

PONTIAC CITY COUNCIL

Kermit Williams, District 7
President
Randy Carter, District 4
President Pro Tem



Patrice Waterman, District 1
Megan Shramski, District 2
Mary Pietila, District 3
Gloria Miller, District 5
Dr. Doris Taylor Burks, District 6

It is this Council's mission "To serve the citizens of Pontiac by committing to help provide an enhanced quality of life for its residents, fostering the vision of a family-friendly community that is a great place to live, work and play."

47450 Woodward Pontiac, MI 48342 Phone: (248) 758-3200
Website: <http://pontiaccityclerk.com/city-council-meetings>

Garland S. Doyle, M.P.A.
Interim City Clerk

FORMAL MEETING
253rd Session of the 10th Council
September 14, 2021 at 6:00 P.M.
Bowens Center 52 Bagley Pontiac, MI 48341

Call to order

Invocation

Pledge of Allegiance

Roll Call

Authorization to Excuse Councilmembers

Approval of the Agenda

Approval of the Minutes

1. September 7, 2021

Subcommittee Report

2. Public Safety- August 2021

Recognition Elected Officials

Agenda Address

Agenda Items

Resolutions

Department of Public Works (DPW)

3. Resolution to approve the agreement between the City and Asphalt Specialist, Inc. for \$2,096,286.00 for the 2021 Local Street Improvement Project
4. Resolution to approve the Support Emergency Operations Plan in cooperation with the Oakland County Emergency Management and Oakland County Emergency Management Program

Finance

5. Resolution to approve hazard pay for DPW essential workers using American Rescue Plan (ARP) funds

Mayoral Monthly Reports

6. Personnel Monthly Staff Report
7. Monthly Check Register (**Per the Administration, the check registers are posted on the city's website [http://pontiac.mi.us/departments/finance/financial_reports.php#revize document center rz3702](http://pontiac.mi.us/departments/finance/financial_reports.php#revize_document_center_rz3702)**)
8. City Credit Card Statement (**Per the Administration, the credit card statement was given directly to Council Members by the Finance Director.**)

Public Comment**Mayor, Clerk and Council Closing Comments****Adjournment****Upcoming Special Presentations**

September 7, 2021

1. Reducing the Digital Divide
2. Office of the City Clerk Medical Marihuana Application Process Update
3. Legal Report of the Status of the Medical Marihuana Review Process

#1

MINUTES

September 7, 2021 Study

**Official Proceedings
Pontiac City Council
252nd Session of the Tenth Council**

Call to order

A Study Session of the City Council of Pontiac, Michigan was called to order at the Bowens Senior Center, 52 Bagley Pontiac, MI 48342 on Tuesday, September 7, 2021 at 6:00 p.m. by Council President Kermit Williams.

Roll Call

Members Present – Carter, Pietila, Shramski, Taylor-Burks, Waterman and Williams

Mayor Waterman was present.
A quorum was announced.

Authorization to Excuse Councilperson Gloria Miller. Moved by Councilperson Taylor-Burks and second by Councilperson Waterman.

Councilwoman Gloria Miller arrived at 6:01 p.m. during roll call to excuse her.

Amendments to and Approval of the Agenda

21-274 **Motion to defer item # 2 (special presentation on reducing the Digital Divide) for two weeks.** Moved by Councilperson Waterman and second by Councilperson Taylor-Burks.

Ayes: Pietila, Shramski, Taylor-Burks, Waterman, Williams, Carter and Miller
No: None
Motion Carried

21-275 **Motion to refer item #3 (resolution to approve a contract between the City and Filmtools to complete the transition from analog to fiber-based broadcasting services in the amount of \$149,283.00) item #4 (resolution to approve a contract between the City and Comcast Cable to complete the transition from analog to fiber-based broadcasting services in the amount of \$16,572,87) and item #5 (resolution to approve a contract between the City and HED to consult on the renovations of the Council Chambers/Studio not to exceed \$38,000) to the Cable Subcommittee meeting on September 14, 20201 at 5:00 p.m.** Moved by Councilperson Taylor-Burks and second by Councilperson Miller.

Ayes: Shramski, Taylor-Burks, Waterman, Williams, Carter, Miller and Pietila
No: None
Motion Carried

21-276 **Motion to approve the agenda as amended.** Move by Councilperson Taylor-Burks and second by Councilperson Pietila.

Ayes: Taylor-Burks, Waterman, Williams, Carter, Miller, Pietila and Shramski
No: None
Motion Carried

September 7, 2021 Study

Approval of the Minutes

21-277 **Motion to approve meeting minutes for August 31, 2021.** Moved by Councilperson Waterman and second by Councilperson Taylor-Burks.

Ayes: Waterman, Williams, Carter, Miller, Pietila, Shramski and Taylor-Burks

No: None

Motion Carried

Public Comment

Six (6) individuals addressed the body during public comment

Suspend the Rules

21-278 **Motion to suspend the rules.** Moved by Councilperson Waterman and second by Councilperson Taylor-Burks.

Ayes: Williams, Carter, Miller, Pietila, Shramski, Taylor-Burks, and Waterman

No: None

Motion Carried

Resolution

Department of Public Works – (DPW)

21-279 **Resolution to approve the City entering into an agreement with Amistee Air Duct Cleaning and Insulation to perform air duct cleaning services at all city-owned buildings not to exceed \$79,060.00.** Moved by Councilperson Waterman and second by Councilperson Taylor-Burks.

WHEREAS, The Department of Public Works has reviewed quotes and have determined that Amistee Air Duct Cleaning & Insulation is the best firm to provide the Air Duct Cleaning services requested by the city according pricing and safety and timeline.

NOW, THEREFORE, BE IT RESOLVED, The Pontiac City Council authorized the Mayor to enter into an agreement with Amistee Air Duct Cleaning & Insulation for the amount of \$79,060 to provide air duct cleaning services for all city owned buildings according to the quote dated July 26, 2021.

Ayes: Carter, Miller, Pietila, Shramski, Taylor-Burks, Waterman and Williams

No: None

Resolution Passed

Council President left the meeting and Pro Tem Randy Carter assumed the chair

Communication from the City Attorney

Memorandum regarding Open Meetings act Obligations regarding Public Comment

Communication from the City Clerk

Citizen Request to locate a commemorative plaque honoring Hubert Price, Jr. within Beaudette Park is schedule for September 28, 2021 from 11am to 1pm at Beaudette Park.

Adjournment

Council President Pro-Tem Randy Carter adjourned the meeting at 7:11 p.m.

Garland Doyle
Interim City Clerk

#2

**SUBCOMMITTEE
REPORT**

Public Safety Subcommittee September 8, 2021

Meeting was called to order at 9:00; present was Charles Hughes from Star EMS, Waterford Regional Fire Department Deputy Chief Carl Wallace, and Oakland County Deputy Pontiac Substation Captain Andre Ewing, Council ProTem Randy Carter and Councilperson Mary Pietila, Councilwoman Sharamski called stating she was dealing with trees down and electrical matters, she would not be in attendance. Star reported there were some minor glitches during dream cruise with the construction ongoing at and the positioning of Emergency Vehicles, which will be taken under consideration next year, however there was no delay in attending to anyone needing service or transport.

Star has hired part-time basic EMT's which are going through training. Car seat checks are now ongoing, although this month there were no interested parties, although numerous agencies have started with the checks, which may be contributing to this matter.

Deputy Wallace shared the time frames of new trucks is now 19 months, before Covid-19 trucks could be delivered in 9 months, but unfortunately that is no longer the case. Times were questioned, on Engine 9 which was involving a truck going out to assist on a non-emergency call to Waterford, recorded by oversight in the wrong listing.

Neither SSgt was available as they both had training, but Captain Ewing was present, the first question Was about the rubber on the road and how do we prevent this next year. He explained there wasn't proper placement of the deputies, nor was there enough deputies trying to cut costs. That will be addressed next year as he has already talked to the Sheriff about more Deputies for Dream Cruise weekend. This will be an added cost to the City. We then talked about the conversation which was had during the Council meeting Tuesday night of the additional deputies. That matter went in front of the County Commissioners this past week, it was approved so now the hiring begins to fill those positions, this is a process of several months, so although Captain first said November, it may be December because of the delays on both Council and the Administrative departments, Council because some did not understand hiring another SSgt would not eliminate the overtime, which prolonged the Executive administration in submitting the letter of approval to the Commissioners for their vote. One commissioner was hesitant upon his approval, feeling additional deputies were not needed, until Major suggested he ride with a Pontiac Deputy, Captain Ewing suggested Deputy Garrett and that ride is upcoming.

Oakland County Sheriff's Office
Pontiac Substation
2021

9/10/2021 12:37

Road Patrol/DB	January	February	March	April	May	June	July	August	Sept	October	November	December	Totals
Road Patrol Arrests:	293	293	355	308	306	257	315	298					2,425
Traffic Citations:	219	290	302	352	324	474	457	275					2,693
Detective Bureau Warrants:	111	115	143	132	120	121	130	140					1,012
Cases Assigned to Detectives:	404	325	403	396	432	403	430	459					3,252
Appearance Citations:	8	7	13	10	6	5	8	7					64
DNA Swabs	1	0	0	0	0	0	0	1					2

Domesic Violence Arrests

State Law Warrants:	38	34	44	47	41	40	36	56					336
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Directed Patrol Unit

Felony Arrests:	50	48	43	35	42	37	25	35					315
Misdemeanor Arrests in Custody:	9	14	7	8	6	7	2	3					56
Appearance Citations:	8	13	5	2	1	3	1	2					35
Traffic Citations:	0	0	0	0	0	0	0	3					3
Controlled Buys:	0	0	0	0	0	0	0	0					0
Handguns Seized:	8	13	14	7	12	8	10	10					82
Long Guns Seized:	0	0	0	0	0	0	0	0					0
Search Warrants Executed:	0	0	0	0	0	0	0	1					1

Violent Crimes Statistics

Armed Robberies	3	7	2	3	4	4	3	6					32
Homicides:	1	1	0	1	0	0	3	1					7
Discharged Firearm (Injuries):	6	0	3	3	8	8	2	6					36



WATERFORD REGIONAL FIRE DEPARTMENT

2495 Crescent Lake Road • Waterford, MI 48329

Phone: 248.673.0405 • Fax: 248.674.4095

www.waterfordmi.gov

Matthew J. Covey, *Fire Chief* • Carl J. Wallace, *Deputy Fire Chief* • John R. Phebus, *Fire Marshal*

MONTHLY FIRE DEPARTMENT REPORT For the City of Pontiac August 2021

Total Pontiac Fire Station calls - month: **480** Average Response Time **5:58** min. per call

Total calls for Pontiac Stations - YTD: **3,232**

City Calls: Fires **16** EMS: **247** False Alarms: **48** Other: **169**

Pontiac YTD: Fires: **160** 4.95% EMS: **1,837** 56.84%

False Alarms: **261** 8.08% Other: **923** 30.13%

<u>Month Count</u>	<u>Response Times</u>	<u>YTD</u>
FS-6: Fires -04	5:59	027
EMS -65	5:03	327
FS-7: Fires -05	5:52	070
EMS -98	5:17	760
FS-8: Fires - 04	4:23	033
EMS -46	5:24	369
FS-9: Fires -03	7:07	033
EMS -38	5:02	315

NOTE: Totals per Station could reflect response out of the city limits.

Fire Injuries to personnel: Zero

Fire Injuries to civilian: Zero

Notable Event:

- Fire Training for August was Leadership session final overview/ department budget conducted by Chief Covey and ongoing general firefighting skills training.
- Two members and one past member of the fire department had the honor of being presented Lifesaving Citations from the Sheriff at the annual awards ceremony Aug. 10, 2021. -Lt. James Todd, D.E./Paramedic Kenneth Estell, and past member C.J. Waldron.
- Crews attended public events in both the City and Township throughout the month.

#3

RESOLUTION



CITY OF PONTIAC

OFFICIAL MEMORANDUM

Executive Branch

TO: Honorable Mayor, Council President and City Council Members

FROM: Abdul H. Siddiqui, City Engineer

DATE: September 7, 2021

RE: **2021 Local Street Improvement Project – Asphalt Specialists, Inc.**

The City of Pontiac received and publicly opened bids for the referenced improvement project on Thursday, August 26, 2021. The project consists of four parts:

- Part A: Local Streets Rehabilitation: Asphalt mill and fill of multiple local streets throughout the City. Local Street Fund (Construction Account)
- Part B: West Columbia Rehabilitation: Asphalt overlay of W Columbia from Baldwin to Starlite. Major Street Fund (Construction Account)
- Part C: Woodward Avenue Pavement Repair: Asphalt mill and fill of small section of new pavement damaged by 2019 Roadkill Nights activities. This is required by MDOT and will be reimbursed by the organizers of Roadkill Nights.
- Part D: Local Streets Pavement Repair: Asphalt repair of short segments of multiple local streets. Local Street Fund (Maintenance Account)

A total of seven (7) bids were received for the project in the amounts as follows:

1. Asphalt Specialists, Inc. (ASI)	\$2,096,286.00
2. Florence Cement	\$2,319,581.00
3. Hutch Paving	\$2,369,729.30
4. Pro-Line Asphalt	\$2,414,284.31
5. Cadillac Asphalt, LLC.	\$2,446,862.87
6. Ajax	\$2,718,342.53
7. Pamar Enterprises	\$2,762,127.96

The Engineering Division has reviewed the proposals and references submitted by all contractors and based on the attached is recommending the award to the low bidder, ASI.

Construction is anticipated to start in late September and continue until end of July 2022.

Funding for the project has been identified in the 21-22 Local Street Fund and 21-22 Major Street Fund.

Based upon the above information, it is recommendation of the Department of Public Works that the 2021 Local Street Improvement Project be awarded to ASI, in the amount of \$2,096,286.00.

WHEREAS, the City of Pontiac has advertised and received responses to a Request For Proposal for the 2021 Local Street Improvement Project on August 26, 2021, and publically opened bids; and

WHEREAS, a bid tabulation was prepared and reviewed, and;

WHEREAS, the City identified the low bidder as Asphalt Specialists, Inc. (ASI), and references of the low bidder checked and found acceptable, and;

NOW, THEREFORE,

BE IT RESOLVED, The Pontiac City Council authorizes the Mayor to enter into a contract with ASI for \$2,096,286.00 for the 2021 Local Street Improvement Project.

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 20__, by and between the City of Pontiac, Oakland County, Michigan, party of the first part, hereafter called the City, and Asphalt Specialists, Inc., party of the second part, hereinafter called the Contractor:

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR shall commence and complete the construction of:

2021 Local Street Improvement Project

in full conformance with the Contract Documents as enumerated in Article 6 of this Agreement.

2. The CONTRACTOR shall furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein, excepting those things which are specifically stipulated in the contract documents to be furnished or done by the City.

3. The CONTRACTOR shall commence the work required by the CONTRACT DOCUMENTS on or before the date stipulated in the NOTICE TO PROCEED and will complete the same on or before July 31, 2022. Time shall be considered to be of the essence of this Contract.

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the contract price of:

\$ 2,096,286.00

unless the contract price is duly changed by the contract documents.

5. The CITY shall pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

6. The term "CONTRACT DOCUMENTS" means and includes the following:

- A. AGREEMENT
- B. BID BOND
- C. PERFORMANCE BOND
- D. LABOR AND MATERIAL BOND

E. MAINTENANCE BOND

F. CHANGE ORDER (Pursuant to General Conditions, Section 9)

G. ADDENDA:

No. _____, dated _____, 20____.

No. _____, dated _____, 20____.

No. _____, dated _____, 20____.

H. ADVERTISEMENT

I. INSTRUCTIONS TO BIDDERS

J. BIDDER'S PROPOSAL (Incl. final Compliance Plan as accepted by OWNER)

K. GENERAL CONDITIONS (Incl. SUPPLEMENTAL GENERAL CONDITIONS and SPECIAL CONDITIONS (if any))

L. SPECIFICATIONS (Incl. SUPPLEMENTAL SPECIFICATIONS and SPECIAL PROVISIONS (if any))

M. PLANS (As listed in Schedule of Drawings)

N. NOTICE OF AWARD

O. NOTICE TO PROCEED

This agreement, together with other documents enumerated in this ARTICLE 6, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, forms the Contract between the parties hereto. In the event that any provision in any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this ARTICLE 6 shall govern, except as otherwise specifically stated.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in four (4) copies, each of which shall be deemed an original, on the date first above written.

**CONTRACT AGREEMENT BETWEEN THE CITY OF PONTIAC
AND CONTRACTOR**

2021 LOCAL STREET IMPROVEMENT PROJECT

CONTRACTOR: ASPHALT SPECIALISTS, INC.

In witness whereof, the parties have executed this agreement the day and year last written below.

WITNESSES:

1) _____ By: _____
2) _____ Its: _____

CITY OF PONTIAC

WITNESSES:

DEPARTMENT OF PUBLIC WORKS

1) _____ By: _____
2) _____ Its: Acting Director Date

WITNESSES:

DEPARTMENT OF FINANCE

1) _____ By: _____
2) _____ Its: Finance Director Date

WITNESSES:

RISK MANAGEMENT DIVISION

1) _____ By: _____
2) _____ Its: Risk Management Administrator Date

WITNESSES:

OFFICE OF THE MAYOR

1) _____ By: _____
2) _____ Its: Mayor Date

Approved as to form:

By: _____
_____, City Attorney

SPECIFICATIONS AND CONTRACT DOCUMENTS
FOR
CITY OF PONTIAC
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
2021 LOCAL STREET IMPROVEMENT PROJECT



BIDS DUE:

Thursday, August 26, 2021
2:00 pm
City Clerks Office
Pontiac City Hall
47450 Woodward Avenue
Pontiac, MI 48342

PRE-BID MEETING:

Meeting details will be issued
in Addendum 1

ENGINEER

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVENUE
PONTIAC, MI 48342
(248) 332-7931

NFE Job No. M143

CONTRACT DOCUMENTS
2021 LOCAL STREET IMPROVEMENT PROJECT

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**CITY OF PONTIAC
ADVERTISEMENT FOR BIDS**

Notice to Contractors

Sealed proposals will be received at the office of the City Clerk, City Hall, 47450 Woodward Avenue, Pontiac, Michigan 48342, until **2:00 p.m., local time, Thursday, August 26, 2021**, at which time the bids will be publicly opened and read by the Clerk and the amounts of the bids noted for the:

2021 Local Street Improvement Project

The estimated quantities involved in this work consist principally of the following:

Description

HMA Surface, Rem	38,450	SYD
Cold Milling Conc Pavt	6,900	SYD
Subgrade Undercutting, 21AA	1,949	CYD
Aggregate Base, 8 inch	3,940	SYD
HMA, 5E3	7,720	TON
HMA, 4E3	882	TON
Pavt Repr, Nonreinf Conc, 8 inch	3,275	SYD
Curb and Gutter, Det F4	1,279	LF
Sidewalk, Conc, 4 inch	2,619	SFT
Driveway, Nonreinf Conc, 6 inch	292	SYD
Dr Structure, Adj, Case 1	146	EA
Hand Patching	1,400	TON

A mandatory pre-bid meeting will be scheduled through Addendum 1. Contract requirements and technical specifications will be discussed in said meeting and it is mandatory that all prospective bidders attend.

A certified check or a satisfactory surety bid bond for a sum not less than five (5) percent of the amount of the proposal will be required with each proposal as a guarantee of good faith and same to be subject to the conditions stipulated in the Instructions to Bidders.

The bidder will be required to comply with Michigan statutory prohibitions against discrimination in employment and with employment opportunities for City of Pontiac residents.

No proposal once submitted may be withdrawn for at least 90 days after the actual opening of the bids. The right to accept any proposal, to reject any or all proposals, and to waive defects in proposals, is reserved by the City.

**BY THE ORDER OF:
DIERDRE WATERMAN, MAYOR
CITY OF PONTIAC**

**DAN RINGO, DPW ADMINISTRATOR
CITY OF PONTIAC**

INSTRUCTIONS TO BIDDERS

INDEX

Article

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INSTRUCTION TO BIDDERS

1. PROPOSALS TO BE RECEIVED

Sealed Bids or proposals for the:

2021 Local Street Improvement Project

will be received at the office of the City Clerk of the City of Pontiac, Michigan until **2:00 p.m., local time, Thursday, August 26, 2021** and immediately thereafter will be publicly opened and read.

Each BID must be submitted in a sealed envelope, addressed to the City Clerk of the City of Pontiac. Each sealed envelope containing a BID must be plainly marked on the outside as:

2021 Local Street Improvement Project

and the envelope should bear on the outside the name of the BIDDER, his address, his license number (if applicable) and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the City Clerk, City of Pontiac, 47450 Woodward Ave., Pontiac, MI 48342.

Bids will be received during regular business hours at the place and up to the time stated in the Advertisement or up to the time extended by official notification. Bids may be delivered in person or mailed, but their delivery is the bidder's entire responsibility. Any bid received after the stated hour, even through the mail, will be returned unopened to the bidder.

No bidder may withdraw a bid within 90 days after the actual date of the opening thereof. Should there be reason why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the City of Pontiac, herein after also referred to as the City, and the BIDDER.

2. LOCATION OF THE WORK

Cherry Hill Drive, Fairmount Avenue, Starlight Lane, Woodward Avenue (BL-75), Grandville Court, Bynan Lane / Gambrell Drive, Omar Street, Granada Drive, Russell / Whittemore Street Intersection, S. Merrimac Street, St. Clair Street, and W. Columbia Avenue in the City of Pontiac, Oakland County, Michigan

3. INSPECTION OF THE SITE

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 their proposal, has obtained firsthand information concerning any probable interference and the available facilities for transporting, handling, and storing construction equipment and materials, and concerning other conditions which may affect his work.

4. CONFORMITY TO PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS

Proposals must be made in full conformity to all the conditions as set forth in the Plans, Specifications, and any Addendum for the work now on file in the office of the City Engineer. The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the City or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve him from fulfilling any of the conditions of the contract.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to his BID.

5. BASIS ON WHICH PROPOSALS ARE SOLICITED

A. PROPOSAL SOLICITATION

Proposals may be solicited on the basis of unit prices, lump sum, or a combination of both. The proposal will clearly state which basis is used.

The lump sum price, when applied to the project, or the unit prices, when applied to the several demolition or salvage items, are to make up the total price for the entire work, exclusive of those things which are to be done or furnished by the City, finished and complete in every particular, according to the Plans and Specifications appertaining to such work, which have been approved by the City Council and are now on file in the office of the City Engineer.

Where Proposals are solicited on the basis of unit prices for certain construction units, which are clearly set forth in the Form of Proposal, the Bidder shall state a unit price for each and every item listed in the Proposal and such prices shall be extended and totaled. If during the review of the Proposals, the City finds any errors in any extension or total, the City will make the necessary corrections and award the Contract on the basis of such corrections, since the unit prices shall govern. Any proposal which does not contain a unit price for each item listed will be deemed incomplete and will not be considered in the award of the Contract.

The unit price for each of the several items in the Proposal shall be such that the whole of the unit prices will represent a balanced bid. Any Proposal, in which the unit prices bid for any of the several items are deemed by the City to be manifestly unbalanced, will be subject to instant rejection.

B. STATEMENT OF QUANTITIES

The quantities indicated in the proposal show the Engineer's estimate of the construction quantities involved in the job, and bids will be computed, tested, and compared by the quantities given in the proposal. Although estimated carefully and with as much accuracy as is practicable beforehand, these quantities are not to be taken as defining or limiting the amount of work to be done under the Contract, but rather as information furnished to bidders concerning the approximate extent of the several items and as a basis for comparing bids.

The City may increase or decrease the original contract price without renegotiation of the Unit Prices.

C. MATERIALS TO BE FURNISHED BY THE CITY

The City will furnish to the Contractor, delivered at the site: NONE. The Contractor will receive and be responsible for all these materials from the time of their delivery to him until the time when they are received back by the City as part of the completed and accepted structure.

D. EXTRA WORK

All extra work that may be required of the Contractor will be estimated and paid for under provisions of the General Conditions, contained within this document, which govern such work.

E. ALTERNATES

When the Proposal so provides, a price shall be stated for each listed alternate. Unsolicited alternates are not to be submitted and, if so, will not be considered in the award of the Contract and may cause the entire bid to be rejected.

Selection of whether to award the Contract on the basis of the Base Bid or utilizing one or more of the Alternates will be made on the basis of value engineering and the City's need to keep project costs within the project budget. The City reserves full right to make this selection. After making such selection, the award shall be made on the basis of the lowest responsive bid utilizing the Alternates selected, and evaluated in accordance with the provisions of the Purchasing Ordinance of the City, in accordance with Article 15 of the Instructions to Bidders.

F. LEGAL CONDITIONS

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the contract throughout.

G. PERMITS AND LICENSES

Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SUPPLEMENTAL GENERAL CONDITIONS.

H. UTILITIES

Unless otherwise provided in these Specifications, the Contractor shall make his own arrangements for electricity, gas, water and sewer services for use during the construction of the work and shall pay for all connections, extensions, and services.

6. FORM OF PROPOSALS (Pages 13 through 18a)

All proposals must be made in the form attached hereto, and without removal from the bound pamphlet. Additional copies of this proposal form for the bidder's files may be obtained on request at the office of the City of Pontiac Water & Sewer Maintenance Division.

All prices stated in the Proposal must be plainly expressed in figures only, and in the proper space or spaces provided. Prices shall be filled in, in ink or typewritten. Any corrections shall be initialed by the Bidder.

All information called for on the Proposal must be furnished to enable a fair comparison of the bids to be made. (Also see Instructions to Bidders, Section 10.)

The place of residence and phone number of each bidder, or the official address and phone number in the case of a firm or company, with County and State, must be given with the signature.

When bidder's drawings and/or specifications are required to be submitted, they shall be in sufficient detail to fully and distinctly show and describe the equipment which the bidder proposes to furnish, including the kind and quality of the material and workmanship that will be used in the various parts. If any general drawings, specifications, catalogs or any other literature are submitted which contain information or data not pertaining to the particular equipment proposed to be furnished, appropriate notations to that effect must be made.

Any stipulation or qualification contrary to the Contract requirements made by the bidder in or accompanying his proposal as a condition for the acceptance of the Contract will not be considered in the award of the Contract and may cause the rejection of the entire Proposal.

7. LEGAL STATUS OF BIDDER

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 the title of the official having authority under the by-laws to sign contracts. A partnership bidder must give the full names and addresses of all partners.

8. AGENCY

Anyone signing a proposal as agent of another or others must submit with the proposal legal evidence of his or her authority to do so.

9. BID DEPOSIT

When the Advertisement states that security is required with the Proposal to ensure the acceptance and execution of the Contract and Bonds, no bid will be considered complete unless so guaranteed.

Each proposal must be accompanied by a certified check of guaranty or a bid bond in an amount not less than five percent (5%) of the total price, drawn upon a solvent bank to the order of the City Treasurer of the City of Pontiac, or if a bond, executed by a surety company

acceptable to the City, as a guarantee of good faith on the part of the bidder and subject to the conditions stipulated in the proposal form.

A single certified check or guaranty (bidder's) bond may serve to cover two or more alternative proposals when such alternative proposals are submitted by the same bidder.

10. INTENTIONALLY LEFT BLANK

11. STATEMENT OF BIDDER'S QUALIFICATIONS

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 a statement of bidder's experience and ability in this particular class of work, and for references concerning his/her business standing and capacity. Contractor shall list the names, addresses and phone numbers of references. The mere ability to offer bonds will not be taken as sufficient evidence of responsibility on the part of the bidder. If Contract is awarded to a foreign company, a certificate of authority to do business in this State must accompany the executed Contract.

The low BIDDER shall supply the names, addresses and phone numbers of major material SUPPLIERS and SUBCONTRACTORS when requested to do so by the CITY.

12. PAYMENTS

Partial payments will be made to the Contractor during the satisfactory progress of the work, calculated at the rate of ninety percent (90%) of the dollar amount of the work completed, until fifty percent (50%) of the established contract amount is in place. After fifty percent (50%) of the work is in place, additional retainage shall not be withheld unless the Contractor's progress is unsatisfactory, all in accordance with Article 13 of the General Conditions hereof and Act 524 of 1980.

13. TIME OF COMPLETION

This work to be done under the proposed Contract is to begin on or before the date stipulated in the Notice to Proceed and must be completed on or before the completion dates provided in the PROGRESS SCHEDULE. Time shall be considered to be of the essence of this Contract.

14. RIGHT TO ACCEPT, TO REJECT, AND TO WAIVE DEFECTS

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. In particular, any alteration, erasure, or interlineation in the Form of Contract in the Specifications which are attached hereto and made a part, specifically, of these Instructions, or of the Form of Proposal, shall render the accompanying proposal irregular and subject to rejection by the City. In case any explanations, additions or alterations are to be offered, they shall be indicated on separate sheets attached to the proposal and referred to therein. Proposals which are clearly unbalanced will also be considered as irregular, and will be subject to instant rejection by the City.

15. AWARD OF CONTRACT

The Contract will be awarded to the qualified Bidder submitting the lowest responsive Bid complying with the conditions of the Invitation for Bids and Pontiac Purchasing Ordinance. This Purchasing Ordinance provides a "benefit" for bids of Pontiac-based persons and is referred to as the "equalization percentage credit" (See Article 21 of the Instruction to Bidders). The Bidder's qualification and responsiveness shall be determined by the City of Pontiac. The Bidder to whom the award is made will be notified at the earliest possible date. The City reserves the right to reject all bids and not award the Contract, at its sole discretion.

16. OBLIGATION TO EXECUTE CONTRACT

The Bidder whose proposal is accepted will be required to execute the Contract, in the form attached hereto, and to furnish sureties as hereafter specified, within ten days (Sundays and legal holidays excepted), after receiving notice of acceptance of bid and preparation Contract forms is completed, and in case of the successful bidder's refusal or failure to do so, shall be considered to have abandoned all their rights and interests in the award, and their certified check or guaranty (bidder's) bond may be declared to be forfeited to the City as liquidated damages and not a penalty, and the Contract may be awarded to another.

17. BONDS

The successful bidder will be required to execute surety bonds, with sureties acceptable to the City. One such bond shall be a Performance Bond in the amount of 100 percent of the Contract Price on the form attached as pages 25 and 26 of the specifications. Another such bond shall be a Labor and Material Bond in the amount of 100 percent of the Contract Price on the form attached as pages 27 and 28 of the specifications. The Contractor shall also provide a Maintenance Bond in the amount of 100 percent of the Contract Price on the form attached as pages 29 and 30 of the specifications.

18. INDEMNIFICATION AND INSURANCE

To the fullest extent permitted by law, the successful bidder agrees to defend, pay on behalf of, indemnify, and hold harmless the CITY OF PONTIAC, its elected and appointed officials, employees and volunteers and others working on behalf of the CITY OF PONTIAC, against any and all claims, demands, suits, or loss, including all costs connected therewith, and for any damages which may be asserted, claimed or recovered against or from the CITY OF PONTIAC, its elected and appointed officials, employees, volunteers or others working on behalf of the CITY OF PONTIAC, 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 contract.

The successful bidder shall purchase and maintain in a company or companies licensed to do business in the State of Michigan, such insurance as will protect him from claims set forth below which may arise out of or result from the contractor's operations under the contract, whether such operations be by himself or any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone whose acts are associated with the project by any of them, may be liable.

a. Workers Compensation Insurance: The contractor shall procure and maintain during the life of the contract, Workers Compensation Insurance, including Employer's Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

b. 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 the limits of liability not less than \$2,000,000, per occurrence and/or aggregate combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (1) Contractual Liability; (2) Products and Completed Operations; (3) Independent Contractors Coverage; (4) Broad Form General Liability Extensions or equivalent; and (5) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.

c. Motor Vehicle Liability: The contractor shall procure and maintain during the life of the contract, Motor Vehicles Liability Insurance, including Michigan No-Fault coverage, with limits of not less than \$1,000,000, per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles.

d. Additional Insured: Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following shall be **"Additional Insured"**. *"THE CITY OF PONTIAC, INCLUDING ALL ELECTED AND APPOINTED OFFICIALS, ALL EMPLOYEES AND VOLUNTEERS, ALL BOARDS, COMMISSIONS AND/OR AUTHORITIES AND THEIR BOARD MEMBERS, EMPLOYEES AND VOLUNTEERS" AND NOWAK & FRAUS ENGINEERS, the project consultant.* (This coverage shall be primary to the Additional Insured, and not contributing with any other insurance or similar protection available to the Additional Insureds, whether said other available coverage be primary, contributing or excess.)

e. Cancellation Notice: Workers Compensation Insurance, Commercial General Liability Insurance, and Motor Vehicle Insurance, as described above, shall include an endorsement stating the following: ***"IT IS UNDERSTOOD AND AGREED THAT THIRTY (30) DAYS ADVANCE WRITTEN NOTICE OF CANCELLATION, NON-RENEWAL, REDUCTION AND/OR MATERIAL CHANGE SHALL BE SENT TO: CITY OF PONTIAC, RISK MANAGEMENT DIVISION, 47450 WOODWARD AVE., PONTIAC, MICHIGAN, 48342"***.

f. Owner's and Contractor's Protective Liability: The contractor shall procure and maintain during the life of this contract, a separate Owner's and Contractor's Protective Liability insurance coverage of not less than **\$2,000,000**, per occurrence and/or aggregate, combined single limit, Personal Liability, Bodily Injury, and Property Damage. The City of Pontiac shall be "Named Insured" on said coverage. Thirty (30) days Notice of Cancellation shall apply to this policy.

