

INDEX OF SHEETS

1. TITLE SHEET
2. BRIDGE QUANTITY SHEET
3. GENERAL NOTES
4. BORING INFORMATION SHEET
5. SITE PLAN
6. RIGHT OF WAY PLAN
7. LAYOUT PLAN
8. GUARDRAIL DETAIL SHEET
9. ROADWAY PROFILE
10. TRUSS DETAIL I
11. TRUSS DETAIL II
12. TRUSS BEARINGS
13. BRIDGE BARING
14. ABUTMENT 1
15. ABUTMENT 2
16. REINFORCING STEEL SCHEDULE
17. ROADWAY CROSS SECTIONS
18. ROADWAY CROSS SECTIONS
19. CHANNEL CROSS SECTIONS
20. CHANNEL CROSS SECTIONS
21. CHANNEL CROSS SECTIONS

ROADWAY STANDARDS

E-100	CONSTRUCTION APPROACH SIGNS	10-21-82 R
E-101	CONSTRUCTION SIGN DETAILS	10-21-82 R
E-107	ELEVATION, BARRICADES AND DETOURS FOR CONSTRUCTION	04-29-88 R
E-107A	BREAKAWAY BARRICADE DETAILS	09-10-87
E-121	STANDARD SIGN PLACEMENT CONVENTIONAL ROAD	01-23-89
G-1	HEAVY DUTY STEEL BEAM GUARD RAIL	10-31-85 R
G-10	HEAVY DUTY STEEL BEAM GUARD RAIL	10-31-85 R
T-1	TEMPORARY EROSION CONTROL DETAILS	12-07-76 R
T-2	TEMPORARY EROSION CONTROL DETAILS	07-5-72
SB-R6-B2	BRIDGE RAILING	11-13-91 R
SB-R6A-B2	BRIDGE RAILING, GALVANIZED BOX BEAM	09-18-89 R
SB-R6B-B2	QUADRAIL APPROACH, TYPE I & II	03-30-88 R

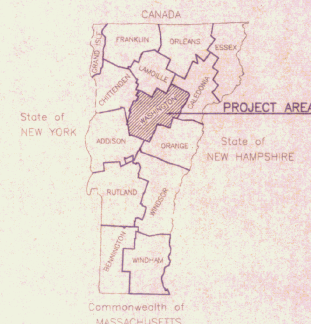
TOWN OF BERLIN, VERMONT COUNTY OF WASHINGTON

REHABILITATION OF THE LOVER'S LANE BRIDGE ROUTE: TH 61, BRIDGE NO. 27 (LOCAL - CLASS 2)

PROJECT LOCATION: BEGINNING AT A POINT ON TH 61, APPROXIMATELY 95 FEET WESTERLY OF JUNCTION WITH VERMONT RT. 12 AND EXTENDING WESTERLY ALONG TH 61 FOR A DISTANCE OF 425 FEET,

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES REPAIRS AND MODIFICATIONS TO EXISTING TRUSS SYSTEM, INSTALLATION OF NEW BEARINGS AND DECK, RESTORATION OF ABUTMENTS WITH EXTENSIONS OF SOUTH WINGWALL, INSTALLATION OF NEW GUARDRAIL, CHANNEL STABILIZATION, SITE GRADING AND ROADWAY RECONSTRUCTION.

LENGTH OF ROADWAY 336.33 FT. 0.064 MILES
LENGTH OF BRIDGE 88.67 FT. 0.017 MILES
LENGTH OF PROJECT 425.00 FT. 0.081 MILES



RECORD PLANS
COPY OF ORIGINALS
7-31-95.

BEGIN PROJECT
STA. 21+25

END PROJECT
STA. 25+50

**DuBois
& King** INC.

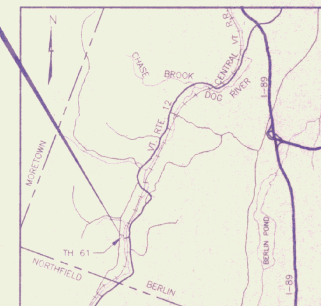
engineering

planning

management

development

PROJECT AREA



TRAFFIC DATA

1993 ADT = 228
2013 ADT = 317
1993 DMV = 38
2013 DMV = 43
RT = 1
SD = 55%
SPFL LIMIT = 10 MPH
FUNCTIONAL CLASSIFICATION = TOWN HIGHWAY (LOCAL CLASS 2)

LOCATION MAP
NOT TO SCALE

DATUM
VERTICAL: NGVD 1928
HORIZONTAL: N/A

RECORD DRAWING

DRAWING NO. 8247 SHEET 1 OF 21

QUANTITY BREAKDOWN

		SUBBASE	CRUSHED GRAVEL FOR
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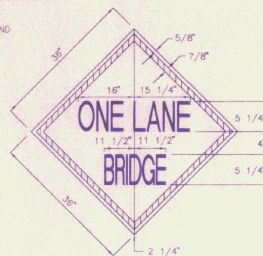
 REVISION DESCRIPTION REVISIT ITEM #21(2)	DATE JULY 93	TOWN OF BERLIN, VERMONT	
		TOWN OF BERLIN	
 engineering planning management development	BRIDGE QUANTITY SHEET		Bridge No. 27
	LOVER'S LANE BRIDGE		Log. Sta.
	Drawn by: <i>J. H. 61</i>		Surv. Sta.
	Designed by: <i>J. H. 61</i>		Bridge Design Supervisor
Checked by: <i>J. H. 61</i>		Date	Date
VDOT PROJECT NO.		D&K PROJECT NO.	
Twp-3-9266		R1248373	
Drawing No. 8248		Sheet 2 of 21	

RURAL SEEDING FORMULA

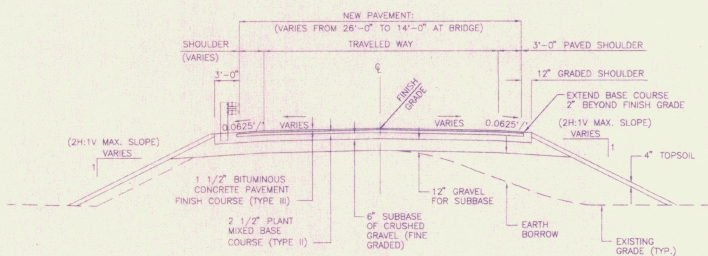
% WT.	LBS./A.	NAME	PURITY %	GERM %
37.5	22.5	CREeping RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

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

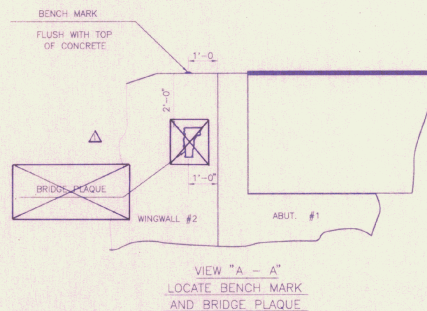
APPLICATION RATES	SEED	60 LB/ACRE
	LIME	2 TON/ACRE
	FERTILIZER	500 LB/ACRE



W5-3



TYPICAL ROADWAY CROSS SECTION
NOT TO SCALE



THE BENCH MARK AND BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.

GENERAL NOTES

- CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR CONSTRUCTION (DATED 1990), AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (DATED 1992), AND ITS LATEST REVISIONS.
- NOT USED.
- DESIGN IS FOR HS-20-44 LOADING.
- ANY INSTREAM CONSTRUCTION SHALL BE ACCOMPLISHED DURING THE PERIOD OF JUNE 15 TO OCTOBER 1. ANY DEVIATION FROM THIS PERIOD MUST BE APPROVED BY THE VERMONT AGENCY OF NATURAL RESOURCES.
- THE EXISTING PORTION OF SUBSTRUCTURE TO BE REMOVED UNDER ITEM "PARTIAL REMOVAL OF STRUCTURE", AS SHOWN ON THE PLANS.
- NOT USED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING AND UNDERSTANDING ALL APPLICABLE ENVIRONMENTAL PERMITS OBTAINED BY THE ENGINEER AND ENSURING THAT ALL CONSTRUCTION CONDITIONS ARE MET. (i.e. PROPER EROSION CONTROL, WORK WITHIN THE STREAM, ETC.)
- NOT USED.
- NOT USED.
- ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE".
- NOT USED.
- MINIMUM COVER FOR REINFORCING STEEL SHALL BE TWO (2) INCHES ALONG BACK FACES OF WALLS AGAINST EARTH, AND THREE (3) INCHES ELSEWHERE.
- REINFORCING PLACEMENT TOLERANCES SHALL BE: SPACING $\pm 1"$ CLEARANCE $\pm 1/4"$.
- ALL CONCRETE SHALL BE "CONCRETE, CLASS B".
- ALL EXPOSED EDGES SHALL BE CHAMFERED $1"$ BY $1"$.
- WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.
- THE FOLLOWING TABLE OF ALLOWABLE STRESSES AND WEIGHTS APPLIES TO THESE PLANS FOR DESIGN PURPOSES:
CONCRETE: $f_c = 3,500$ PSI
 $f_c = 1,400$ PSI
REINFORCING STEEL:
Grade 60
 $f_s = 24,000$ PSI
 $f_s = 20,000$ PSI
SOIL:
UNIT WEIGHT 140 PCF.
- ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES F.
- JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ALL ON-PROJECT SIGNING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.
- THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT.
- DETOUR SIGNING IS THE RESPONSIBILITY OF THE TOWN, THE TOWN SHALL BE NOTIFIED BY THE CONTRACTOR 2 WEEKS PRIOR TO BEGINNING WORK ON THE PROJECT.

EXISTING STRUCTURE

- STRUCTURE TYPE WARREN TYPE PONY TRUSS OVERALL LENGTH 86.5 FEET INVENTORY RATING CLOSED TO TRAFFIC
- SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS 85 FEET
- CLEAR SPAN LENGTH(S) NORMAL TO STREAM 82.5 FEET
- WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM) _____ VERTICAL CLEARANCE ABOVE STREAMBED _____
- WATER SURFACE ELEVATION @ Q 2.33 _____ WATER SURFACE ELEVATION @ Q _____
- WATER SURFACE ELEVATION AT FLOOD OF RECORD _____ YEAR _____ ESTIMATED DISCHARGE _____
- DOES ALL WATER PASS THROUGH EXISTING STRUCTURE? _____ IF NOT, WHAT FREQUENCY AND ELEVATION DOES RELIEF OCCUR? _____
- ADDITIONAL WATERWAY AREA PROVIDED BY RELIEF _____
- TYPE OF SUBSTRUCTURE FOUNDATION MATERIAL LODGE
- DISPOSITION OF STRUCTURE _____

NEW STRUCTURE

- STRUCTURE GEOMETRY:
- STRUCTURE TYPE REHABILITATED TRUSS W/ LAMINATED TIMBER DECK OVERALL LENGTH 88.67 FT.
 - SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS 85.00 FEET
 - VERTICAL CLEARANCE ABOVE STREAMBED OR ROAD UNDER 82.00 FEET
 - CLEAR SPAN LENGTH(S) NORMAL TO STREAM 82.00 FEET
 - WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM) _____
 - ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES? NO

- HYDRAULIC DATA:
- Q 2.33 _____ WATER ELEVATION _____ VELOCITY _____
 - Q 10 _____ WATER ELEVATION _____ VELOCITY _____
 - Q 25 _____ WATER ELEVATION _____ VELOCITY _____
 - Q 50 _____ WATER ELEVATION _____ VELOCITY _____
 - Q 100 _____ WATER ELEVATION _____ VELOCITY _____
 - DRAINAGE AREA _____ CHARACTER OF TERRAIN _____
 - ARE THERE OBJECTIONS TO A PIER IN THE STREAM? _____
 - DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY? _____ IS ORDINARY RISE RAPID? YES
 - NATURE OF NATURAL STREAMBED _____
 - WILL ALL WATER PASS THROUGH NEW STRUCTURE? _____ IF NOT, WHAT FREQUENCY AND ELEVATION WILL RELIEF OCCUR? Q=415.1
 - ADDITIONAL WATERWAY AREA PROVIDED BY RELIEF _____
 - VERTICAL CLEARANCE ABOVE Q₂₅ _____
 - ALLOWABLE WATER SURFACE ELEVATION _____ LIMITED BY _____
 - IS DESIGN STAGE EFFECTED BY UPSTAGE OR DOWNSTREAM CONDITIONS? _____
 - STREAMBANK OR CHANNEL PROTECTION REQUIRED _____
 - DISTANCE TO EXISTING UPSTREAM STRUCTURE _____
 - DISTANCE TO EXISTING DOWNSTREAM STRUCTURE _____

