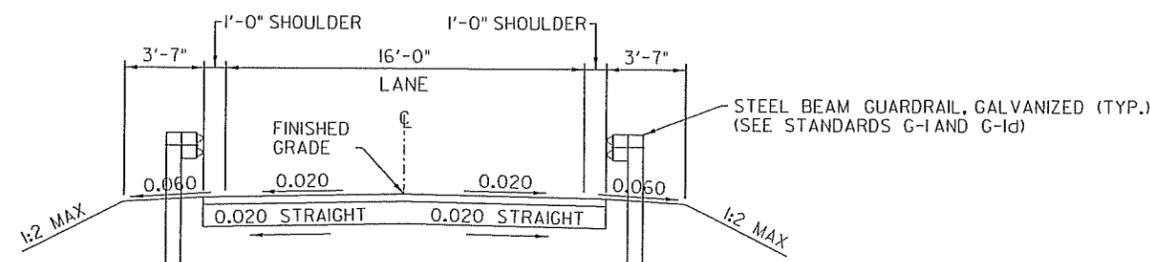


4" BITUMINOUS CONCRETE PAVEMENT (2-2" LIFTS) (TYPE 111)
 12" SUBBASE OF DENSE GRADED CRUSHED STONE



TYPICAL DETOUR ROADWAY SECTION WITH
 ALTERNATING ONE-WAY TRAFFIC

SCALE: 1/4" = 1'-0"

TRAFFIC CONTROL NOTES

1. ANY USE OF UNIFORMED TRAFFIC OFFICERS SHALL BE PAID UNDER ITEM 630.10, "UNIFORMED TRAFFIC OFFICERS". ANY USE OF FLAGGERS SHALL BE PAID UNDER ITEM 630.15, "FLAGGERS".
2. TRAFFIC CONTROL SHALL CONSIST OF ONE-WAY ALTERNATING TRAFFIC UNDER SIGNALIZED CONTROL. ANY EXCAVATION, GRANULAR BACKFILL FOR STRUCTURES, SUBBASE MATERIALS, DRAINAGE CULVERTS, TEMPORARY BRIDGE, TEMPORARY TRAFFIC BARRIER, TRAFFIC CONTROL DEVICES, TEMPORARY SIGNALS, TEMPORARY PAVEMENT MARKINGS, REMOVAL OF EXISTING AND TEMPORARY PAVEMENT MARKINGS, BITUMINOUS CONCRETE PAVEMENT, AND OTHER ITEMS REQUIRED TO CONSTRUCT, INSPECT, MAINTAIN AND REMOVE THE TEMPORARY DETOUR WILL BE INCLUDED UNDER PAY ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)". ALL OTHER ITEMS RELATED TO TRAFFIC CONTROL, INCLUDING THE PROJECT TRAFFIC CONTROL PLAN AND ALL OTHER ON AND OFF-PROJECT TEMPORARY CONSTRUCTION SIGNING, WILL BE INCLUDED UNDER PAY ITEM 641.10, "TRAFFIC CONTROL".
3. ANY VEGETATION WITHIN OR OUTSIDE THE CONSTRUCTION LIMITS SHOWN ON THE PLANS WHICH IS DISTURBED IN ORDER TO MAINTAIN TRAFFIC IN CONJUNCTION WITH THIS PLAN OR ANY OTHER PLAN, SHALL BE RE-ESTABLISHED TO THE SATISFACTION OF THE ENGINEER. PAYMENT WILL BE MADE UNDER THE APPROPRIATE PAY ITEM.
4. NO ACCOMMODATIONS NEED TO BE MADE FOR PEDESTRIAN AND BICYCLE TRAFFIC.
5. ACCESS TO ALL EXISTING DRIVES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
6. INSTALLATION OF NECESSARY SIGNS SHALL NOT BLOCK ANY EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES. THE CONTRACTOR SHALL ATTEMPT TO MAINTAIN AT LEAST 100 FEET BETWEEN SIGN ASSEMBLIES.
7. THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233 PRIOR TO COMMENCING ANY WORK.
8. ALL TRAFFIC SIGNS, TYPE A THAT ARE 36" X 36" OR LARGER SHALL BE MOUNTED ON TWO POSTS.
9. ALL SIGN PACKAGES SHALL CONFORM TO THE 2009 MUTCD OR ITS LATEST REVISION.
10. NON CRASHWORTHY FEATURES RESULTING FROM CONSTRUCTION ACTIVITIES THAT ARE LOCATED WITHIN THE CLEAR ZONE SHALL BE PROPERLY PROTECTED. ALL TEMPORARY DEVICES SHALL BE NCHRP REPORT 350 OR MASH COMPLIANT AND SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 621.
11. WHERE TEMPORARY BARRIER IS USED, BARRIER ENDS FACING ONCOMING TRAFFIC SHALL BE TAPERED BEYOND THE CLEAR ZONE OR PROTECTED WITH AN ENERGY ABSORPTION ATTENUATOR. ENERGY ABSORPTION ATTENUATORS WILL BE INCLUDED UNDER PAY ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)".
12. REFER TO MUTCD FIGURE 6H-12, LANE CLOSURE ON A TWO-LANE ROAD USING TRAFFIC CONTROL SIGNALS (TA-12) AND THE TRAFFIC CONTROL PLAN ON SHEET 30 FOR ADDITIONAL INFORMATION REGARDING REQUIRED SIGNAGE AND SIGN LOCATIONS.
13. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THE PLAN (AND MAKING CHANGES IF NECESSARY) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10, "TRAFFIC CONTROL".
14. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) WARNING MOTORISTS OF THE CONSTRUCTION PROJECT AND CHANGING TRAFFIC PATTERNS WILL BE INCLUDED UNDER PAY ITEM 641.15, "PORTABLE CHANGEABLE MESSAGE SIGN". THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO DETERMINE APPROPRIATE LOCATIONS FOR PCMS.

C.L.D. 12-0106 MODEL: TYP03

SCALE 1/4" = 1'-0"
 0 4 8



PROJECT NAME: LUNENBURG	PLOT DATE: 8/24/2015
PROJECT NUMBER: NH CULV(27)	DRAWN BY: W. GORDON
FILE NAME: 11b294/cos/z11b294frm.dgn	CHECKED BY: P. SHEDD
PROJECT LEADER: J. BYATT	SHEET 21 OF 74
DESIGNED BY: M. HALEY	
TYPICAL DETOUR SECTION SHEET	

NOTE

REMOVAL OF EXISTING PAVEMENT MARKINGS AND APPLICATION OF TEMPORARY PAVEMENT MARKINGS, GUARDRAIL, ANCHORS, DELINEATORS AND DRIVE CONSTRUCTION AS NOTED ON THIS SHEET WILL BE INCLUDED UNDER PAY ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)". NOTES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

TEMPORARY 4 INCH WHITE LINE, PAINT
100+50 TO 104+96 SOLID LT & RT

TEMPORARY 4 INCH YELLOW LINE, PAINT
100+50 TO 101+95 SOLID LT & RT

TEMPORARY 24 INCH STOP BAR, PAINT
101+95 RT

STEEL BEAM GUARDRAIL, GALVANIZED

102+90.0 TO 104+40.0 LT
103+65.0 TO 104+40.0 RT

ANCHOR FOR STEEL BEAM RAIL

102+90.0 LT
103+65.0 RT

DELINEATOR WITH STEEL POST

102+90.0 LT
103+65.0 RT

CONSTRUCT DRIVES WITH 4 FOOT PAVED APRON

102+38 LT (18.4 FT WIDE, GRAVEL, RES.)

RETAIN EXISTING POLE.
INSTALL NEW ANCHOR
(BY OTHERS).



