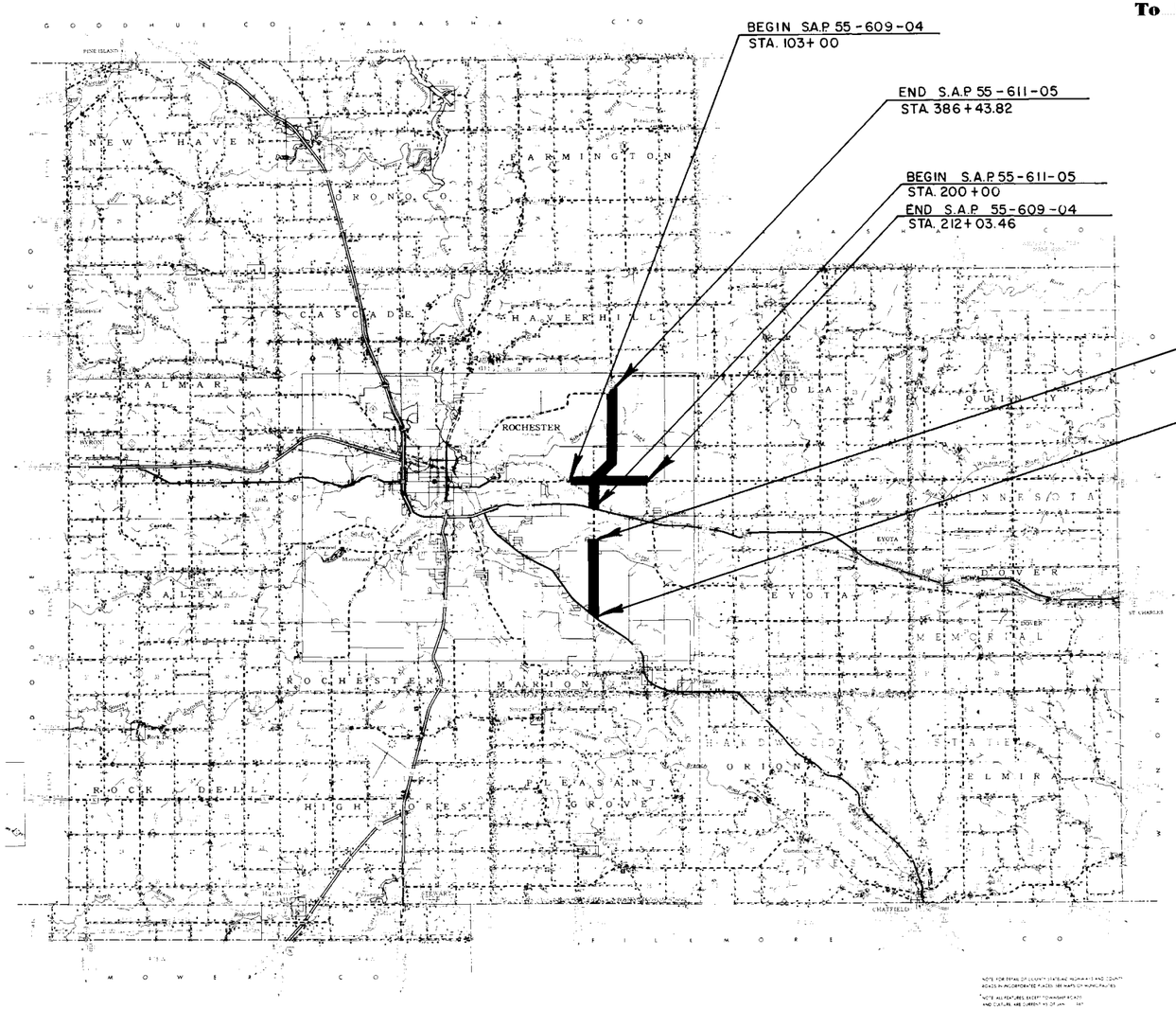
FORM 100-A '65

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
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 — G —
WATER MAIN — I — 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 —>—O—>—



IGF

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

NOTE ALL FEATURES EXCEPT TOWNSHIP PLATS AND CAPTIONS ARE CURRENT AS OF JAN 1967

Fed. Proj. No.

