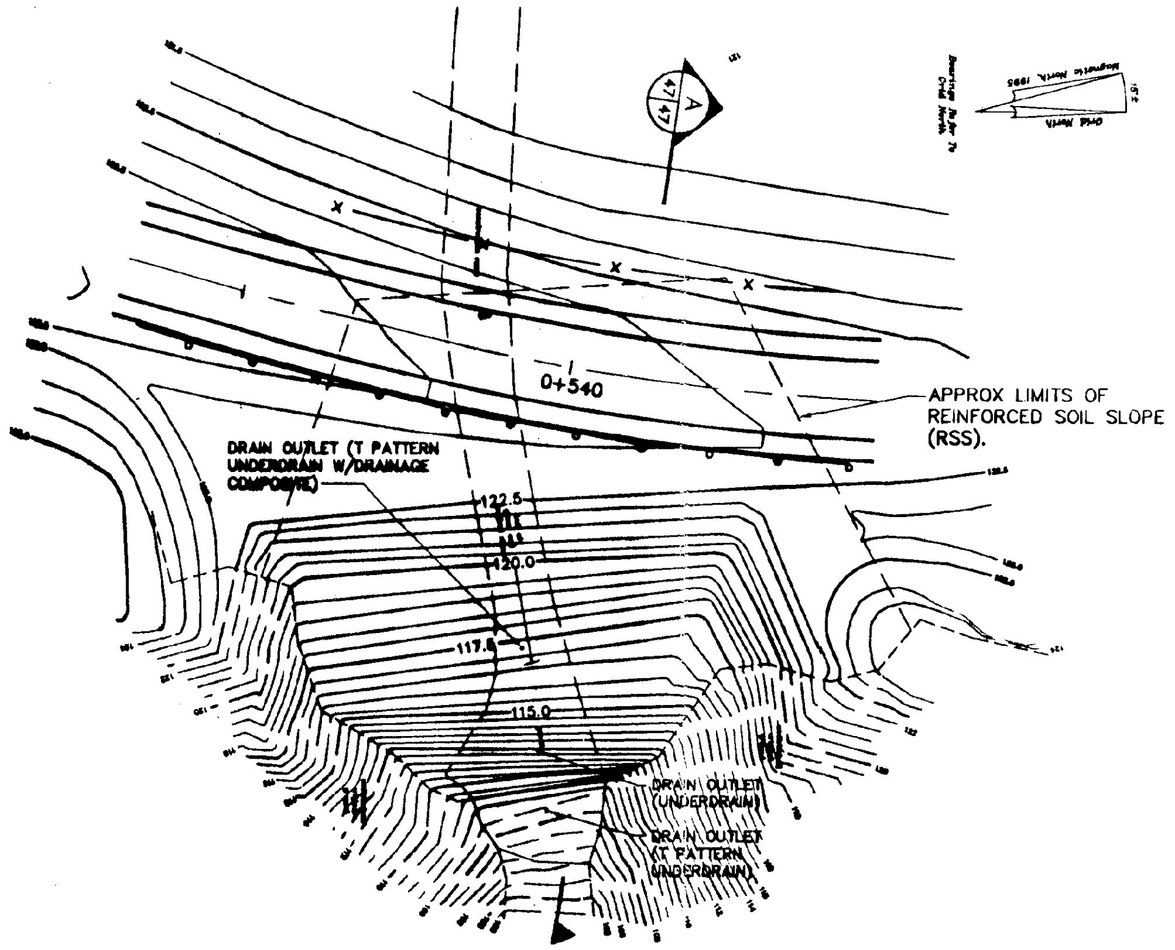
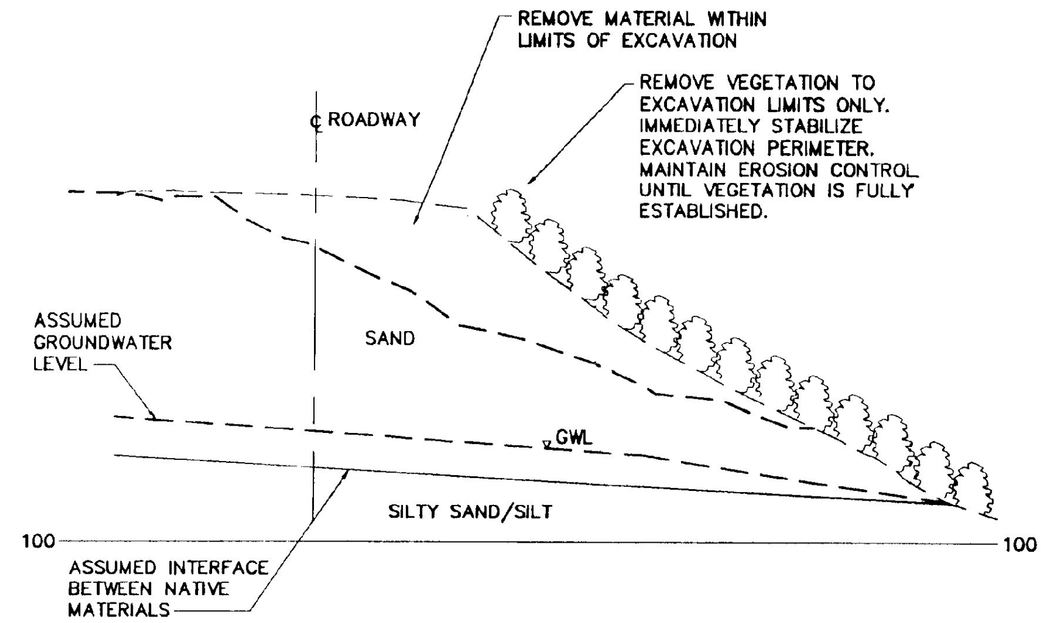
