INDEX OF SHEETS
SEE SHEET 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENT
BRIDGE PROJECT

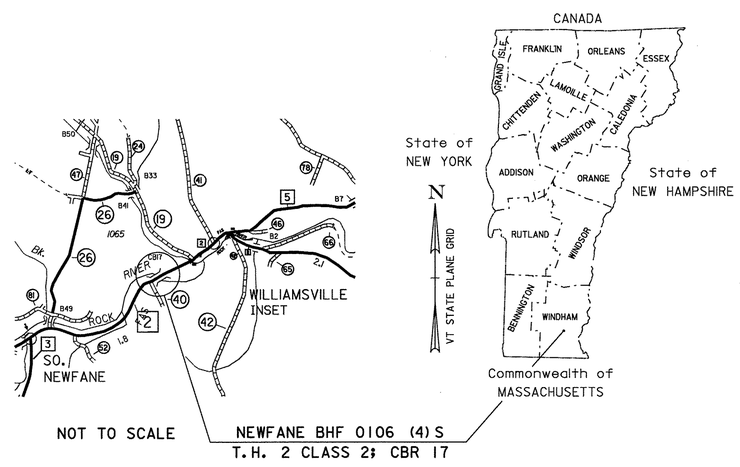
TOWN OF NEWFANE
COUNTY OF WINDHAM

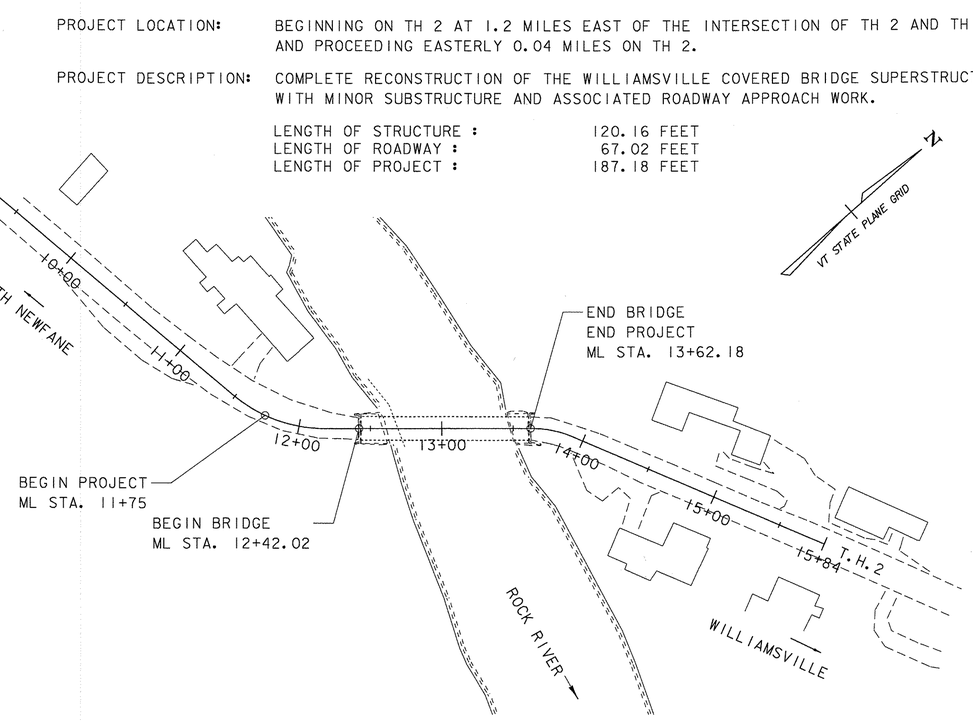
ROUTE NO : T.H. 2 CLASS 2 FAS 0106 BRIDGE NO : 17

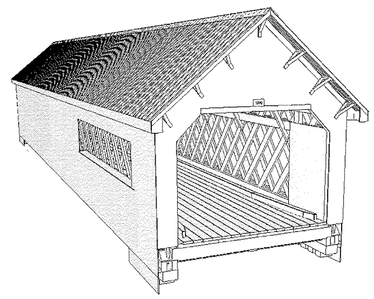
PROJECT LOCATION: BEGINNING ON TH 2 AT 1.2 MILES EAST OF THE INTERSECTION OF TH 2 AND TH 3 AND PROCEEDING EASTERLY 0.04 MILES ON TH 2.

PROJECT DESCRIPTION: COMPLETE RECONSTRUCTION OF THE WILLIAMSVILLE COVERED BRIDGE SUPERSTRUCTURE WITH MINOR SUBSTRUCTURE AND ASSOCIATED ROADWAY APPROACH WORK.

LENGTH OF STRUCTURE : 120.16 FEET
LENGTH OF ROADWAY : 67.02 FEET
LENGTH OF PROJECT : 187.18 FEET







WILLIAMSVILLE COVERED BRIDGE

RECORD PLANS

CONTRACTOR: ALPINE CONSTRUCTION, LLC - SCHUYLERVILLE, NY
RESIDENT ENGINEER: FRED ROSS
CONSTRUCTION BEGAN: NOVEMBER 16, 2009
CONSTRUCTION COMPLETE: NOVEMBER 22, 2010
RECORD PLANS BY: FRED ROSS & AMOS KEMPTON

I HEREBY CERTIFY THAT ALL THE CONSTUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Frederick D Ross III RESIDENT ENGINEER
DATE 10-12-11

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : R.D. GILMAN
SURVEYED DATE : 4-23-1998

DATUM
VERTICAL NAVD88
HORIZONTAL NAD-83 (92)

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

29-APR-2009

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED Richard D Gilman DATE 4-29-09

PROJECT MANAGER : R.R. WHITCOMB

PROJECT NAME : NEWFANE
PROJECT NUMBER : BHF 0106 (4) S

SHEET 1 OF 67 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET

INDEX OF SHEETS

PROJECT PLAN DRAWINGS

1. TITLE SHEET
2. PRELIMINARY INFORMATION SHEET
3. PROJECT NOTES 1
4. PROJECT NOTES 2
5. TYPICAL SECTIONS ROADWAY
6. TYPICAL SECTIONS BRIDGE
7. TYPICAL SECTIONS PORTALS
8. QUANTITY SHEET 1
9. QUANTITY SHEET 2
10. QUANTITY SHEET 3
11. SURVEY TIES
12. SURVEY PLAN 1
13. SURVEY PLAN 2
14. LAYOUT PLAN 1
15. LAYOUT PLAN 2
16. PAVEMENT LAYOUT PLAN 1
17. PAVEMENT LAYOUT PLAN 2
18. PROFILE
19. RESOURCE PLAN
20. EPSC NARRATIVE
21. EPSC EXISTING SITE PLAN
22. EPSC CONSTRUCTION SITE PLAN
23. EPSC FINAL SITE PLAN
24. EPSC DETAILS 1
25. EPSC DETAILS 2
26. TRAFFIC CONTROL PHASE 1
27. TRAFFIC CONTROL PHASE 2
28. TRAFFIC FINAL PLAN
29. TRAFFIC SIGN SUMMARY SHEET
30. PLAN & ELEVATION
31. SUBSTRUCTURE REMOVAL DETAILS
32. SUBSTRUCTURE DETAILS 1
33. SUBSTRUCTURE DETAILS 2
34. RETAINING WALL DETAILS
35. BRIDGE END DETAILS
36. LOWER LATERAL BRACING DETAILS
37. FLOOR BEAM DETAILS
38. DECK PANEL DETAILS
39. CURB & RUNNING PLANK DETAILS
40. LEFT TRUSS DETAILS
41. RIGHT TRUSS DETAILS
42. TRUNNEL DETAILS
43. UPPER LATERAL BRACING DETAILS 1
44. UPPER LATERAL BRACING DETAILS 2
45. UPPER LATERAL BRACING DETAILS 3
46. TIE BEAM DETAILS 1
47. TIE BEAM DETAILS 2
48. RAFTER DETAILS 1
49. RAFTER DETAILS 2
50. SIDING DETAILS 1
51. SIDING DETAILS 2
52. SIDING DETAILS 3
53. GUARDRAIL LAYOUT 1
54. GUARDRAIL LAYOUT 2
55. GUARDRAIL DETAILS 1
56. GUARDRAIL DETAILS 2
57. GUARDRAIL DETAILS 3
58. MAINLINE CROSS SECTIONS 1
59. MAINLINE CROSS SECTIONS 2
60. MAINLINE CROSS SECTIONS 3
61. MAINLINE CROSS SECTIONS 4
62. MAINLINE CROSS SECTIONS 5
63. MAINLINE CROSS SECTIONS 6
64. MAINLINE CROSS SECTIONS 7
65. CHANNEL CROSS SECTIONS 1
66. CHANNEL CROSS SECTIONS 2
67. ROW LAYOUT PLAN

VAOT STANDARD DRAWINGS

E-100	CONSTRUCTION APPROACH SIGNS	01/02/04
E-100A	SIDE ROAD CONSTRUCTION - APPROACH SIGNS	01/02/04
E-101	CONSTRUCTIONSIGN DETAILS	05/30/03
E-102	CONSTRUCTIONSIGN DETAILS	06/30/03
E-102A	CONSTRUCTION SIGN DETAILS	05/01/04
E-106	TRAFFIC CONTROL- MISCELLANEOUS DETAILS	03/01/04
E-107	DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS	06/30/03
E-107A	BREAKAWAY BARRICADE DETAILS	08/08/95
E-108	CONSTRUCTIONZONE LONGITUDINAL DROP OFFS	12/08/08
E-121	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD	08/08/95
E-138	MILE MARKER DETAILS - STATE & TOWN HIGHWAYS	05/30/03
E-164	SQUARE STEEL SIGN POST	05/20/99

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: 1/15/08

DRAINAGE AREA : 40.5 sq.mi.
CHARACTER OF TERRAIN : Mountainous to hilly, mostly forested
STREAM CHARACTERISTICS : Small, perennial, sinuous
NATURE OF STREAMBED : Gravel, cobbles to boulders

PEAK FLOW DATA

Q 2.33 =	2120 cfs	Q 50 =	7420 cfs
Q 10 =	4590 cfs	Q 100 =	8830 cfs
Q 25 =	6360 cfs	Q 500 =	11,480 cfs

DATE OF FLOOD OF RECORD: September 1938
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY: @ Q25 = 11.5 fps
ICE CONDITIONS : Moderate
DEBRIS: Moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? No
IS ORDINARY RISE RAPID? No
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE:

WATERSHED STORAGE: 1%
HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Single span timber covered bridge
YEAR BUILT: 1859 ~~Unknown~~ - reconstructed in 1950
CLEAR SPAN(NORMAL TO STREAM): 76 ft
VERTICAL CLEARANCE ABOVE STREAMBED: 17 ft
WATERWAY OF FULL OPENING: 1285 sq. ft.
DISPOSITION OF STRUCTURE: Reconstruct
TYPE OF MATERIAL UNDER SUBSTRUCTURE: Unknown

WATER SURFACE ELEVATIONS AT:

Q2.33 =	545.6 ft	VELOCITY =	7.2 fps
Q10 =	548.2 ft	"	10.5 fps
Q25 =	549.9 ft	"	13.1 fps
Q50 =	550.9 ft	"	14.8 fps
Q100 =	551.8 ft	"	15.4 fps

LONG TERM STREAMBED CHANGES: Approximately 3 ft of scour directly under the bridge.

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Above Q100
RELIEF ELEVATION: 554.8 ft
DISCHARGE OVER ROAD @Q100: None

UPSTREAM STRUCTURE

TOWN: Newfane — DISTANCE: 5250 ft
HIGHWAY#: TH-26 — STRUCTURE #: 49
CLEAR SPAN: 147.6 ft — CLEAR HEIGHT: 16 ft
YEAR BUILT: 1939 — FULL WATERWAY: Unknown
STRUCTURE TYPE: Steel truss

DOWNSTREAM STRUCTURE

TOWN: Newfane — DISTANCE: 3940 ft
HIGHWAY#: TH-2 — STRUCTURE #: 12
CLEAR SPAN: 75.5 ft — CLEAR HEIGHT: 34.1 ft
YEAR BUILT: 1929 — FULL WATERWAY: Unknown
STRUCTURE TYPE: Concrete Arch

ASD LOAD RATING (TONS)

LOADING LEVELS	TRUCK						
	H	HS	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
INVENTORY	23	-					
POSTED	28	-	-		-	-	-
OPERATING		-	-	-	-	-	

COMMENTS: FLOOR BEAM IN BENDING CONTROLS

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2009	1600	180	53	6.4	80
2029	2000	230	53	10.9	170

20 year ESAL for flexible pavement from 2009 to 2029 : 314000
40 year ESAL for flexible pavement from 2029 to 2049 : 794000
Design Speed : 25 mph

PROPOSED STRUCTURE

STRUCTURE TYPE: Reconstruct existing timber covered bridge

CLEAR SPAN(NORMAL TO STREAM): 76 ft
VERTICAL CLEARANCE ABOVE STREAMBED: 17 ft
WATERWAY OF FULL OPENING: 1285 sq.ft.

WATER SURFACE ELEVATIONS AT:

Q2.33 =	545.6 ft	VELOCITY=	7.2 fps
Q10 =	548.2 ft	"	10.5 fps
Q25 =	549.9 ft	"	13.1 fps
Q50 =	550.9 ft	"	14.8 fps
Q100 =	551.8 ft	"	15.4 fps

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Above Q100
RELIEF ELEVATION: 554.8 ft
DISCHARGE OVER ROAD @Q100: None

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 557.0 ft
VERTICAL CLEARANCE: @ Q25 = 7.1 ft

SCOUR: Estimated contraction scour at 3 ft.

REQUIRED CHANNEL PROTECTION: Type IV stone fill

PERMIT INFORMATION

AVERAGE DAILY FLOW:	81 cfs	
ORDINARY LOW WATER:	35 cfs	DEPTH OR ELEVATION: 1.0 ft
ORDINARY HIGH WATER:	901 cfs	4.9 ft

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: None
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

ADDITIONAL INFORMATION

DESIGN CRITERIA

1. DESIGN LIVE LOAD AASHTO H 20-44
2. DESIGN SPAN 104 ft
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 4 ksf
   ON LEDGE 10 ksf
4. ALLOWABLE LOAD FOR PILING N/A
   TYPE
   ESTIMATED LENGTH
5. STRUCTURAL STEEL AASHTO M270M/M270 GRADE
6. REINFORCING STEEL GRADE 60
7. CONCRETE, HIGH PERFORMANCE CLASS A f'c: N/A
   CONCRETE, HIGH PERFORMANCE CLASS B f'c: 3500 psi
8. DESIGN SOIL UNIT WEIGHT 140 pcf
9. DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL 1.21 ksf

TRAFFIC MAINTENANCE

1. IS TRAFFIC TO BE MAINTAINED? Yes, Detour
   IF YES, ON EXISTING STRUCTURE? TH 19, 47 & 26
   OR ON TEMPORARY BRIDGE?
   ONE OR TWO-WAY TRAVEL? Two Way, See Project Notes
2. TRAFFIC CONTROL SIGNALS REQUIRED? No
3. ARE SIDEWALKS REQUIRED? No
   IF SO, ON WHAT SIDE?

PROJECT NAME: **NEWFANE**
PROJECT NUMBER: **BHF 0106(4)S**

FILE NAME: **96j230\str\s96j230pi.xls** — PLOT DATE: **5/4/2009**
PROJECT LEADER: **R. WHITCOMB** — DRAWN BY: **T. LACKEY**
DESIGNED BY: **T. LACKEY** — CHECKED **R. WHITCOMB**
PRELIMINARY INFORMATION SHEET — SHEET 2 OF 67

PROJECT NOTES

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO: THE 2006 STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND ITS LATEST REVISIONS; AND THE 2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES AND ITS LATEST REVISIONS.

2. THIS PROJECT IS FOR THE COMPLETE RECONSTRUCTION OF THE EXISTING COVERED BRIDGE SUPERSTRUCTURE WITH MINOR SUBSTRUCTURE AND ASSOCIATED ROADWAY APPROACH WORK. THE INTENT OF THE PROJECT IS TO CLOSELY MATCH THE DIMENSIONS AND GEOMETRY OF THE BRIDGE AND MOST OF THE CONNECTION TYPES AND DETAILS. SOME DIMENSIONS ON THE PLANS MAY VARY SLIGHTLY FROM THE EXISTING DUE TO DESIGN CHANGES NECESSARY TO OBTAIN LIVE LOAD CAPACITY OR IMPROVEMENTS TO THE ORIGINAL DESIGN OR GEOMETRY. ANY DIMENSIONS OR FRAMING DETAILS NOT SHOWN ON THE PLANS SHALL BE CHECKED IN THE FIELD BY THE CONTRACTOR PRIOR TO SUBMITTING FABRICATION DRAWINGS AND COMMENCING THE WORK.

3. TO FACILITATE CONSTRUCTION AND MINIMIZE THE DURATION OF THE DETOUR, THE TOWN OF NEWFANE HAS PROVIDED A STAGING AREA FOR CONSTRUCTION OF ALL OR PART OF THE SUPERSTRUCTURE. THE STAGING AREA IS A GRAVEL PULL OFF LOCATED 0.1 MILES WEST OF THE BRIDGE ON TH 2.

   THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING HOW MUCH OF THE NEW SUPERSTRUCTURE WILL BE BUILT AT THE STAGING AREA AND HOW IT WILL BE TRANSPORTED TO AND ERECTED AT THE EXISTING BRIDGE SITE.

   THE ERECTION PLAN SUBMITTED IN ACCORDANCE WITH SUBSECTION 522.04 SHALL INCLUDE METHODS OF HANDLING AT THE STAGING AREA AS WELL AS THE MOVING AND ERECTING OF SUPERSTRUCTURE COMPONENTS.

4. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR MAKING ARRANGEMENTS WITH UTILITY COMPANIES FOR MOVING UTILITIES TO ACCOMMODATE THE MOVING OR ERECTING OF THE SUPERSTRUCTURE. NO ADDITIONAL COMPENSATION WILL BE MADE AND NO EXTENSION OF CONTRACT TIME WILL BE GRANTED FOR WORKING AROUND AND WITH THE UTILITY COMPANIES.

TRAFFIC CONTROL

5. DURING PHASE ONE OF THE PROJECT, TRAFFIC WILL BE MAINTAINED ON THE EXISTING BRIDGE AND THE DECK OF BR 50 ON TH 47 (PARRISH ROAD) WILL BE REPLACED.

6. DURING PHASE TWO, THE CONTRACTOR WILL BE ALLOWED TO CLOSE TH 2 AT BRIDGE 17 FOR AN EIGHT WEEK PERIOD TO REMOVE THE EXISTING AND PLACE THE NEW SUPERSTRUCTURE. DURING THAT TIME, TRAFFIC WILL BE DETOURED ON TH 19 (BAKER BROOK ROAD), TH 47 (PARRISH ROAD), AND TH 26. SEE SPECIAL PROVISIONS FOR SPECIFIC CLOSURE DATES.

   SEE SPECIAL PROVISIONS FOR INCENTIVE/DISINCENTIVE PAY ITEM IN EFFECT DURING THIS CLOSURE PERIOD. IF THE CONTRACTOR CHOOSES TO INSTALL TEMPORARY TRAFFIC BARRIER AS ALLOWED UNDER THE IDENTIFIED WORK, THE BARRIER SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 621 AND WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 641.10 "TRAFFIC CONTROL".

   THE CONTRACTOR SHALL NOTIFY THE NEWFANE ROAD FOREMAN, TODD LAWLEY, TWO WEEKS PRIOR TO SHIFTING TRAFFIC TO THE DESIGNATED DETOUR. MR. LAWLEY'S PHONE NUMBER IS (802)348-7949.

7. ITEM 641.10 "TRAFFIC CONTROL" SHALL INCLUDE ERECTING AND MAINTAINING ALL TEMPORARY ON AND OFF-PROJECT SIGNS AND BARRICADES AS SHOWN IN THE PLANS AND AS DIRECTED BY THE RESIDENT ENGINEER TO:

   a. MAINTAIN TRAFFIC ON THE EXISTING BRIDGE WHILE CONSTRUCTING THE NEW SUPERSTRUCTURE IN THE STAGING AREA AND REPLACING THE DECK OF BR 50 ON TH 47.

   b. MAINTAIN TRAFFIC ON THE DETOUR WHILE REMOVING THE EXISTING SUPERSTRUCTURE AND COMPLETING THE NEW SUPERSTRUCTURE.

   c. MAINTAIN FULL ACCESS TO ALL SIDE ROADS AND DRIVES WITHIN THE PROJECT LIMITS AT ALL TIMES.

8. ITEM 527.10 "MAINTENANCE OF STRUCTURES AND APPROACHES" WILL NOT INCLUDE REPLACING THE DECK ON THE EXISTING COVERED BRIDGE.

9. ITEM 607.10 "ROADWAY PATROL MAINTENANCE" WILL ONLY INCLUDE THE DETOUR ON TH 19 (BAKER BROOK ROAD), TH 47 (PARRISH ROAD), AND TH 26.

DETOUR BRIDGE 50

10. BRIDGE 50 IS ON THE PROJECT DETOUR ROUTE ON TH 47 (PARRISH ROAD) APPROXIMATELY 100 FEET FROM ITS INTERSECTION WITH TH 19 (BAKER BROOK ROAD). AS PART OF THIS PROJECT, THE DECK AND WOODEN COMPONENTS OF THE RAILING SYSTEM SHALL BE REPLACED IN KIND AS DETAILED ON THE TRAFFIC CONTROL 1 SHEET USING NEW MATERIAL AND HARDWARE CONFORMING TO SECTION 522. THE STEEL BEAM RAILING WILL BE SALVAGED AND REUSED.

11. ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE" (TH 47 BRIDGE NO. 50) SHALL BE PAYMENT FOR REMOVAL AND DISPOSAL OF ALL MATERIAL NECESSARY TO COMPLETE THE REPAIR OF BR 50.

12. A QUANTITY OF FIVE (5) MFBM IS INCLUDED UNDER ITEM 522.25 "STRUCTURAL LUMBER AND TIMBER, TREATED" FOR THE REPLACEMENT OF THE NAIL LAMINATED DECK, CURBS AND RAIL POSTS WITH SPECIES AND GRADE AS SPECIFIED IN SUBSECTION 709.01(c). TIMBER PRESERVATIVE SHALL BE TYPES II, III, IV OR V AS SPECIFIED IN SUBSECTION 726.01.

13. ALL COSTS ASSOCIATED WITH SALVAGING AND RESETTING THE EXISTING BRIDGE AND APPROACH RAILING WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE" (TH 47 BRIDGE NO. 50).

14. THE CONTRACTOR WILL NOT BE REQUIRED TO REPAVE THE DECK OR INSTALL STEEL PLATES AT END OF BRIDGE.

15. BR 50 IS ON THE TOWN'S DESIGNATED TRUCK ROUTE FOR PERMITTED TRUCKS WEIGHING OVER TEN TONS. TO MINIMIZE THE TIME TRUCKS WILL BE UNABLE TO USE THE TRUCK ROUTE, THE CONTRACTOR WILL BE REQUIRED TO DO THE WORK EITHER AT NIGHT, IN ACCORDANCE WITH THE SPECIAL PROVISIONS, OR OVER A SINGLE WEEKEND. THE CONTRACTOR WILL BE ALLOWED TO CLOSE THE BRIDGE DURING THE DESIGNATED "NIGHT" HOURS AND WILL BE REQUIRED TO HAVE IT IN A SAFE AND PASSABLE CONDITION AT THE END OF THE "NIGHT" HOURS. IF WEEKEND WORK IS CHOSEN, THE BRIDGE MAY BE CLOSED FROM 7 P.M. ON FRIDAY EVENING AND RE-OPENED BY 5 A.M. ON THE FOLLOWING MONDAY WITH NIGHT WORK ALLOWED ON ALL THREE NIGHTS. PORTABLE CHANGEABLE MESSAGE SIGNS WARNING TRUCKS ABOUT THIS CLOSURE SHALL BE POSITIONED AT LOCATIONS DESIGNATED BY THE ENGINEER A MINIMUM OF TWO WEEKS PRIOR TO THE CLOSING AND SHALL REMAIN IN PLACE DURING THE CLOSURE.

MISCELLANEOUS

16. ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE" (TH 2 BRIDGE NO. 17) SHALL INCLUDE THE COMPLETE REMOVAL OF THE EXISTING SUPERSTRUCTURE INCLUDING THE AUXILIARY GLULAM SUPPORT GIRDERS. NO BURNING OF THE REMOVED MATERIALS WILL BE ALLOWED AT THE PROJECT SITE. THE EXISTING BRIDGE MAY CONTAIN LUMBER OR TIMBER WITH HAZARDOUS WOOD PRESERVATIVES. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS AND EMPLOYEES HARMLESS REGARDING THE CONTRACTOR'S HANDLING OF THESE MATERIALS AND SUBSEQUENT USE, RE-USE OR DISPOSAL OF THE MATERIALS. ALL COSTS ASSOCIATED WITH DISPOSING OF MATERIALS REMOVED AS PART OF THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 529.20.

17. ITEM 613.10 "STONE FILL, TYPE I" SHALL BE USED TO HELP PREVENT EROSION AT ENDS OF WINGWALLS AS SHOWN IN THE PLANS AND AT THE DISCRETION OF THE RESIDENT ENGINEER.

18. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS OTHERWISE NOTED.

19. ITEM 203.31 "SAND BORROW". THE CONTRACTOR MAY SUBSTITUTE SUBBASE MATERIAL FOR THE SAND BORROW SHOWN ON THE PLANS. THE SUBBASE MATERIAL SHALL BE THE TYPE SPECIFIED IN THE CONTRACT AND SHALL BE PLACED TO MEET THE SUBBASE SPECIFICATIONS. IF SUBBASE IS PLACED IN LIEU OF SAND BORROW, A GEOTEXTILE MEETING THE REQUIREMENTS OF ITEM 649.11 "GEOTEXTILE FOR ROAD BED SEPARATOR" SHALL BE PLACED BETWEEN THE SUBGRADE AND THE SUBBASE MATERIAL. ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING THE GEOTEXTILE SHALL BE INCIDENTAL TO 203.31 "SAND BORROW".

ALPINE CHOSE TO USE SUBBASE MATERIAL, BUT SUBGRADE CONDITIONS DID NOT WARRANT USE OF "GEOTEXTILE FOR ROAD BED SEPARATOR".

STRUCTURAL STEEL

20. ITEM 506.60 "STRUCTURAL STEEL" SHALL INCLUDE ALL TIE RODS BETWEEN TRUSSES AND CORRESPONDING TURNBUCKLES, NUTS AND OGEE WASHERS. TIE RODS SHALL MEET ASTM A 307.

CONCRETE

21. 501.34 "CONCRETE, HIGH PERFORMANCE CLASS B" SHALL BE USED FOR THE ABUTMENTS AND RETAINING WALL.

22. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH X 1 INCH.

23. ITEM 514.10 "WATER REPELLENT, SILANE" SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES INCLUDING THE EXISTING ABUTMENTS.

24. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230pn.dgn	PLOT DATE: 04-MAY-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
PROJECT NOTES 1	SHEET 3 OF 67

PROJECT NOTES (Continued)

WOOD FOR COVERED BRIDGE

23. WOODEN MEMBERS WERE DESIGNED WITH THE 2001 AMERCIAN FOREST & PAPER ASSOCIATION NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION.

24. ALL LUMBER AND TIMBER SHALL BE FULL SAWN TO THE DIMENSIONS GIVEN IN THE PLANS AS DESCRIBED IN SUBSECTION 709.01(d) (1).

25. WOOD SPECIES AND GRADES BY PAY ITEM FOR MEMBERS

    a. ITEM 522.20 "STRUCTURAL LUMBER AND TIMBER, UNTREATED"

        SOUTHERN PINE, GRADE NO. 1
            UPPER TOP TRUSS CHORDS
            LOWER TOP TRUSS CHORDS
            UPPER BOTTOM TRUSS CHORDS
            LATTICES

        WHITE OAK, GRADE NO. 3 OR BETTER
            RUNNING PLANKS

        SPRUCE-PINE-FIR, GRADE NO. 1
            RIDGE PLATE
            RAFTERS
            COLLAR TIES
            TIE BEAMS
            UPPER LATERAL BRACING
            LOWER LATERAL BRACING
            KNEE BRACES
            OVERHANG BRACES

    b. ITEM 522.25 "STRUCTURAL LUMBER AND TIMBER, TREATED"

        SOUTHERN PINE, GRADE NO. 1
            BEARING BLOCKS
            BEDDING BLOCKS

    c. ITEM 522.30 "NONSTRUCTURAL LUMBER, UNTREATED"

        EASTERN HEMLOCK-OR EASTERN SPRUCE, GRADE NO. 1
            SIDING
            TRIM

        SPRUCE-PINE-FIR, STANDARD GRADE
            NAILERS
            STRAPPING

    d. ITEM 522.35 "NON-STRUCTURAL LUMBER, TREATED"

        SOUTHERN PINE, STANDARD GRADE
            CURBS & BLOCKING

    e. ITEM 522.40 "STRUCTURAL GLUED LAMINATED TIMBER" (CHORDS)

        COMBINATION SYMBOL 16F-V2 SP/SP
            LOWER BOTTOM TRUSS CHORDS

    f. ITEM 522.40 "STRUCTURAL GLUED LAMINATED TIMBER" (FLOORBEAMS)

        COMBINATION SYMBOL 26F-V2 SP/SP
            FLOOR BEAMS

    g. ITEM 522.40 "STRUCTURAL GLUED LAMINATED TIMBER" (DECK PANELS)

        SOUTHERN PINE COMBINATION SYMBOL 47 SP
            DECK PANELS

26. ITEM 522.20 "STRUCTURAL LUMBER AND TIMBER, UNTREATED" SHALL INCLUDE TRUNNELS.

    a. TRUNNELS SHALL BE WHITE OAK, SELECT STRUCTURAL. THEY SHALL BE UNTREATED, AND DRIED (MAXIMUM MOISTURE CONTENT OF 12%).

    b. TRUNNELS SHALL BE 2 INCHES IN DIAMETER. TRUNNEL HOLES SHALL BE DRILLED SMALLER THAN THE TRUNNEL TO PROVIDE A FRICTION FIT. TRUNNELS MAY BE DIPPED IN BOILED LINSEED OIL PRIOR TO DRIVING. TRUNNELS SHALL BE DRIVEN IN A MANNER WHICH AVOIDS SPLITTING THEM OR THE PIECES CONNECTED BY THEM.

    c. **TRUNNELS SHALL BE CONSIDERED TIMBER CONNECTORS. THE COST OF TRUNNEL MATERIAL AND INSTALLATION SHALL BE INCIDENTAL TO ITEM 522.20 "STRUCTURAL LUMBER AND TIMBER, UNTREATED".**

27. ALL SIDING SHALL BE FULL LENGTH BOARDS.

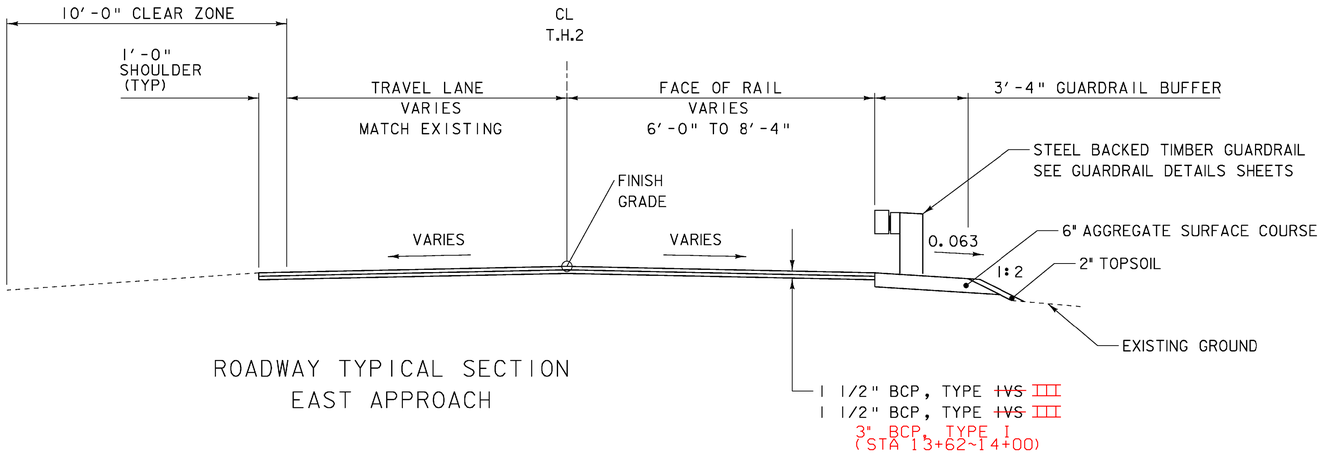
28. ALL SIDING, NAILERS, AND DECK EDGE BOARDS SHALL BE FASTENED WITH NO. 8 GALVANIZED SCREWS. THE LENGTH OF THE SCREWS SHALL BE 2 ½ TIMES THE THICKNESS OF THE ATTACHED BOARD. FOR EXAMPLE, USE 2 ½" SCREWS FOR 1" BOARDS, AND 5" SCREWS FOR 2" BOARDS.

29. ALL INTERIOR AND EXTERIOR UNTREATED WOOD SURFACES SHALL BE PAINTED WITH INSECTICIDE/FUNGICIDE AND FIRE RETARDANT COATINGS IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 660. COATING SHALL BE CLEAR EXCEPT ON END PORTALS WHERE THE FIRE RETARDANT COATING SHALL BE WHITE. ALL COSTS ASSOCIATED WITH THE CLEANING AND PAINTING SHALL BE INCLUDED IN THE UNIT PRICES FOR THE 660 TIMBER PAINTING ITEMS.

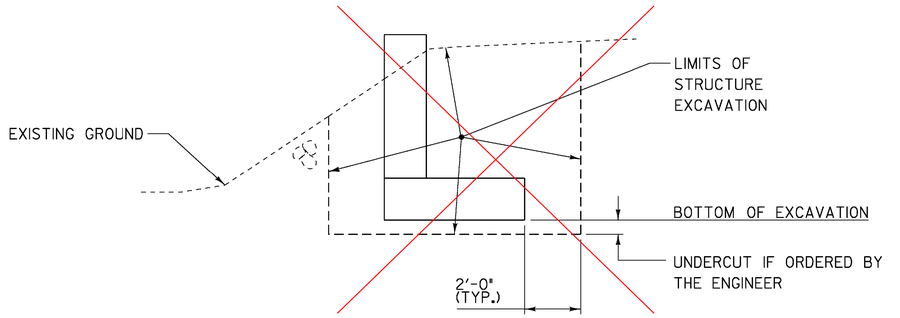
30. ALL COSTS ASSOCIATED WITH SIZING, SHAPING, AND PLANING BEDDING BLOCKS IN BEARING AREAS UNDER BEARING BLOCKS AND FLOOR BEAMS SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 522.25 "STRUCTURAL LUMBER AND TIMBER, TREATED".

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230pn.dgn	PLOT DATE: 04-MAY-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
PROJECT NOTES 2	SHEET 4 OF 67

MATERIAL ITEM	TOLERANCE
PAVEMENT	±1/4" TOTAL THICKNESS
AGGREGATE SURFACE COURSE	± 1/2"
BASE COURSE	± 1/2"
SUBBASE	± 1"
SAND BORROW	± 1"
GRANULAR BORROW	± 1"

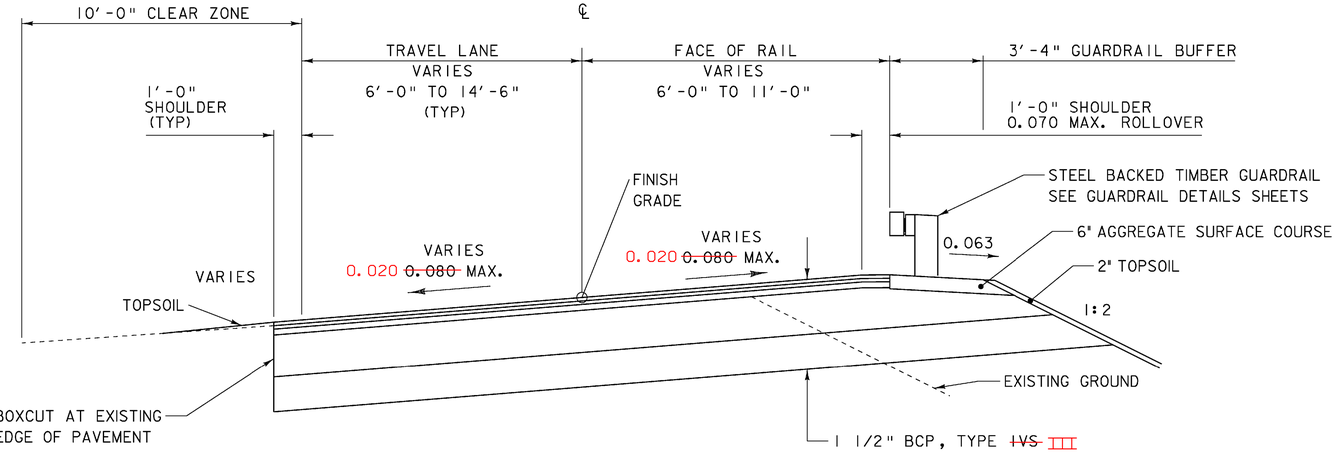


ROADWAY TYPICAL SECTION
EAST APPROACH

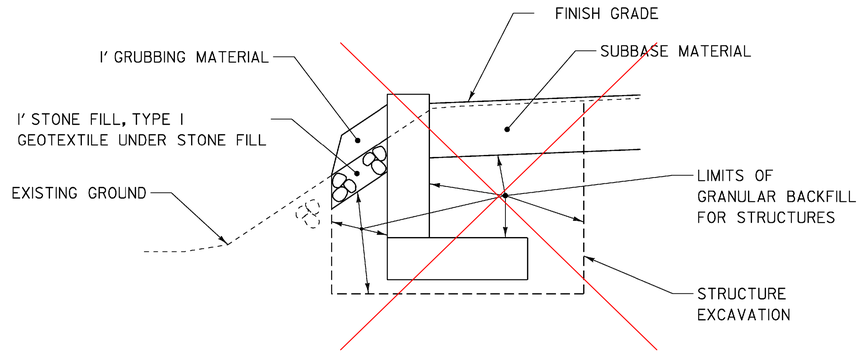


EARTHWORK TYPICAL SECTION
WINGWALL EXCAVATIONS

RETAINING WALL ELIMINATED



ROADWAY TYPICAL SECTION
WEST APPROACH

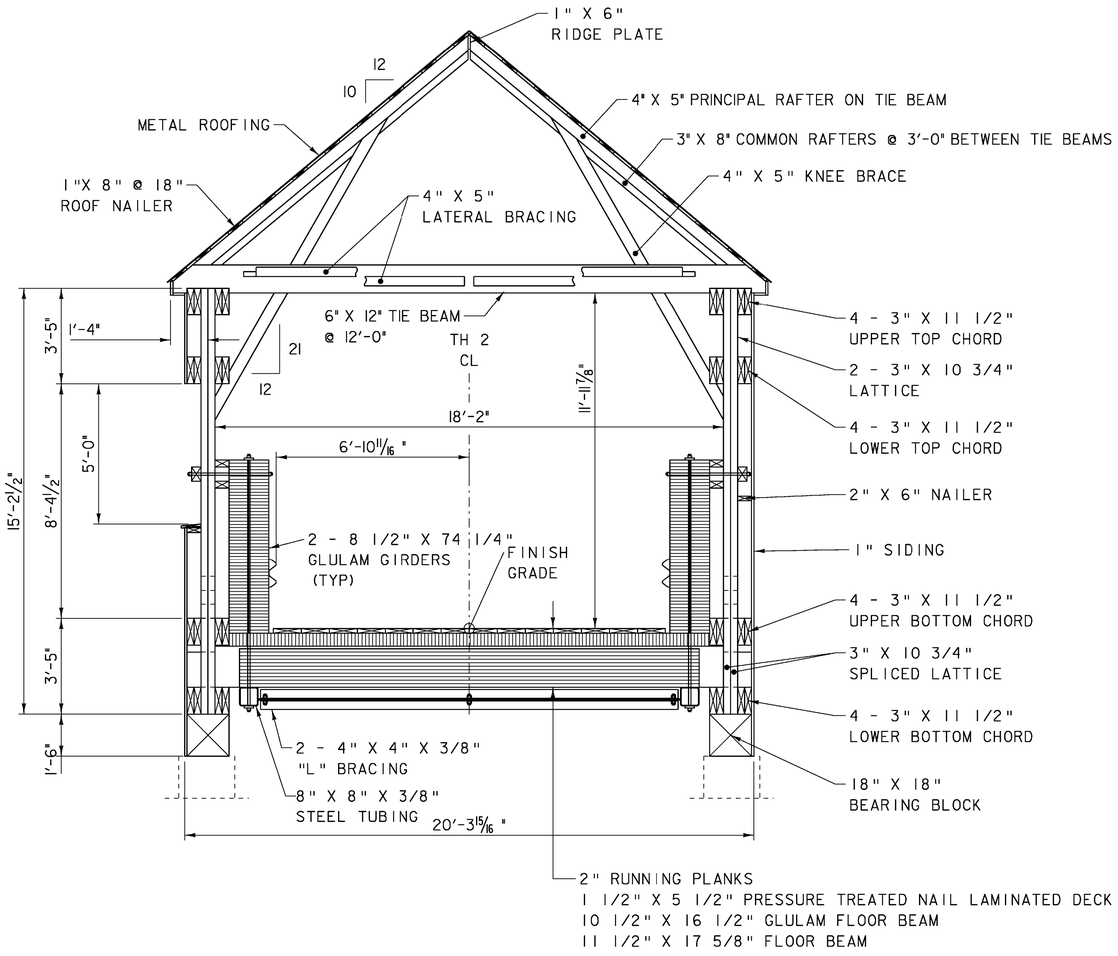


EARTHWORK TYPICAL SECTION
WINGWALL FILLS

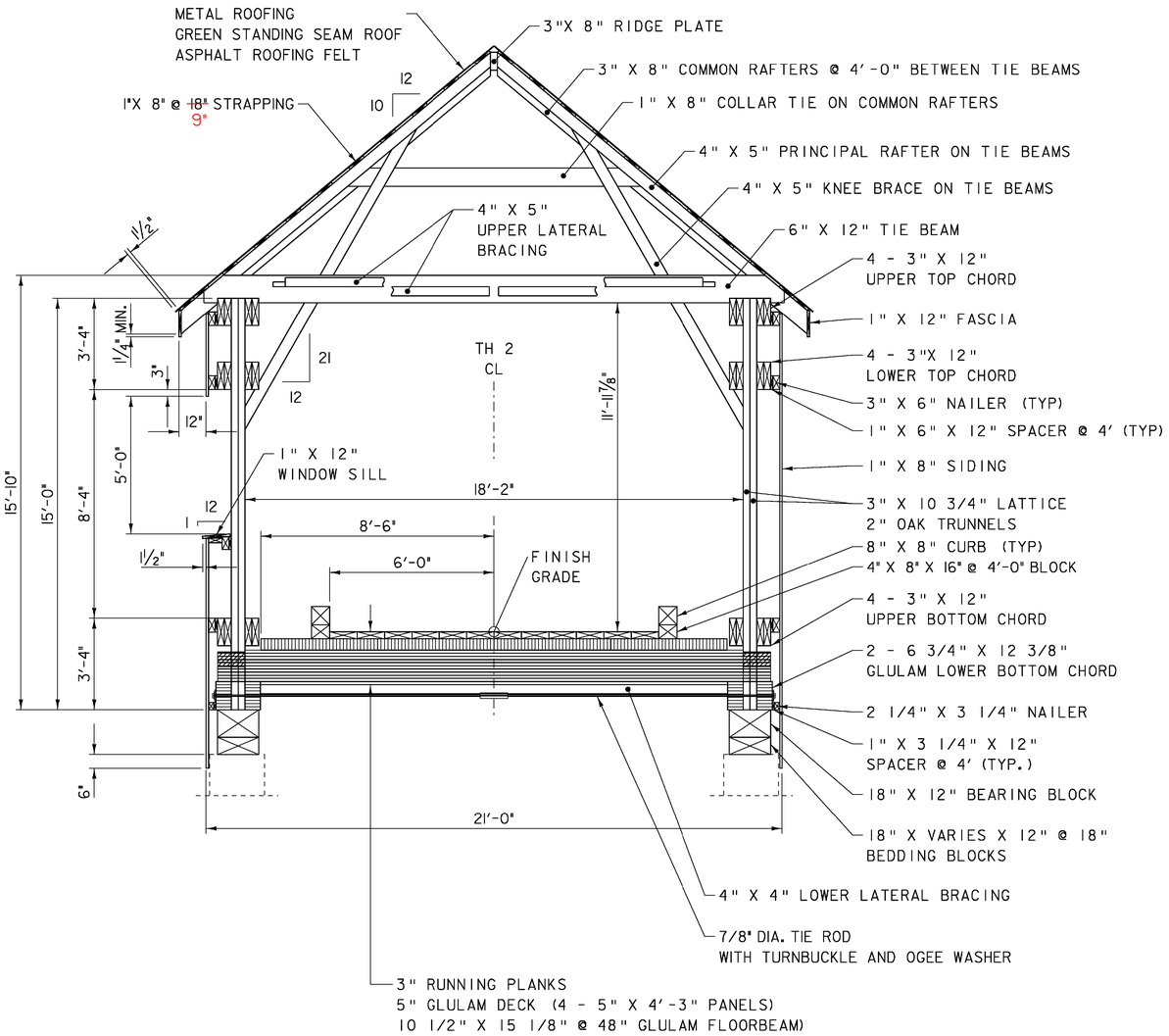
BCP = SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)

SCALE 3/8" = 1'-0
1 0 1 2 3 4

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230typ.dgn	PLOT DATE: 04-MAY-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
TYPICAL SECTIONS ROADWAY	SHEET 5 OF 67



EXISTING
TYPICAL SECTION



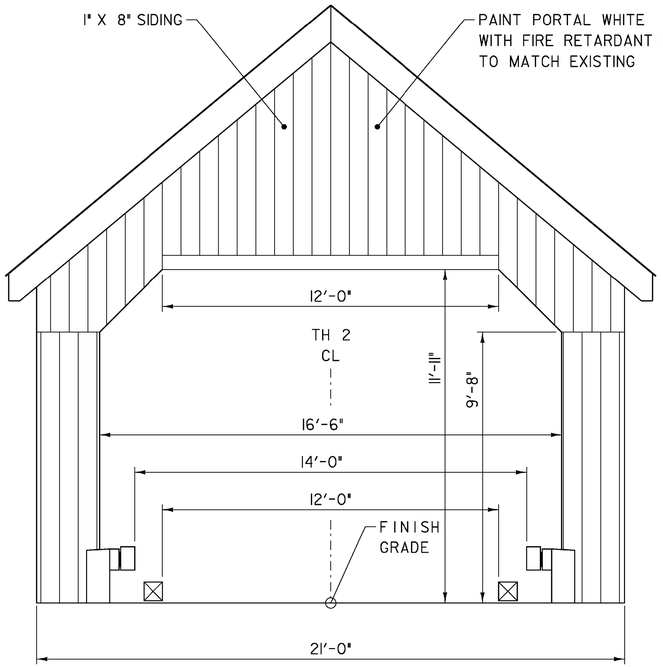
RECONSTRUCTION
TYPICAL SECTION

NOTE: ALL COMPONENTS DETAILED ARE NEW.

