LAX

MARCH 2019

PROJECT ID: 1662-01-61

COUNTY: GRANT

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
~~Section No.~~	~~4~~	~~Right-of-Way Plat~~
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
~~Section No.~~	~~7~~	~~Sign Plates~~
~~Section No.~~	~~8~~	~~Structure Plans~~
~~Section No.~~	~~8~~	~~Computer Earthwork Data~~
~~Section No.~~	~~9~~	~~Cross Sections~~

TOTAL SHEETS = 78

02

N

DESIGN DESIGNATION

A.A.D.T.	2016	=	2800
A.A.D.T.	2040	=	3400
D.H.V.		=	14.9
D.D.		=	60/40
T.		=	17.7%
DESIGN SPEED		=	60 M.P.H.
ESALS		=	1,500,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

PRAIRIE DU CHIEN - FENNIMORE

STH 35 TO DIAGONAL ST

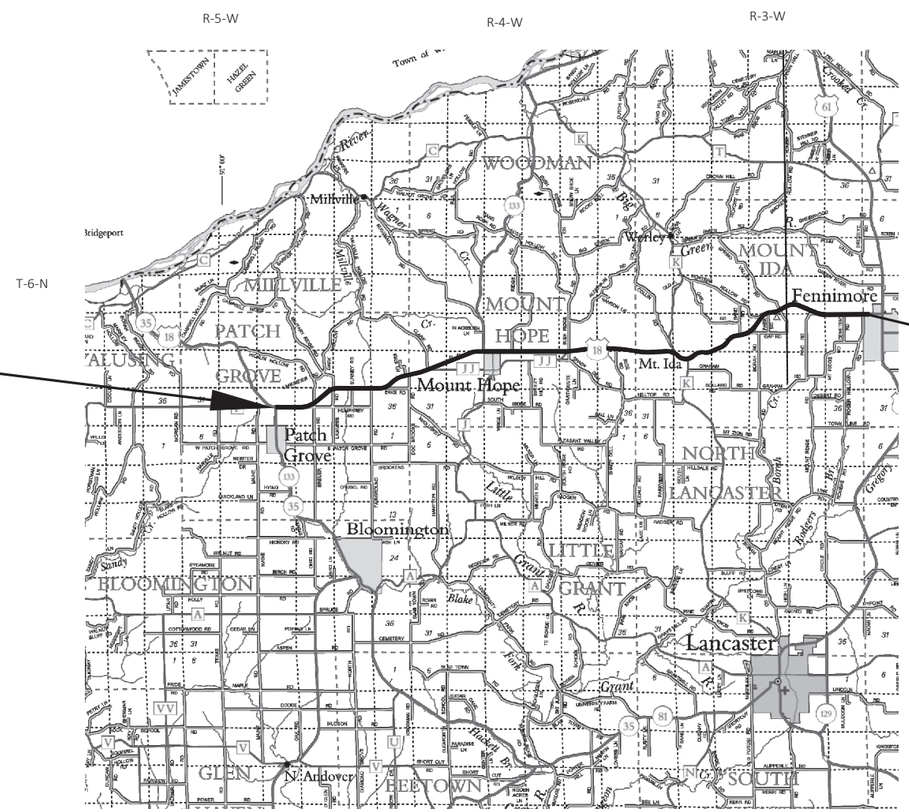
USH 18

GRANT COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1662-01-61	WISC 2019149	1

STATE PROJECT NUMBER

1662-01-61



BEGIN PROJECT
STA 305+00
X: 562100.5406
Y: 747790.7686

END PROJECT
STA 1174+00

LAYOUT SCALE 0 — 4 MI

TOTAL NET LENGTH OF CENTERLINE = 16.458 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, GRANT COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SURVEYOR
Designer	KATHLEEN KLUDY, P.E.
Project Manager	TODD WALDO, P.E.
Regional Examiner	SW REGION
Regional Supervisor	REINY YAHNKE, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 10/26/2018 Todd Waldo (Signature)

E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\010101_TI.DWG PLOT DATE : 10/23/2018 9:27 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME :

THE FOLLOWING IS THE PREFERRED ORDER OF SECTION 2 SHEETS:
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTIONS
PAVEMENT MARKING

GENERAL NOTES

1. THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

2. WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE THICKNESS SHOWN ON THE PLAN IS APPROXIMATE. THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

3. ALL P.E.'S SHALL BE REPLACED IN KIND (AGGREGATE OR ASPHALT).

4. LOCATIONS OF ASPHALTIC PRIVATE AND FIELD ENTRANCES AS SHOWN ON PLAN ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

5. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETE. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

6. THE RATE OR SUPER ELEVATION AND LENGTH OF THE TRANSITION SHALL BE DETERMINED USING THE EXISTING SUPER ELEVATION, NOT TO EXCEED 0.08 AND DESIGN SPEED OF 55 MPH. THE LENGTH ON TANGENT AND ONE-THIRD WITHIN THE CURVE.

7 ASPHALTIC SURFACE WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN

8 LONGITUDINAL JOINTS ARE NOT TO BE PLACED IN DRIVING AND TURNING LANES.

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
<	ANGLE
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC
BTWN	BETWEEN
CTR.	CENTER
C/L	CENTER LINE
Δ	CENTRAL ANGLE OR DELTA
C.E.	COMMERCIAL ENTRANCE
CONST.	CONSTRUCTION
CO.	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CABC	CRUSHED AGGREGATE BASE COURSE
CY	CUBIC YARD
C&G	CURB AND GUTTER
D	DEGREE OF CURVE
D.H.V.	DESIGN HOURLY VOLUME
D.D.	DIRECTIONAL DISTRIBUTION
EA	EACH
E	EAST
EB	EASTBOUND
ELEC.	ELECTRIC(AL), ELEC. CABLE
EL., ELEV.	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC.	EXCAVATION
EXIST	EXISTING
FERT.	FERTILIZER
F/L, F.L.	FLOW LINE
GALV.	GALVANIZE
H.S.	HIGH STRENGTH
CWT	HUNDRED WEIGHT
INL	INLET
INTER.	INTERSECTION
JT.	JOINT
LT	LEFT
L.	LENGTH OF CURVE
L.F.	LINEAR FOOT(FEET)
LS	LUMP SUM
M.P.	MARKER POST
MGAL	1000 GALLONS
N.C.	NORMAL CROWN
N	NORTH
NB	NORTHBOUND
NOR	NORMAL
NO.	NUMBER
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
P.L.	PROPERTY LINE
R	RADIUS OR RANGE
R/L	REFERENCE LINE
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT OF WAY
RD.	ROAD
SHLD.	SHOULDER(S)
SHR.	SHRINKAGE
S	SOUTH
SB	SOUTHBOUND
S.F.	SQUARE FOOT (FEET)
SDD	STANDARD DETAIL DRAWING(S)
STH	STATE TRUNK HIGHWAY
STA.	STATION
S.E.	SUPERELEVATION
S/L	SURVEY LINE
T.	PERCENT TRUCKS
TEL.	TELEPHONE
TEMP.	TEMPORARY
TYP	TYPICAL
U.G.	UNDERGROUND (CABLE)
VAR	VARIABLE
Wt.	WEIGHT
W	WEST
WB	WESTBOUND

UTILITY COMPANIES & PERSONNEL

COMMUNICATION LINE

TDS TELECOM - COMMUNICATION LINE
ATTN: KEN KLAAS
140 N MONROE ST
LANCASTER, WI 53813
PHONE: (608) 723-2181
EMAIL: ken.klaas@pcli.net

WI INDEPENDENT NETWORK
- COMMUNICATIONS LINE
ATTN: DICK HAMMETTER
800 WISCONSIN AVE
EAU CLAIRE, WI 54703
PHONE: (715) 838 - 4406
EMAIL: Hammetter@WINS.net

ELECTRIC

ATC MANAGEMENT, INC - ELECTRICITY TRANSMISSION
ATTN: MIKE OLSEN
801 O'KEEFE RD
DE PERE, WI 54115-6113
PHONE: (920) 338-6582
EMAIL: molsen@atcllc.com

ALLIANT ENERGY - ELECTRICITY
ATTN: MICHAEL BROLIN
4902 NORTH BITMORE LN
MADISON, WI 53713
PHONE: (608) 458-4871
EMAIL: MichaelBrolin@alliantenergy.com

CITY OF FENNIMORE - ELECTRICITY
ATTN: DENNIS BIDDICK
860 LINCOLN AVE
FENNIMORE, WI 53809
PHONE: (608) 822-6501
EMAIL: dpw@fennimore.com

DAIRYLAND POWER COOPERATIVE - ELECTRICITY
ATTN: ROB MALY
3200 EAST AVE S
LA CROSSE, WI 54602-0817
PHONE: (608) 788-4000
EMAIL: Rob.Maly@DairylandPower.com

SCENIC RIVERS ENERGY COOPERATIVE - ELECTRICITY
ATTN: CHAD OLMSTEAD
231 N SHERIDAN ST
LANCASTER, WI 53813
PHONE: (608) 723-2121

GAS/PETROLEUM

NORTHERN NATURAL GAS COMPANY - GAS/PETROLEUM
ATTN: TOM DICKSON
1120 CENTRE POINTE DR, SUITE 400
MENDOTA HEIGHTS, MN 55120
PHONE: (651) 456-1777
EMAIL: tom.dickson@nngco.com

WE ENERGIES - GAS/PETROLEUM
ATTN: NICOLE SMULLEN
333 W EVERETT ST
MILWAUKEE, WI 53203
PHONE: (414) 221-5617
EMAIL: Nicole.Smullen@wecenergygroup.com

WATER/SEWER

CITY OF FENNIMORE - WATER / SEWER
ATTN: DENNIS BIDDICK
860 LINCOLN AVE
FENNIMORE, WI 53809
PHONE: (608) 822-6501
EMAIL: dpw@fennimore.com

CONTACTS

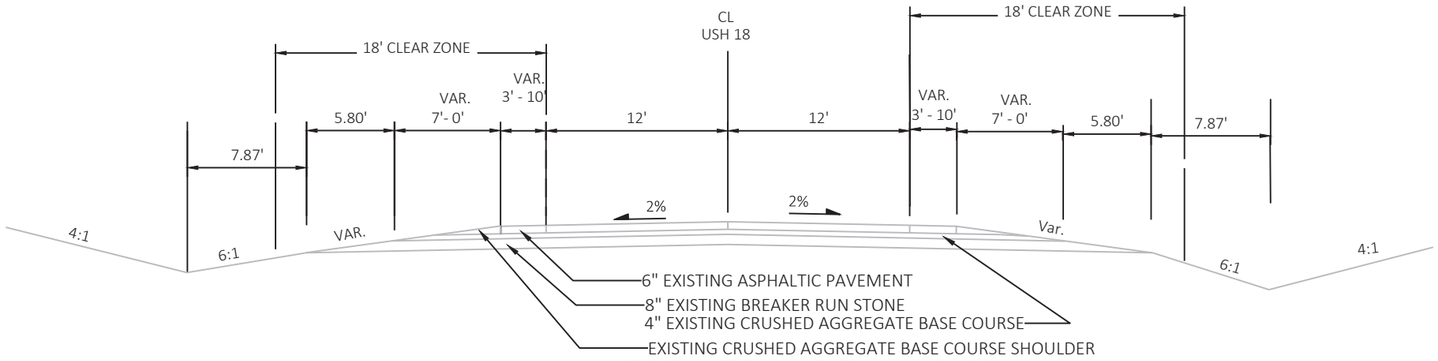
WISDOT

WISCONSIN DEPARTMENT OF TRANSPORTATION
SOUTHWEST REGION - LA CROSSE OFFICE
3550 MORMON COULEE RD
LA CROSSE, WI 54601
ATTN: TODD WALDO, P.E. PROJECT MANGER
PHONE: (608) 785-9462
EMAIL: todd.waldo@dot.wi.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION
SOUTHWEST REGION - LA CROSSE OFFICE
3550 MORMON COULEE RD
LA CROSSE, WI 54601
ATTN: KATHLEEN KLUDY, P.E. PROJECT DESIGNER
PHONE: (608) 785-9948
EMAIL: kathleen.kludy@dot.wi.gov

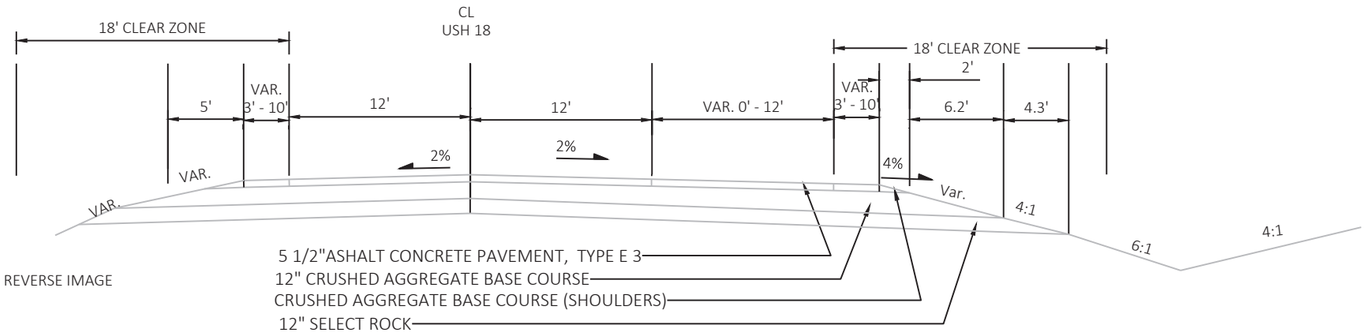
DNR LIAISON

DNR SOUTH CENTRAL REGION HQ
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
ATTN: ANDY BARTA (GRANT COUNTY)
PHONE: (608) 275-3308
EMAIL: andrew.barta@wisconsin.gov



EXISTING TYPICAL SECTION MAINLINE

STA 305+00 TO 593+00
STA 613+50 TO 922+50
STA 1049+50 TO 1174+00



*LEFT AUXILLARY LANE REVERSE IMAGE

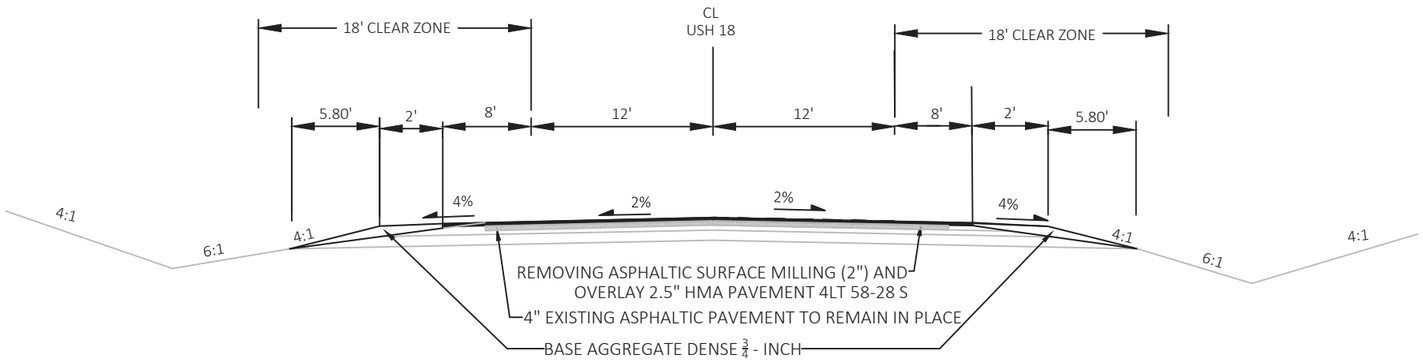
EXISTING TYPICAL SECTION AUXILIARY LANE *

LEFT AUXILIARY LANE
STA 598+00+00 TO 613+50
STA 922+50 TO 989+00
STA 1021+00 TO 1032+50

RIGHT AUXILIARY LANE
STA 593+00 TO 610+00
STA 984+00 TO 1021+00
STA 1021+00 TO 1049+50

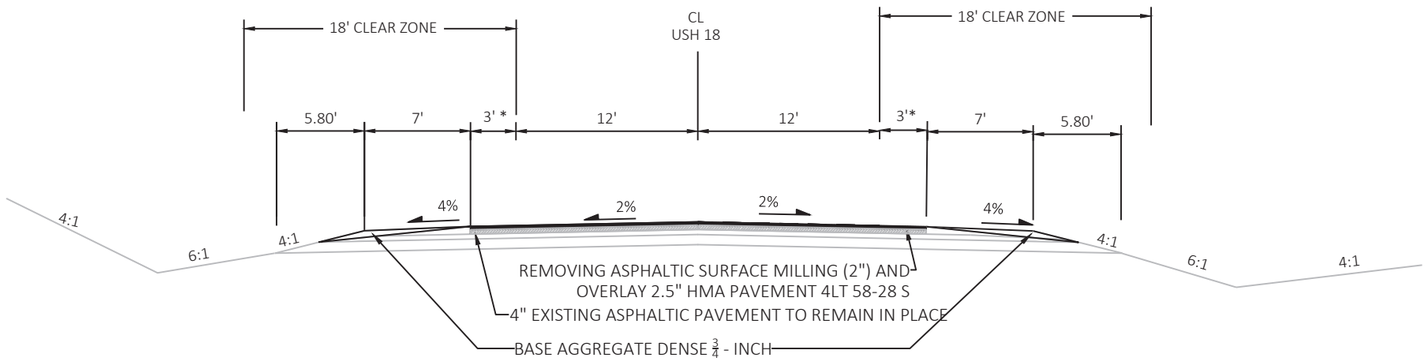
PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	TYPICAL SECTIONS	SHEET 3	E

2



PROPOSED TYPICAL SECTION MAINLINE

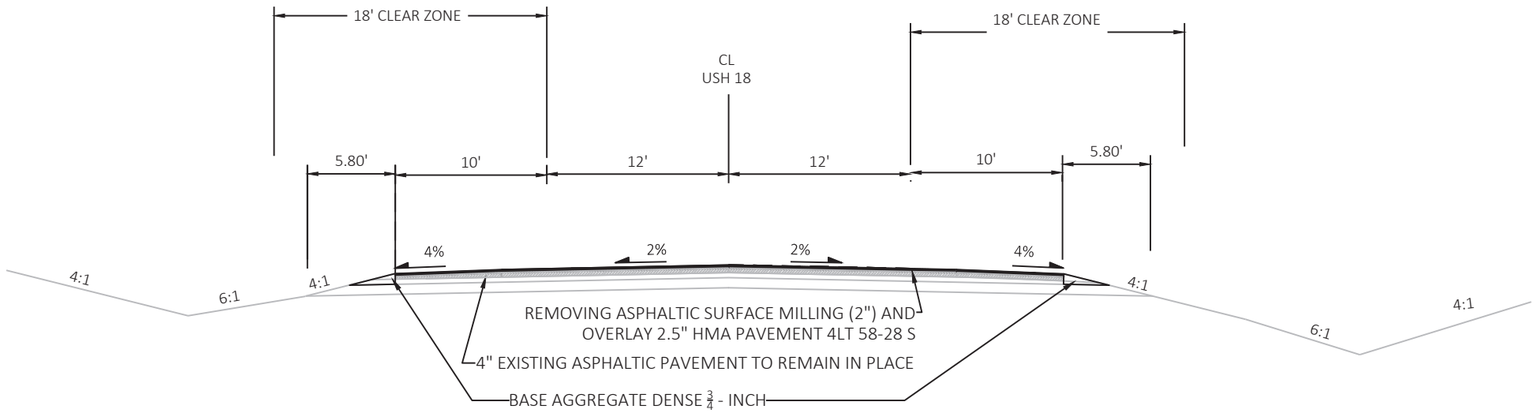
STA 305+00 TO 568+80



PROPOSED TYPICAL SECTION MAINLINE

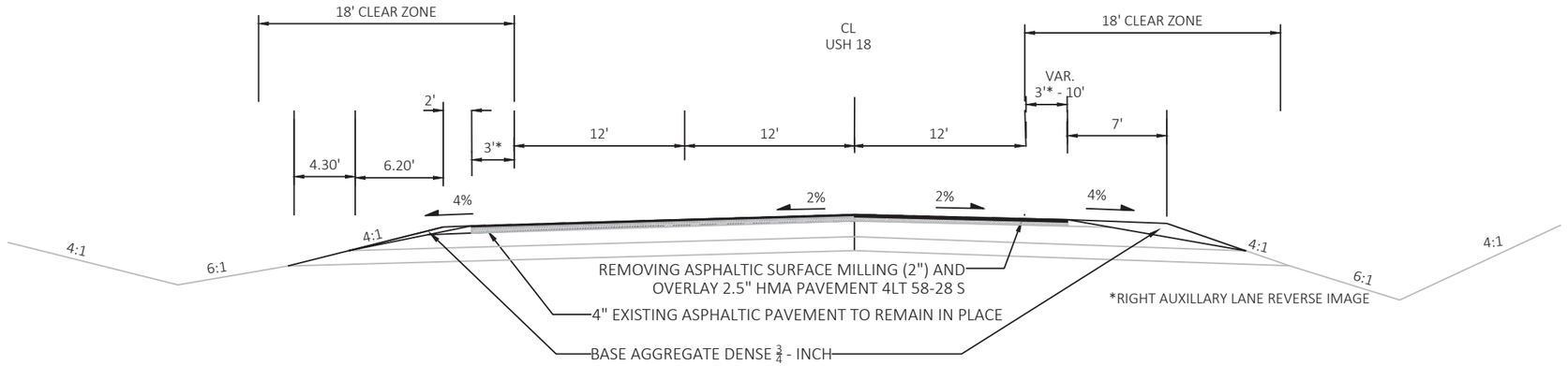
STA 568+80 TO 593+42
STA 614+10 TO 714+50
STA 871+90 TO 882+17
STA 891+00 TO 922+50
STA 716+00 TO 865+88
STA 1049+50 TO 1160+00

* SAFETY EDGE REQ'D ON 3' PAVED SHOULDER



PROPOSED TYPICAL SECTION MAINLINE

STA 593+42 TO 614+10
STA 714+50 TO 716+00
STA 865+88 TO 871+90
STA 882+17 TO 891+00
STA 1160+00 TO 1174+75



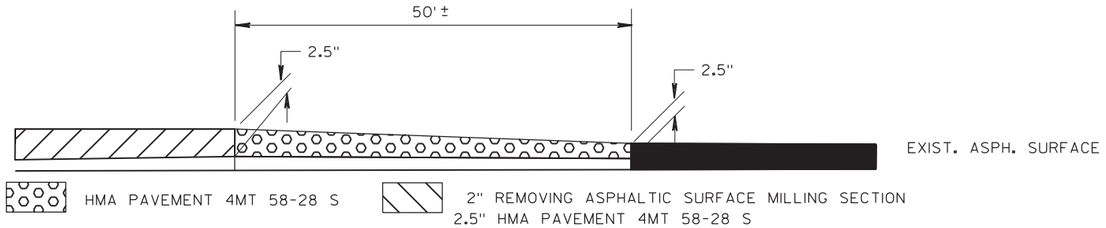
PROPOSED TYPICAL SECTION AUXILIARY LANES*

LEFT AUXILIARY LANE
STA 922+50 TO 989+00
STA 1021+00 TO 1032+50

RIGHT AUXILIARY LANE
STA 984+00 TO 1021+00
STA 1032+50 TO 1049+50

* SAFETY EDGE REQ'D ON 3' PAVED SHOULDERS

2

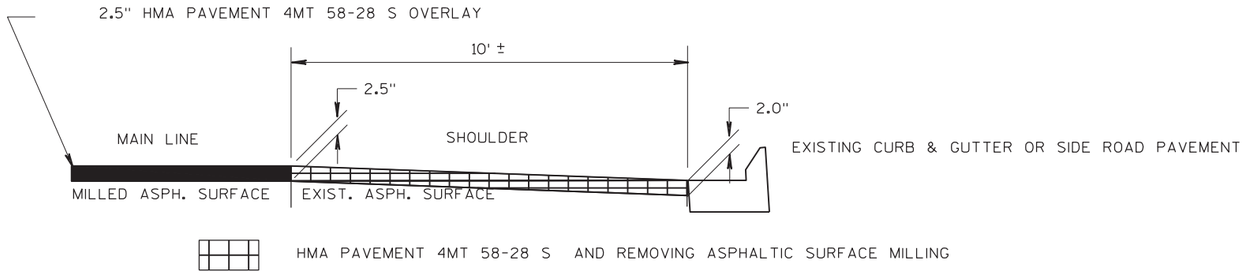


0.5" TO 0" BUTT JOINT DETAIL

305+00 - 305+50
1174+25 - 1174+00

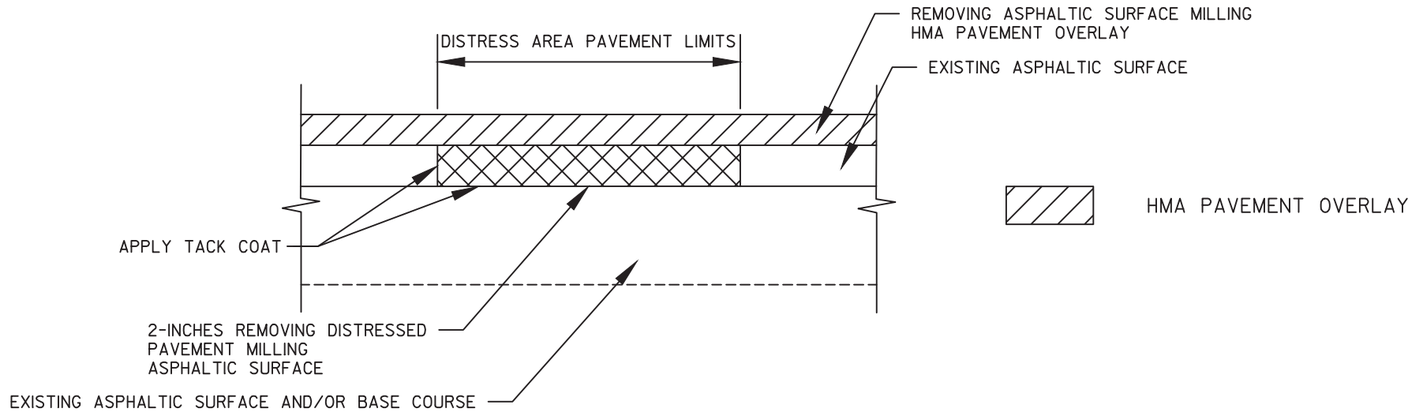
PWL MIXTURE USE TABLE

Location	Station	Mixture use	Underlying Surface	Bid Item	Tons	Thickness	Quality Management Program to be used for: Mixture Acceptance	Quality Management Program to be used for: Density Acceptance
2 - 12 foot Driving Lane	305+00 to 1174+00	Upper Layer	Milled Existing HMA Surface	4 LT 58-28 S	32,800	2.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
Shoulders	Var.	Upper Layer	Milled Existing HMA Surface	4 LT 58-28 S	11,888	2.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
Auxillary Lanes, Turn Lanes and Intersections	Var.	Upper Layer	Milled Existing HMA Surface	4 LT 58-28 S	3,840	2.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.

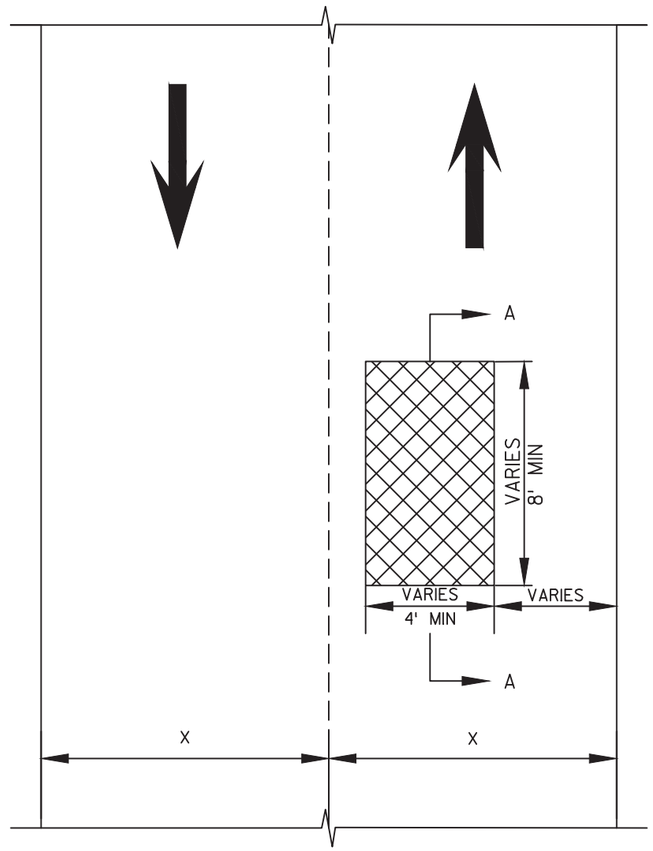


ASPHALT TAPER DETAIL AT CURB & GUTTER

2



REMOVING DISTRESS PAVEMENT MILLING
SECTION A-A



PLAN VIEW

EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	CONSTRUCTION DETAIL REMOVING DISTRESSED PAVEMENT MILLING	SHEET 7	E

2

2

STA. 887+34.5
BP: 20+00.00CTH K

CONCRETE CURB & GUTTER 30-INCH TYPE D

882+00
883+00
884+00
885+00
886+00
887+00
888+00
889+00

BEGIN TAPER
STA. 882+50 (15' RT)

END TAPER
STA. 883+25 (24' RT)

15'
15'
75'

STA. 886+77 (70' RT)
R45'

STA 886+41 (86'RT)
R65'

21+00CTH K

3'
3'
3'

XXXX

22+00CTH K

10:1 TAPER

END CONSTRUCTION
STA. 21+47.85CTH K
SAW CUT REQUIRED
MATCH INTO EXISTING

EXISTING CTH K

EP: 22+15.10CTH K

N

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	CTH K INTERSECTION	SHEET 8	E

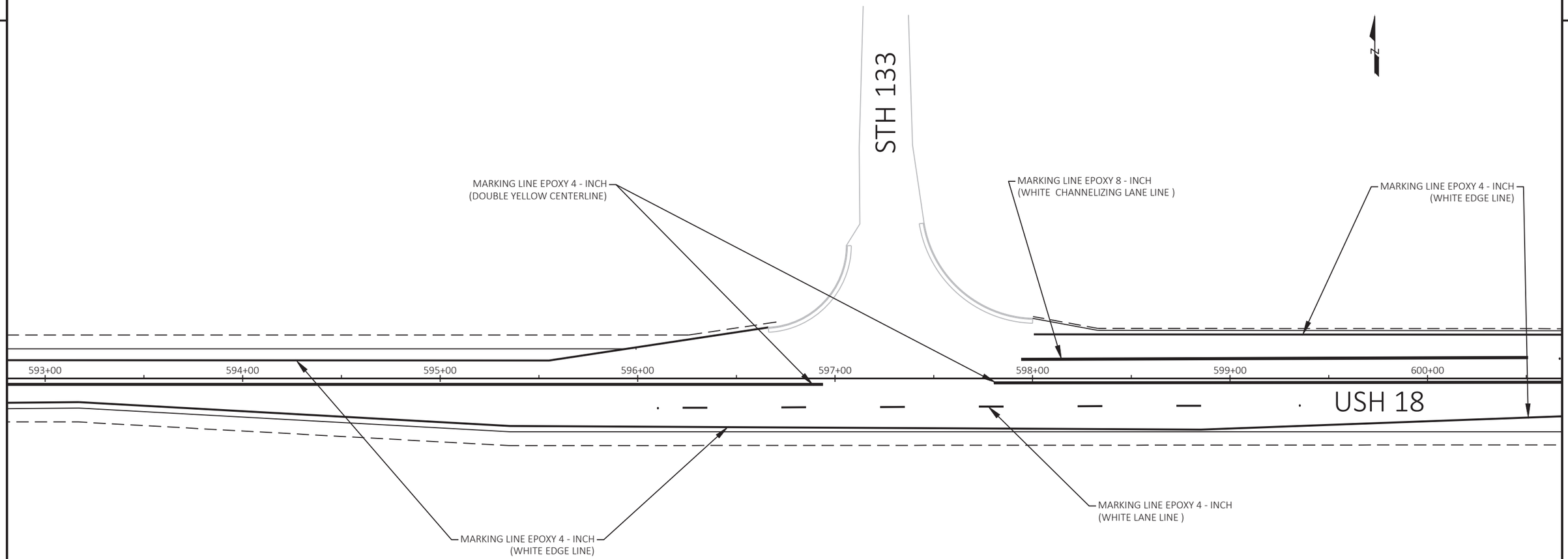
FILE NAME : N:\PDS\C3D\16620131\DESIGN\EDGELINES\CTH K INTERSECTION.DWG
LAYOUT NAME - 021101_id

PLOT DATE : 10/23/2018 2:56 PM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2



SEE THE FOLLOWING STANDARD DETAIL DRAWINGS FOR MORE INFORMATION:

15C8-A LONGITUDINAL MARKING (MAINLINE)
15C35-3A PAVEMENT MARKING (INTERSECTIONS)

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PAVEMENT MARKING	SHEET 9	E

2

2

N

MARKING LINE EPOXY 8 - INCH
(WHITE CHANNELIZING LANE LINE)

MARKING LINE EPOXY 4 - INCH
(DOUBLE YELLOW CENTERLINE)

ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL

MARKING LINE EPOXY 4 - INCH
(WHITE LANE LINE)

600+00 601+00 602+00 603+00 604+00 605+00 606+00 607+00

USH 18

MARKING LINE EPOXY 8 - INCH
(WHITE CHANNELIZING LANE LINE)

