FORM 100-A '65

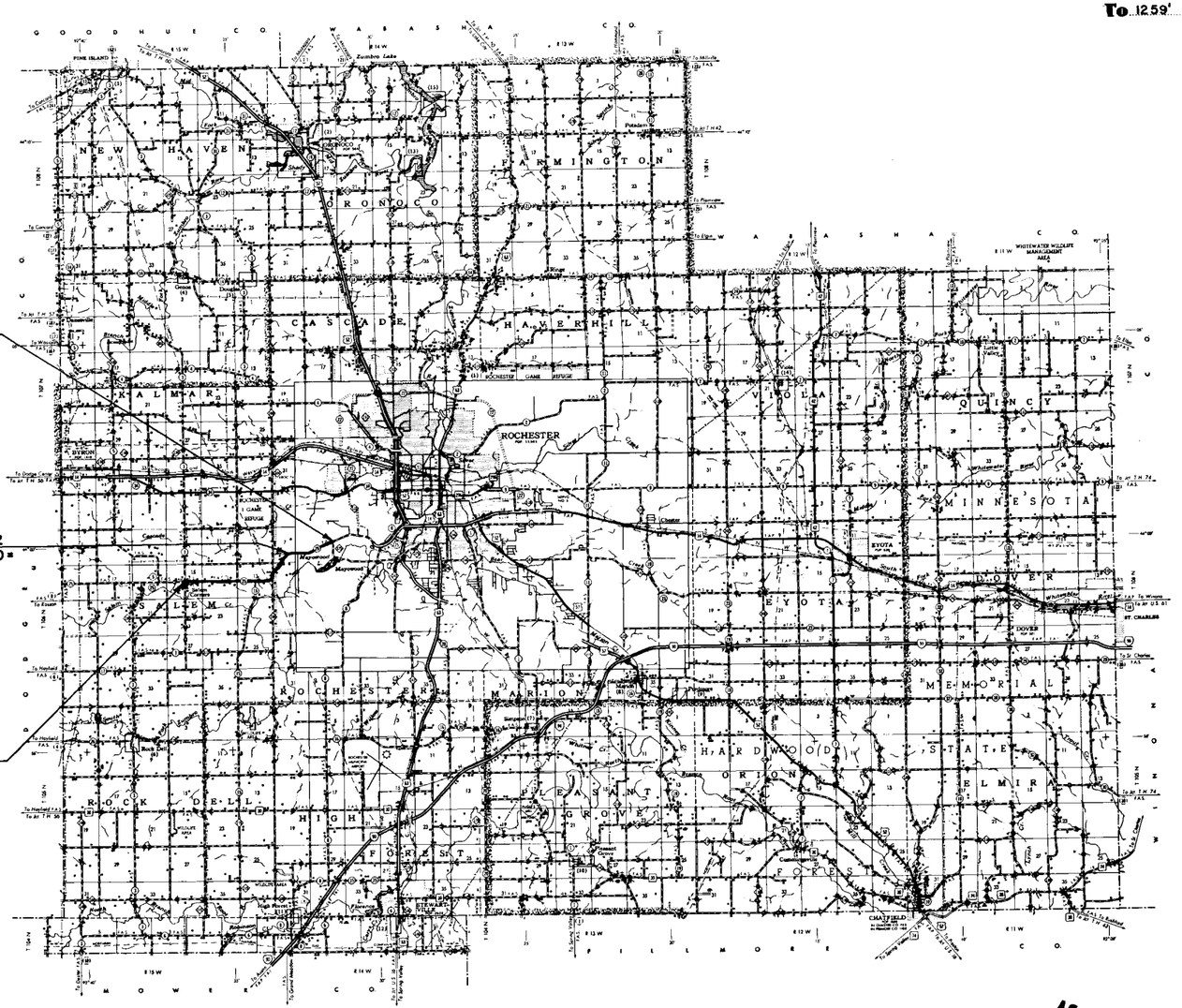
Fed. Proj. No.

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
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
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



END: SAP 55-625-12
STA. 535+48.65

EQUATION STA. 468+25.2 = STA. 457+83.0

BEGIN: SAP 55-625-12
STA. 280+33.3

AS BUILT PLANS

AS BUILT PLANS

AS BUILT PLANS

SPECIFICATIONS REFERENCE

THE 1978 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" SHALL GOVERN.

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR GRADING AND AGGREGATE BASE.

COUNTY STATE AID HIGHWAY NO. 25

BETWEEN CSAH 3 **AND** CR 125

From CENTER SECTION 15 T.106N.-R.15W.
(Give proper reference to Sections, Township and Range)

To 1259' EAST AND 365' NORTH OF CENTER SECTION 8 T. 106N.-R.14W.

GROSS LENGTH	24,473.15	FEET	4.635 MILES
BRIDGES-LENGTH		FEET	MILES
EXCEPTIONS-LENGTH		FEET	MILES
NET LENGTH	24,473.15	FEET	4.635 MILES

INDEX OF SHEETS

Sheet No. 1 Title Sheet & Layout Map
" No. 2 Est. Quantities & Typical Sec
" No. 3 To 11 Plan & Profile
" No. 12 To 43 Cross Sections

SCALES
PLAN 100 FEET
PROFILE HORZ. 100 FEET
VERT. 10 FEET
CROSS SECTION 10 FEET
INDEX MAP 10,560 FEET

DESIGN SPEED 55 M. P. H.

PROJECTED A. D. T. 2714
EST. PROJECTED HCADT 407

9 TON DESIGN

SOIL FACTOR 130

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

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

J. K. Dolan
COUNTY ENGINEER DATE 6/19/78

Olmsted COUNTY REG. NO. 10219

RECOMMENDED FOR APPROVAL G. J. Wiedl 6-20 1978
DISTRICT STATE AID ENGINEER

RECOMMENDED FOR APPROVAL Robert D. Gleich 8-3 1978

APPROVED 8/3 1978
DIRECTOR, STATE AID

S.A.P. 55-625-12
State Project No.

Minn. Project No.

