	Traffic Maintenance & Control @ <u>Thirty thousand dollars</u>	1	LS	\$30,000.00	\$30,000.00
91.	Inspector Crew Days @ <u>Six-Hundred and Fifty Dollars</u>	<u>40</u>	DAYS	\$650.00	\$26,000.00
SUBTOTAL - PAVING ALTERNATE #2 PAY ITEMS				\$	<u>\$426,018.00</u>

GRANT STREET WATER MAIN REPLACEMENT PAY ITEMS					
No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
92.	Erosion Control, Inlet Protection Fabric Drop @ <u>One Hundred fifty Dollars</u>	8	EA	\$150.00	\$1,200.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
93.	Curb and Gutter, Remove @ <u>One hundred dollars</u>	6	LF	\$100.00	\$600.00
94.	Cold Milling HMA 1.5" @ <u>Five dollars</u>	1571	SY	\$5.00	\$7,855.00
95.	HMA Surface Removal @ <u>Nine dollars</u>	345	SY	\$9.00	\$3,105.00
96.	Subgrade Undercut & Backfill @ <u>Sixty five dollars</u>	35	CY	\$65.00	\$2,275.00
97.	Agg Base, 21AA LS, 8 inch @ <u>Forty five dollars</u>	345	SY	\$45.00	\$15,252.00
98.	Curb and Gutter, Concrete @ <u>Forty dollars</u>	6	LF	\$40.00	\$240.00
99.	HMA 4EML @ <u>Two hundred seventy eight dollars</u>	68	TON	\$278.00	\$18,904.00
100	HMA 5EML @ <u>One hundred ninety dollars</u>	200	TON	\$190.00	\$38,000.00
101	Water Main, 8 inch DI CL 54 w/ Polywrap, Tr A @ <u>Two hundred ten dollars</u>	428	LF	\$210.00	\$89,880.00
102	Gate Valve & Well, 8 inch @ <u>Six thousand dollars</u>	2	EA	\$6,000.00	\$12,000.00
103	Water Main Connection, 8 inch to ex 8 inch @ <u>seven thousand dollars</u>	4	EA	\$7,000.00	\$28,000.00
104	Temp Hydra-Stop, 8 inch @ <u>Five thousand dollars</u>	2	EA	\$5,000.00	\$10,000.00
105	Water Main, Abandon @ <u>ten dollars</u>	414	LF	\$10.00	\$4,140.00

106	Turf Establishment @ Fifty Dollars	10	SY	\$50.00	\$500.00
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**EDGEWOOD ROAD TOTAL BID W/
 PAVING ALTERNATE #1:** \$ \$1,993,197.50

**EDGEWOOD ROAD TOTAL BID W/
 PAVING ALTERNATE #2:** \$ \$1,847,470.50

GRANT STREET WATER MAIN TOTAL BID: \$ \$232,224.00

**OVERALL CONTRACT (6-24S) TOTAL BID W/
 PAVING ALTERNATE #1:** \$ \$2,225,421.50

**OVERALL CONTRACT (6-24S) TOTAL BID W/
 PAVING ALTERNATE #2:** \$ \$2,079,694.50

OVERALL CONTRACT (6-24S) BID AMOUNT W/ ALTERNATE #1 (WRITE OUT IN WORDS):

Two Million Two Hundred Twenty Five Thousand Four Hundred Twenty One Dollars and Fifty Cents

OVERALL CONTRACT (6-24S) BID AMOUNT W/ ALTERNATE #2 (WRITE OUT IN WORDS)

Two Million Seventy Nine Thousand Six Hundred Ninety Four Dollars and Fifty Cents

Accompanying this proposal is a certified check, bid bond or bank draft in the amount of five (5) percent of the total bid, payable to the City of Birmingham, Michigan, which it is agreed will be forfeited to the City of Birmingham if the undersigned fails to enter into a contract in conformity with the form of contract incorporated herein, and furnish bonds and insurance as specified within twenty-one (21) days after the contract is awarded to the undersigned or withdraws this bid within sixty (60) days of the date hereof.

In submitting this bid, it is understood that the right is reserved by the City of Birmingham, Michigan to reject any or all bids.

The undersigned hereby agrees to execute a contract with the City of Birmingham, Michigan according to the forms attached hereto and furnish the required bonds, all within twenty-one (21) days after the award of the contract; and will fully complete all work as stated under TIME OF COMPLETION and LIQUIDATED DAMAGES in Supplemental Instructions to Bidders.

The Bidder will identify the business entity as individuals, or if doing business under assumed name, indicate assumed name, partnership (naming partners) and indicate official capacity of persons executing proposal and bid.

Contractor's Name Eminent Excavating LLC

Street Address 514 S Fort St

City Detroit

County Wayne

State/Zip Code Michigan/48217

Telephone (313) 304-1154

Fax _____

Date 12/20/2023

Signed by _____

Print Name: Francisco Guardado

Title: Operations Manager

If a corporation, give state in which incorporated: _____

Witnessed: _____

Print Name: Marcos Guzman

Name of Superintendent Eriberto Guardado

Supervision & time sequence according to the General Requirements

Give below at least three (3) references as to ability to do work proposed.

Name Mike Harrington

Address 51301 Schoenherr Rd, Shelby Twp, MI 48315

Firm AEW INC

Telephone (810) 650-8095

Name Brent Kraft

Address 28 W Adams Ave #1200, Detroit, MI 48226

Firm Giffels Webster

Telephone (586) 292-7148

Name Frank Brzezinski

Address 1001 Springwells Ct, Detroit, MI 48209

Firm BNA Constructors USA

Telephone (734) 899-0298

Give below the last five (5) projects worked on, including those currently in progress, in chronological order. The names need not all be different from those listed above:

Project #1: Name of Project: Gordle Howe International Bridge Project

Date Started November 2022 Finished On Going

Name Frank Brzezinski Address 1001 Springwells Ct, Detroit, Mi 48209

Firm BNA Constructors USA Telephone (734) 899-0298

Project #2: Name of Project: City of Inkster Phase 2/3 Sewer Manhole Rehab.

Date Started April 2022 Finished On Going

Name Jerome Blvins Address 26215 Trowbridge St

Firm City of Inkster Telephone (313)563-9774

Project #3: Name of Project: Ecorse As Needed Water, Sewer, and Storm Repairs

Date Started September 2022 Finished On Going

Name Mike Harrington Address 51301 Schoenherr Rd, Shelby Twp, Mi 48315

Firm AEW INC Telephone (810) 650-8095

Project #4: Name of Project: Wayne County Sewer Manhole Rehab

Date Started February 2023 Finished On Going

Name Nathan Zgnilec Address 1145 Griswold St #200, Detroit, MI 48226

Firm OHM Advisors Telephone (248) 751-3122

Project #5: Name of Project: Greenland and Saj Building

Date Started April 2023 Finished October 2023

Name Najim N. Jaymuah Address 6 Parkland Blvd, Dearborn, MI 48126

Firm CDPA Architects + Planner Telephone (313) 763-8945

Give below all the subcontractors to be used on the project: If additional space is necessary, please use the back of this page. Should the contractor wish to use any subcontractors that are not on this list after award, the contractor shall submit a written request to the Engineer and obtain authorization for same, prior to proceeding. All subcontractors not listed must receive written approval from the City of Birmingham, prior to working on this project.

Name Ed Swanson Address 25500 Brest Rd, Taylor, MI 48180

Firm Al's Asphalt Telephone 734-946-1880

Type of Work to be Performed: Asphalt Paving

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

END OF SECTION

EDGEWOOD ROAD PAVING PROJECT
CONTRACT #6-24(S)

CONTRACT

THIS AGREEMENT made the _____ day of _____, 2024, by and between the CITY OF BIRMINGHAM, Oakland County, Michigan, hereinafter called the "City", and Eminent Excavating, LLC of the City of Detroit, County of Wayne, State of Michigan, hereinafter called the "Contractor", relative to Contract No. 6-24(S), otherwise known as: EDGEWOOD ROAD PAVING PROJECT in the amount of \$2,225,421.50 to wit:

1. The documents consisting of RFP, including all exhibits and the General Contract Conditions, and the Bid shall be incorporated herein by reference, shall become a part of this Agreement, and shall be binding upon both parties hereto. If there is a conflict between these documents, this Agreement shall control, then the RFP, and then the Bid.
2. The Contractor shall furnish all labor, materials, and appliances necessary, and to all the work as set forth in the Proposal, and in accordance with the plans and specifications, which have been made a part of this agreement in a manner, time and place, as therein set forth.
 - a. The Contractor shall provide a Performance Bond, which form is attached hereto and incorporated herein by reference to protect the City and conditioned upon the faithful performance of the contract in accordance with the plans, specifications, and terms hereof.
 - b. The Contractor shall provide a Payment Bond which form is attached hereto and incorporated herein by reference for the protection of the claimants as defined in MCL §129.201(6) to supply labor or materials to the principal Contractor or his Subcontractor and the prosecution of the work provided for in this contract.
3. Time is of the essence of this agreement. All the work to be performed by the Contractor shall be completed on or before the Time of Completion, as set forth in the Supplemental Instructions to Bidders. The Contractor shall pay to the City as liquidated damages, the amount per day as set forth under Liquidated Damages in the Supplemental Instructions to Bidders, for each calendar day after the date specified under Time of Completion that the work to be performed by the Contractor is not completed. Liquidated damages are established because of the difficulty in ascertaining actual damages which the City might sustain and are not intended as a penalty.
4. The City promises and agrees to pay said Contractor for all labor, materials and appliances supplied, and for all work performed under this agreement at the unit prices provided in the attached Proposals and Specifications.
5. For the faithful performances of the terms of this agreement, said parties respectively bind themselves, their successors, heirs, executors, administrators, and assigns.

IN WITNESS WHEREOF, the parties execute this agreement as of the day and year first written above.

CITY OF BIRMINGHAM


Attest _____
City Clerk

By: _____
Mayor

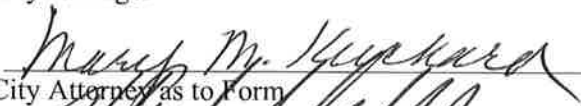
Witnessed _____

By: JOSE GARCIA
 Project
Manager.
Contractor

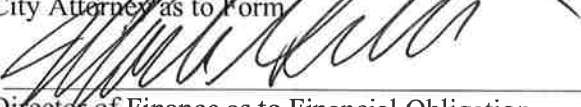
APPROVAL (1.135 City Code)



City Manager as to Substance



City Attorney as to Form



Director of Finance as to Financial Obligation



City Engineer

**SECTION 115
IRAN SANCTIONS ACT CERTIFICATION FORM**

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.


By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

Francisco Guardado
PREPARED BY
(Print Name)

02/21/2024
DATE

Operations Manager
TITLE

02/21/2024
DATE


AUTHORIZED SIGNATURE

fguardado@eminentcontractingllc.com
E-MAIL ADDRESS

EMINENT EXCAVATING LLC
COMPANY

514 S. Fort, Detroit, MI 48217
ADDRESS

313-513-0848
PHONE

N/A
NAME OF PARENT COMPANY

N/A
ADDRESS

N/A
PHONE

TAXPAYER I.D.#

PIERCE STREET PAVING PROJECT
CONTRACT #6-24(S)

BOND #B 1298680

PERFORMANCE BOND

KNOW ALL PEOPLE BY THESE PRESENTS that we, the undersigned

Eminent Excavating LLC

as Principal, and

Selective Insurance Company of America

as Sureties, are

hereby held and firmly bound unto the **CITY OF BIRMINGHAM, MICHIGAN** in the sum of

Dollars (\$ 2,225,421.50)

), in lawful money of the United States, for the payment of which we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns this _____ day of _____, 2024.

WHEREAS, the above bounded Principal has entered a certain written contract with the above-named City of Birmingham, Michigan dated _____ day of _____, 2024 for the construction of Edgewood Road Paving Project Contract #6-24(S)

which contract is hereby referred to and made a part hereof as fully and to the same extent as if the same were entirely written herein,

AND THE SAID SURETY, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder of the specifications accompanying the same shall in anywise affects its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work or to the specifications.

NOW, THEREFORE, the condition of the above obligation is such that if the Principal shall fully perform the annexed contract according to the terms thereof, or as such terms may be changed or modified by mutual agreement, and shall guarantee all work furnished against all defects and incidental damage to other property for a period of one (1) year following final acceptance of the work, then this obligation shall be void, otherwise the same shall remain in full force and effect.

***Two Million Two Hundred Twenty-Five Thousand Four Hundred Twenty-One and 50/100


This Bond is provided in compliance with and subject to the provisions of Act 213 of the Public Acts of Michigan for 1963, as amended by Act 351 of the Public Acts of Michigan for 1972, also known as MCL §129.201 et. seq.

WITNESSED:



JOSE GARCIA

Eminent Excavating LLC

By 

Francisco Guardado, DPM
Principal

Selective Insurance Company of America

By 

Eliot Motu, Attorney-in-Fact

PIERCE STREET PAVING PROJECT
CONTRACT #6-24(S)

PAYMENT BOND

BOND #B 1298680

KNOW ALL PEOPLE BY THESE PRESENTS, that we Eminent Excavating LLC

of the City of Detroit, Michigan

hereinafter called the "Principal" and Selective Insurance Company of America

hereinafter called the "Surety", are held and firmly bound unto

those persons known as "Claimants", as defined in MCL §129.206(6) supplying labor or materials to the

Principal or his subcontractors and the prosecution of the work provided for in a certain Contract by and

between the City of Birmingham and the Principal in the sum of

Two Million Two Hundred Twenty-Five Thousand Four Hundred Twenty-One and 50/100 Dollars

(\$ 2,225,421.50), in lawful money of the United States, for the payment whereof, we bid

ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally this

_____ day of _____, 2024.

WHEREAS the above named Principal has entered into a Contract with the CITY OF BIRMINGHAM, MICHIGAN dated the _____ day of _____, 2024, wherein said principal has covenanted and agreed as follows, to wit:

To furnish all the labor and materials Edgewood Road Paving Project Contract #6-24(S)

and,

WHEREAS this Bond is given in compliance with and subject to the provisions of Act No. 213 of the Public Acts of Michigan for 1963, as amended by Act. No. 351 of the Public Acts of Michigan for 1972, also known as MCL §129.201 et seq.

NOW, THEREFORE, the condition of the above obligation is such that if all persons or claimants as defined in Public Act 213 of 1963 supplying labor or materials to the principal contractor or his subcontractors in the prosecution of the work provided for in the contract are paid, the obligation of this Bond shall be void; otherwise, it shall be in full force and effect.

WITNESSED:

JOSE GARCIA

Eminent Excavating, LLC

By

Francisco Guardado - OPM
Principal

Selective Insurance Company of America

By

Eliot Motu, Attorney-in-Fact
Surety

SELECTIVE

BE UNIQUELY INSUREDSM

Selective Insurance Company of America
40 Wantage Avenue
Branchville, New Jersey 07890
973-948-3000

BondNo.B 1298680

POWER OF ATTORNEY

SELECTIVE INSURANCE COMPANY OF AMERICA, a New Jersey corporation having its principal office at 40 Wantage Avenue, in Branchville, State of New Jersey ("SICA"), pursuant to Article VII, Section 1 of its By-Laws, which state in pertinent part:


The Chairman of the Board, President, Chief Executive Officer, any Executive Vice President, any Senior Vice President or any Corporate Secretary may, from time to time, appoint attorneys in fact, and agents to act for and on behalf of the Corporation and they may give such appointee such authority, as his/her certificate of authority may prescribe, to sign with the Corporation's name and seal with the Corporation's seal, bonds, recognizances, contracts of indemnity and other writings obligatory in the nature of a bond, recognizance or conditional undertaking, and any of said Officers may, at any time, remove any such appointee and revoke the power and authority given him/her.

does hereby appoint **Eliot Motu**

, its true and lawful attorney(s)-in-fact, full authority to execute on SICA's behalf fidelity and surety bonds or undertakings and other documents of a similar character issued by SICA in the course of its business, and to bind SICA thereby as fully as if such instruments had been duly executed by SICA's regularly elected officers at its principal office, in amounts or penalties not exceeding the sum of: **5000000**

Signed this ___ day of _____, 2024

SELECTIVE INSURANCE COMPANY OF AMERICA

By: 

Brian C. Sarisky

Its SVP, Strategic Business Units, Commercial Lines



CERTIFIED COPY

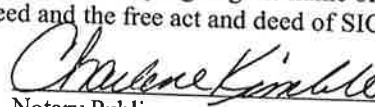
STATE OF NEW JERSEY :

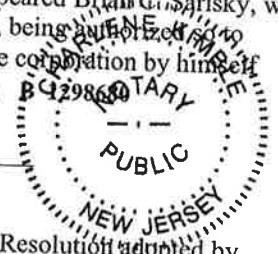
:ss. Branchville

COUNTY OF SUSSEX :

On this ___ day of _____, 2024 before me, the undersigned officer, personally appeared Brian C. Sarisky, who acknowledged himself to be the Sr. Vice President of SICA, and that he, as such Sr. Vice President, being authorized to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Sr. Vice President and that the same was his free act and deed and the free act and deed of SICA.

Charlene Kimble
NOTARY PUBLIC
STATE OF NEW JERSEY
ID # N/A
MY COMMISSION EXPIRES 6/2/26


Notary Public



The power of attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of SICA at a meeting duly called and held on the 6th of February 1987, to wit:

"RESOLVED, the Board of Directors of Selective Insurance Company of America authorizes and approves the use of a facsimile corporate seal, facsimile signatures of corporate officers and notarial acknowledgements thereof on powers of attorney for the execution of bonds, recognizances, contracts of indemnity and other writing obligatory in the nature of a bond, recognizance or conditional undertaking."

CERTIFICATION

I do hereby certify as SICA's Corporate Secretary that the foregoing extract of SICA's By-Laws and Resolutions in full force and effect and this Power of Attorney issued pursuant to and in accordance with the By-Laws is valid.

Signed this ___ day of _____, 2024.


Michael H. Lanza, SICA Corporate Secretary



Important Notice: If the bond number embedded within the Notary Seal does not match the number in the upper right-hand corner of this Power of Attorney, contact us at 53-948-3000.

B91 (4-14)

To: CITY-OF BIRMINGHAM
151 MARTIN
P.O. BOX 3001
BIRMINGHAM, MI 48012-3001

Date Submitted: _____

Date Received: _____

REQUEST FOR PARTIAL PAYMENT

Partial Payment Request # _____

The undersigned (the "Contractor") hereby requests payment for work performed on EDGEWOOD ROAD PAVING PROJECT- CONTRACT #6-24(S) for the period beginning _____ and ending _____. Attached is an itemized list of completed quantities delivered to date.

During the above period, did Contractor incur additional costs for labor or materials because the bid package was missing important information? _____ (if yes, you must provide details of the additional costs and the missing information).

During the above period, did Contractor incur additional costs for labor or materials because the bid package contained information that was not true? _____ (if yes, you must provide details of the additional costs and the untrue statements).

During the above period, did Contractor incur additional costs for labor or materials because the site conditions were different from what you expected? _____ (if yes, you must provide details of the additional costs and the site conditions, both what you expected and what you encountered).

During the above period, did Contractor incur additional costs for labor or materials because of any reasons not mentioned above? _____ (if yes, you must provide details of the additional costs and the reasons the same were incurred).

The above does not include additional work through work directives issued by the City of Birmingham as described on the attached or as covered by an agreed basis of payment attached. _____.

Contractor hereby certifies, represents and warrants that all suppliers, subcontractors and employees have been paid in full for all materials and labor provided on the job during the above period. Contractor certifies, represents and warrants that there have been no change orders issued or requested during the above period, except for the following: _____

Contractor certifies, represents and warrants that Contractor will never request payments, other than the request made in this form, for any work performed or materials provided during the above period, except for the following unresolved items: _____

Attached are the following documents
Further detailing the above.

1. _____
2. _____
3. _____

Contractor:

(Company or Contractor Name)

(Signature of Officer of the Company)

Type or Print Name and Title

CONTRACTOR'S AFFIDAVIT

To: CITY OF BIRMINGHAM
151 MARTIN ST.
P.O. BOX 3001
BIRMINGHAM, MI 48012-3001

Date Submitted _____

Date Received _____

REQUEST FOR FINAL PAYMENT

Payment Request # _____

The undersigned _____
Name of Contractor

hereby represents that on _____ Date he/she (it) was awarded a contract by

The City of Birmingham hereafter called the Owner to complete construction, in accordance with the terms and conditions of Contract No. 6-24(S), Contract Name EDGEWOOD ROAD PAVING PROJECT; and the undersigned further represent that the subject work has now been accomplished and the said contract has now been completed.

The undersigned hereby warrants and certifies that all of his/her (its) indebtedness arising by reason of the said contract has been fully paid or satisfactorily secured; and that all claims from subcontractors and others for labor and material used in accomplishing the said contract, have been fully paid or satisfactorily settled. The undersigned further agrees that if any such claim should hereafter arise, he/she (it) shall assume responsibility for the same immediately upon request to do so by the Owner.

The undersigned, for a valuable consideration, the receipt of which is hereby acknowledged, does further hereby waive, release and relinquish any and all claims or right of lien which the undersigned now has or may hereafter acquire upon the subject premises for labor and material used in accomplishing said project owned by the Owner.

This affidavit is freely and voluntarily given with full knowledge of the facts on this ____ day of _____, 2024.

Company or Contractor Name: _____

Signature of Officer of Company: _____

Type or Print Name and Title: _____
Name Title

Subscribed and sworn to before me, a Notary Public in and for _____ County,

Michigan on this _____ day of _____, 2024.

_____, Notary Public

My commission expires: _____

SWORN STATEMENT

STATE OF MICHIGAN)
) ss:
COUNTY OF OAKLAND)

_____ , being duly sworn, deposes and says that
_____ is the Contractor for an
improvement to the following described real property situated in the County of Oakland, City of Birmingham,
State of Michigan, described as follows:

in accordance with the general requirements of the Contract by and between the CITY OF BIRMINGHAM
and _____ the following is a statement of each subcontractor, supplier and
laborer for the payment of wages or fringe benefits and withholdings is due but unpaid with whom the
(contractor)(subcontractor) has (contracted) (subcontracted) for the performance under the contract with the
CITY OF BIRMINGHAM, and that the amounts due to the persons as of the date hereof are correctly and fully
set forth opposite their names as follows:

The contractor has not procured material from, or subcontracted with, any person other than those set forth above, and owes no money for the improvement other than the sums set forth above.

Deponent further says that he or she makes the foregoing statement as the (contractor)(subcontractor) or as _____ of the (contractor)(subcontractor) for the purpose of representing to the CITY OF BIRMINGHAM that the Payment Bond for labor and materials is free from claims for the possibility of claims except as specifically set forth above.

Deponent further says that he or she is a duly authorized representative of the (contractor)(subcontractor) and has been authorized to give this release of all claims against the City arising under or by virtue of contract _____ dated _____.

Deponent

Subscribed and sworn to before me

this ___ day of _____, 2024

Notary Public

_____ County, Michigan

My Commission Expires:

WORK DIRECTIVE

From: CITY OF BIRMINGHAM
151 MARTIN
P.O. BOX 3001
BIRMINGHAM, MI 48012-3001

Time: _____

Date: _____

Work Directive No. _____

To: Contractor: _____

Name and # of Contract: Edgewood Road Paving Project, Contract #6-24(S)

The following changed condition(s) is recognized by the City of Birmingham for the above referenced Contract. In order to ensure continuation of the progress of the contract this work directive is issued for the following work described below:

The basis for payment will be: _____ Written Quotation from the contractor.

_____ Unit Bid Prices _____ Time and Material

_____ Other (describe) _____

A written quotation shall include a detailed description of the tasks involved and the expected timetable to be completed along with a firm quotation for cost.

A time and material basis for work shall be supplemented with agreed quantities and prices between the contractor's field representative authorized to act on behalf of the contractor and the city inspector. It also shall be backed up by unit prices for time, material and equipment supplied to the City in a timely manner. Should this information not be readily available, it shall be provided the following day or a basis for payment shall be agreed to in writing within 24 hours of agreeing to a time and material work directive.

Any other basis shall be approved by all parties in writing before starting work. Should a utility cause the delay, names and approval shall be obtained if possible by their agent.

Approved:

Contractor Supt. Date City Inspector Date City Engineer Date

ADVERTISEMENT

CITY OF BIRMINGHAM, MICHIGAN
2024 EDGEWOOD ROAD PAVING PROJECT
CONTRACT #6-24(S)

Sealed proposals endorsed "EDGEWOOD ROAD PAVING PROJECT CONTRACT #6-24(S)" will be received from contractors by the City of Birmingham, at the office of the City Clerk, located at 151 Martin Street, Birmingham, Michigan, until **3:00 p.m. local time, on Thursday, December 21st, 2023**. The proposals will be opened and publicly read aloud at that time. Bids submitted after the exact time specified for receipt will not be considered.

The project will include installation of new combined sewers, storm sewers, water mains, underdrains, water and sanitary services, pavements, sidewalks, sidewalk ramps and driveway approaches on Edgewood Road between Lincoln Avenue and E. Southlawn Boulevard. **Approximate quantities are as follows: 1,109 linear feet of combined sewers, 560 linear feet of storm sewers; 278 linear feet of water mains, 4,875 square yards of new pavement (bid alternates for concrete and asphalt options), 313 square yards of new concrete driveway approaches, 2,685 square feet of new sidewalks, plus other work to make a complete project.**

Bidders shall review and comply with all Contract Documents, and supplemental information, as defined in the Information For Bidders.

Bidding documents for this project must be obtained electronically through the Michigan Inter-governmental Trade Network (MITN), which may be accessed at <https://www.bidnetdirect.com/mitn>. Vendors wishing to obtain copies of the bidding documents will need to register through the MITN website. Electronic versions of bidding documents will be posted to MITN starting **Friday, December 1, 2023**.

In order to provide the City of Birmingham with Contractors and Subcontractors who will carry out the work in a timely and satisfactory manner, a fully completed Sworn Statement of Qualifications must be submitted to the Engineering Department of the City of Birmingham prior to the bid opening. This shall be done for the above project before the close of business (**5:00 p.m.) on Thursday, December 14th, 2023**. Copies of the Sworn Statement form will be sent by email to prospective bidders upon request. The qualifications and list of references for the General Contractor and all Subcontractors to be used on the project will be reviewed on the basis of the proposed bidder's past performance on work of a similar nature for the City of Birmingham and other owners. Those bidders and bidder's subcontractors who are determined not to be suitable to bid on any work shall be notified in writing of the determination before the bids are opened. This information may be emailed to the contact below and confirmed by calling (248) 530-1850:

Attention: Mr. Cory Borton, Assistant Director of Engineering, cborton@bhamgov.org

The successful bidder shall be required to post bonds, and to comply with the contract requirements of the City Charter. Bids are firm, and no bid may be withdrawn for a period of sixty (60) days after opening of bids.

Procurement for the City of Birmingham will be handled in a manner providing fair opportunity for all businesses. This will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City of Birmingham. The City reserves the right to reject any and all bid proposals,

to waive any irregularity in any of the bid proposals submitted, and to accept any proposal which it shall deem to be the most favorable to the interest of the City.

A certified check or bid bond in the amount of five percent (5%) of the base bid must accompany each bid proposal.

CHERYLYNN MYNSBERGE
CITY CLERK

Published in:
Birmingham Eccentric
MITN

**SECTION 301
SUPPLEMENTAL INSTRUCTIONS TO BIDDERS**

1.01 TIME OF COMPLETION

Upon review of the submitted bids received on **Thursday, December 21st, 2023**, the City will issue a Notice of Intent to Award Letter to the confirmed low bidder (during the **week of Monday, January 1st, 2024**). After receipt of this letter, the Contractor will be allowed to start initiation of the contract, including procurement of bonding and insurance documents.

It is anticipated that the project will receive approval from the Birmingham City Commission on **Monday, February 5th, 2024**. The Contractor shall be allowed to commence the project as soon as all bonds and insurance submittals have been approved, the contract has been fully executed by both parties, and the pre-construction meeting has been held. The pre-construction meeting is anticipated to be scheduled during the **week of Monday, March 4th, 2023**.

The Contractor shall have the project substantially completed by Friday, June 28th, 2024. Substantial completion shall be defined by having all utility construction completed, all roadway, sidewalk, and driveway pavements being installed and cured, and all greenbelt areas restored to final grade using with applicable lawn restoration pay items.

The Contractor shall have the project finally completed by Friday, August 2nd, 2024. Final completion shall be defined as having all punch list work completed, pavement markings and permanent signage installed, satisfactory establishment of landscaping restoration, and all temporary signage, traffic controls, and all other equipment and materials removed from the site.

LIQUIDATED DAMAGES

- A. The contractor shall pay to the City of Birmingham as liquidated damages, the sum of one-thousand dollars (\$1,000) per day for each calendar day after the completion dates specified under "Time of Completion" that the work to be performed by the contractor is not completed. Liquidated damages in this amount shall apply for each day that the project is not substantially or finally complete beyond the dates specified under "Time of Completion", regardless of the actual time work began. Liquidated damages are established to compensate the City and the public for the costs of the inconvenience caused by the contractor by extending the work beyond the time specified. Liquidated damages are in place of actual damages, which the City of Birmingham might sustain, and are not intended as a penalty.
- B. In addition to the overall project Time of Completion requirements listed above, the following job requirements shall be placed on this Contract:

The Contractor shall provide the Engineer with a written comprehensive time schedule that details the various steps in the Contract to ensure that the order of the utility and paving operations is clear and meets phasing requirements specified in the drawings for each work area.
- C. For the purpose of determining Liquidated Damages, the Contract Time for work shall be increased proportionally to increases in contract value (if any) for this portion of the work provided that the following conditions are met:
 1. Increase in contract value is greater than 10% of the base bid;
 2. The parties have not adjusted the Contract Time by other mutually agreeable means such as an executed change order;

3. Adjustments in time on account of unusual weather shall be made in accordance with Section 108.08.D. of the 2020 MDOT Standard Specifications for Construction. The Contractor shall submit a written request for a time extension due to unusual weather conditions, along with supporting documentation, within fourteen (14) days after the last day of the calendar month in which the delay occurred. Failure to notify the City within this time limit shall constitute a waiver of claim for a time extension on account of unusual weather.

1.02 QUESTIONS REGARDING THE CONTRACT DOCUMENTS

- A. All questions about meaning or intent of Contract Documents shall be submitted to the Engineer in writing. Address written inquiries to:

Melissa A. Coatta, P.E.
City Engineer
City of Birmingham Engineering Department
P.O. Box 3001
Birmingham, MI 48012
Phone: 248-530-1850
Fax: 248-530-1290
Email: mcoatta@bhamgov.org

- B. Replies will be issued by Addenda delivered to all parties recorded by as having received Contract Documents for Bidding. Questions received less than five (5) days prior to date for opening of Bids will not be answered. Only answers contained in formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. Any Addendum issued during pre-bid period shall be included in the Bid, shall become part of Contract Documents, and shall be acknowledged on Bid Form.

1.03 PROJECT SCHEDULE

- A. The Contractor shall submit their preliminary construction schedule within fourteen (14) days of the award of this Contract, along with the signed contract, and required bonds and insurance certificates.
- B. Details on the schedule shall be sufficient to meet the requirements set forth in paragraph 1.02 above, or else the Engineer shall have the right to reject and request further information to meet the needs of this requirement.

1.04 HOURS OF WORK

- A. Typically, work of this nature is allowed six (6) days a week, from 7:00 AM to 7:00 PM, Monday through Saturday, excluding major holidays, such as Memorial Day, July 4th and Labor Day.

1.05 CONTRACTOR SUPERVISION

- A. The Contractor shall have a competent superintendent or foreman available at all times, authorized to act for the contractor as agent on the work, who thoroughly understands the plans and specifications, and who shall receive instructions from the Engineer. The superintendent or foreman shall be responsible for all subcontractors. The superintendent or foreman shall be designated by name prior to commencement of the work, and shall be available ON SITE for proper management of the project for the duration of the contract, regardless of whether or not the contractor or subcontractors are engaged in activity on the project.

1.06 WORK AREA

- A. The contractor for this project shall be alert to the fact that the work areas are very visible to the public, and that his work operations have a direct impact on a large number of people on a daily basis. The work shall be organized to minimize the number of work days as much as possible. Also, the contractor shall keep his work area as clean and dust-free as practical at all times.

1.07 STATEMENT OF QUANTITIES

- A. The quantities indicated in the proposal are the engineer's estimate of quantities required for the project, and bids will be computed, reviewed, analyzed and compared using these quantities. While these quantities have been estimated with as much accuracy as practical beforehand, they should not be construed as defining, or limiting the amount of work to be performed under this Contract, but rather as information furnished to bidders as an approximate estimation of the work items, and as a basis for comparing bids.

1.08 COORDINATION CLAUSE

- A. The following coordination issues are brought to the Contractor's attention for consideration when preparing their bid and planning the construction:
 1. Utility owners, such as Detroit Edison, AT&T, and Consumer's Energy, may be relocating their facilities during construction operations. The Contractor is to cooperate with and help facilitate such operations.
 2. The Contractor shall protect all existing infrastructure, materials, and operations of the City of Birmingham.
 3. Emergency services must be given immediate passage through the construction site.
 4. The Contractor shall be responsible to coordinate with the City of Birmingham Police and Fire Departments regarding road closures connected to execution of work in this Contract.
 5. There are other construction projects that will be in operation during the term of this Contract and may impact local traffic. The Contractor shall so conduct their operations to cooperate fully with the other contractors, and minimize conflicts to ensure maximum safety and courtesy in the expedient completion of this work.

END OF SECTION

SECTION 310
GENERAL INSTRUCTIONS TO BIDDERS

1.01 CONTRACT PRICE

- A. Proposals are solicited on the basis of unit prices and/or lump sum prices which are to be clearly set forth in the Proposal Form. The final contract price on the accepted proposal will be determined by multiplying the number, or fraction thereof, units of work actually performed, or labor, material, or appliances actually supplied by the price designated for such items in the proposal. The total bid figure on the proposal form is merely for purposes of estimating and comparing costs, and under no circumstances on unit price contracts does it constitute or imply the total contract price.

1.02 FORM OF PROPOSAL

- A. All proposals must be made in the form attached hereto. Additional copies of this proposal form for the bidder's files may be obtained on request at the City Engineering Department.
- B. All prices stated in the proposals must be plainly written in figures.
- C. All information called for on the proposal must be furnished to enable a fair comparison of the bids.
- D. The place of residence of each bidder, or the official address in the case of a firm or company, with county and state, must be given with the signature.
- E. Each proposal must be enclosed in a sealed envelope addressed to the City Clerk of the City of Birmingham, and endorsed upon the outside with the name of the project, as it appears in the advertisement for bids.

1.03 CONFORMITY TO PLANS AND SPECIFICATIONS

- A. Proposals must be made in full conformity to all the conditions, as set forth in the plans and specifications for the work now on file in the office of the City Engineer.

1.04 AGENCY

- A. Anyone signing a proposal as agent of another or others must submit with the proposal, legal evidence of their authority to do so.

1.05 LEGAL STATUS OF BIDDER

- A. The legal status of the bidder, that is, as a corporation, a partnership or an individual, must be stated in the proposal. A corporation bidder must name the state in which its articles of incorporation are held, and must give title of the official having authority under the bylaws to sign contracts. A partnership bidder must give the full names and addresses of all partners.

1.06 CERTIFIED CHECK, BIDDER'S BOND OR BANK DRAFT

- A. Each proposal must be accompanied by a certified check, bidder's bond or bank draft in an amount not less than five (5) percent of the total price, drawn to the order of the City of Birmingham, as a guarantee of good faith on the part of the bidder and subject to the conditions stipulated in the proposal form.
- B. No proposal shall be withdrawn for a period of sixty (60) days after the date set for the opening of bids.
- C. A single check, bond or draft may serve to cover two (2) or more alternative proposals when such alternative proposals are submitted by the same bidder.

- D. The bid deposit of all except the three (3) lowest bidders will be returned within three (3) weeks after the opening of bids. The bid deposit of the three (3) lowest bidders will be returned within two (2) weeks after the contract has been executed by both parties.

1.07 OBLIGATION TO EXECUTE CONTRACT

- A. The bidder whose proposal is accepted will be required to execute the contract, and to furnish sureties hereafter specified, within twenty-one (21) days after receiving notice of such acceptance; and in case of refusal or failure to do so, the bidder shall be considered to have abandoned all rights and interest in the award, and the bid deposit may be declared to be forfeited to the City, as liquidated damages and not a penalty, and the contract may be awarded to another.

1.08 BONDS

- A. The successful bidder will be required to furnish two (2) bonds, each on the forms provided as follows:
1. A Performance Bond in an amount not less than 100% of the contract price in favor of the City of Birmingham, conditioned upon the faithful performance of the contract, and completion on or before the date specified.
 2. A Payment Bond for labor or material running to the claimants, which is defined in MCL §129.206 as those persons supplying labor or materials to the principal contractor or subcontractors in the prosecution of the work provided for in this contract in an amount not less than 100% of the contract price for the protection of those persons supplying labor, materials or both.
- B. The cost of all bond premiums is incidental to the other work on this project and shall be included in the Contractor's bid price(s) for the work. No additional or separate payment shall be made to the Contractor for providing the required bonds.

1.09 INDEMNITY

- A. The Contractor shall indemnify the City of Birmingham in accordance with the INDEMNITY section set forth in the General Requirements.

1.10 INSURANCE

- A. The Contractor shall not commence work under this contract until obtainment of the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with insurance carriers acceptable to the City of Birmingham. The cost of all insurance premiums is incidental to the other work on this project and shall be included in the Contractor's bid price(s) for the work. No additional or separate payment shall be made to the Contractor for providing the required insurance coverage.
1. **Workers' Compensation Insurance:** The Contractor shall procure and maintain during the life of this contract, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
 2. **Commercial General Liability Insurance:** The Contractor shall procure and maintain during the life of this contract, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$3,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent

- Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
3. **Motor Vehicle Liability:** The Contractor shall procure and maintain during the life of this contract Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$3,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
 4. **Additional Insured:** Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement starting the following shall be Additional Insureds. The City of Birmingham, including all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any coverage that may be available to the additional insured, whether any other available coverage be primary, contributing or excess.
 5. **Pollution Liability Insurance:** CONTRACTOR shall procure and maintain during the life of this Agreement Pollution Liability Insurance, with limits of liability of not less than \$1,000,000, per occurrence preferred, but claims made accepted.
 6. **Cancellation Notice:** Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal shall be sent to the Finance Department, City of Birmingham, P.O. Box 3001, 151 Martin Street, Birmingham, Michigan 48012.
 7. **Owners Contractors Protective Liability:** The Contractor shall procure and maintain during the life of this contract, an Owners Contractors Protective Liability Policy with limits of liability not less than \$3,000,000 per occurrence, combined single limit, Personal Injury, Bodily Injury and Property Damage. The City of Birmingham shall be "Name Insured" on said coverage. Thirty (30) days' Notice of Cancellation shall apply to this policy.
- B. **Proof of Insurance Coverage:** The Contractor shall provide the City of Birmingham at the time the contracts are returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below:
1. Two (2) copies of Certificate of Insurance for Workers' Compensation;
 2. Two (2) copies of Certificate of Insurance for Commercial General Liability;
 3. Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
 4. Original policy, or original binder pending issuance of policy, for Owners Contractors Protective Liability Insurance;
 5. If so requested, Certified Copies of all policies mentioned above will be furnished.
- C. **Coverage Expiration:** If any of the above coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least ten (10) days prior to the expiration date.
- D. **Maintaining Insurance:** The CONTRACTOR also agrees to provide all insurance coverage as specified. Upon failure of the CONTRACTOR to obtain or maintain such insurance coverage for the term of the agreement, the City of Birmingham may, at its option, purchase such coverage from

the contract amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.

1.11 EXAMINATION OF SITE

- A. It is expected that each bidder will make a personal examination of the entire site of the proposed work, and of its surroundings. It will be assumed that each bidder, before offering his proposal, has obtained firsthand information concerning any probable interference and the available facilities for transporting, handling and storing of construction equipment and materials, and concerning other conditions which may affect his work.

1.12 LEGAL CONDITIONS

- A. Bidders are notified that they should acquaint themselves with the various provisions in the laws of the State of Michigan, and in the ordinances and regulations of the City of Birmingham and Oakland County, with respect to the carrying on of public improvements.

1.13 BIDDER'S ABILITY

- A. It is the intention of the City to award the contract for this job to a contractor whose construction skill and financial resources are fully equal to the task of prosecuting the work in a satisfactory manner, and of bringing it to completion within the time limit specified. With this end in view, the Form of Proposal calls for at least three (3) references concerning his ability to do this particular class of work, and a reference list of the last five (5) projects, including those not completed or currently being performed. The mere ability to offer bonds will not be taken as sufficient evidence of responsibility on the part of the bidder. If the contract is awarded to a foreign company, a certificate of authority to do business in this state must accompany executed contract.

1.14 PAYMENTS

- A. Partial payments will be made monthly to the Contractor during the satisfactory progress of the working accordance with the Payments section of the General Requirements.

1.15 RIGHT TO ACCEPT, REJECT AND TO WAIVE DEFECTS

- A. The City reserves the right to accept any proposal, to reject any or all proposals, and to waive any defect or irregularity in any proposal, if it appears advantageous to the City to do so.
- B. In particular, any alterations, erasure or interlineation in the Specifications which are made a part, specifically, of these instruments, or of the Form of Proposal, shall render the accompanying proposal irregular and subject to rejection by the City. In case any explanation, additions or alterations are to be offered, they shall be indicated on separate sheets attached to the proposal form and referred to therein.
- C. Proposals which are clearly unbalanced, will also be considered as irregular, and will be subject to instant rejection by the City.

END OF SECTION

SECTION 400 GENERAL REQUIREMENTS

1.01 DEFINITION OF TERMS

- A. The intent and meaning of words and expressions, or pronouns used in their stead, occurring in these specifications or in other contract documents, shall be interpreted as described under Section 101.03 Definitions of Terms of the Current Standard Specifications for Construction adopted by the Michigan Department of and Transportation, with the following additions or exceptions:
1. City - The corporation of the City of Birmingham, Michigan.
 2. Commission - The Commission of the City of Birmingham, Michigan, and any other board, body, official or officials to which or to whom the powers belonging to the said Commission shall, by virtue of any act or acts, hereafter passed or be held to appertain.
 3. Engineer - The person holding the position or acting in the capacity of the City Engineer of the City of Birmingham, Michigan, acting either directly or through his properly authorized agents, such agents acting within the scope of the duties entrusted to them.
 4. Directed, required, permitted, etc. - Whenever in the specifications the words "as directed", "as required", "as permitted", or words of like effect are used, it shall be understood that the direction, requirements or permission of the Engineer is intended; similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean approved by, or acceptable, or satisfactory to the Engineer.

1.02 INTENT OF THE PLANS, SPECIFICATIONS AND CONTRACT

- A. The intent of the plans, specifications and contract is to provide for the completion of the work in substantial compliance with the details as shown thereon, and as described herein. The Contractor shall furnish all labor, materials, equipment, tools, transportation and necessary supplies, and shall perform all operations required to complete the work in accordance with the specifications, and the lines, grades and cross sections provided for on the plans, or by authorization.

1.03 EXTRA WORK

- A. No extra work shall be started, or extra material furnished, until such extra work or furnishing of extra material is authorized in writing by the Engineer.
- B. The price for such extra work or material must be approved by the Engineer. Said price may be a unit price, a lump sum price, or if the Engineer so elects, the work shall be done on a force account basis, which will be paid for in the following manner:
1. For all labor, teams and foremen in direct charge of the specific work, the Contractor shall receive the actual rate of wage paid for each and every hour that said labor, teams and foremen are actually engaged in such work, plus 20% of the sum thereof.
 2. For materials and supplies, the Contractor will receive the actual cost of such materials delivered on the work, including freight charges, as shown by original receipted bills, plus 15% of the sum thereof.
 3. For any machinery and equipment owned or rented by the Contractor, which it may be deemed necessary or desirable to use on extra work, the Contractor will be paid at the actual charge-out rate, if reasonable, for his own equipment, or at the actual rental price paid, if reasonable, for rented equipment for each and every hour that such equipment is used on the work, to which sum 15% will be added.

4. Bond premium, workmen's compensation insurance, personal injury public liability and property damage public liability insurance, unemployment compensation, and Federal Social Security will be paid for at actual cost, to which sum 15% will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such insurance.
5. The compensation as herein provided shall be accepted by the Contractor as payment in full for extra work done by force account, and the said percentages shall cover profit, superintendence, general expense, overhead, and the use of small tools and equipment for which no rental is allowed.

1.04 ALTERATION IN CHARACTER OF WORK

- A. Should the Contractor encounter, or the Engineer encounter, during the progress of the work, sub-surface and/or latent conditions at the site materially differing from those shown on the plans or indicated in the specifications, the Engineer's attention shall be called immediately to such conditions before they are disturbed. The Engineer shall thereupon investigate the conditions, and if he finds that they materially differ from those shown on the plans and indicated in the specifications, he shall at once make such changes in the plans and/or specifications, as he may find necessary.

1.05 COORDINATION OF SPECIFICATIONS AND PLANS

- A. In case of discrepancy, written figures shall govern over numerals, figured dimensions shall govern over scaled dimensions, plans shall govern over standards specifications, supplemental specifications shall govern over standard specifications and plans, and special provisions shall govern over supplemental specifications.
- B. The Contractor shall not take advantage of any apparent error or omission in the plans or specifications, but the Engineer shall be permitted to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the plans and specifications.

1.06 AUTHORITY OF ENGINEER

- A. The Engineer shall decide all questions which may arise as to the quality and acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work; all questions which may arise as to the interpretation of the plans and specifications; and all questions as to the satisfactory and acceptable fulfillment of the terms of the contract by the Contractor.

1.07 INSPECTION

- A. Inspectors may be appointed and directed to inspect all materials used, and all work done. The inspection may extend to all parts of the work, and to the preparation or manufacture of the materials for use in the work. The Inspectors will not be authorized to revoke, alter, enlarge or relax any of the provisions of these specifications, nor to change the plans in particular. The Inspector on the work will inform the Engineer as to the progress of the work, the manner in which it is being done, and the quality of the materials being used. He will also call to the attention of the Contractor any failure to follow the plans and specifications that he may observe. In case of any dispute arising between the Contractor and the Inspector as to the materials furnished, or the manner of performing the work, the Inspector shall have the authority to reject materials or suspend the work until the question at issue can be referred to and be decided by the Engineer. In no instance shall any action or omission on the part of the Inspector relieve the Contractor of the responsibility of completing the work in accordance with the plans and specifications.

- B. The Engineer and his duly authorized Inspector, shall at all times have the right to enter the premises upon which the work under this contract is being done, and to inspect said work and to ascertain whether or not the construction is carried out in accordance with the terms of the contract or specifications; and the Contractor shall render all necessary assistance and provide all reasonable facilities and give ample time for such inspection.

1.08 SUPERVISION

- A. The Contractor shall give his personal supervision to the faithful prosecution of the work. In case of his absence, he shall have a competent superintendent or foreman on the work site who shall follow, without delay, all instructions of the Engineer or his assistants in the prosecution and completion of the work, and every part thereof in conformity with this contract. He shall also have full authority to supply material and labor immediately.
- B. The Contractor's supervisor shall be responsible to act on behalf of the Contractor. This includes being always present or available, making decisions on behalf of the Contractor and Subcontractor, scheduling, monitoring work progress on a continued basis, communicating with City representatives, etc. His name shall be submitted prior to the start of work, with all appropriate ways of contacting him. He shall remain the responsible Contractor's representative throughout completion of the project, including any subcontract work associated with this contract. If it is necessary to replace this person, it shall have the approval of the Engineer.

1.09 TIME AND SEQUENCE OF WORK

- A. The Contractor shall have control over the sequence of order of execution of the several parts of the work to be done under this contract, and over the methods of accomplishing the required results, except as some particular sequence or method may be distinctly demanded by these specifications and plans, or by the express provisions of the contract.
- B. The Engineer may make such reasonable requirements that in his judgment are necessary for the proper and effective protection of work partially or wholly completed, and to these requirements the Contractor shall strictly conform.
- C. The Contractor shall submit a written work plan prior to starting construction. This shall include a written schedule, critical path or equal, to focus in on the date required for completion. This schedule must be updated periodically (not to exceed two (2) weeks) if it becomes necessary to modify the plan. This does not relieve the Contractor of the responsibility to complete the contract according to contractual stipulations. Any modification to the time schedule must obtain prior written approval from the Engineer.
- D. Once the Contractor has mobilized, the Contractor must execute the contract in a continuous, expeditious manner, and may not suspend prosecution of work without written permission of the Engineer.

1.10 RELATION TO OTHER CONTRACTORS

- A. The Contractor shall so conduct his operations as not to interfere with or injure the work of other Contractors employed by the City on adjoining or related work, and he shall promptly make good any injury or damage which may be done to such work by him.
- B. Should a contract for adjoining work be awarded to another Contractor, and should the work on one of these contracts interfere with that of the other, the Engineer shall decide which Contractor shall cease work for the time being, and which shall continue, or whether the work of both contracts shall continue at the same time and in what manner. In case territory of one contract should be the necessary means of access to another contract, the Engineer shall have power to grant reasonable

privileges with respect to the transportation or movement of personnel, equipment or materials, as he may adjudge to be necessary or expedient, and in the best interest of the City. Any decision which the Engineer may make as to method and time of conducting work or the use of the territory shall not be made the basis of any claim for damage, but an extension of time may be claimed if justified by the circumstances, the same as in the case of other delays caused by the acts of the City. Any difference of opinion or conflict of interest which may arise between the Contractor and other Contractors or workmen of the City regarding adjoining work, shall be determined and adjusted by the Engineer.

1.11 CONSTRUCTION STAKES

- A. The location, alignment, elevation and grade of the work will be determined by the Engineer, who will set such stakes as are necessary to properly mark these elements. The Contractor shall assume full responsibility for detail dimensions and elevations measured from the lines, grades and elevations so established.
- B. The Engineer may require the Contractor, at the Contractor's expense, to provide such masts, scaffolds, batter boards, straightedges, templates or other devices as may be necessary to facilitate laying out, inspecting and constructing the work.
- C. The Contractor shall exercise proper care in the preservation of all stakes set for his use, or for the use of the Engineer, and if such stakes are injured, lost or removed by the Contractor's operations, the cost of resetting may be charged to the Contractor. The Department will be responsible for the accuracy of lines, slopes and grades established by the City, except that the Contractor shall not take advantage of any obvious errors or omissions.

1.12 SOIL CONDITIONS

- A. The Contractor shall make his own determination of the soil conditions and he shall complete the work in whatever materials, and under whatever conditions he may encounter or create, without extra cost of the City.

1.13 MATERIALS FURNISHED BY THE CITY

- A. When specified, the City of Birmingham may furnish materials at no cost to the Contractor. All other materials necessary to complete the project shall be furnished by the Contractor.
- B. Materials to be furnished by the City will be at the Department of Public Works Yard at Eton Road and Holland Avenue. The Department of Public Works will require the Contractor to provide a written authorization from the Engineer before releasing any materials. The Contractor shall load and transport all such materials from the Department of Public Works Yard to the construction site, at his own expense.
- C. The City may, at its discretion, furnish to the Contractor, any materials, supplies or transportation required for extra work, and the Contractor shall not be entitled to any allowance or percentage on account of materials, supplies or transportation so furnished.

1.14 STORED MATERIAL

- A. Materials and equipment distributed, stored or placed upon or near the site of the work shall be at all times so disposed as not to interfere with work being executed by the City, or by other Contractors in the City employ, or with street drainage, fire hydrants, or with access thereto, and not to hinder any more than may be necessary the ordinary pedestrian or vehicular traffic of the streets. Such material shall be stored in such a manner as to facilitate inspection.

1.15 REJECTED MATERIAL

- A. If any materials used in the work, brought upon the ground, or selected for use in the work are condemned by the Engineer on account of bad or improper workmanship, or as being unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove from the work or its vicinity, without delay, all such rejected or condemned material of whatever kind. Upon failure to do so within forty-eight (48) hours after having been so directed by the Engineer, the condemned material may be removed by the City and the cost of said removal deducted from any money that is then due, or that may thereafter become due to the Contractor. No payment shall be made until such materials, work or workmanship has been removed and proper materials and workmanship substituted therefor.

1.16 WATER SUPPLY

- A. Water for construction purposes may be taken from the City mains, at no charge, subject to the rules of the City Water Department. Special approval of the Engineer must be obtained prior to the opening of any fire hydrant.
- B. The Contractor shall provide for his employees an adequate supply of drinking water taken from the City mains.

1.17 SANITARY REGULATIONS

- A. Necessary convenience, properly secluded from public observation, shall be constructed where needed for the use of laborers on the work. Such conveniences shall be located, constructed and maintained, subject to the approval of the Engineer and the collections therein shall be removed at such times, and to such places as he shall direct. The Contractor shall obey and enforce such sanitary regulations as may be prescribed by the County Health Department.

1.18 PERMITS AND LICENSES

- A. The Contractor shall procure all permits and licenses and pay all charges and fees necessary and incident to the due and lawful prosecution of the work. Unless otherwise stated in these contract documents, there will be no charge for any permits required by the City of Birmingham.

1.19 LAWS AND ORDINANCES

- A. The Contractor shall keep himself fully informed of all local ordinances and regulations, state and national laws in any manner affecting the work herein specified. He shall at all times observe and comply with, and shall cause all his agents and employees to observe and comply with, said ordinances, laws and regulations, and shall protect and indemnify the City and its duly authorized officers and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, regulations, etc.
- B. The Contractor shall obey and abide by all the laws of the State of Michigan and of the Federal Government relating to the employment of labor on public work and all Charter provisions and ordinances of the City of Birmingham regulating or in respect to public improvements.
- C. The Contractor and his Subcontractors shall not discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to hire, tenure, terms, conditions or privileges of employment, because of sex, race, color, religion, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

1.20 PROPERTY AND SURVEY MONUMENTS

- A. Before any monuments or stakes marking the boundaries of property along or near the work are removed or disturbed, the Contractor shall notify the Engineer in sufficient time so that they can be properly located and reset.
- B. All precautions shall be taken to avoid disturbance of permanent survey monuments of any City, County or State authority, and when any of these are disturbed or destroyed, the Contractor shall restore them to the satisfaction of such authority and shall pay all costs incurred by such authority in connection therewith.

1.21 BUILDING AND OTHER STRUCTURES ENCOUNTERED

- A. Full responsibility shall be assumed by the Contractor for the protection of all buildings and other structures, public or private, including tracks, pavements, driveways, curbs, poles, signs, hydrants, underground pipes and conduits and other structures of every sort that may be encountered in or adjacent to the work.
- B. Wherever settlement or lateral movement of structures might occur, adequate underpinning or other means of support shall be installed. Where necessary, such support shall be installed in advance of construction.

1.22 PROTECTION TO TREES AND SHRUBBERY

- A. The Contractor shall take all prudent and feasible measures that will reduce or eliminate the impacts of development and construction on City owned trees. Trees or shrubbery shall be surrounded by protective cushioning, posts or fencing before construction work begins, if, in the judgment of the Staff Arborist, such precautions are necessary. Further detailed information is included in the supplemental specifications section of the contract if applicable.

1.23 DUST CONTROL

- A. All Contractors working on projects that require removal of the paved surface during construction shall provide dust control as directed by the Engineer, at no additional cost to the City. When weather conditions are such that dusty conditions can be created, the Contractor shall be prepared to act. When dry conditions are declared by the Engineer, the Contractor shall always have a water truck and calcium chloride on site, to be applied as needed. The Contractor shall be pro-active with respect to applying dust control measures as needed.

1.24 PROTECTION AND RESTORATION OF PROPERTY

- A. The Contractor shall restore, at his own expense, any and all public or private property damaged or injured in consequences of any act or omission on his part, or on the part of his employees or agents, to a condition similar and equal to that existing before such damage or injury was done. If the Contractor neglects to repair or make restoration, the Engineer may, after forty-eight (48) hours written notice to the Contractor, proceed to make such repairs or restoration, and will deduct the cost thereof from any monies that are or may become due to the Contractor.

1.25 RESPONSIBILITY FOR DAMAGE TO WORK

- A. The Contractor shall protect his work and materials from damage, due to the nature of the work, the action of the elements, the carelessness of other contractors, or from any cause whatever, until the completion and acceptance of the work. Should any damage occur, he shall repair or replace it at his own expense and complete the work to the satisfaction of the Engineer.

1.26 INDEMNITY

- A. To the fullest extent permitted by law, the CONTRACTOR and any entity or person for whom the CONTRACTOR is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the CITY OF BIRMINGHAM, its elected and appointed officials, employees and volunteers and any others working on behalf of the CITY OF BIRMINGHAM against, any and all claims demands, suites, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the CITY OF BIRMINGHAM, its elected and appointed officials, employees, volunteers or others working on behalf of the CITY OF BIRMINGHAM, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or other working on behalf of the CITY OF BIRMINGHAM.

1.27 INSURANCE

- A. The Contractor shall comply with the INSURANCE requirements set forth in the General Instructions to Bidders.

1.28 PUBLIC TRAVEL

- A. The Contractor shall at no additional compensation make suitable and adequate provisions, unless otherwise authorized by the Engineer, for the safe and free passage of persons and vehicles by, over or under the work while it is in progress.
- B. The Contractor shall obtain permission from the Engineering Department to close or block any street. The Contractor shall notify the Engineering Department at least four (4) hours before closing or blocking any street.

1.29 PUBLIC SAFETY

- A. The Contractor shall furnish, erect and maintain a good and sufficient fence, railing or barrier around all exposed portions of his work, to effectively prevent any accident in consequences of his operations and to protect the work. Such fences, railings and barriers shall be illuminated from sunset to sunrise by suitable and sufficient lights, flares or torches, in such a manner as to make them clearly visible to approaching pedestrians and/or traffic.
- B. When equipment and materials are located within the construction site, or within any public right-of-way, the public shall be safe-guarded by suitable and sufficient signs, lights, barricades or other means furnished and maintained by the Contractor.
- C. If any portion of the work is not properly barricaded, signed or lighted by one-half (1/2) hour after sunset, the necessary barricades, signs and lights may be placed by the City and all costs to the City for such work will be charged to the Contractor. The furnishing, erection and maintenance of barricades, signs and lights by the City will not relieve the Contractor of his responsibility for the protection of traffic and the work.
- D. The Contractor shall provide such traffic regulators and watchmen as are necessary to insure safe and convenient travel by the public and to protect the work.
- E. Barricades, signs and lights shall be erected in accordance with the provisions of the Michigan Manual of Uniform Traffic Control Devices.

1.30 MAINTAINING SERVICE TO DRAIN, WATER MAINS, ETC.

- A. The Contractor shall maintain in continuous and effective service all drains, sewers, watercourses and water mains touched during the progress of the work. If it should become necessary to temporarily divert or obstruct the flow of any watercourse or drain, written consent must first be obtained from the Engineer, and then the Contractor shall assume full responsibility for the consequences.

1.31 NOTIFICATION OF UTILITIES

- A. The Contractor shall notify all utilities of his intention to excavate or otherwise cause any underground disturbance, by calling MISS DIG at least three (3) full working days before commencing such excavating or disturbances.
- B. The rights are reserved to both the City and to the owners of public utilities or franchises to enter upon the work for the purpose of making repairs to their installations and making changes in their installations necessitated by the work.

1.32 SUBLETTING OR ASSIGNING

- A. The Contractor shall perform without subletting, at least twenty-five (25) percent of the work provided for in this contract, computed based on cost.
- B. The subletting of any portion of the contract work shall be subject to approval by the Engineer, but such approval shall not relieve the Contractor of responsibility for the work of such Subcontractors who likewise shall be bound by all pertinent provisions of these specifications. Before any work is sublet, the Contractor shall satisfy the Engineer that the proposed Subcontractor is suitably equipped and experienced in that kind of work, and that he has proper financial resources to enable him to carry it out.
- C. No assignment by the Contractor of any principal construction contract or any part thereof, or of the funds to be received thereunder by the Contractor will be recognized unless such assignment has had the approval of the Engineer, and the Surety has been given due notice of such assignment in writing.
- D. No assignment will receive approval unless the instrument of assignment contains a clause to the effect that it is agreed that the funds to be paid the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said contract in favor of all persons, firms or corporations rendering such services or supplying such materials.

1.33 DISCHARGE OF EMPLOYEES

- A. The Contractor shall employ only competent, skillful persons to do the work. Whenever the Engineer shall notify the Contractor in writing that, in his opinion, any employee on the work is incompetent, impertinent, disobedient, unfaithful, disorderly or otherwise unsatisfactory, that employee shall be discharged from the work and shall not again be employed on it except with the written consent of the Engineer.

1.34 PROSECUTION OF WORK

- A. The Contractor shall begin work in accordance with the detailed progress schedule after execution of the Contract by the City. He shall prosecute the work in the order given in the progress schedule, with force and equipment adequate to complete the major items, portions, or sections within the time limit therein fixed for completion. In case of failure to proceed with the work as rapidly as is provided in the progress schedule, or if it appears at any time that such work is not being prosecuted

in such manner as to insure its completion within the time specified, the Engineer shall have the right to require the Contractor to furnish and place in operation such additional force and equipment as the Engineer shall deem necessary to bring the work up to the progress schedule; with or without notice to the Surety, place such working force and equipment on the work and charge the Contractor the cost of the labor and such rental and depreciation rates for the plant and equipment as in his judgment is reasonable, and for such time as the plant and equipment are in service.

1.35 EXTENSION OF TIME

- A. If the Contractor is obstructed or delayed in the prosecution or completion of the work by reason of the neglect, delay or default of any other Contractor having a contract with the City for adjoining or contiguous work; by reason of any damage that may happen thereto by the unusual action of the elements; by reason of the abandonment of the work by the employees in a general strike; the Contractor shall have no claim of damages for any such cause or delay. He shall, however, be entitled to such extension of the time specified for the completion of the work as the Engineer shall determine to be just and proper, provided however, that such claim for such extension of time is made by the Contractor in writing to the Engineer within one (1) week from the time when any such cause for delay occurs.

1.36 SUNDAY AND HOLIDAY WORK

- A. No work shall be done on Sundays, or upon any days celebrated as holidays by the City of Birmingham, except in case of emergency, or to protect work from damage or injury. All Sunday or holiday work must have prior written approval of the Engineer.

1.37 NIGHT WORK

- A. No work shall be carried on from 7:00 p.m. to 7:00 a.m., except in case of emergency, or to protect from damage or injury work that has already been done. All night work must have the prior written approval of the Engineer. This provision does not apply to work covered under the provision entitled "shutting off water".

1.38 MEASUREMENT OF QUANTITIES

- A. Quantities of work completed under the contract will be measured by the Engineer according to United States standard measures. When material is measured by weight in tons, the unit shall be the ton of two thousand (2000) pounds.
- B. All longitudinal measurements for area of base courses, surface courses and pavements will be made along the actual surface of the roadway. For all transverse measurements for area of base courses, surface courses and pavement, the dimensions used in calculating the pay area shall be the neat dimensions provided in the plans or by authorization.
- C. Structures will be measured according to neat lines provided on the plans or by authorization.
- D. All materials which are specified for measurement by the cubic yard "Loose Measure" will be measured at the location where used on the project under construction, unless otherwise provided.

1.39 CLEANING UP

- A. Upon completion of the actual work of construction, the Contractor shall clean up and leave in a neat condition all the premises which he has occupied during the construction period.
- B. Before the time of the final estimate, the Contractor shall remove from the premises, debris, rubbish and all unused materials, together with all tools and equipment, or shall deposit them at such points and in such a manner as the Engineer may require.

- C. Before leaving the grounds, the Contractor shall replace and put in good repair all fences, telephone poles and lines, roadways and other property that may have been damaged by him in the progress of the work.

1.40 ENVIRONMENTAL PROTECTION

- A. Contractor shall at all times be responsible to ensure that no chemicals, pollutants or other harmful or hazardous materials are spilled, discharged or otherwise released into the environment or onto City property, rights-of-way or into the storm or sanitary systems. Should such a release occur, Contractor shall immediately take action to extract the contaminants and prevent further exposure and damage. Contractor shall immediately contact the City and all other required governmental agencies to assess and determine the necessary and appropriate remediation activities. Contractor shall be responsible for all costs and damages stemming from the release including, but not limited to, the cost to remove and dispose of the contaminant, repair/replace/restore the affected areas, and all costs incurred by the City or governmental agency in response.

