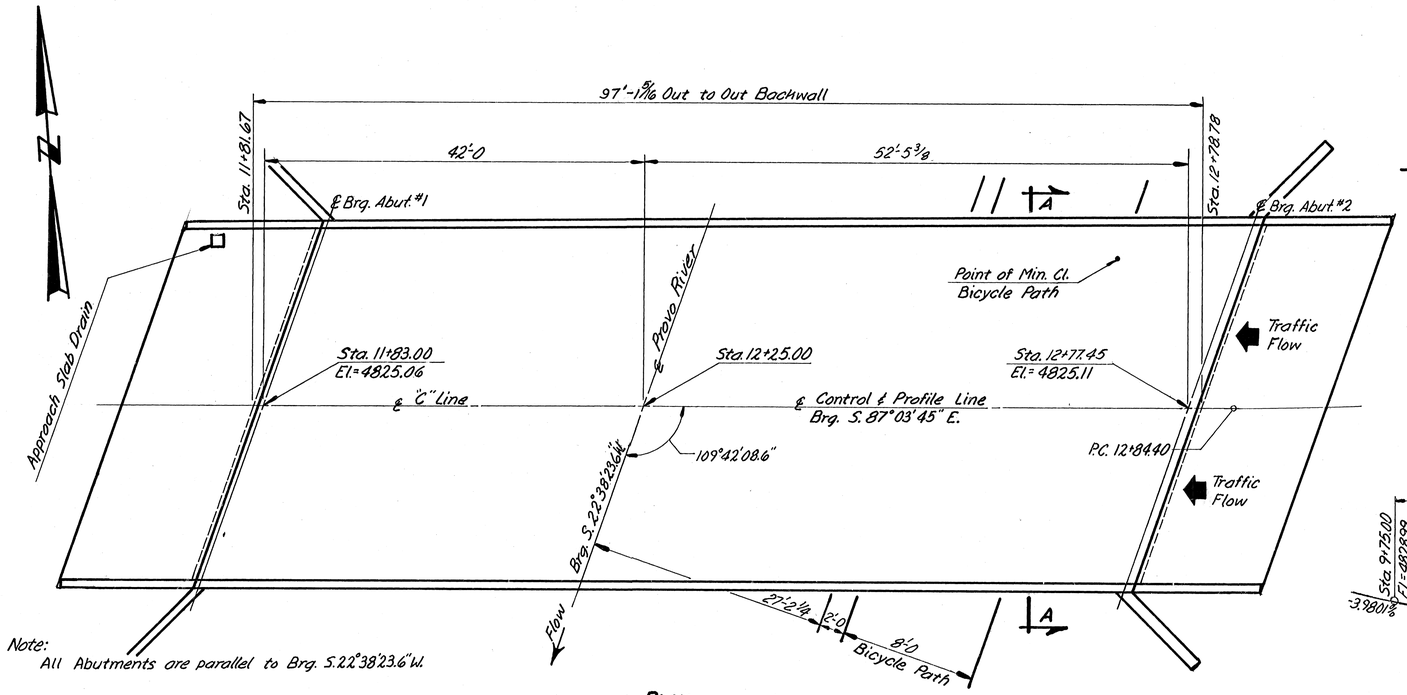
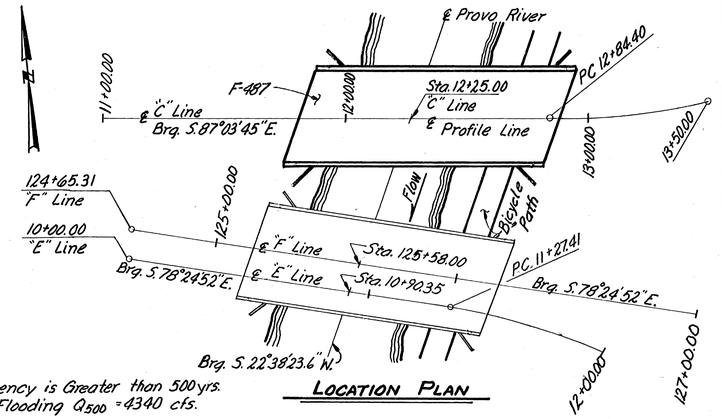


