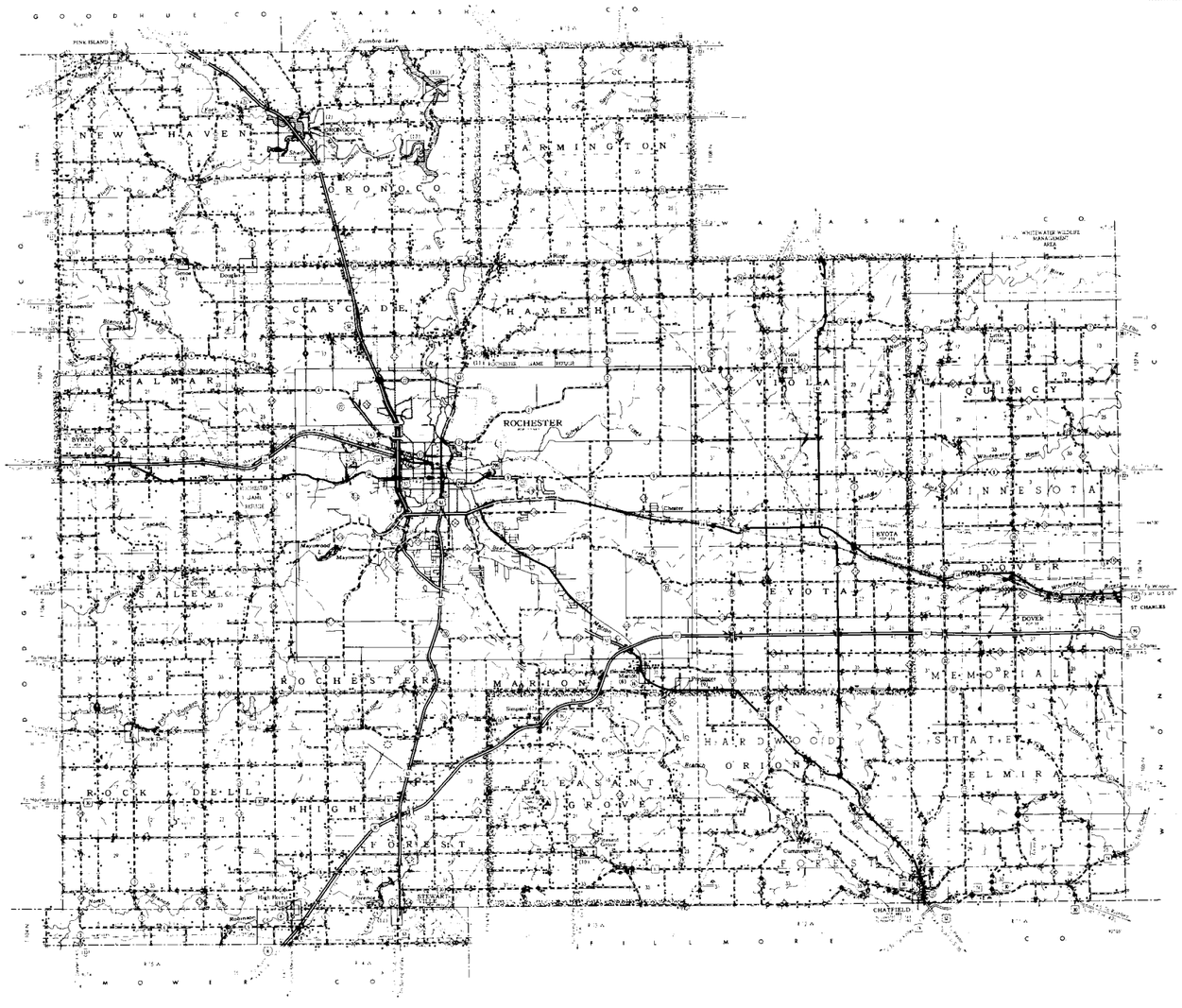
FORM 100-A '65

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
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
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) 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 W
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



C.P. C110-76-6
Sta. 100+32

— SPECIFICATIONS —

M.H.D. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED JANUARY 1, 1972
AS AMENDED BY SUPPLEMENTAL SPECIFICATIONS DATED APRIL 1, 1976 SHALL GOVERN.

Fed. Proj. No.

STATE OF MINNESOTA

DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR Culvert Construction

COUNTY [redacted] **HIGHWAY NO.** 110

BETWEEN C.S.A.H. No. 10 **AND** CR No. 130

AT 2643.22' North of S.E. Corner Sec. 21 T105 N – R11 W
Give proper reference to Sections, Township and Range

GROSS LENGTH		**FEET**	**MILES**
BRIDGES-LENGTH	23.666	**FEET**	0.004 **MILES**
EXCEPTIONS-LENGTH		**FEET**	**MILES**
NET LENGTH	23.666	**FEET**	0.004 **MILES**

INDEX OF SHEETS

Sheet No 1 Title Sheet & Layout Map
" No 2 Est Quantities & Typical Sec
" No 3 To Plan & Profile
" No To Cross Sections

DESIGN SPEED _____ **M. P. H.**

PROJECTED A. D. T. _____

_____ **TON DESIGN**

SOIL FACTOR _____

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.