The successful bidder shall not commence work until he has obtained the insurance required under this section, nor shall the successful bidder permit any subcontractor to commence work on his subcontract until the insurance required of the subcontractor has been obtained.

Certificates of Insurance, along with copies of original policies where applicable, acceptable to the City, shall be filed with the City of Pontiac, Risk Management Division, ten (10) days prior to commencement of the contract. A sample certificate is included on page **12** for reference.

19. CITY INCOME TAX

a. Contractor agrees to contact City of Pontiac Income Tax Division, Audit and Compliance Section, 47450 Woodward Avenue, Pontiac, Michigan, 48342, telephone (248) 758-3236, to establish reporting and withholding obligations under the City of Pontiac Income Tax Ordinance. Contractor will require the same of all subcontractors employing labor under this contract.

b. Normally, the Contractor will be required to withhold City of Pontiac income tax if either of the following applies:

- (1) Performance under this contract (together with any other contracts in the City during the calendar year) will last 13 weeks or more.

- (2) Contractor employs one or more Pontiac residents for the performance of this contract.

- c. Contractor agrees to pay any personal property taxes required by the City Assessor.

20. PRE-BID MEETING

A mandatory pre-bid meeting will be scheduled by Addendum 1 with meeting instructions.

21. CITY OF PONTIAC PURCHASING ORDINANCE (Chapter 2, Article VI, Division 2) Municipal Code, City of Pontiac, Michigan, adopted March 21, 1996 and effective March 31, 1996.

Bidders are advised of the following provisions of the Purchasing Ordinance:

a. PUBLIC BIDS - EQUALIZATION PERCENTAGE CREDIT

An "equalization percentage credit" will be allowed for bids of Pontiac-based bidders. This means that bids by Pontiac-based bidders will be compared as if they were two percent (2%) less than their actual amount. The equalization percentage credit will be one percent (1%) if the lowest bid is \$100,000 or above. Not applicable to emergency purchases. Successful Pontiac - based bidder awarded on this basis may not sublet to non-Pontiac-based business.

b. CONTRACTOR OR VENDOR IN DEFAULT OR INDEBTED TO THE CITY

No bid shall be accepted from or contract awarded to any contractor or vendor who is in arrears to the City upon debt or contract including payments of real property taxes or an income tax obligation of any kind, or who is in default as to security or otherwise upon an obligation to the City.

c. VIOLATIONS - MISREPRESENTATION

Any material misrepresentation to the City of Pontiac by a bidder or prospective bidder, contractor or vendor in any documentation or paperwork submitted in a bid or proposal or otherwise in connection with an attempt to obtain a contract or engage in a business transaction shall be a violation, and may be considered sufficient basis to disqualify the contractor or vendor from eligibility for the award of a City contract.

22. NON-DISCRIMINATION PROVISION

Pursuant to the requirements of 1976, P.A. 453 (Michigan Civil Rights Act) and 1976, P.A. 220 (Michigan Handicapped Rights Act), the bidder and any subcontractors agree not to discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status, or due to a handicap that is unrelated to the person's ability to perform the duties of a particular job or position. The Bidder must include this provision in any subcontracts associated with the project work.

CONTRACTOR: _____

FORM OF PROPOSAL

Date: _____

To the Honorable Mayor / City Council
City of Pontiac, Michigan

Ladies and Gentlemen:

Having carefully examined the site of the proposed work, and being fully informed in regard to the conditions to be met in the prosecution and completion of the work, and having read and examined the Instructions to Bidders, Agreement, Bonds, General Conditions, Plans and Specifications pertaining to this work, and agreeing to be bound accordingly, the undersigned proposes to furnish all the materials, labor, tools, power, transportation and construction equipment necessary for the satisfactory and complete construction of the **2021 Local Street Improvement Project** in full accordance with and conformity to the specifications for this work now on file in the office of the City Engineer at and for the following named prices, to wit:

Contractor acknowledges receipt of the following Addendum(s):

Addendum No.: _____ Dated: _____

Addendum No.: _____ Dated: _____

Addendum No.: _____ Dated: _____

Part A - Local Streets Rehabilitation

ITEM		QUANTITY		UNIT PRICE	AMOUNT
1	Mobilization, Max. 10%	1	LSUM		
2	HMA Surface, Rem	28,973	SYD		
3	Excavation, Earth	2,327	CYD		
4	Curb and Gutter, Rem	1,555	FT		
5	Sidewalk, Rem	310	SYD		
6	Pavt, Rem	388	SYD		
7	Subgrade Undercutting, 21AA	1,492	CYD		
8	Aggregate Base, 8 Inch	2,825	SYD		
9	HMA, 5E3	3,821	TON		
10	Curb and Gutter, Conc, Det F4	1,129	FT		
11	Curb and Gutter, Conc, Det M	426	FT		
12	Sidewalk, Conc, 4 Inch	2,547	SFT		
13	Sidewalk, Conc, 6 Inch	240	SFT		
14	Driveway, Nonreinf Conc, 6 Inch	267	SYD		
15	Driveway, Nonreinf Conc, 8 Inch	67	SYD		
16	Dr Structure Cover, Adj, Add Depth	212	FT		
17	Dr Structure Cover, Adj, Case 1	106	EA		
18	Dr Structure, Temp Lowering	74	EA		
19	Dr Structure Cover, Type K	28	EA		
20	Dr Structure Cover, Pontiac, Sanitary	38	EA		
21	Dr Structure Cover, Pontiac, Water	5	EA		
22	Dr Structure Cover, Pontiac, Storm	31	EA		
23	Hand Patching	1,150	TON		
24	Sign, Type B, Temp, Prismatic, Furn	560	SFT		
25	Sign, Type B, Temp, Prismatic, Oper	560	SFT		
26	Erosion Control, Inlet Protection, Inlet Filter	72	EA		
27	Clearing	330	FT		
28	Restoration	1	LSUM		
29	Minor Traf Devices	1	LSUM		
30	Traffic Regulator Control	1	LSUM		

Subtotal Part A: _____

Part B - West Columbia Rehabilitation					
ITEM		QUANTITY		UNIT PRICE	AMOUNT
31	Mobilization, Max. 10%, Columbia	1	LSUM		
32	HMA Surface, Rem, Columbia	5,135	SY		
33	Cold Milling Conc Pavt	6,900	SY		
34	Curb and Gutter, Rem, Columbia	150	LF		
35	Pavt, Rem, Columbia	25	SY		
36	Pavt Repr, Rem, Columbia	3,275	SY		
37	Subgrade Undercutting, 21AA, Columbia	250	CYD		
38	Aggregate Base, 8 inch, Columbia	500	SY		
39	Pavt Repr, Nonreinf Conc, 8 inch	3,275	SY		
40	Lane Tie, Epoxy Anchored	250	EA		
41	HMA, 5E3, Columbia	3,756	TON		
42	HMA, 4E3, Columbia	648	TON		
43	Curb and Gutter, Conc, Det F4, Columbia	150	LF		
44	Driveway, Nonreinf Conc, 6 Inch, Columbia	25	SYD		
45	Dr Structure Cover, Adj, Add Depth, Columbia	62	FT		
46	Dr Structure Cover, Adj, Case 1, Columbia	31	EA		
47	Dr Structure, Temp Lowering, Columbia	31	EA		
48	Dr Structure Cover, Type K, Columbia	13	EA		
49	Dr Structure Cover, Pontiac, Sanitary, Columbia	16	EA		
50	Dr Structure Cover, Pontiac, Storm, Columbia	15	EA		
51	Pavt Mrkg, Polyurea, 4 inch, White	42	FT		
52	Pavt Mrkg, Polyurea, 4 inch, Yellow	8,400	FT		
53	Pavt Mrkg, Polyurea, Only	1	EA		
54	Pavt Mrkg, Polyurea, Lt Turn Arrow Sym	1	EA		
55	Pavt Mrkg, Polyurea, 24 inch, Stop Bar	21	FT		
56	Hand Patching, Columbia	250	TON		
57	Erosion Control, Inlet Protection, Inlet Filter, Columbia	58	EA		
58	Sign, Type B, Temp, Prismatic, Furn, Columbia	256.5	SFT		
59	Sign, Type B, Temp, Prismatic, Oper, Columbia	256.5	SFT		
60	Restoration, Columbia	1	LSUM		
61	Minor Traf Devices, Columbia	1	LSUM		
62	Traffic Regulator Control, Columbia	1	LSUM		

Subtotal Part B: _____

Part C - Woodward Avenue Pavement Repair					
ITEM		QUANTITY		UNIT PRICE	AMOUNT
63	Mobilization, Max. 10%, Woodward	1	LSUM		
64	HMA Surface, Rem, Woodward	397	SY		
65	Sidewalk, Rem, Woodward	8	SY		
66	HMA, 5E3, High Stress	35	TON		
67	Sidewalk, Conc, 4 Inch, Woodward	72	SF		
68	Lighted Arrow, Type B, Furn, Woodward	2	EA		
69	Lighted Arrow, Type B, Oper, Woodward	2	EA		
70	Channelizing Device, 42 inch, Furn, Woodward	75	EA		
71	Channelizing Device, 42 inch, Oper, Woodward	75	EA		
72	Sign, Type B, Temp, Prismatic, Furn, Woodward	252	SF		
73	Sign, Type B, Temp, Prismatic, Oper, Woodward	252	SF		
74	Pavt Mrkg, Polyurea, 4 inch, White, Woodward	50	FT		
75	Restoration, Woodward	1	LSUM		
76	Minor Traf Devices, Woodward	1	LSUM		
77	Traffic Regulator Control, Woodward	1	LSUM		

Subtotal Part C:

Part D - Local Streets Pavement Repair					
ITEM		QUANTITY		UNIT PRICE	AMOUNT
78	Mobilization, Max. 10%, Street Repair	1	LSUM		
79	HMA Surface, Rem, Street Repair	1240	SY		
80	Dr Structure Cover, Adj, Case 1, Street Repair	5	EA		
81	Dr Structure, Temp Lowering, Street Repair	7	EA		
82	Dr Structure Cover, Pontiac Sanitary, Street Repair	2	EA		
83	Dr Structure Cover, Pontiac Storm, Street Repair	3	EA		
84	Water Shutoff, Adj, Case 1	2	EA		
85	Underdrain, Subgrade, 6 inch	370	FT		
86	HMA, 5E3, Street Repair	108	TON		
87	HMA, 4E3, Street Repair	234	TON		
88	Aggregate Base, 8 inch, Street Repair	195	SY		
89	Subgrade Undercutting, 21AA, Street Repair	67	CYD		
90	Restoration, Street Repair	1	LSUM		
91	Minor Traf Devices, Street Repair	1	LSUM		
92	Traffic Regulator Control, Street Repair	1	LSUM		

Subtotal Part D: _____

TOTAL: _____

The Contractor acknowledges that he has not received nor relied upon any representations or warranties of any nature whatsoever from the City of Pontiac, its officers, employees or agents and that if he is awarded this contract, he shall enter into this Contract solely as the result of his own independent business judgment.

The undersigned acknowledges that he has made his own independent investigation and has satisfied himself as to the conditions of the work, including soil and subsurface conditions.

The undersigned agrees that, in case any additions or deductions in the amount of work contemplated are made, the above named unit prices for the various classes of work shall be used to allow for such additions or deductions.

The undersigned hereby agrees that if this Proposal shall be accepted by the said City, he will, within ten days after receiving notice of such acceptance and delivery of Contract forms thereof at the address given below (Sundays and legal holidays excepted), enter into contract, in the attached form, to construct the said work according to said plans and specifications and to furnish therefor all necessary equipment, tools and building appliances, materials, labor, power and transportation as aforesaid at and for the prices named in the foregoing paragraph; to furnish to the said City and to the State of Michigan such sureties for the faithful performance of such Contract and for the payment of all materials used therein and for all labor expended thereon as shall be approved and accepted by the said City; and to furnish to the said City of Pontiac a Maintenance Bond.

The undersigned attaches hereto a (certified check), (bidder's bond), in the sum of:

Dollars (\$ _____)

as required in the Instructions to Bidders. And the undersigned hereby agrees that, in case he shall fail to fulfill his obligations under the foregoing proposal and agreement, the said City may, at its option, determine that the undersigned has abandoned his rights and interests in such contract and that the certified check or bidder's bond accompanying this proposal has been forfeited to the said City as liquidated damages and not as a penalty; but, otherwise

The undersigned states that he currently owns or intends to rent the following equipment that will be used in work covered by this proposal:

List of Equipment Owned

List of Intended Rental Equipment

The undersigned states that he has done work similar in character to that covered by this proposal at the following named times and places, to wit:

The undersigned refers the said City to the following named parties for information concerning his experience, skill and business standing:

NAME, ADDRESS AND PHONE NUMBER:

Dated and signed at _____, MI on _____
(City) (Date)

Name of Bidder: _____

Address of Bidder: _____

By: _____

Title: _____

Telephone#: _____ Fax#: _____

Federal Tax I.D. Number (_____)

CERTIFICATIONS

IF A CORPORATION

I, _____, certify that I am the _____ of the corporation named as Contractor herein; that _____, who signed this Agreement on behalf of the Contractor, was then _____ of said corporation; that said Agreement was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Corporate Seal

Signature

IF A PARTNERSHIP

I, _____, certify that I am a partner in the partnership named as Contractor herein, and that I have authority to sign for and on behalf of this partnership consisting of the following partners:

NAME AND ADDRESS:

Signature

IF A SOLE PROPRIETORSHIP

I, _____, certify that I am the sole owner and proprietor.

Signature

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____
_____ as Principal,
and _____ as Surety, are
hereby held and firmly bound unto the City of Pontiac, Michigan, as OWNER in the
penal sum of:

_____ Dollars (\$) _____)

for the payment of which, well and truly to be made, we hereby jointly and severally bind
ourselves, successors and assigns. Signed, this _____ day of _____, 20 _____.

The Condition of the above obligation is such that whereas the Principal has
submitted to the City of Pontiac, Michigan, a certain BID, attached hereto and hereby
made a part hereof to enter into a contract in writing, for the

NOW, THEREFORE,

(a) If said BID shall be rejected, or

(b) If said BID shall be accepted and the Principal shall execute and deliver a
contract in the Form of Contract attached hereto (properly completed in
accordance with said BID) and shall furnish a BOND for his faithful performance
of said contract, and for the payment of all persons performing labor or furnishing
materials in connection therewith, and shall in all respects perform the agreement
created by the acceptance of said BID, then this obligation shall be void,
otherwise the same shall remain in force and effect; it being expressly understood
and agreed that the liability of the Surety for any and all claims hereunder shall, in
no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____(L.S)
Principal

_____(L.S.)
Surety

By:_____

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 540 as amended) and be authorized to transact business in the State of Michigan.

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 20__, by and between the City of Pontiac, Oakland County, Michigan, party of the first part, hereafter called the City, and _____, Michigan, party of the second part, hereinafter called the Contractor:

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR shall commence and complete the construction of:

in full conformance with the Contract Documents as enumerated in Article 6 of this Agreement.

2. The CONTRACTOR shall furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein, excepting those things which are specifically stipulated in the contract documents to be furnished or done by the City.

3. The CONTRACTOR shall commence the work required by the CONTRACT DOCUMENTS on or before the date stipulated in the NOTICE TO PROCEED and will complete the project based on the dates established in the PROGRESS CLAUSE special provision, unless the date for completion is extended otherwise by the CONTRACT DOCUMENTS. Time shall be considered to be of the essence of this Contract.

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the contract price of:

unless the contract price is duly changed by the contract documents.

5. The CITY shall pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

6. The term "CONTRACT DOCUMENTS" means and includes the following:

- A. AGREEMENT
- B. BID BOND
- C. PERFORMANCE BOND
- D. LABOR AND MATERIAL BOND

E. MAINTENANCE BOND

F. CHANGE ORDER (Pursuant to General Conditions, Section 9)

G. ADDENDA:

No. _____, dated _____, 20____ .

No. _____, dated _____, 20____ .

No. _____, dated _____, 20____ .

H. ADVERTISEMENT

I. INSTRUCTIONS TO BIDDERS

J. BIDDER'S PROPOSAL (Incl. final Compliance Plan as accepted by OWNER)

K. GENERAL CONDITIONS (Incl. SUPPLEMENTAL GENERAL CONDITIONS and SPECIAL CONDITIONS (if any))

L. SPECIFICATIONS (Incl. SUPPLEMENTAL SPECIFICATIONS and SPECIAL PROVISIONS (if any))

M. PLANS (As listed in Schedule of Drawings)

N. NOTICE OF AWARD

O. NOTICE TO PROCEED

This agreement, together with other documents enumerated in this ARTICLE 6, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, forms the Contract between the parties hereto. In the event that any provision in any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this ARTICLE 6 shall govern, except as otherwise specifically stated.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in four (4) copies, each of which shall be deemed an original, on the date first above written.

**CONTRACT AGREEMENT BETWEEN THE CITY OF PONTIAC
AND CONTRACTOR**

2021 Local Street Improvement Project

CONTRACTOR: _____

In witness whereof, the parties have executed this agreement the day and year last written below.

WITNESSES:

1) _____ By: _____
2) _____ Its: _____

CITY OF PONTIAC

WITNESSES:

DEPARTMENT OF PUBLIC WORKS

1) _____ By: _____ Date
2) _____ Its: DPW Administrator

WITNESSES:

DEPARTMENT OF FINANCE

1) _____ By: _____ Date
Darin Carrington
2) _____ Its: Director

WITNESSES:

OFFICE OF THE MAYOR

1) _____ By: _____ Date
Dierdre Waterman
2) _____ Its: Mayor

Approved as to form:

By: _____
_____, City Attorney

CERTIFICATIONS

IF A CORPORATION

I, _____, certify that I am the _____ of the corporation named as Contractor herein; that _____, who signed this Agreement on behalf of the Contractor, was then _____ of said corporation; that said Agreement was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.*

Corporate Seal

Signature

* Attach copy of corporate resolution verifying authorization of individuals named above.

IF A PARTNERSHIP

I, _____, certify that I am a partner in the partnership named as Contractor herein, and that I have authority to sign for and on behalf of this partnership consisting of the following partners:

NAME AND ADDRESS:

Signature

IF A SOLE PROPRIETORSHIP

I, _____, certify that I am the sole owner and proprietor.

Signature

BOND FOR FAITHFUL PERFORMANCE

KNOW ALL MEN BY THESE PRESENTS, That _____

_____ as principal, and

_____, as surety, are held and

firmly bound unto the City of Pontiac, Michigan, a Municipal Corporation, in the sum of:

good and lawful money of the United States of America, to be paid to said City of Pontiac, its legal representatives and assigns, for which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, and each and every one of them, jointly and severally, firmly by these presents.

Sealed with our Seals and dated this _____ day of _____ A.D. 20 _____.

WHEREAS, the above named principal has entered into a certain written contract with the City of Pontiac, dated this _____ day of _____ A.D. 20 _____, wherein the said principal covenanted and agreed as follows, to-wit:

TO COMMENCE AND COMPLETE the:

2021 Local Street Improvement Project

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS such that if the above named principal or their legal representatives or successors, shall in all things well and truly keep and perform the covenants, conditions, and agreements in the manner and form and at the time agreed upon to be kept and performed as provided by said contract, and plans, drawings, and specifications, referred to in said contract, and as may be required by the changes, alterations, and modifications thereof, as provided in said contract, then the above obligation shall be void; otherwise to remain in full force and effect.

This bond is given upon the express condition that any changes, alterations, or modifications that may be hereafter ordered or made in the construction and complete installation of the work herein referred to, or the placing of an inspector or superintendent thereon by the City of Pontiac shall not operate to discharge or release the surety or sureties thereon.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be
executed by their respective authorized officers this _____ day of _____ A.D.
20 _____.

Signed, Sealed and Delivered in the Presence of:

_____	_____ (L.S.)
_____	_____ (L.S.)
_____	_____ (L.S.)

**LABOR AND MATERIAL BOND TO THE
CITY OF PONTIAC, MICHIGAN**

KNOW ALL MEN BY THESE PRESENTS, That _____

_____ as principal, and _____

_____, as surety, are

held and firm bound unto the City of Pontiac, Michigan, a Municipal Corporation, in the sum of:

good and lawful money of the United States of America, pursuant to Michigan State Public Act 213 of 1963, to be paid to the City of Pontiac, Michigan, for the use and benefit of all subcontractors, and persons, firms and corporations who shall furnish materials, supplies and perform labor entering into the work of:

2021 Local Street Improvement Project

for which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, and each and every one of them jointly and severally, firmly by these presents.

Sealed with our Seals and dated this _____ day of _____ A.D. 20____.

WHEREAS, the above named principal has entered into a certain written contract with the City of Pontiac, dated this _____ day of _____ A.D. 20____, wherein the said principal covenanted and agreed as follows, to wit:

TO COMMENCE AND COMPLETE the:

2021 Local Street Improvement Project

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above named principal, legal representatives, or successors shall pay or cause to be paid to all subcontractors, persons, firms, and corporation, as the same may become due and payable, all indebtedness which may arise from said principal to a subcontractor or party performing labor or furnishing materials and supplies, or any subcontractor to any person, firm or corporation on account of any labor performed or materials and supplies furnished in connection with the contract, construction and work herein referred to, then this obligation shall be void; otherwise to remain in full force and effect.

This bond is given upon the express condition that any changes, alterations, or modifications that may be hereafter ordered or made in the construction and complete installation of the work herein referred to, or the placing of an inspector or superintendent thereon by the City of Pontiac shall not operate to discharge or release the surety or sureties thereon.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed by their respective authorized officers this _____ day of _____ A.D. 20 ____.

Signed, Sealed and Delivered in the Presence of:

_____	_____ (L.S.)
_____	_____ (L.S.)
_____	_____ (L.S.)

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS, That _____

_____ as principal, and _____

_____, as surety, are held

and firm bound unto the City of Pontiac, Michigan, a Municipal Corporation, in the sum of:

good and lawful money of the United States of America, pursuant to Michigan State Public Act 213 of 1963, to be paid to the City of Pontiac, Michigan, for the use and benefit of all subcontractors, and persons, firms and corporations who shall furnish materials, supplies and perform labor entering into the work of:

2021 Local Street Improvement Project

for which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, and each and every one of them jointly and severally, firmly by these presents.

Sealed with our Seals and dated this _____ day of _____ A.D. 20 _____.

WHEREAS, the above named principal has entered into a certain written contract with the City of Pontiac, dated this _____ day of _____ A.D. 20 _____, wherein the said principal covenanted and agreed as follows, to wit:

TO COMMENCE AND COMPLETE construction of:

2021 Local Street Improvement Project

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that by and under said contract, the above named principal has agreed with the City of Pontiac that for a period of ONE year(s) from the date of payment of Final Estimate, to keep in good order and repair all the work, done under said contract, excepting only such part or parts of said work as may have been disturbed without the consent or approval of the principal after the final acceptance of the work, and that whenever directed so to do by the City Engineer of the City of Pontiac by notice served in writing, either personally or by mail, on the principal at:

_____, or _____
legal representative, or successors, or on the surety at: _____

_____, WILL PROCEED at once to make such repairs as directed by said City Engineer; and in case of failure so to do within one week from the date of service of such notice, or within reasonable time not less than one week, as shall be fixed in said notice, then the City of Pontiac shall have the right to purchase such materials and employ such labor and equipment as may be necessary for the purpose, and to undertake, do and make such repairs, and charge the expense thereof to, and receive same from said principal or surety. If any repair is necessary to be made at once to protect life and property, then and in that case, the City may take immediate steps to repair or barricade such defects without notice to the contractor. In such accounting the City shall not be held to obtain the lowest figures for the doing of the work or any part thereof, but all sums actually paid therefore shall be charged to the principal or surety. In this connection the judgment of the City Engineer is final and conclusive. If the said principal for a period of ONE year(s) from the date of payment of Final Estimate, shall keep said work so constructed under said contract in good order and repair, excepting only such part or parts of said work which may have been disturbed without the consent or approval of said principal after the final acceptance of the same, and shall, whenever notice is given as hereinbefore specified, at once proceed to make repair as in said notice directed, or shall reimburse said City of Pontiac for any expense incurred by making such repairs, should the principal or their surety do so as hereinbefore specified, then the above obligation shall be void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed by their respective authorized officers this _____ day of _____ A.D. 20 _____.

Signed, Sealed and Delivered in the Presence of:

_____	_____ (L.S.)
_____	_____ (L.S.)
_____	_____ (L.S.)

GENERAL CONDITIONS

The following general conditions are agreed to as defining certain relationships which shall be taken to exist between the parties hereto and as setting forth certain conditions under which the Contract is to be fulfilled.

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GENERAL CONDITIONS

Article 1 - DEFINITIONS

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:
- 1.2 ADDENDA - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS by additions, deletions, clarifications or corrections.
- 1.3 BID - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed. (See 1.8)
- 1.4 BIDDER - Any person, firm or corporation submitting a BID for the WORK.
- 1.5 BONDS - Bid, Performance, Labor and Material, and Maintenance Bonds and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the CONTRACT DOCUMENTS.
- 1.6 CHANGE ORDER - A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.7 CITY - The City of Pontiac, Michigan, or its properly authorized representatives; and whenever the term "City Council", "Mayor", "City Clerk", "Director of Finance", "City Engineer", or "Engineer", is used, it shall be understood to mean the Council, Mayor, Clerk, Director of Finance, or Engineer of the said City.
- 1.8 PARTICIPATION PLAN - The participation document required to accompany each proposal, as finally accepted by the City, including any revisions up to the time of acceptance.
- 1.9 CONTRACT DOCUMENTS - The Contract, including ADVERTISEMENT, INSTRUCTIONS TO BIDDERS, FORM OF PROPOSAL, BID BOND, AGREEMENT, LABOR & MATERIAL BOND, PERFORMANCE BOND, MAINTENANCE BOND, GENERAL CONDITIONS, SUPPLEMENTAL GENERAL CONDITIONS, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, PLANS, SPECIFICATIONS, ADDENDA, and the PARTICIPATION PLAN, and any other documents specifically set forth in the Agreement.
- 1.10 CONTRACT PRICE - The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.

- 1.11 CONTRACT TIME - The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK on each street; or the number of calendar days from the date established in the NOTICE TO PROCEED to the DATE stated in the CONTRACT DOCUMENTS for the completion of all of the WORK of the TOTAL CONTRACT; or both.
- 1.12 CONTRACTOR - The person, firm or corporation with whom the CITY has executed the Agreement, or its legal representatives.
- 1.13 ENGINEER - The City Engineer and/or the person, firm or corporation named as such in the CONTRACT DOCUMENTS.
- 1.14 FIELD ORDER - A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.15 NOTICE OF AWARD - The written notice of the acceptance of the BID from the CITY to the successful BIDDER.
- 1.16 NOTICE TO PROCEED - Written communication issued by the CITY to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.
- 1.17 OPEN TO TRAFFIC - That date as certified by the ENGINEER, when the WORK (PROJECT) or any section thereof is in a suitable condition for safe travel. The term "SUITABLE CONDITION FOR SAFE TRAVEL" shall be construed to mean that all work, INCLUDING the Leveling Course of Bituminous Material and all Concrete Work are complete. The PROJECT, or any portion thereof may be designated as "Accepted for Traffic" prior to completion of the whole project, and shall be opened to traffic as may be directed by the ENGINEER. In general, the term "OPEN TO TRAFFIC" shall be in accordance with Section 107.21 of the MDOT 2012 Standard Specifications for Construction.
- 1.18 PLANS - The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.19 PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.20 RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the CITY who is assigned to the PROJECT site or any part thereof.
- 1.21 SHOP DRAWINGS - All drawings, diagrams, illustrations, brochures, schedules and other

data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.

- 1.22 SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship (may include SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS).
- 1.23 SUBCONTRACTOR - An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
- 1.24 SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.
- 1.25 WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.
- 1.26 WORK ORDER - A written order to the CONTRACTOR causing a change in WORK involving the authorization to undertake additional work at existing contract unit prices or at new contract unit prices for new items of work.
- 1.27 WRITTEN NOTICE - Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the WORK.

Article 2 - PLANS AND SPECIFICATIONS

The location of the structures and improvements which are to be built or made under this Contract, and the character, form and dimensions of their various parts, are shown in the accompanying drawings, specifications and details in the Contract Document entitled:

2021 Local Street Improvement Project

These drawings constitute the Plans according to which the work of this Contract is to be done. Additional drawings may be prepared by the City Engineer and supplied to the Contractor during the progress of the work, as he may deem to be necessary or expedient. All such additional drawings, made in elaboration or explanation of the original drawings, are to be considered as part and parcel of the Plans and shall be respected and followed as such by the Contractor.

The Plans are supplemented and explained by a set of technical specifications, which are appended hereto, and which describe and define the quality of materials and the character of workmanship which are to enter into the work of this Contract. These are the Specifications which are referred to in Article 1, and elsewhere in this Contract. Additional specifications in further elaboration or explanation of the work to be done may be prepared by the City Engineer and supplied to the Contractor during the progress of the work, as he may deem to be necessary or expedient. Such additional specifications are to be considered as part and parcel of the specifications under this Contract, and shall be respected and followed as such by the Contractor.

Both Plans and Specifications are considered as essential parts of this Contract, and are intended to be cooperative. They shall be construed as supplementary each to the other, and any work called for in the Plans and not particularly mentioned in the Specifications, or described in the Specifications and not specially shown on the Plans, is to be regarded as included under this Contract the same as if fully set forth in the Specifications and exhibited on the Plans. Wherever figures or definite dimensions are given on the Plans or in the Specifications, these shall have precedence over dimensions taken by scaling.

In case any inconsistency, omission, or conflict shall be discovered in the Specifications or Plans, or if in any place the meaning of either or both shall be obscure or uncertain or in dispute, the City Engineer shall decide as to the true intent and his decision shall be final and binding. Any such inconsistencies, omissions, or conflict noted should be called to the attention of the Engineer, and a decision on the same obtained in advance.

Article 3 - SHOP DRAWINGS

- 3.1 The CONTRACTOR shall provide SHOP DRAWINGS as may be necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER's approval of any SHOP DRAWINGS shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The approval of any SHOP DRAWING which substantially deviates from the requirement of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER.
- 3.2 When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 3.3 Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

Article 4 - MATERIALS AND WORKMANSHIP

It is mutually understood that all materials and workmanship furnished under this Contract shall be of the highest quality, to the end that a good and substantial and workmanlike job may be produced. The Contractor shall bring only first class materials to the work, and he shall furnish suitable tools and equipment and shall employ competent labor to perform the work to be done. Any materials or labor or tools or equipment that shall not, in the judgment of the Engineer, be suitable or competent to produce the desired result, may be ordered from the work by the Engineer, and such materials or labor or tools or equipment shall be promptly substituted therefor by the Contractor as will meet with the approval of the Engineer. Wherever a brand or name is given, it is for the purpose of defining or establishing a type or quality of material only.

4.1 Defective Materials

Any materials or fabricated articles furnished by the Contractor to be used in this work which shall not, in the judgment of the Engineer, be equal to the requirements of the Plans and Specifications, may be rejected by the Engineer; and such rejected materials or articles shall not be used, but shall be immediately removed by the Contractor from the site of the work.

4.2 Stored Materials

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 prosecuted directly by the City or by other Contractors in the City's employ or with access thereto, and not to hinder any more than may be necessary the ordinary pedestrian and vehicular traffic of the streets.