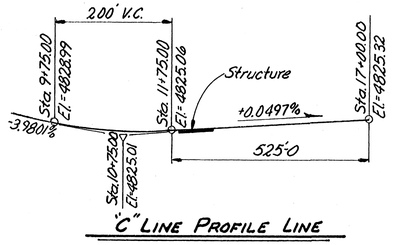
PLAN



LOCATION PLAN

HYDRAULIC DATA

Drainage Area = 680 sq. mi.
Q_d = 2600 cfs
Normal Stage El.= 4809.7
Normal Depth = 7.7 ft.
Back-water El.= 4810.2
Back-water = 0.5 ft.
Velocity = 6.0 ft./sec.
Q_{100} = 3200 cfs
Back-water El.= 4811.2
Back-water = 1.0 ft.
Overtopping Flooding Frequency is Greater than 500 yrs.
Magnitude of Overtopping Flooding Q_{500} = 4340 cfs.
W.S. Q_{500} El.= 4812.8



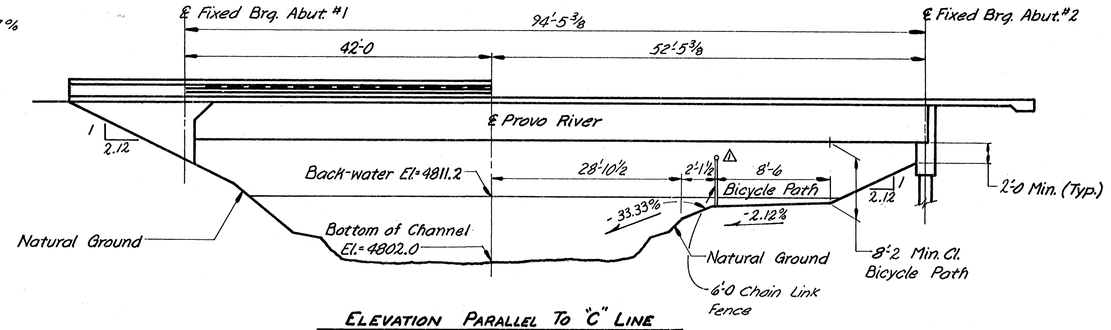
"C" LINE PROFILE LINE

GENERAL NOTES

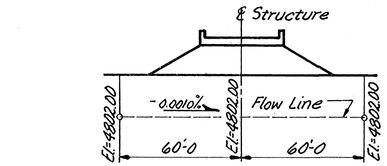
1. Materials, construction, and workmanship shall be in accordance with the Utah Department of Transportation Standard Specifications for Road and Bridge Construction, Edition of 1979, and Supplements thereto, which are in effect at the date of request for bids.
2. All reinforcing steel shall be deformed billet-steel bars conforming to ASTM Designation A615, Grade 60.
3. All structural steel shall be structural carbon steel conforming to AASHTO Designation M-183 except where noted otherwise.
4. Exposed concrete corners shall be chamfered 3/4" except where noted otherwise.
5. Cover to reinforcing steel shall be 2" except where noted otherwise.
6. All cast-in-place concrete shall be Class AA(AE) except where specified otherwise.

SUPER ELEVATION

Sta.	Lt.	Rt.
11+50.00	0%	0%
14+00.00	-5.7%	+5.7%



ELEVATION PARALLEL TO "C" LINE



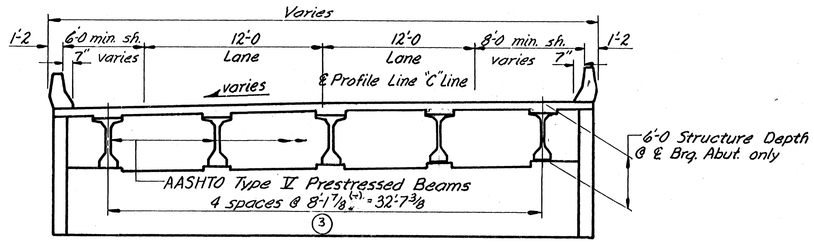
PROVO RIVER PROFILE

INDEX OF SHEETS

1. Situation & Layout
2. Soil Data
3. Foundation Plan
4. Abutment Details
5. Prestressed Beam Details
6. Deck Plan & Sections
7. Framing Plan & Screed Elevations
8. Parapet Details
9. Approach Slab Drain Details
10. Reinforcing Steel Schedule

