41

E 1/4 SEC

ROAD

AUSTIN ST

88TH LANE

BRANT ST

RICE ST

88TH AVENUE

STREET NE

LEXINGTON AVENUE

AUSTIN CREEK

PARK

COUNTY STATE AID HWY NO 17

STATE (OLD TRUNK

88TH AVE

COUNTY

ROB

AV

4

5

6

NAPLES ST NE

STREET

RENDOVA

(CO. ST AID HWY NO 23)

(COUNTY ROAD "J")

DITCH

115

120

125

135

140

155

160

N

100

0

200

SCALE

ANOKA COUNTY - BLAINE

RAMSEY COUNTY - SHOREVIEW

BROOKSIDE MOBILE HOME PARK

(19.95ac IN SEC. 4)

Total of 35.66 ac

83-00400 100 01

VACATED

BLKS 5 THRU 8 INCL

PEG NO 78 OA

HILL

AIRPORT (2) ST

AVE

PARK

LEGEND

WATERSHED DIVIDE

SUB-WATERSHED DIVIDE

ANOKA COUNTY - BLAINE

RAMSEY COUNTY - SHOREVIEW

REVISED
11-19-85 SB
9-23-86 BJ
1-7-87 BJ
6-5-87 BJ

27-118

STORM DRAINAGE SYSTEM AND TRIBUTARY AREAS

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01 Sheet No. / of / Sheets

16

41

E. 1/4 SEC.

ROAD

AUSTIN ST.

ST.

BRIANT

88TH LANE

RICE

88TH AVENUE

ST.

STREET

NE

AVENUE

LEXINGTON

CREEK

AUSTIN

BRIANT

PARK

85TH LANE

COUNTY STATE AID HWY. NO. 17

STATE (OLD TRUNK

COUNTY

88TH AVE.

OUTLOT A

(OLD TRUNK HWY NO 8)

NAPLES ST NE

(CO. ST. AID. HWY. NO 23)

STREET

RENDOVA

4

5

6

N

100

0

200

SCALE

ANOKA COUNTY - BLAINE

RAMSEY COUNTY - SHOREVIEW

(COUNTY ROAD "J")

115

120

125

135

140

150

155

160

DITCH

ALTA ST.

ALTA ST.

LEGEND

WATERSHED DIVIDE

SUB-WATERSHED DIVIDE

ANOKA COUNTY - BLAINE

RAMSEY COUNTY - SHOREVIEW

GOVT LOT 4

GOVT LOT 3

GOVT LOT 2

GOVT LOT 1

HILL

VACATED

BLKS 1-5 TEM AIRPORT (2)

AVE

RES NO 10

78.00

(19.95ac. IN SEC. 4)

(15.71ac. IN SEC 3)

BROOKSIDE MOBILE HOME PARK

83-00400 100 01

Total of = 35.66 ac.

35.66 ac.

12.9 ac.

400

140

S 60.00 E

S 34°54'40" E 548.

N 56°E 270

REVISED
11-19-85 SB
9-23-86 BJ
1-7-87 BJ
6-5-87 BJ

27-118

STORM DRAINAGE SYSTEM AND TRIBUTARY AREAS

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01 Sheet No. / of / Sheets

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
SLOPE EASEMENT

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
SAND PIT
BORROW PIT
ROCK QUARRY

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
WATER MAIN

CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE

SEE TECH MANUAL FOR ADDITIONAL SYMBOLS

NOTE SECTION NUMBERS READ FROM THE SOUTH

CENTER SECTION 35 T.30N. R.23W.

T.30N. R.23W. 35|36 2|1 T.29N. R.23W.

PIT DATA

PIT NO. ____ Located in ____
Dead Haul ____

PIT NO. ____ Located in ____
Dead Haul ____

GOVERNING SPECIFICATIONS

THE 1983 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

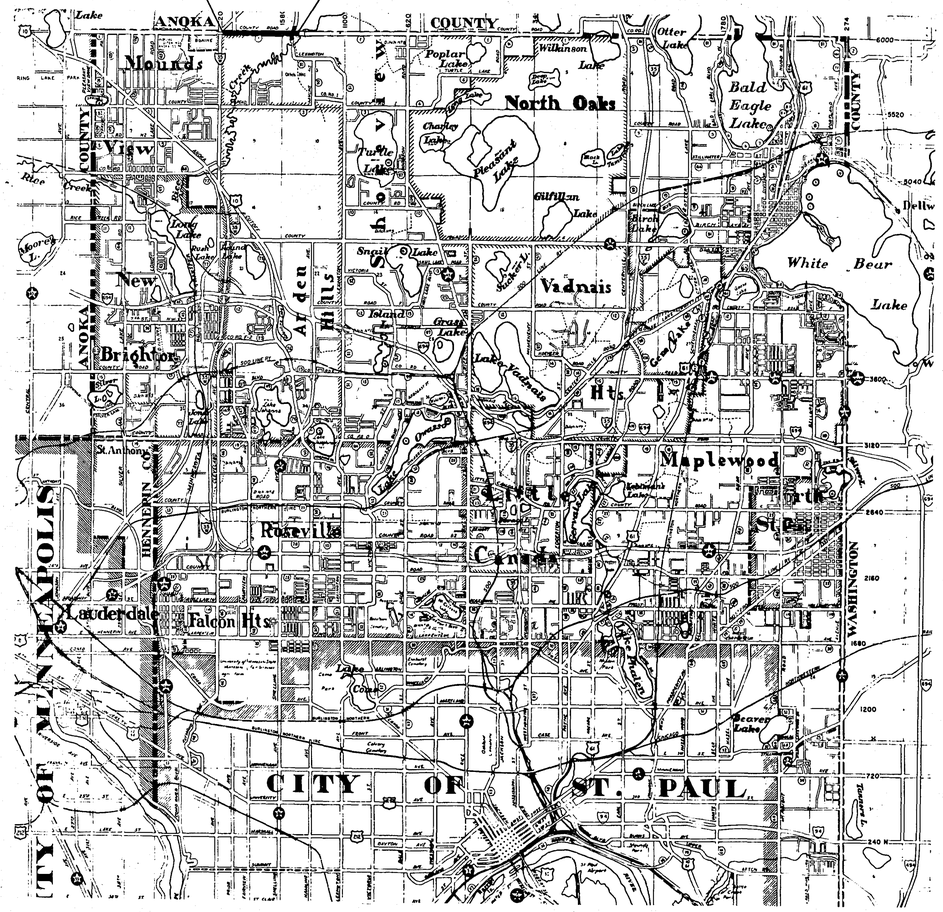
COUNTY ROAD "J"

GROSS LENGTH	6,270	FEET =	1.1875	MILES
BRIDGE LENGTH	0	FEET =	0	MILES
EXCEPTIONS	0	FEET =	0	MILES
NET LENGTH	6,270	FEET =	1.1875	MILES

PLAN 10 30 50
PROFILE HORIZ. 10 20 30 40 50
PROFILE VERT. 20 40
CROSS SECTIONS 5 10
LAYOUT MAP 5 10

BEGIN PROJECT STA. 101+84

END PROJECT STA. 164+54



DESIGN DESIGNATION

COUNTY ROAD "J"	I-35W TO NAPLES ST.	NAPLES ST. TO LEXINGTON AVE.	LEXINGTON AVE.
ADT (CURRENT YEAR) 1985	11,400	5,300	5,900
ADT (FUTURE YEAR) 2005	15,000	8,000	9,500
ΣN20 20 YEAR	2,553,112	1,334,671	1,519,040
DESIGN LOAD	10 TON	10 TON	10 TON
STABILOMETER R VALUE	50	50	50
DESIGN SPEED	40 MPH	40 MPH	40 MPH
DESIGN HOUR VOLUME	1500	800	
DIRECTIONAL DISTRIBUTION	50-50	50-50	
HCADT	6 %	6 %	

DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE
3.5' HEIGHT OF EYE, 0.5' HEIGHT OF OBJECT.

RAMSEY COUNTY
DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION PLAN: FOR GRADING, AGGREGATE BASE, BITUMINOUS BASE AND SURFACING, AND STORM SEWER.

COUNTY ROAD "J"

BETWEEN: BRIDGE 9606 (OVER I35W) AND BRIDGE 2310 (OVER RICE CREEK)

FROM: A POINT 330 FEET EAST OF THE NORTHWEST CORNER OF SECTION 4 T.30N., R.23W.

TO: A POINT 1161.5 FEET EAST OF THE NORTHWEST CORNER OF SECTION 3 T.30N., R.23W.

S.A.P. 02-632-03 ANOKA COUNTY
S.A.P. 62-601-01 RAMSEY COUNTY

ROAD ACCOUNT NO. 47311

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	ESTIMATED QUANTITIES, NOTES
4	TYPICAL SECTIONS
5-6	DETAILS
7	REMOVALS, STANDARD DETAIL PLATES & CLEAR & GRUB CHART
7A	PLANTING DETAIL
8-9	EXISTING & PROPOSED DRAINAGE CHARTS
10-21	PLAN & PROFILE
22-67	CROSS SECTIONS

THIS PLAN CONTAINS 71 SHEETS

DESIGN SQUAD R.J. OLSEN DATE 4-85
DRAWN BY R.J.O. & B.J.J DATE 5-85
CHECKED BY ____ DATE ____

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 4-13-87 REG. NO. 14257 ENGR. David T. Kroll

RECOMMENDED FOR APPROVAL ____ DATE 4/14/87
RAMSEY COUNTY ENGINEER

RECOMMENDED FOR APPROVAL DES TRAFFIC ENGR DATE 4/13/87
APPROVED ____ DATE ____
CHAIR OF THE RAMSEY COUNTY BOARD

RECOMMENDED FOR APPROVAL ENV ENGR DATE 4/13/87
APPROVED Paul K. Lund DATE 6/4/87
ANOKA COUNTY ENGINEER

RECOMMENDED FOR APPROVAL DDS MAINT ENGR DATE 4-13-87
APPROVED Julian H. Fruendel DATE 5/12/87
CITY OF SHOREVIEW

RECOMMENDED FOR APPROVAL RHP CONST ENGR DATE 4-13-87
APPROVED Robert W. Egert DATE 5/21/87
CITY OF BLAINE

RECOMMENDED FOR APPROVAL DLR DESIGN ENGR DATE 4-13-87
MINNESOTA DEPARTMENT OF TRANSPORTATION

RECOMMENDED FOR APPROVAL ____ DATE 4-14-87
RECOMMENDED FOR APPROVAL Julius Skallman DATE 7/20/87
DISTRICT STATE AID ENGINEER

APPROVED ____ DATE 6-19-87
COORDINATING ENGR
APPROVAL ____ DATE 7/20/87
STATE AID ENGINEER

PLAN REVISIONS		
DATE	SHEET NO.	BY
9-16-86	R/W U. of M	B.J.
9-17-86	KEBEC & VALTA ST.	B.J.
3-25-87	SHTS. 15-19 & X-SECTIONS	B.J.
5-4-87	WILLIAMS PIPELINE PROP. RELOCATION	D.M., B.J.

2718

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 **Sheet No. 1 of 67 Sheets**

STATEMENT OF ESTIMATED QUANTITIES

	ITEM NO	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES	ANOKA COUNTY S.A.P. 02-632-03 NON-PARTICIPATING BLAINE ESTIMATED QUANTITIES	ANOKA COUNTY S.A.P. 02-632-03 NON-PARTICIPATING BLAINE FINAL QUANTITIES	ANOKA COUNTY S.A.P. 02-632-03 PARTICIPATING ESTIMATED QUANTITIES	ANOKA COUNTY S.A.P. 02-632-03 PARTICIPATING FINAL QUANTITIES	RAMSEY COUNTY S.A.P. 62-601-01 NON-PARTICIPATING SHOREVIEW ESTIMATED QUANTITIES	RAMSEY COUNTY S.A.P. 62-601-01 NON-PARTICIPATING SHOREVIEW FINAL QUANTITIES	RAMSEY COUNTY S.A.P. 62-601-01 PARTICIPATING ESTIMATED QUANTITIES	RAMSEY COUNTY S.A.P. 62-601-01 PARTICIPATING FINAL QUANTITIES	STORM SEWER ESTIMATED QUANTITIES	STORM SEWER FINAL QUANTITIES
	2021.501	MOBILIZATION	L.S.	1				0.5				0.5			
	2101.502	CLEARING	TREE	142				56				86			
	2101.507	GRUBBING	TREE	132				57				75			
	2104.501	REMOVE CONCRETE RETAINING WALL	L.F	35				35							
	2104.501	REMOVE FLAGSTONE WALL	L.F.	20				20							
	2104.501	REMOVE PIPE CULVERTS & SEWERS	L.F	435				315				120			
	2104.501	REMOVE CONCRETE CURB	L.F.	250				100				150			
	2104.501	REMOVE CONCRETE CURB AND GUTTER	L.F.	52				52							
	2104.505	REMOVE CONCRETE PAVEMENT	S.Y.	187				67				120			
(14)	2104.521	SALVAGE CHAIN LINK FENCE	L.F.	1443				1363				80			
	2104.521	SALVAGE WOOD FENCE	L.F.	50				50							
	2104.521	SALVAGE GUARD RAIL - CABLE	L.F.	305				305							
	2104.521	SALVAGE GUARD RAIL - PLATE BEAM	L.F.	235				145				90			
	2104.523	SALVAGE ANCHORAGE ASSEMBLY - CABLE	EACH	2				2							
	2104.523	SALVAGE CONCRETE APRONS	EACH	1				1							
	2104.523	SALVAGE ELECTRIC SIGN	EACH	1				1							
	2104.523	SALVAGE WOOD VEHICULAR GATE - SINGLE	EACH	1				1							
	2104.523	SALVAGE HYDRANTS	EACH	3				3							
(8,14)	2105.501	COMMON EXCAVATION (P)	C.Y.	47421				23965				23456			
(8)	2105.505	MUCK EXCAVATION	C.Y.	23842				11921				11921			
(1,14)	2105.525	TOPSOIL BORROW (L.V.)	C.Y.	3338				1648				1690			
(8)	2105.522	SELECT GRANULAR BORROW MODIFIED (L.V.)	C.Y.	29888				14944				14944			
(2,8)	2130.501	WATER	(M)GAL.	100				50				50			
(7,14)	2211.501	AGGREGATE BASE CL. 6 (OR CL. 5 100% CRUSHED)	TON	15950				8176				7774			
	2211.501	AGGREGATE BASE CL. 4	TON	11736				5993				5743			
	2331.531	TEMPORARY LANE MARKING	RD.STA.	400				200				200			
(9,14)	2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	840				427				413			
(3,14)	2331.508	WEARING COURSE MIXTURE	TON	643				386				257			
(3)	2331.510	BINDER COURSE MIXTURE	TON	4038				2114				1924			
	2331.514	BASE COURSE MIXTURE	TON	12626				6270				6356			
(5)	2104.511	SAWING CONCRETE PAVEMENT	L.F.	136				10				126			
(6)	2104.513	SAWING BITUMINOUS PAVEMENT SURFACE	L.F.	563				440				123			
	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	4343				2170				2173			
(9)	2361.504	ASPHALT CEMENT	TON	174				85				89			
	2361.508	WEARING COURSE MIXTURE	TON	2566				1257				1309			
(12)	2451.507	GRANULAR BEDDING (L.V.)	C.Y.	37										37	
	0412.602	INSTALL ELECTRIC SIGN	EACH	1				1							
	0412.604	TIMBER RETAINING WALL	S.F.	1867								1867			
	2501.515	15" R.C. PIPE APRONS	EACH	7				1						6	
	2501.515	24" R.C. PIPE APRONS	EACH	1										1	
	2501.515	36" R.C. PIPE APRONS	EACH	1										1	
	2503.521	22" SPAN R.C. PIPE-ARCH SEWER CLASS IIA	L.F.	59										59	
	2503.541	15" PIPE SEWER DESIGN 3006 CLASS V	L.F.	1378										1378	
	2503.541	18" PIPE SEWER DESIGN 3006 CLASS V	L.F.	1527										1527	
	2501.515	18" R C. PIPE APRONS	EACH	1										1	
	2503.541	24" PIPE SEWER DESIGN 3006 CLASS V	L.F.	628										628	
	2503.541	36" PIPE SEWER DESIGN 3006 CLASS V	L.F.	91										91	
	2506.521	INSTALL CASTING	EACH	1				1							
	2506.509	CONSTRUCT SURFACE DRAINS DESIGN A OR F	EACH	1										1	
	2506.508	CONSTRUCT MANHOLES DESIGN A OR F	EACH	8										8	
	2506.511	RECONSTRUCT SANITARY M.H.	L.F.	7				7							
(11)	2506.509	CONSTRUCT CATCH BASINS DESIGN 1 (4008)	EACH	1										1	
	2506.509	CONSTRUCT CATCH BASINS DESIGN LP4	EACH	23										23	
	2506.509	CONSTRUCT CATCH BASINS DESIGN SP.-2	EACH	9										9	
	2506.509	CONSTRUCT SURFACE DRAINS DESIGN C	EACH	1										1	
	2506.522	ADJUST FRAME AND RING CASTINGS	EACH	6				6							
	0504.602	INSTALL HYDRANTS	EACH	2				2							
	2511.505	HANDPLACED RIPRAP CLASS III 15" THICK (L.V.)	C.Y.	104.7										104.7	
(15)	2531.501	CONCRETE CURB AND GUTTER DESIGN B624	L.F.	13143		3287.5		3287.5				6568			
	2535.501	BITUMINOUS CURB	L.F.	178				178							
	2511.511	GRANULAR FILTER CL. III 7.5" THICK (L.V)	C.Y.	52.1										52.1	
	2554.501	TRAFFIC BARRIER DESIGN B 8307	L.F.	851				747				104			
	2554.523	TWISTED END TREATMENT	EACH	3				2				1			
	2575.501	ROADSIDE SEEDING	ACRE	1.0								1.0			
	2575.502	SEED MIXTURE 6	LB.	75								75			
(1,14)	2575.505	SODDING	S.Y.	35544				19757				15787			
	2575.511	MULCH MATERIAL TYPE 5	TON	0.7								0.7			
(4)	2575.531	COMMERCIAL FERTILIZER ANALYSIS 12-12-12	TON	2.7				1.3				1.4			
	0411.603	PRECAST RETAINING WALL	S.F.	1081				1081							
	0557.603	INSTALL WOOD FENCE	L.F.	50				50							
(14)	0557.603	INSTALL CHAIN LINK FENCE	L.F.	1418				1338				80			
	2573.502	SILT FENCE HEAVY DUTY	L.F.	2011				963				1048			
	0554.602	GUARD RAIL TERMINAL POST	EACH	2				1				1			

QUANTITY NOTES

(1) AREAS TO BE TOPSOILED AND SODDED HAVE BEEN INCREASED 10% TO ALLOW FOR ADDITIONAL AREA ON SLOPES.

(2) FOR DUST CONTROL.

(3) INCLUDES BITUMINOUS FOR ENTRANCES AND PARKING AREAS.

(4) ESTIMATED AT 350 POUNDS PER ACRE.

(5) FOR PAVEMENT REMOVAL.

(6) FOR PAVEMENT AND ENTRANCE REMOVAL.

(7) THE CONTRACTOR IS ADVISED THAT HE MAY USE AGGREGATE BASE, CLASS 6 OR, AS AN ALTERNATE, HE MAY USE 100% CRUSHED MATERIAL WHICH MEETS THE REQUIREMENTS OF CLASS 5 IN TABLE 3138-1 OF THE MN/DOT STANDARD SPECIFICATIONS.

(8)

QUANTITY SPLIT	PARTICIPATION %
ANOKA COUNTY =	50 %
RAMSEY COUNTY =	50 %

(9) OIL CONTENT - PERCENT

2331 BASE COURSE MIXTURE - 4.8%
2331 BINDER COURSE MIXTURE - 4.8%
2331 WEARING COURSE MIXTURE - 6.2%
2361 WEARING COURSE MIXTURE - 6.8%

(10) FOR ENTRANCES.

(11) CONSTRUCT OVER 44" SPAN R.C.P.

(12) INCLUDES SURFACE DRAINS.

(13)

(14) TEMPORARY ENTRANCE, RENDOVA ST. EAST.

509 C.Y. COMMON EX.
30 C.Y. TOPSOIL
549 TON AGG. BASE CL. 6 OR 5
17 TON BITUMINOUS MATERIAL FOR MIXTURE
265 TON WEARING COURSE MIXTURE
345 S.Y. SODDING
88 L.F. SALVAGE AND INSTALL CHAIN LINK FENCE

(15) INCLUDES 65 L.F. D424 C&G AT I 35 RAMP

CONSTRUCTION NOTES

THE CONTRACTOR WILL COOPERATE WITH BOTH ANOKA AND RAMSEY COUNTIES AS RELATES TO PERPETUATING MONUMENTATION. INCLUDING ADVANCE NOTICE OF ANY DISTURBANCE OF MONUMENTS.

PROVIDE DRAINAGE OUTLETS FOR ALL SUBCUTS DURING CONSTRUCTION. DITCHES SHOULD BE DEEPER THAN SUBCUT TO PROVIDE OUTLET DRAINAGE.

TAPER ENDS OF SUBCUTS TO A 20:1 SLOPE UNLESS OTHERWISE INDICATED.

WHERE THE PROPOSED SUBCUT IS LOCATED UNDER INPLACE BASE AND BITUMINOUS SURFACING OR CONCRETE PAVEMENT, THE ENDS OF SUBCUT SHALL BE VERTICAL FOR THE DEPTH OF THE BITUMINOUS OR CONCRETE AND 2:1 IN AGGREGATE BASE.

STRIP TOPSOIL FROM ALL AREAS TO BE DISTURBED BY CONSTRUCTION AND STOCKPILE (IF PRACTICAL) FOR REPLACEMENT LATER AS SLOPE DRESSING.

PROVIDE FOR REMOVAL AND DISPOSAL OF (OUTSIDE THE CONSTRUCTION ZONE) ANY INPLACE SURFACING AND STRUCTURES THAT WILL INTERFERE WITH CONSTRUCTION.

FROM A SOILS STANDPOINT, TRAFFIC SHOULD BE MAINTAINED NO CLOSER THAN AN IMAGINARY 2:1 LINE DRAWN FROM THE BOTTOM OF ANY EXCAVATION INTERSECTING THE SURFACE.

THE ORDINARY COMPACTION METHOD SHALL BE USED ON THIS PROJECT FOR GRADING AND AGGREGATE BASE.

THE CONTRACTOR SHALL OBTAIN FROM THE UTILITY COMPANIES THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES WHICH HE MAY ENCOUNTER IN THE PERFORMANCE OF HIS WORK.

TOP OF "GRADING GRADE" IS DEFINED AS THE TOP OF THE EMBANKMENT MATERIAL OR THE BOTTOM OF THE AGGREGATE BASE COURSE.

UNSUITABLE GRADING MATERIAL SHALL CONSIST OF TOPSOIL, OTHER ORGANIC SOIL AND DEBRIS.

NO PENETRATION PRIME IS REQUIRED ON THIS PROJECT.

PROVIDE A TACK COAT, SPEC. 2357.2A, BETWEEN BITUMINOUS COURSES.

(CONSTRUCTION NOTES CONTINUED ON SHEET 3)

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO	ITEM	UNIT	TOTAL ESTIMATED	TOTAL FINAL	ANOKA COUNTY S.A.P. 02-632-03 NON-PARTICIPATING BLAINE ESTIMATED QUANTITIES	ANOKA COUNTY S.A.P. 02-632-03 NON-PARTICIPATING BLAINE FINAL QUANTITIES	ANOKA COUNTY S.A.P. 02-632-03 PARTICIPATING ESTIMATED QUANTITIES	ANOKA COUNTY S.A.P. 02-632-03 PARTICIPATING FINAL QUANTITIES	RAMSEY COUNTY S.A.P. 62-601-01 NON-PARTICIPATING SHOREVIEW ESTIMATED QUANTITIES	RAMSEY COUNTY S.A.P. 62-601-01 NON-PARTICIPATING SHOREVIEW FINAL QUANTITIES	RAMSEY COUNTY S.A.P. 62-601-01 PARTICIPATING ESTIMATED QUANTITIES	RAMSEY COUNTY S.A.P. 62-601-01 PARTICIPATING FINAL QUANTITIES	STORM SEWER ESTIMATED QUANTITIES	STORM SEWER FINAL QUANTITIES
2571.501	PINE, AUSTRIAN 5' HI B & B	TREE	3								3			
2571.502	ASH, GREEN 2.5" CAL. B & B	TREE	3								3			
2571.503	MAPLE, AMUR 7' HI B & B	TREE	3								3			
2571.503	OLIVE, RUSSIAN 5' HI B & B	TREE	3								3			
2511.515	GEOTEXTILE FABRIC TYPE III	S.Y.	169										169	
2501.525	44" SPAN RC PIPE-ARCH APRON	EACH	2										2	
2503.521	44" SPAN RC PIPE-ARCH SEWER CLASS IIA	L.F.	426										426	
2506.508	CONSTRUCT MANHOLE DESIGN 60-4020	EACH	2										2	
2506.508	CONSTRUCT MANHOLE DESIGN 66-4020	EACH	1										1	
2506.508	CONSTRUCT MANHOLE DESIGN 78-4020	EACH	1										1	
2557.501	WIRE FENCE DESIGN 32V-9322	L.F.	400								400			
(14) 2557.501	CHAIN LINK FENCE DESIGN 60V-9322	L.F.	377				377							
0504.602	ADJUST VALVE BOX	EACH	4				4							
0506.602	INLET STRUCTURE	EACH	1										1	
(10) 2501.511	18" C.M. PIPE CULVERT	L.F.	158										158	
(14) 2501.511	48" C.M. PIPE CULVERT	L.F.	44				44							
2501.515	15" R.C. PIPE CULVERT	L.F.	81				81							
(10) 2501.515	18" C.M. PIPE APRONS	EACH	4										4	
(14) 2501.515	48" C.M. PIPE APRONS	EACH	2				2							
(14) 2557.517	CHAIN LINK VEHICULAR GATE - DOUBLE W/SECURITY LOCKS	EACH	1				1							
2501.531	30" G.S. ELL P CULVERT 1	L.F.	8										8	
2501.531	30" G.S. ELL P CULVERT 2	L.F.	8										8	
0501.602	TRASH GUARD FOR 15" R.C. APRON	EACH	1										1	
0501.602	TRASH GUARD FOR 24" R.C. APRON	EACH	1										1	
0501.602	TRASH GUARD FOR 36" R.C. APRON	EACH	1										1	
2502.541	3" PE CORR. PERFORATED PIPE DRAIN	L.F.	631								631			
	8' DETACHED BITUMINOUS PATH (NON-PARTICIPATING)													
2211.501	AGGREGATE BASE CL. 6	TON	1401						1401					
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	47						47					
2331.508	WEARING COURSE MIXTURE	TON	436						436					
2331.510	BINDER COURSE MIXTURE	TON	436						436					
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	199						199					

CONSTRUCTION NOTES

(CONTINUED FROM SHEET 2)

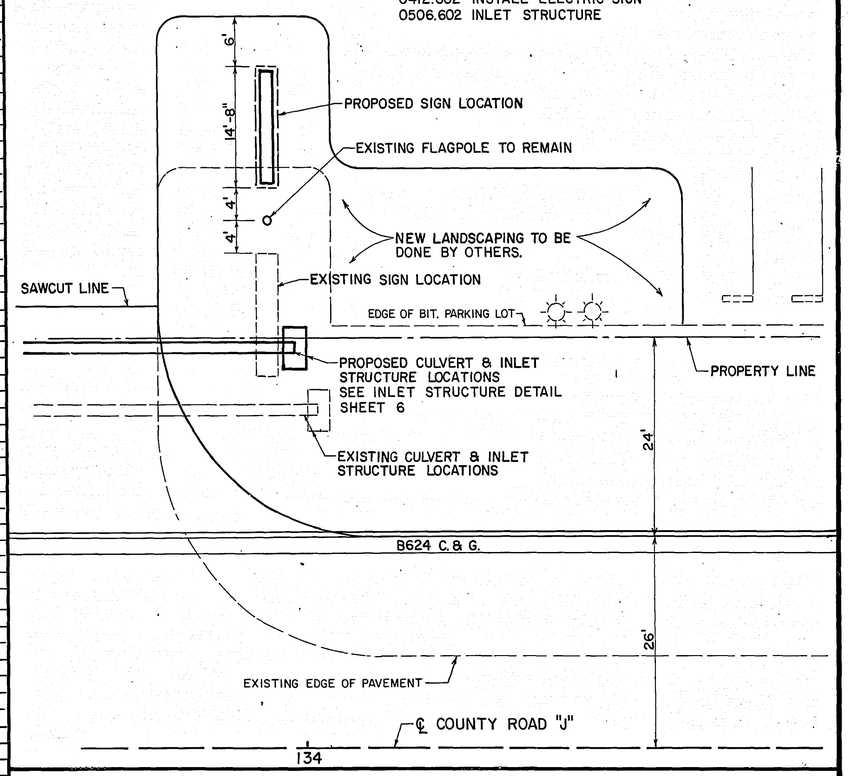
FURNISH & PLANT SHADE TREES AT THE APPROXIMATE LOCATIONS OF THE ELMS REMOVED BY CONSTRUCTION BETWEEN STATIONS 142 AND 157 RIGHT SIDE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

SILT FENCE WILL BE INSTALLED AT ALL CATCH BASIN INLETS AND OTHER AREAS AS DIRECTED BY THE ENGINEER.

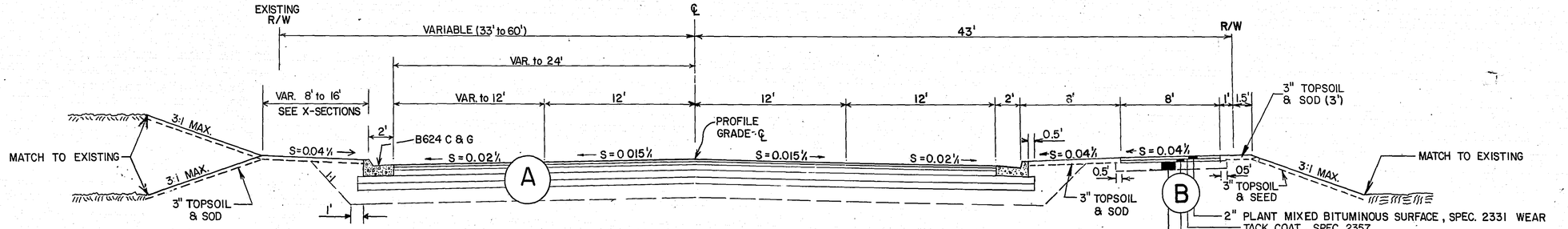
TO MEET CERTAIN CONDITION OF PHASING, TRAFFIC CONTROL, ETC., THE CONTRACTOR MAY HAVE TO DOUBLE HANDLE AND STOCKPILE MATERIAL OUTSIDE THE RIGHT-OF-WAY FOR FUTURE USE. ALL COSTS INCURRED BY THE CONTRACTOR IN EXCAVATING, PLACING, AND TRANSPORTING THIS MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 2105.501, COMMON EXCAVATION.

3701 CO. RD. "J"
SIGN & INLET STRUCTURE RELOCATION DETAILS

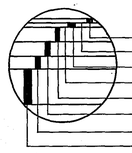
PAID FOR AS ITEM: 2104.523 SALVAGE ELECTRIC SIGN
0412.602 INSTALL ELECTRIC SIGN
0506.602 INLET STRUCTURE



SIGN & INLET STRUCTURE LOCATION DETAIL
ESTIMATED QUANTITIES (CONT.) 27-118



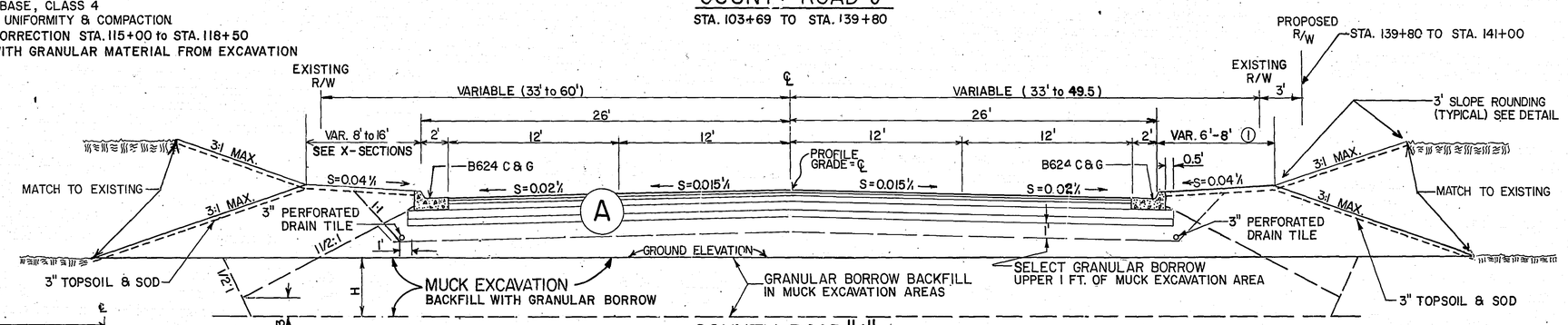
SECTION A



1"	PLANT MIXED BITUMINOUS SURFACE, SPEC. 2361 WEAR
	TACK COAT, SPEC. 2357
1 1/2"	PLANT MIXED BITUMINOUS SURFACE, SPEC. 2331 BINDER
	TACK COAT, SPEC. 2357
5"	PLANT MIXED BITUMINOUS SURFACE, SPEC. 2331 BASE
6"	AGGREGATE BASE, CLASS 6
5"	AGGREGATE BASE, CLASS 4
1'	SUBCUT FOR UNIFORMITY & COMPACTION
2.5'	SUBGRADE CORRECTION STA. 115+00 to STA. 118+50
	BACKFILL WITH GRANULAR MATERIAL FROM EXCAVATION

COUNTY ROAD "J"

STA. 103+69 TO STA. 139+80



3" PERFORATED PIPE DRAIN

LEXINGTON AVENUE
STA. 514+27 TO STA. 517+30

3" PERFORATED PIPE DRAIN

LEXINGTON AVENUE
STA. 514+27 TO STA. 517+55

BOULEVARD RT.

