

VILLAGE OF MCFARLAND

NOTICE OF PUBLIC MEETING

PUBLIC WORKS COMMITTEE

Tuesday, December 13, 2016

6:00 P.M.

McFarland Municipal Center
Conference Room A

AGENDA

1. Call to Order.
2. Public Comments.
3. Review and possible action on the draft minutes of the regular meeting held November 8, 2016.
4. Discussion and possible action regarding the planned public works improvements within the proposed Prairie Place Subdivision.
5. Discussion and possible action regarding the County Trunk Highway MN project for 2017:
 - a. General Design Review Update
 - b. Traffic Control Improvements to Exchange/Farwell Intersection
 - c. Crosswalk Improvement
 - d. Street Lighting Upgrade/Design
 - e. Terrace Enhancement
 - f. Stormwater Features
6. Update on the design and reconstruction of Holscher Road planned for 2017.
7. Set next meeting date and possible agenda items.
8. Adjournment.

NOTES: 1) Persons needing special accommodations should call 838-3153 at least 24 hours prior to the meeting.

2) A quorum of the Village Board may attend this meeting for the purpose of gathering information relevant to their responsibilities as Village Trustees. No matter shall be considered nor shall any action be taken by said Village Members at this meeting other than those that are part of this Committee and acting within the limits of this meeting notice/agenda.

2) More specific information about agenda items may be obtained by calling 838-7287.

This agenda was posted, or caused to be posted, by my hand on the 9th of December, 2016 the following three (3) posting places in the Village of McFarland, to wit: McFarland Municipal Center, 5915 Milwaukee Street; E.D. Locke Public Library, 5920 Milwaukee Street; and McFarland State Bank, 5990 Hwy 51.

Cassandra Suettinger, Clerk/Deputy Treasurer

Public Works Committee
Meeting minutes
November 08, 2016

Members present: Chair Tom Mooney, Jerry Adrian, Bob Mecum, Chris Fredrick, Richard Vela, Marv Meyers, Don Miller.

Members absent: none.

Staff present: Administrator Matt Schuenke, Director Pauline Boness, Director Allan Coville

Others present: Brian Berquist (Town & Country Engineering); Clair Utter (Village Trustee); Shaun O'Hearn, Mark Lenters.

1. **Call to order:** The Public Works Committee meeting was called to order at 6 p.m. by chair Mooney at the Lewis Park Shelter.
2. **Public comments:** Mark Lenters introduced himself as a resident who is employed as a designer of highway roundabouts. Mark stated he was speaking regarding the 2017 project to re-construction County Trunk Highway MN from Marsh Road to Taylor Road. Mark would like the committee to consider putting a roundabout at the intersection of Farwell, Exchange and Bashford. He also offered to participate as a volunteer in the design of the Farwell and Exchange intersection.
3. **Review and possible approval of draft Minutes of the Public Works Committee meeting of October 11, 2016.** Motion by Vela, second by Fredrick, to approve the draft minutes. Motion carried 5-0 with Myers and Miller abstaining.
4. **Discussion and possible action regarding the County Trunk Highway MN project for 2017.**
The Village Engineer provided an update to the Committee regarding various revisions to the base design that have taken place since the last meeting. These include narrow travel lanes and loss of parking near the Main/Broadhead intersection; addition of a bumpout at Main/Anthony intersection; curb adjustment at Main/Long intersection, and a few other issues related to the project. He stated that the Village will need to bid this project at the latest by February and that ideally the design should be approved by their December 13th meeting. Committee members commented that they have reviewed the roundabout issue before with Dane County and that it was not the County's preference to prefer this improvement. The Committee requested Staff to retrieve this concept from the County for review as well as any traffic study data the County may possess as part of their consideration for the project.
The Administrator/Treasurer provided a review of the proposed options for streetscaping through this area with the Committee providing feedback on various alternatives presented as follows:
 - Base Construction Drawings – Preferred keeping the bumpout at Main/Anthony intersection to be constructed as part of the project. Preference for crosswalks is to apply paint as is currently done with additional signage as appropriate. Further enhancements that were discussed could be considered later as needed. A colored and

stamped concrete pattern was desired for the parkway area from the railroad track until mid-block past Anthony on Main. Pattern selection should take into account snow removal/maintenance and not create a tripping hazard. Remainder of parkways will receive standard grass treatments as is customary.

- Street Lighting – The Committee would like to work with Alliant Energy on the design of the lighting system. They want to look at both the standard LED alternative and what HPS design options are available.
- Landscaping – The Committee's preference was to maintain some presence of street trees where it made the most sense and explore feasibility of in ground stormwater features as an alternative to above ground planters. The planter option could be considered but was discussed as a low priority due to the creation of new maintenance needs.
- Library Patio Improvement – It was desired to further explore this alternative but keep away from the street as much as possible to avoid any traffic concerns.
- Aesthetic Amenities – The discussed amenities were desirable but needed further review with assistance possibly from the CDA. It was discussed about partnering with the Lyons on the drinking fountain by the gazebo and whether or not a parking lot could be developed on the Village owned lot opposite the park.
- Wayfinding Signage – It was discussed with the Committee that an overall wayfinding signage plan was a project onto itself that involved the whole Village and not just the downtown. This will be brought forward for consideration at a later date but not as part of the project. Staff will look at ways signage could be introduced along the new trail near Farwell Street to encourage users to come into the Downtown area.
- TID Grant Program – A program for using TID funds to pay for private improvements was discussed but a responsibility of the CDA to create. This would be offered as a way for private property to utilize some funds to complement the investment in the public properties being discussed.

Village Staff will use the direction provided in the meeting to develop additional detail on the streetscaping plan for future consideration. The Village Engineer will work in the design specific elements that were desired into the project design. Further, Staff will reach out to additional groups such as the CDA, Library Board, Chamber of Commerce, and other related entities for feedback on the ideas and plan presented. No action was taken on this item and an update will be provided at the meeting on December 13th.

5. **Update regarding proposed 2017 projects.** Director Coville told the committee that the proposed 2017 projects which were reviewed with the committee at the previous meeting were going before the Village Board for inclusion in the 2017 budget.
6. **Set next meeting date and possible agenda items.** The next meeting was set for December 13, 2016, at the Municipal Center. Agenda items to include update on the County Trunk Highway MN design, including the possibility of a roundabout at Farwell and Exchange and update on 2016 projects.
7. **Adjournment:** Motion by Myers, second by Miller, to adjourn. Motion carried 7-0.



