DOVER VALLEY TRAIL SEGMENT A SIDEWALK
TOWN OF DOVER, VERMONT

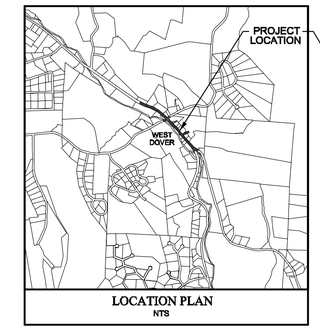
STP EH12 (3)

COUNTY OF WINDHAM
VT ROUTE 100 (MINOR ARTERIAL)

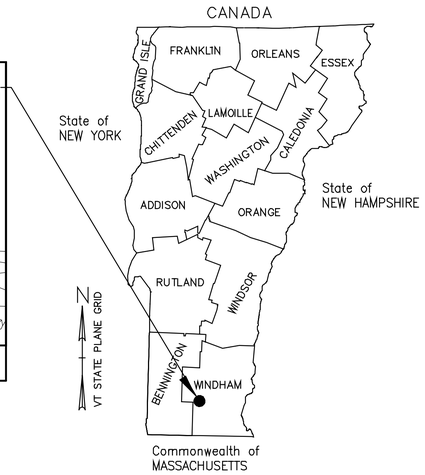
BEGINNING AT A POINT IN THE TOWN OF DOVER AND ADJACENT TO VT ROUTE 100 (MM 0.900) AND EXTENDING NORTHERLY APPROXIMATELY 2,091 FEET (0.395 MILES) TO MM1.295.

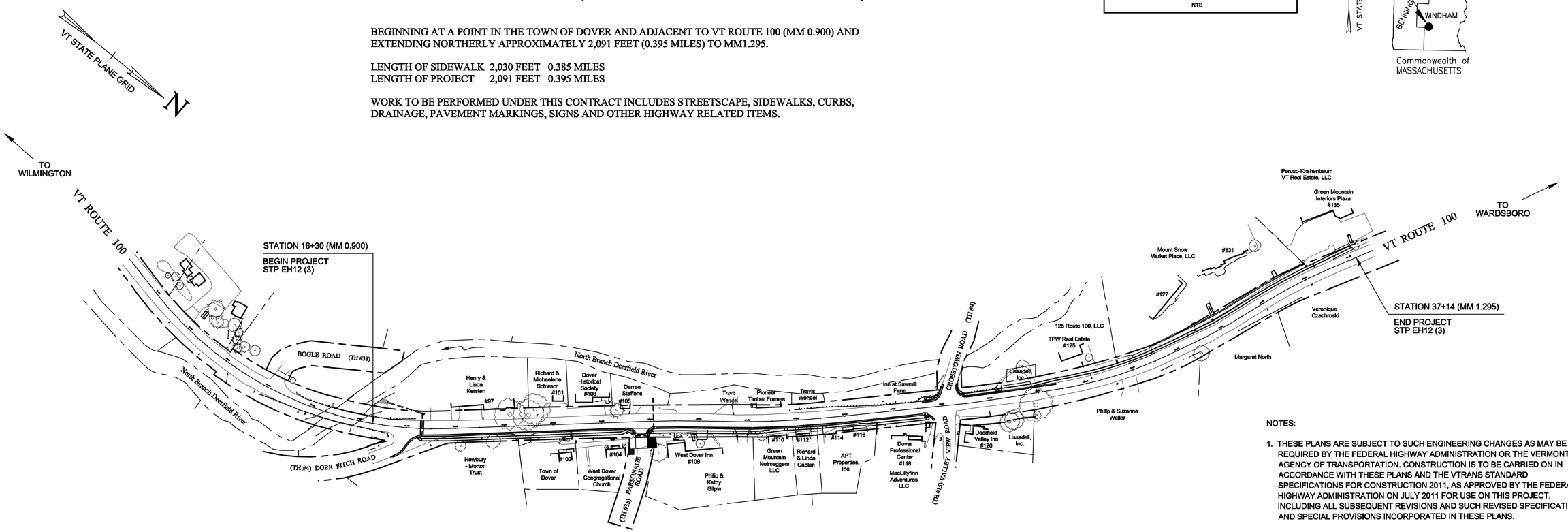
LENGTH OF SIDEWALK 2,030 FEET 0.385 MILES
LENGTH OF PROJECT 2,091 FEET 0.395 MILES

WORK TO BE PERFORMED UNDER THIS CONTRACT INCLUDES STREETSCAPE, SIDEWALKS, CURBS, DRAINAGE, PAVEMENT MARKINGS, SIGNS AND OTHER HIGHWAY RELATED ITEMS.



LOCATION PLAN
NTS





OVERALL SITE PLAN
1" = 100'

NOTES:

1. THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE VERMONT AGENCY OF TRANSPORTATION. CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS INCORPORATED IN THESE PLANS.

2. VT. ROUTE 100 SIDELINES ARE BASED ON LIMITED FOUND EXISTING BOUNDARY EVIDENCE AND VTRANS RIGHT-OF-WAY PLANS DATED OCTOBER 1964. INDIVIDUAL PROPERTY LINES WERE LOCATED BASED ON FOUND EVIDENCE, THE ABOVE VTRANS PLANS AND TOWN PARCEL MAPPING.

3. LINES SHOWN ON THESE PLANS AS EXISTING PROPERTY LINES ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE TOWN OF DOVER'S ACQUISITION OF LANDS AND RIGHTS FOR THIS PROJECT.

4. TRAFFIC DATA (ROUTE 100)
   2012 AADT = 4,900 VPD
   2032 AADT = 5,200 VPD
   2032 DHV = 950 VPH
   2032 %T = 5.4%
   DESIGN SPEED = 35 MPH
   20 YR 18 KIP ESAL'S = N/A

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

QUALITY ASSURANCE PROGRAM:
INSPECTION LEVEL 3

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83(1996)

FUNDING ASSISTANCE FOR THIS PROJECT IS BEING PROVIDED BY VTRANS AND FHWA

PRELIMINARY PLANS
JULY 2014

TOWN OF DOVER
APPROVED _____ DATE _____

PROJECT NAME : DOVER VALLEY TRAIL SEGMENT A SIDEWALK
PROJECT NUMBER : STP EH12 (3)

SHEET 1 OF 35 SHEETS

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INDEX OF SHEETS

1	TITLE SHEET
2	INDEX
3	TYPICAL CROSS SECTIONS
4-5	QUANTITY SHEETS
6-9	LAYOUT PLANS
10-15	CROSS SECTIONS
16-17	TYPICAL DETAILS
18-20	TRAFFIC CONTROL PLANS
21-24	SIGN & PAVEMENT MARKING PLANS
25	SIGN SUMMARY SHEET
26-29	EROSION PREVENTION & SEDIMENT CONTROL PLANS
30-35	RIGHT OF WAY PLANS

STANDARD SHEETS

B-5	SLOPE GRADING, EMBANKMENT ON EARTH SLOPE	6-01-94
B-71	RESIDENTIAL AND COMMERCIAL DRIVES	7-08-05
C-2A	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES	10-14-05
C-2B	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES	10-14-05
C-3A	SIDEWALK RAMPS	3-10-08
C-3B	SIDEWALK RAMPS AND MEDIAN ISLANDS	3-10-08
C-10	CURBING	2-11-08
D-3	TREATED GUTTERS	6-01-94
D-4	CORRUGATED PIPE END SECTION	8-13-07
D-20	HIGHWAY CROSSING FOR UNDERGROUND UTILITIES	3-03-03
E-107A	BREAKAWAY BARRICADE DETAILS	6-08-09
E-121	STANDARD SIGN PLACEMENT, CONVENTIONAL ROAD	8-08-95 R
E-143	REGULATORY SIGN DETAILS	6-15-04 R
E-143B	REGULATORY SIGN DETAILS	3-15-05
E-146	REGULATORY SIGN DETAILS	9-20-95
E-150	WARNING SIGN DETAILS	6-15-04
E-152	WARNING SIGN DETAILS	6-15-04
E-153B	WARNING SIGN DETAILS	6-15-04
E-191	PAVEMENT MARKING DETAILS	2-01-99
E-192	PAVEMENT MARKING DETAILS	10-12-00 R
E-193	PAVEMENT MARKING DETAILS	8-18-95
G-1d	STEEL BEAM GUARDRAIL APPROACH END TERMINAL & TRAILING END TERMINAL	1-03-00
T-1	TRAFFIC CONTROL GENERAL NOTES	8-06-12
T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	8-06-12
T-30	CONSTRUCTION SIGN DETAILS	8-06-12
T-35	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS	8-06-12
T-45	SQUARE TUBE SIGN POST AND ANCHOR	1-02-13

PRELIMINARY PLANS
JULY 2014

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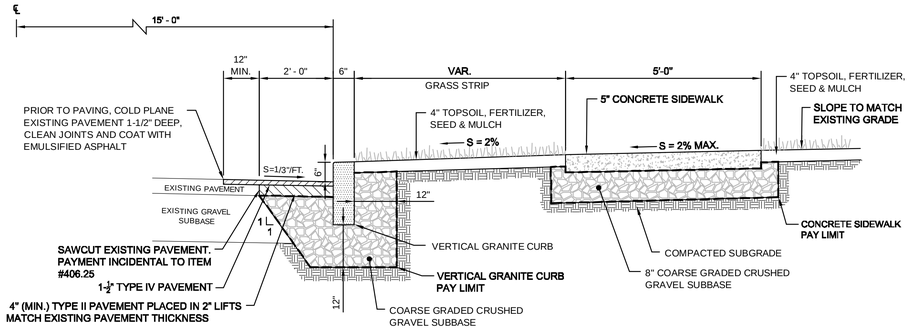
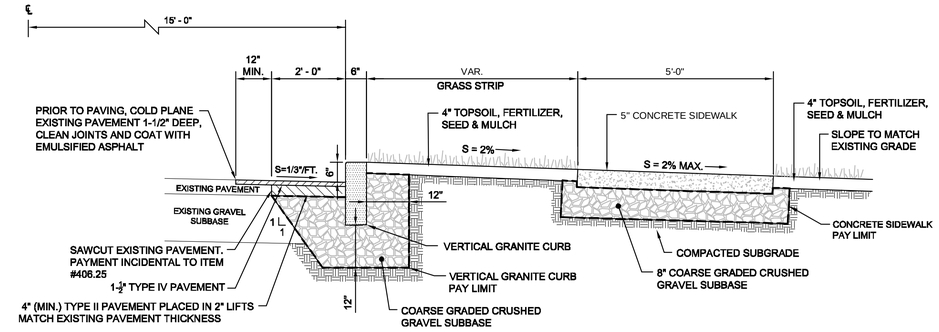


SIDEWALK & CURB WITH GRASS STRIP SLOPED TOWARDS ROAD

NTS

Sta 19+56 to Sta 21+51 RT
Sta 21+94 to Sta 24+43 RT
Sta 26+27 to Sta 27+71 RT

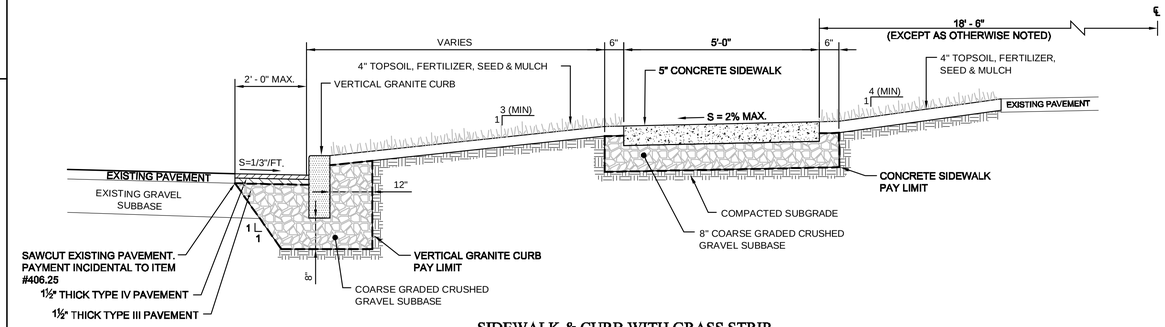


SIDEWALK & CURB WITH GRASS STRIP SLOPED AWAY FROM ROAD

NTS

CURB ONLY
Sta 16+78 to Sta 17+23 RT

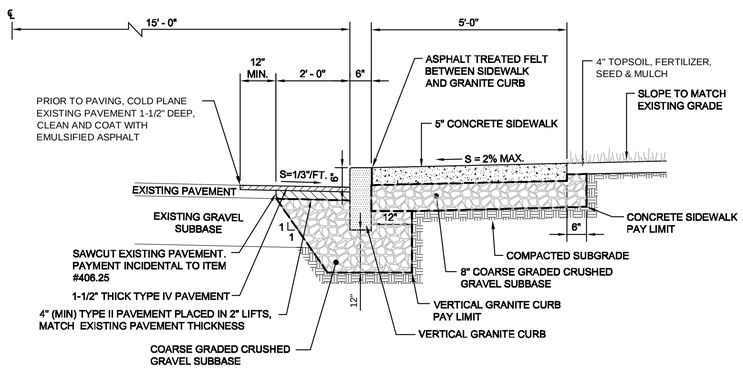
CURB & SIDEWALK
Sta 17+23 to Sta 19+25 RT



SIDEWALK & CURB WITH GRASS STRIP

NTS

Sta 32+46 to Sta 36+10 LT



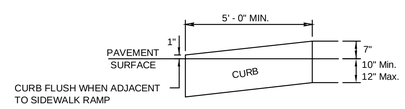
SIDEWALK & CURB SECTION WITH NO GRASS STRIP

NTS

Sta 21+51 to Sta 21+68 RT
Sta 24+43 to Sta 26+27 RT

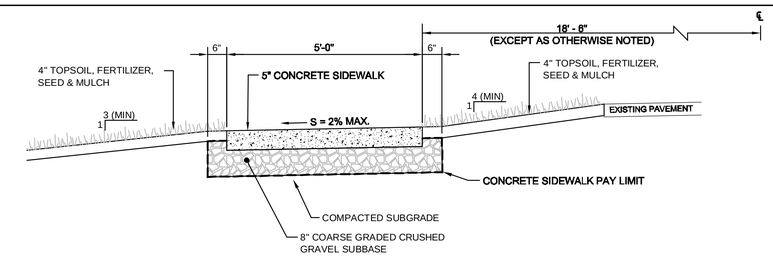
BITUMINOUS CONCRETE PAVEMENT NOTES

1. THE CONTRACTOR SHALL APPLY EMULSION TO THE FULL WIDTH OF THE BASE COURSE/EXISTING PAVEMENT BEFORE INSTALLING THE TYPE III PAVEMENT OVERLAY. EMULSION SHALL ALSO BE PLACED ON THE FACE OF THE CURB, THE EDGES OF EXISTING PAVEMENT AND THE EDGES OF NEW SIDEWALKS WHERE IT WILL BE IN CONTACT WITH THE PAVEMENT. EMULSIFIED ASPHALT TO BE APPLIED AT THE RATE OF 0.015 GAL./SQ YD.
2. BITUMINOUS CONCRETE PAVEMENT TOLERANCE = 1/4" (FOR TOTAL THICKNESS OF BINDER AND/OR WEARING COURSE).
3. BITUMINOUS CONCRETE PAVEMENT SHALL BE 75 BLOW MARSHALL MIX AND PERFORMANCE GRADED BINDER SHALL BE PG 58-34.



VERTICAL GRANITE CURB END SECTION

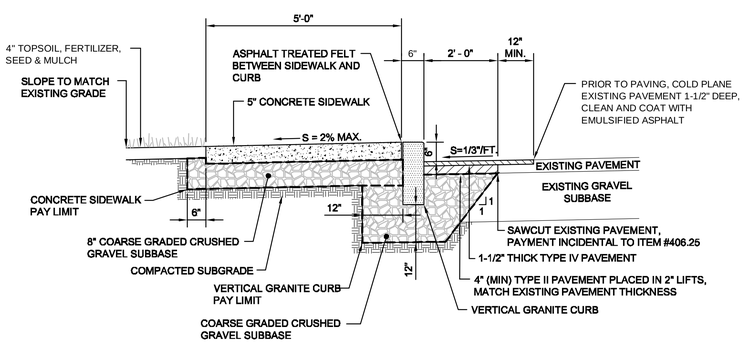
NTS



SIDEWALK WITH GRASS STRIP

NTS

Sta 29+87 to Sta 32+46 LT
Sta 36+10 to Sta 36+79 LT



SIDEWALK & CURB SECTION WITH NO GRASS STRIP

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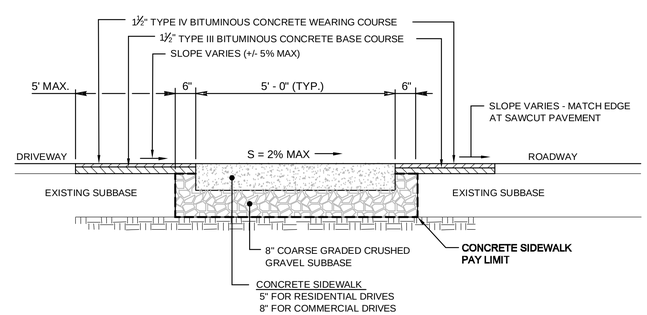
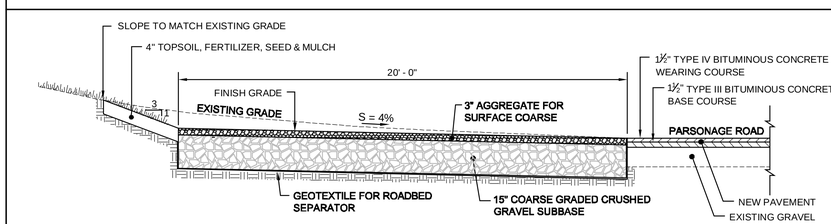
Sta 27+66 to Sta 27+95 LT (NO REVEAL)
Sta 28+40 to Sta 29+16 LT



CONCRETE SIDEWALK ACROSS DRIVEWAYS

NTS

Sta 19+25 to Sta 19+56 RT
Sta 29+16 to Sta 29+87 LT
Sta 32+09 to Sta 32+46 LT
Sta 36+79 to Sta 37+12 LT



PARSONAGE ROAD GRAVEL PARKING

NTS

PRELIMINARY PLANS
JULY 2014

TYPICAL CROSS SECTIONS

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
STP EH12(3)

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L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
CHECKED BY: GHK / RJD

