

CHARTER TOWNSHIP OF
YPSILANTI BOARD OF TRUSTEES

Supervisor

BRENDA L. STUMBO

Clerk

HEATHER JARRELL ROE

Treasurer

STAN ELDRIDGE

Trustees

RYAN HUNTER

JOHN P. NEWMAN II

GLORIA PETERSON

DEBBIE SWANSON

May 7, 2024

Regular Meeting – 6:00 p.m.

**Ypsilanti Township Civic Center
7200 S. Huron River Drive
Ypsilanti, MI 48197**



**YPSILANTI
TOWNSHIP**
— WHERE YOUR FUTURE GROWS —

Charter Township of Ypsilanti

7200 S. HURON RIVER DRIVE • YPSILANTI, MI 48197

SUPERVISOR BRENDA STUMBO • CLERK HEATHER JARRELL ROE • TREASURER STAN
ELDRIDGE TRUSTEES: RYAN HUNTER • JOHN P. NEWMAN II • GLORIA PETERSON •
DEBBIE SWANSON

REGULAR MEETING AGENDA

TUESDAY, MAY 7, 2024

6:00 P.M.

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE AND INVOCATION
3. CONSENT AGENDA
 - A. MINUTES OF THE APRIL 15, 2024 SPECIAL MEETING, APRIL 15, 2024 CLOSED SESSION AND APRIL 16, 2024 REGULAR MEETING
 - B. STATEMENTS AND CHECKS
 1. STATEMENTS AND CHECKS FOR MAY 7, 2024 IN THE AMOUNT OF \$809,588.35
4. ATTORNEY REPORT
 - A. GENERAL LEGAL UPDATE

NEW BUSINESS

1. REQUEST TO APPROVE THE AGREEMENT WITH THE PEACH TRUCK TO UTILIZE FORD HERITAGE PARK AND GREEN OAKS GOLF COURSE PARKING LOT SPACE FOR TEN WEEKS
2. REQUEST TO APPROVE CHANGE ORDER #1 WITH AR BROUWER FOR THE FORD LAKE PARK SHELTER IMPROVEMENTS IN THE AMOUNT OF \$32,863.00 BUDGETED IN LINE ITEM #101-902-981-070
3. REQUEST TO APPROVE AN AGREEMENT WITH OHM ADVISORS TO PROVIDE ENGINEERING SERVICES FOR THE REDESIGN AND REBID FOR THE CIVIC CENTER POND IN THE AMOUNT OF \$9,900.00 BUDGETED IN LINE ITEM #101-902-981-030
4. REQUEST TO APPROVE A LEAVE OF ABSENCE FOR CHRISTINA BENITEZ FOR A TIME LIMIT OF 60 DAYS
5. REQUEST TO APPROVE CIRCUIT COURT LITIGATION TO ABATE A PUBLIC NUISANCE AT 2574 STATE ST. BUDGETED IN LINE ITEM #101-729-801-023
6. REQUEST TO APPROVE CIRCUIT COURT LITIGATION TO ABATE A PUBLIC NUISANCE AT 748 JEROME AVE. BUDGETED IN LINE ITEM #101-729-801-023
7. REQUEST TO APPROVE CIRCUIT COURT LITIGATION TO ABATE A PUBLIC NUISANCE AT 944 N. RIVER ST. BUDGETED IN LINE ITEM #101-729-801-023

8. REQUEST TO APPROVE THE AGREEMENT WITH THE WASHTENAW COUNTY ROAD COMMISSION (WCRC) FOR THE INSTALLATION OF 4 (FOUR) SPEED HUMPS ON BRADLEY AVE. IN THE AMOUNT OF \$33,930.00 BUDGETED IN LINE ITEM #101-446-982-000
9. REQUEST TO APPROVE THE AGREEMENT WITH THE WASHTENAW COUNTY ROAD COMMISSION (WCRC) FOR THE INSTALLATION OF 9 (NINE) SPEED HUMPS ON GEORGE AVE. AND SMITH AVE. IN THE AMOUNT OF \$77,130.00 BUDGETED IN LINE ITEM #101-446-982-000
10. REQUEST TO APPOINT JULIANN TRUDELL TO THE CIVIL SERVICE COMMISSION WITH AN EXPIRATION DATE OF DECEMBER 31, 2024
11. RESOLUTION 2024-06, TEMPORARY ROAD CLOSURE REQUEST FOR THE OBERUN 5K
12. RESOLUTION 2024-07, TEMPORARY ROAD CLOSURE REQUEST FOR THE RUN, SCREAM, RUN 5K
13. BUDGET AMENDMENT #6

AUTHORIZATIONS AND BIDS

1. REQUEST AUTHORIZATION TO SEEK SEALED BIDS FOR PATHWAY AND PLAYGROUND SURFACE REPAIRS AT BURNS PARK AND PATHWAY RENOVATION AND PLAYGROUND REPLACEMENT AT WEST WILLOW PARK
2. REQUEST TO REJECT THE BIDS RECEIVED FOR THE CIVIC CENTER POND AND APPROVE OHM TO REBID WITH A REDUCTION IN SCOPE

CLOSED SESSION

1. REQUEST TO ENTER CLOSED SESSION IN ACCORDANCE WITH THE OPEN MEETINGS ACT, MCL 15.268 SUBSECTION (D) TO CONSIDER THE PURCHASE OR LEASE OF REAL PROPERTY UP TP THE TIME AN OPTION TO PURCHASE OR LEASE THAT REAL PROPERTY IS OBTAINED AND (H) TO CONSIDER MATERIAL EXEMPT FROM DISCUSSION OR DISCLOSURE BY STATE OR FEDERAL STATUTE

OTHER BUSINESS

PUBLIC COMMENTS

- THREE MINUTES PER PERSON
- ALL COMMENTS MUST BE ADDRESSED TO THE CHAIR
- PUBLIC COMMENTS ARE ALSO WELCOME AS THE BOARD ADDRESSES EACH AGENDA ITEM

BOARD MEMBER UPDATES

CONSENT AGENDA

**CHARTER TOWNSHIP OF YPSILANTI
MINUTES OF THE APRIL 15, 2024 SPECIAL BOARD MEETING**

Supervisor Brenda Stumbo called the meeting to order at approximately 5:04pm in the Ypsilanti Township Civic Center Board Room, 7200 S. Huron River Drive, Ypsilanti Township.

Members Present: Supervisor Brenda Stumbo
Trustees: Ryan Hunter (5:10PM), John Newman II (6:03pm),
Gloria Peterson, and Debbie Swanson

Members Absent: Clerk Heather Jarrell Roe and Treasurer Stan Eldridge

Legal Counsel: Wm. Douglas Winters

NEW BUSINESS

- 1. REQUEST ENTER INTO CLOSED SESSION TO DISCUSS TENTATIVE AGREEMENT WITH THE FIREFIGHTER LOCAL 1830 UNION PER MICHIGAN'S OPEN MEETINGS ACT 1976 PA 267, MCL 15.268 (1)(a)**

A motion was made by Trustee Swanson and supported by Trustee Peterson to enter into closed session to discuss tentative agreement with the Firefighters Local 1830 Union per Michigan's Open Meetings Act 1976 PA 267, MCL (1)(a)

The motion carried unanimously.

The meeting went into closed session at 5:05pm.

A motion was made by Trustee Peterson and supported by Trustee Hunter to adjourn the special meeting at 6:42pm.

**CHARTER TOWNSHIP OF YPSILANTI
MINUTES OF THE APRIL 16, 2024 REGULAR BOARD MEETING**

Supervisor Brenda Stumbo called the meeting to order at approximately 6:00pm in the Ypsilanti Township Civic Center Board Room, 7200 S. Huron River Drive, Ypsilanti Township. The Pledge of Allegiance was recited followed by a moment of silent prayer.

Members Present: Supervisor Brenda Stumbo and Treasurer Stan Eldridge
Trustees: Ryan Hunter, John Newman II (6:03pm), Gloria Peterson, and Debbie Swanson

Members Absent: Clerk Heather Jarrell Roe

Legal Counsel: Wm. Douglas Winters

INTRODUCTION OF NEW FIREFIGHTER

CONSENT AGENDA

A. MINUTES OF THE APRIL 2, 2024 REGULAR MEETING

B. STATEMENTS AND CHECKS

- 1. STATEMENTS AND CHECKS FOR APRIL 16, 2024 IN THE AMOUNT OF \$1,452,880.78**
- 2. CLARITY HEALTHCARE DEDUCTIBLE ACH EFT FOR MARCH IN THE AMOUNT OF \$68,621.02**
- 3. CLARITY HEALTHCARE DEDUCTIBLE ADMIN FEE FOR MARCH IN THE AMOUNT OF \$1,513.63**

C. TREASURER'S REPORT FOR MARCH 2024

A motion was made by supported by to approve the consent agenda with the corrections and edits to the minutes.

The motion carried unanimously.

**CHARTER TOWNSHIP OF YPSILANTI
MINUTES OF THE APRIL 16, 2024 REGULAR BOARD MEETING
PAGE 2**

ATTORNEY REPORT

A. GENERAL LEGAL UPDATE

Attorney Winters gave a legal updates on issues concerning the township.

NEW BUSINESS

- 1. REQUEST TO APPROVE THE AMENDED 2024 AGREEMENT WITH THE WASHTENAW COUNTY ROAD COMMISSION FOR THE ADDITION OF DRAINAGE IMPROVEMENT AND LIMESTONE LIFT OF MUNGER RD. BETWEEN MERRITT RD. AND BEMIS RD. IN THE AMOUNT OF \$191,000.00 AND APPROVE THE TOWNSHIPS CONTRIBUTION OF \$47,750.00 BUDGETED IN LINE ITEM #213-446-982-000**

A motion was made by Treasurer Eldridge and supported by Trustee Swanson to approve the amended 2024 agreement with the Washtenaw County Road Commission for the addition of drainage improvement and limestone lift of Munger Rd. between Merritt Rd. and Bemis Rd. in the amount of \$191,000.00 and approve the Townships' contribution of \$47,750.00 budgeted in line item #213-446-982-000 (see attached).

The motion carried unanimously.

- 2. REQUEST TO APPROVE A MEMORANDUM OF UNDERSTANDING WITH THE CITY OF ANN ARBOR REGARDING WATER QUALITY IN FORD AND BELLEVILLE LAKES**

A motion was made by Trustee Peterson and supported by Trustee Hunter to approve a memorandum of understanding with the City of Ann Arbor regarding water quality in Ford and Belleville Lakes (see attached).

The motion carried unanimously.

**CHARTER TOWNSHIP OF YPSILANTI
MINUTES OF THE APRIL 16, 2024 REGULAR BOARD MEETING
PAGE 3**

3. RESOLUTION 2024-05, REGARDING THE PETITION FOR SOUTH FORD LAKE DRAIN

Supervisor Stumbo read the resolution into the record.

Evan Pratt, Washtenaw County Water Resource Commissioner explained that they will need to extend a pipe approximately 70 feet to alleviate the water level. He said he appreciates the Townships' support and will try and get it completed as soon as possible without any cost to the Township.

Supervisor Stumbo stated the road commission is responsible for storm drains.

Mr. Pratt stated it was previously but now it will become a Washtenaw County drain.

Supervisor Stumbo stated that she appreciates all Evan Pratt and his department does for Ypsilanti Township residents.

A motion was made by Treasurer Eldridge and supported by Trustee Swanson to approve Resolution 2024-05, regarding the petition for South Ford Lake Drain (see attached).

The motion carried unanimously.

4. REQUEST TO WAIVE THE FINANCIAL POLICY AND ACCEPT THE LOW QUOTE FROM NORTHGATE CONSTRUCTION FOR THE GREEN OAKS GOLF COURSE BATHROOM REMODEL IN THE AMOUNT OF \$110,250.00 AND FOR THE RENOVATION OF THE GOLF PRO SHOP BATHROOM IN THE AMOUNT OF \$90,880.00 FOR A TOTAL AMOUNT OF \$201,130.00 BUDGETED IN LINE ITEM #101-902-981-100

A motion was made by Treasurer Eldridge and supported by Trustee Newman to waive the financial policy and accept the low quote from Northgate Construction for the Green Oaks Golf Course bathroom remodel in the amount of \$110,205.00

**CHARTER TOWNSHIP OF YPSILANTI
MINUTES OF THE APRIL 16, 2024 REGULAR BOARD MEETING
PAGE 4**

and for the renovation of the Golf Pro Shop bathroom in the amount of \$90,880.00 for a total amount of \$201,130.00 budgeted in line item #101-902-981-100.

John Hines, Municipal Services Director explained the bidding history for this project and how they came to choose Northgate Construction to do the remodeling of both the Green Oaks Golf Course and Golf Pro Shop bathrooms.

Trustee Newman asked Mr. Hines why they chose Northgate Construction instead of Peterson Construction. Mr. Hines stated that Northgate does most of the work themselves and does not contract it out.

Trustee Swanson asked Mr. Hines why we were remodeling the bathrooms at the Golf Course instead of bringing in the prefab ones that we are bringing into the parks. Mr. Hines stated the bathrooms at the Golf Course are structurally sound and the ones at the park were not. He said it's about \$80,000.00 cheaper than going with the prefab.

The motion carried unanimously.

AUTHORIZATIONS AND BIDS

1. REQUEST TO AWARD THE LOW BID TO BALLARD MARINE CONSTRUCTION FOR THE SLUICE GATE INSPECTION PROJECT AT THE HYDRO DAM IN THE AMOUNT OF \$322,500.00 BUDGETED IN LINE ITEM #101-902-981-110

A motion was made by Treasurer Eldridge and supported by Trustee Swanson to award the low bid to Ballard Marine Construction for the sluice gate inspection project at the Hydro Dam in the amount of \$322,500.00 budgeted in line item #101-902-981-110

Mike Saranan, Operations Manager explained this project.

Supervisor Stumbo stated the Hydro Dam was built by Henry Ford and is a historical structure and residents should take a tour.

CHARTER TOWNSHIP OF YPSILANTI
MINUTES OF THE APRIL 16, 2024 REGULAR BOARD MEETING
PAGE 5

The motion carried unanimously.

OTHER BUSINESS

Supervisor Stumbo stated last evening they had a special meeting in regard to the contract with Local 1830 which is our Firefighters union, and it was asked to be moved to the Regular Board meeting.

Karen Wallin, Human Resources Manager explained the proposed contract. She said that they decided that it is time for the Tier 2 Employees to have equal standing with the Tier 1 Employees. She said they worked hard to accomplish this.

Supervisor Stumbo stated it was the first time she was part of the Firefighters negotiations, and she said she learned a lot about operations of the Fire Department. Supervisor Stumbo stated that Karen Wallin did a fabulous job with all the research which made it a better negotiation. She said we started by ways to attract new firefighters and moved into how to retain them.

Attorney Winters stated the highlights of the new Firefighters contract. He said that we need to be more competitive to hire and retain Firefighters. He said they are also concerned for our Firefighters' safety. Attorney Winters stated their goal is to always have at every substation a Class I Firefighter. He said those Firefighters who will be classified as a Class 1 will have more of a leadership position and would have 5-year experience working as a Firefighter with Ypsilanti Township. He said they will activate the physical fitness program that was suspended in 2012. He said they upgraded the pension for the firefighters.

Zach Roland, Union President said they are also requiring the firefighter to get Fire Officer I & II status which is the training they would need to become a Lieutenant or Captain. Mr. Roland said they are excited about the additional training, and it will set them up for the future.

Trustee Peterson stated this contract is a good one and is happy the firefighters' union is bringing it to the Board this evening for a vote.

**CHARTER TOWNSHIP OF YPSILANTI
MINUTES OF THE APRIL 16, 2024 REGULAR BOARD MEETING
PAGE 6**

Supervisor Stumbo shared the additional education and training that will be available for the Firefighters.

Trustee Swanson thanked the Firefighters Team and everyone who negotiated to bring this contract forward for the board to vote on it tonight. She said this takes a lot of cooperation to come to an agreement for both sides.

A motion was made by Trustee Peterson and supported by Treasurer Eldridge to approve the Firefighter Local 1830 Agreement.

The motion carried unanimously.

PUBLIC COMMENTS

There were no comments.

A motion to adjourn was made by Treasurer Eldridge and supported by Trustee Swanson.

Motion carried unanimously.

The meeting was adjourned at approximately 7:15PM.

Respectfully Submitted,

**Brenda L. Stumbo, Supervisor
Charter Township of Ypsilanti**

**Heather Jarrell Roe, Clerk
Charter Township of Ypsilanti**

2024 YPSILANTI TOWNSHIP AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 2024, by and between the Township Board of Ypsilanti Township ("Ypsilanti Township"), Washtenaw County, and the Board of Washtenaw County Road Commissioners ("WCRC").

WHEREAS, Ypsilanti Township desires that certain improvements be made upon the local roads in the Township of Ypsilanti, and

WHEREAS, proper authority is provided to the parties of the agreement under the provisions in Act 51 of Public Acts of 1951 as amended,

IT IS NOW THEREFORE AGREED, the WCRC will accomplish the improvements as specified herein, all in accordance with the standards of the Board of Washtenaw County Road Commissioners,

IT IS FURTHER AGREED, Ypsilanti Township shall pay WCRC for the actual project costs incurred for the project; and

IT IS FURTHER AGREED, the WCRC will submit an invoice to the Township on July 1, 2024, for 50% of the estimated project costs. Following project completion and final accounting of the project costs, WCRC will submit the final invoice for the actual remaining unpaid costs. The final invoice shall provide supporting detail and information, which reasonably identifies the actual project costs incurred by WCRC. The Township described herein agrees to remit payment within 30 days from receipt of WCRC invoices.

Additional Street Sweeping Services

Work to include one (1) additional street sweepings on curbed local roads in Ypsilanti Township. 2024 Local Road Sweeping in Ypsilanti Township (one round)= 174.63 curb miles@ \$98.00 per curb mile= \$17,113.74 per round.

Estimated total project cost: \$ 17,113.74

Munger Road, Merritt Road to Bemis Road

Work to include drainage improvements, forestry, shaping the existing surface, and the application of 6" of 23A Limestone (C.I.P.) (approximately 3,800 tons) with associated dust control and project restoration. This is a shared project with Pittsfield Township and contingent upon a reciprocal agreement between Pittsfield Township and the Washtenaw County Road Commission.

Estimated total project cost: \$ 191,000.00

Estimated cost to Ypsilanti Township: \$ 95,500.00

2024 Ypsilanti Township Agreement

AGREEMENT SUMMARY

2024 LOCAL ROAD PROGRAM

Additional Street Sweeping Services	\$	17,113.74
Munger Road, Merritt Road to Bemis Road	\$	95,500.00
Subtotal	\$	112,613.74
Less WCRC 2024 Local Matching Funds	\$	56,306.87
ESTIMATED AMOUNT TO BE PAID BY YPSILANTI TOWNSHIP UNDER THIS AGREEMENT DURING 2024:	\$	56,306.87

YPSILANTI TOWNSHIP:

Brenda Stumbo, Supervisor

Heather Jarrell Roe, Clerk

Barbara Ryan Fuller, Chair

Matthew MacDonell, Managing Director

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE CITY OF ANN ARBOR AND THE CHARTER TOWNSHIP OF YPSILANTI
REGARDING WATER QUALITY IN FORD AND BELLEVILLE LAKES**

This Memorandum of Understanding ("MOU") is entered into by and between the City of Ann Arbor ("City") and the Charter Township of Ypsilanti, ("Township"). The City and Township may be referred to herein individually as a "Party" or collectively as the "Parties."

BACKGROUND

The Parties share a common interest in eliminating and preventing nuisance blue green algae blooms in Ford and Belleville Lakes, and they acknowledge that information about water quality and conditions in the lakes is important to advancing their common interest.

THEREFORE, the Parties enter into this Memorandum of Understanding to memorialize their understanding as to their efforts to cooperate and work together to monitor, collect, and share water quality information regarding Ford and Belleville Lakes, as follows:

1. COOPERATIVE EFFORTS – MONITORING BUOY AND INFORMATION SHARING.
 - a. The Township operates and maintains a monitoring buoy in Ford Lake that measures various aspects of water quality which it intends to continue to operate.
 - b. The Parties agree to work together to identify any new or replacement monitoring equipment to be placed on the monitoring buoy including which Party will be responsible for the cost and installation of same, which may be agreed upon separately.
 - c. The Township will continue to operate and maintain the monitoring buoy in Ford Lake, and it will be responsible for collecting all information from it.
 - d. The Township agrees to share with and provide to the City all information collected from the monitoring buoy, and the format, method, and frequency, etc of sharing information may be agreed upon separately.
 - e. The Parties will continue to communicate and cooperate regarding the operation and maintenance of the monitoring buoy including matters such as location, schedules, frequency of sampling or collection of data, maintenance, repairs, and data and information analysis, etc.
 - f. The Parties agree to share with and provide to the other any past and future studies, reports, analyses, and data each may have or obtain pertaining to the water quality and conditions in Ford and Belleville Lakes.
 - g. The Parties agree to cooperate and explore other efforts and options for monitoring the water quality and conditions in Ford and Belleville Lakes and for controlling and reducing blue green algae blooms.
 - h. Unless otherwise agreed upon in writing, the Parties agree that each may use the information regarding water quality and conditions in Ford and Belleville Lakes shared pursuant to this MOU for their respective purposes as they see fit,

including, but not limited to, the following: regulatory purposes, permitting, grant applications, compliance, public relations, academic studies, project applications, etc. The Parties agree to keep each other advised of their intent to use and their use of data and information relating to their cooperative actions.

2. DURATION. This MOU will take effect on the date it is signed by the last Party to sign it and shall remain in effect from year to year until terminated by mutual agreement of the Parties or by either Party, at any time for any reason, providing 90 days advance written notice of termination to the other.

3. RESPONSIBILITIES AND COSTS. Unless specifically agreed to otherwise, each Party will be responsible for carrying out its own obligations and bearing its own costs incurred in carrying out and supporting activities relating to this MOU.

4. NO WAIVER OF OTHER OBLIGATIONS AND RIGHTS. Nothing in this MOU shall invalidate or otherwise supersede any agreements or other legal obligations or rights of either Party.

5. RELATIONSHIP. This MOU does not create a partnership or a joint venture and does not create any financial commitments from one Party to the other except where agreed to by the Parties in writing. Neither Party has the authority to bind the other to any obligation. Each Party to this MOU will remain responsible for any and all claims arising out of its own acts and/or omissions relating to this MOU. In addition, it is not intended to increase or decrease either Party's liability for or immunity from tort claims. This MOU is also not intended to nor will it be interpreted as giving either Party a right of indemnification, either by contract or by law, for claims arising out of this MOU.

6. NOTICES. Notices, invoices, and other communications shall be deemed given when mailed by first-class mail postage prepaid, emailed, or personally delivered as follows:

To the City:

City of Ann Arbor
Keith Sanders, Wastewater Treatment Services Manager
49 S. Dixboro Rd
Ann Arbor, MI 48105
Email: ksanders@a2gov.org

With a copy to:

City of Ann Arbor
Atleen Kaur, City Attorney
301 E. Huron St., 3rd Floor
Ann Arbor, MI 48104
akaur@a2gov.org

To the Township:

Charter Township of Ypsilanti
Michael Saranen, Hydro Dam Operations Manager
7200 S. Huron River Dr.

Ypsilanti, MI 48197
msaranen@ytown.org

With a copy to:

Charter Township of Ypsilanti
Brenda Stumbo, Township Supervisor
7200 S. Huron River Dr.
Ypsilanti, MI 48197
bstumbo@ytown.org

7. AMENDMENTS. This MOU may be amended or modified only by a written instrument executed by authorized representatives of the Parties hereto.
8. AUTHORITY TO SIGN. Each person signing this MOU represents and warrants that he or she has authority to sign it on behalf of the respective Party.
9. BINDING EFFECT. This MOU shall bind and inure to the benefit of the Parties and their respective successors and assigns.
10. GOVERNING LAW. This MOU shall be governed by the laws of the State of Michigan.
11. SEVERABILITY. If it is determined by a court of competent jurisdiction that any provision of this MOU is contrary to law or invalid, the remaining provisions of this MOU shall continue in full force and effect.
12. ELECTRONIC SIGNATURES. The Parties agree that this MOU will be considered signed when the electronic signature of a Party is delivered by electronic transmission. Signatures transmitted electronically shall have the same effect as original signatures.

CITY OF ANN ARBOR

CHARTER TOWNSHIP OF YPSILANTI

Milton Dohoney, Jr, City Administrator

By: 
Brenda Stumbo, Township Supervisor

Dated: _____

Dated: April 18, 2024

Approved as to substance:

Brian Steglitz,
Public Services Area Administrator

By: 
Heather Jarrell Roe, Township Clerk

Approved as to form:

Dated: April 17, 2024

Atleen Kaur, City Attorney

CHARTER TOWNSHIP OF YPSILANTI
RESOLUTION 2024-05
REGARDING THE PETITION FOR SOUTH FORD LAKE DRAIN

WHEREAS, the Municipality of Ypsilanti Township hereby petitions the Washtenaw County Water Resources Commissioner to clean out, relocate, widen, deepen, straighten, tile, extend or relocate along a highway as needed the South Ford Lake Drain; and

WHEREAS, the of Municipality of Ypsilanti Township acknowledges that it will be liable for an assessment at large for a percentage of the total amount to be levied for the proposed work; and

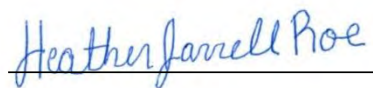
WHEREAS, it has been determined necessary to proceed as soon as possible to accomplish the aforesaid improvements.

NOW THEREFORE BE IT RESOLVED, that the of Municipality of Ypsilanti Township hereby petitions to the Washtenaw County Water Resources Commissioner to clean out, relocate, widen, deepen, straighten, tile, extend or relocate along a highway as needed the South Ford Lake Drain.

BE IT FURTHER RESOLVED, that a certified copy of this resolution be attached to the petition.

BE IT FURTHER RESOLVED, that the Supervisor and Clerk be authorized to execute the petition on behalf of the Township Board.

I, Heather Jarrell Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2024-05 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 16, 2024.



Heather Jarrell Roe, Clerk

Charter Township of Ypsilanti

Supervisor
BRENDA L. STUMBO
Clerk
HEATHER JARRELL ROE
Treasurer
STAN ELDRIDGE
Trustees
RYAN HUNTER
JOHN P. NEWMAN II
GLORIA PETERSON
DEBBIE SWANSON



**YPSILANTI
TOWNSHIP**
— WHERE YOUR FUTURE GROWS —

**Accounting
Department**

7200 S. Huron River Drive
Ypsilanti, MI 48197
Phone: (734) 544-4000 Ext 5
Fax: (734) 484-5154

STATEMENTS AND CHECKS

MAY 7, 2024 BOARD MEETING

ACCOUNTS PAYABLE CHECKS -	\$	537,677.93
HAND CHECKS -	\$	271,910.42
CREDIT CARDS PURCHASES -	\$	0.00
GRAND TOTAL -	\$	809,588.35

Check Date	Check	Vendor Name	Description	Amount
Bank AP AP				
04/12/2024	196533	COMCAST	ACCT. #8529 10 234 0586337	71.84
04/12/2024	196534	COMCAST	ACCT. #8529 10 234 0124352	119.28
04/12/2024	196535	VERIZON WIRELESS	ACCT. #342201808-00001	525.59
04/12/2024	196536	WASTE MANAGEMENT	ACCT. #20-37335-53005	76.14
04/12/2024	196537	WASTE MANAGEMENT	ACCT. #14-44697-63004	177.00
04/15/2024	196538	ABBIE LANE BAYLIS	JUROR COMPENSATION	33.00
04/15/2024	196539	BERNADETTE SKODACK	JUROR COMPENSATION	33.00
04/15/2024	196540	BETTY JEAN MAYWEATHER	JUROR COMPENSATION	129.00
04/15/2024	196541	CHARLES MCPIKE	JUROR COMPENSATION	81.00
04/15/2024	196542	DANIEL SHEPHERD	JUROR COMPENSATION	33.00
04/15/2024	196543	DEBRA DILL	JUROR COMPENSATION	129.00
04/15/2024	196544	DOUGLAS BROWN	JUROR COMPENSATION	81.00
04/15/2024	196545	EMILY YAVARASKI	JUROR COMPENSATION	81.00
04/15/2024	196546	HARVEY SHAMLEY LIVERMAN	JUROR COMPENSATION	81.00
04/15/2024	196547	JAMES ROSEMAN	JUROR COMPENSATION	33.00
04/15/2024	196548	JARRETT DUPUIS	JUROR COMPENSATION	33.00
04/15/2024	196549	JEFFREY MURPHY	JUROR COMPENSATION	33.00
04/15/2024	196550	JUSTINE AUNE	JUROR COMPENSATION	81.00
04/15/2024	196551	LIANE RUIZ	JUROR COMPENSATION	33.00
04/15/2024	196552	LISA BARNES	JUROR COMPENSATION	81.00
04/15/2024	196553	MARCIA ANN BAILEY	JUROR COMPENSATION	33.00
04/15/2024	196554	PATRICK TAME	JUROR COMPENSATION	129.00
04/15/2024	196555	PHILLIP KENNEDY	JUROR COMPENSATION	33.00
04/15/2024	196556	RAYMOND HOOT JR	JUROR COMPENSATION	33.00
04/15/2024	196557	THANPHANH PHOMMAVONG	JUROR COMPENSATION	33.00
04/15/2024	196558	VICKI LYNN SCHNEIDER	JUROR COMPENSATION	81.00
04/15/2024	196559	WILLIAM FIGUEROA	JUROR COMPENSATION	81.00
04/16/2024	196560	HENRY GEBO	REFUND - CRYSTAL POND SAD CAMERAS	102.22
04/17/2024	196561	GRAINGER	KEYED PADLOCK - ELECTIONS	22.14
04/17/2024	196562	HOME DEPOT	STUDS - ELECTIONS	6.70
			CORNER BRACE FOR CREW LOCKERS	5.94
			P&G TOOLS AND SUPPLIES	147.02
				<u>159.66</u>
04/17/2024	196563	WEX BANK	REPLACEMENT - CHARGES ENDING FEB2024	1,468.50
04/18/2024	196564	COMCAST	ACCT. #8529 10 234 0884997	142.95
04/18/2024	196565	DTE ENERGY	GAS & ELECTRIC INVOICES	8,464.40
04/18/2024	196566	GUARDIAN ALARM	CUSTOMER #54144	500.46
04/18/2024	196567	YAMAHA MOTOR FINANCE CORPORATION	GOLF CART LEASE - MAY 2024	8,877.23
04/19/2024	196568	RICH DECISIONS PROFESSIONAL DETAIL	AUTO DETAILING OF TWP VEHICLES	690.00
04/23/2024	196569	POP A LOCK ANN ARBOR	KEYS FOR VEHICLES	709.00
04/29/2024	196570	ABDEL ABDULJABER	JUROR COMPENSATION	18.00
04/29/2024	196571	ADAM CRUSE	JUROR COMPENSATION	18.00
04/29/2024	196572	ALISHIA BELCHER	JUROR COMPENSATION	18.00
04/29/2024	196573	CHRISTINA WALLMAN	JUROR COMPENSATION	18.00
04/29/2024	196574	CLINTON GARRETT JR.	JUROR COMPENSATION	18.00
04/29/2024	196575	DANA BOYD	JUROR COMPENSATION	18.00
04/29/2024	196576	DORIAN HOWARD	JUROR COMPENSATION	18.00
04/29/2024	196577	ELLEN MARIE CHENIER	JUROR COMPENSATION	18.00
04/29/2024	196578	ERIKA JACKSON	JUROR COMPENSATION	18.00
04/29/2024	196579	JANICE ORTIZ	JUROR COMPENSATION	18.00
04/29/2024	196580	JASON BERRY	JUROR COMPENSATION	18.00
04/29/2024	196581	JONATHAN BURCHWELL	JUROR COMPENSATION	18.00
04/29/2024	196582	JOSHUA GARRISON	JUROR COMPENSATION	18.00
04/29/2024	196583	KAREN EGOLF	JUROR COMPENSATION	18.00
04/29/2024	196584	KELLY ANN HILL	JUROR COMPENSATION	18.00

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CHECK REGISTER FOR CHARTER TOWNSHIP OF YPSILANTI
 CHECK NUMBERS 196533 - 196605

Check Date	Check	Vendor Name	Description	Amount
04/29/2024	196585	LAURIE TOOLES	JUROR COMPENSATION	18.00
04/29/2024	196586	MATTHEW PANCONE	JUROR COMPENSATION	18.00
04/29/2024	196587	REGINA MEADOWS	JUROR COMPENSATION	18.00
04/29/2024	196588	ROBERT SCHROEDER	JUROR COMPENSATION	18.00
04/29/2024	196589	RONISA CLARK	JUROR COMPENSATION	18.00
04/29/2024	196590	SALLY ANN PAKALA	JUROR COMPENSATION	18.00
04/29/2024	196591	STACEY JOHNSTON	JUROR COMPENSATION	18.00
04/29/2024	196592	STEPHANIE HOYER	JUROR COMPENSATION	18.00
04/29/2024	196593	TODD LAPOINTE	JUROR COMPENSATION	18.00
04/29/2024	196594	VICTOR ARTILES	JUROR COMPENSATION	18.00
04/29/2024	196595	WILLIAM URQUHART	JUROR COMPENSATION	18.00
04/30/2024	196596	BLUE CROSS BLUE SHIELD OF MI	HEALTH INSURANCE - MAY 2024	188,191.19
04/30/2024	196597	BLUE CROSS BLUE SHIELD OF MI	HEALTH INSURANCE - MAY 2024	29,857.10
04/30/2024	196598	COMCAST	ACCT. #8529 10 234 0186229	198.50
04/30/2024	196599	COMCAST	ACCT. #8529 10 234 0279396	162.50
04/30/2024	196600	CONSTELLATION NEW ENERGY	ACCOUNT #BG-301569	8,307.23
04/30/2024	196601	DELTA DENTAL PLAN OF MICHIGAN	DENTAL INSURANCE - MAY 2024	13,243.48
04/30/2024	196602	GUARDIAN ALARM	CUSTOMER #100169	148.00
04/30/2024	196603	STANDARD INSURANCE COMPANY	DISABILITY INSURANCE - MAY 2024	1,622.07
			LIFE INSURANCE - MAY 2024	2,679.42
				<u>4,301.49</u>
04/30/2024	196604	STANDARD INSURANCE COMPANY	VSP - MAY 2024	3,038.52
04/30/2024	196605	FUN TIME SPORTS LLC	REPLACEMENT - WTR 2024 BASEBALL TRAINING	490.00
				<u><u>490.00</u></u>

AP TOTALS:
 Total of 73 Checks: 271,910.42
 Less 0 Void Checks: 0.00
 Total of 73 Disbursements: 271,910.42

Check Date	Check	Vendor Name	Description	Amount
Bank AP AP				
05/07/2024	196606	14-B DISTRICT COURT	SMALL CLAIMS COURT FILING FEE	210.00
05/07/2024	196607	A DESIGN LINE	TWP APPAREL	1,353.10
05/07/2024	196608	A.F. SMITH ELECTRIC	COMMUNITY CENTER PARKING LOT LIGHTS REPA	6,449.15
05/07/2024	196609	ADVANCED COMMUNICATIONS & DATA	INTERNET UTILITY SERVICE	680.55
05/07/2024	196610	ALL SEASONS LANDSCAPING CO.	CHAINSAW PARTS	25.26
05/07/2024	196611	ALLGRAPHICS CORPORATION	SHORT AND LONG SLEEVE SHIRT FOR PARK ATT CREWNECK SWEATSHIRTS IN ROYAL BLUE FOR P	308.00 587.00
				<u>895.00</u>
05/07/2024	196612	ALLIE BROTHERS, INC.	UNIFORM BADGE - CHIEF	166.50
05/07/2024	196613	AMAZON CAPITAL SERVICES	LIGHTS FOR STATIONS PANTS FOR FF JOHNSON MOUSE PADS - ACCOUNTING CHARGERS FOR TABLETS/PHONES FLOOR DEGREASER/COOLER BOTTLED WATER - SAFETY STORE REPLACEMENT BATTERY CHARGER PROCLAMATION WOOD FRAMES DOCK BUMPERS - FLP BRITA WATER PITCHER - SUPERVISOR WIRELESS MOUSE - RECREATION AVERY LABELS - ASSESSING HP 87X BLACK HIGH-YIELD TONER CARTRIDGES RESTOCK SAFETY STORE- GLOVES AND SUNSCRE TENNIS NET STRAPS - RECREATION SOCCER NETS - RECREATION BATTERY DISCONNECT FOR WELDER AND PULLEY MARKER BUOYS OFFICE SUPPLIES - RECREATION OFFICE SUPPLIES SAMSUNG 49" ODYSSEY OLED G9 GLUE STICKS - ACCOUNTING POST IT ARROW FLAGS - SUPERVISOR EQUIPMENT - ORDINANCE CREDIT MEMO CREDIT MEMO CREDIT MEMO	102.56 256.50 17.98 98.89 276.03 451.18 119.00 49.95 726.57 49.57 33.00 24.99 578.55 146.93 114.00 519.82 52.42 247.40 107.63 318.74 1,099.99 4.24 5.34 436.29 (66.24) (726.57) (49.57)
				<u>4,995.19</u>
05/07/2024	196614	ANN ARBOR CLEANING SUPPLY	CLEANING SUPPLIES - PARKS CLEANING SUPPLIES - COMMUNITY CENTER CLEANING SUPPLIES - FORD LAKE PARK CLEANING SUPPLIES - LEC CLEANING SUPPLIES - COMPOST CLEANING SUPPLIES - COMMUNITY CENTER TRASH BAGS - COMMUNITY ENGAGEMENT	122.20 37.35 76.77 262.62 218.25 32.65 141.75
				<u>891.59</u>
05/07/2024	196615	APPLIED INNOVATION	CONTRACT INVOICE	113.57
05/07/2024	196616	ARCHIVESOCIAL	ARCHIVE SOCIAL RENEWAL	7,188.00
05/07/2024	196617	ASSOCIATED FENCE	REAPIR MAINTENANCE GARAGE CANTILEVER GAT	925.00
05/07/2024	196618	AUTO VALUE YPSILANTI	TRUCK HITCHES AND ELECTRICAL PARTS	300.03

A/P Checks

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CHECK REGISTER FOR CHARTER TOWNSHIP OF YPSILANTI
 CHECK NUMBERS 196606 - 196724

Check Date	Check	Vendor Name	Description	Amount
				1,400.00
05/07/2024	196636	CITADEL EXCAVATING, INC	COURT ORDERED DEMO - 1039 PARKWOOD	9,500.00
05/07/2024	196637	CLEAR RATE COMMUNICATIONS, INC	ACCT. #4850408	266.22
05/07/2024	196638	COMCAST BUSINESS	ACCT. #939737137	3,632.55
05/07/2024	196639	COMERICA BANK	ANNUAL OSHA INSPECTIONS- LIFTS	258.75
05/07/2024	196640	COMMUNICATION SQUARE LLC	MONTHLY OFFICE 365	4,560.00
			MONTHLY OFFICE 365	4,560.00
				<u>9,120.00</u>
05/07/2024	196641	CRIBLEY DRILLING CO., INC.	CONTRACTUAL DE-WINTERIZING SERVICE TO BO	335.00
05/07/2024	196642	CRYSTAL FLASH, INC.	FUEL FOR HQ - REGULAR	550.70
			FORD LAKE PARK: REFILL GAS FUEL TANK - S	1,146.34
			FORD LAKE PARK: REFILL DIESEL FUEL TANK	786.01
			COMMUNITY CENTER: REFILL GAS FUEL TANK -	2,173.68
			GASOLINE 4/11/24	1,461.70
			DIESEL FUEL FOR EQUIPMENT 04/11/24	594.67
			GASOLINE 4/11/24	754.63
				<u>7,467.73</u>
05/07/2024	196643	DANCE WITH ELEGANCE	LATIN DANCE FITNESS INSTRUCTION	595.00
05/07/2024	196644	DECIMA LLC	COMMUNITY CENTER WATER DAMAGE REPAIR	37,824.75
			COMMUNITY CENTER RESTROOM AND SANITARY A	109,527.57
				<u>147,352.32</u>
05/07/2024	196645	DES MOINES STAMP MFG. CO.	STAMP	110.50
05/07/2024	196646	DONTONETTE PATTERSON	2024 UNIFORM ALLOWANCE	240.00
05/07/2024	196647	DU-RITE CARPET CARE INC	CARPET CLEANING AT HQ	990.00
05/07/2024	196648	ELLEN TALIFARRO	WEEKEND RECORDER INVOICE	535.08
05/07/2024	196649	EXOTIC AUTOMATION AND SUPPLY	HOSE ASSEMBLY	119.37
05/07/2024	196650	FIBER LINK	MISSDIG RESPONSE AND LOCATE SERVICES	8.75
05/07/2024	196651	FIRE SAFETY USA	SHIPPING CHARGE FOR RETURN ITEM	40.25
05/07/2024	196652	FONDRIEST ENVIRONMENTAL, INC	REPLACEMENT O RINGS FOR WQ SOLAR PANELS	24.97
05/07/2024	196653	GAMESTOP	REFUND - BUSINESS REGISTRATION FEE	200.00
05/07/2024	196654	GENE BUTMAN FORD	REPAIRS ON FM VEHICLE	652.12
			TIRES FOR FM WALLGREN	73.17
			TIRE REPAIR	35.95
				<u>761.24</u>
05/07/2024	196655	GLOBAL GREEN SERVICE GROUP, LLC	ASBETOS SAMPLING - CIVIC CENTER	150.00
05/07/2024	196656	GOOSE BUSTERS OF MICHIGAN, LLC	MAY BORDER COLLIE SERVICES	455.00
05/07/2024	196657	GOVERNMENTAL CONSULTANT SERVICES	PROFESSIONAL SERVICES RETAINER FEE - APR	3,503.85
05/07/2024	196658	GRAINGER	HARDWARE/CLEANING SUPPLIES	87.87
			BUYOS HARDWARE	44.53
			GAS CAN FOR NEW PILE DIVER	100.57
			RESTOCK SAFETY STORE	78.89
			FUEL FILTERS	101.02
				<u>412.88</u>
05/07/2024	196659	GRIFFIN PEST SOLUTIONS	PEST CONTROL FOR #1	31.00
			PEST CONTROL FOR #3	31.00
			PEST CONTROL FOR #4	31.00
			LEC MARCH PEST SOLUTIONS	68.00

