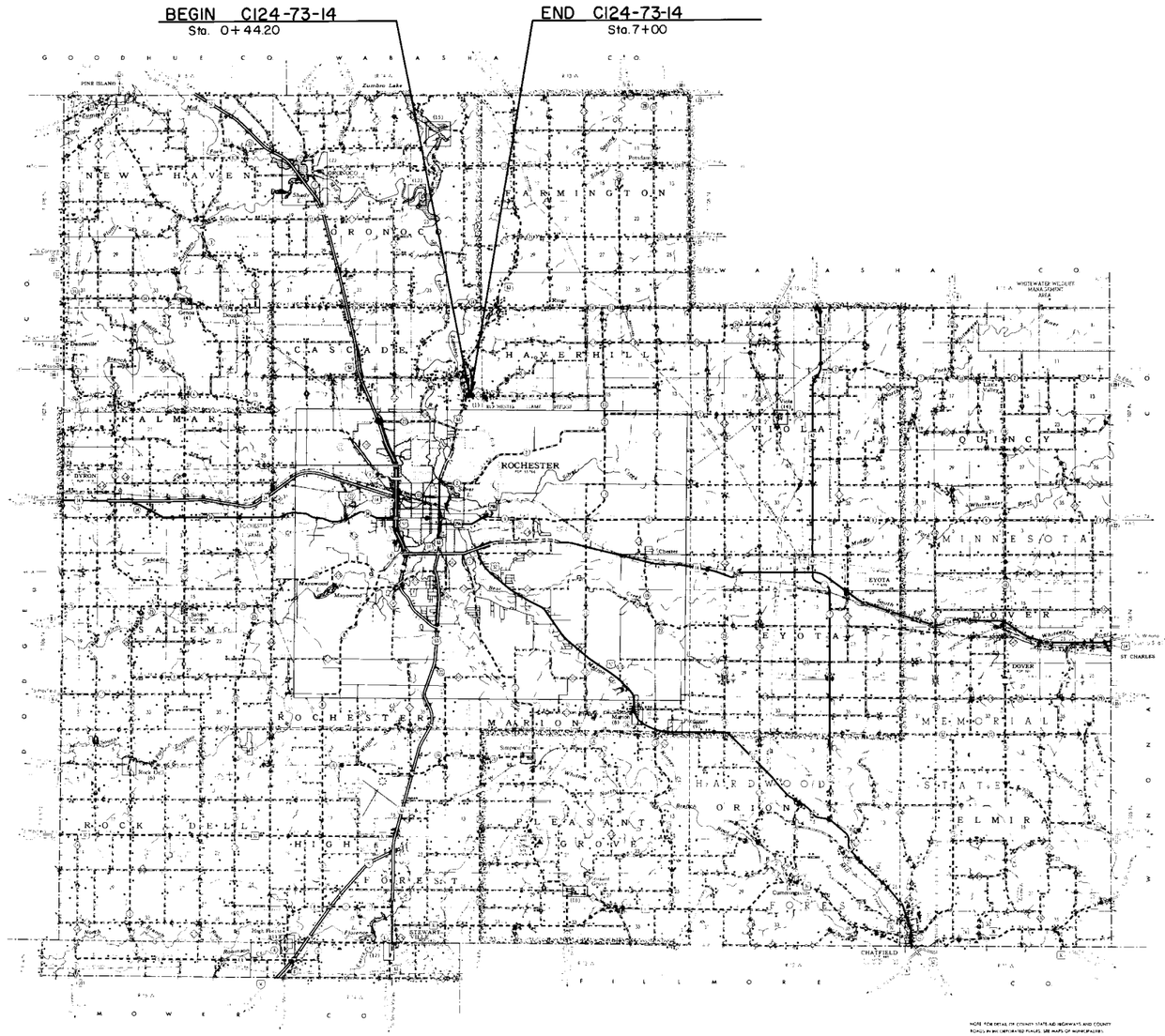
FORM 100-A '65

PLANS SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT RIGHT-OF-WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT-OF-WAY LINE
RIVER OR CREEK (NAME)
DRY RUN
DRAINAGE DITCH (SIZE)
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE (W)
CHAIN LINK FENCE (C-L)
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN (RXR)
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY (TIMBER)
CATCH BASIN (C.B.)
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame) (1-S-F)
F FRAME C-CONCRETE
S STONE T TILE
B BRICK ST STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT (G)
SAND PIT (S)
BORROW PIT (B)
ROCK QUARRY (Q)