SHEET: 3

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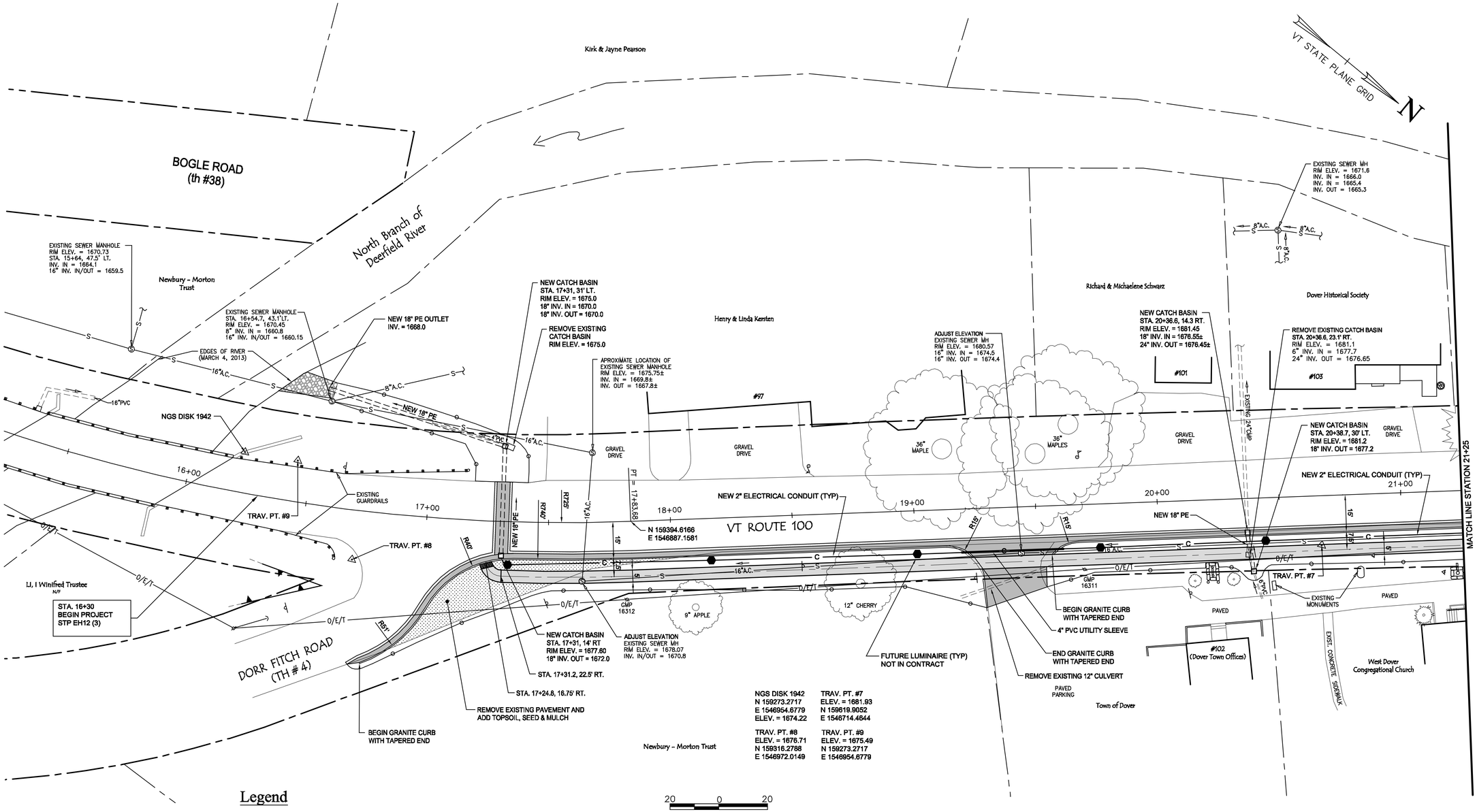

Legend

- EXISTING SPOT LIGHT
- SURVEY CONTROL POINT
- NEW SIGN
- EXISTING SIGNS
- EXISTING TREES
- EXISTING SHRUBS
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- NEW PERMANENT EASEMENT
- NEW TEMPORARY CONSTRUCTION EASEMENT
- O/E/T — O/E/T EXISTING UTILITY POLE & OVERHEAD WIRES
- EXISTING GUARDRAIL
- NEW GUARDRAIL
- EXISTING CATCH BASIN & STORM PIPE
- NEW CATCH BASIN, STORM MANHOLE & PIPES
- S — S EXISTING SEWER MANHOLE & MAIN
- LIMIT OF CONSTRUCTION - FILL
- LIMIT OF CONSTRUCTION - CUT
- WETLAND BOUNDARY
- EXISTING STONE WALL

PRELIMINARY PLANS
JULY 2014

LAYOUT PLAN

DOVER VALLEY TRAIL SEGMENT A SIDEWALK

STP EH12(3)

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L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
CHECKED BY: GHK / RJD

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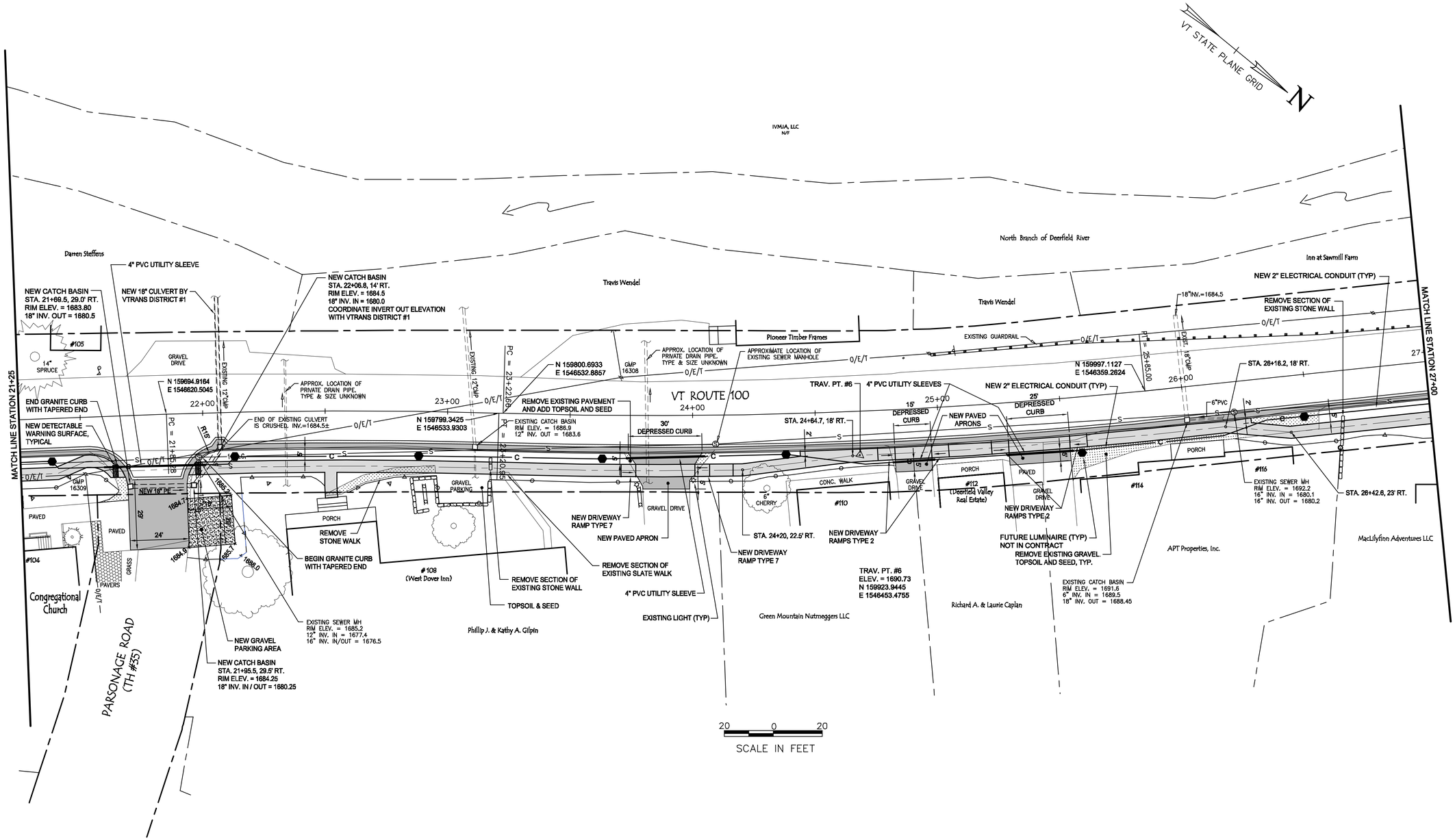

PRELIMINARY PLANS
JULY 2014

LAYOUT PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NUMBER: 12049 DRAWN BY: L&D CHECKED BY: GHK / RJD	SHEET: 7

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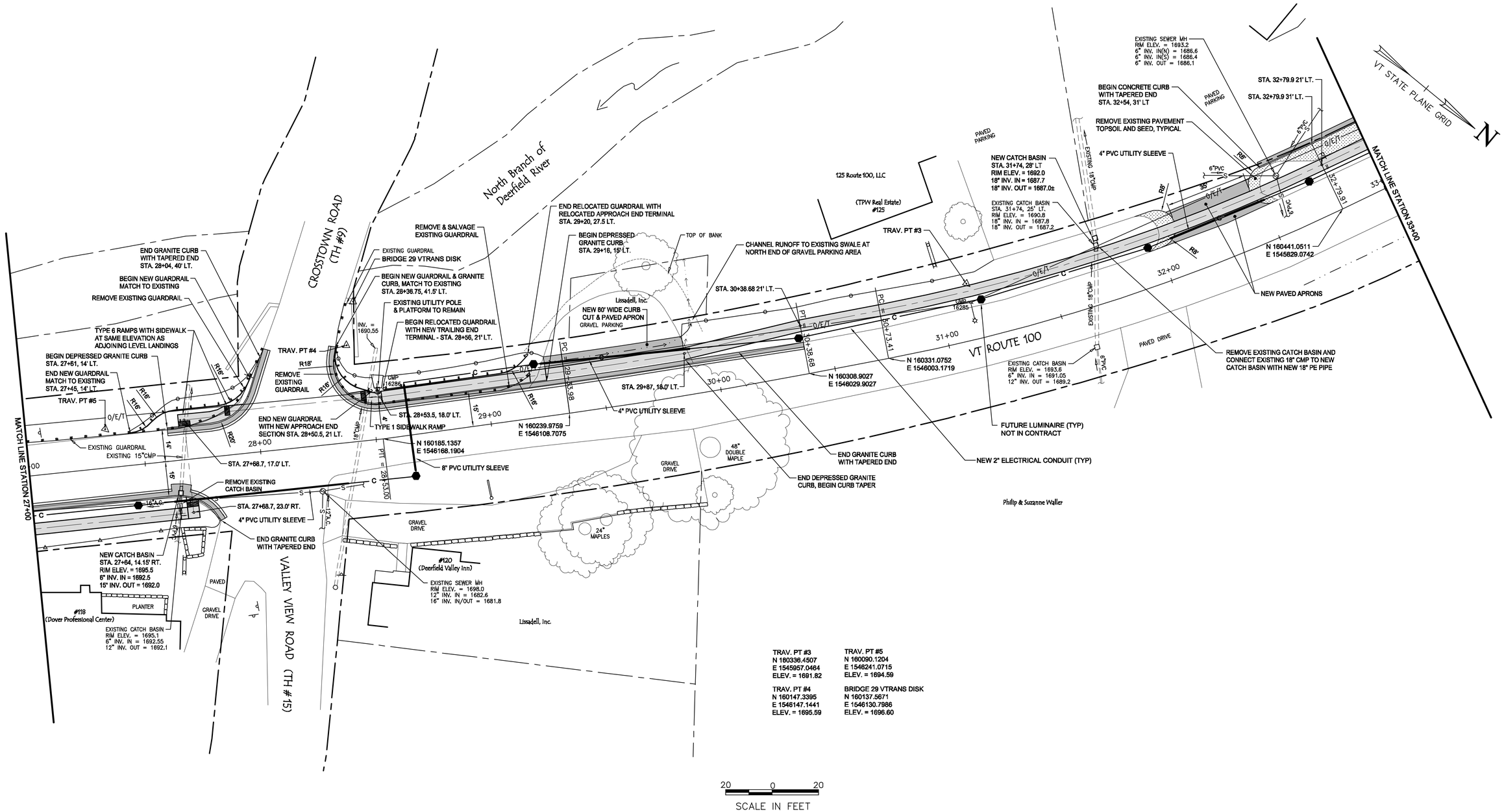

PRELIMINARY PLANS
JULY 2014

LAYOUT PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NUMBER: 12049 DRAWN BY: L&D CHECKED BY: GHK / RJD	SHEET: 8

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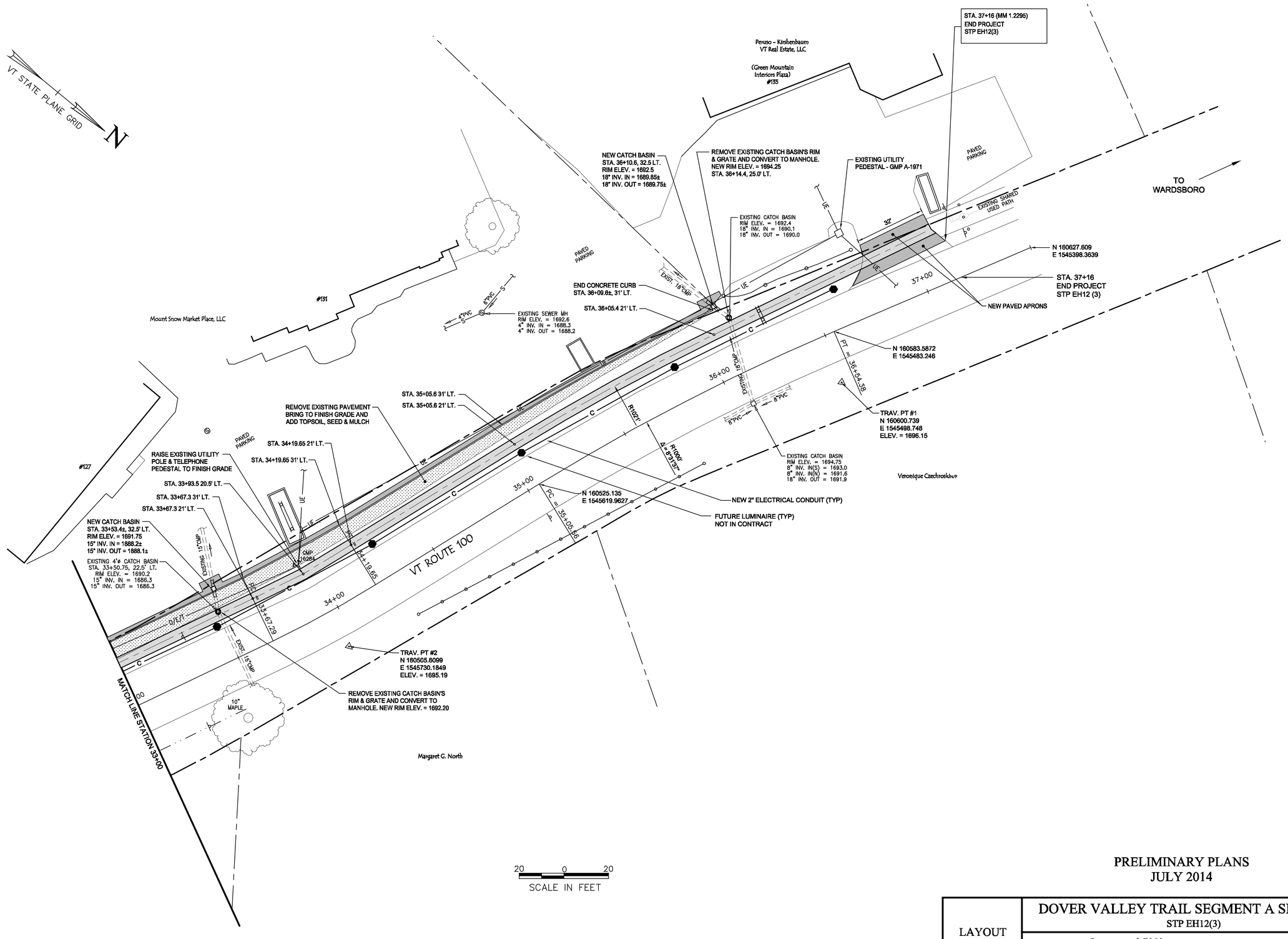

PRELIMINARY PLANS
JULY 2014

LAYOUT PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)	
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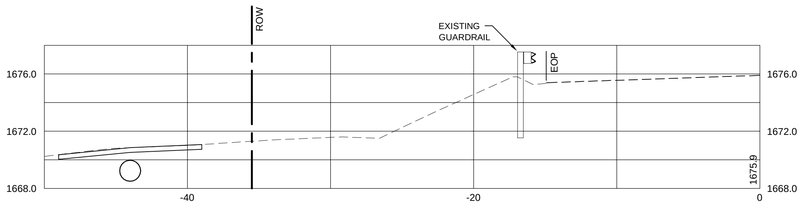

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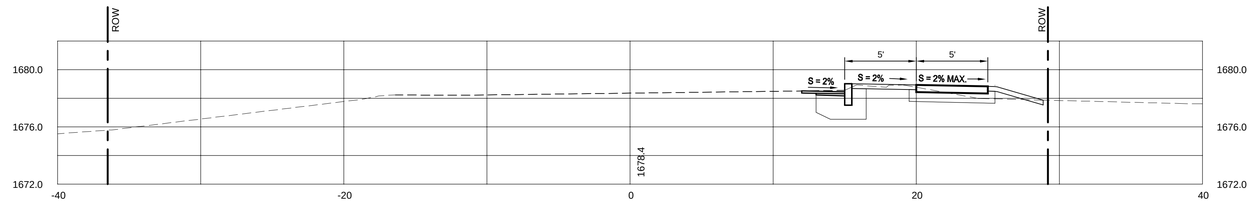

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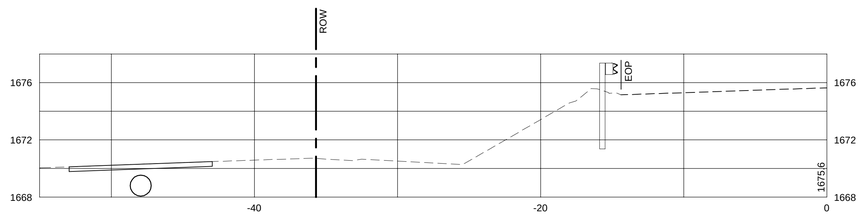

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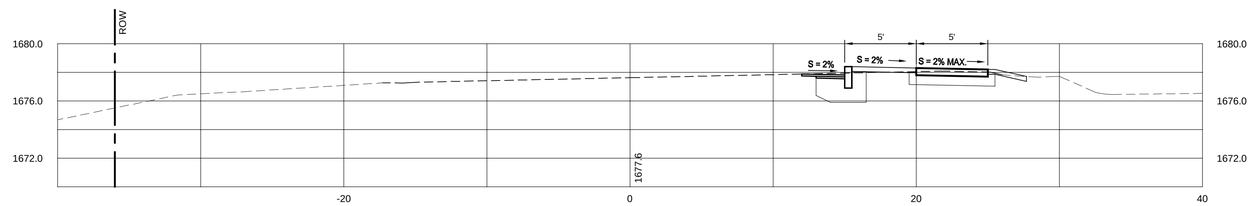

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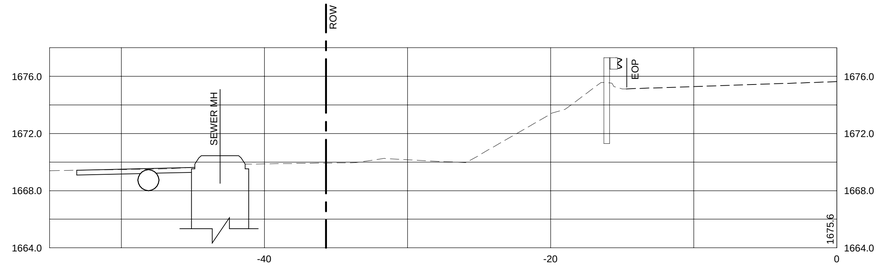

