



# **PERFORMANCE BASED PROJECT MANUAL**

## **FORD FIELD PARK PLAYGROUND**

**BID DUE:** Thursday, 11:00 AM  
April 10, 2025

**ISSUING OFFICE:** Office of the City Manager

**CITY OF NORTHVILLE  
215 W. MAIN STREET, NORTHVILLE, MICHIGAN 48854**

## ADVERTISEMENT FOR BIDS

### FORD FIELD PARK PLAYGROUND REPLACEMENT

CITY OF NORTHVILLE  
215 W. MAIN STREET  
NORTHVILLE, MICHIGAN 48167

The City of Northville is requesting Bids for the design and installation of an accessible playground and poured in place surfacing in Ford Field Park west, 151 N. Griswold Street, Northville, MI, 48167. Sealed proposals will be received at Northville City Hall, 215 W. Main Street, Northville, MI up until **11:00 a.m. local time, Thursday, April 10, 2025** for the furnishing of all materials, labor and equipment to remove an existing wooden play structure, and design supply and install a new accessible play structure including poured in place surfacing, concrete walkways, underdrainage, and landscaping. At that time the City of Northville will conduct a performance-based review process to determine the most qualified company(ies) for further consideration.

Bid Documents, including Bid Form, Drawings and Project Manual, may be downloaded from BidNet: part of the Michigan Inter-governmental Trade Network (MITN) purchasing Group. Registration to MITN is available through their tollfree support department at 1-800-835-4603 option #2 and the following website: <https://www.bidnetdirect.com/mitn>. Bid Documents may be examined at Builders Exchange but neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than BidNet.

Proposals may either be mailed or hand delivered to the Director of Strategic Planning and Special Projects at 215 W. Main Street, Northville, MI 48167 and are to be clearly marked:  
**Bid Documents: Ford Field Playground Replacement.**

Proposals must be accompanied by a certified check, cashier's check or bid bond payable to the City of Northville, in the amount of not less than five percent (5%) of the bid amount, which shall be forfeited to the City of Northville if the bidder to whom the Contract is awarded fails to enter into a Contract within ten (10) days after the Contract is awarded. The unsuccessful bidders' checks or bid bonds will be returned upon final award of Contract, approved and executed.

A **mandatory pre-bid meeting** will be held on **Tuesday, March 18, 3:30 am** at the project site, 151 N. Griswold, Northville.

Questions regarding this Advertisement for Bid may be directed to the Project Designer, Claire Perko, Spalding DeDecker at [cperko@sda-eng.com](mailto:cperko@sda-eng.com).

The City of Northville reserves the right to accept any bid, reject any or all bids, to waive informalities and make the award in any manner deemed in the best interest of the City of Northville.

CITY OF NORTHVILLE  
By: Evan Milan  
Deputy City Clerk

## **PART I - REQUEST FOR PROPOSAL/BID**

### **INTRODUCTION**

City of Northville is accepting proposals from qualified playground equipment manufacturers, suppliers or contractors to provide a performance-based design and development of a new playground at Ford Field Park, Northville, MI. The new playground will replace an existing "Leathers" playground, to be removed by Contractor, and is to be built within the general area of the previous playground. An existing topographic map is provided illustrating the area, please refer to the attached "Playground Development and Staging Plan" for reference. A CAD drawing is provided for your use to layout and illustrate your company's playground configuration for this proposal. All costs in developing your proposal submittal will be the bidders cost and no reimbursement will be provided by the City for time, labor, materials, transportation or any other related cost to develop the submission.

### **BUDGET**

The budget for this project is **\$1,000,000**. The intent of this project is to provide all labor, equipment, and installation for this amount.

The budget indicated shall include:

- ☐ All Playground Equipment layouts and information displayed in the bid/presentation.
- ☐ Mobilization/Shipping/Freight/Storage.
- ☐ Site Preparation including sub-grade, structural and base materials.
- ☐ Protective Safety Surface (i.e. engineered wood fiber and/or synthetic surfacing).
- ☐ Polyethylene edging to contain surfacing and form a clean transition.
- ☐ Installation (all labor, materials, overhead, profit and fringe benefits).
- ☐ Excavation for sub-grade, base materials, backfill, drain tile and related appurtenances.
- ☐ Restoration of existing features, if disturbed outside of the area of demarcation.
- ☐ Maintenance during construction period.
- ☐ Guarantees/Warranties.
- ☐ Equipment Storage (temporary fence, lock box, etc.) and overall security.
- ☐ Geotextile Fabrics, connecting walks, ADA transitions and other related subsurface materials.
- ☐ Drainage structures underneath the play surface/structure.
- ☐ Access connecting to existing walks/entrances to the playground surfacing

### **SPECIFICATIONS FOR INCLUDED ITEMS**

Specifications for equipment, protective safety surfacing, play edging, sub-drainage under the equipment, installation, maintenance, and guarantees are discussed by divisions included in this document.

All equipment and design shall meet ADA, CPSC, and ASTM current standards.

## **PART II - SCOPE OF SERVICES**

### **THE DESIGN BUILD APPROACH**

The “Performance-Based” approach is basically a “Design-Build” approach and has been selected to provide an efficient process showing quick results at a fixed cost. This result-oriented process provides an opportunity for Owner input and produces a variety of manufactured design solutions within a specific budget. This process focuses on product selection which allows manufacturers to be innovative in their design, quantity and configuration using their products and/or, ability to provide other specialized features called for by the Owner. Options/alternatives will be allowed within the Owner’s budget. If the submittal provides products beyond the fixed budget amount in the design they will need to be described clearly labeled with an additional cost for those items which will include all labor, materials and fringe benefits.

### **THE PERFORMANCE-BASED PROCESS**

#### **A. SITE VISITATION**

A **mandatory pre-bid meeting** will be held on **Tuesday, March 18, 3:30 am** at the project site, 151 N. Griswold, Northville. Site visitation by the manufacturer is mandatory for the design of the playground. A map for the site location and existing development area is provided for your use. It also indicates the staging areas.

#### **B. PLAN PREPARATION**

This project includes playground facilities for **Ford Field Park** with fixed budgets for cost control. The budgeted amount is to include; equipment, protective safety surfacing, edging, design, installation, excavation, restoration, inspection, maintenance tips/kit, guarantees, subsurface, and geotextile fabric. **The due date for the playground design will be April 10<sup>th</sup> at 11:00 a.m. local time.** One layout plan will be required and (2) two - three dimensional (3-D perspectives) layouts from opposite views is required as a minimum. One copy of the layout plan and the 3-D perspectives will be mounted on foam core board for display purposes. A non-mounted (paper copy) is also required.

#### **C. PRESENTATION**

The presentation meetings will be scheduled within two (2) weeks after the bids are received. These meetings allow the Manufacturers-Suppliers to present their design(s) to the Playground Committee and the administration. A 40-minute meeting will be scheduled to allow for a timely presentation and dialog of questions and answers. Up to two manufacturer’s representatives may be present at the meeting.

#### **D. IMPLEMENTATION**

Once a playground design (with possible modifications) has been selected and approved, the Installer of the selected team(s) a contract will be signed. After which the manufacturer may order materials and begin work according to an approved schedule that will be determined by both the playground manufacture rep and the Owner. Once approved, the contractor will excavate site to required depth, assemble and install the playground equipment, edging, and protective safety surface in

accordance with ADA, CPSC, ASTM, and manufacturer's specifications. ADA, CPSC, ASTM will prevail over the manufacture's specifications. The Contractor is responsible for storing the equipment on site. The Owner is not to be held responsible for any damage to the playground equipment while in storage. It is assumed the contractor will provide a "lock box" or other means to protect the equipment during latent periods.

#### **E. CONSTRUCTION INSPECTION**

During construction, the contractor, manufacturer, supplier and designer shall supervise the installation. Once the installation is complete, the manufacturer shall certify in writing to the Owner that the installation has been completed in strict accordance with the manufacturer's specifications and requirements that meet ADA, CPSC and ASTM Standards. The Owner's Representative will be allowed to inspect any/all of the work as it progresses throughout the installation process. The Contractor will keep the Owner's representative informed weekly, by issuing a progress report including the next week's anticipated progress. The contractor will notify the Owner 7 days in advance of serving their notice of "Substantial Completion" to allow the Owner to inspect the playground and environs.

#### **F. INSPECTION**

The manufacturer/supplier shall conduct a site inspection of the installation at the end of one (1) year following the completion of the work. A written inspection report shall be provided to the Owner regarding the condition of the equipment and installation/workmanship and any problems which need to be addressed. Touch ups will be noted and the manufacturer/representative will provide assistance and/or supplies/products to correct any deformity and/or latent defects before final acceptance.

#### **G. FUTURE MAINTENANCE**

The manufacturer/supplier shall provide maintenance to the areas on site affected by the playground installation and throughout the duration of the contract. Following installation, the manufacturer/supplier shall provide a written maintenance plan to the Owner which describes, in detail all maintenance requirements, inspection, etc. which will need to be accomplished during the life of the equipment. For the purpose of this project the term "life" shall be defined as a period of seven years after the date of substantial completion. Following the installation the manufacturer/supplier shall also provide a maintenance kit (touch-up paint, parts, etc.) to the Owner.

#### **H. GUARANTEE**

The Contractor shall guarantee in writing all workmanship for a period of one (1) year following substantial completion by the Manufacturer/Representative to the Owner. The poured in place surfacing should carry a 5 year guarantee.

#### **I. AS BUILT DRAWINGS**

The Contractor shall furnish documents/plans with layouts and dimensions noted for the Project that includes any deviation from the plans that might have occurred during construction. The Contractor will also show the Owner/project representative those

areas that have been modified and include any details of equipment and/or modifications.

### **PART III - TEAM SELECTION**

#### **CRITERIA**

The Owner and their Consultants shall review the proposals presented from the various design/build firms and playground manufacturers or their representatives.

A site visit is mandatory for the design of the playgrounds. In addition, the following elements will be strongly considered:

- ☐ Meeting the requirements of this RFP and included Specifications
- ☐ Narrative describing your theme and innovative approach to this playground design
- ☐ Quality of products to be indicated – post size, fasteners, warranties, etc.
- ☐ Variety and quantity of playground events and equipment options
- ☐ **Design innovation and play configuration demonstrating “play value”**
- ☐ Past performance and qualifications (at least 3 references of similar projects)
- ☐ Staff or sub-contractors shall have **at least one** Certified Playground Safety Inspector assigned to the project and who will stay assigned throughout the project, unless the Owner requests a change, or your bid will be considered invalid
- ☐ Provide evidence that your company is IPEMA certified
- ☐ Include any other certifications and/or awards your company has received that demonstrates excellence in your field

Selection of the firm for this project followed by a contract will be awarded based upon, but not limited to the following criteria:

#### **A. FIRM REPUTATION AND HISTORY**

Provide the name, headquarter address, phone number, email, company Facebook page, etc., of your firm’s contact representative and indicate if you have subsidiaries or branch offices. Present the reputation of the firm and information about its history so that we know who you are and what type of work can be produced.

#### **B. EXPERIENCE**

Provide experience of the firm in regard to preparing and implementing plans for similar type/size structures. Please provide at least three (3) projects, including references, of similar size, and scope within the past five years.

#### **C. TEAM MEMBER QUALIFICATIONS**

Who is the president, project manager, foreman etc. Present the qualifications of each member of your team and length of time they have been employed with the company and who will be directly working on the project. **At least one member must be a Certified Playground Safety Inspector (CPSI) from an accredited agency/association.** Please give the name of the sanctioning agency. The person’s

certification shall not be allowed to lapse during the construction period of the installation process. Please include a copy of the team member's certification.

**D. COMMUNICATION**

Demonstrate your ability to prepare clear concise documentation and the ability to communicate and work cooperatively with a Client (City of Northville) is important. Let us know your construction process and how you will communicate with us throughout the project. Weekly correspondence will be required.

**E. ACCESSIBILITY**

Describe your accessibility and ability to work closely with the Owner, or Owner's representative.

**F. SUBMITTALS**

- Layout plan: Show edging, surfacing type and location, equipment layout, child capacity for each component/play piece, and total capacity for each age-appropriate area.
- Two (2) 3-Dimensional views of all Modular structures. One paper exhibit mounted on foam core board.
- Completed Proposal Form
- All required Submittals "See Check List for Submittals"

**PROPOSAL CONTENTS**

The contents of the proposal submitted of the successful vendor will become part of the contractual obligation of the vendor if a contract ensues. An equipment list with description is required. Failure of the successful vendor to accept these obligations may result in cancellation of the award.

**SITE PLAN**

The site data that is provided by the Owner shall be utilized by the vendor to prepare a site plan for the proposed playground development. The Bidder is to provide edging and safety surface (rubber or wood fiber) throughout the proposed. Indicate square footage for each differing type of surfacing, if integrated. Also, show the play area with fall zones, transition to existing equipment, and ADA accessible route into the new play equipment area.

**CONTRACT**

Negotiations as to the dollar amount and other factors may be undertaken with respondents whose proposals show them to be the best qualified, responsible and capable of performing the work. The City reserves the right to consider proposal modifications received at any time before award is made if such an action is deemed to be in the City's best interest.

The Contract Documents shall consist of the Proposal, General Conditions, Detailed Specifications, Contractor's Declaration, Contractor's Evaluation Data, Bonds, Agreement, Contract Drawing(s) and any additional documents which may be made a part of the Contract.

The Contract Documents are complimentary, and what is called for by any one shall be as binding as if called for by all. The intention of the Contract Document is to include in the

Contract price the cost of all superintendence, labor and materials, and all other expense necessary for the proper execution of the work.

The specifications, schedules, and plans and drawings herein referred to shall be taken together to explain each other and to make the whole, taken together consistent. Work on the plan and not mentioned in the specifications, or vice versa, shall be done the same as if shown by both, and in case of conflict, the Owner will determine which will govern. In case of ambiguity in the plans or specifications, the Owner will decide as to the correct interpretation thereof. The Contractor will notify the Owner of any inconsistencies prior to signing the Contract, otherwise they must abide by the terms of the contract.

In interpreting the Contract Documents, words describing materials or work which have a well-known technical or trade meaning, shall be construed in accordance with such trade/industrial/professional standards.

#### **PART IV - INSTRUCTION TO BIDDERS**

##### **ADDENDA**

All Addenda issued during the time of bidding shall be listed in the proposal. Such addenda will become a part of the Contract. Note all addenda in the space provided in the proposal and on the outside of the envelope containing the bid.

##### **COMPLETE PROPOSAL**

Submit proposals in duplicate on the forms provided by the Architect. All blank spaces in the proposal forms shall be fully completed. Completed forms shall be without inter lineation, alteration or erasure. Proposals shall not contain a recapitulation of the work to be done. In case of discrepancy between the amount stated in writing and the amount stated in figures, the amount stated in writing shall govern. An authorized official shall sign the proposal in longhand on behalf of the company and provide their proper name, business address and status (individual, partnership or corporation). Oral, fax or telephone proposals or modifications will not be considered. Submit proposals in opaque envelopes, addressed and labeled on the outside to: **City of Northville 215 W. Main Street, Northville, MI 48167**

##### **NON-DISCRIMINATION**

The Bidder, if awarded a contract for this work, shall agree to not discriminate against any employee or applicant for employment, in the performance of this contract, with regards to hire, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of age, race, color, religion, national origin, sex, height, weight, marital status, tenure or handicap. The Contractor shall further agree that these non-discrimination terms shall be required of all SUBCONTRACTORS employed in the performance of this work.

##### **LIABILITY FOR TAXES**

The Bidder, if awarded a contract for this work, shall be responsible for all "sales taxes" and "use taxes" as applicable to this work.

##### **SAFETY REQUIREMENTS**



It is understood that the Contractor shall perform all work under this contract in accordance with all applicable provisions, policies, rules and standards of all public agencies having jurisdiction.

### **PROPOSAL GUARANTEE**

Each proposal shall be accompanied by a **bid bond** from a safety company in the amount of **five percent (5%) of the base bid**, payable to City of Northville as a guarantee of good faith. If the successful bidder fails to furnish satisfactory bonds and insurance within ten (10) business days after Notice of Award, such guarantee shall be forfeited to City of Northville as liquidated damages. The guarantees of the **three most qualified** bidders will be retained until the bonds and insurance of the Contractor have been approved by City of Northville. The bid guarantees of all other bidders will be returned within ten days after the bid opening.

### **BONDING REQUIREMENTS**

The Contractor shall furnish a Performance Bond and Labor and Materials Payment Bond for 100% of the contract. **All bonds shall be dual obligee bonds naming the Owner as an additional obligee.** Form of bonds shall conform to current AIA document, or other form approved by City of Northville, and Public Works Bonding Law, Act #213. Bonds shall not contain a time limit and shall waive notice of any alteration. The cost of the bonds shall be included in the cost of the work.

### **TIME OF COMPLETION**

The project shall be to substantial completion (90%) on or before October 30<sup>th</sup> 2025. The project should be at final completion (100%) on or before November 30<sup>th</sup> 2025.

### **INDEMNITY AND INSURANCE**

Contractor agrees to the fullest extent permitted by law, to defend, indemnify, and hold harmless the Owner, its employees, elected and appointed officials, agents, and volunteers from and against any and all claims, injuries, demands, damages, costs, expenses, liability, suits, (including actual attorney's fees and costs of defense), or liability (including actual attorneys' fees and cost of defense), proceedings, orders, and decrees of every nature and description arising before, during, or after completion of the Contractor's work caused or alleged to have been caused by, arising out of, or resulting from or occurring in connection with the performance of the work, lack of performance of the work, and / or any activity associated with the work of the contractor, its agents, employees, subcontractors, or sub-consultants.

Nothing in this agreement requires the Contractor to defend and/ or indemnify the Owner for claims, injuries, demands, damages, costs, expenses, liability, suits, (including actual attorney's fees and costs of defense), proceedings, orders, and decrees caused by, arising out of, or resulting from the sole negligence of the Owner, its employees, elected and appointed officials, agents, and volunteers, or for any amount greater than the degree of fault of the contractor and that of his or her respective sub-consultants or subcontractors. The obligation of the contractor to defend, indemnify and hold harmless the Owner shall survive and continue after final payment, completion of the work, and completion and/or termination of this agreement.

The Contractor shall procure and maintain during the life of this Agreement the insurance requirements as listed below and furnish within fifteen (15) working days of Notice of Award,

Certificates of Insurance as well as **required endorsements** providing insurance coverage as follows:

- (A) Workers' Compensation Insurance – including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
- (B) Comprehensive General Liability Insurance – on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and aggregate. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractor Coverage; (D) Broad Form General Liability Extensions or equivalent, including Explosion, Collapse, and underground (XCU), if applicable.
- (C) Automobile Liability Insurance - Including Michigan No-Fault Coverage's with limits of liability no less than \$1,000,000 per occurrence, combined single limit for bodily Injury, and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and hired vehicles.
- (D) Additional Insured – commercial General Liability and Automobile Liability, as described above, shall include an endorsement stating the following shall be additional Insured: The City of Northville, all elected and appointed officials, all employees, and volunteers, all boards, commissions, and/or authorities and board members, including employees and volunteers thereof. It is understood and agreed that by naming the City of Northville as additional insured coverage afforded is considered to be primary and any other insurance the City of Northville may have in effect shall be considered secondary and/or excess.
- (E) Cancellation Notices – All policies, as described above, shall include an endorsement stating that it is understood and agreed that thirty (30) days, ten (10) days for non-payment of premium, Advance Written notice of Cancellation, Non-Renewal, Reduction, and/or Material Change shall be sent to: Dianne Massa, Clerk, Cit of Northville, 215 W. Main Street, Northville, Michigan 48167.
- (F) Proof of Insurance – The contractor shall provide the Owner at the time that the contracts are returned by him/her for execution, a copy of Certificates of Insurance as well as **required endorsements** for all coverage's as listed above.

