# Princeton Township, Mille Lacs County, Minnesota 10039 55<sup>th</sup> Street, Princeton, MN 55371

# Traffic Sign Policy -

#### Introduction:

This policy establishes uniformity in the installation and maintenance of traffics signs on Princeton Township roads by recognizing and following the Minnesota Manual on Uninform Traffic Control Devices (MnMUTCD) as the standard for all traffic control devices on all roads open to public travel in Minnesota. Therefore, all traffic control devices used on Princeton Township roads will conform to the standards and specification per Minnesota Statute 169.06.

#### **Purpose:**

This policy defines how traffic signs will be maintained to assure compliance with retro-reflectivity requirements; and that Princeton Township achieves compliance through a standardized replacement program to assure replacement within specified lifetime of signage per manufacturer specifications.

It is in the best interest of safety for the public to prevent excessive traffic signs, to improve effectiveness of signage and reducing unnecessary costs due to over signage.

#### **Policy:**

Princeton Township roads traffic signs will be in conformance with the MnMUTCD specifications and be replaced based on the expected life following a blanket replacement intervals program. Further, traffic signs not required will not be installed on our Township roads unless authorized by the Township Board of Supervisors and included in the master listing of Township signage.

#### **Removal of Excess Signs:**

In recognition of the fact that excess road signs have been shown to reduce the effectiveness of signage, as well as impose an unnecessary financial burden on the road authority, it shall be the policy of Princeton Township to remove signs determined to be unnecessary for safety purposes and which are not otherwise required to comply with an applicable state or federal statute or regulation. The removal of signs shall be based on an engineering study and the Manual on Uniform Traffic Control Devices. Particular attention shall be paid to recommendations on signage for roads considered to be "low-volume" under the Manual on Uniform Traffic Control Devices as adopted by the State.

#### **Traffic Signs Retro-Reflectivity Management Method**

Princeton Township roads traffic signs will follow Section 2A.8 of the MnMUTCD, which stipulates:

"All signs in an area/corridor, or of a given type, should be replaced at specified intervals. This eliminates the need to assess retro-reflectivity or tract the life of individual signs. The replacement Interval is based on the expected sign life, compared to the minimum levels, for the shortest life material used on the affected signs."

Replacement of the Township's traffic signs will be based upon the expected life of a sign as determined by the manufacturer's warranty period. The replacement interval is not dependent on the Traffic Sign location or orientation.

#### **On-going Maintenance:**

The township shall include a general inspection of road signs in township right-of-ways as part of its annual road inspections. The town shall update its sign inventory as necessary on an annual basis. The Township shall remove and replace any sign which becomes damaged, missing, etc. upon notification to the Town Board.

#### **Review of Policy and Modification if Necessary:**

To ensure standards and guidance is in alignment with future revision of the MnMUTCD, AASHTO, manuals and policies and Traffic Engineering conventions this policy will be reviewed annually and as necessary, to facilitate ongoing compliance.

Adopted by Resolution # 2020-14 of Princeton Township Board on June 16, 2020.

#### **RESOLUTION NO. 2020-14**

### STATE OF MINNESOTA COUNTY OF MILLE LACS PRINCETON TOWNSHIP

# RESOLUTION ADOPTING THE PRINCETON TOWNSHIP SIGN INVENTORY AND REPLACEMENT PLAN AS PRESENTED AT THE JUNE 16, 2020 MEETING OF THE BOARD OF SUPERVISORS

WHEREAS, the township road signs are nearing replacement time; and

WHEREAS, the preferred system of replacement is on a schedule, rather than by test; and

**WHEREAS,** the road manager has worked with the township engineer to reduce the sign inventory to approximately 110 signs:

THEREFORE, BE IT RESOLVED THAT Princeton Township adopt the sign inventory and replacement plan as presented to the Town Board on June 16, 2020.

Adopted this 16th day of June, 2020.

BY THE TOWN BOARD

Attest.

Town Clerk



# **MEMORANDUM**

TO:

Bill Whitcomb, Supervisor - Princeton Township

RE:

Township Road Signs

CC:

Connie Wubben, Clerk

FROM:

Todd McLouth, PE

DATE:

5-22-19

REMARKS: Bill, I have some comments and recommendations for the Township's road signs. I will try to highlight the issues and we can discuss them further later.

> I attended a traffic sign seminar last fall hosted by MN LTAP and Howard Preston (one of the top sign guys in the country). You may be able to find the seminar on line at MN LTAP "MN's Best Practices for Traffic Sign Maintenance and Management". Drivers and attorneys are getting smarter when it comes to accidents and traffic signs and liability. And the state is finding that there are too many signs. Therefore, MN MUTCD (MN Manual of Uniform Traffic Control Devises) is promoting less signs is better.

Per MN MUTCD, only 5 regulatory signs are required:

- Speed Limit (if different that statutory limit)
- One Way / Do Not Enter
- Turn Prohibition
- All Way (Stop) Supplementary Plaque
- STOP or YIELD at RR Crossings

Yes, it is correct, STOP signs are not required. MN MUTCD states that STOP signs should be used on the results of an engineering study. MN Statute 169.30 also says that normally it is desirable to erect STOP signs at all public entrances to highways.

