MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

CONSTRUCTION PLAN FOR (1) TURN LANE RECONSTRUCTION E.B.L. OVERLAY AND STORM SEWER ON C.S.A.H. NO. 8

(2) W. FRONTAGE ROAD GRADING, SURFACING AND STORM SEWER.

LOCATED ON C.S.A.H. No. 8 & ADJACENT W. FRONTAGE ROAD **BETWEEN** 16th STREET S.W. **AND** T.H. No. 52 **(GEOGRAPHIC DESCRIPTION)**

FROM 225 FT. E. AND 430 FT. S. OF THE N.W. COR., S.W. 1/4, N.E. 1/4, SEC. 10, T106N, R14W. **TO** 1475 FT. W. AND 125 FT. S. OF THE N.E. COR., SEC. 10, T106N, R14W. **(LEGAL DESCRIPTION)**

STATE PROJ. NO. C.S.A.H. RECONSTRUCTION

GROSS LENGTH	1778	FEET	0.34 MILES
BRIDGES-LENGTH		FEET	MILES
EXCEPTIONS-LENGTH		FEET	MILES
NET LENGTH		FEET	MILES

STATE PROJ. NO. W. FRONTAGE ROAD

GROSS LENGTH	1590	FEET	0.30 MILES
BRIDGES-LENGTH		FEET	MILES
EXCEPTIONS-LENGTH		FEET	MILES
NET LENGTH		FEET	MILES

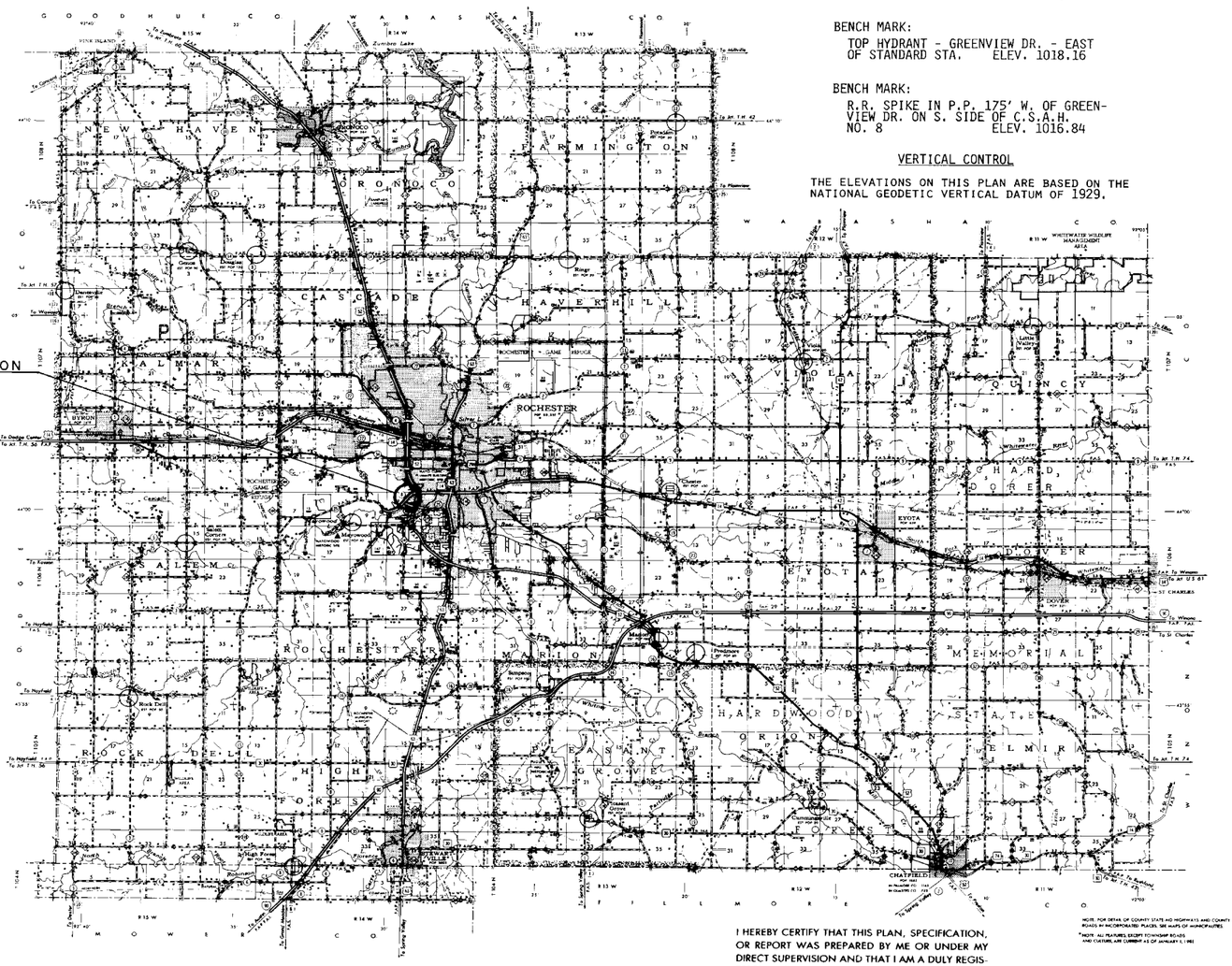
BENCH MARK:
TOP HYDRANT - 16TH ST. & GREENVIEW DR. ELEV. 1018.83