OLMSTED County, Minnesota. County Proj. No. Plan No. Sheet 1 of 43 Sheets

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	MUNICIPAL	RURAL	TOTAL ESTIMATED QUANTITIES
	2021.501	MOBILIZATION	LUMP SUM		1	1
	2502.551	METAL INSPECTION TEES	LIN. FT.		19	19
	2101.501	CLEARING	ACRE		1.93	1.93
	2101.502	CLEARING	TREE		113	113
	2101.506	GRUBBING	ACRE		1.93	1.93
	2101.507	GRUBBING	TREE		117	117
	2502.521	8" C.S. PIPE DRAIN	LIN. FT.		434	434
	2104.501	REMOVE PIPE CULVERTS	LIN. FT.		1708	1708
	2104.501	REMOVE SUB SURFACE DRAINS	LIN. FT.		37	37
①	2104.509	REMOVE CONCRETE BOX CULVERT	EACH		1	1
	2104.521	SALVAGE PRECAST CONC. CATTLE PASS	LIN.FT.		42	42
	2104.523	SALVAGE PRECAST CONC. CATTLE PASS END SECTION	EACH		2	2
	2502.521	10" C.S. PIPE DRAIN	LIN.FT.		120	120
	2105.501	COMMON EXCAVATION	CU.YD.		156,828	156,828
	2105.503	ROCK EXCAVATION	CU.YD.		43,355	43,355
	2105.507	SUBGRADE EXCAVATION	CU. YD.		27,188	27,188
②	2123.501	COMMON LABORERS	HOUR		18	18
②	2123.503	MOTOR GRADER	HOUR		30	30
②	2123.508	14 CU.YD. SCRAPER	HOUR		68	68
②	2123.509	DOZER	HOUR		52	52
④	2130.501	WATER	M-GAL.		200	200
③	2211.501	AGGREGATE BASE, CLASS 2	TON		35,459	35,459
	2502.521	12" C.S PIPE DRAIN	LIN. FT.		120	120
	2501.511	18" C.S. PIPE CULVERT	LIN. FT.		1590	1590
	2501.511	24" C.S. PIPE CULVERT	LIN. FT.		110	110
	2501.511	30" C.S. PIPE CULVERT	LIN. FT.		68	68
	2501.511	42" R.C. PIPE CULVERT CL. III	LIN. FT.		128	128
	2501.511	48" R.C. PIPE CULVERT CL. II	LIN. FT.		98	98
	2501.511	54" R.C. PIPE CULVERT CL. II	LIN. FT.		100	100
	2501.511	60" R.C. PIPE CULVERT CL. II	LIN. FT.		198	198
	2501.515	18" G.S. PIPE APRON	EACH		78	78
	2501.515	24" G.S. PIPE APRON	EACH		6	6
	2501.515	30" G.S. PIPE APRON	EACH		4	4
	2501.515	42" R.C. PIPE APRON	EACH		2	2
	2501.515	48" R.C. PIPE APRON	EACH		2	2
	2501.515	54" R.C. PIPE APRON	EACH		2	2
	2501.515	60" R.C. PIPE APRON	EACH		4	4
	2501.521	50" SPAN C.S. PIPE-ARCH CULVERT	LIN. FT.		50	50
	2501.521	44" SPAN R.C. PIPE-ARCH CULV. CL. II A	LIN. FT.		160	160
	2501.521	59" SPAN R.C. PIPE-ARCH CULV. CL. II A	LIN. FT.		156	156
	2501.521	65" SPAN R.C. PIPE-ARCH CULV. CL. II A	LIN. FT.		78	78
	2501.521	74" SPAN R.C. PIPE-ARCH CULV. CL. II A	LIN. FT.		82	82
	2501.521	102" SPAN R.C. PIPE-ARCH CULV. CL. II A	LIN. FT.		86	86
	2501.525	50" SPAN G.S. PIPE-ARCH APRON	EACH		2	2
	2501.525	44" SPAN R.C. PIPE-ARCH APRON	EACH		4	4
	2501.525	59" SPAN R.C. PIPE-ARCH APRON	EACH		4	4
	2501.525	65" SPAN R.C. PIPE-ARCH APRON	EACH		2	2

① REMOVE CONCRETE BOX CULV. STA. 286+63. INPLACE C104 x 42' CONCRETE BOX CULVERT.
② EQUIPMENT HOURS TO BE USED FOR OBLITERATING OLD ROAD IN LOCATIONS NOTED ON THE PLAN AND PROFILE SHEETS.
③ ITEM 2211.501 INCLUDES 875 TONS FOR 25 F. ENT., 840 TONS FOR 24 RES. DRIVES AND 2086 TONS FOR 10 PUBLIC ROAD APPROACH.
④ WATER TO BE USED AS A DUST PREVENTATIVE AS DIRECTED BY THE ENGINEER.

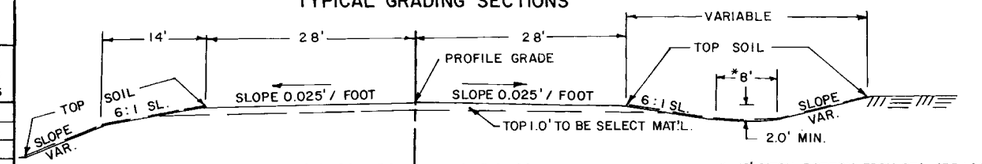
STANDARD PLATES

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

PLATE NO		DESCRIPTION
0003	A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000	H	REINFORCED CONCRETE PIPE
3014	H	REINFORCED CONCRETE PIPE ARCH DETAIL
3040	E	CORRUGATED METAL PIPE
3100	F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3110	D	CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH
3122	G	METAL APRON FOR C.M. PIPE-ARCH CULVERT
3123	G	METAL APRON FOR C.M. PIPE
3124	A	METAL APRON CONNECTION
3133	A	RIPRAP AT RCP OUTLETS
3143	C	INSPECTION TEES METAL
3145	A	CONCRETE PIPE JOINT TIES.
3221	A	CORRUGATED STEEL PIPE COUPLING BAND
8000	F	STANDARD BARRICADES
9000	B	APPROACHES AND ENTRANCES.

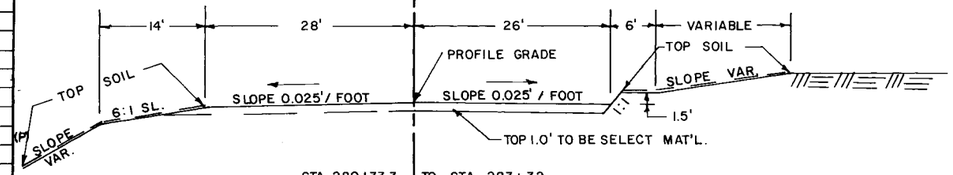
AS BUILT PLANS

TYPICAL GRADING SECTIONS

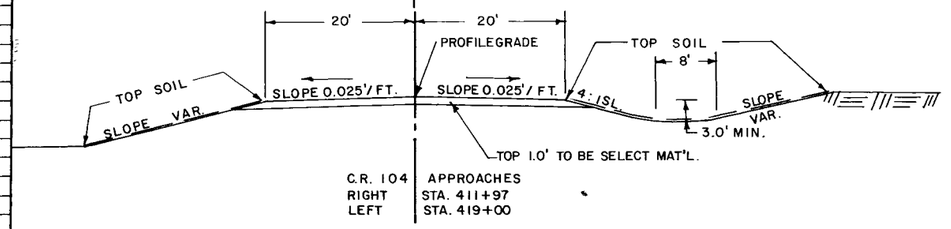


STA. 283+32 TO STA. 318+00
STA. 321+57 TO STA. 348+00
STA. 352+00 TO STA. 535+48.65

* 10' DITCH BOTTOM FROM STA. 435+00 TO STA. 441+00.