For low volume rural roads (less than 400 ADT) - such as townships - the only sign that is required is a STOP or YIELD at a RR crossings.

#### Retroreflectivity

MN has adopted the federal highway admin. rules for retroreflectivity. All regulatory, warning and guide signs and object markers are required to be retroreflective. These signs need to maintained and replaced when not effective anymore.

There are choices to do this:

#### Assessment Methods

- Visual nighttime assessment (inspection needs to follow specific rules)
   This takes time and training. It is hard to be consistent when multiple people are -involved and different vehicles are used.
- Measured sign retroreflectivity.
   This takes time and is costly. One must buy or rent a retroreflectometer. Or hire a company to do the testing. My conversations with MnDOT on this is that testing is tedious. For a STOP sign one must take 10 tests and average the results for each color, red & white. So you can see the time and money involved.

#### Management Methods

- Expected sign life (15 +/- years)
   Each sign is dated and replaced at the end of its life cycle
- Blanket Replacement
  All signs within an area are replaced at specific intervals (12-15 years)

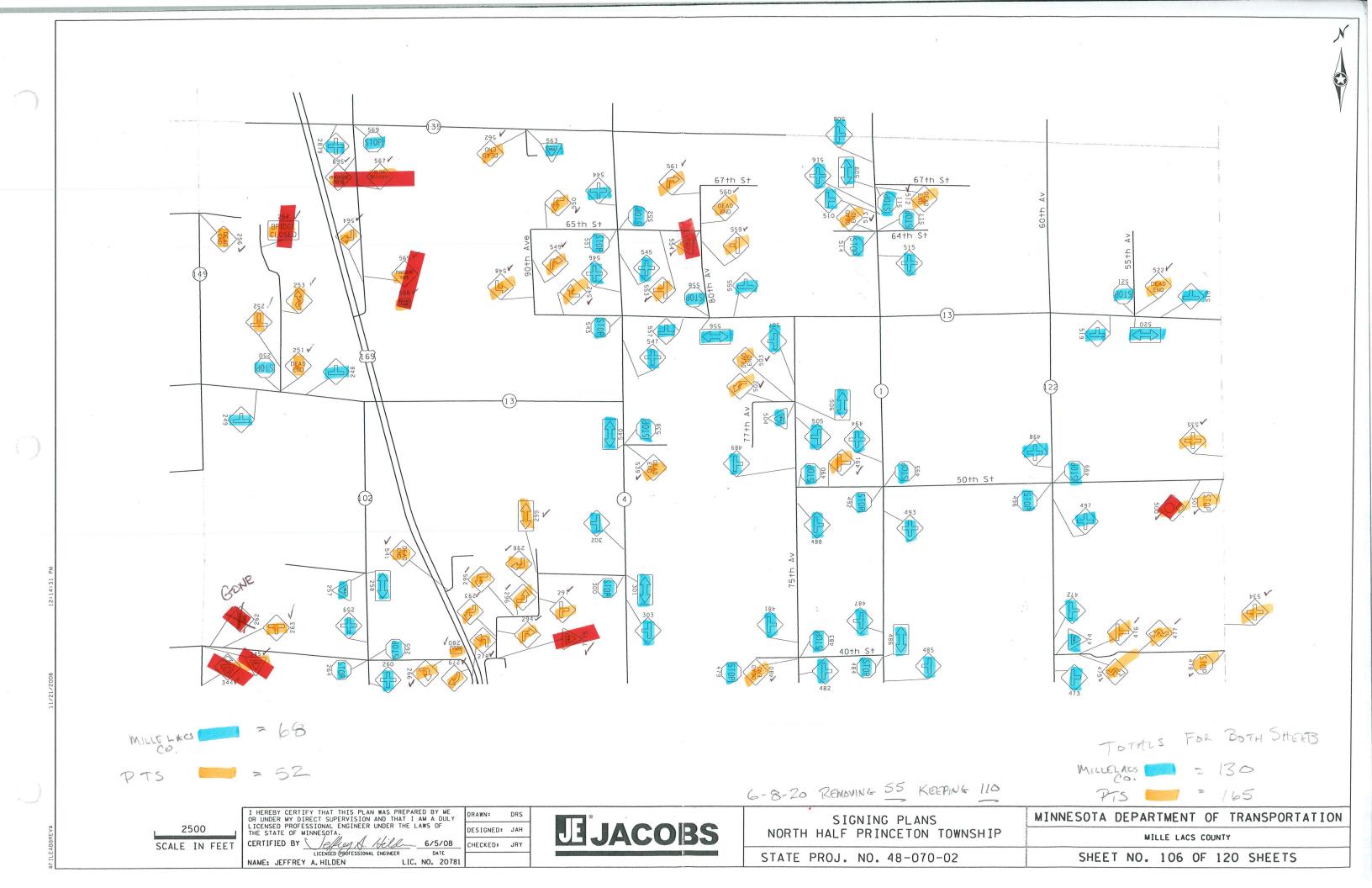
When the County replaced all the Twp signs years ago I urged the Twp to adopt the blanket replacement method for managing and maintaining their signs. I promoted they break up the Twp into areas and start a sign fund so that every 12-15 year cycle the Twp replaces those signs. (this would be just the sign panels – not the posts, unless warranted). This way they will know the costs and can plan for it. No testing is required and you don't have to keep track of individual sign installations. No action was taken as far as I know.