BENCH MARK:
TOP HYDRANT - GREENVIEW DR. - EAST OF STANDARD STA. ELEV. 1018.16

BENCH MARK:
R.R. SPIKE IN P.P. 175' W. OF GREENVIEW DR. ON S. SIDE OF C.S.A.H. NO. 8 ELEV. 1016.84

VERTICAL CONTROL

THE ELEVATIONS ON THIS PLAN ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.



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

DATE 7-5-84 REG. NO. 7660

Y.A.I. PROJ. No. 1147-84

RECOMMENDED FOR APPROVAL _____ DATE _____ ASST. CITY ENGINEER

APPROVED _____ DATE _____ DIR. OF PUBLIC SERVICES

Prepared By:
YAGGY ASSOCIATES, INC.
CONSULTING ENGINEERS ■ PLANNERS ■ SURVEYORS
ROCHESTER, MINNESOTA MASON CITY, IOWA

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
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)
SLOPE EASEMENT SE

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

SCALES

PLAN 50'
PROFILE 50'
INDEX MAP 1 MILE
GENERAL LAYOUT

STATE AID TITLE SHEET ALBINSON APLS 55405 Y.A.I. PROJ. No. 1147-84

MINN. PROJ. NO.

SPECIFICATIONS REFERENCE

The 1983 Edition of the Minnesota Department of Transportation "Standard Specifications For Highway Construction" Shall Govern.

INDEX

1	TITLE SHEET AND PROJECT LOCATION MAP
2	ESTIMATE OF QUANTITIES - DETAIL PLATES AND DETAILED DRAWINGS
3,4	DETAIL SHEETS
5,6	PLAN AND PROFILE
7-13	CROSS SECTIONS

DESIGN DESIGNATION

R
ADT (Current Year) =
ADT (Future Year) =
DHV (Design Hr. Vol.) =
D (Directional Distr.) = %
T (Heavy Commercial) = %
SOIL FACTOR

ΣN18(20) 55 C.S.A.H. No. 8*
Design Speed 30 MPH FRONTAGE RD.
Based on 200 Sight Distance
Height of eye 3.5 Height of object 0.50'
Design Speed not achieved at:
STA. TO STA. MPH
STA. TO STA. MPH
STA. TO STA. MPH

*C.S.A.H. OVERLAY DESIGN BASED ON CONFORT SAG VERTICAL CURVE.

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.

DATE 7-12-84 REG. NO. 10219 ENGR. _____

COUNTY Olmsted

Recommended for Approval _____ 19 _____
DISTRICT STATE AID ENGINEER

Recommended for Approval _____ 19 _____
STATE AID PLANS AND SPECS ENGINEER

Approved _____ 19 _____
STATE AID ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
_____ _____
DIVISION ADMINISTRATOR DATE

