PART 1 - GENERAL

1.1 SUMMARY

A. The General Conditions and Division - 1 Specification sections apply to the work of this section.

B. The following documents form part of the Specifications to the extent stated. Where differences exist between Codes, Standards, and the Documents, the one affording the greatest protection and/or more stringent condition shall apply.

C. Sustainable Design Requirements: Provide the Work and submit documentation necessary for compliance with specified sustainable requirements.

D. Section Includes:

1. Decomposed granite aggregate paving with Stabilizer binder additive.

1.2 SUBMITTALS

A. Physical sample: One pound representative sample of specified decomposed granite.

B. Product data: For each product indicated.
1. Stabilizing Binder: Manufacturer’s information for stabilizing binder.

C. Test Reports: for Decomposed Granite sieve analysis.
1. Sieve analysis: for gradation of decomposed granite. Sieve analysis is to be performed within one month of product data submission. Outdated sieve analyses will be rejected.
2. Geotextile fabric.

D. Shop Drawings: Show details of installation including plans and section.

E. Installation Procedures: Contractor’s installation procedures for installation of Decomposed Granite. Procedures to include stabilizer installation, placement of Decomposed Granite, and compaction of Decomposed Granite.

1.3 QUALITY ASSURANCE

A. Perform gradation of decomposed granite material in accordance with ASTM C 136 - Method for Sieve Analysis for Fine and Course.

B. Preinstallation Conference: Conduct conference at Project site to include Landscape Architect.

C. Mock-ups: Install 4 ft. wide x 10 ft. long mock-up of decomposed granite or 3/8" or 1/4" minus crushed aggregate paving with Stabilizer additive at location as directed by owner's representative.

D. Installer to provide evidence to indicate successful experience in providing decomposed granite paving containing Stabilizer binder additive.

E. Contractor’s Quality Control Responsibilities: Contractor is solely responsible for quality control of the Work.

F. Regulatory Requirements: Comply with applicable requirements of the laws, codes, ordinances and regulations of Federal, State and Municipal authorities having jurisdiction. Obtain necessary approvals from all such authorities.

1.4 TESTS

A. Perform gradation of decomposed granite material in accordance with ASTM C 136 - Method for Sieve Analysis for Fine and Course.

1.5 WARRANTY

A. Warranty Period: Contractor shall provide a (1) year warranty for installation, material, and performance of final installed component system.

1.6 ENVIRONMENTAL CONDITIONS

A. Do not install decomposed granite paving during rainy conditions or below 40 degrees Fahrenheit and falling.

1.7 EXCESS MATERIALS

A. Provide Owner's representative with the following excess materials for use in future decomposed granite paving repair:

1. Ten (10) - 50 pound bags of decomposed granite
2. One (1) - 40 lb. bag of the stabilizer additive

PART 2 - PRODUCTS

2.1 DECOMPOSED GRANITE SCREENINGS

A. Color: Match Landscape Architects Control Sample.

B. Crushed Stone Sieve Analysis Percentage of Weight Passing a Square Mesh Sieve AASHTO T11-82 and T27-82

1/4" MINUS AGGREGATE GRADATION

Sieve Designation	Range of % Passing
3/8"	100
No. 4	95-100
No. 8	75-80
No. 16	55-65
No. 30	40-50
No. 50	25-35
No. 100	20-25
No. 200	5-15

C. Sand and crushed stone shall consist of inert materials that are hard and durable, with stone free from surface coatings and deleterious materials.

D. Material to be washed as required by Landscape Architect to remove dirt, dust, etc. Washing to be performed offsite or at a laydown area onsite as identified by the Contractor. Material shall not be washed in place and/or during final installation. Material washing shall be performed prior to mixing of stabilizer binder. All moisture shall be removed as required by stabilizer binder manufacture's installation requirements and instructions.

2.2 STABILIZER BINDER

A. Patented, non-toxic, organic binder that is a colorless and odorless concentrated powder that binds decomposed granite together to produce a firm surface.
   1. Provided by Stabilizer Solutions, Inc. 33 South 28th St., Phoenix, AZ 85034; phone (800) 336-2468. Website stablizersolutions.com; email info@stabilizersolutions.com

2.3 GEOTEXTILE FABRIC

1. Woven Geotextiles Filter Fabric.
   a. US-200 Woven Geotextile, or approved equal.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. US Fabrics, Inc., 800-518-2290

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verification of Conditions: Examine the areas to receive the Work and the conditions under which the Work would be performed. Remedy conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.