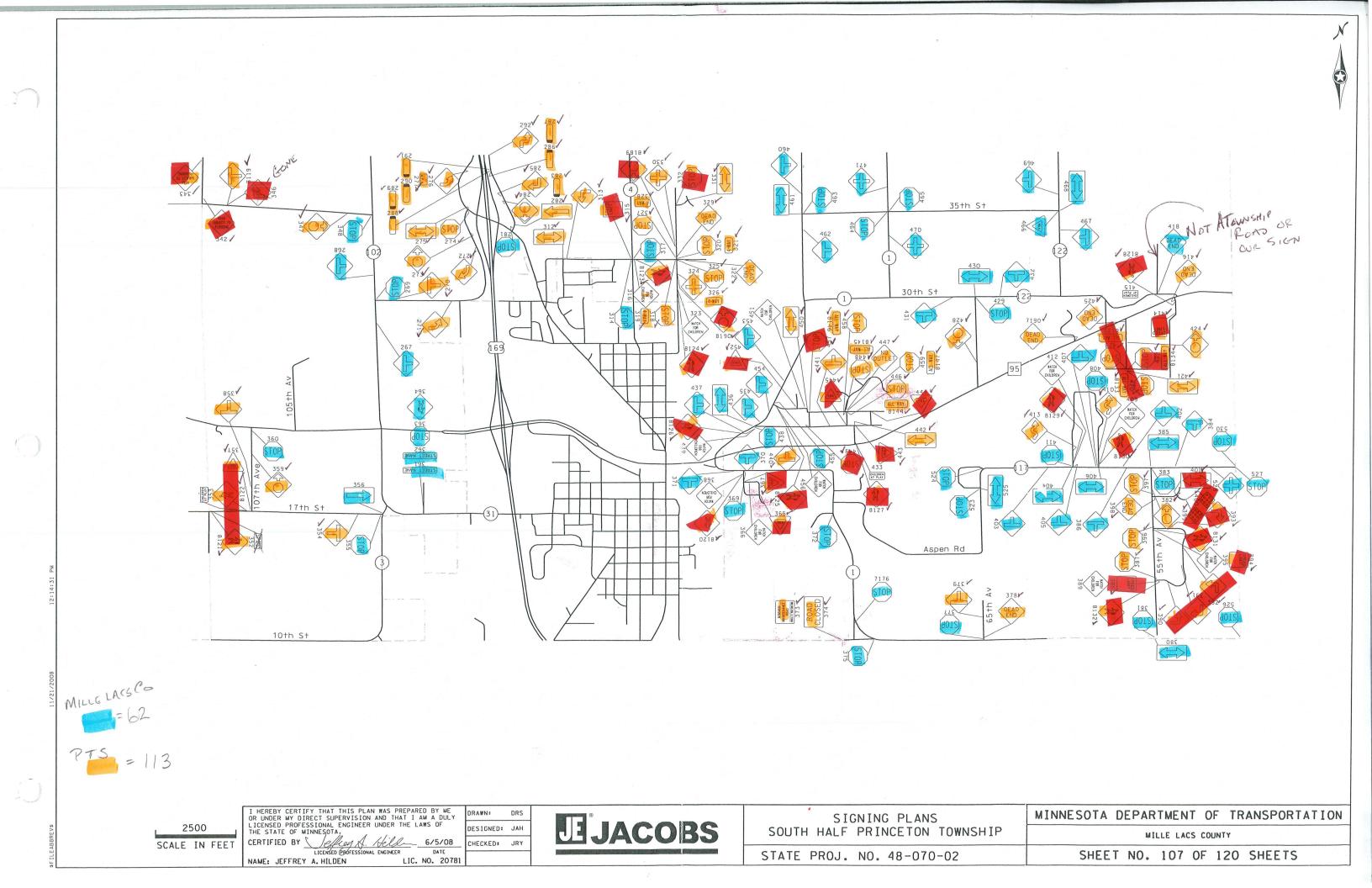
#### Sign Policy

The Twp. should adopt a sign maintenance and management policy. There are numerous sample policies out there to use as a guide. MN tort law provides protection from claims of negligence called 'discretionary immunity' for actions that are consistent with polices adopted by a public agency. I'm not sure the Twp. has one.

Lots to chew on but I hope this helps.