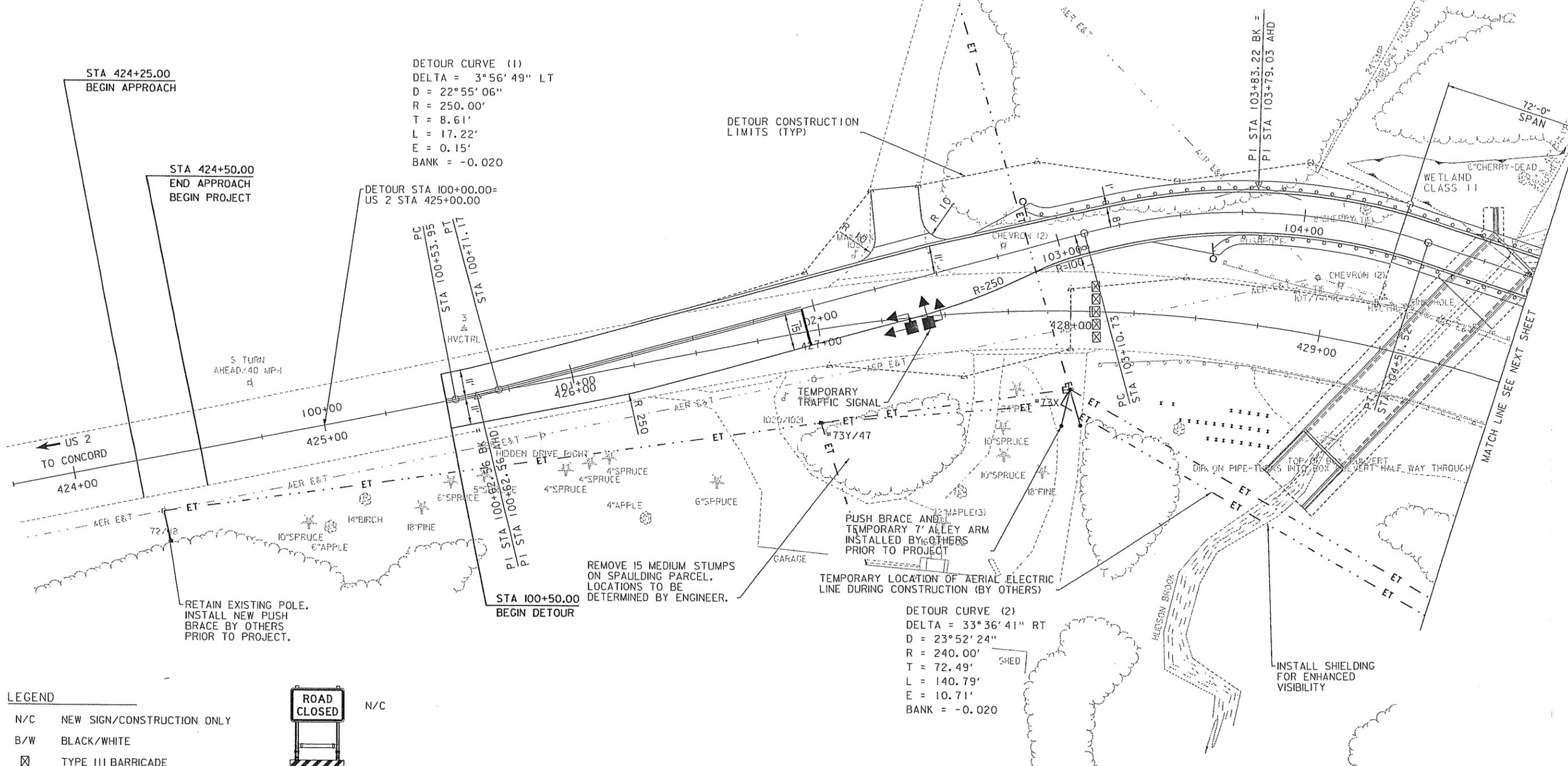
STA 424+25.00
BEGIN APPROACH

STA 424+50.00
END APPROACH
BEGIN PROJECT

DETOUR CURVE (1)
DELTA = 3°56'49" LT
D = 22°55'06"
R = 250.00'
T = 8.61'
L = 17.22'
E = 0.15'
BANK = -0.020

DETOUR CONSTRUCTION
LIMITS (TYP)

DETOUR STA 100+00.00=
US 2 STA 425+00.00



5 TURN
AHEAD/40 MPH

US 2
TO CONCORD

TEMPORARY
TRAFFIC SIGNAL

PUSH BRACE AND
TEMPORARY 7' ALLEY ARM
INSTALLED BY OTHERS
PRIOR TO PROJECT

TEMPORARY LOCATION OF AERIAL ELECTRIC
LINE DURING CONSTRUCTION (BY OTHERS)

REMOVE 15 MEDIUM STUMPS
ON SPAULDING PARCEL.
LOCATIONS TO BE
DETERMINED BY ENGINEER.

INSTALL SHIELDING
FOR ENHANCED
VISIBILITY

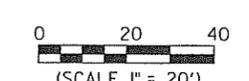
DETOUR CURVE (2)
DELTA = 33°36'41" RT
D = 23°52'24"
R = 240.00'
T = 72.49'
L = 140.79'
E = 10.71'
BANK = -0.020

LEGEND

- N/C NEW SIGN/CONSTRUCTION ONLY
- B/W BLACK/WHITE
- ☒ TYPE III BARRICADE
- ☒ TYPE III BARRICADE (MOD.)
- ▬▬▬ TEMPORARY TRAFFIC BARRIER
- ⊗ ENERGY ABSORPTION ATTENUATOR

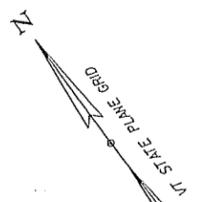


R11-2 B/W SIGN
MOUNTED ON TYPE III
BARRICADE (MODIFIED)



PROJECT NAME: LUNENBURG	PLOT DATE: 8/24/2015
PROJECT NUMBER: NH CULV(27)	DRAWN BY: M. HALEY
FILE NAME: 11b294/cos/z11b294bdr tcopl.dgn	CHECKED BY: P. SHEDO
PROJECT LEADER: J. BYATT	SHEET 22 OF 74
DESIGNED BY: M. HALEY	
PHASE I TRAFFIC CONTROL SHEET 1	

CLO 12-0105 MODEL: L01



DETOUR CURVE (4)
 DELTA = 9° 38' 10" LT
 D = 22° 55' 06"
 R = 250.00'
 T = 21.07'
 L = 42.05'
 E = 0.89'
 BANK = -0.020

BARRIENDE Field Drive During Detour

Install Temp Field Drive

DETOUR CURVE (3)
 DELTA = 27° 54' 18" RT
 D = 23° 52' 24"
 R = 240.00'
 T = 59.63'
 L = 116.89'
 E = 7.30'
 BANK = -0.020

NOTE
 REMOVAL OF EXISTING PAVEMENT MARKINGS AND APPLICATION OF TEMPORARY PAVEMENT MARKINGS, GUARDRAIL, ANCHORS, DELINEATORS AND DRIVE CONSTRUCTION AS NOTED ON THIS SHEET WILL BE INCLUDED UNDER PAY ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)". NOTES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

TEMPORARY 4 INCH WHITE LINE, PAINT
 104+96 TO 108+25 SOLID LT & RT
 TEMPORARY 24 INCH STOP BAR, PAINT
 108+25 LT

STEEL BEAM GUARDRAIL, GALVANIZED
 105+12.0 TO 106+24.5 LT
 105+12.0 TO 106+24.5 RT
 ANCHOR FOR STEEL BEAM RAIL
 106+24.5 LT
 106+24.5 RT
 DELINEATOR WITH STEEL POST
 106+24.5 LT
 106+24.5 RT
 CONSTRUCT DRIVES WITH 4 FOOT PAVED APRON
 107+33.1 LT (18.0 FT WIDE, GRAVEL, FIELD)

