MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

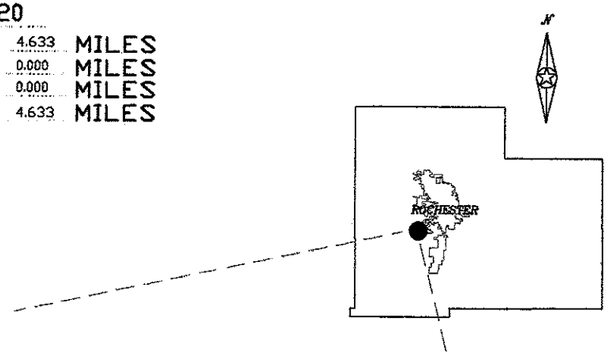
CONSTRUCTION PLAN FOR BITUMINOUS SHOULDERING, RIGHT TURN LANE & BY-PASS LANE

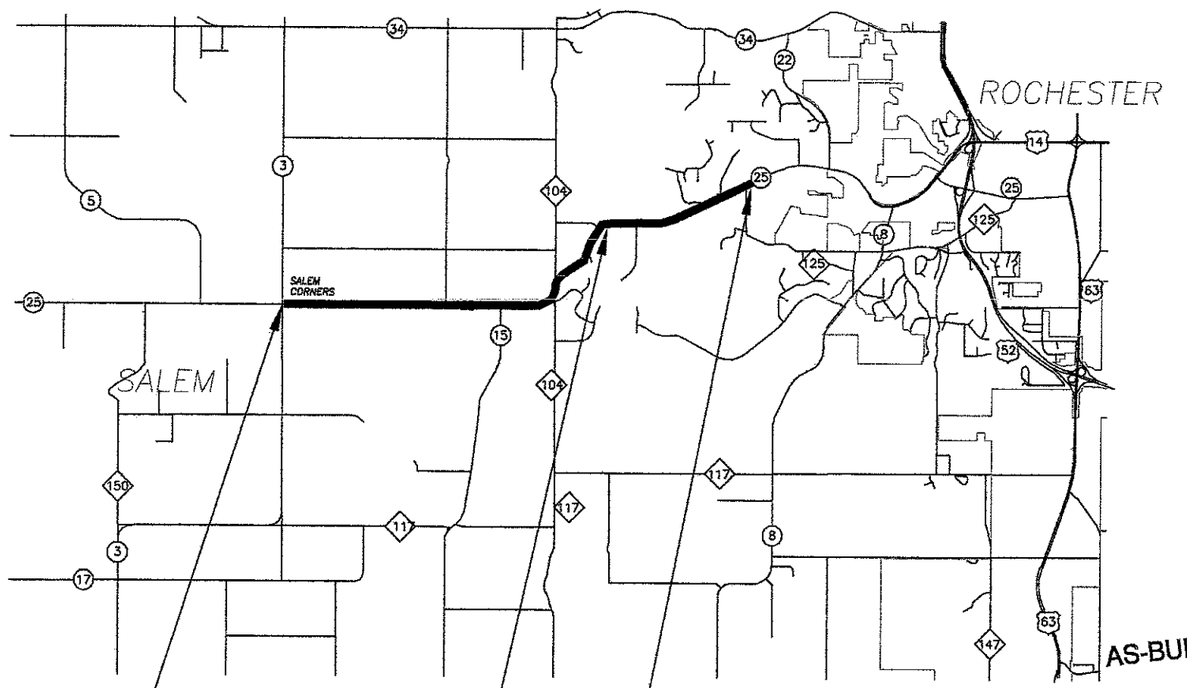
LOCATED ON C.S.A.H. 25 BETWEEN C.S.A.H. 3 AND C.R. 125 (GEOGRAPHIC DESCRIPTION)

FROM CENTER SEC. 15, T106 R15W TO NE 1/4 SEC. 8, T106 R14W (LEGAL DESCRIPTION)

S.A.P. NO. 55-625-20

GROSS LENGTH	24,461.030	FEET	4.633	MILES
BRIDGE-LENGTH	0.000	FEET	0.000	MILES
EXCEPTIONS-LENGTH	0.000	FEET	0.000	MILES
NET LENGTH	24,461.030	FEET	4.633	MILES





BEGIN: S.A.P. 55-625-20
STA. 280+45.33

END: S.A.P. 55-625-20
STA. 535+48.56

EQUA.: STA. 457+83.00 =
STA. 468+25.20

AS-BUILT
MAR 03 2003
ENGINEERING

PLAN 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
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
SLOPE EASEMENT

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLE
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRICAL CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRICAL MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRICAL CABLE
AERIAL TELEPHONE CABLE
SEWER (SANITARY OR SEWER)
SEWER MANHOLE

MINN. PROJ. NO. .....

GOVERNING SPECIFICATIONS

THE 2000 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

INDEX

SHEET NO. 1	TITLE SHEET
SHEET NO. 2	ESTIMATE OF QUANITIES & TYPICAL SECTIONS
SHEET NO. 3-4	DETAILS
SHEET NO. 5-9	PLAN SHEETS (INFORMATION ONLY)
SHEET NO. 10	TRAFFIC CONTROL

THIS PLAN CONTAINS 10 SHEETS

STA 280+45.33 TO EQUA. STA 287+00.00
RETRO FIT DOWEL BARS 2001 UNDER SAP 55-625-17

STA 280+45.33 TO EQUA. STA 287+00.00
CONCRETE PAVING 1982 UNDER SAP 55-625-13

STA 280+33.33 TO STA 535+48.56
GRADED 1979 UNDER SAP 55-625-13

STA 249+00.00 TO 287+00.00
GRADED 1973 UNDER C25-73-3 LOCAL FUNDS

DESIGN DESIGNATION

R = ΣN1B(20)
ADT (Current Year) = 1820(2002) Design Speed 55 MPH
ADT (Future Year) = 2912(2022) Based on STOPPING Sight Distance
DHV (Design Hr. Vol.) = Height of eye 3.5 FT. Height of object 0.5 FT.
D (Directional Distr.) = Design Speed not achieved at:
T (Heavy Commercial) = STA. TO STA. MPH
SOIL FACTOR = 130%
SHOULDER WIDTH = 8 FT.
FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR
TON DESIGN = 10