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN (G)
WATER MAIN (I)
CONDUIT
TELEPHONE CABLE IN CONDUIT (T)
ELECTRIC CABLE IN CONDUIT (P)
TELEPHONE MANHOLE (T)
ELECTRIC MANHOLE (P)
BURIED TELEPHONE CABLE (T-BUR)
BURIED ELECTRIC CABLE (P-BUR)
AERIAL TELEPHONE CABLE (T-AE)
SEWER, (SANITARY OR STORM)
SEWER MANHOLE



NOTE FOR DETAIL OF COUNTY STATE AID HIGHWAYS AND COUNTY ROADS IN INCORPORATED PLACES, SEE MAPS OF MUNICIPALITIES.

NOTE: ALL MILEAGES, EXCEPT SCENIC WAY ROADS AND LOCATIONS, ARE CURRENT AS OF JAN. 1, 1977.

— SPECIFICATIONS —

STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED JANUARY 1, 1972, SHALL GOVERN.

Fed. Proj. No.

STATE OF MINNESOTA

DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR Grading and Culverts

COUNTY **HIGHWAY NO.** 124

BETWEEN T.H. 63 **AND** 700' East

From Center Sec. 13 T107N-R14W
(Give proper reference to Sections, Township and Range)

To 655.8' East Center Sec. 13 T107N-R14W

GROSS LENGTH	655.8	FEET	0.124 MILES
BRIDGES-LENGTH	0	FEET	0 MILES
EXCEPTIONS-LENGTH	0	FEET	0 MILES
NET LENGTH	655.8	FEET	0.124 MILES

INDEX OF SHEETS

Sheet No. 1 Title Sheet & Layout Map
" No. 2 Est. Quantities & Typical Sec
" No. 3 Plan & Profile
" No. 4 Cross Sections
" No. 5 To 6 Bridge Survey

DESIGN SPEED 50 **M. P. H.**

PROJECTED A. D. T. 927

7 **TON DESIGN**

SOIL FACTOR 130

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Ole Liddleammer DATE Sept 24-73
COUNTY ENGINEER

Olmsted COUNTY REG. NO. 8284

RECOMMENDED FOR APPROVAL _____, 19___
DISTRICT STATE AID ENGINEER

RECOMMENDED FOR APPROVAL _____, 19___

APPROVED _____, 19___
STATE AID ENGINEER

Minn. Project No. _____ S.A.P. _____
State Project No. _____

Olmsted County, Minnesota. County Proj. No. C124-73-14 Sheet 1 of 6 Sheets

ALBINSON, INC.

ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT	MUNICIPAL	RURAL	TOTAL ESTIMATED QUANTITIES
2101.502	Clearing	Tree		5	5
2101.507	Grubbing	Tree		5	5
2104.501	Remove Pipe Culvert	Lin.Ft.		42	42
2442.501	Remove Old Bridge	Lump Sum		1	1
2105.501	Common Excavation	Cu.Yd.		810	810
2105.507	Subgrade Excavation	Cu.Yd.		287	287
2105.521	Granular Borrow (C.V.)	Cu.Yd.		5100	5100
2211.501	Aggregate Base Class 2	Ton		630	630
2501.511	30" C.S. Pipe Culvert	Lin.Ft.		36	36
2501.515	30" G.S. Pipe Aprons	Each		2	2
2501.521	154" Span R.C. Pipe-Arch Culv. Cl. 2A	Lin.Ft.		136	136
2501.521	169" Span R.C. Pipe-Arch Culv. Cl. 2A	Lin.Ft.		68	68
2501.525	154" Span RC. Pipe-Arch Aprons	Each		4	4
2501.525	169" Span R.C. Pipe-Arch Aprons (2 Section Aprons)	Each		2	2
2511.501	Random Riprap Class "B"	Cu.Yd.		60	60

