



**City of Hammond  
Purchasing Department**

**RFP 21-17  
Playground Equipment for Cate Square Park**

Sealed Proposals shall be received by

**Purchasing Department  
City of Hammond  
310 E Charles St 2<sup>nd</sup> Fl  
PO Box 2788  
Hammond LA 70404-2788**

until

**10:00 a.m. Thursday, April 22, 2021**

at which time all Sealed Proposals shall be opened and read aloud.

Advertisement in the City's Official Journal of Record, *The Daily Star*, is scheduled to occur 3 times:

March 30 and April 6 and 13, 2021

Copies of this RFP may be downloaded from the City's website: [www.hammond.org](http://www.hammond.org).

To submit questions, contact

Jana Thurman Soileau  
Purchasing Manager  
[thurman\\_je@hammond.org](mailto:thurman_je@hammond.org)  
985-277-5633

between the hours of 8:00 a.m. and 4:00 p. m. Monday through Friday.

**A Site Visit is required and may be scheduled by calling the Grants Department at 985-277-5647.**

**This is the Proposal of:**

**Company:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **ZIP Code:** \_\_\_\_\_

**Point of Contact:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **Fax:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**I acknowledge Addenda (list by number or enter N/A if none):** \_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date** \_\_\_\_\_

**Proposed Costs:**

<b>Line Item</b>	<b>Cost</b>
1. Bonded Rubber Safety Surfacing (including installation)	
2. Playground Equipment	
3. Freight	
4. Project Management	
<b>Total</b>	

**Section 3 Business/MBE/WBE/SBE/DBE**  **Yes Type(s):** \_\_\_\_\_

The City encourages Proposals from Section 3 businesses, Minority Business Enterprises, Woman Business Enterprises, Small Business Enterprises, and other potentially Disadvantaged Business Enterprises. The Proposer should contact the Purchasing Manager if the Proposer is uncertain whether it qualifies as a Section 3 business, MBE, WBE, SBE, and/or DBE.

**Nondiscrimination Certification**

By submitting a Proposal, the Proposer certifies compliance with Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972; Section 202 of Executive Order 11246, as amended; the Vietnam Era Veterans' Readjustment Assistance Act of 1974; Section 503 of the Rehabilitation Act of 1973; and the Americans with Disabilities Act of 1990. The Proposer also certifies its intent to keep informed of and comply with all federal, State, and local laws, ordinances, and regulations which affect the Proposer's employees or prospective employees.

**"No Proposal"**

Any business or enterprise that chooses NOT to submit a Proposal, but wishes to acknowledge notification of this RFP, may complete and submit this Proposal Form with "No Proposal" for Proposal Amount. "No Proposals" shall only serve as a means of verifying notification of this RFP and shall NOT affect participation in future RFPs.

## **PROJECT SCOPE**

This Project consists of the construction of playground equipment in Cate Square Park, 200 W Charles St, Hammond LA 70401 ("Project Site"), as described in the Specifications and Drawings.

The estimated cost of this Project is \$155,000, inclusive of playground equipment, bonded rubber safety surfacing, freight, and supervised installation.

## **SPECIAL REQUIREMENTS**

### **Background**

The City of Hammond has received a \$15,000 Keurig Dr Pepper/KABOOM! Let's Play Construction Grant to install new playground equipment at the Project Site. Local matching funds have been pledged to the Project.

### **Grant Requirements**

The grant requires the City to contract with a KABOOM! preferred vendor, identified as **Burke, Landscape Structures, Miracle, or Playworld**. The City must work directly with a local representative of the Selected Preferred Vendor ("Contractor").

The grant also requires the Contractor to agree to receive payments from the City and KABOOM! separately. KABOOM! will make its payment directly to the Contractor from a final invoice issued to the City showing the playground equipment order, the City's payment, and a remaining balance of \$8,000 (i.e. the amount of the grant, \$15,000, minus a \$7,000 KABOOM! discount pre-negotiated with preferred vendors).

### **Community Build Requirements**

This Project will be community build project managed by the City. The City will provide concrete slabs for playground equipment. And community volunteers will assist in this equipment's installation.

The City has targeted **Friday, June 25–Sunday, June 27, 2021** as its Community Build Days, after which the Contractor will be responsible for the installation of bonded rubber safety surfacing.

The Contractor must restrict access to playground equipment with, at a minimum, heavy-duty, commercial-grade, orange barrier fencing at the end of each Community Build Day and until bonded rubber safety surfacing has been installed and cured and both the equipment and surfacing have been safety-inspected and safety-approved.

### **Playground Equipment Requirements**

The City will require playground equipment to be installed in 4 pre-defined areas:

1. an area for 5–12-year-olds, which will consist of a main structure including
  - multiple deck heights of 24", 32", 40", 48", 96", and 112";
  - a spinner crescent panel at ground level;
  - 2 arc bench climbers at ground level;
  - 2 link climbers to multiple deck heights;
  - a transfer station to the 40"-high deck.
  - a double slide with climber at the 48"-high deck;

- a linking ring climber to the 96"-high deck;
  - 2 slides, one curved and one spiral, from the 112"-high deck;
  - 6 triangular shade sails at the top of the structure;
  - a telescope attached to pipewall barrier;
  - a chimes activity panel;
  - a drum activity panel; and
  - bonded rubber safety surfacing.
2. an area for a wheelchair-accessible spinner, which will consist of
    - a custom, wheelchair-accessible Rev8 or "equal;" and
    - bonded rubber safety surfacing.
  3. an area for 2–5-year-olds, which will consist of a main structure including
    - a bean step as part of a transfer station to a 32"-high deck;
    - a petal step climber to the 32"-high deck;
    - a beta climber to the 40"-high deck;
    - a curved slide from a 40"-high square deck;
    - 2 post toppers;
    - a chimes activity panel;
    - a rain wheel activity panel;
    - a counter activity panel;
    - a acorn activity panels; and
    - bonded rubber safety surfacing;
  4. an area for freestanding activity panels including
    - a signing panel;
    - a tic-tac-toe panel;
    - a 3-in-a-row panel;
    - a hide-the-numbers panel; and
    - a clock panel.

Additionally, a National Program for Playground Safety kit and a maintenance kit should be included for each of Areas 1–3; a maintenance kit should be provided for Area 4.

### **Proposer Requirements**

The Proposer must:

1. be a licensed contractor in the State of Louisiana holding a specialty license in Recreation & Sporting Facilities & Golf Courses for at least 5 years;
2. be insured;
3. be an ISO-9001:2015-certified company;
4. be an ISO-14001:2015-certified company;
5. possess at least 5 years of experience installing playground equipment—including community-built playground equipment;
6. warranty playground equipment, at a minimum, as required under Warranty Requirements;
7. provide documentation of 1–6 with its Proposal;
8. provide 2D diagrams and, optionally, 3D renderings of playground equipment with its proposal;

9. if selected as the Contractor, provide a Project Manager, who is a graduate of the Playground Construction School and a Certified Playground Safety Inspector, to oversee the community build; and
10. if selected as the Contractor, ensure all on-site employees are certified installers of the community-built playground equipment.

### **Site Visit Requirement**

**A site visit is required and may be scheduled by calling the Grants Department at 985-277-5647.**

### **Warranty Requirements**

Proposed playground equipment must be warrantied, at a minimum, as follows:

1. 100-YEAR WARRANTY on aluminum and steel upright posts against structural failure due to corrosion, deterioration, or workmanship;
2. 100-YEAR WARRANTY on KoreKonnnect clamps against structural failure due to corrosion, deterioration, or workmanship;
3. 100-YEAR WARRANTY on hardware (e.g. nuts, bolts, washers);
4. 100-YEAR WARRANTY on bolt-through fastening and clamp systems;
5. 25-YEAR WARRANTY on spring assemblies and aluminum cast animals;
6. 15-YEAR WARRANTY on structure platforms and decks, metal roofs, table tops, bench tops, railings, and barriers against structural failure due to materials or workmanship;
7. 15-YEAR WARRANTY on all plastic components including StoneBorders against structural failure due to materials or workmanship;
8. 10-YEAR WARRANTY on ShadePlay canopies fabric, threads, and cables against degradation, cracking, or material breakdown resulting from ultraviolet exposure, natural deterioration, or manufacturing defects (this warranty is limited to the design loads stated in Specifications);
9. 10-YEAR WARRANTY on full-color custom signs against manufacturing defects that cause delamination or degradation of the sign (full-color custom signs must also carry a 2-YEAR WARRANTY against premature fading of the print and graphics on the signs);
10. 5-YEAR WARRANTY on Intensity and RopeVenture cables and LEVEL X flex bridges against premature wear due to natural deterioration or manufacturing defects; and
11. 5-YEAR WARRANTY on moving parts, including swing components, against structural failure due to materials or workmanship.

## **INSTRUCTIONS TO PROPOSERS**

### **General**

It is the Proposer's responsibility to review this RFP—including these Preliminary Pages, the Specifications, any included Drawings, and any future Addenda—and to submit questions as early as possible during the Proposal Period. Questions must be submitted to

Jana Thurman  
Purchasing Manager  
thurman\_je@hammond.org  
985-277-5633

between the hours of 8:00 a.m. and 4:00 p. m. Monday through Friday and shall become part of the Proposer's Proposal. Proposers who do NOT submit questions shall be assumed to have reviewed this RFP and found it to be clear and the RFP process to be fair and competitive. Protests of the RFP or RFP process shall NOT be considered after Proposals are opened.

RFPs are advertised in the City's Official Journal of Record, *The Daily Star*, and published to the City's website, **www.hammond.org**, from which copies may be downloaded.

This RFP has been/shall be so advertised and published.

**It is NOT the City's responsibility to ensure Proposers receive a copy or notice of this RFP.**

To review or obtain a hardcopy of this RFP, Proposers should contact/visit

Purchasing Department  
City of Hammond  
310 E Charles St 2<sup>nd</sup> Fl  
PO Box 2788  
Hammond LA 70404-2788  
985-277-5633

between the hours of 8:00 a.m. and 4:00 p. m. Monday through Friday.