MARKING LINE EPOXY 4 - INCH
(WHITE EDGE LINE)

SEE THE FOLLOWING STANDARD DETAIL DRAWINGS FOR MORE INFORMATION:

13A10-2A 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING - TYPE 1
15C8-A LONGITUDINAL MARKING (MAINLINE)
15C35-3A PAVEMENT MARKING (INTERSECTIONS)

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PAVEMENT MARKING	SHEET 10	E

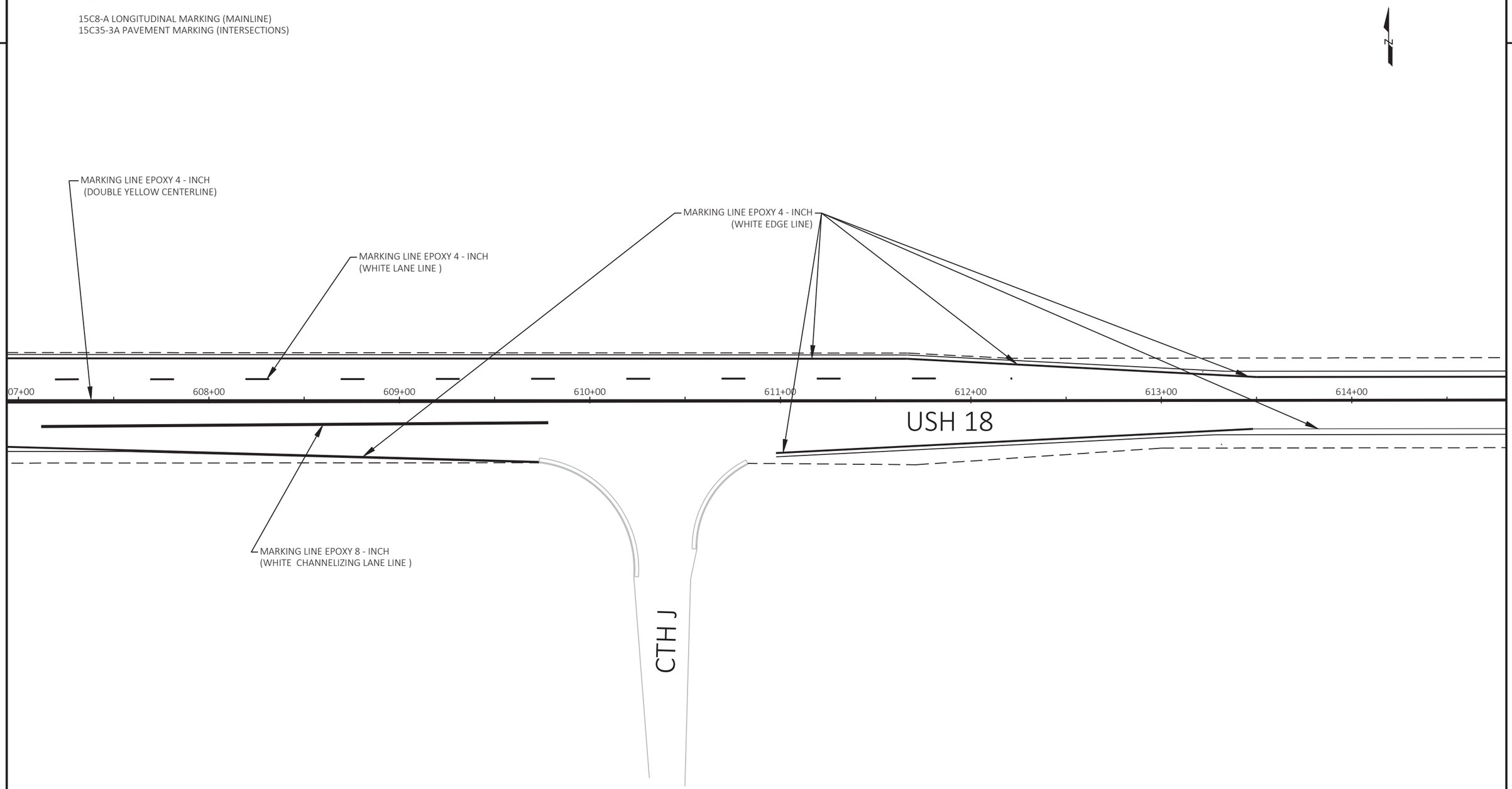
FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 0240502_pm

PLOT DATE : 8/14/2018 10:41 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

SEE THE FOLLOWING STANDARD DETAIL DRAWINGS FOR MORE INFORMATION:

15C8-A LONGITUDINAL MARKING (MAINLINE)
15C35-3A PAVEMENT MARKING (INTERSECTIONS)



PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PAVEMENT MARKING	SHEET 11	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 0240503_pm

PLOT DATE : 8/14/2018 10:40 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

SUPERELEVATION DATA

Curve #1
PI Station 334+00.30

Station	Type	Left	Right
318+32	End NC	-0.02	-0.02
318+86	Zero Super	-0.02	0
319+15	Rev Crown	-0.02	0.02
319+85	Begin FS	-0.037	0.037
346+77	End FS	-0.037	0.037
319+39	Rev Crown	-0.02	0.02
321+38	Zero Super	-0.02	0
348+30	Begin NC	-0.02	-0.02

Curve #2
PI Station 374+64.74

Station	Type	Left	Right
364+59	End NC	-0.02	-0.02
365+12	Zero Super	0	-0.02
365+65	Rev Crown	0.02	-0.02
366+48	Begin FS	0.051	-0.051
382+08	End FS	0.051	-0.051
	-		

Curve #3
PI Station 449+33.04

Station	Type	Left	Right
438+31	End NC	-0.02	-0.02
438+84	Zero Super	-0.02	0
439+37	Rev Crown	-0.02	0.02
440+17	Begin FS	-0.05	0.05
457+47	End FS	-0.05	0.05
	-		

Curve #4
PI Station 470+09.23

Station	Type	Left	Right
459+35	End NC	-0.02	-0.02
459+88	Zero Super	0	-0.02
460+41	Rev Crown	0.02	-0.02
460+97	Begin FS	0.041	-0.041
478+69	End FS	0.041	-0.041
	-		

Curve #5
PI Station 506+15.85

Station	Type	Left	Right
	-		
501+73	Begin FS	-0.026	0.026
510+57	End FS	-0.026	0.026
	-		

Curve #6
PI Station 583+54.87

Station	Type	Left	Right
576+78	End NC	-0.02	-0.02
577+31	Zero Super	0	-0.02
577+85	Rev Crown	0.02	-0.02
578+51	Begin FS	0.045	-0.045
588+45	End FS	0.045	-0.045
	-		

Curve #8
PI Station 750+67.79

Station	Type	Left	Right
743+15	End NC	-0.02	-0.02
743+69	Zero Super	0	-0.02
744+23	Rev Crown	0.02	-0.02
744+28	Begin FS	0.022	-0.022
757+03	End FS	0.022	-0.022
	-		

Curve #10
PI Station 822+88.90

Station	Type	Left	Right
	End NC		
	Zero Super		
	Rev Crown		
	Begin FS	0.02	-0.02
	End FS	0.02	-0.02
	Rev Crown		
	Zero Super		
	End NC		

Curve #11
PI Station 856+93.40

Station	Type	Left	Right
850+28	End NC	-0.02	-0.02
850+82	Zero Super	0	-0.02
851+36	Rev Crown	0.02	-0.02
851+73	Begin FS	0.034	-0.034
862+07	End FS	0.034	-0.034
	-		

Curve #12
PI Station

Station	Type	Left	Right
859+75	End NC	-0.02	-0.02
860+28	Zero Super	0	-0.02
860+81	Rev Crown	0.02	-0.02
861+85	Begin FS	0.059	-0.059
869+22	End FS	0.059	-0.059
	-		

*Note : Curve #7(PI STATION 716+49.04) & Curve #9 (PI STATION 787+73.48) REMAIN AT NORMAL CROWN

Curve #13
PI Station 877+91.39

Station	Type	Left	Right
870+67	End NC	-0.02	-0.02
871+20	Zero Super	-0.02	0
871+73	Rev Crown	-0.02	0.02
872+69	Begin FS	0.056	-0.056
882+59	End FS	0.056	-0.056
	-		

Curve #14
PI Station 888+73.95

Station	Type	Left	Right
	-		
882+59	Rev Crown	-0.02	0.02
883+60	Begin FS	-0.058	0.058
893+43	End FS	-0.058	0.058
	-		

Curve #15
PI Station 905+02.59

Station	Type	Left	Right
897+01	End NC	-0.02	-0.02
897+54	Zero Super	0	-0.02
898+08	Rev Crown	0.02	-0.02
899+09	Begin FS	0.058	-0.058
910+37	End FS	0.058	-0.058
	-		

Curve #16
PI Station 917+91.16

Station	Type	Left	Right
911+71	End NC	-0.02	-0.02
912+24	Zero Super	-0.02	0
912+77	Rev Crown	-0.02	0.02
913+76	Begin FS	0.057	-0.057
921+86	End FS	0.057	-0.057
	-		

Curve #17
PI Station 942+68.83

Station	Type	Left	Right
936+99	End NC	-0.02	-0.02
937+52	Zero Super	-0.02	0
938+05	Rev Crown	-0.02	0.02
939+07	Begin FS	-0.058	0.058
946+13	End FS	-0.058	0.058
	-		

Curve #18
PI Station 958+49.01

Station	Type	Left	Right
950+33	End NC	-0.02	-0.02
950+86	Zero Super	-0.02	0
951+39	Rev Crown	-0.02	0.02
952+41	Begin FS	-0.058	0.058
963+91	End FS	-0.058	0.058
	-		

Curve #19
PI Station 983+85.33

Station	Type	Left	Right
970+70	End NC	-0.02	-0.02
971+23	Zero Super	-0.02	0
971+77	Rev Crown	-0.02	0.02
972+43	Begin FS	-0.045	0.045
994+04	End FS	-0.045	0.045
	-		

Curve #20
PI Station 1017+73.59

Station	Type	Left	Right
1009+16	End NC	-0.02	-0.02
1009+69	Zero Super	0	-0.02
1010+22	Rev Crown	0.02	-0.02
1011+24	Begin FS	0.058	-0.058
1023+46	End FS	0.058	-0.058
	-		

Curve #21
PI Station 1034+11.76

Station	Type	Left	Right
1029+35	End NC	-0.02	-0.02
1029+88	Zero Super	-0.02	0
1030+42	Rev Crown	-0.02	0.02
1031+43	Begin FS	-0.058	0.058
1036+73	End FS	-0.058	0.058
	-		

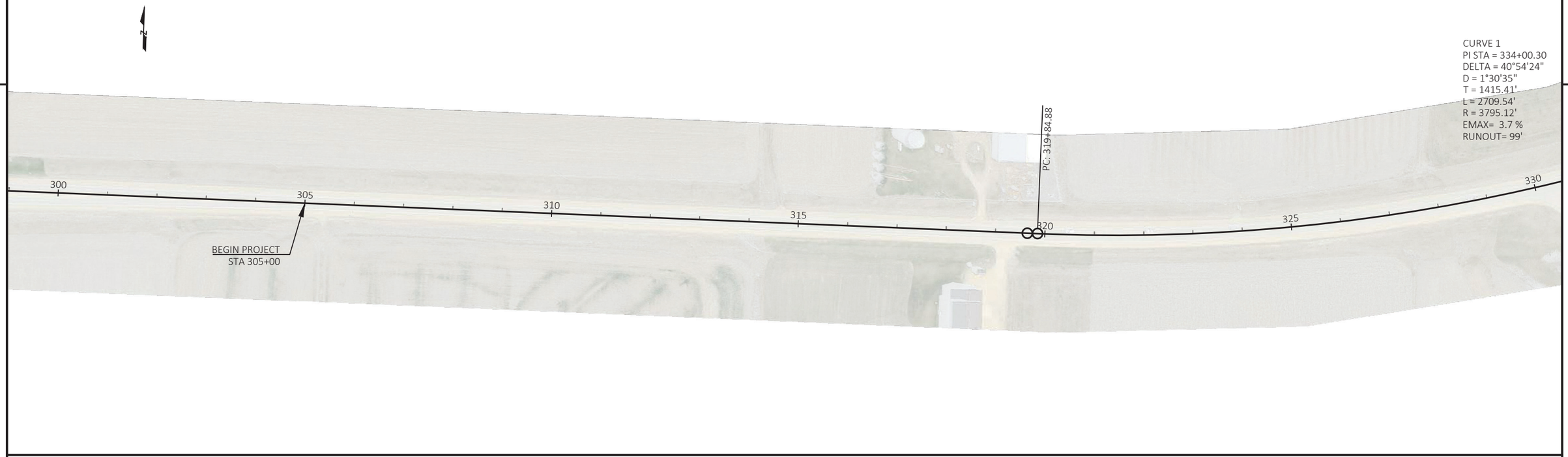
Curve #22
PI Station 1059+57.05

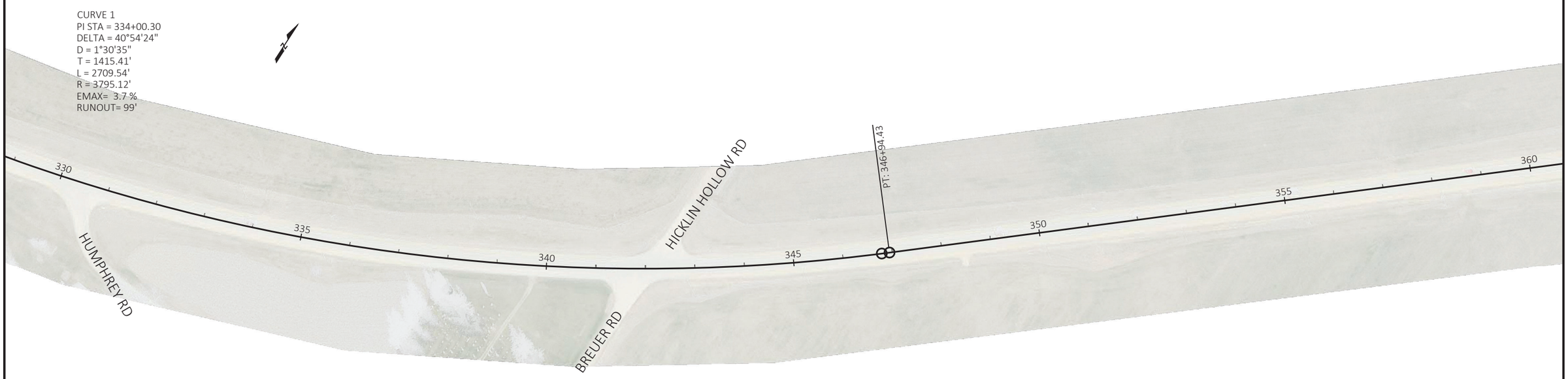
Station	Type	Left	Right
1048+77	End NC	-0.02	-0.02
1049+30	Zero Super	0	-0.02
1049+83	Rev Crown	0.02	-0.02
1050+77	Begin FS	0.055	-0.055
1068+06	End FS	0.055	-0.055
	-		

Curve #23
PI Station 1099+74.90

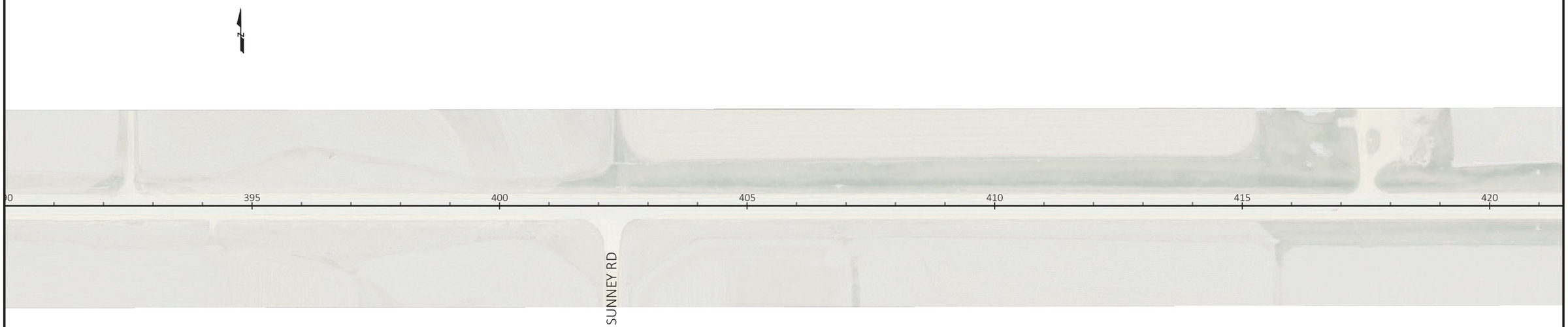
Station	Type	Left	Right
0+00	End NC	-0.02	-0.02
0+00	Zero Super	-0.02	0
0+00	Rev Crown	-0.02	0.02
0+00	Begin FS	-0.05	0.05
0+00	End FS	-0.05	0.05
	-		

** FOR REFERENCE ONLY, TO BE VERIFIED IN THE FIELD BY ENGINEER**

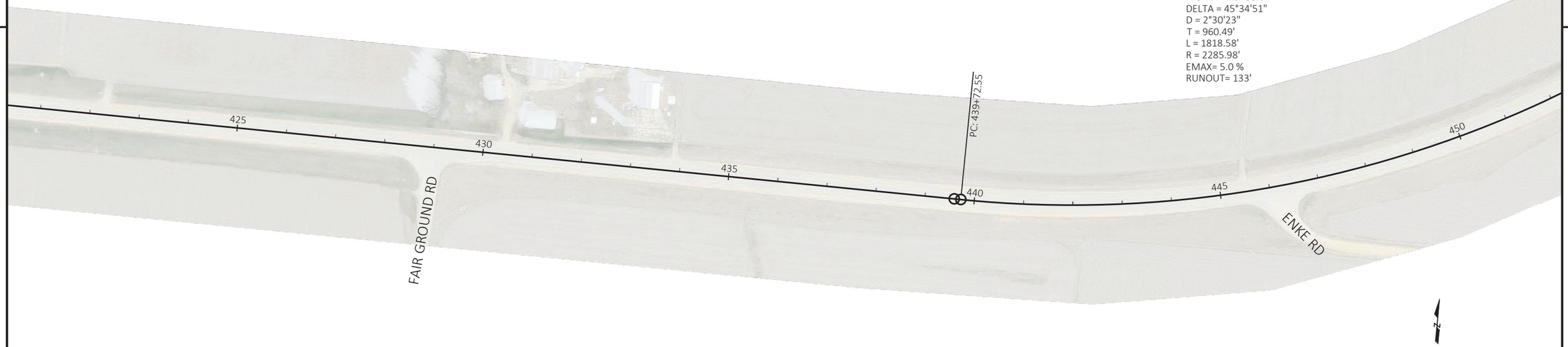




PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 13	E



PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 14	E

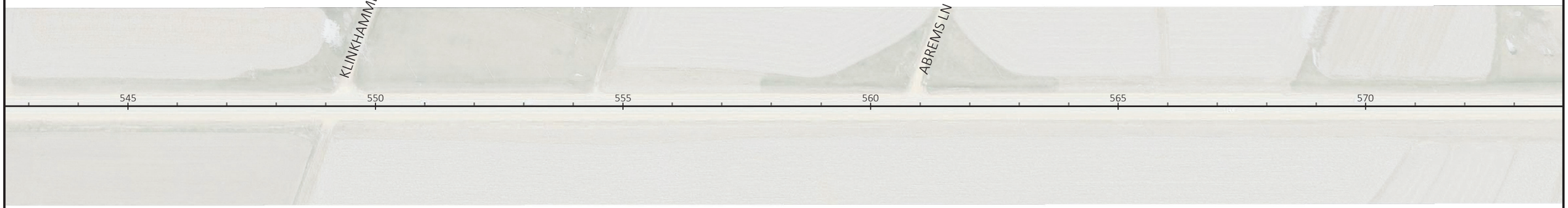


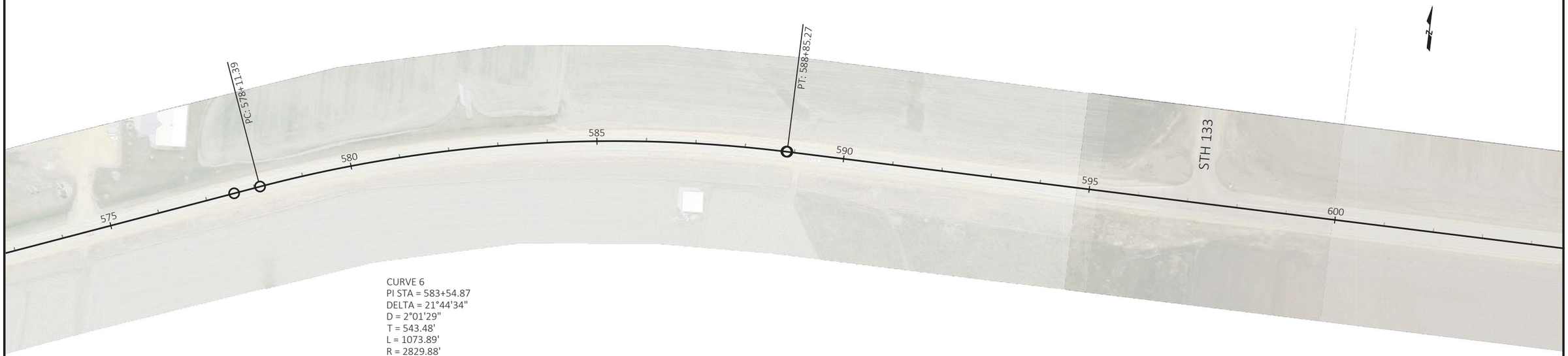
PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 15	E

2

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 16	E

2





CURVE 6
PI STA = 583+54.87
DELTA = 21°44'34"
D = 2°01'29"
T = 543.48'
L = 1073.89'
R = 2829.88'
EMAX= 4.5 %
RUNOUT= 120'

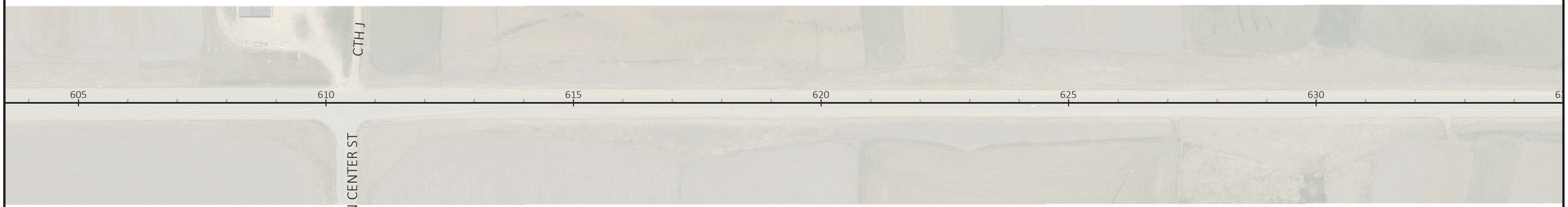
PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 17	E

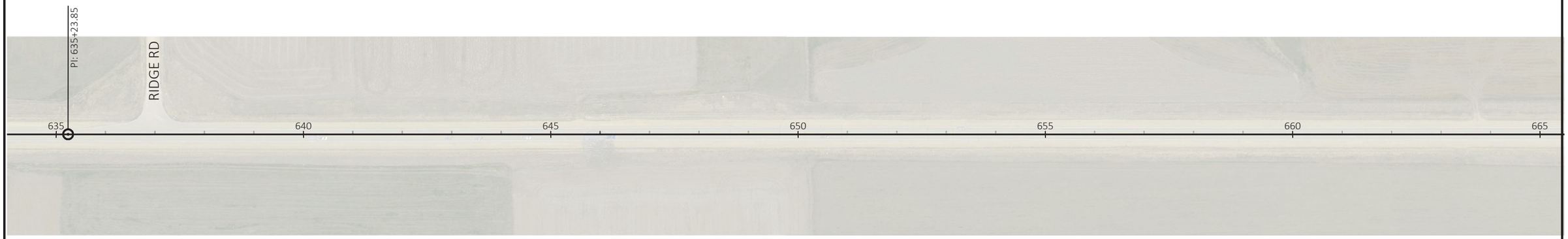
FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027206_ad

PLOT DATE : 10/15/2018 2:06 PM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ##########

2

2

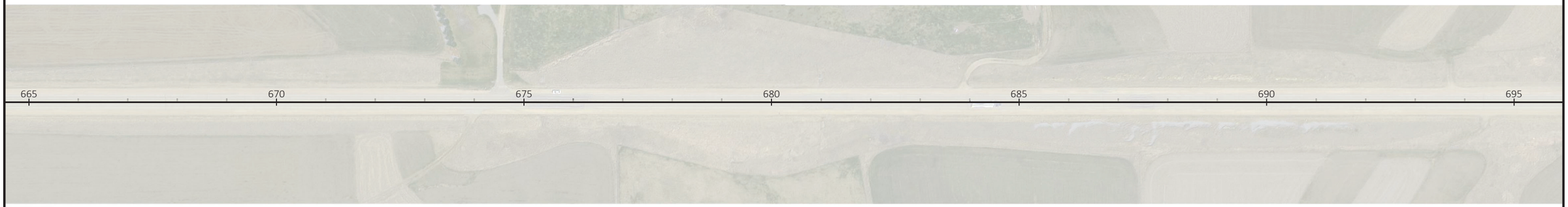


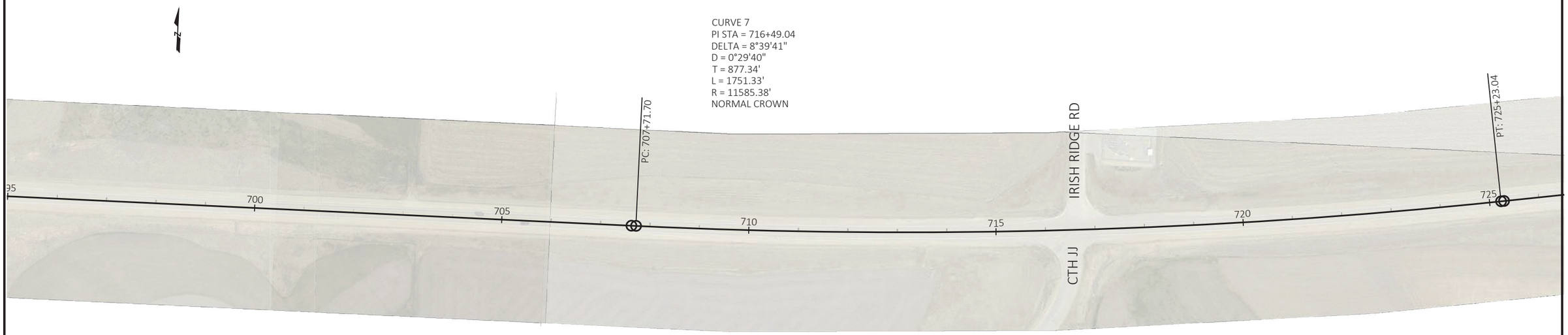


PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 18	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027207_ad
PLOT DATE : 10/8/2018 9:57 AM
PLOT BY : KLUDY, KATHLEEN M
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

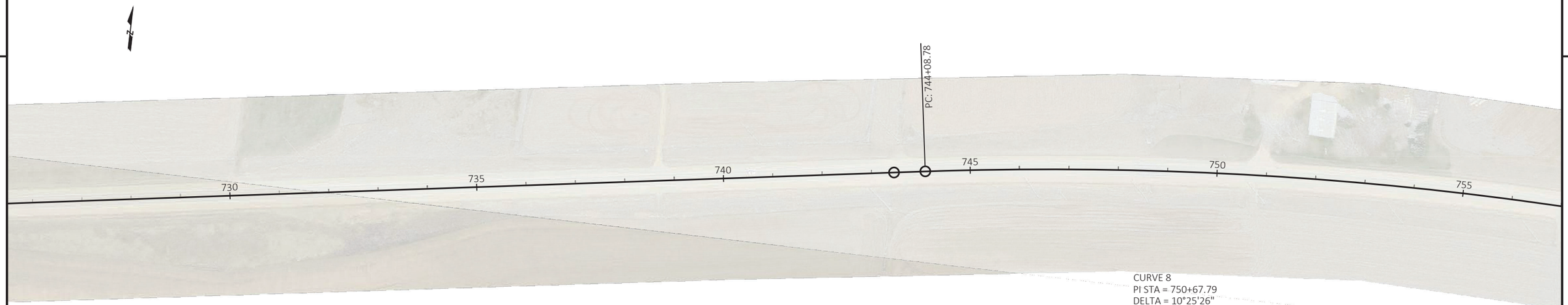
2



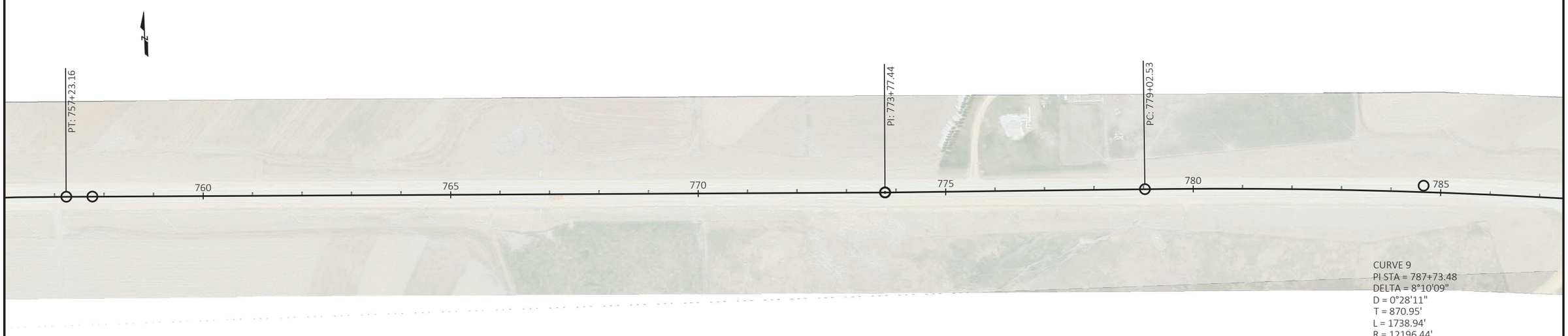


PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 19	E

2



CURVE 8
PI STA = 750+67.79
DELTA = 10°25'26"
D = 0°47'35"
T = 659.01'
L = 1314.38'
R = 7224.51'
EMAX= 2.2 %
RUNOUT= 59'