4.3 Property Rights in Surplus Materials

All excess materials excavated during the progress of the work and not required for backfilling, all timber except tree stumps cut from the right-of-way, and all other materials which have been encountered and handled during construction operations, and which constitute a disposable surplus at the end of the construction period, shall be the property of the Contractor, unless otherwise directed by the City or its Engineer. Such materials shall be hauled and neatly piled, or hauled and dumped at the places designated by the Engineer, at no extra compensation.

4.4 Water Supply

Water for construction purposes may be taken from the City mains subject to the rules of the Oakland County Water Resources Commissioner's office.

Article 5 - SUPERINTENDENCE BY CONTRACTOR

- 5.1 Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the City and the Engineer, on the work at all times during working hours with full authority to act for the Contractor. Any orders by the Engineer given to and received by said superintendent shall be deemed to have been given to and received by the Contractor. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work. The Contractor shall maintain a complete set of plans and specifications at the site.
- 5.2 The Contractor may set up and establish an office on or near the site. On certain large projects, the Engineer may direct the Contractor to set up an office.
- 5.3 The Contractor shall lay out his own work and he shall be responsible for all work executed by him under the Contract. He shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

5.4 Disorderly Employees

Disorderly, intemperate, or incompetent persons must not be employed, retained, or allowed upon the work site. Any foreman or workman who refuses or neglects to comply with the directions of the Engineer in the matter of personal conduct shall, at the request of the Engineer, be promptly discharged and shall not thereafter be re-employed without the consent of the Engineer.

5.5 Relation to Other Contractors

The Contractor shall so conduct his operations as not to interfere with or injure the work of other Contractors or workmen 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 or his employees or agents. Should a contract for adjoining work be awarded to another Contractor, and should the work on any 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 on both contracts shall continue at the same time and in what manner. In case the 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 men, animals, appliances or materials as he may adjudge to be necessary or expedient and in the best interests of the City. Any decision which the Engineer may make as to the method and time of conducting work or the use of territory shall not be made the basis of any claim for damages, 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 this Contractor and other Contractors or workmen of the City in regard to adjoining work shall be determined and adjusted by the Engineer.

5.6 Time and Sequence of Work

In general, it is the intention and understanding that the Contractor shall have control over the sequence or 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 the Plans and Specifications or by the express provisions of this Contract; the Engineer may, however, make such reasonable requirements as may, in his judgement, be necessary for the proper and effective protection of work partially or wholly completed, and to these requirements, the Contractor shall strictly conform.

5.7 Sunday and Night Work

No Sunday work shall be done except in case of emergency or to protect from damage or injury any work that has already been done, and then only with the written consent of the Engineer, and only to such an extent as he may judge to be necessary.

Ordinarily, no night work shall be carried on which will require the presence of the Engineer or an inspector, except with the written permission of the Engineer. Night work is permissible in an emergency to the extent required to meet the emergency, but the Contractor shall notify the Engineer, as far as possible in advance, of his intentions to carry on such emergency work and of the time and place of doing it.

Article 6 - ENGINEERING SUPERVISION

The work covered by this Contract will be executed under the engineering supervision of the City Engineer, who shall have authority to inspect all materials and workmanship entering into the work, to furnish all instructions and information regarding the Plans and Specifications that may be necessary, to supply supplementary or additional plans or specifications as he may deem expedient, and to point out to the Contractor any disregard of any of the provisions of the Contract; but the right of final acceptance or condemnation of the work will not be waived at any time during its progress.

The Engineer will set suitable stakes and marks showing the locations and elevations of various parts of the work and the Contractor shall provide such labor and assistance as the said Engineer may require in setting the same. The Contractor shall take due and proper precautions for the preservation of these stakes and marks, and shall see to it that the work at all times proceeds in accordance therewith. The Engineer may provide for the inspection of any or all materials or workmanship used or intended to be used under this Contract, by assistants under his direction or otherwise, as he may deem to be advisable or expedient; but no inspection shall relieve the Contractor of his fundamental obligation to fully respect all the requirements of his Contract. Such inspection may cover any or all parts of the work, and may extend to and include the preparation or manufacture of any materials or fabricated articles intended to be incorporated in the work. The Contractor shall furnish, upon request therefor by the Engineer, such samples for examination or testing as the Engineer may prescribe. The Contractor shall furnish such labor and assistance as may be necessary for the proper handling of materials in all inspections and tests that may be required.

The Engineer and his duly authorized agents and employees may, at any time and for any purpose, enter upon the work and upon the premises occupied by the Contractor, and the Contractor shall provide proper and safe facilities by which the Engineer may have access to such parts of the work as may be required.

Article 7 - CITY'S RIGHT TO COMPLETE; SUSPENSION OR TERMINATION

It is agreed that the City has the right, when it shall become satisfied that the work provided for in this Contract will not be completed within the time limit, to furnish additional labor and material if necessary and render such other assistance as it may deem advisable, for the completion of said Contract, at the expense of the Contractor, and may retain the same out of the Contract price, or recover the same by legal proceedings.

It is agreed that the Mayor has the right to determine finally all questions as to proper performance of this Contract, or any part or portion thereof, and in case of improper, dilatory or imperfect performance thereof, to suspend the work at any time and to order the partial or entire reconstruction of the same, and if at any time the said Contractor shall abandon the work of this Contract or become habitually negligent of his obligations under it, or shall fail to prosecute the work with reasonable diligence, so that the time of final completion of the work shall be unnecessarily and intolerably delayed, or if he shall violate any of the provisions of the Contract, then and in such case the Mayor may declare this Contract forfeited and may, at address given in the proposal, notify him to discontinue all work under this Contract, or any part thereof, and thereupon he shall discontinue such work, or such part thereof, and shall cease to have any right to the possession of the ground; and the City shall thereupon have the right to complete the work or any part thereof by Contract or otherwise, as it may elect, and for that purpose to take possession and make use of such materials, tools, building appliances, and equipment as may be found upon the work, and to charge the expense thereof to the Contractor. Power is hereby given the Mayor to determine all such questions under this Contract, according to the true intent and meaning thereof.

All expenses charged under this provision shall be deducted and paid by the City of Pontiac out of any monies then due to the Contractor under this Contract, or any part thereof, and in such accounting the City of Pontiac shall not be held to obtain the lowest figures for the work of completing the contract, or any part thereof, or for insuring its proper completion, but all sums actually paid therefor shall be charged to the Contractor. In case the expenses to be charged are less than the sum which would have been payable under this contract if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference; and in case such expenses shall exceed the said sums, the Contractor shall pay the amount of the excess to the City of Pontiac.

Article 8 - ASSIGNMENT OF CONTRACT

It is agreed that the Contractor shall not assign or transfer this Contract, or subcontract any part of the work embraced in it, except with the written consent of the Mayor to do so.

It is further agreed that all parts of the work which may be performed by a subcontractor shall conform to the Plans and Specifications and be subject to all provisions of this Contract exactly as if performed by the Contractor and his immediate employees and workmen. No such letting of the work shall, in any way, diminish or weaken the responsibility of the Contractor for all parts of the work or lessen his obligation under this Contract.

It is likewise agreed that the Contractor shall not assign, either legally or equitably, any of the monies payable to him under this Contract, or his claim thereto, except with the written consent of the Mayor.

Article 9 - EXTRA WORK AND MODIFICATION

It is agreed that the said Contractor shall do such incidental or extra work in connection with this Contract as the Mayor may especially order in writing. If such extra work or any part thereof be of such character that it may be definitely covered by construction items for which unit prices are named in the proposal of this Contract, then and in that case the City will pay, and the Contractor will accept as full compensation for such extra work, or such part thereof, the amount computed by applying the unit prices to the quantities of extra work falling under the several items. Also, such extra work may be paid for at prices mutually agreed upon at the time by the City and the Contractor. But if such extra work, or any part thereof, be of a kind which may not be definitely covered by the regular pay items of this contract, and if no price therefor has been mutually agreed upon in advance, or if the work is of such a nature that it cannot be estimated with fair exactness in advance, then the City will pay, and the Contractor will accept as full compensation for such, an amount equal to the actual and necessary net cost in money to the Contractor for labor and materials actually used therein or expended thereon, plus fifteen percent (15%) of such net cost for superintendence, power, the use of tools, and plant, liability insurance, and all overhead and incidental expenses.

During the progress of any extra work which is to be paid for on the basis of net cost plus fifteen percent (15%), the Contractor will furnish to the City Engineer, at the end of each day, suitable time slips showing the name of and the number of hours worked by each workman employed thereon, the nature of work performed by him, and his rate of pay, together with suitable and adequate memoranda of the materials used therein, showing the character and amount of each such material, the source from which it was purchased, and the price paid or to be paid therefor.

The City may, at its discretion, furnish to the Contractor any materials or supplies or transportation required for extra work, and the Contractor shall not be entitled to any allowance or percentage on account of materials or supplies or transportation so furnished.

It is agreed that all extra work that may be ordered and performed under the provisions of this article shall be done by the Contractor in an effective and workmanlike manner, and shall be subject to the same restrictions and liabilities as those which apply to the general work of this Contract; and the Contractor will be responsible for the maintenance and protection of such extra work until the time of the final acceptance of the entire job by the City.

And it is further agreed that no claim against the City on account of extra work shall be valid unless such extra work has been previously ordered in writing by the Mayor, and unless such claim has been presented for payment as soon as practicable after the completion of such extra work and before the making up of the final estimate.

When it becomes necessary in the prosecution of any work or improvement under contract to make minor alterations or modifications of such contract or the plans and specifications thereof, such alterations, changes or modifications shall be made only on the written order of the Mayor.

No such order shall be made until the price to be paid for the work or material or both and the credits, if any, to be allowed by the City under the altered and modified Contract shall have been agreed upon in writing and signed by the Contractor and by the Mayor.

Article 10 - DISPUTED CLAIMS FOR EXTRA COMPENSATION

If any inconsistency, omission, or conflict is discovered in either the plans or the specifications, or if in any place the meaning of either the plans or the specifications, or both, is obscure, or uncertain, or in dispute, the Engineer will decide as to the true intent.

In case the Contractor deems extra compensation is due for work or materials not clearly covered in the contract, or not ordered by the Engineer as extra work, or due to changed or altered conditions, the Contractor shall notify the Engineer in writing of the Contractor's intention to make claim for such extra compensation before beginning work on which the Contractor intends to base a claim and shall afford the Engineer every facility for keeping actual cost of the work. The Contractor and the Engineer shall compare records and bring them into agreement at the end of each day. Failure on the part of the Contractor to give such notification or to afford the Engineer proper facilities for keeping strict account of actual cost will constitute a waiver of the claim for such extra compensation except that consideration will be given to claims to the extent that they are substantiated by City records. The determination of extra compensation made by the City, where the Contractor has failed to give proper notice of his claim for extra compensation as provided herein or has failed to afford the Engineer proper facilities for keeping strict account of actual costs, shall be final and binding on the Contractor. The filing of such notice by the Contractor and the monitoring of cost by the Engineer for said notice of claim, shall not in any way be construed to establish the validity of the claim. When the extra work in question has been completed, the Contractor shall file the claim for extra compensation with the Engineer.

Such claims shall be filed with the Engineer in a timely manner but no later than 10 days after the contract is completed. A written decision will be given to the Contractor in a timely manner, regarding the approval, partial approval, or disapproval of the Contractor's claim for extra compensation. The City will determine procedures for reviewing the Contractor's claim.

Article 11 - EXTENSION OF TIME

It is agreed that if the Contractor shall be unavoidably delayed in beginning or fulfilling this Contract by reason of excessive storms or floods, or by acts of Providence, or by general strikes, or by court injunction, or by stopping of the work by the City because of any emergency or public necessity, or by reason of extra work ordered by the City Engineer, or by any act, neglect, delay, or default on the part of

the City, the Contractor shall have no valid claim for damages on account of any such cause or delay, but he shall be, in such case, entitled to such extensions or advancement of the time period specified in the Agreement as the City Engineer shall adjudge to be just and reasonable; provided, however, that formal claim for such extension shall be made in writing by the Contractor within a week after the date upon which such alleged cause of delay shall have occurred. The closing down of the work during the winter season on account of cold weather shall not be taken as entitling the Contractor to any extension of time within the meaning of this Article.

In case the Contractor shall be delayed in the fulfillment of his obligations under this Contract, from any cause whatsoever, and in case the City shall acquiesce in the Contractor's prosecution and completion of the work, or any part of it, after the date at which it should have been finished, such acquiescence shall not operate as a waiver of any of the City's rights under this Contract, nor shall it invalidate or in any way weaken the Contractor's bonds.

Article 12 - LIQUIDATED DAMAGES

It is expressly covenanted and agreed by and between the parties hereto that time is and shall be considered as of the essence of the Contract, and in the event that said Contractor shall fail in the due performance of the entire work to be performed under this Contract, by and at the time herein mentioned and referred to in the Agreement, or within some other certain date subsequent to this to which the time limit for completion of the work may have been advanced under provisions of Article 11, the said Contractor shall pay unto the City as and for liquidated damages, and not as a penalty, the sum of **Thirteen Hundred Fifty Dollars(\$ 1,350.00)** for each and every calendar day that the said Contractor shall be in default.

Said sum of **Thirteen Hundred Fifty Dollars(\$ 1,350.00)** per day, in view of the difficulty of estimating such damages with exactness, is agreed upon as the damages which will be suffered by the City by reason of such default. It is also understood and agreed by the parties to this Contract that the liquidated damages hereinbefore mentioned are in lieu of the actual damages arising from such breach of this Contract; which said sum the City shall have the right to deduct from any monies in its possession, otherwise due, or to become due to said Contractor, or to sue for and recover compensation for damages for non-performance of this Contract at the time stipulated herein and provided for. (See also any Special Provisions for Liquidated Damages.)

Said liquidated damages are in addition to any actual damages which the City may recover under the provisions of the contract.

Article 13 - PAYMENTS TO THE CONTRACTOR

13.1 Contractor's Obligation Prior to Payment

It is agreed that before the Contractor shall demand partial or final estimates or payments, the City may require him to furnish the City satisfactory evidence that all persons that have supplied labor or materials for the work embraced under this

Contract have been fully paid for the same; and that in case such evidence be not furnished as aforesaid, such sums as the City may deem necessary to meet the lawful claims of the persons aforesaid be retained by the City from any monies that may be due or become due to him under this Contract until such liabilities shall be fully discharged and evidence thereof be furnished to the City. The Contractor agrees to make prompt settlement for all repair expenses made by the City as a result of the Contractor's work. Consent of the Contractor's surety will be required prior to final payment.

13.2 City's Obligation to Pay

It is agreed that, in consideration of the faithful and entire performance by the Contractor of his obligations under this Contract, the City shall pay to him, at the times and in the manner stipulated, the total sum as determined by calculations from the unit prices in the proposal, but diminished by such amount as the City may lawfully retain as liquidated damages under the provisions of Article 12 herein; and the Contractor shall accept the payment of such sum as full compensation for his work under this Contract.

13.3 Progress Estimates and Payments

Progress payments shall comply with Act No. 524 Public Acts of 1980. At about the first of each month, during which satisfactory progress has been made toward the final completion of the work, the Engineer will make up an estimate of the amount and value of the work which has been done under this Contract since the date of the last preceding estimate, and will report such estimate in writing to the City Director of Finance. Such estimates shall not be required to be made by strict measurements, or with exactness, but may be made either wholly or in part by appraisalment or estimation or by a consideration of accounts for labor and materials, and it shall be sufficient if it is approximate only. Any error or inaccuracy which may occur in any progress estimate may be allowed for or corrected in any subsequent estimate.

Following the rendering of such estimate by the Engineer, and as soon as practicable thereafter, the City will pay to the Contractor on account a sum equal to ninety percent (90%) of the Contract price of such work. The remaining ten percent (10%) will be retained until work is fifty percent (50%) in place. After the work is fifty percent (50%) in place, additional retainage shall not be withheld unless the City determines that the Contractor is not making satisfactory progress, or for other specific cause relating to the Contractor's performance under the Contract. If the City so determines, the City may retain not more than ten percent (10%) of the dollar value of work more than fifty percent (50%) in place.

The Director of Finance may require the Contractor, before the payment of any estimate, to file an affidavit showing the unpaid bills for materials or supplies of any kind furnished for this work.

Any time after 94% of the work is in place, the Contractor may request release of all of the retainage. The City shall be required to release the retainage plus interest to the Contractor in such case only if the Contractor provides to the City an irrevocable letter of credit in the amount of the retainage plus interest, issued by a bank authorized to do business in this State, and containing terms mutually acceptable to the Contractor and the City.

The progress estimates and payments thus provided for will include all extra work which may be done under the provisions of this Contract on the same basis as other work is included, all such extra work being regarded herein as essentially a part of this Contract, and not merely supplementary to it.

Disputes under this provision may be submitted to the decision of an agent, at the option of the City, pursuant to Section 4 of Act 524 of 1980. (MCLA 125.1564).

13.4 Measurement

Due and proper measurements will be taken by the Engineer during the progress of the work, and his estimates, based upon such measurements, shall be final and conclusive evidence of the amount of work performed under this Contract.

13.5 Final Estimate and Payment

As soon as practicable after the satisfactory completion of all the work included under this Contract, the Engineer will make final inspection of all the work and will make up a final estimate of the amount due to the Contractor under the terms of this Contract. At this time the Contractor shall file with the Director of Finance an affidavit stating that all bills have been paid in full for all materials, supplies and labor of every kind that have been furnished for this work, or stating the balance due for such materials, supplies and labor (See sample on Page 52). The Contractor shall file with the City Engineer the Contractor's Declaration found on Page 51, stating that all claims for extra payments have been satisfactorily settled and there will be no further claims. A final certificate relative to compliance of Affirmative Action Plan also will be required as a condition of payment. Consent of the Contractor's surety shall also be filed. The Engineer will then certify this estimate to the City Director of Finance and the Contractor will be paid the amount of said estimate, less the amounts previously paid; excepting that the City may, at its option, reserve such amount as it may deem necessary to meet the undischarged obligations of the Contractor for materials or labor expended upon this work until such obligation shall have been paid.

Article 14 - WARRANTY MAINTENANCE

If, at any time during a one-year period from the date of payment of the final estimate, the need of any repair or replacement becomes apparent, the City will at once notify the Contractor in writing, either personally or by mail at the address given in the proposal; and if within one week after such notification the Contractor has not made the necessary repairs, the City may proceed to do the required work and to charge the cost thereof against the Contractor, excepting

that in the case of a repair necessary to be made at once to protect life and property, then and in that case the City may take immediate steps to repair or barricade such defects without notice to the Contractor.

Following the performance of any such repair work by the City, and as soon as practicable thereafter, an itemized statement of the cost of such work will be sent to the Contractor by the City. In such accounting the City shall not be held to obtain the lowest figures for the doing of the work or any part thereof, but all sums actually paid therefor shall be charged to the Contractor.

Article 15 - MICHIGAN NON-DISCRIMINATION STATUTE

It is agreed that the Contractor and his subcontractors will not discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, or marital status; or because of a handicap that is unrelated to the individual's ability to perform the duties of a particular job or position. Breach of this covenant may be regarded as a material breach of the Contract.

Article 16 - LABOR LAWS AND ORDINANCES

The Contractor shall obey and abide by all laws of the State of Michigan relating to the employment of labor on public work, and all the charter provisions and ordinances of the City of Pontiac regulating or in respect to public improvements.

Article 17 - PATENTS, PATENT RIGHTS, AND TRADEMARKS

The Contractor shall indemnify, protect, defend and save the City of Pontiac, including all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and their board members, employees, volunteers and others working on behalf of the City, harmless against all claims or actions brought against the City by reason of any actual or alleged infringement upon patent, trademark or service mark right in any article, material, process, machine or appliance used by him in this work.

Article 18 - WORK WITHIN RAILROAD, PRIVATE, STATE OR COUNTY RIGHTS-OF-WAY

All construction work within railroad, private, State or County highway rights-of-way shall be performed by the Contractor in accordance with the requirements of the rights-of-way agreement and of the railroad or highway department having jurisdiction; including procedures of excavating, backfilling, removing and replacing pavement, maintaining and safeguarding traffic, inspection procedures of jacking pipes and encasing pipes under railroads and highways, etc. All required construction permits and surety bonds shall be furnished by the Contractor before commencing work. At the conclusion of the work, the Contractor shall furnish a written statement from the railroads and highway departments that work in rights-of-way under their jurisdiction has been completed to their satisfaction.

Article 19 - PROTECTION AND SAFETY

19.1 Protection Against Accident

The Contractor shall put up and shall maintain during the continuance of the work such barriers, lights and other protective devices and watchmen, when necessary, as will effectively prevent any accident in consequence of his work, and he shall be liable for all accidents and damages occasioned in any way by his acts or neglect, or by the acts or neglect of his agents, employees, or workmen.

19.2 Responsibility for Damage to Work

The Contractor shall assume full responsibility for loss or damage to the work during the entire construction period resulting from caving earth and from storms, floods, frosts, and other adverse weather conditions, and from all other causes whatsoever not directly due to the acts or neglect of the City, and shall turn the finished work over to the City in good condition and repair at the time of the final estimate. This responsibility of the Contractor shall cover all these elements included as extra work under this Contract in exactly the same manner as the regular work is covered.

19.3 Responsibility for Adjoining Structures

The Contractor shall have full responsibility for the protection of all property, driveways, buildings, fences, and other structures, and their foundations, along (or near) the line of the work, and shall indemnify, defend and save harmless the City of Pontiac, including all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and their board members, employees, volunteers and others working on behalf of the City, against all damages or alleged damages to any such structure arising out of his work.

No driveway shall be entirely closed to travel, even temporarily, except with the written consent of the Engineer, previously obtained. Highways must be suitably posted during the period in which construction work is in progress in them, and the Contractor shall be responsible for this precaution. Suitable bridges must be built across trenches at highway crossings to facilitate travel, and this same requirement shall apply likewise to private roadways.

19.4 Responsibility for Water Courses

The Contractor shall maintain in continuous and effective service all drains and water courses touched during the progress of the work. If it should become necessary, temporarily, to divert or obstruct the flow of any such water course or drain, written consent must first be obtained from the Engineer, and the Contractor shall assume full responsibility for the consequences.

19.5 Responsibility for Utilities

Certain underground structures and utilities have been shown as an aid to the Contractor, but the City does not guarantee their location or that other underground structures or utilities may not be encountered. It shall be the responsibility of the Contractor to make all arrangements with the owners of the respective utilities for the establishment of their location, prior to beginning the construction.

The Contractor shall assume full responsibility for the protection of all utilities, water, sewer, gas, telephone, or any other, either public or private, along or near the line of work, and will be held responsible for any damages to such utilities arising from his operations. If for the Contractor's convenience he desires that any portion of the utilities be moved to facilitate his operations, he shall make all necessary arrangements with the owner of the respective utilities, and pay all costs resulting from this work.

In cases where utilities, water, sewer, gas, telephone or any other, either public or private, are directly in the line of the structures being constructed, such as those being within the permissible limits of a sewer excavation or pavement excavation, and the City deems it necessary that the said utility be moved, the said company or companies, agents or superintendents will be notified by the City Engineer to remove the same within a specified time. The Contractor shall not interfere with said utility or any portion thereof until the expiration of the time specified in said notice. The Contractor will not be held responsible for any costs resulting from this work.

In all cases where there is a dispute between the Contractor and the owner of the respective utility as to necessity of moving or repairing same within City-owned right of way, the City Engineer shall make the final decision in the matter, which decision shall be binding on the respective parties, and order the respective parties to proceed accordingly.

19.6 Protection of Trees and Shrubbery

The Contractor shall take ample precautions to protect all trees and ornamental shrubbery from injury by workmen, teams, or other agencies connected with his work. Such trees or shrubbery shall be surrounded by protective posts or fencing before construction work begins if, in the judgment of the Engineer, such precautions are necessary.

19.7 Protection of Reference Points

The Contractor shall carefully preserve monuments, bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

19.8 Removal of Water

The Contractor shall provide all necessary pumps, pipes, drains, ditches, dikes, and other means for adequately protecting the work from damage by water, and he shall so protect it during the entire construction period. No direct payment will be made to the Contractor for removing or pumping water, or for any of the means employed in protecting the work against damage by water, but compensation therefor shall be considered as being included in the unit prices fixed in this Contract for the several structures.

Water pumped or delivered from trenches and excavations shall be disposed of in such manner as will not injure the public health, nor damage public or private property, nor injure any work complete or in progress.

19.9 Dust Control

The Contractor shall apply water or dust palliative, or both, for the alleviation or prevention of dust nuisance caused by his operations. Dust control operations shall be performed by the Contractor at the time ordered by the Engineer, but failure of the Engineer to issue such order will not relieve the Contractor of his responsibility.

Such dust control materials shall be applied as often as is necessary to control the dust. The use of road oils and waste oils to control dust is prohibited unless authorized by the Engineer.

No direct payment will be made for any such work performed or material used to control dust under this Contract.

19.10 Control of Noise

The Contractor shall eliminate noise to as great an extent as possible at all times. Air compressors shall be equipped with silencers, and the exhaust of all gasoline motors and other power equipment shall be provided with mufflers. In the vicinity of hospitals, libraries and schools, special precautions shall be taken to avoid noise and other nuisance, and the Contractor shall require strict observances of all pertinent ordinances and regulations. Any blasting permitted in such locations shall be done with reduced charges.

19.11 Erosion Control

The Contractor shall comply with the Soil Erosion and Sedimentation Control Act, Act 347 of 1972, as amended by Act 197, Public Acts of 1974 and local City or County soil erosion control programs. Also, should the local agency determine that the construction operation is in violation of the act and cites the City, the Contractor shall take immediate action, as directed by the City, to insure compliance with the Act.

19.12 First Aid

The Contractor shall at all times provide a satisfactory first aid kit at the job site. Emergency phone numbers for police, doctors, and emergency vehicles shall also be kept in the first aid kit.

19.13 Ventilation and Safety in Gas

Positive and approved means shall be provided by the Contractor for the detection of gas in existing sewers. If gas is encountered and cannot be removed by natural ventilation, then ventilating equipment of sufficient capacity and suitable type to adequately and quickly dilute the gas shall be promptly installed and operated. In all work where gas is present, no flame or other open light shall be used on the work. The Contractor shall be required to enforce a "no smoking" ban on all workmen present.

19.14 Sanitary Regulations

The Contractor shall provide for his employees an abundant and convenient supply of drinking water, taken from the City mains or from some other safe and wholesome source, and shall give orders against the use for drinking purposes of any other water in the neighborhood known to be prejudicial to the health of the workers.

The Contractor shall provide at convenient points, properly secluded from observation, a sufficient number of sanitary conveniences, and shall maintain them strictly without nuisance and without offense to the public or to residents in the vicinity of the work. The number, location, character and conditions of maintenance of these utilities must at all times be such as will meet the approval of the Engineer.

Article 20 - CLEANING UP

Upon completion of the actual work of construction, the Contractor shall clean up and leave in neat condition all the premises which he has occupied during the construction period. Before the time of the final estimate, the Contractor shall remove from the premises all surplus excavation, debris, and rubbish, and all unused materials, together with all tools and equipment, or shall deposit them at such points and in such manner as the Engineer may require.

Before leaving the grounds, he shall replace or put in good repair all fences, telephone poles and lines, roadways, and other property that may have been damaged by him during the progress of the work. Damage to crops within the limits of the right-of-way or street will be paid by the City, but the Contractor must assume responsibility for all damages outside of this right-of-way.

Article 21 - PROGRESS SCHEDULE

The CONTRACTOR shall submit a Progress Schedule to the City for review and approval within ten (10) days of receipt of the "NOTICE OF AWARD". The Contractor shall address the following items in the proposed schedule.

21.1 All work on Part C and Part D streets (Woodward Avenue (BL-75), Russell / Whittemore Street Intersection, S. Merrimac Street, and St. Clair Street) shall be completed on or before November 12, 2021.

21.2 All work on Part A and Part B streets (Cherry Hill Drive, Fairmount Avenue, Starlight Lane, Grandville Court, Bynan Lane / Gambrell Drive, Omar Street, Granada Drive , and W. Columbia Avenue) shall be completed on or before July 30, 2022.

CONTRACTOR'S DECLARATION

I hereby declare that I have not, during the period of _____
to _____ A.D., 20 _____, performed any work, furnished
any material, sustained any loss, damage or delay for any reason, including soil conditions
encountered or created, or otherwise done anything for which I shall ask, demand, sue for, or
claim compensation from the City of Pontiac or his agents, in addition to the regular items set
forth in the contract named or numbered **2021 Local Street Improvement Project** and dated ____
_____, A.D., 20 _____, for _____

executed between myself and the City of Pontiac, and in the Change Orders for work issued by
the City in writing as provided thereunder, except as I hereby make claim for additional
compensation and/or extension of time as set forth on the itemized statement attached hereto.

There (is) (is not) an itemized statement attached.

Date: _____

By: _____

Title: _____

CONTRACTOR'S AFFIDAVIT

STATE OF MICHIGAN)
)SS
COUNTY OF)

The undersigned _____, hereby represents that on _____, he (it) was awarded a contract by the City of Pontiac, hereinafter called the Owner, to _____

_____ in accordance with the terms and conditions of Contract **2021 Local Street Improvement Project** and the undersigned further represents 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 (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 project, as well as all other claims arising from the performance of the said contract, have been fully paid or satisfactorily settled. The undersigned further agrees that, if any such claim should hereafter arise he (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 _____ A.D. 20 ____.

Contractor: _____

By: _____

Title: _____

Subscribed and sworn and to before me, a Notary Public in and for _____ County, Michigan, on this _____ day of _____ A.D. 20 ____.

Notary Public
My Commission expires: _____

**NOTICES TO BIDDERS,
SPECIFICATIONS
AND
SPECIAL PROVISIONS**

CITY OF PONTIAC
NOTICE TO BIDDERS
GENERAL REQUIREMENTS

1 of 1

NFE: JCK

2021-04-28

All work shall be done in accordance with the City of Pontiac Standard Details and the Michigan Department of Transportation 2012 Standard Specifications for Construction and the latest revisions to the Standard Details as published by MDOT except as specifically modified in the Contract Documents

CITY OF PONTIAC
NOTICE TO BIDDERS

JOB SITE SAFETY

1 of 1

NFE: JCK

2021-04-26

Neither the professional activities of the Engineer, nor the presence of the Engineer or its employees and consultants at, shall relieve the Contractor and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the work of construction in accordance with the Contract Documents and any health or safety precautions required by any regulatory agencies. The Engineer and its personnel have no authority to exercise any control over any construction Contractor or other entity or their employees in connection with their work or any health or safety precautions. The Contractor agrees that the Contractor is solely responsible for job site safety. The Contractor also agrees, to the extent permitted by law, that the Owner, Engineer and Engineer's consultants shall be indemnified by the Contractor for claims, demands, damages, judgements, losses, interest, attorney's fees, litigation costs and expenses of any kind, at any time, for bodily injury and or property damage, arising out of or in any way connected to the Contractor's work or acts related to the Project. The Contractor also agrees that the Owner, Engineer and Engineer's consultants shall be made additional insureds under the Contractor's general liability insurance policy.

CITY OF PONTIAC

NOTICE TO BIDDERS

BI-WEEKLY PROGRESS MEETING

1 of 1

NFE: JCK

2021-04-26

Bidders are advised that after the commencement of construction activities, the Contractor will be required to attend a bi-weekly progress meeting with the Engineer and any other interested parties. Dates will be selected at the beginning of the project and the meeting will be held at the office of the Engineer, or as otherwise arranged. The Contractor's project representative along with representatives from all critical subcontractors, as requested by the Engineer, shall be present at the meeting to discuss the status of the project and to coordinate the work for the following two (2) weeks.

CITY OF PONTIAC
NOTICE TO BIDDERS

PERMIT REQUIREMENTS

1 of 1

NFE: JCK

2021-04-27

Bidders are advised that the following permits are required for construction of this project:

MDOT Right-of-Way Permit: A permit to perform work or place traffic control devices within the Michigan Department of Transportation right-of-way shall be provided to the contractor. The Contractor shall be responsible for meeting all of the requirements outlined in the permit.

Canadian National Railroad: A permit to perform work in the right-of-way of the Canadian National Railroad at Woodward Ave. shall be provided to the contractor. The Contractor shall be responsible for meeting all of the requirements outlined in the permit.

Water Use Permit: A permit will be required to access City fire hydrants to obtain water for construction, cleaning, dust control, etc. The Contractor must obtain this permit from the Oakland County Water Resources Commissioner. As a part of this permit a meter will be provided by the County to measure the usage of water. Backflow prevention must be maintained at all times. Payment for any fees or for water usage will be the responsibility of the Contractor.