- LEGEND**
- N/C NEW SIGN/CONSTRUCTION ONLY
 - B/W BLACK/WHITE
 - ☒ TYPE III BARRICADE
 - ☒ TYPE III BARRICADE (MOD.)
 - ▬ TEMPORARY TRAFFIC BARRIER
 - ⊗ ENERGY ABSORPTION ATTENUATOR



R11-2 B/W SIGN MOUNTED ON TYPE III BARRICADE (MODIFIED)



PROJECT NAME: LUNENBURG	
PROJECT NUMBER: NH CULV(27)	
FILE NAME: \\b294\cos\z11b294bdr\toppl.dgn	PLOT DATE: 8/24/2015
PROJECT LEADER: J. BYATT	DRAWN BY: M. HALEY
DESIGNED BY: M. HALEY	CHECKED BY: P. SHEDD
PHASE I TRAFFIC CONTROL SHEET 2	SHEET 23 OF 74

CLD 12-0105 MODEL 1.102

NOTE

REMOVAL OF EXISTING PAVEMENT MARKINGS AND APPLICATION OF TEMPORARY PAVEMENT MARKINGS, GUARDRAIL, ANCHORS, DELINEATORS AND DRIVE CONSTRUCTION AS NOTED ON THIS SHEET WILL BE INCLUDED UNDER PAY ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)". NOTES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

TEMPORARY 4 INCH WHITE LINE, PAINT
425+50 TO 429+75 LT & RT

TEMPORARY 4 INCH YELLOW LINE, PAINT
425+50 TO 426+85 LT & RT

TEMPORARY 24 INCH STOP BAR, PAINT
426+85 RT

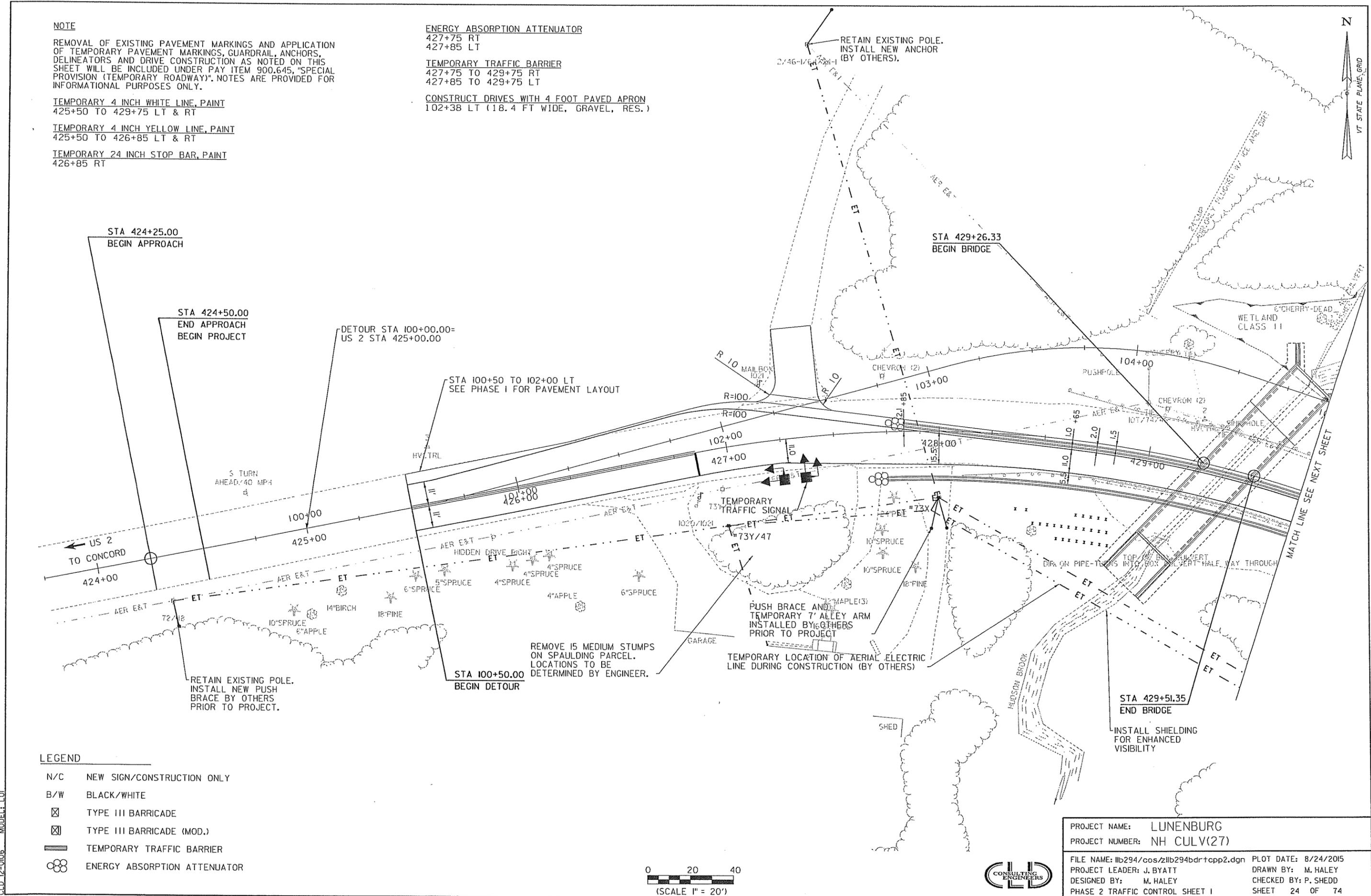
ENERGY ABSORPTION ATTENUATOR

427+75 RT
427+85 LT

TEMPORARY TRAFFIC BARRIER

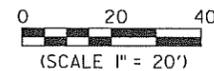
427+75 TO 429+75 RT
427+85 TO 429+75 LT

CONSTRUCT DRIVES WITH 4 FOOT PAVED APRON
102+38 LT (18.4 FT WIDE, GRAVEL, RES.)