STATE OF MINNESOTA

DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR Grading, Box Culvert and Crushed Rock Base Inplace

COUNTY STATE AID HIGHWAY NO. 11

BETWEEN T.H. 52 **AND** 0.9 MILE S. OF T.H. 14

From 676.55' North of the Common to 21-22-28-27 T106N-R13W
(Give proper reference to Sections, Township and Range)

To 1207.63' South of the NE Corner SE 1/4 SE 1/4 Section 9 T106N-R13W

GROSS LENGTH	11300.00 FEET	2.14015 MILES
BRIDGES-LENGTH	0.00 FEET	0.00 MILES
EXCEPTIONS-LENGTH	0.00 FEET	0.00 MILES
NET LENGTH	11300.00 FEET	2.14015 MILES

INDEX OF SHEETS

Sheet No 1 Title Sheet & Layout Map
" No 2 Est Quantities & Typical Sec
" No 3 To 6 Plan & Profile
" No 7 To 25 Cross Sections
" No. 6A BASE TYPICAL SEC.

DESIGN SPEED 50 M. P. H.

PROJECTED A. D. T. 395

7 TON DESIGN

SOIL FACTOR 85

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.

D. J. Sullivan COUNTY ENGINEER DATE 3-3-66

Olmsted COUNTY REG. NO. 1207

S.A.P 55-609-04
S.A.P 55-611-05

RECOMMENDED FOR APPROVAL _____ DISTRICT ENGINEER ____, 19__

RECOMMENDED FOR APPROVAL C.E. Weichselbaum 6-29, 1966

APPROVED [signature] ACTING STATE AID ENGINEER 6-29 1966

S.A.P 55-611-01

RECOMMENDED FOR APPROVAL Claude F. Peterson DISTRICT STATE AID ENGINEER S.A. 3/4, 1966

RECOMMENDED FOR APPROVAL C.E. Weichselbaum 4-19, 1966

APPROVED _____, 19__ STATE AID ENGINEER

— SPECIFICATIONS —

STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED JANUARY 1, 1964 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS" DATED FEBRUARY 1, 1966 SHALL GOVERN.

S.A.P. 55-611-03, 55-611-05
55-609-04

Minn. Project No. _____

Olmsted County, Minnesota. County Proj. No. _____ Plan No. _____ Sheet 1 of 25 Sheets

ALBINSON, INC.
MINNEAPOLIS, MINN. 55415

FORM 129c - No. 2 Rev. '

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SEC.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MINN.					

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	SAP 55-611-03		
	2101.502	Clearing	Tree	157		
	2101.507	Grubbing	Tree	143		
	2101.501	Clearing	Acre	0.5		
	2101.506	Grubbing	Acre	05		
	2104.501	Remove Portable Culverts	Lin. Ft.	521		
	2104.520	Remove Box Culvert Sta. 61+07	Structure	One		
	2105.501	Class A Excavation	Cu.Yd.	64458		
	2105.502	Class B Excavation	Cu.Yd.	27503		
	2105.504	Class SG Excavation	Cu.Yd.	8008		
**	2123.501	Common Laborers	Hour	65		
***	2123.503	Motor Grader	Hour	10		
***	2123.508	15 C.Y. (Min.) Scraper	Hour	10		
***	2123.509	Dozer	Hour	10		
***	2123.511	75 H.P. Tractor	Hour	10		
	2130.501	Water	M.Gal.	130		
*	2210.526	Crushed Rock Base Inplace	Tons	9792		
	2122.533	Crushed Rock in Stockpile	Tons	2075		
	2411.501	Concrete	Cu.Yd.	71.18		
	2411.511	Structure Excavation Class U	Cu.Yd.	208		
	2411.541	Reinforcement Bars	Lb	11688		
	2441.502	Single Lane By-Pass	By-Pass	One		
	2501.511	F&I 18" CMP Culverts	Lin.Ft.	528		
	2501.511	F&I 24" CMP Culverts	Lin.Ft.	50		
	2501.512	F&I 18" Span CMP-A Culverts	Lin.Ft.	128		
	2501.521	F&I 24" RCP Culverts Class III	Lin.Ft.	124		
	2501.521	F&I 30" RCP Culverts Class III	Lin.Ft.	184		
	2501.522	F&I 51 1/8" Span RCP-A Culverts Class III	Lin.Ft.	44		
	2515.531	F&I Metal Aprons for 18" CMP	Apron	34		
	2515.531	F&I Metal Aprons for 24" CMP	Apron	2		
	2515.532	F&I Metal Aprons for 18" Span CMP-A	Apron	8		
	2515.541	F&I Conc Aprons for 24" RCP	Apron	4		
	2515.541	F&I Conc Aprons for 30" RCP	Apron	4		
	2515.542	F&I Conc Aprons for 51 1/8" Span RCP-A	Apron	2		
	2210.526	Crushed Rock Base Inplace	Ton		* 31579	** 32736
	2130.501	Water	M.Gal.		564	585

