

SECTION [32 15 40] [02730]

STABILIZED DECOMPOSED GRANITE SURFACING

EDIT SPECIFICATION: Edit the following guide specification to comply with project requirements. This document is available in word processing format at our website. Section numbers based on *MasterFormat 2004* except that numbers shown in blue are based on *MasterFormat 1995*. TURN ON HIDDEN TEXT FUNCTION TO SEE OR PRINT NOTES TO THE SPECIFIER.

COORDINATE WITH DRAWINGS: Show location and extent of stabilized granite surfacing. Show details required at adjoining materials and special conditions. The depth of base coursed and the thickness of stabilized granite surfacing can be either shown on the drawings or described in the specifications; edit this section carefully to avoid conflicting requirements.

FOR MORE INFORMATION: Contact Minick Materials at www.minickmaterials.com or call 405-789-2068.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Stabilized decomposed granite surfacing.
- B. Related Work:
 - 1. Section [[32 16 13] [02770] – Concrete Curbs] [_____]: Concrete curbs.
 - 2. Section [[31 10 00] [02310] – Earth Moving] [_____]: Grading.
 - 3. Section [[32 11 00] [02720] – Base Courses] [_____]: Base Course.

1.2 REFERENCES

- A. ASTM C136 – Sieve Analysis of Fine and Coarse Aggregates.
- B. ASTM D2419 – Sand Equivalent Value of Soils and Fine Aggregates.
- C. “Greenbook” Standard Specifications for Public Works Construction.
- D. [RIS – Redwood Inspection Services Grades of California Redwood.]
- E. USP – U.S. Pharmacopeial Convention (1995).

1.3 SEQUENCING

- A. Do not install work specified in this Section prior to acceptance of earth moving.
- B. Coordinate work specified in this Section with work specified in other Sections to minimize cutting of and operation of heavy equipment over installed stabilized decomposed granite surfacing.

1.4 SUBMITTALS

- A. Submit in accordance with Section [[01 33 00] [01330] – Submittal Procedures] [_____]:
 - 1. Manufacturer’s product data sheet and installation instructions indicating that product complies with specifications for:
 - a. Stabilized decomposed granite surfacing.
 - b. [Edging] [and] [_____].
 - 2. Submit [quart] [_____] samples of stabilized decomposed granite material [in color[s] specified.] [in manufacturer’s standard colors for selection.]
 - 3. [Redwood Edging: Submit evidence of chain-of-custody in accordance with Forest Stewardship Council.]

1.5 MOCK-UP

- A. Install [20] [_____] square feet minimum of stabilized decomposed granite surfacing, including [base course and] edging, at location approved by [Architect] [Engineer].
- B. Allow [Architect] [Engineer] to view mock-up before proceeding with rest of stabilized decomposed granite surfacing.
- C. [Approved mock-up may remain as part of completed Work.] [Remove mock-up after acceptance of work specified in this Section.]

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Protect stabilized decomposed granite mix from contamination. Store under cover.

1.7 FIELD CONDITIONS

- A. Do not install stabilized decomposed granite surfacing when subbase is wet at saturated field capacity.

PART 2 - PRODUCTS

2.1 STABILIZED DECOMPOSED GRANITE MATERIALS

- A. Acceptable Manufacturer:
1. Specification is based on products by Minick Materials, Oklahoma City, OK; phone 405-789-2068; fax 405-495-1842; www.minickmaterial.com.
 2. Substitutions: [Not allowed.] [Products by other manufacturers that comply with specifications will be considered in accordance with Section [[00 21 13] [00200] - Instructions to Bidders.] [[01 25 00] [01630] – Substitution Procedures.] [_____.]

B. Decomposed Granite:

1. Produce from naturally friable granite. Blends of coarse sand and rock dust are not acceptable.
2. Gradation, in accordance with ASTM C136:

Sieve Size	Percent Passing
1/2"	100
3/8"	90 – 100
No. 4	50 – 100
No. 30	25 – 55
No. 100	10 – 20
No. 200	5 – 18

3. Sand Equivalent: 30 minimum in accordance with ASTM D2419.
4. Color: [Equal to Minick Materials [_____].] [To be selected by [Architect] [Engineer] from manufacturer’s standard colors.]
5. Supplier: Minick Materials, Oklahoma City, OK; phone 405-789-2068; fax 405-495-1842; www.minickmaterial.com.www.

C. Binder: Provide Natracil by Minick Materials and complying with following requirements:

1. Swell Volume: 35 ml/gm minimum in accordance with USP procedures.
2. 90% minimum shall pass a No. 40 mesh screen.

D. Factory Blending:

1. Mix decomposed granite and Natracil™ with a pug mill that includes a weigh-belt feeder.
2. [Pedestrian Paths] [Horse Trails] and [_____]: Mix 12 lbs. of binder per 2000 lbs. of aggregate.
3. [Vehicular Drives] [Roadways] and [_____]: Mix 14 lbs. of binder per 2000 lbs of aggregate.

2.2 BASE COURSE MATERIAL

- A. Comply with Greenbook Section 200-2 – “Untreated Base Materials” for [crushed aggregate base or crushed slag base] [crushed miscellaneous base] [processed miscellaneous base] [select subbase].