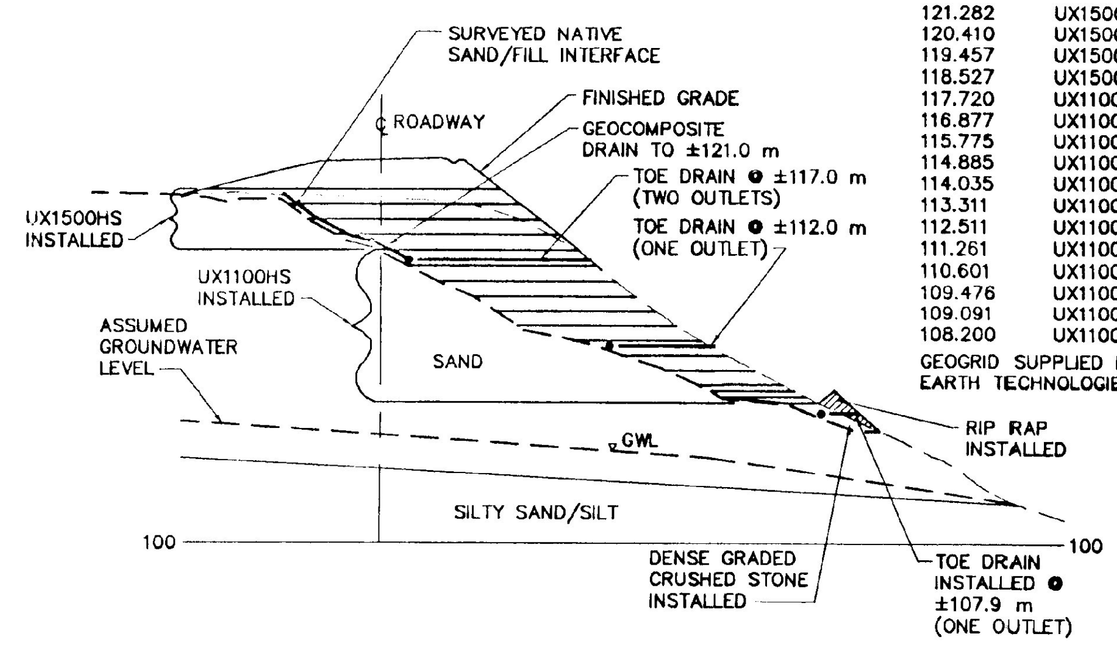