"C" LINE CURVE DATA

P.I.	14+89.03
Δ	59°29'32" Lt.
D	16°00'00"
R	358.10'
T	204.64'
L	371.83'



SECTION A-A
Normal to "C" Line

DESIGN DATA

HS 20-44 or Interstate Alternate Loading in accordance with AASHTO Specifications of 1977 and Interim Specifications.
Cast-in-place Concrete : f'_c = 1400 psi, f_s (Reinf) = 24,000 psi n=8
Prestressed Concrete : f'_c = 5,000 psi, f_s (Nonprestressed) = 24,000 psi, n=6
Structural Steel : f_s = 20,000 psi
Wearing Surface : 1/2" Concrete, 35 lbs./sq. ft. Future Wearing Surface
Design Speed : 30 M.P.H.

QUANTITIES

	ITEM	ESTIMATED	UNIT	AS CONST.
	Class AA(AE) Concrete	292	Cu. Yds.	
	Reinforcing Steel	15493	lbs.	
	Reinforcing Steel (Epoxy Coat)	25573	lbs.	
	Structural Steel (Est. 4/0)	1	Lump	
	Prestressed Concrete Beam Type V (95'-10 5/16)	5	Each	
	Granular Backfill Borrow	143	Cu. Yds.	
2	Drilled Caissons (2'-6 Dia.)	168	Lin. Ft.	

NO.	BY	DATE	REVISIONS
3	MPP	3/12/84	changed Beam spacing
2	MPP	12/21/83	Changed Caissons Length & Dia.
1	MPP	12/18/83	Added Fence to Bicycle Path

UTAH DEPARTMENT OF TRANSPORTATION
SALT LAKE CITY, UTAH
STRUCTURES DIVISION

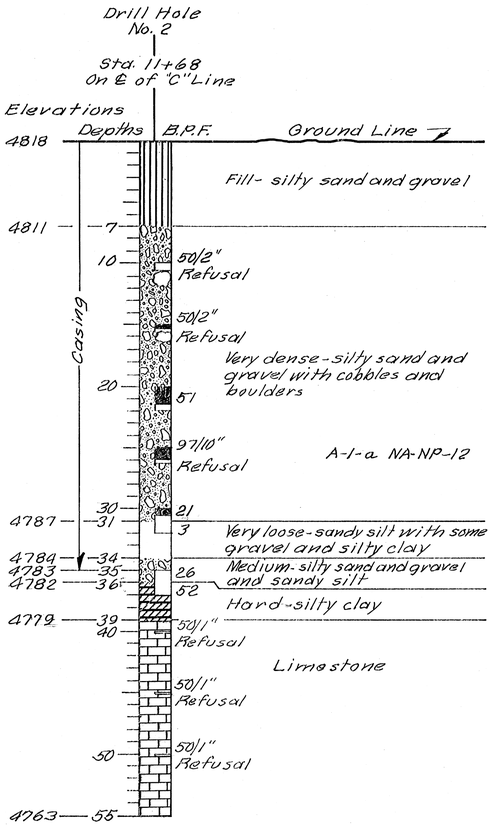
800 NORTH STREET, OREM Us 89 To Us 189
"C" LINE OVER PROVO RIVER
SITUATION & LAYOUT

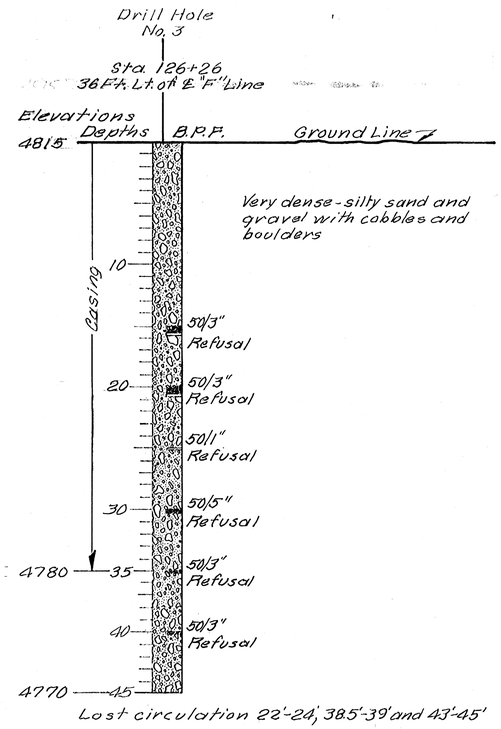
DESIGN M.O. 7-82	CHECK JWG 12-2-83	
DRAWN M.P.P. 7/13/82	CHECK RP 10-1-82	12+25.00 "C" LINE
QUANT M.P.P. 6/15/83	CHECK Mc 6-21-83	STATION
APPROVAL RECOMM. 9-16-83 DATE	GROUP LEADER James H. Hobbs	UTAH COUNTY
APPROVED 12/6/83 DATE	CHIEF STRUCTURAL ENGR. Alyn Manson	DRG. NO. F-487
F-019(25) PROJECT NUMBER		SHT. 1 OF 10