If any of the above coverage expires during the term of this agreement, the contractor shall deliver renewal certificates and/or policies and endorsements to the Owner at least ten (10) days prior to the expiration date. All coverage shall be with insurance companies licensed and admitted to do business in the State of Michigan and acceptable to the Owner. The requirement above should not be interpreted to limit the liability of the contractor. All deductibles and SIR's are the responsibility of the Contractor.

It shall be the Contractor's responsibility to provide similar insurance for each subcontractor or to provide evidence that each subcontractor carries such insurance in like amount showing the City of Northville as "ADDITIONAL INSURED" prior to the time such subcontractor proceeds to perform under the contract.

The Manufacturer shall provide Certificates of Product Liability Insurance to City of Northville evidencing the following:

- A. Products/Completed Operations Liability on an Occurrence Form. Insurance shall apply to bodily injury and property damage that occurs during the policy period. Damages because of bodily injury include damages claimed by any person or organization for care, loss of services, or death resulting at any time from the bodily injury.
- B. A Limit of Liability for Products/Completed Operations Liability of no less than \$2,000,000.
- C. A deductible not to exceed \$25,000
- D. Insuring Companies shall have an A.M. Best Company rating of A or higher and shall be licensed to operate within the State of Michigan.

The Contractor shall carry Fire and Extended Coverage Insurance under a form of Builder's Risk Coverage of the work at the site to the full insurance value thereof on its installations and materials. The policy shall include Vandalism and Malicious Mischief. Contractor shall carry glass breakage and theft insurance at its own discretion as such coverage will not be carried by the Owner on this project.

#### **LIQUIDATED DAMAGES**

Owner and Contractor recognize that time is of the essence of this agreement and that Owner will suffer financial loss if the work is not completed within the times specified, plus any extensions allowed in the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay Owner **Two Hundred Dollars (\$200.00)** for each day that expires after the time specified, for Substantial Completion, until the work is substantially complete. After Substantial Completion if Contractor shall neglect, refuse or fail to complete the remaining work within the contract time extension, additional charges shall continue until work is completed.

BIDDER'S PROPOSAL FORM  
FOR  
City of Northville  
Ford Field Park Playground

City of Northville  
215 W. Main Street  
Northville, MI 48167

Dear City of Northville:

The undersigned having familiarized itself with the existing conditions of the Project Area affecting the cost of the work, and with the Bidding Documents, which include the Invitation for Bids, Instructions to Bidders, the Proposal Form, Addenda (if any), Statement of Bidder's Qualifications, Form of Labor & Material Bond, Form of Performance Bond, General Conditions, Supplementary Conditions, Technical Specifications (including General Requirements), Drawings as prepared by Spalding DeDecker, and Form of Agreement, hereby proposes and agrees to furnish all permits, materials, labor, supervision, equipment, tools, incidentals, appurtenances, services, bonds, and insurance required to complete the work in accordance with the specifications and conditions contained herein in consideration of the sum or sums stated below.

Bidder \_\_\_\_\_

Complete Address \_\_\_\_\_

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

Title \_\_\_\_\_

Witness's Signature \_\_\_\_\_ Date \_\_\_\_\_

**CITY OF NORTHVILLE  
FORD FIELD PARK PLAYGROUND**

**BASE BID WORK**

This section of the proposal is to include items which are part of the set budget as defined by the plans and project manual. This includes but is not limited to the bid items listed below. The bidder must provide the quantities for the following items: Engineered wood fiber surfacing, unitary synthetic surfacing; geotextile fabric, sub-surfacing, and concrete walk. These quantities are to be based on the surfacing area layout indicated on the included drawings, available space, and area required for the new equipment layout. The City's "wish list" is included. The bidder shall attach an equipment list with manufacturer's name, model numbers and quantities of play equipment which are included in the bid.

<b>DESCRIPTION</b>	<b>QTY.</b>	<b>UNIT</b>	<b>TOTAL</b>
<b>Demolition and Removal of Existing Play Structure</b>	1	LS	
<b>Engineered Wood Fiber Surfacing (15" depth uncompacted, 12" compacted) Includes below</b>		SF	
Sub-surface drainage (6" depth of pea stone or approved equal)			
Geotextile Fabric			
<b>Unitary Poured-in-Place Surfacing</b>		SF	
<b>Play Edging - Concrete curbing</b>		LF	
<b>Concrete Walk</b>		SF	
<b>Archway</b>	1	EA	
<b>Boulders</b>	11	EA	
<b>Stones for Path</b>		LS	
<b>Drainage Structure Alterations to Connect Underdrain</b>		LS	
<b>Custom Benches (2)</b>	1	LS	
<b>Fence</b>		LF	
<b>Bike Loops</b>	4	EA	
<b>Site Preparation</b>	1	LS	
<b>Mobilization</b>	1	LS	
<b>SESC Measures</b>	1	LS	
<b>Temporary Construction Barrier Fencing</b>	1	LS	

<b>Move Existing Clock and Base</b>	<b>1</b>	<b>LS</b>	
<b>Lock Box or Storage Security</b>	<b>1</b>	<b>LS</b>	
<b>Machine Grading/Excavation</b>	<b>1</b>	<b>LS</b>	
<b>Site Restoration - topsoil, seeding, mulching and roping</b>	<b>1</b>	<b>LS</b>	
<b>Landscaping</b>	<b>1</b>	<b>LS</b>	
<b>Play Equipment - attach list</b>	<b>1</b>	<b>LS</b>	
<b>BASE BID TOTAL (EXACTLY \$1,000,000)</b>			<b>\$1,000,000</b>

All bids should total \$1,000,000 no exceptions

**LUMP SUM BASE BID WORK:** Including the bidders equipment list, includes all work indicated in the Project Manual and on the Drawings for this Project. All work will be awarded under one contract.

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

### **UNIT PRICES**

The bidder proposes to add or delete work in this project for the following unit prices as authorized in writing by the Owner to include all permits, labor, materials, equipment, profit, tools, incidentals, overhead, taxes, and the like complete. Such authorization will be defined by the issuance of a change order.

<b>DESCRIPTION</b>	<b>UNIT</b>	<b>UNIT COST</b>
<b>Engineered Wood Fiber Surfacing (15" depth un-compacted, 12" compacted) Includes below</b>	<b>SF</b>	
Sub-surface drainage (6" depth of pea stone or approved equal)	-	
Geotextile Fabric	-	
<b>Unitary Poured-in-Place Surfacing</b>	<b>SF</b>	
<b>Play Edging – Concrete Curbing</b>	<b>LF</b>	
<b>Temporary Construction Barrier Fencing</b>	<b>LF</b>	
<b>Lock Box or Storage Security</b>	<b>LS</b>	
<b>Excavation</b>	<b>CY</b>	
<b>Hauling Off Site</b>	<b>CY</b>	

Abbreviations: CY = Cubic Yard, EA = Each, LF = Linear foot, LS = Lump sum, SF= Square Foot

## **CONTRACT TIME AND LIQUIDATED DAMAGES**

- A. **TIME:** Time is and shall be considered of the essence of the Contract. If the Contractor fails to complete the work on or before the completion date, liquidated damages will be assessed as stated under "Delays and Liquidated Damages."
- B. **DELAYS:** Delays shall be separated into three (3) categories as follows:
- Category A - Delays for which the Contractor is responsible.  
(Reason stated)
  - Category B - Delays for which the Contractor is not responsible.  
(Reason stated)
  - Category C - Delays caused by adverse weather conditions, such as heavy rain, extreme cold, snow, etc. (Dates to be recorded with evidence – weather report)

The Contractor will not be eligible to request an extension of the contract completion date based on delays falling into category A above.

Delays for which the Contractor is not responsible, category B, shall include delays caused by Acts of Providence, or by general strikes, or by court injunction, or by stopping of the work by the Owner because of any emergency or public necessity, or by reason of alterations ordered by the Owner. Delays falling into category B shall in no way affect the validity of the contract, but the time limitation of the contract shall be extended by the same amount of time as such delay may cause to be lost; provided, however, that formal claim for such extension shall be made in writing by the Contractor within one week after the date upon which such alleged delay shall have occurred.

The Contractor may request an extension of the contract completion date for delays falling into category C above, subject to the following conditions:

The Contractor shall schedule the progress of the project work based on the premise that adverse weather conditions will result in the loss of one workday, excluding Saturdays and Sundays, per week. If, during the specified contract completion period, the Contractor is prevented from working on the project because of adverse weather conditions in excess of the average of one workday per week, the Contractor may request an extension of the contract completion date based on the difference between the actual workdays lost and the number of weeks allowed for completion of the project work.

**REQUEST FOR TIME EXTENSION:** Requests for extension of time shall be filed by the Contractor with the Architect. The request shall be in writing and state the reasons for the extension. In any case the request for extension of time shall be filed within one week (7 calendar days) following the occurrence of the delay for which the time extension is requested. Failure to notify the Architect as provided herein, may constitute a waiver of claim for an extension of time. The Architect may approve or deny the extension of time

request. Approved time extensions will be granted in writing. Any contract time, as extended, shall thereafter be binding upon the Contractor and Surety as if they appeared in the contract, originally.

**LIQUIDATED DAMAGES:** Should the work under this Contract not be finished within the time specified in the original Contract or by approved time extensions for reasons outlined herein, it is agreed that there may be deducted by the Owner from the final certificate to the Contractor, a sum computed at the rate of Two hundred dollars (\$200.00) per calendar day for each and every calendar day beginning the day following the scheduled date of completion and continuing until the date of final acceptance of the work. Said sum of Two hundred dollars (\$200.00) per day, in view of the difficulty of estimating such damages with exactness, is hereby expressly fixed and agreed upon as the damages which will be suffered by the Owner for reason of such defaults.

It is understood that the above deduction of Two hundred dollars (\$200.00) per day, is not a penalty, but money due to be treated as liquidated damages.

### **STARTING DATE**

Unless otherwise stated herein or unless otherwise agreed upon by the Contractor and Owner, the Contractor shall commence work after receiving notification that the project contract has been signed by the Owner and with a start date of \_\_\_\_\_.

### **COMPLETION DATE**

The completion date for this project shall be \_\_\_\_\_. Bidder will commence work \_\_\_\_\_ and following Contract Award.

### **BID SECURITY**

5% Bid Security in the amount of \_\_\_\_\_  
(\$ \_\_\_\_\_) in the form of a bid bond is submitted herewith.

### **LIST OF SUBCONTRACTORS**

The Contractor shall submit a list of subcontractors to be approved by the Owner.

### **DECLARATION OF CONTRACTOR**

The undersigned, as Bidder, hereby declares this bid is made in good faith, without fraud or collusion with any person bidding, and that the Project Manual, and Drawings (including any soil boring logs or geotechnical information provided) and the project site have been examined. The Bidder confirms that he/she is familiar with the location of the work described and is fully informed as to the nature of the work and the conditions relating to its performance.

The Bidder acknowledges that all information provided by the Owner and the Engineer or Landscape Architect regarding the site conditions have been provided as a matter of convenience to all bidders, and understands that the Owner and Engineer or Landscape Architect makes no warranties or representations of any nature whatsoever regarding such conditions, including subsoil conditions. The Bidder acknowledges that he/she has not relied upon any representations from the Owner and Engineer or Landscape Architect, its agents or employees, as to any conditions to be encountered in accomplishing the work, including



subsoil conditions, and that the bid is based solely upon the Bidder's own independent judgment.

The Bidder is responsible for providing 15" of safety surfacing, engineered wood fiber or synthetic surfacing, or a combination of both. They are responsible for the safety surfacing throughout the newly installed play equipment with safety zones, transitions to other equipment areas, and ADA accessible routes within the new play area.

The Bidder certifies that the drawings and specifications have been examined, and that he/she has reviewed the proposed construction methods and finds them compatible with the site conditions which the Contractor anticipates based upon its investigation of this project.

The Bidder shall complete the work under any job or field condition which is present or is encountered and he shall complete the work under whatever conditions exist, whether or not he anticipated those site conditions.

### **REJECTION OF BIDS**

In submitting this bid, the bidder understands that the right is reserved by the Owner to reject any and all bids at its sole discretion.

### **AGREEMENT / BONDS**

If written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned within sixty (60) days after the opening thereof, or at any time thereafter before this bid is withdrawn, the undersigned agrees to execute and deliver an agreement in the prescribed form and furnish the required bonds within ten (10) days after the agreement is presented to him for signature.

### **INSURANCE CERTIFICATES**

The undersigned also agrees to provide certificates of insurance as required by City of Northville and State of Michigan statutes. Insurance certificates shall contain a clause whereby the insurer shall give not less than thirty (30) days' notice in writing to City of Northville prior to cancellation, termination, or material change in the terms of the policy. Spalding DeDecker shall be named as insured on all such policies required.

### **ADDENDA**

The following addenda was issued and acknowledged.

#1 date \_\_\_\_\_ #2 date \_\_\_\_\_ #3 date \_\_\_\_\_

Signed,

Firm Name: \_\_\_\_\_

By: \_\_\_\_\_  
(Type Name)

By: \_\_\_\_\_  
(Bidder's Signature)

Title: \_\_\_\_\_

( ) Individual    ( ) Partnership    ( ) Corporation in \_\_\_\_\_ State

Official Business Address:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Business Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Date: \_\_\_\_\_

**CHECK LIST FOR BIDDERS**  
**(Check and submit with Bid)**

All information required by the terms of the Bid Documents must be furnished by the Bidder. The following is to be filled out by the Bidder. False statements, mistakes or omissions may result in the rejection of your bid.

Important items for you to check are included in but not limited to, those listed below. This checklist is furnished only to assist you in submitting a proper bid. Check as you read.

Yes	No	
		Completed Proposal Forms
		All play equipment meets or exceeds recommendation set forth by the U. S. Consumer Product Safety Commission 1997.
		All play equipment complies with ASTM F1487-01 Standard Consumer Safety Performance Specification for Play Equipment for Public Use.
		The playground as designed by the Manufacturer or Supplier complies with ADAAG for ADA Standards and contains the minimum required number of accessible play events as defined by ADA Standards.
		Every piece of proposed equipment has been independent laboratory tested and is certified by the International Playground Equipment Manufacturers Association (IPEMA). If you answered NO please provide a list of proposed equipment that is not IPEMA certified.
		Play equipment manufacturer carries at least \$2 million dollars in product liability insurance.
		Play equipment manufacturer carries at least \$2 million dollars in general liability insurance.
		Bidder has personally inspected the site of the proposed work to arrive at a clear understanding of the conditions under which the work is to be done.
		Play equipment proposed by bidder fits within the defined project area as indicated on the site plans.
		Bidder has provided one (1) plan view and two (2) 3-D presentation boards that include pictures and model numbers for each piece of equipment being proposed. (Catalogue cut outs are acceptable)
		Designs and products comply with specification 02901.
		Bidder has provided submittals as requested by specification 02901, 1.03, located in Division 2: Site Work.

## **Product Minimum Specification and Design Checklist**

(Check and submit with Bid)

(Bidder must indicate yes to all items below by initialing the line to the left of each item in order to qualify to bid)

**YES    ITEM**

### **POSTS/UPRIGHTS**

\_\_\_\_\_ Structures for 5-12 year olds

All posts shall be aluminum with an outside diameter of 5" min. Posts shall have a minimum wall thickness of .118" extruded from aluminum alloy. Minimum yield strength shall be 35,000 psi. Minimum tensile strength shall be 38,000 psi. Post tops shall be a minimum of 44 inches above the deck surface. Post shall be set at a minimum depth of 42" below top of surfacing with a finished grade marker at this location. Post shall have a minimum 50-year warranty.

\_\_\_\_\_ Structures 2-5 years old

All posts shall be aluminum with an outside diameter of 3.5". Posts shall have a minimum wall thickness of .118" extruded from aluminum alloy. Minimum yield strength shall be 35,000 psi. Minimum tensile strength shall be 38,000 psi. Post tops shall be a minimum of 38" inches above the deck surface. Post shall be set at a minimum depth of 42" below top of surfacing with a finished grade marker at this location. Posts shall have a minimum 50-year warranty.

\_\_\_\_\_ Caps

All upright shall have caps which are to be permanently installed at the factory. Caps shall be secured to posts with a minimum of two self-sealing rivets, three rivets are preferred. Caps shall have a minimum 50-year warranty.

\_\_\_\_\_ Concrete Footings

Posts are to be set at a minimum depth of 36" below the surfacing. Concrete footings are to be a minimum 6" thick x 12" square/round or approved precast block/concrete.

### **DECKS**

Decks shall be manufactured from a single piece of 10-13 gauge sheet steel. The steel shall be perforated for drainage. Holes are to be no larger than 5/16". Four sided decks are to have a minimum surface area of 2111 square inches. Three sided decks are to have a minimum surface area of 985 square inches. Deck shall support a minimum of 1.5 PSI when assembled. All deck connections are to be made from the underside of the deck with no exposed fasteners on the deck perimeter. Deck shall conform to ASTM F-1487-01. Decks shall be warrantied for 15 years.

### **PIPE WALL BARRIERS/ HANDRAILS/HAND LOOPS/HANDHOLDS AND HAND RUNGS**

The rung enclosure shall be fabricated of 1.029"-1.315" O.D., wall thickness of .075"-.120" galvanized 14 gauge steel tubing. Interior and exterior of tubing shall be galvanized. The

rung enclosure shall be an all welded assembly and shall be coated with a polyester powder coating in conformance with the specifications outlined herein, after fabrication. All welds are to be cleaned and galvanized after welding is complete. PVC coated 11 gauge steel is an acceptable alternative. The warranty on pipe wall barriers and handrails shall be for 10 years.

#### **ROTATIONALLY MOLDED PRODUCTS**

All polyethylene shall be first quality linear low-density material with UV-stabilized color and an anti-static compound additive. Wall thickness shall be at least .25". The tensile strength shall be 2,500-2,900 PSI. All rotationally molded products shall meet or exceed the following specifications: ASTM Density (ASTM D-1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790). The warranty shall be for 10 years.

#### **HARDWARE**

All hardware shall be stainless steel, blue dichromate or yellow dichromate. Manufacturer shall provide special installation tools for pinned fasteners. Hardware shall have a 50-year warranty.

#### **POWDER COAT FINISH**

Shall be an electrostatically applied polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a three-six-stage bath system. Coating shall be applied at 2-5 mils. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Pencil Hardness H (ASTM D-3363), Abrasion (ASTM 1907), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D-2242, Salt Spray ASTM B-117 & Fadometer 300 hours with no loss of gloss). Owner shall receive touch-up paint in colors to match powder coating.

#### **WEAR PADS**

Shall be a minimum of 3' X 3' and meet CPSC requirements for a 4' fall height beneath single user swings and slide exits. Wear pads beneath tire swings shall be a minimum of 4'x 6' and meet CPSC requirements for a 4' fall height. Wear pads beneath single post rotational equipment shall be 4'x6'. Pads shall have a minimum 2" thickness.

## **CHECK LIST FOR SUBMITTALS**

(Check and submit with bids)

- \_\_\_\_\_ Check List for Bidders.
- \_\_\_\_\_ Product Minimum Specification and Design Checklist.
- \_\_\_\_\_ Check List for Submittals (this sheet).
- \_\_\_\_\_ Layout plans indicating all proposed equipment, play edging layout, dimensions of edging and between each piece of equipment. (Scaled drawings)
- \_\_\_\_\_ (2) Color Copies (minimum of 24" x 36") of 3-Dimensional View of proposed equipment. One on foam core board and the other on paper.
- \_\_\_\_\_ Completed Proposal
- \_\_\_\_\_ Bid bond in the amount of 5% of the total Bid
- \_\_\_\_\_ Project Schedule (May be revised at Owner's discretion)
- \_\_\_\_\_ Manufacturer's experience record, include 3 references minimum of projects of similar size and scope within the past 5 years
- \_\_\_\_\_ Installers experience record, include 3 references minimum and all CPSI certificate of Installation crewmembers
- \_\_\_\_\_ Certificates of product liability.
- \_\_\_\_\_ Description of equipment storage method (on site - lock box, 8' chain link fence, security cameras, etc).
- \_\_\_\_\_ Manufacturer's specifications for decks, uprights, clamps, barrier, railing tubing, hardware, footings, safety surfacing, wear pads and powder coated finish.
- \_\_\_\_\_ Product Warranty(s)
- \_\_\_\_\_ Product samples of materials manufacturer deems superior to industry standard. Products will be evaluated for quality (optional submittal).