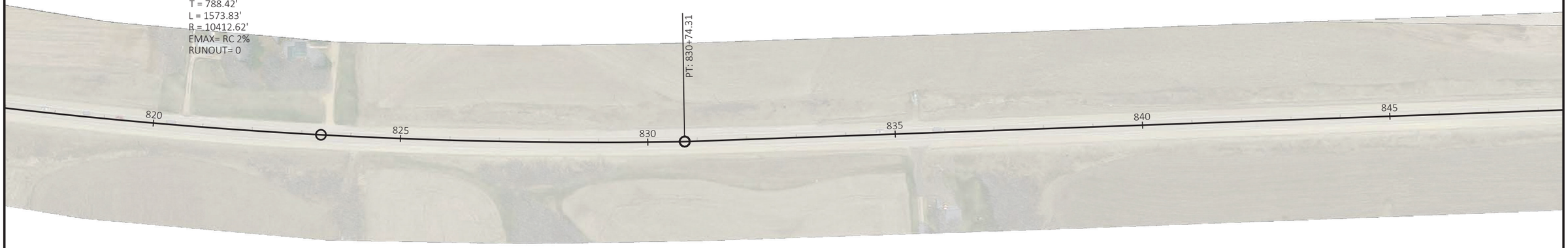


CURVE 9
PI STA = 787+73.48
DELTA = 8°10'09"
D = 0°28'11"
T = 870.95'
L = 1738.94'
R = 12196.44'
NORMAL CROWN

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 20	E

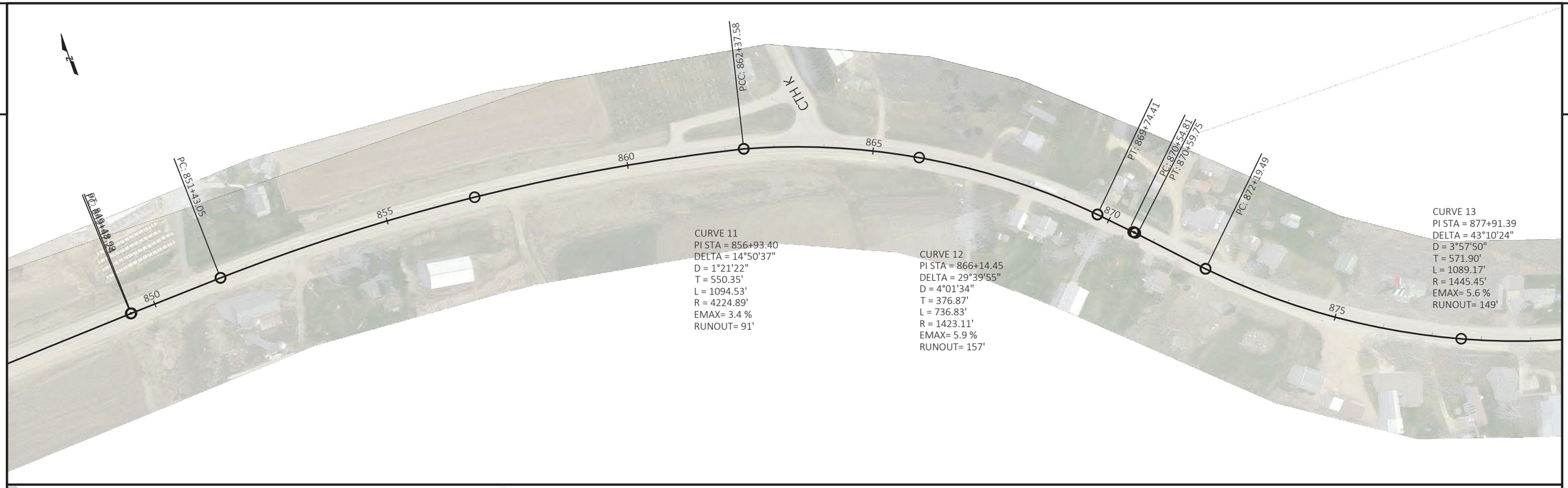
2

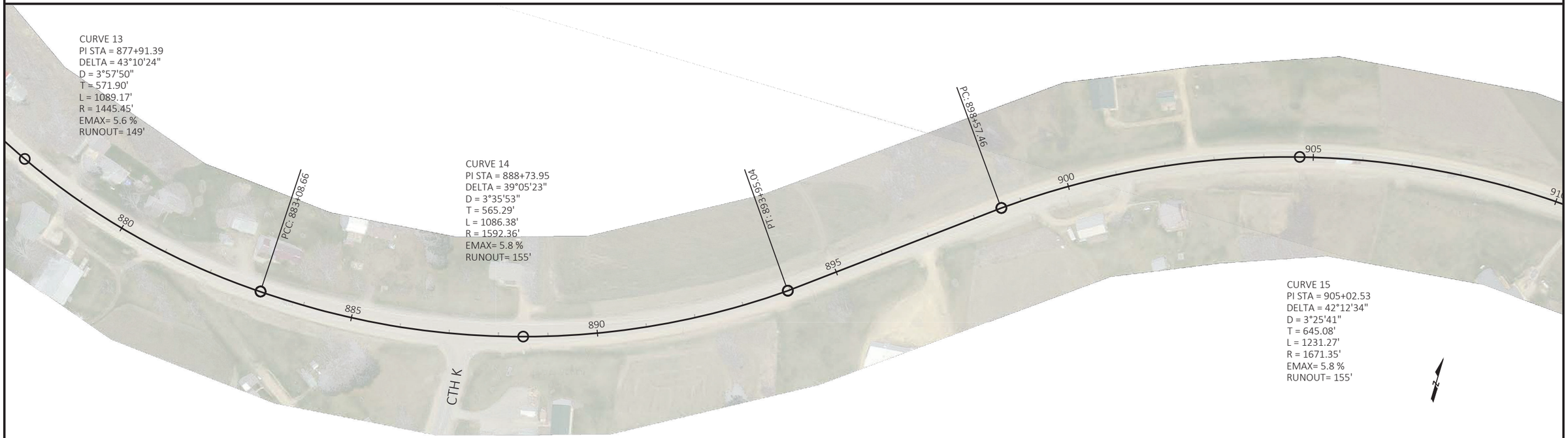
CURVE 10
PI STA = 822+88.90
DELTA = 8°39'36"
D = 0°33'01"
T = 788.42'
L = 1573.83'
R = 10412.62'
EMAX= RC 2%
RUNOUT= 0



PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 21	E

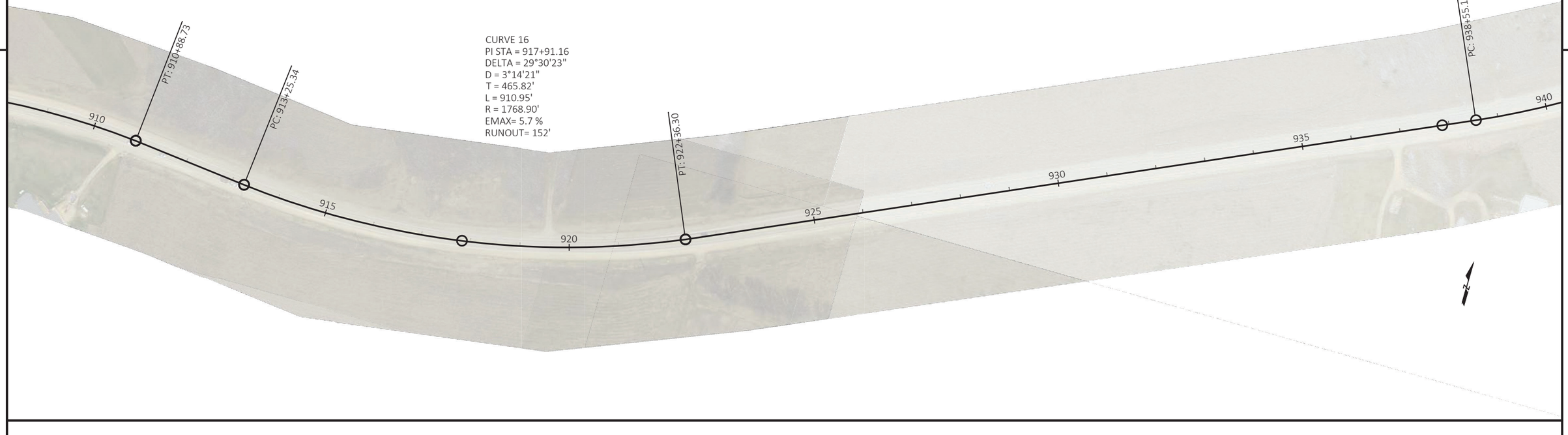
2





SEE CONSTRUCTION DETAIL FOR CTH K LAYOUT

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 22	E



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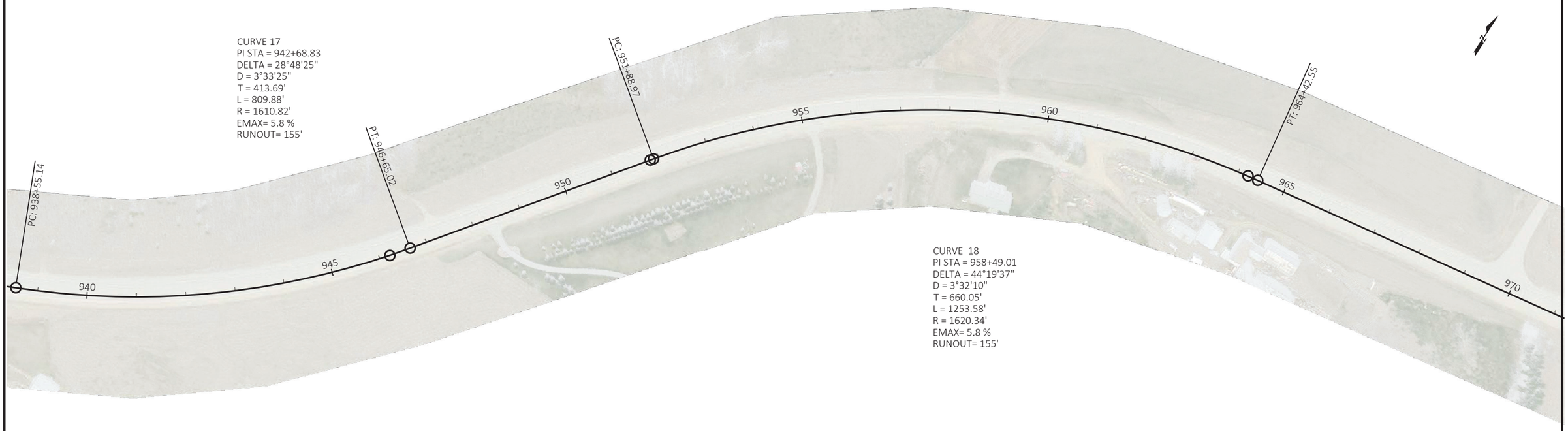


PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 23	E

2

OAK RD

PC: 972+03.34

970

975

980

985

990

995

1000

GAP RD

CURVE 19
PI STA = 983+85.33
DELTA = 45°09'38"
D = 2°00'57"
T = 1181.99'
L = 2240.30'
R = 2842.29'
EMAX= 4.5 %
RUNOUT= 120'

PT: 994+43.64

N

PC: 1010+72.37

HUNTERS HOLLOW RD

1000

1005

1010

1015

1020

1025

1030

PARK RD

CURVE 20
PI STA = 1017+73.59
DELTA = 46°24'49"
D = 3°30'12"
T = 701.22'
L = 1324.90'
R = 1635.53'
EMAX= 5.8 %
RUNOUT= 155'

PT: 1023+97.26

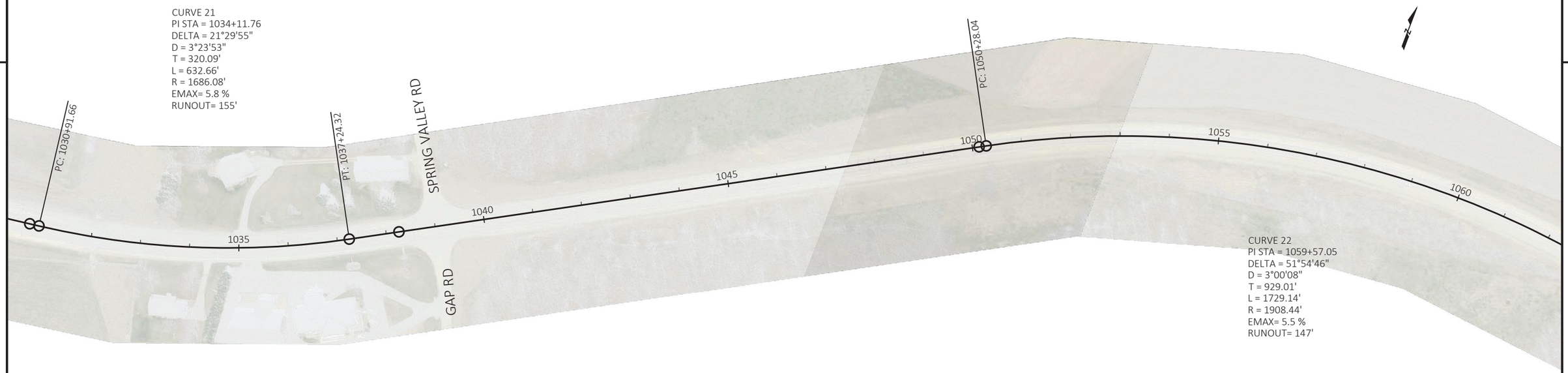
PC: 1030+91.66

N

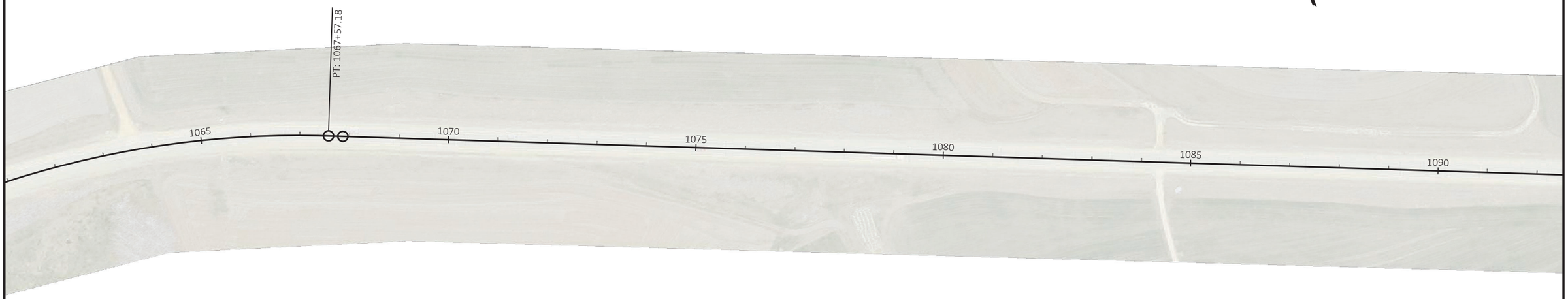
PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 24	E

2

CURVE 21
PI STA = 1034+11.76
DELTA = 21°29'55"
D = 3°23'53"
T = 320.09'
L = 632.66'
R = 1686.08'
EMAX= 5.8 %
RUNOUT= 155'



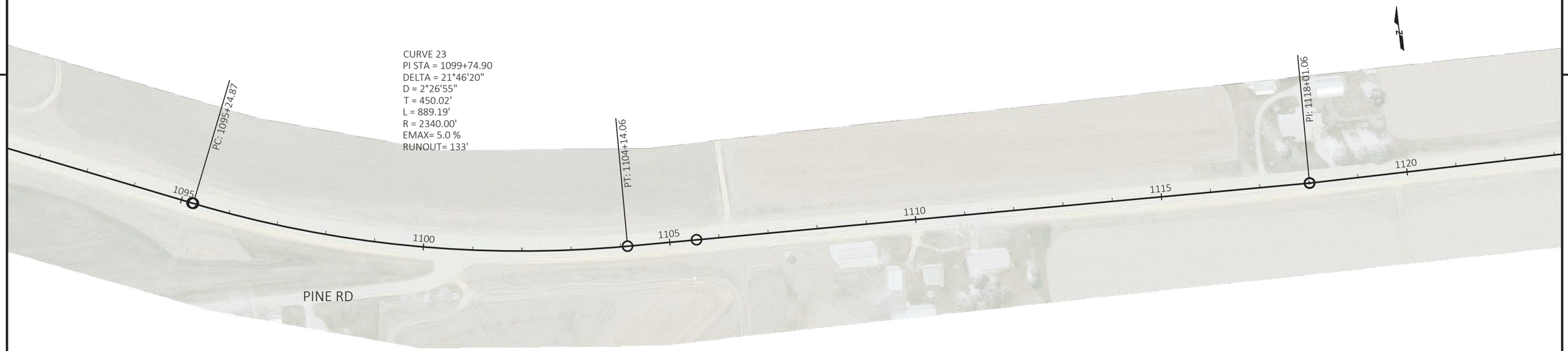
CURVE 22
PI STA = 1059+57.05
DELTA = 51°54'46"
D = 3°00'08"
T = 929.01'
L = 1729.14'
R = 1908.44'
EMAX= 5.5 %
RUNOUT= 147'

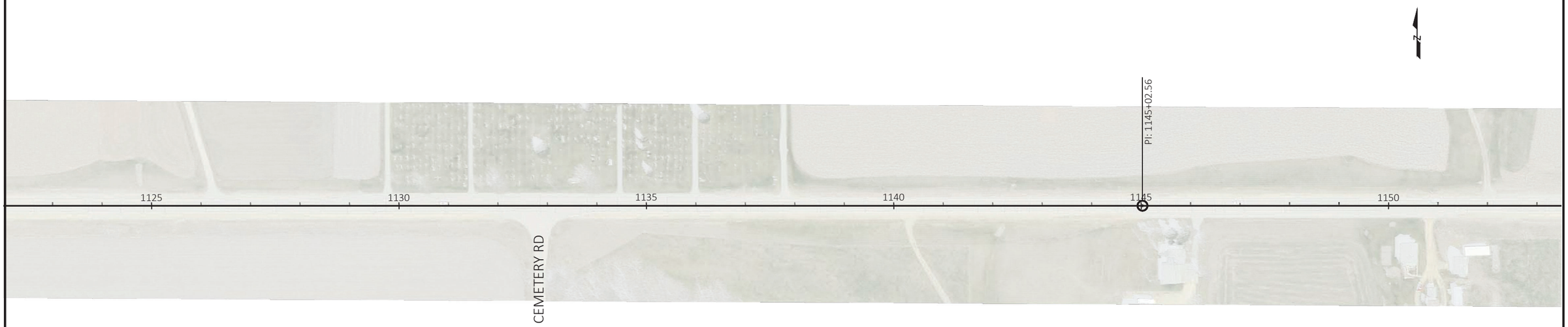


PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 25	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027214_ad
PLOT DATE : 10/8/2018 10:09 AM
PLOT BY : KLUDY, KATHLEEN M
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44

2





PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 26	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027215_ad
PLOT DATE : 10/8/2018 10:10 AM
PLOT BY : KLUDY, KATHLEEN M
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44

2

2

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	ALIGNMENT	SHEET 27	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027216_ad

PLOT DATE : 10/8/2018 10:12 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ##########

1662-01-61

Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	425.000	425.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	305,380.000	305,380.000
0006	204.0150	Removing Curb & Gutter	LF	124.000	124.000
0008	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	528.000	528.000
0010	213.0100	Finishing Roadway (project) 01. 1662-01-61	EACH	1.000	1.000
0012	305.0110	Base Aggregate Dense 3/4-Inch	TON	13,055.000	13,055.000
0014	305.0500	Shaping Shoulders	STA	1,158.000	1,158.000
0016	455.0605	Tack Coat	GAL	24,232.000	24,232.000
0018	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0020	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0022	460.2005	Incentive Density PWL HMA Pavement	DOL	32,800.000	32,800.000
0024	460.2010	Incentive Air Voids HMA Pavement	DOL	48,530.000	48,530.000
0026	460.5224	HMA Pavement 4 LT 58-28 S	TON	48,758.000	48,758.000
0028	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	45,365.000	45,365.000
0030	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	84,212.000	84,212.000
0032	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	139.000	139.000
0034	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1662-01-61	EACH	1.000	1.000
0036	619.1000	Mobilization	EACH	1.000	1.000
0038	624.0100	Water	MGAL	136.700	136.700
0040	642.5001	Field Office Type B	EACH	1.000	1.000
0042	643.0300	Traffic Control Drums	DAY	105.000	105.000
0044	643.0900	Traffic Control Signs	DAY	6,478.000	6,478.000
0046	643.5000	Traffic Control	EACH	1.000	1.000
0048	646.1020	Marking Line Epoxy 4-Inch	LF	428,729.000	428,729.000
0050	646.3020	Marking Line Epoxy 8-Inch	LF	2,100.000	2,100.000
0052	648.0100	Locating No-Passing Zones	MI	16.500	16.500
0054	649.0105	Temporary Marking Line Paint 4-Inch	LF	106,876.000	106,876.000
0056	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	106,876.000	106,876.000
0058	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	139.000	139.000
0060	650.8000	Construction Staking Resurfacing Reference	LF	86,900.000	86,900.000
0062	650.9910	Construction Staking Supplemental Control (project) 01. 1662-01-61	LS	1.000	1.000
0064	690.0150	Sawing Asphalt	LF	88.000	88.000
0066	740.0440	Incentive IRI Ride	DOL	77,200.000	77,200.000
0068	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	500.000	500.000
0070	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	200.000	200.000
0072	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	3,450.000	3,450.000

3

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION TO	STATION	LOCATION	204.0120 SY	REMARKS
0010	30500	117475	CL	231935	MAINLINE
0010	30500	59300	CL	19200	3 FT SHOULDERS
0010	33700	34100	RT	535	RT TURN LANE
0010	37600	37800	LT	270	RT TURN LANE
0010	51200	51350	RT	200	RT TURN LANE
0010	59300	61000	RT	1900	10 FT SHOULDER
0010	59300	61000	RT	2270	AUXILLIARY LANE
0010	59300	59800	LT	175	3 FT SHOULDER
0010	59800	61500	LT	1900	10 FT SHOULDER
0010	59780	61300	LT	2030	AUXILLIARY LANE
0010	71300	71600	LT	335	10 FT SHOULDER
0010	71450	71600	RT	170	10 FT SHOULDER
0010	71750	73100	LT	1500	10 FT SHOULDER
0010	82000	82500	LT	560	10 FT SHOULDER EXISTING C&G TO REMAIN
0010	82900	83400	LT	560	10 FT SHOULDER EXISTING C&G TO REMAIN
0010	86100	89000	LT	3225	10 FT SHOULDER
0010	86500	87200	RT	780	10 FT SHOULDER EXISTING C&G TO REMAIN
0010	87475	87550	RT	85	10 FT SHOULDER
0010	88050	88150	RT	115	10 FT SHOULDER
0010	88250	89100	LT	1135	AUXILLIARY LANE
0010	88300	89000	RT	780	
0010	92500	98450	LT	8000	
0010	98300	101975	RT	5000	
0010	98400	104950	RT	8735	AUXILLIARY LANE
0010	101400	101500	LT	115	10 FT SHOULDER
0010	102000	102900	LT	1200	AUXILLIARY LANE
0010	102900	104300	LT	1560	10 FT SHOULDER
0010	102900	104300	RT	500	3 FT SHOULDER
0010	104300	109500	LT & RT	3500	3 FT SHOULDERS
0010	109500	110400	LT	1000	10 FT SHOULDER
0010	110400	111500	LT & RT	735	3 FT SHOULDERS
0010	111500	112100	LT	670	10 FT SHOULDER EXISTING C&G TO REMAIN
0010	112800	113700	LT	1000	10 FT SHOULDER EXISTING C&G TO REMAIN
0010	114400	115050	RT	725	10 FT SHOULDER EXISTING C&G TO REMAIN
0010	115800	117475	LT	1865	10 FT SHOULDER EXISTING C&G TO REMAIN
0010	116400	117400	RT	1115	10 FT SHOULDER EXISTING C&G TO REMAIN
TOTAL 0010				305380	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION TO	STATION	LOCATION	204.0115 SY	REMARKS
0010	305+00	305+50	CL	222	BEGINNING OF PROJECT
0010	1173+50	1174+00	CL	203	END OF PROJECT
TOTAL 0010				425	

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

CATEGORY	STATION TO	STATION	LOCATION	211.0400 STA	REMARKS
0010	305+00	568+80	LT & RT	528	
TOTAL 0010				528	

CURB & GUTTER

CATEGORY	STATION TO STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	REMARKS
0010	886+44 - 887+09	RT	62	97	97	CTH K TO SOUTH
0010	887+46 - 887+75	RT	62	42	42	CTH K TO SOUTH
TOTAL 0010			124	139	139	

SEE CTH K TO THE SOUTH INTERSECTION DETAIL

LOCATING NO-PASSING ZONES

CATEGORY	STATION TO STATION	LOCATION	648.0100 MI	REMARKS
0010	30500 - 117400	STH 35	16.5	
TOTAL 0010			16.5	

SAWING ASPHALT

CATEGORY	STATION	LOCATION	690.0150 LF	REMARKS
0010	305+00	CL	30	
0010	1174+00	CL	34	
0010		CTH K CL	24	CTH K
		TOTAL 0010	88	

CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION TO STATION	LOCATION	650.8000 LF	REMARKS
0010	30500 - 117400	CL	86900	
		TOTAL 0010	86900	

HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS

CATEGORY	STATION TO STATION	LOCATION	460.0105.S EACH	REMARKS
0010	305+00 - 1174+00	CL	1	
		TOTAL 0010	1	

HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY

CATEGORY	STATION TO STATION	LOCATION	460.0110.S EACH	REMARKS
0010	305+00 - 1174+00	CL	1	
		TOTAL 0010	1	

SPECIAL (01. REMOVING DISTRESSED PAVEMENT MILLING)

CATEGORY	STATION TO STATION	LOCATION	SPV.0180.01 SY	REMARKS
0010	305+00 - 1174+00	CL	3,450	
		TOTAL 0010	3,450	

BASE AGGREGATE, SHAPING SHOULDERS & WATER

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4 - INCH TON	305.0500 SHAPING SHOULDERS STA	624.0100 WATER MGAL	REMARKS
0010	305+00	-	568+80	LT & RT	3,900	264	40.00	SHOULDERS
0010	376+00	-	378+00	LT	4	2	0.10	RT TURN LANE SHOULDER
0010	512+00	-	513+50	RT	3	2	0.10	RT TURN LANE SHOULDER
0010	568+80	-	713+00	LT	1,870	145	20.00	SHOULDER
0010	568+80	-	714+50	RT	1,890	146	20.00	SHOULDER
0010	593+00	-	610+00	RT	95	17	1.00	AUXILLIARY LANE SHOULDER
0010	597+80	-	613+00	LT	85	15	1.00	AUXILLIARY LANE SHOULDER
0010	713+00	-	716+00	LT	6	3	0.10	SHOULDER
0010	714+50	-	716+00	RT	3	2	0.10	SHOULDER
0010	717+50	-	719+50	LT	4	2	0.10	RT TURN LANE SHOULDER
0010	820+00	-	825+00	LT	10	5	0.10	SHOULDER
0010	825+00	-	829+00	LT & RT	105	4	1.00	SHOULDER
0010	829+00	-	834+00	LT	10	5	0.10	SHOULDER
0010	834+00	-	922+50	LT	1,150	89	12.00	SHOULDER
0010	861+00	-	890+00	LT	55	29	0.50	SHOULDER
0010	865+00	-	872+00	RT	15	7	0.10	SHOULDER
0010	874+75	-	875+50	RT	1	1	0.10	SHOULDER
0010	880+50	-	881+50	RT	2	1	0.10	SHOULDER
0010	882+50	-	891+00	LT	45	9	0.50	AUXILLIARY LANE SHOULDER
0010	882+50		887+00	RT	8	5	0.10	RT TURN LANE SHOULDER
0010	883+00	-	890+00	RT	15	7	0.10	SHOULDER
0010	922+50	-	989+00	LT	370	67	4.00	AUXILLIARY LANE SHOULDER
0010	925+00	-	984+50	LT	775	60	8.00	SHOULDER
0010	983+00	-	1019+75	RT	480	37	5.00	SHOULDER
0010	984+00	-	1049+50	RT	365	66	4.00	AUXILLIARY LANE SHOULDER
0010	989+00	-	1115+00	LT	1,635	126	17.00	SHOULDER
0010	1011+00	-	1013+00	LT	4	2	0.10	SHOULDER
0010	1013+00		1015+50	LT	5	3	0.10	RT TURN LANE SHOULDER
0010	1015+25		1017+00	LT	25	2	0.30	SHOULDER
0010	1020+00	-	1032+00	LT	70	12	0.80	AUXILLIARY LANE SHOULDER
0010	1029+00	-	1043+00	LT	30	14	0.10	SHOULDER
0010	1095+00	-	1104+00	LT	20	9	0.10	SHOULDER
TOTAL 0010					13,055	1,158	136.70	

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ASPHALT SUMMARY

CATEGORY	STATION TO STATION	LOCATION	HMA PAVEMENT DEPTH INCH	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	REMARKS
0010	305+00 - 1174+75	CL	2.50	16,240	32,800	MAINLINE
0010	305+00 - 568+80	LT & RT	2.50	3,300	6,625	8 FT SHOULDERS
0010	337+00 - 341+00	RT	2.50	40	80	RT TURN LANE
0010	376+00 - 378+00	LT	2.50	20	40	RT TURN LANE
0010	512+00 - 513+50	RT	2.50	14	30	RT TURN LANE
0010	568+80 - 713+00	LT	2.50	340	680	3 FT SHOULDER
0010	568+80 - 714+50	RT	2.50	340	690	3 FT SHOULDER
0010	593+00 - 610+00	RT	2.50	160	325	AUXILLIARY LANE RT
0010	597+80 - 613+00	LT	2.50	150	300	AUXILLIARY LANE LT
0010	713+00 - 716+00	LT	2.50	25	50	10 FT SHOULDER
0010	714+50 - 716+00	RT	2.50	12	25	10 FT SHOULDER
0010	717+50 - 719+50	LT	2.50	20	40	RT TURN LANE
0010	820+00 - 825+00	LT	2.50	40	80	10 FT SHOULDER
0010	825+00 - 829+00	LT & RT	2.50	20	40	3 FT SHOULDERS
0010	829+00 - 834+00	LT	2.50	40	80	10 FT SHOULDER
0010	834+00 - 922+50	LT	2.50	208	420	3 FT SHOULDERS
0010	861+00 - 890+00	LT	2.50	226	455	10 FT SHOULDER
0010	865+00 - 872+00	RT	2.50	55	110	10 FT SHOULDER
0010	874+75 - 875+50	RT	2.50	6	12	10 FT SHOULDER
0010	880+50 - 881+50	RT	2.50	8	16	10 FT SHOULDER
0010	882+50 - 891+00	LT	2.50	80	160	AUXILLIARY LANE LT
0010	882+50 887+00	RT	2.50	42	85	RT TURN LANE
0010	883+00 - 890+00	RT	2.50	55	110	10 FT SHOULDER
0010	922+50 - 989+00	LT	2.50	625	1,255	AUXILLIARY LANE LT
0010	925+00 - 984+50	LT	2.50	140	285	3 FT SHOULDERS
0010	983+00 - 1019+75	RT	2.50	90	175	3 FT SHOULDERS
0010	984+00 - 1049+50	RT	2.50	615	1,235	AUXILLIARY LANE RT
0010	989+00 - 1115+00	LT	2.50	300	595	3 FT SHOULDER
0010	1011+00 - 1013+00	LT	2.50	20	35	10 FT SHOULDER
0010	1013+00 1015+50	LT	2.50	25	50	RT TURN LANE
0010	1015+25 1017+00	LT	2.50	5	10	3 FT SHOULDER
0010	1020+00 - 1032+00	LT	2.50	115	240	AUXILLIARY LANE LT
0010	1024+57 1029+33	RT	1.75	162	230	WAYSIDE OVERLAY
0010	1029+00 - 1043+00	LT	2.50	110	220	10 FT SHOULDER
0010	1095+00 - 1104+00	LT	2.50	70	145	10 FT SHOULDER
0010	1115+00 - 1121+00	LT	2.50	50	100	10 FT SHOULDER
0010	1121+00 - 1128+00	LT	2.50	20	35	3 FT SHOULDER
0010	1128+00 - 1137+00	LT	2.50	70	145	10 FT SHOULDER
0010	1137+00 - 1158+00	LT	2.50	50	100	3 FT SHOULDER
0010	1144+00 - 1150+50	RT	2.50	55	105	10 FT SHOULDER
0010	1150+50 - 1164+00	LT & RT	2.50	64	130	3 FT SHOULDERS
0010	1158+00 - 1174+00	LT	2.50	125	255	10 FT SHOULDER
0010	1164+00 - 1174+00	RT	2.50	80	160	10 FT SHOULDER
		TOTAL 0010		24,232	48,758	

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ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

465.0425

CATEGORY	STATION TO STATION	LOCATION	LF	REMARKS
0010	305+00 - 318+25	LT	1,325	
0010	305+00 - 318+75	RT	1,375	
0010	319+25 - 340+00	LT	2,075	
0010	319+75 - 328+00	RT	825	
0010	332+25 - 336+00	RT	375	
0010	344+00 - 373+00	RT	2,900	
0010	345+00 - 373+50	LT	2,850	
0010	377+25 - 399+75	RT	2,250	
0010	380+00 - 391+75	LT	1,175	
0010	393+25 - 416+75	LT	2,350	
0010	404+25 - 426+50	RT	2,225	
0010	418+25 - 430+00	LT	1,175	
0010	431+00 - 443+75	RT	1,275	
0010	431+00 - 480+25	LT	4,925	
0010	448+25 - 484+75	RT	3,650	
0010	484+00 - 487+25	LT	325	
0010	489+25 - 510+00	RT	2,075	
0010	488+00 - 505+75	LT	1,775	
0010	507+00 - 512+00	LT	500	
0010	516+50 - 568+80	RT	5,230	
0010	516+50 - 548+00	LT	3,150	
0010	551+75 - 559+00	LT	725	
0010	562+75 - 568+80	LT	605	
0010	602+50 - 604+80	RT	230	SEE PAVEMENT MARKING DETAIL SHEET
	TOTAL 0010		45,365	

ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL

465.0475

CATEGORY	STATION TO STATION	LF	REMARKS
0010	305+00 - 328+50	2,350	
0010	332+50 - 339+50	700	
0010	344+50 - 373+50	2,900	
0010	378+00 - 400+26	2,226	
0010	404+26 - 427+00	2,274	
0010	431+00 - 444+26	1,326	
0010	448+26 - 485+00	3,674	
0010	489+00 - 512+10	2,310	
0010	516+10 - 595+26	7,916	
0010	599+26 - 608+40	914	
0010	612+40 - 635+00	2,260	
0010	639+00 - 714+50	7,550	
0010	718+50 - 786+00	6,750	
0010	780+00 - 860+00	8,000	
0010	894+00 - 967+75	7,375	
0010	971+75 - 980+00	825	
0010	984+00 - 1010+50	2,650	
0010	1014+50 - 1019+50	500	
0010	1025+88 - 1028+00	212	
0010	1030+00 - 1037+00	700	
0010	1041+00 - 1098+50	5,750	
0010	1102+50 - 1130+82	2,832	
0010	1032+82 - 1155+00	12,218	
		84,212	

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TRAFFIC CONTROL SIGNS

CATEGORY	LOCATION	LT/RT	643.0900 DAY	NO. SIGN	SIGN NO.	SIGN	SIZE	STAGE
0010	USH 18	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	USH 18	RT	80	1	W20-1C	ROAD WORK 1000 FT		ENTIRE PROJECT
0010	USH 18	RT	80	1	W20-1D	ROAD WORK 500 FT		ENTIRE PROJECT
0010	USH 18	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	USH 18	RT	80	1	G20-1	ROAD WORK NEXT 18 MILES	60"X24"	ENTIRE PROJECT
0010	USH 18	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	USH 18	LT	80	1	W20-1C	ROAD WORK 1000 FT		ENTIRE PROJECT
0010	USH 18	LT	80	1	W20-1D	ROAD WORK 500 FT		ENTIRE PROJECT
0010	USH 18	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	USH 18	LT	80	1	G20-1	ROAD WORK NEXT 18 MILES	60"X24"	ENTIRE PROJECT
0010	HUMPHREY RD	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	HUMPHREY RD	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	BREUER RD	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	BREUER RD	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	HICKLIN HOLLOW RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	HICKLIN HOLLOW RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	LAWLESS RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	LAWLESS RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	MILITARY RIDGE RD	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	MILITARY RIDGE RD	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	SUNNEY RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	SUNNEY RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	FAIRGROUND RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	FAIRGROUND RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	ENKE RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	ENKE RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	KIES LN	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	KIES LN	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	DOC BROOKS RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	DOC BROOKS RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	CLARK RD	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	CLARK RD	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	CTH JJ TO S	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	CTH JJ TO S	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
	PAGE 1 SUBTOTAL		2,720					

