

PATRICIA A. PESHKA

PURCHASING AGENT



JOSEPH J. SOLOMON

MAYOR

**CITY OF WARWICK**  
PURCHASING DIVISION  
3275 POST ROAD  
WARWICK, RHODE ISLAND 02886  
TEL (401) 738-2013  
FAX (401) 737-2364

The following notice is to appear on the City of Warwick's website Wednesday, February 6, 2019. The website address is <http://www.warwickri.gov/bids>.

**CITY OF WARWICK  
PROPOSALS REQUESTED FOR**

**RFP2019-248 Playground Renovations at Salters Grove**

Specifications are available in the Purchasing Division, Warwick City Hall, Monday through Friday, 8:30 AM until 4:30 PM on or after Wednesday, February 6, 2019. **Please note that our office will be closed on Monday, February 18, 2019 and will re-open on Tuesday, February 19, 2019.**

Sealed proposals will be received by the Purchasing Division, Warwick City Hall, 3275 Post Road, Warwick, Rhode Island 02886 up until 11:00 AM, Wednesday, February 20, 2019. The proposals will be opened publicly commencing at 11:00 AM on the same day in the Lower Level Conference Room at Warwick City Hall.

Awards will be made on the basis of the lowest evaluated or responsive proposal price. Please note that no proposals can be accepted via email or fax.

The City of Warwick, in addition to soliciting proposals in response to this RFP, may consult, consider, and make an award for any and all open proposal offers for a comparable unit as sought herein at the following websites:

RI State MPA: <http://www.purchasing.ri.gov/MPA/MPASearch.aspx>

NASPO: <https://www.naspo.org/>

NJPA (National Joint Powers Alliance): <https://www.njpacoop.org/cooperative-purchasing>

MHEC (Massachusetts Higher Education Consortium): <https://www.mhec.net/>

Individuals requesting interpreter services for the hearing impaired must notify the Purchasing Division at 401-738-2013 at least 48 hours in advance of the proposal opening date.

**Original Signature on File**

Patricia A. Peshka

Purchasing Agent

**PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR PROPOSAL**

**Acknowledgement of Addendum (if applicable)**

**Addendum Number**

**Signature of Bidder**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

BIDDER'S SIGNATURE: \_\_\_\_\_

BIDDER'S NAME (PRINT): \_\_\_\_\_

TITLE: \_\_\_\_\_ TEL. NO.: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_\*

\*Please include your email address. Future proposals will be emailed, unless otherwise noted.

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**II. AWARD AND CONTRACT:**

The CITY OF WARWICK, acting as duly authorized through its Purchasing Agent/Finance Director/Mayor, accepts the above proposal and hereby enters into a contract with the above party to pay the proposal price upon completion of the project or receipt of the goods unless another payment schedule is contained in the specifications. All terms of the specifications, both substantive and procedural, are made terms of this contract.

DATE: \_\_\_\_\_

RFP2019-248

\_\_\_\_\_

Purchasing Agent

**PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR PROPOSAL**

**CERTIFICATION & WARRANT FORM\***

**This form must be completed and submitted with sealed bid  
Failure to do so will result in automatic rejection.**

Any and all bids shall contain a certification and warrant that they comply with all relevant and pertinent statutes, laws, ordinances and regulations, in particular, but not limited to Chapter 16- Conflicts of Interest, of the Code of Ordinances of the City of Warwick. Any proven violation of this warranty and representation by a bidder at the time of the bid or during the course of the contract, included, but not limited to negligent acts, either directly or indirectly through agents and/or sub-contractors, shall render the bidder's contract terminated and the bidder shall be required to reimburse the City for any and all costs incurred by the City, including reasonable attorney fees, to prosecute and/or enforce this provision.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

**\*This form cannot be altered**

**CITY OF WARWICK  
NOTICE TO BIDDERS**

**RFP2019-248 Playground Renovations at Salters Grove**

If you received this document from our homepage or from a source other than the City of Warwick Purchasing Division, please check with our office prior to submitting your proposal to ensure that you have a complete package. The Purchasing Division cannot be responsible to provide addenda if we do not have you on record as a plan holder.

The opening of proposals will be in the order established by the posted agenda and the agenda will continue uninterrupted until completion.

Once an item has been reached and any proposals on that item has been opened, no other proposals on that item will be accepted and any such proposal will be deemed late.

The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap for any position for which the employee or applicant is qualified and that in the event of non-compliance the City may declare the contractor in breach and take any necessary legal recourse including termination or cancellation of the contract.

A bidder filing a proposal thereby certifies that no officer, agent, or employee of the City has a pecuniary interest in the proposal or has participated in contract negotiations on the part of the City, that the proposal is made in good faith without fraud, collusion, or connection of any kind with any other bidder for the same call for proposals, and that the bidder is competing solely in his own behalf without connection with, or obligation to, any undisclosed person or firm.

All proposals should be submitted with one (1) original, one (1) copy and one (1) electronic copy in a sealed envelope, which should read: *YOUR COMPANY NAME* plainly marked on the exterior of the envelope as well as "RFP2019-248 Playground Renovations at Salters Grove."

Proposals received prior to the time of the opening will be securely kept, unopened. No responsibility will be attached to an officer or person for the premature opening of a proposal not properly addressed and identified. No proposals will be accepted via facsimile or email.

Should you have any questions, please contact Lucas Murray, Special Projects Coordinator, 51 Draper Ave, Warwick, RI 02889, at 401-921-9683 or [lucas.murray@warwickri.com](mailto:lucas.murray@warwickri.com).

All proposals should be written in ink or typed. If there is a correction with whiteout, the bidder should initial the change.

Negligence on the part of the bidder in preparing the proposal confers no rights for the withdrawal of the proposal after it is open.



Any deviation from the specifications must be noted in writing and attached as part of the bid proposal. The bidder should indicate the item or part with the deviation and indicate how the proposal will deviate from specifications.

The IRS Form W-9 is available on [www.warwickri.gov](http://www.warwickri.gov) should be completed and submitted with the proposal if the bidder falls under IRS requirements to file this form.

Prevailing Wages will apply to this proposal. Current rates may be viewed at <http://www.dlt.state.ri.us/pw>.

The successful bidder must comply with all Rhode Island Laws, applicable to public works projects, including, but not limited to provisions of Chapter 13 of Title 37 of the Rhode Island General Laws, pertaining to prevailing wage rates, and all other applicable local, state and federal laws.

The contractor must carry sufficient liability insurance and agree to indemnify the city against all claims of any nature, which might arise as a result of his operations or conduct of work.

The contractor must keep himself informed of and comply with all laws, ordinances and regulations of the federal, state and municipal governments which may apply and be in force during the life of the contract, in any manner which may affect himself/employees or the conduct of the work or the materials used or employed in the work. Before submitting proposals, prospective bidders should examine the terms, covenants and conditions of all codes, permits and laws which may apply. By submitting a proposal, the bidder agrees to comply with all pertinent laws/regulations if awarded a contract.

Every contractor and subcontractor awarded a contract for public works, construction, alteration and/or repair, including painting and decorating, or public buildings or public works must submit completed RI Certified Weekly Payroll forms listing employees employed on the project to the awarding authority on a monthly basis for all work completed in the preceding month. These forms may be found at: [www.dlt.ri.gov/pw/pwFormsPubs.htm](http://www.dlt.ri.gov/pw/pwFormsPubs.htm). Certified Payroll forms concerning RI Department of Transportation projects may be submitted on federal forms. However, when a complaint is being investigated by the RI Department of Labor & Training (DLT), the contractor must resubmit the payroll information on the RI Certified Weekly Payroll forms for the entire project.

Awarding authorities, contractors and subcontractors must provide any and all payroll records to the DLT within ten (10) days of any request that is made by the department.

The awarding authority of any public works project will withhold the next scheduled payment to any contractor or subcontractor who fails to comply with the above provisions, as well as any further payments until they comply. The DLT may also impose a penalty of up to \$500 for each calendar day of noncompliance.

Please refer to Rhode Island state laws Section 37-13 for more information.

The successful bidder must provide the City of Warwick with an original **Certificate of Insurance** for General Liability and Automobile Liability in a minimum amount of \$1 million, naming the **City of Warwick as the additional insured** and so stated on the certificate with the proposal name and proposal number. It is the vendor's responsibility to provide the City of Warwick with an updated Certificate of Insurance upon expiration of the original certificate.

Failure to provide adequate insurance coverage within the specified duration of time as set forth is a material breach of contract and grounds for termination of the contract.

The successful bidder must furnish a **Labor & Materials Bond** in the amount of 100 percent of the total proposal price.

For a bid to be awarded to a corporation, limited liability company or other legal entity, prior to commencing work under the awarded bid, that corporation, company or legal entity may be required to provide to the Purchasing Agent a **Certificate of Good Standing** dated no more than thirty (30) days prior to the date upon which the bid approval was made.

If required, the successful bidder will provide said **Certificate of Insurance, bonds and Certificate of Good Standing** within ten (10) calendar days after notification or the City reserves the right to rescind said award.

Prices to be held firm one (1) year from date of award. Term contracts may be extended for one (1) additional term upon mutual agreement unless otherwise stated.

The City is exempt from the payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph I, as amended.

The contractor must carry sufficient liability insurance and agree to indemnify the City against all claims of any nature, which might arise as a result of his operations or conduct of work.

The Purchasing Agent reserves the right to reject any and all proposals, to waive any minor deviations or informalities in the proposals received, and to accept the proposal deemed most favorable to the interest of the City.

The City reserves the right to terminate the contract or any part of the contract in the best interests of the City, upon 30-day notice to the contractor. The City will incur no liability for materials or services not yet ordered if it terminates in the best interests of the City. If the City terminates in the interests of the City after an order for materials or services has been placed, the contractor will be entitled to compensation upon submission of invoices and proper proof of claim, in that proportion which its services and products were satisfactorily rendered or provided, as well as expenses necessarily incurred in the performance of work up to time of termination.

No extra charges for delivery, handling or other services will be honored. All claims for damage in transit will be the responsibility of the successful bidder. Deliveries must be made during normal working hours unless otherwise agreed upon.

All costs directly or indirectly related to the preparation of a response to this solicitation, or any presentation or communication to supplement and/or clarify any response to this solicitation which may be required or requested by the City of Warwick will be the sole responsibility of and will be borne by the respondent.

If the respondent is awarded a contract in accordance with this solicitation and fails or refuses to satisfy fully all of the respondents obligations thereunder, the City of Warwick will be entitled to recover from the respondent any losses, damages or costs incurred by the City as a result of such failure or refusal.

The City reserves the right to award in part or full and to increase or decrease quantities in the best interest of the City.

Any quantity reference in the proposal specifications are estimates only, and do not represent a commitment on the part of the City of Warwick to any level of billing activity. It is understood and agreed that the agreement will cover the actual quantities ordered during the contract period.

The City reserves the right to rescind award for non-compliance to proposal specifications.

The successful bidder must adhere to all City, State and Federal Laws, where applicable.

**CITY OF WARWICK**  
**PROPOSAL AND CONTRACT FORM**

**TITLE OF SPECIFICATION:** RFP2019-248 Playground Renovations at Salters Grove

**I. PROPOSAL:**

WHEREAS, the CITY OF WARWICK has duly asked for proposals for performance of services and/or supply of goods in accordance with the above-indicated specifications.

The person or entity does irrevocably offer to perform the services and/or furnish the goods in accordance with the specifications, which are hereby incorporated by reference in exchange for the proposal price.

This offer will remain open and irrevocable until the CITY OF WARWICK has accepted this proposal or another proposal on the specifications or abandoned the project.

The bidder agrees that acceptance by the CITY OF WARWICK will transform the proposal into a contract. This proposal and contract will be secured by Bonds, if required by the specifications.

**Pricing as Submitted**

**Please see additional specifications as attached.**

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**PLEASE COMPLETE THIS PAGE AND SUBMIT WITH YOUR PROPOSAL**

**SECTION 00 41 13: FORM FOR BID**

**NOTE TO CONTRACTOR:**

This Form for Bid must be submitted no later than **Wednesday, February 20, 2019 @ 11:00 a.m.**  
Bids may be submitted to the awarding authority at the following address:

**Purchasing Division  
Warwick City Hall  
3275 Post Road  
Warwick, RI 02886**

The proposals will be opened publicly commencing at 11:00 AM on the same day in the Lower Level Conference Room, Warwick City Hall.

Awards will be made on the basis of the lowest evaluated or responsive proposal price. Please note that no proposals can be accepted via email or fax.

**BID ACKNOWLEDGEMENTS**

WHEREAS, the CITY OF WARWICK has duly asked for proposals for performance of services and/or supply of goods in accordance with the above-indicated specifications.

The person or entity does irrevocably offer to perform the services and/or furnish the goods in accordance with the specifications, which are hereby incorporated by reference in exchange for the proposal price.

This offer will remain open and irrevocable until the CITY OF WARWICK has accepted this proposal or another proposal on the specifications or abandoned the project.

The bidder agrees that acceptance by the CITY OF WARWICK will transform the proposal into a contract. This proposal and contract will be secured by Bonds, if required by the specifications.

