SECTION 000101
Dearborn Public Schools
Bid Release No. 8
PROJECT MANUAL COVER
July 2nd 2026

Dearborn Public Schools

Salina Intermediate School Recreation Field
Project Manual & Bid Information
Bid Package No. 8

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END OF SECTION

SECTION 001100
ADVERTISEMENT / INVITATION FOR BIDS

PROJECT:	Salina Intermediate School Recreation Field
CLARK PROJECT NO.:	2957-A01
DPS BID NO.:	1577
BID RELEASE NO.:	08
DESCRIPTION:	Site Improvements at Salina Intermediate School
OWNER:	Dearborn Public Schools 10421 Haggerty St. Dearborn, MI 48126
ARCHITECT:	Kingscott Associates, Inc. 950 Trade Centre Way, Suite 130 Portage, MI. 49002

1. PRE-BID CONFERENCE

1.1. A pre-Bid conference will be held at 11:00AM, Thursday, July 9th at 2623, Salina St. Dearborn, Mi.

2. BID DUE DATE/LOCATION

2.1. Lump sum sealed Bids will be received at the office of:

Dearborn Public Schools – Administrative Building
18700 Audette St
Dearborn MI 48124

2.2. Bids must be delivered not later than 10:00AM, Monday, July, 20th.

2.3. The front of the sealed bid envelope shall be clearly labeled as follows.

Dearborn Public Schools
18700 Audette St
Dearborn, MI, 48124
Attention: Mark Andrews

Bid for: Dearborn Public Schools – Salina Recreation Field

Bid Category: *Insert Bid Category Number and Description*

3. BID CATEGORIES

06 – General Contracting	

4. BID DOCUMENT AVAILABILITY

4.1. Bid Documents, drawings and specifications will be available at 12:00PM, Thursday, July 2nd at the following location(s):

www.buildingconnect.com
www.Clarkcc.com, click BIDS/Open Bids

5. BID PROPOSAL REQUIREMENTS

5.1. The Board of Education will not consider or accept a Bid received by the Board after the Due Date for receipt of Bids.

5.2. No oral, fax or emailed Bids shall be submitted.

5.3. Each Bid must be accompanied by a Bid security in an amount of not less than 5% of the total base Bid sum, pledging that the Bidder will enter into a Contract with the Owner under the terms stated in the Bid Documents. Bid Bonds shall be issued by a bonding company meeting the requirements as described in Section 006113 Performance and Payment Bond. Bid security may also be in the form of certified check made out to the School District.

5.4. All Bidders shall provide a familial disclosure in compliance with MCL 380.1267 and attach this information to the Bid. The Bid shall be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the owner or any employee of the Bidder and any member of the Board of Education of the School District, or the Superintendent of the school district. **The Board of Education of the School District will not consider a Bid that does not include this sworn and notarized statement.**

5.5. Each Bid must be accompanied by a sworn and notarized statement certifying that the Bidder is not an "Iran linked business" within the meaning of the Iran Economic Sanctions Act.

5.6. School District Board of Education reserves the right to accept or reject any and all Bids, either in whole or in part, to waive any informalities or irregularities therein, or to award the contract to other than the Bidder(s) submitting the best financial Bid (low Bidder), in its sole and absolute discretion.

5.7. All questions during the bidding period shall be referred to Clark Construction Company:

CONTACT:	Mitchel Rice
TELEPHONE:	313-282-0458
EMAIL:	mrice@clarkcc.com

5.8. Bids will be opened publicly and read aloud at 10:00am, Monday, July 20th at 18700 Audete St. Dearborn, MI.48124. **Post-Bid Interview will take place directly after bid opening.**

SECTION 001100
ADVERTISEMENT / INVITATION FOR BIDS

END OF SECTION

SECTION 002113
INSTRUCTIONS TO BIDDERS

1. DEFINITIONS

1.1. All definitions set forth in the General Conditions of the Contract for Construction are applicable to these Instructions to Bidders.

1.2. **Bid Documents:** include the Contract, the General, Division 00 – Procurement and Contracting Requirements, Division 01 – General Requirements, Design Drawings and Specifications, and Addenda.

1.3. **Bid Release:** a set of Bid Documents.

1.4. **Bid Category:** areas of Work performed by a Trade Contractor and its Subcontractors.

1.5. **Addenda:** written or graphic instruments issued prior to the execution of the Contract which modify or interpret the Bid Documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections.

1.6. **Bid:** a proposal prepared and submitted as required herein.

1.7. **General Contractor:** shall refer to the entity contracted to perform the Work of one or more Bid Categories whether referred to in the Contract Documents as Contractor, Subcontractor or Trade Contractor.

2. BIDDER'S REPRESENTATION

2.1. Each Bidder, by submitting a Bid, represents that the Bidder has read and understands the Bid Documents, has visited the site and is familiar with the local conditions under which the Work is to be performed and has made its own review therefore of the facilities and difficulties attending the performance and completion of the Work.

3. BIDDING PROCEDURES

3.1. All Bids must be submitted on the unaltered Bid Proposal Forms provided as part of the Bid Documents and in accordance with these Instructions to Bidders.

3.2. Each Bidder shall ascertain prior to submitting a Bid that it has received all Addenda issued and shall acknowledge receipt on the Bid Proposal Form.

3.3. All Bids must be signed as follows:

A. Corporations: Signature of official shall be accompanied by a certified copy of the resolution of the board of directors authorizing the individual signing to bind the corporation.

B. Partnerships: Signature of one partner shall be accompanied by a certified copy of the power of attorney authorizing the individual signing to bind all

partners. If a certified copy of the partnership's certificate submitted with the Bid indicated that all partners have signed, no authorization is required.

C. Bids submitted by joint ventures shall be signed by one of the joint ventures and shall be accompanied by a certified copy of the power of attorney authorizing the individual signing to bind all the joint ventures.

D. Individual signing on own behalf: No authorization is required.

E. Individual signing on behalf of another: Power of attorney or comparable evidence of authority shall accompany Bid.

3.4. Bids shall be submitted in an opaque, sealed envelope. Facsimile and email Bids will not be accepted.

3.5. A Bid shall be invalid if it is not delivered to the location indicated in the Advertisement/Invitation for Bids on or before the required Bid Due Date and time.

3.6. No responsibility shall attach to the the Owner, or representatives of either, for premature opening of any Bid, which is not properly addressed, delivered and identified.

3.7. Negligence in preparation, improper preparation, error in and/or omissions from the Bid shall not relieve the Bidder from fulfillment of any and all applicable obligations and requirements of the contract documents.

3.8. The Owner, or Architect/Engineer, in making copies of the Bid Documents available, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

3.9. All Bids submitted shall be for the specified base scope of Work with no exceptions. Exceptions in the base Bid may be considered as basis for rejection.

3.10. Voluntary alternates will be considered at the Architect and Owner's discretion.

3.11. Bidder shall not modify, withdraw or cancel a Bid or any part thereof for ninety (90) days after the time designated for the Due Date of Bids.

4. FAMILIAL DISCLOSURE

4.1. All Bidders shall provide familial disclosure in compliance with MCL 380.1267 and attach this information to the Bid. The Bid shall be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the Owner or any employee of the Bidder and any member of the Board of Education of the school district, or the Superintendent of the school district. The District will not consider a Bid that does not include this sworn and notarized statement.

5. IRAN ECONOMIC SANCTIONS ACT

5.1. Each Bid must be accompanied by a sworn and notarized statement certifying that the Contractor is not an "Iran linked business" within the meaning of the Iran Economic Sanctions Act.

6. CRIMINAL BACKGROUND CHECKS

6.1. Each Bid must be accompanied by a sworn and notarized Affidavit of Compliance – Criminal Background Checks.

6.2. Dearborn Public Schools require all Contractor owners, employees, agents, representatives, subcontractors, and/or other personnel who will be present on School grounds to submit to a criminal history background check. This background check will include a requirement for each contractor owner, employee, agent, representative, subcontractor, and/or other personnel to be screened before he/she enters School grounds. A valid State ID card or Driver's License is required to complete the background check. Once screened, the district will provide approved personnel with a Contractor Badge with a unique number.

6.3. Contract Dearborn Public Schools HR Department to arrange background checks.

7. EXAMINATION OF BIDDING DOCUMENTS

7.1. Each Bidder shall examine the Bidding Documents carefully and, not later than seven (7) days prior to the Due Date of Bids, shall make written request to Clark Construction Company for interpretation or correction of any ambiguity, inconsistency or error therein discovered. Only written interpretation or correction by Addendum shall be binding.

7.2. Each Bidder shall submit a Bid based on the entire set of Bid Documents. Bidders shall review all Drawings and Specifications to identify Work related to its respective Bid category. Complete sets of Drawings are available for review at the locations indicated in the Advertisement/Invitation for Bids.

7.3. Failure to review the complete set of Bid Documents and to identify items reasonably interpreted to be in the scope of the Bid Category shall not relieve the Trade Contractor of its responsibility to perform the Work.

7.4. Any incidental item of material, labor or detail, required for proper execution and completion of the Work, omitted from the Bid Documents, but required by governing codes, local regulations, trade practices, operational functions, and quality workmanship, shall be provided as part of the contract Work at no additional cost, even though not specifically detailed or noted.

7.5. Trade Contractor shall not scale Drawings to obtain dimensions.

8. BIDDER'S EXAMINATION OF PREMISES

8.1. The Bidder represents that it has carefully inspected the Project site and examined the Drawings and Specifications and other Contract Documents and is familiar with and has satisfied itself as to the nature, location and amount of the Work, the Bidder's access thereto and ability to perform the Work, local code requirements applicable to the Work and requirements of permits and inspections, safety and barricade requirements, the terms and conditions of any applicable project labor and collective bargaining agreements, as well as the quality, quantity and availability of labor, materials, equipment and facilities and other items required for the performance of the Work and the possible limiting physical and other conditions which may be encountered in the performance of the Work and assumes all risks therefrom. The Bidder has determined, by its own investigation and research, all the conditions affecting the Work to be performed and materials to be furnished and does not rely upon any representation by the Owner in connection therewith. In performing the Work, Bidder accepts the condition of the Project site as-is and assumes the risks with regard to existing conditions at the Project site.

8.2. The Bidder shall take its own measurements and be responsible for the correctness of same.

8.3. The Bidder shall be held to have made such examinations of the premises and no allowances will be made on its behalf by reason of error or omission on its part.

8.4. Plans, diagrams and other descriptive information which depict existing conditions are provided for scope identification and scheduling purposes only. Quantities, elevations, measurements and locations shown may have been approximated and/or gathered from dated, incomplete original construction documents. <u>This data should not be used for bidding purposes without field verification by the Bidder.</u>

8.5. The Bidder's own Bid Document review and site inspection review of the Work areas shall be relied upon to provide the Bidder information he/she may require to properly execute and complete the Work. Questions must be submitted in writing to the Owner at least seven (7) days before the date for receipt of Bids to allow time for written Addenda to be issued.

8.6. Each Bidder shall examine the premises carefully and, not later than seven (7) days prior to the date for receipt of Bids, shall make written request to Clark Construction Company for any additional information required. Only written interpretation or correction by Addendum shall be binding.

9. <u>SUBSTITUTIONS</u>

9.1. Each Bid shall be based upon materials and equipment described in the Bid Documents.

9.2. Material and equipment substitutions will not be considered unless written request has been submitted for approval at least fourteen (14) days prior to Bid Due

Date. Only approvals in a written Addendum shall be binding. Each substitution request shall include the following:

A. Complete description of the proposed substitution.

B. Information regarding specified material or equipment for which substitution is being submitted.

C. Drawings.

D. Manufacturer's literature.

E. Performance and test data.

F. Effect on performance characteristics.

G. Impact on the Work of other trades.

H. Any other data or information necessary for a complete evaluation.

10. RESERVATION OF RIGHTS

10.1. The Owner reserves the right, in its sole and absolute discretion (for this provision and all other provisions contained in this RFB), to accept or reject, in whole or in part, any or all Bids. The Owner further reserves the right to waive any irregularity or informality in this RFB process or any Bid, and the right to award the Contract to other than the low Bidder(s). The Owner reserves the right to request additional information from any or all Bidders. The Owner reserves the right to select one or more Bidders. In the event a Bidder's Bid is accepted by the Owner and Bidder asserts exceptions, special considerations or conditions after acceptance, the Owner, in its sole and absolute discretion, reserves the right to thereafter reject the Bid and award the Contract to another Bidder.

11. OWNER RIGHTS

11.1. Bidder acknowledges the right of the Owner to accept or reject in whole or in part, any or all Bids and to waive any informality or irregularity in any Bid received. In addition, the Bidder recognizes the right of the Owner to reject a Bid for any reason including but not limited to the following:

A. Bidder fails to furnish or submit data required in the Bidding Documents;

B. Bid is in any way incomplete or irregular;

C. Bidder's performance as a Trade Contractor was unsatisfactory under a prior contract for the construction, repair, modification, or demolition of a facility with the Owner or Architect;

D. Known poor performance on prior contracts with parties other than the Owner or Architect; or

E. Unsatisfactory financial condition.

F. Unsatisfactory safety record

11.2. The Owner may accept alternates that serve its own best interest. The Owner shall have the right to accept alternates in any order or combination and to determine the low Bidder based on the sum of the base Bid and Bid alternates accepted.

11.3. Bidders to whom the award of a Contract is under consideration shall complete the Clark Construction Company Online Prequalification database as follows. Firms having previously filled out Clark Construction Company's Online Prequalification database shall confirm and/or update the information.

A. Follow the link below to the Clark Construction Pre-Qualification Website.

1. www.Clarkcc.com, click BIDS/Pre-qualification.

B. Upload required information into the database.

C. After completion of uploading, updating, or confirming your firm's information notify Mitchel Rice – mrice@clarkcc.com Provide Bid Categories for which your firm desires to be prequalified.

D. For questions or issues using the online system, contact Mitchel Rice – (313)-282-0458.

12. EQUAL OPPORTUNITY EMPLOYMENT POLICIES

12.1. The Bidder agrees that it will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or age. The Bidder shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to race, religion, color, sex, or national origin.

13. BID SECURITY

13.1. Each Bid must be accompanied by a Bid security in an amount of not less than 5% of the total base Bid sum, pledging that the Bidder will enter a Contract with the Owner under the terms stated in the Bid Documents. Bid Bonds shall be issued by a bonding company meeting the requirements as described in Section 006113 Performance and Payment Bond. Bid security may also be in the form of a certified check made out to the School District.

13.2. The Owner shall have the right to retain the Bid security of Bidders under consideration until either:

A. the Contract has been executed and bonds and insurance have been furnished, or

B. the specified time has elapsed so that Bids may be withdrawn, or

C. All Bids have been rejected.

13.3. The amount of the Bid security shall be forfeited to the Owner upon failure of the successful Bidder to enter into a Contract and provide all required Bonds and Insurance to Dearborn Public Schools within fifteen (15) days after acceptance of the Bid.

14. PERFORMANCE AND LABOR AND MATERIAL PAYMENT BONDS

14.1. The Bidder shall, within 10 days after the acceptance of any Bid, provide a Labor and Material Payment and Performance Bond, each covering the full amount of the Contract sum as security for the faithful performance of all Work under the Contract and payment of all charges in connection therewith. (Refer to "Performance and Payment Bond" section). **Cost of said bonds shall be included in the Base Bid.**

14.2. The Owner has the right to waive the performance and labor and material payment bond if the Bid is under $50,000.

15. PERMIT COMPETITION

15.1. The name of a model, manufacturer, or brand in this RFB shall not be considered as exclusive of other brands. Brands and models specified in this RFB are preferred. All supplies, materials, equipment, or products Bid by a Bidder shall meet or exceed the specifications set forth in this RFB.

15.2. It is the Owner's intent that this RFB permit competition. Accordingly, the use of any patent, proprietary name or manufacturer's name is for demonstrative purposes only and is not intended to curtail competition. Whenever any supplies, material, equipment or products requested in this RFB are specified by patent, proprietary name or by the name of the manufacturer, unless stated differently, such specification shall be considered as if followed by the words "or comparable equivalent," whether or not such words appear.

15.3. The Owner, in its sole and absolute discretion, shall have the right to determine if the proposed equivalent products/brands submitted by Bidder meet the specifications contained in this RFB and possess equivalent and/or better qualities.

15.4. It is the Bidder's responsibility to notify the Owner in writing not later than 14 days prior to the bid Due Date if any specifications or suggested comparable equivalent products/brands require clarification.

16. LATE BIDS

16.1. Each Bidder is responsible for the submission of its Bid. Bids or Bid revisions received after the Due Date will not be accepted or considered. The Owner is not liable for any delivery or postal delays.

17. RETURNED BIDS

17.1. All Bids received after the Due Date will be unopened and made available to the respective Bidder for pick-up, at their sole cost and expense for a period of two (2) weeks after the Due Date.

18. CONTRACT ASSINGMENT OR SUB-CONTRACT

18.1. The Contract shall not be assigned, transferred, or sublet, in whole or in part, by the Bidder without the prior written consent of the Owner.

19. SUBCONTRACTORS

19.1. All Trade Persons shall be thoroughly experienced in the particular class of Work in which they are employed.

19.2. Nothing contained in the Contract shall create a contractual relationship between the Owner and any third party, including any Subcontractor of the Bidder. The Bidder shall be responsible for the management of its Subcontractors in their performance of their work. When using Subcontractors, the Bidder shall be fully responsible to the Owner for the acts and omissions of its Subcontractors and of persons employed or directly employed by the Bidder as if the Subcontractors were employees of the Bidder.

END OF SECTION

SECTION 002413
SCOPE OF WORK
GENERAL NOTES

1. GENERAL

1.1. All Trade Contractors shall be bound to all requirements and conditions applicable to the Work of their respective area of Work including the Contract, General Conditions, Division 00 – Procurement and Contracting Requirements, Division 01 – General Requirements, Drawings, Specifications, and Addenda.