- ALLOWABLE STRESSES
- DESIGN LIVE LOAD AASHTO HS-20-44
 - ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL N/A
 - ALLOWABLE LOAD FOR PILING N/A
 - ALLOWABLE STRESS FOR STRUCTURAL STEEL ASTM A _____ TENSION _____ COMPRESSION _____
 - ALLOWABLE STRESS FOR REINFORCING STEEL GRADE 60 TENSION 24,000 PSI COMPRESSION 20,000 PSI
 - ALLOWABLE STRESS FOR CONCRETE CLASS A f_c 4,000 PSI f_c 1,800 PSI CLASS B f_c 3,500 PSI f_c 1,400 PSI

- TRAFFIC MAINTENANCE:
- TRAFFIC TO BE MAINTAINED N/A BRIDGE CLOSED
 - TEMPORARY BRIDGE REQUIREMENTS N/A

		LOAD RATING (TONS)							
		TRUCK							
STRESS LEVELS		20	36	36	66	30	34.5	36	
	H	HS	352	6 AXLE	34 STR.	44 STR.	54 SEM.		
INVENTORY									
0.55 F _y	TRUSS	27	37			34			
	FLBM	24	37			28			
	DECK	21	37			25			
POSTED									
0.67 F _y	TRUSS	36	49	57		46	46	53	
	FLBM	31	48	61		36	38	61	
	DECK	26	46	50		30	31	50	
OPERATING									
0.75 F _y	TRUSS	37	51	59	68	47	48		
	FLBM	36	55	69	65	41	43		
	DECK	29	52	56	55	34	35		

TOWN OF BERLIN, VERMONT

TOWN OF BERLIN	Bridge No. 27
HIGHWAY NO. 102	Log. Sta.
GENERAL NOTES	
COVER'S LANE BRIDGE	
Designed by JOT	Drawn by EBS
Checked by JOT	Bridge Design Supervisor
DATE 9/1/93	DATE
PROJECT NO. 143-926	PROJECT NO. R12483/3
Sheet 3 of 21	

NO. _____ REVISIONS _____ BY & DATE _____

AS BUILT REVISIONS DCF 6/6/95

RECORD DRAWING

DuBois & King

engineering planning management development

AASHTO	
A1	Gravel and Sand
A3	Fine Sand
A2	Silty or Clayey Gravel and Sand
A4	Silty Soil - Low Compressibility
A5	Silty Soil - Highly Compressible
A6	Clayey Soil - Low Compressibility
A7	Clayey Soil - Highly Compressible

GW/GP	Clean Gravels (Few Fines)
GM/GC	Gravels (Appreciable Fines)
SW/SP	Clean Sands (Few Fines)
SM/SC	Sand (Appreciable Fines)
ML/CL	Low Plastic Silts & Clays
OL	Low Plastic Organic Silt
MH/CH	High Plastic Silts & Clays
OH	High Plastic Organic Silt
Pt	Highly Organic Soils

DESCRIPTIVE TERM	OBSERVED IN FIELD	% $\pm$ BY ANALYSIS
Dry	No Visible Water	<10
Moist	Damp	10-20
Moist to Wet	Moist to Wet	21-50
Wet	Visible Water	51-70
Saturated		>70

R.Q.D.	ROCK DESCRIPTION
<.25	Very Poor
.25 to .50	Poor
.51 to .75	Fair
.76 to .90	Good
>.90	Excellent

UNDRAINED SHEAR STRENGTH IN P.S.F.	CONSISTENCY
<250	Very Soft
250-500	Soft
500-1000	Med. Stiff
1000-2000	Stiff
2000-4000	Very Stiff
>4000	Hard

DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

▼	Water Elevation
⑤	Standard Penetration Boring
⑥	Auger Boring
⑦	Rod Sounding
⑧	Sample
N	Standard Penetration Test
	Blow Count Per Foot For:
	2" O. D. Sample
	1 3/8" I. D. Sampler
	Hammer Weight Of 140 Lbs.
	Hammer Fall Of 30"
US	Field Vane Shear Test
B	Undisturbed Soil Sample
DC	Blast
MD	Diamond Core
WA	Mud Drill
HA	Wash Ahead
AX	Hollow Stem Auger
BN	Core Size 1 1/8"
BX	Core Size 1 5/8"
M	Core Size 2 1/8"
LL	Double Tube Core Barrel Used
PL	Liquid Limit
PI	Plastic Limit
NP	Plasticity Index
D	Not Plastic
	Moisture Content (Dry Wgt. Basis)
MTW	Dry
	Moist
	Moist To Wet

blk	Black	pnk	Pink
bl	Blue	pu	Purple
brn	Brown	rd	Red
dk	Dark	tn	Tan
gr	Gray	wh	White
gn	Green	yel	Yellow
lt	Light	mltc	Multicolored
or	Orange		

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 12 inches.

COBBLE - Rock fragments with an average dimension between 3 and 12 inches.

GRAVEL - Rounded particles of rock < 3" and > 0.078" (#10 sieve).

SAND - Particles of rock < 0.078" (#10 sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#200 sieve), non- or slightly plastic and exhibits no strength when air-dried.

CLAY - Fine grained soil, exhibits plasticity when air-dried, or considerable strength when air-dried.

HARDPAN = Extremely dense soil, cemented layer, not softened when wet.

MUCK = Soft organic soil (containing > 10% organic material).

MOISTURE CONTENT = Weight of water divided by dry weight of soil.

FLOWING SAND = Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

STRIKE = Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP = Inclination of bed with a horizontal plane.

The subsurface explorations shown herein were obtained by Green Mountain Boring on December 7-9, 1992.

Soil and rock classification, properties and descriptions are based on contractor's interpretation from available subsurface information by Green Mountain and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.

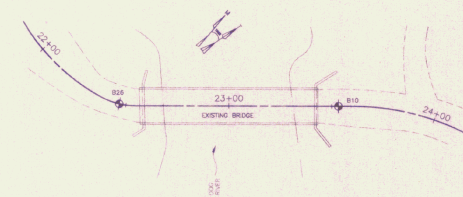
Observed water levels and/or groundwater elevations are recorded at the time of exploration and may vary according to the prevailing weather conditions and methods of exploration and other factors.

4. Analysis and interpretation of subsurface data was performed and interpreted for Engineer design and estimating purposes. The interpretation of the information in the Contract is intended to provide the Contractor access to the same data available to the Engineer. The subsurface information is presented in good faith but is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgement by the Contractor.

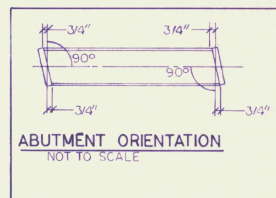
5. Pictorial structure details shown on the boring plan and/or cross section profile are for illustrative purposes only and may not accurately portray actual contract details.

TOWN OF
BERLIN, VERMONT

TOWN OF BERLIN	Bridge No. 27
	Log Sta.
HIGHWAY NO. 14 9256	Surv. Sta.
BORING INFORMATION SHEET	
LOVER'S LANE BRIDGE	
Designed By: JUT	Drawn by: EBS
Checked by:  date	Bridge Designer Supervisor date
VAOT PROJECT NO. THS-9266	D-K PROJECT NO. R12483F3
Drawing No. A250	Sheet 4 of 11



BORING LOCATION KEY MAP
NOT TO SCALE



[illegible]

1. ALL APPLICABLE TEMPORARY CONSTRUCTION MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.

2. WORK WITHIN THE STREAM SHALL BE PERFORMED BETWEEN JUNE 1 AND SEPTEMBER 15.

3. NO CONSTRUCTION ACTIVITY, INCLUDING TEMPORARY STORAGE OR STOCKPILES SHALL OCCUR OUTSIDE OF THE LIMITS OF SILT AND SNOW FENCES INDICATED ON THIS SHEET.

4. THE (2) NEW "ONE LANE BRIDGE" SIGNS SHALL BE INSTALLED WITH THE STANDARD DIMENSIONS INDICATED ON THE DETAIL ON SHEET "4" AND IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFY CONTROL DEVICES AND THE WAOT TRAFFIC SAFETY DIVISION.

5. THE NEW SIGNS SHALL BE LOCATED ADJACENT TO THE ROADWAY IN ACCORDANCE WITH STANDARD E-121.

6. THE NEW "ONE LANE BRIDGE" SIGN SHALL BE INSTALLED AT STATION 25+35 LOT 1. THE SECOND SIGN FOR EASTERLY TRAFFIC SHALL BE INSTALLED AT STATION 21+00 RT, AS DIRECTED BY THE ENGINEER.

7. THE NEW "ONE LANE BRIDGE" SIGNS SHALL BE MOUNTED AT A HEIGHT OF 5.0 FEET, MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE TRAVELWAY.

8. A FLANGED CHANNEL STEEL SIGN POST, (SIZE = 15/8" FT) SHALL BE USED FOR EACH NEW SIGN IN ACCORDANCE WITH STANDARD E-160.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES (PRIVATE AND PUBLIC) WITHIN THE LIMITS OF CONSTRUCTION PRIOR TO BEGINNING THE WORK AND SHALL BE RESPONSIBLE FOR ANY UTILITIES ARE NOT AFFECTED WITHIN PLOT WRITTEN APPROVAL FROM THE OWNER.

10. A STAGING AND REPAIR AREA HAS NOT BEEN DESIGNATED FOR THIS PROJECT. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM ANY LAND OWNER AND ALL APPROPRIATE REGULATORY AGENCIES PRIOR TO PERFORMING THE WORK.

	EXISTING CONTOUR
	PROPOSED CONTOURS
	EXISTING OVERHEAD LINE
	EXISTING UTILITY POLE
	EXISTING RAILROAD TRACKS
	EXISTING RAILROAD CROSSING SIGN
	EXISTING FENCING
	EDGE OF RIVER
	LIMITS OF CLEARING AND GRUBBING
	EXISTING TREELINE AND EDGE OF WOODS
	LEDGE
	SINGLE TREE
	WETLAND DRAINAGE SWALE
	LIMIT OF CUT
	LIMIT OF FILL
	LIMITS OF NEW BITUMINOUS PAVEMENT
	SNOW FENCE
	SILT FENCE
	LIMITS OF CONSTRUCTION

RECORD DRAWING

REVISED				LIMITS OF CONSTRUCTION	
NO.	DESCRIPTION	BY & DATE	TOWN OF BERLIN, VERMONT		
Δ	CHANGE BEGIN STA TO 2H25 AND ADJUSTED RIGHT-OF-WAY LIMITS REVISED GUARDRAIL LIMITS NEAR STA 2H24RT	JULY 93			
Δ	AS BUILT REVISIONS	JUNE 95			
			TOWN OF BERLIN	Bridge No. 27	
			TOWN HIGHWAY NO. 61	Leg. Sta.	
				Surf. Sta.	
 engineering planning management development			SITE PLAN		
			LOVER'S LANE BRIDGE		
			Designed by: <i>JKT</i>	Drawn by: RWS/ATC	
			Checked by: <i>JS</i>	Bridge Design Supervisor	
VAGT PROJECT NO. TH3-9266			date		
			D&K PROJECT NO. R12489F3		
Drawing No. 8251			Sheet 5 of 21		

1. THE EXISTING RIGHT-OF-WAY LIMITS SHOWN ALONG TOWN HIGHWAY NO. 61 ARE APPROXIMATE, AND BASED ON THE FIELD SURVEY OF THE CENTER LINE OF THE EXISTING ROAD, BASED ON INFORMATION PROVIDED BY THE TOWN.
2. THE RIGHT-OF-WAY IS 44.0 FEET (43.5 FEET) ROW, CENTER ON THE CENTER LINE OF THE EXISTING ROAD, A PROPERTY SURVEY HAS NOT BEEN PERFORMED AS A PART OF THIS PROJECT.
3. THE STATION AND OFFSET DISTANCES OF CHANNEL RIGHTS AND EASEMENT LIMITS INTERSECTING WITH SHOWN EXISTING RIGHT-OF-WAY LIMITS ARE APPROXIMATE AND BASED ON GRAPHICAL MEASUREMENTS.
4. THE LOCATION OF THE RAILROAD RIGHT-OF-WAY IS 44.0 FEET ALONG THE WESTERLY SIDE OF THE RAILROAD TRACKS, BASED ON INFORMATION PROVIDED BY CENTRAL VERMONT RAILWAY.