**BASE PROJECT BID**

The bidder proposes to provide all labor, materials, means and methods to supply and install playground equipment as outlined in Section 11 68 13, Item 2.01, site furnishings as outlined in Section 32 33 00, asphalt paving as outlined in Section 32 12 16, swings provided by the City in accordance with Section 11 68 13, and provide (no install) engineered wood fiber in accordance with Section 32 18 16 for the following lump sum amount:

**\$**

**Total Sum in Numbers**

**Written Amount**

**PLEASE COMPLETE THIS PAGE AND SUBMIT WITH YOUR PROPOSAL**

**ALLOWANCES**

In addition to the "Base Project Bid" all bidding Contractors are required to carry specified dollar allowances to cover items that could not be adequately detailed, quantified, or require input from the Contractor to determine the most responsible, reasonable, and cost effective method of installation.

If the Contractor is instructed to conduct work outside of the basic project scope outlined herein s/he shall immediately provide a written description of the modified scope and pricing for work to be conducted. The Owner reserves the right to accept, negotiate, or reject stated Contractor pricing. If work is authorized, the Contractor shall commence with the additional work immediately so as not to delay the project completion date. Adjustments to the completion date may be made by the Owner upon request, but must be stated in writing.

If the Owner elects not to accept the proposed Contractor pricing for work covered by an allowance, the Owner may seek additional outside bids to conduct the work by other qualified contractors.

Any allowance funds carried in the project bid, but not expended or obligated by the conclusion of the project, shall remain property of the Owner and may not be invoiced by the contractor. Contractor is instructed to add the total amount of allowances with the base bid and provide a "Total Project Bid Cost" as outlined below.

Allowance Item	Description	Allowance Amount to be Carried In Bid
General Contingency Allowance	To be utilized for various site work and unforeseen conditions as required.	\$3,000
<b>TOTAL ALLOWANCES TO BE CARRIED IN "TOTAL PROJECT BID"</b>		<b>\$3,000</b>

**TOTAL PROJECT BID**

The "Total Project Bid" includes the proposed "Base Project Bid" outlined above **in addition to any and all Allowances outlined herein**. This is the total cost of the project if options related to the Allowances are fully exercised under this contract. Contractors shall note that this may not be the total actual cost of the contract should some or all of the stipulated Allowances not be exercised by the Owner. **Owner reserves the right to award the contract with or without the allowances included in the contract.**

\$

**Total Sum in Numbers**

**Total Written Amount**

**PLEASE COMPLETE THIS PAGE AND SUBMIT WITH YOUR PROPOSAL**

**ADD ALTERNATE ITEMS**

In addition to the base project bid, the Awarding Authority may award work items outlined below based on the availability of funding. Alternate items will be awarded in numerical order. The Awarding Authority reserves the right approve or reject any of the following alternate items. If alternate items are accepted, the Owner shall award based on the lowest cumulative cost.

**Add Alternate #1 – Additional Play Structure Components**

The bidder proposes to provide all labor, materials, means and methods to supply and install additional playground equipment as outlined in Section 11 68 13, Item 2.02 for the following lump sum amount:

\$

**Total Sum in Numbers**

**Written Amount**

**UNIT PRICING**

In addition to the total project bid and alternative item pricing, the Awarding Authority is requesting that bidders provide unit pricing for certain quantifiable elements contained in the project for the purposes of adding or deducting work to/ or from the base bid amount once the contract is awarded. Bidders are required to provide an Add/ Deduct unit price for each of the following elements as part of their bid. Pricing provided may be used as a basis for changes in contract relating to the specified elements to either add or deduct items in the overall scope. Pricing shall be provided based on the units provided.

Item	Description	Unit	Add Amt. Per Unit	Deduct Amt. Per Unit
Model SSG245P 46" Round Pedestal Table with 4 Seats or approved equal	Supply and install 46" round table in accordance with specification section 32 33 00. Includes all excavation and pouring of concrete footings but does not include preparation of the site furnishing pad.	Each		
Model SG111P Signature Series Picnic Table with Model SG135 or approved equal	Supply and install rectangular table in accordance with specification section 32 33 00. Includes ground anchors and installation but does not include preparation of the site furnishing pad.	Each		
Model BRK538I Multi-Axis Bike Rack or approved equal	Supply and install bike rack in accordance with specification section 32 33 00. Includes all excavation and pouring of concrete footings but does not include preparation of the site furnishing pad.	Each		



## **SECTION 01 31 00 SUMMARY OF WORK/SITE LOCATION**

### **PART 1 - GENERAL**

#### **1.01 LOCATION**

Salters Grove State Park is located adjacent to Narragansett Parkway approximately 1 mile south of Pawtuxet Village. The playground area is located opposite 497 Narragansett Parkway, Warwick, RI 02888. Vehicular and pedestrian access to the play area can be obtained from the interior access aisle from Narragansett Parkway. The limit of work extends from the interior access road extending south to the existing wood line, and approximately 50' from Narragansett Parkway to the interior paved pathway to the east. The City will secure the work area with a temporary fence that must be maintained by the Contractor at all times (refer to Section 01 50 00). See the map below for further details regarding the work zone limits.



#### **1.02 GENERAL REQUIREMENTS**

The General Conditions, Supplementary Conditions and applicable parts of Division 01 - General Requirements are all included as part of this section. The Contractor is required to examine all other sections of the specifications for requirements that may affect the work of this Section. The Contractor is also required to coordinate the work with that of all trades affecting or affected by the work of this Section, and to cooperate with such trades to assure the continued progress of the work. The intent of the Contractor documents is to require that the

Contractor provide all material, labor, and equipment needed to furnish a complete Project, and that all of the material, labor and equipment be furnished complete in every respect.

### 1.03 SCOPE OF WORK

A. Materials and workmanship covered by this contract consists of the following:

1. The supply and installation of all playground equipment, site furnishings, and asphalt paving as outlined herein. All labor, equipment, and materials necessary to install playground equipment, furnishings, and paving shall be included in the total bid. Components of this project include, but are not limited to layout; limited excavating, earthwork, and fine grading; supply and installation of asphalt paving; supply and installation of a climbing net, slide, stepping pods, and other related play equipment; installation of swings (to be provided by Owner); supply and installation of table and a bike rack; miscellaneous other site work components as outlined herein. Bid prices shall include the cost of all materials with installation unless otherwise called out in the project specifications.
2. Contractor shall note that any items labeled as "Alternate" or "Paid Under Allowance" shall not be considered part of the base bid. Separate pricing should be provided as required. These items may or may not be accepted and must be authorized by the Owner or Owners representative.
3. Coordinating closely with the City's Landscape Architect and Director of Public Works to ensure proper coordination of work activities.

B. The Contractor should note the following:

1. The City will be responsible for the majority of site excavation and preparation work prior to the installation of play equipment and site furnishings. The Contractor will be required to verify preparation is suitable for the equipment installation and perform all work as required for the proper installation of playground equipment, site furnishings, and pavement as outlined herein.
2. Access to the work site may be obtained from the main vehicular travel aisle leading into the park. The Contractor shall take special care with vehicles, machines, and other equipment not to damage any existing elements and remain at a low rate of speed at all times. In addition the Contractor shall provide control measures as necessary to slow traffic and protect users during work activities. Pedestrian safety must be considered a priority at all times.

***Playground Renovation  
Salters Grove Park, Warwick, Rhode Island***

3. Contractor must not block the park access aisle for more than is necessary to off load materials or equipment.

- END OF SECTION 00 31 00 -

SUMMARY OF WORK SITE LOCATION

## **01 33 00 SUBMITTAL PROCEDURES**

### **PART 1 - GENERAL**

#### **1.01 SCOPE**

- A. Includes providing submittals for bituminous concrete (asphalt), manufactured play components, site furnishings and other related site materials and products as outlined on project drawings and/or specifications. Also includes shop drawings for any custom built site components as required herein.

#### **1.02 SUBMITTAL PROCEDURES**

- A. Transmit a submittal for each product or material proposed for the project as required by City's Landscape Architect.
- B. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing sheet and detail number(s), and specification section number, as appropriate.
- C. Apply Contractor's stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents.
- D. Contractor may provide submittals to the City's Landscape Architect electronically in a standard document or image format (PDF, JPEG, etc.) in order to expedite the review process.
- E. Identify any variations from Contract Documents and originally specified product. Highlight any system limitations which may be detrimental to successful performance of the completed work. Also highlight any attributes of the product or system that exceed the bid specification requirements.
- F. Provide space for Contractor and Landscape Architect review and approval stamps.
- G. The Contractor shall revise and resubmit submittals as required by the City's Landscape Architect until requirements are satisfied under this provision and the submittal is approved. The Contractor shall identify all changes made since previous submittals to expedite approval.
- H. Once the submittal is stamped "APPROVED" or "APPROVED AS NOTED" the Contractor may proceed with ordering of the materials or items outlined in the submittal. It is the Contractors responsibility to wait for approval prior to ordering any materials.

1.03 SHOP DRAWINGS

- A. Provide Landscape Architect with shop drawings for any custom elements as requested to include signage or other items as noted herein. Shop drawings shall include:
1. Name and contact information of the Fabricator or Contractor.
  2. Call outs labeling various component features including all fabrication materials including fasteners.
  3. Support attachment details including specific fastener systems and footing details.
  4. Schematic installation details to ensure alignments and details work with other project components.
  5. Color and finish selections for all materials.
  6. Any additional information as required by the Landscape Architect to ensure the structure will meet all performance specifications outlined herein.

- END OF SECTION 01 33 00 -  
SUBMITTAL PROCEDURES

SECTION 01 45 00 - QUALITY CONTROL

PART 1 - GENERAL

1.01 SCOPE

- A. Quality assurance and control of installation.
- B. References.
- C. Field samples.
- D. Inspection and testing laboratory services.

1.02 RELATED SECTIONS

- A. Section 01 33 00 – Submittal Procedures: Submission of Manufacturers' Instructions and Certificates.
- B. Section 01 60 00 - Material and Equipment: Requirements for materials and product quality.
- C. Section 11 68 13 – Playground Equipment
- D. Section 32 33 00 - Site Furnishings

1.03 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce work of specified quality.
- B. The Contractor shall comply fully with manufacturers' instructions, recommended installation techniques, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents notify the City's Landscape Architect for a determination on how to proceed before initiating work.
- D. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. All work shall be performed by persons qualified to produce workmanship of specified quality. The designated workers shall have the necessary skills and knowhow to properly install materials according to the drawings, specifications, and manufacturer recommendations.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.04 REFERENCES

- A. Conform to reference standard by date of issue current on date of Contract Documents
- B. Obtain copies of standards when required by Contract Documents.
- C. Should specified reference standards conflict with Contract Documents, this conflict shall be brought to the attention of the Landscape Architect.

- END OF SECTION 01 45 00 -

EXECUTION AND CLOSEOUT REQUIREMENTS

## **01 50 00 TEMPORARY FACILITIES AND CONTROLS**

### **PART 1 - GENERAL**

#### **1.01 TEMPORARY TOILETS**

- A. The Contractor shall provide a portable chemical type toilet for the duration of site work activities in suitable numbers to maintain ratios set forth by the toilet manufacturer.
- B. The toilets shall be erected in locations acceptable to the City's Landscape Architect. They shall be maintained by the Contractor in a clean and orderly condition in compliance with all local and state health requirements, and shall be removed at the direction of the City's Landscape Architect.

#### **1.02 TEMPORARY WATER**

- A. If access to water is required the Contractor shall contact the Owner or City's Landscape Architect to coordinate access to a suitable water source. The City may make water available to the Contractor and pay all usage charges, provided the quantity utilized is not excessive. High volume/ high pressure water requirements necessary for dust control or other related activities shall be the responsibility of the Contractor. If the City determines that water is unavailable at the project site the contractor shall be responsible for making all necessary provisions for water as required to complete contract requirements.

#### **1.03 TEMPORARY ELECTRICITY**

- A. The site does not contain an electrical power source for operation of equipment. The Contractor shall be responsible to provide temporary electric power as required to complete work outlined herein.

#### **1.04 STORMWATER AND POLLUTION CONTROL**

- A. The Contractor shall protect excavations, trenches, buildings, and materials at all times from rain and/or ground water, backing-up or leakage of sewers, drains or other piping, and from water damage of any origin. S/he shall provide all pumps, piping, coverings, hay bales, siltation fencing, and other materials and required equipment to properly protect the site and surrounding areas from erosion. Any erosion that occurs shall be promptly repaired by the contractor.



1.05 TEMPORARY CONSTRUCTION FENCING

- A. The City shall provide temporary construction fencing as required to completely enclose the work area in order to prevent injury to persons or property. A vehicular access gate will be provided for access from the main travel aisle.
- B. The Contractor shall keep all temporary construction fencing in good operable condition throughout the course of their respective work activities. Gates shall be closed and locked at the end of each day. .
- C. Fencing that is hit, bent, displaced, or otherwise damaged shall be immediately replaced and/or repaired by the Contractor. If the Contractor fails to provide proper repair or replacement of damaged fencing the City reserves the withhold monies owed to the Contractor to make said repairs or cover fees from the fencing supplier.