Memorandum

To: Public Works Committee

From: Matthew G. Schuenke, Village Administrator/Treasurer 

Date: December 9, 2016

Re: **County Highway MN (Main Street) Streetscape Concepts**

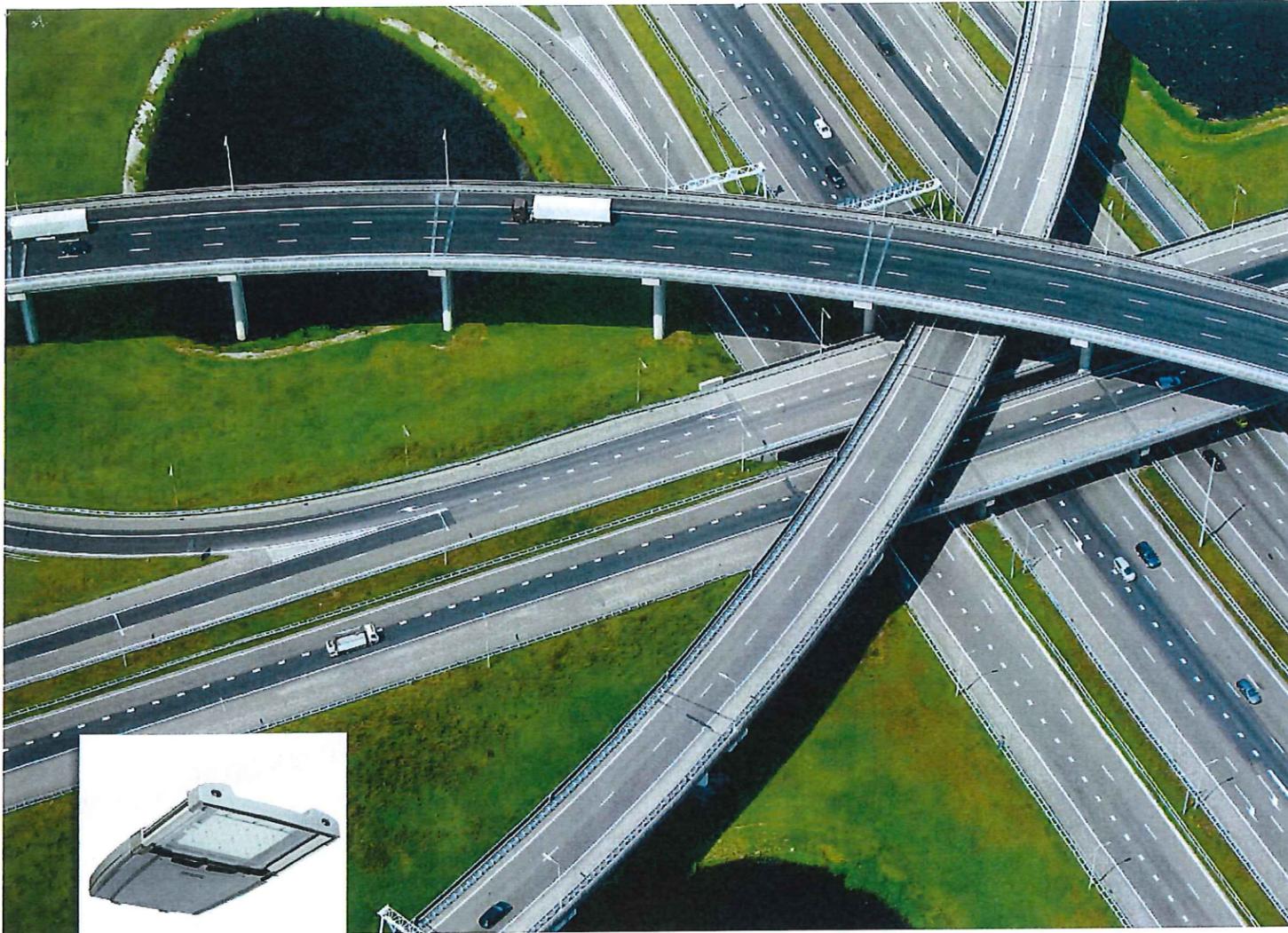
Executive Summary

The second phase of County Highway MN is scheduled for reconstruction in 2017 following the completion of the first phase in 2016. The Committee met on November 8th to discuss initial concepts regarding streetscaping as they impact the project design. Staff has been working on following up on these concepts and their feasibility within the scope of the project in order to bring forward to additional groups as a means to expand the discussion. The Community Development Authority will be reviewing these concepts at its meeting on December 7th followed by a second meeting of the Public Works Committee on December 13th. This memorandum will follow up on additional planning behind the concepts discussed at the last meeting and review their ongoing feasibility within this project.

Streetscaping Concepts

Please note the following issues regarding the project:

- Base Construction Drawings – Not all of the elements desired for streetscaping are necessary within the base plans for construction being prepared by Town and Country Engineering. The following items require direction from the Committee as they effect the base design of the project that will ultimately be used to bid the project in February:
 - *General Update* – The Village Engineer will provide an update on the design of what has changed or been adjusted since the last meeting.
 - *Exchange/Farwell Intersection* – A determination as to what sort of improvement is desired at this intersection. It has thus far been discussed to construct it as is within Phase II, look at traffic signals, or consider a round-a-bout. If the existing condition is acceptable, then we can proceed with the project limits as planned. If we desire to introduce a different sort of improvement, then we need to revise the project limits to remove the intersection from Phase II for inclusion in Phase III. By removing it from Phase II, we can then complete a traffic study who can look at all three concepts for the intersection and make recommendations on the design with cost projections. The County will cost share on an improvement at this location if we are able to meet warrants and we will not know that either unless a traffic study is completed.
 - *Crosswalk Enhancements* – The Village Engineer has provided some exhibits within the packet showing some options for stamping/painting a pattern into asphalt. Staff is looking for direction if the Committee would like to implement this as part of the project and to what extent.



RoadView

Versatile performance

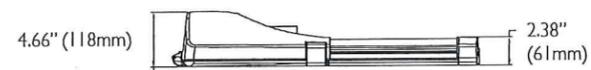
Philips RoadView Series incorporated with Philips LEDGINE LED platform



PHILIPS

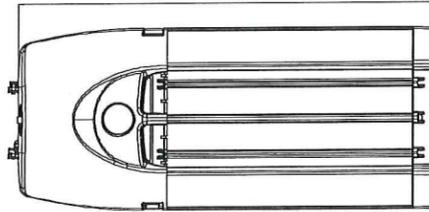
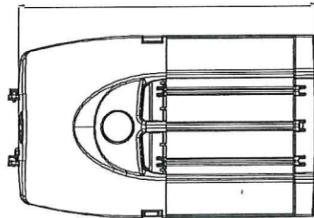
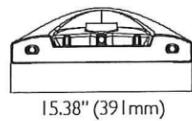
Dimensions

	Standard wattage	Weight		Length		EPA	
		lb.	kg.	in.	mm.	sq. ft.	sq. m.
RVS	55W32LED	23	10.4	21.38	543	0.53	0.049
	80W48LED	23	10.4	21.38	543	0.53	0.049
	110W64LED	26	11.8	25.25	641	0.60	0.056
	135W80LED	26	11.8	25.25	641	0.60	0.056
RVM	160W96LED	34	15.4	31.25	794	0.71	0.066
	190W112LED	34	15.4	31.25	794	0.71	0.066
	215W128LED	34	15.4	31.25	794	0.71	0.066
	245W144LED	37	16.8	35.25	895	0.78	0.072
	270W160LED	37	16.8	35.25	895	0.78	0.072



21.38" (543mm) min. – 25.25" (641mm) max.

31.25" (794mm) min. – 35.25" (895mm) max.



RVS
Weight: 23 to 26 lbs
(10.4 to 11.8 kg)

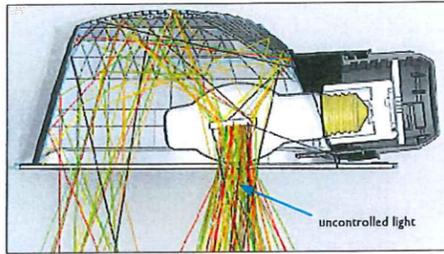
RVM
Weight: 34 to 37 lbs
(15.4 to 16.8 kg)

Product features

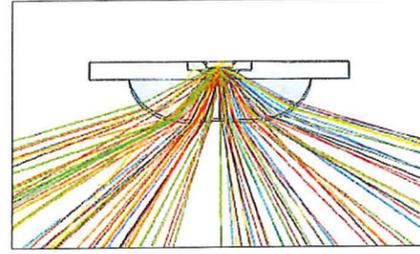
- Competitive high value performance luminaire
- Highly efficient optics improve illuminance uniformity
- Versatile and expandable LED boards
- Expanded flexibility in choosing the right wattage for the application
- Tool free access to electrical compartment.
- Easy to install and maintain
- Innovative thermal management provides longer LED lifetime
- Designed to accommodate the latest in street lighting control technology
- Tool-less 360 degree rotatable twist-lock photocell receptacle
- 3G tested per ANSI C136.31
- Up to 100,000 hour rated life
- Highly efficient IP66 optics
- Modular design
- Protective lens

Optics

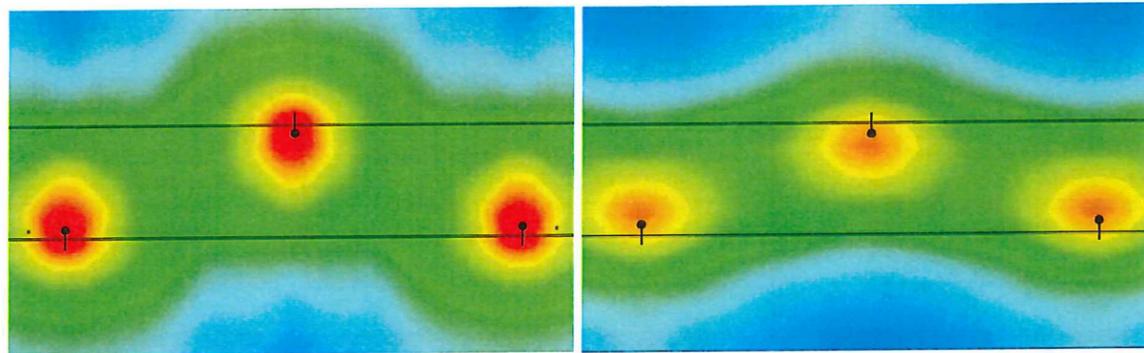
- Significant light from HID lamps is lost or uncontrolled in traditional luminaires.
- LED's directional light output can be more easily captured and directed toward the roadway.
- Precision optical lenses in the Philips RoadView send light where it is needed, with very little waste.