3.2 SUBGRADE PREPARATION

A. The subgrade preparation shall include the following:

   1. Prepare Subgrade to 8" below finished grade of the decomposed granite.
   2. Compact subgrade to 95% density.

B. Lay filter fabric flat over the compacted subgrade, without wrinkles and carefully cut around necessary elements. Utilize metal filter fabric staples as required to keep the fabric in place during installation.

3.3 BLENDING STABILIZER

A. Blend 15 pounds of Stabilizer per ton of decomposed granite or crushed 3/8-inch or 1/4-inch minus aggregate screenings. It is critical that Stabilizer be thoroughly and uniformly mixed throughout decomposed granite screenings. Bucket blending is not acceptable. Blending with a rake and / or shovel is not acceptable. Blend material dry.

3.4 PLACEMENT OF DECOMPOSED GRANITE SCREENINGS

A. Place material in two (2) 2" lifts. Dampen thoroughly, roll and compact each layer separately to achieve finished grade per plans. Insure positive drainage.

B. Upon thorough moisture penetration, compact aggregate screenings to 95% relative compaction by compaction equipment such as; double drum roller (2-4 ton) or single drum roller (1000 lbs.) Do not use vibratory plate tamp or vibration function on roller. Do not begin compaction for 6 hours after placement and up to 48 hours.

C. Take care in compacting decomposed granite screenings when adjacent to planting and irrigation systems.
   1. Do not compact decomposed granite within 3-feet of a tree trunk.

D. Finished surface of pathway shall be smooth, uniform and solid. There shall be no evidence of chipping or cracking. Cured and compacted pathway shall be firm throughout profile with no spongy areas. Loose material will not be present on the surface after installation, but may appear after use and according to environmental conditions. Pathway shall remain stable underneath the loose granite on top. Any significant irregularities in path surface shall be repaired to the uniformity of entire installation.

3.5 INSPECTION

A. Finished surface of pathway shall be smooth, uniform and solid. There shall be no evidence of chipping or cracking. Cured and compacted pathway shall be firm throughout profile with no spongy areas. Loose material will not be present on the surface after installation, but may appear after use and according to environmental conditions. Pathway should remain stable underneath the loose granite on top. It is a "natural" looking pathway, yet stable throughout. Any significant irregularities in path surface shall be repaired to the uniformity of the entire installation.

3.6 REPAIRS AND PROTECTION

A. Remove and replace decomposed granite paving that is damaged, defective or does not meet requirements of this section.

B. Excavate damaged area to the depth of the Stabilized aggregate and square up side walls.

C. If area is dry, moisten damaged portion lightly.

D. Pre-blend the dry required amount of Stabilizer powder with the proper amount of aggregate in a concrete mixer.

E. Add water to the pre-blended aggregate and Stabilizer. Thoroughly moisten mix with 25 to 35 gallons per ton of pre-blended material or to approximately 10% moisture content.

F. Apply moistened pre-blended aggregate to excavated area to finish grade.

G. Compact with an 8" to 10" hand tamp or 250 to 300 pound roller (if area is high traffic such as, cart path, driveway, parking lot, use a larger 1000 lb. roller). Keep traffic off areas for 12 to 48 1lours after repair has been completed.

3.7 MAINTENANCE

A. Remove debris; such as paper, grass clippings, leaves or other organic material by mechanically blowing or hand raking the surface as needed.

B. During the first year, a minor amount of loose aggregate will appear on the surface (1/1 6 to 1/4 inch). If this material exceeds a 1/4 of an inch redistribute the material over the entire surface. Water thoroughly to the depth of 1”. Compact with power roller of no less than 1000 lbs. This process should be repeated as needed.

C. If cracking occurs, sweep fines into the cracks, water thoroughly and hand tamp with an 8" to 10” hand tamp plate.

D. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.

END OF SECTION