

DESCRIPTIONS/SPECIFICATIONS/WORK STATEMENT

1. Requisition number: N6258816RC048Z0

2. Delivery Date: NLT 60 days from the date of Award

3. Delivery Site: NSA, Support Site – Family Housing Recreation Area
Via Boscariello, 81031 Gricignano d’Aversa (CE) - Italy

5. General Requirements:

This acquisition will allow complementing of the current Family Housing Playgrounds equipment outfit throughout the Support Site. The herein stated product technical requirements are required and must be met, in order to have a premium product, fabricated by using only high-grade material and accomplished as per the most restrictive European Safety and/or US ASTM standards/norms (which is the most restrictive).

Instructions to Offeror:

The Contractor shall furnish all materials, labor, supervision and effort necessary to accomplish all the contract requirements correctly. Equipment, materials, installation, workmanship, inspection, and testing shall be in strict accordance with the required and advisory provisions of the applicable European Safety code/norms and/or US Navy Public Playground Safety Handbook (ASTM playground standards).

The equipment shall also comply with the new standard UNI 11123:2004 "Guidelines for the design of parks and outdoor play areas (or US equivalent). All product items must have passed the inspection and approval of the European standard/norm EN 1177 (for the Impact Absorbing Surfacing) and EN 1176 (for the playground equipment).

The Contractor with the furnishing of the equipment shall also perform the required assembling of the product and the positioning as per the design layout (see below play area layout). Furthermore, the contractor shall provide technical instructions/guidance to the Lessor for the relative construction work required for the equipment supports and flooring. The equipment shall come with the manufacturer’s product original and proper assembling and mounting hardware.

Along with the submission of the cost proposal, the Contractor shall provide Playground technical design/layout (on scale), each equipment technical description and installation layout and also catalog cut and/or the manufacturer’s website of each product showing the technical data, including illustration/technical design of the product intend to provide with this contract. Equipment certifications shall be provided prior the approval of the cost proposal.

6. Product Description:

Qty.	Item Description	Manufacturer/Model (or Equal)	Unit Price
1 ea.	Theme Play Combi Unit	EUROPLAY, Jet Fighter #U401	€
1 ea.	Theme Climbing Combi Unit	EUROPLAY, Enterprise #E5001	€
1 ea.	Theme Climbing Combi Unit	EUROPLAY, Pathfinder #E52011	€
1 ea.	Stainless Steel 3 Seats Swing Set	KAISER&KUHNE #0-40216-000	€
1 ea.	Stainless Steel Giant Tire Swing Set	KAISER&KUHNE #0-40720-000	€
7 lmt.	Theme Cast Stone Wave Bench	ESCOFET - NAGUSIA	€
550 sqmt	EPDM rubber surfacing (various colors)	HOLZHOF - Flooring	€
1 ea.	Assembling Service/Technical Assistance	-----	€

A. PLAY UNIT “TORNADO JET FIGHTER” (see picture)



This new play unit has a bearing structure made entirely of natural wood larch solid certificate PEFC, cut out heart, properly rounded and edged, protected by a painting natural, without impregnating toxic and polluting, with poles uprights of min. 120mm diameter fixed to the ground by brackets from and bury their plinths, of galvanized steel.

Decor components and elements are made of polyamide or colored polyethylene and galvanized steel and coated in colored polyester. Ropes and nets are made from rope-type diameter min. 16 mm with soul to 6 strands steel coated on the individual components of a braid resistant polypropylene weathering and vandalism.

Has Central platforms, one located at a height of 1200mm to 1400mm dump height, a platform of the jet with the cockpit complete cloche made of molded plastic material. The tip is attached to a pole L made of tubular galvanized steel and coated colored polyester diameter 34mm, fixed directly to a pillar by terminals conjunction patented painted aluminum.

Adjacent to the central platform jet engines are represented by 2 tunnels for crawl made plank Lericé and trim laminate, complete with handles polyamide to the inputs.

On the right side of the unit are present a climbing wall on the back of Jet, access to the platform height (min.) 1400mm, made with polyethylene panel and colored handles. A network of equilibrium of access to the platform height 1200mm passing under the wing of the plane, made of rope-type.

The network is may accessed to the wing directly through a porthole made on wing finished with edges colored polyethylene.