* Note: Item 2210.526 Includes 1370 Tons for Approaches and 510.3 Tons for TWP Rds. and Streets.

**For Remove & Resetting Fence

***For Obliterating Old Road

* 380 Tons for Approaches

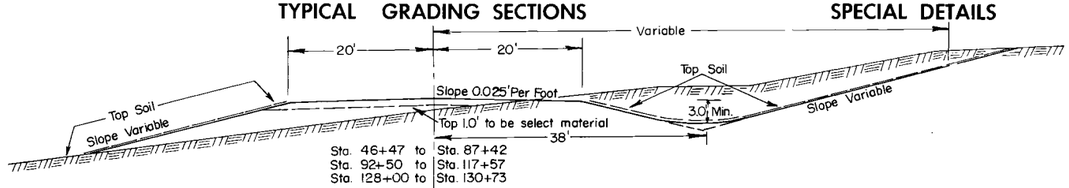
** 1155 Tons for Approaches

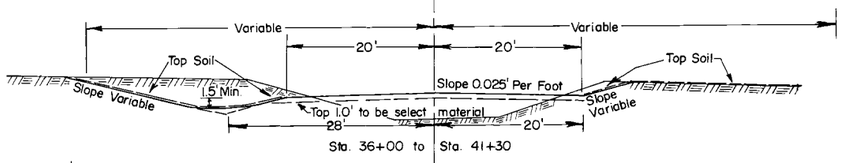
STANDARD DETAIL PLATES

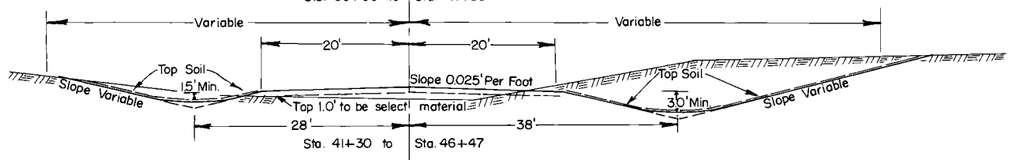
Standard Detail Plates issued October 1, 19 and submitted for approval by the Division Engineer of the Public Roads Administration October 15, 19 shall govern

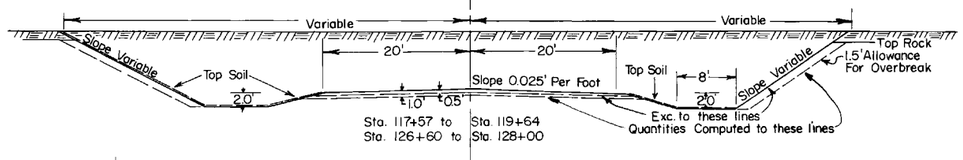
PLATE NO.	STANDARD DETAIL PLATES
3000C	Reinforced Concrete Pipe
3040	Corrugated Metal Pipe-Arch
3100D	Concrete Apron for Reinforced Concrete Pipe
3102C	
3122C	Metal Apron for CM Pipe-Arch Culvert
3123C	Metal Apron for CM Pipe
3014	Reinforced Concrete Pipe-Arch
3110B &	
3112B	Concrete Apron for Reinf. Concrete Pipe-Arch
9000	Approaches and Entrances