1.2. **Scope of Work General Notes shall be applicable to all Trade Contractors**. The Scope of Work of each bid category shall include the following items required for, caused by or resulting from its Work.

2. GENERAL NOTES

2.1. Trade Contractor shall furnish and utilize a Tablet on site.

2.2. Coordinate and cooperate with all entities associated with the project including the Owner, Architect, Independent Testing and Inspection agencies, local and other governmental authorities, and other Trade Contractors. Cost incurred as a result of lack of coordination of Work, deliveries, access required by others, testing/inspection, schedule, penetrations, etc., shall be the responsibility of the Trade Contractor failing to notify others of action to be taken or other requirements.

A. Coordination with other Trade Contractors and Bid Categories shall include construction systems where one or more Trade Contractors are involved to provide a complete functioning system in accordance with the contract documents. In the event of a system failing to function in accordance with the contract documents, each Trade Contractor having a part in a fully functioning system shall remain fully engaged in problem resolution until such time as the system functions in accordance with the contract documents or the problem is identified as unequivocally being the responsibility of one or more other Trade Contractors and Clark Construction Company releases the non-responsible Trade Contractor(s) in writing.

B. Construction systems where one or more Trade Contractors are involved to provide a complete functioning system include but not limited to 1) HVAC systems, including controls and electrical requirements, 2) roofing system 3) waterproofing systems 4) building envelope etc.

2.3. Provide written Daily Reports to include the following minimum information:

A. Description of Work performed

B. Trade personnel classification and hours

C. Equipment used

D. Significant events/issues

E. Weather

F. Other items as requested

2.4. Commencement of Work subsequent to associated Work by other Trade Contractor shall indicate acceptance of the condition of the Work by other Trade Contractor and/or existing conditions.

2.5. All means and methods, labor, material, tools, construction equipment and machinery necessary, including cranes, hoisting equipment, scaffolding, shoring and bracing, to complete the Work. All equipment shall be marked with the Trade Contractor's company name and contact information.

2.6. Trade Contractor shall obtain and pay for all permits and fees associated with its Work and provide evidence of same to Owner.

2.7. Basic benchmarks and control lines will be provided. Trade Contractor shall be responsible for all other engineering and layout required for the performance of its Work (Refer to "Field Engineering" section). Barricades, traffic maintenance and control as required.

2.8. Confine operations at the site to areas permitted by the Owner.

2.9. Dust control to prevent nuisance and hazard.

2.10. Provide sound level control within maximum levels as required by Owner and/or local ordinances. Trade Contractor shall obtain a variance in the event sound below maximum levels controls cannot be met.

2.11. Construct material and equipment mock-ups required by the documents in a timely manner for review, modifications if required and final acceptance to maintain the project schedule.

2.12. Protect all existing structures, equipment, trees, landscaping, etc.

2.13. Cutting, coring, patching, and penetrations of any structural, architectural, mechanical, and electrical materials required to complete the Work unless noted otherwise (Refer to Section 017329 "Cutting and Patching" for specific cutting and patching requirements).

2.14. All Trade Contractors shall be responsible for the following items included in Specification Section 01500 Temporary Facilities and Controls.
A. Cleaning
B. Material and Equipment Deliveries, Handling, and Storage
C. Protection of Installed Work
D. Security
E. Office/Storage Facilities

F. Removal of Utilities, Facilities and Controls
G. Data Connections

2.15. Parking will be available on the project site.

2.16. Use of tobacco products will not be allowed on the project site.

2.17. All trade contractors shall provide their own HEPA air filter for demo and HEPA vacuum for their cleanup

2.18. Trade contractor shall provide cleaning of street of mud and debris (Refer to "Temporary Facilities and Controls" section).

2.19. Trade contractor shall provide daily clean-up which shall include broom cleaning, dumpster cost and removal of identifiable debris and rubbish from site

2.20. Electrical cords shall be hung and off floor to prevent trip hazards.

END OF SECTION

SECTION 002416
SCOPE OF WORK
BID CATEGORY SPECIFIC NOTES

1. BID CATEGORY – 06 – GENERAL CONTRACTOR

1.1. GENERAL

1.2. The following shall not be interpreted as a complete itemization of the work to be performed under this Bid Category. This Bid Category, General Contractor, shall be responsible to perform all work reasonably interpreted to be included in its scope of work in accordance with the drawings and specifications in addition to these Bid Category notes of clarification.

1.3. BID CATEGORY (BID CATEGORY 06 – GENERAL CONTRACTOR)

BASE SPECIFICATION – (Include all Work specified or reasonably inferred)
002413 – SCOPE OF WORK GENERAL NOTES – (include all Work specified or reasonably inferred)

All Drawings and Specification as Issued by King Scott Associates, Inc. dated 6/05/2026

DIVISION 01 – GENERAL REQUIRMENTS
024119 – Selective Demolition
061000 – Rough Carpentry
311000 – Site Clearing
312000 – Earth Moving
313219 – Geotextile Fabric
321124 - Aggregate Base Course
321216 - Asphalt Paving
321313 - Concrete Paving
323113 - Chain Link Fences and Gates
323300 - Site Furnishings
329113 - Soil Preparation
329119 - Topsoil for Landscaping & Construction
329200 - Natural Turf and Sodding
329400 - Landscape Maintenance and Warranty Standards
329410 - Engineered Wood Fiber
334200 - Stormwater Conveyance
334600 – Subdrainage

1.4. All labor, material, tools, equipment, general requirements, general conditions necessary to complete all work in the drawings and specifications for Dearborn – Salina Intermediate School Recreation Field as issued by Kingscott Associates, Inc. dated June 5, 2026. This includes but is not limited to scheduling testing per the specs, ordering and maintaining dumpsters and portable toilets, paying and obtaining permits and scheduling all necessary state inspections. Include costs for site restoration for any area disturbed by construction activities. All cost for drawings reproductions, dumpsters, portable toilets, permits, site restoration etc. will be by the Contractor. Testing cost will be by the Owner.

END OF SECTION

SECTION 003113
PROJECT MILESTONE SCHEDULE

1. GENERAL

1.1. Milestone dates identified herein shall become binding under the Contract. The Bidder represents that it will provide sufficient labor, material, supervision, equipment and other necessary resources to achieve the milestone dates.

2. WORK HOURS

2.1. Project site standard work hours shall be 7:00AM to 3:30PM.

2.2. The Trade Contractor shall notify and obtain authorization from the Dearborn Public Schools in the event work is required to be performed outside of standard work hours.

2.3. For work required outside of standard work hours which is the result of the Trade Contractor's failure to perform the work as scheduled during standard hours, the Trade Contractor shall reimburse the Owner (Dearborn Public Schools) for the Supervision cost to be on site while such work is performed.

3. SCHEDULE REQUIREMENTS

3.1. Bidders shall review the milestone schedule for Work included in the construction documents and advise, at bid time, of any severe discrepancies identified.

3.2. Bid Proposals shall be based on the overall time duration provided in the milestone schedule for all construction activities.

3.3. Trade Contractors will be required to submit monthly progress reports and updated schedules as directed by the Owner.

3.4. The Owner (Dearborn Public Schools) will endeavor to incorporate Trade Contractor input into the final project schedule. Under no circumstances will data be incorporated that causes delay to any milestone or to the overall project completion date.

3.5. The Trade Contractor shall review, check, approve, and submit, in such sequence as to cause no delay in the Work or in the Work of the Owner or any separate Trade Contractor, all shop drawings, product data, and samples required by the Contract Documents.

3.6. Trade Contractors failing to meet the project schedule shall be required to submit a detailed recovery schedule within two (2) days of notification by Dearborn Public Schools. Such a recovery schedule shall contain sufficient detail to satisfy the requirements of Dearborn Public Schools and shall include overtime as necessary to accomplish recovery in the shortest possible duration.

3.7. The Trade Contractor shall be responsible for all additional cost associated with a project delay caused by the Trade Contractor. Project delay costs include but are not limited to; 1) Dearborn Public Schools personnel cost associated with additional scheduling and/or coordination time including phone calls, emails, meetings etc.; 2) overtime cost expended by other Trade Contractors and that of the failing Trade Contractor necessary to recover lost schedule time.

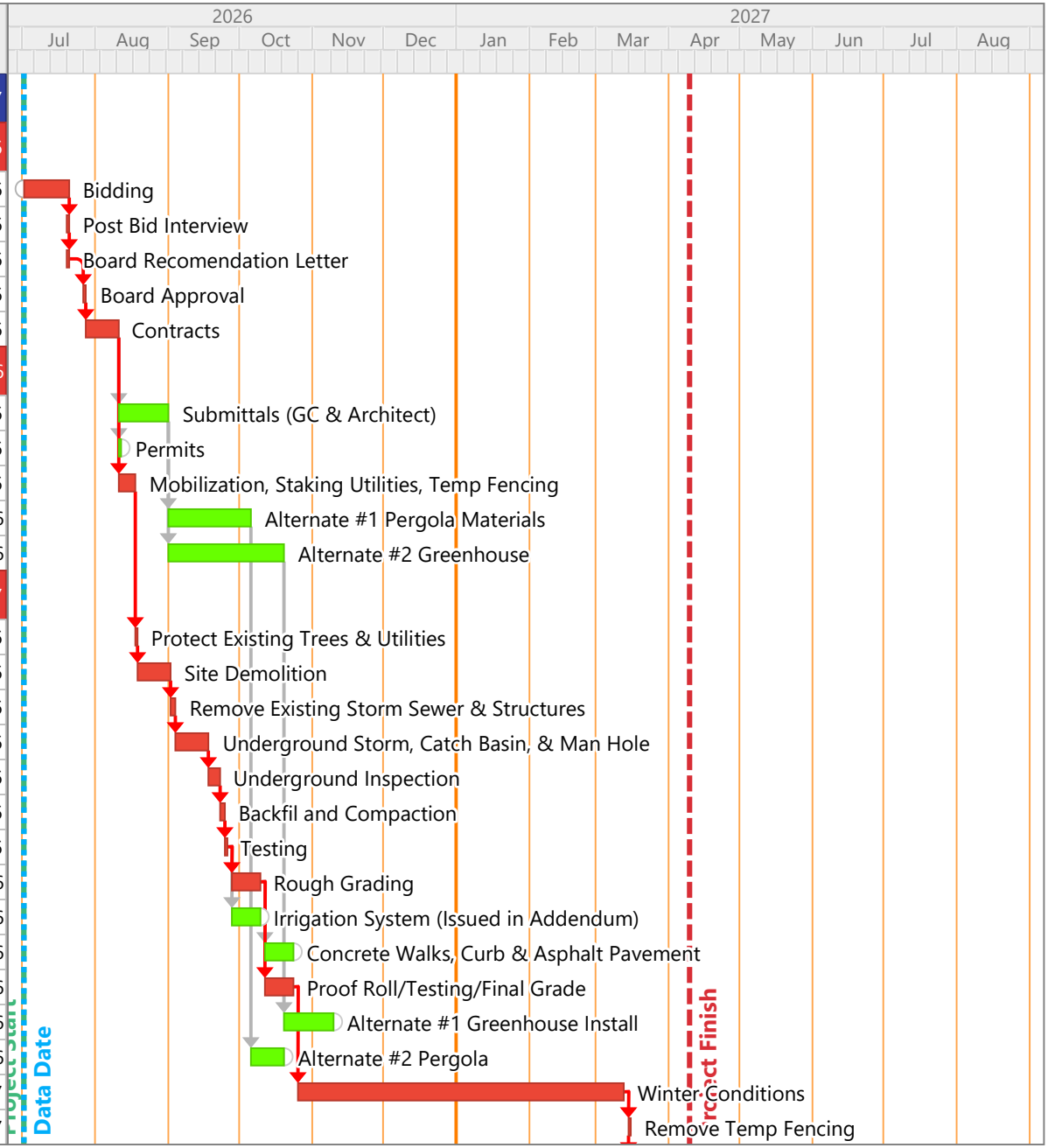
3.8. All scheduled "float time" shall belong exclusively to Dearborn Public Schools. Trade Contractor shall endeavor to improve upon the project schedule dates.

4. MILESTONE SCHEDULE

(Attached below)

END OF SECTION

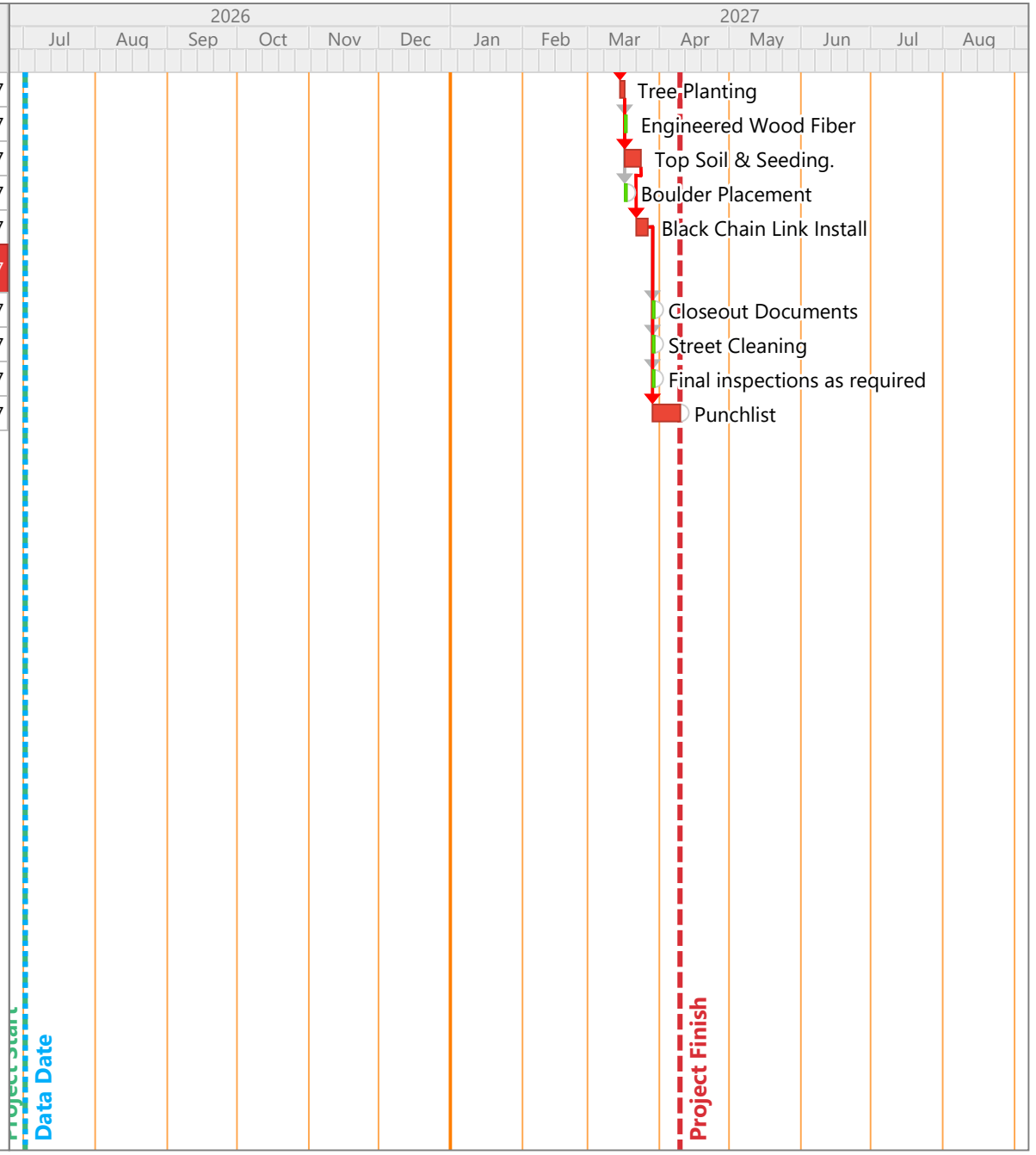
ID	Description	Start	Finish
Salina Intermediate Recreation Field		07/02/26	04/09/27
Pre-Construction		07/02/26	08/10/26
10	Bidding	07/02/26	07/20/26
20	Post Bid Interview	07/20/26	07/20/26
30	Board Recomendation Letter	07/20/26	07/20/26
40	Board Approval	07/27/26	07/27/26
50	Contracts	07/28/26	08/10/26
Procurement		08/11/26	10/19/26
60	Submittals (GC & Architect)	08/11/26	08/31/26
70	Permits	08/11/26	08/11/26
80	Mobilization, Staking Utilities, Temp Fencing	08/11/26	08/17/26
90	Alternate #1 Pergola Materials	09/01/26	10/05/26
100	Alternate #2 Greenhouse	09/01/26	10/19/26
Construction		08/18/26	03/26/27
110	Protect Existing Trees & Utilities	08/18/26	08/18/26
120	Site Demolition	08/19/26	09/01/26
130	Remove Existing Storm Sewer & Structures	09/02/26	09/03/26
140	Underground Storm, Catch Basin, & Man Hole	09/04/26	09/17/26
150	Underground Inspection	09/18/26	09/22/26
160	Backfil and Compaction	09/23/26	09/24/26
170	Testing	09/25/26	09/25/26
180	Rough Grading	09/28/26	10/09/26
185	Irrigation System (Issued in Addendum)	09/28/26	10/09/26
190	Concrete Walks, Curb & Asphalt Pavement	10/12/26	10/23/26
200	Proof Roll/Testing/Final Grade	10/12/26	10/23/26
210	Alternate #1 Greenhouse Install	10/20/26	11/09/26
220	Alternate #2 Pergola	10/06/26	10/19/26
230	Winter Conditions	10/26/26	03/12/27
250	Remove Temp Fencing	03/15/27	03/15/27



Start Date: 07/02/26
Finish Date: 04/09/27
Data Date: 07/02/26
Run Date: 07/02/26
Salina Intermediate Recreation Field Update.ppx

DEARBORN SCHOOLS

ID	Description	Start	Finish
260	Tree Planting	03/15/27	03/16/27
270	Engineered Wood Fiber	03/17/27	03/17/27
275	Top Soil & Seeding.	03/17/27	03/23/27
280	Boulder Placement	03/17/27	03/17/27
290	Black Chain Link Install	03/22/27	03/26/27
Closeout		03/29/27	04/09/27
300	Closeout Documents	03/29/27	03/29/27
305	Street Cleaning	03/29/27	03/29/27
310	Final inspections as required	03/29/27	03/29/27
320	Punchlist	03/29/27	04/09/27



Start Date: 07/02/26
Finish Date: 04/09/27
Data Date: 07/02/26
Run Date: 07/02/26
Salina Intermediate Recreation Field Update.ppx

DEARBORN SCHOOLS

SECTION 004126
BID FORM

BIDDER'S NAME:_____

PROJECT:	Salina Intermediate School Recreation Field
DPS BID NO.:	1577
BID RELEASE NO.:	08
DESCRIPTION:	Site Improvements at Salina Intermediate School
OWNER:	Dearborn Public Schools 10421 Haggerty St. Dearborn, MI 48126
ARCHITECT:	Kingscott Associates, Inc. 950 Trade Centre Way, Suite 130 Portage, MI. 49002
ATTENTION:	Mark Andrews – Dearborn Public Schools
TELEPHONE:	313-590-9783

1. BID

1.1. This Bid has been prepared after our examination of the complete Drawings and Specifications, together with their related documents, and our examination of the conditions surrounding the construction of the proposed Work including the availability of materials, equipment, and labor. The undersigned submits the following Bid to enter into a Contract with Dearborn Public Schools and agrees to furnish all labor, material, equipment, and service to complete the Work in accordance with the Contract Documents for:

A. **Bid Category No.:_____ Description:_____**

1. For the Lump Sum Base Bid of: ($_____)

_____Dollars

1.2. All appropriate sales taxes are included in the above Lump Sum Base Bid.

2. ADDENDA

2.1. The undersigned acknowledges receipt of the following Addenda and has included the cost thereof in the Lump Sum Base Bid:

No. 1, dated_____ No. 4, dated_____

No. 2, dated_____ No. 5, dated_____
No. 3, dated_____ No. 6, dated_____

3. TRADE HOURS

3.1. Total estimated trade hours required to perform the Work:

A. _____ Trade Hours

3.2. The undersigned acknowledges that the estimated trade hours provided above are for Clark Construction Company scheduling purposes only and shall not be deemed a limit to trade hours required to perform the Work and shall not be considered as a basis for claim.

