

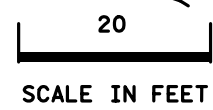
**SIGNAL REPLACEMENT APS EXAMPLE PLAN**

See MnDOT Standard Legend on ADA Website

Only one intersection per sheet

Include (x,y) for the center of all proposed push button, pedestal and signal pole locations. The point numbers will cross reference with the Signal Plan.

20' or 30' scale required



**Legend**

- PROPOSED SIGNAL POLE
- PROPOSED PEDESTAL
- PEDESTRIAN PUSH BUTTON STATION
- PEDESTRIAN PUSH BUTTON
- CONTROL POINTS AT GUTTER FLOW LINE
- TRUNCATED DOMES (SEE STANDARD PLATE 7038)
- CONSTRUCT CONCRETE CURB & GUTTER
- BITUMINOUS TREATMENT-SEE TABULATIONS
- CURB HEIGHT
- LANDING AREA - 4' X 4' MIN. DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS
- INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%
- INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%
- DRAINAGE FLOW ARROW

**SIGNAL CONTROL POINTS**

POINT NO.	X	Y	DISTANCE TO FRONT OF LANDING (FT)	DISTANCE TO BACK OF LANDING (FT)
PB8-1	555973.5471	186473.9606	2	6
PB2-2	555916.2765	186470.6450	2	6
PB2-1	555930.3865	186471.5934	9	1
PB4-2	ON POLE 3	ON POLE 3	8	2
PB4-1	555986.7955	186457.9452	4.5	1
PB6-2	555986.7955	186457.9452	2	7.5
PB6-1	555986.7955	186457.9452	2	6.5
PB8-2	ON POLE 6	ON POLE 6	2	2
POLE 1	573198.8601	253778.9766		
POLE 2	573089.5181	253699.4266		
POLE 3	573175.1256	253599.9369		
POLE 4	555986.7955	186457.9452		
POLE 5	573281.4871	253680.3494		
POLE 6	573198.8601	253778.9766		

Distances from push button to front and back of landing included to provide the 6 ft MAR (Maintenance Access Route), or the 4 ft min. PAR, and to emphasize that 2 ft min. is achieved from all grade breaks thus providing usable landings adjacent to the push buttons.

**TABULATED QUANTITIES**

LOCATION	REMOVE CONC. WALK	REMOVE CONC. CURB & GUTTER	MILL AND PATCH BITUMINOUS PAVEMENT	CONCRETE WALK	CONCRETE CURB & GUTTER	CONCRETE CURB DESIGN V	TRUNCATED DOMES	
							SQUARE	35' RAD SECTION SF
NE QUAD								
SE QUAD								40
S MEDIAN								
SW QUAD								
NW QUAD								
N MEDIAN								
TOTALS	797	168	983	1440	136	-	72	40

Quantity tabulation included only if it's a standalone signal project. ADA pay item quantities are otherwise included in the Plan Tabulations and SEQ.

**CONTROL POINTS**

POINT NO.	X	Y
100	556067.9106	186373.7930
101	556063.9194	186378.2730
102	555987.3742	186375.4952
103	555976.9660	186361.4794
104	555920.5656	186359.3100
105	555911.5503	186359.0742
106	555861.6673	186358.6566
107	555849.4321	186371.1055
108	555848.4949	186452.2368

Push buttons quite often need to be located at the back of walk such that a maintainable clear distance of 6 ft can be achieved between raised obstacles (MAR)

For level 2 quadrants, include only one Control Point per ramp. Locate this point on the outside edge of domes. Select the Trunk Highway side for depressed corner or fan ramps.

Always explain vertical tie-ins using contractor friendly terms or the Designers Intent.

REMOVAL LIMIT OR THE NEAREST JOINT OF THE CONCRETE GUTTER. ALL SAWCUTS SHALL BE INCIDENTAL. MAINTAINING A CROSS SLOPE THAT DOES NOT EXCEED 2.0% AND A RUNNING SLOPE THAT DOES NOT EXCEED 8.3%.