STATE AID PROJ. NO.
STATE PROJ. NO. SHEET NO. 1 OF 13 SHEETS

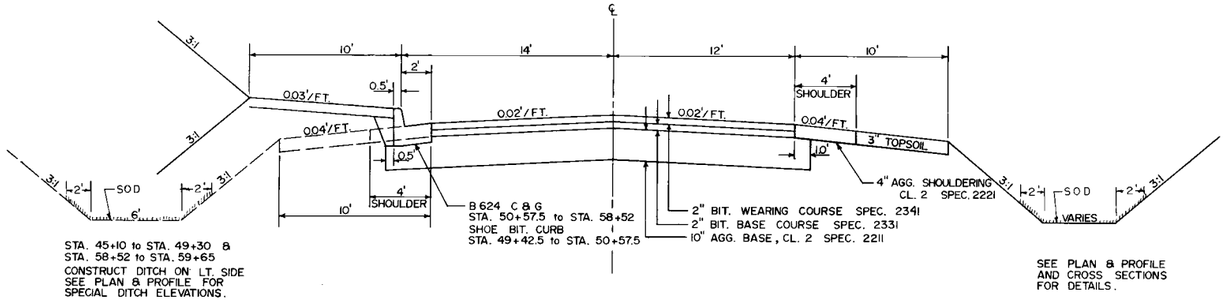
ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT	MUNICIPAL	RURAL	TOTAL ESTIMATED QUANTITIES
2101.513	Clear and Grub Right-of-Way	Lump Sum			1
2103.501	Building Removal	Lump Sum			1
2104.501	Remove B624 Curb and Gutter	L.F.			1,492
2104.501	Remove B6 Curb and Gutter	L.F.			452
2104.501	Remove 18" Culvert Pipe	L.F.			20
2104.501	Remove 24" Culvert Pipe	L.F.			68
2104.505	Remove Bituminous Paving	S.Y.			4,107
2104.505A	Bituminous Paving Saw Cut	L.F.			969
2104.505	Remove Miscellaneous Concrete	S.Y.			102
2104.523	Salvage 24" R.C.P. Apron	Each			1
2105.501	Common Excavation	C.Y.			8,424
2105.502	Common Excavation-Subcut	C.Y.			187
2211.501	Aggregate Base Cl. 2	Ton			3,721
2221.501	Aggregate Shouldering Cl. 2	Ton			467
2301.501	Concrete Pavement 6" Thick	S.Y.			86
2301.536	BD Joints	L.F.			116
2331.504	Bituminous Material for Mixture (AC-1, 120-150 Pen)	Ton			53
2331.514	Base Course Mixture	Ton			1,173
2341.504	Bituminous Material for Mixture (AC-1, 120-150 Pen)	Ton			63
2341.508	Wearing Course Mixture	Ton			1,060
2356.505	~~Bituminous Material for Seal Coat~~	~~Gal.~~			~~1,441~~
2356.507	~~Seal Coat Aggregate (FA-2)~~	~~Ton~~			~~60~~
2357.502	Bituminous Material for Tack Coat (RC-800)	Gal.			514
2501.511	15" R.C. Pipe Culvert Cl. 5	L.F.			197
2501.511	21" R.C. Pipe Culvert Cl. 5	L.F.			41
2501.511	24" R.C. Pipe Culvert Cl. 5	L.F.			49
2501.511	27" R.C. Pipe Culvert Cl. 5	L.F.			78
2501.515	15" R.C. Pipe Apron	Each			4
2501.515	21" R.C. Pipe Apron	Each			1
2501.515	24" R.C. Pipe Apron	Each			1
2501.515	27" R.C. Pipe Apron	Each			2
2501.573	Install 24" R.C.P. Apron	Each			1
2506.509	Construct Catch Basin Design C	Each			4
2506.522	Adjust Frame and Ring Casting	Each			1
2511.501	~~Random Rip Rap Class A~~	~~C.Y.~~			~~20.7~~
2511.511	~~Granular Filter Type 1~~	~~C.Y.~~			~~10.6~~
2531.501	Concrete Curb and Gutter, Design B624	L.F.			1,460
2531.502	Concrete Curb, Design B6	L.F.			1,274
2535.501	Bituminous Curb	L.F.			115
2575.501	Roadside Seeding	Acres			1.5
2575.505	Sodding	S.Y.			4,366

STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

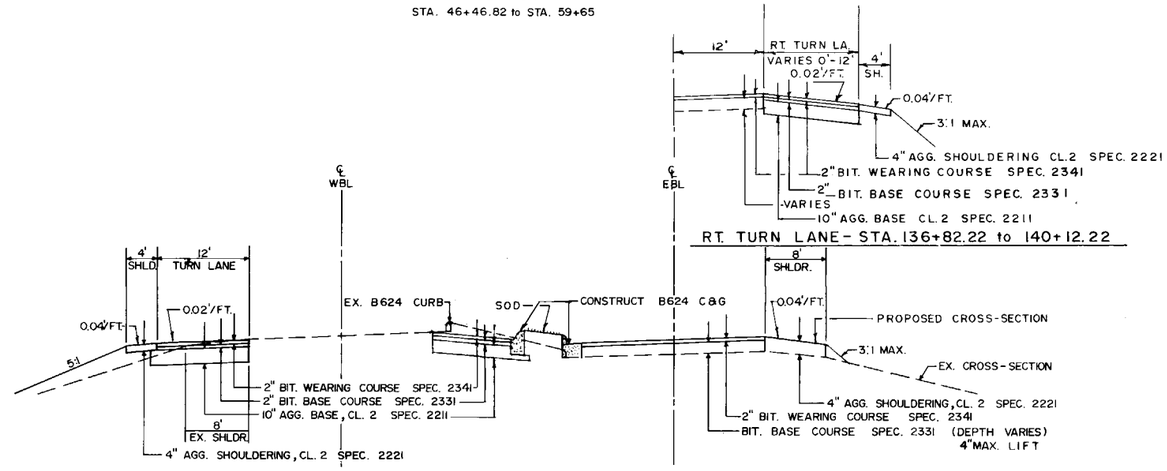
PLATE NO	DESCRIPTION
3100F	Concrete Aprons for Reinforced Concrete Pipe
3133A	Riprap at R.C.P. Outlets
3145C	Concrete Pipe Ties
4002E	Manhole or Catch Basin
4010F	Conc. Short Cone & Adjusting Ring
4011D	Precast Concrete Base
4129E	Catch Basin Frame Casting
4151B	Grate Casting for Catch Basin
4160D	Curb Box Casting for Catch Basin
7020J	Concrete Curb
7100F	Concrete Curb and Gutter
7110E	Curb and Gutter Construction at Catch Basin
7111F	Installation of Catch Basin Castings



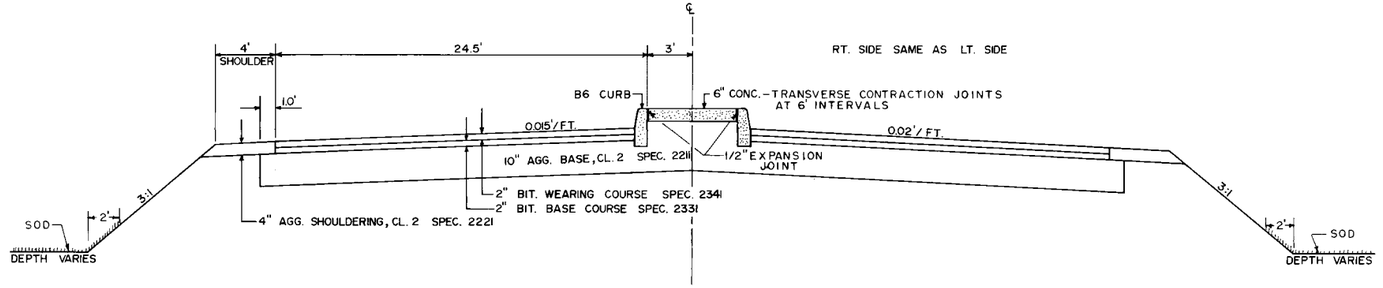
STA. 45+10 to STA. 49+30 & STA. 58+52 to STA. 59+65
CONSTRUCT DITCH ON LT. SIDE
SEE PLAN & PROFILE FOR SPECIAL DITCH ELEVATIONS.

SEE PLAN & PROFILE AND CROSS SECTIONS FOR DETAILS.