### **Addenda**

If substantial clarifications or changes to this RFP become necessary, these shall be issued in the form of written Addenda to this RFP and published to the City's website: **www.hammond.org**.

### **Proposals**

Sealed Proposals shall be accepted only on the form(s) furnished with this RFP. Substitute, altered, or incomplete forms shall NOT be accepted.

All Proposals must be typed or printed in blue or black ink. Manual corrections are acceptable when they are few and minor and initialed by the Proposer. Uninitialed corrections shall be cause for a Proposal's rejection.

All Proposals must be signed. An unsigned Proposal shall be cause for its rejection.

The **RFP Number, Proposer's Name, Proposer's Address, Proposer's Louisiana Contractor License Number, and RFP Opening Date** must be clearly typed or printed on the outside of the Proposal envelope. Only 1 Proposal shall be accepted from each Proposer. Alternates shall NOT be accepted unless specifically requested/allowed by the RFP. Proposals must be delivered to

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310 E Charles St 2<sup>nd</sup> Fl  
PO Box 2788  
Hammond LA 70404-2788

and must be received by **10:00 a.m. Thursday, April 22, 2021**.

By submitting a Proposal, the Proposer agrees:

1. the Proposer has read and thoroughly examined this RFP and complied with all Instructions to Proposers included therein;
2. the Proposer has found no errors, conflicts, ambiguities, or omissions in this RFP—except as previously submitted to and addressed by the Purchasing Manager (e.g. through Addenda)—that would affect costs, performance, or completion of the Project;
3. the Proposer has familiarized itself with the Project Site, Project Site conditions, and the surrounding area;
4. the Proposer has correlated its observations with this RFP;
5. the Proposer has familiarized itself with the federal, State, and local laws, regulations, and requirements applicable to the performance and completion of the Project described in this RFP;
6. the Proposer is properly licensed in the State of Louisiana to perform this Project;
7. if its Proposal is selected, the Proposer shall obtain the necessary permits to perform this Project; and
8. the Proposer understands the terms and conditions for satisfactory performance and completion of the Project.

### **Forms and Related Documents**

The following forms and related documents are required of all Proposers:

1. **Proposal Form** (note: the Proposer must acknowledge Addenda, if any, by number on the Proposal Form);
2. **Corporate Resolution** or other written evidence of the authority of the person signing the Proposal to sign the Proposal; and
3. any **Related Documents** specified under Special Requirements.

Proposals that omit these forms or related documents shall be considered incomplete and may be rejected accordingly.

### **Modification or Withdrawal of a Proposal**

The Proposer may modify or withdraw its Proposal at any time up to, but NOT including, the deadline for Proposals. Any request to withdraw or modify a Proposal at or after this deadline shall NOT be accepted.

A Modification must be made in the proper places on a new Proposal Form, which must then be signed by the person previously authorized to sign the Proposal or must be accompanied by a new Corporate Resolution or other written evidence of the authority of the person signing the Modification to sign the Proposal.

Properly completed and signed, the Modification shall be placed in a sealed envelope labeled "**MODIFICATION**" with the **RFP Number, Proposer's Name, Proposer's Address, Proposer's Louisiana Contractor License Number, and RFP Opening Date** clearly typed or printed on the outside of the envelope.

A Withdrawal must be made in writing and signed by the person previously authorized to sign the Proposal or must be accompanied by a new Corporate Resolution or other written evidence of the authority of the person signing the Withdrawal to sign the Proposal.

A Proposal containing patently obvious, unintentional, and substantial mechanical, clerical, or mathematical errors or errors of unintentional omission of a substantial quantity of work, labor, material, or services made in compiling the Proposal may be withdrawn up to 48 hours following the deadline for Proposals only as allowed by law and subject to the evidentiary requirements and conditions set forth by law.

### **Evaluation of Proposals**

The City shall evaluate, ratify, and award or reject Proposals within 30 calendar days of the deadline for Proposals.

The Proposer shall honor its Proposal for the duration this period.

Currently, the City anticipates ratifying and awarding or rejecting Proposals **Tuesday, April 27, 2021**.

### **Rejection of a Proposal**

The City reserves its right under law to reject any and all Proposals for just cause.

## **INSTRUCTIONS TO THE CONTRACTOR**

### **Liability Insurance Requirements**

At all times during the term of the Contract, the Contractor must maintain and pay for property damage and public liability insurance with limits of at least \$1,000,000, inclusive of bodily injury and property damage for any 1 occurrence.

Prior to commencing the Project described in this RFP, the Contractor must file with the City a "certificate of insurance" meeting the aforementioned requirements and listing

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310 E Charles St  
Hammond LA 70401-3324

as a named insured by added endorsement. Any cost associated with this addition shall, like the cost of the insurance itself, be paid by the Contractor.

The Contractor shall be responsible for any and all accidents, injuries, damages, losses, claims, demands, suits, judgments, other legal actions, payments, recoveries, and fees caused by the Contractor, its officers, employees, or agents (referred to collectively as the "Contractor"), or resulting from the execution of this Project or any operations relating to this Project, or reason of existence or location or condition of facilities or of any materials or supplies or machinery used thereon or therein, or neglect or omission on the

Contractor's part, or any and all of the several acts or things required to be done by the Contractor under and by the conditions and covenants of the Contract.

The Contractor shall further assume the defense of and indemnify and hold harmless the City, its officers, employees, and agents (referred to collectively as the "City") from and against any and all accidents, injuries, damages, losses, claims, demands, suits, judgments, other legal actions, payments, recoveries, and fees of every nature and description brought or recovered against the City by reason of any act or omission of the Contractor relating to this Project.

### **Workers' Compensation Requirements**

The Contractor shall pay or cause to be paid all assessments and compensations required by the Workers' Compensation Act.

The Contractor shall provide evidence that all assessments and compensations payable to the Workers' Compensation Board up to and including the date of the Contract have been paid.

The City may, at any time during the Contract or at the completion of the Contract, require further evidence that such assessments and compensations have been paid.

## **SPECIFICATIONS AND DRAWINGS**

### **General**

The following Specifications and Drawings have been written in a manner to invite open competition. Any manufacturer's name, trade name, brand name, or catalog number referenced in the Specifications and Drawings is for the purpose of describing and establishing general quality levels and appearance. Such references are NOT intended to be restrictive; Proposers are always free to submit "equals."

### **"Equals"**

Wherever the Proposer deviates from the Specifications and Drawings to propose "equal" supplies, materials, or workmanship, the Proposer must provide a list of these deviations, as well as specifications, drawings, samples, or other evidence of the deviation's equality to

Jana Thurman Soileau  
Purchasing Manager  
thurman\_je@hammond.org  
985-277-5633

The Purchasing Manager shall reserve the right to approve or disapprove the deviation as "equal" based upon a review of this evidence; his/her decision shall be final.

# SPECIFICATIONS

## NOTICE

Unless otherwise specified, playground equipment shall be surface-mounted.

## MEASUREMENTS & FORMULATIONS

ALL measurements and formulations are the responsibility of the Contractor. The City will NOT authorize ANY change resulting from inaccurate measurements or formulations.

## GENERAL SPECIFICATIONS

### 2.01 GENERAL PRODUCT MATERIAL SPECIFICATIONS

#### A. Clamps

1. KoreKonnnect clamp castings [Nucleus, Synergy, Voltage] shall be cast aluminum heat-treated alloy A356-T6 with a tensile strength of at least 34,000 psi, yield strength of at least 24,000 psi, shear of 20,700 psi, and elongation of 3.50% minimum. **Each casting shall attach to the post with two connection bolts. Deck/collar attachments shall not be acceptable.** Clamp casting shall encapsulate the component attached to support surge loads, preventing surge loads being supported by only the hardware. Clamp shall be finished with a baked-on powder coating.
2. Clamp Castings [Little Buddies] shall be cast aluminum heat-treated alloy A356-T6 with a tensile strength of at least 34,000 psi, yield strength of at least 24,000 psi, shear of 20,700 psi, and elongation of 3.50% minimum. Each casting shall clamp to the post with one connection bolt. Clamp shall be finished with a baked-on powder coating.

#### B. Platforms

1. Platforms [Nucleus, Synergy, Voltage, Little Buddies] One piece all welded construction consisting of 12 ga HRPO steel shell and gussets, PVC coated after fabrication. Platforms shall connect to posts with EZKonnnect (patent pending) self-leveling fastening system, with two attachment points per corner, one of those being an open-ended slot for easy assembly. Platform fasteners shall attach to threaded inserts which are CNC precision factory installed into the posts.
2. Recycled Platforms [Nucleus] One piece all welded construction consisting of 12 ga HRPO steel shell and gussets, PVC coated after fabrication. Platforms shall connect to posts with EZKonnnect (patent pending) self-leveling fastening system, with two attachment points per corner, one of those being an open-ended slot for easy assembly. Platform fasteners shall attach to threaded inserts which are CNC precision factory installed into the posts. Boards are a one-piece solid, non-hollow foamed recycled HDPE (ReHDPE)
3. 90 Degree Platform [Nucleus, Voltage] One piece all welded construction consisting of 12 ga HRPO steel shell and gussets, PVC coated after fabrication. Platforms shall connect to posts with patented EZKonnnect self-leveling fastening system, with two attachment points per corner, one of those being an open-ended slot for easy assembly. Platform fasteners shall attach to threaded inserts which are CNC precision factory installed into the posts. Barriers shall be one piece all welded construction consisting of 1.315" OD x 12 ga & 1.029" OD x 14 ga galvanized steel tubing, and 10 ga galvanized steel plate. Finished with a baked-on powder coating.
4. Crescent Platform: Platform mount shall be one piece all welded construction consisting of 2.375" 12 ga and 1.315" 14 ga formed galvanized tubing, 7 ga stainless steel and 8 ga

galvanized steel plates, finished with a baked-on powder coating. Platform panel shall be 3/4" co-extruded HDPE.