HID lamp with reflector



LED with lens



The HPS luminaire (left) concentrates a lot of light below and behind the pole. The LED luminaire provides more uniform lighting on the roadway, while minimizing light trespass.

Superior downward street side lumens

- Lumens directed toward the roadway are downward street side lumens (DSSL).
- A typical flat-lens cobra head only manages about 40% DSSL.
- The Philips RoadView puts over 70% of its lumen output on the downward street side.

Local roadway	100w HPS cobra head	Philips RoadView
Average illuminance (fc)	0.68	0.71
Average luminance	0.46	0.56
Meets RP8 uniformity	yes	yes
Meets RP8 veiling luminance	yes	yes
Source lumens*	9400	5303
DSSL %	38%	72%
DSSL lumens	3572	3792
BUG rating (IES TM-15-11)	B2-U0-G2	B1-U0-G1
System wattage	130	56
Wattage savings	-	57%

* Source lumens are initial lamp lumens for HPS, luminaire lumens from LM-79 test for LED.

Note: This is a representative example of a typical local roadway. Each lighting application is unique and should be examined individually.

Efficiency with less energy

- Both fixtures satisfy IES RP-8-00 requirements for a local road, low pedestrian activity.
- The two calculations are performed at equal mounting height, pole spacing, and LLF.
- The LED solution saves energy with better utilization of lumen output.

Electronics

	Number of LEDs	Lamps	Typical wattage		Max. system current (amps)	LED drive current (mA)
			Lamp	System		
RVS	32	35W32LED4K	35	37	0.31	350
	32	55W32LED4K	55	56	0.47	530
	32	72W32LED4K	72	73	0.61	700
	48	55W48LED4K	55	53	0.44	350
	48	80W48LED4K	80	81	0.68	530
	48	108W48LED4K	108	105	0.88	700
	64	70W64LED4K	70	68	0.57	350
	64	110W64LED4K	110	104	0.87	530
	80	90W80LED4K	90	85	0.71	350
	80	135W80LED4K	135	129	1.08	530
RVM	96	110W96LED4K	110	105	0.88	350
	96	160W96LED4K	160	160	1.33	530
	96	215W96LED4K	215	208	1.73	700
	112	125W112LED4K	125	120	1.00	350
	112	190W112LED4K	190	183	1.53	530
	128	145W128LED4K	145	137	1.14	350
	128	215W128LED4K	215	209	1.74	530
	144	160W144LED4K	160	154	1.28	350
	144	245W144LED4K	245	235	1.96	530
	160	180W160LED4K	180	170	1.42	350
160	270W160LED4K	270	260	2.17	530	

CRI 70 minimum, Nominal ANSI CCT 4000K

Voltage

UNIV (120 - 277) 347 480
Contact factory for availability

Philips SP1 surge protection



The Philips SP1 surge protective device provides single phase protection for line/neutral, line/ground and neutral/ground in accordance with IEEE C62.41 C High (10kV & 10kA). The SP1 small size corresponds to the design requirements of today's LED luminaires. Compliant to Elevated Electrical Immunity Requirement, per the U.S. Department of Energy Municipal Solid State Street Lighting Consortium Model Specification of LED Roadway Luminaires.

Philips Xitanium driver



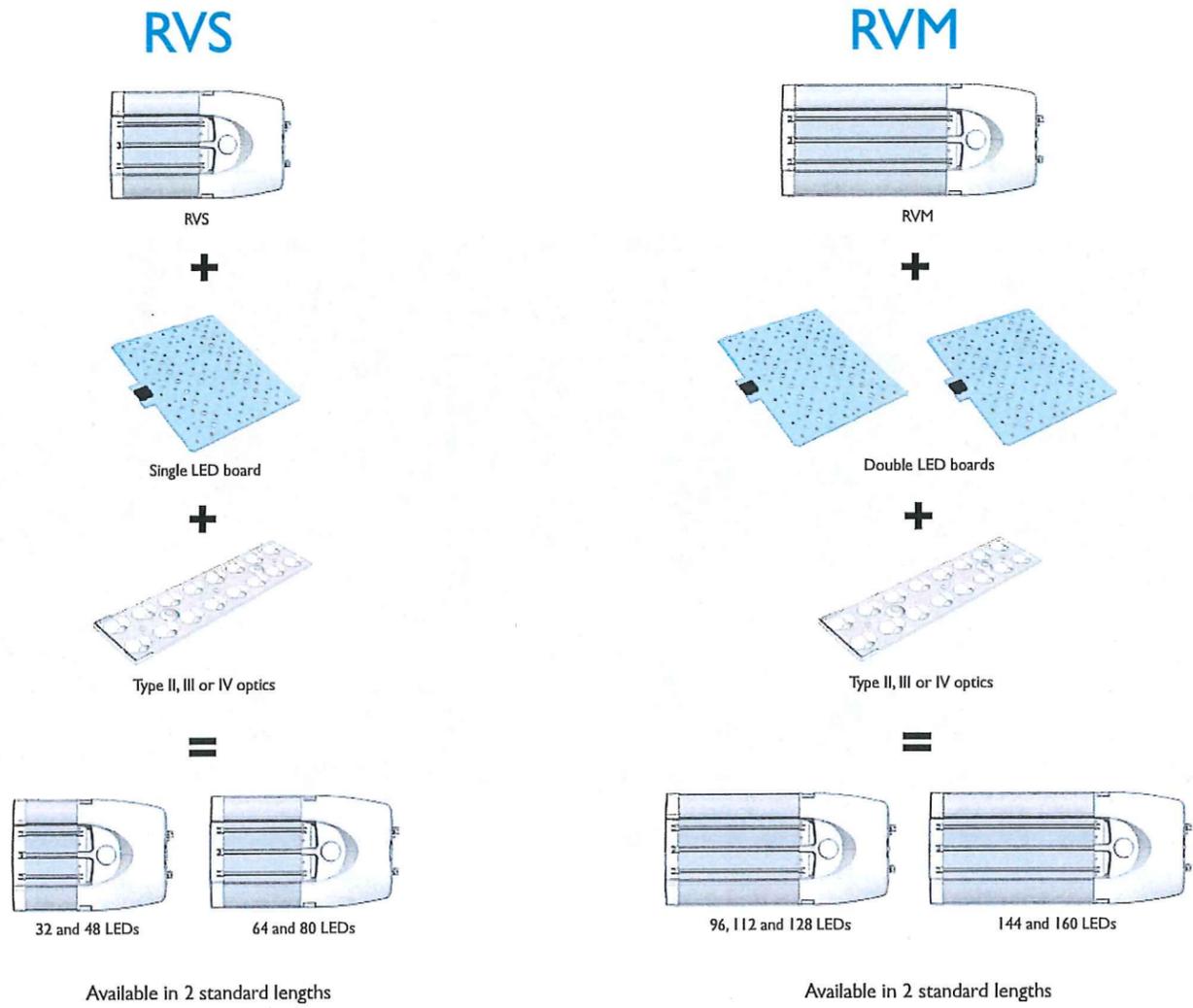
Using state-of-the-art technology, Xitanium drivers deliver solid performance, high reliability and are fully compatible with a variety of LED lighting systems.

- UL Class I Rated
- UL Outdoor Damp location rated
- Extreme low temperature performance (-40° C)
- UL and cUL recognized
- Current Crest Factor: 1.5 maximum
- Load Regulation: 5% output current variation across load range
- Line Regulation: 1% output voltage variation across input voltage range

Expandability

From residential streets to major interstate highways, the RoadView's expandability provides the right product for the application.