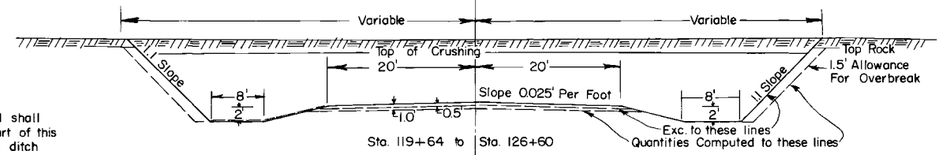
TYPICAL GRADING SECTIONS

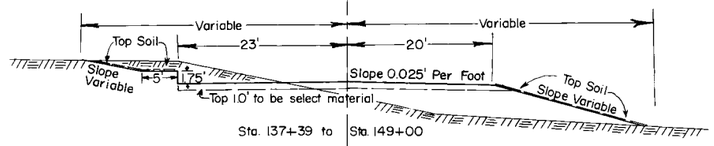


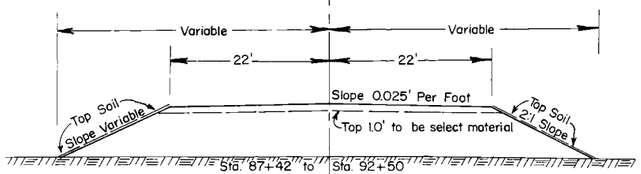




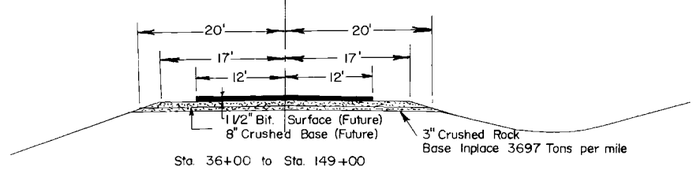








TYPICAL BASE & SURFACE SECTION



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 Class A 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 metal and sectional concrete pipe culvert excavation will be considered incidental, and will be under unit price for "Furnish and Install Culvert Pipe".

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 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.

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

SPECIAL DETAILS

S.A.P. 55-609-04 S.A.P. 55-611-05

H.A. ROGERS CO.
MPLS. MINN.

Olmsted County, Minn. Proj. No. SAP 55-611-03 Plan No. _____ Sheet No. 2 of 25 Sheets

PLAN — SURVEYED ____ PLOTTED ____ GRADES CHECKED ____ R/W STAKES ____ R/W CHECKED ____ NOTE BOOK ____ NO. ____ BY ____ DATE ____

PROFILE — SURVEYED ____ PLOTTED ____ GRADES CHECKED ____ B.M.'s NOTED ____ STRUCTURE NOTATNS CHKD ____ NOTE BOOK ____ NO. ____ BY ____ DATE ____

BEGIN S.A.P. 55-611-03
STA. 36+00

HOMEWOOD ADDITION

SPRUCE STREET

PINE STREET

VINE STREET

Block 5

Block 2

Block 1

BURR OAK SUBDIVISION

4 3 2 1 2 3 5 4 3 2 1 1

P.O.T. 55+59

676.86 265 875 1739.5 1065 3795 3495 68.48 530

Valve

36+44 ℄ Culv
Inpl 24"X34 SCP
Extend 20' Rt & 18' Lt RCP Class III
F&I 2-24" Conc Aprons
For SCP

36+56 FE Rt
No Culv Inpl
No Change

38+76 School Drive Rt
No Culv Inpl
No Culv. Req'd

39+82 School Drive Rt
No Culv Inpl
No Culv. Req'd

38+66 Driveway Lt
No Culv Inpl
F&I 18"Span X 32' CMP-A
F&I 2-18"Span Metal Apron
For CMP-A