CH RT (P)

CHANNEL RIGHTS (PERMANENT)

CONST. EASE (T)

EXISTING RAILROAD TRACKS

EXISTING 3 RD (49.5')
RIGHT-OF-WAY

EXISTING FENCING

EDGE OF RIVER

EXISTING EDGE OF
GRAVEL ROAD

22+54
48' RT

BASE LINE STATION
OFFSET DISTANCE

TOWN OF
BERLIN, VERMONT

TOWN OF BERLIN	Bridge No. 27
TOWN HIGHWAY NO. 61	Log Sta.
	Surv. Sta.
RIGHT OF WAY PLAN	
LOVER'S LANE BRIDGE	
Designed by: <i>FWT</i>	Drawn by: RWS/ATC
Checked by: <i>V</i> date	Bridge Design Supervisor date
VADT PROJECT NO.	D&K PROJECT NO. R1248.3F 3
Drawing No. 8252	Sheet 6 of 21

00
2

DELETE

— EDGE OF PROPOSED ROAD (TYP.)

GILE, FRANK A. JR. AND
SANDRA JEANNE

EXISTING 3 ROD (49.5')

JENETT, DAVID AND
MARY .

PELCHAR, MICHAEL R. AND
CROSSETT, SUSAN E.

ROW PLAN

SCALE: 1"=20'

0 20 40 60

SCALE IN FEET

DATUM

VERTICAL NGVD 1929

HORIZONTAL N/A

REVISIONS		
NO.	DESCRIPTION	REV. & DATE
1	CHANGE BEGIN PROJECT TO STA 21+25 AND ADJUSTED RIGHT-OF-WAY LIMITS	JULY 93
2	REVISED GUARDRAIL LIMITS NEAR STATION 20+87	
3	AS BUILT REVISIONS	JUNE 95



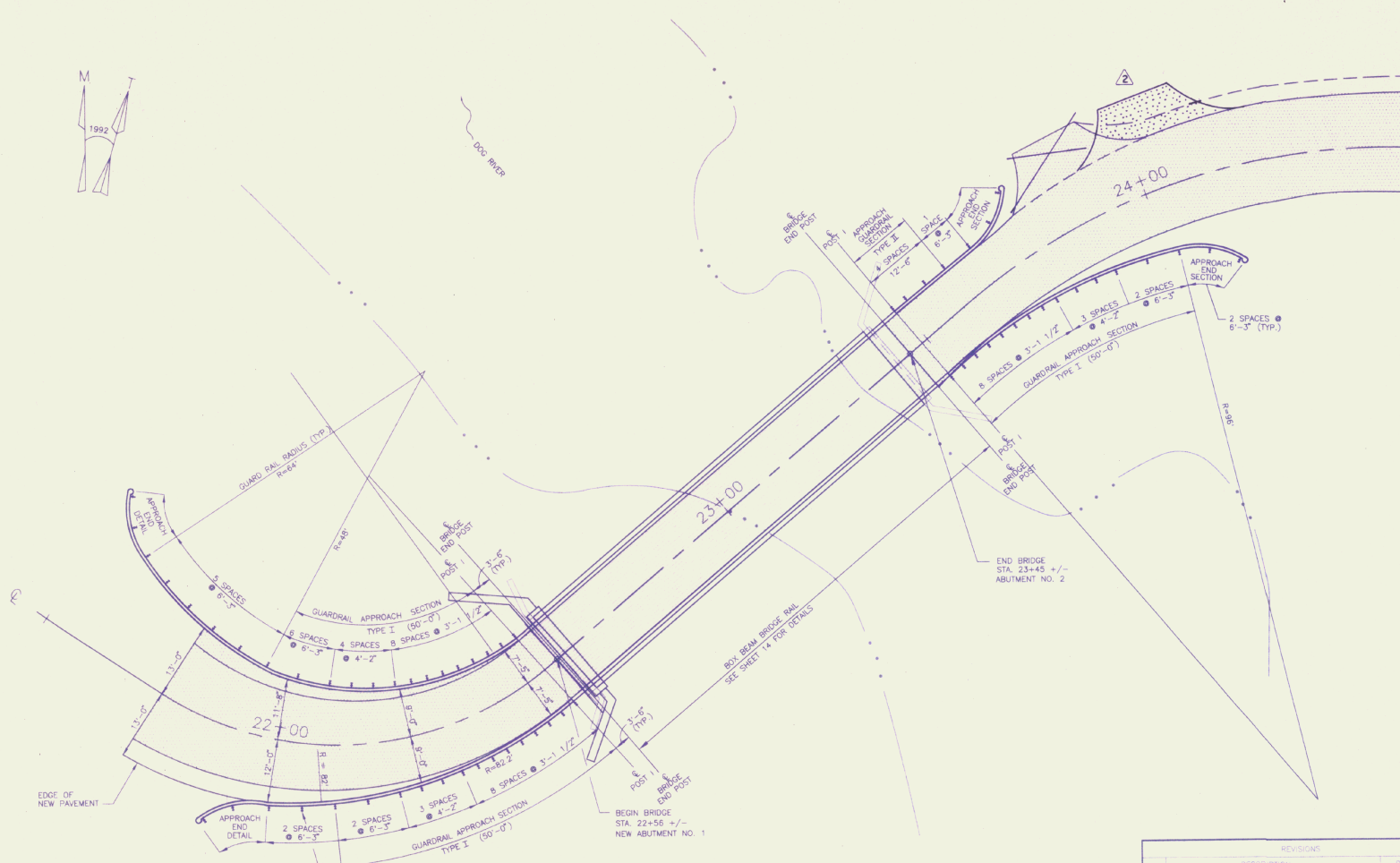
engineering planning management development

DuBois
& King^{INTL}

engineering planning management development



DOG RIVER



HEAVY DUTY STEEL BEAM GUARD RAIL:
 APPROACH SECTION TYPE I, II AND END SECTIONS
 STATION 21+49 LT. - 22+54 LT.
 STATION 23+48 LT. - 23+75 LT.
 STATION 21+93 RT. - 22+54 RT.
 STATION 23+48 RT. - 24+13 RT.

BRIDGE RAILING:
 STATION 22+54 LT. - 23+48 LT.
 STATION 22+54 RT. - 23+48 RT.

ANCHORS FOR HEAVY DUTY STEEL BEAM GUARD RAIL:
 STATION 21+55 LT. AND 23+89 LT.
 STATION 21+99 RT. AND 24+10 RT.

DRIVEWAY:
 23+88 LT.

GUARDRAIL NOTES:

1. THE APPROACH END DETAILS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD G-10.
2. GUARDRAIL APPROACH SECTION TYPE I & II SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARDS SB-4A-82 AND SB-R4B-82.
3. THE GUARDRAIL STATIONS INDICATED ABOVE ARE APPROXIMATE AND INTENDED ONLY FOR GENERAL INFORMATION. THE NEW GUARDRAILS SHALL BE LOCATED IN ACCORDANCE WITH STANDARD DRAWINGS SB-R4A-82 AND SB-R4B-82 AND THE INDICATED POST SPACING. THE APPROACH SECTIONS SHALL BEGIN AT THE CENTERLINE OF POST 1, WHICH WILL BE LOCATED 3'-6" FROM THE BRIDGE END POST, AS INSTALLED IN THE FIELD.

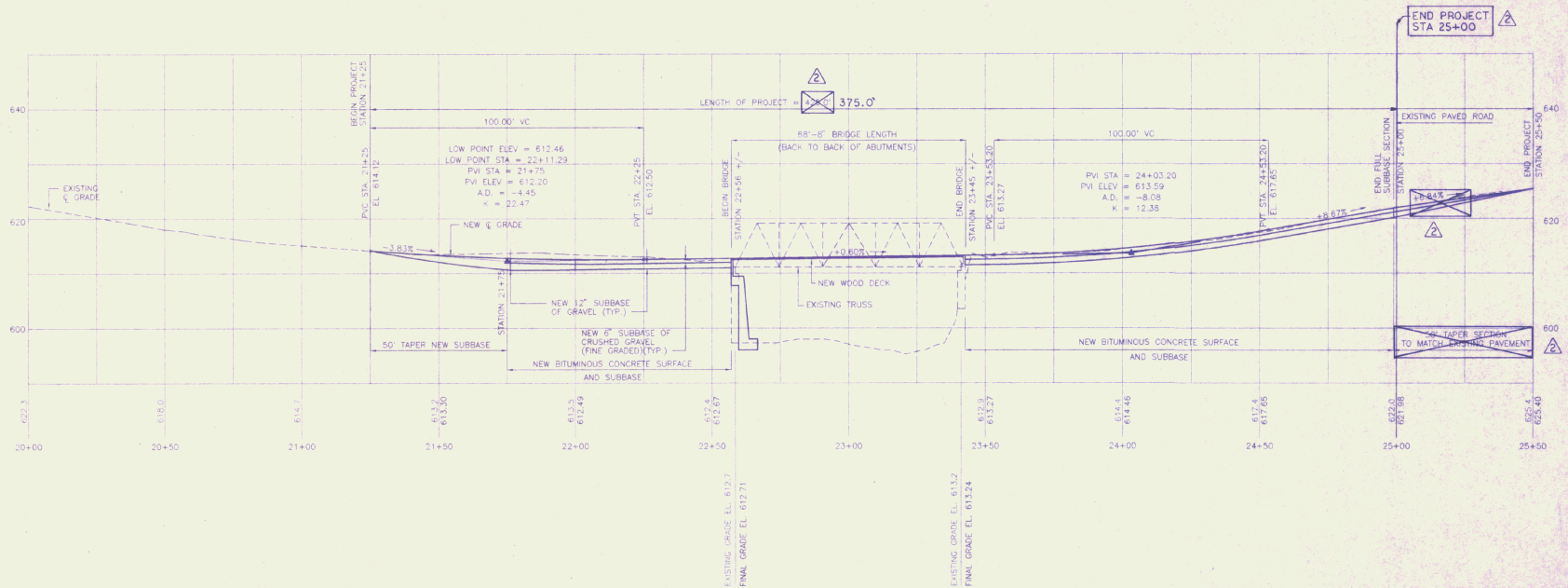
RECORD DRAWING

DATUM
 VERTICAL: NAD 83
 HORIZONTAL: N/A

SITE PLAN
 SCALE: 1"=10'
 0 10 20 30
 SCALE IN FEET

REVISIONS		BY & DATE	
NO.	DESCRIPTION		
1	REVISED GUARDRAIL LIMITS NEAR STA 21+50 RT.	JULY 95	
2	AS BUILT REVISIONS	JUNE 95	

TOWN OF BERLIN, VERMONT	
TOWN OF BERLIN	Bridge No. 27
TOWN HIGHWAY NO. 61	Log Sta.
SURV. STA.	
GUARDRAIL DETAIL SHEET	
LOVER'S LANE BRIDGE	
Designed by: <i>JSB</i>	Drawn by: RAB/TOL
Checked by: <i>JSB</i>	Bridge Design Supervisor: <i>JSB</i>
VADT PROJECT NO. 743-9266	D&K PROJECT NO. R12483F3
Drawing No. 5254	Sheet: 8 of 21



PROFILE

1" = 20' H
1" = 10' V



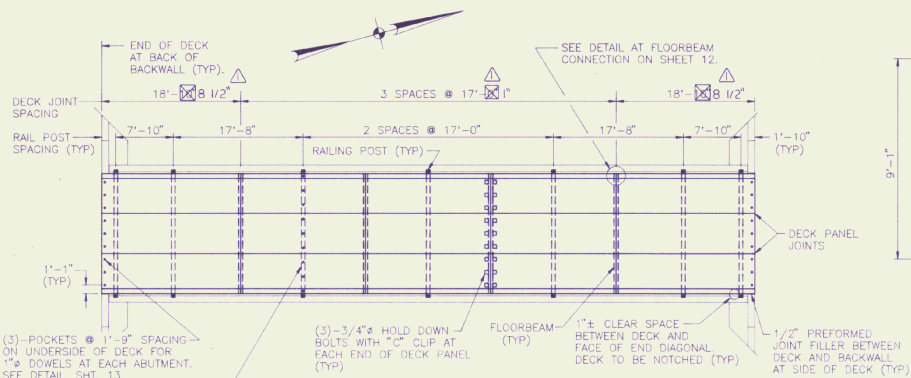
RECORD DRAWING

TOWN OF BERLIN, VERMONT

REVISIONS		BY & DATE
NO.	DESCRIPTION	
1	CHANGE BEGIN PROJECT TO STA 21+25	JULY 93
2	CHANGE END PROJECT TO STA 25+00	JUNE 95