- Modular design using castings and extrusions
- Multiple wattages
- Multiple drive currents
- Multiple lumen outputs
- Multiple optical distributions



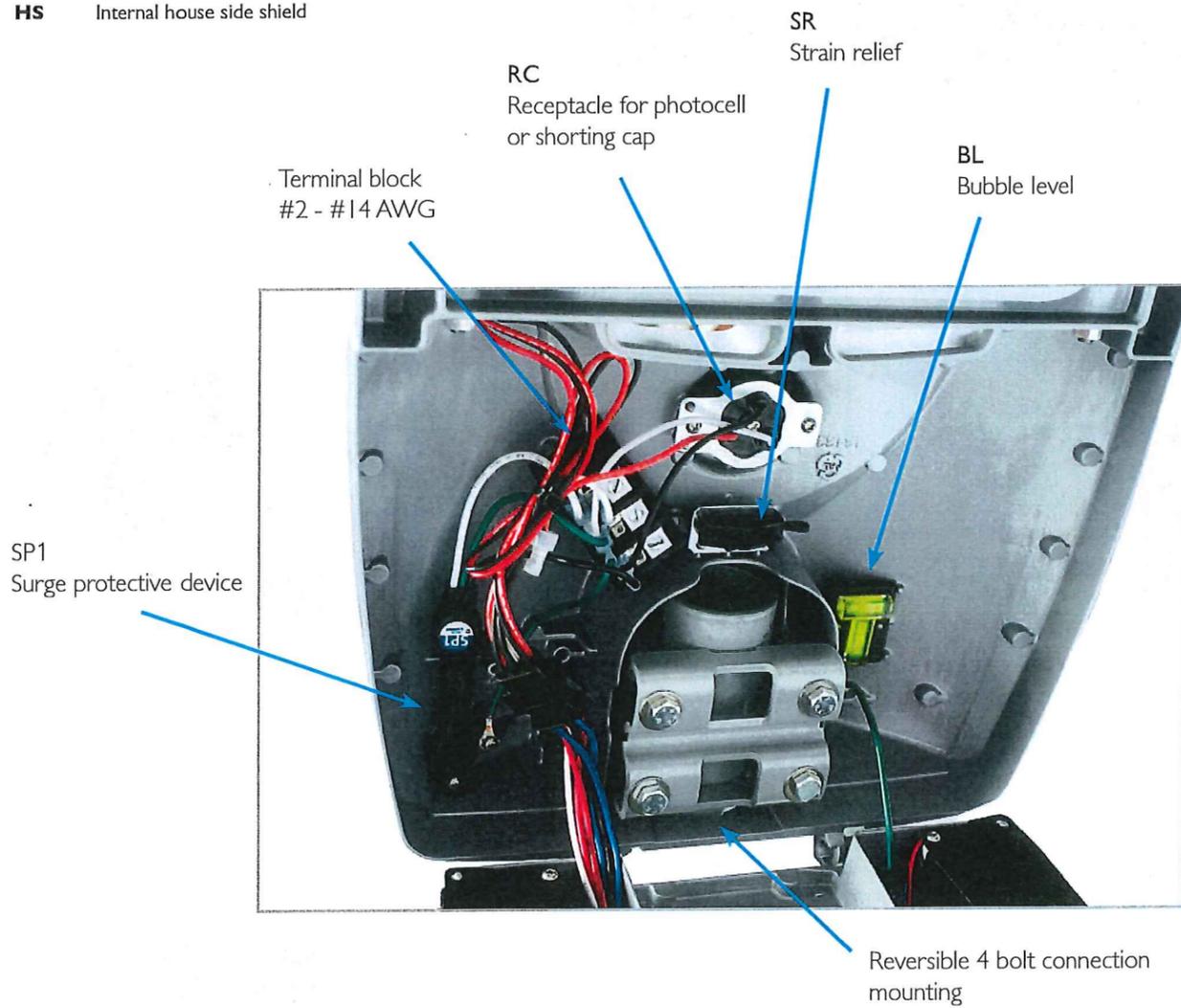
Options and accessories

Luminaire options

- BL** Bubble level
- PH8** Photocell and receptacle
- RC** Receptacle for photocell or shorting cap
- SR** Strain relief
- HS** Internal house side shield

Driver options

- CDMG** Programmable step-dimming
- DMG** Dimming driver



SP1
Surge protective device

Terminal block
#2 - #14 AWG

RC
Receptacle for photocell
or shorting cap

SR
Strain relief

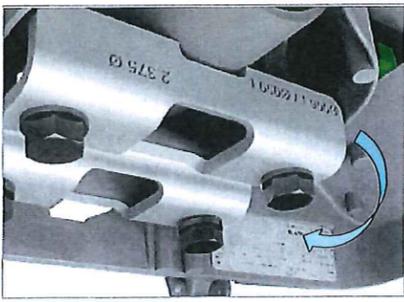
BL
Bubble level

Reversible 4 bolt connection
mounting

Mountings

Reversible mounting accommodates different arm diameters

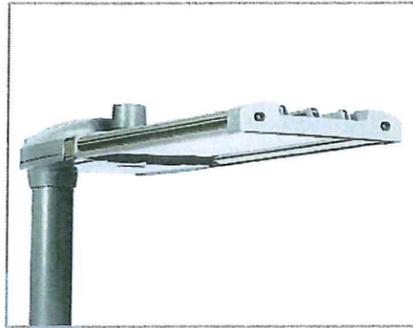
- 4 Bolt connection
- Horizontal tenon 1.66" to 2.38" OD
- Adjust tilt +/- 5 degrees
- Contact factory for additional mounting options



Finishes

The specially formulated Lumital powder coat finish is available in standard gray. Additional colors are available. Consult factory for complete specifications.

Smart controls

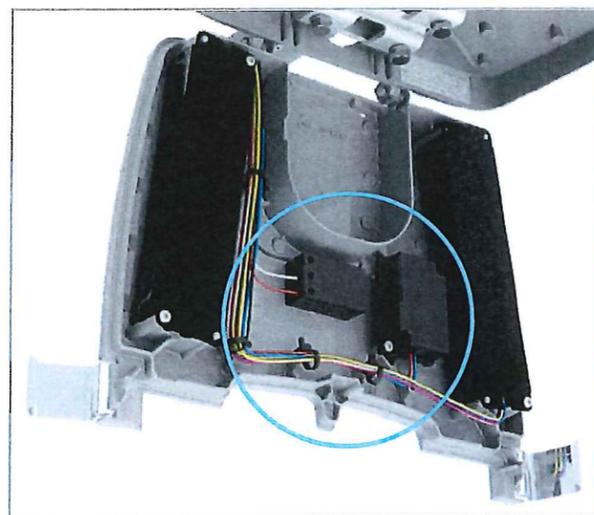


With the arrival of the high power LED luminaires, the control system has become a more important element of the overall lighting system. The various control systems available offer a variety of possibilities and complexities based on application and need. Some of the available features in today's control systems include:

- Dimming
- Energy consumption, metering
- Light on demand – motion detector
- Constant light output
- End of life signaling
- Failure monitoring
- Temperature monitoring
- Diagnostics
- Fixture, circuit, wireless based
- Operational efficiency

Some systems are luminaire based, some require local communication and some require mesh networks. Depending on the customer application needs Philips offers several different control solutions that will help manage your lighting system. These systems are built around 3 overall solution types:

- **Smart luminaires**
- **Smart systems**
- **Smart cities**



RVM shown with control module and motion detector

Smart luminaires

The smart luminaire lighting control system is a perfect complement to the latest in energy-efficient LED lighting solutions. Driving energy-savings with minimum effort, the smart luminaire module is a compact and independent luminaire-based device that works in conjunction with easy-to-use software and programming equipment. It empowers users to set dimming times and levels when and as they wish, offers users true flexibility and is ideal for outdoor lighting of parking lots, residential streets and public areas.

- Autonomous
- Small and large scale projects
- Easily programmable
- Individual luminaire schedules
- No maintenance fees
- Software included

One Philips

Philips is a global company of leading businesses creating value with meaningful innovations that improve the visibility of our roads and highways. With our collective passion, expertise, depth and reach, we open up new possibilities powered by advanced technologies. We are determined to innovate, collaborate and provide unsurpassed value to our customers. The Philips RoadView luminaire is a combination of our knowledge in LED design, optics, electronics and controls that brings all of these together into one unique and powerful luminaire designed around your needs. We don't simply manufacture luminaires, we design solutions.



Matt Schuenke

From: Price, Jason <JasonPrice@alliantenergy.com>
Sent: Wednesday, November 16, 2016 12:28 PM
To: Matt Schuenke
Cc: Bradley, Donna
Attachments: AEL Colonial.pdf; PHILIPS ROADVIEW LED.PDF; Comparison Photos.pptx

Matt,

Here are the spec sheets for available LED lighting. The LED "Cobrahead" type lights come in different sizes and the pattern for which it illuminates can be adjusted. The photosensor can also be adjusted on these.