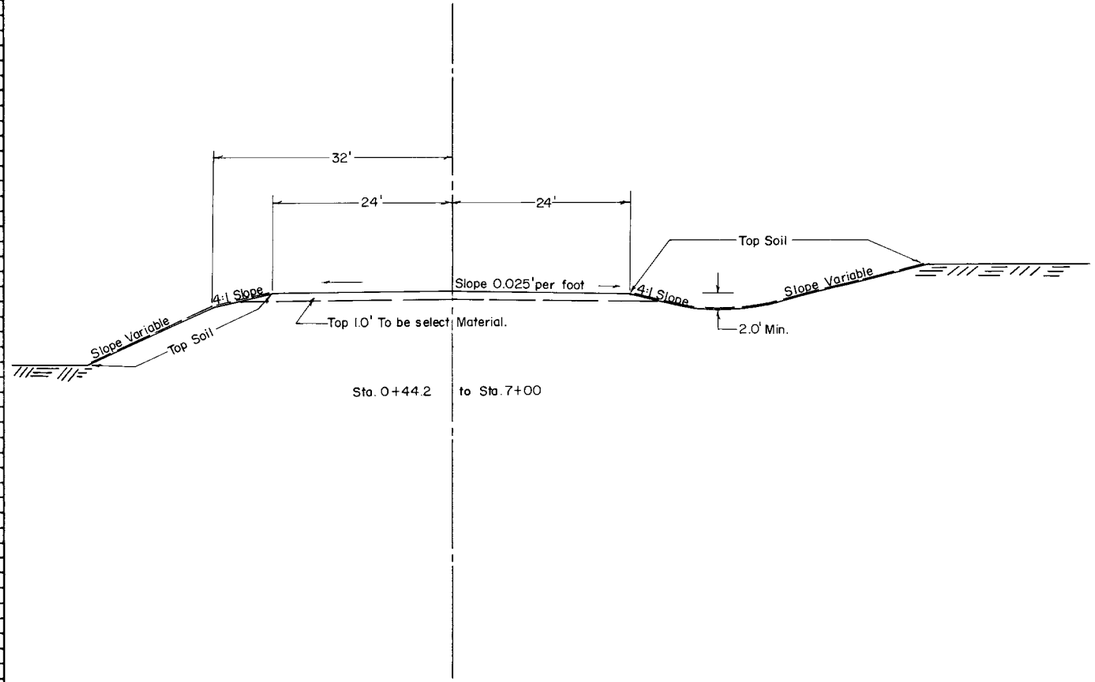
① Includes 40 Tons for Approaches and Radius.

STANDARD DETAIL PLATES

THE FOLLOWING STANDARD DETAIL PLATES, APPROVED BY THE DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINSTRATION, SHALL APPLY ON THIS PROJECT.

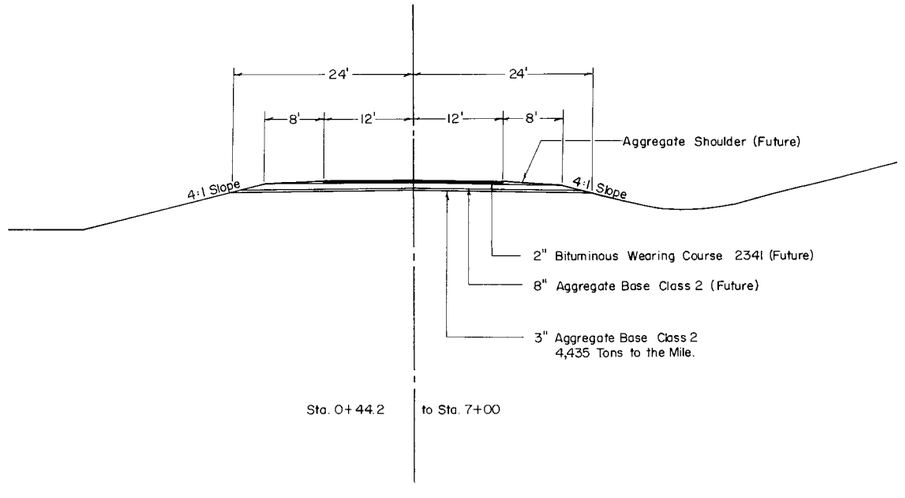
PLATE NO	DESCRIPTION
0002 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3014 F	REINFORCED CONCRETE PIPE-ARCH DETAIL
3040 C	CORRUGATED STEEL PIPE
3114 D	SECTIONAL CONCRETE APRON FOR REINFORCED CONC. PIPE-ARCH
3123 F	STEEL APRON FOR C.S.PIPE
3145 A	CONCRETE PIPE JOINT TIES
8000 D	STANDARD BARRICADES
9000 B	APPROACHES AND ENTRANCES
8008 D	CONTRACTOR'S SIGN