Check Date	Check	Vendor Name	Description	Amount
				161.00
05/07/2024	196660	HANSON'S WINDOW & SIDING	REFUND - ADJUSTMENT OF FEES	240.00
05/07/2024	196661	HENDERSON GLASS SOLUTIONS LLC	GLASS TOP - SUPERVISOR	117.21
05/07/2024	196662	HERITAGE-CRYSTAL CLEAN, LLC	MACHINE SERVICE	360.84
05/07/2024	196663	HOME DEPOT	INSECT KILLER - COURT	21.91
			HARDWARE FOR MAINTENANCE AND THE GOLF CO	66.95
			ORTHO GROUND CLEAR SPRAY - CIVIC	82.18
			INSECT TRAPS & REFILLS - CIVIC	53.88
			CUSTODIAL SUPPLIES - COMMUNITY CENTER	19.74
			MAINTENANCE AND PARKS GARAGE SUPPLIES (I	120.95
			MAINTENANCE SUPPLIES FOR CIVIC CENTER (I	17.02
			MAINTENANCE TOOLS & SCREWS (INV#2020448)	121.32
			P&G GARAGE TOOLS FOR MOWING TRAILERS (IN	150.49
			MAINT. TOOLS FOR USE AT CIVIC (INV#53734	28.91
			SUPPLIES FOR FLP FENCE (INV#5372523)	295.20
			MAINT. TOOLS & PARK HARDWARE SUPPLIES (I	106.53
			MAINT SUP AND HARDWARE FOR FLP OFFICE (I	90.12
			HARDWARE FOR USE AT CIVIC - BOLTS & WASH	1.28
			P&G PAINT SUPPLIES, FLOWER BED SUPPLIES,	263.69
			MAINTENANCE AND HARDWARE SUPPLIES FOR LO	15.47
				<u>1,455.64</u>
05/07/2024	196664	HOWLETT LOCK & DOOR	LEC DOOR SERVICING	172.00
			SERVICE FOR KEYS TO CIVIC CENTER	417.70
				<u>589.70</u>
05/07/2024	196665	JAMIE KELSEY	REIMBURSEMENT FOR MILEAGE	34.17
05/07/2024	196666	JUMP-A-RAMA	SPRING GYMNASTICS INSTRUCTION	1,732.50
05/07/2024	196667	KESTLY DEVELOPMENT	CHECKPOINT 360 EVALUATION FOR HINES & KI	900.00
05/07/2024	196668	LANGUAGE LINE SERVICES	INTERPRETER SERVICES	534.60
05/07/2024	196669	LANSING SANITARY SUPPLY, INC	FOAM SOAP - LEC	465.82
			HAND SOAP - COMMUNITY CENTER	238.66
				<u>704.48</u>
05/07/2024	196670	LIFE AFTER INCARCERATION	LAI TR PILOT: COMMUNITY BEAUTIFICATION SE	9,000.00
			LAI TR PILOT: COMMUNITY BEAUTIFICATION SE	9,000.00
				<u>18,000.00</u>
05/07/2024	196671	LISA STANFIELD	MILEAGE REIMBURSEMENT	161.87
05/07/2024	196672	LOWE'S	MAINTENANCE SUPPLIES	82.83
			MAINTENANCE SUPPLIES	87.80
			MATERIAL FOR PROJECTS	33.66
			CREDIT MEMO	(87.80)
				<u>116.49</u>
05/07/2024	196673	MCMMASTER-CARR	PROTECTIVE HOSE FOR NEW DOCK	884.95
			REPLACEMENT GREASE LINE FITTINGS	55.26
				<u>940.21</u>
05/07/2024	196674	MENARDS, INC.	SHOP SUPPLIES - COMPOST	142.77
			MAINT SUPPLIES - SOCKET/ADAPTER (INV#028	22.92

Check Date	Check	Vendor Name	Description	Amount
				165.69
05/07/2024	196675	MGT OF AMERICA CONSULTING	COMPENSATION STUDY PER TPOAM AGREEMENT	3,900.00
05/07/2024	196676	MICHIGAN LINEN SERVICE, INC.	LINEN SERVICE FOR STATION HQ LINEN SERVICE FOR STATION 3 LINEN SERVICE FOR STATION 4 LINEN SERVICE FOR STATION HQ LINEN SERVICE FOR STATION 3 LINEN SERVICE FOR STATION 4 LAUNDRY SERVICES 2024 LAUNDRY FOR CIVIC CENTER 4/23/2024 (INVO MAINT. GARAGE LINEN SERVICE 4/23/24 (INV LINEN SERVICE FOR COMMUNITY CENTER 4/23/ MAINT. GARAGE LINEN SERVICE 4/9/24 (INV# LAUNDRY FOR CIVIC CENTER 4/9/2024 (INVOI LINEN SERVICE FOR COMMUNITY CENTER 4/9/2 LAUNDRY SERVICES 2024 MAINT. GARAGE LINEN SERVICE 4/16/24 (INV LAUNDRY FOR CIVIC CENTER 4/16/2024 (INVO LINEN SERVICE FOR COMMUNITY CENTER 4/16/ LEC LAUNDRY SERVICE LAUNDRY SERVICES 2024 WEEKLY LINEN SERVICES	190.40 86.26 85.03 190.40 86.26 85.03 24.00 101.10 24.00 49.50 24.00 101.10 49.50 24.00 24.00 24.00 101.10 49.50 60.25 24.00 68.50
				1,447.93
05/07/2024	196677	MICHIGAN MUNICIPAL LEAGUE	WORKERS' COMPENSATION	12,864.00
05/07/2024	196678	MINUTES SERVICES LLC	03-26-2024 PC MEETING MINUTES 03-12-2024 PLANNING COMMISSION MEETING M	100.00 100.00
				200.00
05/07/2024	196679	MLIVE MEDIA GROUP	ADVERTISEMENT - ASSESSING & FIRE	1,588.90
05/07/2024	196680	NAPA AUTO PARTS	#44 UJOINT	95.79
05/07/2024	196681	NORTHGATE CONSTRUCTION LLC	GREEN OAKS GOLF COURSE BATHROOM RENOVATI	93,815.00
05/07/2024	196682	NTG ENTERPRISES INC.	WELDING/FABRICATING ON GRINDER	1,975.00
05/07/2024	196683	OAKLAND COUNTY	CLEMIS ANNUAL CONTRACT	2,097.25
05/07/2024	196684	OOMA, INC.	OOMA SERVICES	248.44
05/07/2024	196685	ORCHARD, HILTZ & MCCLIMENT INC	ENG CONST.CEILING FOR STATION 3 CONSTRUCTION ENGINEERING SERVICES FOR RI CARPORT REBUILDING PROJECT PROFESSIONAL SERVICE - ADDITIONAL PROPER	1,950.00 3,724.00 1,522.00 1,947.00
				9,143.00
05/07/2024	196686	OSCAR W. LARSON CO.	REPLACEMENT OF HOSE AND TESTED FLP PUMP REPAIR -REBUILD KIT FUEL PUMP REPAIR AT CC	804.22 2,296.52 351.00
				3,451.74
05/07/2024	196687	PARKWAY SERVICES, INC.	PORTABLE TOILET RENTAL - FORD LAKE PARK PORT A JOHN SERVICE - HYDRO PORTABLE TOILET RENTAL - FORD HERITAGE P	180.00 130.00 320.00
				630.00
05/07/2024	196688	PEARLINE DAVIS	RECOVERY COURT PAYROLL	426.65

Check Date	Check	Vendor Name	Description	Amount
			RECOVERY COURT PAYROLL	296.80
			RECOVERY COURT PAYROLL	129.85
				<u>853.30</u>
05/07/2024	196689	PEPSI BEVERAGES COMPANY	BEVERAGES FOR RESALE IN THE GOLF SHOP.	433.08
			PEPSI VENDING ORDER APRIL 2024	375.91
				<u>808.99</u>
05/07/2024	196690	PRINTING SYSTEMS	CUSTOM VOTER ID CARDS AND MASTER CARDS	419.51
05/07/2024	196691	PRIORITY ONE EMERGENCY	POLO'S FOR CHIEF	95.00
			PANTS FOR CAPTAIN RAGLIN & LT ROLAND	272.97
			PANTS FOR CAPTAIN RAGLIN	90.99
			YTFD NEW SHOULDER PATCHES	1,300.00
				<u>1,758.96</u>
05/07/2024	196692	RANDAZZO MECH HEAT & COOL	REFUND - PERMIT FEES #PM23-1197	37.50
05/07/2024	196693	RHETT REYES	RECOVERY COURT PAYROLL	1,177.13
			RECOVERY COURT PAYROLL	1,515.75
			RECOVERY COURT PAYROLL	999.75
				<u>3,692.63</u>
05/07/2024	196694	RICK FIE	FINAL FIRE WITHHOLDING RELEASE - 1039 PA	183.50
05/07/2024	196695	ROBERT ACTON	ROBERT ACTON CONTRACTUAL INSPECTIONS 04.	1,100.00
05/07/2024	196696	RUSSELL GIRBACH	MEDICAL CE'S	1,275.00
05/07/2024	196697	S & W PLUS HOME SERVICES CORP	REMAINING PAYMENT FOR WINDOW REPAIR PRO	4,980.00
05/07/2024	196698	SAM'S CLUB DIRECT	SUPPLIES HQ FOR EVENTS	64.36
			SUPPLIES FOR ALL 3 STATIONS	388.48
			FLOOD LIGHTS - COURT	21.96
			DRINKING CUPS - P&G	37.98
			WATER & CUTLERY - SUPERVISOR	34.88
			SUPPLIES FOR FRONT DESK VENDING	204.92
				<u>752.58</u>
05/07/2024	196699	SAND SALES COMPANY LLC	TOPDRESSING SAND FOR GREENS	2,448.47
05/07/2024	196700	SHERRON LOVE	REFUND - ROOM RENTAL	100.00
05/07/2024	196701	SHI INTERNATIONAL CORP	EASY365MANAGER 1 YEAR LICENSE	898.16
05/07/2024	196702	SHRADER TIRE & OIL	TRAILER TIRES	354.95
			TRAILER TIRES	354.95
			TRAILER TIRES	354.95
				<u>1,064.85</u>
05/07/2024	196703	SIGNS BY TOMORROW	BATHROOM SIGNS - PARKS	281.76
05/07/2024	196704	SITEONE LANDSCAPE SUPPLY, LLC	RAINBIRD FD 102 DECODERS, ELECTRIC VALVE	1,508.86
05/07/2024	196705	SOUTHERN COMPUTER WAREHOUSE	MICROSOFT SURFACE DOCK 2	2,055.00
05/07/2024	196706	SPARTAN DISTRIBUTORS	MOWER SUPPLIES	656.99
			MOWER SUPPLIES	1,628.71
			MOWER SUPPLIES	1,241.90
			PARTS FOR TORO MOWERS (ALL 3)	1,390.42
			COMPRESSOR FOR TORO MOWER	571.98
				<u>5,490.00</u>
05/07/2024	196707	SPICER GROUP	APPLERIDGE PARK IMPROVEMENTS	117.50

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CHECK REGISTER FOR CHARTER TOWNSHIP OF YPSILANTI
 CHECK NUMBERS 196606 - 196724

Check Date	Check	Vendor Name	Description	Amount
05/07/2024	196708	STANDARD PRINTING	PRECINCT MAPS ENVELOPES	430.00 990.00 <u>1,420.00</u>
05/07/2024	196709	STANTEC	COMMUNITY CENTER BATHROOM IMPROVEMENTS COMMUNITY CENTER WATER DAMAGE RENOVATION	2,145.50 2,974.50 <u>5,120.00</u>
05/07/2024	196710	STATE OF MICHIGAN - MDOT	HURON BRIDGE TAP GRANT JOB#113542CON	1,189.78
05/07/2024	196711	STATE OF MICHIGAN..	REGISTRATION FEE FOR FIRE INSPECTOR I AN	75.00
05/07/2024	196712	STEPHEN BROWN	STEVE BROWN CONTRACTUAL INSP 04.01.24 -	2,500.00
05/07/2024	196713	TEESNAP LLC	POS - 4 IPADS FOR PARK GATES POS SYSTEM	5,000.00
05/07/2024	196714	ULINE	SIGNAGE STANDS - P&G	741.97
05/07/2024	196715	UNIVERSITY TRANSLATORS	TRANSLATION SERVICES FOR COURT PROCEEDIN TRANSLATOR SERVICES TRANSLATOR SERVICES TRANSLATION SERVICES TRANSLATOR SERVICES	220.00 220.00 220.00 220.00 220.00 <u>1,100.00</u>
05/07/2024	196716	W.J. O'NEIL COMPANY	HEAT WORKING INTERMITTENTLY-14B	678.00
05/07/2024	196717	WALLSIDE INC	REFUND - PERMIT FEES #PB24-0166	37.50
05/07/2024	196718	WALLSIDE INC	REFUND - PERMIT FEES #PB24-0170	67.50
05/07/2024	196719	WASHTENAW COUNTY HEALTH DEPT.	FOOD LICENSE RENEWAL APPLICATION	287.00
05/07/2024	196720	WOLVERINE CRANE	ANNUAL OSHA INSPECTION	181.60
05/07/2024	196721	YAMAHA GOLF CARS PLUS	2024 ANNUAL GOLF CART MAINT	2,984.25
05/07/2024	196722	YPSILANTI ACE HARDWARE	PREM ADHESIVE SUPPLIES HARDWARE - FLP DOOR LOCK REKEY (INV#1670 SUPPLIES PARKS MAINTENANCE KEYS (INV#166723) MAINTENANCE SUPPLIES FOR CIVIC BROOM/PAN SUPPLIES	9.59 9.98 8.00 3.96 3.78 24.58 41.58 <u>101.47</u>
05/07/2024	196723	YPSILANTI COMMUNITY	LIFT STATION MAINT. TUTTLE HILL MARCH 20 LIFT - STATION MAINT. FORD LAKE PARK - M LIFT - STATION MAINT. FORD BLVD - MARCH DIESEL AND GAS CHARGES 2024 WATER REBATE MARCH - YCUA	174.58 108.57 89.36 1,776.96 1,360.00 <u>3,509.47</u>
05/07/2024	196724	YPSILANTI TOWNSHIP PETTY CASH	REIMBURSE PETTY CASH	442.25
AP TOTALS:				
Total of 119 Checks:				537,677.93
Less 0 Void Checks:				0.00
Total of 119 Disbursements:				<u>537,677.93</u>

ATTORNEY REPORT

GENERAL LEGAL UPDATE

NEW BUSINESS



MEMORANDUM

To: Charter Township of Ypsilanti Full Time Elected Officials

From: Robin Castle-Hine, Community Events Director

CC: Josh Kugler, Recreation Services Manager
John Hines, Municipal Services Director

Date: April 30, 2024

Subject: Request Authorization to accept the agreement with The Peach Truck to utilize Ford Heritage Park and Green Oaks Golf Course Parking lot space for ten weeks

The Recreation Department is seeking approval to accept the agreement with The Peach Truck to utilize about fifteen parking spaces at Ford Heritage Park and Green Oaks Golf Course over ten dates in ten weeks, ranging from May 28-August 28, 2024 from 4:30-6:30pm.

The Peach Truck is a company based out of Nashville, Tennessee that was founded in 2012. The company specializes in delivering freshly picked peaches from Georgia to be hand delivered to customers who purchase the peaches beforehand via subscription. They also offer one-time purchases for pick up at the sites, both prepaid and walk ups. The Peach Truck, working with Recreation Department staff, identified Ford Heritage Park and Green Oaks Golf Course as premier sites that would be easily accessible by their customers and high visibility by potential walk up customers.

This agreement has been reviewed by Township Legal and after slight modifications, approved to move forward. There is no financial commitment for the Township or Peach Truck to utilize the space. Any transaction will be handled between the patron and Peach Truck.

Robin Castle-Hine
Community Events Manager
rcastlehine@ypsitownship.org



The Peach Truck Summer Agreement

This Agreement, which includes the Terms and Conditions attached as Exhibit A (this "Agreement"), is made as of 4/30/2024, by and between The Peach Truck, LLC, a Tennessee limited liability company, ("Seller"), located at 1109 Woodland St. P.O. Box 60425, Nashville, TN, 37206, phone (615)-913-4225, and, Ford Heritage Park located at 8399 Textile Rd, phone 7345444000 (the "Host").

TOUR HOST: Green Oaks Golf Course
DATE: 6/5/2024, 6/26/2024, 7/17/2024, 8/7/2024, 8/28/2024
EVENT TIME: 4:30pm - 6:30pm
LOCATION OF EVENT: 1775 E Clark Rd, Ypsilanti, MI 48198

Retail Space: Host shall assign Seller adequate space, approx. 15 parking spots to sell Seller's products and merchandise. Seller, in its sole discretion, has final say on how the space is used and how Seller presents to the general public. Seller agrees, at its sole cost and expense, to keep its space clean and in a manner satisfactory with Host. Seller shall not transfer, assign, sublet, or share any space without written approval. Additionally, Seller shall have all property and trash removed in a reasonable time following the conclusion of the event.

PARKING: Parking is included and will be available on a first come first serve basis in Host's controlled lots.

By signing this Agreement, I have read and agreed to the Terms and Conditions, a copy of which are attached to this Agreement as Exhibit A.

The Peach Truck, LLC

[X]

Signature:

Signature:

Jessica Miller

Heather Jarrell Roe

Name: Jessica Miller

Name: Heather Jarrell Roe

Date:

Date:

Address: 1109 Woodland St. PO Box 60425
Nashville, TN 37206

Address:

EXHIBIT A -- TERMS AND CONDITIONS

1. **CANCELLATION POLICY:** Both parties reserves the right to terminate this Agreement outside of 30 days from event, for any reason, and in their sole discretion, without any penalty whatsoever.
2. **INDEMNIFICATION:** Host agrees to indemnify, defend, and hold harmless Seller and its respective managers, members, affiliates, officers, employees, agents, and representatives from and against any and all losses, lawsuits, judgments, causes of action, costs, damages, claims (actual or alleged) and expenses resulting from unsafe conditions or property defects arising out of or incidental to or in any way resulting from negligent acts or omissions of Host and its agents, representatives and employees, if any, in the performance of this Agreement and/or use of Tour Space. Nothing herein shall be construed to waive, limit, or restrict any governmental immunity defense available to the Charter Township of Ypsilanti.
3. **On-site Marketing Materials:** Ability to have signs/A-frames on property during day of event with materials to help facilitate the sale of the product. IE: URL, Time, Date, Prices, Products.
4. **Contractual Easement:** In case of change of ownership the agreement for times and dates stays valid.
5. **Site of Location Set-Up:** Site of Set-Up will be in a high traffic and visible location as well as mutually agreed upon between both parties.
6. **LIMITATION OF LIABILITY:** To the extent Host maintains any claim against Seller, Host shall look solely against Seller's profits from the Event for the recovery of any judgment against Seller and no other property or assets of Seller shall be subject to levy, execution or other enforcement procedure for the satisfaction of Host's remedies under or with respect to this Agreement. In no event shall Seller be liable to Host for any other person or entity for consequential, special, indirect, incidental, or punitive damages, costs, expenses, or losses (including without limitation lost profits, loss of business, anticipatory profits and opportunity costs). Notwithstanding the foregoing, nothing in this paragraph is intended to limit or restrict the indemnification rights or obligations in this Agreement.
7. **MEDIA RELEASE:** Host grants Seller the irrevocable and unlimited right and permission to use photographs and/or video recordings of EVENT, Host's intellectual property, and Host's property on each of Seller's social media and other Internet properties, publications, promotional flyers, marketing materials, derivative works, or for any other similar purpose without compensation or permission from Host.
8. **NO WAIVER:** No delay or failure of any party to exercise any right provided herein shall in any way affect its right to enforce that right or any other right under this Agreement at a later time. No waiver shall be effective unless in writing signed by the waiving party.
9. **SEVERABILITY:** If any provision of this Agreement is declared invalid by any lawful tribunal, then it shall be adjusted to conform to legal requirements of that tribunal and that modification shall automatically become a part of the Agreement. Or, if no adjustment can be made, the provision shall be deleted as though never included in the Agreement and its remaining provisions shall remain in full force and effect.
10. **NO PARTNERSHIP OR AGENCY:** Seller and Host are independent contractors, and neither party shall be, nor represent itself to be, the joint venture, franchiser, franchisee, partner, broker, employee, servant, agent or representative of the other party for any purpose. Neither party is, or shall be, responsible for the acts or omissions of the other and neither party shall bear authority to make any representation or incur any obligation on behalf of the other party unless expressly authorized herein. Each party also acknowledges that it has not relied on any promises, inducements, representations or other statements made by the other party regarding the commercial viability, profitability or success in the marketplace of any Projects or services, and that each party's decision to enter into this Agreement is made independently from the other party.
11. **CHOICE OF LAW:** This Agreement shall be governed by the laws of the State of Tennessee without regard to its conflict of laws provisions.
12. **DISPUTE RESOLUTION:** If a dispute arises out of or relates to this contract, or the breach thereof, and if the dispute cannot be settled through negotiation, the parties agree first to try in good faith to settle the dispute by mediation administered by the American Arbitration Association under its Commercial Mediation Procedures in Nashville, Tennessee (or such other location agreed upon by the parties) or by private party before resorting to arbitration, litigation, or some other dispute resolution procedure unless both parties agree in writing to forego mediation. Any dispute or controversy arising under or in connection with this Agreement that cannot be settled through mediation shall be settled exclusively

by arbitration in accordance with the rules of the American Arbitration Association then in effect in Nashville, Tennessee (or such other location agreed upon by the parties.

13. ENTIRE AGREEMENT: The Agreement constitute the complete and exclusive statement of the agreement between the parties and supersede all prior oral and written agreements, communications, representations, statements, negotiations and undertakings relating to the subject matter.



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TOUR HOST: Ford Heritage Park
DATE: 5/28/2024, 6/18/2024, 7/9/2024, 7/30/2024, 8/20/2024
EVENT TIME: 4:30pm-6:30pm
LOCATION OF EVENT: 8399 Textile Rd, Ypsilanti, MI 48197

Retail Space: Host shall assign Seller adequate space, approx. 15 parking spots to sell Seller's products and merchandise. Seller, in its sole discretion, has final say on how the space is used and how Seller presents to the general public. Seller agrees, at its sole cost and expense, to keep its space clean and in a manner satisfactory with Host. Seller shall not transfer, assign, sublet, or share any space without written approval. Additionally, Seller shall have all property and trash removed in a reasonable time following the conclusion of the event.

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By signing this Agreement, I have read and agreed to the Terms and Conditions, a copy of which are attached to this Agreement as Exhibit A.

The Peach Truck, LLC

[x]

Signature:

Signature:

Jessica Miller

Heather Jarrell Roe

Name: Jessica Miller

Name: Heather Jarrell Roe

Date:

Date:

Address: 1109 Woodland St. PO Box 60425
Nashville, TN 37206

Address:

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7. **MEDIA RELEASE:** Host grants Seller the irrevocable and unlimited right and permission to use photographs and/or video recordings of EVENT, Host's intellectual property, and Host's property on each of Seller's social media and other Internet properties, publications, promotional flyers, marketing materials, derivative works, or for any other similar purpose without compensation or permission from Host.
8. **NO WAIVER:** No delay or failure of any party to exercise any right provided herein shall in any way affect its right to enforce that right or any other right under this Agreement at a later time. No waiver shall be effective unless in writing signed by the waiving party.
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by arbitration in accordance with the rules of the American Arbitration Association then in effect in Nashville, Tennessee (or such other location agreed upon by the parties.

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THE Peach Truck®

DELIVERING JOY

Featured in:



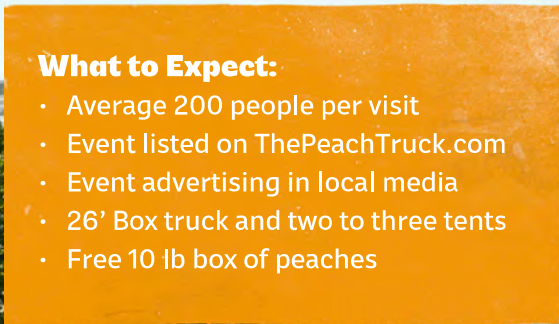
Social Media Stats

331K 176K 1.9K

thepeachtruck.com
@thepeachtruck

What to Expect:

- Average 200 people per visit
- Event listed on ThePeachTruck.com
- Event advertising in local media
- 26' Box truck and two to three tents
- Free 10 lb box of peaches



Origin Story

After moving to Nashville, Stephen and Jessica Rose loved everything about their new home except one thing: fresh, delicious peaches! The kind Stephen grew up with — perfectly ripe and ready to bite into, right off the tree, juice running everywhere. To Stephen, peaches were more than a juicy treat — they were summer itself. And grocery store peaches couldn't come close. Stephen & Jessica reached out to his hometown farm, bought a Forest Green '64 Jeep Gladiator, and brought that first truckload of summer joy back to their friends.

Today, The Peach Truck has grown. The trucks are bigger. The Gladiator is retired. But our recipe remains the same: fresh peaches picked with extra care and put in your hands as fast as possible.

Our mission remains the same, too: bringing you peaches—and delivering joy.



Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



**YPSILANTI
TOWNSHIP**
— RESIDENTIAL SERVICES DEPARTMENT —

Trustees
Ryan Hunter
John Newman II
Gloria Peterson
Debbie Swanson

MEMORANDUM

To: Charter Township of Ypsilanti Board of Trustees

From: John Hines, Municipal Services Director

Date: May 1, 2024

Subject: Request authorization to approve Change Order #1 for the Ford Lake Park Shelter Improvements as part of the American Rescue Plan Act (ARPA) funds.

The Residential Services Department is requesting authorization for the signing of Change Order #1 with AR Brouwer for \$32,863.00 for additional repairs needed for Ford Lake Park Shelters 1 & 2 budgeted in account 101-902-981.070.

Change Order #1 provided by AR Brouwer and recommended by Spicer Group includes repaving the existing pathway to Shelter 1 due to the amount tree roots going through it and the cracks that have formed. It also includes removing the interior grills at Shelter 2, filling the spaces in with concrete and adding a granite countertop was suggested by AR Brouwer and stated that it will hold up better than concrete for extreme weather conditions.

The grills being removed adds the need for removal of the vents and hood, and the associated roof work to repair the holes. If the grills are removed, township staff will add more exterior grills around the shelter when work commences.

Attached is the prepared Change Order by Spicer Group outlining the work expected to be added and updated costs associated with each line.

CHANGE ORDER

AIA DOCUMENT G701

OWNER
 ARCHITECT
 CONTRACTOR
 FIELD
 OTHER

PROJECT:

Ypsilanti Charter Township
 ARPA Parks Project - Shelters
TO CONTRACTOR:
 A.R. Brouwer Company
 2830 Baker Road, Suite 100
 Dexter, MI 48130

CHANGE ORDER NUMBER: 2
 DATE: 4/30/2024
 ARCHITECT'S PROJECT NO.: 134586SG2023
 CONTRACT DATE: 2/8/2024
 CONTRACT FOR: Renovations to Ford Park and West Willow park Pavilions

All Changes per Attached "ARPA Parks Projects Shelter Repairs - Additional Work" Dated 4/23/24 and Amended 4/30/24 by David Marr

\$32,863.00

Shelter #1-1 Net change \$15,774.00
 Shelter #1-2 Net change \$1,980.00
 Shelter #2 Net change \$15,109.00

Not valid until signed by the Owner, Architect and Contractor.

The original (Contract Sum) (Guaranteed maximum Price) was	<u>\$379,788.00</u>
Net change by previously authorized Change orders	<u>(\$2,251.00)</u>
The (Contract Sum) (Guaranteed maximum Price) prior to this Change order was	<u>\$377,537.00</u>
The original (General Allowance) in contract	<u>\$30,000.00</u>
Net change in (General Allowance) by previously authorized Change orders	<u>\$0.00</u>
The (General Allowance) balance prior to this Change order was	<u>\$30,000.00</u>
The (Contract Sum) (Guaranteed maximum price) will be (increased) (decreased) (unchanged) by this Change Order in the amount of	<u>\$32,863.00</u>
The (General Allowance) balance including this Change order is	<u>\$0.00</u>
The new (Contract Sum) (Guaranteed maximum Price) including this Change order will be	<u>\$410,400.00</u>

The Contract Time will be ~~(increased)~~ ~~(decreased)~~ ~~(unchanged)~~ by 00 days

NOTE: This summary does not reflect changes in the Contract Sum, Contract Time or Guaranteed Maximum Price which have been authorized by Construction Change Directive.

 ARCHITECT Spicer Group
 230 S Washington Ave
 Address
 Saginaw, MI 48607

 CONTRACTOR A.R. Brouwer
 2830 Baker Road, Suite 100
 Address
 Dexter, MI 48130

 OWNER Ypsilanti Charter Township
 7200 S.Huron River Dr.
 Address
 Ypsilanti, MI 48197

 BY

 BY

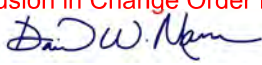
 BY

 DATE

 DATE

 DATE

4/23/2024

This document has been edited by David Marr, AIA, Project Manager for Spicer Group, for inclusion in Change Order No. 2 dated 4/30/24 

John Hines
Municipal Services Director
Ypsilanti Township

Ypsilanti Township ARPA Parks Projects Shelter Repairs – Additional Work

John,

Here are the costs associated with the additional scopes of work at Ford Lake Park for Shelter #1, Shelter #2, and the Pavilion.

Shelter #1:

1. Asphalt Work:

- a. Remove and replace entire existing asphalt path (approximately 1,300 square feet). Includes cost to remove existing roots from under path.

Shelter #1-1 Add: \$15,774.00

- ~~b. Remove and replace problem areas of existing path (approximately 500 square feet). Includes cost to remove existing roots from under path.~~

~~Add: \$5,500.00~~

- ~~c. Regrade and place 3 inch asphalt path from Shelter #1 to existing path (approximately 210 square feet).~~

~~Add: \$1,256.00~~

2. Existing Retaining Wall Work:

- a. Remove and dispose of existing retaining wall made of railroad ties. Grade out area where existing retaining wall is removed. Existing culvert to remain abandoned.

Add: \$1,100.00

- b. Seed and install straw mat in area graded out.

Add: \$880.00

Shelter #1-2 \$1,980.00

~~c. Note: Additional investigative work via camera and locate device can be provided on the culvert. It is assumed that the culvert is abandoned due to a lack of water flow and because we cannot locate the inlet.~~

~~Add: \$1,188.00~~

Shelter #2:

1. Remove and dispose of existing hood, vents (3), grill tops (3), and concrete countertop.
Add: \$7,722.00
2. Make roof deck repairs/roofing at vent locations.
Add: \$589.00
3. Repair/install T1-11 board where hood is removed.
Add: \$415.00
4. Infill grills (3) and match face on infill to that of the countertop. Any necessary masonry repairs and cleaning of existing brick/block is included.
Add: \$3,158.00
5. Furnish and install granite countertop (246 inch by 30 inch) for outside use with edge profile.
Add: \$3,225.00

Shelter #2 Total for Additional Scope at Shelter #2: \$15,109.00

Pavilion:

- ~~1. Remove and dispose of existing wood structure, concrete slab, and existing block down to existing footing.
Add: \$16,500.00~~
- ~~2. Add soil erosion (silt fence) protection during and after demolition.
a. Note: Additional soil erosion measures may need to be taken, unclear until demolition happens.
Add: \$205.00~~

~~**Total for Existing Pavilion Removal: \$16,705.00**~~

Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



**YPSILANTI
TOWNSHIP**
— RECREATION DEPARTMENT —

Trustees
Ryan Hunter
John Newman II
Gloria Peterson
Debbie Swanson

MEMORANDUM

To: Charter Township of Ypsilanti Board of Trustees

From: John Hines, Municipal Services Director

Date: May 3, 2024

RE: **Request Authorization to approve OHM Advisors to provide engineering services to re-design and prepare the re-bidding packing for the Ypsilanti Township ARPA Civic Center Pond Renovation.**

The Residential Services Department is looking for authorization to approve OHM Advisors to provide additional professional services related to the engineering, re-design and re-bidding process for the Civic Center Pond APRA project for \$9,900, which is budgeted in GL#101-902-981.030

The original bid package prepared by OHM was opened on January 23rd, 2024 with five competitive bids. The bids were above what was budgeted for the project. OHM attempted to work with the low bidder to bring the price within the allotted number, but was unable to do so without re-bidding the project. The additional funds are being requested for OHM to re-design the project and bid package to fall within the budgeted amount and achieve the project goals.

If approved, OHM and Township staff will post the updated RFP to MITN and bring a potential award to the Board of Trustees in June.



April 30, 2024

Ms. Brenda Stumbo
Township Supervisor
Charter Township of Ypsilanti
7200 S. Huron River Drive
Ypsilanti, MI 48197

RE: **Revised Proposal for Civic Center Pond Rehabilitation**
Professional Engineering Design

Dear Ms. Stumbo:

Please accept this proposal for professional engineering services for the rehabilitation of the pond adjacent to the Township Civic Center.

PROJECT UNDERSTANDING

In January 2024, bids were received for the rehabilitation of the Civic Center Pond. This work included the complete removal of the existing pond liner, regrading of the entire pond, constructing an embankment between the Civic Center building, waterproofing the northern foundation of the Civic Center building, and the addition of a landscaping design among other improvements. Upon review of the bids, it was apparent that the project costs were much higher than the initial ARPA monies budgeted and slightly higher than the assumed engineer's estimate. anticipated project estimates. OHM Advisors (OHM) and Township attempted to work with the low bidder to "value engineer" the job into a cost range which was acceptable to the Township; however, in order to meet the desired ARPA budget, the scope radically changed and didn't meet the intent of the original project scope.

The Township has now requested that OHM put a redesigned bid package (plans, specifications, and bidding documents) together in order to readvertise the job this summer with a significantly reduced scope in hopes of more favorable contract prices. The redesigned bid package will include several modifications from the original bid that OHM believes will still create a desirable final product. These modifications are listed below:

- ▼ No liner removal. The existing liner will be buried within the existing pond footprint.
- ▼ All soils proposed to be removed from the site will be relocated onsite.
- ▼ Riprap perimeter proposed as part of the original project will be bid as an alternate with some modifications. This will likely require funding above and beyond the ARPA monies.
- ▼ Propose more cost-effective building waterproofing.
- ▼ Township assistance with lowering water levels upon project initiation.

SCOPE OF SERVICES

Task 1 – Design & Bidding Documents

Working with Township Staff, OHM engaged in original design work dating back to Summer 2023. This effort was addressed through a previous proposal and has been invoiced. The fees reflected in this proposal includes those necessary to complete the redesign and bidding efforts for the revised project.



Moving forward, OHM will create bidding documents that will include redesigned plan sheets and a revised bid book reflecting all required information and specifications pertaining to the proposed redesign. The pond rehabilitation construction plans will meet the requirements set forth by the Township, as noted previously. In developing the specifications, OHM will follow the Charter Township of Ypsilanti Engineering Standards and Design Specifications. These specifications will pertain to specific items such as special instructions to bidders, supplemental and technical specifications, and a method of payment for the contractor to follow. The bid package will include the bonding requirements, Davis Bacon/prevaling wage information, insurance requirements, a bid form and technical specifications. After completion of the design/specification assembly, the Township will be provided with two (2) hard copies of the Bid Package for review along with an updated final engineer's opinion of probable cost. Final adjustments to the Bid Package will be made based on the Township comments prior to advertising and bidding.

Task 2 – Bidding Assistance and Contract Execution

The final Bid Package will be provided to the Township to be posted on BidNet (through the Township's Clerk's office). OHM will assist with the bid process and conduct a bid opening. OHM can hold an onsite pre-bid conference with potential bidders, if requested by the Township. OHM will address any questions and/or Requests for Information (RFIs) received by the bidding contractors during the bid phase. OHM will then hold a bid opening at the Township on the date specified in the bid documents. Bids will be received, read aloud, collected, tabulated, and reviewed. A letter of recommendation will be provided to the Township based on bid price, references, and other criteria outlined in the bid documents. During this task, OHM will arrange for the SESC Permit to be reviewed and prepare the permit for pickup by the awarded contractor.

DELIVERABLES

Task	Deliverable
Task 1	Design & Bidding Documents
Task 2	Bidding Assistance and Contract Execution

It is anticipated that the project will be Advertised for Bid and awarded in Summer 2024, with construction commencing in either the Summer or Fall of 2024.

ASSUMPTIONS/CLARIFICATIONS

- Some of the value engineering work that was performed is included in the Task 1 fee (approximately \$1500)
- It is assumed that the adjacent land can be used for staging and set up area, including area needed for dewatering and hauling away spoils.
- This proposal includes no work to the interior of the Township Civic Center. All work is assumed to be from the exterior of the building, adjacent to the pond area only.
- Dewatering outlet will utilize the existing Township Storm System and pipe sizing and redesign of the outlet control is not included in the design. Flow rates, in/out of the pond are not proposed to change.
- The only permit assumed to be required is assumed to be an SESC permit through the Township.
- Additional permits or the need for an EGLE permit is not included in the scope.
- No construction phase services are included in the proposal. The Township can inspect and administer this project with their staff or OHM can submit a proposal under separate cover for consideration upon request. In general, small projects like this require approximately 12-15% of the overall construction cost to administer construction services. This can change based on the level of service provided.
- Any meetings in addition to the meetings outlined in the above scope or tasks not included in the scope



of services can be requested and performed on an hourly basis. Time spent for these meetings will be charged on an hourly basis.

- ▶ No survey services or easement documentation preparation is included in this proposal.
- ▶ Coordination between this project and other proposed improvement projects at the Civic Center will need to be coordinated by the Township.

FEE

OHM Advisors will invoice the Charter Township of Ypsilanti for the above stated services on an hourly not-to-exceed basis, in accordance with our 2024 Rate Schedule. Invoices will be sent monthly as work is performed.

Design Tasks	Design Fee
Task 1 – Design & Bidding Documents	\$6,400.00
Task 2 – Bidding Assistance and Contract Execution	\$3,500.00
Total	\$9,900.00

The total fee is estimated to be **\$9,900.00**. Additional services can be provided on a time and material basis, as requested and approved, in writing.

ACCEPTANCE

If this proposal is acceptable to you, a signature on the enclosed copy of this letter and initials on the contract terms and conditions will serve as our authorization to proceed. This proposal, by reference, uses OHM Advisors' Standard Terms and Conditions that have also been used on past proposals with the Township.

Thank you for giving us the opportunity to present this proposal to you. We look forward to collaborating with you throughout this project.

OHM Advisors _____
CONSULTANT

Charter Township of Ypsilanti _____
CLIENT

(Signature)

Matthew D. Parks, P.E. _____

(Name)

Ms. Brenda Stumbo _____

Principal in Charge _____

(Title)

Township Supervisor _____

(Date)

(Signature)

(Name)

Ms. Heather Jarrel Roe _____

(Title)

Township Clerk _____

(Date)

Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



**YPSILANTI
TOWNSHIP**
— OFFICE OF THE CLERK —

Trustees
Ryan Hunter
John Newman II
Gloria Peterson
Debbie Swanson

Board of Trustees

In accordance with the TPOAM Bargaining Agreement, Article #10 – “Leaves of Absence”, section “B”, and the “Political Activity” policy from the Charter Township of Ypsilanti Policy and Procedure Manual (copies attached), I am forwarding to the Board of Trustees a Leave of Absence request from TPOAM member, Christina Benitez to run for the office of Township Clerk.

This request comes with my recommendation for approval.

Your consideration in this matter is appreciated. Should you have any questions, please feel free to me or the HR Department.

Heather Jarrell Roe, Ypsilanti Township Clerk

Leave of Absence Requirement

Christina Benitez <cbenitez@ypsitownship.org>

Thu 5/2/2024 10:31 AM

To:Heather Jarrell Roe <hjarrellroe@ypsitownship.org>;Lisa Stanfield <lstanfield@ypsitownship.org>

Good morning,

Please accept this as my official notice of my intent to run for Clerk of Ypsilanti Township. In accordance with Ypsilanti Township policy, I am required to take a leave of absence 60 days prior to the August 6, 2024, primary election. Depending on the results of the August primary, I may also be required to take another 60 day leave of absence prior to the November 5, 2024, general election. If you have any questions, please let me know.