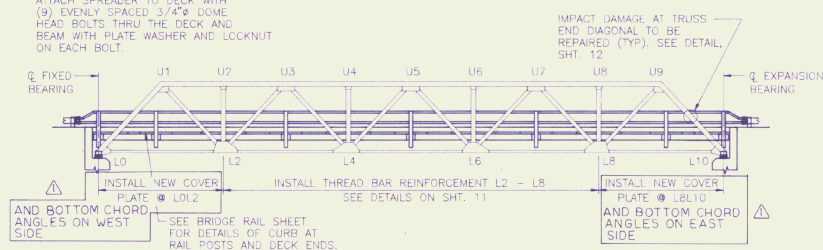
TOWN OF BERLIN		Bridge No. 27
TOWN HIGHWAY NO. 61		Long Sta.
		Surv. Sta.
ROADWAY CENTERLINE PROFILE		
LOVER'S LANE BRIDGE		
Designed by: <i>JWT</i>	Drawn by: RWS/TOL	
Checked by: <i>JP</i>	Bridge Design Supervisor	
VAOT PROJECT NO. TH3-92-66	DATE	
Drawing No. 8255	SHEET 9 OF 21	

DuBois & King Inc.
engineering planning management development



DECK PLAN

SCALE 1/8" = 1'-0"

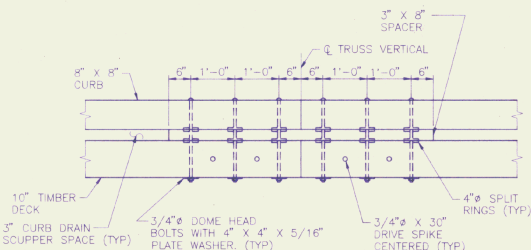


TRUSS ELEVATION

SCALE 1/8" = 1'-0"

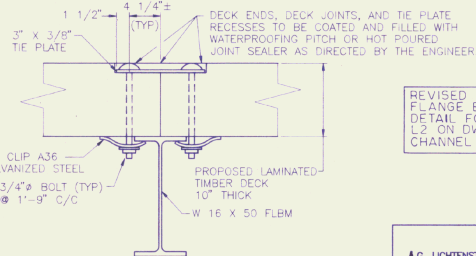
NOTE:

THE TRUSSES SHALL BE MOVED FROM THE ABUTMENTS, AFTER REMOVAL OF THE FLOOR SYSTEM, FOR CLEANING, STRENGTHENING, AND PAINTING. TRUSSES TO BE RESET ON NEW BEARINGS AFTER ABUTMENT SEAT REPAIRS ARE COMPLETED.



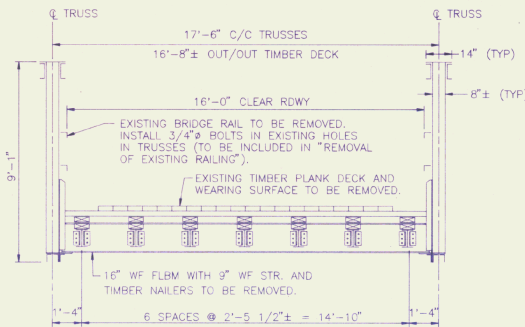
CURB ASSEMBLY

SCALE 3/4" = 1'-0"



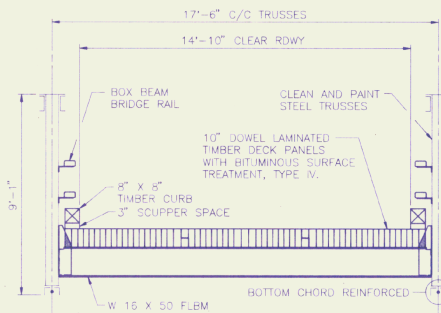
DECK TO FLOORBEAM CONNECTION

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



EXISTING CROSS SECTION

SCALE 3/8" = 1'-0"



PROPOSED CROSS SECTION

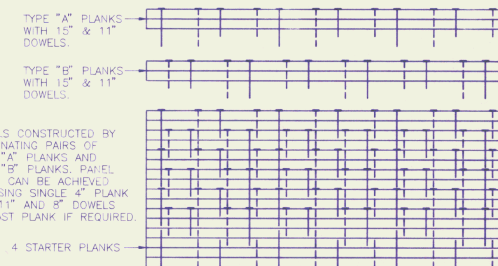
SCALE 3/8" = 1'-0"

LEGEND FOR DOWELS



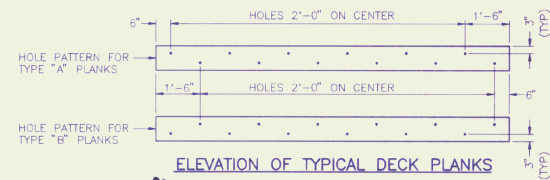
DECK NOTES

1. THE TIMBER DECK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 522 OF THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.
2. ALL TIMBER SHALL BE DOUGLAS FIR (COAST REGION) WITH A MINIMUM ALLOWABLE BENDING STRESS OF 1500 PSI AND CONFORMING TO THE REQUIREMENTS OF SECTION 709.01.
3. ALL TIMBER SHALL BE TREATED WITH TYPE II PRESERVATIVE IN ACCORDANCE WITH SECTION 726.01.
4. DECK PANELS SHALL BE FULLY ASSEMBLED WITH ALL HOLES PREDRILLED BEFORE BEING TREATED AT THE FABRICATION PLANT.
5. ALL DECK PANELS SHALL BE PRECISION END TRIMMED TO LENGTH WITH 1/4" UNDERLENGTH AND NO OVERLENGTH TOLERANCE PERMITTED.
6. DECK PANELS TO BE ASSEMBLED WITH 15" RING SHANK DOWELS.
7. ALL TIMBER IS ROUGH UNLESS OTHERWISE NOTED.
8. ANY TIMBER CUT OR DRILLED IN THE FIELD SHALL BE RETREATED WITH PRESERVATIVE IN ACCORDANCE WITH SECTION 522.14.
9. ALL HARDWARE TO BE GALVANIZED.
10. BITUMINOUS SURFACE TREATMENT, TYPE IV, SHALL BE APPLIED TO THE TIMBER DECK FROM CURB TO CURB AND END TO END.
11. THE MINIMUM PRESERVATIVE TREATMENT RETENTION SPECIFIED FOR THE DECK SHALL NOT BE EXCEEDED BY MORE THAN 10% (MORE IS NOT BETTER).
12. 3" NOMINAL TIMBER RUNNING BOARDS MAY BE PLACED ON THE BRIDGE DECK (10" WIDE) IF NECESSARY IN THE FUTURE. PLANKS SHALL BE SECURED WITH 5/16" x 7" SPIKES AT 16" STAGGERED SPACING AND 1 1/2" MINIMUM EDGE DISTANCE. HOLES FOR THE SPIKES SHALL BE PREDRILLED 1/16" SMALLER THAN THE SPIKE DIAMETER AND EACH HOLE FILLED WITH A LIQUID PRESERVATIVE.



PLAN OF TYPICAL DECK PANEL

(LOCATION OF LOWER DOWELS SHIFTED TO THE RIGHT FOR CLARITY ON DRAWING)

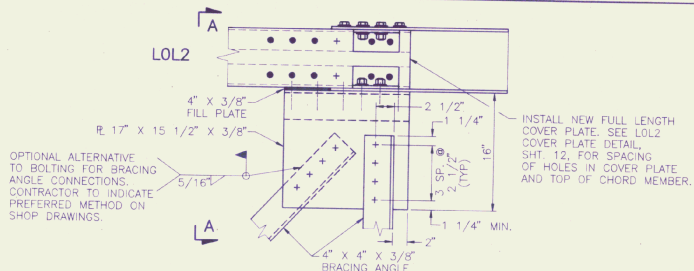


ELEVATION OF TYPICAL DECK PLANKS

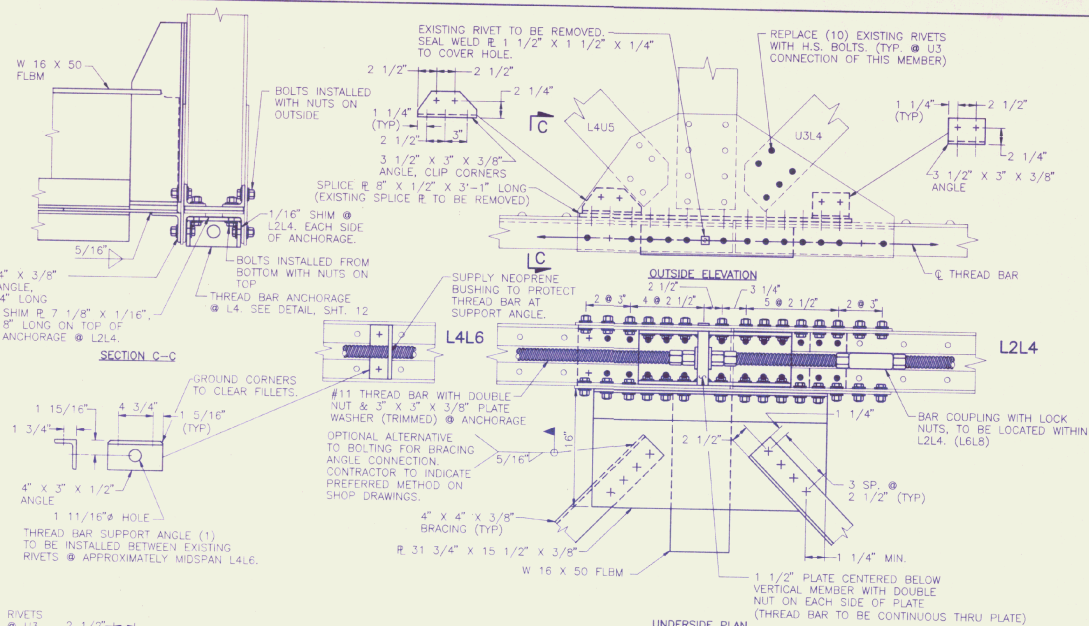
RECORD DRAWING		TOWN OF BERLIN, VERMONT	
NO.	DESCRIPTION	BY & DATE	
1	AS BUILT REVISIONS	JUNE 95	
LOVER'S LANE BRIDGE		TIMBER DECK	
TOWN OF BERLIN		Bridge No. 51	
HIGHWAY NO.		Log Sta.	
Designed by: J.B.M.		Drawn by: C.B.	
Checked by: E.A.K.		Bridge Design Supervisor	
VDOT PROJECT NO. TH3-9206		D+K PROJECT NO. R12483F3	
Drawing No. 8256		Sheet 15 of 21	

A.G. LICHTENSTEIN & ASSOCIATES, INC.
CONSULTING ENGINEERS
Lichtenstein

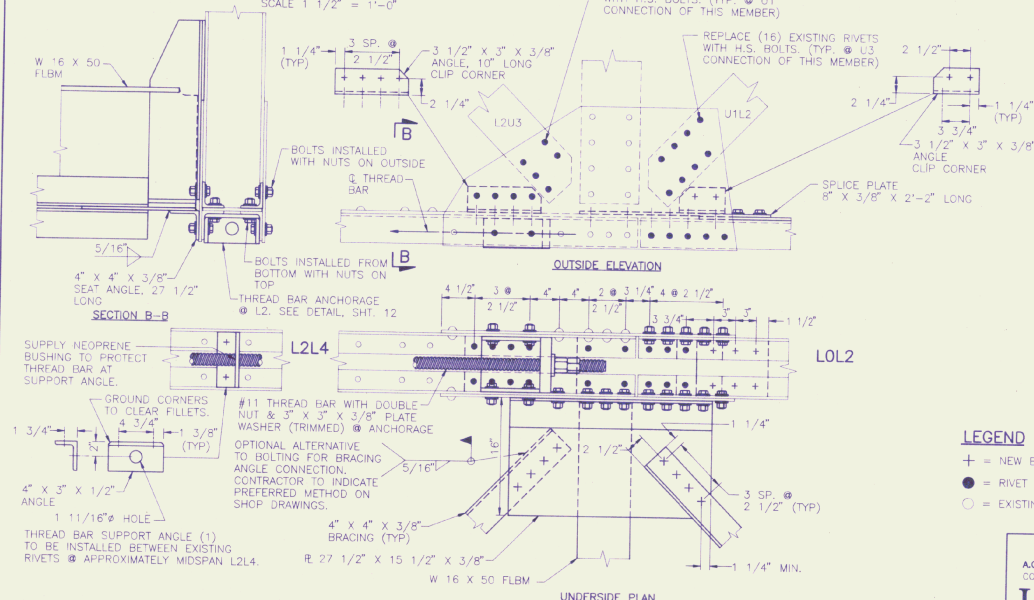
DuBois & King Inc.
engineering planning management development