1.41 UNNOTICED DEFECTS

- A. Any defective work or material that may be discovered by the Engineer before the final acceptance of the work, or before final payment has been made, shall be removed and replaced by work and material which conform to the specifications. Failure to neglect on the part of the Engineer to condemn or reject bad or inferior work or materials shall not be construed to imply acceptance of such work or materials.

1.42 FINAL INSPECTION

- A. As soon as practicable, after the completion of all the work covered by the Contract, the Engineer shall make the final inspection of the work. If the work is found to comply with all the terms of the Contract plans and specifications, the Engineer shall accept the completed work with reasonable promptness. If the work is not acceptable to the Engineer at the time of such inspection, he shall advise the Contractor as to the defects to be remedied before final acceptance.
- B. If within a period of ten (10) days after such notification the Contractor has not taken steps to speedily complete the work as outlined by the Engineer, the Engineer may, without further notice to the Contractor and without in any way impairing the Contractor, make such arrangements as he may deem necessary to have the work completed in a satisfactory manner. The cost of so completing the work may be deducted from any monies due, or which may become due the Contractor.
- C. Use by the City or public of all or any part of the work before acceptance shall not be construed as acceptance of the part used.

1.43 PAYMENTS

- A. Partial payments will be made monthly on the basis of the value of work completed during the estimated period, less the percentages retained as specified herein, provided the work is progressing in accordance with the progress schedule, provided the contract provisions are being fulfilled, and provided the time of completion has not elapsed.
- B. The Contractor shall be responsible to submit requests for partial payments in writing by completing the Request for Partial Payment form supplied in the contract and/or by the City with the attached appropriate quantities as measured or estimated by the Superintendent.
- C. Request for Final Payment shall be made by an officer of the company submitting final quantities to the Engineer based upon the value of the work performed and materials completed in accordance with the contract. Prior to final payment, and as a condition thereto, the Contractor shall furnish

the City with a duly executed, notarized, "Contractor's Affidavit", stating that all bills and claims have been satisfied, except as stated therein, and a release of all claims against the City arising under and by virtue of this Contract.

- D. If the Contractor fails to submit a request for a payment, as specified, the Engineer may at his (her) discretion prepare a Contractor's Estimate for such payment.
- E. When submitting a request for partial or final payment, the Contractor shall complete the appropriate forms as included in Section 140 of the Contract. When requesting a partial payment, the Contractor shall submit the "Request for Partial Payment" form and the "Sworn Statement" form. When requesting final payment, the Contractor shall complete the "Request for Final Payment" form and the "Sworn Statement" form.
- F. When the Contractor determines that work will need to be completed outside of the specified pay items, the "Work Directive" form shall be submitted to the Engineer and approved prior to said work commencing.
- G. Except as hereinafter provided, the City will retain ten (10) percent from the partial payments of the amount earned up to fifty (50) percent of the Contract price. After fifty (50) percent of the Contract work is in place, the City will not hold additional retainage, unless the Engineer determines that the Contractor is not making satisfactory progress. If the Engineer determines the Contractor is not making satisfactory progress, the City may retain up to ten (10) percent of the value of the work over fifty (50) percent of the Contract price.
- H. After final acceptance of the Contract work by the Engineer, he shall process a final estimate for the total amount due the Contractor, less the total amount of all previous payments. Except as hereinafter provided, the total amount due the Contractor shall include interest earned on retained amounts from partial payments.
- I. Prior to final payment, and as a condition thereto, the Contractor shall furnish the City with a duly executed, notarized, affidavit or certificate, stating that all bills and claims have been satisfied, except as stated therein, and a release of all claims against the City arising under and by virtue of this Contract.
- J. In case evidence exists that all bills with respect to the work have not been paid in full, the Engineer may retain out of any amounts due the Contractor, sufficient sums to cover all such unpaid bills.
- K. Except as hereinafter provided, and at the City's option, a dispute regarding the percent retained from partial payments or regarding payment of interest on retained amounts, shall be settled in accordance with the provisions of Act 524 of the Public Acts of Michigan for 1980.
- L. For a Contract having a dollar value of less than \$30,000.00, or a Contract having three (3) months or less between the date of the Contractor and the Contract Time of Completion:
 - 1. The City will retain ten (10) percent of the amount earned from partial payments.
 - 2. The City will not pay interest on amounts retained from partial payments.
 - 3. The provision to settle disputes in accordance with Act 524 will not apply.

1.44 SETTLEMENT OF DISPUTES

- A. Any controversy of claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suite in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three

arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. If the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suite in the Oakland County Circuit Court or the 48th District Court.

1.45 MAINTENANCE AND GUARANTY

- A. The Contractor shall guarantee all the work furnished under this Contract against all defects in workmanship and materials, and incidental damage to other property, for a period of one (1) year following the date of the final acceptance of the work by the City. The Performance Bond shall fully cover all guarantees contained in this article.

1.46 CONFLICT OF INTEREST

- A. The Contractor shall not directly or indirectly employ or otherwise use a City official of the City of Birmingham in conjunction with this contract. If subsequent to entering into the Contract a City official, a spouse, child or parent shall become directly or indirectly interested in the contract, the City shall have the right to terminate the contract without further liability if the disqualification has not been removed within thirty (30) days after the City has given notification of the disqualifying interest.

1.47 INSPECTOR CREW DAYS

- A. It shall be the responsibility of the bidder to extend as a bid item in his proposal, when called for, the number of inspection crew days he requires for the completion of the project, times the unit price for inspection. The basis of computing crew days shall be as follows:

Total Hours Worked

Crew Days Charged

When an Inspector reports to the project and the Contractor decides not to work, or does not appear to work, weather permitting.

- One-half (1/2) crew day

Under four (4) hours

- One-half (1/2) crew day

Four (4) hours or more

- One (1) crew day

- B. The above hours are only for the usual working days of Monday through Friday.
- C. All Saturday work shall multiply the number of crew days by a factor of 1.5. All Sunday work shall multiply the number of crew days by a factor of 2.0.
- D. All holiday work shall multiply the number of crew days by a factor of 2.0. Holiday work shall include all legal holidays, and any other days when the Municipal Building of the City of Birmingham is officially closed.
- E. The amount bid shall be included in comparative evaluation of the bids. OMISSION OF THIS ITEM, WHEN CALLED FOR, SHALL BE CAUSE FOR REJECTION OF THE BID.
- F. The City of Birmingham will bill the Contractor six hundred and fifty (\$650) dollars per day for each day they require inspection according to the Engineer. The bill must be paid monthly to the City of Birmingham Treasurer. A thirty (30) day grace period will be provided in which to pay the inspection bill, after which a 1% per month late fee will be assessed. All inspection bills must be paid prior to issuance of final payment.

- G. In the event that the number of crew days required is less than the amount bid, the excess shall be paid to the Contractor at the end of the project. If the number of days required is more than the amount bid, the pay item shall remain as the amount bid, and all days used shall be due to the City prior to final payment.
- H. If the quantity of work under the Contract varies from that stated in the Proposal, the number of "crew days" allowed under the bid item shall be increased or decreased in proportion to changes in the total value of work under the Contract. This revision in the number of crew days shall be agreed upon at the time the Contract quantities are revised.
- I. The Contractor shall give the City Engineer at least twenty-four (24) hours notice, exclusive of Saturdays, Sundays or holidays, when the project requires an increase or decrease in the number of Inspectors. Failure to observe this requirement will either necessitate the charging of one-half (1/2) crew day if the Inspector appears on the project, or the halting of all additional work until an Inspector is available. Unless the Inspector is notified in advance, crew days will be charged when an Inspector appears on a project and the Contractor decides not to work.
- J. A separate crew day shall be charged for each and every Inspector or Engineer employed on a project for inspection purposes.
- K. The number of Inspectors or Engineers required for the complete inspection of any project shall be as determined by the City Engineer.
- L. One (1) Inspector or Engineer shall be assigned to each construction crew or each operation listed below:
 - 1. General
 - a. Material Testing (not the operations done by a testing laboratory).
 - b. Checking barricades and lighting.
 - c. Checking maintenance of traffic.
 - d. Emergency conditions, as determined by the Engineer.
 - e. Measuring quantities when said measurements are taken during one of the operations included within this list.
 - 2. Clean-Up and Complaints
 - a. Replacement of driveways, sidewalks, pavement, etc.
 - b. Checking restoration and answering complaints.
 - 3. Water Mains and Appurtenances
 - a. Excavation.
 - b. Laying of Mains.
 - c. Installing Valves and Hydrants.
 - d. Tunneling, Jacking or Boring of Water Mains.
 - e. Backfilling of Trenches.
 - f. Restoration of Existing Conditions.
 - g. Cleanup.

- h. Pressure Testing.
 - i. Cleansing and Disinfecting.
 - j. Checking final installation for conformance to specifications prior to releasing for connections to be made.
 - k. The same Inspector may inspect the installation of hydrants, thrust blocks, gate wells, etc., in the proximity of the pipe laying operations, provided the Contractor cooperates to the extent that no portion of the work is covered prior to inspection.
4. Concrete Pavement
- a. Excavation and Preparation of the Site.
 - b. Mucking and Filling Ditches.
 - c. Pavement Removal.
 - d. Subgrade Preparation and Fine Grading.
 - e. Adjusting and Reconstructing Existing Structures.
 - f. Sub-Base Construction.
 - g. Checking Form Alignment and Grade.
 - h. Placing of Concrete.
 - i. Constructing Compression Cylinders.
 - j. Finishing of Concrete.
 - k. Placing of Cold Weather Protection.
 - l. Sawing and Sealing.
 - m. Finish Grading.
 - n. Coring Finished Pavement (One (1) crew day will be charged for each twelve (12) cores taken).
 - o. Adjusting Existing Driveways and Sidewalks.
 - p. Seeding and Mulching.
 - q. Restoration.
 - r. Site Clean-Up.
 - s. Checking final pavement prior to final acceptance for conformance to specifications.
5. Sanitary, Combined, and Storm Sewers, and Appurtenances
- a. Excavation and Preparation of the Site.
 - b. Checking Sewer Pipe.
 - c. Installing Pipe Bed.
 - d. Laying Pipe.
 - e. Installing House Leads.
 - f. Tunneling, Jacking or Boring of Sewer.

- i. Mining Operation:
 - ii. Placement of Concrete:
 - One (1) Inspector in Tunnel.
 - One (1) Inspector Top Side.
 - g. Constructing Manholes, Catch Basins, Inlets.
 - h. Backfilling.
 - i. Restoration.
 - j. Infiltration or Ex-Filtration Tests.
 - k. Site Clean-Up.
 - l. Final checking of sewers prior to releasing for connections to be made or placing in service.
 - m. The same Inspector may inspect the installation of manholes, catch basins, inlets, etc., in the proximity of the pipe laying operation, provided the Contractor cooperates to the extent that no portion of the work is covered prior to inspection.
- 6. Reinforced Concrete Structures
 - a. Excavation for Structure.
 - b. Sheeting.
 - c. Checking Forms and Re-steel.
 - d. Placing of Concrete.
 - e. Backfilling Around Structures.
 - f. Checking Installation of Equipment.
- 7. Asphalt Paving and Pavement Resurfacing
 - a. Excavation.
 - b. Preparation of Subgrade.
 - c. Construction of Base.
 - d. Preparation of Existing Pavement.
 - e. Priming Base Course.
 - f. Construction of Bituminous Concrete Pavement or Surface.
 - g. Checking of Material.
 - h. Checking of Asphalt Plants.
 - i. Checking of Final Pavement for Conformance to Specifications.
 - j. Restoration.
 - k. Site Clean-Up.
- M. Inspection rates for crew days will be charged as follows:
 - 1. Half Day = \$325.00

2. Full Day = \$650.00
- N. No payment on inspector crew days shall occur while the project is in progress. Upon final evaluation and inspection approval inspector crew days will be calculated and paid along with the final payment of the project to the contractor.

END OF SECTION

**SECTION 500
WATER MAIN CONSTRUCTION**

PART 1. GENERAL

1.01 SUMMARY

- A. The work of this section shall consist of the installation of water mains, valves, risers, corporations, boxes, hydrants, water services and connections, of the size and character and at the locations shown on the drawings. This work shall include the provision of all labor, materials, equipment, and supervision required, including excavation, bedding, backfill, testing and sterilization and other incidental work necessary for a complete system. The Contractor shall set crosses, tees, bends, sleeves, and other special fittings in the main where shown on the drawings or directed by the Engineer. All unconnected openings of such special fittings shall be closed by standard plugs. All special fittings shall be incidental to the water main construction.

1.02 REFERENCES

- A. Unless otherwise specified, all water main pipe materials shall conform to the latest edition of the applicable AWWA standard for construction.
- B. Performance and material requirements shall meet specific Reference Standards as referred to hereinafter under individual items.
- C. Unless otherwise specified, all materials shall also conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 CERTIFICATION AND INSPECTION

- A. All pipe and fittings delivered to the job shall be accompanied by certification papers showing that the pipe and fittings have been tested in accordance with the applicable Specifications for this project. All pipe and fittings will be inspected upon delivery to the jobsite. No cracked, broken or damaged pipe will be allowed in this work.
- B. Each piece of ductile iron pipe and each fitting shall have its weight and class designation conspicuously painted or cast on it. All other pipe materials shall have the class designation painted thereon. Where required, other designation marks shall be painted on the pipe or fittings to indicate correct location in the pipeline in conformity to a detailed layout plan.

1.04 SHOP DRAWINGS AND GUARANTEES

- A. Contractor shall furnish shop drawings and guarantees of the items to be furnished under this section of the Contract. Design details of joints and joint restraint shall be submitted to the Engineer for consideration and approval before ordering any pipe.

PART 2. MATERIALS

2.01 WATER MAIN PIPE

- A. All water main pipe supplied and installed on this project shall be Pressure Class 52 Ductile Iron Pipe (DIP) conforming to ANSI A21.5, latest revision.
- B. Joints shall be push-on type conforming to ANSI A21.11, latest revision.
- C. Ductile iron pipe shall be cement mortar lined and bituminous seal coated, in accordance with ANSI A21.4, latest revision.

2.02 POLYETHYLENE ENCASEMENT

- A. All ductile iron pipe and fittings shall be encased with polyethylene encasement in accordance with the requirements of ANSI/AWWA Standard C105/A21.5-10.
- B. Polyethylene encasement materials shall be manufactured of virgin polyethylene possessing the following characteristics:
 - 1. Type, Class, Grade, other Characteristics:
 - a. In accordance with A.S.T.M. Specification D-1248-84 or latest revision thereof.
 - b. Type.....I
 - c. Class A..... A natural color where exposure to weather (including sunlight) is less than forty-eight (48) hours total burial OR Black where exposure to weather (including sunlight) may be more than forty-eight (48) hours. Exposure to weather should be kept to a minimum, and in no case should it exceed ten (10) days.
 - d. Grade..... E-1
 - e. Flow Rate (formerly Melt Index)0.4 maximum
 - f. Tensile Strength..... 1200 psi
 - g. Elongation.....300%
 - h. Dielectric Strength.... Volume resistivity, ohm-Cm3 = 1015 volts per mil thickness.
 - i. Polyethylene tube material shall have a thickness of .008" (8-mils). Thickness tolerance shall not exceed 10% of the total tube thickness. A suggested tube size for each pipe diameter is listed in Table 1 below. For pipe sizes greater than 24", tube size may be determined by multiplying the nominal pipe diameter by 2.25 to obtain minimum flat tube width.

TABLE 1: Polyethylene Flat Tube Width (Inches)

<u>Nominal Pipe Diameter (Inches)</u>	<u>Ductile Iron Pipe, Bell & Spigot Joints</u>	<u>Ductile Iron Pipe with Mechanical Joints</u>
4	16	16
6	20	20
8	24	24
10	27	27
12	30	30
14	34	34
16	37	37
18	41	41
20	45	45
24	54	54

- C. Adhesive tape used to connect Water main Polyethylene Encasement shall be a general-purpose adhesive tape two (2) inches wide and approximately ten (10) mils thick, such as Scotchrap No. 50, Polyken No. 900, or Tapecoat CT. Tape used for repair of damage to the polyethylene shall possess a life expectancy equal to that of the polyethylene.

2.03 FITTINGS

- A. Ductile Iron Water Main Fittings shall be furnished in accordance with ANSI A21.10, latest revision.

- B. Joints shall be mechanical joint or push-on, conforming to ANSI A21.11, latest revision. When called for on the plans or supplemental specifications, fittings shall be cement mortar lined as detailed for pipe.
- C. When connecting to existing water mains, oversized fittings may be required to match the outer diameter of the older water mains. The Contractor shall determine sizes as necessary.

2.04 HYDRANTS

- A. Hydrants shall be EJIW model 5BR with 6" mechanical joint inlet, two pumper nozzle, all opening left, 5'6" bury, plugged drain, block bolts.

2.05 GATE VALVES AND BOXES

- A. All gate valves shall be of the resilient seat wedge type with mechanical joints.
- B. Gate valves shall be designed for 150 psi working pressure and meet the requirements of AWWA Specification C509.
- C. Gate valves shall be cast iron body, fully bronze mounted, bronze stem, O ring stem seal, non-rising stem and wedge disc with resilient rubber seat ring disc seat. Gate valves shall have a clear waterway equivalent in area, when fully open, equal to that of the connecting pipe.
- D. Valves shall be made to open when turned to the left, or counterclockwise.
- E. The gate valves shall have square wrench nuts.
- F. Gate valves of the size specified shall be produced by either Mueller or East Jordan Iron Works.
- G. Valve boxes shall be of the three (3) piece adjustable height type with cast iron curves with a 5 1/4" shaft diameter. The cover shall be marked "WATER". The length of the box shall be adequate for the depth of cover at the valve location.

2.06 WATER LEADS

- A. All water service leads shall be of Type K copper of the sizes called for on the plans.

2.07 CORPORATION STOPS

- A. Corporation stops shall be Mueller Model No. H-15000
- B. Corporation Stops shall have an AWWA Taper threaded inlet with copper flare straight connection outlet.
- C. Corporation Stops shall be manufactured and tested to meet ANSI/AWWA Standard C800.
- D. Corporation stops shall be constructed of heavy-duty brass components meeting the requirements of ASTM B62.

2.08 CURB STOPS AND BOXES

- A. Curb Stops shall be manufactured and tested to meet ANSI/AWWA Standard C800.
- B. Curb stops shall be constructed of heavy-duty brass components meeting the requirements of ASTM B62.
- C. Inlet and outlet shall both have copper flare straight connections.
- D. Curb stops valve shall have Minneapolis pattern thread top
- E. Curb stop valves shall be Mueller Model No. H-15154

- F. Curb stop valves shall be Mueller Model No. H-10300.
- G. Curb stop boxes shall be cast iron extension type with lid and plug and shall have a Minneapolis pattern base with a 1-1/4" inner diameter upper section. Curb stop boxes shall be furnished to include a valve box riser (EJIW 8500) and cover (EJIW 6800) to allow for a flush rim elevation to the sidewalk grade.

PART 3. CONSTRUCTION

3.01 CARE IN HANDLING PIPE

- A. The pipe shall be distributed at the site by the Contractor as required and care shall be exercised to prevent injury to the pipe in handling. Proper tools and implements for safely handling the pipe and other materials shall be provided by the Contractor, and particular care shall be exercised to prevent the abrasion of the pipe coating which shall be repainted, if injured, with coal tar varnish properly mixed with oil and heated before applying. The Contractor shall keep on hand a sufficient supply of the coal tar varnish for such purpose.
- B. Care shall be taken in handling cement-lined pipe. Hooks inserted inside the pipe shall have blunt ends which will spread the bearing to more than two (2) square inches of cement surface.
- C. Pipe must be protected from falling, either from truck to ground or into the trench and, when distributed along the line or stored near a road, must be kept clear of passing vehicles.
- D. All materials will be inspected before placing in the trench, and if defective, marked "REJECTED" and removed from the work by the Contractor at no additional expense to the City. All damaged materials shall be replaced by the Contractor at no cost to the City.

3.02 MATERIALS FURNISHED BY THE CITY

- A. See the "General Requirements" section for materials furnished by the City.

3.03 SHUTTING OFF WATER

- A. The Contractor shall familiarize himself with the locations of existing gate valves, and have the gates made easily accessible for emergency shut-offs. He shall always keep on the job all the necessary equipment to shut the water off and to make immediately emergency repairs without undue delay.
- B. WARNING: Since some water mains and valves are old, it is not uncommon for valves to not shut off "tight". In such cases, it may be necessary to close additional valves and/or for the Contractor to contend with a flow of water through such valve(s).
- C. In case of an emergency break in a water line due to his construction operations, it shall be the Contractor's responsibility to supply water for immediate needs to those deprived of such service.

3.04 EXISTING STRUCTURES AND UTILITIES

- A. The Contractor shall notify all utilities of his intention to excavate or otherwise cause any underground disturbance, by calling MISS DIG at least three (3) full working days before commencing such excavation or disturbance.
- B. Underground structures and utilities are shown on the construction drawings as an aid to the Contractor, but the Owner does not guarantee their location or that other underground structures or utilities may not be encountered. No attempt has been made to show utility services on the plans, and it shall be the Contractor's responsibility to locate them. The City will, whenever

possible, and when requested by the Contractor, stake the location of sewer and water services at the street right-of-way line.

- C. In crossing over or under underground utilities, the Contractor shall use all possible care in protecting the utilities and to maintain their free unobstructed continuous use. The Contractor will be required without additional compensation to repair, replace or rebuild any such improvement injured or damaged by him, and he shall be responsible to the department, companies, individuals, or corporations controlling such improvements.
- D. All underground utilities shall be supported on a foundation of sand or sand-gravel thoroughly compacted by mechanical tamping to prevent future settlement and possible failure of the utility. "Cement reinforced sand backfill" rather than "sand or sand 'gravel'" shall be used under sewers and sewer services. Gas mains and gas services shall be supported in accordance with the requirements of the Consumer Power Company.

3.05 TRENCH EXCAVATION

- A. Excavation shall be open cut. All work shall be done to true line and grade. The Contractor shall protect all line and grade stakes and he will be held responsible for any defective work occasioned by his negligence in this regard.
- B. The trench shall be of sufficient depth to provide a cover above the crown of the pipe of at least five (5) feet.
- C. The bottom of trench shall be excavated neatly to the required grade and filled two (2) inches with MDOT Class II sand thoroughly compacted by tamping before the pipe is laid.
- D. Methods and equipment for excavating shall be such as will produce a trench without excessive width or irregularity. The width of trench shall be sufficient to allow the pipe to be laid and jointed properly and to allow the backfill to be placed and compacted properly.
- E. The Contractor shall take great care to protect all trees and shrubs along the site of the work. No equipment will be permitted which causes excessive damage to existing trees along the site of the work.
- F. If the trench at any point along the line will be opened nearer than six (6) feet to the face of the trunk of an existing tree, and in the opinion of the Engineer the excavation would be injurious to the tree, he may require the Contractor to tunnel under the tree at no extra cost to the City.
- G. Selected excavated material may be used for backfilling under trees and it shall be thoroughly tamped to completely fill the excavated space.
- H. Where the trench must be cut through concrete or asphalt pavement, driveways, or sidewalk particular care shall be taken not to damage adjoining areas. All cuts through existing concrete or asphalt pavements, and driveways shall be made with a concrete saw, except where an existing parallel joint is located not more than two (2) feet beyond the line of the intended saw cut. In that case the pavement or driveway shall be removed and replaced to the existing joint. Sidewalks shall not be saw cut and all removal and replacement shall go to existing joints. Pavement breaking using a drop weight may be limited or prohibited by the Engineer, if the Engineer determines the use of such equipment is causing damage to adjacent structures.

3.06 TUNNELING

- A. Tunneling, Boring and Jacking under pavements or streets will not be allowed without the approval of the Engineer in writing, or unless noted on plans or in the Specifications. Where tunneling is permitted there shall be a minimum clear space of not less than six (6) inches between

the outside of the pipe in the tunnel and the face of the excavation or the sheeting or bracing that is nearest the pipe. Upon completion of the construction work in the tunnel, the sheeting and bracing (if any) shall be left in place and all the remaining space between the outside of the pipe and the excavation shall be filled with cement reinforced sand backfill thoroughly compacted. The Contractor shall receive no additional compensation for sheeting and bracing left in place in the tunnel.

3.07 EXCAVATED MATERIAL

- A. The materials excavated and to be used in backfilling shall be so handled and stored as to cause as little inconvenience as possible to the public travel and adjoining property owners. The materials excavated and not suitable or needed for backfilling shall be disposed of by the Contractor at his own dumpsites.
- B. Payment for handling the surplus excavated material, as outlined above, shall be included in the unit prices quoted in the proposal for pipe installation.

3.08 LAYING PIPE

- A. Water mains shall be laid with a minimum of five (5) feet of cover from the top of the main to the final surface grade above the main, unless otherwise designated on the plans, authorized by the Engineer, or necessary to connect to existing fittings.
- B. Before laying pipe, all lumps, blisters, and excess coal tar coating shall be removed from the bell and spigot ends of each pipe; the outside of the spigot and the inside of the bell shall then be wire brushed and wiped clean and dry.
- C. Before lowering, and while suspended, the pipe shall be inspected for defects and rung with a light hammer to detect cracks. Any defective, damaged, or unsound pipe shall be rejected. The interior of each piece shall be inspected for cleanness and cleared of any dirt or foreign matter before being lowered into the trench.
- D. Each length of pipe shall have bearing upon the sub-grade throughout the length of the barrel. The pipe will not be permitted to rest in the trench on any hard unyielding object such as stone, brick, etc. Blocking pipe up to proper level with blocking of any kind will not be permitted.
- E. Unless otherwise directed, pipe shall be laid with bell ends facing the direction of laying. After a length of pipe is placed in the trench the spigot shall be centered in the bell of the adjacent pipe, the pipe shoved into position and brought into true alignment, and there secured with sand, carefully tamped under and on each side of the pipe.
- F. When the temperature is above 60 degrees F., the spigot of each pipe laid shall be brought tightly home in the bell of the preceding pipe. When the temperature is below 60 degrees F., the pipe shall be laid with the spigot end approximately 1/16" from the face of the bell to allow for expansion.
- G. Wherever deflections at joints are required by changes in grade or alignment or to plumb valve stems, the deflection at any joint shall not exceed three-quarters of the maximum deflection recommended by the manufacturer of the joint used.
- H. Where necessary to cut pipe, cutting shall be done with approved tools and cut ends of pipe shall be square and regular. Cutting shall be done in a manner to avoid damage to lining and coating.
- I. Spigot ends of field cut pipe shall be tapered back one-eighth (1/8) inch at an angle of thirty (30) degrees with the centerline of the pipe.

- J. All branches or other openings shall be bulkheaded until either capped or connected. The end of the pipe shall be bulkheaded and braced at the end of each day's work.
- K. Tools or other objects shall not be stored or left in the pipe.

3.09 JOINTING OF PIPE

- A. Molded rubber gasket slip on type joints shall be used for jointing of pipe. Prior to positioning the rubber gasket, the bell and spigot shall be wiped clean. After properly positioning the gasket in the bell, the joint shall be lubricated with an approved lubricant.
- B. The spigot end shall be centered into the bell end until it engages the gasket. The joining pipe shall then be aligned both vertically and horizontally before applying force to make the joint. Any deflection shall be taken after the joint assembly has been completed.
- C. Mechanical joints may be used as an alternate for the slip-on type joining, if approved by the Engineer.

3.10 INSTALLATION OF POLYETHYLENE ENCASEMENT

- A. Polyethylene encasement shall be installed on all new pipe and fittings installed on this project. Although not intended to be a completely air- and water-tight enclosure, the polyethylene shall provide a continuous barrier between the pipe and the surrounding backfill.
- B. On Pipe:
 - 1. Cut polyethylene tube to a length approximately two (2) feet longer than the length of the pipe section. Slip the polyethylene around the pipe, centering it to provide a one (1) foot overlay on each adjacent pipe section, and bunching it accordion fashion until it clears the pipe ends.
 - 2. Lower the pipe into the trench and make up the pipe joint with the preceding section of pipe. A shallow bell hole must be made at joints to facilitate installation of the polyethylene.
 - 3. After completing the joint, make the overlap. Pull the bunched-up polyethylene from the preceding length of pipe, slip it over the end of the new length of pipe, and secure in place with one circumferential turn of tape, plus enough new pipe section over the end of the first wrap until it overlaps the joint at the end of the preceding length of pipe. Tape it in place. Take up the slack width to make a snug, but not tight, fit along the barrel of the pipe, securing the fold as necessary with adhesive tape at quarter points.
 - 4. Repair any rips, punctures, or other damage to the polyethylene with tape, or with a short length of polyethylene tube cut open, wrapped around the pipe, and secured with tape. Proceed with installation of the next section of pipe.
- C. On Pipe – Alternate Method:
 - 1. Cut polyethylene tube to a length approximately one (1) foot shorter than the length of the pipe section. Slip polyethylene around the pipe, centering it to provide six (6) inches of bare pipe at each end. Make polyethylene snug, but not tight; tape down at quarter points and secure ends as described above.
 - 2. Before making up a joint, slip a three (3) foot length of polyethylene tube over the end of the preceding pipe section, bunching it accordion fashion. After completing the joint, pull the three (3) foot length of polyethylene over the joint, overlapping the polyethylene previously installed on each adjacent section of pipe by a least one (1) foot; make snug, tape down, and secure each end as described above.
 - 3. Repair any rips, punctures, or other damage to the polyethylene as described above. Proceed with installation of the next section of pipe in the same manner.

- D. Bends, Reducers, Offsets, and other fittings that can be wrapped in a polyethylene encasement tube shall be covered with polyethylene in the same manner as the pipe.
- E. Valves and other odd-shaped fittings which cannot practically be wrapped in a tube, shall be wrapped with a flat sheet obtained by splitting open a length of polyethylene tube. This sheet shall be passed under the valve and brought up around the body of the stem. Seams shall be made by bringing the edges together, folding over twice, and tamping down. Slack width and overlaps at joints shall be handled as described above. Tape polyethylene securely in place at valve stem and other penetrations.
- F. Openings for branches, service taps, blow-offs, air valves and similar appurtenances shall be made by making an X-shaped cut in the polyethylene and temporarily folding the film back. After the appurtenance is installed, replace the film, and repair the cut, as well as other damaged areas in the polyethylene, with tape. Branches, service taps, blow-offs, air valves and similar appurtenances shall not be wrapped with polyethylene unless otherwise specified or shown on the drawings.
- G. Junctions Between Wrapped and Unwrapped Pipe:
 - 1. Where polyethylene wrapped pipe joins a pipe which is not wrapped, extend the polyethylene tube to cover the unwrapped pipe three (3) feet, unless shown on the drawings. Secure the end with circumferential turns of tape.

3.11 COATING OF BOLTS

- A. All bolts and nuts installed by the Contractor shall be coated with coal tar.

3.12 SHORING, SHEETING AND BRACING

- A. Where necessary for the safety of persons, adjoining structures, or property, or the work itself, the Contractor shall adequately sheet or shore the trenches and sides of all excavations and shall provide adequate support for such sheeting or shoring. The sheeting, shoring and supports shall be furnished, placed and maintained by the Contractor during the time of need for same.
- B. As the excavations are backfilled, the Contractor shall carefully pull the sheeting and remove its supports in such a manner as not to endanger persons, adjoining structures or property or the work, taking care that the space left unfilled by the removal of the sheeting is compactly backfilled. No extra compensation will be allowed for removal of sheeting, shoring or supports.

3.13 THRUST BLOCKING

- A. Bends, tees, dead end of pipe or fittings and hydrants shall have concrete thrust blocks installed in accordance with the details as shown on the contract drawings. No separate payment will be made for thrust blocks. This work is incidental to the installation of the water main.

3.14 GATE VALVES

- A. The cost of installing gate valves in new water mains and in hydrant connections shall be included with the appropriate pay item for construct gate wells, install gate valve and box, or hydrant connection.
- B. Payment for installing gate valves in existing mains will be made at the contract unit price each.
- C. Gate valves and valve boxes shall be furnished by the Contractor.

3.15 GATE WELLS

- A. Gate wells shall be constructed at the locations as indicated on the contract drawings.

- B. Gate well walls are to be built of pre-cast concrete meeting ASTM C-471, concrete block masonry, or brick masonry laid in full and close joint of cement mortar. The outside of masonry gate wells shall be plastered to a thickness of one-half (1/2) inch with mortar. The inside joints shall be left smooth. The ring shall be set in a bed of mortar and adjusted to the grade set by the Engineer.
- C. Gate wells will be paid for at the contract unit price each, which will be payment in full for furnishing all materials (including Construction castings), for all necessary excavation, backfilling, disposal of surplus material, removing and replacing pavement, curb, curb and gutter, sidewalk, and driveways, and constructing the structure complete.
- D. Where gate wells are constructed over new gate valves, the unit price shall cover furnishing and installing both the gate well and the gate valve.

3.16 HYDRANT INSTALLATION

- A. Hydrants shall be set plumb and to the grade established by the Engineer.
- B. Payment for hydrant installation will be made at the contract unit price each, which price will be payment in full for excavation; furnishing and installing a tee in the water main; furnishing and installing the hydrant, the gate valve, and the gate valve box; blocking; and backfilling.
- C. Six (6) inch hydrant connection pipe from the main to the hydrant will be paid for at the contract unit price per lineal foot for installing six (6) inch ductile iron pipe.

3.17 HYDRANT REMOVAL

- A. Wherever possible, hydrants to be removed shall be left in service until new hydrants to be installed are in service. The Contractor shall do all necessary excavation required and shall remove the hydrant and hydrant valve (if any) and cap and plug the hydrant connection at the main. After the connection has been capped or plugged, necessary concrete blocking shall be placed and before backfilling, the connection shall be tested for leakage. Salvaged hydrants and fittings shall be delivered by the Contractor to the Department of Public Services Yard.
- B. Payment for hydrant removal will be made at the contract unit price each, which price will be payment in full for excavation, removing hydrant and gate valve, plugging, blocking, backfilling, removing the existing surface materials, and replacing the surface materials with the same type and thickness of material as removed.

3.18 BACKFILLING OPEN TRENCHES

- A. Before the usual backfilling is commenced, sand backfill shall be placed along the side and under the lower haunches of the pipe up to the top or crown of the pipe for the full width of the trench. This sand backfill shall be placed manually in layers not exceeding six (6) inches in thickness. Each layer shall be thoroughly compacted by mechanical tamping or vibrating. The cost of placing this sand backfill to the top of the pipe shall be included in the unit price bid for installation of the pipe.
- B. Insofar as practicable, without interfering with the progress of the work, the Contractor shall keep streets, driveways and sidewalks open to safe use by the public.
- C. All trenches and excavations under existing pavement, proposed pavement, existing roadways, driveways or sidewalk shall be backfilled with sand or gravel and thoroughly compacted by mechanical tamping or vibrating in layers not exceeding 12 inches in depth. The Engineer may

require the Contractor to further consolidate the backfill by the water jetting method after compaction by mechanical means.

- D. Backfill shall not be placed against any portion of a structure until it (structure) has passed inspection.
- E. Where the trench or excavation is in the parkway between the roadway and the street line or in unimproved streets, excavated material may be used in completing the backfill. Care shall be taken in placing this backfill to make sure that all boulders, pieces of concrete and such other material that might damage the pipe or structure, or prevent consolidation are not allowed to remain in the backfill material and it shall be compacted by tamping, jetting, or using compacting equipment.
- F. If a bulldozer or other machine is used to place the backfill material, no material shall be pushed or dropped into the trench but shall be placed on the sloping ends of the completed backfill and allowed to roll in place to the bottom of the trench.
- G. All trenches and excavations shall be backfilled as soon as inspection is completed to avoid unnecessary risk of damage to the line and to reduce the risk of accidents involving the public.
- H. After backfilling is completed, the Contractor shall promptly remove all surplus and waste materials from the site, leaving the site and all places disturbed or affected by the work in a neat and orderly and dust free condition.

3.19 NEW WATER MAIN CONNECTIONS TO EXISTING MAINS

- A. When connecting to existing water mains, oversized fittings may be required to match the outer diameter of the older water mains. The Contractor shall determine if oversized fittings are necessary for each connection, and shall provide all necessary materials, parts, tools, labor, equipment and all incidental work required for the connection. No additional compensation will be made for the use of oversized fittings on any connection to an existing water main.

3.20 CONNECT WATER SERVICES TO NEW MAIN

- A. This item involves connecting water services to new water mains. The water services to be connected to the new mains are currently connected to water mains that will be removed or abandoned under this contract.
- B. The Contractor shall install corporations in the new main and connect the services at the corporations. Locations and sizes of existing water services are shown on the plans in accordance with the best information available to the City. However, there will be no adjustment made in pay items if the locations or sizes are different than those shown on the plans.
- C. If the Contractor encounters a lead water service during the installation of the water main or water service connections, they shall notify the City of the lead water service. Once the material of the service is verified by the City, the Contractor shall remove and replace the lead service with a type K copper service to the property line.
- D. New pipe necessary to make the connections shall be Type K Copper and shall be of the same size as the existing service.
- E. For water service connections where the existing water service will cross the trench of the proposed water main installation, payment will be made for installing a water service connection using the existing water service lead (unless it is a lead water service). No payment will be made for installing new Type K Copper water service on these leads. Any new Type K Copper water

service required on these services shall be considered incidental to the construction of the water service connection.

3.21 MAINTENANCE OF TRENCHES

- A. During the period between the time when a section of water main is completed and the time when the final pavement surface is replaced, the Contractor shall maintain the top of the trench in a suitable condition for traffic to use. The Contractor shall place a minimum thickness of three inches of cold-mix asphalt in all areas where pavements have been removed. Such cold-mix asphalt shall be maintained, and supplemented, if necessary, until such time as permanent pavement is replaced.
- B. There is no separate pay item for maintenance of trenches, as that work is considered incidental to the water main construction.

3.22 SURFACE RESTORATION

- A. Surfaces removed or damaged for the construction shall be replaced as follows, unless otherwise specified on the plans:

<u>1. Existing Surface</u>	<u>Replaced By</u>
a. Gravel (driveways, shoulders, etc.)	8" 23A aggregate
b. Bituminous mat	5" full-depth asphalt
c. Asphalt (full-depth or over aggregate)	5" full-depth asphalt
d. Concrete pavement	8" concrete
e. Asphalt surfaced concrete	8" concrete and 2" asphalt surfacing
f. Concrete sidewalk	4" concrete, except 6" at drives
g. Grass surface	3" topsoil plus seed or sod

- B. For asphalt surfaces, the top shall be a wearing course mixture at one (1) inch minimum thickness. The balance of the thickness shall be: (a) leveling course mixture when over a concrete base and (b) base course mixture when in a full-depth asphalt.
- C. Surfaces not described above, which are damaged for the construction, shall be replaced with the same type and thickness of material removed.
- D. All surface restoration shall comply with the City's Standard Details and specifications for the specific type of work being done.

3.23 FLUSHING

- A. Upon completion, the new main shall be flushed with potable water until the water runs clear in color and no foreign matter is discharged. The main shall be slowly filled and due care taken to expel all air from the main. A temporary connection may be installed to conduct the water out of the trench. Flushing shall be done in a manner that will not cause damage to adjacent property.

3.24 PRESSURE TEST

- A. The completed main shall be pressure tested with water at a pressure of 150 pounds per square inch. This pressure shall be maintained for at least two hours and for such longer time as the Engineer may require. The leakage, as measured by water meter or by other means approved by the Engineer, from the section of main under test pressure shall not exceed a rate of 11.65 U.S. gallons per inch of main diameter per mile of pipe in twenty-four (24) hours. (See "Water Main Disinfection & Leakage Test" table at the end of this specification section).

- B. In case the leakage under test exceeds the maximum above specified, the leaks shall be discovered and repaired in an approved manner.
- C. Any faulty pipe, fittings, valves, or other accessories included in work under this Contract and disclosed during testing shall be replaced with sound material and the test shall be repeated until specified requirements are met.

3.25 CLEANSING AND DISINFECTION OF NEW WATER MAIN

- A. Before the new water mains and appurtenances are placed in service, they shall be cleansed, sterilized, and the water passing through them must show by tests safe bacteriological results.
- B. All rules and practices of the Oakland County Health Department, the Michigan Department of Public Health, and the Michigan Department of Environmental Quality must be strictly followed.
- C. The Contractor shall provide all necessary connections at the points of beginning of the individual sections of mains for applying chlorine to the mains for disinfection purposes.
- D. After water mains laid under this contract have been acceptably tested and flushed, they shall be disinfected by the Contractor, in accordance AWWA Standard C651. All new mains and pipe shall be chlorinated with up to fifty (50) parts per million or more of liquid chlorine, or approved equal, and the chlorinated water allowed to stand in the mains for twenty-four (24) hours, at the end of which period the chlorinated water at all parts of the new mains shall show a free available chlorine residual of not less than twenty-five (25) parts per million. If less than twenty-five (25) parts per million residual is shown at the end of the first twenty-four (24) hour period, additional chlorine shall be added until a residual of not less than twenty-five (25) parts per million at all parts of the new system is shown after a subsequent twenty-four-hour period. The chlorinated water shall then be removed from the mains by the Contractor and the mains left full of water ready for use. (See "Water Main Disinfection & Leakage Test" table at the end of this specification section).
- E. After satisfactory chlorination of the mains has been completed as described above, and the chlorinated water flushed out and the mains filled with potable water, the Southeastern Oakland County Water Authority will take bacteriological samples of the water in the mains for analysis. If the analyses of samples show the Construction water to be unpotable because of unsatisfactory disinfection of the mains, the mains shall be re-chlorinated at the Contractor's expense until satisfactory samples are obtained. Any charges by the Water Authority for re-testing the water shall be paid by the Contractor.

3.26 PAYMENT FOR WATER MAINS

- A. Measurement of completed and accepted water main laid will be made in lineal feet, measured on the axis of the pipe laid from the beginning to the end and shall include measurements through fittings and valves. Branches will be measured in lineal feet from the center of the tee or cross, on the supplying water main, to the end of the pipe or special casting including the cap or plug in the case of a dead end and to the center of hydrants.
- B. The unit price per lineal foot of pipe laid shall include all excavating; tunneling; boring and jacking; sheeting; bracing; shoring and de-watering of trench; removing and replacing pavement, sidewalk, or other type of existing surface; furnishing, laying and jointing of pipe and fittings; installing gate valves; connecting to existing water main; installing blocking; all backfilling; flushing; pressure testing; and disinfecting.

3.27 WATER MAIN DISINFECTION & LEAKAGE TEST

TABLE 2: WATER MAIN DISINFECTION AND LEAKAGE TEST				
Nominal Pipe Diameter (Inches)	Contents Per 1,000 Feet of Pipe		Pounds of Calcium Hypochlorite @ 65% to obtain 50 PPM Per 1,000 Feet of Pipe	Allowable Leakage (L)* in Gallons of Water Per 1,000 Feet of Pipe at 150 PSI in Two Hour Test
	Cubic Feet	Gallons		
4	87.3	650	0.42	0.74
6	196	1,470	0.94	1.10
8	349	2,610	1.67	1.47
10	545	4,080	2.62	1.84
12	785	5,880	3.77	2.21
16	1,396	10,400	6.67	2.94

*L = 11.65 gallons per day, per mile, per inch diameter at 150 psi., per AWWA C600.

SECTION 600
SEWERS AND RELATED STRUCTURES

PART 1. GENERAL

1.01 SUMMARY

- A. This work shall include the furnishing of all labor, materials and construction equipment necessary for the construction of sewers of the size and character shown on the drawings and specified herein including the furnishing and installing of the pipe and bedding and necessary testing. This work shall include the provision of all labor, materials, equipment, and supervision required, including excavation, bedding, backfill, testing and sterilization and other incidental work necessary for a complete system.
- B. The work of this section shall also consist of the furnishing and construction of manholes and catch basins including inlets as detailed on the Drawings and at the locations shown on the Drawings. Concrete, excavation and backfill shall be as specified in this section and other sections of the specifications. Manholes and catch basins shall be complete with frames, inlets, etc., to meet new or existing pavement surfaces, sidewalks, or grades and shall be included in the work under this section of the Contract.
- C. Contractor shall check entire length of route for acceptability of site conditions, up to and including soil conditions, to perform this work prior to bidding and again prior to mobilizing on the site to perform the various work items.

1.02 REFERENCES

- A. Performance and material requirements shall meet specific Reference Standards as referred to hereinafter under individual items.
- B. Unless otherwise specified, all materials shall also conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 CERTIFICATION AND INSPECTION

- A. All pipe and fittings delivered to the job shall be accompanied by certification papers showing that the pipe and fittings have been tested in accordance with the applicable Specifications for this project. All pipe and fittings will be inspected upon delivery to the jobsite. No cracked, broken or damaged pipe will be allowed in this work.
- B. Each piece of pipe and each fitting shall have its weight and class designation conspicuously painted or cast on it. All other pipe materials shall have the class designation painted thereon. Where required, other designation marks shall be painted on the pipe or fittings to indicate correct location in the pipe line in conformity to a detailed layout plan.

1.04 SHOP DRAWINGS AND GUARANTEES

- A. Contractor shall furnish shop drawings and guarantees of the items to be furnished under this section of the Contract. Design details of joints and joint restraint shall be submitted to the Engineer for consideration and approval before ordering any pipe.

PART 2. MATERIALS

2.01 SEWER PIPE

- A. All sewer pipe supplied and installed on this project shall be of the sizes and types called for on the drawings.
 - 1. Reinforced Concrete Sewer Pipe (RCSP): ASTM C 76, Class as designated on the drawings or special design conforming to ASTM C655;
 - 2. ABS Solid Plastic Pipe: ASTM D-2751, SDR 23.5;
 - 3. PVC Schedule 40 Sewer Pipe: ASTM D1785 "Standard Specification for PolyVinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120";
 - 4. Polyvinyl Chloride Pipe (PVC) - ASTM D-2241, SDR 26. PVC compounds to meet ASTM D-1784.
 - 5. Polyvinyl Chloride Pipe (PVC) - ASTM D-2241, SDR 23.5. PVC compounds to meet ASTM D-1784.
- B. Precast Concrete Pipe shall meet the requirements of ASTM C76.

2.02 SEWER POINT REPAIR MATERIALS

- A. The materials acceptable for use in making a point repair are listed below:
 - 1. Sewer Pipe - The following types of sewer pipe may be used as replacement pipe for a point repair. They shall conform to the appropriate American Society for Testing Materials (ASTM) Specification as listed below and any other ASTM or other applicable specification:
 - a. PVC Schedule 40 Sewer Pipe for 10" and smaller only.
 - b. ASTM C76 Class IV Concrete Sewer Pipe for 12" diameter and larger.
 - c. Approved Equal
 - 2. Sewer Connections and Appurtenances
 - a. Service Connection - Any service connection replaced during a point repair shall conform to the pipe manufacturer's recommendations and specifications and applicable ASTM Specifications, for the service connection and for installation of such. The material of the connection shall be similar to the sewer pipe it will be connected to.

2.03 PIPE BEDDING

- A. All sewer six (6) inches in diameter and larger laid on this project shall be installed in conformance with the bedding requirements established on the cross-section on the plan. The gradation requirements for the crushed stone chips shall be according to the following:
 - 1. Crushed stone chips shall be made from crushing sound limestone, dolomite ledge rock, or other materials as approved by the Engineer. Material shall be hard, tough, and durable. The crushing process shall produce material of which 85% to 100% of the particles shall have at least one machine fractured face. Crushed pea gravel will be acceptable if it meets this criteria:

- a. For sewer pipe 18" in diameter or less, crushed stone chips meeting the gradation requirements of the following table may be used:

GRADATION REQUIREMENTS FOR 3/8" CRUSHED STONE CHIPS
 (18" DIAMETER PIPER OR SMALLER)

<u>Sieve Size</u>	<u>Percentage Passing by Weight</u>
1/2"	100%
3/8"	90 - 100%
No. 8	0 - 15%
No. 30	0 - 3%

For purposes of this specification, MDOT Aggregate Mix No. 29A, using crushed limestone, will meet the requirements of this specification.

- b. For pipe larger than 18" in diameter, crushed stone chip bedding meeting the requirements of the following table may be used:

GRADATION REQUIREMENTS FOR 3/4" CRUSHED STONE CHIPS
 (LARGER THAN 18" DIAMETER)

<u>Sieve Size</u>	<u>Percentage Passing by Weight</u>
1"	100%
3/4"	90 - 100%
3/8"	20 - 55%
No. 4	0 - 10%
No. 8	0 - 5%

For purposes of this specification, MDOT Aggregate Mix No. 17A, using crushed limestone, will meet the requirements of this specification.

2.04 STRUCTURES

- A. Unless otherwise noted on the drawings or in supplemental specifications, precast manhole sections shall be used for all new sewer structures, including manholes, catch basins, and inlets. All concrete shall be 4,000 pounds per square inch, as determined by core test or cylinders. All precast sections shall bear the stamp of an approved testing laboratory as having been tested and delivered from tested stock of the manufacturer, at the expense of the Contractor. Precast reinforced manhole sections shall meet the requirements of current A.S.T.M. C-478.
- B. The top section shall be an eccentric cone with one straight side (with manhole steps installed in straight side at the factory). The top section shall be set at an elevation to provide for three (3) courses of brick between the top face and the manhole frame when set to grade. All precast

manholes shall be standard tongue and groove using mastic joint materials equal to DeWitt No. 10. All interior joints shall be pointed with mortar and all visible leaks must be stopped.

- C. Manhole frames and covers shall be E.J.I.W. #1040-A. Drainage structure frames and covers shall be E.J.I.W. #5080 with M1 grates, except where modified on the plan.
- D. Cast iron manhole steps shall be castings meeting the requirements of A.S.T.M. Specifications for "Gray Iron Castings," A48, Class No. 35B. The steps shall be approximately 10" x 10" x 3". Steps in precast manhole sections shall be cast in place at the plant.
- E. All manholes shall have channeled bottoms. For sewers 12" diameter or less, the channel shall be 3/4 depth of pipe. For sewers larger than 12" diameter, the channel shall be a minimum of 9" deep.

2.05 GRANULAR BACKFILL

- A. Contractor shall install compacted sand backfill meeting MDOT Class II specifications, compacted to 95% maximum modified proctor density in the locations required per MDOT Standard Detail R-83-B, or where called for on the plans.

PART 3. EXECUTION

3.01 MEASUREMENT AND PAYMENT

- A. Where called for in the proposal, the compensation to the Contractor for the sewer installation of the diameter specified will be paid for at the contract unit price per lineal foot measured in place along the center of the pipe. The contract unit price for this work shall be payment in full for furnishing the materials including wyes and all necessary excavation, sheeting or bracing, draining, laying, jointing, bedding, backfilling, disposal of surplus materials, testing, and restoration, and all other work incidental to the construction of the sewer. Final measurements for sewer will be total lineal feet from center to center of standard manholes or center of manholes to face of tunnel sewers where connection only is made thereto.
- B. Junction chambers, gate chambers, and other special structures will not be included in measurements of the sewer. Sewer measurements at these structures will end and begin respectively at inside wall of outlet and inlet end respectively, unless otherwise indicated on the plans.
- C. Unless specified otherwise, manholes and drainage structures will be paid for at the contract unit price each, which price shall be payment in full for furnishing the materials, including the required fittings, frames, and full grates, steps, and for all labor, equipment and tools, all necessary excavation, backfilling, disposal of surplus material, and all work incidental to the completed structures.

3.02 PIPE DELIVERY

- A. A test certificate from an independent testing laboratory showing strength of pipe when tested in accordance with the applicable A.S.T.M. Standards shall be submitted to the Engineer before pipe is delivered to the job site. One certificate shall be furnished for each size of pipe. The Engineer may require additional tests of pipe stored at the plant or delivered to the job, should he have reason to believe that inferior pipe is being delivered on the job. The cost of each test shall be borne by the Contractor. The pipe supplier shall also furnish a certificate stating that all pipe supplied was manufactured from substantially the same material and in the same manner as pipe tested and all pipe delivered to site shall have the test stamp of the testing laboratory making such tests.

- B. The pipe shall be distributed at the site by the Contractor as required, and care shall be exercised to prevent injury to the pipe in handling. Proper tools and implements, for safely handling the pipe and other materials, shall be provided by the contractor.
- C. Pipe must be protected from falling, either from truck to ground or into the trench, and when distributed along the line or stored near a road, must be kept clear of passing vehicles.
- D. The Contractor shall place the pipe so as to cause the least amount of interference to abutting property owners and traffic using the street. Barricades and lighting shall be provided at intersections and other locations where the pipe will interfere with pedestrian or vehicular traffic.
- E. All damage caused by storage of the pipe on the construction site shall be repaired by the Contractor, including but not limited to sidewalks, driveways, lawns, and shrubbery. No pipe shall be allowed to be stored longer than three days prior to beginning construction on the section of sewer.
- F. All materials will be inspected before placing in the trench, and if defective, marked "REJECTED" and removed from the site by the Contractor. All damaged materials shall be replaced by the Contractor at no additional cost to the City.

3.03 EXISTING STRUCTURES AND UTILITIES

- A. Underground structures and utilities are shown on the construction drawings as an aid to the contractor, but the owner does not guarantee their location or that other underground structures or utility services on the plans, and it shall be the Contractor's responsibility to locate them. The City will, whenever possible, and when requested by the Contractor, stake the location of sewer and water services at the street right-of-way line.
- B. In crossing over or under underground utilities, the Contractor shall use all possible care in protecting the utilities and to maintain their free unobstructed continuous use. The contractor will be required without additional compensation to repair, replace or rebuild any such improvement injured or damaged by him, and shall be responsible to the department, companies, individuals or corporation controlling such improvements.
- C. All underground utilities shall be supported on a foundation of sand or sand-gravel thoroughly compacted by mechanical tamping in order to prevent future settlement and possible failure of the utility. Under sewers and sewer services "cement reinforced sand backfill" rather than "sand or sand gravel" shall be used. Gas mains and gas services shall be supported in accordance with the requirements of the Consumers Power Company.

3.04 MAINTAINING FLOW

- A. All combined sewers will likely have continuous dry weather flows, all of which shall be diverted in a safe manner so as to cause no inconvenience to the public. Special care must be taken to ensure that no part of the work is built under water, and the work must remain dry until all concrete and/or mortar has set up.

3.05 EXCAVATION

- A. Excavation shall be open cut from the surface. All work shall be done to true line and grade. The Contractor shall remove all obstructions or encumbrances (except those which are specifically noted to be preserved) which may be in the proposed line of the sewer, the cost of doing such work shall be included in the contract unit price per lineal foot for laying sewer.
- B. Trenches shall not be excavated for a distance greater than fifty (50) feet in advance of completed sewer without the permission of the Engineer.

- C. Excavated material permitted to be used for backfill may be deposited along the line of work where space permits provided it does not cause damage to trees, shrubs, fences, etc., nor cause excessive inconvenience to public travel and adjoining property owners, nor endanger the bank of the trench by imposing too great a load thereon. All material in excess of the quantity permitted for backfilling and all materials unsuitable for backfilling shall be hauled away by the Contractor at his expense in an expeditious manner.
- D. Excavation shall be of sufficient widths and depths to provide adequate room for the construction and installation of the work to the lines, grades, and dimensions called for on the drawings, except the width of a trench from the invert to a height twelve inches above the top of the sewer barrel shall not be greater than as follows:

<u>Pipe Size</u>	<u>Maximum Trench Width</u>
12" or less	30"
15" to 36"	O.D. + 12"
42" or greater	O.D. + 24"

- E. If the trench width as specified above is exceeded, the Contractor shall install, at his own expense, concrete cradling or other approved bedding, to support the additional backfill load. In case the bottom of the trench is unsuitable as a foundation, it shall be further excavated and prepared. If the unsuitable condition of the foundation is caused by factors beyond the Contractor's control, the additional excavation and preparation will be paid for as extra work.
- F. Where, through the Contractor's construction procedure, or because of poor existing ground conditions, it is impossible to maintain alignment and grade properly, the Contractor shall, at his own expense, excavate below grade and replace with large size aggregate or slag in order to insure the pipe, when laid, will maintain correct alignment and grade.
- G. If the trench at any point along the line will be opened nearer than six (6) feet to the face of the trunk of an existing tree, and in the opinion of the Engineer the excavation would be injurious to the tree, he may require the Contractor to tunnel under the tree.
- H. Selected excavated material may be used for backfilling under trees and it shall be thoroughly tamped to completely fill the excavated space between the pipe and excavation by means of mechanical tampers.
- I. Where the trench must be cut through concrete or asphalt pavement, driveways, or sidewalk, particular care shall be taken not to unnecessarily damage adjoining areas. All cuts through existing concrete or asphalt pavement, sidewalks or driveways are to be resurfaced with like materials. Pavement breaking by the use of a drop weight is prohibited.
- J. Excavation shall be sheeted and braced as necessary to ensure complete working safety and to protect adjoining structures or conduits. If at any time the Engineer has reason to believe that the sheeting or bracing installed by the Contractor is insufficient, he may require that an additional amount shall be placed, but such requirement or failure to make such requirements shall not relieve the Contractor from his liability.
- K. No extra compensation shall be paid the Contractor for sheeting or bracing left in place, unless ordered left in place by the Engineer and then only a fair salvage value for the material left in place shall be paid. The Contractor shall receive no extra compensation for sheeting or bracing left in place in tunnels.

3.06 TUNNELING

- A. Tunneling under pavements or streets will not be allowed without the approval of the Engineer in writing, or unless noted on plans or in the Specifications. Where tunneling is permitted, there shall be a minimum clear space of not less than six (6) inches between the outside of the pipe in the tunnel and the face of the excavation or the sheeting or bracing that is nearest the pipe.
- B. All space outside the finished sewer wall shall be completely filled with 1:2 cement-sand grout applied under pressure.
- C. Facilities for ventilation and lighting shall be supplied as necessary for reasonable working conditions and for inspection.
- D. Any excess trench excavation made below the pipe shall be refilled with crushed stone, sand, or concrete as directed by the Engineer. Under all conditions, sewer pipe shall have a firm bearing which will insure permanent grade and alignment and proper support against crushing load.
- E. Upon completion of the construction work in tunnel, the sheeting and bracing, if any, shall be left in place and all the remaining space between the outside of the pipe and the excavation shall be filled with cement reinforced sand backfill and thoroughly compacted.
- F. When boring under pavement, the pit must be a minimum of ten (10) feet away from the pavement edge, unless previously approved by the Engineer.

3.07 LAYING PIPE

- A. Unless otherwise allowed under specific specifications for a particular type of sewer or unless permitted by the Engineer, construction shall begin at the outlet end of sewer and proceed upgrade.
- B. All pipe shall be laid true to line and grade and the ends of the pipe shall abut against each other with the bell end facing the direction of laying. Each pipe as laid shall be checked by the Contractor with line and a grade pole or a laser beam to insure that this result is obtained.
- C. Alignment of laser beams shall be checked with sufficient frequency to assure compliance with plans.
- D. Each pipe shall be inspected for defects prior to being lowered into the trench and inside of pipe and outside of spigot shall be cleaned of any dirt or foreign matter.
- E. Proper support and bedding of all pipe through the full length of the barrel shall be made by constructing bedding as required and detailed on the plans. Special care shall be observed to avoid load on bells of bell and spigot pipe. Each pipe shall be pushed firmly against pipe previously placed and carefully aligned.
- F. Mechanical means, consisting of a cable placed inside the pipe with a suitable winch, jack, or come-along for pulling the pipe home and holding the pipe in position, shall be used where the manual means will not result in pushing and holding the pipe in position.
- G. Work executed during the winter shall receive exceptional attention to avoid excessive backfill load on pipe. If sides of trench are frozen, the amount of selected material tamped above the pipe shall be increased to at least two feet. No frozen backfill material shall be used.
- H. At manholes the pipe shall be placed on a concrete cradle from the manhole to the point where the sewer trench does not exceed the specified width and shall be done in accordance with the City of Birmingham "Underground Structures and Water Main Standards".

3.08 JOINTS

- A. All sewer joints shall be sealed with flexible, watertight, rubber type gaskets; pre-cast die molded bituminous material as used on slip seal pipe; or an approved equal. Before placing the pipe in position in the trench adjusted to grade, the joint compound on both ends of the pipe shall be painted with suitable solvent or lubricant material. The spigot or tongue ends of the pipe to be laid shall be inserted and shoved home against the base of the socket last laid. Throughout this operation every effort shall be taken to prevent sand or gravel from entering the joint or pipe.
- B. Joint material shall be applied to the pipe on the day the pipe is placed in the trench. Joint material shall be stored in closed containers when unattended.
- C. Concrete pipe 36" and larger shall have all joints inside cement pointed, with cement mortar compound of one (1) part cement and two (2) parts of sand. Mastic compound or any foreign material within 3/4" below inside finish of pipe shall be thoroughly removed before cement grout is applied.

3.09 MANHOLES, DRAINAGE STRUCTURES

- A. Manholes and drainage structures shall be constructed of the type and in accordance with the details shown on the plans and at the locations shown on the plans. All necessary steps, frames, and covers shall be furnished and installed. Covers shall be set at the required final elevation so that no subsequent adjustment shall be necessary.
- B. Excavation shall be carried to the depth required to permit the construction of the required base and bottom of excavation shall be trimmed to a uniform horizontal bed. The excavation shall be sufficiently wide to allow for shoring, bracing, or form work, should any or all be necessary, and to allow for accessibility in plastering the exterior of brick masonry. The excavated section shall be completely de-watered before any concrete is placed thereon.
- C. Concrete shall be Grade A 3,000 pounds per square inch compressive strength, minimum content 1.375 barrels per cubic yard.
- D. Brick shall be made of clay or shale or concrete brick and shall be whole, thoroughly and evenly burned, of close and uniform texture, free from cracks and warps, with even faces and uniform texture, and uniform in shape and size. Brick shall show a minimum average compressive strength of 2,000 pounds per square inch and average absorption of water in twenty-four (24) hours of not more than 22 percent of dry weight.
- E. The brick shall be laid radially in courses in a full bed of mortar with interior joint not more than 1/4" in width. Whole bricks only shall be used except to effect closure and to fill in the outside portion of the radial joints. Each seventh course shall be laid in "stretchers," the intervening courses shall be composed of "headers". Below a depth of thirteen (13) feet, walls of brick manholes shall be laid in alternative stretcher and header courses.
- F. When completed, manholes and drainage structures shall have sand or gravel placed uniformly around the structure in one foot lifts, and compacted in place. No backfill shall be placed around manholes or structures for twenty-four (24) hours, if an outside plaster coat has been applied.
- G. Manholes and Structures shall not be placed under conditions which may be expedited to result in defective work. If the soil at the established grade is not sufficiently stable to properly support structures, the Contractor, at his own expense, shall excavate up to 24" below grade and refill the trench to the proper grade with compacted crushed stone chips. If stable support cannot be established in this manner, the work shall be discontinued until plans for change in construction have been submitted by the Contractor to the Engineer for approval and approval has been granted.

3.10 SERVICE CONNECTIONS

- A. Service connections shall be made to sewers with "wyes" manufactured on the sewer pipe. Breaking holes in the pipe will not be allowed without specific authorization of the Engineer.

3.11 SHEETING AND BRACING

- A. Where necessary in order to construct the work called for by the contract, to insure the safety of the men, or to protect other things of value, the Contractor shall adequately sheet or brace all open excavation or tunnels. The Contractor shall install additional sheeting or bracing as directed by the Engineer, but such order, or failure to give such order, shall not release the Contractor from his liability for damage to person or property under this contract.
- B. All sheeting, shoring and bracing, unless left in place as ordered by the Engineer, shall be removed from open trench work progressively with the backfilling operations in order to prevent slides from the sides of the trench. All sheeting left in place shall be cut off five (5) feet below ground line.