Thank you,

Christina Benitez



To: Charter Township of Ypsilanti Board of Trustees

From: Fletcher Reyher, Planning and Development Coordinator

Re: **Request to receive authorization for Circuit Court litigation to abate a public nuisance at a property identified as 2574 State Street, Ypsilanti, MI 48198, Parcel K-11-13-330-006; funded in account 101-729-801.023.**

Date: May 7, 2024

Following an extensive investigation by the Ypsilanti Township Planning Department, it has become evident that a public nuisance exists at 2574 State Street, Ypsilanti, MI 48198, Parcel K-11-13-330-006, necessitating the engagement of legal services to address the matter.

2574 State Street – Aerial (2023)



The subject property, located north of Coolidge Road and south of State Street, adjacent to the YCUA entrance, is zoned I-C for Industrial and Commercial use. Present ownership is attributed



to Thomas Poullath, who acquired the property in 2020 for \$300,000. Operating as a salvage yard specializing in automobile parts, the site engages in the resale of spare parts and the recycling of dismantled vehicles through crushing. A Business Registration was approved by the Township on February 01, 2021.

On November 04, 2022, Deputy Assessor Brian McCleery alerted Planning and Development Coordinator Fletcher Reyher to the unauthorized erection of a large warehouse building (100 x 100) on the western edge of the property. This information was relayed to former Planning Director Jason Iacoangeli and Building Official Dave Bellers.

On November 16, 2022, an inspection was conducted on site with former Planning Director Jason Iacoangeli, former Ordinance Administrator Thomas Greenwood, and Building Inspector Mike Cromer.

Subsequently, on March 23, 2023, former Planning Director Jason Iacoangeli issued a Notice of Violation to Mr. Poullath, requesting submission of a plot plan detailing the building's location in relation to property lines.

Mr. Poullath responded on April 10, 2023, providing a plot plan illustrating the building's placement. However, it was observed that the building, along with a 60 x 100 attached storage canopy, lacked adequate side yard setbacks. Additionally, a building of this size necessitates full site plan review and Planning Commission Consideration, and compliance with all relevant Township Zoning Ordinance standards, including dimensional requirements, lighting, parking, screening, and landscaping.

Despite these notifications, on June 30, 2023, Building Inspector Mike Cromer placed a "do not occupy" notice on the building due to its lack of zoning and building approvals. Regrettably, the building continued to be occupied after this notice.

In efforts to address the situation, a meeting was convened on December 21, 2023, involving Mr. Poullath, Building Official Dave Bellers, Building Inspector Mike Cromer, former Planning Director Jason Iacoangeli, and Planning and Development Coordinator Fletcher Reyher. Jason informed the property owner that there were many issues with the building, and approval for this building may be impossible. The property owner informed Township officials that he would determine the best path forward and inform the Township of his decision.

As of our recent inspection on April 22, 2024, no progress has been made toward the removal of the building, and no plan has been submitted to the Planning Department for review. Visual documentation has been obtained for reference.

Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



YPSILANTI TOWNSHIP

— PLANNING & ZONING DEPARTMENT —

Trustees
John Newman II
Gloria Peterson
Debbie Swanson
Ryan Hunter



Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



YPSILANTI TOWNSHIP

— PLANNING & ZONING DEPARTMENT —

Trustees
John Newman II
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Debbie Swanson
Ryan Hunter



Township Supervisor
Brenda L. Stumbo
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Stan Eldridge



YPSILANTI TOWNSHIP

— PLANNING & ZONING DEPARTMENT —

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YPSILANTI TOWNSHIP

— PLANNING & ZONING DEPARTMENT —

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Ryan Hunter



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Stan Eldridge



**YPSILANTI
TOWNSHIP**
— PLANNING & ZONING DEPARTMENT —

Trustees
John Newman II
Gloria Peterson
Debbie Swanson
Ryan Hunter



Township Supervisor
Brenda L. Stumbo
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Stan Eldridge



YPSILANTI TOWNSHIP

— PLANNING & ZONING DEPARTMENT —

Trustees
John Newman II
Gloria Peterson
Debbie Swanson
Ryan Hunter



Township Supervisor
Brenda L. Stumbo
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Township Treasurer
Stan Eldridge



YPSILANTI TOWNSHIP

— PLANNING & ZONING DEPARTMENT —

Trustees
John Newman II
Gloria Peterson
Debbie Swanson
Ryan Hunter



Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



YPSILANTI TOWNSHIP

— PLANNING & ZONING DEPARTMENT —

Trustees
John Newman II
Gloria Peterson
Debbie Swanson
Ryan Hunter





2020 Aerial Image



Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



YPSILANTI TOWNSHIP

— PLANNING & ZONING DEPARTMENT —

Trustees
John Newman II
Gloria Peterson
Debbie Swanson
Ryan Hunter

2023 Aerial Image



Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



**YPSILANTI
TOWNSHIP**
— WHERE YOUR FUTURE GROWS —

Trustees
John Newman II
Gloria Peterson
Debbie Swanson
Ryan Hunter

To: Charter Township of Ypsilanti Board of Trustees

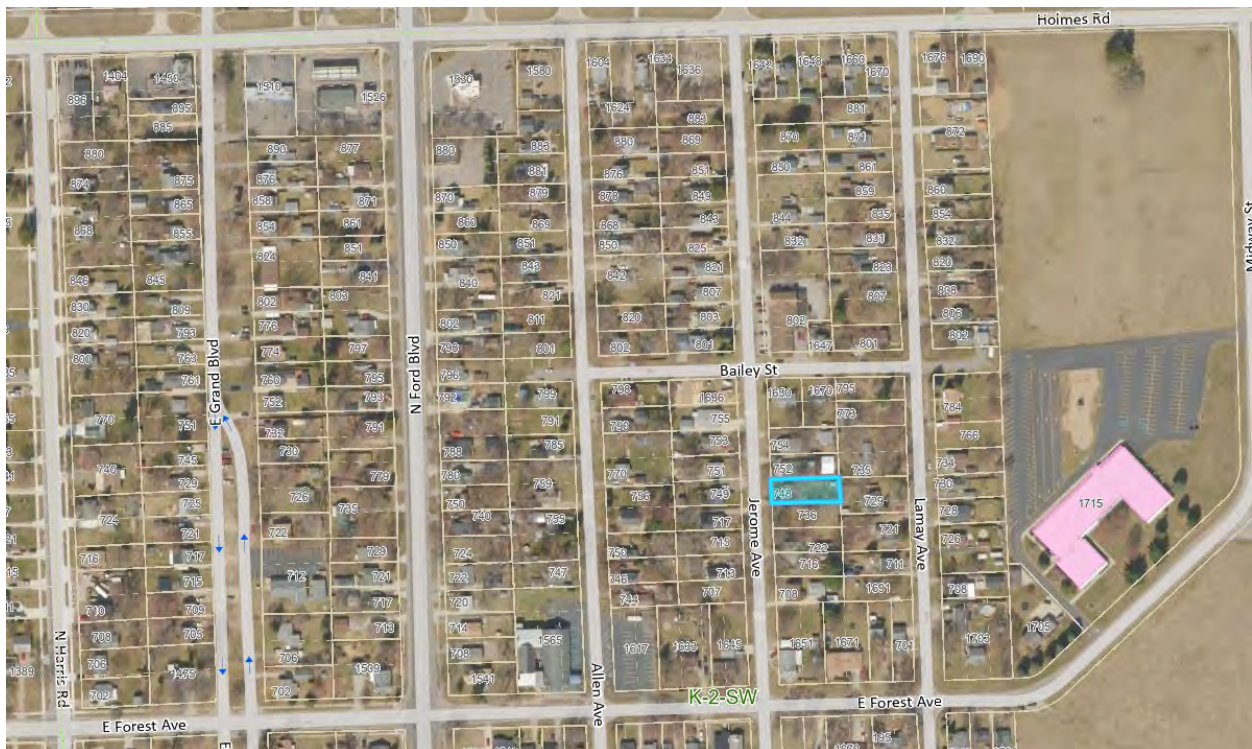
From: Belinda Kingsley, Community Compliance Director

Re: **Request to receive authorization for Circuit Court litigation to abate a public nuisance at properties identified as 748 Jerome Ave; funded in account 101-729-801.023.**

Date: May 1, 2024

The Ypsilanti Township Ordinance Department has investigated a public nuisance, at 748 Jerome Ave, for which authorization is requested to engage legal services to abate said nuisance.

748 Jerome



The property identified as 748 Jerome Ave is located north of E Forest, between Lamay and Allen, in an R-5 One-Family Residential zone known as the Lay Garden Subdivision. The current

owner of the property is Betty Jean Rudy, who does not reside there. Based on information from the occupants, the house is occupied by family members of the owner.

The Ordinance Department has handled a number of complaints regarding this property since 2003. The condition of the property has become more blighted, and the number of complaints has increased since September 2023. Through multiple Notice of Violations issued the occupants have been asked to:

- Remove blight on the lawn extension, driveway, front and back yards – trash, trash bags, junk, car parts, etc.
- Cease parking on the lawn extension, front and back yards.
- Store vehicles without proper registration, damaged in accidents or inoperable in an enclosed building, i.e. garage.
- Do not make repairs to vehicles not legally belonging to the occupant.
- Repair damaged fence to code.
- Remove brush and vegetation that is creating rodent harborage.
- Maintain vegetation below 7”.

There are currently four vehicles stored in the backyard and an ongoing flow of vehicles in the driveway, front yard and street that are being worked on. Based on the most recent complaint, vehicles are being repaired, with revving of the engines, blaring music and loud voices, blocking the mailboxes of neighboring properties, leaving tools in the road and the use of spray paint in an open area with no containment.

The occupant has stated that he purchases vehicles to repair and sell and admits that a few have been stored for a lengthy period of time. The Zoning Ordinance does not permit R-5 One-Family Residential parcels to be used as an auto repair facility. This is not an acceptable home occupation due to the obvious signs of a business being conducted on the site, and the disturbance to the neighbors. Residents are permitted to make simple repairs on their own vehicles in the driveway, or more complex repairs in an enclosed garage.

In addition to the vehicle storage and repair operation, there are International Property Maintenance Code violations that have not been addressed, such as dilapidated sheds in the backyard, damaged fences and the condition of the exterior of the house. The property is severely blighted and is having a negative impact on the quality of life and property values of the neighbors, who are entitled to peaceful enjoyment of their properties.

Authorization to initiate legal action in Circuit Court to address the public nuisance this property represents is requested. Thank you for your consideration and your continued support for our efforts to remove public nuisances from the Township.



3/27/24 1



3/27/24 2











Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



**YPSILANTI
TOWNSHIP**
— WHERE YOUR FUTURE GROWS —

Trustees
John Newman II
Gloria Peterson
Debbie Swanson
Ryan Hunter

To: Charter Township of Ypsilanti Board of Trustees

From: Belinda Kingsley, Community Compliance Director

Re: **Request to receive authorization for Circuit Court litigation to abate a public nuisance at properties identified as 944 N River St; funded in account 101-729-801.023.**

Date: May 1, 2024

The Ypsilanti Township Ordinance Department has investigated a public nuisance, at 944 N River St, for which authorization is requested to engage legal services to abate said nuisance.

944 N River St



The property identified as 944 N River St is located north of Holmes Rd, south of W Clark Rd and west of N Prospect St, in an R-4 One-Family Residential zone. The current owner of the property is Shane Woodbring. It is unknown if he is able to reside in the house, based on the current condition.

The Ordinance Department has been responding to complaints regarding the property since 2022, when a tree fell on the house, causing extensive damage. The damaged areas have been covered with tarps that are disintegrating after two years of exposure to weather conditions. Additionally, other violations identified in the two Notices of Violation issued include:

- An open pit has been dug around the house.
- Two PODS in the front yard. These are only to be used for temporary storage.
- Multiple utility trailers stored in the front and back yards.
- Several disintegrating temporary structures.
- Hot tub stored in yard, covered with a tarp.
- Piles of wood, cement, tools and equipment scattered around the yard.
- Rodent harborage in overgrown weeds and brush.

The Building Dept was in contact with the property owner from 10/21/22 to 7/17/23 and performed a Pre-Permit Inspection. The property owner stated that no work was being done on the house, and that he was dealing with his insurance company. He also indicated that the open pit around the house was to repair the foundation, but there was no permit issued for that type of work, or any other work on the property. On several occasions the property owner has indicated that he would be submitting plans to renovate the house, but to date there have been no plans submitted.

The most recent complaint received states that the house has been vacant for over a year, the open “moat” is a danger, the lot is filled with tall weeds and the PODS and other items scattered on the property are unsightly. We agree, and despite our best efforts the property owner has continued to allow the property to remain in the condition shown in the attached photos.

The property is severely blighted and is having a negative impact on the quality of life and property values of the neighbors, who are entitled to peaceful enjoyment of their properties. Authorization to initiate legal action in Circuit Court to address the public nuisance this property represents is requested.

Thank you for your consideration and your continued support for our efforts to remove public nuisances from the Township.



Network: Mar 12, 2024 at 9:46:40 AM EDT
N 42° 15' 19.594", W 83° 36' 30.256"
943 N River St











Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



**YPSILANTI
TOWNSHIP**
— OFFICE OF THE SUPERVISOR —

Trustees
Ryan Hunter
John Newman II
Gloria Peterson
Debbie Swanson

MEMORANDUM

To: Charter Township of Ypsilanti Board of Trustees

From: Brenda Stumbo, Township Supervisor

Date: May 1, 2024

RE: Request to authorize the agreement with the Washtenaw County Road Commission (WCRC) for the installation of 4 (four) speed humps on Bradley Avenue in the amount of \$33,930, budgeted in line 101-446-982.000

The Supervisor's Office is requesting for the board authorize an agreement with the Washtenaw County Road Commission to install four speed humps on Bradley Avenue. Earlier this year, the Road Commission held a meeting seeking resident input on the possibility of closing Lakeview Avenue and placing speed bumps on Ide Avenue, which they believed would negate the reason for speed humps on Bradley. Due to the resident feedback, the service drive will remain open and speed humps will be placed on Bradley. Ide Ave is currently in the process of gathering signatures for the installation petition.

In order to qualify, 51% of residents on Bradley Avenue were in support of this speed hump installation. The cost is \$38,930 and is budgeted in line 101-446-982.000.

Attached please find an agreement, cost estimate, and proposed layout.

Thank you for your consideration.

**AGREEMENT BETWEEN
CHARTER TOWNSHIP OF YPSILANTI AND
THE WASHTENAW COUNTY ROAD COMMISSION**

THIS AGREEMENT, made and entered into this _____ day of _____, 2024 between the Board of the Charter Township of Ypsilanti (the "Township") and the Board of Washtenaw County Road Commissioners (the "Road Commission").

WHEREAS, the Charter Township of Ypsilanti desires to install four (4) speed humps on Bradley Avenue between Grove Road and Lakeview Avenue (the "Project"); and

WHEREAS, proper authority is provided to the parties of this Agreement under the provisions of Act 51 of Public Acts of 1951 as amended; and

WHEREAS, the Road Commission will prepare documents for the Project; and

WHEREAS, the Township shall promptly reimburse the Road Commission upon receipt of any invoices for all costs and expenses attributed to the Project;

THEREFORE, BE IT AGREED that the Township will pay the Road Commission for all actual costs incurred associated with the construction of the Project estimated to be \$38,930.00.

IT IS FURTHER UNDERSTOOD that the Charter Township of Ypsilanti will be a named insured on the Washtenaw County Road Commission's coverage for liability for the activities described above. The Road Commission will submit a certificate of insurance evidencing such coverage to the Township Clerk prior to implementation of services under the contract. Each party to this contract shall be responsible for the acts and omissions of its employees and agents.

AGREEMENT SUMMARY

Estimated Cost

Installation of four speed humps on Bradley Avenue **\$38,930.00**

FOR YPSILANTI TOWNSHIP:

Brenda L. Stumbo, Supervisor

Heather Jarrell Roe, Clerk

FOR WASHTENAW COUNTY ROAD COMMISSION:

Barbara R. Fuller, Chair

Matthew F. MacDonell, Managing Director

PRELIMINARY ENGINEER'S ESTIMATE

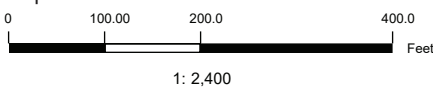
Project: Speed Humps Installation
 Location: Bradley Ave, Ypsilanti Twp
 Date: 04/29/2024



ITEM CODE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTES
	SPEED HUMP INSTALLATION	4	EA	\$5,820.00	\$23,280.00	<i>Contractor Install</i>
	PVMT MKGS INSTALLATION	4	EA	\$1,200.00	\$4,800.00	<i>Contractor Install</i>
	TRAFFIC SIGNS	8	EA	\$310.00	\$2,480.00	<i>WCRC Install</i>
				SUBTOTAL	\$30,560.00	
				CE/INCID 15%	\$6,370.00	<i>Eng./Inspect. Costs</i>
				CONST EST	\$36,930.00	
	TRAFFIC CONTROL		LS		\$2,000.00	<i>Contractor Cost</i>
				PROJECT TOTAL:	\$38,930.00	



 Proposed locations for speed humps



10/21/2022



NOTE: Parcels may not be to scale.

The information contained in this cadastral map is used to locate, identify and inventory parcels of land in Washtenaw County for appraisal and taxing purposes only and is not to be construed as a "survey description". The information is provided with the understanding that the conclusions drawn from such information are solely the responsibility of the user. Any assumption of legal status of this data is hereby disclaimed.

THIS MAP REPRESENTS PARCELS AT THE TIME OF PRINTING. THE OFFICIAL PARCEL TAX MAPS ARE MAINTAINED SOLELY BY THE WASHTENAW COUNTY EQUALIZATION DEPARTMENT AND CAN BE OBTAINED BY CONTACTING THAT OFFICE AT 734-222-6662.

Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



**YPSILANTI
TOWNSHIP**
— OFFICE OF THE SUPERVISOR —

Trustees
Ryan Hunter
John Newman II
Gloria Peterson
Debbie Swanson

MEMORANDUM

To: Charter Township of Ypsilanti Board of Trustees

From: Brenda Stumbo, Township Supervisor

Date: May 1, 2024

RE: Request to authorize the agreement with the Washtenaw County Road Commission (WCRC) for the installation of 9 (nine) speed humps on George Avenue and Smith Avenue in the amount of \$77,130, budgeted in line 101-446-982.000

The Supervisor's Office is requesting for the board authorize an agreement with the Washtenaw County Road Commission to install nine speed humps on George Avenue and Smith Avenue.

In order to qualify, 51% of residents on these streets were in support of this speed hump installation. The cost is \$77,130 and is budgeted in line 101-446-982.000.

Attached please find an agreement, cost estimate, and proposed layout.

Thank you for your consideration.

**AGREEMENT BETWEEN
CHARTER TOWNSHIP OF YPSILANTI AND
THE WASHTENAW COUNTY ROAD COMMISSION**

THIS AGREEMENT, made and entered into this _____ day of _____, 2024 between the Board of the Charter Township of Ypsilanti (the "Township") and the Board of Washtenaw County Road Commissioners (the "Road Commission").

WHEREAS, the Charter Township of Ypsilanti desires to install nine (9) speed humps on George Avenue and Smith Avenue (the "Project"); and

WHEREAS, proper authority is provided to the parties of this Agreement under the provisions of Act 51 of Public Acts of 1951 as amended; and

WHEREAS, the Road Commission will prepare documents for the Project; and

WHEREAS, the Township shall promptly reimburse the Road Commission upon receipt of any invoices for all costs and expenses attributed to the Project;

THEREFORE, BE IT AGREED that the Township will pay the Road Commission for all actual costs incurred associated with the construction of the Project estimated to be \$77,130.00.

IT IS FURTHER UNDERSTOOD that the Charter Township of Ypsilanti will be a named insured on the Washtenaw County Road Commission's coverage for liability for the activities described above. The Road Commission will submit a certificate of insurance evidencing such coverage to the Township Clerk prior to implementation of services under the contract. Each party to this contract shall be responsible for the acts and omissions of its employees and agents.

AGREEMENT SUMMARY

Estimated Cost

Installation of nine speed humps on George Avenue and Smith Avenue	\$77,130.00
---	--------------------

FOR YPSILANTI TOWNSHIP:

Brenda L. Stumbo, Supervisor

Heather Jarrell Roe, Clerk

FOR WASHTENAW COUNTY ROAD COMMISSION:

Barbara R. Fuller, Chair

Matthew F. MacDonell, Managing Director


PRELIMINARY ENGINEER'S ESTIMATE

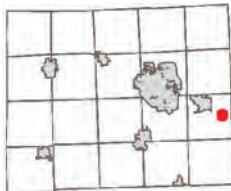
Project: Speed Humps Installation
 Location: George Avenue and Smith Avenue, Ypsilanti Twp
 Date: 04/29/2024



ITEM CODE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTES
	SPEED HUMP INSTALLATION	9	EA	\$5,820.00	\$52,380.00	<i>Contractor Install</i>
	PVMT MKGS INSTALLATION	9	EA	\$1,200.00	\$10,800.00	<i>Contractor Install</i>
	TRAFFIC SIGNS	18	EA	\$310.00	\$5,580.00	<i>WCRC Install</i>
				SUBTOTAL	\$68,760.00	
				CE/INCID 15%	\$6,370.00	<i>Eng./Inspect. Costs</i>
				CONST EST	\$75,130.00	
	TRAFFIC CONTROL		LS		\$2,000.00	<i>Contractor Cost</i>
				PROJECT TOTAL:	\$77,130.00	



 Proposed locations for speed humps



1: 3,600

11/14/2023



NOTE: Parcels may not be to scale.

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Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



**YPSILANTI
TOWNSHIP**
— OFFICE OF THE SUPERVISOR —

Trustees
Ryan Hunter
John Newman II
Gloria Peterson
Debbie Swanson

MEMORANDUM

To: Charter Township of Ypsilanti Board of Trustees

From: Brenda Stumbo, Township Supervisor

Date: May 2, 2024

RE: Request to appoint Juliann Trudell to fill the Civil Service Commission vacancy until 12/31/2024

The Civil Service Commission vacancy was posted for four weeks and there were two applicants. I would like to recommend Juliann Trudell as the new Civil Service Commissioner.

Thank you for your consideration.

CHARTER TOWNSHIP OF YPSILANTI

RESOLUTION NO. 2024-06

RESOLUTION REGARDING TEMPORARY ROAD CLOSURE

Resolution authorizing the temporary road closure of Merritt Road between Munger and Stoney Creek for runners to cross Merritt Road at Wiard's Orchard to enter Rolling Hills on Friday, July 19, 2024 from 6:30pm to 7:15pm for the Oberun 5K to benefit Huron Waterloo Pathways (Border to Border Trail).

WHEREAS, the Charter Township of Ypsilanti Board of Trustees has approved the temporary closure of Ypsilanti Township roads as indicated above; and

WHEREAS, the Driveways, Banners, and Parades Act 200 of 1969 requires the Township to authorize an official designated by resolution to make such request from the Road Commission.

NOW THEREFORE, BE IT RESOLVED that the Township of Ypsilanti Board of Trustees designates and agrees that Randal Step, owner R.F. Events be the authorized official designee in this instance, when application is made to the Washtenaw County Road Commission for this temporary road closure.

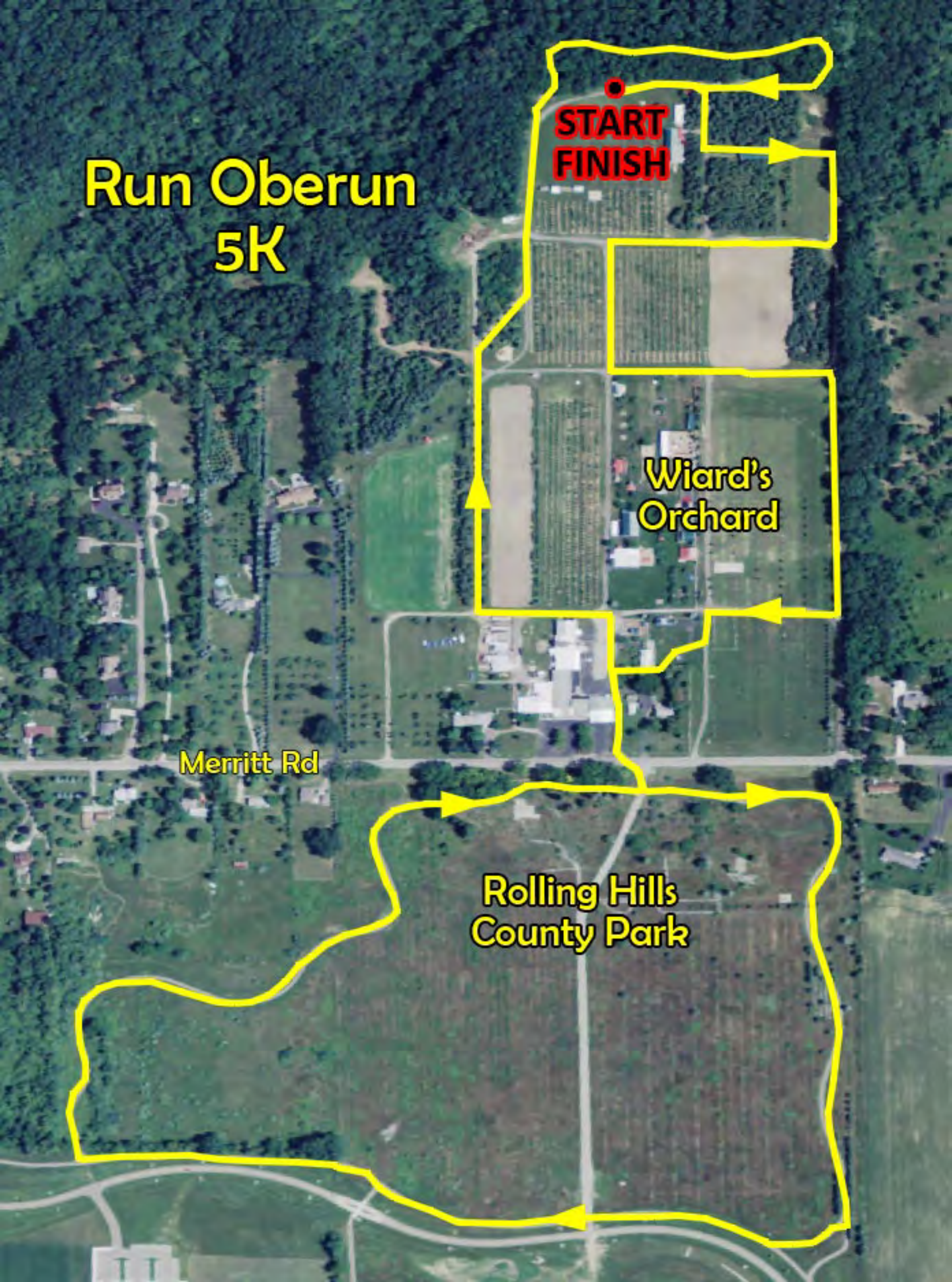
Run Oberun 5K

**START
FINISH**

**Wiard's
Orchard**

Merritt Rd

**Rolling Hills
County Park**




Oberun - Road Crossing Application 2024

mandy@rfevents.com <mandy@rfevents.com>

Mon 4/22/2024 10:32 AM

To: Lisa Stanfield <lstanfield@ypsitownship.org>; Heather Jarrell Roe <hjarrellroe@ypsitownship.org>

 1 attachments (260 KB)

Oberun5K.pdf;

You don't often get email from mandy@rfevents.com. [Learn why this is important](#)

Oberun - Road Crossing Application

Hi Lisa –

This is a request for the summer event: Oberun 5K on July 19.

This event has been able to donate more than \$30,000 to the Friends of the Border to Border Trail!

We are looking to get put on the list for Board approval at an upcoming Board Meeting.

This is our 6th year doing this event and have never had any issues.

We will be submitting our permit application to Wash Co. soon and they will need Ytown board approval.

Event: Oberun 5K

Date: Friday, July 19, 2024

Start/Finish & parking: Wiard's Orchard

Distances: 5k

Expected # of participants: 1,500

Map: Attached, the only road we go on is Merritt and this is only to cross from Wiard's Orchard to Rolling Hills.

Time Frame: 5K will start at 6:30pm. All runners will be across and back into Wiards by 7:15pm.

Runners on Road from 6:30pm – 7:15pm

The race benefits Huron Waterloo Pathways (Border to Border Trail)

There will be course marshals and police at the road crossing to ask traffic to hold until runners cross.

There will also be "Runners on Road" crossing signs to warn vehicles before they get to the runners.

Randal Step, owner of R.F. Events, as the official designee for this event

Please let me know what other information you need. Thank you for turning this around to WCRC for this event.

Thank you!

Mandy

Mandy Hetfield
RF Events
5700 Jackson Rd
Ann Arbor, MI 48103

CHARTER TOWNSHIP OF YPSILANTI

RESOLUTION NO. 2024-07

RESOLUTION REGARDING TEMPORARY ROAD CLOSURE

Resolution authorizing the temporary road closure of Merritt Road between Munger and Stoney Creek for runners to cross Merritt Road at Wiard's Orchard on Saturday, October 12, 2024 from 8:30am to 11:00am for the Run Scream Run 5K, 10K and Kid's Mile to benefit Washtenaw Promise.

WHEREAS, the Charter Township of Ypsilanti Board of Trustees has approved the temporary closure of Ypsilanti Township roads as indicated above; and

WHEREAS, the Driveways, Banners, and Parades Act 200 of 1969 requires the Township to authorize an official designated by resolution to make such request from the Road Commission.

NOW THEREFORE, BE IT RESOLVED that the Township of Ypsilanti Board of Trustees designates and agrees that Randal Step, owner R.F. Events be the authorized official designee in this instance, when application is made to the Washtenaw County Road Commission for this temporary road closure.

START/FINISH



Ward's Orchard

REGISTRATION

PARKING

STORE

Pedestrian Entrance

Rolling Hills County Park

MERRITT ROAD

FUTURE PARK DEVELOPMENT

MUNGER ROAD

500 feet

NO ENTRANCE

AID

Water Park (see detail map)

Family Pavilions

Entrance

Prairie Pavilion

Family Pavilions

Gatehouse

Disc Golf Course

Sunshine Pavilion

Woodlands Pavilion

SASSAFRASWOODS

"The Lodge" Park Headquarters

Shedding Hill

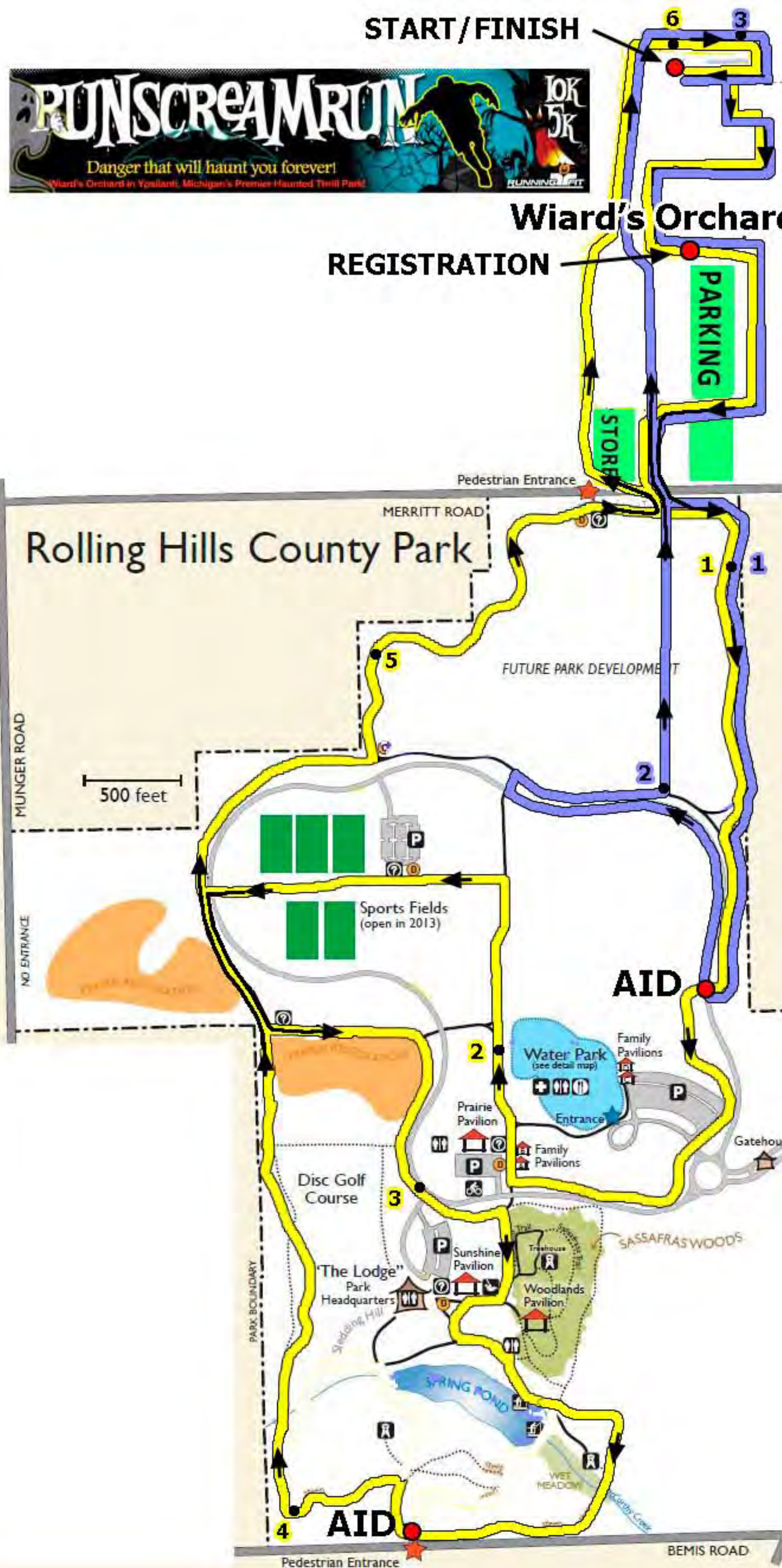
SPRING POND

WET MEADOW

AID

Pedestrian Entrance

BEMIS ROAD



2024 Run Scream Run - Road Crossing Application

mandy@rfevents.com <mandy@rfevents.com>

Wed 4/24/2024 3:32 PM

To: Lisa Stanfield <lstanfield@ypsitownship.org>

 1 attachments (144 KB)

5K-10K-Map.pdf;

You don't often get email from mandy@rfevents.com. [Learn why this is important](#)

Hi Lisa –

We are looking forward to another great event! Getting this to you early, hoping you can get approval for both events at the same time.

We are looking to get put on the list for Board approval in an upcoming meeting.

This is our 13th year doing this event and everything has always worked out great!

We will be submitting our permit application to Wash Co soon and they will need Ytown board approval.

Event: Run, Scream, Run

Date: Saturday, October 12, 2024

Start/Finish & parking: Wiard's Orchard

Distances: 5k/10k, Kid's Mile (1 Mile will not cross into Rolling Hills)

Expected # of participants: 1,500

Map: Attached, the only road we go on is Merritt and this is only to cross from Wiard's Orchard to Rolling Hills.

Time Frame: 5k/10k will start together at 8:30am first runners can be expected in Rolling Hills shortly after that. All races should be finished and packed up by 11:00am

The race will benefit local charity Washtenaw Promise.

There will be course marshals at the road crossing to ask traffic to hold until runners cross.

There will also be "Runners on Road" crossing signs to warn vehicles before they get to the runners.

Randal Step, owner of R.F. Events, as the official designee for this event

Please let me know what other information you need. Thank you for turning this around to WCRC for this event.

Thank you!

Mandy

Mandy Hetfield

RF Events
5700 Jackson Rd
Ann Arbor, MI 48103

**CHARTER TOWNSHIP OF YPSILANTI
2024 BUDGET AMENDMENT # 6**

May 7, 2024

AMOUNTS ROUNDED UP TO THE NEAREST DOLLAR

213 - BIKE, SIDEWALK, REC, ROADS FUND (BSRII)	Total Increase	<u><u>\$34,091.00</u></u>
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Request to carryforward the remaining \$34,091 encumbered for the Huron Bridge Project with MDOT. This will be funded by an appropriation of prior year fund balance.

Revenues:	Prior Year Fund Balance	213-000-699.999	\$34,091.00
			<u>\$34,091.00</u>
		Net Revenues	<u><u>\$34,091.00</u></u>
Expenditures:	Huron Bridge Pathway	213-901-986.010	\$34,091.00
			<u>\$34,091.00</u>
		Net Expenditures	<u><u>\$34,091.00</u></u>

206 - FIRE FUND	Total Increase	<u><u>\$0.00</u></u>
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Request to do a budget line transfer between cost center expenditures, from capital outlay to uniforms. There are funds budgeted in capital outlay fire stations that are available and are needed in the uniform line to purchase Class A dress jackets for all firefighters to represent the Township at special functions such as; funerals, township celebrations and other special events. This will not change the total budget in the fund.

Expenditures:	Capital outlay - Fire Stations	206-901-976.005	(\$20,000.00)
	Uniforms	206-336-741.001	\$20,000.00
			<u>\$0.00</u>
		Net Expenditures	<u><u>\$0.00</u></u>

216 - FIRE PENSION & OPEB MILLAGE FUND	Total Increase	<u><u>\$72,000.00</u></u>
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Request to budget for fire pension contribution. There is an excess amount available in fund balance. These funds are for a specific millage that can only used for fire pension and other pension employee benefits (OPEB). This will be funded by an appropriation of prior year fund balance.

Revenues:	Prior Year Fund Balance	216-000-699.999	\$72,000.00
			<u>\$72,000.00</u>
		Net Revenues	<u><u>\$72,000.00</u></u>
Expenditures:	Retirement Fire Dept pension	216-336-876.004	\$72,000.00
			<u>\$72,000.00</u>
		Net Expenditures	<u><u>\$72,000.00</u></u>

Motion to Amend the 2024 Budget (#6)

Move to increase the Bike, Sidewalk, Rec, Roads Fund (BSRII) budget by \$34,091 to \$4,296,036 and approve the department line item changes as outlined.

Move to complete a line transfer in the Fire Fund budget for a net result of zero and approve the department line item changes as outlined.

Move to increase the Fire Pension & OPEB Millage Fund budget by \$72,000 to \$1,557,154 and approve the department line item changes as outlined.

AUTHORIZATIONS AND BIDS



MEMORANDUM

To: Charter Township of Ypsilanti Board of Trustees

From: John Hines, Municipal Services Director

Date: April 30, 2024

RE: **Request Authorization to seek sealed bids for pathway and playground surface repairs at Burns Park and pathway renovation and playground replacement at West Willow Park as part of the American Rescue Plan Act (ARPA) projects funding.**

The Residential Services Department is requesting authorization to seek sealed bids for the repairs of the existing pathway and playground decking at Burns Park budgeted in GL #101-902-981.010 and the renovation of the pathway and replacement of the playground equipment and decking at West Willow Park that is budgeted in GL#101-902-981.150.

Spicer Group was approved by the board to provide professional engineering services for both approved ARPA projects at each park. Spicer and Township staff held public input meetings in November 2023 and mailed postcards to residents of each neighborhood to get input on improvements to best impact the community. Proposed RFP used the input received to craft plans for each park.

Burns Park, the bid package will focus on renovation on the existing path around the park. Due to weather, age and use over time, the path has shifted to be broken in places and uneven at spots. Also included is to remove the existing mulch and decking of the playground surfaces in the park and replace new, with updated borders and replacement of fresh mulch. This will alleviate a highlighted issue of weeds growing through that is a current playground deterrent.

West Willow Park renovations will plan for a complete playground area replacement. This will include the equipment, decking and barrier areas and replacement new mulch. The plans will also include pathway replacement with new limestone as a base bid and pavement of the path as an alternate.

Staff will return to the Board of Trustees to recommend and award the selection of a bidder.

Please find attached this memorandum the proposed construction documents and the bidding package as created by Spicer Group.

**CONTRACT DOCUMENTS
FOR
BURNS PARK AND WEST WILLOW PARK IMPROVEMENTS**

**YPSILANTI CHARTER TOWNSHIP
YPSILANTI, MICHIGAN**

Prepared By:
SPICER GROUP, INC.

MAY 2024

Plans Included

DP-xxxx-1-7

Project I.D. Number: 134586SG2023

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CHARTER TOWNSHIP OF YPSILANTI
YPSILANTI, MICHIGAN
BURNS PARK AND WEST WILLOW PARK IMPROVEMENTS

ADVERTISEMENT FOR BIDS

Sealed Bids for the **Burns Park and West Willow Park Improvements** will be received by CLERK'S OFFICE, Ypsilanti Township Civic Center, 7200 S. Huron River Dr., Ypsilanti MI., 48197, until **2:00 p.m.** local time on **June 11, 2024**.

The Project consists of removing and replacing existing HMA paths at Burns Park, removing and replacing play surface at Burns Park, removing and replacing playground equipment at West Willow Park, and removing and replacing existing gravel path at West Willow Park.