① 7' STA. 141+50 TO STA. 154+20
STA. 158+20 TO STA. 160+25
6' STA. 154+20 TO STA. 158+20
8' ALL OTHER LOCATIONS

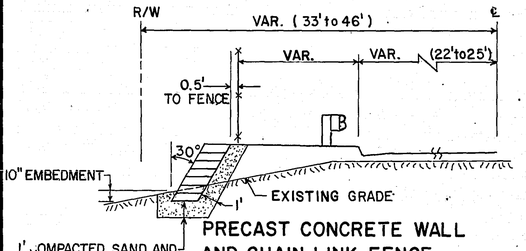
MUCK EXCAVATION:
CO. RD. J STA. 158+75 TO 164+50
LEXINGTON AVE. STA. 512+00. TO STA. 520+05

COUNTY ROAD "J"

STA 139+80 TO STA. 161+85±

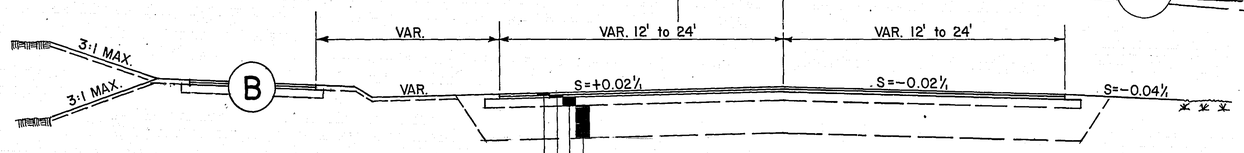
LEXINGTON AVENUE

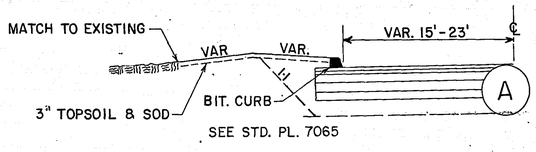
STA 512+00 TO STA. 520+50±



PRECAST CONCRETE WALL AND CHAIN LINK FENCE

(STA. 106+25 to STA. 109+25 LT.)
(SEE SHEET NO. 5)





SEE STD. PL. 7065

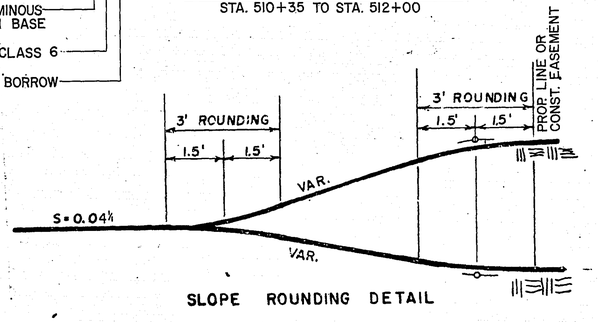
STA. 102+27 TO 104+05 LT. SIDE ONLY

BITUMINOUS CURB

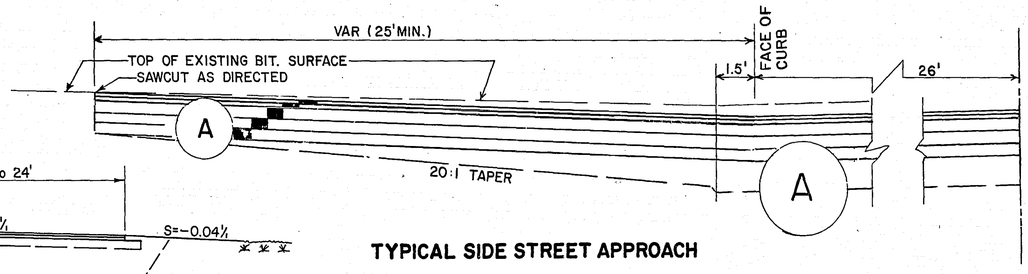
1 1/2"	PLANT MIXED BITUMINOUS SURFACE, SPEC. 2361 WEAR
2"	PLANT MIXED BITUMINOUS SURFACE, SPEC. 2331 BASE
6"	AGGREGATE BASE, CLASS 6
2.0'	SELECT GRANULAR BORROW

TEMPORARY CONSTRUCTION

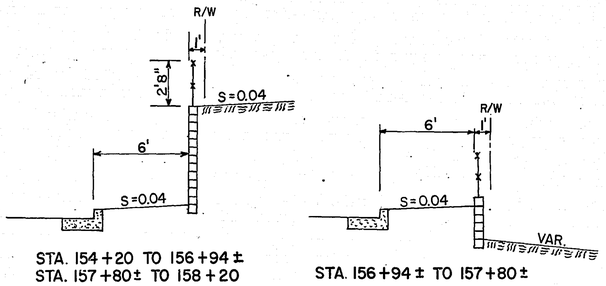
LEXINGTON AVENUE
STA. 510+35 TO STA. 512+00



SLOPE ROUNDING DETAIL



TYPICAL SIDE STREET APPROACH



STA. 154+20 TO 156+94±
STA. 157+80± TO 158+20

STA. 156+94± TO 157+80±

TIMBER WALL TYPICAL SECTIONS
(SEE DETAILS SHEET NO. 5)

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.

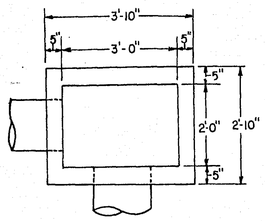
DATE _____ REG. NO. _____

TYPICAL SECTIONS

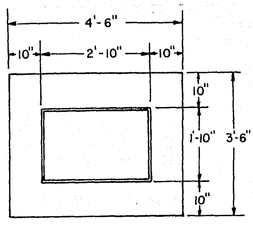
27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601 01

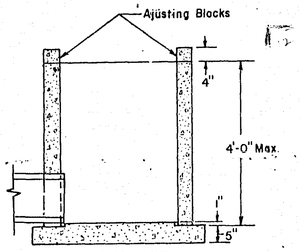
Sheet No. 4 of 67 Sheets



CATCH BASIN PLAN



BASE SLAB PLAN



SECTIONAL VIEW
CATCH BASIN & BASE SLAB

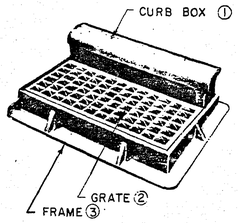
NOTES:

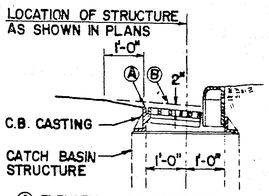
1. TO BE USED WITH NEENAH R-3067-L OR EQUAL.
2. PIPE CUT-OUTS TO BE LOCATED WHERE REQUIRED.
3. ALTERNATE CAST-IN-PLACE BASE SLAB CAN BE USED.
4. INSTALL AS PER MN./DOT STD. PLATE NO. 7111
5. REINFORCING: SINGLE LINE STEEL WIRE FABRIC,
   WALL= W3.5 x W3.0 HAVING A AREA OF NOT LESS THAN .21 SQ. IN. PER. FOOT OF HEIGHT.
   BASE= W4.0 X W4.0 HAVING A AREA OF NOT LESS THAN .16 SQ. IN. PER. FOOT OF HEIGHT

CASTING ASSEMBLY
(FOR DESIGN SPECIAL 2 CATCH BASIN)

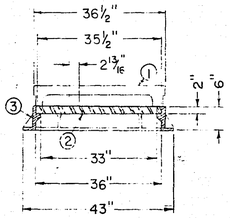
NOTES:

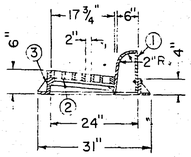
1. MATERIALS: CAST GRAY IRON, CLASS 30, MN/DOT SPEC. REFERENCE 3321
2. CURB BOX HEIGHT SHALL BE ADJUSTABLE 6" TO 9"
3. SEE CATCH BASIN-DESIGN SPECIAL 2 DETAIL FOR CASTING INSTALLATION DETAIL.



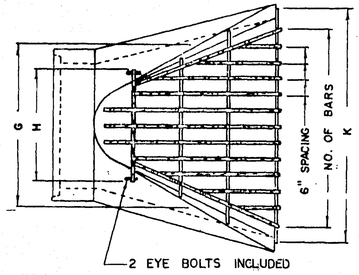


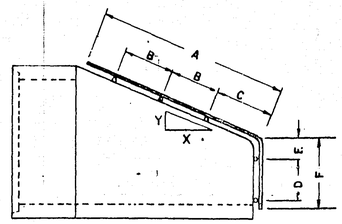
INSTALLATION DETAIL





TRASH GUARD (GALVANIZED)
(FOR CONCRETE APRON)





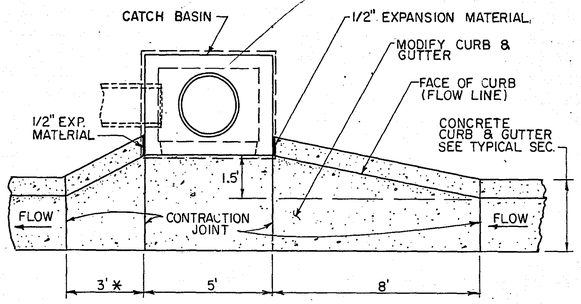
1/2" BARS FOR LONGITUDINAL INTERIOR BARS, WELD EACH INTERSECTION.

CONTRACTOR SHALL FURNISH SUITABLE LOCKING DEVICE APPROVED BY ENGINEER.

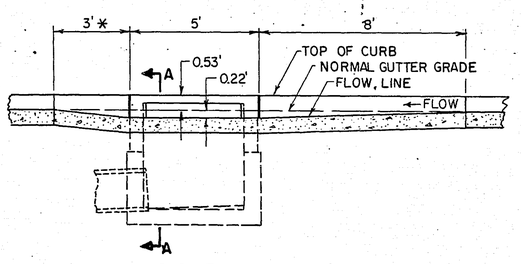
3/4" BARS FOR TRANSVERSE AND EDGE REINFORCEMENT

SIZE	NO. OF BARS	SLOPE	A	B	C	D	E	F	G	H	K
12"	5	3 to 1	24	10	10	5	2	8	24		30
15"	6	"	24	10	10	6	2	10	26		34
18"	7	"	24	10	10	6	3	12	28		40
21"	8	"	36	16	16	7	3	12	34		50
24"	9	"	44	20	20	10	4	16	36		52
27"	10	"	50	23	23	10	4	16	38		58
30"	11	"	56	26	26	12	4	18	42		64
36"	13	"	64	30	30	12	4	18	48		76
42"	15	"	68	32	32	16	8	26	60		88
48"	16	"	76	36	36	14	10	28	62		92
54"	17	2.4 to 1	76	36	36	16	12	32	68		95

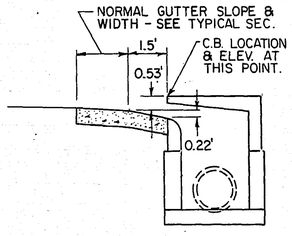
CURB OPENING CATCH BASIN - DESIGN LP
INSTALLATION DETAIL



PLAN VIEW



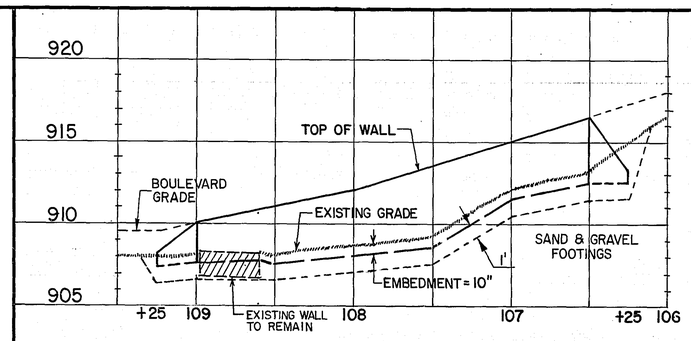
ELEVATION
(AT FLOW LINE)



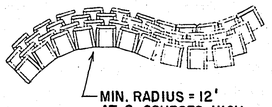
SECTION A-A

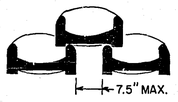
NOTES:

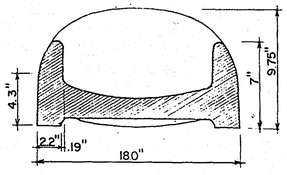
1. * DIMENSION SHALL BE 8' WHEN STRUCTURE INSTALLED AT LOW POINT IN GRADE
2. CATCH BASIN - DESIGN LP - SEE MN/DOT STD. PL. NO. 4021
3. TOP OF CATCH BASIN SHALL BE INSTALLED AT SAME SLOPE AS BLVD. GRADES AND TOP OF CURB GRADE EACH SIDE OF STRUCTURE.
4. ELEVATION OF STRUCTURE IS COMPUTED AT LOCATION SHOWN IN SEC. A-A AT ℄ OF C.B. OPENING.

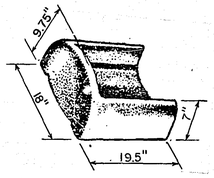


WALL ELEVATION DETAILS









SLOPE STONE WALL DETAILS

PRECAST CONCRETE WALL CONSTRUCTION NOTES

CONSTRUCT WALL AT STA. 106+25 TO 109+25 LT. WALL SHALL BE CONSTRUCTED OF SLOPE STONE, FABRICATED ACCORDING TO DETAILS ON THIS PLAN. COURSES OF STONE SHALL BE HORIZONTAL. FOOTING FOR WALL SHALL BE SAND AND GRAVEL FROM THE PROJECT OR BORROW.

SAND & GRAVEL SHALL BE CONSTRUCTED ACCORDING TO THE APPLICABLE PROVISIONS OF SPECIFICATION 2541.

SALVAGE AND INSTALL FENCE 2' INSIDE FACE OF WALL. SEE SHEET 3 FOR TYPICAL SECTION (0.5' TO BACK FACE).

PAYMENT SHALL BE MADE AS ITEM 0411.603 PRECAST RETAINING WALL AND PAYMENT INCLUDES SAND & GRAVEL BACKFILL.

TOPSOIL SHALL BE PLACED IN BLOCKS AS DIRECTED BY ENGINEER. PAYMENT SHALL BE MADE AS ITEM NUMBER 2105.525 TOPSOIL BORROW.

SPECIFICATIONS

MATERIAL - PRECAST AIR-ENTRAINED CONCRETE HAVING 2500 PSI MINIMUM COMPRESSIVE STRENGH AND MEETING ASTM SPECIFICATIONS C-150.

WEIGHT - 114.6 POUNDS

LENGTH - 19-5/8" (1.64')

WIDTH - 17-3/4" (1.48')

HEIGHT - 9-7/8" (FACE), 8" (SIDE RAILS)

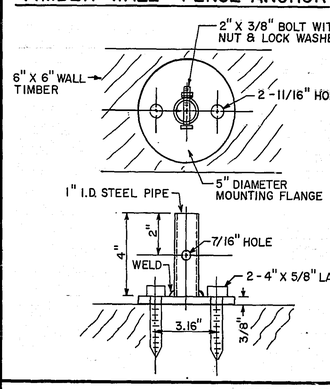
QUANTITIES

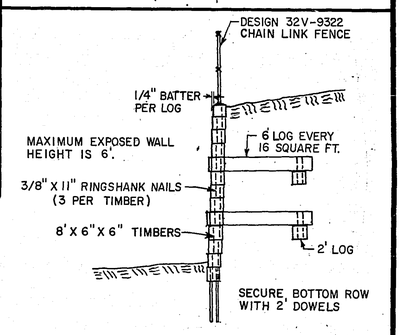
1081 SQUARE FEET GROSS
793 SQUARE FEET NET (EXPOSED)
87 C.Y. SAND & GRAVEL C.V.

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 _____ REG. NO. _____

TIMBER WALL - FENCE ANCHORING



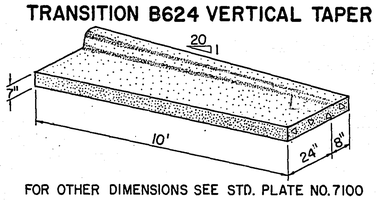


TIMBER WALL DETAIL

WALL CONSTRUCTION NOTES

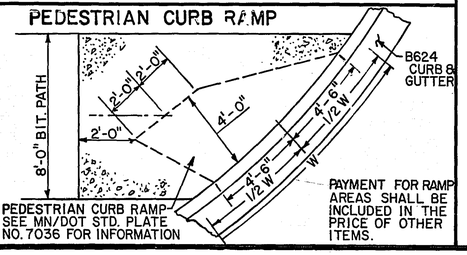
- ALL TIMBER SHALL BE TREATED PER MN/DOT SPECIFICATION 3491.
- LINE POSTS SHALL BE PIPE TYPE I-1/2" I.D. PER STANDARD PLATE 9322
- LINE POST SPACING SHALL BE 10' O.C. EXCEPT: STA. 156+50 TO STA. 156+94 SHALL BE 9' O.C.. 43 POSTS ESTIMATED.
- CHAIN LINK FENCE SHALL BE PAID FOR BY THE LINEAL FOOT AND INCLUDES ALL HARDWARE NEEDED FOR INSTALLATION.

TRANSITION B624 VERTICAL TAPER



FOR OTHER DIMENSIONS SEE STD. PLATE NO. 7100

PEDESTRIAN CURB RAMP



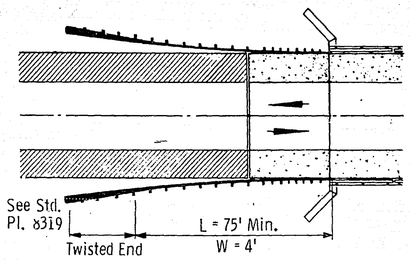
PEDESTRIAN CURB RAMP SEE MN/DOT STD. PLATE NO. 7036 FOR INFORMATION

PAYMENT FOR RAMP AREAS SHALL BE INCLUDED IN THE PRICE OF OTHER ITEMS.

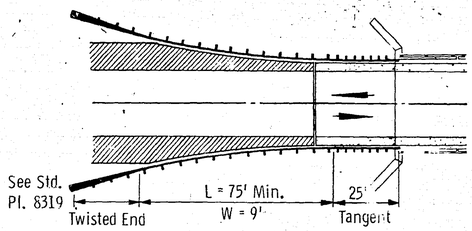
TIMBER RETAINING WALL
PRECAST RETAINING WALL
CATCH BASIN DETAILS
CURB & GUTTER TRANSITION

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601--01

Sheet No. 5 of 67 Sheets 27-118



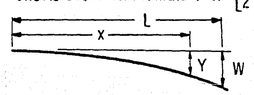
TWO-WAY BRIDGE WITH SHOULDERS



TWO-WAY BRIDGE WITHOUT SHOULDERS

OFFSET FORMULA

Offsets Based On Formula $Y = W\frac{x^2}{L^2}$



Y = Intermediate Offsets
W = Width of Final Offset
X = Intermediate Distances
L = Total Length of Flare

GENERAL NOTES:

All guardrail posts shall be 6' 3" c. to c. except where noted.

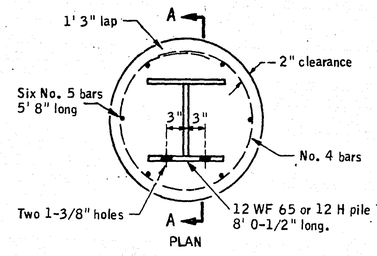
When the approaching flare can be buried in the backslope eliminate the twisted end and add 25' of rail.

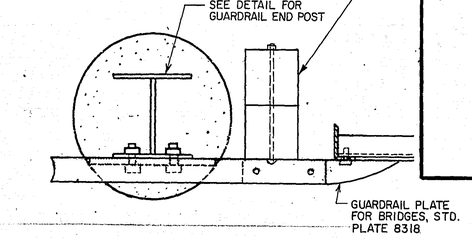
The required L length and W offset shall be determined in the field by the Engineer.

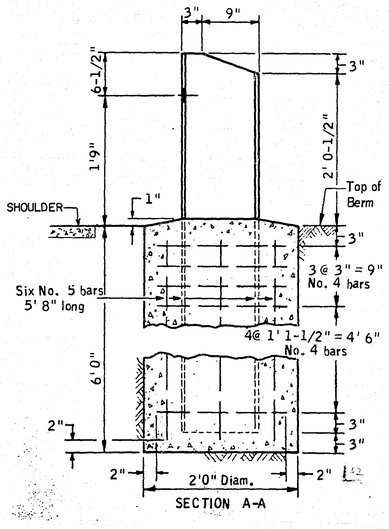
See Road Design Manual Fig C 5-291.566 for offset charts.

The latest approved Standard Plates shall apply 8307, 8316, 8317, 8319.

GUARDRAIL DETAILS







GUARDRAIL END POST DETAIL

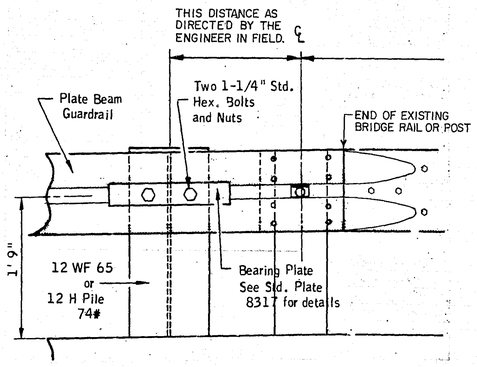
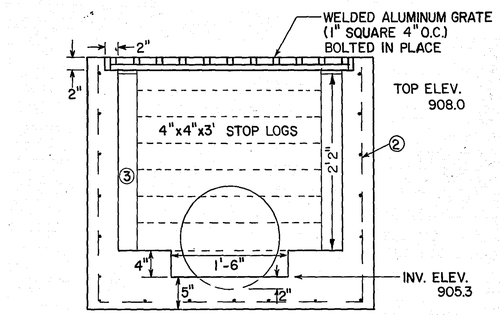


PLATE BEAM GUARDRAIL CONNECTION TO BRIDGE

SPECIFICATION REFERENCE 2554
APPROXIMATELY STA. 164+54 CO. RD. "J"

STA. 133+97 LT. 49'



① A NEW STRUCTURE MAY BE PRECAST OR CAST INPLACE. IF PRECAST, SPACE AROUND PIPE TO BE FILLED WITH MORTAR.

② REINFORCING: # 3 BARS @ 6" SPACING (BOTH DIRECTIONS). WIRE MESH OF EQUIVALENT MAY BE USED IN LIEU OF #3 BARS.

③ ALUMINUM CHANNEL CAST IN PLACE TO ACCOMODATE 4"X4" STOP LOGS.

④ THE CONTRACTOR SHALL EITHER SALVAGE AND INSTALL STRUCTURE AT PROPOSED LOCATION OR REMOVE EXISTING AND CONSTRUCT A NEW ONE PER THIS PLAN.

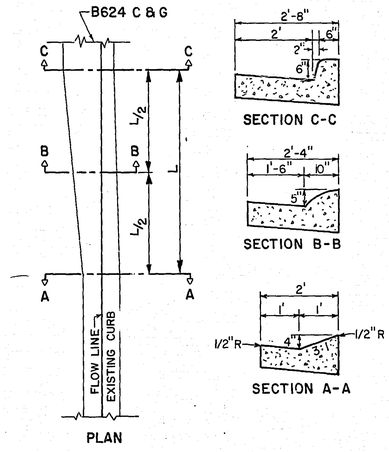
⑤ PAYMENT FOR THE ABOVE WORK SHALL BE MADE AS 0506.602 INLET STRUCTURE.

⑥ INCLUDE FURNISHING NEW STOP LOGS IN ABOVE ITEM.

SCALE
0 6" 1' 2' 3'

INLET STRUCTURE DETAIL

STA 133 + 97 LT. 49



PLAN

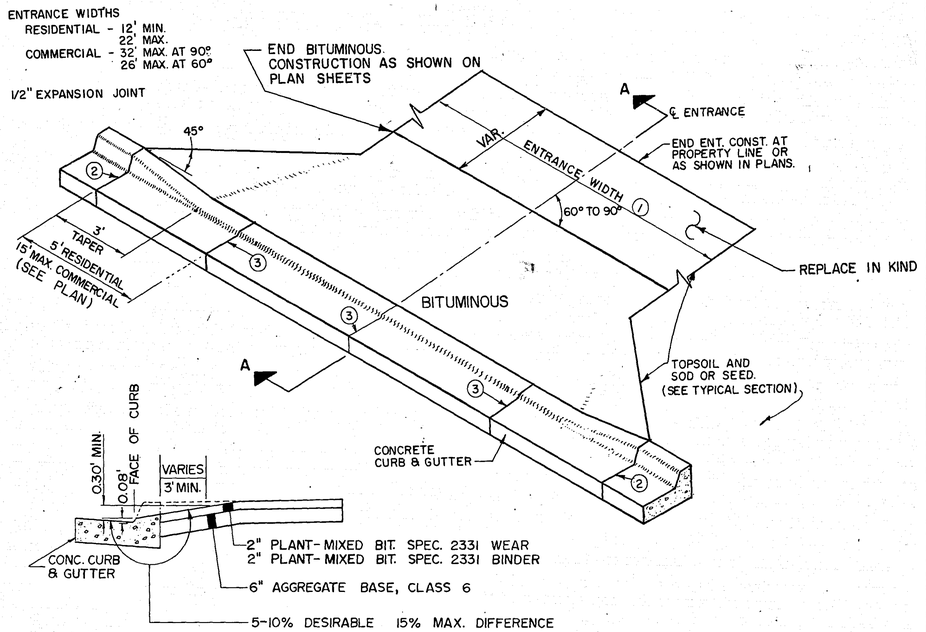
B624 C & G TRANSITION TO EXISTING CURB

ENTRANCE DETAIL

① ENTRANCE WIDTHS
RESIDENTIAL - 12' MIN.
22' MAX.
COMMERCIAL - 32' MAX. AT 90°
26' MAX. AT 60°

② 1/2" EXPANSION JOINT

③ PLACE JOINTS AS REQUIRED FOR CONC. CURB & GUTTER CONSTRUCTION.



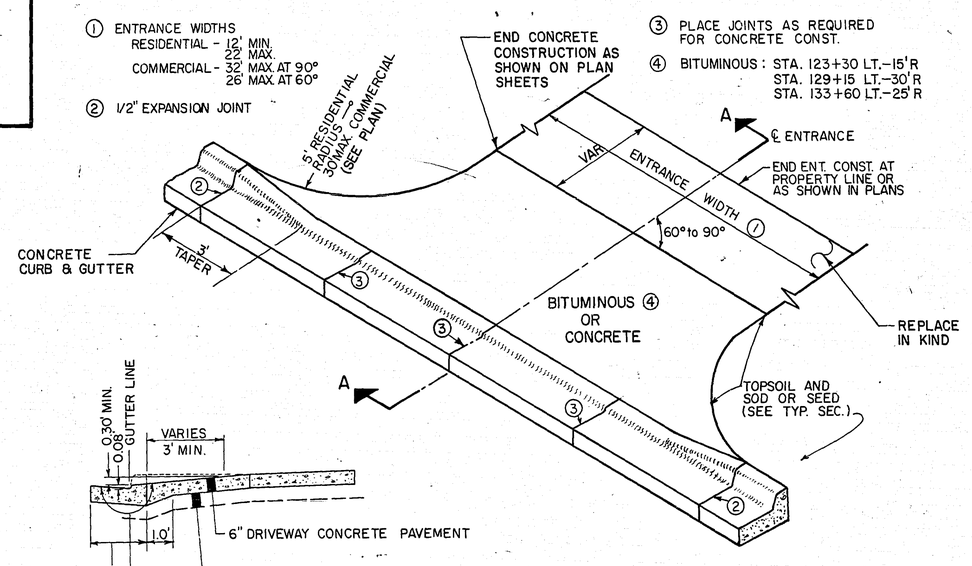
SECTION A-A TYPICAL
BITUMINOUS

① ENTRANCE WIDTHS
RESIDENTIAL - 12' MIN.
22' MAX.
COMMERCIAL - 32' MAX. AT 90°
26' MAX. AT 60°

② 1/2" EXPANSION JOINT

③ PLACE JOINTS AS REQUIRED FOR CONCRETE CONST.

④ BITUMINOUS : STA. 123+30 LT.-15'R
STA. 129+15 LT.-30'R
STA. 133+60 LT.-25'R



SECTION A-A TYPICAL
CONCRETE ENTRANCE
STA. 141+90± LT

INLET STRUCTURE DETAILS
GUARDRAIL DETAILS
ENTRANCE DETAILS

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S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 6 of 67 Sheets

REMOVALS & SALVAGES & ADJUST

STATION	LOCATION	REMOVE CONC. PVMT.	REMOVE PIPE SEWER & CULVERT	REMOVE CONC. CURB	REMOVE CONC. C. & G.		REMOVE WALL		SALVAGE APRONS	SALVAGE GUARD RAIL	SALVAGE CHAIN LINK FENCE	SALVAGE WOOD FENCE	SALVAGE ELECTRIC SIGN	SALVAGE HYDRANT	ADJUST VALVE BOX
		S.Y.	L.F.	L.F.	L.F.		L.F.		EACH	L.F.	L.F.	L.F.	EACH	EACH	EACH
101+85 - 105+80	LT.									305 3-CABLE 90 P.B.					
104+00 - 104+25	RT.	120													
104+46 - 104+97	RT.										50				
106+00 - 110+70	LT.										470				
108+60 - 108+97	LT.						35' CONC.								
123+05	LT.										15				
121+00	LT.										15				
121+00 - 123+05	LT.										210				
124+86	LT.				26										
125+24	LT.				26										
126+36 - 127+14	LT.		80' CMP												
128+74 - 129+53	LT.		80' CMP												
132+37 - 132+99	RT.														
133+00 - 133+53	RT.		55' CMP												
133+13 - 133+32	LT.														
133+22 - 134+02	LT.		80' CMP												
133+50 - 139+71	RT.														
133+81 - 134+02	LT.														
133+96	LT.												1		
139+25 - 139+65	LT.											40			
139+63	LT.			25											
139+85	LT.			25											
140+55 - 140+59	LT.			25											
140+70 - 140+74	LT.			25											
140+80	LT.											10			
141+00	RT.			30											
141+35	RT.			30											
141+72 - 142+04	LT.		35' CMP												
141+83 - 141+93	LT.	67													
149+53	LT.														1
149+45	RT.			30											
149+81	RT.			30											
149+62	LT.														1
151+49	LT.											1 WOOD GATE			
152+07	RT.			30											
152+68 - 152+92	RT.		25' RCP												
153+45	LT.													1	
154+76	LT.										15				
156+30±	LT.													1	2
157+28	LT.										5				
157+28 - 157+47	LT.										20				
157+30	LT.													1	
157+79 - 157+95	LT.						20 FS.								
158+87 - 159+16	LT.		30' CMP												
159+14 - 159+82	LT.										70				
160+82 - 160+92	LT.		10' RCP												
160+95	LT.								1						
163+64 - 164+55	RT.									90 P.B.					
164+00 - 164+55	LT.									55 P.B.					
LEXINGTON AVE.															
515+00	LT.		40' CMP												
EASEMENT 124+50															
2+75	℄										30				
RENDOVA ST.															
TEMP. ENTRANCE											88				
0+97	RT.										10				
0+97 - 5+32	RT.										435				
5+32	RT.										10				
TOTALS		187 S.Y.	435 L.F. ①	250 L.F.	52 L.F.		55 L.F. ②		1 EA.	540 L.F. ③	1443 L.F.	50 L.F. 1 GATE	1 EA.	3 EA. ④	

NOTES

① 400 LF C.M.P. AND 35 L.F. R.C.P.

② 35 LF CONCRETE WALL & 20 LF FLAGSTONE WALL

③ 305 LF 3 CABLE, 2 ANCHORAGE ASSEMBLIES & 235 LF PLATE BEAM

④ HYDRANTS TO BE INSTALLED AS DIRECTED BY CITY OF BLAINE WATER UTILITY

STANDARD DETAIL PLATES

0004 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000 K	REINFORCED CONCRETE PIPE
3006 F	GASKET JOINT FOR R.C. PIPE
3040 F	CORRUGATED METAL PIPE CULVERT (STD. 2-2/3 x 1/2 CORRUGATION)
3100 G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3123 I	METAL APRON FOR C.S. PIPE
3124 B	METAL APRON CONNECTION
3133 B	RIPRAP AT R.C.P. OUTLETS
3145 E	CONCRETE PIPE TIES
3221 C	CORRUGATED STEEL PIPE COUPLING BAND
4000 I	MANHOLE OR CATCH BASIN (MASONRY CONSTRUCTION OR CAST-IN-PLACE CONCRETE)
4005 K	MANHOLE OR CATCH BASIN
4008 E	CATCH BASIN
4002 E	MANHOLE OR CATCH BASIN
4010 G	CONCRETE SHORT CONE & ADJUSTING RING (SECTIONAL CONCRETE)
4011 D	PRECAST CONCRETE BASE
4020 E	MANHOLE OR CATCH BASIN
4021 C	PRECAST CURB OPENING CATCH BASIN
4101 C	MANHOLE OR CATCH BASIN RING CASTING
4108 E	MANHOLE ADJUSTING RING
4110 D	COVER CASTING FOR MANHOLE
3014 J	REINFORCED CONCRETE PIPE ARCH DETAIL
4140 D	GRATE CASTING FOR CATCH BASIN (SPECIAL)
4180 H	MANHOLE OR CATCH BASIN STEP
3110 G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH
7036 C	PEDESTRIAN CURB RAMP (FOR THE HANDICAPPED)
7065 C	BITUMINOUS CURB
7100 F	CONCRETE CURB & GUTTER (DESIGN B & DESIGN V)
7102 G	CONCRETE CURB & GUTTER (DESIGN BR, DESIGN D & DESIGN S)
8000 I	STANDARD BARRICADES
8002 F	PERMANENT BARRICADE
8003 B	BREAKAWAY SIGN SUPPORT
8307 N	STRUCTURAL PLATE BEAM GUARDRAIL
8317 D	GUARDRAIL ANCHORAGE ASSEMBLY FOR BRIDGES
8318 C	GUARDRAIL ANCHORAGE PLATE FOR BRIDGES AND BCT'S
8319 F	TWISTED END TREATMENT
9001 A	TANGENT APPROACHES AND ENTRANCES
9102 C	SODDING AT PIPE CULVERT ENDS
9322 I	CHAIN LINK FENCE

CLEAR & GRUB CHART

STATION	LOCATION LT.	LOCATION RT.	DESCRIPTION
126+33		48'	TR 6" CW
126+49		54'	TW 6" CW
126+51		48'	4" CW
126+56		47'	6" CW
126+59		47'	6-6" CW
121+97		45'	4" ELM
135+57	42'		4" R.O.
136+34	41'		4" APPLE
137+39		39'	14" OAK
139+43	36'		STUMP
139+55	35'		STUMP
140+03	38'		10" PINE
140+16	38'		10" PINE
140+24	38'		12" PINE
140+37	38'		12" PINE
140+46	38'		12" PINE
142+97		46'	6" ELM
143+26		48'	6" ELM
147+63	49'		20" ELM
148+64		42'	12" ELM
148+94		43'	12" ELM
150+60 to 151+40	36'-41'		10 STUMPS
"	"		10" CW
"	"		12" CW
"	"		18" CW
151+55 to 152+15	26'-44'		18" CW
"	"		4" BIRCH
"	"		20" CW
"	"		18" CW
"	"		6" CW
"	"		24" CW
"	"		8" CW
"	"		20" OAK
152+35	37'		24" OAK
152+35 to 152+75		35'-44'	2-4" POPLAR
"		"	TW 8" ELM
"		"	TW 10" ELM
152+87		38'-42'	2 STUMPS
153+00 to 153+50		32'-43'	4" POPLAR

STATION	LOCATION LT.	LOCATION RT.	DESCRIPTION
153+50 to 153+86		31'-46'	18" CW
"		"	4-4" POPLAR
"		"	8" CW
"		"	TW 4" POPLAR
154+59		44'	TW 8" ELM
154+61		37'	4" ELM
154+63		44'	6" ELM
154+63		43'	8" ELM
154+74		44'	TW 10" ELM
154+92		42'	TW 6" ELM
155+53		36	4" ELM
156+08	37'		TW 4" ARBOR.
157+73		30'	6" ELM
158+72	50'		6" CW
160+26		54'	TW 8" ASH
161+04		54'	6" ELM
161+28		46'	TW 6" MAPLE
LEXINGTON AVENUE			
510+36	46'		4" ASH
510+46	58'		4" ASH
510+70	55'		4" ASH
510+88	68'		6" ASH
511+05	47'		8" ASH
511+35	40'		TW 6" MAPLE
511+50	58'		4" ASH
511+75	54'		TW 5" CW
512+00	60'		6" ASH
512+19	45'		6" ASH
512+69	49'		TW 4" APPLE
513+38	59'		4" ELM
514+46		14'	4" BIRCH
514+73		42'	6" BIRCH
515+78		10'	12" ELM
515+82	13'		6" ELM
517+22	6'		TW 6" ELM

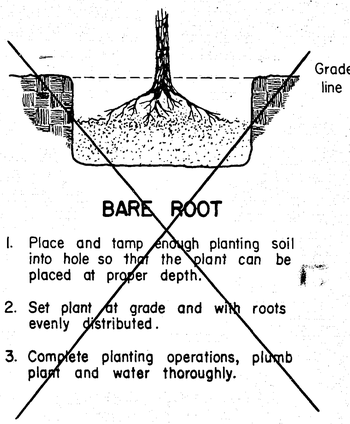
STATION	LOCATION LT.	LOCATION RT.	DESCRIPTION
515+10 to 515+80		15'-45'	15-4" POPLAR
"		"	TW 4" POPLAR
"		"	TW 4" POPLAR
"		"	TW 4" POPLAR
"		"	8-6" POPLAR
"		"	6" OAK
"		"	12" OAK
"		"	2-STUMPS
"		"	TW 6" POPLAR
521+24 to 523+00		23'-52'	TW 20" CW
"		"	12" CW
"		"	TR 12" CW
"		"	TR 15" CW
"		"	10" CW
"		"	TW 24" CW
"		"	15" CW
"		"	18" CW
"		"	18" CW

STANDARD PLATES
REMOVALS CHART
CLEAR & GRUB CHARTS 207-118

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 7 of 67 Sheets

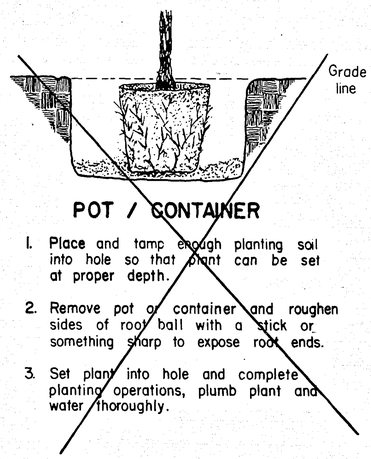
Fed. Proj. No.