4. BID SECURITY

4.1. Bid security in the amount of 5% of the Bid, shall accompany this Bid.

5. PERFORMANCE AND LABOR AND MATERIAL PAYMENT

5.1. The undersigned confirms that the cost of required Bonds is included in the base Bid amount.

6. REJECTION OF BID

6.1. The undersigned acknowledges the right of the Owner to accept or reject any or all Bids in whole or in part and to waive any informality or irregularity in the Bid, or to award the Contract to other than the low Bidder in its sole and absolute discretion.

7. PROJECT SCHEDULE

7.1. The undersigned acknowledges that it shall meet the requirements of the Project Schedule (Section 003113).

8. EXTRA WORK

8.1. The undersigned agrees that:

A. A maximum of 10% overhead and profit will be allowed for Changes in the Work performed by the Trade Contractor.

B. A maximum of 5% overhead and profit will be allowed for Changes in the Work for any tier Subcontractor.

C. For changes involving both additional costs and credits to the Contract, the markup will be allowed on the net add only after all credits have been deducted from the additional Work.

9. ALTERNATES

9.1. General

A. Each Bidder must furnish alternate pricing for the Work of its respective Bid Category for the following alternates.

B. Alternates shall not be included in the Lump Sum Base Bid.

C. Alternate price shall include all costs for labor, material, equipment, service, overhead, and profit including any bonds and taxes as required in the Bid Documents to complete the Work of the Bid Category.

9.2. List of Alternates

A. **Alternate No.: 1 Description: Greenhouse Kit Installation:**

1. Alternate Item: Section 321124 and 323300 and Drawing number L1.10A including construction of a gravel base with installation of a Greenhouse Kit.

a. Add/Deduct (Circle one) $_____

B. **Alternate No.: 2 Description: Pergola Installation:**

1. **2. Alternate Item: Section 061000 and Drawing number L1.10A2 including installation of a timber Pergola**

a. Add/Deduct (Circle one) $_____

C. **Alternate No.: 3 Description: Removal of Asphalt Pavement, Concrete Pavement & Concrete Curb & Gutter shown on Drawing C2.10:**

a. Add/Deduct (Circle one) $_____

9.3. **GENERAL**

A. Each Bidder for Bid Categories listed below, must submit unit prices for the Work of its respective Bid Category.

B. Unit prices shall include all overhead, profit and incidentals to furnish and install the Work.

BIDDER'S NAME:_____

LEGAL ADDRESS: _____

_____ZIP CODE:_____

CONTACT NAME: _____

SECTION 004126
BID FORM

TELEPHONE NO.: _____

FAX NO.: _____

EMAIL ADDRESS: _____

The Bidder declares the following legal status in submitting this Bid : (Check one)

_____A Corporation organized and existing under the laws of the State of Michigan

_____A Partnership

_____Other

CONTRACT ACKNOWLEDGEMENT

Trade Contractor hereby acknowledges acceptance of the terms of the Contract and will enter into the Contract with no modifications to the terms of the Contract.

SIGNATURE

Respectfully submitted:

_____
SIGNATURE

BY:_____

TITLE:_____

DATE:_____

Federal Employer Identification No.:_____

State License No.:_____

Familial Disclosure Affidavit

The undersigned, the owner or authorized officer of _____ (the "Bidder"), pursuant to the familial disclosure requirement provided in Dearborn Public Schools (the "School District") Request For Bids hereby represents and warrants that, except as provided below, no familial relationships exist between the owner or any employee of the Bidder, and any member of the Board of Education of the School District or the Superintendent of the School District. A list of the School District's Board of Education Members and its Superintendent may be found at Dearborn Public Schools – Dearborn Public Schools.

All Bidders shall provide a familial disclosure in compliance with MCL 380.1267 and attach this information to the Bid. **The Board of Education of the School District will not consider a Bid that does not include this sworn and notarized statement.**

List any Familial Relationships:

BIDDER:

_____

By: _____

Its: _____

STATE OF _____)
)ss.
COUNTY OF _____)

This instrument was acknowledged before me on the _____ day of _____, 2026, by _____.

_____
, Notary Public

_____ County, _____

My Commission Expires:_____

Acting in the County of :_____

AFFIDAVIT OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT
Michigan Public Act No. 517 of 2012

The undersigned, the owner or authorized officer of the below named Bidder (the "Bidder"), pursuant to the compliance certification requirement provided in the Dearborn Public Schools (the "School District") Request For Bids For (the "RFB"), hereby certifies, represents and warrants that the Bidder (including its officers, directors and employees) is not an "Iran linked business" within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the "Act"), and that in the event Bidder is awarded a Contract as a result of the aforementioned RFB, the Bidder/Contractor will not become an "Iran linked business" at any time during the course of performing the Work or any services under the Contract.

The Bidder further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than $250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the School District's investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date it is determined that the person has submitted the false certification.

BIDDER:

_____
Name of Bidder

By: _____

Its: _____

Date: _____

STATE OF _____)
)ss.
COUNTY OF _____)

This instrument was acknowledged before me on the _____ day of _____, 2026, by _____.

_____
, Notary Public

_____ County, _____

My Commission Expires:_____

Acting in the County of :_____

AFFIDAVIT OF COMPLIANCE – CRIMINAL BACKGROUND CHECKS

The undersigned, the owner or authorized officer of the below-named contractor (the "Contractor"), pursuant to the criminal background compliance certification requirements of Dearborn Public Schools (the "School District") hereby represents and warrants that the Contractor has performed and/or will perform sufficient criminal background checks, including at a minimum, an Internet Criminal History Tool ("ICHAT") check, for all of its owners, employees, agents, representatives, contractors and/or other personnel who will be on any School District premises to carry out the services contemplated by the Contract Documents. The Contractor further hereby certifies that no owner, employee, agent, representative, contractor and/or other personnel of the Contractor will be on any School District premises if they are a registered criminal sexual offender under the Sex Offenders Registration Act, Public Act 295 of 1994, or have been convicted of "Listed Offense" as defined under Section 722 of the Sex Offenders Registration Act, MCL 28.722.

The Contractor further acknowledges that if it is found to have submitted a false certification or otherwise fails to comply with the requirements of this certification, the School District may immediately terminate the Contract.

CONTRACTOR:

_____
Name of Contractor

By: _____

Its: _____

Date: _____

STATE OF _____)
)ss.
COUNTY OF _____)

This instrument was acknowledged before me on the _____ day of _____, 2026__, by _____.

_____
, Notary Public

_____ County, _____

My Commission Expires:_____

Acting in the County of :_____

SECTION 005216
AGREEMENT FORM

1. GENERAL

2. This project will be completed through a Purchase order between the General Contractor and The District. This will be signed off by both parties before work commences.

END OF SECTION

SECTION 006113
PERFORMANCE AND PAYMENT BOND

1. GENERAL

1.1. Whether the Performance and Labor Material Payment Bond is single or dual obligee, Trade Contractor must provide a "Performance Bond and Labor and Material Payment Bond", using AIA Document A312, 2010, , Prepared by the American Institute of Architects, which "Performance Bond and Labor and Material Payment Bond" is hereby made a part of the Contract Documents, the same as if fully restated herein. The Performance and Payment Bond shall be part of the Contract and shall apply to all Trade Contractors Contract Documents.

1.2. All bonding companies must be listed by the U.S. Treasury.

1.3. All bonding companies must be rated "A" or better by AM Best.

1.4. All bonding companies must be licensed to do business in Michigan.

1.5. Copies of the Performance Bond and Payment Bond may be obtained from the American Institute of Architects, national office, 1735 New York Avenue, NW, Washington, DC 20006.

1.6. The proposed bonding company of the Bidder shall be acceptable to the Owner. The Owner shall be listed as obligee on all Bonds.

1.7. The Bonds shall be provided in accordance with MCL 129.201, et seq., and shall minimally comply with all terms set forth therein.

1.8. The Owner shall be permitted to bring any claim, action, or lawsuit related to the Bonds in accordance with the statute(s) of limitations applicable under Michigan law. Any attempt to contractually limit such time period shall be null and void.

END OF SECTION

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Agent Name and Address	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : A Rated Insurance Company	
INSURER B : A Rated Insurance Company	
INSURER C : A Rated Insurance Company	
INSURER D : A Rated Insurance Company	
INSURER E : A Rated Insurance Company	
INSURER F : A Rated Insurance Company	

INSURED: Subcontractor Name and Address

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	[X] COMMERCIAL GENERAL LIABILITY	X					DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 300,000
	[ ] CLAIMS-MADE [X] OCCUR						MED EXP (Any one person)	$ 10,000
	[X] X, C & U						PERSONAL & ADV INJURY	$ 1,000,000
	[X] Broad Form Property Damage						GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
	[ ] POLICY [X] PRO-JECT [ ] LOC						Fire Damage	$ 100,000
	AUTOMOBILE LIABILITY	X					COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	[X] ANY AUTO						BODILY INJURY (Per person)	$
	[ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	[X] HIRED AUTOS [X] NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	[X] **UMBRELLA LIAB** [X] OCCUR	X					EACH OCCURRENCE	$ 2,000,000
	[ ] **EXCESS LIAB** [ ] CLAIMS-MADE						AGGREGATE	$ 2,000,000
	[ ] DED [ ] RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						[X] WC STATU-TORY LIMITS [ ] OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICE/MEMBER EXCLUDED? [ ]	N / A	X				E.L. EACH ACCIDENT	$ 500,000
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 500,000
							E.L. DISEASE - POLICY LIMIT	$ 500,000
	Pollution Liability		X				Per Claim/Aggregate $1,000,000	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Dearborn Public Schools - Salina Intermediate Recreation Field

Dearborn Public Schools, and Kingscott Associates, Inc. are listed as additional insureds

CERTIFICATE HOLDER

Dearborn Public Schools
18700 Audette
Dearborn, MI 48124

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

AIA® Document G702™ – 1992

Application and Certificate for Payment

TO OWNER: | PROJECT: | APPLICATION NO: | Distribution to:

PERIOD TO: | OWNER ☐

CONTRACT FOR: | ARCHITECT ☐

FROM CONTRACTOR: | VIA ARCHITECT: | CONTRACT DATE: | CONTRACTOR ☐

PROJECT NOS: / / | FIELD ☐

OTHER ☐

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
AIA Document G703™, Continuation Sheet, is attached.

1. ORIGINAL CONTRACT SUM ..... $ _____
2. NET CHANGE BY CHANGE ORDERS ..... $ _____
3. CONTRACT SUM TO DATE *(Line 1 ± 2)* ..... $ _____
4. TOTAL COMPLETED & STORED TO DATE *(Column G on G703)* ..... $ _____
5. RETAINAGE:
   a. _____% of Completed Work *(Columns D + E on G703)* $ _____
   b. _____% of Stored Material *(Column F on G703)* $ _____

   Total Retainage *(Lines 5a + 5b, or Total in Column I of G703)*..... $ _____
6. TOTAL EARNED LESS RETAINAGE ..... $ _____
   (Line 4 minus Line 5 Total)
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT ..... $ _____
   (Line 6 from prior Certificate)
8. CURRENT PAYMENT DUE ..... $
9. BALANCE TO FINISH, INCLUDING RETAINAGE
   (Line 3 minus Line 6) $ _____

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	$	$
Total approved this month	$	$
TOTAL	$	$
NET CHANGES by Change Order	$	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of:

County of:

Subscribed and sworn to before me this _____ day of _____

Notary Public:

My commission expires:

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED ..... $ _____

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

AIA® Document G702™ – 1992 Instructions

Application and Certificate for Payment

GENERAL INFORMATION

Purpose and Related Documents. AIA Document G702™–1992, Application and Certificate for Payment, is to be used in conjunction with AIA Document G703™, Continuation Sheet. These documents are designed to be used on a Project where a Contractor has a direct Agreement with the Owner. Procedures for their use are covered in AIA Document A201™, General Conditions of the Contract for Construction.

Use of Current Documents. Prior to using any AIA Contract Document, users should consult www.aia.org or a local AIA component to verify the most recent edition.

COMPLETING G702

After the Contractor has completed AIA Document G703, Continuation Sheet, summary information should be transferred to AIA Document G702, Application and Certificate for Payment.

The Contractor should sign G702, have it notarized, and submit it, together with G703, to the Architect.

The Architect should review G702 and G703 and, if they are acceptable, complete the Architect's Certificate for Payment on G702.

The Architect may certify a different amount than that applied for, pursuant to Sections 9.5 and 9.6 of A201. The Architect should then initial all figures on G702 and G703 that have been changed to conform to the amount certified and attach an explanation. The completed G702 and G703 should be forwarded to the Owner.

MAKING PAYMENT

The Owner should make payment directly to the Contractor based on the amount certified by the Architect on AIA Document G702, Application and Certificate for Payment. The completed form contains the name and address of the Contractor. Payment should not be made to any other party unless specifically indicated on G702.

EXECUTING THE DOCUMENT

Persons executing the document should indicate the capacity in which they are acting (i.e., president, secretary, partner, etc.) and the authority under which they are executing the document. Where appropriate, a copy of the resolution authorizing the individual to act on behalf of the firm or entity should be attached.

SWORN STATEMENT

STATE OF: _____ }
} SS
COUNTY OF: _____ }

_____ (deponent), being sworn, states the following:

_____ is the (contractor) (subcontractor) for an

improvement to the following described real property in _____County, Michigan, described as follows: *(Insert legal description from Notice of Commencement or name and address of the Project)*

That the following is a statement of each subcontractor and supplier and laborer, for whom payment of wages or fringe benefits and withholdings is due but unpaid, with whom the (contractor) (subcontractor) has (contracted) (subcontracted) for performance under the contract with the owner or lessee of the property and the amounts due to the persons as of the date of this statement are correctly and fully set forth opposite their names:

Name of subcontractor, supplier or laborer	Type of improvement furnished	Total contract price	Amount already paid	Amount currently owing	Balance to complete (optional)	Amount of laborer wages due but unpaid	Amount of laborer fringe benefits and withholdings due but unpaid
Totals	0	0	0	0			

(Some columns are not applicable to all persons listed)

The contractor has not procured material from, or subcontracted with any person other than those set forth, and owes no money for the improvement other than the sums set forth.

I make this statement as the (contractor) (subcontractor) or as _____ of the (contractor) (subcontractor) to represent to the owner or lessee of the property and his or her agents that the property is free from claims of construction liens, or the possibility of construction liens, except as specifically set forth in this statement for claims of construction liens by laborers that may be provided under section 109 of the construction lien act, 1980, P.A. 497, MCL 570.1109.

WARNING TO OWNER: AN OWNER OR LESSEE OF THE PROPERTY MAY NOT RELY ON THIS SWORN STATEMENT TO AVOID THE CLAIM OF A SUBCONTRACTOR, SUPPLIER, OR LABORER WHO HAS PROVIDED A NOTICE OF FURNISHING OR A LABORER WHO MAY PROVIDE A NOTICE OF FURNISHING UNDER SECTION 109 OF THE CONSTRUCTION LIEN ACT 1980 P.A. 497, MCL 570.1109 TO THE DESIGNEE OR THE OWNER OR LESSEE IF THE DESIGNEE IS NOT NAMED OR HAS DIED.

_____

Deponent

WARNING TO THE DEPONENT: A PERSON, WHO GIVES A FALSE SWORN STATEMENT WITH THE INTENT TO DEFRAUD IS SUBJECT TO CRIMINAL PENALTIES AS PROVIDED IN SECTION 110 OF THE CONSTRUCTION LIEN ACT, 1980 PA 497, MCL 570.1110.