The Issuing Office for the Bidding Documents is: Spicer Group, Inc., 125 Helle Blvd., Suite 2, Dundee, MI 48131, Elsie Jorgensen, 269-252-6100, elsie.jorgensen@spicergroup.com. The contract documents for bidding purposes are available beginning May 21, 2024 on MITN Purchasing Group, Bidnetdirect.com; and Charter Township of Ypsilanti, 7200 Huron River Drive, Ypsilanti, MI 48197. **Bidders are encouraged to download plans from MITN at Bientedirect.com at no additional cost.** Neither Owner nor ENGINEER will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than the Issuing Office. Bidders should direct correspondence to ENGINEER.

For bidders choosing to pick up copies of bid documents, copies may be obtained on or after 12:00 PM, local time May 21, 2024 at the CLERK'S OFFICE, Ypsilanti Township Civic Center, 7200 S. Huron River Dr., Ypsilanti MI., 48197 for no fee.

Bid Security in the form of a Bid Bond for a sum no less than 5% of the amount of the Bid will be required with each Bid.

The OWNER reserves the right to accept any Bid, reject any Bid, or waive irregularities in Bids.

No Bid may be withdrawn for a period of 60 calendar days after the scheduled closing time for receipt of bids.

John Hines, Municipal Services Director
Charter Township of Ypsilanti

++ END OF ADVERTISEMENT FOR BIDS ++

Ypsilanti Charter Township
Clubview and Community Center Pickleball and Tennis Courts

Advertisement
C-111-1

INSTRUCTIONS TO BIDDERS

ARTICLE 1 – DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. *Issuing Office* – The office from which the Bidding Documents are to be issued.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within 3 days of Owner's request, Bidder shall submit (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:
- 3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

- 4.01 *Site and Other Areas*
- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.
- 4.02 *Existing Site Conditions*
- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
1. The Supplementary Conditions identify:
- a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.

- b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
 - 2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
 - 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
 - B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.
 - C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.
- 4.03 *Site Visit and Testing by Bidders*
- A. Bidder shall conduct the required Site visit during normal working hours, and shall not disturb any ongoing operations at the Site.
 - B. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
 - C. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
 - D. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.
- 4.04 *Owner's Safety Program*
- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER’S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
- E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder’s safety precautions and programs;
- F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

- 6.01 No pre-bid conference will be held for this project. Bidders are encouraged to visit the site prior to bidding on this project.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted via email only to Elsie Jorgensen at elsie.jorgensen@spicergroup.com. All email questions must be received by 5:00 P.M. on Wednesday, June 5, 2024. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received after 5:00 P.M. June 5, 2024 may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

ARTICLE 8 – BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

- 9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

- 10.01 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND "OR-EQUAL" ITEMS

- 11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows the

Contractor to request that Engineer authorize the use of a substitute or “or-equal” item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.

- 11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 12.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 12.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.
- 12.03 The apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of the Subcontractors or Suppliers.
- 12.04 If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.
- 12.05 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.

ARTICLE 13 – PREPARATION OF BID

- 13.01 The Bid Form is included with the Bidding Documents.
- A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
- B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.

- 13.03 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.04 A Bid by an individual shall show the Bidder's name and official address.
- 13.05 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.06 All names shall be printed in ink below the signatures.
- 13.07 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.08 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.09 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form..

ARTICLE 14 – BASIS OF BID

14.01 Base Bid with Alternates

- A. Bidders shall submit a Bid on a lump sum basis for the base Bid and include a separate price for each alternate described in the Bidding Documents and as provided for in the Bid Form. The price for each alternate will be the amount added to or deleted from the base Bid if Owner selects the alternate.
- B. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form.

14.02 *Unit Price*

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
- B. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

14.03 *Allowances*

- A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.

ARTICLE 15 – SUBMITTAL OF BID

- 15.01 With each copy of the Bidding Documents, a Bidder is furnished one Affidavit of Compliance – Iran Economic Sanctions Act (C210) This form must be signed, notarized and included with the submitted bid package.
- 15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation “BID ENCLOSED.” A mailed Bid shall be addressed to Ypsilanti Township Civic Center, 7200 S. Huron River Dr., Ypsilanti MI., 48197
- 15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

- 17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.

- 19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.
- 19.03 Evaluation of Bids
- A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
 - B. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.
- 19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 20 – BONDS AND INSURANCE

- 20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner’s requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 21 – SIGNING OF AGREEMENT

- 21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 22 – EQUAL EMPLOYMENT

- 22.01 Attention of Bidders is particularly called to the requirement for ensuring that employees and applicants for employment are not discriminated against on any illegal basis 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, partisan considerations, genetic information, or a disability that is unrelated to the individual’s ability to perform the duties of a particular job or position as required by Public Act 453 of 1976 (Elliot-Larsen Civil Rights Act), Public Act 220 of 1976 (Persons with Disabilities Act), as amended, and Executive Directive 2019-09.

ARTICLE 23 – BUILD AMERICA, BUY AMERICA (BABA)

- 23.01 Attention of Bidders is particularly called to the requirement for ensuring that all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States.” (Build America, Buy America Act, P.L. 117-58, Secs 70911 - 70917.

**BID FORM
FOR CONSTRUCTION CONTRACTS**

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

*Clerk's Office
Ypsilanti Township Civic Center
7200 S Huron River Dr
Ypsilanti, MI 48197*

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 45 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

If no addenda have been issued, insert "N/A". Bidder shall submit signed copies of the Addendum Acknowledgment receipt form issued with each addendum with the complete bid form.

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER’S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

Burns Park					
Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1.	Mobilization, Max 5%	Each	1		
2.	Pavement Removal	Sq Yd	420		
3.	Removal of Safety Surfacing	Sq Yd	540		
6.	Playground Curb	Lin Ft	442		
9.	Safety Surfacing	Sq Yd	420		
10.	Aggregate Base, 8 inch	Sq Yd	530		
11.	HMA, 13A	Ton	80		
12.	Sidewalk, 4 inch	Sq Ft	370		
13.	Restoration	Sq YD	3160		
14.	Soil Erosion and Sedimentation Control	Lum Sump	1		
Subtotal of Burns Park					\$

West Willow Park					
Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1.	Mobilization, Max 5%	Each	1		
2.	Removal of Safety Surfacing	Sq Yd	630		
3.	Removal of Play Equipment	Lump Sum	1		
4.	Relocate Existing Bench	Each	2		
5.	Playground Curb	Lin Ft	273		
6.	Gravel Walk	Sq Yd	1,310		
7.	Play Equipment, West Willow, Supply & Install	Lump Sum	1		
8.	Safety Surfacing	Sq Yd	630		
9.	Aggregate Base, 8 inch	Sq Yd	1,440		
10.	Restoration	Sq YD	2,000		
11.	Soil Erosion and Sedimentation Control	Lum Sump	1		
Subtotal of West Willow					\$
Total of Burns Park and West Willow Park Improvements					\$

ALTERNATE A – Pave 550' of Path at West Willow					
Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1.	Mobilization, Max 5%	Each	1		
2.	Removal of Safety Surfacing	Sq Yd	630		
3.	Removal of Play Equipment	Lump Sum	1		
4.	Relocate Existing Bench	Each	2		
5.	Playground Curb	Lin Ft	273		
6.	Gravel Walk	Sq Yd	700		
7.	Play Equipment, West Willow, Supply & Install	Lump Sum	1		
8.	Safety Surfacing	Sq Yd	630		
9.	Aggregate Base, 8 inch	Sq Yd	1440		
10.	HMA, 13A	Ton	100		
11.	Restoration	Sq YD	2,000		
12.	Soil Erosion and Sedimentation Control	Lum Sump	1		
Subtotal of Alternate A					\$

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete on or before **September 1, 2024** and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before **September 30, 2024**.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;
 - B. Affidavit of Compliance – Iran Economic Sanctions Act;

ARTICLE 8 – DEFINED TERMS

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:

[Signature] _____

[Printed name] _____

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

Bidder's License No.: _____

(where applicable)

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

NOTICE OF AWARD

Date of Issuance:

Owner:	Ypsilanti Charter Township	Owner's Contract No.:	
Engineer:	Spicer Group, Inc.	Engineer's Project No.:	134586SG2023
Project:	Burns Park and West Willow Park Improvements	Contract Name:	Burns Park and West Willow Park Improvements

Bidder:

Bidder's
Address:

TO BIDDER:

You are notified that Owner has accepted your Bid dated [_____] for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

Burns Park and West Willow Park Improvements

The Contract Price of the awarded Contract is: \$ _____ [note if subject to unit prices, or cost-plus]

[] unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically. [revise if multiple copies accompany the Notice of Award]

a set of the Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

1. Deliver to Owner [_____] counterparts of the Agreement, fully executed by Bidder.
2. Deliver with the executed Agreement(s) the Contract security [e.g., performance and payment bonds] and insurance documentation as specified in the Instructions to Bidders and General Conditions, Articles 2 and 6.
3. Other conditions precedent (if any):

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner:

Authorized Signature

Authorized Signature

By:

By:

Title:

Title:

Copy: Engineer

Ypsilanti Charter Township
Burns Park and West Willow Park Improvements

Notice of Award
C-510 - 1

AGREEMENT

THIS AGREEMENT is by and between Ypsilanti Charter Township (“Owner”) and _____ (“Contractor”).

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

ARTICLE 2 – THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Burns Park and West Willow Park Improvements.

ARTICLE 3 – ENGINEER

3.01 The Project has been designed by Spicer Group, Inc.

3.02 The Owner has retained Spicer Group, Inc. (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 *Time of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Dates*

A. The Work will be substantially completed on or before September 1, 2024 and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before September 30, 2024

4.03 *Liquidated Damages*

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. Substantial Completion: Contractor shall pay Owner \$600 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$600 for each day that expires after such time until the Work is completed and ready for final payment.
3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

4.04 *Special Damages*

- A. In addition to the amount provided for liquidated damages, Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.
- B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.

ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

- A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item):

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

- B. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 1st day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such

Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract
 - a. 90 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
 - B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 50 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

- 7.01 All amounts not paid when due shall bear interest at the rate of 0 percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
 - E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and

drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.

- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages 1 to 7, inclusive).
 - 2. Performance bond (pages 1 to 3, inclusive).
 - 3. Payment bond (pages 1 to 4, inclusive).
 - 4. Maintenance and Guarantee (pages 1 to 2, inclusive).
 - 5. General Conditions (pages 1 to 65, inclusive).
 - 6. Supplementary Conditions (pages 1 to 5, inclusive).
 - 7. Specifications as listed in the table of contents of the Project Manual.
 - 8. The Drawings are listed on the document title page.
 - 9. Addenda (numbers █ to █, inclusive).
 - 10. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages █ to █, inclusive).
 - 11. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).

- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 *Terms*

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 *Severability*

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 *Other Provisions*

A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or “track changes” (redline/strikeout), or in the Supplementary Conditions.

B. Equal Opportunity

Contractor shall 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, marital status, or because of a handicap that is unrelated to the person’s ability to perform the duties of a particular job or position.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

Ypsilanti Charter Township

By: _____

By: _____

Title: _____

Title: _____

Attest: _____

Attest: _____

Title: _____

Title: _____

Address for giving notices:

Address for giving notices:

7200 Huron River Drive

Ypsilanti, MI 48197

NOTICE TO PROCEED

Owner:	Ypsilanti Charter Township	Owner's Contract No.:	
Contractor:		Contractor's Project No.:	
Engineer:	Spicer Group, Inc.	Engineer's Project No.:	134586SG2023
Project:	Burns Park and West Willow Park Improvements	Contract Name:	Burns Park and West Willow Park Improvements
		Effective Date of Contract:	

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on _____, **2024**. *[see Paragraph 4.01 of the General Conditions]*

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, the date of Substantial Completion is **September 1, 2024**, and the date of readiness for final payment is **September 30, 2024**.

Owner: **Ypsilanti Charter Township**

By: _____
Authorized Signature

Title: _____

Date Issued: _____

By: _____
Authorized Signature

Title: _____

Date Issued: _____

Copy: Engineer

PERFORMANCE BOND

CONTRACTOR *(name and address):*

SURETY *(name and address of principal place of business):*

OWNER *(name and address):*
Ypsilanti Charter Township
7200 S Huron River Dr
Ypsilanti, MI 48197

CONSTRUCTION CONTRACT
Effective Date of the Agreement:
Amount:
Description *(name and location):*

BOND
Bond Number:
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract):*
Amount:
Modifications to this Bond Form: None See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal *(seal)*

Surety's Name and Corporate Seal *(seal)*

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

PAYMENT BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER *(name and address)*:

Ypsilanti Charter Township
7200 S Huron River Dr
Ypsilanti, MI 48197

CONSTRUCTION CONTRACT

Effective Date of the Agreement:
Amount:
Description *(name and location)*:

BOND

Bond Number:
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:
Amount:
Modifications to this Bond Form: None See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

(seal)
Contractor's Name and Corporate Seal

(seal)
Surety's Name and Corporate Seal

By: _____

Signature

By: _____

Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

Ypsilanti Charter Township
Burns Park and West Willow Park Improvements

Payment Bond
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- to the Surety (at the address described in Paragraph 13).
1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
 2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
 3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
 4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
 5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
 - 5.1 Claimants who do not have a direct contract with the Contractor,
 - 5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim
 6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
 7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2 Pay or arrange for payment of any undisputed amounts.
 - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
 8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
 9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
 10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments

to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

- 16.1 **Claim:** A written statement by the Claimant including at a minimum:
 1. The name of the Claimant;
 2. The name of the person for whom the labor was done, or materials or equipment furnished;
 3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;

4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:

MAINTENANCE AND GUARANTEE BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned, _____
_____ as Principal, and _____,

as Surety, are held and firmly bound onto Charter Township of Ypsilanti, OWNER,

in the sum of _____
_____ Dollars (\$ _____) to be paid to the Owner for which payment

will and truly be made jointly and severally bind ourselves, our heirs, our executors, administrators, and assigns, firmly by these presents.

Sealed with our signature and seals and dated this _____ day of _____, 20__.

WHEREAS, the above named Principal has entered into a certain written Contract with Charter Township of Ypsilanti dated _____, 20__, wherein the Principal agreed as follows:

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH that by and under said Contract, the above-named Principal has agreed with the OWNER, for a period of one (2) years from the date of payment of the final estimate, to keep in good order and repair and defect in all work done under said Contract, either by the Principal or his subcontractors, or his suppliers, that may develop during said period due to improper materials, defective equipment, workmanship or arrangements; any other work affected in making good such imperfections, shall also be made good, all without expense to the OWNER, excepting only such part or parts of said Work as may have been disturbed without the consent or approval of the Principal after final acceptance of the Work, and that whenever directed to do so by the OWNER, by notice served in writing, either personally or by mail, on the Principal, legal representative, successor, or on the Surety, he/she will at once make such repairs as directed by the OWNER; and in case of failure to do so within one (1) week from the date of service of such notice, or within a reasonable time as shall be fixed in said notice, then the OWNER shall have the right to purchase such materials and employ such labor and equipment as may be necessary for the purpose and to undertake to 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 OWNER may take immediate steps to repair or barricade such defects without notice to the CONTRACTOR. In such accounting the OWNER shall not be held to obtain the lowest figure for doing of the Work or nay part thereof, but all sums actually paid therefore shall be charged to the Principal or Surety. In this connection, the judgement of the OWNER is final and conclusive. If the said Principal, for a period of one (2) years from the date of the final estimate of payment, shall keep such Work so constructed under the Contact in good order and repair, excepting only such part or parts of such Work as may have been disturbed without the consent or approval of said Principal after final acceptance of the same, and shall, whenever notice is given as herein specified, at once proceed to make repair as in said notice directed or shall reimburse the OWNER for any expense incurred by making such repairs should the Principal or Surety fail to do as hereinbefore specified, and shall fully indemnify, defend and hold harmless said OWNER from all law suits and actions for damages of every name and description brought or claimed against it for or on account of any injury to person(s) or property received or sustained by any party or parties, by or from any of the acts or omissions or through the prosecution of the Work included in said Contract, and from any and all claims arising under the Workman's Compensation Act, so-called, of the State of Michigan, then the above obligation shall be void, otherwise to remain in full force and effect.

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

Signed, Sealed and Delivered
in the presence of:

Signature

Signature

Name

Name

Principal

Signature

Signature

Name

Name

Surety

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner: Ypsilanti Charter Township	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer: Spicer Group, Inc.	Engineer's Project No.: 133251SG2022
Project: Burns Park and West Willow Park Improvements	Contract Name: Burns Park and West Willow Park Improvements

This [preliminary] [final] Certificate of Substantial Completion applies to:

- All Work The following specified portions of the Work:

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows: *[Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]*

Amendments to Owner's responsibilities: None
 As follows

Amendments to Contractor's responsibilities: None
 As follows:

The following documents are attached to and made a part of this Certificate: *[punch list; others]*

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

EXECUTED BY ENGINEER:		RECEIVED:		RECEIVED:	
By: _____	By: _____	By: _____	By: _____	By: _____	By: _____
(Authorized signature)	Owner (Authorized Signature)	Owner (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)	Contractor (Authorized Signature)
Title: _____	Title: _____	Title: _____	Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____	Date: _____	Date: _____	Date: _____

**STANDARD GENERAL CONDITIONS OF THE
CONSTRUCTION CONTRACT**

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.
 11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material

of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.

28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.
35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.

42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 *Terminology*

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives*:
 1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

- C. *Day*:
 - 1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective*:
 - 1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
- E. *Furnish, Install, Perform, Provide*:
 - 1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 - 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

- A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 *Reference Standards*

- A. Standards Specifications, Codes, Laws and Regulations
 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the

performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies:*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and

binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.

- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. abnormal weather conditions;
 - 3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 - 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

**ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS;
HAZARDOUS ENVIRONMENTAL CONDITIONS**

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

- A. *Limitation on Use of Site and Other Areas:*
 - 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 - 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
 1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
 2. is of such a nature as to require a change in the Drawings or Specifications; or
 3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
 1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or

- c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
 - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
 - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.
- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility,

indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.

E. *Possible Price and Times Adjustments:*

1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
2. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to

be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.

- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.

- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 *Contractor's Insurance*

- A. *Workers' Compensation:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
 - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
 - 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).
 - 4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
 - 1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 - 2. claims for damages insured by reasonably available personal injury liability coverage.
 - 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
 - 1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 - 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 - 3. Broad form property damage coverage.
 - 4. Severability of interest.
 - 5. Underground, explosion, and collapse coverage.
 - 6. Personal injury coverage.
 - 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
 - 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.

- D. *Automobile liability*: Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. *Umbrella or excess liability*: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Contractor's pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.
- G. *Additional insureds*: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
 - 1. include at least the specific coverages provided in this Article.
 - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
 - 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
 - 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
 - 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed

by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.

- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - 1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
 - 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
 - 4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).

5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
 6. extend to cover damage or loss to insured property while in transit.
 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
 10. not include a co-insurance clause.
 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
 12. include performance/hot testing and start-up.
 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and

the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.

- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
 - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 Receipt and Application of Property Insurance Proceeds

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.

- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES

7.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner’s written consent, which will not be unreasonably withheld.

7.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.04 *“Or Equals”*

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or “or equal” item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.

1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an “or equal” item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor’s Expense:* Contractor shall provide all data in support of any proposed “or equal” item at Contractor’s expense.
- C. *Engineer’s Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each “or-equal” request. Engineer may require Contractor to furnish additional data about the proposed “or-equal” item. Engineer will be the sole judge of acceptability. No “or-equal” item will be ordered, furnished, installed, or utilized until Engineer’s review is complete and Engineer determines that the proposed item is an “or-equal”, which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer’s Determination:* Neither approval nor denial of an “or-equal” request shall result in any change in Contract Price. The Engineer’s denial of an “or-equal” request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 *Substitutes*

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.

2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.

- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- O. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute

resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

7.09 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements:*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

1. *Shop Drawings:*

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

2. *Samples:*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. *Engineer's Review:*
 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
 5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
 7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.
- E. *Resubmittal Procedures:*
 1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 1. observations by Engineer;
 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. use or occupancy of the Work or any part thereof by Owner;
 5. any review and approval of a Shop Drawing or Sample submittal;
 6. the issuance of a notice of acceptability by Engineer;
 7. any inspection, test, or approval by others; or
 8. any correction of defective Work by Owner.
- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any

such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.

- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an

equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.
- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

- 9.04 *Pay When Due*
- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.
- 9.05 *Lands and Easements; Reports, Tests, and Drawings*
- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 9.06 *Insurance*
- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.
- 9.07 *Change Orders*
- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.
- 9.08 *Inspections, Tests, and Approvals*
- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.
- 9.09 *Limitations on Owner's Responsibilities*
- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- 9.10 *Undisclosed Hazardous Environmental Condition*
- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.
- 9.11 *Evidence of Financial Arrangements*
- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).
- 9.12 *Safety Programs*
- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

- 10.01 *Owner's Representative*
- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will

not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. *Change Orders:*
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.

2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.
3. *Field Orders:* Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).
- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the

Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12 – CLAIMS

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.

- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 - 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
 - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
 - 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns

from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

- C. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee:* When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances:* Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance:* Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.

- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.
- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs,

losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
 - 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications:*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.

6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- D. *Payment Becomes Due:*
1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.
- E. *Reductions in Payment by Owner:*
1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;

1. there are other items entitling Owner to a set off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

- A. *Application for Payment:*
 - 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- D. *Payment Becomes Due:* Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special

guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.

- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas;
 - 2. correct such defective Work;
 - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension.

Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or

3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

Supplementary Conditions

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-700 (2013 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

SC-5.03 *Subsurface and Physical Conditions*

SC-5.03 Delete Paragraphs 5.03.A and 5.03.B in their entirety and insert the following:

- A. No reports of exploration or test of subsurface conditions at or adjacent to the Site, or drawings of physical conditions relating to existing surface or subsurface structures at the Site, are known to the Owner.**

SC-5.06 *Hazardous Environmental Conditions*

SC 5.06 Delete Paragraphs 5.06.A and 5.06.B in their entirety and insert the following:

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.**
- B. Not Used.**

ARTICLE 6 – BONDS AND INSURANCE

SC-6.03 *Contractor's Liability Insurance*

SC 6.03 Add the following new paragraph immediately after Paragraph 6.03.J:

K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

- 1. Workers' Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:**

\$1,000,000.00 limit each accident

- 2. Contractor's Commercial General Liability under Paragraphs 6.03.B and 6.03.C of the General Conditions:**

Combined single limit of \$1,000,000.00 each occurrence for bodily injury 7 property damage. Must include 60 day written notice for change of coverate, cancellation, or non-renewal of coverate. Must name "The Charter Township of Ypsilanti and its past, present, and future elected officials shall be named as "additional named insured" on the general liability policy with respect to the services provided under this contract" – Occurrence basis.

3. Automobile Liability under Paragraph 6.03.D of the General Conditions:

Covers owned, hired, and non-owned vehicles with personal protection insurance and property protection. Includes residual liability insurance with a combined single limit of \$1,000,000.00 each accident for bodily injury and property damage.

4. Owner's Protective Liability

Combined single limit of \$1,000,000.00 each occurrence for bodily injury & property damage.

5. Builder's Risk

Option. May be used to cover everything.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

SC-7.02 Labor; Working Hours

SC-7.02.B. Add the following new subparagraphs immediately after Paragraph 7.02.B:

1. Regular working hours will be 7 A.M to 7 P.M.
2. Owner's legal holidays shall be defined as U.S. Federal Holidays.

SC-7.02.B. Amend the first and second sentences of Paragraph 7.02.B to state "...all Work at the Site shall be performed during regular working hours, Monday through Saturday. Contractor will not perform Work on a Sunday or any legal holiday."

SC-7.08 Permits

SC 7.08 Add the following new subparagraphs immediately after Paragraph 7.08.A:

- B. A Soil Erosion and Sedimentation Control (SESC) Permit is not required since the Owner is an Authorized Public Agency (APA). However, the Contractor will need to construct the project in accordance with SESC measure as described in the bidding plans and specifications.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

SC-10.03 Project Representative

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.A:

- B. The Resident Project Representative (RPR) will be Engineer's representative at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions.
 1. General: RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner only with the knowledge of and under the direction of Engineer.
 2. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and Schedule of Values prepared by Contractor and consult with Engineer concerning acceptability.
 3. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other

Project-related meetings, and prepare and circulate copies of minutes thereof.

- 4. Liaison:**
 - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.**
 - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.**
 - c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.**
- 5. Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.**
- 6. Shop Drawings and Samples:**
 - a. Record date of receipt of Samples and Contractor-approved Shop Drawings.**
 - b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.**
 - c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by Engineer.**
- 7. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, if any, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.**
- 8. Review of Work and Rejection of Defective Work:**
 - a. Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.**
 - b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress is defective, will not produce a completed Project that conforms generally to the Contract Documents, or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.**
- 9. Inspections, Tests, and System Start-ups:**
 - a. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.**

- b. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.

10. Records:

- a. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, deliveries of equipment or materials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.
- b. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
- c. Maintain records for use in preparing Project documentation.

11. Reports:

- a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the Progress Schedule and schedule of Shop Drawing and Sample submittals.
- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, force majeure or delay events, damage to property by fire or other causes, or the discovery of any Constituent of Concern or Hazardous Environmental Condition.

- 12. Payment Requests:** Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

- 13. Certificates, Operation and Maintenance Manuals:** During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

14. Completion:

- a. Participate in Engineer's visits to the Site to determine Substantial Completion, assist in the determination of Substantial Completion and the preparation of a punch list of items to be completed or corrected.
- b. Participate in Engineer's final visit to the Site to determine completion of the Work, in the company of Owner and Contractor, and prepare a final punch list of items to be completed and deficiencies to be remedied.

- c. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the notice of acceptability of the work.

C. The RPR shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including “or-equal” items).
2. Exceed limitations of Engineer’s authority as set forth in the Contract Documents.
3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor’s work.
5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

SC-13.01 Cost of the Work

SC-13.01 Add the following to the end of Paragraph 13.01.B.1:

Contractor is required to observe and abide by The Charter Township of Ypsilanti’s Prevailing Wage and Living Wage requirements. The relevant Township ordinances, as well as the relevant Prevailing Wage Decision are included in the Bidding Documents.

Work Change Directive No.

Date of Issuance: _____ Effective Date: _____
Owner: Ypsilanti Charter Township Owner's Contract No.: _____
Contractor: _____ Contractor's Project No.: _____
Engineer: Spicer Group, Inc. Engineer's Project No.: 134586SG2023
Project: Burns Park and West Willow Park Contract Name: Burns Park and
Improvements West Willow Park Improvements

Contractor is directed to proceed promptly with the following change(s):
Description:

Attachments: *[List documents supporting change]*

Purpose for Work Change Directive:

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

- Non-agreement on pricing of proposed change.
- Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price \$ _____ [increase] [decrease].
Contract Time _____ days [increase] [decrease].

Basis of estimated change in Contract Price:

- Lump Sum Unit Price
- Cost of the Work Other

RECOMMENDED:	AUTHORIZED BY:	RECEIVED:
By: _____ Engineer (Authorized Signature)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

Approved by Funding Agency (if applicable)

By: _____ Date: _____
Title: _____

Change Order No. _____

Date of Issuance: _____ Effective Date: _____
Owner: Ypsilanti Charter Township Owner's Contract No.: _____
Contractor: _____ Contractor's Project No.: _____
Engineer: Spicer Group, Inc. Engineer's Project No.: 134586SG2023
Project: Burns Park and West Willow Park Improvements Contract Name: Burns
Park and West Willow
Park Improvements

The Contract is modified as follows upon execution of this Change Order:

Description:

Attachments: *[List documents supporting change]*

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$ _____	Original Contract Times: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: \$ _____	[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: Substantial Completion: _____ Ready for Final Payment: _____ days
Contract Price prior to this Change Order: \$ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] of this Change Order: \$ _____	[Increase] [Decrease] of this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
Contract Price incorporating this Change Order: \$ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for Final Payment: _____ days or dates

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____ Engineer (if required)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

Approved by Funding Agency (if applicable)

By: _____ Date: _____
Title: _____

SECTION 01 10 00

SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Contract description.
 - 2. Contractor's use of Site.
 - 3. Permits.
 - 4. Specification conventions.

1.2 CONTRACT DESCRIPTION

- A. Work of the Project includes demolition of an approximately 120' x 120' and 120' x 180' tennis court playing surface, construction of a new 120' x 120' and 120' x 180' tennis and pickleball multi-use playing surface, salvaging fencing, and restoration.
- B. The Work of the Project includes removal and replacement of approximately 528' long HMA path at Burns Park, removal and replacement 420 sqyd of fiber mulch under playground at Burns Park, removal and replacement of playground equipment at West Willow Park, and regrading of gravel walking path at West Willow Park.
- C. Perform Work of Contract under stipulated sum Contract with Owner according to Conditions of Contract.

1.3 CONTRACTOR'S USE OF SITE

- A. Access to Site: Contractor may, at their own cost, close the park or portions of the park to public. Contractor is responsible for safety and security of the site. Contractor must allow safe and reasonable access to the Owner or Owner's representative.
- B. Time Restrictions for Performing Work: as described in General and Supplemental Conditions.
- C. Construction Plan: Before start of construction, submit by email an electronic file in PDF format of construction plan regarding access to Work, use of Site, and utility outages for acceptance by Owner. After acceptance of plan, construction operations shall comply with accepted plan unless deviations are accepted by Owner in writing.

1.4 PERMITS

- A. Furnish any necessary permits for construction of Work and delivery of materials.

1.5 SPECIFICATION CONVENTIONS

- A. These Specifications are written in imperative mood and streamlined form. This imperative language is directed to Contractor unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 10 00

SECTION 01 20 00

PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Application for Payment.
- B. Change procedures.
- C. Defect assessment.
- D. Unit prices.

1.2 APPLICATION FOR PAYMENT

- A. Submit via email electronic file in PDF format of each Application for Payment on EJCDC C-620 - Contractor's Application for Payment.
- B. Content and Format: Use Schedule of Values for listing items in Application for Payment.
- C. Submit updated construction schedule with each Application for Payment.
- D. Payment Period: Submit at intervals stipulated in the Agreement.
- E. Submit submittals with transmittal letter as specified in Section 01 33 00 - Submittal Procedures.
- F. Substantiating Data: When Engineer requires substantiating information, submit data justifying dollar amounts in question. Include the following with Application for Payment:
 - 1. Partial release of liens from major Subcontractors and vendors.
 - 2. Affidavits attesting to off-Site stored products.
 - 3. Construction Progress Schedule, revised and current as specified in Section 01 33 00 - Submittal Procedures.

1.3 CHANGE PROCEDURES

- A. Submittals: Submit name of individual who is authorized to receive change documents and is responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. Carefully study and compare Contract Documents before proceeding with fabrication and installation of Work. Promptly advise Engineer of any error, inconsistency, omission, or apparent discrepancy.

- C. Requests for Interpretation (RFI) and Clarifications: Allot time in construction scheduling for liaison with Engineer; establish procedures for handling queries and clarifications.
 - 1. Use CSI Form 13.2A - Request for Interpretation for requesting interpretations.
 - 2. Engineer may respond with a direct answer on the Request for Interpretation form,, EJCDC C-942 - Field Order, or CSI Form 13/6A - Change Order Request (Proposal).
- D. Engineer will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions on EJCDC C-942.
- E. Engineer may issue CSI Form 13/6A including a detailed description of proposed change with supplementary or revised Drawings and Specifications, a change in Contract Time for executing the change with stipulation of overtime work required and with the period of time during which the requested price will be considered valid. Contractor will prepare and submit estimate within 5 days.
- F. Document requested substitutions according to Section 01 25 00 - Substitution Procedures.
- G. Unit Price Change Order: For Contract unit prices and quantities, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of that which are not predetermined, execute Work under Work Directive Change. Changes in Contract Sum/Price or Contract Time will be computed as specified for Force Account Change Order.
- H. Work Directive Change: Engineer may issue directive, on EJCDC C-940 - Work Change Directive signed by Owner, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- I. Force Account Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract. Engineer will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
- J. Maintain detailed records of Work done on force account basis. Provide full information required for evaluation of proposed changes and to substantiate costs for changes in the Work.
- K. Document each quotation for change in Project Cost or Time with sufficient data to allow evaluation of quotation.
- L. Change Order Forms: EJCDC C-941 - Change Order.
- M. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- N. Correlation of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise Progress Schedules to reflect change in Contract Time, revise subschedules to adjust times for other items of Work affected by the change, and resubmit.
 - 3. Promptly enter changes in Record Documents.

1.4 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of Engineer, it is not practical to remove and replace the Work, Engineer will direct appropriate remedy or adjust payment.
- C. The defective Work may remain, but unit sum/price will be adjusted to new sum/price at discretion of Engineer.
- D. Defective Work will be partially repaired according to instructions of Engineer, and unit sum/price will be adjusted to new sum/price at discretion of Engineer.
- E. Individual Specification Sections may modify these options or may identify specific formula or percentage sum/price reduction.
- F. Authority of Engineer to assess defects and identify payment adjustments is final.
- G. Nonpayment for Rejected Products: Payment will not be made for rejected products for any of the following reasons:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from transporting vehicle.
 - 4. Products placed beyond lines and levels of the required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected products.

1.5 UNIT PRICES

- A. Authority: Measurement methods are delineated in **1.2 Measurement and Payment section.**
- B. Take measurements and compute quantities. Engineer will verify measurements and quantities.
- C. Unit Quantities: Quantities and measurements indicated on Bid Form are for Contract purposes only. Actual quantities provided shall determine payment.
 - 1. When actual Work requires more or fewer quantities than those quantities indicated, provide required quantities at contracted unit sum/prices.
 - 2. When actual Work requires 25 percent or greater change in quantity than those quantities indicated, Owner or Contractor may claim a Contract Price adjustment.
- D. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application, or installation of item of the Work; overhead and profit.
- E. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.
- F. Measurement of Quantities:

1. Weigh Scales: Inspected, tested, and certified by applicable State weights and measures department within past year.
2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
3. Metering Devices: Inspected, tested, and certified by applicable State department within past year.
4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel, or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
5. Measurement by Volume: Measured by cubic dimension using mean length, width, and height or thickness.
6. Measurement by Area: Measured by square dimension using mean length and width or radius.
7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 20 00

SECTION 01 22 20

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SCOPE

1. This section describes the method of measurement and basis of payment for all items of the work included in the Contract and indicated in the Bid Proposal. Provide all labor, material, tools, equipment, and services required to complete the Work included in the Contract Documents. Items described in the Specifications and indicated on the Drawings, but not shown in this specification section, are considered incidental to the Project.
2. Each bid item on the bid form includes all work items required to construct the work as shown on the drawings and indicated in the specifications, including those items not specifically stated below in this section.
3. From time to time, Contractors may receive written authorization to perform additions to or deletions from the Work, on a Unit Rate Price basis; the costs of Changes shall be calculated in accordance with the Unit Rate Pricing or "Add/Deduct" indicated on this Bid Form.

Unless otherwise noted, each Unit Rate Price includes all direct and indirect costs for labor, equipment, transportation, testing services, general work expenses, applicable taxes, overhead, and other costs required to complete the work.

- a) The all-inclusive Unit Rate Prices are fixed for the duration of this Contract, and not subject to escalation.
- b) The Unit Rate Prices shall include all Work the Contractor is required to perform without regard to the quantities involved, difficulty in performing the Work, materials or equipment required, and specific handling of materials and equipment.
- c) All Unit Rate Prices shall apply at 100% of their value for both additions and deletions to the Scope of Work, unless mutually agreed to otherwise in accordance with the Contract Documents.

1.2 UNIT PRICE – MEASUREMENT AND PAYMENT

1. Section 01 20 00 – Price and Payment Procedures Contract Sum/Price.
2. Pavement Removal
 - a) Basis of Measurement: By the unit price bid per square yard as stated in the proposal.
 - b) Basis of Payment: Includes all associated labor, material, and equipment for saw cutting, removal, and disposal of asphalt pavement.
3. Removal of Safety Surfacing
 - a) Basis of Measurement: By the unit price bid per square yard as stated in the proposal.
 - b) Basis of Payment: Installs all the associated labor, material, and equipment for complete removal of existing fiber mulch and wear mats including all excavation required to prepare area for installation of new safety surface.

4. Removal of Playground Equipment
 - a) Basis of Measurement: By the unit price bid per lump sum as stated in the proposal.
 - b) Basis of Payment: Includes all associated labor, materials, and equipment required to remove and dispose of existing playground equipment at West Willow Neighborhood Park.

5. Relocate Existing Bench
 - a) Basis of Measurement: By the unit price per each as stated in the proposal.
 - b) Basis of Payment: Includes all associated labor, materials, and equipment needed to relocated existing benches, including excavation for concrete posts. Existing benches are to be reused and mounted beneath the surface.

6. Playground Curb
 - a) Basis of Measurement: By the unit price per linear foot as stated in the proposal.
 - b) Basis of Payment: Included all associated labor, materials, and equipment needed to install curb around play area. This includes required excavation, granular base.

7. Gravel Walk
 - a) Basis of Measurement: By the unit price of square yard as stated in the proposal.
 - b) Basis of Payment: Includes all associated labor, material, equipment, supplying to the site, preparing the base, placing, and compacting with the plan details for installation of 2" gravel fines.

8. Play Equipment, West Willow, Supply & Installation
 - a) Basis of Measurement: By the unit price of lump sum as stated in the proposal.
 - b) Basis of Payment: Includes all associated labor, material, and equipment required for a complete installation of play equipment as laid out in the plan details.

9. Safety Surfacing
 - a) Basis of Measurement: By the unit price of square yard as stated in the proposal.
 - b) Basis of Payment: Includes associated all labor, materials, and equipment needed to install safety surfacing including engineered wood fiber, wear pads, geotextile fiber, and peastone as needed.

10. Aggregate Base, _ inch:
 - a) Basis of Measurement: at the unit price per square yard as stated in the proposal.
 - b) Basis of Payment: Includes all associated labor, material, and equipment for providing, hauling, placing, compacting, and shaping the material, and providing water for compaction.

11. HMA, __:
 - a) Basis of Measurement: At the unit price per ton as stated in the proposal.
 - b) Basis of Payment: Includes all associated labor, material, equipment, saw cutting, mix design, supplying to site, preparing base, testing, tack coating surfaces, placing, compacting, and rolling in accordance with the plan details for a complete installation.

12. Sidewalk, _ inch:
 - a) Basis od Measurement: At the unit price per square foot as stated in the proposal.
 - b) Basis of Payment: Includes all associated labor, material, equipment needed to install sidewalk, including granular base material at depth specified on plans.

13. Restoration:
 - a) Basis of Measurement: By the unit price bid per square yard as stated in the proposal.
 - b) Basis of Payment: Includes all excavation, labor, materials, fertilizer, mulch, landscape, grading, topsoil, subsoil, seeding, watering, and maintenance to provide uniform grass growth and any re-seeding and erosion repair to provide for a uniform growth at the completion of the project.

14. Soil Erosion and Sedimentation Control
 - a) Basis of Measurement: Included in the lump sum price bid as stated in the Proposal.
 - b) Basis of Payment: Includes all associated labor, material, and equipment, permit fees, etc. required for soil erosion prevention and sedimentation control required for this project. Additional control measures shall be employed as required by site conditions and applicable enforcing agency having project jurisdiction at no additional cost.

15. Mobilization, Max 5%
 - a) Basis of Measurement: Included in the lump sum price bid as stated in the proposal.
 - b) Basis of Payment: This work consists of preparatory work and operations including, but not limited to, the following:
 - a. The movement of personnel, equipment, supplies, and incidental to the project site
 - b. Establishment of the contractor's offices, buildings, and other facilities to support work on the project including associated job sites posters.
 - c. Other work and operations the contractor must perform.
 - d. Expenses incurred, before beginning work on pay items at the project site.
 - e. Pre-construction costs, exclusive of bidding costs, that are necessary direct costs to the project rather than directly attributable to other pay items under contract.
 - f. Payment shall be in accordance with MDOT Standard Specifications of Construction Table 150-1.

END OF SECTION 01 22 20

SECTION 01 25 00
SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Quality assurance.
- B. Product options.
- C. Product substitution procedures.

1.2 QUALITY ASSURANCE

- A. Contract is based on products and standards established in Contract Documents without consideration of proposed substitutions.
- B. Products specified define standard of quality, type, function, dimension, appearance, and performance required.
- C. Substitution Proposals: Permitted for specified products except where specified otherwise. Do not substitute products unless substitution has been accepted and approved in writing by Owner.

1.3 PRODUCT OPTIONS

- A. See Section 01 60 00 - Product Requirements.

1.4 PRODUCT SUBSTITUTION PROCEDURES

- A. Engineer will consider requests for substitutions only within 15 days after date of Owner-Contractor Agreement.
- B. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.
- C. Document each request with complete data, substantiating compliance of proposed substitution with Contract Documents, including:
 - 1. Manufacturer's name and address, product, trade name, model, or catalog number, performance and test data, and reference standards.
 - 2. Itemized point-by-point comparison of proposed substitution with specified product, listing variations in quality, performance, and other pertinent characteristics.
 - 3. Reference to Article and Paragraph numbers in Specification Section.