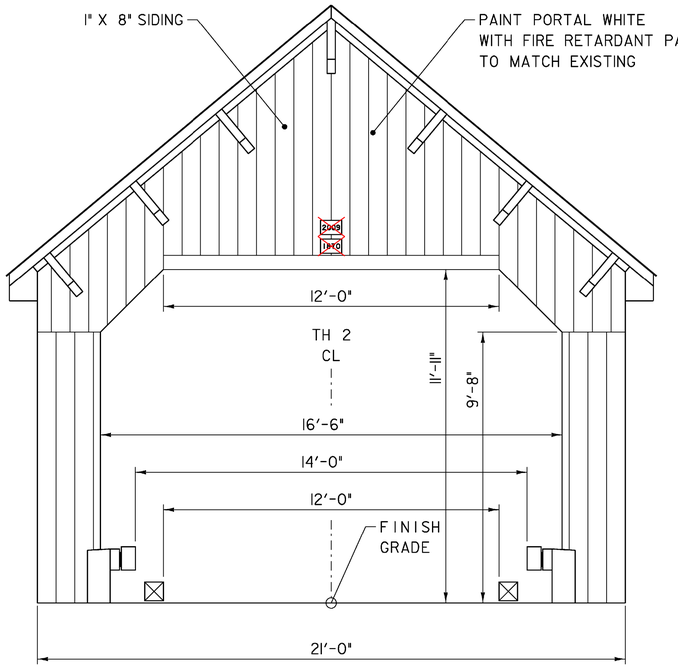
SCALE 3/8" = 1'-0
1 0 1 2 3 4

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S

FILE NAME: s96j230typ.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
TYPICAL SECTIONS BRIDGE	SHEET 6 OF 67



WEST PORTAL
ABUTMENT 1



EAST PORTAL
ABUTMENT 2

SCALE 3/8" = 1'-0
1 0 1 2 3 4

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230typ.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
TYPICAL SECTIONS PORTALS	SHEET 7 OF 67

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES

ROADWAY	EROSION CONTROL	BRIDGE	FULL C. E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
1				1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	
340				340		CY	COMMON EXCAVATION	203.15	
		10		10		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27	
20				20		CY	EARTH BORROW	203.30	
70				70		CY	SAND BORROW	203.31	
		20		20		CY	STRUCTURE EXCAVATION	204.25	
		20		20		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	
520				520		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	
250				250		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	
20				20		CY	AGGREGATE SURFACE COURSE	401.10	
3				3		CWT	EMULSIFIED ASPHALT	404.65	
1				1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	
		6		6		CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34	
		430		430		LB	STRUCTURAL STEEL	506.60	
		327		327		LB	REINFORCING STEEL	507.15	
		1		1		GAL	WATER REPELLENT, SILANE	514.10	
		24.8		24.8		MFBM	STRUCTURAL LUMBER AND TIMBER, UNTREATED	522.20	
		9.6		9.6		MFBM	STRUCTURAL LUMBER AND TIMBER, TREATED	522.25	
		4.9		4.9		MFBM	NONSTRUCTURAL LUMBER, UNTREATED	522.30	
		1.5		1.5		MFBM	NONSTRUCTURAL LUMBER, TREATED	522.35	
		1		1		LS	STRUCTURAL GLUED LAMINATED TIMBER (10.1 MFBM)(DECK PANELS)	522.40	
		1		1		LS	STRUCTURAL GLUED LAMINATED TIMBER (3.3 MFBM)(CHORDS)	522.40	
		1		1		LS	STRUCTURAL GLUED LAMINATED TIMBER (7.9 MFBM)(FLOORBEAMS)	522.40	
1				1		LS	MAINTENANCE OF STRUCTURES AND APPROACHES	527.10	
		1		1		EACH	PARTIAL REMOVAL OF STRUCTURE (TH 2 - BRIDGE NO. 17)	529.20	
		1		1		EACH	PARTIAL REMOVAL OF STRUCTURE (TH 47 - BRIDGE NO. 50)	529.20	
		5		5		CY	REMOVAL OF CONCRETE OR MASONRY	529.25	
20				20		HR	ROADWAY PATROL MAINTENANCE	607.10	
10				10		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	
3				3		MGAL	DUST CONTROL WITH WATER	609.10	
12				12		TON	DUST AND ICE CONTROL WITH CALCIUM CHLORIDE	609.15	
10		10		20		CY	STONE FILL, TYPE I	613.10	
185				185		LF	STEEL BACKED TIMBER GUARDRAIL	621.18	
200				200		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	
100				100		HR	UNIFORMED TRAFFIC OFFICERS	630.10	
300				300		HR	FLAGGERS	630.15	
			1	1		LS	FIELD OFFICE, ENGINEERS	631.10	
			1	1		LS	TESTING EQUIPMENT, CONCRETE	631.16	
			1	1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	
			1	1		LU	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.25	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		EARTHWORK SUMMARY
		FILL REQUIRED
58	CY	COMMON FILL(1.15*50 CY)
		FILL AVAILABLE
306	CY	COMMON EXCAVATION(0.9*340 CY)
3	CY	UNCLASSIFIED CHANNEL EXCAVATION(0.3*10 CY)
6	CY	STRUCTURE EXCAVATION(0.3*20 CY)

315	CY	TOTAL
58	CY	FILL REQUIRED

257	CY	WASTE
		TEMPORARY EROSION CONTROL ITEMS
60	SY	649.51 GEOTEXTILE FOR SILT FENCE
10	LB	651.17 SEED, WINTER RYE
1	LS	652.10 EPSC PLAN
50	HR	652.20 MONITORING EPSC PLAN
1	LU	652.30 MAINTENANCE OF EPSC PLAN (N.A.B.I.)
410	SY	653.20 TEMPORARY EROSION MATTING
30	CY	653.35 VEHICLE TRACKING PAD
2	EA	653.40 INLET PROTECTION DEVICE, TYPE I
500	FT	653.55 PROJECT DEMARCATION FENCE

PROJECT NAME: NEWFANE
PROJECT NUMBER: BHF 0106(4)S

FILE NAME: s96j230qty.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: T. LACKEY
QUANTITY SHEET #1

PLOT DATE: 05/04/2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
						ROADWAY	EROSION CONTROL	BRIDGE	FULL C. E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
						1				1		LS	MOBILIZATION/DEMOBILIZATION	635.11				
						1				1		LS	TRAFFIC CONTROL	641.10				
						2				2		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15				
						1090				1090		LF	4 INCH WHITE LINE	646.20				
						880				880		LF	4 INCH YELLOW LINE	646.21				
						9				9		LF	24 INCH STOP BAR	646.26				
						4				4		EACH	LETTER OR SYMBOL	646.30				
						100				100		EACH	LINE STRIPING TARGETS	646.76				
								140		140		SY	GEOTEXTILE UNDER STONE FILL	649.31				
							60			60		SY	GEOTEXTILE FOR SILT FENCE	649.51				
							30			30		LB	SEED	651.15				
							10			10		LB	SEED, WINTER RYE	651.17				
							200			200		LB	FERTILIZER	651.18				
							1			1		TON	AGRICULTURAL LIMESTONE	651.20				
							1			1		TON	HAYMULCH	651.25				
							110			110		CY	TOPSOIL	651.35				
								140		140		SY	GRUBBING MATERIAL	651.40				
							1			1		LS	EPSC PLAN	652.10				
							50			50		HR	MONITORING EPSC PLAN	652.20				
							1			1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30				
							410			410		SY	TEMPORARY EROSION MATTING	653.20				
							30			30		CY	VEHICLE TRACKING PAD	653.35				
							2			2		EACH	INLET PROTECTION DEVICE, TYPE I	653.40				
							500			500		LF	PROJECT DEMARCATION FENCE	653.55				
								1		1		LS	TIMBER PAINTING, ENVIRONMENTAL PROTECTION	660.10				
								1		1		LS	TIMBER PAINTING, FIRE RETARDANT	660.20				
								1		1		LS	TIMBER PAINTING, INSECTICIDE/FUNGICIDE	660.30				
								402		402		SY	METAL ROOFING	661.10				
						72				72		SF	TRAFFIC SIGNS, TYPE A	675.20				
						225				225		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341				
						16		2		18		EACH	REMOVING SIGNS	675.50				
								2		2		EACH	ERECTING SALVAGED SIGNS	675.60				
						1				1		LU	SPECIAL PROVISION (INCENTIVE/DISINCENTIVE)(N.A.B.I)	900.650				
						1				1		LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY)(N.A.B.I.)	900.650				
						1				1		LU	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT)(N.A.B.I.)	900.650				
						197				197		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	900.680				

PROJECT NAME: NEWFANE
PROJECT NUMBER: BHF 0106(4)S

FILE NAME: s996j230qty.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: T. LACKEY
QUANTITY SHEET #2

PLOT DATE: 04/29/2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 3

SUMMARY OF BRIDGE QUANTITIES											TOTALS	DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES		
					DECK BR 50	DECK BR 17	ABUTMENT 1	ABUTMENT 2	CHANNEL		BRIDGE TOTAL	UNIT	ITEMS	ITEM NUMBER	QUANTITIES	UNIT	ITEMS
							10				10	CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27			
							20				20	CY	STRUCTURE EXCAVATION	204.25			
							20				20	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30			
							5	1			6	CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34			
							430				430	LB	STRUCTURAL STEEL	506.60			
							327				327	LB	REINFORCING STEEL	507.15			
							1				1	GAL	WATER REPELLENT, SILANE	514.10			
						24.8					24.8	MFBM	STRUCTURAL LUMBER AND TIMBER, UNTREATED	522.20			
					5	4.6					9.6	MFBM	STRUCTURAL LUMBER AND TIMBER, TREATED	522.25			
						4.9					4.9	MFBM	NONSTRUCTURAL LUMBER, UNTREATED	522.30			
						1.5					1.5	MFBM	NONSTRUCTURAL LUMBER, TREATED	522.35			
						1					1	LS	STRUCTURAL GLUED LAMINATED TIMBER (10.1 MFBM)(DECK PANELS)	522.40			
						1					1	LS	STRUCTURAL GLUED LAMINATED TIMBER (3.3 MFBM)(CHORDS)	522.40			
						1					1	LS	STRUCTURAL GLUED LAMINATED TIMBER (7.9 MFBM)(FLOORBEAMS)	522.40			
						1					1	EACH	PARTIAL REMOVAL OF STRUCTURE (TH 2 - BRIDGE NO. 17)	529.20			
					1						1	EACH	PARTIAL REMOVAL OF STRUCTURE (TH 47 - BRIDGE NO. 50)	529.20			
							1	4			5	CY	REMOVAL OF CONCRETE OR MASONRY	529.25			
							10				10	CY	STONE FILL, TYPE I	613.10			
							140				140	SY	GEOTEXTILE UNDER STONE FILL	649.31			
							140				140	SY	GRUBBING MATERIAL	651.40			
						1					1	LS	TIMBER PAINTING, ENVIRONMENTAL PROTECTION	660.10			
						1					1	LS	TIMBER PAINTING, FIRE RETARDANT	660.20			
						1					1	LS	TIMBER PAINTING, INSECTICIDE/FUNGICIDE	660.30			
						402					402	SY	METAL ROOFING	661.10			
						2					2	EACH	REMOVING SIGNS	675.50			
						2					2	EACH	ERECTING SALVAGED SIGNS	675.60			

PROJECT NAME: NEWFANE
PROJECT NUMBER: BHF 0106(4)S

FILE NAME: s996j230qty.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: T. LACKEY
QUANTITY SHEET #3

PLOT DATE: 05/04/2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB

GPS CONTROL POINTS

HVCTRL #1

STANDARD DISK STAMPED

Shoskes

N = 160026.02
E = 1589110.89
ELEV. = 587.37

To reach from the intersection of U.S. route 5 and VT route 30 north in Brattleboro, go north on route 30 for 8.8 mi. (14.2 KM) to the intersection of Town Highway 2 (road leading to Williamsville, South Newfane, East Dover and West Dover) left. Turn left and go north and west along TH 2 for 2.0 mi. (3.2 KM) to the bridge over Rock River. At the end of the bridge turn left and go west along TH 2 for 0.7 mi. to the covered bridge over Rock River. Continue straight on TH 2 for 0.4 mi. (0.6 KM) to the mark on the left. The mark is set in the top of a .3 m. (1ft.) diameter concrete monument poured 1.3 m (4.3 ft) deep. It is 4.8 m (15.7 ft) southeast of and about 0.2 m (0.7 ft) higher than the centerline of TH 2, 11.8 m (128.9 ft) northeast of the centerline of a gravel drive leading to the Shoskes residence, and 1.6m (5.2 ft) southwest of pole #39/93 and a fiberglass witness post.

HVCTRL #2

STANDARD DISK STAMPED

Shoskes Az Mk

N = 161007.58
E = 1589488.87
ELEV. = 565.06

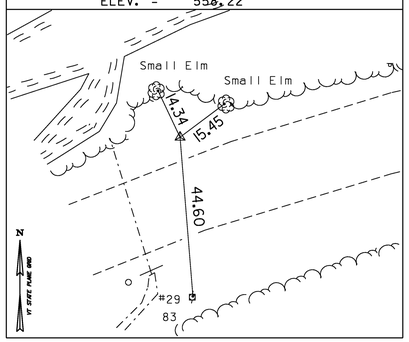
To reach from the intersection of U.S. route 5 and VT route 30 north in Brattleboro, go north on route 30 for 8.8 mi. (14.2 KM) to the intersection of Town Highway 2 (road leading to Williamsville, South Newfane, East Dover, and West Dover) left. Turn left and go north and west along TH 2 for 2.0 mi. (3.2 KM) to the bridge over Rock River. At the end of the bridge turn left and go west along TH 2 for 0.7 mi. to the covered bridge over Rock River. Continue straight on TRH 2 for 0.2 mi. (0.3 KM) to the mark on the right. The mark is set in the top of a large boulder about 0.5 m (1.6 ft) below ground surface, accessible by an access cover. It is 6.6 m (21.7 ft) northwest of and about 0.7 m (2.3 ft) lower than the centerline of TH 2, 23.5 m (77.1 ft) southwest of pole #64/86/32, 8.4 m (27.6 ft) southeast of a 0.3 m (1 ft) diameter white pine, and 0.4 m (1.3 ft) southeast of a fiberglass witness post.

* DESCRIPTION PROVIDED BY VERMONT AGENCY OF TRANSPORTATION GEODETIC SURVEY UNIT

TRAVERSE TIES

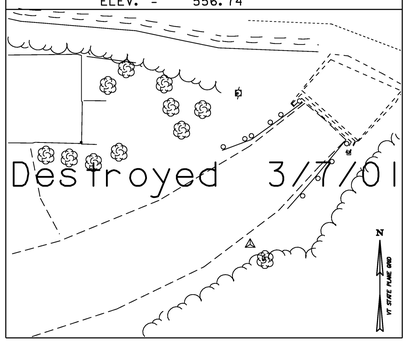
HVCTRL #3

NORTH = 161317.75
EAST = 1589880.30
ELEV. = 558.22



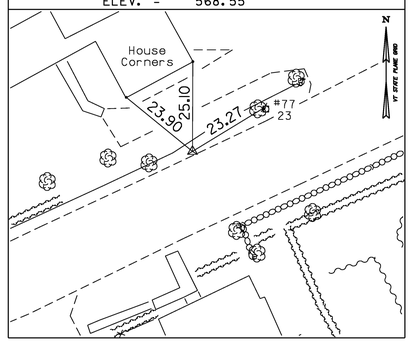
HVCTRL #4

NORTH = 161394.68
EAST = 1590340.29
ELEV. = 556.74



HVCTRL #5

NORTH = 161597.95
EAST = 1590566.41
ELEV. = 568.55



NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

* MAIN TRAVERSE COMPLETED April 23, 1998 by R. Gilman P.C. & T. Companion

ALIGNMENT

Alignment Current as of 04/27/09

Main Line

	STATION	NORTHING	EASTING
POB	7+04.760	161289.1600	1589852.5600
PC	7+09.993	161291.0880	1589857.4250
PT	9+15.563	161344.4370	1590055.4896

Radius: 900.000
Delta: 13°05'13.23" Right
Degree of Curvature (Arc): 1°56'25.52"
Length: 205.570
Tangent: 103.234
Chord: 205.124
Middle Ordinate: 5.863
External: 5.901

PC	11+48.409	161378.9802	1590285.7588
PT	12+18.504	161411.8642	1590346.0419

Radius: 100.000
Delta: 40°09'41.50" Left
Degree of Curvature (Arc): 17°27'49.64"
Length: 70.095
Tangent: 36.557
Chord: 68.669
Middle Ordinate: 6.079
External: 6.473

PC	13+62.464	161520.0042	1590441.0687
PT	13+93.035	161538.2819	1590465.3102

Main Line Continued

PT	13+93.035	161538.2819	1590465.3102

Radius: 75.000
Delta: 23°21'16.38" Right
Degree of Curvature (Arc): 23°17'06.19"
Length: 30.571
Tangent: 15.501
Chord: 30.360
Middle Ordinate: 1.552
External: 1.585

POE	15+84.209	161620.0975	1590638.0925

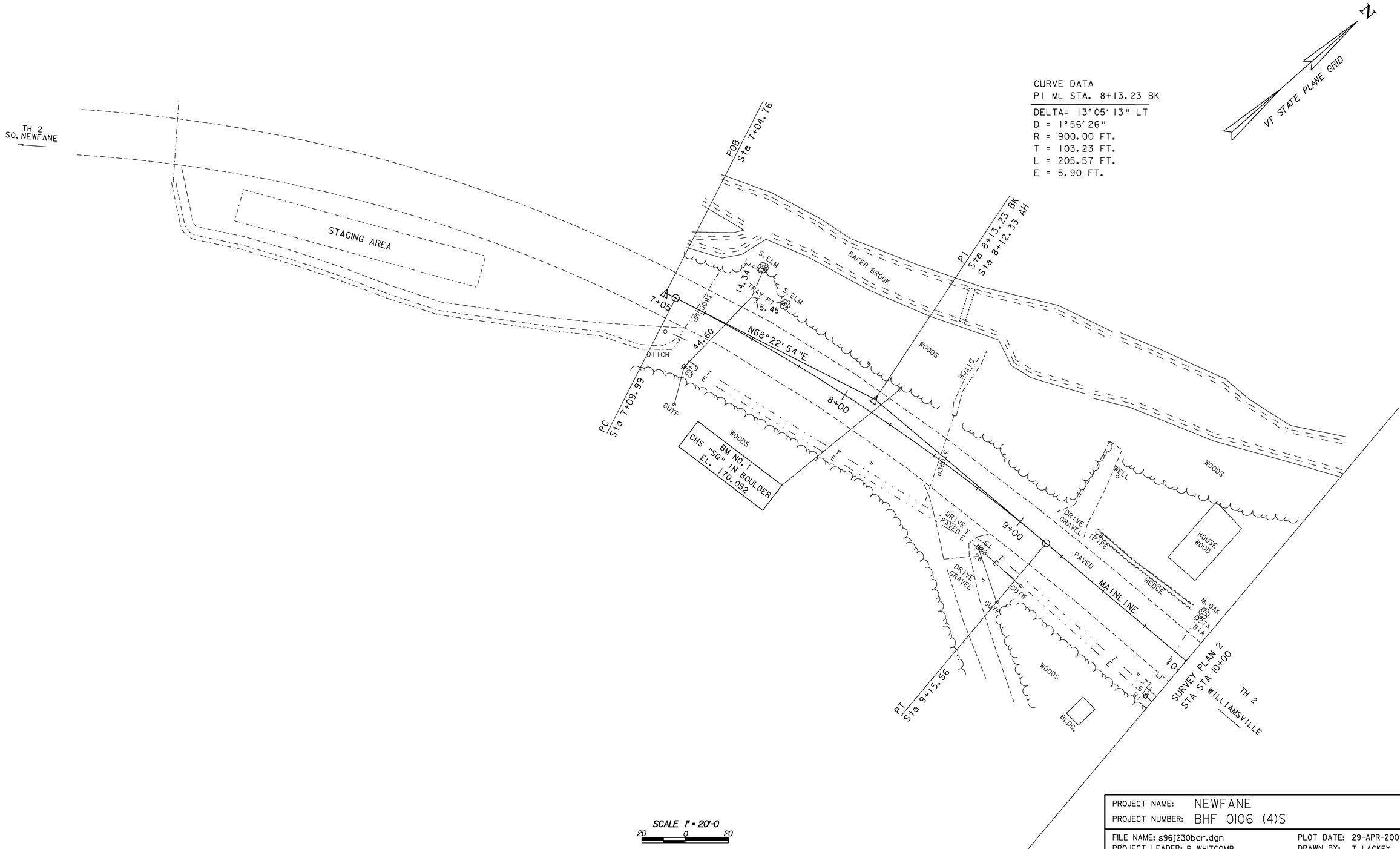
DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)
ADJUSTMENT Compass

PROJECT NAME: Newfane
PROJECT NUMBER: BHF 0106 (4)S

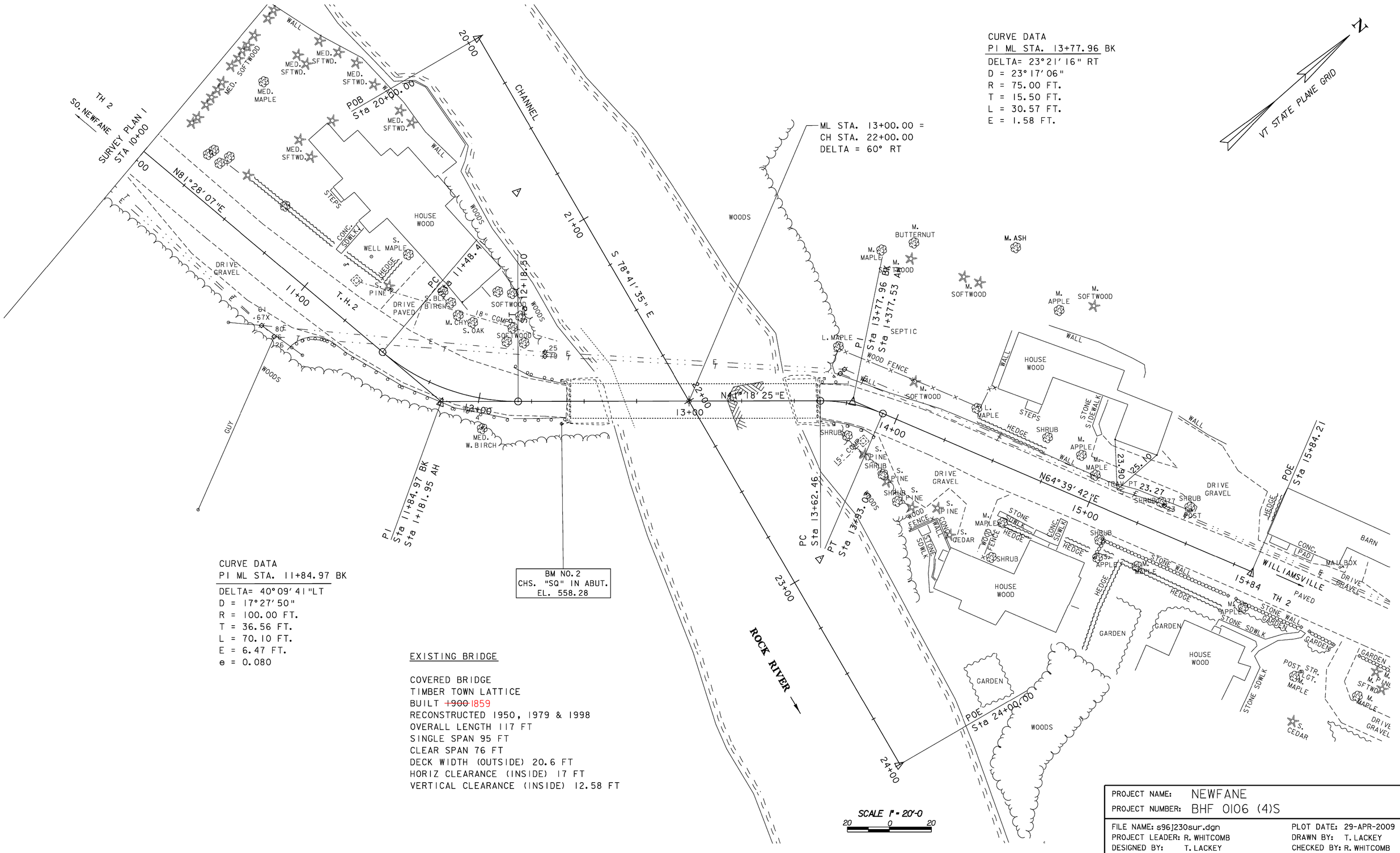
FILE NAME: 96J230\survey\x96J230ti.dgn
PROJECT LEADER: R.Whitcomb
DESIGNED BY: T.Lackey
SURVEY TIES

PLOT DATE: 29-APR-2009
DRAWN BY: R. Bullock
CHECKED BY: R.Whitcomb
SHEET 11 OF 67



SCALE 1" = 20'-0
20 0 20

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230bdr.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
SURVEY PLAN 1	SHEET 12 OF 67



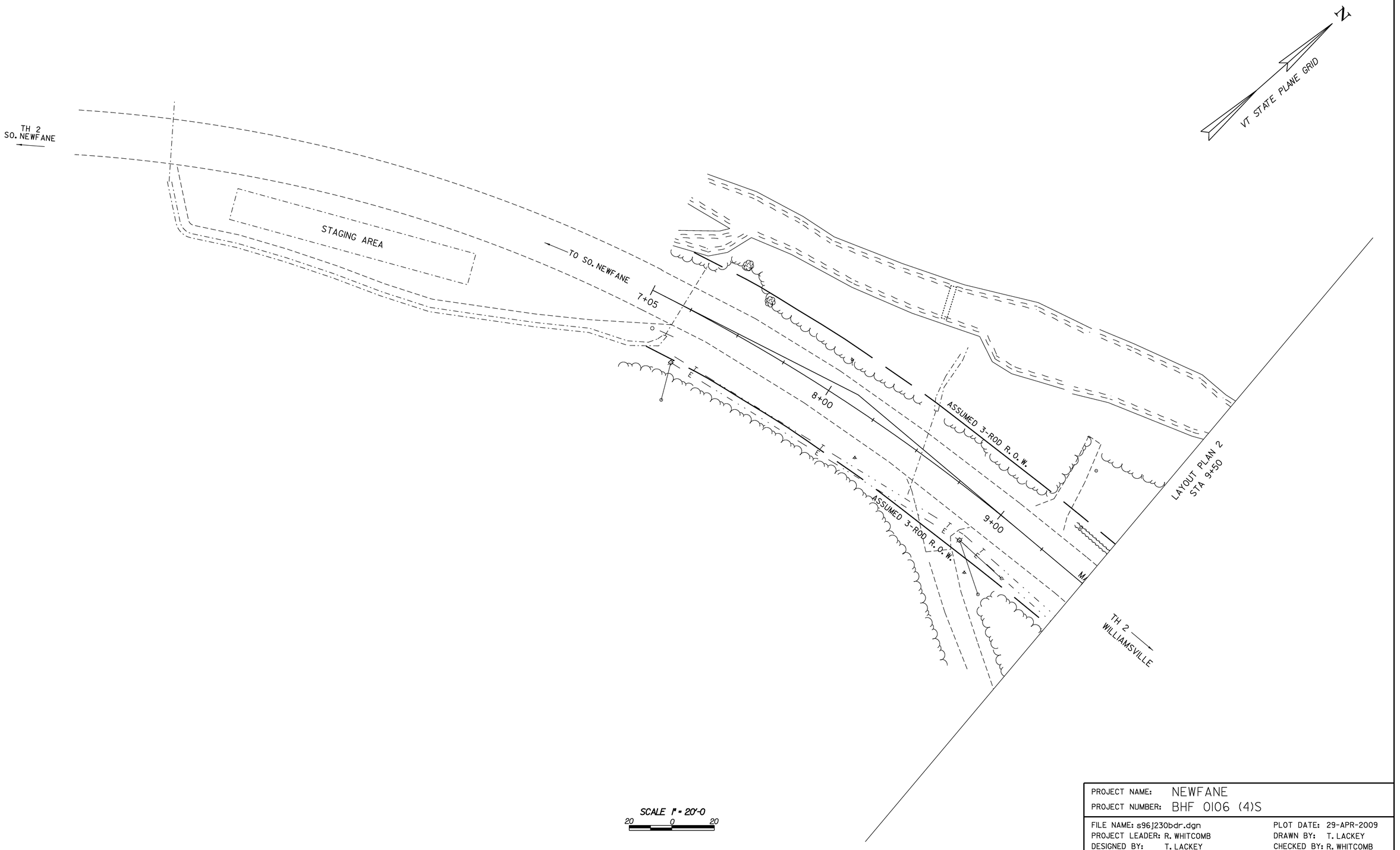
CURVE DATA
PI ML STA. 11+84.97 BK

DELTA= 40°09'41"LT
D = 17°27'50"
R = 100.00 FT.
T = 36.56 FT.
L = 70.10 FT.
E = 6.47 FT.
e = 0.080

EXISTING BRIDGE

COVERED BRIDGE
TIMBER TOWN LATTICE
BUILT ~~1900~~ 1859
RECONSTRUCTED 1950, 1979 & 1998
OVERALL LENGTH 117 FT
SINGLE SPAN 95 FT
CLEAR SPAN 76 FT
DECK WIDTH (OUTSIDE) 20.6 FT
HORIZ CLEARANCE (INSIDE) 17 FT
VERTICAL CLEARANCE (INSIDE) 12.58 FT

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230sur.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
SURVEY PLAN 2	SHEET 13 OF 67



SCALE 1" = 20'-0

20 0 20

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230bdr.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
LAYOUT PLAN 1	SHEET 14 OF 67

CONSTRUCT PAVED DRIVE
ML STA. 11+40 LT

ITEM 621.18 STEEL BACKED TIMBER GUARD RAIL
ML STA. 12+09 LT - 12+42 LT
ML STA. 11+66 RT - 12+42 RT
ML STA. 13+62 LT - 13+74 LT
ML STA. 13+62 RT - 13+93 RT

ITEM 621.80 REMOVAL AND DISPOSAL OF GUARDRAIL
ML STA. 12+16 LT - 12+41 LT
ML STA. 11+13 RT - 12+41 RT
ML STA. 13+62 LT - 13+75 LT
ML STA. 13+62 RT - 13+94 RT

N
VT STATE PLANE GRID

LAYOUT PLAN 1
STA 9+50

TH 2
SO. NEWFANE

CL

10+00

11+00

12+00

13+00

14+00

15+00

20+00

21+00

22+00

23+00

CHANNEL

ROCK RIVER

BEGIN APPROACH
MATCH EXISTING
ML STA. 10+~~50~~.00
22

CONSTRUCTION
LIMIT

BEGIN PROJECT
ML STA. 11+75.00

REMOVE

STONE
FILL,
TYPE 1

RETAINING
WALL

ASSUMED 3-ROD R.O.W.

BEGIN BRIDGE
ML STA. 12+42.02
EL. 558.24

STONE FILL,
TYPE 1

ASSUMED 3-ROD R.O.W.

SAVE

END BRIDGE
END PROJECT
ML STA. 13+62.18
EL. 562.73

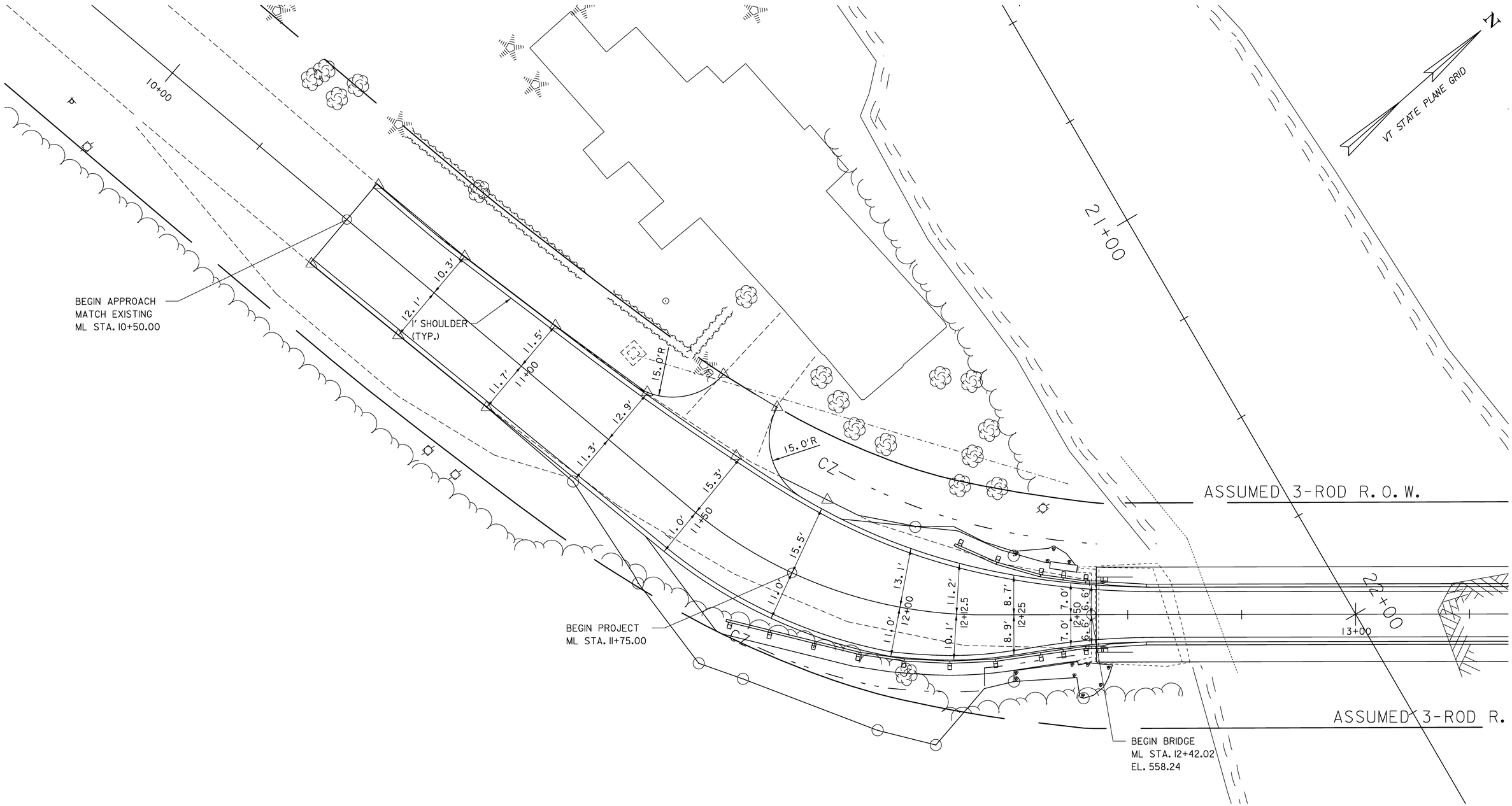
END APPROACH
MATCH EXISTING
ML STA. 15+50.00

SAVE

TH 2
WILLIAMSVILLE

SCALE 1" = 20'-0
20 0 20

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230bdr.dgn	PLOT DATE: 04-MAY-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
LAYOUT PLAN 2	SHEET 15 OF 67



SCALE 1" = 10'-0"
10 0 10

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230bdr.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
PAVEMENT LAYOUT PLAN 1	SHEET 16 OF 67

N

VT STATE PLANE GRID

END BRIDGE
END PROJECT
ML STA. 13+62.18
EL. 562.73

-ROD R. O. W.

ASSUMED 3-ROD R. O. W.

22+00
13+00

23+00

ROCK RIV

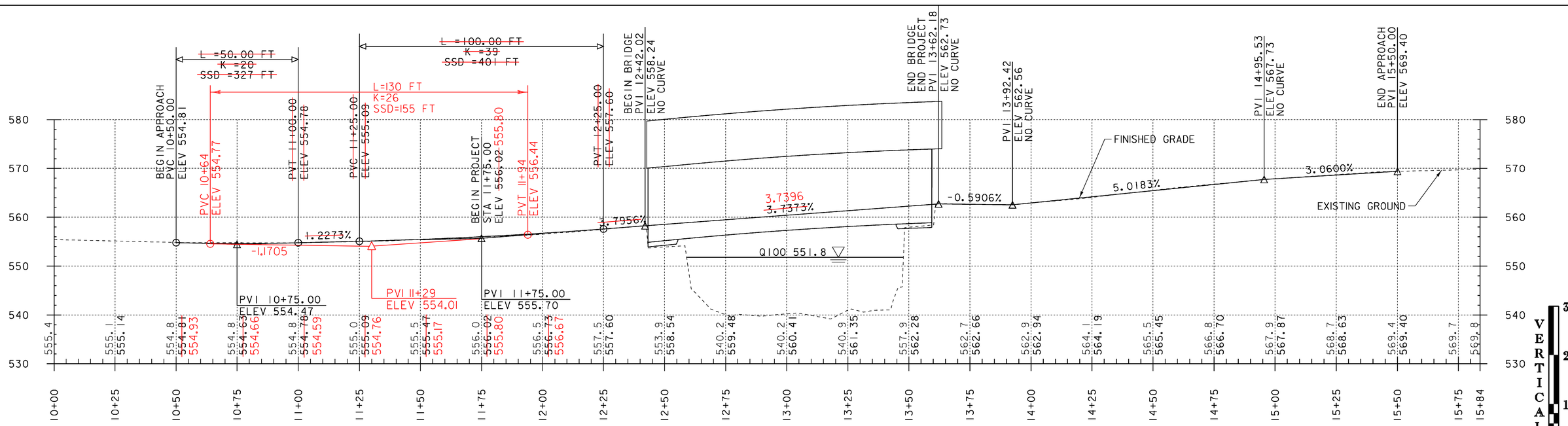
6.6'
5.9'
7.4'
6.4'
13+75
8.0'
7.2'
13+87.5
8.8'
8.9'
14+00
9.6'
9.7'
10.8'
9.8'
14+50
1' SHOULDER
(TYP.)
10.5'
9.8'
10.3'
9.6'
15+00
10.4'
9.5'

END APPROACH
MATCH EXISTING
ML STA. 15+50.00

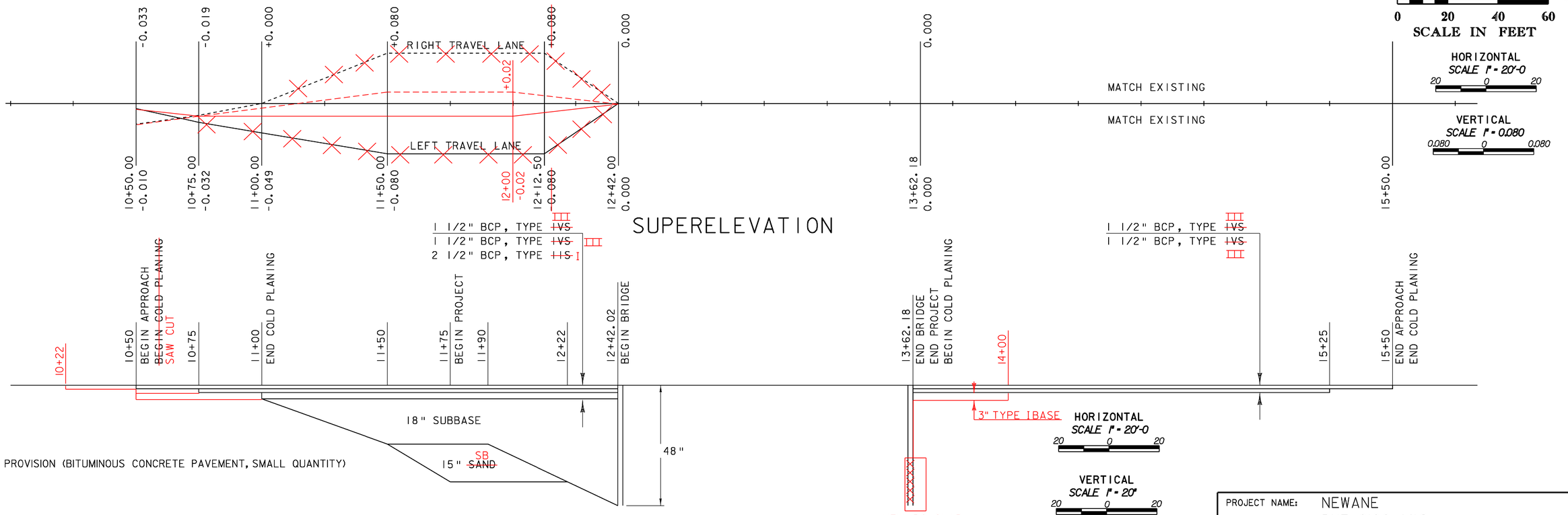
15+84

SCALE 1" = 10'-0"
10 0 10

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230bdr.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
PAVEMENT LAYOUT PLAN 2	SHEET 17 OF 67



PROFILE



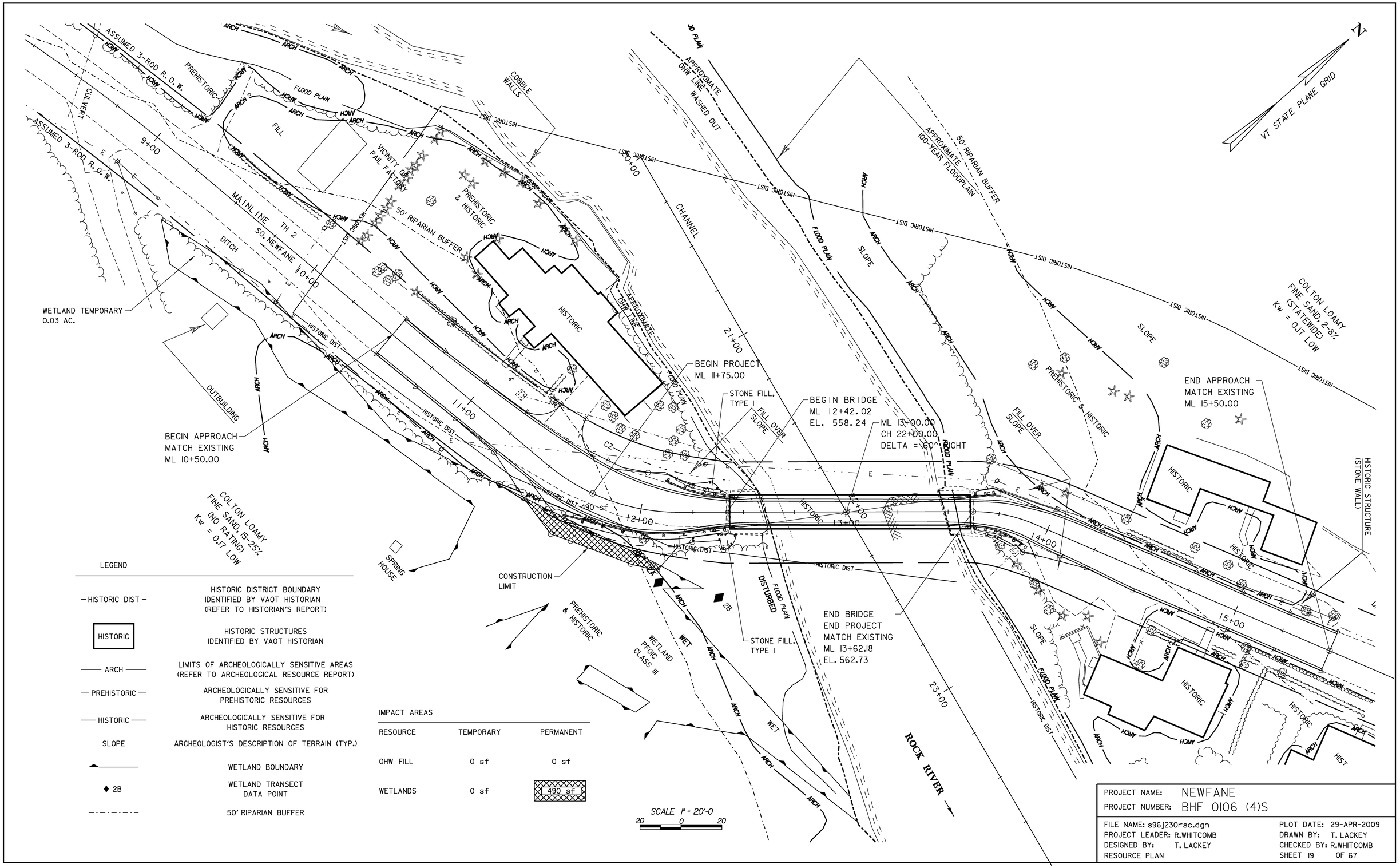
SUPERELEVATION

BCP = SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)

MATERIAL TRANSITION DETAIL

PROFILE NOTES:
1. ELEVATIONS ARE ALONG PROPOSED CENTERLINE.
2. EXISTING ELEVATIONS ARE EXPRESSED TO 0.1 FEET.
3. PROPOSED ELEVATIONS ARE EXPRESSED TO 0.01 FEET.

PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230xs.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
PROFILE	SHEET 18 OF 67



LEGEND

— HISTORIC DIST —	HISTORIC DISTRICT BOUNDARY IDENTIFIED BY VAOT HISTORIAN (REFER TO HISTORIAN'S REPORT)
HISTORIC	HISTORIC STRUCTURES IDENTIFIED BY VAOT HISTORIAN
—— ARCH ——	LIMITS OF ARCHEOLOGICALLY SENSITIVE AREAS (REFER TO ARCHEOLOGICAL RESOURCE REPORT)
— PREHISTORIC —	ARCHEOLOGICALLY SENSITIVE FOR PREHISTORIC RESOURCES
—— HISTORIC ——	ARCHEOLOGICALLY SENSITIVE FOR HISTORIC RESOURCES
SLOPE	ARCHEOLOGIST'S DESCRIPTION OF TERRAIN (TYP.)
	WETLAND BOUNDARY
♦ 2B	WETLAND TRANSECT DATA POINT
	50' RIPARIAN BUFFER

IMPACT AREAS

RESOURCE	TEMPORARY	PERMANENT
OHW FILL	0 sf	0 sf
WETLANDS	0 sf	490 sf

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230rsc.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R.WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R.WHITCOMB
RESOURCE PLAN	SHEET 19 OF 67

1. EROSION PREVENTION & SEDIMENT CONTROL PLAN NARRATIVE

1.1. PROJECT DESCRIPTION

1.1.1. Newfane BHF 0106(4)S will reconstruct Bridge 17 on Town Highway 2 over the Rock River in the Town of Newfane on existing alignment. It will improve the western approach by increasing the radius of the approaching curve and shifting the centerline about 6 ft south. The bridge will stay in its existing footprint. The existing bridge is a wooden Covered Bridge.

1.1.2. Traffic Maintenance. Traffic will be maintained on the existing bridge while the new bridge is constructed on a temporary work area on the southwest side of the bridge. Traffic will be maintained on a detour on TH 19, 47 & 26 while the existing bridge is replaced by the reconstructed bridge.

1.1.3. Length. The total length of roadway work, including roadway approaches, is approximately 500 ft.

1.1.4. Area. The total disturbed area (excluding waste, borrow and staging areas) is approx 0.24 acres.

1.1.5. Duration. This project should last one construction season.

1.2. SITE INVENTORY & ANALYSIS

1.2.1. Off Site Drainage Characteristics (Up And Down Gradient). The land in the project area is a village in a narrow valley of hilly forest. It consists of lawns, brush, and woods with softwood and hardwood trees. The soil is very deep and excessively drained formed in glacial-fluvial deposits.

1.2.2. Drainage, Waterways, Bodies of Water. The bridge crosses the Rock River. The River is in a deep dark narrow valley. The stream banks shift from hillside to terrace. The stream banks are vegetated with mature trees. The river is small, perennial and sinuous. The stream bed is gravel, cobbles, and boulders. The river at the new bridge is about 80 ft wide and on average 1 foot deep. The watershed area is 40.5 square miles.

1.2.3. Topography, Existing Roads, Buildings, Utilities.

1.2.3.1. Topography. The project site is a deep valley leading into a small village.

1.2.3.2. Existing Roads. TH 2 is a Class II paved town highway and major collector on the state highway system.

1.2.3.3. Buildings. Five homes are in the project survey. More homes are in the village of Williamsville east of the project.

1.2.3.4. Utilities. Aerial utility lines run along the mainline shifting from right to left before the bridge heading east.

1.2.4. Vegetation. The vegetation is mature softwood and hardwoods hillside forest with brush and young tree undergrowth. Stone Fill capped with grubbing material will stabilize slopes steeper than 66%. Seed & Mulch will stabilize slopes flatter than 66%.

1.2.5. Soils. The Soil Conservation Service identifies two soil types in the project site.

1.2.5.1. 50B Colton, Loamy Fine Sand 2 to 8% slope. This soil is on the north side of the River. The Colton series consists of very deep, excessively drained soils formed in glacio-fluvial deposits. They are on terraces, kames, eskers, and outwash plains. Slope ranges from 0 to 70 percent. Permeability is rapid or very rapid in the solum and very rapid in the substratum. The soil profile is typically: 8 in surface layer of grayish brown, very friable, gravelly loamy sand; 14 in subsoil of reddish brown, very friable or loose, gravelly loamy sand; 50 in substratum of brown, loose, stratified, extremely gravelly sand. Its erodiblilty rating is low (kw = 0.17). The flat slope suggests low erodiblilty.

1.2.5.2. 50D Colton, Loamy Fine Sand 15 to 25% slope. This soil is on the south side of the River. The soil profile is the same as 50B. Its erodiblilty rating is low (kw = 0.17). The steep slope suggests high erodiblilty.

1.2.6. Sensitive Resource Areas.

1.2.6.1. The Rock River runs through the project area. The project impacts its 50 ft Riparian Zone at the bridge site.

1.2.6.2. Class III Wetlands are on the south side of the River and east side of the bridge.

1.2.6.3. Threatened & Endangered Species. None

1.2.6.4. Historic Features. The buildings in the project area are part of the Williamsville Historic District.

1.2.6.5. Archaeologically Sensitive Areas. Nearly all level areas in the project are historic & prehistoric archaeologically sensitive areas.

1.2.7. Proximity to Natural or Man-Made Water Features.

1.2.7.1. The Rock River is at the bridge site.

1.2.7.2. Existing Inlet & Culvert from ML 11+25 to 12+25 left.

1.2.7.3. Existing Inlet & Culvert at ML 13+90 right

1.2.7.4. No ditches.

1.3. Risk Evaluation

1.3.1. The area of disturbance is less than 1 acre. Therefore the project is not under the jurisdiction of General Permit 3-9020 (2006).

1.3.2. Should changes prior to or during construction result in one or more acres of earth disturbance or should the project become part of a larger plan of development then the selected Contractor will be responsible for additional permitting with VANR via filing of the appropriate Notice of Intent under the Construction General Permit process.

1.4. EROSION PREVENTION & SEDIMENT CONTROL

The purpose of the Plan and its overall measures is to effectively prevent sediment or sediment laden water from leaving the construction site.

Erosion Prevention is the first priority. The three basic erosion prevention strategies are minimizing disturbance, managing runoff, and stabilizing promptly.

After erosion begins, sediment control is the next priority. Sediment control practices fall generally into two categories, those that retain eroded sediment on the construction site, and those that convey sediment to sediment retaining features.

All Erosion Prevention and Sediment Control measures necessary at Waste, Borrow and Staging Areas shall be paid per Specification 105.29

Use the Vermont Agency of Natural Resources (VANR) "The Low Risk Site Handbook for Erosion Prevention and Sediment Control" for the following requirements.

1.4.1. Mark Site Boundaries

1.4.1.1. PROJECT DEMARCATION FENCE will physically mark the site boundaries to identify the limits of construction. Fencing is not required in water, road, drive and walk ways.

1.4.2. Limit Disturbance Area

1.4.2.1. PROJECT DEMARCATION FENCE will limit the area that can be disturbed and exposed to erosion during construction.

1.4.3. Stabilize Construction Exit

1.4.3.1. A VEHICLE TRACKING PAD will control tracking of sediment transport on to public roads during construction wherever construction vehicles leave construction areas. The areas include: the project site; staging areas; and waste and borrow areas. Pipe all surface water flowing to or diverted towards a construction entrance under the stone. Size pipes for their watersheds. The minimum pipe diameter is 6".

1.4.4. Install Silt Fence

1.4.4.1. SILT FENCE placed level on slopes will control sheet flow sediment transport on bare soil. Place level silt fence 5' to 10' from the toe of slopes. Turn the ends of silt fence slightly uphill to stop concentrated water from flowing around the ends. The maximum slope length between separate runs of silt fence is 100'. Place silt fence before beginning upslope earthwork.

1.4.5. Divert Upland Runoff

1.4.5.1. Not Applicable

1.4.6. Slow Down Channelized Runoff

1.4.6.1. Not Applicable

1.4.7. Construct Permanent Controls

1.4.7.1. BITUMINOUS CONCRETE PAVEMENT and AGGREGATE SURFACE COURSE on the road surface will prevent erosion.

1.4.7.2. STONE FILL, TYPE I at the ends of the wing walls will prevent erosion and control sediment transport.

1.4.8. Stabilize Exposed Soils

1.4.8.1. Tracking & Mulching will temporarily stabilize slopes. Use tracking for short term (two weeks) exposed slopes. Drive heavy equipment on the slopes to leave level tracks (small check dams) that will catch water flow. Stabilize slopes within 48 hours or sooner considering rain.

1.4.8.2. SEED & HAY MULCH will stabilize slopes ranging from 0% to 66%. Use seeding for long term exposed slopes. Allow Grass 2 weeks to establish itself. Stabilize slopes within 48 hours or sooner considering rain.

1.4.8.3. Biodegradable TEMPORARY EROSION MATTING will stabilize slopes ranging from 33% to 66%.

1.4.9. Winter Stabilization

1.4.9.1. The "Winter Construction" season occurs between October 15 and April 15, when erosion prevention and sediment control is significantly more difficult.

1.4.9.2. If Winter Construction is necessary, revise this plan according to the VANR Low Risk Site Handbook.

1.4.10. Stabilize Soil at Final Grade

1.4.10.1. SEED & Mulch will establish vegetation on side slopes less than 66% that will prevent erosion and control sediment transport.

1.4.10.2. Biodegradable TEMPORARY EROSION MATTING will stabilize slopes ranging from 33% to 66%.

1.4.11. Dewatering Activities

1.4.11.1. Not Applicable for this project, otherwise:

1.4.11.1.1. Utilize appropriate dewatering measures which filter sediment from collected water prior to discharging into waters of the state.