TYPICAL FRONTAGE ROAD SECTION
STA. 46+46.82 to STA. 59+65

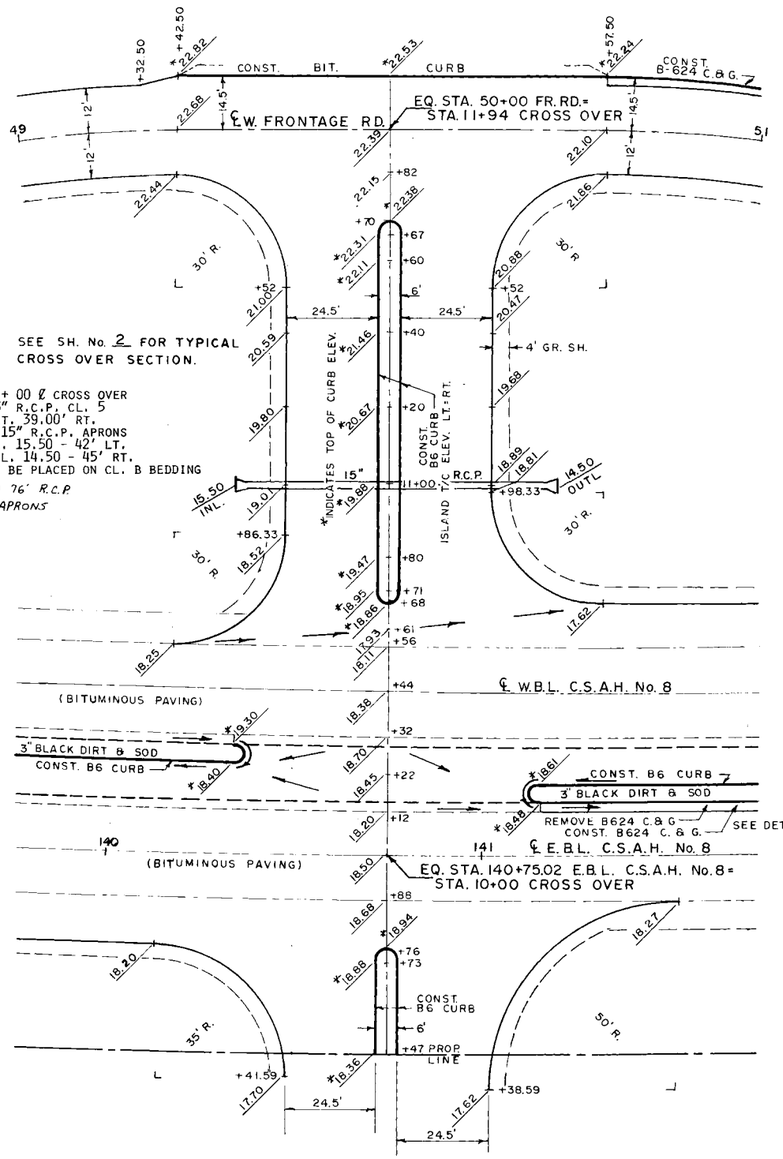


TYPICAL FULL SECTION
C.S.A.H. NO. 8
STA. 142+00



TYPICAL CROSS-OVER SECTION

S. A. P.
State Proj. No.

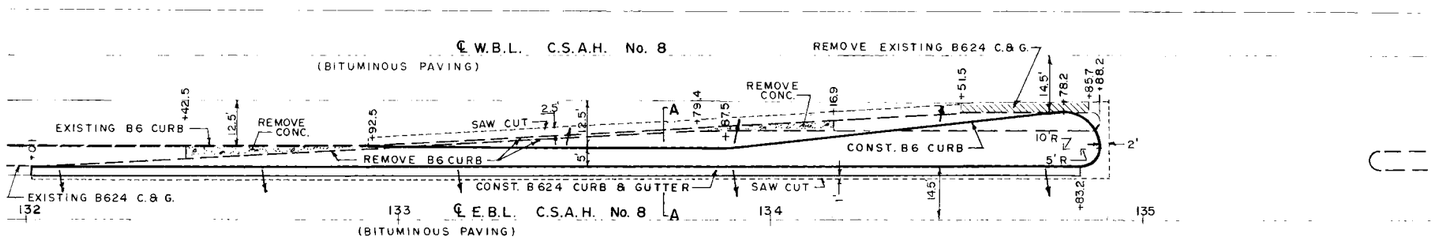


SCALE 1"=20'

BARCLAY SQUARE CROSS OVER

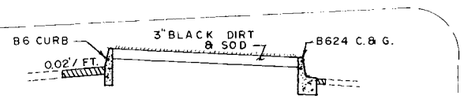
CONSTRUCTION NOTES: W.B.L. C.S.A.H. NO. 8
REMOVE B6 CURB STA. 132 + 92.5 TO 134 + 51.5
REMOVE B624 CURB AND GUTTER STA. 134 + 51.5 TO STA. 134 + 85.7
SAW CUT BITUMINOUS PAVING AS SHOWN AND REMOVE.

CONSTRUCT B6 CURB AS SHOWN ON PLAN.



CONSTRUCTION NOTES: E.B.L. C.S.A.H. NO. 8
REMOVE LEFT TURN LANE STA. 132 + 01 TO 134 + 88.2 INCLUDING ALL B6 CURB. SAW CUT BITUMINOUS PAVING AS SHOWN AND REMOVE.

CONSTRUCT B624 CURB AND GUTTER STA. 132 + 01 TO 134 + 83.2, SLOPE GUTTER AWAY FROM CURB. MATCH GUTTER GRADES WITH EXISTING BITUMINOUS PAVING.

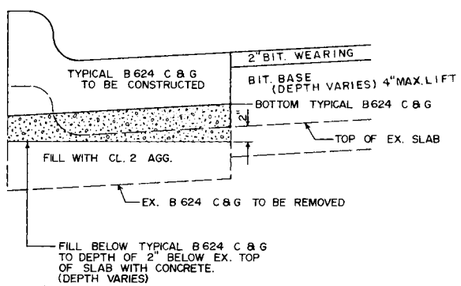


SECTION A-A

GREENVIEW DRIVE S.W.