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

DATE 5/30/02 LICENSE NUMBER 19917

PRINTED NAME: KAYE M. BIENIEK

SIGNATURE: Kaye M Bieniek

APPROVED: COUNTY DESIGN ENGINEER

DATE 5/30/02 LICENSE NUMBER 10397

Michael J Sheehan

APPROVED: OLMSTED COUNTY ENGINEER

STATE AID APPROVALS:

DISTRICT STATE AID ENGINEER, REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY — DATE:

APPROVED FOR STATE AID FUNDING: — DATE: 6-10-02

for STATE AID ENGINEER

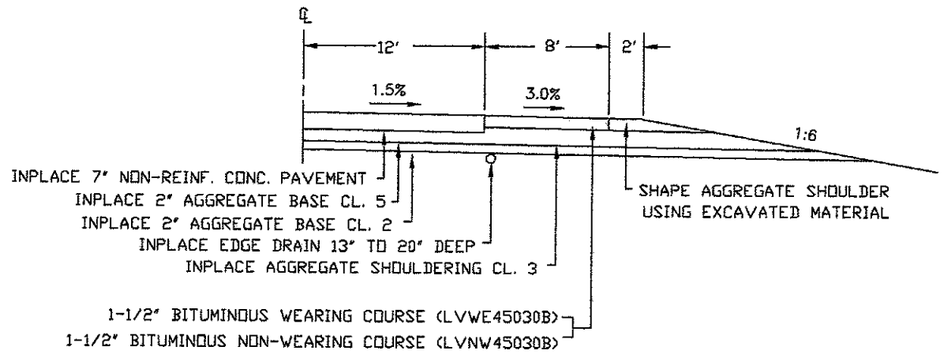
STATE AID PROJ. NO. 55-625-20 C.S.A.H. 25 SHEET NO. 1 OF 10 SHEETS

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	PARTICIPATING	TOTAL ESTIMATED QUANTITIES
①	2104.513	SAWING BITUMINOUS PAVEMENT	LIN. FT.	448	448
②	2105.515	UNCLASSIFIED EXCAVATION	CU. YD.	3223	3223 (P)
	2350.501	TYPE LV4 WEARING COURSE MIXTURE (LV4WE45030B)	TON	3013	3013
	2350.501	TYPE LV4 NON-WEARING COURSE MIXTURE (LV4NW45030B)	TON	3074	3074
	2350.501	TYPE MV4 WEARING COURSE MIXTURE (MV4WE45035C)	TON	248	248
	2350.501	TYPE MV4 NON-WEARING COURSE MIXTURE (MV4NW45035C)	TON	754	754
	2563.601	TRAFFIC CONTROL	LUMP SUM	1	1

(P) PLAN QUANITY

TYPICAL BITUMINOUS SHOULDERING SECTION



QUANTITY NOTES

① SEE SHEET NO. 4

② UNCLASSIFIED EXCAVATION REQUIRES REMOVING 3" OF AGGREGATE MATERIAL IN THE 8' SHOULDER AREAS, AND 6" IN THE 12' TURNLANES AND BY-PASS. THE EXCAVATED MATERIAL SHALL BE PLACED AS AGGREGATE SHOULDERING AND AT ROAD APPROACHES OR ENTRANCES AS DIRECTED BY THE ENGINEER.

BASIS OF PLANNED QUANTITIES

2350 BITUMINOUS MIXTURE 110 LBS / SQ. YD./ INCH OF DEPTH
BITUMINOUS MATERIAL FOR TACK COAT 0.05 GAL. / SQ. YD

STANDARD PLATES

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

PLATE NO.	DESCRIPTION
	NUMERICAL INDEX OF STANDARD PLATES
8000I	STANDARD BARRICADES
9000D	APPROACHES AND ENTRANCES

BITUMINOUS SHOULDER LOCATIONS

NOTE: ALL STATIONS ARE APPROXIMATE.

8' SHOULDER STATION LEFT ON CSAH 25	
BEGIN STATION	END STATION
284+39	309+21
310+06	319+33
323+82	347+93
352+27	358+80
364+31	383+42
389+52	398+93
415+92	418+55
423+84	446+44
447+48	450+16
453+99	457+83
468+25	469+82
470+74	484+95
485+89	511+52
515+68	521+87
524+53	535+49

8' SHOULDER STATION RIGHT ON CSAH 25	
BEGIN STATION	END STATION
283+57	290+13
295+78	317+89
321+92	337+93
338+87	355+15
356+09	380+18
386+77	398+23
400+83	407+16
413+15	423+11
424+05	442+98
469+02	479+65
481+17	523+26
524+20	526+73
527+67	530+69