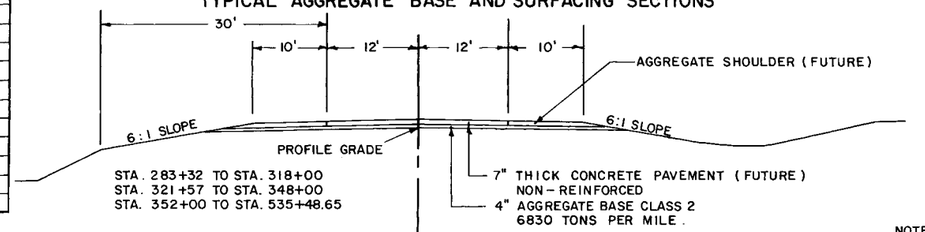


STA. 280+33.3 TO STA. 283+32
STA. 318+00 TO STA. 321+57
STA. 348+00 TO STA 352+00

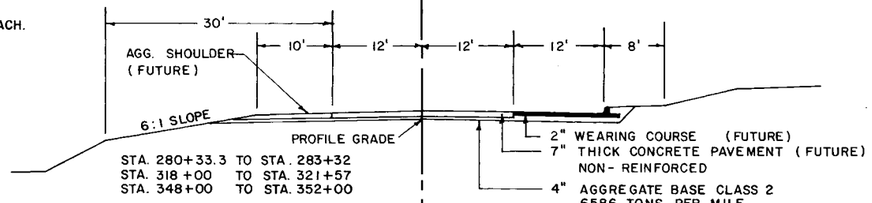


C.R. 104 APPROACHES
RIGHT STA. 411+97
LEFT STA. 419+00

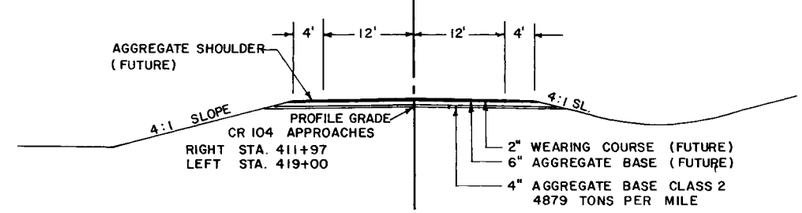
TYPICAL AGGREGATE BASE AND SURFACING SECTIONS



STA. 283+32 TO STA. 318+00
STA. 321+57 TO STA. 348+00
STA. 352+00 TO STA. 535+48.65



STA. 280+33.3 TO STA. 283+32
STA. 318+00 TO STA. 321+57
STA. 348+00 TO STA. 352+00



CR 104 APPROACHES
RIGHT STA. 411+97
LEFT STA. 419+00

NOTE: MATERIAL FROM THE UPPER 1.0' OF THE NATURAL TOP SOIL SHALL NOT BE USED IN THE UPPER 1.0' OF THE ROAD BED. PART OF THIS MATERIAL SHALL BE UNIFORMLY SPREAD ON SLOPES AND DITCH BOTTOMS TO A DEPTH OF 3". NO PAYMENT IN ADDITION TO THE CONTRACT PRICE FOR COMMON EXCAVATION WILL BE MADE FOR SPREADING THE TOPSOIL AS ABOVE PROVIDED, NOR WILL ANY UNDERCUTTING MADE IN EXCAVATION PRIOR TO PLACING THE TOPSOIL BE MEASURED FOR PAYMENT.

NOTE: CORRUGATED STEEL AND REINFORCED CONCRETE PIPE CULVERT EXCAVATION WILL BE CONSIDERED INCIDENTAL, AND WILL BE INCLUDED FOR PAYMENT UNDER UNIT PRICE FOR "PIPE CULVERT."

NOTE: SUBGRADE TREATMENT:
EXCAVATE 1.0' BELOW PROFILE GRADE FOR COMPACTION, AS SHOWN ON THE PLAN AND PROFILE SHEETS. EXCAVATION HAS BEEN COMPUTED AND IS LISTED AS SUBGRADE EXCAVATION. BACKFILL WITH SELECT MATERIAL FROM R.O.W. TAPERS SHALL BE 50:1 IN ALL CASES.

NOTE: PLACE SECTIONAL CONCRETE PIPE ON CLASS "B" AND "C" BEDDING AS DIRECTED BY THE ENGINEER. ALL BEDDING TO BE CONSIDERED AS INCIDENTAL AND NO DIRECT COMPENSATION SHALL BE MADE THERE FOR.

NOTE: ALL DIMENSIONS AND SLOPES SHOWN ON TYPICAL SECTIONS ARE APPROXIMATE.

AS BUILT PLANS

ALBINSON, INC. MINNEAPOLIS 55403

ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT	MUNICIPAL	RURAL	TOTAL ESTIMATED QUANTITIES	
2501.525	74" SPAN R.C. PIPE-ARCH APRON	EACH		2	2	
2501.525	102" SPAN R.C. PIPE-ARCH APRON	EACH		2	2	
2511.501	RANDOM RIPRAP CLASS "A"	CU.YD.		130	130	
2575.501	ROADSIDE SEEDING	ACRE		84	84	(P)
2575.502	SEED, MIXTURE 5	POUND		4200	4200	
2575.511	MULCH MATERIAL, TYPE 1	TON		168	168	
2575.519	DISC ANCHORING	ACRE		84	84	(P)
④ 2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON		8	8	
2575.505	SODDING	SQ.YD.		1200	1200	
2105.523	COMMON BORROW (CV)	CU.YD.		1151	1151	(P)

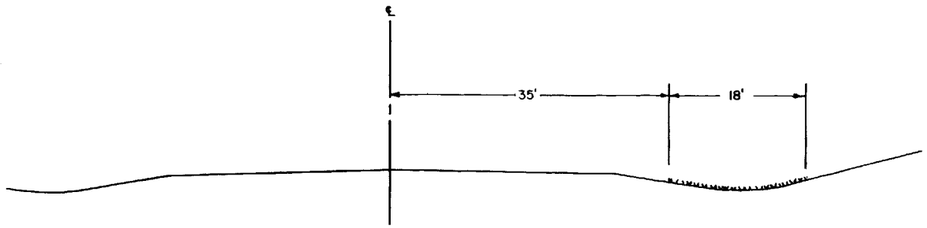
(P) PLAN QUANTITY.

④ COMMERCIAL FERTILIZER SHALL BE APPLIED AT A RATE OF 200# PER ACRE.

STANDARD PLATES

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

PLATE NO	DESCRIPTION



SODDED DITCH CROSS SECTION
RIGHT STA. 515 TO STA. 521

AS BUILT PLANS

S. A. P. 55-625-12
State Proj. No.

OLMSTED COUNTY **Sheet No.** 2A **of** 43 **Sheets**

ALBINSON, INC. MINNEAPOLIS 55403

Town Hall Ent. Lt. 282 + 54
Inpl. 18" X 30' C.M.P.
REMOVE
NO CULV. REQ'D

CONST. ENT. LT. STA. 284+00
NO CULV. REQ'D

℄ Culv. 286 + 63
Inpl. 4' X 10' X 42'
Conc. Box Culv. W/Wings
REMOVE STRUCTURE
102" SPAN X 86' RCP-ARCH
CULV. CLASS II A
2-102" SPAN RCP-ARCH
APRONS.
PLACE CULV. ON "B" BEDDING
F&I APPROVED JOINT TIES
35 CU.YDS. CLASS "A" RIP RAP
12" DEPTH.

Tile Outlet 21' Lt. 286 + 68
12" Perferated Metal Pipe
REMOVE 37 LIN. FEET PIPE DRAIN
F&I 4.0 LIN. FEET METAL INSPECTION
TEE AT INLET.
10" ~~12"~~ X 120' C.S. PIPE DRAIN
OUTLET ELEV. 66.0

CONST. F.E. LT. STA. 289 + 75
18" X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CONST. CULV. IN BERM 44' LT.
FROM STA. 282+27 TO STA. 284+36
~~18"X212' G.S. PIPE CULV.~~ NO CULV REQUIRED
~~2-18" G.S. PIPE APRONS~~
~~INLET ELEV. 74.0 OUTLET ELEV. 73.36~~

INSTALLED 4" PLASTIC DRAIN TILE
RT. STA. 298+80 — 310+95

BEGIN: SAP 55-625-12
STA. 280+33.3

C.S.A.H. 3
C.S.A.H. 25
P.I. 280 + 33.3
¾" Pipe
Center Section 15 T 108 N R 15 W
Town Hall
212' C.S. PIPE CULV.
Tile Outlet
Tele. Cable Marker
EXISTING TILE
Gas Pumps
Store
Ho.
Tele. Cable Markers
Trailer
Houses
Tele. Cable Marker

CONST. 8" DRAIN PIPE
STA. 299+00 SKEW 20°
8" X 120' C.S. PIPE DRAIN

Res. Drive Rt. 283 + 20
Inpl. 18" X 30' C.M.P.
REMOVE
NO CULV. REQ'D

INSTALLED BY O.C.H.D.

FE Rt. 289 + 83
No Culv. Inpl.
NO CULV. REQ'D
18"X 28' C.S. PIPE CULV
2- 18" G.S. PIPE APRON

Mobile Court Drive Rt. 290+54
Inpl. 18" X 45' C.M.P.
REMOVE
18"X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Mobile Court Drive Rt 291 + 80
Inpl. 18" X 26' C.M.P.
REMOVE
18"X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Res. Drive Rt 293 + 45
Inpl. 18" X 37' C.M.P.
REMOVE
18"X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

F. Ent. Rt. Sta. 295+26
Inpl. 18 X 30' C.M.P.
REMOVE
18" X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CONST. F.E. RT. STA. 296+00
18" X 26' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CL. 6 — GR. 6

B.M. Elev. 1078.74
Spk. in PP S.W. Cor.
Inter. C.S.A.H. 3 & 25

B.M. Elev. 1075.22
Nail in N.W. Wing
Box Culv. 286+63

B.M. Elev. 1097.14
Spk. in PP Rt.
Sta. 297+48

℄ SUBGRADE ELEVATION

P.I. + 55.26316
ELEV. 74.23421
800' V.C.
M = 3.8

P.V.C. + 55.26316
ELEV. 75.43421

P.V.T. + 55.26316
ELEV. 88.23420

+ 3.5 %

- 0.3 %

Profile 75' Lt.
Profile 75' Rt.