LEGEND

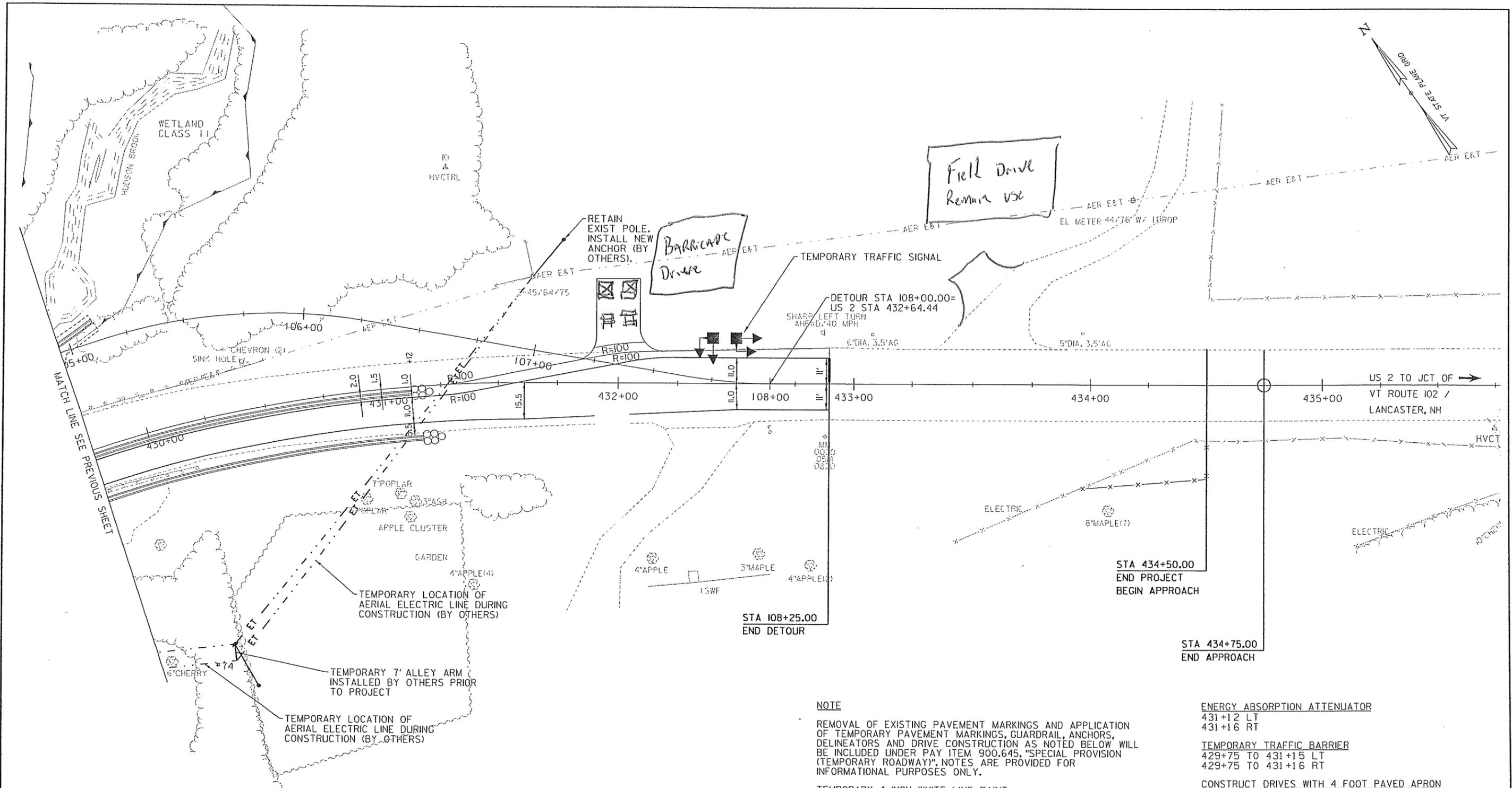
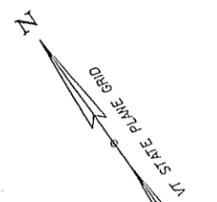
- N/C NEW SIGN/CONSTRUCTION ONLY
- B/W BLACK/WHITE
- ☒ TYPE III BARRICADE
- ☒ TYPE III BARRICADE (MOD.)
- ==== TEMPORARY TRAFFIC BARRIER
- ⊗ ENERGY ABSORPTION ATTENUATOR



PROJECT NAME: LUNENBURG
PROJECT NUMBER: NH CULV(27)

FILE NAME: llb294/cos/zllb294bdr+cpp2.dgn PLOT DATE: 8/24/2015
PROJECT LEADER: J. BYATT DRAWN BY: M. HALEY
DESIGNED BY: M. HALEY CHECKED BY: P. SHEDD
PHASE 2 TRAFFIC CONTROL SHEET I SHEET 24 OF 74

CLD 12-0106 MODEL: L01



STA 434+50.00
END PROJECT
BEGIN APPROACH

STA 434+75.00
END APPROACH

STA 108+25.00
END DETOUR

NOTE
REMOVAL OF EXISTING PAVEMENT MARKINGS AND APPLICATION OF TEMPORARY PAVEMENT MARKINGS, GUARDRAIL, ANCHORS, DELINEATORS AND DRIVE CONSTRUCTION AS NOTED BELOW WILL BE INCLUDED UNDER PAY ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)". NOTES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

TEMPORARY 4 INCH WHITE LINE, PAINT
429+75 TO 432+90 LT & RT

TEMPORARY 24 INCH STOP BAR, PAINT
432+90 LT

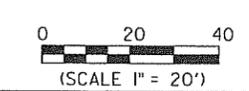
ENERGY ABSORPTION ATTENUATOR
431+12 LT
431+16 RT

TEMPORARY TRAFFIC BARRIER
429+75 TO 431+15 LT
429+75 TO 431+16 RT

CONSTRUCT DRIVES WITH 4 FOOT PAVED APRON
107+33.1 LT (18.0 FT WIDE, GRAVEL, FIELD)

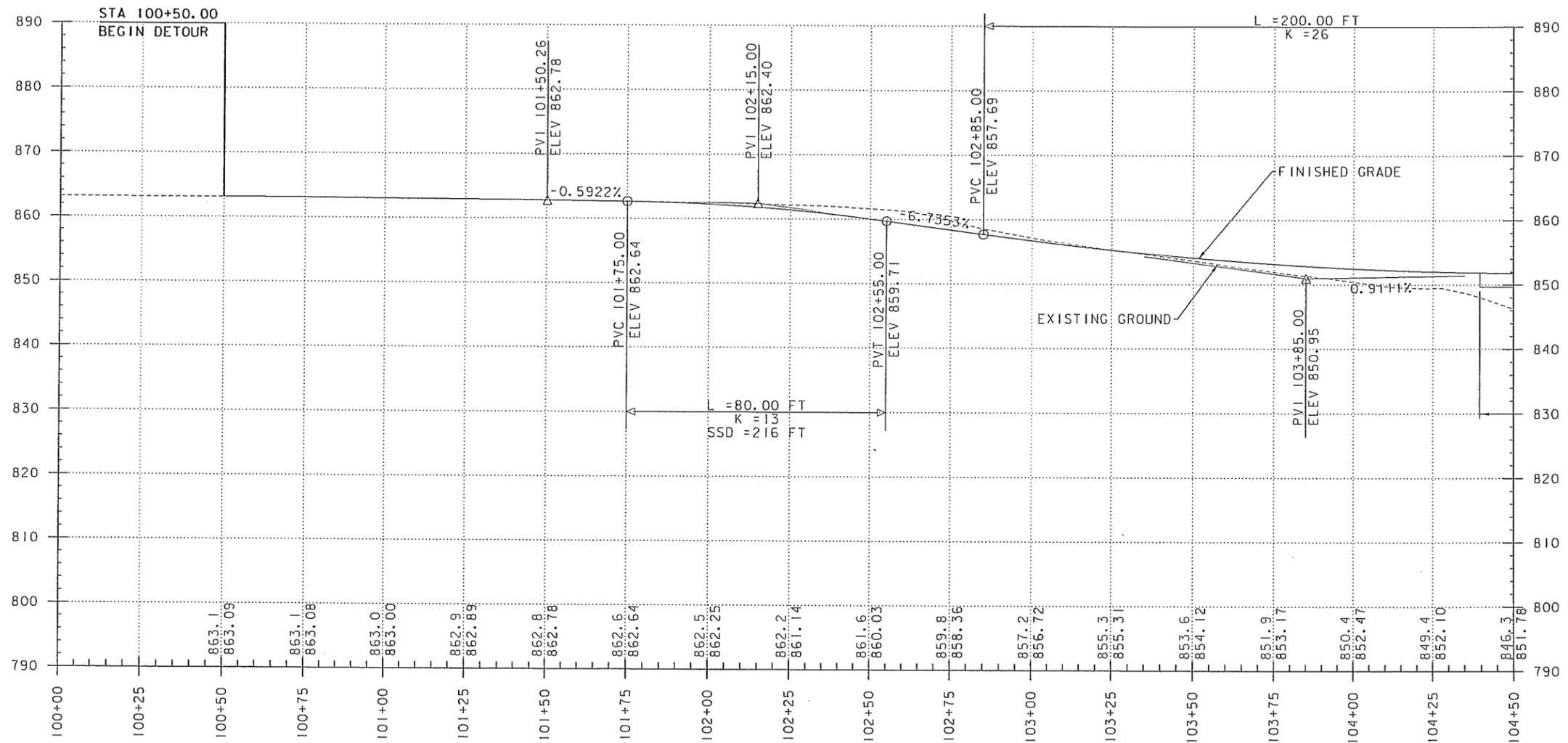
LEGEND

N/C	NEW SIGN/CONSTRUCTION ONLY
B/W	BLACK/WHITE
☒	TYPE III BARRICADE
☒	TYPE III BARRICADE (MOD.)
▬▬▬	TEMPORARY TRAFFIC BARRIER
⊗	ENERGY ABSORPTION ATTENUATOR