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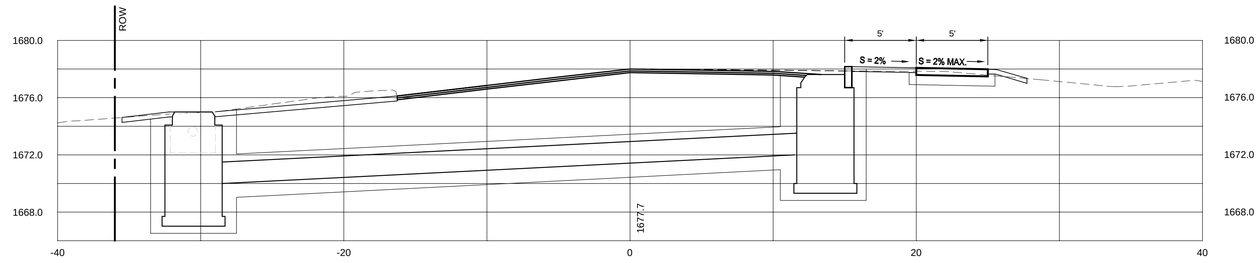

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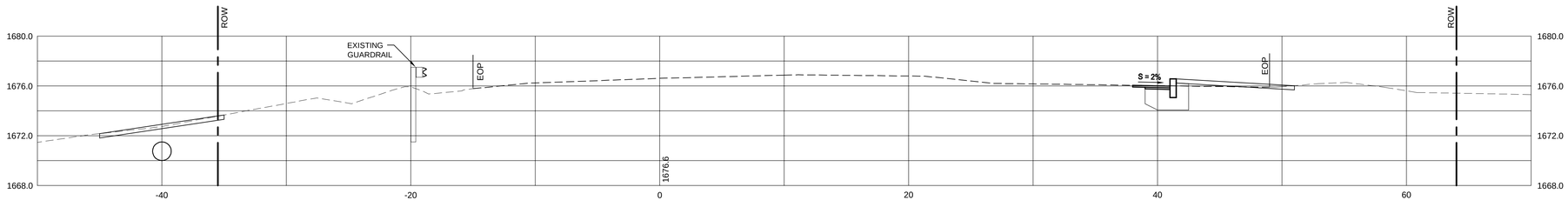

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PRELIMINARY PLANS
JULY 2014

CROSS SECTIONS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)	SHEET:
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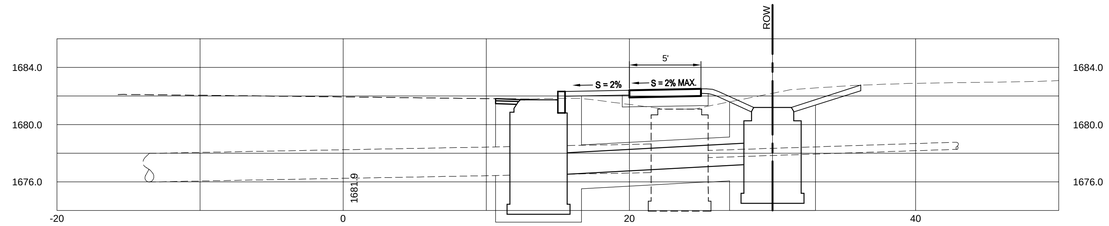

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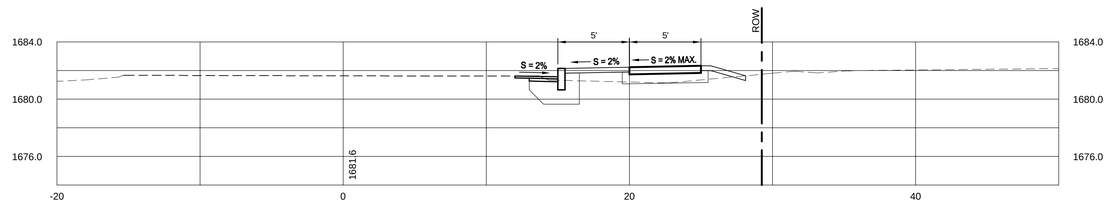

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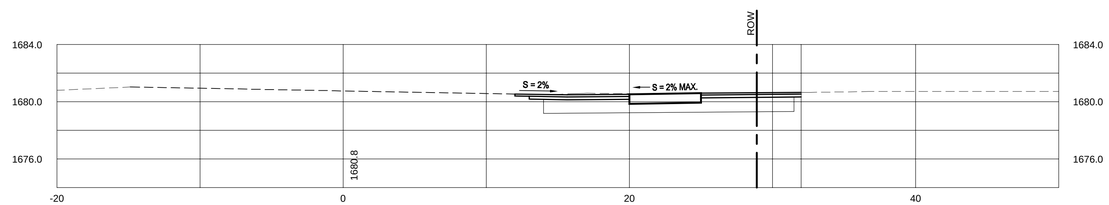

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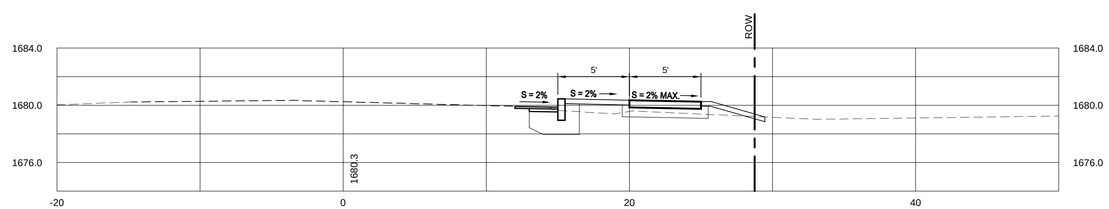

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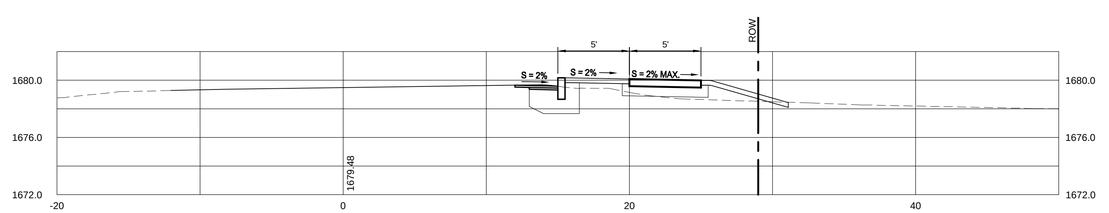

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PRELIMINARY PLANS
JULY 2014

CROSS SECTIONS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)		
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com	L&D PROJECT NUMBER: 12049 DRAWN BY: L&D CHECKED BY: GHK / RJD	SHEET: 11

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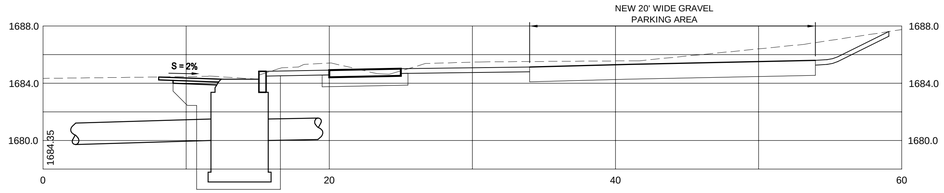

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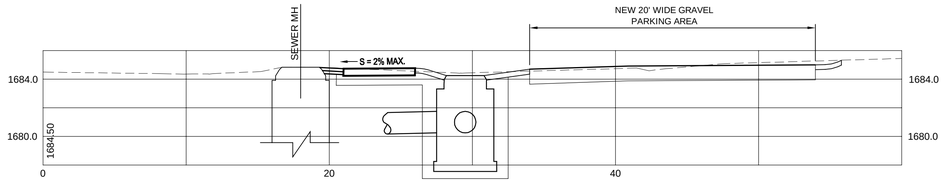

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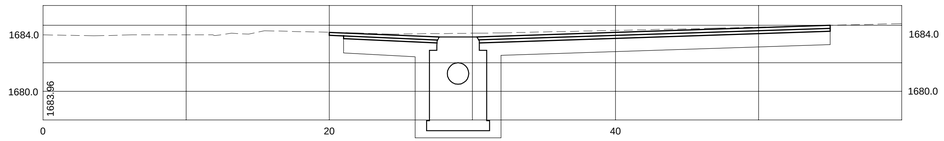

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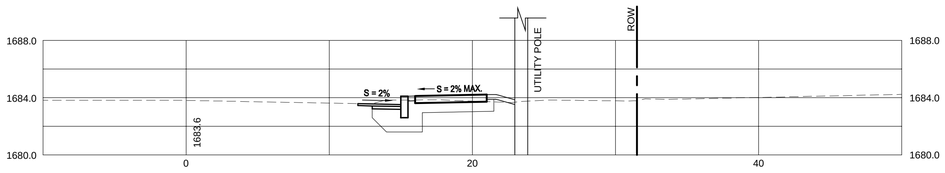

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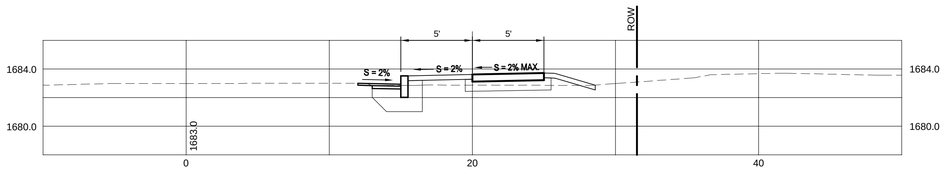

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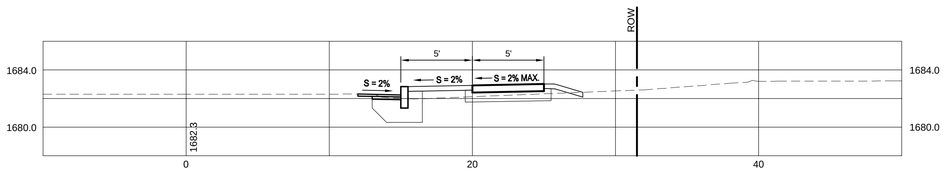

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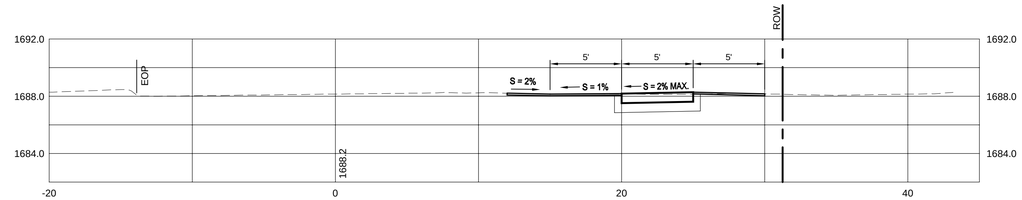

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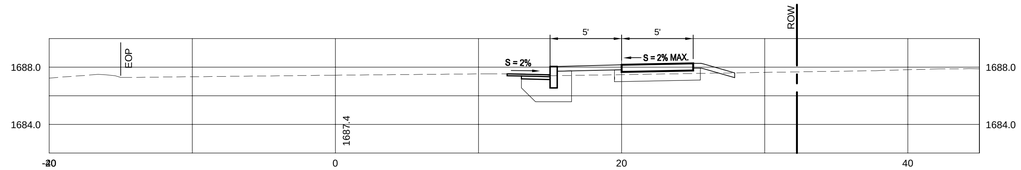

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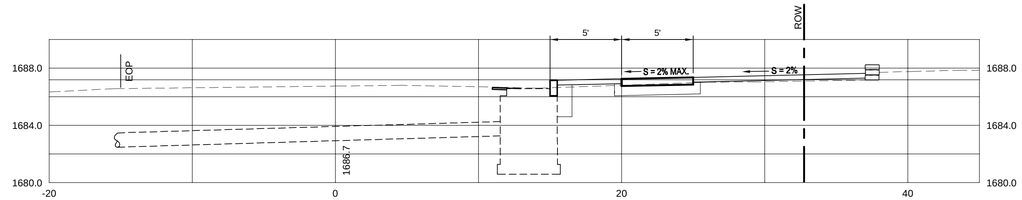

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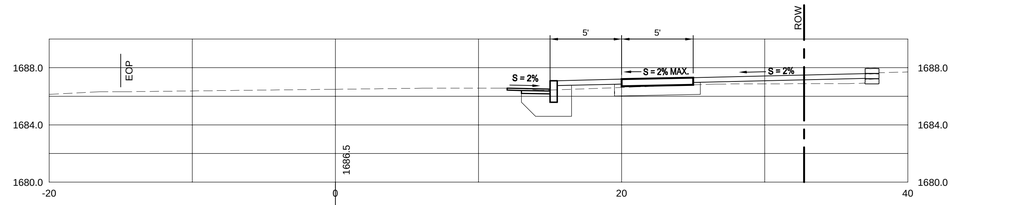

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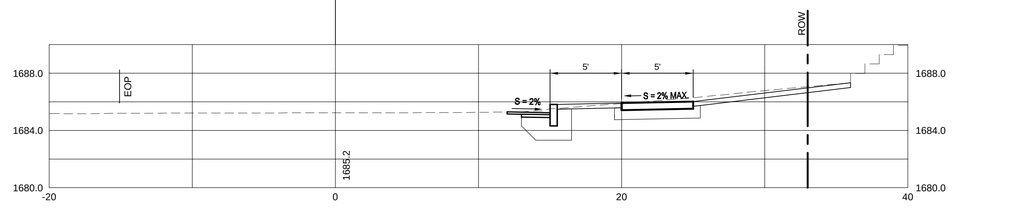

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PRELIMINARY PLANS
JULY 2014

CROSS SECTIONS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NUMBER: 12049 DRAWN BY: L&D CHECKED BY: GHK / RJD	SHEET: 12

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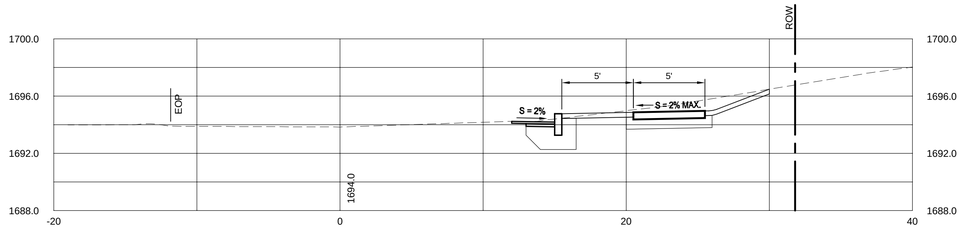

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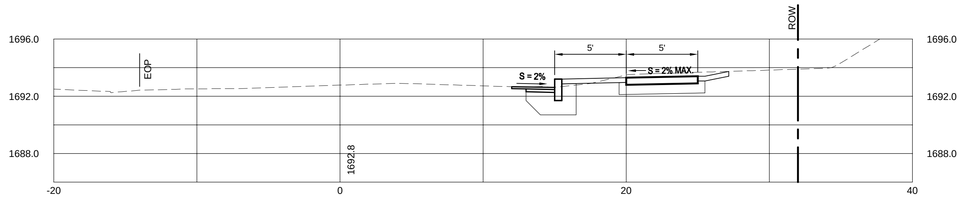

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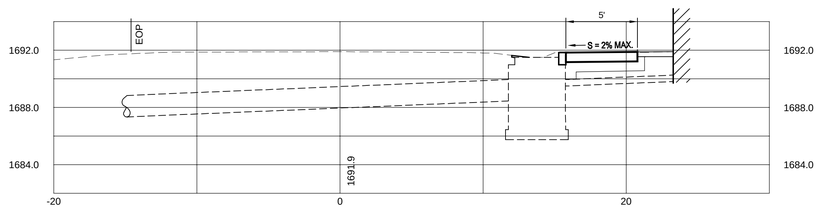

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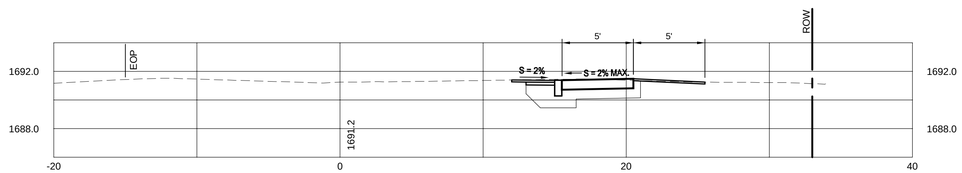

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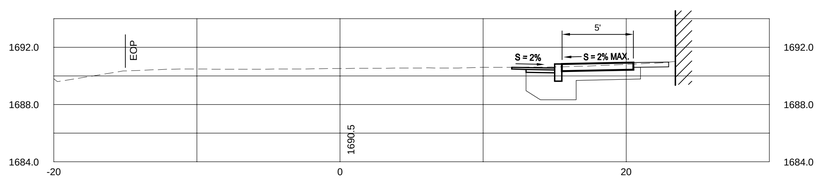

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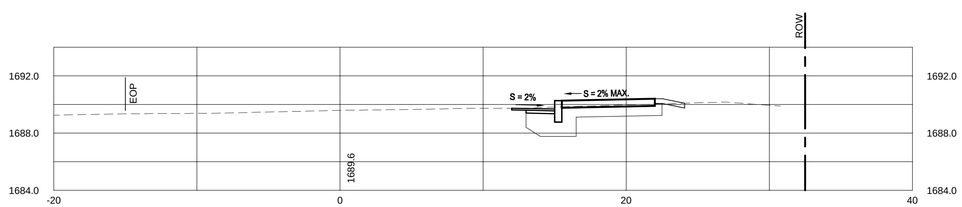

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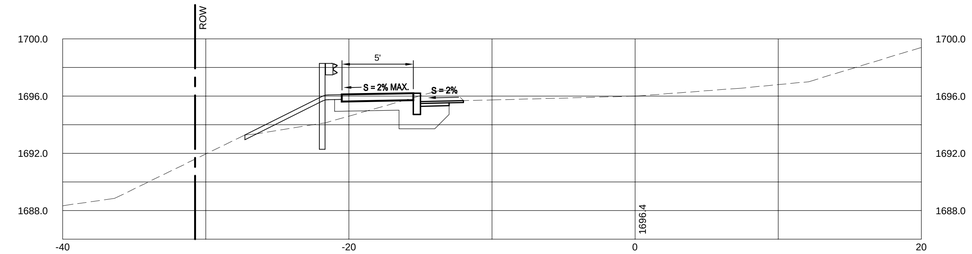

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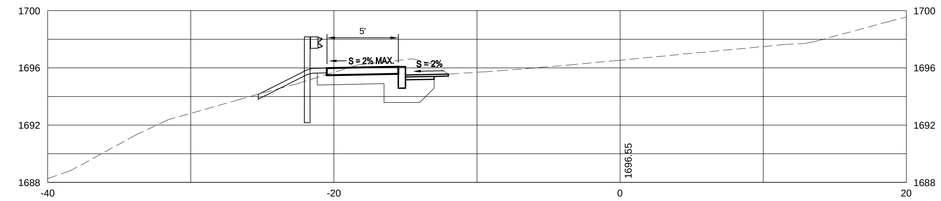

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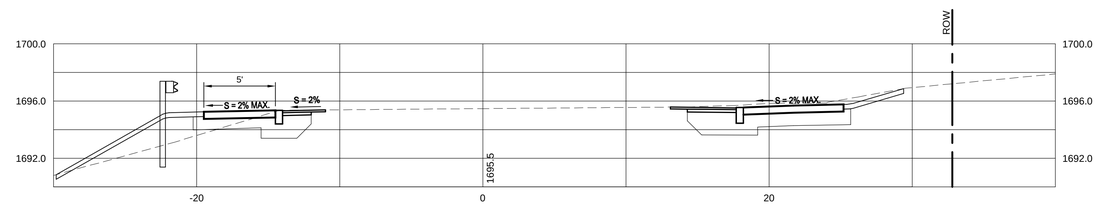