C. Fasteners

1. Button head cap screws and socket head cap screws shall be 302HQ corrosion resistant, passivated, stainless steel, tamper resistant, and pre-treated with a locking/sealing adhesive.
2. Other stainless steel hardware shall be 302HQ corrosion resistant stainless steel.
3. Non stainless steel hardware shall be zinc plated grade 5 steel.
4. Threaded Post Nut Inserts [Nucleus, Synergy, Voltage, Little Buddies] shall be a corrosion resistant threaded insert crimped into post. Inserts shall be precision CNC located and factory installed for all attachment points.

D. Rotationally Molded Plastic Parts, shall be manufactured from color compounded, linear, low density polyethylene with an average of .250" wall thickness and textured non-sliding surfaces. Plastic parts shall be UV stabilized to UV-16 and shall have a density of 0.935 per ASTM D-1505. Plastic parts shall have a tensile strength at yield no less than 2500 psi with flexural modulus of 87,200 psi.

E. HDPE plastic panel parts shall be precision cut from a single solid sheet of either .50" or .75" thick UV-stabilized extruded high-density polyethylene with colors molded in, with a durable matte finish. The material will have a density of 59.6 lb/cu ft and a tensile strength of 4000psi. All edges shall be rounded or chamfered for safe play.

F. Play Mats are 100% recycled rubber buffing's bonded with urethane.

G. Posts, steel [Nucleus, Synergy, Voltage, Little Buddies] shall be cold-formed steel tubing with a yield test of at least 50,000 psi and a tensile strength of at least 55,000 psi. Tube members shall comply with ASTM A-135 and ASTM A-500 Grade B minimum and shall be tested according to ASTM E-8.

1. Tubing Exteriors shall be triple coated for maximum exterior protection: galvanized, then coated with a chromate conversion coating and finished with a baked-on powder-coat.
2. Tubing interiors shall be coated with a corrosion resistant zinc-rich coating.
3. Tubing and cap finished with a baked-on powder coating.
4. Standard posts shall be an assembly consisting of the galvanized steel tubing with a cast aluminum cap factory installed in the post with 1/8" x 15/32" stainless steel pinned aluminum drive rivets.
5. Posts [Nucleus, Intensity] shall be 5" OD x 11 ga galvanized steel tubing.
6. Posts [Little Buddies] shall be 2 3/8" OD x 12 ga galvanized steel tubing.
7. Posts [Synergy, Voltage] Post shall be 3 1/2" OD x 11 ga galvanized steel tubing.

H. Posts, aluminum [Nucleus, Synergy, Voltage, Intensity] shall be extruded aluminum tubing with a yield test of at least 35,000 psi and a tensile strength of at least 38,000 psi. Tube members shall comply with and shall be tested according to ASTM B-221. Standard posts shall be an assembly consisting of the extruded aluminum tubing with a cast aluminum cap factory installed in the post with 1/8" x 15/32" stainless steel pinned aluminum drive rivets.

1. Posts [Nucleus, Intensity] shall be 5" OD x 1/8" wall thickness aluminum tubing.
2. Posts [Synergy, Voltage] Post shall be 3 1/2" OD x 1/8" wall thickness aluminum tubing.

**1.02 DESCRIPTIONS OF COATINGS**

A. PVC Coating (Poly-Vinyl Chloride): Prior to coating, each part shall be chemically washed, submerged in a heat-activated primer and dried. After drying, each part shall be pre-heated to a temperature no less than 350° F and immersed in liquid PVC. Play/usage surfaces shall have coating thickness of .085-.150 in. Park and site surfaces (i.e. benches, picnic tables) shall have coating thickness of .050-.080 in. PVC shall comply with California Assembly Bill #1108 by having a concentration that does not exceed 0.1% of the following phthalates; DINP, DIDP, DnOP, DEHP, or BBP. This formulation is also free of heavy metals such as Lead and Cadmium. The PVC shall have:

1. Tensile strength of no less than 1830 psi per ASTM 412.
  2. Elongation of no less than 350% per ASTM 412.
  3. Tear strength of no less than 250 lb/in per ASTM 624.
  4. Hardness of 75 +/- 3 (Durometer, Shore A) per ASTM 2240.
  5. UV stabilizer shall be added to PVC to withstand one year in a QUV panel tester without any significant color drift.
  6. Burn Rate will meet or exceed Federal Safety Standard MVSS 302. This is the same as a UL 94 HB rating.
- B. Powder Coating – Standard and Super Durable colors: All metal parts will be coated with a two-part powder coat system that consists of a primer and a top coat. Powder coating is electrostatically applied at a thickness of 3 to 6 mils (.003 - .006). Prior to powder coating, all parts shall be cleaned and pretreated with a 5 stage non-phosphate and non-chromic process. The primer is cured before applying the top coat which is a polyester/TGIC powder coating with superior color-, gloss-, and UV-16 additive. Note: Top coat may be Standard or Super Durable powder coating depending on specific color availability. Finish quality conforms to ASTM Specifications and will have the following properties:
1. Adhesion: No less than 5B [The edges of the cuts are completely smooth; none of the squares of the lattice is detached.] (cross hatch/tape adhesion test per ASTM D3359 Method B).
  2. Hardness: No less than 2H (pencil hardness test per ASTM B3363).
  3. Resistance to Impact: Cracking at the perimeter of the concave area, but no cracking pick off from 80 in/lb direct or reverse impact (ASTM D2794).
  4. Resistance to Bending: No visible cracking (1/8" bending test per ASTM 522).
  5. Degree of Gloss: No less than 80% reflected (specular gloss test at 60° per ASTM D523).
  6. Resistance to Salt Spray (Standard colors): No more than 1/8" undercutting and no blistering in 1000 hours (salt spray test per ASTM B117)
  7. Resistance to Humidity (Standard colors): No more than 1/8" undercutting and no blistering in 1000 hours (humidity test per ASTM D2247)
- Further Properties for Specific Super Durable Colors:
8. Resistance to Acid Salt Spray (Super Durable colors): No more than 1/32" undercutting and no blistering in 3000 hours (salt spray test per ASTM G85 Annex 5).
  9. Resistance to Humidity (Super Durable colors): No more than 1/32" undercutting and no blistering in 3000 hours (humidity test per ASTM D2247)
  10. Weathering (Super Durable colors): No less than 4 (tested per EN 20105-A02)
  11. Light fastness (Super Durable colors): No less than Grade 7 (tested per EC ISO 105-B02)
- C. Corrosion protection: All metal parts will either have inherent corrosion protection such as stainless steel, aluminum or galvanized steel, or they will be pre-treated prior to powder coating with either an e-coat or zinc clear chromate coating for superior corrosion protection.

### **1.03 BARRIERS & ENCLOSURES**

- A. Center Mount Enclosure [Nucleus, Voltage] One piece all welded construction consisting of 3 1/2" OD X 11 ga, 1.315" OD X 12 ga & 1.029" x 14 ga galvanized steel tubing and 10 ga galvanized sheet. Finished with a baked-on powder coating.
- B. Clubhouse Enclosures [Nucleus]
  1. Clubhouse Full Board Panel and Clubhouse Half Board Panel consists of 3/4" recycled HDPE with wood grain texture, 1.315" OD x 14 ga galvanized steel tubing and zinc plated steel nut inserts. Finished with a baked-on powder coating, and castings made of A356-T6 aluminum, heat-treated. Finished with baked on powder coating. The hardware package contains stainless steel button head cap screws, nuts, and washers; and aluminum rivets with 302 stainless steel pin.