A climbing curve on the front of the Jet, to access the platform at min. height 1200mm, made with larch planks sect. 140x22mm and elements reinforcement colored polyethylene, complete with rope type "Herkules" diam. 16 mm to facilitate the ascent.

On the left side of the unit are present a ladder, on the back of Jet, access to the platform height of 1400mm, rungs made of galvanized steel and coated in colored polyester.

A shaky bridge, access to the platform height 1200mm, passing under the wing, made of larch planks section. 95x35mm. finished with edges colored polyethylene.

A network of climbing curve on the front of the Jet, always access platform height 1200mm, realized with frame in larch planks and elemnti of reinforcement colored polyethylene and square mesh made of rope type min. Diameter of 16 mm.

B. CLIMBING COMBI UNIT “ENTERPRISE & PATHFINDER THEME” (see picture)





This Climbing Combi unit is made of two sections (see picture) has a bearing structure made up with uprights in galvanized steel tubing complete with head cover, and anchored to the ground with suitable plinths of concrete foundation. Modular play is composed of three sections united between them.

Uprights are in galvanized steel tubing diameter min. of 127mm coated polyester colored anthracite gray RAL 7016, together with a pole suspended ring made of tubular steel diam.48mm with welded rings made of tubular steel diam.27mm, all dressed in yellow colored polyester. Poles are coupled to uprights with clamps conjunction painted aluminum. Curved bar made of tubular steel diameter min. of 43mm, galvanized and coated in polyester colored red, to which is attached a mesh rope-type diam. 16 mm with soul to 6 strands of steel coated on the individual components of a braided polypropylene weatherproof and vandalism; climbing wall formed by curved frame made of tubular steel diam.43mm, galvanized and coated in polyester colored green, to which is attached a climbing wall made of yellow colored polyethylene thickness 22mm complete with handholds of various colors, and portholes. Curved staircase made of tubular steel diam.43mm, galvanized and coated in polyester colored Mezzanine of departure to the pole ring made of colored polyethylene thickness 22mm.

Height 1200mm from the ground floor

Climbing ladder to the floor realized with curved frame in tubular steel diam. 43mm, galvanized and coated in polyester colored blue, and pegs tubular steel diam. 34mm, galvanized and coated in polyester colored blue.

Game loop formed by curved bar made of tubular steel diam.43mm, galvanized and coated in polyester colored green, which are fixed 5 rope-type diam. 16 mm with soul to 6 strands of steel coated on the individual components of a braided polypropylene weatherproof and vandalism which in turn support a ring diam.34mm tubular steel, galvanized and coated in polyester colored yellow.

Curved suspended bridge connecting the two modules made of tubular steel with a diameter of 43mm and 34mm galvanized and coated in polyester colored red.

Bridge height is approx. 2400mm from the ground.

Ladder placed half bridge made of tubular galvanized steel and coated in colored polyester blue diameter 34mm.

Spiral staircase made of tubular galvanized steel and coated in colored polyester blue diameter 34mm.

Platforms in polyethylene thickness 19mm with anti-slip rubber finish, up to a height of 1300 mm from the ground 1 to 2000mm from the ground.

Climbing net with rectangular mesh, lifts the platform made of rope-type diam. 16 mm with soul to 6 strands of steel coated on the individual components of a braided polypropylene weatherproof and vandal, and fixed directly to the studs via terminals conjunction patented painted aluminum.

Bridge connecting the two platforms placed at 1300mm from the ground made of tubular galvanized steel and coated in colored polyester green diameter of 43mm and 34mm.

Post of firefighter made of tubular galvanized steel and coated in colored polyester diameter 34mm, fixed directly to a mast using terminals conjunction patented painted aluminum.

Tunnel connecting two platforms 1 post to 1300mm from the ground and the 'other at 2000mm from the ground, made of galvanized steel tubing and polyester coated colored yellow, frame of 48mm diameter and 34mm diameter rings.

Tunnel complete with cable for ease of 'use, rope-type diam 16 mm with soul to 6 strands of steel coated on the individual components of a braided polypropylene weatherproof and vandal.

Climbing wall formed by curved frame made of tubular steel diam.43mm, galvanized and coated in polyester colored green, to which is attached a climbing wall made of yellow colored polyethylene thickness 22mm complete with handholds of various colors, and portholes.