2.3 ACCESSORIES

- A. Water: Free from contaminants that would discolor or be deleterious to stabilized decomposed granite surfacing.
- B. [Steel [Edging] [and] [Water Diversion Bars]]:
 - 1. Dimensions: [3/16"] [1/4"] [_____] thick by [4-inch] [_____] deep, with overlapping joints.
 - 2. Stakes: 3/16" x 16" long x 1-3/4" wide at top tapering to point at bottom; located 36" o.c. maximum.
 - 3. Finish: [Baked-on [green] [brown] [black] paint.] [Hot-dipped galvanized.]
- C. [Redwood [Edging] [and Water Diversion Bars]]:
 - 1. Material: RIS Merchantable Heart Grade [from sustainability managed forests as certified by the Forest Stewardship Council.]
 - 2. Dimensions: Nominal [1 x 4] [_____] inches.
 - 3. Stakes: Nominal [2 x 2] [_____] inches by 16" long; located 36" o.c. maximum.
- D. [Recycled Plastic Lumber [Edging] [and] [Water Diversion Bars]]:
 - 1. Material: lumber made from recycled polyethylene and UV stabilizers.
 - 2. Dimensions: Nominal [2 x 4] [_____] inches.
 - 3. Stakes: Steel, 3/16" x 16" long x 1-3/4" wide at top tapering to point at bottom; located 36" o.c. maximum.
 - 4. Finish: Provide in color to be selected by [Architect] [Engineer] from manufacturer's standards.
- E. [Geosynthetic Fabric: Comply with Greenbook Section 213-2 – "Geosynthetics", Type [N90] [_____.]
- F. [Soil Sterilant: [_____]]

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine grading and subsoil conditions. Do not proceed until conditions are acceptable.

3.2 PREPARATION

- A. Excavation: Excavate to depth required so edges of stabilized decomposed granite surfacing will match adjacent grades and have a maximum cross slope of 1 percent. [Remove excavated soil from site. [Spread excavated surface as specified in Section [31 10 00] [02310] [_____].]
- B. Subgrade Preparation: Comply with Greenbook Section 301-1 – "Subgrade Preparation."

- C. [Geosynthetic Fabric: Comply with Greenbook Section [300-10 – “Geotextiles for Separation”] [_____]. Do not extend beyond limits of stabilized decomposed granite surfacing.]
- D. Base Course Installation: Comply with Greenbook Section 301-2 – “Untreated Base.”
- E. [[Edging,] [Water Diversion Bars,] [and] [Parking Stall Markings]: Install flush with stabilized decomposed granite surfacing. Provide sufficient stakes to secure in place.]

3.3 INSTALLATION

- A. Prior to installation, thoroughly presoak surface on which stabilized decomposed granite surfacing is to be placed.

Natracil™ Stabilized Decomposed Granite is typically installed four (pedestrian) to six (vehicular) inches thick.

- B. Install in 2” maximum lift thickness and soak with sufficient water to activate Natracil™ through entire depth of lift. Install the additional lifts and soak with sufficient water to activate Natracil™ as required.
- C. Grade and smooth to required elevation.
- D. Compact: After +/- 4 hours, compact final lift with a three-five ton double or single static drum roller.
- E. Minimum Compacted Thickness: Install to depth shown on Drawings.
- F. Minimum Compacted Thickness:
 1. [Pedestrian Paths] [Horse Trails] and [_____]: [4] [_____] inches.
 2. [Vehicular Drives] [Roadways] and [_____]: [6] [_____] inches.
- G. Surface shall follow overall contours of landscape. Flat areas shall be crowned for drainage. [Slope [one] [_____] percent minimum to drain away from structures.]
- H. Completed surface shall be of consistent quality and free of deleterious materials such as organic materials, nails, stones, and loose material. Surface shall not have depressions or humps greater than [¼] [_____] inch in ten feet.

3.4 FIELD QUALITY CONTROL

- A. Material shall comply with manufactures specifications.

3.5 PROTECTION

- A. Do not allow traffic on stabilized decomposed granite surfacing for four days after placement or until compacted stabilized decomposed granite has fully cured.
- B. Protect stabilized decomposed granite surfacing from damage until Project completion. Repair damaged areas to match specified requirements.

3.6 MAINTENANCE & REPAIRS

- A. Loose aggregate will appear on the surface over time which is a natural occurrence. If excessive aggregate over ¼ inches occurs, redistribute the stabilized decomposed granite over the entire surface, water thoroughly and re-compact with a minimum one ton drum roller. This process can be repeated as needed.
- B. To repair, excavate damaged area leaving a minimum one inch depth of existing stabilized decomposed granite, water and scarify. Scarifying existing stabilized decomposed granite will prevent a cold joint layer between the existing stabilized decomposed granite and the newly imported pre-blended stabilized decomposed granite.
- C. Add water to the pre-blended stabilized decomposed granite to activate. Apply moistened pre-blended stabilized decomposed granite to excavated area at or above finished grade.
- D. Compact with a walk behind drum roller. Do not allow traffic on stabilized decomposed granite surfacing for one-two days after placement or until compacted stabilized decomposed granite has fully cured.

E. END OF SECTION