2. Clubhouse Upper Board Panel consists of 3/4" recycled HDPE with wood grain texture, bracket that is one piece all welded construction consisting of 10 ga galvanized sheet steel and a formed 3/16" stainless steel plate, finished with baked on powder coating. The hardware package contains stainless steel button head cap screws, washers and barrel nuts.
- C. Enclosures [Little Buddies] 3/4" co-extruded HDPE.
  - D. Enclosures and Stanchions [ Synergy Imagination] 3/4" co-extruded HDPE face mounted to 3 1/2" OD posts. Filler bracket consisting of 1/2" extruded HDPE and a bracket consisting of 1 3/4" sq X 12 ga galvanized steel tubing finished with a baked-on powder coating. One-piece welded construction consisting of 1.315" OD galvanized tubing and 7 ga stainless steel brackets. Finished with a baked-on powder coat.
  - E. Enclosures, Climbers, Climbers 2-5 [Synergy] Synergy side enclosure shall be one-piece welded construction consisting of 1.315" OD galvanized tubing and 7 ga stainless steel brackets. Finished with a baked-on powder coat.
  - F. Enclosures and Stanchions [Nucleus, Synergy, Voltage] One piece all welded construction consisting of 1.315" OD x 14 ga, 1.315" OD x 12 ga, and 1.029" OD x 14 ga galvanized steel tubing, or 1.315" OD galvanized tubing and 7 ga stainless steel brackets, and HDPE threaded inserts. Finished with a baked-on powder coating.
  - G. Enclosure, Offset [Nucleus, Voltage] One piece all welded construction consisting of 1.315" OD x 14 ga and 1.029" OD x 14 ga galvanized steel tubing, 10 ga galvanized sheet and HDPE threaded inserts. Finished with a baked-on powder coating.
  - H. Enclosure, Offset [Synergy] One piece all welded construction consisting of 1.315" OD x 14 ga, 12 ga and 1.029" OD x 14 ga galvanized steel tubing and 7 ga stainless steel brackets finished with a baked-on powder coating.
  - I. Evolution Barriers and Enclosures [Nucleus] Shall consist of a weldment that is one piece all welded construction consisting of 1.315" OD X 12 ga galvanized steel tubing, 1.315" OD X 14 ga galvanized steel tubing, 13/16" OD X 15 ga or 1.029" OD x 14 ga galvanized steel tubing, and 8 ga and 10 ga galvanized steel plating, which is finished with a baked-on powder coating. The barriers shall have panel that are made of either 3/4"extruded HDPE or 3/4" co-extruded HDPE. There shall be castings that are A356-T6 aluminum, heat-treated, which are finished with a baked-on powder coating. All hardware shall be stainless steel nuts, screws, and washer.
  - J. Evolution Stairway and Bridges [Nucleus] Shall consist of a weldment that is one piece all welded construction consisting of 1.315" OD X 12 ga galvanized steel tubing, 1.315" OD X 14 ga galvanized steel tubing, 13/16" OD X 15 ga or 1.029" OD x 14 ga galvanized steel tubing, and 8 ga and 10 ga galvanized steel plating, which is finished with a baked-on powder coating. The barriers shall have panel that are made of either 3/4"extruded HDPE or 3/4" co-extruded HDPE. There shall be castings that are A356-T6 aluminum, heat-treated, which are finished with a baked-on powder coating. All hardware shall be stainless steel. One piece all welded construction consisting of 12 ga HRPO steel surfaces, sides and gussets. PVC coated after fabrication.
  - K. Internal Barrier [Voltage] Shall consist of four separate parts each being all welded construction consisting of 1.660" OD x 12 ga and 1.315" OD x 14 ga galvanized steel tube and 10 ga galvanized steel plate finished with a baked-on powder coating.
  - L. Pipe Walls, Nature Play Pipe Wall [Nucleus, Synergy, Voltage, Little Buddies] One piece, all welded construction consisting of 1.315" OD x 14 ga and 1.029" OD x 14 ga, galvanized steel tubing, and 1 1/2" x 1/2" x 10 ga formed galvanized steel plate, and finished with a baked-on powder coating.
  - M. Pipe Wall with Steering Wheel or Telescope mount [Synergy] One piece, all welded construction consisting of 1.315" OD x 14 ga and 1.029" OD x 14 ga, galvanized steel tubing, and 1 1/2" x 1/2" x 10 ga formed galvanized steel plate and 304 SS machined shaft and 7 ga stainless steel brackets, and 1.135" OD galvanized tubing and 7GA stainless steel brackets and threaded insert. Finished with a baked-on powder coating.
  - N. Platform Barrier [Synergy, Nucleus] barrier panel shall be 3/4" co-extruded HDPE. Hardware package shall be stainless steel screws, nuts & washers.
  - O. Pipe Wall [Little Buddies] One piece all welded construction consisting of 1.315" OD x 14 ga wall and 1.029" OD x 14 ga wall galvanized tubing, 1 1/2" x 1/2" x 1/8" HR steel channel and zinc coated grade 32510 malleable iron mounting lugs. Finished with a baked-on powder coating.

- P. Slotted Barrier [Nucleus, Voltage, Little Buddies] 3/4" co-extruded HDPE.
- Q. Stanchion [Little Buddies] One piece all welded construction consisting of 1.315" OD x 14 ga, 1.315" OD x 12 ga, and 1.029" OD x 14 ga galvanized steel tubing, and zinc coated grade 32510 malleable iron mounting lugs. Finished with a baked-on powder coating.

#### **1.04 BRACKETS**

- A. Panel Brackets [Synergy, Voltage] for accessible reach panels, upper board panels and battlement panels shall be one piece all welded construction consisting of 7 ga stainless steel formed plate and 8 ga galvanized sheet steel finished with a baked-on powder coating.
- B. Mounting Brackets [Voltage] Bracket shall be one piece all welded construction consisting of 3/16" stainless steel plate and 1.029" OD x 14 ga or 1.315" OD x 12 ga galvanized steel tubing. Finished with a baked-on powder coating.
- C. Mounting Tubes [Little Buddies] Tube shall be one piece all welded construction consisting of 1.315" OD x 14 ga galvanized steel tubing and a stainless steel threaded insert. Finished with a baked-on powder coating.
- D. Mounting Tubes [Synergy, Voltage, Nucleus] Tube shall be one piece all welded construction consisting of a 1.315 OD x .083" wall galvanized tube and a 12L14 steel threaded insert. Finished with a baked-on powder coating.
- E. Panel Mounting Tubes [Synergy, Voltage] Tube shall be one piece all welded construction consisting of 3/16" stainless steel plates and 1.315" OD x 12 ga galvanized steel tubing. Finished with a baked-on powder coating.
- F. Slide Entrance Brackets [Voltage, Nucleus, Synergy] Bracket shall be 14 ga galvanized steel plate finished with a baked-on powder coating.
- G. Steering Wheel Mount Bracket [Voltage, Little Buddies] and Post-Mounted Ship's Wheel Bracket [Nucleus] Bracket shall be one piece all welded construction consisting of a 3/16" stainless steel plate and a stainless-steel threaded shaft. Finished with a baked-on powder coating.

### **PRODUCT SPECIFICATIONS FOR #140-106933-13**

#### **1.02 FS SIGN, AGES 5-12 BOTH SIDES PLANET RECESS**

- A. FS SIGN FRAME: 10 ga GALV steel finished with baked-on black powder coating.
- B. ARCH POST, SIGN: One piece all welded construction consisting of 2 3/8" OD x 12 ga galvanized steel tubing and 10 ga galvanized sheet steel. Finished with a baked on powder coating.
- C. WELCOME SIGN, AGES 5-12: A full color graphic sign printed on 3 mm DiBond

#### **1.03 REV8**

- A. ROPE ASSEMBLY: Rope consists of 6 right hand, regular lay strands, closed around a synthetic fiber core, with each preformed strand consisting of 8 galvanized steel wires tightly covered with polyester fibers. Aluminum end connectors and ferrules with stainless steel screws. Rope placement and installation will be customized to allow for wheelchair access onto the platform with a clearance measurement of 46" wide at the platform and tapering in going up. At 42" high, the opening width shall be 31", and at 55" high, the opening width shall be 26".
- B. RING SECTION: One piece all welded construction consisting of formed 2 3/8" OD x 10 ga galvanized steel tubing and 8 ga galvanized steel plate. Finished with a baked on powder coating.
- C. PLATFORM SECTION: One piece all welded construction consisting of 12 ga steel surfaces and gussets. PVC coated after fabrication. Platform shall be customized to allow for installation at rubber surface grade to allow for wheelchair accessibility. Platform shall have customized hatch for access for routine maintenance underneath the structure. Platform shall be at least 10' 10" in diameter.
- D. SUPPORT POST: One piece all welded construction consisting of 5.56" OD Sch 40 Galvanized Pipe and machined stainless steel.

- E. ROTATIONAL POST: One piece all welded construction consisting of 6.63" OD Sch 40 Stainless Steel Pipe and 8 ga galvanized steel sheet. machined stainless steel. Finished with a baked on powder coating.
- F. ROTATIONAL TOP: One piece all welded construction consisting of stainless steel and 8 ga galvanized steel plate. Finished with a baked on powder coating.
- G. CLIMBER SUPPORT: One piece welded construction of 1.900" OD 11 ga galvanized steel tubing. Finished with a baked on powder coating.
- H. CROSS BAR: One piece all welded construction consisting of 1.315" OD x 12 ga galvanized steel tubing and 8 ga galvanized steel plate. Finished with a baked on powder coating.
- I. COUPLING: Machined nylon material.
- J. UPPER BEARING: Machined nylon bearing material.
- K. SPLIT LOWER BEARING: Machined nylon bearing material.
- L. Product must be installed with the platform at the same level as the finished rubber surfacing to facilitate wheelchair access onto the platform.
- M. Rope climbers must be installed in such a way as to allow for wheelchair access onto the platform with at least one section to have a 46" wide clearance at the platform height with a taper going up. At 42" high, the opening shall be 31" and at 55" height, the opening shall be 26".

## **PRODUCT SPECIFICATIONS FOR #140-106933-14**

### **1.04 8" CLOSURE PLATE, ELLIPSE**

- A. 8" CLOSURE PLATE, ELLIPSE: 10 ga. Galv. Sheet

### **1.05 ABSTRACT PLATFORM LADDER 16"**

- A. 16" ABSTRACT TRANSITION LADDER: 3/4" Co-extruded HDPE.

### **1.06 ARA HEX SHADE CANOPY**

- A. RAFTER, ARA SHADE: One piece welded construction of 2.375" OD 10 ga and 2.375" OD 12 ga galvanized steel tubing, formed 7 ga stainless steel plate, 14 ga galvanized steel plate, and machined stainless steel connector. Finished with a baked on powder coating.
- B. UPPER BRACE, ARA HEX: One piece welded construction of 2.375" OD 10 ga galvanized steel tubing, formed 7 ga stainless steel plates, and machined stainless steel connector. Finished with a baked on powder coating.
- C. BRACKET, 25 deg: One piece welded construction of formed 7 ga stainless steel plate and machined stainless steel connector. Finished with a baked on powder coating.
- D. LOWER BRACE, ARA HEX: One piece welded construction of 2.375" OD 10 ga galvanized steel tubing and formed 7 ga stainless steel plates. Finished with a baked on powder coating.
- E. LOCKTITE: Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene glycol, titanium dioxide, and cumene hydroperoxide.
- F. ARA HEX SHADE TOP SAIL: Monofilament and tape construction high density polyethylene knitted shade fabric with woven polyester webbing and vinyl reinforcements, vinyl covered galvanized cables, zinc-plated copper cable fasteners, hot galvanized dipped turnbuckle, and stainless steel dee rings. Performance Specification: Shade Canopy shall withstand uplift values of 19.63 PSF at a maximum of 90 MPH wind speed.
- G. ARA HEX SHADE MID SAIL: Monofilament and tape construction high density polyethylene knitted shade fabric with woven polyester webbing and vinyl reinforcements, vinyl covered galvanized cables, zinc-plated copper cable fasteners, hot galvanized dipped turnbuckle, and stainless steel dee rings. Performance Specification: Shade Canopy shall withstand uplift values of 19.63 PSF at a maximum of 90 MPH wind speed.