STANDARD PLANTING DETAILS



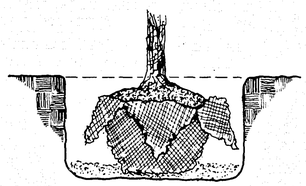
BARE ROOT

1. Place and tamp enough planting soil into hole so that the plant can be placed at proper depth.
2. Set plant at grade and with roots evenly distributed.
3. Complete planting operations, plumb plant and water thoroughly.



POT / CONTAINER

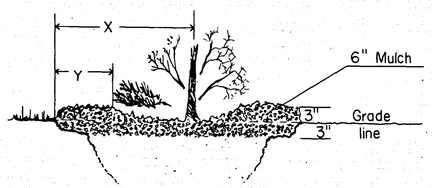
1. Place and tamp enough planting soil into hole so that plant can be set at proper depth.
2. Remove pot or container and roughen sides of root ball with a stick or something sharp to expose root ends.
3. Set plant into hole and complete planting operations, plumb plant and water thoroughly.



B & B

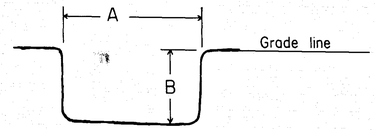
1. Place and tamp enough planting soil into hole so that plant can be set at proper depth, if needed.
2. Set plant into hole and remove cords and burlap to expose top of ball.
3. Complete planting operations, plumb plant and water thoroughly.

PLANTING DETAILS



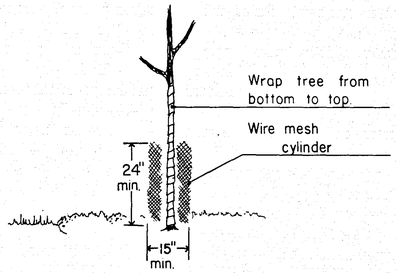
Type of plant	X (center of plant to the mulch line)	Y (outer edge of widest branches to the mulch line)
Evergreen trees & shrubs.		__' minimum.
Shade trees & Half trees.	2.5' minimum.	
Deciduous shrubs	__' minimum.	
Vines & Ground covers	__" minimum.	or __" minimum.

MULCHING DETAIL

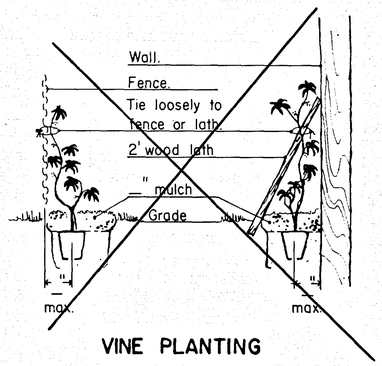


Minimum hole size A x B	Type plant	Size range
62" x 28"	B&B Shade tree	over 3" cal. thru 4" cal.
48" x 21"	B&B Shade tree.	up to 3" cal.
	B.R. Shade tree.	over 2" cal.
	Evergreen tree.	up to 8' hi.
36" x 18"	Evergreen shrub.	over 30" spread.
	B.R. Shade tree	up to 2" cal.
	Deciduous shrubs (B.R.)	over 5' hi.
	B.R. Half tree.	over 8' hi. (1" cal.)
30" x 18"	Evergreen shrub.	up to 30" spread.
	B.R. Half tree.	up to 8' hi.
	Deciduous shrub. (B.R.)	up to 5' hi.
24" x 18"	Container / Potted	up to 5 gallon.
12" x 12"	Vine / Ground cover (potted)	up to 1 gallon.

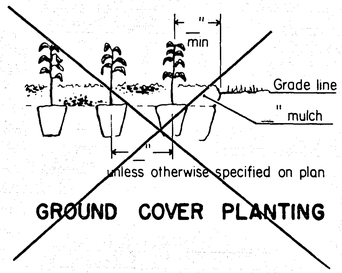
MINIMUM HOLE SIZE



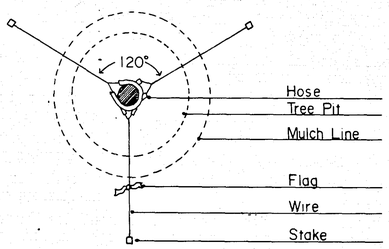
PROTECTION DETAIL

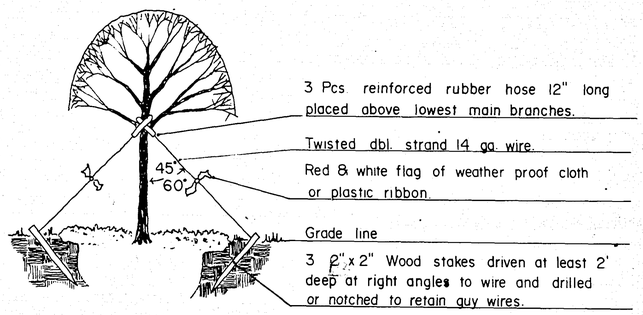


VINE PLANTING

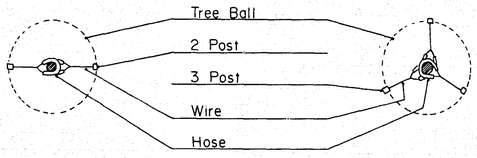


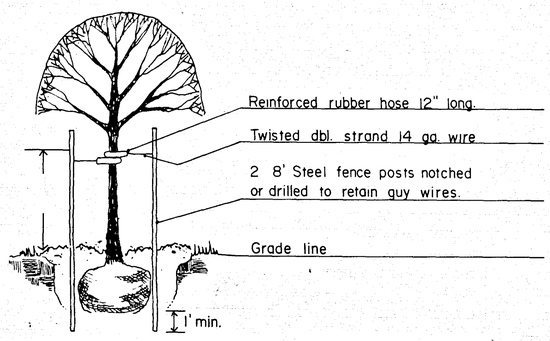
GROUND COVER PLANTING





STAKING AND GUYING (NORMAL AREA)





STAKING AND GUYING (RESTRICTED AREA)

GENERAL NOTES

Planting Soil: Mn/Dot 2571.2C1, Mn/Dot 2571.3D, Mn/Dot 3877.2B

Fertilizer: Mn/Dot 2571.2C3, Mn/Dot 3881

Mulch Material: Mn/Dot 2571.2C4, Mn/Dot 2571.3H, Mn/Dot 3882

Guying: Mn/Dot 2571.3J (Normal area)

Wrapping: Mn/Dot 2571.2D3, Mn/Dot 2571.3J

Rodent protection: Mn/Dot 2571.2D1 and special provisions, Mn/Dot 2571.3J

~~**Mass plantings:** Plant spacings of ' or less shall be mass excavated and spacings of ' or less shall be continuously mulched.~~

Location: Shade trees will be placed at the approximate locations of the elms removed by construction between station 142 & 157 right side. Exact locations will be determined by the engineer in the field

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DRAINAGE CHART

STATION	LOCATION	NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT.	CASTING ASSEMBLY	ELEVATION: PROFILE	ELEVATION: ORIGNAL GRATE OR RING	ELEVATION: NEW GRATE OR RING	ELEVATION: CB. or M.H. INVERT	ADJUST CASTING ASSEMBLY	RECONSTRUCT CATCH BASIN OR MAN HOLE L.IN. F.T.	INSTALL CASTING ASSEMBLY	FURNISH AND INSTALL PIPE SEWER: REINFORCED CONCRETE PIPE 12"	15"	18"	21"	24"			CORRUGATED STEEL PIPE 12"	15"	18"			APRON	CLASS	DRAINS TO: STRUCTURE NO.	INVERT EL.	REMARKS
				EXISTING STRUCTURES																										
	COUNTY RD "J"																													
99+45	LT. 14	1	CB	STORM			–	927.54	–	–																			NOT IN PROJECT
99+45	RT. 14	2	CB	STORM			–	927.49	–	–																			NOT IN PROJECT
102+19	RT. 14	3	CB	STORM			–	927.47	–	922.57																			DO NOT DISTURB
102+19	LT. 14	4	CB	STORM			–	927.50	–	923.00																			DO NOT DISTURB
104+20	LT. 57	5	MH	TELE.			–	912.29	–	–																			OK
112+30	LT. 30	6	MH	TELE.			909.55	909.21	909.0±	–																			ADJUST BY OTHERS
112+43	LT. 29	7	MH	TELE.			909.48	908.89	908.9±	–																			ADJUST BY OTHERS
112+43	LT. 36	8	MH	TELE.			909.48	908.87	908.9±	–																			ADJUST BY OTHERS
156+17	LT. 24	9	MH	SAN.			901.95	902.75	901.51	890.67		7	1																RECONSTRUCT
159+60	RT. 85	10	MH	SAN.			890.75±	887.10	–	873.25																			OK
159+83	LT. 31	11	MH	SAN.			889.84	888.7	889.90	880.67	1																		ADJUST
159+88	LT. 105	12	MH	SAN.			889.16	888.36	–	878.08																			OK
159+90	LT. 95	13	MH	SAN.			889.09	888.0	–	877.04																			OK
159+99	LT. 73	14	MH	SAN.			888.80	888.0	–	876.33																			OK
160+02	LT. 102	15	SD	STORM			888.70	865.7	–	879.2																			OK
160+02	LT. 106	16	MH	SAN.			888.70	888.35	–	877.19																			OK
160+41	LT. 23	17	MH	SAN.			888.52	887.22	888.10	873.46	1																		ADJUST
160+94	LT. 62	18	APR	STORM			886.29	–	–	877.93																27"			SALVAGE APRON
	RENDOVA ST.																													
5+33	RT. 23	19	MH	SAN.			–	906.74	–	887.74																			OK
6+32	LT. 17	20	CB	STORM			–	906.29	–	–																			OK
6+32	RT. 18	21	CB	STORM			–	906.36	–	–																			OK
6+63	RT. 21	22	MH	SAN.			–	906.61	–	888.21																			OK
	LEXINGTON AVE.																													
512+91	LT 29	25	MH	SAN.			885.28	887.58	–	–																			OK
521+59	RT. 25	26	MH	SAN.			890.43	890.29	889.8±	874.33	1																		ADJUST
522+51	LT. 37	27	APR	STORM			891.69	–		899.43																24"			OK
522+93	LT. 148	28	CB	STORM			–	–	–	–																			OK
522+98	LT. 30	29	SD	STORM			–	892.43	–	–																			OK
523+09	LT. 111	30	CB	STORM			–	–	–	–																			OK
523+16	LT. 26	31	APR	STORM			–	–	–	–																24"			OK
	COUNTY RD "J" (CITY OF BLAINE 1987 CONSTRUCTION)																													
149+64	LT. 12	32	MH	SAN.			909.49	908.73	909.29	897.72	1																		VERIFY IN FIELD
153+64	LT. 12	33	MH	SAN.			907.76	911.00	907.56	899.32	1																		VERIFY IN FIELD
155+15	LT. 12	34	MH	SAN.			904.72	907.6±	904.52	900.00	1																		VERIFY IN FIELD

ADJUST 6 EA.
RECONSTRUCT 7 L.F.
INSTALL CASTING 1 EA.

SALVAGE CONCRETE APRONS 1 EA.

EXISTING DRAINAGE CHART

27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

DRAINAGE CHART

PROPOSED STRUCTURES

STATION	LOCATION	NO.	TYPE	DESIGN	CONST. HEIGHT LIN. FT	CASTING ASSEMBLY	ELEVATION: PROFILE	ELEVATION: ORIGNAL GRATE OR RING	ELEVATION: NEW GRATE OR RING	ELEVATION: C.B. or M.H. INVERT	ADJUST CASTING ASSEMBLY	RECONSTRUCT CATCH BASIN OR MANHOLE LIN. FT.	INSTALL CASTING ASSEMBLY	FURNISH AND INSTALL PIPE SEWER: REINFORCED CONCRETE PIPE 13 1/2 x 22	15"	18"	21"	24"	36"	26 5/8 x 43 3/4	CORRUGATED STEEL PIPE 12"	15"	18"			APRON	CLASS ④	DRAINS TO: STRUCTURE NO.	INVERT EL.	REMARKS
110+11	LT. 27'	101	CB	LP4-3		C	909.15		909.14	905.75					59												102	905.53	
110+11	LT. 27.5'	102	CB	LP4-3		C	909.15		909.14	905.50						107											103	905.09	
111+18	LT. 27.5'	103	CB	LP4-4		C	909.30		909.29	905.07						145											104	904.51	
112+61	LT. 51'	104	MH	A OR F	3.1	A	909.40		907.5±	904.48						24											105	904.14	③
112+53	LT. 80'	105	AP				909.44		—	904.14															18"				R.R. 3.6 C.Y. & GR. F 1.8 C.Y.
114+50	RT. 27.5'	106	CB	LP4-3		C	908.52		908.51	905.50					59												107	905.28	
114+50	LT. 27.5'	107	CB	LP4-3		C	908.52		908.51	905.25						190											104	904.51	
124+26	LT. 27.5'	108	CB	LP4-4		C	908.08		908.07	904.05					77												109	903.32	
124+86	LT. 77'	109	CB	SP2	4.3	B	907.78		907.5±	903.28					37												110	902.95	③
125+24	LT. 77'	110	CB	SP2	4.7	B	907.59		907.5±	902.91					12												111	902.75	③
125+42	LT. 77'	111	AP	—			907.50		—	902.75															15"				R.R.-2.9 C.Y. & GR. F 1.4 C.Y.
126+50	RT. 27.5'	112	CB	LP4-3		C	907.01		907.00	903.44					67												113	903.19	
126+20	LT. 27.5'	113	CB	LP4-3		C	907.11		907.10	903.16					17												114	902.95	
126+20	LT. 52.5'	114	AP	—			907.11		—	902.95															15"				R.R.-2.9 C.Y. & GR. F 1.4 C.Y.
130+02	RT. 27.5'	115	CB	LP4-3		C	907.04		907.03	903.83				59												IIA	116	903.61	
130+02	LT. 27.5'	116	CB	LP4-3		C	907.04		907.03	903.58					16												117	903.38	
130+02	LT. 51.5'	117	AP	—			907.04		—	903.38															15"				CONSTRUCT BERM NO. 3
138+47	RT. 27.5'	118	CB	LP4-4		C	908.18		908.17	903.57					11												119	903.50	
138+47	RT. 18'	119	MH	A OR F	4.6	A	908.18		907.86	903.33						253											121	901.46	
138+47	LT. 27.5'	120	CB	LP4-4		C	908.18		908.17	903.94					48												119	903.50	
141+00	RT. 18'	121	MH	A OR F	7.4	A	909.07		908.75	901.43						150											123	900.30	
142+50	RT. 27.5'	122	CB	SP2	4.2	B	907.82		907.20	903.22					8												123	903.16	
142+50	RT. 18'	123	MH	60-4020	7.8	A	907.82		907.50	899.80								172									153	892.91	
142+82	LT. 47'	124	CB	SP2	3.5	B	907.57		906.4±	903.07					74												123	902.37	③
143+13	LT. 47'	125	CB	SP2	3.0	B	907.34		906.2±	903.38					31												124	903.11	③
145+00	RT. 25.5	126	CB	SP2	4.2	B	906.05		905.43	901.40					8												127	901.34	
145+00	RT. 18'	127	MH	60-4020	4.7	A	906.05		905.73	901.20								250									123	899.90	
145+00	LT. 27.5'	128	CB	LP4-4		C	906.05		906.04	901.97					48												127	901.53	
146+25	LT. 46	129	SD	C	2.6	D	906.84		905.5±	903.06					125												128	902.01	③
147+20	RT. 18'	130	MH	A OR F	4.5	A	907.59		907.27	902.88						220											127	901.80	
149+24	RT. 18'	131	MH	A OR F	5.1	A	909.23		908.91	903.90						204											130	902.90	
149+44	LT. 53±	132	CB	LP4-4		C	909.36		909.5±	904.64					74												131	903.94	③
149+82	LT. 53±	133	CB	LP4-4		C	909.63		909.5±	905.03					39												132	904.68	②
150+08	RT. 25.5'	134	CB	SP2	4.6	B	909.77		909.15	904.75					85												131	903.94	
155+25	LT. 27.5'	135	CB	LP4-4		C	904.50		904.49	899.93					48												136	899.18	
155+25	RT. 18'	136	MH	A OR F	5.2	A	904.50		904.18	899.08					268												139	898.84	
155+25	RT. 25.5'	137	CB	SP2	4.8	B	904.50		903.88	899.24					8												136	899.18	
157+93	LT. 27.5'	138	CB	LP4-5		C	895.96		895.95	890.34					48												139	889.90	②
157+93	RT. 18'	139	MH	A OR F	6.1	A	895.96		895.64	889.70						234											143	881.88	
157+93	RT. 25.5	140	CB	SP2	4.8	B	895.96		895.34	890.79					8												139	890.73	
160+18	RT. 27.5'	142	CB	LP4-6		C	889.01		889.00	881.66					14												143	881.56	
160+27	RT. 18'	143	MH	78-4020	7.1	A	888.81		888.49	881.48								59									143A	880.38	
160+74	LT. 48'	144	SD	A OR F	5.8	D	886.72		885.5±	879.84								20									145	879.52	③
160+87	LT. 64'	145	MH	66-4020	7.7	A	886.43		885.5±	877.88									66								147	877.57	BUILD OVER EXISTING 27" R.C.P. ⑤
518+46	LT. 25.5'	146	CB	LP4-4		C	886.84		886.83	882.84					8												145	882.76	③
161+52	LT. 60'	147	CB	LP4-8		C	885.33		886.84	877.55									25								148	877.40	③
161+84	LT. 60'	148	AP	—			884.91		—	877.40															36"				R.R.-11.0 C.Y. & GR. F-5.5 C.Y. ①
160+60	LT. 27.5'	143A	CB	LP4-8		C	888.15		888.14	880.30								23									144	879.92	③
514+25	LT. 47'	149	AP	—			884.37		—	883.5					12										15"		150	881.90	①
514+25	LT. 27.5'	150	CB	LP4-3		C	884.37		884.36	881.37					59												151	881.09	
514+25	RT. 27.5'	151	CB	LP4-3		C	884.37		884.36	881.07					10												152	880.93	
514+25	RT. 45.5'	152	AP	—			884.37		—	880.93															15"				RR.-2.9 C.Y. & GR. F.-1.4 C.Y.
1+30	℄	153	MH	A OR F	5.1	A	896.60		896.60	891.62								104									154	890.00	
3+00	℄	154	AP	—			888.99		—	890.00															24"				CONSTRUCT BERM NO. 2 ①
0+96	RT. 35'	155	AP	—			—		—	902.70										196					44" SPAN	II	156	902.29	
3+00	RT. 35'	156	CB	I(4008)	3.2	E	—		905.5±	902.29										230						II	158	901.82	③
3+00	RT. 38'	157	AP	—			—		—	903.75															15"		156	902.29	
5+33	RT. 35	158	AP	—			—		—	901.82															44" SPAN				R.R.-11.0 C.Y. & GR. F.-5.5 C.Y.
														TOTAL:	59	1378	1527	628	91	426									

CO. RD. J

LEX. AVE.

ST. SEWER EASE

RENDOVA ST.

MANHOLES, CATCH BASINS & SURFACE DRAINS

DESIGN A OR F — SEE MN/DOT STD. PL. NO. 4000 OR 4005
DESIGN SPECIAL 2 — SEE DETAIL SHEET NO. 5
DESIGN LP4-HT — SEE MN/DOT STD. PL. NO. 4021 AND DETAIL SHEET NO. 5
DESIGN 4020 - SEE MN/DOT STD. PL. NO. 4020
DESIGN C - SEE MN/DOT STD. PL. NO. 4002
DESIGN I(4008) — SEE MN/DOT STD. PL. NO. 4008

CASTING ASSEMBLIES

A= {DESIGN A OR F; RING CASTING — MN/DOT NO. 700-7 - SEE STD. PL. NO. 4101, 4108; COVER CASTING — MN/DOT NO. 712 - SEE STD. PL. NO. 4110}

B= {DESIGN — SPECIAL 2; FRAME, GRATE, & CURB BOX (SEE DETAIL SHEET NO. 5)}

C= {DESIGN — LP; RING CASTING — MN/DOT NO. 790-2 MODIFIED - SEE STD. PL. NO. 4021; COVER CASTING — MN/DOT NO. 712 - SEE STD. PL. NO. 4110}

D= {DESIGN 4020 (SURFACE DRAIN), DESIGN C (SURFACE DRAIN); RING CASTING — MN/DOT NO. 700-7 - SEE STD. PL. NO. 4101; GRATE CASTING — MN/DOT NO. 720 - SEE STD. PL. NO. 4140}

E= {GRATE CASTING — MN/DOT NO. 720 - SEE STD. PL. NO. 4140}

TOTALS

ITEM	QUANTITY
CATCH BASIN DESIGN	
LP4-3	10 EACH
LP4-4	9 EACH
LP4-5	1 EACH
LP4-6	2 EACH
LP4-8	1 EACH
SP-2	9 EACH
I(4008)	1 EACH
SURFACE DRAIN DESIGN	
C	1 EACH
A OR F	1 EACH
MANHOLE DESIGN	
66-4020	1 EACH
A OR F	8 EACH
60-4020	2 EACH
78-4020	1 EACH

ITEM	QUANTITY
15" R.C. PIPE APRON (SEWER)	6 EACH
24" R.C. PIPE APRON	1 EACH
36" R.C. PIPE APRON	1 EACH
44" SPAN R.C.P. APRON	2 EACH
15" R.C. PIPE (SEWER)	1378 L.F.
18" R.C. PIPE	1527 L.F.
24" R.C. PIPE	628 L.F.
36" R.C. PIPE	91 L.F.
26 5/8" X 43 3/4" R.C. PIPE	426 L.F.
18" R.C. PIPE APRON	1 EACH
HANDPLACED RIPRAP CL. III	104.7 C.Y.
GRANULAR FILTER	52.1 C.Y.
GEOTEXTILE FABRIC	169 S.Y.
15" R.C. PIPE APRON (CULVERT)	1 EACH
13 1/2" X 22" R.C. PIPE	59 L.F.
15" R.C. PIPE (CULVERT)	81 L.F.

① F. & I. TRASH GUARD

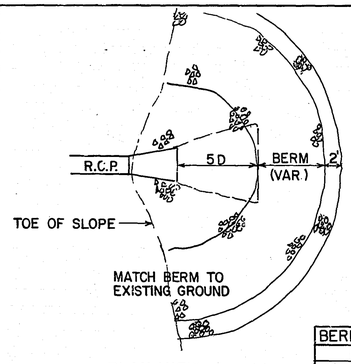
② THE CONTRACTOR SHALL FURNISH & INSTALL 2 - 8' LONG 30" C.M. ELBOW FITTINGS TO CONNECT C.B. 138 TO EXISTING 30" C.M.P. THE CONTRACTOR SHALL DETERMINE THE CORRECT ANGLES FOR THESE 2 FITTINGS.

③ EXACT ELEVATION IN FIELD

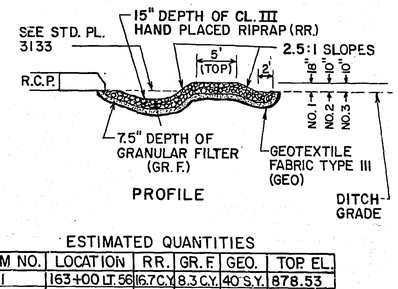
④ WHEN CLASS DESIGNATION IS NOT SHOWN FURNISH ALL R.C.P. IN CLASS V

FILTER BERM NOTES

- LOCATION OF ROCK FILTER BERMS 2 & 3 WILL BEGIN AND MATCH THE RIPRAP AT OUTFALL STRUCTURES PER STD. PL. 3133
- PAYMENT FOR FILTER BERMS SHALL BE MADE AS ITEMS 2511.505 H.P. RIPRAP, 2511.511 GRANULAR FILTER, AND 2105.609 GEOTEXTILE FABRIC
- GEOTEXTILE FABRIC SHALL BE A NON-WOVEN TYPE IV AND MEET THE REQUIREMENTS OF SPECIFICATION 3733.2



PLAN VIEW



PROFILE

ESTIMATED QUANTITIES

BERM NO.	LOCATION	RR.	GR. F	GEO.	TOP EL.
1	163+00 LT. 56'	16.7 C.Y.	8.3 C.Y.	40 S.Y.	878.53
2	142+50 RT. 30'	32.1 C.Y.	16.0 C.Y.	76.9 S.Y.	890.83
3	130+02 LT. 59'	21.6 C.Y.	10.8 C.Y.	51.9 S.Y.	904.61

FILTER BERM DETAILS

(NO SCALE)

PROPOSED DRAINAGE CHART

27-118

S.A.P. NO. 02-632-03, S.A.P. NO. 62-601-01 — Sheet No. 9 of 87 Sheets

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

ANOKA COUNTY - BLAINE

B.M. EL 928.59
DISC IN BRIDGE SE.
CORNER "J" & I-35W

B.M. EL 923.18
SPIKE IN GUARDRAIL
POST STA. 104+26 LT. 26'

NOTE: THERE IS A 1" CONDUIT ATTACHED TO CHAIN LINK FENCE FROM STA. 104+98 TO STA. 108+00 ON THE LEFT. ELECTRICAL DISCONNECTION TO BE MADE BY OWNER. CONTRACTOR SHALL COORDINATE FENCE RELOCATION WITH OWNER. SEE SPECIAL PROVISION.

+84 BEGIN DESIGN B GUARDRAIL MAKE SUITABLE CONNECTION TO BRIDGE

+27 BEGIN BIT. CURB MATCH TO EXISTING DESIGN B CURB

+05 BEGIN TAPER END BIT. CURB AND BEGIN B624 C & G.

+25 BEGIN PRECAST WALL LT. 46' TO FACE

2' WIDE CONC. RET. WALL (3.5' HIGH)

BEGIN SALVAGE CHAIN LINK FENCE STA. 106+00

AMERICAN FREIGHT

CONCRETE PARKING LOT

CONSTRUCT PRECAST RETAINING WALL. SEE DETAIL SHEET 4

PROTECT ELEC. PLUG IN

SALVAGE AND INSTALL CHAIN LINK FENCE. SEE DETAIL. SHEET 4

B6 CURB

CONST. LIMITS

BEGIN PHASE I CONSTRUCTION STA. 101+84

EXISTING PLATE BEAM GUARDRAIL TRANSITIONS TO 3-CABLE AT STA. 102+71 LT. 26'

SALVAGE PLATE BEAM GUARDRAIL

SALVAGE 3-CABLE GUARDRAIL

CONSTUCT GUARDRAIL

B624 C&G

EXISTING CONCRETE SIDEWALK

EX. BIT. SW. CB3

103+69 BEGIN BIT. OVERLAY

103 COUNTY ROAD "J"

REMOVE CONCRETE PAVEMENT AS DIRECTED

END D424 C&G

BITUMINOUS PATH

CONSTRUCT PED. CURB RAMP - SEE DETAIL ON SHEET NO. 5

SAWCUT AS DIRECTED

WILLIAMS PIPELINE

PROPOSED WILLIAMS PIPELINE

BEGIN D424 C&G PAY AS ITEM NO. 2531.501 B624 C&G

I-35W S.B.

I-35W N.B.

SAN 8" PVC F.M.

SALVAGE & INSTALL CHAIN LINK FENCE

+80 BEGIN TAPER & CURB TRANSITION (SEE TRANS. DETAIL SHEET 6)

+40 END TAPER & CURB TRANSITION

RAMSEY COUNTY - SHOREVIEW

CO. RD. J SECTION LINE
STA. 100+38.65

T31N R23W
34
5 | 4
R23W T30N

0 10 20 30 40 50

EL. 927.90 | EL. 928.21 | EL. 928.23 | EL. 927.31

BRIDGE NO. 9607

BEGIN APPROACH PANEL +49 | BEGIN BRIDGE +84 | END BRIDGE +84 | END APPROACH PANEL +35

BEGIN BIT. OVERLAY

-2.7%

104+05 BEGIN WIDENING SUBCUT

R.L. 103+69.92 EL. 924.43

R.L. 105+00 EL. 920.85

-3.0%

2.54

EXISTING PROFILE = SURVEY ℄

EL. 913.78

PC. 107+35.15

PROFILE GRADE = CONST. ℄

2.54' SUBCUT FOR WIDENING ONLY

1' SUBCUT FOR UNIFORMITY AND COMPACTION WIDENING ONLY

930 925 920 915 910 905 900

99 100 101 102 103 104 105 106 107 108

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: M.R.
DATE: 12-16-88

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 _____ REG. NO. _____

27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 10 of 67 Sheets

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SALVAGE AND INSTALL CHAIN LINK FENCE. SEE DETAIL SHEET 4

CONSTRUCT PRECAST RETAINING WALL. SEE DETAIL SHEET 4

CONC. RET. WALL

+25 END PRECAST WALL LT. 37' TO FACE

+33 END DESIGN B GUARDRAIL

AMERICAN FREIGHT SYSTEM INC.

CONST. LIMITS

CONCRETE PARKING LOT

3 PHASE TRANSFORMER, CIRCUIT BREAKER BOX & JUNCTION BOX - RELOCATE BY OTHERS

B6 CURB

MATCH EXISTING CHAIN LINK FENCE STA. 110+70

F&I TWISTED END TREATMENT

ELEC. PLUG IN LINE - PROTECT

B624 C&G

CB 102

END BIT. OVERLAY STA. 110+05

SAWCUT AS DIRECTED BEGIN FULL WIDTH SUBCUT

BIT. PARKING LOT

B612 C&G

END TAPER LEFT +30

50' R

CB 103

T.E.

END B624 C&G WITH 10' TAPER SEE DETAIL SHEET 5

CONST. LIMITS

SAWCUT AS DIRECTED & MATCH EXISTING

NAPLES ST.

CLEAN NAPLES ST. DITCH AS DIRECTED TO OUTLET 400' TO NORTH. INCLUDE THIS WORK IN THE PRICE OF OTHER ITEMS

RIP RAP AND GRANULAR FILTER

APRON 105

SALVAGE & INSTALL HYDRANT

50' R

M.H. 104

MH8

MH6

MH7

CB 107

T. BOX

T-BUR

SAN

B624 C&G

1/4 - 1/4 CORNER

ANOKA COUNTY - BLAINE

SCALE 0 10 20 30 40 50

108 109 110 111 112 113 114 115 116 117

COUNTY ROAD "J"

CB 101

WILLIAMS PIPELINE-TO BE REMOVED BY OTHERS

SAN. 8" P.V.C. FM

CB 106

15' R

PROPOSED WILLIAMS PIPELINE

8' BIT. PATH

CONST. LIMITS

B.M. EL. 909.56
SPIKE IN PP SW CORNER "J" & NAPLES

BIT. ENT.

SAWCUT AND REPLACE IN KIND AS DIRECTED

SWAMP

RAMSEY COUNTY - SHOREVIEW

V.C. = 365'
M = 1.5969'

59' 15" RCP @ 0.4%

905.70 905.53

906.06 906.19

EL. 909.22

CB 102

CB 101

CB 103

+0.5%

EL. 909.58

EL. 909.58

M.H 104

APRON 105

V.C. = 50'
M = 0.0625'

904.19 904.14

904.52 904.48

24 L.F. 18" R.C.P. @ 1.2% PLUS APRON

CB 107

CB 106

59' 15" RCP @ 0.4%

905.15 905.26

905.41 905.50

EL. 908.58

EL. 908.83

PROFILE GRADE = CONST. ℄

-3.0%

EXISTING PROFILE = SURVEY ℄

2.54'

20:1

107 L.F. 18" R.C.P. @ 0.4%

905.60 905.58

905.05

905.34 905.07

145 L.F. 18" R.C.P. @ 0.4%

904.51

-0.5%

190 L.F. 18" R.C.P. @ 0.4%

905.15 905.25

20:1

5.04'

2.5' SUBGRADE CORRECTION

2.54' SUBCUT FOR WIDENING ONLY

BEGIN FULL WIDTH SUBCUT 110+05

EXISTING 12" D.I.P

EXISTING 8" FORCE MAIN

1' SUBCUT FOR UNIFORMITY AND COMPACTION

BEGIN SUBGRADE CORRECTION STA. 115+00

EXISTING 8" FORCE MAIN

915 910 905 900

P.C. 111+75
P.I. 112+00
EL. 909.70
P.T. 112+25

P.C. 114+25
P.I. 114+50
EL. 908.43
P.T. 114+75

P.C. 115+25

108 109 110 111 112 113 114 115 116 117

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: M.R.
DATE: 12-16-88

EL. 908.30

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 _____ REG. NO. _____

27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 11 of 67 Sheets

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UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

ANOKA COUNTY - BLAINE

NOTE: CONSTRUCT NEW ENTRANCE. EXACT LOCATION TO BE DETERMINED IN FIELD BY ENGINEER.

B.M. EL. 908.89
SPIKE IN P.P. STA 120+50 LT. 30'

SALVAGE & INSTALL CHAIN LINK FENCE AS DIRECTED

CONST. LIMITS

H.V. JOHNSTON CULVERT CO. (3575)

BIT. PARKING LOT

TAPER B624 C. & G. TO MATCH EXISTING B618 C. & G. IN 10'. (SEE DETAIL SHEET 6)

SEE SHEET 20

SAWCUT AS DIRECTED AND MATCH EXISTING.

RIP RAP AND GRANULAR FILTER

SAWCUT AS DIRECTED

SIGN & PLANTINGS TO BE RELOCATED BY OWNER.

RENDOVA ST.

C.B.109 C.B.110 APRON 111 C.B. 108

B624 C&G P-BUR T-BUR

BIT. SPILLWAY

BIT. ENT.

15'R 32' BIT. 15'R 50'R 38' 40' 40'

60' 26' 43' 8'

San

COUNTY ROAD "J"

117 118 119 120 121 122 123 124 125 126

WILLIAMS PIPELINE TO BE REMOVED BY OTHERS

WOOD POST

PROPOSED WILLIAMS PIPELINE

BIT. PATH

T.E.

CONST. LIMITS

S W A M P

89° 34' 59"

RENDOVA ST. STA. 0+00
CO. RD. "J" STA. 125+04.13

RAMSEY COUNTY - SHOREVIEW

NOTE: REMOVALS OF WOOD POSTS, WIRE FENCE AND BITUMINOUS SPILLWAYS SHALL BE INCIDENTAL TO COMMON EXCAVATION.