## **FORM OF AGREEMENT BETWEEN OWNER & CONTRACTOR FOR CONSTRUCTION**

THIS AGREEMENT, Made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and *City of Northville*, party of the first part, commonly referred to herein as the OWNER, and \_\_\_\_\_, party of the second part, commonly referred to herein as the CONTRACTOR;

WITNESSETH: That the said parties, each in consideration of the covenants and agreements on the part of the other herein contained, have covenanted and agreed, and do hereby covenant and agree, the party of the first part for itself, and the party of the second part, for itself and all its heirs, executors, administrators, and assigns, as set forth in the following ARTICLES OF AGREEMENT.

### **ARTICLE 1. CONTRACTOR'S OBLIGATION TO BUILD**

It is agreed that the said CONTRACTOR shall provide all playground equipment, protective safety surface, polyethylene timber edging, pea gravel, geotextile fabric, installation, excavation and site restoration at FORD FIELD PARK in City of Northville, MI, hereinafter called the PROJECT;

All in full accordance with and conformity to the Contract Documents for FORD FIELD PARK PLAYGROUND, a list of which is herein included and made a part of this agreement, and that he shall furnish all labor, materials, tools, power, permits, transportation, and construction equipment necessary therefore, excepting those things which are specifically stipulated therein to be furnished or done by the Owner and/or others.

### **ARTICLE 2. TIME OF COMPLETION**

It is agreed hereby that upon receipt of the written notice to proceed, the Contractor shall commence the work on \_\_\_\_\_ and shall prosecute the work under this contract with all due diligence at such points and with such force and in such manner and at such rate as will bring it to full completion on or before \_\_\_\_\_; and that in the event that Contractor's delay, not excused in the manner prescribed in the specifications, shall occur, Contractor shall compensate the Owner in damages for expense, inconvenience, or other loss occasioned to Owner by such delay.

### **ARTICLE 3. CONTRACT SUM**

The Owner shall pay the Contractor for his performance, subject to additions and deductions, in current funds as follows:

The expense of making good any damages to the Project or premises and the removal and replacement of materials or work rejected or condemned by the Owner as failing to conform with the requirements of the plans and specifications, which in the opinion of the Owner has resulted from a lack of reasonable diligence on the part of the Contractor, shall not be charged as items of cost.

The Contractor's proposal as submitted shall become part of this agreement and unit prices stated therein shall be binding upon both parties.

#### ARTICLE 4. PAYMENTS

The OWNER shall make payments to the Contractor as specified herein:

1. As of the last day of each month during which satisfactory progress has been made toward the final completion of the Project, the Contractor shall submit to the Owner an application for payment based upon the amount and value of the work which has been done under this contract during the month or since the date of the last previous estimate.

The Contractor shall submit, along with such application for payment, waiver of lien or sworn affidavits or other vouchers showing payments for materials for labor, payments to subcontractors and such other evidence of the Contractor's right to payment application, the Owner will pay to the Contractor on account a sum equal to ninety percent (90%) of the amount of such application except that the said Owner may deduct and retain out of any such partial payment, a sum sufficient to meet any undischarged obligations of the Contractor for labor and/or materials incorporated in the work.

2. As soon as practicable after the satisfactory completion of all work covered by this contract, the Contractor shall notify the Owner and request a final inspection of the Project; and, if the work is found satisfactory, shall submit to the Owner its request for final payment along with a sworn statement and conditional waiver of lien, or a receipt in full, from each manufacturer or dealer in materials covering all equipment and materials of every kind that have been furnished for this work or, in lieu of such receipt, he shall file a bill showing balance due on such equipment or materials. The Owner will then pay the Contractor except that the Owner may, at its option, deduct and retain such sums as he may deem to be necessary to meet the undischarged obligations of the Contractor for materials or labor expended upon this project.

The acceptance by the Contractor of this final payment shall operate as and be a release of the Owner from all claims and liability to the Contractor for anything done or furnished for or relating to the Project or for any act or neglect of the Owner or any persons relating to or affecting the Project.

3. Progress payments shall be made in the following manner: A single check each month to Contractor.

#### ARTICLE 5. CONTRACT DOCUMENTS

The Contract Documents are listed herein, and they are as fully a part of the Contract as if hereto attached or herein repeated: Plan Drawings entitled: Ford Field Park Playground.

#### ARTICLE 6. NOTICES



Notices to Owner shall be deemed sufficient if in writing and mailed, postage prepaid, addressed to, City of Northville, 215 W. Main Street, Northville, MI 48167, or to such address as may be designated in writing by the OWNER from time to time. Copies will be sent to Owner's representatives from Spalding DeDecker

Notices to Contractor shall be deemed sufficient if in writing and mailed, postage prepaid, addressed to:

\_\_\_\_\_, or to such other address as may be designated in writing by Contractor from time to time.

#### ARTICLE 7. INDEPENDENT CONTRACTOR

No provision or term of this Agreement herein contained shall be construed by the parties or by any other person as one creating an employer-employee relationship. It is hereby expressly understood and agreed that Contractor is an independent Contractor.

#### ARTICLE 8. APPLICABILITY OF CONTRACT

This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan applicable to contracts made and to be performed in this state. The invalidation of one or more terms of this contract shall not affect the validity of the remaining terms.

#### ARTICLE 9. WHOLE AGREEMENT CLAUSE

This written agreement embodies the entire agreement between the parties hereto. Any additions, deletions or modifications hereto must be in writing and signed by both parties.

IN WITNESS WHEREOF, CITY OF NORTHVILLE, as Owner,  
and \_\_\_\_\_, as Contractor,  
have caused this Agreement to be signed this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_.

OWNER:

CONTRACTOR:

By \_\_\_\_\_  
Signature

By \_\_\_\_\_  
Signature

Name \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

Telephone \_\_\_\_\_

Witness \_\_\_\_\_  
Signature

Witness \_\_\_\_\_  
Signature

## GENERAL CONDITIONS

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1. **DEFINITIONS:**      Wherever used in the Contract Documents, the following terms shall have the meanings indicated, which shall be applicable to both the singular and plural thereof:

**ADDENDA** - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the Contract Documents, Drawings, and Specifications, by additions, deletions, clarifications, or corrections.

**BID** - The offer or proposal of the Bidder, submitted on the prescribed form, setting forth the prices for the Work to be performed, and the time for start and completion of Work in calendar days.

**BIDDER** - Any person, firm, or corporation submitting a Bid for the Work.

**BONDS** - Bid, Performance, and Payment Bonds and other instruments of security, furnished by the Contractor and its Surety in accordance with the Contract Documents.

**CHANGE ORDER** - A written order to the Contractor, authorizing an addition, deletion, or revision in the Work within the general scope of the Contract Documents, or authorizing an adjustment in the Contract Price or Contract Time.

**CONTRACT DOCUMENTS** - Contract Documents shall include the executed Proposal and Contract, the Project Manual, all Addenda and Change Orders, all Drawings, and all required permits.

**CONTRACTOR** - The Bidder whose proposal is accepted by the Owner.

**CONTRACT** - The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Engineer, Landscape Architect, and Contractor; (2) between the Owner and a Subcontractor or Sub-subcontractor; (3) between the Owner and Engineer or Landscape Architect; or, (4) between any persons or entities other than the Owner and Contractor. The Landscape Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Landscape Architect's duties.

**CONTRACT PRICE** - The total monies payable to the Contractor under the terms and conditions of the Contract Documents.

**CONTRACT TIME** - The number of calendar days stated in the Contract Documents for the completion of the Work.

**DRAWINGS**- The graphic and pictorial portions of the Contract Documents which show the design, location, dimensions, characteristics and scope of the Work to be

performed and which generally include plans, elevations, sections, details, schedules, and diagrams.

**FIELD ORDER (OR CHANGE DIRECTIVE)** - A written order effecting a change in the Work not involving an adjustment in the Contract Price or an extension of the Contract Time, issued by the Landscape Architect to the Contractor during construction.

**FINAL COMPLETION** - That date as certified by the Engineer or Landscape Architect when the Project is completed and accepted by the Owner and when the Contractor has complied with all terms of the Contract.

**INSPECTOR** - An individual appointed by Spalding DeDecker to perform construction observation services including monitoring the progress of the Work at the Project Site.

**LANDSCAPE ARCHITECT** – Spalding DeDecker and their named Project Manager for the project.

If the employment of the Engineer or Landscape Architect is terminated by the Owner, the Owner may employ a new representative or firm (licensed by the State of Michigan to practice landscape architecture, architecture, or engineering) against whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be the same as the former Engineer or Landscape Architect.

**MATERIALS** - All items or substances necessary to be incorporated into the Project to produce the construction required by the Contract Documents.

**MODIFICATION** - A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order (Field Order) for a minor change in the Work issued by the Architect.

**NOTICE OF AWARD** - The Written Notice of the acceptance of the Bid from the Owner to the successful Bidder.

**NOTICE TO PROCEED** - Written communication issued by the Owner to the Contractor authorizing him to proceed with the Work and establishing the date of commencement of the Work.

**NOTIFICATION** - Written Notice delivered in person or by mail.

**OWNER** - The person, firm, company, or corporation with whom the Contractor has executed the Agreement.

**PROJECT** - The undertaking to be performed as provided in the Contract Documents.

**PROJECT MANUAL** - The Project Manual is the volume assembled for the Work and includes the bidding requirements, sample forms, Conditions of the Contract, and Specifications.

**PROJECT SITE** - The location or site where Construction Work will be undertaken as required by the Contract Documents.

**SHOP DRAWINGS** - All drawings, diagrams, illustrations, brochures, schedules, and other data which are prepared by the Contractor, a Subcontractor, manufacturer, supplier, or distributor, which illustrate how specific portions of the Work shall be fabricated or installed.

**SPECIFICATIONS** - A part of the Contract Documents consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards, and workmanship.

**SUBCONTRACTOR** - An individual, firm, or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work.

**SUBSTANTIAL COMPLETION** - That date as certified by the Engineer or Landscape Architect when the construction of the project or a specified part thereof is sufficiently completed in accordance with the Contract Documents so that the Project or specified part can be utilized for the purposes for which it is intended.

**SUPPLEMENTAL GENERAL CONDITIONS** - Modifications to General Conditions required by a federal, state, or local agency for participation in the Project and approved by the agency in writing prior to inclusion in the Contract Documents, or such requirements that may be imposed by applicable state laws or local laws.

**SUPPLIER** - Any person or organization who supplies materials and/or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site.

**SURETY** - Any person, firm, or corporation which has executed, as Surety, the Contractor's Bonds securing the performance of the Contract.

**WORK** - The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

**WRITTEN NOTICE** - Any notice to any part of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at its last given address or delivered in person to said party or its authorized representative on the Project site.

2. **CONTRACT DOCUMENTS:** The Work under this Contract shall consist of the items listed in the Proposal, including all incidental items necessary to fully complete the Project in accordance with the Contract Documents. The Contract Documents shall consist of the Advertisement, Instruction to Bidders, the executed Proposal, Conditions of the Contract (General, Supplemental, and other Conditions), General Requirements, Technical Specifications, Supplemental Specifications, Bonds, Contract Drawings, and all attachments, Addenda and exhibits to the foregoing, and all easements, permits and other documents with which the Contractor must comply in performing the work hereunder. The intent of the Contract Documents is to include in the Contract Price the cost of all labor and materials, water, fuel, tools, equipment, light, transportation, and all other expenses as may be necessary for the proper execution and completion of the Work.

The Project Manual, the Proposal and Contract, the Drawings and Change Orders (if any) constitute the documents according to which the Work is to be done. The Contractor shall keep at the Project Site an approved copy of the Project Manual, Drawings, and Change Orders (if any) and shall at all times give the Engineer or Landscape Architect and its agents' access thereto. If in any case there shall be a question or dispute as to the meaning of the Specifications or the Drawings, the Engineer or Landscape Architect shall decide the true intent of the Documents.

3. **ERRORS, CONFLICTS AND OMISSIONS:** The intent of the Contract Documents is to provide everything necessary for the proper execution of the Work. However, no Work shall be done under conditions that may be expected to result in defective Work. If the Contractor wishes to question the materials prescribed or the site conditions, he shall immediately notify the Engineer or Landscape Architect. The Engineer or Landscape Architect shall review these conditions, and if deemed necessary, shall direct changes to be made in design or construction procedures before Work is continued. The Contractor shall not be allowed to take advantage of any error, conflict or omission, as full instructions will be issued by the Engineer or Landscape Architect, and the Contractor shall carry out such instructions as if originally specified. In case of conflict, the Work shall not proceed until a decision has been agreed upon by all parties concerned. Any Work done by the Contractor after discovery of an error, omission or conflict until authorized, will be at the Contractor's risk and responsibility and without additional compensation to the Contractor.
4. **SCHEDULES, REPORTS, AND RECORDS:** The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records, and other data where applicable as are required by the Contract Documents or the Work to be performed, in the format they may be specified by the Engineer or Landscape Architect.

Prior to the first partial payment estimate, the Contractor shall submit construction progress schedules showing the order in which he proposes to carry on the Work, including dates at which he will start the various parts of the Work, estimated date of completion of each part, and, as applicable:

The dates at which special detail drawings will be required; and Respective dates for submission of shop drawings, the beginning of manufacture, the testing and installation of materials, supplies, and equipment.

The Contractor shall also submit a schedule of payments that he anticipates he will earn during the course of the Work.

5. **SURVEYS, LAYOUT OF WORK, PERMITS, and REGULATIONS:** The Contractor shall thoroughly examine the Drawings and Specifications before commencing Work. He shall verify all measurements on the site and be responsible for any mistakes he may make and their results. Any discrepancy shall be reported to the Owner before proceeding with any Work affected. Failure to report such discrepancy shall not relieve the Contractor of its responsibilities.

The Contractor shall establish all base lines for locating the principal component parts of the Work and lay out its own Work as to line and grade and verify all measurements on the Project Site. The Contractor shall contact the utility companies and consult the Owner as to the exact location of all utilities and appurtenances that could be encountered.

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

The Contractor shall give all requisite notices to public officials; secure and pay for all permits, legal fees, or charges; have the Work inspected by all proper public authorities; pay all charges connected with such inspections; and deliver the proper inspection certificates and all receipts for charges to the Owner.

6. **SUBSURFACE CONDITIONS:** The Contractor shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the Owner by Written Notice of:

Subsurface of latent physical conditions at the Project Site differing materially from those indicated in the Contract Documents; or

Unknown physical conditions at the Project Site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

The Owner shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the Work, an equitable adjustment shall be made and the Contract Documents shall be modified by a Change Order. Any claim of the Contractor for adjustment hereunder shall not be allowed unless he has given the required Written Notice; provided that the Owner may, if he determines the facts

so justify, consider and adjust any such claims asserted before the date of final payment.

7. **SHOP DRAWINGS:** The Contractor shall provide Shop Drawings as may be necessary for the prosecution of the Work as required by the Contract Documents. The Engineer or Landscape Architect shall promptly review all Shop Drawings. The Engineer or Landscape Architect's approval of any Shop Drawing shall not release the Contractor from responsibility for deviations of the Contract Documents. The approval of any Shop Drawing which substantially deviates from the requirement of the Contract Documents shall be evidenced by a Change Order.

When submitted for the Engineer or Landscape Architect's review, Shop Drawings shall bear the Contractor's certification that he has reviewed, checked, and approved the Shop Drawings and that they are in conformance with the requirements of the Contract Documents.

Portions of the Work requiring a Shop Drawing or sample submission shall not begin until the Shop Drawing or submission has been approved by the Engineer or Landscape Architect. A copy of each approved Shop Drawing and each approved sample shall be kept in good order by the Contractor at the Project Site and shall be available to the Engineer or Landscape Architect.

8. **ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS:** The Contractor may be furnished additional instructions and detail drawings, by the Engineer or Landscape Architect, as necessary to carry out the Work required by the Contract Documents. The additional drawings and instruction thus supplied will become a part of the Contract Documents. The Contractor shall carry out the Work in accordance with the additional detail drawings and instructions.
9. **CONTRACTOR'S RESPONSIBILITIES:** The Contractor shall assume full responsibility for the Work and take all precautions for preventing injuries to persons and damage to property on or about the Work. The Contractor shall assume the defense of and save harmless the Owner and its individual officers and agents from all claims relating to labor provided and materials furnished for the Work; to injuries to any persons or property received or sustained by or from the Contractor, its agents or employees in doing the Work or arising out of the Work performed or to be performed; and to any act, or neglect of the Contractor, its agents or employees. The mention of any specific duty or liability of the Contractor in this or any part of the Contract Documents shall not be construed as a limitation or restriction upon any general liability or duty imposed on the Contractor by the Contract Documents. The Contractor shall bear all losses resulting to him on account of the amount or character of the Work or because the conditions under which the Work is done are different, or because the nature of the ground in which the Work is done is different from what was estimated or expected, or on account of the weather, flood, elements, or other causes.
10. **SUBCONTRACTS:** The Contractor shall not sublet, assign, or transfer this Contract or any portion thereof or any payments for Work completed, without the consent of



the Engineer or Landscape Architect. Assignment or subletting any portion of this Contract shall not release the Contractor or the Contractor's bonding company from any Contract obligations. The Contractor shall as soon as practicable after the signing of the Contract, notify the Engineer or Landscape Architect of the names of any Subcontractors. The Owner reserves the right to prohibit the use of any subcontractor which it may consider as being unacceptable. The provisions of this Contract shall apply to all Subcontractors employed by the Contractor and their officers and employees in all respects as if it and they were employees of the Contractor, and the Contractor shall not be relieved from the obligations and liabilities described or required by the project plans, Specifications and proposal. The Work and materials furnished by Subcontractors shall be subject to the same provisions as if furnished by the Contractor.

11. **ROYALTIES, PATENTS, NOTICES, AND FEES:** Contractor shall give all notices and pay all royalties and fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof. He shall comply with all laws, ordinances and codes applicable to any portion of the Work.

In the event any claim, suit or action at law or in equity of any kind, whatsoever, is brought against the Owner, involving such patents or license rights, then the Owner shall have the right to, and may, retain from any monies due to or to become due to the Contractor, such sufficient sum as is considered necessary to protect the Owner against loss, and such sum may be retained by the Owner until such claim or suit shall have been settled and satisfactory evidence to that effect shall have been furnished to the Owner.

12. **ACCEPTANCE OF CONDITIONS:** If any part of the Contractor's Work depends, for proper results, upon existing work or the work of another contractor, the Contractor shall notify the Engineer or Landscape Architect before commencing Work of any defects that will affect the results. Failure to so notify will constitute its acceptance of the conditions.

13. **WORKING CONDITIONS:** The Contractor shall at all times conduct, and cause all its agents, employees and Subcontractors to conduct all work in accordance with all applicable State and Federal laws and ordinances and with minimum possible interference with the proper functioning of the activities of the Owner. The Contractor shall secure, at no cost to the Owner, all permits and licenses necessary for the prosecution of the Work. Materials, tools, etc., shall be confined so as not to unduly encumber the premises. The Contractor shall be held to have visited the Project Site and checked with the authorities the working conditions and the methods of carrying out the Work and to have included in its proposal all costs for meeting such working conditions.

14. **MATERIALS AND WORKMANSHIP:** Unless otherwise specified, all materials and workmanship shall be new and of the best grade of their respective kinds for the purpose. In certain instances specific articles and materials are specified in order to maintain compatibility with existing materials. However, it is generally not the intent of

these Specifications to limit competition. Therefore, except in those instances where brand named materials are specifically required, a substitute of equal qualification may be supplied for articles, materials or equipment specified by name in these documents, upon the written approval of the Engineer or Landscape Architect. The Engineer or Landscape Architect's decision will be final as to whether the materials or equipment offered are equal to those specified.

