#### SECTION 32 18 16.13 - 'WOOD CARPET' REACTIVE PLAYING SURFACE

## **PART 1 GENERAL**

#### 1.01 SCOPE OF WORK

- A. Provide labor, equipment and materials to install 'Wood Carpet' reactive playing surface.
- B. Provide labor, equipment and materials to install wood edge.

## 1.02 RELATED WORK

A. Section 32 13 13 Concrete Paving

#### 1.03 QUALITY ASSURANCE

A. All material components of the 'Wood Carpet' reactive playing surface shall be obtained from Zeager Bros., Inc., or its' authorized distributors.

## 1.04 SUBMITTALS

A. Zeager Bros., Inc. shall submit samples of the 'Wood Carpet' Reactive Playing Surface.

# 1.05 ACCEPTABLE MANUFACTURERS

- A. Zeager Bros. Inc., 4000 East Harrisburg Pike, Middletown, Pennsylvania 17057, (800) 346-8524.
- B. Manufacturers of systems to be considered equal to 'Wood Carpet' reactive play surface shall be approved by the Owner in writing prior to the bid date.

# PART 2 PRODUCTS

## 2.01 MATERIALS

- A. 'WOODCARPET' will consist of North American Hardwoods such as Oak, Maple, Ash, Poplar, Hickory, Beech, Birch, Locust. All wood will have been debarked and free of soil, leaves and twig material and other contaminates which may otherwise hasten decomposition. No chemical treatments or additives will be used.
- B. 4" diameter perforated pipe 4" perforated pipe with 'ADS' Drain Sock as manufactured by ADS, Columbus, Ohio 43221, (614) 457-3051 or equal.
- C. Soil separator-Polypropylene, soil separator Model #'Mifari' 140N' as manufactured by Mirafi, Inc., Charlotte, NC 28224, (800) 438-1855, or equal.
- D. 4" x 4" nom. pressure-treated southern yellow pine.
- E. Geotextile board Model '#9010' by 'Enkadrain' or equal.
- F. Drainage gravel -VDOT #57

#### 2.02 DIMENSIONS

A. WOODCARPET shall be randomly sized, and approximately ten times longer than wide. WOODCARPET shall meet the gradation requirements of ASTM C 136.---Ninety-eight percent (98%) of WOODCARPET dimensions shall not exceed 4.00 centimeters in length, 1.30 centimeters in width and 3.25 centimeters in depth.

#### 2.03 PERMEABILITY

A. Moisture absorption of WOODCARPET shall be no greater than one hundred fifty percent (150%) by weight. Coefficient of permeability is greater than 0.6 cm/sec ASTM D 2434.

## PART 3 EXECUTION

#### 3.01 BASE

- A. Subgrade- Compact to 95% standard proctor density and compressive strength- ASTM C39.
- B. If aggregate base course is not constructed immediately after subgrade has been prepared, compacted and approved by Owner, and subgrade becomes cut-up or rough, scarify a minimum of 8 inched depth, mix, reshape, and recompact to 95% of maximum density.
- C. Construct aggregate base course of thickness indicated in accordance with Section 309, VDOT Road and Bridge Specifications.

#### 3.02 WOODCARPET

- A. Install drainage piping as per plans. Drain towards storm line and connect to solid pipe.
- B. Geotextile fabric shall be continuous. Lap all material splices a minimum of 4" width. Seams should be placed in same direction as routes of play equipment.
- C. Wood edging shall be installed according to plan. Joints shall be alternated, beams shall be 1/2" above grade.
- WOODCARPET (resilient surface material) shall be spread to a 12 inch depth after compaction.

To achieve compaction:

- 1. Apply 6"-10" of WOODCARPET to the top layer of geotextile fabric. If WOODCARPET is not moist to the touch, wet down surface with approximately 1" of water.
- 2. Using a vibrating roller or flat surface compactor, run over the surface two times, changing direction 90° on each pass. WOODCARPET should compact to approximately 4.5 inches.
- 3. Apply second 6"-10" of WOODCARPET, adding moisture as indicated above.
- Compact second layer of WOODCARPET using a vibrating roller or flat surface compactor, as instructed above. Total depth of WOODCARPET should be approximately 9".

- 5. Apply final 4" to 8" layer of WOODCARPET. If WOODCARPET is not moist to the touch, wet down the surface with approximately 3/4" of water.
- 6. Using a rake, or other leveling device, remove all hills and valleys from the surface.
- 7. On final compaction, level the surface between each change of direction. Run compactor over the surface at least 3 times to achieve final compaction. Final WOODCARPET depth should now be approximately 12".

## 3.03 COORDINATION

Coordinate installation of play surface and drainage with play equipment provided by others.

# **END OF SECTION**