V.C. = 750'
M = 0.9375

EL. 910.70

EXISTING PROFILE = SURVEY ℄

PROFILE GRADE = CONST. ℄

+0.5%

-0.5%

5.04'

20:1

2.5' SUBGRADE CORRECTION

END SUBGRADE CORRECTION STA. 118+50

2.54'

1' SUBCUT FOR UNIFORMITY AND COMPACTION

EXISTING 8" FORCE MAIN

EL. 908.83

P.T. 122+75

C.B. 108 C.B. 109 C.B. 110 APRON 111

76 LF. 15" R.C.P @ 10%

77 L.F. 15" R.C.P @ 10%

12 L.F. 15" R.C.P @ 10% PLUS APRON

904.05 903.98

903.32 ~~903.28~~ 903.09

~~902.91~~ 902.95 ~~902.80~~ (902.75)

37 34 L.F. 15" R.C.P @ 10%

915 910 905 900

117 118 119 120 121 122 123 124 125 126

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: M.R
DATE: 12-18-88

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DATE _____ REG. NO _____

27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

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TOPOGRAPHY				
UTILITIES				
PROFILE				

+34 APRON EL. 902.96

+18 APRON EL. 903.29

GUY WIRE ALTERATIONS AT LEWIS VAN LINES BY OTHERS

LEWIS VAN LINES (3601)

+72 APRON EL. 903.65

+56 APRON EL. 903.46

ENTRANCE CLOSED DURING CONSTRUCTION CONTRACTOR TO PROVIDE TEMPORARY ACCESS ROAD SEE SHEET 21A.

NOTE: SALVAGE & INSTALL STONE RIPRAP AS DIRECTED BY THE ENGINEER TO NEW DRIVEWAY CULVERT LOCATION. INCLUDE THIS WORK IN THE PRICE OF OTHER ITEMS.

ANOKA COUNTY - BLAINE

STA. 139+97 LT 49' EL. 905.30
SALVAGE & INSTALL OR RECONSTRUCT INLET STRUCTURE AT NEW CULVERT. SEE SPECIAL PROVISIONS. SEE DETAIL SHEET NO. 6

CONSOLIDATED FREIGHT (3701)

RIP RAP AND GRANULAR FILTER

APRON 114

F&I 18" x 79' C.M.P. + APRONS

BIT. ENT.

SAWCUT AS DIRECTED

CONST. LIMITS

P-BUR

PROPANE TANKS

T.E.

SAWCUT AS DIRECTED

BIT. ENT.

CONSTRUCT BERM NO. 3 SEE SHEET NO. 9

RIP RAP AND GRANULAR FILTER

F&I 18" x 79' C.M.P. + APRONS

BIT. PARKING LOT

+10 APRON EL. 904.80

F&I 15" x 81' RCP + APRON

BIT. PARKING LOT

SEE RELOCATION DETAIL SHEET 3

DO NOT DISTURB PORTABLE CONCRETE CURBS BETWEEN STA. 130+50 AND STA 135+00 LT. 50'

DO NOT DISTURB

DO NOT DISTURB

BIT. ENT. T.E.

SAWCUT AS DIRECTED

STONE R.R. 25'R

SIGN (ELEC.)

WEIR

DO NOT DISTURB

BIT.

REMOVE

18" CMP

15" CMP

C.B. 113

C.B. 112

C.B. 116

C.B. 117

T-BUR

B624 C&G

COUNTY ROAD "J"

WILLIAMS PIPELINE - TO BE REMOVED BY OTHERS

C.B. 115

3 STRAND BARB WIRE

REMOVE

REPLACE IN KIND

PROPOSED WILLIAMS PIPELINE

BIT. PATH

CONST. LIMITS

B.M. EL. 907.40
SPIKE IN P.P. STA. 130+90 LT. 30'

RAMSEY COUNTY - SHOREVIEW

DENTON AVE (VACATED)

CARLTON AVE. (VACATED)

NOTE: REMOVALS OF WOOD POSTS AND WIRE FENCE SHALL BE INCIDENTAL TO COMMON EXCAVATION.

CO. RD. J SECTION LINE
STA. 126+69.72

126 127 128 129 130 131 132 133 134 135

PROFILE

APRON 114 — C.B. 113 — C.B. 112 — APRON 117 — C.B. 116 — C.B. 115

907.00

903.22 / 903.4

66 L.F. 15" RCP CL V @ 0.4%

903.16 / 903.12

17 L.F. 15" R.C.P. @ 1.0% + APRON

902.85 / 903.03

903.49 / 903.44

907.03

59' 13 1/2" x 22" Q IIA RCP-A @ 0.4%

903.51 / 903.73

903.58 / 903.63

15 L.F. 15" RCP @ 1.0% + APRON

907.03

904.05 / 903.83

903.38 / 903.42

EL. 907.46

EL. 907.46

EL. 906.83

EL. 906.83

EL. 907.08

EL. 907.6

EL. 910.44

EL. 910.49

V.C. = 50'
M. = .0625'

V.C. = 150'
M. = 0.1875'

V.C. = 50'
M. = .0625'

V.C. = 50'
M. = .0966'

915 / 910 / 905 / 900

EXISTING PROFILE = SURVEY ℄

PROFILE GRADE = CONST. ℄

-0.5%

+0.5%

-0.5%

+0.82%

-0.63%

2.54'

2.54'

2.54'

907.10

903.16 / 903.18

903.58 / 903.70

1' SUBCUT FOR UNIFORMITY AND COMPACTION

P.C. 126+25 — P.T. 126+75 — P.C. 127+50 — P.T. 129+00 — P.C. 129+75 — P.T. 130+25 — P.C. 134+25 — P.T. 134+75

P.I. 126+50 EL. 906.95

P.I. 123+25 EL. 907.82

P.I. 130+00 EL. 906.96

P.I. 134+50 EL. 910.65

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: M.R
DATE: 12-16-88

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27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

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CONSOLIDATED FREIGHT (370i)

ANOKA COUNTY - BLAINE

B.M. EL. 911.17
SPIKE IN P.P. STA.
139+90 LT. 30'

STA. 1+25 XEBEC ST. MATCH B624 C&G TO EXISTING D-412 CURBS AND GUTTER IN 10'. SEE DETAIL SHEET 6

XEBEC ST.

BIT. PARKING LOT

← DO NOT DISTURB PORTABLE CONCRETE CURBS → BETWEEN STA. 135+00 AND STA 138+35 LT. 50' ±

DO NOT DISTURB

CONST. LIMITS

SALVAGE & INSTALL WOOD FENCE AS DIRECTED

PROTECT TREES

SAWCUT AS DIRECTED

SALVAGE & INSTALL WOOD FENCE AS DIRECTED

CLOSE ENT. REMOVE CONC. PAVEMENT AS DIRECTED

T.BOX

C.B. 120

T-BUR

B624 C&G

C.B 124 25'R

C.B 125 25'R

REMOVE

C.M.P

32' F TO F

COUNTY ROAD "J"

WILLIAMS PIPELINE-TO BE REMOVED BY OTHERS

M.H. 119

C.B 118

M.H. 123

C.B 122

SAVE IF POSSIBLE

XEBEC ST. STA. 0+00
CO. RD. J STA. 142+97.25

CONSTRUCT PED CURB RAMP-SEE DETAIL ON SHEET NO 5

M.H 121

3 STRAND BARBED WIRE

BIT. PATH

CONST. LIMITS

PROPOSED WILLIAMS PIPELINE

STA. 139 + 81.12 CO. RD. J

SAVE

25 R

TRAILER

BIT. PARKING AREA

SHED

SAWCUT & MATCH EXISTING AS DIRECTED

TRANSITION FROM B624 C&G TO EXISTING S-CURB IN 10'. SEE DETAIL SHEET 6

DO NOT DISTURB PARKING AREA

12' DRAINAGE EASEMENT

SEE SHEET 21

NOTE: REMOVALS OF WOOD POSTS AND WIRE FENCE SHALL BE INCIDENTAL TO COMMON EXCAVATION.

RAMSEY COUNTY - SHOREVIEW

BURTON AVE. (VACATED)

+50 BEGIN BIT. CURB

+40 BEGIN PATH TRANS.

80 END PATH TRANS.

ALTON AVE. (VACATED)

25'

STA. 139+81.12 CALCULATED

W. HALL ST. (PRIVATE ST.)

San

M.H.

135 136 137 138 139 140 141 142 143 144

C.B. 120 | M.H. 119 | C.B. 118 | C.B 125 | C.B 124 | M.H. 123 | C.B 122

48 L.F 15" RCP @ 1.0%

903.94

903.37
~~903.50~~

903.79
903.57

11 L.F 15" R.C.P. @ 1.0%

~~903.50~~
903.57

EL. 906.29

V.C. = 50'
M. = 0.0919'

EL. 908.34

EL. 908.65

V.C. = 250'
M = 0.509375'

EL. 908.61

8 L.F 15" R.C.P @ 1.5%

903.01
~~903.22~~

74 L.F 15" R.C.P @ 1.0%

PROPOSED WILLIAMS PIPELINE

903.16

31 L.F 15" RCP @ 1.0%

~~903.12~~
~~903.36~~

~~903.11~~
902.67

903.07

902.37

~~899.80~~
899.62

915 910 905 900

EXISTING PROFILE - SURVEY ℄

PROFILE GRADE - CONST. ℄

-0.63%

-0.63%

+.84%

-0.79%

2.54'

1' SUBCUT FOR UNIFORMITY AND COMPACTION

253 L.F. 18" RCP @ 0.75%

150 L.F. 18" RCP @ 0.77%

250 L.F. 24" RCP @ 0.53%

903.33
903.27

LOW POINT STA. 138+46.43
EL. 908.22

901.46

~~901.43~~
901.36

900.30

~~899.90~~
899.72

P.C. 133+25
P.I. 138+50
EL. 908.80
P.T. 133+75
C.C. 139+00
P.I. 140+25
EL. 909.60
P.T. 141+50

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: M.R.
DATE: 12-16-88

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DATE _____ REG. NO. _____

27-18

S.A.P. NO. 02-632-03, S.A.P. NO. 62-601-01

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TOPOGRAPHY				
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PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

ANOKA COUNTY - BLAINE

B.M EL. 910.76
SPIKE IN P.P. STA.
150+00 LT 30'

YALTA ST.

EXISTING D412 C & G

STA 0+67 YALTA ST.
MATCH EXISTING D412
CURB & GUTTER.
SEE DETAIL SHEET 6.

SALVAGE WOOD
VEHICULAR GATE - SINGLE

CLOSE ENT

SAWCUT

CONST. LIMITS

S.D. 129

C.B. 128

C.B. 132

C.B. 133

YALTA ST. STA. 0+00
CO. RD. "J" STA. 149+63.50

T-BUR

B624 C&G

GV

MH 32

WOODS

BIT ENT.

COUNTY ROAD "J"

M.H. 127

M.H. 130

M.H. 131

C.B. 126

C.B. 134

WILLIAMS PIPELINE-TO BE REMOVED BY OTHERS

8" D.I.P.

15" RCP

SAVE IF POSSIBLE

PROPOSED WILLIAMS PIPELINE

T.E.

T.BOX

P-BUR

SHED

TRAILER

San

8" PVC San

M.H.

BIT. PARKING AREA

DO NOT DISTURB PARKING AREA

25'R

(PRIVATE) E. HALL ST.

S-CURB

SAWCUT AS DIRECTED MATCH EXISTING

TAPER B.624 C&G TO MATCH EXISTING CURB IN 10'
SEE DETAIL SHEET 6

GAR.

HO. 1586

REMOVE B6 CURB--30LF

REPLACE IN KIND

REMOVE

RAMSEY COUNTY - SHOREVIEW

T31N R23W NOEL 35 4 3 R22W

CO. RD. J SECTION LINE
STA. 152+92.54

S.D. 129 — C.B. 128 — M.H. 127 — C.B. 126

122
126 L.F. 15" R.C.P. @ 0.87%
902.56
903.66
902.01

48 L.F. 15" RCP @ 1.0%
901.97
901.53
901.34

8 L.F. 15" R.C.P. @ 1.5%
900.96

901.40
901.08

PROPOSED WILLIAMS PIPELINE

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: M.R.
DATE: 12-16-88

V.C. = 100'
M = 1.975

EL. 906.35

EL. 906.35

EXISTING PROFILE = SURVEY ℄

-0.79%

2.54'

220 L.F. 18" R.C.P. @ 0.5%

901.80

900.69

901.20
900.96

LOW POINT STA 145+00
EL 906.05

R = 144+50

PL 145+00
EL 905.85

R = 145+50

C.B. 133 — C.B. 132 — M.H. 131 — C.B. 134

EL. 909.41

37
39 L.F. 15" R.C.P. @ 1.0%
905.03
904.68
904.64

71
74 L.F. 15" R.C.P. @ 1.0%

84
85 L.F. 15" R.C.P. @ 1.0%
903.94
903.94

904.75
904.45

PROPOSED WILLIAMS PIPELINE

M.H. 130

M.H. 131

PROFILE GRADE = CONST. ℄

+0.79%

2.54'

203
204 L.F. 18" R.C.P. @ 0.5%
902.88
902.90
902.45

1' SUBCUT FOR UNIFORMITY & COMPACTION

903.90

915 / 910 / 905 / 900

R = 144+50 — PL 145+00 EL 905.85 — R = 145+50 — R = 146+50

144 — 145 — 146 — 147 — 148 — 149 — 150 — 151 — 152 — 153

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.

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27-118

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Sheet No. 15 of 67 Sheets

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ANOKA COUNTY - BLAINE

RAMSEY COUNTY - SHOREVIEW

HO.

HO.

HO.

SALVAGE & INSTALL HYDRANT AS DIRECTED EXTENSIONS TO BE SALVAGED & DELIVERED TO THE CITY OF BLAINE

SALVAGE & INSTALL CHAIN LINK FENCE AS DIRECTED REMOVE TO R/W LINE

SAWCUT AS DIRECTED

CONST. LIMITS

T.E.

GRAVEL

USGS-B.M.

C.B 135

BIT.

T-BUR

B624 C&G

MH 33

MH 34

Sa

REPLACE IN KIND

SALVAGE & DELIVER HYDRANT TO THE CITY OF BLAINE

SALVAGE & INSTALL CHAIN LINK FENCE AS DIRECTED

FLAGSTONE WALL

30" C.M.P.

PROTECT

SAWCUT AS DIRECTED

T.E. BOX

GOV

M.H. 9

SALVAGE & INSTALL HYDRANT AS DIRECTED

END PHASE I CONST.
BEGIN PHASE II CONST.
STA. 157+75

CONSTRUCT 16' X 30" G.S. ELL PIPE SEWER

REMOVE FLAGSTONE WALL C.B 138

BIT. SPILLWAY

WOOD TIE WALL

BIT. PARKING LOT

CONST. LIMITS

PROTECT

SAWCUT AS DIRECTED

REMOVE 10' R

18" C.M.P.

SALVAGE & INSTALL CHAIN LINK FENCE AS DIRECTED

REMOVE EXISTING ROADWAY AND GRADE TO DRAIN SEE SHEET NO. 18

UTILITY EASEMENT

P-BUR

EXISTING 30" R.C.P.

LEXINGTON AVE.

MH 12

MH 16

SD 15

MH 13

MH 14

MH 145

SD 144

C.B 147

APRON 18

C.B 146

DITCH

APRON 48

SILT FENCE

MATCH SHEET 15' LINE NO. 18

CONST. LIMITS

15' T.E.

RIP RAP & GRANULAR FILTER

SALVAGE APRON & REMOVE 10' R.C.P.

CONSTRUCT BIT. SPILLWAY

C.B 147-A

SAN MH 11

B624 C&G

MH 17

46°15'

153 154 155 156 157 158 159 160 161 162

COUNTY ROAD "J"

WILLIAMS PIPELINE-TO BE REMOVED BY OTHERS

MH 136

C.B 137

MH 139

C.B 140

B624 C&G

PROPOSED WILLIAMS PIPELINE

WILLIAMS PIPELINE-TO BE REMOVED BY OTHERS

30:1 TAPER

MH 143

C.B 142

CONSTRUCT PED. RAMP SEE DETAIL SHEET NO. 5

W O O D S

S W A M P

T.E.

CONST. LIMITS

TEL. BOX

SHED

TRAILER

P-BUR

+20 BEGIN TIMBER RETAINING WALL BEGIN FENCE-SEE DET. SHEET NO. 5

+20 END TIMBER RETAINING WALL END FENCE

SAN. MH 10

LEXINGTON AVE.

SILT FENCE

MATCH SHEET 15' LINE NO. 18

8' B624 C&G

8' BIT. PATH

+85 BEGIN TAPER RT. END B624 C&G WITH 10' TAPER. SEE DETAIL SHEET 5.

NOTE: INSTALL SILT FENCE AS DIRECTED BY THE ENGINEER.

NOTE: REMOVALS OF BITUMINOUS SPILLWAYS SHALL BE INCIDENTAL TO COMMON EXCAVATION.

B.M. EL. 888.44
SPIKE IN P.P. STA. 160+20 LT 120'

3" PERFORATED PIPE

N

0 10 20 30 40 50

P.I. 153+25 EL. 912.35

EXISTING PROFILE = SURVEY ℄

48 L.F 15" R.C.P @ 1.7%

899.93

899.18 899.05

899.24

8 L.F 15" R.C.P @ 1.5%

899.18

VC = 750'
M = 4.021875'

2.54'

899.08

890.66

2.70

268 L.F 15" R.C.P @ 3.5%

EXISTING 30" CMP

894.15

CONSTRUCT 16' x 30" G.S. ELL PIPE SEWER

891.5 ± 890.79

48 L.F 15" RCP @ 1.0%

390.54 889.90

8 L.F 15" R.C.P @ 1.5%

890.79

890.73

PROPOSED WILLIAMS PIPELINE

P.I. 159+00 EL. 893.11

PROFILE GRADE = CONST. ℄

3.5%

2.4'

235

34 L.F 18" RCP @ 3.4%

889.84

889.70 889.37

1' SUBCUT FOR UNIFORMITY AND COMPACTION

EXISTING 8" PVC

BEGIN MUCK EXCAVATION STA. 158+75

P.V.C. 158+75

873.25

873.46

EX 36" SAN. RCP

880.67

20:1

881.14 881.88

P.I. 161+00 EL. 883.23

9 L.F 24" RCP @ 2.0%

882.00 881.86

14 L.F 15" RCP @ 1.0%

881.70

881.14 881.16

880.38 880.05 880.30

23 L.F 24" RCP @ 2.0%

891.56

879.92 879.76 879.84

20 L.F 24" RCP @ 2.0%

879.52

EX. 878.07

877.88

877.57

877.55 877.46

65 L.F 36" RCP @ 0.5%

877.40 877.28

25 L.F 36" RCP ÷ APRON @ 0.5%

MH 145

CB 146

886.79

9 L.F 15" RCP @ 1.0%

882.76

882.84

877.88

MH 142

MH 141

MH 143

MH 147

VC = 450'
M = 2.25'

+0.5%

910 905 900 895 890 885 880 875 870

885 880 875

153 154 155 156 157 158 159 160 161 162

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: M.R.
DATE: 12-16-88

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 _____ REG. NO. _____

27-118

S.A.P. NO. 02-632-03 ; S.A.P. NO. 62 601-01

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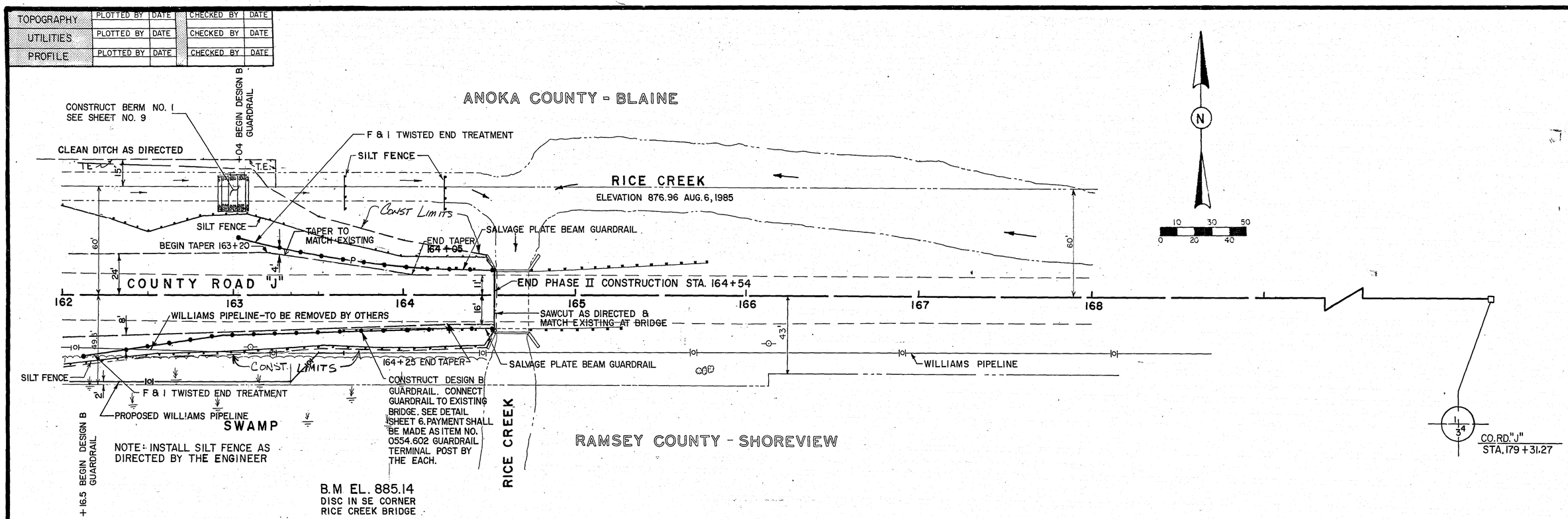
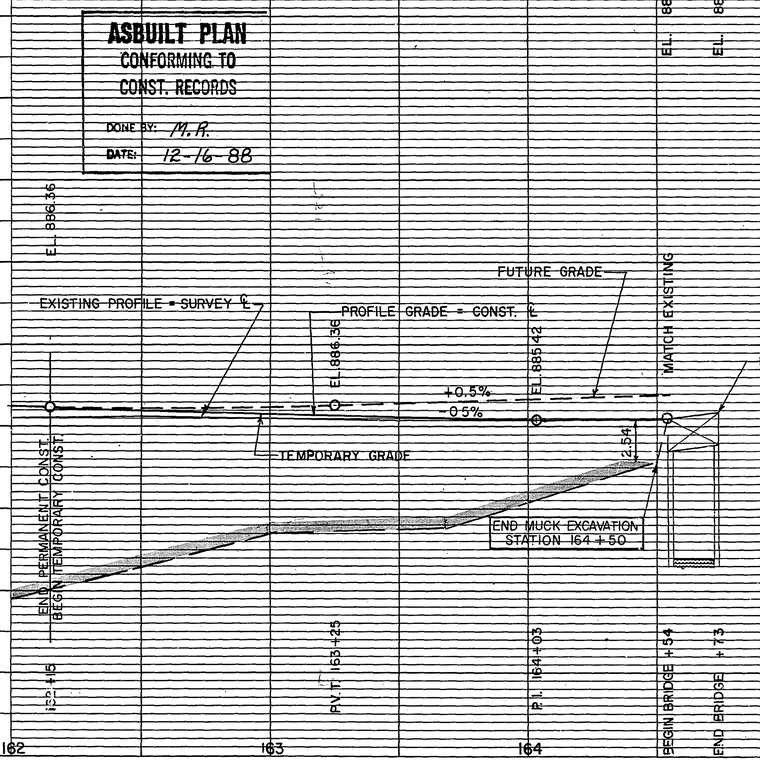


ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: M.R.
DATE: 12-16-88



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 _____ REG. NO. _____

27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 17 of 67 Sheets

TOPOGRAPHY	PLOTTED BY	DATE	CHECKED BY	DATE
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE

B.M. EL. 888.44
SPIKE IN P.P. STA.
160+20 LT. 120'

RAMSEY COUNTY - SHOREVIEW

ANOKA COUNTY - BLAINE

TEMP CONST. ℄
PI = 522+06.38
Δ = 10° 33'
D = 3° 20'
R = 1719'
T = 158.86'
L = 317'
PC = 520+47
PT = 523+64

NOTE: REMOVAL OF BITUMINOUS SPILLWAY SHALL BE INCIDENTAL TO COMMON EXCAVATION.

PROPOSED WILLIAMS PIPELINE
COUNTY ROAD "J"
LEXINGTON AVENUE
REMOVE EXISTING ROADWAY AND GRADE TO DRAIN (SEE X-SECTIONS)
GRADE TO DRAIN
EXISTING R/W
PROPOSED R/W
REMOVE
END TEMPORARY CONST.
BEGIN PERMANENT CONSTRUCTION STA. 513+50
8' BIT. PATH.
CONSTRUCT PED. RAMP - SEE SHEET 5
WILLIAMS PIPELINE - TO BE REMOVED BY OTHERS
TEMPORARY CONST. ℄
TEMPORARY CONST. ℄
P-BUR CONST. LIMITS
REMOVE
BIT. SPILLWAY
SEE SHEET NO. 19
MATCH LINE
SILT FENCE
PROPOSED R/W
CONST. LIMITS
RIPRAP AND GRANULAR FILTER
3" PERFORATED PIPE
SILT FENCE
CLEAR DITCH TO RICE CREEK AS NEEDED
CONST. BIT. SPILLWAY 3'X12'
RIP RAP AND GRANULAR FILTER
SILT FENCE
SILT FENCE STA. 520+47.52 BEGIN TEMP. CONST. RIGHT SIDE ONLY. TAPER TO MATCH EXISTING.
SWAMP
WOODS

CONST. ℄
P.I. = 517+54.56
Δ = 30°
D = 5°
R = 1145.916'
T = 307.047
L = 600'

END B624 C&G STA. 161+85. SEE DETAIL SHEET 5

+50 BEGIN B624 C&G
+47.52 END B624 C&G RIGHT

NOTE: INSTALL SILT FENCE AS DIRECTED BY THE ENGINEER.

12 L.F. 15" RCP @ 1.0% + APRON
59 L.F. 15" RCP @ 0.5%
10 L.F. 15" RCP @ 1.0% + APRON

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: M. R.
DATE: 12-16-88

SEE SHEET NO. 16 FOR STORM SEWER PROFILES

END TEMPORARY CONST. STATION 513+50 WARP CROWN TO MATCH EXISTING AT STA. 510+35
BEGIN PERMANENT CONSTRUCTION AND B624 C.P.C. AT STA. 513+50
V.C. = 100'
M = 0.20875
V.C. 100'
M = 0.23125'
℄ COUNTY RD "J" STA. 517+95
PROFILE GRADE = CONST. ℄
EXISTING PROFILE = SURVEY ℄
FUTURE GRADE -0.81%
TEMPORARY GRADE
+0.86%
-0.5%
+1.35%
PROPOSED WILLIAMS PIPELINE
EXISTING 24" R.C.P.
1' SUBCUT FOR UNIFORMITY AND COMPACTION
END MUCK EXCAVATION STATION 520+05
MUCK EXCAVATION
EXISTING 42" SAN. R.C.P. - M.W.C.C.
EXISTING 54" SAN. R.C.P. - M.W.C.C.
20:1

P.C. STA. 513+75 EL. 884.57
P.C. STA. 514+25 EL. 884.16
P.T. STA. 514+75 EL. 884.59
P.T. STA. 515+75
P.I. STA. 517+71 EL. 887.14
P.V.C. STA. 518+19
P.I. STA. 518+69 EL. 886.66
P.T. STA. 519+19
P.C. TEMP. CONST. STA. 520+47.52
P.I. STA. 522+00

EL. 885.42
EL. 887.56
EL. 886.91
EL. 887.34
EL. 884.77
EL. 891.16

873.25
873.40
874.33
872.51

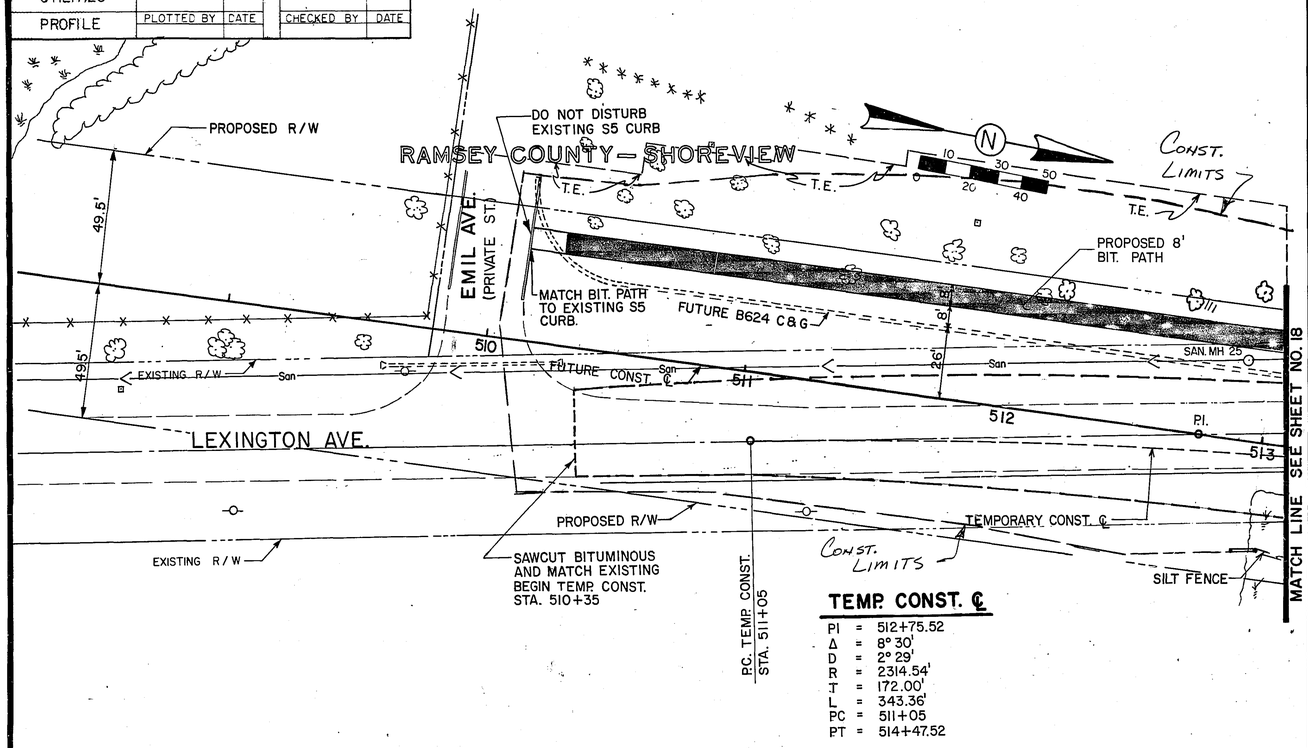
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE _____ REG. NO. _____

27-118

S.A.P. NO. 02-632-03, S.A.P. NO. 62-601-01

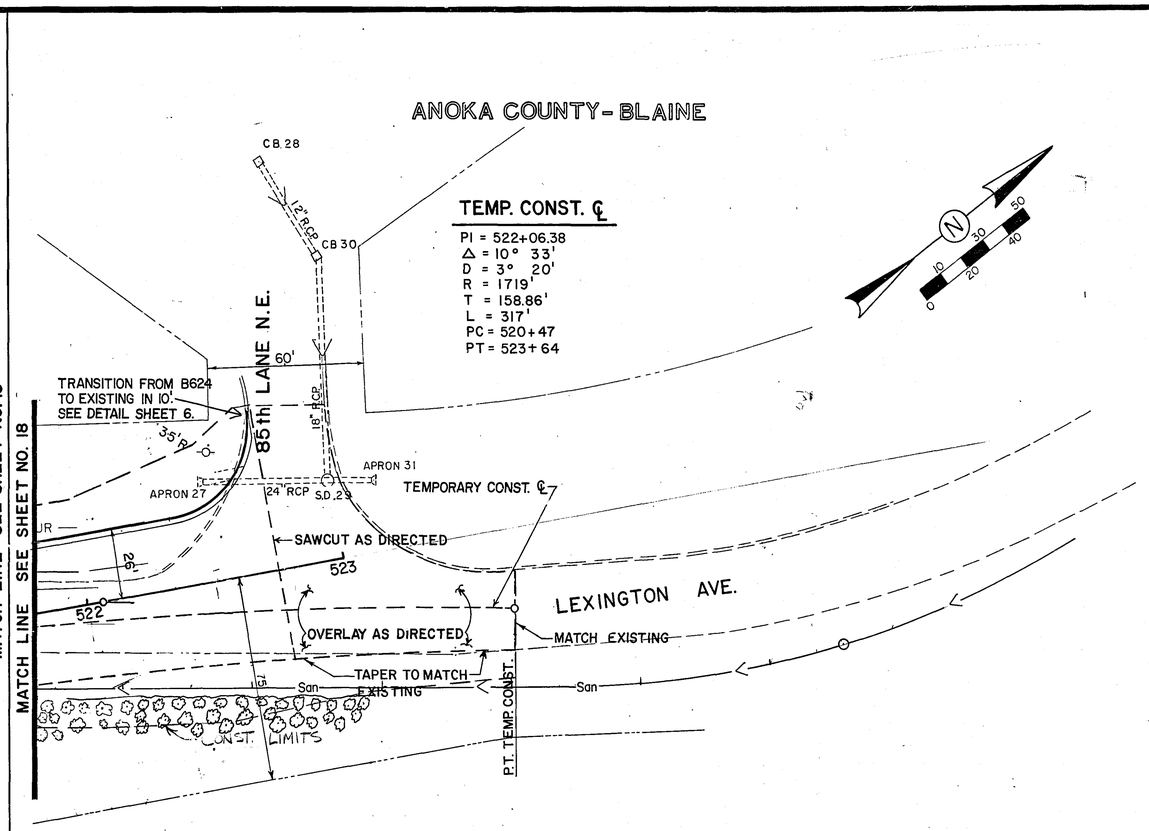
Sheet No. 18 of 67 Sheets

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES	PLOTTED BY	DATE	CHECKED BY	DATE
PROFILE	PLOTTED BY	DATE	CHECKED BY	DATE