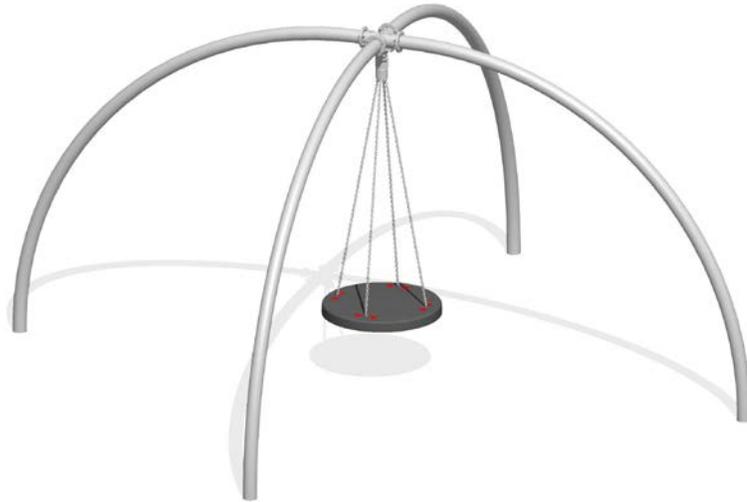
Board spherical lifts the platform placed at different heights made of polyethylene thickness 19 mm diam. 300mm. Slide made of 2 stainless steel tube 48mm diameter properly shaped.

C. STAINLESS STEEL SWING SET (3 FLEX. RUBBER SEATS) (see picture)



This new Swing is a round type poles, height of 200cm, with three rubber seats. Secured to the ground with concrete plinths. Structure entirely made of stainless steel AISI 304 The swing axle is of single bar with anti-windup bushings and bearings; the chain is stainless steel with pad seats rubber reinforced aluminum shielding.

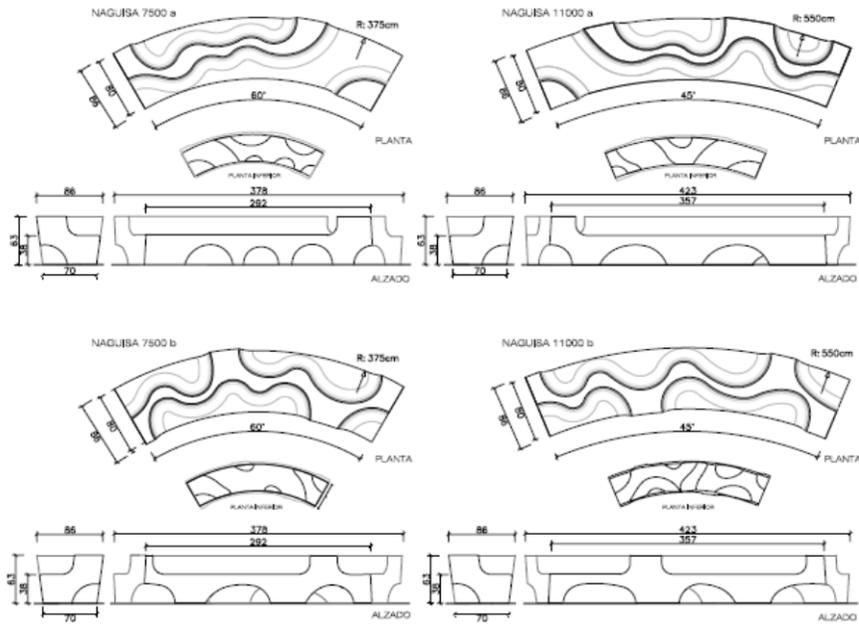
D. GIANT TIRE SWING SET (see picture)



This new Swing is a pendulum type, height 285cm, with giant tire rubber seat. Secured to the ground with concrete plinths. Structure entirely made of stainless steel AISI 304 The swing axle is of single bar with anti-windup bushings and bearings; the chain is stainless steel with pad seats rubber reinforced aluminum shielding.