- END OF SECTION 00 01 10 -

TEMPORARY FACILITIES AND CONTROLS

**SECTION 01 60 00 – Product Requirements**

**PART 1 - GENERAL**

**1.01 SCOPE**

- A. Products.
- B. Transportation and handling.
- C. Storage and protection.
- D. Product options.
- E. Substitutions.

**1.02 RELATED SECTIONS**

- A. Section 01 45 00 - Quality Control: Product quality monitoring.

**1.03 PRODUCTS**

- A. Products: Means new material, machinery, components, equipment, fixtures, and system forming the work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the work. Products may also include existing materials or components required for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. Provide interchangeable components of the same manufacturer, for similar components.

**1.04 TRANSPORTATION AND HANDLING**

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

**1.05 STORAGE AND PROTECTION**

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible.

- B. For exterior storage of fabricated products, place on sloped supports, above ground.
- C. Provide off-site storage and protection when site does not permit on-site storage or protection.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

1.06 PRODUCT OPTIONS

- A. Products specified by reference standards or by description only: Any product meeting those standards or description.
- B. Products specified by naming one or more manufacturers with a provision for substitutions: Submit a request for substitution for any manufacturer not named.
- C. Due to the nature of the project only component parts from the specified manufacturer will be accepted. No substitutions will be allowed.

1.07 SUBSTITUTIONS

- A. Landscape Architect will consider requests for substitutions only **within 14 days after date of Owner-Contractor Agreement** unless the specification or provisions provided herein specifically state "NO SUBSTITUTIONS".
- B. Document each request with complete data substantiating compliance of proposed substitution with contract documents.
- C. A request constitutes a representation that the Contractor:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2. Will provide the same warranty for the substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other work which may be required for the work to be completed with no additional cost to Owner.

4. Waives claims for additional costs or time extension which may subsequently become apparent.
  5. Has investigated any proprietary features of the specified product and attests that the proposed product does not violate any patents or laws in making the product "equal."
- D. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- E. Substitution Submittal Procedure:
1. Submit three copies of requests for substitution for consideration. Limit each request to one proposed substitution.
  2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
  3. The Landscape Architect will notify Contractor, in writing, of decision to accept or reject request.

- END OF SECTION 01 60 00 -

#### SUMMARY OF WORK SITE LOCATION

## **01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS**

### **PART 1 - GENERAL**

#### **1.01 CLOSEOUT PROCEDURES**

- A. When the Contractor considers that the project has reached Substantial Completion, the Contractor shall submit written certification to the City's Landscape Architect that the Contract Documents have been reviewed, the work has been inspected, and that the work is complete in accordance with the Contract Documents. The City Landscape Architect or other authorized Official will inspect the site to determine the level of completion and create a "punch list" of items necessary to complete the contract in full.
- B. Once the City's Landscape Architect formulates the punch list of items to be completed on the project, he/ she will provide the list to the Contractor for follow up and completion of specified items. The Contractor is required to complete all items on the punch list before final payment and contract retainer amounts will be released.
- C. Once the Contractor certifies that the project is fully complete, the City's Landscape Architect shall inspect the site and, if all work is satisfied in accordance with the specifications and drawings, issue a notice of contract closeout and final completion.

#### **1.02 FINAL CLEANING**

- A. The Contractor shall, as a minimum, perform the following tasks regarding Final Cleaning, prior to final inspection by the City's Landscape Architect and the Official:
  - 1. Wash all surfaces of playground equipment and site furnishings exposed to view; remove temporary labels, stains, and foreign substances, polish transparent and glossy surfaces. Wash down all pavement surfaces.
  - 2. Remove waste and surplus materials, rubbish, and construction facilities from the Project and from the site.
  - 3. Sweep all paths and roadway surfaces impacted by Construction.

- END OF SECTION 01 70 00 -

### **EXECUTION AND CLOSEOUT REQUIREMENTS**

## **03 30 53 – CAST IN PLACE CONCRETE**

### **PART 1 - GENERAL**

#### **1.01      RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions, Division 00 and General Requirements, Division 01 Specification sections, apply to work of this section.
- B. Examine all Contract Drawings and all other Sections of the Specifications for requirements therein affecting the work of this Section.
- C. All work under this section shall conform to Section 600 and other applicable sections of the RIDOT Standard Specifications for Road and Bridge Construction.

#### **1.02      DESCRIPTION OF WORK**

- A. Excavate for all footings, cast-in-place curbing, and other concrete as outlined in Section 31 00 00, Excavation, Filling and Grading.
- B. Provide all materials and labor to install formwork and reinforcing steel to the dimensions shown on the drawings. The Contractor shall form all footings and curbs to the dimensions shown on the drawings. **Pouring concrete directly into excavated trenches for curbing is not allowed.** Formwork shall be completed in logical stages to allow for proper vibration and forming of concrete.
- C. Providing installing all concrete and related materials, including final finish work.
- D. Providing and installing all Joint fillers or sealers as required.

#### **1.03      QUALITY ASSURANCE**

- A. Codes and Standards: Comply with local governing regulations if more stringent than herein specified.

#### **1.04      SUBMITTALS**

- A. Furnish manufacturer's product mixing data, test reports, and materials certifications as required in referenced sections for concrete, reinforcement bars or mesh, color additives, joint fillers and sealers.

## 1.05 TESTING

- A. Due to the limited nature of the project and concrete work required, no testing is required by an independent testing agency. However, the Contractor shall obtain and submit specific mix criteria from the Supplier for review and approval by the City's Landscape Architect prior to delivering and setting concrete.
- B. The Contractor shall notify the project Official and Landscape Architect 48 hours in advance of any concrete delivery and finishing so they may inspect all excavations and forms and review the concrete mix at the site. The Landscape Architect or Official reserves the right to reject a concrete mix if it is determined that the mix integrity has been sacrificed or does not meet the mix criteria.
- C. It is the Contractors responsibility to review the concrete mix prior to setting and to accept or reject the mix prior to setting.

## PART 2 - PRODUCTS

### 2.01 CONCRETE

- A. Cement concrete masonry for footings and curbs shall be Class A or B as specified in Section 600 of the RIDOT Standard Specifications for Road and Bridge Construction, latest edition. All concrete shall meet a minimum compressive strength of 3000PSI after 28 days.
- B. Portland Cement:
  - a. Portland cement shall conform to ASTM Standard Specifications C 150 Type I or Type 1A latest edition.
  - b. High-Early strength Portland shall conform to ASTM Standard Specification s C 150 Type III or Type IIIA.
  - c. All cement poured under extreme heat conditions shall use ASTM Standard Specifications C-150 Type II.
  - d. White Portland Cement shall conform to U.S. Governmental Federal Specifications SSC-181 latest edition.
- C. Water for concrete construction shall be clean and free of oil, acids, salts, or other deleterious materials.
- D. Forms:
  - a. Forms shall conform to the shape, lines grade and dimensions indicated on the drawings. They shall be substantial and sufficiently tight to prevent leakage of mortar, and shall not deflect under the weight of the wet concrete or construction loads. They shall be properly braced or tied together so as to maintain position and shape, and insure the safety of workmen and passerby. All forms shall be cleaned and oiled each time they are used.

- b. Temporary openings shall be provided to facilitate cleaning and inspection immediately before depositing concrete. Forms shall be assembled in such a manner as to facilitate their removal without damage to the concrete.
  - c. Plywood panel forms or steel forms may be used with the approval of the Landscape Architect.
- E. Form ties approved by the engineer shall be used. These ties shall be adjustable in length and of such types as to leave no metal closer than one and one-half inches of the concrete surface. Ties shall not be fitted with any lugs, cones, washers, or other devices to act as a spreader within the form which will leave a hole larger than seven-eighths inch in diameter.
- F. Reinforcement shall be as specified in Sections M.05.01, Bar Reinforcement, and M.05.02, wire Reinforcement, of RI DOT Standard Specifications for Roads and Bridges.
- G. Handling and placements of concrete shall be as specified in Section 600 of RI DOT Standard Specifications for Roads and Bridges.
- H. Joints: Construction and expansion shall be as specified in section 600 of RI DOT Standard Specifications for Roads and Bridges.

### PART 3 - EXECUTION

#### 3.01 CONCRETE PLACEMENT

- A. Concrete placement, forms, reinforcement, joints, etc. for curbs, and foundations shall be as specified in section 600 of the RI DOT Standard Specifications for Roads and Bridges.

#### 3.02 FORMWORK

- A. Only Sonotubes, box forms, other similar types of forms intended for used with concrete shall be used.
- B. Removal of Forms: Do not remove forms and bracing until concrete has gained sufficient strength to carry its own weight, construction loads and design loads which are liable to be imposed on it. Verify strength of concrete by compressive strength results.
- C. Sonotube forms shall be left in the ground and excess cardboard remaining above the level of the concrete shall be trimmed flush or below the top of the concrete.

#### 3.03 PROTECTION

- A. The Contractor shall make every effort including watchmen and paid police details, to protect the newly poured concrete against vandalism or movement of anchored



elements. Schedule concrete work (limit paving concrete to AM hours only) to assure sufficient time for concrete panels to cure sufficiently to prevent vandalism.

3.04     REPAIR OF SURFACE DEFECTS

- A.    Allow Landscape Architect to inspect concrete surfaces immediately upon removal of forms.
- B.    Replace concrete not conforming to required lines, detail and elevations.
- C.    Replace concrete not properly placed resulting in poor anchorage of site elements. Do not patch, repair or replace architectural concrete except upon express direction of Landscape Architect.

- END OF SECTION 03 30 53 -

EXECUTION AND CLOSEOUT REQUIREMENTS

## **SECTION 11 68 13 - PLAYGROUND EQUIPMENT**

### **PART 1 - GENERAL**

#### **1.01      RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including General and Special Conditions, Division-1 specification sections, and plans included in Appendix 1 apply to work of this section.
- B. Examine all Contract Specifications, Drawings, and all other Sections of the Specifications for requirements therein affecting the work of this Section.

#### **1.02      SCOPE**

- A. Contractor shall purchase and deliver all playground equipment, site furnishings, and other materials as outlined herein to the project site. All materials must be kept secured and maintained in good condition throughout the course of construction.
- B. Install all playground equipment and site furnishings outlined herein in accordance with manufacturer provided instructions and recommendations unless otherwise stated herein.
- C. Install two (2) swings to be provided by the Owner in accordance with standard manufacturer details.
- D. Contractor **is not** required to conduct major site work or prepare the playground pad for acceptance of the equipment. The City will prepare the pad and leave the playground areas in a compacted subgrade condition for installation of concrete footings by the Contractor. Once the play structure is installed, the City will install safety surfacing and complete other site work components.

#### **1.03      STANDARDS AND DEFINITIONS**

- A. The following standards and definitions shall apply to the work of this Section.
  - 1. CPSI - "Certified Playground Safety Inspector" as certified by the National Recreation and Park Association and the National Playground Safety Institute.
  - 2. CPSC Standards - Standards outlined in Publication no. 325 current edition - "Public Playground Safety handbook" published by the U.S. Consumer Product Safety Commission.
  - 3. ASTM Standards - Standards that relate to public playground safety as published by the American Society for Testing and Materials International to include the following:

- a. ASTM F1487 - latest edition - "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use"
- b. ASTM F1292 - latest edition - "Standard Specification for Impact Attenuation of Surfacing Materials within use areas."
- c. ASTM F1951 - latest edition - "Specification for the Determination of Accessibility of Surface Systems Under and Around Play Equipment"
- d. ASTM F2075 - latest edition - "Specification for Engineered Wood Fiber for Use as Playground Safety Surface under and Around Play Equipment."
- e. ASTM F2049 - latest edition - "Standard Safety Performance Specification for Fences/Barriers for Public, Commercial, and Multi-Family Residential Use Outdoor Play Areas."
- f. IPEMA - International Playground Equipment Manufacturers Association.

**1.04     RELATED WORK IN OTHER SECTIONS**

- A. Section 03 30 53 - Cast in Place Concrete
- B. Section 32 18 16 - Playground Protective Surfacing
- C. Section 32 12 16 - Asphalt Paving
- D. Section 32 33 00 – Site Furnishings

**1.05     SUBMITTALS AND SHOP DRAWINGS**

- A. Provide submittals for all specified manufactured play components to include installation instructions, color selections, and relevant details.
- B. Provide shop drawings any custom play elements if required. Plans shall include all materials, fasteners, connections, coatings, and other relevant details. Provide both 2 dimensional (plan view) and 3 dimensional (model) view of the playground equipment to be provided for review. The 3 dimensional image shall depict all playground equipment with selected colors for final review.

**1.06     PRODUCT OPTIONS**

- A. If products are specified by performance standards or by description only the Contractor may submit any product meeting those standards or description for consideration. Products submitted that substantially comply with the performance standards and description outlined herein will be approved. Products submitted that do not substantially comply with the performance standards and description outlined herein will be rejected.
- B. If Products are specified by name with the term "or approved equal" the Contractor may either submit the product as specified or request a substitution for any manufacturer or product not named for consideration. The product(s) proposed must be deemed substantially comparable in terms of materials, quality, and fabrication to

those specified by name. In addition the products proposed for substitution must not require alteration of the site design to accommodate proposed products. The City reserves the right to reject proposed substitutions if the proposed products are found to be inferior to those specified herein.