- H. ARA HEX SHADE BOTTOM SAIL: Monofilament and tape construction high density polyethylene knitted shade fabric with woven polyester webbing and vinyl reinforcements, vinyl covered galvanized cables, zinc-plated copper cable fasteners, hot galvanized dipped turnbuckle, and stainless steel dee rings. Performance Specification: Shade Canopy shall withstand uplift values of 19.63 PSF at a maximum of 90 MPH wind speed.
- I. 1/2" X 6" EYE-EYE TURNBUCKLE ASSEMBLY: Hot dipped galvanized steel eye-eye turnbuckle assembly with split lock washers and hex nuts.
- J. UPPER POST ASSY 5" OD X 103": Assembly consisting of 5" OD x 11 ga galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
- K. UPPER POST ASSY 5" OD X 31 3/4": Assembly consisting of 5" OD x 11 ga galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.

#### **1.07 CENTER MOUNT ENCLOSURE**

- A. CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
- B. S5 CENTER MOUNT ENCLOSURE: One piece all welded construction consisting of 3 1/2" OD x 11 ga, 1.315" OD x 12 ga & 1.029" OD X 14 ga galvanized steel tubing, and 10 ga galvanized sheet. 3 1/2" aluminum post cap and rivets. Finished with a baked on powder coating.

#### **1.08 CHIMES PANEL**

- A. CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
- B. CHIMES PANEL ASSEMBLY: Assembly consisting of 3/4" extruded HDPE panels, 1" OD x .049" wall stainless steel tubes, 1/16" diameter stainless steel wire rope, zinc plated steel washers, zinc plated copper compression sleeves, and stainless steel screws, T-nuts & 3/8" washers.

#### **1.09 DRUM PANEL, BELOW PLATFORM**

- A. CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
- B. DRUM, 10": An average of 3/16" thick, linear, low density, rotationally molded, UV stabilized polyethylene with single wall construction, molded in 3/8" T-nut inserts, and a textured outside surface.
- C. DRUM, 15": An average of 3/16" thick, linear, low density, rotationally molded, UV stabilized polyethylene with single wall construction, molded in 3/8" T-nut inserts, and a textured outside surface.
- D. PANEL, DRUM: 3/4" co-extruded HDPE.

#### **1.10 FS SIGN, AGES 5-12 BOTH SIDES PLANET RECESS**

- A. FS SIGN FRAME: 10 ga GALV steel finished with baked-on black powder coating.
- B. ARCH POST, SIGN: One piece all welded construction consisting of 2 3/8" OD x 12 ga galvanized steel tubing and 10 ga galvanized sheet steel. Finished with a baked on powder coating.
- C. WELCOME SIGN, AGES 5-12, PLANET RECESS: A full color graphic sign printed on 3 mm DiBond

#### **1.11 GRAB BAR ASSEMBLY**

- A. GRAB BAR: One piece all welded construction consisting of 1.029" OD x 14 ga galvanized steel tubing and formed 3/16" stainless steel plates. Finished with a baked on powder coating.

#### **1.12 HALF HEXAGON PLATFORM**

- A. HALF HEX PLATFORM S5P: 12 ga HRPO sheet, finished with a PVC Coating

#### **1.13 HALF PIPE WALL**

- A. CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.

- B. HALF PIPE WALL: One piece all welded construction consisting of 1.315" OD x 14 ga, 1.315" OD x 12 ga, and 1.029" OD x 14 ga galvanized steel tubing. Finished with a baked on powder coating.

#### **1.14 HALF PLATFORM**

- A. HALF PLATFORM: 12 ga HRPO sheet, finished with a PVC Coating

#### **1.15 HEXAGONAL PLATFORM S5P**

- A. HALF HEX 4 POST S5 PLATFORM: One piece platform all welded construction consisting of 12 ga surfaces, gussets, and corner plates. PVC coated after fabrication.

#### **1.16 LINKING RING CLIMBER 80"-96"**

- A. LINKING RING CLIMBER 80"-96": One piece all welded construction consisting of 1.660" OD x 12 ga and 1.315" OD x 14 ga galvanized steel tubing finished with a baked on powder coating.

#### **1.17 LUGE SLIDE, 48"-56"**

- A. CASTING, 90 DEGREE BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
- B. TUBE 1.315" OD X 48 3/4": 1.315" OD X 12 ga galvanized tubing. Finished with a baked on powder coating.
- C. DOUBLE SLIDE HOOD: Double wall, linear low density, rotationally molded, UV stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts, and a textured surface.
- D. SLIDE, LUGE: 1/4" thick, linear, low density, rotationally molded, UV stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts, and a textured surface.
- E. SUPPORT, SLIDE EXIT: One piece all welded construction consisting of 2 3/8" OD x 12 ga galvanized steel tubing and 8 ga galvanized sheet steel. Finished with a baked on powder coating.
- F. HOOD MOUNT BRACKET 1.315" X 4 3/8": 10 gage mounting plate welded to 1.315" OD tubing. Finished with baked on powder coat.
- G. LUGE SLIDE MID SUPPORT: One piece all welded construction consisting of 2 3/8" OD x 10 ga galvanized steel tubing and 2 1/2" x 1 1/2" x 3/16" HRS angle. Finished with a baked on powder coating after fabrication.

#### **1.18 NOVO ARC BENCH**

- A. PANEL, NOVO ARC BENCH SEAT: 3/4" Extruded HDPE
- B. WELDMENT, POST 3 1/2" OD X 46 13/16": One piece all welded construction consisting of 3 1/2" OD x 8 ga galvanized tubing and 12 ga galvanized sheet steel. Finished with a baked on powder coating.
- C. WELDMENT, NOVO ARC BENCH SEAT: One piece all welded construction consisting of 1.315" OD x 14 ga galvanized tubing and 12 ga galvanized sheet steel. Finished with a baked on powder coating.

#### **1.19 NPPS SUPERVISION SAFETY KIT**

- A. NPPS DVD: National Program for Playground Safety Supervision safety kit including training manual, training DVD, and supervision fanny pack with supplies.

#### **1.20 NUCLEUS STANCHION**

- A. CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
- B. S5 STANCHION: One piece all welded construction consisting of 1.315" OD x 14 ga, 1.315" OD x 12 ga, and 1.029" OD x 14 ga galvanized steel tubing, and HDPE threaded inserts. Finished with a baked on powder coating.

#### **1.21 ODYSSEY DECK LINK**

- A. ODYSSEY DECK LINK: One piece all welded construction consisting 1.315 OD x 12 ga galvanized steel tubing, 10 ga galvanized steel plate and 7 ga stainless steel plate. Finished with a baked on powder coating.

### **1.22 OFFSET ENCLOSURE**

- A. CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
- B. S5 OFFSET ENCLOSURE: One piece all welded construction consisting of 1.315" OD x 14 ga, 1.315" OD x 12 ga, and 1.029" OD x 14 ga galvanized steel tubing, and 10 ga sheet steel. Finished with a baked on powder coating.

### **1.23 PIPE WALL**

- A. CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
- B. S5 PIPE WALL: One piece all welded construction consisting of 1.315" OD x 14 ga, 1.315" OD x 12 ga, and 1.029" OD x 14 ga galvanized steel tubing. Finished with a baked on powder coating.

### **1.24 SPINNER CRESCENT PANEL**

- A. BRONZE BEARING .377 X .75 X .75: Oil impregnated, bronze.
- B. SPINNER: 3/4" Co-extruded HDPE.
- C. SPINNER PANEL: 3/4" Extruded HDPE.
- D. STEER WHEEL STANDOFF KPSL: 1 3/8" OD threaded cold rolled steel round.
- E. NUCLEUS CRESCENT FRAME: One piece welded construction consisting of 1.135" OD X 14 ga galvanized tubing, 10 ga galvanized tabs, and formed 7 ga stainless steel plates finished with a baked on powder coating.

### **1.25 TELESCOPE ASSEMBLY**

- A. STEERING WHL ATTACH PLATE: Formed 10 ga galvanized steel plate, finished with a baked on powder coating.
- B. TELESCOPE ASSEMBLY: Assembly consisting of a stainless steel screw, zinc plated washers, an oil impregnated bronze bearing, a 1/2" OD x .058" wall black tube, a one piece all welded telescope mount consisting of formed 10 ga galvanized steel plate, 1.315 OD x 14 ga galvanized

### **1.26 TRANSFER STATION, HANDRAIL 40"**

- A. CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
- B. SINGLE STEP HANDRAIL: Formed 1.315" OD x 12 ga galvanized steel tubing finished with a baked on powder coating.
- C. TUBE, 1.315 x 47 1/2": 1.315" OD x 12 ga galvanized steel tubing finished with a baked on powder coating.
- D. SPACER, STAIR HANDRAIL: 3/4" extruded HDPE.
- E. EXIT SUPPORT: 1.660" OD x 13 ga galvanized steel tubing finished with a baked on powder coating.
- F. SINGLE STEP P: One piece all welded construction consisting of 12 ga surfaces and gussets. PVC coated after fabrication.
- G. LEFT HANDRAIL 32": One piece all welded construction consisting of 1.315" OD x 12 ga & 1.029" OD x 14 ga galvanized steel tubing, and 10 ga galvanized steel cap. Finished with a baked on powder coating.
- H. RIGHT HANDRAIL 32": One piece all welded construction consisting of 1.315" OD x 12 ga & 1.029" OD x 14 ga galvanized steel tubing, and 10 ga galvanized steel cap. Finished with a baked on powder coating.
- I. 24" ACCESSIBLE STAIRS: One piece all welded construction consisting of 12 ga HRPO steel surfaces, sides, and gussets. PVC coated after fabrication.
- J. TRANSFER PLATFORM SQUARE: One piece all welded construction consisting of 12 ga surfaces, gussets, and corners. PVC coated after fabrication.