TYPICAL GRADING SECTIONS



Sta. 0+44.2 to Sta. 7+00

TYPICAL BASE AND SURFACE SECTION



Sta. 0+44.2 to Sta. 7+00

SPECIAL DETAILS

Note: Material from the upper 1.0' of the natural topsoil shall not be used in the upper 1.0' of the roadway. Part of this material shall be uniformly spread on slopes and ditch bottoms to a depth of 3". No payment in addition to the contract price for Common Excavation will be made for spreading the topsoil as above provided, nor will any undercutting made in excavation prior to placing the topsoil be measured for payment.

Note: Corrugated Steel and Reinforced Concrete pipe culvert excavation will be considered incidental, and will be under unit price for "Pipe Culvert."

Note: Subgrade Treatment
Excavate 1.0' below profile grade for compaction, as shown on the plan and profile sheets. Excavation has been computed and is listed as C.V. borrow excavation. Backfill with select material from R.O.W. Tapers shall be 50:1 in all cases.

Note: Place Sectional Concrete Pipe on Class "B" and Class "C" Bedding. All bedding to be considered as incidental and no direct compensation shall be made therefor.

Note: All dimensions and slopes shown on typical sections are approximate.

ALBINSON, INC. MINNEAPOLIS

County Proj. No. C124-73-14

S.A.P. _____
State Project No. _____

Olmsted County, Minn. Proj. No. _____ Plan No. _____ Sheet No. 2 of 6 Sheets

PLAN — SURVEYED: PLOTTED: QUANTITY CHECKED: R/W OF WAY CHECKED: NOTE BOOK: NO.: BY: DATE:

PROFILE — SURVEYED: PLOTTED: QUANTITY CHECKED: DESIGNATION: NOTE BOOK: NO.: BY: DATE:

Bridge No. 89177 2+00
Inpl. 28.6' Span 16' Roadway
Remove Old Bridge

Res. Drive Lt. 9+20
Inpl. 15" X 30' CMP
No Change

Res. Drive Lt. 9+95
No Culv. Inpl.
No Change

BEGIN C124-73-14
Sta. 0+4420

END C124-73-14
Sta. 7+00

Center Section 13 T.107 N. R.14 W.

Tele. Cable Marker

Tele. Cable Marker

House

Rt. 0+44.20

+32

+20

+95

66'

50' R

Bridge 6840

Run

Dry

Rt. 1+83

Outdoor Theater Exit Rt. 4+10
Inpl. 24" X 42' CMP

30" X 36' C.S. Pipe Culvert
2-30" G.S. Pipe Aprons

Sta. 1+83 Construct ℄ Culv. skew 10°
154" Span X 68' R.C. Pipe-Arch Culvert Cl. 2A
2-154" Span R.C. Pipe-Arch Aprons
Place Culv. on "B" Bedding
F & I Approved Joint Fasteners
Inlet Elev. 79.8
Outlet Elev. 80.5

Sta. 2+00 Construct ℄ Culv. skew 10°
169" Span X 68' R.C. Pipe-Arch Culvert Cl. 2A
2-169" Span R.C. Pipe-Arch Aprons
Place Culv. on "B" Bedding
F & I Approved Joint Fasteners
Inlet Elev. 80.8
Outlet Elev. 81.5

Sta. 2+17 Construct ℄ Culv. skew 10°
154" Span X 68' R.C. Pipe-Arch Culvert Cl. 2A
2-154" Span R.C. Pipe-Arch Aprons
Place Culv. on "B" Bedding
F & I Approved Joint Fasteners
Inlet Elev. 79.8
Outlet Elev. 80.5

CL. 5 – GR. 5

BM Elev. 995.59
Disk S.E. Cor.
Bridge 6840

℄ Subgrade Elev.