PROJECT NAME: LUNENBURG	
PROJECT NUMBER: NH CULV(27)	
FILE NAME: lb294/cos/zlb294bdr+topp2.dgn	PLOT DATE: 8/24/2015
PROJECT LEADER: J. BYATT	DRAWN BY: M. HALEY
DESIGNED BY: M. HALEY	CHECKED BY: P. SHEDD
PHASE 2 TRAFFIC CONTROL SHEET 2	SHEET 25 OF 74

CLD 12-0106 MODEL: L02



US 2 DETOUR PROFILE

HOR. SCALE 1" = 20'-0"
 VER. SCALE 1" = 10'-0"

CLD 12-0106 MODEL: PROOF

STATIONS AND ELEVATIONS ARE IN FEET.

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG THE CENTERLINE.

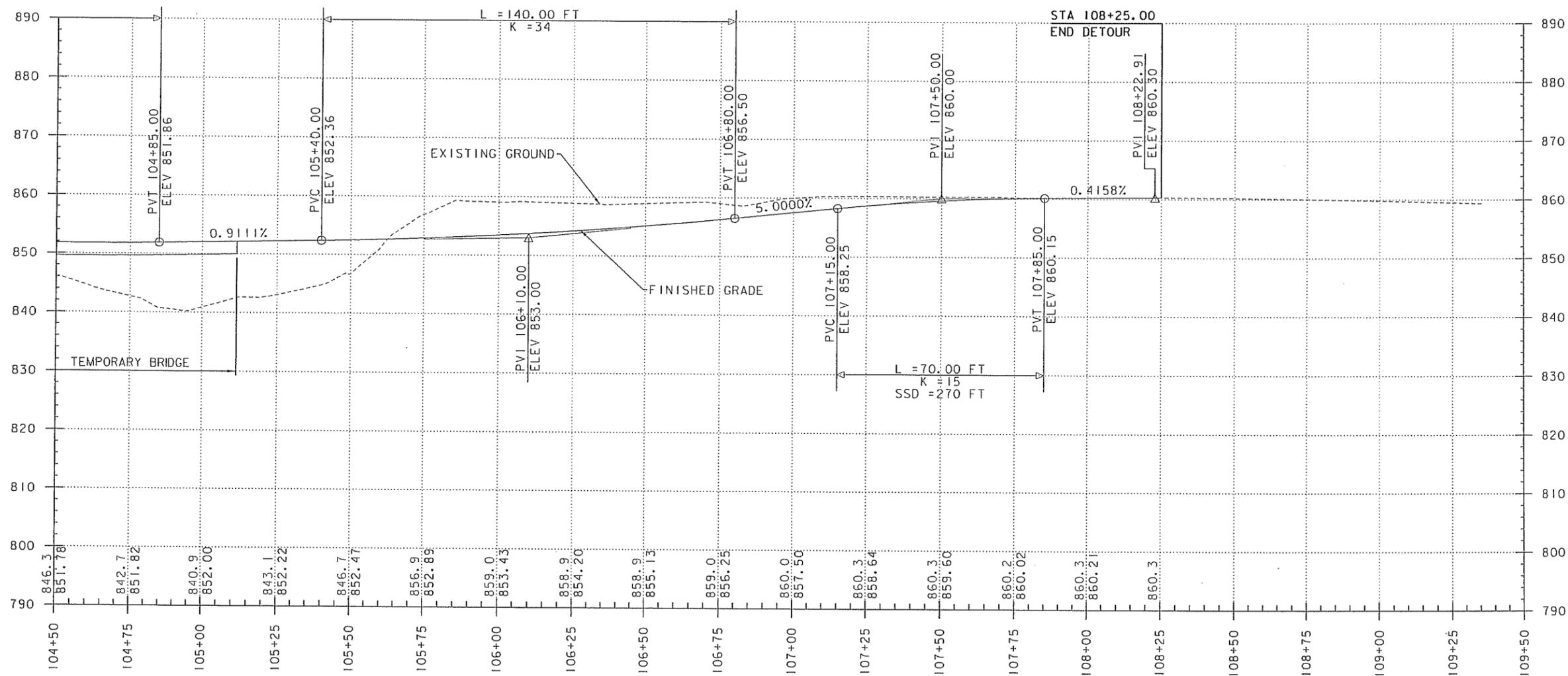
THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED FINISHED GRADE ALONG THE CENTERLINE.



PROJECT NAME: LUNENBURG
 PROJECT NUMBER: NH CULV(27)

FILE NAME: lb294/cos/zlb294prodtr.dgn
 PROJECT LEADER: J. BYATT
 DESIGNED BY: M. HALEY
 TEMPORARY DETOUR PROFILE SHEET 1

PLOT DATE: 8/6/2015
 DRAWN BY: M. HALEY
 CHECKED BY: P. SHEDD
 SHEET 26 OF 74



US 2 DETOUR PROFILE

HOR. SCALE 1" = 20'-0"
 VER. SCALE 1" = 10'-0"

CLD 12-0106 MODEL: P0002

STATIONS AND ELEVATIONS ARE IN FEET.

