This ClosureTurf® Specification document has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor / Installer with a general guidance specification. All information, recommendations and suggestions appearing in this specification concerning the use of our products are based upon experience, tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The independent professional shall edit this document to suit the site specific project design criteria. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. ClosureTurf® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. Nothing herein is to be construed as permission to grant license or as a recommendation to infringe any patent.

SECTION 31 23 13

ClosureTurf® SUBGRADE PREPARATION

PART 1: GENERAL

1.01 SUMMARY

A. Section Includes:

Specifications for approved subgrade below the ClosureTurf® System.

1.02 RELATED SECTIONS

Section 31 23 13 - Subgrade preparation (Upper 6 inches of subgrade only) **Section 01 42 00** - References and Definitions Section 01 60 00 - ClosureTurf® Product Specification - ClosureTurf® MicroDrain® Product Specification Section 01 60 00 - ClosureTurf® MicroSpike® Product Specification Section 01 60 01 - ClosureTurf® Installation Specification Section 01 73 19 - ClosureTurf® Sand Infill Specification **Section 31 05 16** - Alternate HydroBinder® Infill Specification Section 03 49 01 - ClosureTurf® HDPE Pressure Relief Valve Specification Section 23 51 23

1.03 REFERENCES

A. See Section 01 42 00 - Quality Requirements - References and Definitions

PART 2: PRODUCTS

Not Used.

PART 3: EXECUTION:

3.01 EXAMINATION

A. Evaluation and Assessment:

Responsibilities for the approval and maintenance of the subgrade are as follows:

1. OWNER'S REPRESENTATIVE:

a. Verify in writing that the surface on which the geomembrane component will be installed is acceptable.

2. GEOSYNTHETICS INSTALLER:

- a. Keep the accepted subgrade surface in a condition conducive to the deployment of all ClosureTurf® components.
- b. Subgrade acceptance is determined when the deployment of the geomembrane component begins.
- c. Maintain the previously accepted subgrade.
- d. Identify any part of the subgrade that becomes non-compliant to the specifications during the course of construction.
- e. Timely submission to the OWNER'S REPRESENTATIVE of subgrade acceptance certificates.

3.02 PREPARATION

A. Surface Preparation:

- 1. Subgrade will be substantially smooth, uniform, firm and free from rocks or other debris.
- 2. No rocks or protrusions greater than 1 inch in diameter will be exposed

- at the subgrade surface.
- 3. Approved subgrade to be capable of supporting the weight of geosynthetics installation equipment.
- 4. Daily evaluation to show no changes have occurred that would render the subgrade unacceptable.

B. Non-Conforming Work

 Subgrade not meeting specifications either before or during deployment of the ClosureTurf® components will be reported to the OWNER'S REPRESENTATIVE and corrected as required.

END OF SECTION