TRAFFIC CONTROL SIGNS CONTINUED

CATEGORY	LOCATION	LT/RT	643.0900 DAY	NO. SIGN	SIGN NO.	SIGN	SIZE	STAGE
0010	KLINKHAMMER LN	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	KLINKHAMMER LN	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	ABREMS LN	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	ABREMS LN	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	STH 133 N	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	STH 133 N	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	CTH J TO N	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	CTH J TO N	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	N CENTER ST	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	N CENTER ST	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	RIDGE RD	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	RIDGE RD	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	IRISH RIDGE RD	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	IRISH RIDGE RD	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	CTH JJ TO S	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	CTH JJ TO S	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	RICE RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	RICE RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	CTH K TO N	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	CTH K TO N	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	CTH K TO S	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	CTH K TO S	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	OAK RD	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	OAK RD	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	GAP RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	GAP RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	HUNTERS HOLLOW RD	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	HUNTERS HOLLOW RD	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	PARK RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	PARK RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	SPRING VALLEY RD	RT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	SPRING VALLEY RD	LT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
	PAGE 2 SUBTOTAL		2,560					

TRAFFIC CONTROL SIGNS CONTINUED

CATEGORY	LOCATION	LT/RT	643.0900 DAY	NO. SIGN	SIGN NO.	SIGN	SIZE	STAGE
0010	GAP RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	GAP RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	PINE RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	PINE RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	CEMETERY RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	CEMETERY RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	ROGER HOLLOW RD	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	ROGER HOLLOW RD	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	WILSON ST	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	WILSON ST	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	WASHINGTON ST	LT	80	1	G20-2A	END ROAD WORK	48"X24"	ENTIRE PROJECT
0010	WASHINGTON ST	RT	80	1	W20-1A	ROAD WORK AHEAD		ENTIRE PROJECT
0010	USH 18	LT	29	1	W20-4A	ONE LANE ROAD AHEAD		MILLING AND PAVIN
0010	USH 18	LT	29	1	W20-7A	FLAGGER		MILLING AND PAVIN
0010	USH 18	RT	29	1	W20-4A	ONE LANE ROAD AHEAD		MILLING AND PAVIN
0010	USH 18	RT	29	1	W20-7A	FLAGGER		MILLING AND PAVIN
0010	USH 18	RT	29	1	W8-11	UNEVEN LANES		MILLING AND PAVIN
0010	USH 18	LT	29	1	W8-11	UNEVEN LANES		MILLING AND PAVIN
0010	USH 18	LT	16	1	W21-5	SHOULDER WORK		SHOULDER
0010	USH 18	LT	16	1	W8-9A	SHOULDER DROP OFF		SHOULDER
0010	USH 18	RT	16	1	W21-5	SHOULDER WORK		SHOULDER
0010	USH 18	RT	16	1	W8-9A	SHOULDER DROP OFF		SHOULDER
		PAGE 3 SUBTOTAL	1,198					
		PAGE 1 SUBTOTAL	2,720					
		PAGE 2 SUBTOTAL	2,560					
		PAGE 3 SUBTOTAL	1,198					
		GRAND TOTAL 0010	6,478					

TRAFFIC CONTROL DRUMS

CATEGORY	LOCATION	NO. DRUMS	643.0300 DAY	REMARKS
0010	C&G LT	10	70	CTH K TO S
0010	C&G RT	5	35	CTH K TO S
	TOTAL 0010		105	

MARKING LINE EPOXY 8-INCH

CATEGORY	STATION TO STATION	RT TURN LANE LOCATION	646.3020 LF	REMARKS
0010	337+50 - 339+50	RT	300	BREUER RD
0010	511+42 - 513+42	RT	200	CTH JJ
0010	597+89 - 600+89	LT	300	STH 133 N
0010	606+66 - 609+66	RT	300	CTH J
0010	713+62 - 715+62	RT	200	CTH JJ
0010	717+30 - 719+30	LT	200	IRISH RIDGE RD
0010	864+33 - 865+33	LT	100	CTH K TO NORTH
0010	883+67 - 886+67	RT	300	CTH K TO SOUTH
0010	1013+00 - 1015+00	LT	200	HUNTERS HOLLOW
	TOTAL 0010		2100	

PAVEMENT MARKING

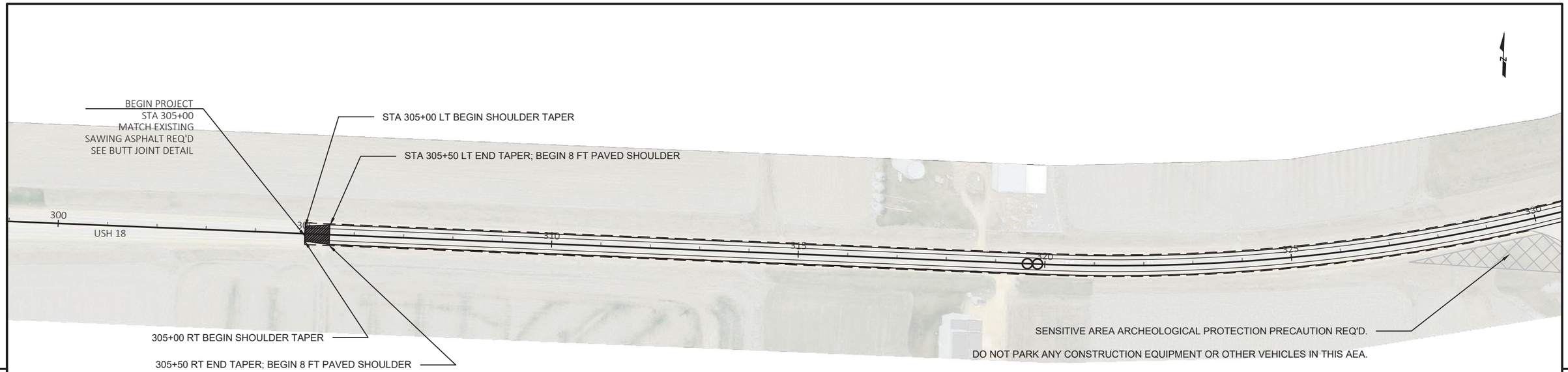
CATEGORY	STATION TO STATION	LENGTH (FT)	646.1020 MARKING LINE EPOXY 4-INCH LT EDGE LINE SOLID WHITE LF	RT EDGE LINE SOLID WHITE LF	12.5' DASHED WHITE LF	3' DASHED WHITE LF	SOLID NO PASSING YELLOW LF	12.5' DASHED YELLOW LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (USE ON MILLED SURFACE) C/L DASHED YELLOW LF	SOLID NO PASSING YELLOW LF	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH (USE ON SURFACE LAYER) C/L DASHED YELLOW LF	SOLID NO PASSING YELLOW LF	REMARKS
0010	305+00 - 329+87	2,487	4,974	4,974	-		4,974	-	-	4,974	-	4,974	
0010	329+87 - 331+01	114	114	114	-	29	228	-	-	228	-	228	HUMPHREY RD
0010	331+01 - 341+11	1,010	2,020	2,020	-		2,020	-	-	2,020	-	2,020	
0010	341+11 - 343+60	249	55	55	-	44	498	-	-	498	-	498	BREUER RD, HICKLIN HOLLOW RD
0010	343+60 - 375+67	3,207	6,349	6,349	-		6,414	-	-	6,414	-	6,414	
0010	375+67 - 376+77	110	52	52	-	28	220	-	-	220	-	220	LAWLESS RD, MILITARY RIDGE RD
0010	376+77 - 378+77	200	143	143	-	14	400	-	-	400	-	400	
0010	378+77 - 390+16	1,139	2,255	2,255	-	2	1,139	285	91	1,139	91	1,139	
0010	390+16 - 401+62	1,146	2,292	2,292	-	-	-	287	92	-	92	-	
0010	401+62 - 402+81	119	119	119	-	-	-	30	10	-	10	-	SUNNEY RD
0010	402+81 - 428+28	2,547	5,094	5,094	-	-	-	637	204	-	204	-	
0010	428+28 - 429+54	126	126	126	-	-	-	32	10	-	10	-	FAIRGROUND RD
0010	429+54 - 431+80	226	452	452	-	-	-	57	18	-	18	-	
0010	431+80 - 444+38	1,258	2,516	2,516	-	-	1,332	296	95	1,332	95	1,332	
0010	444+38 - 446+68	230	230	230	-	58	460	-	-	460	-	460	ENKE RD
0010	446+68 - 481+54	3,486	6,972	6,972	-	-	6,972	-	-	6,972	-	6,972	
0010	481+54 - 486+37	483	966	966	-	22	483	121	39	483	39	483	
0010	486+37 - 487+69	132	132	132	-	-	132	33	11	132	11	132	DOC BROOKS RD
0010	487+69 - 495+00	731	1,462	1,462	-	-	731	183	58	731	58	731	
0010	495+00 - 513+60	1,860	3,464	3,464	-	241	-	465	149	-	149	-	
0010	513+60 - 514+75	115	-	-	-	-	-	29	9	-	9	-	CLARK RD, CTH JJ
0010	514+75 - 571+33	5,658	11,168	11,168	-	30	-	1,415	453	-	453	-	
0010	571+33 - 584+44	1,311	2,622	2,622	-	-	1,311	328	105	1,311	105	1,311	
0010	584+44 - 596+93	1,249	2,472	2,472	20	-	2,498	-	-	2,498	-	2,498	
0010	596+93 - 597+79	86	86	86	22	-	-	-	-	-	-	-	STH 133
0010	597+79 - 609+79	1,200	2,898	2,898	465	-	2,400	-	-	2,400	-	2,400	
0010	609+79 - 610+94	115	115	115	29	-	230	-	-	230	-	230	N CENTER ST
0010	610+94 - 613+57	263	526	526	19	-	526	-	-	526	-	526	
0010	613+57 - 622+46	889	1,778	1,778	-	-	889	222	71	889	71	889	
0010	622+46 - 627+21	475	950	950	-	-	-	119	38		38		
0010	627+21 - 636+46	925	1,850	1,850	-	-	925	231	74	925	74	925	
0010	636+46 - 637+47	101	101	101	-	-	101	25	8	101	8	101	RIDGE RD
0010	637+47 - 640+50	303	606	606	-	54	303	76	24	303	24	303	
0010	640+50 - 643+11	261	522	522	-	-	522	-	-	522	-	522	
0010	643+11 - 655+79	1,268	2,536	2,536	-	-	1,268	317	101	1,268	101	1,268	
	PAGE 1 SUBTOTALS	68,017	68,017	555	522	36,976	5,188	1,660	36,976	1,660	36,976	

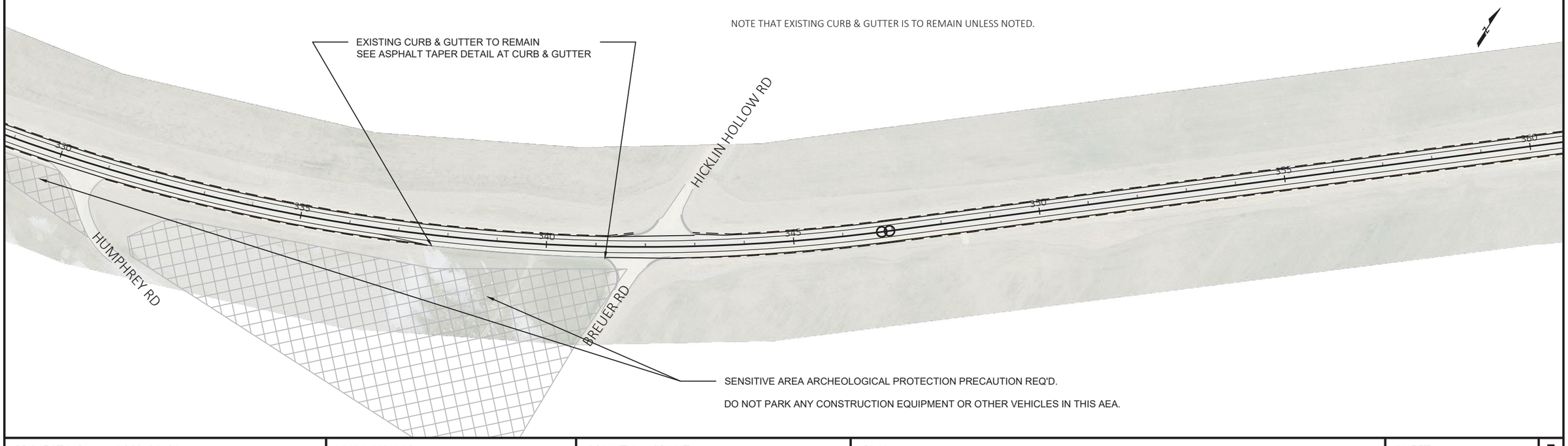
PAVEMENT MARKING CONTINUED

CATEGORY	STATION TO STATION	LENGTH (FT)	646.1020 MARKING LINE EPOXY 4-INCH LT EDGE LINE SOLID WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH RT EDGE LINE SOLID WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH 12.5' DASHED WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH 3' DASHED WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH SOLID NO PASSING YELLOW LF	646.1020 MARKING LINE EPOXY 4-INCH 12.5' DASHED YELLOW LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (USE ON MILLED SURFACE) C/L DASHED YELLOW LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (USE ON MILLED SURFACE) SOLID NO PASSING YELLOW LF	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH (USE ON SURFACE LAYER) C/L DASHED YELLOW LF	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH (USE ON SURFACE LAYER) SOLID NO PASSING YELLOW LF	REMARKS
0010	717+43 - 722+31	488	800	800	-	44	976	-	-	976	-	976	
0010	722+31 - 732+85	1,054	2,108	2,108	-	-	1,054	264	84	1,054	84	1,054	
0010	732+85 - 750+23	1,738	3,476	3,476	-	-	-	435	139	-	139	-	
0010	750+23 - 758+53	830	1,660	1,660	-	-	830	208	66	830	66	830	
0010	758+53 - 760+73	220	440	440	-	-	-	55	18	-	18	-	
0010	760+73 - 769+33	860	1,720	1,720	-	-	860	215	-	860	-	860	
0010	769+33 - 773+65	432	864	864	-	-	-	108	35	-	35	-	
0010	773+65 - 783+78	1,013	2,026	2,026	-	-	1,013	253	-	1,013	-	1,013	
0010	783+78 - 785+20	142	284	284	-	-	-	36	11	-	11	-	
0010	785+20 - 787+22	202	294	294	-	28	202	51	16	202	16	202	
0010	787+22 - 788+76	154	154	154	-	-	154	39	12	154	12	154	RICE RD
0010	788+76 - 794+15	539	1,078	1,078	-	-	539	135	43	539	43	539	
0010	794+15 - 812+51	1,836	3,672	3,672	-	-	-	459	147	-	147	-	
0010	812+51 - 823+31	1,080	2,160	2,160	-	-	1,080	270	86	1,080	86	1,080	
0010	823+31 - 832+61	930	1,860	1,860	-	-	930	233	74	930	74	930	
0010	832+61 - 846+56	1,395	2,790	2,790	-	-	-	349	112	-	112	-	
0010	846+56 - 857+11	1,055	2,110	2,110	-	-	1,055	264	84	1,055	84	1,055	
0010	857+11 - 863+31	620	1,240	1,240	-	-	1,240	-	-	1,240	-	1,240	
0010	863+31 - 864+44	113	113	113	-	28	226	-	-	226	-	226	CTH K
0010	864+44 - 886+20	2,176	4,266	4,266	-	26	4,352	-	-	4,352	-	4,352	
0010	886+20 - 888+35	215	268	268	54	67	430	-	-	430	-	430	CTH K
0010	888+35 - 929+20	4,085	8,170	8,170	-	-	8,170	-	-	8,170	-	8,170	
0010	929+20 - 969+20	4,000	8,000	8,000	1,000	-	8,000	-	-	8,000	-	8,000	
0010	969+20 - 970+85	165	165	165	41	-	330	-	-	330	-	330	OAK RD
0010	970+85 - 980+34	949	1,898	1,898	237	-	1,898	-	-	1,898	-	1,898	
0010	980+34 - 982+49	215	215	215	54	54	430	-	-	430	-	430	
0010	982+49 - 986+18	369	738	738	105	-	738	-	-	738	-	738	
0010	986+18 - 1012+00	2,582	5,164	5,164	646	-	5,164	-	-	5,164	-	5,164	
0010	1012+00 - 1014+57	257	560	560	64	94	514	-	-	514	-	514	HUNTER HOLLOW RD
0010	1014+57 - 1020+84	627	1,254	1,254	157	-	1,254	-	-	1,254	-	1,254	
0010	1020+84 - 1021+92	108	108	108	27	-	216	-	-	216	-	216	PARK RD
0010	1021+92 - 1029+41	749	1,498	1,498	375	-	1,498	-	-	1,498	-	1,498	
0010	1029+41 - 1038+60	919	1,819	1,819	230	-	1,838	-	-	1,838	-	1,838	
0010	1038+60 - 1039+61	101	-	-	25	-	202	-	-	202	-	202	GAP RD
	PAGE 2 SUBTOTALS	62,972	62,972	62,972	3,015	341	45,193	3,374	927	45,193	927	45,193	

PAVEMENT MARKING CONTINUED

CATEGORY	STATION TO STATION	LENGTH (FT)	646.1020 MARKING LINE EPOXY 4-INCH LT EDGE LINE SOLID WHITE LF	RT EDGE LINE SOLID WHITE LF	12.5' DASHED WHITE LF	3' DASHED WHITE LF	SOLID NO PASSING YELLOW LF	12.5' DASHED YELLOW LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (USE ON MILLED SURFACE) C/L DASHED YELLOW LF	SOLID NO PASSING YELLOW LF	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH (USE ON SURFACE LAYER) C/L DASHED YELLOW LF	SOLID NO PASSING YELLOW LF	REMARKS
0010	1039+61 - 1044+28	467	707	707	117	57	934	-	-	934	-	934	
0010	1044+28 - 1064+09	1,981	3,962	3,962	-	-	3,962	-	-	3,962	-	3,962	
0010	1064+09 - 1074+19	1,010	2,020	2,020	-	-	1,010	253	81	1,010	81	1,010	
0010	1074+19 - 1089+40	1,521	3,042	3,042	-	-	-	380	122	-	122	-	
0010	1089+40 - 1099+32	992	1,984	1,984	-	-	992	248	79	992	79	992	
0010	1099+32 - 1101+38	206	206	206	-	52	412	-	-	412	-	412	PINE RD
0010	1101+38 - 1132+30	3,092	6,150	6,150	-	9	6,184	-	-	6,184	-	6,184	
0010	1132+30 - 1133+43	113	113	113	-	-	226	-	-	226	-	226	CEMETARY RD
0010	1133+43 - 1158+78	2,535	5,004	5,004	-	17	5,004	-	-	5,004	-	5,004	
0010	1158+78 - 1160+03	125	125	125	-	-	230	-	-	230	-	230	ROGER HOLLOW RD
0010	1160+03 - 1166+65	662	995	995	-	-	1,324	-	-	1,324	-	1,324	
0010	1166+65 - 1174+00	780	-	-	-	-	1,560	-	-	1,560	-	1,560	
	PAGE 3 SUBTOTALS		24,308	24,308	117	135	21,838	881	282	21,838	282	21,838	
	PAGE 1 SUBTOTALS		68,017	68,017	555	522	36,976	5,188	1,660	36,976	1,660	36,976	
	PAGE 2 SUBTOTALS		62,972	62,972	3,015	341	45,193	3,374	927	45,193	927	45,193	
	PAGE 3 SUBTOTALS		24,308	24,308	117	135	21838	881	282	21838	282	21838	
	SUBTOTAL 0010		155,297	155,297	3,687	998	104,007	9,443	2,869	104,007	2,869	104,007	
	TOTAL 0010		428,729						TOTAL 0010	106,876	TOTAL 0010	106,876	



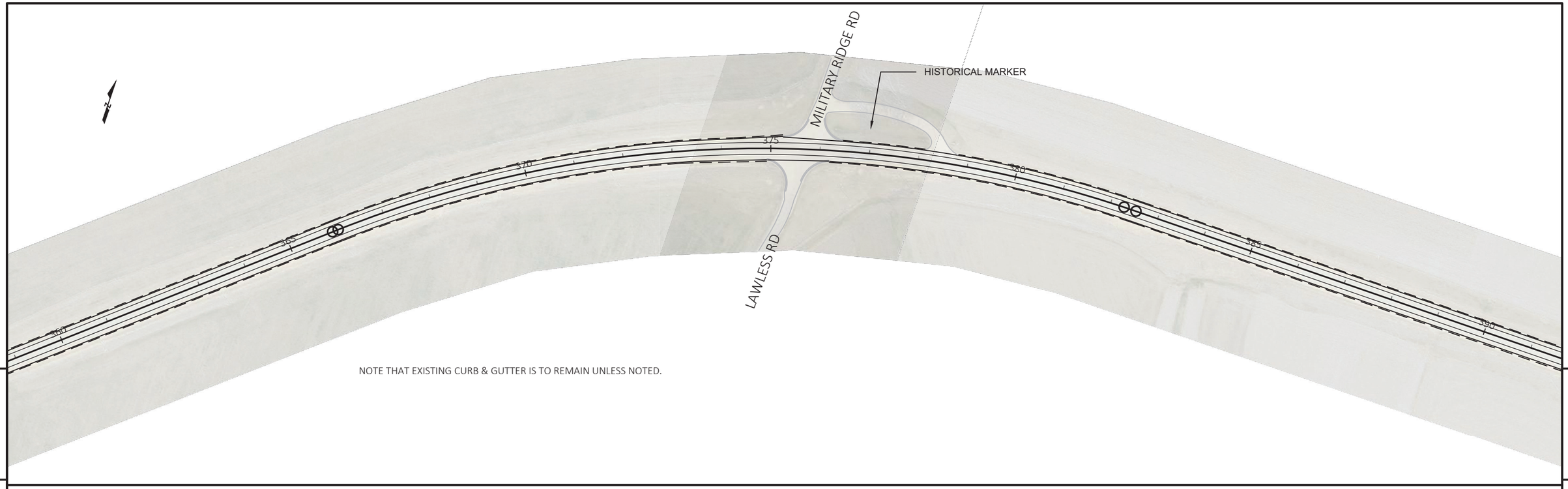


PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 40	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050201_pn

PLOT DATE : 10/8/2018 10:28 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ############

WISDOT/CADDS SHEET 44



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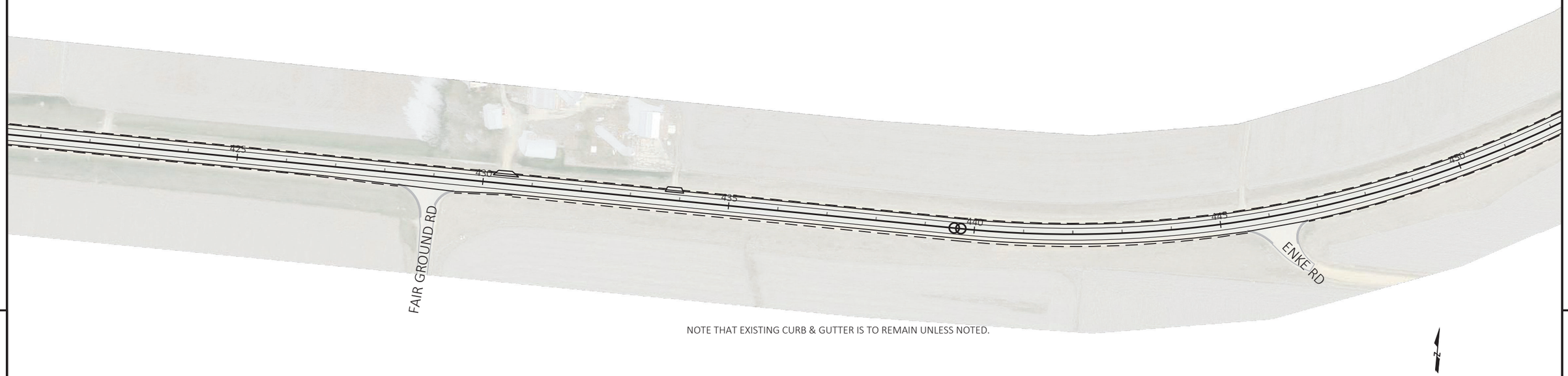
PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 41	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050202_pn

PLOT DATE : 10/8/2018 10:29 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ##########



NOTE THAT EXISTING CURB & GUTTER IS TO REMAIN UNLESS NOTED.

SENSITIVE AREA ARCHEOLOGICAL PROTECTION PRECAUTION REQ'D.

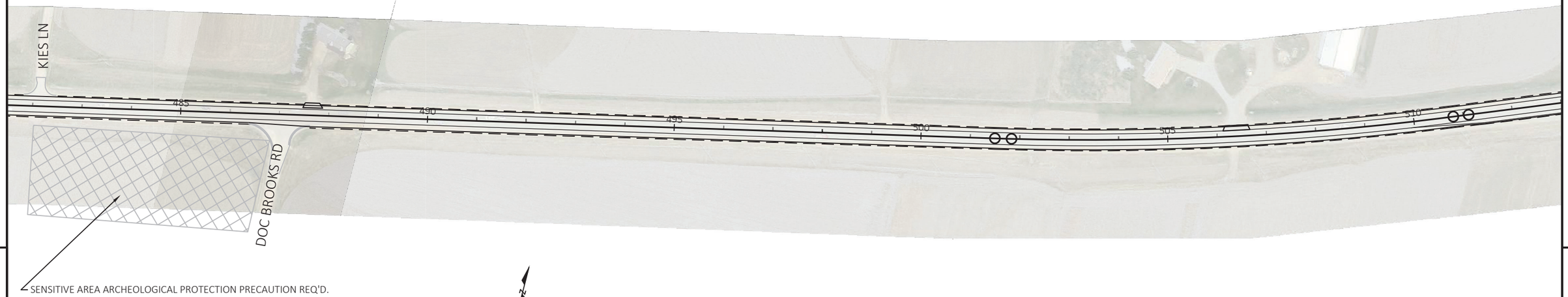
DO NOT PARK ANY CONSTRUCTION EQUIPMENT OR OTHER VEHICLES IN THIS AEA.

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 42	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050203_pn

PLOT DATE : 10/8/2018 10:30 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ############

NOTE THAT EXISTING CURB & GUTTER IS TO REMAIN UNLESS NOTED.



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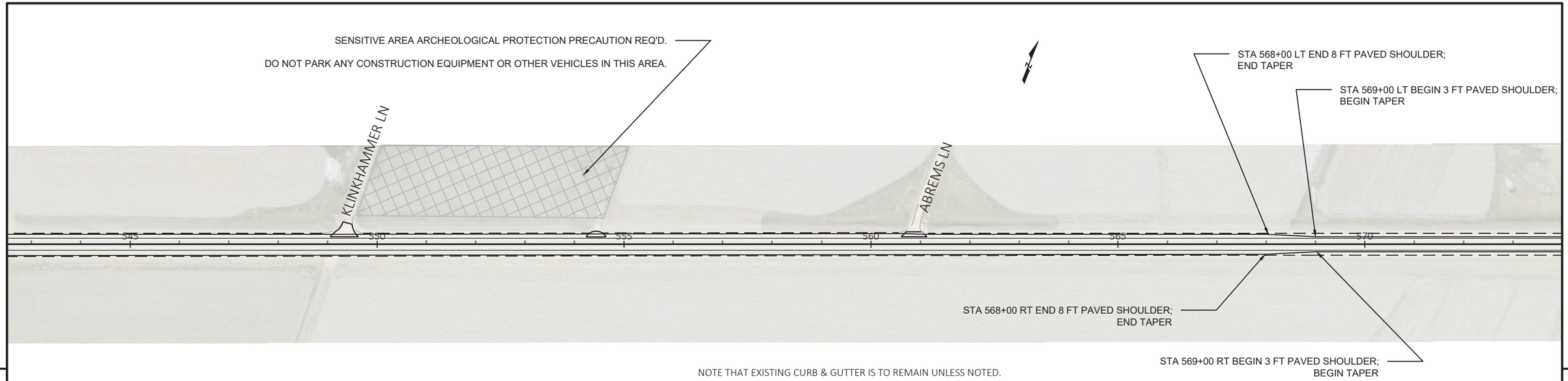
NOTE THAT EXISTING CURB & GUTTER IS TO REMAIN UNLESS NOTED.

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 43	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050204_pn

PLOT DATE : 10/8/2018 10:32 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ##########



NOTE THAT EXISTING CURB & GUTTER IS TO REMAIN UNLESS NOTED.

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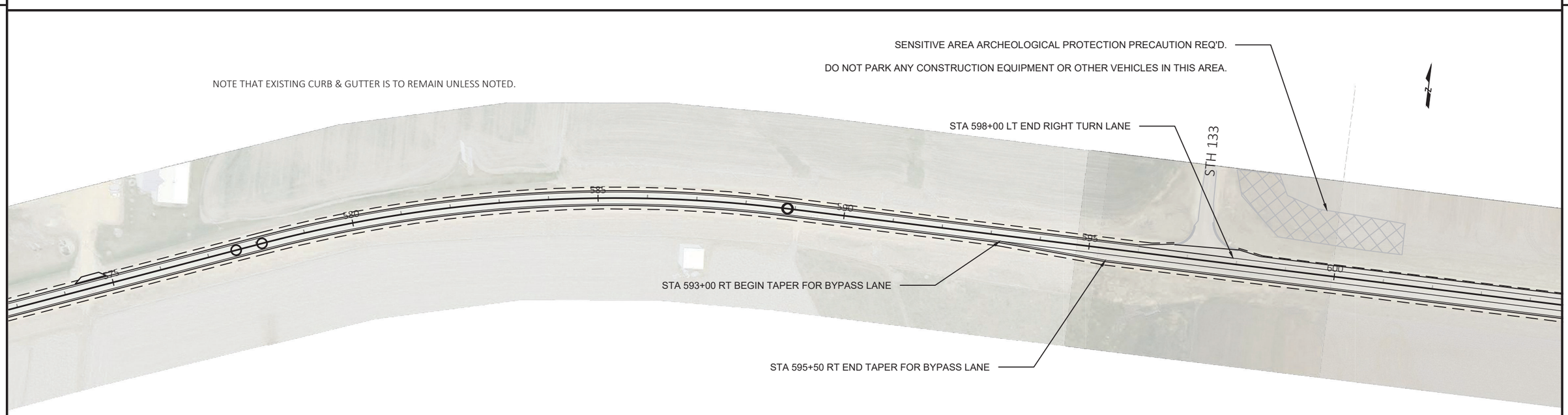
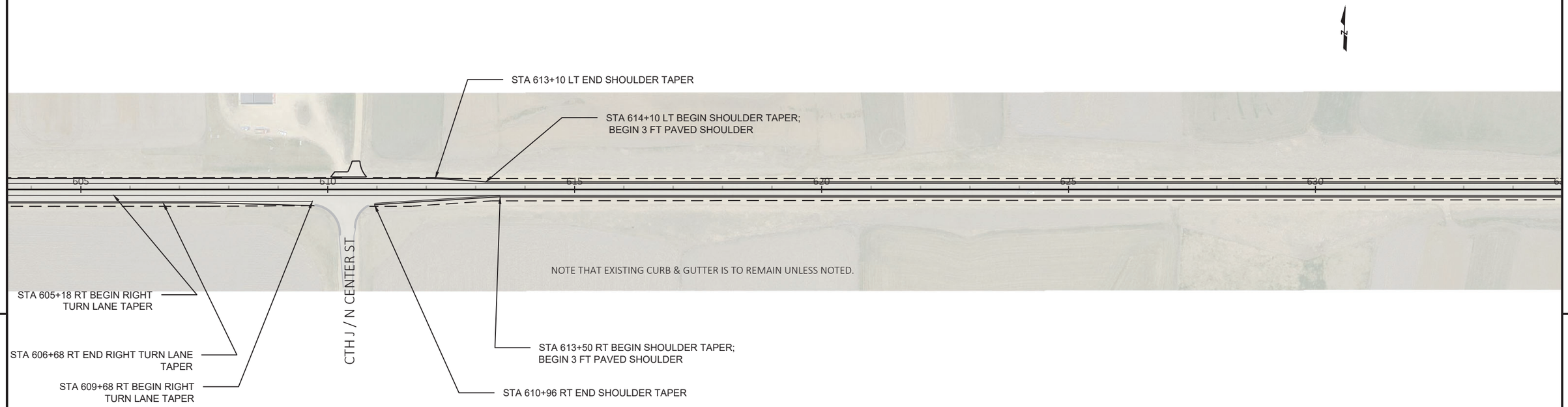


PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 44	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050205_pn

PLOT DATE : 10/8/2018 10:34 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ############



PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 45	E

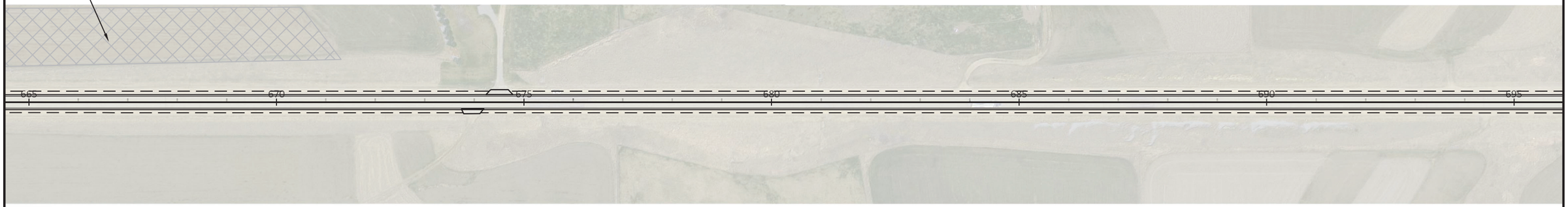
FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050206_pn

PLOT DATE : 9/13/2018 12:40 PM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ##########

SENSITIVE AREA ARCHEOLOGICAL PROTECTION PRECAUTION REQ'D.