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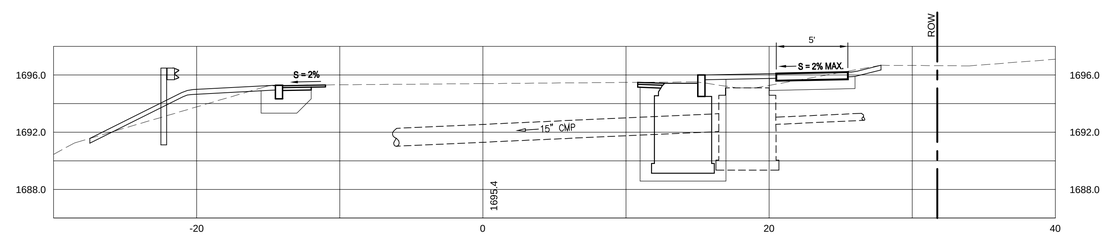

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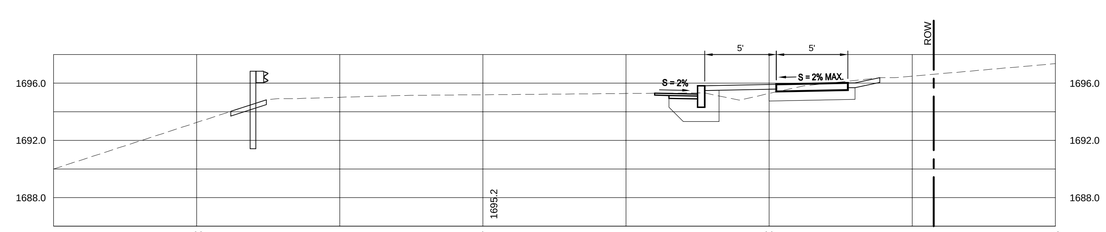

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PRELIMINARY PLANS
JULY 2014

CROSS SECTIONS

DOVER VALLEY TRAIL SEGMENT A SIDEWALK

STP EH12(3)

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
CHECKED BY: GHK / RJD

SHEET: 13

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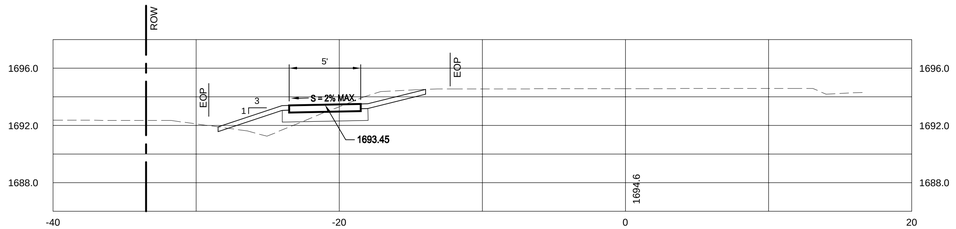

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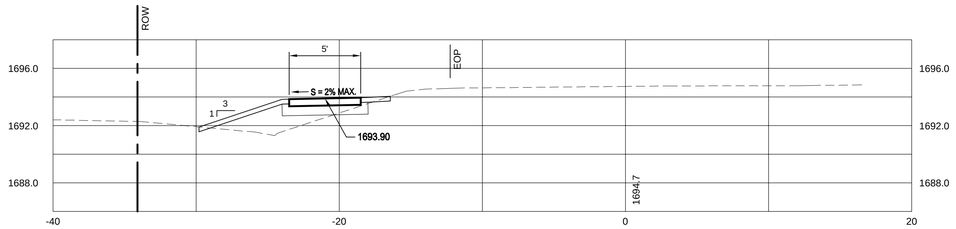

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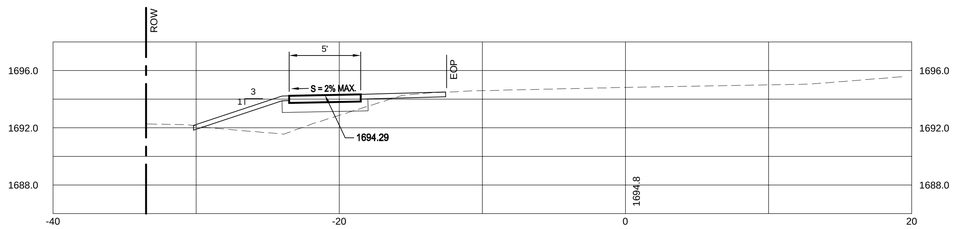

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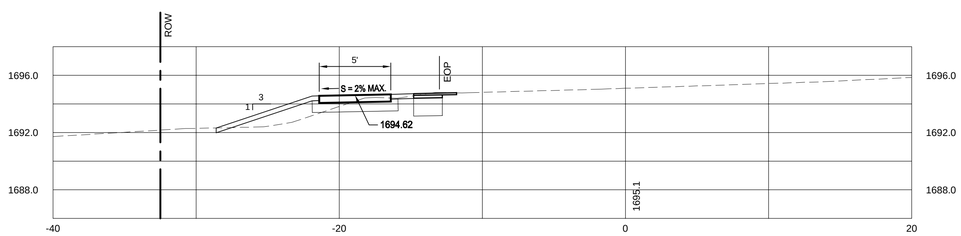

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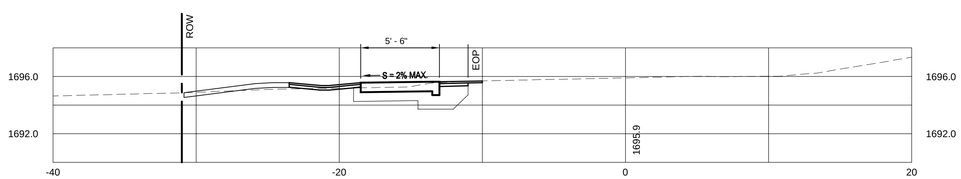

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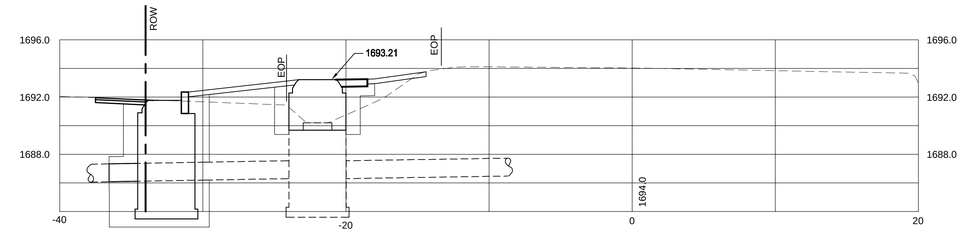

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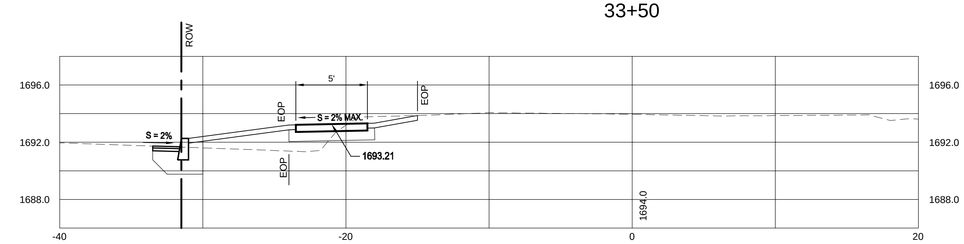

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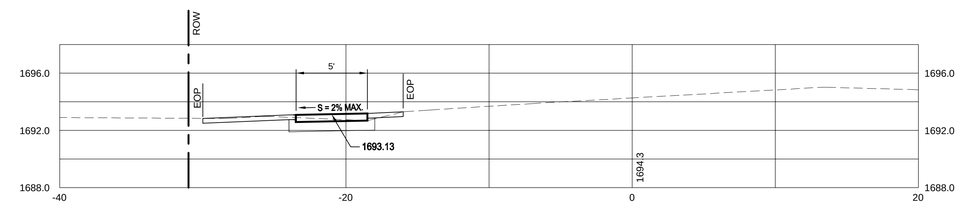

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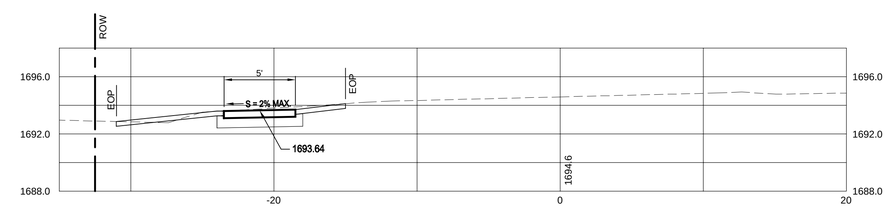

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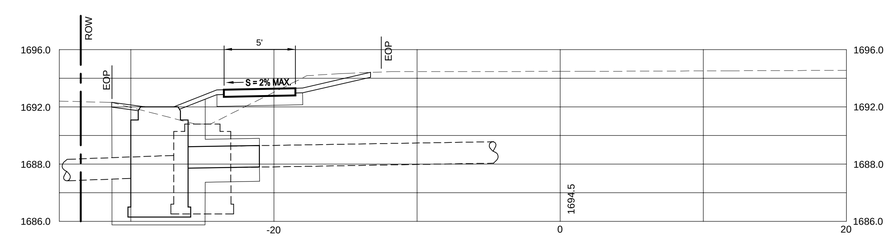

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PRELIMINARY PLANS
JULY 2014

CROSS SECTIONS

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
STP EH12(3)

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
CHECKED BY: GHK / RJD

SHEET: 14

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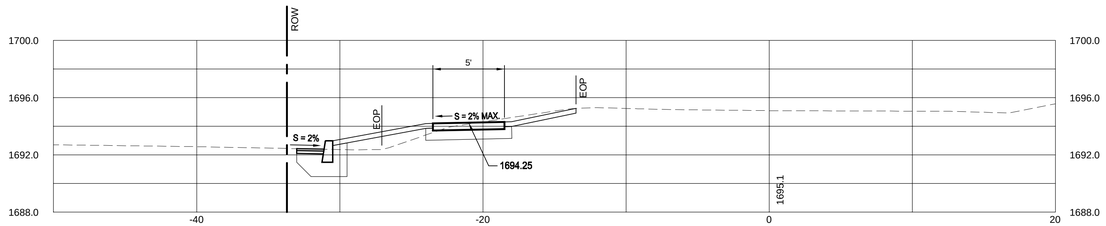

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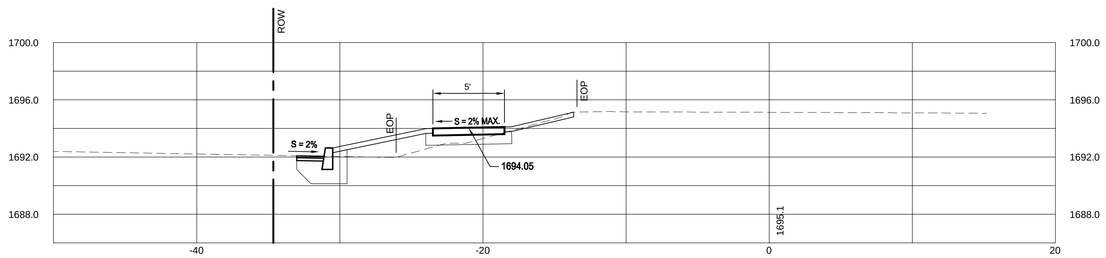

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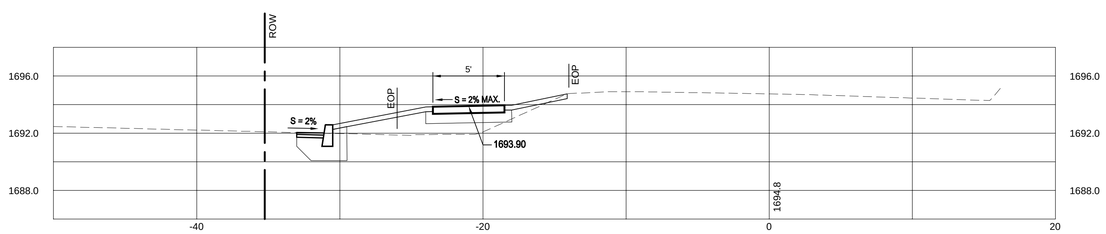

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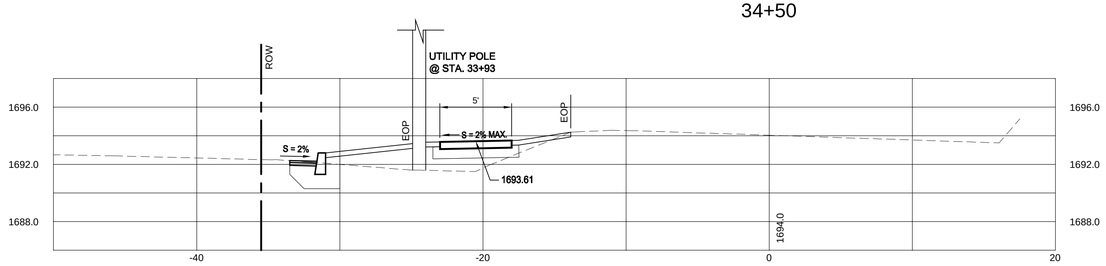

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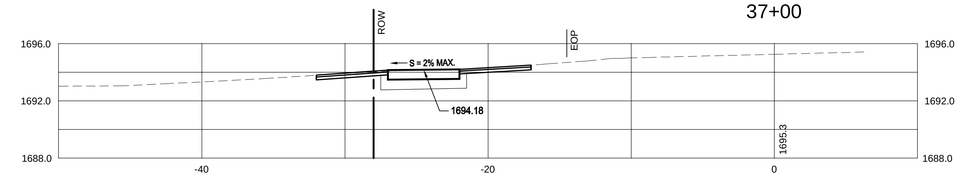

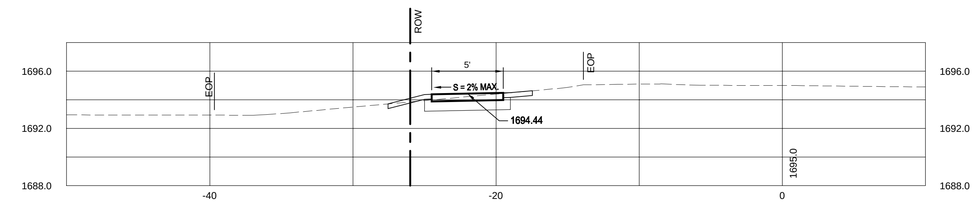

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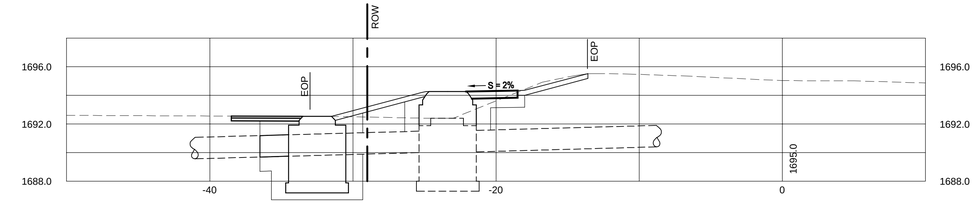

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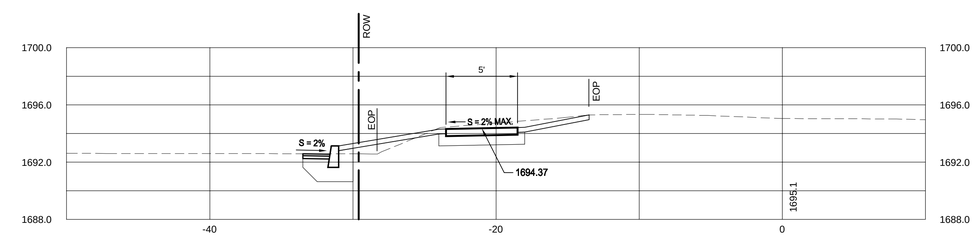

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PRELIMINARY PLANS
JULY 2014

CROSS SECTIONS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)		SHEET:
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com	L&D PROJECT NUMBER: 12049 DRAWN BY: L&D CHECKED BY: GHK / RJD	15

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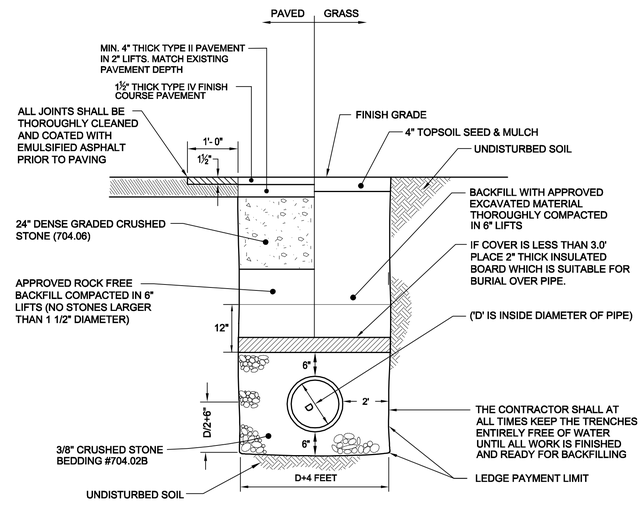
GENERAL CONSTRUCTION SPECIFICATIONS

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2011 AND ITS LATEST REVISIONS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2009 EDITION) AND THESE PLANS.

2. THE CONTRACTOR SHALL CONTACT ALL UTILITIES BEFORE EXCAVATION TO VERIFY THE LOCATION OF ANY UNDERGROUND LINES. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" AND THE TOWN OF DOVER PRIOR TO ANY EXCAVATION.

3. UTILITIES INFORMATION SHOWN HEREON WERE OBTAINED FROM BEST AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. EXPLORATORY EXCAVATION SHALL BE PERFORMED IN THE LOCATIONS SHOWN ON THE PLANS. ADDITIONAL EXPLORATORY EXCAVATION SHALL BE COORDINATED WITH AND SUBJECT TO THE RESIDENT ENGINEERS APPROVAL. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. THE CONTRACTOR SHALL CONNECT OR RECONNECT ALL UTILITIES TO THE NEAREST SOURCE THROUGH COORDINATION WITH UTILITY OWNER.

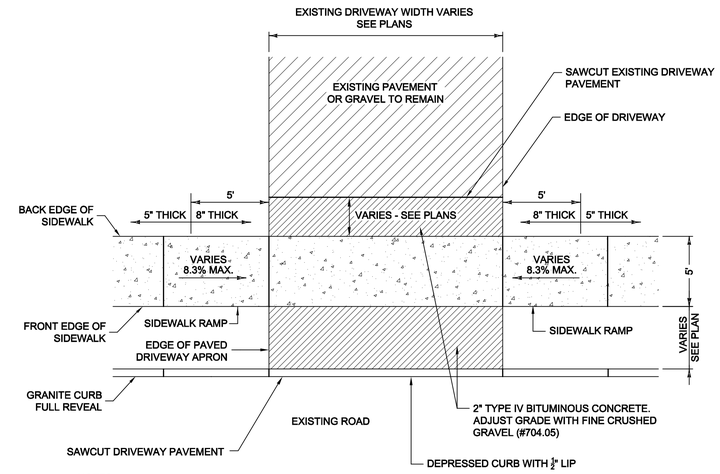
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. THE CONTRACTOR SHALL WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER AND/OR SWEEP ASPHALT ROADS WITH A POWER BROOM (TYPE 1) OR A STREET SWEEPER (POWER BROOM TYPE II) AS DUST CONTROL ON A DAILY BASIS, OR AT MORE FREQUENT INTERVALS AS DIRECTED BY THE ENGINEER AND/OR OWNER.



