PROJECT REFERENCE NO. SHEET NO. B-3186 / B-5898 W-01A GEOTECHNICAL ENGINEER kenneth R. Bussey, Ir. 3/31/2022 DATE **DOCUMENT NOT CONSIDERED FINAL** 

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**UNLESS ALL SIGNATURES COMPLETED** 

TOP OF WALL (SEE NOTE FOR FENCE OR HANDRAIL ON TOP OF WALL, IF APPLICABLE) EXTENSION 6"MIN WITHOUT DITCH 12"MIN WITH DITCH FINISHED GRADE\*\* — BOND BREAKER WITH DITCH\* -GRADE ELEVATION -EPOXY COATED OR ENCAPSULATED ——
STEEL BAR (TYP) — NAIL HEAD (TYP) SOIL NAIL (TYP) — SHOTCRETE 4"MIN GROUT (TYP) — GEOCOMPOSITE SHEET DRAINS — @ 10' MAX HORIZONTAL SPACING CIP REINFORCED CONCRETE FACE --- WALL FACE CENTRALIZER (TYP) -6"MIN (TYP) SINGLE FACED PRECAST CONCRETE BARRIER, IF APPLICABLE INCLINATION ANGLE (TYP) FINISHED GRADE\*\* — 12 DEGREES MIN 6:1 (H:V) OR FLATTER BOTTOM OF WALL -TOP OF LEVELING PAD ---EMBEDMENT 12" MIN LEVELING PAD 6"MIN - AGGREGATE SHOULDER DRAIN IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO.816.02 NO.57 STONE -

FINISHED GRADE OR — END BENT SLOPE\*\*

— CONCRETE DITCH AND IF APPLICABLE, CONCRETE SLOPE PROTECTION\*

## SOIL NAIL WALL (RETAINING WALL NO.8) - TYPICAL SECTION

\*SEE CONCRETE DITCH BEHIND WALL DETAILS.

\*\*SEE PLANS FOR FINISHED GRADE OR END BENT SLOPE DETAILS.

## NOTES:

FOR SOIL NAIL RETAINING WALLS, SEE SOIL NAIL RETAINING WALLS PROVISION.

FOR SINGLE FACED PRECAST CONCRETE BARRIER, SEE ROADWAY PLANS AND SECTION 857 OF THE STANDARD SPECIFICATIONS.

A FENCE OR HANDRAIL IS REQUIRED ON TOP OF RETAINING WALL NO.8. SEE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS.

BEFORE BEGINNING SOIL NAIL WALL DESIGN FOR RETAINING WALL NO.8, SURVEY WALL LOCATION AND SUBMIT A REVISED WALL PROFILE VIEW (WALL ENVELOPE) FOR REVIEW. DO NOT START WALL DESIGN OR CONSTRUCTION UNTIL THE REVISED WALL ENVELOPE IS ACCEPTED.

DESIGN RETAINING WALL NO.8 FOR THE FOLLOWING: 1) H = DESIGN HEIGHT + EMBEDMENT 2) DESIGN LIFE = 100 YEARS 3) IN-SITU ASSUMED MATERIAL PARAMETERS:

UNIT WEIGHT,  $\gamma$  = 120 PCF FRICTION ANGLE,  $\phi$  = 30 DEGREES COHESION, c = 0 PSF

DESIGN RETAINING WALL NO.8 FOR A PIPE EXTENDING THROUGH THE WALL AS SHOWN. VERIFY PIPE LOCATION AND ELEVATION BEFORE BEGINNING SOIL NAIL WALL DESIGN OR CONSTRUCTION.

EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, GUARDRAIL, FENCE OR HANDRAIL POSTS, PAVEMENTS, PIPES, INLETS OR UTILITIES MAY INTERFERE WITH SOIL NAILS FOR RETAINING WALL