Structure Adjustments: A permit from the Oakland County Water Resources Commissioner for adjusting sanitary and water structures covers in the right-of-way will be provided to the contractor. The contractor shall be responsible for all fees associated with said permit, and shall be responsible for meeting all of the requirements outlined in the permit.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
PROGRESS CLAUSE
1 of 1

NFE: JCK

2021-07-30

The Contractor shall begin work within ten (10) calendar days after receiving the "Notice to Proceed" or on or before the date designated as the starting date in the detailed Progress Schedule. The completion dates for this project shall be as follows:

- All work on Part C and Part D streets (Woodward Avenue (BL-75), Russell / Whittemore Street Intersection, S. Merrimac Street, and St. Clair Street) shall be completed on or before November 12, 2021.
- All work on Part A and Part B streets (Cherry Hill Drive, Fairmount Avenue, Starlight Lane, Grandville Court, Bynan Lane / Gambrell Drive, Omar Street, Granada Drive , and W. Columbia Avenue) shall be completed on or before July 30, 2022.

The Contractor shall perform all work in accordance with the traffic control plans provided in the construction drawings. Temporary traffic and detours shall be maintained at all times. The Contractor shall complete all restoration work and pavement markings as specified in the construction drawings and as directed by the Engineer.

Failure by the Contractor to meet the above requirements and dates will result in the Contractor being assessed liquidated damages in accordance with the Special Provision for Schedule of Liquidated Damages for Oversight.

The Contractor shall also be assessed liquidated damages in accordance with the Special Provision for Schedule of Liquidated Damages for Oversight for any days exceeding ten (10) between the placement of the leveling and wearing courses of HMA on any street. The City Engineer will consider all requests for extensions of time based on weather or extenuating circumstances that prevent HMA paving operations.

The low bidder for the work covered by this proposal will be required to attend a preconstruction meeting and to submit a detailed progress schedule for approval by the Engineer. The progress schedule shall include, as a minimum, the starting and completion dates of all items of work, as well as the date the project is to be completed. The Contractor shall schedule their work such that no more than three (3) business days will elapse between major items of work. It is the intent of this provision that a continuous flow of operations will be maintained from start to finish.

CITY OF PONTIAC
NOTICE TO BIDDERS
UTILITY COORDINATION

1 of 1

NFE: JCK

2021-04-26

Description

The Contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Section 104.07 of the 2012 MDOT Standard Specifications for Construction. In addition, for the protection of underground utilities, the Contractor shall follow the requirements in Section 107.12 of the 2012 MDOT Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon Section 109.03 of the 2012 MDOT Standard Specifications for Construction.

The following public utilities have facilities located within the right-of-way:

Electric - Distribution:

DTE Energy
1530 Trombly Street
Detroit, MI 48211
Contact: Laura Toporowski 630-336-2020

Telephone:

AT&T
54 N. Mill Street
Pontiac, MI 48342
Contact: Matt Silwa 248-877-0762

Gas:

Consumers Energy
4600 Coolidge Hwy
Royal Oak, MI 48073
Contact: Ernie Martyniuk 248-433-5868

Cable Television:

Comcast Cable
25626 Telegraph Rd
Southfield, MI 48033
Contact: Michael Marlow 248-809-2765

Sanitary Sewer:

Oakland County W.R.C.
1 Public Works Dr
Waterford, MI 48328
Contact: Rick DeVisch 248-858-4939

Electric – Community Lighting:

DTE Energy
15600 19 Mile Rd
Clinton Twp, MI 48038
Contact: Reggie Brown 586-412-3207

Water Main

Oakland County W.R.C.
1 Public Works Dr
Waterford, MI 48328
Contact: Amy Ploof 248-452-2271

City of Pontiac – Street Lighting and Storm Drain

City of Pontiac – Engineering Department
47450 Woodward Ave.
Pontiac, MI 48342
Contact: Abdul Siddiqui 248-758-3615

Storm drain, water main and street lighting improvements shall be constructed as identified in the construction plans or specifications.

On all projects: "Three Working Days before you Dig – Call MISS DIG (800)482-7171"

Existing service facilities, which are located within grading or structure limits, will be moved or adjusted by the owners to locations or elevations designated by the Engineer or will be removed entirely from the right of way. Owners of public utilities will not be required by the City to move additional poles or structures in order to facilitate the operation of construction equipment unless it is determined by the Engineer that such poles or structures constitute a hazard to the public or are extraordinarily dangerous to the Contractor's operations.

CITY OF PONTIAC
NOTICE TO BIDDERS
USE OF CITY WATER
1 of 1

NFE: JCK

2021-04-26

Description

Water from the City of Pontiac water distribution system is available for use by the Contractor. The Contractor **MUST** apply for and have a permit for water use in the possession of the individual taking the water from the City system. Unauthorized use will not be permitted. The Oakland County Sheriff's Department has been instructed to halt any unauthorized use of City water.

As a part of this permit, a meter will be provided by the Oakland County Water Resources Commissioner to measure the usage of water. Backflow prevention must be maintained at all times. A permit fee will be due upon issuance of the permit. A usage fee will be due upon the return of the provided meter.

The Contractor is advised to contact Amy Ploof at 248-858-0958 or ploofa@oakgov.com to ascertain the procedures for obtaining a permit and for paying the required fees for such use.

Measurement and Basis of Payment

The cost of the permit fee and metered use of the City's water supply is the responsibility of the Contractor and shall be considered incidental to the project and shall not be paid for separately.

CITY OF PONTIAC

NOTICE TO BIDDERS

STAGING OF CONSTRUCTION ACTIVITIES

1 of 1

NFE: JCK

2021-04-27

Bidders are advised that if they intend on staging their activities outside of the public right-of-way, approval for a variance from the City of Pontiac Zoning Board of Appeals is required. It shall be the responsibility of the Contractor to make application to the City of Pontiac's Office of Land Use and Strategic Planning. The procedure for making this application includes:

1. Obtain and complete the property application forms and pay fees.
2. File the forms with the Office of Land Use and Strategic Planning and include the following items:
 - a. A fully dimensioned and scaled plot plan showing property lines and locations of all buildings.
 - b. A clear description of any proposed change of use to include present use and a detailed accounting of the new use.
 - c. Any additional information required by the Office of Land Use and Strategic Planning, for proper processing of the application.
3. The request will be placed on the agenda of the Zoning Board of Appeals as soon as possible.
4. The applicant will be notified by mail of the hearing time and date.
5. A variance, if granted, will be void six (6) months after date of approval if not acted upon the applicant.
6. A variance, if granted, does not constitute permission to proceed without first obtaining the necessary permits to complete the required work.

Furthermore, if City of Pontiac property is to be used for staging activities, an agreement between the Contractor and the City, allowing the Contractor the use of the property, shall be approved by the City prior to the Contractor accessing the property.

The costs associated with the Contractor obtaining approval from the City of Pontiac Zoning Board of Appeals shall not be paid for separately.

CITY OF PONTIAC
NOTICE TO BIDDERS
FOR
DRIVEWAY ACCESS, TEMPORARY
1 of 1

NFE: JCK

2021-04-29

Description

Maintain access to all driveways during construction except that each drive may be closed for no more than 3 days to pour and cure the concrete drive, sidewalk behind the drive, and portion of the driveway behind the sidewalk. The Contractor shall notify each resident three working days prior to closing a drive. Temporary materials approved of by the Engineer, such as maintenance gravel may be used, but must be used in a manner that ensures the material does not infiltrate the underlying material to remain in place. This work will NOT be paid for separately but considered incidental to adjacent pay items.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
SWEEPING
1 of 1

NFE: JCK

2021-04-27

Description

This work shall consist of sweeping pavements, as often as necessary, in the construction area, as directed by the Engineer.

A final cleaning shall be completed within five (5) working days prior to the opening of the roadway.

Equipment

The machine that is used shall be self-propelled or towed street sweeper, equipped with pickup attachments and curb brushes.

Measurement and Basis of Payment

The completed work for Sweeping shall not be paid for separately, but shall be considered included in other items of work on the project.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
DUST CONTROL
1 of 1

NFE: JCK

2021-04-26

Description

The Contractor shall take such precautions and do such work so as to effectively control dust caused by his operations on all streets that are affected by the construction of the project.

During each seven (7) day period that the street is under construction, the Contractor shall supply and apply water to the grade in such amounts that dust will be kept to a minimum. The water shall be applied to the grade at least once during each seven (7) day period and at such other times and places as the Engineer may direct. The Contractor shall schedule the application of water to be done on the Thursday of each week. The rate of application shall be 0.5 gallons per square yard.

In the event that the ground is already sufficiently wet from natural causes, the Contractor may not be required to apply water to the grade. The Contractor's equipment and labor to apply the water to the grade shall be on site every Thursday ready and equipped to apply water. The Engineer shall have sole direction as to whether or not water is required and the Engineer's decision shall be final.

Measurement and Basis of Payment

The completed work for Dust Control shall not be paid for separately.

In the event that the City deems it necessary to perform this work for the Contractor, the City shall have the work done and charge the cost thereof against any monies that may be due or may become due to the Contractor.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
PROOF ROLLING
1 of 1

NFE: JCK

2021-04-27

Description

This work shall be done in accordance with the Michigan Department of Transportation 2012 Standard Specifications for Construction, except as follows:

Construction Methods

After pavement removal and/or excavation the Engineer will inspect the condition of an existing aggregate base course or underlying subgrade. If in the opinion of the Engineer an area of the roadway appears unsuitable for paving they may order the Contractor to proof roll the area to identify unstable areas. Proof rolling must be scheduled so as not to delay the time of completion for opening the roadway to traffic, and be mutually convenient for the Engineer and the Contractor. The Engineer must be present to observe the proof rolling activity.

After any require proof rolling is completed then the Engineer may order subgrade undercutting, manipulation, or other methods to improve the pavement subgrade and identify the limits of work.

Any required subgrade improvements ordered by the Engineer will not be a basis to extend the time of completion, unless in the opinion of the Engineer an extension of time is warranted.

Measurement and Basis of Payment

The work of proof rolling will not be measured separately and shall be considered incidental to the project.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
ACCEPTANCE OF HOT MIX ASPHALT MIXTURE ON LOCAL AGENCY PROJECTS

CFS:KPK

1 of 7

APPR:CJB:JWB:07-05-16

FHWA:APPR:07-05-16

a. Description. This special provision provides sampling and testing requirements for local agency projects using the roller method and the nuclear density gauge testing. Provide the hot mix asphalt (HMA) mixture in accordance with the requirements of the standard specifications, except where modified herein.

b. Materials. Provide aggregates, mineral filler (if required), and asphalt binder to produce a mixture proportioned within the master gradation limits shown in the contract, and meeting the uniformity tolerance limits in Table 1.

Table 1: Uniformity Tolerance Limits for HMA Mixtures

Parameter		Top and Leveling Course		Base Course	
Number	Description	Range 1 (a)	Range 2	Range 1 (a)	Range 2
1	% Binder Content	-0.30 to +0.40	±0.50	-0.30 to +0.40	±0.50
2	% Passing	# 8 and Larger Sieves	±5.0	±8.0	±7.0
		# 30 Sieve	±4.0	±6.0	±6.0
		# 200 Sieve	±1.0	±2.0	±2.0
3	Crushed Particle Content (b)	Below 10%	Below 15%	Below 10%	Below 15%
a. This range allows for normal mixture and testing variations. The mixture must be proportioned to test as closely as possible to the Job-Mix-Formula (JMF).					
b. Deviation from JMF.					

Parameter number 2 as shown in Table 1 is aggregate gradation. Each sieve will be evaluated on one of the three gradation tolerance categories. If more than one sieve is exceeding Range 1 or Range 2 tolerances, only the one with the largest exceedance will be counted as the gradation parameter.

The master gradation should be maintained throughout production; however, price adjustments will be based on Table 1. Aggregates which are to be used in plant-mixed HMA mixtures must not contain topsoil, clay, or loam.

c. Construction. Submit a Mix Design and a JMF to the Engineer. Do not begin production and placement of the HMA until receipt of the Engineer's approval of the JMF. Maintain the binder content, aggregate gradation, and the crushed particle content of the HMA mixture within the Range 1 uniformity tolerance limits in Table 1. For mixtures meeting the definition of top or leveling course, field regress air void content to 3.5 percent with liquid asphalt cement unless

specified otherwise on HMA application estimate. For mixtures meeting the definition of base course, field regress air void content to 3.0 percent with liquid asphalt cement unless specified otherwise on HMA application estimate.

Ensure all persons performing Quality Control (QC) and Quality Assurance (QA) HMA field sampling are "Local Agency HMA Sampling Qualified" samplers. At the Pre-Production or Pre-Construction meeting, the Engineer will determine the method of sampling to be used. Ensure all sampling is done in accordance with *MTM 313 (Sampling HMA Paving Mixtures)* or *MTM 324 (Sampling HMA Paving Mixtures Behind the Paver)*. Samples are to be taken from separate hauling loads.

For production/mainline type paving, obtain a minimum of two samples, each being 20,000 grams, each day of production, for each mix type. The Engineer will sample and maintain possession of the sample. Sampling from the paver hopper is prohibited. Each sample will be divided into two 10,000 gram parts with one part being for initial testing and the other part being held for possible dispute resolution testing. Obtain a minimum of three samples for each mix type regardless of the number of days of production.

Obtain samples that are representative of the day's paving. Sample collection is to be spaced throughout the planned tonnage. One sample will be obtained in the first half of the tonnage and the second sample will be obtained in the second half of the tonnage. If planned paving is reduced or suspended, when paving resumes, the remaining sampling must be representative of the original intended sampling timing.

Ensure all persons performing testing are Bit Level One certified or Bit QA/QC Technician certified.

Ensure daily test samples are obtained, except, if the first test results show that the HMA mixture is in specification, the Engineer has the option of not testing additional samples from that day.

At the Pre-Production or Pre-Construction meeting, the Engineer and Contractor will collectively determine the test method for measuring asphalt content (AC) using *MTM 319 (Determination of Asphalt Content from Asphalt Paving Mixtures by the Ignition Method)* or *MTM 325 (Quantitative Extraction of Bitumen from HMA Paving Mixtures)*. Back calculation will not be allowed for determining asphalt content.

Ensure all labs performing local agency acceptance testing are qualified labs per the *HMA Production Manual* and participate in the MDOT round robin process, or they must be AASHTO Materials Reference Laboratory (AMRL) accredited for AASHTO T 30 or T 27, and AASHTO T 164 or T 308. Ensure on non-National Highway System (NHS) routes, Contractor labs are made available, and may be used, but they must be qualified labs as previously stated. Contractor labs may not be used on NHS routes. Material acceptance testing will be completed by the Engineer within 14 calendar days, except holidays and Sundays, for projects with less than 5,000 tons (plan quantity) of HMA and within 7 calendars days, except holidays and Sundays, for projects with 5,000 tons (plan quantity) or more of HMA, after the Engineer has obtained the samples. QA test results will be provided to the Contractor after the Engineer receives the QC test results. Failure on the part of the Engineer or the laboratory to provide Quality Assurance test results within the specified time frame does not relieve the Contractor of their responsibility to provide an asphalt mix within specifications.

The correlation procedure for ignition oven will be established as follows. Asphalt binder content based on ignition method from MTM 319. Gradation (*ASTM D 5444*) and Crushed particle content (*MTM 117*) based on aggregate from *MTM 319*. The incineration temperature will be established at the Pre-Production Meeting. The Contractor will provide a laboratory mixture sample to the acceptance laboratory to establish the correction factor for each mix. Ensure this sample is provided to the Engineer a minimum of 14 calendar days prior to production.

For production/mainline type paving, the mixture may be accepted by visual inspection up to a quantity of 500 tons per mixture type, per project (not per day). For non-production type paving defined as driveways, approaches, and patching, visual inspection may be allowed regardless of the tonnage.

The mixture will be considered out-of-specification, as determined by the acceptance tests, if for any one mixture, two consecutive tests per parameter, (for Parameter 2, two consecutive aggregate gradations on one sieve) are outside Range 1 or Range 2 tolerance limits. If a parameter is outside of Range 1 tolerance limits and the second consecutive test shows that the parameter is outside of Range 2, then it will be considered to be a Range 1 out-of-specification. Consecutive refers to the production order and not necessarily the testing order. Out-of-specification mixtures are subject to a price adjustment per the Measurement and Payment section of this special provision.

Contractor operations will be suspended when the mixture is determined to be out-of-specification, but contract time will continue to run. The Engineer may issue a Notice of Non-Compliance with Contract Requirements (Form 1165), if the Contractor has not suspended operations and taken corrective action. Submit a revised JMF or proposed alterations to the plant and/or materials to achieve the JMF to the Engineer. Effects on the Aggregate Wear Index (AWI) and mix design properties will be taken into consideration. Production and placement cannot resume until receipt of the Engineer's approval to proceed.

Pavement in-place density will be measured using one of two approved methods. The method used for measuring in-place density will be agreed upon at a pre-production or pre-construction meeting.

Pavement in-place density tests will be completed by the Engineer during paving operations and prior to traffic staging changes. Pavement in-place density acceptance testing will be completed by the Engineer prior to paving of subsequent lifts and being open to traffic.

Option 1 – Direct Density Method

Use of a nuclear density gauge requires measuring the pavement density using the Gmm from the JMF for the density control target. The required in-place density of the HMA mixture must be 92.0 to 98.0 percent of the density control target. Nuclear density testing and frequency will be in accordance with the *MDOT Density Testing and Inspection Manual*.

Option 2 – Roller Method

The Engineer may use the Roller Method with a nuclear or non-nuclear density gauge to document achieving optimal density as discussed below.

Use of the density gauge requires establishing a rolling pattern that will achieve the required in-place density. The Engineer will measure pavement density with a density gauge using the Gmm from the JMF for the density control target.

Use of the Roller Method requires developing and establishing density frequency curves, and meeting the requirements of Table 2. A density frequency curve is defined as the measurement and documentation of each pass of the finished roller until the in-place density results indicate a decrease in value. The previous recording will be deemed the optimal density. The Contractor is responsible for establishing and documenting an initial or QC rolling pattern that achieves the optimal in-place density. When the density frequency curve is used, the Engineer will run and document the density frequency curve for each half day of production to determine the number of passes to achieve the maximum density. Table 5, located at the end of this special provision, can be used as an aid in developing the density frequency curve. The Engineer will perform density tests using an approved nuclear or non-nuclear gauge per the manufacturer's recommended procedures.

Table 2: Minimum Number of Rollers Recommended Based on Placement Rate

Average Laydown Rate, Square Yards per Hour	Number of Rollers Required (a)	
	Compaction	Finish
Less than 600	1	1 (b)
601 - 1200	1	1
1201 - 2400	2	1
2401 - 3600	3	1
3601 and More	4	1
a. Number of rollers may increase based on density frequency curve.		
b. The compaction roller may be used as the finish roller also.		

After placement, roll the HMA mixture as soon after placement as the roller is able to bear without undue displacement or cracking. Start rolling longitudinally at the sides of the lanes and proceed toward the center of the pavement, overlapping on successive trips by at least half the width of the drum. Ensure each required roller is 8 tons minimum in weight unless otherwise approved by the Engineer.

Ensure the initial breakdown roller is capable of vibratory compaction and is a maximum of 500 feet behind the paving operations. The maximum allowable speed of each roller is 3 miles per hour (mph) or 4.5 feet per second. Ensure all compaction rollers complete a minimum of two complete rolling cycles prior to the mat temperature cooling to 180 degrees Fahrenheit (F). Continue finish rolling until all roller marks are eliminated and no further compaction is possible. The Engineer will verify and document that the roller pattern has been adhered to. The Engineer can stop production when the roller pattern is not adhered to.

d. Measurement and Payment. The completed work, as described, will be measured and paid for using applicable pay items as described in subsection 501.04 of the Standard Specifications for Construction, or the contract, except as modified below.

Base Price. Price established by the Department to be used in calculating incentives and adjustments to pay items and shown in the contract.

If acceptance tests, as described in section c. of this special provision, show that a Table 1 mixture parameter exceeds the Range 1, but not the Range 2, tolerance limits, that mixture parameter will be subject to a 10 percent penalty. The 10 percent penalty will be assessed based on the acceptance tests only unless the Contractor requests that the 10,000 gram sample part retained for possible dispute resolution testing be tested. The Contractor has 4 calendar days from receipt of the acceptance test results to notify the Engineer, in writing, that dispute resolution testing is requested. The Contractor's QC test results for the corresponding QA test results must result in an overall payment greater than QA test results otherwise the QA tests will not be allowed to be disputed. The Engineer has 4 calendar days to send the dispute resolution sample to the lab once dispute resolution testing is requested. The dispute resolution sample will be sent to an independent lab selected by the Local Agency, and the resultant dispute test results will be used to determine the penalty per parameter, if any. Ensure the independent lab is a MDOT QA/QC qualified lab or an AMRL HMA qualified lab. The independent lab must not have conflicts of interest with the Contractor or Local Agency. If the dispute testing results show that the mixture parameter is out-of-specification, the Contractor will pay for the cost of the dispute resolution testing and the contract base price for the material will be adjusted, based on all test result parameters from the dispute tests, as shown in Table 3 and Table 4. If the dispute test results do not confirm the mixture parameter is out-of-specification, then the Local Agency will pay for the cost of the dispute resolution testing and no price adjustment is required.

If acceptance tests, as described in section c. of this special provision, show that a Table 1 mixture parameter exceeds the Range 2 tolerance limits, the 10,000 gram sample part retained for possible dispute resolution testing will be sent, within 4 calendar days, to the MDOT Central Laboratory for further testing. The MDOT Central Laboratory's test results will be used to determine the penalty per mixture parameter, if any. If the MDOT Central Laboratory's results do not confirm the mixture parameter is out-of-specification, then no price adjustment is required. If the MDOT Central Laboratory's results show that the mixture is out-of-specification and the Engineer approves leaving the out-of-specification mixture in place, the contract base price for the material will be adjusted, based on all parameters, as shown in Table 3 and Table 4.

In the case that the Contractor disputes the results of the test of the second sample obtained for a particular day of production, the test turn-around time frames given would apply to the second test and there would be no time frame on the first test.

The laboratory (MDOT Central Laboratory or independent lab) will complete all Dispute Resolution testing and return test results to the Engineer, who will provide them to the Contractor, within 13 calendar days upon receiving the Dispute Resolution samples.

In all cases, when penalties are assessed, the penalty applies to each parameter, up to two parameters, that is out of specification.

Table 3: Penalty Per Parameter

Mixture Parameter out-of-Specification per Acceptance Tests	Mixture Parameter out-of-Specification per Dispute Resolution Test Lab	Price Adjustment per Parameter
NO	N/A	None
YES	NO	None
	YES	Outside Range 1 but not Range 2: decrease by 10%
		Outside Range 2: decrease by 25%

The quantity of material receiving a price adjustment is defined as the material produced from the time the first out-of-specification sample was taken until the time the sample leading to the first in-specification test was taken.

Each parameter of Table 1 is evaluated with the total price adjustment applied to the contract base price based on a sum of the two parameter penalties resulting in the highest total price adjustment as per Table 4. For example, if three parameters are out-of-specification, with two parameters outside Range 1 of Table 1 tolerance limits, but within Range 2 of Table 1 limits and one parameter outside of Range 2 of Table 1 tolerance limits and the Engineer approves leaving the mixture in place, the total price adjustment for that quantity of material is 35 percent.

Table 4: Calculating Total Price Adjustment

Cost Adjustment as a Sum of the Two Highest Parameter Penalties		
Number of Parameters Out-of-Specification	Range(s) Outside of Tolerance Limits of Table 1 per Parameter	Total Price Adjustment
One	Range 1	10%
	Range 2	25%
Two	Range 1 & Range 1	20%
	Range 1 & Range 2	35%
	Range 2 & Range 2	50%
Three	Range 1, Range 1 & Range 1	20%
	Range 1, Range 1 & Range 2	35%
	Range 1, Range 2 & Range 2	50%
	Range 2, Range 2 & Range 2	50%

Table 5: Density Frequency Curve Development

Tested by: _____ Date/Time: _____

Route/Location:		Air Temp:
Control Section/Job Number:		Weather:
Mix Type:	Tonnage:	Gauge:
Producer:	Depth:	Gmm:

Roller #1 Type: _____

Pass No.	Density	Temperature	Comments
1			
2			
3			
4			
5			
6			
7			
8			
Optimum			

Roller #2 Type: _____

Pass No.	Density	Temperature	Comments
1			
2			
3			
4			
5			
6			
7			
8			
Optimum			

Roller #3 Type: _____

Pass No.	Density	Temperature	Comments
1			
2			
3			
4			
5			
6			
7			
8			
Optimum			

Summary: _____

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
QUALITY CONTROL AND ACCEPTANCE OF PORTLAND CEMENT CONCRETE
(FOR LOCAL AGENCY PROJECTS ONLY)

CFS:JFS

1 of 21

APPR:TES:DBP:06-14-19

FHWA:APPR:06-14-19

a. Description. The Contractor must administer quality control (QC) and the Department will administer quality assurance (QA) procedures that will be used for acceptance of and payment for all Portland cement concrete (PCC) for the project. Except as explicitly modified by this special provision, all materials, test methods, and PCC mixture requirements of the standard specifications and the contract apply.

Do not place concrete until the Engineer's daily startup testing verifies that the fresh concrete properties have been met, in accordance with subsection d.2 of this special provision.

Provide the Engineer a minimum 24 hours notification prior to each concrete placement.

1. Terminology.

Air Content of Fresh Concrete. The recorded total air content of fresh concrete sampled and tested according to this special provision.

Air Content Test Results. The recorded air content of fresh concrete corresponding to the strength test specimens that were molded for acceptance.

Alkali-Silica Reactivity (ASR). A chemical reaction which occurs over time within concrete between high alkaline cement paste and reactive forms of silica found in some aggregates. In the presence of moisture, an expansive ASR gel is formed which can exert pressure within the concrete, causing random cracking and premature deterioration of the concrete. See subsection c.5.A of this special provision.

Base Price. Price established by the Department to be used in calculating incentives or adjustments to pay items and shown in the contract.

Concrete Mix Design. The process, by which the concrete mixture performance characteristics are defined, based on selected materials, performance requirements, environmental exposure considerations, placement methods, and other factors that control the plastic and hardened properties of the concrete in efforts to produce an economical and durable product.

Job Mix Formula (JMF). The actual batch quantities (mixture proportions) of each constituent included in the concrete mixture, based on adjustments to the target weights attained from the mix design process, necessary to optimize the concrete mixture properties.

Pay Factor (PF). The factor that is determined according to subsections d.3 of this special provision, used to calculate the price adjustment for a discrete quantity of concrete relative

to its respective level of quality. Pay factor will not exceed 1.00. Therefore, there will never be a positive pay adjustment.

Price Adjustment (ADJ). The price adjustment applied to the quantity of concrete represented by the respective quality index analysis described in subsections d.3 of this special provision.

Production Lot. A discrete cubic yard quantity of concrete containing the same JMF and used for the same application, as described in subsection d.2 of this special provision.

Quality Assurance (QA). Activities administered by the Engineer dealing with acceptance of the product, including, but not limited to, materials selection, sampling, testing, construction inspection, and review of Contractor QC documentation. All concrete QA sampling and testing will be administered by the Department. Department administered QA is described in section d of this special provision.

Quality Control (QC). All activities administered by the Contractor to monitor, assess, and adjust production and placement processes to ensure the final product will meet the specified levels of quality, including, but not limited to, training, materials selection, sampling, testing, project oversight and documentation. Contractor administered QC is described in section c of this special provision.

QC Action Limits. A range of values established by the Contractor in the QC plan that, if exceeded, requires that corrective action be taken by the Contractor to restore the continuity and uniformity of the mixture and methods in conformance with specification requirements. The QC action limits must not exceed the QC suspension limits.

QC Plan. The project-specific plan developed by the Contractor describing, in detail, all aspects of production and construction for the project to ensure consistent control of quality to meet specification requirements.

QC Plan Administrator. An employee of, or consultant engaged by the Contractor, responsible for developing and overseeing all aspects of QC for the project. This includes, but is not limited to preparing the QC plan, managing the Contractor QC personnel, communicating routinely with the production personnel to ensure quality, initiating corrective action and suspending operations when the process is found to be producing non-conforming materials, and preparing and submitting all necessary QC documentation to the Engineer within the specified time period.

QC Suspension Limits. A range of values defined in Table 1 that, if exceeded on a single QC test, requires that the Contractor suspend operations and determine, correct, and document the deficiencies before resuming production. The QC suspension limit must not exceed specification requirement thresholds.

Sample. A representative quantity of concrete taken during production which is used to measure the quality characteristics for the concrete.

Sampling Rate. The number of times the fresh concrete is sampled, as described in subsection d.2 of this special provision.

Small Incidental Quantity. A single day's placement of less than 20 cubic yards of concrete used for non-structural or non-pavement related applications, including, but not limited to:

curb and gutter, sidewalks and sidewalk ramps (excluding driveways and driveway ramps), installing sign or fence posts, guard rail or cable rail foundations (excluding end anchorage foundations), or other contract items where the small quantity of concrete is not paid for separately, as approved by the Engineer. Requirements for small incidental quantity consideration are described in subsections c.5.G, d.2.B and d.3 of this special provision. The corresponding weekly QA test results must meet specification limits defined in Table 3.

Specification Limits. The threshold values placed on a quality characteristic used to evaluate the quality of the material.

Strength Sample Test Result. The average of the two companion 28-day compressive strength test specimens taken from the same sample of concrete is considered a strength sample test result.

Strength Test Specimen. A strength test specimen is an individual 6-inch by 12-inch strength test cylinder or 4-inch by 8-inch strength test cylinder molded and cured according to *AASHTO T23/ASTM C 31* and tested according to *AASHTO T22/ASTM C 39*. All respective QC or QA strength test specimens must be the same nominal size. Strength test specimen cylinder size of 4-inch by 8-inch is permitted only if the nominal maximum coarse aggregate particle size, as specified for the coarse aggregate in the concrete mixture, is 1-inch, or less.

Sublot. A portion of a production lot, represented by a complete set of QA tests, as described in subsection d.2.A of this special provision. The Engineer and the Contractor may agree to reduce the typical sublot size based on project staging or other project conditions.

Supplementary Cementitious Materials (SCM). A mineral admixture (slag cement, fly ash) used to replace a portion of the Portland cement, either individually or as a blended cement, in the concrete mixture. SCM requirements are described in subsection c.5 of this special provision.

b. Materials. Mixture requirements must be in accordance with the contract.

c. Contractor Administered Quality Control (QC).

1. Contractor Quality Control Plan (QC plan). Prepare, implement, and maintain a QC plan specific to the project for concrete that will provide quality oversight for production, testing, and control of construction processes. The QC plan must be in conformance with the contract and must identify all procedures used to control production and placement including when to initiate corrective action necessary to maintain the quality and uniformity of the work.

Develop concrete mix designs and JMFs, as specified, and conduct QC sampling, testing, and inspection during all phases of the concrete work at the minimum frequency, or at an increased frequency sufficient to ensure that the work conforms to specification requirements.

Project-specific items required in the QC plan include (where applicable), but are not limited to the following:

A. Organization chart.

- B. QC Plan Administrator and contact information.
- C. The name(s) and credentials of the QC staff.
- D. Methods for interaction between production and QC personnel to engage timely corrective action, including suspension of work.
- E. Coordination of activities.
- F. Documentation, procedures, and submittals.
- G. Project and plant specifics.
- H. Concrete production facilities inspections and certifications.
- I. Current testing equipment calibration documentation including calibration factor.
- J. Testing and initial field curing facilities for QC and QA strength test specimens (AASHTO T23/ASTM C 31).
- K. Stockpile management plan.
- L. Corrective action plan.
- M. Mixing time and transportation, including time from batching to completion of delivery and batch placement rate (batches per hour), along with the manufacturer's documentation relative to the batching equipment's capabilities in terms of maximum mixing capacity and minimum mixing time (*ASTM C 94*).
- N. Placement and consolidation methods including monitoring of vibration, depth checks, and verification of pavement dowel bar alignment.
- O. Process for monitoring stability of air content of fresh concrete during concrete production and placement.
- P. Hot and cold weather protection considerations and methods.
- Q. Control charts with action and suspension limits.
- R. Verification for non-deleterious alkali-silica reactivity (see subsection c.5.A of this special provision).
- S. Mix design and JMFs.
- T. Proposed production lot size and location for use of each JMF on the project.
- U. The frequency of sampling, testing, and yield verification.
- V. Handling, protection, initial curing, and transporting of strength test specimens (*AASHTO T23/ASTM C31*).