LO (L10) CONNECTION
SCALE 1 1/2" = 1'-0"



L4 (L6) CONNECTION
SCALE 1 1/2" = 1'-0"



L2 (L8) CONNECTION
SCALE 1 1/2" = 1'-0"

TRUSS REPAIR NOTES:

- DIMENSIONS SHOWN FOR SPACING OF EXISTING RIVETS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING SHOP DRAWINGS FOR THE PROPOSED STEEL.
- THE CONTRACTOR SHOULD BE AWARE THAT DUE TO TIGHT TOLERANCES THE SEQUENCE OF INSTALLATION OF THE REPAIR PARTS IS CRITICAL TO ITS CONSTRUCTIBILITY. THE CONTRACTOR SHALL INDICATE HIS PROPOSED INSTALLATION SEQUENCE ON THE SHOP DRAWINGS.
- TRUSS REPAIRS SHALL BE COMPLETED AFTER THE EXISTING FLOOR SYSTEM IS REMOVED AND BEFORE INSTALLATION OF THE NEW DECK. THE CONTRACTOR IS RESPONSIBLE FOR SUPPORTING THE TRUSSES AND MAINTAINING THE TRUSS GEOMETRY THROUGHOUT THE REPAIR PROCESS.
- ALL BOLTS TO BE 3/4" ASTM A325, EXCEPT AS NOTED. BOLT COATING SHALL MEET AASHTO M298 CLASS 50 TYPE I.
- THREADBARS SHALL BE ASTM A615 (GRADE 60), EPOXY COATED, WITH CONTINUOUS THREADS ALONG THEIR FULL LENGTH.
- ALL STEEL FOR TRUSS REPAIRS SHALL CONFORM TO AASHTO M270 GRADE 36 (ASTM A709 GRADE 36) EXCEPT THAT STEEL FOR THREADBAR ANCHORAGES SHALL CONFORM TO AASHTO GRADE 50W (ASTM A709 GRADE 50W).
- THREAD BARS, THREAD BAR ANCHORAGES, CHORD COVER PLATES, SPLICE PLATES, REPAIR PLATES, AND CHORD CONNECTION ANGLES SHALL BE PAID FOR UNDER THE ITEM "STRUCTURAL STEEL (TRUSS REPAIRS)."
- BOLTS IN NEW HOLES, INCLUDING FIELD DRILLING, SHALL BE INCLUDED IN THE ITEM "STRUCTURAL STEEL (TRUSS REPAIRS)." BOLTS INSTALLED IN EXISTING HOLES SHALL BE INCLUDED IN THE ITEM "RIVET REMOVAL."
- THREAD BARS FOR BOTTOM CHORD STRENGTHENING SHALL BE INSTALLED TO SNUG WRENCH-TIGHT FIT WITH NO INITIAL TENSION.

LEGEND

- + = NEW BOLT IN NEW 13/16" HOLE
- = RIVET REMOVAL & NEW BOLT IN EXISTING HOLE
- = EXISTING RIVET TO REMAIN

RECORD DRAWING

TOWN OF
BERLIN, VERMONT

TOWN OF BERLIN Bridge No. 51
Log Sta.
HIGHWAY NO. Surv. Sta.

TRUSS DETAILS I

LOVER'S LANE BRIDGE
Designed by: J.B.M. Drawn by: C.D.
Checked by: E.A.R. Bridge Design Supervisor
VAOT PROJECT NO. date
TH3-9266 R12483/3
Drawing No. 8257 Sheet 11 of 21

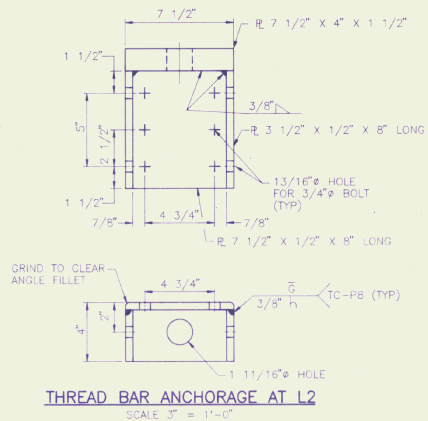
A.G. LICHTENSTEIN & ASSOCIATES, INC.
CONSULTING ENGINEERS

Lichtenstein

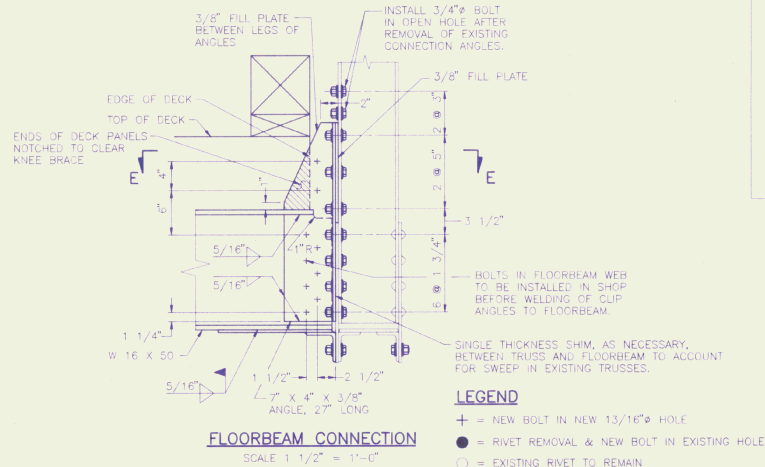
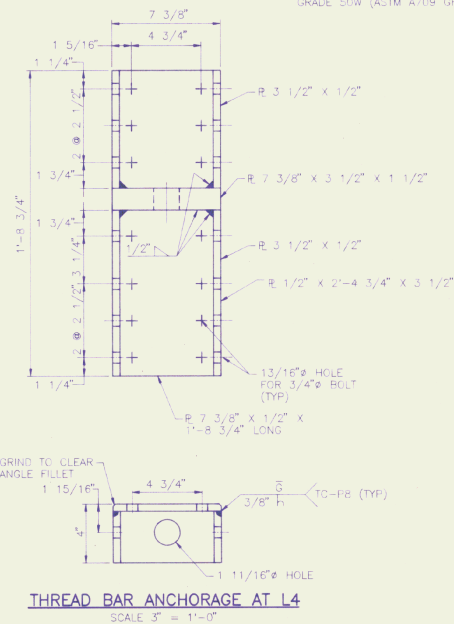
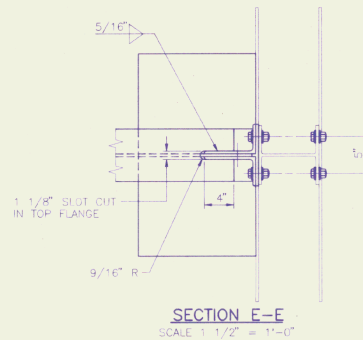
PROJECT: HIGHWAYS: ANALYSIS: SITE ENGINEERING: DATE:

DuBois & King

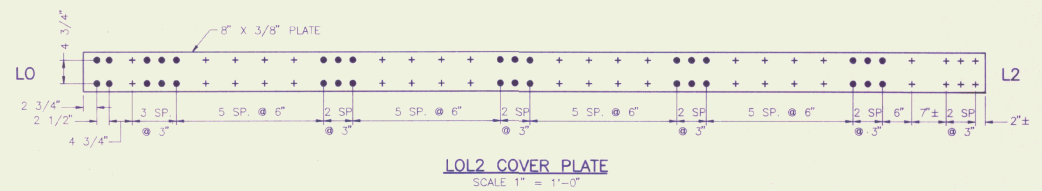
engineering planning management



NOTE:
STEEL FOR THREAD BAR ANCHORAGES
SHALL CONFORM TO AASHTO M270,
GRADE 50W (ASTM A709 GRADE 50W).



NOTE:
TOP FLANGE OF FLOORBEAM TO RECEIVE TOP
COAT OF PAINT PRIOR TO INSTALLATION OF DECK.

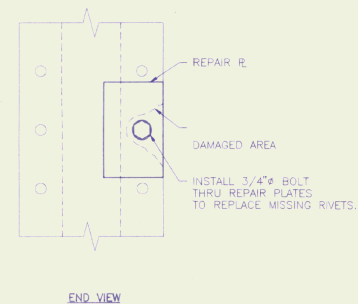


LOL2 COVER PLATE
SCALE 1" = 1'-0"

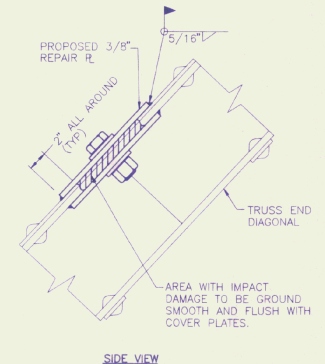
EXISTING

PROPOSED

LOL2 PLAN VIEW
SCALE 1" = 1'-0"



IMPACT DAMAGE REPAIR DETAIL
N.T.S.



RECORD DRAWING

**TOWN OF
BERLIN, VERMONT**

TOWN OF BERLIN Bridge No. 51
Log Sta. _____
Highway No. _____ Surv. Sta. _____

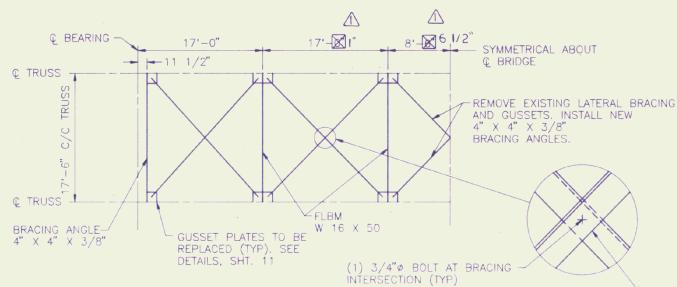
TRUSS DETAILS II
LOVER'S LANE BRIDGE

Designed by: J.B.M. Drawn by: C.D.
Checked by: E.A.R. Bridge Design Supervisor
date
VADT PROJECT NO. TH3-9266 D+K PROJECT NO. R12483/3
Drawing No. #258 Sheet 12 of 21

A.O. LICHTENSTEIN & ASSOCIATES, INC.
CONSULTING ENGINEERS
Lichtenstein
BRIDGES HIGHWAYS RAILROADS SITE ENGINEERING DAMS

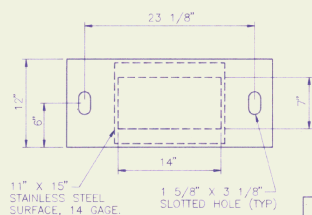
NO.	REVISIONS DESCRIPTION	BY & DATE

DuBois & King
engineering planning management development

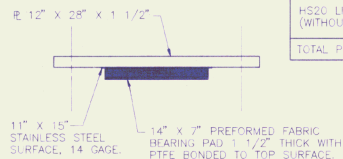


NOTE:
ALL STEEL FOR THE FLOOR SYSTEM AND BRACING, INCLUDING CONNECTIONS, SHALL CONFORM TO AASHTO M270 GRADE 36 (ASTM A709 GRADE 36) EXCEPT THAT THE STEEL FOR THE W16 X 50 FLOORBEAMS SHALL CONFORM TO AASHTO M270 GRADE 50W (ASTM A709 GRADE 50W). ALL FLOOR SYSTEM STEEL (BRACING AND FLOORBEAMS) INCLUDING GUSSETS AND CONNECTION ANGLES SHALL BE PAID FOR UNDER THE ITEM "STRUCTURAL STEEL (ROLLED BEAM)".