Subscribed and sworn to before me on
(date) _____

_____

Notary Public

_____ County, Michigan.

My commission expires: _____

MATERIALS STORED PAYMENT FORM

Progress Payment Number____Bid Package No./Category____ Description_____

1. The following items, if approved by the Owner, have been included in the above noted request for payment even though not yet incorporated into the work (attach additional sheets, if required):

ITEM	STORED AT	VALUE PER ATTACHED INVOICE
_____	_____	$_____
_____	_____	$_____
_____	_____	$_____
_____	_____	$_____
_____	_____	$_____

2. TOTAL VALUE OF THE ABOVE ITEMS PER ATTACHED INVOICE(S): $_____

3. **Provide a copy of all invoices(s) for the materials.**

4. In addition to any insurance(s) the Owner may carry, the undersigned states that the above **materials only are** covered by Trade Contractor's property insurance against all risk and that said insurance will remain in effect until final acceptance of the completed project by the Owner. Trade Contractor must provide proof of insurance stating description, location and value of items stored. ***(Mark-up and labor are not to be billed under this request.)***

5. The undersigned hereby represents and guarantees that full payment has been made for the above items, and provides proof of payment, and by signature below, contingent upon receipt of payment on account of the above items, the Trade Contractor hereby transfers title to the above items to the Owner of the project. ***(Photos labeled (clearly read in photos) to be provided with this form.***

6. Stored Materials are to be roped off or separated from all others. Boxes or pieces must be clearly marked.

7. Owner and/or Construction Manager reserves the right to inspect stored material at any time.

8. Receipt of payment on account for the above items shall in no manner or in any degree relieve the Trade Contractor of any obligation under its contract, particularly, but not limited to, its obligations with regard to the warranties and guarantees.

Signature is by a member of firm or corporation entitled to sign Contract documents for the Trade Contractor.

Trade Contractor:_____Signed:_____

Title: _____Date:_____

LABOR RATE CALCULATIONS

TRADE: _____

	STRAIGHT TIME		TIME & ONE HALF		DOUBLE TIME	
	JOURNEYMAN	FOREMAN	JOURNEYMAN	FOREMAN	JOURNEYMAN	FOREMAN
WAGES						
Base Rate						
Vacation/Holiday						
Dues						
Taxable Wages						
Fringes						
Health & Welfare						
Pension						
Annuity						
S.U.B.						
Other:						
_____						
_____						
_____						
Total Fringes						
Payroll Tax & Ins.						
F.I.C.A.						
Medicare						
S.U.I.T.						
F.U.I.T.						
S.B.T.						
Worker's Compensation						
PL & PD Insurance						
Total Payroll Tax & Ins.						
Total Premium Cost						
Total Hourly Cost						
Overhead & Profit (15%)						
Total Hourly Rate						

FORM OF GUARANTEE

CLARK PROJECT NUMBER: XXXX

PROJECT NAME: XXXX

LOCATION: XXXX

NAME OF TRADE CONTRACTOR: XXXX

CONTRACT FOR: XXXX

We hereby agree that:

a) We have completed our contract in full conformity with the intent of the contract documents and have made no substitutions in materials except as authorized in writing by the Architect.

b) We will return to the project and commence work within three (3) working days of receipt of written notification from the Owner of the Architect and will provide at our expense all necessary labor, equipment and material to make proper repairs or corrections made necessary by defective materials or inferior workmanship furnished or performed under contract, all to the satisfaction of the Owner and the Architect, and without cost to the Owner.

c) This guarantee of our work and the work of all our Trade Contractors shall commence on
XXXX and remain in full force and effect
XXXX (date of substantial completion) until
XXXX (one year)

d) We hereby certify that all payrolls, material bills, and other indebtedness connected with the work on the subject project have been paid in full.

SIGNED _____

PRINTED _____
(AUTHORIZED OFFICER)

WITNESS _____

PRINTED _____

DATE _____

ADDRESS _____

_____

SECTION 007316
INSURANCE REQUIREMENTS

1. GENERAL

1.1. Trade Contractor shall provide general liability insurance, including comprehensive, products and completed operations, hazards, contractual and independent contractors, as well as automobile liability, workman's compensation and employee liability coverage on all their employees and their Subcontractors' employees engaged in executing this Contract and to provide all other insurance coverage required by the Contract Documents to the Prime Contract.

1.2. The Trade Contractor agrees that the insurance coverage required by Contract shall be occurrence-based and continued throughout the duration of the warranty period specified by the Contract. For Contracts that require Pollution Insurance coverage, such coverage shall be continued for three years beyond the Substantial Completion date of the Project, or as specified by the Prime Contract, whichever duration is greater. Upon request by Owner, Trade Contractor shall provide evidence/proof of insurance that the insurance coverage is being continued throughout the period specified by Contact.

1.3. The Trade Contractor shall require its Subcontractors to carry, identical insurance to that required of the Trade Contractor. Trade Contractor's insurance shall include contractual liability coverage applicable to its obligations pursuant to this Contract.

1.4. Trade Contractor shall cause its insurance carriers to add the Owner and Architect as an additional named insured on all such policies excluding Workers Compensation prior to commencement of Work. Trade Contractor's insurance carriers shall be directed to notify the Owner thirty (30) days in advance of the cancellation of any insurance coverage required herein. If the additional insureds have other insurance which is applicable to the Project, such other insurance shall be on an excess or contingent basis. The amount of the Trade Contractor's liability under this insurance policy shall not be reduced by the existence of such other insurance.

1.5. As a condition of being awarded a Contract, the Trade Contractor must provide Dearborn Public Schools with satisfactory evidence of insurance coverage as follows. (Refer to sample Certificate of Insurance included in Certificates and Other Forms Section).

A. Certificate of Insurance must be provided on the ACORD Certificate Form #25 or 25-S.

B. AM Best rating for each insurance carrier shall be at **A, V** or better.

C. The issuing company shall provide thirty (30) day written notice of cancellation to the certificate holder.

D. The Owner and the Architect/Engineer shall be listed on the Certificate as **"Additional Insured's"** on the General Liability and Auto policy. The additional insured status shall include On-going Operations using **ISO**

General Liability Form #CG 20 10 01 and Products & Completed Operations using **ISO General Liability Form #CG 2037 10 01** or the insurance company equivalent coverage endorsement. **(**Insert School is the Certificate Holder.

1.6. The Trade Contractor shall purchase from and maintain a company or companies lawfully licensed and authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Trade Contractor from claims set forth which may arise out of or result from the Trade Contractor's operations under the Contract and for which the Trade Contractor may be legally liable whether such operations be performed by the Trade Contractor or by a Subcontractor or by anyone for whose acts any of them may be liable:

A. Claims under workers' compensation disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;

B. Claims for damages because of bodily injury, occupational sickness, disease or death of the Trade Contractor's employees;

C. Claims for damages because of bodily injury, sickness or disease or death of a person other than the Trade Contractor's employees;

D. Claims for damages insured by usual personal injury liability coverage which are sustained (1), by a person as a result of an offense directly or indirectly related to employment of such person by the Trade Contractor, or (2) by another person;

E. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;

F. Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of motor vehicle;

G. Claims involving contractual liability insurance applicable to the Trade Contractor's obligations under the Contract;

H. The Trade Contractor's liability insurance shall be written on a Commercial General Liability basis with coverage at least as broad as an **ISO General Liability Endorsement CG 0001 12 04** or later revised version and such coverage shall specifically include but shall not be limited to:

1. Premises/Operations;

2. Independent Trade Contractor's Protective;

3. Products and Completed Operations:

4. Personal Injury Liability with Employment Exclusion deleted;

5. Contractual, including coverage for Trade Contractor's obligations under its Contract;

6. Owned, non-owned and hired motor vehicles; and

7. Broad Form Property Damage including Completed Operation.

1.7. The Trade Contractor shall, for the protection and benefit of the Owner and the Architect/Engineer (hereinafter these parties are collectively referred to as "Trade Contractor Indemnities") and the Trade Contractor and as part of the Trade Contractor's efforts to satisfy the insurance obligation of Section 1. Procure, pay for and maintain in full force and effect at all times during the performance of the Trade Contractor's Work until final acceptance of the Trade Contractor's Work or for such duration as required policies of insurance issued by a responsible carrier or carriers acceptable to the Owner which afford the coverages in the limits set forth below:

2. LIMITS OF LIABILITY

2.1. **Commercial General Liability** including Premises – Operations: Independent Trade Contractor's Protective; Products and Completed Operations; Broad Form Property Damage; Personal and Advertising Injury.

A. General Aggregate shall not be less than $2,000,000/per occurrence and it shall apply in total to this project only using the **ISO General Liability Endorsement CG 2503 03 97** or Trade Contractor's Insurance Carrier's equivalent coverage endorsement.

B. Products – Completed/Operations Aggregate shall not be less than $2,000,000 aggregate limit.

C. Personal and Advertising Injury shall not be less than $1,000,000 aggregate.

D. Each Occurrence shall not be less than $1,000,000.

E. Fire Damage shall not be less than $100,000 on any one (1) fire.

F. Medical Expense shall not be less than $10,000 on any one (1) person.

G. Property Damage Liability shall provide X, C and U coverages.

H. Broad Form Property Damage coverage shall include completed operations.

I. All such insurance shall be written on an occurrence basis.

2.2. **Automobile Liability**

A. Automobile liability coverage shall be at least as broad as a CA 00 01 (3-10) or insurance companies equivalent endorsement.

B. Coverage shall include: Any Auto, Hired Autos and Non-Owned Autos.

C. Combined Single Limit shall not be less than $1,000,000.

D. All such insurance shall be written on an occurrence basis.

2.3. **Excess Liability**

A. The Umbrella Form is to be provided.

B. Each Occurrence shall not be less than $1,000,000 over primary insurance.

C. Self-Insured Retention (SIR) shall not be more than $10,000 for each occurrence.

D. All such insurance shall be written on an occurrence basis.

2.4. **Workers Compensation and Employers Liability** (including the Proprietor / Partners / Executive Officers)

A. Workers Compensation coverage shall be at least as broad as an **ISO**

B. **Workers Compensation Endorsement WC 00 03 13** or insurance companies equivalent endorsement.

C. Each Accident shall not be less than $500,000.

D. Disease – Policy Limit shall not be less than $500,000.

E. Disease – Each Employee shall not be less than $500,000.

F. All such insurance shall be written on an occurrence basis.

2.5. **Pollution Liability**

A. Trade Contractors responsible for remediation, including containerization, transportation, or disposal of any hazardous or toxic wastes, materials, or substances requiring permits or licenses by state or Federal Law or regulation shall maintain Pollution Legal Liability Insurance with limit no less than $1,000,000.

B. Coverage shall apply to sudden and gradual pollution legal liability including defense costs and completed operations.

C. All such insurance shall be written on an occurrence basis.

2.6. The Trade Contractor hereby agrees to deliver to Dearborn Public Schools within seven (7) days of the date of the Contract and prior to any equipment or personnel being brought onto the Project site, certified copies of all insurance policies

procured by the Trade Contractor or with consent of the Owner Certificates evidencing the required coverages with limits not less than those specified in Section 2.0 hereto. Trade Contractor's indemnities shall be included as additional insured on Trade Contractor's Commercial General Liability Policy and shall be primary coverage to any valid and collectible insurance carried separately by any of the Trade Contractor's Indemnities. Further, all policies and Certificates of Insurance shall expressly provide that not less than thirty (30) days prior written notice shall be given the Owner and the Trade Contractor's Indemnities in the event of material alteration, cancellation, non-renewal or expiration of the coverage contained in such policy or evidenced by such certified copy or Certificate of Insurance.

2.7. In no event shall any failure of Dearborn Public Schools to receive certified copies or certificates of policies required under Section 1.0 or to demand receipt of such certified copies or certificates prior to the Trade Contractor commencing the Work be construed as a waiver by the Owner of the Trade Contractor's obligations to obtain insurance pursuant to this Section 1.0. The obligation to procure and maintain any insurance required by this Section 1.0 is a separate responsibility of the Trade Contractor and independent of the duty to furnish a certified copy or certificate of such insurance policies.

2.8. If the Trade Contractor fails to purchase and maintain or require to be purchased and maintained, any insurance required under this Section, the Owner, may, but shall not be obligated to, upon five (5) days written notice to the Trade Contractor, purchase such insurance on behalf of the Trade Contractor and shall be entitled to be reimbursed by the Trade Contractor upon demand, or deduct the cost of insurance from the Contract amount.

2.9. When any required insurance, due to the attainment of a normal expiration date or renewal date shall expire, the Trade Contractor shall supply the Owner Certificates of Insurance and amendatory riders or endorsements that clearly evidence the continuation of all coverage as is required by this Section. In the event any renewal or replacement policy, for whatever reason obtained or required is written by a carrier other than that with whom the coverage was previously placed or the subsequent policy differs in any way from the previous policy, the Trade Contractor shall also furnish the Owner with a certified copy of the renewal or replacement policy unless, Dearborn Public Schools provides the Trade Contractor with prior written consent to submit only a Certificate of Insurance for any such policies. All renewal and replacement policies shall be in form and substance satisfactory to the Owner.

2.10. Any aggregate limit under the Trade Contractor's liability insurance shall, by endorsement, apply to this Project separately.

2.11. The Trade Contractor shall cause each of its Subcontractors to (1) procure insurance reasonably satisfactory to the Owner and (2) name the Trade Contractor, the Owner and Architect as additional insured under the Subcontractor's

comprehensive general liability policy. The additional insured endorsement included on the Subcontractor's comprehensive general liability policy shall state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the Subcontractor. If additional insured have other insurance which is applicable to the Project, such other insurance shall be for the purpose hereof, on an excess or contingent basis. The amount of the insurer's liability under this insurance policy shall not be reduced by the existence of such other insurance.

2.12. The Trade Contractor shall provide for the Owner and Architect as additional named insured parties under the comprehensive general liability insurance and completed operations required herein, and the insurance shall be primary and non-contributory.

3. INDEMNIFICATION

3.1. The Trade Contractor shall indemnify, defend and hold harmless School District, its Board of Education, its Board Members, in their official and individual capacities, its administrators, employees, agents, Trade Contractors, successors and assignees, from and against any and all claims, counter claims, suits, debts, demands, actions, injuries, judgments, liens, costs, expenses, damages, injuries and liabilities, including actual attorney's fees and actual expert witness fees arising out of or in connection with the Trade Contractor's performance of the Work pursuant to this Contract and/or from the Trade Contractor's violation of any of the terms of the Contract, including, but not limited to: (i) the negligent acts or willful misconduct of the Trade Contractor, its owners, employees, and agents; (ii) any breach of the terms of this Contract by the Trade Contractor, its owners, employees and agents; (iii) any violation or breach of any applicable Federal, State or local law, rule, regulation, ordinance, policy and/or licensing and permitting requirements applicable to providing the Work; or (iv) any breach of any representation or warranty by the Trade Contractor, its owners, employees and agents under this Contract. The Trade Contractor shall notify the School District by certified mail, return receipt requested, immediately upon actual knowledge of any claim, suit, action, or proceeding for which the School District may be entitled to indemnification under this Contract. This Paragraph shall survive the expiration or earlier termination of this Contract. It is acknowledged that the Trade Contractor's duty to indemnify shall be to the fullest extent permitted by law, including, by way of example only, MCL 691.991.

3.2. In the event an Indemnified Party (the Owner and the Architect) takes any action, to enforce the Indemnification Provision (3.1) the Indemnified Party shall be entitled to payment of actual attorney fees and costs incurred including all actual attorney fees and costs incurred by the Indemnified Party to enforce the Indemnification Provision from the Trade Contractor.

4. WAIVER OF SUBROGATION

4.1. A waiver of subrogation shall be provided by the Trade Contractor's insurance carrier for general liability and workers compensation related claims. No waiver of subrogation shall be required or provided by the Owner's insurance carrier.

END OF SECTION

SECTION 012900
PAYMENT PROCEDURES

1. GENERAL

1.1. Payment procedures shall be strictly adhered to as a condition of payment.

2. PROJECT START-UP DOCUMENTATION

2.1. Prior to beginning Work at the project site, the following documentation shall be submitted to and approved by the Owner:

A. Current Certificate of Insurance with appropriate limits and Owner and Architect named as additional insured. Purchase Order Number and project description shall be noted on the Certificate of Insurance. (Refer to "Insurance Requirements" section).

B. Purchase Order must be returned and fully executed by the Owner.

C. Performance and payment bond must be submitted to the Owner.

3. APPLICATION FOR PAYMENT

3.1. All Applications for Payment shall be submitted in the AIA G702 and G703 format.

3.2. A Sworn Statement and Waivers of Lien as applicable shall be submitted with Applications for Payment. Applications which are not accompanied by an appropriate Sworn Statement will be rejected.

3.3. Payment applications which include application for payment for stored materials shall be accompanied by a Materials Stored Payment Form.

3.4. Payment applications shall be submitted to Mark Andrews with Dearborn Public Schools at andrewm@dearbornschools.org.

3.5. The following shall be clearly stated on all Applications for Payment:

A. General Contractor name

B. Address

C. Telephone number

D. Purchase Order Number

3.6. All paperwork associated with each Application for Payment shall be fastened together as one package to avoid loss of items.

END OF SECTION

SECTION 012973
SCHEDULE OF VALUES

1. GENERAL

1.1. General Contractor shall submit to the Owner for approval, a Schedule of Values prior to award of Contract.

1.2. Upon request the General Contractor shall submit supporting data to substantiate the accuracy of the values provided.

1.3. The Schedule of Values as approved by the Owner shall be used as the basis of all applications for payment.

2. FORM OF SUBMITTAL

2.1. The Schedule of Values shall be broken down sufficiently for ease of assessment of work completed throughout performance of the Work.

2.2. Each line item value shall be broken down into labor and material components including overhead and profit. The aggregate value for all items shall be equal to the Contract sum.