- W. Methods to monitor construction equipment loading and open-to-traffic strengths.
- X. Finishing and curing procedure.
- Y. Ride quality control.
- Z. List of QC records to be submitted to the Engineer in accordance with subsection c.2 of this special provision.

Submit the QC plan, for the appropriate items of work, to the Engineer for review a minimum of 10 working days before the start of related work. The Engineer will notify the Contractor of any objections relative to the content of the QC plan within 5 working days of receipt of the QC plan. Do not begin concrete placement before acceptance of the QC plan by the Engineer. If the approved QC plan fails to provide acceptable work, or acceptable control of the work, the Engineer may require the Contractor to revise the QC plan. Revisions to the QC plan must be approved by the Engineer prior to resuming work.

2. QC Records. Maintain complete records of all QC tests and inspections. Document what action was taken to correct deficiencies. Include sufficient information to allow the test results to be correlated with the items of work represented.

Furnish one copy of all QC records, including test reports for the fresh concrete placement, to the Engineer within 24 hours after the date covered by the record in a format acceptable to the Engineer. The Engineer will withhold acceptance of the concrete for failure to provide properly documented and timely QC records and reports.

If the Engineer is performing QA sampling and testing at the same time the Contractor is performing QC sampling and testing, all associated QC records must include the appropriate production lot identification number that correlates with the Department's QA production lot identification number.

3. Personnel Requirements. The QC Plan Administrator must have full authority and responsibility to take all actions necessary for the successful implementation of the QC plan, including but not limited to, the following:

- A. Monitoring and utilizing QC tests, control charts, and other QC practices to ensure that delivered materials and proportioning meets specification requirements.
- B. Monitoring materials shipped to the project, prior to their use, to ensure their continued compatibility toward producing consistent quality.
- C. Periodically inspecting all equipment utilized in transporting, proportioning, mixing, placing, consolidating, finishing, and curing to ensure proper operation.
- D. Monitoring materials stockpile management, concrete batching, mixing, transporting, placement, consolidation, finishing, and curing to ensure conformance with specification requirements.
- E. Maintaining and submitting all QC records and reports.
- F. Directing the necessary corrective action to ensure continual conformance within

the QC action limits.

G. Suspending production for the project when suspension limits are exceeded.

H. Conducting or monitoring adjustments to the JMF.

Individuals performing QC tests must demonstrate that they are proficient and capable of sampling and testing concrete or aggregate, where applicable, in accordance with the associated test procedures and Department requirements prior to commencement of related work. Any adjustments to the JMF must be made by a certified concrete technician (Michigan Concrete Association (MCA) Michigan Level II).

4. QC Laboratory Requirements. Laboratories, including field laboratories and all associated testing equipment that prepare concrete mixes or perform QC testing, must demonstrate to the Engineer that they are equipped, staffed, calibrated, and managed so as to be capable of batching, and testing PCC in accordance with the applicable test methods and procedures. Mix designs and their accompanying JMFs must include a statement, signed by a certified concrete technician (MCA Michigan Level II), that all applicable standard test methods have been followed in verifying the mix design and JMF.

5. Mix Design and Documentation. Design concrete mixtures meeting the requirements specified in Table 1. Provide the grade of concrete for the section number reference application specified in Table 1, or as specified in the contract. Request variance in writing when proposing a mix design that exhibits temperature, slump or air content other than those specified. Include the proposed mix design, JMF, and associated trial batch verification test data. Do not use a grade of concrete with a lower specification limit (LSL) 28-day compressive strength greater than what is designated for the application.

Blended cement meeting the requirements of *ASTM C 595 Type IL* is permitted.

Ensure supplementary cementitious materials are from an MDOT Approved Manufacturer. Slag cement must meet the requirements of subsection 901.06 of the Standard Specifications for Construction. Fly ash must meet the requirements of subsection 901.07 of the Standard Specifications for Construction.

Secure prior approval from the Engineer to use concrete intended for early opening to traffic to facilitate driveway gaps or other features necessary for required local access.

Unless otherwise specified in the contract, set accelerating admixtures are prohibited.

Optimized aggregate gradation is required for high performance concrete and concrete mixtures that are placed using a pump. Concrete mixtures for tremie and drilled shaft applications do not require optimized aggregate gradation. The physical requirements for coarse and intermediate aggregates specified in subsection 902.03.C of the Standard Specifications for Construction apply to high performance concrete pavement mixtures. The physical requirements for aggregates used in concrete mixtures for all other applications will be according to the contract.

Unless otherwise specified in the contract, provide either concrete Grade P1 or Grade D for bridge approach slab applications.

Unless otherwise specified in the contract, do not exceed 40 percent replacement of the Portland cement in the concrete mixture with a supplementary cementitious material. Do not exceed 40 percent total replacement of the Portland cement if more than one supplementary cementitious material is used in the concrete mixture.

Use the combined weight of all cementitious materials to determine compliance with the maximum water-cementitious ratio and cementitious material content requirements specified in Table 1.

For night casting, where applicable, a water-reducing admixture may be used in lieu of a water-reducing and retarding admixture, provided the concrete can be placed and finished in the sequence specified on the plans prior to initial set, is not subjected to residual vibration, or is not within the areas influenced by dead load deflections as a result of adjacent concrete placement operations. When the maximum air temperature is not forecast to exceed 60 degrees F for the day, the Contractor may use a water-reducing admixture or a water-reducing retarding admixture.

Table 1: Minimum Mix Design Requirements for Concrete

Mix Design Parameter	Grade of Concrete						
	P1M (a,b,e)	P1 (a,b)	D,DM (a,b,e)	T	S1 (a)	S2,S2M (a,b,e)	S3/P2 (a)
Lower Specification Limit (LSL) (28-day compressive, psi)	3500	3500	4500	3500	4000	3500	3000
Rejection Limit for an Individual Strength Sample Test Result	3000	3000	4000	3000	3500	3000	2500
Maximum Water/Cementitious Ratio (lb/lb) (c)	0.45						
Cementitious Material Content (lb/yd ³) (d)	470-564	517-611	517-658	517-611	517-611	517-611	489-517
Air Content (percent) (f)	5.5-8.5						
Slump (inch) (max.)	(g)						
Section Number Reference (h)	602, 603	602, 603, 801, 802, 803, 810	706, 711, 712	706, 718	705	401, 706, 712, 713, 718, 801, 802, 803, 810, 819	402, 403, 602, 803, 804, 806, 808, 810, 813, 814
<p>a. If the local average minimum temperature in the next 10 consecutive days is forecast to be below 40 degrees F, submit a revised QC plan for the Engineer's approval, addressing in detail changes in materials, concrete batching and mixing processes, construction methods, curing, and protection of the in situ concrete to ensure that the necessary quality characteristics of the hardened concrete product will not be compromised as a result of the cold weather. The revised QC plan must be approved by the Engineer prior to cold weather concrete placement. Do not remove supplementary cementitious material from the concrete mixture.</p> <p>b. Use aggregates from only geologically natural sources for pavement, shoulder, miscellaneous pavement (including ramps), concrete pavement overlay, bridge approach slab, structural concrete, drilled shaft, bridge railing, and bridge sidewalk applications.</p> <p>c. Use admixtures as listed in the Qualified Products Lists to reduce mixing water. Ensure concrete in concrete diaphragms contains a water-reducing admixture, or a water-reducing retarding admixture.</p> <p>d. Type III cement is not permitted.</p> <p>e. For grades of concrete requiring optimized gradation, aggregates must meet the physical requirements specified in subsection 902.03.C of the Standard Specifications for Construction.</p> <p>f. For action, suspension, and specification limits, see Tables 2 and 3, where applicable.</p> <p>g. The maximum slump for Grades P1, P1M, and P2 concrete is 3 inches or as documented on the approved JMF. All other grades of concrete will be according to Table 701-1 of the Standard Specifications for Construction.</p>							
h. Section Number Reference:			402 Storm Sewers 602 Concrete Pavement Construction 705 Foundation Piling 711 Bridge Railings 713 Bridge Rehabilitation-Steel 801 Concrete Driveways 803 Concrete Sidewalk, Sidewalk Ramps, and Steps 806 Shared Use Paths 810 Permanent Traffic Signs and Supports 814 Paved Ditches				
401 Pipe Culverts 403 Drainage Structures 603 Concrete Pavement Restoration 706 Structural Concrete Construction 712 Bridge Rehabilitation-Concrete 718 Drilled Shafts 802 Concrete Curb, Gutter and Dividers 804 Concrete Barriers and Glare Screens 808 Fencing 813 Slope Protection 819 Electrical and Lighting							

A. Alkali-Silica Reactivity. 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 mortar bars 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.

B. Contractor Provided Mixes. Provide mix design and accompanying JMFs using the methods of verification included in this special provision. Include sufficient information on constituent materials and admixtures along with trial batch verified physical properties of the fresh concrete, mix proportions per cubic yard for all constituents and compressive strength test results necessary to allow the Engineer to

fully evaluate the expected performance of the concrete mixture.

(1) Mix Documentation. Prepare mix designs for each grade of concrete required on the project. Submit JMF for each mix design, including all required documentation, to the Engineer for review 10 working days before the anticipated date of placement. The Engineer will notify the Contractor of any objections within 5 working days of receipt of the mix documentation. Number or otherwise identify each JMF and reference all accompanying documentation to this identification. Reference each JMF to the appropriate method of verification. Mix design and JMF submittals that do not include all required documentation will be considered incomplete and the Engineer will return them without review.

Mix documentation is valid for 2 years provided the material characteristics have not deviated beyond the requirements specified in the contract.

All mix designs and accompanying JMFs must be traceable to a laboratory meeting the requirements of this special provision.

Submit mix design and JMF on the MDOT Job Mix Formula (JMF) Concrete Field Communication form (MDOT Form Number 1976); include accompanying documentation. List the source of materials, bulk density (unit weight) of coarse aggregate (rodding procedure or shoveling procedure), absorption of aggregates, relative density (specific gravity) of aggregates, aggregate correction factors, batch weights, and project specific or historical laboratory test data. Include the recorded air content of fresh concrete using the same admixture and cementitious material sources to be used in the production of the concrete for the project. A JMF will be approved only if all of the minimum mix design requirements specified in the contract have been met.

(2) Job Mix Formula (JMF). Select proportions for concrete mixtures according to *ACI Standard 211.1*. The volume (oven-dry-rodded) of coarse aggregate per unit volume of concrete must be 65 percent, minimum.

Four methods of verification of proposed JMF are acceptable.

(a) Method 1. Trial Batches. Verification of JMF is based on trial batches with the same materials and proportions proposed for use on the project. Prepare at least one trial batch for each mix design in sufficient time before starting concrete placement to allow for review according to subsection c.5.B.(1) of this special provision. Provide the results of temperature, slump, density (unit weight), air content of fresh concrete, 28-day compressive strength, and age of concrete at the time of strength testing, for a minimum of three independent samples. All samples may be taken from a single trial batch for a mix design provided the trial batch is at least four cubic yards in volume. For JMF trial batch verification purposes only, 7-day compressive strength test results which report at least 70 percent of the specified 28-day lower specification limit (LSL) will be sufficient documentation in lieu of 28-day compressive strengths. The average of at least two strength test specimens represents one compressive strength sample test result for each independent sample. Provide the necessary ASR documentation as described in subsection c.5.A of this special provision.

(b) Method 2. Same Mix. Verification of JMF is based on the concrete producer's experience with the same mix design, JMF, and the same materials. Provide the results of temperature, slump, density (unit weight), air content of fresh concrete, 28-day compressive strength, and age of concrete at the time of strength testing, for a minimum of three independent samples. The average of at least two strength test specimens represents one compressive strength sample test result for each independent sample. Do not substitute material types or sources, including admixtures or cementitious materials, nor change mix proportions in the JMF. Provide the necessary ASR documentation as described in subsection c.5.A of this special provision.

(c) Method 3. Similar Mix. Verification of JMF is based on requirements described in Method 2, in subsection c.5.B.(2).(b) of this special provision. Substitution of coarse aggregate source is permitted if the new source is of the same geologic type as the original aggregate, and conforms to the specification requirements for the application. Substitution of fine aggregate is permitted only if the new source has been tested for ASR. Provide the necessary ASR documentation as described in subsection c.5.A of this special provision.

Provide the supporting laboratory trial batch documentation and accompanying calculations showing how the mix proportions in the JMF were adjusted, based on the documented differences in relative density (specific gravity), bulk density (unit weight) and absorption of the substituted aggregate sources, to produce a theoretical yield of 100 percent and the required fresh concrete properties.

(d) Method 4. Annual Verification. At the Engineer's option, verification may be accepted annually for a concrete producer rather than on a project basis provided the sources and proportions of the constituent materials, including cementitious materials and source and types admixtures, do not change. If the project is the continuation of work in progress during the previous construction season and written certification is submitted to the Engineer that materials from the same source and with the same mixture properties are to be used, the Engineer may waive the requirement for annual renewal verification of the JMF for the project. Provide the necessary ASR documentation as described in subsection c.5.A of this special provision.

C. Department Provided Mixes. Unless otherwise specified in the contract or approved by the Engineer, the Engineer will provide the concrete JMF for the following types of concrete regardless of the total quantity for the project.

- (1) Structural concrete patching mixtures, mortar and grout.
- (2) Bridge deck overlay concrete mixtures.
- (3) Project-specific concrete mixtures and grades not defined in Table 1.

Provide all other mix designs and accompanying JMF's according to subsection c.5.B of this special provision.

The ASR documentation for the fine aggregate described in subsection c.5.A of this special provision must accompany the Contractor's request for the concrete JMF.

D. Changes in Materials and Proportions. Any changing from one approved JMF to another for the same grade of concrete must have prior approval by the Engineer.

Prior to batching, verify that the proposed JMF changes will not affect the properties of the fresh concrete (slump, temperature, air content, density (unit weight), workability), nor result in deleterious mortar bar expansion as a result of ASR, as described in subsection c.5.A of this special provision.

Record all changes to JMF in the QC records along with the rationale for the change.

E. QC Sampling and Testing. Conduct startup sampling and testing for temperature, slump, density (unit weight), and air content on the first load. Do not place concrete until testing verifies that the fresh concrete properties have not exceeded the QC action and suspension limit thresholds specified in Table 2 and the testing correlation requirements of subsection d.1.B of this special provision have been met. Continue testing subsequent loads as described in the QC plan, for each grade of concrete delivered to the work site each day. The QC sampling and testing must be random and independent from the Agencies QA sampling and testing.

Provide the curing facilities in accordance with subsection d.2.C of this special provision prior to start of concrete production.

Perform QC sampling and testing for air content of fresh concrete that is either slipformed or pumped, as described in the QC plan. Sample and test a representative haul unit of concrete immediately after its discharge but before the slipform paver or pump hopper, where applicable. Sample and test the concrete representing the same haul unit, again, after the slipform paver or after discharge from the pump (without interruption or alteration of the pumping operation), where applicable. If the difference in measured air content between the two test locations for the same concrete is greater than 1.5 percent air by volume of concrete, suspend operations and administer corrective action. Resume concrete placement only after taking the necessary corrective action to reduce the loss in air content of fresh concrete between the two test locations, as approved by the Engineer. Document the corrective action to be taken in the QC records and make the necessary changes to the QC plan, where applicable.

Concrete exceeding the maximum specification limits for slump or temperature must be rejected regardless of the total mixing time at the time of arrival to the project.

The Engineer may require the Contractor to administer additional QC sampling and testing if the Engineer determines the Contractor's current QC sampling and testing methodology is shown to be insufficient to ensure continual control of the quality of the concrete.

Take the appropriate corrective action, as described in the QC plan, when QC testing shows the QC action limits for any quality characteristic are exceeded. Suspend production if any of the QC suspension limits are exceeded or if the corrective action is not sufficient to restore the quality to acceptable levels.

Resume production only after making all necessary adjustments to bring the mixture into conformance with all applicable specifications and receiving approval to resume work

from the Engineer. Document these adjustments in the QC records.

Table 2: QC Action and Suspension Limits

Quality Characteristic	Action Limits	Suspension Limits
Air Content (percent)	See Note Below	< 5.0 or > 9.0
Air Content Loss (percent)	As Defined in the Contractor QC plan	Greater than 1.5
Conc. Temp. (Deg. F)		< 45 or > 90 at time of placement
Slump (max.) (inch)		See Table 1, footnote (g)
Density (unit weight)		N/A
Note: Action limits must be defined in the Contractor QC plan and cannot be < 5.5 or > 8.5. Suspend work if air content is < 5.0 or > 9.0 percent after pump or paver, regardless of the air content loss.		

F. Work Progress Test Specimens. Determine the strength of concrete for opening to construction traffic or regular traffic, for removing shoring and forms, or for similar purposes in accordance with subsections 104.11, 601.03.H and 701.03.D of the Standard Specifications for Construction, and as approved by the Engineer. Cure work progress test specimens in the same manner as the in-situ concrete. Allow the Engineer to witness testing of work progress test specimens.

The maturity method may be used to determine the in-place, opening-to-traffic flexural strength, provided the necessary preliminary flexural strength versus time-temperature factor correlation, using the same materials and JMF, is established according to Department procedures and approved by the Engineer before placing the concrete.

G. Reduced QC for Small Incidental Quantities. If approved by the Engineer, reduced levels of on-site QC testing for concrete may be considered for small incidental quantities defined in subsection a.1 of this special provision.

Unless approved by the Engineer, multiple small incidental quantities, including ones that are consecutively placed throughout the project on the same day, are not eligible for reduced QC consideration if the total plan quantity of concrete for the item exceeds 100 cubic yards in volume. Include details for reduced QC testing and oversight in the approved QC plan, and in accordance with following:

(1) The small incidental quantity of concrete will be limited to a single day's concrete placement of a maximum 20 cubic yards in volume.

(2) The small incidental quantity of concrete is not an integral part of a structural load bearing element.

(3) The Engineer received written certification from the Contractor that the concrete supplier has a current QC plan in place and available for review upon request by the Engineer.

(4) The concrete supplier employs a certified concrete technician (MCA Michigan Level II) available at the plant or on call during concrete placement to validate and authorize modifications to the concrete JMF, as necessary.

(5) Prior to the first concreting operation, concrete representing the JMF for the small incidental quantity has been sampled and tested by a certified concrete technician (MCA Michigan Level I or II) to verify that, historically, the JMF produced a

concrete mixture meeting the minimum requirements for density (unit weight), slump, air content, and strength. Annual verification may be acceptable provided there are no changes to the material types or sources, including the cementitious materials and admixtures.

(6) The Engineer verified that the temperature, slump, and air content conform to specification requirements at the start of the day's concreting operation associated with the small incidental quantity.

(7) The Engineer is notified and provided sufficient opportunity to witness concrete placement.

d. Department Administered Quality Assurance (Acceptance).

1. Department Quality Assurance Plan (QA plan). The Engineer will be responsible for administering the quality-based acceptance and will institute any actions necessary toward its successful implementation.

Acceptance of concrete pavement repair mixtures and concrete mixtures not included in Table 1 will be in accordance with the contract.

The Engineer will develop and follow a QA plan. The Engineer will provide the QA plan to the QC Plan Administrator a minimum of 5 working days prior to the pre-production meeting. The QA plan will be reviewed at the pre-production meeting and any proposed changes will be documented.

The nominal QA strength test specimen size, defined in subsection a.1 of this special provision will be noted in the QA plan.

A. Personnel Requirements. The personnel responsible for field inspection and for obtaining QA samples will possess the required qualifications to collect QA samples. Sampling will be performed by a certified concrete technician (MCA Michigan Level I or II) or (MCAT) certified aggregate technician, where applicable.

B. Testing Correlation. Prior to initial concrete placement, the testing personnel for both the Engineer's QA and Contractor's QC will use the equipment they have assigned to the project to conduct side by side correlation testing of the same concrete used on the project to verify correlation of both the Department's and the Contractor's test results for temperature and air content of fresh concrete. Additional side by side correlation testing will be conducted whenever there is a change in QC or QA equipment and/or testing personnel for the project, or as directed by the Engineer. The temperature measuring devices used for QC and QA must correlate with each other within 2 degrees F. If the air content results of the side by side tests conducted by the QC and QA testers and equipment differ by more than 0.8 percent air by volume of concrete, a referee air content test of fresh concrete must be conducted by a third party, designated by the Engineer but independent of the project, prior to commencement or continuation of concrete placement in efforts to resolve issues associated with non-correlation.

C. Laboratory Facilities. The testing laboratory with responsibility for acceptance testing on this project is the Department testing laboratory, or a qualified facility under the authority of the Engineer.

2. QA Sampling and Testing. The Engineer will verify the Contractor's daily startup sampling and testing of temperature, slump, and air content of fresh concrete on the first load; conduct QA sampling and testing; monitor Contractor adherence to the QC plan; and inspect field placed materials in such a manner as to ensure that all concrete for the project is represented. The testing correlation requirements of subsection d.1.B of this special provision must be met prior to concrete placement.

The following *ASTM* test methods will apply. The Department's established procedures for sampling and testing are acceptable alternatives.

C 31 Practice for Making and Curing Concrete Test Specimens in the Field

C 39 Test Method for Compressive Strength of Cylindrical Concrete Specimens

C 78 Test Method for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)

C 138 Test Method for Density (Unit Weight), Yield and Air Content (Gravimetric) of Concrete

C 143 Test Method for Slump of Hydraulic-Cement Concrete

C 172 Practice for Sampling Freshly Mixed Concrete

C 173 Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method

C 231 Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method

C 293 Test Method for Flexural Strength of Concrete (Using Simple Beam with Center-Point Loading)

A. Lot Size and Make Up. A production lot will not include more than one grade of concrete, concrete of the same grade having different specified slump or air content, or concrete of the same grade having different mix designs, or JMFs. Lot size and makeup will be determined by the Engineer, based on site conditions. A production lot may consist of a single day's production, individual concrete structural elements (eg. footing, column, pier cap, deck, bridge approach slab), or any combination thereof, provided they are of the same JMF. Each production lot will be divided into sublots of approximately equal size, as determined by the Engineer. The minimum number of sublots will be one per production lot, with the maximum number of sublots based on the anticipated total quantity of concrete to be placed and site conditions. A minimum of one sublot will be required for each day of production.

B. Sampling. QA sampling and testing will be conducted by the Engineer during concrete placement. Where practical, the random number method (as described in the "Random Sampling for Quality Control/Quality Assurance Projects" section of the Materials Quality Assurance Procedures Manual) will be used to determine the sampling locations. The sampling rate will be determined by the Engineer, based on the anticipated total quantity of concrete to be placed and site conditions, with a minimum of one sampling for each day of production.

At the option of the Engineer, small incidental quantities as defined in subsection a.1 of this special provision may be accepted (visually inspected and noted on the Inspector's Daily Report) without daily 28-day compressive strength QA test specimens provided there is a current acceptable strength test history of the JMF for the project prior to placement of the small incidental quantity. One set of compressive strength QA test specimens will then be molded for each small incidental quantity JMF at least once per week during production, thereafter, as determined by the Engineer (note the test results or identification number for the corresponding weekly QA compressive strength test result on the Inspector's Daily Report for each small incidental quantity). Quality control testing and daily QA testing for temperature, slump, and air content of fresh concrete are still required. Reduced QC for small incidental quantities, as described in subsection c.5.G of this special provision, may be considered.

The QA sampling rate and sample location will be based on cubic yard quantities.

Samples for acceptance will be taken at the point of discharge from the haul unit, at approximately the middle one-third of the load. Mix adjustments to the concrete contained within the haul unit selected for QA sampling and testing (beyond normal QC) will not be permitted prior to QA sampling and testing. QA sampling will be random and without prior notification.

The Engineer will perform QA sampling and testing for air content loss of fresh concrete that is either slipformed or pumped, (1) at least once during each day of production, (2) whenever the concrete pump is relocated, where applicable, or (3) whenever there is a significant change in the boom configuration or operation of the concrete pump, or there is a significant change in the characteristics of the paving operation during concrete placement. Concrete will be sampled from a representative haul unit immediately after its discharge but before the slipform paver or pump hopper, where applicable. The concrete representing the same haul unit will then be sampled and tested after the slipform paver or after discharge from the pump (without interruption or alteration of the pumping operation), where applicable. If the difference in measured air content between the two test locations for the same concrete is greater than 1.5 percent air by volume of concrete, the Engineer will issue a Notice of Non-Compliance with Contract Requirements (Form 1165), as described in subsection d.2.D of this special provision. The Contractor may resume concrete placement only after the necessary corrective action is taken to reduce the loss in air content of fresh concrete between the two test locations, as approved by the Engineer. Document the corrective action that was taken by the Contractor.

C. Testing. The location(s) within the project limits for QA testing of the fresh concrete and placement of curing facilities for initial curing of the 28-day compressive strength QA test cylinders will be determined by the Engineer in conformance with the following criteria:

- (1) The elapsed time between obtaining the first and the final portion of the composite sample must not exceed 15 minutes.
- (2) Testing for slump, temperature, and air content of fresh concrete must begin within 5 minutes after obtaining the final portion of the composite sample.
- (3) Molding of the 28-day compressive strength QA test cylinders must begin within 15 minutes after obtaining the final portion of the composite sample.

- (4) The concrete sample must be protected from the sun, wind, and other sources of rapid evaporation, and from contamination.

Two QA concrete strength test specimens per sample will be molded for 28-day compressive strength QA testing.

The Contractor will provide curing facilities equipped to ensure the proper environment for the Agencies QA concrete strength test specimens during initial cure. Each initial cure facility must provide ventilation or insulation, where applicable, to ensure the ambient temperature surrounding the specimens is maintained according to *AASHTO T23/ASTM C 31*. Failure by the Contractor to maintain the proper curing environment during initial cure will not be basis for rejection of samples or claims against the Department. Each initial curing facility must be capable of being locked, using an Department provided padlock. The Contractor will ensure that all initial curing facilities are accounted for at all time, and protected against theft and damage. The Contractor will place and secure each initial cure facility throughout the project limits in such a manner so as to minimize excessive transport of the test specimens prior to initial cure, as follows:

- (5) Immediately after finishing molded specimens, the Engineer will move the QA concrete strength test specimens to the closest initial cure facility provided by the Contractor.

- (6) Immediately after all QA concrete strength test specimens are placed into the cure facility and the proper initial curing conditions have been established, the Engineer will secure the facility using the Department provided padlock. Access to the QA concrete strength test specimens, thereafter, must be coordinated with the Engineer and will only be permitted in the presence of the Engineer.

- (7) The Engineer will transport the QA concrete strength test specimens within 48 hours after molding, but not prior to 8 hours after final set of the concrete, from the initial curing facility to the Department's designated testing laboratory for final curing and strength testing. The specimens will be protected with a suitable cushioning material to prevent damage from jarring during transport. The total transportation time must not exceed 4 hours prior to commencement of final curing.

D. QA Stop Production Criteria. The Engineer will issue a Notice of Non-Compliance with Contract Requirements (Form 1165) and concrete production must stop when one or more of the following are observed.

- (1) The QA testing shows that one or more of the suspension limits for quality characteristics defined in Table 2 are in non-compliance.

- (2) The QC plan is not being followed.

- (3) Segregation, excessive slumping of unsupported slipformed edges, or other notable changes in the fresh concrete properties is observed that may prevent proper placement, consolidation and finishing, or compromise the performance or long-term durability of the finished product.

- (4) The required curing system is not being applied in a timely manner, as specified by the contract.

(5) If the measured air content loss between the two testing locations for the same concrete is greater than 1.5 percent air by volume of concrete as described in subsections c.5.E and d.2.B of this special provision.

(6) If the air content of fresh concrete is less than 5.0 or greater than 9.0 percent after pump or paver, regardless of the recorded QC or QA air content loss through the pump or paver.

The Engineer will issue a Notice to Resume Work (Form 1165) only after all necessary adjustments are made to restore conformance with all applicable specifications, and the appropriate documentation is made in the QC records.

E. QA Records. The Engineer will maintain a complete record of all QA tests and inspections. The records will contain, as a minimum, signed originals of all QA test results and raw data, random numbers used (where applicable) and resulting calculations. The QA test results will not be provided to the Contractor until the corresponding QC test results are received by the Engineer.

3. Quality Index Analysis. The Engineer's QA test results will be used to determine the pay factor (PF) and price adjustment (ADJ). The Contractor's QC test results will not be used for pay factor and price adjustment analysis. The Engineer will complete pay factor and price adjustment analysis within 7 working days after completion of all 28-day compressive strength testing for the representative production lot or quantity of concrete. The quality index parameter specification limits are defined in Table 3. Unless otherwise specified in the contract, concrete not conforming to the requirements specified in Table 3 is rejectable and subject to further evaluation. All values of PF and OLPF in these formulae are decimal, not percent. All values of PF and OLPF are rounded to two decimal places.

Price adjustment for 28-day compressive strength deficiencies will be based on test results for the corresponding weekly QA test specimens and the pay factor (PFs) calculated according to the formula defined in subsection d.3.A. The price adjustment (ADJ) = (PFs – 1)(Price).

Table 3: Quality Index Parameter Specification Limits

Quality Characteristic	Specification Limits
Air Content of Fresh Concrete (percent)	5.5 – 8.5
Rejection Limit (percent)	<5.0 or >9.0
Conc. Temp. (deg. F)	45 - 90 at time of placement
Slump (max.) (inch)	See Table 1, footnote (g)
28-day Compressive Strength (psi)	For LSL see Table 1
Rejection Limit - 28-day Compressive Strength	See Table 1

A. Pay Factor for 28-Day Compressive Strength (PFs).

$$PFs = \frac{\text{Tested Strength}}{LSL}$$

Where:

PFs = Pay Factor for 28-day compressive strength (not to exceed 1.00)

Tested Strength = QA 28-day compressive strength sample test result

LSL = Lower specification limit (see Table 1)

If the tested strength does not meet the rejection limit specified in Table 1, the Engineer will require additional evaluation as described in subsection d.4 of this special provision.

B. Pay Factor for Air Content of Fresh Concrete (PFac). The pay factor for air content of fresh concrete (PFac) will be according to Table 4.

Table 4: Air Content of Fresh Concrete Pay Factor (PFac)

Air Content of Fresh Concrete (percent)	Pay Factor (PFac)
5.5 – 8.5	1.00
5.0 – 5.4	0.50
Below 5.0	Rejection
8.6 – 9.0	0.75
Above 9.0	Rejection

If the air content of fresh concrete is below 5.0 or above 9.0 percent, the Engineer will elect to do one of the following.

(1) Require removal and replacement of the entire quantity of concrete represented by the test with new testing conducted on the replacement concrete and repeat the evaluation procedure.

(2) Allow submittal of a corrective action plan for the Engineer's approval. If the Engineer does not approve the plan for corrective action, subsection d.3.B.(1) of this special provision will be applied. All costs associated with plan submittal and corrective action under this subsection will be borne by the Contractor.

C. Overall Lot Pay Factor (OLPF). The following formulae are used to calculate the OLPF and ADJ. The OLPF will not exceed 1.00.

$$\text{OLPF} = (0.60 \times \text{PFs}) + (0.40 \times \text{PFac})$$

$$\text{ADJ} = (\text{OLPF} - 1)(\text{Price})$$

ADJ = Price adjustment per pay unit to be applied to the quantity represented by the QA test

Price = Base price established for the pay item

4. Evaluation of Rejectable Concrete. The Engineer will require additional evaluation to decide what further action may be warranted, as described below. Acceptance for air content of fresh concrete will be based on QA test results reported at the time of concrete placement.

If the Engineer determines that non-destructive testing (NDT) is appropriate, this work will be

done by the Contractor in the presence of the Engineer within 45 calendar days from concrete placement. All costs associated with this work will be borne by the Contractor. A complete set of non-destructive tests must be conducted (in accordance with the respective standard test method) at a minimum three randomly selected locations. If NDT is used to estimate the in-situ strength, a calibrated relationship between the project JMF under evaluation and the NDT apparatus must have been established prior to NDT testing according to its respective standard test method.

If the 28-day compressive strength QA test results show that the rejection limit (as specified in Table 1) has not been achieved, the quantity of concrete under evaluation will be rejected and the Engineer will require additional evaluation to decide what further action may be warranted.

Propose an evaluation plan and submit it to the Engineer for approval before proceeding. The results from NDT will be used only to decide what further action is required. This determination will be made by the Engineer, as follows:

A. For non-structural concrete. If no test result from non-destructive testing falls below the lower specification (LSL) 28-day compressive strength, the represented quantity of concrete under evaluation will remain in place and a pay factor for 28-day compressive strength (PFs) of 1.00 will be applied for overall lot pay factor (OLPF) and price adjustment (ADJ) determinations according to subsection d.3 of this special provision.

