STABILIZED CRUSHER FINES TRAIL

302.1 GENERAL

The work provided under this specification shall include the furnishing, placement and compaction of stabilized crusher fine aggregate to the lines, grades, dimensions, moisture, density and typical sections as specified in the plans and specifications, and or as directed by the ENGINEER/LANDSCAPE ARCHITECT. The CONTRACTOR shall be solely responsible for the stabilized crusher fine aggregate batched at the site. The crusher fine aggregate, shall be certified in accordance with the requirements of Section 13 of these specifications

302.1.1 The stabilized crusher fine trail is not intended to meet the American with Disabilities Act requirements.

302.2 REFERENCES

302.2.1 ASTM:

C136	D1557
D422	D2940
D4318	
D2419	
D2922	

302.2.2 This Publication:

Section 301 Subgrade Preparation

302.3 MATERIALS

- 302.3.1.1 Crusher fine aggregate shall be of either crushed stone or crushed gravel of materials conforming to the requirements of ASTM D2940 and the plans and specifications, as authorized by the ENGINEER/LANDSCAPE ARCHITECT.
- 302.3.1.2 A 5 lb sample and sieve analysis, certified by a Registered New Mexico Professional Engineer shall be submitted to and authorized for use by the ENGINEER before the material may be incorporated in the construction. The ENGINEER should consult Tables 302.A and 302.B for guidance as well as a visual inspection of the material.
- 302.3.2 Stabilizer of the crusher fine aggregate shall comply with this specification and be mixed into the crusher fine aggregate prior to placement.
- 302.3.3 The stabilizer shall meet the following requirements:

- A. Non-toxic and Organic binder
- B. Porous
- C. 100% recyclable
- D. Colorless and odorless powder
- E. Maintains the bond during wet conditions
- F. Stabilizer Solutions, Inc or equivalent

302.4 TRANSPORTATION AND PLACEMENT

- 302.4.1 Crusher fine aggregate shall be transported in suitable vehicles with a cover. A load shall be covered immediately after loading and remain covered until unloading.
- 302.4.2 The CONTRACTOR shall provide to the ENGINEER/LANDSCAPE ARCHITECT with each load of batched and/or delivered to the job site, before unloading at the site, a copy of the delivery ticket on which is printed, stamped or written, the information defined in TABLE 302.D.
- 302.4.3 The area of placement for the stabilized crusher fine trail shall be excavated to the depth of the trail and the top of the trail shall match the grade on either side of the trail. There is to be a 18 inch clear area on either side of the trail. If the adjacent land beyond the 18 inches is higher than the grade of the trail, a swale is to be installed to prevent concentrated flows from draining across the trail.
- 302.4.4 The crusher fine trail is to have a cross slope of 1.0% to 2.0% and the longitudinal slope is to be less than 8%.
- 302.4.5 Do not install Stabilized Crusher fines during rainy conditions or below 40 degrees Fahrenheit and falling.
- 302.4.6 Stabilizer shall be thoroughly pre-mixed with the crusher fine aggregate per manufacturer's specifications at the rate specified by the manufacture.
- 302.4.7 Crusher fine aggregates shall be placed on prepared subgrade, prepared in accordance with the requirements of SECTION 301, the plans and specifications, and or as directed by the ENGINEER/LANDSCAPE ARCHITECT.
- 302.4.8 Crusher fine aggregate shall be placed in one lift.
- 302.4.9 Water for full-depth moisture penetration or profile. It is estimated that the application of water will be 25 to 45 gallons per ton.

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- 302.4.10 Contractor shall wait a minimum of 6-72 hours or until such time that the stabilized crusher fine aggregate is able to accept compaction from a 1 to 5 ton roller without separation, plowing or any other physical compromise of the material. Vibratory compaction is prohibited as it separates the large aggregate particles.
- 302.4.11 If the surface dries significantly quicker than the subsurface material, lightly mist the surface before compacting.
- 3.4.12 Compact stabilized crusher fine aggregate to 85% relative compaction per ASTM D 2922.
- 302.4.13 The finish surface of the compacted aggregate base course shall not deviate from the plan thickness by more than 1/2 inch. If the thickness deviates by more than 1/2 inch the trail will be rejected, or if accepted by the ENGINEER/LANDSCAPE ARCHLITECT a pay factor of 0.7 shall be applied.
- 302.4.7 Motorized vehicles are not allowed on finished crusher fine trails.
- 302.4.8 Public Access shall be prevented for 12-72 hours after installation, depending on weather conditions, the drier the weather, the shorter the drying time.

302.5 TESTING

- 302.5.1 Finished surface shall be smooth, uniform and solid with no evidence of chipping or cracking. The pathway shall be firm throughout the profile with no soft areas. Loose material shall not be present on the surface after installation, but may appear after use.
- 302.5.2 A sample of material delivered to the project shall be taken for each 50 tons placed or each day's placement, whichever is greater, and tested for gradation and compliance with the approved material for the job. Non complying material shall be re-sampled and tested for compliance. Material not in compliance after the initial and follow up testing shall be removed and replaced by the CONTRACTOR at no cost to the OWNER, as directed by the ENGINEER/LANDSCAPE ARCHITECT.
- 302.5.4 Compaction tests shall be taken at the rate of one test for each 50 sy/lift placed, or as directed by the ENGINEER, in accordance with the requirements of ASTM D 2922. Areas represented by non complying tests shall be reworked and retested for compliance.
- 302.5.4 Test reports shall include but not be limited to the requirements of TABLE 302.E.
- 302.5.5 Test Results shall be reported to the ENGINEER/LANDSCAPE ARCHITECT,

CONTRACTOR, and OWNER in writing, within 4 working days of completion of the sampling and or field test. Non-complying test shall be reported within 1 working day of completion of the test.

302.6 MEASUREMENT AND PAYMENT

- 302.6.1 Measurement of crusher fine aggregate shall be by the square yard for a 3" thick compacted trail, complete in place.
- 302.6.2 Payment shall be at the contract unit price per square yard per each thickness required, complete in place which shall include all material, labor and equipment required in placing, grading and compacting the crusher fine aggregate.

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Table 302.A AGGREGATE REQUIREMENTS

Color Per construction plans
Plasticity Index (Material finer than No. 40 sieve) Per construction plans
6.0 max

TABLE 302.B GRADATION RANGES

SIEVE SIZE/TYPE	PRODUCTION RANGE (% passing)
3/8 inch	100
#4	90-100
#8	55-80
#16	40-70
#30	25-50
No.200	6-15

TABLE 302.C SUBMITTAL REQUIREMENTS

- A. Supplier
- B. Date
- C. 5 lb. of crusher fine aggregate
- D. Contractor
- E. Construction project number
- F. Construction Project Title (contract)
- G. Certification of compliance
- H. Target Gradation of Material
- I. Manufacturer of stabilizing Agent

The submittal shall be rejected without review if the specified data is not included.

TABLE 302.D DELIVERY TICKET INFORMATION

- A. Name of Supplier
- B. Date of Delivery
- C. Delivery Ticket Number
- **D.** Name of Contractor
- E. Project Name (optional)
- F. Weight of load
- G. Time loaded

TABLE 302.E TEST REPORT INFORMATION

A. Field Data

Date of Sampling/Field Test Project Number or Permit Number Project Title

STABILIZED CRUSHER FINE TRAILS

Location of sample/field test as defined by the project plans and specifications Time of Sampling/field testing Field test results with reference specification limits

B. Laboratory Data

Compaction Plasticity Index