If not otherwise provided, Work called for in this Contract shall be furnished and performed in accordance with well-established practice and standards recognized by architects, engineers and contractors. The Contractor shall furnish suitable tools, materials, and equipment and employ competent labor to perform the Work to be done; and any labor, tools, materials or equipment that shall not in the judgment of the Engineer or Landscape Architect, be suitable or competent to produce this result may be ordered from the Project Site by the Engineer or Landscape Architect, and such labor, tools, materials and equipment shall be substituted therefore by the Contractor as will meet with the approval of the Engineer or Landscape Architect.

15. **SUPERINTENDENTS AND EMPLOYEES:** Contractor shall enforce good order among its employees and shall not employ on the Work any disorderly, intemperate or unfit person or anyone not skilled in the Work assigned to him. There shall be no consumption of alcoholic beverages or other illegal drugs by any of the Contractor's employees within the vicinity of the Project Site, said vicinity to be at the discretion of the Architect. Whenever the Engineer or Landscape Architect shall notify the Contractor that any employee on the Work is, in the Architect's opinion, careless, incompetent, disorderly, or otherwise unsatisfactory, such employee shall be discharged from Work and shall not again be employed on the Project Site except with the consent of the Engineer or Landscape Architect.

The Contractor shall at all times keep on the site of the Work a competent superintendent and any and all foremen and assistants. The superintendent shall have authority to act for the Contractor. He shall have the Drawings and Specifications available on the site at all times. Any and all directions given to the superintendent shall be binding as if given to the Contractor.

16. **OTHER CONTRACTS:** The Owner may perform other work related to the Project at the site or have other work performed by utility companies, or let other contracts in connection with the Work and the Contractor shall properly connect and coordinate its work with the work of all other such projects. The Contractor shall afford to all other parties working in the area at the Owner's direction, proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the additional work with its. The Contractor shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only alter other work with written consent of the Engineer or Landscape Architect and the others whose work will be affected. Should the work of others interfere with that of the Contractor, the Engineer or Landscape Architect shall decide which party shall cease work for the time being or whether the work of all parties shall continue at the same time and in what manner. The duties and responsibilities under this paragraph shall

also apply to all outside utility work forces and other contractors working for the Owner within the Project area.

If any part of the Contractor's Work depends for proper execution or results upon the work of other outside forces, the Contractor shall inspect and promptly report to the Engineer or Landscape Architect any delays, defects or deficiencies in such work that render it unavailable or unsuitable for proper execution and results. The Contractor's failure to so report will constitute an acceptance of the other work as fit and proper for integration with the Contractor's Work. The Owner shall not be liable for any damages or increased costs occasioned by the failure of other contractors to execute their work as may be anticipated by these documents.

17. **ASSIGNMENTS:** Neither the Contractor nor the Owner shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of its right, title, or interest therein, or its obligations there under, without written consent of the other party.
18. **PROTECTION AND SAFETY:** Contractor shall properly protect all new and existing work from damage and shall protect all public property and private abutting property from injury or loss arising in connection with this Contract. The Contractor shall without delay make good any such damage, injury or loss, and shall defend and save the Owner harmless from all such damages or injuries occurring because of this work. The Contractor shall furnish and maintain all passageways, barricades, guard fences, lights, and danger signals, provide watchmen and other facilities for protection required by public authority or by local conditions or as directed by the Engineer or Landscape Architect, all at no additional cost to the Owner. The Contractor shall assume full responsibility for loss or damage to the Work during the entire construction period from all causes whatsoever not directly due to the acts or neglect of the Owner. For the purposes of this section the decision of the Engineer or Landscape Architect, with respect to existing conditions and for the need for corrective action by the Contractor, shall be final.

Proper safety provisions, in accordance with MIOSHA rules and regulations, shall be adhered to at all times by the Contractor for the protection of all persons and property. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work being performed under this Contract. The Contractor shall designate a responsible member of the Contractor's organization at the Project Site whose duties shall include the prevention of accidents. This person shall be the site superintendent unless otherwise designated by the Contractor and approved by the Owner.

19. **INSURANCE:** The Contractor shall, procure and maintain at its expense the following insurance during the Contract Time and through completion of the guarantee:
  - (1) Workers Compensation and Employers Liability Insurance for all employees employed in connection with the work.
  - (2) Automobile Liability Insurance.
  - (3) Contractor's Public Liability Insurance.

- (4) Insurance that shall indemnify the Owner and Spalding DeDecker as stated below. (Owner's Protective Liability Policy)
- (5) All Risk type Builder's Risk Insurance.

The limits of liability to be provided in each liability insurance policy shall not be less than \$1,000,000 for injuries, including accidental death, to any one person, and subject to the same limit for each person, not less than \$2,000,000 for any one accident involving two or more persons; and property damage liability insurance shall not be less than \$1,000,000, for any one accident and not less than \$2,000,000 aggregate.

Automobile Liability Insurance shall provide property damage and public liability insurance of not less than \$1,000,000 combined single limit each covering all motor vehicles which are used in connection with the Work in any way or place whatsoever.

Should all or any part of the Contract be sublet, Contractor shall, in addition to the foregoing insurance, maintain Contractor's Protective Liability Insurance in an amount not less than \$1,000,000 for injuries, including accidental death, to any one person, and subject to the same limit for each person, not less than \$2,000,000 for any one accident involving two or more persons.

The Contractor shall procure and shall maintain during the life of this Contract, insurance naming the Owner, Spalding DeDecker. as additional named insured and provide the Owner with a Certificate of insurance that shall then and thereafter indemnify, protect and hold harmless the Owner, Spalding DeDecker, its officers, employees, servants and agents against any and all claims for loss, injury, liability or damage of any kind whatsoever including injury, death or damage to property and claims of liens or other claims of workmen or material men, howsoever caused, resulting directly or indirectly from the performance of this Contract or arising out of or in connection with or arising out of the acts or omissions of Contractor, contractor's officers, employees, servants or agents howsoever caused, while said Contractor, subcontractor or its respective officers, employees, servants or agents are doing any act whatsoever directly or indirectly connected with this Contract.

The Contractor shall secure "All Risk" type Builder's Risk insurance for Work to be performed. Unless specifically authorized by the Owner, the amount of such insurance shall not be less than the Contract Price totaled in the Bid. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the Contract Time and until the Work is accepted by the Owner. The policy shall name as the insured the Contractor, the Project Manager, and the Owner.

Each certificate of insurance provided shall contain a statement that the Owner shall be given Written Notice not less than thirty (30) days prior to cancellation, termination, or other material change to said policy or policies of insurance.

The insurance shall comply with all State of Michigan requirements as applicable.

Prior to the start of Work, the Contractor shall furnish the Owner with a certificate or certificates of insurance as required which shall serve as written evidence of a contract or contracts of insurance with a reliable company or companies authorized to do business in the State of Michigan.

20. **BONDS (CONTRACT SECURITY):** The Contractor shall, within ten (10) days after the receipt of the Notice of Award, furnish the Owner with a Performance Bond and a Payment Bond in acceptable form in penal sums equal to the amount of the Contract Price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions, and agreements of the Contract Documents, and upon the prompt payment by the Contractor to all persons supplying labor and materials in the prosecution of the work provided by the Contract Documents. Such Bonds shall be executed by the Contractor and a corporate bonding company licensed to transact such business in the State of Michigan. The expense of these Bonds shall be borne by the Contractor. If at any time a Surety of any such Bond is declared bankrupt or loses its right to do business in the State of Michigan, the Contractor shall, within ten (10) days after notice from the Owner to do so, substitute an acceptable Bond (or Bonds) in such form and sum and signed by such other Surety or Sureties as may be satisfactory to the Owner. The premiums on such Bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new Surety or Sureties shall have furnished an acceptable Bond to the Owner. Bonds are to remain in full force and effect through the guarantee period.
21. **CHANGES AND CHANGE ORDERS:** The Owner shall have the right to require, by written order, changes in, additions to, or deductions from the Work required by the Contract Documents; provided that if change, additions or deductions are made, the general character of the Work as a whole is not changed. Contractor shall make changes in the Work only as authorized in writing by the Owner. This does not preclude the Engineer or Landscape Architect from authorizing minor changes to the Work without Written Notification. The Engineer or Landscape Architect will have authority to order minor changes in the Work not involving adjustment in the Contract Price or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by a Field Order (or Change Directive) and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly. Adjustments in the Contract Price for the value of any Work covered by a Change Order or of any claim for increase or decrease in the Contract Price shall be determined by one or more of the following methods in the order of precedence listed below:
- a. Unit prices previously approved.
  - b. An agreed lump sum.
  - c. The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition, there shall be added an amount to be agreed upon but not to exceed fifteen percent (15%) of the actual cost of the Work to cover the cost of general overhead and profit.

Any claim for extension of Contract Time for completion shall be addressed at the time of ordering the change, addition or deduction.

Where the written order diminishes the quantity of Work to be done, this shall not constitute a basis for a claim for damages or anticipated profits on the Work that may be dispensed with.

It is understood and agreed that in case any deviation from the original contracted Work is required, said change shall in no way invalidate the Contract and shall not affect or discharge the Bonds furnished by the Contractor.

The Contract Price may be increased and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates its agreement therewith, including the adjustment in the Contract Price or the Contract Time.

22. **INSPECTION & TESTING:** Contractor shall at all times permit and facilitate inspection and testing of the Work by the Owner, or its representative. The Engineer or Landscape Architect may appoint on the job inspectors to monitor the progress of the Work. The Inspector may call to the attention of the Contractor any failure to follow the Plans and Specifications that may be observed. The Inspector shall have the authority to reject materials or to suspend the Work until questions on the performance of the Work can be referred to and decided by the Engineer or Landscape Architect. The Inspector shall not direct the Contractor's Work or workmen, nor supervise the Contractor's operation. The Inspector, upon solicitation from the Contractor, may offer suggestions to the Contractor regarding its construction. However, in no instance shall any action or omission on the part of the Inspector release the Contractor of the responsibility of completing the Work in accordance with the Plans and Specifications.

All materials and equipment used in the construction of the Project shall be subject to adequate testing in accordance with generally accepted standards, as required and defined in the Contract Documents.

The Owner shall provide all inspection and testing services not required by the Contract Documents.

The Contractor shall provide at its expense the testing and inspecting services required by the Contract Documents.

If the Contract Documents, laws, ordinances, rules, regulations, or orders of any public agency having jurisdiction require any Work to specifically be inspected, tested, or approved by someone other than the Contractor, the Contractor will give the Engineer or Landscape Architect timely notice of readiness. The Contractor shall then furnish the Engineer or Landscape Architect the required certificates or inspection, testing, or approval.

If any Work is covered prior to a required inspection or approval of the Engineer or Landscape Architect, then the Work must be uncovered by the Contractor upon request by the Engineer or Landscape Architect to permit the Work to be inspected

by the Engineer or Landscape Architect and then replaced after the Work is inspected and approved at the Contractor's expense.

If the Engineer or Landscape Architect considers it is necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the Engineer or Landscape Architect's request, will uncover, expose, or otherwise make available for observation, inspection, or testing as the Engineer or Landscape Architect may require, that portion of the Work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such Work is defective, the Contractor will bear all the expenses of such uncovering, exposure, observation, inspection, and testing, and of satisfactory reconstruction. If, however, such Work is not found to be defective, the Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction, and an appropriate Change Order shall be issued.

23. **SUSPENSION OF WORK, TERMINATION, and DELAY:** The Owner may suspend the Work or any portion thereof for a period of not more than ninety (90) days, or such further time as agreed upon by the Contractor, by written notice to the Contractor and the Engineer or Landscape Architect, which notice shall fix the date on which Work shall be resumed. The Contractor will resume the Work on the date so fixed. (The Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension.)

If the Contractor is adjudged bankrupt or insolvent, or if he makes a general assignment for the benefit of its creditors, or if a trustee or receiver is appointed for the Contractor or for any of its property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to subcontractors or for labor, materials, or to equipment, or if he disregards laws, ordinances, rules, regulations, or orders of any public body having jurisdiction of the Work, or if he disregards the authority of the Engineer or Landscape Architect, or if he otherwise violates any provision of the Contract Documents; then the Owner may, without prejudice to any other right or remedy and after giving the Contractor and its Surety a minimum of ten (10) days from delivery of a Written Notice, terminate the services of the Contractor and take possession of the project and of all materials, equipment, tools, construction equipment, and machinery thereon owned by the Contractor, and finish the work by whatever method he may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the project, including compensation for additional professional services, such excess shall be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor will pay the difference to the Owner. Such costs incurred by the Owner will be determined by the Engineer or Landscape Architect and incorporated in a Change Order.

Where the Contractor's services have been so terminated by the Owner, said termination shall not affect any right of the Owner against the Contractor then existing or which may thereafter accrue. Any retention or payment of monies by the Owner due the Contractor will not release the Contractor from compliance with the Contract Documents.

After ten (10) days from delivery of a Written Notice to the Contractor and the Engineer or Landscape Architect, the Owner may, without cause and without prejudice to any other right or remedy, elect to abandon the project and terminate the Contract. In such case, the Contractor shall be paid for all Work actually performed up to the date of such abandonment.

If, through no act or fault of the Contractor, the Work is suspended for a period of more than ninety (90) days by the Owner or under an order of court or other public authority, or the Engineer or Landscape Architect fails to act on any request for payment within thirty (30) days after it is submitted, or the Owner fails to pay the Contractor substantially the sum approved by the Engineer or Landscape Architect or awarded by arbitrators within thirty (30) days of its approval and presentation, then the Contractor may, after ten (10) days from the delivery of a Written Notice to the Owner and the Engineer or Landscape Architect, terminate the Contract and recover from the Owner payment for all Work executed and all expenses sustained. In addition and in lieu of terminating the Contract, if the Engineer or Landscape Architect has failed to act on a request for payment or if the Owner has failed to make any payment as aforesaid, the Contractor may, upon ten (10) days Written Notice to the Owner and the Engineer or Landscape Architect, stop the work until he has been paid all amounts then due, in which event and upon resumption of the Work, Change Orders shall be issued for adjusting the Contract Price or extending the Contract Time or both, to compensate for the costs and delays attributable to the stoppage of the Work.

If the performance of all or any portion of the Work is suspended, delayed, or interrupted as a result of a failure of the Owner or Engineer or Landscape Architect to act within the time specified, within a reasonable time, an adjustment in the Contract Price or an extension of the Contract Time, or both, may be made by Change Order to compensate the Contractor for the costs and delays necessarily caused by the failure of the Owner or Engineer or Landscape Architect.

24. **TIME FOR COMPLETION AND LIQUIDATED DAMAGES:** The date of beginning and the time for completion of the Work are essential conditions of the Contract Documents and the Work embraced shall be commenced on a date specified in the Notice to Proceed.

The Contractor will proceed with the Work at such rate of progress to insure full completion within the Contract Time. It is expressly understood and agreed, by and between the Contractor and the Owner, that the Contract Time for the completion of the Work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the Work.



If the Contractor shall fail to complete the Work within the Contract Time, or extension of time granted by the Owner, then the Contractor will pay to the Owner the amount for liquidated damages as specified in the Bid for each calendar day that the Contractor shall be in default after the time stipulated in the Contract Documents.

The Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the Work is due to the following and the Contractor has promptly given Written Notice of such delay to the Engineer or Landscape Architect. The Engineer or Landscape Architect shall concur or reject such request for delay within forty-eight (48) hours in writing.

To any preference, priority, or allocation order duly issued by the Owner.

To unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to acts of God or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather; and

To any delays of Subcontractors occasioned by any preference, priority, or allocation order duly issued by the Owner.

To unforeseeable causes beyond the control and without the fault or negligence of the Subcontractor, including but not restricted to acts of God or of the public enemy, acts of the Owner, acts of another subcontractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather.

25. **TERMINATION FOR BREACH:** The Owner may terminate this Contract when violations are not stopped immediately and corrected within a reasonable length of time after Notification by the Owner. In the event of such termination, the Owner may complete the contracted work and the Contractor will be liable for any excess cost occasioned the Owner thereby and in such case the Owner may take possession of and utilize in completing the Work such materials and equipment as may be on the Project Site and necessary therefore.
26. **OWNER'S RIGHT TO COMPLETE:** It is understood and agreed that at any time the Contractor shall abandon the Work or become habitually negligent of its obligations under this Contract or fail to prosecute the Work with reasonable regularity so that the final completion date is not delayed, or if the provisions of this Contract are willfully and repeatedly violated, or with due notice permanent or temporary repairs are not made; the Owner may notify the Contractor in writing to discontinue all or any part of the Work under this Contract and the Owner shall have the right to complete the Work in part or whole, or make permanent or temporary repairs by Contract or otherwise as it may elect and take possession of any and all materials, tools and

equipment found on the job and may reimburse itself for the actual cost and expense of such Work by deducting said actual cost from funds due the Contractor.

27. **PAYMENT:** The Owner shall pay the Contractor the prices bid in the proposal, less deductions for uncompleted Work, based upon measurements made by the Engineer or Landscape Architect or as otherwise stipulated herein. The quantity measurements shall be final and conclusive. Unless otherwise specified, no allowance will be made for materials furnished which are not incorporated in the finished Work. On a monthly basis, the Contractor shall submit a written itemized payment request to the Owner, or its authorized representative for Work completed during the previous month. When requested by the Owner, the Contractor shall submit sworn statements and waivers of liens, receipts or other vouchers showing payments made to its materials and labor Suppliers, including payments to Subcontractors, for those monthly periods for which Project Work has been paid by the Owner. Payments based on progress estimates will be made on or about the fifteenth (15th) of each month. To assure proper performance by the Contractor and to assure payment to Subcontractors and material Suppliers, the Owner will retain ten (10%) percent of the dollar value of the Work completed until the Contract is fifty percent (50 %) complete. After the Contract is 50 % complete, additional retainage shall not be withheld unless the Owner determines that the Contractor is not making satisfactory progress or for other specific cause related to the Contractor's performance under the Contract. At the time of Final Payment, all retainage shall be released to the Contractor. No partial payment shall be considered as acceptance of all or part of the Work completed.

In addition the Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate for progress payment to such extent as may be necessary to protect itself from loss on account of: (a) defective Work not remedied, (b) claims filed or reasonable evidence indicating probable filing of claims, (c) failure of the Contractor to make payments properly to subcontractors or for material or labor, (d) a reasonable doubt that the Contract can be completed for the balance then unpaid, (e) damage of any other contractor. When these grounds are removed, payment shall be made for amounts withheld because of them.

28. **WALK THROUGH/PUNCH LISTS**

The Engineer or Landscape Architect will do two walk through project inspections; one will be done when requested by the Contractor at Substantial Completion (See Section 29 of General Conditions), and one when Contractor requests Final Inspection (See Section 32 of General Conditions).

If the Contractor does not have everything completed at Final Inspection in accordance with the Contract Documents and another "walk through" or inspection is required, the Contractor will be charged time and material for extra expenses incurred by Owner or Spalding DeDecker.

29. **SUBSTANTIAL COMPLETION:** Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in

accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Engineer or Landscape Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

Upon receipt of the Contractor's list, the Engineer or Landscape Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. The Engineer or Landscape Architect then will prepare a Punch List of all items which are incomplete and items which are not in accordance with the Contract Documents, whether or not the items are on the Contractor's list. The Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct all such items on the Punch List. The Contractor shall then submit a request for another inspection by the Engineer or Landscape Architect to determine Substantial Completion after he has addressed the items on the Punch List.

When the Work or designated portion thereof is substantially complete, the Engineer or Landscape Architect will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

30. **PARTIAL OCCUPANCY OR USE:** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the

Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Engineer or Landscape Architect. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Engineer or Landscape Architect.