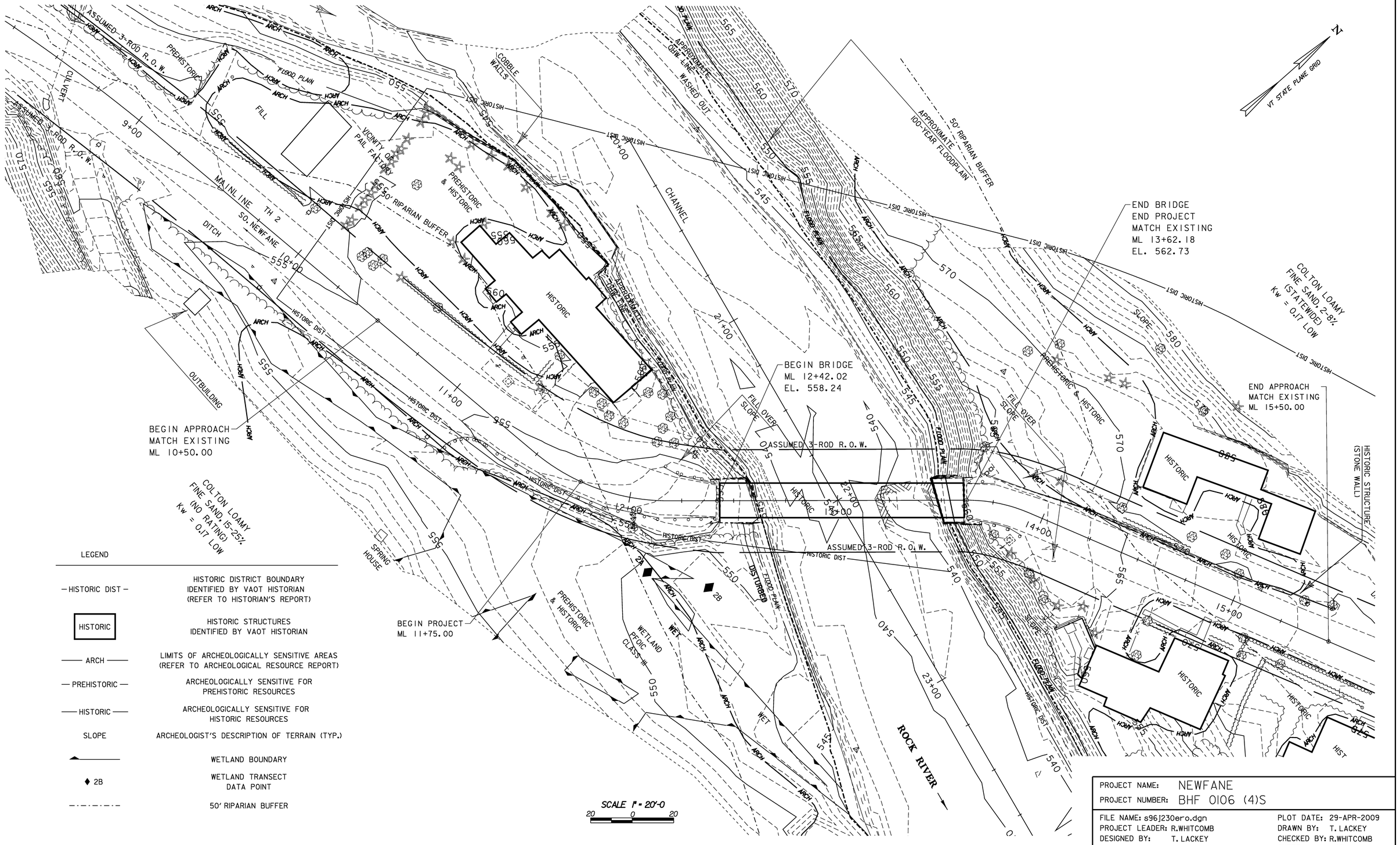
1.4.12. Inspect your Site

1.4.12.1. Inspect all control measures weekly and after each rainfall event. Repair measures promptly once damage is discovered.

1.4.12.2. Note any changes on the plans, in the weekly inspection report, and report them to the appropriate authority in a timely manner.

1.4.12.3. Check temporary measures regularly for accumulation of sediment. Remove sediment build-up when the level of sediment reaches one-half the height of the control measure. Dispose of sediments in an approved area where they will not be subject to erosion.

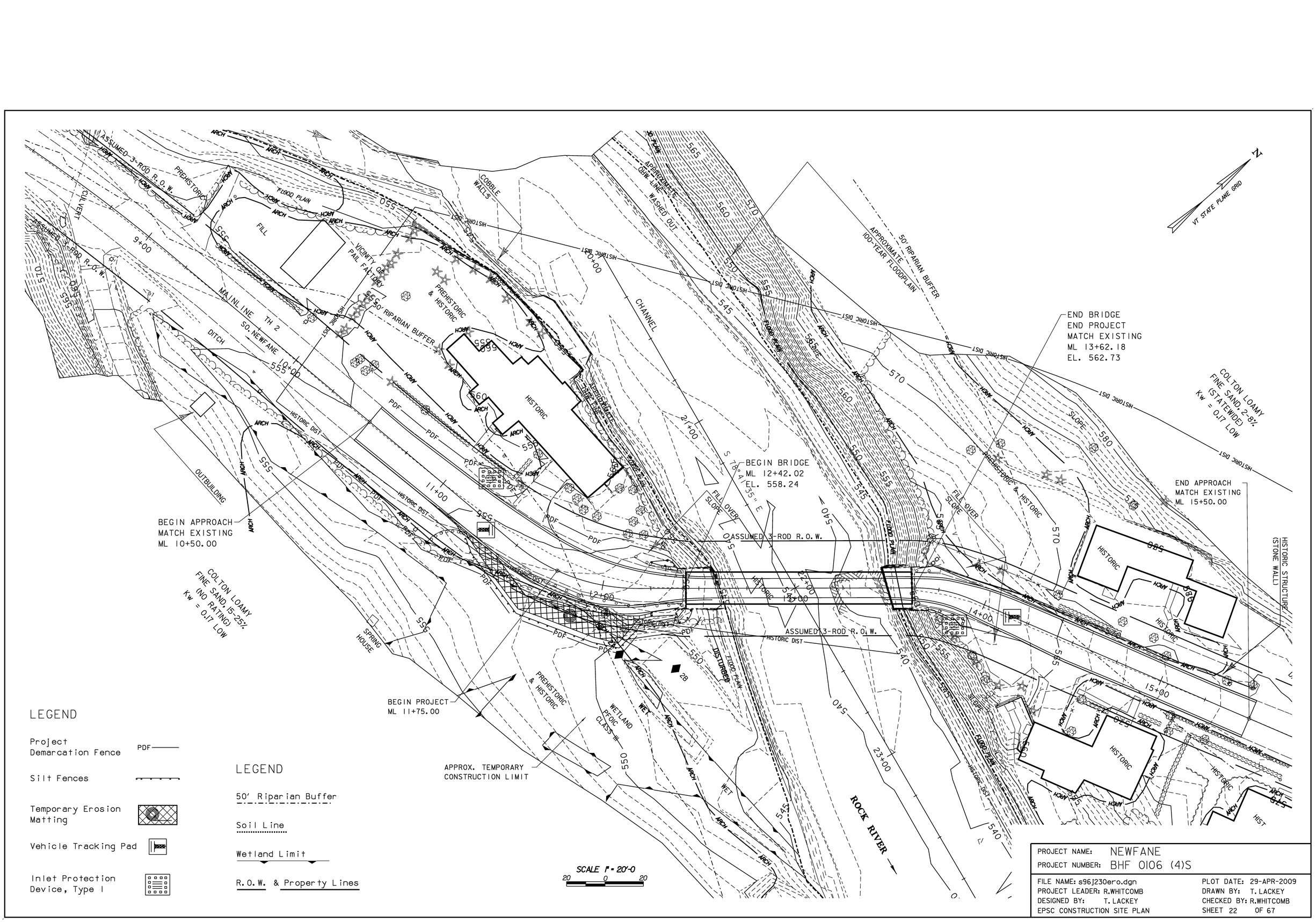
PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230ero.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
EPSC NARRATIVE	SHEET 20 OF 67



LEGEND

— HISTORIC DIST —	HISTORIC DISTRICT BOUNDARY IDENTIFIED BY VAOT HISTORIAN (REFER TO HISTORIAN'S REPORT)
HISTORIC	HISTORIC STRUCTURES IDENTIFIED BY VAOT HISTORIAN
—— ARCH ——	LIMITS OF ARCHEOLOGICALLY SENSITIVE AREAS (REFER TO ARCHEOLOGICAL RESOURCE REPORT)
— PREHISTORIC —	ARCHEOLOGICALLY SENSITIVE FOR PREHISTORIC RESOURCES
—— HISTORIC ——	ARCHEOLOGICALLY SENSITIVE FOR HISTORIC RESOURCES
SLOPE	ARCHEOLOGIST'S DESCRIPTION OF TERRAIN (TYP.)
	WETLAND BOUNDARY
♦ 2B	WETLAND TRANSECT DATA POINT
-·-·-·-·-	50' RIPARIAN BUFFER

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230ero.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R.WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R.WHITCOMB
EPSC EXISTING SITE PLAN	SHEET 21 OF 67



LEGEND

Project Demarcation Fence — PDF

Silt Fences

Temporary Erosion Matting

Vehicle Tracking Pad

Inlet Protection Device, Type I

LEGEND

50' Riparian Buffer

Soil Line

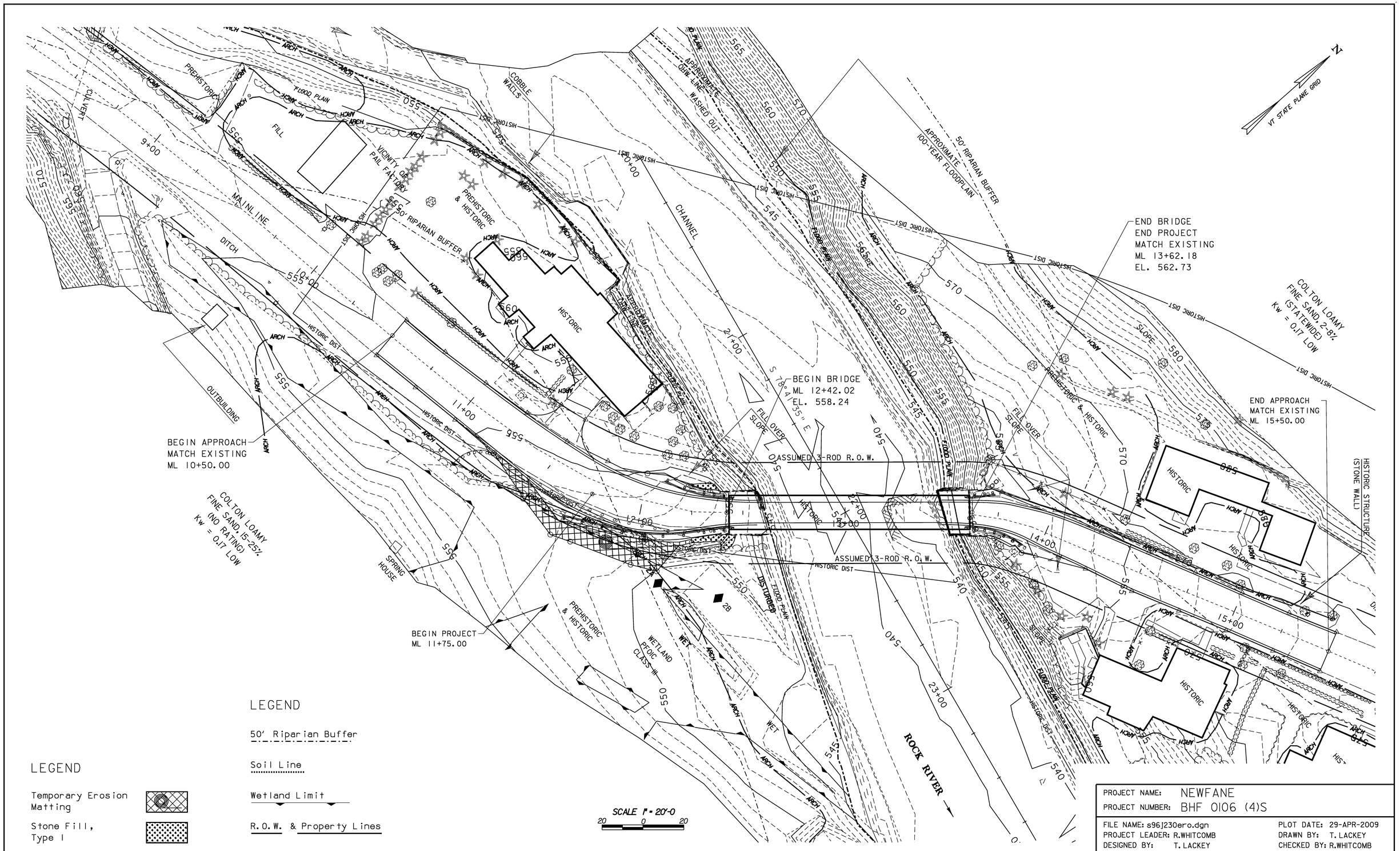
Wetland Limit

R.O.W. & Property Lines

SCALE 1" = 20'-0

20 0 20

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230ero.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R.WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R.WHITCOMB
EPSC CONSTRUCTION SITE PLAN	SHEET 22 OF 67



LEGEND

50' Riparian Buffer

Soil Line

Wetland Limit

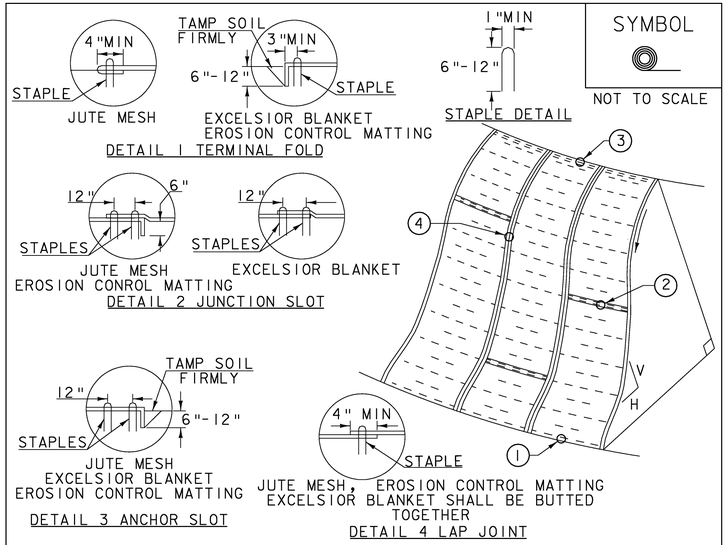
R.O.W. & Property Lines

LEGEND

Temporary Erosion Matting

Stone Fill, Type I

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230ero.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R.WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R.WHITCOMB
EPSC FINAL SITE PLAN	SHEET 23 OF 67



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF

SEEDING FORMULA
RURAL AREAS

% WT.	LBS./A.	NAME	PUR %	GERM %
37.5	22.5	CREEPING RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDSFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

GENERAL NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

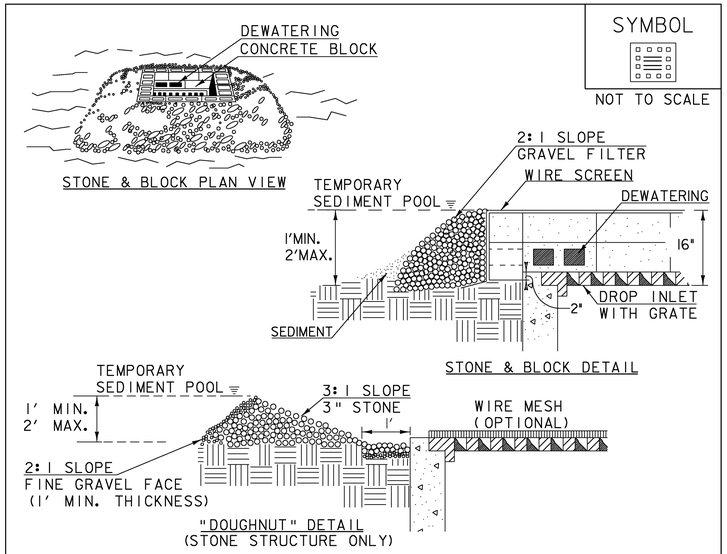
SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2" MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR ½" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL ½"- ¾" IN DIAMETER PLACED 2" BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1' THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3" STONE AS SHOWN ON THE DRAWINGS.
5. MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	STONE & BLOCK DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

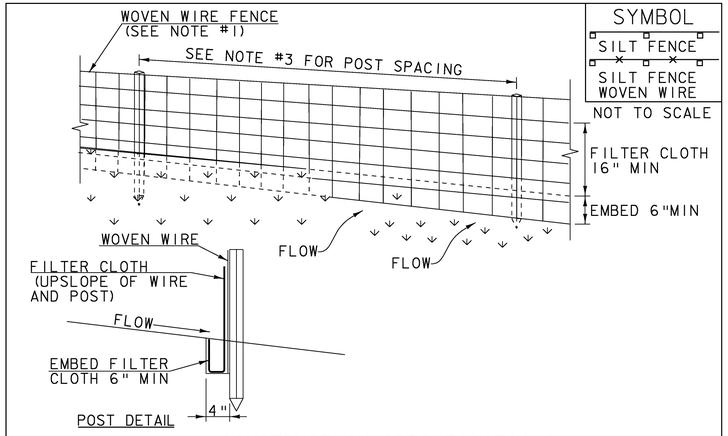
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF

PROJECT NAME: NEWFANE
PROJECT NUMBER: BHF 0106 (4)S

FILE NAME: s96j230ero.dgn
PROJECT LEADER: R. WHITCOMB
DESIGNED BY: T. LACKEY
EPSC DETAILS 1

PLOT DATE: 29-APR-2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB
SHEET 24 OF 67



SYMBOL

SILT FENCE

SILT FENCE
WOVEN WIRE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

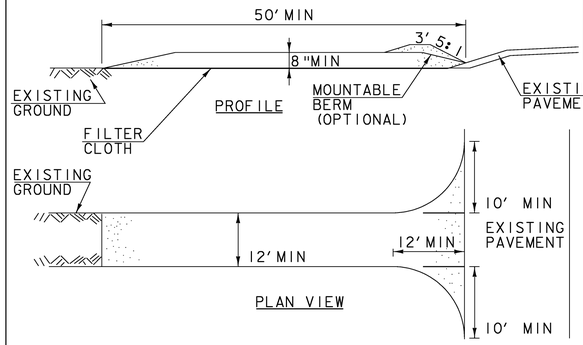
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

NOTES:
REFER TO 'THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- ' FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STABILIZED CONSTRUCTION ENTRANCE

NOTES:
REFER TO 'THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- ' FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

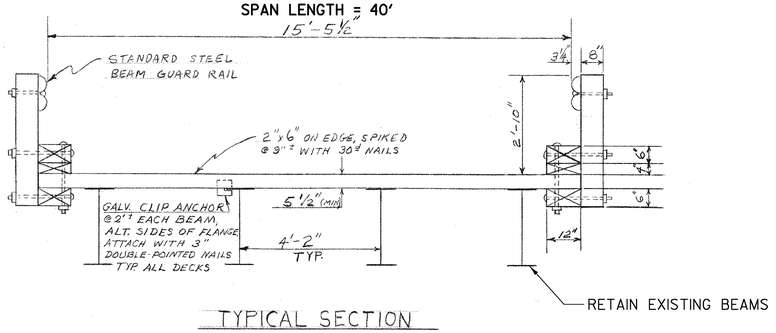
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

PROJECT NAME: NEWFANE
PROJECT NUMBER: BHF 0106 (4)S

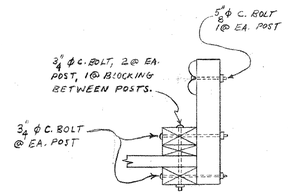
FILE NAME: s96j230ero.dgn
PROJECT LEADER: R. WHITCOMB
DESIGNED BY: T. LACKEY
EPSC DETAILS 2

PLOT DATE: 29-APR-2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB
SHEET 25 OF 67



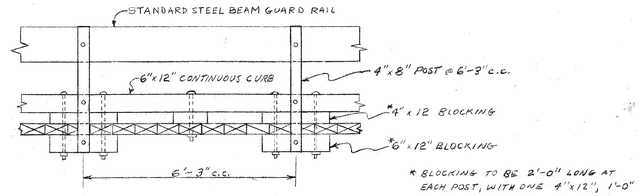
TYPICAL SECTION

NOTE: ALL BOLTS ARE TO BE GALVANIZED CARRIAGE BOLTS WITH ONE GALV. NUT AND WASHER PER BOLT.



CURB DETAIL

TYPICAL ALL DECKS



ELEVATION AT FASCIA

SIMILAR FOR ALL DECKS

BRIDGE 50
DECK REPLACEMENT DETAILS

SCALE ½" = 1'-0"

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96J230trf.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
TRAFFIC CONTROL PHASE I	SHEET 26 OF 67

TRAFFIC CONTROL PHASE 2 NOTES

1. MAINTAIN TRAFFIC ON A DETOUR ON TH 19, 47 & TH 26 SHOWN ON THIS SHEET.

N

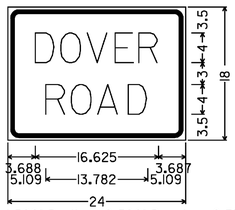
VT STATE PLANE GRID

DOVER ROAD
DETOUR

M4-9L
30"X24"
(TYP)

DOVER ROAD
DETOUR

DOVER ROAD



1.500" Radius, 0.500" Border, 0.375" Indent, Black on Orange;
[DOVER] D; [ROAD] D;

DOVER ROAD
DETOUR

M4-8
24"X12"
(TYP)

DOVER ROAD
END DETOUR

M4-8a
24"X18"
(TYP)

ROAD WORK AHEAD

W20-1
36"
(TYP)

BR 50
REPLACE DECK
BEFORE DETOUR

B50

47

19

DETOUR

0.33

0.60

B33

B41

26

1.04

BK.

PROJECT AREA

STAGING AREA

CB17

RIVER

0.79

0.40

B16

B12

B7

B2

2.1

DOVER RD.

JOY

ROCK

B49

B14

0.22

0.80

1.8

SO. NEWFANE

NOT USED
PORTABLE MESSAGE BOARD

DETOUR AHEAD

W20-2
36"
(TYP)

DOVER ROAD
DETOUR

ROAD CLOSED
1 MILE AHEAD
LOCAL TRAFFIC ONLY

R11-3a
60"X30"
(TYP)

ROAD CLOSED
1000 FT

W20-3
36" (TYP)

ROAD CLOSED
500 FT

W20-3
36" (TYP)

ROAD CLOSED

ROAD CLOSED

TYPE III BARRICADE
(MODIFIED)
(TYP.)

ROAD CLOSED
500 FT

ROAD CLOSED
1000 FT

R11-2
48"X30"
(TYP)

DOVER ROAD
END DETOUR

NOT USED
PORTABLE MESSAGE BOARD

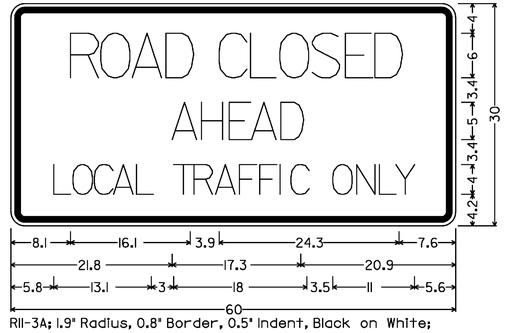
ROAD WORK AHEAD

DETOUR AHEAD

ROAD CLOSED AHEAD
LOCAL TRAFFIC ONLY

DOVER ROAD
DETOUR

WILLIAMSVILLE



R11-3A; 1.9" Radius, 0.8" Border, 0.5" Indent, Black on White;
[ROAD] C 77] spacing; [CLOSED] C 94] spacing;
[AHEAD] C 95] spacing; [LOCAL] C 86] spacing;
[TRAFFIC] C 108] spacing; [ONLY] C 105] spacing;

PHASE II
DETOUR PLAN

SCALE 1" = 1/8 MILE

0 0.25 0.5

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230trf.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
TRAFFIC CONTROL PHASE 2	SHEET 27 OF 67

ITEM 646.20 4 INCH WHITE LINE
10+22 ML ~~8+85~~ TO 12+42 LT & RT
ML 13+62 TO 15+50 LT & RT

ITEM 646.214 INCH YELLOW LINE
10+22 ML ~~8+85~~ TO 11+75 LT & RT
ML 14+00 TO 15+50 LT & RT

ITEM 646.26 24 INCH STOP BAR
ML 11+75 RT

ITEM 646.30 LETTER OR SYMBOL
ML 11+66 RT "STOP" 4 EA

ITEM 675.50 REMOVING SIGNS
ML 8+28 RT (1EA)
ML 9+87 RT (1EA)
ML 12+42 CL (6 EA)
ML 13+06 LT (1EA)
ML 13+62 CL (5 EA)
ML 13+68 LT (2 EA)
ML 17+35 LT (1EA)
ML 18+75 LT (1EA)

W5-3 NEW NEW
ML 6+75 RT

W5-3 ONE LANE BRIDGE NEW NEW
ML 8+25 RT

W5-3 ONE LANE BRIDGE REM REM
ML 8+28 RT

W1-2L REM REM
ML 9+87 RT

W12-2 11'-2" NEW NEW
ML 10+00 RT

24 INCH STOP BAR
"STOP" PAVEMENT MARKING
ML 11+75 RT

R1-1 STOP NEW
ONCOMING TRAFFIC DOES NOT STOP NEW
W4-4b NEW
ML 11+77 RT

R12-1 WEIGHT LIMIT 10 TONS NEW NEW
ML 11+95 RT

OM-3L NEW NEW
OM-3R NEW NEW
ML 12+~~15~~ LT & RT
34

1870 SAL
CENTER CLEARANCE 11'-2" REM
POSTED WEIGHT 20,000 POUNDS REM
OM-3L REM
OM-3R REM
LOOKING WEST
ML 13+62

Herrick's Pills
SAL
ML 13+06 LT

W5-3 ONE LANE BRIDGE REM
SPEED LIMIT 5 REM
R2-1 REM
ML 13+68 LT

OM-3L NEW NEW
OM-3R NEW NEW
ML 13+~~93~~ LT & RT
67

R12-1 WEIGHT LIMIT 10 TONS NEW
ML ~~15+50~~ LT
13+75

W12-2 11'-2" NEW NEW
ML ~~17+00~~ LT
13+75

W1-2L REM REM
ML 17+35 LT

W5-3 ONE LANE BRIDGE NEW NEW
ML 18+50 LT

R2-1 SPEED LIMIT 25 REM REM
ML 18+75 LT

R2-1 SPEED LIMIT 25 NEW NEW
ML ~~20+00~~ LT
18+50

CENTER CLEARANCE 11'-2" REM
OM-3L REM REM
OM-3R REM
POSTED WEIGHT 20,000 POUNDS REM
SPEED LIMIT 5 REM
R2-1
STOP REM
R1-1
LOOKING EAST
ML 12+42

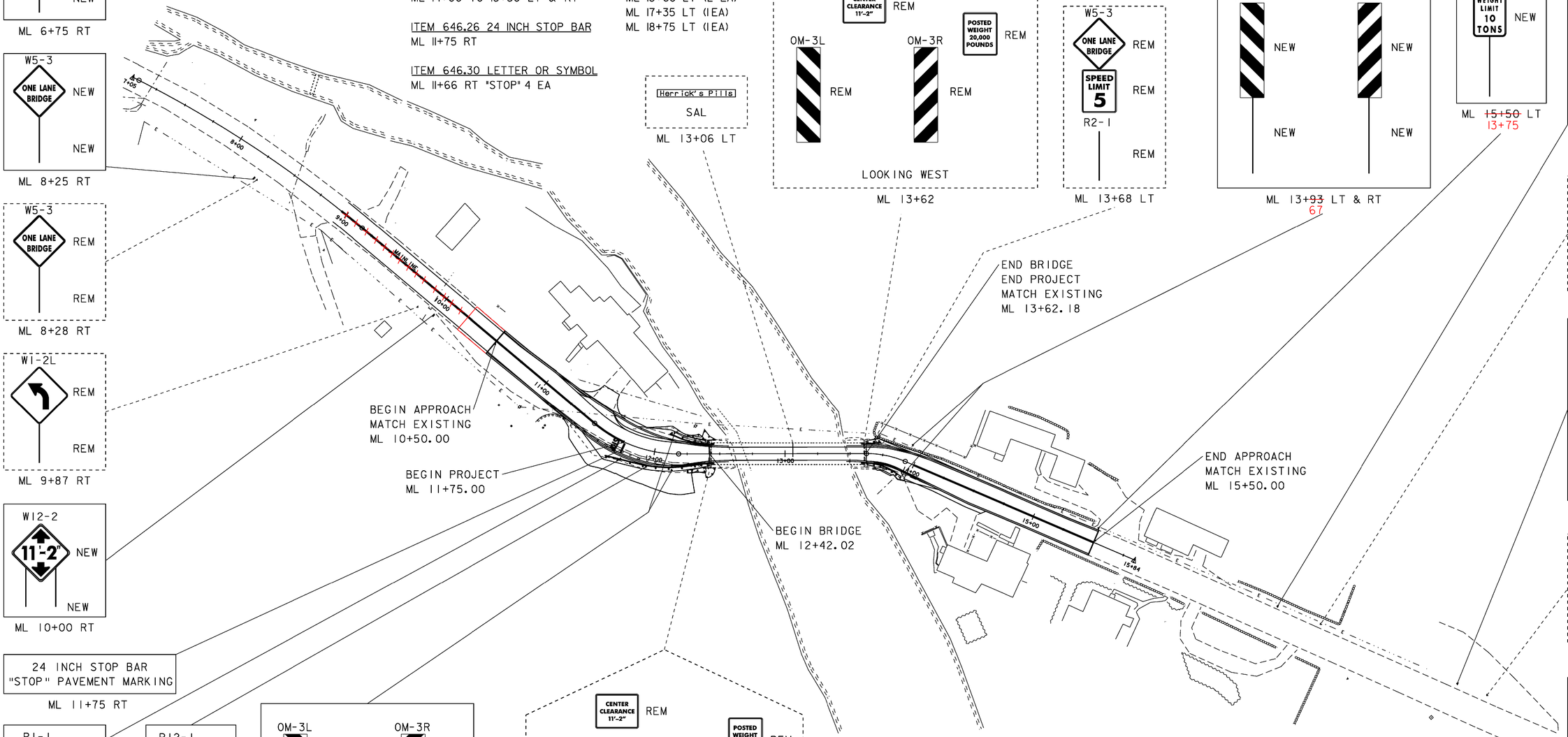
BEGIN APPROACH
MATCH EXISTING
ML 10+50.00

BEGIN PROJECT
ML 11+75.00

BEGIN BRIDGE
ML 12+42.02

END BRIDGE
END PROJECT
MATCH EXISTING
ML 13+62.18

END APPROACH
MATCH EXISTING
ML 15+50.00



LEGEND

REM - REMOVE
SAL - SALVAGE
NEW - NEW
B-B - BACK TO BACK

EXISTING

NEW

VT STATE PLANE GRID

SCALE 1" = 40'-0
40 0 40

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230trf.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
TRAFFIC FINAL PLAN	SHEET 28 OF 67

STATE OF VERMONT
AGENCY OF TRANSPORTATION

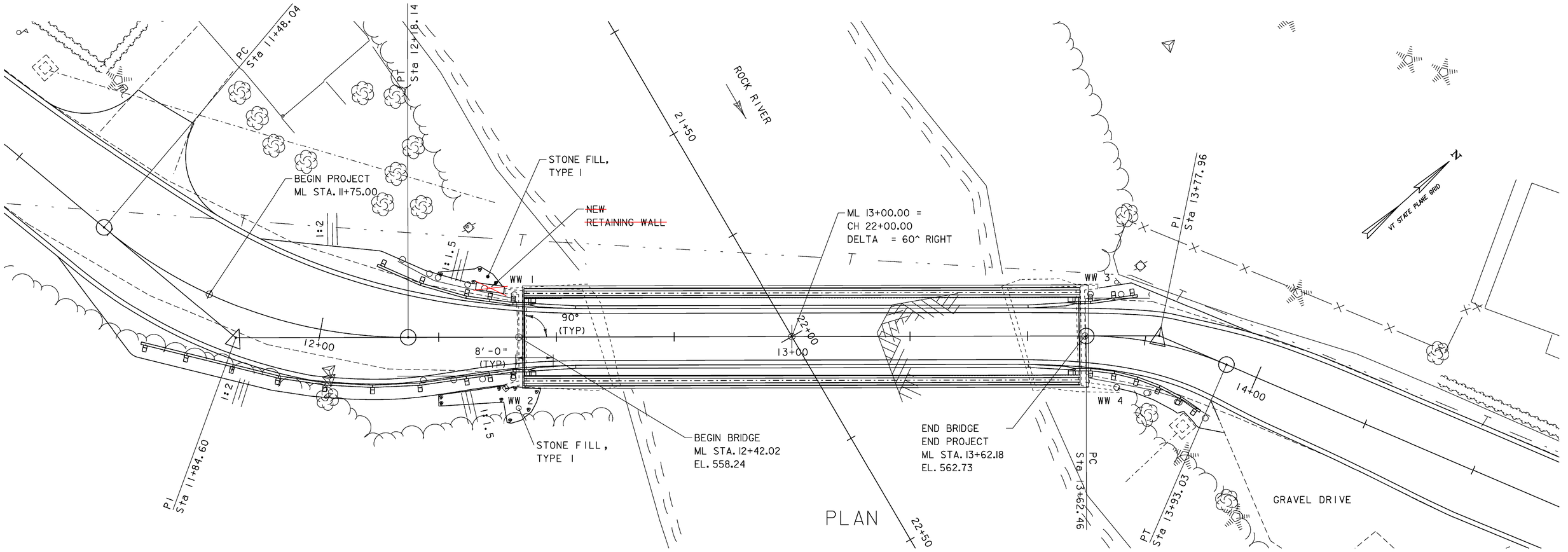
TRAFFIC SIGN SUMMARY SHEET

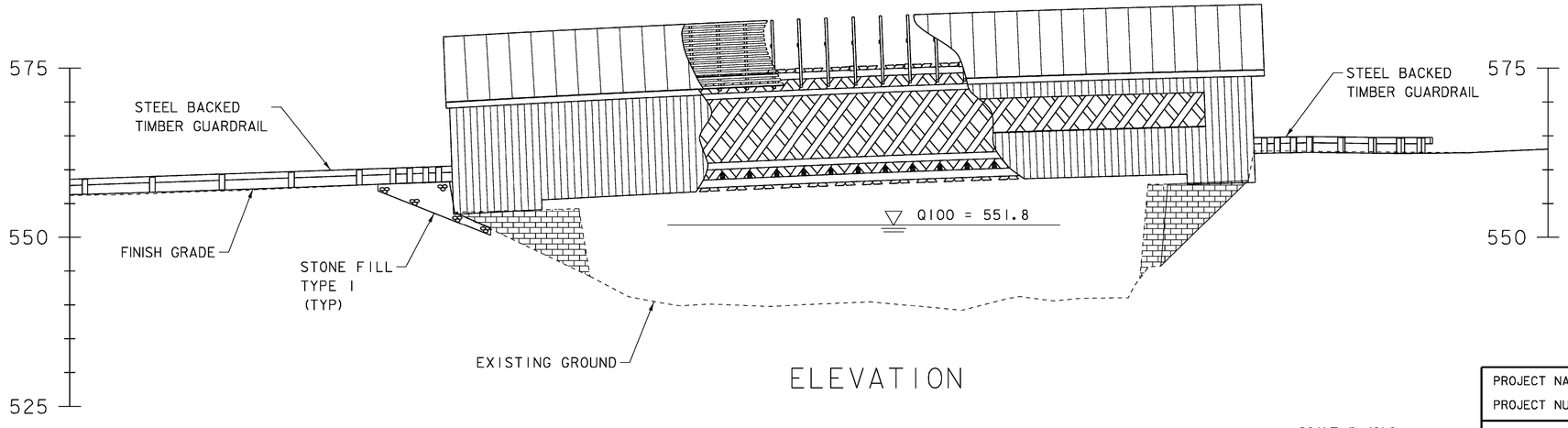
MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST		NEW SIGN POSTS																								REMARKS	SIGN DETAIL	
												FLANGED CHANNEL			SQUARE STEEL (in)					TUBULAR ALUMINUM Ø (IN)			TUBULAR STEEL Ø (IN)					W-SHAPE STEEL									
															1.75	2.00	2.50			3.00	4.00	4.0 MOD						FTG. SIZE									
												(LB / FT)			(LB / FT)					(LB / FT)																	
		EACH	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	RETAIN	SALVAGE	NO. OF POST	1.12	2.00	3.00	1.88	2.42	3.35	ANCHOR	SLEEVE	1.30	1.70	1.70	FOUNDATION	7.60	9.00	10.80	14.60	24"	30"	WEIGHT	POST SIZE	SIGN FRAME REQUIRED				
OPTION ITEMS																																				
6+75 RT		1	30	30	6.25						1					X		X																	MUTCD W3-1a		
8+25 RT		1	30	30	6.25						1					X		X																	MUTCD W5-3		
10+00 RT		1	36	36	9.00						2					X		X																	MUTCD W12-2		
11+77 RT		1	30	30	6.25						1					X		X																	MUTCD R1-1		
		1	24	12	2.00																														MUTCD W4-4b		
11+95 RT		1	24	30	5.00						1					X		X																	MUTCD R12-1		
12+~~15~~ 34 LT		1	12	36	3.00						1					X		X																	MUTCD OM-3L		
12+~~15~~ 34 RT		1	12	36	3.00						1					X		X																	MUTCD OM-3R		
13+~~93~~ 67 LT		1	12	36	3.00						1					X		X																	MUTCD OM-3L		
13+~~83~~ 67 RT		1	12	36	3.00						1					X		X																	MUTCD OM-3R		
~~15+50~~ 13+75 LT		1	24	30	5.00						~~1~~ 0					X		X																	MUTCD R12-1		
~~17+00~~ 13+75 LT		1	36	36	9.00						2					X		X																	MUTCD W12-2		
18+50 LT		1	30	30	6.25						~~1~~ 2					X		X																	MUTCD W5-3		
~~20+00~~ 18+50 LT		1	24	30	5.00						~~1~~ 0					X		X																	MUTCD R2-1		
13+06 LT	Herrick's Pills						1																													
13+62	1870						1																													
												FT 0	FT 0	FT 0	FT 0	FT 225	FT 0	XXXXX XXXXX XXXXX XXXXX	EA .	LB .	LB .	LB .		LB .	LB .	LB .	LB .								
	TOTALS				SF 72.	SF .	EA. 2.	SF .	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX		FT 0			FT 225					LB .			EA.	LB .				EA. .	EA. .	LB .								

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

PROJECT NAME: **NEWFANE**
PROJECT NUMBER: **BHF 0106(4)S**

FILE NAME: **s96j230trf.dgn** PLOT DATE: **5/12/2006**
PROJECT MANAGER: **R. WHITCOMB** DRAWN BY: **T. LACKEY**
DESIGNED BY: **T. LACKEY** CHECKED BY: **R. WHITCOMB**
TRAFFIC SIGN SUMMARY SHEET SHEET **29** OF **67**



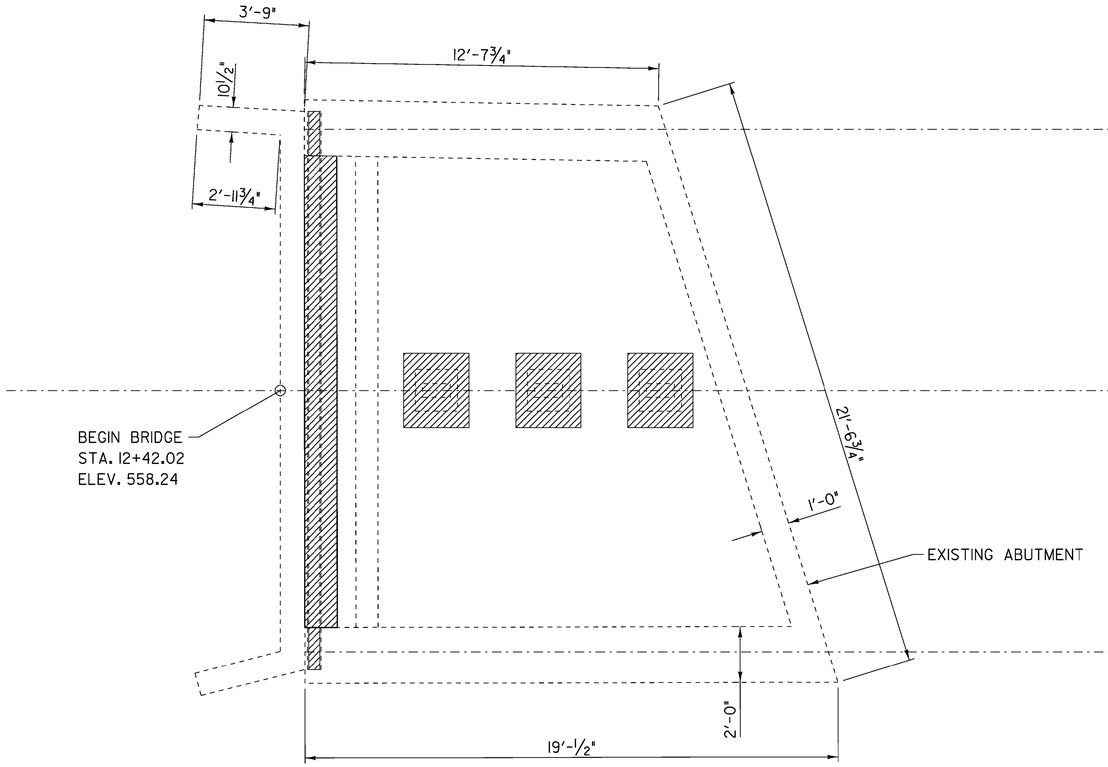


ELEVATION

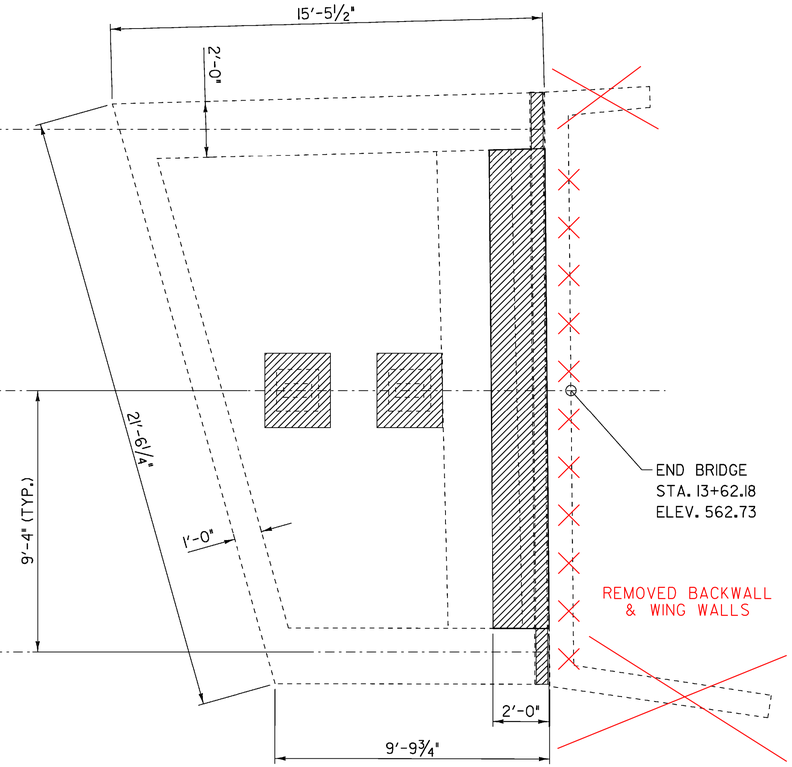
SCALE 1" = 10'-0

10 0 10

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230pe.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
PLAN & ELEVATION	SHEET 30 OF 67

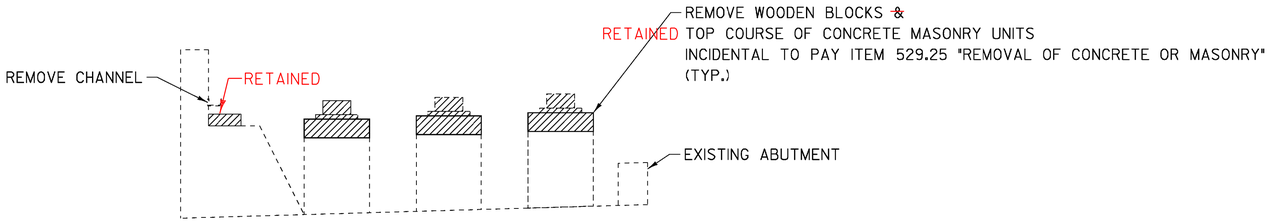


ABUTMENT 1
PLAN

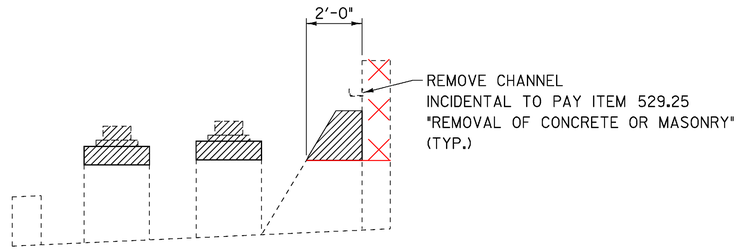


ABUTMENT 2
PLAN

REMOVAL OF CONCRETE OR MASONRY



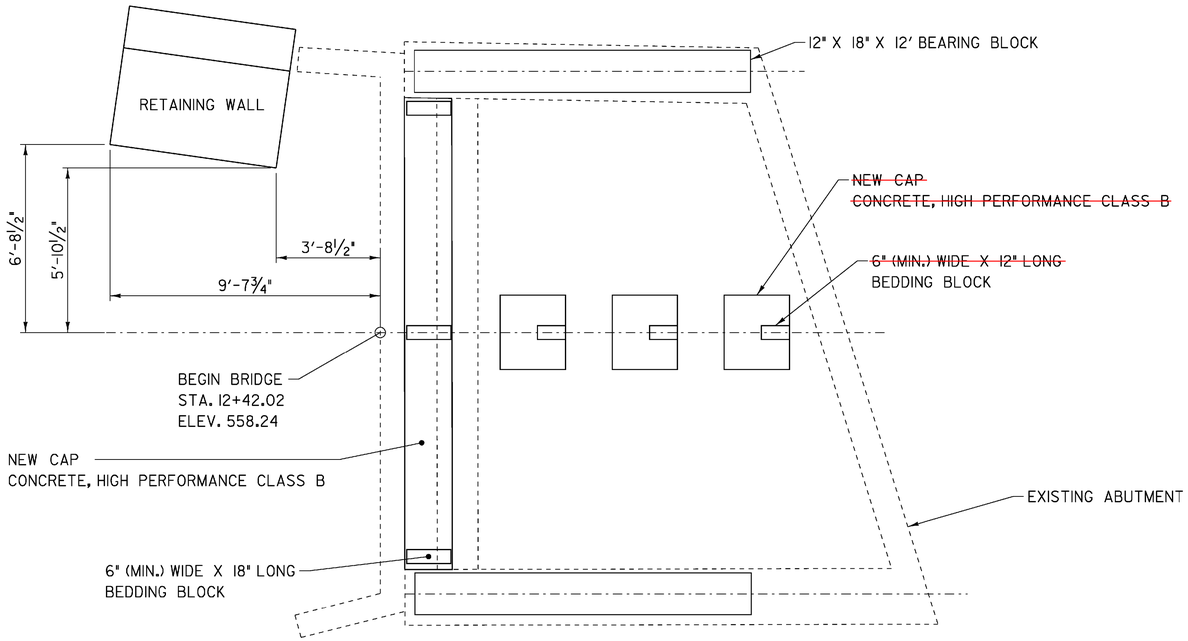
ABUTMENT 1
CL SECTION



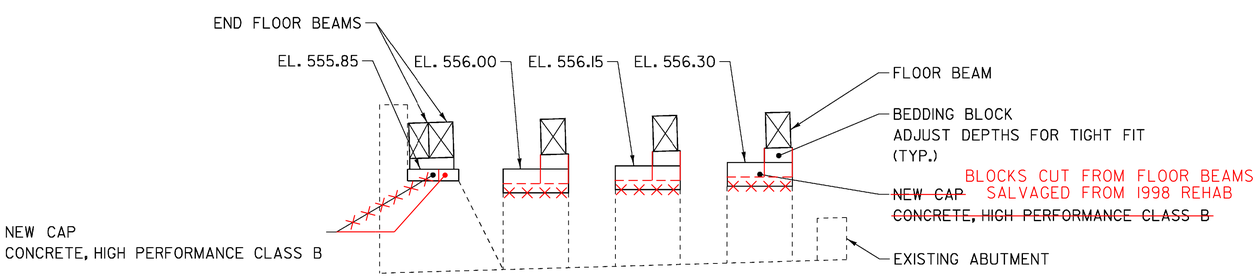
ABUTMENT 2
CL SECTION

SCALE ⅜" = 1'-0"
1 0 1 2 3 4

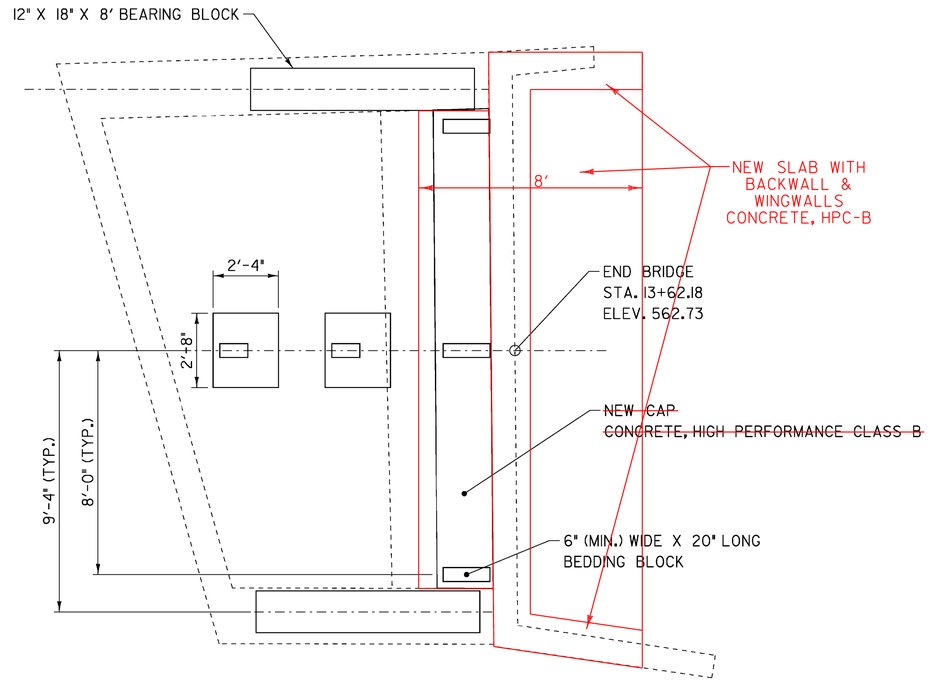
PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
SUBSTRUCTURE REMOVAL DETAILS	SHEET 31 OF 67



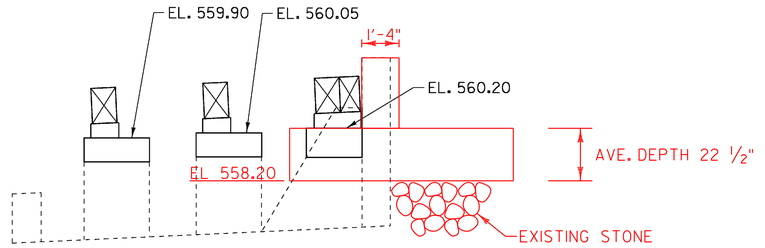
ABUTMENT 1
PLAN



ABUTMENT 1
CL SECTION



ABUTMENT 2
PLAN



ABUTMENT 2
CL SECTION

SCALE ⅜" = 1'-0"
1 0 1 2 3 4

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
SUBSTRUCTURE DETAILS I	SHEET 32 OF 67

NOTES:

1. ALL DIMENSION ARE APPROXIMATE. DIMENSIONS ARE GIVEN TO ESTIMATE QUANTITIES AND LAYOUT. VERIFY ALL DIMENSIONS.

2. CUT TO FIT ALL BARS.

3. PROVIDE 3" OF COVER. IF 3" COVER IS IMPOSSIBLE, THEN CENTER BARS IN THE STRUCTURAL UNIT.

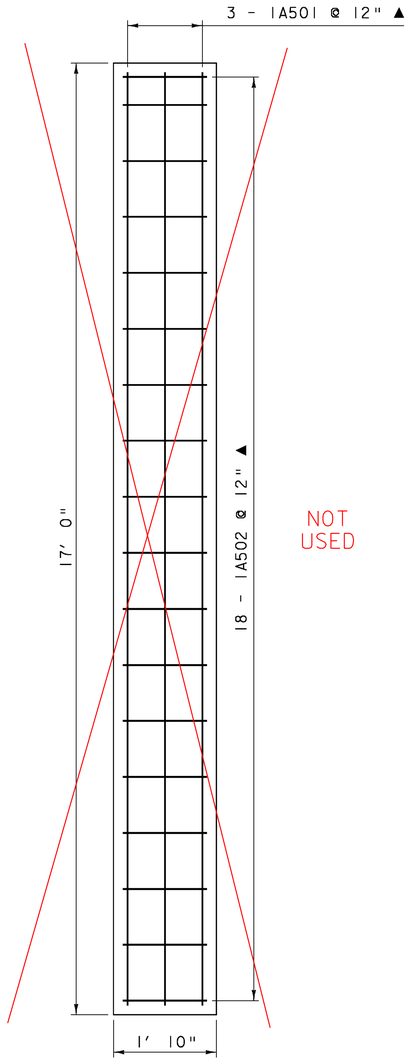
4. SEE THE SUBSTRUCTURE DETAILS SHEET FOR ELEVATIONS .