My





Remove		Sign ID				Sign Panel	Sign Panel	Sign			Reference	GPS	GPS	Structure	Sign	Mounting	Offset			Direction
?	Comments  Keep - Advanced warning	No. 251	Sign Code W14-1	Sign Panel Legend DEAD END	Township/Owner PRINCETON	Width (in)	Height (in)	Condition ventory R	Route	Reference Point	Point Distance (ft)	Latitude 45.6254408	Longitude -93.6255718	Condition	Structure Type 2U	Height (ft)	(ft)	Substrate	Sign Sheeting Material	Sign Faces South
	Keep - Advanced warning Keep - Advanced warning	252 253	W2-4 W1-5(L)	T intersection Winding road - left BRIDGE CLOSED	PRINCETON PRINCETON	30 30	30 30		105th Ave 105th Ave 105th Ave	CO RD 13	897 2640 4857	45.6273964 45.6322009 45.6376069	-93.6256701 -93.6254124 -93.6278945		2U 2U 2U-1A	5 5		Aluminum Aluminum		North South South
X	Remove - there hasn't' been a bridge in-place for decades  Keep - Advanced warning  Already Gone	254 256 262	R11-2a W14-1 W8-3	DEAD END PAVEMENT ENDS	PRINCETON PRINCETON PRINCETON	48 30 30	30 30 30		65th Ave 40th St	CO RD 13 CO RD 149	105	45.6404836 45.6038242	-93.6349415 -93.6343817		2U 2U	5		Aluminum Aluminum		West
	Keep - Advanced warning Keep - Advanced warning	263 266	W2-2(L) W1-1(R)	Side road 90 degree - left Turn - right T intersection	PRINCETON PRINCETON	30	30 30		40th St 40th St BAPTIST		686 7550	45.6036999 45.6024553	-93.6328196 -93.6063619		2U 2U	5 5	_	Aluminum Aluminum		East West
	Keep - Advanced warning Keep - Advanced warning	270 271	W2-4 W1-2(L)	Curve - left	PRINCETON PRINCETON	30 30	30 30		CHURCH RD BAPTIST	CO RD 102 CO RD 102	868 2428	45.5882772 45.5880321	-93.6123345 -93.6055627		2U 2U	5 5		Aluminum Aluminum		East West
	Keep - Advanced warning Keep - Approaches a CNTY RD. Keep - Approaches a CNTY RD.	272 273 274	W1-2(R) W3-1 R1-1	Stop ahead STOP	PRINCETON PRINCETON PRINCETON	30 36 30	30 36 30		BAPTIST BAPTIST	CO RD 102 CO RD 102	4910 5385 6177	45.5925409 45.5937363 45.595632	-93.6026603 -93.6031981 -93.603564		2U 2U-1A 2U	5 5 5		Aluminum Aluminum Aluminum		North South South
	Keep - Advanced warning Keep - Advanced warning	275 276	W1-7 W1-2(L)	Large arrow - double head Curve - left	PRINCETON	48	24 30		BAPTIST BAPTIST CHURCH RD	CO RD 102	6230 7550	45.5958287 45.5990885	-93.6034401 -93.603897		2U-1A 2U-1A	5		Aluminum		South
	Keep - Collector Road Keep - Advanced warning	277 278	W13-1	40 MPH Turn - left	PRINCETON PRINCETON	18	18		BAPTIST BAPTIST	CO RD 102 CO RD 102	7550	45.5990885 45.6010218	-93.603897		2U	5		Aluminum Aluminum		West
	Keep - Advanced warning	279	W1-2(L)	Curve - right 40 MPH	PRINCETON	30	30		BAPTIST CHURCH RD BAPTIST	CO RD 102	8606	45.6015779	-93.6033489		2U-1A	5		Aluminum		North
	Keep - Collector Road  Keep - Advanced warning  Keep - Advanced warning	280 282 283	W13-1 W1-6(R) X4-6	Large arrow - right Guide delineator	PRINCETON PRINCETON PRINCETON	18 48	18 24 24	Poor	Brickton Rd Brickton Rd	CO RD 102 CO RD 29 CO RD 29	8606 211 211	45.6015779 45.5944207 45.5944207	-93.6033489 -93.5979389 -93.5979389		2U-1A	5 5 4		Aluminum Aluminum Aluminum	ENGINEEERING GRADE	North North North
	Keep - Sight distance to STOP sign is only 125' Keep - Advanced warning Keep - Advanced warning	284 285 286	W3-1	Stop ahead Turn - right Guide delineator	PRINCETON PRINCETON PRINCETON	30 30	30 30 24	Poor	Brickton Rd Brickton Rd Brickton Rd	CO RD 29 CO RD 29 CO RD 29	950 1214	45.5961839 45.5968449	-93.5991577	Fair	2U 2U	5		Aluminum Aluminum	ENGINEEERING GRADE	North North South
	Keep - Advanced warning Keep - Advanced warning	287 288 289	X4-6 X4-6 X4-6	Guide delineator Guide delineator Guide delineator Guide delineator	PRINCETON PRINCETON PRINCETON	8 8	24 24 24 24	Poor Poor Poor	Brickton Rd Brickton Rd	CO RD 29 CO RD 29 CO RD 29	2059 2112 2112	45.5988953 45.5990132 45.5990132	-93.6008667	Fair Fair Fair				Aluminum	ENGINEEERING GRADE ENGINEEERING GRADE ENGINEEERING GRADE	North South North
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	290 291	X4-6 X4-6	Guide delineator Guide delineator	PRINCETON PRINCETON	8 8	24 24	Poor Poor	Brickton Rd Brickton Rd Brickton Rd Brickton Rd	CO RD 29 CO RD 29	2112 2112	45.5991349 45.5991349	-93.6009363 -93.6009363	Fair Fair				Aluminum Aluminum	ENGINEEERING GRADE ENGINEEERING GRADE	South North