I have included a Colonial LED only because it was provided to me. I caution that it probably is not available in Wisconsin yet due to our Rate Case including the Pilot for LED's and not a full blown program as yet.

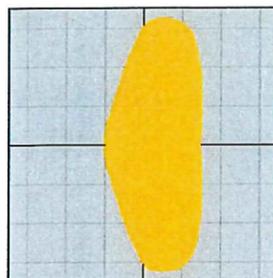
Replacing these lights on a company level required a pragmatic approach. We need to be sure that the lights are true and tested on a companywide level prior to implementing exchanges in one sweep. We are testing distributors and lighting in all of our locations for efficacy, supply chain and lamp guaranteed life.

I don't want us to forget that when a current High Pressure Sodium light goes out it should be replaced with an LED fixture. If you have a specific preference on the distribution of light we can provide that information so installation reflects the distribution of light consistently.

Knowing the distribution preference at time of installation will actually be important. I don't want to send them back after installing an LED if we can avoid it.

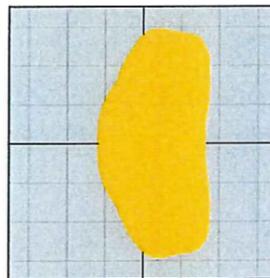
Page 6 of Philips Roadview LED shows the patterns below. Dark downtown streets may be able to angle the pattern to include sidewalks as long as the road is lit. So type IV may be a selection. We will learn more after hearing your preference.

IES TYPE II, MEDIUM



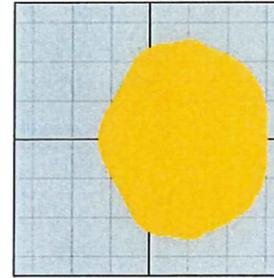
- Maximizes distribution along the roadway
- Common applications: 2 and 3 lane roads, alleyways

IES TYPE III, MEDIUM



- Balances distribution along and across the roadway
- Common applications: 3 and 4 lane roadways

IES TYPE IV, SHORT



- Maximizes distribution across the roadway
- Common applications: 4-6 lane roadways, areas with large pole setback

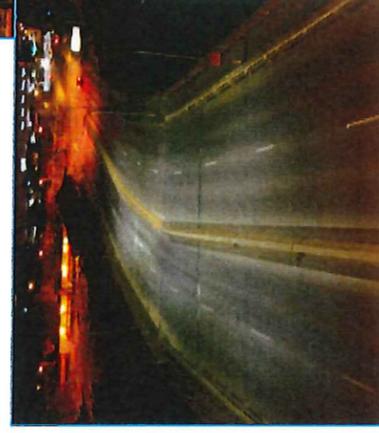
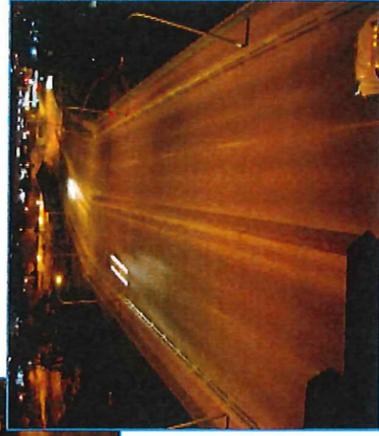
Thank you,

Jason

Why switch to LED Street

Lights?

- Better lighting performance
- Reduced energy costs for customers
- Less maintenance needed through entire life of fixture, reducing O&M expenses
- 20+ year life expectancy for each unit
- Customers love the brighter, white light



TYPE:

CATALOG #:

STREETWORKS®

APPLICATION

The Traditionaire outdoor luminaires display the old fashion charm of traditional area lighting, enhancing any setting with a distinctive styling.

SPECIFICATION FEATURES

A--Housing & Cover
Hinged (stainless steel hinge pins) die-cast aluminum housing and cover with cupola. Standard color is black polyester powder coat. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

B--Reflector
Injection molded acrylic refractor panels.

C--Socket
Mogul-base porcelain socket. (50-150W MH is medium-base socket standard).

D--Ballast
Ballast assembly with encapsulated starter (where used). Tunnel type compression terminal lugs.

E--Screws
Captive retaining screws.

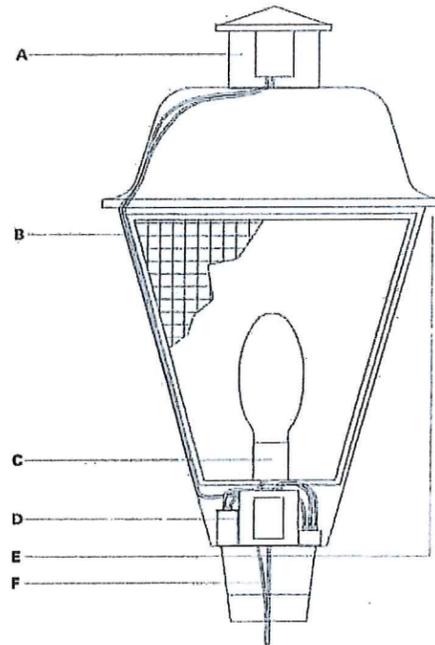
F--Mounting
Self-aligning pole-top fitter—fits 3" O.D. pole tops or vertical tenons



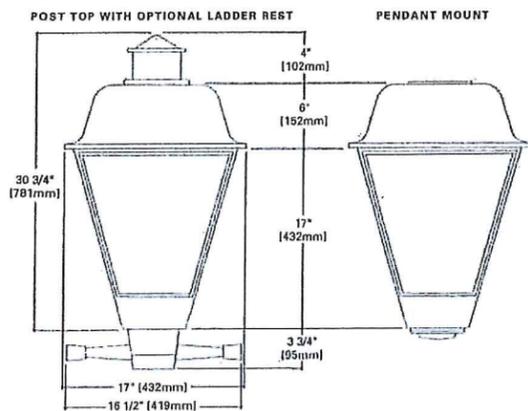
**UTR
TRADITIONAIRE**

50 - 250 W
High Pressure Sodium
Metal Halide
Mercury

**DECORATIVE
LUMINAIRE**



DIMENSIONS



COOPER LIGHTING

EPA
Effective Projected Area:
2.3 Square Feet

Approximate Net Wt: 37 lbs.

ADW010581



TYPE:

APPLICATION

The Acorn tastefully compliments roadways, parks and residential roadways.

CATALOG #:

SPECIFICATION FEATURES

A---Globe

Textured or milk-white polycarbonate globes available in standard 8" or optional 9" design. (Optional internal Type III refractor available.)

B---Socket

Mogul-base socket for 50W through 150W HPS and 175W and 250W Metal Halide; 50W through 150W MH is medium base socket. All sockets are 4KV pulse rated.

C---Ballast

Easily accessible, tilt-back power module. Standard plug-in starter when applicable.

D---Photocontrol

Photocontrol receptacle available.

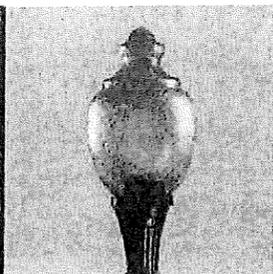
E---Housing

Cast aluminum housing. Standard with two position terminal block. Standard color is black. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

F---Mounting

Post-top mount fits 3" tenons. Stainless steel mounting bolts.