+57	93.97	93.8	93.4	93.0	92.86	93.25	94.16	95.6

1000
990
980
970

P.I. +00
Elev. 92.2
400' V.C.
M = 1.05

-0.4%

+1.7%

Elev. 93.0

P.V.C. +00

Elev. 95.6

P.C.T. +00

Culvert Elev. See Above

+44.2

+00

COMMON EXC. 810 Cu.Yds.
GRANULAR BORROW 5,100 Cu.Yds. (C.V.)
SUBGRADE EXC. 287 Cu.Yds.

Profile 75' Rt.
Profile 75' Lt.

EMB 5,045 Cu.Yds.

Construction Note: 500 Cu. Yds. of the top 1.0' of top soil to be salvaged from Sta. 1+00 to Sta. 7+00 and placed on backslopes. Quantity included in "Common Excavation" quantity.

Subgrade Treatment:
Excavate 1.0' Below Profile Grade
Sta. 0+75 to Sta. 1+25 and
Sta. 4+00 to Sta. 7+00.

+44.20 +57 +75		+72	+44		+42									
994.4	94.9	95.0	94.1	90.5	90.2	90.0	90.1	90.8	91.6	993.2	94.7	95.7	96.5	98.8	1001.2	02.1	01.8

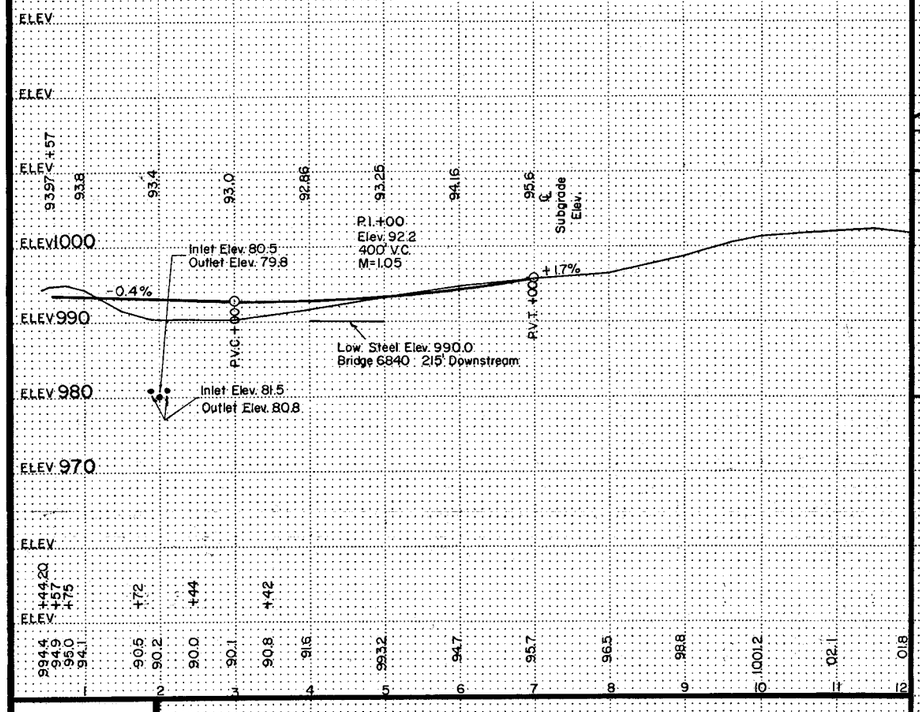
0 5 10

C.P. C124-73-14 C.R. 124 OLMSTED COUNTY, MINN. SHEET 3 OF 6 SHEETS

SINGLE PLAN & PROFILE – JOTTED
CHARLES BRUNING COMPANY, INC.