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	292 293 294	W1-1(R)	Reverse turn - right Reverse turn - right Turn - right	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30		Brickton Rd Brickton Rd	CO RD 29 CO RD 29 CO RD 29	2587 4382 4540	45.6003441 45.6043669 45.6048652	-93.599991 -93.599895		2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		South North South
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	295 296 297	W1-1(L) W1-1(L) W2-2(R)	Turn - left Turn - left Side road 90 degree - right	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30		Brickton Rd Brickton Rd Brickton Rd	CO RD 29 CO RD 29 CO RD 29	5544 5702 6811	45.6060885 45.6061705 45.6075484	-93.5978249 -93.5973808 -93.5948173		2U 2U 2U	5 5		Aluminum Aluminum Aluminum		East West South
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	298 299 312	W1-1(R) W1-7 W1-7	Turn - right Large arrow - double head Large arrow - double head	PRINCETON PRINCETON PRINCETON	30 48 48	30 24 24		Brickton Rd Brickton Rd 33rd Ave	CO RD 29	6969 7656 528	45.6079549 45.6097394 45.591566	-93.5949493 -93.5950707 -93.5922239		2U 2U-1A 2U-1A	5 5 5		Aluminum Aluminum Aluminum		North East South
X	Keep - Advanced warning Remove - not consistent with the rest of the township Keep	313 315 318	W1-1(L) R2-1 R1-1	Turn - left SPEED LIMIT 30 STOP	PRINCETON PRINCETON PRINCETON	30 24 30	30 30 30		33rd Ave 33rd Ave 33rd Ave		686 2640 4488	45.5915559 45.5914973 45.5913095	-93.5917645 -93.5841199 -93.5788009		2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		East East West
	Replace Keep	319 320	R1-3 R1-1	4-WAY Should be ALL WAY STOP	PRINCETON PRINCETON	12 30	6 30		33rd Ave 33rd Ave		4488 4593	45.5913095 45.5914255	-93.5788009		2U	5		Aluminum		West
	Replace	321	R1-3	4-WAY Should be ALL WAY	PRINCETON	12	6		33rd Ave		4593 4593 4646	45.5914255	-93.578547		20	5		Aluminum		East
	Keep - Advanced warning Keep Replace	322 325		DEAD END STOP 4-WAY Should be ALL	PRINCETON PRINCETON	30	30 30		82ND AV 82ND AV		1003		-93.5783681 -93.5785874		2U 2U	5		Aluminum		South South
	Kep Keep Replace	326 327	R1-3 R1-1	WAY STOP 4-WAY Should be ALL	PRINCETON PRINCETON	12 30	6 30		82ND AV 82ND AV		1003 1056	45.5912768 45.591512	-93.5787584		2U	5		Aluminum		South North
	Keep - Advanced warning Keep - Advanced warning	328 329 331	R1-3 W14-1 W1-7	WAY DEAD END Large arrow - double head	PRINCETON PRINCETON PRINCETON	12 30 48	6 30 24	Good	82ND AV BLUFF RD	36th St	1056 1161		-93.5771031	Fair	2U	5			DG3	North South West
X	Remove - Mn. Stat. 169.20 deals with uncontrolled intersections.  Remove - Flooded road would be self-evident	332 342	R1-1 W8-X2	ROAD SUBJECT TO ROAD SUBJECT TO	PRINCETON PRINCETON	30 30	30 30		36th St 110th Ave 110th Ave	BLUFF RD 35th St	1056 158	45.596977	-93.5786746 -93.6355925		2U 2U	5		Aluminum Aluminum		East South
X	Remove - Flooded road would be self-evident  Remove - 300'+ of sight distance approaching a township road  Remove - Mn. Stat. 169.20 deals with uncontroled intersections.	343 344 345	W8-X2 W3-2 R1-2	FLOODING Yield ahead YIELD	PRINCETON PRINCETON PRINCETON	30 36 33	30 36 29		110th Ave	35th St 35th St 35th St	1372 1953 2640				2U 2U-1A 2U	5 5	_	Aluminum Aluminum Aluminum		North South South
	Keep - Advanced warning, Approaches a CNTY RD.  Keep - Advanced warning, Approaches a CNTY RD.  Keep - Advanced warning  Remove - Mn. Stat. 169.20 deals with uncontroled intersections.	345 347 354 357	W3-1 W2-4 R1-2	Stop ahead T intersection YIELD	PRINCETON PRINCETON PRINCETON PRINCETON	36 30 33	36 30 29		35th St 17th St 107th Ave	110th Ave 110th Ave 17th St	4699 4593	45.5955263 45.570116			2U-1A 2U 2U	5 5		Aluminum Aluminum Aluminum		West West North
	Keep - Advanced warning Keep - Advanced warning, Approaches a MN HWY.	358 359	W2-4 W3-1	T intersection Stop ahead	PRINCETON PRINCETON PRINCETON	30 30 33	30 30 29		107th Ave 107th Ave	17th St 17th St 17th St Ridge Rd	844 1846	45.5724835	-93.6298984 -93.6297612		2U 2U 2U	5 5		Aluminum Aluminum Aluminum		North South South