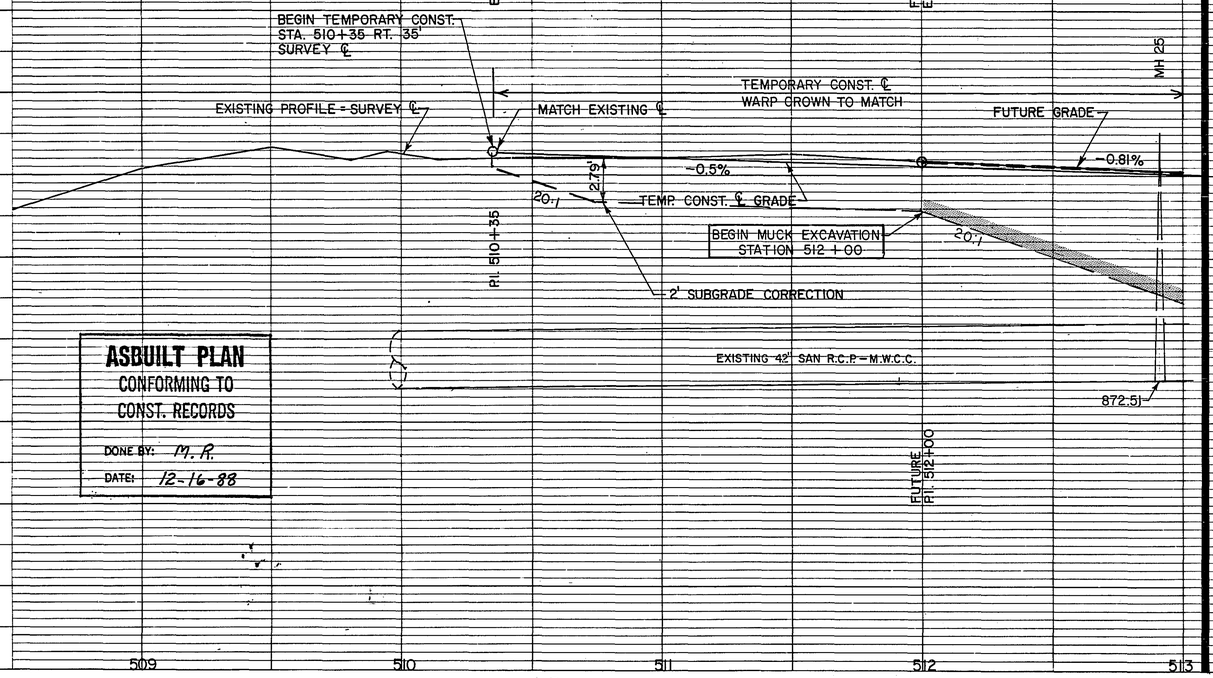
TEMP. CONST. ℄

PI = 512+75.52
Δ = 8° 30'
D = 2° 29'
R = 2314.54'
T = 172.00'
L = 343.36'
PC = 511+05
PT = 514+47.52

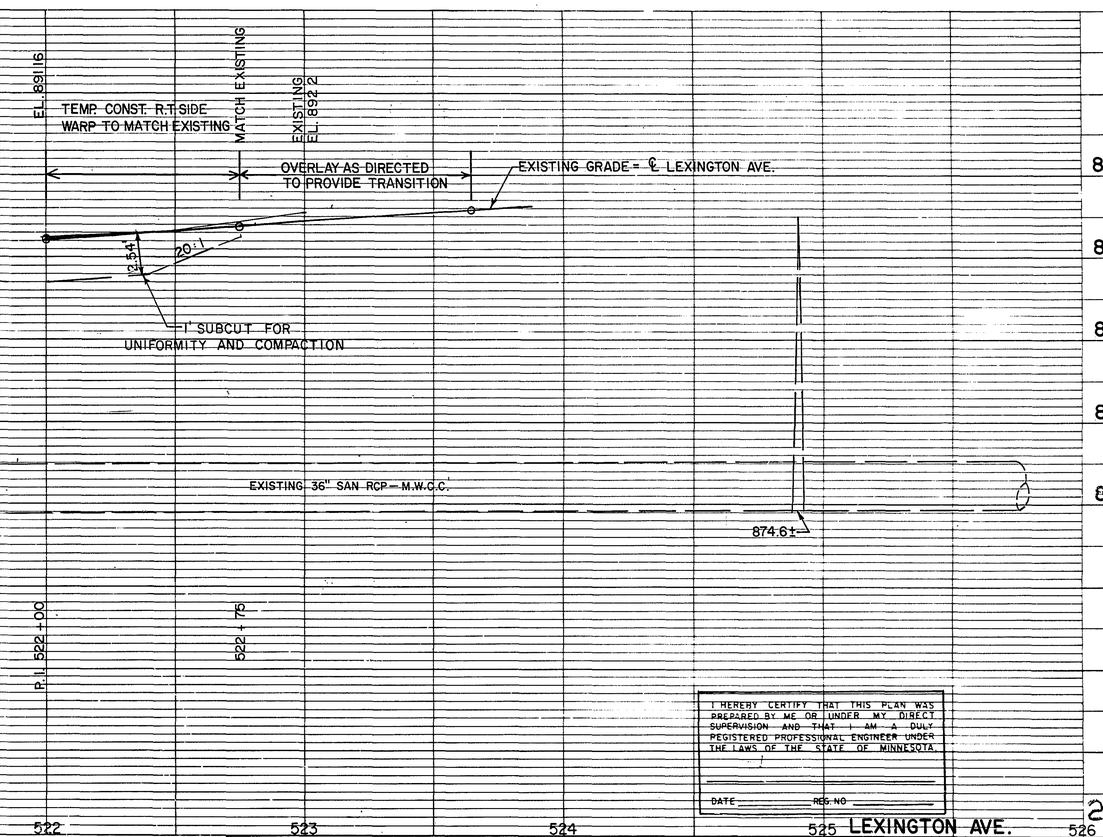


TEMP. CONST. ℄

PI = 522+06.38
Δ = 10° 33'
D = 3° 20'
R = 1719'
T = 158.86'
L = 317'
PC = 520+47
PT = 523+64



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: M.R.
DATE: 12-16-88



509 510 511 512 513 522 523 524 525 LEXINGTON AVE. 526

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 _____ REG. NO _____

27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

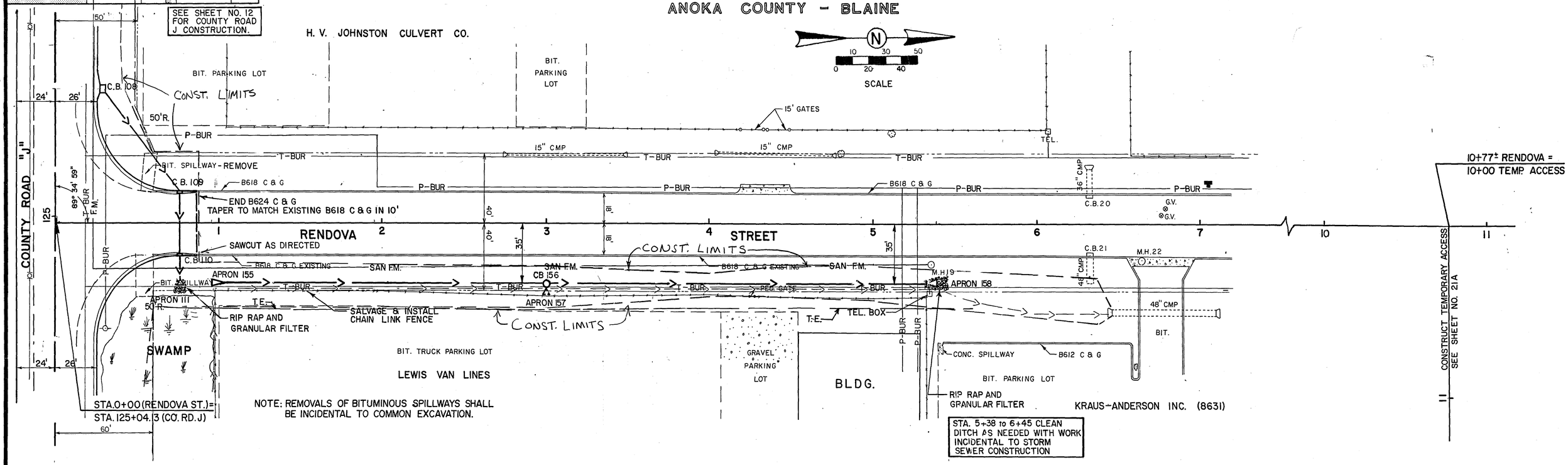
Sheet No. 19 of 67 Sheets

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES				
PROFILE				

SEE SHEET NO. 12 FOR COUNTY ROAD J CONSTRUCTION.

ANOKA COUNTY - BLAINE

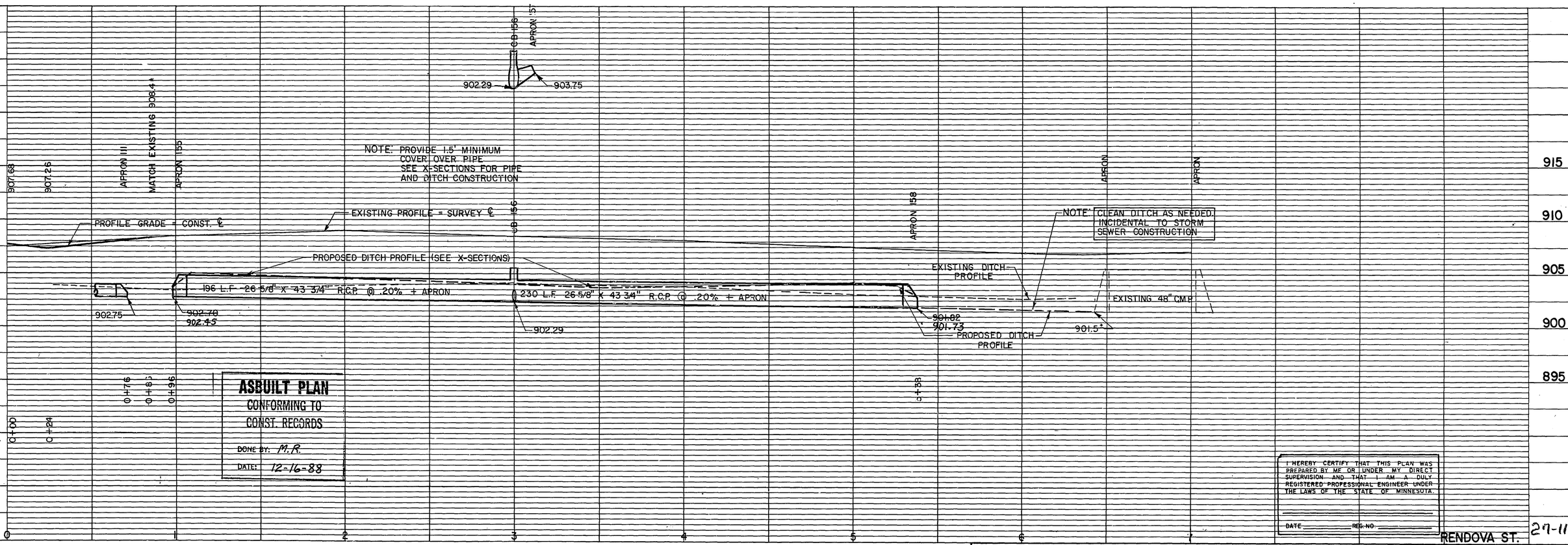
H. V. JOHNSTON CULVERT CO.



NOTE: REMOVALS OF BITUMINOUS SPILLWAYS SHALL BE INCIDENTAL TO COMMON EXCAVATION.

KRAUS-ANDERSON INC. (8631)

STA. 5+38 to 6+45 CLEAN DITCH AS NEEDED WITH WORK INCIDENTAL TO STORM SEWER CONSTRUCTION



ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: M.R.
DATE: 12-16-88

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 _____ REG. NO. _____

RENDOVA ST.

27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 20 of 67 Sheets

	PLOTTED BY	DATE	CHECKED BY	DATE
TOPOGRAPHY				
UTILITIES				
PROFILE				

RAMSEY COUNTY - SHOREVIEW

ANOKA COUNTY - BLAINE

XEBEC ST

CO. RD. "J"

HALL ST.

PROPOSED WILLIAMS PIPELINE

WILLIAMS PIPELINE TO BE REMOVED BY OTHERS

CONST. LIMITS

C.B.125

C.B.124

C.B.122

M.H.123

M.H.153

M.H.121

STA. 0+00 SURVEY LINE = STA. 142+50 CO. RD. "J"

SEE SHEET NO. 14 FOR COUNTY RD. J CONSTRUCTION.

SAVE IF POSSIBLE

REPLACE IN KIND

SAWCUT AS DIRECTED

20' DRAINAGE EASEMENT

12' DRAINAGE EASEMENT

APRON 154 STA. 3+00

CONSTRUCT BERM NO. 2 SEE DETAIL SHEET NO. 9

RIP RAP AND GRANULAR FILTER

SALVAGE AND INSTALL WIRE FENCE AS DIRECTED 30 L.F. PAYMENT SHALL BE INCIDENTAL TO STORM SEWER CONSTRUCTION

REMOVE & CONSTRUCT CONC. CURB AS DIRECTED. PAYMENT SHALL BE MADE AS ITEM 2531.501 B624 CURB & GUTTER BY THE L.F.

OPEN SPACE R/W LINE

DO NOT DISTURB PARKING AREA

ACCESS AREA FOR STORM SEWER

SAWCUT & MATCH EXISTING

REMOVE

TRAILER

SHED

BIT. PARKING AREA

CONC. ENT.

B624 C & G

T-BUR

P-BUR

S-CURB

TEL BOX

25' R

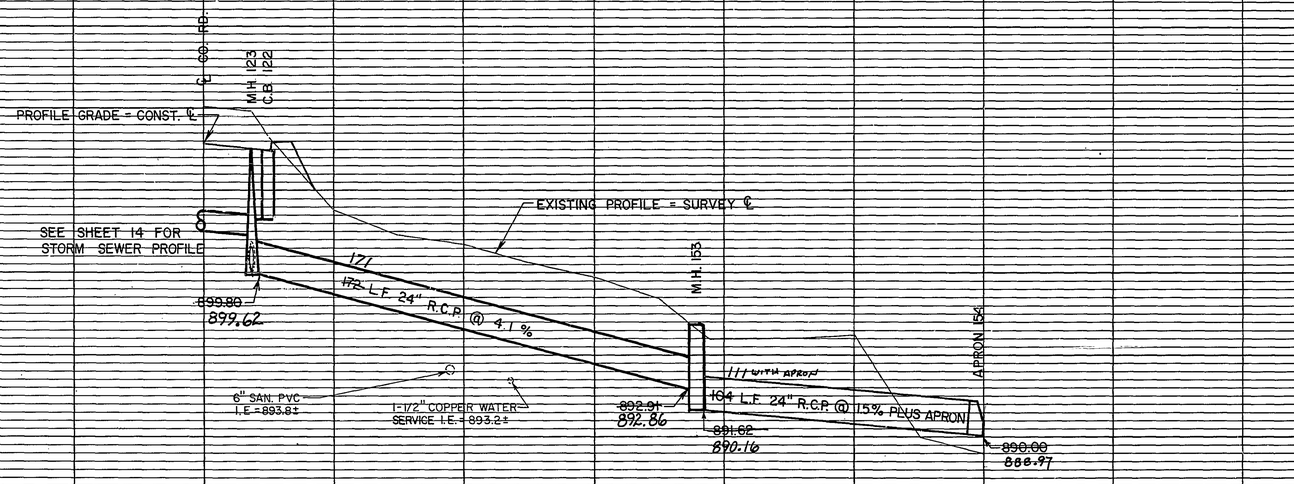
60'

33'

26'

50'

10 30 50
0 20 40



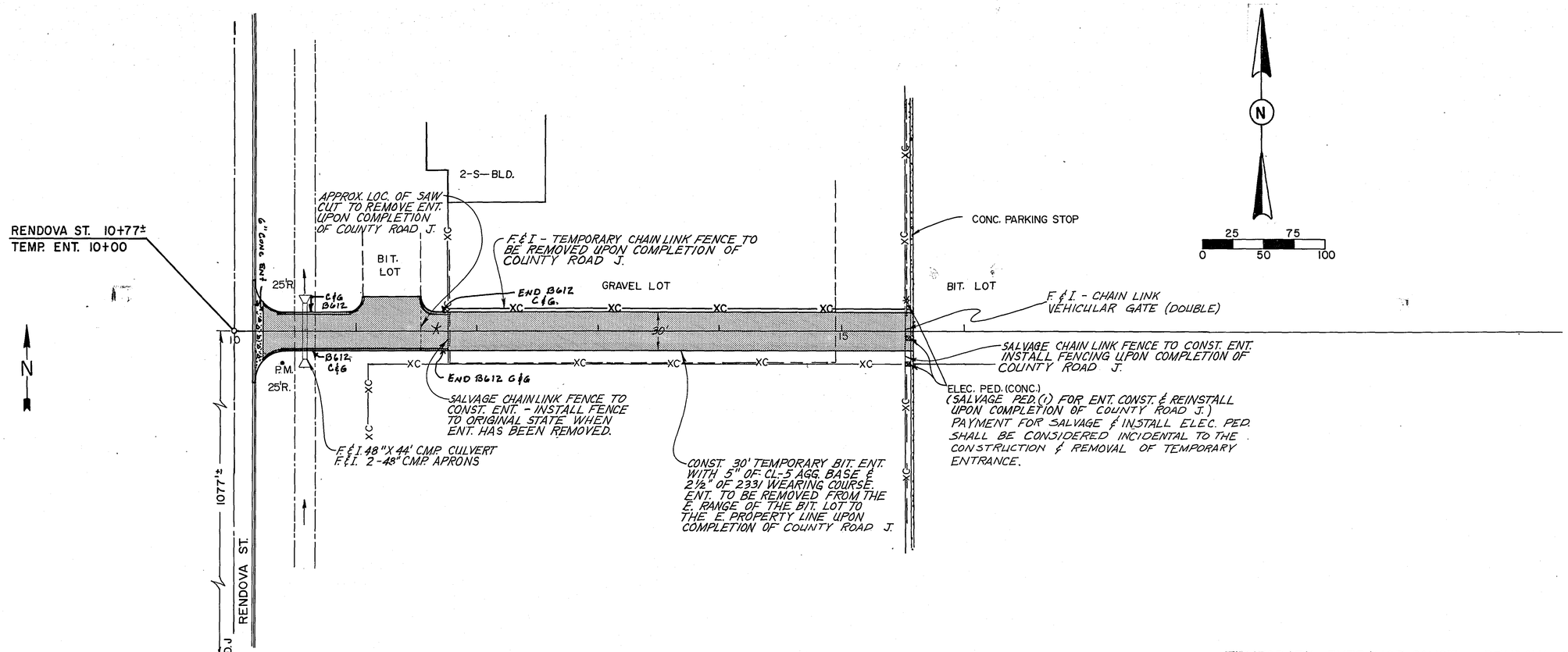
ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: M.R.
DATE: 12-16-88

STORM SEWER EASEMENT STA. 142+50 RT.

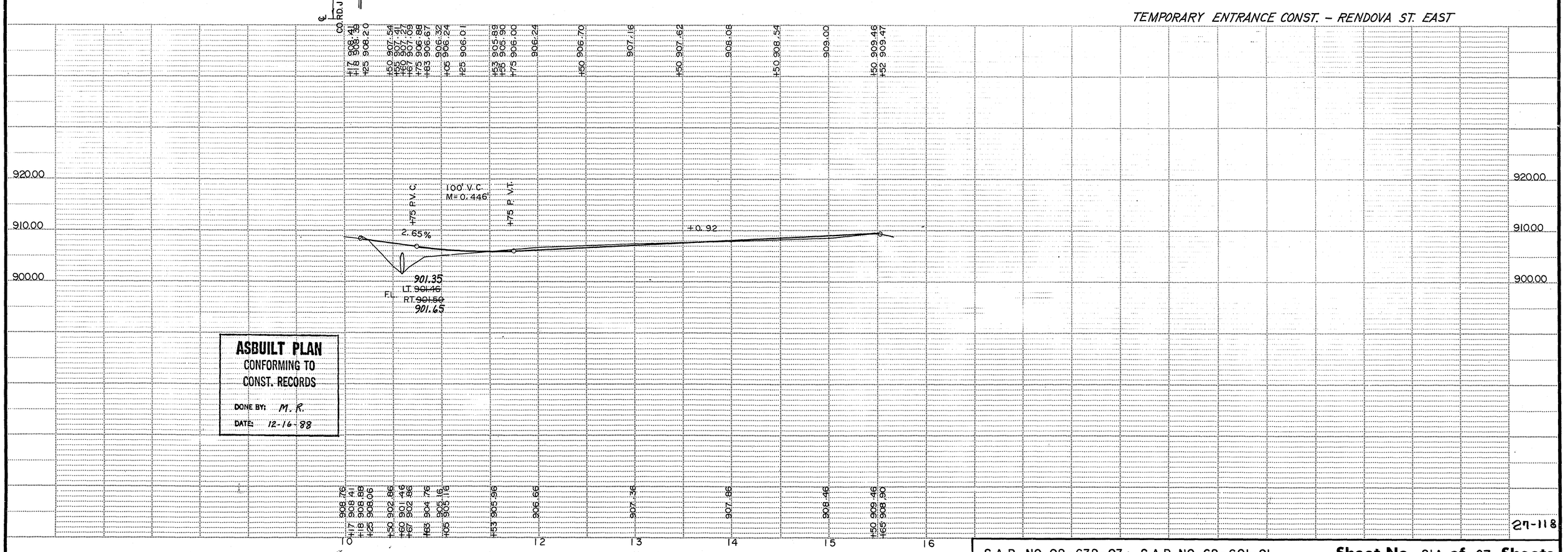
27-118

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 21 of 67 Sheets



TEMPORARY ENTRANCE CONST. – RENDOVA ST. EAST



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: M. R.
DATE: 12-16-88

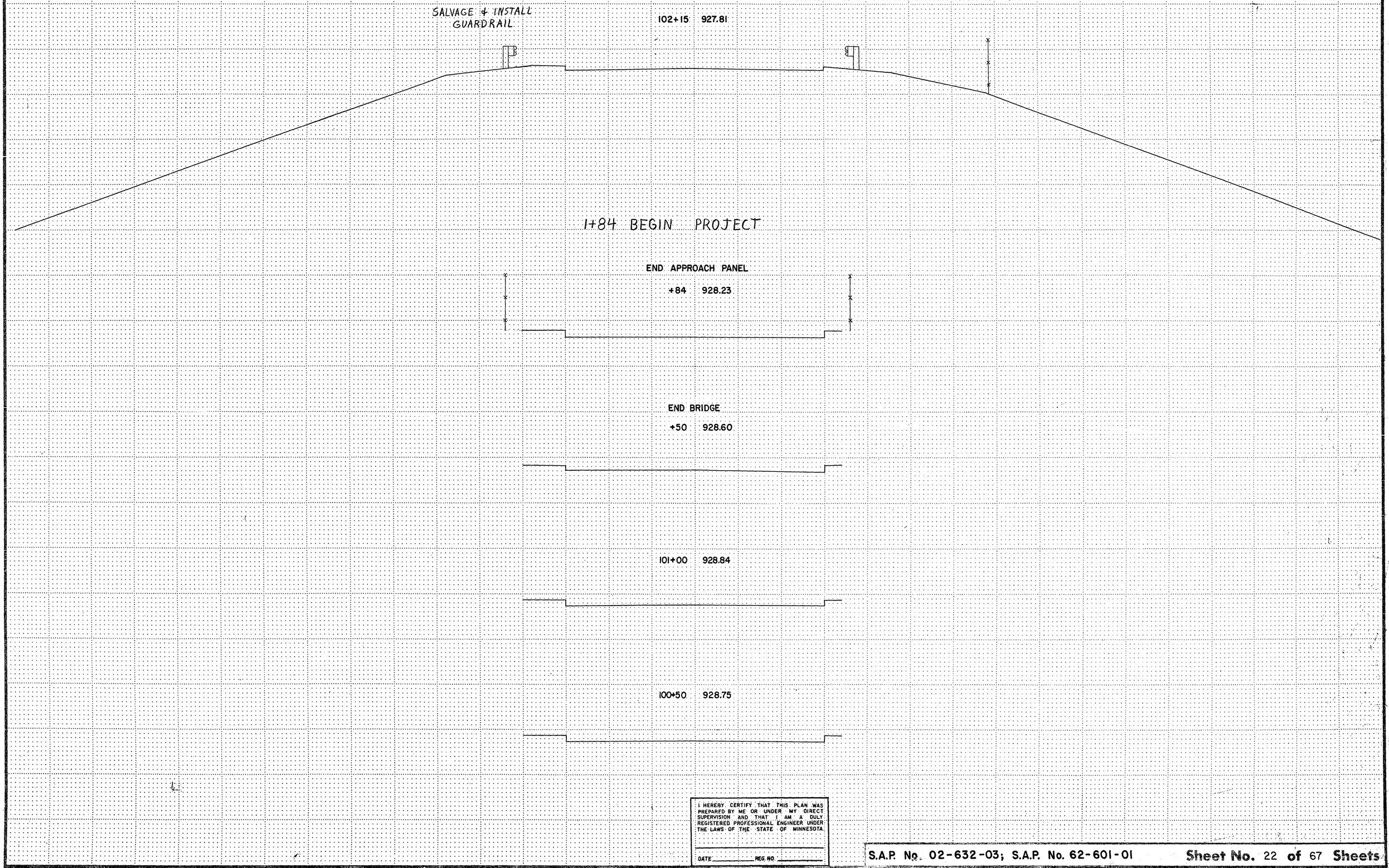
27-118

S.A.P. NO. 02-632-03 ; S.A.P. NO. 62-601-01 **Sheet No.** 21A **of** 67 **Sheets**

TELEDYNE POST - 107 - 3 YR. - MSP74

STATION—ELEVATION

Fed. Proj. No.



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 _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 22 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

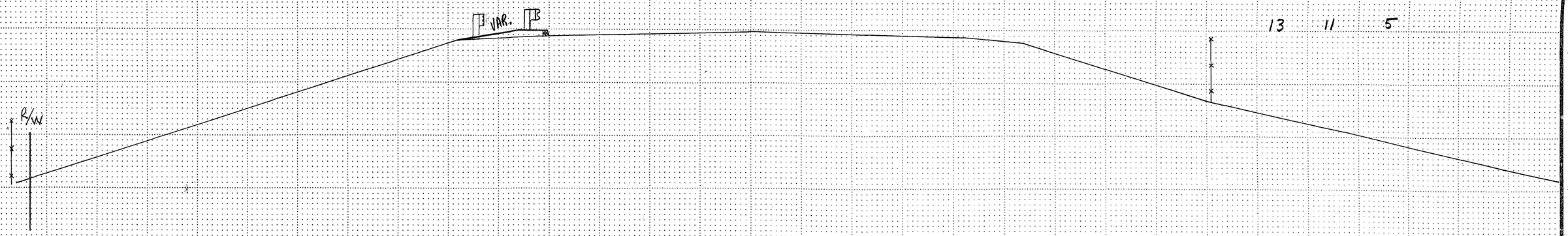
STATION—ELEVATION

℄

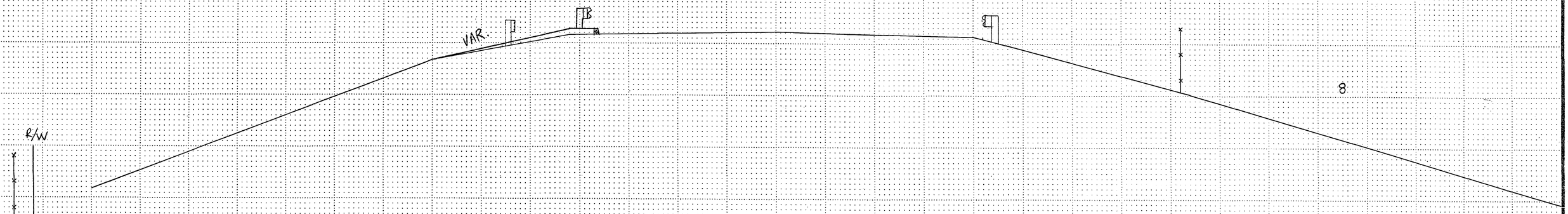
Fed. Proj. No.

EXC. EMB. SUBCUT BACKFILL

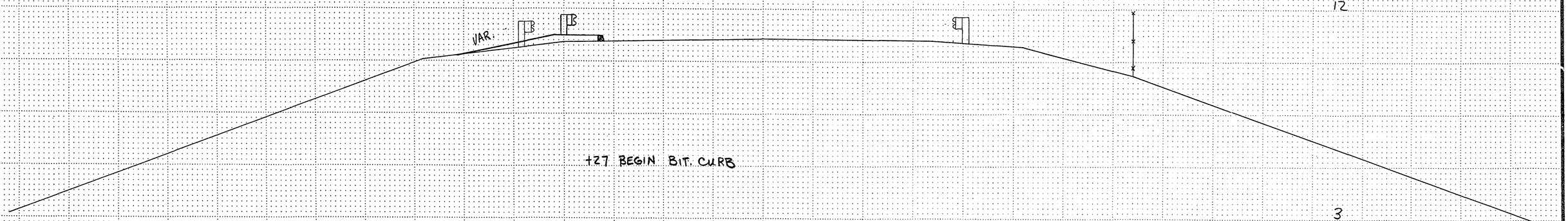
+50 24.8



103+00 26.2



102+50 927.2



+27 BEGIN BIT. CURB

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 _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 23 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

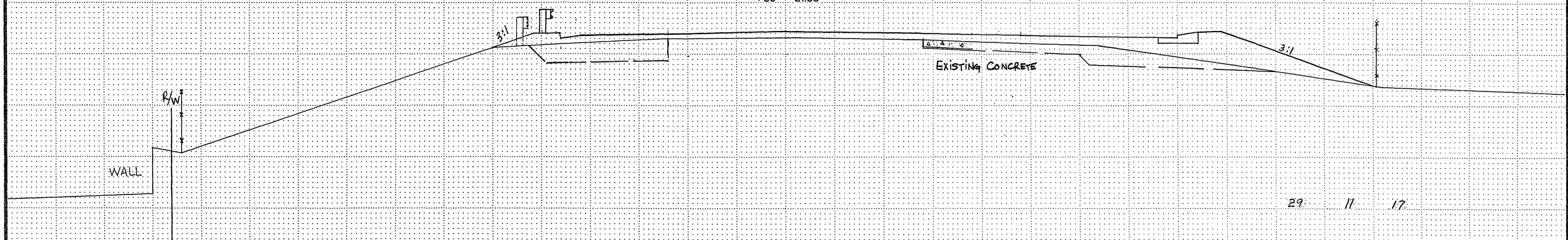
STATION—ELEVATION

Fed. Proj. No.

	EXC.	EMB.	SUBCUT BACKFILL MUCK
	101	222	60
	29	11	17
	27	8	10

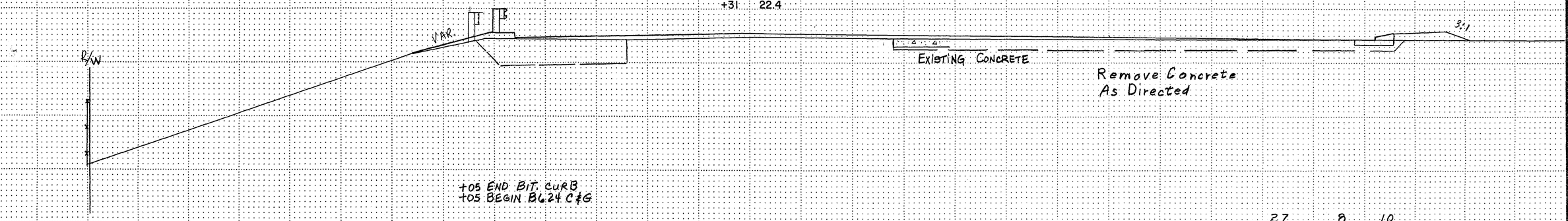
22.22

+50 21.58



22.74

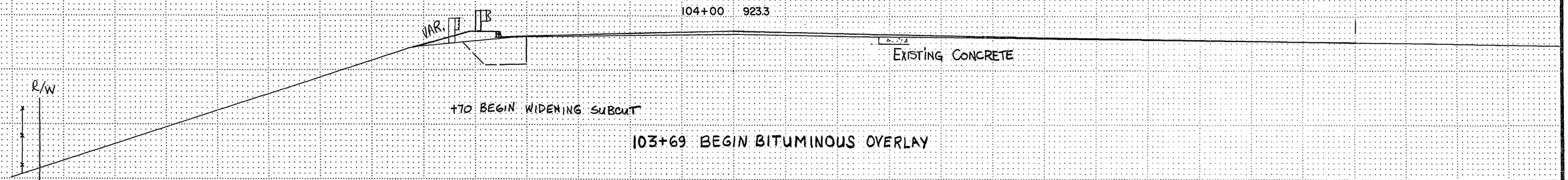
+31 22.4



+05 END BIT. CURB
+05 BEGIN B624 C&G

923.59

104+00 923.3



+70 BEGIN WIDENING SUBCUT

103+69 BEGIN BITUMINOUS OVERLAY

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 _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 24 **of** 67 **Sheets**

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

Fed. Proj. No.

℄

14.85
107+00 914.4

R/W

SUBCUT
EXC. EMB. BACKFILL MUCK

124 210 56

R/W

SE

RELOCATE GL FENCE

16.35
+50 915.9

R/W

127 179 56

R/W

BLDG.

+25± BEGIN WALL

17.85
106+00 917.3

8'

BEGIN SALVAGE CHAIN LINK FENCE

R/W +00± 2:1

107 280 56

R/W

SE = 81'

CONST. LIMITS

19.35
+50 918.9

R/W

8'

8'

104 426 56

2½:1

SE = 87'

R/W

920.85
105+00 920.4

8'

8'

2.5'

107 432 56

R/W

2½:1

3:1

R/W

SE = 87'

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 _____ REG. NO _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

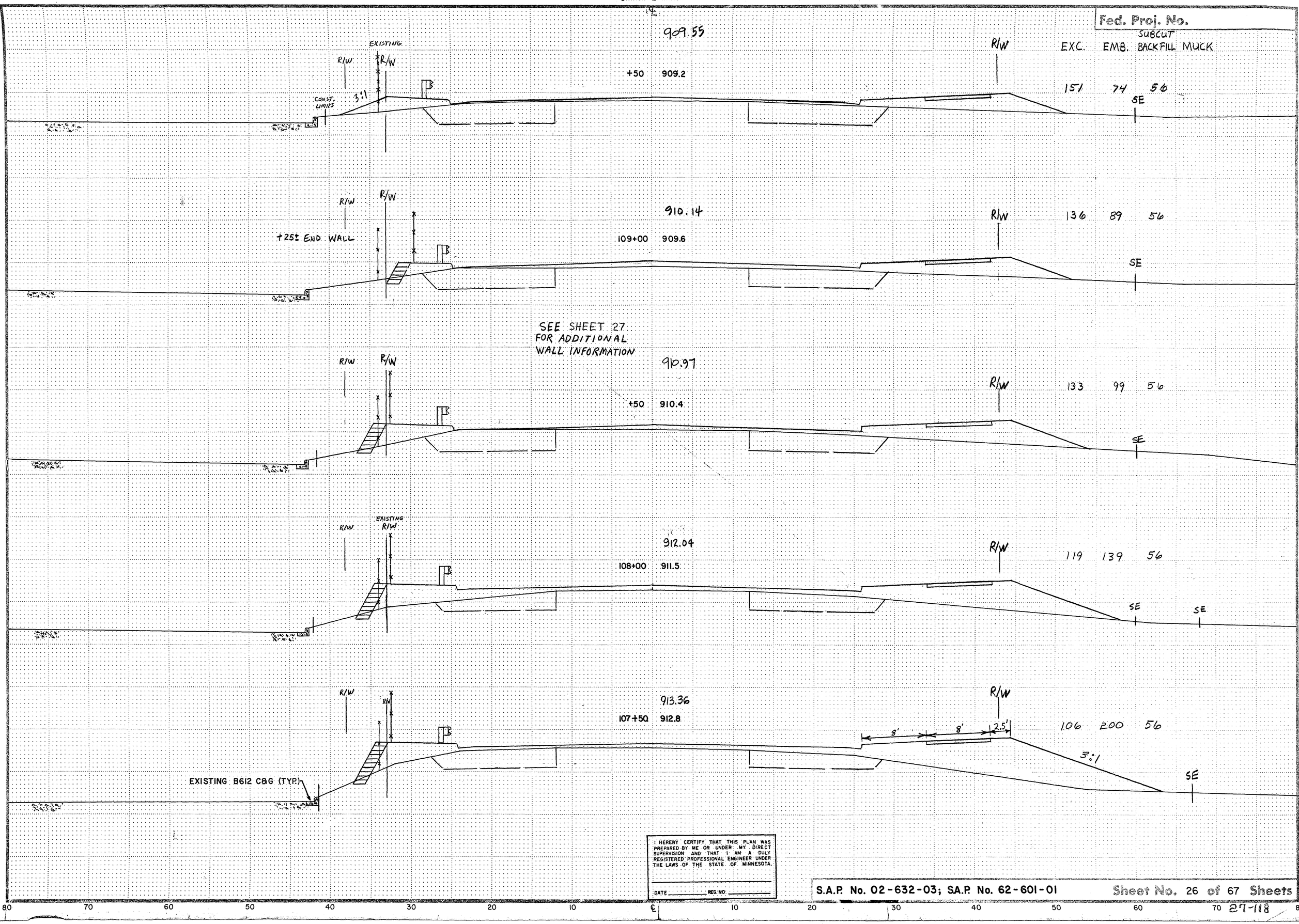
Sheet No. 25 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

Fed. Proj. No.