1.07 SUBSTITUTIONS

- A. The City will consider requests for substitutions **within 14 days after date of Owner-Contractor Agreement** unless the specification or provisions provided herein specifically state "NO SUBSTITUTIONS".
- B. Each request for substitution request must be submitted with complete data substantiating compliance of proposed substitution with contract documents.
- C. A request constitutes a representation that the Contractor:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2. Will provide the same warranty for the substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other work as required for the work to be completed with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extensions which may subsequently become apparent as a result of the product substitution.
  - 5. Has investigated any proprietary features of the specified product and attests that the proposed product does not violate any patents or laws in making the product "equal."
  - 6. That products will fit within the current layout and not require any modifications in order to accommodate alternate equipment.
- D. Substitutions will not be considered when indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision of the Contract Documents.
- E. Substitution Submittal Procedure:
  - 1. Submit three copies of requests for substitution for consideration. Limit each request to one proposed substitution.
  - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.

3. The City's Landscape Architect will notify Contractor, in writing, of decision to accept or reject request.

**1.08 DELIVERY, STORAGE AND HANDLING**

- A. Upon receipt at the job site, all materials shall be checked by the Contractor to ensure that no damages occurred during shipping or handling. All installation materials shall be stored in a manner to ensure proper ventilation and drainage and to protect against damage, weather, vandalism and theft. The Contractor shall ensure that materials are not left out in the open for extended amounts of time.

**1.09 COORDINATION WITH WORK ACTIVITIES**

- A. The Contractor shall carefully store materials as necessary to avoid potential damage or site conflicts. Coordinate with the City to determine when the area will be excavated and prepared to subgrade for the installation of the play structure and related components. Coordinate the installation of play components and site furnishings with relevant grading, paving, and other related site work. Install equipment in a logical and progressive manner to avoid redundancy or damage to recently built works.

**PART 2 - PRODUCTS**

**2.01 PLAY STRUCTURE (Base Bid)**

- A. Contractor shall provide the following commercial quality playground components as specified herein and shown on the plan entitled "George B. Salter Memorial Grove Playground Layout" (Refer to Appendix A – Plans):

- a. Model CP003289 IND Lunar Blast with Black Rope, DB
- b. Model 193170 Lolliladder
- c. Model 229832 Dot-to-Dot Climber
- d. Model 222708 Wooshwinder spiral slide with 96 Deck
- e. Model 116244 Pipe Barrier
- f. Model 166809 E-Pod Seats (4) for Swiggleknots and Lolliladder
- g. Model 193171 Swiggleknots (no deck)

**Or approved equal**

\* numbers in parenthesis indicate quantities of each item

- B. Equipment shall be manufactured by:

Landscape Structures, Inc.  
601 7<sup>th</sup> Street South – P.O. Box 198  
Delano, Minnesota 55328  
www.landscapestructures.com  
1-800-328-0035

Manufacturer Representative:

O'Brien and Sons, Inc.  
93 West Street  
P.O. Box 650  
Medfield, MA 02052-0650

**Or approved equal.**



*Figure 1- 3 Dimensional image of playground equipment. Note that some elements shown are included as an add alternate item.*



*Figure 2- 3 Dimensional image of playground equipment. Note that some elements shown are included as an add alternate item.*

C. General playground equipment material specifications:

- a. Material: All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all steel parts by the use of time-tested coatings such as zinc plating, galvanizing, powder coating, etc. Colors shall be approved by the owner.
- b. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless-steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications). All primary fasteners shall include a locking patch type material that will meet the minimum torque requirements of IFI-125. Manufacturer to provide special tools for pinned tamperproof fasteners.
- c. Coating: Metal components to be shall be thoroughly cleaned in a hot phosphatising wash system, then primed with a water-based thermosetting solution. Primed parts shall be preheated prior to dipping in UV stabilized, liquid polyvinyl chloride (PVC), and then salt cured at approximately 400 degrees. The finished coating shall be approximately .080" thick at an 85 durometer with a minimum tensile strength of 1700 psi and a minimum tear strength of 250 lbs/inch. Standard colors are available, all with a matte finish.
- d. Finish: All metal components with powder coat finish shall be thoroughly cleaned and pretreated through a multi-stage wash system. Parts are then thoroughly dried, preheated and processed through a set of powder spray guns where a minimum .002" of epoxy primer is applied. A minimum .004" of architectural-grade Super Durable polyester TGIC powder is applied. The average film thickness is .006". Each color must meet or exceed the ratings listed below:
  - i. Hardness (D3363) rating 2H
  - ii. Flexibility (D522) pass 1/8" mandrel
  - iii. Impact (D2794) rating minimum 80 inch-pounds
  - iv. Salt Fog Resistance (B117 and D1654) 4,000 hours and rating 6 or greater
  - v. UV Exposure (G154, 340 bulb) 3,000 hours, rating delta E of 2, and 90 percent gloss retention
  - vi. Adhesion (D3359, Method B) rating 5B
- e. Decks: All decks shall be of modular design and have 5/16" diameter holes on the standing surface. There shall be a minimum of (4) slots in each face to accommodate face mounting of components. Decks shall be manufactured from a single piece of low carbon 12 GA (.105") sheet steel conforming to ASTM specification A-1011. The sheet shall be perforated with a return flange on the perimeter to provide the reinforcement necessary to ensure structural integrity. There shall be no unsupported area larger than 3.5 square feet. The



unit shall then be coated brown or gray only. Decks shall be designed so that all sides are flush with the outside edge of the supporting posts.

- f. Concrete Products: Two processes may be used to produce concrete products.
  - i. Glass Fiber Reinforced Concrete (GFRC) Products: Glass fiber is alkali-resistant (AR) with high tensile properties formulated for concrete. GFRC nominal product thickness is 1" with a unit weight of about 12 lbs per square foot and an average ultimate flexural strength of 2,100 psi per ASTM C947. Finish: Exterior latex paint suited for concrete applications.
  - ii. Precast Concrete Products: Wet-cast solid, molded concrete with an average compressive strength of 5,000 psi per ASTM C39. Unit weight range of about 115-145 lbs per cubic foot. Finish: Exterior latex paint suited for concrete applications.
- g. Rotationally Molded Polyethylene Parts: These parts shall be molded using prime natural linear low-density polyethylene having a tensile strength of 2400 psi per ASTM D638. Rotational molding resin is compounded with color and UV-stabilizing additives with a nominal wall thickness typically 1/4" with some variation depending upon product type. Standard colors are available.
- h. Recycled Permalene Parts: These parts shall be manufactured from 3/4" high-density polyethylene that has been specially formulated for optimum UV stability and color retention. Products shall meet or exceed density of .960 G/cc per ASTM D1505, tensile strength of 2400 PSI per ASTM D638. Available in a three-layer product with (2) .100" thick colored exterior layers over a .550" thick recycled Black interior core. Standard colors are available.
- i. Footings: Unless otherwise specified, bury on all footings shall be 34" below Finished Grade (FG) on all in-ground play events/posts. Other types of anchoring are available upon request.
- j. Hardware Packages: All shipments shall include individual component-specific hardware packages. Each hardware package shall be labeled with the part number, description, a component diagram showing the appropriate component, package weight, a bar code linking the hardware package to the job number, assembler's name, date and time the package was assembled, work center number and work order number.
- k. Installation Documentation: All shipments shall include a notebook or packet of order-specific, step by-step instructions for assembly of each component, including equipment assembly diagrams, estimated hours for assembly, footing dimensions, concrete quantity for direct bury components, fall height information, area required information and detailed material specifications.



- I. Packing List: All shipments shall include a packing list for each skid/container, specifying the part numbers and quantities on each skid or within each container.
- m. Packaging: All components shall be individually wrapped or bulk wrapped and placed on skids (pallets) then shrink wrapped to provide protection during shipment. Small parts and hardware packages will be placed in crates for shipment. Other components shall be individually wrapped or bulk wrapped to provide protection during shipment.
- n. Maintenance Kit: An order-specific maintenance kit shall be provided for each structure order. The kit will include a notebook or packet with a second set of installation documents and order-specific maintenance documentation with recommendations on how often to inspect, what to look for and what to do to keep the equipment in like-new condition. The kit also includes touch-up primer, appropriate color touch-up paint, sandpaper, appropriate color touch-up PVC and additional installation tools for the tamperproof fasteners.
- o. Posts: Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be finished to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy finished to match the post color. All caps shall be factory installed and secured in place with (3) self-sealing rivets. A molded low-density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.
- p. Steel Posts: All steel posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D. and the cut ends sprayed with a corrosion resistant coating. Steel Post Mechanical Properties:
  - i. Yield Strength (min): 50,000 PSI
  - ii. Tensile Strength (min): 55,000 PSI
  - iii. Elongation: 25% in 2 inches
  - iv. Modulus of Elasticity: 29.5 x 10<sup>6</sup> PSI
- q. Aluminum Posts: All aluminum posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness. Aluminum Post Mechanical Properties:
  - i. Yield Strength (min): 35,000 PSI
  - ii. Tensile Strength (min): 38,000 PSI
  - iii. Elongation: 10% in 2 inches
  - iv. Modulus of Elasticity: 10 x 10<sup>6</sup> PSI

- r. Arch Posts: Aluminum arch posts shall be manufactured from 6005-T5 alloy. The arch shall be formed to a 21" center line radius to complement the 42" center-to-center module. The arch shall be of one continuous piece construction. There shall be no welds or additional pieces mechanically fastened to manufacture the arch. Each arch shall be designed to provide a minimum of 90 1/2" clear span from the deck to the inside of the arch at the radius peak. Arches shall be finished to a specified color.
- s. Clamps: All clamps shall be finished and, unless otherwise noted, be die cast using a 369.1 aluminum alloy and have the following mechanical properties:
  - i. Ultimate Tensile: 47,000 PSI
  - ii. Yield Strength: 28,000 PSI
  - iii. Elongation: 7% in 2 inches
  - iv. Shear Strength: 29,000 PSI
  - v. Endurance Limit: 20,000 PSI
  - vi. Each functional clamp assembly shall have an appropriate number of half clamps and shall be fastened to mating parts with (2) 3/8" x 1 1/8" pinned button head cap screws (SST) and (2) stainless-steel (SST) recessed "T" nuts. A 1/4" aluminum drive rivet with stainless steel pin is used to ensure a secure fit to the post.
- t. Net Structure Clamps: All clamps are finished and, unless otherwise noted, shall be die cast using a 369.1 aluminum alloy and have the following mechanical properties:
  - i. Ultimate Tensile: 47,000 PSI
  - ii. Yield Strength: 28,000 PSI
  - iii. Elongation: 7% in 2 inches
  - iv. Shear Strength: 29,000 PSI
  - v. Endurance Limit: 20,000 PSI
  - vi. Each functional clamp assembly shall have an appropriate number of rope clamps and back clamps and shall be fastened to each other with (2) 5/8" x 1 1/2" pinned button head cap screws (SST) and (2) stainless-steel (SST) recessed "T" nuts. Either a face clamp shall be fastened to rope clamp with (2) 3/8" by 1-3/8" pinned button head cap screws or a single tab casting plate shall be fastened to rope clamp with (4) 3/8" by 1-3/8" pinned button head cap screws with 3/8" SAE flat washers. A 1/4" x 5/8" aluminum drive rivet with stainless steel pin is used to ensure a secure fit to the post.
- u. Net Clamps: All clamps are finished and, unless otherwise noted, shall be fabricated from 7GA using .179" (4,54 mm) T316 stainless steel.
  - i. Ultimate Tensile: 84,000 PSI
  - ii. Yield Strength: 25,000 PSI

- iii. Each functional clamp assembly shall have an appropriate number of locking clamps and shall be fastened to mating parts with (2) 3/8" x 7/8" pinned button head cap screws (SST) with (2) 3/8" SAE flat washers. A 1/4" aluminum drive rivet with stainless steel pin is used to ensure a secure fit to the post.
- v. Steel-reinforced cables: Made of tightly woven, polyester-wrapped, six-stranded galvanized steel cable. These abrasion-resistant, color-stable cables are extremely durable and vandal resistant. Color shall be black.
- w. PlayOdyssey® or approved equal Structural Frame: Post length of the double ladder/central column shall vary depending upon the deck height and shall be flush with the bottom of a deck infill or a minimum of 46" above the deck height. All posts shall be Powder coat finished to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 60" bury line required for correct installation and the top of the loose fill protective surfacing. Post caps shall be aluminum die cast from 369.1 alloy and Powder coat finished to match the post color. All caps shall be factory installed and secured in place with (3) self-sealing rivets. A molded low-density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the ladder posts to increase the footing area. Ladders are bolted together below grade to act as a single column for installation purposes. The deck support weldments/arms are comprised of 5/16" (.313") steel conforming to 1010 steel per ASTM A635 and welded to a 52" steel post. Arms are secured to each ladder post with (4) 5/8" x 1 1/2" pinned button head cap screws through (2) 1/4" flanges.
- x. Handholds: Rotomolded shell, with 7 GA (.179") HRPO steel sheet insert that is zinc plated then powder coat finished.
- y. Roof: Rotomolded shell, with 12 GA (.105") HRPO steel sheet insert that is zinc plated then Powder coat finished.
- z. Enclosures: Rotomolded shell, with 7 GA (.179") HRPO steel sheet insert that is zinc plated then powder coat finished.