3.12 PUMPING, BAILING AND DRAINING

- A. The Contractor shall provide and maintain adequate pumping and drainage facilities for removal and disposal of waste from trenches or other excavation.
- B. Where the work is in ground containing an excessive amount of water, the Contractor shall provide, install, maintain, and operate suitable well points, connecting manifolds, and reliable pumping equipment to operate same to insure proper construction of the work.
- C. In no case shall water be allowed to rise in or about the pipe before the joint has become thoroughly set. No walking on or over the pipes after they are laid, except as may be necessary in tamping the earth in refilling, will be permitted until they are covered with earth to a depth of twelve (12) inches.
- D. Drainage or discharge lines shall be connected to adjacent public storm sewers or extended to nearby watercourses wherever possible. In any event, all pumping and drainage shall be done without damage to any highway or other property, public or private, and without interference with the rights of the public or private property owners.
- E. The Contractor shall receive no extra compensation for providing, maintaining, or operating any de-watering or drainage facilities.

3.13 BACKFILLING

- A. It is the intent of these specifications that all of the excavation be backfilled with thoroughly consolidated, suitable material in such a manner that the alignment and grade of the construction work in the excavation be not disturbed and that the subsequent settlement of the surface over the excavation and adjacent thereto be avoided as far as possible.
- B. Insofar as practicable, without interfering with the progress of the work, the Contractor shall keep streets, driveways and sidewalks open to safe use by the public.
- C. All trenches and excavations under existing pavement, proposed pavement, existing roadways, driveways or sidewalk shall be backfilled with sand or gravel and thoroughly compacted by mechanical tamping or vibrating. Where the existing roadway or driveway is gravel surfaced, the top eight (8) inches of the backfill shall be road gravel. The Contractor will not be required to replace any oil treatment or seal coat, however, he shall maintain the top of the trench in a dust free manner until completion of the project. No additional payment will be allowed for the sand or gravel backfill, the cost of which shall be included in the unit price bid for the installation of the pipe and structures.

- D. Backfill shall not be placed against any portion of a structure until it (structure) has passed inspection.
- E. Where the trench or excavation is located in the parkway between the roadway and the street line or in unimproved streets, excavated material may be used in completing the backfill. Care shall be taken in placing this backfill to make sure that all boulders, pieces of concrete and such other material that might damage the pipe or structure, or prevent consolidation are not allowed to remain in the backfill material and it shall be compacted by tamping, jetting, or by use of compacting equipment.
- F. If a bulldozer or other machine is used to place the backfill material, no material shall be pushed or dropped into the trench, but shall be placed on the sloping ends of the completed backfill and allowed to roll in place to the bottom of the trench.

3.14 EMERGENCY REPAIR

- A. When the Contractor is not actively performing work on a particular construction site, but where delayed construction operations, testing and/or surface restoration work yet remains to be completed to meet the requirements of the Specifications, situations may arise of an emergency nature as a result of such uncompleted work which may affect directly or indirectly public and/or private property or which may ultimately, either directly or indirectly, affect the health, safety, and welfare of individuals or the general public. While these situations can readily develop as emergencies, the Engineer shall direct field related operations and require immediate efforts by the Contractor to remedy the deficiency in a method of his choosing because of his expertise in the field, time being of the essence. The correction of the emergency which may arise when no construction activity exists on the construction site shall be handled in the following manner.
 - 1. The Engineer shall inspect the site, take any necessary photographs and/or prepare any necessary sketches of conditions at the site to determine that the situation constitutes an emergency.
 - 2. The Engineer then has three (3) alternate sources of manpower and equipment to be selected to remedy the emergency situation in the following order:
 - a. The Contractor under contract with the Owner to perform all work on the site location in question.
 - b. The City's Department of Public Services (DPS).
 - c. An independent contractor designated by the Engineer.
- B. Since the nature and extent of most unfinished work on a particular construction site is well known by both the Engineer's authorized agent and the Contractor at the time of declaring an "emergency situation" as set forth herein before the Contractor, under contract to the Owner for the particular project, the Contractor would be the first party notified and would be expected to respond immediately with necessary labor and equipment to remedy the problem.
- C. If a reasonable time to respond to the emergency notification is not evident, in the best judgment of the Engineer, then the Contractor shall be judged to have waived his rights to physically correct the problem, but not to his obligations to pay for such physical correction or damages resulting therefrom. The Engineer shall then contact the City's DPS for their assistance in correcting the "emergency situation". Where existing commitments by the DPS prohibits their immediate response to the request of the Engineer, the Engineer shall finally direct that corrective measures be performed by the independent contractor noted above to perform such work when so directed.

- D. Since the cost for all remedial work undertaken by the Contractor on this project shall be borne by the Contractor and it is necessary to engage the assistance of the DPS or an independent contractor, then all costs incurred shall be deducted from monies due and payable to the Contractor on the particular project as set forth on any ensuing regular job estimates.
- E. Typical costs which will be deducted from the contractor monies due would be as follows:
 - 1. Payroll wages, benefits, and taxes.
 - 2. Material bills.
 - 3. Equipment rental (Detroit area rates) and mobilization costs.
 - 4. 15% profit and overhead for independent contractor.
 - 5. Inspection costs.

3.15 POINT REPAIRS TO SEWER LINES

- A. It is the intent of the specifications to provide a basis by which a contractor can successfully and completely make a point repair to a sanitary sewer line. This basis shall cover all aspects of a point repair including methods, materials, and payment for work.
- B. A point repair to a sanitary sewer line shall be defined as a repair made at a specified location on a sanitary sewer line.
- C. A point repair shall be classified by the inside diameter of the pipe and the length of pipe replaced.
- D. Methods:
 - I. The method by which a repair shall include all supervision, labor, equipment and materials necessary to perform and successfully complete the following items:
 - a. Excavating a trench deep enough to uncover a sanitary sewer line, wide enough to work in, and long enough to uncover up to twenty (20) linear feet of sewer pipe while providing protection of adjacent utilities, pavements, etc.
 - b. Remove any landscaping fences, asphalt, concrete, base material, storm sewer, etc., that interferes with the repair made at each specified point, and for the replacement of said landscaping, fences, asphalt, concrete, base materials, storm sewer, etc., in the same or better condition as found. Any such item not replaced in the same or better condition as found, as determined by the Engineer, shall be redone at the Contractor's expense.
 - c. De-water any trench where excess water accumulates and installation, as required, of compacted sand backfill under paved area.
 - d. Replace and reshape the bottom of the trench so that the grade of the pipe replaced will match that required for the existing sewer line. Any material replaced in the bottom of the trench shall be compacted so as to prevent sags in the sewer line due to settlement of the trench material.
 - e. Repair and replace up to twenty (20) feet of the existing sewer pipe with the properly sized pipe the same as existing, as needed.
 - f. Repair and replace any house service lateral encountered within the required twenty (20) linear feet of uncovered pipe with properly sized service, as specified and with enough sewer pipe to reconnect to the service line where it was severed.
 - g. Tie all new laid sewer pipe to existing sewer pipe, main sewer lines and service lines, so that no possible source of infiltration/inflow (a leak in the line) may be created.
 - h. Any sewer pipe broken by the Contractor, outside of the required twenty (20) linear feet of pipe, shall be replaced or repaired at the Contractor's expense. All such

- occurrences shall be pointed out by the Contractor to the Engineer when they happen. The materials to use for making the tie-in shall be properly sized.
 - i. Backfill the open excavation so that the ground elevation will most nearly match the elevation before excavation.
- E. Bypass Pumping:
1. On all sewer lines in which a point repair is to be made, the normal flow of sewage shall be re-routed by bypass pumping.

END OF SECTION

**SECTION 605
INTERNAL SEWER INSPECTION**

PART 1 GENERAL

1.1 SUMMARY

- A. It is the intent of these specifications to provide a basis for which a sewer line can be internally inspected by a Closed Circuit Television (CCTV) camera. The inspection shall include providing the Owner with digital videos, images, and reports that include condition and other descriptive data related to the sewer. This basis shall include all aspects of televising including method, equipment, and payment for work.
- B. This Section shall include all supervision, labor, equipment, materials, traffic control, temporary plugging and/or bypassing of flow, disposal of debris, required cleaning, video media, still pictures and any applicable electrical service necessary to successfully complete the inspection and assessment of the designated lines, as well as the required reporting and deliverables which includes the Contractor providing the Owner with applicable recommendations for corrective actions.
- C. The Contractor shall provide and furnish all required skilled and unskilled labor, materials, fuel, machinery, tools, so that the contract and all work required to be done under the contract can and will be carried on continuously and expeditiously to completion, in all respects to the satisfaction of the Owner.
- D. The sewer lines for which televising is required are shown in these Contract Documents.

1.2 REFERENCES

- A. Abbreviations and Acronyms
 1. NASSCO - National Association of Sewer Service Contractors
 2. PACP - Pipeline Assessment and Certification Program
 3. MACP - Manhole Assessment and Certification Program
 4. LACP - Lateral Assessment and Certification Program
- B. Definitions
 1. Reverse Setups - a situation that arises when the television camera cannot pass through the manhole section, making it necessary to reverse the positions of the television equipment and enter the sewer from the opposite direction

1.3 QUALIFICATIONS

- A. The Contractor performing the work shall be a company specializing in performing internal sewer inspections, and shall have a minimum experience of at least three other projects of similar size and scope within the last five years that included surveying, processing, and interpretation of data associated with CCTV inspections.

- B. The work shall be performed under the supervision of personnel trained and certified in the use of NASSCO's PACP for the inspection of sewer mains, LACP for the inspection of laterals and MACP for the inspection of manholes.

1.4 SUBMITTALS

- A. Prior to initiation of work, the Contractor shall submit for Owner review and approval the following:
 - 1. Data sheets for proposed CCTV equipment, description of proposed electronic storage device (hard drive, etc.) and proposed electronic file formats.
 - 2. Description of proposed software for recording inspection logs along with a sample of a typical log and samples of all required reports as described in this Section.
 - 3. Proposed sequence and schedule, and sample resident/business notification letter.
 - 4. Contact information for Contractor's staff including mobile phone and email, and emergency contact information.

1.5 QUALITY ASSURANCE

- A. After completion of one week of Internal Sewer Inspection (or alternative period as approved by the Owner), the Contractor shall provide the Owner with a sample of the required deliverables for the work completed for review and approval of format.

1.6 REPORTING

- A. The Contractor shall record any and all defects such as radial and linear cracks no matter how minor, dips, blockages, or obstructions, pipe joint conditions, infiltration and calcite buildup, lateral connections, root infiltration, deterioration of pipe material surface, penetrating utilities, etc. The Contractor shall record the characteristics and defects observed using the NASSCO PACP/MACP/LACP Inspection Report format and coding for each sewer segment. All pipes, manholes, laterals and other structures shall be identified using Owner naming convention. The operators NASSCO certification number shall be recorded on the Report.
- B. Location of defects shall be given as a distance from the starting point and location around the pipe (i.e., 2 o'clock)
- C. The Contractor shall provide the following reports for each inspected segment that include all descriptions in NASSCO format of all defects found as part of the survey, all NASSCO header information, and identify the asset using the Owner's identification system:
 - 1. Graphic Reports, include;
 - a. Linear sketch of the inspected manhole or pipe/lateral segment showing defect locations
 - b. List of the individual defects
 - c. Defect "grade" assigned using the NASSCO PACP/MACP/LACP Condition Grading System guidelines.
 - 2. Tabular Reports, include;
 - a. List of the individual defects

- b. A-defect "grade" using the NASSCO PACP/MACP/LACP Condition Grading System guidelines
 - c. NASSCO segment scores, including
 - 1) Overall Pipe Rating (Structural, Maintenance, and Overall)
 - 2) Pipe Rating Index (Structural, Maintenance, and Overall), and
 - 3) Quick Scores (Structural, Maintenance and Overall.)
 - 3. Defects by Inspection Report
 - a. Generated at completion of the project, or at intermediate milestones as required by the Owner
 - b. Includes;
 - 1) A tabular list of all segments inspected to date,
 - 2) The surveyed length for each segment,
 - 3) A count of defects encountered for each segment,
 - 4) Quick rating scores and,
 - 5) The overall pipe rating index
- D. Submit Samples of Contractor Reports for Owner approval prior to starting project.
- E. Provide Final Reports in accordance with Required Deliverables.
- F. Sample reports are provided at the end of this Section.

1.7 REQUIRED DELIVERABLES

- A. The Contractor shall deliver to the Owner one hard copy each of the Graphic Report and Tabular Report for each segment inspected, and one hard copy of the Defects by Inspection Report that summarizes all segments inspected during the project. The copies shall be housed in protective three-ring binders labeled to include the Project Name, Contractor Contact Information, Project Date and area surveyed. The Contractor shall also submit preliminary copies of the Graphic Report and Tabular Report for areas completed for review by the Owner as the project progresses. All reports shall also be provided in Adobe PDF format. The final Defects by Inspection report shall also be provided in an editable format, such as Microsoft Excel format.
- B. The Contractor shall deliver to the Owner digital copies of all video recordings, still photos, and other media for the segments inspected. The files shall be accessible using commonly-installed software, or a viewer may be provided instead.
- C. All electronic records and digital files shall be provided to the Owner on a suitable data storage device (CD, DVD, hard drive, etc.) The devices shall be labelled to correspond with the hard copy inspection reports. Labels shall be permanent with complete project information.
- D. The Owner reserves the right to reject any or all televising and recording of sewer segments due to poor quality or clarity of defects. If necessary the Contractor shall re-inspect those segments as determined by the Owner at no additional cost to the Owner.
- E. All video recordings, still images and reports shall become property of the Owner without restriction for copying, re-use or publication.

1.8. ACCEPTANCE

- A. A daily log of work accomplished shall be duly recorded and acknowledged by the Owner and the Contractor's superintendent.
- B. All inspection recordings and reports will be reviewed by the Owner. The Owner shall have the authority to reject all or any portion of recordings not conforming to Specifications. These areas shall be re-inspected at no additional charge.

1.9 SAMPLE REPORTS

- A. Sample of the required reporting is provided at the end of this Specification (Section 3.8).

PART 2 PRODUCTS

2.1 INSPECTION EQUIPMENT

- A. General:
 - 1. Provide equipment as required for the proposed work to perform inspections of sewer mains, manholes and/or laterals. Laterals shall be inspected from mainline to property line or cleanout located in streets, street rights-of-way, and off road easements.
 - 2. Equipment shall include but not be limited to portable CCTV equipment, vehicles capable of transporting TV equipment and accessing remote easements, cleaning equipment, and any additional equipment and supplies required to allow for communication between personnel and to maintain a safe working environment. The Contractor shall have on site fans and/or blowers necessary to remove any fog or steam that may be present, during or caused by the inspection of the piping system. All cost incurred in the use of fans or blowers shall be considered incidental to this project. No inspection of pipe shall proceed while fog is present.
 - 3. Necessary playback equipment shall be readily accessible in the field for Owner to perform periodic review of the inspection work.
- B. Sewer Main CCTV:
 - 1. All equipment used for televising sewer lines shall be of the highest quality and shall have high performance capabilities. It shall be operative in 100 percent humidity conditions and shall be specifically designed for the proposed work.
 - 2. The CCTV camera shall be of the remotely operated pan and tilt type. The rotating camera and lighthouse configuration shall provide 240 degrees of pan and tilt angle measuring centerline to centerline and minimum 65-degree lens viewing angle.
 - 3. The camera shall be color and shall provide a minimum of 460 lines of horizontal resolution and 400 lines of vertical resolution.
 - 4. The color camera shall be equipped with the necessary circuitry to allow for either automatic or remote adjustment of the optical focus and iris from the power control unit at the viewing station.

5. Mounting: Cameras may be mounted on conventional camera skids, floating skids or rafts, or maybe handheld and carried manually through larger diameter sewers.
6. Lighting: Suitable to allow clear picture of entire inner pipe wall extending at least 10 feet in front, including black High Density Polyethylene (HDPE) pipe.
7. Image: Capable of self-righting itself.
8. Features: Equipment shall have a display feature capable of showing following information.
 - a. Project name.
 - b. Contractor's name.
 - c. Date and time of inspection.
 - d. Inside pipe diameter and type.
 - e. Manhole identification (upstream manhole to downstream manhole).
 - f. On-going footage counters accurate within 0.2 foot.
9. Operator narration capability: Follow NASSCO standards.
10. Recording of a single section of sewer onto two different media storage devices will not be acceptable. Each sewer segment shall be documented in a continuous video.

C. Lateral CCTV:

1. Shall conform to sewer main CCTV, except as modified herein and also be able to inspect laterals as small as 3-inches diameter for a distance of up to 70 feet from sewer mainline.
2. Launched from within mainline sewer: Unit shall be mounted on tread tractor that moves through sewers and positions inspection camera launcher opposite lateral line connection.
3. Launched from within cleanout: Unit shall be able to travel to mainline sewer.
4. Shall be of the self-leveling type.
5. Display shall include lateral address. Manhole CCTV.
6. Color Video Camera:
 - a. Shall conform to sewer main CCTV, except as modified herein and also be specifically designed and constructed for this application.
 - b. Capable of capturing both video and high resolution stills.
 - c. High-resolution, pan and tilt or rotating head (manually performed or motor operated) with wide viewing angle lens and either automatic or remote focus and iris control.
 - d. Lighting: Suitable for use with digital color inspection cameras and manhole and structure sizes as identified in contract.
 - e. Operative in 100 percent humidity conditions.

D. Software:

1. Software for logging condition and feature coding shall conform to current NASSCO standards:
 - a. Sewer Mains: Follow PACP
 - b. Laterals: Follow LACP
 - c. Manholes: Follow MACP
2. The software shall offer all coding compliant with PACP standards and validate each entry before it can be saved.

3. The footage reading from the camera equipment shall be automatically entered into the survey log and shall directly correspond to the noted defect location throughout the pipe graphic and tabular reports generated.
4. Software shall be compatible with Microsoft Windows operating system and shall be capable of importing and exporting data to and from the standard PACP database.
5. Recorded audio-video files shall be in a format viewable by commonly available software, either directly or via export. Any additional software required viewing files in their native format shall be provided at no additional cost with the deliverables.

PART 3 EXECUTION

3.1 GENERAL

- A. The Contractor shall be responsible for securing the site and protection of the Owner's personnel and public. Any necessary traffic control shall be in accordance with the current Michigan Manual of Uniform Traffic Control Devices.
- B. All inspection and recording of sewer features and condition shall be in accordance with NASSCO standards.
- C. Unless otherwise noted, a sewer line shall be cleaned as specified in these Contract Documents prior to insertion of the television camera.
- D. Maintain sewer isolation by temporary plugging or bypass pumping, as required by the Contract Documents. Contractor shall conduct operations to prevent backups and sewer overflows, and coordinate all activities with Owner. Should bypass pumping be required, the Contractor shall have personnel witnessing the pumping continuously during operations to assure that the capacity of bypass pumping equipment is sufficient.
- E. For sewers impacted by wet weather, including storm sewers, combined sewers and sewers with significant inflow and/or infiltration, work shall be coordinated with weather forecasts. No work shall be scheduled within 24 hours before or after an anticipated precipitation event.
- F. The Contractor shall notify affected residents/businesses one day prior to starting cleaning and sewer inspection with a "Resident Notification Letter" informing the residents/businesses of the Contractor's activities and to provide contact information for the Contractor and Owner. The Contractor shall submit the letter for Owner review and approval prior to notification.
- G. The Owner shall have the authority to designate areas for which coverage may be added or omitted.

3.2 INSPECTION PREPARATION

- A. The Contractor shall be responsible for having the necessary camera skids, floats, and rafts available to allow for inspection in a manner acceptable to the Owner under live flow conditions. The following general criteria shall be followed:
1. No inspections shall be performed where flow depths exceed 50% of pipe diameter without prior approval of the Owner.
 2. The maximum flow depth for remote inspection work is 33% of the pipe diameter. The Contractor may be required to perform inspections during off-peak hours (night inspections) if specifically requested by the Owner to achieve this maximum flow standard.
 3. No maximum flow depth has been established for manual (walk-through) inspections since depths in excess of one-third pipe will probably make such inspection methods unsafe.
 4. Pipes 60 inches in diameter and larger, and having flow depths of less than 20% of the pipe diameter, shall be manually inspected unless the Contractor provides the owner with reasons for deeming manual inspections to be impractical or unsafe.

3.3 INSPECTION METHOD FOR SEWER MAIN LINES

- A. All recording of the piping system shall be a continuous record from structure to structure. The camera shall be positioned at the center of the sewer pipe. All inspection shall be completed during times of dry weather flow, and the camera shall record in the same direction as the flow. Inspection against the flow especially during high flow conditions must be approved by the Owner.
- B. The rate of speed shall be adjusted to produce a clear, concise record of the piping system and shall not exceed 30 feet per minute for conventional CCTV cameras. Travel shall stop for minimum of 10 seconds to record lateral connections, mainline connections, defects, features, and other observations. Advanced Digital Video Survey (DVS) inspection camera systems with high digital image recording resolution and lighting characteristics will be allowed to record at faster rates subject to Owner review and approval of images.
- C. The camera pan/tilt and zoom-in/zoom-out rates shall be controlled sufficient such that during playback all angles or magnifications may be viewed clearly. Lighting shall be sufficient to ensure true color and minimal glare/reflective distortions.
- D. Manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the sewer line.
- E. If there is interference in the sewer line that will not allow the CCTV equipment to pass, then it shall be backed out of the line and an attempt shall be made to inspect the line from the manhole at the other end. If the entire length of the sewer line cannot be televised because of two or more obstructions, then the Owner shall be notified to determine how to proceed.

3.4 INSPECTION METHOD FOR LARGER DIAMETER SEWER MAIN LINES
("WALKABLE")

- A. Manual inspections will be required in lines where conditions will allow the Contractor's inspection crew to safely walk through the sewer, and shall conform to the requirements for sewer main lines except as otherwise modified herein.
- B. Manual pipe inspections (walk-through inspections) shall be conducted in such a manner as to transmit the video signal to an above-ground viewing room to permit the Owner to watch the inspection work live on a color monitor in the viewing facility.
- C. Direct voice communication between the Owner, the in-pipe inspection personnel, and the recording technician in the above-ground unit shall be maintained at all times during the manual inspection work. Video recording equipment shall also be located above ground in the inspection truck and accurate, continuous footage readings shall be superimposed on the video recording of permanent record.
- D. The Contractor shall conform to all regulations and requirements for confined space entry, and shall prepare and submit a health and safety plan to the Owner prior to initiation of any work.
- E. The Contractor shall provide for coordination of flow control.

3.5 INSPECTION METHOD FOR LATERALS

- A. Follow sewer main line procedure above, modified as follows:
 - 1. Verify accessible cleanout exists near limits of inspection prior to performing internal inspection. Notify Owner if no cleanout is available.
 - 2. Isolate section inspected by bypassing flow or turning off property water. Prevent backflow into laterals.

3.6 INSPECTION METHOD FOR MANHOLES

- A. Obtain still photos of exterior of manhole and surrounding area, and include manhole identification in photo. This may be done by placement of a whiteboard in the photo or post-editing of image to include the data.
- B. Interior manhole inspection
 - 1. Start at manhole rim in line with largest diameter outgoing pipe.
 - 2. Rotate camera clockwise until 360 degree panorama is complete. Provide still photos of noted defects and features following MACP. Lower camera two to three vertical feet and repeat procedure until bench invert is reached.
 - 3. Record vertical location of all defects and features and position in manhole. All photos and report logs shall include the manhole structure ID and location within manhole.

3.7 CLEANUP

- A. The Contractor shall be responsible to clean up any debris or spills during each day of work and restore conditions to existing as soon as possible.
- B. The Contractor shall be responsible for the disposal of personal protection equipment used during the work.

3.8 SAMPLE REPORT

Tabular Report Owner Asset ID#

Setup XXX	Surveyor XXX	Certificate # XXX	System Owner OWNER NAME						
Drainage	Survey Customer OWNER NAME								
P/O #	Date YYYY/MM/DD	Time 17:10	Street STREET NAME						
City	LOCATION	Further location details CAMERA IS HEADING SOUTH							
Up ID #XXX	Rim to invert	Grade to invert	Rim to grade	Ft					
Down ID #XXX	Rim to invert	Grade to invert	Rim to grade	Ft					
Use Sanitary/Combined/Storm	Direction Down	Flow control Not Controlled	Media No XXX						
Shape Circular	Height 18	Width ins	Preclean J	Date Cleaned YYYYMMDD					
Material Vitrified Clay Pipe	Joint length	Total length	Length Surveyed 187.8						
Lining	Year laid	Year rehabilitated	Weather Dry						
Purpose Capital Improvement Program Assessment	Cat	Pressure							
Additional info			Structural	O & M	Constructional				
Location Light Highway			Miscellaneous	Hydraulic					
Project PROJECT NAME			Work Order						
Northing			Elevation						
Coordinate System			GPS Accuracy						
Count	Video	CD Code	Grade	In1	In2	% JntFr	To	ImRef	Remarks
0.0		ST	Start of Survey						
0.0		AMH	Manhole						C-039
0.0		MWL	Water Level			0			
20.6		CM	Crack Multiple	3			02	04	
20.6		TB	Tap Break-in	6.000			02		WEST
33.2		TB	Tap Break-in	6.000			02		WEST
87.6		S01	RFJ Roots Fine Joint	1			J 05	07	
92.6		TF	Tap Factory	6.000			09		EAST
94.3		FC	Fracture Circumferential	2			05	07	
117.0		TB	Tap Break-in	6.000			03		WEST
128.7		FD1	RFJ Roots Fine Joint	1			J 05	07	
187.8		AMH	Manhole						C-040
187.8		EH	End of Survey						

187.8 Ft Total Length Surveyed

Scores	Structural: Pipe Rating 5	Pipe Ratings Index 2.5	Quick Rating 3121
	O&M: Pipe Rating 8	Pipe Ratings Index 1.6	Quick Rating 1500
	Overall: Pipe Rating 13	Pipe Ratings Index 1.9	Quick Rating 3121

Contractor Logo/Name, Address and Contact Information

**SECTION 610
FLOWABLE FILL**

PART 1. GENERAL

1.01 SUMMARY

- A. This work shall include the furnishing of all labor, materials and construction equipment necessary for the providing flowable fill for the abandonment of sewers and/or structures of the size and character shown on the drawings and specified herein.
- B. Where called for on the drawings certain areas of the excavation and areas of existing structures and sewers to be abandoned shall be backfilled with flowable fill.

1.02 REFERENCES

- A. Performance and material requirements shall meet specific Reference Standards as referred to hereinafter under individual items.
- B. Unless otherwise specified, all materials shall also conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 SUBMITTALS

- A. The method used to measure fly ash and cement shall be submitted for acceptance. The contractor's proposed method shall be one that compliments the type of mixing plant being used and provides assurance that the percentage of cement is being satisfactorily controlled. Cement content shall be based on the dry weight of the fly ash in the mix. The batched weight of fly ash shall be corrected for its moisture content. Water shall be measured, although its control will be a function of consistency (slump and workability) of the mix.

PART 2. MATERIALS

2.01 FLOWABLE FILL

- A. Flowable fill shall consist of a mixture of fly ash, cement and water such as "C-Fill" as manufactured by Clawson Concrete or "M-Crete" as manufactured by Michigan Foundation or equal.
- B. Cement shall be Portland Cement conforming to A.S.T.M. C 150 Type I. Air entrained cement, pozzolan, and other types of cement shall not be used. Fly ash shall conform to the requirements of A.S.T.M. C618, Class F. Water shall be potable.
- C. The stabilized fly ash mixture shall contain 4 to 5% Portland cement based on the dry weight of the fly ash. Occasional batches of mixture with a cement content of 3 to 4% will be allowed provided immediate action is taken to restore the cement content to the specified range. Mixtures containing less than 3% shall not be used. The mixture shall have a slump of 10 to 12 inches at the point of placement. The mix temperature shall not be lower than 50°. The mixture shall have a compressive strength of 100 psi minimum at twenty-eight (28) days.

PART 3. EXECUTION

3.01 PREPARATION

- A. Prior to abandoning sewers with flowable fill, the Contractor shall install all necessary bulkheads in sewers and/or structures and ensure that they will not leak when flowable fill is placed.

3.02 MIXING

- A. The flowable fill may be mixed by a pug mill, central concrete mixer, turbine mixer or other acceptable equipment or method. Provisions shall be made to maintain the mix temperatures and slump as stated.

3.03 PLACEMENT

- A. The material shall be placed by end or side dumping, tremie, pump, conveyors, or other suitable method. Lines and grades shall be as shown on the design drawings. Stabilized fly ash shall be protected from freezing temperatures for the initial twenty-four (24) hours after placement. Protection may consist of earth cover, straw, or a sacrificial layer of the stabilized fly ash mix.

3.04 MEASUREMENT & PAYMENT

- A. Unless it is identified in the Proposal as a separate pay item, installation of flowable fill is incidental to the other work of this project.

END OF SECTION

SECTION 710
PORTLAND CEMENT CONCRETE PAVEMENT CONSTRUCTION

PART 1. GENERAL

1.01 SUMMARY

- A. This section includes the provision of all labor, materials, equipment, supervision and incidentals required for the furnishing and placement of ready mixed Portland Cement Concrete (PCC) pavement and curbs and gutter.

1.02 REFERENCES

- A. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 SUBMITTALS

- A. Contractor shall submit proposed mix design for all PCC pavements to be supplied on this project.
- B. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.01 CONCRETE

- A. Provide materials in accordance with subsection 602.02 of the Standard Specifications for Construction and the contract. Concrete Grade 3500HP requires optimized aggregate gradation and 25 to 40 percent replacement of the Portland cement in the concrete mixture with a supplementary cementitious material (slag cement, fly ash). Do not use other concrete Grades or Types in lieu of Grade 3500HP. Prepare the optimized aggregate gradation and perform process control according to the procedure for Optimized Aggregate Gradation included in the contract.
- B. The concrete mixture supplied on this project shall conform to the requirements of the Concrete Durability Requirements section for resistance to alkali-silica reactivity (ASR) and for air entraining requirements.
- C. Concrete provided on this project shall be Ready Mixed Concrete; central mixed or transit mixed concrete is permitted. The source of ready mixed concrete shall be approved by the Engineer.
- D. Admixtures - Admixtures shall be used only when specified or authorized by the Engineer.
- E. The City reserves the right to make air and slump tests on any or all loads of concrete supplied to the job prior to placing the concrete in the grade. Concrete shall not be placed in the grade until such tests have been completed and approved by the Engineer. Concrete not meeting the specifications will be rejected. Re-tempering of rejected concrete for re-use on the job will not be allowed.
- F. Water shall not be added to the concrete at any time without specific permission by the Engineer.

2.02 AGGREGATE BASE COURSE

- A. Unless otherwise specified on the drawings, or in the specifications, the aggregate base course to support the PCC pavement shall be MDOT 21AA crushed limestone compacted to 95% of the maximum modified proctor density.

B.

PART 3. CONSTRUCTION

3.01 EXAMINATION

- A. Contractor shall verify the existing conditions prior to submitting a bid on the project.

3.02 EQUIPMENT

- A. All equipment used in the construction of the work shall be inspected and shall meet approval of the Engineer prior to start of construction. All equipment, tools and machinery shall be maintained in a satisfactory working condition.

3.03 MAINTAINING TRAFFIC

- A. The Contractor shall furnish, erect and maintain road construction barricades in accordance with current Michigan Manual of Uniform Traffic Control Devices.
- B. The Contractor shall at all times allow access to abutting property along the job. It is not intended that this shall permit access to the property during the actual processes of construction, however, the Contractor shall provide for temporary crossings and crossovers over the work partially completed prior to final completion of the construction. No roadway surface shall be opened to traffic prior to authorization by the Engineer.

3.04 CONCRETE PAVEMENT REMOVAL

- A. Caution shall be exercised during pavement breaking operations, and the use of a crane and ball type pavement breaker will not be permitted. Equipment used for this work shall be such as will not cause damage to adjacent buildings and underground utilities.
- B. Concrete pavement removal will be paid for at the contract unit price per square yard, which shall include the removal of adjacent curb or curb and gutter, and any asphaltic concrete surfacing. No additional payment will be made for pavement removal with reinforcing.

3.05 CUTTING TREE ROOTS

- A. Tree roots larger than two (2) inches in diameter shall not be cut beyond a point three (3) inches in back of the proposed curb line, and no tree roots shall be cut beyond a point twelve (12) inches in back of the proposed curb line. The above limits may be exceeded only with specific authorization by the City Parks and Recreation Department.

3.06 EXCAVATION

- A. All earth and other material shall be excavated for the full depth and width of the cross section, as given on the plans.
- B. Trees and stumps to be removed will be removed by the City at no cost to the Contractor. Removing and disposing of shrubs, brush and trees or stumps less than four (4) inches in diameter shall be considered as incidental to the work of excavation.
- C. The Contractor shall rough grade as close as possible to finished subgrade, leaving a minimum to be removed in fine grading.
- D. Excavation material shall be disposed of by the Contractor in the following order of preference:
 - 1. Along the site of the work to fill requirements of the work.
 - 2. At the Contractor's own dump sites.

- E. Excavation will be determined by the average end area method of all material included above the base between backs of curbs, or edges of pavement where no curb is constructed. Excavation and fill required from curb to property line will be classed as grading. Concrete pavement removal and other items included in separate pay items will be deducted from excavation. Asphalt removal will be considered part of excavation.
- F. Excavation for manholes, catch basins, inlets and gate wells shall be included in the price bid for these items.
- G. All excavated material stored along the line of work between curb and sidewalk on improved lawns shall not be left longer than forty-eight (48) hours. Said lawns or otherwise improved parkway shall be left in a neat and clean state within the specified forty-eight (48) hours.
- H. Excavated material removed in fine grading or any other operations shall be removed from any completed pavement slab, before any slab is opened for traffic whatsoever, including Contractor's equipment.

3.07 PREPARATION OF SUBGRADE

- A. The subgrade shall be smoothed, trimmed and compacted in the required line, grade and cross section to receive the pavement. The roadbed shall be compacted to at least ninety-five (95) percent of the maximum unit weight. The subgrade thus formed shall be maintained in a smooth and compacted condition until pavement has been placed. Should the subgrade between the forms become rutted or disturbed in any manner, the subgrade shall be reshaped and compacted as specified herein.
- B. Compaction shall be accomplished by self-propelled steel wheeled or a pneumatic-tired roller weighing not less than five (5) tons or a self-propelled vibratory compactor of adequate size to compact the subgrade to the required density.
- C. No concrete shall be placed on the subgrade until the subgrade has been approved by the Engineer.
- D. The cost for preparation of subgrade will be paid for under the items "Earth Excavation" or "Station Grading", as noted in the Proposal, and not as a separate pay item.
- E. The roadbed and adjacent grade shall be maintained in such condition that the work will be well drained at all times. If it is necessary, in the prosecution of the work, to interrupt existing surface drainage, sewers or underdrainage, then temporary drainage facilities shall be provided until the permanent drainage work is completed. The construction of all temporary drainage facilities shall be considered as incidental to the construction of the project.
- F. The Contractor shall perform a proof roll on the subgrade, to be witnessed by the Engineer to determine if there are areas that are unstable or need additional compaction. Proof rolling of subgrade shall be performed with a pneumatic-tired rolling equipment, developing a load of thirty (30) to fifty (50) tons. In a systematic manner acceptable to the Engineer, the equipment shall perform a minimum of three (3) passes over the designated areas(s). When proof rolling of the subgrade shows an area to be unstable as determined by the Engineer, the unstable material shall be removed and replaced to the limits designated by the Engineer.

3.08 INSTALLING ROADWAY BASE

- A. Aggregate base shall be placed on streets, roadways, shoulders and driveways at the thickness shown on the drawings in not more than six (6) layers. Such surface shall be compacted to 95% density and shall meet lines and grades established on the drawings or meeting existing pavements.

- B. The aggregate base shall not be placed if the subgrade is saturated.

3.09 ADJUSTING CASTINGS

- A. Existing manholes, water valve gate wells, catch basins and other like surface structures shall be raised, lowered, shifted in alignment or reconstructed if necessary to fit the proposed line or grade. This work will be paid for at the unit price as bid in the proposal. If there are no work items listed in the proposal for this work, it shall be considered incidental to the other work of the project.

3.10 FORMS

- A. Forms shall be of metal, of any approved section which will insure their rigidity under the impact, thrust and weight of the heaviest machine carried on them.
- B. Forms shall have a minimum length of ten (10) feet, and shall have a depth not less than the edge thickness of the work prescribed. Forms with a height of eight (8) inches or more shall have a base width of at least eight (8) inches. Other forms shall have a minimum base width of six (6) inches. The forms shall be straight, free from distortion and shall show no vertical variation greater than one-eighth (1/8) of an inch in ten (10) foot lengths from the true plane surface on the top of the forms when tested with a ten (10) foot straight edge.
- C. Flexible forms and hand finishing will be required on all pavement where the edge of pavement radius is less than two hundred (200) feet.
- D. When tree roots may not be cut enough to allow room to use forms as specified above, wood forms (planks) may be used.
- E. The method of connections between form sections shall be such that a locked joint is formed free from vertical movement in excess of one-eighth (1/8) of an inch and horizontal movement in excess of one-quarter (1/4) of an inch under the impact, thrust and weight of the heaviest machine carried on the forms. Each form shall be fully pinned with pins of an adequate length, and the soil under the forms shall be thoroughly compacted by use of a mechanical form tamper or vibrator.
- F. All forms shall be thoroughly cleaned and oiled before concrete is placed against them.
- G. Forms shall be set at least three hundred (300) feet in advance of the paver, in order to allow ample time for inspection and checking prior to the placing of concrete.

3.11 POURING CONCRETE

- A. The roadway base and subgrade shall be in a moist condition, but not saturated, at the time concrete is placed.
- B. Concrete shall be handled from the mixer to the place of deposit as rapidly as possible, and by methods which will prevent separation of the ingredients. The concrete shall be deposited directly into the forms as nearly as possible in its final position, so as to avoid re-handling. The piling up of concrete in the forms will not be permitted. No concrete which has partially hardened shall be deposited in the work.
- C. Before beginning a run of concrete, all hardened concrete or foreign material shall be completely removed from the inner surface of the mixer and conveying equipment. Before depositing any concrete, all debris or other foreign matter shall be removed from the space to be occupied by the concrete; all reinforcing steel shall be secured in its proper locations and shall be inspected and approved by the Engineer.

- D. Concrete shall be worked into all the recesses and corners of the forms and closely compacted around the reinforcing steel by means of thorough spading or an approved method of mechanical vibration.
- E. When the air temperature falls to 40°F and is dropping, no concrete shall be placed. Pouring may be started when the temperature is 35°F in the shade, away from artificial heat, and is rising. All concrete during curing shall be protected in freezing weather by straw, hay or tarpaulins, for not less than seventy-two (72) hours after pouring.
- F. No concrete shall be poured on a frozen, dry, saturated, or uncompacted subgrade.

3.12 PAVEMENT CONSTRUCTION

- A. Concrete shall be placed only on subgrade prepared as previously specified. After the concrete has been deposited, it shall be struck off and consolidated by an approved finishing machine to such an elevation that when all finishing operations are completed, the surface will conform to the required finished grade. While striking off, a uniform ridge of concrete at least two (2) inches above the finished pavement grade shall be maintained ahead of the screed for its entire length. In consolidating, the finishing machine shall operate over each section of the pavement at least twice. Only sufficient mortar shall be worked to the surface to provide for a dense smooth finish. Excessive operation of the machine over a given area will not be permitted. Segregated particles of coarse aggregate, which may collect in front of the screed, shall be thoroughly mixed by hand with the mass of concrete already on the subgrade.
- B. The concrete shall then be floated by means of a hand operated wood float not less than five (5) feet long.
- C. As soon as the above operations are completed, all laitance, surplus water and inert materials shall be worked entirely off the pavement, and the surface made smooth by scraping or dragging with a rigid straightedge ten (10) feet in length.
- D. The straightedge shall be placed at the center of the slab, with the blade parallel to the centerline, and pulled slowly and uniformly to the edge. This operation shall be repeated until the surface of the concrete is free from irregularities and makes contact at all points with the bottom of the straightedge. The straightedge shall then be moved forward one-half (1/2) its length and the operations repeated.
- E. Depressions found in the surface shall be filled with fresh concrete and consolidated by floating with long handled float not less than five (5) feet in length. This float may also be used to smooth sections of the surface that may have become rough or torn by scraping the straightedge. Where a wood float does not give satisfactory surface, the Contractor will be required to provide metal or metal-shod long handled floats.
- F. The surface will then be tested for smoothness with the straightedge. During this operation, the contact of the straightedge with the concrete shall be uniform over the entire length tested. At the time of testing, the surface shall be free from soft mortar or excessive water.
- G. As soon as all excessive moisture has disappeared, and while it is still possible to produce a uniform surface of gritty texture, the pavement shall be finished by dragging a seamless strip of damp burlap or cotton fabric, not less than five (5) feet, nor more than six (6) feet in width, over the full width of the pavement. The fabric shall be renewed as often as necessary, to obtain the required texture.
- H. Transverse connection joints shall be raised one-eighth (1/8) inch above the slab and finished with a notched wood float, not less than five (5) feet long, to eliminate high or low spots following

burlapping. The edge next to all expansion and construction joints shall be rounded with a finishing tool having a radius of one-quarter (1/4) inch.

- I. The finishing of the surface and any joints shall be done from a bridge which does not touch the concrete at any point. The finished concrete shall be free from porous or open spots; no portion of the surface shall vary more than one-quarter (1/4) inch below a straightedge ten (10) feet in length laid on the pavement parallel to the centerline of the street.
- J. Immediately following final finishing operations, the gutter line shall be water tested to assure uniform grade and complete drainage.
- K. Should any unevenness appear in the surface of the pavement more than allowed by the Specifications, the Contractor shall at once take measures to eliminate such unevenness. After the concrete has obtained its initial set, no depressions shall be fixed by filling with concrete. In case the unevenness covers a large area of the slab, then the entire slab shall be removed and replaced with new concrete.
- L. Any laitance deposited on pavement shall be immediately cleaned off.
- M. The paving mixer will not be permitted on completed pavement and vehicles will be permitted only after the concrete has obtained a compressive strength of 3,500 psi. Any equipment wheels (including finishing machine) shall operate at least one (1) foot from the edge of the pavement.

3.13 JOINTS

- A. Pre-molded bituminous expansion joints, construction joints, pre-molded bituminous contraction joints and sawed longitudinal contraction joints shall be placed in all pavements. All of the above mentioned joints shall be included in the price bid per square yard of pavement. Care must be exercised in joint construction, to insure vertical planes and complete separation at the joint.
- B. Expansion Joints - Expansion joints shall be one (1) inch thick and of the pre-molded non-extruding bituminous fiber filler type. Joints shall be perpendicular to the subgrade and extend entirely through the concrete to between one-quarter (1/4) inch and one-half (1/2) inch below the top of the pavement. Expansion joint material shall bear uniformly on subgrade. After the concrete has set, and before the pavement has been opened to traffic, the joint shall be thoroughly cleaned and filled to the surface of the pavement with a hot poured rubber-asphalt type joint sealer.
- C. Contraction Joints - Transverse contraction joints shall be made of pre-molded bituminous material one-quarter (1/4) inch thick. Contraction joints shall be edged at the curb. Contraction joints shall be properly aligned and shall butt against adjacent sections, with no space between ends.
- D. All the longitudinal contraction joints shall be cut with a self-propelled concrete saw to a width and depth as shown on the plans, prior to any traffic being permitted on the new pavement. Sawed joints shall be cleaned by washing and blowing out with air immediately after sawing, and permitted to dry out at least twenty-four (24) hours prior to sealing. Joints shall be sealed with a hot poured rubber asphalt type joint sealing material applied with pressure equipment designed for that particular purpose.
- E. If the Contractor elects to construct a full width pavement with a center longitudinal contraction joint, said joint shall be cut in more than twelve (12) hours, and no more than thirty (30) hours after the pouring and finishing of that part of the pavement.
- F. Construction Joints - Longitudinal construction joints shall be placed as shown on plans. Construction joints shall also be placed at the ends of all pours, and at places where paving operations are stopped for a period of more than one-half (1/2) hour, except where such pours end at expansion joints. The second pour of concrete shall be edged with a longer lipped edging tool

than the first concrete pour. Joints shall be sealed with a hot poured rubber-asphalt type joint sealing material applied with pressure equipment designed for that particular purpose.

3.14 REMOVAL OF FORMS

- A. Forms shall not be removed from freshly placed concrete until it has set for at least twelve (12) hours. They shall be carefully removed and in such a manner that no damage will be done to the edge of the pavement.
- B. After the forms have been removed, the ends of all joints shall be cleaned and all honeycombed areas pointed.
- C. The sides of the pavement shall be covered with curing material, or with at least twelve (12) inches of wetted earth, wetted straw or other suitable curing agent, except where honeycombed areas are to be pointed. Such areas shall be covered with wetted burlap until the pointing has been completed, at which time they shall be cured as specified above.

3.15 WHITE MEMBRANOUS CURING

- A. After finishing operations have been complete, and immediately after the free water has left the surface, the surface of the pour shall be completely coated and sealed with a uniform layer of white membranous curing compound.
- B. The compound shall be applied in continuous uniform film by means of mechanical pressure sprayer equipment at a rate of not less than two (2) gallons per twenty-five (25) square yards of surface. The equipment shall provide adequate stirring of the compound during application. The equipment for applying the compound must be approved by the Engineer before work is started.
- C. If rain falls on the newly coated pavement before the film has dried sufficiently to resist damage, or if the film is damaged in any other way, the Contractor will be required to apply a new coat of material to the affected areas equal in curing value to that specified for the original coat.

3.16 CLEAN-UP AND GRADING

- A. The Contractor shall perform final grading the area between the edge of the new pavement and the sidewalk, or the property line if there is no sidewalk. This area shall be graded to drain to the curb.
- B. Wherever lawn areas are unnecessarily damaged by the Contractor, he will be required to repair any such areas at his own expense.

3.17 GRADING AT INTERSECTIONS

- A. The Contractor shall grade from the completed paving at a grade not exceeding one (1) inch in twenty (20) inches at all places where the paving adjoins the roadways. At existing roadways, the re-graded area shall be finished with the same type of material as removed. At places where paving adjoins gravel or gravel treated roadways, the regraded area shall be finished with a road gravel at a minimum thickness of six (6) inches compacted. However, the Contractor will not be required to replace any oil treatment or seal coat.
- B. There will be no additional payment for this work, and the cost of such should be included in the price bid for the concrete pavement.

3.18 CURB, CURB AND GUTTER

- A. Joints in integral curb shall line up with, and be the same type as, those in the concrete pavement.

- B. Joints in separate straight curb and in curb and gutter shall line up with, and be the same type as, those in adjacent concrete pavement, but spacing shall in no case exceed ten (10) feet. The Contractor shall use face forms on all straight curbs.
- C. The face and top of the curb shall be finished smooth and true to line, grade and cross section. No more troweling than necessary shall be done. Prior to the initial set of the concrete, the curb face shall be lightly brushed to give a slightly roughened surface. The curb shall be dropped to within (1) inch of the gutter at integral curb shall proceed simultaneously and follow immediately the placing of pavement concrete.
- D. Form excavations on the street side of curb and gutter sections shall be backfilled with road gravel and thoroughly compacted.

3.19 DRIVES

- A. The Contractor shall remove and replace, or construct gravel, asphalt or concrete drives adjacent to new construction where designated by the Engineer.
- B. Drives shall be constructed on a uniform slope from the gutter to the sidewalk, property line or place designated by the Engineer.
- C. Gravel Drives - The existing material shall be excavated and road gravel placed at a minimum thickness of six (6) inches compacted.
- D. Asphalt Drives - The existing material shall be excavated, and a minimum thickness of one and one half (1 1/2) inches of hot mix asphalt pavement placed on a road gravel base, with a minimum compacted thickness of five (5) inches. A neat joint shall be cut when meeting existing asphaltic concrete.
- E. Concrete Drives - Concrete drives shall be six (6) inches thick, unless otherwise designated. A portion of an existing concrete drive to be removed shall be removed to an existing joint, or to a joint made with a concrete saw. Concrete drives shall be constructed in accordance with the procedures and specifications for Cement Concrete Pavement.
- F. Payment will be made at the contract unit price per square yard, and for the designated thickness, which will be payment-in-full for excavating material other than concrete, and for constructing the drive complete.
- G. Payment for concrete removal will be made at the contract unit price per square yard. Payment for saw cutting will be made at the contract unit price per lineal foot.

3.20 CONCRETE HEADERS

- A. Concrete end headers shall be placed at the end of all pavements, including street returns not connecting with concrete or asphaltic concrete pavements.
- B. Payment will be made at the contract unit price per square yard for the adjoining concrete pavement.

3.21 SAW CUTTING

- A. Payment for saw cutting will be made at the contract unit price per lineal foot for saw cutting designated on the plans, or designated by the Engineer.
- B. No additional payment will be made for saw cutting pavement joints or for saw cutting done for the Contractor's convenience.

3.22 DAMAGE BY CONSTRUCTION

- A. Sidewalks, driveways, etc., unnecessarily damaged by construction operations shall be repaired or replaced as directed by the Engineer, at no additional cost to the City.

3.23 MEASUREMENT AND PAYMENT

- A. Concrete pavement will be paid for at the contract unit price per square yard, which will be payment in full for furnishing all materials (not including pavement reinforcement), dowels, tie bars, joint dowel hook bolts, and all joint materials; laying, curing and protecting the concrete; constructing the pavement complete; grading at intersections; and maintaining traffic.
- B. Payment for integral curb will be included in the contract unit price per square yard for concrete pavement with integral curb.

END OF SECTION

**SECTION 711
PORTLAND CEMENT CONCRETE DURABILITY REQUIREMENTS**

PART 1. GENERAL

1.03 SUMMARY

- B. All Portland cement concrete mixtures supplied by the Contractor for this project shall have been tested under this specification and shown to be resistant to excessive expansion caused by alkali-silica reactivity (ASR) and provides adequate air entrainment for freeze thaw durability. The contractor shall construct the project with practices outlined in this specification.
- C. All labor, materials, equipment, supervision and incidentals required for complying with the requirements of this section shall be incidental to the other work of this project.

1.04 REFERENCES

- B. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.05 SUBMITTALS

- B. Contractor shall submit proposed mix design for all Portland cement concrete mixtures to be supplied on this project.
- C. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.03 PORTLAND CEMENT CONCRETE MIXTURE COMPONENTS

- | | |
|--------------------------------|-------------------|
| A. Portland cement | ASTM C-150 |
| B. Fine Aggregate | ASTM C-33 |
| C. Coarse Aggregate | ASTM C-33 |
| D. Fly Ash, Class F | ASTM C-618 |
| E. Slag Cement, Grade 100, 120 | ASTM C-689 |
| F. Silica Fume | ASTM C-1240 |
| G. Blended Cements | ASTMC-595 |
| H. Air Entraining Admixtures | ASTM C-260 |
| I. Chemical Admixtures | ASTM C-494 |
| J. White Membrane Cure | ASTM C-309 Type 2 |

PART 3. EXECUTION

3.03 ALKALI-SILICA REACTIVITY

- A. Provide documentation to the Engineer that the concrete mixture does not present the potential for deleterious expansion caused by alkali-silica reactivity (ASR). Provide current ASR test results (valid for 2 years from completion of testing), for the fine aggregate that is proposed to be used in the concrete, from an independent testing laboratory proficient in ASR testing. The independent

testing laboratory must certify in writing, including a signed statement that all testing was conducted in accordance with the designated standard test procedures, described herein. Test results must conform to the specified criterion for one of the following standard test methods. ASR testing is not required for concrete pavement repairs and temporary concrete pavements. Use the Rounding Method described in ASTM E 29 when determining significant digits for reporting expansion test results.

1. Method 1. ASTM C 1293. Concrete Prism Test. If the expansion of concrete prisms is not greater than 0.040 percent (rounded to the nearest 0.001 percent) after 1 year, the fine aggregate is considered non-deleterious to ASR and may be used in the JMF.
2. Method 2. ASTM C 1567. Mortar Bar Test. If no previous test data are available for the fine aggregate that shows it is resistant to ASR using Method 1, above, replace 25 to 40 percent of the Portland cement in the concrete mixture with a supplementary cementitious material. A blended cement meeting the requirements of ASTM C 595 containing the above Portland cement and supplementary cementitious material proportions may also be used.

Demonstrate the ability of the supplementary cementitious material to control the deleterious expansion caused by ASR by molding and testing mortar bars according to the standard test method described in ASTM C 1567 using the mix proportions and constituent sources for both the aggregates and the cementitious materials that will be used for the project. Make at least three test specimens for each cementitious materials-aggregate combination. If the average of three mortar bars for a given cementitious materials-aggregate combination produces an expansion less than 0.10 percent (rounded to the nearest 0.01 percent) at 14 days of immersion, the JMF associated with that combination will be considered non-deleterious to ASR. If the average expansion is 0.10 percent (rounded to the nearest 0.01 percent) or greater, the JMF associated with that combination will be considered not sufficient to control the deleterious expansion caused by ASR and the JMF will be rejected.

3. Method 3. ASTM C 1260. Mortar Bar Test. If the expansion of the mortarbars is less than 0.10 percent (rounded to the nearest 0.01 percent) at 14 days of immersion, the fine aggregate is considered non-deleterious to ASR and may be used in the concrete without the need for ASR mitigation. The Engineer will not approve the use of the JMF if the expansion exceeds the respective threshold limits for the respective ASTM test method used.

3.04 QUALITY CONTROL

- A. The Owner and Contractor shall monitor the concrete that is delivered to the project site so as to insure that the approved mix design is being followed. The supplier shall include on the delivery ticket for each batch of concrete delivered to the job, the identification and proportions of each material batched. In lieu of individual batch tickets a detailed summary report showing the batch weights for each load may be submitted, at the end of each production shift, provided that individual ticket information is supplied upon request for inspection and testing personnel.
- B. When concrete is placed during cold weather, below 40 degrees F, the use of accelerators, heated aggregates, silica fume and/or additional forms of cold weather protection will be required. Cold weather will not eliminate the requirement for furnishing and placing a concrete mix that is considered resistant to ASR attack.
- C. Prior to cool weather placement, temperatures between 40 and 60 degrees F, the set time of the proposed mix shall be verified under anticipated field conditions. This information shall be used when scheduling pours and saw crews.

3.05 AIR ENTRAINMENT

- A. Air entrainment shall be accomplished by addition of an approved air entraining agent. Air content as determined by ASTM C 231 or ASTM C 173, shall be determined on each day of production as early and as frequently as necessary until the air content is consistently acceptable. Acceptance testing for air content shall be on the grade ahead of the placement operation.
- B. Paver placement:
 - 1. The target air content of the in-place finished plastic concrete is 6.0%. During production acceptance will be at the point of acceptance sampled ahead of the paver, the target value referred to as the Acceptance Air Content (AAC). The AAC will be determined by the air loss actually experienced during transportation, consolidation and placement of the concrete. The difference between the as-produced concrete in front of the paver and the in-place air content will be considered the air loss. The AAC for the project will be 6.0% plus an amount equal to the air loss.
 - 2. To establish the initial target AAC on the first day of paving, the first load shall be tested at the plant. For up to the first ten (10) loads, the AAC measured prior to placement shall be at least 8.0% and no more than 12.0%. After initial testing at the plant at least two sample sets shall be tested to determine the actual air loss during placement. A set shall consist of two (2) samples of concrete from the same batch, one taken at the point of discharge and the other from the in-place concrete behind the paver. The air loss from the two (2) sets shall be averaged and added to 6.0% to establish the AAC (rounded to the next higher 0.5%). The project acceptance air tests shall be taken prior to placement and shall be within the range of the AAC plus 2.0% or minus 1.0%.
 - 3. After the AAC has been established it shall be verified and/or adjusted through daily checks of the air loss through the paver. The loss through the paver shall be checked twice daily. A Revised AAC shall be established if the average air loss from two (2) consecutive tests deviates by more than 0.5% from the current accepted air loss.
- C. Hand placed concrete:
 - 1. The air content for non-slip form paving shall be 7.0% plus 1.5% or minus 1.0% at point of placement.

3.06 CONSTRUCTION PROCESSES

- A. Aggregate control
 - 1. Gradation control – The Contractor shall provide a detailed stockpile management plan, describing their process control procedure for shipping, handling, and stockpiling of each aggregate including workforce training.
 - 2. Moisture control – All aggregate materials must be conditioned to a moisture content of not less than saturated surface dry (SSD) prior to batching. A watering process using some type of sprinkler system is required on all coarse aggregate material stockpiles.
- B. Mixing
 - 1. Central mix plants
 - a. The total volume of the batch shall not exceed the designated size of the mixer or the rated capacity as shown on the manufacturer's rating plate.
 - b. Drum Mix Plants:

- i. After all solid materials are assembled in the mixer drum; the mixing time shall be a minimum of sixty (60) seconds and a maximum of five (5) minutes. The mixing time may be decreased if the ASTM C-94 11.3.3 mixer efficiency tests show that the concrete mixing is satisfactory. The Engineer may require an increase in the minimum mix time if the mixer efficiency test determines that the concrete is not being mixed satisfactorily. The minimum mixing time shall start after the mixer is fully charged. Mixers shall be operated at the speed recommended by the manufacturer as mixing speed. The mixer shall be charged so that a uniform blend of materials reached the mixer throughout the charging cycle. Any additional slump water required shall be added to the mixing chamber by the end of the first 25% of the specified mixing time. Mixers shall not be used if the drum is not clean or if the mixing blades are damaged or badly worn.
 - c. Ribbon mixers:
 - i. After all solid materials are assembled in the mixer; the mixing time shall be a minimum of thirty (30) seconds and a maximum of 2.5 minutes. The mixing time may be decreased if the ASTM C-94 11.3.3 mixer efficiency tests show that the concrete mixing is satisfactory. The Engineer may require an increase in the minimum mix time if the mixer efficiency test determines that the concrete is not being mixed satisfactorily. The minimum mixing time shall be indicated by an accurate timing device which is automatically started when the mixer is fully charged. Mixers shall be operated at the speed recommended by the manufacturer as mixing speed. The mixer shall be charged so that a uniform blend of materials reached the mixer throughout the charging cycle. After any additional slump water is added to the mixing chamber the mixing shall continue for a minimum of ten (10) seconds. Mixers shall not be used if the mixer is not clean or if the mixing blades are damaged or badly worn.
- 2. Truck mixers
 - a. The capacities and mixing capabilities shall be as defined in ASTM C 94, and each unit shall have an attached plate containing the information described therein. The plate may be issued by the Truck Mixer Manufacturer. The mixer capacity shall not be exceeded, and the mixing speeds shall be within the designated limits. Truck mixers shall be equipped with a reliable reset revolution counter. If truck mixers are used for mixing while in transit, the revolution counter shall register the number of revolutions at mixing speed.
 - b. An authorized representative of the concrete producer shall certify that the interior of the mixer drum is clean and reasonably free of hardened concrete, that the fins or paddles are not broken or worn excessively, that the other parts are in proper working order, and that the unit has been checked by the representative within the previous thirty (30) calendar day period to substantiate this certification. The current, signed certification shall be with the unit at all times.
 - c. The required mixing shall be between seventy (70) and ninety (90) revolutions. The mixing shall be at the rate designated by the manufacturer and shall produce uniform, thoroughly mixed concrete.
 - d. The Engineer may inspect mixer units at any time to assure compliance with certification requirements, and removal of inspection ports may be required. Should the Engineer question the quality of mixing, the Engineer may check the slump

variation within the batch. Should the slump variation between two (2) samples taken, one (1) after approximately 20% discharge and one (1) after approximately 90% discharge of the batch, show a variation greater than 3/4 inch (20 mm) or 25% of the average of the two, whichever is greater, the Engineer may require the mixing to be increased, the batch size reduced, the charging procedure be modified or the unit removed from the work.

- e. The practice of adding water on the site shall be discouraged. After the first round of trucks has been adjusted on the grade the amount of water added at the plant shall be adjusted and shall become the point of adjustment throughout the pour. All water additions on site shall be approved by the Engineer.

C. Curing

1. Apply liquid curing compound in a fine atomized spray to form a continuous, uniform film on the horizontal surface, vertical edges, curbs and back of curbs immediately after the surface moisture has disappeared, but no later than thirty (30) minutes after concrete placement. With approval of the Engineer, the timing of cure application may be adjusted due to varying weather conditions and concrete mix properties.
2. The cure system shall be on site and tested prior to concrete placement.
3. Apply a curing compound at a rate of application not less than two (2) gallons per twenty-five (25) square yard; keep the material thoroughly mixed per the manufactures recommendation and do not dilute the compound.
4. The finished product shall appear as a uniformly painted solid white surface. Areas exhibiting a blotchy or spotty appearance shall be recoated immediately.

END OF SECTION

**SECTION 712
CONCRETE SIDEWALK CONSTRUCTION**

PART 1. GENERAL

1.01 SUMMARY

- A. This section includes the provision of all labor, materials, equipment, supervision and incidentals required for the construction of concrete sidewalks and ramps, and associated work, including detectable warning plates for sidewalk ramps as required for compliance with the American with Disabilities Act.
- B. Related Sections: The following sections contain requirements that relate to this Section:
 - 1. Concrete Durability Requirements

1.02 REFERENCES

- A. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.
- B. All sidewalk and ramp shall meet ADA requirements for slope, surface finish, width, and all other requirements.

1.03 SUBMITTALS

- A. Contractor shall submit proposed mix design for all concrete to be supplied for sidewalk construction.
- B. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.01 CONCRETE

- A. The concrete mixture shall meet the requirements of MDOT Mixture 3500, with 3,500 PSI minimum compressive strength, and utilize 6AA coarse aggregate and Type 1A Portland Cement.
- B. The concrete mixture supplied on this project shall conform to the requirements of the Concrete Durability Requirements section for resistance to alkali-silica reactivity (ASR).
- C. Admixtures shall be used only when specified or authorized by the Engineer.
- D. The City reserves the right to make air and slump tests on any or all loads of concrete supplied to the job prior to placing the concrete in the grade. Concrete shall not be placed on the grade until such tests have been completed and approved by the Engineer. Concrete not meeting the specifications will be rejected. Re-tempering of rejected concrete for re-use on the job will not be allowed.
- E. Water shall not be added to the concrete at any time without specific permission by the Engineer.

2.02 TRUNCATED DOMES / DETECTABLE WARNING

- A. Truncated Domes / Detectable Warning shall be manufactured of cast iron, and shall at a minimum have the following properties:

Slip Resistance (ASTM C-1028):	1.10 Dry / 1.06 Wet
Wear Resistance (ASTM C-501):	7333
Impact Resistance (ASTM D-1709)	>238 Newtons
Adhesion to Concrete (Bond Strength ASTM D-482)	>5000 lbs
Tensile Strength (ASTM A-48)	35,000 PSI

- B. Truncated Domes / Detectable Warning shall be supplied with a natural finish. Black asphalt dip finish is acceptable as well, as long as all of the detectable warning plates at each intersection (all corners) that are constructed as a part of the work have the same finish.
- C. Truncated Domes / Detectable Warning shall be supplied at each sidewalk ramp in accordance with ADAAG and/or MDOT requirements, whichever is more stringent.
- D. Truncated Domes / Detectable Warning shall be at least two (2) feet deep along the direction of travel. The detectable warning plate width shall generally be five (5) feet, unless otherwise specified on the drawings or in the field by the Engineer. Radial plates may be used where called for on the drawings, or in the field by the Engineer.
- E. Truncated Domes / Detectable Warning shall be manufactured by East Jordan Iron Works, or approved equal.

2.03 FORMS

- A. Forms shall be of metal or wood, and of an approved section. Materials, other than metal or wood shall not be used for forms, unless specifically authorized by the Engineer.
- B. Forms shall be straight, free from distortions, and shall show no vertical variation greater than one-eighth (1/8) of an inch in ten (10) foot lengths from the true plane surface on the top of the forms when tested with a ten (10) foot straight edge, and shall show no lateral variations greater than one-quarter (1/4) of an inch from the true plane surface on the vertical face of the form when tested with a ten (10) foot straight edge.

PART 3. CONSTRUCTION

3.01 EXAMINATION

- A. Contractor shall verify the existing conditions prior to submitting a bid on the project.