J K Dolan COUNTY ENGINEER DATE 8-3-76

Olmsted COUNTY REG NO 10219

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. C110-76-6 **Plan No.** _____ **Sheet 1 of** 3 **Sheets**

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	MUNICIPAL	RURAL	TOTAL ESTIMATED QUANTITIES
1.	2501.521	115" Span R.C.P. – A Culv. CL. II A	Lin. Ft.		102.8'	102.8'
2.	2501.525	115" Span R.C.P. – Arch Aprons	Each		4	4
3.	2511.501	Random Rip Rap Class A	Cu. Yd.		70	70
3.	2511.504	Filter Blanket Type I	Cu. Yd.		35	35
	2104.509	Remove Box Culvert	Each		1	1
	2104.521	Salvage Pipe Culvert	Lin. Ft.		30'	30'

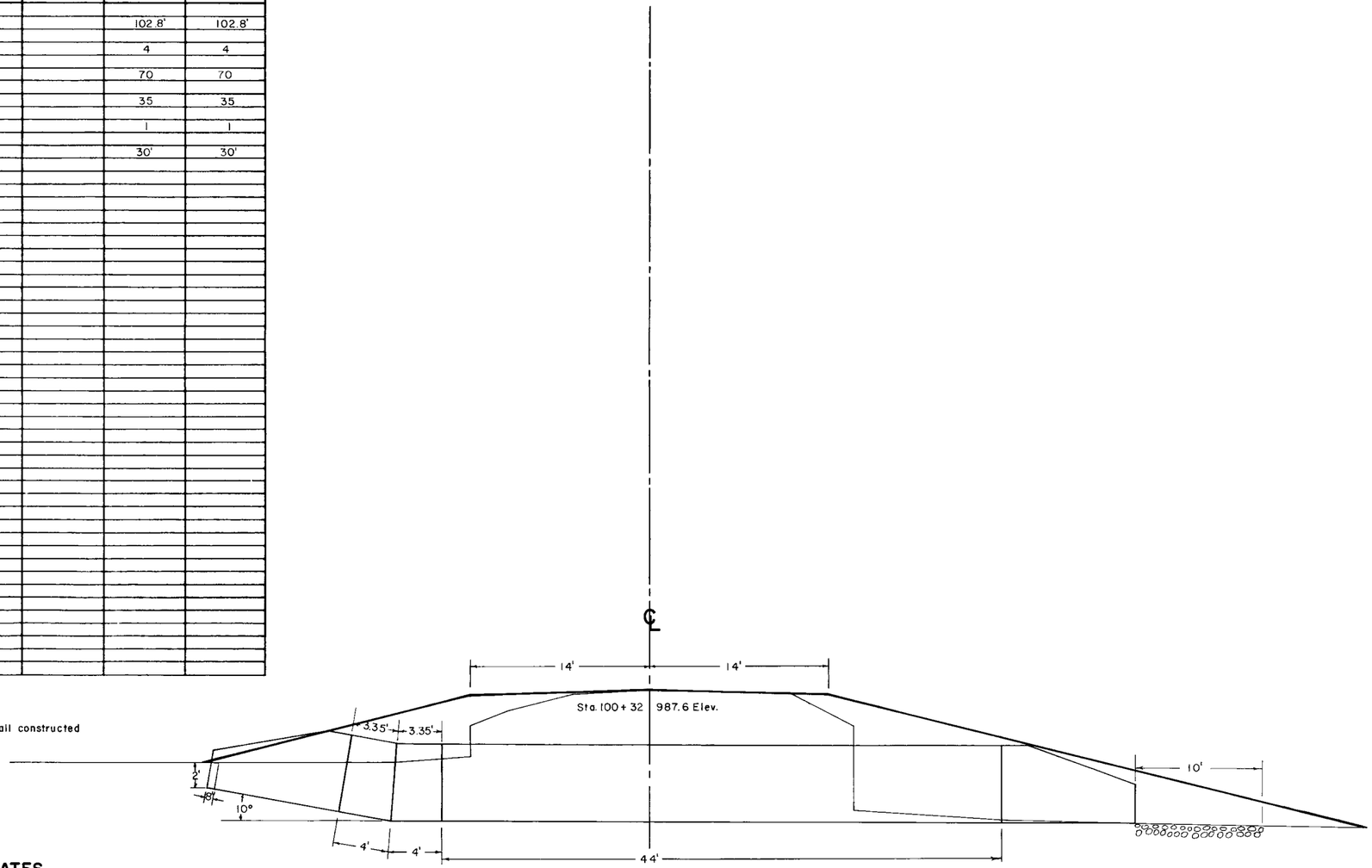
1. Length includes 2 – 10° verticle bends.
2. The two inlet aprons shall have a 2' high by 8" thick concrete drop wall constructed at the end of the aprons as noted in the typical section.
3. Filter Blanket and Random Rip Rap to be placed between the two structures at inlet and outlet and in flowline at outlet.