4. Cost data comparing proposed substitution with specified product and amount of net change to Contract Sum.
5. Changes required in other Work.
6. Availability of maintenance service and source of replacement parts as applicable.
7. Certified test data to show compliance with performance characteristics specified.
8. Samples when applicable or requested.
9. Other information as necessary to assist Engineer's evaluation.

D. A request constitutes a representation that Contractor:

1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
2. Will provide same warranty for substitution as for specified product.
3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
4. Waives claims for additional costs or time extension that may subsequently become apparent.
5. Will coordinate installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.
6. Will reimburse Owner for review or redesign services associated with reapproval by authorities having jurisdiction.

E. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals without separate written request or when acceptance will require revision to Contract Documents.

F. Substitution Submittal Procedure:

1. Submit requests for substitutions on CSI Form 13.1A Substitution Request-After the Bidding/Negotiating Stage.
2. Submit, via email, a file in PDF format of Request for Substitution for consideration. Limit each request to one proposed substitution.
3. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
4. Engineer will notify Contractor in writing of decision to accept or reject request.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 25 00

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Coordination and Project conditions.
- B. Preconstruction meeting.
- C. Progress meetings.
- D. Closeout meeting.

1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of various Sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Verify that utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate Work of various Sections having interdependent responsibilities for installing, connecting to, and placing operating equipment in service.
- C. Coordination Meetings: In addition to other meetings specified in this Section, hold coordination meetings with personnel and Subcontractors to ensure coordination of Work.
- D. Coordinate completion and clean-up of Work of separate Sections in preparation for Substantial Completion.
- E. After Owner's occupancy of premises, coordinate access to Site for correction of defective Work and Work not complying with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRECONSTRUCTION MEETING

- A. Engineer will schedule and preside over meeting after Notice of Award.
- B. Attendance Required: Engineer, Owner, major Subcontractors, and Contractor.
- C. Minimum Agenda:
 - 1. Submission of executed bonds and insurance certificates.
 - 2. Distribution of Contract Documents.
 - 3. Submission of list of Subcontractors, list of products, schedule of values, and Progress Schedule.
 - 4. Designation of personnel representing parties in Contract and Engineer.

5. Communication procedures.
6. Procedures and processing of requests for interpretations, field decisions, field orders, submittals, substitutions, Applications for Payments, proposal request, Change Orders, and Contract closeout procedures.
7. Scheduling.
8. Critical Work sequencing.

- D. Engineer: Record minutes and distribute copies to participants within two days after meeting, with two copies each to Contractor, Owner, and those affected by decisions made.

1.4 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.
- B. Engineer will make arrangements for meetings, prepare agenda with copies for participants, and preside over meetings.
- C. Attendance Required: Job superintendent, major Subcontractors and suppliers, and Engineer, as appropriate to agenda topics for each meeting.
- D. Minimum Agenda:
1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems impeding planned progress.
 5. Review of submittal schedule and status of submittals.
 6. Review of off-Site fabrication and delivery schedules.
 7. Maintenance of Progress Schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on Progress Schedule and coordination.
 13. Other business relating to Work.
- E. Engineer: Record minutes and distribute copies to participants within two days after meeting, with two copies each to Contractor, Owner, and those affected by decisions made.

1.5 CLOSEOUT MEETING

- A. Schedule Project closeout meeting with sufficient time to prepare for requesting Substantial Completion. Preside over meeting and be responsible for minutes.
- B. Attendance Required: Contractor, major Subcontractors, Engineer, Owner, and others appropriate to agenda.
- C. Notify Engineer four days in advance of meeting date.

D. Minimum Agenda:

1. Contractor's inspection of Work.
2. Contractor's preparation of an initial "punch list."
3. Procedure to request Engineer inspection to determine date of Substantial Completion.
4. Completion time for correcting deficiencies.
5. Inspections by authorities having jurisdiction.
6. Final cleaning.
7. Preparation for final inspection.
8. Closeout Submittals:
9. Final Application for Payment.
10. Contractor's demobilization of Site.
11. Maintenance.

- E. Record minutes and distribute copies to participants within two days after meeting, with two copies each to Engineer, Owner, and those affected by decisions made.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION – Not Used

END OF SECTION 01 30 00

SECTION 01 32 16

CONSTRUCTION PROGRESS SCHEDULE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Submittals.
- B. Review and evaluation.
- C. Updating schedules.
- D. Distribution.

1.2 SUBMITTALS

- A. Within 10 days after date of Owner-Contractor Agreement, submit proposed preliminary network diagram defining planned operations for first 60 days of Work, with general outline for remainder of Work.
- B. Participate in review of preliminary and complete network diagrams jointly with Engineer.
- C. Within 20 days after joint review of proposed preliminary network diagram, submit draft of proposed complete network diagram for review. Include written certification that major Subcontractors have reviewed and accepted proposed schedule.
- D. Within 10 days after joint review, submit complete network analysis consisting of network diagrams and mathematical analyses.
- E. Submit updated network schedules with each Application for Payment.
- F. Submit number of opaque reproductions Contractor requires, plus two copies Engineer will retain.
- G. Submit network schedules under transmittal letter form specified in Section 01 33 00 - Submittal Procedures.
- H. Schedule Updates:
 - 1. Overall percent complete, projected and actual.
 - 2. Completion progress by listed activity and subactivity, to within five working days prior to submittal.
 - 3. Changes in Work scope and activities modified since submittal.
 - 4. Delays in submittals or resubmittals, deliveries, or Work.
 - 5. Adjusted or modified sequences of Work.
 - 6. Other identifiable changes.
 - 7. Revised projections of progress and completion.

I. Narrative Progress Report:

1. Submit with each monthly submission of Progress Schedule.
2. Summary of Work completed during the past period between reports.
3. Work planned during the next period.
4. Explanation of differences between summary of Work completed and Work planned in previously submitted report.
5. Current and anticipated delaying factors and estimated impact on other activities and completion milestones.
6. Corrective action taken or proposed.

1.3 REVIEW AND EVALUATION

- A. Participate in joint review and evaluation of schedules with Engineer at each submittal.
- B. Evaluate Project status to determine Work behind schedule and Work ahead of schedule.
- C. After review, revise schedules incorporating results of review, and resubmit within 10 days.

1.4 UPDATING SCHEDULES

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity. Update schedules to depict current status of Work.
- C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- D. Upon approval of a Change Order, include the change in the next schedule submittal.
- E. Indicate changes required to maintain Date of Substantial Completion.
- F. Submit sorts as required to support recommended changes.
- G. Prepare narrative report to define problem areas, anticipated delays, and impact on schedule. Report corrective action taken or proposed and its effect.

1.5 DISTRIBUTION

- A. Following joint review, distribute copies of updated schedules to Contractor's Project site file, to Subcontractors, suppliers, Engineer, Owner, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 32 16

SECTION 01 33 00
SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Definitions.
- B. Submittal procedures.
- C. Construction progress schedules.
- D. Proposed product list.
- E. Product data.
- F. Use of electronic CAD files of Project Drawings.
- G. Shop Drawings.
- H. Samples.
- I. Other submittals.
- J. Test reports.
- K. Certificates.
- L. Manufacturer's instructions.
- M. Manufacturer's field reports.
- N. Erection Drawings.
- O. Contractor review.
- P. Engineer review.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Engineer's responsive action.
- B. Informational Submittals: Written and graphic information and physical Samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

- A. Transmit each submittal with CSI Form 12.1A - Submittal Transmittal.
- B. Sequentially number transmittal forms. Mark revised submittals with original number and sequential alphabetic suffix.
- C. Identify: Project, Contractor, Subcontractor and supplier, pertinent Drawing and detail number, and Specification Section number appropriate to submittal.
- D. Apply Contractor's stamp, signed or initialed, certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is according to requirements of the Work and Contract Documents.
- E. Schedule submittals to expedite Project, and submit electronic submittals via email as PDF electronic files. Coordinate submission of related items.
- F. For each submittal for review, allow 15 days excluding delivery time to and from Contractor.
- G. Identify variations in Contract Documents and product or system limitations that may be detrimental to successful performance of completed Work.
- H. Allow space on submittals for Contractor and Engineer review stamps.
- I. When revised for resubmission, identify changes made since previous submission.
- J. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- K. Submittals not requested will not be recognized nor processed.
- L. Incomplete Submittals: Engineer will not review. Complete submittals for each item are required. Delays resulting from incomplete submittals are not the responsibility of Engineer.

1.4 CONSTRUCTION PROGRESS SCHEDULES

- A. Comply with Section 01 32 16 - Construction Progress Schedule

1.5 PROPOSED PRODUCT LIST

- A. Within 15 days after date of Owner-Contractor Agreement, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, indicate manufacturer, trade name, model or catalog designation, and reference standards.

1.6 PRODUCT DATA

- A. Product Data: Action Submittal: Submit to Engineer for review for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Submit electronic submittals via email as PDF electronic files.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.7 ELECTRONIC CAD FILES OF PROJECT DRAWINGS

- A. Electronic CAD Files of Project Drawings: May only be used to expedite production of Shop Drawings for the Project. Use for other Projects or purposes is not allowed.
- B. Electronic CAD Files of Project Drawings: Distributed only under the following conditions:
 - 1. Use of files is solely at receiver's risk. Engineer does not warrant accuracy of files. Receiving files in electronic form does not relieve receiver of responsibilities for measurements, dimensions, and quantities set forth in Contract Documents. In the event of ambiguity, discrepancy, or conflict between information on electronic media and that in Contract Documents, notify Engineer of discrepancy and use information in hard-copy Drawings and Specifications.
 - 2. CAD files do not necessarily represent the latest Contract Documents, existing conditions, and as-built conditions. Receiver is responsible for determining and complying with these conditions and for incorporating addenda and modifications.
 - 3. User is responsible for removing information not normally provided on Shop Drawings and removing references to Contract Documents. Shop Drawings submitted with information associated with other trades or with references to Contract Documents will not be reviewed and will be immediately returned.
 - 4. Receiver shall not hold Engineer responsible for data or file clean-up required to make files usable, nor for error or malfunction in translation, interpretation, or use of this electronic information.
 - 5. Receiver shall understand that even though Engineer has computer virus scanning software to detect presence of computer viruses, there is no guarantee that computer viruses are not present in files or in electronic media.
 - 6. Receiver shall not hold Engineer responsible for such viruses or their consequences, and shall hold Engineer harmless against costs, losses, or damage caused by presence of computer virus in files or media.

1.8 SHOP DRAWINGS

- A. Shop Drawings: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. When required by individual Specification Sections, provide Shop Drawings signed and sealed by a professional Engineer responsible for designing components shown on Shop Drawings.
 - 1. Include signed and sealed calculations to support design.
 - 2. Submit Shop Drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
 - 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- D. Submit electronic submittals via email as PDF electronic files.
- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.9 SAMPLES

- A. Samples: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Samples for Selection as Specified in Product Sections:
 - 1. Submit to Engineer for aesthetic, color, and finish selection.
 - 2. Submit Samples of finishes, textures, and patterns for Engineer selection.
- C. Submit Samples to illustrate functional and aesthetic characteristics of products, with integral parts and attachment devices. Coordinate Sample submittals for interfacing work.
- D. Include identification on each Sample, with full Project information.
- E. Submit number of Samples specified in individual Specification Sections; Engineer will retain one Sample.
- F. Reviewed Samples that may be used in the Work are indicated in individual Specification Sections.
- G. Samples will not be used for testing purposes unless specifically stated in Specification Section.
- H. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.10 OTHER SUBMITTALS

- A. Closeout Submittals: Comply with Section 01 70 00 - Execution and Closeout Requirements.
- B. Informational Submittal: Submit data for Engineer's knowledge as Contract administrator or for Owner.
- C. Submit information for assessing conformance with information given and design concept expressed in Contract Documents.

1.11 TEST REPORTS

- A. Informational Submittal: Submit reports for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit test reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

1.12 CERTIFICATES

- A. Informational Submittal: Submit certification by manufacturer, installation/application Subcontractor, or Contractor to Engineer, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product but must be acceptable to Engineer.

1.13 MANUFACTURER'S INSTRUCTIONS

- A. Informational Submittal: Submit manufacturer's installation instructions for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit printed instructions for delivery, storage, assembly, installation, adjusting, and finishing, to Engineer in quantities specified for Product Data.
- C. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.14 MANUFACTURER'S FIELD REPORTS

- A. Informational Submittal: Submit reports for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit report within 5 days of observation to Engineer for information.

- C. Submit reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

1.15 ERECTION DRAWINGS

- A. Informational Submittal: Submit Drawings for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit Drawings for information assessing conformance with information given and design concept expressed in Contract Documents.
- C. Data indicating inappropriate or unacceptable Work may be subject to action by Engineer or Owner.

1.16 CONTRACTOR REVIEW

- A. Review for compliance with Contract Documents and approve submittals before transmitting to Engineer.
- B. Contractor: Responsible for:
 - 1. Determination and verification of materials including manufacturer's catalog numbers.
 - 2. Determination and verification of field measurements and field construction criteria.
 - 3. Checking and coordinating information in submittal with requirements of Work and of Contract Documents.
 - 4. Determination of accuracy and completeness of dimensions and quantities.
 - 5. Confirmation and coordination of dimensions and field conditions at Site.
 - 6. Construction means, techniques, sequences, and procedures.
 - 7. Safety precautions.
 - 8. Coordination and performance of Work of all trades.
- C. Stamp, sign or initial, and date each submittal to certify compliance with requirements of Contract Documents.
- D. Do not fabricate products or begin Work for which submittals are required until approved submittals have been received from Engineer.

1.17 ENGINEER REVIEW

- A. Do not make "mass submittals" to Engineer. "Mass submittals" are defined as six or more submittals or items in one day or 15 or more submittals or items in one week. If "mass submittals" are received, Engineer's review time stated above will be extended as necessary to perform proper review. Engineer will review "mass submittals" based on priority determined by Engineer after consultation with Owner and Contractor.
- B. Informational submittals and other similar data are for Engineer's information, do not require Engineer's responsive action, and will not be reviewed or returned with comment.

- C. Submittals made by Contractor that are not required by Contract Documents may be returned without action.
- D. Submittal approval does not authorize changes to Contract requirements unless accompanied by Change Order, Field Order, or Work Change Directive.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 33 00

SECTION 01 40 00
QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Quality control.
- B. Tolerances.
- C. References.
- D. Labeling.
- E. Mockup requirements.
- F. Testing and inspection services.
- G. Manufacturers' field services.

1.2 QUALITY CONTROL

- A. Monitor quality control over suppliers, manufacturers, products, services, Site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with specified standards as the minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- C. Perform Work using persons qualified to produce required and specified quality.
- D. Products, materials, and equipment may be subject to inspection by Engineer and Owner at place of manufacture or fabrication. Such inspections shall not relieve Contractor of complying with requirements of Contract Documents.
- E. Supervise performance of Work in such manner and by such means to ensure that Work, whether completed or in progress, will not be subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during construction period.

1.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

- B. Comply with manufacturers' recommended tolerances and tolerance requirements in reference standards. When such tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current as of date of Contract Documents except where specific date is established by code.
- C. Obtain copies of standards and maintain on Site when required by product Specification Sections.
- D. When requirements of indicated reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- E. Neither contractual relationships, duties, or responsibilities of parties in Contract nor those of Engineer shall be altered from Contract Documents by mention or inference in reference documents.

1.5 LABELING

- A. Attach label from agency approved by authorities having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label:
 - 1. Model number.
 - 2. Serial number.
 - 3. Performance characteristics.
- C. Manufacturer's Nameplates, Trademarks, Logos, and Other Identifying Marks on Products: Not allowed on surfaces exposed to view in public areas, interior or exterior.

1.6 MOCK-UP REQUIREMENTS

- A. Tests will be performed under provisions identified in this Section and identified in individual product Specification Sections.
- B. Assemble and erect specified or indicated items with specified or indicated attachment and anchorage devices, flashings, seals, and finishes.
- C. Accepted mockups shall be comparison standard for remaining Work.

- D. Where mockup has been accepted by Engineer and is specified in product Specification Sections to be removed, remove mockup and clear area when directed to do so by Engineer.

1.7 TESTING AND INSPECTION SERVICES

- A. Owner will employ and pay for specified services of an independent firm to perform testing and inspection.
- B. Independent firm will perform tests, inspections, and other services specified in individual Specification Sections and as required by authorities having jurisdiction.
 - 1. Laboratory: Authorized to operate in State of Michigan.
 - 2. Laboratory Staff: Maintain full-time Professional Engineer on staff to review services.
 - 3. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to National Bureau of Standards or accepted values of natural physical constants.
- C. Testing, inspections, and source quality control may occur on or off Project Site. Perform off-Site testing as required by Engineer or Owner.
- D. Reports shall be submitted by independent firm to Engineer, Contractor, and authorities having jurisdiction, in duplicate, indicating observations and results of tests and compliance or noncompliance with Contract Documents.
 - 1. Submit final report indicating correction of Work previously reported as noncompliant.
- E. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - 1. Notify Engineer and independent firm 48 hours before expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional Samples and tests required for Contractor's use.
- F. Employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work according to requirements of Contract Documents.
- G. Retesting or re-inspection required because of nonconformance with specified or indicated requirements shall be performed by same independent firm on instructions from Engineer. Payment for retesting or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.
- H. Agency Responsibilities:
 - 1. Test Samples of mixes submitted by Contractor.
 - 2. Provide qualified personnel at Site. Cooperate with Engineer and Contractor in performance of services.
 - 3. Perform indicated sampling and testing of products according to specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 5. Promptly notify Engineer and Contractor of observed irregularities or nonconformance of Work or products.

6. Perform additional tests required by Engineer.
 7. Attend preconstruction meetings and progress meetings.
- I. Agency Reports: After each test, promptly submit two copies of report to Engineer, Contractor, and authorities having jurisdiction. When requested by Engineer, provide interpretation of test results. Include the following:
1. Date issued.
 2. Project title and number.
 3. Name of inspector.
 4. Date and time of sampling or inspection.
 5. Identification of product and Specification Section.
 6. Location in Project.
 7. Type of inspection or test.
 8. Date of test.
 9. Results of tests.
 10. Conformance with Contract Documents.
- J. Limits on Testing Authority:
1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 2. Agency or laboratory may not approve or accept any portion of the Work.
 3. Agency or laboratory may not assume duties of Contractor.
 4. Agency or laboratory has no authority to stop the Work.

1.8 MANUFACTURER'S FIELD SERVICES

- A. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe Site conditions, conditions of surfaces and installation, and quality of workmanship, as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Engineer 30 days in advance of required observations. Observer is subject to approval of Engineer.
- C. Report observations and Site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions.
- D. Refer to Section 01 33 00 - Submittal Procedures, "Manufacturer's Field Reports" Article.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 40 00

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Temporary Utilities:
 - 1. Temporary electricity.
- B. Construction Facilities:
 - 1. Vehicular access.
 - 2. Parking.
 - 3. Progress cleaning and waste removal.
 - 4. Traffic regulation.
- C. Temporary Controls:
 - 1. Barriers.
 - 2. Enclosures and fencing.
 - 3. Security.
 - 4. Water control.
 - 5. Dust control.
 - 6. Erosion and sediment control.
 - 7. Noise control.

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 2. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
 - 3. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials.

1.3 TEMPORARY ELECTRICITY

- A. Provide and pay for power service required from utility source as needed for construction operation.
- B. Complement existing power service capacity and characteristics as required for construction operations.

1.4 PARKING

- A. If Site space is not adequate, provide additional off-Site parking.
- B. Permanent Pavements and Parking Facilities:
 - 1. Avoid traffic loading beyond paving design capacity. Tracked vehicles are not allowed.
- C. Maintenance:
 - 1. Maintain traffic and parking areas in sound condition free of excavated material, construction equipment, products, mud, snow, ice, and the like.
 - 2. Maintain existing and permanent paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original condition.
- D. Mud from Site vehicles: Provide means of removing mud from vehicle wheels before entering streets.

1.5 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain Site in clean and orderly condition.
- B. Collect and remove waste materials, debris, and rubbish from Site periodically and dispose of off-Site.

1.6 TRAFFIC REGULATION

- A. Signs, Signals, and Devices:
 - 1. Post-Mounted and Wall-Mounted Traffic Control and Informational Signs: As approved by authorities having jurisdiction.
 - 2. Traffic Cones, Drums, Flares, and Lights: As approved by authorities having jurisdiction.
 - 3. Flag Person Equipment: As required by authorities having jurisdiction.
- B. Flag Persons: Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- C. Haul Routes:
 - 1. Consult with authorities having jurisdiction and establish public thoroughfares to be used for haul routes and Site access.
 - 2. Confine construction traffic to designated haul routes.
 - 3. Provide traffic control at critical areas of haul routes to regulate traffic and to minimize interference with public traffic.
- D. Traffic Signs and Signals:
 - 1. Provide signs at approaches to Site and on Site, at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.

2. Relocate signs and signals as Work progresses, to maintain effective traffic control.

E. Removal:

1. Remove equipment and devices when no longer required.
2. Repair damage caused by installation.
3. Remove post settings to depth of 2 feet.

1.7 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's use of Site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Tree and Plant Protection: Preserve and protect existing trees and plants designated to remain.
 1. Protect areas within drip lines from traffic, parking, storage, dumping, chemically injurious materials and liquids, ponding, and continuous running water.
 2. Replace trees and plants damaged by construction operations.
- C. Protect non-owned vehicular traffic, stored materials, Site, and structures from damage.

1.8 ENCLOSURES AND FENCING

- A. Construction: Contractor's option.
- B. Exterior Enclosures: Contractor's option

1.9 SECURITY

- A. Security Program:
 1. Protect Work on existing premises from theft, vandalism, and unauthorized entry.

1.10 WATER CONTROL

- A. Grade Site to drain. Maintain excavations free of water. Provide, operate, and maintain necessary pumping equipment.

1.11 DUST CONTROL

- A. Execute Work by methods that minimize raising dust from construction operations.
- B. Provide positive means to prevent airborne dust from dispersing into atmosphere.

1.12 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize surface area of bare soil exposed at one time.
- C. Provide temporary measures including berms, dikes, drains, and other devices to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts and clays.
- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation. Promptly apply corrective measures.

1.13 NOISE CONTROL

- A. Provide methods, means, and facilities to minimize noise produced by construction operations.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 50 00

SECTION 01 60 00
PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.

1.2 PRODUCTS

- A. At minimum, comply with specified requirements and reference standards.
- B. Specified products define standard of quality, type, function, dimension, appearance, and performance required.
- C. Furnish products of qualified manufacturers that are suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise. Confirm that manufacturer's production capacity can provide sufficient product, on time, to meet Project requirements.
- D. Do not use materials and equipment removed from existing premises except as specifically permitted by Contract Documents.
- E. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products according to manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products; use methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products according to manufacturer's instructions.

- B. Store products with seals and labels intact and legible.
- C. Store sensitive products in weathertight, climate-controlled enclosures in an environment suitable to product.
- D. For exterior storage of fabricated products, place products on sloped supports aboveground.
- E. Provide off-Site storage and protection when Site does not permit on-Site storage or protection.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products; use methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Products complying with specified reference standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of one of manufacturers named and complying with Specifications; no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit Request for Substitution for any manufacturer not named, according to Section 01 25 00 - Substitution Procedures.

PART 2 - PRODUCTS – Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 60 00

SECTION 01 70 00

EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Field engineering.
- B. Closeout procedures.
- C. Manual for equipment and systems.
- D. Product warranties and product bonds.
- E. Examination.
- F. Preparation.
- G. Execution.
- H. Protecting installed construction.
- I. Final cleaning.

1.2 FIELD ENGINEERING

- A. Owner will locate and Contractor shall protect survey control and reference points. Promptly notify Engineer of discrepancies discovered.
- B. Control datum for survey is indicated on Drawings.
- C. Verify setbacks and easements; confirm Drawing dimensions and elevations.
- D. Provide field engineering services. Establish elevations, lines, and levels using recognized engineering survey practices.
- E. Maintain complete and accurate log of control and survey Work as Work progresses.
- F. Protect survey control points prior to starting Site Work; preserve permanent reference points during construction.
- G. Promptly report to Engineer loss or destruction of reference point or relocation required because of changes in grades or other reasons.
- H. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Engineer.

1.3 CLOSEOUT PROCEDURES

- A. Prerequisites to Substantial Completion: Complete following items before requesting Certification of Substantial Completion, either for entire Work or for portions of Work:
1. Submit maintenance manuals, Project record documents, and other similar final record data in compliance with this Section.
 2. Complete facility startup, testing, adjusting, balancing of systems and equipment, demonstrations, and instructions to Owner's operating and maintenance personnel as specified in compliance with this Section.
 3. Conduct inspection to establish basis for request that Work is substantially complete. Create comprehensive list (initial punch list) indicating items to be completed or corrected, value of incomplete or nonconforming Work, reason for being incomplete, and date of anticipated completion for each item. Include copy of list with request for Certificate of Substantial Completion.
 4. Obtain and submit releases enabling Owner's full, unrestricted use of Project and access to services and utilities. Include certificate of occupancy, operating certificates, and similar releases from authorities having jurisdiction and utility companies.
 5. Deliver tools, spare parts, extra stocks of material, and similar physical items to Owner.
 6. Discontinue or change over and remove temporary facilities and services from Project Site, along with construction tools, mockups, and similar elements.
 7. Perform final cleaning according to this Section.
- B. Substantial Completion Inspection:
1. When Contractor considers Work to be substantially complete, submit to Engineer:
 - a. Written certificate that Work, or designated portion, is substantially complete.
 - b. List of items to be completed or corrected (initial punch list).
 2. Within seven days after receipt of request for Substantial Completion, Engineer will make inspection to determine whether Work or designated portion is substantially complete.
 3. Should Engineer determine that Work is not substantially complete:
 - a. Engineer will promptly notify Contractor in writing, stating reasons for its opinion.
 - b. Contractor shall remedy deficiencies in Work and send second written request for Substantial Completion to Engineer.
 - c. Engineer will reinspect Work.
 - d. Redo and Inspection of Deficient Work: Repeated until Work passes Engineer's inspection.
 4. When Engineer finds that Work is substantially complete, Engineer will:
 - a. Prepare Certificate of Substantial Completion on EJCDC C-625 - Certificate of Substantial Completion, accompanied by Contractor's list of items to be completed or corrected as verified and amended by Engineer and Owner (final punch list).
 - b. Submit Certificate to Owner and Contractor for their written acceptance of responsibilities assigned to them in Certificate.
 5. After Work is substantially complete, Contractor shall:

- a. Allow Owner occupancy of Project under provisions stated in Certificate of Substantial Completion.
 - b. Complete Work listed for completion or correction within time period stipulated.
- C. Prerequisites for Final Completion: Complete following items before requesting final acceptance and final payment.
 - 1. When Contractor considers Work to be complete, submit written certification that:
 - a. Contract Documents have been reviewed.
 - b. Work has been examined for compliance with Contract Documents.
 - c. Work has been completed according to Contract Documents.
 - d. Work is completed and ready for final inspection.
 - 2. Submittals: Submit following:
 - a. Final punch list indicating all items have been completed or corrected.
 - b. Final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 - c. Specified warranties, workmanship/maintenance bonds, maintenance agreements, and other similar documents.
 - d. Accounting statement for final changes to Contract Sum.
 - 3. Perform final cleaning for Contractor-soiled areas according to this Section.
- D. Final Completion Inspection:
 - 1. Within seven days after receipt of request for final inspection, Engineer will make inspection to determine whether Work or designated portion is complete.
 - 2. Should Engineer consider Work to be incomplete or defective:
 - a. Engineer will promptly notify Contractor in writing, listing incomplete or defective Work.
 - b. Contractor shall remedy stated deficiencies and send second written request to Engineer that Work is complete.
 - c. Engineer will reinspect Work.
 - d. Redo and Inspection of Deficient Work: Repeated until Work passes Engineer's inspection.

1.4 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Engineer will review draft and return one copy with comments.
- B. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit documents within ten days after acceptance.

- C. Submit one copy of completed volumes before Substantial Completion. Draft copy will be reviewed and returned after Substantial Completion, with Engineer comments. Revise content of document sets as required prior to final submission.
- D. Submit in PDF composite electronic indexed file of final manual within ten days after final inspection.
- E. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and troubleshooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.

1.5 PRODUCT WARRANTIES AND PRODUCT BONDS

- A. Obtain warranties and bonds executed in duplicate by responsible Subcontractors, suppliers, and manufacturers within ten days after completion of applicable item of Work.
- B. Execute and assemble transferable warranty documents and bonds from Subcontractors, suppliers, and manufacturers.
- C. Verify documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Submit prior to final Application for Payment.
- F. Time of Submittals:
 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
 2. Make other submittals within ten days after date of Substantial Completion, prior to final Application for Payment.
 3. For items of Work for which acceptance is delayed beyond Substantial Completion, submit within ten days after acceptance, listing date of acceptance as beginning of warranty or bond period.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that existing Site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual Specification Sections.

- D. Verify that utility services are available with correct characteristics and in correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance according to manufacturer's instructions.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer-required or -recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

3.3 EXECUTION

- A. Comply with manufacturer's installation instructions, performing each step in sequence. Maintain one set of manufacturer's installation instructions at Project Site during installation and until completion of construction.
- B. When manufacturer's installation instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Verify that field measurements are as indicated on approved Shop Drawings or as instructed by manufacturer.
- D. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
 - 1. Secure Work true to line and level and within specified tolerances, or if not specified, industry-recognized tolerances.
 - 2. Physically separate products in place, provide electrical insulation, or provide protective coatings to prevent galvanic action or corrosion between dissimilar metals.
 - 3. Exposed Joints: Provide uniform joint width and arrange to obtain best visual effect. Refer questionable visual-effect choices to Engineer for final decision.
- E. Allow for expansion of materials and building movement.
- F. Climatic Conditions and Project Status: Install each unit of Work under conditions to ensure best possible results in coordination with entire Project.
 - 1. Isolate each unit of Work from incompatible Work as necessary to prevent deterioration.
 - 2. Coordinate enclosure of Work with required inspections and tests to minimize necessity of uncovering Work for those purposes.
- G. Mounting Heights: Where not indicated, mount individual units of Work at industry recognized standard mounting heights for particular application indicated.
 - 1. Refer questionable mounting heights choices to Engineer for final decision.
 - 2. Elements Identified as Accessible to Handicapped: Comply with applicable codes and regulations.

- H. Adjust operating products and equipment to ensure smooth and unhindered operation.
- I. Clean and perform maintenance on installed Work as frequently as necessary through remainder of construction period. Lubricate operable components as recommended by manufacturer.

3.4 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual Specification Sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate Work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Use durable sheet materials to protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

3.5 FINAL CLEANING

- A. Execute final cleaning prior to final Project assessment.
 - 1. Employ experienced personnel or professional cleaning firm.
- B. Clean Site; sweep paved areas, rake clean landscaped surfaces.
- C. Remove waste and surplus materials, rubbish, and construction facilities from Site.

END OF SECTION 01 70 00

SECTION 02 41 13
SITE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification sections, apply to this section.

1.2 SUMMARY

- A. Provide labor, materials, and equipment as necessary to complete work as indicated on the Drawings and specified herein.
- B. This section includes the removal of existing structures, fences, pavements, and other items indicated on the Drawings or specified, or both.
- C. Related sections include the following:
 - 1. Division 01 Section "General Requirements – Temporary Facilities and Controls."
 - 2. Division 31 Section "Site Clearing."
 - 3. Division 31 Section "Earthwork."

1.3 PROJECT CONDITIONS

- A. Do not close or obstruct streets, walks or other occupied or used facilities without permission from the Project Representative. Provide alternate routes around closed or obstructed traffic ways if required.

PART 2 - EXECUTION

2.1 PREPERATION

- A. Provide, erect, and maintain temporary barriers, and barricades to protect existing operations.
- B. Erect and maintain weatherproof closures for exterior openings, if applicable.
- C. Erect and maintain temporary partitions to prevent spread of dust, odors, and noise to permit continued Owner occupancy, if applicable.
- D. Protect existing materials and equipment which are not to be demolished.
- E. Prevent movement of structure; provide bracing and shoring.
- F. Notify affected utility companies before starting work and comply with their requirements.

- G. Mark locations and termination of utilities.
- H. Provide appropriate temporary signage including signage for exit of site egress.

2.2 DEMOLITION

- A. Disconnect, remove, cap, and identify designated utilities within demolition areas.
- B. Demolish in an orderly and careful manner. Protect existing structures and existing utilities designed to be left in service.
- C. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- D. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- E. Remove temporary Work.

2.3 REMOVAL OF PAVEMENTS

- A. Saw cut concrete curb and gutter and flatwork on nearest existing joint beyond area required to be removed as shown on the Drawings.
- B. Provide a minimum of 18 inches between the new gutter pan edge and the bituminous paving edge.

2.4 CLEANUP

- A. Contractor shall be responsible for disposing debris from demolition and salvage operations. Disposal of debris shall be done legally off the Owner's property, except that specifically requested for salvage by the Owner or Engineer. Burning of debris is not permitted.
- B. During demolition operations, keep dust to a minimum using appropriate methods.
- C. During demolition operations, access roads and adjacent concrete pathways shall be maintained broom clean. Roads shall be cleaned by using a pick-up type sweeper. A front-end tractor mounted sweeper is not permitted.
- D. The site shall be graded to provide surface drainage and shall be left in a clean condition.

END OF SECTION 02 41 13

SECTION 03 10 00

CONCRETE FORMING AND ACCESSORIES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Formwork for cast-in-place concrete.
 - 2. Shoring, bracing, and anchorage.
 - 3. Form accessories.
 - 4. Form stripping.
- B. Related Sections:
 - 1. Section 03 30 00 - Cast-In-Place Concrete.

1.2 REFERENCES

- A. American Concrete Institute:
 - 1. ACI 117 - Standard Specifications for Tolerances for Concrete Construction and Materials.
 - 2. ACI 301 - Specifications for Structural Concrete.
 - 3. ACI 318 - Building Code Requirements for Structural Concrete.
 - 4. ACI 347 - Guide to Formwork for Concrete.
- B. American Forest and Paper Association:
 - 1. AF&PA - National Design Specifications for Wood Construction.
- C. The Engineered Wood Association:
 - 1. APA/EWA PS 1 - Voluntary Product Standard for Construction and Industrial Plywood.
- D. ASTM International:
 - 1. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
 - 2. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials.
- E. West Coast Lumber Inspection Bureau:
 - 1. WCLIB - Standard Grading Rules for West Coast Lumber.
 - 2. Michigan Department of Transportation 2012 Standard Specifications for Construction.

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 347.
- B. For wood products furnished for work of this Section, comply with AF&PA.
- C. Perform Work in accordance with State of Michigan Department of Transportation 2020 Standard Construction Specifications.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Products storage and handling requirements.
- B. Deliver void forms and installation instructions in manufacturer's packaging.
- C. Store off ground in ventilated and protected manner to prevent deterioration from moisture.

1.5 COORDINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate this Section with other sections of work, requiring attachment of components to formwork.

PART 2 PRODUCTS

2.1 WOOD FORM MATERIALS

- A. Plywood: Douglas Fir 5 ply species; solid one side grade; sound undamaged sheets with clean, true edges.
- B. Lumber Forms:
 - 1. Application: Use for edge forms and unexposed finish concrete.
 - 2. Boards: 6 inches or 8 inches in width, shiplapped or tongue and groove, "Pine species no. 2 grade with grade stamps clearly visible.
- C. Plywood Forms:
 - 1. Application: Use for exposed finish concrete.
 - 2. Forms: Conform to PS 1; full size 4 x 8 feet panels; each panel labeled with grade trademark of APA/EWA.
 - 3. Plywood for Surfaces to Receive Membrane Waterproofing: Minimum of 5/8 inch thick; APA/EWA "B-B Plyform Structural I Exterior" grade.
 - 4. Plywood where "Smooth Finish" is required, as indicated on Drawings: APA/EWA "HD Overlay Plyform Structural I Exterior" grade, minimum of 3/4 inch thick.

2.2 PREFABRICATED FORMS

- A. Glass Fiber Fabric Reinforced Plastic Forms: Matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished concrete surfaces.
- B. Tubular Column Type: Round, spirally wound laminated fiber material, surface treated with release agent, non-reusable, sizes as indicated on Drawings.
- C. Steel Forms: Sheet steel, suitably reinforced, and designed for particular use indicated on Drawings.

D. Form Liners: Smooth, durable, grainless and non-staining hardboard, unless otherwise indicated on Drawings.

E. Framing, Studding and Bracing: Stud or No. 3 structural light framing grade.

2.3 FORMWORK ACCESSORIES

A. Form Release Agent: Colorless material which will not stain concrete, absorb moisture or impair natural bonding or color characteristics of coating intended for use on concrete; manufactured by W.R. Meadows, or equal.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Verify lines, levels, and centers before proceeding with formwork. Verify dimensions agree with Drawings.

C. When formwork is placed after reinforcement resulting in insufficient concrete cover over reinforcement before proceeding, request instructions from Engineer.

3.2 INSTALLATION

A. Earth Forms: Not allowed.

B. Formwork - General:

1. Provide top form for sloped surfaces steeper than 1.5 horizontal to 1 vertical to hold shape of concrete during placement, unless it can be demonstrated that top forms can be omitted.
2. Construct forms to correct shape and dimensions, mortar-tight, braced, and of sufficient strength to maintain shape and position under imposed loads from construction operations.
3. Camber forms where necessary to produce level finished soffits unless otherwise shown on Drawings.
4. Carefully verify horizontal and vertical positions of forms. Correct misaligned or misplaced forms before placing concrete.
5. Complete wedging and bracing before placing concrete.

C. Forms for Smooth Finish Concrete:

1. Use steel, plywood or lined board forms.
2. Use clean and smooth plywood and form liners, uniform in size, and free from surface and edge damage capable of affecting resulting concrete finish.
3. Install form lining with close-fitting square joints between separate sheets without springing into place.
4. Use full size sheets of form lines and plywood wherever possible.
5. Tape joints to prevent protrusions in concrete.
6. Use care in forming and stripping wood forms to protect corners and edges.
7. Level and continue horizontal joints.

8. Keep wood forms wet until stripped.

D. Framing, Studding and Bracing:

1. Space studs at 16 inches on center maximum for boards and 12 inches on center maximum for plywood.
2. Size framing, bracing, centering, and supporting members with sufficient strength to maintain shape and position under imposed loads from construction operations.
3. Construct beam soffits of material minimum of 2 inches thick.
4. Distribute bracing loads over base area on which bracing is erected.
5. When placed on ground, protect against undermining, settlement or accidental impact.

E. Erect formwork, shoring, and bracing to achieve design requirements, in accordance with requirements of ACI 301 and MDOT Standard Construction Specifications.

F. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.

G. Obtain Engineer's approval before framing openings in structural members not indicated on Drawings.

H. Install void forms in accordance with manufacturer's recommendations.

3.3 APPLICATION - FORM RELEASE AGENT

A. Apply form release agent on formwork in accordance with manufacturer's recommendations.

B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.

C. Do not apply form release agent where concrete surfaces are indicated to receive special finishes that are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

D. Reuse and Coating of Forms: Thoroughly clean forms and reapply form coating before each reuse. For exposed work, do not reuse forms with damaged faces or edges. Apply form coating to forms in accordance with manufacturer's specifications. Do not coat forms for concrete indicated to receive "scored finish". Apply form coatings before placing reinforcing steel.

3.4 INSTALLATION - INSERTS, EMBEDDED PARTS, AND OPENINGS

A. Install formed openings for items to be embedded in or passing through concrete work.

B. Locate and set in place items required to be cast directly into concrete.

C. Coordinate with Work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.

D. Install accessories straight, level, and plumb. Ensure items are not disturbed during concrete placement.

- E. Install water stops continuous without displacing reinforcement.
- F. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain.
- G. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.
- H. Form Ties:
 - 1. Use sufficient strength and sufficient quantity to prevent spreading of forms.
 - 2. Place ties at least 1 inch away from finished surface of concrete.
 - 3. Leave inner rods in concrete when forms are stripped.
 - 4. Space form ties equidistant, symmetrical and aligned vertically and horizontally unless otherwise shown on Drawings.
- I. Arrangement: Arrange formwork to allow proper erection sequence and to permit form removal without damage to concrete.
- J. Construction Joints:
 - 1. Install surfaced pouring strip where construction joints intersect exposed surfaces to provide straight line at joints.
 - 2. Just prior to subsequent concrete placement, remove strip and tighten forms to conceal shrinkage.
 - 3. Show no overlapping of construction joints. Construct joints to present same appearance as butted plywood joints.
 - 4. Arrange joints in continuous line straight, true and sharp.
- K. Embedded Items:
 - 1. Make provisions for pipes, sleeves, anchors, inserts, reglets, anchor slots, nailers, water stops, and other features.
 - 2. Do not embed wood or uncoated aluminum in concrete.
 - 3. Obtain installation and setting information for embedded items furnished under other Specification sections.
 - 4. Securely anchor embedded items in correct location and alignment prior to placing concrete.
 - 5. Verify conduits and pipes, including those made of coated aluminum, meet requirements of ACI 318 for size and location limitations.
- L. Openings for Items Passing Through Concrete:
 - 1. Frame openings in concrete where indicated on Drawings. Establish exact locations, sizes, and other conditions required for openings and attachment of work specified under other sections.
 - 2. Coordinate work to avoid cutting and patching of concrete after placement.
 - 3. Perform cutting and repairing of concrete required as result of failure to provide required openings.
- M. Screeds:
 - 1. Set screeds and establish levels for tops of concrete slabs and levels for finish on slabs.
 - 2. Slope slabs to drain where required or as shown on Drawings.