3.02 PREPARATION

- A. If removal and replacement of the existing sidewalk is specified in the work item, the Contractor shall remove the existing sidewalk to the extent shown on the plans, or as directed by the Engineer in the field.
- B. During removals and construction, Contractor shall protect all adjacent sidewalks, pavement, curb and gutter, and drive approaches from damage. Any adjacent infrastructure that is damaged by the Contractor during construction shall be replaced by the Contractor at no additional cost to the City.
- C. The subgrade shall be formed by trenching or filling to the required elevation for bottom of concrete, or to bottom of subbase, if a subbase is specified. All sod and vegetative matter shall be stripped from the subgrade.
- D. The subgrade after grading shall be thoroughly tamped or otherwise compacted, to insure its stability. Any soft, spongy or otherwise unstable areas in the subgrade shall be removed and replaced with granular fill.

- E. In cuts, the subgrade shall be made sufficiently wide to permit the proper placing of forms, and in fills, the subgrade shall be made at least one (1) foot wider on each side than the required width of sidewalk.
- F. All fills shall be of granular material, and shall be placed in thoroughly compacted layers not to exceed six (6) inches in depth. Compaction shall be accomplished by the use of mechanical equipment or hand tamps with metal bases.
- G. Existing sidewalks or paved areas under proposed sidewalks shall be removed, except where grade will allow at least two (2) inches of granular fill to be placed over them.

3.03 SIDEWALK THICKNESS

- A. Unless otherwise noted on the drawings, sidewalks shall be at least four (4) inches thick, except at ramps and across driveways, where they shall be at least six (6) inches thick.

3.04 DISPOSAL OF WALK AND EXCAVATED MATERIALS

- A. The old walk, after removal, and excavated materials shall be disposed of by the Contractor at his own expense. He shall provide his own dump. When directed by the Engineer, the Contractor shall leave removed sod in an area adjacent to the construction. The Contractor will not be held responsible for the sod after that time or responsible for the condition of the area under which the sod was placed.

3.05 PREPARATION OF SUBGRADE

- A. The subgrade shall be formed by trenching or filling to the required elevation for bottom of concrete, or to bottom of subbase, if a subbase is specified. All sod and vegetative matter shall be stripped from the subgrade.
- B. The subgrade after grading shall be thoroughly tamped or otherwise compacted, to insure its stability. Any soft, spongy or otherwise unstable areas in the subgrade shall be removed and replaced with granular fill.
- C. In cuts, the subgrade shall be made sufficiently wide to permit the proper placing of forms, and in fills, the subgrade shall be made at least one (1) foot wider on each side than the required width of sidewalk.
- D. All fills shall be of granular material, and shall be placed in thoroughly compacted layers not to exceed six (6) inches in depth. Compaction shall be accomplished by the use of mechanical equipment or hand tamps with metal bases.
- E. Existing sidewalks or paved areas under proposed sidewalks shall be removed, except where grade will allow at least two (2) inches of granular fill to be placed over them.

3.06 PROTECTION OF TREES

- A. Where a tree is less than twenty-four (24) inches from the existing walk, or at the Engineer's discretion, the Contractor may be required to curve the walk around the tree, maintaining the full width of the walk through the curve. The Contractor shall cut and remove all tree roots that are in the sidewalk grade. Merely shaving the roots in order to place the sidewalk at proper grade and thickness will not be acceptable. The cost of the work of cutting and removing the roots and curving the walk around the trees shall be included in the unit price bid. The City may elect to cut and remove certain tree roots with their own forces, but the Contractor shall submit his bid based on performing all of the necessary root cutting and removal.

3.07 BARRICADES AND LIGHTS

- A. Barricades and lights shall be placed in accordance with the "Public Safety" section of the "General Requirements" section of these specifications. In addition, the following requirements shall be met.
- B. Barricades used under this contract shall be "horses" or other barricades approved by the Engineer. Barricades made of rope, wood siding and other similar types will not normally be approved by the Engineer.
- C. Barricades shall be placed where sidewalks under construction join sidewalks or driveways which are open for use.
- D. Lights shall be placed at the beginning and end of construction in each block. Where such lights are more than five hundred (500) feet apart, intermediate lights shall be placed so that the distance between any light does not exceed five hundred (500) feet.

3.08 FORMS

- A. Forms shall be of metal or wood, and of an approved section. Materials, other than metal or wood shall not be used for forms, unless specifically authorized by the Engineer.
- B. Forms shall be straight, free from distortions, and shall show no vertical variation greater than one-eighth (1/8) of an inch in ten (10) foot lengths from the true plane surface on the top of the forms when tested with a ten (10) foot straight edge, and shall show no lateral variations greater than one-quarter (1/4) of an inch from the true plane surface on the vertical face of the form when tested with a ten (10) foot straight edge.

3.09 FORMING

- A. Forms must be used for all edges of all sidewalk construction. Where proposed walk abuts existing concrete, and the edge of the existing concrete is true to line and grade, the existing concrete, with or without expansion paper, will be considered a form for the new sidewalk.
- B. Forms shall be installed true to line and grade established by the Engineer. They shall be adequately staked and braced to remain on line and grade during the placement of concrete.
- C. Walk shall pitch to the center of the street at the rate of one-quarter (1/4) inch per foot of width, unless otherwise provided. Forms shall be of the full depth specified for the walk.
- D. Before placing concrete, forms shall be thoroughly cleaned and oiled.

3.10 PLACING AND FINISHING CONCRETE

- A. Before beginning a run of concrete, all hardened concrete or foreign material shall be completely removed from the inner surface of the mixer and conveying equipment. Before depositing any concrete, all debris or other foreign matter shall be removed from the space to be occupied by the concrete.
- B. The subgrade shall be thoroughly wetted and the concrete shall be deposited thereon to the proper depth. So called "two course" pouring will not be permitted. Concrete shall be handled from the mixer to the place of deposit as rapidly as possible and by methods which will prevent separation of the ingredients. The concrete shall be deposited directly into the forms as nearly as possible in its final position, so as to avoid re-handling. The piling up of concrete in the forms will not be permitted. No concrete which has partially hardened shall be deposited in the work.
- C. Concrete shall be worked into all the recesses and corners of the forms by means of thorough spading of an approved method or mechanical vibration.

- D. When the air temperature falls to 40°F and is dropping, no concrete shall be placed. Pouring may be started when the temperature is 35°F in the shade, away from artificial heat, and is rising. All concrete during curing shall be protected from freezing by straw, hay or tarpaulins, for not less than seventy-two (72) hours after pouring.
- E. No concrete shall be poured on a frozen, dry or uncompacted subgrade.
- F. The concrete shall be alternately tamped and struck off with a strike board until all voids are removed and the surface has the required grade and cross section. The strike board shall be long enough so it can always be in contact with both forms. The surface shall be floated with a wood or aluminum float, followed by a steel float, just enough to produce a smooth surface free from irregularities. All edges and joints shall be rounded to a radius of one-quarter (1/4) inch with an approved finishing tool. The surface shall then be brushed to slightly roughen the surface and remove the finishing tool marks.
- G. The end of a run of concrete shall not remain unformed for more than one-half (1/2) hour, by which time a header form shall be placed. If a header is not placed, the concrete shall be removed back to the last transverse joint prior to continuing the pour. Headers, when used, shall not vary more than six (6) inches in location from the normal transverse joint location.

3.11 JOINTS

- A. Joints shall be constructed true to line, with their faces perpendicular to the surface of the sidewalk, and shall not vary more than one-quarter (1/4) inch from their designated position. Transverse joints shall be constructed at right angles to the centerline of the sidewalk, and longitudinal joints shall be constructed parallel to the centerline, unless otherwise required.
- B. When the sidewalk is constructed in partial width slabs, transverse joints in the succeeding slab shall be placed in line with like joints in the adjacent slab. In the case of widening existing sidewalks, transverse joints shall be placed in line with like joints in the existing sidewalk.
- C. The concrete at the faces of all joints shall be thoroughly spaded and compacted to fill all voids, and the surface shall be finished smooth and true to grade.
- D. Expansion Joints - Expansion joints shall be of the pre-moulded non-extruding bituminous fiber filler type.
- E. In new sidewalk, one-half (1/2) inch thick expansion joints shall be placed at intervals of not more than fifty (50) feet. In repairing existing sidewalk, at least one and one-half (1 1/2) inch expansion joints shall be used in the repair, unless existing expansion joints are less than thirty (30) feet on either side of the repair.
- F. One-half (1/2) inch thick expansion joints shall also be placed at junctions with sidewalks, drives, buildings and other rigid structures. Three-quarter (3/4) inch thick by five (5) inch expansion joints shall be placed at all curb junctions and also between sidewalk and abutting parallel curb or gutter.
- G. Contraction Joints - Insofar as feasible, joints shall be spaced at intervals equal to the width of the walk and with maximum transverse and longitudinal intervals of ten (10) feet. Joints shall be produced by use of slab division forms extending the full width and one-half (1/2) the depth of the walk. The joints shall be of not less than one-eighth (1/8) inch, nor more than one-quarter (1/4) inch in width, and shall be finished smooth and true to line.
- H. Slab division forms shall remain in the concrete a sufficient length of time to insure permanent separation of the concrete.

3.12 WHITE MEMBRANOUS CURING

- A. After finishing operations have been completed, and immediately after the free water has left the surface, the surface of the sidewalk shall be completely coated and sealed with a uniform layer of white membranous curing compound.
- B. The compound shall be applied in a continuous uniform film by means of mechanical pressure sprayer equipment at a rate of not less than one (1) gallon per two hundred (200) square feet of surface. The equipment shall provide adequate stirring of the compound during application. The equipment for applying the compound must be approved by the Engineer before work is started.
- C. If the compound is too thick for satisfactory application during cold weather, the material may be warmed in a water bath at temperatures not over 100°F. Thinning with solvents will not be permitted.
- D. If rain falls on the newly coated sidewalk before the film has dried sufficiently to resist damage, or if the film is damaged in any other way, the Contractor will be required to apply a new coat of material to the affected areas equal in curing value to that specified for the original coat.

3.13 SIDEWALK RAMPS

- A. Sidewalk ramps shall be constructed in accordance with these Concrete Sidewalk Construction Specifications, and in accordance with MDOT Standard Detail R-28, latest edition.
- B. Surface texture of ramps shall be that obtained by a coarse brooming, transverse to the slope of the ramps. The normal gutter line profile shall be maintained through the area of ramps.
- C. There is no separate pay item for sidewalk ramps. The sidewalk portion of ramps will be paid for as concrete sidewalk construction. Work required at the curb for ramps will be paid for under a curb pay item, depending on the type of curb work performed.
- D. Each ramp shall include a Truncated Domes / Detectable Warning installed at the back of the curb. The Truncated Domes / Detectable Warning shall generally be five (5) feet wide by two (2) feet deep. If that is not possible given the site constraints, then they shall be at least as wide as the existing adjacent sidewalk. Radial Truncated Domes / Detectable Warning plates may be required in some locations.

3.14 REMOVAL OF FORMS

- A. Forms shall not be removed from freshly placed concrete until it has set for at least twelve (12) hours. They shall be carefully removed, and in such a manner that no damage will be done to the edge of the sidewalk.

3.15 PROTECTION OF EXISTING LAWNS

- A. The Contractor shall use extreme care while replacing existing sidewalks or constructing new sidewalks in existing lawns not to damage the lawns. The Contractor shall remove a maximum of six (6) inches of sod beyond the edges of the sidewalk. He shall remove the sod after cutting it with a square nosed shovel on a parallel line to the sidewalk.
- B. The Contractor shall protect existing lawns at all times during his work. Equipment or vehicles will not be permitted on established lawns. The Contractor will be held responsible for all damage to lawns more than six (6) inches away from sidewalk construction. Sod and other excavated materials shall not be placed on existing lawns. Any lawn area damaged as a result of the Contractor's operations may be repaired by the City at the Contractor's expense.

3.16 UNDERGROUND SPRINKLER SYSTEMS

- A. Some of the houses in the sidewalk replacement area may have underground sprinkler systems for their lawns. The owners of these sprinkler systems have been notified that they are responsible for locating for the Contractor, all underground sprinkler equipment adjacent to any sidewalk that is to be replaced. The Contractor will be required to use caution when working around these known underground sprinkler systems, and shall repair any damage to sprinklers if, in the opinion of the Engineer, insufficient care was taken to prevent damage to the sprinkler system.

3.17 SERVICE WALKS

- A. Where the grade of a new or replaced sidewalk does not meet the grade of a private service walk, the Contractor may be required to replace a portion of the service walk. The Contractor will be required to replace only that portion of the service walk that the Engineer determines is necessary to eliminate a hazard or drainage problem.
- B. Payment for replacement of service walks will be made at the contract unit price for four (4) inch concrete sidewalk replacement.

3.18 CONSTRUCTION AT PAVED DRIVEWAYS

A. Sidewalk Replacement at Concrete Driveways

- 1. The existing sidewalk shall be removed without damaging the driveway. Expansion joints shall be replaced along each edge of the sidewalk, and the sidewalk shall be replaced using the expansion paper at the drive as forms.

B. Sidewalk Replacement at Asphalt Driveways

- 1. The existing sidewalk, and a maximum of four (4) inches of asphalt on each side of the sidewalk, shall be removed without damaging the rest of the drive. A neat joint shall be cut in the asphalt prior to removing the sidewalk. The sidewalk shall be formed across the driveway. Wood forms may be used in such locations. Upon completion of the sidewalk construction, the Contractor shall place road gravel in the form excavations. There will be no additional payment made for cutting the neat joints, removing asphalt and placing road gravel in the form excavations. The City shall then be responsible to have the remaining asphalt replaced by others.
- 2. Where an asphalt driveway is in good condition and at a suitable grade, the Engineer may direct that the sidewalk be removed and replaced without removing a portion of the driveway. In such case, the Contractor shall use caution to avoid damage to the asphalt. Also, the Contractor will not be required to set forms. The Contractor should avoid getting cement on the surface of any asphalt drive.

C. New Sidewalk at Concrete Driveways

- 1. The Contractor shall saw cut and remove that portion of the driveway necessary to be removed to construct the sidewalk, and necessary to be removed because of grade. The sidewalk shall be formed across the driveway, and following the removal of the forms, the remaining portion of the driveway removed shall be replaced.

D. New Sidewalk (asphalt drives)

1. The Contractor shall cut neat joints in the asphalt at locations determined by the Engineer. The Contractor shall remove the asphalt between the neat joints, shall form the sidewalk across the drive, and following the removal of the forms, shall fill the form excavations with road gravel. There will be no additional payment made for cutting the neat joints, removing the asphalt and placing road gravel in the form excavations.

3.19 CONSTRUCTION AT UNPAVED DRIVEWAYS

- A. The Contractor shall backfill the form excavation across unpaved drives with the same type material as exists in the adjacent driveway.

3.20 FINAL GRADING

- A. For new sidewalk construction, the Contractor shall grade to a uniform slope from the top of the walk to top of the curb, and from the walk to the property line. In the event there is no curb, grading shall be done for a distance of 10 (ten) feet towards the centerline of the street to the existing grade. If this provision should involve destroying or re-grading established lawns and parkways, the Contractor shall confer with the Engineer before starting such grading.
- B. Grading and clean-up work shall be done as soon as possible following the completion of any section of sidewalk, and in no case shall more than two (2) consecutive days (excluding Sundays and holidays) elapse from the time any section of sidewalk is placed until the adjacent grading and clean-up is completed.
- C. In establishing lawns, the Contractor shall place a minimum of two (2) inches of topsoil in all form excavations and on all re-graded areas. The topsoil shall be tamped and graded, and then seeded with grass seed. Clean excavated material may be used to fill under the required topsoil. Topsoil and seed used shall be of a high quality and approved by the Engineer. Topsoil shall be free of sticks, stones, clumps of clay, debris and similar materials.
- D. In unimproved areas, clean excavated material may be used for grading.

3.21 PAYMENT

- A. Payment will be made by unit price per square foot of walk constructed, and price bid shall include: placement and preparation of granular fill (4" or 6" of compacted class II sand base per plan details); forming, furnishing, placing and finishing of concrete (thickness as specified); placing of jointing materials; curing compound; removal of forms; and grading as specified.
- B. There will be no additional payment for removing and replacing unstable subgrade.
- C. No deductions in payment will be made for areas of sidewalk construction occupied by manhole castings, utility boxes, pole bases and similar objects, provided no one such object occupies more than ten (10) square feet of the new (or replaced) sidewalk. Where any one such object occupies more than ten (10) square feet of the new (or replaced) sidewalk, no payment will be made for sidewalk within that area.

END OF SECTION

**SECTION 750
HOT MIX ASPHALT PAVEMENT CONSTRUCTION**

PART 1. GENERAL

1.01 SUMMARY

- A. This section includes the provision of all labor, materials, equipment, supervision and incidentals required for the furnishing and placement of plant mixed Hot Mix Asphalt (HMA) pavements.

1.02 REFERENCES

- A. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 SUBMITTALS

- A. Contractor shall submit proposed mix design for all hot mix asphalt to be supplied on this project.
- B. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.01 HOT MIX ASPHALT PAVEMENTS

- A. Hot-mix asphalt mixture designations shall be as specified on the drawings for wearing (surface) course, leveling course, and base course as applicable. All mix designations shall meet applicable minimum requirements per MDOT standard specifications for construction.
- B. The hot mix asphalt pavements shall meet the requirements of the MDOT Special Provision for Marshall Hot Mix Asphalt Mixtures (12SP501(F)) for the mixes designated on the plans or elsewhere in the specifications, except as modified on the plans or in these specifications.
- C. Binder from Recycled Asphalt Pavement (RAP) materials shall be limited to not more than 17 percent of the total mix binder content by weight. Final binder for all mixes shall meet specification requirements for Performance-Grade PG64-22.
- D. Bond coat shall be SS-1h.

PART 3. CONSTRUCTION

3.01 EXAMINATION

- A. Contractor shall verify the existing conditions prior to submitting a bid on the project.

3.02 ASPHALTIC - BITUMINOUS

- A. For purposes of these specifications, the words, "asphaltic" and "bituminous", and comparable variations of such words, will be considered to be interchangeable.

3.03 MAINTAINING TRAFFIC

- A. The Contractor shall furnish, erect and maintain road construction barricades in accordance with current Michigan Manual of Uniform Traffic Control Devices.
- B. The Contractor shall at all times allow access to abutting property along the job. It is not intended that this shall permit access to the property during the actual processes of construction, however, the Contractor shall provide for temporary crossings and crossovers over the work partially

completed prior to final completion of the construction. No roadway surface shall be opened to traffic prior to authorization by the Engineer.

3.04 ADJUSTING CASTINGS

- A. This work will consist of adjusting manhole, gate well and drainage structure castings to the elevation of the finished surface in accordance with the "Adjusting Drainage Structure Covers" section of the MDOT specifications.
- B. In concrete pavements, the top of the concrete replaced around castings shall be held down two (2) inches below the elevation of the finished surface.
- C. Prior to placing the top course of asphaltic concrete, the area around castings shall be filled with asphaltic concrete to the elevation of the leveling course.
- D. Variable adjusting castings shall not be used unless specifically authorized by the Engineer.
- E. The City may elect to replace some castings. In such cases, the Contractor shall deliver the old castings and pick up new castings at the City Department of Public Services (DPS) yard on Eton Road. That work will be considered to be incidental to Adjusting Castings.

3.05 PREPARATION OF EXISTING PAVEMENT FOR ASPHALT OVERLAY

- A. Repairing Concrete Curb & Slab Replacement
 - 1. Concrete for concrete curb and slab repairs shall meet the requirements for concrete for Portland Cement Concrete Pavement Construction.
 - 2. Repairs to existing concrete pavements shall be made in accordance with MDOT Standard Drawing R-44, latest edition.
 - 3. Curb repairs shall join existing curbs at existing joints, cracks (where authorized by the Engineer), or at saw cut joints where saw cutting is necessary. Unless otherwise provided for in the specifications, saw cutting shall be incidental to the other work on this project.
- B. Removing Bituminous Surface For Joints
 - 1. This work will consist of stripping joints in existing bituminous surfaces in accordance with the "Removing Bituminous Surface" section of the MDOT specifications.
- C. Chipping Pavement Around Structures
 - 1. At drainage structures not to be adjusted, the existing concrete or asphaltic pavement surface shall be cut back up to one and one-half (1 1/2) feet, as designated by the Engineer, around the casting to a depth of at least one (1) inch, completely around the structure.
- D. Hand Patching
 - 1. Hand patching shall be performed where called for in the plans and specifications, or where directed by the Engineer.
 - 2. Areas where pavement surfaces are badly deteriorated or cracked into small sections will be repaired using this method.
 - 3. Hand patching will include stripping, chipping or otherwise removing existing surface materials from deteriorated areas in bituminous or Portland cement concrete pavements, and replacing by hand or machine methods with bituminous material approved by the Engineer.
 - 4. Joint repairs shall be done in conformance with Detail 7 and 8 on MDOT Standard Plan R-44, latest edition, except as modified by the project plans and specifications. This work will consist

of chipping joints in the existing concrete pavement surfaces in accordance with the "Chipping Concrete Pavement for Joints" section of the MDOT specifications.

5. Following the removal of the existing material, holes to be hand patched shall be thoroughly cleaned by blowing out all loose material with an air compressor or with a power blower.
6. Hand patching will not include wedging of low areas.
7. Except as provided herein, this work shall conform to the requirements of the "Hand Patching" section of the MDOT specifications.

E. Joint Clean Out

1. Excess filler in cracks or joints, which may cause bleeding or instability in the opinion of the Engineer, shall be removed to the elevation of the pavement surface. This work is considered to be incidental to the asphalt pavement installation on the project.

3.06 BOND COAT

- A. The amount of bond coat applied to existing pavement surfaces shall be 0.15 gallon per square yard, or less if directed by the Engineer.
- B. The amount of bond coat applied to new HMA surfaces shall be 0.10 gallon per square yard, or less if directed by the Engineer.
- C. Bond coats shall not be diluted, unless authorized by the Engineer.
- D. Proper precautions shall be taken to prevent smearing bond coat on adjacent pavement surfaces, curbs, walks, castings, lawns or shrubbery. The Contractor shall remove all such bond coat smeared on the above mentioned items.
- E. There is no separate pay item for bond coat, as such work is considered to be incidental to asphaltic surfacing.
- F. The Contractor shall furnish tickets or other satisfactory evidence showing the quantity of bond coat used in order to verify the application rate.

3.07 PLACING BITUMINOUS MIXTURE

- A. At the end of each period of work on the wearing surface, joints shall be formed by laying and rolling against boards of the thickness of the wearing surface placed at right angles to the centerline across full width of pavement, or by such means as approved by the Engineer.

3.08 MEETING DRIVEWAYS OR OTHER SURFACES

- A. Where new asphaltic concrete surfacing is higher than abutting paved driveways or other paved surfaces, the Contractor shall place asphaltic wearing course mixture over such driveways or other paved surfaces to provide a transition to meet the new surface elevation. Where the abutting paved surface drains towards the new surfacing, the surfacing mixture shall be extended for a distance sufficient to provide for drainage onto the new surface, as directed by the Engineer. The surfacing mixture may be feathered to zero thickness at the end of the surfacing.
- B. The Contractor shall place bond coat over abutting areas to be surfaced.
- C. There is no separate pay item for this work, and payment will be included under the pay item for the asphaltic mixtures used.

3.09 BASIS OF PAYMENT

- A. Payment for the types of asphalt pavement and pavement repairs shall be as listed in the Proposal. Bid prices for work items listed in the Proposal shall include all other work necessary for a complete job.

END OF SECTION

**SECTION 900
SUPPLEMENTAL SPECIFICATIONS**

1.01 SCOPE

- A. The Supplemental Specifications apply particularly to this Contract. If there are parts of these Specifications, which differ from other sections of these Specifications, the Supplemental Specifications shall control. The 2020 M.D.O.T. Standard Specifications for Construction shall apply for all work items within this contract, except as modified in this Contract Document.
- B. The work covered by this Contract shall consist of those items listed in the proposal. The Contractor shall, for the amount of money earned, based on unit prices stated in the Contract Documents, furnish and provide all labor, tools, equipment and materials, and do all work required in excavating and laying new water main and sewer, removing and replacing existing pavement, and other work related to the project. All of the items of work are to be done in accordance with the plans and Contract Documents of which these Specifications are a part.

1.02 MATERIALS

- A. All materials shall be new and of the grades specified, and shall be the best of their respective kinds for the uses intended. The terms "approved" and "or approved equal" mean that the Engineer must be consulted and approve the material before the material in question is purchased or installed in the work. The approval of any material by the Engineer does not mean the acceptance of the material actually furnished if it should be found defective or inadequate for the purpose intended.
- B. Special brands or grades of material or devices specified or shown on the drawings are named for the purpose of establishing a standard of quality and character desired. Other materials of equality and adaptability for the purpose for which they are intended may be substituted, but shall have the approval of the Engineer as to the equality and adaptability before being incorporated in the work.
- C. The Contractor shall order or arrange for materials well in advance of their expected use in the work, as far as practicable, in order to allow time for inspection, etc., and thus avoid unnecessary delays which may otherwise occur.
- D. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 COMBINED SEWER, VARIOUS SIZES

- A. All Combined Sewers shall be constructed of either Reinforced Concrete Pipe (RCP) or Polyvinyl Chloride (PVC) in the classes and sizes as indicated on the plans.
- B. All combined sewers will require a permit from the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The City has applied for a permit from the above agency for the replacement of the public combined sewer. The Contractor shall be obligated to have this permit approved and in-hand prior to beginning work on these items.
- C. The sewer replacements for this project involves a single County drainage district. The City has submitted the project to the Oakland Co. Water Resources Commissioner's office (OCWRC) for permitting approval. Once approved, a permit inspection fee will be required to be paid to their office prior to starting construction. The permit fee is not currently known but is anticipated to be less than \$2,500.00. The Contractor shall be responsible for payment of the actual fee, up to a cost of \$2,500.00, incidental to the cost of installing these sewers. The terms stated within the forthcoming approval letter from OCWRC shall also apply to this Contract.

- D. All proposed sewers and leads, six (6) inches and up, shall be bedded and backfilled in accordance with the standard pipe bedding detail as shown in the plans. The pipe bedding shall be crushed stone as required in section 600 of the specifications to a minimum of six (6) inches over the top of the pipe. Within the proposed road surface, backfill shall consist of compacted sand up to the proposed aggregate road base. All bedding, backfill and compaction shall be incidental to the cost of the new sewer installation.
- E. Removal of existing sewers is specified on the plans and included in separate pay items. Depending on location, removal may be able to occur in conjunction with proposed sewer installations, or may require separate excavation(s). Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a watertight dumpster, in accordance with Oakland County Health Department regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.
- F. Any small diameter pipes that are encountered during excavations for mainline combined sewers that are damaged and confirmed to be inactive shall be bulkheaded prior to backfilling. If these pipes are less than 8 inches or less in diameter, this work shall be considered incidental to the contract work for combined sewer installation and will not be paid for separately.

1.04 STORM SEWER, VARIOUS SIZES

- A. All Storm Sewers shall be constructed of either Reinforced Concrete Pipe (RCP) or Polyvinyl Chloride (PVC) in the classes and sizes as indicated on the plans.
- B. The contractor shall be responsible for installing gas traps, including sumps, in the first storm structure upstream from a combined sewer, or where specified on the plans. The method for installing gas traps is to install a PVC elbow one size below the pipe being installed, directed down into the sump.
- C. All proposed sewers and leads, six (6) inches and up, shall be bedded and backfilled in accordance with the standard pipe bedding detail as shown in the plans. The pipe bedding shall be crushed stone as required in section 600 of the specifications to a minimum of six (6) inches over the top of the pipe. Within the proposed road surface, backfill shall consist of compacted sand up to the proposed aggregate road base. All bedding, backfill and compaction shall be incidental to the cost of the new sewer installation.
- D. Removal of existing sewers is specified on the plans and included in separate pay items. Depending on location, removal may be able to occur in conjunction with proposed sewer installations, or may require separate excavation(s). Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a watertight dumpster, in accordance with Oakland County Health Department regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.

1.05 SEWER SERVICE – VARIOUS SIZES

- A. For sewer service replacements, the Contractor will be responsible to locate each service lead as construction progresses and maintain all flow therefrom. For homes where information on the location of the sewer lateral does not exist, the Engineer or his designee shall assist in working to gain access to the house as needed, or reviewing sewer videotape records, to locate said sewer laterals.
- B. When installing a new sewer service to an existing sewer, the existing sewer shall be exposed only as much as necessary to verify the stability of it in the area and the condition of the original tap, and connect to it as directed by the Engineer. If the existing sewer is in good condition, it shall be connected with a Fernco adaptor or approved equal, and paid for separately, as detailed below. If

the existing main line sewer is damaged and needs repair in the area of the connection, the Contractor and Engineer shall agree to a time and material payment method for repairs to the City sewer, to be charged to the Water and Sewer Allowance pay item. If a new tap is required at a new or existing sewer main, it will be paid for under SEWER SERVICE TAP pay item.

- C. Assuming all underground work is completed early in the project, while the main pedestrian sidewalks are still in service; the Contractor shall backfill and provide a temporary walkable surface to accommodate pedestrian traffic in a safe manner until the City sidewalks are repaired. Installation of a temporary stable surface in the sidewalk or other pedestrian areas shall be included in the separate pay item for maintenance aggregate.

1.06 NEW MANHOLE, VARIOUS SIZES

- A. All new manhole structures shall include an EJ 1040CGS, with "City of Birmingham Sewer" noted on it.
- B. Adjusting the rim to the proposed elevation noted on the plans is incidental to the installation of a new structure.
- C. Where drop connections are required, they shall be constructed in accordance with applicable requirements of the Oakland County Water Resource Commissioner.

1.07 NEW CATCH BASIN OR INLET, VARIOUS SIZES

- A. All new catch basins or inlet structures shall include an EJ 5000Z4 DI / 5000M4 DI Hinged Assembly (in the curb line), unless otherwise noted on the plans. Underdrain shall be connected to all inlets and catch basins as shown on plan sheets. A separate pay item has been provided for this work.
- B. Adjusting the rim to the proposed elevation noted on the plans is incidental to the installation of a new structure.

1.08 6" PERFORATED PIPE UNDERDRAIN (NO SOCK)

- A. The Contractor shall prepare their base bid unit price for this work based on the assumption that edge drain shall be installed per plan, and connected to all new drainage inlets and catch basins located within pavement areas.
- B. The unit price for this work shall include all labor, equipment and materials necessary for the complete installation of the underdrain, open-graded angular aggregate backfill and non-geotextile trench wrap as shown in the details on the plans. Connecting the edge drains to the appropriate structures shall be incidental to the unit price for the installation, when the connection is to a new catch basin or inlet. Taps to existing drainage structures shall be paid for separately as outlined below.
- C. To limit weather exposure of subgrade soils, Underdrain installation must be performed in conjunction with installation of the proposed road aggregate base and any subgrade undercutting that will be performed in a given location. It is required by the contractor to perform work for underdrain concurrently with installation of final 21AA Aggregate Base layer in a train like manner. The Contractor shall not leave any cut and prepared subgrade surface exposed overnight.

1.09 SEWER INVESTIGATION, LATERALS

- A. The City conducted extensive internal sewer camera work within the project area to help prepare the plans for this project. Despite this effort, there will still be instances when it becomes necessary to confirm if an existing sewer service is active or inactive, and therefore if replacement of the service is warranted. The Contractor shall anticipate the City will assist in confirming status

with property owners as feasible during installation of the mainline sewers: The purpose of this pay item is to have the contractor provide labor time and equipment as needed to help determine the status, location, or material of any unknown sewer services.

- B. The bid price shall cover all labor and equipment costs required to perform supplemental excavations as directed by the engineer, assist in dye testing procedures, and for downtime where the contractor may be delayed in completing other project work due to investigative efforts associated with sewer service investigation.

1.10 SEWER SERVICE TAP, VARIOUS SIZES

- A. Since most existing combined sewers within the project limits will be either removed or abandoned, it is anticipated at most existing sewer laterals will require a tap to the new combined sewer main. This work shall be paid for as a SEWER SERVICE TAP. Sewer service taps to all new reinforced concrete pipe shall be paid under this pay item. In order to avoid misaligned sewer connections, sewer pipe shall not be cored and prepped off-site prior to delivery to the project. All sewer taps in concrete pipe shall be cored and booted in the field once the proper location has been determined (taking the location of existing trees into consideration).
- B. All taps to existing structures or sewers shall be core drilled. A flexible rubber boot and appropriate clamps shall be used at the joint. The tapping pipe outside of the structure or sewer will be supported by placing 2,500 PSI concrete fill under the pipe from springline to undisturbed earth. Width of concrete fill support shall be the tapping pipe outside diameter plus twelve (12) inch minimum. Payment for sewer taps shall be based on the unit price bid for sewer tap for the nominal inside diameter of tapping pipe.

1.11 SEWER TAP, VARIOUS SIZES

- A. Whenever the Contractor must core drill a new hole in an existing manhole or connect a new mainline sewer of different size or material that the existing pipe which shall be removed, it shall be paid for as a SEWER TAP. Connections into a new manhole or drainage structure that was planned for and shown on the plan sheets and represented on the sewer schedule are incidental to the cost of the manhole or drainage structure.
- B. All taps to existing structures shall be core drilled. A flexible rubber boot and appropriate clamps shall be used at the joint. The tapping pipe outside of the structure or sewer will be supported by placing 2,500 PSI concrete fill under the pipe from springline to undisturbed earth. Width of concrete fill support shall be the tapping pipe outside diameter plus twelve (12) inch minimum. Payment for sewer taps shall be based on the unit price bid for various diameters and shall be based on the nominal inside diameter of tapping pipe.

1.12 RECONSTRUCT MANHOLE (IF & WHERE NEEDED)

- A. Prior to starting work, the City shall inspect all existing manholes, catch basins, inlets, and gate wells to determine their condition, and recommend needed repairs. Reconstruction will be paid for by the vertical foot, and will vary from minor repairs to the chimney to extensive mortar joint and brick repairs throughout. Final cover adjustments to meet the final pavement grade shall be included in the cost for reconstruction, and shall not be paid for separately under "Adjusting Structure Cover".
- B. All structure reconstructs shall be paid according to the pay item RECONSTRUCT MANHOLE (IF & WHERE NEEDED) regardless of the diameter of the structure being reconstructed.

1.13 REMOVE AND REPLACE STRUCTURE COVER

- A. As a part of the work of this pay item, the Contractor shall furnish and install the specified manhole covers or inlet covers, along with any adjusting rings necessary to bring the structures to grade. There are also several manholes, catch basins, inlets, and gate well frames and covers that are noted to remain in service. The Engineer and Contractor shall inspect each casting to verify its suitability to continued service. Those castings that, in the opinion of the Engineer, should be replaced shall be removed and replaced under this pay item, with the weight of the new casting being used to determine the value. Any existing frames and castings removed shall be delivered to the City of Birmingham Department of Public Service yard at 851 S. Eton Road, or disposed of by the Contractor as directed by the Engineer at no additional cost to the Owner.

1.14 REMOVE EXISTING MANHOLES & DRAINAGE STRUCTURES

- A. The Contractor shall remove and dispose of the entire structure, including any base sections, if present, remove the frame and casting and deliver to the City of Birmingham Department of Public Services yard at 851 S. Eton Road (if directed by the Engineer), and backfill the excavation with compacted sand. All portions of the structure removed that are not wanted by the City of Birmingham shall become the property of the Contractor and shall be disposed of properly at no additional cost to the Owner.

1.15 REMOVE EXISTING SEWERS, VARIOUS SIZES

- A. The Contractor shall excavate, remove, and dispose of the entire sewer pipe, and backfill the excavation with compacted sand.
- B. Depending on location, removal may be able to occur in conjunction with proposed sewer installations, or may require separate excavation(s). Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a watertight dumpster, in accordance with Oakland County Health Department regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.

1.16 BULKHEAD PIPE, LARGER THAN 8"

- A. The pay item is to provide water-tight bulkheads for any pipes larger than 8 inches in diameter that are encountered during excavations for mainline combined sewers that are damaged and confirmed to be inactive. Bulkheads shall be performed prior to backfilling. Bulkheads for any pipes that are 8 inches or less in diameter shall be considered incidental to the contract work for combined sewer installation, and will not be paid for separately.

1.17 CCTV SEWER ACCEPTANCE INSPECTION

- A. Contractor shall provide a video inspection record of all sewer mains and service leads installed for the project in accordance with the written specification section 605. The vide inspection shall occur after sewer trenches have been backfilled and compacted to final elevation.

1.18 DUCTILE IRON CL 52 WATER MAIN W/ POLYWRAP, TRENCH A, VARIOUS SIZES

- A. All new water mains installed on this job shall include polywrap as a part of the unit price per lineal foot bid as noted in the water main specification section.

1.19 NEW WATER SERVICE, VARIOUS SIZES, TRENCH A

- A. For the short segments of water service extension needed on existing 1" or larger copper water services, the Contractor shall install Type K copper pipe. Installation of a new stop-box at the property line at these services shall be paid for under a separate pay item.

- B. Water services that are being connected to a main that is now closer to the house than the original main shall not be paid for any footage of new pipe. The work required for these service connections shall be covered entirely in the cost per connection, each.
- C. Assuming all underground work is completed early in the project, while the main pedestrian sidewalks are still in service, the Contractor shall backfill and provide a temporary walkable surface to accommodate pedestrian traffic in a safe manner until the City sidewalks are removed in their entirety. Installation of a temporary stable surface in the sidewalk or other pedestrian areas shall be included in the separate pay item for maintenance aggregate.
- D. Where existing trees make installation of the new water service challenging, the Contractor shall move the new water service as needed to reduce damage to the tree, as directed by the Engineer, at no extra cost, other than the additional footage of pipe installed as measured.

1.20 NEW WATER MAIN CONNECTIONS TO EXISTING WATER MAIN (VARIOUS SIZES)

- A. The Contractor shall notify the City at least forty-eight (48) hours before any scheduled water main shut down to make the proposed water main connections. The Contractor may also be required to assist in notifying the properties that will be affected by the shutdown. The Contractor shall complete all required testing on the new water main prior to making the connections to the existing water system.
- B. Oversized fittings may be required for making connections to older existing water mains. Use of oversized fittings on water main connections is incidental to the bid price for water main connections.

1.21 WATER SERVICE CONNECTION, VARIOUS SIZES

- A. This pay item is to connect replacement or new water services to a new or existing water main. Where the new main crosses an existing service, the Contractor will not be paid for any footage of new service pipe to connect the existing service to the new main. When a service needs to be extended from the location of the old main to the new main, the Contractor will be paid for the installation of NEW WATER SERVICE, TRENCH A in the appropriate size(s) for the length required.

1.22 INSTALL CURB STOP AND BOX

- A. All water services that are replaced in their entirety shall have a new curb stop and box at the point designated by the Engineer. Said boxes shall generally be installed on or near the right-of-way (R.O.W.) line and behind the sidewalk. Curb Stop and Boxes shall be installed for such services when they are 2" diameter or less.
- B. Bid pricing shall include all labor, equipment, and materials to furnish and install the curb stop and box to the correct finished grade elevation.

1.23 HYDRA-STOP, INSTA-VALVE 250, VARIOUS SIZES

- A. It is possible that some of the valves will not function as well as they should. When directed to do so by the Engineer, a Hydra-Stop insta-valve system shall be available to install a temporary line stop with permanent valve to stop the flow of water from one (1) or more of the adjacent water mains, thereby allowing a water main connection with a minimum of time lost. Time lost due to unexpected delays on a water main shutdown shall be compensated for (when said delay is outside of the control of the Contractor) when approved when itemized and submitted to the Engineer, under the "Water and Sewer Allowance" pay item.

- B. It shall be noted that the Contractor shall operate and test all necessary valves needed to shut down various portions of the existing water system to implement planned connections. The Contractor shall be prepared to provide the Hydra-Stop Insta-Valves only if an inappropriately large shutdown area will be required to implement the connection work.
- C. The costs for hydra-stop insta-valve pay items shall be bid on per "each" basis, and each shall include necessary full-depth pavement removal, earth excavation, operation time, backfill, and pavement replacement (in kind). The cost shall also include a permanent valve box structure to be installed in conjunction with the valve in accordance with City specifications.

1.24 HYDRA-STOP, LINE STOP, VARIOUS SIZES

- A. It is possible that some of the valves will not function as well as they should. When directed to do so by the Engineer, a Hydra-Stop system shall be available to temporarily stop the flow of water from one (1) or more of the adjacent water mains, thereby allowing a water main connection with a minimum of time lost. Time lost due to unexpected delays on a water main shutdown shall be compensated for (when said delay is outside of the control of the Contractor) when approved when itemized and submitted to the Engineer, under the "Water and Sewer Allowance" pay item.
- B. It shall be noted that the Contractor shall operate and test all necessary valves needed to shut down various portions of the existing water system to implement planned connections. The Contractor shall be prepared to provide the Hydra-Stops only if an inappropriately large shutdown area will be required to implement the connection work.
- C. The costs for hydra-stop pay items shall be bid on per "each" basis, and each shall include necessary full-depth pavement removal, earth excavation, operation time, backfill, and pavement replacement (in kind). Additional payment will not be made for overnight fees or other associated fees that may be required to keep the line stop in operation for the duration of the required work is performed while the stop is in place.

1.25 EARTH EXCAVATION

- A. This work shall be done in accordance with the requirements of Section 205 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as herein described:
 - A. The work of Earth Excavation shall consist of constructing earth grades by excavating soil or rock and placing embankment as necessary to develop the cross section and grade specified in the plans. The work shall include the salvaging and stockpiling of selected materials; disposing of surplus or unsuitable material; furnishing, placing and compacting of embankment materials; trimming of the earth grade and maintaining the work in a finished condition until acceptance by the Engineer.
 - B. Any of the existing material that is excavated and deemed suitable, as determined by the Engineer, may be used for the road embankment material. The Contractor shall be responsible for the proper disposal of any existing material that is excavated and deemed unsuitable by the Engineer.
- B. Earth Excavation shall include the following items:
 - A. Stripping of vegetation and topsoil within the grading limits.
 - B. Clearing of brush and the removal of trees less than four (4) inches in diameter (when approved by the Engineer).
 - C. Excavation for roadway, curb, sidewalk, drive approaches and driveways.

- D. Backfilling behind the curb and adjacent to sidewalks, drive approaches and driveways with Engineer approved material.
- E. Grading from the back of curb to sidewalk, right of way line or grading limits to the required depth in order to receive all topsoil and sod surfaces.
- F. Proof-rolling subgrade in accordance with the final design.
- C. The estimated quantity for earth excavation is based on "in-place" yards and does not account for trenching of underground utilities or subgrade underdrain.
- D. The Contractor shall be responsible for determining his own volume of earth excavation required to construct the proposed roadway to the grade specified in the construction plans. No additional compensation will be made for any variation between the estimated amount stated above and the final amount of earth excavation required to construct the roadway.

1.26 SUBGRADE UNDERCUTTING, 21AA LIMESTONE

- A. Once the subbase is exposed, it shall be proof rolled as a part of the preparation for new pavement. Proof rolling shall be done with a pneumatic tired roller capable of being loaded with ballast. The roller shall be operated in a systematic manner and uniform speed over the exposed subgrade soils so that all areas of the exposed surface are tested. Maximum vehicle speed during proof rolling shall not exceed five (5) MPH. Proof rolling is incidental to the other work of this project and shall not be paid for separately.
- B. Those areas that require additional excavation shall be verified by the Engineer prior to proceeding with additional excavation into the subbase. The additional excavation shall be paid for under the pay item, "Subgrade Undercutting, 21AA Limestone". All work of this nature shall be done in the presence of the Engineer. The areas excavated below the subbase grade shall be backfilled with 21AA Limestone, as a part of the cost of the unit price for "Subgrade Undercutting, 21AA Limestone."
- C. Procedures for undercutting shall be in accordance with MDOT Standard Specifications for construction. Bid prices shall be based on an "in-place" measure, with compaction of all backfill materials meeting a minimum of 95% of dry density.

1.27 SUBGRADE UNDERCUTTING, 1" X 3" LIMESTONE

- A. Once the subbase is exposed, it shall be proof rolled as a part of the preparation for new pavement. Proof rolling shall be done with a pneumatic tired roller capable of being loaded with ballast. The roller shall be operated in a systematic manner and uniform speed over the exposed subgrade soils so that all areas of the exposed surface are tested. Maximum vehicle speed during proof rolling shall not exceed five (5) MPH. Proof rolling is incidental to the other work of this project and shall not be paid for separately.
- B. Those areas that require additional excavation shall be verified by the Engineer prior to proceeding with additional excavation into the subbase. The additional excavation shall be paid for under the pay item, "Subgrade Undercutting, 1"x3" Limestone." All work of this nature shall be done in the presence of the Engineer. The areas excavated below the subbase grade shall be backfilled with 1"x3" Limestone, as a part of the cost of the unit price for "Subgrade Undercutting, 1"x3" Limestone."
- C. Procedures for undercutting shall be in accordance with MDOT Standard Specifications for construction. Bid prices shall be based on an "in-place" measure, with compaction of all backfill materials meeting a minimum of 95% of dry density.

1.28 SUBGRADE GEOGRID FABRIC, TENSAR TRIAX TX130S

- A. The intent of this pay item is to provide additional pavement subgrade stabilization in conjunction with subgrade undercutting pay items, where directed by the Engineer.
- B. Bid price shall include all labor, equipment, and material to furnish and install the geogrid fabric per manufacturer requirements.

1.29 REMOVE AND SALVAGE BRICK PAVERS

- A. There are certain property owners within the construction zone that have installed brick pavers or other special hardscapes within the right of way that conflict with the proposed construction. The property owners shall be contacted by the City to verify if they wish to maintain ownership of the materials. If they do, the Contractor shall carefully remove and stack the pavers at a mutually agreeable location on the owner's property, within the front yard. Replacement of the pavers, if desired by the property owner, will be their responsibility after completion of this project. Measurement and payment for this item shall be per square foot of paver area removed and salvaged.
- B. The Contractor shall work carefully to minimize the need to utilize this pay item, and to ensure that there is no damage to the brick paver materials. Brick paver walks shall only be removed and salvaged under this pay item where it is directly necessary to carry out the construction work. In general, the Contractor shall only remove brick paver service walks to three (3) feet behind the proposed curb to allow for road construction, unless otherwise directed by the Engineer. The Contractor shall backfill the remaining gap between the curb or sidewalk with gravel to allow the driveway or walkway to be used again until the adjacent owner can have these areas repaired at their expense. Backfilling these areas shall be included in the cost of this work.
- C. While generally salvaged brick paver materials shall be stacked on private property to become the adjacent owner's responsibility, the exception shall be at those locations where the replacement of the City sidewalk has required the disruption of a paver walk or driveway on the private side of the sidewalk. In those cases, the Contractor shall be required to backfill and reset the pavers to match the previous conditions to the greatest extent possible, as a part of this pay item.

1.30 REMOVING CONCRETE DRIVE APPROACH

- A. Concrete drive approaches shall only be removed as shown on the plans or as directed by the Engineer in the field. There may be some locations where a drive approach will be removed to either an existing joint line, or to a sawcut joint where specified by the Engineer. Any driveway approaches, or portions thereof, that are noted to remain on the plans that are damaged in the execution of the work on this project shall be removed and replaced at no expense to the City or the property owner.
- B. The Contractor shall notify the City at least seven (7) days ahead of when they plan to remove any drive approaches so that the City can notify the property owners. The Contractor shall also work with the Engineer to contact property owners and tenants the day that the concrete will be removed to ensure that they will not be stuck in their driveways. During the period when the drive approaches are being removed and replaced, it is imperative that the Contractor maintain the sidewalks along both sides of the street in a safe, passable condition to ensure that the pedestrians have access. The Contractor shall minimize the amount of time between driveway removal and driveway replacement.
- C. The unit price for removing concrete drive approaches shall include all costs for the complete removal and disposal of the concrete sections, including any sawcutting required. If a drive approach is a concrete drive approach with an asphalt overlay, it shall be paid for as a concrete

drive approach and the unit price for removal shall include the removal of both the asphalt overlay and the concrete drive approach.

1.31 REMOVING CONCRETE SIDEWALK & RAMP (SAWCUTTING INCLUDED)

- A. Sections of City sidewalk will be removed and replaced as a part of the project. The sidewalks shall remain in place as long as possible to allow pedestrian access down the street. This provision is to provide a solid walking path for the residents that need to access their homes on foot as a result of the work.
- B. The unit price for removing concrete sidewalks and ramps shall include all costs for the complete removal and disposal of the concrete sections, including any sawcutting required.

1.32 REMOVING PAVEMENT FULL DEPTH (CURB & GUTTER INCLUDED)

- A. This pay item shall apply to the full depth removal of the existing asphalt, concrete, and composite pavements and curb and gutter within Edgewood Road for the length of the project limits (Station 0+94 to P.O.E.). Note that removal work within the Lincoln Avenue intersection is covered under a separate lump sum pay item. This pay item also applies to small areas of asphalt or concrete pavement that are to be removed and replaced in isolated parking lot locations near the north end of the project (addresses #280 and 400 E. Lincoln). Removal of driveway approaches and sidewalks behind the road curb are covered under separate pay items. Refer to plan sheets for removal limits and the geotechnical investigation report (Appendix A) for the details regarding existing pavements.
- B. In all areas, the payment for this item includes full-depth pavement removal to the existing base below the pavement as required to complete the work.
- C. The Contractor is encouraged to use care when considering methods of pavement destruction and removals.
- D. After main line pavement removal, and during the underground work, the Contractor shall be expected to maintain traffic to all adjacent driveways. Removal of the pavements in the various pay items shall be timed in such a way that makes this maintenance of traffic as simple and effective as possible.

1.33 AGGREGATE BASE, MDOT 21AA LIMESTONE, 8"

- A. This pay item shall include all earth excavation and base compaction required to provide a stable surface to install the eight (8) inch stone base, using 21AA limestone, required, as detailed in the proposed pavement cross sections. Installation of the aggregate base shall be paid for by the square yard.
- B. Aggregate base placement shall extend a minimum of 12 inches beyond the proposed back of curb for full-depth pavement replacement.
- C. To limit weather exposure of subgrade soils, 21AA Aggregate Base installation must be performed in conjunction with installation of proposed underdrains and any subgrade undercutting that will be performed in a given location. It is required by the contractor to perform work for the final 21AA Aggregate Base layer concurrently with installation of underdrains in a train like manner. The Contractor shall not leave any cut and prepared subgrade surface exposed overnight.

1.34 REMOVE AND REPLACE LINCOLN AVENUE COMPOSITE PAVEMENT

- A. This pay item includes all necessary removal and replacement of the roadway pavement within Lincoln Avenue (up to Station 0+94) as required to complete the proposed combined sewer replacement to Existing Sewer Manhole 64A. It is anticipated that the sewer installation will occur early in the project schedule, and the City requires that traffic impacts to Lincoln Avenue be minimized as much as possible. Therefore, this pay item allows for the pavement replacement to be performed separately from other paving work on the project.
- B. All work will be performed under a single lane closure for east-bound traffic on Lincoln Avenue (see traffic detour plan and plan details for traffic control requirements). Actual limits associated with this pay item will be determined by the contractor based on trenching requirements for the sewer installation (limits shown on plans are approximate).
- C. Work includes all sawcutting, full-depth pavement removal as needed to perform sewer work, and replacement of complete pavement section (including aggregate base) in-kind after sewer work is completed (see plan detail for anticipated pavement replacement cross-section). Work also includes providing necessary minimum cure time associated with concrete base and epoxy-anchoring of lane ties & dowels to existing concrete base and proposed adjacent curb and gutter as required.
- D. A maximum allowable lane closure duration of 3 work weeks (up to 18 working days) will be permitted upon the start of removal operations to the re-opening to traffic. Adjacent work involving concrete sidewalk and curb and gutter (paid with separate pay items) shall also be performed concurrently with the Lincoln Avenue work to limit pedestrian impacts at this intersection.
- E. The contractor is responsible for leaving the area south of the Lincoln Intersection (starting at Station 0+94) in a condition that will be conducive to completing mainline paving work on Edgewood that will likely occur later in the project. This includes installing the curb and gutter and sidewalk ramp at plan grade elevations, and also providing a clean working limit to install the proposed asphalt or concrete pavement on Edgewood Road while protecting completed work.

1.35 CONCRETE PAVEMENT, NONREINFORCED, INCL. INTEGRAL 6" CURB

- A. This work consists of constructing a jointed Portland cement concrete pavement in accordance with Section 602 of the MDOT 2020 Standard Specifications for Construction.
- B. A form riding paving machine or slip-form paving machine which meets the requirements of Section 602.03A of the MDOT 2020 Standard Specifications for Construction shall be utilized to construct the mainline concrete pavement on this Project. A roller screed, power screed, truss screed, etc., will NOT be considered as equivalent to a form riding or slip-form paving machine. A list of the proposed paving equipment shall be provided to the Engineer at the Pre-Construction Meeting. The requirement to use a paving machine can be relieved in areas such as on Brookwood where the curve does not allow the use of the machine. In areas where existing trees do not allow the use of a paver, the Contractor may use other methods to be reviewed and approved by the Engineer. No machine shall be used that would require more removal of roots at the base of trees as compared to installing a form and paving by hand.
- C. There will be no separate measurement and payment for providing the specified equipment. The cost shall be considered incidental to Concrete Pavement pay item.
- D. This pay item shall include all concrete pavement with integral curb and gutter, measured by the square yard, where designated on the plan. Sawcutting and sealing of the joints shall be included

- in the cost per square foot. Hook bolts shall be provided at 40" O.C. when butting up against existing concrete pavement. No separate payment will be provided for this preparatory work.
- E. The concrete pavement provided under this pay item, along with all other concrete pay items, shall comply with Section 711 for durability and resistance to alkali-silica reactivity. The Contractor shall be responsible to close the area off entirely as needed to ensure that the new pavement is not driven on by any vehicles for a minimum of seven (7) days.
 - F. The Contractor shall plan to pour the integral curb and gutter section as a part of the mainline concrete pour. Separate pours for the concrete curb and gutter section shall not be approved.
 - G. The Contractor may be allowed to perform 'full' width paving, provided it can be demonstrated that it can be done in a timely manner, and also without causing unwarranted damage to the base of adjacent trees.
 - H. All sawcutting and joint sealing, as detailed in Section 710 of these Specifications, shall be incidental to this pay item.
 - I. The Contractor shall execute the paving portion of the Contract such that removing excess base materials, installation of new limestone base, and installation of new main line concrete with cure time shall be kept to no more than the time specified in Section 301 of these Contract Documents.

1.36 MDOT "M" APPROACH GUTTER DETAIL

- A. This pay item includes all labor equipment and materials needed to form a gutter pan through the Bennaville intersection meeting MDOT type M approach geometry. Depending on the chosen paving alternate, the gutter will either be formed integral to the 7" thick concrete pavement with integral curb, or poured separately of the 4" HMA pavement. If poured separately, the minimum dimensions for the overall curb/gutter section shall match curb and gutter being installed elsewhere (7 inches thick and 18 inches wide).

1.37 CONCRETE DRIVE APPROACH, 6", INCL. INTEGRAL 6" CURB

- A. All concrete drive approaches on this project shall be a minimum of six (6) inches thick unless otherwise called for on the plans.
- B. The concrete drive approaches shall be poured as soon as possible following the roadway curing to allow residents to access their driveways.
- C. The Contractor is encouraged to review Section 301 of these Contract Documents relative to the required timing for the placement of the driveway approaches.
- D. Typical commercial driveway approaches shall include integral curb where shown on plans.
- E. Concrete Driveway Approaches shall be constructed on minimum 6 inches of 21AA limestone as incidental to the cost of the approaches.

1.38 CONCRETE DRIVE APPROACH, 6"

- A. All concrete drive approaches on this project shall be a minimum of six (6) inches thick unless otherwise called for on the plans.
- B. The concrete drive approaches shall be poured as soon as possible following the roadway curing to allow residents to access their driveways.
- C. The Contractor is encouraged to review Section 301 of these Contract Documents relative to the required timing for the placement of the driveway approaches.

- D. Typical residential driveway approaches shall be constructed using the City detail for "Type L" driveway approach.
- E. Concrete Driveway Approaches shall be constructed on minimum 6 inches of 21AA limestone as incidental to the cost of the approaches.

1.39 CONCRETE SIDEWALK, 6" (INCLUDES RAMPS)

- A. All concrete sidewalks within drive approaches shall be six (6) inches, as well as all sidewalk ramps at intersections. All six (6) inch sidewalks on the project shall be paid for under this pay item.
- B. The unit price for sidewalk installation shall include all materials, labor, equipment and other work necessary for grading, grade preparation, six (6) inches sand base, forming, and pouring the concrete sidewalk, and sawcutting the sidewalk joints per the plans.

1.40 CONCRETE SIDEWALK, 4"

- A. This pay item is for replacement of sections of sidewalk removed as a part of this project for excavations, at intersections, or removed to install other work on this project.
- B. The unit price for sidewalk installation shall include all materials, labor, equipment and other work necessary for grading, grade preparation, six (6) inches sand base, forming, and pouring the concrete sidewalk, and sawcutting the sidewalk joints per the plans.

1.41 HANDICAP RAMP TRUNCATED DOMES

- A. Each sidewalk ramp constructed as a part of this project shall include a detectable warning plate of truncated domes. The Contractor shall supply and install cast iron plates as manufactured by East Jordan Iron Works, or approved equal. Payment for the handicap ramp truncated domes shall be per square foot of detectable warning surface installed. In general, each ramp shall include a two (2) foot by five (5) foot detectable warning surface of truncated domes. In cases where there is not enough space for separate ramps, radial plates may be specified on the plans.
- B. Contractors have experienced long lead times to obtain the cast iron detectable warning plates. The Contractor shall be encouraged to place the order for the necessary items well in advance of the proposed installation dates. Substitutions or changes in design due to lack of parts shall not be approved.

1.42 ADJUST STRUCTURE COVER

- A. All manhole covers that are within the work area that need adjustment, but do not need any repairs below the top six (6) inches beneath the casting shall be paid for under this pay item. If additional work is required below the top six (6) inches beneath the casting, then all of the work, including the adjustment, shall be paid for under the "RECONSTRUCT MANHOLE (IF & WHERE NEEDED)". The repair shall be measured vertically from the top of the existing cover to the ending point of the repair. Adjustment of all new structures shall be included in the price of the new structure, and shall not be paid for under this pay item.

1.43 MAINTENANCE AGGREGATE FOR ENTIRE PROJECT

- A. As noted elsewhere, the majority of the project will be closed to through traffic until the work on the project is completed. However, the contractor will be required to maintain access for local residents through most of the project. The only time that the road may be closed off completely from adjacent residents is when the road is being excavated to the base, limestone is being installed, and when the concrete street is being formed, poured, or cured. This pay item is to pay for all labor, materials and equipment to furnish and install temporary aggregate in the roadway

and/or the sidewalks to ensure safe passage by the local residents. In particular, there are five (5) areas where the Contractor will be asked to ensure that safe travel is available during the project:

- A. Within the intersections on the project site that will remain open to cross traffic during the construction period.
 - B. Within the intersections on job where sewer or water main work will extend out into the intersections.
 - C. To allow for access to all driveways on the project after pavement removals and utility work for the day. Conditions during the underground phases shall be such that residents shall be allowed and able to drive to and from a gap in the barricades to their driveways at all times, unless an excavation is underway in the immediate area of their driveway.
 - D. At all sidewalk transition areas, ensuring that pedestrians are safe at all times.
 - E. At all points where sidewalk has been removed but yet not replaced.
- B. Contractor may use crushed concrete, or asphalt millings as long as they provide a smooth passable surface.

1.44 MOBILIZATION

- A. The purpose of this pay item is to provide payment to the Contractor for the cost of delivering equipment and materials to the job site as needed throughout the project. The Contractor shall not charge more than 5% of the total cost of the project for this pay item. Providing a price in excess of 5% could be grounds for invalidation of the bid.
- B. Payment for this pay item shall be divided into 2 parts. The first payment will be for 75% and the second payment for 25%, with payments arriving on each of the first two disbursements. The Contractor should anticipate being paid approximately every 30 days for work on this Contract.

1.45 PAVEMENT MARKINGS

- A. All pavement markings must be provided to the size and color as noted, and using the material noted. All materials shall comply with MDOT standard specifications.

1.46 REMOVE PAVEMENT MRKG, TRANSV (CATALPA INTERSECTION)

- A. The intent of this pay item is to remove existing cross-walk markings within the Catalpa Intersection that are located on existing concrete pavement to remain. All existing cross-walk markings will be replaced with new 2' wide markings. Existing stop bar marking will be replaced in kind and therefore do not require removal. Removal of the pavement markings must be performed by a City-approved and industry standard method.

1.47 WATER & SEWER ALLOWANCE

- A. Due to gaps in some of the water & sewer records, there may be some exploratory work required to ensure that all homes are connected to the new water main and combined sewer. City staff will endeavor to assist the Contractor wherever possible to keep such work to a minimum. Unexpected work or time lost due to malfunctioning gate valves, or conflicts with the proposed pipeline shall also qualify as time and material work paid for under this allowance.
- B. Payment under this pay item shall only apply when additional work was required as a result of missing information on sewer service connections, or for work that is not normally associated with the pay items as presented in the plans and specifications. The Contractor and the City shall agree to the time spent on a daily basis that will apply under this provision. In addition, the Contractor

shall submit a written statement for each such incident, documenting all labor and equipment charges on an hourly basis used, as well as any materials used, to be paid for under this provision.

- C. For bidding purposes, the allowance shall be the flat amounts listed in the proposal sections. Any amendment may render the bid invalid.

1.48 SALVAGE EXISTING SIGNS

- A. The Contractor shall protect and work around all existing signs wherever possible. If signs need to be removed to accommodate underground work, they shall be replaced with a new post and salvaged sign prior to the end of the project.
- B. Any STOP signs removed shall be erected again at the end of the day either on a temporary or permanent basis, with a permanent installation required prior to the end of the project. All sign removals and replacements, including relocations where noted on the plans, shall be paid for under the lump sum of Salvage Existing Signs.
- C. Street name signs shall be stored in a safe location during construction, and installed back in the same location upon completion of the project. The salvaged signs shall be paid for accordingly.

1.49 SIGN POSTS, U-CHANNEL

- A. All new signs posts shall be buried four (4) to five (5) feet below the ground, with an adequate length above the ground to mount all of the new proposed signs above the specified bottom height of the sign. Sign posts shall be a ridgeback U-channel galvanized steel, with a weight of three (3) pounds per linear foot.

1.50 TREE PROTECTION, 3" DIA. OR GREATER

- A. The Contractor shall take all prudent and feasible measures that will reduce or eliminate the impacts of development and construction on City owned trees. Trees shall be surrounded by protective cushioning, posts or fencing before construction work begins, if, in the judgment of the Staff Arborist or the Engineer, such precautions are necessary.
- B. On all trees greater than three (3) inches in diameter, but less than eighteen (18) inches away from the back of curb (from the edge of the trunk), straw bales shall be installed on end between the tree and the road. Straw bales shall be erected completely around the tree when said tree is in the median. The straw bales shall be wired to the tree around the entire trunk to ensure that they remain in place. If construction of sewer, water main, or concrete requires temporary removal, the bales shall be removed and set aside during that day. The bales shall be re-secured at the end of the work day as needed.
- A. Barriers shall remain in place until all site activities have been completed. Barriers may not be relocated or removed without the prior approval of the Staff Arborist.
- B. The barrier material must be visible and solid enough to withstand the pressure from anything piled up against it.
- C. Protection shall apply to all trees over three (3) inches in diameter.
- C. All trees greater than three (3) inches in diameter, but less than eighteen (18) inches away from the back of the curb (from the edge of the trunk) shall have four (4) temporary fence posts installed around the base of the tree, with snow fence connected to all four (4) posts. Snow fence shall remain in place at all times, except when excavation or paving work in the immediate area requires its temporary removal. After work is completed for the day, the snow fence shall be erected back into place by the Contractor.