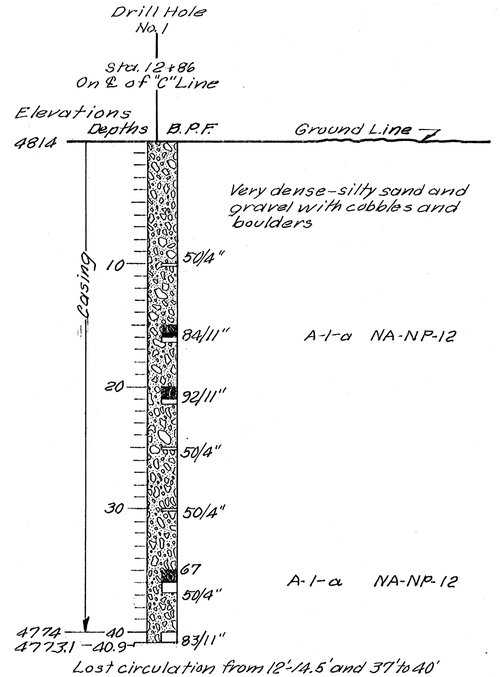
F-487

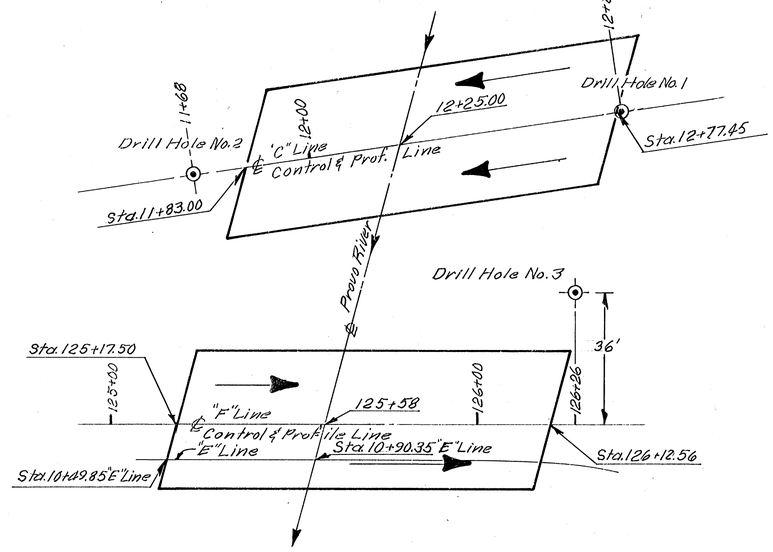
Auth. 5710, CPM 1510

MONSEN ENG. 100 4-81 75967a











KEY TO DRILLING LOG

RELATIVE DENSITY (NON-PLASTIC SAND & SILT)

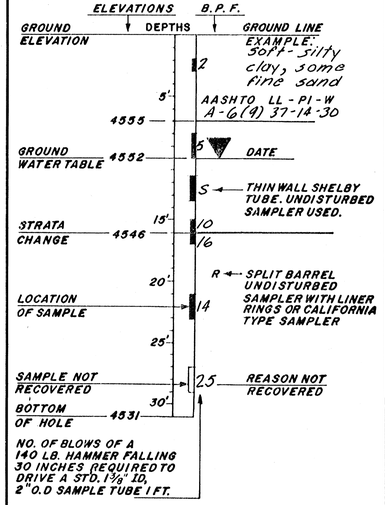
VERY LOOSE — LESS THAN 4 BLOWS PER FOOT.
LOOSE — 4 TO 10 BLOWS PER FOOT.
MEDIUM — 10 TO 30 BLOWS PER FOOT.
DENSE — 30 TO 50 BLOWS PER FOOT.
VERY DENSE — MORE THAN 50 BLOWS PER FOOT.