PLAN

SCALE: 1:250



SECTION A–A (DEMOLITION)



16 LAYERS OF PRIMARY GEOSYNTHETIC REINFORCEMENT AT ELEV:

121.282	UX1500HS
120.410	UX1500HS
119.457	UX1500HS
118.527	UX1500HS
117.720	UX1100HS
116.877	UX1100HS
115.775	UX1100HS
114.885	UX1100HS
114.035	UX1100HS
113.311	UX1100HS
112.511	UX1100HS
111.261	UX1100HS
110.601	UX1100HS
109.476	UX1100HS
109.091	UX1100HS
108.200	UX1100HS

GEOGRID SUPPLIED BY TENSAR EARTH TECHNOLOGIES, INC.

SECTION A–A (INSTALLATION)

SCALE: 1:250

REINFORCED SOIL SLOPE BASIS OF DESIGN/NOTES:

THIS SHEET, SHOWS THE MINIMUM EXTENT AND DEGREE OF GEOSYNTHETIC REINFORCEMENT REQUIRED. MANUFACTURER MAY PROPOSE ALTERATIONS THROUGH THE SUBMITTAL PROCESS.

BASED UPON SOIL BORINGS, NATIVE MATERIAL IS A MEDIUM DENSE SAND OVER A DENSE SILTY SAND/SILT.

BASED ON STABILITY ANALYSIS ASSUMING THE EXISTING SLOPE HAS A FACTOR OF SAFETY OF 1.3 MINIMUM, SOIL CHARACTERISTICS ARE AS LISTED BELOW. THE UPPER SURFACE IS ASSUMED TO COMPRISE A 0.1 m THICK VEGETATED ZONE.

	γ(kN/m^3)	C (kPa)	ϕ
VEGETATED ZONE:	14.2	116	37
SAND:	18.9	0	37
SILTY SAND/SILT:	20.4	0	34

BACKFILL IS ASSUMED TO BE A COMPACTIBLE GRANULAR MATERIAL W/ CHARACTERISTICS AS LISTED BELOW:

	(kN/m^3)	C (kPa)	ϕ
GRANULAR FILL:	19.7	0	32

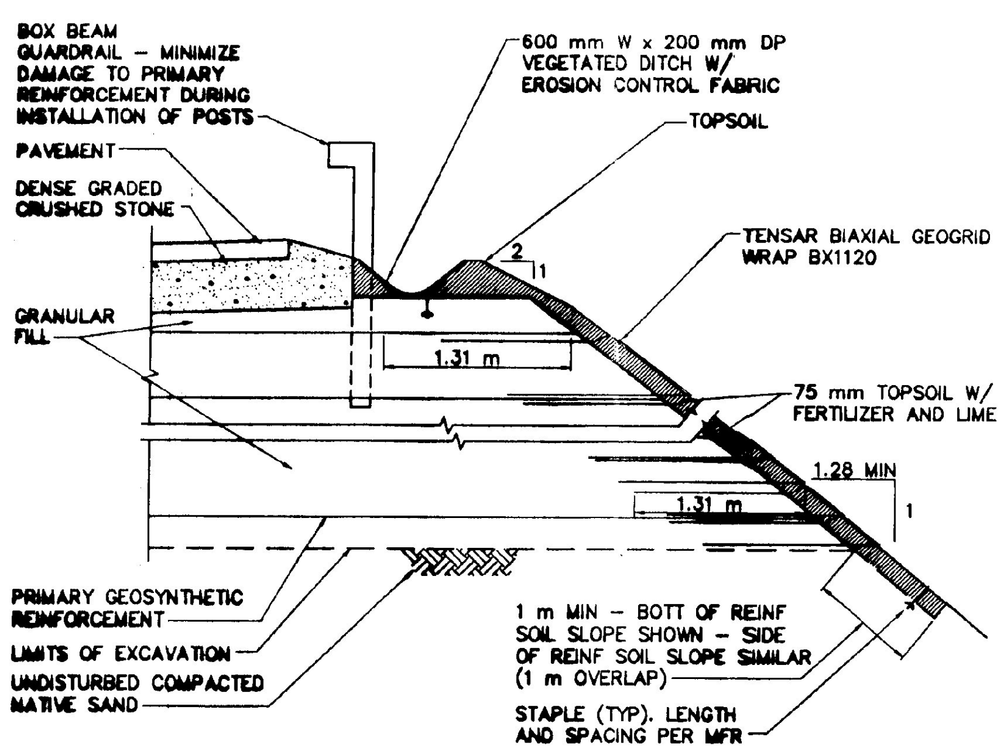
REINFORCEMENT IS ASSUMED TO BE AN ACCEPTABLE GEOTEXTILE/GEOGRID W/A MINIMUM LONG TERM ALLOWABLE TENSILE STRENGTH OF 14.6 kN/m. STRENGTH, INTERACTION AND SAFETY FACTORS ARE AS PROVIDED IN THE SPECIFICATIONS.