- D. Activity within the Root Protection Zone of a City owned tree (normally considered the drip line) shall be limited where practical as determined by the Engineer. These activities shall include, but not be limited to, changing grade, stripping topsoil, and/or placing solvents, building materials, construction equipment, or soil deposits within the Root Protection Zone. The Contractor shall be prepared to perform advance pruning of any City owned trees required for clearance during construction development activities. Pruning must be performed by a qualified arborist and not by untrained construction personnel. Any roots damaged during grading or development activities shall be exposed to sound tissue and cut cleanly with a saw following recommended standards and as directed by the Staff Arborist. Whenever possible, no excess soil, additional fill, liquids, or construction debris shall be placed within the Root Protection Zone of any City owned tree. Construction pruning and root pruning of any City owned trees directly affected by construction require obtaining prior approval from the Staff Arborist.
- E. Trees shall be protected as described above for any tree over three (3) inches in diameter. Trees less than three (3) inches shall be protected at Contractor expense, however, trees shall be replaced at Contractor expense if there is any damage to the tree as determined by the Engineer or Staff Arborist.

1.51 RESTORATION – ST. JAMES PARK

- A. This is a lump sum pay item to cover all restoration work associated with the proposed sewer installation in St. James Park as indicated in the drawings. Required restoration work shall consist of lawn restoration (to be completed with topsoil, seed, straw mulch, and necessary watering), and fencing removal and re-installation. Lawn restoration shall be furnished as required to cover all lawns areas disturbed from construction activities and contractor access & staging areas. All existing surface elevations within lawn and pavement areas requiring restoration shall be brought to the original “pre-construction” elevations. Chain-link fencing posts and link sections shall be removed, salvaged and re-installed to match pre-construction conditions.

1.52 MULCH, 3”

- A. In areas where it will be difficult to establish grass around existing trees, the Contractor shall restore around the trees where directed by the Engineering with three (3) inches of topsoil, and then three (3) inches of hardwood landscape mulch as needed. No mulch shall be placed at trees where the root structure will allow the placement of sod instead. The three (3) inches of topsoil shall be paid for under the Topsoil pay item.

1.53 TOPSOIL, 3”

- A. Topsoil shall be placed according to the Michigan Department of Transportation 2012 Standard Specifications for Construction, Modified to be screened with no objects greater than one (1) inch in diameter.
- B. Topsoil shall be a loamy material. Payment shall be made for topsoil placed to the depth specified, per square yard. Payment shall include all labor, equipment and materials necessary to place the topsoil.

1.54 SOD, CLASS A

- A. Restoration work of this nature shall be limited to the period of time between May 1st and October 31st of each year. Installation of sod (or seed) outside of these dates shall be with special approval only by the Engineer.
- B. Payment on 50% of the pay items regarding restoration may be withheld until the sod or seed has satisfactorily germinated or been established.

- C. The Contractor shall be responsible for watering all sod placed on the project for a period of fourteen (14) days, and at the end of fourteen (14) days, the sod areas shall be inspected by the City. Any sod areas that appear to be failing shall be marked for removal. Removal and replacement of failed sod areas shall be incidental.
- D. A small percentage of the finished areas may be sloped (such as adjacent an existing tree) such that they cannot be sodded. These areas shall be seeded and included in the square yardage for sod placed. Seed shall also be placed at the same price should any adjacent property owners request seed substitution for sod.

1.55 INLET FILTER

- A. Installation of this item shall follow the standard details prepared by the Oakland County Water Resources Commissioner. The detail for the "Inlet Filter" shall be modified appropriately to accommodate the proposed flat catch basin covers.
- B. This pay item will be required on existing catch basins during all excavation, removal, subbase preparation, etc.

1.56 INLET SEDIMENT PIT

- A. Installation of this item shall follow the standard details prepared by the Oakland County Water Resources Commissioner.
- B. This item will only be used should weather cause significant delay after the curbs have been installed and the subbase is awaiting the first course of bituminous pavement. Note that this pay item shall be installed, at the direction of the City, if there is significant delay in the project at this point, regardless of the cause. The work will not be paid for if it is evident that the delay is the responsibility of the Contractor, his Subcontractors or suppliers.

1.57 INSPECTOR CREW DAYS

- A. The "Inspector Crew Days" provision as stated in the "General Requirements" section of the Contract shall be modified as noted below:
 - A. Saturday or Sunday work for this project shall be charged similar to the other weekdays.
 - B. All days shall be charged to a maximum of one (1) day per inspector on the site, regardless of total number of hours spent on the project per day.
 - C. The number of crew days for each pay period will be added as a pay item (up to the amount bid as a maximum) and the actual number of days used will be deducted from the overall total amount due with each pay estimate. If the total amount bid has not been used at the end of the contract, the bid amount will be paid on the final estimate.
 - D. If additional work other than what is noted herein is necessary to complete the project, the City will consider adjusting the inspector crew days number upon request. The adjustment shall be based upon the percentage increase in the total value of the project over what was originally bid.

1.58 TRAFFIC MAINTENANCE AND CONTROL

- A. The Contract Proposal indicates that this pay item will be paid for by the Lump Sum. Although paid as a lump sum, note that the Engineer has experienced difficulty in the past with certain Contractors not maintaining signing and traffic control measures on a daily basis to the extent considered necessary to properly protect the work area. Therefore, the Contractor shall submit a written time schedule to be reviewed and approved by the Engineer no later than 7 calendar days

after the pre-construction meeting, if not sooner. Once approved, the number of calendar days (not counting Sundays) that the schedule indicates are required to complete the project shall be agreed upon by the Engineer and the Contractor, as stipulated in the written time schedule.

The Engineer will be checking the completeness of the signing and road closure features on a daily basis, and will ask for corrections as noted. The Contractor shall have a minimum of one representative on site with the Engineer at the end of the work day verifying that the condition of the traffic control signage is approved before leaving the project site for the day. The following shall be grounds for not receiving payment for this pay item for any given day:

- A. If the Engineer has requested signage to be addressed prior to the Contractor leaving the site and it has not been done, or has not been done satisfactorily. The Engineer shall photograph and document incomplete signage conditions when observed, for the record.
- B. If the Contractor's staff has all left the job site for the day before determining whether or not traffic control conditions have been approved by the Engineer. If problems are later identified by the Engineer, they shall be photographed and documented, for the record.
- C. When not paying for this pay item under the conditions noted in #2 above, the Engineer shall consider how the discrepancy may have occurred. For example, if the problem is located outside of an area that would have been impacted by the Contractor, and if it appears that the discrepancy was caused by the public (such as the relocation of a barricade) at a time of day that the Contractor would not have reasonably known about the problem, then payment will not be docked for that day. Nevertheless, it shall be the Contractor's responsibility to make the effort to check all pertinent areas at the end of the work day so that this condition does not routinely occur.
- D. To calculate the reduction of payment on the LS pay item, the Engineer shall use the following basis as an example:

If the time schedule referenced above indicates that the project will require the maintenance of traffic control measures for 70 calendar days (not including Sundays), and should the Contractor not meet the terms of the pay item for one day under the terms noted above, then the LS pay item shall be reduced in the amount of 1/70 of the pay item for each such day that traffic maintenance has not been performed within the terms of the Contract.
- B. Prior to closing any of the streets on this project to through traffic, the Contractor shall supply cones, barriers, and warning signs in accordance with the MUTCD. Road closure signage shall not be erected more than two (2) work days in advance of planned closing, and erection of signing shall not begin until approved by the Engineer. At all entrances to the job site, the Contractor shall always maintain the appropriate number of Type III barricades and an R11-2 (ROAD CLOSED) signs. Appropriate advance warning at entrances to the job site shall be defined as maintaining a Type III at the next end of the affected block and an R11-4 (ROAD CLOSED TO THRU TRAFFIC) sign. Additional barricades shall be supplied as needed when the road is completely closed, such as when preparing the stone grade for paving, and when the concrete pavement has been recently placed. Refer to the proposed Advanced Warning Signage (AWS) diagram for additional traffic control requirements.
- C. Project-Specific Traffic Maintenance and Control Requirements:
 1. In general, traffic controls shall be provided to prevent thru-traffic within the project limits but resident access must be maintained in at least one direction for the duration of the project. The Contractor shall keep the road accessible to all residents during all phases of the project, except as follows:

If concrete or asphalt work is required across a driveway, the work shall be done expeditiously after removals, so as to keep residents parking on the street or other driveways to a minimum.

If asphalt or concrete is being placed.

If open trenching in the road makes driving in the immediate area hazardous.

2. A hard closure at Lincoln Avenue shall remain in place for the duration of the project to prevent south-bound traffic onto Edgewood Road from Lincoln Avenue. An exit from Edgewood onto Lincoln Avenue will be allowed for resident use when one-way north-bound traffic is being provided within the construction limits on Edgewood.
 3. Ingress/Egress to Edgewood must be always provided via a minimum of one of the following roads: Bennaville, Catalpa, or Southlawn. Flag control must be provided in specific instances to provide safe access for residents.
 4. The Contractor shall provide all materials, labor and equipment necessary to install, maintain, move, and remove traffic control devices as required due to changing traffic access needs during the project.
 5. The Contractor shall maintain access to driveways (including using temporary maintenance gravel) at all times throughout the project unless otherwise directed by the Engineer. Replacement of the two driveway approaches for Grace Baptist Church (#280 E. Lincoln) shall be gapped and paved half-width to maintain parking lot access. If a parcel has more than one driveway for access, one driveway may be closed for construction with approval from the engineer.
 6. The southerly YMCA parking lot located on the east side of Edgewood may be used for material and equipment staging. The Contractor shall be allowed to utilize 7 spaces on the north and south sides of the parking lot, directly east of Edgewood as indicated on the AWS/Detour traffic plan. The condition of the parking lot will be documented in the pre-construction video by the City, and any damage post-construction will be repaired solely by the Contractor as part of the project punch list work.
- D. The Contractor shall be responsible for maintaining traffic control that allow local access to the residents as specified above, including having flag control or labor to move barricades as necessary to facilitate both their operations and local traffic.
- E. Once the road pavement is installed, and seven (7) days curing has been accomplished, the Contractor shall immediately begin preparing for sidewalk and drive approach construction, again, placing concrete expeditiously to allow the curing time to begin as soon as practical. Particular attention to safe and accessible sidewalks shall be provided when the road is closed to all vehicular traffic, given that the sidewalks shall be the only means of access for residents. The Contractor shall repair all sidewalks in driveway areas at the same time as the adjacent drive approaches, again to reduce the time that driveways are out of service.
- F. The Contractor shall maintain signs and barricades as necessary to maintain traffic on this route as shown on the traffic control diagrams in the drawings.
- G. It is anticipated that a small number of residents will, due to health or handicapped access reasons, require almost continuous access to their driveway. With that in mind, the Contractor shall include in the cost of the bid up to two (2) gaps for specific driveway access on half of the width of the road. Communications with the homeowners will occur well in advance of the paving phase, and any gapping requirements will be made clear to the Contractor. The City will not encourage any

pavement gapping with the public, and if they are not needed, the Contractor will not be asked to provide them.

- H. The Contractor shall endeavor to keep the cross streets, as well as the local access within the construction zone as clean and dust free as practical during construction.

1.59 LAWN SPRINKLERS

- A. In General, the Contractor shall take all necessary precaution to maintain all items placed in the right-of-way, and any items removed or damaged shall be replaced in kind. The exception to this is lawn sprinklers in the right-of-way. As long as the damage is not due to Contractor negligence, sprinklers that are in conflict with the construction may be removed and need not be replaced by the Contractor. The Contractor shall take precautions not to damage the sprinkler system any more than necessary, and shall notify the City of any sprinklers that are found during construction.
- B. If a lawn sprinkler line located within the right-of-way is damaged, the Contractor shall sufficiently plug or cap the line to prevent the sprinkler line from discharging when the system is activated, and shall notify the City of the location of the damage.
- C. Lawn sprinklers located on private property shall be the Contractor's responsibility to repair if damaged. For the purposes of this provision, private property shall be defined as any sprinkler damaged between the City sidewalk and the house.

1.60 DUST CONTROL

- A. Dust & dirt control, and general cleanliness of the project work area and vicinity will be monitored by the Engineer on a regular basis. For unpaved surfaces, dust control can take the form of watering the grade, or treating the grade with calcium chloride. Particular attention shall be paid to areas where cross-streets generate more traffic than usual. For paved surfaces, streets must be swept on a regular basis to avoid excess dust being created by traffic. While minor sweeping can be accomplished by a broom tractor, larger sweeping jobs must be accomplished by a professional street sweeper so as to avoid throwing dust, dirt, and stones into the adjacent yards. Although not a direct pay item, the Contractor shall be prepared to address dust and dirt issues as requested by the Engineer within 24 hours. If such issues are not being addressed timely or inappropriately, the Engineer shall have the right to direct its own forces or other contractor to the job site to address the area in question. Such costs shall be charged against the final payment due to the Contractor.

END OF SECTION

APPENDIX – A

**SOIL BORING AND PAVEMENT CORE
INFORMATION**



Report on Geotechnical Investigation

**Edgewood Road
Reconstruction
E. Southlawn Boulevard
to Lincoln Street
Birmingham, Michigan**

Latitude 42.538518° N
Longitude 83.212084° W

Prepared for:

Nowak & Fraus Engineers, Inc.
47777 Woodward Avenue
Pontiac, Michigan 48342

G2 Project No. 210598
December 13, 2021

g2consultinggroup.com

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Ann Arbor	1350 Eisenhower Pl	Ann Arbor, MI 48108	P 734.390.9330	F 734.390.9331
Chicagoland	1186 Heather Dr	Lake Zurich, IL 60047	P 847.353.8740	F 847.353.8742



CONSULTING GROUP

December 13, 2021

Mr. Brett J. Buchholz, P.E.
Principal
Nowak & Fraus Engineers, Inc.
47777 Woodward Avenue
Pontiac, Michigan 48342

Re: Report on Geotechnical Investigation
Edgewood Road Reconstruction
E. Southlawn Boulevard to Lincoln Street
Birmingham, Michigan
G2 Project Number 210598

Dear Mr. Buchholz:

We have completed the geotechnical investigation for the proposed water main, sewer, and paving improvement project along Edgewood Road between E. Southlawn Boulevard and Lincoln Street within the City of Birmingham, Oakland County, Michigan. This report presents the results of our observations and analyses and our recommendations for pavement section design, underground utility replacement, and construction as they relate to the geotechnical conditions on site.

We appreciate the opportunity to be of service to the Nowak & Fraus Engineers, Inc., on this project and look forward to discussing the recommendations presented. In the meantime, if you have any questions regarding this report or any other matter pertaining to the project, please contact us.

Sincerely,

G2 Consulting Group, LLC

Jeffrey M. Hayball, P.E.
Project Engineer

Noel J. Hargrave-Thomas, P.E.
Principal

James Berry, P.E.
Project Manager

JMH/NJHT/JLB/ljv

Enclosures

g2consultinggroup.com

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Chicagoland	1186 Heather Dr	Lake Zurich, IL 60047	P 847.353.8740	F 847.353.8742

EXECUTIVE SUMMARY

The project consists of underground and paving improvements along Edgewood Road between E. Southlawn Boulevard and Lincoln Street within in the City of Birmingham, Michigan. Underground improvements include combined sewer reconstruction and water main replacement. New sewer and water main invert depths range between 10 and 12 feet below existing pavement grade. It is our understanding the new underground utilities will be constructed using open cut installation methods. The existing pavements are proposed to be reconstructed in conjunction with the underground improvements and consist of either new Hot Mix Asphalt (HMA) or Portland cement concrete (PCC) pavement sections.

The existing pavements consist of Portland Cement Concrete (PCC) pavement. The PCC pavement ranges in thickness from 6 to 6-1/4 inches within the borings. No aggregate base is present below the PCC pavement within the borings. Silty sand fill with trace organic matter is present below the PCC pavement within borings B-2 and B-3, extending to depths of 18 inches and 24 inches, respectively. Native stiff to hard silty clay underlies the pavement section and/or silty sand fill within the borings and extends to the explored depth of 15 feet. No measurable groundwater was encountered within the borings during or upon completion of drilling operations.

Temporary unsurcharged trench excavations for the proposed open-cut sewer installation operations and portions of the water main replacement must be sloped back at a minimum of 1H:1V (horizontal: vertical) within the existing stiff cohesive soils and 3/4H:1V within the very stiff to hard cohesive soils. Any accumulations from groundwater seepage or runoff should be controllable from pumping properly constructed sumps.

All excavations should be safely sheeted, shored, sloped, or brace in accordance with MI-OSHA requirements. If material is stored or equipment is operated near the excavation, stronger shoring must be used to resist the extra pressure due to the superimposed loads. Care should always be exercised when excavating near existing buildings, roadways, or utilities to avoid undermining. In no case should excavations extend below the level of adjacent structures or utilities unless underpinning is planned.

Subgrade instability may be encountered due to the presences of silty clay with moisture contents generally at or above the plastic limit. These soils may become unstable under repeated loading of construction traffic. We recommend the exposed subgrade not be left exposed to precipitation and construction operations be performed during the summer months to ensure dry, warm, weather.

Proper pavement drainage is essential for cohesive subgrade soils. We recommend subgrade edge drain be provided along the curb line on both sides of the new pavement sections. These drains should be connected to nearby catch basins. The pavement and subgrade should be properly sloped to promote effective surface and subsurface drainage and prevent water from ponding.

Based on the results of our analyses, we recommend a new HMA pavement section consisting of 2 inches 5EML bituminous concrete wearing course, 2 inches of MDOT 4EML bituminous concrete leveling course, supported on the existing aggregate base or a minimum of 8 inches of the MDOT 21AA aggregate base course. We recommend all bituminous concrete materials have a binder from RAP less than 17 percent of the total binder and using a binder of PG 64-22. We recommend a new PCC pavement section consisting of 7 inches of MDOT P1 Portland cement concrete supported on a minimum of 8 inches of MDOT 21AA aggregate base.

Do not consider this summary separate from the entire text of this report, with all the conclusions and qualifications mentioned herein. Details of our analysis and recommendations are discussed in the following sections and in the Appendix of this report.

PROJECT DESCRIPTION

The project consists of underground and paving improvements along Edgewood Road between E. Southlawn Boulevard and Lincoln Street within in the City of Birmingham, Michigan. Underground improvements include combined sewer reconstruction and water main replacement. New sewer and water main invert depths range between 10 and 12 feet below existing pavement grade. It is our understanding the new underground utilities will be constructed using open cut installation methods. The existing pavements are proposed to be reconstructed in conjunction with the underground improvements and consist of either new Hot Mix Asphalt (HMA) or Portland cement concrete (PCC) pavement sections.

SCOPE OF SERVICES

The field operations, laboratory testing, and engineering report preparation were performed under direction and supervision of a licensed professional engineer. Our services were performed according to generally accepted standards and procedures in the practice of geotechnical engineering in this area. Our scope of services for this project is as follows:

1. We performed a total of three (3) pavement core/soil borings within the proposed project extending to a depth of 15 feet each. We measured the existing Portland cement concrete pavement section materials and identified the type and condition of subgrade soils.
2. We performed laboratory testing on samples obtained from the soil borings. Laboratory testing included visual engineering classification, Atterberg Limits, natural moisture content, dry density, and unconfined compressive strength determinations.
3. We prepared this engineering report. Our report includes recommendations for pavement reconstruction and underground utility replacement construction.

FIELD OPERATIONS

G2 Consulting Group, LLC, selected the number, depth, and location of the soil borings. The soil borings were located in the field by a G2 representative by measuring from existing site features and landmarks using conventional taping methods. The approximate soil boring locations are shown on the Soil Boring Location Plan, Plate No. 1. Ground surface elevations were not available at the time of the field investigation.

We used a gas powered core rig equipped with a 6-inch diameter diamond-tipped core barrel to core the pavement locations. Pavement cores were drilled through the full depth of the existing pavement structure to obtain an accurate determination of the pavement thickness.

The soil borings were drilled using a truck-mounted rotary drilling rig. Continuous flight, 2-1/4-inch inside diameter, hollow-stem augers were used to advance the boreholes. The soil samples were obtained at intervals of 2-1/2 feet by the Standard Penetration Test (SPT) method ASTM D1586, which involves driving a 2-inch diameter split-spoon sampler into the soil with a 140-pound weight falling 30 inches. The sampler is generally driven three successive 6-inch increments with the number of blows for each increment recorded. The number of blows required to advance the sampler the last 12 inches is termed the Standard Penetration Resistance (N). The blow counts for each 6-inch increment and the resulting N-value are presented on the soil boring logs.

The soil samples were placed in sealed containers in the field and brought to the laboratory for testing and classification. During the drilling operations, the drilling crew maintained logs of the encountered subsurface conditions, including changes in stratigraphy and observed groundwater levels of the soil borings to be used in conjunction with our analyses of the subsurface conditions. The final boring logs

are based on the field logs and laboratory soil classification and testing. After completion of the drilling operations, the boreholes were backfilled with excavated soil and capped with cold patch.

LABORATORY TESTING

Representative soil samples were subjected to laboratory testing to determine soil parameters pertinent to pavement design and underground utility construction. An experienced geotechnical engineer classified the samples in general conformance with the Unified Soil Classification System.

Laboratory testing included Atterberg Limits, natural moisture content, dry density, and unconfined compressive strength determinations. Atterberg limits were determined in accordance with ASTM D 4318 "Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils". The unconfined compressive strengths were determined by ASTM Test Method D2166 and using a spring-loaded hand penetrometer. Per ASTM D2166, the unconfined compressive strength of cohesive soils is determined by axially loading a small cylindrical soil sample under a slow rate of strain. The unconfined compressive strength is defined as the maximum stress applied to the soil sample before shear failure. If shear failure does not occur prior to a total strain of 15 percent, the unconfined compressive strength is defined as the stress at a strain of 15 percent. The hand penetrometer estimates the unconfined compressive strength to a maximum of 4-1/2 tons per square foot (tsf) by measuring the resistance of the soil sample to the penetration of a calibrated spring-loaded cylinder.

The results of the moisture content, dry density, and unconfined compressive strength laboratory tests are indicated on the soil boring logs at the depths the samples were obtained. Unconfined Compressive Strength Test are shown graphically on Figure No. 4 within the Appendix. Atterberg limits are shown graphically on Figure No. 5 in the Appendix. We will hold the soil samples for 60 days from the date of this report. If you would like the samples, please let us know.

EXISTING PAVEMENT CONDITIONS

The existing pavements consist of Portland Cement Concrete (PCC) pavement. The PCC pavement ranges in thickness from 6 to 6-1/4 inches within the borings. No aggregate base is present below the PCC pavement within the borings.

Low to moderate severity joint and transverse cracking is present along less than half of the PCC pavement surface. It appears some full depth replacement patching, crack sealing, and cold patching have been performed in the past. The pavements are crowned, allowing for surface runoff water to drain to Portland cement concrete curbs present along the pavement edge. Surface runoff water further drains into catch basins built within the curb line.

EXISTING SUBSURFACE CONDITIONS

Silty sand fill with trace organic matter is present below the PCC pavement within borings B-2 and B-3, extending to depths of 18 inches and 24 inches, respectively. Native silty clay underlies the pavement section and/or silty sand fill within the borings and extends to the explored depth of 15 feet.

The native silty clay is stiff to hard in consistency with natural moisture contents ranging from 12 to 21 percent, a liquid limit of 40 percent, a plasticity index of 23 percent, dry densities ranging from 121 to 129 pounds per cubic foot (pcf), and unconfined compressive strengths ranging from 2,000 to 8,000 pounds per square foot (psf).

The stratification depths shown on the soil boring logs represent the soil conditions at the boring locations. Variations may occur between borings. Additionally, the stratigraphic lines represent the approximate boundaries between soil types. The transition may be more gradual than what is shown. We have prepared the boring logs on the basis of laboratory classification and testing as well as field logs of the soils encountered.

Soil Boring Location Plan, Plate No. 1, Soil Boring Logs, Figure Nos. 1 through 3, Unconfined Compressive Strength Test, Figure No. 4, Atterberg Limits Results, Figure No. 5 and Photographic Documentation, Figure Nos. 6 through 8, are presented in the Appendix. The soil profiles described above are generalized descriptions of the conditions encountered at the boring locations. General Notes Terminology defining the nomenclature used on the soil boring logs and elsewhere in this report are presented on Figure No. 9.

GROUNDWATER CONDITIONS

Groundwater observations were performed during and upon completion of drilling operations. No measurable groundwater was observed within the borings during or upon completion of drilling operations. Fluctuations in perched and long term groundwater levels should be anticipated due to seasonal variations and following periods of prolonged precipitation. It should also be noted that groundwater observations made during drilling operations in predominantly cohesive soils are not necessarily indicative of the static groundwater level. This is due to the low permeability of such soils and the tendency of drilling operations to seal off the natural paths of groundwater flow.

WATER MAIN AND SEWER CONSTRUCTION RECOMMENDATIONS

General

It is our understanding the project includes local combined sewer reconstruction and water main replacement. Combined sewer and water main invert depths are estimated at 10 to 12 feet below existing pavement grade. It is our understanding the new underground utilities will be constructed using open cut installation methods. Once the proposed pipeline profile becomes available and the pipeline installation methods for each segment of the pipeline alignment have been established, G2 should be notified so that we can review our recommendations presented herein.

Open Cut Excavations

Temporary unshored trench excavations for the proposed open-cut sewer installation operations and portions of the water main replacement must be sloped back at a minimum of 1H:1V (horizontal: vertical) within the existing stiff cohesive soils and 3/4H:1V within the very stiff to hard cohesive soils. Where seepage from excavation cuts is observed, the slopes must be flattened sufficiently to achieve stability, but in no case left steeper than 3H:1V at and below the seepage level. If the temporary construction embankments are to be maintained during the rainy season, berms are suggested along the tops of the embankments to prevent runoff water from entering the excavation and eroding the slope faces. The soils exposed in slope faces should be inspected by qualified personnel so modifications of the slopes can be made if variations in the soil or water conditions occur. If sufficient space for open cut consideration is not available trench box shoring may be used.

Trench box shoring may be used provided some lateral deflection of adjacent soils can be tolerated. If a trench box is used, excavations should be performed from within the trench box, such that no unsupported vertical cut is allowed to exist. A trench box is not recommended where adjacent utilities, roadways, or structures are located less than a lateral distance delineated by a plane extending upward from the bottom edges of the excavation at a 1H:1V slope.

All excavations should be safely sheeted, shored, sloped, or brace in accordance with MI-OSHA requirements. If material is stored or equipment is operated near the excavation, stronger shoring must be used to resist the extra pressure due to the superimposed loads. Care should always be exercised when excavating near existing buildings, roadways, or utilities to avoid undermining. In no case should excavations extend below the level of adjacent structures or utilities unless underpinning is planned.

Groundwater Control

No measurable groundwater was observed within the borings during and upon completion of drilling operations. However, groundwater seepage may be encountered within existing utility granular backfill soils. The proposed underground utility inverts ranging from 10 to 12 feet below existing grades. We anticipate construction operations to be performed in dry conditions. However, any accumulations from groundwater seepage or runoff should be controllable from pumping properly constructed sumps.

Pipeline Support

Based on the observed subsurface conditions and the anticipated invert elevations, we expect the proposed utility will generally be supported on stiff to hard cohesive soils. In general, these soils are adequate for support of the utilities; however, where loose granular soils are encountered from possible existing utility backfill within any open-cut excavations, we recommend the sewer trench invert be compacted to further densify any loose granular material on stabilization crushed aggregate. Differential movements of the sewer pipeline may occur if the trench bottom is not adequately stabilized. The exposed subgrade should be visually evaluated for stability prior to the backfilling of the construction excavations.

Trench Backfill

The existing cohesive soils encountered within the soil borings generally do not meet the gradation requirements of MDOT Class II granular fill, therefore, these soils are not suitable to be reused as engineered within construction excavations. We recommend clean granular engineered fill should be used to backfill around the water main and sewers and the remainder of the utility trench. The engineered fill or bedding should be placed up to the springline of the pipe, while making sure that the void beneath the haunches of the pipe are completely filled. The initial lift should be compacted using light-duty compaction equipment, such as walk-behind vibratory plate compactors, and should be compacted in a manner that will not disturb the pipe alignment. The next lift of engineered fill may then be placed to 9 inches above the top of the pipe. Again, light-duty compaction equipment should be used to complete the compaction of the engineered fill.

After the bedding material and initial lift of backfill has been placed and compacted, the remainder of the trench should be backfilled in an engineered manner. The engineered fill should be free of organic matter, frozen soil, clods, or other harmful material. Backfill should be placed in loose layers not to exceed 9 inches in thickness and should be mechanically compacted to achieve a density of at least 95 percent of the materials maximum dry density as determined by the Modified Proctor compact test (ASTM D1557) or in accordance with the latest version of the Michigan Department of Transportation "Density Testing and Inspection Manual". Granular engineered fill material should be placed and compacted at moisture contents within 2 percent above or below the optimum moisture content.

PAVEMENT RECOMMENDATIONS

General

It is our understanding the pavements will be reconstructed with either new HMA or PCC pavement sections. We recommend completely removing the existing PCC pavements, cutting the subgrade to the proposed grade, fine grading the exposed subgrade, evaluating the exposed subgrade for stability, performing any necessary undercuts, then constructing the new pavement section.

Pavement Subgrade Preparation

The existing pavements and curbs should be removed along the roadway alignment. We anticipate subgrade cuts will be necessary to accommodate the addition of the recommended dense graded aggregate base materials.

We anticipate the subgrade soils will generally consist of native silty clay. All exposed subgrade soils should be evaluated for stability before constructing the new pavement cross-section. We recommend the silty clay subgrade soils be proof rolled using a heavily loaded, rubber-tired, tandem-axle dump truck within the cohesive soils area. Unsuitable soils or soils exhibiting excessive instability, such as severe rutting, should be removed by undercutting to expose stable soils.

Significant subgrade instability may be encountered due to the presences of native silty clay with moisture contents generally at or above the plastic limit. These soils may become unstable under repeated loading of construction traffic. We recommend the exposed subgrade not be left exposed to precipitation and construction operations be performed during the summer months to ensure dry, warm, weather.

Subgrade undercuts, if required, should be evaluated by a qualified engineering technician to determine if subgrade stabilization is necessary. We recommend that undercut excavations, where required, be backfilled with MDOT 21AA aggregate, placed in an engineered manner. Lift thicknesses should not exceed 9 inches. The use of a geogrid will reduce undercut depths. We recommend a drain tile be placed within any undercut area and connected to the closest catch basin to prevent groundwater from pooling within the granular soils undercut. All engineered fill should be compacted to a density of at least 95 percent of the maximum density determined by the Modified Proctor (ASTM D1557) method of testing. All engineered fill material should be placed and compacted at approximately the optimum moisture content. Frozen material should not be used as fill, nor should fill be placed on a frozen subgrade.

Pavement Design

We performed pavement design analyses in accordance with the "AASHTO Guide for Design of Pavement Structures". The subgrade soils will generally consist of stiff to very stiff clay with moisture contents generally at or above the plastic limit. Based on the existing subgrade soils, we have provided design pavement sections based on an effective subgrade resilient modulus of 6,000 pounds per square inch (psi) and an effective modulus of subgrade reaction, k , of 50 pounds per cubic inch (pci).

No information regarding the type or amount of traffic along the existing roadways were available upon completion of this report. However, we assume traffic along the roadways is primarily cars with the occasional garbage and delivery truck. We have designed the proposed pavement sections on an estimated of 100,000 18-kip equivalent single-axle loads (ESALs) over a 20-year design life. If any actual traffic volume information becomes available, G2 Consulting Group should be notified so we can reevaluate our recommendations.

For the proposed new pavement section, we estimated a serviceability loss of 2.0, a standard deviation of 0.39 for rigid pavements and 0.49 for flexible pavements, a reliability factor of 0.95, load transfer coefficient of 3.2, a drainage coefficient of 1.0, a Portland cement concrete modulus of rupture of 670 psi, and an elastic modulus of the Portland cement concrete slab of 4,200,000 psi.

Based on the results of our analyses, we recommend a new HMA pavement section consisting of 2 inches 5EML bituminous concrete wearing course, 2 inches of MDOT 4EML bituminous concrete leveling course, supported on the existing aggregate base or a minimum of 8 inches of the MDOT 21AA aggregate base course. We recommend all bituminous concrete materials have a binder from RAP less than 17 percent of the total binder and using a binder of PG 64-22. We recommend a new PCC pavement section consisting of 7 inches of MDOT P1 Portland cement concrete supported on a minimum of 8 inches of MDOT 21AA aggregate base.

All pavement materials are specified within the 2012 Standard Specifications for Construction from the Michigan Department of Transportation. The concrete pavement materials are described in Section 601. The aggregate materials for the subbase are described in Section 902. The bituminous pavement

materials are described in Section 501 and can be assigned a structural coefficient number of 0.42. Any new imported MDOT 21AA material can be assigned a structural coefficient number of 0.14.

Pavement Drainage

Proper pavement drainage is essential for cohesive subgrade soils. We recommend subgrade edge drain be provided along the curb line on both sides of the new pavement sections. These drains should be connected to nearby catch basins. The pavement and subgrade should be properly sloped to promote effective surface and subsurface drainage and prevent water from ponding.

Pavement Maintenance

We recommend that the joints within newly constructed pavements be sealed with hot rubber to prevent moisture intrusion into the subgrade soils below, as well as prevent spalling of the joint due to material entering the joint.

Regular timely maintenance should be performed on the pavement to reduce the potential deterioration associated with moisture infiltration through surface cracks. The owner should be prepared to seal the cracks with a hot-applied elastic crack filler as soon as possible after cracking develops and as often as necessary to block the passage of water to the subgrade soils. In addition, regular joint maintenance should be performed.

GENERAL COMMENTS

We have formulated the evaluations and recommendations presented in this report relative to underground utility construction, site preparation, and pavement reconstruction on the basis of data provided to us relating to the general location for the proposed pavement improvements. Any significant change in this data should be brought to our attention for review and evaluation with respect to the prevailing subsurface conditions.

The scope of the present investigation was limited to evaluation of subsurface conditions for the support of the new underground utilities, pavements, and other related aspects of the development. No chemical, environmental, or hydrogeological testing or analyses were included in the scope of this investigation. If changes occur in the design, location, or concept of the project, the conclusions and recommendations contained in this report are not valid unless G2 Consulting Group, LLC reviews the changes. G2 Consulting Group, LLC will then confirm the recommendations presented herein or make changes in writing.

We have based the analyses and recommendations submitted in this report upon the data from soil borings performed at the approximate locations shown on the Soil Boring Location Plan, Plate No. 1. This report does not reflect variations that may occur between the actual boring locations. The nature and extent of any such variations may not become clear until the time of construction. If significant variations then become evident, it may be necessary for us to re-evaluate our report recommendations.


Soil conditions at the site could vary from those generalized on the basis of soil borings made at specific locations. It is, therefore, recommended that G2 Consulting Group, LLC be retained to provide soil engineering services during the site preparation and pavement construction phases of the proposed project. This is to observe compliance with the design concepts, specifications, and recommendations. Also, this allows design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction.

APPENDIX

Soil Boring Location Plan	Plate No. 1
Soil Boring Logs	Figure Nos. 1 through 3
Unconfined Compressive Strength Test	Figure No. 4
Atterberg Limits Results	Figure No. 5
Photographic Documentation	Figure Nos. 6 through 8
General Notes Terminology	Figure No. 9



Legend

 Pavement Core/Soil Borings performed by Strata Drilling, Inc. on November 24, 2021

Soil Boring Location Plan

Edgewood Road Reconstruction
E. Southlawn Boulevard to Lincoln Street
Birmingham, Michigan



Project No. 210598

Drawn by: JMH

Date: 12/9/21

Scale: NTS

Plate
No. 1



SUBSURFACE PROFILE

SOIL SAMPLE DATA

DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)	
		PCC Pavement (6 inches)	0.5							
		Stiff to Very Stiff Brown and Gray Silty Clay with trace sand and gravel		S-1	3 4 5	9	19.8		3000*	
5			5	S-2	2 3 3	6	19.0		2000*	
					S-3	5 6 7	13	14.9		4000*
10			Hard Brown and Gray Silty Clay with trace sand and gravel	10	S-4	7 10 14	24	12.7		8000*
			Very Stiff Gray Silty Clay with trace sand and gravel		S-5	4 5 6	11	13.6	121	4930
15		15.0		15						
		End of Boring @ 15 ft								
20			20							

Total Depth: 15 ft
 Drilling Date: November 24, 2021
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: D. Watkins

Water Level Observation:
 Dry during and upon completion

Notes:
 * Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
 Auger cuttings and capped with cold patch

Drilling Method:
 6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

SOIL / PAVEMENT .NG 210598.GPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 12/13/21

Figure No. 1

Project Name: Edgewood Road Reconstruction
 Project Location: E. Southlawn Boulevard to Lincoln Street
 Birmingham, Michigan



Soil Boring No. B-2
 G2 Project No. 210598
 Latitude: 42.536785° Longitude: -83.211915°

SUBSURFACE PROFILE				SOIL SAMPLE DATA						
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)	
		PCC Pavement (6-1/4 inches)	0.5							
		Fill: Dark Brown Silty Sand with trace organic matter	1.5							
5		Stiff to Very Stiff Brown and Gray Silty Clay with trace sand and gravel	5	S-1	2 3 3	6	18.4		2000*	
			5	S-2	2 3 4	7	20.3		2500*	
					S-3	4 5 6	11	15.9		3500*
10				10	S-4	6 9 10	19	13.0		6000*
15		Very Stiff Gray Silty Clay with trace sand and gravel	12.0							
			15	S-5	4 4 6	10	12.4	129	4330	
		End of Boring @ 15 ft	15.0							
20			20							

SOIL / PAVEMENT .INC. 210598.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 12/13/21

Total Depth: 15 ft
 Drilling Date: November 24, 2021
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: D. Watkins
 Drilling Method:
 6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observation:
 Dry during and upon completion
 Notes:
 * Calibrated Hand Penetrometer
 Excavation Backfilling Procedure:
 Auger cuttings and capped with cold patch

Figure No. 2

Project Name: Edgewood Road Reconstruction
 Project Location: E. Southlawn Boulevard to Lincoln Street
 Birmingham, Michigan



Soil Boring No. B-3
 CONSULTING GROUP

G2 Project No. 210598

Latitude: 42.534974° Longitude: -83.211776°

SUBSURFACE PROFILE			SOIL SAMPLE DATA						
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		PCC Pavement (6 inches)	0.5						
		Fill: Dark Brown Silty Sand with trace organic matter	2.0	S-1	3 3 3	6	17.0		2000*
5		Stiff to Very Stiff Brown and Gray Silty Clay with trace sand and gravel	5	S-2	2 3 4	7	20.6		2500*
				S-3	5 5 7	12	14.2		3500*
10				S-4	5 7 8	15	16.8		4500*
		Very Stiff Gray Silty Clay with trace sand and gravel	12.0						
15		End of Boring @ 15 ft	15.0	S-5	4 5 5	10	13.0	123	5890
20			20						

Total Depth: 15 ft
 Drilling Date: November 24, 2021
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: D. Watkins

Water Level Observation:
 Dry during and upon completion

Notes:
 * Calibrated Hand Penetrometer

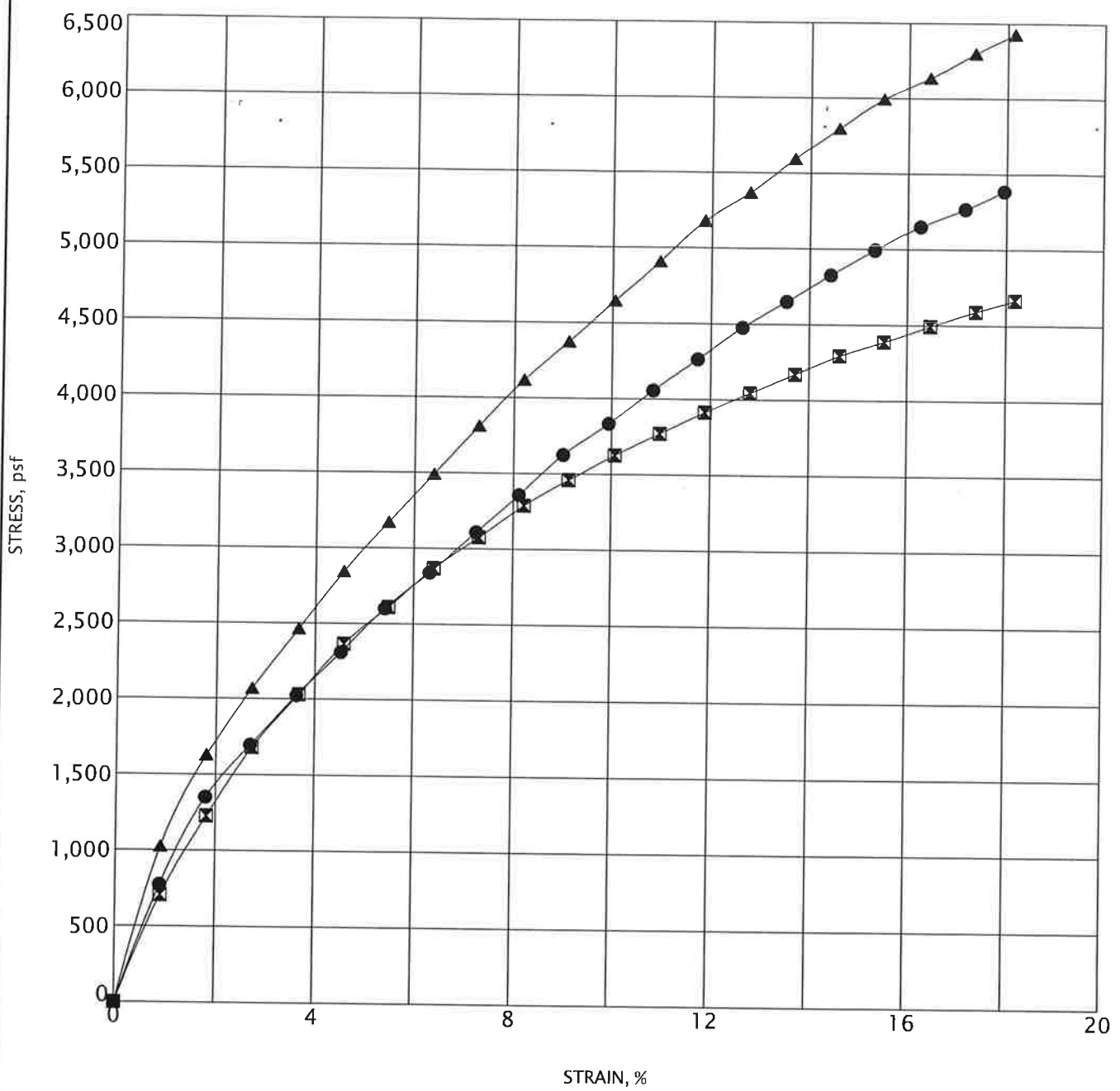
Excavation Backfilling Procedure:
 Auger cuttings and capped with cold patch

Drilling Method:
 6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

SOIL / PAVEMENT NG 210598.GPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 12/13/21

Figure No. 3

U.S. UNCONFINED 210598.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 12/13/21



Specimen	Classification	MC%	γ_d	UC
● B-1 S-5	Gray Silty Clay	14	121	4930
◻ B-2 S-5	Gray Silty Clay	12	129	4330
▲ B-3 S-5	Gray Silty Clay	13	123	5890

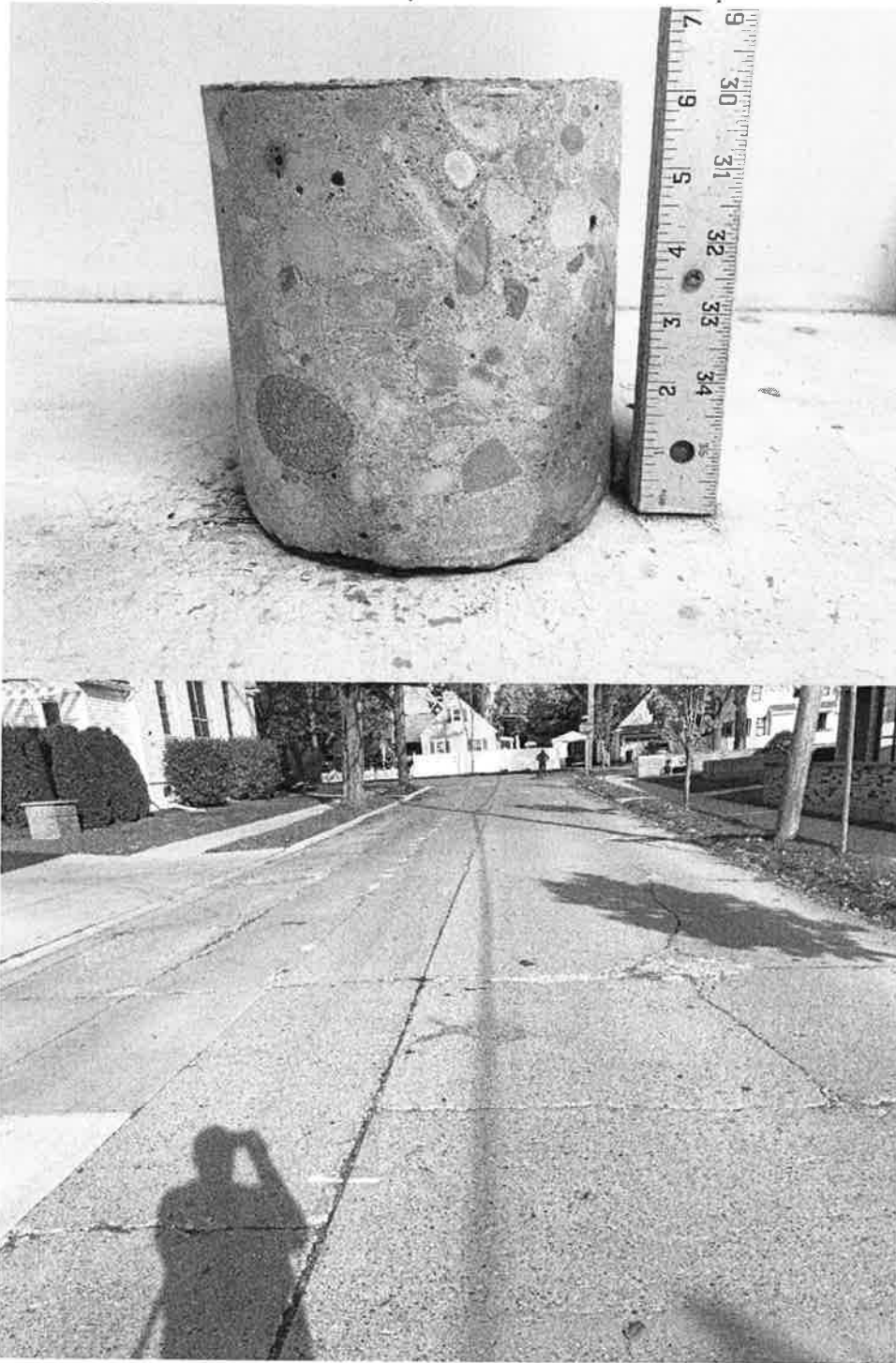


UNCONFINED COMPRESSIVE STRENGTH TEST

Project Name: Edgewood Road Reconstruction
 Project Location: E. Southlawn Boulevard to Lincoln Street
 Birmingham, Michigan
 G2 Project No.: 210598

Figure No. 4

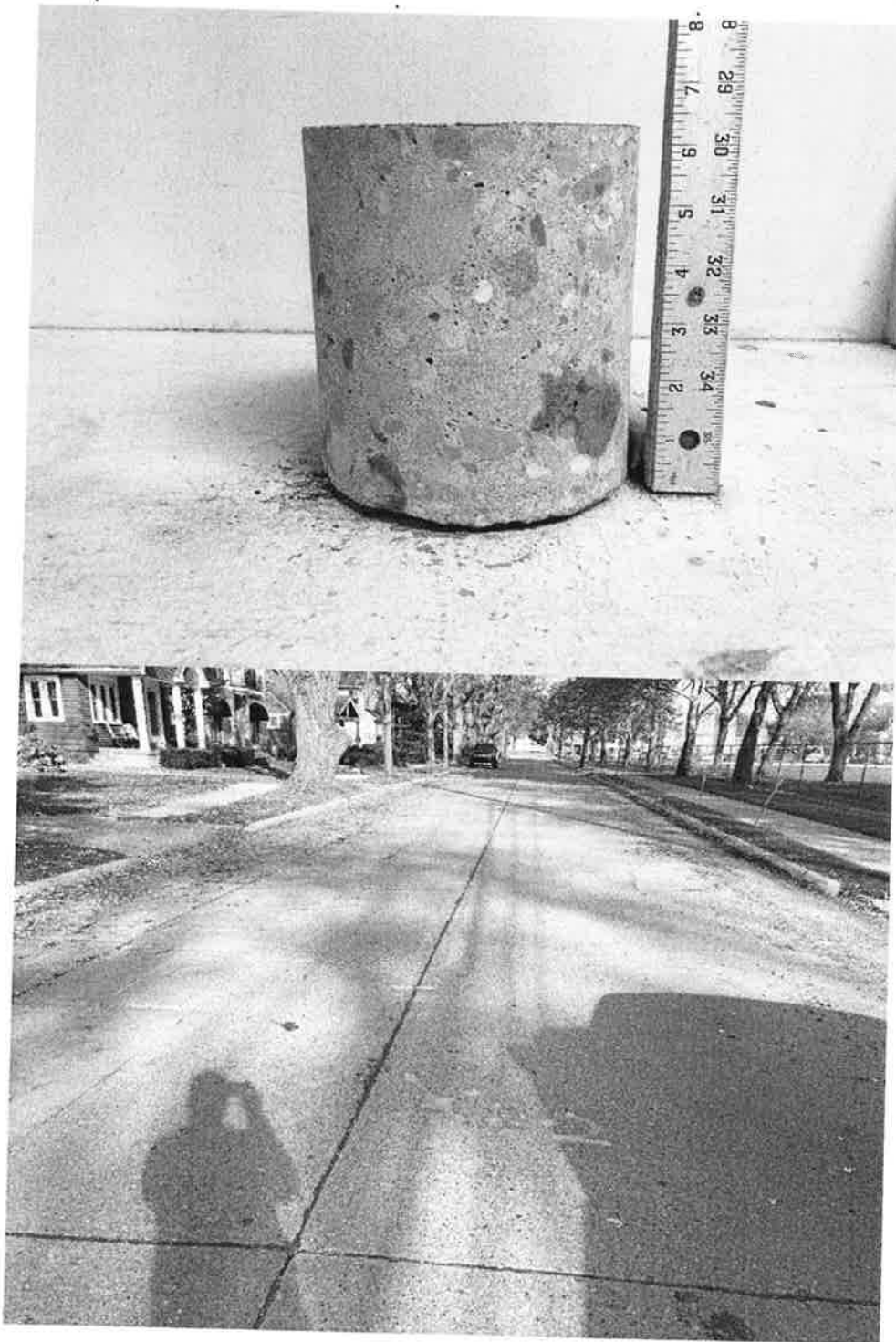
Photographic Documentation
Edgewood Road Reconstruction
Birmingham, Michigan
G2 Project No. 210598



Core Photograph of B-1: PCC Pavement = 6 inches

Figure No. 6

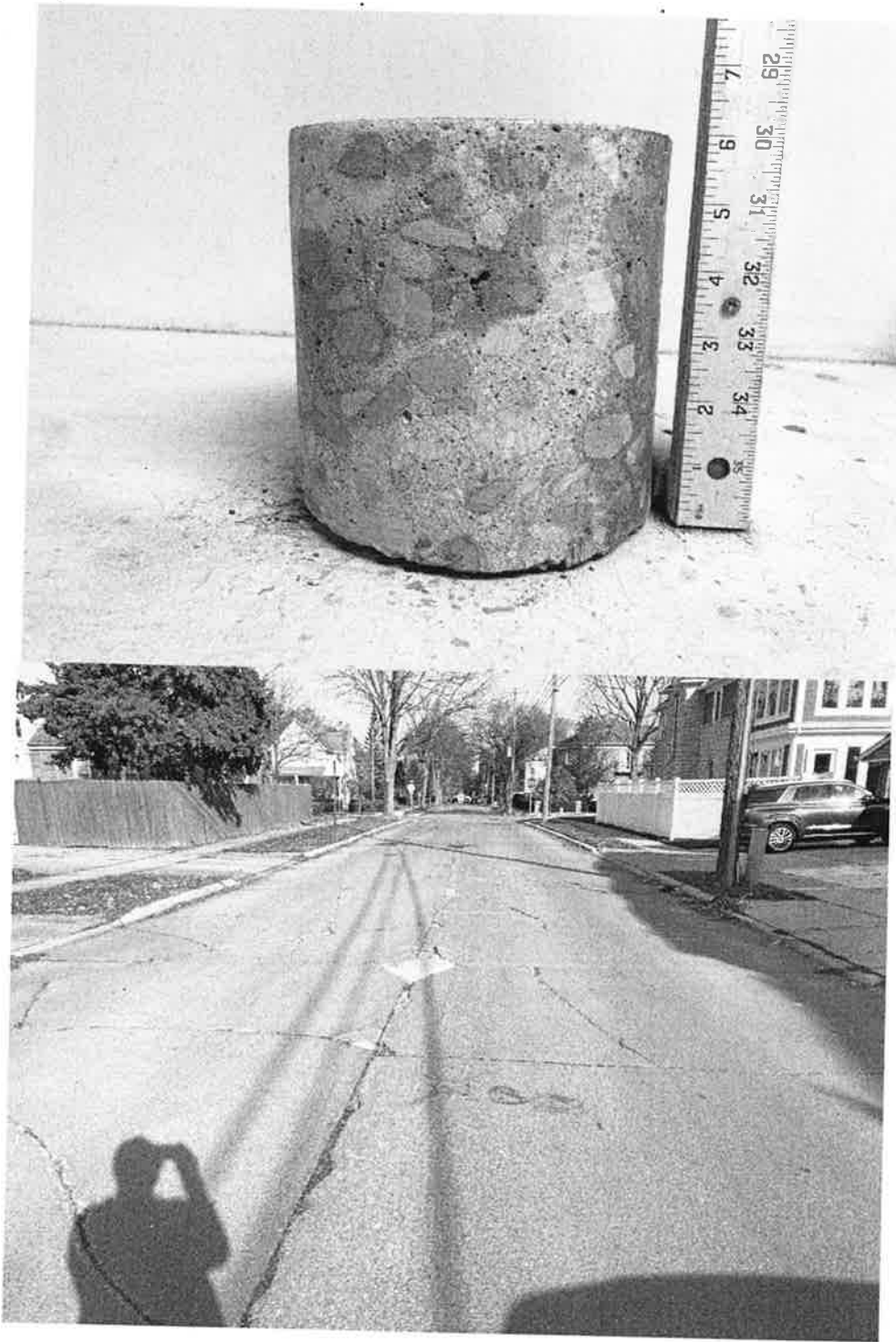
Photographic Documentation
Edgewood Road Reconstruction
Birmingham, Michigan
G2 Project No. 210598



Core Photograph of B-2: PCC Pavement = 6-1/4 inches

Figure No. 7

Photographic Documentation
Edgewood Road Reconstruction
Birmingham, Michigan
G2 Project No. 210598



Core Photograph of B-3: PCC Pavement = 6 inches

Figure No. 8

GENERAL NOTES TERMINOLOGY

Unless otherwise noted, all terms herein refer to the Standard Definitions presented in ASTM 653.

PARTICLE SIZE

Boulders	- greater than 12 inches
Cobbles	- 3 inches to 12 inches
Gravel - Coarse	- 3/4 inches to 3 inches
- Fine	- No. 4 to 3/4 inches
Sand - Coarse	- No. 10 to No. 4
- Medium	- No. 40 to No. 10
- Fine	- No. 200 to No. 40
Silt	- 0.005mm to 0.074mm
Clay	- Less than 0.005mm

CLASSIFICATION

The major soil constituent is the principal noun, i.e. clay, silt, sand, gravel. The second major soil constituent and other minor constituents are reported as follows:

Second Major Constituent (percent by weight)	Minor Constituent (percent by weight)
Trace - 1 to 12%	Trace - 1 to 12%
Adjective - 12 to 35%	Little - 12 to 23%
And - over 35%	Some - 23 to 33%

COHESIVE SOILS

If clay content is sufficient so that clay dominates soil properties, clay becomes the principal noun with the other major soil constituent as modifier, i.e. sandy clay. Other minor soil constituents may be included in accordance with the classification breakdown for cohesionless soils, i.e. silty clay, trace sand, little gravel.

Consistency	Unconfined Compressive Strength (psf)	Approximate Range of (N)
Very Soft	Below 500	0 - 2
Soft	500 - 1,000	3 - 4
Medium	1,000 - 2,000	5 - 8
Stiff	2,000 - 4,000	9 - 15
Very Stiff	4,000 - 8,000	16 - 30
Hard	8,000 - 16,000	31 - 50
Very Hard	Over 16,000	Over 50

Consistency of cohesive soils is based upon an evaluation of the observed resistance to deformation under load and not upon the Standard Penetration Resistance (N).

Density Classification	COHESIONLESS SOILS Relative Density %	Approximate Range of (N)
Very Loose	0 - 15	0 - 4
Loose	16 - 35	5 - 10
Medium Compact	36 - 65	11 - 30
Compact	66 - 85	31 - 50
Very Compact	86 - 100	Over 50

Relative Density of cohesionless soils is based upon the evaluation of the Standard Penetration Resistance (N), modified as required for depth effects, sampling effects, etc.

SAMPLE DESIGNATIONS

AS -	Auger Sample - Cuttings directly from auger flight
BS -	Bottle or Bag Samples
S -	Split Spoon Sample - ASTM D 1586
LS -	Liner Sample with liner insert 3 inches in length
ST -	Shelby Tube sample - 3 inch diameter unless otherwise noted
PS -	Piston Sample - 3 inch diameter unless otherwise noted
RC -	Rock Core - NX core unless otherwise noted

STANDARD PENETRATION TEST (ASTM D 1586) - A 2.0 inch outside-diameter, 1-3/8 inch inside-diameter split barrel sampler is driven into undisturbed soil by means of a 140-pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven three successive 6-inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).

ADDENDA

CITY OF BIRMINGHAM
EDGEWOOD ROAD PAVING PROJECT
CONTRACT #6-24(S)

ADDENDUM
NO. 1

Wednesday, December 13, 2023

The following is a summary of scope of work changes incorporated into the project as Addendum #1.

The following summary is provided to overview revisions to the bid documents:

1. Project Drawings

- a. All Sheets – Re-issued to reflect 12/13/23 Addendum #1 issuance date.
 - i. Sheets are otherwise unchanged unless noted below.
- b. Sheet C1 – Paving and Utility Plan Sta. POB-5+00
 - i. New Combined Manhole 43 and associated drainage structures 43a and 43b have moved south as part of overall grading revisions. The new location for drainage structures 43a and 43b are essentially at the same location as the existing structures which will be removed.
 - ii. Structure 43b has been changed from a 2' inlet to a 4' diameter catch basin and will need to be constructed online of the existing 12" storm pipe that connects northwest at the existing structure.
 - iii. The new location for combined manhole 43 results in minor changes to 15" and 18" diameter combined sewer quantities and inverts.
- c. Sheets C2-C4 - Paving & Utility Plans
 - i. Various minor rim elevation changes have been made to existing structure adjustments and proposed structures as part of minor overall grading revisions.
- d. Sheets C7-C8 – Supplemental Sewer Profile Plans
 - i. Profile has been updated on sheet C7 to reflect relocation of pipe section MH43-Cb43a-CB43b.
 - ii. Other miscellaneous drawing clarifications have been made to reflect overall design.
- e. Sheets C9-C12 – Grading Plans
 - i. Minor grading changes have been made throughout the project limits to reduce several driveway approach slopes.
 - ii. Minor grading changes have been made to accommodate relocation of MH43-CB43a-CB43b.
 - iii. Additional information has been provided for vertical curve grading adjustments at high points and low points (catch basin rims).

- f. Sheet C13 – Intersection Grading Details
 - i. Additional 10-scale grading details are provided for driveway approach and sidewalk replacement areas in front of the YMCA (#400 E. Lincoln) and Grace Baptist Church (#280 E. Lincoln).
 - ii. Drainage arrows have been added to visually depict surface drainage patterns.
 - g. Sheet C14 – Existing and Proposed Road Cross-Sections
 - i. Concrete pavement jointing details have been added to reflect joint details 5 and 6 in the proposed concrete pavement cross-section and other typical standards.
 - ii. Typical pavement cross-slopes have been revised on proposed road cross-section to match updated grading.
 - iii. Notes have been added to proposed cross-section to clarify typical curb heights: 6" on the west side of Edgewood Road and 5" on the east side of Edgewood Road.
 - h. Sheet C18 - Notes & Details (3 of 3)
 - i. Minor updates have been made to 6" underdrain detail to clarify typical surface to invert depth and to the "Birmingham roll" curb detail to clarify typical curb heights.
 - i. Quantities Sheet
 - i. Updated quantities are provided to match the revised bid proposal form (Specification Section 100).
 - ii. Pay item quantities that have been revised from previous include: 18" combined sewer, 15" combined sewer, 15" storm sewer, 12" storm sewer, 4' diameter catch basins, 2' diameter inlets, 6" concrete sidewalk, and earth excavation (alternate #1 and #2).
- 2. Specification Section 95 – Sworn Statement of Qualifications**
- a. The due date to submit this document has been extended to Tuesday December 19th at 5:00 pm.
 - b. Both the previous and re-issued form will be acceptable to use in the submittal of this document.
- 3. Specification Section 100 – Proposal Form:**
- a. Proposal form has been updated to reflect acknowledgement of Addendum #1 issued 12/13/23. This form must be used for bid submissions.
 - b. Pay item quantities have been changed to reflect addendum #1 changes as noted herein.
 - c. Bidders are required to complete both Alternate #1 and Alternate #2 sections of the proposal and provide two separate total bid numbers including the respective paving alternates and also the Grant Street Water Main Replacement Pay Items.

End of Addendum

CITY OF BIRMINGHAM
EDGEWOOD ROAD PAVING PROJECT
CONTRACT #6-24(S)

ADDENDUM
NO. 2

Friday, December 15, 2023

The following is a summary of scope of work changes incorporated into the project as Addendum #2.

The following summary is provided to overview revisions to the bid documents:

1. Clarifications: The following are clarifications being provided in response to questions received from bidder(s):

- a. Bid Item 48: Install Curb Stop & Box. Per Supplemental Specifications Section 900, 1.22, this pay item shall include furnishing of required materials (curb stop valve & box). This is a change from previous contracts in the City of Birmingham where materials were previously furnished by the City.
- b. All water main pipe material on Grant Street shall be bid as Class 54 D.I.P. per the drawings. All water main pipe material on Edgewood Road shall be Class 52 D.I.P. per the drawings.

2. Specification Section 100 – Proposal Form:

- a. Proposal form has been updated to reflect acknowledgement of Addendum #2 issued 12/15/23. This form must be used for bid submissions.
- b. Bid Item 60:
 - i. The name of this pay item has been revised to: "Remove and Replace Lincoln Avenue Composite Pavement". The purpose of the name change is to clarify that pavement removal is included in this lump sum pay item, as described in the Supplemental Specifications Section 900, 1.34.
 - ii. This lump sum pay item shall also include removal and replacement of the 4" wide white pavement parking markings located directly north of Edgewood Road on the north side of Lincoln Avenue. Removal of the markings will be required prior to work is occurring within Lincoln Avenue to shift west-bound traffic away from the work zone while a lane closure & detour is in place for east-bound traffic. Replacement of the markings shall occur upon completion of the work in Lincoln Avenue, and materials may be either waterborne paint or polyurea.
- c. Bid Item 74: Mobilization (Max. 5% of Bid). This pay item has been moved to the alternate 1 and alternate 2 sections of the Proposal Form to allow for bidders to provide a separate mobilization cost associated with the two paving alternates. Each number provided must be no greater than 5% of the "Overall Contract" total bid value listed on

page 14 of the Proposal Form for each applicable alternate. It is also noted that the "Overall Contract" bid numbers for both paving alternates shall include the total cost for the "Grant Street Water Main Pay Items".

End of Addendum

**CITY OF BIRMINGHAM
EDGEWOOD ROAD PAVING PROJECT
CONTRACT #6-24(S)**

**ADDENDUM
NO. 3**

Wednesday, December 20, 2023

The following is a summary of scope of work changes incorporated into the project as Addendum #3.