CONSISTENCY (PLASTIC-SILT & CLAY)

VERY SOFT — LESS THAN 2 BLOWS PER FOOT.
SOFT — 2 TO 4 BLOWS PER FOOT.
MEDIUM — 4 TO 8 BLOWS PER FOOT.
STIFF — 8 TO 15 BLOWS PER FOOT.
VERY STIFF 15 TO 30 BLOWS PER FOOT.
HARD — MORE THAN 30 BLOWS PER FOOT.

TOPSOIL OR FILL	IGNEOUS	SANDY CLAY
GRAVEL	LIMESTONE	CLAYEY SAND
SAND	CONGLOMERATE	SILTY CLAY
SILT	DOLOMITE	CLAYEY SILT
CLAY	SANDSTONE	SILTY SAND
SHALE	SILTSTONE	SANDY SILT

DRILL HOLE NO
STATION 0+00 ℄ OR LT. OR RT. IN FT. OFFSET.



ABBREVIATIONS

L.L. — LIQUID LIMIT IN %
P.I — PLASTIC INDEX
W. — NATURAL MOISTURE CONTENT IN %
Ref. — REFUSAL ≥ 50 BLOWS PER 6"
PEN. — PENETRATION
G.W.T. — GROUND WATER TABLE
B.P.F. — BLOWS PER FOOT.
N.P. — NON PLASTIC
AASHTO - SOIL CLASSIFICATION SYSTEM

Note: All 3 Holes were drilled February, 1983. Water table not observed

NO.	BY	DATE

REVISIONS

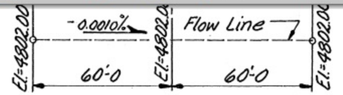
UTAH STATE DEPARTMENT OF TRANSPORTATION
SALT LAKE CITY, UTAH
MATERIALS and RESEARCH SECTION

800 NORTH STREET, OREM
"C" LINE OVER PROVO RIVER
SOIL DATA

Drawn By B.C.S. 3/1/83	Checked By Jerry Ryan	F-019 (25) Project Number
Checked By Ed Keane	Checked By	
Checked By B.Sizemore	Checked By	12+25.00 "C" LINE Station
Approval Recommended By Leon H. Rausher		UTAH County
Received Date	Alex Mansour Chief Structural Engr.	
82-7-FS-29 Foundations File No.	F-487 Drg. No.	2 of 10

Auth. 5710 SPR 1510

F 487.pdf - Adobe Acrobat Pro
File Edit View Document Comments Forms Tools Advanced Window Help
Create Combine Collaborate Secure Sign Forms Multimedia Comment
Sticky Note Text Edits Show



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fs = 20,000 psi
Wearing Surface : ½" Concrete, 35 lbs./sq. ft. Future Wearing Surface
Design Speed : 30 M.P.H.

PROVO RIVER PROFILE

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UTAH DEPARTMENT OF TRANSPORTATION
SALT LAKE CITY, UTAH
STRUCTURES DIVISION

800 NORTH STREET, OREM US 89 TO US 189
"C" LINE OVER PROVO RIVER
SITUATION & LAYOUT

DESIGN M.O. 7-82	CHECK JWG 12-2-83	12+25.00 "C" LINE	
DRAWN M.P.R. 7/13/82	CHECK RP 10-1-82	STATION	
QUANT M.P.R. 6/15/83	CHECK MC 6-21-83	Utah	
APPROVAL RECOMM. 9-16-83 DATE	James A. Holden GROUP LEADER	COUNTY	
APPROVED 12/6/83 DATE	Alex Manson CHIEF STRUCTURAL ENGR.	DRG. NO. F-487	
F-019(25) PROJECT NUMBER		SHT. 1 OF 10	

NO.	BY	DATE	REMARKS
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REVISIONS

Auth. 5710, CPM 1510

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Weather
Gallery
Global Awareness
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Sign in
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Google earth
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11/18/2013