	Remove - Mn. Stat. 169.20 deals with uncontroled intersections.  Remove - Mn. Stat. 169.20 deals with uncontroled intersections.  Keep - Advanced warning	373	R1-2 R1-2 W21-X8	YIELD YIELD MINIMUM MAINTENANCE	PRINCETON PRINCETON	33 36	29 30		Fairlawn Rd Fairlawn Rd Afton Rd	Ridge Rd CO RD 1	1056 316	45.5724491 45.5589779	-93.5704206 -93.5589157		2U 2U-1A	5		Aluminum Aluminum		East East
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	374 378 379	R11-2 W14-1 W2-4	DEAD END T intersection	PRINCETON PRINCETON PRINCETON	48 30 30	30 30 30		Afton Rd 65th Ave 65th Ave	CO RD 1 CO RD 1	316 105 686	45.5590064			2U 2U	5 5 5		Aluminum Aluminum Aluminum		East South North
X	Keep - Advanced warning, Approaches a CNTY RD.  Keep - Advanced warning, Approaches a Township collector.  Remove - not consistent with the rest of the township	382 387 388	W3-1 R1-1 R2-1	Stop ahead STOP SPEED LIMIT 30	PRINCETON PRINCETON PRINCETON	36 30 24	36 30 30		55th Ave Appleton Rd Appleton Rd	CO RD 1 55th Ave 55th Ave	4593 52 105	45.563814	-93.5214713 -93.5211453 -93.5210505	Fair	2U-1A 2U	5 5 5		Aluminum Aluminum Aluminum		South East West
X X X	Remove - Signs cause confusion due to winding roads Remove - Signs cause confusion due to winding roads Remove - Signs cause confusion due to winding roads	390 391 392		Turn - left Turn - right Turn - left	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30		Appleton Rd Appleton Rd Appleton Rd	55th Ave 55th Ave 55th Ave		45.5636026 45.5649959 45.5666632			2U 2U 2U	5 5		Aluminum Aluminum Aluminum		West North South
X X	Remove - Signs cause confusion due to winding roads Remove - not consistent with the rest of the township Keep - Advanced warning, Approaches a Township collector.	393 394 396	W1-1(R)	Turn - right SPEED LIMIT 30 STOP	PRINCETON PRINCETON PRINCETON	30 24 30	30 30 30		Appleton Rd Appleton Rd Appleton Rd	55th Ave 55th Ave 55th Ave	3168	45.5680449 45.5680549		Fair	2U 2U	5 5		Aluminum Aluminum Aluminum		West West East
X	Keep - Advanced warning, Approaches a Township collector. Keep - Advanced warning Remove - not consistent with the rest of the township	397 398 399	R1-1 W14-1 X4-11	STOP DEAD END Object marker	PRINCETON PRINCETON PRINCETON	30 30 24	30 30 24	Fair	18th St 18th St 18th St	55th Ave 55th Ave 55th Ave	52	45.5709661 45.5708047	-93.5214189 -93.5212464	Fair	2U 2U	5		Aluminum Aluminum	ENGINEEERING GRADE	East West West
X X	Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township	400 401 410	X4-11 X4-11 W1-7 W1-5(R)	Object marker Large arrow - double head	PRINCETON PRINCETON	24 48	24 24	Fair	18th St 18th St	55th Ave 55th Ave CO RD 117	1267 844	45.5705577 45.5710103 45.5747501	-93.5173589 -93.51856	Fair	2U-1A	5		Aluminum Aluminum	ENGINEEERING GRADE	West South
x	Keep - Advanced warning Keep - Advanced warning Remove - not consistent with the rest of the township	413 414	W1-5(R) R2-1	Winding road - right Winding road - right SPEED LIMIT 30	PRINCETON PRINCETON PRINCETON	30 30 24	30 30 30	Poor	Scenic Dr 59th Ave 54th Ave	CO RD 117 HWY 95	475 2112	45.5747032 45.5863294	-93.5278116 -93.5309831 -93.5185927	Fair	2U 2U	5		Aluminum	HI PRISMATIC	South South North
X	Keep - Advanced warning Keep - Advanced warning Remove - Mn. Stat. 169.20 deals with uncontroled intersections.	416 418 420	R1-1	DEAD END DEAD END STOP	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30		54th Ave 54th Ave 25th St	HWY 95 CO RD 122 56th Ave	52	45.5874164 45.5880768 45.5814949	-93.520667 -93.5244927		2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		North South West
X	Keep - Advanced warning Remove - Mn. Stat. 169.20 deals with uncontrolled intersections. Remove - Mn. Stat. 169.20 deals with uncontrolled intersections.	421 422 423		STOP STOP	PRINCETON PRINCETON PRINCETON	48 30 30	24 30 30		25th St 25th St 56th Ave	56th Ave 56th Ave 25th St	52	45.5814831 45.5816203 45.5816165	-93.524425 -93.5242687 -93.5245185		2U-1A 2U 2U	5 5 5		Aluminum Aluminum Aluminum		North East North
	Keep - Advanced warning, Approaches a MN HWY.  Keep - Advanced warning  Keep - Advanced warning, Approaches a MN HWY.	424 425 428	W14-1	Stop ahead  DEAD END  Stop ahead	PRINCETON PRINCETON PRINCETON	36 30 36	36 30 36		56th Ave 56th Ave 65th Ave	25th St 25th St HWY 95	1742 686	45.5838851 45.5856721 45.5822407	-93.5424337		2U-1A 2U 2U-1A	5 5 5		Aluminum Aluminum Aluminum		South North North