2.3. General Contractor shall provide further breakdown as Work progresses if required.

2.4. The following items shall be included in the Schedule of Values as a minimum:

A. Performance and Labor and Material Payment Bonds (if applicable)

B. Mobilization

C. Field Supervision, Layout, Barricades and Safety Precautions, Temporary Office and Equipment

D. Shop Drawings, Submittals and Samples

E. Project Clean-up

F. Closeout (The following items shall be included in addition to the contract required retention amount)

1.	As-Built Documents	1.0% of Contract Amount
2.	Training and O&M Manuals	1.0% of Contract Amount
3.	Attic Stock Material	0.5% of Contract Amount
4.	Punchlist Completion	2.0% of Contract Amount
5.	Warranty & Guarantee Documents	0.5% of Contract Amount

END OF SECTION

SECTION 000101 - PROJECT TITLE PAGE

PROJECT MANUAL

FOR

DEARBORN - SALINA INTERMEDIATE SCHOOL RECREATION FIELD

DATE: 06-05-2026

OWNER

SALINA INTERMEDIATE SCHOOL

DEARBORN PUBLIC SCHOOLS

2623 SALINA STREET

DEARBORN, MICHIGAN 48120

ARCHITECTS/ENGINEERS

KINGSCOTT ASSOCIATES, INC.

950 TRADE CENTRE WAY, SUITE 130

PORTAGE, MICHIGAN 49002

(269) 381-4880

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SECTION 003100 - AVAILABLE PROJECT INFORMATION

PART 1 GENERAL

1.1 EXISTING CONDITIONS

A. Certain information relating to existing surface and subsurface conditions and structures is available to bidders but will not be part of Contract Documents, as follows:

B. Site Survey: As shown on the Civil Site plans. Digitial copies available upon request following waiver.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

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SECTION 012300 - ALTERNATES

PART 1 GENERAL

1.1 ACCEPTANCE OF ALTERNATES

A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.

1.2 SCHEDULE OF ALTERNATES

A. Alternate No. 01 - Greenhouse Kit Installation w/ Base:

1. Base Bid Item: Section N/A and Drawing number L1.10 including no work to be completed in this area.

2. Alternate Item: Section 321124 and 323300 and Drawing number L1.10A including construction of a gravel base with installation of a Greenhouse Kit..

B. Alternate No. 02 - Pergola Installation:

1. Base Bid Item: Section N/A and Drawing number L1.10 including no work to be completed in this area.

2. Alternate Item: Section 061000 and Drawing number L1.10A2 including installation of a timber Pergola..

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 DEFINITIONS

A. Substitutions: Changes from Contract Documents requirements proposed by Contractor to materials, products, assemblies, equipment, and methods of construction.

1. Substitutions for Cause: Proposed by Contractor due to changed Project circumstances beyond Contractor's control.

a. Unavailability.

b. Regulatory changes.

2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required to meet other Project requirements due to possibility of offering substantial advantage to the Project.

a. Substitution requests offering advantages solely to the Contractor will not be considered.

1.3 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.4 PROCEDURES

A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

1.5 SUBSTITUTIONS

A. Substitutions for Cause, significant savings or construction schedule: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect

will return requests without action, except to record noncompliance with these requirements:

a. Requested substitution is consistent with the Contract Documents and will produce indicated results.

b. Substitution request is fully documented and properly submitted.

c. Requested substitution will not adversely affect Contractor's construction schedule.

d. Requested substitution is compatible with other portions of the Work.

2. Requested substitution has been coordinated with other portions of the Work.

a. Requested substitution provides specified warranty.

b. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

B. Substitutions for Convenience: Not allowed.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:

1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.

2. Agrees to provide the same warranty for the substitution as for the specified product.

3. Agrees to provide same or equivalent maintenance service and source of replacement parts, as applicable.

4. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.

5. Waives claims for additional costs or time extension that may subsequently become apparent.

6. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.

B. A Substitution Request for specified installer constitutes a representation that the submitter:

1. Has acted in good faith to obtain services of specified installer, but was unable to come to commercial, or other terms.

C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.

1. Note explicitly any non-compliant characteristics.

2. Include statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.

3. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.

D. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.

1. Forms indicated in the Project Manual are adequate for this purpose, and must be used.

E. Limit each request to a single proposed substitution item.

1. Submit an electronic document, combining the request form with supporting data into single document.

3.2 SUBSTITUTION PROCEDURES DURING PROCUREMENT

A. Submittal Time Restrictions:

1. Owner will consider requests for substitutions only if submitted at least 10 days prior to the date for receipt of bids.

B. Submittal Form (before award of contract):

1. Submit substitution requests by completing CSI/CSC Form 1.5C - Substitution Request. See this form for additional information and instructions. Use only this form; other forms of submission are unacceptable.

3.3 SUBSTITUTION PROCEDURES DURING CONSTRUCTION

A. Submittal Form (after award of contract):

1. Submit substitution requests by completing CSI/CSC Form 13.1A - Substitution Request (After Bidding/Negotiating). See this form for additional information and instructions. Use only this form; other forms of submission are unacceptable.

B. Submit request for Substitution for Cause within 14 days of discovery of need for substitution, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.

C. Substitutions will not be considered under one or more of the following circumstances:

1. When they are indicated or implied on shop drawing or product data submittals, without having received prior approval.

2. Without a separate written request.

3. When acceptance will require revisions to Contract Documents.

3.4 RESOLUTION

A. Architect may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.

B. Architect will notify Contractor in writing of decision to accept or reject request.

3.5 ACCEPTANCE

A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

3.6 CLOSEOUT ACTIVITIES

A. See Section 017800 - Closeout Submittals, for closeout submittals.

B. Include completed Substitution Request Forms as part of the Project record. Include both approved and rejected Requests.

3.7 ATTACHMENTS

A. A facsimile of the Substitution Request Form (During Construction) required to be used on the Project is included after this section.

END OF SECTION

SECTION 013000 - ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF, MS Word, or MS Excel) format, as appropriate to the document, and transmitted via an Internet-based submittal service that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.

1. Besides submittals for review, information, and closeout, this procedure applies to Requests for Interpretation (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, Contractor's correction punchlist, and any other document any participant wishes to make part of the project record.

2. Contractor and Architect are required to use this service.

3. It is Contractor's responsibility to submit documents in allowable format.

4. Subcontractors, suppliers, and Architect's consultants will be permitted to use the service at no extra charge.

5. Users of the service need an email address, internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat, www.adobe.com, or Bluebeam PDF Revu, www.bluebeam.com), unless such software capability is provided by the service provider.

6. Paper document transmittals will not be reviewed; emailed electronic documents will not be reviewed.

7. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.

B. Training: One, one-hour, web-based training session will be arranged for all participants, with representatives of Architect and Contractor participating; further training is the responsibility of the user of the service.

C. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for Owner.

3.2 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the work at maximum bi-monthly intervals.

B. Attendance Required:

1. Contractor.

2. Owner.

3. Architect.

4. Contractor's superintendent.

5. Major subcontractors.

C. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.3 CONSTRUCTION PROGRESS SCHEDULE

A. If preliminary schedule requires revision after review, submit revised schedule within 10 days.

B. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.

1. Include written certification that major contractors have reviewed and accepted proposed schedule.

C. Within 10 days after joint review, submit complete schedule.

D. Submit updated schedule with each Application for Payment.

3.4 DAILY CONSTRUCTION REPORTS

A. Include only factual information. Do not include personal remarks or opinions regarding operations and/or personnel.

B. Prepare a daily construction report recording the following information concerning events at Project site and project progress:

1. Date.

2. High and low temperatures, and general weather conditions.

3. Safety, environmental, or industrial relations incidents.

4. Meetings and significant decisions.

5. Stoppages, delays, shortages, and losses. Include comparison between scheduled work activities (in Contractor's most recently updated and published schedule) and actual activities. Explain differences, if any. Note days or periods when no work was in progress and explain the reasons why.

6. Testing and/or inspections performed.

7. Signature of Contractor's authorized representative.

3.5 PROGRESS PHOTOGRAPHS

A. Submit photographs with each application for payment, taken not more than 3 days prior to submission of application for payment.

B. Maintain one set of all photographs at project site for reference; same copies as submitted, identified as such.

3.6 REQUESTS FOR INTERPRETATION (RFI)

A. Definition: A request seeking one of the following:

1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.

2. A resolution to an issue which has arisen due to field conditions and affects design intent.

B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.

C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.

1. Prepare a separate RFI for each specific item.

a. Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.

b. Do not forward requests which solely require internal coordination between subcontractors.

2. Prepare in a format and with content acceptable to Owner.

3. Prepare using an electronic version of the form appended to this section.

4. Prepare using software provided by the Electronic Document Submittal Service.

5. Combine RFI and its attachments into a single electronic file. PDF format is preferred.

D. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.

1. Include in each request Contractor's signature attesting to good faith effort to determine from Contract Documents information requiring interpretation.

2. Unacceptable Uses for RFIs: Do not use RFIs to request the following::

a. Approval of submittals (use procedures specified elsewhere in this section).

b. Approval of substitutions (see Section - 016000 - Product Requirements)

c. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).

E. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.

1. Official Project name and number, and any additional required identifiers established in Contract Documents.

2. Owner's, Architect's, and Contractor's names.

3. Discrete and consecutive RFI number, and descriptive subject/title.

4. Issue date, and requested reply date.

5. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).

6. Annotations: Field dimensions and/or description of conditions which have engendered the request.

7. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.

F. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.

G. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.

1. Indicate current status of every RFI. Update log promptly and on a regular basis.

2. Note dates of when each request is made, and when a response is received.

3. Highlight items requiring priority or expedited response.

4. Highlight items for which a timely response has not been received to date.

H. Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.

1. Response period may be shortened or lengthened for specific items, subject to mutual agreement, and recorded in a timely manner in progress meeting minutes.

I. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.

1. Response may include a request for additional information, in which case the original RFI will be deemed as having been answered, and an amended one is to be issued forthwith. Identify the amended RFI with an R suffix to the original number.

2. Do not extend applicability of a response to specific item to encompass other similar conditions, unless specifically so noted in the response.

3. Upon receipt of a response, promptly review and distribute it to all affected parties, and update the RFI Log.

4. Notify Architect within seven calendar days if an additional or corrected response is required by submitting an amended version of the original RFI, identified as specified above.

END OF SECTION

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SECTION 014000 - QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 DEFINITIONS

A. Contractor's Quality Control Plan: Contractor's management plan for executing the Contract for Construction.

B. Contractor's Professional Design Services: Design of some aspect or portion of the project by party other than the design professional of record. Provide these services as part of the Contract for Construction.

1.2 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES

A. Provide such engineering design services as may be necessary to plan and safely conduct certain construction operations, pertaining to, but not limited to the following:

1. Temporary sheeting, shoring, or supports.
2. Temporary scaffolding.
3. Temporary bracing.
4. Temporary falsework for support of spanning or arched structures.
5. Temporary foundation underpinning.
6. Temporary stairs or steps required for construction access only.
7. Temporary hoist(s) and rigging.
8. Investigation of soil conditions to support construction equipment.

1.3 CONTRACTOR'S DESIGN-RELATED PROFESSIONAL DESIGN SERVICES

A. Base design on performance and/or design criteria indicated in individual specification sections.

1. Submit a Request for Interpretation to Architect if the criteria indicated are not sufficient to perform required design services.

B. Scope of Contractor's Professional Design Services: Provide for the following items of work:

1.4 SUBMITTALS

A. Designer's Qualification Statement: Submit for Architect's knowledge as contract administrator, or for Owner's information.

1. Include information for each individual professional responsible for producing, or supervising production of, design-related professional services provided by Contractor.

    a. Full name.

    b. Professional licensure information.

    c. Statement addressing extent and depth of experience specifically relevant to design of items assigned to Contractor.

B. Design Data: Submit for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.

1. Include calculations that have been used to demonstrate compliance to performance and regulatory criteria provided, and to determine design solutions.

2. Include required product data and shop drawings.

3. Include a statement or certification attesting that design data complies with criteria indicated, such as building codes, loads, functional, and similar engineering requirements.

4. Include signature and seal of design professional responsible for allocated design services on calculations and drawings.

C. Test Reports: After each test/inspection, promptly submit two copies of report to Architect and to Contractor.

1. Test report submittals are for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.

D. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.

1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.

E. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

F. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for Owner.

1. Submit report in duplicate within 30 days of observation to Architect for information.

2. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.

G. Erection Drawings: Submit drawings for Architect's benefit as contract administrator or for Owner.

1. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.

2. Data indicating inappropriate or unacceptable Work may be subject to action by Architect or Owner.

1.5 QUALITY ASSURANCE

A. Testing Agency Qualifications:

1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.

2. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.

B. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

C. Contractor's Quality Control (CQC) Plan:

1. Prior to start of work, submit a comprehensive plan describing how contract deliverables will be produced. Tailor CQC plan to specific requirements of the project. Include the following information:

a. Management Structure: Identify personnel responsible for quality. Include a chart showing lines of authority.

1) Include qualifications (in resume form), duties, responsibilities of each person assigned to CQC function.

b. Management Approach: Define, describe, and include in the plan specific methodologies used in executing the work.

1) Managerial continuity and flexibility.

D. Quality-Control Personnel Qualifications. Engage a person with requisite training and experience to implement and manage quality assurance (QA) and quality control (QC) for the project.

1.6 REFERENCES AND STANDARDS

A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Comply with reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.

C. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.

D. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.

B. Comply with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.

D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Have work performed by persons qualified to produce required and specified quality.

F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.2 MOCK-UPS

A. See Section 014339 - Mockups for additional information.

3.3 DEFECT ASSESSMENT

A. Replace Work or portions of the Work not complying with specified requirements.

END OF SECTION

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SECTION 014216 - DEFINITIONS

PART 1 GENERAL

1.1 DEFINITIONS

A. Furnish: To supply, deliver, unload, and inspect for damage.

B. Install: To unpack, assemble, erect, apply, place, finish, cure, protect, clean, start up, and make ready for use.

C. Product: Material, machinery, components, equipment, fixtures, and systems forming the work result. Not materials or equipment used for preparation, fabrication, conveying, or erection and not incorporated into the work result. Products may be new, never before used, or re-used materials or equipment.

D. Provide: To furnish and install.

E. Supply: Same as Furnish.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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SECTION 014533 - CODE-REQUIRED SPECIAL INSPECTIONS AND PROCEDURES

PART 1 GENERAL

1.1 DEFINITIONS

A. Code or Building Code: ICC (IBC), International Building Code, most recent edition adopted by authority having jurisdiction, including all applicable amendments and supplements without limitation, and specifically Chapter 17 - Special Inspections and Tests.

B. Authority Having Jurisdiction (AHJ): Agency or individual officially empowered to enforce the building, fire and life safety code requirements of the permitting jurisdiction in which the Project is located.

C. NIST: National Institute of Standards and Technology.

D. Special Inspections and Tests: Inspections and testing of materials, installation, fabrication, erection, or placement of components and connections mandated by Building Code to safeguard public welfare.

1. Special inspections and tests are separate from and independent of tests and inspections conducted by Owner or Contractor for purposes of quality assurance and contract administration.

1.2 SUBMITTALS

A. Special Inspection Agency Qualifications: Prior to start of work, Special Inspection Agency is required to:

1. Submit agency name, address, and telephone number, names of full time registered Engineer and responsible officer.

2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.

3. Submit certification that Special Inspection Agency is acceptable to AHJ.

4. Submit documentation that Special Inspection Agency is accredited by IAS according to IAS AC291.

B. Testing Agency Qualifications: Prior to start of work, Testing Agency is required to:

1. Submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.

2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.

3. Submit certification that Testing Agency is acceptable to AHJ.

C. Manufacturer's Qualification Statement: When required by AHJ, submit documentation of manufacturing capability and quality control procedures. Include documentation of AHJ approval.

D. Fabricator's Qualification Statement: When required by AHJ, submit documentation of fabrication facilities and methods and quality control procedures. Include documentation of AHJ approval.

E. Special Inspection Reports: After each special inspection, Special Inspector is required to submit at least two copies of report; one to Architect and one to AHJ.

F. Fabricator Special Inspection Reports: After each special inspection of fabricated items at fabricator's facility, Special Inspector is required to submit report to Architect and to AHJ.

G. Test Reports: After each test or inspection, Testing Agency is required to submit report to Architect and to AHJ.

H. Certificates: When required by AHJ, Special Inspector will submit certification by manufacturer, fabricator, and installation subcontractor to Architect and AHJ.

1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect and AHJ.

I. Fabricator's Inspection Reports: When required by AHJ, submit reports to Architect and AHJ.

1. Submit report in duplicate within 30 days of observation to Architect for information.

1.3 SPECIAL INSPECTION AND TESTING AGENCY

A. Owner or Architect to employ services of Special Inspection Agency to perform inspections and associated testing and sampling in accordance with ASTM E329 and required by building code.

B. Special Inspection Agency may delegate to independent testing agency to perform testing and sampling associated with special inspections and required by building code.

C. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of contract documents.

1.4 TESTING AND INSPECTION AGENCIES

A. Owner or Architect may employ services of independent testing agency to perform additional testing and sampling required by contract documents or associated with special inspections but not required by building code.

B. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of contract documents.

1.5 QUALITY ASSURANCE

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 SPECIAL INSPECTIONS AND TESTING

A. The Code requires special inspections and testing of certain materials, components, assemblies, and connections used in constructing the project. Special inspections and testing will be performed in accordance with the Code.

B. Special inspections and testing will be performed in accordance with the Code for the following materials and project components:

1. Concrete.

2. Wood.

3. Soils.

4. Fabricated items.

5. Wind resistance.

6. Structural observations required by ICC (IBC) section 1704.6.

7. Special cases as determined by building official and required by ICC (IBC) section 1705.1.

3.2 SPECIAL INSPECTION AGENCY DUTIES AND RESPONSIBILITIES

A. Special Inspection Agency shall:

1. Verify samples submitted by Contractor comply with the referenced standards and the approved Contract Documents.

2. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.