NOTES:
1. SEE OPTION PIPE SPECIAL PROVISION FOR A LIST OF WORK AND MATERIALS THAT ARE INCIDENTAL TO THE SPECIAL PROVISION OPTION PIPE ITEMS.

2. REMOVAL OF EXISTING CONCRETE IN ROADWAY PAID UNDER SOLID ROCK EXCAVATION (ITEM 203.16). LEDGE ENCOUNTERED WITHIN THE PAYMENT LIMIT FOR THE TRENCH SHALL BE PAID UNDER SOLID ROCK EXCAVATION (ITEM 203.16). REMOVAL OF EXISTING PAVEMENT PAID UNDER EXCAVATION OF SURFACES AND PAVEMENTS (ITEM 203.28). SAW CUTTING ASSOCIATED WITH THESE ITEMS IS INCIDENTAL TO PAY ITEMS 203.16 AND 203.28.

TYPICAL STORM TRENCH
NTS

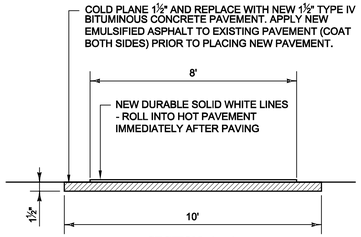


NOTES:

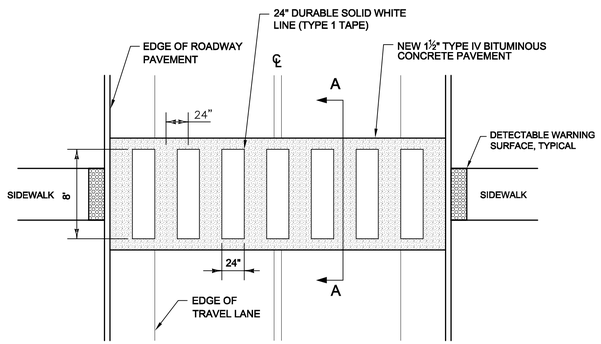
1. SUBBASE MATERIALS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST, ACCORDING TO ASTM D698.

2. EMULSIFIED ASPHALT SHALL BE APPLIED TO THE FACE OF CURB BELOW GRADE, EDGE OF SIDEWALK AND TO THE EXISTING PAVEMENT EDGE. EMULSIFIED ASPHALT SHALL BE APPLIED UNDER PRESSURE OR WITH A "NEW" BRUSH. OLD OR DRIED OUT BRUSHES SHALL NOT BE USED.

TYPICAL BITUMINOUS CONCRETE DRIVEWAY APRON WITH SIDEWALK DETAIL
NTS

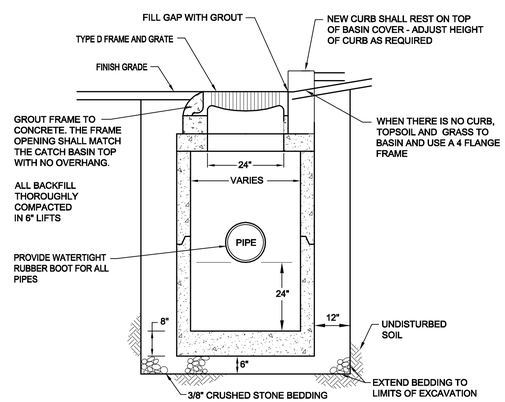


SECTION A - A



PLAN VIEW

DURABLE BLOCK PATTERN CROSSWALK DETAIL
NTS



NOTES:
1. CATCH BASIN TOP ELEVATIONS SHALL BE ADJUSTED AS NEEDED SO THAT THE GRATE WILL BE SLIGHTLY DEPRESSED WITH THE PAVEMENT OVERLAY.

2. LEDGE PAYMENT LIMIT SHALL BE A MAXIMUM DISTANCE OF 24" FROM STRUCTURE.

3. ALL STRUCTURES TO BE DESIGNED BY A STRUCTURAL ENGINEER TO WITHSTAND AN H20 LOADING REQUIREMENT. INSIDE DIAMETER OF STRUCTURE WILL BE DETERMINED BY THE STRUCTURAL ENGINEER AND WILL VARY BASED ON SIZE AND ORIENTATION OF PIPES.

4. SEE SPECIAL PROVISIONS FOR A LIST OF WORK AND MATERIALS THAT ARE INCIDENTAL TO THE STRUCTURE.

TYPICAL PRECAST CONCRETE CATCH BASIN WITH CAST IRON GRATE
NTS

PRELIMINARY PLANS
JULY 2014

TYPICAL DETAILS & SPECIFICATIONS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. *14 Morse Drive, Essex, VT 05452* *802-878-4450 www.LDengineering.com* L&D PROJECT NUMBER: 12049 DRAWN BY: L&D CHECKED BY: GHK / RJD	SHEET: 16

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1. THIS **EPSC PLAN NARRATIVE**

1.1 PROJECT DESCRIPTION

THIS PROJECT TO BE PERFORMED UNDER THIS CONTRACT INCLUDES STREETSCAPE, SIDEWALKS, CURBS, DRAINAGE, PAVEMENT MARKINGS, SIGNS AND OTHER HIGHWAY RELATED ITEMS. AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 1.0 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS ALONG VT ROUTE 100 IN THE TOWN OF DOVER WITH MINOR GRADE CHANGES FOR THE PROPOSED SIDEWALK.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE NORTH BRANCH OF THE DEERFIELD RIVER IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THE RIVER IS CLASSIFIED AS MODERATELY STEEP, NARROW, WITH A CONFINED CHANNEL AT THE SITE. THE RIVER BED CONSISTS OF GRAVEL, COBBLES AND BOULDERS. THERE ARE A NUMBER OF DROP INLETS ON SITE DRAINING FROM THE ROADWAY TO THE RIVER. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF WATER FROM A FEW NEARBY SLOPES.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF GRASSED LAWNS AND GRAVEL & PAVED DRIVES. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY INSTALLATION OF THE NEW OUTFALL CULVERT. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL TYPE IV AS SPECIFIED ON THE PLANS. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDHAM, VERMONT. SOILS ON THE PROJECT SITE ARE SHEEPSCOT FINE SANDY LOAM , 3% TO 8% SLOPES, "K FACTOR" = 0.17. THE SOIL IS CONSIDERED TO HAVE LOW EROSION POTENTIAL.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
0.0 - 0.23 = LOW EROSION POTENTIAL
0.24 - 0.36 = MODERATE EROSION POTENTIAL
0.37 - HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: YES - HISTORIC DISTRICT, NO ARCHEOLOGICAL
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: NORTH BRANCH OF THE DEERFIELD RIVER
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

1.4.2 LIMIT DISTURBANCE AREA
PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION
TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

1.4.4 INSTALL SEDIMENT BARRIERS
SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, WOVEN WIRE REINFORCED SILT FENCE SHALL BE USED INSTEAD OF SILT FENCE WITHIN 100 FEET UPSLOPE OF RECEIVING WATERS.

1.4.5 DIVERT UPLAND RUNOFF
DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF
CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

STONE CHECK DAMS WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN, AT A MINIMUM.

1.4.7 CONSTRUCT PERMANENT CONTROLS
PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION
ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION
VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

1.4.10 STABILIZE SOIL AT FINAL GRADE
EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES
DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

TREATMENT OF DEWATERING COFFERDAM IS ANTICIPATED. A LOCATION FOR TREATMENT HAS BEEN PROPOSED AND IS SHOWN ON THE PLANS. HOWEVER THE SPECIFIC MEANS FOR TREATMENT OF DISCHARGE SHALL BE PROVIDED BY THE CONTRACTOR.

1.4.12 INSPECT YOUR SITE
INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

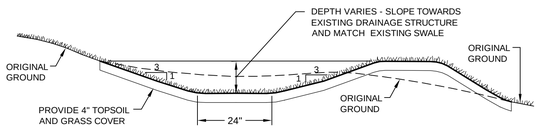
1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES
IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SPECIFICATION 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

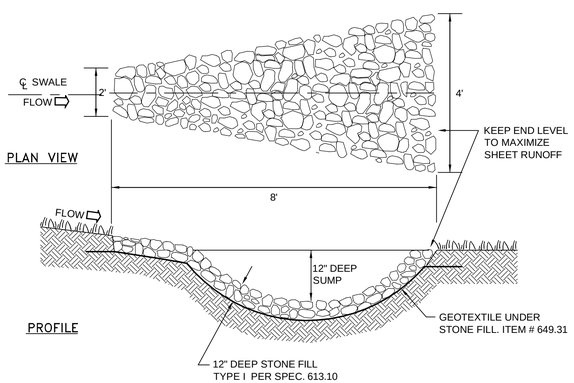
1.5.3 UPDATES

EROSION PREVENTION AND SEDIMENT CONTROL CONSTRUCTION EVENT SEQUENCING

1. THIS PROJECT DOES NOT NEED COVERAGE UNDER THE VERMONT CONSTRUCTION STORMWATER PERMIT PROGRAM. HOWEVER, THE CONTRACTOR SHALL FOLLOW THE VT DEC EROSION PREVENTION AND SEDIMENT CONTROL BEST PRACTICES FOR LOW RISK SITES.
2. THE CONTRACTOR SHALL NOT HAVE DISTURBED EARTH IN ANY ONE LOCATION FOR MORE THAN 14 CONSECUTIVE CALENDAR DAYS WITHOUT TEMPORARY OR FINAL STABILIZATION.
3. THE AREA OF DISTURBED SOILS AND THE DURATION OF EXPOSURE OF THE DISTURBED SOILS SHALL BE MINIMIZED. TO ACCOMPLISH THIS, WORK EFFORT SHOULD BE FOCUSED ON THE COMPLETION AND STABILIZATION OF ONE WORK ITEM COMPONENT BEFORE PROCEEDING TO THE NEXT WORK ITEM COMPONENT.
4. FOR CONSTRUCTION OF THE SIDEWALKS AND CURB EXTENSION, ONLY THAT AREA NECESSARY FOR INSTALLATION SHALL BE DISTURBED.
5. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED DAILY AND SHALL BE PROMPTLY REPAIRED, REPLACED, OR ADDITIONAL MEASURES TAKEN TO CORRECT DEFICIENCIES.
6. DURING CONSTRUCTION, AREAS OF COMPLETED WORK SHALL BE SEEDED AND MULCHED WITHIN 48 HOURS OF FINISH GRADING. THIS SHALL INCLUDE CUT OR FILL SLOPES, AND GRASS AREAS.
7. ALL FINISHED SLOPES SHALL BE 3H:1V OR FLATTER OR AS INDICATED ON PLANS. WHERE EROSION OCCURS FOLLOWING MULCHING, EROSION MATTING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
8. DISTURBED AREAS THAT ARE NOT BEING ACTIVELY WORKED SHALL BE STABILIZED WITHIN 24 HOURS WITH TEMPORARY SEED AND MULCH OR MATTING.
9. THE CONTRACTOR SHALL REMOVE ALL FENCING UPON STABILIZATION AND REVEGETATION.
10. DUST SHALL BE CONTROLLED IN ALL AREAS USING WATER AS NEEDED.



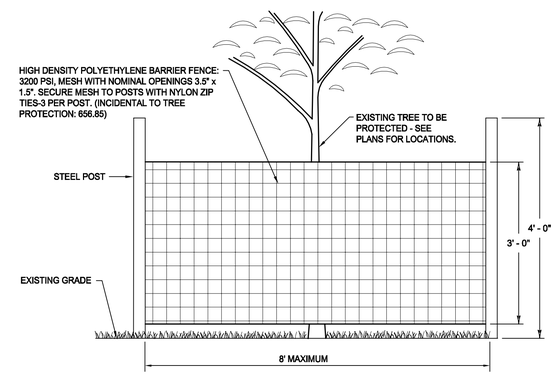
TYPICAL DRAINAGE SWALE SECTION
NTS



TYPICAL DRAINAGE SWALE OUTFALL
NTS

TREE AND PLANT PROTECTION

1. PRIOR TO START OF CONSTRUCTION, INSTALL TEMPORARY PROTECTION ZONE (TPZ) FENCE IN LOCATIONS SHOWN ON PLANS FOR TREE AND PLANT PROTECTION. TPZ FENCE SHALL BE PLACED AT THE EDGE OF TREE DRIP LINES. SEE DETAIL THIS SHEET.
2. TPZ FENCE SHALL PROTECT EXISTING TREES, SHRUBS AND OTHER VEGETATION THROUGHOUT CONSTRUCTION AGAINST CUTTING, BREAKING OR SKINNING OF ROOTS; SKINNING AND BRUISING OF BARK; SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS; EXCESS FOOT OR VEHICULAR TRAFFIC; AND PARKING OF VEHICLES.
3. WHERE TEMPORARY CLEARANCE IS NEEDED DURING CONSTRUCTION THAT MAY CONFLICT WITH EXISTING TREES, BRANCHES SHALL BE TIED BACK TO HOLD THEM OUT OF THE CLEARANCE ZONE.
4. WHEN EXCAVATION IS TO OCCUR IN CLOSE PROXIMITY TO EXISTING TREES, ROOT PRUNING SHALL BE DONE PRIOR TO CONSTRUCTION. ROOTS SHALL BE CLEANLY CUT, WITH CUTS TO THE DEPTH OF THE REQUIRED EXCAVATION. WHEN COMPLETED, REPLACE SOIL IN THE TRENCH AREA.
5. ROOTS ENCOUNTERED DURING EXCAVATION IN THE VICINITY OF TREE PROTECTION ZONES SHALL BE CLEANLY CUT AND PROTECTED DURING CONSTRUCTION OPERATIONS. TEMPORARILY COVER EXPOSED ROOTS WITH A DOUBLE LAYER OF DAMPENED BURLAP TO PREVENT ROOTS FROM DRYING OUT UNTIL THEY CAN BE COVERED WITH SOIL. COVER ROOTS WITH SOIL AS SOON AS POSSIBLE REMOVING BURLAP FIRST.
6. WATER EXISTING TREES AND OTHER VEGETATION TO REMAIN WITHIN LIMITS OF CONTRACT WORK AS REQUIRED TO MAINTAIN THEIR HEALTH DURING THE COURSE OF CONSTRUCTION OPERATIONS.
7. IF ANY TREES OR SHRUBS DESIGNATED TO BE SAVED ARE DAMAGED AND REPLACEMENT IS REQUIRED, TREES OR SHRUBS OF THE SAME SPECIES AND VARIETY SHALL BE PURCHASED AND PLANTED BY THE CONTRACTOR. THE TOTAL INCH DIAMETER OF THE REPLACEMENT TREES OR SHRUBS SHALL EQUAL THE DIAMETER OF THE TREE OR SHRUB TO BE REPLACED.
8. PRUNING OF EXISTING TREES, AS IDENTIFIED ON THE PLANS, SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL SOCIETY OF ARBORICULTURE'S *TREE PRUNING GUIDELINES*, THE ANSI A300 PRUNING STANDARD AND THE MOST RECENT EDITION OF ANSI Z133.1.
9. IF UNDERGROUND UTILITIES MUST TRAVERSE THE PROTECTION AREA, THEY SHALL BE TUNNELED OR BORED UNDER THE TREE.
10. REMOVE TEMPORARY PROTECTION DEVICES AND FACILITIES INSTALLED DURING COURSE OF WORK AFTER COMPLETION OF ALL WORK AND RESTORE PLANT PROTECTION AREAS TO THEIR ORIGINAL CONDITION.



TREE PROTECTION ZONE DETAIL
NTS

TURF ESTABLISHMENT

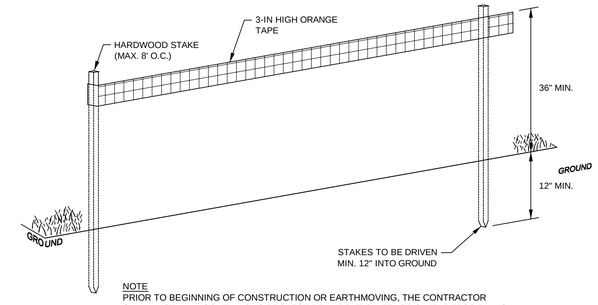
URBAN AREA MIX					
	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
42.5%	34	68	CREEPING RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

SOIL AMENDMENT GUIDANCE			
FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	*FOLLOW*	PELLETIZED	*FOLLOW*
500 LBS/AC	*MANUFACTURER*	2 TONS/AC	*MANUFACTURER*

CONSTRUCTION GUIDANCE

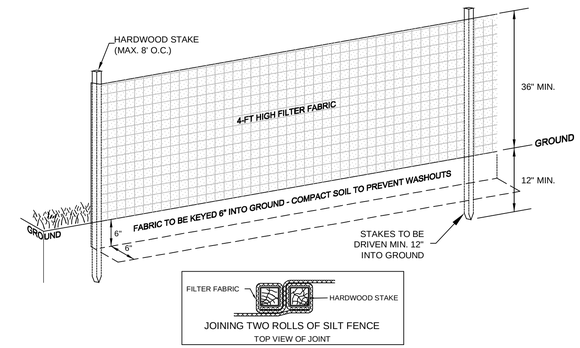
1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)



NOTE
PRIOR TO BEGINNING OF CONSTRUCTION OR EARTHMOVING, THE CONTRACTOR SHALL INSTALL A CONTINUOUS PROJECT DEMARCATION FENCE ON THE EPSC PLANS.

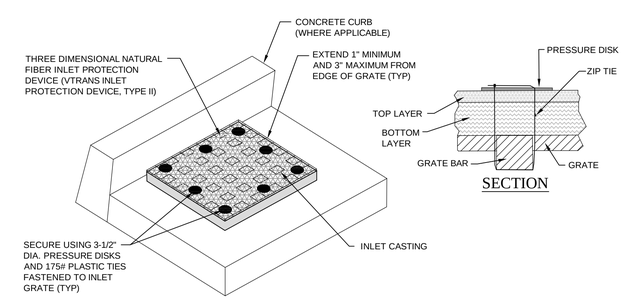
PROJECT DEMARCATION FENCE
NTS



EROSION CONTROL SPECIFICATIONS

1. PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTHMOVING, THE CONTRACTOR SHALL INSTALL A CONTINUOUS PROJECT DEMARCATION FENCE, (PDF) AS SHOWN ON THESE PLANS.
2. TO ENSURE PROPER FUNCTION, THE SILT FENCE SHALL BE PROPERLY INSTALLED. THIS INCLUDES DRIVING THE POSTS TO A DEPTH OF 12 INCHES, KEYING THE SILT FENCE FABRIC 6 INCHES INTO THE GROUND, AND COMPACTING THE SOIL OVER THE KEYED-IN PORTION OF THE FABRIC. USE ONLY MANUAL METHODS OF INSTALLATION WITHIN WETLANDS AND BUFFER ZONES.
3. THE SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION OF THE PROJECT AND UNTIL ESTABLISHMENT OF VEGETATION SUFFICIENT TO PREVENT SOIL EROSION. AFTER WORK IS COMPLETE AND THE DISTURBED SOIL HAS BEEN STABILIZED, THE CONTRACTOR SHALL REMOVE ALL SILT FENCE FROM THE SITE.
4. PROPER SILT FENCE MAINTENANCE SHALL INCLUDE INSPECTIONS AT REGULAR INTERVALS AND AFTER EVERY HEAVY RAINFALL TO ENSURE THAT THERE ARE NO BROKEN POSTS, FABRIC TEARS, WASHOUTS OF THE BOTTOM EDGE OF THE FABRIC, OR EXCESSIVE SEDIMENT ACCUMULATION. ANY DAMAGE OR DEFECTS SHALL BE REPAIRED IMMEDIATELY. SEDIMENT ACCUMULATION OF MORE THAN ONE-QUARTER THE HEIGHT OF THE FABRIC SHALL BE REMOVED AND PLACED IN AN APPROPRIATE AREA OUTSIDE WETLANDS AND BUFFER ZONES.
5. THE CONTRACTOR SHALL INSTALL SILT FENCE AT OTHER LOCATIONS AS NEEDED.
6. WHERE WOVEN WIRE REINFORCEMENT IS USED, THE WOVEN WIRE SHALL BE 14 GAUGE MINIMUM WITH A 150 MM (6 INCH) MAXIMUM MESH OPENING. PAID AS ITEM #649.515.