Immediately prior to such partial occupancy or use, the Owner, Contractor and Engineer or Landscape Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

31. **GUARANTEE:** The Contractor shall furnish the Owner with a written guarantee to correct any defects due to faulty materials or workmanship which appear in the Work within one year from the date of final acceptance by the Owner. This is in addition to other written guarantees to be provided to the Owner which may be required elsewhere in the Specifications.
32. **FINAL INSPECTION, ACCEPTANCE AND PAYMENT:** The Contractor shall give Written Notice to Spalding DeDecker when Work is complete and ready for final inspection and furnish; (1) the required guarantee(s); (2) satisfactory evidence including a sworn statement and absolute final waiver of lien and final waiver of liens from all Subcontractors and Suppliers that all payrolls, material bills and all other indebtedness connected with the Work have been paid or secured; (3) application for final payment; and (4) approval from the Surety. The Owner will promptly make a final inspection and when it is determined the Work is acceptable and all conditions of the Contract Documents have been satisfied, he will issue a final Certificate for Payment, the date of which shall be the date of final acceptance.
33. **NO WAIVER OF CONTRACT:** Neither the acceptance of the whole or any part of the Work by the Owner nor any order, measurements, or certificate by the Engineer or Landscape Architect, nor any other order by the Owner for payment of money, nor any payment for the whole or any part of the Work by the Owner, nor any extension of time, nor any possession taken by the Owner, shall operate as a waiver for any portion of the Contract or any power therein reserved by the Owner, or any right to damages therein provided.
34. **FAIR EMPLOYMENT PRACTICES ACT:** The Contractor agrees that neither he nor its Subcontractors will discriminate against any employee or applicant for employment, to be employed in the performance of this Contract, with respect to hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of the applicant's race, color, religion,

national origin or ancestry. This covenant is of the essence and breach of this covenant shall constitute a material breach of this Contract.

35. **SANITARY FACILITIES:** The Contractor shall provide and maintain in a neat and sanitary condition, accommodations for the Contractor's employees and the Owner necessary to comply with the requirements and regulations of the Federal, State and local health authorities, and shall take the precautions necessary to avoid creating unsanitary conditions. Temporary sanitary facilities shall be removed from the Project Site by the Contractor before the acceptance of the Work. The construction, maintenance and removal of all temporary sanitary facilities shall be by the Contractor at the Contractor's expense.
36. **ESTIMATED QUANTITIES:** The quantities of the various classes of Work to be done and materials to be furnished under this Contract, which have been estimated and may be stated elsewhere herein, are approximate and only for the purpose of comparing on a uniform basis the bids offered for the Work under this Contract; neither the Owner, its Architects or its agents, are to be held responsible should any of the said estimated quantities be found to be at variance with what was actually performed during the construction of the Work. The Contractor shall make no claim for anticipated profit, nor for loss of profit, or for any additional compensation of any type, or for reimbursement of any cost or expense of any type, because of the difference between the quantities of various classes of Work actually done or materials actually delivered, and the estimated quantities as set forth in the Contract.
37. **TAXES:** The Contractor shall pay all income, sales, consumer, use and similar taxes for the Work provided by the Contractor which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

**DIVISION 1**

**GENERAL REQUIREMENTS**

## **SECTION 01000 - SPECIAL REQUIREMENTS**

### **1.01 CONSULTANTS, ENGINEERS, and/or ARCHITECTS**

The term "Consultants", "Engineers", and/or "Architects" as used in the Construction Manual - including General Conditions, Supplementary Conditions, Division 1 - Contract Documents shall mean SPALDING DEDECKER, their employees and authorized representatives, and their Sub-Consultants and their employees and authorized representatives.

### **1.02 ADDITIONAL INSURED**

In addition to the Owner, the Contractor's Certificates of Insurance shall name the Consultants and/or Architects as additional insured.

### **1.03 INDEMNIFICATION**

In addition to the Owner, the Contractor shall indemnify and hold harmless the Consultants, the Sub-consultants, and their agents and employees from and against all claims, damages, losses, and expenses including attorneys' fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss, or expense (1) is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting there from, and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

### **1.04 CONTRACT DOCUMENTS**

The Contract Documents shall consist of General Conditions, Detailed Specifications, Contractor's Declaration, Contractor Evaluation Data, General Specifications, Bonds, Agreement, Contract Drawing(s), and any additional documents which may be made a part of the Contract.

The Contract Documents are complimentary, and what is called for by any one shall be as binding as if called for by all. The intention of the Contract Documents is to include in the contract price the cost of all superintendence, labor and materials, and all other expense necessary for the proper execution of the work.

The specifications, schedules and plans and drawings herein referred to shall be taken together to explain each other and to make the whole, taken together, consistent. Work on the plan and not mentioned in the specification, or vice versa, shall be done the same as if shown by both, and in case of conflict, the Owner will determine which will govern. In case of ambiguity in the plans or specifications, the Owner will decide as to the correct interpretation thereof.

In interpreting the Contract Documents, words describing materials or work which have a well-known technical or trade meaning, unless otherwise specifically defined in the Contract Documents, shall be construed in accordance with such well-known meaning recognized by landscape architects, architects, engineers, and the trade.

### **1.05 TIME LINE**

Contractor to submit a time line and sequence of work to be done with a completion date. Liquidated damages will be assessed at the rate of \$200.00 per calendar day for unauthorized delays beyond the Contract time. This amount is hereby agreed upon by the Contractor by execution of the proposal form and other contract documents.

**1.06 SUB-CONTRACTORS**

Contractor will provide Romulus Community Owners with a list of all sub-contractors; name, address, phone#, fax#, cell phone and/or pager.

**1.07 SITE INSPECTION NOTICE**

Contractor will give owner 48 hours' notice to arrange to inspect depth of holes for footings and drainage layout.

**1.08 SITE MAINTENANCE**

Contractor is responsible for maintenance of the site.

**1.09 MANDATORY MEETINGS**

After contract is awarded or letter of intent is received, prior to any excavation installation or any other related work on site, the manufacturers sales representative, installation contractor and all sub-contractors will meet the Owner, Site Work Contractor installing the remainder of the park improvements, and the Owners authorized representative(s) on site for a preconstruction meeting. Meeting to be determined by the Owner.

**1.10 EXCAVATED MATERIAL**

All excavated material may be reused on site in a designated area, as approved by the Owner, otherwise excavated material will be removed from the site.

**1.11 PLANS AND SPECIFICATIONS**

The work shall be executed in strict conformity with the plans and specifications, and the Contractor shall do no work without proper drawings and instructions. Work shall include ONLY those items included with the performance specifications approved by the Owner.

No person except the Owner shall have authority to revoke, alter, enlarge or change any provisions of these specifications or the plans for the work, and if the Contractor deviates from them in any particular, without written authorization from the Owner, he does so at its own risk, and such work and payment therefore may not be approved.

**1.12 DRAWINGS**

Unless otherwise provided in the Contract Documents, the Owner will furnish the Contractor free of charge all copies of drawings and specifications reasonably necessary to carry out the work.

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## **SECTION 01030 -FIELD ENGINEERING**

### **PART 1 GENERAL**

#### **1.01 DESCRIPTION**

Principal reference lines or points and benchmarks shall be given by the Owner at such time as they may deem necessary; or if the Contractor shall be in need of such reference lines or benchmarks, they shall notify the Owner forty-eight (48) hours in advance.

All costs for layout shall be paid by the Contractor and shall be considered incidental to each item of work.

The Contractor must exercise precaution to verify figures shown on the drawings before layout of work and will be responsible for any error resulting from failure to do so. Architect is to approve all layout items prior to construction.

#### **1.02 LAYOUT REQUIREMENTS**

All layouts are subject to field approval by the Engineer or Landscape Architect.

1. Miss dig is to be contacted a minimum of 72 hours in advance of construction to commence. It is the contractor's responsibility to retain a current Miss Dig number on the project. The owner, nor the consultant will obtain Miss Dig number on the behalf of the contractor. Each trade is responsible for contacting Miss Dig. Failure to obtain a Miss Dig number in accordance with the construction schedule will result in lost workdays subject to liquidated damages.
2. Underground Utilities: All utilities shall be staked for line and grade at all structures, all pipe ends and at no more than 50 foot intervals. The Contractor shall contact all proper agencies as to the exact location of all utilities, sewers, waterlines, etc.
3. Earthwork and Fields: All earth work and fields shall be staked to shown location of all high points, low points, swale lines, turf and skin areas.

#### **1.03 SURVEY MONUMENTS**

The Contractor shall protect and preserve all land survey monuments or property corners along the line of its work. Where monuments or irons are unavoidably disturbed or removed due to operations under this contract, the Contractor, at its own expense, shall employ the services of a registered Land Surveyor to establish, reset or replace such monuments or irons.

#### **1.04 REPORT OF ERROR and DISPREANCIES**

If, in the course of the work, the Contractor finds any discrepancies between the plans and the physical conditions encountered in the work, or any error or omissions in the plans or in the layout, it shall be its duty to immediately inform the Architect in writing. Any work performed after such discovery, until authorized by the Architect, will be at the Contractor's risk.

#### **1.05 DRAINAGE**

The Contractor is responsible for proper drainage from the new installation. They cannot create a problem with other nearby facilities.

## **SECTION 01080 - ABBREVIATIONS AND SYMBOLS**

AIA	American Institute of Architects
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute
ASLA	American Society of Landscape Architects
ASTM	American Society for Testing and Materials
BOCA	Building Officials and Code Administration
CPSC	Consumer Product Safety Commission
CPSI	Certified Playground Safety Inspector
DOL	Department of Labor
IPEMA	International Play Equipment Manufacturer's Association
MDNR	Michigan Department of Natural Resources
MDOT	Michigan Department of Transportation
NEC	National Electric Code
NFPA	Fire Protection Association
NRCA	National Roofing Contractors Association
OSHA	Occupational Health Safety Act
SMACNA	Sheet Metal and Air-conditioning Contractors National Association

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## **SECTION 01091 - DEFINITIONS**

- A. OWNER – City of Northville.
- B. CONTRACTOR - The Corporation, firm or individual who has contracted to construct this project. "Contractor" shall be construed to mean any subcontractors, material dealers, or manufacturers who may develop incidental responsibilities because of the construction project.
- C. SUBCONTRACTOR - The Corporation, firm or individual that has a direct contract with the Contractor to perform a portion of the construction on this project or to furnish machinery and equipment to be incorporated into the completed work.
- D. ENGINEER - Any representative or the person(s) of a company holding a seal in the State of Michigan for the purpose of Civil or Structural Engineering.
- E. LANDSCAPE ARCHITECT - Any representative or the person(s) of a company holding a seal in the State of Michigan for the purpose of Landscape Architecture.
- F. INSPECTOR - An authorized representative of the Engineer, Landscape Architect or Owner assigned to make any or all necessary inspections of the work performed, and materials furnished by the Contractor.
- G. PROPOSAL - The approved, prepared form on which the bidder is to submit or has submitted an offer and a schedule of prices for the work contemplated.
- H. BIDDER - Any corporation, firm or individual who submits a proposal for the performance of this contract.
- I. SURETY - Any corporation, firm or individual who is bound with and for the contractor and is primarily liable for the proper performance of this contract and the payment of wages and materials.
- J. WORK - All labor, materials, equipment, transportation, and all other facilities necessary to complete this project.
- K. PROJECT - The entire improvement proposed by the Owner to be constructed in part or in whole according to this contract.
- L. WORK DAY - A minimum of 8 hours in one 24 hour period dedicated to the completion of the scope of work associated with the project as identified in the working documents.
- M. WORK WEEK - A minimum of 5 working days in a seven-day period starting on a Monday.
- N. WEATHER DAY - A work day in which no work can take place due to prohibiting atmospheric conditions for the safe execution of task aim toward the completion of the project. All weather days are subject to approval by the owner and its' consultant.

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## SECTION 01100 - SUMMARY OF WORK

### 1.01 WORK INCLUDED

The following work is to be included:

#### **WORK TASK ONE - SITE PREPARATION**

**Erosion Control** - Silt fencing, inlet protection, etc. as shown on the SESC plan.

**Equipment Storage** - Contractor shall provide equipment storage on each site according to City of Northville. Contractor is to secure equipment before and during construction. City of Northville assumes no liability for lost or stolen equipment.

**Topsoil Stripping** - Strip and remove 2-inches of topsoil from sites that require expansion of the existing play area. Stockpiled material shall be stored on site, as directed, for reinstallation.

**Temporary Barriers** - Install barrier around construction site, if necessary.

**Tree protection** - Installed around all trees as shown on site plan.

#### **WORK TASK TWO - EARTHWORK**

**Demolition of Existing Structures and Pavement** – Follow Demolition Plan

**Excavation and Grading** - Excavate and grade area to proper elevation for placement of safety surfacing and topsoil.

**Install Drainage Structures** – As Shown on Plan

#### **WORK TASK THREE – SITE AND PLAYGROUND EQUIPMENT INSTALLATION**

**Equipment Layout** - Layout all equipment within area indicated by bidders layout plan and site plan drawing. Final layout of equipment is to be approved on site by owner.

**Equipment Installation** - Supply and install all equipment as per manufacturers specifications and those specifications which have been addressed in this package.

**Concrete Edging and Paving** – Install concrete edging and paving as shown on plans. Place boulders as shown on plan.

#### **WORK TASK FOUR - SITE RENOVATION AND LANDSCAPING**

**Placement of Topsoil** - Spread topsoil in areas scheduled for seeding or areas that have been disturbed by construction of this project.

**Site Amenities** – Place benches, clock, tables, trash receptacles, and bike loops as shown on plan.

**Landscaping** – Install Landscape As Shown on Plan

**Fine Grade, Seed, and Mulch** - As specified on the drawing, in this document, and or as disturbed during construction of this project.

Remove and properly dispose of excess topsoil, pea stone, and other materials related to the construction of this project.

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## **SECTION 01110 - ALTERNATES, "OR EQUAL" CLAUSE**

### **PART 1 GENERAL**

#### **1.01 DESCRIPTION**

If the Contractor wishes to substitute into the work materials or equipment other than those specified, the Contractor shall notify the Owner or the Architect in advance. The Owner must agree with the substitution and be one hundred percent satisfied prior to authorizing the change.

Such items shall be the standards product of a responsible manufacturer who is fully established in the production of such items when applicable, readily provide experienced personnel for the servicing and repair of such equipment.

Such items shall be equal in all respects to that specified in function, efficiencies, ease in maintenance and overall quality and performance.

If such items require any change in the design or an increase in the cost of the work to that specified, the Contractor shall incur all such costs with no additional expense to the Owner.

#### **1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Bid Documents, Proposal: Schedule of Items and/or Equipment.
- B. Contract Documents: Schedule of Submittals.
- C. Drawings: As Shown and/or Noted.

#### **1.03 SUBMISSION REQUIREMENTS**

For those items of work which the Contractor proposed to perform which were not specified, the Bidder shall submit with the proposal, for the Architect's review, detailed specifications, diagrams, working drawings, samples, etc., for the particular item which is proposed as a substitute.

It is the responsibility of the Contractor to furnish all information requested by the Engineer or Landscape Architect to show that the substitute equals or exceeds all requirements of the Contract Documents.

### **PART 2 PRODUCTS**

#### **2.01 MATERIALS**

Comply with all current industry standards for playground equipment and all manufacturer's specifications and standards for each product, service or equipment involved.

### **PART 3 EXECUTION**

#### **3.01 PERFORMANCE**

If the Contractor incorporates a substitute into the finished work, they do so at their own risk, even though the Architect has reviewed the submittals. If during construction or during the warranty period it becomes evident that the product is not equal in all respects, then the Contractor shall correct such deficiencies or replace the item at no cost to the Owner; or if the Owner accepts a deficient product, a change order shall be submitted by the Contractor reducing the price as agreed.

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## **SECTION 01150 MEASUREMENT AND PAYMENT**

### **1.01 BID ITEMS**

#### **Lump Sum Bid Items**

Quantities provided with the Contract Documents are for informational purposes only. The Contractor shall prepare this lump sum bid amount based on its own examination of the plans and determination of the work necessary to complete the item as specified on the plans.

#### **Unit Price Items**

Quantities listed in the Proposal may be approximate and are stated solely to provide a uniform base of calculation for comparison of bids and award of Contract. No guarantee is made by the Owner that actual quantities will correspond with the Proposal quantities.

### **1.02 PAYMENT OF WORK**

Payment to the Contractor will be made based on a Schedule of Values submitted and approved by the Construction Manager and Owner prior to the first payment request. Proposal quantities of work to be performed or materials to be furnished may be increased, decreased or deleted as stipulated elsewhere in the Contract Documents.

### **1.03 EXTRAS**

Except as otherwise herein provided, no charge for any extra work or material will be allowed unless the same has been ordered in writing by the Owner and the price stated in such order.

### **1.04 CHANGES IN WORK – PAYMENT ADJUSTMENTS**

#### **General**

The Owner may authorize changes in, additions to, or deductions from the work to be performed or the materials to be furnished pursuant to the provisions of the contract.

#### **Adjustments**

Adjustments, if any, in the amounts to be paid to the Contractor by reason of any such change, addition or deduction shall be determined by one or more of the following methods:

1. By unit prices contained in the Contractor's original bid and incorporated in the construction contract.
2. By a supplemental schedule of prices contained in the Contractor's original bid and incorporated in the construction contract.
3. By an acceptable lump sum proposal from the Contractor.
4. On a cost-plus-limited basis not to exceed a specified limit. A cost-plus-limited basis is defined as the cost of labor, materials, equipment, and insurance, plus 15% of the said cost to cover superintendence, general expense and profit.

### **1.05 ESTIMATES and PAYMENTS**

The Owner shall pay and the Contractor shall receive the prices bid in the proposal, or agreed upon, less any deduction for any uncompleted portion, based upon measurements made by the Owner or as otherwise herein stipulated, and such measurements shall be final and conclusive.

By the first day of each month the Contractor shall submit to the Construction Manager an application for each payment and shall submit a Contractor's Declaration declaring that he has not performed any work, furnished any material, sustained any loss, damage or delay, for any reasons, including soil conditions encountered or created, or otherwise done anything for which he will ask,

demand, sue for, or claim compensation from the Owner and, if required, shall submit receipts or other vouchers showing its payments for materials and labor, including payments to subcontractors. The Owner may withhold the payment of any estimate or portion of estimate until the Contractor shall have furnished satisfactory evidence that he has paid all claims of every nature.

No payment shall be considered as acceptance of the work or any portion thereof prior to the final completion of the work, and the payment of the final estimate.

Within thirty (30) days after the completion of the work under this contract to the satisfaction of the Owner in accordance with all and singular terms and stipulations herein contained, the Owner shall make final payments, from a final estimate made by the Owner's Engineer. Before final payment is made, the Contractor shall, as directed by the Owner make Contractor's affidavit that he has paid all claims of every nature, or secured a release from the surety or sureties approving payment of final estimate by the Owner. In the event that the completed work must be finally accepted by any corporation, firm, individual, or governmental unit other than the Owner, the completed work must be "approved and accepted" by such entity other than the Owner prior to final payment.

The acceptance by the Contractor of the final payment aforementioned, shall operate as and shall be a release to the Owner and its agents from all claim and liability to the Contractor for anything done or furnished for, relating to the work, or for any act or neglect of the Owner or of any person relating to or affecting the work.

#### **1.06 PAYMENTS WITHHELD**

The Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any certificate for progress payment to such extent as may be necessary to protect itself from loss on account of:

- A. Defective work not remedied.
- B. Claims filed or reasonable evidence indicating probable filing of claims.
- C. Failure of the Contractor to make payments properly to subcontractors or for material or labor.
- D. A reasonable doubt that the contract can be completed for the balance then unpaid.
- E. Damage to another Contractor.

When the above grounds are removed, payment shall be made for amounts withheld because of them.

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## **SECTION 01400 QUALITY CONTROL**

### **1.01 INSPECTION of WORK and MATERIALS**

The Owner and its representatives shall at all times have access to the work wherever it is in progress or preparation, and the Contractor shall provide proper facilities for such access and for inspection. The Owner shall employ a construction manager for site inspection services.

If the Specifications, the Engineer or Landscape Architect's instruction, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Engineer or Landscape Architect timely notice of its readiness for inspection. If any work should be covered up without approval or consent of the Engineer or Landscape Architect, it must, if required by the Engineer or Landscape Architect, be uncovered for examination at the contractor's expense.