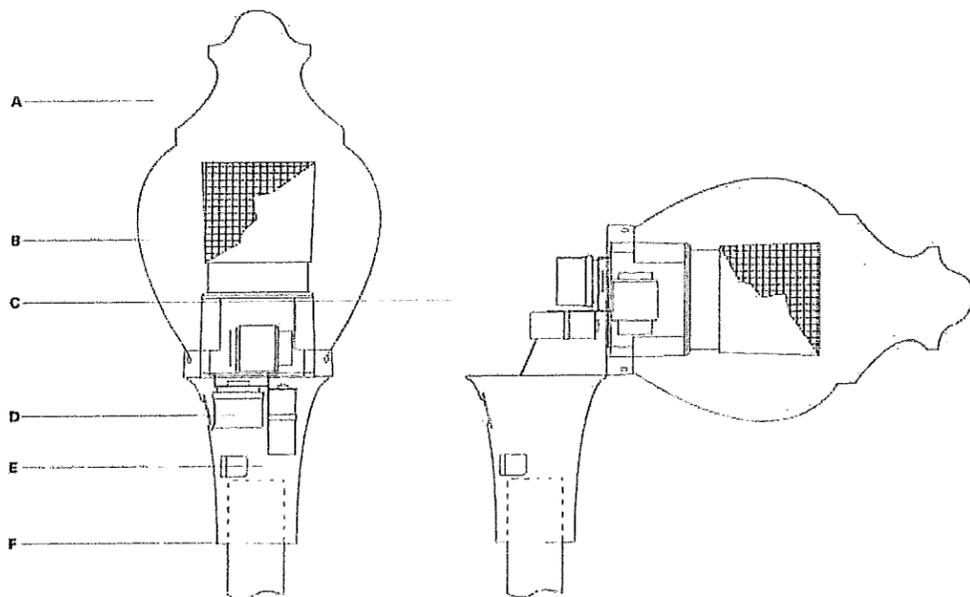
STREETWORKS®



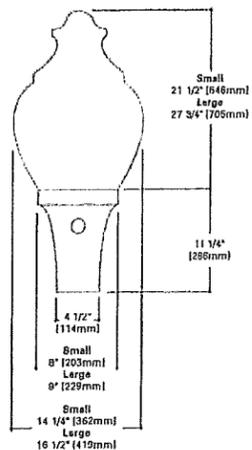
ANE ACORN

50 - 175 W
High Pressure Sodium
Metal Halide
Mercury

**DECORATIVE
LUMINAIRE**



DIMENSIONS



COOPER LIGHTING

EPA
Effective Projected Area:
1.7 Square Feet

Approximate Net Wt: 30 lbs.

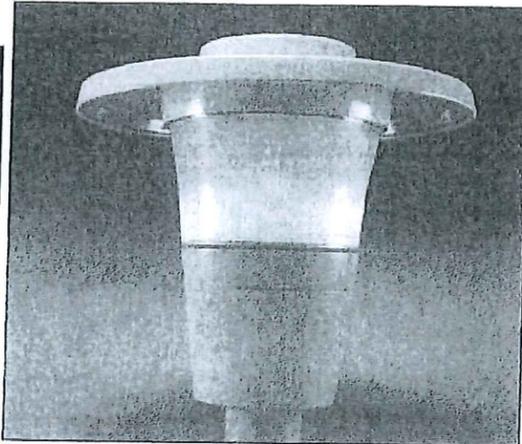
ADW010577



Contempo Series 245

70-400W HPS, 100-400W MV, 175-400W MH

PRODUCT OVERVIEW



DECORATIVE
POST TOP

Features:

Die-cast aluminum housing and spun aluminum hood for long-life performance

Optical assembly designed for maximum performance

Multi-gasketing to provide weatherproof protection of optical assembly for full illumination performance

Hinged hood and captive screw latching provision afford quick, easy access to electrical and optical area for relamping or servicing

Available with two different style hoods and an added scroll option for a more decorative look

Cone mounting filter with three set screws allows secure installation to pole sizes 2-3/8" or 3" OD

Refractor available in tempered glass, acrylic and polycarbonate

Available in a variety of IES light distributions patterns

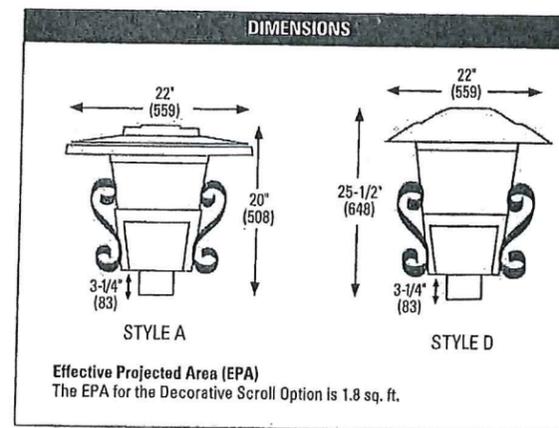
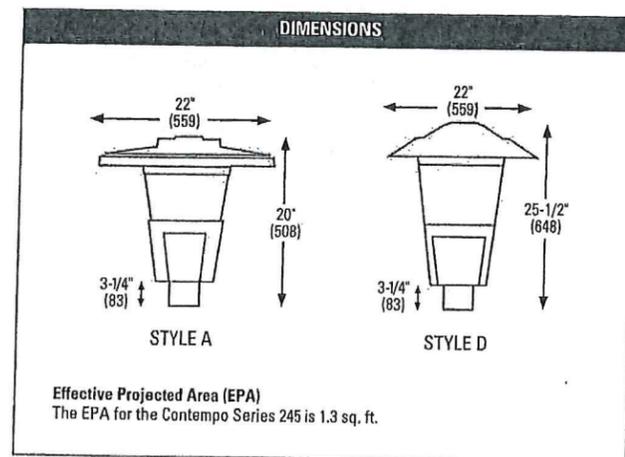
All electrical components warranted by American Electric Lighting's 6-year guarantee

Suitable for ambient temperature ranges from -40°C to 25°C

Complies with ANSI: C136.2, C136.10, C136.15, C136.16

Applications:

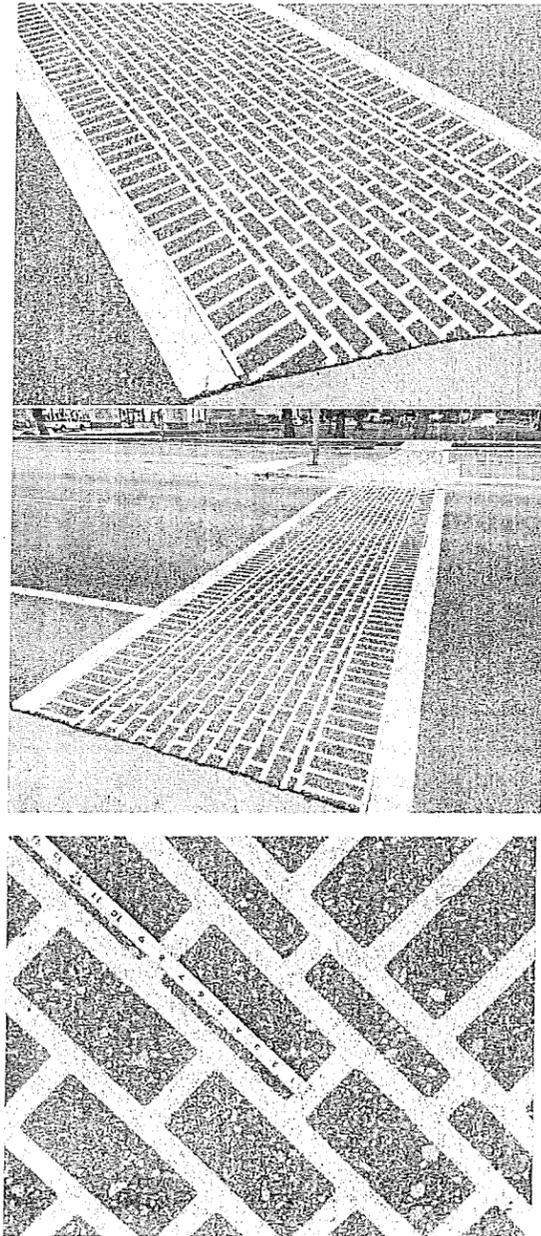
Streetscapes
Walkways
Pathways
Parks



For decorative scroll design see Misc. option DS on page 63.