- ALL PERPENDICULAR RAMPS ARE 4' LONG UNLESS OTHERWISE NOTED.
- LOCATE ALL NEW HANDHOLES OUTSIDE OF THE PAR.
- THE OUTSIDE EDGE OF CROSSWALK MARKINGS SHALL LINE UP WITH THE OUTSIDE EDGE OF TRUNCATED DOMES.

- SALVAGE AND INSTALL SIGN.
- SHORTEN MEDIAN NOSE TO MAKE ROOM FOR NEW CROSSWALK. CONSTRUCT CONCRETE NOSE - SEE STANDARD PLATE 7113.
- CONSTRUCT CONCRETE PAVEMENT TO FILL THE AREA WHERE THE CONCRETE MEDIAN NOSE IS TO BE REMOVED. MATCH INPLACE PAVEMENT THICKNESS.

N.B. T.H. 156

S.B. T.H. 156

BY	DATE	REVISIONS	SYSTEM ID: 20937	T.E. 5112	PEDESTRIAN CROSSWALK DETAILS	S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
			METER ADDRESS: 236 STATE HWY 156		TRAFFIC CONTROL SIGNAL SYSTEM	CERTIFIED BY:			
			MASTER ID: 21720	T.E.	T.H. 156 AT C.S.A.H. 14 (GRAND AVE.)	STATE PROJ. NO. XXXX-XX (T.H. XXX)			
					IN SOUTH ST. PAUL, DAKOTA COUNTY				SHEET NO. X OF XX SHEETS

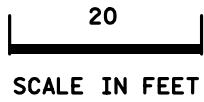
DISTRICT #: DISTRICT \*  
PLOT NAME: SamplePlan  
PATH & FILENAME: Documents\Operations\ADA\_Review\ADA\_Design\del\ines\ADA\space\Sample\space\Plan\space\SIGNAL\space\FEB\REV\REV.DWG: 16-FEB-2017

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**LEGEND**

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**GENERAL NOTES:**

- PROVIDE A SAWCUT AT THE REMOVAL LIMIT OR THE NEAREST JOINT OF THE CONCRETE CURB. ALL SAWCUTS SHALL BE INCIDENTAL.
- MAINTAIN ACCESS ROUTE WITH A CROSS SLOPE OF 2.0% TO 5.0% AND A RUNNING SLOPE THAT DOES NOT EXCEED 2.0%.
- THE OUTSIDE EDGE OF CROSSWALK MARKINGS SHALL LINE UP WITH THE OUTSIDE EDGE OF TRUNCATED DOMES.

- 1 SALVAGE AND INSTALL SIGN.
- 2 SHORTEN MEDIAN NOSE TO MAKE ROOM FOR NEW CROSSWALK. CONSTRUCT CONCRETE NOSE - SEE STANDARD PLATE 7113.
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N.B. T.H. 156

S.B. T.H. 156

BY	DATE	REVISIONS

SYSTEM ID: 20937	T.E. 5112
METER ADDRESS: 236 STATE HWY 156	
MASTER ID: 21720	T.E.

**PEDESTRIAN CROSSWALK DETAILS  
TRAFFIC CONTROL SIGNAL SYSTEM  
T.H. 156 AT C.S.A.H. 14 (GRAND AVE.)  
IN SOUTH ST. PAUL, DAKOTA COUNTY**

S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
CERTIFIED BY:	LIC. NO.	DATE:	
STATE PROJ. NO. XXXX-XX (T.H. XXX)	SHEET NO. X OF XX SHEETS		

DISTRICT #: DISTRICT \*  
 PLOT NAME: retro  
 PATH & FILENAME: Documents\Operations\ADA\_Review\ADA\_Design\Guidelines\ADA\space;Sample\space;Plan\space;Signal\space;Standard\space;16-FEB-2017