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	440 441 442	W2-2(L) W2-2(R) W1-7	Side road 90 degree - left Side road 90 degree - right Large arrow - double head	PRINCETON PRINCETON PRINCETON	30 30 48	30 30 24		6th St. N 6th St. N 6th St. N	75th Ave 75th Ave 75th Ave	2481		-93.5654563 -93.5602209 -93.5572231		2U 2U 2U-1A	5 5 5		Aluminum Aluminum Aluminum		West East South
X X X	Remove - Mn. Stat. 169.20 deals with uncontrolled intersections. Remove - Mn. Stat. 169.20 deals with uncontrolled intersections. Remove - Mn. Stat. 169.20 deals with uncontrolled intersections.	443 444 445	R1-2	YIELD YIELD YIELD	PRINCETON PRINCETON PRINCETON	33 33 33	29 29 29		6th St. N Pine Lane Spruce Dr	75th Ave 6th St. N 6th St. N			-93.5571103 -93.5552614 -93.558204		2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		East South North
	Keep Keep Keep	446 447 448	R1-1 W14-2 R1-1	STOP NO OUTLET STOP	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30		Spruce Dr Spruce Dr Spruce Dr	6th St. N 6th St. N 6th St. N	528	45.5784164	-93.5580988 -93.5580784 -93.5582488		2U 2U 2U	5		Aluminum Aluminum Aluminum		South South North
X	Remove - Mn. Stat. 169.20 deals with uncontrolled intersections.  Keep - Advanced warning  Remove - Mn. Stat. 169.20 deals with uncontrolled intersections.	450	W1-7	STOP Large arrow - double head YIELD	PRINCETON PRINCETON PRINCETON	30 48 33	30 24 29		Ash Ave Ash Ave 76th St	6th St. N 6th St. N 7th St N	52 316	45.5770893 45.5782983	93.5627781 9 -93.5628627 8 -93.5642987		2U 2U-1A 2U	5 5		Aluminum Aluminum Aluminum		North East North
x	Remove - Mn. Stat. 169.20 deals with uncontrolled intersections.  Remove - Mn. Stat. 169.20 deals with uncontrolled intersections.  Keep  Keep		R1-1 R1-1	STOP STOP STOP	PRINCETON PRINCETON PRINCETON PRINCETON	30 30 30 30	30 30 30 30		7th St N. 7th St N. 7th St N. 7th St N.	75th Ave 75th Ave 75th Ave	1267 2376	45.5783551 45.5782408	-93.5626446 3 -93.5582858 3 -93.5580933		2U 2U 2U 2U	5 5		Aluminum Aluminum		East West
	Keep Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	475 476 477	W1-5(R)	Winding road - right T intersection	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30 30		40th Ave 40th Ave 40th Ave	CO RD 122 CO RD 122 CO RD 122	739	45.6023567 45.6024614	-93.5295892 -93.5295615		2U 2U 2U 2U	5 5		Aluminum Aluminum Aluminum		East West East
	Keep - Advanced warning Keep Keep - Advanced warning Keep - Advanced warning	477 478 480 491	R1-1 W14-1	Winding road - left STOP DEAD END T intersection	PRINCETON PRINCETON PRINCETON PRINCETON	30 30 30 30	30 30 30 30		40th Ave 40th Ave 40th Ave 50th St.	CO RD 122 CO RD 122 75th Ave	5280 5280 1372 1003	45.6025615 45.602198	-93.5121283		2U 2U 2U 2U	5 5		Aluminum Aluminum Aluminum		East West East East
X	Remove - 300'+ of sight distance approaching a township road Keep		W3-1	Stop ahead STOP Curve - left	PRINCETON PRINCETON	36 30	36 30		50th St. 50th St. 50th St.	75th Ave 75th Ave 75th Ave 77th Ave, not on	12460 13200		-93.5150544		2U-1A 2U	5 5		Aluminum Aluminum		West West
	Keep - Advanced warning Keep - Advanced warning	502	W1-2(L)	DEAD END	PRINCETON PRINCETON	30	30		55th St	77th Ave, not on map, Section 10 77th Ave, not on map, Section 10	686 1267	45.6240137 45.6240102			2U 2U	5		Aluminum		East
	Keep - Advanced warning Keep - Advanced warning	512 513	W14-1 W14-1	DEAD END DEAD END	PRINCETON PRINCETON	30 30	30 30		67TH ST 65th St	CO RD 1	105 1214	45.6420838 45.6383931	-93.5538952 -93.5542239		2U 2U	5 5		Aluminum Aluminum Aluminum		West East
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	522 534 535	W2-1 W2-1	DEAD END Cross road Cross road	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30		55th Ave 50th Ave 50th Ave	CO RD 13 CO RD 1 CO RD 1	105 16984 22123	45.6048721 45.6190863	-93.5122832	3	2U 2U 2U	5 5		Aluminum Aluminum Aluminum		South North North
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	539 541 542	W14-1 W1-1(R)	DEAD END DEAD END Turn - right	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30		52ND ST Baxter Rd 60th St	CO RD 4 90th Ave	105	45.6316006	-93.6056732 -93.5916029		2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		West West East