FOR THE REINFORCED SOIL SLOPE, DESIGN FACTORS OF SAFETY ARE 1.5 MINIMUM EXCEPT AS NOTED BELOW:

STATIC SLIP STABILITY: 1.37 (INCLUDING VEHICULAR SURCHARGE)
DYNAMIC SLIP STABILITY: 1.10 (USING 0.12g)

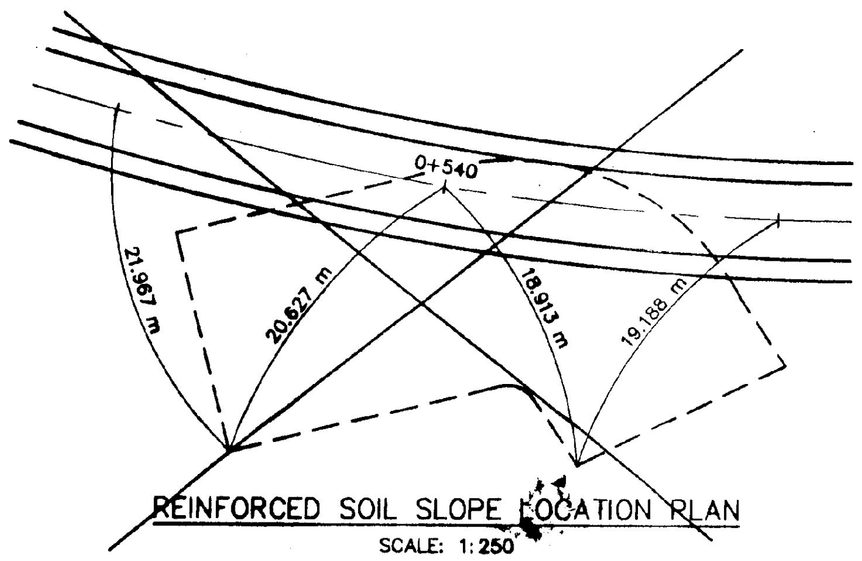
COMPACTION LEVELS SHALL BE 98% OF MAXIMUM DENSITY PER ASTM D-1557 MODIFIED PROCTOR.

BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF GRANULAR FILL. IN ADDITION, THE PLASTICITY INDEX SHALL BE LESS THAN 20 AND THE MAGNESIUM SULFATE SOUNDNESS LOSS LESS TAHN 30% AFTER 4 CYCLES



REINFORCED SOIL SLOPE DETAIL

NOT TO SCALE



REINFORCED SOIL SLOPE LOCATION PLAN

SCALE: 1:250

RECORD DRAWING

SHOWN PICTORALLY MAY NOT BE TO SCALE

THESE AS-BUILT OR RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT OF INFORMATION BY OTHERS.

Metric

NO.	DATE	REVISIONS	DRWN	CHKD
1	12/98	AS-BUILT INFORMATION ADDED	DSM	KAS

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OLD RAILROAD STATION NORTH BENNINGTON, VERMONT 05257
802-442-8184 FAX 802-442-5241

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ROBT W. HALL CONSULTING ENGINEERS, INC. — 540 MEADOW STREET EXTENSION, STE. 2, AGAWAM, MASSACHUSETTS 01001-0002, 413-789-0040, FAX 789-3295
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STATE OF VERMONT — KEVIN A. SMITH No. 5464 — REGISTERED PROFESSIONAL ENGINEER

PROJECT NO.IM 091-1 (30)
SOUTHEAST VERMONT WELCOME CENTER
GUILFORD, VERMONT

SHEET TITLE: REINFORCED SOIL SLOPE PLAN, SECTIONS AND DETAILS

DSGN BY: KAS
DRWN BY: DSM
CHKD BY: KAS
CHKD BY: KAS

STATE OF VERMONT
AGENCY OF ADMINISTRATION
DEPARTMENT OF BUILDINGS & GENERAL SERVICES

DATE: 2-18-98 SHEET NO._____ OF _____ SHEETS

C47

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