TEMPORARY EROSION CONTROL FENCE
NTS



INLET PROTECTION (TYPE II)
NTS

PRELIMINARY PLANS
JULY 2014

TYPICAL DETAILS & SPECIFICATIONS

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
STP EH12(3)

Lamoureux & Dickinson Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
CHECKED BY: GHK / RJD

SHEET: 17

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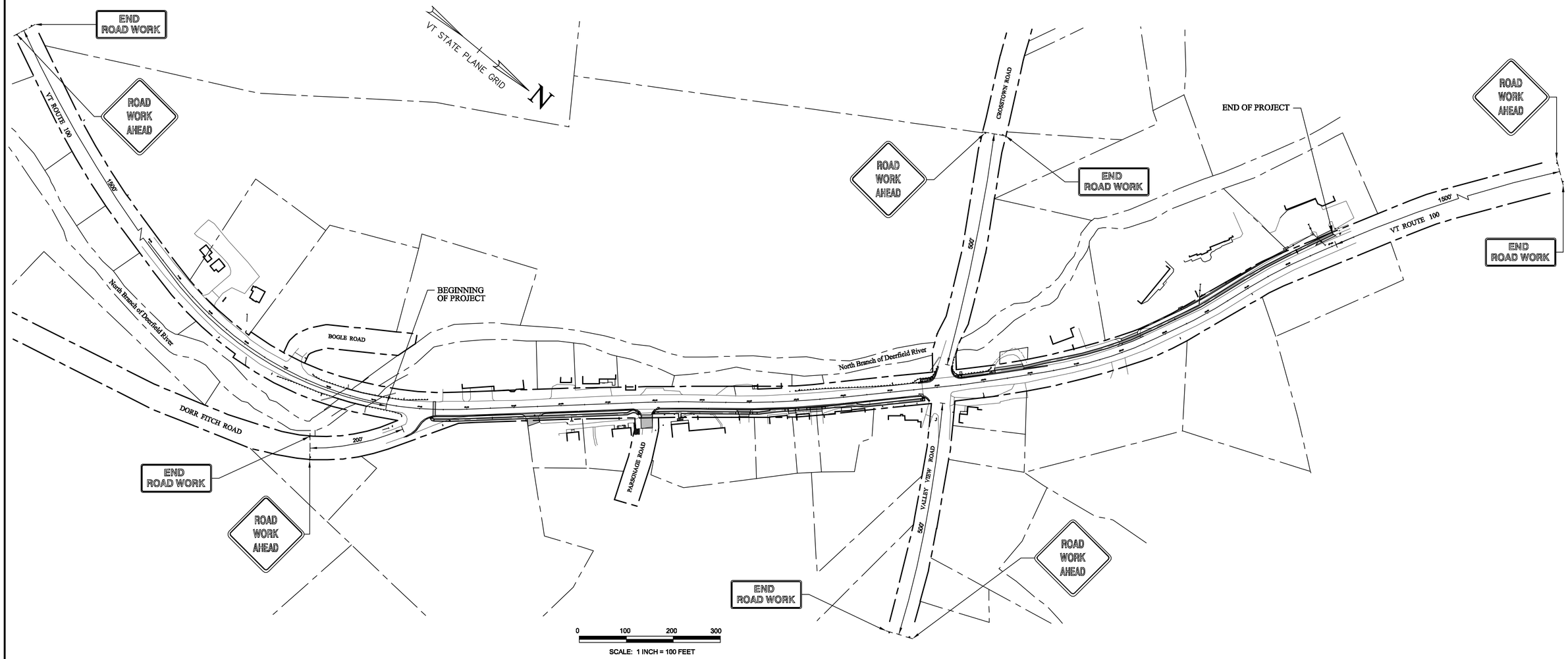

TEMPORARY TRAFFIC CONTROL NOTES

1. ALL TEMPORARY CONTROL DEVICES SHALL MEET OR EXCEED VTRANS STANDARD DETAILS. WHERE THE STANDARD DETAILS CONFLICT WITH THE MUTCD, THE MUTCD SHALL GOVERN.
2. FOR ANY WORK WITHIN THE HIGHWAY RIGHT-OF-WAY A MINIMUM OF ONE-WAY THRU TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. CONTINUOUS TWO-WAY TRAFFIC SHALL BE MAINTAINED AT NIGHT, ON WEEKENDS AND HOLIDAYS, DURING PEAK TRAFFIC AND WHENEVER POSSIBLE DURING CONSTRUCTION.
3. SHORT DURATION TEMPORARY TRAFFIC CONTROL SIGNING AND CHANNELIZING DEVICES SHALL BE IN ACCORDANCE WITH THE APPROPRIATE MUTCD STANDARDS (PART 6). TYPICAL APPLICATIONS 3,10, 22 AND 23 ARE USEFUL EXAMPLES. VARIATIONS IN THE SIGNING PACKAGES MAY BE DICTATED BY UNIQUE GEOMETRY, SPECIFIC CONSTRUCTION ACTIVITIES, AND/OR TRAFFIC CONDITIONS.
4. APPROACH CONSTRUCTION SIGNING SHALL REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PERIOD.
5. THE CONTRACTOR SHALL NOT WORK WITHIN THE HIGHWAY ROW WITHOUT THE APPROPRIATE CONSTRUCTION SIGNING AND TEMPORARY TRAFFIC CONTROL DEVICES IN PLACE.
6. TO FACILITATE THE FLOW OF TRAFFIC, THE TOWN SHALL HAVE AUTHORITY TO MODIFY THE CONTRACTOR'S ONGOING OPERATIONS OR PROPOSED METHODS OF CONSTRUCTION AS DEEMED NECESSARY FOR THE SAFETY, CONVENIENCE AND WELFARE OF THE TRAVELING PUBLIC. THE CONTRACTOR SHALL COMPLY WITH THE TOWN DIRECTIVES CONCERNING THIS MATTER.
7. THE MIXING OF TEMPORARY TRAFFIC CONTROL DEVICES (DRUMS, CONES, ETC.) ALONG A TANGENT HIGHWAY IS NOT ALLOWED. DRUMS SHOULD BE USED TO CHANNELIZE OR DELINEATE ROAD USER'S FLOW WHILE REFLECTORIZED CONES ARE BETTER SUITED TO DELINEATE DRIVES WITHIN THE WORK ZONE.
8. CONTRACTOR SHALL PROVIDE A MINIMUM 48 HOUR ADVANCE NOTICE TO PROPERTY OWNERS PRIOR TO COMMENCING WORK IN DRIVES. WHERE SIDEWALKS CROSS DRIVES, THEY SHALL BE CONSTRUCTED IN TWO PHASES, MAINTAINING ACCESS TO DRIVEWAYS AT ALL TIMES.
9. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN TO BUSINESSES AND RESIDENCES. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MUTCD PART 6 AND ADA ACCESSIBLE ROUTE REQUIREMENTS.
10. FLAGGERS AND/OR TRAFFIC CONTROL PERSONNEL SHALL DIRECT BICYCLISTS THROUGH THE CONSTRUCTION AREA IN THE SAME MANNER AS VEHICULAR TRAFFIC. PEDESTRIANS, WHEN PRESENT, SHALL BE ESCORTED THROUGH THE WORK AREA. THE CONTRACTOR SHALL DESIGNATE AN EMPLOYEE TO ESCORT PEDESTRIANS AROUND THE PERIMETER OF THE CONSTRUCTION SITE.
11. ANY SIDEWALK CLOSURES/PEDESTRIAN DETOURS THAT WILL BE LEFT IN PLACE OVERNIGHT MUST INCLUDE SIGNS THAT MEET THE MUTCD AND PEDESTRIAN CHANNELIZING DEVICES THAT MEET MUTCD AND ADA. CHANNELIZING DEVICES MUST HAVE A CONTINUOUS DETECTABLE BOTTOM EDGE PER MUTCD STANDARDS.
12. SIDEWALK CLOSED SIGNS (R9-9) SHALL BE REQUIRED IN ADVANCE OF THE WORK AREA ON COMPLETED PORTIONS OF THE PROJECT TO PREVENT PEDESTRIANS FROM ENTERING THE WORK ZONE.
13. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
14. THE CONTRACTOR'S OPERATIONS SHALL NOT OCCUPY SIDEWALKS EXCEPT WHERE PROPER PROTECTION AND A TEMPORARY PEDESTRIAN ACCESSIBLE ROUTE (TPAR) HAVE BEEN PROVIDED.

TEMPORARY CONSTRUCTION SIGNS

1. ALL SIGN STANDS AND POST INSTALLATION SHALL BE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM 350 (NCHRP) COMPLIANT.
2. ALL ROLL-UP SIGN MATERIAL SHALL HAVE ASTM D 4956-01 TYPE VI OR TYPE VII FLUORESCENT ORANGE RETRO-REFLECTIVE SHEETING.
3. ALL POST MOUNTED SIGNS SHALL HAVE ASTM D 4956-01 TYPE VIII OR TYPE IX FLUORESCENT ORANGE RETRO-REFLECTIVE SHEETING.
4. ALL STATIONARY SIGNS SHALL BE MOUNTED ON TWO 3 LBS/FT FLANGED CHANNEL POSTS. NO SIGN POSTS SHALL EXTEND OVER THE TOP EDGE OF THE SIGN INSTALLED ON SAID POSTS.
5. PRIOR TO PLACING TEMPORARY WORK ZONE SIGNS ON THE PROJECT, THE CONTRACTOR MUST FURNISH FOR THE TOWN'S APPROVAL A DETAIL FOR TEMPORARY WORK ZONE SIGNS ON STEEL POSTS SHOWING STUBS PROJECTING A MAXIMUM OF 4 INCHES ABOVE GROUND LEVEL AND BOLTS FOR SIGN POST ATTACHMENT SHALL BE NCHRP 350 COMPLIANT, IF IN THE CLEAR ZONE.

FLAGGERS AND UNIFORM TRAFFIC OFFICERS

FLAGGERS SHALL BE REQUIRED TO ATTEND A 4 HOUR APPROVED TRAINING COURSE AND CARRY THEIR FLAGGER CERTIFICATION CARD WITH THEM. THE CONTRACTOR SHALL PROVIDE COPIES OF ALL DOCUMENTATION OF THE CERTIFICATION OBTAINED FOR EACH FLAGGER ON THE PROJECT.

ALL FLAGGERS OR UTO SERVING AS A TRAINED FLAGGER SHALL WEAR SAFETY APPAREL MEETING REQUIREMENTS OF ISEA "AMERICAN NATIONAL STANDARD OF HIGH-VISIBILITY APPAREL" AND LABELED AS MEETING THE ANSI 107-1999 STANDARD PERFORMANCE FOR CLASS 2 RISK EXPOSURE. INDIVIDUALS ENGAGED IN TRAFFIC CONTROL SHALL WEAR THE HIGH-VISIBILITY VEST WITH "TRAFFIC CONTROL" VISIBLE, WITHOUT EXCEPTION.

W21-1a

W3-4

R9-9

PRELIMINARY PLANS
JULY 2014

QUALITY ASSURANCE PROGRAM:
INSPECTION LEVEL 3

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83(1996)

TRAFFIC CONTROL PLAN

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
STP EH12(3)

Lamoureux & Dickinson
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L&D PROJECT NUMBER: 12049
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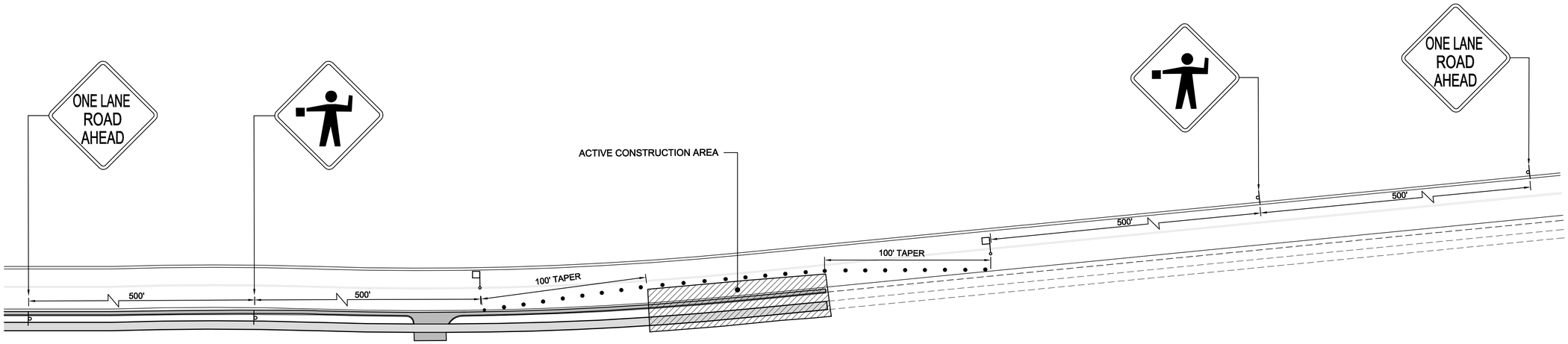

TYPICAL SHORT-TERM LANE CLOSURE DETAIL

LEGEND

- • • 28" REFLECTORIZED CONES
- FLAGGER
- PORTABLE TRAFFIC CONTROL SIGN

W20-4
48" x 48"
(BLACK ON
ORANGE)

W20-7A
48" x 48"
(BLACK ON
ORANGE)

NOTES:

1. ON ANY ONE STREET, SIDEWALK CONSTRUCTION SHALL PROCEED ON ONLY ONE SIDE AT A TIME.
2. CONTRACTOR SHALL STAGE SIDEWALK CONSTRUCTION SO THAT AT ALL TIMES THERE EXISTS A CONTINUOUS, FUNCTIONAL PEDESTRIAN ROUTE, WITH DETOURS AND TEMPORARY CROSSWALKS AS NECESSARY.
3. ONCE PROJECT IS COMPLETE, TEMPORARY CROSSWALKS SHALL BE REMOVED BY GRINDING.

PRELIMINARY PLANS
JULY 2014

TRAFFIC CONTROL PLAN	*DOVER VALLEY TRAIL SEGMENT A SIDEWALK* *STP EH12(3)*	
	Lamoureux & Dickinson Consulting Engineers, Inc. *14 Morse Drive, Essex, VT 05452* *802-878-4450 www.LDengineering.com* *L&D PROJECT NUMBER: 12049* *DRAWN BY: L&D* *CHECKED BY: GHK / RJD*	*SHEET:* 19

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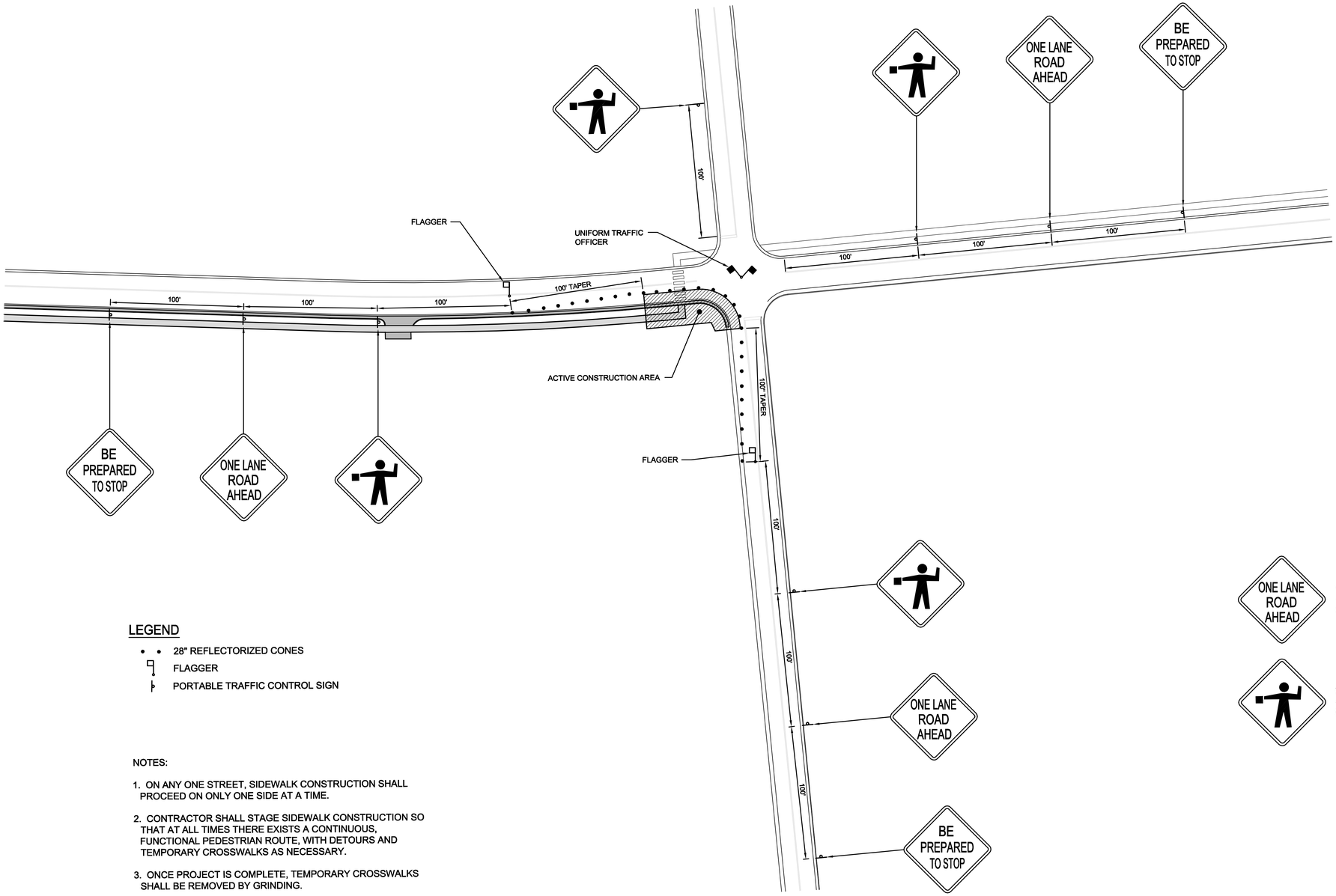

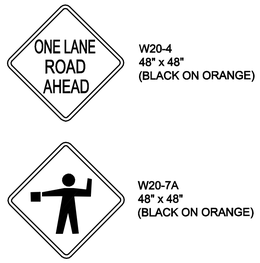

LEGEND

- 28" REFLECTORIZED CONES
- FLAGGER
- PORTABLE TRAFFIC CONTROL SIGN

NOTES:

1. ON ANY ONE STREET, SIDEWALK CONSTRUCTION SHALL PROCEED ON ONLY ONE SIDE AT A TIME.
2. CONTRACTOR SHALL STAGE SIDEWALK CONSTRUCTION SO THAT AT ALL TIMES THERE EXISTS A CONTINUOUS, FUNCTIONAL PEDESTRIAN ROUTE, WITH DETOURS AND TEMPORARY CROSSWALKS AS NECESSARY.
3. ONCE PROJECT IS COMPLETE, TEMPORARY CROSSWALKS SHALL BE REMOVED BY GRINDING.