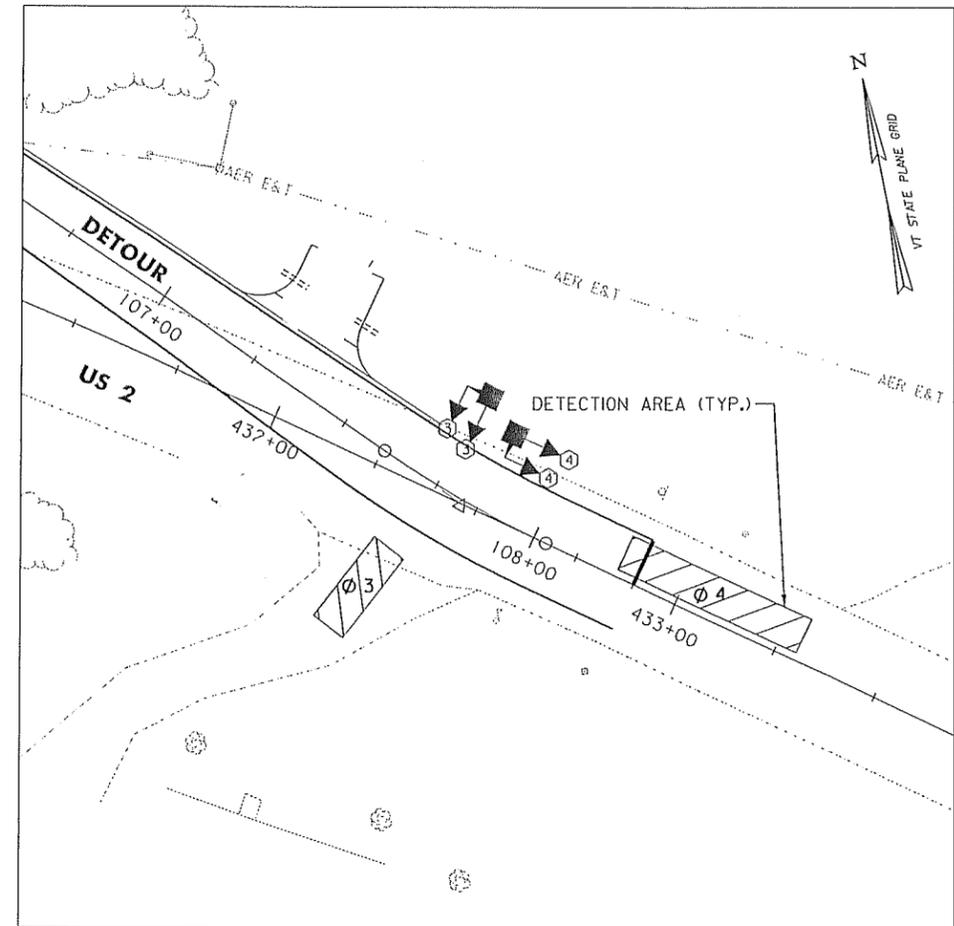
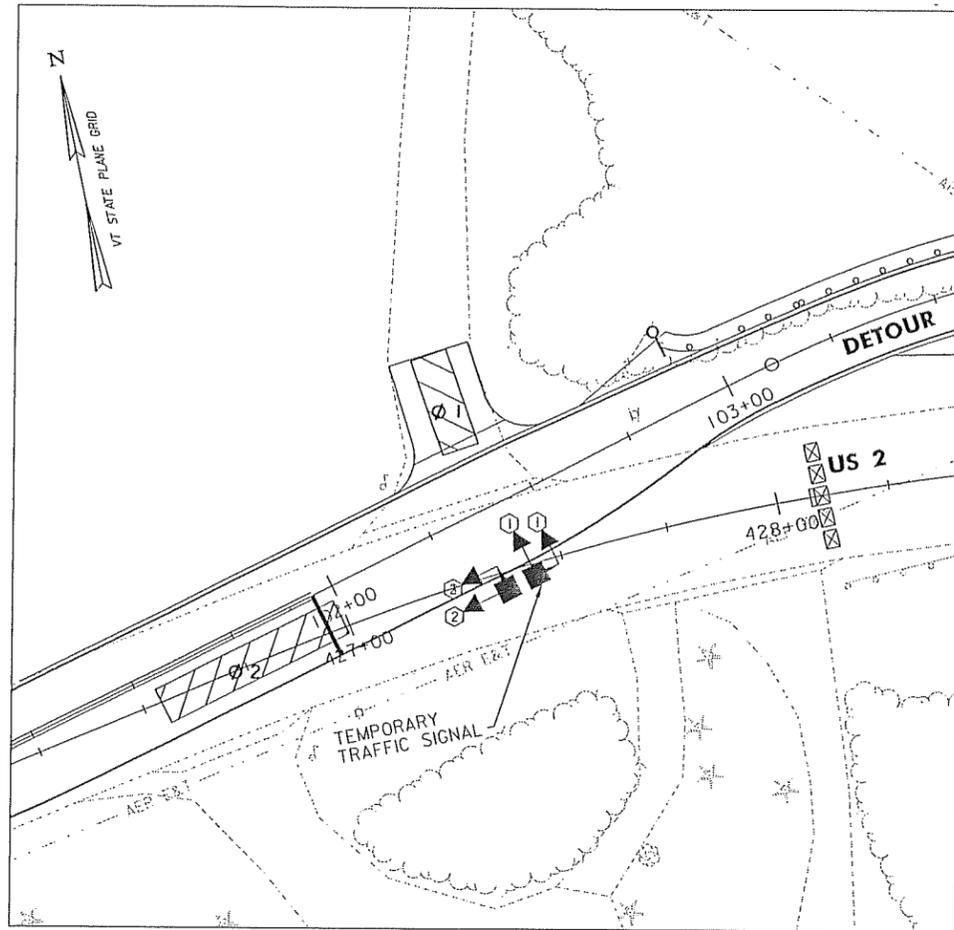
THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG THE CENTERLINE.

THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED FINISHED GRADE ALONG THE CENTERLINE.

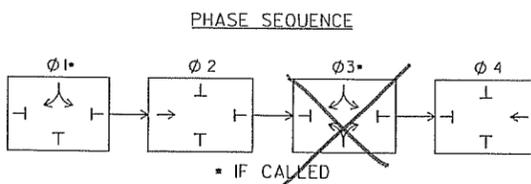
PROJECT NAME: LUNENBURG
 PROJECT NUMBER: NH CULV(27)

FILE NAME: llb294/cos/zllb294prodtr.dgn PLOT DATE: 8/6/2015
 PROJECT LEADER: J. BYATT DRAWN BY: M. HALEY
 DESIGNED BY: M. HALEY CHECKED BY: P. SHEDD
 TEMPORARY DETOUR PROFILE SHEET 2 SHEET 27 OF 74





NEW	LEGEND
	SIGNAL HEAD (12 INCH, LED)
	PORTABLE TRAFFIC SIGNAL TRAILER WITH TRAFFIC ACTUATORS, EMERGENCY VEHICLE PRE-EMPTION, AND RADIO COMMUNICATION.

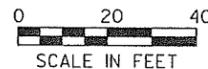


US 2

SIGNAL PHASING DATA				
SIGNAL PHASING (ALL ENTRIES BELOW ARE IN SECONDS)				
PHASE	Ø1	Ø2	Ø3	Ø4
INITIAL	5	10	5	10
VEHICLE EXT.	3	3	3	3
MAX. 1	10	30	10	30
MAX. 2	--	--	--	--
YELLOW	4	4	4	4
RED	2	30	2	30
RECALL	NONE	SOFT	NONE	NONE
DELAY	10	0	10	0