3. Perform specified sampling and testing of products in accordance with specified reference standards.

4. Ascertain compliance of materials and products with requirements of Contract Documents.

5. Promptly notify Architect and Contractor of observed irregularities or non-compliance of work or products.

6. Perform additional tests and inspections required by Architect.

7. Attend preconstruction meetings and progress meetings.

8. Submit reports of all tests or inspections specified.

END OF SECTION

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 DEWATERING

A. Provide temporary means and methods for dewatering all temporary facilities and controls.

B. Maintain temporary facilities in operable condition.

1.2 TEMPORARY UTILITIES

A. Owner will provide the following:

1. Electrical power and metering, consisting of connection to existing facilities.

2. Water supply, consisting of connection to existing facilities.

B. Existing facilities may not be used.

C. New permanent facilities may not be used.

1.3 TELECOMMUNICATIONS SERVICES

A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.

1.4 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.

B. Maintain daily in clean and sanitary condition.

1.5 BARRIERS

A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Provide protection for plants designated to remain. Replace damaged plants.

1.6 FENCING

A. Construction: Contractor's option.

B. Construction: Commercial grade chain link fence.

C. Provide 6 foot (1.8 m) high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.7 SECURITY

A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

1.8 VEHICULAR ACCESS AND PARKING

A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.

B. Coordinate access and haul routes with governing authorities and Owner.

C. Provide and maintain access to fire hydrants, free of obstructions.

1.9 WASTE REMOVAL

A. See Section 017419 - Construction Waste Management and Disposal, for additional requirements.

B. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.

C. Provide containers with lids. Remove trash from site periodically.

1.10 PROJECT IDENTIFICATION

A. Provide project identification sign of design and construction indicated on drawings.

B. Erect on site at location indicated.

1.11 FIELD OFFICES

A. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture, drawing rack, and drawing display table.

B. Provide space for Project meetings, with table and chairs to accommodate 6 persons.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 015713 - TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 GENERAL

1.1 SUBMITTALS

END OF SECTION

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SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SUBMITTALS

A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.

B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

1.2 QUALITY ASSURANCE

A. Bio-Based Content: Of vegetable or animal origin, not including products made by killing the animal.

1. Determine percentage of bio-based content in accordance with ASTM D6866.

2. Bio-based content must be sourced from a Sustainable Agriculture Network certified farm.

B. Environmental Product Declaration (EPD): Publicly available, critically reviewed life cycle analysis having at least a cradle-to-gate scope.

1. Good: Product-specific; compliant with ISO 14044.

2. Better: Industry-wide, generic; compliant with ISO 21930, or with ISO 14044, ISO 14040, ISO 14025, and EN 15804; Type III third-party certification with external verification, in which the manufacturer is recognized as the program operator.

3. Best: Commercial-product-specific; compliant with ISO 21930, or with ISO 14044, ISO 14040, ISO 14025, and EN 15804; Type III third-party certification with external verification, in which the manufacturer is recognized as the program operator.

4. Where demonstration of impact reduction below industry average is required, submit both industry-wide and commercial-product-specific declarations; or submit at least 5 declarations for products of the same type by other manufacturers in the same industry.

C. Health Product Declarations (HPD): Complete, published declaration with full disclosure of known hazards, prepared using one of the HPDC (HPD-OLT) online tools.

D. Manufacturer's Inventory of Product Content: Publicly available inventory of every ingredient identified by name and Chemical Abstract Service Registration Number (CAS RN).

1. For ingredients considered a trade secret or intellectual property, the name and CAS RN may be omitted, provided the ingredient's role, amount, and GreenScreen Benchmark are given.

E. Rapidly Renewable Materials: Made from agricultural products that are typically harvested within a 10-year or shorter cycle.

F. Recycled Content: Determine percentage of post-consumer and pre-consumer (post-industrial) content separately, using the guidelines contained in 16 CFR 260.13.

G. Regional Materials: Materials that are extracted, harvested, recovered, and manufactured within a radius of 100 miles (160.9 Km) from the Project site.

H. Source Location: Location of harvest, extraction, recovery, or manufacture; where information about source location is required to be submitted, give the postal address:

1. In every case, indicate the location of final assembly.

2. For harvested products, indicate location of harvest.

3. For extracted (i.e. mined) products, indicate location of extraction.

4. For recovered products, indicate location of recovery.

5. For products involving multiple manufacturing steps, provide a description of the process at each step, with location.

6. Acceptable Evidence:

a. Manufacturer's certification.

b. Life cycle analysis (LCA) performed by third-party.

PART 2 PRODUCTS

2.1 EXISTING PRODUCTS

A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by Contract Documents, or directed by Owner.

B. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.

2.2 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by Contract Documents.

2.3 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers: Use the listed product, if any, as Baiss of Design, or use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.

C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Use the listed product, if any, as the Basis of Design, or use a product of one of the other named manufacturers which meets the same specifications. Submit a request for substitution for any manufacturer not named.

PART 3 EXECUTION

3.1 SUBSTITUTION LIMITATIONS

A. See Section 012500 - Substitution Procedures.

END OF SECTION

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SECTION 017000 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 SUBMITTALS

A. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.

B. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.

C. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:

1. Structural integrity of any element of Project.

2. Integrity of weather exposed or moisture resistant element.

3. Efficiency, maintenance, or safety of any operational element.

D. Project Record Documents: Accurately record actual locations of capped and active utilities.

1.2 QUALIFICATIONS

A. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

1.3 PROJECT CONDITIONS

A. Use of explosives is not permitted.

B. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.

C. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

D. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.

E. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.

F. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.

G. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.

H. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

PART 2 PRODUCTS

2.1 PATCHING MATERIALS

A. New Materials: As specified in product sections; match existing products and work for patching and extending work.

B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.

PART 3 EXECUTION

3.1 LAYING OUT THE WORK

A. Verify locations of survey control points prior to starting work.

B. Promptly notify Architect of any discrepancies discovered.

C. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:

3.2 GENERAL INSTALLATION REQUIREMENTS

A. In addition to compliance with regulatory requirements, conduct construction operations in compliance with NFPA 241, including applicable recommendations in Appendix A.

B. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.

C. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.

D. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.

E. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.

F. Make neat transitions between different surfaces, maintaining texture and appearance.

3.3 CUTTING AND PATCHING

A. Whenever possible, execute the work by methods that avoid cutting or patching.

B. Perform whatever cutting and patching is necessary to:

1. Complete the work.

2. Fit products together to integrate with other work.

3. Provide openings for penetration of mechanical, electrical, and other services.

4. Match work that has been cut to adjacent work.

5. Repair areas adjacent to cuts to required condition.

6. Repair new work damaged by subsequent work.

7. Remove samples of installed work for testing when requested.

8. Remove and replace defective and non-complying work.

C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.

D. Patching:

1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.

3.4 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

3.5 PROTECTION OF INSTALLED WORK

A. Protect installed work from damage by construction operations.

B. Provide special protection where specified in individual specification sections.

C. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

3.6 FINAL CLEANING

A. Execute final cleaning prior to final project assessment.

B. Use cleaning materials that are nonhazardous.

C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.

D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.

E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.

3.7 CLOSEOUT PROCEDURES

A. Make submittals that are required by governing or other authorities.

B. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.

C. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.

D. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.

E. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

END OF SECTION

SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.1 WASTE MANAGEMENT REQUIREMENTS

A. Owner requires that this project generate the least amount of trash and waste possible.

B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.

1.2 SUBMITTALS

PART 3 EXECUTION

2.1 WASTE MANAGEMENT PLAN IMPLEMENTATION

A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.

B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, Owner, and Architect.

C. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.

D. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.

E. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.

F. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.

G. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

END OF SECTION

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SECTION 017800 - CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 SUBMITTALS

A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.

B. Operation and Maintenance Data:

C. Warranties and Bonds:

1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 PROJECT RECORD DOCUMENTS

A. Maintain on site one set of the following record documents; record actual revisions to the Work:

1. Drawings.

2. Specifications.

3. Addenda.

4. Change Orders and other modifications to the Contract.

5. Reviewed shop drawings, product data, and samples.

6. Manufacturer's instruction for assembly, installation, and adjusting.

3.2 OPERATION AND MAINTENANCE DATA

A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.

B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.

C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.

3.3 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

A. For Each Product, Applied Material, and Finish:

1. Product data, with catalog number, size, composition, and color and texture designations.

2. Information for re-ordering custom manufactured products.

B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.

3.4 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

A. For Each Item of Equipment and Each System:

1. Description of unit or system, and component parts.

2. Identify function, normal operating characteristics, and limiting conditions.

3. Include performance curves, with engineering data and tests.

4. Complete nomenclature and model number of replaceable parts.

B. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.

C. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.

3.5 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.

B. Where systems involve more than one specification section, provide separate tabbed divider for each system.

C. Binders: Commercial quality, 8-1/2 by 11 inch (216 by 280 mm) three D side ring binders with durable plastic covers; 2 inch (50 mm) maximum ring size. When multiple binders are used, correlate data into related consistent groupings.

D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.

3.6 WARRANTIES AND BONDS

A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.

END OF SECTION

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SECTION 061000 - ROUGH CARPENTRY

PART 2 PRODUCTS

1.1 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.

1. If no species is specified, provide species graded by the agency specified; if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements.

2. Grading Agency: Grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee at www.alsc.org, and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

1.2 EXPOSED DIMENSION LUMBER

A. Submit manufacturer's certificate that products meet or exceed specified requirements, in lieu of grade stamping.

B. Grading Agency: Southern Pine Inspection Bureau, Inc; SPIB (GR).

C. Grading Agency: West Coast Lumber Inspection Bureau; WCLIB (GR).

D. Grading Agency: Western Wood Products Association; WWPA G-5.

E. Sizes: Nominal sizes as indicated on drawings.

F. Surfacing: Rough (unfinished).

G. Moisture Content: Kiln-dry or MC15.

H. Joist, Rafter, and Small Beam Framing (2 by 6 through 4 by 16 (50 by 150 through 100 by 400 mm)):

1. Species: Douglas Fir.

2. Grade: No. 1.

1.3 EXPOSED BOARDS

A. Submit manufacturer's certificate that products meet or exceed specified requirements, in lieu of grade stamping.

B. Moisture Content: Kiln-dry (15 percent maximum).

C. Surfacing: Rough.

D. Species: Douglas Fir.

E. Grade: No. 1, 1 Common, or Select.

PART 3 EXECUTION

2.1 INSTALLATION - GENERAL

A. Select material sizes to minimize waste.

END OF SECTION

SECTION 313219

GEOTEXTILE FABRIC

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

1.2 SCOPE

A. The work under this section shall consist of furnishing all labor, materials and equipment for the installation of the geotextile fabric.

1.3 SUBMITTALS

A. Manufacturer's Literature: Furnish to Landscape Architect, when required, copies of manufacturer's specifications, and installation instructions for geotextile fabric. Include photographs, catalogue cuts, samples as may be required to show compliance with these specifications.

PART 2 - PRODUCT

2.1 GEOTEXTILE FABRIC

A. The product shall be AMOCO CEF2006, Mirafi - 600x, LINQ Industrial Fabrics - GTF-300, CSI Geoturf - W315 or an approved equivalent.

B. The geotextile shall be of woven construction and consist of long-chain polymeric yarns. The yarns must be composed of at least 95% propylene or ester polymers. The fibers shall be produced in a manner which achieves a stable network. The geotextile shall conform to the mechanical and hydraulic property requirements listed below:

MINIMUM AVERAGE

PROPERTY	VALUE	UNIT	TEST PROCEDURE
Grab Tensile Strength	315	lbs.	ASTM D-4632
Grab Tensile Elongation	15	%	ASTM D4632
Wide Width Tensile	175/175	lbs/in	ASTM D4595
Wide Width Elongation	15/8	%	ASTM D4595
Mullen Burst	600	Psi	ASTM D3786
Puncture	145	lbs	ASTM D4833
Trapezoidal Tear	120	lbs	ASTM D4533
UV Resistance	70	% @ 500 hr	ASTM D4355
Apparent Opening Size (max)	40	AOS	ASTM D4751
Permitivity	.055	1/sec	ASTM D4491
Flow Rate	4.0	gpm/ft2	ASTM D4491

PART 3 – EXECUTION

3.1 INSTALLATION

A. The geotextile fabric shall be furnished and stored in a wrap which will protect the geotextile fabric from ultraviolet radiation and abrasion. The geotextile fabric shall be covered with the appropriate soil cover within two weeks of its placement.

B. Should the geotextile fabric be damaged during construction, the torn or punctured section shall be repaired by placing a piece of fabric that is sufficiently large enough to cover the damaged area plus two feet (2') of adjacent undamaged geotextile fabric in all directions.

C. Fabric shall be installed on dry soil as per manufacturer.

D. Overlap the fabric as recommended by the manufacturer.

E. Installation and Unit Price shall include overlap quantities.

END OF SECTION 313219

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SECTION 323113 - CHAIN LINK FENCES AND GATES

PART 1 GENERAL

1.1 REFERENCE STANDARDS

A. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2024.

B. ASTM A392 - Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric; 2011a (Reapproved 2022).

C. ASTM A491 - Standard Specification for Aluminum-Coated Steel Chain-Link Fence Fabric; 2011 (Reapproved 2022).

D. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2025a.

E. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2024.

F. ASTM F567 - Standard Practice for Installation of Chain-Link Fence; 2023.

G. ASTM F668 - Standard Specification for Polyvinyl Chloride (PVC), Polyolefin and Other Polymer-Coated Steel Chain Link Fence Fabric; 2025.

H. ASTM F1043 - Standard Specification for Strength and Protective Coatings on Steel Industrial Fence Framework; 2018 (Reapproved 2022).

I. ASTM F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures; 2018 (Reapproved 2022).

J. CLFMI CLF 2445 - Product Manual - Drawings; 2012.

K. CLFMI WLG 2445 - Wind Load Guide for the Selection of Line Post and Line Post Spacing; 2023.

L. UL 467 - Grounding and Bonding Equipment; Current Edition, Including All Revisions.

1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.3 SUMMARY

A. This Section includes the following:

1. Chain-Link Fences.

2. Swing Gates.

B. Related Sections include the following:

1. Division 31 Section "Earth Moving" for site excavation, fill, and backfill where chain-link fences and gates are located.

1.4 PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design chain-link fence and gate frameworks.

B. Structural Performance: Provide chain link fences capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

1. Minimum Post Size and Maximum Spacing for Wind Velocity Pressure: Determine based on mesh size and pattern specified, and on the following minimum design wind pressures and according to CLFMI WLG 2445:

a. Wind Speed: 80 mph (129 km/h).

2. Determine minimum post size, group, and section according to ASTM F1043 for framework up to 16 feet (4.88 m) high, and post spacing not to exceed 10 feet (3 m).

C. Lightning Protection System: Maximum grounding resistance value of 25 ohms under normal dry conditions.

1.5 SUBMITTALS

A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for chain-link fences and gates.

1. Fence and gate posts, rails, and fittings.

2. Chain-link fabric, reinforcements, and attachments.

3. Gates and hardware.

B. Qualification Data: For Installer.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who has completed chain-link fences and gates similar in material, design, and extent to those indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

1.7 PROJECT CONDITIONS

A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

PART 2 PRODUCTS

2.1 CHAIN-LINK FENCE FABRIC

A. General: Height indicated on Drawings. Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist. Comply with ASTM A392, CLFMI CLF 2445, and requirements indicated below:

1. Steel Wire Fabric: Metallic-galvanized wire with a diameter of 0.148 inch (3.76 mm)

a. Mesh Size: 2 inches (50.8 mm).

b. Weight of Aluminum Coating: ASTM A491, Type I, 0.4 oz./sq. ft.

c. Weight of Metallic (Zinc) Coating: ASTM A392, Type II, Class 2, 2.0 oz./sq. ft. with zinc coating applied after weaving.

d. Vinyl Coating: ASTM F668, Class 2b over metallic-coated steel wire.

1) Color: Black

e. Coat selvage ends of fabric that is metallic coated before the weaving process with manufacturer's standard clear protective coating.

2. Selvage: Knuckled at both selvages.

2.2 INDUSTRIAL FENCE FRAMING

A. Posts and Rails: Comply with ASTM F1043 for framing, ASTM F1083 for Group IC round pipe, and the following:

1. Group: IA, round steel pipe, Schedule 40 IB, aluminum pipe, Alloy 6063 IC round steel pipe, yield strength 50,000 psi (345 MPa)

2. Fence Height: As indicated on Drawings.

3. Strength Requirement: Heavy industrial according to ASTM F1043.

4. Post Diameter and Thickness: According to ASTM F1043 ASTM F1083.

5. Post Size and Thickness: According to ASTM F1043.

a. Top and Bottom Rail: 1.66 inches (42 mm)

b. Line Post: 2.375 inches (60 mm)

c. End, Corner and Pull Post: 2.875 inches (73 mm)

6. Coating for Steel Framing:

a. Metallic Coating:

1) Type A, consisting of not less than minimum 2.0-oz./sq. ft. average zinc coating per ASTM A123/A123M or 4.0-oz./sq. ft. zinc coating per ASTM A653/A653M.

2) Type B, zinc with organic overcoat, consisting of a minimum of 0.9 oz./sq. ft. (0.27 kg/sq. m) of zinc after welding, a chromate conversion coating, and a clear, verifiable polymer film.

3) Type C, Zn-5-A1-MM alloy, consisting of not less than 1.8 oz./sq. ft. (0.55 kg/sq. m) coating.

4) Coatings: Any coating above.

b. Vinyl Coating over metallic coating: ASTM F668, class 2b over metallic-coated steel wire.

1) Color: Black, according to ASTM F934.