There are no changes to bidding documents included with Addendum #3. The following summary is provided for clarification purposes:

1. Specification Section 100 – Proposal Form:

- a. The latest Proposal form that was issued on Friday 12/15/23 as part of Addendum #2 shows the incorrect unit of measurement for pay item #12. The proposal currently shows "Sewer Service, 6" PVC SDR 23.5" to be paid for as an "Each" item. This should be bid as a "Linear Foot" or "LF" unit of measurement.
- b. Bidders are asked to write in today's date of 12-20-23 and acknowledgment of receipt of Addendum #3 on page 1 of their submitted bid proposal form.

End of Addendum



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
02/08/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER FEDERATED MUTUAL INSURANCE COMPANY HOME OFFICE: P.O. BOX 328 OWATONNA, MN 55060	CONTACT NAME: CLIENT CONTACT CENTER PHONE (A/C, No, Ext): 888-333-4949 FAX (A/C, No): 507-446-4664 E-MAIL ADDRESS: CLIENTCONTACTCENTER@FEDINS.COM
INSURED EMINENT EXCAVATING LLC 514 S FORT ST DETROIT, MI 48217-1403	INSURERS AFFORDING COVERAGE NAIC # INSURER A: FEDERATED MUTUAL INSURANCE COMPANY 13935 INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES CERTIFICATE NUMBER: 36 REVISION NUMBER: 1

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR W/PT	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			1833004	05/10/2023	05/10/2024	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$100,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS & COMP/OP AGG \$2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			1833004	05/10/2023	05/10/2024	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per Person) BODILY INJURY (Per Accident) PROPERTY DAMAGE (Per Accident)
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION			1833006	05/10/2023	05/10/2024	EACH OCCURRENCE \$2,000,000 AGGREGATE \$2,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/ EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory In NH) If yes, describe under DESCRIPTION OF OPERATIONS below		<input type="checkbox"/> Y <input type="checkbox"/> N	1833005	05/10/2023	05/10/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L EACH ACCIDENT \$1,000,000 E.L DISEASE EA EMPLOYEE \$1,000,000 E.L DISEASE - POLICY LIMIT \$1,000,000
A	POLLUTION LIABILITY			1886940	02/08/2024	05/10/2024	EA POLL INCIDENT \$1,000,000 AGGREGATE \$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
SEE ATTACHED PAGE

CERTIFICATE HOLDER 496-867-3 CITY OF BIRMINGHAM PO BOX 3001 151 MARTIN BIRMINGHAM, MI 48012-3001	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
--	--

**ADDITIONAL REMARKS SCHEDULE**

AGENCY FEDERATED MUTUAL INSURANCE COMPANY		NAMED INSURED EMINENT EXCAVATING LLC 514 S FORT ST DETROIT, MI 48217-1403	
POLICY NUMBER SEE CERTIFICATE # 36.1			
CARRIER SEE CERTIFICATE # 36.1	NAIC CODE	EFFECTIVE DATE: SEE CERTIFICATE # 36.1	

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM.

FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

CONTRACT #6-24S NFE PROJECT #M516
 RE: EDGEWOOD ROAD PAVING PROJECT, STARTING POINT: E LINCOLN AVE AND EDGEWOOD RD BIRMINGHAM MI, END POINT EDGEWOOD RD AND SOUTHLAWN BLVD, CITY OF BIRMINGHAM MI
 SUBJECT TO THE TERMS AND CONDITIONS OF THE POLICY, ADDITIONAL INSURED ALSO INCLUDES: THE CITY OF BIRMINGHAM, INCLUDING ALL ELECTED AND APPOINTED OFFICIALS, ALL EMPLOYEES AND VOLUNTEERS, ALL BOARDS, COMMISSIONS AND/OR AUTHORITIES AND BOARD MEMBERS, INCLUDING EMPLOYEES, CONSULTANTS, AND VOLUNTEERS THEREOF, NOWAK AND FRAUS ENGINEERS, PLLC, THEIR OWNERS, DIRECTORS, OFFICERS, CONSULTANTS, AGENTS, AND EMPLOYEES, AND G2 CONSULTING GROUP, LLC, THEIR OWNERS, DIRECTORS, OFFICERS, CONSULTANTS, AGENTS, AND EMPLOYEES.
 THE CERTIFICATE HDLOER IS AN ADDITIONAL INSURED SUBJECT TO THE CONDITIONS OF THE ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - AUTOMATIC STATUS WHEN REQUIRED IN A WRITTEN CONSTRUCTION AGREEMENT WITH YOU ENDORSEMENT FOR GENERAL LIABILITY.
 THE CERTIFICATE HOLDER IS AN ADDITIONAL INSURED SUBJECT TO THE CONDITIONS OF THE ADDITIONAL INSURED BY CONTRACT ENDORSEMENT FOR BUSINESS AUTO LIABILITY.
 INSURANCE PROVIDED BY THE GENERAL LIABILITY COVERAGE IS PRIMARY AND NONCONTRIBUTORY OVER OTHER INSURANCE.
 INSURANCE PROVIDED BY THE BUSINESS AUTO LIABILITY IS PRIMARY AND NONCONTRIBUTORY OVER OTHER INSURANCE.
 COMMERCIAL UMBRELLA FOLLOWS FORM ACCORDING TO THE TERMS, CONDITIONS, AND ENDORSEMENTS FOUND IN THE COMMERCIAL UMBRELLA POLICY.
 FOR REASONS OTHER THAN NON-PAYMENT OF PREMIUM, 30 DAYS NOTICE WILL BE PROVIDED TO THE CERTIFICATE HOLDER IN THE EVENT THAT THE ISSUING COMPANY CANCELS THE POLICY BEFORE THE EXPIRATION DATE OF THE POLICY.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY AND NONCONTRIBUTORY -
OTHER INSURANCE CONDITION**

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

- A.** The following is added to the **Other Insurance Condition** in the Business Auto Coverage Form and the **Other Insurance - Primary And Excess Insurance Provisions** in the Motor Carrier Coverage Form and supersedes any provision to the contrary:
This Coverage Form's Covered Autos Liability Coverage is primary to and will not seek contribution from any other insurance available to an "insured" under your policy provided that:
1. Such "insured" is a Named Insured under such other insurance; and
 2. You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to such "insured".
- B.** The following is added to the **Other Insurance Condition** in the Auto Dealers Coverage Form and supersedes any provision to the contrary:
This Coverage Form's Covered Autos Liability Coverage and General Liability Coverages are primary to and will not seek contribution from any other insurance available to an "insured" under your policy provided that:
1. Such "insured" is a Named Insured under such other insurance; and
 2. You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to such "insured".

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED BY CONTRACT ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE PART

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

A. WHO IS AN INSURED for "bodily injury" and "property damage" liability is amended to include:

Any person or organization other than a joint venture, for which you have agreed by written contract to procure bodily injury or property damage "auto" liability insurance arising out of operation of a covered "auto" with your permission. However, this additional insurance does not apply to:

- (1) The owner or anyone else from whom you hire or borrow a covered "auto". This exception does not apply if the covered "auto" is a "trailer" connected to a covered "auto" you own.
- (2) Your "employee" if the covered "auto" is owned by that "employee" or a member of his or her household.
- (3) Someone using a covered "auto" while he or she is working in a business of selling, servicing, repairing, parking or storing "autos" unless that business is yours.
- (4) Anyone other than your "employees", partners (if you are a partnership), members (if you are a limited liability company), or a lessee or borrower or any of their "employees", while moving property to or from a covered "auto".
- (5) A partner (if you are a partnership), or a member (if you are a limited liability company) for a covered "auto" owned by him or her or a member of his or her household.

B. The coverage extended to any additional insured by this endorsement is limited to, and subject to all terms, conditions, and exclusions of the Coverage Part to which this endorsement is attached.

In addition, coverage shall not exceed the terms and conditions that are required by the terms of the written agreement to add any insured, or to procure insurance.

C. The limits of insurance applicable to such insurance shall be the lesser of the limits required by the agreement between the parties, or the limits provided by this policy.

D. Additional exclusions. The insurance afforded to any person or organization as an insured under this endorsement does not apply:

1. To "loss" which occurs prior to the date of your contract with such person or organization;
2. To "loss" arising out of the sole negligence of any person or organization that would not be an insured except for this endorsement.
3. To "loss" for any leased or rented "auto" when the lessor or his or her agent takes possession of the leased or rented "auto" or the policy period ends, whichever occurs first.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY AND NONCONTRIBUTORY -
OTHER INSURANCE CONDITION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

- (1) The additional insured is a Named Insured under such other insurance; and

- (2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED - OWNERS, LESSEES OR
CONTRACTORS - AUTOMATIC STATUS WHEN
REQUIRED IN A WRITTEN CONSTRUCTION
AGREEMENT WITH YOU**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

A. Section II - Who Is An Insured is amended to include as an additional insured any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured.

However, the insurance afforded to such additional insured:

1. Only applies to the extent permitted by law; and
2. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

A person's or organization's status as an additional insured under this endorsement ends when your operations for that additional insured are completed.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:
 - a. The preparing, approving, or falling to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
 - b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

2. "Bodily injury" or "property damage" occurring after:

- a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
- b. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III - Limits Of Insurance:**

The most we will pay on behalf of the additional insured is the amount of insurance:

- 1. Required by the contract or agreement you have entered into with the additional insured; or
- 2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

Federated Mutual Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

LIMITED AMENDMENT OF CANCELLATION PROVISIONS

All Coverage Parts included in this policy are subject to the following conditions:

If we cancel this policy, we will mail advance notice to the person(s) or organization(s) as shown in the Schedule.

SCHEDULE

Name and Address of Person(s) Or Organization(s): City of Birmingham 151 Martin PO Box 3001 Birmingham, Mi 48012
Number of days advance notice for any reason other than non-payment of premium: 30
Number of days advanced notice for non-payment of premium: See Common Policy Conditions

Insured: Eminent Excavating LLC
514 S Fort St
Detroit, MI 48217-1403

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WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY

AMENDMENT OF CANCELATION CONDITIONS

This endorsement, effective on 02/08/2024 at 12:01 A.M. standard time, forms a part of

Policy No. 1833005

Issued to Eminent Excavating LLC

Issued by Federated Mutual Insurance Company

Endorsement No.

Authorized Representative

The Cancellation Condition of this policy is extended as follows:

We may cancel this policy by mailing or delivering to you written notice of cancellation at least **30** days before the effective date of cancellation if we cancel for any reason other than non-payment of premium.

AGENCY CUSTOMER ID: _____
LOC #: _____



ADDITIONAL REMARKS SCHEDULE

Page ____ of ____

AGENCY Federated Mutual Insurance Company		NAMED INSURED City of Birmingham Michigan	
POLICY NUMBER		151 Martin	
CARRIER		NAIC CODE	PO Box 3001
			Birmingham MI 48012
		EFFECTIVE DATE:	

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: _____ FORM TITLE: _____

[Empty box for additional remarks]



MEMORANDUM

Engineering Department

DATE: February 26, 2024

TO: Jana L. Ecker, City Manager

FROM: Melissa A. Coatta, City Engineer

SUBJECT: North Adams Road Traffic Study

INTRODUCTION:

The north end of Adams Road, from Madison Street to the northern City limits, is planned to be paved this summer/fall and budgeted for in fiscal year 24/25. The Engineering Department had a traffic study completed and recommends reducing the existing 4 road lanes to 3 road lanes.

BACKGROUND:

North Adams Road from Madison Street to the northern City limits, just north of Adams Road Bridge, has been in the capital improvement plan since the City's budget in 2019/2020. The project goal is to repave the road with minor water and sewer improvements in the summer/fall of 2024.

The Engineering Department had a traffic study completed on this corridor of Adams Road due to the existing 3 lanes south of Madison Street, which recommends a road diet from 4 lanes to 3 lanes. A road diet is a reduction in through traffic lanes. The most common type of road diet is converting existing 4 lanes, two lanes in each direction, to 3 lanes, one lane in each direction with a center turn lane. The City previously completed a road diet on Maple Road from the western City limits to Southfield Road. The preliminary goal of a road diet is improving safety and reducing traffic crashes which are typically rear-end.

The Engineering firm Fleis & Vandenbrink completed the field data in March 2023 and provided a preliminary traffic study to the Multi-Modal Transportation Board in May 2023. The final traffic study was completed in June 2023 and recommends reducing the existing 4 lanes to 3 lanes.

LEGAL REVIEW:

The City Attorney has reviewed the suggested resolution and has no objections.

FISCAL IMPACT:

Design engineering for this project is in the 23/24 fiscal year and the construction of the project is proposed for fiscal year 24/25.

SUSTAINABILITY:

The road diet study shows safety improvement and reduced crashes along the North Adams Roads corridor.

PUBLIC COMMUNICATIONS:

This item was presented in a public setting at the Multi-Modal Transportation Board in May 2023. Future communication with property owners in and near the project will occur before the project is started, and updates will be provided during construction.

SUMMARY:

The Engineering Department recommends North Adams Road from Madison Street to the northern City limits be reduced from existing 4 lanes to 3 lanes. Once a recommendation is made by the City Commission for road design, the Engineering Department will proceed with the final design.

ATTACHMENTS:

- [Adams Road Traffic Study](#)
- 5/4/2023 Multi-Modal Transportation Board Meeting Minutes
- PowerPoint Presentation

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution to direct the Engineering Department to proceed with the final design of the North Adams Road Project from Madison Street to the northern City limits to reduce the existing 4 lanes to 3 lanes.

City Of Birmingham Multi-Modal Transportation Board
Thursday, May 4, 2023

151 Martin Street, City Commission Room 205, Birmingham, MI

Minutes of the regular meeting of the City of Birmingham Multi-Modal Transportation Board held Thursday, May 4, 2023. Chair White convened the meeting at 6:00 p.m.

A. Rollcall

Present: Chair Doug White, Vice-Chair Tom Peard; Board Members David Hocker, Anthony Long, Victoria Policicchio; Student Representatives Sophie Hanawalt, Angie Sharma

Absent: Board Member Mark Doolittle, Joe Zane; Alternate Board Members Gordon Davies, Patrick Hillberg

Staff: Senior Planner Cowan; City Engineer Coatta, City Transcriptionist Eichenhorn, Police Captain Kearney

F&V: Julie Kroll

MKSK: Brad Strader

B. Introductions & Chair Comments

VC Peard provided introductory comments.

C. Review of the Agenda

D. Approval of MMTB Minutes of March 2, 2023

Motion by VC Peard

Seconded by Mr. Long to approve the MMTB Minutes of March 2, 2023 as amended.

Motion carried, 5-0.

VOICE VOTE

Yeas: Policicchio, Hocker, Peard, White, Long

Nays: None

E. Unfinished Business

1. S. Eton Road Design Concepts, 14 Mile to Yosemite

Staff, Mr. Strader, and Ms. Kroll presented the item and answered informational questions from the Board.

Board discussion was as follows:

- There was an increased opportunity to improve the safety of S. Eton since the road was

- being reconstructed;
- There should be a bidirectional bike lane on one side of the street, and all of the on-street parking should be preserved;
 - Option C3 could be modified to have 20 feet for parking and a 2.5 foot buffer zone on each side;
 - It might be possible to reduce the parking while improving the sight distance;
 - It did not seem possible to entirely preserve the parking given that drivers and pedestrians reported the sight distances were unsafe and the area does not meet the City's sight distance standards;
 - The elimination of the two feet off the amenity zone on the west side maybe be prohibitive for people trying to park;
 - It might be appropriate to modify Option C1 for south of Lincoln to preserve but reduce the parking and also to preserve but reduce the amenity zone in order to increase green space; and,
 - Staff's and Consultants' work was appreciated by the Board.

In reply to Board discussion, Staff and Consultants said:

- A 2.5 foot buffer zone could be explored, but might cause issues with vehicle door openings entering the bike lane;
- The Police Department was not in favor of maintaining the bidirectional bike lane because it is an unexpected design and creates difficult to manage conditions at the intersection with Yosemite;
- It might be possible to reduce the curb on the west side of the street and to reduce, but not eliminate, parking in order to improve sight distances;
- While it might be possible to do 'Small Car Only' parking in certain spots to improve sight distances, drivers tend to disregard those signs;
- Staff and Consultants would return with a design with bump outs and pedestrian island crossings for north of Lincoln; and,
- Board consensus seemed to be to leave the green space at the intersection of Lincoln and S. Eton instead of potentially using it for parking/

Public Comment

Carol Tardie recommended a four-way stop at Bradford and S. Eton and a sign at 14 Mile and S. Eton that prohibits through traffic between 4 p.m. and 6 p.m.

Larry Bertollini supported no additional parking at Lincoln and S. Eton, the potential removal of the amenity zones, and a potential bidirectional bike lane. He asked if there were catch basins on S. Eton south of Lincoln.

Denise Rumzey supported signage for the public parking in front of Bolyard Lumber and no additional parking at Lincoln and S. Eton. She did not support widening the south part of S. Eton from Lincoln to 14 Mile.

Claudia Unruh reviewed her email to the Board. She added that safety should be the City's priority, that the removal of parking would be an evidence-based change for improving safety significantly, and that she would be interested in learning more about evidence-based traffic calming measures. She asked whether a study had been conducted to prove that on street parking on S. Eton had

to be maintained.

Mr. Long thanked the public for their participation. He said there was a need for parking on S. Eton, especially closer to Maple. He ventured that removing parking from S. Eton would result in more parking on the adjacent streets.

The Chair also thanked the public for their participation.

2. Adams Road – Road Diet DRAFT Review

SP Cowan introduced the item. Ms. Kroll presented the item and answered informational questions from the Board.

Mr. Hocker noted that while emergency vehicles could use the middle lane generally, Adams has a break in the middle lane at Lake Park which would prevent emergency vehicles from being able to continue down the middle lane without stopping.

In reply to Mr. Hocker, Ms. Kroll noted that vehicles should be allowing emergency vehicles to pass. She said she would solicit feedback from the Fire Department on road diets.¹

VC Peard and Mr. Long said that while they had been skeptical about the Maple road diet, it ended up being a very beneficial change.

Mr. Hocker said the Maple road diet increased the volume of traffic on nearby streets.

Ms. Hanawalt said the Adams road diet might increase traffic and speed in the Poppleton Park neighborhood. She recommended speaking to the residents of the neighborhood.

F. New Business

G. Meeting Open to the Public for items not on the Agenda

H. Miscellaneous Communications

1. Multi-Modal Transportation Day 2023 Planning

SP Cowan presented the item.

Motion by Ms. Policicchio

Seconded by VC Peard to schedule a special meeting of the Multi-Modal Transportation Board for May 25, 2023 at 12 p.m.

Motion carried, 5-0.

VOICE VOTE

Yeas: Policicchio, Hocker, Peard, White, Long

Nays: None

I. Next Meeting

¹ As amended at the June 1, 2023 meeting.

J. Adjournment

No further business being evident, the Board adjourned at 8:03 p.m.



Brooks Cowan, Senior Planner Director

Laura Eichenhorn, City Transcriptionist

DRAFT

North Adams Road Traffic Study

Madison Ave. to Northern City Limits

Engineering
Department

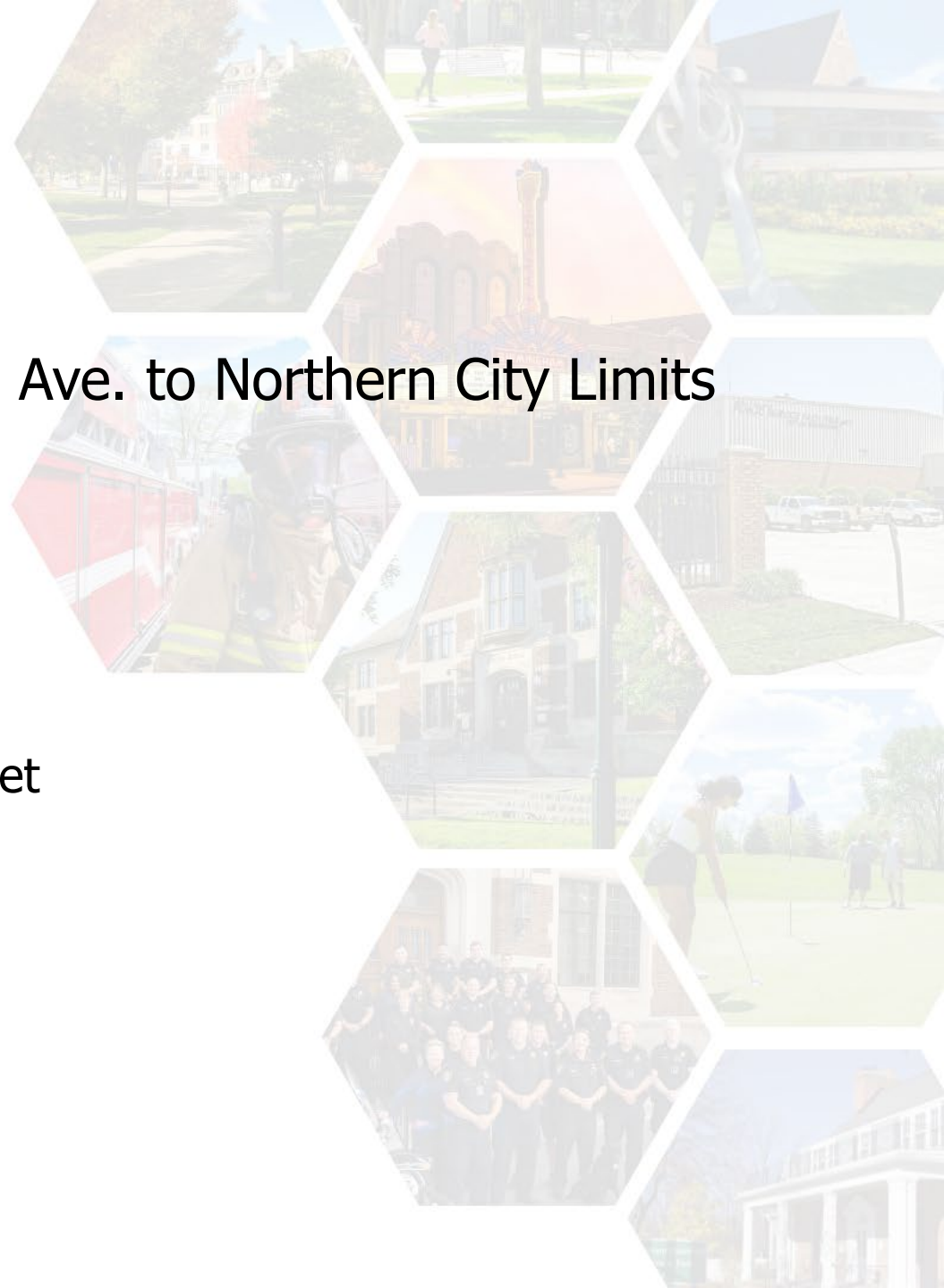
Date: March 4, 2024



North Adams Road Traffic Study

Introduction

- North Adams Road Resurfacing: Madison Ave. to Northern City Limits
 - Road Resurfacing
 - Minor sewer improvements
 - Minor water main improvements
- Schedule
 - Design Engineering in 23/24 fiscal year budget
 - Construction in 24/25 fiscal year budget
 - Construction: Summer/Fall 2024



North Adams Road Traffic Study

Background

- Capital Improvement Program
 - First time included was in fiscal year 19/20 for road resurfacing
- Current Road Conditions:
 - Four lanes of traffic:
 - Two Northbound Lanes
 - Two Southbound Lanes
 - South of this section of Adams road is three lanes:
 - One Northbound Lane
 - One Southbound Lane
 - One Center Turn Lane



North Adams Road Traffic Study

Exhibit 1: Existing N. Adams Road Geometry



North Adams Road Traffic Study



North Adams Road Traffic Study

Traffic Study

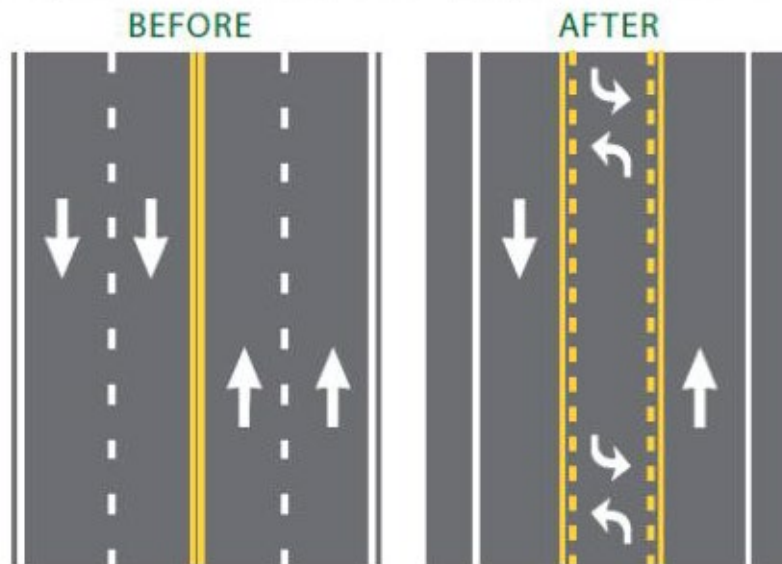
- Fleis & Vandenbrick
- Data Collected in March 2023
- Presented to Multi-Modal Transportation Board in May 2023
- Final Study Completed in June 2023



North Adams Road Traffic Study

Traffic Study

- Results recommends a road diet reducing roadway to three lanes
 - Most common road diet is four lanes to three lanes
 - Improves safety
 - Reduces crashes along Adams Road by 13%-14%



8A

North Adams Road Traffic Study

Traffic Study

- Previous Locations of Road Diet:
 - Adams Road – 2003: North of Woodward to north of Maple Road
 - 4 Lanes to 3 Lanes
 - Maple Road – 2016: East of Cranbrook Road to Southfield Road
 - 4 Lanes to 3 Lanes
 - Cranbrook Road – 2020: Lincoln Road to south of Maple Road
 - 4 Lanes to 3 Lanes



North Adams Road Traffic Study

Summary

- Recommend Engineering Department to complete final design of North Adams Road from Madison Street to the northern City limits to include reducing the existing four lanes to 3 lanes as recommended in the Traffic Study





MEMORANDUM

City Manager's Office

DATE: February 21, 2024

TO: City Commission

FROM: Jana L. Ecker, City Manager

SUBJECT: Establishment of an Ad Hoc Senior/Recreation Center Committee

INTRODUCTION:

The City of Birmingham, like the rest of the country, is watching its population age. By 2040, approximately one in five Americans will be age 65 or older, up from approximately one in eight in 2000. Research is needed to determine the specific demographic trends occurring and forecast to occur within the City, and to determine the type of services needed to support these demographic changes.

BACKGROUND:

The City Commission adopted strategic goals in November of 2022, which included supporting an engaged and connected community by offering City services and amenities that enrich the lives of residents of all ages as a main goal. This strategic goal includes a recommendation to "create a task force to facilitate an aging in place plan, develop a plan for a permanent senior/community center to house NEXT senior services and to offer space for multigenerational programs, engage with youth in the community with a teen board or committee".

Based on the goals identified in the Strategic Plan, the City Commission purchased the current YMCA building and property at 400 E. Lincoln in July 2023. The property was proposed for future use as a senior/recreation center, including the future home of Birmingham NEXT, other recreational services to be provided by the YMCA or others, the possible relocation of the Birmingham Parks and Recreation Division, community meeting space and/or similar uses.

City staff now recommends creating a new ad hoc committee with a distinct name and a specific scope of work to oversee the development of a senior/recreation center. The function of the Ad Hoc Senior/Recreation Center Committee (SCC) would be to provide oversight and input on the planning and development of a senior/recreation center at 400 E. Lincoln, and to provide recommendations throughout the process to the City Commission.

The scope of work of the SCC could include the following:

- Crafting the project vision, goals and objectives
- Preparing the project process outline and estimated timeline
- Reviewing final needs analysis report
- Evaluating concept plan options and recommending the preferred option
- Outlining the parameters and applicable regulations for site plan and design review
- Conducting final site plan and design review
- Reviewing potential funding options
- Recommending the use of consultants for design and/or build services
- Drafting RFPs for final design, construction plan preparation and/or construction

LEGAL REVIEW:

The City Attorney has reviewed the resolution and has no concerns or objections.

FISCAL IMPACT:

There are no fiscal impacts associated with this agenda item at this time.

PUBLIC COMMUNICATIONS:

There are no public communications required for this agenda item.

SUMMARY:

The City Commission may wish to adopt a resolution to establish the Ad Hoc Senior/Recreation Center Committee, to be composed of seven members representing the City Commission, Planning Board, Parks and Recreation Board, Architectural Review Committee, Ad Hoc Aging in Place Committee, Birmingham NEXT, and the Birmingham YMCA.

ATTACHMENTS:

- Exhibit A – Ad Hoc Senior/Recreation Center Committee

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution to establish the Ad Hoc Senior/Recreation Center Committee for a term of 3 years, and to direct the City Manager to serve as an ex-officio member of the committee to facilitate the oversight and provision of input on the planning and development of a senior/recreation center at 400 E. Lincoln.

EXHIBIT A – AD HOC SENIOR/RECREATION CENTER COMMITTEE ROSTER



AD HOC SENIOR/RECREATION CENTER COMMITTEE

Terms: 3 years

Members: Seven members representing the City Commission, various City boards, Birmingham NEXT, and the Birmingham YMCA. A majority of the members shall be residents of Birmingham and qualified voters. Staff from the Managers Office will serve as ex-officio member(s) of the committee.

Duties: The function of the Ad Hoc Senior/Recreation Center Committee (SCC) is to provide oversight and input on the planning and development of a senior/recreation center at 400 E. Lincoln, and to provide recommendations throughout the process to the City Commission. The duties of the SCC include, but are not limited to:

- Crafting the project vision, goals and objectives
- Preparing the project process outline and estimated timeline
- Reviewing final needs analysis report
- Evaluating concept plan options and recommending the preferred option
- Outlining the parameters and applicable regulations for site plan and design review
- Conducting final site plan and design review
- Reviewing potential funding options
- Recommending the use of consultants for design and/or build services
- Drafting RFPs for final design, construction plan preparation and/or construction

Committee Members	Term Expires
City Commissioner	March 2027
Planning Board Member	March 2027
Parks and Recreation Board Member	March 2027
Architectural Review Committee Member	March 2027
Ad Hoc Aging in Place Committee Member	March 2027
NEXT Representative	March 2027
YMCA Representative	March 2027

Fwd: Senior/Community Center Feasibility Study Process

1 message

Jana Ecker <Jecker@bhamgov.org>
To: Alex Bingham <abingham@bhamgov.org>

Thu, Feb 29, 2024 at 12:05 PM

Jana L. Ecker
City Manager
Birmingham, MI
(248) 530-1811

----- Forwarded message -----

From: <bkoseck@comcast.net>
Date: Wed, Feb 28, 2024 at 12:29 PM
Subject: Senior/Community Center Feasibility Study Process
To: <emclain@bhamgov.org>, <kschafer@bhamgov.org>, <cballer@bhamgov.org>, <ahaig@bhamgov.org>, <bhost@bhamgov.org>, <along@bhamgov.org>, <vtlonge@bhamgov.org>
Cc: <jecker@bhamgov.org>, <cbraun@birminghamk12.mi.us>

CITY COMMISSIONERS – BIRMINGHAM, MICHIGAN

REGARDING: SENIOR CENTER FEASIBILITY STUDY

February 26, 2024

My name is Bert Koseck. I am a resident of the City of Birmingham (36-years), a licensed architect (37-years), a former member of the Board of Zoning Appeals (18-years), and current member of the Planning Board (9-years). My letter here is from the perspective of a resident/taxpayer who deeply cares about my community and my expertise as an architect.

I am retired from an architectural firm where I had extensive experience in the programming and design of community and recreation centers. Projects varied in size and scope from small renovations to the design of one of the largest community/recreation centers in our state (examples include the Livonia Community/Recreation Center, Macomb Community Center, Van Buren Township Community Center, Greater Midland Community Center, Ann Arbor YMCA, Wayne County Community College Recreation Center... These alone add up to over 800,000 SF in area and \$360M in cost).

My experience allows me to understand the importance of the process in the development of a community building. With the onset of the making of a new home for NEXT, the process should not be viewed simply as "just the first step" but instead, "the most important step." This initial feasibility study will determine the destiny of this community center and for better or worse, our city will live with and pay for the result for many decades to come. The work product from this phase should provide the city with information that will help the city in making "informed decisions." To maximize our success, it should be led by people that have vast expertise in the programming and design of community centers, have done research and have knowledge of future trends, provide data and metrics for honest evaluation, and create a functional design response.

A WELL-DESIGNED SENIOR/COMMUNITY CENTER

I have witnessed this.....A well programmed and designed community center will draw people to the building, create human connections, and provide a sense of joy and belonging. All things that our new Birmingham Master Plan promotes to improve social connections and make for

desirable place to live. For us, as a bonus, we have the opportunity to have a community center that will revitalize or replace a highly visible aging building, is centrally located, easily accessible, and adjacent to a public park.

A POORLY DESIGNED SENIOR/COMMUNITY CENTER

Unfortunately, I have also witnessed this.....If not done right, a poor design could simply just provide for the “container” of the program spaces and be expensive to maintain and operate. Rooms may be too small, too large, or irregularly shaped to properly function. Spaces may not have the flexibility for multi-use or to accommodate future trends. There may be an abundance of expensive non-program type spaces (corridors, stairs, ramps). If the scientifically determined space program were to call for a 20,000 SF only utilizing 50% of the existing YMCA building, “inventing” additional programs to fill the building will come at a substantial initial cost and the future expenses to maintain and operate. An example might be the Parks and Recreation offices – What would dictate that they would be relocated to the YMCA building? Has their staff size substantially grown, does their current location not function, has their current space been analyzed to see if it could be reconfigured and improved, does it need to be in the new community center building? Maybe it should be for all good reasons, but not just to “fill space.”

CRITICISM OF THE PROCESS

I know that there are many things that have influenced the project to date. Please accept my thoughts below as being positive, with the intent of helping the positive outcome of the project. My perspective on this comes from many years of experience in reading and responding to hundreds of RFP's issued by government entities, including community centers. In my opinion, the process to date has had a number of issues or missed opportunities. The RFP was vaguely written, the proposal review team did not include the appropriate expertise in evaluating proposals for this type of project, the evaluation team shortlist process and metrics were not clearly articulated, the two finalist written proposals were difficult to clearly understand the experience of the firms and team members' involvement in relevant projects, and the City Commission interview format and allocated time frame made it impossible to clearly understand each of the teams project approach and the expertise of the individuals.

WHERE SHOULD BE GO FROM HERE?

At this point, the City Commission has selected an architect consultant. I would hope that the architect consultant firm team members consist of people passionate about the project, have vast expertise with community centers, include someone that is skilled at leading the programming and public engagement discussion, have a talented designer who can arrive at a functional and beautiful design response, understand land planning principals including our city and the unique context of the site, and can quantify this information so that we are making smart decisions. How might we as a city move forward for this phase of the project to maximize its success for Birmingham? I offer the following:

A. OWNER'S REPRESENTATIVE

Who among the city staff has the complete skillset to guiding us through this process? Who has the expertise in helping us in the selection of the most appropriate architects, engineers, and contractors for this unique project type as well as the financial aspects of the project? The federal government and other entities such public universities and health care systems have full-time staff that provide these tasks every day. For a small municipality like Birmingham, the selection of an architect for a specific building type as a community center happens rarely. Engaging an owner's representative, with specific expertise with community centers would bring great value to us. Their proven experience could help us understand what neighboring communities have or are doing, guide us in establishing the criteria for selection of consultants and contractors, managing the overall process, and understanding all relevant financial aspects of the project. Their fees are typically offset by the value they bring during the pre-construction and construction phases through owner occupancy of the building.

B. STAKEHOLDER COMMITTEE

Create a Stakeholder Committee (or whatever name we want to apply to this) consisting of a number of people representing the City of Birmingham residents and NEXT members that bring an understanding of the project and some unique relevant expertise. We are blessed with having some amazing people with various backgrounds in our community. Let us tap into that expertise. Possible Stakeholder Committee members could include:

- City Commissioners (2)

Are residents/taxpayers, elected by the people, will have an intimate understanding of the project, and provide seamless communication from the committee to commissioners.

- **NEXT Board Members (2)**

Are residents/taxpayers, understand the mission and needs of NEXT.

- **Planning Board Member (1)**

Is a resident/taxpayer, understands planning and zoning expectations.

- **Architect (1)**

Is a resident/taxpayer, ideally would have an understanding of municipal and community center type projects.

- **Engineer (1)**

Is a resident/taxpayer, ideally would have an understanding of civil and/or mechanical engineering.

- **Construction Contractor (1)**

Is a resident/taxpayer, should be experienced with commercial/institutional type projects.

In addition to the Stakeholder Committee members, of course the City Manager and NEXT Director, and possibly the Parks and Recreation Director, should be participants in all related interactions throughout the project.

C. PROJECT VISION/GOALS AND WORKPLAN

The City Commission and/or Stakeholder Committee should establish the “guiding principles” for the project including goals and metrics for evaluation. The architect consultant should include this as a driving force for the process and work plan.

D. TOURS

The Stakeholder Committee should tour, along with the architect consultant, other senior/community facilities to learn what others have done, what works, and what does not work (lessons learned). This is a very affective way for people to become familiar with the building type and reference throughout the process.

E. SURVEY

Is this necessary and how would it bring value? If yes, then what level of survey is expected (simple Survey Monkey or engaging an expert in conducting a scientific survey)? The results and costs can vary significantly. How will this inform the space program or design? May be a good idea to show community support (or maybe not).

F. PROGRAMMING

The space and functional program should be developed on what the unique desired needs are of the community (not how to use/fill an existing building).

G. EXISTING CITY-OWNED YMCA

The existing YMCA building should be understood in layout, conditions, deficiencies, code issues, function, hazardous environmental materials, etc., and quantified.

H. CONCEPTUAL DESIGN

The desired program should then explore how it can be accommodated within the existing building and what modifications and improvements are required. As an alternative, a new building option should be conceptually designed, also incorporating the desired program (maybe the new building is constructed in the parking lot adjacent to the existing YMCA building, completed, occupied, and then the existing building demolished).

I. DESIGN EVALUATION

Both the existing building renovation and new building options should be compared based on how they function and meet project needs (note that a poorly functioning building may be fragmented, not make for a good social environment, and require more staffing to manage adding significantly to cost over the years). The level of design should be very simple and conceptual in nature. No expression of architecture or renderings are required for this evaluation phase of the project. The project cost, function, and schedule will probably influence the final selection, not pretty pictures.

J. COST EVALUATION

Both the existing building renovation and new building options should be compared based on cost. Cost estimates must include ALL related costs such as:

- Architectural and Engineering Fees
- Site Improvements
- Selective Demolition
- Environmental Abatement
- Construction Cost
- Surveys, Testing, Permit and Inspection Fees
- Furniture, Fixtures, Equipment, Security and Technology Systems
- Moving Expenses
- Commissioning Costs
- LEED Associated Costs (if desired)
- Operation Costs including Staffing, Utilities, and Maintenance (typically represent 1/3 of total project cost!)
- Cost Estimate Contingencies (many unknowns at this early stage, especially with an existing building, should be 10% to 15%)
- Cost Escalation (5% needs to be added to total cost each year from when construction start is anticipated for anticipated inflation)

Total cost estimates should be calculated for all options under consideration as follows:

- At the completion of construction and owner occupancy
- At a period 10-years after completion of construction and owner occupancy

Note that it is possible that one option may have a lower “first cost” but in comparison could be significantly higher at a 10-year mark. How might that influence our decision on the most appropriate solution for us? Again, we need to make informed decisions.

K. PROJECT SCHEDULE

If a Stakeholder Committee could be put in place over the next few weeks, I believe the Programming and Conceptual Design Phases for the project could be accomplished in 8-12 weeks. Circumventing this process could adversely impact the outcome of the project for decades. Why the rush?

CONCLUSION

In conclusion, this senior/community center is important to our community. Not just as a civic “building” but how it can positively contribute to the life of our residents. This initial project phase is THE MOST IMPORTANT in the making of a community center. Let’s not simply make preconceived presumptions. Let’s do our “homework” as a community and help our architect consultant provide us with the most appropriate and successful outcome.

Sincerely,

Bert Koseck (a resident, architect, and taxpayer)



MEMORANDUM

Parking Division

DATE: February 28, 2024

TO: Jana L. Ecker, City Manager

FROM: Aaron Ford, Parking Systems Manager

SUBJECT: 2023-24 On-Street Parking Changes

INTRODUCTION:

Staff is proposing to make two changes to the current on-street parking system with the intent of improving the parking experience in the downtown area. Based on feedback from guests parking in the city, staff is proposing to increase one (1) hour zones to two (2) hour zones, and to expand the current pilot program of short-term 15-minute parking across the downtown area.

BACKGROUND:

The City currently uses CivicSmart LNG Smart Meters. Guests can pay for their parking at the meters using coins (least popular), credit cards (2nd most popular), and ParkMobile (mobile app, most popular). The City currently has four different time zones that restrict the maximum time a person can park at a meter: 1 hour, 2 hours, 4 hours, and 12 hours. Patrons can park in a metered parking space for one of the 4 time frames from 9 a.m. – 5 p.m. From 5 p.m. – 9 p.m. the time limits at the 1 hour and 2 hour zones extend to 4 hours so patrons are not forced to move their vehicles during that time. Currently, parameters are in place that prevent a patron from being able to pay by credit card or ParkMobile after the max time (1, 2, 4, 12 hours) has been reached in parking zone. Therefore, a patron must move their vehicle to another zone or receive a citation.

With the implementation of the road improvements on both Maple and Old Woodward and the boom of pick-up / deliveries following COVID-19, downtown Birmingham has experienced significant issues with patrons parking illegally in ADA spaces, the hashed areas next to ADA spaces, moped parking spaces, and in the left-hand turn lanes.

When Brown St. was renovated in 2023, staff converted four (4) planned metered parking spaces to 15-minute short-term parking as a pilot program. Appropriate signage was installed and Parking Enforcement has been monitoring its usage. Since it's implementation, this area has been used regularly by both delivery trucks and regular patrons with minimal issues.

Based on the success of the Brown St. zone, staff is proposing to expand the short-term 15-minute parking program to fifteen (15) new locations strategically located across downtown. Parking staff, Parking Enforcement, and the Parking Meter Shop staff worked together to make this recommendation.

The proposed changes were presented to the BSD Maintenance & Capital Improvement Committee, the BSD Board, and the Advisory Parking Committee. Staff originally proposed to convert all one (1) hour zones to two (2) hour zones. However, based on feedback from the BSD Board, it is recommended that one (1) hour zones on Maple, West of Old Woodward, and all one (1) hour zones on Old Woodward between Willits and Brown remain one (1) hour. Board members thought that because these areas are the busiest and most desirable that they should remain as one (1) hour zones to ensure there is turnover. The BSD and APC all supported the conversion of the other one (1) hour zones to two (2) hour zones. The APC recommended that all the proposed changes start as pilots and be reevaluated before being implemented permanently.

LEGAL REVIEW:

The City Attorney has reviewed and approved the suggested action.

FISCAL IMPACT:

There are seventeen on-street meter spaces impacted by the proposed 15-minute short-term parking expansion. Removing the revenue generated from these spaces would result in the loss of an estimated \$49,898 annually to the parking system, as no fees are proposed for the 15 minute short-term spaces.

PUBLIC COMMUNICATIONS:

None.

SUMMARY:

Staff is proposing to make two changes to the current on-street parking system with the intent of improving the parking experience in the downtown area. Staff proposes to increase one (1) hour zones to two (2) hour zones, except in the zones located on Maple between Old Woodward and Chester, and on Old Woodward between Willits and Brown, and to expand the current pilot program of short-term 15-minute parking at fifteen (15) new locations across downtown.

ATTACHMENTS:

1. 2023-24 On-Street Parking Changes presentation
2. Minutes from the January APC meeting
3. Minutes from the BSD Board meeting

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution to convert all one (1) hour parking meters to two (2) hour meters, except those on Maple between Old Woodward and Chester, and those on Old Woodward between Willits and Brown St., and to expand the 15 minute short-term pilot program through downtown, between Brown St. and Harmon, and Woodward and Chester.



2023-24 On-Street Parking Changes

City Commission

Parking

Presented by: Aaron Ford

Date: March 4, 2024

Current Parking Meter Program

Introduction

- On-Street Parking Changes
 - Removal of 1 Hour Zones, except on Maple, between Old Woodward and Chester, and on Old Woodward between Willits and Brown St.
 - Expansion of 15 Minute Parking

Current Parking Meter Program

- The City is currently using CivicSmart LNG Smart Meters. Guests can pay for the parking at the meters in one of three different ways:
 - Coins – least popular form of payment
 - Credit Card (All four major cc's accepted) – 2nd most popular form of payment
 - ParkMobile (Mobile App) – Most popular form of payment
- The City currently has four different time zones that restrict the maximum time a person can park at a meter.
 - 1 hour
 - 2 hours
 - 4 hours
 - 12 hours
- Patrons can park in a metered parking space for one of the 4 time frames from 9 a.m. – 5 p.m. From 5 p.m. – 9 p.m. the time limits at the 1 hour and 2 hour zones extend to 4 hours. S
- Currently, parameters are in place that prevent a patron from being able to pay by credit card or ParkMobile after the max time (1, 2, 4, 12 hours) has been reached in parking zone.

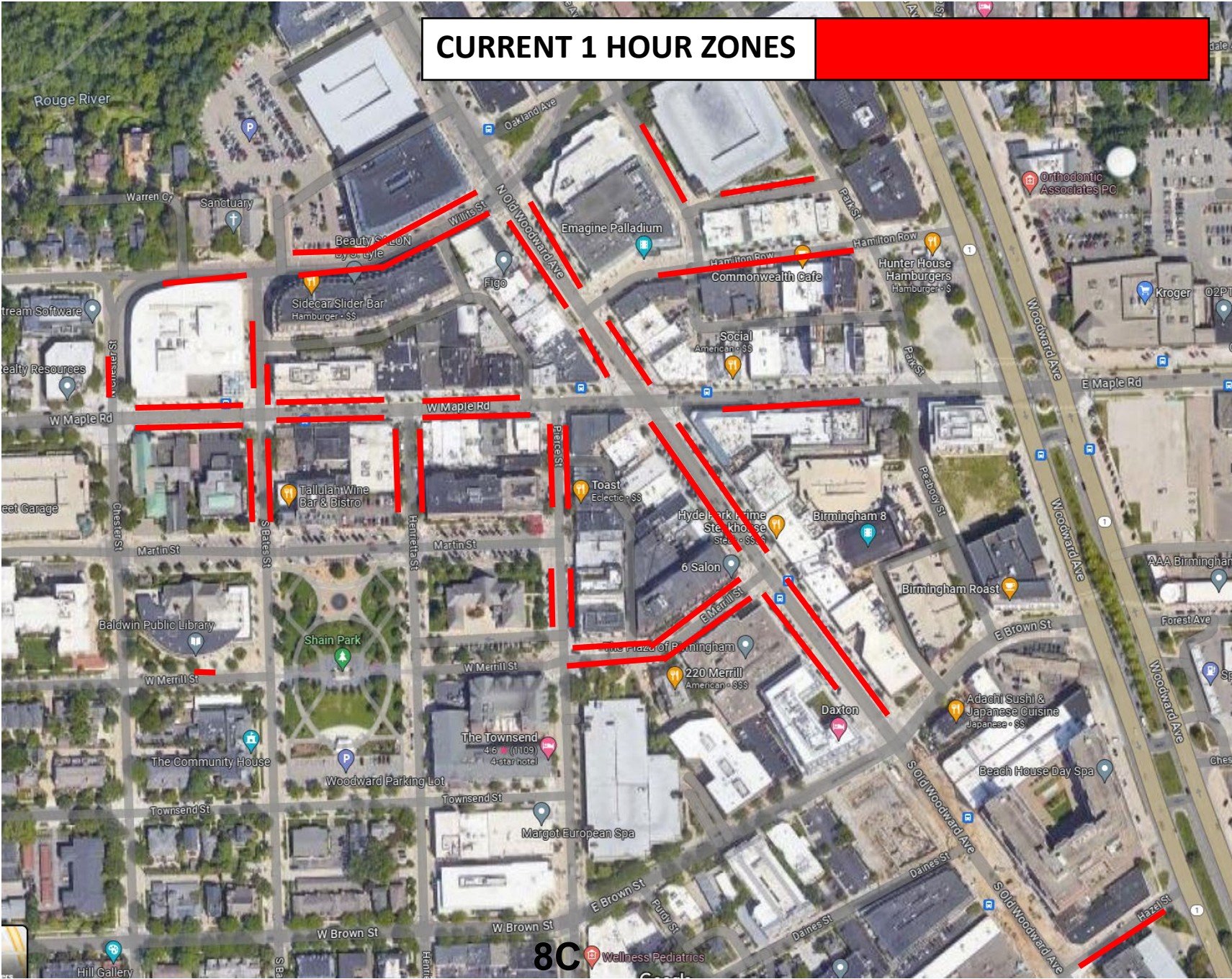
Proposed Changes

- City staff is proposing to make the following changes to enhance the on-street parking experience
 1. Convert some 1 hour zones to 2 hour zones
 2. Identify specific parking spaces to convert to short-term parking

On-Street Program Recommended Changes

1. Convert some 1 hour zones to 2 hour zones
 - According to the BSD (Birmingham Shopping District) the average length of stay from a visiting patron is 2 hours.
 - One of the more common complaints is that it takes longer than 1 hour to go out to eat, get your hair done, or complete a workout/yoga class

CURRENT 1 HOUR ZONES



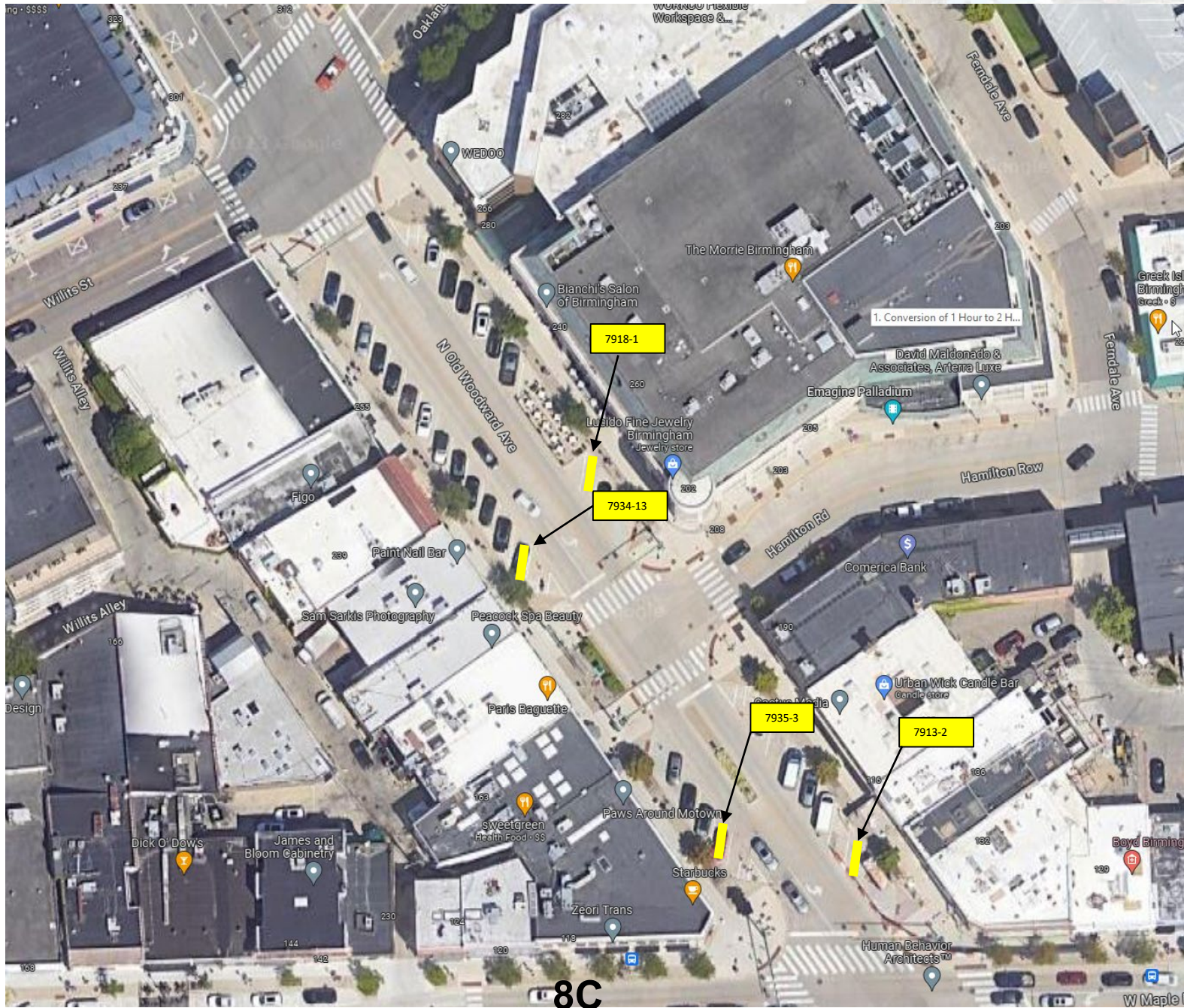
On-Street Program

2. Expand Short-Term Parking (15 Minute) Program

- Expand 15 minute pilot program to 17 spaces throughout downtown to provide locations for deliveries (FedEx & UPS), DoorDash, & GrubHub, etc.
- Providing spaces for these services will hopefully decrease the current offenses of those parking in the left-hand turn lanes, in ADA spots, and hashed off areas next to ADA spaces.
- Exploring potential solutions that will notify Parking Enforcement when a vehicle has overstayed so they can more efficiently enforce the spaces.

This zone currently exists and has been used as a pilot zone since the Brown St. road improvement

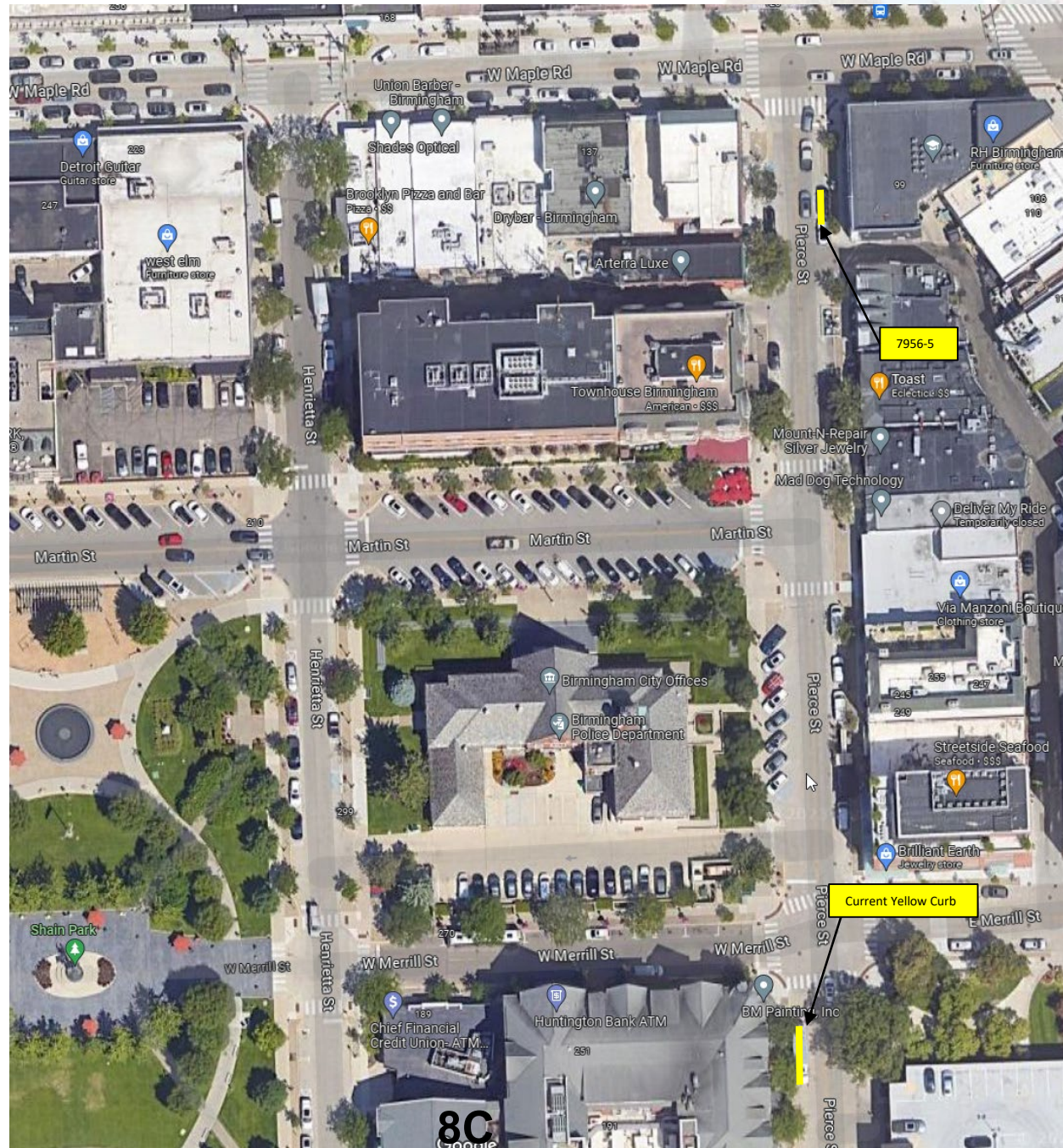




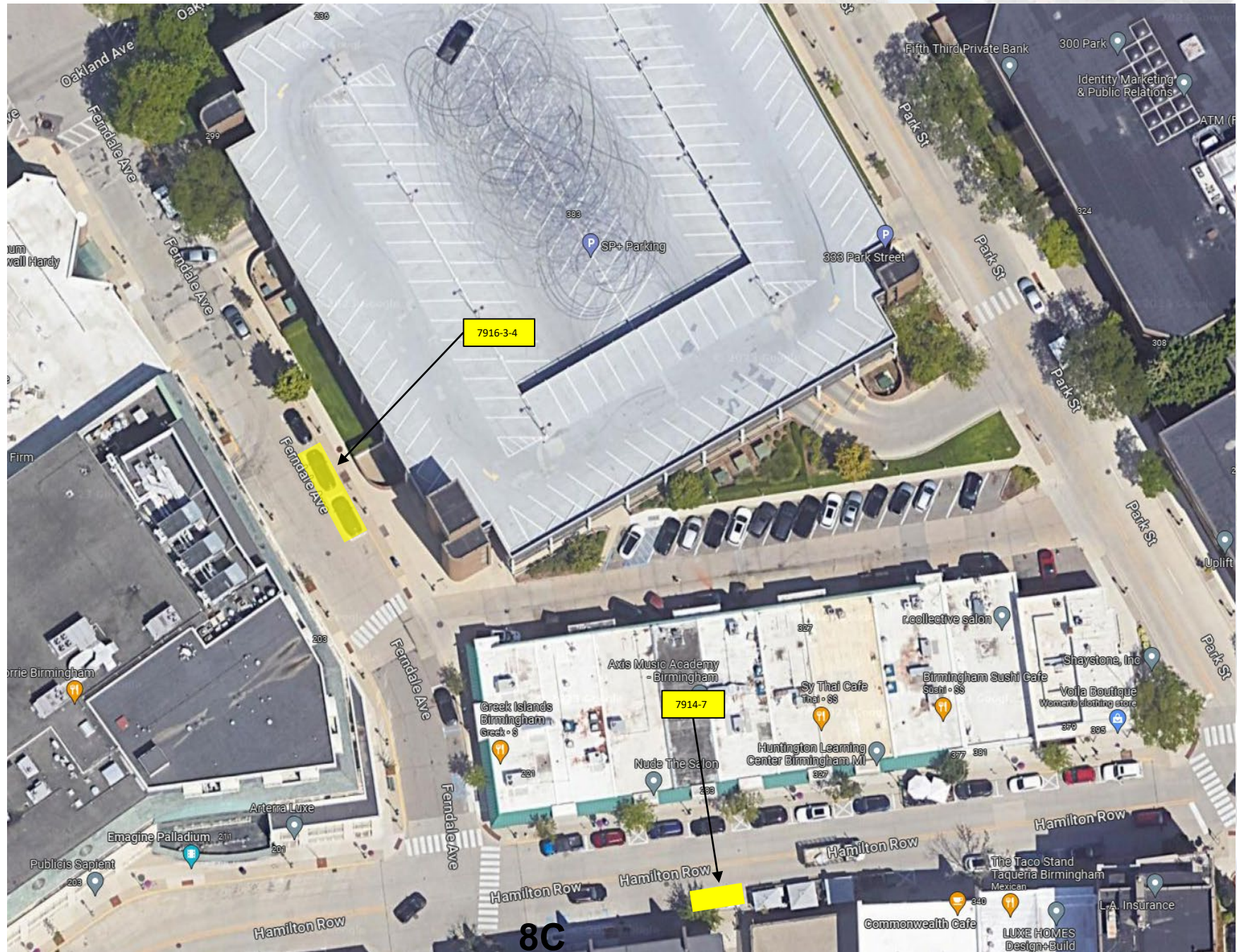
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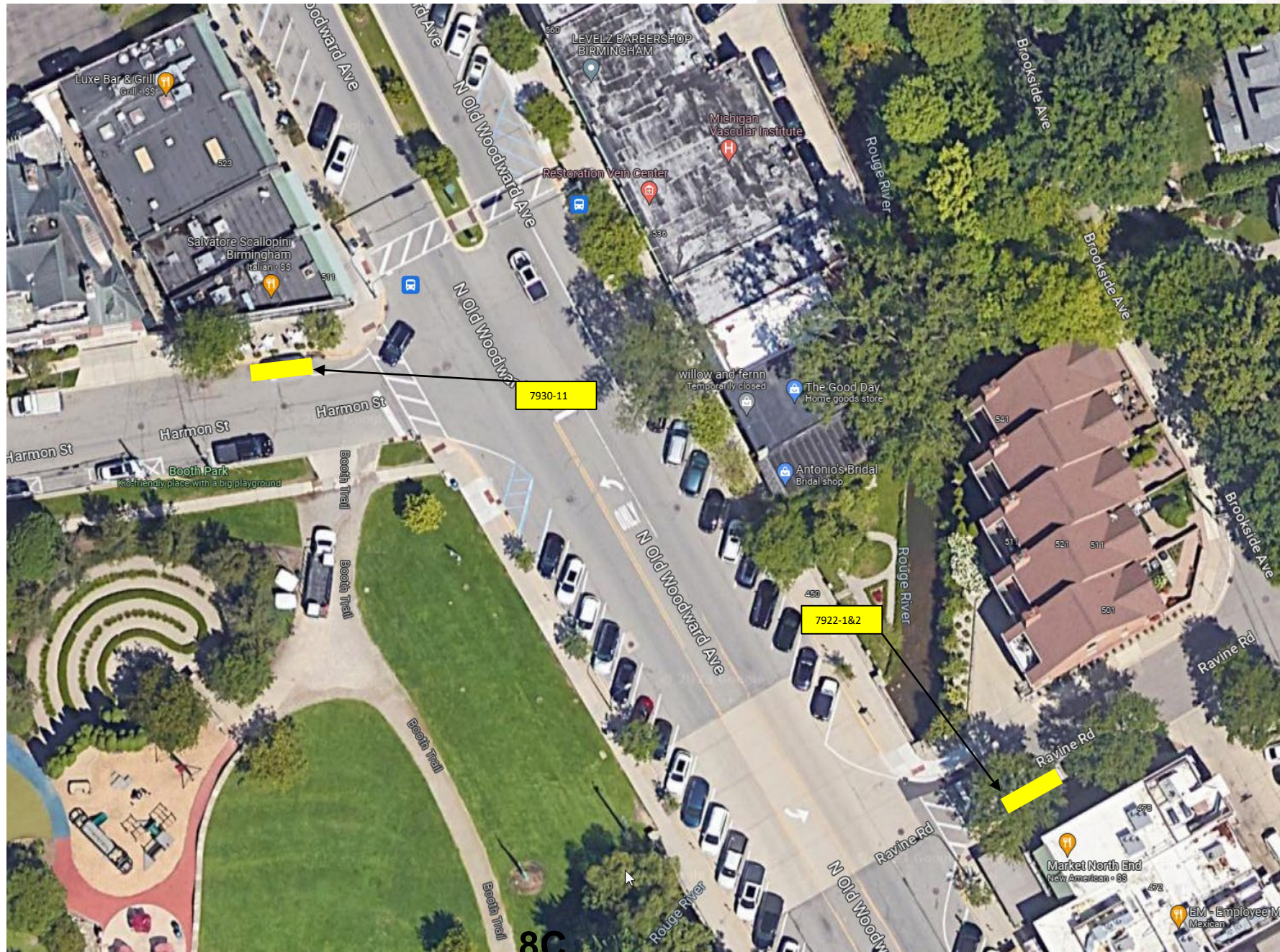












8C



BSD/APC Board Recommendations

Proposed changes to the parking meter program were presented to both the BSD and the APC

1. Removal of 1 hour zones – Both the BSD and APC recommend that 1 hour zones be converted to 2 hour zones except those areas on Old Woodward between Willits and Brown, and on Maple, west of Old Woodward.
2. Expansion of 15 Minute Parking – Both the BSD and APC recommend approval of all aspects of this program.
3. Both the BSD and APC recommend that these programs should start as pilots before permanent implementation.