40+97 Driveway Lt
No Culv Inpl
F&I 18"Span X32' CMP-A
F&I 2-18"Span Metal Apron
For CMP-A

41+12 Town Hall Ent Rt
No Culv Inpl
No Culv Req'd

42+14 Driveway Lt
No Culv Inpl
F&I 18"SpanX 32' CMP-A
F&I 2-18"Span Metal Apron
For CMP-A

43+11 Driveway Lt
No Culv Inpl
F&I 18"SpanX 32' CMP-A
F&I 2-18"Span Metal Apron
For CMP-A

45+13 ℄ Culv
Inpl 30"X 36' CMP-A
Remove
F&I 2-5I 1/8"Span X44'RCP-A
F&I 2-5I 1/8"Span Conc Aprons
For SCP-A (Class III)
Place on "B" Bedding

46+25 Driveway Lt
No Culv Inpl
No Culv. Req'd

48+65 Street Lt
No Culv Inpl
F&I 18"X36" CMP
F&I 2-18" Metal Aprons
For CMP

50+65 Driveway Lt
No Culv Inpl
F&I 18"X 32' CMP
F&I 2-18" Metal Aprons
For CMP

55+61 Street Lt
No Culv Inpl
F&I 18"X 36' CMP
F&I 2-18" Metal Aprons
For CMP

STOCKPILE LOCATION

For Material to be Crushed From Roadway Excavation
Sta 120+00 to Sta 125+80

CSAH 9

Stockpile Location

B.M. Elev. 1068.98
Spk in PP 29' Rt
Sta. 36+67

B.M. Elev. 1097.63
Spk in PP Rt
Sta. 60+20

Cl. 8 Gr. 4

Crushed Gravel

Profile 79 Lt

Profile 79 Rt

Pr 1100
El. 1130
100.00
4.00%

Pr 1100
El. 1130
100.00
4.00%

Pr 1100
El. 1130
100.00
4.00%

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / AS OF MAY CHECKED — BY — DATE — NOTE BOOK NO.

PROFILE — SURVEYED / PLOTTED / CROSS SECTIONS CHECKED / & M's NOTED / STRUCTURE NOTATIONS CHKD — BY — DATE — NOTE BOOK NO.

54+58 FE Lt
Inpl 18"X 22' CMP
Remove
FBI 18"X 28' CMP
FBI 2-18" Metal Aprons
For CMP

59+11 FE Lt
Inpl 18"X 26' CMP
Remove
FBI 18"X 32' CMP
FBI 2-18" Metal Aprons
For CMP

79+54 FE Lt
No Culv Inpl
FBI 18"X 28' CMP
FBI 2- 18" Metal Aprons
For CMP

84+97 FE Lt
Inpl 15"X 20' CMP
Remove
FBI 18"X 28' CMP
FBI 2-18" Metal Aprons
For CMP

58+60 FE Rt
Inpl 8'X 24' SCP
Remove
FBI 18"X 32' CMP
FBI 2-18" Metal Aprons
For CMP

61+07 Bridge ℄
44'H X 6'W X 18' Box Culv
Under Bridge
Remove
61+29 Construct C86 X 66' Conc Box Culvert
Concrete 71.18 Cu.Yds.
Reinf. Bars 11,688 Lbs.
Class U Excavation 208.0 Cu.Yds.
Single Lane By-Poss

73+27 FE Rt
Inpl 15"X 24' CMP & SCP
Remove
FBI 18"X 32' CMP
FBI 2-18" Metal Aprons
For CMP

84+27 ℄ Culv
Inpl 30"X 36' CMP-A
Remove
FBI 30"X 98' RCP Class 3
FBI 2-30" Conc Aprons
For SCP
Place on "C" Bedding