DO NOT PARK ANY CONSTRUCTION EQUIPMENT OR OTHER VEHICLES IN THIS AEA.

N



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SENSITIVE AREA ARCHEOLOGICAL PROTECTION PRECAUTION REQ'D.

DO NOT PARK ANY CONSTRUCTION EQUIPMENT OR OTHER VEHICLES IN THIS AEA.

N

STA 716+00 LT END 10 FT PAVED SHOULDER

STA 713+50 LT END SHOULDER TAPER; BEGIN 10 FT PAVED SHOULDER

IRISH RIDGE RD

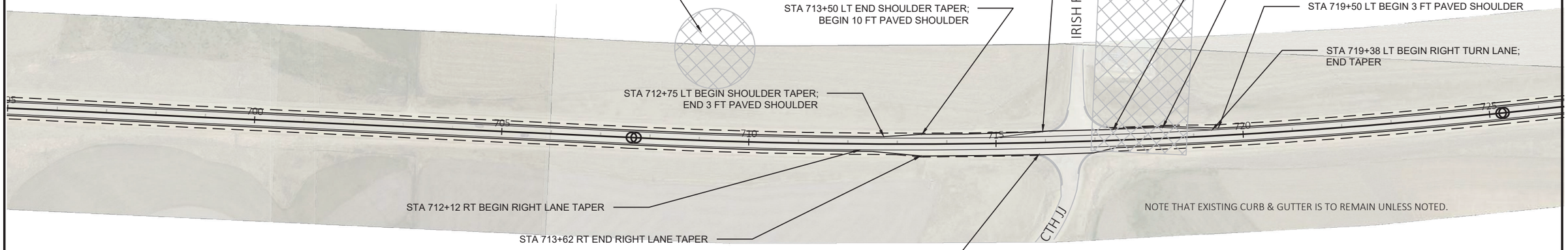
STA 717+38 LT END RIGHT TURN LANE

STA 719+38 LT BEGIN RIGHT TURN LANE; END TAPER

STA 719+50 LT BEGIN 3 FT PAVED SHOULDER

STA 719+38 LT BEGIN RIGHT TURN LANE; END TAPER

STA 712+75 LT BEGIN SHOULDER TAPER; END 3 FT PAVED SHOULDER



STA 712+12 RT BEGIN RIGHT LANE TAPER

STA 713+62 RT END RIGHT LANE TAPER

CTH JJ

NOTE THAT EXISTING CURB & GUTTER IS TO REMAIN UNLESS NOTED.

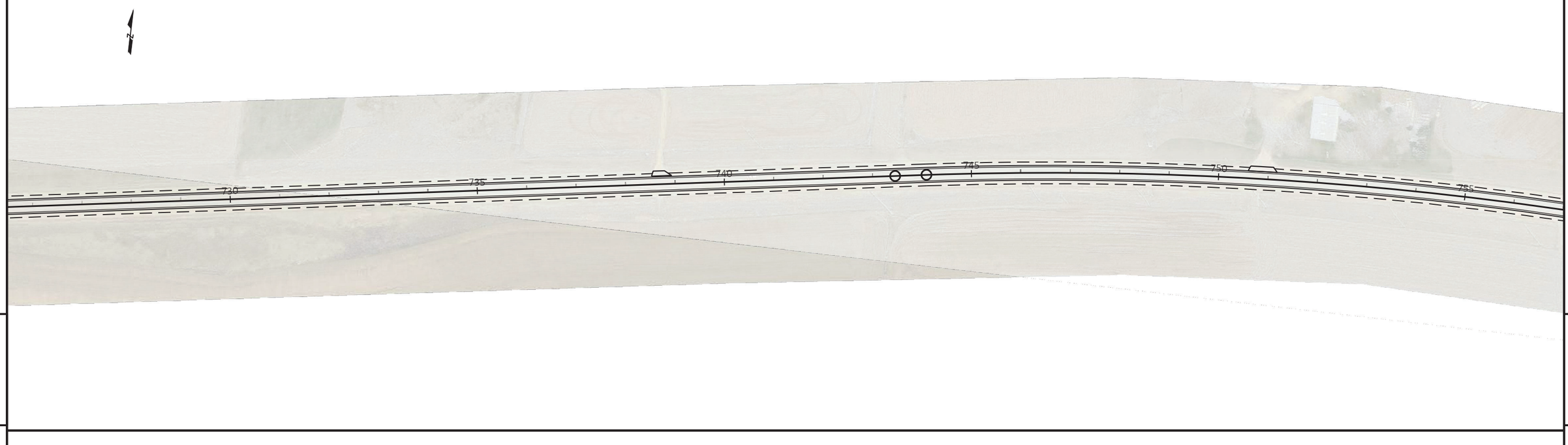
STA 715+62 RT END RIGHT TURN LANE

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 46	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050207_pn

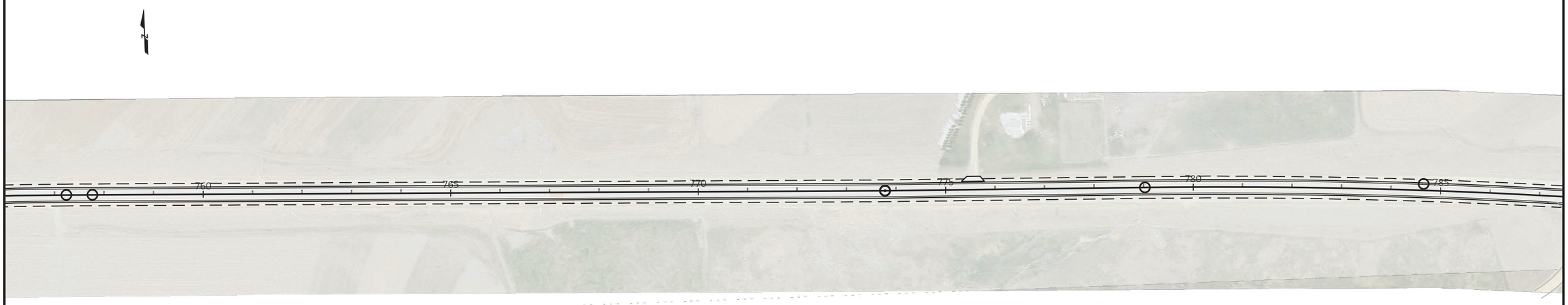
PLOT DATE : 10/8/2018 10:37 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

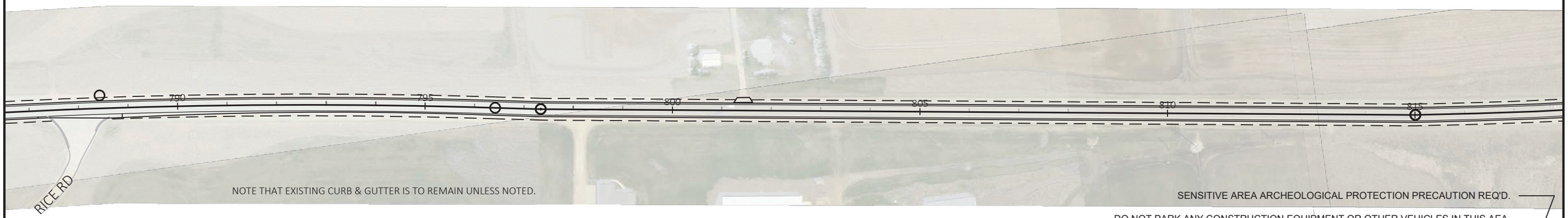


5

5



PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 47	E



NOTE THAT EXISTING CURB & GUTTER IS TO REMAIN UNLESS NOTED.

SENSITIVE AREA ARCHEOLOGICAL PROTECTION PRECAUTION REQ'D.

DO NOT PARK ANY CONSTRUCTION EQUIPMENT OR OTHER VEHICLES IN THIS AEA.

5

5

STA 820+00 LT END 3 FT PAVED SHOULDER;
BEGIN TAPER

STA 820+50 LT BEGIN 10 FT PAVED SHOULDER;
END TAPER; EXISTING CURB AND GUTTER TO
REMAIN.
SEE ASPHALT TAPER DETAIL AT CURB & GUTTER

STA 824+00 LT END 10 FT PAVED SHOULDER;
END TAPER; EXISTING CURB AND GUTTER TO
REMAIN.

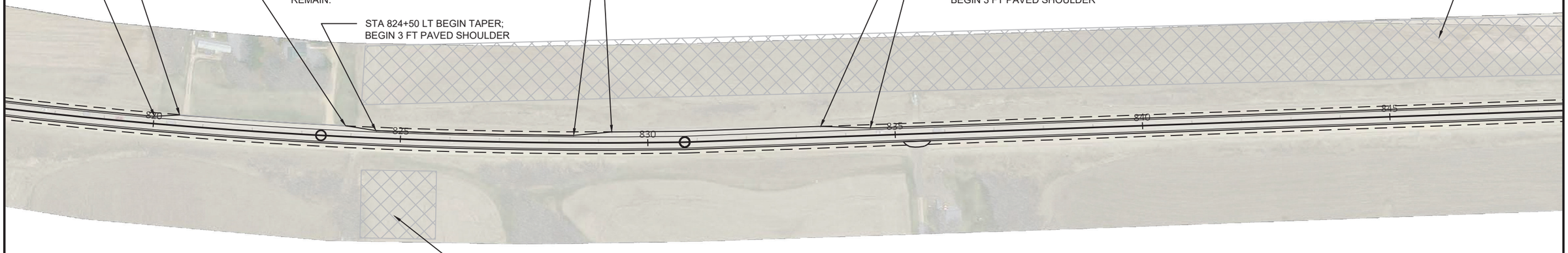
STA 824+50 LT BEGIN TAPER;
BEGIN 3 FT PAVED SHOULDER

STA 828+50 LT END 3 FT PAVED SHOULDER;
BEGIN TAPER

STA 829+00 LT BEGIN 10 FT PAVED SHOULDER;
END TAPER

STA 834+00 LT END 10 FT PAVED SHOULDER;
END TAPER

STA 834+50 LT BEGIN TAPER;
BEGIN 3 FT PAVED SHOULDER

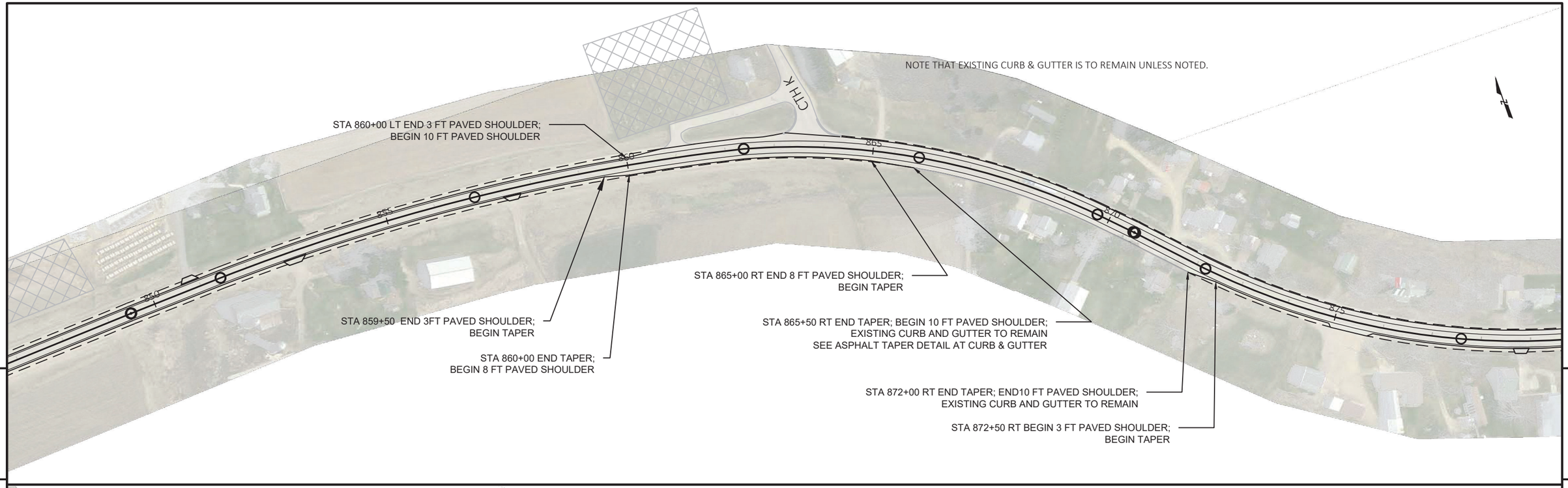


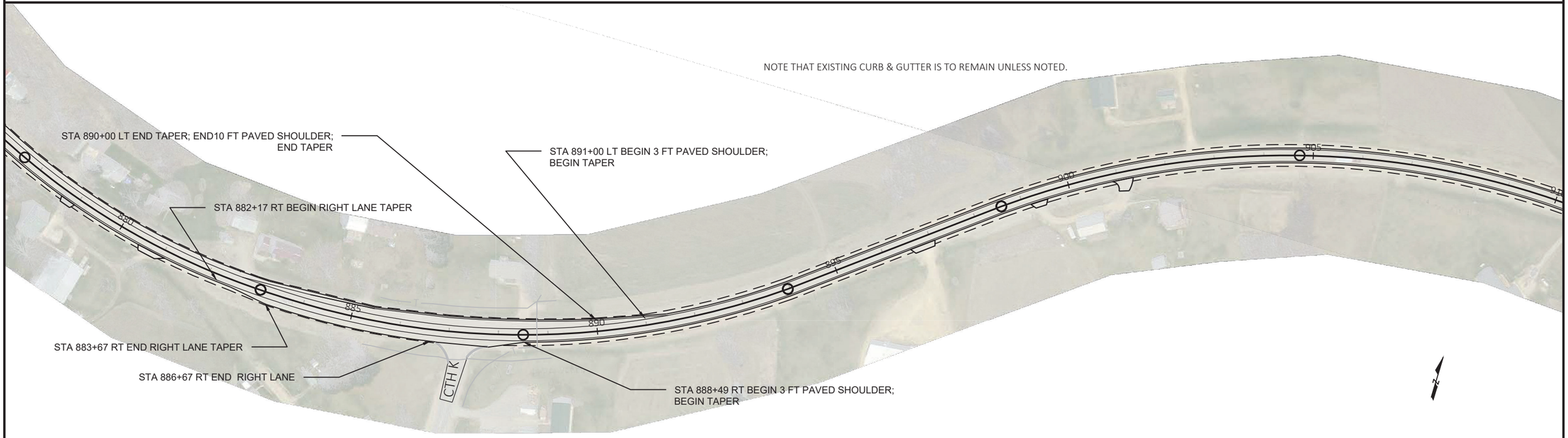
NOTE THAT EXISTING CURB & GUTTER IS TO REMAIN UNLESS NOTED.

SENSITIVE AREA ARCHEOLOGICAL PROTECTION PRECAUTION REQ'D.

DO NOT PARK ANY CONSTRUCTION EQUIPMENT OR OTHER VEHICLES IN THIS AEA.

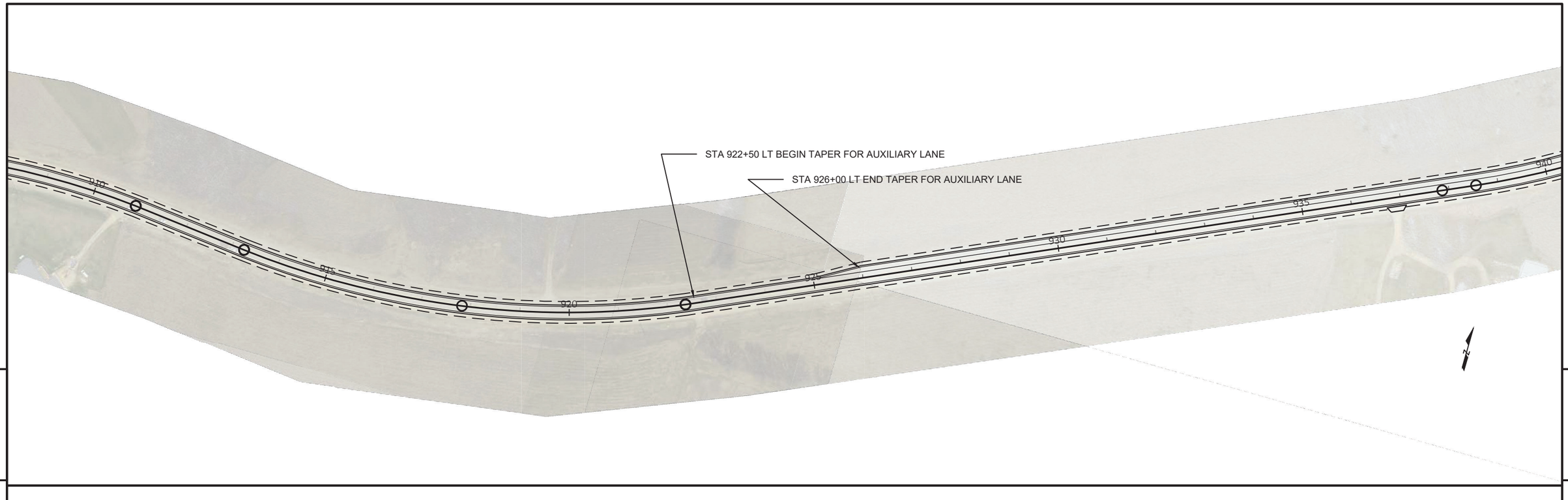
PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 48	E





SEE CONSTRUCTION DETAIL FOR CTH K LAYOUT

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 49	E



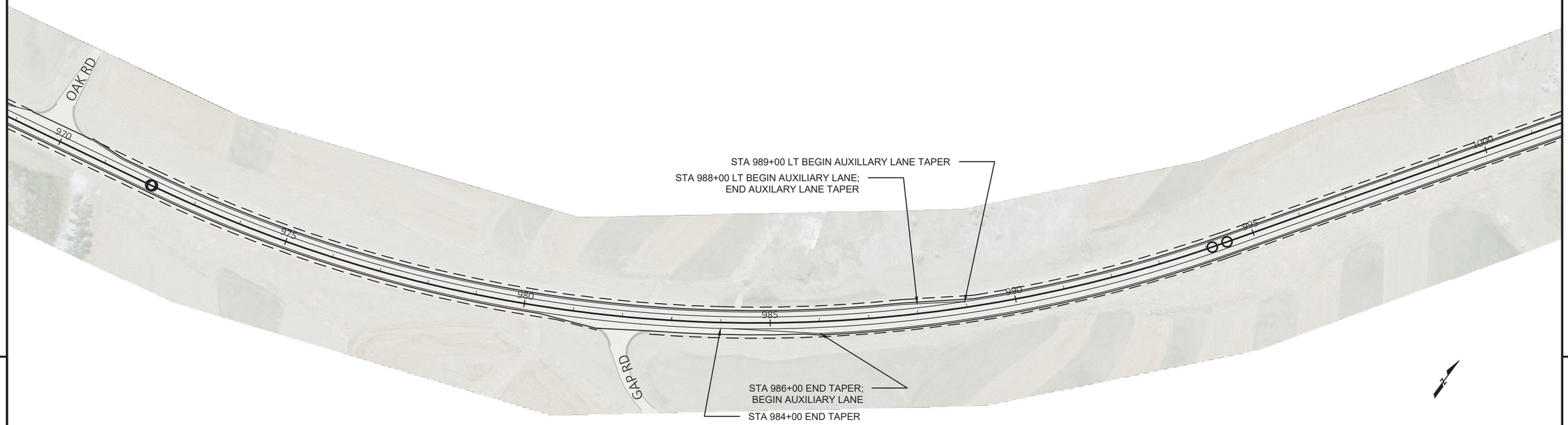
NOTE THAT EXISTING CURB & GUTTER IS TO REMAIN UNLESS NOTED.

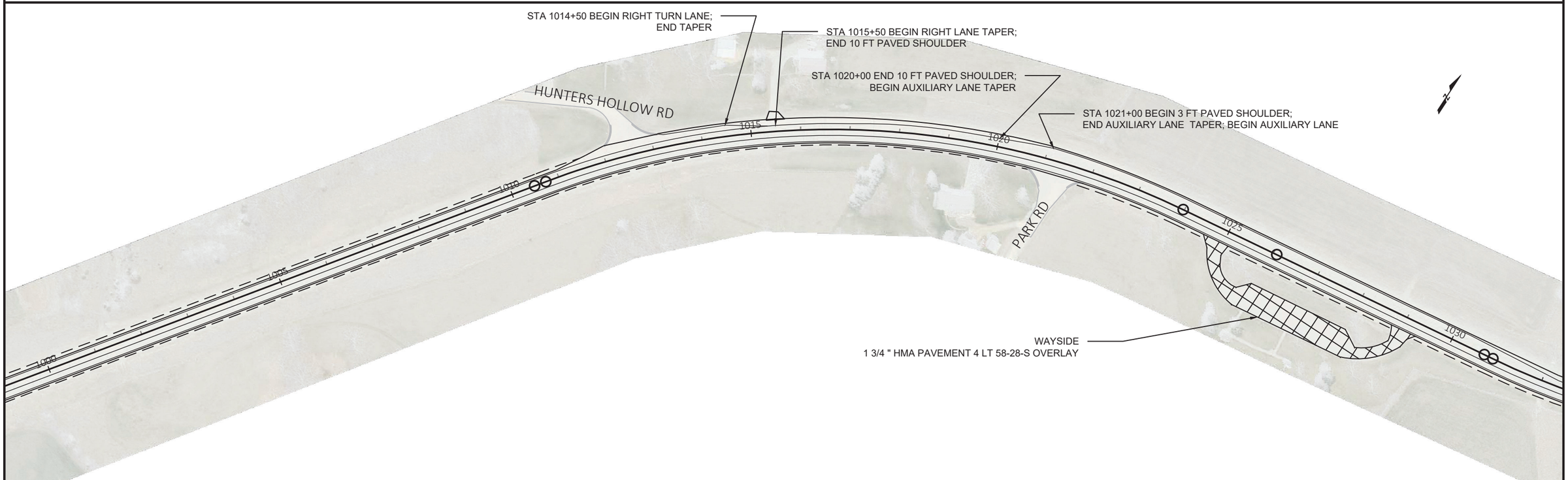
PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 50	E

FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050211_pn

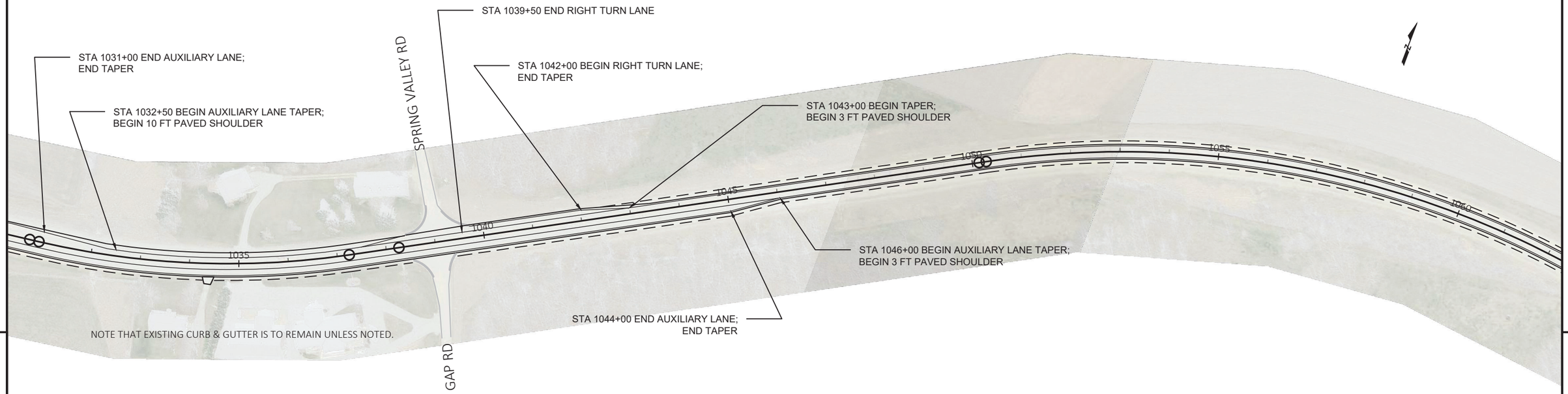
PLOT DATE : 10/8/2018 10:42 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ############

WISDOT/CADDS SHEET 44





PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 51	E



PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 52	E

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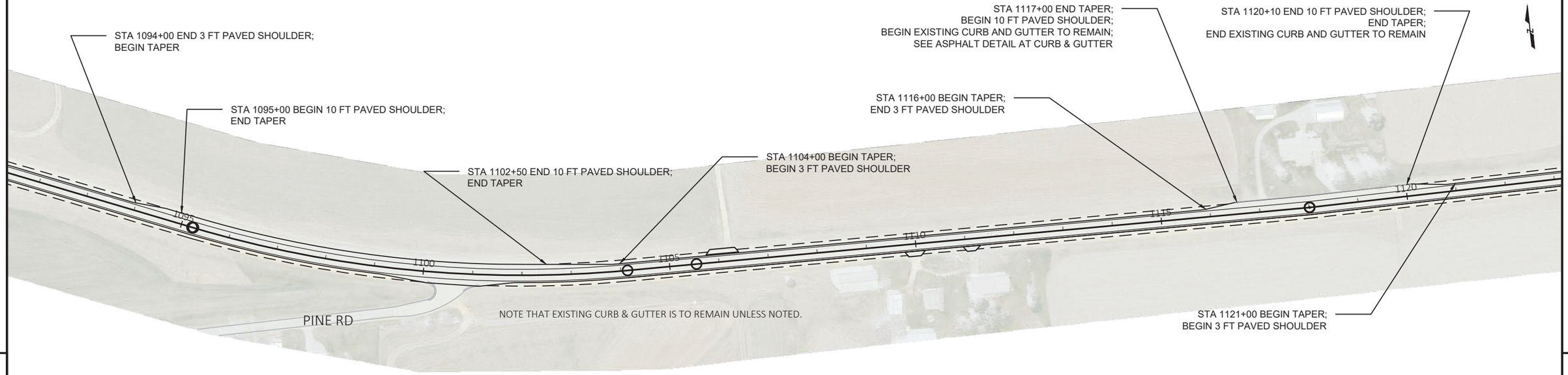
LAYOUT NAME - 050213_pn

PLOT DATE : 10/8/2018 10:46 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ############

WISDOT/CADDS SHEET 44



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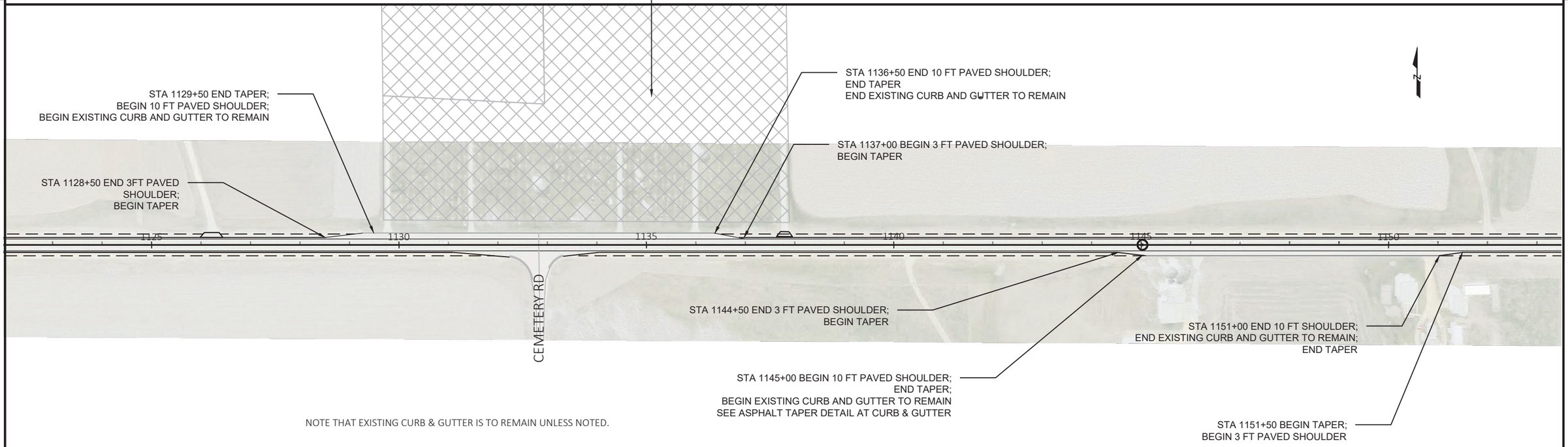
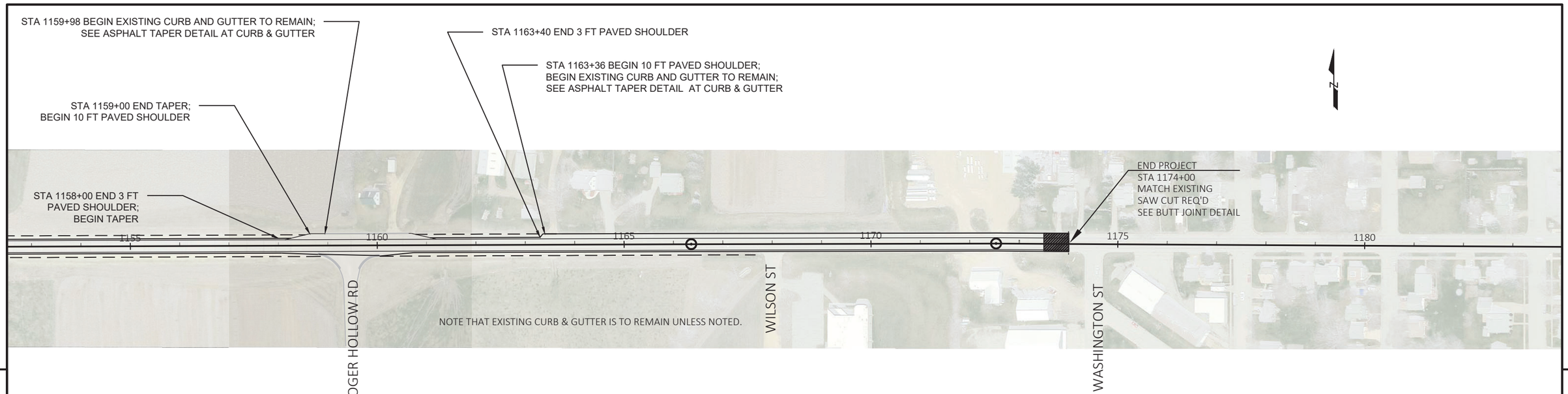
SENSITIVE AREA ARCHEOLOGICAL PROTECTION PRECAUTION REQ'D.

DO NOT PARK ANY CONSTRUCTION EQUIPMENT OR OTHER VEHICLES IN THIS AEA.



NOTE THAT EXISTING CURB & GUTTER IS TO REMAIN UNLESS NOTED.