5. SEE THE RETAINING WALL DETAILS SHEET FOR THE REINFORCING STEEL SCHEDULE LEGEND.

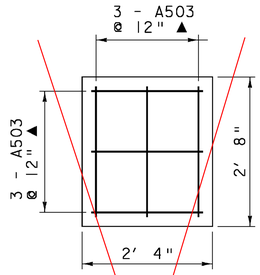
REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G
	ABUTMENT 1											
△	5	5	16'- 6"	1A501	STR							
	18	5	1'- 4"	1A502	STR							
	18	5	2'- 2"	1A503	STR							
	ABUTMENT 2											
△	5	5	16'- 6"	1A501	STR							
	18	5	1'- 6"	1A502	STR							
	12	5	2'- 2"	1A503	STR							

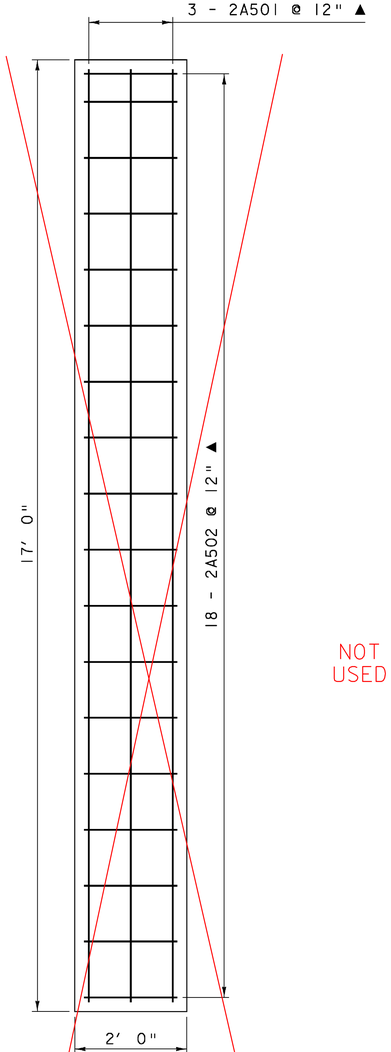
PLANS



NOT USED

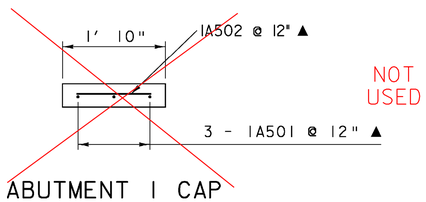


NOT USED



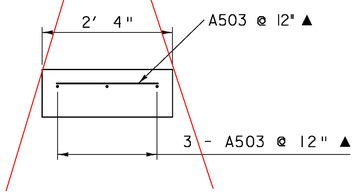
NOT USED

ELEVATIONS



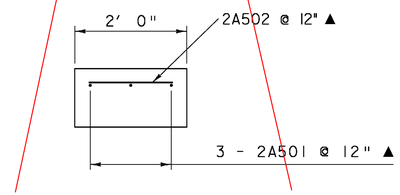
ABUTMENT 1 CAP

NOT USED



TYPICAL PIER CAP

NOT USED



ABUTMENT 2 CAP

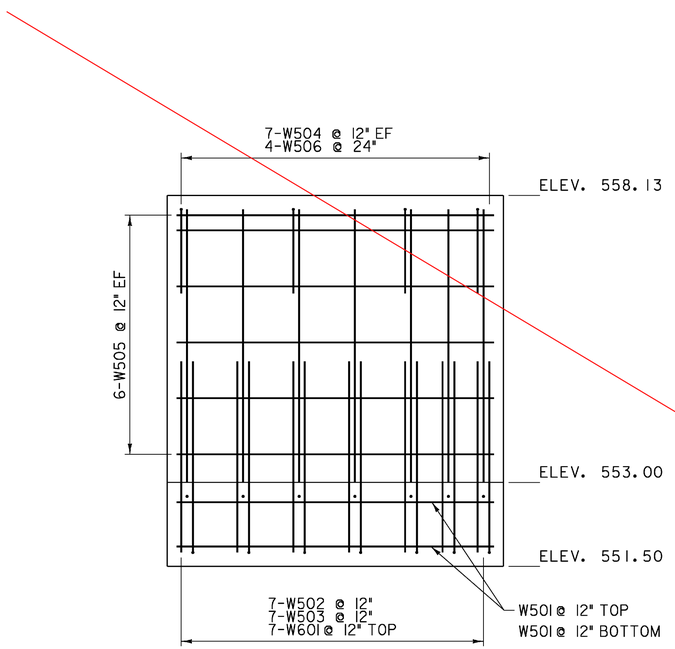
NOTE:
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" COVER, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

SCALE 3/4" = 1'-0"
0 1 2

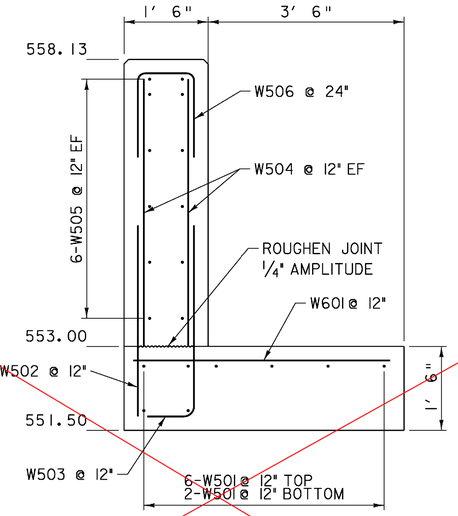
PROJECT NAME: NEWFANE
PROJECT NUMBER: BHF 0106 (4)S

FILE NAME: s96j230str.dgn
PROJECT LEADER: R. WHITCOMB
DESIGNED BY: T. LACKEY
SUBSTRUCTURE DETAILS 2

PLOT DATE: 29-APR-2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB
SHEET 33 OF 67

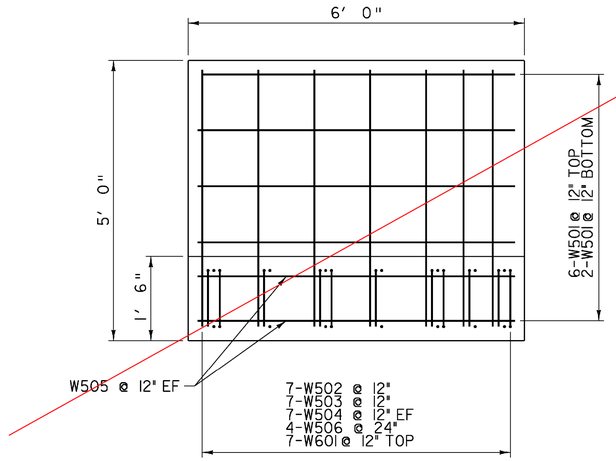


ELEVATION



SECTION

NOT USED



PLAN

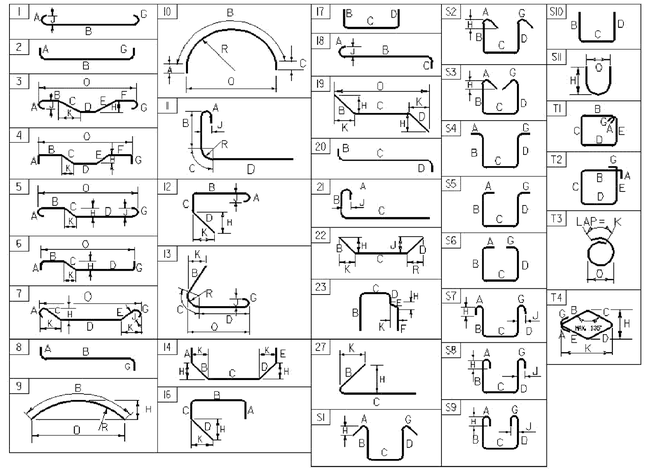
NOTE:
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" COVER, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G
	RETAINING WALL											
	8	5	5'- 6"	W501	STR							
✳	8	5	3'- 5"	W502	STR							
✳	8	5	4'- 3"	W503	2	0'- 10"	3'- 5"					---
	14	5	4'- 10"	W504	STR							
	12	5	5'- 6"	W505	STR							
	4	5	4'- 0"	W506	17		1'- 6"	1'- 0"	1'- 6"			
△	9	6	4'- 6"	W601	STR							

~ NOTES ~

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS

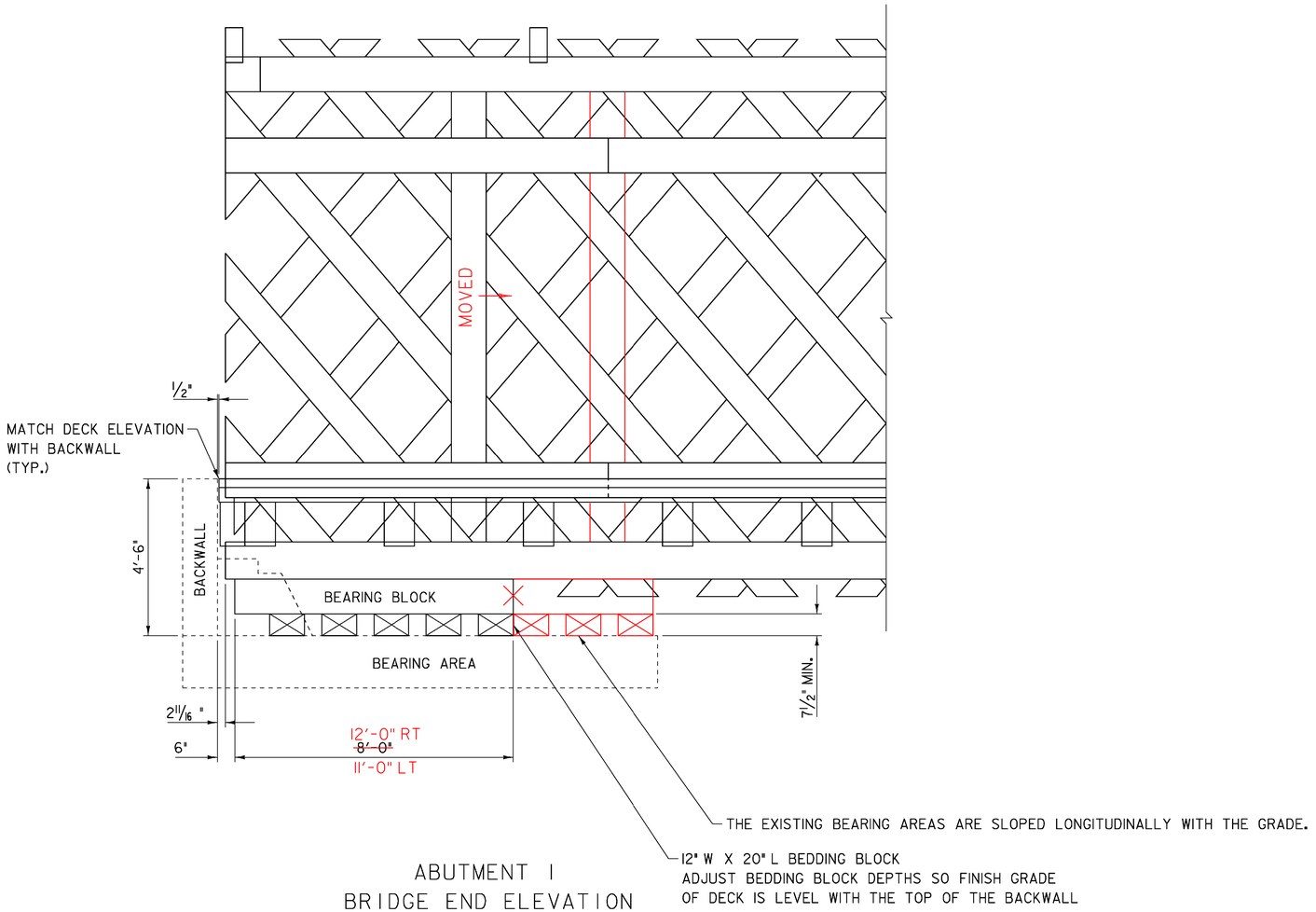
BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTIO		
		DIAMETER INCHES	AREA INCHES^2	PERIMETER INCHES
#3	0.376	0.375	0.11	1.178
#4	0.668	0.500	0.20	1.571
#5	1.043	0.625	0.31	1.963
#6	1.502	0.750	0.44	2.356
#7	2.044	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.00	7.09

SCALE 3/4" = 1'-0"
0 1 2

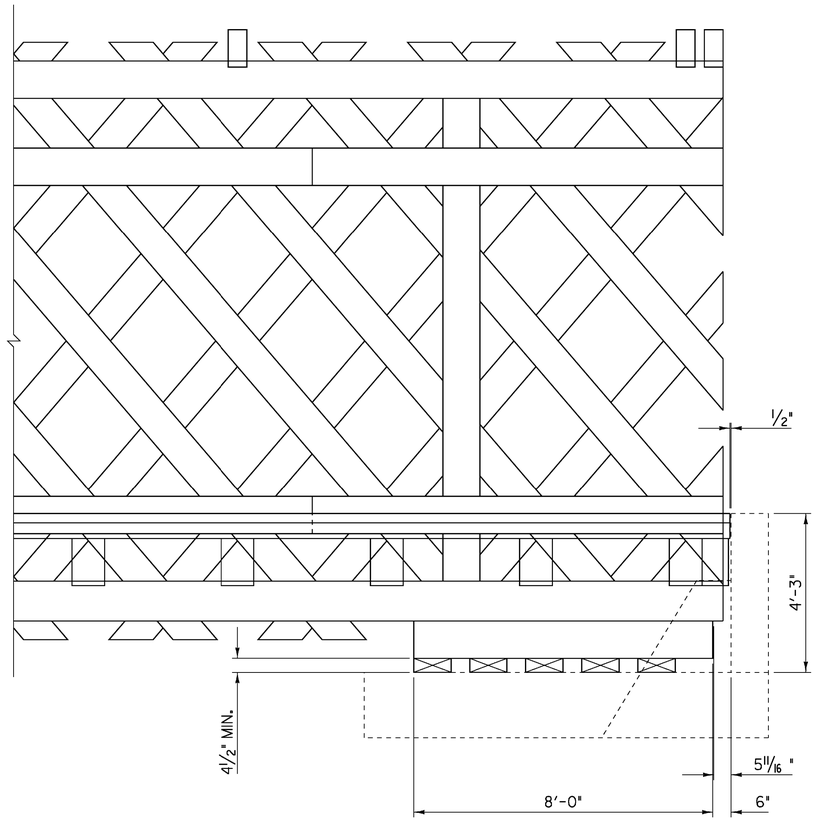
PROJECT NAME: NEWFANE
PROJECT NUMBER: BHF 0106 (4)S

FILE NAME: s96j230str.dgn
PROJECT LEADER: R. WHITCOMB
DESIGNED BY: T. LACKEY
RETAINING WALL DETAILS

PLOT DATE: 29-APR-2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB
SHEET 34 OF 67



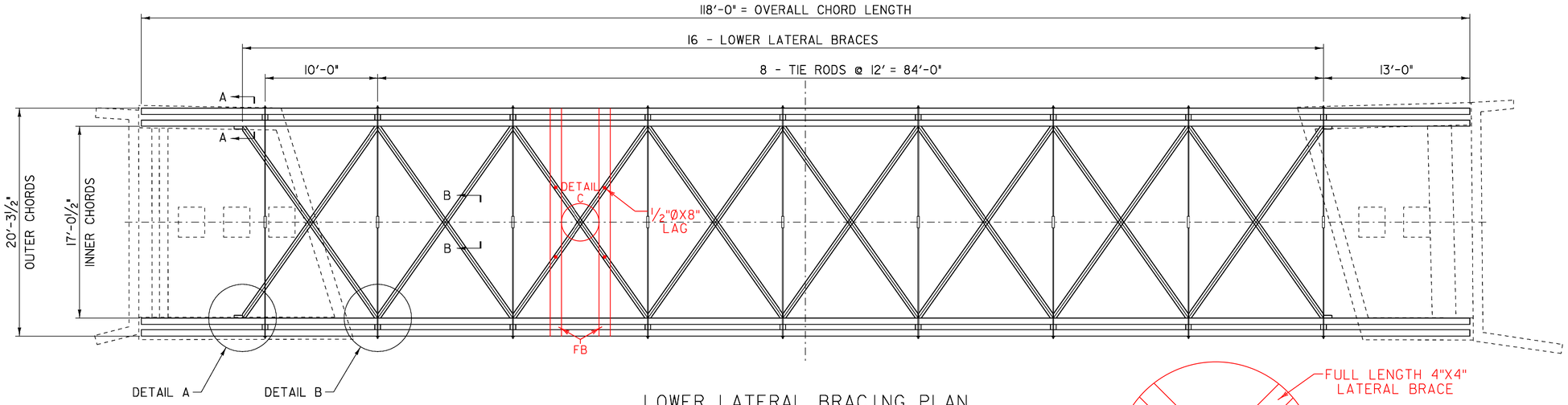
ABUTMENT 1
BRIDGE END ELEVATION
ABUTMENT WAS LONGER THAN SHOWN



ABUTMENT 2
BRIDGE END ELEVATION

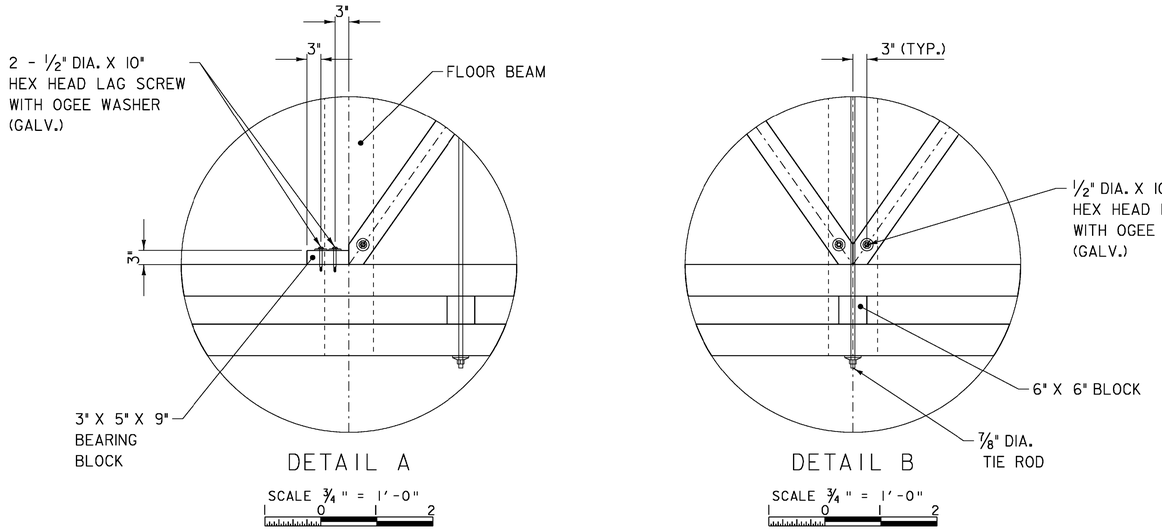
SCALE 1/2" = 1'-0"
0 1 2

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
BRIDGE END DETAILS	SHEET 35 OF 67



LOWER LATERAL BRACING PLAN

SCALE 3/16" = 1'-0"

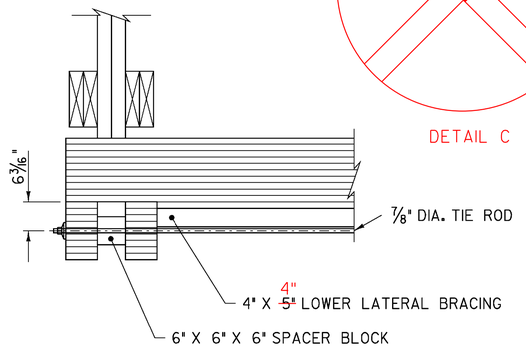


DETAIL A

SCALE ¾" = 1'-0"

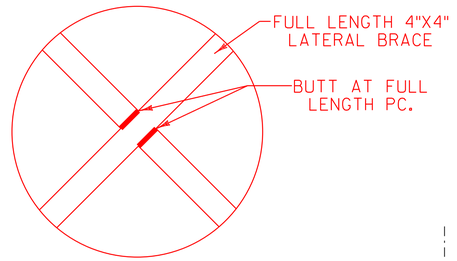
DETAIL B

SCALE ¾" = 1'-0"

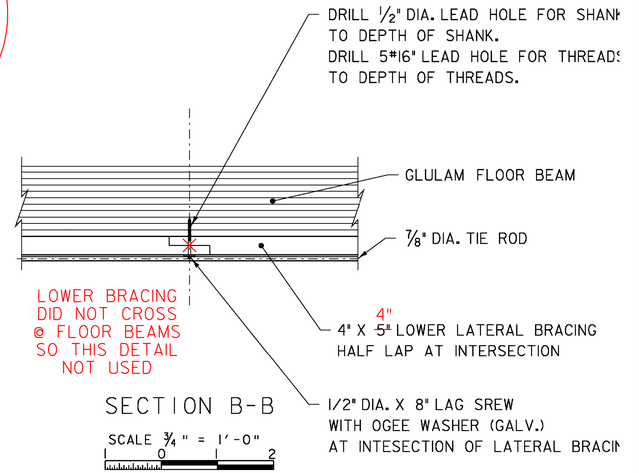


SECTION A-A

SCALE ¾" = 1'-0"

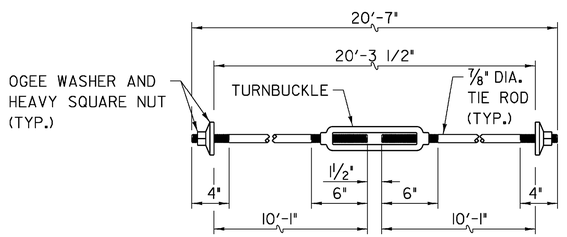


DETAIL C



SECTION B-B

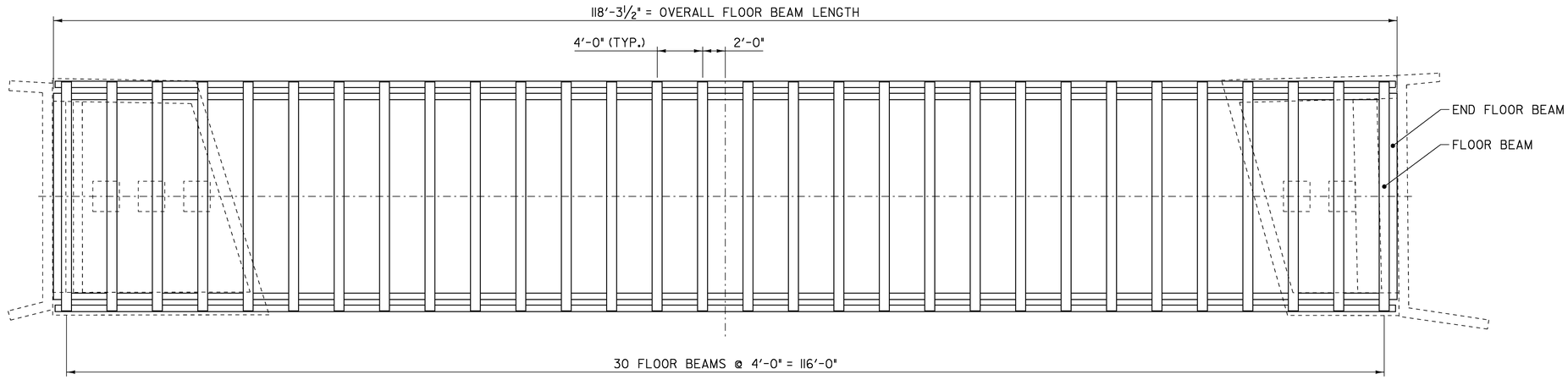
SCALE ¾" = 1'-0"



STRUCTURAL STEEL GALVANIZED TIE ROD ASSEMBLY

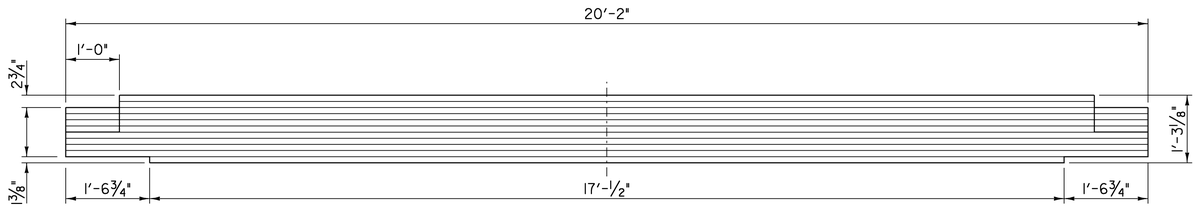
SCALE: 1½" = 1'-0"

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
LOWER LATERAL BRACING DETAILS	SHEET 36 OF 67



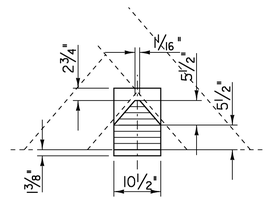
FLOOR BEAM PLAN

SCALE 3/16" = 1′-0"
0 2 4 6 8



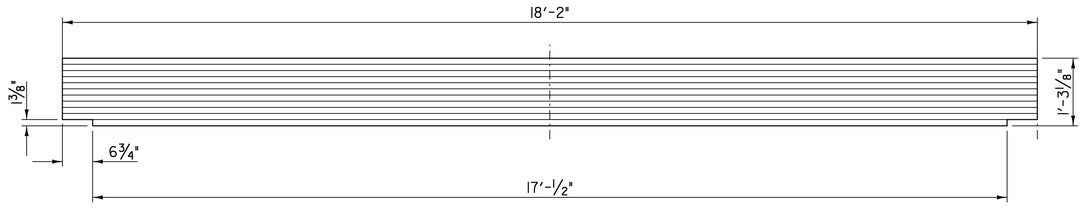
FLOOR BEAM PROFILE

SCALE ¾" = 1′-0"
0 2



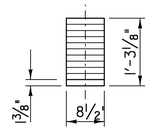
FLOOR BEAM SECTION

SCALE ¾" = 1′-0"
0 2



END FLOOR BEAM PROFILE

SCALE ¾" = 1′-0"
0 2

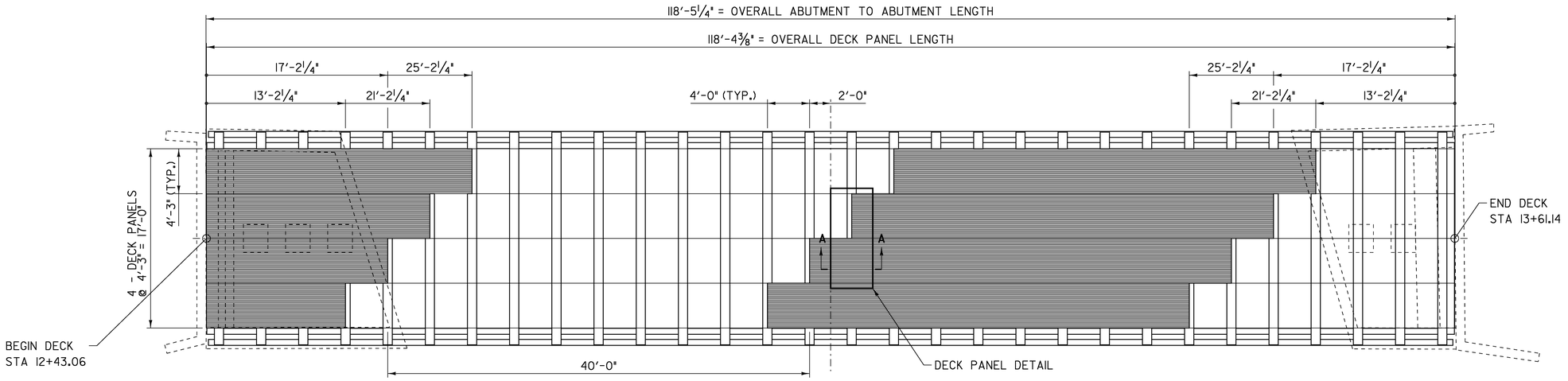


FLOOR BEAM SECTION

SCALE ¾" = 1′-0"
0 2

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S

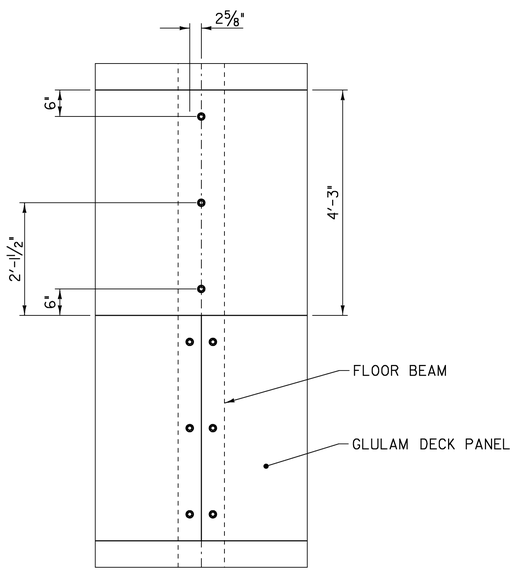
FILE NAME: s96l230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
FLOOR BEAM DETAILS	SHEET 37 OF 67



DECK PANEL PLAN

SCALE ⅜" = 1'-0"

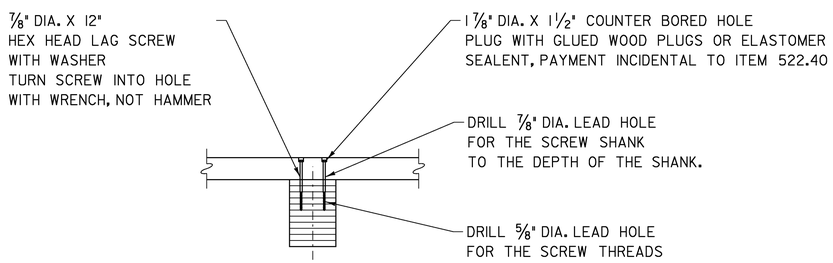
0 2 4 6 8



DECK PANEL DETAIL

SCALE ¾" = 1'-0"

0 2

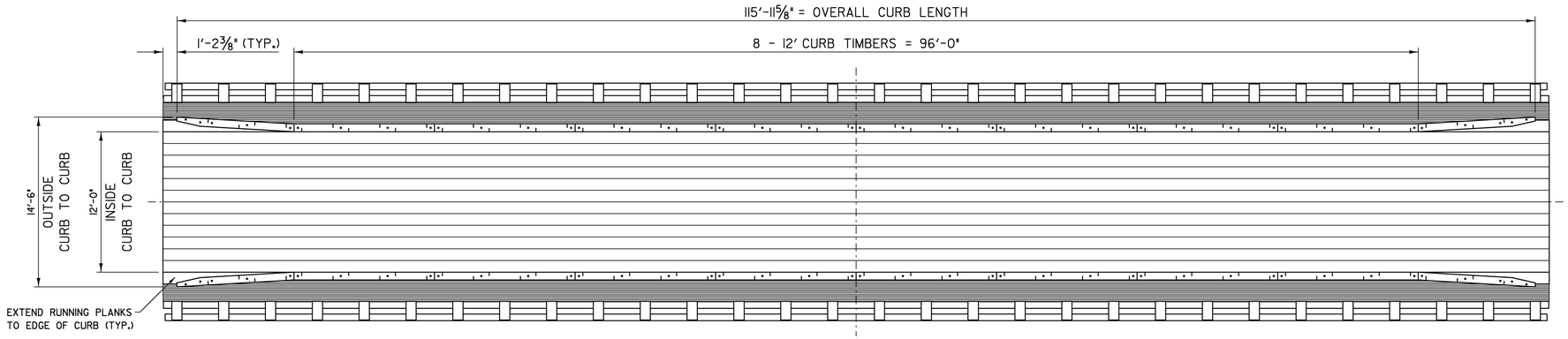


DECK PANEL SECTION

SCALE ¾" = 1'-0"

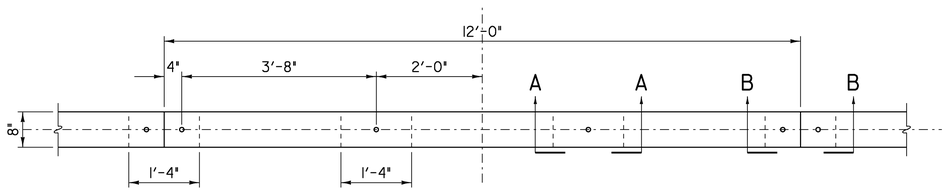
0 2

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
DECK PANEL DETAILS	SHEET 38 OF 67

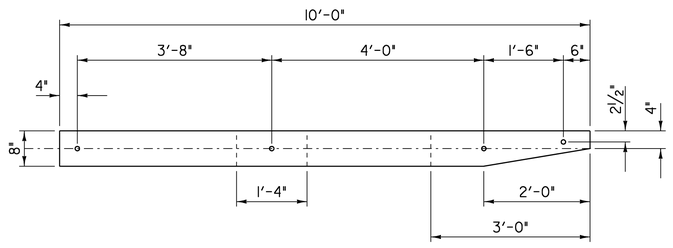


CURB AND RUNNING PLANK LAYOUT PLAN

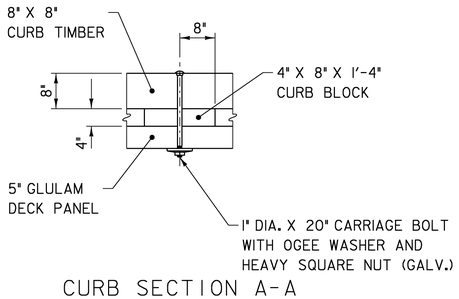
SCALE ⅜" = 1'-0"



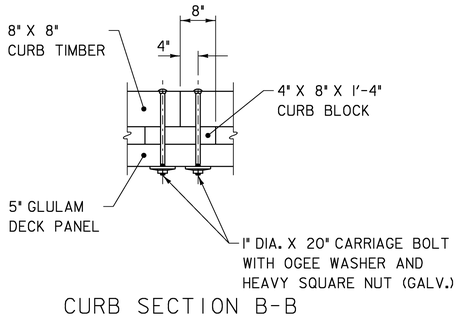
CURB DETAIL



END CURB DETAIL

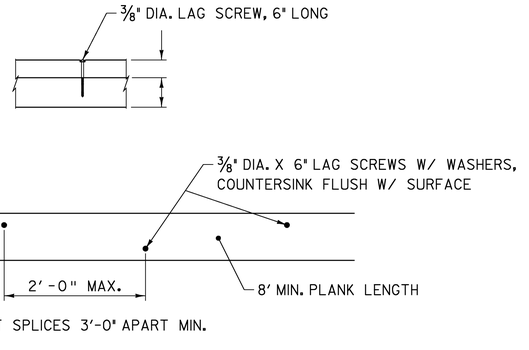


CURB SECTION A-A



CURB SECTION B-B

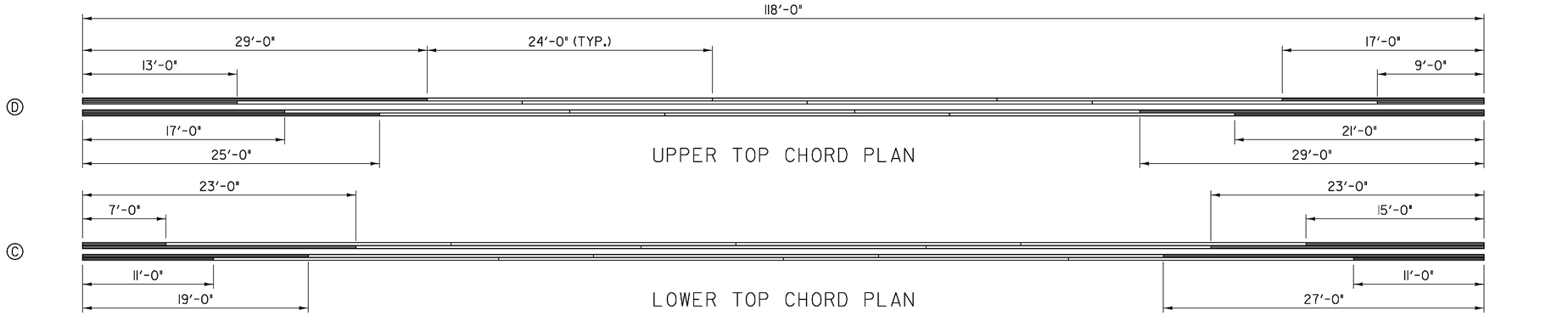
SCALE ¾" = 1'-0"

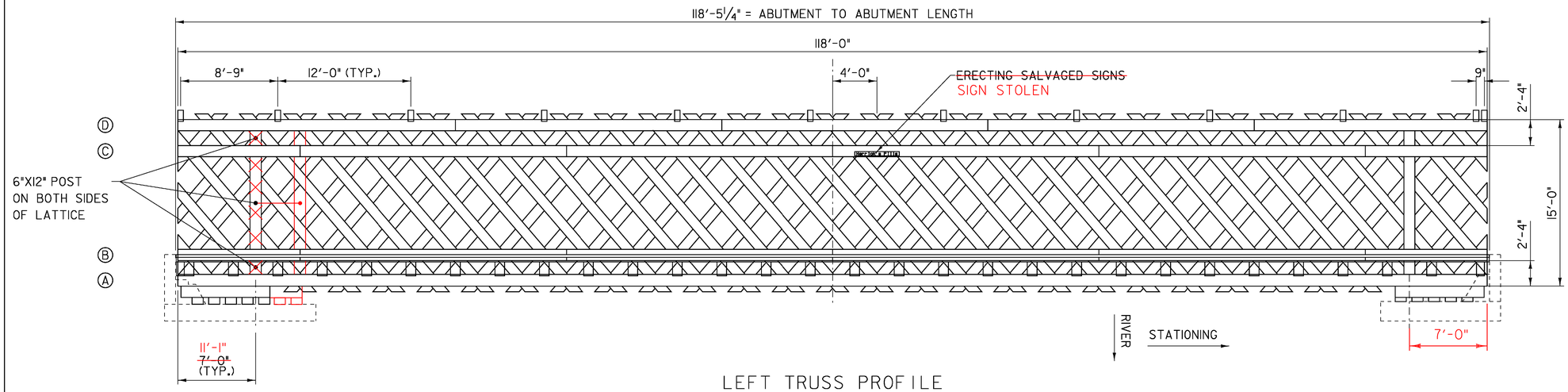


RUNNING PLANK DETAILS

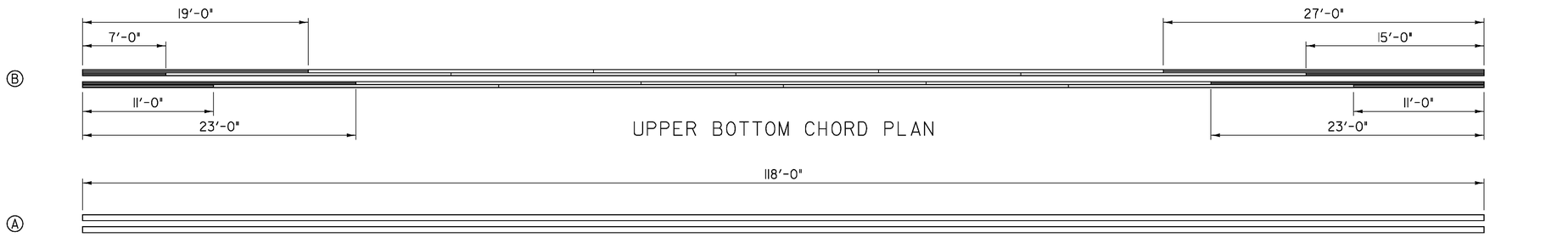
SCALE 1" = 1'-0"

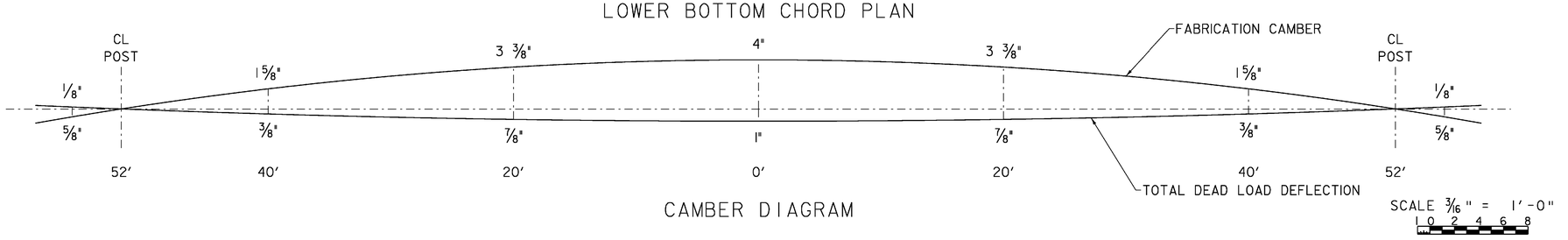
PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
CURB & RUNNING PLANK DETAILS	SHEET 39 OF 67





LEFT TRUSS PROFILE
(LOOKING UPSTREAM)

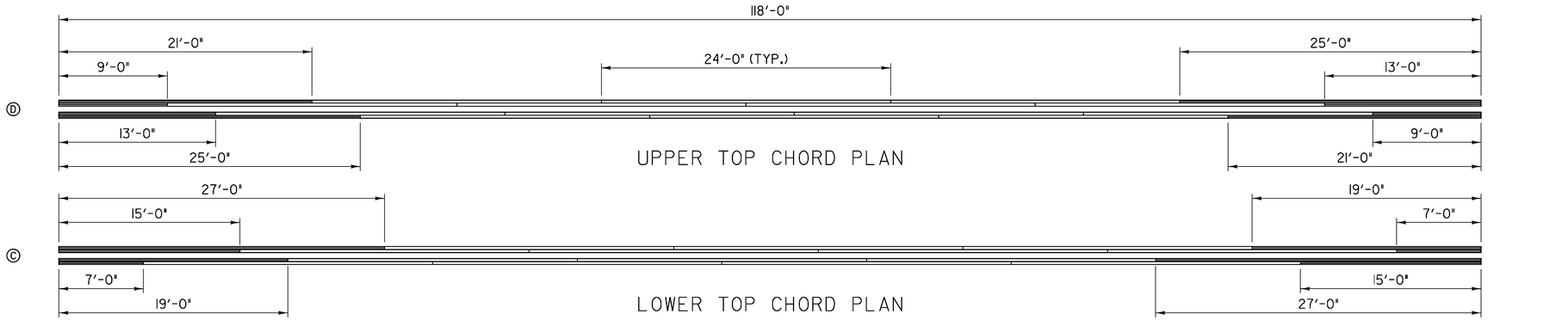


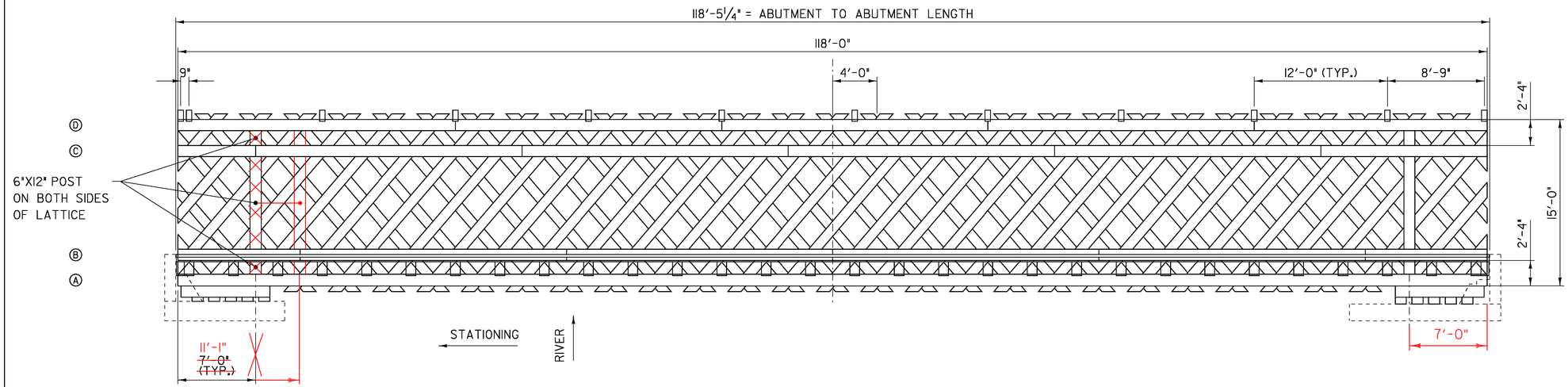


CAMBER DIAGRAM

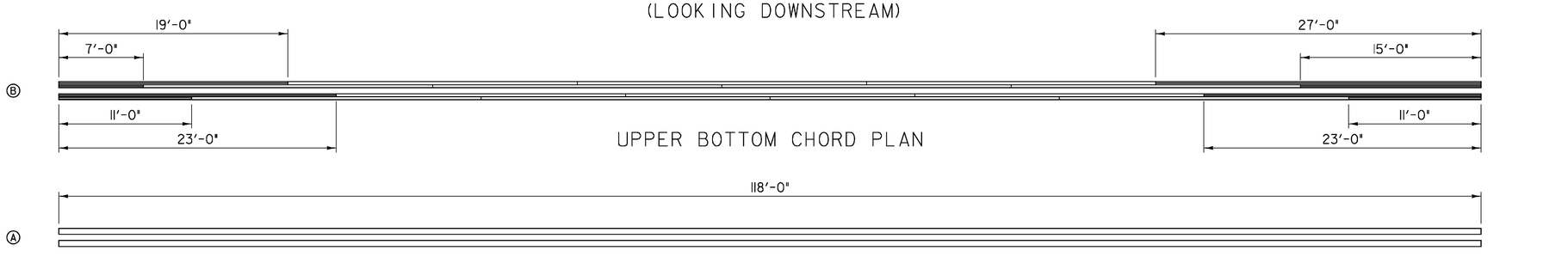
SCALE 3/16" = 1'-0"
1 0 2 4 6 8

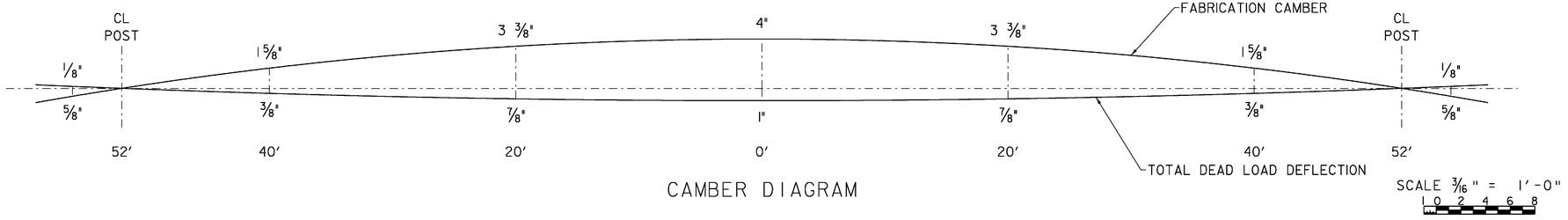
PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
LEFT TRUSS DETAILS	SHEET 40 OF 67





RIGHT TRUSS PROFILE
(LOOKING DOWNSTREAM)



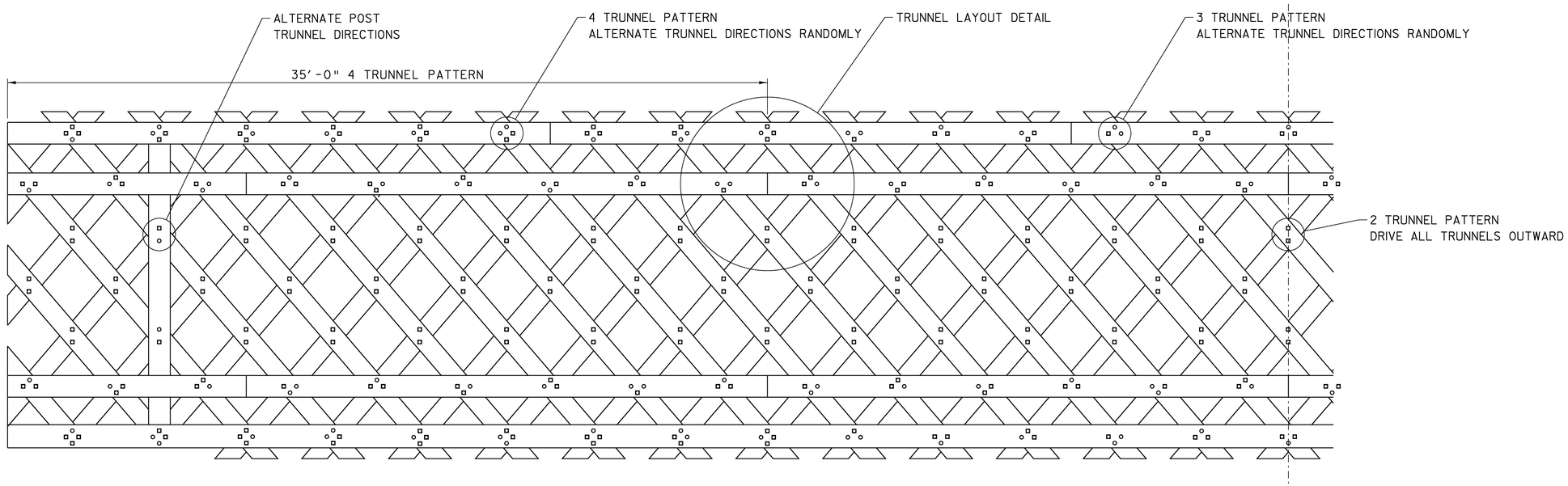


CAMBER DIAGRAM

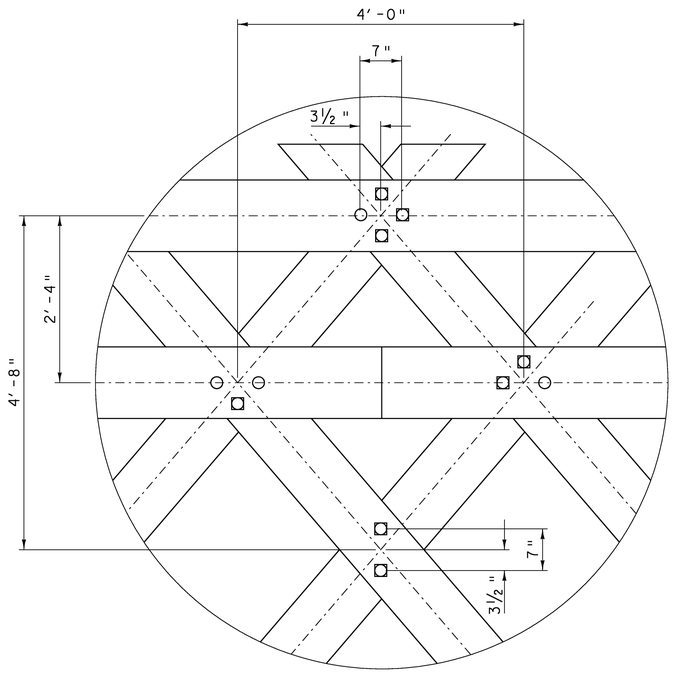
SCALE 3/16" = 1'-0"
1 0 2 4 6 8

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S

FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
RIGHT TRUSS DETAILS	SHEET 41 OF 67