2.3 INDUSTRIAL SWING GATES

A. General: Comply with ASTM F 900 for single and double swing gate types.

1. Metal Pipe and Tubing: Galvanized steel. Comply with ASTM F1043 and ASTM F1083 for materials and protective coatings.

2. Metal Pipe and Tubing: Aluminum comply with ASTM B 429 and ASTM F1043 for materials and protective coatings.

B. Frames and Bracing: Fabricate members from round, galvanized steel tubing with outside dimension and weight according to ASTM F 900 and the following:

1. Gate Fabric Height: 2 inches (50.8 mm) less than adjacent fence height.

2. Leaf Width: As indicated.

3. Frame Members:

a. Tubular Steel: 1.66 inches (42.16 mm)

C. Frame Corner Construction:

1. Welded.

2.4 FITTINGS

A. General: Comply with ASTM F 626.

B. Post and Line Caps: Provide for each post.

1. Line post caps with loop to receive tension wire or top rail.

C. Rail and Brace Ends: Attach rails securely to each gate, corner, pull, and end post.

D. Rail Fittings: Provide the following:

1. Top Rail Sleeves: Pressed-steel or round-steel tubing not less than 6 inches (152.4 mm) long.

2. Rail Clamps: Line and corner boulevard clamps for connecting intermediate and bottom rails in the fence line-to-line posts.

E. Tension and Brace Bands: Pressed steel or Aluminum Alloy 6063.

F. Tension Bars: Steel, length not less than 2 inches (50.8 mm) shorter than full height of chain-link fabric. Provide one bar for each gate and end post, and two for each corner and pull post, unless fabric is integrally woven into post.

G. Truss Rod Assemblies: Steel, hot-dip galvanized after threading rod and turnbuckle or other means of adjustment.

H. Tie Wires, Clips, and Fasteners: According to ASTM F 626.

1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, complying with the following:

a. Hot-Dip Galvanized Steel: 0.148-inch- diameter wire; galvanized coating thickness matching coating thickness of chain link fence fabric.

b. Aluminum: ASTM B211; Alloy 1350-H19; 0.148 inch (3.76 mm) diameter, mill-finished wire.

I. Finish:

1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz. /sq. ft. zinc.

a. Vinyl Coating: ASTM F668, class 2b over metallic-coated steel.

1) Color: Black

2. Aluminum Mill Finish.

2.5 CAST-IN-PLACE CONCRETE

A. Materials: Portland cement complying with ASTM C 150, Type I aggregates complying with ASTM C 33, and potable water for ready-mixed concrete complying with ASTM C94/C94M.

1. Concrete Mixes: Normal-weight concrete air entrained with not less than 3000-psi compressive strength (28 days), 3-inch slump, and 1-inch maximum size aggregate.

B. Materials: Dry-packaged concrete mix complying with ASTM C 387 for normal-weight concrete mixed with potable water according to manufacturer's written instructions.

2.6 FENCE GROUNDING

A. Conductors: Bare, solid wire for No. 6 AWG and smaller; stranded wire for No. 4 AWG and larger.

1. Material above Finished Grade: Copper.

2. Material on or below Finished Grade: Copper.

3. Bonding Jumpers: Braided copper tape, 1 inch (25 mm) wide, woven of No. 30 AWG bare copper wire, terminated with copper ferrules.

B. Connectors and Grounding Rods: Comply with UL 467.

1. Connectors for Below Grade Use: Exothermic welded type.

2. Grounding Rods: Copper clad steel.

a. Size: 5/8 by 96 inches (16 by 2440 mm).

2.7 VINYL FINISHES

A. Supplemental Color Coating: In addition to specified metallic coatings for steel, provide fence components with vinyl coating.

B. Metallic-Coated Steel Tension Wire: PVC-coated wire complying with ASTM F 1164, class 2b.

C. Metallic-Coated Steel or Aluminum Framing and Fittings: Comply with ASTM F 626 and ASTM F1043 for vinyl coating applied to exterior surfaces and, except inside cap shapes, to exposed interior surfaces.

1. Vinyl Coating: Not less than 10 mil (0.254 mm) thick PVC finish.

D. Color: Black, complying with ASTM F 934.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting performance.

1. Do not begin installation before final grading is completed, unless otherwise permitted by Architect.

2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet (15240 cm) or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 INSTALLATION, GENERAL

A. Install chain-link fencing to comply with ASTM F567 and more stringent requirements specified.

1. Install fencing on established boundary lines inside property line.

3.4 CHAIN-LINK FENCE INSTALLATION

A. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.

B. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.

2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.

a. Concealed Concrete: Top 2 inches (50.8 mm) below grade to allow covering with surface material.

b. Slope concrete footings away from posts with ¼” fall.

C. Terminal Posts: Locate terminal end, corner, and gate posts per ASTM F567 and terminal pull posts at changes in horizontal or vertical alignment of 30 degrees or more.

D. Line Posts: Space line posts uniformly at 10 feet (304.8 cm) o.c.

E. Post Bracing and Intermediate Rails: Install according to ASTM F567, maintaining plumb position and alignment of fencing. Install braces at end and gate posts and at both sides of corner and pull posts.

1. Locate horizontal braces at midheight of fabric 6 feet (182.88 cm) or higher, on fences with top rail and at 2/3 fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.

F. Top Rail: Install according to ASTM F567, maintaining plumb position and alignment of fencing. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.

G. Bottom Rails: Install, spanning between posts.

H. Chain-Link Fabric: Apply fabric to inside of enclosing framework. Leave 1 inch (25.4 mm) between finish grade or surface and bottom selvage, unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.

I. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts with tension bands spaced not more than 15 inches (381 mm) o.c.

J. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at 1 end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric per ASTM F 626. Bend ends of wire to minimize hazard to individuals and clothing.

1. Maximum Spacing: Tie fabric to line posts and to braces at 12 inches (304.8 mm) o.c. and top braces at 24 inches (609.6 mm) o.c.

K. Fasteners: Install nuts for tension bands and carriage bolts on the side of the fence opposite the fabric side.

3.5 GATE INSTALLATION

A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

3.6 ADJUSTING

A. Gate: Adjust gate to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

3.7 GROUND AND BONDING

A. Fence Grounding: Install at maximum intervals of 1500 feet (450 m) except as follows:

1. Fences within 100 feet (30 m) of Buildings, Structures, Walkways and Roadways: Ground at maximum intervals of 750 feet (225 m).

a. Gates and Other Fence Openings: Ground fence on each side of opening.

1) Bond metal gates to gate posts.

2) Bond across openings, with or without gates, except openings indicated as intentional fence discontinuities. Use No. 2 AWG wire and bury it at least [18] inches ([460] mm) below finished grade.

B. Protection at Crossings of Overhead Electrical Power Lines: Ground fence at location of crossing and a maximum distance of 150 feet (45 m) on each side of crossing.

C. Grounding Method: At each grounding location, drive a grounding rod vertically until the top is 6 inches (150 mm) below finished grade. Connect rod to fence with No. 6 AWG conductor. Connect conductor to each fence component at the grounding location, including the following:

D. Bonding Method for Gates: Connect bonding jumper between gate post and gate frame.

E. Connections: Make connections so possibility of galvanic action or electrolysis is minimize. Select connectors, connection hardware, conductors and connection methods so metals in direct contact will be galvanically compatible.

1. Use electroplated or hot tin coated materials to ensure high conductivity and to make contact points closer in order of galvanic series.

2. Make connections with clean, bare metal at points of contact.

3. Make aluminum to steel connections with stainless steel separators and mechanical clamps.

4. Make aluminum to galvanized steel connections with tin plated copper jumpers and mechanical clamps.

5. Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.

END OF SECTION

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SECTION 323300 - SITE FURNISHINGS

PART 1 GENERAL

1.1 SUBMITTALS

A. Product Data: Provide manufacturer's specifications and descriptive literature, installation instructions, and maintenance information.

B. Shop Drawings: Indicate plans for each unit or group of units, elevations with model number, overall dimensions, construction, and anchorage details.

C. NSI Installer Qualification: Documentation of Natural Stone Institute Accreditation.

1.2 QUALITY ASSURANCE

1.3 WARRANTY

A. Provide manufacturer’s warranty against defects in materials or workmanship from Date of Substantial Completion.

PART 2 PRODUCTS

2.1 METAL FURNISHINGS

A. Metal Furnishings, General:

1. Steel components: Plates, bars, and shapes complying with ASTM A36/A36M and tubing complying with ASTM A500/A500M; cleaned, treated, and powder-coated.

2. Wood components: Western red cedar with eased edges, and clear wood preservative coating.

3. Hardware: Stainless steel.

B. Greenhouse Kit: Metal frame with Polycarbonate Roof.

1. Frame: Steel.

2. Roof:: Polycarbonate.

3. Shape: Rectangle

4. Mounting: Build timber frame bolted into gravel base according Manufacturer's best practices. Attach timber frame directly to greenhouse frame.

PART 3 EXECUTION

3.1 EXAMINATION

3.2 INSTALLATION

END OF SECTION

SECTION 329400 - LANDSCAPE MAINTENANCE & WARRANTY STANDARDS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specifications, apply to this Section.

1.2 SUMMARY

A. The requirements of this section include a one (1) year warranty period from the date of acceptance of installation.

B. Related work specified elsewhere:

1. Division 32 9200 Section “Turfs and Grasses.”

1.3 ACCEPTANCE OF INSTALLATION

A. At the completion of all landscape installation, or pre-approved portions thereof, the Landscape contractor shall request in writing an inspection for acceptance of installation in which the Landscape contractor, Architect and Owner’s Representative shall be present. After this inspection, a “Punch List” will be issued by the Architect and/or Owner’s Representative. The Architect and/or Owner’s Representative shall re-inspect the project and issue a written statement of acceptance of installation and establish the beginning of the project warranty period.

B. It is the responsibility of the Landscape contractor to make the above written request for inspection of installation in a timely fashion. If there is plant material loss prior to the Landscape Contractor’s written request for inspe3ction of installation, the Landscape contractor shall make all replacements of this dead material at no additional cost. These replacements are not considered to be the required one (1) replacement of dead plant material by the Landscape contractor during the one (1) year project warranty period, as outlined below.

C. Landscape work may be inspected for acceptance in parts agreeable to Owner’s Representative and architect provided work offered for inspection is complete, including maintenance as required.

D. For work to be inspected for partial acceptance, contractor shall provide a drawing outlining work completed and supply a written statement requesting acceptance of this work completed to date.

1.4 PROJECT WARRANTY

A. The project warranty period begins upon written acceptance of the project installation by Architect and Owner’s Representative.

B. The Landscape contractor shall guarantee all seeded or sodded areas through construction and for a period of one (1) year after date of acceptance of installation against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents which are beyond Landscape contractor's control.

C. The cost of replacements is at the contractor's expense. Warranty all replacement plants for one (10 year after installation acceptance. Every plant that is replaced under warranty shall again be guaranteed for one (1) full year from the date of Owner's acceptance.

D. Warranty: One (1) year from date of Owner's acceptance.

1.5 MAINTENANCE

A. Arrange with the Owner's Representative to walk the site monthly during the warranty period to review the maintenance standards. Written minutes of this meeting shall be furnished to the Owner and the Architect.

B. To ensure guarantee standards, the following maintenance procedures shall be executed ruing construction and for the full project warranty period.

C. Maintenance of sodded Lawn Areas:

1. Water sod thoroughly as required to establish proper rooting.

2. The Contractor shall establish a dense lawn of permanent grasses free from lumps and depressions. Repair, rework and resod all areas that have washed out or are eroded. Replace undesirable or dead areas with new sod.

3. Mow lawn areas as soon as lawn top growth reaches a 3" height. Cut back to 2" height. Repeat mowing as required to maintain specified height. Not more than 40% of grass leaf shall be removed at any single mowing.

4. The contractor shall provide a minimum of two cuttings of the lawn or more as necessary until the inspection and acceptance of installation by the Owner's Representative and Landscape Architect. When the lawn reaches 3 inches (76.2 mm) in height it shall be cut to 2 inches (50.8 mm) in height. The Contractor shall notify the Owner's representative and Architect in writing one (1) week in advance of the final lawn cutting to allow the Owner and the Architect to inspect the lawns and schedule Owner's maintenance work.

5. The Owner assumes cutting responsibility following the acceptance of installation by the Owner's Representative and the Architect.

6. After acceptance of installation, and for the duration of the project warranty period, the Landscape contractor shall continue all other maintenance procedures including fertilizing and weeding, and other operations such as rolling, regrading, replanting, and applying herbicides, fungicides, insecticides as required to establish a smooth, acceptable law free of eroded or bare areas.

7. Apply three (3) applications of Type “B” fertilizer once in every seven to eight (7-8) week intervals. These applications hall be in addition to fertilizer applied for the soil preparation. The first application shall be applied on or about thirty (30) days after seeding. Contractor to time the applications in conjunction with anticipated rain. If initial seeding takes place in late fall, begin fertilizing applications very early at onset of the following spring season.

8. At conclusion of project warranty period and after reviewing written final acceptance by Owner’s Representative and Architect, the Owner shall assume all lawn maintenance responsibilities.

D. Maintenance of Seeded Lawn Areas:

1. The Contractor shall establish a dense lawn of permanent grasses, free from lumps and depressions or any bare spots, none of which is larger than one foot of area up to a maximum of 3% of the total seeded lawn area. Any part of the seeded lawn that fails to show a uniform growth and/or germination shall be reseeded until a dense cover is established.

2. If seeded in fall or if not considered acceptable at that time, continue maintenance the following spring until acceptable lawn is established.

3. The contractor shall provide a minimum of two (2) cuttings of the lawn or more as necessary until the inspection and acceptance of installation by the Owner’s Representative and Architect. When the lawn reaches 3 inches (76.2 mm) in height, it shall be cut to 2 inches (50.8 mm) in height.

4. The Owner assumes cutting responsibilities following the acceptance of installation by the Owner’s Representative and the Architect.

5. After acceptance of installation, and for the duration of the project warranty period the Landscape Contractor shall continue all other maintenance procedures including fertilizing and weeding, and other operations such as rolling, regarding, replanting, and applying herbicides, fungicides, insecticides as required to establish a smooth acceptable lawn free of eroded or bare areas.

6. Repair, rework, and re-seed all areas that have washed out, eroded, or do not substantially germinate.

7. At conclusion of project warranty period and after rece3iving written final acceptance by Owner’s Representative and Architect, the Owner shall assume all seeded lawn maintenance responsibilities.

1.6 FINAL ACCEPTANCE

A. At the conclusion of the project warranty period, the Landscape contractor shall request a project inspection for final acceptance in which the Landscape contractor, Architect and Owner's Representative shall be present. After this inspection a "Punch List" will be issued by the Architect. Upon completion of all punch list items, the Architect and Owner's Representative shall reinspect the project and issue a written statement of final acceptance. Upon final acceptance the Owner assumes all maintenance responsibilities for the landscape of the project.

END OF SECTION

SECTION 334200 - STORMWATER CONVEYANCE

PART 1 GENERAL

1.1 REFERENCE STANDARDS

A. AASHTO M 252 - Standard Specification for Corrugated Polyethylene Pipe, 75- to 250-mm (3- to 10-in.) Diameter; 2025.

B. AASHTO M 294 - Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter; 2025.

C. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; 2025.

D. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; 2024.

E. ASTM C14 - Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe; 2020 (Reapproved 2025).

F. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2024a.

G. ASTM C150/C150M - Standard Specification for Portland Cement; 2024.

H. ASTM C443 - Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets; 2021.

I. ASTM C891 - Standard Practice for Installation of Underground Precast Concrete Utility Structures; 2020.

J. ASTM C990 - Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants; 2009 (Reapproved 2019).

K. ASTM D448 - Standard Classification for Sizes of Aggregate for Road and Bridge Construction; 2012 (Reapproved 2022).

L. ASTM D1056 - Standard Specification for Flexible Cellular Materials—Sponge or Expanded Rubber; 2020.

M. ASTM D2321 - Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications; 2026.

N. ASTM D3034 - Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings; 2024, with Editorial Revision (2025).

O. ASTM F477 - Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe; 2014 (Reapproved 2021).

1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.3 SUMMARY

A. Section Includes:

1. PE pipe and fittings.

2. PVC pipe and fittings.

3. Concrete pipe and fittings.

4. Non-pressure transition couplings.

5. Manholes.

6. Catch basins.

7. Stormwater disposal systems.

1.4 DEFINITIONS

A. FRP: Fiberglass-reinforced plastic.

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Do not store plastic manholes, pipe, and fittings in direct sunlight.

B. Protect pipe, pipe fittings, and seals from dirt and damage.

C. Handle manholes in accordance with manufacturer's written rigging instructions.

D. Handle catch basins in accordance with manufacturer's written rigging instructions.

1.7 FIELD CONDITIONS

A. Interruption of Existing Storm Drainage Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary service in accordance with requirements indicated:

1. Notify Construction Manager no fewer than two days in advance of proposed interruption of service.

2. Do not proceed with interruption of service without Construction Manager's written permission.

PART 2 PRODUCTS

2.1 CORRUGATED-PE PIPE AND FITTINGS

A. Source Limitations: Obtain corrugated-PE pipe and fittings from single manufacturer.

B. Corrugated-PE Drainage Pipe and Fittings NPS 3 to NPS 10: AASHTO M 252, Type S, with smooth waterway for coupling joints.

C. Corrugated-PE Pipe and Fittings NPS 12 to NPS 60: AASHTO M 294, Type S, with smooth waterway for coupling joints.

D. Corrugated-PE Silttight Couplings: PE sleeve with ASTM D1056, Type 2, Class A, Grade 2 gasket material that mates with pipe and fittings.