FRAMING PLAN
SCALE 1/8" = 1'-0"



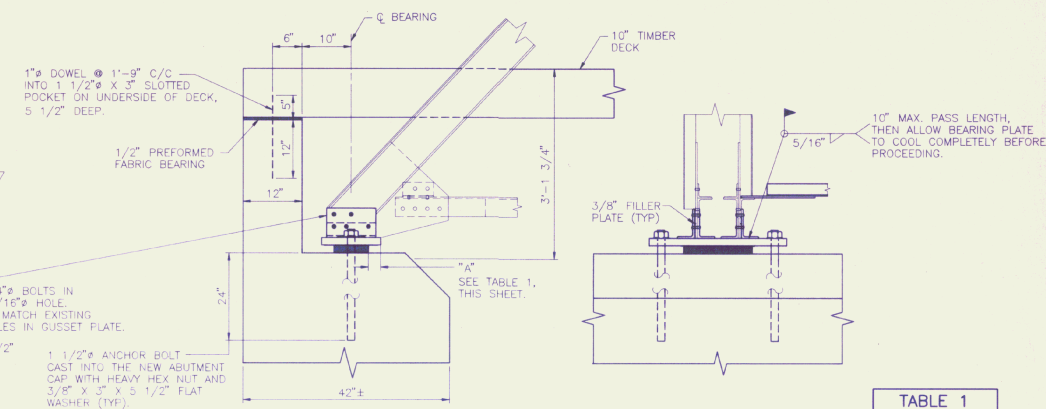
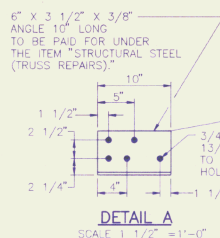
LOADS ON BEARINGS	
DEAD LOAD	= 21K
HS20 LIVE LOAD (WITHOUT IMPACT)	= 42K
TOTAL PER BEARING	= 63K



NOTE:
STEEL FOR THE BEARING ASSEMBLIES SHALL CONFORM TO AASHTO M270 GRADE 50W AND BE METALIZED IN ACCORDANCE WITH THE SPECIFICATIONS.

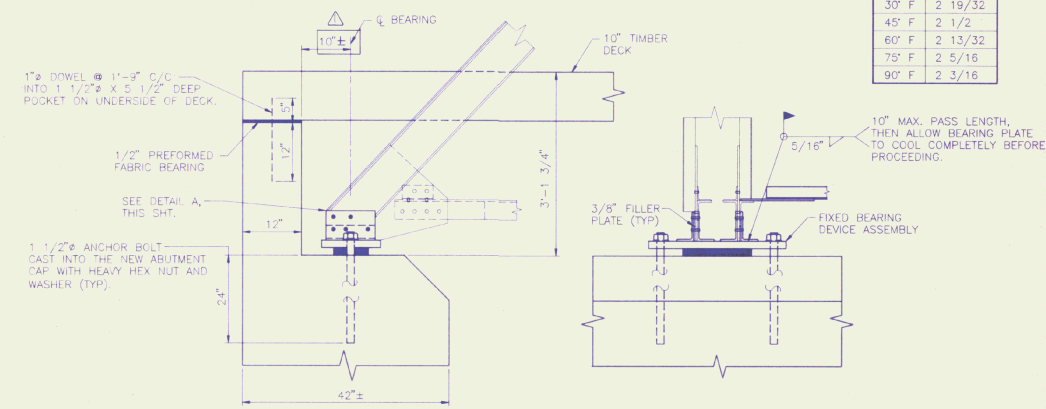
EXPANSION BEARING DEVICE ASSEMBLY
SCALE 1 1/2" = 1'-0"

FIXED BEARING DEVICE ASSEMBLY
SCALE 1 1/2" = 1'-0"



TEMP.	"A" (IN.)
0° F	2 13/16
15° F	2 11/16
30° F	2 19/32
45° F	2 1/2
60° F	2 13/32
75° F	2 5/16
90° F	2 3/16

10" MAX. PASS LENGTH, THEN ALLOW BEARING PLATE TO COOL COMPLETELY BEFORE PROCEEDING.



LEGEND

- + = NEW BOLT IN NEW 13/16" HOLE
- = RIVET REMOVAL & NEW BOLT IN EXISTING HOLE
- = EXISTING RIVET TO REMAIN

NO.	REVISIONS	BY & DATE
1	AS BUILT REVISIONS	JUNE 95

A.G. LICHTENSTEIN & ASSOCIATES, INC.
CONSULTING ENGINEERS

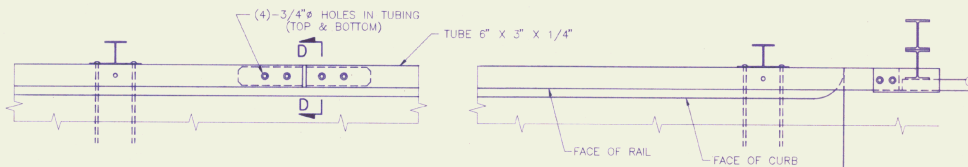
Lichtenstein

BRIDGE HIGHWAYS TAILGATE PIPE EXHAUSTIVE DMS

DuBois & King
engineering planning management development

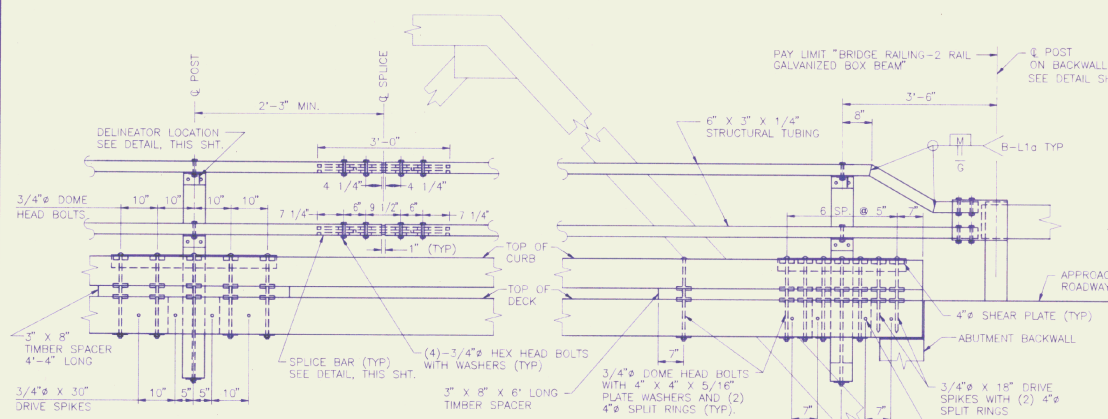
RECORD DRAWING

TOWN OF BERLIN, VERMONT	
TOWN OF BERLIN	Bridge No. 51
HIGHWAY NO.	Log Sta.
	Surv. Sta.
TRUSS BEARINGS	
Designed by: JRM	Drawn by: CD
Checked by: EAB	Bridge Design Supervisor
VAOT PROJECT NO. TH3-9266	D+K PROJECT NO. R12483F3
Drawing No. 8259	Sheet 13 of 21



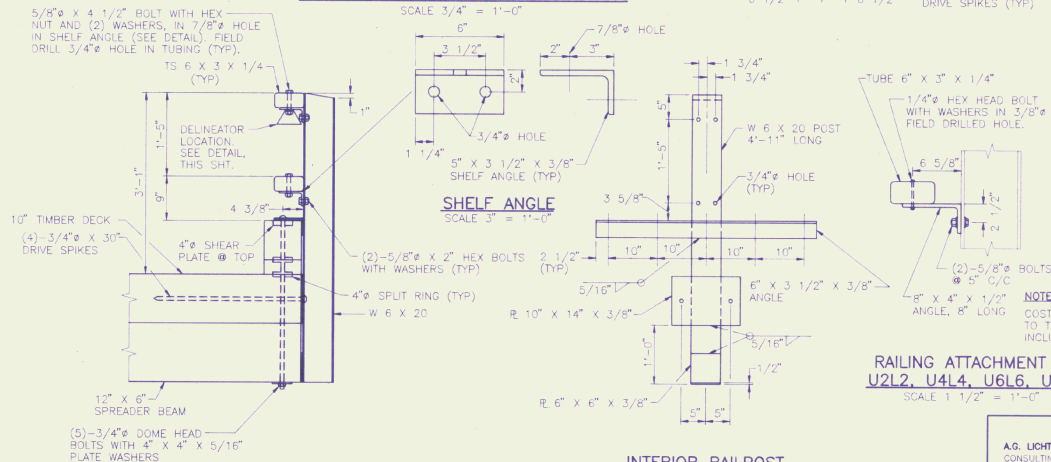
PLAN OF BOX BEAM BRIDGE RAIL

SCALE 3/4" = 1'-0"



ELEVATION OF BOX BEAM BRIDGE RAIL

SCALE 3/4" = 1'-0"



SECTION OF BOX BEAM BRIDGE RAIL

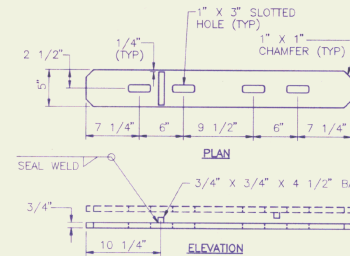
SCALE 1" = 1'-0"

INTERIOR RAILPOST

SCALE 1" = 1'-0"

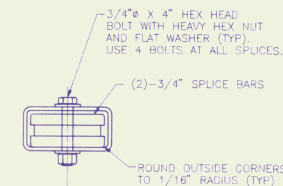
RAILING ATTACHMENT @ U2L2, U4L4, U6L6, U8L8

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



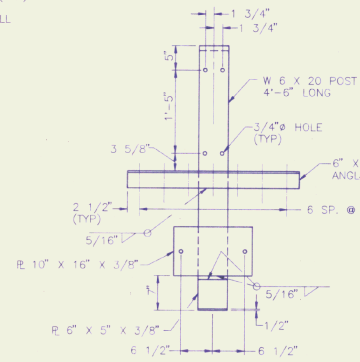
SPLICE BAR

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



SECTION D-D

SCALE 3" = 1'-0"

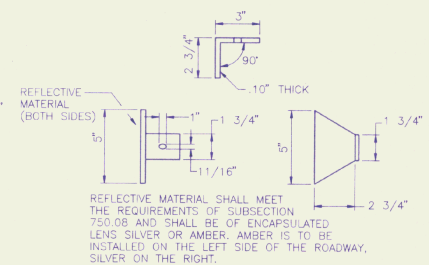


END RAILPOST

SCALE 1" = 1'-0"

RAILING NOTES

1. ALL PLATES, BARS, AND ANGLES SHALL BE ASTM A 36 STEEL UNLESS OTHERWISE SPECIFIED. ALL BOLTS SHALL BE ASTM A 307 STRUCTURAL STEEL TUBING SHALL BE ASTM A 500 COLD-FORMED GRADE B AS MODIFIED IN SECTION 7.32.03(a).
2. ALL BOX BEAM BRIDGE RAILING, COMPONENTS, ANCHOR BOLTS AND ATTACHMENT HARDWARE SHALL BE GALVANIZED TO ASTM A 123 AFTER FABRICATION.
3. THE FABRICATOR SHALL SUBMIT SHOP DRAWINGS, INCLUDING WELDING PROCEDURES, FOR APPROVAL IN ACCORDANCE WITH THE PROVISIONS OF SECTION 506.04-SHOP DRAWINGS. ALL WELDING SHALL CONFORM WITH SECTION 506.10.
4. PROCEDURE QUALIFICATION FOR ALL WELDS SHALL BE PERFORMED AND APPROVED PRIOR TO FABRICATION. WELDER QUALIFICATION WILL BE REQUIRED FOR EACH PROCEDURE. PROCEDURE AND WELDER QUALIFICATION ACCEPTANCE SHALL BE APPROVED BY RADIOGRAPHIC TESTING.
5. THE RAIL SYSTEM SHALL BE CONTINUOUS WITH EACH TUBE SECTION ATTACHED TO A MINIMUM OF TWO POSTS. ALL JOINTS SHALL BE SPLICED AS DETAILED, WITH ALL SPLICE CONNECTIONS IN THE SAME PANEL LOCATED ONE DIRECTLY ABOVE THE OTHER.
6. ALL POSTS SHALL BE SET NORMAL TO GRADE.
7. RAILING JOINT SPLICES SHALL BE PROVIDED FOR ALL SUPERSTRUCTURE JOINTS. THE RAIL JOINT OPENING SHALL BE 1 INCH.
8. REFER TO STANDARD SB-R4B-82 FOR GUARD RAIL APPROACH SECTION- TYPE I & TYPE II DETAILS.
9. DELINEATORS SHALL BE MOUNTED AS SHOWN ON DETAILS. PAYMENT SHALL BE SUBSIDIARY TO OTHER ITEMS.



THIS REFLECTORIZED ALUMINUM DELINEATOR IS TO BE ERECTED AT EACH NEW RAIL POST. DELINEATOR SHALL MEET SPECIFICATION REQUIREMENTS FOR ASTM B209 ALLOY 5052-H32.

DELINEATOR

N.T.S.