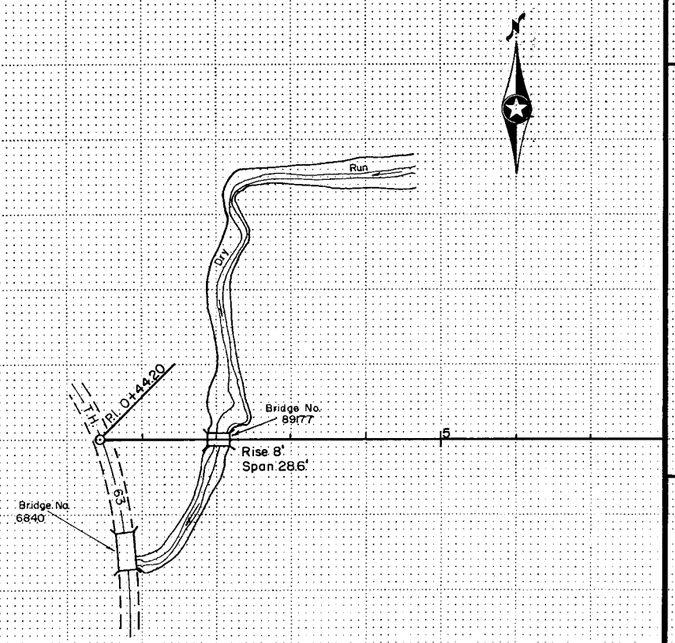
CONTRACTED PROFILE

SCALE: HOR. 1" = 100' VER. 1" = 10'



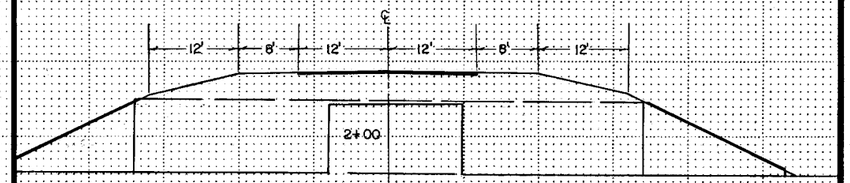
PLAT

SCALE: 1" = 100'



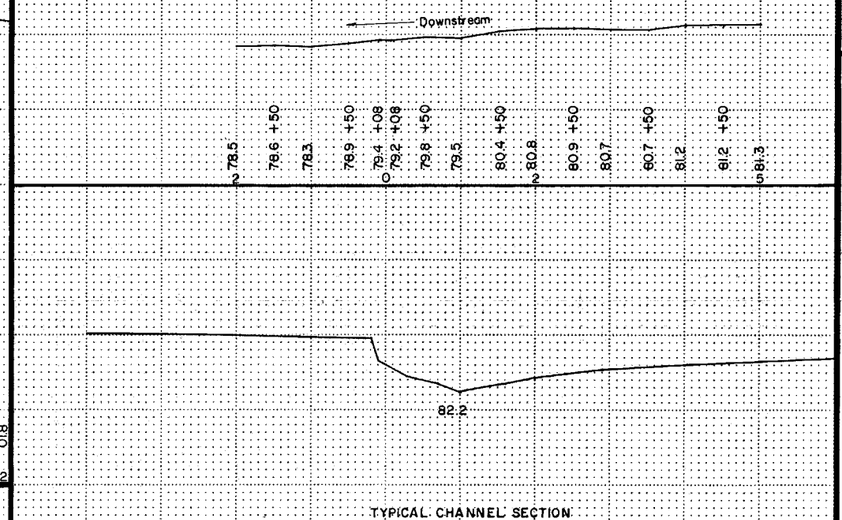
TYPICAL SECTIONS & PERTINENT DATA

SCALES AS SHOWN

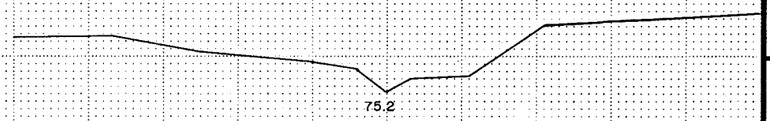


TYPICAL HIGHWAY SECTION

RIVER BOTTOM PROFILE



TYPICAL CHANNEL SECTION
750' Upstream
(Looking Upstream)