3. Before depositing concrete, remove debris from space to be occupied by concrete and thoroughly wet forms. Remove freestanding water.

N. Screed Supports:

1. For concrete over waterproof membranes and vapor retarder membranes, use cradle, pad or base type screed supports which will not puncture membrane.
2. Staking through membrane is not be permitted.

O. Cleanouts and Access Panels:

1. Provide removable cleanout sections or access panels at bottoms of forms to permit inspection and effective cleaning of loose dirt, debris and waste material.
2. Clean forms and surfaces against which concrete is to be placed. Remove chips, saw dust and other debris. Thoroughly blow out forms with compressed air just before concrete is placed.

3.5 FORM CLEANING

- A. Clean forms as erection proceeds, to remove foreign matter within forms.
- B. Clean formed cavities of debris prior to placing concrete.
- C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.
- D. During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure. Use compressed air or other means to remove foreign matter.

3.6 FORM REMOVAL

- A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads and removal has been approved by Engineer.
- B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- C. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.
- D. Leave forms in place for minimum number of days as specified in ACI 347.

3.7 ERECTION TOLERANCES

- A. Construct formwork to maintain tolerances required by ACI 301 and MDOT Standard Construction Specifications.
- B. Tolerances: Construct formwork to produce completed concrete surfaces within construction tolerances specified in ACI 117.

3.8 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements and 01 70 00 - Execution and Closeout Requirements:
Field inspecting, testing, adjusting, and balancing.
- B. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.
- C. Notify Engineer after placement of reinforcing steel in forms, but prior to placing concrete.
- D. Schedule concrete placement to permit formwork inspection before placing concrete.

END OF SECTION 03 10 00

SECTION 03 20 00
CONCRETE REINFORCING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Reinforcing bars.
 - 2. Welded wire fabric.
 - 3. Reinforcement accessories.
- B. Related Requirements:
 - 1. Section 03 10 00 - Concrete Forming and Accessories.
 - 2. Section 03 30 00 - Cast-in-Place Concrete.

1.2 REFERENCE STANDARDS

- A. American Concrete Institute:
 - 1. ACI 301 - Specifications for Structural Concrete.
 - 2. ACI 318 - Building Code Requirements for Structural Concrete.
 - 3. ACI 530/530.1 - Building Code Requirements and Specification for Masonry Structures.
 - 4. ACI SP-66 - ACI Detailing Manual.
- B. American Welding Society:
- C. AWS D1.4 - Structural Welding Code - Reinforcing Steel.
- D. ASTM International:
 - 1. ASTM A184 - Standard Specification for Welded Deformed Steel Bar Mats for Concrete Reinforcement.
 - 2. ASTM A615 - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
 - 3. ASTM A704 - Standard Specification for Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.
 - 4. ASTM A706 - Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement.
 - 5. ASTM A767 - Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement.
 - 6. ASTM A775 - Standard Specification for Epoxy-Coated Steel Reinforcing Bars.
 - 7. ASTM A884 - Standard Specification for Epoxy-Coated Steel Wire and Welded Wire Reinforcement.
 - 8. ASTM A934 - Standard Specification for Epoxy-Coated Prefabricated Steel Reinforcing Bars.ASTM
 - 9. A996 - Standard Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement.

10. ASTM A1064 - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete.

- E. Concrete Reinforcing Steel Institute:
1. CRSI 10-MSP - Manual of Standard Practice.
 2. CRSI 10PLACE - Placing Reinforcing Bars.

1.3 COORDINATION

- A. Section 01 30 00 - Administrative Requirements: Requirements for coordination.
- B. Coordinate Work of this Section with placement of formwork, formed openings, and other Work.

1.4 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Shop Drawings:
1. Indicate bar sizes, spacings, locations, splice locations, and quantities of reinforcing steel and welded wire fabric.
 2. Indicate bending and cutting schedules.
 3. Indicate supporting and spacing devices.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Submit certified copies of mill test report of reinforcement materials analysis.
- E. Welder Certificates: Certify welders and welding procedures employed on Work, verifying AWS qualification within previous 12 months.
- F. Qualifications Statement:
1. Welders: Qualify procedures and personnel according to AWS D1.1.

1.5 QUALITY ASSURANCE

- A. Perform Work according to CRSI 10-MSP.
- B. Prepare Shop Drawings according to ACI SP-66.
- C. Perform Work according to State of Michigan and local municipal standards.

1.6 QUALIFICATIONS

- A. Welders: AWS qualified within previous 12 months for employed weld types.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.

- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture by storing in clean, dry location remote from construction operations areas.
 - 2. Provide additional protection according to manufacturer instructions.

1.8 EXISTING CONDITIONS

- A. Field Measurements:
 - 1. Verify field measurements prior to fabrication.
 - 2. Indicate field measurements on Shop Drawings.

PART 2 PRODUCTS

2.1 REINFORCEMENT

- A. Reinforcing Steel:
 - 1. Comply with ASTM A615.
 - 2. Yield Strength: 60 ksi.
 - 3. Billet Bars: Plain.
 - 4. Finish: Uncoated.
- B. Welded Plain Wire Fabric:
 - 1. Comply with ASTM A1064.
 - 2. Configuration: Flat sheets.
 - 3. Finish: Uncoated.

2.2 FABRICATION

- A. Fabricate concrete reinforcement according to CRSI 10-MSP.
- B. Form standard hooks for 180-degree bends , 90-degree bends , stirrups and tie hooks , and seismic hooks as indicated on Drawings.
- C. Form reinforcement bends with minimum diameters according to ACI 318.
- D. Fabricate column reinforcement with offset bends at reinforcement splices.
- E. Form spiral column reinforcement from minimum 3/8-inch-diameter continuous plain bar or wire.
- F. Form ties and stirrups from following:
 - 1. Bars No. 10 and Smaller: No. 3 deformed bars.
 - 2. Bars No. 11 and Larger: No. 4 deformed bars.
- G. Weld reinforcement according to AWS D1.4.

- H. Galvanized and Epoxy-Coated Reinforcement: Clean surfaces, weld, and re-protect welded joint according to CRSI 10PLACE.
- I. Splicing:
 - 1. If not indicated on Drawings, locate reinforcement splices at point of minimum stress.
 - 2. Obtain approval of splice locations from Engineer.

2.3 SHOP FINISHING

- A. Galvanized Finish for Steel Bars:
 - 1. Comply with ASTM A767 , Class II.
 - 2. Hot-dip galvanized after fabrication.
- B. Epoxy-Coated Finish for Steel Bars: Comply with ASTM A775.
- C. Epoxy-Coated Finish for Steel Wire: Comply with ASTM A884, Class A.

2.4 ACCESSORY MATERIALS

- A. Tie Wire:
 - 1. Minimum 16 gage, annealed type.
- B. Chairs, Bolsters, Bar Supports, and Spacers:
 - 1. Size and Shape: To strengthen and support reinforcement during concrete placement conditions.
 - 2. Furnish load-bearing pad on bottom to prevent vapor retarder puncture.
- C. Special Chairs, Bolsters, Bar Supports, and Spacers Adjacent to Weather-Exposed Concrete Surfaces:
 - 1. Material: Plastic coated steel.
 - 2. Size and Shape: To meet Project conditions.
- D. Reinforcing Splicing Devices:
 - 1. Type: Mechanical threaded; full tension and compression.
 - 2. Size: To fit joined reinforcing.
 - 3. Manufacturers:
 - a. ERICO International Corporation.
 - b. Substitutions: Section 01 60 00 - Product Requirements.
- E. Epoxy Coating Patching Material: Type as recommended by coating manufacturer.

2.5 SOURCE QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Requirements for testing, inspection, and analysis.
- B. Owner Inspection:
 - 1. Make completed concrete reinforcing available for inspection at manufacturer's factory prior to packaging for shipment.

2. Notify Owner at least seven days before inspection is allowed.
- C. Owner Witnessing:
1. Allow witnessing of factory inspections and test at manufacturer's test facility.
 2. Notify Owner at least seven days before inspections and tests are scheduled.
- D. Certificate of Compliance:
1. If fabricator is approved by authorities having jurisdiction, submit certificate of compliance indicating Work performed at fabricator's facility conforms to Contract Documents.
 2. Specified shop tests are not required for Work performed by approved fabricator.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Place, support, and secure reinforcement against displacement.
- B. Do not deviate from required position beyond specified tolerance.
- C. Do not weld crossing reinforcement bars for assembly except as permitted by Engineer.
- D. Do not displace or damage vapor retarder.
- E. Accommodate placement of formed openings.
- F. Spacing:
 1. Space reinforcement bars with minimum clear spacing according to ACI 318.
 2. If bars are indicated in multiple layers, place upper bars directly above lower bars.
- G. Maintain concrete cover around reinforcement according to ACI 318 as follows:

REINFORCEMENT LOCATION		MINIMUM CONCRETE COVER
Footings and Concrete Formed against Earth		3 Inches
Concrete Exposed to Earth or Weather	No. 6 Bars and Larger	2 Inches
	No. 5 Bars and Smaller	1-1/2 Inches
Supported Slabs, Walls, and Joists	No. 14 Bars and Larger	1-1/2 Inches
	No. 11 Bars and Smaller	3/4 Inch
Beams and Columns		1-1/2 Inches
Shell and Folded Plate Members	No. 6 Bars and Larger	3/4 Inch
	No. 5 Bars and Smaller	1/2 Inch

- H. Splice reinforcing where indicated on Drawings according to manufacturer's instructions.

3.2 TOLERANCES

- A. Section 01 40 00 - Quality Requirements: Requirements for tolerances.

- B. Install reinforcement within following tolerances for flexural members, walls, and compression members:

REINFORCEMENT DEPTH	DEPTH TOLERANCE	CONCRETE COVER TOLERANCE
Greater than 8 Inches	Plus or Minus 3/8 Inch	Minus 3/8 Inch
Less than 8 Inches	Plus or Minus 1/2 Inch	Minus 1/2 Inch

- C. Foundation Walls: Install reinforcement within tolerances according to ACI 530/530.1.

3.3 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Requirements for inspecting and testing.
- B. Perform field inspection and testing according to ACI 318.
- C. Provide unrestricted access to Work and cooperate with appointed inspection and testing firm.
- D. Reinforcement Inspection:
1. Placement Acceptance: Inspect specified and ACI 318 material requirements and specified placement tolerances.
 2. Welding: Inspect welds according to AWS D1.1.
 3. Periodic Placement Inspection: Inspect for correct materials, fabrication, sizes, locations, spacing, concrete cover, and splicing.
 4. Weldability Inspection: Inspect for reinforcement weldability if formed from steel other than ASTM A706.
 5. Continuous Weld Inspection: Inspect reinforcement according to ACI 318.
 6. Periodic Weld Inspection: Inspect other welded connections.

END OF SECTION 03 20 00

SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes cast-in-place concrete for the following:
 - 1. Slabs on grade.
 - 2. Equipment pads.
- B. Related Sections:
 - 1. Section 03 10 00 - Concrete Forming and Accessories.

1.2 REFERENCES

- A. American Concrete Institute:
 - 1. ACI 301 - Specifications for Structural Concrete.
 - 2. ACI 305 - Hot Weather Concreting.
 - 3. ACI 306.1 - Standard Specification for Cold Weather Concreting.
 - 4. ACI 308.1 - Standard Specification for Curing Concrete.
 - 5. ACI 318 - Building Code Requirements for Structural Concrete.
- B. ASTM International:
 - 1. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
 - 2. ASTM C31/C31M - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
 - 3. ASTM C33 - Standard Specification for Concrete Aggregates.
 - 4. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
 - 5. ASTM C42/C42M - Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
 - 6. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
 - 7. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic Cement Concrete.
 - 8. ASTM C150 - Standard Specification for Portland Cement.
 - 9. ASTM C172 - Standard Practice for Sampling Freshly Mixed Concrete.
 - 10. ASTM C173/C173M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.
 - 11. ASTM C231 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
 - 12. ASTM C260 - Standard Specification for Air-Entraining Admixtures for Concrete.
 - 13. ASTM C330 - Standard Specification for Lightweight Aggregates for Structural Concrete.
 - 14. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete.
 - 15. ASTM C595 - Standard Specification for Blended Hydraulic Cements.
 - 16. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete.

17. ASTM C685/C685M - Standard Specification for Concrete Made By Volumetric Batching and Continuous Mixing.
18. ASTM C845 - Standard Specification for Expansive Hydraulic Cement.
19. ASTM C989 - Standard Specification for Ground Granulated Blast-Furnace Slag for Use in Concrete and Mortars.
20. ASTM C1017/C1017M - Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete.
21. ASTM C1064/C1064M - Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete.
22. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
23. ASTM C1116 - Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
24. ASTM C1157 - Standard Performance Specification for Hydraulic Cement.
25. ASTM C1218/C1218M - Standard Test Method for Water-Soluble Chloride in Mortar and Concrete.
26. ASTM C1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures.
27. ASTM D994 - Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type).
28. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
29. ASTM D1752 - Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
30. ASTM D6690 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
31. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials.
32. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
33. ASTM E1643 - Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill under Concrete Slabs.
34. ASTM E1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.

- C. Michigan Department of Transportation:
1. 2020 Standard Specifications for Construction.

1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit data on joint devices, attachment accessories, admixtures, and mix design.
- C. Design Data:
1. Submit concrete mix design for each concrete strength.
 2. Submit separate mix designs if admixtures are required for following:
 - a. Hot and cold weather concrete Work.
 - b. Air entrained concrete Work.
 3. Identify mix ingredients and proportions, including admixtures.
 4. Identify chloride content of admixtures and whether or not chlorides were added during manufacture.

- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Manufacturer Instructions: Submit installation procedures and interfacing required with adjacent work.
- F. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.

1.4 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 - Execution and Closeout Requirements: Closeout procedures.
- B. Project Record Documents: Accurately record actual locations of embedded utilities and components concealed from view in finished construction.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301.
- B. Conform to ACI 305 when concreting during hot weather.
- C. Conform to ACI 306.1 when concreting during cold weather.
- D. Acquire cement and aggregate from one source for Work.
- E. Perform Work in accordance with State of Michigan Department of Transportation Standard Specifications for Construction.
- F. Maintain one copy of each document on site.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements: Environmental conditions affecting products on site.
- B. Maintain concrete temperature after installation at minimum 50 degrees F for minimum 7 days.
- C. Maintain high early strength concrete temperature after installation at minimum 50 degrees F for minimum 3 days.

1.7 COORDINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate placement of joint devices with erection of concrete formwork and placement of form accessories.

PART 2 PRODUCTS

2.1 CONCRETE MATERIALS

- A. Cement: ASTM C150, Type IA - Air Entraining Portland type; in accordance with MDOT specifications for construction.
- B. Expansive Hydraulic Cement: ASTM C845.
- C. Coarse Aggregates: ASTM C33.
 - 1. In accordance with MDOT 6AA.
- D. Fine Aggregate: ASTM C33.
 - 1. In accordance with MDOT 2NS.
- E. Water: ACI 318; potable, without deleterious amounts of chloride ions.

2.2 ADMIXTURES

- A. Furnish materials according to State of MDOT standard specification for construction.
- B. Air Entrainment: ASTM C260.
- C. Chemical: ASTM C494/C494M.
 - 1. Type A - Water Reducing.
 - 2. Type B - Retarding.
 - 3. Type C - Accelerating.
 - 4. Type F - Water Reducing, High Range.
- D. Fly Ash: ASTM C618 Class C.
- E. Plasticizing: ASTM C1017/C1017M Type I, plasticizing.

2.3 ACCESSORIES

- A. Bonding Agent: Two component modified epoxy resin.
 - 1. Manufacturers:
 - a. Sikadur 32, Hi-Mod LV manufactured by Sika Corp; concessive 1001 LPL, 3007.
 - b. Substitutions: Or equal manufactured by structural bonding company.
- B. Non-Shrink Grout: ASTM C1107/C1107M; premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 2,400 psi in 48 hours and 7,000 psi in 28 days.
 - 1. Manufacturers:
 - a. Five Star Grout as manufactured by U.S. Grout Company.
 - b. Or equal.
- C. Epoxy Adhesive: Two components epoxy resin adhesive; Sikadur 35, Hi-Mod LV manufactured by Sika Corporation, Glendale Hts., IL 708-924-7900.

- D. Adhesive Anchors: Hilti HVA adhesive anchoring system. Hilti adhesive anchors shall be comprised on an HEA capsule with an ASTM A193, Grade B & HAS stainless steel rod assembly with stainless steel ASTM F594 nuts and ANSI B 18.221 (1965), Type A, plain washers under the turned element. Install per manufacturer’s specifications.

2.4 JOINT DEVICES AND FILLER MATERIALS

- A. Joint Filler Type A: ASTM D1751; Asphalt impregnated fiberboard or felt, 1/4 to 1 inch thick; tongue and groove profile; manufactured by A.C.D. International or equal.
- B. Construction Joint Devices: ANSI/ASTM D1751 type; 1/4 inch to 1 inch thick, manufactured by A.C.D. International or equal.
- C. Expansion and Contraction Joint Devices: Supply materials in accordance with MDOT 2020 standard specifications for construction.
- D. Sealant: ASTM D6690, Type I; Son-No-Mar, manufactured by Sonneborn Building Products or equal.

2.5 CONCRETE MIX

- A. Select proportions for normal weight concrete in accordance with ACI 301 Method 2.
- B. Select proportions for concrete in accordance with ACI 318 without trial mixtures or field experience when approved by Engineer.
- C. Provide concrete to the following criteria:

Concrete Grade: MDOT P1/S2

Material and Property	Measurement
Flexural Strength (7 day)	550 psi
Flexural Strength (28 day)	650 psi
Compressive Strength (7 day)	2,600 psi
Compressive Strength (28 day)	3,500 psi
Cement Type	Type A or IA
Cement Content (minimum)	6.0 sacks
Coarse Aggregate Type	6AA
Coarse Aggregate	72 percent by bulk volume (Dry, loose)
Fine Aggregate	2NS
Air Content	6.5 percent plus or minus 1.5 percent
Slump	4 inches plus or minus 1 inch

- D. Admixtures: Include admixture types and quantities indicated in concrete mix designs only when approved by Engineer.
 - 1. Use accelerating admixtures in cold weather. Use of admixtures will not relax cold weather placement requirements.
 - 2. Do not use calcium chloride nor admixtures containing calcium chloride.
 - 3. Use set retarding admixtures during hot weather.
 - 4. Add air entrainment admixture to concrete mix for work exposed to freezing and thawing.
 - 5. For concrete exposed to deicing chemicals, limit fly ash, pozzolans, silica fume, and slag content as required by applicable ACI code.
- E. Average Compressive Strength Reduction: Permitted in accordance with ACI 318.
- F. Ready Mixed Concrete: Mix and deliver concrete in accordance with ASTM C94/C94M.
- G. Site Mixed Concrete: Mix concrete in accordance with ACI 318.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Verify requirements for concrete cover over reinforcement.
- C. Verify anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with placing concrete.

3.2 PREPARATION

- A. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent. Remove laitance, coatings, and unsound materials.
- B. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout.
- C. Remove debris and ice from formwork, reinforcement, and concrete substrates.
- D. Remove water from areas receiving concrete before concrete is placed.

3.3 PLACING CONCRETE

- A. Place concrete in accordance with ACI 301 and MDOT Standard Specifications for Construction.
- B. Notify testing laboratory and Engineer minimum 24 hours prior to commencement of operations.
- C. Ensure reinforcement, inserts, embedded parts, formed expansion and contraction joints are not disturbed during concrete placement.

- D. Deposit concrete at final position. Prevent segregation of mix.
- E. Place concrete in continuous operation for each panel or section determined by predetermined joints.
- F. Consolidate concrete after placing by means of mechanical vibrators or other suitable tools approved by the Engineer.
- G. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- H. Place concrete continuously between predetermined expansion, control, and construction joints.
- I. Do not interrupt successive placement; do not permit cold joints to occur.
- J. Saw cut joints within 24 hours after placing. Use 3/16 inch thick blade, cut into 1/4 depth of slab thickness.
- K. Concrete transported in a truck mixer, agitator or other transportation device shall be discharged at the job within 1 1/2 hours after the cement has been added to the water or aggregates.
- L. When hand mixing is authorized, it shall be done on a watertight platform and in such a manner as to ensure a uniform distribution of the materials throughout the mass. Mixing shall continue until a homogeneous mixture of the required consistency is obtained.
- M. Retempering of partially hardened concrete or mortar will not be permitted.

3.4 CONCRETE FINISHING

- A. Formed Surfaces:
 - 1. As a minimum of formed surfaces shall receive a plain finish and rubbed finish.
 - 2. Plain Finish: Immediately after removal of forms, all fins and loose material shall be removed and all holes, voids, aggregate pockets and depressions shall be cut out to solid concrete. All such defective areas shall be cleaned and wetted thoroughly and immediately be brushed and net cement and filled with Portland Cement grout finished, flush with the adjacent surfaces. Patch work shall be damp cured for a period of 48 hours and, when exposed, it shall be finished to match adjacent surfaces.
 - 3. Rubbed Finish: All form marks and other such irregularities shall be removed by rubbing the surface with a Carborundum stone and water as soon as practical after form removal.
 - 4. Bagged Finish: All formed surfaces which are not earth backfilled shall receive a bagged finish. All air and water voids shall be finished flush with the wall surface. The wall shall first be moistened with water. Portland cement grout matching the color of the base concrete shall be worked into the voids using burlap or sponge rubber finishing pads.
- B. Unformed Surface Finishes
 - 1. Troweled Finish: After a floated finish, provide a smooth surface, free of defects with a steel trowel. Follow the first troweling with a second troweling after the concrete has hardened sufficiently to produce a ringing sound as the towel is moved over the surface. The

finish surface shall be essentially free of trowel marks, uniform in texture and appearance and shall be plane to 1/8" in 10 ft. tolerance.

2. Broomed Finish: After receiving the floated and troweled finishes, apply a broomed finish with a fiber-bristle brush in a direction transverse to the line of traffic.
 3. Floated Finish: Place, consolidate, strike off and level concrete. After the concrete has stiffened sufficiently, floating shall begin using a hard float, power trowel and float shoes or powered disc float. Cut down high spots and fill low spots to 1/4" in 10 ft. tolerance. Float to a uniform sandy texture.
 4. Scratched Finish: After the concrete has been placed consolidated, struck off and leveled to a 1/4" in 2 ft. tolerance, roughen with stiff brushes or rakes before the final set.
- C. Finish concrete floor surface in accordance with ACI 301.
- D. Provide a troweled finish for base slabs.
- E. Provide a floated finish for slabs as directed by the Engineer.
- F. Provide a broom finish for exterior slabs, sidewalks, pavements and where directed by the Engineer.
- G. Provide a scratched finish where concrete is specified to receive a subsequent concrete topping.
- H. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains at one inch per 10 feet unless otherwise indicated on drawings.
- I. Maximum variation of surface flatness for exposed concrete floors 1/8 inch in 10 feet.

3.5 CURING AND PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
- C. Cure concrete in accordance with MDOT Standard Specification for Construction.
- D. Membrane Curing Compound: Apply curing compound in accordance with manufacturer's instructions. Curing compound shall not contain any ingredients which might stain or otherwise injure the concrete or prevent a good bond for subsequent coatings or finishing's.

3.6 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Field inspection and testing will be performed by Owner's testing laboratory in accordance with MDOT Standard Specification for Construction.
- C. Provide free access to Work and cooperate with appointed firm.

- D. Submit proposed mix design of each class of concrete to Engineer for review prior to commencement of Work.
- E. Concrete Inspections:
 - 1. Continuous Placement Inspection: Inspect for proper installation procedures.
 - 2. Periodic Curing Inspection: Inspect for specified curing temperature and procedures.
- F. Strength Test Samples:
 - 1. Sampling Procedures: ASTM C172.
 - 2. Cylinder Molding and Curing Procedures: ASTM C31/C31M, cylinder specimens, standard cured.
 - 3. Sample concrete and make one set of three cylinders for every 75 cu yds or less of each class of concrete placed each day and for every 5,000 sf of surface area for slabs and walls.
 - 4. When volume of concrete for any class of concrete would provide less than 5 sets of cylinders, take samples from five randomly selected batches, or from every batch when less than 5 batches are used.
 - 5. Make one additional cylinder during cold weather concreting, and field cure.
- G. Field Testing:
 - 1. Slump Test Method: ASTM C143/C143M.
 - 2. Air Content Test Method: ASTM C231.
 - 3. Temperature Test Method: ASTM C1064/C1064M.
 - 4. Measure slump and temperature for each compressive strength concrete sample.
 - 5. Measure air content in air entrained concrete for each compressive strength concrete sample.
- H. Cylinder Compressive Strength Testing:
 - 1. Test Method: ASTM C39/C39M.
 - 2. Test Acceptance: In accordance with MDOT Standard Specification for Construction.
 - 3. Test one cylinder at 7 days.
 - 4. Test two cylinders at 28 days.
 - 5. Dispose remaining cylinders when testing is not required.
- I. Core Compressive Strength Testing:
 - 1. Sampling and Testing Procedures: ASTM C42/C42M.
 - 2. Test Acceptance: In accordance with MDOT Standard Specification for Construction.
 - 3. Drill three cores for each failed strength test from concrete represented by failed strength test.
- J. Maintain records of concrete placement. Record date, location, quantity, air temperature and test samples taken.

3.7 PATCHING

- A. Allow Engineer to inspect concrete surfaces immediately upon removal of forms.
- B. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Engineer upon discovery.

- C. Patch imperfections as directed by Engineer in accordance with MDOT Standard Specification for Construction.

3.8 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by Engineer.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Engineer for each individual area.

END OF SECTION 03 30 00

SECTION 03 39 00
CONCRETE CURING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes initial and final curing of horizontal and vertical concrete surfaces.
- B. Related Sections:
 - 1. Section 03 30 00 - Cast-In-Place Concrete.

1.2 REFERENCES

- A. American Concrete Institute:
 - 1. ACI 301 - Specifications for Structural Concrete.
 - 2. ACI 302.1 - Guide for Concrete Floor and Slab Construction.
 - 3. ACI 308.1 - Standard Specification for Curing Concrete.
 - 4. ACI 318 - Building Code Requirements for Structural Concrete.
- B. ASTM International:
 - 1. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete.
 - 2. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
 - 3. ASTM C1315 - Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.
 - 4. ASTM D2103 - Standard Specification for Polyethylene Film and Sheeting.

1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit data on curing compounds, mats, paper, film, compatibilities, and limitations.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301.
- B. Perform Work in accordance with State of Michigan and local municipal standards.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Deliver curing materials in manufacturer's packaging including application instructions.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Membrane Curing Compound Type A: ASTM C309, Type 1, Class A.
- B. Water: Potable, not detrimental to concrete.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Verify substrate surfaces are ready to be cured.

3.2 INSTALLATION - HORIZONTAL SURFACES

- A. Cure concrete in accordance with ACI 308.1 using moisture curing or moisture-retaining-cover curing method.
- B. Spraying: Spray water over floor slab areas and maintain wet for 7 days.

3.3 INSTALLATION - VERTICAL SURFACES

- A. Cure concrete in accordance with ACI 308.1 using moisture curing or moisture-retaining-cover curing method.
- B. Spraying: Spray water over surfaces and maintain wet for 7 days.

3.4 PROTECTION OF FINISHED WORK

- A. Section 01 70 00 - Execution and Closeout Requirements: Protecting finished Work.
- B. Do not permit traffic over unprotected floor surface.

END OF SECTION 03 39 00

SECTION 11 68 13
PLAYGROUND EQUIPMENT

1 PART 1 GENERAL

1.1 SCOPE

- A. This section covers assembling and installing all playground equipment, age-appropriate signage, and edging as shown on the drawings and as herein specified and/or required for a complete job. The Work shall include all equipment, signage, installation, inspection and guaranties.

1.2 RELATED SECTIONS

- A. Section 01 30 00 – Submittals.
- B. Section 03 30 00 – Cast-In-Place Concrete.
- C. Section 32 18 16 – Playground Protective Surfacing.
- D. ASTM A123/A123M – (2017) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- E. ASTM A135/A135M – (2009; R2014) Standard Specification for Electric-Resistance-Welded Steel Pipe.
- F. ASTM A153/A153M – (2016) Standard Specification for Zinc Coating (Hot-Dip) Iron and Steel Hardware.
- G. ASTM A500/A500M – (2018) Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
- H. ASTM A513/A513M – (2019) Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing.
- I. ASTM B26/B26M – (2014; E 2015) Standard Specification for Aluminum-Alloy Sand Castings.
- J. ASTM B108/B108M – (2018) Standard Specification for Aluminum-Alloy Permanend Mold Castings.
- K. ASTM B117 – (2016) Standard Practice for Operating Salt Spray (Fog) Apparatus.
- L. ASTM B179 – (2017) Standard Specification for Aluminum Alloys in Ingot and Molten Forms for Castings from All Casting Processes.

- M. ASTM B221 - (2014) Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- N. ASTM B221M - (2013) Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric).
- O. ASTM D173/D173M - (2003; R 2011; E 2012) Bitumen-Saturated Cotton Fabrics Used in Roofing and Waterproofing.
- P. ASTM D822 - (2013) Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings.
- Q. ASTM D1248 - (2016) Standard Specification for Polyethylene Plastics Extrusion Materials for Wire and Cable.
- R. ASTM D2454 - (2014) Determining the Effect of Overbaking on Organic Coatings.
- S. ASTM D2794 - (1993; R 2019) Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
- T. ASTM D3359 - (2017) Standard Test Methods for Rating Adhesion by Tape Test.
- U. ASTM D3363 - (2005; E 2011; R 2011; E 2012) Film Hardness by Pencil Test.
- V. ASTM D6112 - (2013) Compressive and Flexural Creep and Creep-Rupture of Plastic Lumber and Shapes.
- W. ASTM F1487 - (2017) Standard Consumer Safety Performance Specification for Playground Equipment for Public Use
- X. ASTM F2373 - (2011) Standard Consumer Safety Performance Specification for Public Use Play Equipment for Children 6 Months through 23 Months.
- Y. CPSC Pub No 325 - (2015) Public Playground Safety Handbook.

1.3 SUBMITTALS

- A. Furnish complete installation product information for all equipment to the Owner's Representative for approval.
- B. At the completion of the project, the contractor must provide the Owner with:
 1. A written maintenance plan which describes in detail any and all requirements for maintenance and inspections.
 2. A maintenance kit containing at a minimum tool, touch-up paint, hardware and graffiti remover.

1.4 QUALITY ASSURANCE

- A. Installer: Must have a minimum of 5 years experience with a minimum of 10 sites.
 - 1. All proposed equipment will be IPEMA certified or show that it has been tested to meet all current safety standards.
- B. Installer: Must be certified by the manufacturer for training and experience installing the playground and must be CPSI Certified.

1.5 DELIVERY, STORAGE AND HANDLING

- A. All shipments shall include a packing list for each skid/container, specifying the part numbers and quantities on each skid or within each container.
- B. Play structure posts shall be individually packaged in sturdy, water-resistant, mar-resistant cardboard boxes. Other components shall be individually wrapped or bulk wrapped to provide protection during shipment. Small parts and hardware packages will be placed in crates for shipment. The components and crates are then shrink-wrapped to skids (pallets) to ensure secure shipping.
- C. All equipment is to remain packaged until delivered to the park site where it is to be installed.

1.6 WARRANTY

- A. Manufacturer shall offer the following warranties on the materials and components of its system:
- B. LIFETIME LIMITED WARRANTY ON SUPPORT POSTS (UPRIGHTS)
- C. 15 YEAR LIMITED WARRANTY ON PUNCHED STEEL DECKS, PIPES, RAILS, LOOPS AND RUNGS
- D. 15 YEAR LIMITED WARRANTY ON ROTOMOLDED POLYETHYLENE COMPONENTS
- E. LIFETIME LIMITED WARRANTY ON HARDWARE

2 PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Landscape Structures, represented by Penchura, LLC, 889 S. Old US23, Brighton, MI 48114, (888) 778-7529, www.penchura.com.

2.2 MATERIAL

- A. Material: All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all steel parts by the use of time-tested coatings such as zinc plating, galvanizing, ProShield finish, TenderTuff coating, etc.
- B. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated. All primary fasteners shall include a locking patch-type material that will meet the minimum torque requirements of IFI-125. Manufacturer to provide special tools for pinned tamperproof fasteners.
- C. TenderTuff Coating:
 - 1. Metal components to be TenderTuff-coated shall be thoroughly cleaned in a hot phosphatizing pressure washer, then primed with a water-based thermosetting solution.
 - 2. Primed parts shall be preheated prior to dipping in UV-stabilized, liquid polyvinyl chloride (PVC), then salt cured at approximately 400 degrees fahrenheit.
 - 3. The finished coating shall be approximately .080" thick at an 85 durometer with a minimum tensile strength of 1700 PSI and a minimum tear strength of 250 pounds/inch.
 - 4. Five standard colors are available all with a matte finish. Color: by Owner.
- D. ProShield Finish:
 - 1. All Metal components with ProShield finish shall be thoroughly cleaned and phosphatized through a five-stage power washer.
 - 2. Parts are then thoroughly dried, preheated and processed through a set of automatic power spray guns where a minimum 0.002" of epoxy primer is applied.
 - 3. A minimum .004" of architectural-grade Super-Durable polyester TGIC powder is applied.
 - 4. The average ProShield film thickness is .006".
 - 5. ProShield is formulated and tested per the following ASTM standards. Each color must meet or exceed the ratings listed below:
 - a. Hardness (D3363) rating 2H
 - b. Flexibility (D522) pass 1/8" mandrel
 - c. Impact (D2794) rating minimum 80 inch-pounds (9.038 newton meters)
 - d. Salt Fog Resistance (B117 and D1654) 4,000 hours and rating 6 or greater
 - e. UV Exposure (G154, 340 bulb) 3,000 hours, rating delta E of 2, and 90 percent gloss retention
 - f. Adhesion (D3359, Method B) rating 5B
 - g. The Paint Line shall employ a "checkered" adhesion test daily.
 - h. Standard Colors – Colors: by Owner.
- E. Decks:
 - 1. All decks shall be of modular design and have 5/16" diameter holes on the standing surface.

2. There shall be a minimum of (4) slots in each face to accommodate face mounting of components.
3. Decks shall be manufactured from a single piece of low carbon 12 GA (.105") sheet steel conforming to ASTM specification A-1011.
4. The sheet shall be perforated with a return flange on the perimeter to provide reinforcement to ensure structural integrity.
5. There shall be no unsupported area larger than 3.5 square feet.
6. Decks shall be designed so that all sides are flush with the outside edge of the supporting posts.
7. Decks shall be Tendertuff coated. Color: by Owner

F. Concrete Products:

1. Two processes are used to produce concrete products:
 - a. Glass Fiber Reinforced Concrete (GFRC) Products:
 - i. Glass fiber is alkali-resistant (AR) with high tensile properties formulated for concrete.
 - ii. GFRC nominal product thickness is 1" with a unit weight of about 12 lbs per square foot and an average ultimate flexural strength of 2,100 psi per ASTM C947.
 - iii. Finish: Exterior latex paint suited for concrete applications.
 - b. Precast Concrete Products: Wet-cast solid, molded concrete
 - i. Average compressive strength of 5,000 psi per ASTM C39.
 - ii. Unit weight range of about 115-145 lbs. per cubic foot.
 - iii. Finish: Exterior latex paint suited for concrete applications

G. Rotationally Molded Polyethylene Parts:

1. These parts shall be molded using prime compounded linear low-density polyethylene with a tensile strength of 2500 psi (per ASTM D638 and with color and UV-stabilizing additives.
2. Wall thickness varies by product from .187" (3/16") to .312" (5/16").

H. Recycled Permalene Parts:

1. These parts shall be manufactured from 3/4" high-density polyethylene that has been specially formulated for optimum UV stability and color retention.
2. Products shall meet or exceed density of .960 G/cc per ASTM D1505, tensile strength of 2400 PSI per ASTM D638.
3. Available in a three-layer product with (2) .100" thick exterior layers over a .550" thick recycled Black interior core.
4. Standard colors. Color: by Owner

I. Footings:

1. Unless otherwise specified, the bury on all footings shall be 34" below Finished Grade (FG) on all in-ground play events/posts.

J. Hardware Packages:

1. All shipments shall include individual component-specific hardware packages.

2. Each hardware package shall be labeled with the part number, description, a component diagram showing the appropriate component, package weight, a bar code linking the hardware package to the job number, assembler's name, date and time the package was assembled, work center number, and work order number.
- K. Installation Documentation:
1. All shipments shall include a notebook or packet of order-specific, step-by-step instructions for assembly of each component, including equipment assembly diagrams, estimated hours for assembly, footing dimensions, concrete quantity for direct bury components, fall height information, area required information and detailed material specifications.
- L. Maintenance Kit:
1. An order-specific maintenance kit shall be provided for each structure order. The kit will include a notebook or packet with a second set of installation documents and order-specific maintenance documentation with recommendations on how often to inspect, what to look for and what to do to keep the equipment in like-new condition.
 2. The kit shall include touch-up primer, appropriate color touch-up paint, sandpaper, appropriate color touch-up PVC, graffiti remover and additional installation tools for the tamperproof fasteners.
- M. Play Structure:
1. Site-specific Play Structure specifications, such as model names and numbers, can be found in the Drawings.

3 PART 3 EXECUTION

3.1 PREPARATION

- A. Prior to any excavation, installation of any other related work, the contractor will verify the conditions of the site.

3.2 ASSEMBLY AND INSTALLATION

- A. To avoid transport damage, All Playground Equipment shall be unpacked and assembled at the installation site.
- B. All play equipment shall be assembled and installed in accordance with the manufacturer's recommendations.
- C. The Contractor shall be responsible for any assembly requirements and installation of all play equipment including concrete footers.

3.3 CONSTRUCTION INSPECTION

- A. Once the installation is complete, the manufacturer shall certify in writing to the Owner that the installation has been completed in strict accordance with the manufacturer's specifications and requirements.

3.4 DISPOSAL OF EXCESS AND WASTE MATERIALS

- A. Remove excess excavated material, trash, debris and waste materials and legally dispose of such off the property, except as otherwise specifically noted.

END OF SECTION 11 68 13

SECTION 31 05 13
SOILS FOR EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Topsoil materials.
- B. Related Requirements:
 - 1. Section 31 05 16 – Aggregates for Earthwork
 - 2. Section 31 23 16 – Excavation
 - 3. Section 31 23 23 – Fill
 - 4. Section 32 91 19 – Landscape Grading
 - 5. Section 32 92 19 – Seeding

1.2 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit name of imported materials source.
- C. Supplier's Certificate: Certify that products meet or exceed specified requirements.

1.3 QUALITY ASSURANCE

- A. Furnish each subsoil and topsoil material from single source throughout Work.
- B. Perform Work according to Michigan Department of Transportation standards.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Topsoil:
 - 1. Comply with Michigan Department of Transportation standard.

2.2 SOURCE QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Requirements for testing, inspection, and analysis.

- B. Owner Inspection:
 - 1. Make topsoil available for inspection at source prior to packaging for shipment.
 - 2. Notify Owner at least seven days before inspection is allowed.
- C. Owner Witnessing:
 - 1. Allow witnessing of source testing at supplier's test facility.
 - 2. Notify Owner at least seven days before tests are scheduled.
- D. Certificate of Compliance:
 - 1. If supplier is approved by authorities having jurisdiction, submit certificate of compliance indicating Work performed at source conforms to Contract Documents.
 - 2. Specified source tests are not required for Work performed by approved supplier.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Excavation:
 - 1. Excavate topsoil from designated areas.
 - 2. Strip topsoil to full depth of topsoil in designated areas.
 - 3. Remove excess excavated materials not intended for reuse from Site.
 - 4. Remove excavated materials not meeting requirements for topsoil materials from Site.
- B. Stockpiling:
 - 1. Stockpile excavated material meeting requirements for topsoil materials.
 - 2. Stockpile in sufficient quantities to meet Project schedule and requirements.
 - 3. Separate differing materials with dividers or stockpile apart to prevent intermixing of soil types or contamination.
 - 4. Direct surface water away from stockpile to prevent erosion or deterioration of materials.

3.2 CLEANING

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for cleaning.
- B. Stockpile:
 - 1. Remove stockpile and leave area in clean and neat condition.
 - 2. Grade Site surface to prevent freestanding surface water.