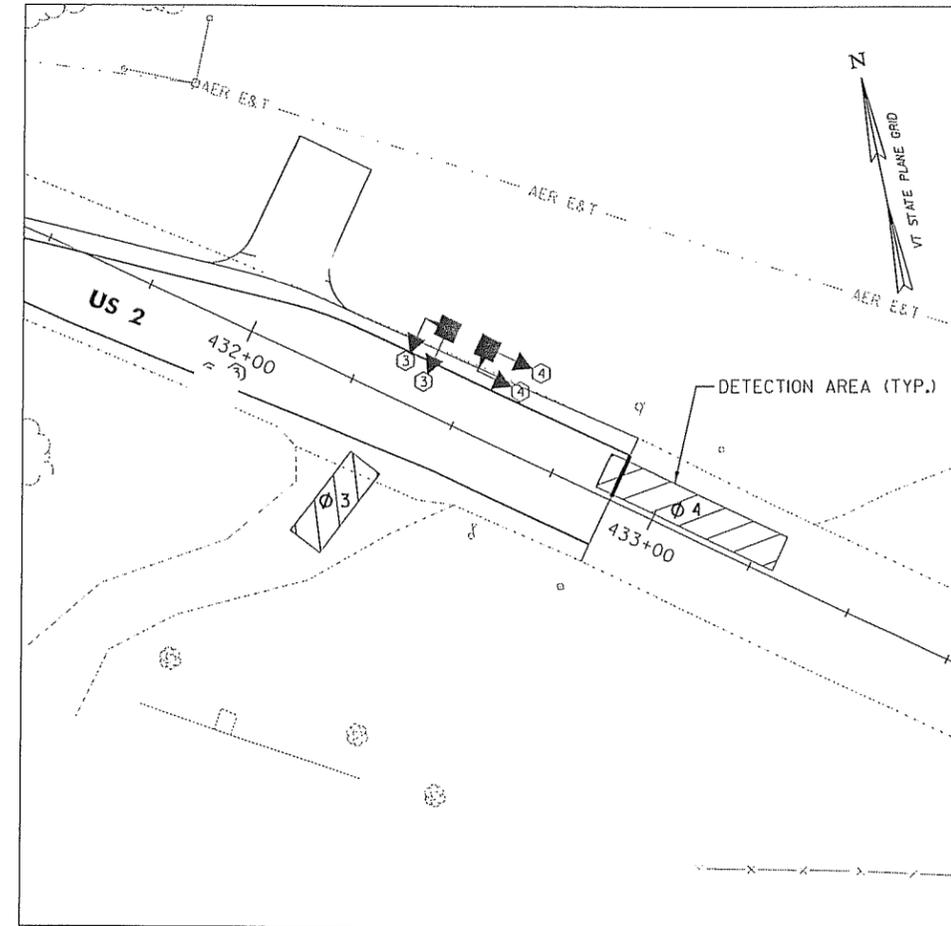
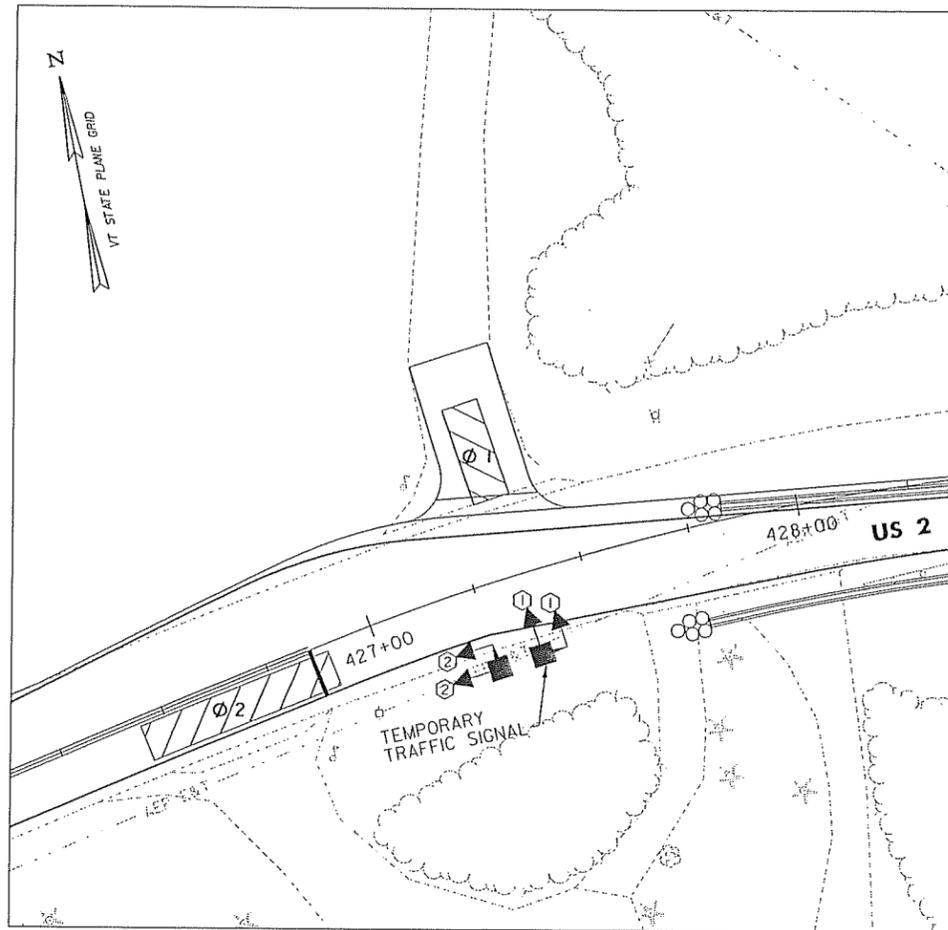
SIGNAL OPERATION NOTES

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION'S (VTRANS) "STANDARD SPECIFICATIONS FOR CONSTRUCTION", DATED 2011, WITH CURRENT MODIFICATIONS.
- TEMPORARY TRAFFIC SIGNAL SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 678, "TRAFFIC CONTROL SIGNALS" AND WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)".
- THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS, AND POSTS, WARNING SIGNS, LUMINAIRES, FLASHING BEACONS, ASSOCIATED PAVEMENT MARKINGS AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COSTS ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
- THE CONTRACTOR SHALL INSTALL PORTABLE TRAFFIC SIGNAL TRAILERS IN PLACE OF A STATIC SIGNAL SYSTEM AS SHOWN ON THE PLANS. THE TRAILERS SHALL COMMUNICATE VIA RADIO INTERFACE TO FUNCTION AS A SINGLE CONTROL SYSTEM. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED ON THE TRAILER, LOCATED AT A DISTANCE OF 14.5 FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE LATEST EDITION OF THE MUTCD FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
- THE BOTTOM OF A SIGNAL FACE NOT MOUNTED OVER A ROADWAY SHALL NOT BE LESS THAN 8.0 FEET NOR MORE THAN 15.0 FEET ABOVE THE GROUND. CAUTION SHOULD BE USED TO ENSURE COMPLIANCE WITH THE HEIGHT REQUIREMENTS IN THE EVENT THE NEW APPROACH GRADES DIFFER SIGNIFICANTLY FROM THE OLD ROADWAY GRADE.
- SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER FACES.
- SIGNAL FACES SHALL BE L.E.D. AND CONSIST OF 12 INCH LENSES (RED, YELLOW AND GREEN)
- SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES UNDER EACH PHASE OF CONSTRUCTION.
- THE TRAFFIC SIGNALS SHALL NOT OPERATE WITHOUT THE PAVEMENT MARKINGS AND SIGNAL RELATED SIGNING IN PLACE.
- INSTALL WIRING BETWEEN POWER SOURCES AND SIGNAL TRAILERS TO PROVIDE FOR A SAFE INSTALLATION. ANY NECESSARY CONNECTIONS TO UTILITY POLES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY COMPANY.
- ANY TEMPORARY POLES SHALL BE PLACED BEHIND GUARDRAIL OR OUTSIDE OF THE CLEAR ZONE.
- LUMINAIRES SHALL BE INSTALLED AT EACH OF THE APPROACHES TO ADEQUATELY ILLUMINATE THE STOP BAR AREAS. 250 WATT HIGH PRESSURE SODIUM, 150 WATT MERCURY OR AN EQUIVALENT WATTAGE L.E.D. LAMP ARE ALL ACCEPTABLE FORMS OF LUMINAIRE. THE MOUNTING HEIGHT SHALL BE 30 FEET ABOVE THE CENTERLINE OR AS DIRECTED BY THE ENGINEER. WHILE THE INTENT IS TO ILLUMINATE THE TEMPORARY SIGNAL SYSTEM, MEASURED NIGHTTIME ILLUMINANCE AT EACH STOP BAR SHALL NOT BE LESS THAN 1.0 FOOT-CANDLE. THE ENGINEER SHALL ORDER CHANGES TO THE LIGHTING COMPONENTS IF DETERMINED TO BE INSUFFICIENT.
- ALL TRAFFIC SIGNS, INCLUDING STOP SIGNS, MADE IRRELEVANT DUE TO THE TEMPORARY SIGNAL SHALL BE COMPLETELY COVERED DURING OPERATION OF THE TEMPORARY SIGNAL OR AT THE DISCRETION OF THE ENGINEER.
- CONSTRUCTION APPROACH SIGNS SHALL BE PROVIDED ON EACH APPROACH PER THE TRAFFIC CONTROL PLANS IN THIS PLAN SET. ADDITIONAL SIGNS SHALL BE INSTALLED AS REQUIRED BY THE ENGINEER PER STANDARD T-1.
- SIGNAL TIMING SHOWN ON THE PLANS MAY REQUIRE FINE-TUNING BY THE ENGINEER IN THE FIELD BASED ON TRAFFIC OBSERVATION (COST OF ADJUSTMENTS SHALL BE INCIDENTAL TO OTHER ITEMS).
- WHEN THE TEMPORARY TRAFFIC CONTROL SIGNALS ARE CHANGED TO FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR REMOVAL INCLUDING ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, ETC.