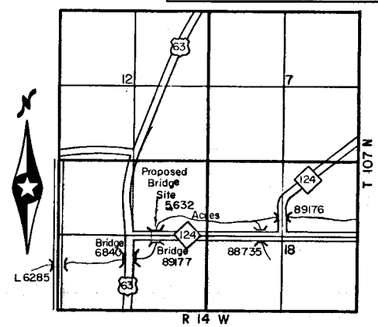


TYPICAL CHANNEL SECTION
1000' Downstream
(Looking Downstream)

B.M. ELEV 995.59 (M.S.L. 19 ADJ.)
Disk in S.E. Cor. Bridge 6840

SEE SHEET OF SHEETS FOR PLAN AND PROFILE

Fed. Proj. No.



R 14 W
INDEX MAP
(FOUR SECTIONS)

FOLLOW SEPARATE "INSTRUCTIONS FOR PREPARATION OF BRIDGE SURVEYS" WHEN MAKING BRIDGE SURVEYS.

DATA

1. Preliminary recommendations of Engineer in charge of Bridge Survey:
   a. Net span length and type of bridge: 1-69" Span Arch & 2-54" Span Arch (Concrete)
   b. Width of roadway on bridge: 40'
   c. Number and width of sidewalks, if any: None
   d. Locate center of bridge at station: 2+00
   e. If a skew bridge is recommended, the angle of skew should be: 10°
   f. Is piling required? No
2. Special features: Waterfalls, dams, exceptional floods, ice, driftwood, sliding banks, logging, etc.
   None
3. Changes: In height or length from that of old bridge, and reasons why:
4. Other bridges in vicinity:
   a. Over same stream (particularly structures which carry high water without overflow of roadway); give location, length, height above water, net cross-sectional area at high water stage and estimated age: Upstream .75 mile W104 Conc. Box Built 1936 Bridge 89176 Upstream 70 mile Bridge 88735 W105 Conc. Box Built 1938 Downstream 215' Bridge 6840 49.5' in length 13.0' low steel to stream bed Downstream .55 mile Bridge L6285 4-72" X 20' CMP Built 1915
   b. Over or under same highway or railroad; give location, length, horizontal and vertical clearances and estimated age:
   c. Reasons why these bridges are, or are not, fair indications of what length the proposed bridge should be:
5. If structure is over a drainage ditch, is ditch gradient liable to be altered? No
6. Navigation clearances required, if any: None
7. Information and evidence in regard to high water stages was obtained as follows:
8. Must contractor provide for traffic during construction of proposed bridge? Yes
   If so, by what means? By Pass

HYDRAULIC ENGINEERS RECOMMENDATION

HIGH AND LOW WATER ELEVATIONS

Data obtained from ..... reflects highest water elevation in the area of this construction to be ..... and the lowest water elevation to be ..... The above figures are for informational purposes only. The state neither warrants nor represents that these figures for high water and low water are in any way indicative of the high water or low water to be expected or encountered during this construction.

SHIPPING POINT

Proposed Bridge is 4 miles North of * Rochester which is the nearest Railroad shipping point.

*(Give name of town, station or siding)

Date ..... County Engineer .....

Date ..... District Engineer .....

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

BRIDGE SURVEY

FOR

PROPOSED BRIDGE LOCATED 4 MILES North OF Rochester (TOWN OR CITY) ON CR. 124 (T.H., C.S.A.H. OR C.A.R. NUMBER)