EXC.	EMB.	SUBCUT BACKFILL MUCK
151	74	56
136	89	56
133	99	56
119	139	56
106	200	56

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 _____ REG. NO. _____

S.A.P. No. 02-632-03; SA.P. No. 62-601-01

Sheet No. 26 of 67 Sheets

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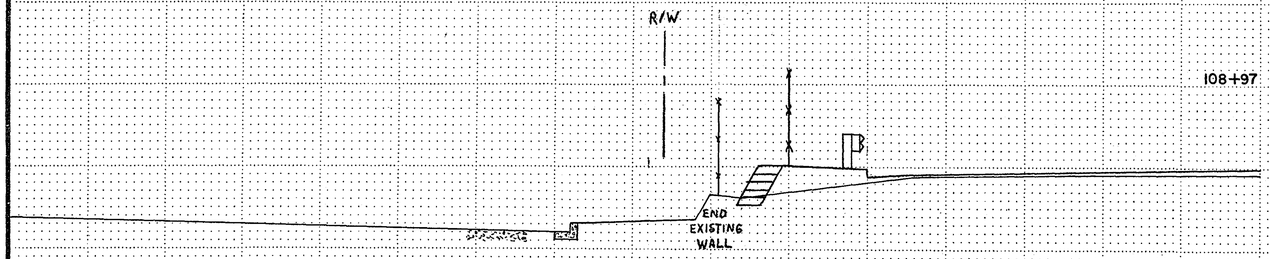
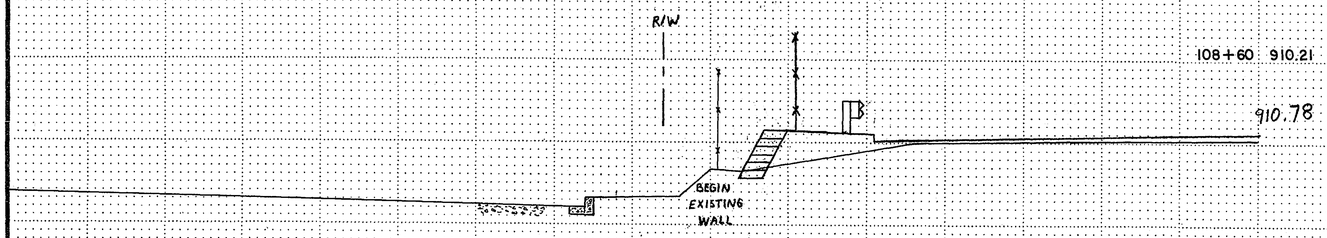
27-118

Fed. Proj. No.



108+97 909.63

910.18



108+60 910.21

910.78

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01 **Sheet No.** 27 **of** 67 **Sheets**

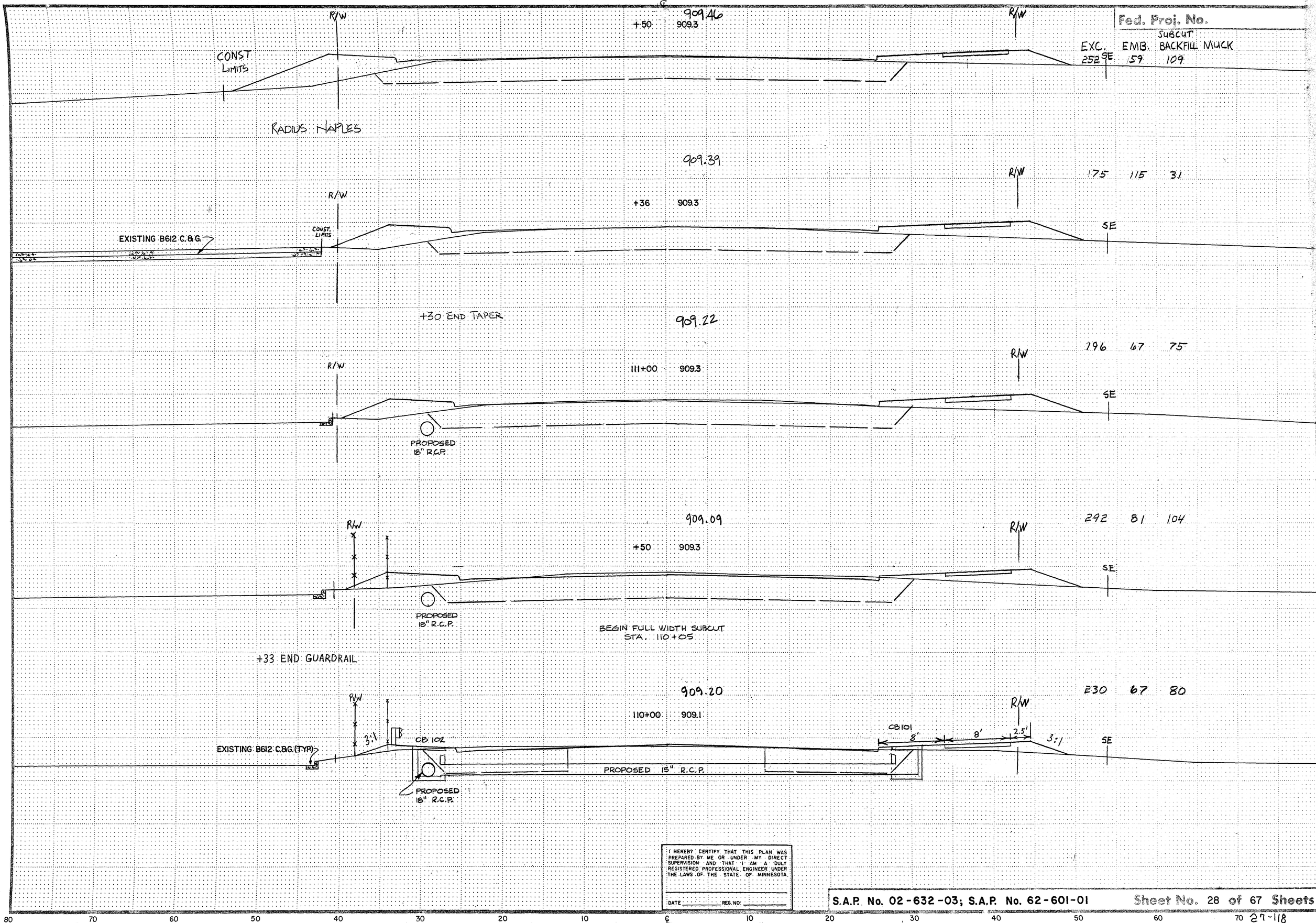
80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

COPY EQUIPMENT FORM #1 75080

STATION—ELEVATION

Fed. Proj. No.



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DATE _____ REG. NO: _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 28 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION—ELEVATION

Fed. Proj. No.

℄

909.39

112+63 909.3

R/W

3:1

16'

R/W

SUBCUT

EXC. EMB. BACKFILL MUCK

177 135 77

SE

909.49

RADIUS NAPLES ST.

DITCH LT.

112+43 909.3

R/W

105 67 46

APRON 10S

STA. 112+53 LT. 80' VAR.

3:1

16'

3:1

SE

909.57

E. G.L. NAPLES

112+26 909.3

R/W

138 34 58

SE

PROPOSED 8" WILLIAMS PIPELINE TOP. EL. = 904.6±

909.68

℄ NAPLES

112+05 909.2

R/W

℄ BIT. ENT.

231 25 89

-5% ±

PROPOSED 8" WILLIAMS PIPELINE TOP. EL. = 904.1±

END RADIUS

909.61

W. G.L. NAPLES

111+83 909.3

R/W

231 27 94

8' 8' 2.5'

SE

PROPOSED 8" WILLIAMS PIPELINE TOP. EL. = 904.3±

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 _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 29 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

Fed. Proj. No.

			SUBCUT		SUBGRADE
	EXC.	EMB.	BACKFILL	MUCK	CORRECTION
908.20	398	157	240		134
908.45	252	165	104		
908.70	225	180	104		
908.95	218	183	104		
909.20	227	183	104		

115+00 908.5

Begin 20:1 Subcut Taper STA. 115+00

+50 908.5

SWAMP

114+00 908.7

+50 908.9

113+00 909.11

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 _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 30 of 67 Sheets

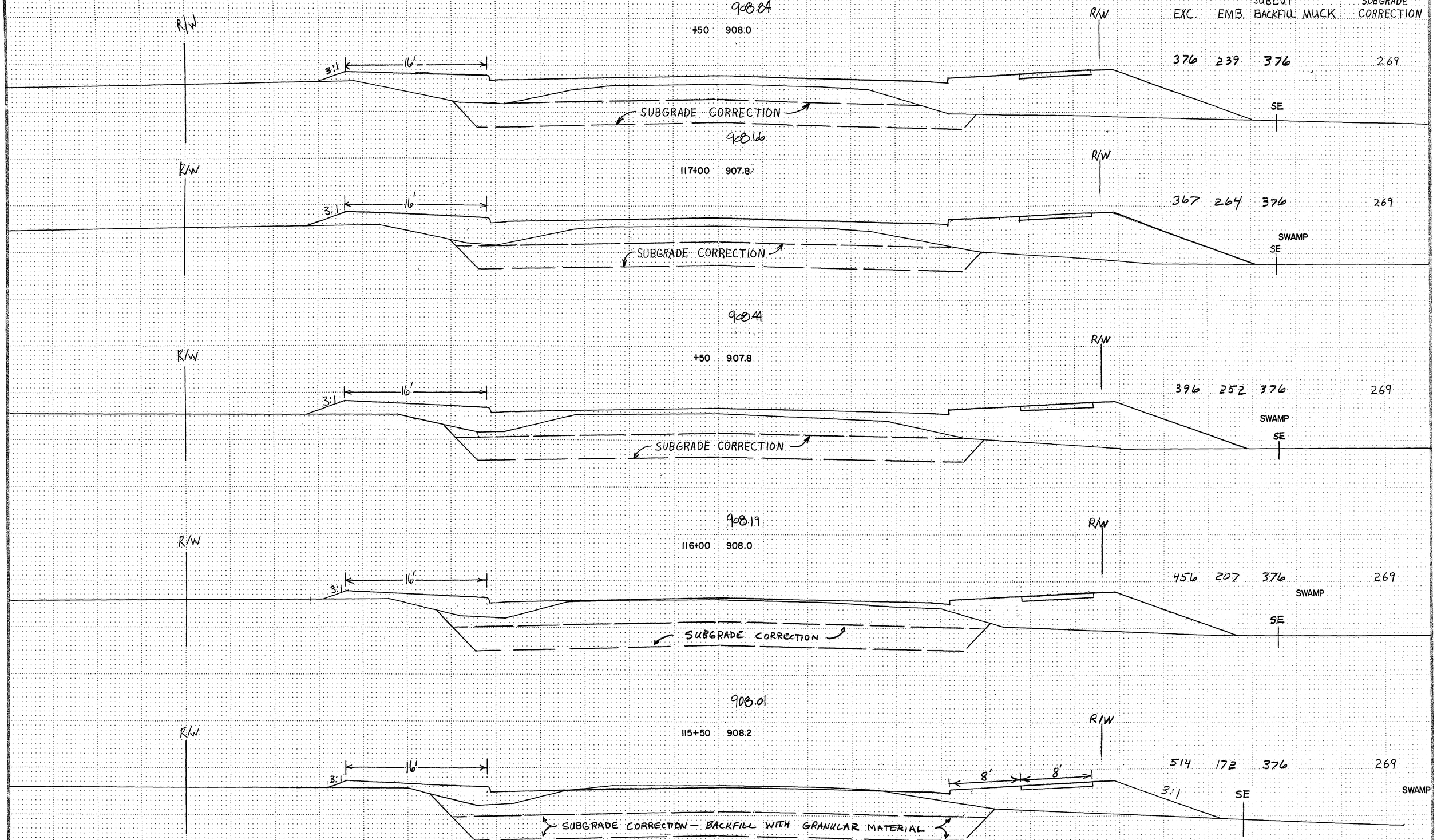
27-118

STATION—ELEVATION

℄

Fed. Proj. No.

			SUBCUT		SUBGRADE
	EXC.	EMB.	BACKFILL MUCK		CORRECTION
908.84 +50 908.0	376	239	376		269
908.66 117+00 907.8	367	264	376		269
908.44 +50 907.8	396	252	376		269
908.19 116+00 908.0	456	207	376		269
908.01 115+50 908.2	514	172	376		269



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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 31 of 67 Sheets

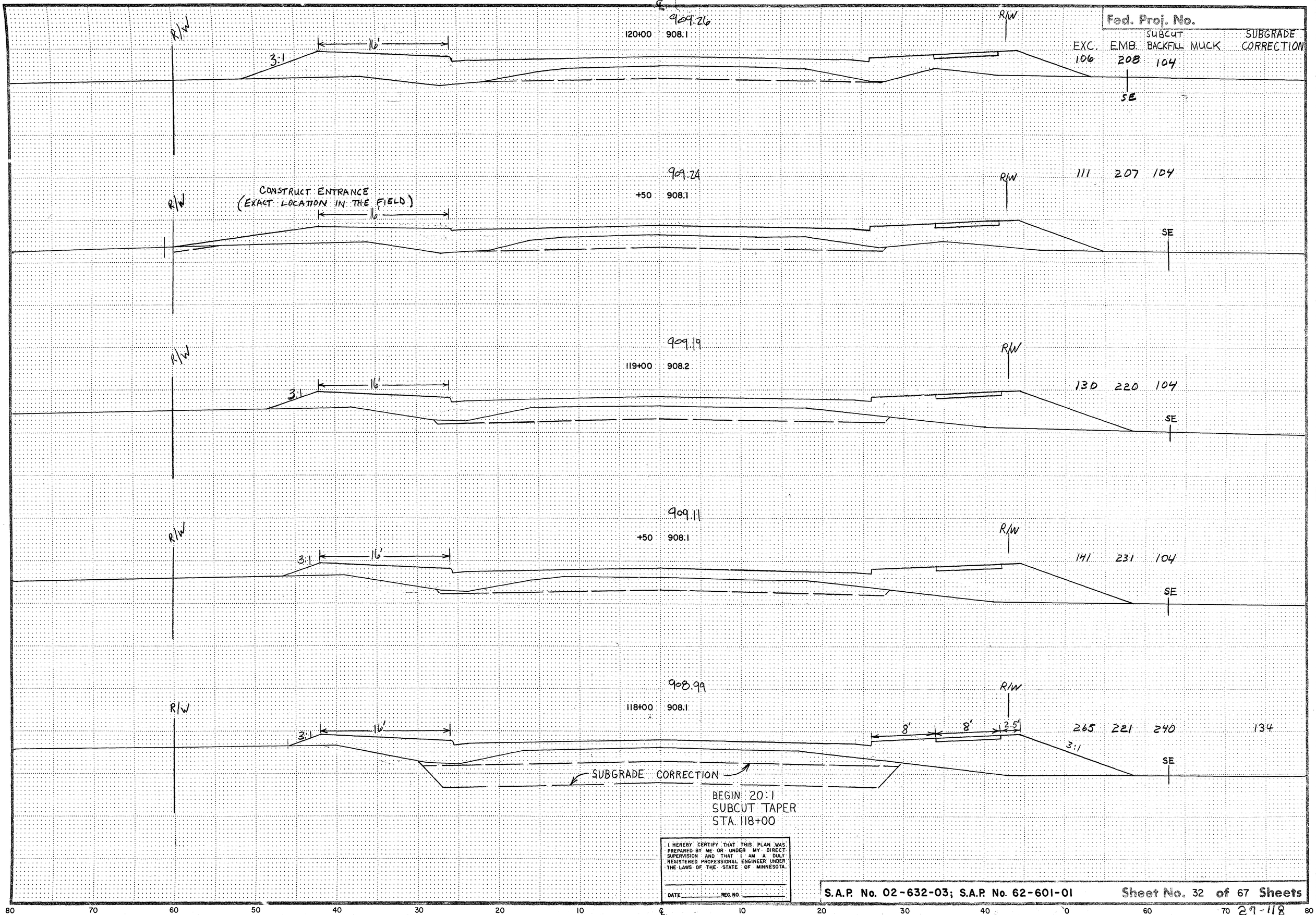
80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION—ELEVATION

Fed. Proj. No.

STATION	℄ ELEVATION	EXC.	EMB.	SUBCUT BACKFILL	MUCK	SUBGRADE CORRECTION
120+00	909.26	106	208	104		
+50	909.24	111	207	104		
119+00	909.19	130	220	104		
+50	909.11	141	231	104		
118+00	908.99	265	221	240		134



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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 32 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 0 60 70 80

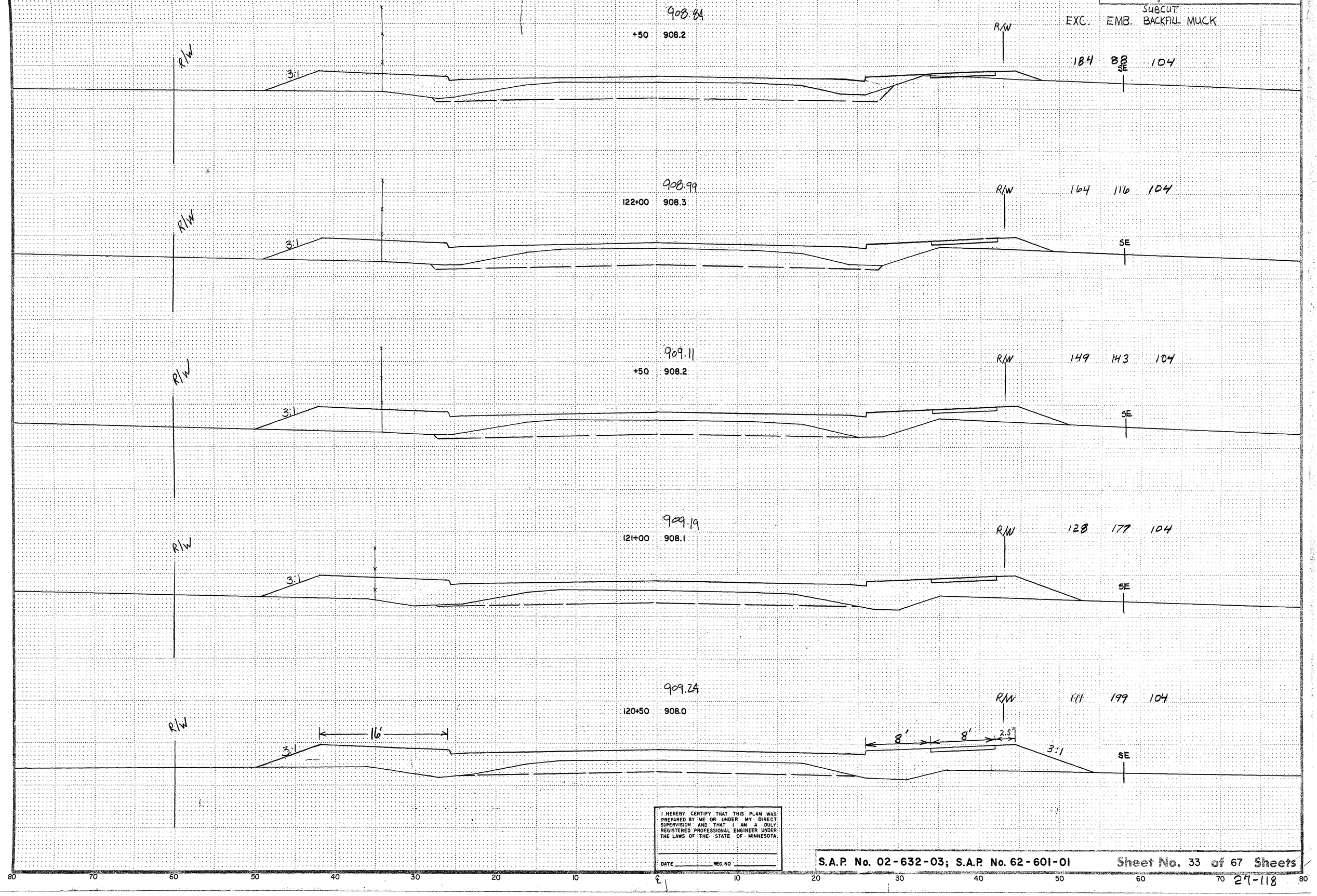
27-118

STATION—ELEVATION

℄

Fed. Proj. No.

			EXC.	EMB.	SUBCUT BACKFILL MUCK
908.84	+50	908.2	184	88	104
908.99	122+00	908.3	164	116	104
909.11	+50	908.2	149	143	104
909.19	121+00	908.1	128	177	104
909.24	120+50	908.0	111	199	104



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DATE _____ REG. NO _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 33 of 67 Sheets

27-118

STATION—ELEVATION

Fed. Proj. No.

907.87

℄ DITCH

+67 907.6

RADIUS RENDOVA ST.

8'

3:1

R/W

SE

	EXC.	EMB.	SUBCUT BACKFILL MUCK
	165	47	70

907.95

8'

RADIUS RENDOVA ST.

+50 907.7

R/W

3:1

R/W

SE

	88	45	38

908.20

BIT. PARKING LOT

124+00 907.9

R/W

8'

3:1

R/W

SE

	231	117	104

908.53

℄ BIT. ENTRANCE

+30 908.1

R/W

8'

R/W

SE

	325	97	145

908.66

123+00 908.1

R/W

8'

8'

3:1

3:1

R/W

SE

	133	33	62

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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 34 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

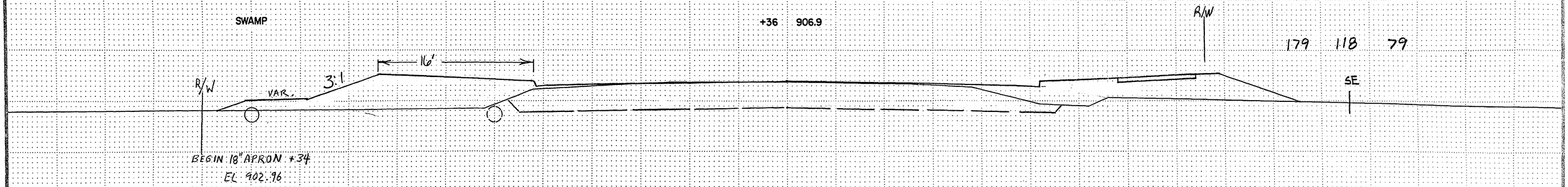
27-118

STATION—ELEVATION

Fed. Proj. No.

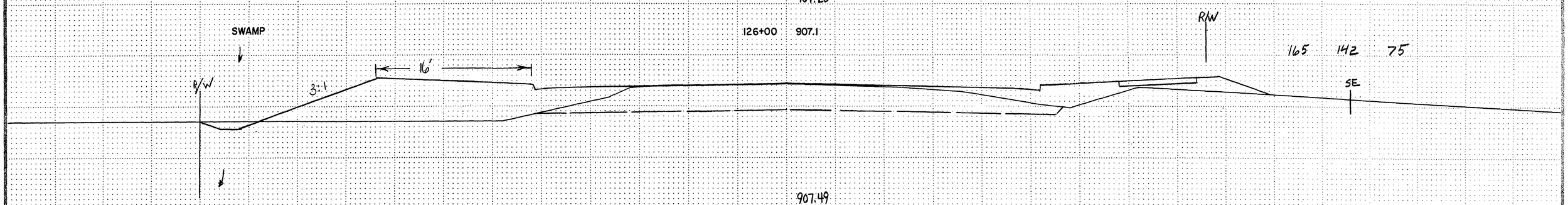
℄

			SUBCUT EXC.	EMB.	BACKFILL MUCK
SWAMP	907.03 +36	906.9	179	118	79



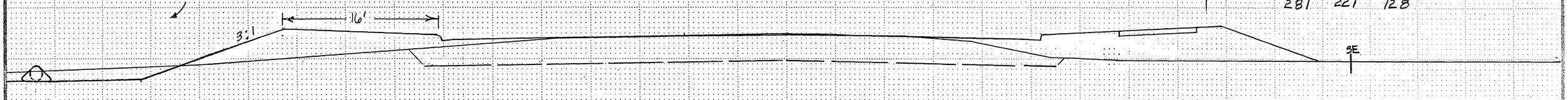
BEGIN 18" APRON +34
EL 902.96

SWAMP	907.20 126+00	907.1	165	142	75



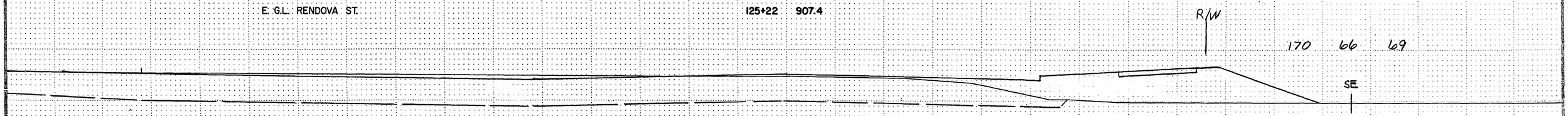
℄ DITCH	907.49 +43	907.3	281	221	128

RADIUS RENDOVA ST.



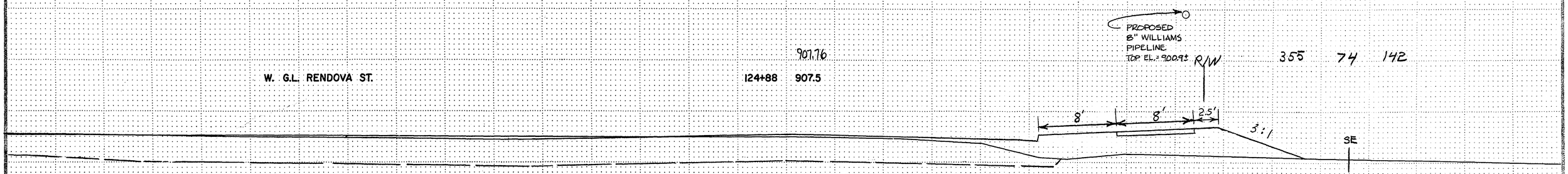
APRON 111

E. G.L. RENDOVA ST.	907.59 125+22	907.4	170	66	69



PROPOSED
8" WILLIAMS
PIPELINE
TOP EL.=900.9±

W. G.L. RENDOVA ST.	907.76 124+88	907.5	355	74	142



PROPOSED
8" WILLIAMS
PIPELINE
TOP EL.=901.6±

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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 35 of 67 Sheets

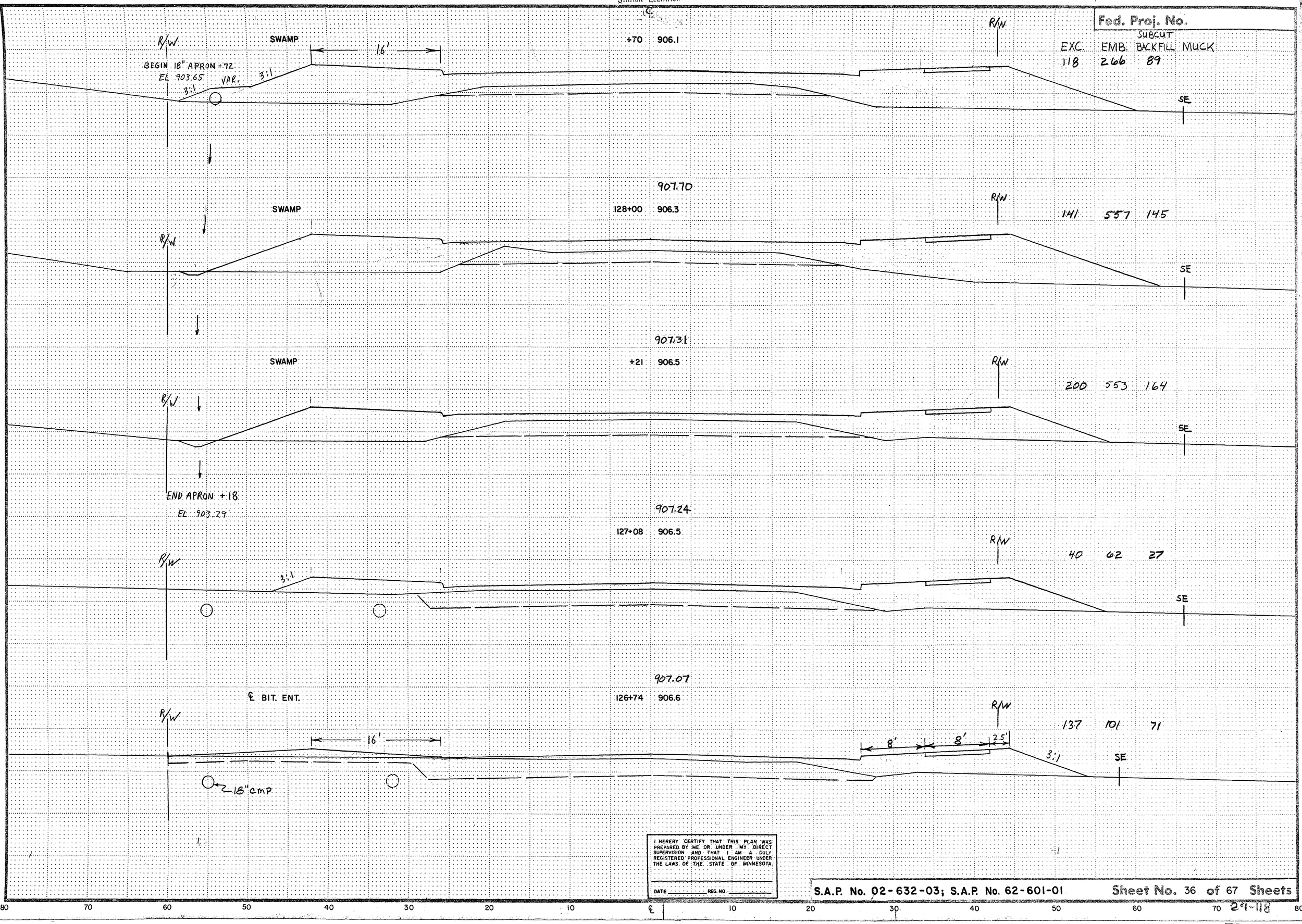
80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

29-118

STATION—ELEVATION

Fed. Proj. No.

				EXC.	EMB.	SUBCUT BACKFILL	MUCK
SWAMP	+70	906.1		118	266	89	
		907.70					
SWAMP	128+00	906.3		141	557	145	
		907.31					
SWAMP	+21	906.5		200	553	164	
		907.24					
	127+08	906.5		40	62	27	
		907.07					
℄ BIT. ENT.	126+74	906.6		137	101	71	



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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 36 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

29-118

STATION—ELEVATION

Fed. Proj. No.

℄ DITCH

907.27

+39 906.9

R/W

3:1

16'

R/W

SUBCUT

EXC. 42 | EMB. 49 | BACKFILL 23 | MUCK

SE

SWAMP

907.04

130+00 906.5

R/W

CONST. BERM NO. 3
SEE SHEET NO. 9
TOP E.L.E.V. 904.61

3:1

R/W

136 | 189 | 81

SE

SWAMP

907.15

+62 906.3

R/W

R/W

3:1

8' 8'

121 | 159 | 79

SE

END APRON +56

R/W EL 903.96

907.21

+50 906.3

R/W

CONST. LIMITS

3:1

138 | 140 | 25

SE

907.39

129+13 906.2

R/W

℄ BIT. ENT.

R/W

16'

8' 8' 2.5

3:1

127 | 149 | 77

SE

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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 37 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION—ELEVATION

Fed. Proj. No.

℄ 909.01

BIT. PARKING LOT

132+50 909.2

R/W

3:1

VAR. WIDTH

R/W

SUBCUT

EXC. 443 EMB. 208 BACKFILL 164 MUCK

SE

908.60

249 124 104

BIT. PARKING LOT

132+00 908.7

R/W

3:1

VAR. WIDTH

R/W

SE

908.19

237 148 104

BIT. PARKING LOT

131+50 908.0

R/W

3:1

VAR. WIDTH

R/W

SE

907.78

BIT. PARKING LOT

131+00 907.4

R/W

3:1

VAR. WIDTH

R/W

209 180 104

SE

907.37

BIT. PARKING LOT

130+50 907.0

R/W

3:1

VAR. WIDTH

R/W

8' 8' 2.5'

3:1

193 204 104

SE

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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 38 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION—ELEVATION

Fed. Proj. No.

						SUBCUT	
					EXC.	EMB.	BACKFILL MUCK
BIT. PARKING LOT	910.33	135+00	910.5	R/W	269	113	104
BIT. PARKING LOT	910.55	+50	910.3	R/W	236	135	104
BIT. PARKING LOT	910.24	134+00	910.1	R/W	222	150	104
℄ BIT. ENTRANCE	909.92	+61	910.0	R/W	199	82	81
					191	60	66
BIT. PARKING LOT	909.66	133+29	909.8	℄ DIRT ENTRANCE			

CONST. LIMITS

R/W

VAR. WIDTH

3:1

SE

EL. 905.30
+95 RELOCATE
CONTROL STRUCTURE
(SEE PLAN SHEET)

+10 15" APRON
EL 904.8

VAR

REPLACE IN KIND

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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 39 of 67 Sheets

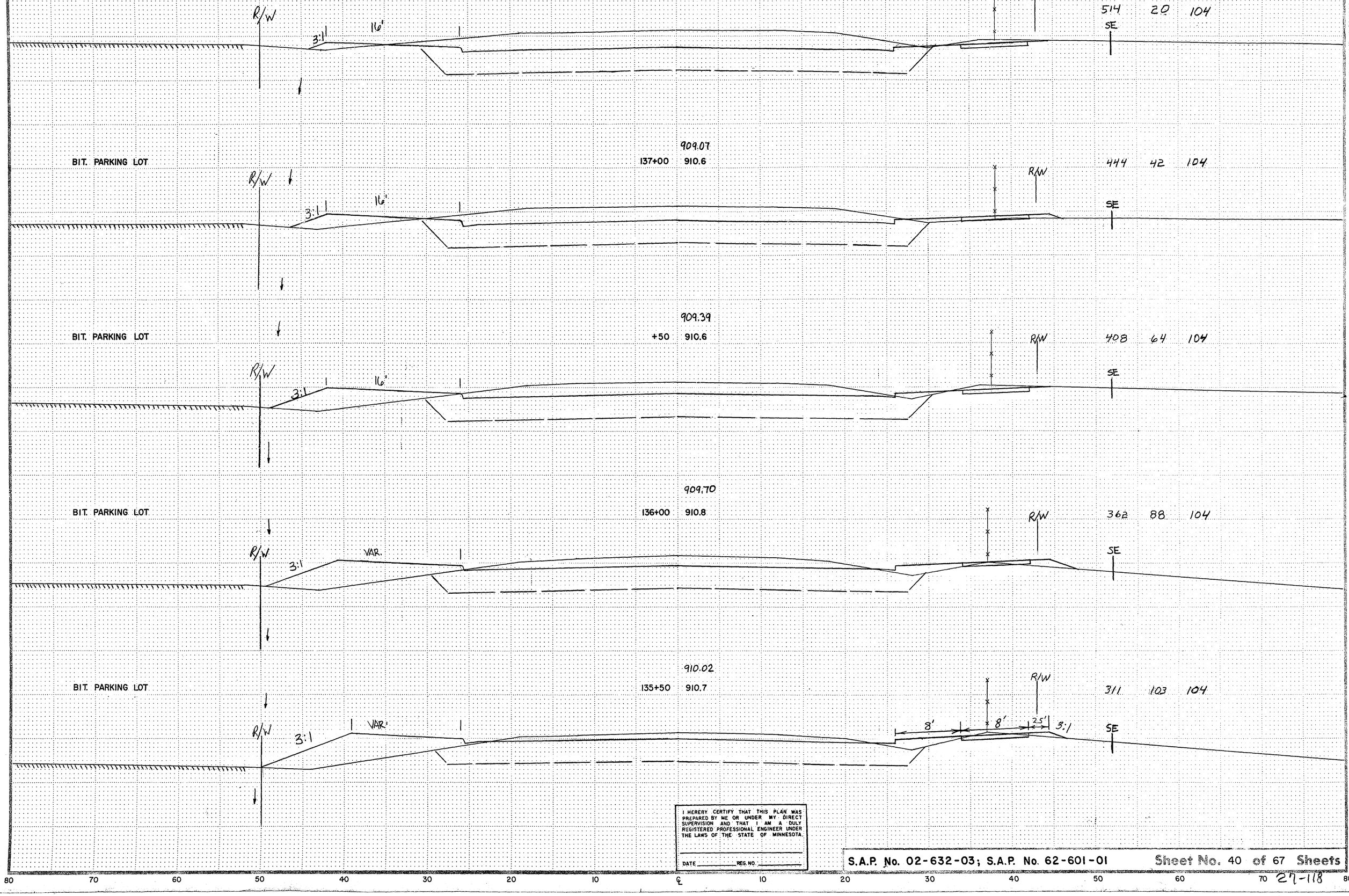
80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION—ELEVATION

Fed. Proj. No.