B. For structural concrete (including overhead sign foundations). If no test result from non-destructive testing falls below the lower specification limit 28-day compressive strength, the represented quantity of concrete under evaluation will remain in place and a pay factor for 28-day compressive strength (PFs) of 0.85 will be applied for overall lot pay factor (OLPF) and price adjustment (ADJ) determinations according to subsection d.3 of this special provision.

C. If one or more of the non-destructive test results fall below the lower specification limit (LSL) 28-day compressive strength, the Engineer may elect to do one of the following:

(1) Require removal and replacement of the entire rejected quantity of concrete, including new initial tests for pay factor (PF) determination and price adjustment conducted according to subsection d.3 of this special provision.

(2) Allow the Contractor to submit a plan for corrective action, for the Engineer's approval, to address the disposition of the rejected concrete. If the Engineer does not approve the plan for corrective action, subsection d.4.C.(1) of this special provision will be applied. All costs associated with plan submittal and corrective action under this subsection will be borne by the Contractor.

(3) Allow the in-situ quantity of concrete under evaluation to remain in place and a pay factor (PFs) of 0.50 will be applied for overall lot pay factor (OLPF) and price adjustment (ADJ) determinations according to subsection d.3 of this special provision.

e. Measurement and Payment. If a price adjustment is made for reasons included in this special provision, that adjustment will be made using the base price established for the specific item. If a contract unit price requires adjustment for other reasons not described in this special provision, the adjustments will be made using the unit price and the adjustments will be

cumulative.

Separate payment will not be made for providing, implementing, and maintaining an effective QC program. All costs associated with this work will be included in the applicable unit prices for the concrete items. Failure by the Contractor to maintain the proper curing environment during initial cure will not be basis for claim against the Department.

All costs associated with providing, locating, relocating, maintaining, and securing the adequate number of portable initial curing facilities for both the QC and QA strength test specimens will be included in the applicable unit prices for the concrete items. No additional payment will be permitted. The Contractor is responsible for damage, theft, subsequent replacement, and removal after completion of the work for each curing facility used on the project.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
SUBGRADE UNDERCUTTING, 21AA
1 of 1

NFE: JCK

2021-04-26

Description

This work shall be done in accordance with the requirements of Section 205 of the Michigan Department of Transportation 2012 Standard Specifications for Construction, except as herein described:

After pavement removal, the Engineer will investigate the condition of any existing aggregate base course and underlying subbase and subgrade. If in the opinion of the Engineer, an area of the roadway appears to be unsuitable for paving, then he may order the Contractor to proof roll and/or undercut the unstable areas. The Engineer must be present to observe the proof rolling and/or undercutting activity.

The Contractor shall also be responsible for the disposal of the material, backfilling and compacting of the new material to the proposed pavement subbase elevation.

Where the subbase or subgrade is determined by the Engineer to be unsuitable to support the roadway paving, the Contractor shall perform the necessary undercutting, as directed by the Engineer, and backfill such area with 21AA crushed concrete and compact to 95% of its maximum unit weight. If free water is present in the undercut area, the Contractor shall install underdrain and backfill the areas as directed by the Engineer.

Equipment

Equipment used for compacting backfill material shall be approved by the Engineer.

Measurement and Basis of Payment

The completed work, as measured, for Subgrade Undercutting, 21AA shall be paid for at the contract unit price for the following contract pay item:

<u>Item</u>	<u>Unit</u>
Subgrade Undercutting, 21AA	Cubic Yard

Proof rolling shall not be paid for separately, but shall be included in the pay item Subgrade Undercutting, 21AA.

The disposal of material, placement and compaction of backfill shall not be paid for separately, but shall be included in the pay item Subgrade Undercutting, 21AA.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
CURB AND GUTTER, CONC, DET F4
1 of 1

NFE: JCK

2021-04-29

Description

This work shall be done in accordance with Sections 802 of the 2012 MDOT Standard Specifications for Construction, except as follows:

Epoxy coated lane ties, per MDOT standard, shall be installed where the new curb and gutter meets existing, these lane ties will not be paid for separately but considered incidental to the adjacent pay item.

The completed work to replace concrete curb and gutter shall be measured along the flow line of the gutter in linear feet and paid for at the Contract Unit Price per linear foot for Curb and Gutter, Conc, Det F-4.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
DRAINAGE STRUCTURE COVERS
1 of 1

NFE: JCK

2021-04-26

Description

This work shall be done in accordance with the requirements of Section 403 of the Michigan Department of Transportation 2012 Standard Specifications for Construction, except as herein described:

The materials shall meet the requirements specified in subsection 403.02 of the 2012 Michigan Department of Transportation Standard Specifications for Construction, except for:
Sanitary Sewer Structures: provide 1040A frame with pressure tight cover with City of Pontiac logo and "SANITARY" label
Storm Sewer Structures: provide 1040A frame and cover with City of Pontiac logo and "STORM" label
Gate Valve Structures: provide 1040 bolted frame and cover with City of Pontiac logo and "WATER" label.

Measurement and Basis of Payment

The completed work shall be paid for at the contract unit price for the following contract pay items:

<u>Item</u>	<u>Unit</u>
Dr Structure Cover, Adj, Case 1	Each
Dr Structure Cover, Pontiac, Sanitary	Each
Dr Structure Cover, Pontiac, Storm	Each
Dr Structure Cover, Pontiac, Water	Each

CITY OF PONTIAC
SPECIAL PROVISION
FOR
HAND PATCHING
1 of 1

NFE: JCK

2021-07-29

Description

This work shall be done in accordance with the requirements of Section 501 of the Michigan Department of Transportation 2012 Standard Specifications for Construction, except as herein described:

Materials

Hand Patching shall have a variable yield and thickness and comprised of HMA, 4E3, when being utilized in paving operations within the public right-of-way, and HMA, 5E3 when being used as the wedge course on W. Columbia Ave. The A.W.I. for the mixture shall be a minimum of 220, for top course mix. The performance grade asphalt binder range for the mixture shall be PG 64-22.

Measurement and Basis of Payment

The completed work shall be paid for at the contract unit price for the following contract pay items:

<u>Item</u>	<u>Unit</u>
Hand Patching	Ton

CITY OF PONTIAC
SPECIAL PROVISION
FOR
RESTORATION
1 of 1

NFE: JCK

2021-04-27

Description

This work shall be done in accordance with the Michigan Department of Transportation 2012 Standard Specifications for Construction, except as follows:

Equipment

Restoration shall consist of, but not be limited to, providing all labor, materials, and equipment necessary for the preparation of the foundation for seeding, fertilizing and mulching all areas to be restored and the placement of topsoil, seed, fertilizer, mulch and watering as required.

Construction Methods

The Contractor shall scarify and loosen the existing foundation to a depth of 3" to 4", rototill the soil to a granular condition, rake the entire area to a smooth condition, remove debris and rocks over 1" in diameter brought to the surface by rototilling and raking, and cultipack the entire area to provide for a smooth seed bed. Place screened topsoil (2" depth), seed, fertilizer, and mulch at designated rates. Thoroughly water entire area upon initial placement. A minimum of two additional waterings as directed by the Engineer shall be required.

In general, restoration will be required in all landscape areas disturbed by the Contractor's operations.

Rates of Application

In those areas where restoration is required, the following rates of application will apply.

Topsoil.....	Screened.....	2 inch depth
Seed.....	TUF Mixture.....	220 #/Ac
Fertilizer.....	Chemical Fertilizer Nutrient, Class A.....	228 #/Ac
Mulch.....	Mulch.....	2 Ton/Ac

Measurement and Basis of Payment

Restoration of all areas disturbed by construction activities will not be measured separately. Payment for the item of Restoration will be based on the contract lump sum price which shall be payment in full for topsoil placement, seeding, mulching, fertilizing and watering required to restore disturbed areas to a condition acceptable to the engineer.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
CLEARING
1 of 1

NFE: JCK

2021-04-29

Description

This work shall be done in accordance with Section 201 of the 2012 MDOT Standard Specifications for Construction, except as follows:

This work shall be to clear the public right-of-way of overgrown brush, shrubs, trees, branches, debris and garbage. Upon completion of this pay item, cleared area shall be stabilized and restored as directed by the Engineer.

Measurement and Basis of Payment

Upon completion and acceptance of this work the contractor will be paid for Clearing at the Contract Unit Price per lineal foot.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
DR STRUCTURE, TEMP LOWERING
1 of 1

NFE: JCK

2021-04-29

Description

This work shall be done in accordance with the requirements of Section 403.04.E of the Michigan Department of Transportation 2012 Standard Specifications for Construction, except as herein described:

Prior to the removal or adjustment of any drainage structure to be temporarily lowered the Contractor shall record the locations of drainage structures with GPS equipment, or with a minimum of two witness points. A log of the structures and the distances to witness points, or a GPS data file, shall be provided to the Engineer.

Measurement and Basis of Payment

The completed work for Dr Structure, Temp Lowering shall be paid for at the contract unit price.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
PAYMENT FOR MINOR TRAFFIC DEVICES AND TRAFFIC REGULATOR CONTROL

OPR:JJG

1 of 1

C&T:APPR:BJO:DBP:07-19-11

FHWA:APPR:07-19-11

Delete Table 812-1 in subsection 812.04.E, on page 625 of the Standard Specifications for Construction, in its entirety and replace with the following.

Table 812-1 Partial Payment Schedule for Minor Traf Devices and Traffic Regulator Control

Percent of Original Contract Amount Earned	Total Percent of Unit Price Paid
First Use	15
25	30
50	55
75	80
90	100

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
TYPE III BARRICADES

DES:DBP

1 of 1

APPR:MWB:CRB:08-07-15
FHWA:APPR:08-23-15

Delete the first sentence for the second paragraph in subsection 812.03.D.8 on page 606 of the Standard Specifications for Construction, and replace with the following:

Light Type III barricades with two, Type C or Type D warning lights, fastened to the uprights above the top rail, provided these warning lights each weigh 3.3 pounds or less.

Delete the following pay items from the list in subsection 812.04 on page 622 of the Standard Specifications for Construction.

Barricade, Type III, High Intensity, Furn.....	Each
Barricade, Type III, High Intensity, Oper.....	Each
Barricade, Type III, High Intensity, Double Sided, Furn	Each
Barricade, Type III, High Intensity, Double Sided, Oper.....	Each

Renumber the existing subsection 812.04.A.5 on page 624 of the Standard Specifications for Construction, as follows:

4. The manufacturer's invoiced cost for damaged equipment included in a lump sum pay item for maintaining traffic.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC
1 of 5

NFE: JCK

2021-04-27

General

Traffic shall be maintained by the Contractor throughout the project in accordance with Section 104.11 and 812 of the Michigan Department of Transportation 2012 Standard Specifications for Construction, the 2011 Michigan Manual of Uniform Traffic Control Devices (MMUTCD) (Revised September 2013), and any supplemental specifications in this proposal.

City of Pontiac maintenance crews and/or City contracted forces may perform maintenance work within or adjacent to the Construction Influence Area (CIA). This work will be coordinated with the Contractor through the Engineer to minimize interference. No additional payment will be made to the Contractor for the joint use of the traffic control items.

The Contractor shall coordinate this work with other Contractors performing work within the Construction Influence Area (CIA) or adjoining areas to avoid conflicts in the maintenance of traffic, construction signing, and to provide for the orderly progress of contract work. Where possible, this special provision will specify upcoming projects in the area.

The Contractor is to note Section 104.08 of the Michigan Department of Transportation 2012 Standard Specifications for Construction for the requirements of cooperation with other Contractors.

Notification: The Contractor shall notify the Engineer, local police department, local fire department, and other emergency response units at least **72 hours** before implementing any road closures, bridge closures, ramp closures, lane closures, detours, or major traffic shifts. Contractor shall notify MDOT of traffic control placement in MDOT right-of-way as required by permit.

Traffic Restrictions – General

No additional lane closures shall be allowed on the following weekends or special events: Memorial Day, Fourth of July, "Woodward Dream Cruise", "Motorbella", "Roadkill Nights", Labor Day, Thanksgiving, and Christmas.

The Engineer will determine the duration of each holiday period and/or special event for the purpose of prohibiting lane closures, detours, or other traffic disruptions.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC
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NFE: JCK

2021-04-27

Prior to opening any lanes, the Contractor shall remove, by sweeping, all accumulated debris that has collected within the closed lane. The cost of sweeping shall be included in the cost of other contract pay items.

Equipment and material stored on site must have prior approval of the Engineer and shall be stored beyond the clear zone of the traveled roadway. Any additional signs or devices required to protect the motoring public from stored equipment or material will be at the Contractor's expense.

The Contractor shall implement shoulder closures, lane closures, detours, etc., according to applicable MDOT Typical Traffic Control Typicals, the suggested sequence of events and the 2011 Michigan Manual of Uniform Traffic Control Devices (MMUTCD) (Revised September 2013). All changes in the traffic control plans, proposed by the Contractor, require prior approval from the Engineer to implementation.

Access for construction vehicles between the travel lanes and work areas will be restricted to specific locations. The number of access points and their locations will require the prior approval of the Engineer.

The Contractor shall maintain reasonable access, as defined by the Engineer, to all businesses, homes and intersecting streets at all times. Alternating business drives may be closed if a business has more than one drive that operates bi-directionally.

The Contractor shall maintain access to the emergency ambulance entrance of McLaren Oakland Hospital at all times during construction.

The Engineer has the authority to limit the duration of lane closures based on the Contractor's progress. The Contractor shall not be granted compensation or extension of time if the Engineer suspends lane closures due to the Contractor's inability to make significant progress during the time frame allotted for the lane closures.

The following typicals M0020a, M0040a, M0140a, M0310a, M0500a shall be used.

The following special details WZD-100-A and WZD-125-E shall be used.

Traffic Restrictions – Hours

Allowable work hours for this project are Monday through Saturday, 7:00 a.m. to 7:00 p.m., unless otherwise approved by the Engineer.

Available work hours may be restricted by local ordinances (i.e. work hours, noise restrictions). It is the Contractor's responsibility to be aware of these restrictions and account for them in the work schedule. The Contractor may request noise and/or work hour variances from the Local Governments. All costs occurred in requesting these variances shall be borne by the Contractor. Hourly restrictions are subject to change by the Engineer based on traffic volume.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC
3 of 5

NFE: JCK

2021-04-27

At non-signalized intersections, the intersecting street may be completely closed during working hours providing that adjacent interconnecting streets afford access to the closed street. If no alternative access to the street is available, a flagging operation must be used at the intersection.

At signalized intersections, the work shall be completed as indicated in the Stage Construction Plans. With the approval of the Engineer, the Contractor may close the intersecting roads to facilitate paving through the intersections, as indicated in the Stage Construction Plans. Traffic stoppages shall be limited to 10 minute intervals after which traffic will be allowed to proceed until the last vehicle in the queue has passed or after traffic has been allowed to free flow for a period of five minutes or longer.

Permits: The Contractor shall obtain all necessary permits from local governments which require them prior to placing construction signing on local roads. The costs associated with obtaining these permits shall be the responsibility of the Contractor and will not be paid for separately.

Traffic Control Devices

All traffic control devices and their use shall conform to the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), 2011 edition, revised September 2013, and as specified herein.

Quality Standards – All traffic control devices including: signs, barricades, vertical panels, drums, warning lights, arrow boards, and changeable message signs shall meet the requirements of American Traffic Safety Services Association (ATSSA).

Traffic control devices moved to facilitate the Contractor's operation shall be reset by the end of the work day. The Contractor shall routinely maintain the traffic control devices including but not limited to, proper alignment, weighting with ballast, cleaning and replacing damaged devices.

Signs – All temporary signs that will remain in place shall be installed on driven supports, defined in the MDOT Special Detail WZD-100-A, when applicable. The stub length of a driven support, if used, shall not extend more than two (2) inches above the surrounding grade. Driven sign supports shall be removed at the time the sign is removed. Where temporary signs cannot be driven, signs may be installed on portable supports.

All warning signs shall be fabricated utilizing fluorescent prismatic retro-reflective sheeting in accordance with Section 922 of MDOT 2012 Standard Specifications for Construction.

Advance warning signs (3 foot x 3 foot) shall be placed on all cross streets, freeways, entrance ramps, and exit ramps where construction activities may be encountered as directed by the Engineer.

Temporary signs indicating sidewalk closures shall be provided for each sidewalk ramp reconstruction.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC
4 of 5

NFE: JCK

2021-04-27

Temporary warning, regulatory, and guide signs not applicable to the current traffic operation or lane closures shall be removed, covered, or laid down with the legs removed as directed by the Engineer. Payment for any of these operations will be included in the cost for Temporary Signs.

Temporary signs damaged by construction activities shall be replaced at the Contractor's expense.

When lane closures are in place, the Contractor shall completely cover all conflicting warning, regulatory, and guide signs in accordance with the MDOT 2012 Standard Specifications for Construction.

Channeling Devices and Barricades – All channelizing devices shall be Plastic Drums with High Intensity Sheeting, Lighted from MDOT's Qualified Products List (QPL) of the Materials Sampling Guide.

The spacing of plastic drums shall be as follows:

25 feet on Tapers and Shifts

35 feet on Tangents

25 feet when required for tighter control is required by the Engineer.

Placement of Type III Barricades shall be as directed by the Engineer.

Lighted Arrows – Lighted Arrows, Type C, shall be used whenever closing a traffic lane or shoulder and as called for on the traffic typical plans.

Existing and Temporary Pavement Marking Removal – Any pavement marking removed as a part of this project shall be removed by means other than grinding. At no time shall the Contractor implement a method that would damage the surface of the roadway pavement.

Final Pavement Markings and Signing – All permanent signs and pavement markings shall be in place prior to reopening the road to traffic.

The Contractor shall remove, salvage and reinstall, on new supports all signs indicated, on the plans or proposal, that are to be salvaged.

The Contractor shall store salvaged signs as per the sign sheeting manufacturer's recommendations.

All markings, shapes and dimensions shall conform to MDOT Pavement Marking Typical, unless specified otherwise by Special Provision.

Traffic Control Item Quantities – The Contractor shall setup shoulder and lane closures, detours, and any other traffic control according to applicable MDOT Typical Traffic Control Drawings and the 2011 Michigan Manual of Uniform Traffic Control Devices (MMUTCD) (Revised September 2013). All proposed traffic control plans require approval from the Engineer prior to implementation.

CITY OF PONTIAC
SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC
5 of 5

NFE: JCK

2021-04-27

Measurement and Payment – The estimate of quantities for maintaining traffic on this project is based on the suggested sequence of operations contained herein and described in this Special Provision and payment for these devices shall be according to Section 812.04 of the MDOT 2012 Standard Specifications for Construction, unless otherwise specified.

Items shall be paid for at the contract unit price for the following contract pay item:

<u>Item</u>	<u>Unit</u>
Sign, Type B, Temp, Prismatic, Furn	Square Feet
Sign, Type B, Temp, Prismatic, Oper	Square Feet
Channelizing Device, 42 inch, Furn	Each
Channelizing Device, 42 inch, Oper	Each
Lighted Arrow, Type B, Furn	Each
Lighted Arrow, Type B, Oper	Each
Traffic Regulator Control	Lump Sum
Minor Traf Devices	Lump Sum

Test Boring Location Plan One

Write a description for your map.

Legend



Google Earth

© 2021 Google

400 ft

Test Boring Location Plan Two

Write a description for your map.

Legend



Test Boring Location Plan Three

Write a description for your map.

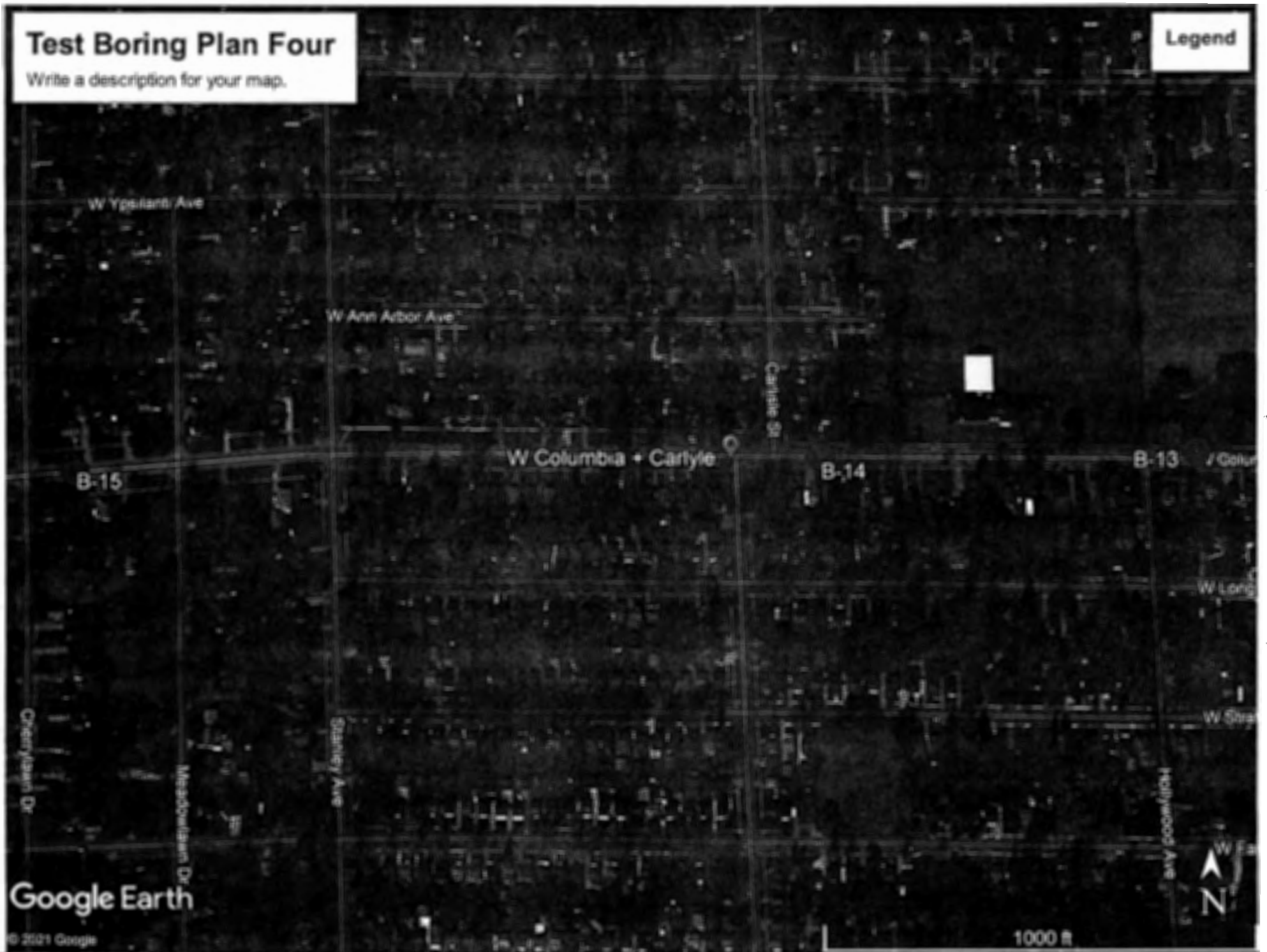
Legend



Test Boring Plan Four

Write a description for your map.

Legend





Testing Engineers & Consultants, Inc.

1343 Rochester Road - PO Box 249 - Troy, Michigan - 48099-0249
 (248) 588-6200 or (313) T-E-S-T-I-N-G
 Fax (248) 588-6232

Boring No.: 1 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/8/2021

Ground Surface Elevation:

Completed: 1/8/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS	6 8 8	.17 .46 .92	ASPHALT (2")	12.2	139	
			3	Crushed Asphalt-FILL (3 1/2")			
5.0	LS	5 7 6		Moist Brown Sand-FILL (5 1/2")	16.9	132	
			6	Stiff Moist Variegated CLAY With Some Silt			
7.5	LS	3 3 2	7	Firm Moist Variegated CLAY With Some Silt	21.3	128	
				Plastic Moist Variegated CLAY With Some Silt			
10.0	LS	1/18"	10	Very Loose Wet Brown SAND With Trace Of Gravel	13.3	126	
12.5				Bottom of Boring at 10'			
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: 7'0"

At Completion: 7'0"

Boring No. 1



Testing Engineers & Consultants, Inc.

1343 Rochester Road - PO Box 249 - Troy, Michigan - 48099-0249
 (248) 588-6200 or (313) T-E-S-T-I-N-G
 Fax (248) 588-6232

Boring No.: 2 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/8/2021

Ground Surface Elevation:

Completed: 1/8/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
			.54 .92	ASPHALT (6 1/2")			
2.5	LS	5 8 8	3	Moist Brown Gravelly Medium To Fine Sand With Some Silt & Clay-FILL (4 1/2")	15.4	134	
	LS	3 4 4	5.5	Stiff Moist Gray Clay With Some Silt-FILL	12.8	129	
5.0				Plastic Moist Dark Gray Clay With Some Silt & Sand Seams-FILL	11.5	139	
7.5	LS	4 6 7	8	Firm Moist Brown Oxidized CLAY With Some Silt & Trace Of Gravel			
	LS	4 7 11	10	Stiff Moist Brown Oxidized CLAY With Some Silt & Trace Of Gravel	13.0	137	
10.0				Bottom of Boring at 10'			
12.5							
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: None

At Completion: None

Boring No. 2



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Boring No.: 3 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/8/2021

Ground Surface Elevation:

Completed: 1/8/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS	5 6 7	.27 .67	ASPHALT (3 1/4")	12.1	139	
5.0	LS	5 6 6		Moist Brown Gravelly Medium To Fine Sand With Some Silt & Clay-FILL (4 3/4")			
7.5	LS	5 7 7	8	Firm Moist Brown CLAY With Some Silt & Sand Seams	14.9	135	
10.0	LS	3 3 3	10	Loose Wet Brown SAND With Trace Of Gravel	21.5	118	
12.5				Bottom of Boring at 10'			
15.0							
17.5							
20.0							
22.5							

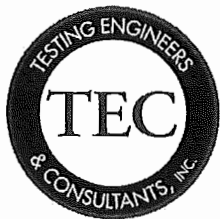
"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: 8'0"

At Completion: 8'2"

Boring No. 3



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Boring No.: 4

Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/8/2021

Ground Surface Elevation:

Completed: 1/8/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
			.42	ASPHALT (5")			
2.5	LS	7 8 10	3	Medium Compact Moist Brown Sand With Clay Layer-FILL	8.5	142	
5.0	LS	3 3 4	5.5	Plastic Moist Brown CLAY With Some Silt	14.9	126	
7.5	LS	2 3 2	8	Loose Moist Brown Clayey SAND	10.9	130	
10.0	LS	4 9 11	10	Stiff Moist Brown CLAY With Some Silt	11.8	139	
12.5				Bottom of Boring at 10'			
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: None

At Completion: None

Boring No. 4



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Boring No.: 5 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/8/2021

Ground Surface Elevation:

Completed: 1/8/2021

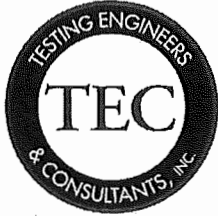
Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
			.46	ASPHALT (5 1/2")			
2.5	LS	4 5 6		Medium Compact Wet Brown Clayey Fine SAND With Trace Of Gravel	9.5	140	
5.0	LS	3 5 6			11.3	137	
7.5	LS	4 6 8			18.7	129	
10.0	LS	5 6 7	9.5 10	Medium Compact Wet Gray Clayey SAND Bottom of Boring at 10'	15.7	132	
12.5							
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample
 w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: 6'6"

At Completion: Caved In 8'7"

Boring No. 5



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Boring No.: 6 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/8/2021

Ground Surface Elevation:

Completed: 1/8/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
			.5	ASPHALT (6")			
2.5	LS	5 4 3		Loose Moist Brown Medium To Fine SAND With Some Gravel & Clay	5.4	130	
5.0	LS	2 3 2	4.5	Very Loose Wet Brown SAND With Clay Layers	11.1	130	
7.5	LS	1 1 2			11.7	129	
10.0	LS	2 2 2	10	Bottom of Boring at 10'	9.9	131	
12.5							
15.0							
17.5							
20.0							
22.5							

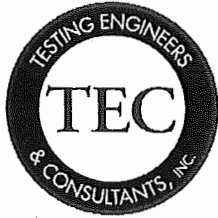
"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: 4'6"

At Completion: Caved In 5'1"

Boring No. 6



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Boring No.: 7 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/8/2021

Ground Surface Elevation:

Completed: 1/8/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
			.42				
			1.2	ASPHALT (5")			
2.5	LS	5 8 7		Moist Brown Gravelly Medium To Fine SAND With Some Silt & Clay-FILL (9 1/2")	11.0	140	
	LS	3 4 5		Firm Moist Gray CLAY With Some Silt & Sand Seams	8.5	142	
5.0			5.5				
	LS	2 3 3		Plastic Moist Gray CLAY With Some Silt	21.3	119	
7.5			8				
	LS	3 5 5		Loose Wet Gray SAND With Trace Of Gravel	13.9	127	
10.0			10				
				Bottom of Boring at 10'			
12.5							
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: 7'9"

At Completion: 7'4"

Boring No. 7



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Boring No.: 8 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/8/2021

Ground Surface Elevation:

Completed: 1/8/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
			.56	ASPHALT (6 3/4")			
2.5	LS	5 7 8	3	Medium Compact Wet Brown Medium To Fine SAND With Some Gravel & Clay	10.4	139	
	LS	3 3 2	5.5	Plastic Moist Brown CLAY With Some Silt	23.6	117	
5.0							
	LS	2 2 2	8	Soft Moist Gray CLAY With Some Silt	22.6	118	
7.5							
	LS	6 7 9	10	Medium Compact Moist Brown Clayey SAND With Trace Of Gravel	23.6	125	
10.0				Bottom of Boring at 10'			
12.5							
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: 6"

At Completion: 8'2"

Boring No. 8



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Boring No.: 9 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/12/2021

Ground Surface Elevation:

Completed: 1/12/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS	5 12 9	.54 3	ASPHALT (6 1/2") Medium Compact Moist Brown Silty Fine SAND With Trace Of Gravel	11.1	138	
5.0	LS	2 5 6	4	Loose Moist Brown SAND	9.9	142	
7.5	LS	6 10 14	6	Firm Moist Brown CLAY With Some Silt Medium Compact Moist Brown SAND With Some Gravel & Clay Layers	29.8	119	
10.0	LS	7 7 10	10	Bottom of Boring at 10'			
12.5							
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: None

At Completion: None

Boring No. 9



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Boring No.: 10 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/12/2021

Ground Surface Elevation:

Completed: 1/12/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS	7 9 10	.29 .83 3	ASPHALT (3 1/2") Moist Brown Gravelly Medium To Fine SAND With Some Silt & Clay (6") Medium Compact Moist Brown SAND With Trace Of Gravel	16.0 4.6	132 122	
5.0	LS	4 4 4	6	Loose Moist Brown SAND Medium Compact Moist Brown SAND With Clay Layers	18.4	129	
7.5	LS	3 6 10			4.2	139	1480
10.0	LS	5 10 16	10	Bottom of Boring at 10'			
12.5							
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: None

At Completion: None

Boring No. 10



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Boring No.: 11		Job No.: 61426		Project: 2021 Local Street Program			
Client: Nowak & Fraus Engineers				Location: Pontiac, Michigan			
Type of Rig: Truck				Drilled By: R. Favor			
Drilling Method: Solid Stem Augers				Started: 2/3/2021			
Ground Surface Elevation:				Completed: 2/3/2021			

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
			.5	ASPHALT (6")			
2.5	LS	16 20 24	2.5	Compact Moist Brown Fine SAND With Trace Of Gravel	7.6	135	
5.0	LS	5 7 9	5	Medium Compact Moist Brown Fine SAND With Trace Of Gravel	11.9	137	
7.5	LS	7 14 17	8	Compact Moist Brown Fine SAND With Trace Of Gravel	14.4	134	
10.0	LS	5 14 14	10	Medium Compact Moist Brown Fine SAND With Trace Of Gravel, Gray Sandy Clay Layers & Some Silt	9.8	126	1320
12.5				Bottom of Boring at 10'			
15.0							
17.5							
20.0							
22.5							