AS-BUILT

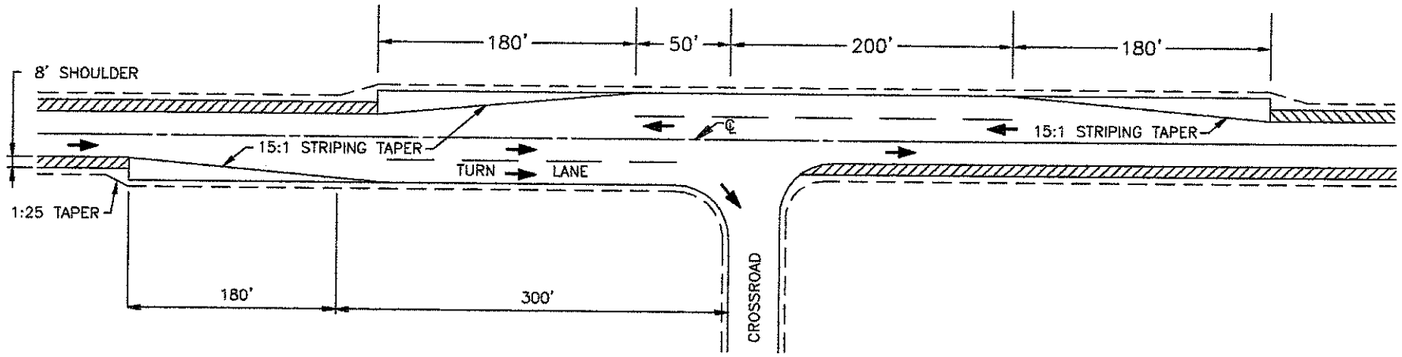
MAR 03 2003

ENGINEERING

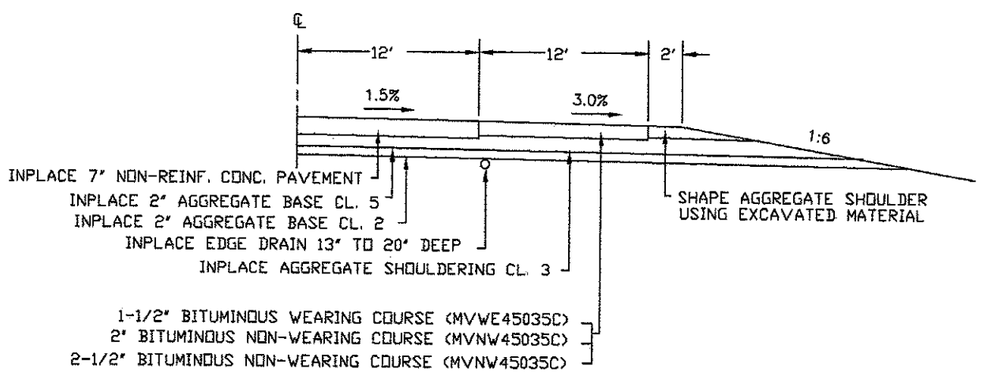
ESTIMATED QUANTITIES AND TYPICAL SECTIONS

CERTIFIED BY Kaye M Bienich LICENSED PROFESSIONAL ENGINEER LIC. NO. 19917 5/30 2002

TYPICAL BITUMINOUS TURN LANE & BY-PASS LANE SECTION



TYPICAL BITUMINOUS TURN LANE & BY-PASS LANE SECTION



TURN LANE & BY-PASS LANE LOCATIONS

NOTE: ALL STATIONS ARE APPROXIMATE.

NEW 12' TURN LANES	
BEGIN STATION	END STATION
359+51 LT	364+31 LT (70th AVE. S.W.)
380+18 RT	384+98 RT (C.S.A.H. 15)
530+69 RT	535+49 RT (C.R. 125)

NEW 12' BY-PASS LANE	
BEGIN STATION	END STATION
383+42 LT	389+52 LT (C.S.A.H. 15)

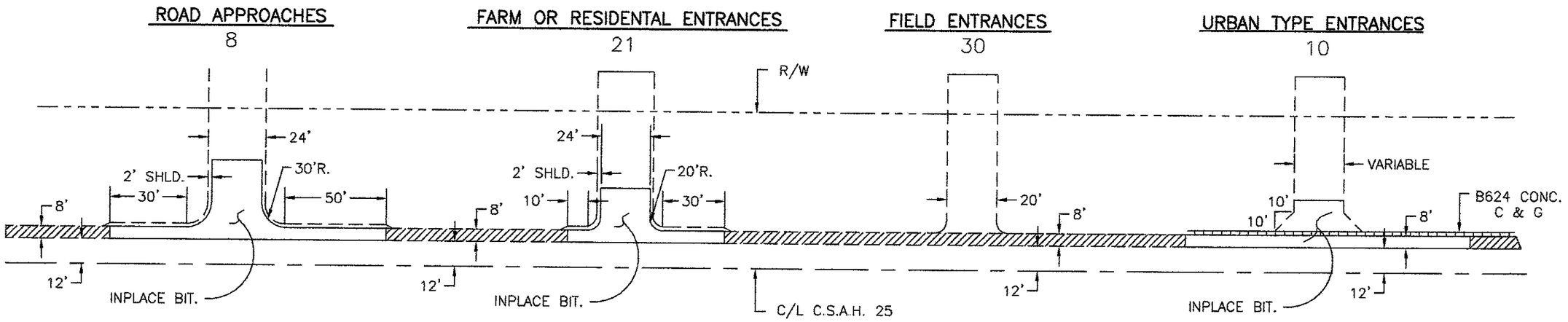
NOTE: INPLACE TURN LANE THAT ARE NOT OVERLAYED:
STA. 412+00 RT (C.R. 104)
STA. 419+15 LT. (C.R. 104)
STA. 450+80 LT (18th ST. S.W.)
STA. 512+00 LT. (WEATHERING HILLS)
STA. 520+31 LT. (WESTHILL DR.)

AS-BUILT
MAR 03 2003
ENGINEERING

TURN LANE & BY-PASS LANE TYPICAL SECTIONS

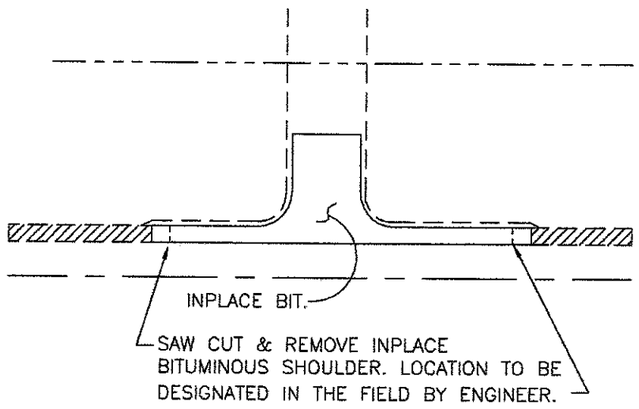
CERTIFIED BY Kaye M Bienick LIC. NO 19917 5/30 2002
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-625-20 | SHEET 3 OF 10 SHEETS