SUBGRADE TREATMENT:
EXCAVATE 1.0' BELOW PROFILE GRADE
FROM STA. 280+50 TO STA. 298+80

118" X 212' C.S. PIPE CULV.

COMMON EXC. 1499 CU.YDS. { 215 CU.YDS. T.S. / 1275 CU.YDS. COMMON EXC.
SUBGRADE EXC. 852 CU.YDS.
EMB. 1949 CU.YDS.

INLET ELEV. 69.0
OUTLET ELEV. 66.0

COMMON EXC. 11047 CU.YDS. { 1279 CU.YDS. TOPSOIL / 9768 CU.YDS. COMMON EXC.
SUBGRADE EXC. 3252 CU.YDS.
EMB. 10847 CU.YDS.

AS BUILT PLANS

VERTICAL CONTROL

ELEVATION SHOWN IN THIS PLAN ARE BASED ON MEAN SEA LEVEL DATUM, 1929 ADJ. AND TIED TO THE U.S. LEVEL NET THROUGH PERMANENT VERTICAL CONTROL MARE TT 51 WM 1953 ELEVATION 1076.092.

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

Res. Drive Lt. 309 + 18
Inpl. 18" X 30' C.M.P.
REMOVE
18"X32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CONST. F. ENT. LT. STA. 311 + 50
18"X28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Res. Drive Lt. 320 + 40
Inpl. 18" X 32' C.M.P.
REMOVE
NO DRIVE REQ'D.

FE Lt. 321 + 48
Inpl. 18" X 32' C.M.P.
REMOVE

CONST. F. ENT. LT. STA. ~~322 + 00~~ 323 + 25
18"X28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

STA. 329+00 CONST. PIPE DRAIN
8"X120' C.S. PIPE DRAIN
F & I 50 LIN. FT. INSPECTION TEE AT INLET
INLET ELEV. 28.2 OUTLET ELEV. 27.8

CONST. CULV. 44' LT. BETWEEN STA. 319+50 & STA. 321+64
18" X 214' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS
INLET ELEV. 54.4 OUTLET ELEV. 51.6

P.I. 307 + 08.25
Δ Lt. 0° 16' Inpl. 1/2 Row

Tele. Cable Markers

P.O.T. 318 + 10.17

Tele. Cable Marker

Ho.

8" Tile Outlet

6" Tile Outlet

CONST. 6" C.S. DRAIN TILE 13' LT. + RT.
STA. 317 + 50 — STA. 321 + 75
WITH FILTER AGGREGATE

CONST. F. ENT. RT. ST. 323 + 45
18" X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CONST. F. ENT. RT. STA. 309+66
18" X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Res. Drive Rt. 318 + 31
No Culv. Inpl.
NO CULV. REQ'D

Res. Drive Rt. 321 + 45
Inpl. 18" X 32' C.M.P.
REMOVE
NO CULV. REQ'D

TILE OUTLET RT. STA. 321 + 27
EXTEND TILE OUTLET TO 45' RT. STA. 321 + 67
8"X40' C.S. PIPE DRAIN

CL. 1 TREE — GR. 1 TREE

CL. 15 TREES — GR. 15 TREES

B.M. Elev. 1137.22
Spk. in PP Rt.
Sta. 307 + 06

B.M. Elev. 1162.37
Spk. in PP Rt.
Sta. 318+68

B.M. Elev. 1132.61
Spk. in Cor. Fe P Rt.
Sta. 329+38

Profile 75' Lt.

Profile 75' Rt.

℄ SUBGRADE ELEVATION

P.V.C. + 99.04250 ELEV. 43.82

P.V.T. + 99.00350 ELEV. 49.0

P.V.T. + 99 Elev. 49.31721

P.V.C. + ~~13.63636~~ 30.20699 ELEV. ~~30.92729~~ 32.00063

P.V.T. + ~~13.63636~~ 30.20699 ELEV. ~~30.92729~~ 32.00063

P.I. + ~~13.63636~~ 30.20699
ELEV. ~~30.92729~~ 32.00063
500' V.C.
M = ~~1.03125~~ 0.90625
C = 0.145

+3.5%

-3.1%

-1.45%

SUBGRADE TREATMENT:
EXCAVATE 1.0' BELOW PROFILE GRADE
FROM STA. 302+00 TO STA. 343+20

P.I. + 5 0
ELEV. ~~68.55~~
1300 V.C.
M = ~~10.725~~ 10.4
C = .2462

+ 50	54.4	+ 50	53.4	+ 50	51.8
	54.0		52.7	+ 64	51.6

FLOWLINE ELEVATION

DRAIN TILE GRADES

COMMON EXC. 23319 CU. YDS.

2539 CU. YDS. TOPSOIL
20780 CU. YDS. COMMON EXC.

SUBGRADE EXC. 6045 CU. YDS.

EMB. 20508 CU. YDS.

AS BUILT PLANS

SAP 55-625-12 C.S.A.H. 25 OLMSTED COUNTY, MINN. SHEET NO. 4 OF 43 SHEETS

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

℄ Culv. 345 + 58
Inpl. 60"X 42' S.C.P.
REMOVE

STA. 345+81 CONST PIPE DRAIN SKEW 30°
8" X 134' C.S. PIPE DRAIN
INLET ELEV. 00.8 OUTLET ELEV. 00.5

MOVE CULV. TO STA 345+85 SKEW 30°
60"X 112' R.C. PIPE CULV. CLASS III
2-60" R.C. PIPE APRONS
PLACE CULV. ON "B" BEDDING
F&I APPROVED JOINT TIES
18 CU. YDS. RANDOM RIP RAP CLASS "A"
12" DEPTH

Res. Drive Lt. 350 + 19
No Culv. Inpl.
MOVE DRIVE TO STA. 350+30
NO CULV. REQ'D

FE Lt. 353 + 48
No Culv. Inpl.
NO CULV. REQ'D
18" X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Twp. Rd. Lt. 359 + 34
Inpl. 18" X 32' C.M.P.
REMOVE
18" X 36' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

FE Lt. 361 + 80
Inpl. 18" X 30' C.M.P.
REMOVE
18"X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

℄ Culv. 363 + 47
Inpl. 58" Span X 58" C.M.P.
REMOVE
65" SPAN X 78' R.C. PIPE CULV.
CLASS III A
2-65" SPAN R.C. PIPE APRONS
PLACE CULV. ON "B" BEDDING
F&I APPROVED JOINT TIES
CONST. DITCH BLOCK INLET

REMOVE 42'X 8" DRAIN PIPE
F+I 48'X 8" DRAIN PIPE

ALL MERCHANTABLE TIMBER SHALL BE SALVAGED FROM RT. STA. 351+00 TO STA. 359+34
SEE SPECIAL PROVISIONS.

EXTEND TILE OUTLET
RT. STA. 338 + 10
65' X 8" PIPE DRAIN

Res. Drive Rt. 338 + 45
Inpl. 18" X 32' C.M.P.
REMOVE
30"X 32' C.S. PIPE CULV.
2-30" G.S. PIPE APRONS

FE Lt. 343 + 90
No Culv. Inpl.
24"X 28' C.S. PIPE CULV.
2-24" G.S. PIPE APRONS
MOVE TO STA. 340 + 60

CONST. F. ENT. RT. STA. 349 + 50
18"X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS
NO CULV. REQ'D.