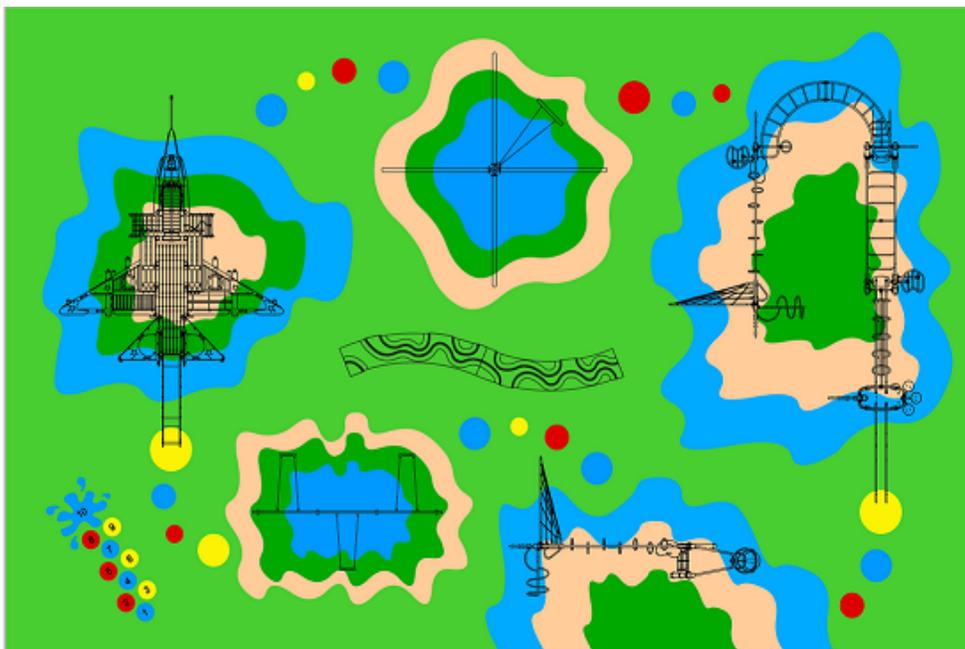
E. WAVE BENCH CAST STONE (see picture)

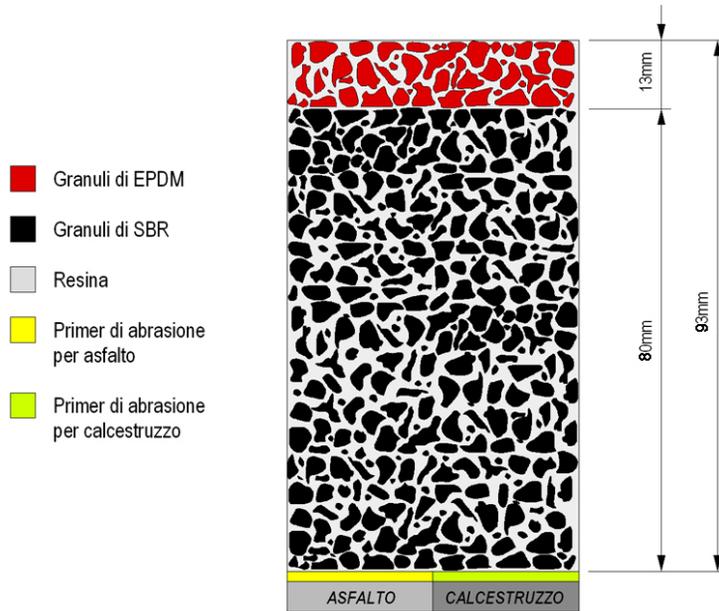




This new seat is a “Wave” type, prefabricated commercial top-design free-standing modular type, made of reinforced cast stone, with dimensions 700x86x63H (cm)., of white color,

F. SURFACING (Impact Absorbing Rubber Surfacing) (see picture)





This new playground surface shall be of the provided design and a wet pour EPDM rubber impact absorbing surfacing material, thoroughly poured on-site on the whole cement surface and shall be continuous, uniform and leveled with a slope to the surrounding lawn ground level. See play area layout design of the new surfacing color/effects design theme with the new play equipment locations. The new wet pour EPDM rubber surfacing shall be a two layer porous impact absorbing rubber surface, as shown in the below figure.