BSD PROPOSED 1 HOUR ZONES



**Advisory Parking Committee
Meeting of January 10, 2024**
151 Martin Street, City Commission Room, Birmingham, MI

Minutes

These are the minutes of the Advisory Parking Committee ("APC") regular meeting held on Wednesday, January 10, 2024. The meeting was called to order by Chair Vaitas at 7:30 a.m.

1. Roll Call

Present: Chair Al Vaitas, Vice Chair Richard Astrein; Committee Members Jim Arpin, Kevin Kozlowski, Michelle Moody, Mary-Claire Petcoff (left at 9:02 a.m.), Lisa Silverman

Absent: None

Staff: Parking Systems Manager Ford; City Transcriptionist Eichenhorn

2. Approval Of Minutes: Meeting Of November 1, 2023

Motion by Mr. Astrein

Seconded by Mr. Arpin to accept the minutes of November 1, 2023 as submitted.

Motion carried, 7-0.

VOICE VOTE

Yeas: Kozlowski, Moody, Petcoff, Astrein, Vaitas, Arpin, Silverman

Nays: None

3. Discussion/Review from December's Parking Workshop

The APC discussed the parking workshop. PSM Ford answered informational questions from the APC.

The APC discussed one member drafting a communication for the Commission that expressed APC concerns, suggested processes, and perspectives on their responsibilities and mission for review at the next APC meeting.

Motion by Mr. Kozlowski

Seconded by Mr. Astrein to request that City Staff provide a presentation on the finances of the parking system and the parking fund at a future meeting.

Motion carried, 7-0.

VOICE VOTE

Yeas: Kozlowski, Moody, Petcoff, Astrein, Vaitas, Arpin, Silverman

Nays: None

4. Parking Operations Update

PSM Ford presented the item and answered informational questions from the APC.

The APC discussed topics to be covered by the City's potential EV charging vendors at a future presentation by said vendors to the APC.

5. Proposed Parking Meter Changes Follow up

PSM Ford presented the item and answered informational questions from the APC.

It was suggested that it would be necessary to add signage indicating any dynamic pricing schemes for different parking areas.

Motion by Ms. Moody

Seconded by Dr. Silverman to approve the BSD recommendation of one hour on Maple, west of Woodward, on Old Woodward in the central shopping district, and two hours everywhere else, per the map.

Motion carried, 6-0.

VOICE VOTE

Yeas: Kozlowski, Moody, Astrein, Vaitas, Arpin, Silverman

Nays: None

Motion by Mr. Kozlowski

Seconded by Ms. Moody to extend the 15 minute parking program to the spots designated in the diagrams in the packet.

It was noted that the APC could evaluate the success of the program at a future date, and that a pilot program was included in the recommendation.

Motion carried, 6-0.

VOICE VOTE

Yeas: Kozlowski, Moody, Astrein, Vaitas, Arpin, Silverman

Nays: None

Motion by Dr. Silverman

Seconded by Ms. Moody to decline dynamic pricing at this time.

It was reiterated that sufficient signage would be necessary for dynamic pricing to be successful in changing parking behavior. It was recommended that the two prior motions be implemented for a period before dynamic pricing is potentially reconsidered.

Motion carried, 6-0.

VOICE VOTE

Yeas: Kozlowski, Moody, Astrein, Vaitas, Arpin, Silverman
Nays: None

Motion by Dr. Silverman

Seconded by Ms. Moody to implement the motioned programs as 90 day pilots from implementation, with subsequent evaluation to be performed by the APC.

Motion carried, 6-0.

VOICE VOTE

Yeas: Kozlowski, Moody, Astrein, Vaitas, Arpin, Silverman
Nays: None

6. Review Parking Reports
7. Meeting open to the public for items not on the agenda
8. Adjournment

No further business being evident, the meeting adjourned at 9:15 a.m.



Aaron Ford, Parking Systems Manager

Laura Eichenhorn, City Transcriptionist

City of Birmingham
Birmingham Shopping District Meeting Minutes
Thursday, January 4, 2024 - 8:30 a.m.
StartupNation
Birmingham, MI 48009

Minutes of the meeting of the Birmingham Shopping District Board held Thursday, January 4, 2024, at 8:30 a.m. at StartupNation.

1. CALL TO ORDER AND ROLL CALL OF BOARD

PRESENT: Astrein, Ecker, Hussey, Kay, Lipari, McKenzie, Pohlod, Director Emeritus Fehan

ABSENT: Eid, Roberts, Surnow

VIRTUAL: Taddei

ADMINISTRATION: Brook, Sheppard-Decius

GUESTS: Floyd A. Simmons, David Hohendorf (virtual), Aaron Ford

2. RECOGNITION OF VISITORS

Pohlod welcomed the guests in attendance.

3. FINANCE REPORT – SHEPPARD-DECIUS

Sheppard-Decius reported that the fund balance is currently over \$1,000,000. We have spent about 50% of the budget. Winter Markt and holiday activities and promotions are large expenses. Therefore, next month's expense sheet will be higher. The year-in-review and assessment bills are scheduled to be mailed later this month.

4. APPROVAL OF CONSENT AGENDA

Consent agenda consisted of the:

- a. Approval of the BSD Board minutes from December 7, 2023;
- b. Approval of vouchers - January 2024;
- c. Appointment of Sloan Wolfe to Marketing & Advertising Committee
- d. Chamber Annual Sponsorship of \$2500
- e. Unabashed Bash Birmingham Bucks Sponsorship of \$300

MOTION: Motion by Astrein, seconded by Kay, to approve the consent agenda for January 4, 2024.

VOTE: Yeas: Astrein, Ecker, Hussey, Kay, Lipari, McKenzie, Pohlod,
Nays: none
Absent: Eid, Roberts, Surnow, Taddei

Motion passed.

5. NEW BUSINESS

a. Election of Officers & Executive Committee Appointments

Pohlod explained that there are three officer positions on the BSD board of directors – Chair, Vice-Chair, and Secretary. The Secretary will attend Executive Committee meetings and review minutes before they are distributed.

MOTION: Motion by Ecker, seconded by Astrein, to appoint Pohlod as Chair.

MOTION: Motion by Pohlod, seconded by Astrein, to appoint McKenzie as Vice-Chair.

MOTION: Motion by Lipari, seconded by Pohlod, to appoint Astrein as Secretary.

No other nominations were made.

MOTION: Motion by Astrein, seconded by Kay, to approve slate as nominated.

**VOTE: Yeas: Astrein, Ecker, Hussey, Kay, Lipari, McKenzie, Pohlod,
Nays: none
Absent: Eid, Roberts, Surnow, Taddei**

Motion passed.

Pohlod shared that the Executive Committee is made up of the Chair, Vice-Chair, Secretary, City Manager, and two others. Pohlod suggested that at least one be a seasoned board member due to their knowledge of the BSD's history.

MOTION: Motion by Pohlod, seconded by McKenzie, to appoint Fehan to Executive Committee.

MOTION: Motion by McKenzie, seconded by Astrein, to table Executive Committee appointments to later in the meeting.

b. Committee Chair & Vice-Chair Appointments

Pohlod shared the slate of committee chair and vice-chair appointments.
Marketing & Advertising – Chair – Jessica Lundberg, Vice-Chair – Zach Kay
Special Events – Chair – Zach Kay, Vice-Chair – Richard Astrein
Maintenance & Capital Improvement – Chair – Sarvy Lipari, Vice-Chair – Amy Pohlod
Business Development – Chair – Mike McKenzie, Vice-Chair – Sam Surnow

Lipari asked about Wayfinding. Ecker responded that Wayfinding is currently an ad-hoc City committee. It may become a standing committee, but it is not currently.

MOTION: Motion by Astrein, seconded by Hussey, to approve the slate of committee chairs and vice-chairs as presented.

**VOTE: Yeas: Astrein, Ecker, Hussey, Kay, Lipari, McKenzie, Pohlod,
Nays: none
Absent: Eid, Roberts, Surnow, Taddei**

Motion passed.

Discussion returned to Executive Committee appointments. Pohlod reminded board members that appointments are for one year. Ecker suggested appointing another committee chair.

MOTION: Motion by Astrein, seconded by Pohlod, to appoint Kay to Executive Committee.

No other nominations were received.

MOTION: Motion by Astrein, seconded by Lipari, to approve the slate of Executive Committee members of Kay and Fehan as presented.

VOTE: Yeas: Astrein, Ecker, Hussey, Kay, Lipari, McKenzie, Pohlod,

Nays: none

Absent: Eid, Roberts, Surnow, Taddei

Motion passed.

c. Short-term Parking & Meter Hours

Parking Manager Aaron Ford shared a PowerPoint presentation regarding possibly changing the maximum length that cars are allowed to stay at parking meters in the downtown area. He is proposing converting the one-hour maximum spaces to two-hour maximums. He would also like to add some 15-minute drop-off/pick-up parking spaces and have dynamic pricing at meters.

Board members discussed different options and agreed that they would like to recommend leaving the meters on Old Woodward, between Hamilton and Brown and the meters on Maple west of Old Woodward at one-hour maximum stay. The Board collectively liked the idea of 15-minute parking places, but were less interested in the idea of dynamic pricing.

Sheppard-Decius said that she would bring this subject up at the merchant meeting next week. Ford explained that recommendations will go to the Advisory Parking Committee and then to City Commission for approval.

MOTION: Motion by Hussey, seconded by Astrein, to recommend that parking meters on Old Woodward and west of Old Woodward on Maple, remain one-hour maximum and other meters convert to two-hour maximum; recommend converting 15-minute loading/unloading spaces as presented; and recommend a trial of dynamic pricing in the one-hour areas.

VOTE: Yeas: Astrein, Ecker, Hussey, Kay, Lipari, McKenzie, Pohlod,

Nays: none

Absent: Eid, Roberts, Surnow, Taddei

Motion passed.

7. OLD BUSINESS

None.

8. REPORTS

a. EXECUTIVE DIRECTOR REPORT

Sheppard-Decius reported that she would be presenting at the City's long range planning meeting on January 20. She shared that she had attended the ICSC conference in New York City. She enjoyed seeing how the city was decorated for the holidays and made some good connections at the conference.

She is working on putting together a packet for new businesses as well as the Year in Review document that will be mailed with annual assessments. She also submitted an application for a grant that could help with work in the alleys.

b. COMMITTEE REPORTS

SPECIAL EVENTS – ASTREIN

Astrein reported that plans for the BRRmingham Blast are underway. Holiday events went well including Late Night Thursdays. The committee will discuss the trolley further at their next meeting.

Santa Walk was very successful as was Winter Markt, even though the weather did not cooperate for Winter Markt.

MARKETING & ADVERTISING - KAY

Kay shared that the committee reviewed the sponsorship policy. Results from holiday ad placement are not yet available.

MAINTENANCE/CAPITAL IMPROVEMENTS – POHLOD

Pohlod reported that there was not a quorum for the meeting. Those in attendance discussed the Pierce alley. They looked at electrical and dumpster placement.

BUSINESS DEVELOPMENT – MCKENZIE

McKenzie shared that a new jewelry store opened on West Maple and another one is planned for the location Fab'rik left.

EXECUTIVE COMMITTEE REPORT - POHLOD

Pohlod reported that they would be scheduling a BSD strategic planning meeting in March to review the goals that were set last year.

She would also like to organize an appreciation lunch for staff, possibly in February at Hazel's. Staff and board will be invited. This is not in the BSD budget. Therefore, board members would be asked to contribute.

c. PARKING REPORT

No report given.

d. WAYFINDING REPORT

Fehan reported that City Commission approved the plan. He will present it to the board next month.

9. UNFINISHED BUSINESS

None.

10. INFORMATION

a. Retail Activity – provided in packet

b. Announcements – no new announcements

c. Letters, Board Attendance & Monthly Meeting Schedule – provided in packet

11. PUBLIC COMMENTS

Fehan asked about how the funds from the Unabashed Bash are used. Sheppard-Decius explained that they go to the Birmingham Education Foundation.

12. ADJOURNMENT – 10:00 A.M.

Respectfully submitted,
Jaimi Brook (back-up notes on file)

Reviewed by: Cristina Sheppard-Decius 1/2/24

APPROVED



Amy Pohod, BSD Board Chair

2/1/2024

Date

To the Birmingham City Commission,

We at the Advisory Parking Committee are charged with providing guidance to the City Commission on the management of the City's parking system. Recently, however, a number of important decisions about the parking system have been made with either limited input from the APC, or sometimes without any input whatsoever. The most recent of these was the decision to replace our parking management contractor, SP+, with a large new team of city staff. Setting aside whether this was the right decision for the City, it is most certainly a decision which fundamentally affects the Parking System both operationally and financially. The APC, however, was not even informed that such a change was being considered until after all decisions had been made.

There have been several other cases where neither City staff nor the Commission has sought nor the Commission required input from the APC before making changes to the parking system. A similar situation occurred with the Parking Equipment in the structures. Originally, staff had only brought to the APC their recommended vendor for parking equipment, a company called Flash. We were not shown the equipment in operation and were only given promotional materials for Flash, not for any of the other companies that responded to the RFP. We were essentially asked to rubber-stamp staff's recommendation having never seen or touched the equipment that was going to be installed and having virtually no information about the competing bids. Eventually, after being provided with presentations from both Flash and Tiba, staff's second-pick, we voted to recommend Flash. However, it was determined later that Flash did not properly respond to the RFP, so they were disqualified. Instead of returning to the APC for further input, staff simply presented Tiba to the Commission for approval, and received it.

In another instance, the APC was formerly consulted on the addition of outdoor dining decks which would be built on top of (and therefore remove) street parking spaces. Previously, proposals for these decks were presented to the APC for review and recommendation. However, we recently learned that because the Commission votes were not typically following the APC recommendations, staff simply stopped presenting these proposals to the APC.

At this point we would like to note that the Advisory Parking Committee is just that - advisory. We don't have any formal power and fully accept that. We do not expect the Commission to follow our recommendations all or even most of the time, but we believe that our input can be valuable to the Commission regardless of your final decision. As of late, however, our input has often been sought only in a token way, or sometimes not at all. This is typically done in the name of expediency or efficiency. We have all volunteered our time in hopes that we can do our part to improve this City, and it is painful and frustrating to be treated as an obstacle to be overcome or evaded rather than a valuable source of input.

Having no formal authority ourselves, we are dependent on you, the Commission, for support. The most concrete way you can support us is by simply requiring an APC vote on parking-related issues before the Commission is willing to vote on them. We are not requesting that you vote in accordance with our recommendations - only that we be given an opportunity to weigh in on matters pertinent to the parking system. Another element of support we need is periodic reporting, at least annual, from someone in the City's finance department. Financial management of the parking system is one of our most critical duties, but we are provided with

no regular, comprehensive information about the revenues and expenses of the system, much less projections of capital expenses.

We endeavor to use our different perspectives and expertise to improve this City by helping to manage some of its most valuable assets. We also wish to be a point of contact for the public, who bring their concerns about parking to us for consideration and action. We know that as Commissioners you are motivated by the same desire to be of service to this community. With your support, we know that we can be a resource you can rely on for insight and advice concerning parking in Birmingham. Thank you for your time and consideration.

- The Advisory Parking Committee

Fwd: Shirley & Arlington Street Improvements

1 message

Jana Ecker <Jecker@bhamgov.org>
To: Alex Bingham <abingham@bhamgov.org>

Fri, Feb 9, 2024 at 12:53 PM

Jana L. Ecker
City Manager
Birmingham, MI
(248) 530-1811

----- Forwarded message -----

From: **Therese Longe** <tlonge@bhamgov.org>
Date: Fri, Feb 9, 2024 at 10:42 AM
Subject: Fwd: Shirley & Arlington Street Improvements
To: Jana Ecker <Jecker@bhamgov.org>

----- Forwarded message -----

From: **Erich Voeffray** <evoeffray@gmail.com>
Date: Fri, Feb 9, 2024 at 10:37 AM
Subject: Shirley & Arlington Street Improvements
To: tlonge@bhamgov.org <tlonge@bhamgov.org>, along@bhamgov.org <along@bhamgov.org>, bhost@bhamgov.org <bhost@bhamgov.org>, ahaig@bhamgov.org <ahaig@bhamgov.org>, cballer@bhamgov.org <cballer@bhamgov.org>, kschafer@bhamgov.org <kschafer@bhamgov.org>, emclain@bhamgov.org <emclain@bhamgov.org>

Hi, my name is Erich Voeffray and I wanted to write to you supporting narrowing Arlington/Shirley roads and adding sidewalks. I live in the Quarton Lake neighborhood, but frequently walk in this area. The lack of sidewalks makes walking in the area difficult as this is a relatively heavily trafficked road with a few blindspots due to curves in the roads. I believe one of the reasons there is a lot of traffic on these roads is because they are so wide compared to other roads and run between Maple and Lincoln. This makes them a perfect high speed cut through, but unsafe for pedestrian traffic, especially children.

Narrowing the roads would improve their appearance and reduce their use as a cut through. Aspen, Linden, and Hawthorne roads just east look far better and are not used as cut throughs because they are far more narrow, which forces drivers to go too slowly to use them as a cut through. In addition, as these are some of the last roads in Birmingham without a sidewalk it would seem obvious this improvement needs to be made.

Thanks for your time,
Erich Voeffray
621 Fairfax St.

One More Vote for Arlington & Shirley

1 message

jmirro <jmirro@intromarketing.com>

Sun, Feb 11, 2024 at 10:14 PM

To: emclain@bhamgov.org, kschafer@bhamgov.org, along@bhamgov.org, tlonge@bhamgov.org, ahaig@bhamgov.org, bhost@bhamgov.org

Cc: Jana Ecker <Jecker@bhamgov.org>, abingham@bhamgov.org, mkucharek@bhlaw.us.com, cballer@bhamgov.org, Melissa Coatta <mcoatta@bhamgov.org>

Dear Commissioners,

Background: Thank you for last Monday's vote on Arlington/Shirley Streets. While we are very grateful for the vote not to destroy 137 trees in the ROW space, not to narrow our two streets and not to install sidewalks, we need to ask you for one more vote tomorrow to complete this process. This vote is not to dig up/replace our existing streets and the reasons are both environmental and financial. It also reflects a central truth that Arlington and Shirley primarily have an immediate water main and sewer replacement problem, not an immediate street replacement problem, which seems to have been lost in the process.

Environmental: We know that the root system for our 137 trees in the ROW space is about as extensive below ground as the branch system is above ground. And approximately 50% of the tree roots are under our two streets. Because of this, if we dig up our roads to replace water mains and sewers, there is a good chance that at least half of our 137 trees will die from this root disturbance. And this is what your Arlington/Shirley vote last Monday was intended to avoid.

Financial: The 1st attachment is the City Staff special assessment cost example of \$36,700 for a 26' street replacement. When adjusted for our 33' street width approved last Monday, this cost example increases to \$44,700. Because most of our lots have over 100' in frontage and allowing for repairs to driveways, etc., the total cost per lot is probably closer to \$50,000 (assuming no overruns which can add up to 25% more). This is a total project cost for 80 lots of at least \$4 million. Explaining that this can be paid for over 10 years at a 9% interest rate does not make the experience any less traumatic for our property owners, especially those on a fixed income.

City Definition: The 2nd attachment is the published City document used for many years that our property owners have relied upon to age in place with the knowledge that our streets fit perfectly the definition of an "improved" street since they were first installed and, because of this, they would never face a large assessment in the future that might force them to move. To reinforce this understanding is the knowledge that our two streets were built at the same time and in the same "engineered" and "durable" manner as our sister streets, Hawthorne/Aspen/Linden (HAL) which the City has always agreed are "improved" and not subject to a future assessment.

Street History: The 3rd attachment is researched information on the history of our 5 streets that confirms Arlington and Shirley Streets are "improved." Based on this information, it is our property owners' belief that, due to HAL streets having sidewalks and Arlington/Shirley not having sidewalks, someone in the Engineering Department made a misclassification a few years back and the error has not been corrected to date. The City Engineer's description of our streets' foundation last Monday was the first time this information was ever presented and does not change our property owners' first-hand knowledge that our streets are meeting our durability test day in and day out and does not change the City's published definition. This misunderstanding between the City and our property owners has such significant financial implications that we must find an acceptable way to meet the goals of both in order to move forward.

Cost Responsibility: The 4th attachment is a 2-7-24 letter from Clinton Baller as a private citizen that states “the cost of sewer and water improvements will be borne solely by the city and paid for by the allocation of money from the water and sewer funds, which are fed by water and sewer fees, as well as general tax revenue.” If the City and voting Commissioners agree with Mr. Baller’s statement, this means that, if the Arlington/Shirley project is strictly a sewer and water improvement project without a street replacement element, neither the City nor the property owners are required to bear any of the cost. And this, is the solution we have been looking for to meet both of our goals. Thank you Mr. Baller.

Horizontal Directional Drilling (HDD): As described briefly at a previous Commission Meeting, HDD is the technology used by many cities to replace water mains and/or sewer pipes without having to dig up an entire street and the 5th attachment is a list of 30 companies in metro Detroit that are in the business of doing this. In fact, one company successfully did this on Strathmore Street in Bloomfield Hills just last year. And none of the companies interviewed believe that 1) the curving nature of our streets or 2) the gradual drop in elevation or 3) existing utilities under the streets pose an obstacle to HDD work on Arlington and Shirley.

Water Mains: Discussions with metro Detroit HDD companies suggest that the average cost to drill a tunnel beneath our streets to accept an 8” water main is about \$30 per foot or about \$160,000 for both Arlington and Shirley Streets combined. This is 4% of the \$4 million cost to replace our two streets. And, if Mr. Baller is correct, this entire \$160,000 should be borne by the water and sewer fund because it is being spent solely to replace an aged water main.

Sewer Pipes: A tunnel to replace sewer pipes will be more expensive than water mains due to a wider diameter than 8” if the City chooses replacement versus lining the existing sewer pipes which the City has stated is also a viable alternative. But the cost of either sewer pipe replacement or sewer pipe lining should also be borne by the water and sewer fund. So, through either method, the City and property owners are spared from paying for water main and sewer upgrades either from the City’s general fund or through property owner assessments.

Exploratory Bids: The only way to move forward on this project is for you to pass a motion asking the Engineering Department to take a precise water main/sewer pipe measurement and to create design specs for HDD companies to bid on the Arlington/Shirley project. To avoid any delay in this process, we property owners are asking you to do this at the 2-12-24 Commission Meeting during either the “unfinished business” or “new business” segments of the meeting.

Asphalt Milling: After the water main and sewers are replaced and the 15 house projects on Arlington and Shirley are completed, the City can then take bids for milling the top surface of our existing chip seal pavement and reusing it to create a new asphalt surface. This will achieve the appearance and usability of two new streets at a fraction of the cost to completely replace them without endangering one tree in the ROW space. And, voila, we have fixed the water main, sewer and street surface problems at the least possible cost to everyone and in the most environmentally-friendly way. This is how the City and its citizens work together to meet all of our goals. Thank you.

Jim Mirro, Resident Agent

Save Our Streets & Trees

A MI Nonprofit Foundation

248-420-5113

P. S. This letter and attachments have been reviewed by a former NASA scientist and 5 engineers including one with a U of M Master’s Degree in Civil Engineering who is presently building a \$16 billion HDD tunnel under the Hudson River in NYC. They all agree that this plan is inherently feasible.

 **Special Assessment Cost Example..pdf**
453K

 **Birmingham Definition of Improved & Unimproved Streets..pdf**
915K

 **History of Arlington, Shirley, HAL Streets..pdf**
659K

 **Clinton Baller Letter, 2-7-24..pdf**
561K

 **List of 30 Metro Detroit HDD Companies..pdf**
1969K

EXPRESSION OF INTEREST SURVEY FOR STREET IMPROVEMENT

SPECIAL ASSESSMENT COST EXAMPLE

This example is provided to illustrate how the special assessment costs are calculated for a typical residential property. Assuming a 100-foot wide lot is used with a double-car drive approach (20-ft wide), and need to replace the sewer and water lateral (located 20-ft and 30-ft from the property line, respectively):

				<u>26' ST.</u>	<u>33' ST.</u>
Paving Assessment:	100 ft @	\$300.00 per ft =	\$ 30,000		+ 38,000
Drive Approach:	200 sq ft @	\$10.00 per sq ft =	\$ 2,000		2,000
Sewer Lateral Replacement:	20 ft @	\$100.00 per ft =	\$ 2,000		2,000
Water Service Replacement:	30 ft @	\$90.00 per ft =	\$ 2,700		2,700
			TOTAL =	\$ 36,700	+ 44,700

Note that special assessments related to the street improvements illustrated here are payable over a 10-year period (with interest rate to be set at time of special assessment roll being confirmed).

Questionnaire:

1. Are you supportive of the project to improve the water system along your street? _____

2. Are you supportive of the project to improve the sewer system along your street? _____

3. Are you supportive of constructing an improved street upon completion of the underground utility work? _____

4. Are you supportive of constructing sidewalk along the street? _____

PLEASE SUBMIT A SCAN OR PHOTO OF THIS FORM TO MCOATTA@BHAMGOV.ORG BY WEDNESDAY, OCTOBER, 2023.

Contact Information:

Name: _____ Phone Number: _____
Address: _____ Email: _____

Understanding Improved and Unimproved Roads

Improved Road

Improved Road – An improved road is a road with curb and gutters which has a surface of concrete or asphalt.

Benefits:

- It is professionally engineered and constructed as a durable roadway.
- Provides for adequate drainage from the roadway.
- Once improved, an improved road is maintained by the City for any future road repairs.
- Improved streets with curbs are provided routine street sweeping and leaf pick-up each Fall, which allows residents to rake their leaves into the street at the curb.
- The average life span is 20 to 30 years.

Disadvantages:

- Initial one time higher cost for installation.

Unimproved Road

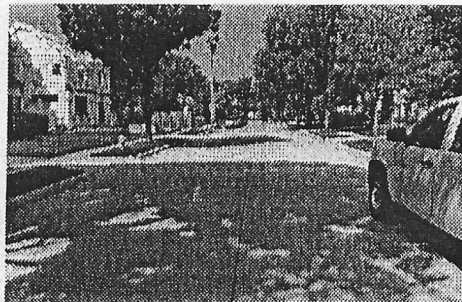
Unimproved Road – An unimproved road is a gravel road with or without curbs that has been treated with cape seal to provide a relatively smooth and dust free driving surface.

Benefits:

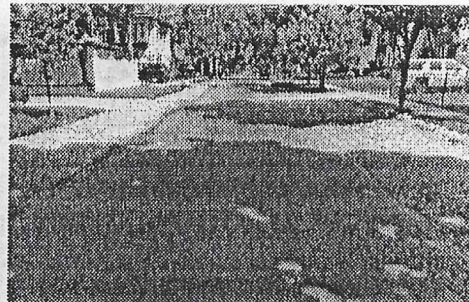
- Enhances rural neighborhood characteristics.

Disadvantages:

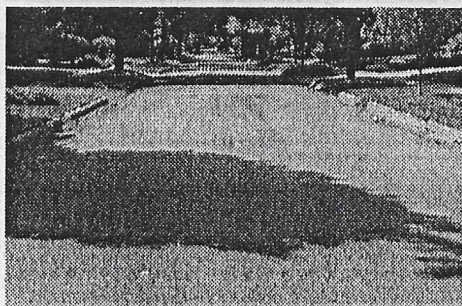
- The roadway is not professionally engineered and does not have a durable foundation.
- Unimproved roads without curbs do not provide adequate drainage from the roadway.
- Unimproved roads without curbs do not receive street sweeping and must bag their leaves.
- The average life span is 7 to 10 years and the need for repairs is more frequent.
- The cost for road repair and replacement is the responsibility of the homeowners on the street.



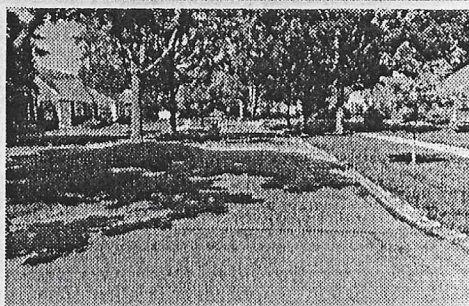
Improved Road



Unimproved Road



Unimproved Road with Curbs



Unimproved Road with Gutter

HISTORY OF ARLINGTON, SHIRLEY, HAWTHORNE, ASPEN, LINDEN STREETS

This history is based on information obtained from Baldwin Library, Birmingham Museum and supplemented with letters and verbal communication between property owners and Ralph I. Coryell, the grandson of R J (Rolla) Coryell, the developer of these streets and subdivision. Unfortunately Ralph I. Coryell died on 12-6-15 at the age of 88 in Lakeland, FL, and no need for an affidavit of this history was considered necessary prior to his death. But, all information is deemed accurate to the best of knowledge of property owners from Arlington, Shirley, Hawthorne, Aspen and Linden Streets.

These 5 streets sit upon the land originally owned by R J Coryell who founded the Coryell Tree Nursery in 1915. About a dozen years after opening the nursery, the Coryells decided that the ultimate value of their land lay in developing it for homeowner lots rather than in retail sales of trees and shrubbery. True to his love of trees, R J Coryell named all 5 of the streets after trees, including Arlington and Shirley which are named after very rare tree species (e.g., Eucalyptus Shirleyi).

Based on Birmingham directories from the 1920's and 1930's, all 5 streets were built and developed at the same time, with the Aspen/Hawthorne/Linden (HAL) streets having smaller lots and sidewalks to cater to a more "urban" clientele and Arlington/Shirley Streets having one-acre lots and winding streets to appeal to a more "rural" clientele.

All 5 streets were built to rigorous, first class standards. They were designed from the beginning to have engineered concrete curbs/gutters and mid-street crowns for proper water management, engineered water main and sewer systems with access chambers, man hole/water main covers, and engineered drain grates. All 5 streets were engineered for state of the art durability of the time and, 100 years later, have shown that this goal has been met. Because R J Coryell built a house for each of his 2 daughters on Linden and Shirley Streets, both streets had to meet equal standards of engineering/durability.

All 5 streets were designed from the beginning to meet the City's present definition of "improved streets" for engineering and durability. Due to The Great Depression, Linden Street never was completed and connected to the south end of Shirley Street and the land that is now Linden Park reverted to the City because of back taxes not paid after R J Coryell's death in 1937 and the collapse of his tree nursery business. As a result, Brandon Street was built at the lowest possible cost as an "unimproved" connector to the other streets. Importantly, not one lot in the subdivision faces or has a street number of Brandon, which underscores its role as simply a minor roadway with minimal, secondary traffic. As such, Brandon has none of the engineered or durability features of the other 5 streets, such as curbs, gutters, crowns, sewers/water mains, drain grates, etc., clearly contrasting it with the other 5 streets in the subdivision. This contrast underscores the intent of R J Coryell in creating the 5 primary streets as "improved" streets. The City has recognized this definition by providing leaf pickup and street sweeping on all 5 primary streets since these services were first started by the City as "improved street benefits."

jmirro

From: Clinton Baller [clinton@baller4bham.com]

Sent: Wednesday, February 07, 2024 1:24 PM

To: jmirro

Cc: lou Baughman; karleenovice@gmail.com; asimmons@boon-health.com; Kerry Milliron; loribconway@comcast.net; Lisa Drake; Mike Walsh; Midge Moran; georgenemorán@gmail.com; n.ramdev@yahoo.com; Mike Minelli; Pamela Minelli; christinetobiascolman@gmail.com; Sherry McCormick; Eliza Nascimento; Ryan Chayka; Lorry Schwegman; Heidi Pinkert; shayspaniola@gmail.com; sawbone; Lisa Miller; bconnolly1@aol.com; Mary Connolly; Kevin Marsh; Lindsay Vansyckle; Gail Abraham; gabraham@comcast.net; vtree@aol.com; Donna Gach; dabloom2002@yahoo.com; antiquer62@aol.com; Yan S; jlannen57@aol.com; jeanlannen@mac.com; Lana Gmail; tshaffou@gmail.com; Elaine C Hazel; Gary Saltzgeber; Nick and Jenny; Nick Shebib; Alfred Fisher IV; brookesfisher@me.com; Alice Silbergleit; drteetime@aol.com; Kathleen Milford; docmilford@aol.com; Alex Davis; andrea@andreabrowninteriors.com; David Mendelson; duncan.eldred@gmail.com; davidfw8@gmail.com; dave.mitchell@trpfund.com; Stuart Borman; hilaryborman@gmail.com; mosquetfamily@hotmail.com; sjnyc@aol.com; sdodge2011@gmail.com; William Edmunds; brethencapital@gmail.com; JOHN SMITH; lightbodysmith@aol.com; cherbear1648@yahoo.com; kcdevereaux@yahoo.com; lbalian@comcast.net; David Provost; Lauren Buttazoni; Paul Reagan; Barbara Heller; Thomas booth; serenafmarshman@yahoo.com; djkrizanic@gmail.com; Corey holter; Jay Shell; EDWARD KULNIS; Sonia Just; bfinkbeiner@maxbrook.com; dianeshrift@comcast.net; njdarr@hotmail.com; keaksilver@yahoo.com; Dave Smith; carolsmith36756@gmail.com; Lee Hubbard; cardsbycarol.artist@gmail.com; John Stockdale; sylviacs@sbcglobal.net; Bob Eliassen; Betty & Bob Eliassen; Chuck Moss; City Commission; Department Heads

Subject: Re: Fwd: Commission Meeting Results

Mr. Mirro,

Close observers of this process should know by now that the cost of sewer and water improvements will be borne solely by the city and paid for by the allocation of money from the water and sewer funds, which are fed by water and sewer fees, as well as general tax revenue. This fact -- contrary to what you report here -- has been stated repeatedly in public, in both written and oral reports to the Multi-Modal Board and the City Commission. It has been difficult, if not impossible, to overcome the avalanche of false information surrounding this project. That it continues is most disheartening to those of us who respect the truth and have desired only to see a fair and reasonable process unfold. Those who cheer the outcome should take no pride in how it was reached.

Sincerely,

Clinton Baller
(writing as a private citizen and resident of the project area)

PS: We had another water main break on Arlington this morning

On Tue, Feb 6, 2024 at 3:26 PM jmirro <jmirro@intromarketing.com> wrote:

Dear Neighbors & Friends,

2/7/2024

Browse

Auto Services

Beauty

Home Services

Insurance

Legal Services

Medical Services

Pet Services

Restaurants

Home > MI > Detroit > Building Contractors > Drilling Contractors

Directional Boring in Detroit, MI

Map View All **BBB Rated A+/A**

Sort: **Default** ▾

[About Search Results](#)

View all businesses that are **OPEN 24 Hours**

1. Brown Drilling Company
 Building Contractors, Inspection Service, Drilling & Boring Contract...
 (9)

Website
 97 Years in Business

“ The quick service was great! I noticed I had water coming out of the top of my well so I called Brown Drilling & a technician was at my house within 90 minutes! The service...”

(517) 798-5037
 Serving the Detroit Area
OPEN NOW

2. Joe Curry Well Drilling Inc.
 Gas Companies, Oil Well Drilling Mud & Additives, Nursery & Grow...
 (2)

Website Directions More Info
 32 Years in Business 3 Years with Yellow Pages Accredited Business

“ Joe came highly recommended by a family member of mine and I got to say he was right. Extremely professional explained everything, there was no BS, extremely nice guy, I...”

(248) 887-1738
 3900 Clyde Rd
 Holly, MI 48442
CLOSED NOW

3. Ayer's Waters Systems
 Inspection Service, Water Well Plugging & Abandonment Service, P...
 Website Directions More Info
 5 Years with Yellow Pages

From Business: Please Visit Our Website for More Information.

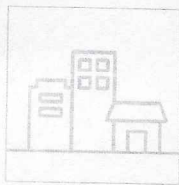
(888) 732-1218
 1990 Teggerdine Rd
 White Lake, MI 48386
OPEN NOW

Manage your **free** listing

Update your business information in a few steps.

[Claim Your Listing](#)

or call **1-866-794-0889**



4. McDowell & Associates

Geotechnical Engineers, Construction Engineers, Environmental En...

[Directions](#) [More Info](#)

46 Years
in Business

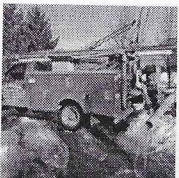
1 Year with
Yellow Pages

(248) 607-0397

21355 Hatcher Ave
Ferndale, MI 48220

OPEN NOW

From Business: In 1978, Bob McDowell founded McDowell & Associates as a geotechnical firm with a focus on heavy construction. McDowell has worked closely with industrial and...



5. Joe Maher Well Drilling Inc

Building Contractors, Construction & Building Equipment, Gas Com...

(2)

[Website](#) [Directions](#) [More Info](#)

37 Years
in Business

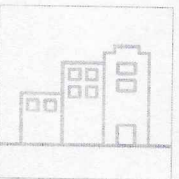
6 Years with
Yellow Pages

(248) 438-5314

2725 Childs Lake Rd
Milford, MI 48381

OPEN NOW

“ I just had Joe out to quote me on replacing a well pressure tank. He was prompt, courteous, and very knowledgeable. He explained what was going on and also how to fix other...



6. Orzel Well Drilling & Pump Shop

Sump Pumps, Gas Companies, Drilling & Boring Contractors

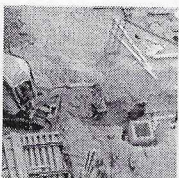
[Website](#) [Directions](#) [More Info](#)

12 Years with
Yellow Pages

(586) 646-4386

8916 Division Rd
Columbus, MI 48063

From Business: The Name to Know for H2O



7. Ernest Morris Well Drilling

Building Contractors, Oil Field Equipment, Plumbing Fixtures, Parts...

[Directions](#) [More Info](#)

71 Years
in Business

7 Years with
Yellow Pages

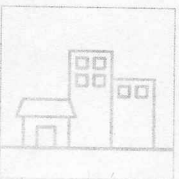
Accredited
Business

(248) 714-7286

689 Tomahawk Trl
Hartland, MI 48357

CLOSED NOW

From Business: Ernest C. Morris Well Drilling Inc. (License # 631154 Michigan): Ernest C. Morris Well Drilling is a second generation, family owned business that has been...



8. Marine Machining & Manufacturing

Propellers, Metals, Drilling & Boring Contractors

[Website](#) [Directions](#) [More Info](#)

45 Years
in Business

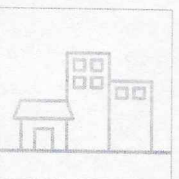
16 Years with
Yellow Pages

(586) 791-8800

33475 Gifts Dr
Clinton Township, MI 48035

OPEN NOW

From Business: Midwest's Largest Propeller Shafting & Repair Facility INVENTORY BLOW OUT SALE !!!! One of the largest Michigan Wheel-stocked inventories in North America. ALL...



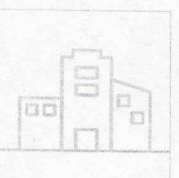
9. Performance Boring

Drilling & Boring Contractors

14 Years
in Business

(586) 759-2000

24760 Romano St
Warren, MI 48091



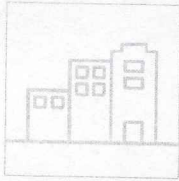
10. Palazzolo Directional Boring

Drilling & Boring Contractors

15 Years
in Business


(734) 284-1974

13583 Netherwood St
Southgate, MI 48195

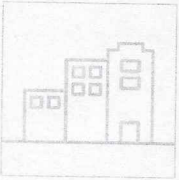


11. Industrial Boring Co

Drilling & Boring Contractors


 58 Years
in Business

(586) 756-9110
23175 Blackstone Ave
Warren, MI 48089



12. Deep Drill & Machine Inc

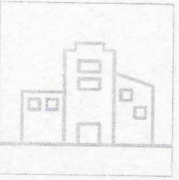
Drilling & Boring Contractors

 36 Years
in Business

(313) 295-3357

5875 Tulane St
Taylor, MI 48180


 **CLOSED NOW**



13. Acromatic Deep Hole Drilling

Drilling & Boring Contractors, Water Well Drilling & Pump Contractors

Website

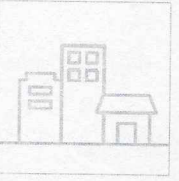
 50 Years
in Business

(248) 680-1222

1830 Woodslee Dr
Troy, MI 48083

 **CLOSED NOW**

From Business: Acromatic Deep Hole Drilling is a precision deep hole drilling service based in Troy, Michigan since 1974. We specialize in gun drilling on steel bars and...



14. B C & F Tool Co

Drilling & Boring Contractors

Website

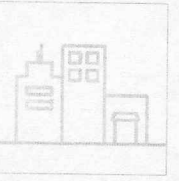
 78 Years
in Business

(248) 545-9075

26670 Harding St
Oak Park, MI 48237

 **OPEN NOW**

From Business: Formed in 1946, B.C. & F. Tool Company is a drilling and boring contractor that provides various related products. Based in Oak Park, Mich., the firm specializes...



15. American Underground Corporation


Telephone & Television Cable Contractors, Trenching & Undergroun...

Website

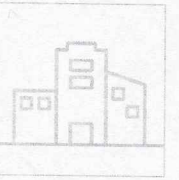
 25 Years
in Business

(810) 459-6430

17900 Nick Dr
Macomb, MI 48044

 **OPEN 24 Hours**

From Business: We have over 25 years experience with the placement and locating off all underground utilities. We are certified with CCR, MDOT. We are also members of The Blue...

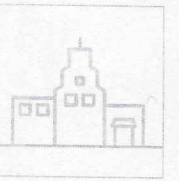


16. Accurate Boring

Drilling & Boring Contractors

(586) 294-7555

28178 Hayes Rd
Roseville, MI 48066



17. Intercept Boring & Machine CO

Drilling & Boring Contractors

 45 Years
in Business

(248) 589-1622

32022 Edward Ave
Madison Heights, MI 48071



18. Net Force One

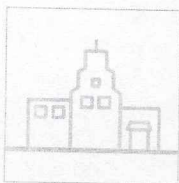
Drainage Contractors, Leasing Service, Drilling & Boring Contractors

 12 Years
in Business

(248) 390-8449

31325 Schoolcraft Rd
Livonia, MI 48150

 **OPEN NOW**

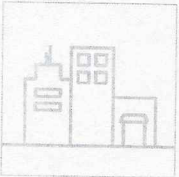


19. Rtc Drilling And Honing

Drilling & Boring Contractors, Water Well Drilling & Pump Contractors
Website

(248) 516-5660

20712 Robinson St
Farmington Hills, MI 48336



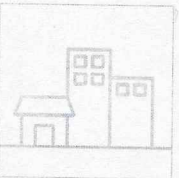
20. R K Boring, Inc

Drilling & Boring Contractors

(734) 542-7920

11761 Levan Rd
Livonia, MI 48150

🕒 **CLOSED NOW**

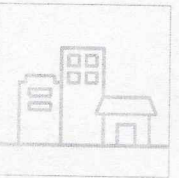


21. GHD Services Inc

Drilling & Boring Contractors

(734) 432-1600

36975 Amrhein Rd
Livonia, MI 48150



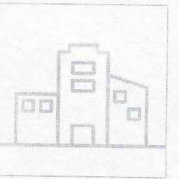
22. Eagle Boring

Drilling & Boring Contractors
Website

(586) 722-3874


44043 N Groesbeck Hwy
Clinton Township, MI 48036

🕒 **OPEN NOW**



23. T E C Boring

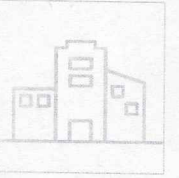
Drilling & Boring Contractors

 **12 Years**
in Business

(586) 443-5437


15645 Sturgeon St
Roseville, MI 48066

🕒 **CLOSED NOW**



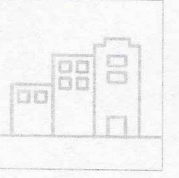
24. W B Deering Co

Drilling & Boring Contractors

 **72 Years**
in Business

(248) 435-0464

918 W 14 Mile Rd
Clawson, MI 48017



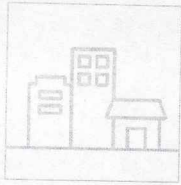
25. CBS Boring & Machine Company

Drilling & Boring Contractors
Website

(586) 294-6939

34487 Doreka
Fraser, MI 48026

🕒 **OPEN NOW**



26. Richman Well Drilling


Drilling & Boring Contractors, Pumps-Service & Repair, Water Well ...

(248) 634-4629

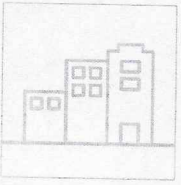
9900 Buckhorn Lake Rd
Holly, MI 48442

(1)

Website

 21 Years
in Business

“ Exceptional service! Found them to be very honest.”



27. DPW & SON

Drilling & Boring Contractors

(248) 620-4421

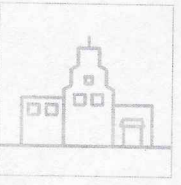
PO Box 1004
Clarkston, MI 48347

Website

 35 Years
in Business

 **OPEN NOW**

From Business: Being in the Water and Sewer industry for over 35 years has earned DPW & Son an outstanding reputation. Keeping our clients happy is our #1 goal. Once they see...



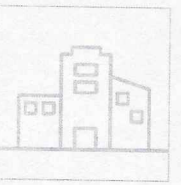
28. G T C Specialties Inc

Drilling & Boring Contractors

(586) 992-1236

51195 Regency Center Dr
Macomb, MI 48042

 **OPEN NOW**




29. Precision Drilling & Testing

Drilling & Boring Contractors, Concrete Contractors, Foundation Co...

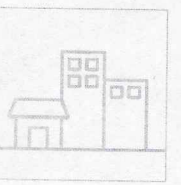
(248) 652-9428

1353 E Fairview Ln
Rochester Hills, MI 48306

Website

 34 Years
in Business

 **OPEN NOW**




30. Fettigs Well Drilling

Drilling & Boring Contractors, Pumps

(248) 363-4927

2990 Towering Oaks Dr
White Lake, MI 48383

 23 Years
in Business

Showing 1-30 of 36

< **1** 2 >

Places Near Detroit, MI with Directional Boring

Hamtramck (7 miles)
Highland Park (10 miles)
River Rouge (10 miles)
Dearborn (11 miles)
Melvindale (12 miles)
Grosse Pointe (13 miles)
Ecorse (13 miles)
Lincoln Park (14 miles)

Related Categories

Water Well Drilling & Pump Contractors
Building Contractors
Pumps
Plumbing Fixtures, Parts & Supplies
Pumps-Service & Repair
Gas Companies
Glass Bending, Drilling, Grinding, Etc
Utility Companies
Building Specialties
Water Well Plugging & Abandonment Service

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[City Guides](#)

Arlington/Shirley Agenda Item Request

jmirro <jmirro@intromarketing.com>

Sun, Feb 18, 2024 at 9:52 PM

To: emclain@bhamgov.org

Cc: Jana Ecker <Jecker@bhamgov.org>, abingham@bhamgov.org, mkucharek@bhlaw.us.com, Melissa Coatta <mcoatta@bhamgov.org>

Dear Mayor McLain,

Thank you for the opportunity to speak at the last Commission Meeting during the "Items Not On The Agenda" segment. Also thank you for allowing all the Commissioners to vote at the end of the meeting to consider Horizontal Directional Drilling (HDD) for future infrastructure changes. Unfortunately, I believe that some of the Commissioners did not have my 2-11-24 letter in front of them when you asked your question as to whether the motion referred to all city streets in general or to just Arlington and Shirley Streets. Clearly, Arlington and Shirley property owners cannot speak for streets other than their own.

In view of the misunderstanding noted above, our property owners are requesting that I speak at the 3-4-24 Commission Meeting as part of a separate agenda item entitled "Arlington/Shirley Infrastructure/Street Changes." The logic goes something like this. If we property owners are being asked to pay an assessment for changes to property owned by the City (water mains, sewers, streets), we would like the City Staff/Commissioners to have information that impacts the amount of the project cost/assessment before any design decisions are made and bids taken for this work. If we can save money for both the City and property owners, this information should be presented now.

In my Commissioner letter of 2-11-24, I attached a list of 30 companies in the metro Detroit area that are in the HDD business. During the past week, I have talked with representatives from most of these companies, including some who have visited our streets and who have done work for the City in the past. At the 3-4-24 Commission Meeting, I would like to share information from these representatives with the Commissioners/City Staff that can affect the total cost of our project moving forward. In view of the timing involved, please let me know by Tuesday, 2-20-24, if you can place this item on the 3-4-24 agenda and, if not, how such an item can be placed on the agenda so that we do not miss the deadline for doing so. Please also let me know if the City is able to provide me with civil drawings of our two streets. If not, this will not affect our request to be on the agenda. Thank you.

Jim Mirro, Resident Agent

Save Our Streets & Trees

A MI Nonprofit Foundation

737 Arlington

248-420-5113



**NOTICE OF INTENTION TO APPOINT TO THE
MARTHA BALDWIN PARK BOARD**

At the regular meeting of Monday, April 15, 2024 the Birmingham City Commission intends to appoint two regular members to the Martha Baldwin Park Board to serve four-year terms to expire May 1, 2028. Members must be electors of the City of Birmingham.

Interested citizens may submit an application available at the City Clerk’s office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk's office on or before noon on Wednesday, April 10, 2024. These documents will appear in the public agenda for the regular meeting at which time the City Commission will discuss recommendations, and may make nominations and vote on appointments.

All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement

Criteria/Qualifications of Open Position	Date Applications Due (by noon)	Date of Interview
Members must be electors in the City of Birmingham.	4/10/2024	4/15/2024



**NOTICE OF INTENTION TO APPOINT TO THE
HOUSING BOARD OF APPEALS**

At the meeting of Monday, April 15, 2024, the Birmingham City Commission intends to appoint one regular member to the Housing Board of Appeals to serve a three-year term to expire May 4, 2027, and two regular members to serve the remainder of three-year terms set to expire May 4, 2026. Members shall be educated or experienced in building, construction administration, social services, real estate or other responsible positions.

The Housing Board of Appeals was established in order to provide an appeal process from regulation derived from the housing and maintenance requirements found in Chapter 22 of the City Code. The purpose of the housing and maintenance regulations is to protect, preserve and promote the physical and social well being of the people, to regulate privately and publicly owned dwellings for the purpose of maintaining adequate sanitation and public health.

Interested citizens may submit an application available at the City Clerk’s office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk’s office on or before noon on Wednesday, April 10, 2024. These documents will appear in the public agenda for the regular meeting at which time the City Commission will discuss recommendations, and may make nominations and vote on appointments.

All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement.

Criteria/Qualifications of Open Position	Date Applications Due (by noon)	Date of Interview
Members shall be educated or experienced in building, construction administration, social services, real estate or other responsible positions.	4/10/2024	4/15/2024



MEMORANDUM

Finance

DATE: February 19, 2024

TO: Jana L. Ecker, City Manager

FROM: Mark Gerber, Director of Finance/Treasurer

SUBJECT: Second Quarter Financial Reports

Background

Chapter 7, section 3(b) of the City Charter requires the Director of Finance to report on the condition of the City quarterly. Quarterly reports are prepared for the first 3 quarters of the year with the annual audit serving as the 4th quarter report. Only the following funds are reported quarterly because by state law they require a budget: General Fund, Greenwood Cemetery Perpetual Care Fund, Major and Local Street Funds, Solid Waste Fund, Community Development Block Grant Fund, Law and Drug Enforcement Fund, Baldwin Public Library Fund, Principal Shopping District Fund, Brownfield Redevelopment Authority Fund, Triangle District Corridor Improvement Authority Fund, and the Debt Service Fund.

Overview

Attached are the second quarter 2023-2024 fiscal year financial reports. The reports compare budget to actual for the current fiscal year and the prior fiscal year for the same quarter. The previous year's budget and actual have been restated using the required State chart of account groupings. This allows meaningful comparisons between fiscal years as well as percentage of budget received/spent for the year. The budget categories used for each fund are the same ones approved by the Commission when they adopted the 2023-2024 budget. Budget discussions that follow will focus on each fund individually.

At this point, 50% of the fiscal year has lapsed.

General Fund

Revenues are approximately \$3M higher than the previous year as a result of an increase in tax revenue. Decreases in Licenses and Permits were offset by an increase in Fines and Forfeitures and Interest and Rent. Taxes increased as a result of an increase in taxable value. Licenses and Permits decreased as a result of large scale construction permits in FY 2022-2023. Interest is

higher due to an increase in the interest rate and Fines and Forfeitures are higher due to 48th District Court revenues.

Federal, State, and Local Grant funds, Special Assessments and Fines and Forfeitures are below expected budget due to timing of when the revenues are received.

Total current year-to-date expenditures for the General Fund are higher than the prior year by approximately \$.7M, or 3%. Most of the increase is related to an increase in Transfers Out of \$1.5M, Public Safety of \$.5M, General Government of \$.3M, and Recreation and Culture of \$.2M. This was offset by a decrease in Public Works of \$.2M. The increase in the Transfers Out is due to an increase in transfers to the Major and Local Street Funds. The increase in Public Safety and General Government is mainly the result of higher personnel costs and implementing OpenGov budgeting. The increase in Recreation and Culture is the result of personnel costs and parks master plan. The decrease in Public Works is related to construction on S. Old Woodward which was in fiscal year 2022-2023.

Greenwood Cemetery Fund

Cemetery perpetual care revenues are slightly higher than last year as a result of plot sales.

Major Street Fund

Total revenues are approximately \$1M higher than the prior year as a result of higher budgeted transfers from the General Fund. State grant revenue is at 34% as a result of November and December road funding being received after the quarter ended.

Overall expenditures are approximately \$.2M higher than the previous year as a result of higher traffic control expenditures through the end of the quarter compared to the prior year.

Local Street Fund

Total revenues for the year are approximately \$.6M higher than the previous year as a result of higher transfers from the General Fund. As with the Major Street fund, State grants are generally received 2 months after the close of the month which explains the low budget to actual variance.

Total expenditures are \$.2M higher than the previous year, approximately the same as the prior year. Maintenance of Streets and Bridges is higher by \$.2M due to a cape sealing project. Street Cleaning is higher by \$.1M as a result of the cape sealing project. Street Trees is \$.1M higher as a result of storm damage. This was partially offset by a decrease in Construction of Roads and Bridges of \$.2M.

Solid Waste Fund

Revenues are approximately \$.1M higher than the previous year as a result of higher property tax revenue.

Expenditures are approximately the same as the prior fiscal year.

Brownfield Redevelopment Authority Fund

Revenues are approximately \$.2M lower than the prior year. This is the result of lower property taxes being captured on brownfield sites.

Reimbursements to developers for site contamination cleanup were paid in October 2023 and October 2022.

Principal Shopping District

Revenues and expenditures are approximately the same as the prior fiscal year. Special assessments are normally billed in January.

Community Development Block Grant Fund

CDBG expenditures for this fiscal year represent work for the ADA parking space at the Birmingham Historic Museum.

Triangle District Corridor Improvement Authority

The City is attempting to re-engage with the County regarding tax capture for the district. To-date no property taxes have been captured and no funds spent on this activity.

Michigan Indigent Defense Fund

Revenues are approximately \$.1M higher as a result of grants from the State. Expenditures to defense attorneys is approximately the same as last year.

Baldwin Library

Revenue has increased approximately \$.3M. This is the result of an increase in property tax revenue of \$.3M.

Expenditures are approximately \$2M more than the prior fiscal year due to building construction for the next phase of building improvements in the current fiscal year.

Law and Drug Enforcement Fund

Revenues are approximately \$.1M more than the previous fiscal year as a result of receiving forfeiture funds related to the Fraud and Financial Crimes Task Force.

Debt Service Fund

Budgeted revenues and expenditures are based on scheduled debt service payments. Expenditures are at 95% spent for the year as a result of making a principal payment in September.

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 GENERAL FUND
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	2,856,787	-	0%	2,482,384	-	0%
TAXES	33,524,900	33,410,572	100%	30,327,140	30,304,878	100%
SPECIAL ASSESSMENTS	656,810	79,853	12%	1,265,360	133,794	11%
LICENSES AND PERMITS	2,720,510	1,553,643	57%	2,678,930	2,176,487	81%
FEDERAL GRANTS	133,190	85,692	64%	51,500	50,638	98%
STATE GRANTS	2,833,900	563,028	20%	2,446,470	580,775	24%
LOCAL CONTRIBUTIONS	151,650	36,936	24%	90,240	2,793	3%
CHARGES FOR SERVICES	3,557,890	1,610,653	45%	3,159,460	1,598,898	51%
FINES AND FORFEITURES	1,957,340	588,504	30%	1,372,250	410,241	30%
INTEREST AND RENT	756,500	657,318	87%	417,320	326,062	78%
OTHER REVENUE	250,130	63,602	25%	51,650	48,466	94%
TRANSFERS IN	100,000	50,000	50%	100,000	50,000	50%
TOTAL REVENUES	49,499,607	38,699,801	78%	44,442,704	35,683,032	80%
EXPENDITURES:						
GENERAL GOVERNMENT	6,596,920	2,836,659	43%	5,801,960	2,526,283	44%
JUDICIAL	1,999,280	1,114,750	56%	1,243,770	958,326	77%
PUBLIC SAFETY	20,068,345	9,521,803	47%	18,451,712	9,065,459	49%
PUBLIC WORKS	8,866,222	2,685,582	30%	10,979,849	4,780,546	44%
HEALTH AND WELFARE	217,630	113,754	52%	179,040	77,911	44%
COMMUNITY AND ECONOMIC DEVELOPMENT	784,658	315,105	40%	739,544	264,014	36%
RECREATION AND CULTURE	3,366,519	1,548,905	46%	3,210,828	1,331,355	41%
TRANSFERS OUT	7,600,000	3,500,000	46%	3,835,968	1,960,968	51%
TOTAL EXPENDITURES	49,499,574	21,636,558	44%	44,442,671	20,964,863	47%

CITY OF BIRMINGHAM
QUARTERLY BUDGET REPORT
GREENWOOD CEMETERY FUND
QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
% OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	(58,000)	-	0%	(82,500)	-	0%
CHARGES FOR SERVICES	35,000	47,800	137%	60,000	21,150	35%
INTEREST AND RENT	23,000	12,249	53%	22,500	14,679	65%
TRANSFERS IN	-	-	0%	-	-	0%
TOTAL Revenues	-	60,049	0%	-	35,829	0%
EXPENDITURES:						
ENGINEERING AND PUBLIC SERVICES	-	-	0%	-	-	0%
TOTAL EXPENDITURES	-	-		-	-	

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 MAJOR STREETS
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	5,174,957	0	0%	3,170,411	0	0%
SPECIAL ASSESSMENT	0	0	0%	31,900	0	0%
STATE GRANTS	1,841,950	633,496	34%	1,786,350	608,977	34%
INTEREST AND RENT	35,180	79,569	226%	38,590	40,974	106%
OTHER REVENUE	-	3,252	0%	-	-	0%
TRANSFERS IN	<u>3,500,000</u>	<u>1,750,000</u>	50%	<u>1,500,000</u>	<u>750,000</u>	50%
TOTAL REVENUES	<u>10,552,087</u>	<u>2,466,317</u>	<u>23%</u>	<u>6,527,251</u>	<u>1,399,951</u>	<u>21%</u>
EXPENDITURES:						
PUBLIC WORKS:						
ADMINISTRATIVE	19,670	10,707	54%	19,640	10,785	55%
TRAFFIC CONTROLS & ENGINEERING	1,347,407	294,531	22%	993,067	141,929	14%
CONSTRUCTION OF ROADS & BRIDGES	7,710,454	2,223,275	29%	4,098,064	2,228,726	54%
MAINTENANCE OF ROADS & BRIDGES	488,256	166,472	34%	447,520	145,390	32%
STREET CLEANING	236,050	86,034	36%	237,990	97,976	41%
STREET TREES	471,580	227,116	48%	456,420	193,752	42%
SNOW AND ICE REMOVAL	<u>278,670</u>	<u>25,171</u>	9%	<u>274,550</u>	<u>25,320</u>	9%
TOTAL EXPENDITURES	<u>10,552,087</u>	<u>3,033,306</u>	<u>29%</u>	<u>6,527,251</u>	<u>2,843,878</u>	<u>44%</u>

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 LOCAL STREETS
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	969,147	-	0%	478,752	-	0%
SPECIAL ASSESSMENT	237,740	19,901	8%	521,730	47,362	9%
STATE GRANTS	752,340	254,928	34%	729,630	244,805	34%
INTEREST AND RENT	42,000	51,811	123%	28,950	20,631	71%
OTHER REVENUE	5,000	7,700	154%	5,000	3,938	79%
TRANSFERS IN	<u>3,500,000</u>	<u>1,750,000</u>	50%	<u>2,250,000</u>	<u>1,125,000</u>	50%
TOTAL REVENUES	<u><u>5,506,227</u></u>	<u><u>2,084,340</u></u>	<u>38%</u>	<u><u>4,014,062</u></u>	<u><u>1,441,736</u></u>	<u>36%</u>
EXPENDITURES:						
PUBLIC WORKS:						
ADMINISTRATIVE	27,690	14,565	53%	27,680	14,630	53%
TRAFFIC CONTROLS & ENGINEERING	74,110	31,051	42%	66,100	27,332	41%
CONSTRUCTION OF ROADS & BRIDGES	2,762,265	240,214	9%	1,466,862	421,301	29%
MAINTENANCE OF ROADS & BRIDGES	1,214,002	420,152	35%	1,073,210	214,070	20%
STREET CLEANING	265,690	177,026	67%	258,350	84,698	33%
STREET TREES	982,950	550,487	56%	946,370	470,424	50%
SNOW AND ICE REMOVAL	<u>179,520</u>	<u>25,151</u>	14%	<u>175,490</u>	<u>24,254</u>	14%
TOTAL EXPENDITURES	<u><u>5,506,227</u></u>	<u><u>1,458,645</u></u>	<u>26%</u>	<u><u>4,014,062</u></u>	<u><u>1,256,710</u></u>	<u>31%</u>

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 SOLID WASTE
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	3,672	0	0%	(7,320)	-	0%
TAXES	2,343,860	2,344,783	100%	2,245,000	2,248,764	100%
STATE GRANTS	4,000	4,976	124%	3,990	4,180	105%
CHARGES FOR SERVICES	100	2,428	2428%	17,100	9,584	56%
INTEREST AND RENT	20,000	28,325	142%	15,440	14,016	91%
OTHER REVENUE	<u>300</u>	<u>200</u>	67%	<u>-</u>	<u>208</u>	0%
TOTAL REVENUES	<u>2,371,932</u>	<u>2,380,712</u>	<u>100%</u>	<u>2,274,210</u>	<u>2,276,752</u>	<u>100%</u>
EXPENDITURES:						
PUBLIC WORKS	<u>2,371,932</u>	<u>1,131,164</u>	<u>48%</u>	<u>2,274,210</u>	<u>1,151,664</u>	<u>51%</u>

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 BROWNFIELD REDEVELOPMENT FUND
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	(880)	-	0%	(770)	-	0%
TAXES	481,830	464,340	96%	627,240	691,568	110%
CHARGES FOR SERVICES	-	-	0%	-	-	0%
INTEREST AND RENT	880	3,438	391%	770	1,478	192%
OTHER REVENUE	20,000	1,989	10%	20,000	5,394	27%
TRANSFERS IN	-	-	0%	-	-	0%
TOTAL REVENUES	<u>501,830</u>	<u>469,767</u>	<u>94%</u>	<u>647,240</u>	<u>698,440</u>	<u>108%</u>
EXPENDITURES						
COMMUNITY DEVELOPMENT	<u>501,830</u>	<u>462,145</u>	<u>92%</u>	<u>647,240</u>	<u>471,787</u>	<u>73%</u>

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 PRINCIPAL SHOPPING DISTRICT
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	111,004	-	0%	173,135	-	0%
SPECIAL ASSESSMENTS	1,201,500	1,513	0%	1,101,370	27,390	2%
CHARGES FOR SERVICES	25,000	-	0%	25,000	-	0%
INTEREST AND RENT	5,420	15,829	292%	5,310	5,782	109%
OTHER REVENUE	<u>220,000</u>	<u>148,585</u>	68%	<u>160,000</u>	<u>155,730</u>	97%
TOTAL REVENUES	<u>1,562,924</u>	<u>165,928</u>	<u>11%</u>	<u>1,464,815</u>	<u>188,902</u>	<u>13%</u>
EXPENDITURES						
COMMUNITY DEVELOPMENT	<u>1,562,924</u>	<u>630,889</u>	<u>40%</u>	<u>1,464,815</u>	<u>574,521</u>	<u>39%</u>

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 COMMUNITY DEVELOPMENT BLOCK GRANT
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
FEDERAL GRANTS	<u>65,640</u>	<u>3,950</u>	<u>6%</u>	<u>36,670</u>	<u>-</u>	<u>0%</u>
EXPENDITURES						
HEALTH AND WELFARE	<u>65,640</u>	<u>46,340</u>	<u>71%</u>	<u>36,670</u>	<u>-</u>	<u>0%</u>

CITY OF BIRMINGHAM
QUARTERLY BUDGET REPORT
TRIANGLE DISTRICT CORRIDOR IMPROVEMENT AUTHORITY
QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
% OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	(220)	-	0%	(190)	-	0%
PROPERTY TAXES	-	-	0%	-	-	0%
INTEREST AND RENT	<u>220</u>	<u>265</u>	120%	<u>190</u>	<u>130</u>	68%
TOTAL REVENUES	<u>-</u>	<u>265</u>	<u>0%</u>	<u>-</u>	<u>130</u>	<u>0%</u>
EXPENDITURES						
COMMUNITY DEVELOPMENT	<u>-</u>	<u>-</u>	<u>0%</u>	<u>-</u>	<u>-</u>	<u>0%</u>

CITY OF BIRMINGHAM
QUARTERLY BUDGET REPORT
MICHIGAN INDIGENT DEFENSE FUND
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	-	-	0%	2,860	-	0%
STATE GRANTS	494,100	252,207	51%	128,810	162,621	126%
LOCAL CONTRIBUTIONS	17,600	-	0%	-	-	0%
INTEREST AND RENT	<u>3,000</u>	<u>3,196</u>	107%	<u>480</u>	<u>1,706</u>	355%
TOTAL REVENUES	<u><u>514,700</u></u>	<u><u>255,403</u></u>	<u><u>50%</u></u>	<u><u>132,150</u></u>	<u><u>164,327</u></u>	<u><u>124%</u></u>
EXPENDITURES:						
HEALTH AND WELFARE	<u><u>514,700</u></u>	<u><u>165,583</u></u>	<u><u>32%</u></u>	<u><u>132,150</u></u>	<u><u>141,226</u></u>	<u><u>107%</u></u>

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 BALDWIN LIBRARY
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	2,203,880	-	0%	(478,930)	-	0%
TAXES	4,165,640	4,173,278	100%	3,854,880	3,867,794	100%
FEDERAL GRANTS	0	-	0%	0	6,400	0%
STATE GRANTS	42,000	8,558	20%	36,000	7,052	20%
LOCAL CONTRIBUTIONS	1,093,140	440,876	40%	1,062,390	425,462	40%
CHARGES FOR SERVICES	20,650	16,280	79%	21,000	14,300	68%
FINES AND FORFEITURES	5,000	3,179	64%	6,000	2,209	37%
INTEREST AND RENT	5,000	58,323	1166%	30,000	28,607	95%
OTHER REVENUE	260,000	152	0%	-	-	0%
TOTAL REVENUES	7,795,310	4,700,646	60%	4,531,340	4,351,826	96%
EXPENDITURES:						
RECREATION AND CULTURE	7,795,310	4,178,741	54%	4,531,340	2,137,808	47%

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 LAW & DRUG ENFORCEMENT FUND
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	29,790	-	0%	(20,150)	-	0%
FINES & FORFEITURES	25,000	136,790	547%	25,000	42,410	170%
INTEREST AND RENT	-	3,134	0%	580	1,134	195%
OTHER REVENUE	-	-	0%	-	-	0%
TOTAL REVENUES	<u>54,790</u>	<u>139,924</u>	<u>255%</u>	<u>5,430</u>	<u>43,543</u>	<u>802%</u>
EXPENDITURES:						
PUBLIC SAFETY	54,790	3,878	7%	5,430	3,635	0%
CAPITAL OUTLAY	-	-	0%	-	-	0%
TOTAL EXPENDITURES	<u>54,790</u>	<u>3,878</u>	<u>7%</u>	<u>5,430</u>	<u>3,635</u>	<u>67%</u>

CITY OF BIRMINGHAM
 QUARTERLY BUDGET REPORT
 DEBT SERVICE FUND
 QUARTER ENDED: DECEMBER 31, 2023 AND DECEMBER 31, 2022
 % OF FISCAL YEAR COMPLETED: 50%

	2023-2024			2022-2023		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
USE OF (CONTRIB. TO) FUND BALANCE	-	-	0%	-	-	0%
TAXES	1,637,910	1,639,832	100%	1,508,190	1,513,248	100%
STATE GRANTS	2,770	3,324	120%	5,200	2,982	57%
INTEREST AND RENT	<u>5,500</u>	<u>4,963</u>	90%	<u>1,740</u>	<u>2,314</u>	133%
 TOTAL REVENUES	 <u><u>1,646,180</u></u>	 <u><u>1,648,119</u></u>	 <u>100%</u>	 <u><u>1,515,130</u></u>	 <u><u>1,518,544</u></u>	 <u>100%</u>
EXPENDITURES:						
DEBT SERVICE	<u><u>1,646,180</u></u>	<u><u>1,566,211</u></u>	<u>95%</u>	<u><u>1,515,130</u></u>	<u><u>1,398,411</u></u>	<u>92%</u>



MEMORANDUM

Finance Department

DATE: February 14, 2024

TO: Jana L. Ecker, City Manager

FROM: Mark Gerber, Finance Director/Treasurer

SUBJECT: 2nd Quarter Investment Report

Public Act 213 of 2007 requires investment reporting on the City's general investments to be provided to the City Commission on a quarterly basis. This information is also required to be provided annually, which the City has and will continue to include within the audited financial statements.