All materials used in this project are subject to tests for quality, strength, durability, soundness, etc., to meet the requirement of these Specifications for the various materials. The number of tests for each material shall be as specified or as directed by the Engineer or Landscape Architect.

The tests will be made by a qualified independent testing laboratory at the expense of the contractor. The Contractor shall furnish all samples of the materials necessary for this testing as required by the Engineer or Landscape Architect, without extra compensation.

All specifications of any society, institute, association, or governmental agency hereinafter referred to are hereby made a part of the Contract the same as if written in full. Where reference is made to standard specification, such as the American Society for Testing and Materials (ASTM), these references refer to the Standards and Tentative Standards of said Society in force on the date when bids on this Contract are received.

No inspection shall relieve the Contractor from any obligation to furnish materials and equipment and to perform the work strictly in accordance with the Contract Documents. Any material or workmanship or equipment which may be discovered to be defective, prior to the final acceptance of the work, shall be removed and made good by the Contractor regardless of previous inspection.

The Contractor shall promptly remove from the site of the work, or from any premises where materials are being prepared, fabricated or worked, expressly for the work under this Contract, all materials condemned by the Engineer or Landscape Architect as failing to conform to the Contract.

All shop drawings as request are to be submitted in duplicate to the Consultant for review. All shop drawings are to be reviewed and approved via written notification citing the submitted drawing. Installation of products without the approval of shop drawings is done at the contractor's own risk.

### **1.02 MATERIALS and WORKMANSHIP**

Unless otherwise stipulated in the specifications, all equipment, materials, and articles incorporated in the work covered by this contract are to be new and of the best grade of their respective kinds for the purpose. Quality of material is subject to review in the field by the construction manager.

If not otherwise provided, material or work called for in this contract shall be furnished and performed in accordance with well-known established practice and standards recognized by Landscape Architects, Engineers and the trade.



When required by the specifications, or when called for by the Owner, the Contractor shall furnish the Owner for approval, full information concerning the materials or articles which he contemplates incorporating in the work. Samples of materials shall be submitted for approval when so directed. Machinery, equipment, materials, and articles installed or used without such approval shall be at the risk of subsequent rejection.

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## **SECTION 01500 TEMPORARY FACILITIES AND CONTROLS**

### **1.01 GENERAL**

The Contractor shall be responsible for arranging for and providing general services and temporary facilities as may be required for the proper prosecution of the work. Temporary facilities shall include, but are limited to, temporary toilets, electricity, enclosures, openings, protective barricades and fences, walkways and ramps, fire protection, coverings and security surveillance. The Contractor shall pay all costs for such general services and temporary facilities. All protective measures are to be in accordance with local city safety standards and OSHA.

### **1.02 TEMPORARY STORAGE**

Suitable weather tight storage shall be provided for materials that may be damaged by storage in the open. The Contractor shall submit a complete description of any temporary buildings for the Engineer or Landscape Architect and Owner's approval as to appearance, size and location. The Contractor must have approval of the Owner prior to constructing temporary storage facilities. All temporary buildings shall remain the property of the Contractor and shall be removed from the site upon the completion of the work.

### **1.03 WATER**

All water required during construction operations shall be provided by the Contractor and/or its Subcontractor(s).

### **1.04 FIRE PROTECTION**

Construction practices including cutting, welding and protection during construction shall be in accordance with the published standards of the Factory Insurance Association and the National Fire Protection Association which, by reference, are made a part of this specification. A sufficient number of approved portable fire extinguishers must be provided. Gasoline, diesel fuel and other flammable liquids shall be stored in and dispensed from Underwriters Laboratories listed safety containers in conformance with the National Board of Fire Underwriters recommendations. Inspections may be made by State and local fire protection and safety authorities and insurance underwriters. The Contractor shall cooperate with authorities and promptly carry out their recommendations. All tarpaulins that may be used for any purpose during the construction of the work shall be made of material which is resistant to fire, water and weather. All tarpaulins shall have the Underwriters Laboratories approval and shall comply with applicable Federal standards. Fires of any kind must not be lighted on or about the premises.

### **1.05 PROTECTIVE COVERING**

Tight wood sheathing or plywood shall be laid under any materials that are stored on finished paved surfaces. Reinforced non-staining kraft building paper must be laid over all types of finished floor surface in traffic areas and where otherwise directed by the Engineer or Landscape Architect to prevent damage to these surfaces. Before moving any materials over such finished areas or performing any subsequent work which might damage them, lay plywood or planking over the kraft paper. Wheelbarrows used over such areas shall have rubber-tired wheels. The Contractor shall provide any and all temporary structures to all the safe movement of pedestrians, service vehicles, or other temporary or permanent access areas regarding the project.

### **1.06 PUMPING AND DRAINAGE**

The Contractor shall be responsible for dewatering, pumping and drainage of pits, trenches, etc. as necessary for installation of the work.

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## **SECTION 01532 TREES AND PLANT PROTECTION**

Except as expressly provided by the Plans and Specifications the Contractor shall protect from damage and preserve all trees and shrubs, on both public and private property, in the vicinity of its operation. Failing this in any instance, the Contractor shall replace any damaged tree or shrub with like kind, size and quality, except as may be otherwise expressly approved by the Engineer or Landscape Architect. The cost to replace a tree is a minimum of \$500.00 per tree.

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## **SECTION 01562 - DUST CONTROL**

Dust control and the movement of air borne dust and dirt are of prime concern to the Owner.

Continuous dust control shall be maintained. Dust control equipment in good working order shall be maintained on the job site at all times. Dust control shall be maintained at all times including weekends and holidays.

If at any time during construction the Contractor should fail to properly and adequately maintain dust control then the Owner may twenty-four (24) hours after having given the Contractor notice of such failure to maintain dust control, provide such dust control measures as it deems necessary.

All costs incurred by the Owner in providing dust control for which the Contractor is responsible shall be deducted from the next progress payment due to the Contractor.

Dust control shall be considered incidental to the various items of work listed in the Proposal and shall be included in the unit price bid.

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## SECTION 01600 - GENERAL

### PART 1 GENERAL

#### 1.01 INCLUDES BUT NOT LIMITED TO

All Conditions of the Contract apply to this Division.

#### 1.02 PRODUCT OPTIONS

**Products Specified by Reference Standards or by Description Only** - Approved products meeting those standards or description.

#### 1.03 CONSTRUCTION ENGINEERING

It shall be the responsibility of the Contractor to provide all instrumental surveying required to layout and construct the work.

#### 1.04 CONTRACTOR RESPONSIBILITIES

**Barricades** - The Contractor shall provide and maintain barricades where necessary for the protection of its work and persons.

**Laws, Codes, and Ordinances** - The Contractor's attention is directed to the fact that all applicable State laws, Federal laws, Municipal Ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

**Safety** - It shall be the responsibility of the Contractor to familiarize himself with the latest safety laws, rules and regulations of Federal, State and Local governmental agencies and to comply with their requirements.

#### 1.05 PROTECTION OF UNDISTURBED SECTIONS OF SITE

**Protection** - All items and areas designated for removal, relocation or regrading shall be protected from damage or injury; this includes existing structures, staircases, fire escapes, fences, grounds, plant materials, and underground utilities. If damage does occur during construction, repair and compensation shall be made by the Contractor. Damaged item shall be returned to its original state at no extra cost to the Owner.

**Miss Dig** - Contractor is required to call MISS DIG prior to any excavation of any type. Call must be made at least three (3) business days prior to excavation. Documentation of the contractor's Miss Dig number for the project is to be presented to the owner for the construction file.

**Prior to Construction** - Before the work of clearing and rough grading begins, the necessary precautions shall be taken to prevent needless and avoidable injury to trees during construction. Tree trunks shall be wrapped with burlap and protected with 2x4's extending from grade to the lowest limbs. The 2x4's shall be placed close together and secured in place by at least three bands of stapled wire. In addition, erect a protective barrier made of sound lumber, with posts securely driven or dug into ground, placed no closer than the dripline of the tree. Barrier may be removed after heavy construction or when necessary to facilitate grading work. All care possible must be used when working near existing trees.

**Under Trees** - Do not work in areas under the tree equal to the spread of the branches. Specifically:

1. Do not light or maintain fires.
2. Do not place or store materials or debris.

3. Do not operate or store mechanical equipment of any kind. Do not repair or perform maintenance service.
4. Do not permit traffic.
5. Do not permit or perform excavating, grading, or other operations unless specifically required by drawings and/or other parts of the specifications.

**Damage to Trees** - If any trees, marked or noted to remain, are permanently damaged, the Contractor shall pay the Owner the minimum sum of \$1,500.00 as liquidated damages per tree damaged.

**Removal of Debris** - All shrubs, vines, stumps, and trees which have been cut down shall be properly removed from the site. No vegetation or debris may be buried or burned at the site. All non-vegetative debris is to be kept in an approved container which is to be emptied prior to mounding out from the containment potential of receptacle.

**Housekeeping** - Throughout all operations under this contract, the Contractor shall keep adjoining streets, driveways and walks clean from truck dropping and debris. The site is to be kept in a clean and orderly fashion such that it is presentable to the owner. Removal of waste material is to be handled and discarded in a manner which in keeping with all local, state and federal guidelines for waste disposal. All recycling options are to be exercised. The site is to remain safe at all times.

#### **1.06 DELIVERY, STORAGE and HAULING**

Deliver all materials in the manufacturers' packaging with tags and labels intact and legible. Handle and store materials to prevent damage, deterioration and rust. All equipment assembly must occur on site.

### **PART 2 - PRODUCTS**

#### **2.01 MATERIALS AND EQUIPMENT**

All materials shall meet or exceed the following applicable standards:

1. The American Society for Testing and Materials (ASTM) F1487-01
2. 1997 Consumer Product Safety Commission (CPSC)
3. The Americans with Disabilities Act (ADA)
4. The Uniform Federal Accessibility standards (UFAS)
5. Michigan's Barrier Free Design Law

### **PART 3 - EXECUTION**

#### **3.01 PREPARATION**

Examine the areas and conditions under which site work is performed prior to beginning any portion of the work. If unsatisfactory conditions are found, contact the Architect. Do not proceed with the work until such conditions are corrected.

The Contractor is to prepare the playground site with the proper slope, sub-drainage, access to the site and all other applicable items as noted on the drawings or specifications.

#### **3.02 CLEANING**

The Contractor shall remove from site all rubbish and debris found thereon and all materials and debris resulting from the work. All Manufacturer's shipping labels shall be removed from equipment. Throughout all operations under this contract, the Contractor shall keep adjoining streets, driveways and walks clean from truck dropping and debris. The site shall be left in a safe and clean condition upon completion of the work.

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**DIVISION 2**  
**SITE WORK**



## SECTION 02110 SITE PREPARATION

### PART 1 GENERAL

#### 1.01 DESCRIPTION OF WORK

The extent of site preparation required includes, but is not limited to, all labor, material, equipment, and services necessary for:

- Protection of existing trees and vegetation
- Removal of trees and other vegetation
- Clearing and grubbing
- Related work as required

#### 1.02 SOIL SEDIMENTATION AND EROSION CONTROL

**Purpose:** The purpose of this section is due to legislation requiring the control of soil sedimentation and erosion by Public Act 347 of 1972 of the State of Michigan as adopted and by any amendments.

**Permit:** All permits relative to this section shall be obtained by Owner prior to construction. Such permit shall be based upon an Erosion Control Plan prepared for this project.

**Implementation:** It shall be the responsibility of the Contractor to implement the Erosion Control Plan for this project in strict accordance with the permit. All materials for the implementation of temporary and permanent soil sedimentation and erosion control measures shall be as per plan or as per other relative sections of the specifications such as seeding, etc. Unless specified within other sections of the specifications, all work under this section shall be in strict accordance with the construction methods as prescribed by the State of Michigan Department of Natural Resources for the implementation of this legislation. Refer to Michigan Guidebook for Soil Erosion and Sedimentation Control, prepared for and distributed by the Water Resources Commission of the Department of Natural Resources, State of Michigan.

#### 1.03 JOB CONDITIONS

**Protection of Existing Improvements:** Provide barricades, coverings or other types of protection necessary to prevent damage to existing improvements indicated to remain in place. Protect improvements on adjoining properties and on the Owner's property. Restore any improvements damaged by this work to the original condition as acceptable to the Owner and other parties or authorities having jurisdiction.

**Protection of Existing Trees and Vegetation:** Protect existing trees and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line. Provide temporary fences, barricades or guards as required to protect trees and vegetation to be left standing. Water trees and other vegetation to remain within the limits of the contract work as required to maintain their health during the course of construction operations. Provide protection for roots over 1.5" diameter cut during construction operations. Coat the cut faces with an acceptable coating formulated for horticultural use on cut or damaged plant tissues. Temporarily cover exposed roots with wet burlap to prevent roots from drying out and cover with earth as soon as possible. Repair or replace trees and vegetation damaged by construction operations in a manner acceptable to the Engineer or Landscape Architect. Tree damage shall be repaired by a qualified tree surgeon. The selected tree

surgeon shall be subject to the written approval of the Engineer or Landscape Architect. Replace trees which cannot be repaired and restored to full growth status as determined by the tree surgeon.

## **PART 2 PRODUCTS**

### **2.01 SITE FURNISHINGS**

All benches to be removed and protected until they can be reinstalled as shown on plan. The existing clock should also be removed and reinstalled. If this is not possible then the contractor is to notify client.

## **PART 3 EXECUTION**

### **3.01 SITE CLEARING AND GRUBBING**

Remove vegetation, improvements or obstruction interfering with the installation of new construction. Clear the project site of trees, shrubs and other vegetation except for those indicated to be left standing. Removal includes new and old stumps of trees and their roots. Carefully and cleanly cut roots and branches of trees indicated to be left standing, where such roots and branches obstruct new construction. Completely remove stumps, roots and other debris protruding through the ground surface. Use only hand methods for grubbing inside the drip line of trees indicated to be left standing. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated. Place fill material in horizontal layers not exceeding 0.5' loose depth, and thoroughly compact to a density equal to adjacent original ground.

### **3.02 DISPOSAL OF WASTE MATERIALS**

Burning of combustible cleared and grubbed materials is not permitted on the Owner's property. Remove from the Owner's property and legally dispose of all waste materials and unsuitable or excess soils. If a landfill is used the Contractor will provide the Name, Address, Phone, and dump tickets, including quantities, to the Owner.

### **3.03 TOPSOIL REMOVAL**

Topsoil is defined as friable clay loam surface soil found in a depth of not less than 0.4'. Satisfactory topsoil is reasonably free of subsoil, clay lumps, stones and other objects over 2.0" in diameter, and without weeds, roots and other objectionable materials. Strip topsoil from within the areas to be occupied by the structure, Paving and walks and from other areas within the grading limits to be cut, filled or re-graded. Strip topsoil to whatever depth encountered in a manner to prevent intermingling with the underlying subsoil or objectionable material. Remove heavy growth of grass from areas before stripping. Where trees are indicated to be left standing, stop topsoil stripping at a sufficient distance to prevent damage to the main root system. Stockpile topsoil as indicated and where it will not interfere with construction operations or site work. Locate topsoil storage piles in areas shown or where otherwise directed. Construct storage piles to freely drain surface water and cover if required to prevent windblown dust. If soil or weather conditions are unsuitable, the Contractor shall cease topsoil removal operations and resume only when directed to do so by the Engineer or Landscape Architect. Dispose of excess topsoil and top 2-inches of turf in Owner designated area to be determined in field with Owner. Fine grade any excess topsoil stockpiles. The Owner reserves the right to use any soils that have been derived from the site.

## **SECTION 02210 EARTHWORK**

### **PART 1 GENERAL**

#### **1.01 DESCRIPTION OF WORK**

The extent of Earthwork required includes, but is not limited to, all labor, material, equipment and services necessary for:

- Site grading
- Cutting
- Placement of fill materials
- Related work as required

Excavating and backfilling for storm drainage and other utilities are not included as a part of this work and, as may be applicable, may be specified elsewhere in these documents.

#### **1.02 QUALITY ASSURANCE**

**Codes and Standards** - Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.

**Lines and Grades** - The Contractor shall provide all instrumental surveying required to lay out and construct this work in conformance with the drawings. Verify subgrade by staking on section lines before installing topsoil or other surfacing material.

#### **1.02 JOB CONDITIONS**

**Site Information** - The Contractor shall make its own investigation as he or she deems necessary prior to the bid opening. Data on surface or subsurface conditions is not intended as representations or warranties of accuracy or continuity of actual site conditions. It is expressly understood that the Owner and project consultants employed as representatives of the work will not be responsible for interpretations or conclusions drawn there from by the Contractor. Data is made available for the convenience of the Contractor.

**Existing Utilities** - Locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the utility owner immediately for directions. Cooperate with the Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to the satisfaction of the utility owner. Do not interrupt existing utilities serving facilities occupied and used by the Owner or others, except when permitted in writing by the Engineer or Landscape Architect, and then only after acceptable temporary utility services have been provided.

**Explosives** - The use of explosives is not permitted.

**Protection of Persons and Property** - Barricade open excavations occurring as part of this work and post with warning lights. Operate warning lights as recommended by authorities having jurisdiction. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washouts and other hazards created by earthwork operations.

## PART 2 PRODUCTS

### 2.01 DEFINITIONS

**Standards** - Satisfactory soil materials are defined as those complying with American Association of State Highway and Transportation Officials (AASHTO) M145, soil classification Groups A1, A24, A25 and A3. Unsatisfactory soil materials are those defined in AASHTO M145 Soil Classification Groups A26, A27, A4, A6 and A7. Also listed as unsatisfactory are peat and other highly organic soils. Cohesion less soil materials includes gravel, sand gravel mixture and gravelly sands. Cohesive soil materials include clayey and silty gravel, sand clay mixtures, gravel silt mixtures, clayey and silty sands, sand silt mixtures, clays, silts and very fine sands.

**Topsoil** - Topsoil shall be fertile, friable organic soil, characteristic of the soils in the project area which will produce heavy growths of vegetation. Topsoil shall be capable of supporting a healthy and vigorous stand of turf (lawn) grass. The following mechanical analysis shall be met:

1" Sieve	100% Passing
1/4" Sieve	97_99% Passing
#100 Sieve	40_60% Passing

The Ph level shall be between 5.5 and 7.5. Organic material shall not be less than 4% by weight nor greater than 25%. Topsoil shall be free of any matter which will retard or prevent healthy growth of plant material. Slag, cinders, subsoil, and stone shall not exceed 5% by volume. Topsoil shall be free of viable seeds of noxious weeds and/or illegal plants, and herbicide chemicals. Contractor shall provide a representative sample of proposed topsoil and shall identify the original and current location from which the material will be obtained.

## PART 3 EXECUTION

### 3.01 INSPECTION

Examine the areas and conditions under which excavation, filling and grading is to be performed and notify the Engineer or Landscape Architect, in writing, of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

### 3.02 EXCAVATION

**Excavation** consists of removal and disposal of material encountered when establishing required grade elevations. Earth excavation includes removal and disposal of pavements and other obstructions visible on the ground surface, underground structures and utilities indicated to be demolished and removed, material of any classification indicated in data on subsurface conditions, and other materials encountered that are not classified as rock excavation or unauthorized excavation. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of the Engineer or Landscape Architect. Unauthorized excavation, as well as remedial work directed by the Engineer or Landscape Architect, shall be at the expense of the Contractor.

**Dewatering** - Prevent surface water and subsurface or groundwater from flowing into excavations and from flooding project site and surrounding area. Convey water removed from excavations and rainwater to collecting or run off areas. Establish and maintain temporary drainage ditches and other

diversions outside excavation limits for each structure. Do not use trench excavations as temporary drainage ditches.

**Materials Storage** - Stockpile satisfactory excavated materials where directed, until required for fill. Place grade and shape stockpiles for proper drainage. Locate and retain soil materials away from the edge of excavations. Dispose of excess soil material and waste materials as directed.

**Excavations for Paved Areas** - Cut surface under pavements to comply with cross-sections, elevations and grades as shown.