Res. Drive Rt. 355 + 61
Inpl. 18" X 30' C.M.P.
REMOVE 28'
18"X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

FE Rt. 358 + 64
Inpl. 18" X 30' C.M.P.
REMOVE
NO F. ENT. REQ'D

F. E. RT. STA. 363+77
NO CULV. INPL.
~~18"X 28' C.S. PIPE CULV.~~
~~2-18" G.S. PIPE APRONS~~
NO CULV. REQ'D

CL. 1 TREE — GR. 1 TREE — CL. 0.02 ACRE — GR. 0.02 ACRE

B.M. Elev. 1122.62
Spk. in PP Rt.
Sta. 350+07

B.M. Elev. 1098.39
Spk. in PP Lt.
Sta. 359 + 66

Profile 75' Lt
Profile 75' Rt.

INLET ELEV. 03.7
OUTLET ELEV. 03.0

SUBGRADE TREATMENT:
EXCAVATE 1.0' BELOW PROFILE GRADE
FROM STA. 347+75 TO STA. 392+90

COMMON EXC.	13315	CU. YDS.
	2056	CU. YDS. TOPSOIL
	11259	CU. YDS. COMMON EXC.
SUBGRADE EXC.	6671	CU. YDS.
EMB.	16021	CU. YDS.

AS BUILT PLANS

INLET ELEV. 91.0
OUTLET ELEV. 89.8

SAP 55-625-12 C.S.A.H. 25 OLMSTED COUNTY, MINN. SHEET NO. 5 OF 43 SHEETS

SINGLE PLAN & PROFILE - DOTTED
CHARLES HOUNING COMPANY, INC

FE Lt. 373+68
Inpl. 18" X 30' C.M.P.
REMOVE

18"x28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

℄ Culv. 380+06
Inpl. 36"X46' S.C.P.
REMOVE

379+94
STA. ~~380+02~~
44" SPAN x 80' R.C.P.-ARCH
CULV. CLASS II A
2-44" SPAN R.C.P. ARCH APRONS

380+02
STA. ~~380+10~~
44" SPAN x 80' R.C.P. ARCH CULV. CL. II A
2-44" SPAN R.C.P. ARCH APRONS

PLACE CULVERTS ON "B" BEDDING
F.&I. APPROVED JOINT TIES

FE Lt. 380+77
Inpl. 18" X 30' C.M.P.
REMOVE

NO CULV. REQ'D.

FE Lt. 385+85
Inpl. 18" X ~~28'~~ 30' C.M.P.
REMOVE

18"x28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

℄ Culv. 391+42
Inpl. 58" Span. x 60' C.M.P.
REMOVE

74" SPAN x 82' R.C.P.-ARCH CULV. CLASS II A
2-74" SPAN R.C.P. ARCH APRONS
PLACE CULV. ON "B" BEDDING
F.&I. APPROVED JOINT TIES
19 CU. YDS. RANDOM RIP-RAP CLASS "A"
12" DEPTH.

Center Section 13 T106 NR 15

R.O.T. 385+73.50

FE Rt. 382+01
No Culv. Inpl.

NO F. ENT. REQ'D.

CSAH 15 Rt. 385+74
No Culv. Inpl.

NO CULV. REQ'D.

CONST. F. ENT. RT. STA. 390+50
18" X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

B.M. Elev. 1083.07
Spk. in PP 45' Rt.
Sta. 373+95

B.M. Elev. 1074.12
Spk. in PP SW. Cor.
C.S.A.H. 15 & 25

℄ SUBGRADE ELEVATION

P.I. +00
ELEV. ~~92.95~~ 93.55
400' V.C.
M = ~~-0.5~~ -0.55
C = 0.1375

P.V.C. +00 ELEV. 94.15
P.V.T. +00 ELEV. 93.78
P.V.C. +00 ELEV. 86.66
P.V.T. +00 ELEV. 83.35
P.V.C. +02.04082 ELEV. 73.58674
P.V.T. +02.04082 ELEV. 75.88672

-0.6%
-1.79%
-4.6%
-0.65%
+1.8%

P.I. +00
ELEV. 83.35
400' V.C.
M = ~~-0.475~~ -0.525
C = 0.1313

P.I. +02.04082
ELEV. 72.28674
400' V.C.
M = 1.225

INLET ELEV. 85.7
OUTLET ELEV. 84.2

INLET ELEV. 67.9
OUTLET ELEV. 66.6

Profile 75' Lt
Profile 75' Rt.

AS BUILT PLANS

SAP 55-625-12 C.S.A.H. 25 OLMSTED COUNTY, MINN. SHEET NO. 6 OF 43 SHEETS

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

RES. DR. RT. 398+55
INPL. 18"x30' CMP.
REMOVE
~~18"X32' C.S. PIPE CULV.~~
~~2-18" G.S. PIPE APRONS~~
NO CULV. REQ'D

℄ CULV. 402+26
INPL. 48"x56' SCP.
REMOVE
54"X100' R.C.P. CULV. CLASS III
2-54" R.C.P. CULV. APRONS
PLACE CULV. ON "B" BEDDING
F&I APPROVED JOINT TIES
16 CU. YDS. RANDOM RIP RAP
CLASS "A" 12" DEPTH

CO. RD. 104 RT. 411+05
INPL. 24"x56' CMP. W/A
REMOVE 63 LIN. FEET
24"X54' C.S. PIPE CULV.
2-24" G.S. PIPE APRONS

℄ CROSSES RES. DR. 415+45
INPL. 18"x30' CMP.
REMOVE
18"X32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

FM. E. LT. 416+98
NO CULV. INPL.
18"X28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CONST. F.E. LT. STA. 85+00 CR 104
NO CULV. REQ'D.

CO. RD. 104 LT. 419+14
NO CULV. REQ'D

Fed. Proj. No.

END GRADING CR 104
STA. 93+00

8" PLASTIC DRAIN TILE
INSTALLED BY O.C.H.D.

SUPERELEVATION 0.058'/FT.
LENGTH OF RUNOFF 280'
P.I. 407+36.0
Δ LT. 66° 16'
D 5° 00'
T 747.96
L 1325.33
E 222.5

P.I. 87+36.0
Δ LT. - 10°00'
D - 3° 00'
T - 167.09'
L - 333.33'
E - 07.3'

P.I. 84+38.67
Δ RT. - 75°47'
D - 75° 00'
T - 59.45'
L - 101.04'
R - 76.39'

P.I. 424+00.0
Δ RT. 16° 57'
D 2° 00'
T 426.87
L 847.50
E 31.63

SUPERELEVATION 004'/FT. OBLITERATE
LENGTH RUNOFF 190'

RES. DR. RT. 400+44
NO CULV. INPL.
~~18"X32' C.S. PIPE CULV.~~
~~2-18" G.S. PIPE APRONS~~
NO CULV. REQ'D

FM. E. RT. 403+50
NO CULV. INPL.
NO CULV. REQ'D.

PIPE LINE MARKER

30½ CU. YDS. COMMON EXC. FOR NEW RD. WAY

OBLITERATE OLD ROAD

END GRADING CR. 104
STA. 81+00

CR. 104
P.I. 83+82.0
Δ LT. 63°00'
D 22°
T 159.87'
L 286.36
E 45.01
R 260.44'

GLENCROFT LANE S.W. RT.
STA. 81+73
INPL. 18"x52' CMP.
REMOVE 50'
18"X36" C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

177 CU. YDS. COMMON EXC. FOR CR 104 APPROACH

P.I. 82+88.97 CR 104=
419+15.00 C.S.A.H. 25

RES. DR. RT. STA. 423+40
INPL. 18"x30" C.M.P.
REMOVE 40'
18"X32" C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

F.E. RT. STA. 426+00
INPL. 18"x30" C.M.P.
NO CHANGE

CL. 13 TREES GR. 16 TREES — CL. 13 TREES GR. 13 TREES — CL. 3 TREES — GR. 3 TREES

B.M. EL. 1088.59
SPK IN T.P.
RT. STA. 398+71

B.M. EL. 1125.35
SPK. IN STUB. P.
RT. STA. 415+72

75' LT.
75' RT.

℄ SUBGRADE ELEV.