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 53	E



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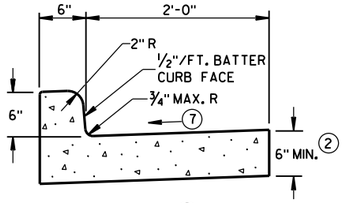
5

PROJECT NO: 1662-01-61	HWY: USH 18	COUNTY: GRANT	PLAN	SHEET 54	E

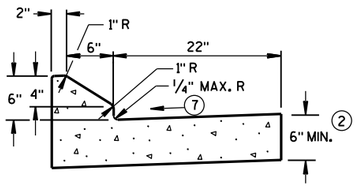
FILE NAME : N:\PDS\C3D\16620131\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050215_pn
PLOT DATE : 10/8/2018 10:45 AM PLOT BY : KLUDY, KATHLEEN M PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

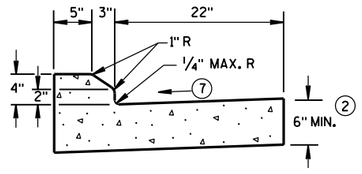
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19B	PAVEMENT MARKING (TURN LANES)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-05A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15C35-03B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



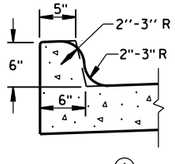
TYPES A (1) & D



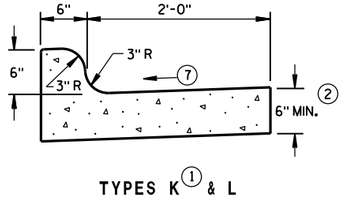
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

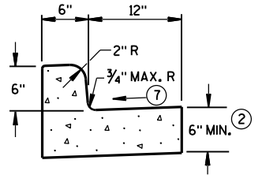


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



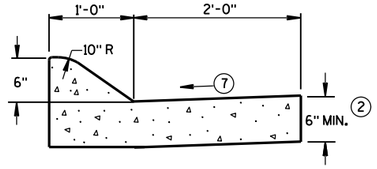
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

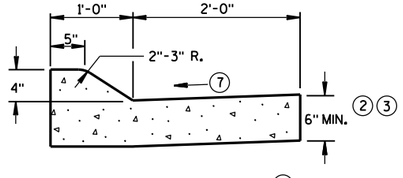


TYPES A (1) & D

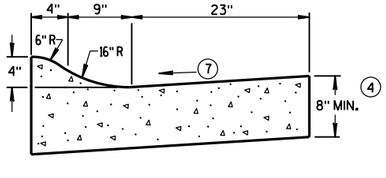
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

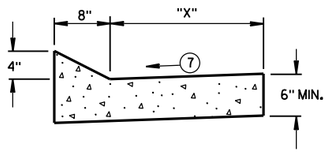


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

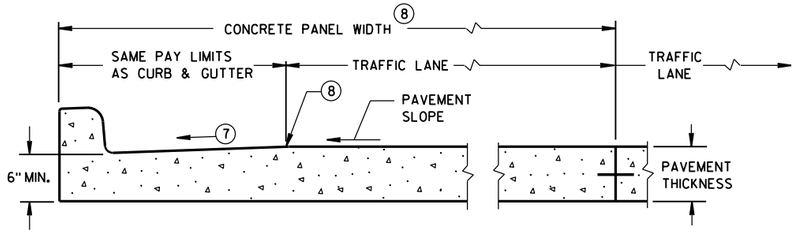
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

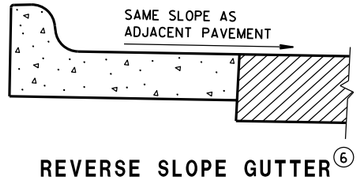
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.



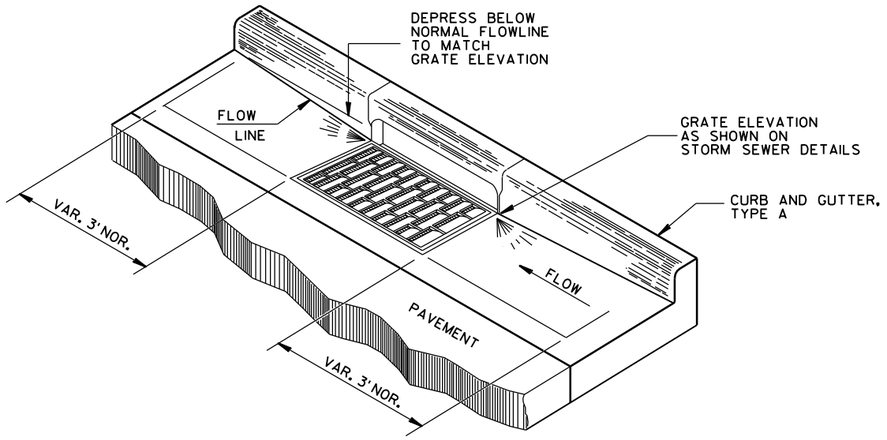
REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

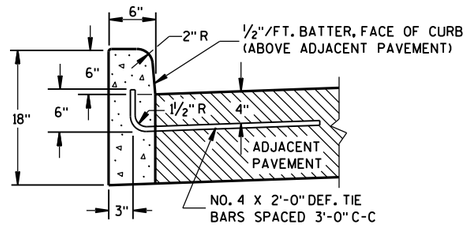
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

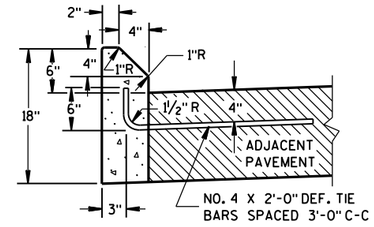
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

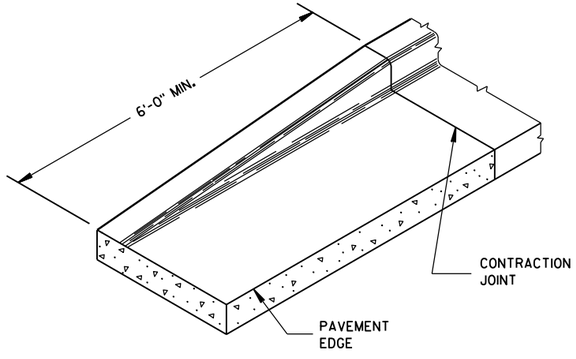


TYPES A(1) & D

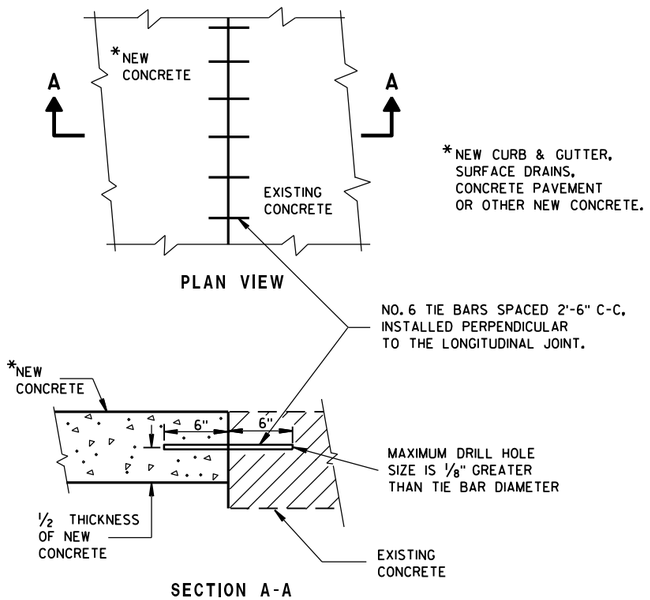


TYPES G(1) & J

CONCRETE CURB



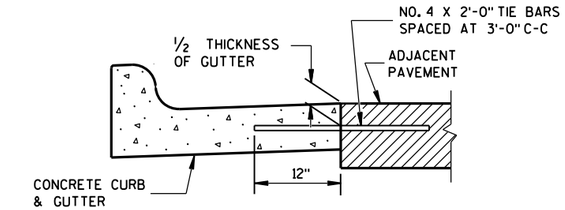
END SECTION CURB & GUTTER



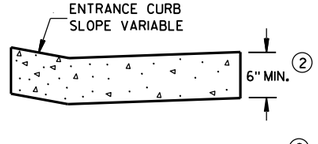
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

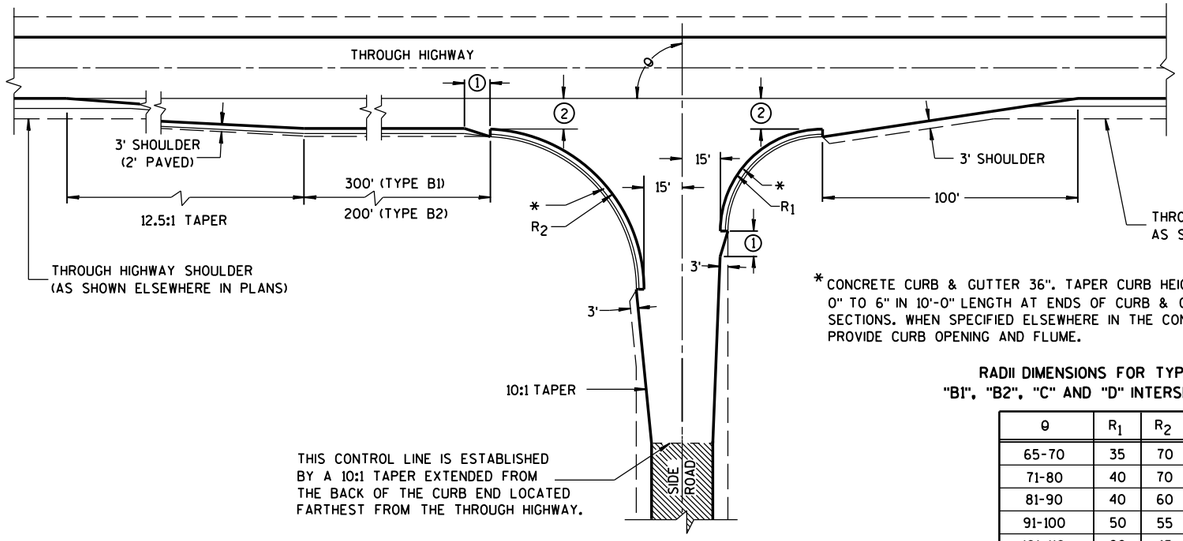
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS 57 — UNIT SUPERVISOR
ENT
FHWA

6

S.D.D. 8 D 1-20b

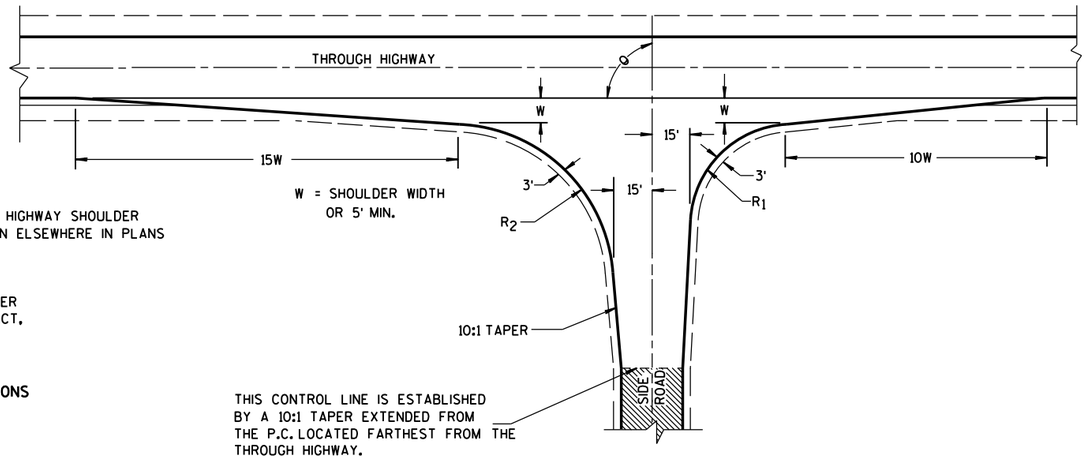


TYPE "B1" AND "B2"

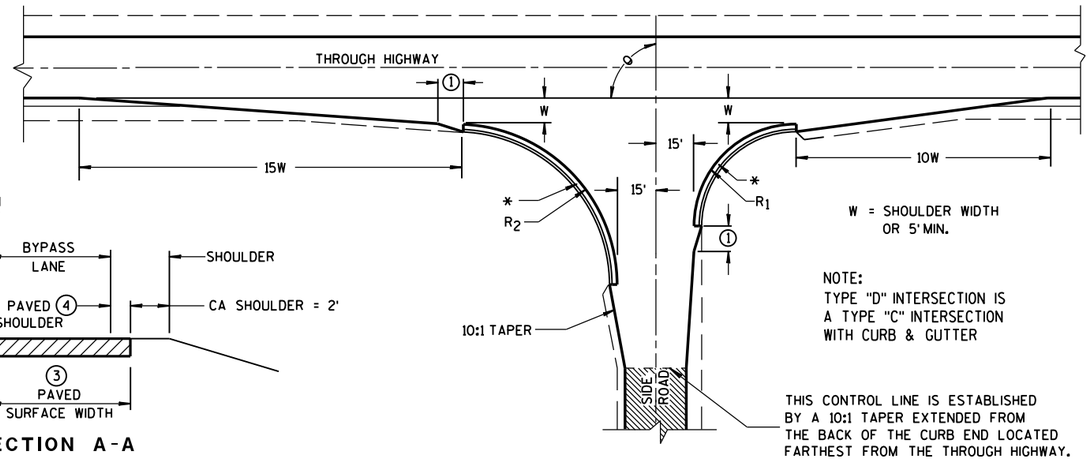
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

(1) 10-FT TYPICAL.

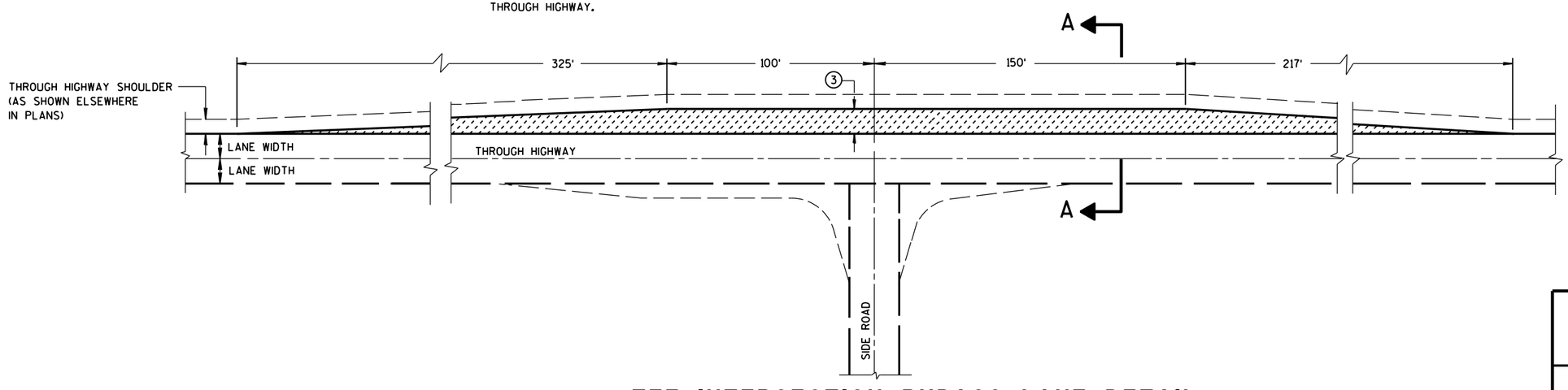
(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.

SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)

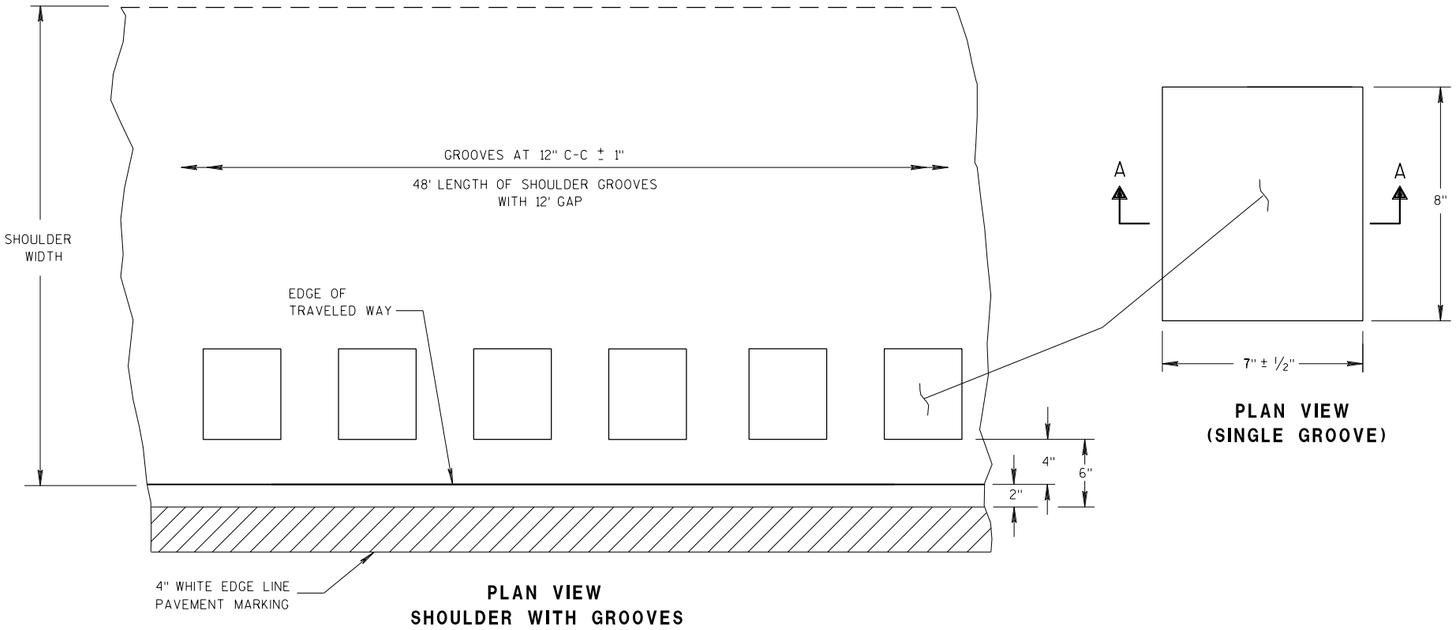


TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 9 A 1-13a



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

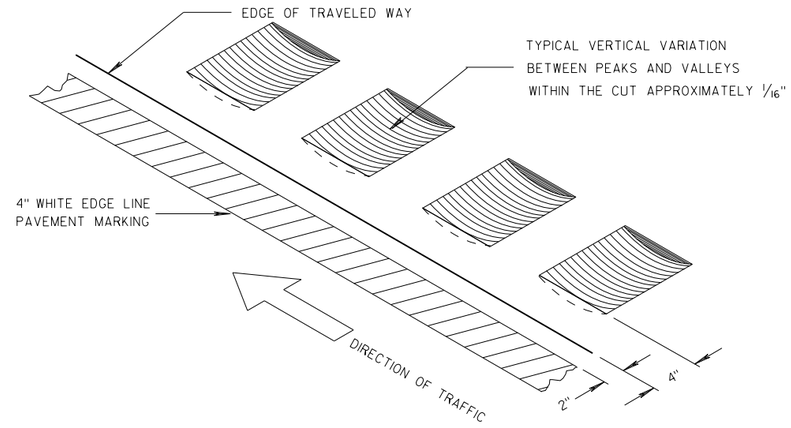
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

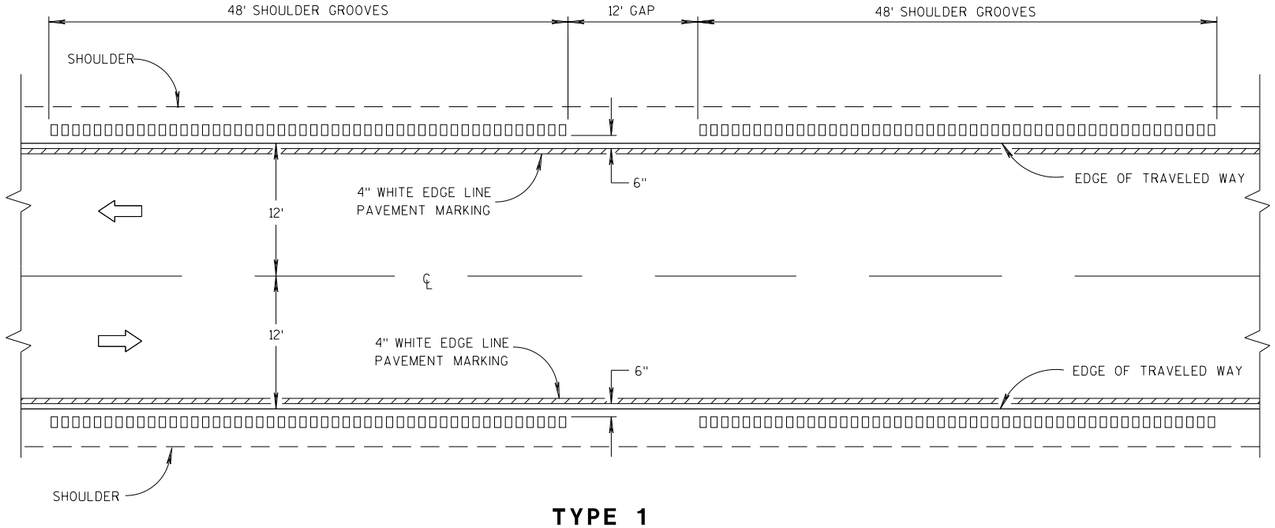
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.

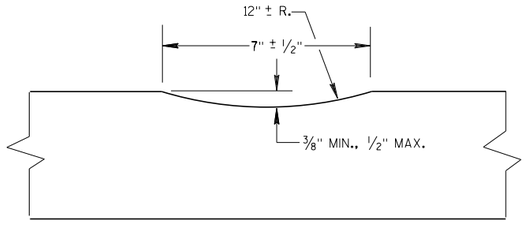
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



ISOMETRIC



TYPE 1
2-LANE SHOULDER RUMBLE STRIP

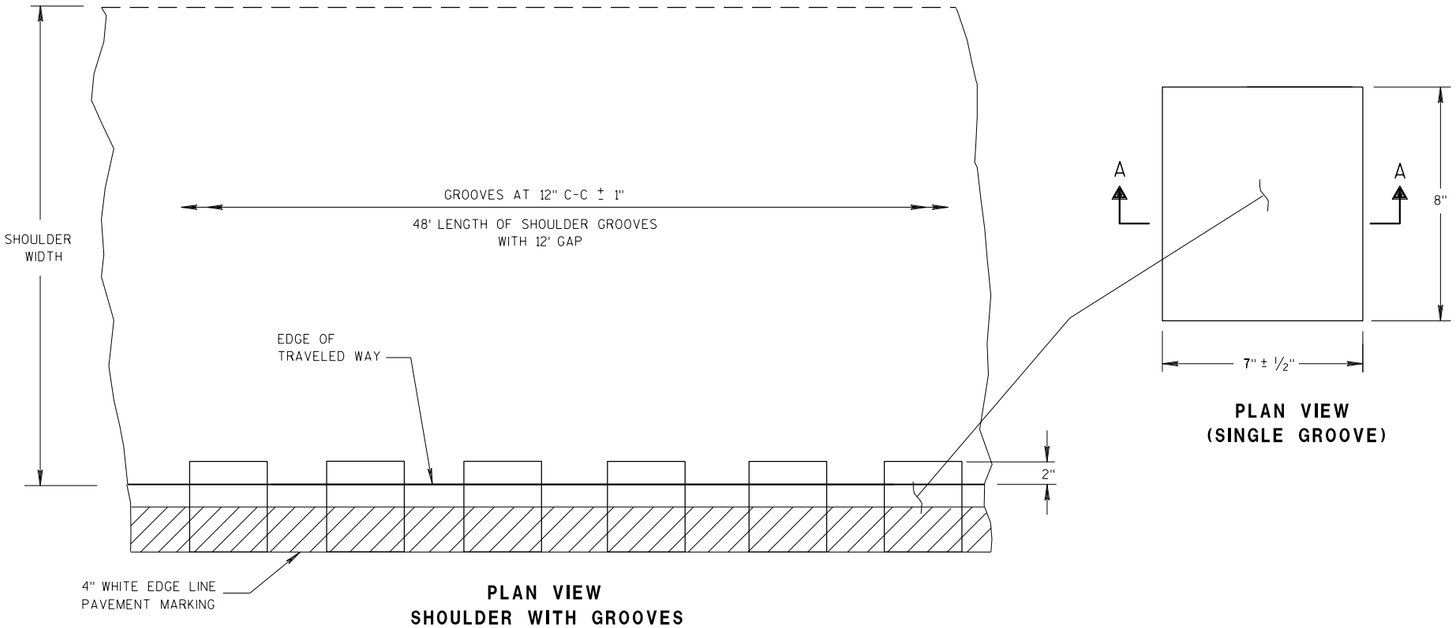


SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORT.

6
S.D.D. 13 A 10-2a



PLAN VIEW
SHOULDER WITH GROOVES

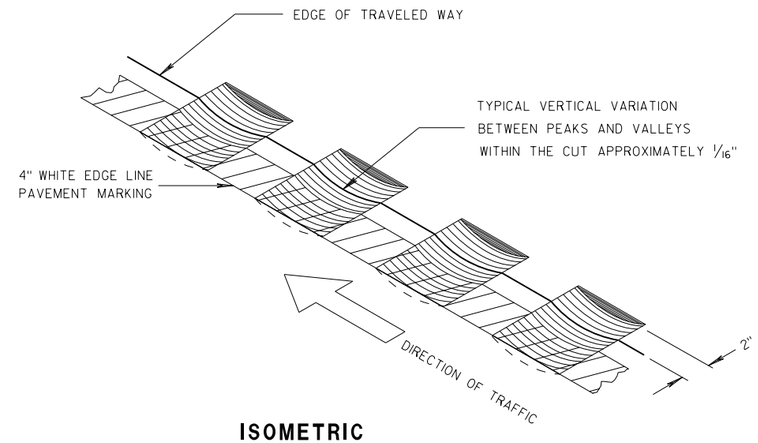
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

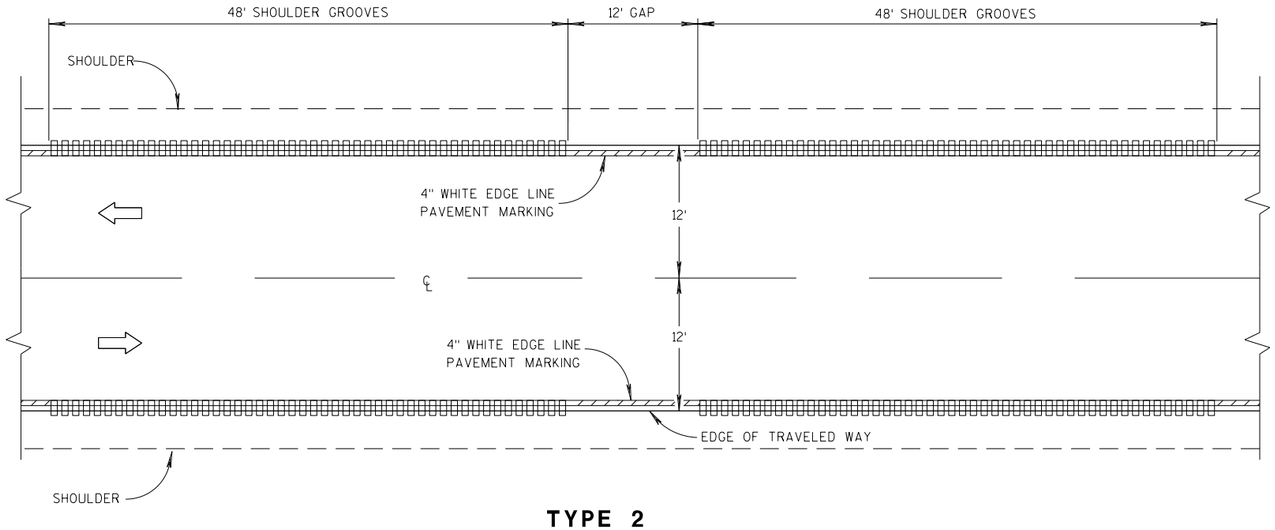
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.

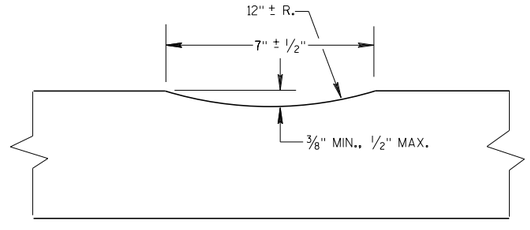


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2-LANE SHOULDER RUMBLE STRIP



SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

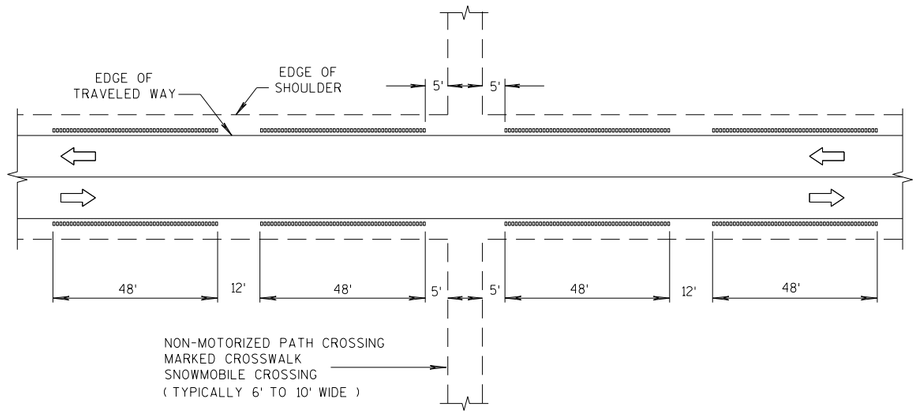
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORT, 60

6

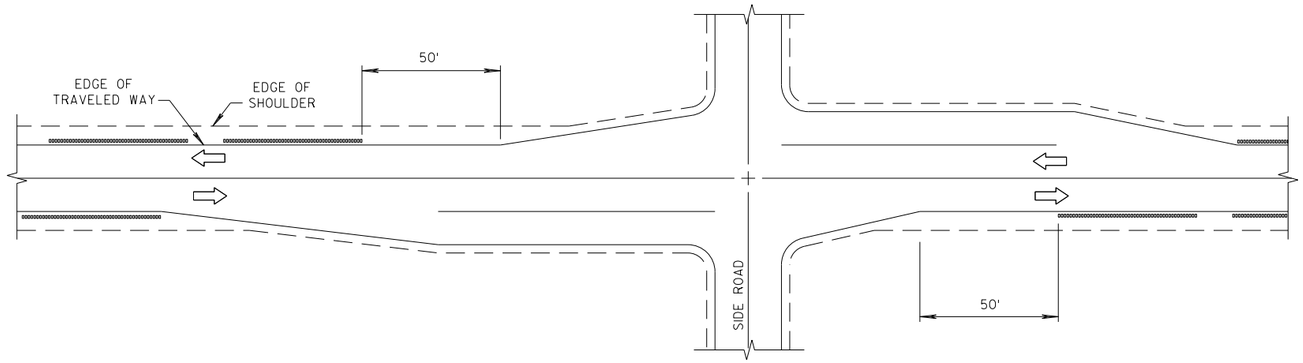
S.D.D. 13 A 10-2b

6

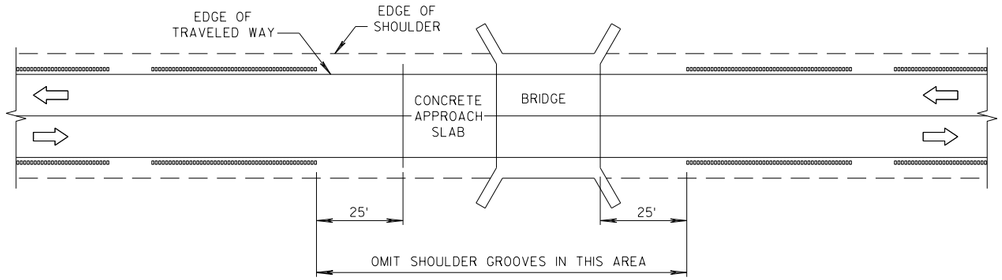
S.D.D. 13 A 10-2b



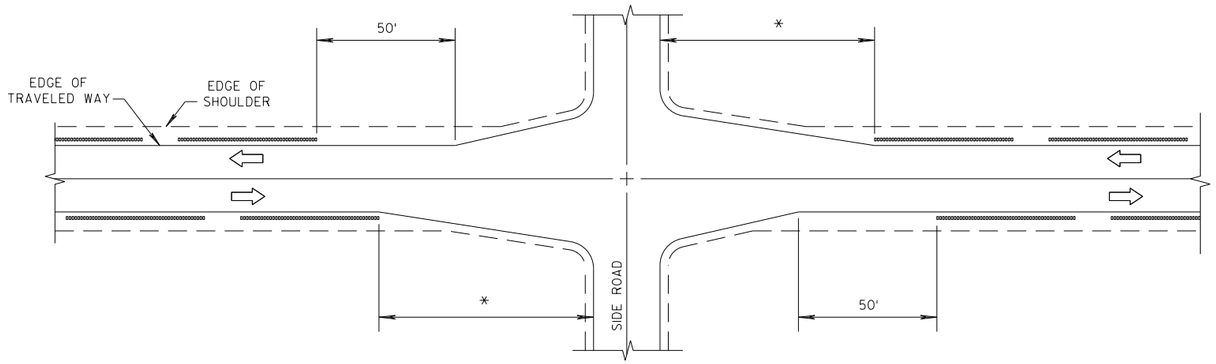
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT WITH RIGHT TURN LANE

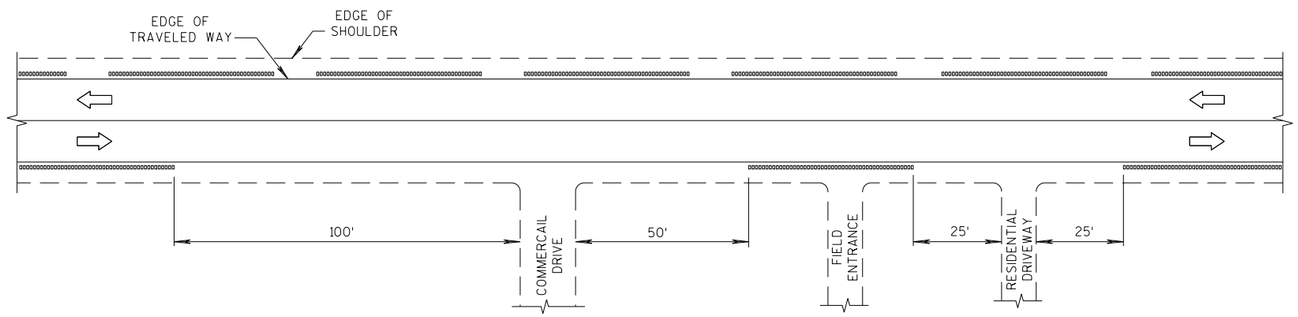


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER

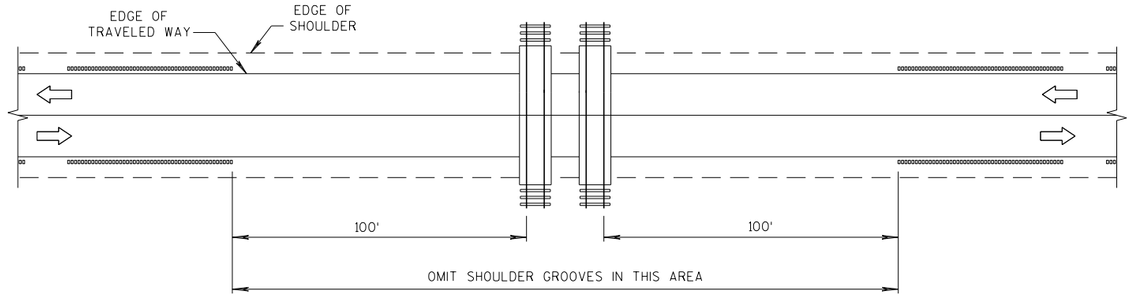


SHOULDER GROOVES AT DRIVEWAYS (1)

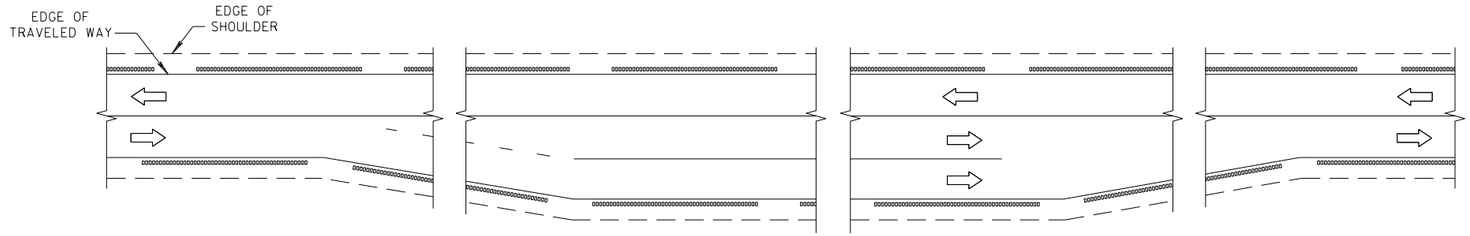
2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORT.