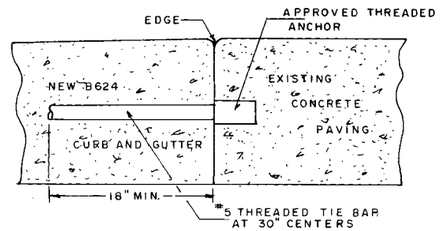
SCALE 1"=20'

TURN LANE RECONSTRUCTION BETWEEN 16th STREET S.W. AND GREENVIEW DRIVE S.W.



RECONSTRUCTED CURB
E.B.L. C.S.A.H. No. 8

APPROX. STA 141+15 to STA. 142+60



BD JOINT

STA. 93+54.7 to STA. 94+12+88 C.S.A.H. No. 8

Fed. Proj. No.

C.B. No. 3
STA. 139 + 04.94 - ℄ E.B.L. C.S.A.H. NO. 8
CONST. CATCH BASIN DESIGN C - 22.83' LT.
TOP CURB EL. 17.71
TOP GRATE EL. 17.01
OUTLET EL. 13.01 - 15" R.C.P. CL. 5
OUTLET EL. 15" R.C.P. APRON 10.00 - 59.00' RT.
PIPE TO BE PLACED ON CL. B BEDDING

SCALE: 1" = 20'

STA. 142± 75' LT.
INPL. 24" R.C.P.
REMOVE INPL. 24" R.C.P. APRON W. END
EXTEND PIPE 8.00 FEET WEST WITH
24" R.C.P. CL. 5. REPLACE APRON.

C.B. No. 4 (INPLACE)
STA. 142 + 18 - ℄ E.B.L. C.S.A.H. NO. 8
INPL. CATCH BASIN DESIGN C - 22.83' LT.
EX. TOP GRATE EL. 16.25
ADJ. UP TO EL. 17.11
TOP CURB EL. 17.81
PIPE TO BE PLACED ON CL. B BEDDING

C.B. No. 5
STA. 143 + 18.58 - ℄ E.B.L. C.S.A.H. NO. 8
CONST. CATCH BASIN DESIGN C - 12.83' LT.
TOP CURB EL. 17.32
TOP GRATE EL. 16.62
OUTLET EL. 12.62 - 15" R.C.P. CL. 5
OUTLET EL. 15" R.C.P. APRON 09.00 - 53.00' RT.
PIPE TO BE PLACED ON CL. B BEDDING

C.S.A.H. No. 8 E.B.L.

PI = 139 + 79.03
△ = 6°48'00" LT.
D = 1°08'00"
R = 5055.51
T = 300.36
L = 600.18
P.C. = 136 + 78.67
P.T. = 142 + 78.85

NOTE: END PAVING & CURB AT PROP LINE.

SEE SHEET No. 3 FOR CROSS OVER DETAILS

TURN LANES AT BARCLAY SQUARE CROSS OVER E.B.L. C.S.A.H. No. 8 OVERLAY AND STORM SEWER

EX. ℄ PROFILE W.B.L.
EX. ℄ PROFILE E.B.L.
℄ PROFILE E.B.L. OVERLAY
+0.66%
-0.20%
P.V.I. 139+25
ELEV. 1017.68
75' V.C.
M = 0.08
P.V.I. 140+75
ELEV. 1018.67
100' V.C.
M = 0.17
-0.74%
+0.34%
P.V.I. 143+00
ELEV. 1017.00
100' V.C. M = 0.14
P.V.C.
P.V.T.
TOP CURB ELEV. 24.5' LT.
TOP CURB ELEV. 19.5' LT.
TOP CURB ELEV. 14.5' LT.
EXISTING SLAB ELEV 32' LT.
SLAB ELEV. 12' LT.
SLAB ELEV. 12' RT.
SLAB ELEV. 24' RT.
FINISHED ℄ ELEV.
C.B. OUTL. 13.01
C.B. OUTL. 12.62
APRON OUTL. 10.00
APRON OUTL. 09.00
BEGIN OVERLAY
END OVERLAY & NEW B-624 C & G.

Copy Equipment Form 22

Proj. No.

△ 20°55'44"
R. 300.00
L. 109.58
T. 55.41
P.I. 47 + 02.23

△ 16°26'40"
R. 300.00
L. 86.10
T. 43.35
P.I. 48 + 99.75

CULVERT 84'
STA. 47 + 00 ℄ W. FRONTAGE ROAD
F & I 27" X ~~90'~~ R.C.P. CL. 5 - APRONS INCL.
APRON INLET EL. 17.~~00~~ 36' LT.
APRON OUTLET EL. 16.80 - ~~54'~~ RT. 48'
PIPE TO BE PLACED ON CL. B BEDDING

BAILHLY HILLS DRIVE S.W.