END OF SECTION 31 05 13

SECTION 31 05 16
AGGREGATES FOR EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Aggregate materials.
- B. Related Requirements:
 - 1. Section 31 23 16 - Excavation
 - 2. Section 31 23 23 - Fill

1.2 REFERENCE STANDARDS

- A. American Association of State Highway and Transportation Officials:
 - 1. AASHTO T 180 - Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit name of imported materials source.
- C. Supplier's Certificate: Certify that products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

- A. Furnish each aggregate material from single source throughout Work.
- B. Perform Work according to Michigan Department of Transportation standards.
- C. Maintain one copy of each standard affecting Work of this Section on Site.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aggregate:

1. MDOT 22A Crushed Limestone: Comply with Michigan Department of Transportation

2.2 SOURCE QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Requirements for testing, inspection, and analysis.
- B. Testing and Analysis:
 1. Comply with AASHTO T 180.
 2. If tests indicate materials do not meet specified requirements, change material and retest.
- C. Owner Inspection:
 1. Notify Owner at least seven days before inspection is allowed.
- D. Owner Witnessing:
 1. Allow witnessing of source testing at supplier's test facility.
 2. Notify Owner at least seven days before tests are scheduled.
- E. Certificate of Compliance:
 1. If supplier is approved by authorities having jurisdiction, submit certificate of compliance indicating Work performed at source conforms to Contract Documents.
 2. Specified source tests are not required for Work performed by approved supplier.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Excavation:
 1. Remove excess excavated aggregate materials not intended for reuse from Site.
 2. Remove excavated materials not meeting requirements for aggregate from Site.
- B. Stockpiling:
 1. Stockpile excavated material meeting requirements for aggregate materials.
 2. Stockpile in sufficient quantities to meet Project schedule and requirements.
 3. Separate different aggregate materials with dividers or stockpile apart to prevent intermixing of aggregate types or contamination.
 4. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

3.2 CLEANING

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for cleaning.
- B. Stockpile:

1. Remove stockpile and leave area in clean and neat condition.
2. Grade Site surface to prevent freestanding surface water.

END OF SECTION 31 05 16

SECTION 31 22 13
ROUGH GRADING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Excavating topsoil.
2. Excavating subsoil.
3. Cutting, grading, filling, rough contouring, and compacting, site for paving and playground equipment.

B. Related Requirements:

1. Section 31 05 13 - "Soils for Earthwork" for soils for fill.
2. Section 31 05 16 - "Aggregates for Earthwork" for aggregates for fill.
3. Section 31 23 16 - "Excavation" for building excavation.
4. Section 31 23 23 - "Fill" for general building area backfilling.
5. Section 32 91 19 - "Landscape Grading" for finish grading with topsoil to contours.

1.2 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Record actual locations of remaining utilities by horizontal dimensions, elevations or inverts, and slope gradients.

1.3 QUALITY ASSURANCE

- A. Perform Work according to State of Michigan Department of Transportation 2020 standard specifications for construction.
- B. Furnish each coarse- and fine-aggregate material from single source throughout Work.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Perform Work according to:
1. The State of Michigan Department of Transportation standards.

2.2 MATERIALS

- A. Topsoil: as specified in Section 31 05 13 - "Soils for Earthwork".
- B. Subsoil Fill: as specified in Section 31 05 13 - "Soils for Earthwork".
- C. Structural Fill: as specified in Section 31 05 16 - "Aggregates for Earthwork".
- D. Granular Fill: as specified in Section 310516 "Aggregates for Earthwork".

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of the work.
- B. Verify Site conditions under provisions of Section 01 30 00 - "Administrative Requirements".
- C. Verify survey benchmark and intended elevations for the Work are as indicated on Drawings.

3.2 PREPARATION

- A. Call Miss Dig not less than three working days before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Identify required lines, levels, contours, and datum.
- C. Notify utility company to remove and relocate utilities.
- D. Protect utilities indicated to remain free from damage.
- E. Protect plant life, lawns, and other features remaining as portion of final landscaping.
- F. Protect benchmarks, survey control point, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

3.3 TOPSOIL EXCAVATION

- A. Excavate topsoil from areas to be further excavated, relandscaped, or regraded without mixing with foreign materials for use in finish grading.
- B. Do not excavate wet topsoil.
- C. Stockpile in area designated on Site to depth not exceeding 8 feet and protect from erosion. Stockpile material until disposal.

- D. Remove from Site excess topsoil not intended for reuse.
- E. Remove topsoil from Site.
- F. Do not remove topsoil from Site.

3.4 SUBSOIL EXCAVATION

- A. Excavate subsoil from areas to be further excavated, relandscaped, or regraded.
- B. Do not excavate wet subsoil or excavate and process wet material to obtain optimum moisture content.
- C. When excavating through roots, perform Work by hand and cut roots with sharp axe or a Sawzall reciprocating saw.
- D. Remove from Site excess subsoil not intended for reuse.
- E. Remove subsoil from Site.
- F. Stockpile subsoil in area designated on Site to depth not exceeding 8 feet and protect from erosion.
- G. Stockpile excavated material in area designated on Site according to Section 31 05 16 - "Aggregates for Earthwork".
- H. Benching Slopes: Horizontally bench existing slopes greater than 1:4 to key placed fill material to slope to provide firm bearing.
- I. Stability: Replace damaged or displaced subsoil as specified for fill.

3.5 FILLING

- A. Fill areas to contours and elevations with unfrozen materials.
- B. Place material in continuous layers as follows:
 - 1. Subsoil Fill: Maximum 12 inches compacted depth.
 - 2. Structural Fill: Maximum 8 inches compacted depth.
 - 3. Granular Fill: Maximum 8 inches compacted depth.
- C. Maintain optimum moisture content of fill materials to attain required compaction density.
- D. Slope grade away from building with a minimum 2 percent slope for minimum distance of 10 feet, unless noted otherwise.
- E. Make grade changes gradual. Blend slope into level areas.
- F. Repair or replace items damaged by excavation or filling.

G. Install Work according to State of Michigan Department of Transportation standards.

3.6 TOLERANCES

A. Top Surface of Subgrade: Plus or minus 1.2 inches from required elevation.

3.7 FIELD QUALITY CONTROL

A. Perform in-place compaction tests according to the following:

1. Density Tests: ASTM D2922
2. Moisture Tests: ASTM D6938.

B. When tests indicate Work does not meet specified requirements, remove Work, replace, and retest.

C. Frequency of Tests: As indicated by the Engineer.

D. Prepare test and inspection reports.

END OF SECTION 31 22 13

SECTION 31 23 16

EXCAVATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Soil densification.
2. Excavating for playground installation.
3. Excavation for paving.

B. Related Requirements:

1. Section 02 41 13 - Selective Site Demolition
2. Section 31 05 13 - Soils for Earthwork
3. Section 31 05 16 - Aggregates for Earthwork
4. Section 31 23 23 - Fill

1.2 REFERENCE STANDARDS

- A. Local utility standards when working within 48 inches of utility lines.

PART 2 - PRODUCTS

- 2.1 Not Used.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation preparation.

B. Utility Service Locator:

1. Call MissDIG not less than three working days before performing Work.
2. Request that underground utilities be located and marked within and immediately surrounding Site.
3. Identify required lines, levels, contours, and data.

C. Existing Utilities:

1. Notify utility company to remove and relocate utilities.
 2. Protect from damage utilities indicated to remain.
- D. Protect plant life, lawns, rock outcroppings, and other features designated to remain as portion of final landscaping.
- E. Protect benchmarks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- F. Do not close or obstruct roadways without permits.
- G. Erect and maintain temporary barriers and security devices, including warning signs, warning lights, and similar measures, for protection of public, Owner, and existing improvements indicated to remain.

3.2 SOIL DENSIFICATION BY VIBRO-COMPACTION

- A. Description:
1. Vibro-compact substrates below footing bearing surfaces for footings as indicated on Drawings before excavating Site.
 2. Densify existing subsoils with existing relative density rating of "compact to dense" to attain relative density rating of "very dense."

3.3 EXCAVATION

- A. Excavate subsoil to accommodate fence footings.
- B. Compact disturbed load-bearing soil in direct contact with foundations to original bearing capacity.
- C. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- D. Trim excavation and remove loose matter.
- E. Removal of Deleterious Materials:
1. Remove excess and unsuitable material from Site.
- F. Notify Architect/Engineer of unexpected subsurface conditions.
- G. Correct over-excavated areas as directed by Engineer.
- H. Remove excavated material from Site.
- I. Repair or replace items indicated to remain that have been damaged by excavation.

3.4 FIELD QUALITY CONTROL

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for testing, adjusting, and balancing.
- B. Inspecting: Request visual inspection of bearing surfaces by Engineer before installing subsequent Work.

3.5 PROTECTION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.
- B. Prevent displacement or loose soil from falling into excavation and maintain soil stability.
- C. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- D. Protect structures, utilities, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards that may be created by earth operations.

END OF SECTION 31 23 16

SECTION 31 23 23

FILL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Backfilling fence footing.

B. Related Requirements:

1. Section 03 30 00 - Cast-in-Place Concrete
2. Section 31 05 13 - Soils for Earthwork
3. Section 31 05 16 - Aggregates for Earthwork
4. Section 31 23 16 - Excavation

1.2 REFERENCE STANDARDS

A. American Association of State Highway and Transportation Officials:

1. AASHTO T 180 - Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:

1. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
2. ASTM D1556/D1556M - Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method.
3. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
4. ASTM D6031/D6031M - Standard Test Method for Logging In Situ Moisture Content and Density of Soil and Rock by the Nuclear Method in Horizontal, Slanted, and Vertical Access Tubes.
5. ASTM D6938 - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Materials Source: Submit name of imported materials suppliers.

C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

- D. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.

1.4 QUALITY ASSURANCE

- A. Perform Work according to Michigan Department of Transportation standards.
- B. Maintain one copy of each standard affecting Work of this Section on Site.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Structural Fill: MDOT Class I for lower area of excess excavation over 24", compacted to 97 percent of maximum density in accordance with MDOT standards.
- B. Granular Fill: MDOT Class II for dry excavation and backfill under structure compacted to 95 percent of maximum density in accordance with MDOT standards.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation examination.

3.2 PREPARATION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation preparation.
- B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with structural fill and compact to density equal to or greater than requirements for subsequent fill material.

3.3 BACKFILLING

- A. Backfill areas to contours and elevations.
- B. Systematically backfill to allow maximum time for natural settlement.
- C. Place material in continuous layers as follows:
 - 1. Structural Fill: Maximum 6 inches compacted depth.
 - 2. Granular Fill: Maximum 18 inches compacted depth.

- D. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces, and do not backfill with frozen materials.
- E. Maintain optimum moisture content of fill materials to attain required compaction density.
- F. Make gradual grade changes and blend slope into level areas.
- G. Remove surplus backfill materials from Site.
- H. Leave fill material stockpile areas free of excess fill materials.

3.4 TOLERANCES

- A. Section 01 40 00 - Quality Requirements: Requirements for tolerances.
- B. Top Surface of Backfilling under Paved areas: Plus or minus ½ inch from required elevations.

3.5 FIELD QUALITY CONTROL

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for testing, adjusting, and balancing.
- B. Testing:
 - 1. Laboratory Material Testing: Comply with AASHTO T 180.
 - 2. In-Place Compaction Testing:
 - a. Density Tests: Comply with ASTM D2922
 - b. Moisture Tests: Comply with ASTM D3017
 - 3. If tests indicate that Work does not meet specified requirements, remove Work, replace, compact, and retest.
 - 4. Proof-roll compacted fill surfaces under HMA surface.

3.6 PROTECTION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.
- B. Reshape and recompact fills subjected to vehicular traffic during construction.

3.7 ATTACHMENTS

- A. Fill Under Grass Areas: Native material to 4 inches below finish grade; compacted uniformly to 95 percent of maximum density.
- B. Fill under Asphalt Paving:

1. Compact existing base to 95 percent of maximum density.
2. 21AA Crushed Limestone to 3 inches below finish paving elevation; compacted uniformly to 95 percent of maximum density.

END OF SECTION 31 23 23

SECTION 32 11 23

AGGREGATE BASE COURSES

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Aggregate subbase.
2. Aggregate base course.
3. Aggregate for path.

B. Related Sections:

1. Section 31 22 13 - Rough Grading: Preparation of site for base course.
2. Section 31 23 23 - Fill: Compacted fill under base course.
3. Section 32 12 16 - Asphalt Paving: Binder and finish asphalt courses.
4. Section 32 13 13 - Concrete Paving: Finish concrete surface course.
5. Section 32 91 19 - Landscape Grading: Topsoil fill at areas adjacent to aggregate base course.

1.02 REFERENCES

A. American Association of State Highway and Transportation Officials:

1. AASHTO M288 - Standard Specification for Geotextile Specification for Highway Applications.

B. ASTM International:

1. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
2. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
3. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
4. ASTM D2940 - Standard Specification for Graded Aggregate Material For Bases or Subbases for Highways or Airports.
5. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

1.03 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Samples: Submit, in air-tight containers, 10 lb. sample of each type of aggregate fill to testing laboratory.

- C. Materials Source: Submit name of aggregate materials suppliers.
- D. Manufacturer's Certificate: Certify products meet or exceed specified requirements MDOT 2020 Standard Specifications for Construction.

1.04 QUALITY ASSURANCE

- A. Furnish each aggregate material from single source throughout the Work.
- B. Perform Work according to MDOT 2020 Standard Specifications for Construction standards.

PART 2 - PRODUCTS

2.01 AGGREGATE MATERIALS

- A. Coarse Aggregate: MDOT 22A Aggregate as specified in MDOT 2020 Standard Specifications for Construction standards Table 902-1.
 - 1. Material should be crushed limestone
- B. Trail Surface Aggregate
 - 1. Crushed limestone fines. Any substitution must be approved by engineer prior to bidding,

2.02 GRANULAR MATERIALS

- A. Fine Aggregate: MDOT Class II Sand as specified in MDOT 2020 Standard Specifications for Construction standards Table 902-3.

2.03 ACCESSORIES

- A. Geotextile Fabric: AASHTO M288; non-woven, polypropylene.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting Work.
- B. Verify compacted substrate is dry and ready to support paving and imposed loads.
 - 1. Proof roll substrate with 3 ton in minimum two perpendicular passes to identify soft spots.
 - 2. Remove soft substrate and replace with compacted fill as specified in Section 31 23 23 or as approved by Engineer.
- C. Verify substrate has been inspected, gradients and elevations are correct.

3.02 PREPARATION

- A. Correct irregularities in substrate gradient and elevation by scarifying, reshaping, and re-compacting.
- B. Do not place fill on soft, muddy, or frozen surfaces.

3.03 AGGREGATE PLACEMENT

- A. Gradation of Aggregate: MDOT 2020 Standard Specifications for Construction standards Table 902-1.
- B. Spread aggregate over prepared substrate to total compacted thickness as indicated on Drawings.
- C. Roller compact aggregate to 98 percent maximum density.
- D. Level and contour surfaces to elevations, profiles, and gradients indicated.
- E. Add small quantities of fine aggregate to coarse aggregate when required to assist compaction.
- F. Maintain optimum moisture content of fill materials to attain specified compaction density. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.
- G. Use mechanical tamping equipment in areas inaccessible to compaction equipment.

3.04 TOLERANCES

- A. Section 01 40 00 - Quality Requirements: Tolerances.
- B. Maximum Variation From Flat Surface: 1/4 inch measured with 10 foot straight edge.
- C. Maximum Variation From Thickness: 1/4 inch.
- D. Maximum Variation From Elevation: 1/2 inch.

3.05 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Compaction testing will be performed according to MDOT 2020 Standard Specifications of Construction – Density Requirements.
- C. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.
- D. Frequency of Tests: As determined by the Engineer in the field with a minimum of one test for every 500 square yards of each layer compacted aggregate.

3.06 COMPACTION

- A. Compact materials to 98 percent of maximum density as determined from test strip, according to MDOT 2020 Standard Specifications of Construction – Density Requirements.

END OF SECTION 32 11 23

SECTION 32 12 16

ASPHALT PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Asphalt materials.
2. Aggregate materials.
3. Aggregate subbase.
4. Asphalt paving base course, binder course, and wearing course.

1.2 REFERENCE STANDARDS

A. American Association of State Highway and Transportation Officials:

1. AASHTO M29 - Standard Specification for Fine Aggregate for Bituminous Paving Mixtures.
2. AASHTO M140 - Standard Specification for Emulsified Asphalt.
3. AASHTO M208 - Standard Specification for Cationic Emulsified Asphalt.
4. AASHTO M288 - Standard Specification for Geotextile Specification for Highway Applications.
5. AASHTO M320 - Standard Specification for Performance-Graded Asphalt Binder.
6. AASHTO M324 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
7. AASHTO MP1a - Standard Specification for Performance-Graded Asphalt Binder.

B. Asphalt Institute:

1. AI MS-2 - Mix Design Methods for Asphalt Concrete and Other Hot-Mix Types.
2. AI MS-19 - Basic Asphalt Emulsion Manual.
3. AI SP-2 - Superpave Mix Design.

C. ASTM International:

1. ASTM C1371 - Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers.
2. ASTM C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
3. ASTM D242 - Standard Specification for Mineral Filler For Bituminous Paving Mixtures.
4. ASTM D692 - Standard Specification for Coarse Aggregate for Bituminous Paving Mixtures.
5. ASTM D946 - Standard Specification for Penetration-Graded Asphalt Cement for Use in Pavement Construction.
6. ASTM D977 - Standard Specification for Emulsified Asphalt.

7. ASTM D1073 - Standard Specification for Fine Aggregate for Bituminous Paving Mixtures.
8. ASTM D1188 - Standard Test Method for Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Coated Samples
9. ASTM D2027 - Standard Specification for Cutback Asphalt (Medium-Curing Type).
10. ASTM D2397 - Standard Specification for Cationic Emulsified Asphalt.
11. ASTM D2726 - Standard Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures.
12. ASTM D2950 - Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods.
13. ASTM D3381 - Standard Specification for Viscosity-Graded Asphalt Cement for Use in Pavement Construction.
14. ASTM D3515 - Standard Specification for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures.
15. ASTM D3549 - Standard Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens.
16. ASTM D3910 - Standard Practices for Design, Testing, and Construction of Slurry Seal.
17. ASTM D6690 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
18. ASTM E408 - Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques.
19. ASTM E903 - Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.
20. ASTM E1918 - Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field.
21. ASTM E1980 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.

1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data:
 1. Submit product information for asphalt and aggregate materials.
 2. Submit mix design with laboratory test results supporting design.
- C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

- A. Mixing Plant: Certified by Michigan Department of Transportation.
- B. Obtain materials from same source throughout.
- C. Perform Work in accordance with Michigan Department of Transportation standard.
- D. Maintain one copy of document on site.

1.5 QUALIFICATIONS

- A. Installer: Company specializing in performing work of this section with minimum 2 years' experience.

1.6 AMBIENT CONDITIONS

- A. Section 01 50 00 - Temporary Facilities and Controls: Ambient conditions control facilities for product storage and installation.
- B. Do not place asphalt mixture between November 15 and March 1.
- C. Do not place asphalt mixture when ambient air or base surface temperature is less than 40 degrees F, or surface is wet or frozen.

PART 2 - PRODUCTS

2.1 ASPHALT PAVING

- A. Performance / Design Criteria:
- B. Asphalt Materials:
 - 1. Asphalt Binder: AASHTO M320; performance grade PG 58-28.
 - 2. Tack Coat: In accordance with Michigan Department of Transportation standards.
- C. Aggregate Materials:
 - 1. Coarse Aggregate: ASTM D692; crushed stone, gravel, or blast furnace slag.
 - 2. Fine Aggregate: AASHTO M29; natural sand or sand manufactured from stone, gravel, or blast furnace slag.

2.2 MIXES

- A. Use dry material to avoid foaming. Mix uniformly.
- B. Asphalt Paving Mixtures: Designed in accordance with Michigan Department of Transportation standards.
 - 1. Wearing Course: 36A.

2.3 SOURCE QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Testing, inspection and analysis requirements.
- B. Submit proposed mix design for review prior to beginning of Work.
- C. Test samples in accordance with AI MS-2.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify compacted subbase is dry and ready to support paving and imposed loads.
 - 1. Proof roll subbase with fully loaded tandem-axle dump truck in minimum two perpendicular passes to identify soft spots.
 - 2. Remove soft subbase and replace with compacted fill as specified in Section 31 23 23 - Fill.
- C. Verify gradients and elevations of base are correct.

3.2 INSTALLATION

- A. Subbase:
 - 1. Prepare subbase in accordance with the State of Michigan Department of Transportation.
- B. Tack Coat:
 - 1. Apply tack coat in accordance with Michigan Department of Transportation standards.
- C. Double Course Asphalt Paving:
 - 1. Install Work in accordance with Michigan Department of Transportation standards.
 - 2. Place asphalt wearing course after tack coat has "broke" but before it loses tackiness.
 - 3. Place each course of asphalt to thickness indicated on Drawings.
 - 4. Compact each course by rolling to specified density. Do not displace or extrude paving from position. Hand compact in areas inaccessible to rolling equipment.
 - 5. Perform rolling with consecutive passes to achieve even and smooth finish, without roller marks.

3.3 TOLERANCES

- A. Section 01 40 00 - Quality Requirements: Tolerances.
- B. Flatness: Maximum variation of 1/4 inch measured with 10 foot straight edge.
- C. Scheduled Compacted Thickness: Within 1/4 inch.
- D. Variation from Indicated Elevation: Within 1/2 inch.

3.4 FIELD QUALITY CONTROL

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for testing, adjusting, and balancing.
- B. Take samples and perform tests including mat density tests in accordance with Michigan Department of Transportation standards.
- C. Asphalt Paving Mix Temperature: Measure temperature at time of placement.
- D. Asphalt Paving Density: ASTM D2950 nuclear method; test one location for every 500 square yards compacted paving.

3.5 PROTECTION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.
- B. Immediately after placement, protect paving from mechanical injury until surface temperature is less than 140 degrees F (60 degrees C).

END OF SECTION 32 12 16

SECTION 32 16 23

CONCRETE PAVING AND SIDEWALKS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Concrete paving for sidewalks, parking pads, dumpster pads, approaches to boardwalk sections, and approaches to road crossings.
- B. Related Sections:
 - 1. Section 03 10 00 – Concrete Forming and Accessories.
 - 2. Section 03 20 00 – Concrete Reinforcement.
 - 3. Section 03 30 00 – Cast In Place Concrete.
 - 4. Section 03 39 00 – Concrete Curing.

1.2 REFERENCES

- A. MDOT 2020 Standard Specifications for Construction.
- B. American Association of State Highway and Transportation Officials:
- C. American Concrete Institute:
 - 1. ACI 304 - Guide for Measuring, Mixing, Transporting, and Placing Concrete.
- D. ASTM International:
 - 1. ASTM C31/C31M - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
 - 2. ASTM C33/C33M - Standard Specification for Concrete Aggregates.
 - 3. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
 - 4. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
 - 5. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete.
 - 6. ASTM C150/C150M - Standard Specification for Portland Cement.
 - 7. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete.
 - 8. ASTM C172/C172M - Standard Practice for Sampling Freshly Mixed Concrete.
 - 9. ASTM C173/C173M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.
 - 10. ASTM C231/C231M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
 - 11. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete.
 - 12. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
 - 13. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete.
 - 14. ASTM C595/C595M - Standard Specification for Blended Hydraulic Cements.

15. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
16. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
17. ASTM C1315 - Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.
18. ASTM C1371 - Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emisimeters.
19. ASTM C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
20. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
21. ASTM D1752 - Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction.
22. ASTM D5893/D5893M - Standard Specification for Cold Applied, Single Component, Chemically Curing Silicone Joint Sealant for Portland Cement Concrete Pavements.
23. ASTM D6690 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.

1.3 PREINSTALLATION MEETINGS

- A. Section 01 30 00 - Administrative Requirements: Requirements for preinstallation meeting.
- B. Convene minimum one week prior to commencing Work of this Section. At this meeting the Owner and Contractor shall discuss schedule, concrete finishing requirements, and clean-up.

1.4 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data:
 1. Submit required information regarding concrete materials, joint filler, admixtures, and curing compounds.
 2. Mix Design:
 - a. Submit concrete mix design for each concrete strength prior to commencement of Work.
 - b. Submit separate mix designs if admixtures are required for hot- and cold-weather concrete Work.
 - c. Identify mix ingredients and proportions, including admixtures.
 3. Identify chloride content of admixtures and whether or not chloride was added during manufacture.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Qualifications Statement:
 1. Submit qualifications for manufacturer and installer.

1.5 QUALITY ASSURANCE

- A. Perform Work according to MDOT 2020 Standard Specifications for Construction.
- B. Obtain cementitious materials from same source throughout.
- C. Maintain one copy of each standard affecting Work of this Section on Site.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years' documented experience.
- B. Installer: Company specializing in performing Work of this Section with minimum three years' documented experience.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.

1.8 AMBIENT CONDITIONS

- A. Section 01 50 00 - Temporary Facilities and Controls: Requirements for ambient condition control facilities for product storage and installation.
- B. Minimum Conditions: Do not place concrete if base surface temperature is less than 40 deg. F, or if surface is wet or frozen.
- C. Subsequent Conditions: Maintain minimum 50 deg. F, for not less than 72 hours after placing, and at a temperature above freezing for remainder of curing period.

1.9 EXISTING CONDITIONS

- A. Field Measurements:
 - 1. Verify field measurements prior to placing concrete.
 - 2. Indicate field measurements on Shop Drawings.

PART 2 - PRODUCTS

2.1 AGGREGATE SUBGRADE

- A. MDOT 21AA or suitable Class II sand that is able to be compacted to 95% or better.

2.2 MATERIALS

A. Forms:

1. Material:
 - a. Wood: Straight and free from warping, twisting, loose knots, splits, or other defects.
 - b. Steel: Channel-formed sections.
2. Profile: To suit conditions.
3. Cement: The cement shall be Portland Cement, Type I, and shall comply with the Standard Specifications for Portland Cement (ASTM C150), or the Standard Specifications for Air-Entraining Portland Cement (ASTM C175). The air-entraining content of concrete shall be 6.5 +/- 1.5 percent.
4. Concrete Mix: See Section 2.3.
5. Water: The water used in mixing concrete shall be clean and free from deleterious amounts of acid, alkalis or organic material.
6. Coarse Aggregate shall be 6A in accordance with the current MDOT Standard Specifications for Construction.
7. Fine Aggregate shall be 2NS in accordance with the current MDOT Standard Specifications for Construction.
8. Joint Filler:
 - a. Material: Asphalt-impregnated fiberboard or felt. Full depth transverse expansion joints shall be constructed perpendicular to the surface of the sidewalk at intervals not to exceed fifty (50') feet. Expansion joint material shall be one-half (1/2") inch pre-molded expansion joints and shall be set 1/4" below the surface of the sidewalk. Sealing of joints will not be required. One (1") inch pre-molded expansion joints must be placed between the sidewalk and back-of-curb when sidewalk is constructed between the curb and building or other rigid structures. Sealing of joints will not be required. Transverse control/contraction joints shall be true to line and grade and shall be placed at a minimum of four (4') foot intervals and shall be formed with a grooving tool or saw cut and constructed to a depth of at least one (1") inch and a width of 1/8 inch to 1/4 inch. Sealing of joints will not be required. See Section 3.3 for more finishing requirements.

2.3 MIXES

A. Concrete Mix:

1. The concrete shall be mixed in a approved mixing device prepared for this purpose and produce a homogenous mass which can be deposited in the forms, without segregation. The concrete mix shall me the requirements of Grade P1, S1, or S2 concrete as specified by the

MDOT Standard Specifications for Construction. The concrete shall not have less than six (6) bags of cement per cubic yard, and a 28-day compressive strength of not less than 3,500 psi.

2.4 ACCESSORIES

A. Curing Compound:

1. Comply with MDOT 2020 Standard Specifications for Construction.

2.5 SOURCE QUALITY CONTROL

- ##### A. Section 01 40 00 - Quality Requirements: Requirements for testing, inspection, and analysis.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that compacted subgrade is dry and ready to support paving and imposed loads.
- B. Verify that gradients and elevations of subgrade are as indicated on Drawings.
- C. Verify reinforcing placement for proper size, spacing, location, and support.

3.2 PREPARATION

- A. If site conditions require, moisten substrate to minimize absorption of water from fresh concrete.
- B. Notify Engineer minimum 24 hours prior to commencement of concreting operations.

3.3 INSTALLATION

A. Subgrade:

1. As specified in Section 2.1. Existing vegetation shall be removed and topsoil excavated to provide a four (4") inch 22A or sand sub-base for the proposed sidewalk. The existing subgrade shall be disturbed as little as possible during preparation, and shall be compacted to ninety-five (95%) percent maximum unit weight in accordance with current MDOT procedures. Where fill sand is required it shall be compacted to achieve ninety-five (95%) percent maximum unit weight in accordance with current MDOT Standard Specifications for Construction.

B. Forms:

1. Place and secure forms and screeds to correct location, dimension, profile, and gradient.
2. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
3. Clean forms and coat with form oil each time before concrete is placed.

- C. Placing Concrete:
 - 1. Comply with MDOT 2020 Standard Specifications for Construction.
 - 2. The concrete shall be thoroughly spaded along the forms and joints before finishing operations are started. The concrete shall be alternately tamped and struck off with a proper strike board until all the voids are removed and the surface has the required grade and cross section. The surface shall be floated with a steel float just enough to produce a smooth surface free from irregularities. The surface shall be floated again with a steel trowel, walk-behind or by hand, to achieve a smooth surface free from irregularities.
 - 3. Where the sidewalk meets the existing boardwalk, an 8" thickened edge shall be formed to prevent the sand subbase from leaching out from under the sidewalk.

- D. Finishing:
 - 1. Place curing compound on exposed concrete surfaces immediately after finishing.
 - 2. Edges and Joints:
 - a. All edges on sidewalk shall be rounded to a radius of ¼ inch with an approved finishing tool. All control or contraction joints shall be saw cut or rounded with an approved double edging tool (i.e., walk behind joint tool) having a radius of ¼ inch on each side. All tooled joints and edges shall be "closed up" with a walk-behind trowel, and re-tooled to assure a smooth and uniform joint edge.
 - b. Spalled Corners and Edges: Clean and fill with mortar mixture and re-finish.
 - c. Broom finish: The surface shall be brushed lightly to produce a slightly roughened surface and remove the finishing tool marks. Broom perpendicular to the edge of the sidewalk. Texture the surface of sidewalk ramps with a coarse broom transverse to the ramp slope.
 - d. Control/contraction joints shall be constructed by dividing the sidewalk into areas of approximately 25 square feet unless otherwise shown on the plans. Where feasible the unit areas shall be square and not less than 16 square feet, and not more than 36 square feet.

- E. Curing:
 - 1. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete. Barricade all sidewalks and crossings from vehicular traffic of any kind for seven (7) days after placing concrete.

3.4 TOLERANCES

- A. According to MDOT 2020 Standard Specifications for Construction.

3.5 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Requirements for inspecting and testing.
- B. The Contractor is responsible to ensure that all forms meet the requirements shown on the Plans. If any discrepancy is noticed, the Contractor shall notify the Owner and Engineer immediately, and prior to placing the concrete.

3.6 PROTECTION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.
- B. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, rain and flowing water, and mechanical injury. The Contractor shall be responsible for the proper protection of the sidewalk until it has sufficiently cured. Walk must be properly barricaded and lighted during evening and nighttime hours. The Contractor shall take all necessary precautions to protect the sidewalk from rain. The Contractor shall be responsible for the concrete placed during cold weather. Any concrete damage or failure as a result of frost action shall be removed and replaced at the Contractor's expense.
- C. Do not permit traffic over paving for minimum 7 days after finishing.
- D. Project Clean-up:
 - 1. Backfilling along the outside edge of the sidewalk shall be performed after the concrete has gained sufficient strength. The fixed forms may then be removed. The space on both sides of the walk shall be backfilled with clean, screened topsoil which shall be compacted and graded to conform to the cross section shown on the plans. Place seed or sod as specified.
 - 2. Clean-up shall be completed before final acceptance of work. The contractor shall clean the walk, adjacent surfaces, gutters, lawns, private property, rights-of-way, and structures leaving them in as good of a condition as originally found. All machinery, tools, surplus materials, and barricades shall be removed from the site.
 - 3. Legally dispose of all excess material off-site, including concrete "wash out" from the concrete truck chute.

END OF SECTION

SECTION 32 18 16.33
PLAYGROUND PROTECTIVE SURFACES

PART 1 GENERAL

1.1 WORK INCLUDED

- A. Playground Surfacing including all Engineered Wood Fiber Surfacing and Wear Mats.

1.2 RELATED SECTIONS

- A. Section 01 33 00 – Submittals
- B. Section 11 68 13 – Playground Equipment
- C. Section 31 22 13 – Rough Grading
- D. Section 31 23 16 – Excavation
- E. Section 31 23 23 – Fill
- F. Section 32 33 00 – Site Furnishings

1.3 REFERENCES

- A. CPSC – Consumer Product Safety Commission, Public Playground Safety Handbook.
- B. ASTM F1487 – American Society for Testing and Materials, Playgrounds for Public Use.
- C. ADA – Americans with Disabilities Act Accessibility Guidelines for Play Areas (ADAAG).
- D. ASTM C67 – Standard Test Method for Weathering and Aging of Surface Systems and Materials and Standard Test Method for Rubber – Deterioration in an Air Over.
- E. ASTM D2434 – Standard Test Method for Permeability of Granular Soils (Constant Head).
- F. ASTM D2859 – Standard Test Method for the Surface Flammability of Products (Burn Pill Test).
- G. ASTM D3776 – Standard Test Methods for Mass Per Unit Area (Weight) of Fabric.
- H. ASTM D3786 – Standard Test Method for Bursting Strength of Textile Fabrics - Diaphragm Bursting Strength Tester Method.
- I. ASTM D4491 – Standard Test Methods for Water Permeability of Geotextiles by Permittivity.
- J. ASTM D4533 – Standard Test Method for Trapezoid Tearing Strength of Geotextiles.
- K. ASTM D4632 – Standard Test Method for Grab Breaking Load and Elongation of Geotextiles.

- L. ASTM D4716 – Standard Test Method for Determining the (In plane) Flow rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head.
- M. ASTM D4751 – Standard Test Method for Determining Apparent Opening Size of a Geotextile. ASTM D4833 – Standard Test Method for Index Puncture Resistance of Geomembranes, and Related Products.
- N. ASTM D5199 – Standard Test Method for Measuring the Nominal Thickness of Geosynthetics.
- O. ASTM E108 – Standard Test Method for Fire Tests of Surface Systems and Materials.
- P. ASTM E303-93 – Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.
- Q. ASTM F1292 and F355-95 – Standard Test Method for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
- R. ASTM F1951 – Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
- S. ASTM F2075 – Standard Specification for Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment.
- T. 16 CFR 1500.44 – Method for Determining Extremely Flammable and Flammable Solids.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - 1. Member of International Play Equipment Manufacturer’s Association (IPEMA).
 - 2. Sales Representatives trained by National Playground Safety Institute (NPSI).
- B. Installer Qualifications: A firm or individual certified, licensed, or otherwise qualified by surfacing manufacturer as experienced and with sufficient trained staff to install manufacturer's products according to specified requirements.
- C. Workmanship: The Contractor is responsible for correction of work which does not conform to the specified requirements.

1.5 SUBMITTALS

- A. Submit under the provision of Section 01 33 00.
- B. Product Data: Submit manufacturer’s product data, specifications, warranty, detailed drawings, maintenance, and installation instructions, ASTM F 1292 test results, ASTM F1951 Accessibility test results, ASTM F2075 test results, and IPEMA Certificates of Complianacce, where applicable.
- C. Samples: Submit manufacturer’s samples of each specified material.
- D. Manufacturer’s / Installer’s Certificates: Certify products meet or exceed the specified requirements.
- E. Quality Assurance / Control: Certificate of qualifications of the surfacing installer.

- F. Maintenance Instructions: Submit manufacturer's maintenance and cleaning instructions for playground surfacing.
- G. Warranty: Submit manufacturer's standard warranty.
- H. References: Submit at least 3 customers that have been using the product for at least 3 years.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer. Deliver engineered wood fiber playground surfacing to site in bulk.
- B. Storage: Store materials in a clean, dry area in accordance with manufacturer's instructions. Store engineered wood fiber playground surfacing to prevent contamination.
- C. Handling: Protect materials during handling and installation to prevent damage. Handle engineered wood fiber playground surfacing to prevent contamination.

1.7 COORDINATION

- A. Coordinate work with the work of other trades on the project.

1.8 WARRANTY

- A. Warranty cover Playground Surfacing for the following periods:
 - 1. Engineered Wood Fiber: 15 years.
 - 2. Wear Mats: 5 years.
- B. Operation Data: Submit for continuing Owner maintenance.
- C. Maintenance Data: Include methods for cleaning, replacement, and repair.

PART 2 PRODUCTS

2.1 MANUFACTURER / PRODUCT

- A. Engineered Wood Fiber Safety Surfacing: GT Impax, GameTime (represented by Sinclair Recreation), 128 East Lakewood Blvd, Ste 40, Holland, MI 49424, 800-444-4954, www.sinclair-rec.com, or approved equal.
- B. Rubber Wear Mats: DynaCushion Beveled Wear Mat, Pierceton Rubber Products, Inc., (represented by Sinclair Recreation), 128 East Lakewood Blvd, Ste 40, Holland, MI 49424, 800-444-4954, www.sinclair-rec.com, or approved equal.
 - 1. Wear Mats will be installed in per the manufacturer's specifications and will be required in the following locations:
 - a. Swings – Wear mat shall be placed directly beneath the swing seat, minimum size four (4) feet by six (6) feet for each swing
 - b. Slides – Wear mat shall be placed directly under the slide exit, minimum size three (3) feet by three (3) feet.
 - c. Merry-go-rounds – Wear mat shall extend a minimum of three (3) feet beyond the edge of the merry-go-round, in all directions.

C. GEOTEXTILE FABRIC

1. Geotextile fabric shall be a polyester drainage fabric, non-woven, meeting or exceeding the following:

PROPERTIES	STANDARD	AMOCO 4546 <i>(or approved equal)</i>
<i>Physical</i>		
• Grab Tensile Strength	• ASTM-D 4632	• 90 oz/yd ²
• Grab Tensile Elongation	• ASTM- D 4632	• 50%
• Mullen Burst	• ASTM- D 3786	• 185 lb/in ²
• Puncture	• ASTM- D 4833	• 55lbs.
• Trapezoidal Tear	• ASTM- D 4533	• 40 lbs.
• UV Resistance	• ASTM- D 4355	• 70/500 (%@_hr)
<i>Hydraulic</i>		
• Apparent Opening Size	• ASTM- D 4751	• 70 (US std. Sieve no.)
• Permittivity	• ASTM- D 4491	
• Flow Rate	• ASTM- D 4491	• 145 gal/min/feet ²

D. PEASTONE

1. Peastone shall be natural smooth rock material. Supply sample of peastone to the Owner for approval prior to delivery to site.
2. Peastone is not an acceptable safety surfacing; it is only to be used in the drainage layer as indicated on the drawings.

PART 3 EXECUTION

3.1 INSPECTION

- A. Contractor shall thoroughly examine the areas and conditions under which excavation, filling, and grading are to be performed. Architect is to be notified, in writing, of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

3.2 PREPARATION

- A. Excavate play area as indicated on the drawings and to ensure proper safety use zones of play equipment.

3.3 PREPARATION

- A. The subgrade shall be graded to a minimum of 1% and a maximum of 5% to insure positive drainage throughout the site.
- B. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated subsoil.
- C. The subgrade shall be compacted to 95% of the dry density, as determined by the provisions of AASHTO or T 205.

- D. Drainage Trenches
 1. Dig trenches and construct the french drains as indicated on the drawings.
 2. Fabric and peastone gravel shall be placed in the trenches, to depths indicated on the drawings.
 3. Four (4) inch perforated pipe shall be placed in the trenches, as indicated on the drawings. Unless otherwise indicated on the plans, pipe shall have a minimum slope of 0.5%.
 4. All installation sites shall have positive grade to facilitate drainage away from the playground area and other active areas within the park.
- E. Install the playground equipment.
- F. Install the edging around the play area.

3.4 SAFETY SURFACE INSTALLATION

- A. Begin the safety surfacing only after the play equipment and edging have been installed.
- B. Geotextile Fabric
 1. Geotextile fabric shall be used as separation between the subsoil and safety surfacing.
 2. In areas where equipment exists, it is necessary to cut the fabric to fit. Once fitted, any cuts should be overlapped with fabric wherever possible.
 3. Geotextile fabric shall be placed on smooth subgrade and all wrinkles removed. All seams shall overlap a minimum of six (6) inches.
 4. Machinery shall not disturb or travel on the geotextile fabric.
- C. Wear Mats
 1. Place all wear mats in the required areas per this specification, Part 2, 2.1, B.
 2. All wear mats shall be installed as per the manufacturer's specifications to assure maximum impact protection for proposed equipment fall heights.
- D. Engineered Wood Fiber (EWF) Safety Surfacing
 1. Place Engineered Wood Fiber Safety Surfacing in all remaining areas, as indicated on the plans.
 2. All material must be installed to allow for settling and natural compaction.

3.5 GUARANTEE and MAINTENANCE

- A. All Materials and Installations shall be guaranteed by the manufacturer/supplier for a period of one year beyond the date of final acceptance by the Owner. The manufacturer/supplier shall provide a written maintenance plan to the Owner which describes, in detail, any, and all maintenance requirements which will need to be accomplished during the life of the safety surfacing.