**D. Individual component material specifications:**

- a. 193171C SwiggleKnots Bridge w/o Deck Connections DB Only or approved equal:
  - i. Footer (DB): Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) galvanized steel tubing and 3/16" (4,75 mm) HRPO sheet steel. Finish: Powder coated, color to be specified by owner.
  - ii. Clamps: Cast aluminum. Finish: Powder coated, color specified by Owner.

- iii. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
- iv. E-Pod Rotationally molded from U.V. stabilized linear low density polyethylene, color specified by Owner.
- v. Pod: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified by Owner.
- vi. Grab Bar: Weldment comprised of formed 7/8" (22,23 mm) O.D. x 11 GA (.120") (3,04 mm) and 1/4" x 1 3/4" (6,35 mm x (44,45 mm) stainless steel half clamps.
- vii. Chain: Steel 1/4" (6,35 mm) straight link chain, 3,150 lb (1428,82 kilograms). working load limit.
- viii. Cable Assy.: (Cable) Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. (Cable Connectors) 6063-T6 aluminum.
- ix. Pod Bolt Plate: Weldment consists of 3/16" (4,75 mm) HRPO steel plate and 3/8" (9,53 mm) thick HRPO steel plate.
- x. Ball Knot: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified by Owner.
- xi. Beam: Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,67 mm) wall galvanized steel tubing, 3/8" (9,53 mm) thick stainless steel plate, and 1/4" (6,35 mm) HRPO flat steel.

b. 193170A Lolliladder w/2 E-Pods or approved equal:

- i. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
- ii. Clamps: Cast aluminum. Finish: Powder coat, color specified by owner.
- iii. Pod Casting: Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: Powder coat, color specified by owner.
- iv. E-Pod Rotationally molded from U.V. stabilized linear low density polyethylene, color specified by owner.
- v. Pod: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified by owner.
- vi. Ladder: Weldment comprised of 1/4" (6,35 mm) HRPO flat steel, 2.375" (60,33 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,55 mm) wall galvanized steel tubing, and 1.315" (33,40 mm) O.D. RS20 (.080"-.090") (2,03 mm-2,29 mm) wall galvanized tubing. Finish: Powder coat, color specified by owner.. Finish: Powder coat, color specified by owner.
- vii. Rung Cap: EPDM, black in color.

1. 120710A Pod Climber 8" DB, , 158997A Pod Climber 10" DB, 120711A Pod Climber 16" DB, 158998A Pod Climber 20" DB, 120712A Pod Climber 24" DB
  - viii. Disc: Rotationally molded from U.V. stabilized linear low density polyethylene, disc measures 14" (356 mm) in diameter x 7" (178 mm) high, color specified by owner.
  - ix. Support: Weldment comprised of 1.900" (48,26 mm) O.D. RS-20 (.090" - .100") (2,28 mm-2,54 mm) 1.315" (33,40 mm) O.D. RS-20 (.080" - .090") (2,03 mm-2,28 mm) and 3/16" x 5" (4,75 mm x 127 mm) diameter plate. Finish: Powder coat, color specified by owner.
  - x. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
- c. 166809A E-Pod Seat or approved equal.
- i. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
  - ii. Pod Casting: Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: Powder coat, color specified.
  - iii. Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
  - iv. Pod: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
- d. 222708B Whoosh Winder Slide 96"Dk DB or approved equal.
- i. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
  - ii. Exit Footer: Weldment comprised of 2.375" (60,33 mm) O.D. RS-20 (.095" - .105") (2,41 mm-2,66 mm) galvanized steel tubing and 1/4" x 3" x 7 1/2" (6,35 mm x 76 mm x 191 mm) HRPO steel mounting plate. Finish: Powder coat, color specified.
  - iii. Mid-Support: Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090" - .100") (2,28 mm-2,54 mm) galvanized steel tubing and 7 GA. (.179") (4,54 mm) HRPO steel strap. Finish: Powder coat, color specified.
  - iv. Rail Spacer: Fabricated from 1.312" (33,32 mm) O.D. x 16 Ga. (.065") (1,65 mm) steel tubing. Finish: Powder coat, color specified.
  - v. Lower Support: Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,28 mm - 2,54 mm) galvanized steel tubing and 1/4" (6,35 mm) flat steel. Finish: Powder coat, color specified.
  - vi. Rail: 1 1/8" (28,58 mm) O.D. 6061-T6 aluminum extrusion with 5/16" (7,92 mm) walls. Finish: Powder coat, color specified.

- vii. Slide Sections: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
  - viii. Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powder coat, color specified.
- e. 111231A Triangular Tender deck or approved equal.
- i. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
  - ii. Deck: Flange formed from 12 GA (.105") (2,66 mm) sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" (7,92 mm) diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 37 3/4" (66,68 mm x 958,85 mm). Finish: Color specified by Owner.
- f. Deck Hanger Clamp Assembly: Cast aluminum. Finish: Powder coat, color specified.
- g. 16244A Pipe Barrier above deck or approved equal.
- i. Pipe Barrier: Weldment comprised of 5/8" (15,88 mm) solid steel vertical rails, 1 1/8" (28,58 mm) O.D. x 11 GA (.120") (3,04 mm) steel horizontal rails with 203 or 303 stainless steel welded inserts with 5/8" (15,88 mm) internal threads, 1 1/2" x 1 1/2" x 29 1/2" (38,1 mm x 38,1 mm x 749,3 mm) angle iron. Barrier measures 33 7/8" (860,43 mm) wide x 39 13/16" (1011,22 mm) high. Color specified by Owner.
  - ii. 90o Bracket: Formed from 1/4" x 1 1/4" (6,35 mm x 31,75 mm) HRPO flat steel. Finish: Powder coat, color specified.
  - iii. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
  - iv. Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powder coat, color specified.

2.02 ALTERNATIVE PLAY STRUCTURE ITEMS (Add Alternate Item #1)

A. Contractor shall provide the following commercial quality playground components as specified herein and shown on the plan entitled "George B. Salter Memorial Grove Playground Layout" (Refer to Appendix A – Plans) **if add alternate item #1 is accepted by the owner:**

- a. Model 184605A O-Zone 3-Ring Climber(1)
- b. Model 120710A Pod Climber 8" DB (3)
- c. Model 158997A Pod Climber 10" DB (1)
- d. Model 120711A Pod Climber 16" DB (2)
- e. Model 158998A Pod Climber 20" DB (1)
- f. Model 120712A Pod Climber 24" DB (1)
- g. Model 193174 Sol Spinner
- h. Model 166809 E Pod Seat (3)

**Or approved equal.**

\* numbers in parenthesis indicate quantities of each item

B. Equipment shall be manufactured by:

Landscape Structures, Inc.  
601 7<sup>th</sup> Street South – P.O. Box 198  
Delano, Minnesota 55328  
www.landscapestructures.com  
1-800-328-0035

Manufacturer Representative:

O'Brien and Sons, Inc.  
93 West Street  
P.O. Box 650  
Medfield, MA 02052-0650

**Or approved equal.**

C. General material specifications:

- a. 120710A Pod Climber 8" DB, 158997A Pod Climber 10" DB, 120711A Pod Climber 16" DB, 158998A Pod Climber 20" DB, 120712A Pod Climber 24" DB or approved equal.
  - i. Disc: Rotationally molded from U.V. stabilized linear low density polyethylene, disc measures 14" (356 mm) in diameter x 7" (178 mm) high, color specified.

- ii. Support: Weldment comprised of 1.900" (48,26 mm) O.D. RS-20 (.090" - .100") (2,28 mm-2,54 mm) 1.315" (33,40 mm) O.D. RS-20 (.080" - .090") (2,03 mm-2,28 mm) and 3/16" x 5" (4,75 mm x 127 mm) diameter plate. Finish: Powder coat, color specified.
  - iii. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
- b. 184605A O-Zone 3-Ring Climber Ground to Ground DB or approved equal.
- i. Handhold Panel: Permalene, color specified by owner.
  - ii. Upper Cable: Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. (Cable Connector) 6063-T6 aluminum Finish: Powder coat, black in color. (Footing Connectors) Fabricated from 1.250" (31,75 mm) O.D. 6063-T6 aluminum.
  - iii. Ring Caps: Fabricated from sand-cast alloy 356. Finish: Powder coat, color specified by owner.
  - iv. Footer (DB): Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) galvanized steel tubing and 3/16" (4,75 mm) HRPO sheet steel. Finish: Powder coat, color specified.
  - v. Clamps: Cast aluminum. Finish: Powder coat, color specified by Owner.
  - vi. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
  - vii. Spacer Tube: Made from 6061-T6 aluminum 7/8" (22,23 mm) O.D. x 1 11/16" (42,85 mm). Finish: Powder coat, color specified by Owner.
  - viii. Cable: Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. (Cable Connector) 6063-T6 aluminum. Finish: Powder coat, black in color.
  - ix. Ring: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
  - x. Arch Beam: Weldment comprised of 2.375" (60,32 mm) O.D. RS20 (.095" - .105") (2,41 mm-2,66 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO flat steel and 3/8" (9,52 mm) stainless flat steel. Finish: Powder coat, color specified by Owner.
  - xi. Lower Cable: Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. (Cable Connector) 6063-T6 aluminum. Finish: Powder coat, black in color. (Footing Connector) Fabricated from 1.250" (31,75 mm) O.D. 6063-T6 aluminum.
- c. 166809A E-Pod Seat or approved equal.
- i. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).



- ii. Pod Casting: Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: Powder coat, color specified.
  - iii. E-Pod Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
  - iv. Pod: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
- d. 193174A Sol Spinner DB or approved equal.
- i. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
  - ii. Clamps: Cast aluminum. Finish: Powder coat, color specified.
  - iii. Bushing: Oil-filled UHMW PE.
  - iv. Footer: Weldment comprised of 2.375" (60,32 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,56 mm) wall galvanized steel tube, 12 GA. (.105") (2,66 mm) HR flat steel and 1 7/8" (47,62 mm) steel ball. Finish: Powder coat, color specified by Owner.
  - v. GripX Panel: Permalene®, black in color.
  - vi. Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,29 mm-2,54 mm) wall galvanized steel tube, 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,82 mm-3,07 mm) wall galvanized steel tube, 1/4" (6,35 mm) HRPO steel plate, 3/8" (9,53 mm) HRPO steel plate, 2.750" (69,85 mm) O.D. 1018 steel, and 1 7/8" (47,63 mm) steel ball. Finish: Powder coat, color specified.
  - vii. Support Arm: Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130"-.140") (3,30 mm - 3,56 mm) wall galvanized steel tube, 2.750" (69,85 mm) O.D. 1018 steel, and 1/4" (6,35 mm) HRPO flat steel. Finish: powder coat, color specified by Owner.

## 2.03 PLAY EQUIPMENT WARRANTY

The playground manufacturer shall provide documentation outlining specific terms of warranty for all equipment. The manufacturer shall provide the following:

- A. 100-Year limited warranty on all aluminum posts, stainless steel fasteners, clamps, beams and caps, against structural failure due to corrosion/natural deterioration or manufacturing defects, and on steel posts and arches against structural failure due to material or manufacturing defects.
- B. 15-Year limited warranty on all plastic components (including edging), all steel components (except 100-year steel posts), climbers, decks and coatings (except Wiggle Ladders, Chain Ladders and Swing Chain) against structural failure due to material or manufacturing defects.

- C. 10-Year limited warranty on concrete products against structural failure due to natural deterioration or manufacturing defects. Does not cover minor chips, hairline cracks or efflorescence.
- D. 8-Year limited warranty on climbing cables against defects in materials or manufacturing defects.
- E. 3-Year limited warranty on Cable products, swing seats and hangers, grills, Wiggle Ladders, Chain Ladders and Swing Chain, Track Ride trolleys and bumpers, all rocking equipment, PVC belting material, hydraulic cylinders, Seesaws, Wiggle Ring Bridge, etc., against failure due to corrosion/natural deterioration or manufacturing defects.
- F. Warranty does not need to include any cosmetic issues or wear and tear from normal use.

2.04     SWINGS (PROVIDED BY THE OWNER)

- A. The Owner shall provide two (2) sets of T-Swings to the Contractor for installation. The Contractor shall be responsible to transport the swing structures and all related hardware components from the Department of Public Works headquarters located at 925 Sandy Lane, Warwick, RI 02889 to the project site.
- B. The Contractor shall maintain the swing equipment in good condition and secure the items at the project site until they are installed. The Contractor is responsible for any damage to the swing equipment once they accept the items from the Department of Public Works. Any subsequent damage due to mishandling or improper care shall be borne by the Contractor.

2.05     PLAYGROUND SIGNAGE

- A. Contractor shall provide and install one (1) 12"X18" "Playground Rules" safety sign in the location shown on the project drawings and/or directed by the Landscape Architect.
- B. The City will provide the graphics for the sign in PDF, PSD, or other acceptable digital format to the sign vendor for review, modification, and production.
- C. Provide shop drawing submittals of all signs for approval by the City's landscape architect prior to fabrication. Once submittals are approved, they may be fabricated and installed.
- D. Signs shall be fabricated from .080 aluminum with vinyl overlay for all text, logos, and images. Edges shall be rounded.
- E. Contractor shall supply all necessary hardware and fasteners to affix the signs to wood or steel posts, fencing, buildings, or other areas as directed by the Landscape Architect.