## 1.27 TRIANGLE PLATFORM

- A. TRIANGLE PLATFORM S5P: 12 ga HRPO sheet, finished with a PVC Coating

## 1.28 VIPER II L2-SPIRAL 112

- A. CASTING, 90 DEGREE BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
- B. TUBE 1.315" OD X 48 3/4": 1.315" OD X 12 ga galvanized tubing. Finished with a baked on powder coating.
- C. ENTRANCE SLIDE SECTION: 1/4" thick, linear, low density, rotationally molded, UV stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts, and a textured surface.
- D. EXIT SLIDE SECTION: 1/4" thick, linear, low density, rotationally molded, UV stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts, and a textured surface.
- E. STRAIGHT SLIDE SECTION: 1/4" thick, linear, low density, rotationally molded, UV stabilized polyethylene with double wall construction, and a textured surface.
- F. 45 deg LEFT SLIDE SECTION: 1/4" thick, linear, low density, rotationally molded, UV stabilized polyethylene with double wall construction, and a textured surface.
- G. SPIRAL 90 deg SLIDE SECTION: 1/4" thick, linear, low density, rotationally molded, UV stabilized polyethylene with double wall construction, and a textured surface.
- H. DOUBLE SLIDE HOOD: Double wall, linear low density, rotationally molded, UV stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts, and a textured surface.
- I. SUPPORT, SLIDE EXIT: One piece all welded construction consisting of 2 3/8" OD x 12 ga galvanized steel tubing and 8 ga galvanized sheet steel. Finished with a baked on powder coating.
- J. SLIDE ENTRANCE PLATFORM, S5: Welded platform 12 gage shell and gussets. Finished with PVC coating.
- K. HOOD MOUNT BRACKET 1.315" X 4 3/8": 10 gage mounting plate welded to 1.315" OD tubing. Finished with baked on powder coat.
- L. SLIDE SUPPORT 3J: 8 gage formed plate welded to 1.660" OD tubing. Finished with baked on powder coat.
- M. SLIDE SUPPORT 4J: 8 gage formed plate welded to 1.660" OD tubing. Finished with baked on powder coat.
- N. SLIDE SUPPORT 2J: 8 gage formed plate welded to 1.660" OD tubing. Finished with baked on powder coat.
- O. VIPER SPIRAL SUPPORT 112: 8 gage formed plate welded to formed 1.660" OD galvanized tubing. Finished with baked on powder coat.

## BONDED RUBBER SAFETY SURFACING SPECIFICATIONS

- A. Surfacing shall be installed over a concrete base provided by the owner.
- B. Surfacing shall be installed at depth appropriate for the critical fall height of playground equipment— with the following minimum square footages:
  - 1. For 2-5 Area: minimum 610 sf in use zone with minimum 50 sf of sloped edge all around use zone.
  - 2. For Accessible Spinner Area: minimum 520 sf in use zone with minimum 45 sf of sloped edge all around use zone.
  - 3. For 5-12 Area: minimum 1005 sf in use zone with minimum 65 sf of sloped edge all around use zone.

### C. DESIGN CRITERIA:

1. Surfacing shall have been marketed by name within the United States for at least ten (10) years.
2. Installation of Surfacing shall be performed by an organization who can furnish supporting evidence of rubberized surfacing installation experience (i.e. a company regularly engaged in this type of work on a full time basis for a period of not less than ten (10) years).
3. Installation of Surfacing must be performed by experienced mechanical applicators who are factory trained and approved installation contractors.
4. The raw materials used to formulate the Surfacing and the mechanical installation methodologies used to manufacture the finished product must be validated by the customer prior to surfacing being installed.
5. An authorized factory trained representative must approve and endorse in person the authenticity and correctness of the completed Surfacing once installed and his/her signed authorization must appear on certificates of completion.
6. Surfacing must be mechanically applied and fully compacted while installing to manufacturer's installation specifications.

### D. PRODUCT TESTING:

1. Shock Absorbency: When tested in accordance with ASTM F-1292, Surfacing shall not impart to the head form upon impact, a peak deceleration exceeding 200 times the acceleration due to Gravity (200 G's). Drop height used in this test shall be at 4'. Successful attenuated testing passes must be documented at a material depth of 1 ½".
2. Slip Resistance: Wet dynamic reading shall not be less than 40 when tested in accordance with ASTM E 303, using British Portable Skid Resistance Tester.
3. Flammability: Minimum Critical radiant flux of 0.22 Watts/CM<sup>2</sup> when tested in accordance with ASTM E 648. Particulate Rubber Particles must successfully pass ASTM standard CFR 1630 for flammability of carpet and rugs.
4. Rubber Buffing Material: Passes Long-Strand Water Permeability per USTC Test Procedure:
  - a. Rubber Buffing Long-Strand Material Passes ASTM E 303 Test for Skid Resistance
  - b. Rubber Buffing Long-Strand Material Passes ASTM D412-98a Test for Tensile & Elongation Properties
  - c. Rubber Buffing Long-Strand Material Passes ASTM C501-84 (96) Test for Abrasive Wear
  - d. Rubber Buffing Passes Accelerated UV Colored Buffing Test Rating a 'No Change when exposed to 420 AFU's – Testing Methodology AATCC 16E for loose-particle Rubber Buffing
  - e. Buffing Material Passes Accelerated Wear Test Rating when bonded by Urethane showing 'No Change' of 20,000 foot counts – Testing Methodology CRI TM-101 for rubber buffing bounded together as a solid surface as a rubber walking surface.
5. Water Leaching Test: Passes Department of Health SW-846 test method for the chemical analysis and evaluation of water and solid waste materials.

### E. SITE CONDITIONS

1. Manufacturer's current installation methodologies and procedures must be used and adhered to.
2. Proceed with work only after substrate construction and penetrating work has been compacted to 90+% of dry density.
3. Do not proceed with work during inclement weather. Comply with manufacturer's recommendations for application and curing under specific climatic conditions.
4. Conditions of substrates with respect to structural performance shall be evaluated and approved by a Factory Representative prior to applying the surfacing.
5. At the time of application ambient air temperature shall be 40 Degrees Fahrenheit or greater and remain so during product installation.

6. Adjacent Material along with the Surfacing shall be protected and secured during the installation process and while curing from weather and other site related damaging.

F. MATERIALS:

1. Primer: Single component moisture cured RD MR 1165 polyurethane primer.
2. Binder: An elastic polyurethane pre-polymer with minimal odor, excellent weathering and binding characteristics. The use of RD MR 1165 Urethane is specific and required for this Supplier must verify the use supply of urethane specified for this project. **No "equal" urethane bonding agent substitutions are permitted.**
3. RD Colored Buffing: RD colored rubber buffing particles are used for the purpose of Surfacing and its sizing is class sized specific to and for use of and manufactured bonded rubber playground surfacing. RD colored rubber buffing consists of 100% recycled tire. Buffing product is color pigmented by way and use of iron oxide pigments. **No "equal" raw material substitutions will be accepted.**
4. The body and proportionate formulation of RD colored rubber buffing consists of rubber particles ranging in size from 1/2" to 2" that when mixed to proper proportion meet or exceed the following basic criteria in addition to the product testing mandated:
  - a. Rubber Buffing Long-Strand Material Passes ASTM D412-98a Test for Tensile & Elongation Properties
  - b. Rubber Buffing Material is Non-Toxic
  - c. Rubber Buffing Material is Anti-Fungal
  - d. Rubber Buffing Material is Non-Absorbent
  - e. Rubber Buffing to Avert Nesting of Insects
  - f. Rubber Buffing is consistent of proportionate Long-Strand Particles
  - g. Rubber Buffing is 100% free of wire, and cotton/polyester contaminates

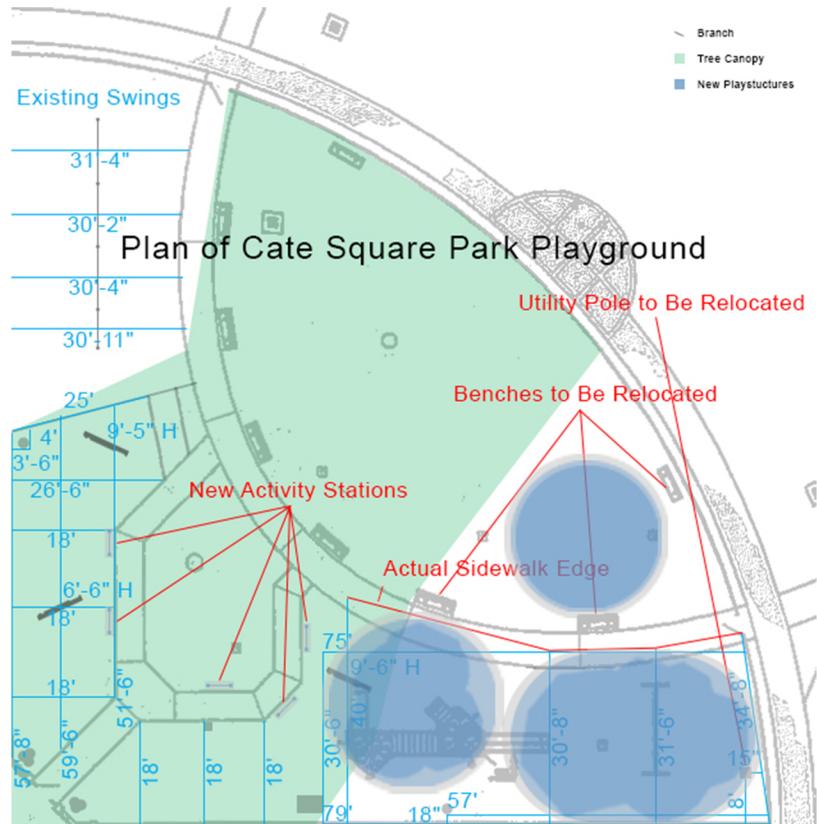
G. WARRANTY:

1. 5-YEAR WARRANTY: Provide a written warranty stating that work executed will be free from defects of materials and workmanship for a period of five (5) years from date of completion and that material breakdown and unraveling will be remedied on written notice at no additional cost.
2. Warranty shall be supplied in writing and honored by the selected Preferred Vendor.
3. The selected Preferred Vendor shall warranty removal and replacement of materials as required for repairing or replacing surfacing.