PLACE 3" THICK BITUMINOUS – SEE SHOULDERING TYPICAL

SAW BITUMINOUS PAVEMENT



AS-BUILT

MAR 03 2003

ENGINEERING

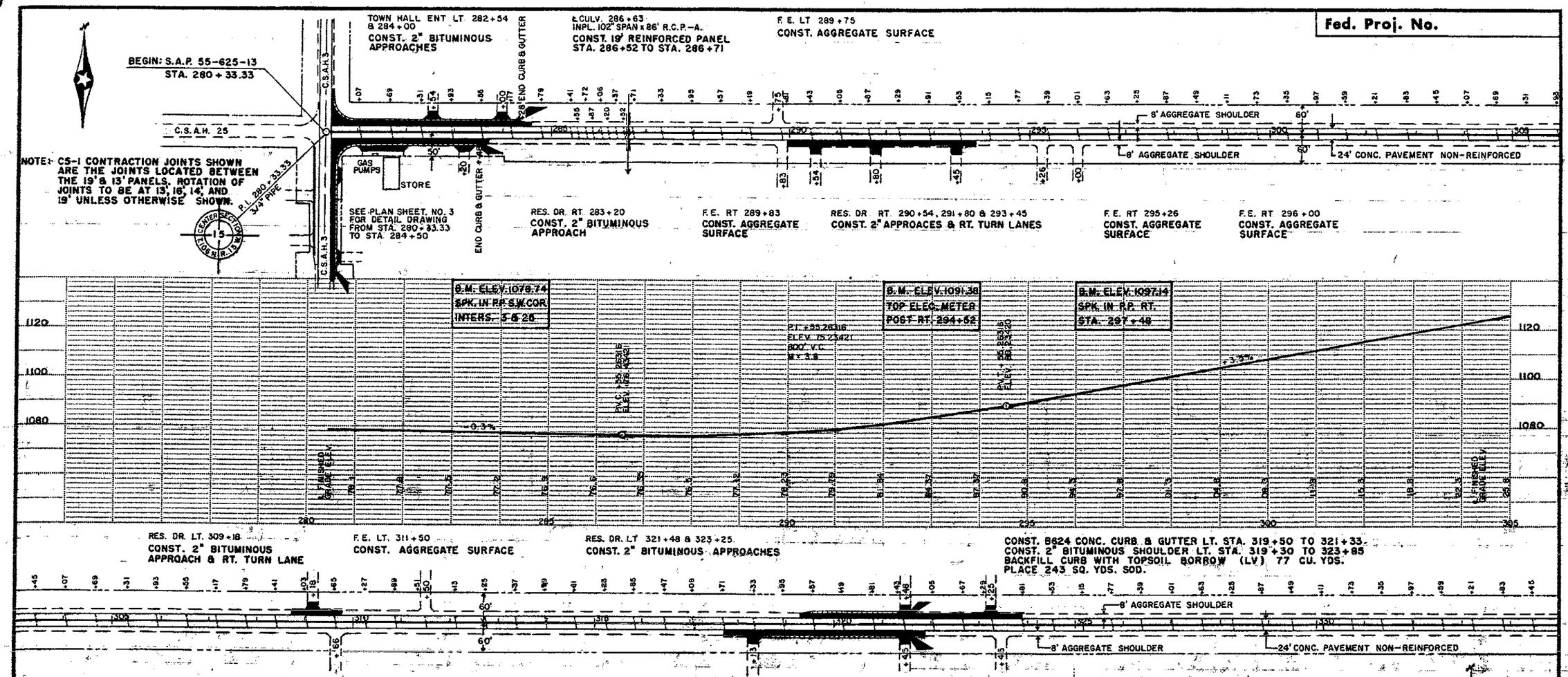
ENTRANCES AND DETAILS

CERTIFIED BY Kayl M Pieniek LICENSED PROFESSIONAL ENGINEER LIC. NO. 19917 5/30 20 02

S.A.P. 55-625-20

SHEET 4 OF 10 SHEETS

Fed. Proj. No.



State Proj. No. S.A.P. 55-625-13 OLMSTED COUNTY Sheet No. 5 of 10 Sheets

FOR INFORMATION ONLY | CERTIFIED BY Kevin M Biennek LICENSED PROFESSIONAL ENGINEER LIC. NO. 19917 5/30 2002 | S.A.P. 55-625-20 | SHEET 5 OF 10 SHEETS

Fed. Proj. No.

F. E. LT 343 + 90
CONST. AGGREGATE SURFACE

℄ CULV. 345 + 85 SKEWED 30°
INPL. 60" x 112' R.C.P.
CONST. 13', 16', 14', AND 19' REINFORCED PANELS
STA. 345 + 55 TO STA. 346 + 17.

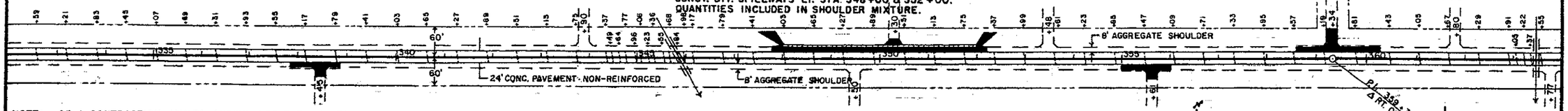
RES. DR. RT. 350 + 30
CONST. 2" BITUMINOUS APPROACH

CONST. 8624 CONC. CURB & GUTTER LT. STA. 348 + 00 TO STA. 352 + 00. CONST. 2" BITUMINOUS SHOULDER STA. 347 + 80 TO STA. 352 + 20. BACKFILL CURB WITH TOPSOIL BORROW (LV) 162 CU. YDS.
PLACE 497 SQ. YDS. SOD.
CONST. BIT. SPILLWAYS LT. STA. 348 + 00 & 352 + 00.
QUANTITIES INCLUDED IN SHOULDER MIXTURE.