### 3.03 COMPACTION

Control soil compaction during construction, providing minimum percentages of density specified for each area classification. Compact soil to not less than the following percentages of maximum dry density for soils which exhibit a well-defined moisture density relationship determined in accordance with ASTM D 1557.

**Turf or Unpaved Areas** - Compact top 0.5 foot of subgrade and each layer of backfill or fill material not to exceed 80% maximum density.

**Moisture Control** - Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade or layer of soil materials. Prevent free water from appearing on surface during or subsequent to compaction operations. Remove and replace or scarify and air dry soil material that is too wet to permit compaction to specified density.

### 3.04 BACKFILL AND FILL

Place acceptable soil material in layers to required subgrade elevations, for each area classification listed below:

**Walks and Paved Areas** - Use subbase material, satisfactory excavated or borrow material or combination of both. See – 4" Concrete Details

**Turf or Unpaved Areas** - Use satisfactory excavated or borrow materials.

**Ground Surface Preparation** - Remove vegetation, debris, unsatisfactory soil materials, obstructions and deleterious materials from ground surface prior to placement of fills. Plow strip or break up sloped surface steeper than one vertical to four horizontal so that fill materials will bond with existing surface. When existing ground surface has a density less than that specified under "Compaction" for the particular area classification, break up the ground surface, pulverize, moisture condition to the optimum moisture content and compact to required depth and percentage of maximum density.

**Placement and Compaction** - Place fill materials in layers not more than 0.6 foot in loose depth for material compaction by heavy construction equipment and not more than 0.3 foot in loose depth for material compacted by hand operated tampers.

### 3.05 DISTRIBUTION OF TOPSOIL

Prior to topsoil placement, the subgrade shall be prepared to uniform levels and slope between points where elevations are shown. Abrupt changes in slope are to be rounded off. Loosen subgrade to a minimum depth of 0.4 foot. Remove stones over .75" in any dimension and sticks, roots, rubbish

and other extraneous matter. Fine rake by York Rake, Viking Roller Blade, Rotovator, Rockhound or approved equal or by hand to produce a smooth even surface that conforms to the grades established on the drawings. Any irregularities shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall be uniformly distributed to a minimum depth of 0.4 foot after firming, unless otherwise indicated. Topsoil in planting bed areas, if applicable, shall be placed to a minimum depth of 1.0 foot. Topsoil shall be spread in such a manner that finish grading, seeding or sodding, and landscape planting operations can proceed with a minimum of additional soil preparation. Place approximately 50% of the total amount of the topsoil required, work into top of loosened subgrade to create a transition layer, and then place remainder of topsoil. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet or in a condition that may otherwise be detrimental to proper grading. Irregularities in the surface resulting from topsoil spreading or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Provide additional clean topsoil subject to approval of the Engineer or Landscape Architect as may be required to complete work. Distribute any excess topsoil as directed.

### **3.06 MAINTENANCE**

**Protection of Graded Areas** - Protect newly graded areas from traffic and erosion. Keep free of trash and debris. Repair and reestablish grades in settled, eroded and rutted areas to specified tolerances.

**Reconditioning of Compacted Areas** - Where completed compacted areas are disturbed by subsequent construction operation or adverse weather, scarify surface, reshape and compact to required density prior to further construction.

### **3.07 DISPOSAL OF EXCESS AND WASTE MATERIALS**

Remove trash, debris, waste materials, excess topsoil, and removed pea stone and timbers and legally dispose of such off the property, except as otherwise specifically noted.

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## SECTION 02760 – RECREATION & SITE FURNISHINGS

### PART 1 - GENERAL

#### 1.01 DESCRIPTION OF WORK

Site furnishings includes ordering, scheduling, assembling, and installing incidental products from manufacturers as per the manufacturers' specifications and/or in conjunction with the plans included in this project.

The contractors' attention is directed to the GENERAL CONDITIONS OF THE CONTRACT, as well as the GENERAL REQUIREMENTS.

### PART 2 - PRODUCTS

#### 2.01 TABLES

DuMor Inc. Steel Table 448-43 ADA 3 Seat OR SIMILAR TO  
(Determination will be made by Engineer/Architect. Submittals/Shop Drawings/Specifications)  
and

DuMor Inc. Steel Table 448-44 4 Seat OR SIMILAR TO  
(Determination will be made by Engineer/Architect. Submittals/Shop Drawings/Specifications)  
and

DuMor Inc. Steel Table 443-558-1 8' STEEL ADA PICNIC TABLE, 2 BENCHES OR SIMILAR TO  
(Determination will be made by Engineer/Architect. Submittals/Shop Drawings/Specifications)

#### 2.02 TRASH RECEPTACLES

DuMor Inc. 436-40 40-GAL TRASH/RECYCLING RECEPTACLE, TOP OR SIMILAR TO  
(Determination will be made by Engineer/Architect. Submittals/Shop Drawings/Specifications)

#### 2.03 BIKE LOOPS

DuMor Inc. 83-00/S-1 POWDER COATED BIKE RACK, EMBEDMENT MOUNT  
OR SIMILAR TO  
(Determination will be made by Engineer/Architect. Submittals/Shop Drawings/Specifications)

#### 2.04 FENCING

Elite, Inc. EFF-20 3 1/2 Foot OR SIMILAR TO  
(Determination will be made by Engineer/Architect. Submittals/Shop Drawings/Specifications)

### PART 3 – EXECUTION

All site furnishings are to be bought and installed by Contractor.

## **SECTION 02810 FINISH GRADING**

### **PART 1 GENERAL**

#### **1.01 DESCRIPTION OF WORK**

The extent of the landscape finish grading work is to meet the existing grading around the playground area. The work of this section includes, but is not limited to, the furnishing of all labor, materials, equipment, and services necessary for:

Finish grading of topsoil  
Seeding  
Related work as required

#### **1.02 LANDSCAPE SUBCONTRACTOR**

The selection of the landscape subcontractor if applicable is subject to the written approval of the Engineer or Landscape Architect.

#### **1.03 SITE CONDITIONS**

The Contractor shall examine the soils, verify elevations, observe the conditions under which the work is to be performed and notify in writing the Engineer or Landscape Architect of any unsatisfactory conditions prior to bid preparation. All unsatisfactory topsoil quantities or qualities or other unsatisfactory conditions encountered during construction shall be reported in writing to the Engineer or Landscape Architect. Finish grading of landscape areas shall not continue prior to correction of or written acceptance of the encountered condition by the Owner.

### **PART 2 PRODUCTS**

#### **2.01 TOPSOIL Refer to "Section 02210 Earthwork"**

### **PART 3 EXECUTION**

#### **3.01 GRADING**

The topsoil shall be fine graded to uniform levels and slope between points where elevations are shown. Abrupt changes in slope are to be rounded off. Loosen lawn areas to a minimum depth of 0.4 foot. Remove stones over 1.0" in any dimension and sticks, roots, rubbish, and other extraneous matter. Fine rake to produce a smooth even surface that conforms to the grades established by drawings. Any irregularities in the surface from topsoil spreading or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall not be graded while in a frozen or muddy condition, when the subgrade is wet, or in a condition that may otherwise be detrimental to proper grading. Compaction shall not exceed 80% maximum density. Manually install topsoil at tree roots to remain to avoid damage to root systems.

#### **3.02 CLEANUP**

After the final grades are approved, remove all grade stakes, surface trash and other objects that would hinder maintenance of turf and planted areas.

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## SECTION 02821 SEEDING WITH MULCH

### PART 1 GENERAL

#### 1.01 DESCRIPTION OF WORK

The extent of seeding work required for this project is around the project area. Seeding is to be done around the project area and in areas damaged from construction. The work of this section includes, but is not limited to, all labor, material, equipment, and services necessary for:

Seeding of all scheduled areas and areas disturbed during construction of this project.  
Mulching of all seeded areas  
Related work as required

#### 1.02 LANDSCAPE SUBCONTRACTOR

The selection of the landscape subcontractor if applicable is subject to the written approval of the Engineer or Landscape Architect.

#### 1.03 DELIVERY, STORAGE, and HANDLING

Seed and fertilizer materials shall be in original unopened containers and shall indicate weight, analysis, name, and date code of the manufacture. Materials shall be stored in an orderly manner, at location acceptable to the Engineer or Landscape Architect, in a manner to prevent wetting and/or deteriorated.

#### 1.04 PROJECT CONDITIONS

Seed Blend - Submit proposed Seed Blend to the Engineer or Landscape Architect for approval.

Seeding - Perform seeding work only after other work affecting ground surface has been completed.

Watering - Provide adequate hose and watering equipment as required.

Germination - Within thirty (30) days after seeding, it is expected that 60-80% of the seed will have germinated and grown.

#### 1.05 SITE CONDITIONS

All unsatisfactory topsoil quantities or qualities or other unsatisfactory conditions detrimental to seeding shall be reported in writing to the Engineer or Landscape Architect. Seeding shall not continue prior to correction of or written acceptance of the encountered conditions by the Owner.

#### 1.06 WARRANTY

The Contractor shall provide a uniform stand of grass and shall provide watering, mowing, and maintenance of all seeded areas prior to final acceptance by the Owner. The Contractor shall reseed all areas which fail with specified materials to provide a uniform stand of grass until all affected areas are accepted by the Engineer or Landscape Architect.

### PART 2 PRODUCTS

#### 2.01 SEED

Seed shall be a consistent mixture of the following varieties or approved equal:

A. Permanent cover (& Dormant Cover): shall be a consistent mixture of the following varieties:			
Seed	%/Wt.	Germination	
Kentucky Bluegrass	25%	85%	

Creeping Red Fescue	25%	90%
Perennial Ryegrass	25%	90%
Annual Ryegrass	25%	85%

The seed mixture prepared shall not contain more than 0.15% weed and more than 0.00% noxious weed seed. Submit all tags from seed bags to the Architect for inspection. Kentucky Bluegrass shall be a mixture of at least three (3) varieties. Merion or Fylking Kentucky Bluegrass shall not be used. Ryegrass shall be at least one (1) of the following: Pennfine, Omega, Manhattan, Derby or NK-200.

Temporary Cover: shall be a consistent mixture of the following varieties:

Seed	lbs/acre	Germination
Kentucky Bluegrass	20	85%
Creeping Red Fescue	20	90%
Perennial Ryegrass	10	90%
Annual ryegrass	5	80%

## **2.02 FERTILIZER**

Fertilizer for turf areas shall have a chemical analysis shall be at least 12% available nitrogen, 12% readily available phosphoric acid, and 12% total available potash (12-12-12).

## **2.03 MULCH**

Mulch shall be hydro mulch, matted straw, free of noxious weed seed or other approved organic material commonly used by the industry for the purpose of the mulching of seeding and approved by the Engineer or Landscape Architect. Mulch shall be held in place with an approved tackifier agent intended for such an application. The rate of application shall be in accordance with manufacturers' specifications. Mulch type is to be approved by the Engineer or Landscape Architect in writing prior to installation.

## **2.04 WATER**

Water shall be free of substance harmful to seed growth. Hoses and other methods of water transportation and application shall be furnished by the Contractor.

# **PART 3 EXECUTION**

## **3.01 SURFACE PREPARATION**

Topsoil shall be fine raked to produce a smooth even surface which conforms to established grades. All stones larger than .75" in diameter shall be removed from the surface of areas to be seeded. The area shall be made smooth and uniform and parallel to the finished grade. The tops and bottoms of all slopes shall be rounded to blend into the natural ground or adjacent slopes by vertical curves.

## **3.02 TOLERANCE**

Seeded areas will be allowed to have a tolerance of 0.1 foot. Slope for drainage over turf areas shall have a minimum grade of 1.0%

## **3.03 CHEMICAL TREATMENT**

Seeding shall not be done on soil which has been chemically treated until sufficient time has elapsed to permit dissipation of all toxic materials. The Contractor shall assume full responsibility for any loss or damage to turf arising from improper dissipation of toxic residues, whether or not such materials are specified herein.

### **3.04 FERTILIZER APPLICATION**

Fertilizer shall be applied uniformly over the entire area to be seeded and incorporated into the topsoil. Application rate shall be 15# per 1000 square feet.

### **3.05 SEEDING**

Seed shall be applied evenly over the entire area. This Mixture shall be evenly applied by seeding or drilling with a Brillion Seeder, Viking Roller Blade\, or approved equal at the rate of 5# per 1000 square feet.

### **3.06 MULCHING**

Roll straw mat to obtain continuous coverage over the seeded area. Straw shall be mechanically crimped. As an alternate method, approved organic fibrous material may be applied at the rate of 1000# per acre by hydro seeder. Refer to tackifier requirement above.

### **3.07 HYDRO SEEDING**

This method may be used only when authorized in writing by the Engineer or Landscape Architect. When such authorization is given, the finish grading and surface treatment is as previously specified.

### **3.08 WATERING**

To the point of acceptance, the Contractor shall be responsible for providing adequate water and application to assure the establishment of a dense permanent turf.

### **3.09 MAINTENANCE**

**Duration** - The Contractor shall maintain newly seeded turf until the final acceptance of the entire project.

**Maintenance Included** - Maintain newly seeded turf areas, including watering, spot weeding, mowing, application of herbicides, fungicides, insecticides, and reseeding until a full, uniform stand of grass free of weed, undesirable grass species, disease, and insects is achieved and accepted by the Engineer or Landscape Architect.

1. Water daily to maintain adequate surface soil moisture for proper seed germination. Continue daily watering for not less than 30 days. After 30 days, apply ½" of water two times per week until final acceptance.
2. Repair, rework, and/or reseed all areas what have washed out and/or eroded or areas which turf has not established.
3. Mow new turf prior to a height of 3 inches. Set mower blades at a minimum height of 2 inches. Not more than 30% of the grass leaf shall be removed at the initial or following mowing.
4. If infestation of weeds or crabgrass develops, treat infested area by hand weeding or herbicidal control. Furnish and install weed chemical control as per manufacturer's recommendation. All herbicidal controls - including renovation before reseeding operations - shall be acceptable to the Engineer or Landscape Architect.

### **3.10 ACCEPTANCE**

An inspection to determine acceptance of installed lawns will be made by the Engineer or Landscape Architect upon the Contractor's request. Provide notification at least five (5) working days prior to the requested inspection.

1. New lawn areas will be acceptable provided all requirements - including maintenance - have been complied with, and a healthy uniform stand of specified grasses is established, and is free of weeds of undesirable grass species, disease, and insects.
2. Turf areas shall NOT have bare spots or unacceptable cover totaling more than 2% of the individual areas, in areas requested to be inspected.
3. Upon final acceptance, the Owner will assume turf maintenance responsibility.

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## **SECTION 02900 PLAYGROUND SAFETY SURFACES**

### **PART 1 GENERAL**

#### **1.01 DESCRIPTION OF WORK**

The extent of Playground Safety Surface work is to include installing approved safety surfaces within "Safety Use Zones" under all playground equipment.

A permanent resilient safety surfacing (rubber, latex and/or vinyl) is to be included under play area.

The edge safety surfaces shall be commercially prepared wood fiber products, a combination of wood fiber products and unitary poured in place surfacing, or a combination of pea stone and unitary poured in place surfacing suitable for play areas. The surfacing must meet ADA and CPSC Standards.

This work includes, but is not limited to, all labor, material, equipment, and services necessary for:

- Excavation and trenching
- Disposal of unsuitable or excess excavated materials
- Disposal of unsuitable or excess pea stone and wood timbers
- Dewatering of Excavations
- Subgrade Preparation
- Subsurface Drainage
- Supply and Placement of Geotextile Fabric under pea stone and Wood Fiber Surfacing
- Supply and Placement of Commercially produced Wood Fiber Surfacing 15" uncompressed (12" minimum compressed depth)
- Installation of Synthetic Surfacing per manufacturer's specifications
- Foundations, bedding, backfill and fill materials
- Restoration of finished surfaces
- Related work as required

#### **1.02 REQUIREMENTS OF REGULATORY AGENCIES**

Work of this section shall be constructed in accordance with all standards, guidelines, laws, ordinances, rules, regulations and orders of any public authority having jurisdiction. When such work is required to be constructed in a manner differing from the Contract Documents, the Contractor shall so notify the Architect, in writing, prior to proceeding with the work. Work of this section shall specifically meet or exceed the 1997 Consumer Product Safety Commission (CPSC), the American Society for Testing Materials (ASTM F1487-01), the Americans with Disabilities Act (ADA), Uniform Federal Accessibility Standards (UFAS) Michigan's Barrier Free Design Law, and any other applicable standard, guidelines, law, ordinance, rule, regulation and/or order of any public jurisdiction having authority.

If fall heights for any equipment and surfacing exceed the test data supplied by CPSC's, "Playground Surfacing: Technical Information Guide", additional test data shall be provided by the manufacturer/supplier of the product to support the proposed products compliance and safety with the standards and guidelines. The manufacturer/supplier shall also provide a written waiver to the Owner and the Owner's Representative(s) holding them harmless.

#### **1.03 SITE CONDITIONS**

The Contractor shall examine the subgrade, verify the elevations, observe the conditions under which the work is to be performed, and notify the Owner and the Architect of any unsatisfactory

conditions prior to bid preparation. Safety Surface Systems shall not be installed until all unsatisfactory conditions are corrected.

#### **1.04 QUALITY ASSURANCE**

**A. Workmanship**

The Contractor is responsible for correction of work that does not conform to the specified requirements.

**B. Source Limitations**

Obtain specified safety surface from one manufacturer and one source.

**C. Manufacturer's Test Data**

The Contractor shall submit the manufacturer's test data demonstrating that materials to be used on this project meet applicable requirements of regulatory agencies, as listed in 1.02.

**D. Test Results**

Tests conducted to determine shock-absorbing properties of surfacing materials shall be in accordance with ASTM test method, ASTM F355-86.

**E. Test Method Results:**

Test method results of safety surfaces shall meet or exceed standards for Impact Attenuation (G-Max and Head Injury Criteria (HIC)).

#### **1.05 JOB CONDITIONS**

**A. Site Information**

Data on indicated surface and subsurface conditions, if provided, is not intended as an exact representation or warranty of accuracy or continuity of the site. It is expressly understood that the Owner and the Owner's Representative(s) are employed as representatives of the Owner, and will not be responsible for interpretations or conclusions drawn there from by the Contractor. Data is made available only for the convenience of the Contractor. Additional test data and other exploratory operation may be made by the Contractor, either prior to submitting its bid and during construction, if at no additional cost to the Owner.

**B. Existing Utilities**

Contractor shall locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the utility owner immediately for directions. Cooperate with the Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to the satisfaction of the utility owner. Do NOT interrupt existing utilities serving facilities occupied and used by Owner or others - except when permitted in writing by the Architect and then only after acceptable temporary utility services have been provided. Demolish and completely remove from the site existing underground utilities indicated to be removed. Coordinate with utility companies for shut off of services if lines are active.

**C. Explosives.**

The use of explosives is not permitted.

**D. Protection of Persons and Property**

Barricade open excavations occurring as part of this work and post with warning lights. Operate warning lights as recommended by authorities having jurisdiction. Protect structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by sub-drainage operations.

## **1.06 SUBMITTALS**

Contractor shall submit the following safety surface product information to the Owner and the Owner's Representative:

Reference List

Source of the wood product

Name of the company

Address, Phone, E-mail

Product Samples - A minimum of one cubic yard

A written guarantee from the manufacturer for the proposed product against all defects in material and/or workmanship and that in an event where contaminants have been discovered all wood fiber will be replaced at the Contractors expense.

Impact Attenuation (G-max) (per fall height requirements), Head Injury Criteria (HIC), coefficient of friction, permeability and flammability test results from reputable independent testing laboratories

## **PART 2 - PRODUCTS**

### **2.01 WOOD FIBER SURFACING**

Wood fiber surfacing shall be a commercially prepared mix of random-sized wood fibers specifically manufactured for playgrounds. Standard wood chips or bark mulch will not be acceptable.