PROFILE CR. 104 RIGHT STA. 411+97.6

P.I. +00
ELEV. 111.1
100' V.C.
M = 0.5

P.I. +50
ELEV. 89.35
400' V.C.
M = 0.75

P.I. +50
ELEV. 91.18
400' V.C.
M = 1.55

P.I. +50
ELEV. 22.15
900' V.C.
M = 5.0625

P.V.C. +50 ELEV. 85.75
P.V.T. +50 ELEV. 89.9
P.V.C. +50 ELEV. 90.55
P.V.T. +50 ELEV. 98.05
P.V.C. +00
P.V.T. +00 ELEV. 20.2

+1.8%
0.35%
+0.8%
+3.4%
-1.1%
1.0%

INLET ELEV. 81.0
OUTLE ELEV. 77.3

NOTE: 977 CU. YDS. COMMON EXC. TO BE HAULED FROM OLD ROAD STA 10+00 TO STA. 12+28 AND PLACED IN EMBANKMENT OF CR. 104 APPROACH.
EARTHWORK QUANTITIES FROM CR. 104 APPROACHES ARE INCLUDED IN QUANTITIES IN BALANCE FROM STA. 392+74 TO STA. 420+00

COMMON EXC.	~~29543~~ 24991	CU. YDS.	~~3340~~ CU. YDS. TOPSOIL
ROCK EXC.	~~5496~~ 8233	CU. YDS.	~~26203~~ CU. YDS. COMMON EXC.
SUBGRADE EXC.	~~1862~~ 2101	CU. YDS.	
EMB.	24781	CU. YDS.	

SUBGRADE TREATMENT:
EXCAVATE 10" BELOW PROFILE GRADE
FROM STA. 396+10 TO STA. 401+15,
FROM STA. 408+50 TO STA. 417+80 AND
FROM STA. 418+70 TO STA. 422+00.

AS BUILT PLANS

Fed. Proj. No.

CONSTRUCT ℄ CULV. STA. 430+72
42"x 128' R.C.P. CULV. CLASS III
2-42" R.C.P. APRONS
PLACE CULV. ON "B" BEDDING
F & I. APPROVED JOINT TIES.
11 CU. YDS. RANDOM RIP RAP
CLASS "A" 12" DEPTH.

CONST. F. ENT. LT. STA 433+00
18"X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

F.M. E. LT. 446+76
INPL. 18"x 30' CMP.
REMOVE
30"x 36' C.S. PIPE CULV.
2-30" G.S. PIPE APRONS.

HO.

SHED

END GRADING T.W.P. ROAD
STA. 10+00

CONST. T.W.P. RD. APPROACH
LT. STA. 450+80.5
50" SPAN x 50' C.S.P.-ARCH. CULV.
2-50" SPAN G.S.P.-ARCH APRONS.

ALL MERCHANTABLE TIMBER SHALL BE SALVAGED FROM LT. & RT. STA. 436+80 TO STA. 445+00
SEE SPECIAL PROVISIONS

P.I. 11+70.8
Δ RT. 51° 05'
D 16° 00'
T 170.8
L 318.75

P.C. 10+00

+49

P.T. 13+18.75

OBLITERATE TWP. ROAD

P.O.S.T. 452+69.95

P.C. 434+13.19

F.E. +00

P.T. 441+40.46

WOODS

425 430 435 440 445 450 456

60' 60'

+76 +76

P.T. 428+20.63

NOT REQ'D

P.T. 437+77.40
Δ LT. 5° 27'
D 0° 45'
T 363.71
L 726.67
E 8.65'
NO SUPERELEVATION REQ'D.

SHED

GAR.

SPRING

P.C. 446+84.17

P.O.T. 14+05.75 TWP. RD.
P.O.C. 450+80.5 C.S.A.H. 25

OBLITERATE OLD ROAD

F.E.

F.E. RT. OF OLD RD.
INPL. 18"x 30' C.M.P.
REMOVE
NO F. ENT. REQ'D.

CONST. TWP. RD. APPROACH
RT. STA. 444+00
18"x 54' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS.

F. E. RT. 446+76
NO CULV. INPL.

NO CULV. REQ'D.

P.I. 452+80.15
Δ RT. 54° 56' 30"
D 5° 00'
T 595.98'
L 1098.83'
E 145.63'
SUPERELEVATION 0.058'/FT.
LENGTH OF RUNOFF 280'

℄ CULV. IN OLD RD.
LT. STA. 453+70
INPL. 24"x 52' C.M.P.
REMOVE
NO CULV. REQ'D.

SECTIONAL CONC. CATTLE PASS IN OLD RD.
60"x 42' S.C.P. AND 2-60" APRONS
SALVAGE

CONST. 60' RADIUS CULDESAC

RES. DR.

100'

CONST. F. ENT.
18" X 26' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CL. 1.34 ACRES — GR. 1.34 ACRES — CL. 0.57 ACRES — GR. 0.57 ACRES — CL. 10 TREES — GR. 10 TREES

EQUATION
P.T. 457+83.00
P.O.T. 458+25.20

B.M. EL. 1081.58
SPK. IN 36" ELM
℄ STA. 442+72

℄ SUBGRADE ELEV.

75' LT.
75' RT.

P.I. +65.7428
ELEV. 00.77715
700' V.C.
M = 3.0825

P.V.C. +15.71428
ELEV. 04.62715

-1.1%

INLET ELEV. 97.8
OUTLET ELEV. 90.9

P.V.T. +15.78428
ELEV. 84.67716

-4.6%

P.I. +00
ELEV. 48.6
400' V.C.
M = 1.85

P.V.C. +00
ELEV. 57.8

P.V.T. +00 ELEV. 46.8

-0.9%

P.V.C. +77.78281
ELEV. 44.29997

COMMON EXC.	~~26102~~ 27240	CU.YDS.	1788 CU. YDS. TOPSOIL
	~~24314~~ 25452	CU.YDS.	COMMON EXC.
ROCK EXC.	~~20703~~ 27068	CU. YDS.	
SUBGRADE EXC.	~~460~~	CU. YDS.	652
EMB.	37378	CU. YDS.	

SUBGRADE TREATMENT:
EXC. 1.0 BELOW PROFILE GRADE
FROM 433+65 TO 436+50 AND
FROM 440+40 TO 443+40

COMMON EXC.	~~13192~~ 17354	CU.YDS.	1543 CU. YDS. TOIL SOIL
	~~11649~~ 12172	CU.YDS.	15811 CU YDS COMMON EXC.
ROCK EXC.	~~12392~~	CU. YDS.	
SUBGRADE EXC.	~~859~~	CU. YDS.	961
EMB.	21583	CU. YDS.	

NOTE: QUANTITIES FOR TWP. ROAD APPROACH LT. STA. 450+80 ARE INCLUDED IN QUANTITIES IN BALANCE FROM 439+11 TO 457+83.

AS BUILT PLANS

State Proj. No. 55-625-12 CSAH 25 OLMSTED COUNTY, MINN. **Sheet No.** 8 **of** 43 **Sheets**

CONST. PIPE DRAIN STA. 469+85
12"~~10"~~ X 120' C.S. PIPE DRAIN
4.0 ~~7.0~~ LIN. FT. INSPECTION TEE.
INLET ELEV. 34.8 OUTLET ELEV. 34.4

℄ Culv. 469+35
Inpl. 36" X 38' S.C.P.
REMOVE

STA. 469+30
59" SPAN X 78' R.C. PIPE ARCH
CULV. CLASS II A
2-59" SPAN R.C.P.-ARCH APRONS

STA. 469+40
59" SPAN X 78' R.C. PIPE ARCH
CULV. CLASS II A
2-59" SPAN R.C.P.- ARCH APRONS
PLACE CULVERTS ON "B" BEDDING
F&I APPROVED JOINT TIES.