<p>"N" - Standard Penetration Resistance SS - 2" J.D. Split Spoon Sample LS - Sectional Liner Sample ST - Shelby Tube Sample AS - Auger Sample</p>	<p>w - H₂O, % of dry weight d - Bulk Density, pcf qu - Unconfined Compression, tsf DP - Direct Push RC - Rock Core</p>	<p>Water Encountered: None</p> <p>At Completion: None</p> <p>Boring No. 11</p>
--	---	---



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Boring No.: 12		Job No.: 61426		Project: 2021 Local Street Program			
Client: Nowak & Fraus Engineers				Location: Pontiac, Michigan			
Type of Rig: Truck				Drilled By: R. Favor			
Drilling Method: Solid Stem Augers				Started: 2/3/2021			
Ground Surface Elevation:				Completed: 2/3/2021			

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
			.1	ASPHALT (1 1/4")			
2.5	LS	16 9 9		Medium Compact Moist Brown Fine SAND With Trace Of Gravel & Clay Layers	13.8	123	820
5.0	LS	6 10 12			20.3	127	
7.5	LS	6 13 21	6	Compact Moist Brown Fine SAND With Trace Of Gravel	7.4	135	
10.0	LS	10 17 21	8.5 10	Extremely Stiff Moist Brown CLAY With Some Silt & Trace Of Gravel	9.9	142	
12.5				Bottom of Boring at 10'			
15.0							
17.5							
20.0							
22.5							

<p>"N" - Standard Penetration Resistance SS - 2" J.D. Split Spoon Sample LS - Sectional Liner Sample ST - Shelby Tube Sample AS - Auger Sample</p>	<p>w - H₂O, % of dry weight d - Bulk Density, pcf qu - Unconfined Compression, tsf DP - Direct Push RC - Rock Core</p>
--	---

Water Encountered: None

At Completion: None

Boring No. 12



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Boring No.: 13 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: R. Favor

Drilling Method: Solid Stem Augers

Started: 2/3/2021

Ground Surface Elevation:

Completed: 2/3/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS	7 7 5	.69	CONCRETE (8 1/4")	14.3	126	1900
5.0	LS	3 5 4	4.5	Medium Compact Moist Dark Brown Fine Sand With Trace Of Gravel & Clay Layers-FILL	19.4	129	
7.5	LS	5 7 9	6	Loose Moist Brown Clayey SAND With Trace Of Gravel	10.9	141	8320
10.0	LS	6 7 8	8.5 10	Extremely Stiff Moist Brown CLAY With Some Silt & Trace Of Gravel	14.6	134	3210
12.5				Firm Moist Brown CLAY With Some Silt & Trace Of Gravel			
15.0				Bottom of Boring at 10'			
17.5							
20.0							
22.5							

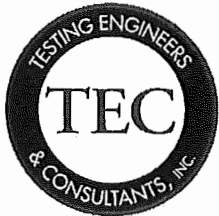
"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: None

At Completion: None

Boring No. 13



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 Fax (248) 588-6232

Boring No.: 14 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: R. Favor

Drilling Method: Solid Stem Augers

Started: 2/3/2021

Ground Surface Elevation:

Completed: 2/3/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS	10 8 6	1.5 1.8 2.3	ASPHALT (1 3/4") CONCRETE (7")	8.0	125	
5.0	LS	5 7 6	5.5	Medium Compact Moist Brown Gravelly Fine SAND With Some Silt	11.1	132	
7.5	LS	4 5 4		Loose Moist Brown Fine SAND With Trace Of Gravel	12.2	120	
10.0	LS	2 3 3	10	Bottom of Boring at 10'	13.0	128	
12.5							
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample
 w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: None

At Completion: None

Boring No. 14



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Boring No.: 15 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: R. Favor

Drilling Method: Solid Stem Augers

Started: 2/3/2021

Ground Surface Elevation:

Completed: 2/3/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS	6 9 7	.77 2.5	CONCRETE (9 1/4") Medium Compact Moist Brown Gravelly Fine SAND With Some Silt	9.9	125	
5.0	LS	3 4 4	6	Loose Moist Brown Fine SAND With Trace Of Gravel	12.1	120	
7.5	LS	2 2 1	9	Very Loose Moist Brown Fine SAND With Trace Of Gravel	14.1	126	
10.0	LS	1 1 1	10	Very Loose Very Moist Brown Very Fine SAND With Trace Of Gravel	17.5	130	
12.5				Bottom of Boring at 10'			
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: None

At Completion: None

Boring No. 15



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 Fax (248) 588-6232

Boring No.: 16 Job No.: 61426

Project: 2021 Local Street Program

Client: Nowak & Fraus Engineers

Location: Pontiac, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

Drilling Method: Solid Stem Augers

Started: 1/14/2021

Ground Surface Elevation:

Completed: 1/14/2021

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
			.33 .92	ASPHALT (4")			
2.5	LS	4 5 6		Moist Brown Gravelly Fine SAND With Some Silt & Clay-FILL (7")	14.7	135	
5.0	LS	7 6 6		Firm Moist Brown CLAY With Some Silt & Sand Seams	9.5	140	
7.5	LS	5 4 5	5.7	Plastic Moist Gray CLAY With Some Silt & Sand Seams	11.3	141	1810
10.0	LS	4 5 7	10	Bottom of Boring at 10'	10.1	142	
12.5							
15.0							
17.5							
20.0							
22.5							

"N" - Standard Penetration Resistance
 SS - 2" J.D. Split Spoon Sample
 LS - Sectional Liner Sample
 ST - Shelby Tube Sample
 AS - Auger Sample

w - H₂O, % of dry weight
 d - Bulk Density, pcf
 qu - Unconfined Compression, tsf
 DP - Direct Push
 RC - Rock Core

Water Encountered: None

At Completion: None

Boring No. 16

#4

RESOLUTION

SUPPORT EMERGENCY OPERATIONS PLAN GUIDE

**A GUIDE TO ASSIST MUNICIPALITIES INCORPORATED INTO THE COUNTY
EMERGENCY MANAGEMENT PROGRAM TO DEVELOP A SUPPORT EMERGENCY
OPERATIONS PLAN.**

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INTRODUCTION TO THE GUIDE

I. Purpose

This document is designed to serve as a guide for municipalities with a population of 10,000 residents or above that have elected to incorporate into the County Emergency Management Program and need to develop a Support Emergency Operations Plan (EOP) following the Administrative Rules for Section 19, 1976 PA 390, as amended. In accordance with these rules, the Support EOP shall be consistent with the County Emergency Operations Plan and will become part of the county plan.

The preparation of a Support EOP will increase emergency preparedness through the definition of the responsibilities of local departments and agencies. The plan assigns tasks that need to be accomplished when an incident occurs, and describes how local and county emergency management efforts are related. Maintaining a current Support EOP also establishes eligibility to receive Section 19 funding in accordance with Section 19 of 1976 PA 390, as amended. If federal assistance does not become available after the Governor has declared a State of Disaster or Emergency, affected counties and municipalities can be eligible to receive state assistance up to \$100,000 or 10% of their operating budget, whichever is less, to cover certain disaster related expenses. To be eligible for Section 19 funding, municipalities with a population of 10,000 and above that do not maintain an independent emergency management program must develop and submit a Support EOP to the county, and implement that plan in a timely manner at the beginning of the incident.

II. Scope

This document provides basic guidance and a template for the development of a Support EOP. The template (Attachment B) contains general information that can be adapted to any municipality. The annexes specify how the municipality will carry out common emergency support functions.

Also included with this document is a sample Emergency Management Resolution (Attachment B) that appoints the County Emergency Management Coordinator as the Emergency Management Coordinator of the municipality, and outlines how emergency management efforts on the local level are organized in relation to the County Emergency Management Program.

If either template is used, it should be reviewed and adjusted to the specific needs of each municipality. Municipalities that do not utilize the templates can develop individual plans or resolutions. Other available guiding materials for the development of EOPs include MSP/EMSHD Pub 201 (Local Planning Workbook) and FEMA Comprehensive Preparedness Guide 101.

III. Maintenance

Pub 204 has been developed by MSP/EMHSD and is maintained to ensure compliance with current national planning standards and relevant state laws pertaining to emergency planning. This document was last updated in August 2015 and supersedes the October 2011 version. It will be updated every four years.

DEVELOPING THE PLAN

All stakeholders that are involved in the community response to emergencies and disasters should be involved in the development of the Support EOP. The County Emergency Management Program should work with the municipality to ensure that the plan is compatible with the County Emergency Operations Plan. A standardized planning approach can be used for the development of the Support EOP.

I. Plan requirements

The Administrative Rules for Section 19 of 1976 PA 390, as amended, establish four requirements for the development of Support EOPs. In accordance with these requirements, Support EOPs shall:

1. **Describe the relationship between the County Emergency Management Program and the municipality:**

The plan should state that the municipality has chosen to incorporate into the county program, coordinates emergency management related matters with the county program, and has assigned the County Emergency Management Coordinator as the responsible Emergency Management Coordinator for the municipality.

2. **Identify the municipality's response procedures in relation to the county response procedures:**

The plan should establish annexes that describe common tasks that need to be accomplished when responding to an emergency or disaster, and assign responsibility for these tasks to municipal departments and other local agencies. The annexes should identify the responsible agencies on the local level that coordinate and share information with at the county level, and clarify joint responsibilities. Annexes in the Support EOP should also identify which annex or annexes they relate to in the County EOP.

3. **Be maintained in accordance with the standards and currentness of the county plan, be consistent with the county plan:**

The efforts described in local and county plans should be consistent and complement each other. To maintain the Support EOP in currentness with the County EOP, updates to the local plan are necessary whenever the county plan is updated. When the County EOP is updated, the Support EOP should be revised to ensure that it is still compatible with the county plan.

4. **Contain the signature of the Chief Executive Official (CEO) of the municipality, be forwarded to the county:**

After a new Support EOP has been developed or an existing plan has been updated, the signature of the CEO (Mayor, Township Supervisor) needs to be obtained. If a change of the CEO occurs, the plan needs to be reviewed and the signature of the new official obtained. After the plan is signed, a copy must be forwarded to the County Emergency Management Program, where it should be filed with the County EOP.

II. Plan format

The plan should consist of a Basic Plan section and functional annexes.

The Basic Plan defines the purpose of the plan, provides a community profile, identifies hazards and community vulnerabilities, and describes the relationship between municipality and the County Emergency Management Program.

The annexes identify specific emergency management and response tasks that need to be accomplished before, during and after an incident, and assign responsibility for carrying out these tasks to local agencies. Annexes should be organized by emergency response functions or tasked agencies and can be written in narrative or bulleted style. While municipalities are not required to mirror the format used in the county plan, this can be beneficial. The template included with this document uses a bulleted "Emergency Action Guidelines" format for its annexes.

III. Planning process

The following seven step planning process also utilized in County EOP development should be used to develop a Support EOP. For additional information on the process steps, please refer to MSP/EMSHD Pub 201 (Local Planning Workbook).

1. **Form a collaborative planning team:**

The planning team is the group of individuals responsible for designing, developing, and implementing the Support EOP. It should include representatives from all agencies that are committed to participate in emergency response activities within the municipality. Other stakeholders that should be engaged in

the planning process include representation from the municipality's executive office, the County Emergency Management Program, agencies that can provide insight into necessary accommodations for groups or individuals requiring Functional Needs Support Services (FNSS), schools, etc.

2. Identify hazards and assess risks:

The hazard analysis is the foundation upon which the municipality's emergency planning efforts should be built. It identifies conditions or situations that have the potential to cause harm to people or property in the community. The hazard analysis process involves four steps.

Step 1: A profile of the community is developed (demographic and economic make-up, geography and land-use, key facilities, etc.).

Step 2: The development of a community profile is followed by the hazard identification, which should start with a review of the County Hazard Analysis or Hazard Mitigation Plan. Local resources should then be used to identify further hazards that are unique to the community and might not have been included in county documents.

Step 3: The assessment of risks explores how likely it is that a risk will manifest itself in an incident, how often this might occur, where it might occur, and what the severity of impact would be. Hazards should be ranked based on the expected frequency of occurrence and severity of impact.

Step 4: The vulnerability determination examines how susceptible citizens, property, infrastructure and critical systems are to the identified hazards.

3. Determine Goals and Objectives:

Developing clear goals and objectives will help the municipality to identify problems, issues and opportunities. Establishing goals outlines the vision of what the community wants to achieve. Goals can be pursued in the long-term, but need to be achievable. Objectives are specific and measurable strategies to achieve these goals. Often, multiple objectives will need to be established to support one goal.

4. Plan Development:

This step describes the conceptualization of the plan, which includes the generation and comparison of alternate strategies to achieve the established goals and objectives. This involves two tasks: Developing and analyzing courses of actions to be conducted during an incident, and identifying the resources that determine the capability of the municipality to take these actions. Developing actions allows planners to depict how an operation unfolds by building and working through a portrait of a potential event, including key decision points and participant activities. This helps to identify actions that occur and resources that will be required throughout the progression of an event.

After identifying potential strategies to achieve established goals, an important sub-step in the conceptualization of the plan is the evaluation of actions to ensure that the actions that are selected to be included in the plan are feasible. It is critical to determine if required resources are available or easily obtainable during an incident, and if actions are compliant with laws and regulations, such as local ordinances and resolutions, legal authorities, law enforcement standards, and Governor's orders and directives.

5. Plan Preparation, Review and Approval:

When writing the plan, a simple format should be used. The finished plan must be compatible with the County EOP. This can be achieved by including references to the county plan, utilizing a similar format, or organizing annexes after similar emergency response functions. Feedback should be solicited from all stakeholders that are tasked within the plan, the County Emergency Management Program, and local elected officials. After the review process, necessary adjustments should be implemented. The municipality should adopt the plan by resolution, obtain the signature of the CEO, and forward a signed copy of the plan to the County Emergency Management Program.

6. Plan implementation and update:

The last step is to implement, maintain and update the plan. Plan updates are required after change of the CEO or when the County EOP has been updated. Plan reviews should also be considered after plan activations (during incidents or exercises), changes in operational resources, and changes in the community and/or hazard profile of the municipality. Lessons learned from actual events and exercises are essential to the evaluation of a plan's effectiveness, and help to determine if the plan is:

- Adequate: The concept of operations identifies and addresses critical tasks effectively.
- Feasible: Critical tasks can be accomplished timely and with available resources.
- Acceptable: The needs and demand driven by an event are met, actions meet the expectation of local officials and the public, and are consistent with law.
- Complete: The plan includes all necessary tasks, steps and required capabilities to reach an identified desired end state.
- Compliant: The plan complies with guidance and doctrine to the highest extent possible.

FEMA Comprehensive Preparedness Guide 101 established adequacy, feasibility, acceptability, completeness and compliance as criteria that allow planners and decision makers to determine the efficiency and effectiveness of their plans.

EMERGENCY MANAGEMENT RESOLUTION

In addition to the development of a Support EOP, it is recommended that municipalities adopt a local Emergency Management Resolution (if they have not already done so). The Emergency Management Resolution should appoint the County Emergency Management Coordinator as the Emergency Management Coordinator responsible for the municipality, describe the local emergency management organization and its relationship to the County Emergency Management Program, and provide a means for the local legislative body to exercise the authority vested in them by 1976 PA 390, as amended. Attachment A provides a sample Emergency Management Resolution.

The The City of Pontiac

SUPPORT EMERGENCY OPERATIONS PLAN

An all-hazards plan supporting the Oakland County Emergency Operations Plan, for use in the event of disaster or severe emergency of natural, human, wartime, technological or terrorism origin.

(5/13/2021)

The information contained in this template, developed by the Michigan State Police, Emergency Management and Oakland County Emergency Management Division (MSP/EMHSD), should be used to assist in developing a Support Emergency Operations Plan which must then be reviewed by the Local Planning Team (LPT) and modified based on the community's emergency response capabilities.

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Promulgation Document

Officials of Pontiac, Michigan, in conjunction with County and State Emergency Eanagement (EM) agencies, have developed this Support Emergency Operations Plan that will enhance the local emergency response capability.

This plan, when used properly and updated, will assist local government officials with accomplishing their primary responsibilities of protecting lives and property in their community. This plan and its provisions will become official when it has been signed and dated below by the Chief Executive Official (CEO) of the municipality.

Chief Executive Official
Mayor of Pontiac

Date

Approval and Implementation

The Support Emergency Operations Plan, referred to in this document as the Support EOP, describes how **The City of Pontiac** will handle emergency situations in cooperation with the Oakland County Emergency Management and Oakland County Emergency Management Program. The Support EOP assigns responsibilities to agencies for coordinating emergency response activities before, during, and after any type of emergency or disaster. The Support EOP does not contain specific instructions as to how each department will respond to an emergency; these can be found in the plan annexes or separate Standard Operating Procedures (SOP).

The goal of the Support EOP is to coordinate emergency response efforts to save lives, reduce injuries, and preserve property. The Support EOP addresses emergency issues before and after an emergency, but its primary goals are to assemble, mobilize and coordinate a team of responders that can respond to any emergency, and describe response procedures in relation to the county response procedures.

The Support EOP will use a graduated response strategy that is in proportion to the scope and severity of an emergency. **The City of Pontiac** will plan, prepare and activate resources for local emergencies that affect the local area (or a specific site) and/or widespread disasters that affect the entire state and/or nation.

The Support EOP was developed by a Local Planning Team (LPT). The LPT consists of key departments covering emergency functions such as law enforcement, fire, public works, and public health. The team works to establish and monitor programs, reduce the potential for hazard events in the community through planning, review, and training, and assisting Oakland County in developing and maintaining the County EOP.

The Support EOP must be signed by the current CEO each time it is updated, with the exception of the following activities:

1. Minor updates e.g. changing system names, grammar, spelling or layout changes
2. Updates to the annexes

These activities may be updated in the plan without the CEO signature by the following individuals:

1. Emergency Management Liaison
2. Department head responsible for an annex

Oakland County Emergency Management Presidential Directive (HSPD) 5 facilitates a standard management approach to major incidents, the National Incident Management System (NIMS). NIMS is administered as part of the National Response Framework (NRF) which integrates the federal government into a single, all discipline, and all-hazards plan. NIMS will provide a nationwide approach that enables federal, state, tribal and local government agencies to "work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size or complexity." This Support EOP has integrated NIMS concepts, including the Incident Command System (ICS), and language to help incident management operate in accordance to the NIMS using the guidance provided by the Department of Oakland County Emergency Management (DHS).

During an emergency, all response personnel will use the ICS to manage the incident and employ emergency resources at the site. The Emergency Operation Center (EOC) will coordinate additional resources when needed. This EOP will be used during community recovery after an emergency.

This plan supersedes all previous plans.
Record of Revisions

The following is a list of revisions made to the Support EOP. This chart tracks the date that changes were made, reason for the changes, updated pages, and who made the revision.

Date	Reason for Revision	Page Numbers	Revised By

Record of Distribution

The following is a list of the individuals and facilities that have been provided a copy of the Support EOP in order to conduct the assigned tasks addressed in this plan.

Title of Recipient	Name of Recipient	Agency	Date	Number of Copies
Chief Executive Official				
(Legislative body, e.g. City Council/Commission, Township Board of Commissioners)				
(County) Emergency Management Coordinator				
The City of Pontiac Emergency Management Liaison				
Communications and Warning Official				
Damage Assessment Official				
Fire Services Official	Matthew Covey	WRFD		
Mass Care, Emergency Assistance, Housing, and Human Services Official				
Public Health and Medical Services Official				
Public Information Official				
The City of Pontiac Public Information Center				
The City of Pontiac Emergency Operations Center				

Basic plan

Purpose

The City of Pontiac has elected to incorporate into the Oakland County Emergency Management Program. As partners in the five phases of emergency management, mitigation, preparedness, prevention, response and recovery, The City of Pontiac and the County Emergency Management Program share joint responsibilities. The The City of Pontiac Support EOP has been developed to identify these responsibilities. It is to be used in concurrence with the County EOP. In accordance with Section 19 of the Michigan Emergency Management Act (1976 PA 390, as amended), activation of this this plan at the beginning of a disaster or emergency also establishes eligibility to receive state assistance for disaster related expenses incurred during a State of Emergency or Disaster declared by the Governor, for which federal assistance is unavailable.

Scope

The The City of Pontiac Support EOP is an adaptable document that can be applied to all hazards. Due to the unique nature of emergencies, it may become necessary to deviate from the contents of the plan when responding to an incident. Agencies that have been assigned supporting roles in this plan have developed and will maintain SOPs that provide systematic instructions for accomplishing their assigned functions. The local government conducts additional activities, such as personnel training, participation in exercises, public information, land-use planning, etc., to support emergency preparedness, mitigation, and response efforts. To facilitate efficient emergency management operations, The City of Pontiac continues to implement the NIMS.

Authorities and References

A. Authority of local officials during an emergency:

1. 1976 PA 390, as amended
2. The City of Pontiac, local Emergency Management resolution
3. The City of Pontiac, adoption of the Support EOP
4. Executive Directive No. 2005-09, the state adoption of the NIMS
5. The Robert T. Stafford Disaster Relief and Emergency Assistance Act,
6. Emergency Planning and Community Right to Right to Know Act of 1986 (EPCRA) also known as the Superfund Amendments and Reauthorizations Act (SARA), Title III
7. Good Samaritan Law and Right to Know Act of 1986

B. References used to develop the Support EOP:

1. NIMS
2. NRF
3. Michigan Emergency Management Plan (MEMP), Michigan State Police, Emergency Management and Oakland County Emergency Management Division (MSP/EMSHD)
4. Pub 204, MSP/EMHSD

Plan Development and Maintenance

To ensure that this Support EOP addresses the needs of the community and is consistent with the Oakland County EOP, this document was developed in a cooperative, whole community effort between municipal government, local community, and the County Emergency Management Program. The Support EOP is updated after every change of the municipal CEO or when changes to the County EOP create inconsistencies.

After the plan is adopted by resolution of the **City Council** and approved by the CEO, it is forwarded to the County Emergency Management Program. The plan will be implemented, tested through exercises in concurrence with county officials, and maintained in accordance with the standards and currentness of the Oakland County EOP.

This plan has been provided to all municipal departments, local elected officials, the County Emergency Management Program and all agencies tasked within the document. It includes this Basic Plan, which provides an overview of the municipality's preparedness and response strategies, and functional annexes that describe the actions, roles and responsibilities of participating organizations.

Situation Overview

- B. **The City of Pontiac** has taken various preparedness and incident management steps to enhance capabilities in responding to incidents including:

1. The mitigation of potential hazards.
2. Identification of emergency response agencies and mechanisms that will protect life and property before, during and after an emergency.
3. Tasking agencies, organizations, and individuals with specific functions and responsibilities relative to emergency operations. Assigned tasks are explained in further detail under "Organization and Assignment of Responsibilities."
4. Integration with the Oakland County EOP, Oakland County Hazard Mitigation Plan, MEMP, etc.

- C. Community profile:

The City of Pontiac is located in the northern part of Oakland County. The community has a population of 60,000 residents. Approximately (percentage) of residents have been recognized as individuals with Access and Functional Needs. Many of the residents that require Functional Needs Support Services (FNSS) reside in congregate care centers, while others reside in non-group homes where support is provided as needed or on-call.

- D. Hazard and threat analysis:

According to the Oakland County Hazard Mitigation Plan, communities in the county are most vulnerable to: **(common hazards)**. Areas within **The City of Pontiac** that are especially vulnerable to these hazards are: **(locations)**. Additional hazards that have been identified as unique to **The City of Pontiac** include: **(unique local hazards)**.

(Number) sites that contain extremely hazardous materials are located in **The City of Pontiac**. Facility owners have reported the types of hazardous materials that are stored on-site, as required by the Emergency Planning and Community Right-To-Know Act (EPCRA). Pursuant to SARA Title III requirements, off-site emergency response plans have been developed by the Local Emergency Planning Committee (LEPC) to prepare fire departments for responding to the release of the specific hazardous materials on these sites.

- E. Relationship between municipality and County Emergency Management Program:

Emergency management and response are primarily local responsibilities. However, disasters and emergencies might exhaust the resources and capabilities of local governments. Therefore, **The City of Pontiac** has chosen to incorporate into the Oakland County Emergency Management Program. To coordinate emergency management related matters with the County Emergency Management

Program, the **The City of Pontiac** has appointed the **(title)** to serve as the Emergency Management Liaison. The Emergency Management Liaison facilitates communication and coordination between **The City of Pontiac** and county, and is the local point of contact for the County Emergency Management Coordinator (EMC).

Planning Assumptions

- A. The proper implementation of this plan will result in saved lives, incident stabilization, and property protection in **The City of Pontiac**.
- B. Some incidents occur with enough warning that necessary notification can be issued to ensure the appropriate level of preparation. Other incidents occur with no advanced warning.
- C. Depending upon the severity and magnitude of the situation, local resources may not be adequate to deal with an incident. It may be necessary to request assistance through volunteer organizations, the private sector, mutual aid agreements (MAAs)/memorandums of understanding (MOUs), and/or county, state and federal sources. When provided, these will supplement, not substitute for, relief provided by local jurisdictions.
- D. All emergency response agencies within **The City of Pontiac** that have been tasked in the plan are considered to be available to respond to emergency incidents. Agencies will work to save lives, protect property, relieve human suffering, sustain survivors, stabilize the incident, repair essential facilities, restore services and protect the environment.
- E. When a jurisdiction receives a request to assist another jurisdiction, reasonable actions will be taken to provide the assistance as requested.
- F. Emergency planning is a work-in-progress; the Support EOP is consistently reviewed and updated.
- G. During an emergency or disaster, parts of the plan may need to be improvised or modified, if necessary, based on the situation.

Concept of Operations

- A. Activation of the Support EOP and declaration of a local state of emergency:

When a threat is perceived, the Emergency Management Liaison activates this Support EOP and the local Emergency Operations Center (EOC) to facilitate activities that ensure the safety of people, property and environment. Pursuant to 1976 PA 390, as amended, the **(CEO/other official designated by charter)** may declare a local state of emergency for **The City of Pontiac** if circumstances indicate that the occurrence or threat of widespread or severe damage, injury, or loss of life or property exist. In the absence of the **(CEO/other official designated by charter)**, pursuant to local legislation, the **(title)** is authorized to declare a local state of emergency. Upon a local declaration, PA 390 authorizes the the **(Chief Executive Official/other official designated by charter)** to issue directives as to travel restrictions on local roads. To facilitate activities that ensure the safety of people, property and environment, a local declaration also activates this Support EOP and the municipal Emergency Operations Center (EOC). A local state of emergency shall not be continued or renewed for a period in excess of seven days except with the consent of the governing body of the municipality.

- B. The following procedures are conducted and coordinated with the county in response to an incident:
 - 1. The Emergency Management Liaison will perceive the threat, assess the hazard and ensure that municipal emergency response agencies, elected officials and County EMC are notified of the situation.

2. Municipal agencies assess the nature and scope of the emergency or disaster.
3. If the situation can be handled locally, the following guidelines are used:
 - a. The Emergency Management Liaison advises the CEO and coordinates all local emergency response actions.
 - b. The Emergency Management Liaison activates the EOC. The EOC is located at **47450 Woodward, Pontiac, Michigan 48342**. If this location is unavailable, the alternate EOC location is **47450 Woodward, Pontiac, Michigan 48342**.
 - c. The CEO declares a local state of emergency. The Emergency Management Liaison notifies the County EMC and forwards the declaration to the County Emergency Management Program.
 - d. Emergency Response Agencies are notified by the Emergency Management Liaison to report to the EOC through **(identify notification system(s), e.g., telephone, smart messaging, etc.)**.
 - e. The CEO directs departments/agencies to respond to the emergency in accordance with the guidelines outlined in this plan and its annexes, and issues directives as to protective actions and travel restrictions on local roads.
 - f. The Emergency Management Liaison keeps the County EMC informed of the situation and actions taken.
4. If the emergency is beyond local control, municipal resources become exhausted, or special resources are needed, county assistance is requested through the County EMC.
5. If county assistance is requested, the County EMC assesses the situation and makes recommendations on the type and level of assistance. The county may also take the following steps:
 - a. Activate County EOC and EOP
 - b. Respond with county resources
 - c. Activate MAA/MOUs to supplement county resources
 - d. Notify MSP/EMSHD District Coordinator
 - e. Make available incident information to MSP/EMSHD and statewide agencies via the Michigan Critical Incident Management System (MI CIMS) online platform, by submitting and maintaining applicable MI CIMS boards and logs.
6. If county resources and capabilities are exhausted, the county requests the Governor to declare a State of Emergency or State of Disaster in accordance with procedures set forth in 1976 PA 390, as amended. If the emergency occurs solely within the confines of the municipality, the county shall not request state assistance or the Declaration of a State of Disaster or Emergency unless requested to do so by the municipal CEO.

Organization and Assignment of Responsibilities

A. Emergency Management Organization:

1. The **The City of Pontiac** emergency management organization is comprised of **(number)** agencies and departments that are responsible for conducting activities in response to emergencies within the community. To facilitate an effective emergency response, these departments have been assigned to specific emergency functions. All agencies are responsible for implementing pre-disaster activities to prevent, mitigate and prepare for the various hazards that the community is vulnerable to. These activities include awareness training and public education, exercising, preparing Standard Operating Procedures (SOPs) and job aides, hygienic practices to prevent spreading of infectious diseases, stockpiling equipment, regulating land-use, etc.
2. The following table lists the established emergency support functions, assigned agencies, primary points of contact, and phone numbers.

Function	Agency	Primary Contact	Phone
Direction, Control and Coordination	City of Pontiac	Mayor Waterman	248-705-5316
Communications and Warning	City of Pontiac	Darin Carrington	248-758-3118
Damage Assessment	City of Pontiac	Mike Wilson	248-670-5771
Fire Services	WRFD	Chief Matt Covey	248-431-0103
Mass Care, Emergency Assistance, Housing, and Human Services	City of Pontiac	Linnette Phillips	248-330-4523
Public Health and Medical Services	Star EMS	Chris Haney	248-672-3726
Public Information	City of Pontiac	Ken Martin	248-758-3101
Public Safety	OCSD	Captain Ewing	248-881-3629
Public Works	City of Pontiac	Al Cooley III	248-673-4118

3. The following table lists the alternates designated to represent the emergency functions.

Agency	1 st Alternate	2 nd Alternate

4. **The City of Pontiac** maintains 10 fulltime departments. All departments contribute to the safety and welfare of the community. Each department employs qualified emergency personnel and maintains equipment that can be used in emergency response. A list of resources available for utilization during incidents can be requested through the Emergency Management Liaison. If resource needs exceed the capabilities of the community, the CEO may activate MAA/MOUs and pre-disaster contracts, or it may become necessary to request county assistance.

B. Responsibilities:

1. The following responsibilities have been assigned to each organization that has been assigned responsibility in this plan:
 - a. Assist in the development, review and maintenance of Support EOP and County EOP.
 - b. Report to the local EOC when activated for scheduled exercises or emergencies.
 - c. Build capabilities and develop/maintain SOPs for specific functions or actions identified in the plan. Continuously review and update procedures.
 - d. Maintain a list of resources available through the departments.
 - e. Establish MAA/MOUs and contracts with other jurisdictions and organizations to supplement municipal resources.
 - f. Activate MAA/MOUs and contracts with other organizations to supplement response activities when local resources become exhausted.
 - g. Train personnel in emergency management functions and NIMS/ICS concepts.
 - h. Protect vital records and other resources deemed essential for continuing government functions and each agency's emergency operations in accordance to procedures and policies.
 - i. Ensure compliance with this plan and the County EOP, and any pertinent procedures and documents that impact the provision of emergency services in the municipality.
2. The annexes attached to this plan further describe nine emergency support functions and their associated responsibilities in mitigation, preparedness, prevention, response and recovery. Annexes include the organizations that are responsible for carrying out the emergency functions, and assign tasks associated with each function.

ANNEXES

The annexes attached to the Basic Plan describe all-hazard functions and include the roles and responsibilities that each responsible agency should consider during an emergency for which the Support EOP has been activated. Each annex contains: the agencies responsible for carrying out a function, their assigned tasks, and the concept of operations.

The annexes attached to this plan include the following functions:

Annex A, Direction, Control, and Coordination

Annex B, Damage Assessment

Annex C, Communications and Warning

Annex D, Fire Services

Annex E, Mass Care, Emergency Assistance, Housing, and Human Services

Annex F, Public Health and Medical Services

Annex G, Public Information

Annex H, Public Safety

Annex I, Public Works (Includes Appendix A – Debris Management Guidelines)

ANNEX A

DIRECTION, CONTROL, AND COORDINATION

The Direction, Control, and Coordination function is responsible for the activation, organization and operation of the local EOC, the facilitation of incident management, response, and recovery efforts, and coordination with the County Emergency Management Program.