F. E. LT 353 + 48
CONST. AGGREGATE SURFACE

TWP. RD. LT. 359 + 34
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

F. E. LT 361 + 80
CONST. AGGREGATE SURFACE



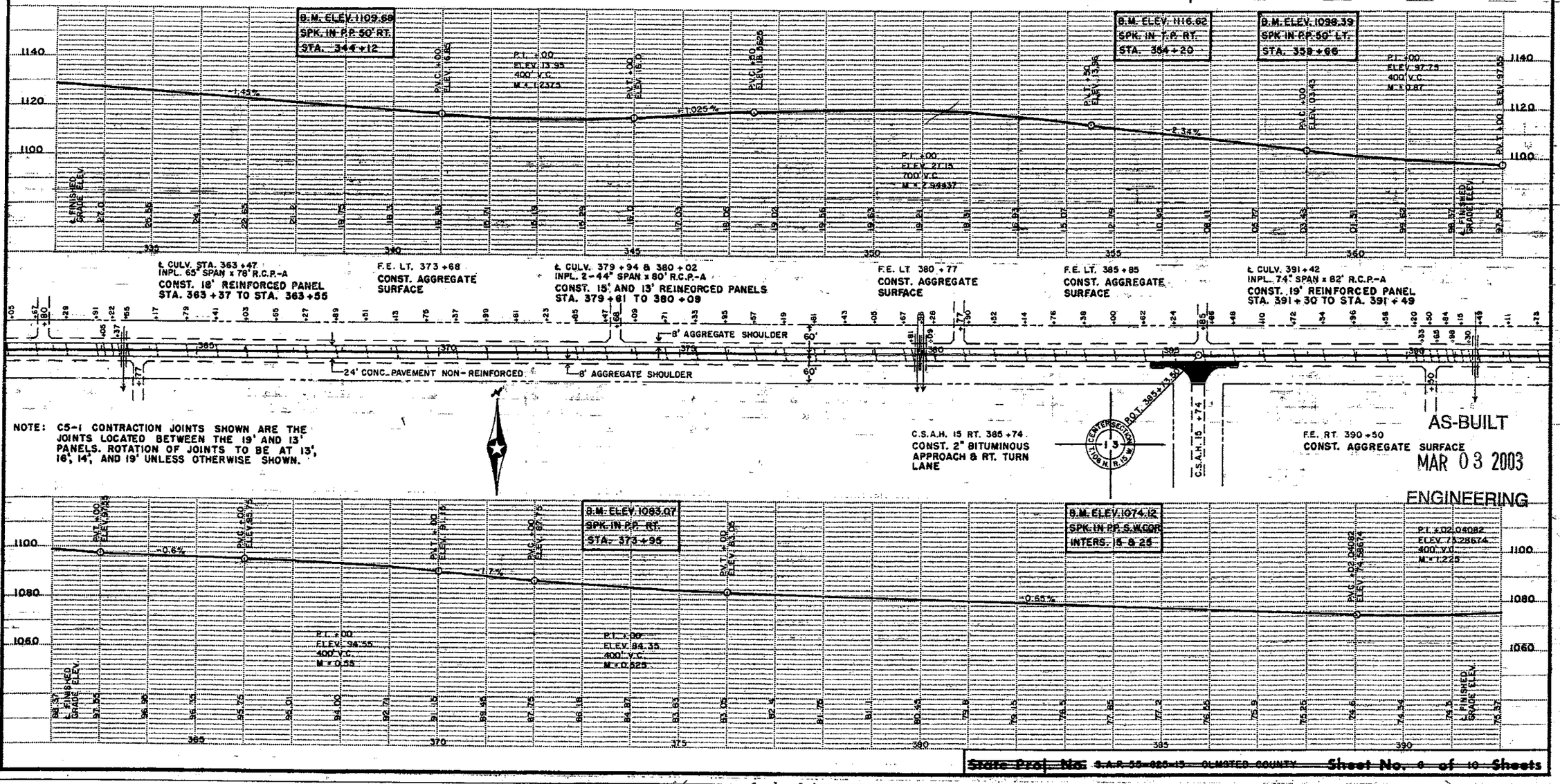
NOTE: C5-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 19' & 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 19' UNLESS OTHERWISE SHOWN.

RES. DR. RT 338 + 45
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

F. E. RT. 349 + 50
CONST. AGGREGATE SURFACE

RES. DR. RT 355 + 61
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

F. E. RT. 363 + 77
CONST. AGGREGATE SURFACE



℄ CULV. STA. 363 + 47
INPL. 65" SPAN x 78" R.C.P.-A
CONST. 18' REINFORCED PANEL
STA. 363 + 37 TO STA. 363 + 55

F. E. LT. 373 + 68
CONST. AGGREGATE SURFACE

℄ CULV. 379 + 94 & 380 + 02
INPL. 2 - 44" SPAN x 80' R.C.P.-A
CONST. 15' AND 13' REINFORCED PANELS
STA. 379 + 61 TO 380 + 09

F. E. LT. 380 + 77
CONST. AGGREGATE SURFACE

F. E. LT. 385 + 85
CONST. AGGREGATE SURFACE

℄ CULV. 391 + 42
INPL. 74" SPAN x 82' R.C.P.-A
CONST. 19' REINFORCED PANEL
STA. 391 + 30 TO STA. 391 + 49

NOTE: C5-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 19' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14', AND 19' UNLESS OTHERWISE SHOWN.

C.S.A.H. 15 RT. 385 + 74
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

AS-BUILT

F. E. RT. 390 + 50
CONST. AGGREGATE SURFACE

MAR 03 2003

ENGINEERING

~~State Proj. No.~~ ~~S.A.P. 55-625-15 OLMSTED COUNTY~~ **Sheet No. 6 of 10 Sheets**

FOR INFORMATION ONLY

CERTIFIED BY Kurt M Bruinsma LICENSED PROFESSIONAL ENGINEER LIC. NO. 17917 5/30 2002

S.A.P. 55-625-20

SHEET 6 OF 10 SHEETS

Fed. Proj. No.