Architect. All fasteners and hardware shall be stainless steel, galvanized steel, aluminum or other corrosion resistant material. Wood utilize for affixing signs shall be ACQ pressure treated southern yellow pine or equivalent rot resistant wood material.

### **PART 3 - EXECUTION**

#### **3.01 SITE REVIEW AND COORDINATION**

- A. The Contractor shall coordinate with the City's landscape architect to determine when the site is appropriately prepared by the City to accept the playground equipment. No work shall be performed until the site is excavated to subgrade, compacted, and properly graded.
- B. The Contractor shall verify grades and layout with the City's landscape architect prior to the installation of any playground equipment. If the grades need to be adjusted, the City will make modifications as required at the request of the Contractor. The Contractor is not required to make adjustments to the subgrade.

#### **3.02 PLAYGROUND EQUIPMENT INSTALLATION**

- A. Inventory all equipment and ensure all necessary parts have been received in order to complete the project. The Contractor shall notify the vendor immediately if parts are missing to ensure the play structure is erected in a timely manner.
- B. Layout the location of equipment and related footings. After the layout is complete, coordinate with the City's landscape architect to review the footing and structure location. Make adjustments as required to conform to the drawings and meet project requirements.
- C. Once the layout is approved, excavate for footings pursuant to manufacturer standard details for cold weather climates. Unless otherwise specified, footings shall be a minimum of 34" below Finished Grade (FG) on all in-ground play events/posts unless otherwise specified by the manufacturer for a specific piece of equipment. Footing diameter shall be in accordance with manufacturer instructions.
- D. Assemble the structure in accordance with manufacturer details, making sure to verify all component heights from finished grade and setbacks from obstructions to ensure conformance with ASTM 1487 and CPSC Publication 325. Take care to include the surfacing depth in final height calculations.
- E. Once the structure is fully assembled and leveled, re-check the structure height, setbacks, and overall layout.
- F. Anchor the structure by pouring concrete in the footing foundation holes. Concrete mix shall cure to a minimum of 3000 PSI within thirty (30) days. Pour to the top of each footing hole, ensuring that concrete remains 12" below finished grade to allow

for the installation of play surfacing. Any leftover concrete should be removed from the site.

- G. After concrete has cured a minimum of 48 hours finish attaching clamps, decks, swings, seats, hand grips, guardrails, slides, barrier panels, and components in accordance with manufacturer recommendations.
- H. Ensure all clamps are thoroughly tightens and secured with locking pins or rivets.
- I. Thoroughly clean all work areas and dispose of all trash properly at an off-site facility. Any cured concrete left over shall be removed from the site by the Contractor.
- J. Wash all play structure components to remove dirt, concrete, debris and other items.
- K. Touch up any small scrapes or marks using paint provided by the manufacturer.
- L. Review final installation with the City for final acceptance.

### 3.03 SAFETY SIGNAGE

- A. Contractor shall consult with City's Landscape Architect prior to sign installation to review sign locations and attachments.
- B. Attach to post with fasteners and hardware as outlined herein. Contractor shall supply all mounting hardware to include one (1) 4"X4" X 8' pressure treated landscape post.

### 3.04 POST INSTALLATION INSPECTION

- A. Once installation of components are complete the Contractor shall notify the City's Landscape Architect for a follow up inspection. The Landscape Architect will inspect the components within 48 hours of notification to ensure they meet approved shop drawings, guidelines, and specifications. Any deficiencies will be noted in a punch list.
- B. All deficiencies are required to be completed within 10 working days of receipt of the punch list. After punch list is complete, notify the City's Landscape Architect for a final inspection and Certificate of Completeness.

### 3.05 DOCUMENTATION

- A. At the completion of the project, prior to final payment, Contractor shall provide all touchup paint, warranty certificates, maintenance manuals, installation guides, and regulatory compliance documentation to the City's Landscape Architect prior to final invoicing and payment.

### 3.06 CLEANUP

- A. The Contractor is responsible to clean up all site debris to include all boxes, straps, crating, wood, cardboard, foam, and other packing elements. Clean and blow out all

hardscape areas. Repair any damaged existing elements. Wash down the play structure.

- END OF SECTION 11 68 13 -

PLAYGROUND EQUIPMENT

## **32 12 16 Asphalt Paving**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions, Division 00 and General Requirements, Division 01 Specification sections, apply to work of this section.
- B. Examine all Contract Drawings and all other Sections of the Specifications for requirements therein affecting the work of this Section.
- C. All work under this section shall conform to Section 400 and other applicable sections of the RIDOT Standard Specifications for Road and Bridge Construction.

#### **1.02 DESCRIPTION OF WORK**

- A. Work included: Provide all labor, materials, equipment, and transportation necessary to fine grade pathways and parking areas and complete the placement of bituminous concrete (asphalt) as show on project plans (See Appendix A – Plans).

#### **1.03 QUALITY ASSURANCE**

- A. Codes and Standards: Comply with local governing regulations if more stringent than herein specified.

#### **1.04 SUBMITTALS**

- A. Furnish manufacturer's product mixing data, test reports, and materials certifications as required in referenced sections for bituminous concrete.

### **PART 2 - PRODUCTS**

#### **2.01 BITUMINOUS CONCRETE**

##### **A. Aggregates**

- 1. General: Use materials and gradations that have performed satisfactorily in previous installations.
- 2. Coarse Aggregate: ASTM D 692, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.
- 3. Fine Aggregate: ASTM D 1073 or AASHTO M 29, sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations

thereof. For hot-mix asphalt, limit natural sand to a maximum of 20 percent by weight of the total aggregate mass.

4. Mineral Filler: ASTM D 242 or AASHTO M 17, rock or slag dust, hydraulic cement, or other inert material.

**B. Asphalt Materials**

1. Asphalt Binder: AASHTO M 320 or AASHTO MP 1a, PG 64-22 **OR** PG 58-28 **OR** PG 70-22..

2. Asphalt Cement: ASTM D 3381 for viscosity-graded material **OR** ASTM D 946 for penetration graded material.

3. Prime Coat:

a. ASTM D 2027, medium-curing cutback asphalt, MC-30 or MC-70 **OR** MC-250, **or** Asphalt emulsion prime coat complying with State or local DOT requirements.

4. Tack Coat: ASTM D 977 or AASHTO M 140 emulsified asphalt, or ASTM D 2397 or AASHTO M 208 cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.

5. Fog Seal: ASTM D 977 or AASHTO M 140 emulsified asphalt, or ASTM D 2397 or AASHTO M 208 cationic emulsified asphalt, slow setting, factory diluted in water, of suitable grade and consistency for application.

6. Water: Potable.

7. Undersealing Asphalt: ASTM D 3141, pumping consistency.

**PART 3 - EXECUTION**

**3.01 EXAMINATION**

A. Verify that subgrade is dry and in suitable condition to begin paving.

B. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

a. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph (5 km/h).

b. For pathways too small to compact with a roller, compact with a vibratory compactor.

- c. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by the Owner, and replace with compacted backfill or fill as directed.
- C. Added up to 2" of processed gravel to areas to bring the pathway up to a suitable grade and provide a suitable finish for paving work.
- D. Proceed with paving only after unsatisfactory conditions have been corrected.
- E. Verify that utilities, traffic loop detectors, and other items requiring a cut and installation beneath the asphalt surface have been completed and that asphalt surface has been repaired flush with adjacent asphalt prior to beginning installation of imprinted asphalt.

### 3.02 HOT-MIX ASPHALT PLACING

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
  - a. Place hot-mix asphalt base course in two (2) lifts of 1 ½" thickness.
  - b. Place hot-mix asphalt surface course in single lift.
  - c. Spread mix at minimum temperature of 250 deg F (121 deg C).
  - d. Begin applying mix along centerline of crown for crowned sections and on high side of one-way slopes unless otherwise indicated.
  - e. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.
- B. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface

### 3.03 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.
  - a. Clean contact surfaces and apply tack coat to joints.
  - b. Offset longitudinal joints, in successive courses, a minimum of 6 inches (150 mm).
  - c. Offset transverse joints, in successive courses, a minimum of 24 inches (600 mm).
  - d. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations" **OR** as shown on Drawings, **as directed**.



- e. Compact joints as soon as hot-mix asphalt will bear roller weight without excessive displacement.
- f. Compact asphalt at joints to a density within 2 percent of specified course density.

### 3.04      COMPACTION

- A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers. Complete compaction before mix temperature cools to 185 deg F (85 deg C).
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
  - a. Average Density: 96 percent of reference laboratory density according to ASTM D 6927 or AASHTO T 245, but not less than 94 percent nor greater than 100
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Repairs: Remove paved areas that are defective or contaminated with foreign materials and replace with fresh, hot-mix asphalt. Compact by rolling to specified density and surface smoothness.
- G. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- H. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.05 ASHPALT CURBS

A. Construct hot-mix asphalt curbs over compacted pavement surfaces. Apply a light tack coat unless pavement surface is still tacky and free from dust. Spread mix at minimum temperature of 250 deg F (121 deg C).

a. Asphalt Mix: Same as pavement surface-course mix.

B. Place hot-mix asphalt to curb cross section indicated or, if not indicated, to local standard shapes, by machine or by hand in wood or metal forms. Tamp hand-placed materials and screed to smooth finish. Remove forms after hot-mix asphalt has cooled.

3.06 DISPOSAL

A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.

-END OF SECTION 03302-

BITUMINOUS CONCRETE

## **32 18 16 PLAYGROUND PROTECTIVE SURFACING**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including General and Special Conditions and Division-1 Specification sections, apply to work of this section.
- B. Examine all Contract Drawings and all other sections of the specifications for requirements therein affecting the work of this Section.

#### **1.02 SCOPE**

- A. Contractor shall supply and deliver **X Cubic Yards** of approved engineered wood fiber playground surfacing to the project site as directed by the City. The wood fiber material shall be deposited in a location on the site as directed by the City's Landscape Architect for installation by the City.
- B. All surfacing shall be designed to meet or exceed current ASTM and CPSC safety standards and guidelines related to protective surfacing.

#### **1.03 STANDARDS AND DEFINITIONS**

- A. The following standards and definitions shall apply to the work of this Section.
  - 1. Impact Attenuation - ASTM F1292 (latest edition): Impact attenuation test results will be provided to the Owner or Owner's representative. These test results shall be certified and submitted on the letterhead of an independent testing lab. Impact attenuation test results shall meet or exceed Consumer Product Safety Commission Guidelines for impact attenuation (G-max and Head Injury Criteria (HIC)).
  - 2. Accessibility of Surface System - ASTM F1951 (latest edition): All Playground surfacing products must pass testing to ensure wheelchair access under and around playground equipment as required by the American Disabilities Act.
  - 3. Coefficient of Friction - ASTM D2047-82: All products must meet a minimum standard of coefficient of friction of .9-wet, 1.0 dry.
  - 4. Permeability: Products shall meet or exceed a coefficient of permeability of 0.4 gallons per square yard per second.
  - 5. Flammability of Finished Floor cover - ASTM D2859: Product shall meet requirements of ASTM D2859.

6. ASTM F2075 (latest edition) - This document sets standards for engineered wood fiber for use as playground surfacing under and around playground equipment.

1.04 RELATED WORK IN OTHER SECTIONS

- A. Section 11 68 13 – Playground Equipment.

1.05 SUBMITTALS

- A. Submittal packages shall include but not be limited to: (1) product samples, (2) supplier's written warranty, and (3) independent laboratory results.

- B. Product samples shall include:

1. 1 - 1 quart bag of proposed EWF surfacing.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Material shall be delivered to the project site and deposited in a location determined by the City's Landscape Architect. Upon receipt at the job site, all materials shall be checked to ensure that product meets qualitative and quantitative standards of the specifications.

PART 2 - PRODUCTS

2.01 ENGINEERED WOOD FIBER

- A. Engineered wood fiber play surfacing shall contain 100 percent pre-consumer recovered wood designed to reduce injuries on playgrounds and provide a stable resilient surface for trails. System shall be tested according to ASTM methods to ensure compliance with ADA, ASTM, CPSC, and CSA standards for playground surfacing. EWF shall meet the following criteria:

1. Composition: Engineered wood fiber. No chemical treatments or additives.
2. Compliance: Meet or exceed CPSC guidelines for impact attenuation.
3. Recycled Content: 100 percent pre-consumer recovered materials.
4. Dimensions: Per sieve analysis, ASTM F2075 / 4.4: Meets Criteria.
5. Hazardous Metal, ASTM F 2075 / 4.5: Meets Criteria.
6. Tramp Metal, ASTM F 2075 / 4.6: Meets Criteria.
7. Coefficient of Permeability, ASTM D 2434: Greater than 0.6 cm/s.
8. When bonded: Permeability per falling head test, EM1110-2-1906-VII-13: 191.19 gal/min/sq.ft.