Product Salient Characteristics:

- 1) All metal components have been treated against corrosion and maintain an everlasting good look. All synthetic components are UV-resistant and protected against breaking and color changes. All ropes and nets are made of steel cables covered by polypropylene.
- 2) **Metals (three types):** Aluminum and stainless steel; all steel components are being sandblasted and treated against corrosion, whereupon they receive a final color by means of polyester powder-coating. This entire treatment process offers high-quality characteristics and ensures color fastness. Aluminum parts are always anodized and colored by means of polyester powder-coating. Stainless steel components offer a high durability and protection against corrosion, as well as an everlasting good look.
- 3) **Plastics:** Synthetic elements consist of polyethylene, polypropylene, polyamide or polycarbonate. The materials are selected and processed depending on their strength and applicability. All plastic components are UV-resistant and protected against breaking and color changes. HDPE polyethylene sheets (High Density Polyethylene) are produced specifically for the creation of playground equipment. This product's high density offers an absolute added value against deformations. All plastics are 100% recyclable.
- 4) **Ropes/Nets:** Ropes and Net constructions are made of vandalism resistant steel cables. These consist of an interweaving of thin galvanized steel wires. This construction ensures rope flexibility and

resistance against heavy overload and pulling force. The galvanized steel wires are eventually covered by polypropylene (Ø 16 mm).

A. PLAY UNIT “TORNADO JET FIGHTER” (see picture)

- Round metal poles of min. diameter 12cm
- HDPE polyethylene sheets
- All metals components have been treated against corrosion and powder-coated with polyester.
- Polypropylene ropes and nets (min. diam. 16 mm) with steel wire reinforcement
- Synthetic connection elements
- Synthetic hand grips and climbing grips
- plastic slide
- Glued arches
- Poles uprights of min. 120mm diameter,
- Metal base supports are galvanized steel (to avoid any contact of the wood with the ground)
- Decor components and elements are made of polyamide and/or colored polyethylene and galvanized steel and coated in colored polyester.
- Ropes and nets are made from rope-type diameter min. 16mm with soul to 6 strands steel coated on the individual components of a braid resistant polypropylene weathering and vandalism.
- All components of the game are joined by specific clamps and joints and painted aluminum color
- Platforms made of larch planks sect. 140x22mm

B. CLIMBING COMBI UNIT “ENTERPRISE & PATHFINDER THEME” (see picture)

- Metal posts min. diameter 89mm (secondary) and 127 mm (main)
- Metal tubes are stainless steel, diameter are from 27mm to 48 mm (based on required support)
- All metal components are treated against corrosion and are powdercoated with polyester.
- Slides are synthetic and with climbing grips
- Perforated steel platforms have anti-slip rubber coating
- Synthetic and aluminium connection elements
- Vandalism resistant synthetic connection clamps
- UV-resistant synthetic play components
- HDPE polyethylene sheets and climbing grips
- Polypropylene ropes and nets min. diameter of 16 mm with steel wire reinforcement
- Vertical steel posts in color RAL 1001and/ or RAL 7016
- Uprights in galvanized steel tubing of min. diameter 127mm coated polyester colored anthracite gray RAL 7016, together with a pole suspended ring made of tubular steel min. diam.48mm with welded rings made of tubular steel diam.27mm, all dressed in yellow colored polyester.
- All tubular are in steel and galvanized, finished with a coat in polyester,
- Panels are made of polyethylene with min. thickness of 22 mm.
- Ropes of min. diameter of 16 mm with soul to 6 strands of steel coated on the individual components of a braided polypropylene weatherproof and vandalism

C. STAINLESS STEEL SWING SET (3 FLEX. RUBBER SEATS) (see picture)

- Height of swing: 1,80 m
- Posts/swing support: stainless steel tubes (Ø 9cm,14cm)
- Corner supports treated against corrosion and powdercoated with polyester
- Centre Supporting Swing posts

- Maintenance-free, stainless steel swing hooks
- Swing axle: maintenance free friction bearing with integrated swivel device
- Swing chain: stainless steel
- Safety swing seat: flexible rubber with aluminum insert
- Swing crossbeam powder coated and stove enamel (RAL color)
- Swing post powder coated and stove enamel (RAL color)
- Pod seat, color orange