# 2D Drawings & 3D Renderings

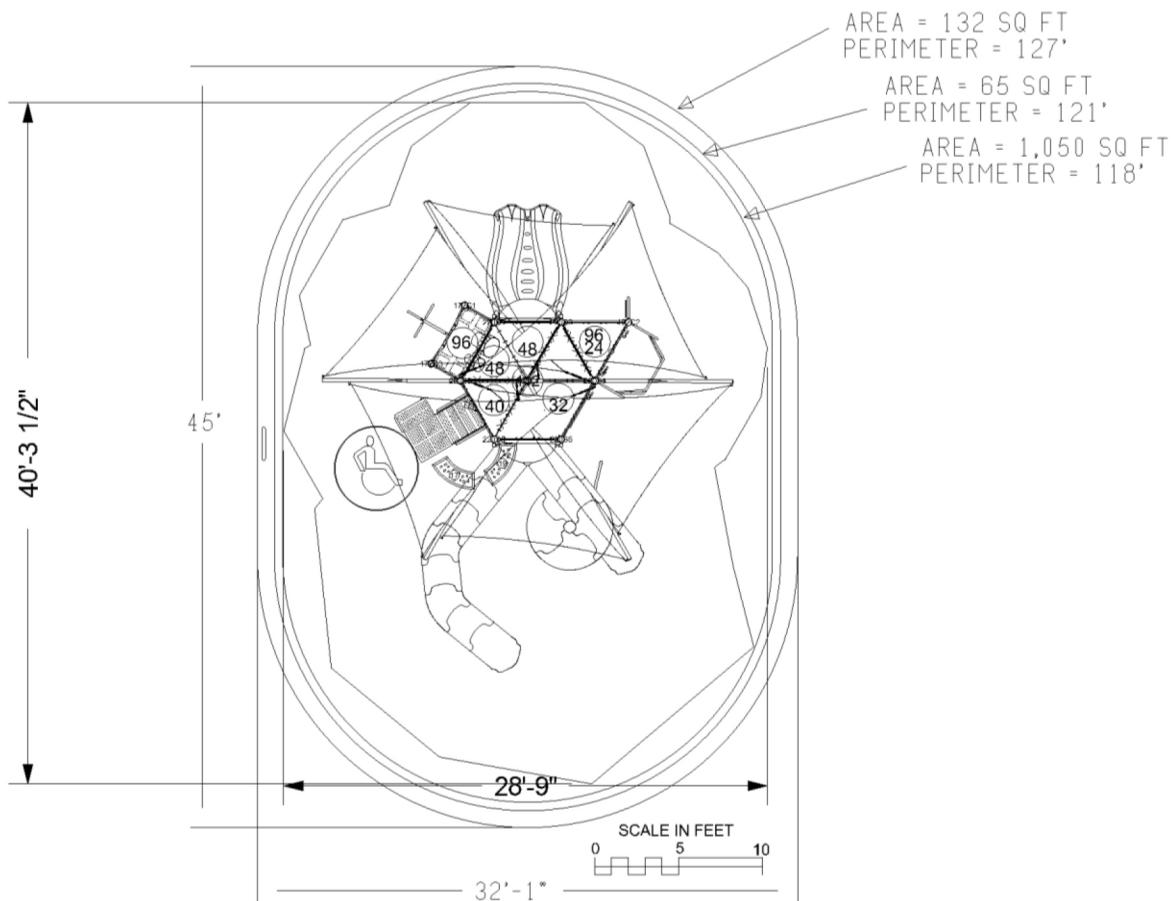
## Cate Square Park Playground (Final Design)





Cate Square Park Playground (Final Design)

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INFORMATION  
MINIMUM FALL ZONE  
SURFACED WITH  
RESILIENT MATERIAL  
AREA

866 SQ.FT.

PERIMETER

115 FT.

STRUCTURE SIZE

40' 4" x 28' 9"

STRUCTURE IS DESIGNED  
FOR CHILDREN AGES:

- 6-23 MONTH OLDS
- 2-5 YEAR OLDS
- 5-12 YEAR OLDS
- 13 + YEAR OLDS

ADA ACCESSIBILITY GUIDELINE (ADAAG CONFORMANCE)

NUMBER OF PLAY EVENTS:	11		
NUMBER OF ELEVATED PLAY EVENTS:	8		
NUMBER OF ELEVATED PLAY EVENTS ACCESSIBLE BY RAMP:	PROVIDED: 0	REQ'D: 0	
NUMBER OF ELEVATED PLAY EVENTS ACCESSIBLE BY TRANSFER SYSTEM:	PROVIDED: 4		
NUMBER OF ELEVATED PLAY EVENTS ACCESSIBLE BY RAMP OR TRANSFER SYSTEM:		REQ'D: 4	
NUMBER OF GROUND LEVEL PLAY EVENTS:	PROVIDED: 3	REQ'D: 3	
NUMBER OF TYPES OF GROUND LEVEL PLAY EVENTS:	PROVIDED: 2	REQ'D: 3	

WARNING!

ACCESSIBLE SAFETY SURFACING MATERIAL IS REQUIRED BENEATH AND AROUND THIS EQUIPMENT.

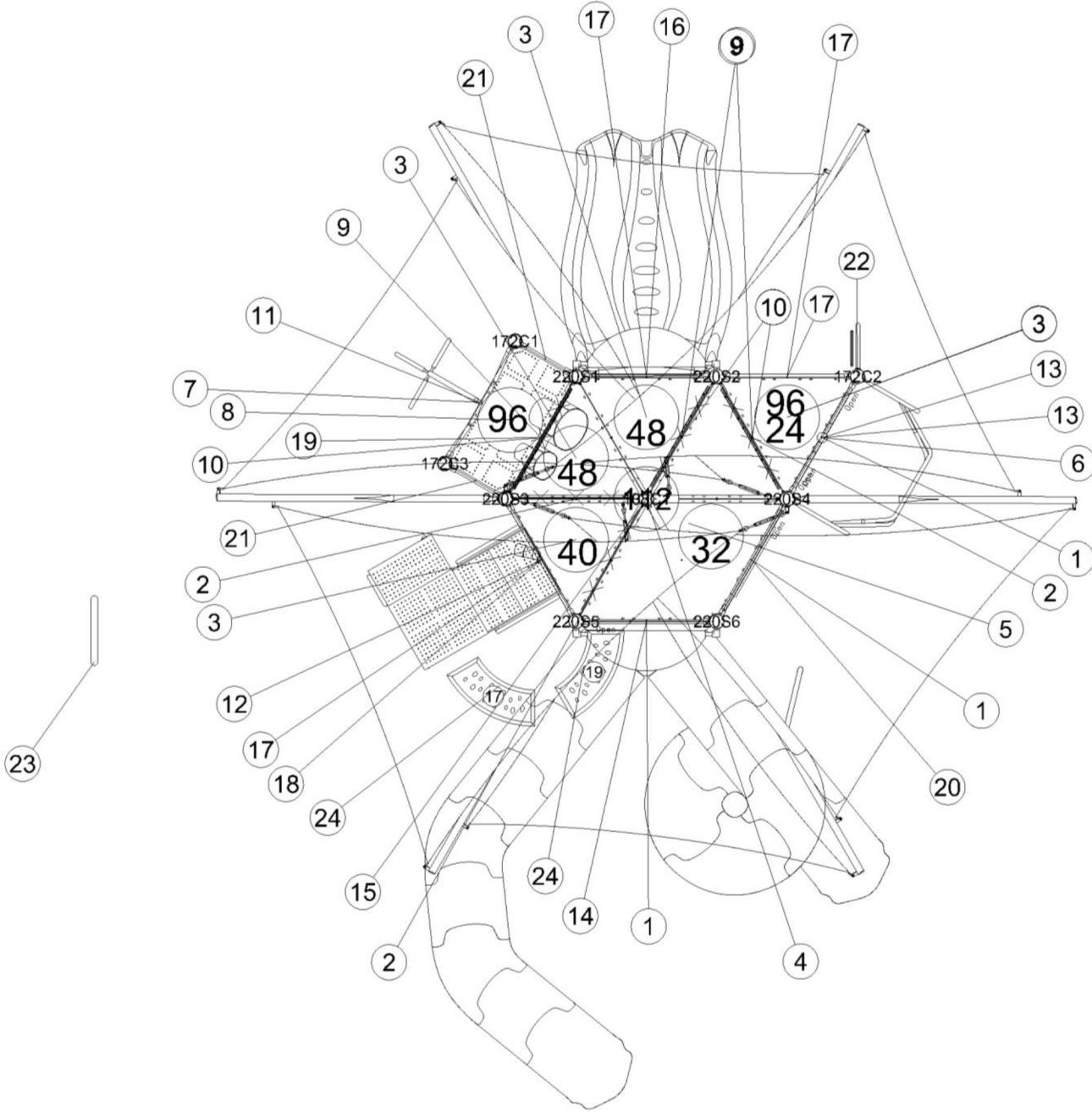
FOR SLIDE FALL ZONE SURFACING AREA SEE CPSC's Handbook for Public Playground Safety.

PLATFORM HEIGHTS ARE IN INCHES ABOVE RESILIENT MATERIAL.