General investments of the City are governed by State law and the City's General Investment Policy approved by the City Commission. The services of an outside investment advisor are utilized to assist the treasurer in determining which types of investments are most appropriate and permitted under the investment policy, maximize the return on the City's investments within investment policy constraints, and provide for cash flow needs.

The two primary objectives for investment of City funds are the preservation of principal and liquidity to protect against losses and provide sufficient funds to enable the City to meet all operating requirements that might be reasonably anticipated. Investment activities include all City funds except the retirement and retiree health-care funds as follows:

- General Fund
- Permanent Funds
- Special Revenue Funds
- Capital Projects Fund
- Enterprise Funds
- Debt Service Funds
- Component Unit Funds
- Internal Service Funds

Overall, the City has \$120.8 million invested in various securities according to its general investment policy as of December 31, 2023.

The City has two pooled funds (CLASS Pool and J-Fund), which are used to meet payroll, contractor and other accounts payable needs. As indicated on the attached schedule, there was approximately \$10.6 million invested in pooled funds at the end of December. A maximum of 50% of the portfolio may be invested in pooled funds that meet State guidelines. The amount currently invested in pooled funds is 9%.

The City also holds approximately \$56.2 million, or 46%, of its investments in treasury notes and bills, which are obligations of the United States. The maximum amount of investments that may be held in government securities is 100%.

Investments in federal agencies total approximately \$54.0 million, or 45%, of the City's investments. The maximum amount of the portfolio that may be invested in federal agencies is 75%.

The Investment Policy requires that the average maturity of the portfolio may not exceed two and one-half years. The current average maturity of the portfolio is 1.8 years.

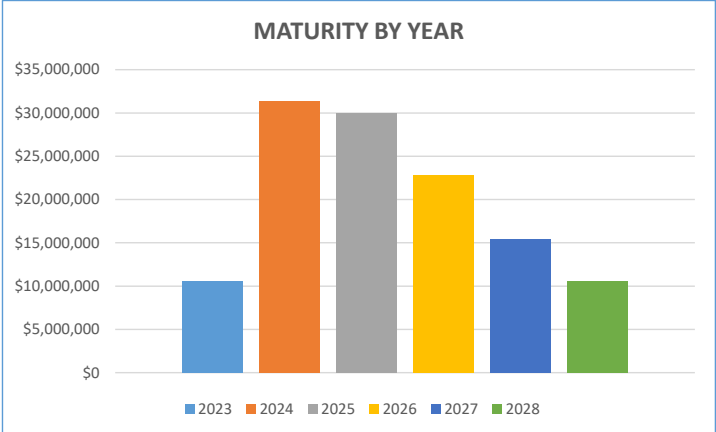
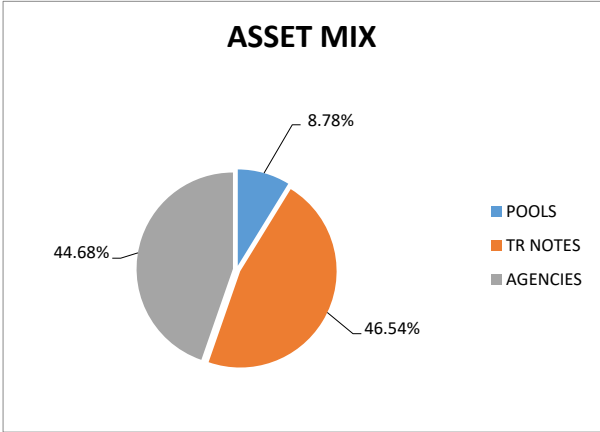
**CITY OF BIRMINGHAM
GENERAL INVESTMENT PORTFOLIO SUMMARY**

12/31/2023

YEAR	MATURITY DATE	DESCRIPTION	% YIELD	*	PAR VALUE	COST	CURRENT MARKET VALUE	YEARLY TOTAL
2023	12/31/2023	CLASS POOL	5.225%	CITY	2,302,572.66	2,302,572.66	2,302,572.66	
	12/31/2023	J FUND	4.841%	CITY	8,300,785.33	8,300,785.33	8,300,785.33	
								10,603,357.99
2024	1/18/2024	TR NOTE	5.335%	INSIGHT	1,000,000.00	985,625.14	997,650.00	
	1/19/2024	AGENCY	0.241%	INSIGHT	1,000,000.00	999,670.00	997,600.00	
	2/5/2004	AGENCY	1.572%	INSIGHT	1,500,000.00	1,558,201.50	1,496,025.00	
	2/29/2024	TR NOTE	1.637%	INSIGHT	1,750,000.00	1,785,621.10	1,741,022.50	
	3/8/2024	AGENCY	4.396%	INSIGHT	2,900,000.00	2,868,825.00	2,891,068.00	
	4/15/2024	TR NOTE	0.434%	INSIGHT	3,000,000.00	2,995,546.88	2,958,750.00	
	5/17/2024	AGENCY	0.360%	INSIGHT	1,000,000.00	999,800.00	981,120.00	
	5/31/2024	TR NOTE	0.462%	INSIGHT	1,000,000.00	1,040,823.66	986,680.00	
	6/14/2024	AGENCY	0.377%	INSIGHT	1,500,000.00	1,556,520.00	1,477,665.00	
	6/14/2024	AGENCY	4.343%	INSIGHT	2,500,000.00	2,481,025.00	2,483,425.00	
	7/2/2024	AGENCY	1.719%	INSIGHT	1,500,000.00	1,502,037.00	1,474,980.00	
	8/19/2024	AGENCY	0.450%	INSIGHT	2,000,000.00	1,999,500.00	1,942,560.00	
	9/13/2024	AGENCY	1.729%	INSIGHT	1,750,000.00	1,843,345.00	1,725,430.00	
	9/30/2024	TR NOTE	0.569%	INSIGHT	1,500,000.00	1,541,020.65	1,462,320.00	
	10/31/2024	TR NOTE	0.465%	INSIGHT	1,000,000.00	1,032,695.31	2,918,670.00	
	10/31/2024	TR NOTE	2.476%	INSIGHT	1,000,000.00	994,378.35	978,440.00	
11/15/2024	TR NOTE	0.560%	INSIGHT	1,500,000.00	1,578,637.84	1,466,430.00		
12/16/2024	AGENCY	0.500%	INSIGHT	1,000,000.00	1,000,000.00	957,990.00		
12/30/2024	AGENCY	0.390%	INSIGHT	1,500,000.00	1,499,025.00	1,434,285.00		
								31,372,110.50
2025	1/7/2025	AGENCY	0.362%	INSIGHT	1,500,000.00	1,580,434.50	1,453,515.00	
	1/28/2025	AGENCY	0.550%	INSIGHT	1,500,000.00	1,500,000.00	1,436,745.00	
	2/12/2025	AGENCY	0.344%	INSIGHT	1,500,000.00	1,575,136.50	1,448,115.00	
	2/26/2025	AGENCY	0.680%	INSIGHT	1,000,000.00	1,000,000.00	959,320.00	
	2/28/2025	TR NOTE	0.508%	INSIGHT	1,500,000.00	1,533,925.38	1,440,765.00	
	3/28/2025	AGENCY	1.250%	INSIGHT	1,500,000.00	1,370,835.00	1,432,830.00	
	3/28/2025	AGENCY	0.450%	INSIGHT	1,500,000.00	1,500,000.00	1,422,180.00	
	3/31/2025	TR NOTE	0.669%	INSIGHT	1,500,000.00	1,491,215.96	1,426,230.00	
	4/22/2025	AGENCY	0.625%	INSIGHT	1,500,000.00	1,399,770.00	1,426,170.00	
	6/30/2025	AGENCY	0.750%	INSIGHT	2,000,000.00	2,000,000.00	1,895,260.00	
	7/15/2025	TR NOTE	4.233%	INSIGHT	3,000,000.00	2,903,095.99	2,934,480.00	
	8/15/2025	TR NOTE	3.037%	INSIGHT	2,000,000.00	1,937,506.70	1,924,620.00	
	9/15/2025	TR NOTE	4.187%	INSIGHT	3,000,000.00	2,942,939.74	2,955,810.00	
	10/15/2025	TR NOTE	4.457%	INSIGHT	1,500,000.00	1,491,386.71	1,497,195.00	
10/31/2025	TR NOTE	3.167%	INSIGHT	2,500,000.00	2,487,020.09	2,441,800.00		
11/15/2025	TR NOTE	3.025%	INSIGHT	2,000,000.00	1,951,959.82	1,926,260.00		
12/15/2025	TR NOTE	5.023%	INSIGHT	2,000,000.00	1,984,517.46	1,989,300.00		
								30,010,595.00
2026	1/15/2026	TR NOTE	5.005%	INSIGHT	2,000,000.00	1,953,209.83	1,984,760.00	
	2/25/2026	AGENCY	3.577%	INSIGHT	1,500,000.00	1,487,659.50	1,470,765.00	
	3/31/2026	TR NOTE	4.144%	INSIGHT	3,000,000.00	2,816,142.86	2,877,900.00	
	5/26/2026	AGENCY	5.015%	INSIGHT	1,965,000.00	1,797,385.50	1,846,117.50	
	6/16/2026	AGENCY	4.203%	INSIGHT	3,000,000.00	2,928,240.00	2,952,180.00	
	7/27/2026	AGENCY	4.412%	INSIGHT	1,500,000.00	1,504,590.00	1,514,220.00	
	8/14/2026	AGENCY	4.731%	INSIGHT	1,500,000.00	1,490,415.00	1,512,615.00	
	9/11/2026	AGENCY	4.963%	INSIGHT	2,000,000.00	1,995,156.00	2,039,100.00	
	10/15/2026	TR NOTE	4.847%	INSIGHT	3,000,000.00	2,981,611.61	3,044,520.00	
	11/15/2026	TR NOTE	4.852%	INSIGHT	2,000,000.00	1,838,131.70	1,890,780.00	
	12/18/2026	AGENCY	4.790%	INSIGHT	1,885,000.00	1,675,380.46	1,704,473.55	
2027	1/12/2027	AGENCY	3.803%	INSIGHT	1,500,000.00	1,520,295.00	1,505,010.00	
	3/31/2027	TR NOTE	4.071%	INSIGHT	1,500,000.00	1,406,430.81	1,433,610.00	
	4/30/2027	TR NOTE	4.867%	INSIGHT	1,500,000.00	1,398,930.81	1,442,865.00	
	6/30/2027	TR NOTE	3.701%	INSIGHT	3,000,000.00	2,943,867.19	2,931,690.00	
	8/15/2027	TR NOTE	4.510%	INSIGHT	1,950,000.00	1,799,643.25	1,839,103.50	
	9/30/2027	TR NOTE	4.005%	INSIGHT	1,500,000.00	1,507,851.56	1,509,495.00	
	10/13/2027	AGENCY	4.885%	INSIGHT	3,000,000.00	2,985,456.00	3,079,440.00	

	11/30/2027	TR NOTE	4.513%	INSIGHT	1,700,000.00	1,658,701.01	1,696,413.00	
								15,437,626.50
2028	2/29/2028	TR NOTE	4.736%	INSIGHT	2,000,000.00	1,942,272.32	2,006,560.00	
	3/10/2028	AGENCY	3.539%	INSIGHT	1,575,000.00	1,641,386.28	1,612,248.75	
	6/30/2028	AGENCY	4.433%	INSIGHT	1,500,000.00	1,471,840.50	1,506,300.00	
	7/31/2028	TR NOTE	4.825%	INSIGHT	1,500,000.00	1,455,825.34	1,515,465.00	
	8/28/2028	AGENCY	4.454%	INSIGHT	1,800,000.00	1,803,792.60	1,835,388.00	
	9/22/2028	AGENCY	4.779%	INSIGHT	2,000,000.00	1,975,600.00	2,052,040.00	
								10,528,001.75
			3.232%		120,878,357.99	119,495,214.40	120,789,122.79	120,789,122.79

AVERAGE MATURITY (YEARS): 1.83



POOLS	\$10,603,357.99	8.78%
TR NOTES	\$56,219,584.00	46.54%
AGENCIES	\$53,966,180.80	44.68%
TOTAL	\$120,789,122.79	100.00%

COMPARATIVE RETURNS			
	City Portfolio	1-Yr TR	2-Yr TR
Current Month	3.17%	4.96%	4.47%
Previous Month	3.24%	5.27%	4.89%
1 Year Ago	2.11%	4.71%	4.30%



* Berkley * Beverly Hills * Bingham Farms * Birmingham
 * Clawson * Huntington Woods * Lathrup Village * Pleasant Ridge
 * Royal Oak * Southfield * Southfield Township

QUARTERLY REPORT January 2024

BOARD OF TRUSTEES	
Representative	Municipality
Shawn Young	City of Berkley
Jeff Campbell	Village of Beverly Hills
Kurt Jones	Village of Bingham Farms
Melissa Coatta	City of Birmingham
Trever Zablocki	City of Clawson
Rocco Fortura	City of Huntington Woods
Susie Stec	City of Lathrup Village
Jim Breuckman	City of Pleasant Ridge
Aaron Filipski	City of Royal Oak
Patrick Ryan	City of Southfield
Jeff Campbell	Township of Southfield

OFFICERS	
Chair:	J. Breuckman
Vice Chairman:	K. Jones
Secretary:	R. Fortura
Advisory Committee:	Breuckman, Jones, Fortura, Filipski

Jeff McKeen	General Manager
Bob Jackovich	Operations Manager

January 2024

Board of Trustees
Southeastern Oakland County Water Authority

Subject: Quarterly Report - January 2024

Board Members:

Attached is a copy of the Southeastern Oakland County Water Authority's Quarterly Report covering the first six months operation of the fiscal year 2023/24. The report contains a financial statement of the Authority's operation and an outline of projects in progress or completed during the second quarter. The report also contains statistical information and other information of general interest to the members of this Authority.

FINANCIAL STATEMENT

The total net operating income before depreciation for the first 6 months of 2023/24 was \$125,154, which was \$1,077,108 less than budgeted. This was a very large decrease from the net income of \$1,765,101 for the first six months of 2022/23.

	Actual	Compared to Budget
Revenue	\$14,633,887	- \$2,125,550
Expenses	\$14,508,733	- \$1,048,442
Net Income (before depreciation)	\$ 125,154	- \$1,077,108

SOCWA's working capital was 20.3% as of December 30, 2023. This is higher than the 8.3% working capital goal approved by the Board and a decrease from the 23.6% working capital as of December 29, 2022.

The decrease in revenue was primarily due to lower than planned water sales to the member communities (-\$1,132,000) and to Bloomfield Hills and Bloomfield Twp. (-\$1,256,000) which were partially offset by higher than planned miscellaneous revenue (+\$186,000) and interest income (+\$84,000). Water sales volumes for the six-month period were 14.6% lower than the actual water sales volumes for the same period in 2022/23 and were 14.7% lower than budgeted.

The decrease in expenses was due largely to lower than planned costs for water purchased (-\$954,000), utilities (-\$29,000), supplies (-\$28,000), Miss Dig (-\$22,000, which are largely a matter of timing), non-labor Administrative & General (-\$21,000), maintenance (-\$20,000) and labor (-9,000) which were partially offset by higher regulatory water testing costs (+\$35,000).

Capital expenditures for the first six months of the fiscal year totaled \$133,048 and were for purchase of two vehicles (\$68,000) and for the initial expenses for the replacement of two pressure reducing valves (\$62,000).

Additional financial detail is attached.

The following is the Authority's record of revenues and expenditures based on the average cost per 1,000 cu. ft. of water.

	2021/22	2022/23	2023/24	Over or Under 2022/23
Total Sales (MCF)	645,997	728,574	622,172	-106,402
Water Sales	\$20.99	\$21.70	\$22.87	+1.17
Other Income	<u>0.12</u>	<u>0.16</u>	<u>0.65</u>	+0.49
Total Income	\$21.11	\$21.86	23.52	+\$1.66
Water Purchased for Resale	18.94	18.19	21.48	+3.29
Operating Expenses	<u>1.86</u>	<u>1.42</u>	<u>1.84</u>	+0.42
Total Operating Expenses	\$20.80	\$19.60	\$23.32	+\$3.71
Available for Improvements	\$0.31	\$2.26	\$0.20	-\$2.06

COMPARATIVE STATEMENT

The following is a comparison of the first six months operation of the current fiscal year with the same period of the previous fiscal year.

Revenues From the Sale of Water	- \$1,580,048	
Revenues From Other Sources	+ <u>166,201</u>	
TOTAL REVENUES		- \$ <u>1,413,847</u>
<u>Operating Expenses</u>		
Water Purchased for Resale	+ \$114,436	
Other Operating Expenses	+ <u>111,664</u>	
TOTAL EXPENDITURES		+ \$ <u>226,100</u>
NET INCOME BEFORE DEPRECIATION		- \$1,639,947

The table on the next page is the record of SOCWA water sales volumes for the period July 1 through December 31. The six-month record shows a very large decrease in water sales volume of 14.6% during the current fiscal year compared with the same period of the previous fiscal year. Water sales volumes were also 14.6% below budget for the period. Precipitation was much higher than normal for July and August. Water sales were lower than the previous year for all six months of the period.

WATER CONSUMPTION – DAILY AVERAGE (MGD) JULY 1 THROUGH DECEMBER 31						
Month	2019	2020	2021	2022	2023	Over or Under 2022
July	36.08	44.53	30.79	39.81	33.77	-6.04
August	38.35	39.57	33.02	37.13	31.19	-5.94
September	30.00	31.16	29.77	34.10	28.27	-5.83
October	22.48	22.88	22.51	24.52	21.26	-3.26
November	20.21	19.78	20.68	21.00	18.69	-2.31
December	20.12	19.73	20.74	21.02	18.46	-2.56
Average	27.90	29.65	26.26	29.62	25.29	-4.33
Variance	-5.8%	+6.3%	-11.4%	+12.8%	-14.6%	

The following is the precipitation record, as recorded at the Webster Station:

PRECIPITATION – INCHES					
Month	2019	2020	2021	2022	2023
July	7.15	2.46	7.15	3.06	4.25
August	3.04	7.31	5.64	4.93	5.47
September	4.84	2.72	6.00	1.89	1.42
October	4.97	3.27	6.20	0.53	3.14
November	1.52	2.49	2.39	1.28	1.19
December	<u>2.60</u>	<u>5.30</u>	<u>2.13</u>	<u>2.60</u>	<u>3.40</u>
Total:	24.12	23.55	30.15	14.29	18.87

MAJOR PROJECTS

GLWA WATER RATES

GLWA will be announcing the rates for 2024/25 in January. GLWA is budgeting water sales for 2024/25 that will be lower than the 2023/24 budget which may make the expected rate increase from GLWA greater than in previous years. SOCWA water rate estimates for 2024/25 will be provided to the SOCWA Board at their February meeting.

GLWA ISSUES

GLWA Customer Outreach

GLWA has adopted the same Customer Outreach Program that DWSD has used for many years. SOCWA staff is continuing to participate in the GLWA Customer Outreach Process. I have been serving as one of seven elected customer co-chairs of the One Water Partnership that guides this process. Significant progress has been made in improving the level of communication and understanding between GLWA and its customers through this process, which will be a continuing effort. SOCWA continues to be a strong proponent of GLWA's customer partnering process. The Customer Outreach Program continues to be very important in continuing the excellent relationship between GLWA and its customers.

GLWA Board of Directors

Mr. Brian Baker, the GLWA Director representing Macomb County, was elected Board Chair for 2024. Mr. Baker replaces Mr. Freman Hendrix, one of the GLWA Directors representing Detroit, who was Board Chair for 2023. GLWA is using an annual rotation for Board Officers.

Highland Park

A settlement has been reached between GLWA, Highland Park and the State of Michigan that resolves the various court actions over Highland Park's unpaid water and sewer bills. As of June 30, 2023, Highland Park owed over \$54 million in unpaid bills for water service (\$12.1 million) and sewer service (\$42.2 million). As part of this settlement, Highland Park will be using a third party to set their water and sewer rates and all water and sewer revenue will be deposited into a trust account which will pay GLWA's bills before any remaining funds are provided to Highland Park. The State of Michigan will be providing \$25 million to GLWA for sewer infrastructure projects and \$5 million for water infrastructure projects. GLWA has determined that they will use a portion of this money to make refunds to their customers that have seen increased costs due to Highland Park not paying their GLWA bills. The refunds will be made after all the settlement details have been resolved. SOCWA will receive a refund of \$327,000. GLWA will be making larger refunds to their sewer customers. The SOCWA Board determined that this refund will be passed along to the member communities based on historic water consumption. These refunds will probably not be made until the 2024/25 fiscal year.

GLWA will not be including any costs associated with Highland Park's unpaid water bills in their rates for 2024/25.

GLWA Website

The GLWA website, www.glwater.org, is a great source of information regarding GLWA. The agendas and minutes for all Board and Board Committee meetings are posted along with procurement information about all projects being performed by GLWA.

SUMMER 2023 OPERATIONS

The summer of 2023 was very poor for water sales. The consistently rainy weather greatly reduced the amount of water sold for outdoor irrigation. SOCWA water sales volumes for the first half of the year decreased by 14.6% from last year. Our maximum day occurred on June 2 when we purchased 46.22 million gallons from GLWA. This was only 0.2% lower than the maximum day for 2022 and was 24% below our GLWA contract limit. The weather deteriorated after early June, and we had only 3 days with water sales over 40 million gallons during the summer of 2023 compared with 28 days with water sales over 40 million gallons during the summer of 2022. SOCWA water sales were significantly below budget for every month of the first half of the year.

WEBSTER WATER TANK SEPARATION PROJECT

We have begun working on a project to separate the two large water storage tanks at Webster Station. This \$4 million project will result in increased operational flexibility and increase the resiliency of the SOCWA water storage system. The engineering design work for this project has been completed. We applied for and received an infrastructure planning grant from Oakland County that paid for a portion of the engineering costs of this project. We also applied for a low interest loan for this project from Michigan's Drinking Water State Revolving Fund. However, our project did not have high enough priority to be included in the 2023 or 2024 programs.

The first phase of this project, the installation of a 36" isolation valve at Webster Station, will take place in early 2024. We are currently revisiting the construction schedule for the remainder of this project.

WATER SERVICE REPLACEMENT AND VERIFICATION CONTRACTS

SOCWA has a contract in place that can be used by the member communities for the replacement of lead water services. The member communities with lead water services will need to replace 5% to 7% of those services each year under the new State of Michigan lead and copper rules. Having a contractor available for all the member communities has helped reduce the cost of performing this required work. Several communities have begun to use the services of the lead service line replacement contractor.

SOCWA also has a contract in place that can be used by the member communities to verify water service line material type. The State of Michigan is requiring each community to verify the material type of a random sample of about 20% of the water service lines in the community. Several communities have begun to use the services of the service line verification contractor.

ANNUAL AUDIT

The audit report for the 2022/23 fiscal year was completed by our auditors, Plante & Moran, and was reviewed at the November SOCWA Board meeting. The audit found the Authority to be in complete conformity with generally accepted accounting practices. The auditors concluded that the Authority's level of working capital increased by \$1.3 million in the fiscal year due to increased water sales. Working capital continues to be maintained above the goal level established by the Board. The net position of SOCWA increased by \$945,313 during the year.

Audit standards require SOCWA to conduct an annual actuarial valuation of our liability for Other Post Employment Benefits (OPEB or retiree health insurance). We performed this year's valuation using a tool provided by Milliman, which was significantly less expensive and much quicker than having the analysis performed by our prior actuarial firm. The valuation as of June 30, 2023 showed that the OPEB plan for salaried employees was 186.0% funded and the OPEB plan for Union employees was 137.0% funded. We are now using the OPEB trust funds to pay for all of our retiree health insurance expenses.

NEW GENERAL MANAGER

I will be retiring as the General Manager of SOCWA and SOCRRA during the second quarter of 2024 after more than 22 years of service. In preparation for my retirement, the SOCWA and SOCRRA Boards conducted a detailed interview process that resulted in the selection of Eric Griffin as the new General Manager of SOCWA and SOCRRA. Eric is starting as General Manager on February 12, 2024. I will be continuing to work with Eric for a couple of months to ensure a smooth transition. Eric is an engineer that has been working for GLWA and DWSD for over 10 years. He worked closely with SOCWA staff on SCADA and metering issues, so he is familiar with the SOCWA water system.

Respectfully submitted,

Jeffrey A. McKeen, P.E.
General Manager

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
INCOME STATEMENT
07/01/23 -12/31/23

	Period Actual	Period Budget	Variance
REVENUES			
SALE OF WATER MEMBERS	9,071,416.00	10,203,754.00	(1,132,338.00)
SALE OF WATER OTHERS	5,156,064.77	6,412,312.00	(1,256,247.23)
TOTAL SALE OF WATER REVENUES	14,227,480.77	16,616,066.00	(2,388,585.23)
RENTALS	59,274.04	63,370.60	(4,096.56)
WATER ANALYSIS & MISC	670.00	3,000.00	(2,330.00)
INTEREST ON INVESTMENTS	158,552.41	75,000.00	83,552.41
MISCELLANEOUS REVENUES	187,909.73	2,000.00	185,909.73
TOTAL OTHER REVENUES	406,406.18	143,370.60	263,035.58
TOTAL REVENUES	14,633,886.95	16,759,436.60	(2,125,549.65)
LEAD SERVICE REPLACEMENT	525,326.75	1,350,000.00	(824,673.25)
EXPENSES			
PURCHASE OF WATER FOR RESALE	7,285,449.13	8,019,000.00	(733,550.87)
POWER, PUMPING & GROUNDS WEBSTER	285,251.81	305,770.04	(20,518.23)
POWER, PUMPING & GROUNDS	97,834.26	158,442.08	(60,607.82)
COMPUTER OPERATIONS	50,712.81	51,999.65	(1,286.84)
PURIFICATION	98,160.92	77,262.48	20,898.44
METERS & MAINS	119,521.57	131,400.88	(11,879.31)
ADMINISTRATION & GENERAL	492,888.36	514,300.00	(21,411.64)
WATER IN TRANSIT	6,078,914.18	6,299,000.00	(220,085.82)
TOTAL EXPENSES	14,508,733.04	15,557,175.13	(1,048,442.09)
LEAD SERVICE LINE REPLACEMENT	525,516.01	1,350,000.00	(824,483.99)
NET INCOME BEFORE DEPRECIATION	125,153.91	1,202,261.47	(1,077,107.56)
DEPRECIATION	317,512.00		
NET INCOME	(192,358.09)		

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
STATEMENT OF REVENUES AND EXPENDITURES COMPARED WITH TOTAL BUDGET
07/01/23 - 12/31/23

	Period Actual	Total Budget 2023-2024	Remaining Budget	% Received or Expended
REVENUES				
SALE OF WATER MEMBERS	9,071,416.00	19,015,100.00	(9,943,684.00)	48%
SALE OF WATER OTHERS	5,156,064.77	10,686,200.00	(5,530,135.23)	48%
TOTAL SALE OF WATER REVENUES	14,227,480.77	29,701,300.00	(15,473,819.23)	48%
RENTALS	59,274.04	130,999.90	(71,725.86)	45%
WATER ANALYSIS & MISC	670.00	10,000.00	(9,330.00)	7%
INTEREST ON INVESTMENTS	158,552.41	150,000.00	8,552.41	106%
MISCELLANEOUS REVENUES	187,909.73	2,000.00	185,909.73	9395%
TOTAL OTHER REVENUES	406,406.18	292,999.90	113,406.28	
TOTAL REVENUES	14,633,886.95	29,994,299.90	(15,360,412.95)	49%
LEAD SERVICE REPLACEMENT	525,326.75	2,500,000.00	(1,974,673.25)	21%
EXPENSES				
PURCHASE OF WATER FOR RESALE	7,285,449.13	27,357,000.00	(20,071,550.87)	27%
POWER, PUMPING & GROUNDS WEBSTER	285,251.81	595,500.08	(310,248.27)	48%
POWER, PUMPING & GROUNDS	97,834.26	314,240.16	(216,405.90)	31%
COMPUTER OPERATIONS	50,712.81	103,499.63	(52,786.82)	49%
PURIFICATION	98,160.92	154,524.96	(56,364.04)	64%
METERS & MAINS	119,521.57	263,049.76	(143,528.19)	45%
ADMINISTRATION & GENERAL	492,888.36	830,300.00	(337,411.64)	59%
WATER IN TRANSIT	6,078,914.18	0.00	6,078,914.18	0%
TOTAL EXPENSES	14,508,733.04	29,618,114.59	(15,109,381.55)	49%
LEAD SERVICE LINE REPLACEMENT	525,516.01	2,500,000.00	(1,974,483.99)	21%
NET INCOME BEFORE DEPRECIATION	125,153.91	376,185.31	(251,031.40)	33%

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
COMPARATIVE STATEMENT
07/01/23 - 12/31/23

	Period Actual 2023-2024	Period Actual 2022-2023	Over/Under
REVENUES			
SALE OF WATER	9,071,416.00	9,838,319.70	(766,903.70)
SALE OF WATER OTHERS	5,156,064.77	5,969,209.20	(813,144.43)
TOTAL SALE OF WATER REVENUES	14,227,480.77	15,807,528.90	(1,580,048.13)
RENTALS	59,274.04	64,270.20	(4,996.16)
WATER ANALYSIS-LAB & MISC	670.00	730.00	(60.00)
INTEREST ON INVESTMENTS	158,552.41	53,668.40	104,884.01
MISCELLANEOUS REVENUES	187,909.73	121,536.43	66,373.30
TOTAL OTHER REVENUES	406,406.18	240,205.03	166,201.15
TOTAL REVENUES	14,633,886.95	16,047,733.93	(1,413,846.98)
LEAD SERVICE LINE REPLACEMENT	525,326.75	1,929,068.89	(1,403,742.14)
EXPENSES			
WATER PURCHASED FOR RESALE	7,285,449.13	7,358,750.64	(73,301.51)
WATER PURCHASE IN TRANSIT	6,078,914.18	5,891,175.88	187,738.30
OPERATING EXPENSES	1,144,369.73	1,032,706.18	111,663.55
FIXED CHARGES	0.00	0.00	0.00
TOTAL EXPENSES	14,508,733.04	14,282,632.70	226,100.34
LEAD SERVICE LINE REPLACEMENT	525,516.01	1,932,238.89	(1,406,722.88)
NET INCOME BEFORE DEPRECIATION	125,153.91	1,765,101.23	(1,639,947.32)
DEPRECIATION	317,512.00	320,715.50	(3,203.50)
NET INCOME	(192,358.09)	1,444,385.73	(1,636,743.82)

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
TOTAL CHARGES
07/01/23 - 12/31/23

MUNICIPALITY	WATER CONSUMPTION CUBIC FEET	TOTAL WATER CHARGES
MEMBERS		
BERKLEY	23,681.68	455,535.18
BEVERLY HILLS	19,909.70	383,085.58
BINGHAM FARMS	5,601.10	107,060.71
BIRMINGHAM	61,769.28	1,178,353.04
CLAWSON	17,512.56	334,551.21
HUNTINGTON WOODS	10,832.02	209,257.63
LATHRUP VILLAGE	6,675.09	135,356.78
PLEASANT RIDGE	5,466.20	105,017.54
ROYAL OAK	115,753.89	2,241,312.71
SOUTHFIELD	195,948.22	3,774,658.89
DETROIT ZOO & RACKHAM	7,340.19	140,985.91
MEMBERS TOTAL	470,489.93	9,065,175.18
NON MEMBERS		
BLOOMFIELD HILLS	30,537.23	1,028,793.90
BLOOMFIELD TOWNSHIP	121,144.84	4,125,311.67
NON MEMBERS TOTAL	151,682.07	5,154,105.57
GRAND TOTAL	622,172.00	14,219,280.75

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
INCOME STATEMENT WITH AVERAGE PER CUBIC FOOT
07/01/23 - 12/31/23

	Period Actual	2023/2024 Average Per 1,000 cubic feet	2022/2023 Average Per 1,000 cubic feet
REVENUES			
SALE OF WATER	9,071,416.00	19.2808	18.1692
SALE OF WATER OTHERS	5,156,064.77	33.9926	31.9055
TOTAL SALE OF WATER REVENUES	14,227,480.77	22.8674	21.6965
RENTALS	59,274.04	0.0953	0.0882
WATER ANALYSIS-LAB & MISC	670.00	0.0011	0.0010
INTEREST ON INVESTMENTS	158,552.41	0.2548	0.0726
MISCELLANEOUS REVENUES	187,909.73	0.3020	0.1668
TOTAL OTHER REVENUES	406,406.18	0.6532	0.1618
TOTAL REVENUES	14,633,886.95	23.5206	21.8584
EXPENSES			
WATER PURCHASED FOR RESALE	7,285,449.13	11.7097	10.1002
POWER, PUMPING & GROUNDS WEBSTER	285,251.81	0.4585	0.4062
POWER , PUMPING & GROUNDS	97,834.26	0.1572	0.1658
COMPUTER OPERATIONS	50,712.81	0.0815	0.0610
PURIFICATION	98,160.92	0.1578	0.1082
METERS & MAINS	119,521.57	0.1921	0.1104
ADMINISTRATIVE & GENERAL	492,888.36	0.7922	0.5657
WATER IN TRANSIT	6,078,914.18	9.7705	8.0859
TOTAL EXPENSES	14,508,733.04	23.3195	19.6033
NET INCOME BEFORE DEPRECIATION	125,153.91		

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
CAPITAL EXPENSES
07/01/23 - 12/31/23

Fixed Asset Expenditures

2023 Ford F150 Pick Up #1	32,213.00
12 Mile Meter Station (PRV)	30,204.00
2023 Ford F150 Pick Up #2	36,080.00
11 & Franklin (16" Valve)	31,810.00
11 & Greenfield (2-8" Valves & Handwheels)	2,655.92
Tank Separation (Engineering)	84.83

Total Expenditures 133,047.75



MEMORANDUM

Police Department

DATE: February 29, 2024

TO: Jana L. Ecker, City Manager

FROM: Scott A. Grewe, Chief of Police

SUBJECT: Torry and Haynes Yield Sign Review

At the January 8, 2024, regular meeting, Commissioner Haig asked for a review of the yield sign located at the intersection of Torry and Haynes noting that earlier in the meeting a yield sign was changed to stop sign on Columbia.

It should be noted that the review of Columbia was conducted after multiple complaints of speeding vehicles, cut-through traffic, and sight line issues at intersections. Other mitigation attempts failed to address the issue on a more permanent basis, such as extra patrols for enforcement and temporary speed boards. Therefore, a review of sight line distances was conducted by F&V which found that the stop sign installations were warranted according to the Michigan Manual on Uniform Traffic Control Devices (MMUTCD).

In regards to the intersection of Torry and Haynes, there have been no traffic complaints received by the Police Department for this stretch of roadway. Additionally, there were no recorded accidents at this intersection in 2023, and the daily volume of vehicles at this location does not meet the levels identified by the MMUTCD for the installation of a stop sign. A review of the location also shows no permanent visual obstruction for drivers attempting to turn onto Haynes from Torry, however, the presence of parked vehicles on the south side of Haynes could present an obstruction.

Therefore, F&V was asked to provide a recommendation for this intersection. They have completed their review and it is attached.

MEMO

VIA EMAIL: RKearney@bhamgov.org

To: Cpt. Ryan Kearney
Birmingham Police Department

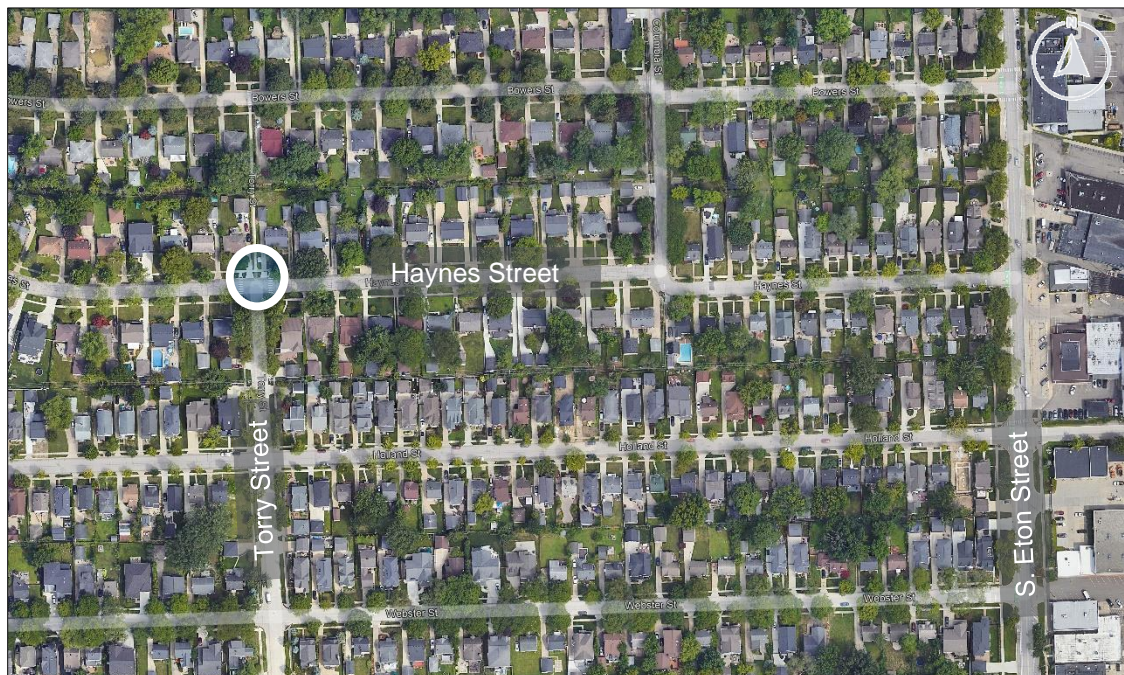
From: Julie M. Kroll, PE, PTOE
Paul Bonner, EIT
Fleis & VandenBrink Engineering

Date: February 22, 2024

Re: Torry Street and Haynes Street
Traffic Control Review

Fleis & VandenBrink (F&V) staff is pleased to present this memo to the City of Birmingham for your use in evaluating the recommended traffic control signing for the intersection of Torry Street and Haynes Street, shown in **Figure 1** below. This study was performed to determine if changes to the existing yield-control is recommended.

FIGURE 1: STUDY INTERSECTION LOCATION MAP



The guidance regarding regulatory traffic measures is provided in the *Michigan Manual of Uniform Traffic Control Devices (MMUTCD)* Sections 2B.05 and 2B.09. Additional information is provided in the American Association of State Highway and Transportation Officials (AASHTO) *Geometric Design of Highway and Streets (Green Book)*. F&V referenced the *MMUTCD* and additional documents to evaluate the existing intersection conditions and develop recommendations. The results of the analysis and recommendations are included herein.

27725 Stansbury Boulevard, Suite 195
Farmington Hills, MI 48334
P: 248.536.0080
F: 248.536.0079
www.fveng.com

FIELD REVIEW

F&V staff performed a field review of the study intersections on Tuesday, January 23, 2024, to review the intersection and sight distance. The photos taken during the field visit are attached.

Key findings from the field review are summarized below:

- YIELD control is provided on the Torry Street northbound approach.
- No vehicles were observed to be parked along Torry Street or Haynes Street that would impact sight distance.
- Marked crosswalks are provided on Haynes Street on both the east and west legs of the intersection.

INTERSECTION CONTROL ANALYSIS

Section 2B.05 of the *MMUTCD* provides guidance in order to determine when the installation of a STOP sign should be considered at an intersection. The application guidance includes the evaluation of the following conditions:

- Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law; **Not met.***
- Street entering a through highway or street; **Met.***
- Unsignalized intersection in a signalized area; and/or **Not met.***
- High speeds, restricted view, or crash records indicate a need for control by the STOP sign. **Not met.***

Due to the study intersection being at three-way “T-leg” intersection, there is an underlying implication that the major roadway is designated as the through street and the dead-end street is the minor roadway. Additionally, Torry Street and Haynes Street are both residential streets where there are no traffic signals present at similar intersections in the surrounding area.

The crash data utilized in the analysis was obtained by F&V from the Michigan Traffic Crash Facts (MTCF) website. The historical crash data was obtained for the most recent available **five years** (January 1, 2018 – December 31, 2022). The result of the crash analysis indicates that there have been zero (0) crashes reported at the study intersection in the most recent five years.

F&V conducted an evaluation of the corner clearance for the intersection of Torry Street and Haynes Street and compared existing conditions to the requirements for corner clearance outlined in the AASTHO *Green Book*. The evaluation indicates that the study intersection of Torry Street and Haynes Street has the necessary intersection corner clearance provided and there are no vehicles parked within approximately 60 feet of the intersection on the east side and approximately 80 feet on the west side. The field review showed that there were no vehicles parked at this intersection.

Additionally, Section 2B.09 of the *MMUTCD* was reviewed which provides guidance as to when a YIELD sign may be used instead of a STOP sign. The guidance includes the evaluation of the following conditions:

- When the ability to see all potentially conflicting traffic is sufficient to allow a road user traveling at the posted speed, the 85th percentile speed, or the statutory speed to pass through the intersection or to stop in a reasonably safe manner. **Met.***
- If controlling a merge type movement on the entering roadway where acceleration geometry and/or sight distance is not adequate for merging traffic operation. **N/A***
- The second crossroad of a divided highway, where the median width at the intersection is 30 feet or greater. In this case, a STOP sign may be installed at the entrance to the first roadway of a divided highway, and a YIELD sign may be installed at the entrance to the second roadway. **N/A***
- An intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign. **Not met.***

SUMMARY

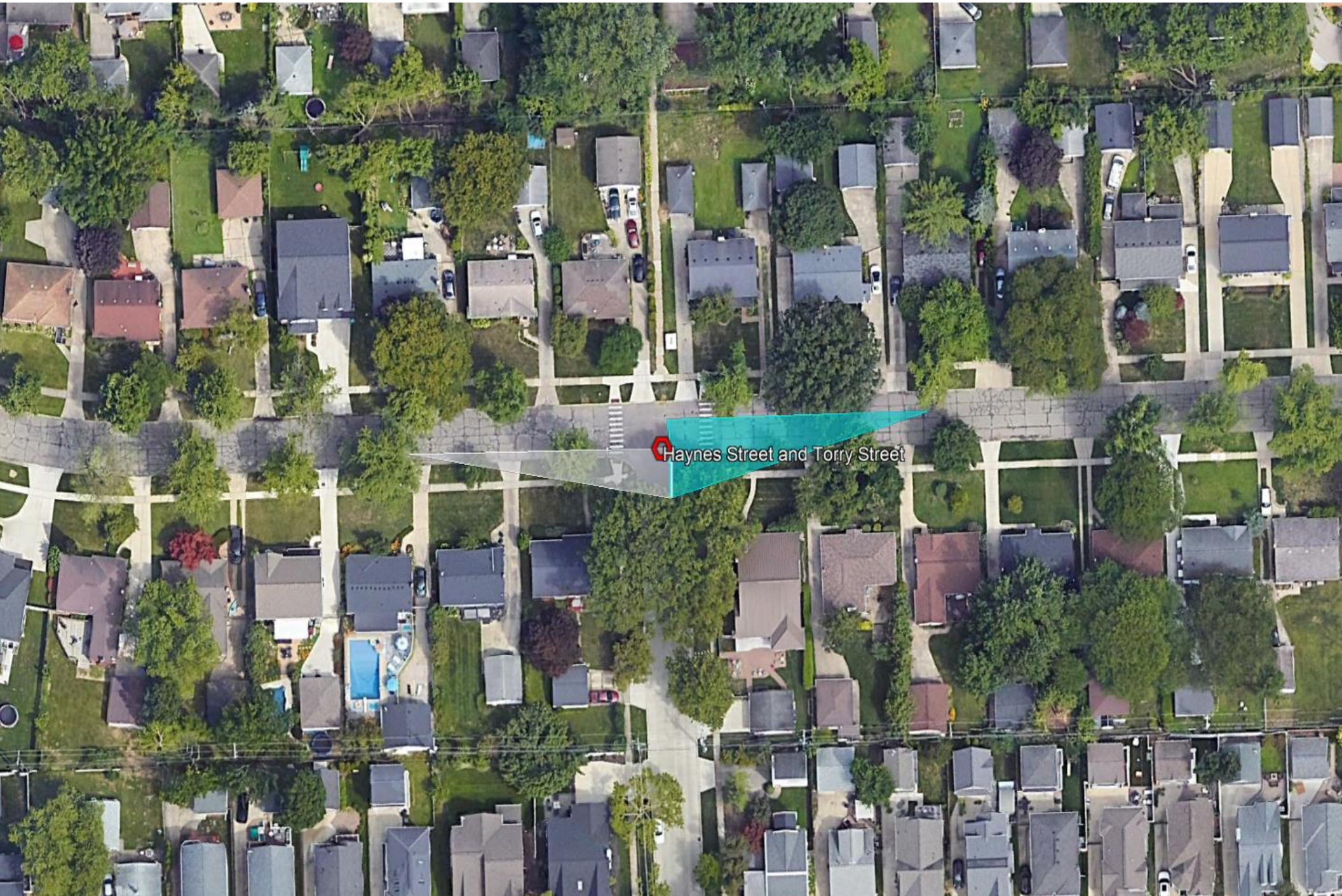
- The results of the analysis show that a STOP sign is not recommended at the intersection of Torry Street and Haynes Street and the existing YIELD control is appropriate at this intersection.
- No changes to the existing traffic control measures is recommended.

Stop Sign Guidance (MMUTCD Section 2B.05)	Met?
A. <i>Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law.</i>	No
B. <i>Street entering a through highway or street.</i>	Yes
C. Unsignalized intersection in a signalized area.	No
D. High speeds. Restricted view, or crash records indicate a need for control by the STOP sign.	No
Stop Control Not Recommended	No
Yield Sign Guidance (MMUTCD Section 2B.09)	Met?
A. <i>When the ability to see all potentially conflicting traffic is sufficient to allow a road user traveling at the posted speed, the 85th percentile speed, or the statutory speed to pass through the intersection or to stop in a reasonably safe manner.</i>	Yes
B. <i>If controlling a merge type movement on the entering roadway where acceleration geometry and/or sight distance is not adequate for merging traffic operation.</i>	No
C. The second crossroad of a divided highway, where the median width at the intersection is 30 feet or greater. In this case, a STOP sign may be installed at the entrance to the first roadway of a divided highway, and a YIELD sign may be installed at the entrance to the second roadway.	No
D. An intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.	No
Yield Control Recommended	Yes

If you have any questions or concerns regarding this engineering analysis, please do not hesitate to contact our office.

Attachments: Sight Distance Exhibit
 Intersection Photos

CC: Brooks Cowan, City Planner
 Melissa Coatta, PE, City Engineer



11E4



Westbound Haynes Street approach at Torry Street
Looking West

11E4



Westbound Haynes Street approach at Torry Street
Looking South

11E4



Eastbound Haynes Street approach at Torry Street
Looking South

11E4



Eastbound Haynes Street approach at Torry Street
Looking East

11E4



Northbound Torry Street approach at Haynes Street
Looking East

11E4



Northbound Torry Street approach at Haynes Street
Looking West

11E4

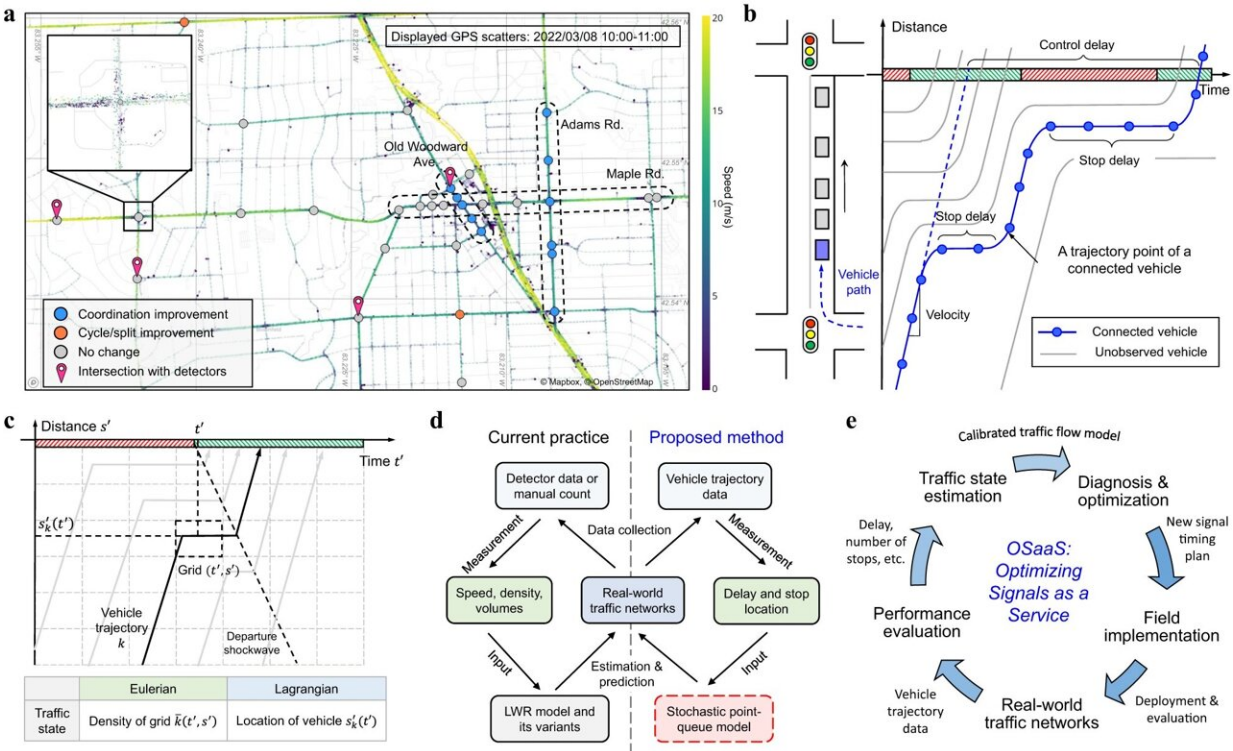


Northbound Torry Street approach at Haynes Street
Looking North

11E4

Improving traffic signal timing with a handful of connected vehicles

February 20 2024, by Jim Lynch



Traffic signal retiming with vehicle trajectories. **a** Trajectory point scatters in the City of Birmingham, Michigan, which has a total of 34 signalized intersections, including three main corridors and some isolated intersections. Each point represents a vehicle’s location at a certain timestamp, and the color of the point changes with speed. Corridors and intersections that were identified with traffic signal re-timing opportunities are labeled with different colors. **b** Time-space (TS) diagram and connected vehicle trajectory. The blue line shows the vehicle trajectory of a connected vehicle. Each blue dot represents a trajectory point. **c** Eulerian and Lagrangian traffic state representations. Eulerian

traffic state representation defines the traffic state as the density of each cell, while the Lagrangian keeps track of the movement of the vehicle. **d** Comparison of current practice based on fixed-location detector data and the proposed method with vehicle trajectories. LWR models are frequently used to model traffic flow from detector data, which directly provides speed, density, and volumes at certain locations. We utilize the stochastic point-queue model under the Newellian coordinates, where vehicle trajectory data, which directly provides delays and stop locations, is the only input. **e** OSaaS system: an integrated closed-loop system with performance evaluation, traffic state & parameter estimation, diagnosis, optimization, and field implementation. Credit: *Nature Communications* (2024). DOI: 10.1038/s41467-024-45427-4

With GPS data from as little as 6% of vehicles on the road, University of Michigan researchers can recalibrate traffic signals to reduce congestion and delays at intersections significantly.

In an 18-month pilot study conducted in Birmingham, Michigan, the team used connected vehicle data insights provided by General Motors to test its system, resulting in a 20% to 30% decrease in the number of stops at signalized intersections. GM vehicles make up 6-10% of cars currently on the road in the United States.

Officially, it's the world's first large-scale, cloud-based traffic signal retiming system, and it represents a major opportunity for communities to recalibrate their signal patterns at a reduced cost. U-M's research [appears](#) in *Nature Communications*.

The U-M system takes GPS data from a percentage of vehicles on the road and extrapolates traffic patterns. For example, a connected vehicle that comes to a stop roughly 100 feet from an [intersection](#) strongly indicates that it is behind at least three or four other vehicles.

"While detectors at intersections can provide traffic count and estimated speed, access to vehicle trajectory information, even at low penetration rates, provides more valuable data including vehicle delay, number of stops, and route selection," said Henry Liu, U-M professor of civil engineering and director of both Mcity and the Center for Connected and Automated Transportation.

There are roughly 320,000 traffic signals in the U.S., and the annual congestion costs—direct and indirect—associated with those intersections come out to \$22.9 billion. Those costs include time spent waiting at lights, as well as unnecessary energy consumption caused by signal times that can be improved.

Most [traffic signals](#) operate on a time-of-day signal timing plan, where preset patterns are in place for morning, afternoon, evening, and overnight. Traffic planners attempt to coordinate those cycles with surrounding intersections to allow cars to flow between intersections with as little stop-and-go travel as possible.

"The reason these signals should be changed more often is that traffic is always changing," Liu said. "A good example is the traffic patterns we saw in the year before COVID's arrival and the two years afterward. Your morning peak hour changed drastically with so many people working from home. When you see that kind of change, you need to retime these signals."

Optimizing signals to keep up with changes in traffic flows isn't a simple task. The costs and time involved in doing traffic counts and recalculation mean most municipalities won't reassess for two to five years or sometimes decades.

While adaptive signals have been around since the 1970s, detecting vehicles at intersections to reprogram signals almost in [real-time](#), the

cost has kept them from widespread use. Installation of an adaptive system at a single intersection can cost as much as \$50,000, with regular maintenance required—a price tag not all communities can afford. The U-M system for optimization would cost a fraction of that of an adaptive system.

The U-M system, called a probabilistic time-space diagram, allows for a smaller percentage of connected [vehicle](#) data to do the same workload as sensors at an adaptive traffic signal. To test its effectiveness, researchers collected data over the course of three weeks in March 2022 from each of Birmingham's 34 signalized intersections—most of which are fixed-time systems.

"What this has done is really solve our data collection issue," said Gary Piotrowicz, deputy managing director of the Road Commission for Oakland County. "And I could argue that this is going to be the way everybody in the country does it. Once they've solidified the system, there's no reason to do it any other way."

Liu's team features several graduate students including Zachary Jerome, a graduate research assistant and member of the Michigan Traffic Lab who helped develop U-M's algorithm. Jerome worked directly with RCOC and hopes to collaborate with industry partners to help other municipalities deploy this cost-saving technology.

"The opportunity to work with industry to bring this groundbreaking technology into real-world applications is incredibly inspiring," Jerome said. "My vision is that this system will provide a revolutionary signal retiming solution for communities across the world that is scalable, sustainable and efficient."

More information: Xingmin Wang et al, Traffic light optimization with low penetration rate vehicle trajectory data, *Nature Communications*

(2024). [DOI: 10.1038/s41467-024-45427-4](https://doi.org/10.1038/s41467-024-45427-4)

Provided by University of Michigan

Citation: Improving traffic signal timing with a handful of connected vehicles (2024, February 20) retrieved 22 February 2024 from <https://techxplore.com/news/2024-02-traffic-vehicles.html>

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February 19, 2024

Patricia Voelker
Planning Director
4200 Telegraph Road
P.O. Box 489
Bloomfield Twp., MI
48203-0489

Re: Birmingham Country Club Sport Court Expansion

Earlier this year, the Birmingham City Commission discussed Birmingham Country Club's proposed sports court expansion project at a public meeting after hearing from surrounding neighbors regarding concerns about the activity and noise levels that may result from the expansion of the sport courts. As neighbors and partners in expanding opportunities for pickleball in our own community, we would like to provide you with a few requests made by the City of Birmingham on behalf of our residents for use in the Special Land Use process:

- Post in a conspicuous location a sign outlining the rules and code of conduct expected of club members while using club facilities to reduce the use of vulgar language and/or distasteful activities, and to promote respectful behavior. This should serve as a reminder that the club has residential neighbors that deserve to be treated with respect. The club representatives we have spoken with in the past have seemed willing to post this type of signage.
- Ensure that no lighting be included in the sport court expansion.
- Adopt a policy that precludes the use of "Red Zone" paddles, which produce noise levels that may be perceived as unacceptable in the close proximity to residential zones. A club representative previously suggested this restriction.
- A parking study should be provided and fully vetted as the club has purportedly agreed to provide at the request of Beverly Hills.
- A sound study should be provided and fully vetted as the club has purportedly agreed to produce.
- Establish a regularly scheduled meeting between the neighbors and the club to discuss issues and keep the lines of communication open. Club representatives in the past seemed willing to consider this recommendation.

As we continue to advocate for pickleball for our respective constituents, an honest and good faith attempt to address these types of concerns is essential for our future endeavors.

Please do not hesitate to contact me if you have any questions.

INFORMATION ONLY

Sincerely,



Jana L. Ecker
City Manager

- Cc. Bloomfield Township Planning Commission
Bloomfield Township Board of Trustees
Birmingham City Commission
Nicholas Dupuis, Planning Director
Melissa Fairbairn, Assistant City Manager
Mark Clemence, Assistant City Manager
Scott Zielinski, Director of Public Services
Scott Grewe, Chief of Police