RES. DRIVE LT. STA. 470+28
INPL. 18" X 30' C.M.P.
REMOVE
18" X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CONST PIPE DRAIN STA. 469+15
8" X 130' C.S. PIPE DRAIN
INLET ELEV. 34.8 OUTLET ELEV. 34.4
HOOKED TO INPLACE TILE

END GRADING TWP. ROAD
STA. 10+00

TWP. ROAD

Tele. Cable Marker

Tile

P.O.T. 472 + 40.90

Shed

P.C. 10+00

P.I. 11+70.8
Δ RT. 51°08'
D 16°00'
T 170.8
L 318.75

P.T. 13+18.75

EQUATION
P.T. 457+83.0 =
P.O.T. 468+25.2

P.I. 452+80.15
Δ RT. 54°56'30"
D 5°00'
T 595.98'
L 1098.83'
E 145.63'
SUPERELEVATION 0.058'/FT.
LENGTH OF RUNOFF 280'

FE Rt. 472 + 26
Inpl. 18" X 30' C.M.P.
REMOVE
18" X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

TWP. Rd. Rt. 480 + 46
Inpl. 18" X 32' C.M.P.
REMOVE
18" X ~~36~~ 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Profile 75' Lt. - - - -
Profile 75' Rt. ———

℄ SUBGRADE ELEVATION

P.I. + 77.78261
ELEV. 42.49995
400' V.C.
M = 0.575

P.V.C. + 77.78261
ELEV. 44.29997

P.V.T. + 19.98261
ELEV. 42.99995

INLET ELEV. 38.3
OUTLET ELEV. 38.0

P.I. + 00
ELEV. 46.45
400' V.C.
M = 0.35

P.V.C. + 00
P.V.T. + 00

-0.9 %
+0.25 %

COMMON EXC.	4707 ~~2985~~ 2433	CU. YDS.	871 CU. YDS. TOPSOIL ~~2114~~ CU. YDS. COMMON EXC. 2593
ROCK EXC.	~~4221~~	CU. YDS.	
SUBGRADE EXC.	1642	CU. YDS.	
COMMON BORROW	~~1042~~ 00	CU. YDS. (CV)	
EMB.	8052	CU. YDS.	

SUBGRADE TREATMENT:
EXCAVATE 1.0' BELOW PROFILE GRADE
FROM STA. 454+00 TO STA. 483+00

AS BUILT PLANS

Res. Drive Lt. 485+29
Inpl. 18" X 30' C.M.P
REMOVE

18"x 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

℄ Culv. 493+79
Inpl. 60" X 44' S.C.P.
REMOVE

60"x 86' R.C. PIPE CULV. CLASS II
2-60" R.C. PIPE APRONS
PLACE CULV. ON "B" BEDDING
F. & I. APPROVED JOINT TIES
18 CU. YDS. RANDOM RIP RAP
CLASS "A" 12" DEPTH.

FE Lt. 497+50
No Culv. Inpl.

NO CULV. REQ'D.

℄ Culv. 499+38
Inpl. 36" X 63' S.C.P.
REMOVE

MOVE CULV. TO STA. 498+95
SKEW 30°
48"x 98' R.C. PIPE CULV. CL. II
2-48" R.C. PIPE APRONS
PLACE CULV. ON "B" BEDDING
F. & I. APPROVED JOINT TIES
13 CU. YDS. RANDOM RIP RAP
CLASS "A" 12" DEPTH

CONST. PIPE DRAIN STA. 499+05
SKEW 30°
8"x 140' C.S. PIPE DRAIN
3.0' LIN. FT. INSPECTION TEE
INLET ELEV. 35.0 OUTLET ELEV. 34.8

FE Lt. 501+80
Inpl. 24" X 26' C.M.P.
REMOVE

24"x 28' C.S. PIPE CULV.
2-24" G.S. PIPE APRONS

Weatherhills Rd. Sta. 4+00
℄ Culv. Inpl. 48" Span x 48' C.M.P.

NO CHANGE

LOT 2
BLOCK 1

4+45 Res. Dr.

END GRADING
STA. 4+00

P.I. 2+26.7
Δ LT. 51° 39'
D 25°
T 110.91
L 206.6
E 25.43

P.T. 3+22.39
P.C. 1+15.79

OBLITERATE OLD ROAD

Weather Vane

LOT 1
BLOCK 1

Weatherhill Rd. Lt. S.W. 54+66
No Culv. Inpl.

NO CULV. REQ'D.
MOVE ENT. TO STA. 512+00
18" X 54" C.S. PIPE CULVERT
CONST. F. ENT. RT. 3+00
18"X 30' C.S. PIPE CUL 2-18" G.S. PIPE APRONS

P.O.T. 515+41.78

Tele. Cable Marker

P.O.T. 486+60.40

P.C. 490+96.94

P.I. 494+14.28
Δ Lt. 24° 59'
D 4°
T 317.34'
L 624.58'
E 34.73'

P.T. 497+21.52

Izaak Walton League Seedlings

Izaak Walton Pines

P.O.T. 511+48.59

CONST. F.E. RT. STA. 512+00
18" x 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

WEATHER VANE LEFT STA. 513+70
WEATHER VANE TO BE MOVED BY OTHERS.

FE Rt. 486+70
Inpl. 18" X 30' C.M.P.
REMOVE

18"x ~~28'~~ 30' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CONST. PIPE DRAIN STA. 492+55
8"X 120' C.S. PIPE DRAIN

IMPLACE 10" CONC. DRAIN TILE STA. 493+45
NO CHANGE

CONST. F. ENT.
RT. STA. 496+75
NO CULV. REQ'D

FE Rt. 499+61
Inpl. 15" X 30' C.M.P.
REMOVE

NO CULV. REQ'D.

FE Rt. 504+11
Inpl. 18" X 30' C.M.P.
REMOVE

18"x ~~28'~~ 30' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS
MOVE F. ENT. TO STA. ~~502+50~~ 504+20

CL. 8 TREES — GR. 8 TREES

CL. 6 TREES — GR. 6 TREES

B.M. Elev. 1039.13
Spk. in P.P. 44' Rt.
Sta. 496+85

B.M. Elev. 1069.65
Spk. in PP 48' Rt.
Sta. 506+60

Profile 75' Lt.
Profile 75' Rt.

℄ SUBGRADE ELEV.

45.55 45.1 44.65 44.2 43.75 43.3 42.85 42.4 41.95 41.5 41.05 40.6 40.51 41.15 42.54 44.66 47.54 51.15 55.15 59.15 63.15 67.07 70.59 73.59 76.09 78.09 79.59 80.59 81.09 81.09 80.59

P.I. +50
ELEV. 01.15
1800' V.C.
M = 20.25

P.V.C. +50 ELEV. 65.15

P.V.T. +00
ELEV. 45.55

-0.45%

P.V.C. +02.24719
ELEV. 40.58989

+0.6%

P.I. +02.24719
ELEV. 39.23989
600' V.C.
M = 3.3375

P.V.T. +02.24719
ELEV. 51.23988

+4.0%

INLET ELEV. 33.4
OUTLET ELEV. 33.0

INLET ELEV. 36.0
OUTLET ELEV. 35.3

SPECIAL DITCH GRADE LEFT +0.6%

33.7 34.3 34.9 35.5

P.I. +00
Elev. 80.3
100' V.C.
M=1.36875

+11.45%

P.I. +00
Elev. 03.2
300' V.C.
M=5.68125

-3.7%

1080 +0.5%

84.1 83.9 80.8 80.3 90.7 93.4 96.6 98.4 01.0 01.4 01.2 00.4 99.7 96.5 91.4

+13 +23 +36 +76 +50 +40 +23 +33

0 1 2 3 4 5

PROFILE WEATHER HILLS ROAD LEFT STA. 512+00

NOTE: EARTHWORK QUANTITIES FOR WEATHER HILLS APPROACH LEFT STA. 512+00 ARE INCLUDED IN QUANTITIES IN BALANCE FROM STA. 488+44 TO STA. TO STA. 516+71.

00
COMMON BORROW ~~109~~ CU. YDS. (CV)
1207
COMMON EXC. ~~1029~~ CU. YDS.
200
ROCK EXC. ~~544~~ CU. YDS.
SUBGRADE EXC. 373 CU. YDS.
EMB. 1604 CU. YDS.