Village of McFarland
2017 CTH MN Improvements
Streetscape Options

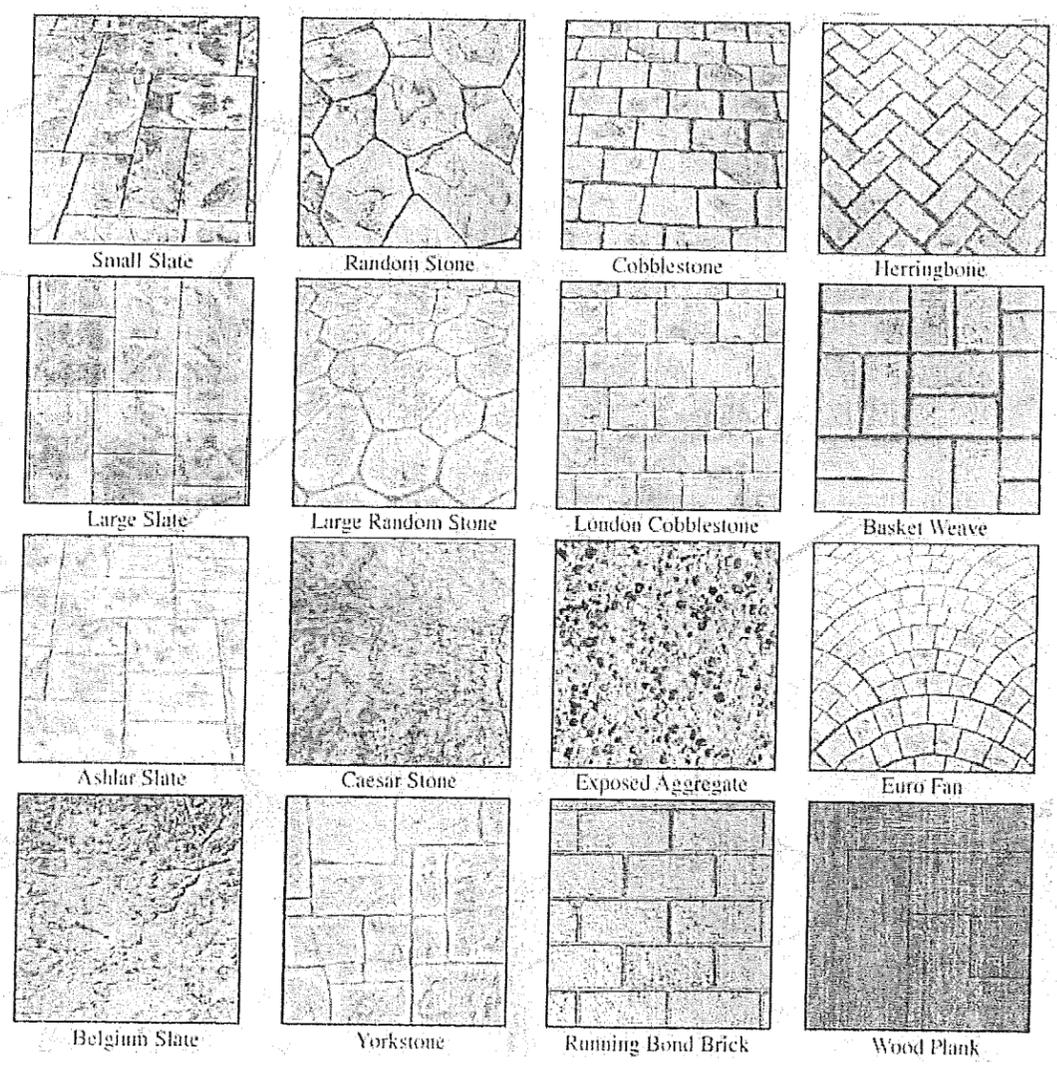
Potential Crosswalk Treatments



Duratherm System
Utilizes plastic material melted into physical grooves in the asphalt.
Photos taken in 2016 of a 2013 installation on USH 12

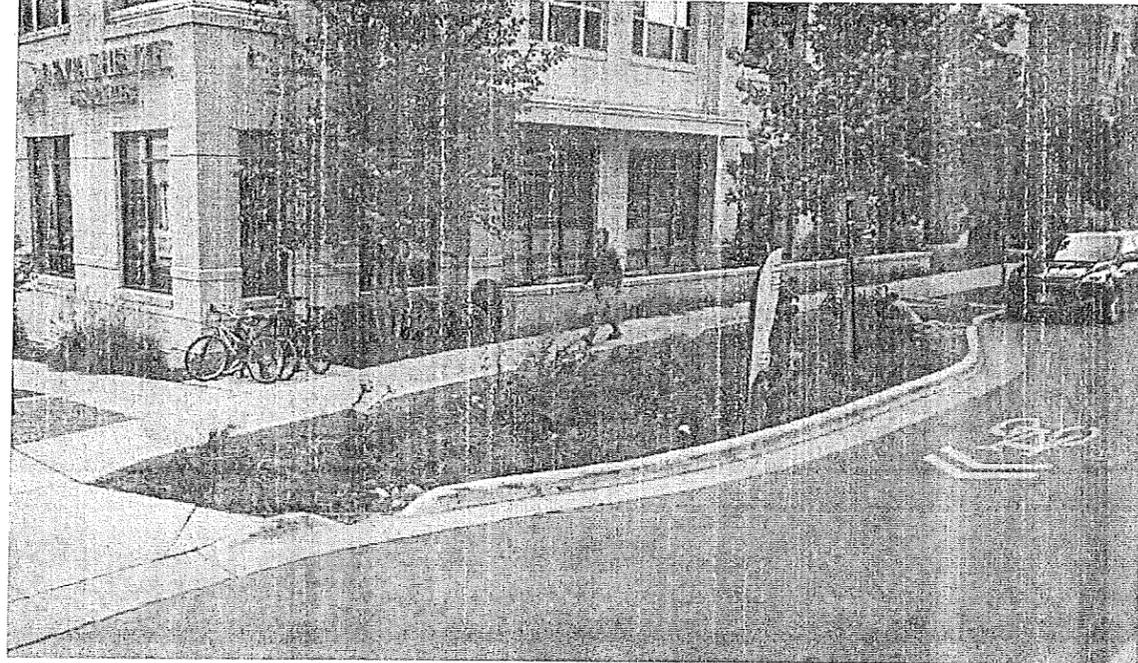
Paved Terrace Treatments

These patterns are imprinted on the fresh concrete surface. The color is mixed throughout the concrete mixture so chipping does not expose different colors.

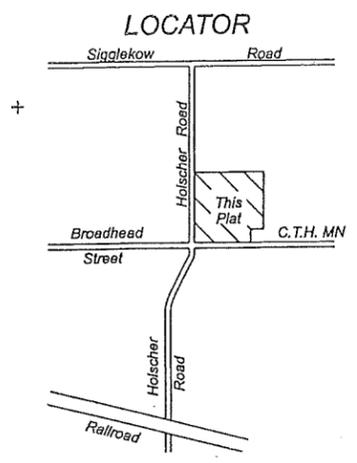


Options for Bumpout at Anthony Street

These are from Town & Country projects in Shorewood Hills. Runoff is directed to the infiltration areas via curb cuts along the sidewalk and street. Overflows are provided in the event of frozen ground.



REVISIONS:



- INDEX**
- 1. Cover Sheet
 - 2 - 7. Detail Sheets
 - 8 - 10. North Peninsula Way
 - 11. Shooting Star Court
 - 12. Shooting Star Trail
 - 13. Meadowsweet Terrace
 - 14. White Daisy Court
 - 15 - 17. County Trunk Hwy. MN
 - 18. Sanitary Easement
 - 19. Storm Sewer Easement Lot 50-51
 - 20. Storm Sewer Easement Lot 47-48
 - 21. Storm Sewer Easement Lot 35-36
 - 22. - 28. Erosion Control Plans

PLAN BY
 Royal Oak & Associates
 3678 Kinsman Blvd
 Madison Wisconsin 53704
 Phone 274-0500