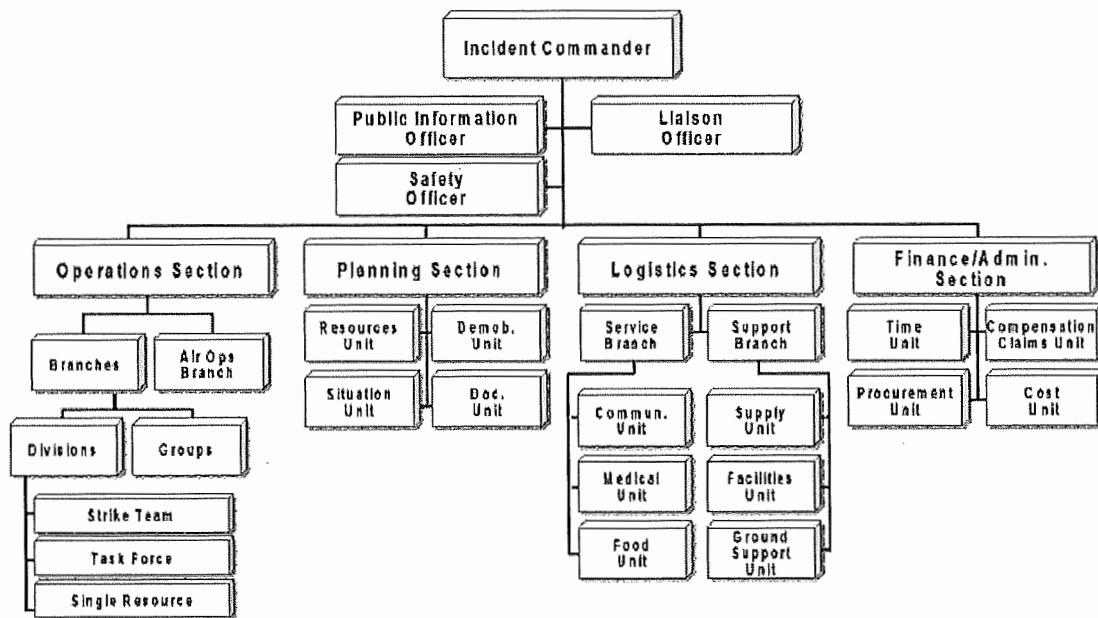
Direction, Control, and Coordination officials will maintain liaison and coordinate emergency management and response activities with the Direction, Control and Coordination function at the county level. This annex relates to the following annex(es) in the Oakland County EOP: ESF#5 - Emergency Management/Information & Planning, ESF#7 - Logistics and Resource Support.

Responsible Agency: **Executive Office**

Direction, Control, and Coordination Checklist

	Report to the EOC, when activated, for scheduled exercises and disasters, or delegate another representative from the agency to staff the EOC and implement the plan.
	EOC operations
	Activate the EOC and ensure that appropriate staff is notified.
	Establish a system of coordination, such as ICS (see Figure 1), within the EOC. (Field operations at the ICP are required to utilize ICS.)
	Maintain administrative materials for the EOC, i.e., pencils, paper, maps, and status boards.
	Ensure copies of the Support EOP and EOC SOPs are available to EOC staff.
	Coordinate with law enforcement officials for EOC security.
	Local authority
	Direct and coordinate response activities in accordance with this plan, including prioritizing allocation of scarce resources.
	Relieve jurisdiction employees of normal duties and temporarily reassign them to emergency duties, and employ temporary workers, as necessary.
	Declare a local state of emergency and notify the County
	Issue directives as to travel restrictions on municipal roads.
	Recommend appropriate protective measures to ensure the health and safety of people and property.
	Assistance to other agencies
	Advise the County Emergency Management Coordinator of the situation and maintain liaison with the County Emergency Management Program.
	Establish communications with and provide support to the Incident Command Post (ICP).
	Provide frequent staff briefings and ensure all groups function as planned.
	Inform legislative body of measures taken.
	Review and authorize the release of information to the public through the Public Information Officer (PIO).
	Logistics
	Ensure all resources are made available for response.
	Formulate specific assistance requests to adjacent jurisdictions and the county.
	Activate MAA/MOUs and contracts with other jurisdictions and organizations.
	Provide aid to other communities as provided for in MAA/MOUs.
	Ensure staff maintains logs of actions taken and financial records.

Figure 1. ICS Incident Management Structure



DIRECTION, CONTROL, AND COORDINATION

The following agency is responsible for this annex:

AGENCY	TITLE OF CONTACT
City of Pontiac	Mayor

The line of succession for the CEO for representing the Direction, Control, and Coordination function during a response to an emergency or disaster situation is:

TITLE	AGENCY
Mayor	City of Pontiac
Deputy Mayor	City of Pontiac
Finance Director	City of Pontiac

The line of succession for the Emergency Management Liaison for representing the Direction, Control, and Coordination function during a response to an emergency or disaster situation is:

TITLE	AGENCY
Mayor	City of Pontiac
Deputy Mayor	City of Pontiac
Finance Director	City of Pontiac

The **CEO and Emergency Management Liaison** are responsible for reporting or delegating an individual from their agency to report to the EOC during scheduled exercises or emergencies to coordinate and represent the Direction, Control, and Coordination function.

SIGNATURE OF CHIEF EXECUTIVE OFFICIAL	DATE

SIGNATURE OF EMERGENCY MANAGEMENT LIAISON	DATE

ANNEX B

COMMUNICATIONS AND WARNING

The Communications and Warning function is responsible for alerting and notification of key officials, receiving and disseminating warning and critical emergency information to the public, and the establishment, maintenance, and coordination of communication protocols and links between the EOC and other incident facilities.

The Communications and Warning Official will maintain liaison and coordinate emergency management and response activities with the Communications and Warning functions at the county level. This annex relates to the following annex(es) in the Oakland County EOP: ESF#2 – Communications and Supporting Technologies, ESF#15 – External Affairs and Public Information.

Responsible Agency: (e.g., 911 Dispatch Center, IT Department)

Communications and Warning Checklist

	Report to the EOC, when activated, for scheduled exercises and disasters, or delegate another representative from the agency to staff the EOC and implement the plan.
	Communication links
	Ensure lines of communication have been established between all agencies represented in the local EOC, their department offices and their staff at the incident site. Available channels for establishing communications includes (communications channels, e.g. telephone, cell phone, radios, pagers, etc.)
	Coordinate communications between municipal and county EOC. Available channels for establishing communications include (communications channels, e.g. telephone, cell phone, radios, pagers, etc.)
	Establish communications links with the adjacent communities and higher levels of government.
	Coordinate warning frequencies and procedures with adjacent communities and other government agencies.
	Disaster warning and information
	Activate public warning systems when instructed to do so by the CEO or Emergency Management Liaison. Warning methods include (warning methods, e.g., social media, door-to-door notification, reverse 911, etc.)
	Ensure that warning messages received through the Law Enforcement Information Network (LEIN), National Warning System (NAWAS), Emergency Alert System (EAS), local weather spotters, or other verifiable means are issued in a timely manner.
	Determine which facilities are endangered by the incident and contact those facilities. Ensure they are contacted when protective actions are rescinded.
	Notify special locations (e.g., schools, hospitals, nursing homes, major industries, institutions, and places of public assembly).
	Ensure that public warning systems provide notification to residents with Access and Functional Needs, such as the elderly, hearing impaired, non-English speakers, individuals with mobility limitations, etc.
	Official notification
	Ensure that all necessary officials have been notified and/or updated about the incident.
	Notify neighboring jurisdictions of impending hazard or hazardous situations when instructed to do so by the Chief Executive Official or Emergency Management Liaison.

COMMUNICATIONS AND WARNING

The following agency is responsible for this annex:

AGENCY	TITLE OF CONTACT
City of Pontiac	HR Manager

The line of succession for representing the Communications and Warning function during a response to an emergency or disaster situation is:

TITLE	AGENCY
HR Manager	City of Pontiac
Finance Director	City of Pontiac

IT/Cable and Communications Director is responsible for reporting or delegating another individual from their agency to report to the EOC during scheduled exercises or emergencies to coordinate and represent the Communications and Warning function.

SIGNATURE OF COMMUNICATIONS AND WARNING OFFICIAL	DATE

ANNEX C

DAMAGE ASSESSMENT

The Damage Assessment (DA) function is concerned with the process of documenting damage from emergencies in the community. Information gathered may be used to determine the extent of damage and impact on the community resulting from an incident to justify future federal funding, declarations of emergency, and disaster proclamations. An accurate damage assessment is a necessary part of the recovery phase and determines qualification for state and federal disaster aid.

The Damage Assessment Official will maintain liaison and coordinate emergency management and response activities with the DA function at the county level. This annex relates to the following annex(es) in the Oakland County EOP: ESF#5 - Emergency Management/Information Planning, ESF#14 – Recovery.

Responsible Agency: (e.g., Assessing Office, Building Department)

Damage Assessment Checklist

	Report to the EOC, when activated, for scheduled exercises and disasters, or delegate another from the agency to staff the EOC and implement the plan.
	Damage assessment
	Maintain current list of DA field team members.
	Maintain damage assessment field team supplies for contingency purposes, i.e., MSP/EMSHD Pub 901 Michigan Damage Assessment Handbook, blank forms, flashlights, cameras, pencils, paper, maps, etc.
	Activate DA field teams.
	Collect both public and private damage assessment information.
	Record initial information on damages from first responders.
	Augment DA field teams, as the situation dictates.
	Dissemination of DA information
	Provide an initial DA to EOC staff.
	Provide and verify DA information to the CEO and, if necessary, assist in preparation of a local state of emergency declaration.
	Prominently display DA information in the EOC, including maps, situation updates and assessment data.
	Provide the PIO with current DA information for release to the public.
	Provide DA data to the Emergency Management Liaison. The Emergency Management Liaison will forward information to the County Emergency Management Program for submission in MI CIMS; MICIMS damage assessment data should be entered within 72 hours of incident onset.
	Logistics
	Maintain a status list of requested resources.
	Compile and maintain a record of expenditures for personnel, equipment, supplies, etc.

DAMAGE ASSESSMENT

The following agency is responsible for this annex:

AGENCY	TITLE OF CONTACT
Building Safety	Building Official

The line of succession for representing the DA function during a response to an emergency or disaster situation is:

TITLE	AGENCY
Building Official	Building Safety
Deputy Building Official	Building Safety
Building Inspector	Building Safety

Buildings and Safety Director and/or their designee is responsible for reporting or delegating another individual from their agency to report to the EOC during scheduled exercises or emergencies to coordinate and represent the DA function.

SIGNATURE OF DAMAGE ASSESSMENT OFFICIAL	DATE

ANNEX D

FIRE SERVICES

The Fire Services function is concerned with detecting and suppressing wild land, rural, and urban fires and any of these that result from, or occur coincidentally with, an incident response.

The Fire Services Official will maintain liaison and coordinate emergency management and response activities with the Fire Services function at the county level. This annex relates to the following annex(es) in the Oakland County EOP: ESF#4 – Firefighting, ESF#9 – Search & Rescue, ESF#10 – Hazardous Materials.

Responsible Agency: (e.g., Fire Department)

Fire Services Checklist

	Report to the EOC, when activated, for scheduled exercises and disasters, or delegate another representative from the agency to staff the EOC and implement the plan.
	Response activities
	Coordinate fire response and search and rescue activities with appropriate personnel at the County Emergency Management Program, including assistance to regional special teams such as Regional Response Teams, Michigan Task Force One (MI-TF1) Urban Search and Rescue, MABAS 3201, MABAS 3202, bomb squads, etc.
	Respond to hazardous materials spills.
	Coordinate with the County EMC and the State of Michigan in the decontamination of affected citizens and emergency workers after exposure to CBRNE hazards.
	Assist in searching for bombs and explosive devices in connection with terrorism or weapons of mass destruction (WMD) events.
	Assistance to other agencies
	Advise EOC staff about fire and rescue activities.
	Provide communications and other logistical supplies, as needed.
	Assist with evacuations.
	Assist in damage assessment operations.
	Assist in warning the population. Loud speakers on fire vehicles or door-to-door warning may be utilized.
	Assist in salvage operations and debris clearance.

FIRE SERVICES

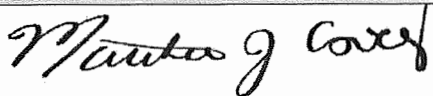
The following agency is responsible for this annex:

AGENCY	TITLE OF CONTACT
Waterford Regional Fire	Fire Chief

The line of succession for representing the Fire Services function during a response to an emergency or disaster situation is:

TITLE	AGENCY
Deputy Fire Chief	Waterford Regional Fire
Fire Marshal	Waterford Regional Fire
Battalion Chief	Waterford Regional Fire

Fire Chief and/or their designee is responsible for reporting or delegating another individual from their agency to report to the EOC during scheduled exercises or emergencies to coordinate and represent the Fire Services Functions.

SIGNATURE OF FIRE SERVICES OFFICIAL	DATE
	6/9/2021

ANNEX E

MASS CARE, EMERGENCY ASSISTANCE, HOUSING, AND HUMAN SERVICES

This function is concerned with issues related to the provision of mass care, emergency assistance, housing, and human services to disaster survivors, including those that require Functional Needs Support Services, throughout the prevention, preparedness, mitigation, response, and recovery phases of disasters and emergencies.

The Mass Care, Emergency Assistance, Housing, and Human Services Official will maintain liaison and coordinate emergency management and response activities with the Mass Care functions at the county level. This annex relates to the following annex(es) in the Oakland County EOP: ESF#2 – Communications and Supporting Technologies, ESF#6 – Mass Care, Shelter and Human Services, ESF#17 – Animal Care.

Responsible Agency: (e.g., Recreation Department, Housing Office)

Mass Care, Emergency Assistance, Housing, and Human Services Checklist

	Report to the EOC, when activated, for scheduled exercises and disasters, or delegate another representative from the agency to staff the EOC and implement the plan.
	Disaster-related needs
	Coordinate activities of municipal departments that provide mass care and human services.
	Coordinate with the County Emergency Management Program, the American Red Cross (ARC) and other agencies to distribute food, water, and clothing, and meet other basic needs of disaster survivors and emergency responders.
	Coordinate to provide transportation for disaster survivors and emergency responders.
	Arrange for the provision of crisis counseling to disaster survivors and emergency responders.
	Coordinate procedures for the tracking of family members and reunification of families.
	Identify and account for personal property that may be lost during a disaster.
	Coordinate with the County EOC to establish procedures for the registration and management of volunteers and donations.
	Coordinate with agencies in the community that work with individuals with access and functional needs to ensure disaster related needs are met.
	Protective action
	Coordinate the provision of transportation for evacuation.
	Provide staff and resources to manage open shelters.
	Coordinate care for individuals at shelters and for those who have been sheltered-in-place.
	Determine whether shelters must be opened long or short-term.
	Provide guidance/policies for the care of household pets that are brought to shelters by evacuees (only service animals are allowed into ARC shelters).
	Pre-identified shelter locations include: <u>(shelter locations; information on pre-identified shelter locations should be available from the County Emergency Management Program or ARC)</u>

MASS CARE, EMERGENCY ASSISTANCE, HOUSING, AND HUMAN SERVICES

The following agency is responsible for this annex:

AGENCY	TITLE OF CONTACT
City of Pontiac	Director, Economic and Community Development

The line of succession for representing the Mass Care, Emergency Assistance, Housing, and Human Services function during a response to an emergency or disaster situation is:

TITLE	AGENCY
Dir. Economic & Community Development	City of Pontiac
Manager, Planning & Development	City of Pontiac
CSR, Economic Development	City of Pontiac

Office of the Mayor of Pontiac is responsible for reporting or delegating another individual from their agency to report to the EOC during scheduled exercises or emergencies to coordinate and represent the Mass Care, Emergency Assistance, Housing, and Human Services function.

SIGNATURE OF MASS CARE, EMERGENCY ASSISTANCE, HOUSING, AND HUMAN SERVICES OFFICIAL	DATE
Linnette Phillips	6/9/21

ANNEX F**PUBLIC HEALTH AND MEDICAL SERVICES**

The Public Health and Medical Services function is responsible for assessing public health and medical needs, health surveillance, and provision of medical care personnel, supplies and equipment.

The Public Health and Medical Services Official will maintain liaison and coordinate emergency management and response activities with the Public Health and Medical Services function at the county level. This annex relates to the following annex(es) in the Oakland County EOP: ESF#8 – Public Health and Medical, ESF#17 – Animal Care.

Responsible Agency: (e.g., Fire Department, EMS agency)

Public Health and Medical Services Checklist

	Report to the EOC, when activated, for scheduled exercises and disasters, or delegate another representative from the agency to staff the EOC and implement the plan.
	Patient care
	Coordinate with medical providers and shelter managers to staff medical personnel at shelters.
	Identify the transportation resources and personnel needs to transport disaster survivors to temporary care centers.
	Provide transportation of patients and assist hospitals with transfer of patients.
	Ensure identification and notification of disaster survivors and emergency responders in need of crisis counseling and/or debriefing.
	Coordinate the monitoring of disaster survivors and emergency responders for exposure to chemical, radiological, or biological contaminants, and assist in their decontamination.
	Public health
	If necessary, identify a site for a temporary morgue. NOTE: The medical examiner is responsible for identifying the deceased. Law enforcement and EMS may provide additional support in collecting and transporting.
	Assist with animal and pet control and support the county Animal Control Unit in the quarantine and disposal of diseased animals.

PUBLIC HEALTH AND MEDICAL SERVICES

The following agency is responsible for this annex:

AGENCY	TITLE OF CONTACT
Star EMS	President/CEO

The line of succession for representing the Public Health and Medical Services function during a response to an emergency or disaster situation is:

TITLE	AGENCY
Chris Haney Director of Operations	Star EMS
Brian Long, Director Safety and Risk Management	Star EMS
Douglas Miles, V.P Operations	Star EMS

Office of the Mayor of Pontiac and/or their designee is responsible for reporting or delegating another individual from their agency to report to the EOC during scheduled exercises or emergencies to coordinate and represent the Public Health and Medical Services function.

SIGNATURE OF HEALTH AND MEDICAL OFFICIAL	DATE
<i>Brian Long</i>	08-09-2021

ANNEX G

PUBLIC INFORMATION

The Public Information function ensures accurate, coordinated, timely, and accessible information is disseminated to governments, media, the general public, and the private sector throughout the prevention, preparedness, mitigation, response, and recovery phases of disasters and emergencies.

The Public Information Official will maintain liaison and coordinate emergency management and response activities with the Public Information function at the county level. This annex relates to the following annex(es) in the Oakland County EOP: ESF#15 – External Affairs and Public Information.

Responsible Agency: Mayor's Office

Public Information Checklist

	Report to the EOC, when activated, for scheduled exercises and disasters, or delegate another from the agency to staff the EOC and implement the plan.
	Pre-disaster public education
	Assist the Emergency Management Liaison in developing educational materials on the hazards facing the community and explaining what people can do to protect themselves to recover from incidents.
	Ensure that written materials/social media are developed for non-English speaking individuals or others who require FNSS.
	Disaster warning and information
	Coordinate with the County to develop and release updated EAS messages based on incoming information.
	Coordinate with the County to document which EAS messages have been delivered over radio and television.
	Ensure that accurate information is disseminated describing such items as the locations of shelters, missing persons information hotline, volunteer hotline, rumor control hotline, etc.
	Distribute prepared public educational materials.
	Media coordination
	Establish and maintain contact with the EOC and/or the ICP.
	Prepare press releases and ensure that all press releases and official information is reviewed by (positions that will review press releases, e.g. Mayor/Deputy Mayor) .
	Verify that information is accurate before releasing it to the media.
	Schedule media briefings.
	Establish a Public Information Center as the central point from which municipal news releases are issued at Mayor's Office
	Assist the county in establishing a Joint Information Center (JIC; the JIC can be used by agency representatives for releasing information to the news media).
	Coordinate public information activities with the County PIO and the JIC.
	Schedule interviews between the CEO and media agencies.
	Monitor all forms of media, both traditional and social, for rumors, and address rumors as soon as possible

PUBLIC INFORMATION

The following agency is responsible for this annex:

AGENCY	TITLE OF CONTACT
Office of Information Technology	Lead Engineer

The line of succession for representing the Public Information function during a response to an emergency or disaster situation is:

TITLE	AGENCY
Lead Engineer Frank Antoun	Information Technology Office
Senior Technician Kenneth Martin	Information Technology Office
Technician Kim Gamez	Information Technology Office

Director of Public Information is responsible for reporting or delegating another individual from their agency to report to the EOC during scheduled exercises or emergencies to coordinate and represent the Public Information function.

SIGNATURE OF PUBLIC INFORMATION OFFICIAL	DATE
Frank Antoun	09-01-2021

ANNEX H

PUBLIC SAFETY

The Public Safety function is concerned with ensuring the safety of all citizens, maintaining law and order, protecting public and private property and providing protection for essential industries, supplies and facilities.

The Public Safety Official will maintain liaison and coordinate emergency management and response activities with the Public Safety function at the county level. This annex relates to the following annex(es) in the Oakland County EOP: ESF#13 – Public Safety and Security/Law Enforcement, ESF#17 – Animal Care, ESF#18 – Military/Defense Support to Civil Authorities.

Responsible Agency: Oakland County Sheriff's Department

Public Safety Checklist

	Report to the EOC, when activated, for scheduled exercises and disasters, or delegate another from the agency to staff the EOC and implement the plan.
	Response activities
	Provide security and access control at critical facilities and incident sites.
	Implement any curfews ordered by the governor or CEO.
	Enforce evacuation orders and assist in evacuations.
	Ensure prisons and jails are notified of potential threat and determine whether proper safety and security precautions are being taken.
	Implement urban search and rescue capabilities, including animals.
	Investigate incident and provide intelligence information to county, state and federal officials.
	Transportation
	Secure unusable roads. (Use Fire Services and Public Works for support, if necessary).
	Identify routes that need barricades and signs. Request necessary assistance from Public Works.
	Ensure vehicles on evacuation routes are removed. If necessary, request that Public Works agencies move vehicles off the road. Maintain record of where vehicles are being taken.
	Coordinate with the Road Commission or Public Works in rerouting traffic and putting the appropriate signs in place.
	Assistance to other agencies
	Assist Warning function in warning the public, when necessary.
	Assist the medical examiner with mortuary services.
	Assist families isolated by the effects of the disaster.

PUBLIC SAFETY


The following agencies are responsible for this annex:

AGENCY	TITLE OF CONTACT
Oakland County Sheriff's Office	Pontiac Substation

The line of succession for representing the Public Safety function during a response to an emergency or disaster situation is:

TITLE	AGENCY
Captain Andre Ewing	Oakland County Sheriff's Office
Lieutenant Robert Ford	Oakland County Sheriff's Office
Lieutenant Steven Troy	Oakland County Sheriff's Office

Director of Public Safety and/or their designee is responsible for reporting or delegating another individual from their agency to report to the EOC during scheduled exercises or emergencies to coordinate and represent the Public Safety function.

SIGNATURE OF PUBLIC SAFETY OFFICIAL	DATE
	06/10/21

ANNEX I

PUBLIC WORKS

The Public Works function is responsible for conducting pre- and post-incident assessments, ensuring critical services are met through existing contracts, providing technical assistance and engineering expertise and construction management, providing emergency repair of damaged public infrastructure and critical facilities, and the clearing of debris from public roads.

The Public Works Official will maintain liaison and coordinate emergency management and response activities with the Public Works function at the county level. This annex relates to the following annex(es) in the Oakland County EOP: ESF#1 – Transportation/Transportation Infrastructure, ESF#3 – Public Works and Engineering and ESF#12 – Energy and Energy Infrastructure.

Responsible Agency: Department of Public Works

Public Works Checklist

	Report to the EOC, when activated, for scheduled exercises and disasters, or delegate another from the agency to staff the EOC and implement the plan
	Response activities
	Coordinate debris removal activities (see Appendix A for Debris Management Guidelines)
	Coordinate activities designed to control the flow of floodwater.
	Damage assessment
	Provide engineering expertise to inspect public structures and determine if they are safe to use.
	Provide DA information for roads, bridges, buildings, infrastructure, etc. to DA function.
	Transportation
	Provide barricades and signs for road closures and boundary identification (to include activating MAA/MOUs if additional barricades are needed).
	Provide technical expertise in road weight limits, road capacity, etc., to determine whether evacuation routes are adequate for traffic flow.
	Notify law enforcement of the location(s) of disabled vehicles.
	Contact appropriate Michigan Department of Transportation (MDOT) and county transportation officials to request travel restrictions on state and county roads, if necessary.
	Assistance to other agencies
	Assist in identifying access control areas.
	Assist with urban search and rescue activities, if necessary.
	Maintain contact with local utilities to determine the extent and cause of damage and outages. Report this information and restoration schedules to EOC staff.
	Coordinate with utility companies in the restoration of essential services.
	Logistics
	Provide vehicles and personnel to transport essential goods, such as food and medical supplies, when directed by the EOC staff.
	In conjunction with public health, help identify sources of potable water.
	Assist in identifying and obtaining the appropriate construction equipment to support disaster response and recovery operations.
	Provide emergency generators and lighting.

PUBLIC WORKS

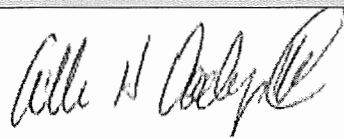
The following agencies are responsible for this annex:

AGENCY	TITLE OF CONTACT
DPW	Director of Public Works

The line of succession for representing the Public Works function during a response to an emergency or disaster situation is:

TITLE	AGENCY
Director of Public Works	DPW
Deputy Director of Public Works	DPW
City Engineer	DPW

The Department of Public Works is responsible for reporting or delegating another individual from their agency to report to the EOC during scheduled exercises or emergencies to coordinate and represent the Public Works function.

SIGNATURE OF PUBLIC WORKS OFFICIAL	DATE
	6/9/2021

APPENDIX A

Debris Management Guidelines

The Department of Public Works is responsible for debris management activities. The following guidelines represent a checklist of actions that agency officials must consider for providing effective debris management.

Guidelines:

Debris Clearance – Occurs in the first 24-72 hours and generally focuses on clearing roadways for emergency vehicles & rescue operations to have unobstructed routes to critical facilities

- a. Maintain detailed record keeping (critical for possible reimbursement)
 - i. Document all expenses and time involved in the debris removal process
- b. Coordinate with public utilities and waste haulers
- c. Consider how to handle access to private property
 - i. Right-of-entry, hold-harmless agreements
- d. Consider health & safety concerns (obtain detailed safety plans from contractors)
- e. Obtain any necessary permits and/or waivers

Debris Removal – The management and disposal of accumulated debris after life-safety has been addressed

- f. Consider the following steps in the debris management process:
 - i. Removal
 - ii. Transportation/hauling routes
 - iii. Temporary storage/staging site selection & management
 1. Consider water tables, affected populations, terrain
 - iv. Monitoring/load tickets/weights & measures
 - v. Sorting/Processing
 - vi. Recycling of applicable materials
 - vii. Reduction (Chipping, grinding, burning)
 - viii. Final disposition/landfill or other

When Trash Removal Providers are Individually Contracted by Residents:

- a. If the jurisdiction does not provide trash removal services to residents under normal circumstances, after a large emergency, if the private company is unable or unwilling to remove the debris, it will become the responsibility of the local jurisdiction to ensure health and safety to their residents.
- b. Contact local private companies to see what, if any, services they will provide their contracted residents with debris removal caused by an emergency.
- c. Track all costs associated with the debris removal.
- d. Contact DPW (if applicable) to determine what equipment is owned by the jurisdiction and if any can be used for this purpose.
- e. Contact neighboring communities who provide trash removal on a daily basis. If they were unaffected by the disaster, see if they can provide some assistance for equipment, temporary storage locations and/or transport to landfill.
- f. Identify a location (possibly parking lot) that can be used for temporary storage site of garbage.
- g. Request guidance from DEQ on permits and licenses.

- h. Contact landfill to set-up contract, rates and drop off schedule.
- i. Set hours and map out pick-up locations of affected areas. Send out public messages regarding the services available and process.
- j. Consider requiring residents to drop off debris to one identified site. The jurisdiction won't need the trucks, staff or logistics for curb side removal but will have to load semi-trucks and take to landfill.

#5

RESOLUTION



CITY OF PONTIAC

OFFICIAL MEMORANDUM

Executive Branch

TO: Honorable City Council President Williams and City Council Members

FROM: Darin Carrington, Finance Director

DATE: September 2, 2021

RE: **Proposed Hazard Pay for Department of Public Works
Employees using funds from the American Rescue Plan (ARP)**

Earlier this year the federal government passed the American Rescue Plan ("ARP") to help address some of the economic fallout from the COVID_19 pandemic. From the ARP, the City of Pontiac has been granted \$37.7 million in funding. Under the ARP, the funding can be used for a number of allowable purposes. One of these allowable purposes is for Hazard Pay for essential workers.

For the City of Pontiac, the employees of the Department of Public Works continued to work during the time from when the pandemic and emergency was first declared back in March 2020. To help compensate these essential employees, the Administration is proposing that a Hazard Pay bonus be provided to employees. The bonus would be a one-time bonus that would cover current employees. For any employee that started after the pandemic started, the amount of the bonus would be prorated based on the employee's start date..

WHEREAS, City of Pontiac has been awarded \$37.7 million in funding from the American Rescue Plan (ARP); AND

WHEREAS, one of the allowable expenses under the ARP guidelines is for hazard pay to essential workers; AND

WHEREAS, City of Pontiac Department of Public Works (DPW) employees have worked consistently throughout the COVID-19 pandemic beginning in March 2020 which has involved increased risk due to the pandemic; AND

WHEREAS, DPW employees are essential employees and it is the City's desire to provide them with hazard pay to provide additional compensation for their work during the pandemic; AND

NOW THEREFORE BE IT RESOLVED that the City of Pontiac DPW workers be provided with hazard pay from the City's ARP funds to the employees and for the amounts detailed in the attached document.

Name	Position	Worked During COVID / Hire Date	Covid Bonus	
Vacant	Director			
Al Cooley III	Deputy Director	Yes / 2017	\$ 5,000.00	
Abdul Siddiqui	City Engineer	Yes /2020	\$ 4,000.00	
Mendy Wesley	Accounting Assistant	Yes / 10-28 2009	\$ 1,000.00	
Chanitia Cody	CSR	Yes / 2020	\$ 200.00	1000-800
Vince Jimenez	ROW Inspector	Yes / 2015	\$ 3,000.00	
Matt Lande	ROW Inspector/Miss Dig	Yes / 8-24 2020	\$ 2,400.00	3000-600
Larry Robinson	Building Superintendant	Yes / 2009	\$ 3,000.00	
Victor Stevens	Building Laborer	Yes / 2009	\$ 3,000.00	
Eric Brimm	Supervisor	Yes / 1996	\$ 3,000.00	
Bob Shelton	Forman	Yes / 2017	\$ 3,000.00	
Talia Harden	Laborer II	Yes / 8-17-2020	\$ 2,400.00	3000-600
Bob Locher	Laborer II	Yes / 2018	\$ 3,000.00	
Vacant	Laborer II			
Vacant	Laborer II			
Ryan Holler	Laborer II	Yes / 2-1-2021	\$ 1,900.00	3000-1100
Vacant	Laborer II			
Vacant	Laborer I			
Gabe Jimenez	Laborer I	Yes / 8-17-2020	\$ 2,400.00	3000-600
Derrick Hardy	Litter Pickup	Yes / 8-12-2020	\$ 2,400.00	3000-600
Lee Johnson*	DPW Assistant (PT Sanitation 30 hrs a week)	Yes / 2015	\$ 3,000.00	
Omer Murati	Janitorial	Yes / 8-8-2020	\$ 500.00	
Fatime Murati	Janitorial	Yes / 8-8-2020	\$ 500.00	
			\$ 43,700.00	

#6

**Mayoral
Monthly
Report**



Mayor Deirdre Waterman

City of Pontiac, Michigan

Human Resources Department

To: Honorable Mayor, Council President, and City Council Members
From: Sabrina Kirtz, HR Manager
Date: September, 9, 2021
Re: August New Hire Report

Last Name	First Name	Hire Date	Job Title	Department
Kirtz	Sabrina	08/30/2021	Human Resource Manager	270-HUMAN RESOURCES
Jones	Ka'moren	08/11/2021	Youth Recreation	756-YOUTH REC
Thompson	Robin	08/11/2021	Youth Recreation	756-YOUTH REC