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ITEM	COMP.	DESCRIPTION
1	270-0001	OFFSET ENCLOSURE
2	270-0009	8" CLOSURE PLATE, ELLIPSE
3	270-0129	TRIANGLE PLATFORM
4	270-0131	HEXAGONAL PLATFORM S5P
5	270-0132	HALF HEXAGON PLATFORM
6	270-0266	CENTER MOUNT ENCLOSURE
7	270-0286	NUCLEUS STANCHION
8	270-0290	HALF PLATFORM
9	270-0300	ABSTRACT PLATFORM LADDER
10	370-0016	GRAB BAR ASSEMBLY
11	370-0113	LINKING RING CLIMBER 80"-96"
12	370-0719	TRANSFER STATION, HANDRAIL
13	370-0763	ODYSSEY DECK LINK
14	470-0579	VIPER II L2-SPIRAL 112
15	470-0678	ARA HEX SHADE CANOPY
16	470-0755	LUGE SLIDE, 48"-56"
17	570-0394	PIPE WALL
18	570-0516	TELESCOPE ASSEMBLY
19	570-0852	DRUM PANEL, BELOW PLATFORM
20	570-1851	CHIMES PANEL
21	570-2624	HALF PIPE WALL
22	570-2705	SPINNER CRESCENT PANEL
23	580-1022	FS SIGN, AGES 5-12 BOTH SIDES
24	580-1312	NOVO ARC BENCH

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# Cate Square Park Playground (Final Design)

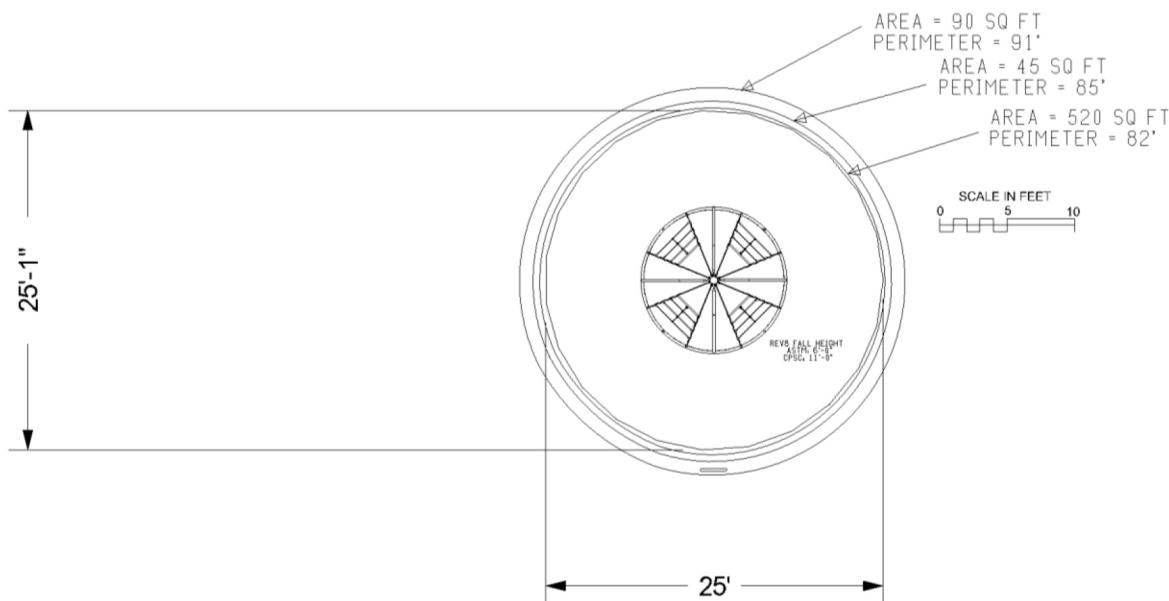
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Cate Square Park Playground (Final Design)

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**INFORMATION**  
 MINIMUM FALL ZONE SURFACED WITH RESILIENT MATERIAL AREA  
 490 SQ.FT.  
 PERIMETER  
 79 FT.  
 STRUCTURE SIZE  
 25' 1" x 25' 0"  
 STRUCTURE IS DESIGNED FOR CHILDREN AGES:

- 6-23 MONTH OLDS
- 2-5 YEAR OLDS
- 5-12 YEAR OLDS
- 13 + YEAR OLDS

ADA ACCESSIBILITY GUIDELINE (ADAAG CONFORMANCE)

NUMBER OF PLAY EVENTS:	1	
NUMBER OF ELEVATED PLAY EVENTS:	0	
NUMBER OF ELEVATED PLAY EVENTS ACCESSIBLE BY RAMP:	PROVIDED: 0	REQ'D: 0
NUMBER OF ELEVATED PLAY EVENTS ACCESSIBLE BY TRANSFER SYSTEM:	PROVIDED: 0	
NUMBER OF ELEVATED PLAY EVENTS ACCESSIBLE BY RAMP OR TRANSFER SYSTEM:		REQ'D: 0
NUMBER OF GROUND LEVEL PLAY EVENTS:	PROVIDED: 1	REQ'D: 0
NUMBER OF TYPES OF GROUND LEVEL PLAY EVENTS:	PROVIDED: 1	REQ'D: 0

**WARNING!**

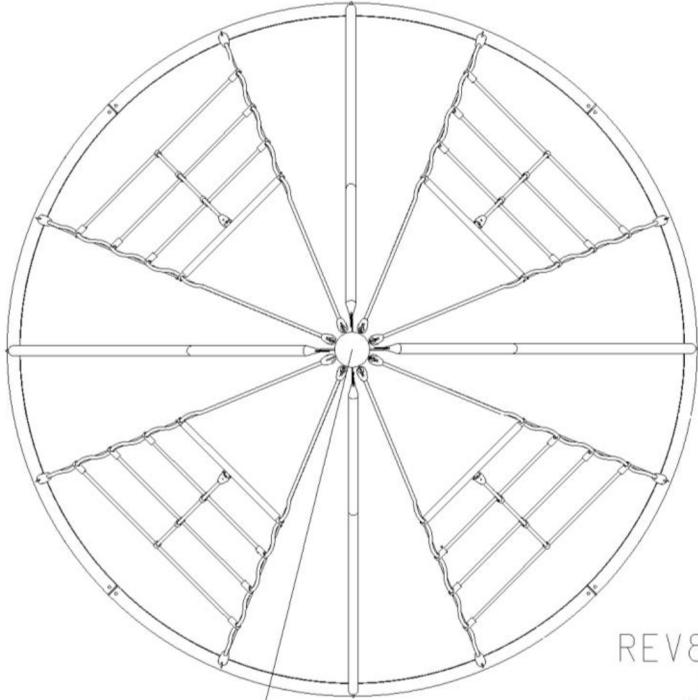
ACCESSIBLE SAFETY SURFACING MATERIAL IS REQUIRED BENEATH AND AROUND THIS EQUIPMENT.  
 FOR SLIDE FALL ZONE SURFACING AREA SEE CPSC's Handbook for Public Playground Safety.  
 PLATFORM HEIGHTS ARE IN INCHES ABOVE RESILIENT MATERIAL.



# Cate Square Park Playground (Final Design)

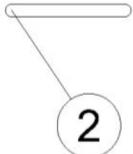
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ITEM	COMP.	DESCRIPTION
1	560-0576	REV8
2	580-1022	FS SIGN, AGES 5-12 BOTH SIDES



REV8 FALL HEIGHT  
ASTM: 6'-0"  
CPSC: 11'-0"

1



2

# Cate Square Park Playground (Final Design)

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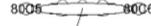
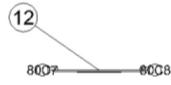
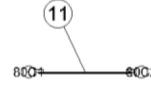
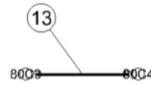
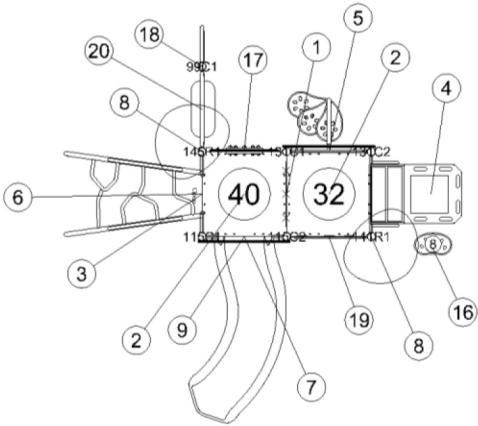






# Cate Square Park Playground (Final Design)

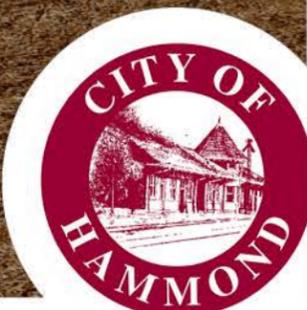
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ITEM	COMP.	DESCRIPTION
1	290-0101	8" CLOSURE PLATE
2	290-0102	SQUARE PLATFORM
3	290-0111	CLIMBER ENCLOSURE 2-5
4	390-0147	TRANSIT STATION HANDRAIL
5	390-0285	IMAGINATION
6	390-0288	BETA CLIMBER 32"-40"
7	490-0134	IMAGINATION DISCOVER SLIDE
8	490-0145	PETAL POST TOPPER
9	490-0186	MONACO SLIDE, 32"-40"
10	570-0784	TIC TAC TOE PANEL ASSEMBLY
11	570-0847	SIGNING 2-SIDED PLAY PANEL, F
12	570-0858	3-IN-A-ROW PANEL, BELOW PLAT
13	570-2677	CLOCK PANEL, BELOW PLATFOR
14	570-2711	HIDE THE NUMBERS PLAY PANE
15	580-1021	FS SIGN, AGES 2-5 BOTH SIDES
16	580-1364	LIL NOVO BEAN STEP
17	590-0127	RAIN WHEEL PANEL, 2-5 ABOVE
18	590-0151	CHIMES CRESCENT PANEL, LEF
19	590-0156	ACORN PANEL, 2-SIDED 2-5 ABO
20	590-0400	SYNERGY COUNTER

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