NOTE: C5-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 19' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 19' UNLESS OTHERWISE SHOWN

P.I. 407+36.00
Δ LT. 66° 16'
D = 5° 00'
T = 747.96'
L = 1325.33
R = 1145.92

P.C. 399+88.04

MATCH LINE SIA 406+00

8' AGGREGATE SHOULDER

24' CONC. PAVEMENT NON-REINFORCED

8' AGGREGATE SHOULDER

CONST. 2" BITUMINOUS SHOULDER LT. STA. 399+00 TO STA. 416+05

RES. DR. LT. 415+45
CONST. 2" BITUMINOUS APPROACH

F. E. LT. 416+98
CONST. AGGREGATE SURFACE

C.R. 104 LT. 419+15
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

P.T. 413+15.37

24' CONC. PAVEMENT NON-REINFORCED

8' BITUMINOUS SHOULDER

8' AGGREGATE SHOULDER

P.C. 419+73.13

RES. DR. RT. 398+55 & 400+44
CONST. 2" BITUMINOUS APPROACH

CONST. B624 CONC. CURB & GUTTER RT. STA. 398+70 TO STA. 400+29.
CONST. 2" BITUMINOUS SHOULDER RT. STA. 397+95 TO STA. 400+74.
BACKFILL CURB WITH TOPSOIL BORROW (LV) 64 CU. YDS.
PLACE 196 SQ. YDS. SOD.
CONST. BITUMINOUS SPILLWAY RT. STA. 398+40
BIT. QUANTITIES INCLUDED IN SHOULDER MIXTURE.

℄ CULV. 402+26
INPL. 54" x 100' R.C.P.
CONST. 16' REINFORCED PANEL STA. 402+18 TO STA. 402+34

C.R. 104 RT. 412+00
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

B.M. ELEV. 1089.01
PAINTED BOLT TOP
WELL RT. 399+60

B.M. ELEV. 1116.50
SPK. IN P.P. 60' LT.
STA. 420+50

P.V.T. +00 ELEV. 1082.62
P.V.C. +50 ELEV. 86.79
P.I. +50 ELEV. 89.35 400' V.C. M = 0.75
P.V.T. +50 ELEV. 90.31
P.V.C. +50 ELEV. 91.55
P.I. +50 ELEV. 92.15 400' V.C. M = 1.55
P.V.T. +50 ELEV. 99.05
P.V.C. +00 ELEV. 100.85
P.I. +50 ELEV. 23.15 300' V.C. M = 5.0625
P.V.T. +00 ELEV. 21.25

+1.9%
+0.3%
+3.4%

NOTE: C5-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 19' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 19' UNELESS OTHERWISE SHOWN.

℄ CULV. 430+72
INPL. 42" x 128' R.C.P.
CONST. 13' AND 16' REINFORCED PANEL STA. 430+57 TO STA. 430+86

F.E. LT. 433+00
CONST. AGGREGATE SURFACE

P.I. 437+77.40
Δ LT. 5° 27'
D = 0° 45'
T = 363.71'
L = 726.67'
R = 7639.44'

RES. DR LT 446+76
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

AS-BUILT
MAR 03 2003
ENGINEERING

C.R. 104

8' AGGREGATE SHOULDER

24' CONC. PAVEMENT NON-REINFORCED

8' AGGREGATE SHOULDER

P.I. 424+00
RT. 16° 57'
D = 2° 00'
T = 426.87'
L = 847.50
R = 2864.79

P.C. 419+73.13

RES. DR. RT. 423+40
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

TWP. RD. RT. 444+00
SEE PLAN SHEET NO. 3 FOR CONSTRUCTION DETAILS

TWP. RD.

F.E.

P.C. 446+84.17

F.E. RT. NORTH TWP. RD.
CONST. AGGREGATE SURFACE

B.M. ELEV. 1112.44
HUB 100' LT.
STA. 433+50

P.V.T. +00 ELEV. 1112
P.I. 65.79428 ELEV. 01.77715 700' V.C. M = 3.0625
P.V.C. 15.79428 ELEV. 00.82715
P.V.T. +15.79428 ELEV. 86.57715
P.V.C. +00 ELEV. 88.8

-1.1%
-4.6%
-4.6%

State Proj. No. S.A.P. 55-625-13 OLMSTED COUNTY Sheet No. 7 of 10 Sheets

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TWP RD. LT. 450+80
CONST. 2" BITUMINOUS APPR.
& RT. TURN LANE

NOTE: C5-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 19' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 19' UNLESS OTHERWISE SHOWN.

P.T. 457+83.00

TWP RD. +80

P.I. 452+80.15
Δ RT. 54°56.15
D 5°00'
T 595.98'
L 1098.83'
R 1145.92'

EQUATION

℄ CULV. 469+30 & 469+40
INPL. 2-59" SPAN x 78" RCP-A.
CONST. 14'AN 19' REINFORCED PANELS
STA. 469+18 TO 469+51

P.O.T. 468+25.20

RES. DR. LT. 470+28
CONST. 2" BITUMINOUS APPROACH
& RT. TURN LANE

RES. DR LT 485+29
CONST. 2" BITUMINOUS APPROACH
& RT. TURN LANE

Fed. Proj. No.

8' AGGREGATE SHOULDER

24' CONC. PAVEMENT NON-REINFORCED

8' AGGREGATE SHOULDER

CONST. 2" BITUMINOUS SHOULDER RT.
STA. 443+08 TO 469+00

F.E. RT. 472+26
CONST. AGGREGATE SURFACE

TWP RD. RT. 480+46
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE.

TWP RD. +46

F.E. RT. 486+70
CONST. AGGREGATE SURFACE

B.M. ELEV. 1042.04
SPK. IN PP 50' LT.
STA. 470+35

B.M. ELEV. 1038.83
SPK IN PP 55' LT.
STA. 489+10

P.I. +00
ELEV. 49.6
400' V.C.
M = 1.85

P.I. +77.78261
ELEV. 43.49995
400' V.C.
M = 0.575

P.V.T. +00
ELEV. 47.78

P.V.T. +77.78261
ELEV. 43.99995

P.V.C. +00
ELEV. 46.85

P.I. +00
ELEV. 47.45
400' V.C.
M = 0.35

P.V.T. +00
ELEV. 46.55

-0.9%

+0.25%

-0.45%

1060
1040
1020

E.P. FINISHED GRADE ELEV.

P.I. 494+14.28
Δ LT. 24°59'
D 4°
T 317.34
L 624.58
R 1432.39

P.C. 490+96.94

℄ CULV. 493+79
INPL. 6'x 86' RCP
CONST. 14' REINFORCED PANEL STA. 493+72 TO 493+86.

P.T. 497+21.52

F.E. LT. 497+50
CONST. AGGREGATE SURFACE.