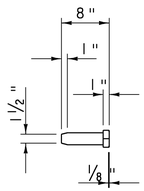


SCALE 3/8" = 1'-0
0 1 2 3 4

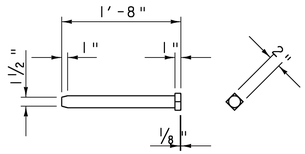


TRUNNEL LAYOUT DETAIL

SCALE 1" = 1'-0"
1 9 6 3 0 2



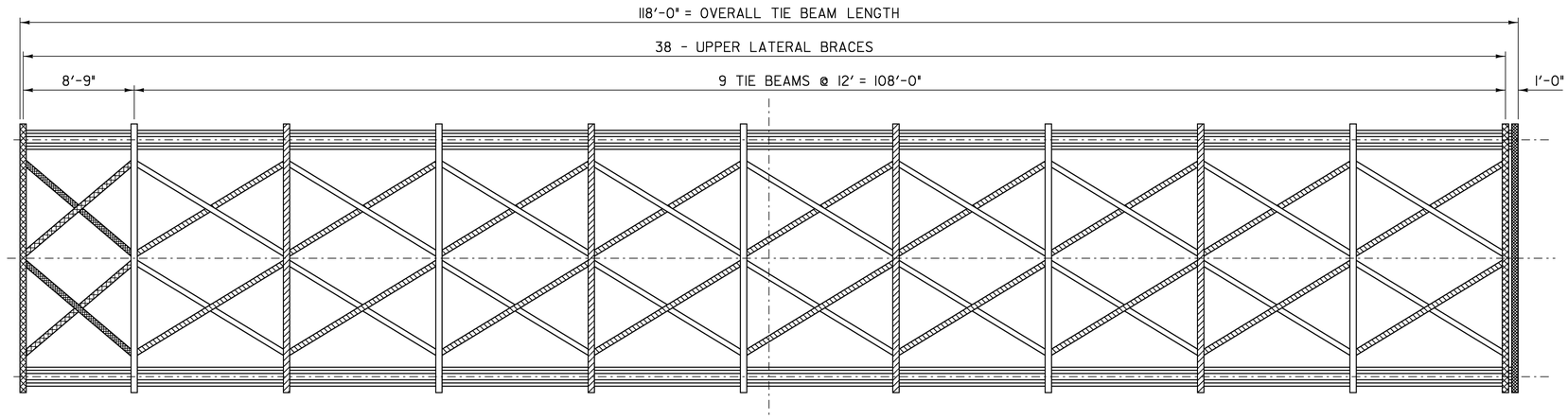
LATTICE
TRUNNEL DETAIL
(BASED ON EXISTING)



CHORD & POST
TRUNNEL DETAIL
(BASED ON EXISTING)

SCALE 1" = 1'-0"
1 9 6 3 0 2

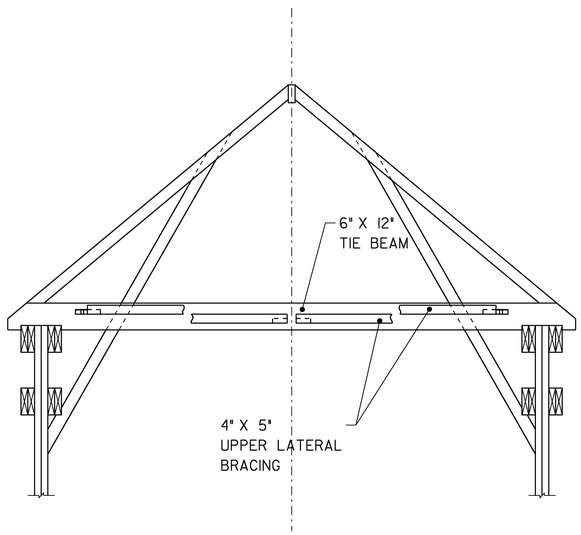
PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
TRUNNEL DETAILS	SHEET 42 OF 67



UPPER LATERAL BRACING PLAN

SCALE 3/16" = 1'-0"

TIE BEAM LEGEND	LATERAL BRACE LEGEND
TIE BEAM 1	UPPER LATERAL BRACE 1
TIE BEAM 2	UPPER LATERAL BRACE 2
PORTAL TIE BEAM	UPPER LATERAL BRACE 3
SPACER TIE BEAM	UPPER LATERAL BRACE 4

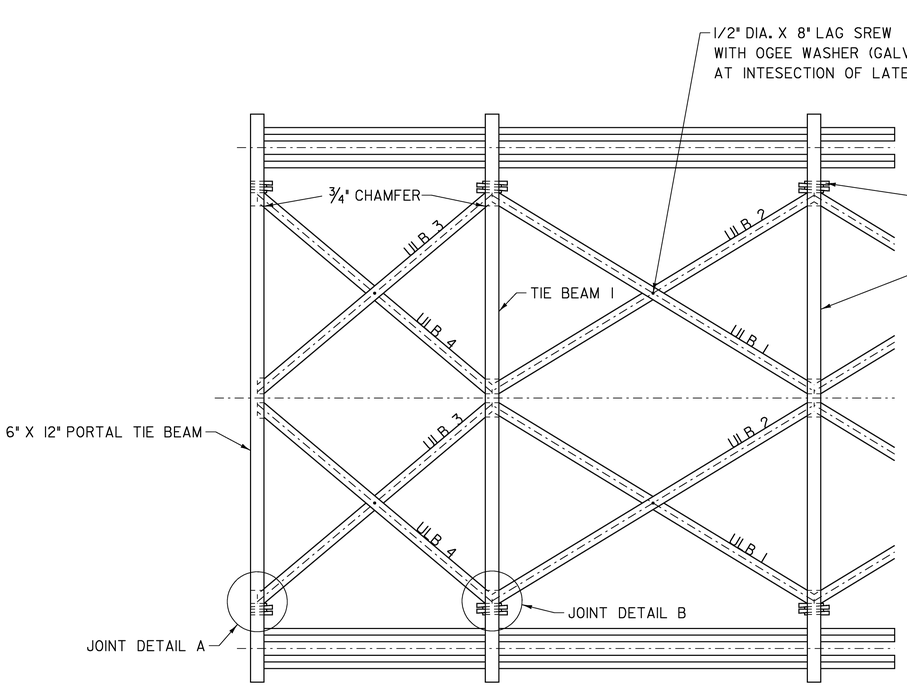


TIE BEAM PROFILE

SCALE 3/8" = 1'-0"

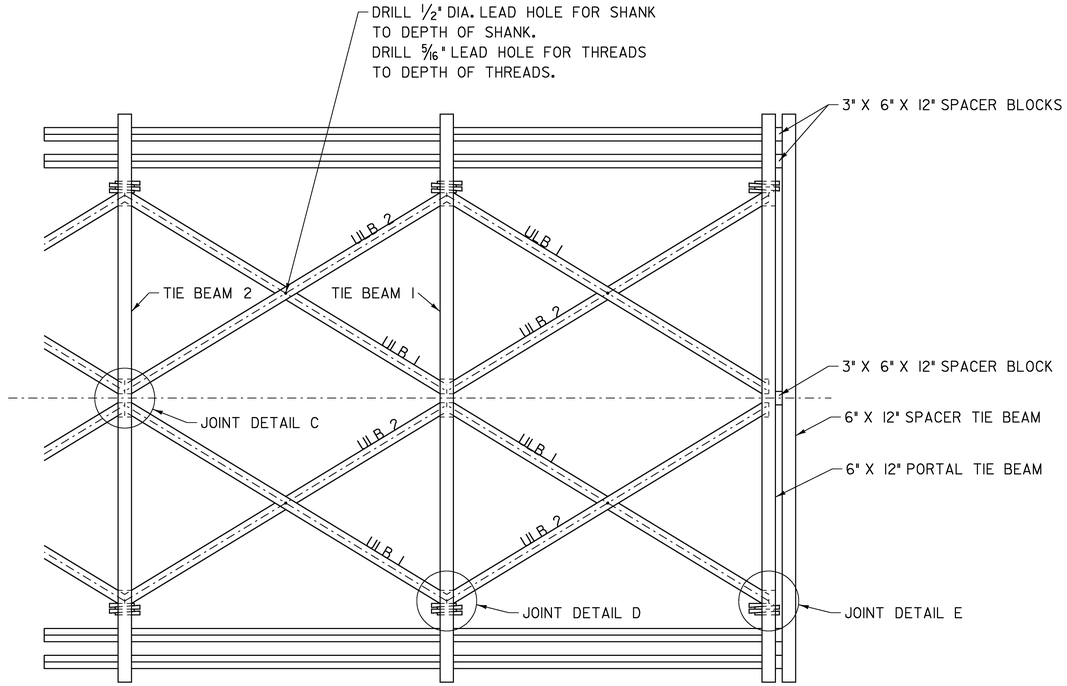
PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S

FILE NAME: s96J230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
UPPER LATERAL BRACING DETAILS 1	SHEET 43 OF 67

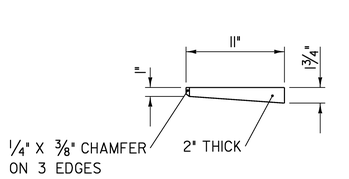


UPPER LATERAL BRACING
ABUTMENT 1

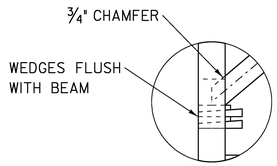
SCALE 3/8" = 1'-0"
1 0 1 2 3 4



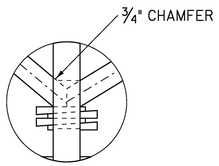
UPPER LATERAL BRACING
ABUTMENT 2



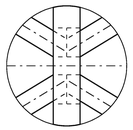
LATERAL BRACE WEDGE



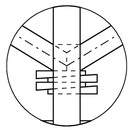
JOINT DETAIL A



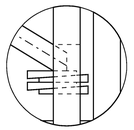
JOINT DETAIL B



JOINT DETAIL C



JOINT DETAIL D

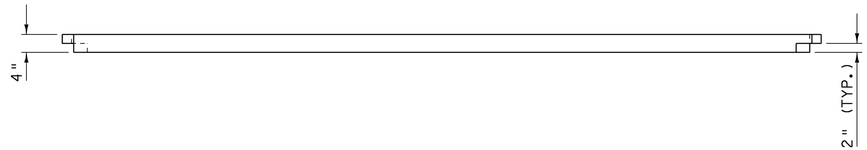


JOINT DETAIL E

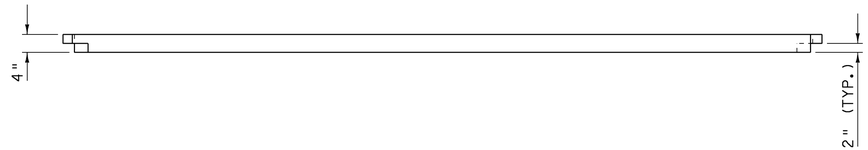
SCALE 1 1/2" = 1'-0"
9 6 3 0 1

SCALE 3/4" = 1'-0"
0 1 2

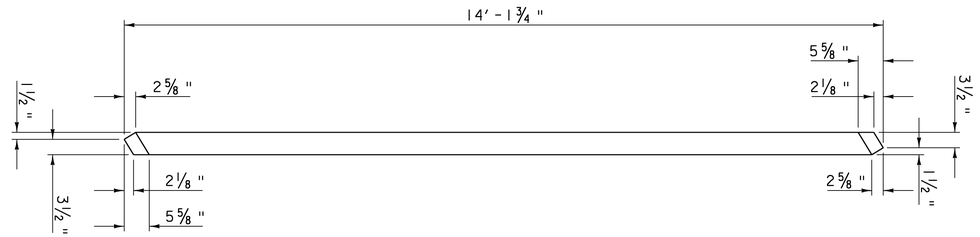
PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
UPPER LATERAL BRACING DETAILS 2	SHEET 44 OF 67



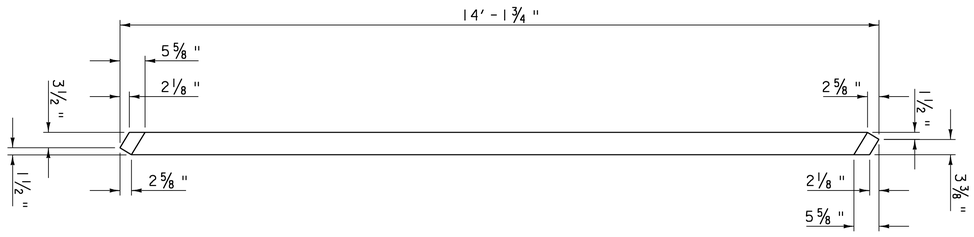
UPPER LATERAL BRACE 1 PLAN



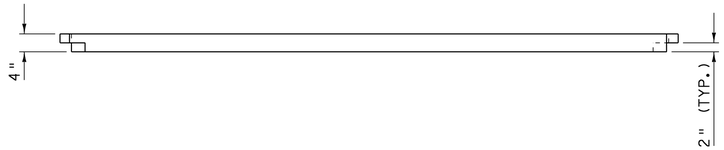
UPPER LATERAL BRACE 2 PLAN



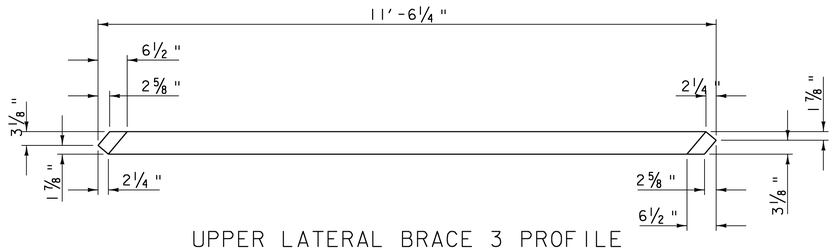
UPPER LATERAL BRACE 1 PROFILE



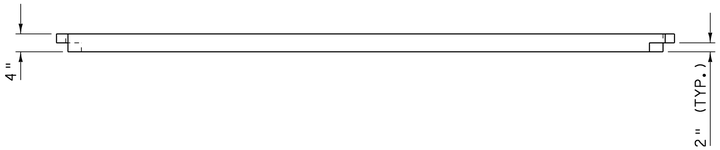
UPPER LATERAL BRACE 2 PROFILE



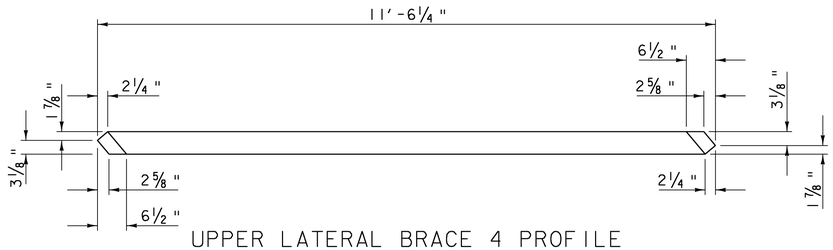
UPPER LATERAL BRACE 3 PLAN



UPPER LATERAL BRACE 3 PROFILE



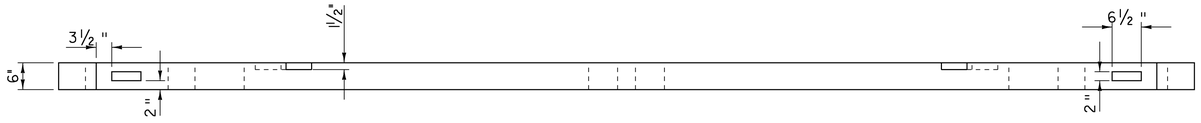
UPPER LATERAL BRACE 4 PLAN



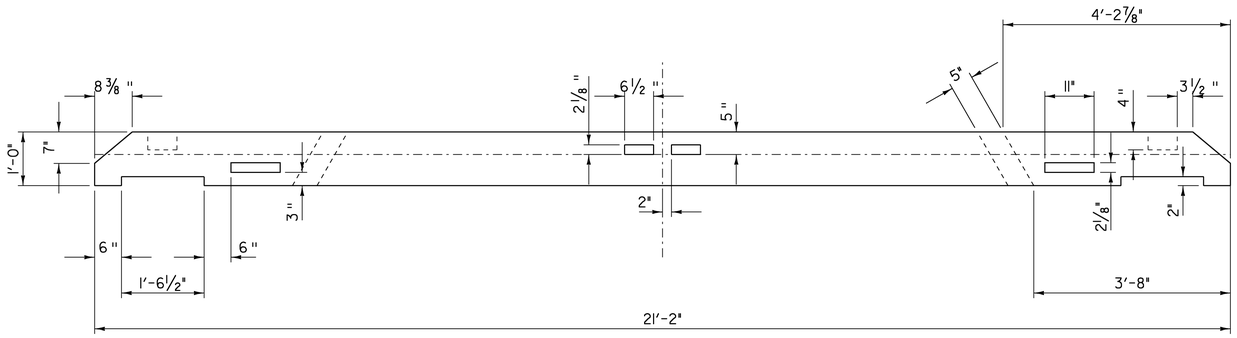
UPPER LATERAL BRACE 4 PROFILE

SCALE 3/4" = 1'-0"
0 1 2

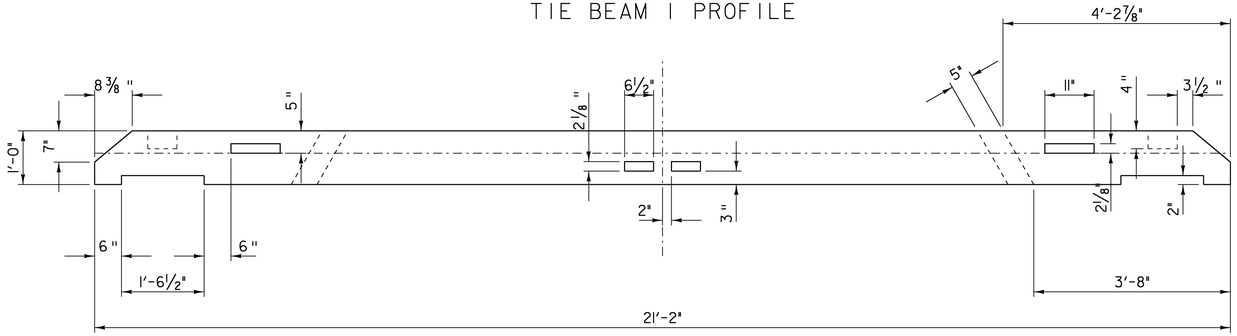
PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96J230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
UPPER LATERAL BRACING DETAILS 3	SHEET 45 OF 67



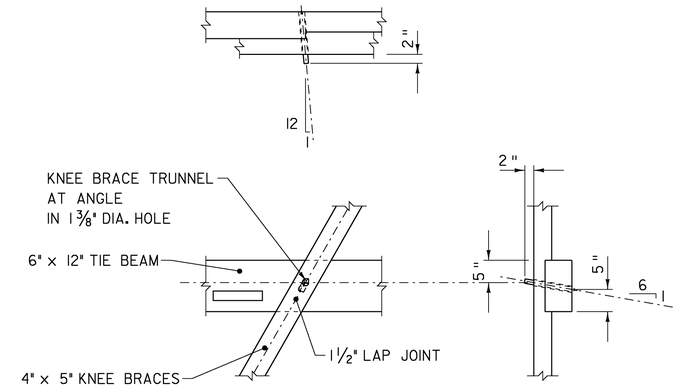
TIE BEAM 1 & 2 PLAN



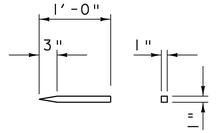
TIE BEAM 1 PROFILE



TIE BEAM 2 PROFILE

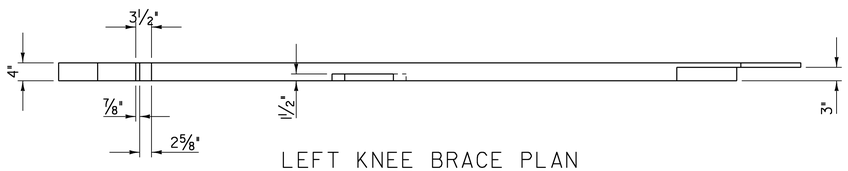


TIE BEAM & KNEE BRACE
JOINT DETAILS

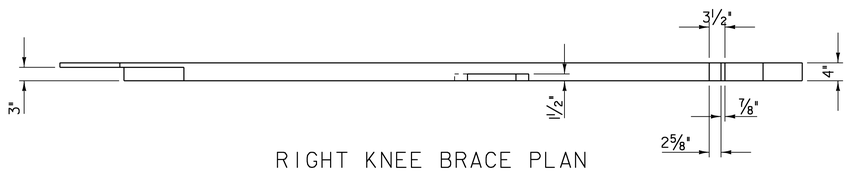


KNEE BRACE TRUNNEL DETAIL
(BASED ON EXISTING)

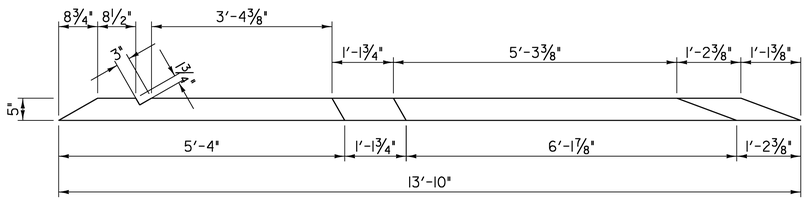
SCALE 1" = 1'-0"
1 9 6 3 0 2



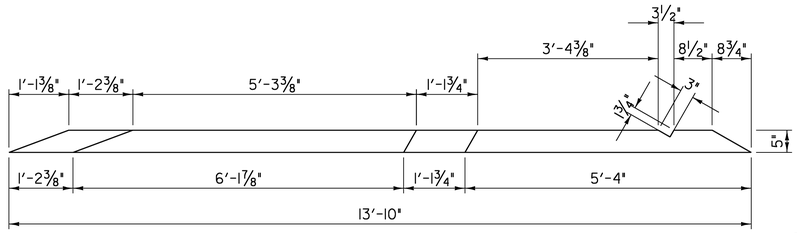
LEFT KNEE BRACE PLAN



RIGHT KNEE BRACE PLAN



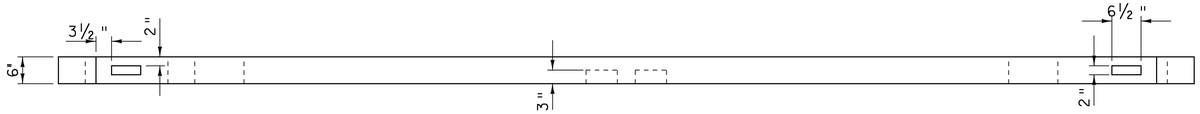
LEFT KNEE BRACE PROFILE



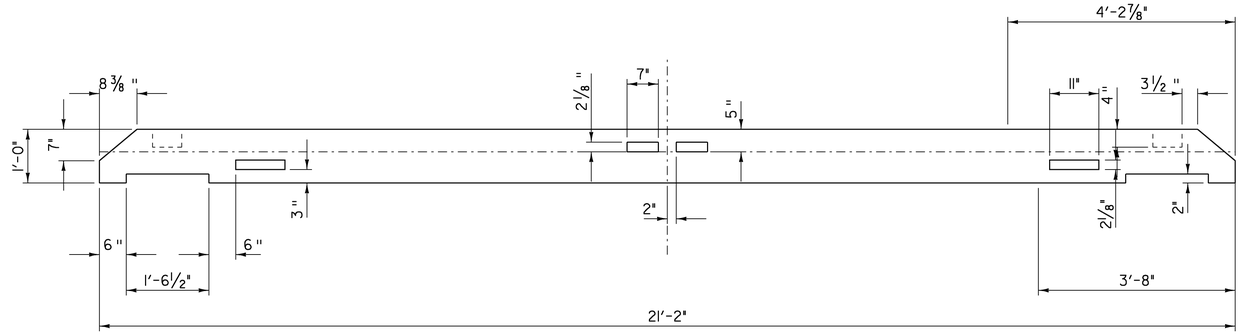
RIGHT KNEE BRACE PROFILE

SCALE ¾" = 1'-0"
0 1 2

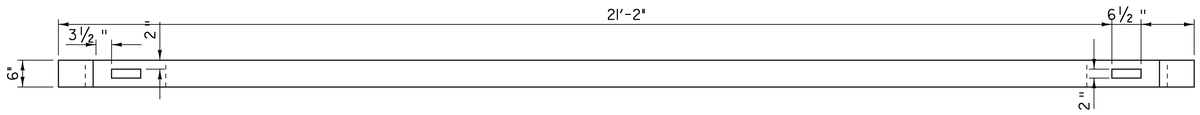
PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
TIE BEAM DETAILS 1	SHEET 46 OF 67



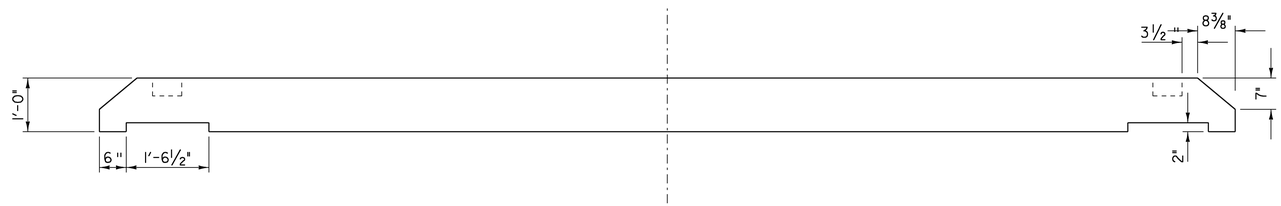
PORTAL TIE BEAM PLAN



PORTAL TIE BEAM PROFILE



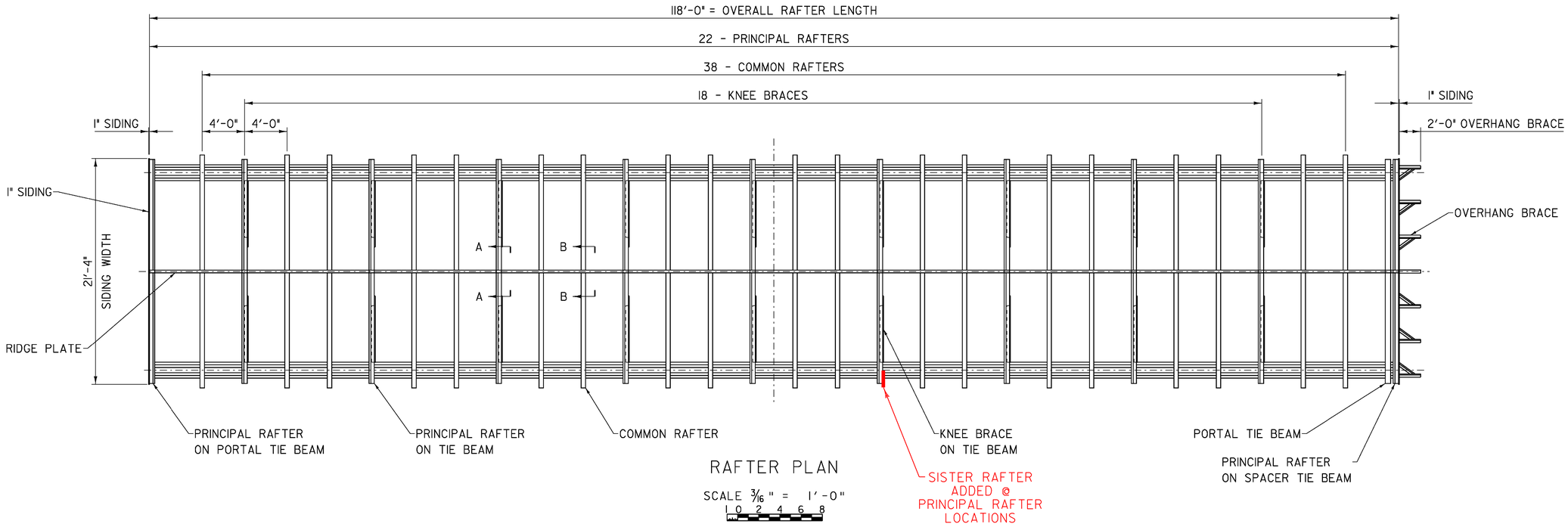
SPACER TIE BEAM PLAN



SPACER TIE BEAM PROFILE

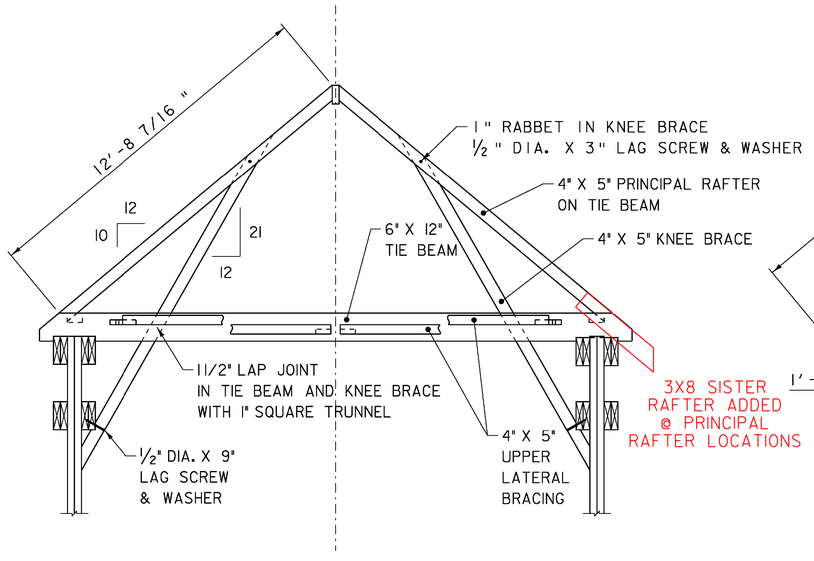
SCALE 3/4 " = 1'-0"
0 2

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
TIE BEAM DETAILS 2	SHEET 47 OF 67

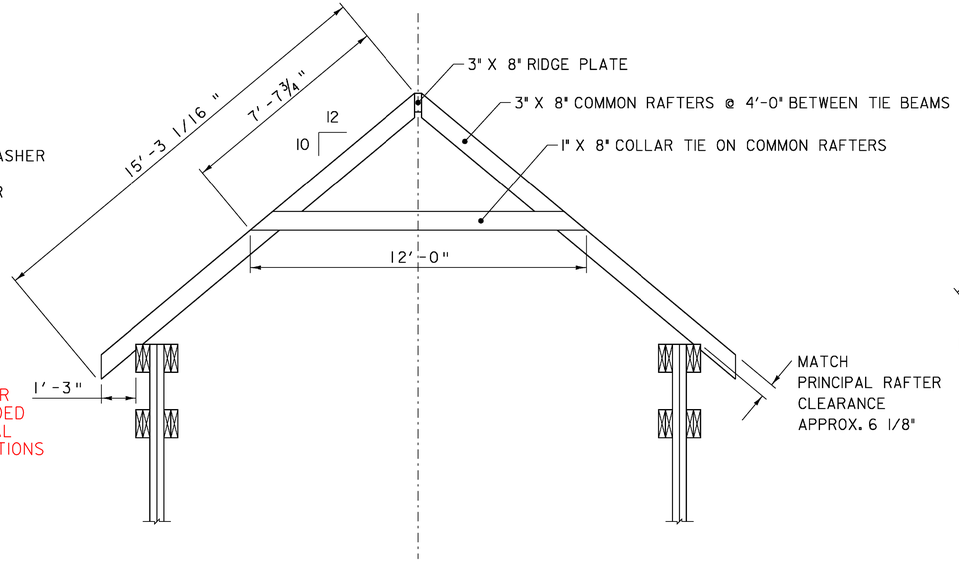


RAFTER PLAN

SCALE 3/16" = 1'-0"

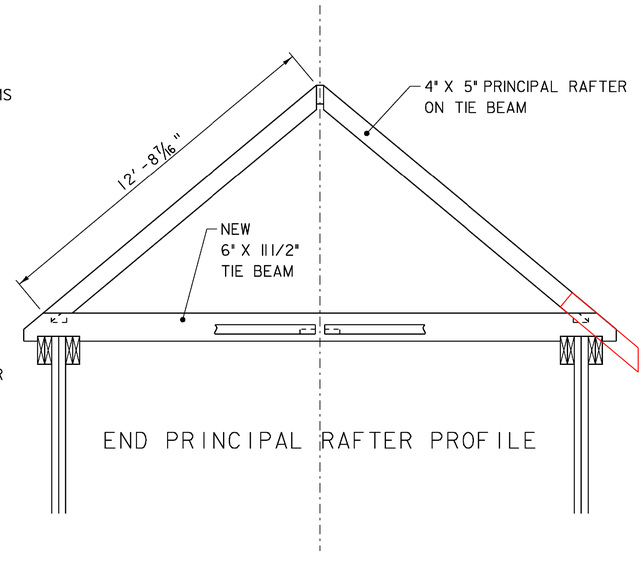


PRINCIPAL RAFTER PROFILE



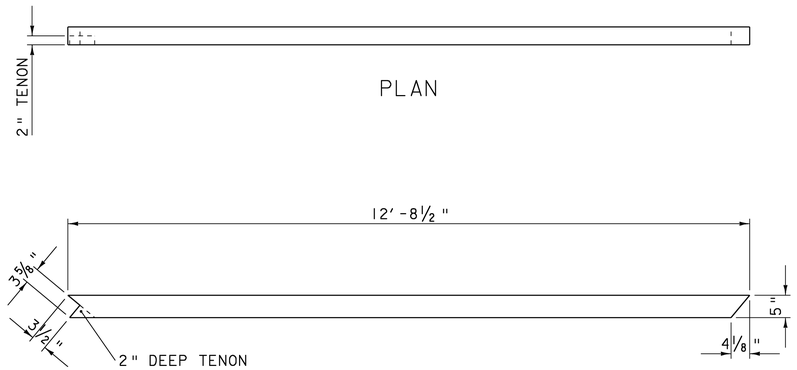
COMMON RAFTER PROFILE

SCALE 3/8" = 1'-0"

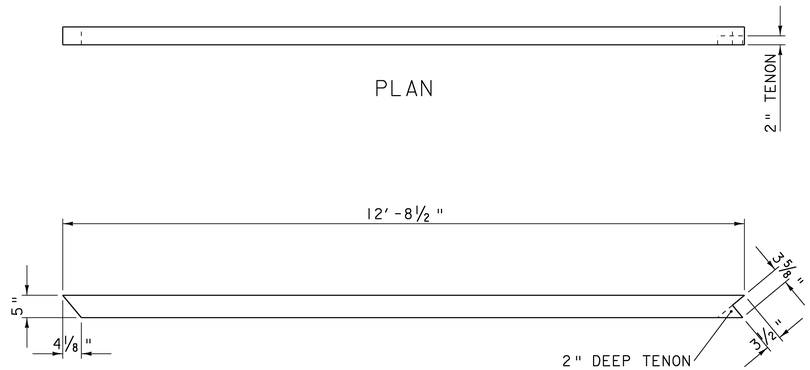


END PRINCIPAL RAFTER PROFILE

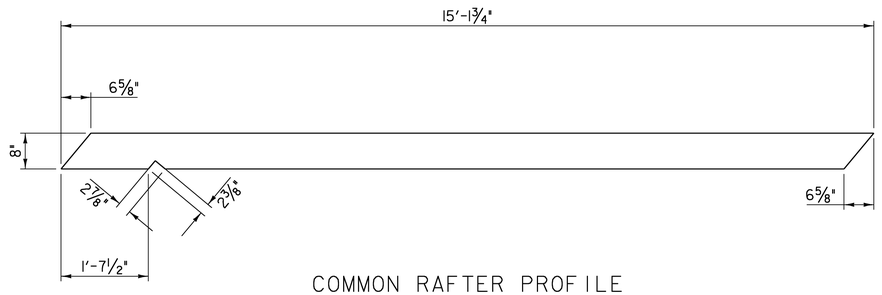
PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
RAFTER DETAILS I	SHEET 48 OF 67



LEFT PRINCIPAL RAFTER



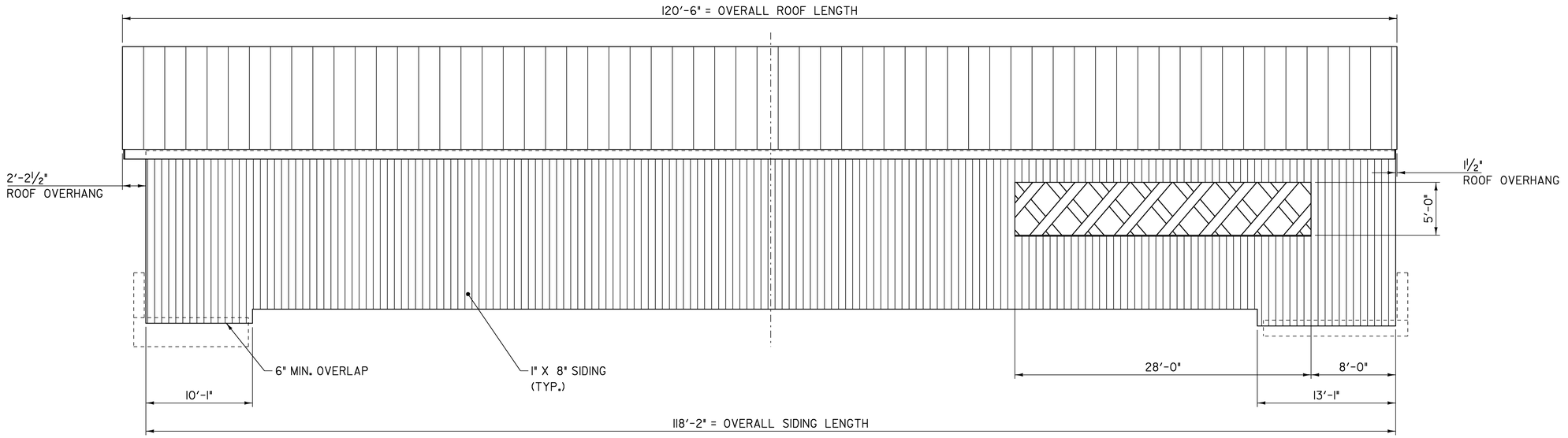
RIGHT PRINCIPAL RAFTER



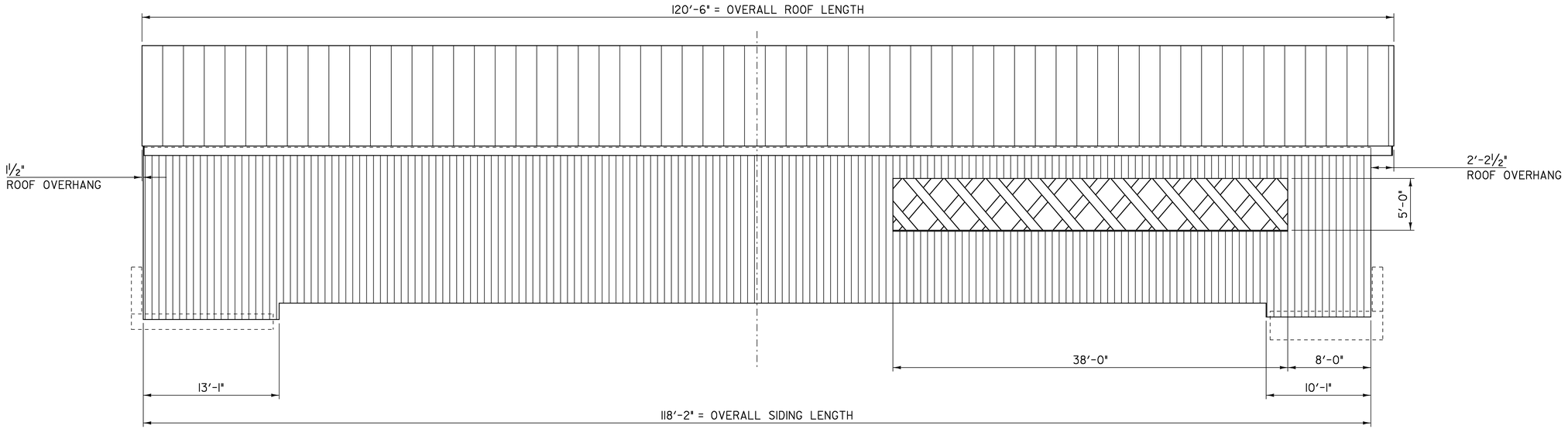
COMMON RAFTER PROFILE

SCALE ¾" = 1′-0"
0 2

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
RAFTER DETAILS 2	SHEET 49 OF 67



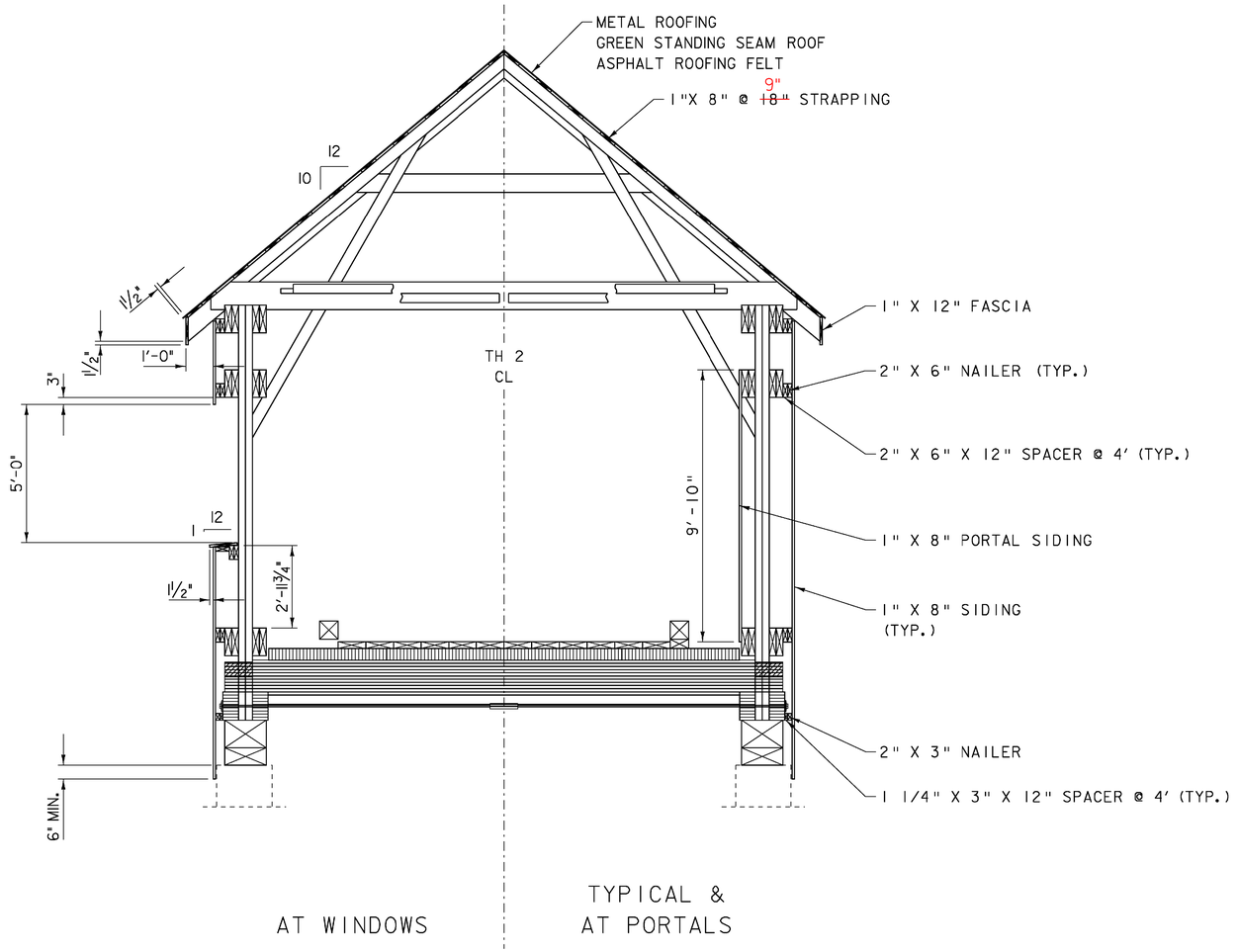
LEFT TRUSS PROFILE
(LOOKING DOWNSTREAM)



RIGHT TRUSS PROFILE
(LOOKING UPSTREAM)

SCALE 3/16" = 1'-0"
1 0 2 4 6 8

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96J230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
SIDING DETAILS 1	SHEET 50 OF 67



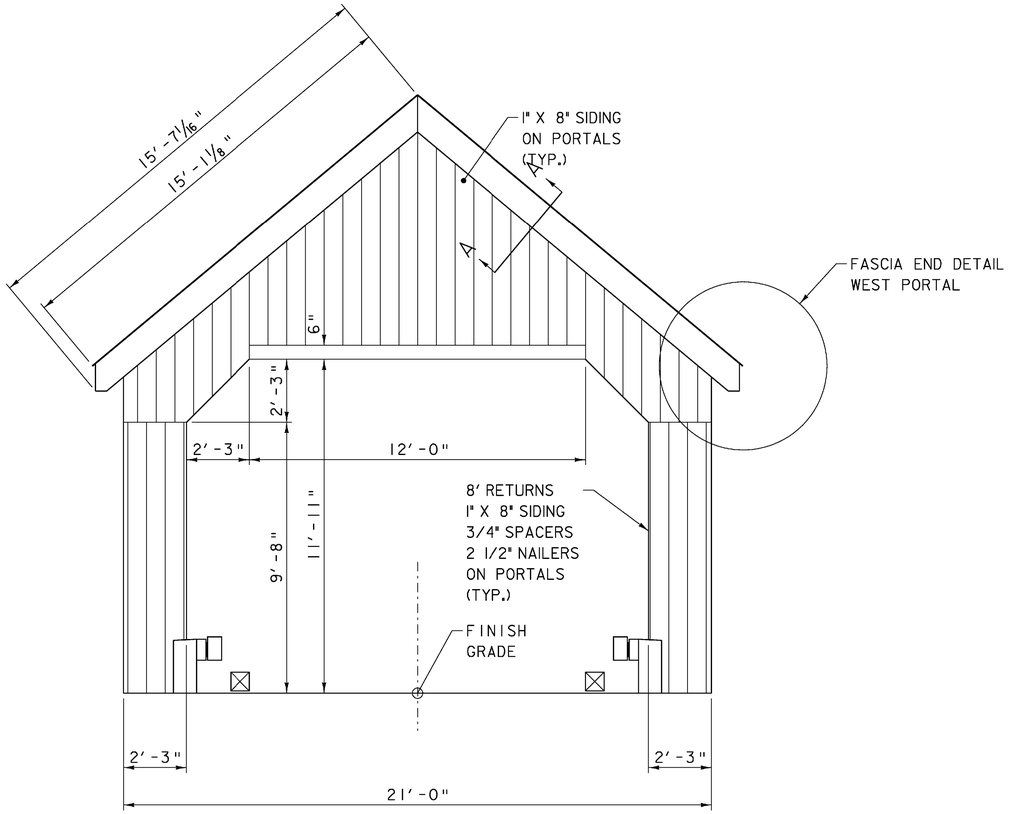
AT WINDOWS

TYPICAL &
AT PORTALS

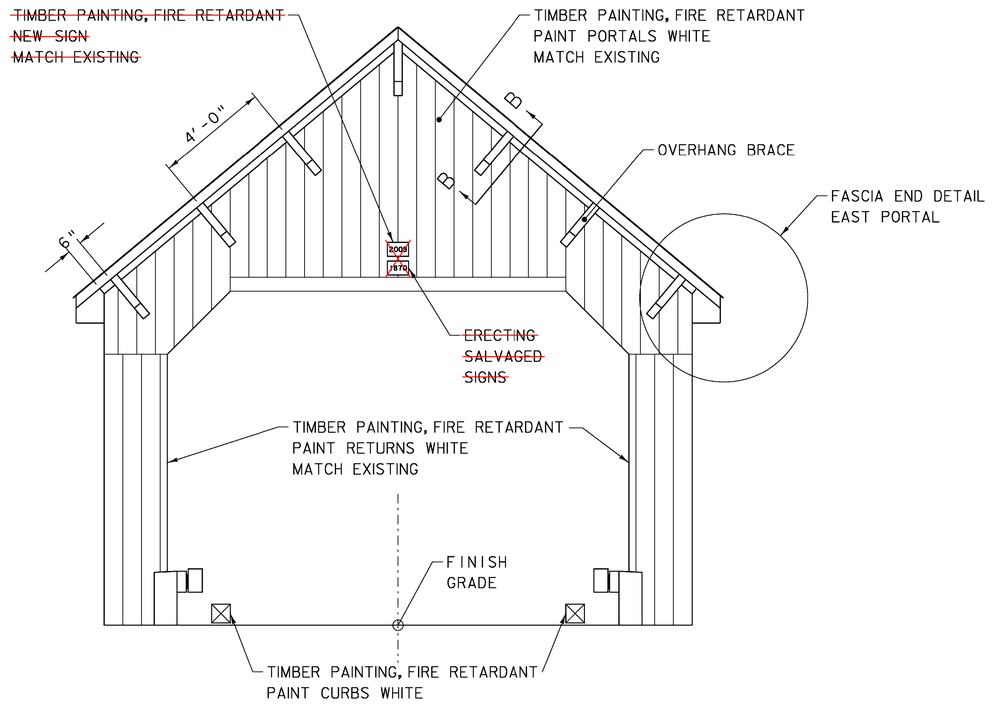
SIDING SECTIONS

SCALE ⅜" = 1'-0

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
SIDING DETAILS 2	SHEET 51 OF 67