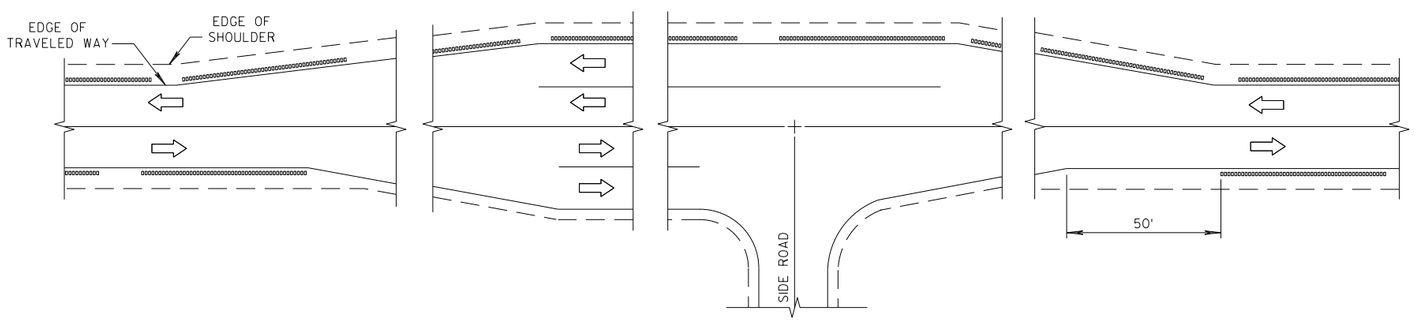
6
S.D.D. 13 A 10-2c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEV
UNIT SUPERVISOR

6

S.D.D. 13 A 10-2d

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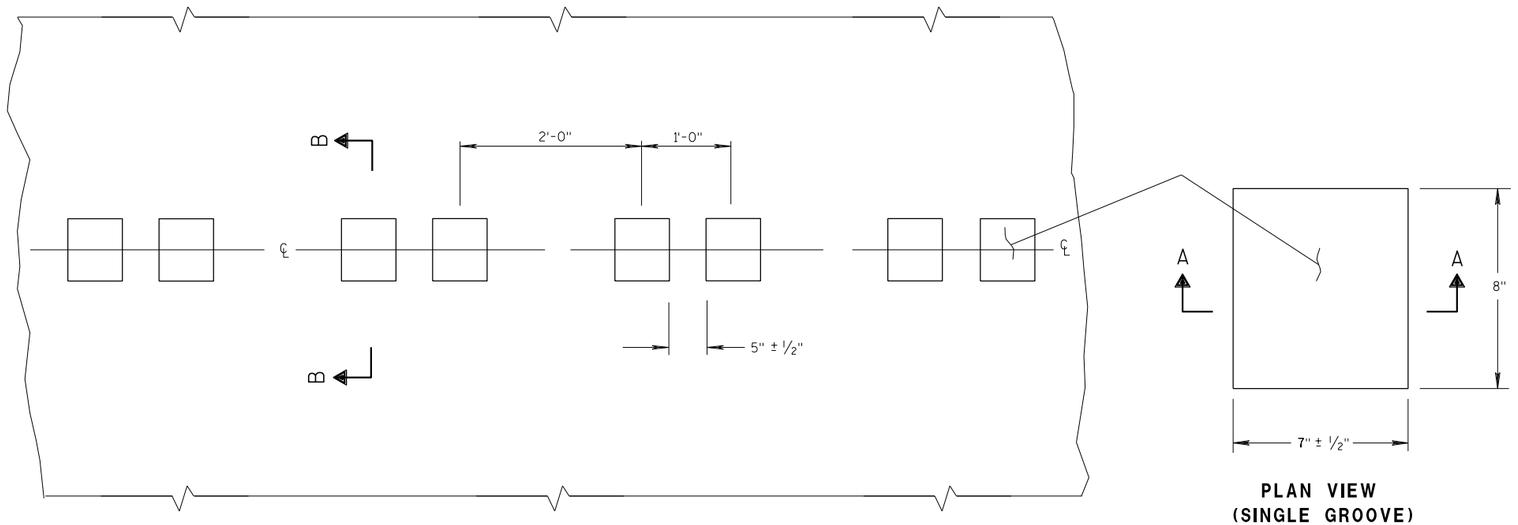
S.D.D. 13 A 10-2d



PLAN VIEW
CENTER LINE WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

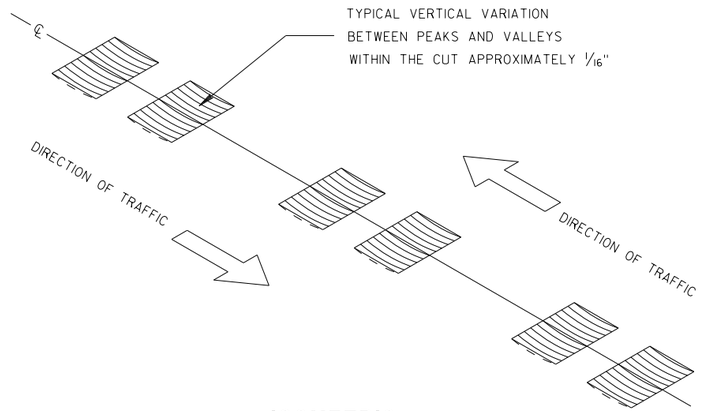
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

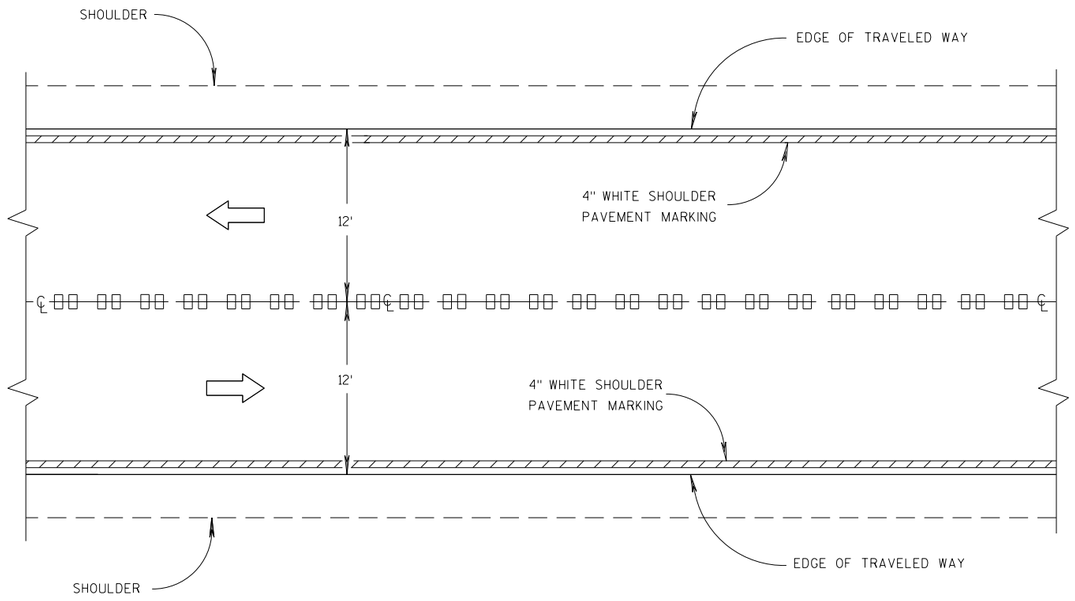
INSTALL PERMANENT MARKING EPOXY 4-INCH AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

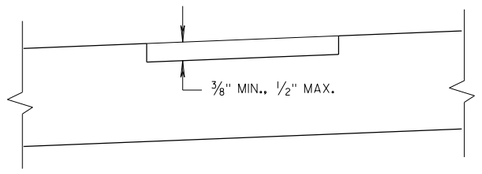
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



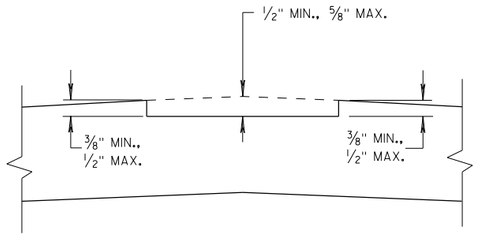
ISOMETRIC



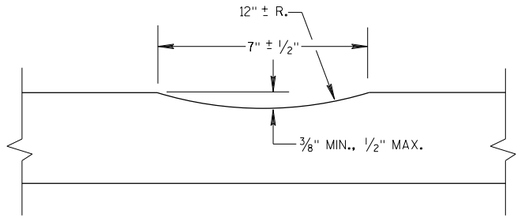
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY

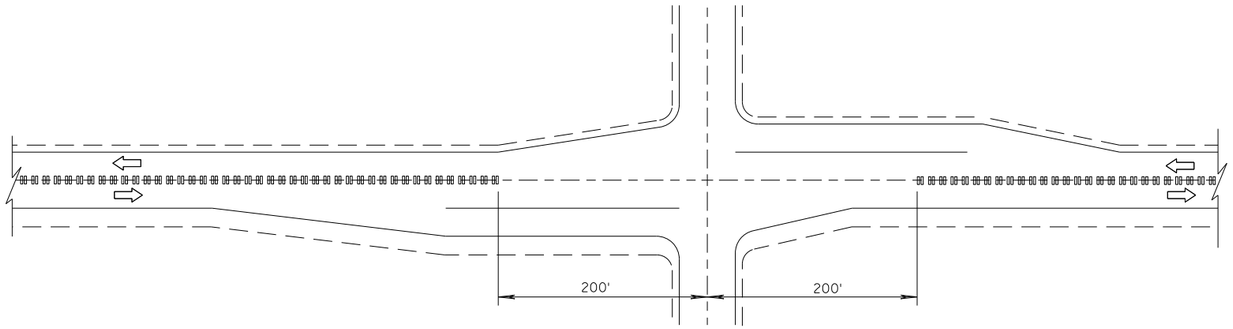


SECTION A-A

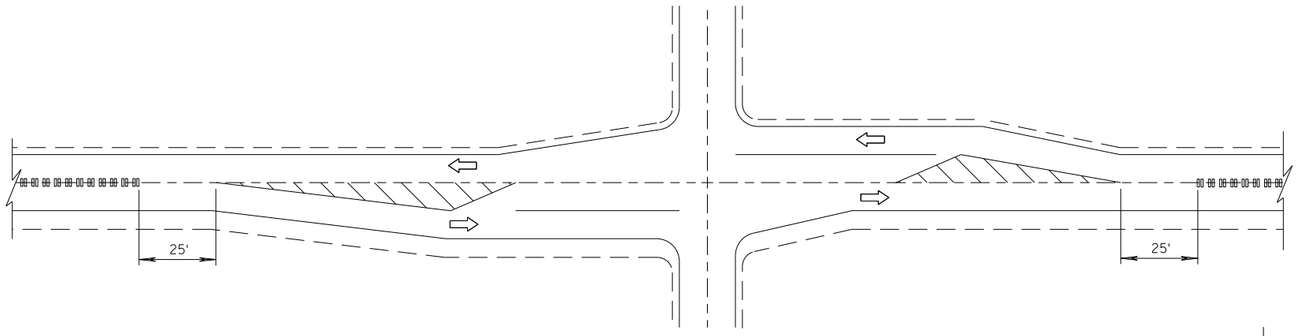
2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

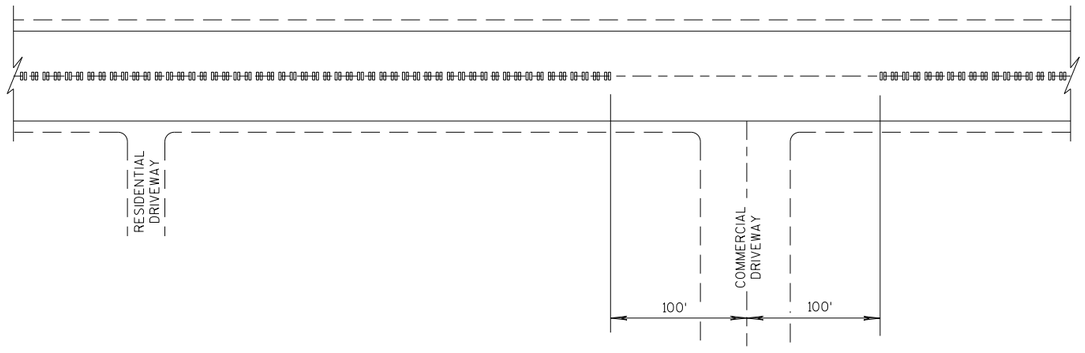
6
S.D.D. 13 A 11-3a



CENTER LINE GROOVES AT INTERSECTIONS

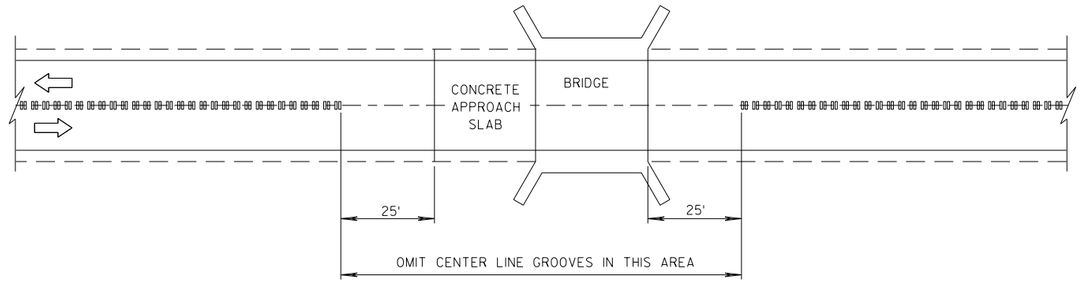


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

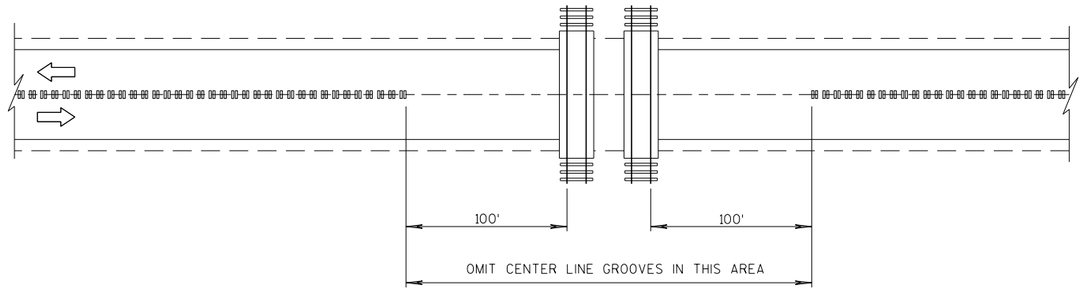


CENTER LINE GROOVES AT DRIVEWAYS (1)

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 — DATE

/S/ Rodney T. — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

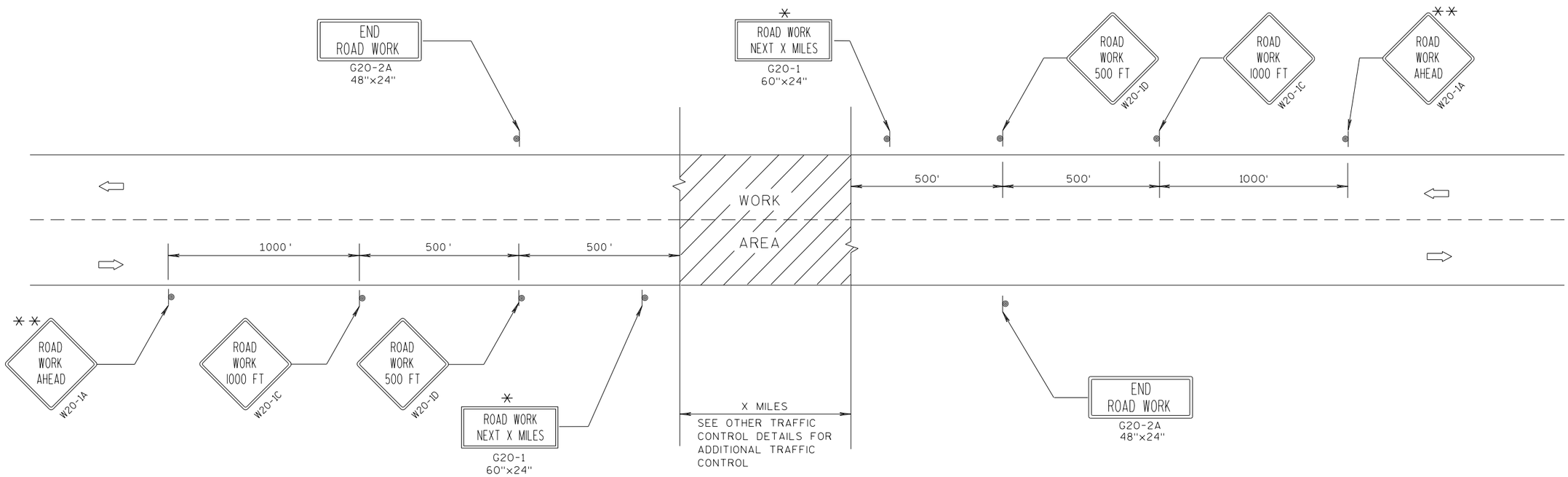
6

S.D.D. 13 A 11-3b

6

S.D.D. 13 A 11-3b

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

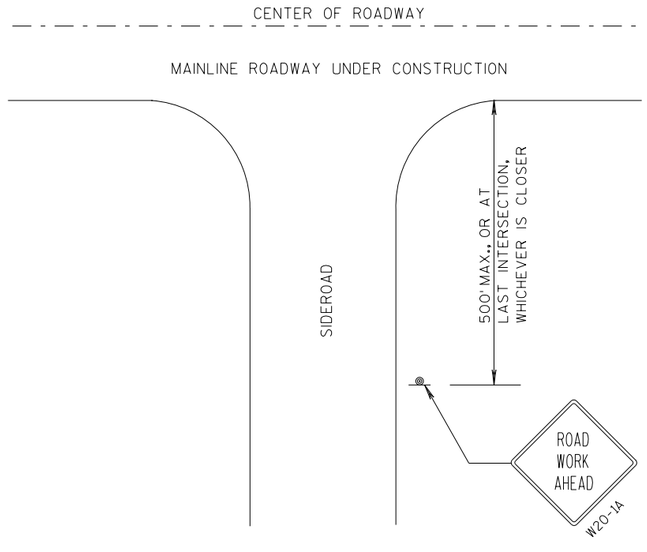
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

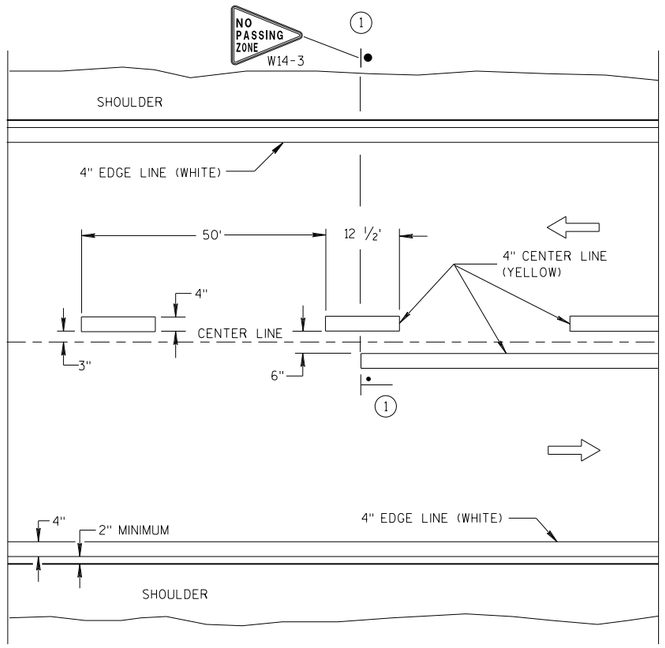
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

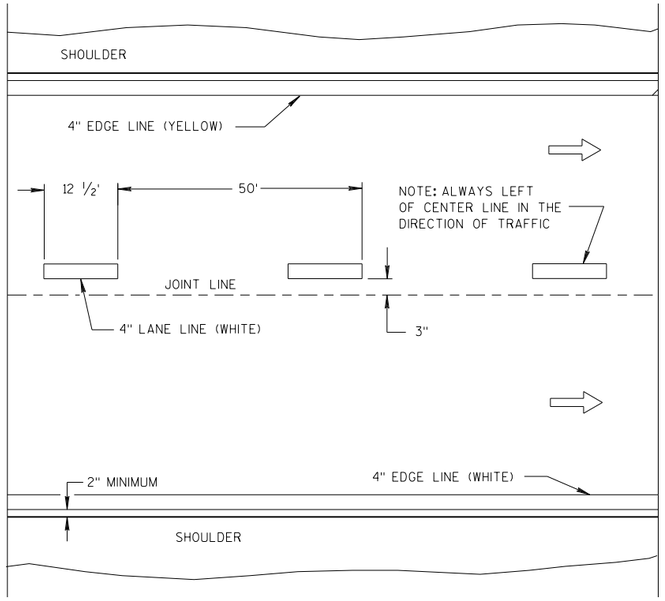
APPROVED
7/2018 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGI
FHWA

6

S.D.D. 15 C 4-5



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

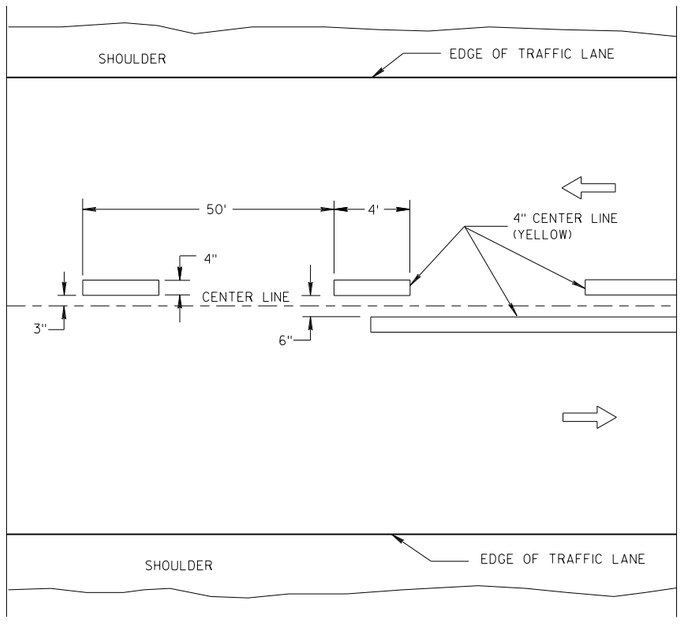
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

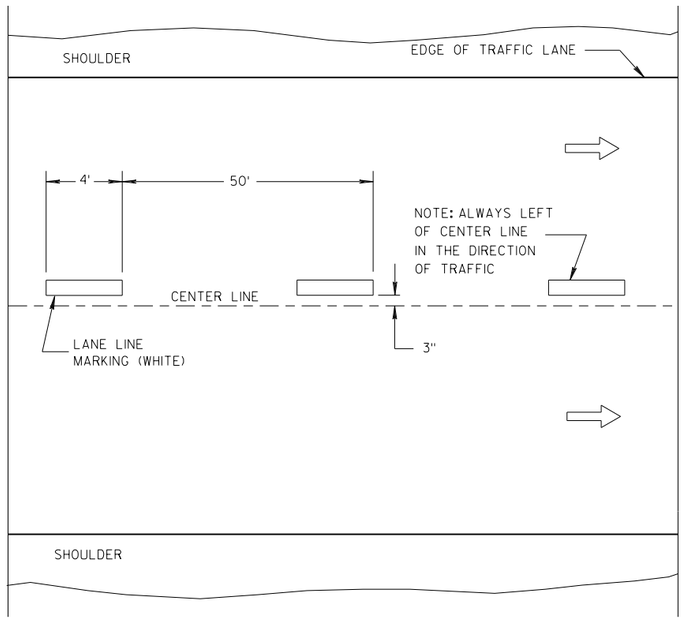
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 8-19a

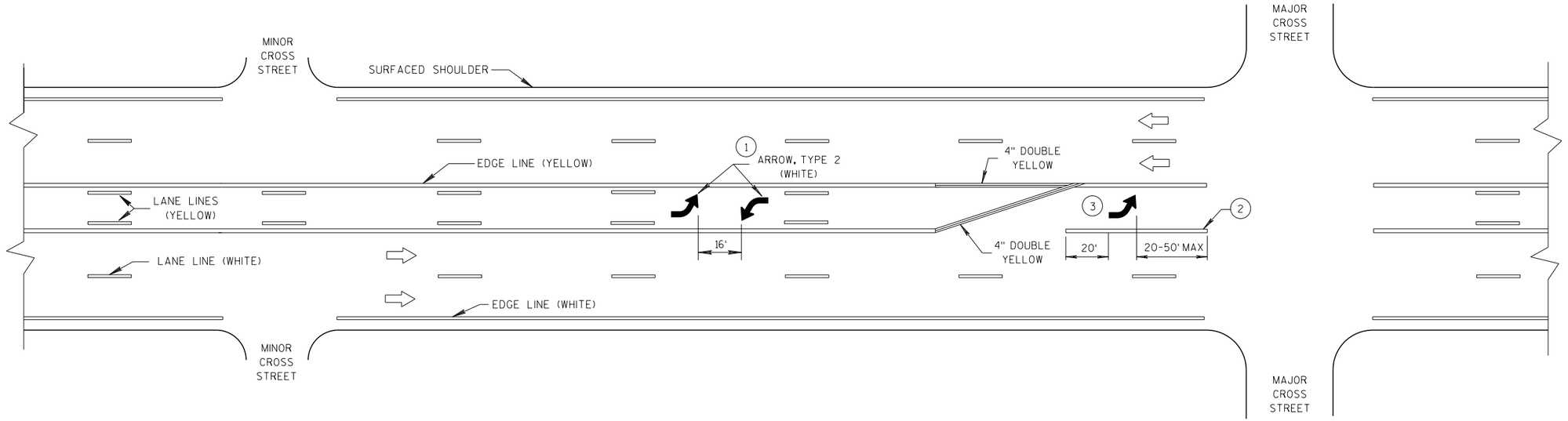
6

S.D.D. 15 C 8-19a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48'DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT

DIRECTION OF TRAFFIC



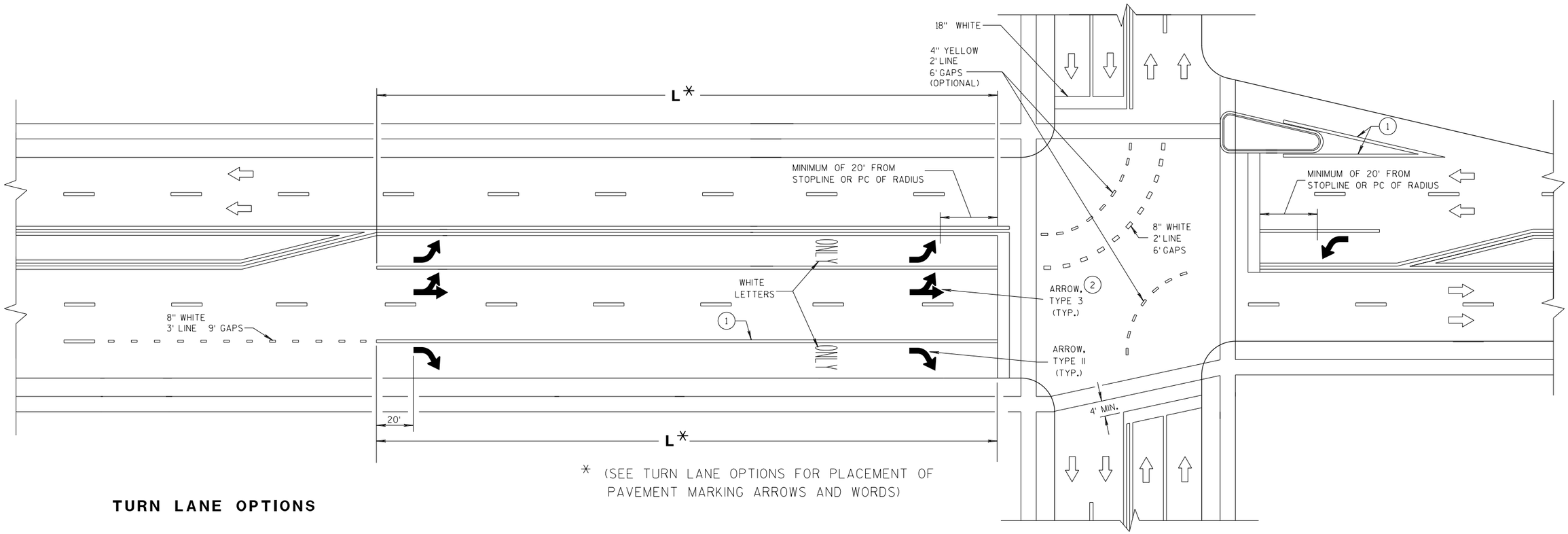
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

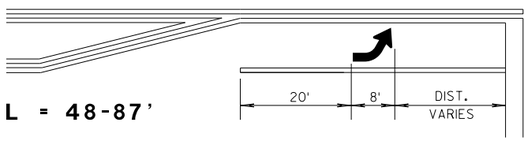
S.D.D. 15 C 8-19b



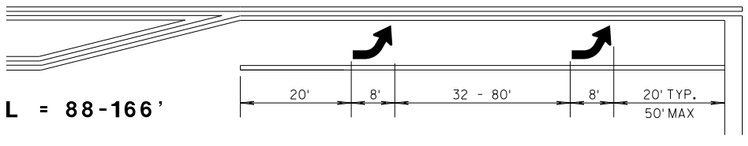
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

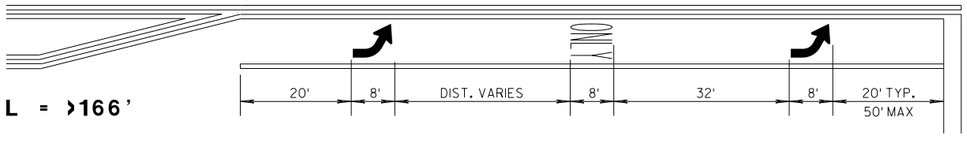
LENGTH OF TURN BAY (**L**) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48-87'



L = 88-166'



L = >166'

GENERAL NOTES

(1) 8" WHITE

(2) QUANTITY AND LOCATION OF TYPE 3 ARROW ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION, THE ARROWS AND ONLY MARKING ARE ELIMINATED.