P.C. 46+46.82 BEGIN GRADING

REMOVE 18"x 20' C.M.P.

P.T. 47+56.40

P.C. 48+56.40

P.T. 49+42.50 BEGIN BIT. CURB +50.5 ℄ 16' F.E.

W. FRONTAGE ROAD

SPECIAL DITCH LT.

24" STUMP

27" TREE

BITUMINOUS OVERLAY

REMOVE INCL. BIT. PAVING

STONE WALL

39" STUMP 26" TREE 6" TREE 36" STUMP 30" TREE

36" TREE 32" STUMP 34" STUMP 27" STUMP

SPECIAL DITCH RT.

RIP RAP (REMOVE)

SPECIAL DITCH BLOCK

SPECIAL DITCH RT.

SPECIAL DITCH B

15" R.C.P.

BEGIN OVERLAY

℄ W.B.L. C.S.A.H. No. 8

℄ E.B.L. C.S.A.H. No. 8

TURN LANE RECONSTRUCTION

REMOVE RT TURN LANE & CROSS OVER

CONST 8' WIDE GRANULAR SHOULDER 4" THICK.

RESTORE STONE WALL REMOVED FOR CONST. OF STORM SEWER

C.B. No. 3

1.40 BIT. OVERLAY

0 25 50 75 100
SCALE: 1" = 50'

SEE SH. No. 3 FOR BARCLAY SQUARE CROSS OVER DETAILS
SEE SH. No. 4 FOR BIT. OVERLAY DETAILS
SEE SH. No. 2 FOR W. FRONTAGE ROAD SECTION

SEE SH. No. 3 FOR TURN LANE RECONSTRUCTION BETWEEN 16th ST. S.W. & GREENVIEW DR. S.W.

GREENVIEW DRIVE

16TH STREET S.W.

EQUATION STA.
P.C. STA. 136+78.67 E.B.L.
STA. 46+08.29 ℄ W. FR. RD.
13600 LT.

C.S.A.H. No. 8 E.B.L.

PI = 139 + 79.03
△ = 6°48'00" LT.
D = 1°08'00"
R = 5055.51
T = 300.36
L = 600.18
P.C. = 136 + 78.67
P.T. = 142 + 78.85

BARCLAY SQUARE

C.S.A.H. No. 8 & W. FRONTAGE ROAD

INPL. 3 - 28 1/2" SPAN R.C.P.A.

SPECIAL DITCH RT.

0.20%

TRANSITION

-0.80%

EXISTING ℄ PROFILE

+0.50%

PVI 47+00
EL. 22.59
V.C. 50
M. 0.08

PVI 48+30
EL. 23.24
V.C. 50
M. 0.06

FINISHED ℄ PROFILE

-0.50%

SPECIAL DITCH LT.

1.7%

DITCH BLOCK

1.1%

1.0%

SPECIAL DITCH B

1.1%

SPECIAL DITCH RT.

0.6%

15" R.C.P.

	43	44	45	46	47	48	49	50
FINISHED ℄ ELEV.					22.59 22.67 22.84 23.09 23.14 22.89 22.84 22.59			
24								24
22								22
1020								1020
18								18
16								16
14								14
SPECIAL DITCH LT.			20.6 +10 19.9	19.0	18.2 17.3	18.0 18.5	19.1 19.6	20.0 +30
12								12
SPECIAL DITCH B					20.3 19.8	19.3 18.8	18.3 16.6	15.5
1010								1010
SPECIAL DITCH RT.	16.0	16.2	16.4	16.6	16.8 +98 17.3	16.7 16.2	15.9 15.6	15.5

State Proj. No.

Sheet No. 5 of 13 Sheets

Cross Equipment Form #21

Fed. Proj. No.

SEE SH. No. 2 FOR W. FRONTAGE ROAD SECTION

P.C. 50+57.50 BEGIN 8624 CURB
△ 15°39'29"
R. 300.00
L. 81.99
T. 41.25
P.I. 50 + 98.75

P.T. 51+39.49
P.C. 52+38.48
△ 11°56'19"
R. 300.00
L. 62.51
T. 31.37
P.I. 52 + 70.85

P.T. 53+01.99

P.C. 56+46.99
△ 14°59'55"
R. 300.00
L. 78.53
T. 39.49
P.I. 56 + 86.48

P.T. 57+25.52

P.C. 58+25.52 END 8624 CURB
△ 21°01'43"
R. 300.00
L. 110.11
T. 55.68
P.I. 58 + 81.20

P.T. 59+35.63

0 25 50 75 100
SCALE 1" = 50'

NOTE: REMOVE ALL TREES AND STUMPS BETWEEN STA. 50+00 & 54+35 WITHIN R/W.