STANDARD DETAIL PLATES

THE FOLLOWING STANDARD DETAIL PLATES, APPROVED BY THE BUREAU OF PUBLIC ROADS, SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
3014 G	Reinforced Concrete Pipe – Arch Detail
3114 D	Sectional Concrete Apron For Reinforced Concrete Pipe – Arch
3134 A	Riprap At R.C.P Outlets
3145 A	Concrete Pipe Joint Ties

TYPICAL GRADING SECTIONS



Scale : 1"= 5' Verticle
1"= 5' Horizonal

SPECIAL DETAILS

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

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

S.A.P. _____
Minn. Proj. No. _____ County Project No. C 110-76-6

Olmsted County, Minn. Proj. No. _____ Plan No. _____ Sheet No. 2 of 3 Sheets

FE Lt. 93+30
No Culv. Inpl.

FE Rt. 97+73 No Culv. Inpl.

FE Rt. 97+90 No Culv. Inpl.

℄ Culv. 100+32
Inpl. 30" 30' CMP

℄ Bridge 100+32
Inpl. Stone & Conc. Br.
8'W 24'L 4'H

FE. Lt. 101+14
No Culv. Inpl.

℄ Road East 106+44
Rt. 87°27'30"

Fed. Proj. No.

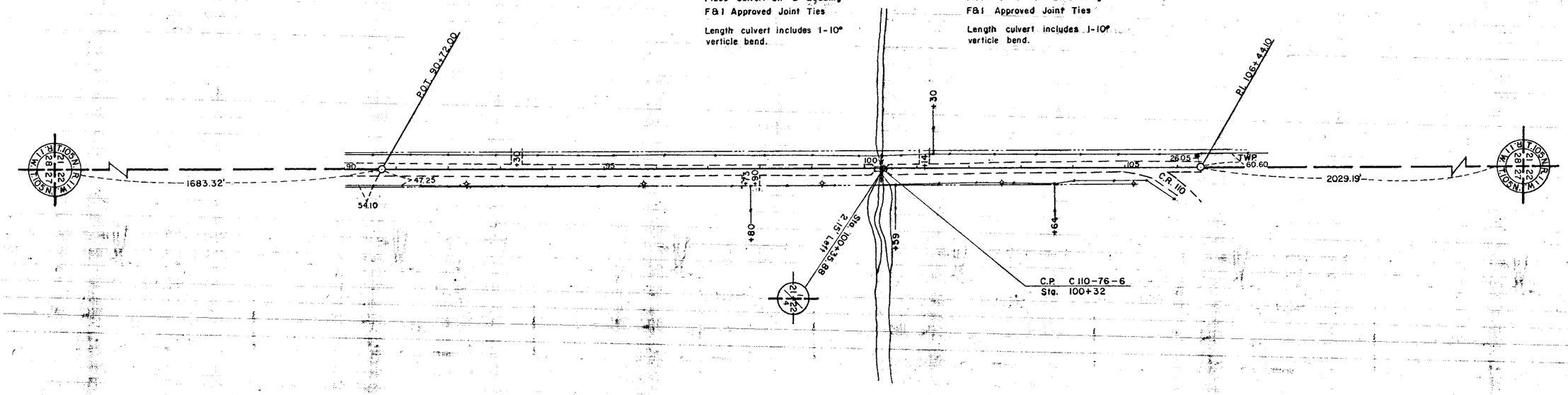
Salvage 30 Lin. Feet Culv.
Remove Stone and Concrete Box Culvert

Construct ℄ Culv. Sta. 100+24.5
115" X 51.4' R.C.P. – Arch Culv. Class II A
2-115" R.C.P. – Arch Aprons
Place Culvert On "B" Bedding
F&I Approved Joint Ties

Length culvert includes 1-10° verticle bend.

Construct ℄ Culv. Sta. 100+39.5
115" X 51.4' R.C.P. – Arch Culv. Class II A
2-115" R.C.P. – Arch Aprons
Place Culvert On "B" Bedding
F&I Approved Joint Ties

Length culvert includes 1-10° verticle bend.


POT. 90+72.00
PI 106+44.10
T.103N. R.11W. SOUTH 28 21 22 27 NORTH
1683.32'
30
30
30