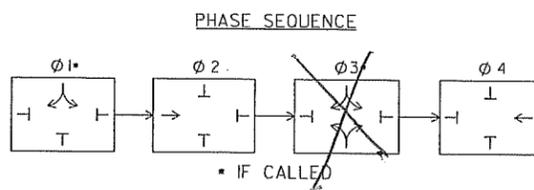


PROJECT NAME: LUNENBURG
PROJECT NUMBER: NH CULV(27)

FILE NAME: 11b294/cos/211b294tr.f.dgn PLOT DATE: 8/24/2015
PROJECT LEADER: J. BYATT DRAWN BY: S. GOODWIN
DESIGNED BY: R. LYFORD CHECKED BY: P. KONIECZKA
PHASE I TEMPORARY TRAFFIC SIGNAL SHEET SHEET 28 OF 74



NEW	LEGEND
	SIGNAL HEAD (12 INCH, LED)
	PORTABLE TRAFFIC SIGNAL TRAILER WITH TRAFFIC ACTUATORS, EMERGENCY VEHICLE PRE-EMPTION, AND RADIO COMMUNICATION.



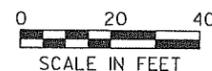
US 2

SIGNAL PHASING DATA				
SIGNAL PHASING (ALL ENTRIES BELOW ARE IN SECONDS)				
PHASE	Ø1	Ø2	Ø3	Ø4
INITIAL	5	10	5	10
VEHICLE EXT.	3	3	3	3
MAX. 1	10	30	10	30
MAX. 2	--	--	--	--
YELLOW	4	4	4	4
RED	2	30	2	30
RECALL	NONE	SOFT	NONE	NONE
DELAY	10	0	10	0

SIGNAL OPERATION NOTES

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION'S (VTRANS) "STANDARD SPECIFICATIONS FOR CONSTRUCTION", DATED 2011, WITH CURRENT MODIFICATIONS.
- TEMPORARY TRAFFIC SIGNAL SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 678, "TRAFFIC CONTROL SIGNALS" AND WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)".
- THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS, AND POSTS, WARNING SIGNS, LUMINAIRES, FLASHING BEACONS, ASSOCIATED PAVEMENT MARKINGS AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COSTS ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
- THE CONTRACTOR SHALL INSTALL PORTABLE TRAFFIC SIGNAL TRAILERS IN PLACE OF A STATIC SIGNAL SYSTEM AS SHOWN ON THE PLANS. THE TRAILERS SHALL COMMUNICATE VIA RADIO INTERFACE TO FUNCTION AS A SINGLE CONTROL SYSTEM. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED ON THE TRAILER, LOCATED AT A DISTANCE OF 14.5 FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE LATEST EDITION OF THE MUTCD FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
- THE BOTTOM OF A SIGNAL FACE NOT MOUNTED OVER A ROADWAY SHALL NOT BE LESS THAN 8.0 FEET NOR MORE THAN 15.0 FEET ABOVE THE GROUND. CAUTION SHOULD BE USED TO ENSURE COMPLIANCE WITH THE HEIGHT REQUIREMENTS IN THE EVENT THE NEW APPROACH GRADES DIFFER SIGNIFICANTLY FROM THE OLD ROADWAY GRADE.
- SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER FACES.
- SIGNAL FACES SHALL BE L.E.D. AND CONSIST OF 12 INCH LENSES (RED, YELLOW AND GREEN)
- SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES UNDER EACH PHASE OF CONSTRUCTION.
- THE TRAFFIC SIGNALS SHALL NOT OPERATE WITHOUT THE PAVEMENT MARKINGS AND SIGNAL RELATED SIGNING IN PLACE.

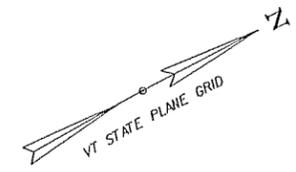
- INSTALL WIRING BETWEEN POWER SOURCES AND SIGNAL TRAILERS TO PROVIDE FOR A SAFE INSTALLATION. ANY NECESSARY CONNECTIONS TO UTILITY POLES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY COMPANY.
- ANY TEMPORARY POLES SHALL BE PLACED BEHIND GUARDRAIL OR OUTSIDE OF THE CLEAR ZONE.
- LUMINAIRES SHALL BE INSTALLED AT EACH OF THE APPROACHES TO ADEQUATELY ILLUMINATE THE STOP BAR AREAS. 250 WATT HIGH PRESSURE SODIUM, 150 WATT MERCURY OR AN EQUIVALENT WATTAGE L.E.D. LAMP ARE ALL ACCEPTABLE FORMS OF LUMINAIRE. THE MOUNTING HEIGHT SHALL BE 30 FEET ABOVE THE CENTERLINE OR AS DIRECTED BY THE ENGINEER. WHILE THE INTENT IS TO ILLUMINATE THE TEMPORARY SIGNAL SYSTEM, MEASURED NIGHTTIME ILLUMINANCE AT EACH STOP BAR SHALL NOT BE LESS THAN 1.0 FOOT-CANDLE. THE ENGINEER SHALL ORDER CHANGES TO THE LIGHTING COMPONENTS IF DETERMINED TO BE INSUFFICIENT.
- ALL TRAFFIC SIGNS, INCLUDING STOP SIGNS, MADE IRRELEVANT DUE TO THE TEMPORARY SIGNAL SHALL BE COMPLETELY COVERED DURING OPERATION OF THE TEMPORARY SIGNAL OR AT THE DISCRETION OF THE ENGINEER.
- CONSTRUCTION APPROACH SIGNS SHALL BE PROVIDED ON EACH APPROACH PER THE TRAFFIC CONTROL PLANS IN THIS PLAN SET. ADDITIONAL SIGNS SHALL BE INSTALLED AS REQUIRED BY THE ENGINEER PER STANDARD T-1.
- SIGNAL TIMING SHOWN ON THE PLANS MAY REQUIRE FINE-TUNING BY THE ENGINEER IN THE FIELD BASED ON TRAFFIC OBSERVATION (COST OF ADJUSTMENTS SHALL BE INCIDENTAL TO OTHER ITEMS).
- WHEN THE TEMPORARY TRAFFIC CONTROL SIGNALS ARE CHANGED TO FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR REMOVAL INCLUDING ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, ETC.



PROJECT NAME: LUNENBURG
PROJECT NUMBER: NH CULV(27)

FILE NAME: lb294/cos/zlb294trf.dgn PLOT DATE: 8/19/2015
PROJECT LEADER: J. BYATT DRAWN BY: S. GOODWIN
DESIGNED BY: R. LYFORD CHECKED BY: P. KONECZKA
PHASE 2 TEMPORARY TRAFFIC SIGNAL SHEET SHEET 29 OF 74

US 2 STA 429+38.92 =
 CHANNEL STA. 1+50.00
 ASKEW ANGLE = 60° 00' 00"



G20-2
 END
 ROAD WORK

R10-6
 STOP
 HERE ON
 RED

W3-3

W20-4
 ONE LANE
 ROAD
 AHEAD

W20-1
 ROAD
 WORK
 AHEAD

PCMS

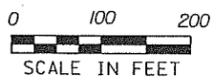
ROAD
 WORK
 AHEAD
 W20-1

ONE LANE
 ROAD
 AHEAD
 W20-4

W3-3

STOP
 HERE ON
 RED
 R10-6

END
 ROAD WORK
 G20-2



PROJECT NAME: LUNENBURG
 PROJECT NUMBER: NH CULV(27)

FILE NAME: lb294/cos/zlb294+cp.dgn
 PROJECT LEADER: J. BYATT
 DESIGNED BY: M. HALEY
 TRAFFIC CONTROL PLAN

PLOT DATE: 8/6/2015
 DRAWN BY: M. HALEY
 CHECKED BY: P. SHEDD
 SHEET 30 OF 74

CLD 12-0106 MODEL: TCPO1