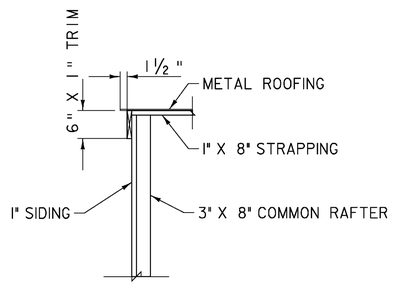


WEST PORTAL
ABUTMENT 1



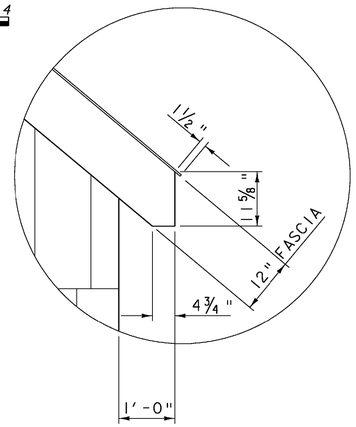
EAST PORTAL
ABUTMENT 2

SCALE 3/8" - 1'-0
1 0 1 2 3 4



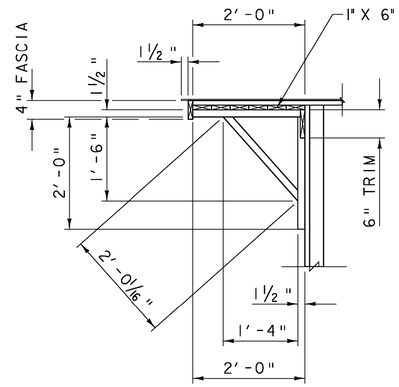
SECTION A-A
ROOF OVERHANG SECTION
WEST PORTAL

SCALE 3/4" = 1'-0"
0 1 2



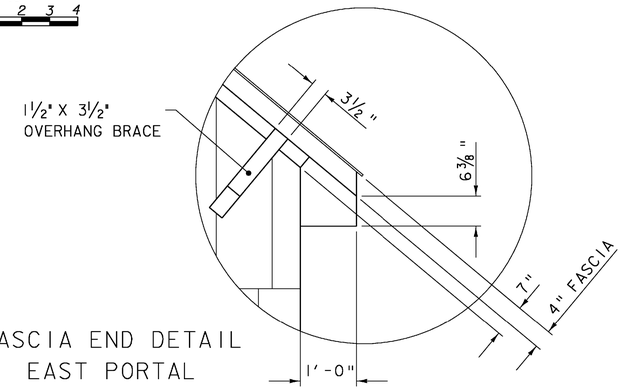
FASCIA END DETAIL
WEST PORTAL

SCALE 3/4" = 1'-0"
0 1 2



SECTION B-B
ROOF OVERHANG SECTION
EAST PORTAL

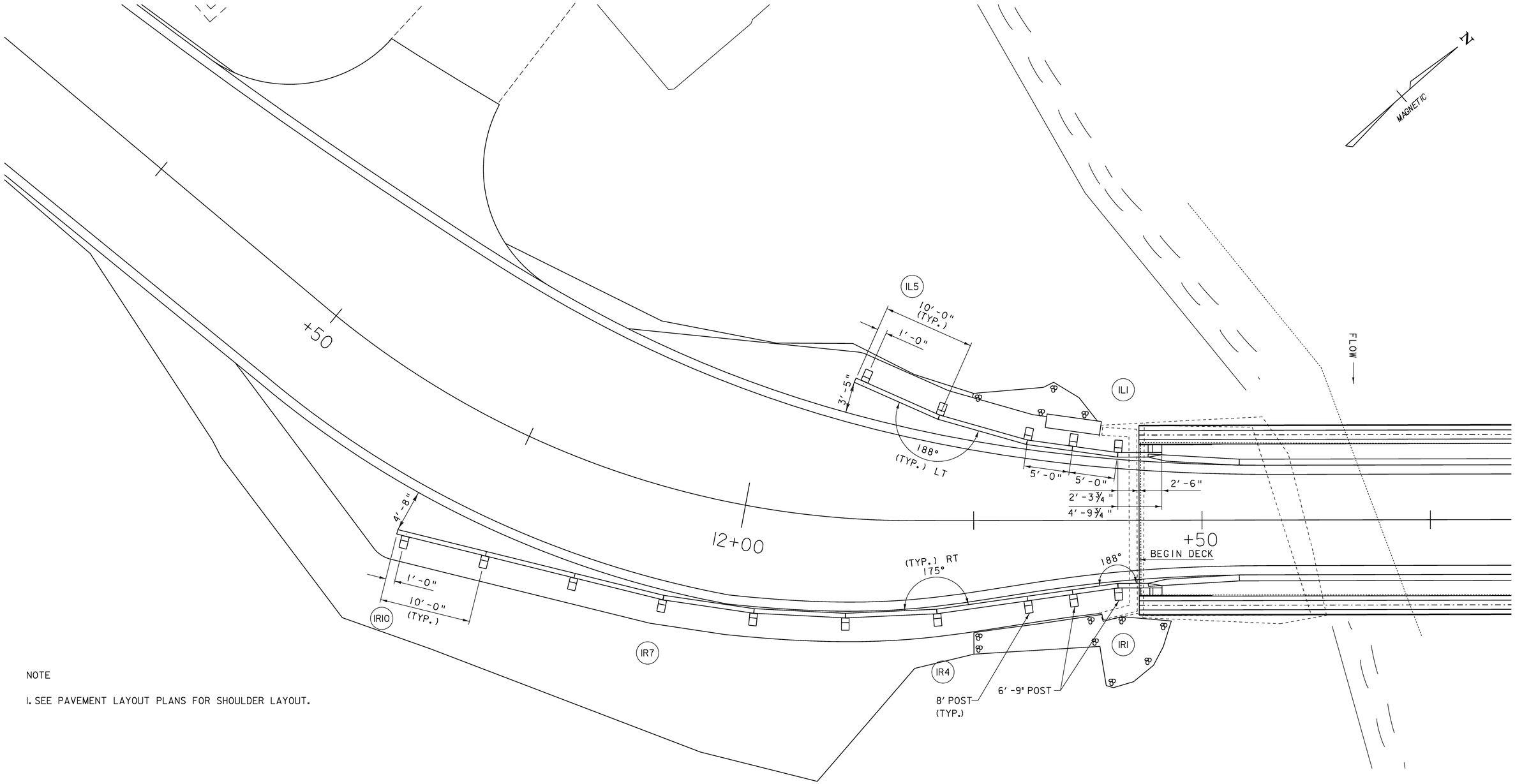
SCALE 3/4" = 1'-0"
0 1 2



FASCIA END DETAIL
EAST PORTAL

SCALE 3/4" = 1'-0"
0 1 2

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230str.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
SIDING DETAILS 3	SHEET 52 OF 67



NOTE

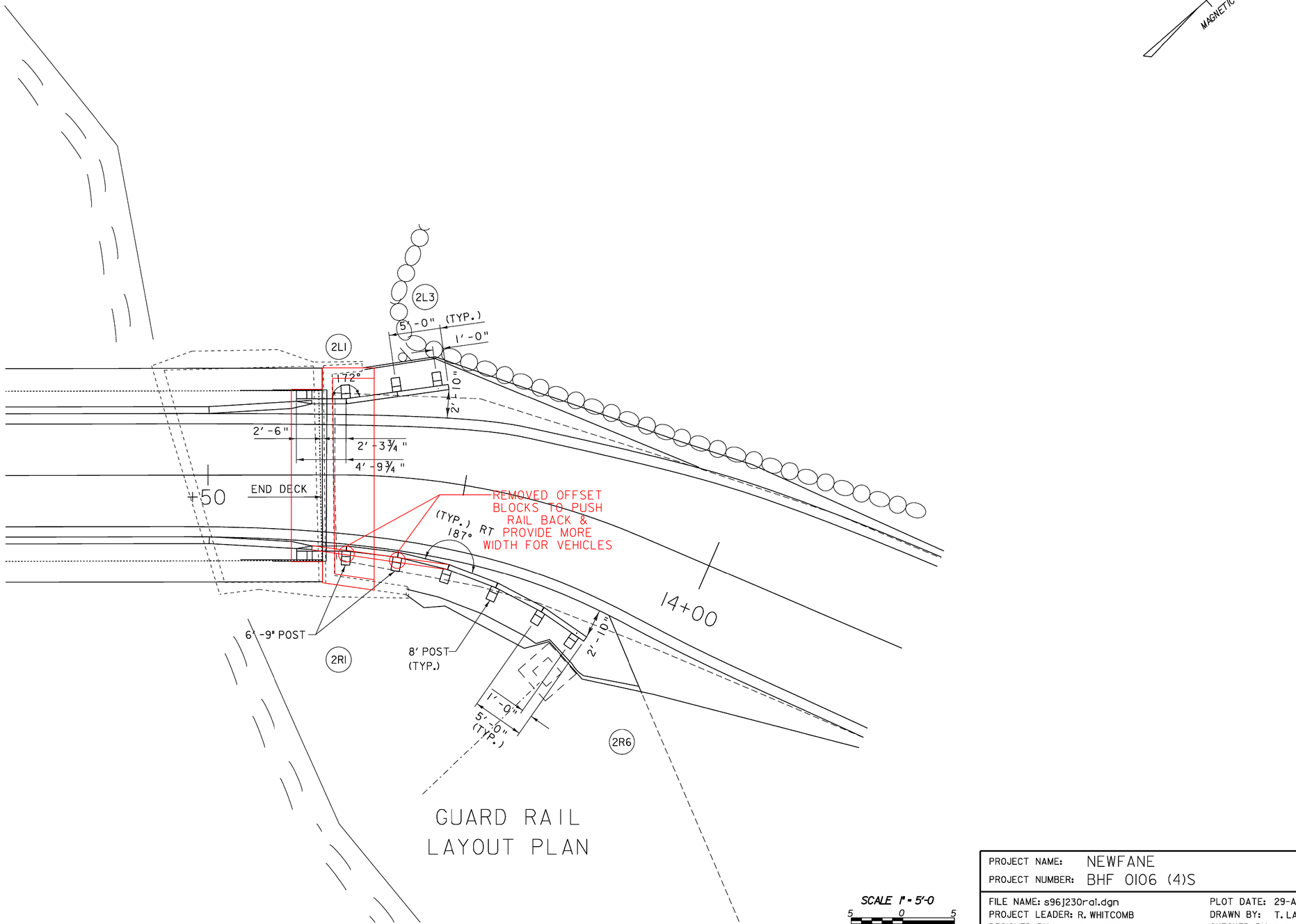
1. SEE PAVEMENT LAYOUT PLANS FOR SHOULDER LAYOUT.

GUARD RAIL LAYOUT PLAN

SCALE 1" = 5'-0

5 0 5

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230rail.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
GUARDRAIL LAYOUT 1	SHEET 53 OF 67

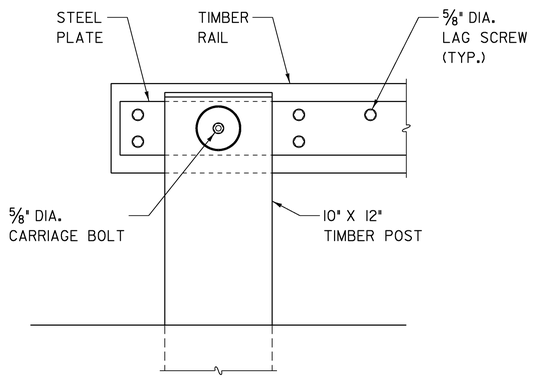


GUARD RAIL LAYOUT PLAN

SCALE 1" = 5'-0
5 0 5

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S

FILE NAME: s96J230rail.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
GUARDRAIL LAYOUT 2	SHEET 54 OF 67



END POST
CONNECTION ELEVATION

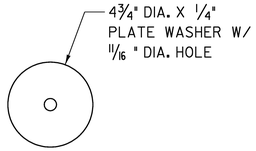


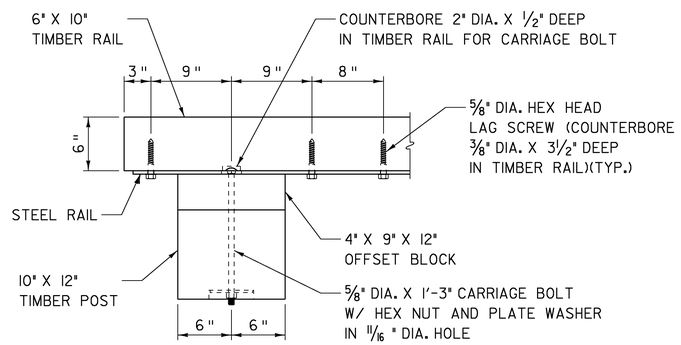
PLATE WASHER DETAIL

0.5 0.25 0 0.25 0.5

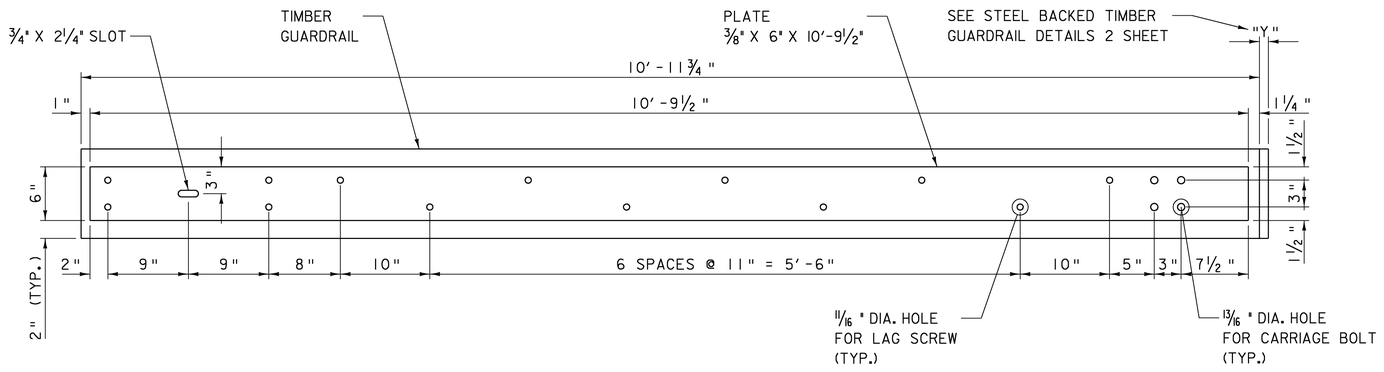
SCALE: 3" = 1'-0"

NOTES

1. SEE THE 2006 GENERAL SPECIAL PROVISIONS SECTIONS 621 AND 728 FOR MORE INFORMATION ABOUT ITEM 621.18, "STEEL BACKED TIMBER GUARDRAIL".



END POST
CONNECTION PLAN

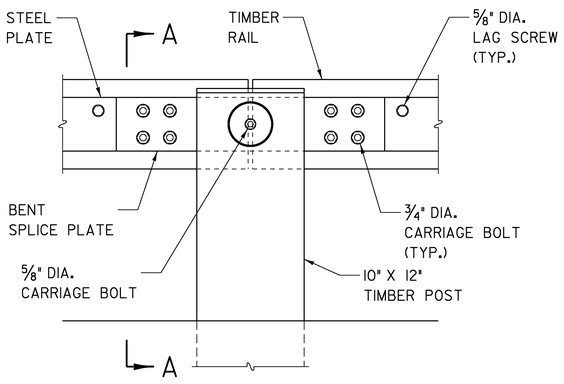


END STEEL PLATE DETAIL
FOR 10'-0" POST SPACING

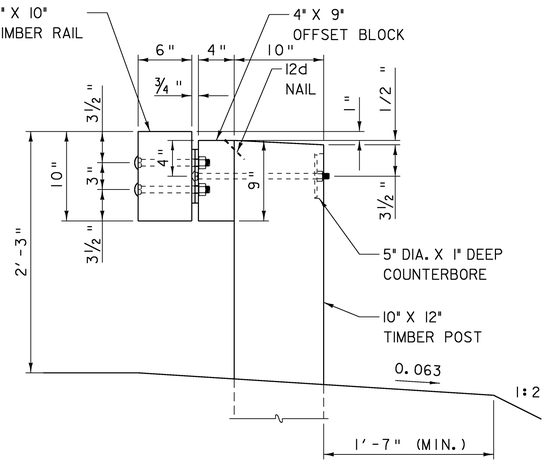
1 0 1 2

SCALE: 1 1/2 " = 1'-0"

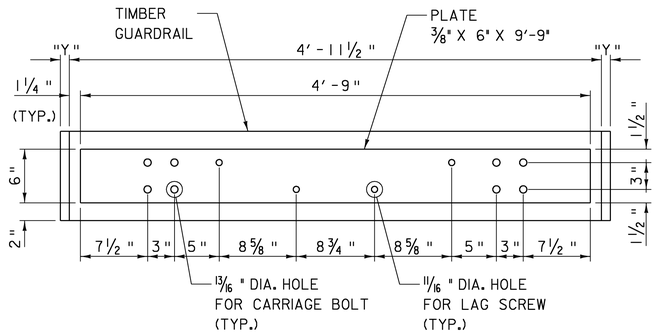
PROJECT NAME: NEWFANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230rail.dgn	PLOT DATE: 29-APR-2009
PROJECT MANAGER: R. WHITCOMB	DRAWN BY: STR3
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
GUARDRAIL DETAILS 1	SHEET 55 OF 67



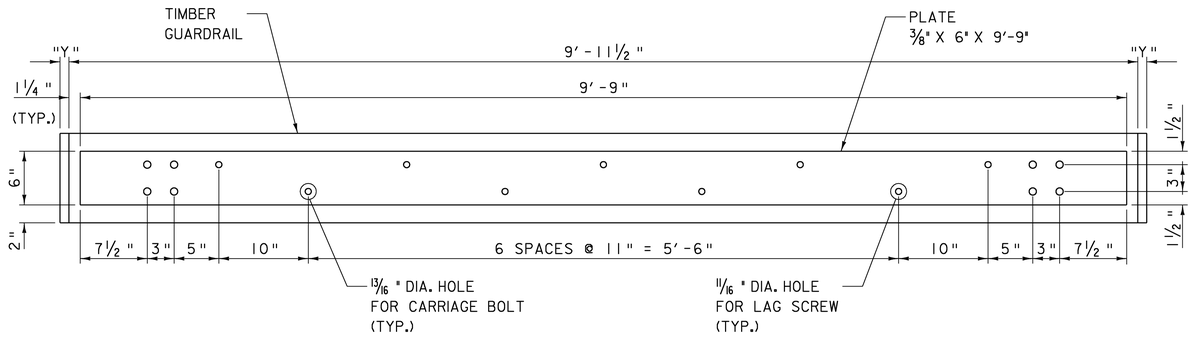
INTERMEDIATE POST CONNECTION ELEVATION



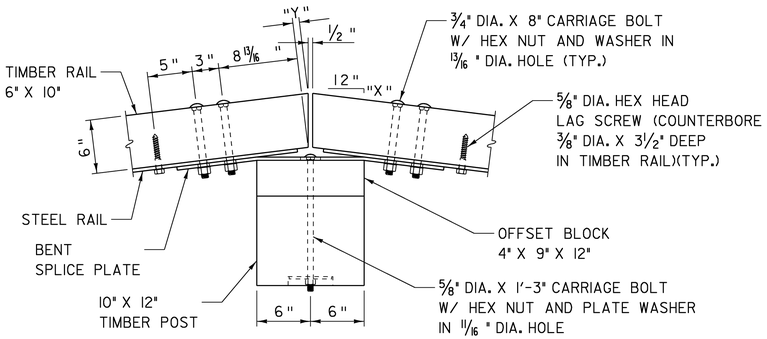
SECTION A-A



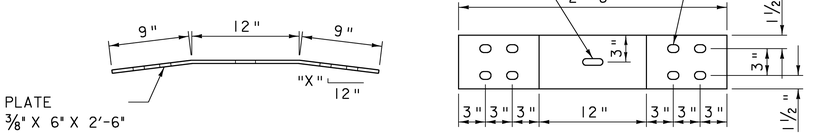
INTERMEDIATE STEEL PLATE DETAIL FOR 5'-0" POST SPACING



INTERMEDIATE STEEL PLATE DETAIL FOR 10'-0" POST SPACING



INTERMEDIATE POST CONNECTION PLAN



PLAN ELEVATION

BENT SPLICE STEEL PLATE DETAIL

POST DIMENSION TABLES

POST NO.	"X"	"Y"
IL1	7/8"	7/16"
IL2	0"	0"
IL3	7/8"	7/16"
IL4	7/8"	7/16"
IL5	0"	0"

POST NO.	"X"	"Y"
IR1	7/8"	7/16"
IR2	0"	0"
IR3	0"	0"
IR4	9/16"	5/16"
IR5	9/16"	5/16"
IR6	9/16"	5/16"
IR7	9/16"	5/16"
IR8	0"	0"
IR9	0"	0"
IR10	0"	0"

POST NO.	"X"	"Y"
2L1	7/8"	7/16"
2L2	0"	0"
2L3	0"	0"

POST NO.	"X"	"Y"
2R1	7/8"	7/16"
2R2	7/8"	7/16"
2R3	7/8"	7/16"
2R4	7/8"	7/16"
2R5	7/8"	7/16"
2R6	0"	0"

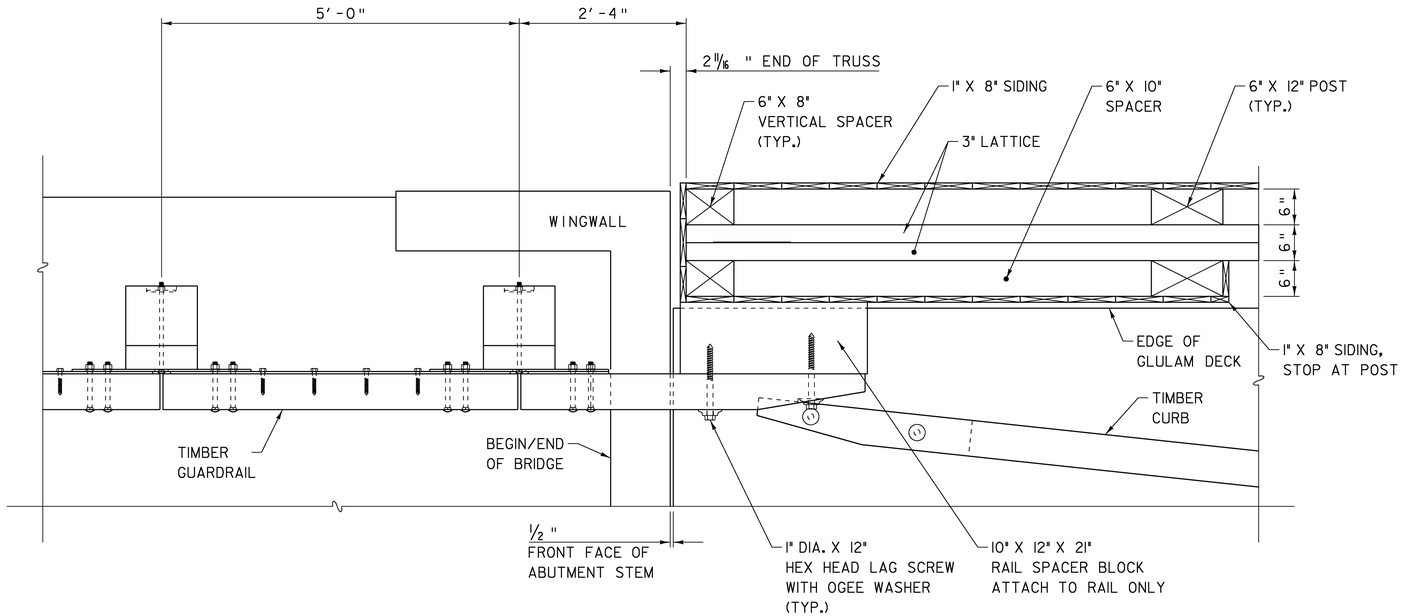
1 0 1 2

SCALE: 1 1/2" = 1'-0"

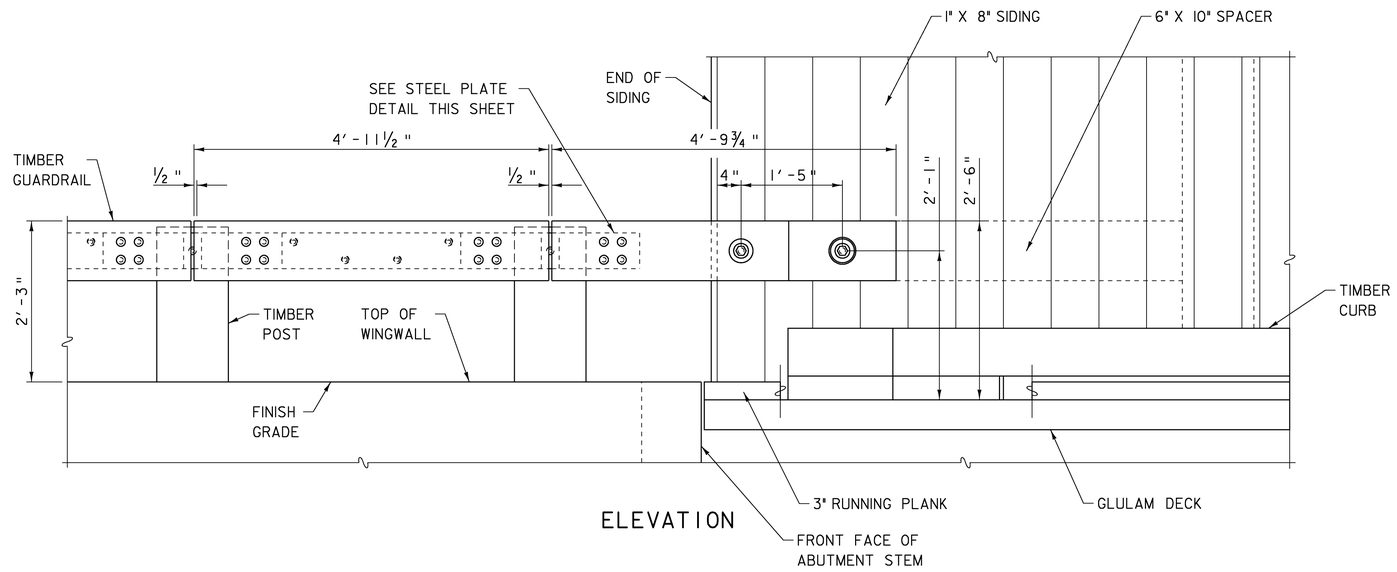
PROJECT NAME: NEWFANE
PROJECT NUMBER: BHF 0106 (4)S

FILE NAME: s96j230rail.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: T. LACKEY
GUARDRAIL DETAILS 2

PLOT DATE: 29-APR-2009
DRAWN BY: STR3
CHECKED BY: R. WHITCOMB
SHEET 56 OF 67



PLAN

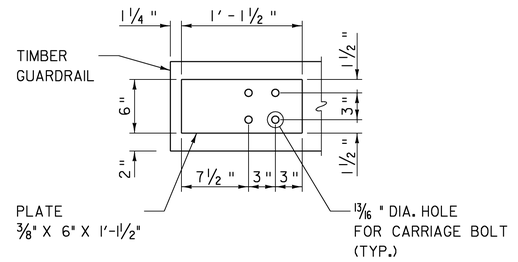


ELEVATION

GUARDRAIL DETAIL AT END OF COVERED BRIDGE

0 1 2

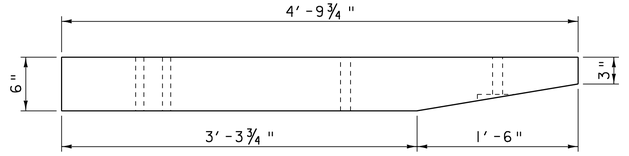
SCALE: 1" = 1'-0"



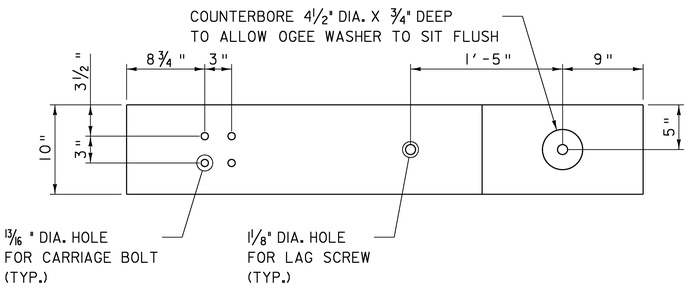
STEEL PLATE DETAIL AT FIRST POST OFF BRIDGE

0 1 2

SCALE: 1 1/2 " = 1'-0"



PLAN



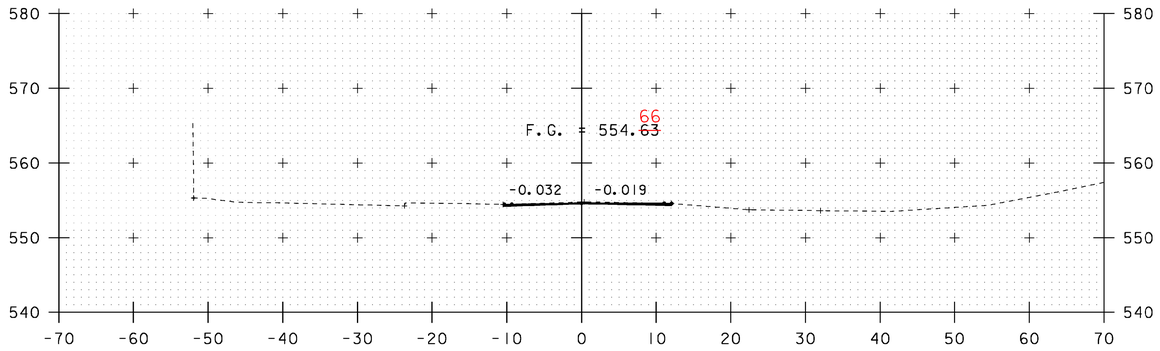
ELEVATION

TIMBER GUARDRAIL DETAIL AT COVERED BRIDGE

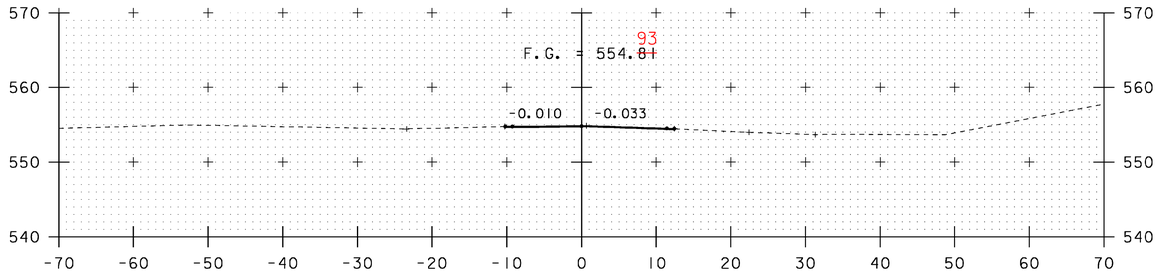
0 1 2

SCALE: 1 1/2 " = 1'-0"

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230rail.dgn	PLOT DATE: 29-APR-2009
PROJECT MANAGER: R. WHITCOMB	DRAWN BY: STR3
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
GUARDRAIL DETAILS 3	SHEET 57 OF 67



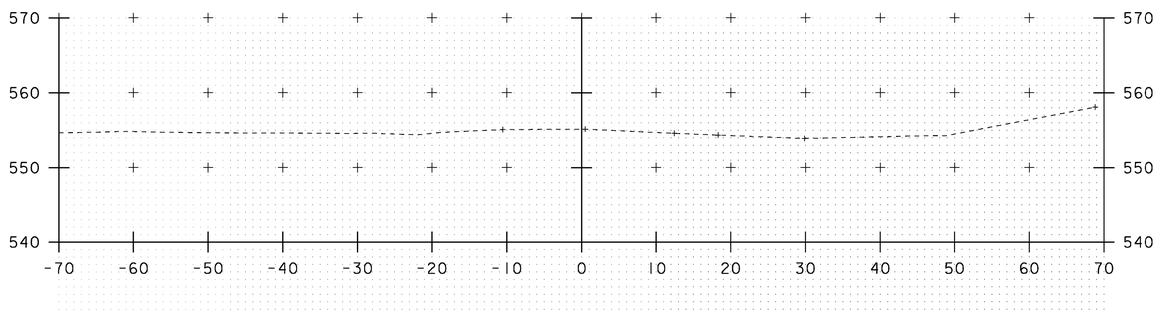
10+75



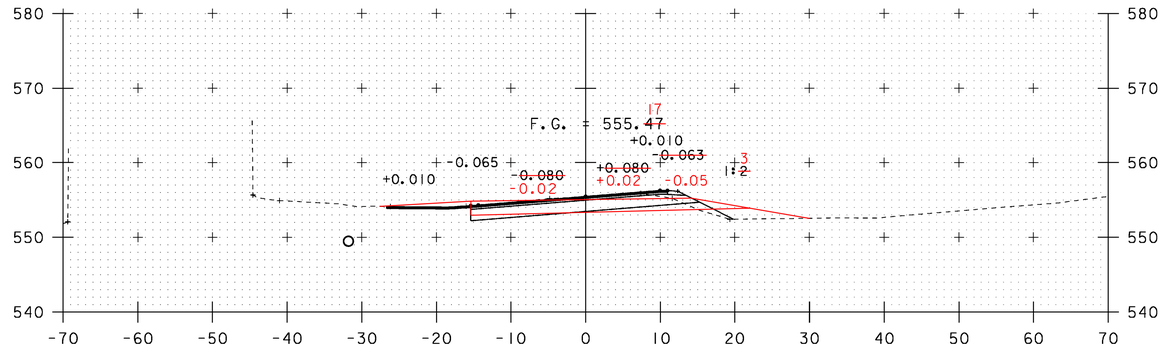
ML 10+50
BEGIN APPROACH
MATCH EXISTING

10+50

SAW CUT PAVEMENT
FOR BASE & BINDER

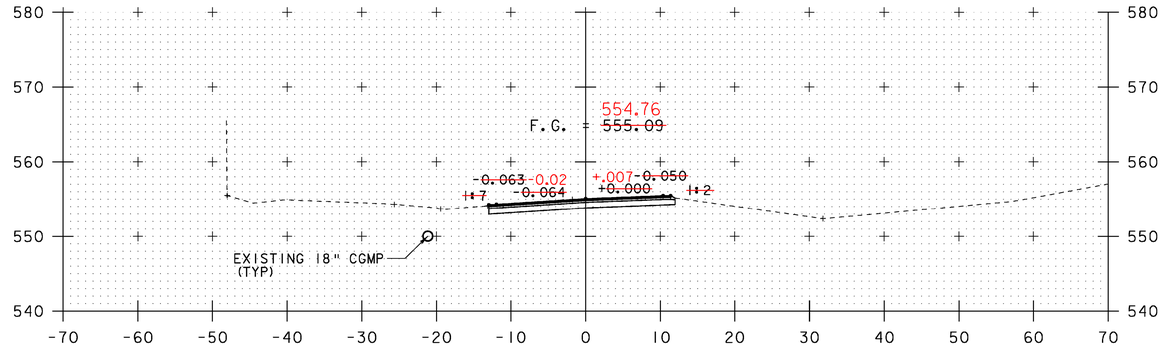


10+25

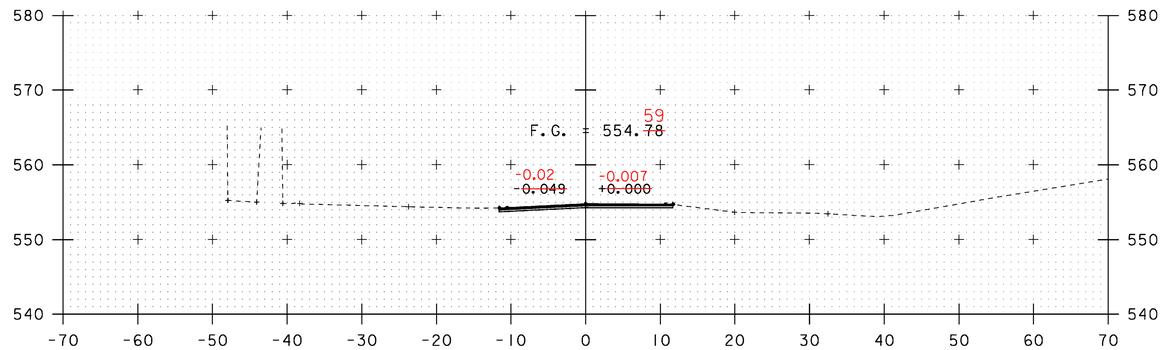


11+50

ML 11+50
BEGIN SAND



11+25



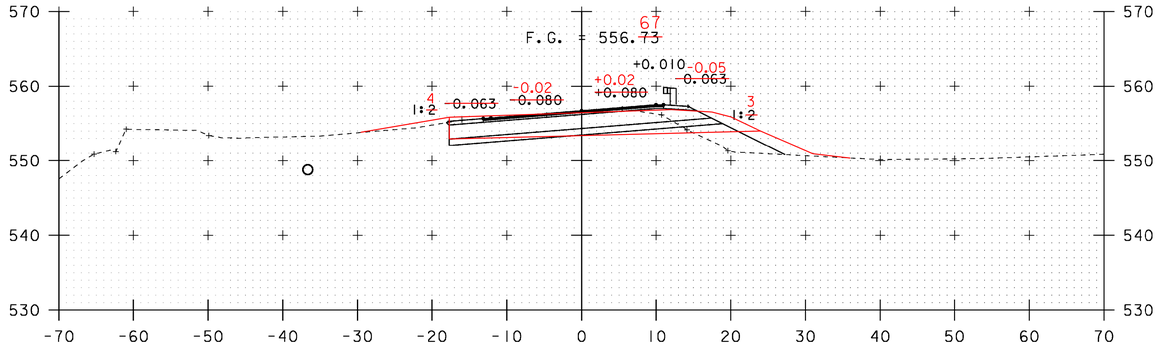
ML 11+00
BEGIN SUBBASE

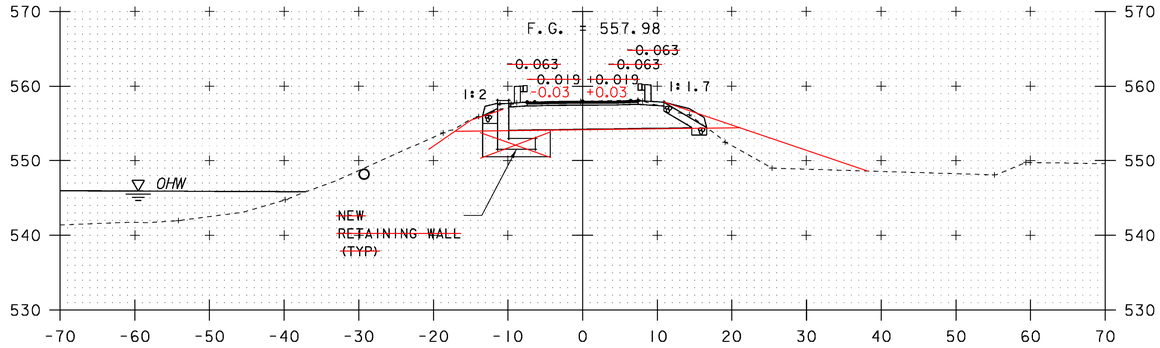
11+00

SCALE 1" = 10'-0
10 0 10

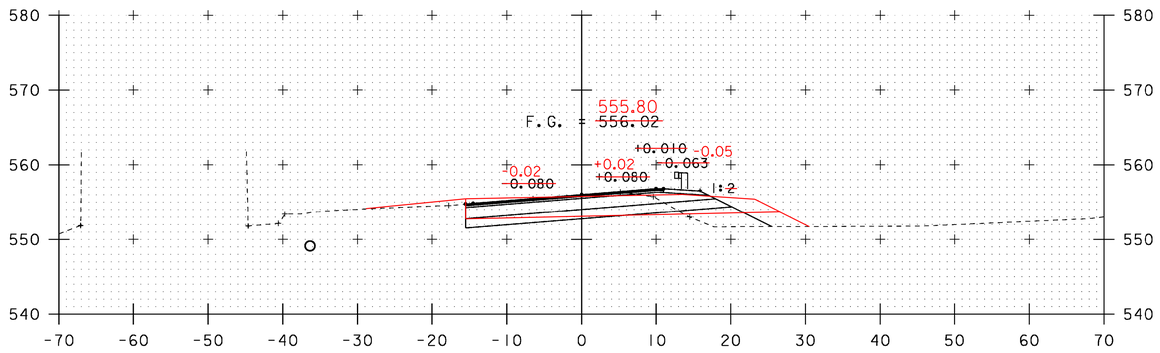
STA. 10+25 TO STA. 11+50

PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230xs.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
MAINLINE CROSS SECTIONS I	SHEET 58 OF 67

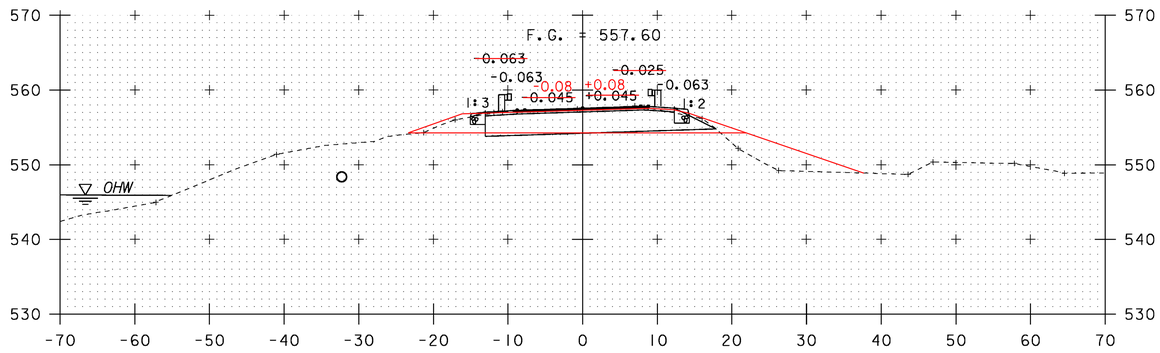




12+00

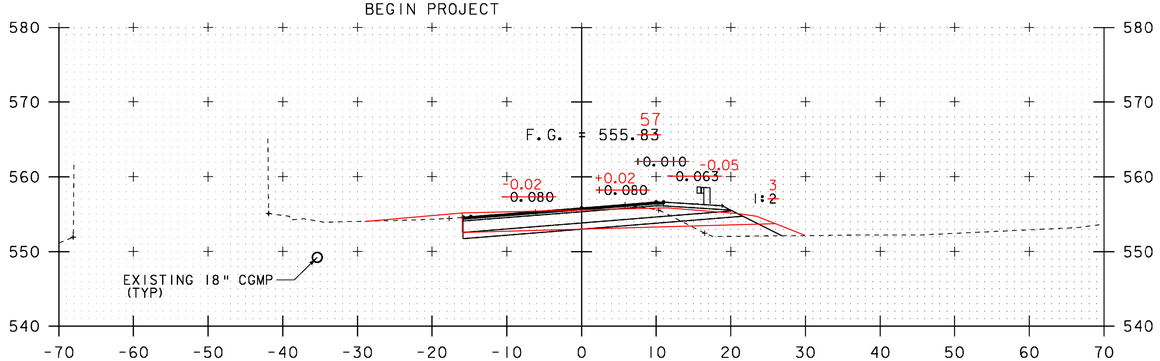


12+35



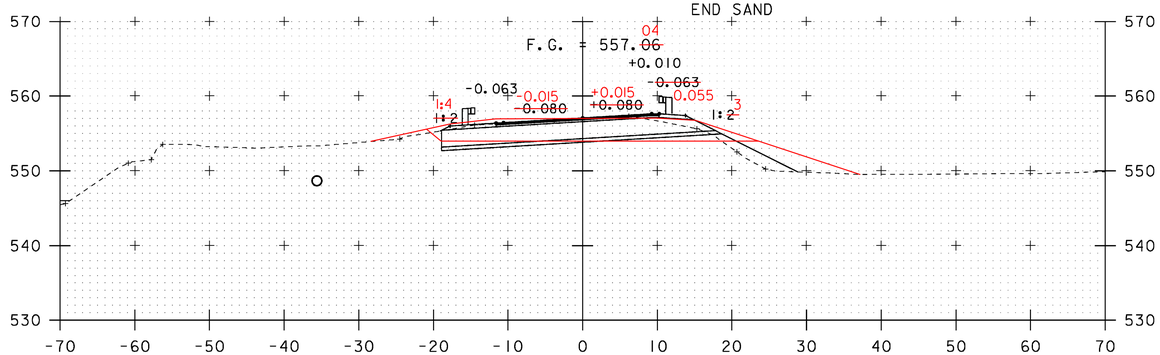
ML 11+75
END APPROACH
BEGIN PROJECT

11+75



12+25

ML 12+22.5
END SAND



11+67

12+10

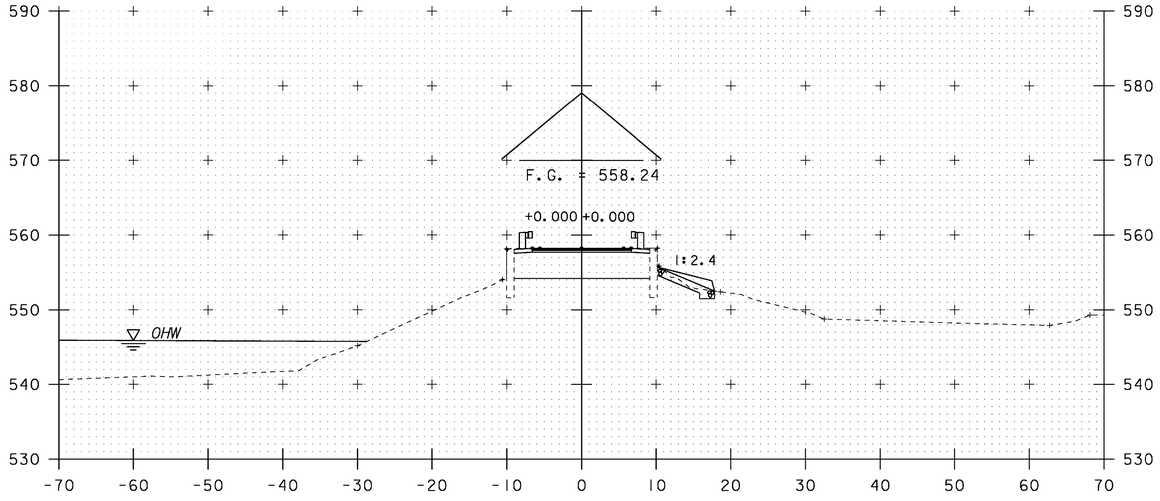
SCALE 1" = 10'-0
10 0 10

STA. 11+67 TO STA. 12+35

PROJECT NAME: NEWANE
PROJECT NUMBER: BHF 0106 (4)S

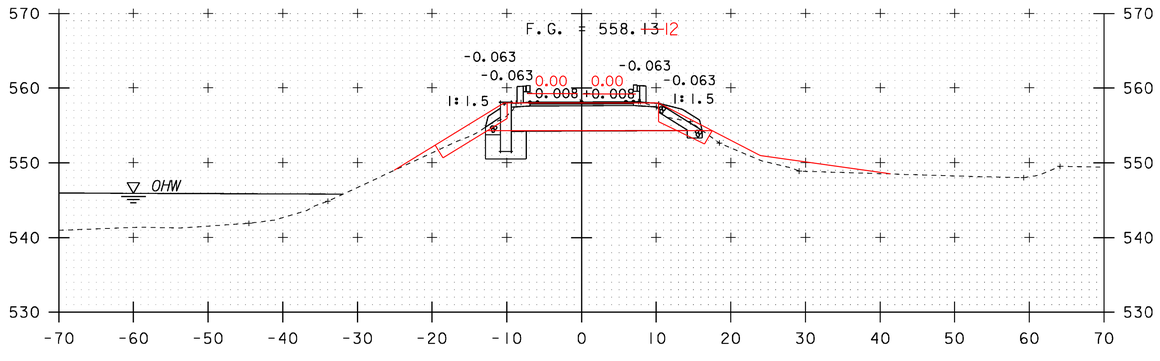
FILE NAME: s96j230xs.dgn
PROJECT LEADER: R. WHITCOMB
DESIGNED BY: T. LACKEY
MAINLINE CROSS SECTIONS 2

PLOT DATE: 29-APR-2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB
SHEET 59 OF 67