℄ CULV. 498+95 SKEWED 30°
INPL. 48"x 98' RCP
CONST. 12', 15', 13' & 18' REINF PANELS STA. 498+67 TO 499+25

F.E. LT 501+80
CONST. AGGREGATE SURFACE

TWP RD. LT 512+00
CONST. 4" AGGREGATE BASE
CONST. 2" BITUMINOUS SURFACE & RT. TURN LANE 12' WIDE.
CONST. 2' AGGREGATE SHOULDER.
SEE TYPICAL SECTION ON SHEET 2

TWP RD. +00

400'

RES. DR. LT. 518+16
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE.

F.E. RT. 496+75
CONST. AGGREGATE SURFACE

8' AGGREGATE SHOULDER

24' CONC. PAVEMENT NON-REINFORCED

F.E. RT. 499+61
CONST. AGGREGATE SURFACE

F.E. RT. 504+20
CONST. AGGREGATE SURFACE

NOTE: C5-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 19' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 19' UNLESS OTHERWISE SHOWN.

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B.M. ELEV. 1039.05
SPK. IN RP 50' LT.
STA. 498+10

B.M. ELEV. 1081.65
SPK. IN PP 60' RT.
STA. 513+90

P.I. +02.24719
ELEV. 39.23999
600' V.C.
M = 3.9375

P.V.T. +02.24719
ELEV. 40.56669

P.V.C. +50
ELEV. 68.16

+4.0%

0.45%

P.I. +50
ELEV. 92.15
1800' V.C.
M = 20.25

1080
1060
1040

E.P. FINISHED GRADE ELEV.

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S.A.P. 55-625-20

SHEET 8 OF 10 SHEETS

Fed. Proj. No.

RES. DR. LT. 518 +16
CONST. 2" BITUMINOUS APPROACH & RT TURN LANE

P.I. 521 +11.60
ΔLT. 1° 00'
D = 00° 08' 30"
T = 352.94'
L = 705.89'
R = 40,444.07

RES. DR. LT. 521+31
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

F.E. LT. 524 +11
CONST. AGGREGATE SURFACE

F.E. LT. 526 +15
CONST. AGGREGATE SURFACE

R.C. 517+58.66

P.T. 524+64.54

P.O.T. 535+48.56=

EQUATION

F.E. LT. 249 +22
CONST. AGGREGATE SURFACE

P.O.T. 249+00

8' AGGREGATE SHOULDER

24' CONC. PAVEMENT NON-REINFORCED

8' AGGREGATE SHOULDER

F.E. RT 520 +25
CONST. AGGREGATE SURFACE

RES. DR. RT. 523 +81
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

RES. DR. RT. 527 + 20
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

R.C. 527+90.57

F.E. RT. 534 + 43
CONST. AGGREGATE SURFACE

P.I. 531 + 47.70
ΔRT. 00° 50'
D = 00° 07'
T = 357.17'
L = 714.58'
R = 34,377.40'

P.T. 535+04.84

C.R. 125 +45
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

NOTE: C5-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 19' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 19' UNLESS OTHERWISE SHOWN.

B.M. ELEV. 1030.88
SPK. IN P.P. 60' RT.
STA. 536 + 48

P.I. +00
ELEV. 44.65
300' V.C.
M = 2.1875

P.V.T. +50
ELEV. 43.75

P.V.C. +00
ELEV. 40.90

P.V.T. +60
ELEV. 40.90

P.V.C. +14.2857
ELEV. 39.67858

P.V.T. +34.28857
ELEV. 39.67858

+1.5%

-1.8%

EQUATION

B.M. ELEV. 1030.01
SPK. IN P.P. RT.
STA. 26 +00

P.I. +00
ELEV. 28.55
400' V.C.
M = 0.335

P.V.C. +00
ELEV. 30.45

P.V.T. +00
ELEV. 29.89

-0.45%

-0.22%

1080
1060
1040
1020

FINISHED GRADE ELEV.

NOTE: C5-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 19' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 19' UNLESS OTHERWISE SHOWN.

8' AGGREGATE SHOULDER

24' CONC. PAVEMENT NON-REINFORCED

8' AGGREGATE SHOULDER

P.I. 263 +92.72
ΔRT. 5° 18'
D = 0.99738°
T = 265.898'
L = 531.39'
R = 5744.63'

P.C. 261+26.83

P.T. 266+58.22

EQUATION

1.38

F.E. LT. 271+96
CONST. AGGREGATE SURFACE

℄ CULV. 275+66 & 275+75
INPL. 2-51" SPAN x 76" R.C.P.-A.
CONST. 15' AND 14' REINFORCED PANELS STA. 275 +57 TO STA. 275 + 86.

34TH. AVE. S.W. LT. 275+97
T.W.P. RD.
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE.

RES. DR. LT. 277 +87
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

F.E. LT. 281 +24
CONST. AGGREGATE SURFACE

℄ CULV. 287 +41
INPL. 30" x 82" R.C.P.
CONST. 13' REINFORCED PANEL STA. 287.+37 TO STA. 287+45

RES. DR. LT. 279+83
CONST. 2" BITUMINOUS APPROACH & RT. TURN LANE

34TH. AVE. S.W. LT. 275+97
T.W.P. RD.