**RECORD
DRAWING**

A.G. LICHTENSTEIN & ASSOCIATES, INC.
CONSULTING ENGINEERS

Lichtenstein

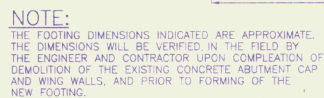
BRIDGE HIGHWAY RAILROAD SITE ENGINEERING

**DuBois
& King**

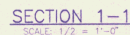
engineering planning management development

**TOWN OF
BERLIN, VERMONT**

TOWN OF BERLIN	Bridge No. 51
HIGHWAY NO.	Log Sta.
BRIDGE RAILING - 2 RAIL GALVANIZED BOX BEAM	Surv. Sta.
LOVER'S LANE BRIDGE	
Designed by JBM	Drawn by C.B.
Checked by E.A.R.	Bridge Design Supervisor
VAOT PROJECT NO.	DATE
THS-9266	R12483/3
Drawing No. 8260	Sheet 14 of 21



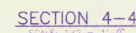
SCALE: 1/4" = 1'-0"



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



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

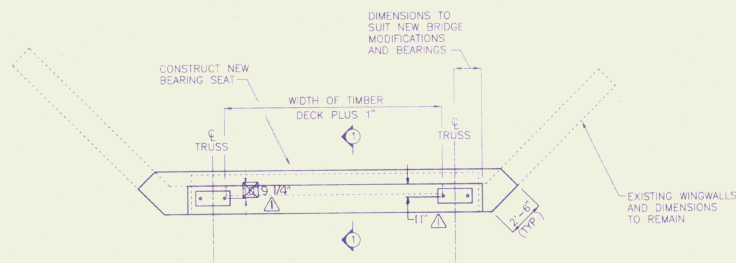


POURED TREMMY
CONCRETE IN
COFFERDAM UP TO
EL 595±.
CONTINUED WITH FTG.
AS DESIGNED TO
EL 600.00

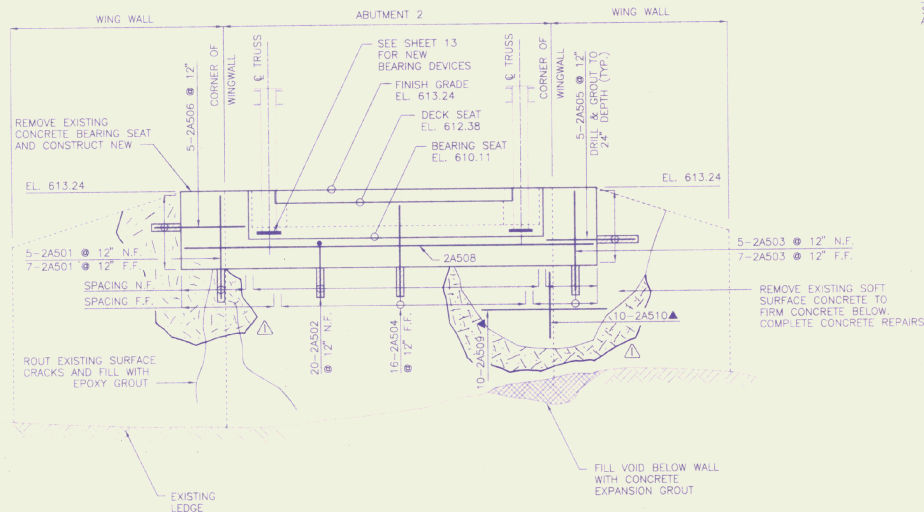
ABUTMENT 1 NOTES:

1. ALL SPLICE LENGTHS FOR NO. 5 BARS SHALL BE 2'-2" MINIMUM.

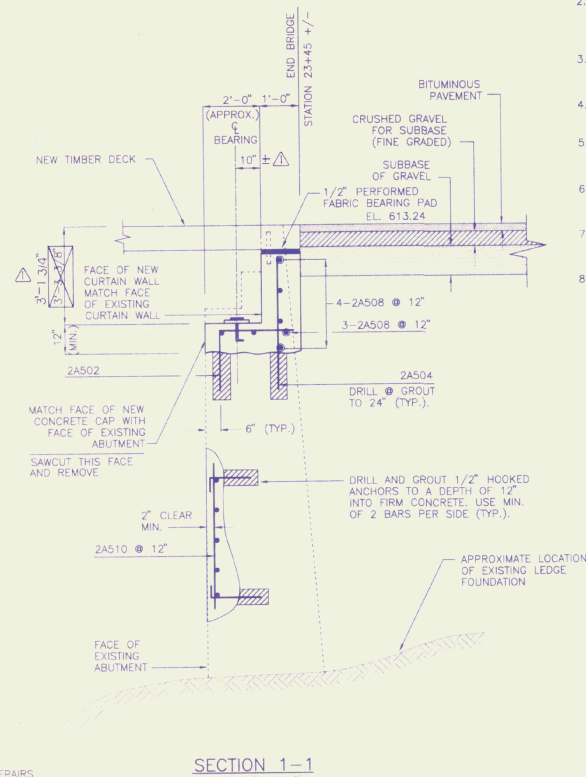
NO.	DESCRIPTION	BY & DATE
△	AS BUILT REVISION	JUNE 95
RECORD DRAWING		
		
engineering	planning	development
TOWN OF BERLIN, VERMONT		
TOWN OF BERLIN	Bridge No. 27	
	Loc. Shs.	
HIGHWAY NO. 61	Surv. Shs.	
ABUTMENT 1 LOVER'S LANE BRIDGE		
Designed by: JWC	Drawn by: JWC	
Checked by: <i>180 Date 6/11/95</i>	Bridge Design Supervisor Date	
WAOI PROJECT NO.	C&K PROJECT NO.	
T-13-9266	R1248373	
Drawing No. 5261	Sheet 15 of 21	



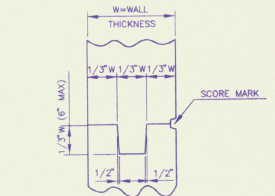
ABUTMENT 2 PLAN
SCALE: 1/4" = 1'-0"



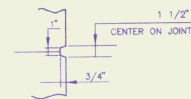
ABUTMENT 2 ELEVATION (DEVELOPED VIEW)
SCALE: 1/4" = 1'-0"



SECTION 1-1



TYPICAL CONCRETE CONSTRUCTION JOINT
NOT TO SCALE



SCORE MARK DETAIL
NOT TO SCALE

ABUTMENT 2 NOTES:

1. THE DIMENSIONS SHOWN FOR THE CENTERLINE OF TRUSS BEARING MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
2. CONTRACTOR SHALL FIELD VERIFY WITH ENGINEER THAT THE 85'-0" CENTER TO CENTER OF EXISTING BEARING LENGTH WILL BE MAINTAINED PRIOR TO PLACEMENT OF CONCRETE AND BEARING DEVICES.
3. THE CONTRACTOR SHALL DISCUSS A CONSTRUCTION SEQUENCE WITH THE FIELD ENGINEER REGARDING PLACEMENT OF THE NEW CONCRETE CAP PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL PREVENT LATERAL MOVEMENT OF THE ABUTMENT DURING CONSTRUCTION.
5. REMOVAL OF SOFT CONCRETE AND SURFACE REPAIRS TO ABUTMENT 1 WILL BE PAID FOR UNDER ITEM NO. 580.15, REPAIR CONCRETE SUBSTRUCTURE SURFACE, CLASS III.
6. SAW CUTTING AND REMOVAL OF THE EXISTING CONCRETE ABUTMENT SHALL BE PAID FOR UNDER ITEM NO. 529.20, PARTIAL REMOVAL OF STRUCTURE.
7. PLACEMENT OF NEW CONCRETE CAP WILL BE PAID FOR UNDER ITEMS 501.25, CONCRETE, CLASS B AND 507.15 REINFORCING STEEL.
8. DOWEL HOLE DIAMETERS SHALL BE 2 INCHES. HOLES SHALL BE THOROUGHLY CLEANED BY AIR BLASTING PRIOR TO PLACING GROUT MATERIAL.

NOTES

- = CUT TO FIT IN FIELD
 NF = NEAR FACE
 FF = FAR FACE
 EF = EACH FACE

RECORD DRAWING

TOWN OF
BERLIN, VERMONT

TOWN OF BERLIN Bridge No. 27
Log Sta. _____
HIGHWAY NO. 61 Surv. Sta. _____

ABUTMENT 2

LOVER'S LANE BRIDGE

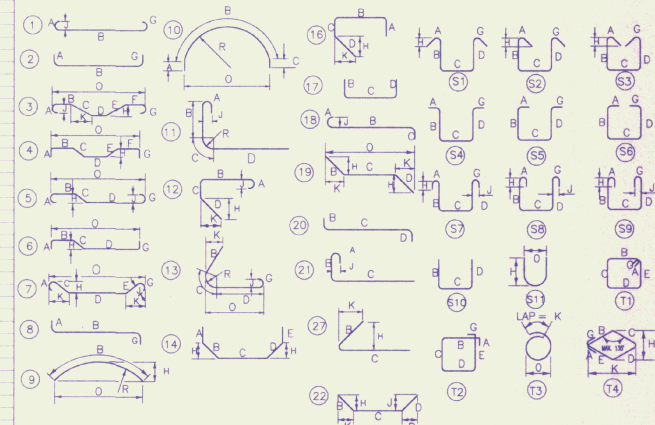
Designed by: *J. E. T.* Drawn by: *EBS*
 Checked by: *DS* Bridge Design Supervisor
 VDOT PROJECT NO. 140-9066 Date PROJECT NO. 2014093
 Drawing No. 8262 Sheet 16 of 21

NO.	DESCRIPTION	BY & DATE
1	AS BUILT REVISIONS	JUNE 95

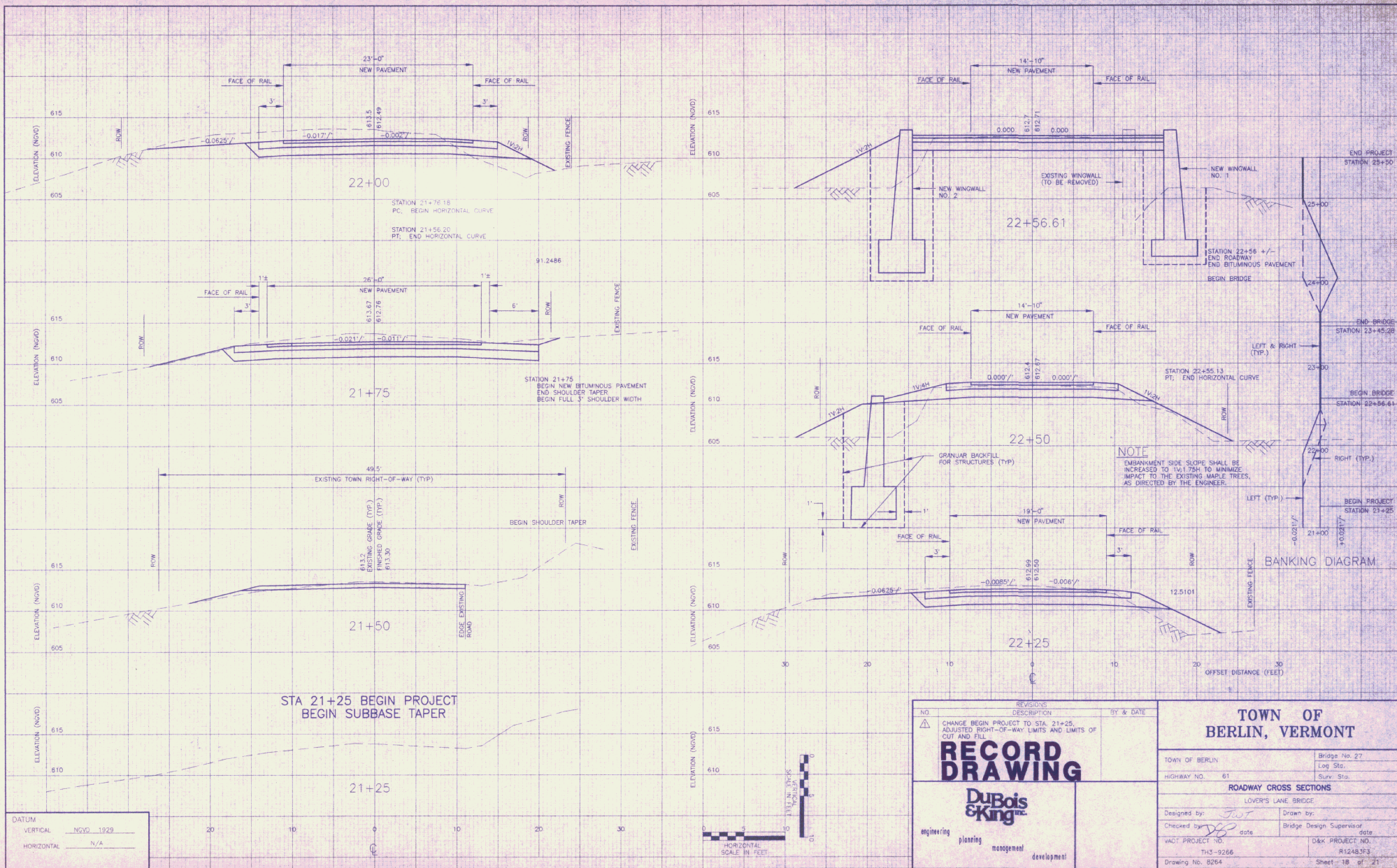
engineering planning management development
DuBois & King INC.