TYPICAL SHORT-TERM LANE CLOSURE AT INTERSECTION DETAIL

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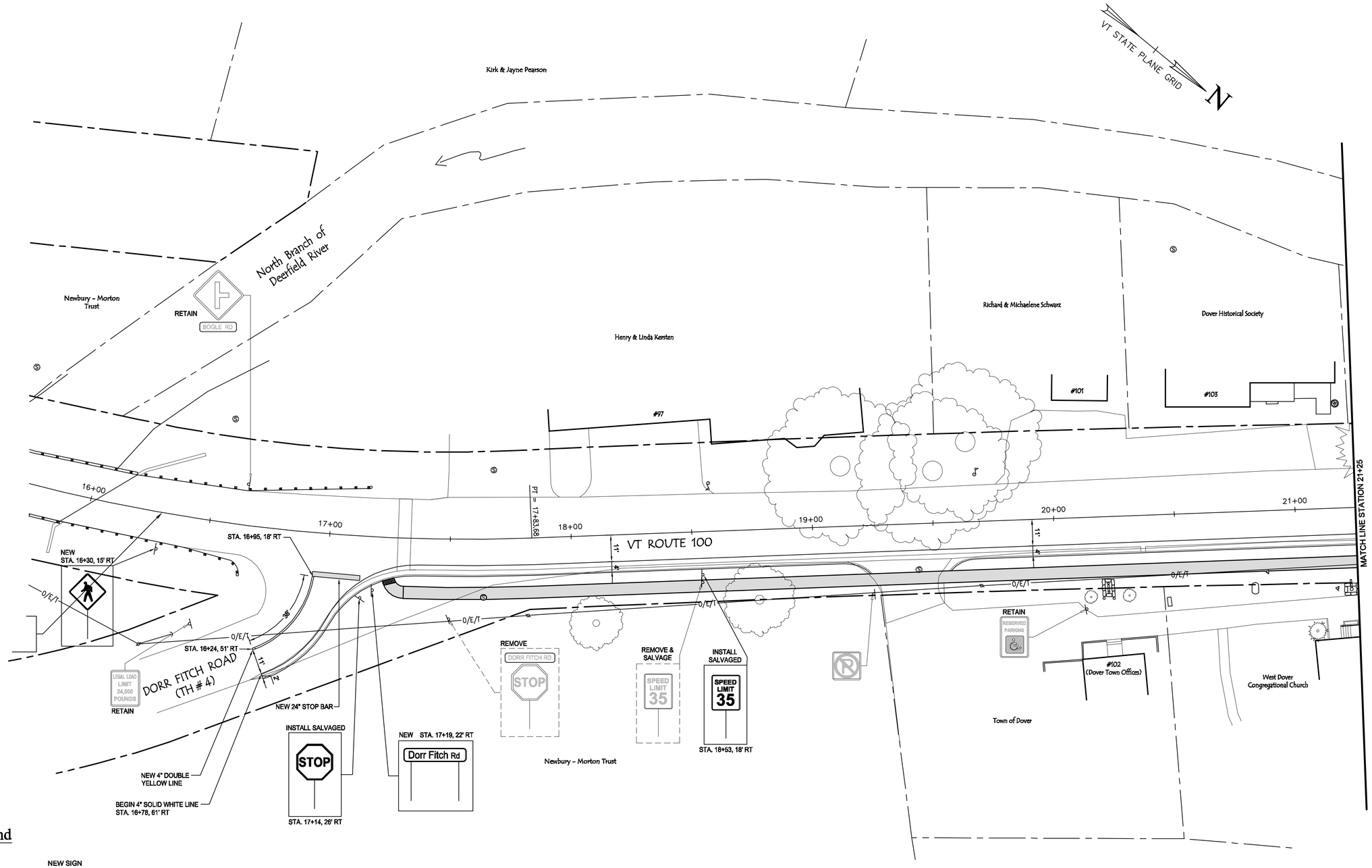

Legend

- NEW SIGN
- EXISTING SIGNS
- EXISTING TREES
- EXISTING SHRUBS
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- 0/E/T — 0/E/T — EXISTING UTILITY POLE & OVERHEAD WIRES
- EXISTING GUARDRAIL
- NEW GUARDRAIL
- EXISTING CATCH BASIN
- NEW CATCH BASIN & STORM MANHOLE
- EXISTING SEWER MANHOLE

20 0 20
SCALE IN FEET

PRELIMINARY PLANS
JULY 2014

SIGNS & PAVEMENT MARKINGS

DOVER VALLEY TRAIL SEGMENT A SIDEWALK

STP EH12(3)

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
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L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
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SHEET: 21

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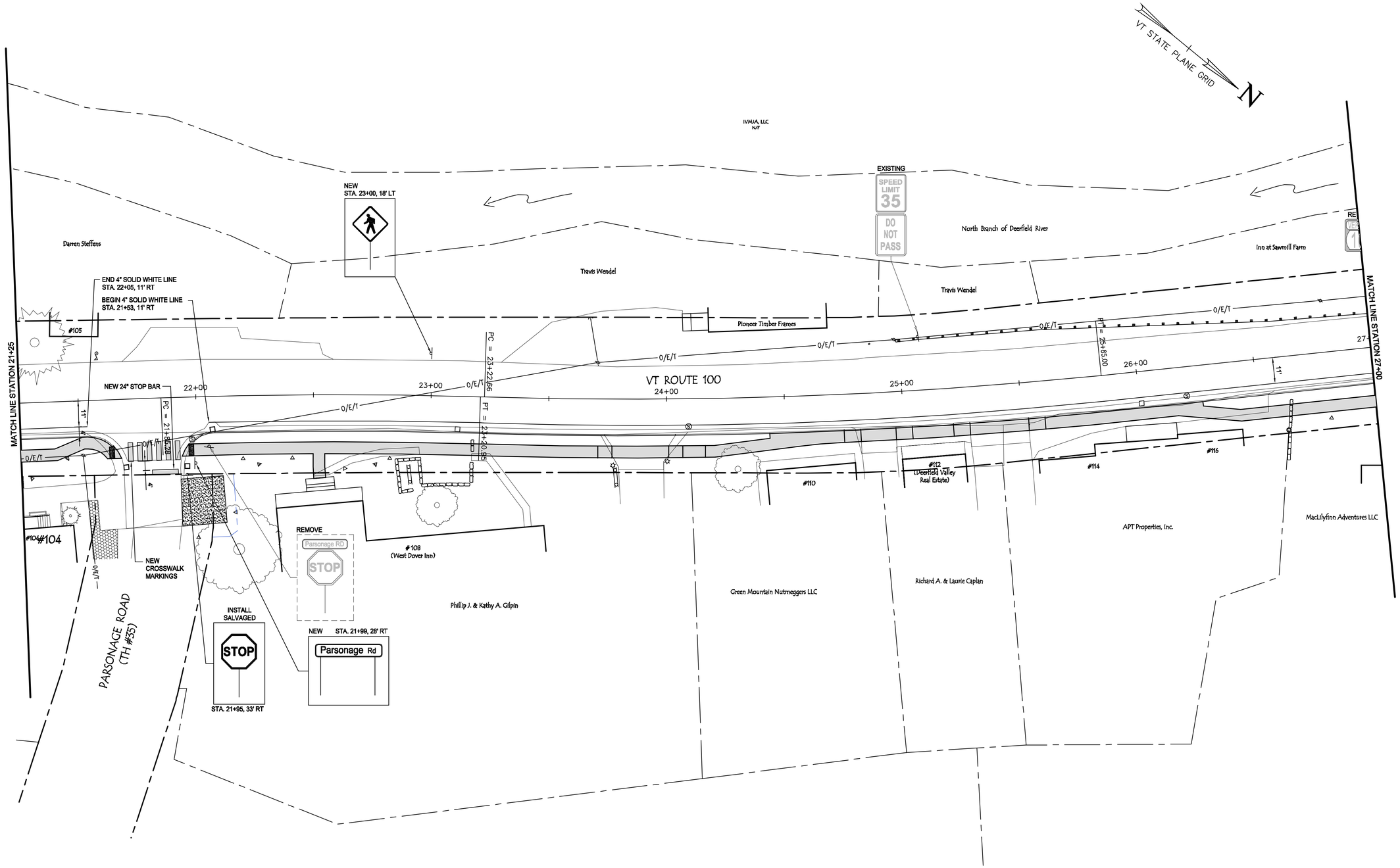

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SCALE IN FEET

PRELIMINARY PLANS
JULY 2014

SIGNS & PAVEMENT MARKINGS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NUMBER: 12049 DRAWN BY: L&D CHECKED BY: GHK / RJD	SHEET: 22

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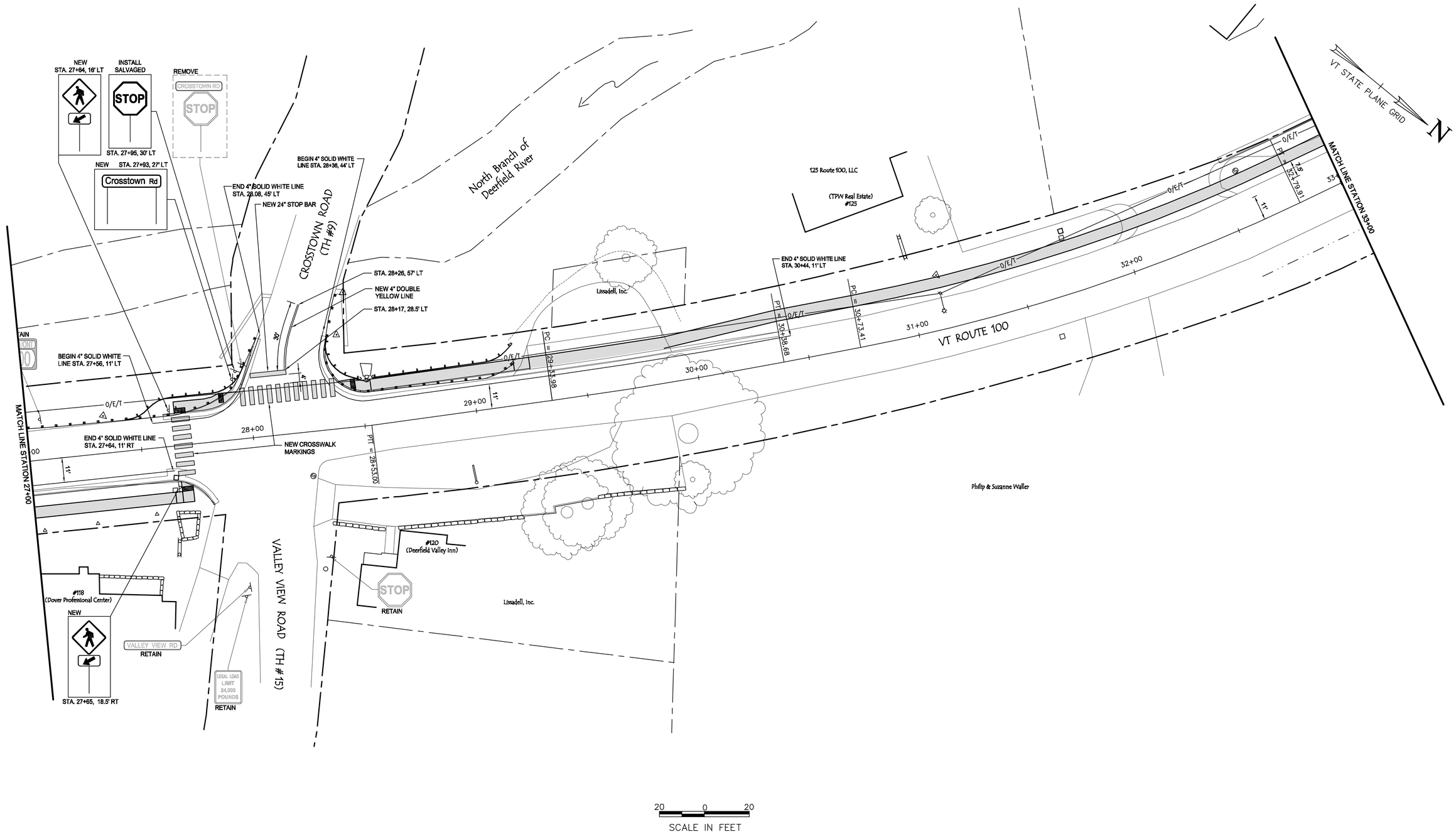

PRELIMINARY PLANS
JULY 2014

SIGNS & PAVEMENT MARKINGS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK STP EH12(3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NUMBER: 12049 DRAWN BY: L&D CHECKED BY: GHK / RJD	SHEET: 23

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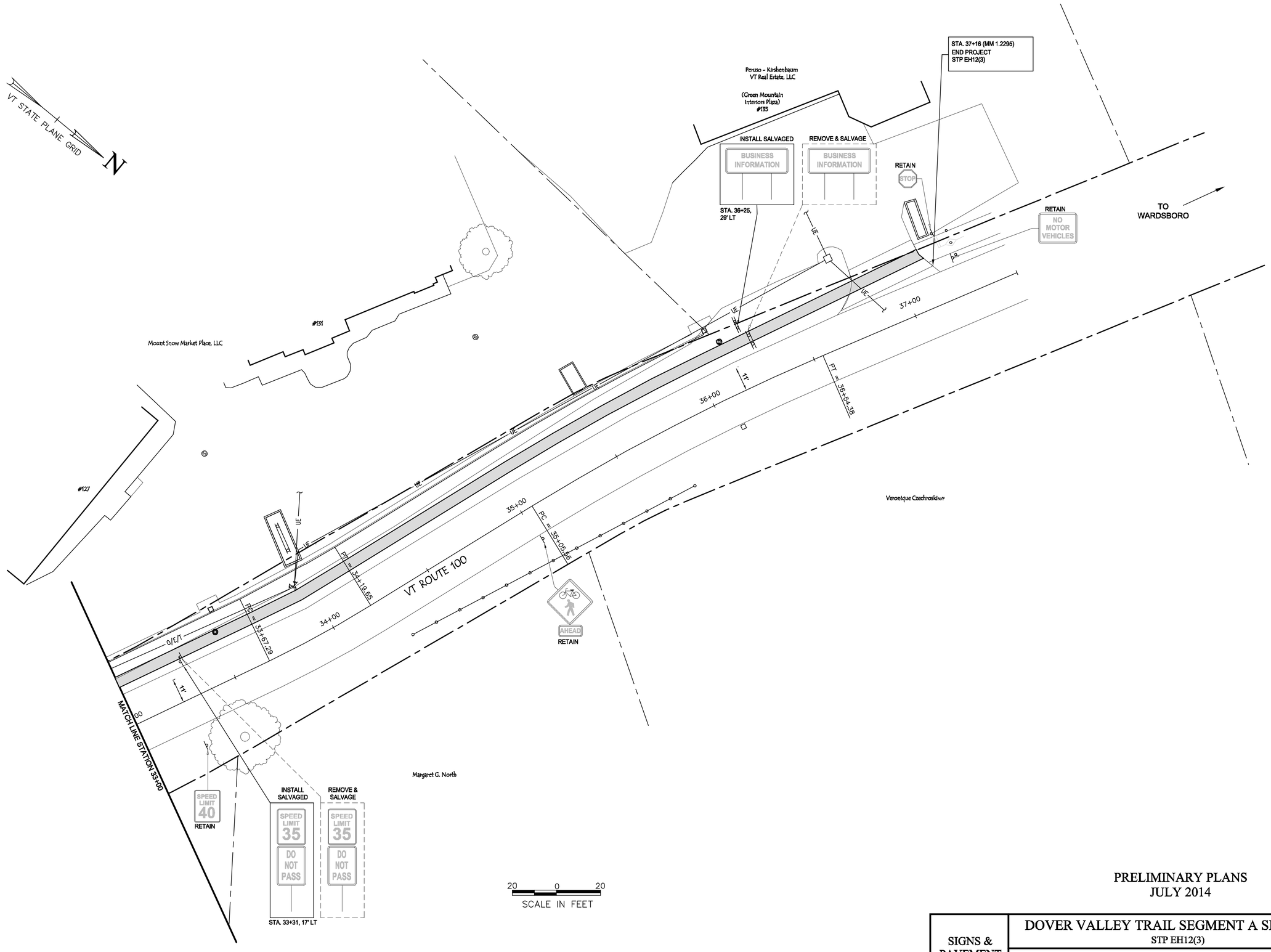

PRELIMINARY PLANS
JULY 2014

SIGNS & PAVEMENT MARKINGS

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
STP EH12(3)

Lamoureux & Dickinson
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L&D PROJECT NUMBER: 12049
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SHEET: 24

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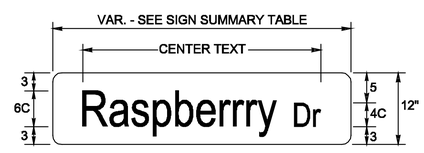
SIGN SUMMARY TABLE

STATION	SIGN LEGEND	SIGN DIMENSIONS EACH	SIGN DIMENSIONS SALVAGED	WIDTH (in)	HEIGHT (in)	AREA (SF)	NEW SIGN POSTS NO. OF POSTS	SQUARE STEEL (in) 1.75 (lb/ft 1.88)	2.0 (lb/ft 2.42)	2.5 (lb/ft 3.35)	MUTCD (COLOR)
16+30 RT		1		30"	30"	6.25	1		15		W11-2 (FYG)
17+14 RT	STOP		1								INSTALL ON SALVAGED POST
17+19 RT	Dorr Fitch Rd	1		50"	12"	3.5	2		(2)15		SEE DETAIL THIS SHEET
18+53, RT	SPEED LIMIT 35		1								INSTALL ON SALVAGED POST
21+95 RT	STOP		1								INSTALL ON SALVAGED POST
21+99 RT	Parsonage Rd	1		50"	12"	3.5	2		(2)15		SEE DETAIL THIS SHEET
23+00 LT		1		30"	30"	6.25	1		15		W11-2 (FYG)
27+64 LT		1 1		30" 24"	30" 12"	6.25 2.0	1		15		W11-2 (FYG) W11-7p (FYG)
	TOTAL	6	3					FT	FT	FT	
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."				TOTAL		SF 27.75	7		FT 135		

SIGN SUMMARY TABLE

STATION	SIGN LEGEND	SIGN DIMENSIONS EACH	SIGN DIMENSIONS SALVAGED	WIDTH (in)	HEIGHT (in)	AREA (SF)	NEW SIGN POSTS NO. OF POSTS	SQUARE STEEL (in) 1.75 (lb/ft 1.88)	2.0 (lb/ft 2.42)	2.5 (lb/ft 3.35)	MUTCD / COLOR
27+65 RT		1 1		30" 24"	30" 12"	6.25 2.0	1		15		W11-2 (FYG) W11-7p (FYG)
STA. 27+93, LT	Crosstown Rd	1		52"	12"	3.5	2		(2)15		SEE DETAIL THIS SHEET
STA. 27+95, LT	STOP		1								INSTALL ON SALVAGED POST
33+31 LT	SPEED LIMIT 35 DO NOT PASS		1 1								INSTALL ON SALVAGED POST
36+25 LT	BUSINESS INFORMATION		1								INSTALL ON SALVAGED POSTS
	TOTAL	3	4					FT	FT	FT	
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."				TOTAL		11.75	3		45		
				TOTALS		SF 39.5	10		FT 180		



DESIGN SAMPLE

STREET NAME SIGNS NOTES

DESIGN
EXCEPT AS SPECIFIED BELOW, LETTERS, DIGITS, ARROWS, SYMBOLS, SPACING AND TEXT DIMENSIONS SHALL CONFORM WITH THE "STANDARD HIGHWAY SIGNS BOOK - 2012 SUPPLEMENT" AND DESIGNS PRESCRIBED IN THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) ADOPTED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION (FHWA). STREET NAME SIGNS SHALL USE A 12" HIGH BLADE WITH SERIES "C" LETTERING. SPACING BETWEEN LETTERS IN EACH WORD SHALL BE KERNED AT 80%.