28" TREE (DEAD)
20" TREE (DEAD)
REMOVE 24"x32" C.M.P.
REMOVE 24"x26" R.C.P. With 24"x 10' C.M.P. Ext.
SPECIAL DITCH A
REMOVE INPL. BIT. PAVING
24" TREE
14" TREE
24" STUMP
12" TREE
24" TREE
REMOVE
24" TREE
3-12" TREES
8" TREE (DEAD)
15" TREE (DEAD)
20' DRIVE
25" TREE
SHED
C.B. No. 1
24" R.C.P.
C.B. No. 2
21" R.C.P.
W. 55 FRONTAGE ROAD
GAS REGULATOR
RIP RAP
DITCH BLOCK
SPECIAL DITCH RT.
WOODED AREA
BRUSH
LIGHT BASE
W. FRONTAGE RD.
N.W. RAMP
REMOVE ACCESS
IN PL. 8' BIT. SH.
SAW
S-624 C.B.G.
50" STUMP
33" STUMP
34" STUMP
15" R.C.P.
℄ W.B.L., C.S.A.H. No. 8
℄ E.B.L., C.S.A.H. No. 8
INPL. 24" R.C.P.
C.B. No. 4 (INPL.)
C.B. No. 5
BIT. OVERLAY
15" R.C.P.
P.T. 142+78.85
S.W. LOOP
E.B.L., T.H. No. 14
BRIDGE No. 55011
P.T. 97+46.80

STA. 142± 75' LT.
INPL. 24" R.C.P.
REMOVE INPL. 24" R.C.P.
EXTEND PIPE 8.00 FEET WES
24" R.C.P. CL. 5. REPLA

SEE SH. No. 4 FOR BIT. OVERLAY DETAILS

C.B. No. 1
STA. 53 + 79.95 - ℄ W. FRONTAGE RD.
CONST. CATCH BASIN DESIGN C - 12.83' LT.
TOP CURB EL. 20.69
TOP GRATE EL. 19.99
OUTLET EL. 15.99 - 24" R.C.P. CL. 5
OUTLET EL. 24" R.C.P. APRON 15.60 - 35.00' RT.
PIPE TO BE PLACED ON CL. B BEDDING

MOVE TO STA. 54+37 SKEW 5° RT.
C.B. No. 2
STA. 55 + 07.00 - ℄ W. FRONTAGE RD.
CONST. CATCH BASIN DESIGN C - 12.83' LT.
TOP CURB EL. ~~21.27~~ 20.91
TOP GRATE EL. ~~20.57~~ 20.21
OUTLET EL. ~~16.57~~ 21" R.C.P. CL. 5 15.9
OUTLET EL. 21" R.C.P. APRON ~~15.50~~ - 35.00' RT.
PIPE TO BE PLACED ON CL. B BEDDING
~~NOTE: ALIGN OUTLET OF 21" R.C.P. WITH THE INLET OF INPLACE 24" R.C.P., PLACE CLASS A RIP RAP AND TYPE 1 FILTER BLANKET PER STD. PLATE No. 3133A.~~

ADJ. LOCATION OF CATCH BASIN TO CLEAR POWER POLE AND ANCHOR IF NECESSARY.

EQUATION STA. 146+59.51 = P.C. 91+61.28

C.S.A.H. No. 8 E.B.L.
PI = 92 + 19.90
△ = 11°53'00" RT.
D = 10°11'00"
R = 603.11
T = 58.62
L = 116.69
P.O.I. = 146 + 59.51 =
P.C. 91 + 61.28
P.T. = 92 + 77.97

P.T. 92+77.97
P.C. 92+78.40

C.S.A.H. No. 8 E.B.L.
PI = 95 + 25.1
△ = 44°30'00" RT.
D = 09°30'00"
R = 881.50
T = 246.70
L = 468.40
P.C. = 92 + 78.40
P.T. = 97 + 46.8

PAVING
3.8
RBS
EEN
TO MATCH
NC. SLAB.
CK

C.S.A.H. No. 8 & W. FRONTAGE ROAD

FINISHED ℄ ELEV.
FINISHED ℄ ELEV.
SPECIAL DITCH A ELEV.
SPECIAL DITCH RT. ELEV.

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