E. Corrugated-PE Soiltight Couplings: AASHTO M 294, corrugated, matching pipe and fittings.

2.2 PVC PIPE AND FITTINGS

A. Source Limitations: Obtain PVC pipe and fittings from single manufacturer.

B. PVC Type PSM Sewer Piping:

1. Pipe: ASTM D3034, SDR 35, PVC Type PSM sewer pipe with bell-and-spigot ends for gasketed joints.

2. Fittings: ASTM D3034, PVC with bell ends.

3. Gaskets: ASTM F477, elastomeric seals.

2.3 CONCRETE PIPE AND FITTINGS

A. Source Limitations: Obtain concrete pipe and fittings from single manufacturer.

B. Nonreinforced-Concrete Sewer Pipe and Fittings: ASTM C14, Class 1, with bell-and-spigot ends and gasketed joints with ASTM C443, rubber gaskets.

2.4 NONPRESSURE TRANSITION COUPLINGS

A. Comply with ASTM C1173, elastomeric, sleeve-type, reducing or transition coupling, for joining underground nonpressure piping. Include ends of same sizes as piping to be joined, and corrosion-resistant-metal tension band and tightening mechanism on each end.

B. Sleeve Materials:

1. For Concrete Pipes: ASTM C443, rubber.

2. For Plastic Pipes: ASTM F477, elastomeric seal or ASTM D5926, PVC.

3. For Dissimilar Pipes: ASTM D5926, PVC or other material compatible with pipe materials being joined.

C. Shielded, Flexible Couplings:

1. Source Limitations: Obtain shielded, flexible couplings from single manufacturer.

2. Description: ASTM C1460, elastomeric or rubber sleeve with full-length, corrosion-resistant outer shield and corrosion-resistant-metal tension band and tightening mechanism on each end.

2.5 MANHOLES

A. Standard Precast Concrete Manholes:

1. Description: ASTM C478, precast, reinforced concrete, of depth indicated, with provision for sealant joints.

2. Diameter: 48 inches (1219.2 mm) minimum unless otherwise indicated.

3. Ballast: Increase thickness of precast concrete sections or add concrete to base section as required to prevent flotation.

4. Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and separate base slab or base section with integral floor.

5. Riser Sections: 4-inch minimum thickness, and lengths to provide depth indicated.

6. Top Section: Eccentric-cone type unless concentric-cone or flat-slab-top type is indicated, and top of cone of size that matches grade rings.

7. Joint Sealant: ASTM C990, bitumen or butyl rubber.

8. Steps: Individual FRP steps or FRP ladder, wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals. Omit steps if total depth from floor of manhole to finished grade is less than 60 inches (1524 mm).

9. Adjusting Rings: Interlocking HDPE rings with level or sloped edge in thickness and diameter matching manhole frame and cover, and of height required to adjust manhole frame and cover to indicated elevation and slope. Include sealant recommended by ring manufacturer.

10. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover, and height as required to adjust manhole frame and cover to indicated elevation and slope.

2.6 CONCRETE

A. General: Cast-in-place concrete in accordance with ACI 318, ACI 350, and the following:

1. Cement: ASTM C150/C150M, Type II.

2. Fine Aggregate: ASTM C33/C33M, sand.

3. Coarse Aggregate: ASTM C33/C33M, crushed gravel.

4. Water: Potable.

B. Portland Cement Design Mix: 4000 psi (27579.04 kPa) minimum, with 0.45 maximum water/cementitious materials ratio.

1. Reinforcing Fabric: ASTM A1064/A1064M, steel, welded wire fabric, plain.

2. Reinforcing Bars: ASTM A615/A615M, Grade 60 60958 psi (420 MPa) deformed steel.

C. Ballast and Pipe Supports: Portland cement design mix, 3000 psi (20684.28 kPa) minimum, with 0.58 maximum water/cementitious materials ratio.

1. Reinforcing Fabric: ASTM A1064/A1064M, steel, welded wire fabric, plain.

2. Reinforcing Bars: ASTM A615/A615M, Grade 60 60958 psi (420 MPa) deformed steel.

2.7 CATCH BASINS

A. Standard Precast Concrete Catch Basins:

1. Description: ASTM C478, precast, reinforced concrete, of depth indicated, with provision for sealant joints.

2. Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and separate base slab or base section with integral floor.

3. Riser Sections: 4-inch minimum thickness, 48-inch diameter, and lengths to provide depth indicated.

4. Top Section: Eccentric-cone type unless concentric-cone or flat-slab-top type is indicated. Top of cone of size that matches grade rings.

5. Joint Sealant: ASTM C990, bitumen or butyl rubber.

6. Adjusting Rings: Interlocking rings with level or sloped edge in thickness and shape matching catch basin frame and grate. Include sealant recommended by ring manufacturer.

7. Grade Rings: Include two or three reinforced-concrete rings, of 6- to 9-inch total thickness, that match 24-inch-diameter frame and grate.

8. Steps: Individual FRP steps or FRP ladder, wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals. Omit steps if total depth from floor of catch basin to finished grade is less than 60 inches (1524 mm).

2.8 STORMWATER DISPOSAL SYSTEMS

A. Chamber Systems:

1. Source Limitations: Obtain chamber systems from single manufacturer.

2. Storage and Leaching Chambers: Molded PE with perforated sides and open bottom. Include number of chambers, distribution piping, end plates, and other standard components as required for system total capacity.

3. Filtering Material: ASTM D448, Size No. 24, 3/4- to 2-1/2-inch washed, crushed stone or gravel.

4. Filter Mat: Geotextile woven or spun filter fabric, in one or more layers, for minimum total unit weight of 4 oz./sq. yd..

B. Pipe Systems: Perforated manifold, header, and lateral piping complying with AASHTO M 252 for NPS 10 and smaller, AASHTO M 294 for NPS 12 to NPS 60. Include proprietary fittings, couplings, seals, and filter fabric.

1. Source Limitations: Obtain pipe systems from single manufacturer.

PART 3 EXECUTION

3.1 EARTHWORK

A. Excavation, trenching, and backfilling are specified in Section 312000 "Earth Moving."

3.2 PIPING INSTALLATION

A. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground storm drainage piping. Location and arrangement of piping layout take into account design considerations. Install piping as indicated, to extent practical. Where specific installation is not indicated, follow piping manufacturer's written instructions.

B. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings in accordance with manufacturer's written instructions for use of lubricants, cements, and other installation requirements.

C. Install manholes for changes in direction unless fittings are indicated. Use fittings for branch connections unless direct tap into existing sewer is indicated.

D. Install proper size increasers, reducers, and couplings where different sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.

E. Install gravity-flow, nonpressure drainage piping in accordance with the following:

1. Install piping pitched down in direction of flow.

2. Install piping with 36-inch-minimum cover.

3. Install PVC sewer piping in accordance with ASTM D2321 and ASTM F1668.

4. Install nonreinforced-concrete sewer piping in accordance with ASTM C1479 and ACPA's "Concrete Pipe Installation Manual."

3.3 PIPE JOINT CONSTRUCTION

A. Join gravity-flow, nonpressure drainage piping in accordance with the following:

1. Join corrugated PE piping in accordance with ASTM D3212 for push on joints.

2. Join PVC sewer piping in accordance with ASTM D2321 and ASTM D3034 for elastomeric-seal joints or ASTM D3034 for elastomeric-gasketed joints.

3. Join nonreinforced-concrete sewer piping in accordance with ASTM C14 and ACPA's "Concrete Pipe Installation Manual" for rubber-gasketed joints.

4. Join dissimilar pipe materials with nonpressure-type flexible couplings.

3.4 MANHOLE INSTALLATION

A. General: Install manholes, complete with appurtenances and accessories indicated.

B. Install precast concrete manhole sections with sealants in accordance with ASTM C891.

C. Where specific manhole construction is not indicated, follow manhole manufacturer's written instructions.

D. Set tops of frames and covers flush with finished surface of manholes that occur in pavements. Set tops 3 inches (76.2 mm) above finished surface elsewhere unless otherwise indicated.

3.5 CATCH BASIN INSTALLATION

A. Construct catch basins to sizes and shapes indicated.

B. Set frames and grates to elevations indicated.

3.6 CONCRETE PLACEMENT

A. Place cast-in-place concrete in accordance with ACI 318.

3.7 CONNECTIONS

A. Connect nonpressure, gravity-flow drainage piping in building's storm building drains specified in Section 221413 "Facility Storm Drainage Piping."

B. Make connections to existing piping and underground manholes.

1. Use commercially manufactured wye fittings for piping branch connections. Remove section of existing pipe; install wye fitting into existing piping; and encase entire wye fitting, plus 6-inch overlap, with not less than 6 inches (152.4 mm) of concrete with 28-day compressive strength of 3000 psi (20684.28 kPa).

2. Make branch connections from side into existing piping, NPS 4 to NPS 20. Remove section of existing pipe, install wye fitting into existing piping, and encase entire wye with not less than 6 inches (152.4 mm) of concrete with 28-day compressive strength of 3000 psi (20684.28 kPa).

3. Make branch connections from side into existing piping, NPS 21 or larger, or to underground manholes and structures by cutting into existing unit and creating an opening large enough to allow 3 inches (76.2 mm) of concrete to be packed around entering connection. Cut end of connection pipe passing through pipe or structure wall to conform to shape of and be flush with inside wall unless otherwise indicated. On outside of pipe, manhole, or structure wall, encase entering connection in 6 inches (152.4 mm) of concrete for minimum length of 12 inches (304.8 mm) to provide additional support of collar from connection to undisturbed ground.

a. Use concrete that will attain a minimum 28-day compressive strength of 3000 psi (20684.28 kPa) unless otherwise indicated.

b. Use epoxy-bonding compound as interface between new and existing concrete and piping materials.

4. Protect existing piping, manholes, and structures to prevent concrete or debris from entering while making tap connections. Remove debris or other extraneous material that may accumulate.

C. Connect to sediment interceptors specified in Section 221323 "Sanitary Waste Interceptors."

D. Pipe couplings, expansion joints, and deflection fittings with pressure ratings at least equal to piping rating may be used in applications below unless otherwise indicated.

1. Use nonpressure-type flexible couplings where required to join gravity-flow, nonpressure sewer piping unless otherwise indicated.

a. Shielded flexible couplings for same or minor difference OD pipes.

b. Unshielded, increaser/reducer-pattern, flexible couplings for pipes with different OD.

c. Ring-type flexible couplings for piping of different sizes where annular space between smaller piping's OD and larger piping's ID permits installation.

3.8 CLOSING ABANDONED STORM DRAINAGE SYSTEMS

A. Abandoned Piping: Close open ends of abandoned underground piping indicated to remain in place. Include closures strong enough to withstand hydrostatic and earth pressures that may result after ends of abandoned piping have been closed. Use either procedure below:

1. Close open ends of piping with at least 8 inch (203.2 mm) -thick, brick masonry bulkheads.

2. Close open ends of piping with threaded metal caps, plastic plugs, or other acceptable methods suitable for size and type of material being closed. Do not use wood plugs.

B. Abandoned Manholes and Structures: Excavate around manholes and structures as required and use one procedure below:

1. Remove manhole or structure and close open ends of remaining piping.

2. Remove top of manhole or structure down to at least 36 inches (914.4 mm) below final grade. Fill to within 12 inches (304.8 mm) of top with stone, rubble, gravel, or compacted dirt. Fill to top with concrete.

C. Backfill to grade in accordance with Section 312000 "Earth Moving."

3.9 CLEANING

A. Clean interior of piping of dirt and superfluous materials. Flush with water.

END OF SECTION

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SECTION 334600 - SUBDRAINAGE

PART 1 GENERAL

1.1 REFERENCE STANDARDS

A. AASHTO M 252 - Standard Specification for Corrugated Polyethylene Pipe, 75- to 250-mm (3- to 10-in.) Diameter; 2025.

B. AASHTO M 288 - Standard Specification for Geosynthetic Specification for Highway Applications; 2022.

C. AASHTO M 294 - Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter; 2025.

D. ASTM D2321 - Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications; 2026.

E. ASTM D2729 - Standard Specification for Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings; 2021.

1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.3 SUMMARY

A. Section Includes:

1. Perforated-wall pipe and fittings.

2. Geotextile filter fabrics.

1.4 SUBMITTALS

A. Product Data:

1. Geotextile filter fabrics.

PART 2 PRODUCTS

2.1 PERFORATED-WALL PIPES AND FITTINGS

A. Perforated PE Pipe and Fittings:

1. NPS 6 and Smaller: ASTM F 405 or AASHTO M 252, Type CP; corrugated, for coupled joints.

2. NPS 8 and Larger: ASTM F 667; AASHTO M 252, Type CP; or AASHTO M 294, Type CP; corrugated; for coupled joints.

3. Couplings: Manufacturer's standard, band type.

B. Perforated PVC Sewer Pipe and Fittings: ASTM D2729, bell-and-spigot ends, for loose joints.

2.2 SOIL MATERIALS

A. Soil materials are specified in Division 31 Section "Earth Moving."

2.3 GEOTEXTILE FILTER FABRICS

A. Description: Fabric of PP or polyester fibers or combination of both, with flow rate range from 110 to 330 gpm/sq. ft. when tested according to ASTM D 4491.

B. Structure Type: Nonwoven, needle-punched continuous filament.

1. Survivability: AASHTO M 288 Class 2.

2. Styles: Flat and sock.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine surfaces and areas for suitable conditions where subdrainage systems are to be installed.

B. If subdrainage is required for landscaping, locate and mark existing utilities, underground structures, and aboveground obstructions before beginning installation and avoid disruption and damage of services.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 EARTHWORK

A. Excavating, trenching, and backfilling are specified in Division 31 Section "Earth Moving."

3.3 LANDSCAPING DRAINAGE INSTALLATION

A. Provide trench width to allow installation of drainage conduit. Grade bottom of trench excavations to required slope, and compact to firm, solid bed for drainage system.

B. Lay flat-style geotextile filter fabric in trench and overlap trench sides.

C. Place supporting layer of drainage course over compacted subgrade and geotextile filter fabric, to compacted depth of not less than 4 inches (101.6 mm).

D. Install drainage conduits as indicated in Part 3"Piping Installation" Article for landscaping subdrainage with horizontal distance of at least 6 inches (152.4 mm) between conduit and

trench walls. Wrap drainage conduits without integral geotextile filter fabric with flat-style geotextile filter fabric before installation. Connect fabric sections with adhesive or tape.

E. Add drainage course to top of drainage conduits.

F. After satisfactory testing, cover drainage conduit to within 12 inches (304.8 mm) of finish grade.

G. Install drainage course and wrap top of drainage course with flat-style geotextile filter fabric.

H. Place layer of flat-style geotextile filter fabric over top of drainage course, overlapping edges at least 4 inches (101.6 mm).

I. Fill to Grade: Place satisfactory soil fill material over drainage course. Place material in loose-depth layers not exceeding 6 inches (152.4 mm). Thoroughly compact each layer. Fill to finish grade.

3.4 PIPING INSTALLATION

A. Install piping beginning at low points of system, true to grades and alignment indicated, with unbroken continuity of invert. Bed piping with full bearing in filtering material. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions and other requirements indicated.

1. Landscaping Subdrainage: Install piping pitched down in direction of flow, at a minimum slope per plans and with a minimum cover of 36 inches (914.4 mm) unless otherwise indicated.

2. Lay perforated pipe with perforations down.

3. Excavate recesses in trench bottom for bell ends of pipe. Lay pipe with bells facing upslope and with spigot end entered fully into adjacent bell.

B. Use increasers, reducers, and couplings made for different sizes or materials of pipes and fittings being connected. Reduction of pipe size in direction of flow is prohibited.

C. Install thermoplastic piping according to ASTM D2321.

3.5 PIPE JOINT CONSTRUCTION

A. Join perforated PE pipe and fittings with couplings according to ASTM D 3212 with loose banded, coupled, or push-on joints.

B. Join perforated PVC sewer pipe and fittings according to ASTM D 3212 with loose bell-and-spigot, push-on joints.

C. Special Pipe Couplings: Join piping made of different materials and dimensions with special couplings made for this application. Use couplings that are compatible with and fit materials and dimensions of both pipes.

3.6 CLEANOUT INSTALLATION

A. Comply with requirements for cleanouts specified in Division 33 Section "Storm Utility Drainage Piping."

B. Cleanouts for Landscaping Subdrainage:

1. Install cleanouts from piping to grade. Locate cleanouts at beginning of piping run and at changes in direction. Install fittings so cleanouts open in direction of flow in piping.

2. In vehicular-traffic areas, use NPS 4 cast-iron soil pipe and fittings for piping branch fittings and riser extensions to cleanout. Set cleanout frames and covers in a cast-in-place concrete anchor, 18 by 18 by 12 inches (304.8 mm) deep. Set top of cleanout flush with grade.

3. In nonvehicular-traffic areas, use NPS 4 cast-iron or PVC pipe and fittings for piping branch fittings and riser extensions to cleanout. Set cleanout frames and covers in a cast-in-place concrete anchor, 12 by 12 by 4 inches (101.6 mm) deep. Set top of cleanout 1 inch (25.4 mm) above grade.

4. Comply with requirements for concrete specified in Division 03 Section "Cast-in-Place Concrete."

3.7 CONNECTIONS

A. Comply with requirements for piping specified in Division 33 Section "Storm Utility Drainage Piping." Drawings indicate general arrangement of piping, fittings, and specialties.

3.8 IDENTIFICATION

A. Arrange for installation of green warning tapes directly over piping. Comply with requirements for underground warning tapes specified in specified in Division 31 Section "Earth Moving."

1. Install PE warning tape or detectable warning tape over ferrous piping.

2. Install detectable warning tape over nonferrous piping and over edges of underground structures.

3.9 FIELD QUALITY CONTROL

A. Tests and Inspections:

1. After installing drainage course to top of piping, test drain piping with water to ensure free flow before backfilling.

2. Remove obstructions, replace damaged components, and repeat test until results are satisfactory.

B. Drain piping will be considered defective if it does not pass tests and inspections.

C. Prepare test and inspection reports.

3.10 CLEANING

A. Clear interior of installed piping and structures of dirt and other superfluous material as work progresses. Maintain swab or drag in piping and pull past each joint as it is completed. Place plugs in ends of uncompleted pipe at end of each day or when work stops.

END OF SECTION