SHOP DRAWING REVIEW FORM AND TRANSMITTAL

DATE: October 15, 2021

TO: Carl Hendrickson FROM: Michael Andrus, P.E.

Project Manager
Veolia Water

Project Manager
BETA Group, Inc.

825 West Water Street 701 George Washington Hwy Taunton, MA 02780 Lincoln, Rhode Island 02865

RE: City of Taunton, MA

WWTF Phase 1 Improvements

Contract S-2021-1

Shop Drawing No. 02272-01 REV 0 – Geotextile Materials

BETA COMMENTS:

| <u>Item</u> | Action Code | Description/Comments | |
|-------------|--------------------|-----------------------------|--|
| 1 | 1 | Geotextile Materials | |
| | | 1. Acceptable as submitted | |

Action Codes

- 1 No Exception Taken
- 2 Make Corrections Noted
- 3 Amend and Resubmit
- 4 Rejected, See Remarks
- 5 Record File Only
- a. Installation shall proceed only when Action Code is '1' or '2'.
- b. Submittals action coded '3' shall be resubmitted within time limit set in Contract.
- c. Review does not relieve Contractor from responsibility of compliance with the Contract Documents.



Hart Engineering Corporation

SUBMITTAL: 02272-01

PROJECT: 9900. - Veolia/Taunton WWTF Phase 1 Improvements DATE: 10/12/2021

SUBMITTAL: 02272-01 - Geotextile Materials

REVISION: 0 STATUS: Eng SPEC #: 02272

TO:

Michael Andrus

Beta Group Inc. 6 Blackstone Place Lincoln, RI 02865

MAndrus@BETA-Inc.com

FROM:

Ryan Murphy

Hart Engineering Corporation 800 Scenic View Drive Cumberland, RI 02864

rmurphy@hartcompanies.com

| Item | Revision | Description | Status | Date Sent | Date Returned |
|---|----------|----------------------|--|--|--|
| 02272-01 | 0 | Geotextile Materials | Eng | 10/12/2021 | |
| Notes: | | | SHOP DRAWING REVIEW | | |
| Additional Notes: Status Codes 1-APP – No Exceptions Taken 2-ANR – Make Corrections Noted 3-R&R – Revise and Resubmit 4-REJ – Rejected 5-IPO – For Information Purposes Only 6-NRR – Not Required for Review | | | 3 - Revise and Results 3 - Revise and Results 3 - Record File Only (Above Check Designates A IMPORTANT NOTE FOR C Review is only for general and information provided and comments made on the not relieve the Contractor requirements of the plans approval of a specific item of an assembly of which the or correction of a Shop Dr for extra work. The Contract and dimensions to be contracted that pertains solely to the means, methods, technique construction; coordination and subcontractors; and pastisfactory manner. BETA GROUP, INC. Mike Andrus | Action Code – See Review ONTRACTOR compliance with the des in Contract Documents. The Shop Drawings during from compliance with the and specifications. Review he item is a component. The sawing shall not include review he item is a component. The sawing shall be construed actor is responsible for: a firmed and correlated; infer fabrication processes or items, sequences and processes of the Work with that of the Work with that of the sawing all Work in a sequenced by: | ign concept Corrections review do ew and/or or approval No approval as an order ill quantities formation to the edures of all trades |
| | | | DATE: | 10/12/2021 | |



N040

Technical Data Sheet

N040

Polypropylene NonWoven Fabric

N040 is a polypropylene, needle punched nonwoven geotextile for use in drainage and separation applications. It has been stabilized to resist degradation due to ultraviolet exposure and is resistant to commonly encountered mildew, insects and soil chemicals, and is non-biodegradable.

| Property | Test Method | Min Avg. Roll Values |
|------------------------------------|-------------|-------------------------|
| Grab Tensile Strength ¹ | ASTM D4632 | 100 Lbs |
| Grab Tensile Elongation | ASTM D4632 | 50% |
| CBR Puncture | ASTM D6241 | 280 Lbs |
| Trapezoid Tear Strength | ASTM D4533 | 50 Lbs |
| Apparent Opening Size (AOS) | ASTM D4751 | 70 US Sieve |
| Permittivity (sec ⁻¹) | ASTM D4491 | 2.0 sec ⁻¹ |
| Flow Rate | ASTM D4491 | 140 gpm/ft ² |
| UV Resistance after 500 hrs. | ASTM D4355 | 70% |

Values quoted above are the result of multiple tests conducted at an independent testing facility. N040 meets or exceeds values listed.

¹Values apply to both machine and cross-machine directions

| Packaging | | |
|-------------|---------|---------------------|
| Roll Width | 12.5 ft | 15 ft |
| Roll Length | 360 ft | 360 ft |
| Roll Area | 500 sy | 600 yd ² |