					SUBCUT EXC.	EMB.	BACKFILL MUCK
BIT. PARKING LOT	908.76	+50	910.7		514	20	104
BIT. PARKING LOT	909.07	137+00	910.6		444	42	104
BIT. PARKING LOT	909.39	+50	910.6		408	64	104
BIT. PARKING LOT	909.70	136+00	910.8		362	88	104
BIT. PARKING LOT	910.02	135+50	910.7		311	103	104



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DATE _____ REG. NO _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 40 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION—ELEVATION

Fed. Proj. No.

℄ 909.06

140+00 911.3

R/W | 8' | 3:1 | R/W | SE

SUBCUT EXC. 738 | EMB. 24 | BACKFILL MUCK 135

+80 END PATH TRANS.

909.00

+77 911.4

R/W ℄ BIT. ENTRANCE | 8' | R/W | SE | 3:1

282 | 8 | 48

+40 BEGIN PATH TRANS.

908.55

139+00 911.4

R/W | 8' | 3:1 | R/W | SE

967 | 21 | 160

908.22

+50 911.1

R/W | 12' | 3:1 | R/W | SE | 3:1

580 | 20 | 104

908.44

BIT. PARKING LOT

138+00 910.9

R/W | 16' | 3:1 | 8' | 8' | R/W | 2.5' | SE

574 | 20 | 104

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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 41 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION—ELEVATION

℄

Fed. Proj. No.

907.82

142+50 910.1

SUBCUT EXC. EMB. BACKFILL MUCK

561 98 132

R/W

8'

3:1

MH 123

CB 122

R/W

3:1

℄ DRAINAGE EASEMENT SEE SHEET 65

15" RCP @ -1.0%

O PROPOSED 8" WILLIAMS PIPELINE TOP EL. 903.±

24" RCP @ -4.1%

908.32

+87 910.5

CLOSE ENT.

℄ CONC. ENTRANCE

733 36 131

TRAILER

R/W

3:1

7'

SE

682 13 118

908.72

+35 910.7

E. G.L. HALL ST.

R/W

SAWCUT

SE

3:1

O PROPOSED 8" WILLIAMS PIPELINE TOP EL. 904.6 ±

443 9 86

908.93

141+00 910.8

W. G.L. HALL ST.

R/W

SAWCUT

SE

3:1

20:1

O PROPOSE 8" WILLIAMS PIPELINE TOP EL. 905.2 ±

420 9 79

909.05

140+65 911.0

℄ BIT. ENTRANCE

TRAILER

R/W

8'

R/W

SE

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DATE _____ REG. NO. _____

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 42 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION—ELEVATION

℄

Fed. Proj. No.

SUBCUT

	EXC.	EMB.	BACKFILL MUCK
906.05			
145+00 909.0	665	19	104
906.25			
+50 909.2	703	51	104
906.44			
144+00 909.4	613	119	104
907.03			
+50 909.6	518	170	104
907.43			
143+00 909.8	484	167	104

R/W 16' 1 1 3:1 1 7' R/W 3:1 SE

R/W 3:1 1 1 1 7' 3:1 SE

R/W 1 1 3:1 1 7' 3:1 SE

R/W 16' 1 1 3:1 1 7' 3:1 SE

STA. 143+37± END RADIUS XERBEC ST.

R/W 7' 3:1 SE

TEMPORARY GRADE XEBEC ST. (−1.39%)

FUTURE GRADE (+1.51%±)

+97 PROPOSED ℄ XERBEC ST. @ 907.45±

STA. 142+56± BEGIN RADIUS XERBEC ST.

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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 Sheet No. 43 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION--ELEVATION

℄

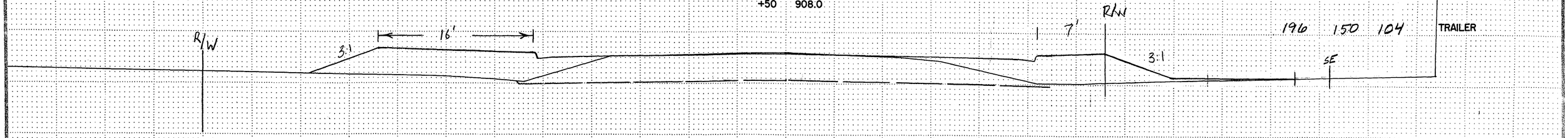
Fed. Proj. No.

907.83

+50 908.0

EXC. EMB. SUBCUT MUCK BACKFILL

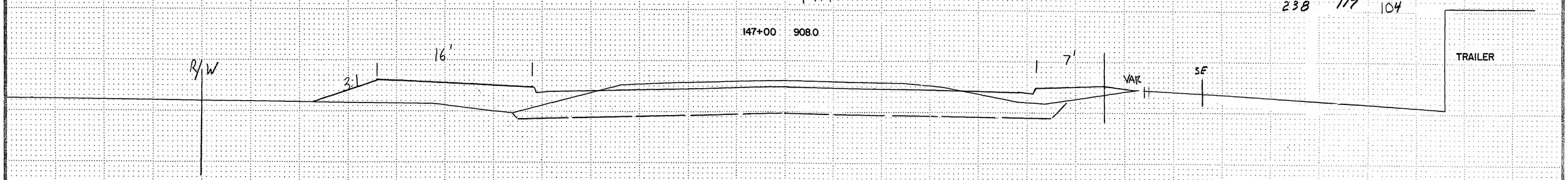
196 150 104



907.43

147+00 908.0

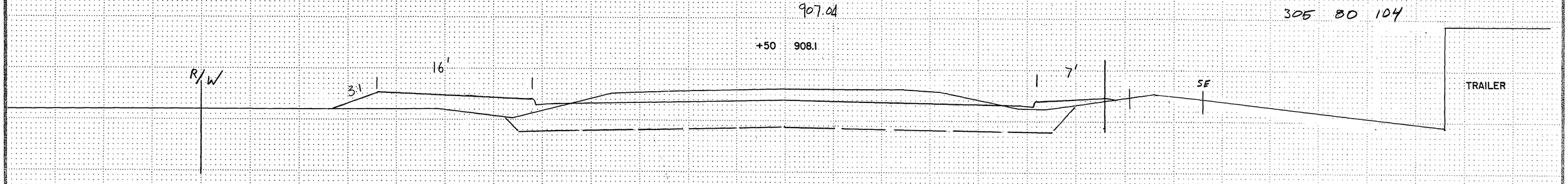
238 117 104



907.04

+50 908.1

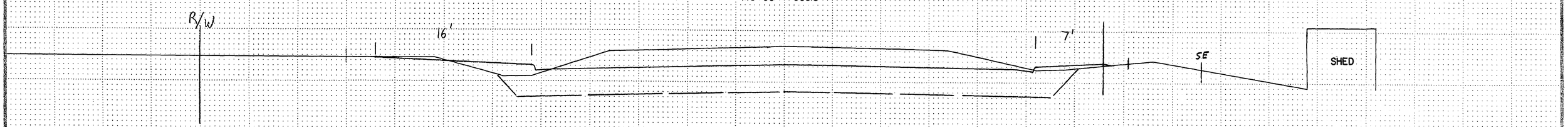
305 80 104



906.65

146+00 908.5

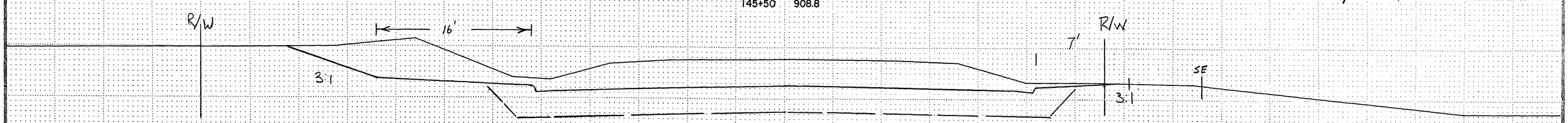
375 47 104



906.25

145+50 908.8

507 24 104



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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 44 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

Fed. Proj. No.

150+04± END RADIUS
YALTA ST.

℄

909.63

EXC. EMB. BACKFILL MUCK

PROPOSED BOULEVARD YALTA ST. → ← MATCH YALTA ST.

+81 909.6

R/W

E. G.L. HALL ST.

445 29 162

SE

+63.5± PROPOSED ℄ YALTA ST. @909.52

PROPOSED 8" WILLIAMS PIPELINE TOP EL.: 904.8±

909.30

224 8 92

PROPOSED BOULEVARD YALTA ST. → ← MATCH YALTA ST.

+46 909.2

W. G.L. HALL ST.

SE SE

PROPOSED 8" WILLIAMS PIPELINE TOP EL. 904.4±

+23± BEGIN RADIUS
YALTA ST.

251 90 125

909.01

R/W

149+00 908.7

1 7'

VAR.

SE

908.62

169 180 104

R/W

+50 908.2

1 7'

VAR.

SE

908.23

168 167 104

R/W

148+00 907.9

R/W

1 7'

VAR.

SE

18" RCP

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DATE _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 45 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

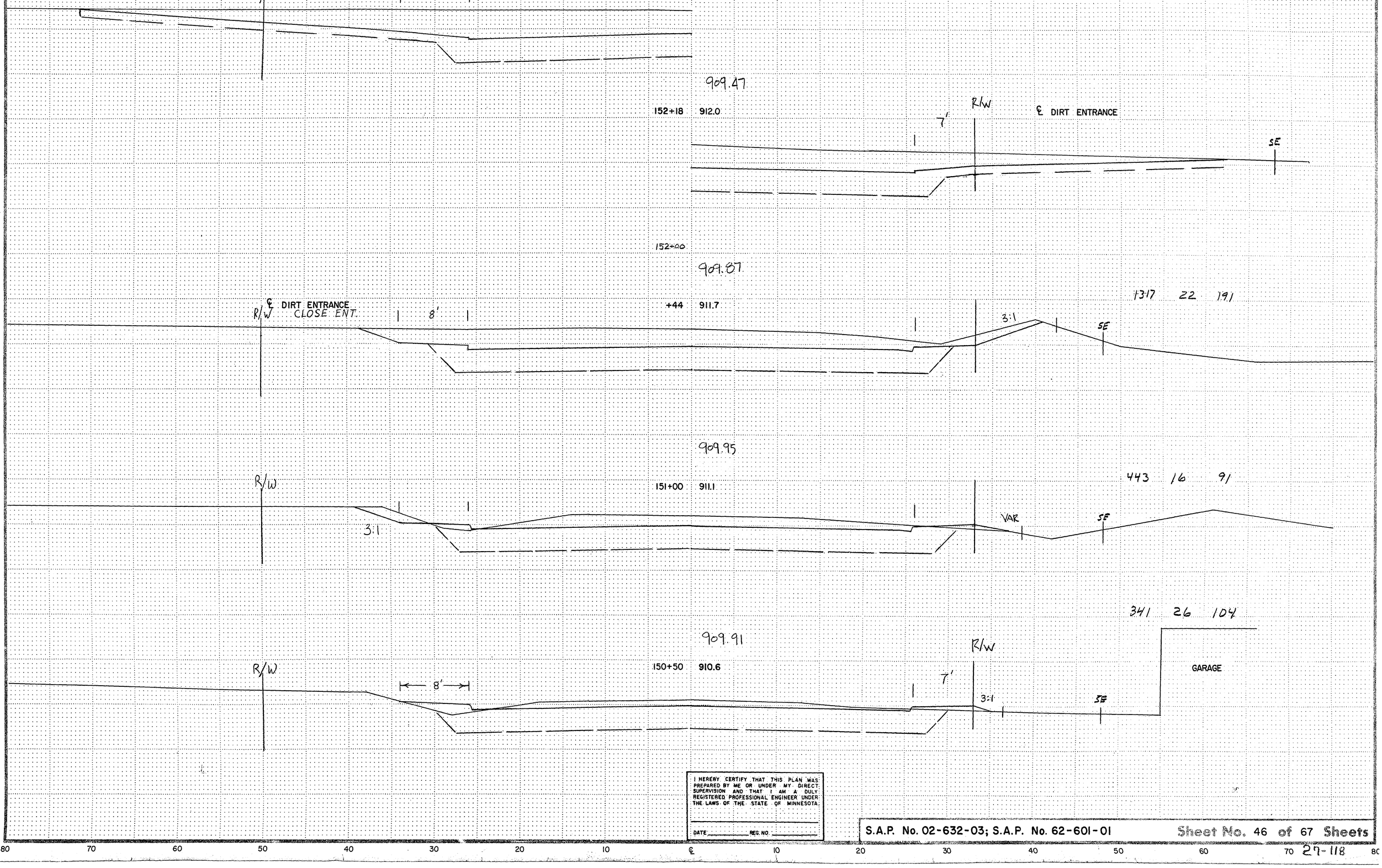
27-118

STATION–ELEVATION

℄

Fed. Proj. No.

			SUBCUT EXC.	EMB.	BACKFILL MUCK
		909.41			
℄ BIT. ENTRANCE R/W	+26	912.1	853	14	112
		909.47			
R/W ℄ DIRT ENTRANCE	152+18	912.0			
		909.87			
℄ DIRT ENTRANCE R/W CLOSE ENT.	+44	911.7	1317	22	191
		909.95			
R/W	151+00	911.1	443	16	91
		909.91	341	26	104
R/W	150+50	910.6			



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 _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 46 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

Fed. Proj. No.

SUBCUT
EXC. EMB. BACKFILL MUCK

℄ DIRT TURNAROUND

905.10

155+00 908.2

894 15 102

8'

906.21

154+50 909.8

903 19 104

3:1

BEGIN WALL & FENCE
STA 154+20

907.42

℄ BIT. ENTRANCE

+86 911.0

1159 26 133

46

3:1

907.99

153+50 911.4

608 13 75

3:1 3:1

908.90

152+80 911.9

1053 23 145

℄ DIRT ENTRANCE

3:1

8'

7'

R/W SE

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 _____ REG. NO. _____

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 47 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

29-118

STATION–ELEVATION

Fed. Proj. No.

+75 END PHASE I

SUBCUT
EXC. EMB. BACKFILL MUCK

℄ BIT. ENTRANCE

R/W

897.14

+60 897.4

8'

R/W

SE

219 47 83

℄ BIT. ENTRANCE

R/W

898.75

157+14 899.7

SAVE TREE

SAVE TREE

R/W

SE

316 50 95

R/W.

SE

574 43 133

R/W

900.93

+50 902.5

3:1

SE

576 22 104

RW

902.46

156+00 904.5

VAR.

R/W.

SE

℄ DIRT ENTRANCE

REPLACE IN KIND

R/W

903.80

155+49 906.4

8'

R/W

SE

53

756 20 106

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

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 _____ REG. NO. _____

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: JA

DATE: 1-6-89

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 48 of 67 Sheets

27-118

STATION–ELEVATION

Fed. Proj. No.

SUBCUT

EXC. EMB. BACKFILL MUCK

890.13

192 63 58 391

BIT. PARKING LOT

R/W

8'

159+~~72~~ 75 889.0

℄ LEXINGTON AVE.

7'

3:1

1½:1

MUCK EXCAVATION

882.2

1½:1

R/W

REMOVE PAVEMENT

159+50 BEGIN MUCK

892.29

℄ BIT. ENTRANCE

R/W

+99 891.4

7'

341 126 (EX. 42" RCP) 151 502

3:1

SE

1½:1

MUCK EXCAVATION

1½:1

~~BEGIN MUCK EXCAVATION~~

STA. 158+75

893.74

BIT. PARKING LOT

R/W

VAR.

+57 893.0

163 90 102 24

893.99

R/W

VAR.

+50 893.3

SE

45.5

R/W

END WALL & FENCE

STA. 158+20

895.74

R/W

8'

158+00 895.5

198 67 104

VAR.

37

SE

157+75 BEGIN PHASE II

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 1/6/89

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DATE _____ REG. NO. _____

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 49 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

℄

Fed. Proj. No.

SUBCUT

EXC. EMB. BACKFILL MUCK

886.42

162+00 885.5

331 32 104 886

R/W

CONST. LIMITS

R/W

8'

8'@4%

3:1

EXISTING DITCH

MUCK EXCAVATION

1/2:1

73.6

73.2

74.0

+85 END B624 ℄ ℄G

BEGIN TAPER

1/2:1

EDGE LEXINGTON STA. 518+76 RT. 24'

+50 885.6 886.84

282 105 104 1216

R/W

8' @+2%

3:1

EXISTING DITCH

MUCK EXCAVATION

72.0

870.9

161+00 886.1 887.48

870.4 RT 25'

PROPOSED 8" WILLIAMS PIPELINE TOP EL. 867.3± STA. 161+50

226 213 104 1460

PROPOSED ℄ LEXINGTON AVE; (+1.0%±)

PROPOSED LEXINGTON AVE (-10%±)

EXISTING DITCH

MUCK EXCAVATION

73.8

872.6

872.1 RT 30'

PROPOSED 8' WILLIAMS PIPELINE TOP EL. 867.0± STA. 161+00

194 171 104 1425

R/W

8'

+50 886.9 888.34

PROPOSED LEXINGTON AVE. BLVD.

REMOVE OLD PAVEMENT

1/2:1

+50 77.3

160+36 879.4

MUCK EXCAVATION

+50 876.2

+50 RT 20' 875.5

END 7' BLVD. 160+25±

1/2:1

PROPOSED 8" WILLIAMS PIPELINE TOP EL. 867.3± STA. 160+50

284 86 104 1039

℄ LEXINGTON AVE.

160+00 LT 888.1

160+15 RT 889.42

8'

REMOVE OLD PAVEMENT

1:1

LEXAVE 812+00 LT 36'

+36 79.4

MUCK EXCAVATION

+00 80.6

878.0 +15

+00 RT 15 78.0

878.3 RT 33

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DATE REG. NO.

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: B.W.
DATE: 1/6/89

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 50 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

℄

Fed. Proj. No.

	EXC.	EMB.	SUBCUT BACKFILL	MUCK
274	10	104	256	
310	16	104	395	
338	13	104	560	

885.68

163+50 885.4

8'@-4%

8'@-4%

R/W

3:1

EXISTING DITCH

MUCK EXCAVATION

1½:1

1½:1

73.9

75.5

76.9

R/W

+04 Begin Guardrail

885.93

163+00 885.5

CONST. BERM NO. 1
SEE SHEET NO. 9
TOP ELEV. 878.53

CONST. LIMITS

8'@-4%

8'@-4%

3:1

3:1

1½:1

1½:1

MUCK EXCAVATION

75.3

76.6

75.6

886.18

162+50 885.6

R/W

CONST. LIMITS

8'@-4%

8'@-4%

3:1

3:1

EXISTING DITCH

1½:1

1½:1

MUCK EXCAVATION

74.6

76.3

R/W

+16.5 Begin Guardrail

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

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DATE _____ REG. NO. _____

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: J.A

DATE: 1-6-89

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 51 of 67 Sheets

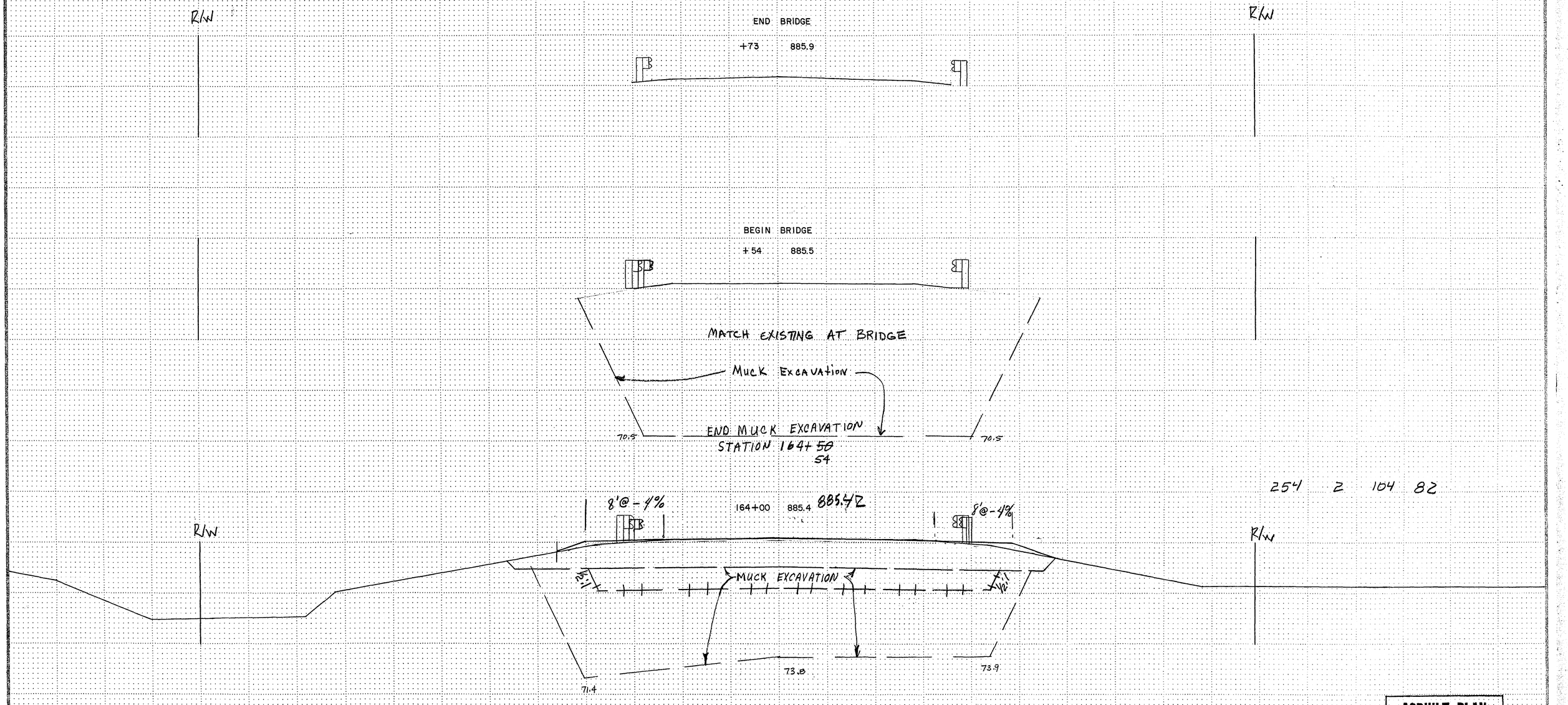
27-118

STATION–ELEVATION

℄

Fed. Proj. No.

SUBCUT
EXC. EMB. BACKFILL MUCK



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DATE _____ REG. NO _____

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: J.A
DATE: 1-6-89

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 52 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

Fed. Proj. No.

STATION–ELEVATION

℄

PROP. R/W

FUTURE ℄

EXISTING R/W

PROP. R/W

EXISTING ℄

+50 886.7

PROP. R/W

FUTURE ℄

EXISTING R/W

PROP. R/W

EXISTING ℄

509+00 885.4

PROP. R/W

FUTURE ℄

EXISTING R/W

PROP. R/W

EXISTING ℄

+50 882.9

PROP. R/W

FUTURE ℄

EXISTING R/W

PROP. R/W

EXISTING ℄

508+00 881.5

A

SWAMP

A

LEXINGTON AVE.

S.A.P NO. 02-632-03; S.A.P NO. 62-601-01

Sheet No. 53 of 67 Sheets

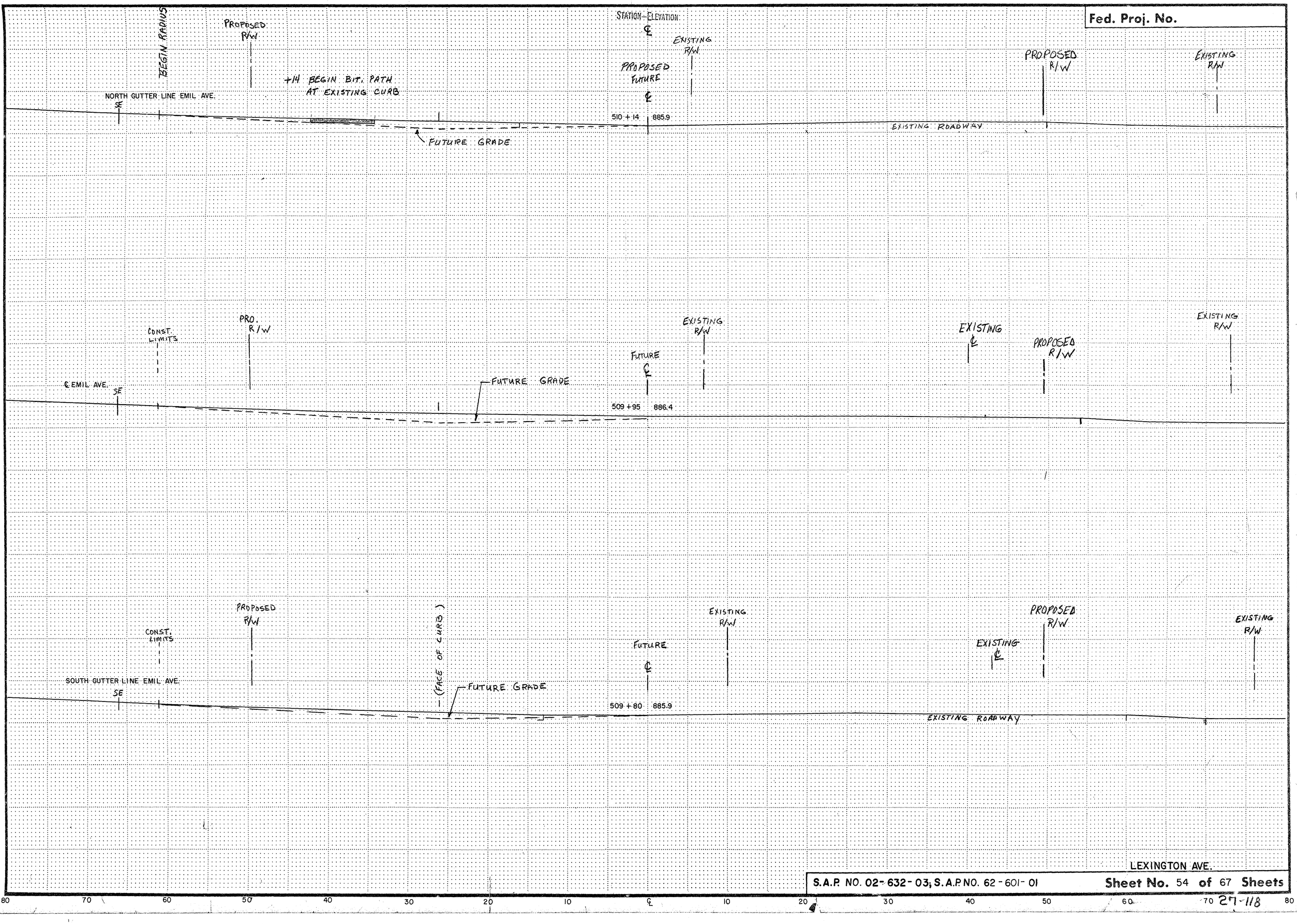
80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

COPY EQUIPMENT FORM #1 75680

Fed. Proj. No.

STATION–ELEVATION



LEXINGTON AVE.

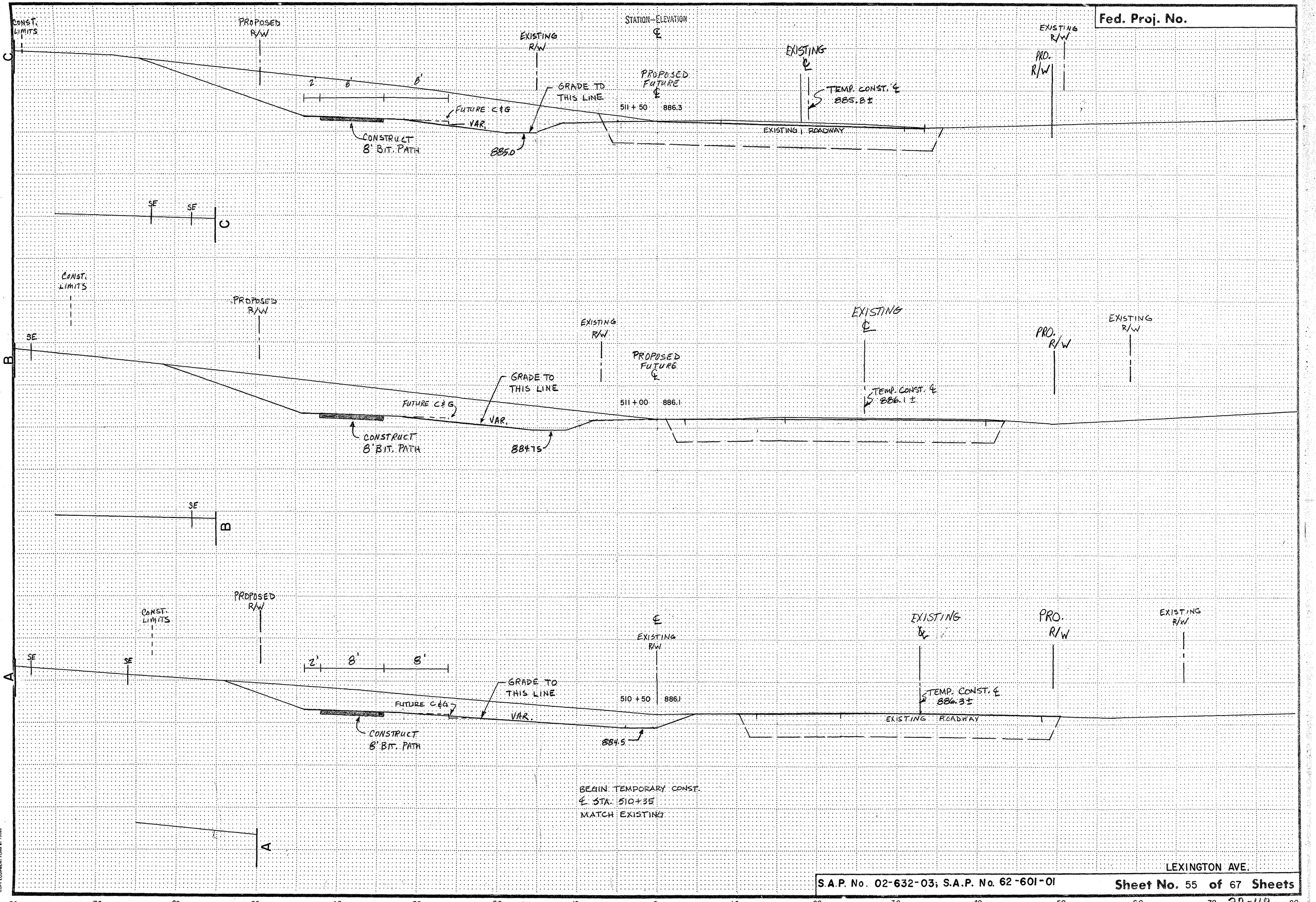
S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01 **Sheet No.** 54 **of** 67 **Sheets**

27-118

COPY EQUIPMENT FORM #1 T-5080

Fed. Proj. No.

STATION–ELEVATION



BEGIN TEMPORARY CONST.
℄ STA. 510+35
MATCH EXISTING

LEXINGTON AVE.

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 55 of 67 Sheets

27-118

COPY EQUIPMENT FORM #1 76080

STATION - ELEVATION

Fed. Proj. No.

	EXC.	EMB.	SUBCUT BACKFILL	MUCK
PROP. R/W	297	78	104	645
PROP. R/W	280	47	104	684
PROP. R/W	251	22	104	524
PROP. R/W	241	22	96	193

D

SE

PROPOSED R/W

EXISTING R/W

2' 8' 8'

CONSTRUCT 8' BIT. PATH

½:1

8843

81.3

℄ LEX (EXISTING)

+50 884.8

TEMPORARY ℄ 884.7± SURVEY ℄ BEGIN PERMANENT CONST. & B624 C.4.G.

R/W

0'

3:1

MUCK EXCAVATION

76.6

TEMPORARY ℄ 885.1±

74.1

C

SE

PROPOSED R/W

EXISTING R/W

2' 8' 8'

FUTURE C&G 884.50

3:1

CONSTRUCT 8' BIT. PATH

½:1

513+00 885.2

℄ LEX (EXISTING)

MUCK EXCAVATION

77.3

R/W

3:1

71.6

B

PROPOSED R/W

EXISTING R/W

TEMPORARY ℄ 885.3±

+50 885.6

℄ LEX (EXISTING)

SE

FUTURE C&G 884.75

3:1

CONSTRUCT 8' BIT. PATH

½:1

81.9

MUCK EXCAVATION

VAR.

77.5

R/W

3:1

A

PROPOSED R/W

EXISTING R/W

TEMP. CONST. ℄ 885.6±

512+00 885.9

℄ LEX (EXISTING)

2' 8' 8'

SE

FUTURE C&G

VAR.

CONSTRUCT 8' BIT. PATH

EXISTING ROADWAY

MUCK EXCAVATION

885.0

BEGIN MUCK EXCAVATION STA. 512+00

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DATE _____ REG. NO. _____

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: J. A
DATE: 1-6-89

LEXINGTON AVE.

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 **Sheet No.** 56 **of** 67 **Sheets**

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

Fed. Proj. No.

	EXC.	EMB.	SUBCUT BACKFILL	MUCK
PROP. R/W	434	173	104	2044
PROP. R/W	285	121	104	1931
PROP. R/W	214	87	104	1625
PROP. R/W	204	79	108	1150
PROP. R/W	237	71	96	694

B

EXIST. R/W

PROP. R/W

℄ LEX

D.G. 885.0

D.G. 884.5

D.G. 884.0

D.G. 885.75

SE

EXISTING R/W

EXIST. R/W

A

2' 8' 8'

3:1

1½:1

8'

SWAMP

786

871.8

67.6 @ +75

8' 86A

516+00 881.8

805.90

EXISTING R/W +50 882.0

805.28

14.1

MUCK EXCAVATION

516+00

78.6

515+00 882.9

804.93

EXIST. R/W

871.5

515+50

74.5

MUCK EXCAVATION

+75 +48 883.2

70.1 @ +75

884.81

515+00

66.8

72.1

EXIST. R/W

MUCK EXCAVATION

+48 884.80

71.5

514+00 884.3

73.0

+25 APRON # 99
Lt. 47' Elev. 883.5 69.9

79.4

MUCK EXCAVATION

76.8

75.8

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DATE _____ REG. NO. _____

ASBUILT PLAN
CONFORMING TO CONST. RECORDS

DONE BY: B.W.

DATE: 1/6/89

LEXINGTON AVE.

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 57 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

℄

Fed. Proj. No.