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	548 549 550	W1-1(R) W1-1(L)	Turn - left Turn - right Turn - left	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30		90th Ave 90th Ave 65th St	60th St 60th St 90th Ave	528 1689 475	45.6389317	-93.5952577 -93.5935753	3	2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		North South East
X	Keep - Advanced warning Remove - Mn, Stat. 169.20 deals with uncontrolled intersections. Keep - Advanced warning	559	R1-2 W2-2(L)	T intersection YIELD Side road 90 degree - left	PRINCETON PRINCETON PRINCETON	30 33 30	30 29 30		65th St 65th St 80th Ave	90th Ave 90th Ave CO RD 13	2376	45.6385096 45.6376708	-93.5752336 -93.5749003	3	2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		West West South
	Keep - Advanced warning Keep - Advanced warning Keep - Advanced warning	560 561 562	W1-1(R) W14-1	DEAD END Turn - right DEAD END	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30		80th Ave 80th Ave 90th Ave	CO RD 13 CO RD 13 CO RD 135		45.641785 45.6471398	-93.5750626 3 -93.5960204	1	2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		South South North
X	Keep - Advanced warning Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township	564 565 566	W8-3		PRINCETON PRINCETON PRINCETON	30 30 24	30 30 18		100th Ave 100th Ave 100th Ave	HWY 169 HWY 169 HWY 169	1108 1267	45.634543 45.635060 45.635060	-93.6156848 1 -93.6155702		2U 2U-1A	5 5 5		Aluminum Aluminum Aluminum		North South South
X X X	Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township Remove - Mn. Stat. 169.20 deals with uncontroled intersections	567 568	W2-X12 W2-X12	HIDDEN ENTRANCE HIDDEN ENTRANCE YIELD	PRINCETON PRINCETON PRINCETON	30 30 30 33	30 30 29		100th Ave 100th Ave	HWY 169 HWY 169	4118	45.6427963 45.6451438	-93.616233	5	2U 2U 2U	5 5		Aluminum Aluminum Aluminum		South North East
Y	Keep - Advanced warning Keep - Advanced warning Remove - not consistent with the rest of the township	7190 8119 8120	W14-1 W2-4	DEAD END T intersection Pedestrian crossing	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30								2U 2U	5 5		Aluminum Aluminum		North East
X X	Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township	8120 8121 8122 8123	W11-2 W11-2	Pedestrian crossing Pedestrian crossing	PRINCETON PRINCETON	30 30 30 30	30 30 30 30								2U 2U 2U	5 5		Aluminum Aluminum Aluminum		West West East
X X X	Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township	8124 8125	W11-2 W11-2	Pedestrian crossing Pedestrian crossing Pedestrian crossing	PRINCETON PRINCETON PRINCETON	30 30	30 30 30								2U 2U 2U	5 5		Aluminum Aluminum Aluminum		South West
X X X	Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township	8126 8127 8128	W11-2 W11-2	Pedestrian crossing Pedestrian crossing Pedestrian crossing	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30								2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		South North
X X	Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township Remove - not consistent with the rest of the township	8129 8130 8131	W11-2 W11-2	Pedestrian crossing Pedestrian crossing Pedestrian crossing	PRINCETON PRINCETON PRINCETON	30 30 30	30 30 30								2U 2U 2U	5 5 5		Aluminum Aluminum Aluminum		South South West
X X X	Remove - not consistent with the rest of the township Remove - Mn. Stat. 169.20 deals with uncontrolled intersections Remove - Mn. Stat. 169.20 deals with uncontrolled intersections	8134	R1-4 R1-4	Pedestrian crossing ALL WAY ALL WAY	PRINCETON PRINCETON PRINCETON	30 18 18	30 6 6								2U	5		Aluminum Aluminum Aluminum		West West East
X	Remove - Mn. Stat. 169.20 deals with uncontrolled intersections Keep Keep	8144 8145	R1-4 R1-4	ALL WAY ALL WAY ALL WAY	PRINCETON PRINCETON PRINCETON	18 18 18	6 6											Aluminum Aluminum		North South North
X	Keep Keep Remove - 300'+ of sight distance approaching a township road		R1-4 W3-1	ALL WAY ALL WAY Stop ahead	PRINCETON PRINCETON PRINCETON	18 18 36	6 6 36								2U-1A	5		Aluminum Aluminum Aluminum		West East North
X	Remove - 300'+ of sight distance approaching a township road	8190	W3-1	Stop ahead	PRINCETON	36	36								2U-1A	5		Aluminum		South