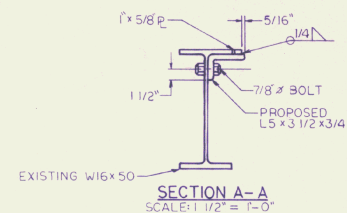
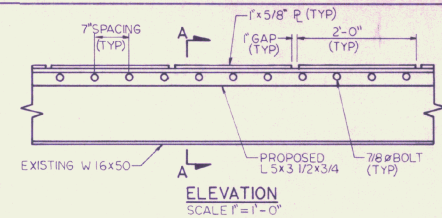
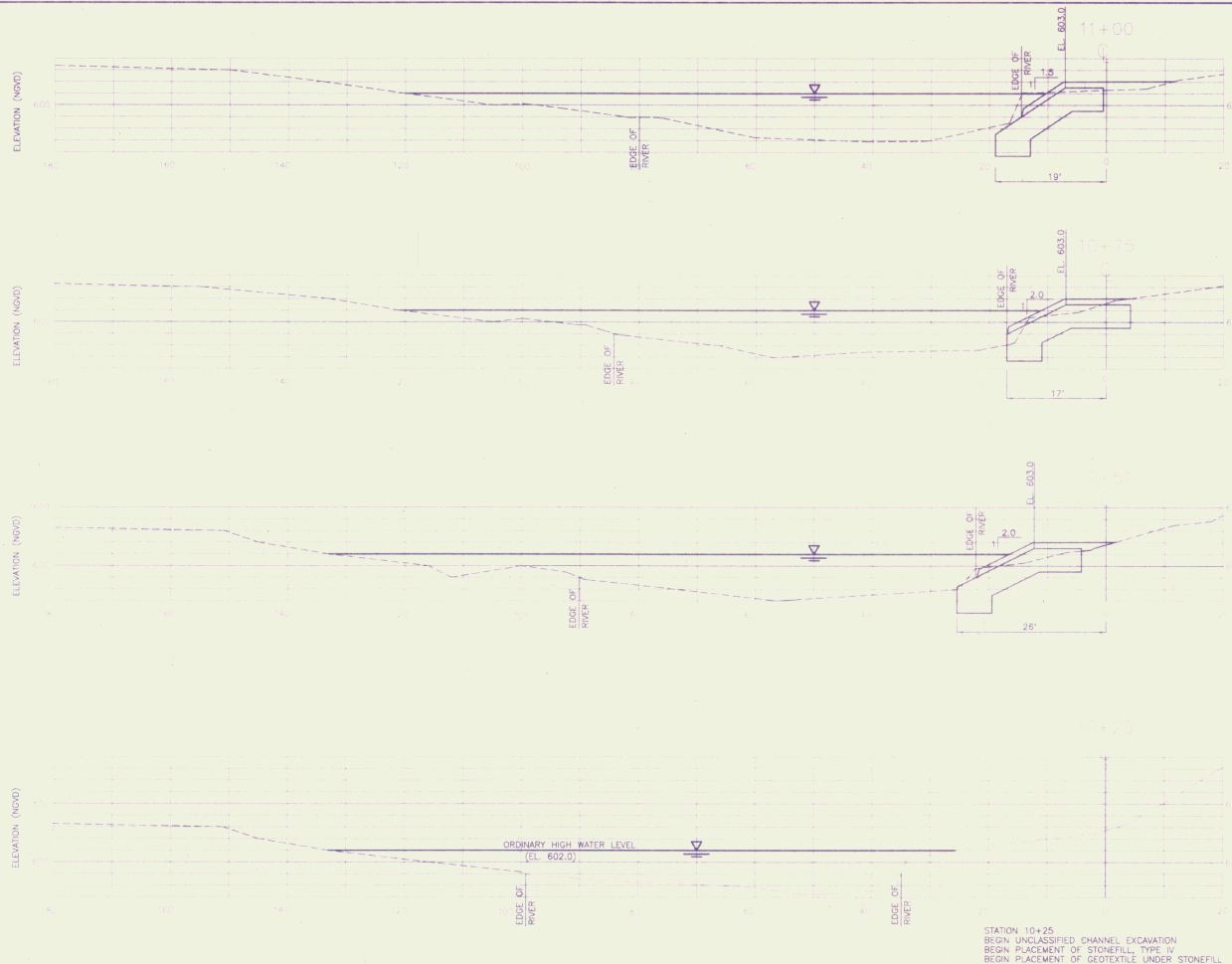
ASTM STANDARD REINFORCING BARS				
BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIAMETER INCHES	DIMENSIONS ROUND SECTION CROSS SECTIONAL AREA SQ. INCHES	PERIMETER INCHES
#3	.376	.375	.11	1.178
#4	.668	.500	.20	1.571
#5	1.043	.625	.31	1.983
#6	1.502	.750	.44	2.356
#7	2.044	.875	.60	2.749
#8	2.670	1.000	.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

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 BARS AND BARS IN CONCRETE REINFORCEMENT," ASTM A 31 (ASTM A 615-S1). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIMETER "C" FOR HOOKS 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 STANDARDS ARE OUT TO OUT OF BAR EXCEPT "K" AND "G" ON DIMENSIONS 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT THE 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.



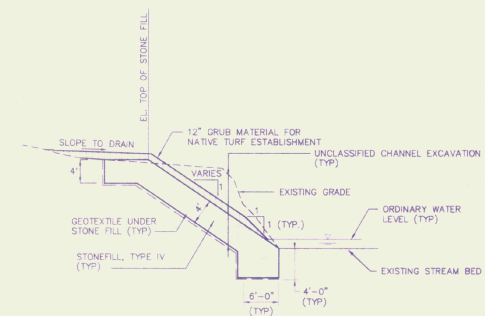
	REVISIONS		TOWN OF BERLIN, VERMONT		
NO.	DESCRIPTION	BY & DATE			
 engineering planning management development			TOWN OF BERLIN		Bridge No. 27
			HIGHWAY NO. T.H. 61		Log Sta.
					Surv. Sta.
			REINFORCING STEEL SCHEDULE		
			LOVER'S LANE BRIDGE		
			Designed by: J.W.T.		Drawn by: E.B.S.
			Checked by: D.D.		Bridge Design Supervisor date
			VAOT PROJECT NO. Th3-9286		D&K PROJECT NO. R12483F3
			Drawing No. 8263		Sheet 17 of 21





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

△ FLOORBEAM FLANGE WIDENING
AT NODE L2 ONLY

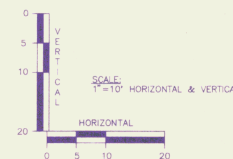


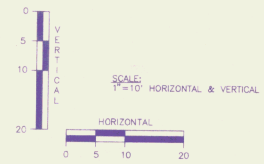
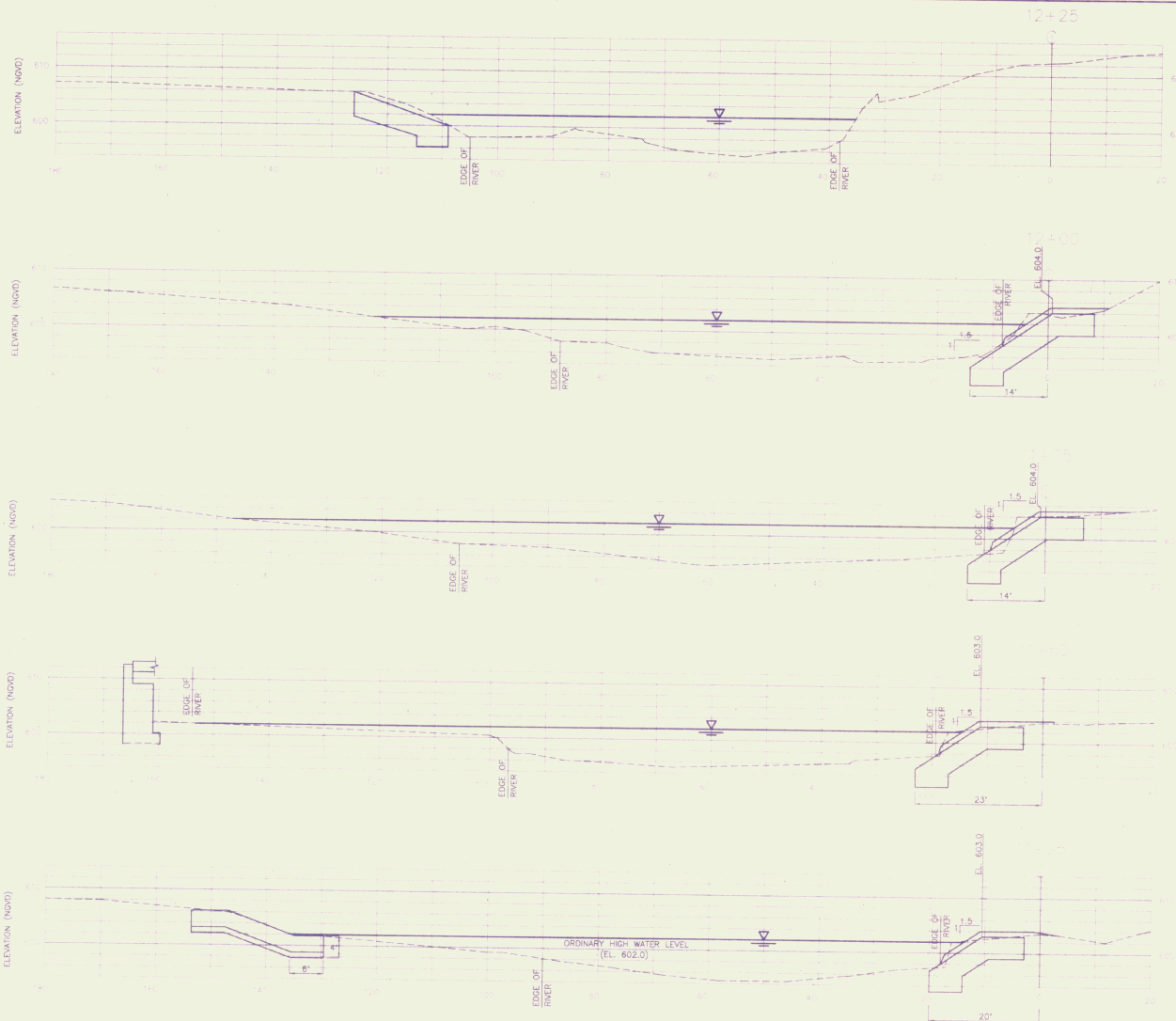
TYPICAL CHANNEL/STONEFILL
SECTION
NOT TO SCALE

RECORD DRAWING

REVISIONS		TOWN OF BERLIN, VERMONT	
NO.	DESCRIPTION	BY & DATE	
1	AS BUILT REVISIONS	JUNE 95	
		TOWN OF BERLIN	Bridge No. 27
		TOWN HIGHWAY NO. 61	Log Sta.
		Channel Sections	Surv. Sta.
		LOVER'S LANE BRIDGE	
Designed by: <i>JS</i>		Drawn by: RMB/ATC	
Checked by: <i>JS</i>		Bridge Design Supervisor	Site
VAD PROJECT NO. 113-9266		PROJECT NO. R12483F3	
Drawing No. 8266		Sheet 20 of 21	

DATUM
VERTICAL: NAD 83
HORIZONTAL: N/A





RECORD DRAWING

TOWN OF
BERLIN, VERMONT

TOWN OF BERLIN Bridge No. 27
TOWN HIGHWAY NO. 61 Log Sho

CHANNEL SECTIONS

LOVER'S LANE BRIDGE
Designed by *JWT* Drawn by RWS/ATC
Checked by *DD* Bridge Design Supervisor
PROJECT NO. TH3-3266 PROJECT NO. R124833
Drawing No. R267 Sheet 21 of 21

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& King**

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DK PROJ. R12483.1