MATERIALS
THE MATERIAL FOR THE BLADES SHALL BE FLAT SHEET ALUMINUM WITH A MINIMUM THICKNESS OF 0.125 INCH. THE MOUNTING METHOD FOR STREET NAME SIGNS SHALL USE POST TOP MOUNTING BRACKETS HAVING A 12" SLOT LENGTH. HARDWARE FOR MOUNTING SIGNS TO POST SHALL BE INCIDENTAL TO OTHER ITEMS. THE MINIMUM VERTICAL CLEARANCE IS 8'-0" TO THE BOTTOM OF THE SIGN. FOR POST TOP MOUNTINGS, STREET NAME SIGNS SHALL HAVE TEXT ON BOTH SIDES. STREET NAME SIGNS SHALL HAVE 1.5" CORNER RADII.

COLORS
STREET NAME SIGNS SHALL HAVE REFLECTORIZED WHITE TEXT ON A REFLECTORIZED GREEN BACKGROUND.

PRELIMINARY PLANS
JULY 2014

SIGN SUMMARY SHEET

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
STP EH12(3)

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14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
CHECKED BY: GHK / RJD

SHEET: 25

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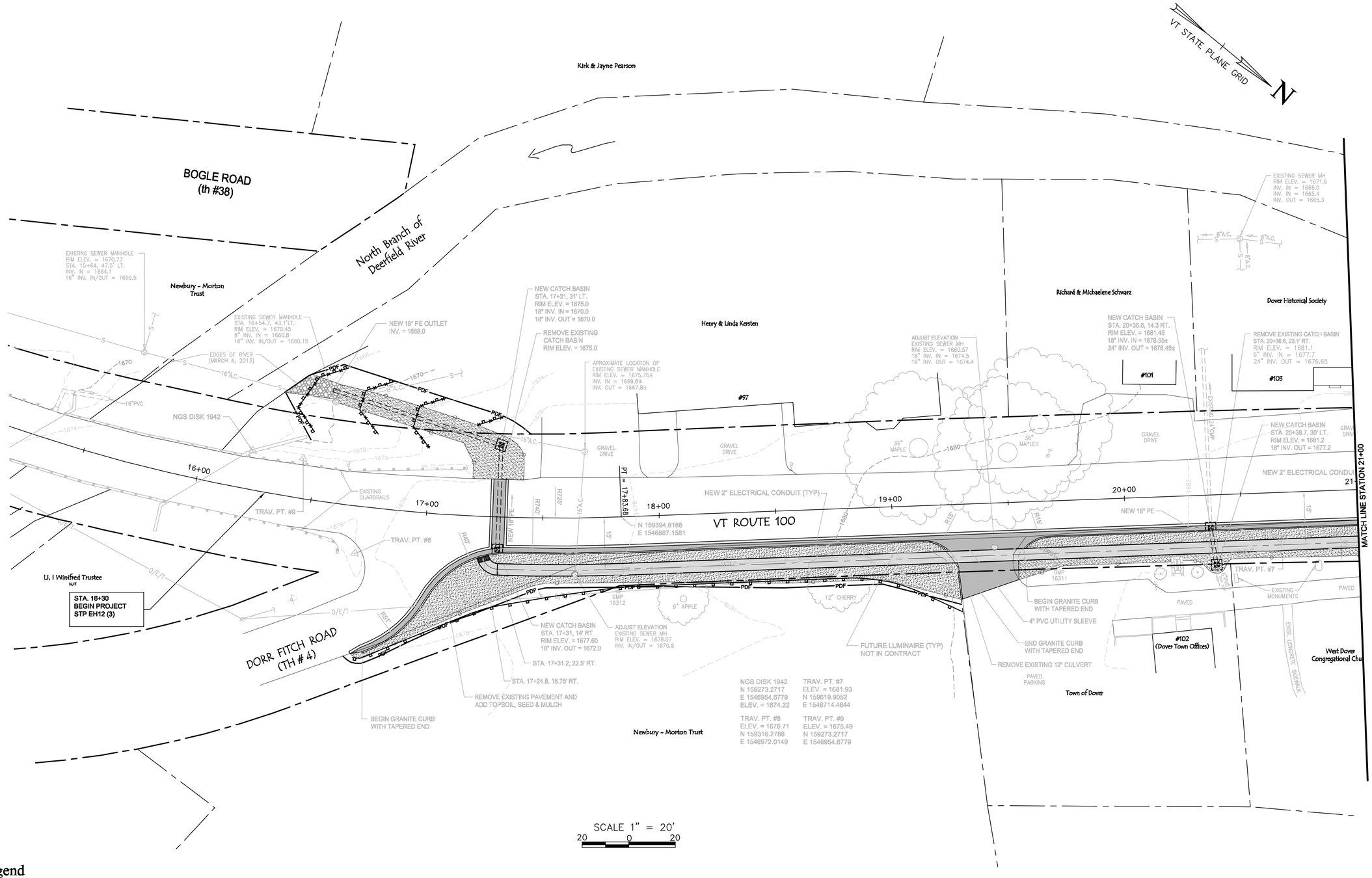

Legend

- SURVEY CONTROL POINT
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- NEW PERMANENT EASEMENT
- NEW TEMPORARY CONSTRUCTION EASEMENT
- PDF — PROJECT DEMARCATION FENCE
- TEMPORARY SILT FENCE WITH WOVEN WIRE
- TEMPORARY SILT FENCE
- TEMPORARY INLET PROTECTION
- NEW TOPSOIL, SEED & MULCH AREA

PRELIMINARY PLANS
JULY 2014

EROSION PREVENTION & SEDIMENT CONTROL

DOVER VALLEY TRAIL SEGMENT A SIDEWALK

STP EH12(3)

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L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
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SHEET: 26

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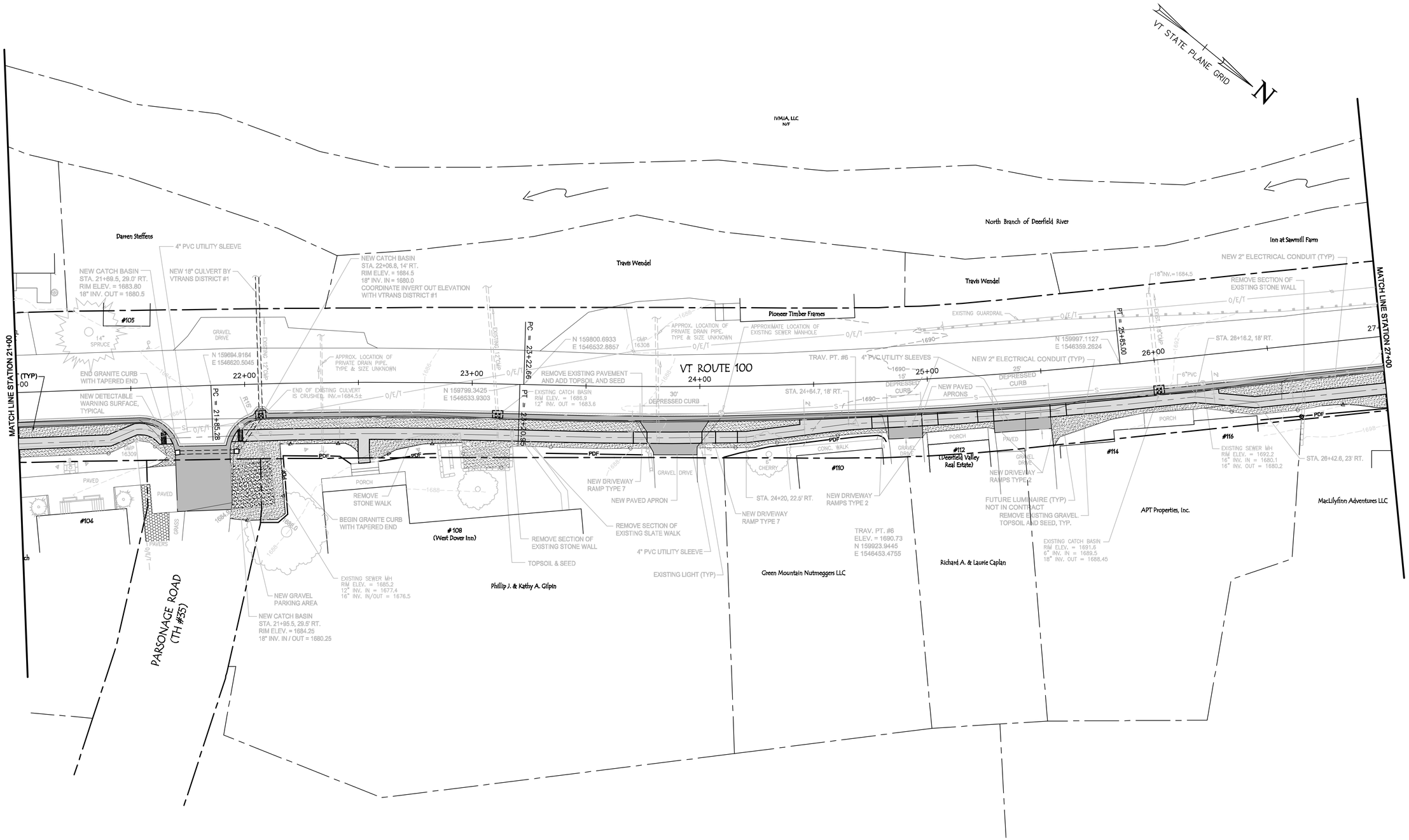

Legend

- SURVEY CONTROL POINT
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- NEW PERMANENT EASEMENT
- NEW TEMPORARY CONSTRUCTION EASEMENT
- PDF — PROJECT DEMARCATION FENCE
- TEMPORARY SILT FENCE
- TEMPORARY INLET PROTECTION
- NEW TOPSOIL, SEED & MULCH AREA

SCALE 1" = 20'
20 0 20

PRELIMINARY PLANS
JULY 2014

EROSION PREVENTION & SEDIMENT CONTROL

DOVER VALLEY TRAIL SEGMENT A SIDEWALK

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L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
CHECKED BY: GHK / RJD

SHEET: 27

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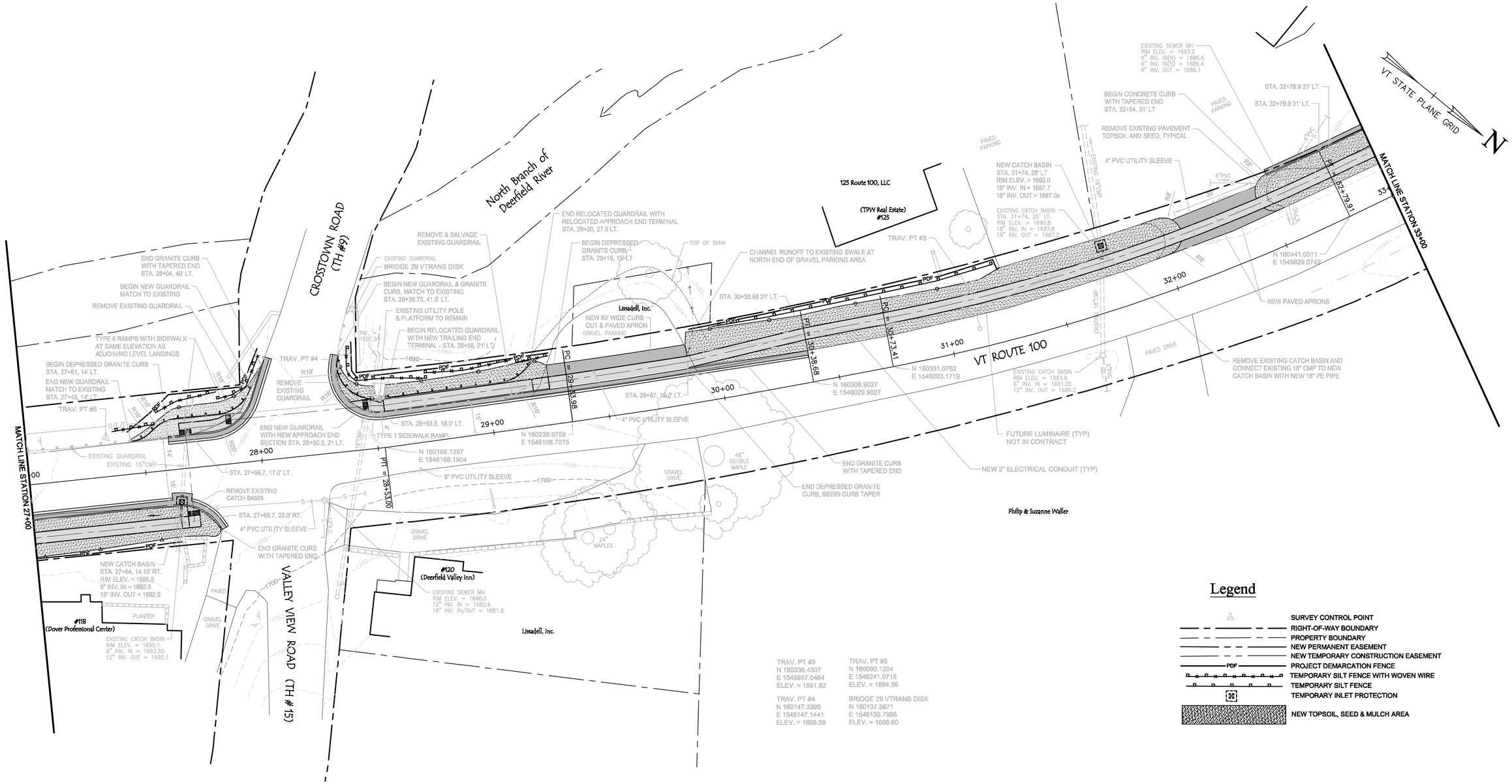

Legend

- SURVEY CONTROL POINT
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- NEW PERMANENT EASEMENT
- NEW TEMPORARY CONSTRUCTION EASEMENT
- PDF — PROJECT DEMARCATION FENCE
- TEMPORARY SILT FENCE WITH WOVEN WIRE
- TEMPORARY SILT FENCE
- TEMPORARY INLET PROTECTION
- NEW TOPSOIL, SEED & MULCH AREA

PRELIMINARY PLANS
JULY 2014

EROSION PREVENTION & SEDIMENT CONTROL

DOVER VALLEY TRAIL SEGMENT A SIDEWALK

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DRAWN BY: L&D
CHECKED BY: GHK / RJD

SHEET: 28

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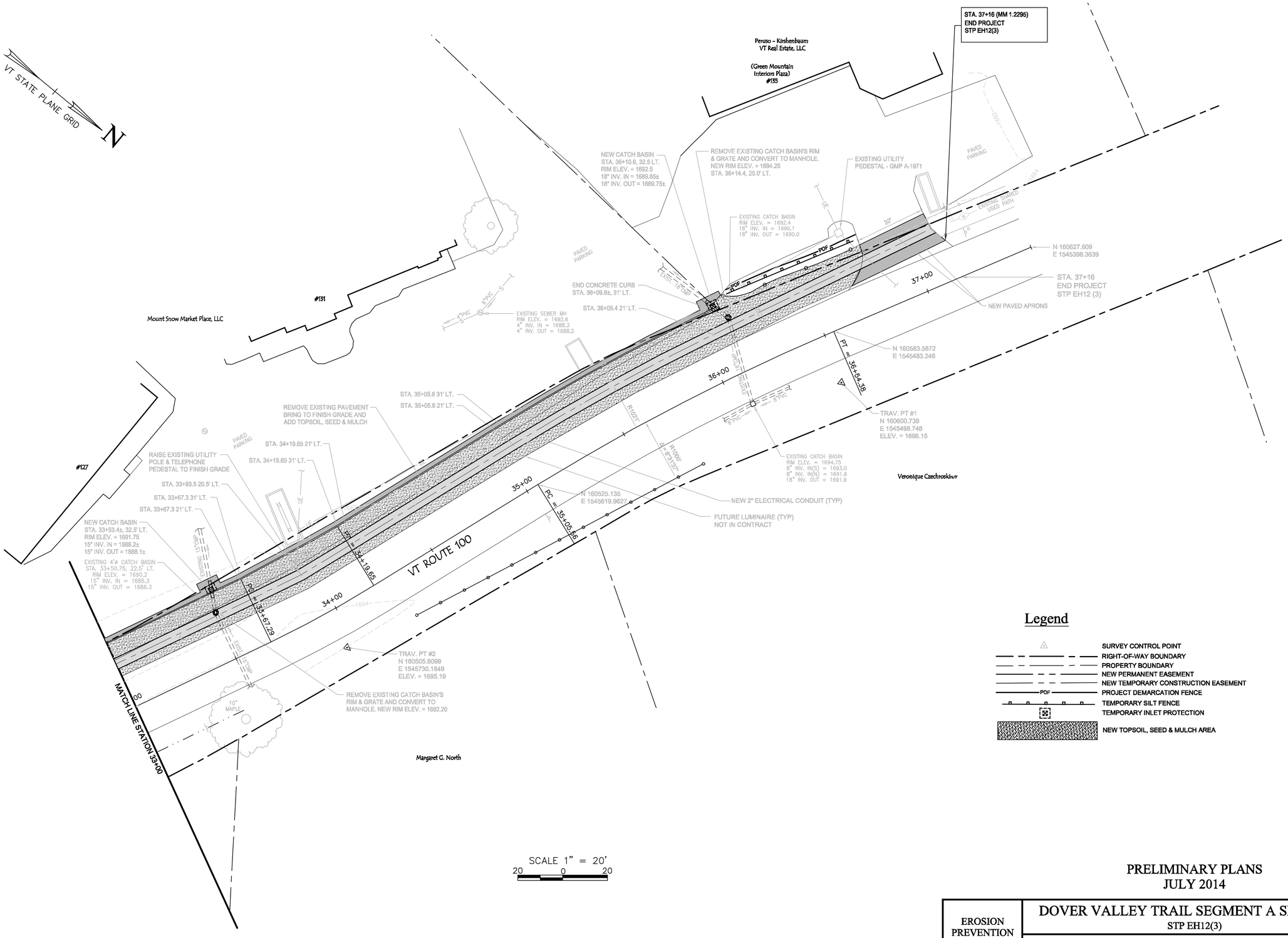

Legend

- SURVEY CONTROL POINT
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- NEW PERMANENT EASEMENT
- NEW TEMPORARY CONSTRUCTION EASEMENT
- PDF — PROJECT DEMARCATION FENCE
- TEMPORARY SILT FENCE
- TEMPORARY INLET PROTECTION
- NEW TOPSOIL, SEED & MULCH AREA

PRELIMINARY PLANS
JULY 2014

EROSION PREVENTION & SEDIMENT CONTROL

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L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
CHECKED BY: GHK / RJD

SHEET: 29

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