168 CU. YDS. TOPSOIL
~~861~~ CU. YDS. COMMON EXC.
1039

COMMON EXC.	27063	CU. YDS.
SUBGRADE EXC.	2583	CU. YDS.
EMB.	21613	CU. YDS.

2427 CU. YDS. TOPSOIL
24636 CU. YDS. COMMON EXC.

AS BUILT PLANS

SUBGRADE TRATMENT:
EXCAVATE 1.0 BELOW PROFILE GRADE FROM STA. 485+20 TO 489+00, FROM STA. 494+80 TO 499+00 AND FROM STA. 506+50 TO 521+60.

1048.3 47.2 45.0 44.7 43.4 1042.5 42.0 41.6 41.3 41.2 41.2 1041.3 41.4 41.6 42.0 42.4 42.9 1043.8 46.4 49.5 53.5 57.8 1062.2 66.6 70.9 74.8 78.2 1080.9 82.9 84.1 85.0 84.9 1084.4

485 490 495 500 505 510 515

S.A.P. 55-625-12 C.S.A.H. 25 OLMSTED COUNTY, MINN.

Sheet No. 10 of 43 Sheets

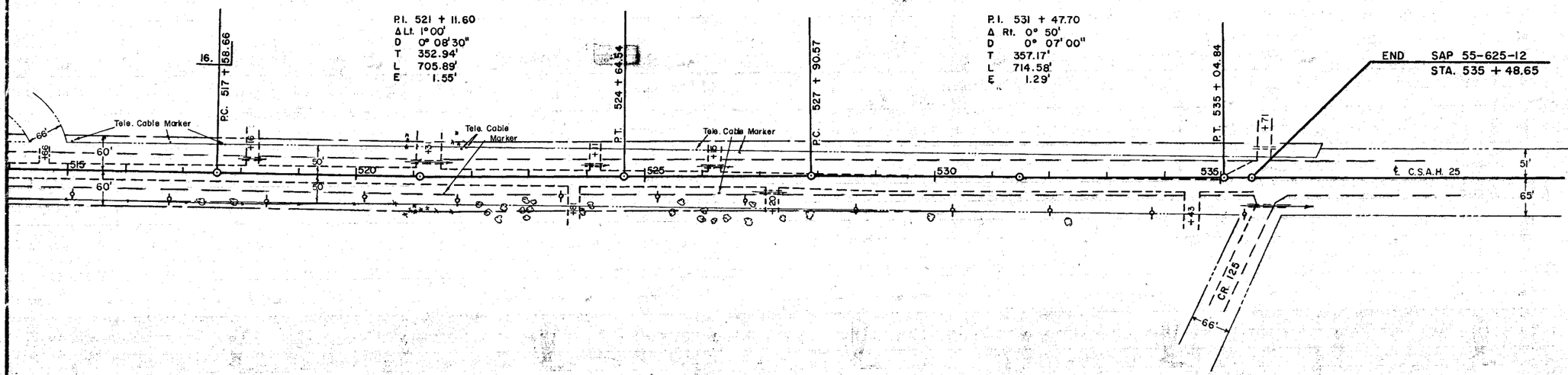
Res. Drive Lt. 518 + 16
Inpl. 18" X 30' C.M.P.
REMOVE
18" X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Res. Drive Lt. 521 + 31
Inpl. 18" X 60' C.M.P.
REMOVE
18" X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

FE Lt. 524 + 11
Inpl. 18" X 30' C.M.P.
REMOVE
18" X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

FE Lt. 526 + 15
Inpl. 18" X 30' C.M.P.
REMOVE
18" X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

FE Lt. 535 + 71
Inpl. 18" X 30' C.M.P.
NO CHANGE



CONST F. ENT. RT. STA. 520+25
18"X 28' C.S. PIPE CULV.
2 - 18" G.S. PIPE APRONS

Res. Drive Rt. 523 + 81
No Culv. Inpl.
18" X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

Res. Drive Rt. 527 + 20
Inpl. 18" X 30' C.M.P.
REMOVE 30'
18" X 32' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

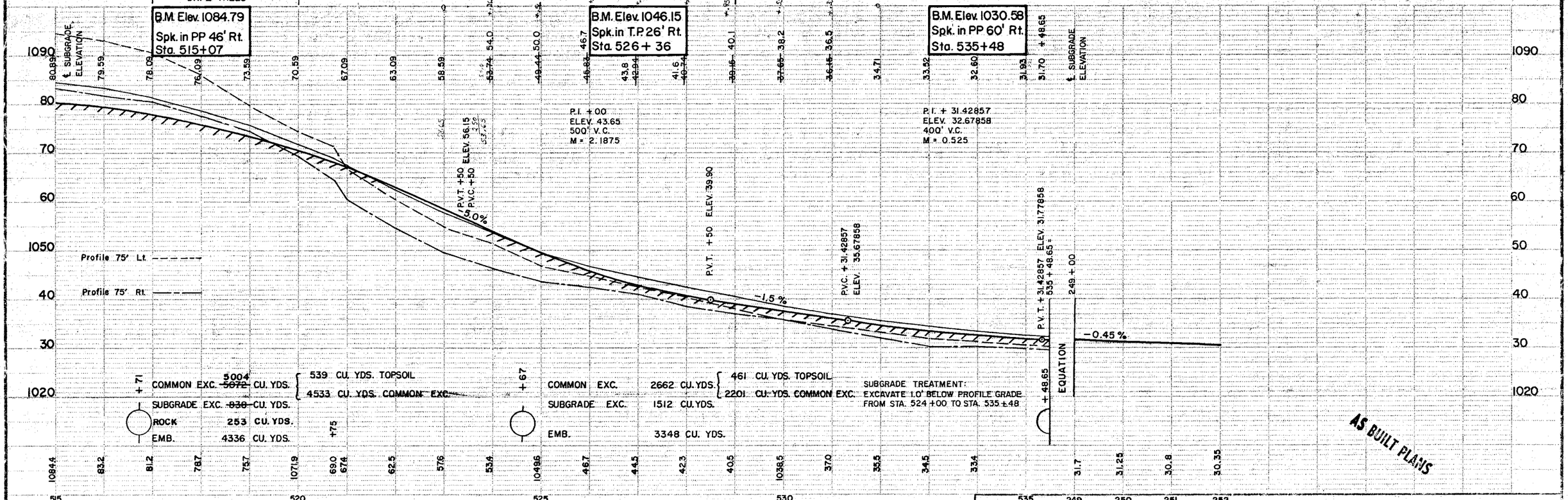
FE Rt. 534 + 43
No Culv. Inpl.
18" X 28' C.S. PIPE CULV.
2-18" G.S. PIPE APRONS

CL 2 TREES
GR. 2 TREES
CL 17 TREES
GR. 18 TREES

B.M. Elev. 1084.79
Spk. in PP 46' Rt.
Sta. 515+07

B.M. Elev. 1046.15
Spk. in T.P. 26' Rt.
Sta. 526 + 36

B.M. Elev. 1030.58
Spk. in PP 60' Rt.
Sta. 535+48



COMMON EXC. ~~5072~~ 5004 CU. YDS. { 539 CU. YDS. TOPSOIL; 4533 CU. YDS. COMMON EXC.
SUBGRADE EXC. ~~838~~ CU. YDS.
ROCK 253 CU. YDS.
EMB. 4336 CU. YDS.

COMMON EXC. 2662 CU. YDS. { 461 CU. YDS. TOPSOIL; 2201 CU. YDS. COMMON EXC.
SUBGRADE EXC. 1512 CU. YDS.
EMB. 3348 CU. YDS.

SUBGRADE TREATMENT:
EXCAVATE 1.0' BELOW PROFILE GRADE FROM STA. 524 + 00 TO STA. 535 ± 48

AS BUILT PLANS

SAP 55-625-12 C.S.A.H. 25 OLMSTED COUNTY, MINN. SHEET NO. 11 OF 43 SHEETS