The following mechanical analysis shall be met:

3/8" sieve	85% passing
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#60 sieve	50% passing
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Wood fiber shall have no foreign matter, or twigs, bark, leaf, debris or other organic material incorporated within. Provide "Shop Drawings", product specifications and product safety and test data for proposed shredded wood fiber system prior to ordering.

### **2.02 SYNTHETIC SURFACING**

Provide "Shop Drawings", product specifications, and product safety and test data for proposed synthetic safety surface system prior to ordering. All synthetic surfacing shall be installed as per manufacturer's specifications to assure maximum impact protection per critical fall height.

### **2.03 GEOTEXTILE FABRIC**

Geotextile fabric shall be a Terrabond Polyester Drainage Fabric, non-woven, meeting a grade of 1114.

### **2.04 PEA STONE**

Pea stone used for safety surfacing or Subsurface drainage - See Section 02510.

### **2.05 SUBSURFACE DRAINAGE PIPE**

Drainage Pipe used in play areas – See Section 02510.

## **PART 3 - EXECUTION**

### **3.01 INSPECTION**

Contractor shall thoroughly examine the areas and conditions under which excavation, filling, and grading are to be performed. Architect is to be notified, in writing, of conditions detrimental to the

proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

### **3.02 SUBGRADE**

- A. The subgrade shall be graded to a minimum of 1% and a maximum of 5%.
- B. All roots, stones and vegetation shall be removed.
- C. The subgrade shall be compacted to 95% of the dry density, as determined by the provisions of AASHTO or T 205.
- D. Subgrade shall be level with existing grade, or excavated below existing grade as determined necessary by the Architect.

### **3.03 APPLICATION**

#### **A. WOOD FIBER SURFACING**

- 1. Geotextile Fabric
  - a) Geotextile fabric shall be used as separation between the pea stone drainage course and wood fiber material and between the pea stone drainage course and subbase.
  - b) In areas where equipment exists, it is necessary to cut the fabric to fit. Once fitted, any cuts should be overlapped with fabric wherever possible.
  - c) Geotextile fabric shall be placed on smooth subgrade and all wrinkles removed. All seams shall overlap a minimum of 12". Machinery shall not disturb or travel on the geotextile fabric.
- 2. Drainage Course

Four inches (min.) of pea stone gravel shall be placed on the subbase with a layer of geotextile fabric separating the pea stone from the subbase.

  - a) Four inch (or larger as indicated on plans) perforated corrugated PVC pipe shall be placed across the playground area and along the edges of the playground area with a minimum slope of 0.5%.
  - b) All installation sites shall have positive grade to facilitate drainage away from the playground area.
- 3. Wood Fiber
  - a) Wood fiber material shall be placed on top of the pea stone drainage course, separated by a layer of geotextile fabric.
  - b) The wood fiber surfacing shall be spread to a uniform depth of 15" (12" is a minimum compressed depth). All material must be installed to allow for settling and natural compaction.

#### **B. SYNTHETIC SURFACING**

- 1. Provide Shop Drawings, product specifications and product safety and test data to the Owner and the Owner's Representative(s) for proposed synthetic surface system per critical fall height.
- 2. All synthetic surfaces shall be installed as per the manufacturer's specifications to assure maximum impact protection for proposed equipment.
- 3. Synthetic surfacing shall be placed in the Safety Use Zones

### **3.04 DISPOSAL OF EXCESS AND WASTE MATERIALS**

Remove excess excavated material, trash, debris and waste materials and legally dispose of such off the property, except as otherwise specifically noted or approved in writing by Owner.



### **3.05 GUARANTEE and MAINTENANCE**

All Materials and Installations shall be guaranteed by the manufacturer/supplier for a period of two years beyond the date of final acceptance by the Owner. The manufacturer/supplier shall provide a written maintenance plan to the Owner that describes in detail any and all maintenance requirements, inspections, etc. which will need to be accomplished during the life of the equipment. For the purpose of this project the term "life" shall be defined as for a period of seven years from the date of substantial completion.

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## **SECTION 02901 PLAYGROUND AND PARK EQUIPMENT**

### **PART 1 GENERAL**

#### **1.01 DESCRIPTION OF WORK**

Provide playground equipment as shown on the drawings and as specified. Work shall include age-appropriate equipment, protective safety surfacing, surface retainer system, sub-drainage under the equipment, installation, future inspection, future maintenance and guaranties.

#### **1.02 STANDARDS**

All play equipment shall be specified to meet or exceed the 2008 Consumer Product Safety Commission (CPSC) Guidelines, the American Society for Testing and Materials (ASTM F1487-01) Standards, the Americans with Disabilities Act (ADA), Uniform Federal Accessibility Standards (UFAS) and Michigan's Barrier Free Design Law.

If a conflict occurs between any two or more of the above listed standards, guidelines and/or data, the stricter shall take precedence.

If any part of the proposed playground is not supported by the standards, guidelines and or test data listed above, the manufacturer shall provide all of the following to the Owner and to the Owner's Representative(s):

1. Test data to support the proposed product(s) compliance and safety with the standards and guidelines listed above.
2. A signed waiver holding the Owner and Owner's Representative(s) harmless.

#### **1.03 SUBMITTALS**

- A. Shop Drawings** - Detailed construction drawings shall be furnished for each play structure. Drawings shall include technical data necessary for correct assembly.
- B. Detailed Specifications** - Manufacturer Specifications for decks, uprights, clamps, barrier/railing tubing, hardware, footings, safety surfacing, surface retainer, wear pads and powder coated finish must be submitted with bid.

#### **1.04 DELIVER AND STORAGE**

Equipment delivered and stored at the site shall be immediately piled in stacks to insure drainage and free circulation. No two pieces in contact; lay on skids, placed to give slope of not less than ½" per foot to the stack and minimum clearance of 6" above grade. Cover stacks with suitable roof covering tarpaulins. Contractor responsible for inventory of manufactured play equipment delivered to the site and checking material for cracks, warping, scratches or other defects and arranging with the manufacturer for replacements, if necessary. The Engineer or Landscape Architect has the right to reject any material which is defective or in generally poor condition. Contractor responsible for proper and secure storage. Owner shall not be held responsible for theft vandalism or damage to equipment regardless of storage location, manufacturer assumes all responsibility.

#### **1.05 MEASUREMENTS**

Verify all measurements required for the proper execution and fit of work. Includes manufacturer's equipment relative to CPSC safety zones, heights, decks, platforms, rails, spacing, gaps, protrusions, entrapments, access ramps, vertical or horizontal obstructions and all potential hazards. All dimensions shall be checked and verified with field conditions. Any discrepancies and/or conflicts

including choice between different installations involving changes shall be reported to the Engineer or Landscape Architect for correction and adjustment before materials are fabricated.

#### **1.06 WORKMANSHIP**

All fabrication and installation work required under this section of the Specifications shall be executed in accordance with the best standard of practice for each type of work. Only new materials shall be used. All construction shall be of the best quality to ensure durability. All edges, surfaces, connections and exposed fittings shall be finished to avoid sharp edges and similar hazards.

#### **1.07 JOB CONDITIONS**

##### **A. Site Information**

The Contractor shall make an onsite investigation prior to the bid opening. Data on surface or subsurface conditions is not intended as representation or warranties of accuracy or continuity of actual site conditions. It is expressly understood that the Owner and project consultants employed as representatives of the work will not be responsible for interpretations or conclusions drawn there from by the Contractor. Data made available by the Engineer or Landscape Architect or Owner for the Contractor to utilize and verify independently.

##### **B. Existing Utilities**

Locate existing underground utilities in the work area. At least 48 hours prior to excavation- call Miss Dig. If utilities are to remain in place, provide adequate means of protection during earthwork operations. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the utility owner immediately for direction. Cooperate with the Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to the satisfaction of the utility owner. Do not interrupt existing utilities serving facilities occupied and used by the Owner or others, except when permitted in writing by the Architect or utility company, and then only after acceptable temporary utility services have been provided.

##### **C. Protection of Persons and Property**

Barricade open excavations occurring as part of this work. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washouts and other hazards created by this work.

#### **1.08 DESIGN REQUIREMENTS**

All proposed equipment must meet the requirements as listed below.

1. All uprights are to be aluminum unless otherwise noted on the drawings or bid forms.
2. Track rides shall not have platforms at ends.
3. All slides shall have hoods or means to channel user into a sitting position.
4. Bridge railings/barriers shall curve, following the line of the bridge surface unless otherwise approved.
5. No bubble panels, mirror panels, roller slides, or spiral slides are allowed, unless otherwise approved.

6. Crawl tubes shall be coated expanded metal which allows visibility of the user unless otherwise approved.
7. Tops of post caps shall be rounded.
8. Decks, railings, barriers and other components shall be attached to posts using a clamp system on structures for 5-12 year olds.
9. All decks are to be a single piece of sheet steel, which is PVC coated and slip resistant unless otherwise approved.
10. Decks shall have barriers at event entrances.
11. Decks on modular designed for lower elementary play areas are not to exceed 4'.
12. Age appropriate (2-5) play areas are to be designed according to the CPSC users age group.
13. Age appropriate (5-12) play areas are to be designed according to the CPSC users age group.

## **PART 2 - PRODUCTS**

### **2.01 MAXIMUM EQUIPMENT HEIGHTS**

Equipment heights are not to exceed those which have been tested by CPSC and ASTM to be above the Critical Fall Height. If the equipment exceeds the critical fall height, the manufacturer will provide test data to support the proposed product's safety and compliance with the standards and guidelines. A waiver shall be written and signed by the manufacturer to the Owner and the Owner's Representative(s) holding them harmless from any future litigation.

### **2.02 POSTS / UPRIGHTS**

#### **A. Structures for 5-12 year olds**

All posts shall be aluminum with an outside diameter of 5" minimum. Posts shall have a minimum wall thickness of .125" extruded from 6005-T5 aluminum alloy conforming to ASTM-B-221 and QQ-A-200/8. Minimum yield strength shall be 35,000 psi. Minimum tensile strength shall be 38,000 psi.

#### **B. Structures for 2-5 year olds**

All posts shall be aluminum with an outside diameter of 3.5". Posts shall have a minimum wall thickness of .125" extruded from 6005-T5 aluminum alloy conforming to ASTM-B-221 and QQ-A-200/8. Minimum yield strength shall 35,000 psi. Minimum tensile strength shall be 38,000 psi.

#### **C. Caps**

Caps shall be aluminum. All upright caps are to be permanently installed at the factory. All caps to be rounded or angled. No cap shall have a 2" x 2" level surface.

### **2.03 DECKS**

Decks shall be manufactured from a single piece of 11-12 gauge sheet steel. The steel shall be perforated for drainage. Holes are to be no larger than 5/16". Four sided decks are to have a minimum surface area of 2275 square inches. Three sided decks are to have a minimum surface area

of 617 square inches. All deck connections are to be made from the underside of the deck with no exposed fasteners on the deck perimeter.

#### **2.04 RUNG ENCLOSURES**

The rung enclosure shall be fabricated of 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The vertical rungs shall be fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The rung enclosure shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

#### **2.05 ROTATIONALLY MOLDED PRODUCTS**

All polyethylene shall be first quality linear low-density material with UV-stabilized color and an anti-static compound additive. All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D-1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790).

#### **2.06 STEEL TUBING**

All tubing used to manufacture components shall be an electrical resistance welded, cold rolled, high strength steel tubing. The minimum yield strength is 50,000 psi and the minimum tensile strength is 55,000 psi. The exterior coating will consist of an in line hot-dipped uniform zinc galvanizing, chromate conversion, and powder coated.

#### **2.07 HARDWARE**

All nuts, bolts, screws, inserts, and lock washers used in the assembly of all play equipment shall be yellow dichromate plated steel, stainless steel, mechanically galvanized or powder coated/yellow dichromate plated steel. Yellow dichromate treatment includes an elector-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate topcoat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing. Hardware shall be button-pin-in head, hex socket cap screws with a two-part epoxy-locking patch added to the threads. The two part-locking patch shall consist of one part resin and one part catalyst which is activated during installation. After curing, the material shall require a minimum of five times the installation torque to remove the fastener. Manufacturer shall provide special installation tools for pinned fasteners.

#### **2.08 POWDER COAT FINISH**

Shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a six stage bath system with an iron phosphate wash, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0-5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Abrasion (ASTM 1907), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D-2242, Salt Spray ASTM B-117 & Fadometer 300 hours with no loss of gloss), and Oven bake Stability 100% at 400 degrees Fahrenheit.

### **PART 3 - EXECUTION**

### **3.01 PRE-CONSTRUCTION**

Prior to any excavation, installation or any other related work on site, the manufacturer's sales representative, installation contractor and all sub-contractors will meet the Owner and the Owner's Representative(s) on site for a pre-construction meeting.

### **3.02 ASSEMBLY**

To avoid transport damage, all playground and park equipment shall be unpacked from shipping containers and assembled on each playground site. Exceptions must be approved in writing by Owner or Engineer or Landscape Architect.

### **3.03 FOOTINGS**

Bottom depth of concrete footings shall be installed at a minimum depth of 36" below finish grade.

### **3.04 CONSTRUCTION INSPECTION**

During the course of construction, the contractor, manufacturer, supplier and manufacturer's designer shall supervise the installation. Once the installation is complete, the manufacturer shall certify in writing to the Owner that the installation has been completed in strict accordance with the manufacturer's specifications and requirements.

The Owner and Owner's Representative(s) shall at all times have access to the work wherever work is in progress or preparation, and the Contractor shall provide proper facilities for such access and inspection.

If any work or material was not observed during construction and covered without approval or consent of the Owner or Owner's Representative, it must, if required by the Owner or Owner's Representative(s), be uncovered for examination at the Contractor's expense.

No inspection shall relieve the Contractor from any obligation to furnish materials and equipment and to perform the work strictly in accordance with the Contract Documents. Any Material or workmanship or equipment which may be discovered to be defective, prior to the final acceptance of the work, shall be removed and made good by the Contractor regardless of previous inspection.

The Contractor shall promptly remove from the site all materials condemned by the Owner or Owner's Representative(s) as failing to conform to the Contract.

The manufacturer/ supplier shall conduct a site inspection of the installation one year and two years following the completion of the work. A written inspection report shall be provided to the Owner regarding the condition of the installation and any special problems, which need to be addressed. Contractor must correct any latent defects.

### **3.05 WARRANTY**

- A. All aluminum posts, clamps, hardware and caps shall have a limited lifetime warranty against structural failure due to corrosion, deterioration or workmanship.
- B. All decks, rotationally molded parts, steel components, polyethylene timbers, rubber or plastic coated components shall have a minimum 10-year warranty against failure due to corrosion, deterioration or workmanship.
- C. All other parts shall be warranted for a period of one year.
- D. The manufacturer must carry at least 15 million dollars in product liability insurance.

### **3.06 MAINTENANCE**

The manufacturer/supplier shall provide a written maintenance plan to the Owner, which describes in detail any and all maintenance requirements, inspections, etc. which will need to be accomplished during the life of the equipment (for the purpose of this project the term "life" shall be defined as for a period of seven years from the date of substantial completion).

Following the installation, the manufacturer/supplier shall provide a maintenance kit. The kit is to include touch up paint in colors, which match the structure and are compatible with the powder coating, a chemical cleanser of adequate strength to remove paint, ink and other common forms of graffiti from most material surfaces on the structure. The manufacturer shall provide wrenches or other tools needed to adjust or replace special vandal resistant fasteners - not commonly found in local stores.

The manufacturer/supplier shall provide As Builts for the Project.

### **3.07 DISPOSAL OF EXCESS AND WASTE MATERIALS**

Remove excess excavated material, trash, debris and waste materials and legally dispose of off the property, except as otherwise specifically noted.

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**DIVISION 3**  
**CONCRETE**



## **SECTION 03300 - CAST-IN-PLACE CONCRETE**

### **PART 1 GENERAL**

#### **1.01 DESCRIPTION OF WORK**

The work covered by this Section consists of, but is not necessarily limited to, placing concrete for play equipment footings and subbase for synthetic poured-in-place surfacing. Also included are required forms, reinforcing, finishing and curing as specified herein.

#### **1.02 QUALITY ASSURANCE**

##### **A. Qualifications of Workers:**

1. Provide at least one person who shall be present at all times during execution of this portion of the work and who shall be thoroughly familiar with the type of materials being installed, the reference standards, and the requirements of this work, and who shall direct all work performed under this Section.

##### **B. Test Cylinders:**

1. The Project Manager will engage an independent concrete testing service for purposes of testing concrete cylinders taken by the Contractor at intervals as directed by Project Manager.
2. The Contractor shall be required to furnish test cylinder containers for this purpose
3. Subsequent testing for a failed cylinder test will be arranged and paid for by the Contractor.

##### **C. Test Reports:**

1. The testing agency engaged by the Project Manager shall submit three (3) copies of the following reports directly to the Project Manager, with one copy being sent to the Contractor, if so requested. The report will include the following:
  - a. Date poured, location, time in field, time in office, date broken, 7, 14, 28-day tests, strength of concrete, etc.

#### **1.03 PRODUCT HANDLING**

##### **A. Protection:**

1. Use all means necessary to protect materials before, during and after installation and to protect the installed work and materials of all other trades.

##### **B. Replacements:**

1. In event of damage, immediately make all repairs and replacements necessary to the approval of the Project Manager and at no additional cost to the Owner.

### **PART 2 PRODUCTS**

#### **2.01 MATERIAL**

##### **A. Form Work:**

1. General:
  - a. Forms shall be of sound and tight materials.
  - b. Forms for all exposed parts of concrete shall be made of plywood or metal, or of structural backing with plywood or metal liners to produce a smooth surface on the concrete.
  - c. Forms for unexposed parts may be of sound wood boarding, salvaged plywood or of other approved material herein specified.

2. Sealers:
  - a. All form sealers shall be first quality of their respective kinds and subject to the approval of the Project Manager.
- B. Concrete:**
  1. Concrete Reinforcement:
    - a. All concrete reinforcement materials shall be new, free from rust and comply with the following reference standards:
    - b. Specifications for "Deformed and Plain Billet Steel Bars for Concrete Reinforcement", ASTM A 615, A 616, or A 617, Grade 60
    - c. Cement:
      - i. Cement shall be Portland cement, Type 1A, conforming to ASTM C-150.
      - ii. All exterior concrete and exposed concrete shall receive air entrainment conforming to MDOT Standard Specifications, Section 8.2403, and shall be measured at 4-6% by volume.
- D. Aggregate:**
  1. General:
    - a. All aggregate shall meet the requirements of ASTM C-33 and MDOT Standard Specifications, Section 8.02.
  2. Coarse Aggregate:
    - a. Coarse aggregate shall meet MDOT Specifications for class 6A of 6AA, and be composed of stone or crushed rock of hard durable pieces, well graded, and free from clay or organic substance.
    - b. Maximum size not to exceed one-fifth of the minimum dimension of the concrete member in which placed and not to exceed three-fourths of clear spacing between reinforcing steel.
    - c. Maximum size aggregate for floor slabs and sidewalks shall be ¾ inch.
  3. Fine aggregate:
    - a. Fine aggregate shall meet MDOT Specifications for class 2NS, and be composed of hard natural sand, free of clay or other material that will have a deleterious effect on the finished product.
- E. Concrete:**
  1. Unless otherwise noted, concrete shall have a 28-day compressive strength of 4000psi.
  2. Cement content shall be 564 lbs/cy.
    - a. Maximum slump shall be 3".
    - b. Entrained air content shall be 6.5% +/- 1%.
- F. Water:**
  1. Water shall be clean and free from injurious amounts of foreign matter.
- G. Miscellaneous Concrete Accessories:**
  1. Expansion Joint Material:
    - a. Fiber-type Federal Specifications No. HHF-341F, Type III.

## **PART 3 EXECUTION**

### **3.01 SURFACE CONDITIONS**

#### **A. Inspection:**

1. Prior to all work of this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.

**B. Discrepancies:**

1. In the event of discrepancy, immediately notify the Contractor related to any deficiencies.
2. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

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**ATTACHMENTS**

**LAYOUT PLANS**