P.O.T. 266+56.84

F.E. RT. 266.+16
CONST. AGGREGATE SURFACE

P.C. 271+88.09

F.E. RT. 279 +75
CONST. AGGREGATE SURFACE

P.I. 276+38
ΔRT. 26° 20'
D = 2.97662°
T = 490.39'
L = 884.67'
R = 1924.86'

P.T. 280+72.76

EQUATION

MATCH EQUATION
P.O.T. 280+65.87

EQUATION

℄ BUILT
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B.M. ELEV. 1027.83
SPK. IN P.P. RT.
STA. 267 +75

P.I. +00
ELEV. 31.31
400' V.C.
M = 0.325

P.V.C. +00
ELEV. 30.87

P.V.T. +00
ELEV. 30.45

+0.22%

-0.43%

EQUATION

B.M. ELEV. 1022.83
BOLT IN P.P. 57'
RT. STA. 277 +22

P.I. +00
ELEV. 26.58
400' V.C.
M = 0.19

P.V.C. +00
ELEV. 26.96

P.V.T. +00
ELEV. 26.96

-0.05%

-0.05%

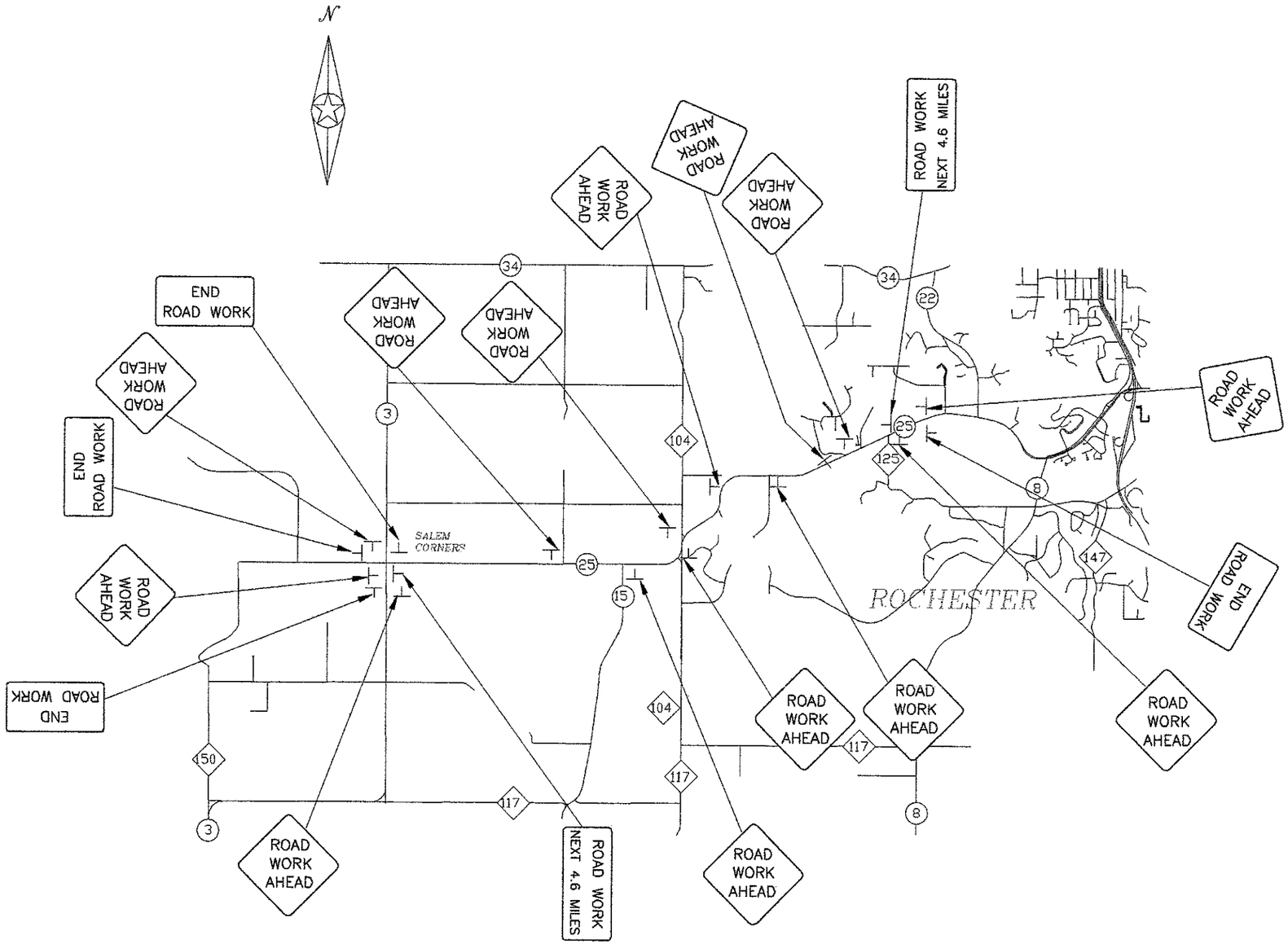
EQUATION

1040
1020

FINISHED GRADE ELEV.

State Proj. No. S.A.P. 55-625-13 OLMSTED COUNTY Sheet No. 9 of 10 Sheets

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ESTIMATE OF TRAFFIC CONTROL DEVICES				
DEVICE	NUMBER	SIZE (INCHES)	COLOR	TOTAL QUANTITY
LOW SHOULDER	W8-9	48 x 48	BLK/OR	SEE NOTE #5
UNEVEN LANES	W8-11	48 x 48	BLK/OR	SEE NOTE #5
ROAD WORK AHEAD	W20-1	48 x 48	BLK/OR	13
NO SHOULDER	W21-X1	48 x 48	BLK/OR	SEE NOTE #5
ROAD WORK NEXT_ MILES	G20-1	60 x 24	BLK/OR	2
END ROAD WORK	G20-2A	48 x 24	BLK/OR	4
	REBOUNDABLE PLASTIC DRUM	APPROX 36"	OR & WH	SEE NOTE #5

AS-BUILT

MAR 03 2003

ENGINEERING

TRAFFIC CONTROL LEGEND

⊥ POST OR STAND MOUNTED SIGN

TRAFFIC CONTROL NOTES

1. THE LOCATION OF SIGNS AND DEVICES WILL BE STAKED BY THE ENGINEER IN THE FIELD
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL ON THIS PROJECT.
3. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES INCLUDING THE TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL DATED JANUARY 2001
4. CONSTRUCTION ZONE SIGNING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL INCLUDE, BUT NOT BE LIMITED TO SIGNS FOR LANE CLOSURE, MACHINERY AHEAD, BUMP, DIP, LOOSE GRAVEL, ETC.. THE NUMBER AND LOCATION WILL BE DETERMINED BY THE CONTRACTORS OPERATION

TRAFFIC CONTROL

CERTIFIED BY Kaye M Briesch LIC NO. 19917 5/30 2002
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-625-20

SHEET 10 OF 10 SHEETS