*Playground Renovation  
Salters Grove Park, Warwick, Rhode Island*

9. Moisture Absorption: Maximum of 150 percent by weight.
10. Moisture Content: 25 to 60 percent by weight.
11. Density: 15 to 24 pounds per cubic foot.
12. Impact Attenuation: ASTM F 1292. Meets criteria.
13. IPEMA Certification: 8 inch thickness rated to 8 feet and 12 inch thickness to 12 feet.
14. Meet ASTM F1951 for accessibility.
15. Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering
16. Flammable, Meet 16 CFR 1500.44, Federal Hazardous Substances Act Title 16, Chapter II, Subchapter C for Rigid and Pliable Solids:

B. Vendor Alternatives:

In the interest of public playground safety, IPEMA provides an independent laboratory which validates a manufacturer's certification of conformance to ASTM F1292 & F2075. A list of current validated products, their thickness and critical height may be viewed at [www.ipema.org](http://www.ipema.org). The following are known qualified and acceptable local and regional EWF manufacturers and distributors that may be submitted for this project provided their product and warranty meet the performance standards set forth herein:

1. Ultiplay Parks and Playgrounds  
Mike Parody, President  
51 Carney Street  
Uxbridge, MA 01569  
[www.ultiplayus.com](http://www.ultiplayus.com)  
508-278-9622
2. M.E. O'Brien and Sons, Inc.  
Meghan O'Brien, President  
93 West Street, Unit F  
Medfield, MA 02052  
[www.obrienandsons.com](http://www.obrienandsons.com)  
508-359-4200
3. J.P. LaRue, Inc.  
35 Oak Forest Drive  
Little Compton, RI 02837  
[www.jplarue.com](http://www.jplarue.com)  
1-800-986-3716

All proposed EWF products will be considered if the proposed vendors can meet the performance specifications contained herein. Contractor shall submit all product, warranty, and installation data as outlined in this section after project award. Contractors should note that acceptance of EWF product/vendor/ installer will be based on a thorough review of product materials, installation, and

performance measures and therefore must demonstrate that they meet or exceed product and installation performance criteria outlined herein in all regards. These specifications are intended to outline a minimum standard for product performance.

### PART 3 - EXECUTION

#### 3.01 REVIEWS AND SUBMITTALS

- A. Prior to delivery the Contractor shall provide all product samples and data as required herein. Do not order materials until approval is provided.

#### 3.02 ENGINEERED WOOD FIBER DELIVERY

- A. Coordinate delivery of surfacing with other site activities. Contact the City's Landscape Architect to determine the location of where surfacing should be deposited and timeframe for delivery. It is the sole responsibility of the Contractor to ensure activities proceed in an orderly fashion that allows conformance with the drawings and specifications and maintains project time tables.

- END OF SECTION 32 18 16 -

PLAYGROUND PROTECTIVE SURFACING

## **SECTION 32 33 00 – SITE FURNISHINGS**

### **PART 1 - GENERAL**

#### **1.01      RELATED DOCUMENTS**

- A. Drawings and general provisions of contract, including General and Special Conditions and Division -1 specification sections, apply to work of this section.
- B. Examine all contract specifications, drawings, and all other sections of the specifications for requirements therein affecting the work of this section.

#### **1.02      SCOPE**

- A. Contractor shall purchase and deliver all site furnishings and other materials as outlined herein to the project site. All materials must be kept secured and maintained in good condition throughout the course of construction.
- B. Install all site furnishings in accordance with manufacturer provided instructions and recommendations unless otherwise stated herein.
- C. Contractor **is not** required to conduct major site preparation work. The City will prepare areas as required to accommodate the site furnishings. Once site furnishings are installed the City will perform all finished grading and backfill around each site element.

#### **1.03      STANDARDS AND DEFINITIONS**

- A. The following standards and definitions shall apply to the work of this Section.
  - a. ASTM Standards - The American Society for Testing and Materials International applicable standards as outlined herein.
  - b. AAMA – American Architectural Manufacturers Association applicable standards as outlined
  - c. ADA – Americans with Disabilities Act – Standards for Accessible Design – 2010 or later.

#### **1.04      RELATED WORK IN OTHER SECTIONS**

- A. Section 03 30 53 - Cast in Place Concrete
- B. Section 32 12 16 - Asphalt Paving
- C. Section 11 68 13 - Playground Equipment

1.05     SUBMITTALS AND SHOP DRAWINGS

- A. Provide submittals for all specified site furnishings and related equipment to include installation instructions, color selections, and relevant installation details. Provide color options to Owner for selection prior to ordering.
- B. Provide shop drawings for any custom elements. Plans shall include all materials, fasteners, connections, coatings, and other relevant details.

1.06     PRODUCT OPTIONS

- A. If products are specified by performance standards or by description only the Contractor may submit any product meeting those standards or description for consideration. Products submitted that substantially comply with the performance standards and description outlined herein will be approved. Products submitted that do not substantially comply with the performance standards and description outlined herein will be rejected.
- B. If Products are specified by name with the term “or approved equal” the Contractor may either submit the product as specified or request a substitution for any manufacturer or product not named for consideration. The product(s) proposed must be deemed substantially comparable in materials, quality, and fabrication to those specified by name. The City reserves the right to reject proposed substitutions if the proposed products are found to be inferior to those specified herein.

1.07     SUBSTITUTIONS

- A. The City will consider requests for substitutions **within 14 days after date of Owner-Contractor Agreement** unless the specification or provisions provided herein specifically state “NO SUBSTITUTIONS”.
- B. Each request for substitution request must be submitted with complete data substantiating compliance of proposed substitution with contract documents.
- C. A request constitutes a representation that the Contractor:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2. Will provide the same warranty for the substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other work as required for the work to be completed with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extensions which may subsequently become apparent as a result of the product substitution.



5. Has investigated any proprietary features of the specified product and attests that the proposed product does not violate any patents or laws in making the product "equal."
  6. That products will fit within the current layout and not require any significant modifications to the special layout in order to accommodate alternate equipment.
- D. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision of the Contract Documents.
- E. Substitution Submittal Procedure:
1. Submit three copies of requests for substitution for consideration. Limit each request to one proposed substitution.
  2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
  3. The City's Landscape Architect will notify Contractor, in writing, of decision to accept or reject request.

1.08 DELIVERY, STORAGE AND HANDLING

- A. Upon receipt at the job site, all materials shall be checked by the Contractor to ensure that no damages occurred during shipping or handling. All materials shall be stored in a manner to ensure proper ventilation and drainage and to protect against damage, weather, vandalism and theft. The Contractor shall ensure that materials are not left out in the open for extended amounts of time.

1.09 COORDINATION WITH WORK ACTIVITIES

- A. The Contractor shall carefully store materials as necessary to avoid potential damage or site conflicts. Coordinate with the City to determine when areas will be prepared for the installation of site furnishings and any related components. Coordinate the installation of site furnishings with grading, paving, and other related site work. Install site furnishings in a logical and progressive manner to avoid redundancy or damage to recently built works.
-

PART 2 - PRODUCTS

2.01 SITE FURNISHINGS (ADD ALTERNATE 2)

A. If add alternate 2 is accepted by the City the Contractor shall provide the following commercial site furnishings as specified herein and shown on the plan entitled "George B. Salter Memorial Grove Playground Layout" (Refer to Appendix A – Plans):

- a. Model SSG250P 46" Round ADA Pedestal Table with 3 Seats (1)
- b. Model SSG245P 46" Round Pedestal Table with 4 Seats (2)
- c. Model SG111P Signature Series Picnic Table with Model SG135 (1)
- d. Model BRK538I Multi-Axis Bike Rack (direct burial) (1)

**Or approved equal.**

B. Equipment shall be manufactured by:

Wabash Valley  
P.O. Box 5 – 505 East Main Street  
Silver Lake, Indiana 46982  
www.wabashvalley.com  
1-800-253-8619

Manufacturer Representative:

O'Brien and Sons, Inc.  
93 West Street  
P.O. Box 650  
Medfield, MA 02052-0650

**Or approved equal.**

C. Material specifications:

- a. Model SSG250P 46" Round ADA Pedestal Table with 3 Seats or approved equal:
  - i. Heat fused poly-vinyl coating, finished on inner-metal structure, to an approximate 3/16" thickness.
  - ii. Framework assemblies finished with powder coating; electrostatically applied and oven cured according to powder manufacturer's specifications. Fasteners are stainless steel to resist corrosion.
  - iii. Table Frame: Main support constructed from 4" x 4" x 11 gauge galvanized structural steel tubing. Square mounting frame, for top, consists of 1 1/4" x 1 1/4" steel flat bar, 1/4" plate steel and 14 gauge sheet steel. Seat assembly arm constructed with a 2 7/8" O.D. x 9 gauge galvanized structural steel tubing. Cross tubing is 2 3/8" O.D x 12 gauge

galvanized structural steel tubing. Seats mounting ears are 10 gauge sheet steel. Mounting bracket, to the post, is 3/8" x 3 1/2" x 8" plate steel. Mounting plate covers are cast aluminum.

- iv. Top and seat: fabricated from 3/4" #9 expanded steel mesh and 12 gage sheet metal for the perforated. Framing consists of die formed 14 gauge mitered angles 3/4" x 1 3/4 ". Round tops are framed with 1/8" thick x 1 1/2" wide strip steel. Top's square mounting frame and the seats mounting brackets are 1/4" x 1 1/2" steel flat bar. Top's support braces are 1/8" x 1 1/2" strip steel.



*Figure 1 - Model SSG250P 46" Round ADA Pedestal Table with 3 Seats or approved equal.*

- b. Model SSG245P 46" Round Pedestal Table with 4 Seats or approved equal:
  - i. Heat fused poly-vinyl coating, finished on inner-metal structure, to an approximate 3/16" thickness.
  - ii. Framework assemblies finished with powder coating; electrostatically applied and oven cured according to powder manufacturer's specifications. Fasteners are stainless steel to resist corrosion.
  - iii. Table Frame: Main support constructed from 4" x 4" x 11 gauge galvanized structural steel tubing. Square mounting frame, for top, consists of 1 1/4" x 1 1/4" steel flat bar, 1/4" plate steel and 14 gauge sheet steel. Seat assembly arm constructed with a 2 7/8" O.D. x 9 gauge galvanized structural steel tubing. Cross tubing is 2 3/8" O.D x 12 gauge galvanized structural steel tubing. Seats mounting ears are 10 gauge sheet steel. Mounting bracket, to the post, is 3/8" x 3 1/2" x 8" plate steel. Mounting plate covers are cast aluminum.
  - iv. Top and seat: fabricated from 3/4" #9 expanded steel mesh and 12 gage sheet metal for the perforated. Framing consists of die formed 14 gauge mitered angles 3/4" x 1 3/4 ". Round tops are framed with 1/8" thick x 1 1/2" wide strip steel. Top's square mounting frame and the seats



*Figure 2 - Model SSG245P 46" Round Pedestal Table with 4 Seats or approved equal.  
Color to be selected by Owner from standard options.*

- c. Model SG111P Signature Series Picnic Table with Model SG135 or approved equal:
- i. Heat fused poly-vinyl coating, finished on inner-metal structure, to an approximate 3/16" thickness.
  - ii. Framework assemblies finished with powder coating; electrostatically applied and oven cured according to powder manufacturer's specifications. Fasteners are stainless steel to resist corrosion.
  - iii. Table Frame: Main support constructed from 2 3/8" x 13 gauge and 1 5/8" X 14 gauge structural steel tubing. Cross braces are 1" O.D. x 15 gauge structural steel tubing. Mounting brackets on legs are 10 gauge x 2 7/8" x 6" sheet steel.
  - iv. Top and seat: fabricated from 3/4" #9 expanded steel mesh and 12 gage sheet metal for the perforated. Framing on the 8', 6' tops and 8' and 6' seats are 10 gauge mitered angles 3/4" x 1 3/4". The top's center support brace is 1/8" x 1 1/2" strip steel. Top and seat mounting brackets are 1/4" x 1 1/2" steel flat bar.



*Figure 3 - Model SG111P Signature Series Picnic Table with Model SG135 or approved equal. Color to be selected by Owner from standard options.*

d. Model BRK538I Multi-Axis Bike Rack or approved equal:

A. Frame: The Bike Rack tube consists of 13 gauge x 2 3/8" diameter mechanical steel tubing. The base plate for the surface mount unit is 7 gauge thick x 6" steel plate.



*Figure 4 - Model BRK538I Multi-Axis Bike Rack or approved equal or approved equal. Color to be selected by Owner from standard options.*

## 2.02 PLAY EQUIPMENT WARRANTY

The manufacturer shall provide documentation outlining specific terms of warranty for all equipment. The manufacturer shall provide the following:

- A. Warrant that all Plastisol coated products will not:
  - i. Peel, chip, crack, rot or warp for a period of five (5) years from the date of invoice.
  - ii. Chalk in excess of numerical rating of eight (8) when measured in accordance with the standard procedures specified in ASTM D 4214-98 for a period of five (5) years from the date of invoice.
  - iii. Fade or change color in excess of seven (7) "E" units (McAdam) calculated in accordance with the standard procedures specified in ASTM D 2244 for a period of five (5) years from the date of invoice. Color measurements are to be performed on clean surfaces, free of all contaminants such as dirt, chalk, dust, mud or oxidized films.
- B. Warrant that all powder coated products will:
  - i. Meet and exceed AAMA 2604-05 (American Architectural Manufacturers Association) test specifications.
  - ii. Be free from defects in material and/or workmanship for a period of five (5) years from date of invoice

## PART 3 - EXECUTION

### 3.01 SITE REVIEW AND COORDINATION

- A. The Contractor shall coordinate with the City's landscape architect to determine when the site is appropriately prepared by the City to accept the site furnishings. No work shall be performed until areas are graded and properly compacted.
- B. The Contractor shall verify grades and layout with the City's landscape architect prior to the installation of any furnishings. If grades need to be adjusted, the City will make modifications as required at the request of the Contractor. The Contractor is not required to perform site work to prepare areas for site furnishings unless furnishings are located within the limits of paved areas as shown on the site plans (refer to Appendix A – Site Plans).