84+96 FE Rt
No Culv Inpl
No Culv Req'd

Cl. 81 Gr. 30 — Cl. 55 Gr. 70

B.M. Elev. 109763
Spk in PP Rt
Sta. 60+20

B.M. Elev. 1144.58
Spk in TP Rt
Sta. 73+43

B.M. Elev. 1146.09
Spk in PP Rt
Sta. 84+70

Finished ℄ Grades

Profile 75' ℄

Profile 75' ℄

Pl. +50.947457
Elev. 00.740678
700' V.C.
M= 51625'

Pl. +53.04247
Elev. 54.168008
300' V.C.
M= 4025'

Pl. 450
Elev. 565
500' V.C.
M= 30'

Pl. 814-9678
Δ 11°00'04" Rt

Inlet Elev. 92.8
Outlet Elev. 92.5

Inlet Elev. 47.1
Outlet Elev. 45.5

Finished ℄ Grades

SINGLE PLAN & PROFILE - DOTTED
CHARLES BRUNING COMPANY, INC.

90+80 FE Lt
No Culv Inpl
No Culv Req'd

108+21 FE Lt
No Culv Inpl
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

115+23 FE Lt
No Culv Inpl
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

POT. 941+40

PI 108+32.58
Δ RT 0°11'11"
R=19,114.91'

POT. 1174+42.91

Survey Marker

Survey Marker

90+94 ℄ Culv
Inpl 18"X34' CMP
Remove
F&I 30"X86' RCP Class 3
F&I 2-30" Conc Aprons
For SCP
Place on "C" Bedding

108+74 FE Rt
No Culv Inpl
F&I 18"X28' CMP
F&I 2-18" Metal Aprons
For CMP

114+06 FE Rt
No Culv Inpl
No Culv Req'd

B.M. Elev. 1232.86'
Spk in Cor fe Post
Lt Sta. 108+33

B.M. Elev. 1191.37'
Spk in PP 33' Lt
Sta. 93+95

PI +00
Elev 09.0
400' V.C.
M=0.9'

PI +38.96551
Elev. 33.60589
500' V.C.
M=1.8125'

PI +76.42857
Elev. 37.229285
900' V.C.
M=7875'

+0.5%

Subgrade Treatment
Excavate 1.0 Below Profile Grade
Sta. 93+30 to Sta. 117+00

Profile 75' LT
Profile 75' RT

30°Skew

Inlet Elev. 61.3
Outlet Elev. 58.7

EXC	Class A	2243	
	Class B	305	
	Class SG	910	
EMB		1913	

Class A	4129	
Class B	315	
Class SG	1145	
	3067	

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
GRADES CHECKED
STRUCTURE NOTATNS CHKD
BY
DATE

SINGLE PLAN & PROFILE--DOTTED
CHARLES BRUNING COMPANY, INC.

119+00 Const. FE Lt
FBI 18"x32' CMP
FBI 2-18" Metal Aprons For CMP

121+23 FE Lt
No Culv Inst.
Remove F.Ent.

124+48 FE Lt
Inst 12"X24' CMP
Remove F.Ent.

126+15 Drive Rd FE Lt
No Culv Inst.
No F.Ent Req'd

127+05 Driveway Lt
No Culv Inst.
No Culv. Req'd

130+05 Driveway Lt
Inst 15"X 30' CMP
Remove
No Culv. Req'd

132+20 Driveway Lt
Inst 15"X 32' CMP
Remove
No Culv. Req'd

134+68 Driveway Lt
Inst 18"X 25' CMP
Remove
No Culv. Req'd

137+20 F. Ent. Lt.
No Culv. Inst.
No Culv. Req'd

144+14 Driveway Lt
Inst 15"X 22' CMP & SCP
Remove
No Culv. Req'd

144+67 Driveway Lt
Inst 15"X 24' CMP
Remove
No Culv. Req'd

145+95 Driveway Lt
Inst 15"X 16' CMP
Remove
No Culv. Req'd

BROOKSIDE ACRES

TOINTON'S FIRST SUBDIVISION

DEERWOOD PARK

POT 124+32.00

P.I. 124+68.95
Delta 15° 03' 00" Rt
D 4° 00' 00"
T 53.70
L 107.39

POT 148+20.09

End S.A.P. 55-611-03
Sta. 149+00

Woods

Garage

50 ft. R.R.