SUBCUT
EXC. EMB. BACKFILL MUCK

887.00
518+00 886.0

℄ CO. RD. "J"

SEE CO. RD. "J" CROSS STATIONS

SWAMP →

PROP. R/W

CO RD J BLVD

RADIUS "J"

887.02
+50 882.6

EXISTING R/W

PROP. R/W

3:1

SWAMP

MUCK EXCAVATION

SWAMP →

12:1

H

DG 886.0

EXISTING R/W

PROP. R/W

2' 8' 8'

2:1

885.58
517+00 +45± 881.9

PROPOSED 8" WILLIAMS PIPELINE
TOP EL.= 867.0±

67.9

12:1

66.8

3:1

PROP. R/W 283 213 104 2222

R/W
130' from ℄

SWAMP

SWAMP →

12:1

MUCK EXCAVATION

886.14

EXISTING R/W

PROP. R/W

70:0

516+50 882.2

℄ LEX

REMOVE EXISTING ROADWAY GRADE TO DRAIN

DG 885.5

2' 8' 8'

2:1

12:1

3:1

PROP. R/W 555 231 104 2176

A

SWAMP

SWAMP →

MUCK EXCAVATION

74.2

A

R/W
105' from ℄

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 _____ REG. NO. _____

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: J.A
DATE: 1-6-89

LEXINGTON AVE.

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01

Sheet No. 58 **of** 67 **Sheets**

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

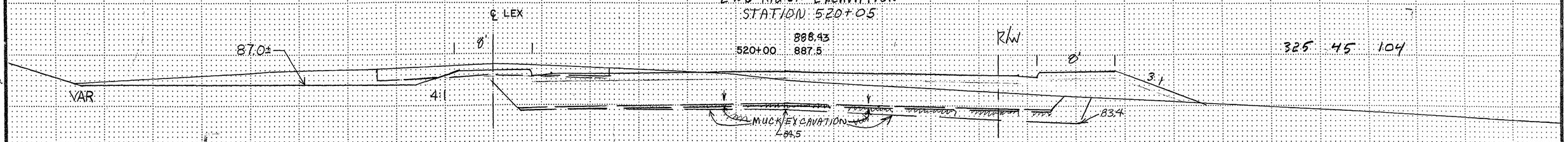
27-118

STATION–ELEVATION

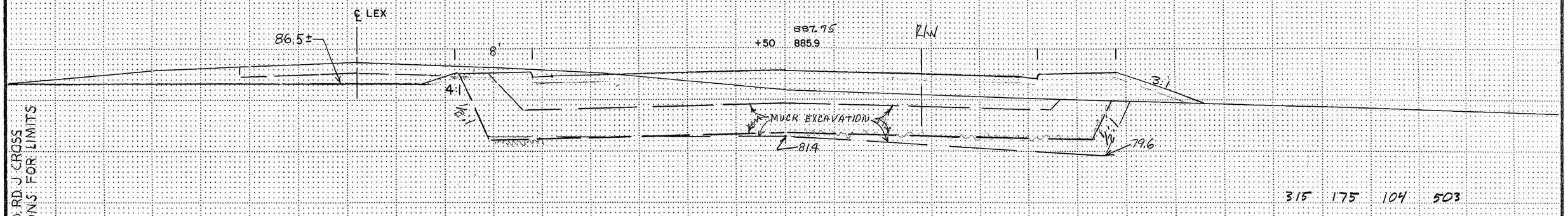
Fed. Proj. No.

	EXC.	EMB.	SUBCUT BACKFILL	MUCK
	325	45	104	
	349	53	104	191
	315	175	104	503
	266	379	114	745
		279		

END MUCK EXCAVATION
STATION 520+05

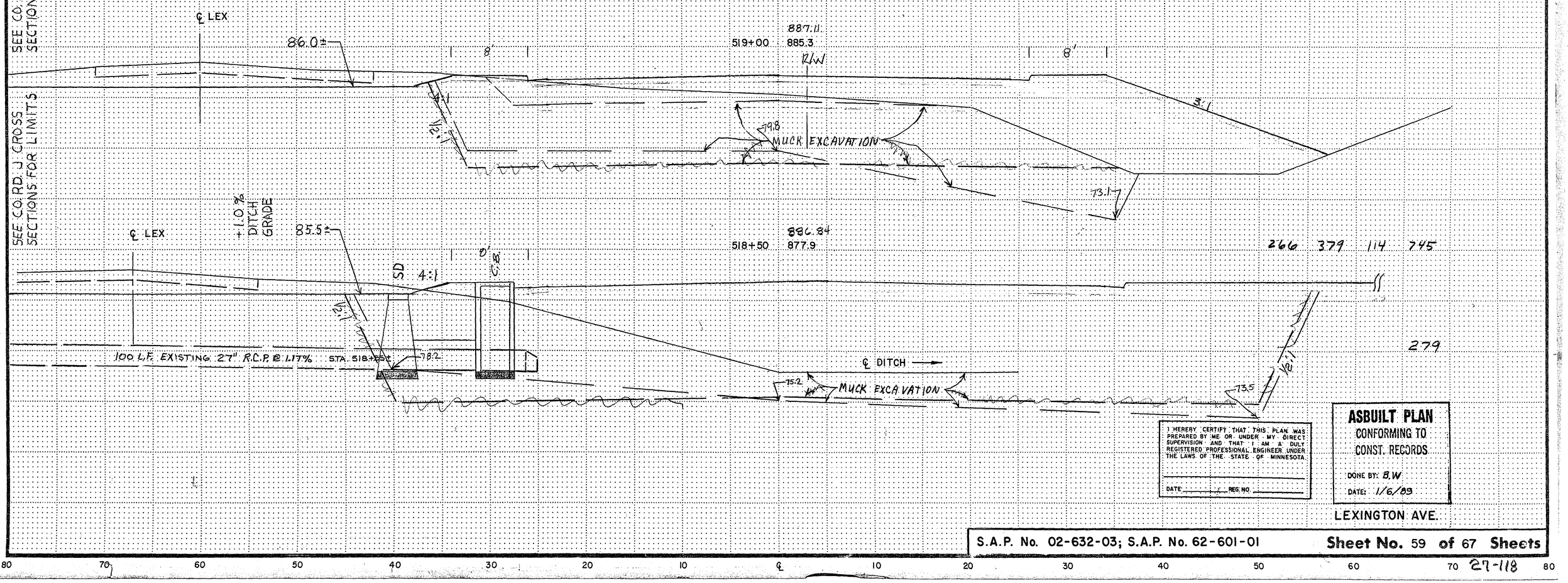


R/W 98' from ℄



R/W 109' from ℄

SEE CO. RD. J CROSS SECTIONS FOR LIMITS



R/W 122' from ℄

SEE CO. RD. J CROSS SECTIONS FOR LIMITS

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 _____ REG. NO. _____

ASBUILT PLAN
CONFORMING TO CONST. RECORDS
DONE BY: B.W
DATE: 1/6/09

LEXINGTON AVE.

S.A.P. No. 02-632-03; S.A.P. No. 62-601-01 **Sheet No.** 59 **of** 67 **Sheets**

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

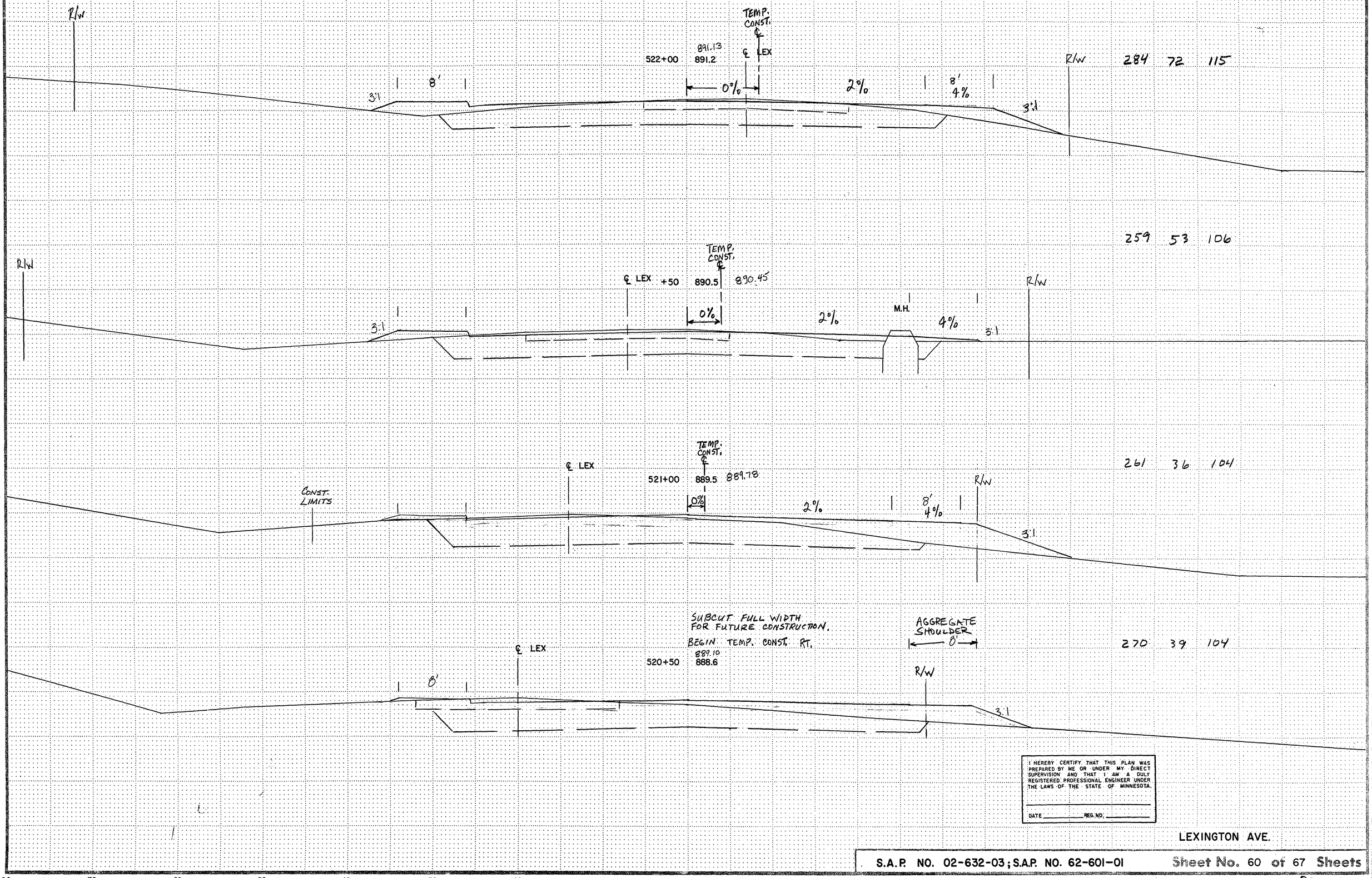
27-118

STATION - ELEVATION

Fed. Proj. No.

SUBCUT

	EXC.	EMB.	BACKFILL MUCK
522+00	284	72	115
521+00	259	53	106
520+50	261	36	104
	270	39	104



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DATE _____ REG. NO. _____

LEXINGTON AVE.

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 60 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION-ELEVATION

℄

Fed. Proj. No.

EARTHWORK SUMMARY - PHASE I *

	EXC. ①	EMB.	SUBCUT BACKFILL	MUCK EXC.
TOTALS	38,133 C.Y.	13,701 C.Y.	12,629 C.Y.	0 C.Y.

EMBANKMENT	13,701 C.Y.
SUBCUT FILL	+12,629 C.Y.
	26,330 C.Y.
	x 1.3
TOTAL FILL	34,229 C.Y.
EXCAVATION	38,133 C.Y.
- FILLS	-34,229 C.Y.
EXCESS	3,904 C.Y.
SUBGRADE CORRECTION STA 115+00 To STA 118+50	- 1,613 C.Y.
EXCESS	2,291 C.Y. EXCESS

* PHASE I - STA. 101+84 To STA. 157+75

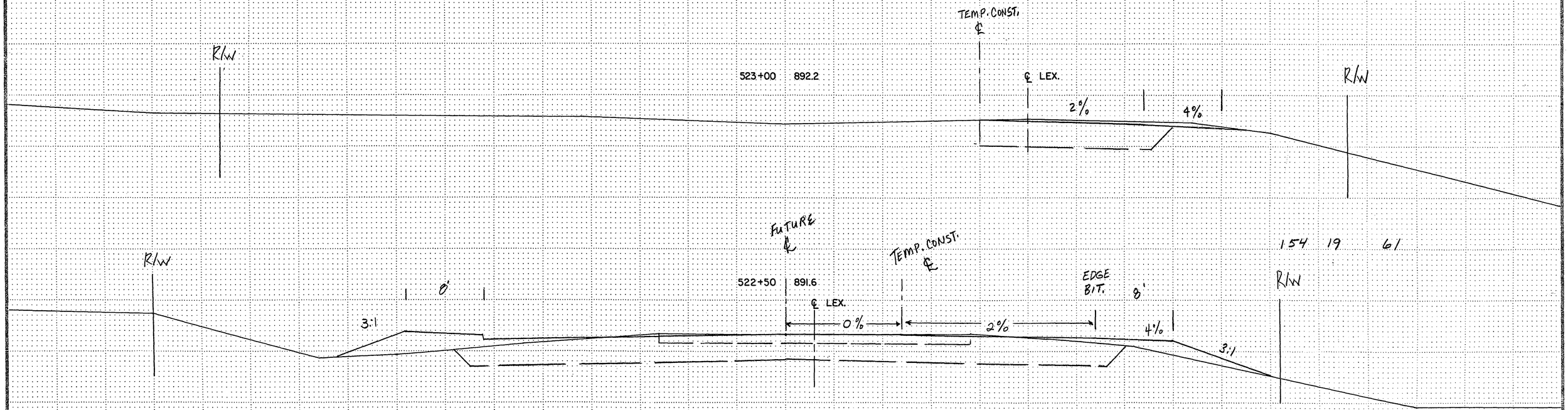
EARTHWORK SUMMARY - PHASE II *

	EXC. ①	EMB.	SUBCUT BACKFILL	MUCK EXC.
TOTALS	9,288 C.Y.	3,038 C.Y.	3,451 C.Y.	23,842 C.Y.

EMBANKMENT	3,038 C.Y.
SUBCUT FILL	+3,451 C.Y.
	6,489 C.Y.
	x 1.3
TOTAL FILL	8,436 C.Y.
EXCAVATION	9,288 C.Y.
- FILLS	-8,436 C.Y.
	852 C.Y. EXCESS
MUCK EXCAV.	23,842 C.Y.
EXCESS EXC.	- 852 C.Y.
EXCESS MUCK	22,990 C.Y.
	x 1.3
SELECT GRANULAR MODIFIED	29,888 C.Y. (L.V.)

* PHASE II - STA. 157+75 TO STA. 164+54 ℄ LEXINGTON AVENUE

① EXCAVATION QUANTITIES INCLUDE INPLACE BITUMINOUS SURFACE - APPROX. 1962 CY TOTAL FOR PROJECT. MATERIAL SHALL BE DISPOSED OF OUTSIDE THE R/W WITH NO ADDITIONAL COMPENSATION.



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DATE _____ REG. NO _____

LEXINGTON AVE.

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01 Sheet No. 61 of 67 Sheets

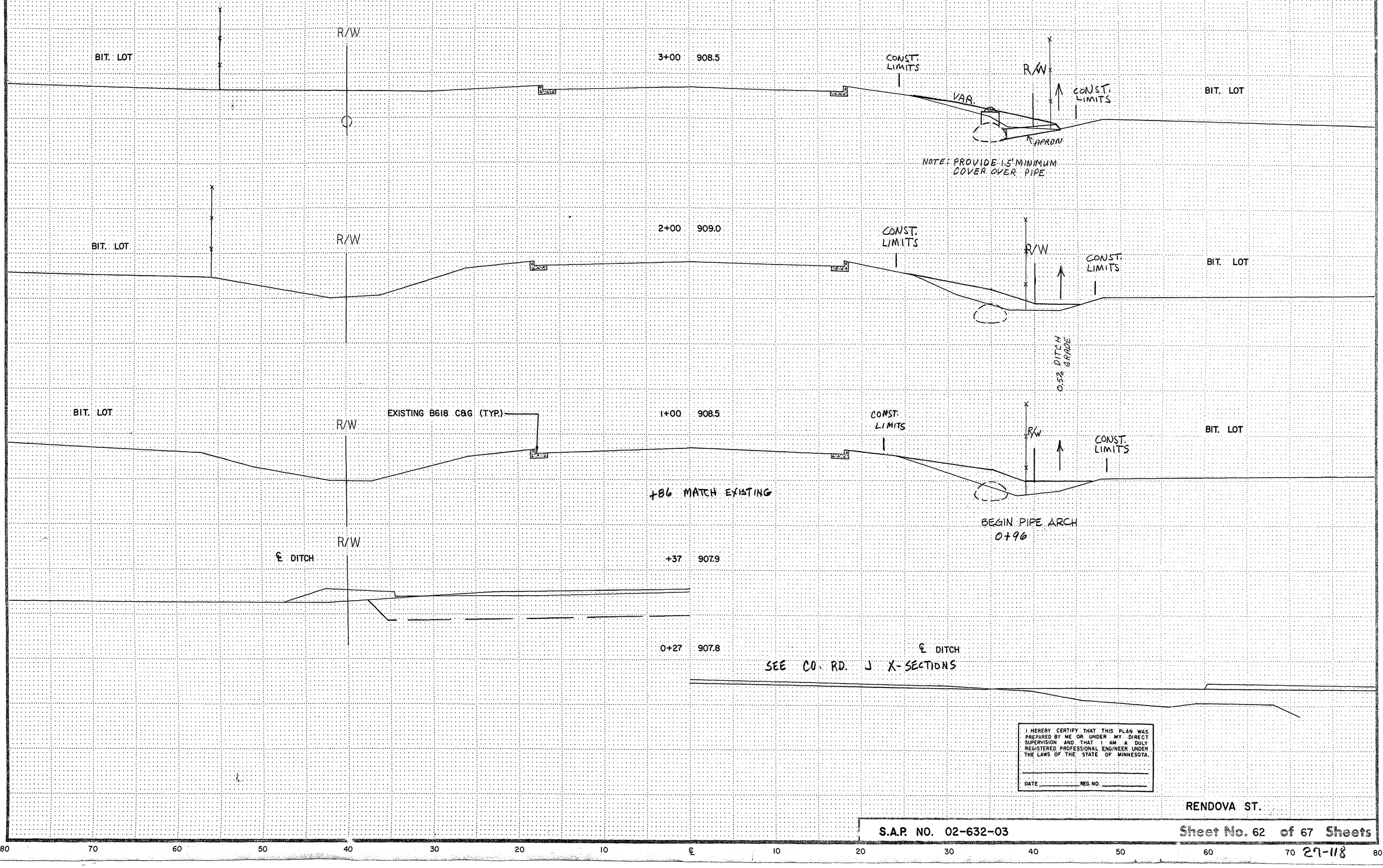
80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION—ELEVATION

℄

Fed. Proj. No.



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 _____ REG. NO. _____

RENDOVA ST.

S.A.P. NO. 02-632-03

Sheet No. 62 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

27-118

STATION–ELEVATION

Fed. Proj. No.

℄

+32 906.9

R/W

R/W

EXISTING 48" RCP

3:1

EXISTING 48" C.M.P. BEGINS 6+48

CONST. LIMITS

T.C.

6+00 907.0

R/W

R/W

CLEAN DITCH HERE

BIT. PARKING LOT

END PIPE ARCH 5+38

5+00 907.5

R/W

CONST LIMITS

R/W

VAR.

CONST. LIMITS

BLDG.

R/W

℄ CONC. ENTRANCE

+34 907.9

NOTE: PROVIDE 1.5' MINIMUM COVER OVER PIPE

CONST. LIMITS

R/W

VAR.

CONST. LIMITS

BIT. LOT

EXISTING B618 C&G (TYP)

4+00 908.1

R/W

CONST. LIMITS

R/W

VAR.

CONST. LIMITS

BIT. LOT

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 _____ REG. NO. _____

RENDOVA ST.

S.A.P. NO. 02-632-03

Sheet No. 63 of 67 Sheets

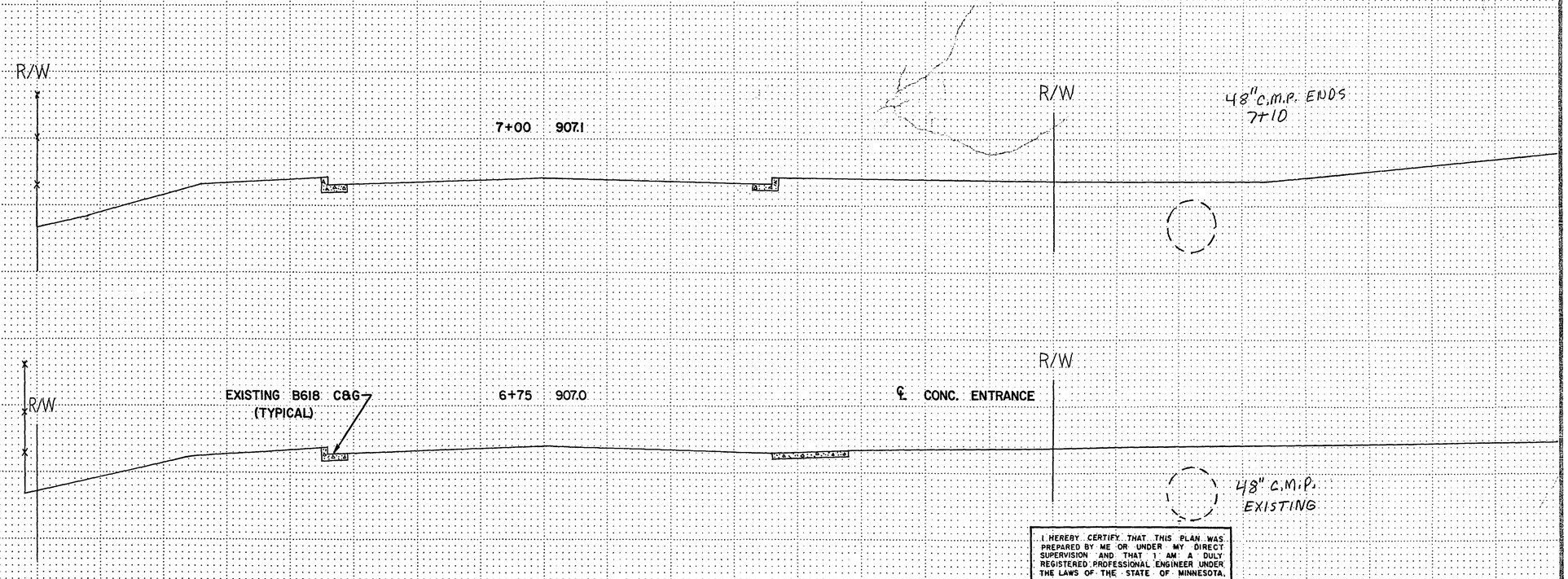
80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

29-118

STATION–ELEVATION

℄

Fed. Proj. No.



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DATE _____ REG. NO. _____

RENDOVA ST.

S.A.P. No. 02-632-03

Sheet No. 64 of 67 Sheets

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

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EXCAVATION EMBANKMENT

Sub-Totals	Cu. Yds.	Co. Yds.	Sub-Totals
10+60 901.46			
	0	58	

STA. 10+58 - F&I, 48" X 44' C.M.P. CULVERT
2 - F&I, 48" C.M.P. APRONS

	0	94	
10+50 902.86			
	12	106	
10+25 908.06			
	14	0	
10+18 908.88			
	3	0	
10+17 908.41			
10+00 908.76			

EXCAVATION EMBANKMENT

Sub-Totals	Cu. Yds.	Co. Yds.	Sub-Totals
12+00 906.66			
	144	0	
	77	0	
11+53 905.96			
BIT. LOT			
	43	4	
11+05 905.16			
BIT. LOT			
	1	1	
11+00 905.16			
	0	16	
10+83 904.76			
	0	63	
10+67 902.86			

SCALE : 1" = 10'

RENDOVA ST. E-ALIGN.

S.A.P. 62-601-01 S.A.P. 02-632-03 **Sheet No. 64A of 67 Sheets**

℄

TELEDYNE POST CROSS SECTION 1011 1.86 4/1992

29-118

EXCAVATION EMBANKMENT

Sub-Totals	Cu. Yds.	Cu. Yds.	Sub-Totals
15+65 908.90			
		14	0
15+50 909.46			
		40	0
15+00 908.46			
		63	0
14+00 907.86			
		98	0
13+00 907.36			

℄

TEMPORARY ENTRANCE
EARTHWORK BALANCE

COMMON EXC.	509 C.Y.
REGULAR FILL	342 C.Y.

SCALE: 1" = 10'

RENDOVA ST. E. — ALIGN.

S.A.P. 62-601-01 S.A.P. 02-632-03 **Sheet No. 64B of 67 Sheets**

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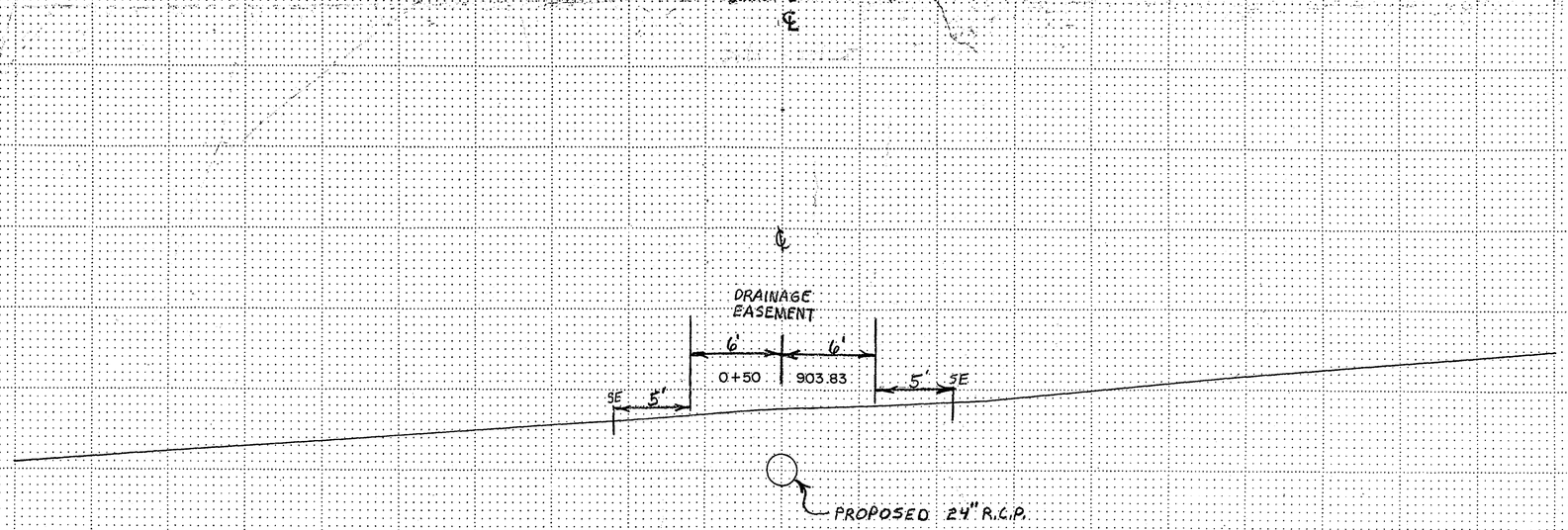
TELEDYNE POST CROSS SECTION 1971 1 lb. NOVAY

Fed. Proj. No.

STATION-ELEVATION



0+18 909.83

0+00 910.13
(142+50 CO. RD. 'J')

EASEMENT STA. 142+50 RT.

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 65 of 67 Sheets

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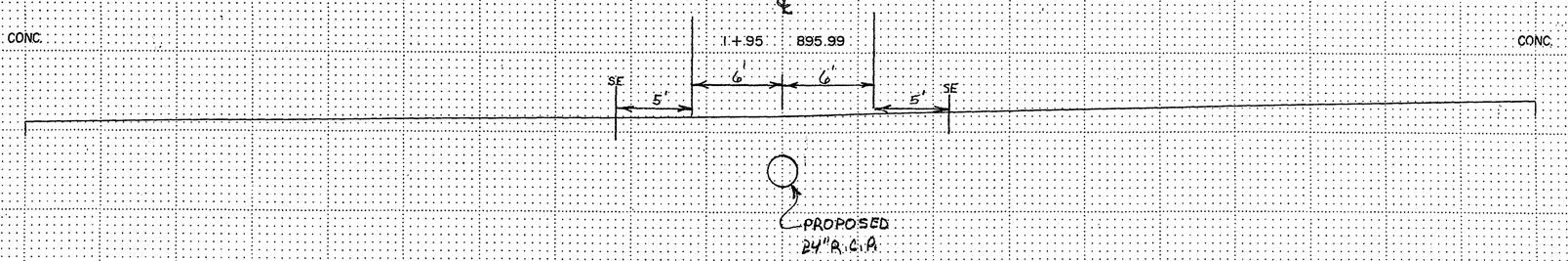
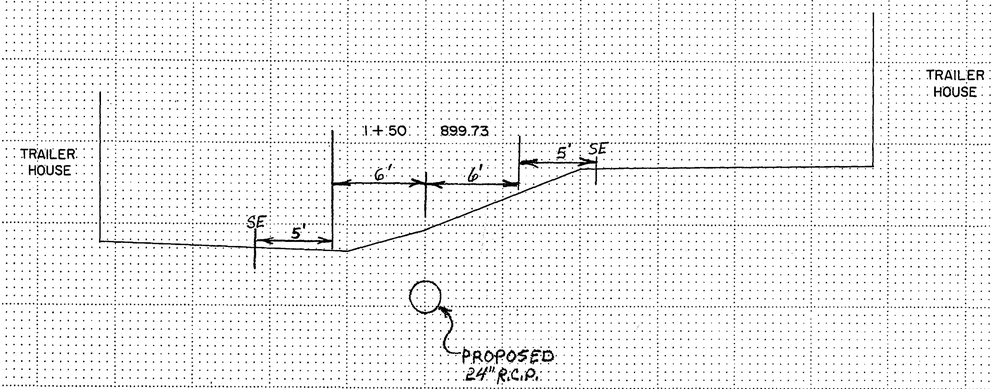
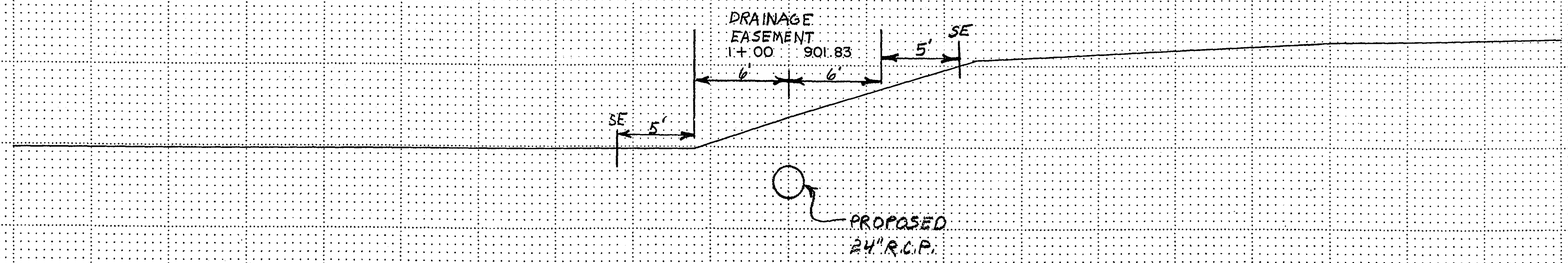
COPY EQUIPMENT FORM #1 T5080

Fed. Proj. No.

STATION–ELEVATION







EASEMENT STA. 142+50

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 66 of 67 Sheets

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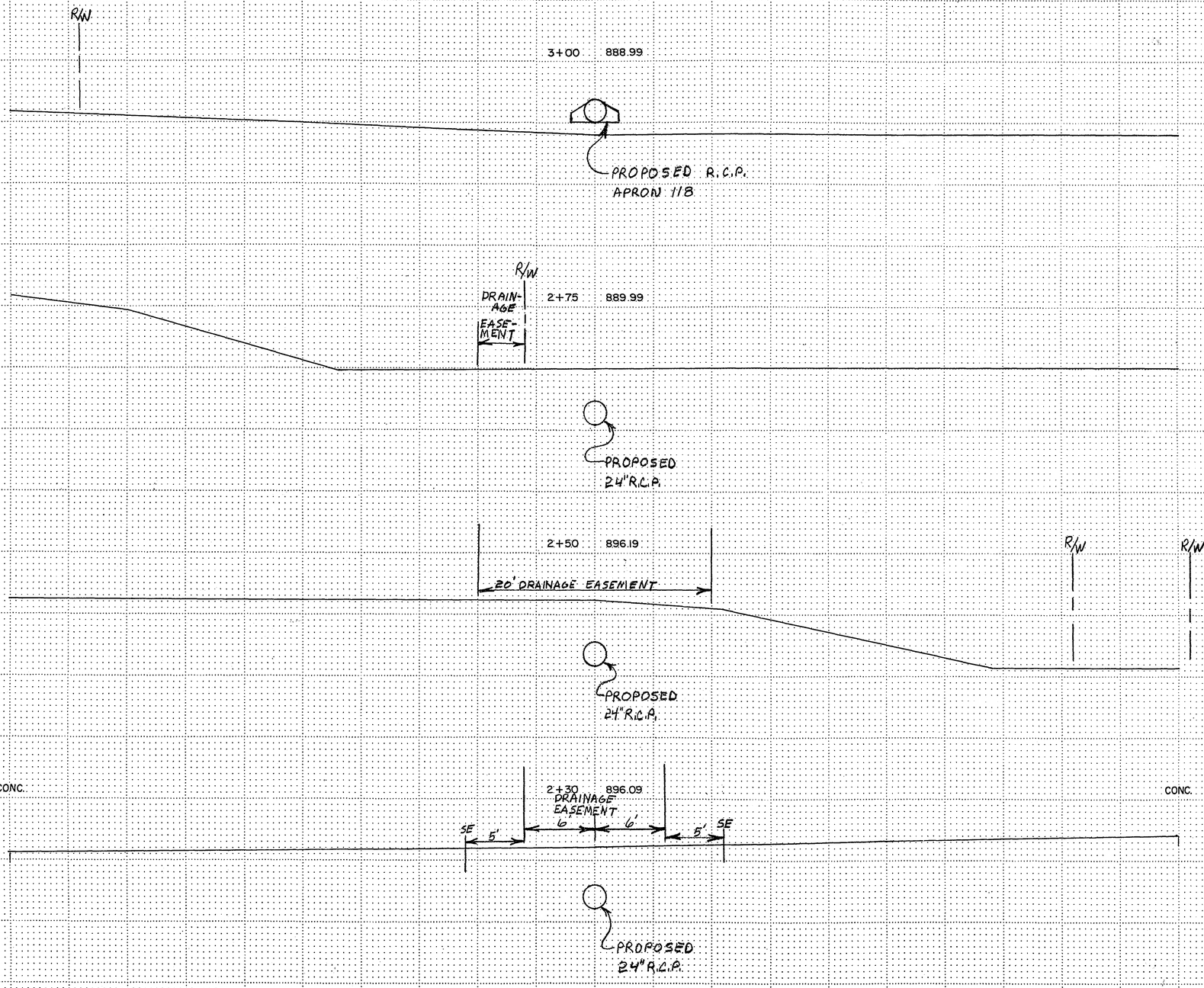
COPY EQUIPMENT FORM #1 75080

STATION-ELEVATION

℄

Fed. Proj. No.

EARTHWORK SUMMARY
SEE SHEET 61



EASEMENT STA. 142+50

S.A.P. NO. 02-632-03; S.A.P. NO. 62-601-01

Sheet No. 67 **of** 67 **Sheets**

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COPY EQUIPMENT FORM # 75080