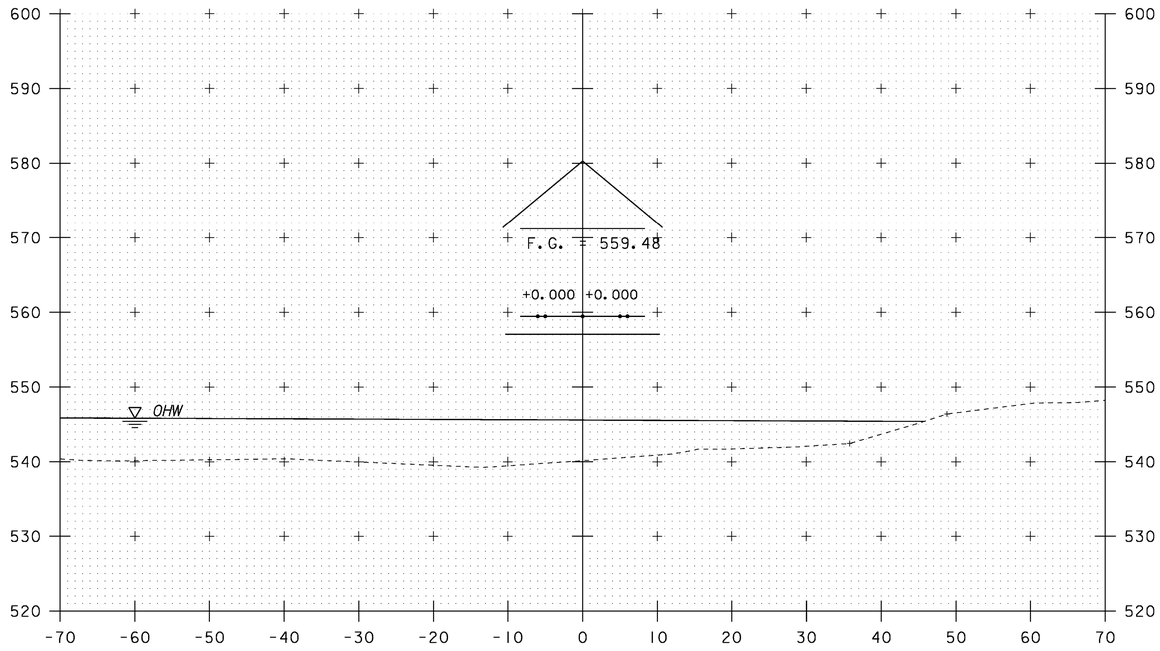


ML 12+42.02
BEGIN BRIDGE

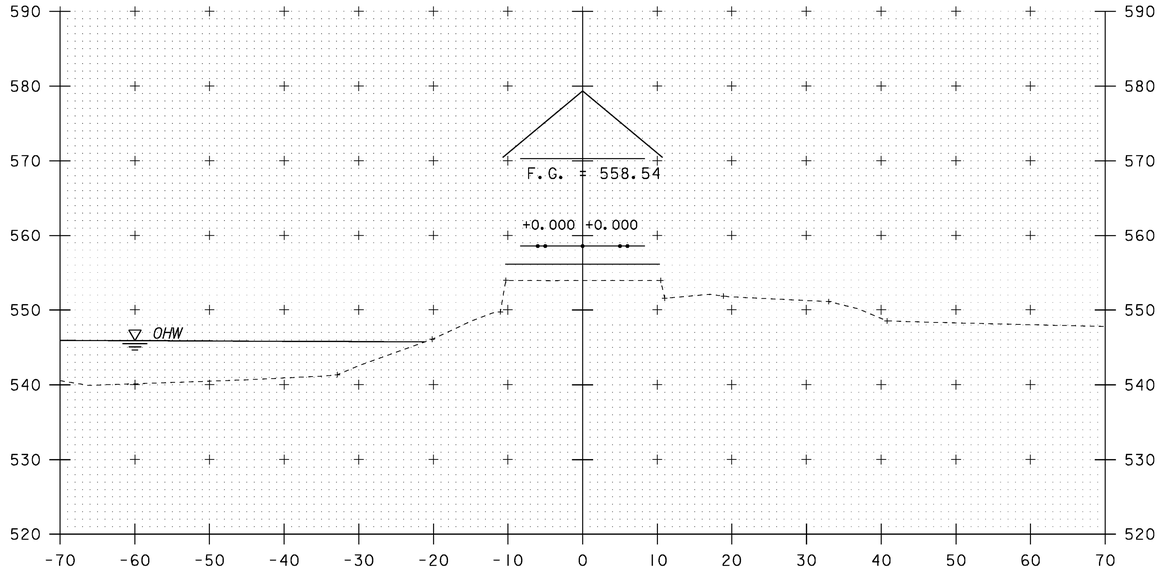
12+42



12+39



12+75

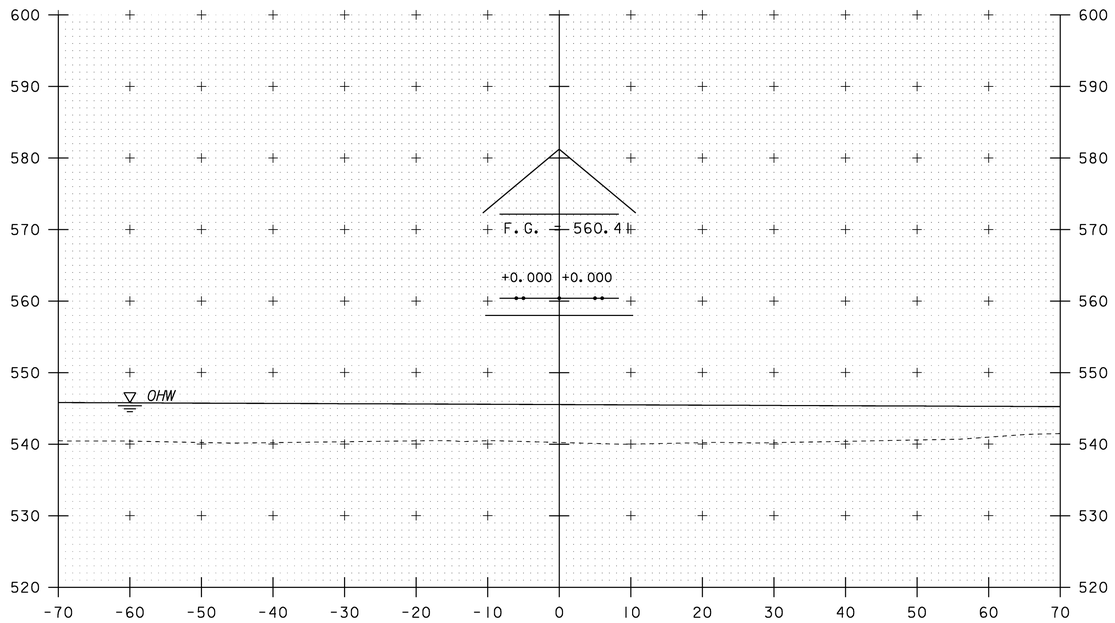


12+50

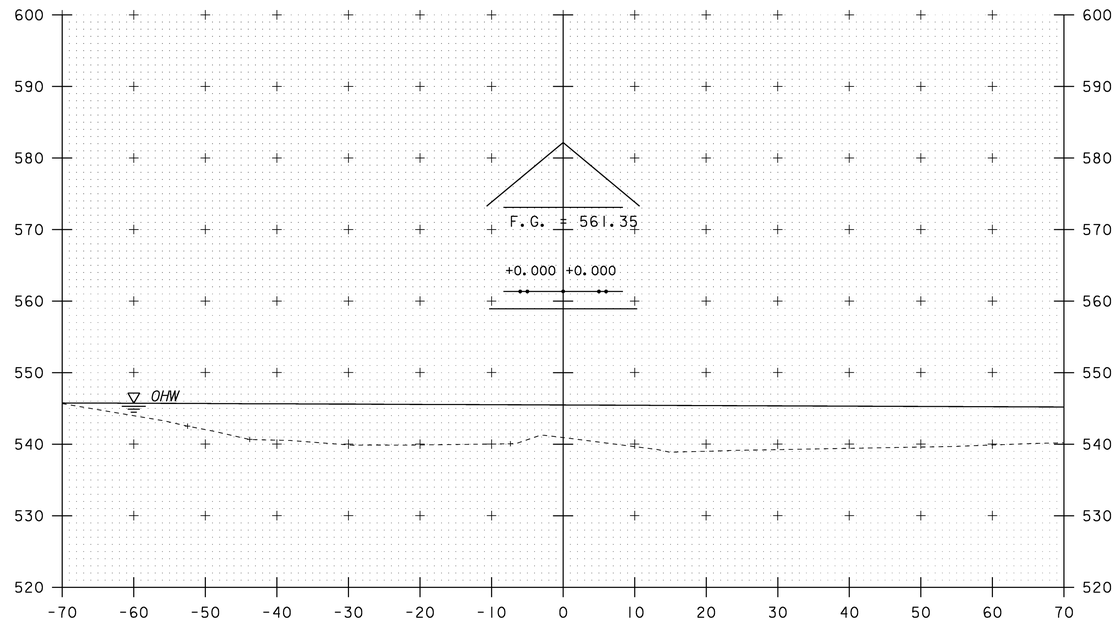
SCALE 1" = 10'-0
10 0 10

STA. 12+39 TO STA. 12+75

PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230xs.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
MAINLINE CROSS SECTIONS 3	SHEET 60 OF 67



13+00



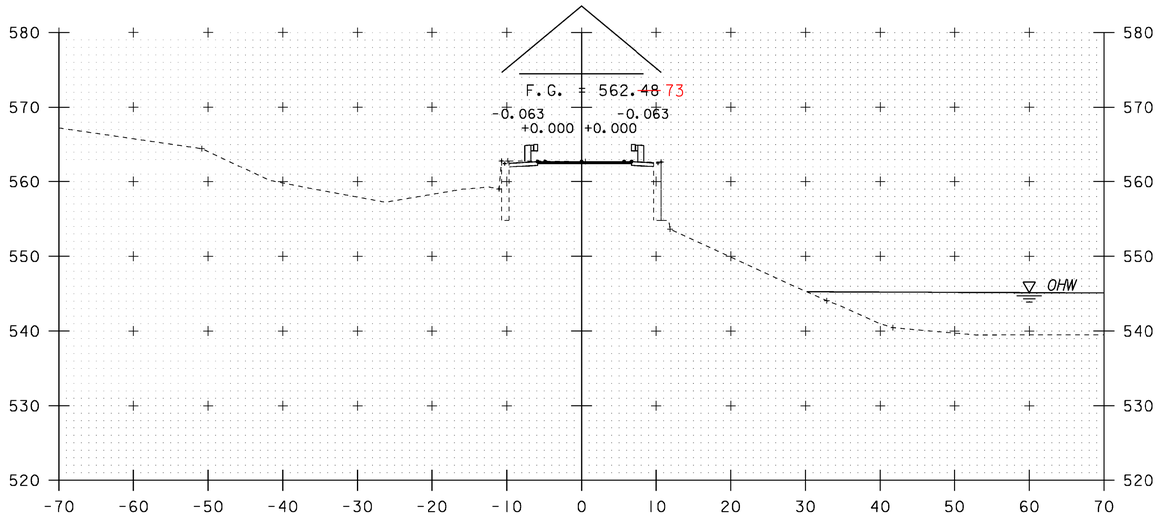
13+25

SCALE 1" = 10'-0

10 0 10

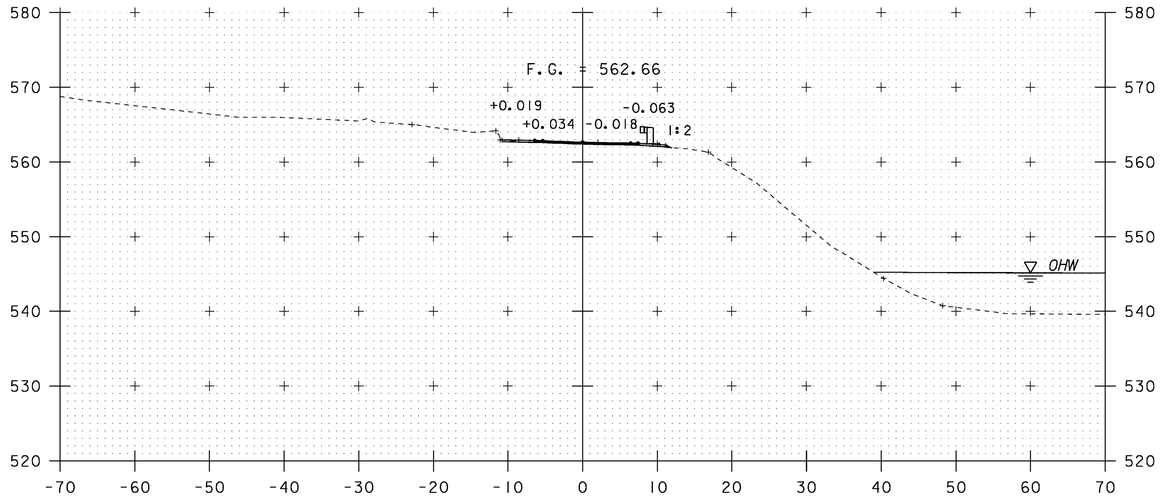
STA. 13+00 TO STA. 13+25

PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230xs.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
MAINLINE CROSS SECTIONS 4	SHEET 61 OF 67

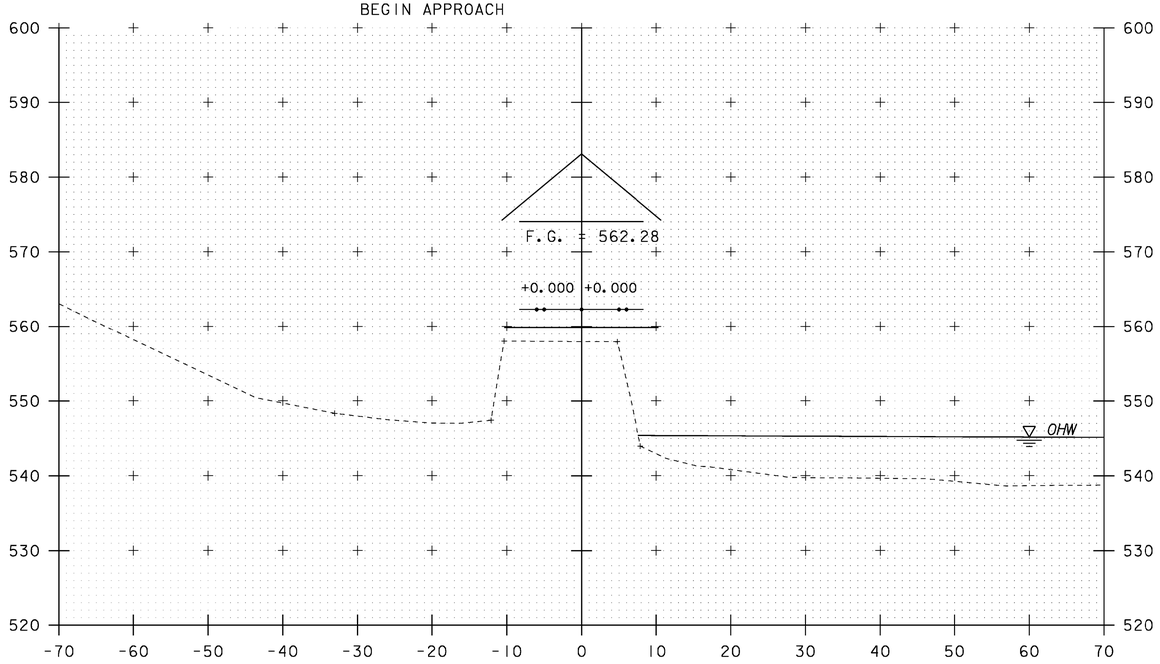


ML 13+62.18
END BRIDGE
END PROJECT
BEGIN APPROACH

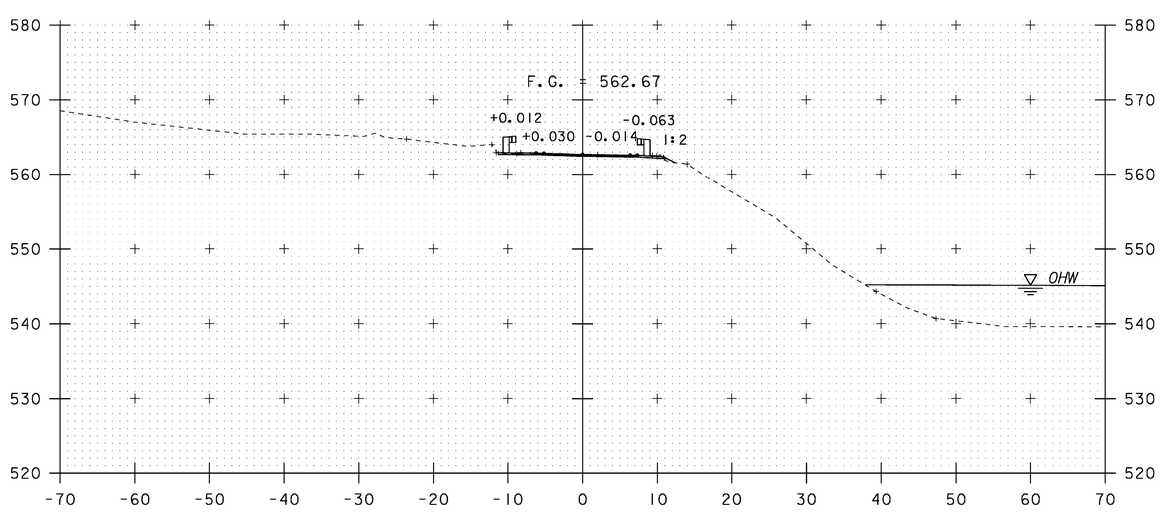
13+62



13+75



13+50

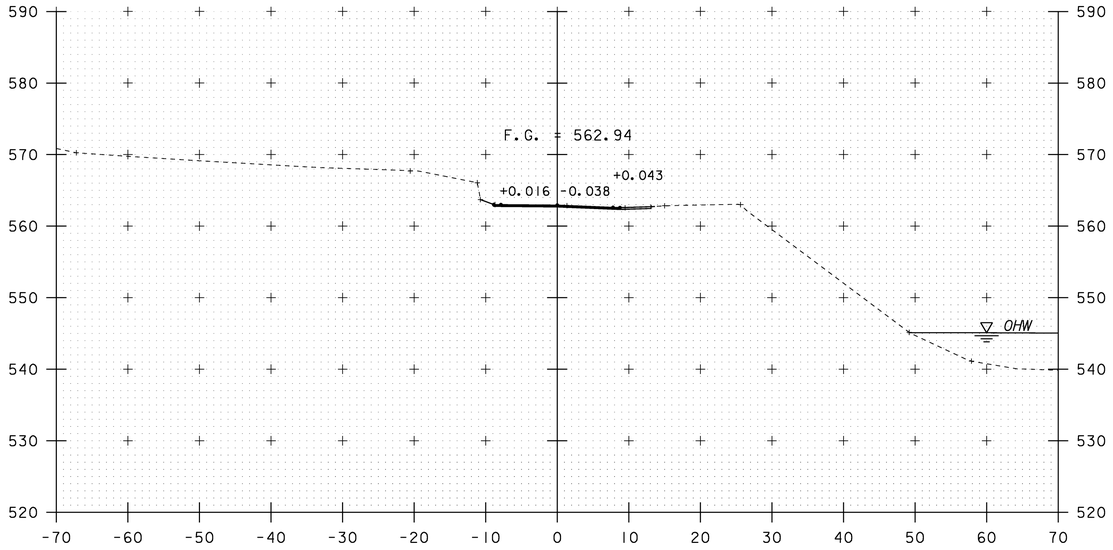


13+73

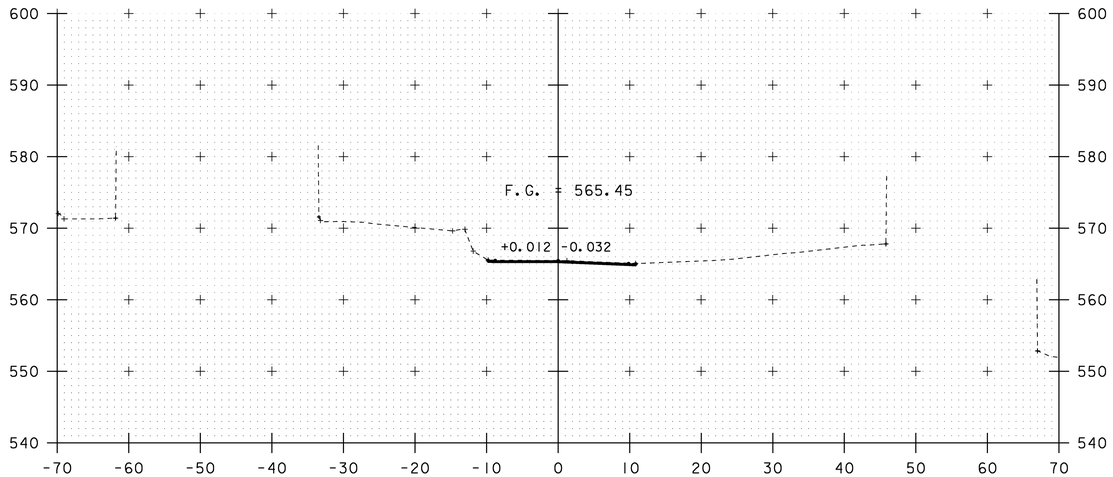
SCALE 1" = 10'-0
10 0 10

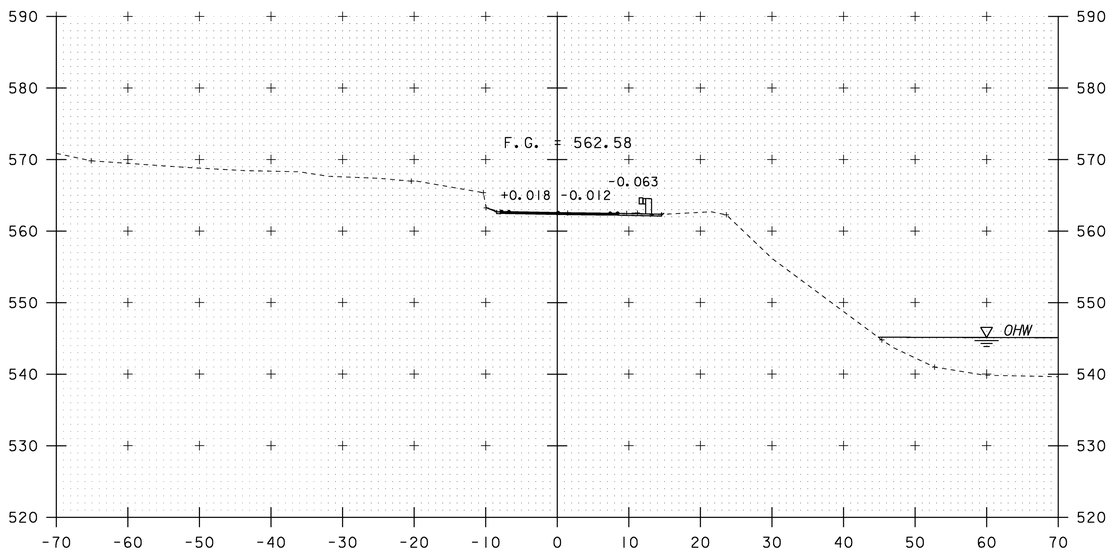
STA. 13+50 TO STA. 13+75

PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230xs.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
MAINLINE CROSS SECTIONS 5	SHEET 62 OF 67



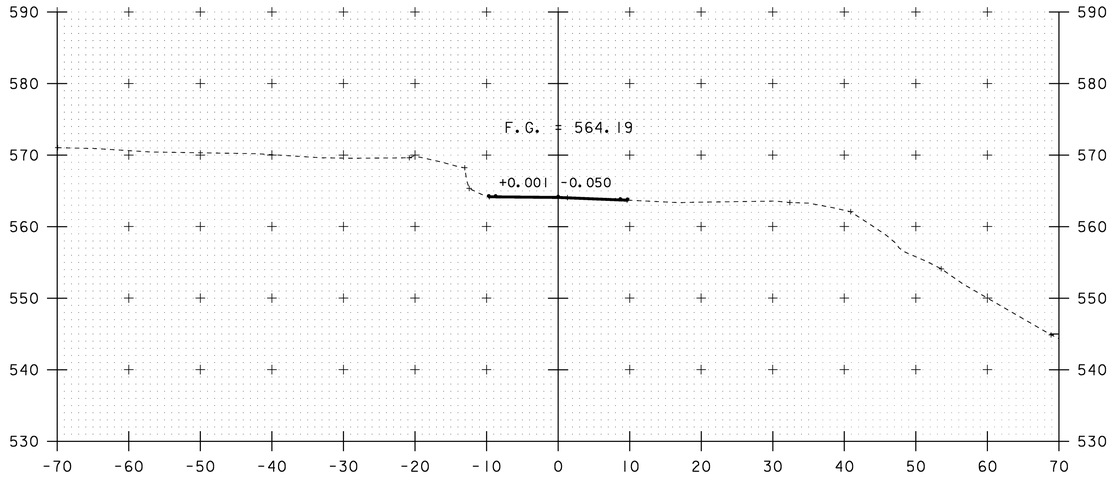
14+00





13+92

14+50

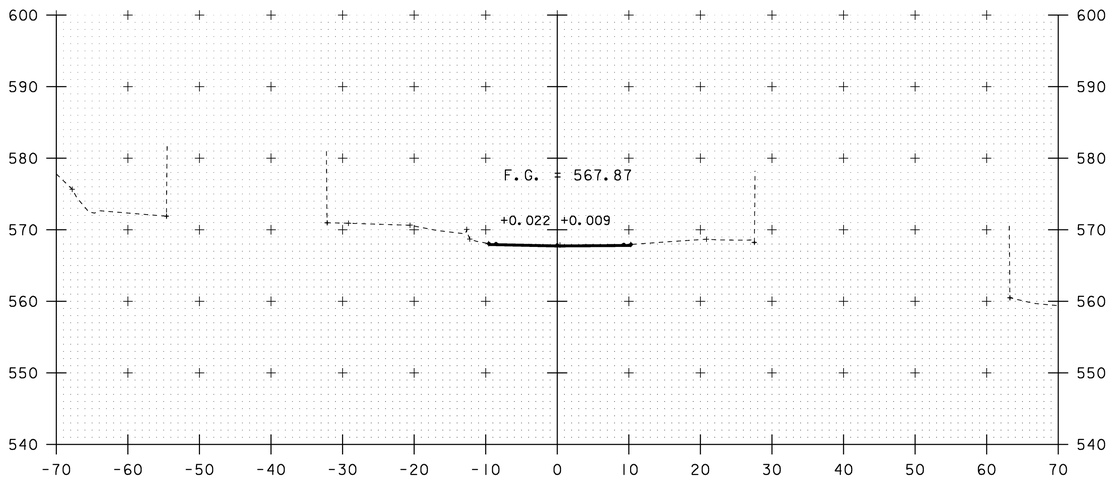


14+25

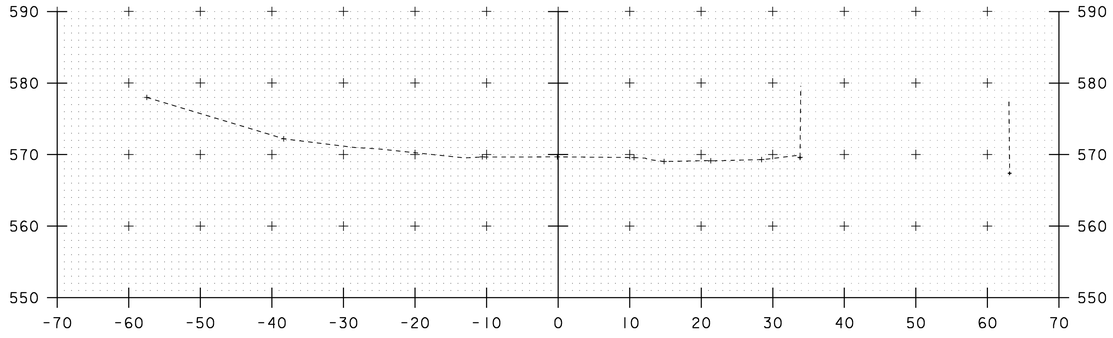
SCALE 1" = 10'-0

STA. 13+92 TO STA. 14+50

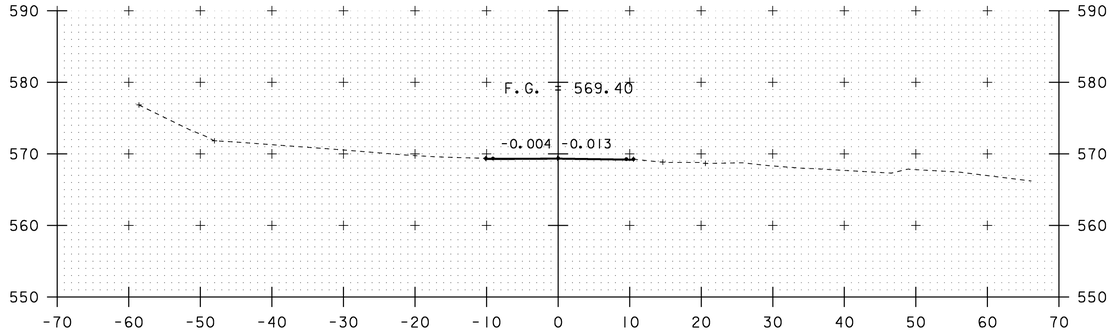
PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230xs.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
MAINLINE CROSS SECTIONS 6	SHEET 63 OF 67

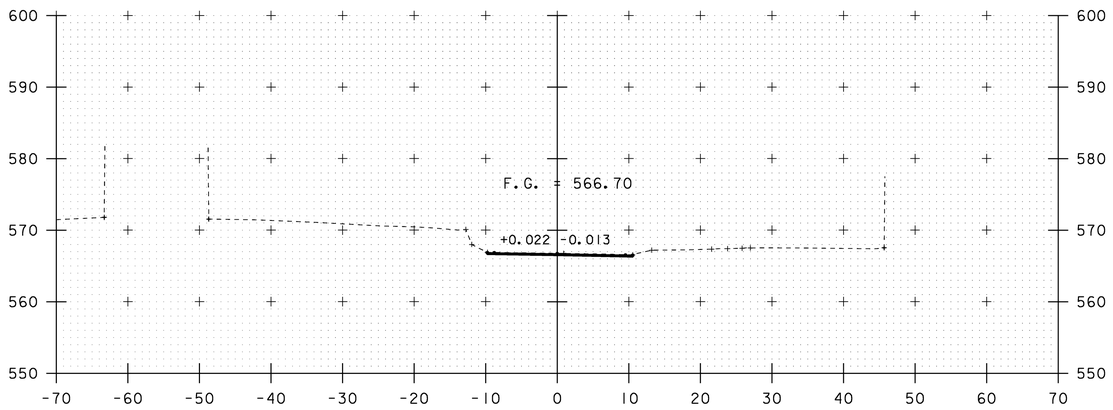


15+00



15+75

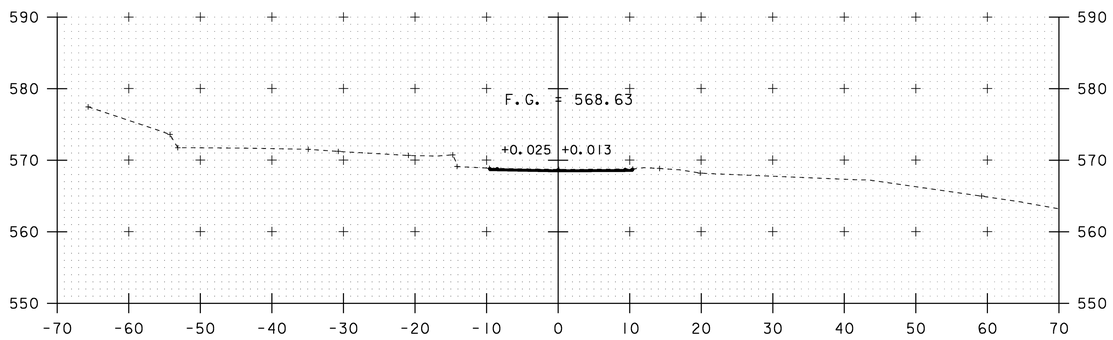




14+75

ML 15+50
END APPROACH
MATCH EXISTING

15+50

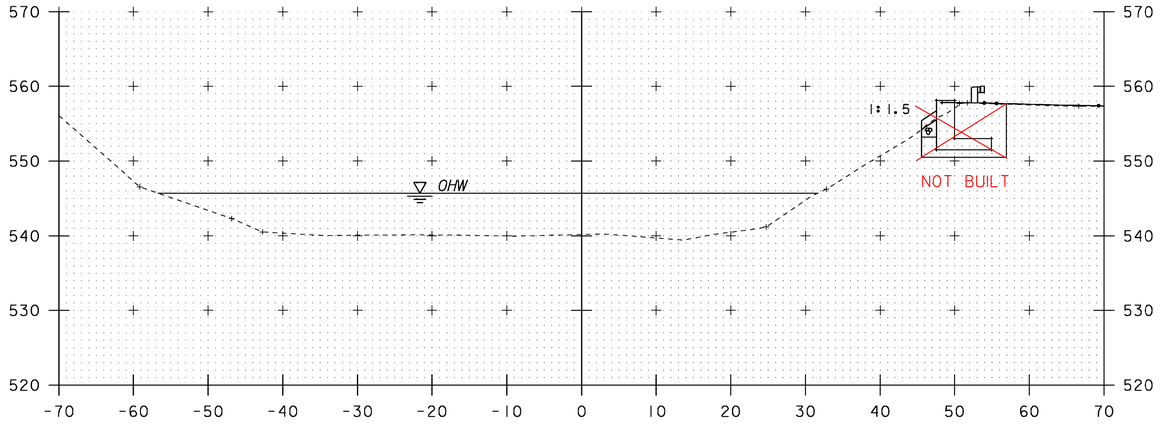


15+25

SCALE 1" = 10'-0
10 0 10

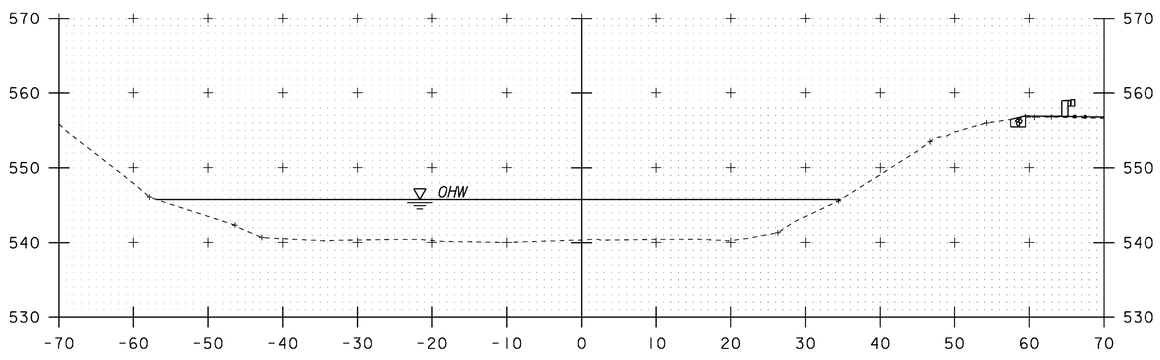
STA. 14+75 TO STA. 15+75

PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230xs.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
MAINLINE CROSS SECTIONS 7	SHEET 64 OF 67



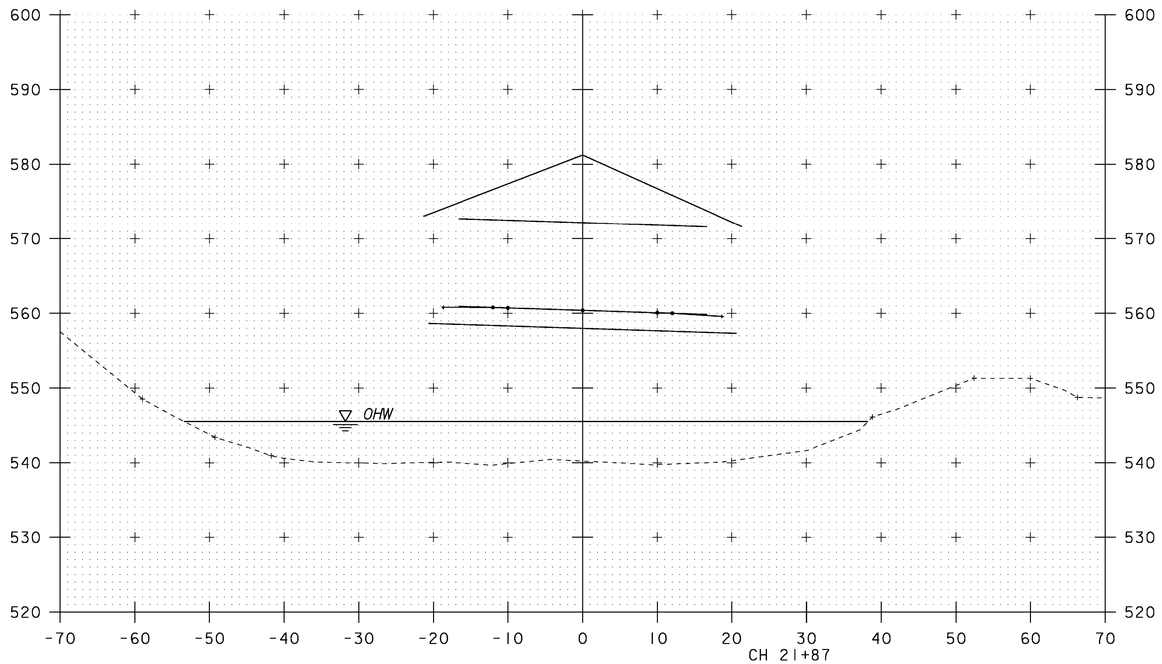
CH 21+60
STOP STONE FILL, TYPE I

21+60



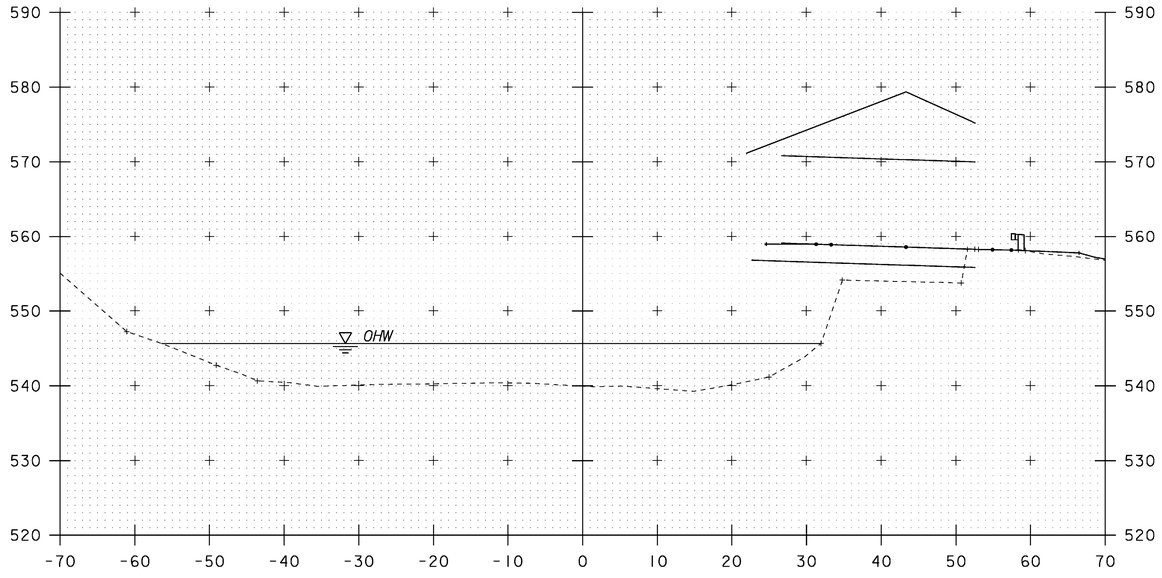
CH 21+50
BEGIN STONE FILL, TYPE I
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN GRUBBING MATERIAL

21+50



CH 21+87
END STONE FILL, TYPE I
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END GRUBBING MATERIAL

22+00



CH 21+77
RESUME STONE FILL, TYPE I

21+75

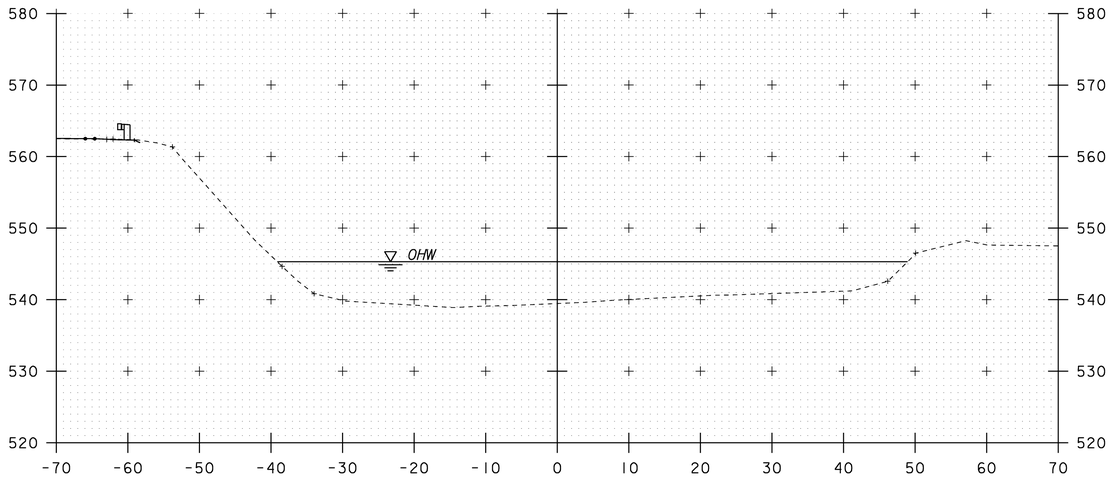
SCALE 1" = 10'-0
10 0 10

STA. 21+50 TO STA. 22+00

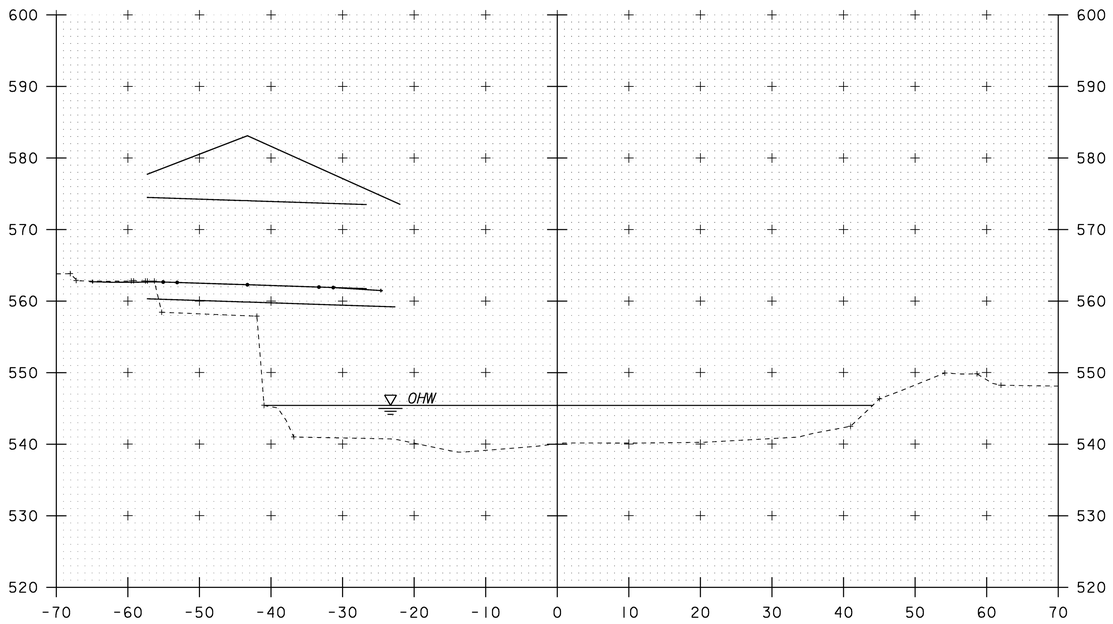
PROJECT NAME: NEWANE
PROJECT NUMBER: BHF 0106 (4)S

FILE NAME: s96j230xs.dgn
PROJECT LEADER: R. WHITCOMB
DESIGNED BY: T. LACKEY
CHANNEL CROSS SECTIONS I

PLOT DATE: 29-APR-2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB
SHEET 65 OF 67



22+50



22+25

SCALE 1" = 10'-0

10 0 10

STA. 22+25 TO STA. 22+50

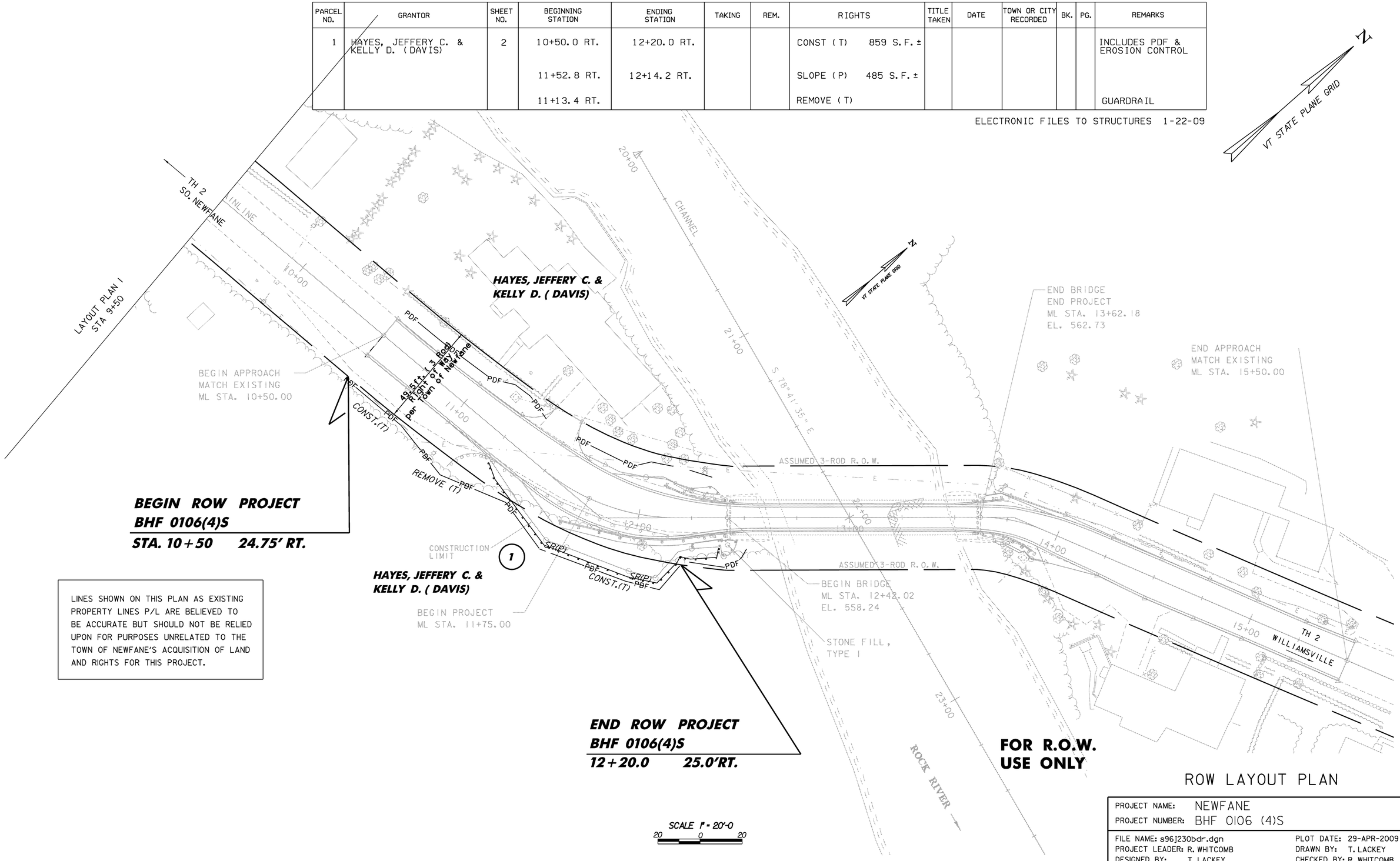
PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230xs.dgn	PLOT DATE: 29-APR-2009
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
CHANNEL CROSS SECTIONS 2	SHEET 66 OF 67

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1	HAYES, JEFFERY C. & KELLY D. (DAVIS)	2	10+50.0 RT.	12+20.0 RT.			CONST (T) 859 S.F.±						INCLUDES PDF & EROSION CONTROL
			11+52.8 RT.	12+14.2 RT.			SLOPE (P) 485 S.F.±						
			11+13.4 RT.				REMOVE (T)						GUARDRAIL

ELECTRONIC FILES TO STRUCTURES 1-22-09

N

VT STATE PLANE GRID

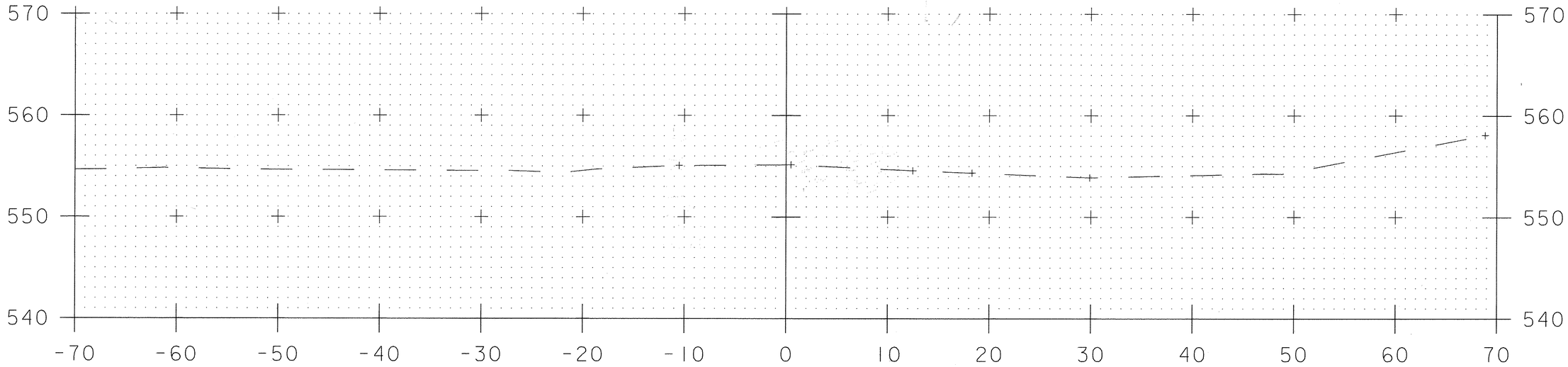


ROW LAYOUT PLAN

PROJECT NAME: NEWFANE
PROJECT NUMBER: BHF 0106 (4)S

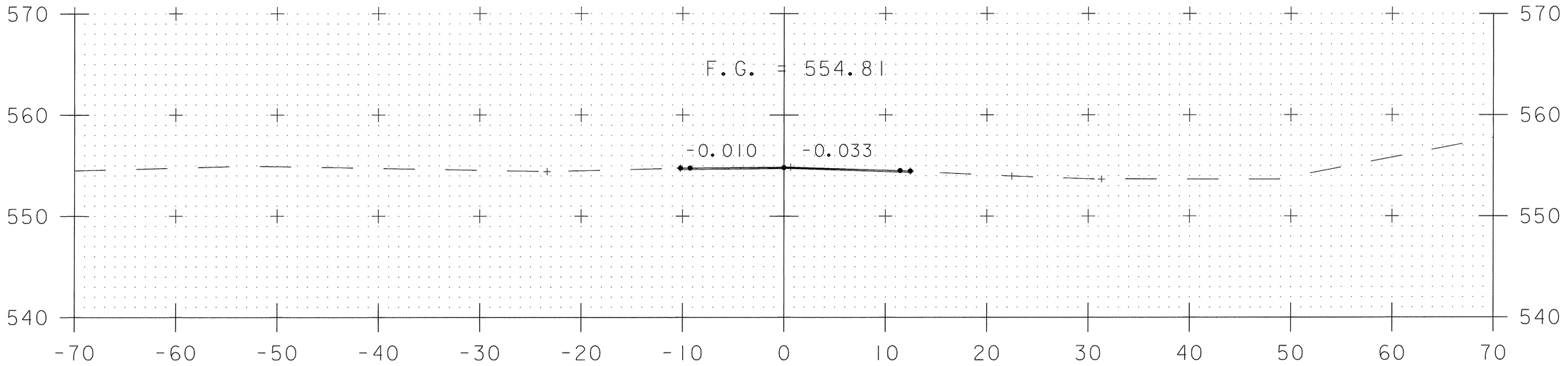
FILE NAME: s96j230bdr.dgn
PROJECT LEADER: R. WHITCOMB
DESIGNED BY: T. LACKEY
R.O.W. SHEET 2 OF 2 SHEETS

PLOT DATE: 29-APR-2009
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB
SHEET 67 OF 67



10+25

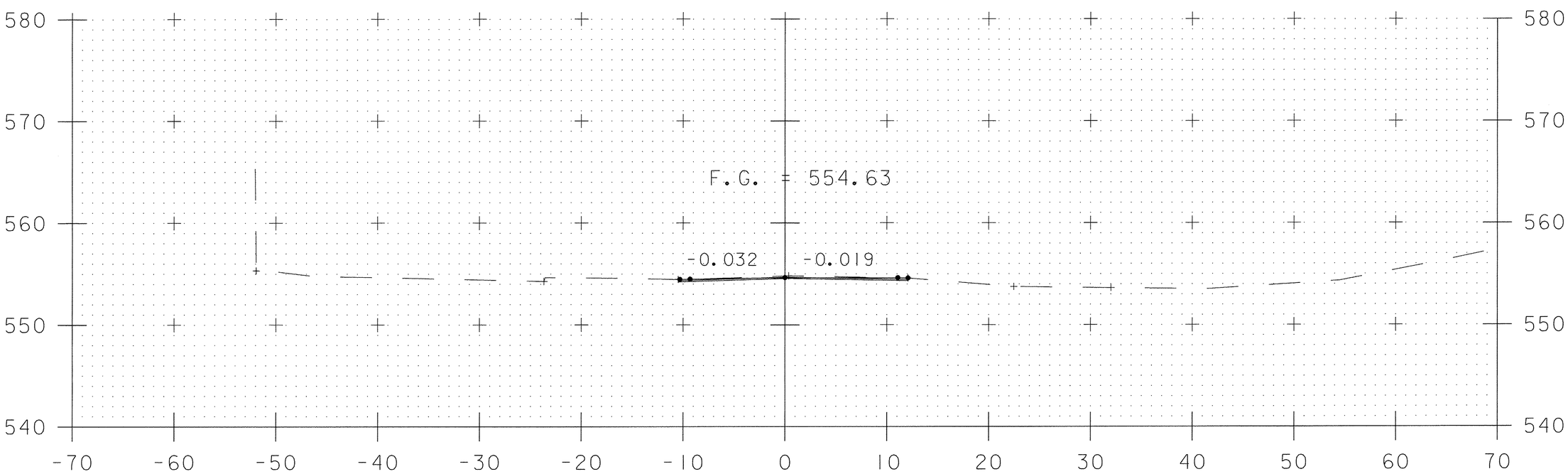
PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 10+25	SHEET 1 OF 14