3.6 DISPOSAL OF EXCESS AND WASTE MATERIALS

- A. Remove excess excavated material, trash, debris and waste materials and legally dispose of such off the property, except as otherwise specifically noted.

3.7 ACCEPTANCE

- A. Inspection will be made jointly by the Contractor, Engineer, and the Owner's representative.
- B. Upon acceptance of the work by the Engineer and owner, the project will be approved for final payment.

END OF SECTION 32 18 16.33

SECTION 32 33 00

SITE FURNISHINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Furnishing and installing all items of site furnishings or amenities as shown on drawings, as herein specified and/or as required for a complete job.
- B. Related Requirements:
 - 1. Section 01 30 00 - Submittal Procedures
 - 2. Section 03 30 00 - Cast in Place Concrete
 - 3. Submit shop drawings and product data for all items to be installed within this section.

PART 2 - PRODUCTS

2.1 MATERIAL

- A. Contractor to reuse existing benches from site.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. The Contractor shall be responsible for any assembly requirements and installation of site furnishings including concrete footings. Assemble and install per manufacturer's instructions.
- B. Field located with Owner/Engineer prior to installation, unless noted otherwise.

END OF SECTION 32 33 00

SECTION 32 91 19
LANDSCAPE GRADING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Final grade topsoil for finish landscaping.
- B. Related Sections:
 - 1. Section 31 23 23 - Fill
 - 2. Section 32 05 13 - Soils for Earthwork

1.2 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures
- B. Materials Source: Submit name of imported materials source.
- C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.3 QUALITY ASSURANCE

- A. Furnish each topsoil material from single source throughout the Work.
- B. Perform Work in accordance with Michigan Department of Transportation standard.
- C. Maintain one copy on site.

PART 2 - PRODUCTS

2.1 MATERIAL

- A. Topsoil: as specified in Section 31 05 13.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify substrate base has been contoured and compacted.

3.2 PREPARATION

- A. Protect landscaping and other features remaining as final Work.
- B. Protect existing structures, fences, sidewalks, utilities, paving, and curbs.

3.3 SUBSTRATE PREPARATION

- A. Eliminate uneven areas and low spots.
- B. Remove debris, roots, branches, and stones in excess of ½ inch in size. Remove contaminated subsoil.
- C. Scarify surface to depth of 3 inches where topsoil is scheduled. Scarify in areas where equipment used for hauling and spreading topsoil has compacted subsoil.

3.4 PLACING TOPSOIL

- A. Place topsoil in areas where seeding is required. Place topsoil during dry weather.
- B. Fine grade topsoil to eliminate rough or low areas. Maintain profiles and contour of subgrade.
- C. Remove roots, weeds, rocks, and foreign material while spreading.
- D. Lightly compact placed topsoil.
- E. Remove surplus subsoil and topsoil from site.
- F. Leave stockpile area and site clean and raked, ready to receive landscaping.

3.5 PROTECTION OF INSTALLED WORK

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.
- B. Prohibit construction traffic over topsoil.

3.6 SCHEDULES

- A. Compacted topsoil thicknesses: Minimum four inches (4") thickness.
 - 1. Seeded Grass: 3 inches.

END OF SECTION 32 91 19

SECTION 32 92 19

SEEDING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Fertilizing.
 - 2. Seeding.
 - 3. Maintenance.
- B. Related Sections:
 - 1. Section 32 05 13 – Soils for Earthwork
 - 2. Section 32 91 19 – Landscape Grading

1.2 DEFINITIONS

- A. Weeds: Vegetative species other than specified species to be established in given area.

1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit data for seed mix, fertilizer, mulch, and other accessories.
- C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

- A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging, and location of packaging.
- B. Perform Work according to Michigan Department of Transportation standards.
- C. Maintain one copy of document on site.

1.5 QUALIFICATIONS

- A. Seed Supplier: Company specializing in manufacturing Products specified in this section with minimum three years experience.

- B. Installer: Company specializing in performing work of this section with minimum three years experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- C. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.7 MAINTENANCE SERVICE

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for maintenance service.
- B. Maintain seeded areas immediately after placement until grass is well established and exhibits vigorous growing condition.

PART 2 - PRODUCTS

2.1 SEED MIXTURE

- A. Furnish materials according to Michigan Department of Transportation standards.
- B. Description:
 - 1. Perennial Ryegrass: 20 percent.
 - 2. Kentucky Blue Grass: 30 percent.
 - 3. Creeping Red Fescue Grass: 50 percent.

2.2 ACCESSORIES

- A. Mulching Material: Oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.
- B. Fertilizer: Commercial grade; recommended for grass; of proportion necessary to eliminate deficiencies of topsoil to the following proportions: Nitrogen 12 percent, phosphoric acid 12 percent, soluble potash 12 percent.
- C. Water: Clean, fresh and free of substances or matter capable of inhibiting vigorous growth of grass.

2.3 SOURCE QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Testing, inspection and analysis requirements.

- B. Analyze to ascertain percentage of nitrogen, phosphorus, potash, soluble salt content, organic matter content, and pH value.
- C. Provide recommendation for fertilizer and lime application rates for specified seed mix as result of testing.
- D. Testing is not required when recent tests and certificates are available for imported topsoil. Submit these test results to testing laboratory. Indicate, by test results, information necessary to determine suitability.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify prepared soil base is ready to receive the Work of this section.

3.2 FERTILIZING

- A. Apply fertilizer at application rate 500 lbs. per acre.
- B. Apply after smooth raking of topsoil and prior to roller compaction.
- C. Do not apply fertilizer at same time or with same machine used to apply seed.
- D. Mix fertilizer thoroughly into upper 2 inches of topsoil.
- E. Lightly water soil to aid dissipation of fertilizer. Irrigate top level of soil uniformly.

3.3 SEEDING

- A. Apply seed at rate of 220 lbs per acre evenly in two intersecting directions. Rake in lightly.
- B. Do not seed areas in excess of that which can be mulched on same day.
- C. Planting Season: April 15 through October 10.
- D. Do not sow immediately following rain, when ground is too dry, or when winds are over 12 mph (19 km/h).
- E. Roll seeded area with roller not exceeding 112 lbs/linear foot.
- F. Immediately following seeding, apply mulch to thickness of 1/8 inches. Maintain clear of shrubs and trees.

- G. Apply water with fine spray immediately after each area has been mulched. Saturate to 4 inches of soil.

3.4 HYDROSEEDING

- A. Apply seeded slurry for lawn with a hydraulic seeder at a rate of 8 lbs. per 1000 sq. ft. evenly in two intersecting directions. Native seed will be seeded at the rate earlier specified in this section.
- B. Do not hydroseed area in excess of what which can be mulched on same day.
- C. Immediately following seeding, apply mulch at a rate of 50 lbs. per 1000 sq. ft. Maintain clear of shrubs and trees.
- D. Apply water with a fine spray immediately after each are has been mulched. Saturate to 3 inches of soil.

3.5 SEED PROTECTION

- A. Cover seeded slopes where grade is 4 inches per foot or greater with erosion fabric. Roll fabric onto slopes without stretching or pulling.
- B. Lay fabric smoothly on surface, bury top end of each section in 6 inch (150 mm) deep excavated topsoil trench. Overlap edges and ends of adjacent rolls minimum 12 inches (300 mm). Backfill trench and rake smooth, level with adjacent soil.
- C. Secure outside edges and overlaps at 36 inch (900 mm) intervals with stakes.
- D. Lightly dress slopes with topsoil to ensure close contact between fabric and soil.
- E. At sides of ditches, lay fabric laps in direction of water flow. Lap ends and edges minimum 6 inches (150 mm).

3.6 MAINTENANCE

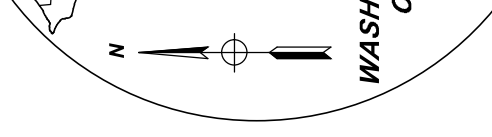
- A. Immediately reseed areas showing bare spots.
- B. Repair any eroded areas and reseed immediately.
- C. Contractor shall guarantee a uniform grass growth over the entire project and shall reseed bare and thin areas until this is accomplished at no additional cost to the project.
- D. Water to prevent grass and soil from drying out.
- E. Roll surface to remove minor depressions or irregularities.
- F. Control growth of weeds. Apply herbicides. Remedy damage resulting from improper use of herbicides.
- G. Repair washouts or gullies.

- H. Protect from traffic and erosion in newly seeded areas is the responsibility of the Contractor. Safety fences and/or silt fences with appropriate signage may be used at the Contractor's expense until the grasses are fully established.

END OF SECTION 32 92 19

BURN WEST V

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GENERAL NOTES

NO WORK SHALL BE PERFORMED BEFORE 7:00 AM OR AFTER 7:00 PM MONDAY THROUGH SATURDAY. NO WORK SHALL HAPPEN ON SUNDAYS OR HOLIDAYS. UNLESS AUTHORIZED BY THE OWNER.

CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS PRIOR TO START OF CONSTRUCTION. CONSTRUCTION STAKING AND INSPECTION.

CONTRACTOR TO PROVIDE DUST CONTROL AND SWEEP ROADS DAILY.

ALL EXCAVATED MATERIAL NOT TO BE REUSED OR DISPOSED OF ON SITE SHALL BE REMOVED FROM SITE. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSING MATERIALS ACCORDING TO LOCAL AND STATE REQUIREMENTS.

UNDERGROUND UTILITIES/MISS DIG FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 1-800-482-7171 OR 811 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE EXISTING UTILITIES ON THESE DRAWINGS HAVE BEEN SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND SHALL NOTIFY THE ENGINEER AS TO WHERE POSSIBLE CONFLICT EXISTS.

ALL CONSTRUCTION UNDER EXISTING UTILITIES, INCLUDING HOUSE SERVICES, SHALL BE COMPLETELY BACKFILLED WITH SAND, IN 12" LAYERS, AND COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

ANY UTILITIES ENCOUNTERED DURING CONSTRUCTION SHALL BE SUPPORTED, PER THE SPECIFICATIONS OF THE INDIVIDUAL UTILITY COMPANY CLAIMING OWNERSHIP OF THE UTILITY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES APPROPRIATE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTH-DISTURBING ACTIVITIES. PLACE TURF ESTABLISHMENT ITEMS AS SOON AS POSSIBLE ON POTENTIAL ERODIBLE SLOPES AS DIRECTED BY THE ENGINEER. CRITICAL DITCH GRADES SHALL BE PROTECTED WITH EITHER SOD OR SEED/MULCH OR MULCH BLANKET AS DIRECTED BY THE ENGINEER.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE AND MAINTAINED UNTIL THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MEASURES SHALL ONLY BE PAID FOR ONCE.

ALL CATCHBASINS AND SEDIMENTATION TRAP/BASIN SHALL BE CLEANED OUT UPON COMPLETION OF THE PROJECT.

ALL DEWATERING REQUIRED FOR CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR UTILITY BEING INSTALLED.

ALL RIPRAP SHALL BE MDOT PLAIN RIPRAP TYPE MATERIAL, UNLESS OTHERWISE NOTED.

CONTRACTORS SHALL FINISH GRADE, SEED, FERTILIZE, AND MULCH DAILY ON ALL DISTURBED AREAS.

CONTRACTOR SHALL CONFORM TO SOIL EROSION AND SEDIMENTATION CONTROL ACT, PART 91 OF ACT 451 OF 1994.

PROPERTY OWNERS' NAMES, WHERE SHOWN, ARE FOR INFORMATION ONLY, AND THEIR ACCURACY IS NOT GUARANTEED.

ADJUSTING MONUMENT BOXES
ALL GOVERNMENT CORNERS ON THIS PROJECT SHALL BE PRESERVED. WHETHER SHOWN OR NOT, IT MAY BE

SITE WORK
ELECTRIC SERVICE TO BUILDING
SERVICE LINES AND PAD LOCATED
WITH UTILITY COMPANY.

ALL TRENCHED CONSTRUCTION
SHALL BE COMPLETELY BACKFILLED
LAYERS AND COMPACTED TO NOT LESS
THAN 95% OF THE MAXIMUM UNIT WEIGHT.

UNPAVED AREAS SHALL BE FINISHED
TO A MAXIMUM DESIRABLE SLOPE
AS SHOWN ON THE DRAWINGS.

CONTRACTOR IS RESPONSIBLE FOR
ADJACENT EXISTING AND PROPOSED
DIMENSIONS SHOWN ARE TO BE MAINTAINED
UNLESS OTHERWISE NOTED.

WHERE A DISCREPANCY OCCURS
BETWEEN THE DRAWINGS AND THE
NOTIFY THE ENGINEER FOR CLARIFICATION.

PAVEMENT / SIDEWALK
CONTRACTOR SHALL SAWCUT
PAVEMENT AND CURB & GUTTERS
AS SHOWN ON THE DRAWINGS.

HMA PAVEMENT AND OR CURB & GUTTERS
WHEN RAIN IS FORECAST TO OCCUR
WITHIN 24 HOURS OF COMPLETION.

SIDEWALK SHALL BE CONSTRUCTED TO
SLOPES NOT TO EXCEED 2% TO
CURBS OR PAVEMENT.

IN GRASS AREAS, THE SURFACE SHALL BE
SURFACE, UNLESS NECESSARY FOR
PAVEMENT.

THE CONTRACTOR SHALL PROTECT ALL
VANDALISM. DAMAGED HMA PAVEMENT
SHALL BE REPAIRED TO ORIGINAL
CONDITION.

PAVEMENT MARKINGS AND
ALL PERMANENT PAVEMENT MARKINGS
MARKING TYPICALS PAVE-9-9

PARK OPERATIONS
PARK SHALL BE CLOSED DURING
CONSTRUCTION. CLOSED SIGNS SHALL BE
INSTALLED AT ALL ENTRANCES TO THE
PARK.

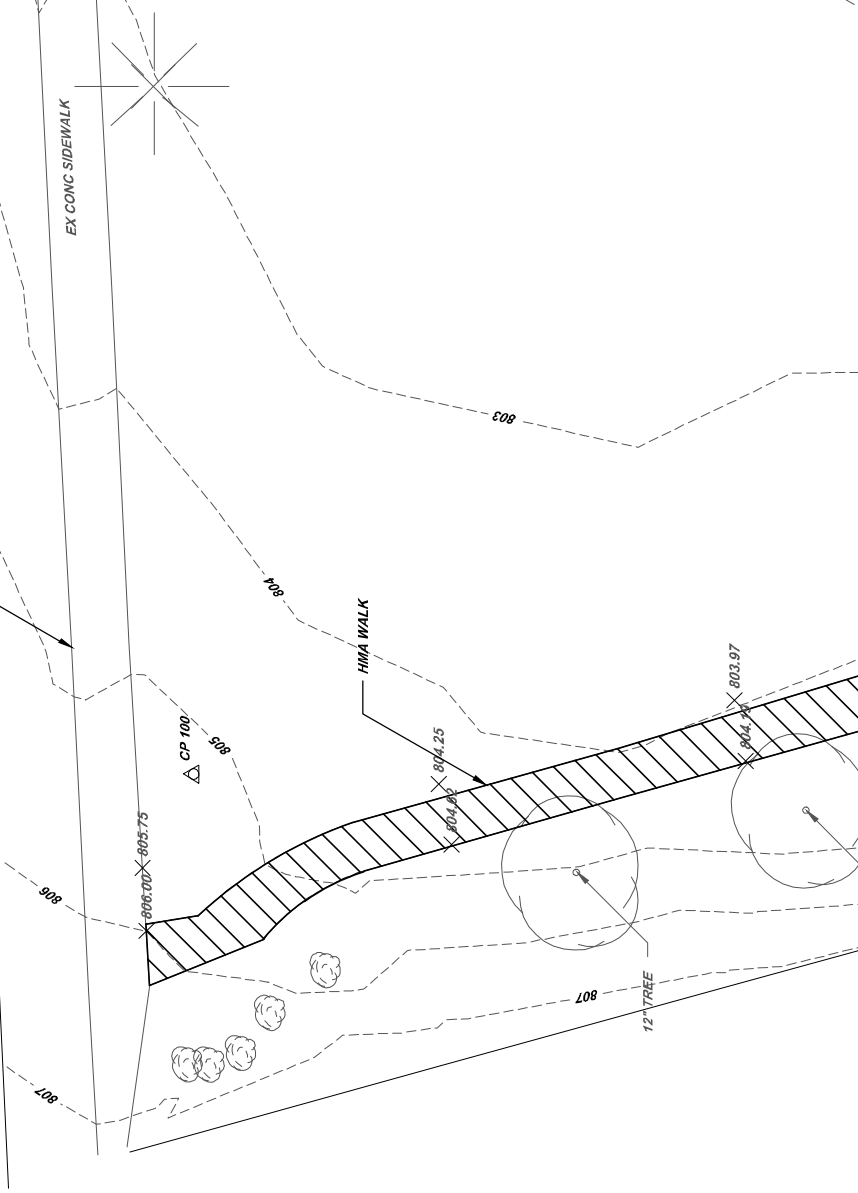
CONC SIDEWALK

EX CONC SIDEWALK

HMA WALK

CP 100

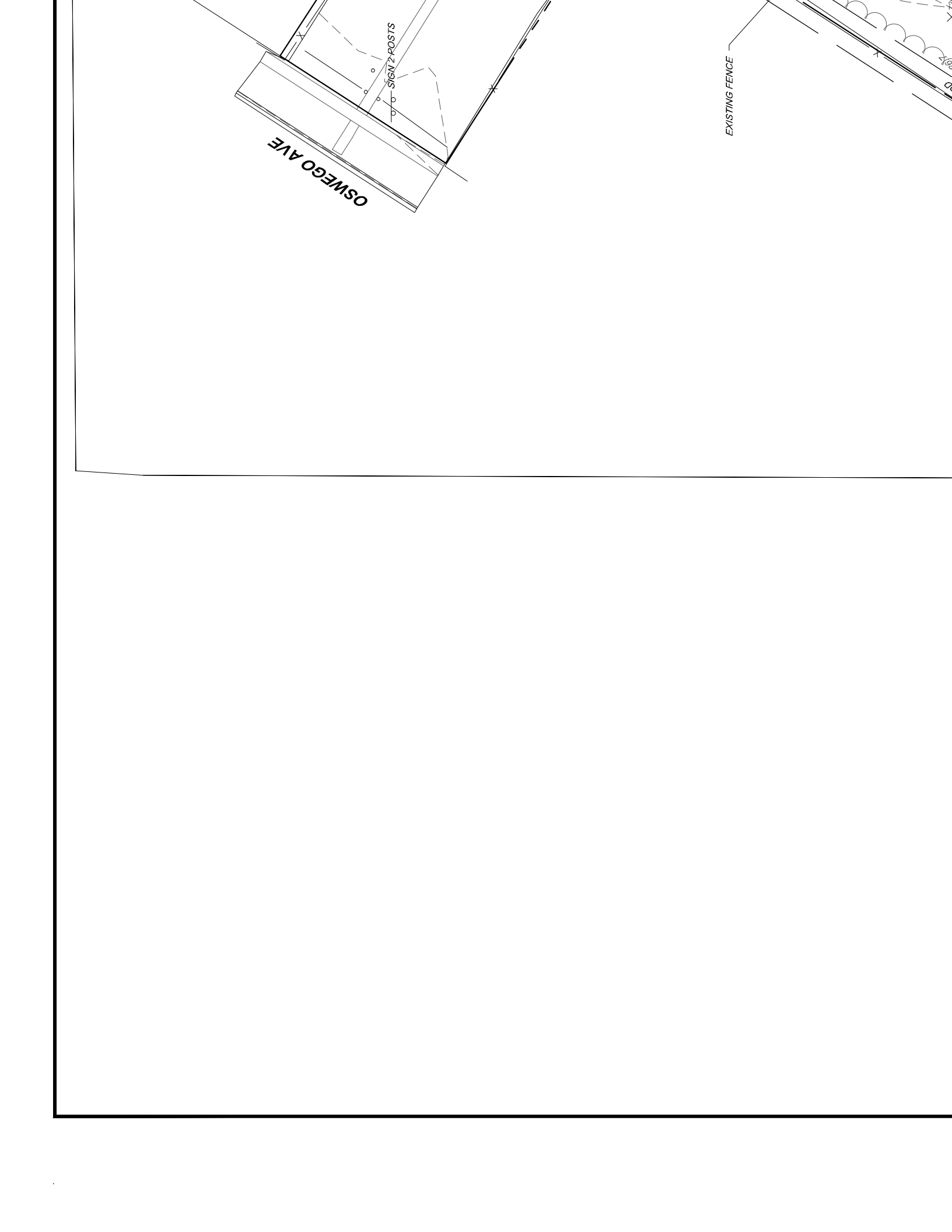
12" TREE



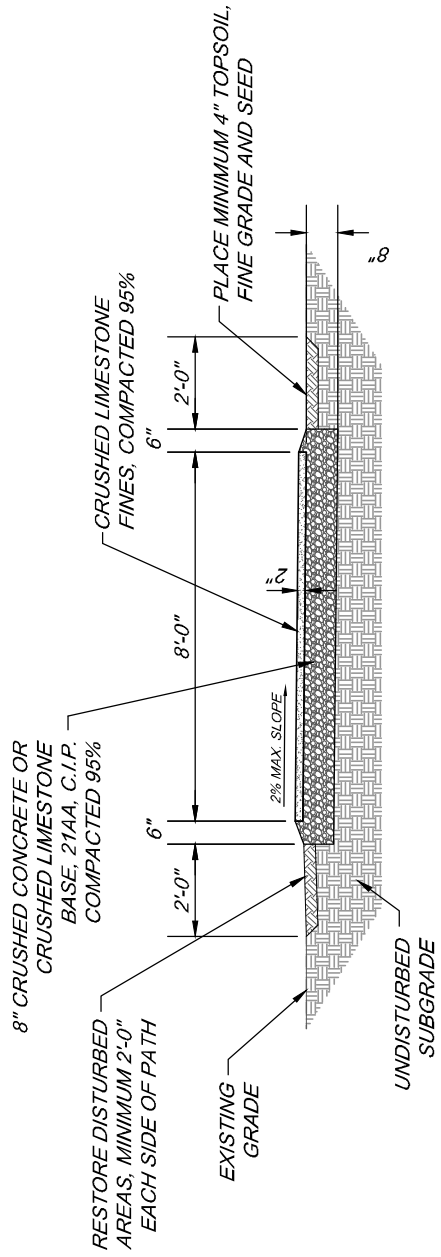
OSWEGO AVE

SIGN POSTS

EXISTING FENCE



NOTE: THE PROPOSED ACCESSIBLE PATH'S RUNNING SLOPE SHALL NOT EXCEED 5% (1:20) SLOPE AND THE PATH'S CROSS SLOPE SHALL NOT EXCEED 2%, UNLESS OTHERWISE NOTED.

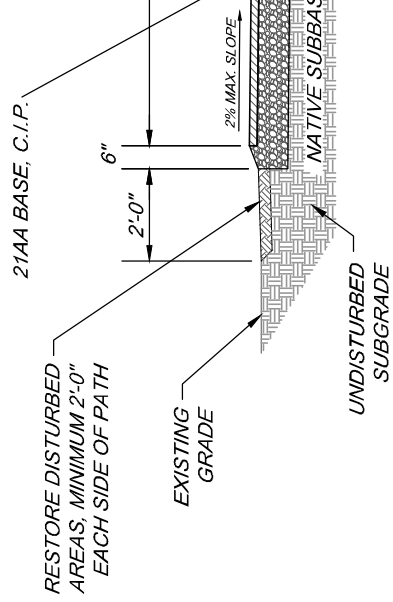


1 TYP. STONE PATH CROSS SECTION

NOT TO SCALE

1 DP-7

NOTE: THE PROPOSED ACCESSIBLE PATH'S RUNNING SLOPE SHALL NOT EXCEED 5% (1:20) SLOPE AND THE PATH'S CROSS SLOPE SHALL NOT EXCEED 2%, (1:50) UNLESS OTHERWISE NOTED.

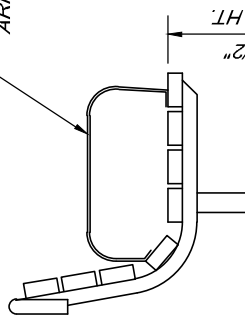


2 TYP. HMA PATH

NOT TO SCALE

2 DP-7

ADA PARK BENCH WITH ARMREST ONE END ONLY



EXISTING SAFETY SURFACE

SIDEWALK CONSTRUCTION NOTES:

- PROVIDE EXPANSION JOINTS:
- AROUND STRUCTURES LOCATED WITHIN THE SIDEWALK.
- AT SLAB ADJACENT TO DRIVEWAY CROSSING.



MEMORANDUM

To: Charter Township of Ypsilanti Board of Trustees

From: John Hines, Municipal Services Director

Date: May 3, 2024

RE: Request Authorization to reject the bids received for the Civic Center Pond Project to re-bid with a reduction in scope.

The Residential Services Department is requesting authorization to reject the five bids received for Civic Center Pond project due to bid pricing and funds available.

At the December 5th, 2023 Board of Trustees meeting, the board approved for the Residential Services Department along with OHM to seek sealed bids for the replacement of the civic center pond liner, landscaping and water proofing of the building. On January 23rd, 2024 bids were opened at the Township Civic Center where five bids were received. Bid Tab Below:

Bids:	
TSP Services, Inc.	- \$735,734.13
Angelin Civil, LLC	- \$940,109.83
All Star Power Excavation	- \$1,042,421.00
Diversified Excavating & Site Utilities, LLC	- \$1,158,297.95
M-K Construction Co., Inc.	- \$1,901,276.00

The request for rejection of the bids is due to the price far exceeding our price projections and allotted budget. Through the bids received OHM and township staff agree that removing the replacement of the liner and focusing primarily on moving the water away from the building will align more with the amount budgeted and achieve the project goals. The previously approved RFP will be evaluated and adjusted by OHM and posted in late May for an end of Summer project goal.

If approved, Staff and representatives from OHM will return to the Board of Trustees to recommend and award the selection of a contractor and a proposed construction schedule after the bids are received.



March 19, 2024

John Hines
Municipal Services Director
7200 S Huron River Dr
Ypsilanti Township, MI 48197

RE: **Civic Center Pond Rehabilitation**
Project Update

Dear Mr. Hines:

Sealed bids for Civic Center Pond Rehabilitation project were opened on January 29, 2024, and the low bidder was TSP Environmental (TSP) with a total bid amount of \$591,993.48 (excluding the optional landscaping). The bid total was higher than what the Township had set aside in ARPA dollars in 2023.

After the opening, it was discussed that there were several items of work that could potentially be eliminated from the contract (rip rap edging and reduced hauling or materials) to get this total cost down closer to \$450,000 - \$475,000 and we attempted to coordinate a value engineering process. However, when TSP Environmental was asked to consider these modifications, they came back with a completely different scope which omitted replacing the failed liner. Because this was such a significant scope change to what was bid, we do not feel comfortable recommending this alternative to the Township and believe it would be better to rebid the project, if changes like this were to be allowed. After following up with TSP again, our attempts only slightly modify the original scope. It was evident that TSP was not interested in any other modification other than what they had proposed or what they originally bid on.

To recap, Civic Center Pond Rehabilitation project included removing and replacing the entire pond liner, building a "land-berm" along the Civic Center foundation, install rock edging along the reestablished perimeter of the pond, and waterproof the exterior of the Civic Center crawl space.

It is our recommendation the Township budget \$500,000 - \$600,000 for a full pond liner replacement and waterproofing for the Civic Center in the future and rebid the project at a later date with a slightly modified scope. The initial \$350,000.00 set aside in ARPA funds was based off a 2017/18 estimate and it is clear after bidding, that prices for this niche work have increased significantly. The recommended budget noted above will allow the Township to move forward with something closer to the original scope.

Alternatively, the project could be redesigned, and the liner could be omitted, and the project could focus on only the waterproofing of the building and establishment of an earthen berm to eliminate potential for water intrusion. It's assumed a reduced scope without a new pond liner could be accomplished for \$250,000 - \$350,000.

Prior to any of this, we recommend the Township has professional inspection completed on the crawl space area to confirm that there are still water penetration issues as previously reported and obtain a report with recommendations specific to this issue. Once we receive this, OHM would be happy to discuss alternatives and repackage this work in an appropriate manner that is in line with the desired budget. If there is a concern with obligating ARPA dollars



now, we would recommend putting these dollars towards the parking lot or water main replacement as part of the Civic Center Parking Lot project that is scheduled to be bid later this spring or summer for 2024/25 construction.

Should there be any questions, please contact this office at (734) 522-6711.

Sincerely,
OHM Advisors

A handwritten signature in black ink that reads "Matthew D. Parks".

Matthew D. Parks, P.E.

cc: Brenda Stumbo, Township Supervisor
Stan Eldridge, Township Treasurer
Doug Winters, Township Attorney

BID FORM for
CWC CENTER POND REHABILITATION
 Charter Township of Ypsilanti, Washtenaw County, State of Michigan
 OHM Job Number: 0998-23-0060

TSP Services, Inc.
 25000 Capital
 Redford, MI 48239
 734-938-0426

Angln Cwi, LLC
 12000 Newburg Rd
 Livonia, MI 48150
 734-464-2600

All Star Power Excavation, LLC
 833 North Gays Drive
 Grosse Pointe Woods, MI 48236
 734-771-7064

Diversified Excavating & Site Utilities, LLC
 7810 Whitaker Rd
 Ypsilanti, MI 48197
 734-487-6454

MAX Construction Co., Inc.
 18388 Dix Toledo Road
 Brownstown, MI 48193
 734-283-4637

Category 1 - MISCELLANEOUS

Item	Description	Estimated Quantity	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	
1	Permit Fees Allowance	5000.00	Dlr	\$ 1.00	\$ 5,000.00	\$ 1.00	\$ 5,000.00	\$ 1.00	\$ 5,000.00	\$ 1.00	\$ 5,000.00	\$ 1.00	\$ 5,000.00
2	Audio/Video Route Survey	1.00	LSUM	\$ 1,992.84	\$ 1,992.84	\$ 4,000.00	\$ 4,000.00	\$ 1,500.00	\$ 1,500.00	\$ 3,500.00	\$ 3,500.00	\$ 6,500.00	\$ 6,500.00
3	Mobilization, Max 5%	1.00	LSUM	\$ 24,469.78	\$ 24,469.78	\$ 39,000.00	\$ 39,000.00	\$ 45,000.00	\$ 45,000.00	\$ 30,000.00	\$ 30,000.00	\$ 75,000.00	\$ 75,000.00
Subtotal Category 1 (ITEM 1-3 incl):				\$	\$ 31,462.32	\$	\$ 48,000.00	\$	\$ 51,500.00	\$	\$ 38,500.00	\$	\$ 86,500.00

Category 2 - REMOVALS

Item	Description	Estimated Quantity	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	
4	Existing Pond Liner, Rem	1.00	LSUM	\$ 21,737.24	\$ 21,737.24	\$ 26,313.27	\$ 26,313.27	\$ 35,000.00	\$ 35,000.00	\$ 18,000.00	\$ 18,000.00	\$ 132,310.00	\$ 132,310.00
Subtotal Category 2 (ITEM 4 incl):				\$	\$ 21,737.24	\$	\$ 26,313.27	\$	\$ 35,000.00	\$	\$ 18,000.00	\$	\$ 132,310.00

Category 3 - CONSTRUCTION

Item	Description	Estimated Quantity	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	
5	Sand Fill, MDOT CL II	4408.00	Syd	\$ 11.14	\$ 49,105.12	\$ 18.00	\$ 79,344.00	\$ 20.00	\$ 88,160.00	\$ 12.50	\$ 55,100.00	\$ 15.00	\$ 66,120.00
6	Embankment, CIP	2000.00	Cyd	\$ 11.87	\$ 23,740.00	\$ 28.75	\$ 57,500.00	\$ 25.00	\$ 50,000.00	\$ 140.00	\$ 280,000.00	\$ 86.00	\$ 132,000.00
7	Earthwork	1.00	LSUM	\$ 136,394.55	\$ 136,394.55	\$ 250,000.00	\$ 250,000.00	\$ 362,620.00	\$ 362,620.00	\$ 270,665.00	\$ 270,665.00	\$ 753,750.00	\$ 753,750.00
8	Erosion Control, Inlet Protection, Fabric Drop	1.00	Ea	\$ 2,490.80	\$ 2,490.80	\$ 235.42	\$ 235.42	\$ 150.00	\$ 150.00	\$ 400.00	\$ 400.00	\$ 813.00	\$ 813.00
9	1' x 3' Aggregate, Access Road	187.00	Ton	\$ 41.55	\$ 7,789.85	\$ 60.00	\$ 11,220.00	\$ 40.00	\$ 7,480.00	\$ 69.80	\$ 13,015.20	\$ 49.00	\$ 9,183.00
10	Geotextile, Stabilization, Woven	11243.00	Syd	\$ 4.15	\$ 46,658.45	\$ 4.25	\$ 47,782.75	\$ 3.00	\$ 33,729.00	\$ 2.80	\$ 31,480.40	\$ 1.00	\$ 11,243.00
11	Building Waterproofing	1.00	LSUM	\$ 31,037.34	\$ 31,037.34	\$ 18,518.00	\$ 18,518.00	\$ 31,000.00	\$ 31,000.00	\$ 16,000.00	\$ 16,000.00	\$ 36,250.00	\$ 36,250.00
12	Pond Liner	11900.00	Syd	\$ 6.96	\$ 83,062.00	\$ 6.85	\$ 81,515.00	\$ 6.00	\$ 71,400.00	\$ 10.50	\$ 124,950.00	\$ 15.00	\$ 178,500.00
13	Riprap, Plain	2589.00	Syd	\$ 35.44	\$ 91,754.16	\$ 50.00	\$ 129,450.00	\$ 60.00	\$ 155,340.00	\$ 81.85	\$ 211,391.85	\$ 46.00	\$ 119,094.00
14	Turf Establishment	7445.00	Syd	\$ 8.97	\$ 66,781.65	\$ 4.70	\$ 34,915.50	\$ 4.00	\$ 29,780.00	\$ 2.10	\$ 15,634.50	\$ 25.00	\$ 186,125.00
Subtotal Category 3 (ITEM 5-14 incl):				\$	\$ 538,793.92	\$	\$ 710,557.67	\$	\$ 829,659.00	\$	\$ 1,016,636.95	\$	\$ 1,493,058.00

Category 4 - ALT - LANDSCAPING

Item	Description	Estimated Quantity	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	
15	Mobilization, Max 5%, Landscaping	1.00	LSUM	\$ 5,385.45	\$ 5,385.45	\$ 7,000.00	\$ 7,000.00	\$ 4,000.00	\$ 4,000.00	\$ 3,000.00	\$ 3,000.00	\$ 12,500.00	\$ 12,500.00
16	Electrical Allowance	30000.00	Dlr	\$ 1.00	\$ 30,000.00	\$ 1.00	\$ 30,000.00	\$ 1.00	\$ 30,000.00	\$ 1.00	\$ 30,000.00	\$ 1.00	\$ 30,000.00
17	Azer x freemantii 'Autumn Blaze'	2.00	Ea	\$ 1,323.13	\$ 2,646.26	\$ 961.54	\$ 1,923.08	\$ 935.00	\$ 1,870.00	\$ 605.00	\$ 1,210.00	\$ 938.00	\$ 1,876.00
18	Ametanther x grandiflora 'Autumn Brilliance'	3.00	Ea	\$ 1,211.33	\$ 3,633.99	\$ 1,025.64	\$ 3,076.92	\$ 560.00	\$ 1,680.00	\$ 450.00	\$ 1,350.00	\$ 1,000.00	\$ 3,000.00
19	Asclepias incarnata	282.00	Ea	\$ 36.47	\$ 10,284.54	\$ 38.46	\$ 10,845.72	\$ 36.00	\$ 10,192.00	\$ 22.00	\$ 6,204.00	\$ 38.00	\$ 10,716.00
20	Asclepias tuberosa	770.00	Ea	\$ 34.22	\$ 26,349.40	\$ 38.46	\$ 29,614.20	\$ 28.00	\$ 21,560.00	\$ 13.00	\$ 10,010.00	\$ 38.00	\$ 29,260.00
21	Betula nigra	3.00	Ea	\$ 1,156.46	\$ 3,469.38	\$ 961.24	\$ 2,883.72	\$ 955.00	\$ 1,695.00	\$ 390.00	\$ 1,170.00	\$ 938.00	\$ 2,814.00
22	Carex pensylvanica	933.00	Ea	\$ 8.75	\$ 8,163.75	\$ 8.97	\$ 8,369.01	\$ 9.00	\$ 8,397.00	\$ 3.00	\$ 2,799.00	\$ 9.00	\$ 8,367.00
23	Ceanothus americanus	226.00	Ea	\$ 59.30	\$ 13,401.80	\$ 64.10	\$ 14,486.60	\$ 36.00	\$ 8,136.00	\$ 18.50	\$ 4,181.00	\$ 63.00	\$ 14,238.00
24	Echinacea purpurea	47.00	Ea	\$ 54.20	\$ 2,547.40	\$ 38.46	\$ 1,807.62	\$ 28.00	\$ 1,316.00	\$ 18.00	\$ 846.00	\$ 38.00	\$ 1,786.00
25	Fuchsia americana 'Autumn Purple'	4.00	Ea	\$ 1,237.75	\$ 4,951.00	\$ 1,153.85	\$ 4,615.40	\$ 925.00	\$ 3,700.00	\$ 660.00	\$ 2,640.00	\$ 1,125.00	\$ 4,500.00
26	Hypericum pyramidatum	194.00	Ea	\$ 17.23	\$ 3,342.62	\$ 14.10	\$ 2,735.40	\$ 9.00	\$ 1,746.00	\$ 4.00	\$ 776.00	\$ 14.00	\$ 2,716.00
27	Iris versicolor	207.00	Ea	\$ 37.76	\$ 7,816.32	\$ 38.46	\$ 7,961.22	\$ 28.00	\$ 5,796.00	\$ 16.00	\$ 3,312.00	\$ 38.00	\$ 7,896.00
28	Picea glauca 'Pendula'	4.00	Ea	\$ 1,015.19	\$ 4,060.76	\$ 1,185.90	\$ 4,743.60	\$ 1,445.00	\$ 5,780.00	\$ 550.00	\$ 2,200.00	\$ 1,156.00	\$ 4,624.00
29	Thuja Occidentalis	5.00	Ea	\$ 987.75	\$ 4,938.75	\$ 1,153.85	\$ 5,769.25	\$ 875.00	\$ 4,375.00	\$ 410.00	\$ 2,050.00	\$ 1,125.00	\$ 5,625.00
30	Topsoil, 3 inch	1212.00	Syd	\$ 3.66	\$ 4,435.92	\$ 8.00	\$ 9,696.00	\$ 7.00	\$ 8,484.00	\$ 4.00	\$ 4,848.00	\$ 33.00	\$ 39,996.00
31	Mulch, 3 inch	101.00	Cyd	\$ 82.31	\$ 8,313.31	\$ 96.15	\$ 9,711.15	\$ 75.00	\$ 7,575.00	\$ 65.00	\$ 6,565.00	\$ 94.00	\$ 9,464.00
Subtotal Category 4 (ITEM 15-31 incl):				\$	\$ 143,740.65	\$	\$ 155,238.89	\$	\$ 126,262.00	\$	\$ 83,161.00	\$	\$ 189,408.00

Subtotal Category 1:	\$	\$ 31,462.32	\$	\$ 48,000.00	\$	\$ 51,500.00	\$	\$ 38,500.00	\$	\$ 86,500.00
Subtotal Category 2:	\$	\$ 21,737.24	\$	\$ 26,313.27	\$	\$ 35,000.00	\$	\$ 18,000.00	\$	\$ 132,310.00
Subtotal Category 3:	\$	\$ 538,793.92	\$	\$ 710,557.67	\$	\$ 829,659.00	\$	\$ 1,016,636.95	\$	\$ 1,493,058.00
Subtotal Category 4:	\$	\$ 143,740.65	\$	\$ 155,238.89	\$	\$ 126,262.00	\$	\$ 83,161.00	\$	\$ 189,408.00
Total Bid Amount (Categories 1-4 incl):	\$	\$ 735,734.13	\$	\$ 940,109.83	\$	\$ 1,042,421.00	\$	\$ 1,198,297.95	\$	\$ 1,901,276.00

CORRECTIONS
 1 Total amount adjusted to reflect bidder's multiplication error
 2 Line item amount adjusted to reflect bidder's multiplication error

Township Supervisor
Brenda L. Stumbo
Township Clerk
Heather Jarrell Roe
Township Treasurer
Stan Eldridge



**YPSILANTI
TOWNSHIP**
— OFFICE OF THE CLERK —

Trustees
Ryan Hunter
John Newman II
Gloria Peterson
Debbie Swanson

Board of Trustees,

Please accept this as a request to go into closed session in accordance with the Open Meetings Act, MCL 15.268, subsections (d) To consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained and (h) To consider material exempt from discussion or disclosure by state or federal statute.

Heather Jarrell Roe, Ypsilanti Township Clerk

OTHER BUSINESS

PUBLIC COMMENTS

BOARD MEMBER UPDATES