D. GIANT TIRE SWING SET (see picture)

- Arched supporting structure made entirely of tubular galvanized steel diam.120mm, to be anchored to the ground with suitable plinths uprights in concrete
- Swinging platform of diam. 1000 mm made of non-slip rubber with steel frame.
- The platform fixed to the supporting structure, by means of four stainless steel chains, rotation by means of special universal joint with ball bearings.
- Corner supports treated against corrosion and powdercoated with polyester
- Tubes corner supports treated against corrosion and powdercoated with polyester
- Maintenance-free, stainless steel swing hooks
- Stainless steel swing hook with double suspension

E. WAVE BENCH CAST STONE (see picture)

- The “wave” bench is an approx. seven (7) meters long free-standing Modular Reinforced cast stone, pre-fabricated commercial top-design item, made out of; white color, Soft acid-etched and waterproofed. The design of this bench is based on a four metre long arc sector. The highest, central zone of the bench is configured as a backrest/armrest with sinuous forms, while the lower part of the volume is scooped out casually. The interruption of the backrest every eight metres facilitates access to the interior space generated in a ring formation. By adding several of these curved arcs together, creates a seat capacity of approx. 7.0 meters. The seat is 38cm high, while the top of the backrest is 63cm above the ground.

F. SURFACING (Impact Absorbing Rubber Surfacing) (see picture)

- The new wet pour EPDM rubber impact absorbing surfacing, which shall be thoroughly poured on-site on the whole cement surface and shall be continuous/uniform and leveled with a slope to ground level. See enclosure #1 for the proposed new surfacing color/effects design theme and the new play equipment locations.
- The new wet pour EPDM rubber surfacing shall be a two layer porous impact absorbing rubber surface, as shown in the below figure. The new area surfacing surrounding border, shall be made out of pre-fabricated (sidewalk type) concrete (CLS) curbs (having dimensions 100x10x30cm). These curbs shall be secured onto the existing grass surface.
- The accomplishment of the new Impact Absorbing Surfacing rubber casting work shall be according to safety regulations UNI EN 1176-77, elastic material, draining, completely homogeneous, non-slip, non-flammable and weather resistant and complying with the performance requirements of BS 7188 for Abrasive Wear [un-aged], Slip Resistance [Dry & Wet] and Ease of Ignition.
 - Wet pour rubber surfacing poured on-site of a thickness mm 80 + 13 (HIC 240 cm). Floor surfacing with an bottom layer in SBR black thickness 80 mm out of granules of variable size

from 3-7 mm, composed of 18 kg per square meter by SBR granules and 2.34 kg of one-component moisture curing polyurethane resin; and from surface layer (final) made of EPDM 13 mm thick, composed of square meters by 12.50 kg of granules EPDM and 2.40 kg of one-component moisture curing polyurethane resin.

EPDM (compound minimum 26,10% of EPDM, additives, fillers) pigmented origin in its totality, in manufacturing processes, solids particle size variable from 1-4 mm containing approximately 22% of polymer.

- Where necessary, polyurethane paving PRIMER for anchoring to the substrate shall be used and accomplished with metal staffs and special sets.
Surface Layer shall be a rubber flooring poured on-site, out of elastic material, draining, completely homogeneous, non-slip, non-flammable, weather resistant and quick drying, finishing in the top layer of EPDM as follows: EPDM granules (from grinding VIRGIN very high quality), with polymer content of 22%, staining carried out exclusively with mineral pigments that do not contain heavy metals, particle size 1/4 mm, tied with BINDER component polyurethane-based MDI / TDI permanently elastic medium reactivity with atmospheric moisture.
- Wet Pour Rubber Surfacing 'Wearing Course' an EPDM rubber crumb mixed and bonded with a polyurethane resin screed, rolled and floated by hand to the required finish color EPDM (Ethylene Propylene Dine Modified)
- Resistance to fire EN 13501-1 E fl/E.
- Temperature resistance -40°C/+80°C
- The impact absorbing base layer depth must meet the required Critical Fall Height (CFH) of the play equipment and BS EN 1177 requirements. Therefore, prior the initial of work, the Contractor shall verify carefully the proper full base thicknesses before pouring the new surfacing.

Note: The Contractor prior the realization of the rubber surfacing shall submit several floor design layout (theme and colors) proposal to the Government (Housing Office) for review and approval.