ML 10+50
BEGIN APPROACH
MATCH EXISTING

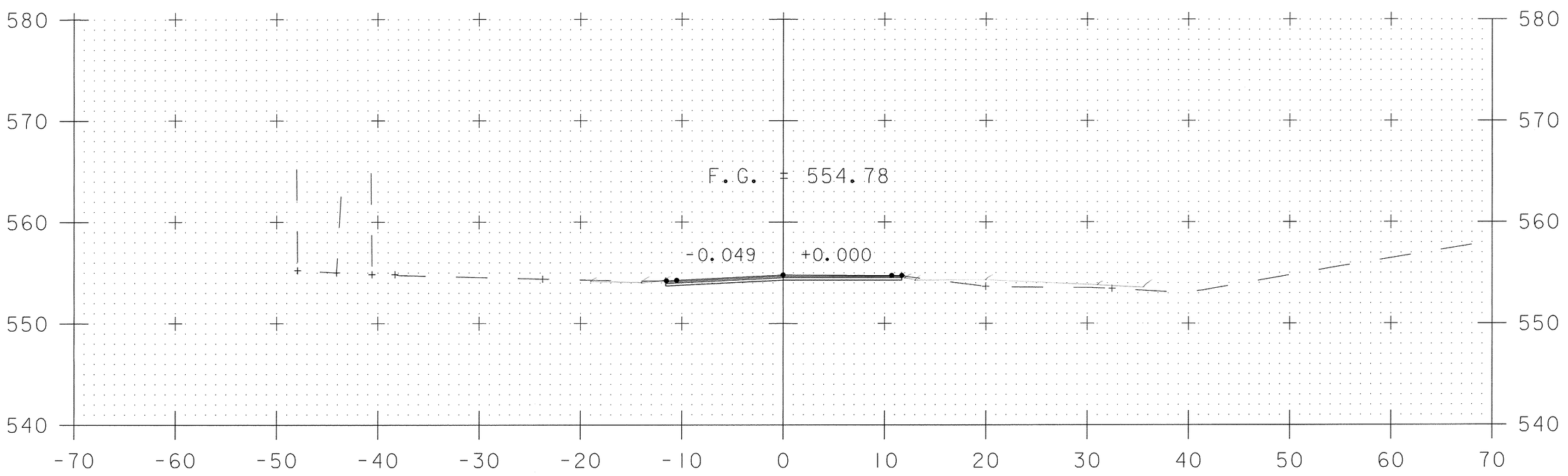
10+50

PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 10+50	SHEET 2 OF 14



10+75

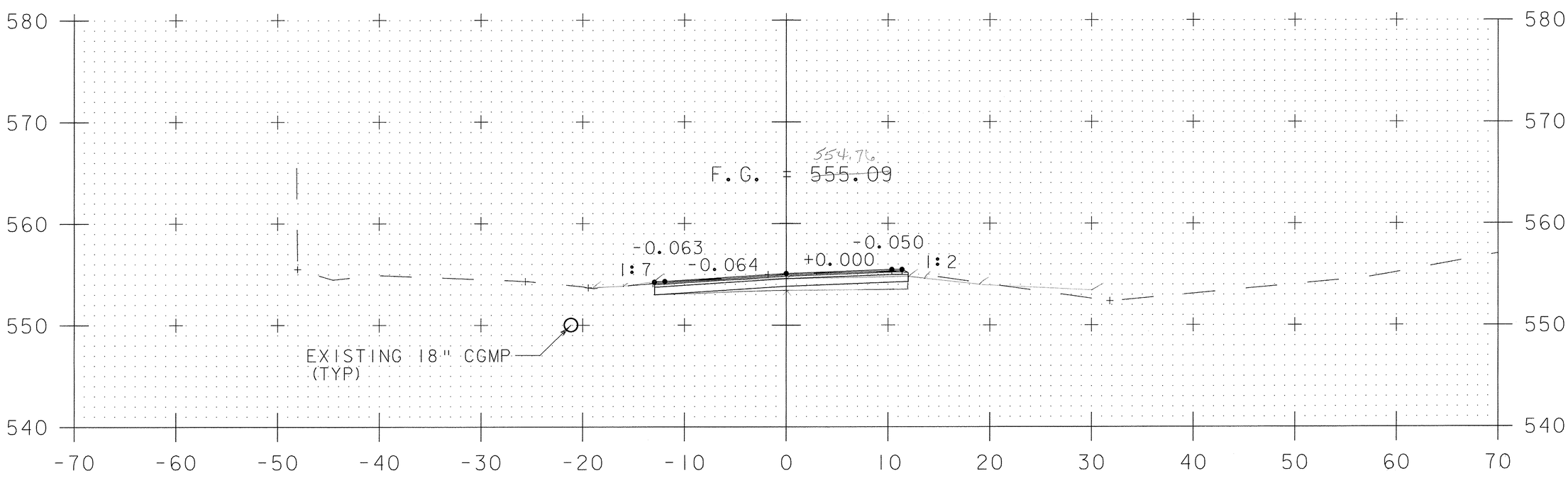
PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 10+75	SHEET 3 OF 14



ML 11+00
BEGIN SUBBASE

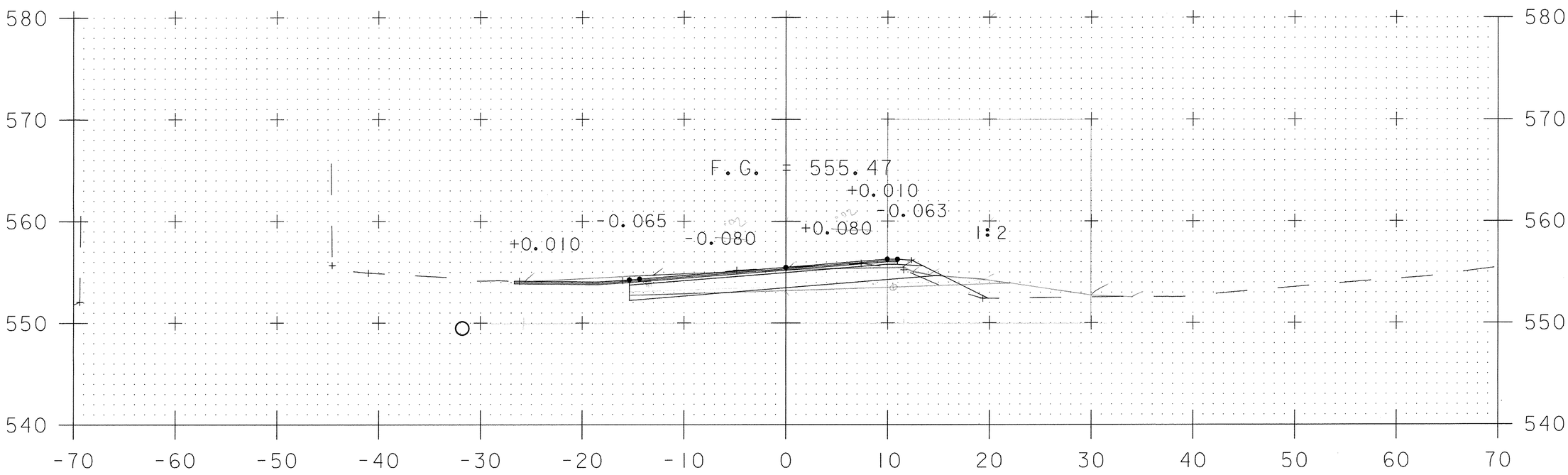
11+00

PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 11+00	SHEET 4 OF 14



11+25

PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 11+25	SHEET 5 OF 14



11+50

ML 11+50
BEGIN SAND

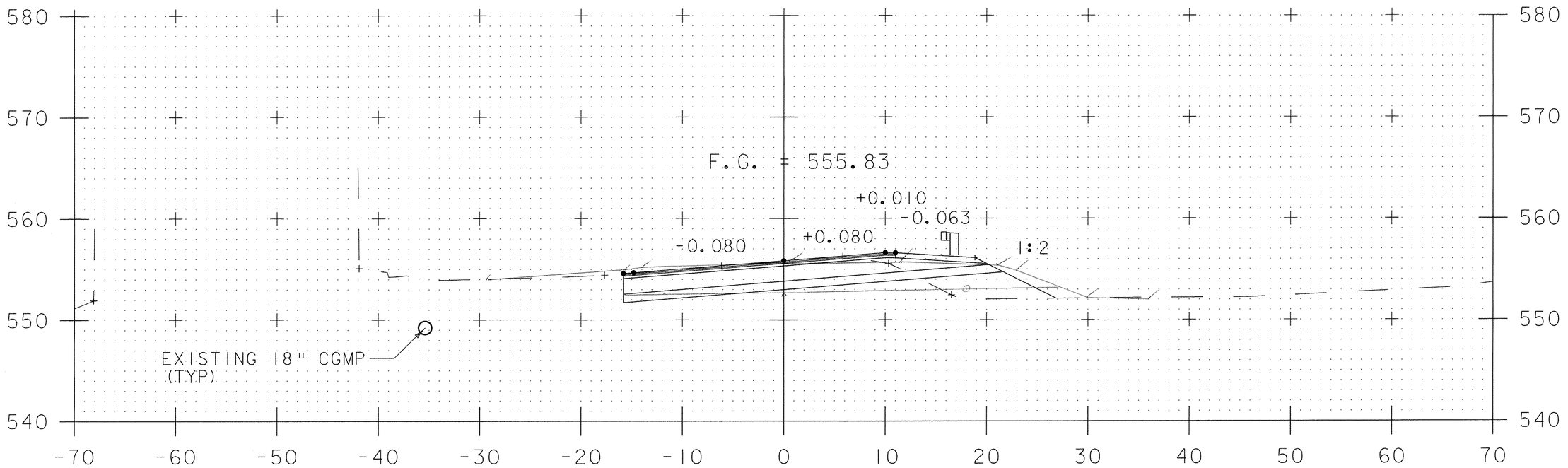
PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 11+50	SHEET 6 OF 14

CB Depths

11+50 18"

11+75 18"+15" = 33

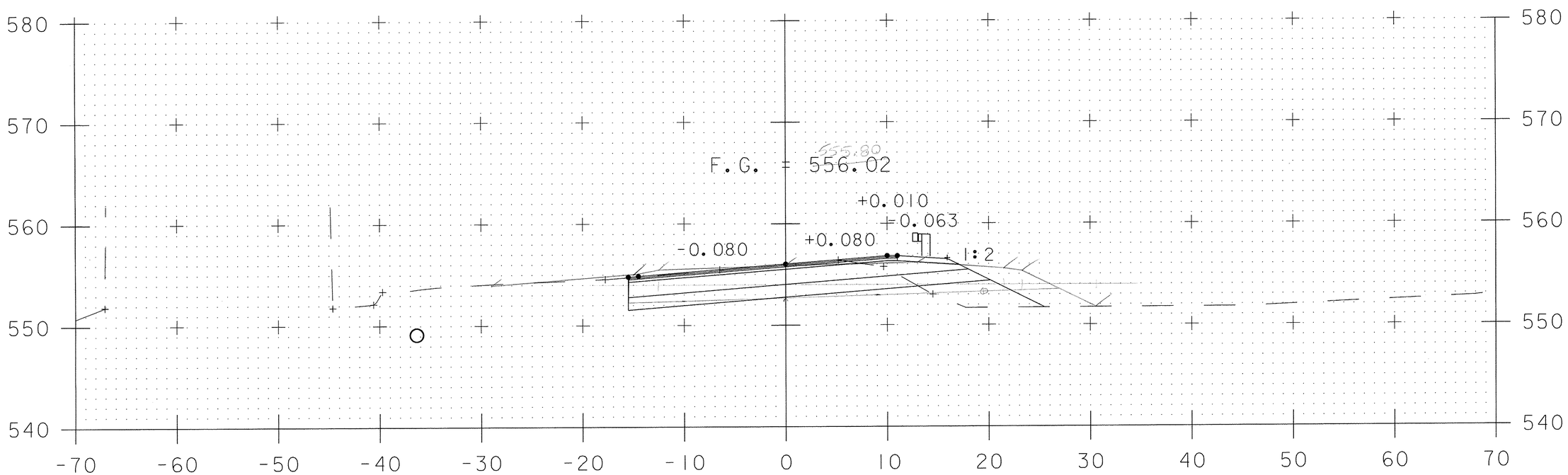
11+67 17/25 (15") + 18" = 29.2"



11+67

5½" PA
28.2° CB
108°

PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 11+67	SHEET 7 OF 14

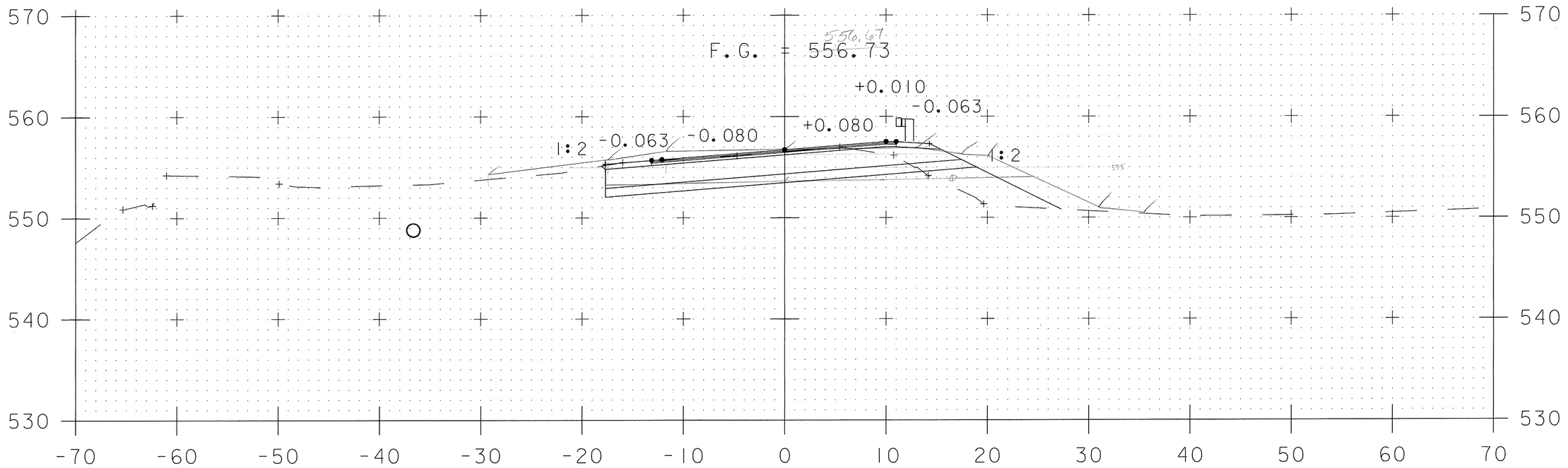


ML 11+75
END APPROACH
BEGIN PROJECT

11+75

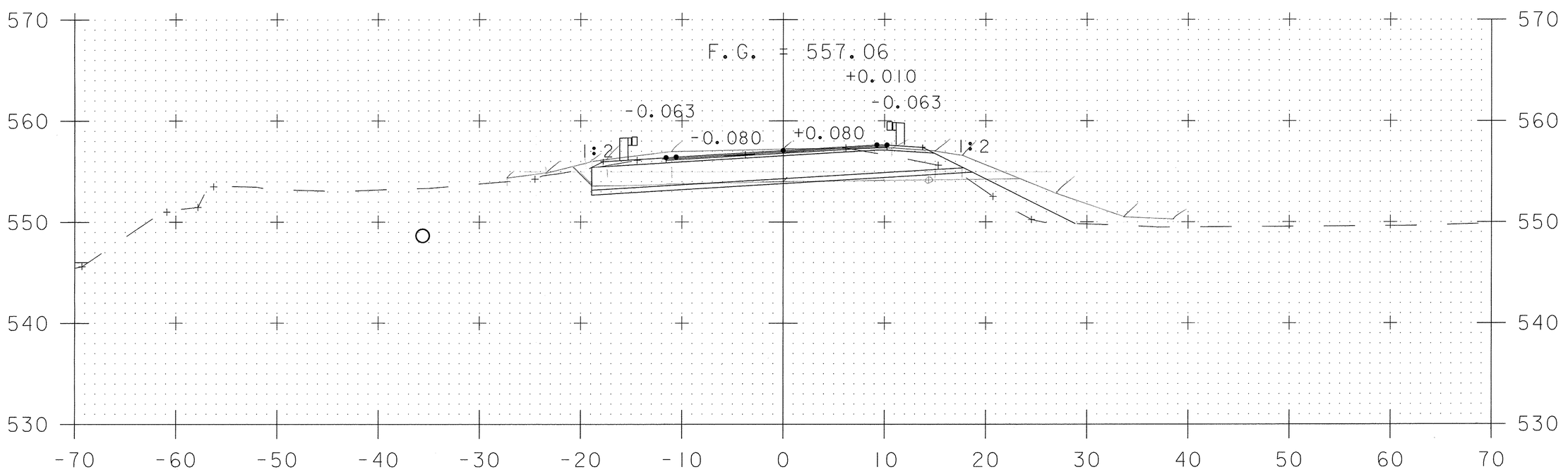
5½" PA 120'
33" SB

PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96J230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 11+75	SHEET 8 OF 14



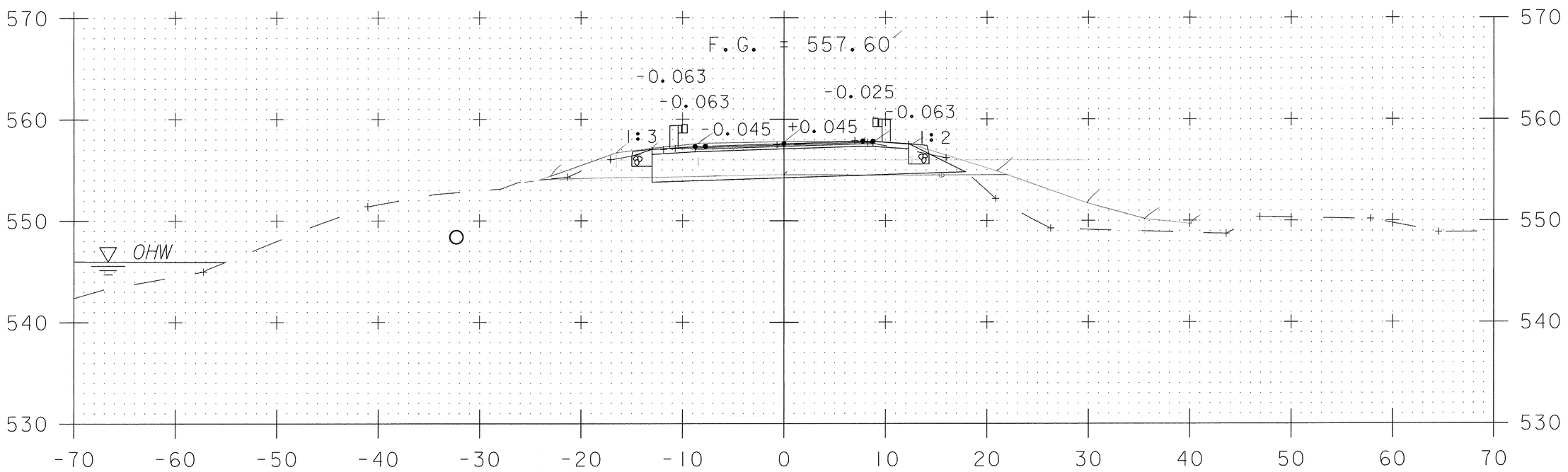
12+00

PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 12+00	SHEET 9 OF 14



12+10

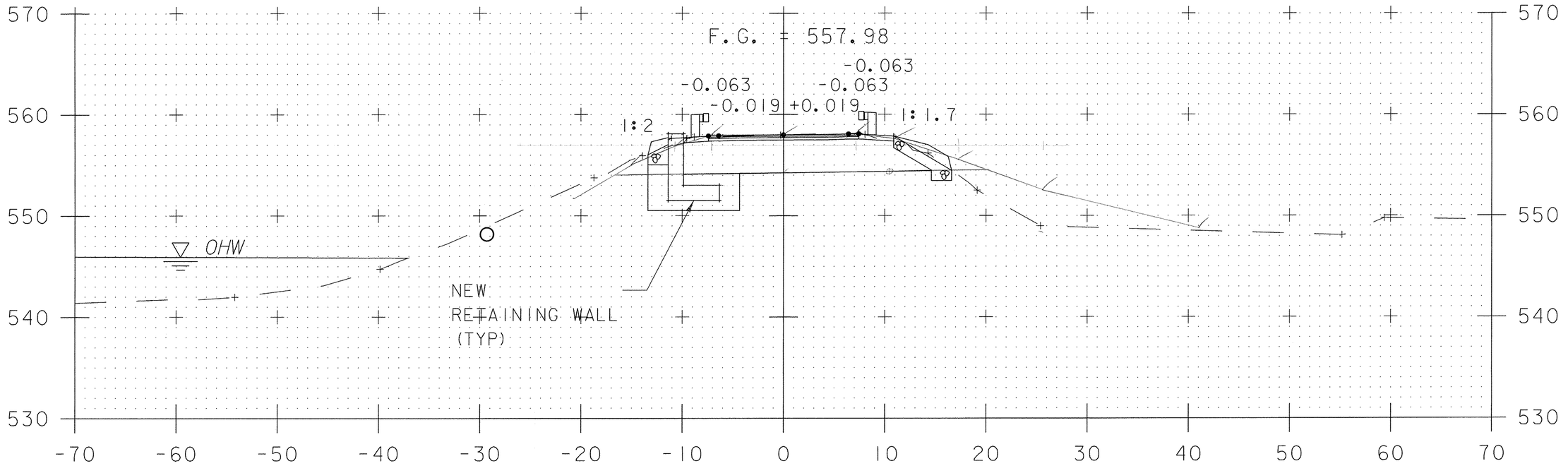
PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 12+10	SHEET 10 OF 14



12+25

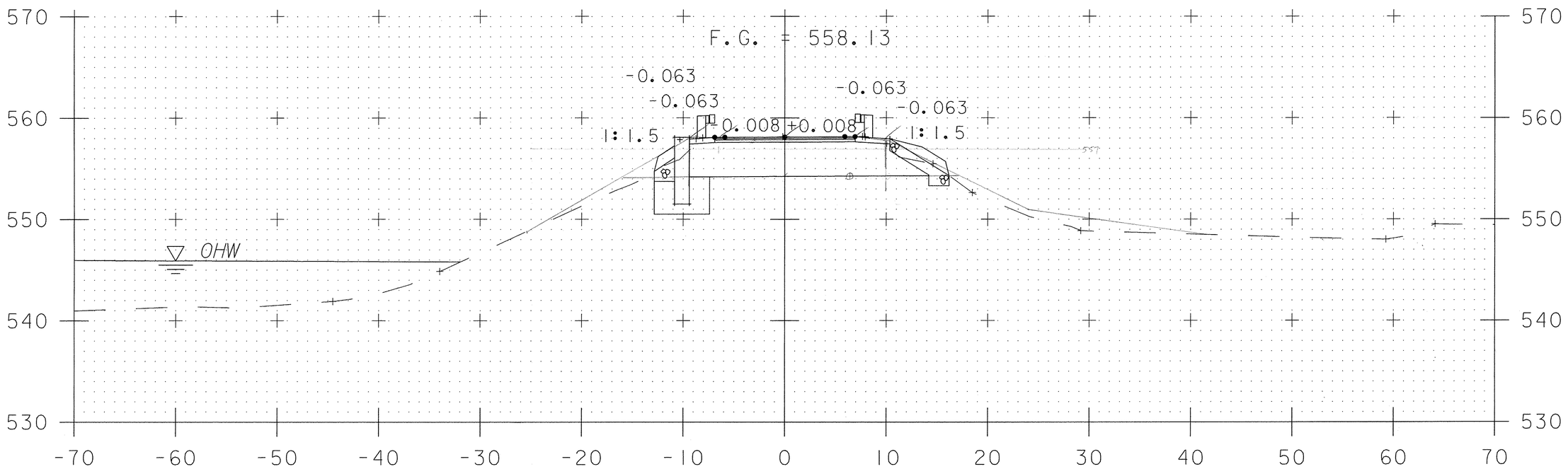
ML 12+22.5
END SAND

PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96j230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 12+25	SHEET 11 OF 14



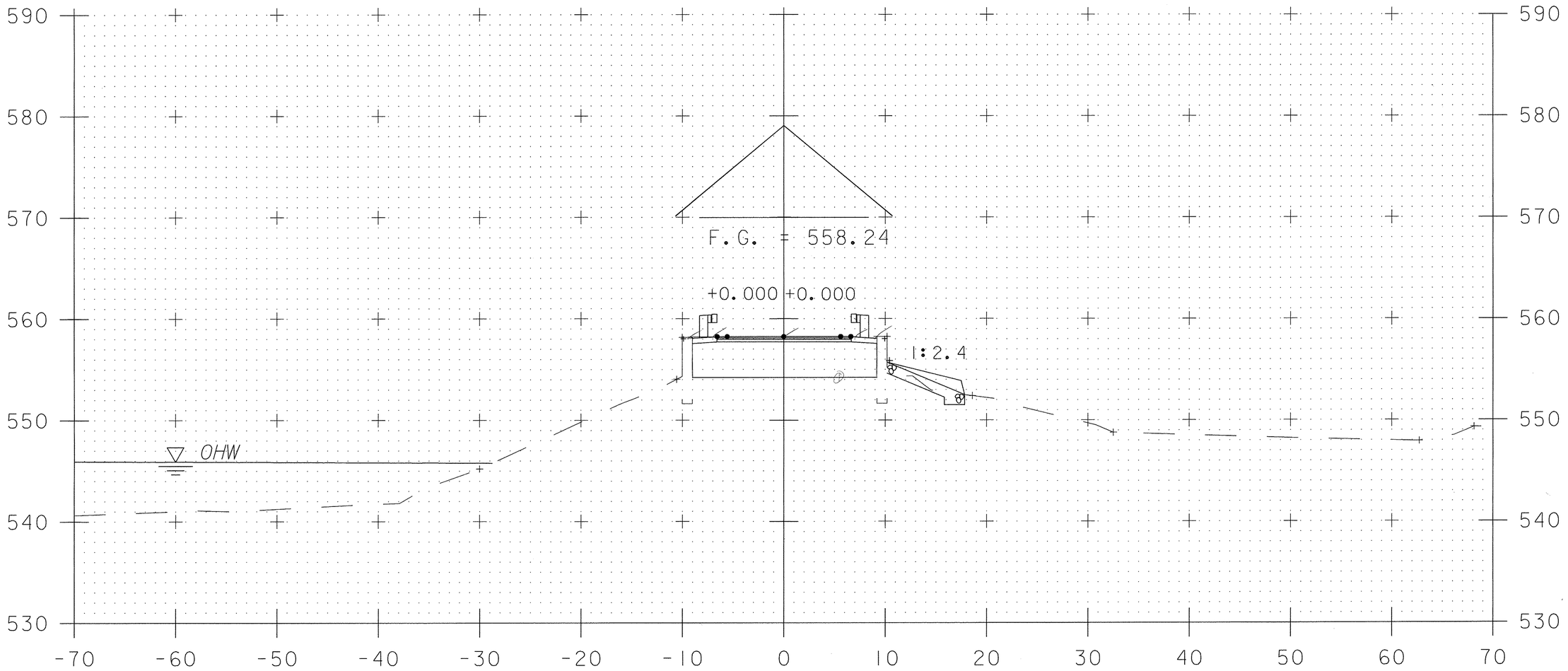
12+35

PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96j230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 12+35	SHEET 12 OF 14



12+39

PROJECT NAME:	NEWANE
PROJECT NUMBER:	BHF 0106 (4)S
FILE NAME: s96J230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 12+39	SHEET 13 OF 14



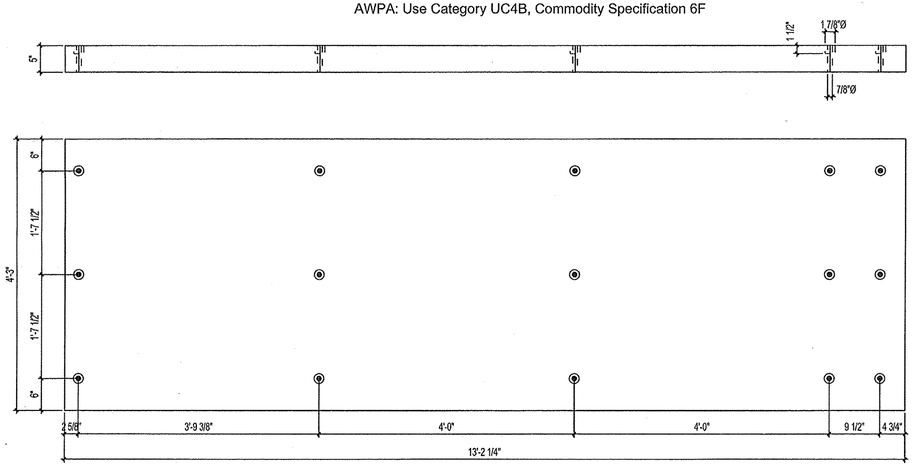
ML 12+42.02
BEGIN BRIDGE

12+42

PROJECT NAME: NEWANE	
PROJECT NUMBER: BHF 0106 (4)S	
FILE NAME: s96J230conXsect.dgn	PLOT DATE: 14-OCT-2010
PROJECT LEADER: C. CARLSON	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: T. LACKEY
MAINLINE CROSS SECTIONS STA. 12+42	SHEET 14 OF 14

FINISH / FINITION: **PENTA TREATED after gluing and fabrication**

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



RECEIVED
CK'D BY LM CK'D BY TRL
AUG 17 2009
DESIGNED APPROVED ✓
BY TRL DATE 08/28/09

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

IMPRIMER / PRINTED: 14.08.2009

TROU/HOLE 13/16"Ø 21mmØ S.I.C./U.N.O.	REV.#	DATE:	REVISION	PAR BY:
---------	---------	---------	----------	---------
---------	---------	---------	----------	---------

Prod:# 1

Deck Panel | **Qté/Qty: 2** | **Echelle/Scale: 1:16**

DATE: 24.07.2009
By/Par: R.D.
Checked/Vérifier: J.M.

Goodfellow inc,
225, Goodfellow Street
DELSON, QUEBEC, J5B 1V5
Tel.: 450-635-6511 Fax : 450-635-8304
www.goodfellowinc.com

Nom du projet/Project name: NEWFANE BRIDGE
Numero du projet/Project number: 2009-176-U / G-44764
Nom du client/Customer name:

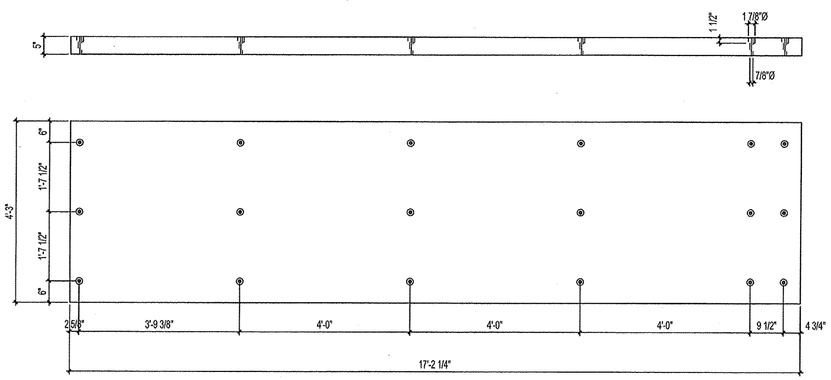
FABRICATION dd/mm/yyyy

Stress Grade: Comb 47
App. Grade: Industrial

X-section: 5"/4'-3"
Longueur/Lenght: 13'-2 1/4"
Materiel/Material: Glulam - Southern Pine

FINISH / FINITION: **PENTA TREATED after gluing and fabrication**

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



RECEIVED
CK'D BY MM CK'D BY THL
AUG 17 2009
RESUBMIT ____ APPROVED. ✓
BY THL DATE 08/18/09

Prod:# 2

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

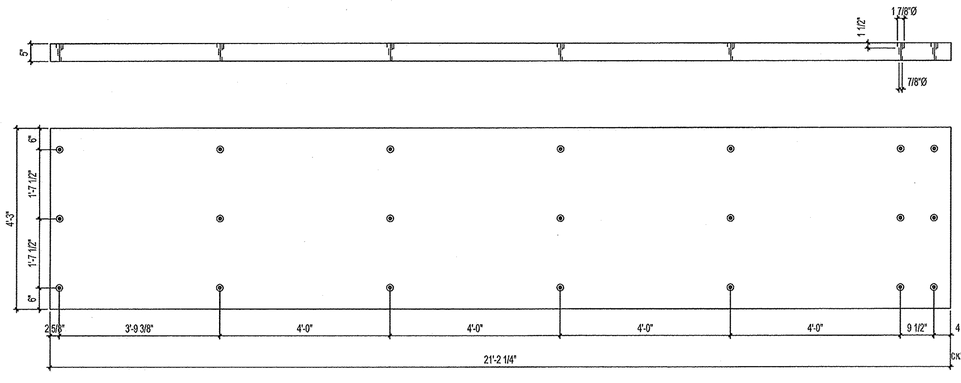
IMPRIMER / PRINTED: 14.08.2009

TROU/HOLE 13/16"Ø 21mmØ S.I.C./U.N.O.	---	---	---	---
	---	---	---	---
	REV.#	DATE:	REVISION	PAR BY:

Deck Panel	**Qté/Qty: 2**	**Echelle/Scale: 1:24**		DATE: 24.07.2009	Goodfellow inc,
Nom du projet/Project name: NEWFANE BRIDGE Numero du projet/Project number: 2009-176-U / G-44764 Nom du client/Customer name:	**FABRICATION** dd/mm/yyyy	Stress Grade: Comb 47 App. Grade: Industrial	X-section: 5"/4'-3" Longueur/Lenght: 17'-2 1/4" Materiel/Material: Glulam - Southern Pine	By: R.D. Checked: J.M.	225, Goodfellow Street DELSON, QUEBEC, J5B 1V5 Tel.: 450-635-6511 Fax : 450-635-8304 www.goodfellowinc.com

FINISH / FINITION: **PENTA TREATED after gluing and fabrication**

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



RECEIVED
AUG 17 2009
BY TML DATE

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

IMPRIMER / PRINTED: 14.08.2009

TROU/HOLE 13/16"Ø 21mmØ S.I.C./U.N.O.				
REV.#	DATE:	REVISION	PAR BY:

Prod:# 3

Deck Panel

Qté/Qty: 2

Echelle/Scale: 1:24

DATE: 24.07.2009

Goodfellow inc,

Nom du projet/Project name: NEWFANE BRIDGE
Numero du projet/Project number: 2009-176-U / G-44764
Nom du client/Customer name:

FABRICATION dd/mm/yyyy

Stress Grade: Comb 47
App. Grade: Industrial

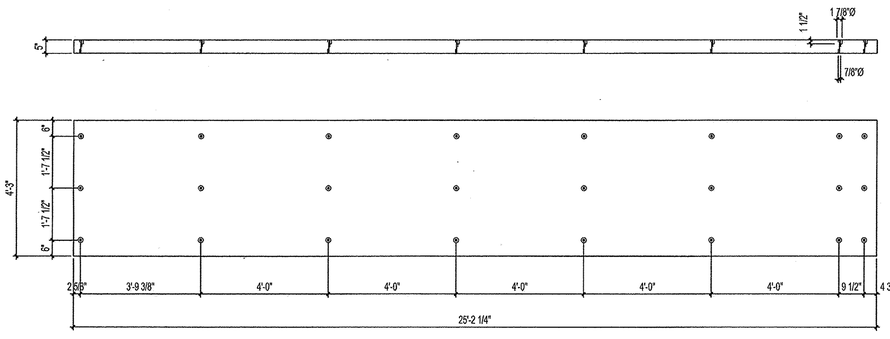
X-section: 5"/4'-3"
Longueur/Lenght: 21'-2 1/4"
Materiel/Material: Glulam - Southern Pine

By: R.D.
Checked/Vérifié: J.M.

225, Goodfellow Street
DELSON, QUEBEC, J5B 1V5
Tel.: 450-635-6511 Fax : 450-635-8304
www.goodfellowinc.com

FINISH / FINITION: **PENTA TREATED after gluing and fabrication**

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



RECEIVED
CK'D BY ____ OK'D BY ____
AUG 17 2009
RESUBMIT ____ APPROVED ____
BY ____ DATE ____

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

IMPRIMER / PRINTED: 14.08.2009

TROU/HOLE				
13/16"Ø 21mmØ				
S.I.C./U.N.O.	REV.#	DATE:	REVISION	PAR BY:

Prod:# 4

Deck Panel | **Qté/Qty: 2** | **Echelle/Scale: 1:32**

DATE: 24.07.2009
By/Par: R.D.
Checked/Vérifier: J.M.

Goodfellow inc,
225, Goodfellow Street
DELSON, QUEBEC, J5B 1V5
Tel.: 450-635-6511 Fax : 450-635-8304
www.goodfellowinc.com

Nom du projet/Project name: NEWFANE BRIDGE
Numero du projet/Project number: 2009-176-U / G-44784
Nom du client/Customer name:

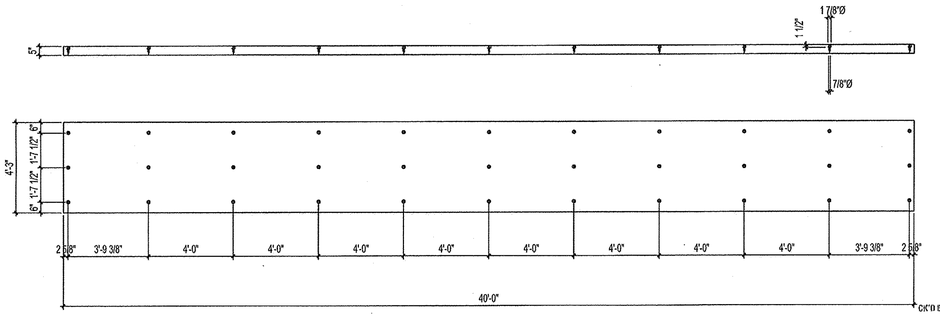
FABRICATION dd/mm/yyyy

Stress Grade: Comb 47
App. Grade: Industrial

X-section: 5"/4'-3"
Longueur/Lenght: 25'-2 1/4"
Materiel/Material: Gluiam - Southern Pine

FINISH / FINITION: **PENTA TREATED after gluing and fabrication**

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



RECEIVED
CKD BY GWH CKD BY THL
AUG 17 2009
RESUBMIT ___ APPROVED ✓
BY THL DATE 08/20/09

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

IMPRIMER / PRINTED: 14.08.2009

TROU/HOLE 13/16"Ø 21mmØ S.I.C./U.N.O.	--------	--------	----------	--------
	--------	--------	----------	--------
	REV.#	DATE:	REVISION	PAR BY:

Prod:# 5

Deck Panel | **Qté/Qty: 8** | **Echelle/Scale: 1:48**

DATE: 24.07.2009

Goodfellow inc,

Nom du projet/Project name: NEWFANE BRIDGE
Numero du projet/Project number: 2009-176-U / G-44764
Nom du client/Customer name:

FABRICATION dd/mm/yyyy

Stress Grade: Comb 47
App. Grade: Industrial

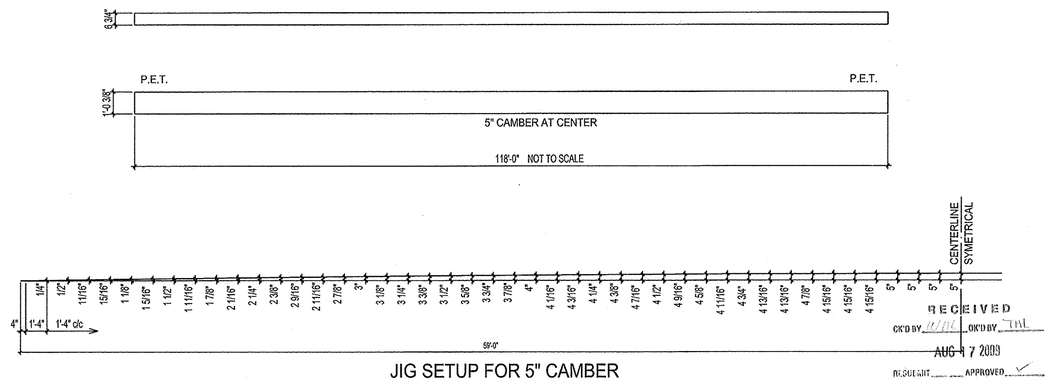
X-section: 5"/4'-3"
Longueur/Lenght: 40'-0"
Materiel/Material: Glulam - Southern Pine

By: R.D.
Checked: J.M.
Date:

225, Goodfellow Street
DELSON, QUEBEC, J5B 1V5
Tel.: 450-635-6511 Fax : 450-635-8304
www.goodfellowinc.com

FINISH / FINITION: PENTA TREATED after gluing and fabrication

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



JIG SETUP FOR 5" CAMBER
HALF SPAN SHOWN - SYM @ CL

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

RECEIVED
CK'D BY ____ OK'D BY TML
AUG 17 2009
RESUBMIT ____ APPROVED ✓
BY TML DATE 08/20/09

IMPRIMER / PRINTED: 14.08.2009

TROU/HOLE 13/16"Ø 21mmØ S.I.C./U.N.O.	REV.#	DATE:	REVISION	PAR BY:
--------	--------		----------	--------
--------	--------		----------	--------

Prod:# 6

Lower Bottom Chord | **Qté/Qty: 4** | **Echelle/Scale: 1:48**

DATE: 24.07.2009
By/Par: R.D.
Checked/Distec: J.M.

Goodfellow inc,
225, Goodfellow Street
DELSON, QUEBEC, J5B 1V5
Tel.: 450-635-6511 Fax : 450-635-8304
www.goodfellowinc.com

Nom du projet/Project name: NEWFANE BRIDGE
Numero du projet/Project number: 2009-176-U / G-44764
Nom du client/Customer name:

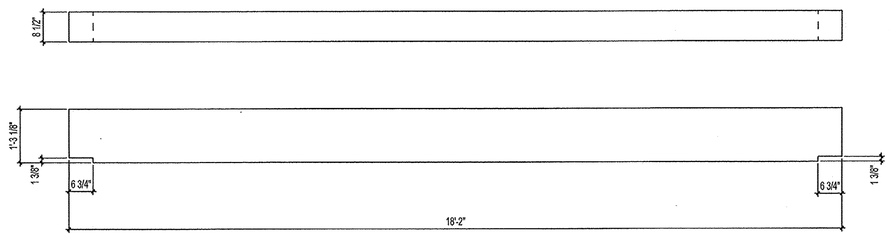
FABRICATION dd/mm/yyyy

Stress Grade: 16F-V2 | **App. Grade: Industrial**

X-section: 6 3/4"/1'-0 3/8"
Longueur/Lenght: 118'-0"
Materiel/Material: Glulam - Southern Pine

FINISH / FINITION: **PENTA TREATED after gluing and fabrication**

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



RECEIVED
CK'D BY ____ OK'D BY ____
AUG 17 2009
REJECTED ____ APPROVED ✓
BY ____ DATE 08/20/09

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

IMPRIMER / PRINTED: 14.08.2009

TROU/HOLE 13/16"Ø 21mmØ S.I.C./U.N.O.				
	---	---	---	---
	---	---	---	---
REV.#	DATE:	REVISION	PAR BY:

Prod:# 7

End Floor Beam

Qté/Qty: 2

Echelle/Scale: 1:24

DATE: 24.07.2009

Goodfellow inc,

Nom du projet/Project name: NEWFANE BRIDGE
Numero du projet/Project number: 2009-176-U / G-44764
Nom du client/Customer name:

FABRICATION dd/mm/yyyy

Stress Grade: 26F-V2
App. Grade: Industrial

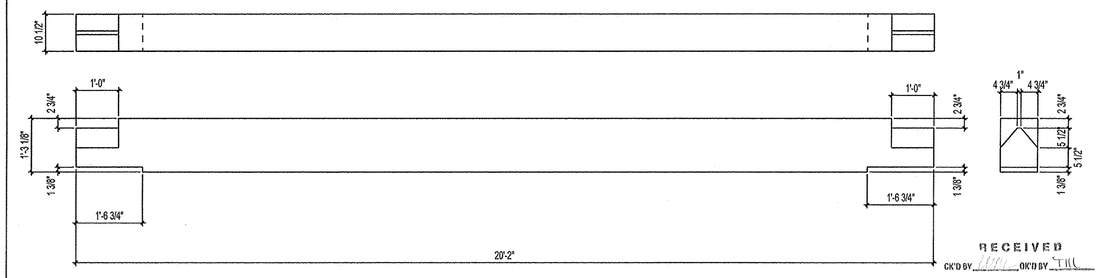
X-section: 8 1/2"/1'-3 1/8"
Longueur/Lenght: 18'-2"
Materiel/Material: Glulam - Southern Pine

By: R.D.
Checked: J.M.

225, Goodfellow Street
DELSON, QUEBEC, J5B 1V5
Tel.: 450-635-6511 Fax : 450-635-8304
www.goodfellowinc.com

FINISH / FINITION: **PENTA TREATED after gluing and fabrication**

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



RECEIVED
CK'D BY ____ OK'D BY ____
AUG 17 2009
REQUEST ____ APPROVED ✓
BY ____ DATE 08/20/09

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

IMPRIMER / PRINTED: 14.08.2009

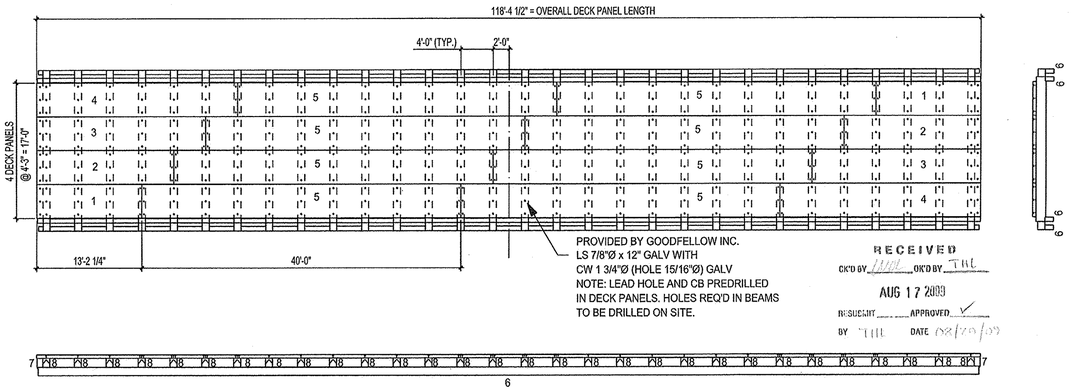
Prod:# 8

TROU/HOLE 13/16"Ø 21mmØ S.I.C./U.N.O.				
REV.#	DATE:	REVISION		PAR BY:

Floor Beam	**Qté/Qty: 30**	**Echelle/Scale: 1:24**		DATE: 24.07.2009	Goodfellow inc,
Nom du projet/Project name: NEWFANE BRIDGE Numero du projet/Project number: 2009-176-U / G-44764 Nom du client/Customer name:	**FABRICATION** dd/mm/yyyy	**Stress Grade: 26F-V2** **App. Grade: Industrial**	**X-section: 10 1/2"/1'-3 1/8"** **Longueur/Lenght: 20'-2"** **Materiel/Material: Glulam - Southern Pine**	By: Par: R.D. Checked: Vérifié: J.M.	225, Goodfellow Street DELSON, QUEBEC, J5B 1V5 Tel.: 450-635-6511 Fax : 450-635-8304 www.goodfellowinc.com

FINISH / FINITION: PENTA TREATED after gluing and fabrication

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



RECEIVED
CK'D BY ____ OK'D BY TGL
AUG 17 2009
RESUBMIT ____ APPROVED ✓
BY TGL DATE 08/17/09

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

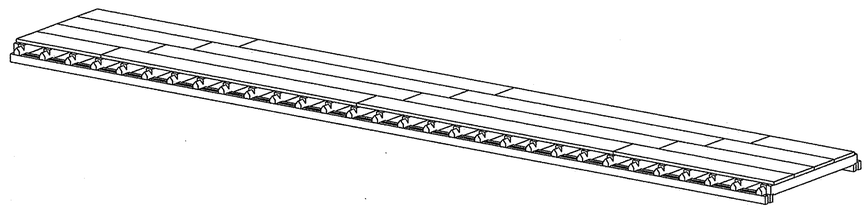
IMPRIMER / PRINTED: 14.08.2009

TROU/HOLE 13/16"Ø 21mmØ S.I.C./U.N.O.	REV.#	DATE:	REVISION	PAR BY:
----------	----------	----------	----------	----------
----------	----------	----------	----------	----------

Framing Plan	**Qté/Qty: 1 BRIDGE**	**Echelle/Scale: 1:128**			DATE: 24.07.2009	Goodfellow inc,
Nom du projet/Project name: NEWFANE BRIDGE Numero du projet/Project number: 2009-176-U / G-44764 Nom du client/Customer name:	**FABRICATION** dd/mm/yyyy		**Stress Grade:** see shop dwgs **App. Grade:** Industrial	**X-section:** see shop dwgs **Longueur/Lenght:** see shop dwgs **Materiel/Material:** Glulam - Southern Pine	By: R.D. Checked: J.M.	225, Goodfellow Street DELSON, QUEBEC, J5B 1V5 Tel.: 450-635-6511 Fax : 450-635-8304 www.goodfellowinc.com

FINISH / FINITION: **PENTA TREATED after gluing and fabrication**

Pentachlorophenol, Heavy Oil Hydrocarbon Solvent, Type A
AWPA: Use Category UC4B, Commodity Specification 6F



RECEIVED
CK'D BY LLMC CK'D BY THL
AUG 17 2009
RESUBMIT ___ APPROVED ✓
BY THL DATE 08/20/09

ISSUED FOR RE-APPROVAL - AUG 14, 2009
ISSUED FOR APPROVAL - JULY 24, 2009

IMPRIMER / PRINTED: 14.08.2009

TROU/HOLE			
13/16"Ø 21mmØ			
S.I.C./U.N.O.	REV.#	DATE:	REVISION	PAR BY:

Isometric	**Qté/Qty: 1 BRIDGE**	**Echelle/Scale: 1:128**		DATE: 24.07.2009	Goodfellow inc,
Nom du projet/Project name: NEWFANE BRIDGE Numero du projet/Project number: 2009-176-U / G-44704 Nom du client/Customer name:	**FABRICATION** dd/mm/yyyy	Stress Grade: see shop dwgs App. Grade: Industrial	X-section: see shop dwgs Longueur/Lenght: see shop dwgs Materiel/Material: Glulam - Southern Pine	By/Par: R.D. Checked/Vérifié: J.M.	225, Goodfellow Street DELSON, QUEBEC, J5B 1V5 Tel.: 450-635-6511 Fax : 450-635-8304 www.goodfellowinc.com