Begin Radius

100' Radius

200' Radius

Side Road 148

Begin Radius

120+70 Tile Rd. Rt
Corr. Inst.
Remove Ent.

135+33 ℄ Culv.
Inst 15"X38' CMP
Remove
136+33 Const ℄ Culv.
FBI 24"X 36' RCP Class 3
FBI 2-24" Conc Aprons
For SCP
Place on "C" Bedding

139+19 FE Rt
No Culv Inst.
FBI 15"X32' CMP
FBI 2-18" Metal Aprons
For CMP

Shed Well

Barn

141+97 Driveway Rt
Inst 12"X 20' SCP
Remove
FBI 18"X32' CMP
FBI 2-18" Metal Aprons
For CMP

138+00 Construct TWP Road Ent. Rt
FBI 24"X 50' CMP (28' Top)
FBI 2-24" Metal Aprons
For CMP

147+77 FE Lt
Inst 15"X 16' CMP
Remove
No Culv Req'd

148+09 FE Rt
Inst 12"X16' SCP
Remove
FBI 18"X 28' CMP
FBI 2-18" Metal Aprons
For CMP

148+22 Street Lt
Inst 18"X 36' CMP
Remove
FBI 18"X 36' CMP
FBI 2-18" Metal Aprons
For CMP

PLAN
SURVEYED
PLOTTED
GRADES CHECKED
ELEMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
BY
DATE

Cl. 0.5 Acre Gr. 0.5 Acre
Cl. 0 Gr. 20
Cl. 1 Gr. 7
Cl. 3 Gr. 3
Cl. 9 Gr. 9

Finished ℄ Grades
Present ℄ Grades

B.M. Elev. 1218.27
Spk in TP 51' Rt
Sta. 124+00

B.M. Elev. 1119.44'
Spk in PP Lt
Sta. 134+44

B.M. Elev. 1102.54'
Spk in PP Lt
Sta. 140+29

B.M. Elev. 1063.23'
Spk in PP Lt
Sta. 147+14

Profile 75' Lt
Profile 75' Rt

Elev. 07078266

P.V.I. 123+26.57

67%

Elev. 1209.95

Subgrade Treatment
Excavate 10' Below Profile Grade
Sta. 127+30 to Sta. 129+60

Note: Durab's Lime Rock for Crushing to be taken from Sta. 120+00 to Sta. 125+81

P.V.I. 136+00

Elev. 1119.44

P.V.C. 133+00

Elev. 1117.80

Inlet Elev. 12.5

Outlet Elev. 11.4

PI 4.50
Elev. 45.2
500' V.C.
M=11.312.5'

PI 1.50
Elev. 17.9
500' V.C.
M=14'

PI 4.90
Elev. 61
500' V.C.
M=9.979

Subgrade Treatment
Excavate 10' Below Profile Grade
Sta. 138+45 to Sta. 149+00

P.V.C. 140+00

Elev. 1102.54

P.V.I. 142+00

Elev. 1106.54

P.V.C. 145+00

Elev. 1106.54

P.V.I. 147+00

Elev. 1106.54

P.V.C. 149+00

Elev. 1106.54

Class A 13835
Class B 16178
Class SG 2884
EMB 26546
EXC

Class A 2073
Class SG 1192
EMB 1490
EXC

Class A 1122
Class SG 136
EMB 130
EXC

Note: Add 25 Cu Yds of Class B material from this balance to be crushed and either stockpiled or placed on road. This material not shown with Class B Excavation.

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTATIONS CHKD
NOTE BOOK
NO.
BY
DATE

SINGLE PLAN & PROFILE—DOTTED
CHARLES BRUNING COMPANY, INC.

S.A.P. 55-611-03 (CSAH 11) Sheet 6 of 25 Sheets