⇨ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

6

S.D.D. 15 C 8-19c

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

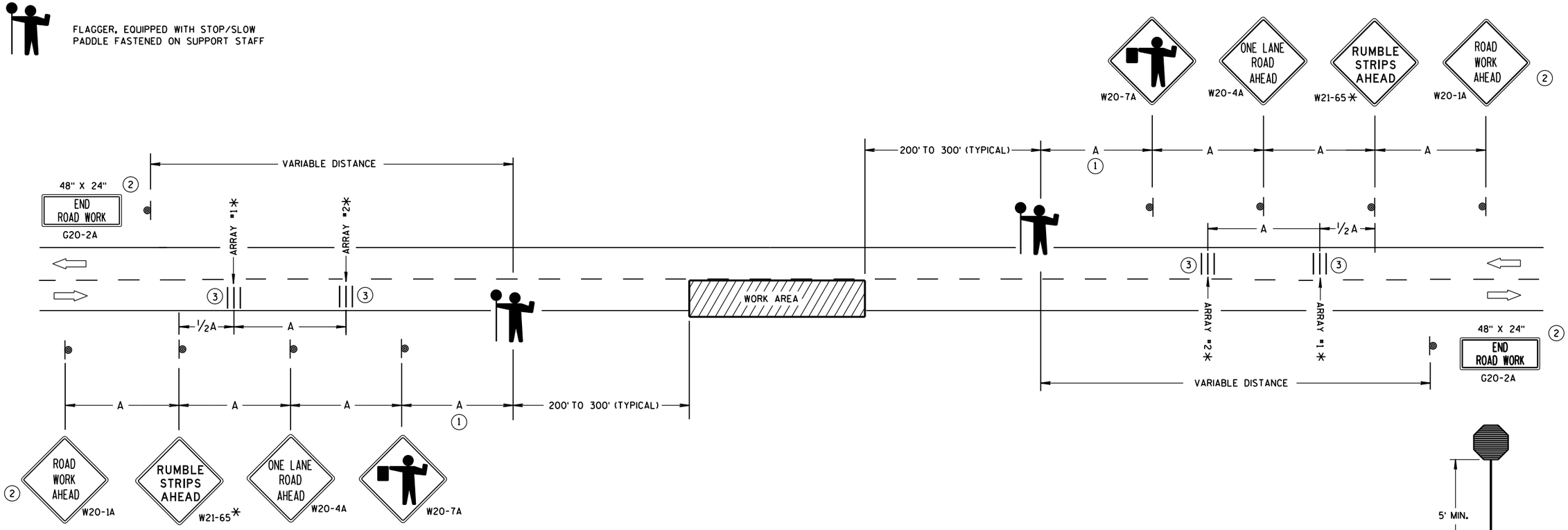
WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING A.



STOP/SLOW PADDLE ON SUPPORT STAFF

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

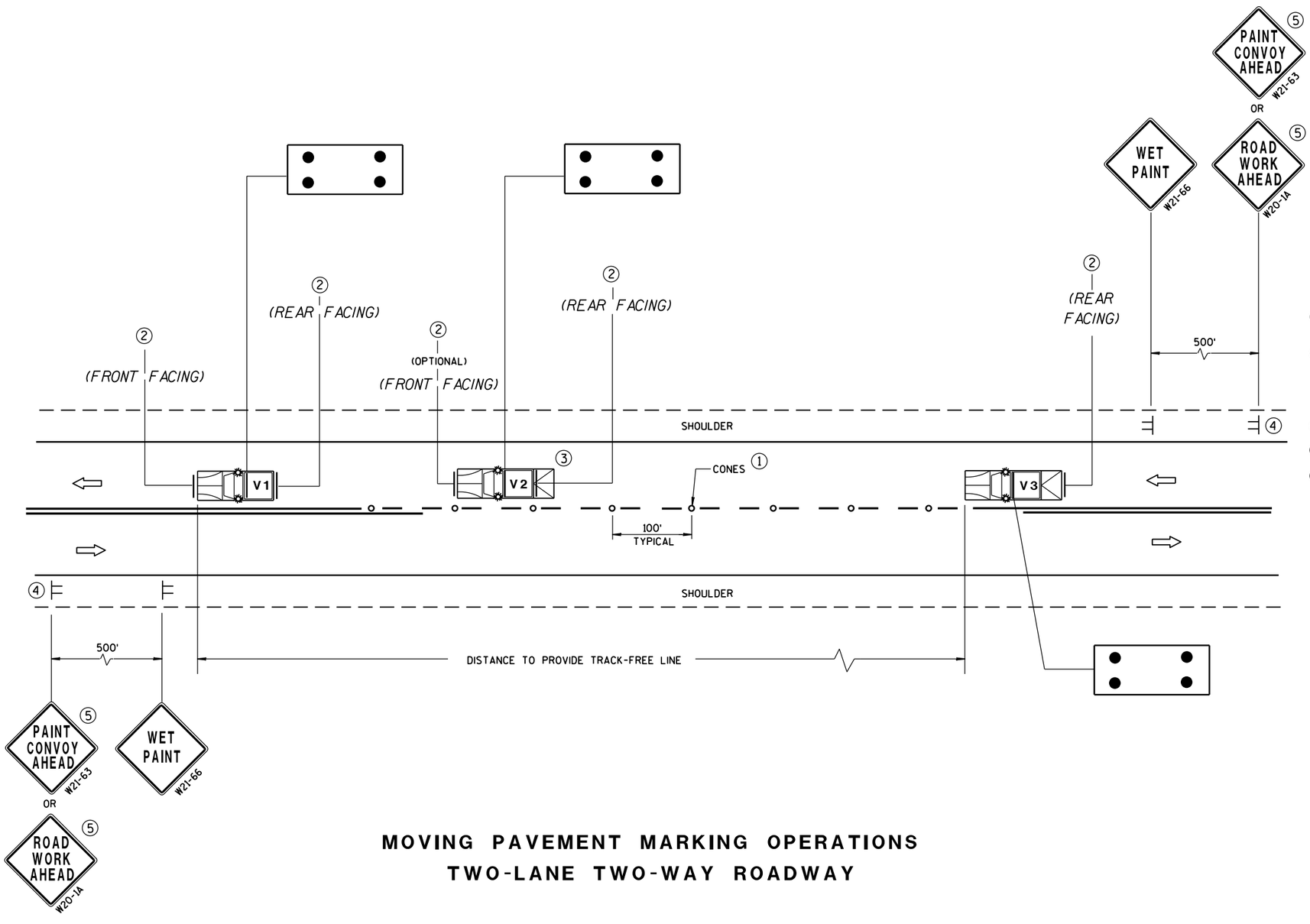
(3) EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

S.D.D. 15 C 12-6



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

- **V1** LEAD VEHICLE
- **V2** SHADOW VEHICLE
- **V3** TRAIL VEHICLE WITH TMA
- **TMA** TRUCK-MOUNTED ATTENUATOR
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept., 2017 DATE	/S/ Andrew Heldtke WORK ZONE ENGR
FHWA	

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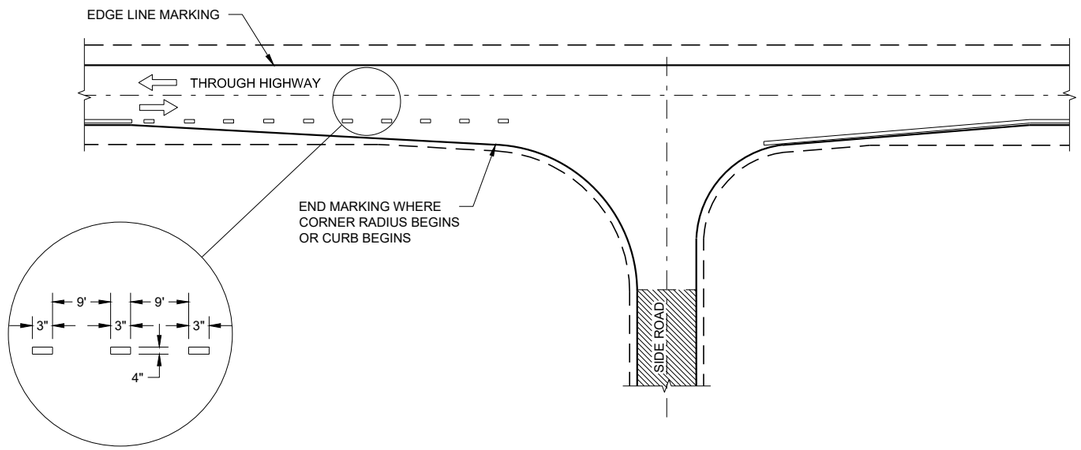
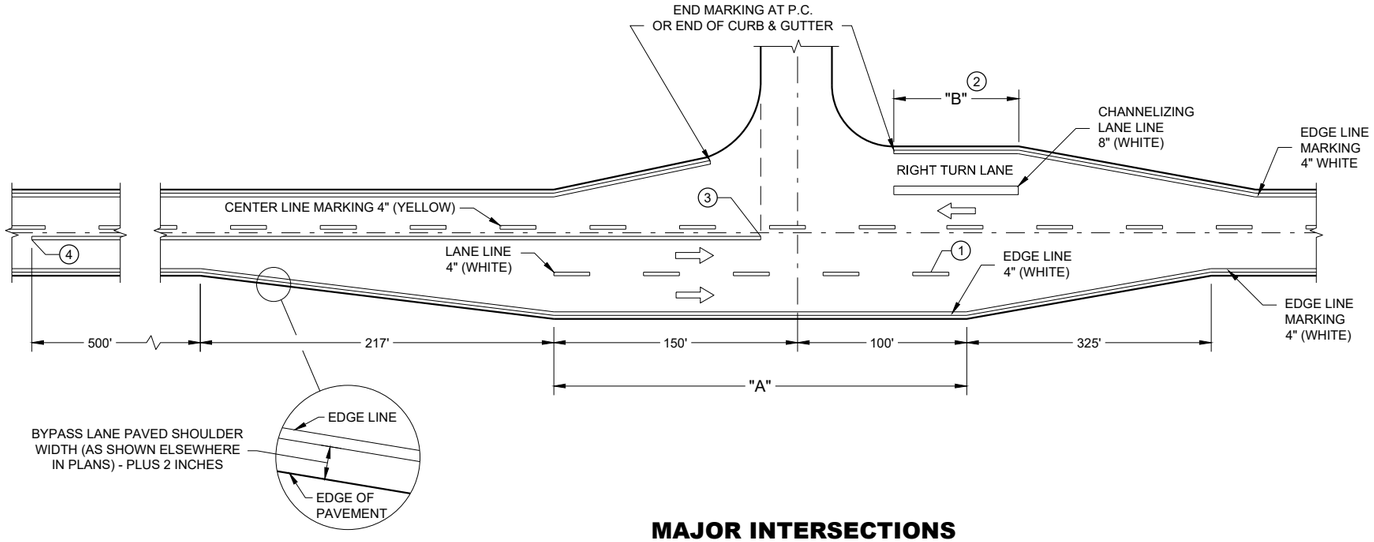
S.D.D. 15 C 19-5a



MINOR INTERSECTION



MAJOR INTERSECTIONS

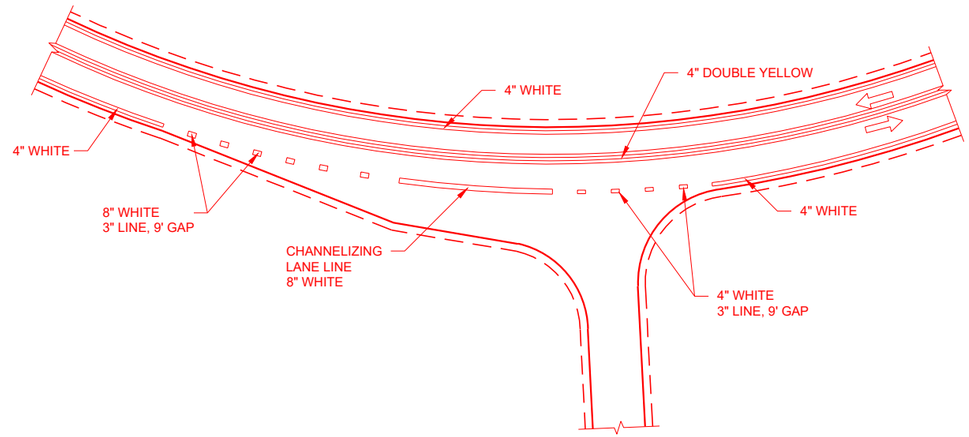
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15C35 - 03a

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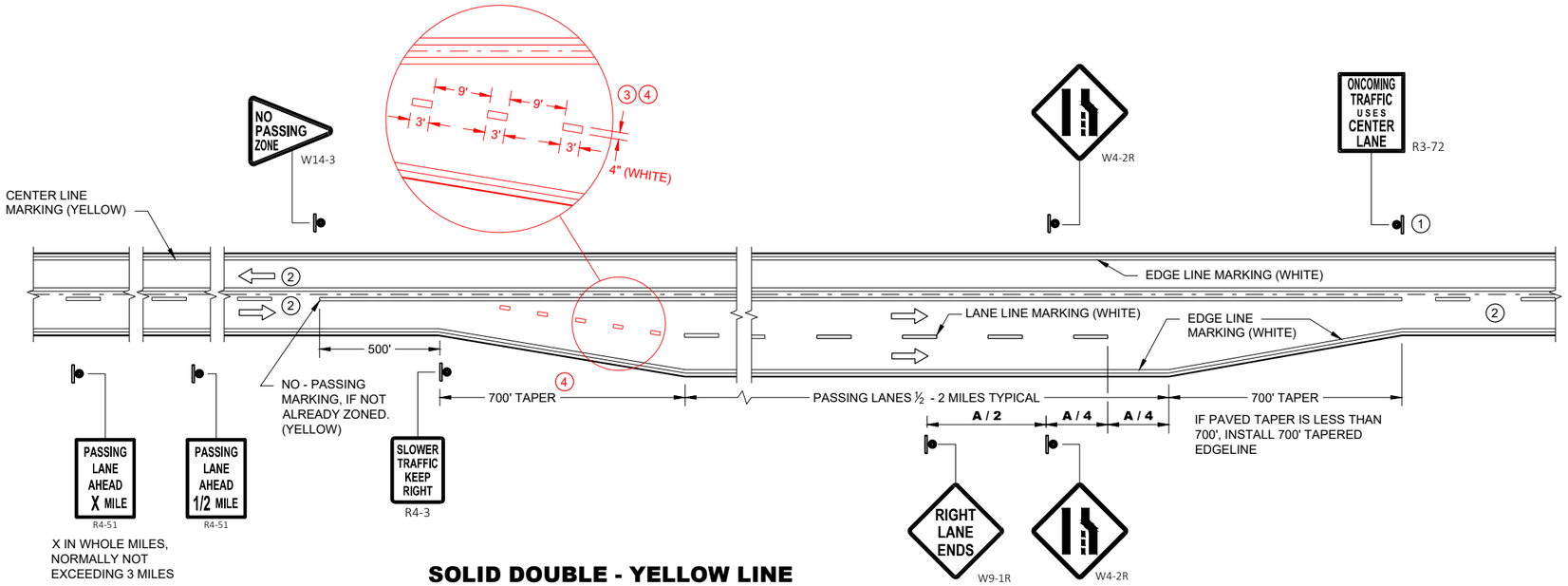
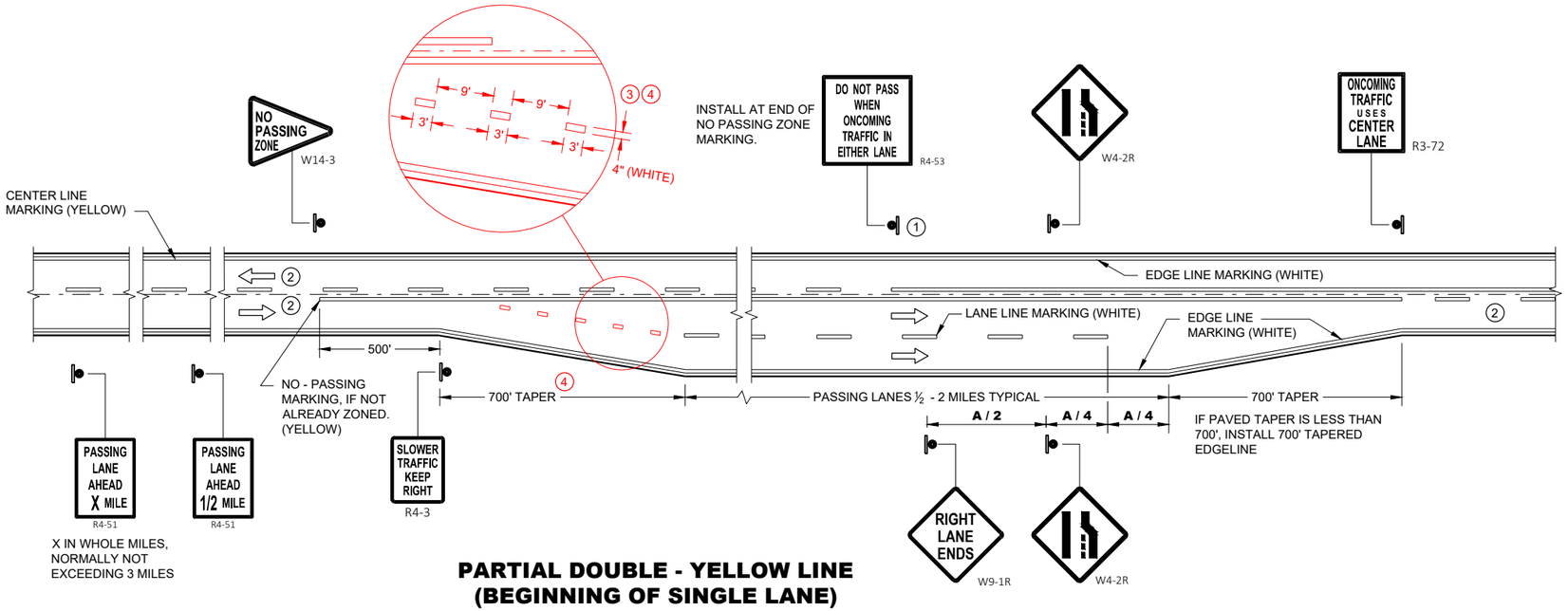
SDD 15C35 - 03a



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBLING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C35 - 03b

SDD 15C35 - 03b

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

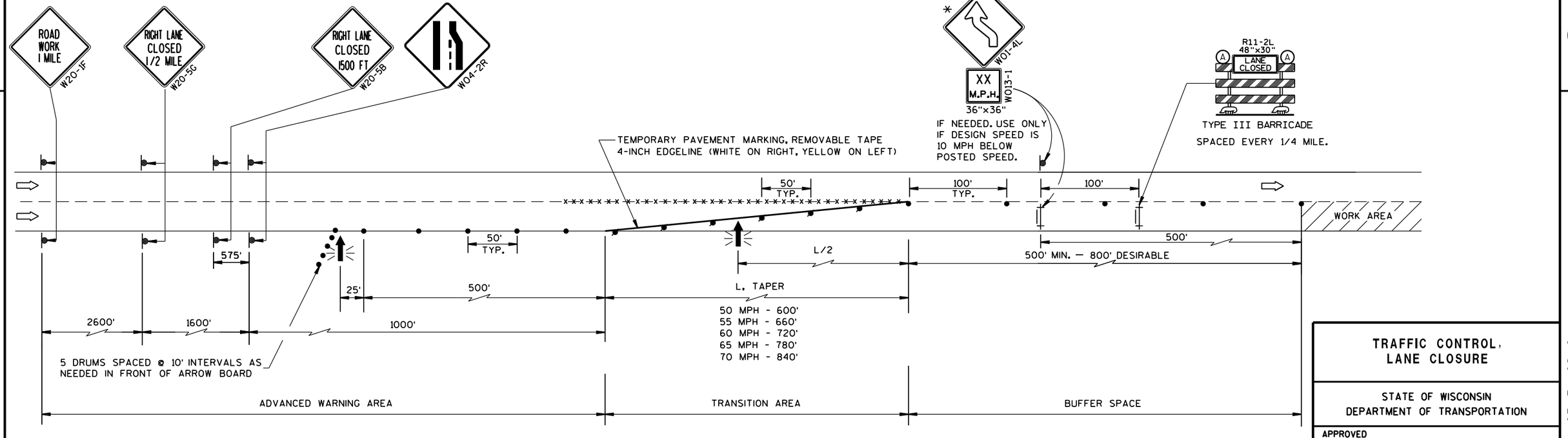
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

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S.D.D. 15 D 12-6a

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

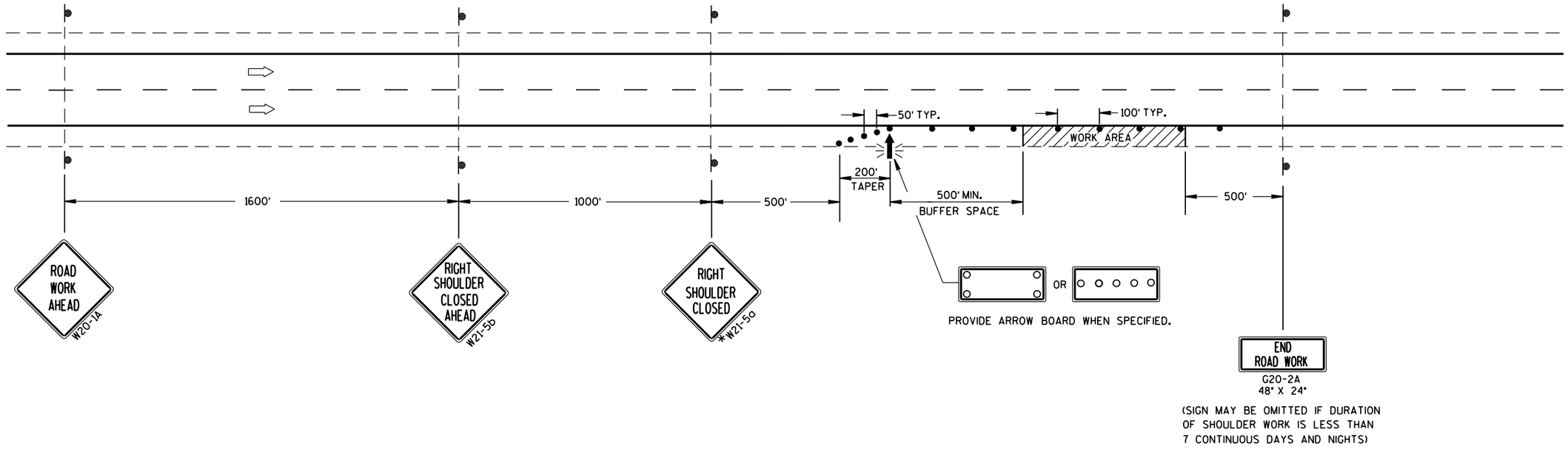
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

6

S.D.D. 15 D 27-3

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

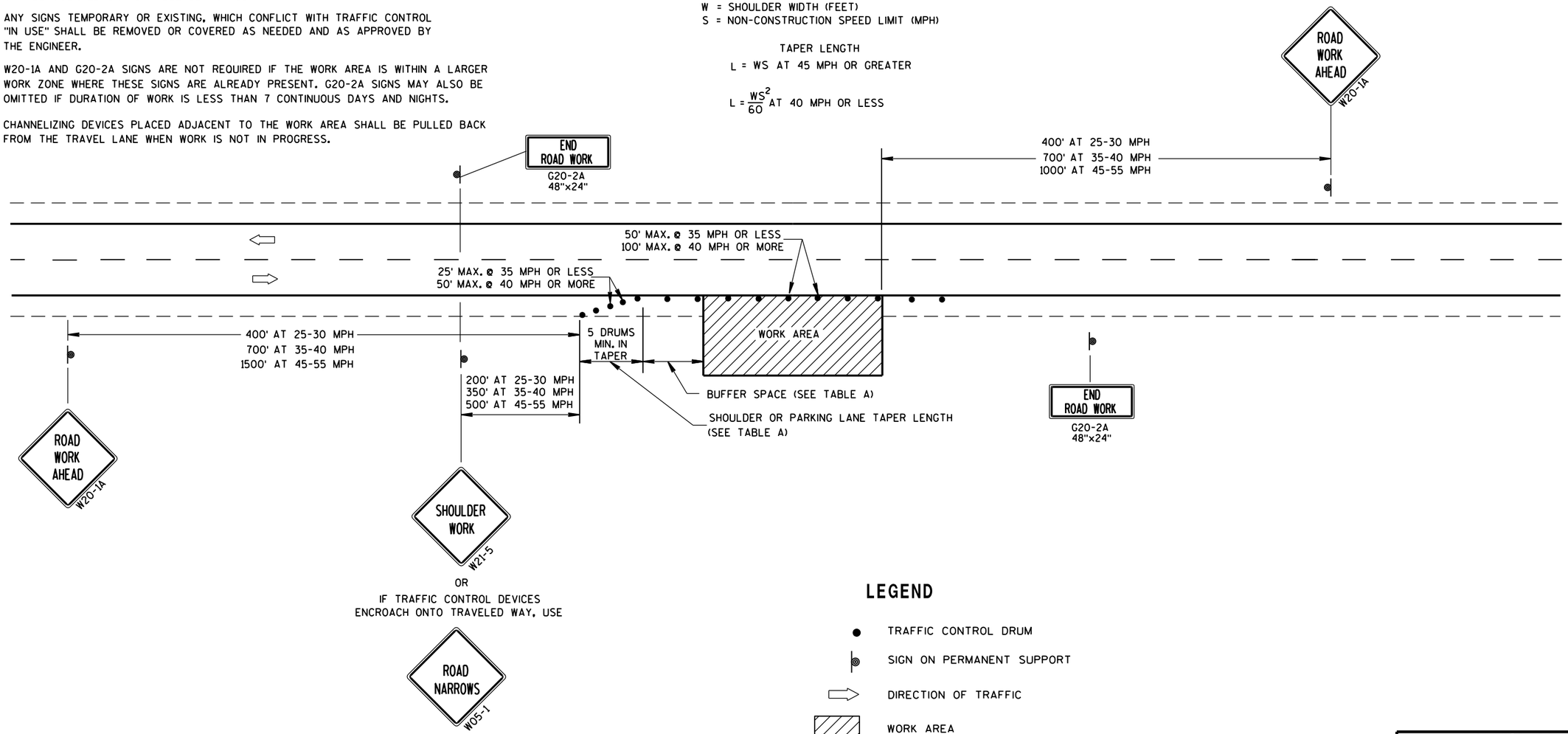
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO... SAFETY ENGI... FIC

FHWA

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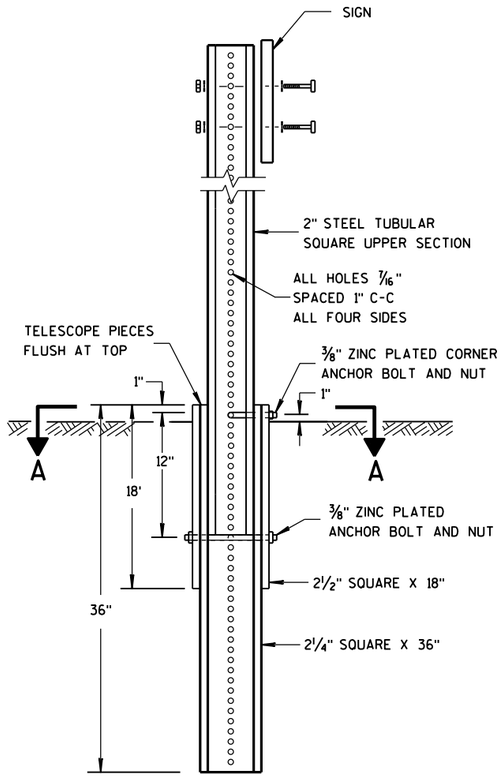
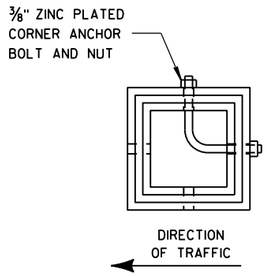
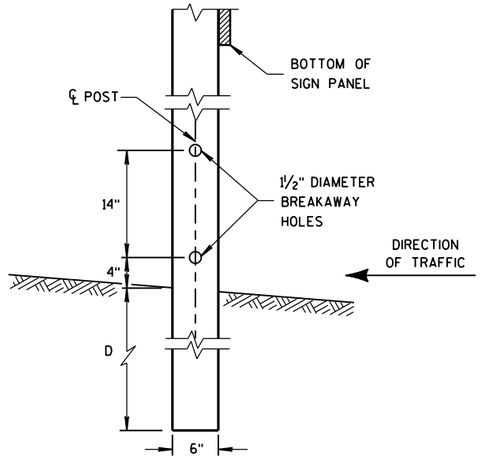
S.D.D. 15 D 28-3



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



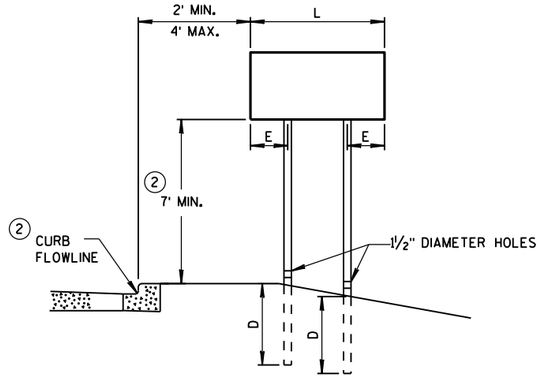
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

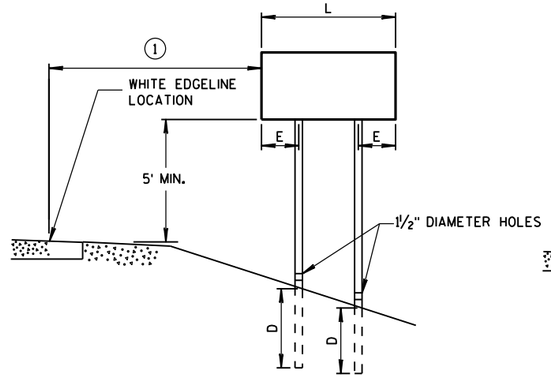
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

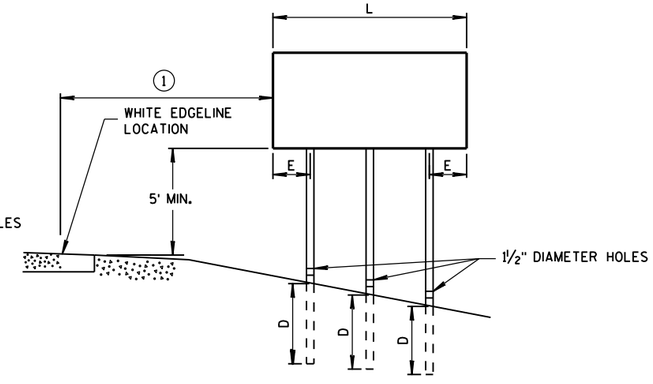
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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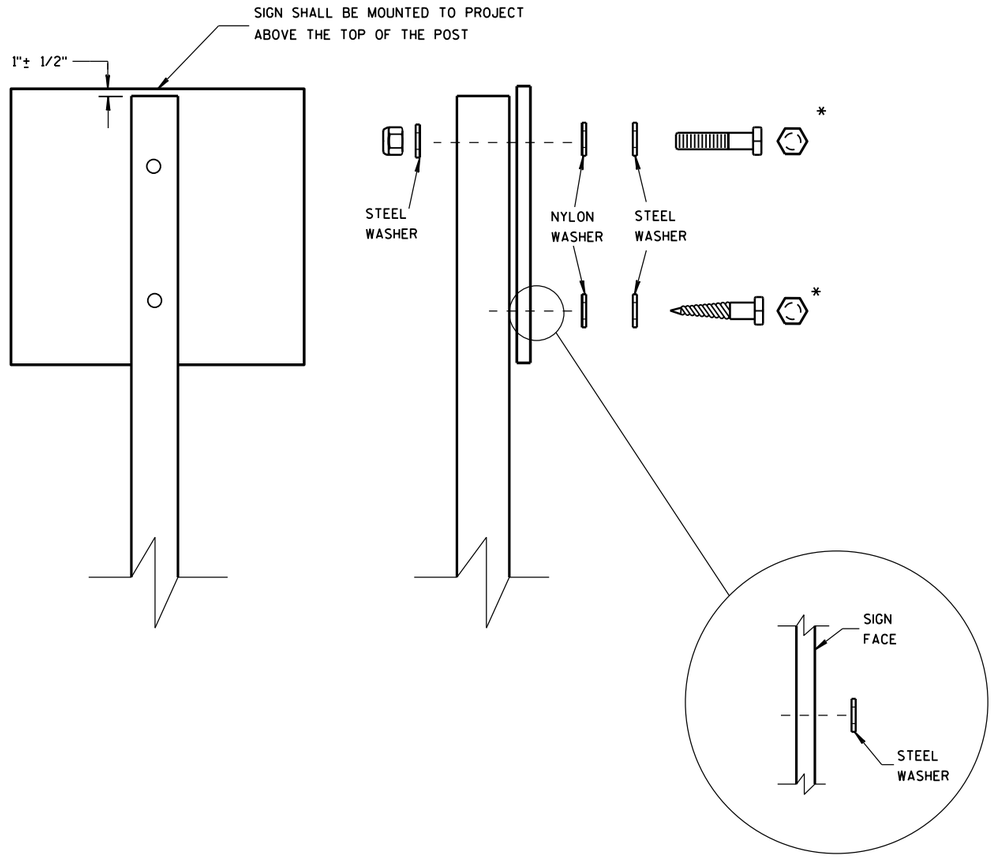
S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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