SEC. 13 TWP. 107 R. 14

TOWNSHIP Haverhill COUNTY Olmsted

SURVEY MADE DURING MONTH OF May 19 73

SURVEY MADE BY Lawler

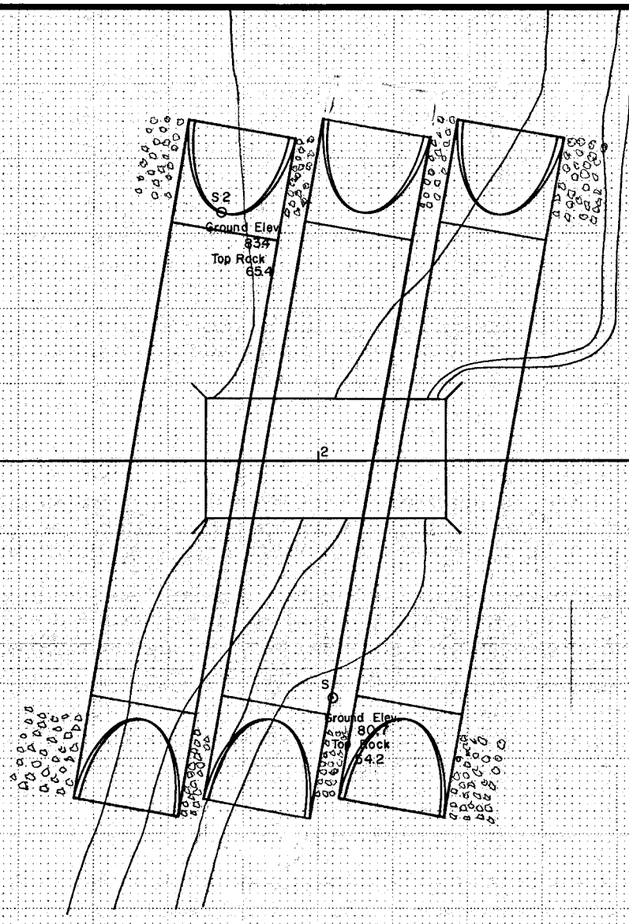
BRIDGE NO. .....

Area No. Job No. Proj. No. C124-73-14 Sheet No. 5 of 6 Sheets

Bridge Survey Sheet (Sheet 1 of 2)

Fed. Proj. No.

SCALE: 1" = 10'



CENTERLINE OF LAYOUT

1 2 3

ELEV

Scale: 1"=5'

ELEV

ELEV

ELEV

ELEV

ELEV

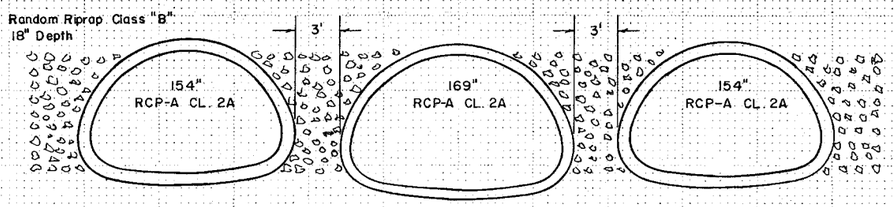
ELEV

ELEV

ELEV

ELEV

B.M. ELEV 995.59 (M.S.L. 19 ADJ.)
Disk in S.E. Cor. Bridge 6840



BORINGS SHOWN [T] TAKEN WITH
STD. 140 LB. HAMMER
30 INCH DROP
2 INCH O.D. SAMPLER

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN

For the design of the structure foundation, to obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing with the log of such exploration data as interpreted for such design purpose as shown. The explorations were made by ordinary and conventional methods and care deemed adequate for such purpose. However, since it is a matter of common knowledge that the exact character of any material and its reaction is difficult to determine from such subsurface exploration and that the kind and character of material at the site where the foundations are built may vary substantially from that indicated by the log they are made available to the bidders simply for what they are worth, without any warranty, expressed or implied that the material to be encountered in building the foundation will conform therewith. If the log is used by the contractor in making his bid, it is hereby expressly stipulated that the Highway Department accepts no responsibility for said use.

TRUNK HIGHWAY NO.
STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

BRIDGE NO.

BRIDGE SURVEY
PLAN AND PROFILE

SEE SHEET NO. FOR ADDITIONAL INFORMATION

Proj. No. C124-73-14

Sheet No. 6 **of** 6 **Sheets**

Bridge Survey Sheet (Sheet 2 of 2)