### 3.02 INSTALLATION

- A. Inventory all equipment and ensure all necessary parts have been received in order to complete the project. The Contractor shall notify the vendor immediately if parts are missing to ensure the site furnishings are erected in a timely manner.
- B. Layout the location of furnishings and related footings. After the layout is complete, coordinate with the City's landscape architect to review the footing and structure location. Make adjustments as required to conform to the drawings and meet project requirements.
- C. Assemble the site furnishings in accordance with manufacturer details and instructions.
- D. Once the layout is approved, excavate for footings. Footings for in ground mount tables shall be a minimum of 10" diameter and 42" below Finished Grade (FG). Footings for bicycle rack shall be minimum 8" diameter and 30" below grade. Install picnic table with provided ground mount anchors in accordance with manufacturer installation instructions.
- E. After concrete has cured a minimum of 48 hours finish assembling furnishings in accordance with manufacturer recommendations. Ensure all fasteners are thoroughly tightened and secured.
- F. Thoroughly clean all work areas and dispose of all trash properly at an off-site facility. Any cured concrete left over shall be removed from the site by the Contractor.
- G. Touch up any small scrapes or marks using paint provided by the manufacturer.
- H. Review final installation with the City for final acceptance.

**3.03 DOCUMENTATION**

- A. At the completion of the project, prior to final payment, Contractor shall provide all touchup paint, warranty certificates, maintenance manuals, installation guides, and regulatory compliance documentation to the City's Landscape Architect prior to final invoicing and payment.

**3.04 CLEANUP**

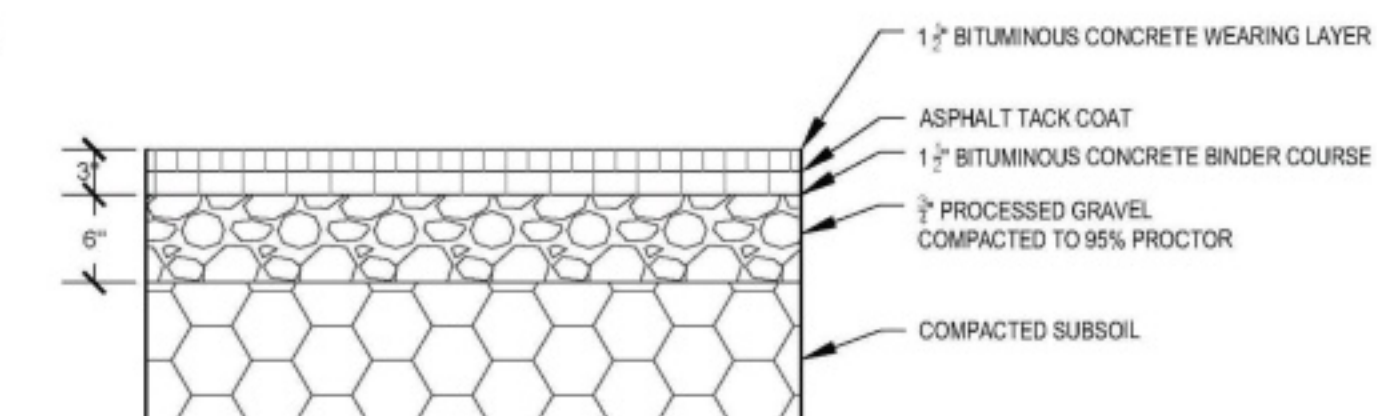
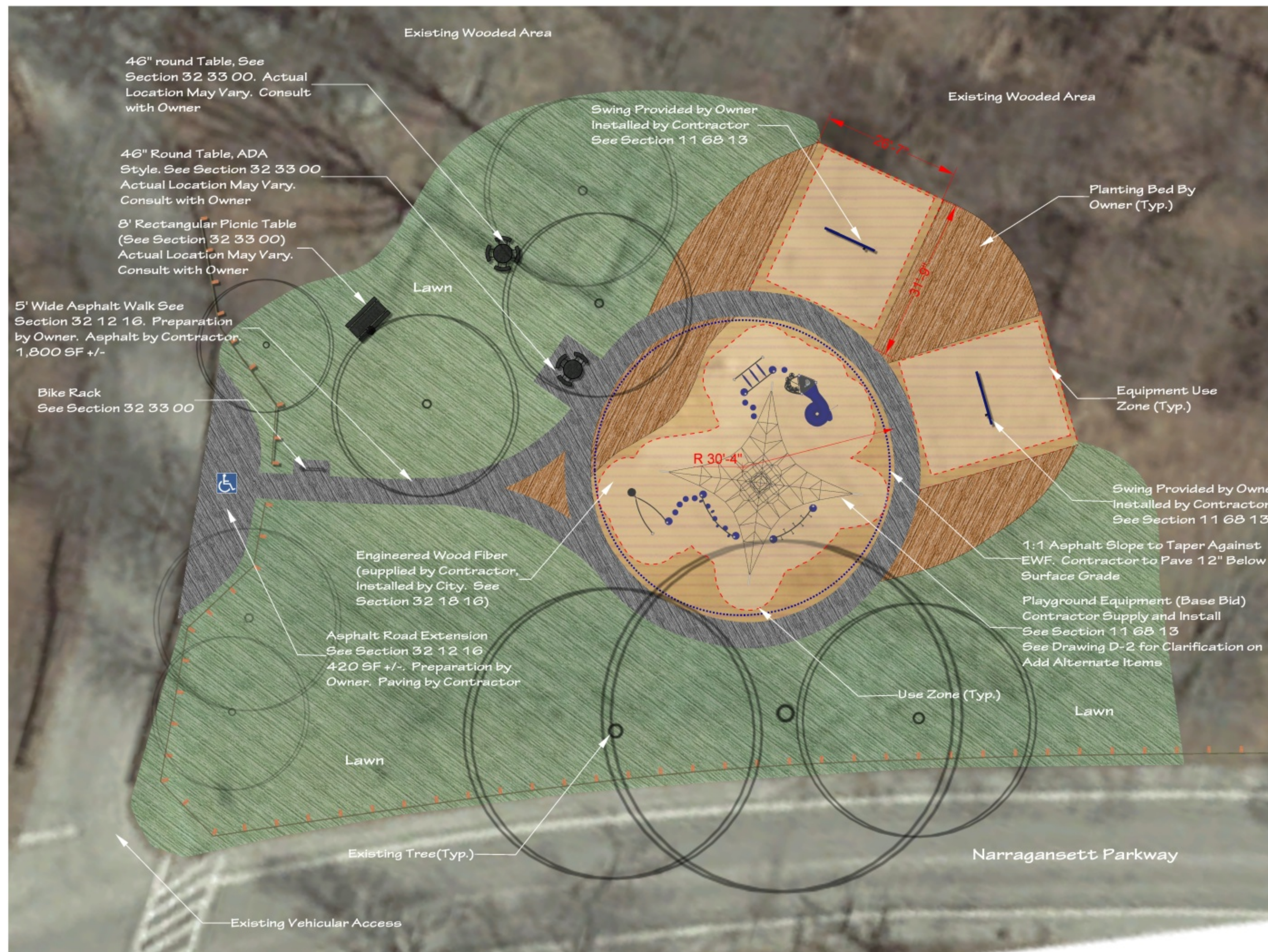
- A. Wash all furnishings to remove dirt, concrete, debris and other items. Clean up all site debris to include all boxes, straps, crating, wood, cardboard, foam, and other packing elements. Clean and blow out all hardscape areas. Repair any damaged existing elements.

- END OF SECTION 11 68 13 -

PLAYGROUND EQUIPMENT

**APPENDIX A - PLANS**





#### BITUMINOUS CONCRETE PAVING

Note: Preparation within 2" of finished subgrade will be completed by the Owner. Contractor shall provide finish grading and asphalt paving. See Section 32 12 16



Image of playground structure. Some elements shown are add alternate items. Refer to specification section 11 68 13 for more information.



Image of playground structure. Some elements shown are add alternate items. Refer to specification section 11 68 13 for more information.

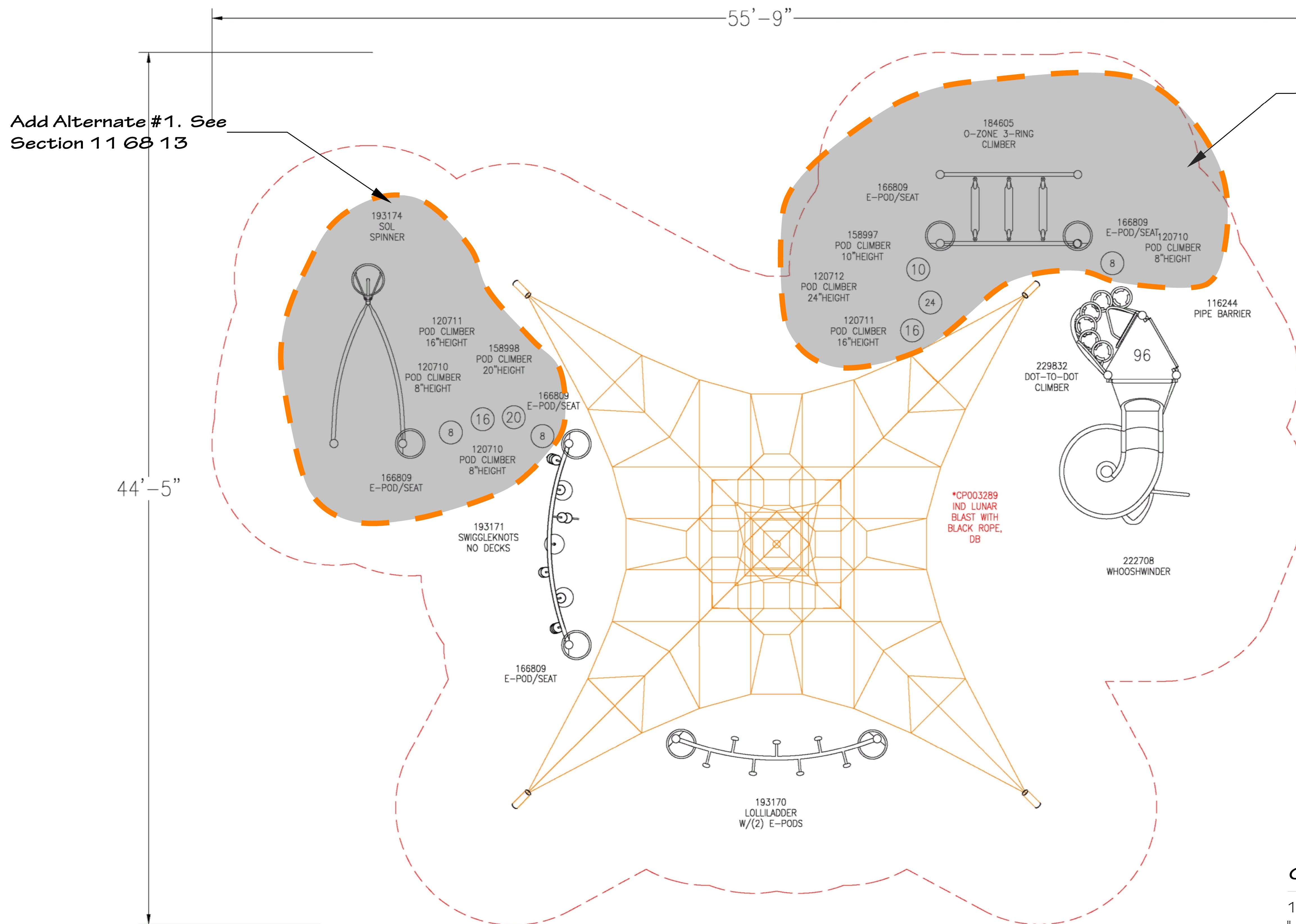
#### GENERAL NOTES:

1. Base plans were compiled utilizing aerial photography and on site measurements. All measurements and quantities should be verified prior to construction or estimating.



Scale = 1"=10'-0"  
(IN FEET)





Add Alternate #1. See Section 11 68 13



Image of swing set(2) to be provided by the Owner for installation by the Contractor. Contractor shall be responsible to transport the swingsets from the City's DPW yard to the project site and install per manufacturer specifications. Please refer to specification section 11 68 13 for more information.

#### GENERAL NOTES:

1. All playground elements shown that are not specifically highlighted or identified as "add alternate 1" should be included in the base bid cost.
2. All playground components identified are "or approved equal." Refer to specification section 11 68 13 for details on submitting substitutions.

Not to Scale