PLAN FOR
 Gannon Construction
 4719 Farwell Street
 McFarland Wisconsin 53558

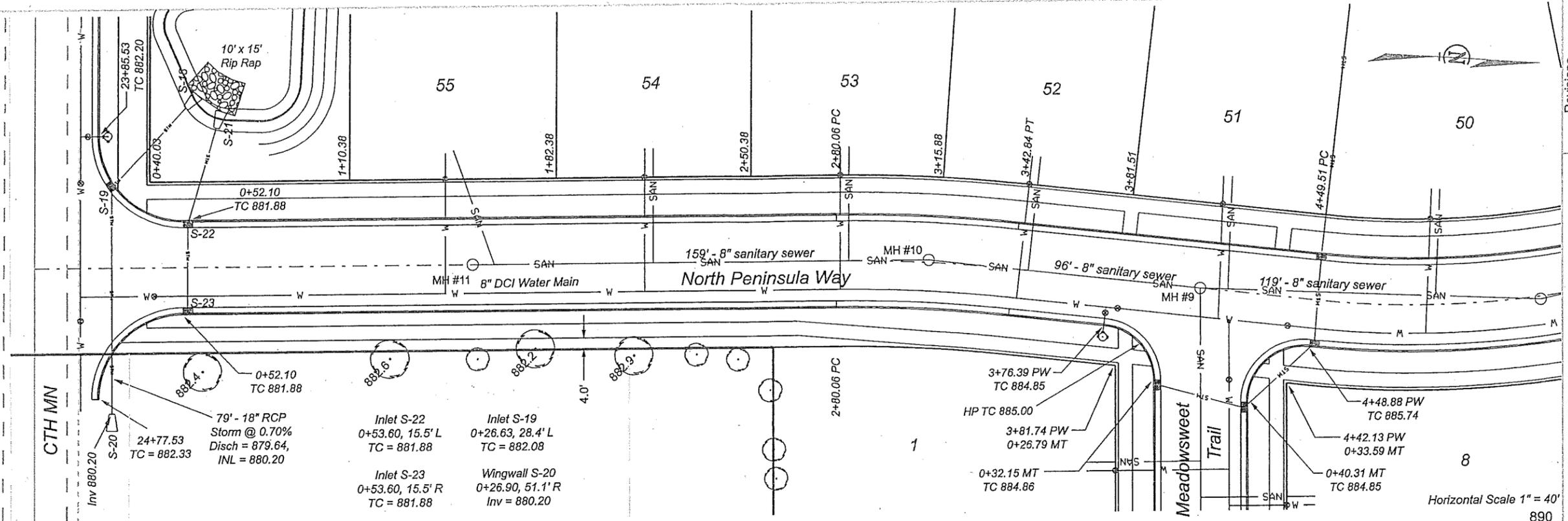
Praririe Place

Village of McFarland,
 Dane County, Wisconsin

S-18 to S-19
44' - 24" RCP
Storm @ 0.70%
Disch = 879.20
INL = 879.54

S-22 to S-23
30' - 12" RCP
Storm @ 0.50%
Disch = 879.23
INL = 879.38

S-21 to S-22
41' - 12" RCP
Storm @ 0.50%
Disch = 879.00
INL = 879.20



CTH MN

S-20
Inv 880.20
24+77.53
TC = 882.33

79' - 18" RCP
Storm @ 0.70%
Disch = 879.64,
INL = 880.20

Inlet S-22
0+53.60, 15.5' L
TC = 881.88

Inlet S-19
0+26.63, 28.4' L
TC = 882.08

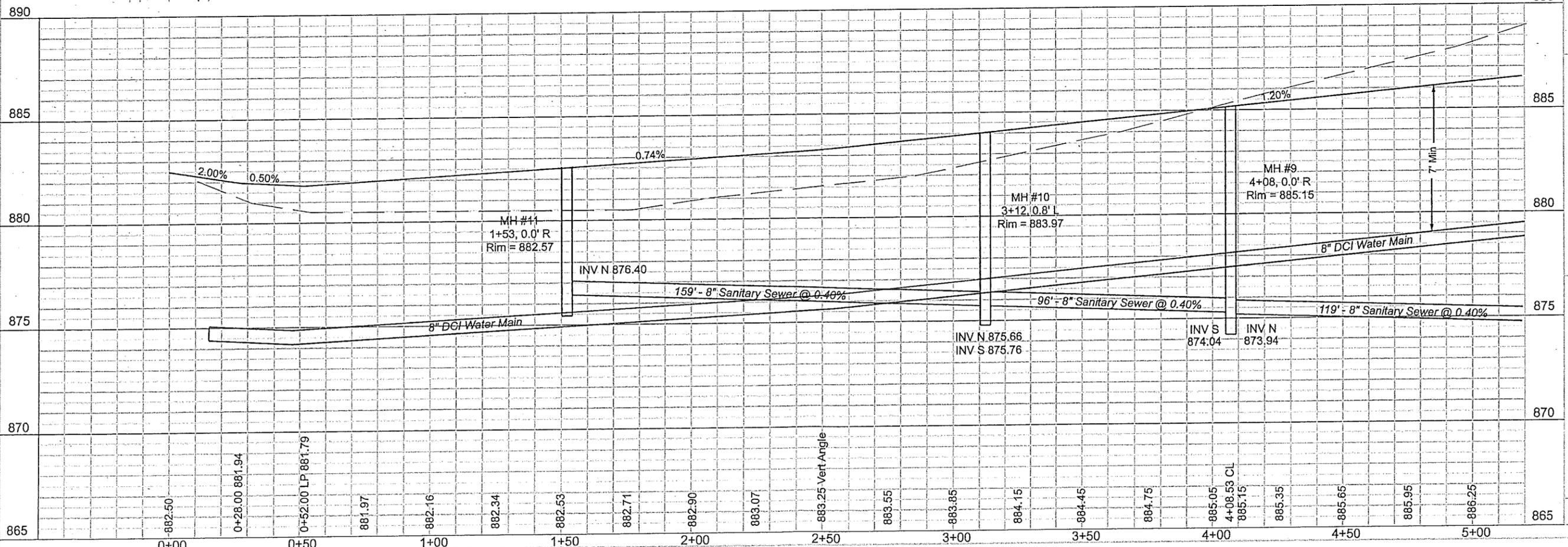
Inlet S-23
0+53.60, 15.5' R
TC = 881.88

Wingwall S-20
0+26.90, 51.1' R
Inv = 880.20

3+76.39 PW
TC 884.85
HP TC 885.00
3+81.74 PW
0+25.79 MT
0+32.15 MT
TC 884.86

4+48.88 PW
TC 885.74
4+42.13 PW
0+33.59 MT
0+40.31 MT
TC 884.85

Horizontal Scale 1" = 40'



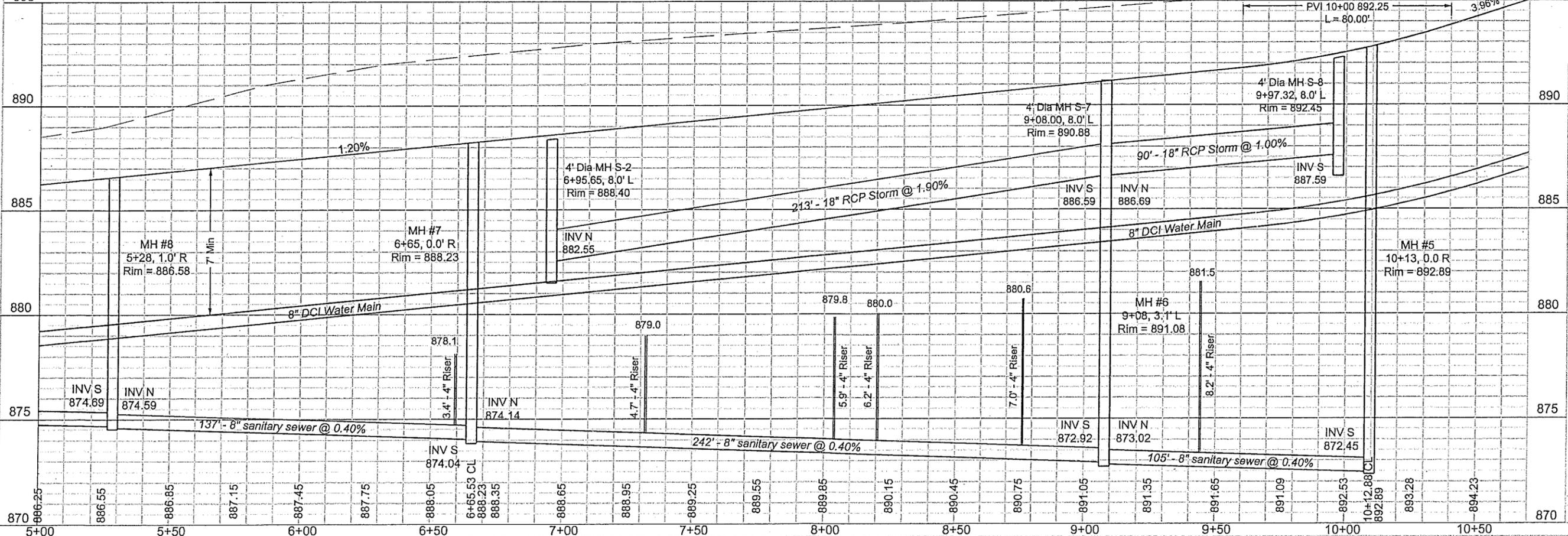
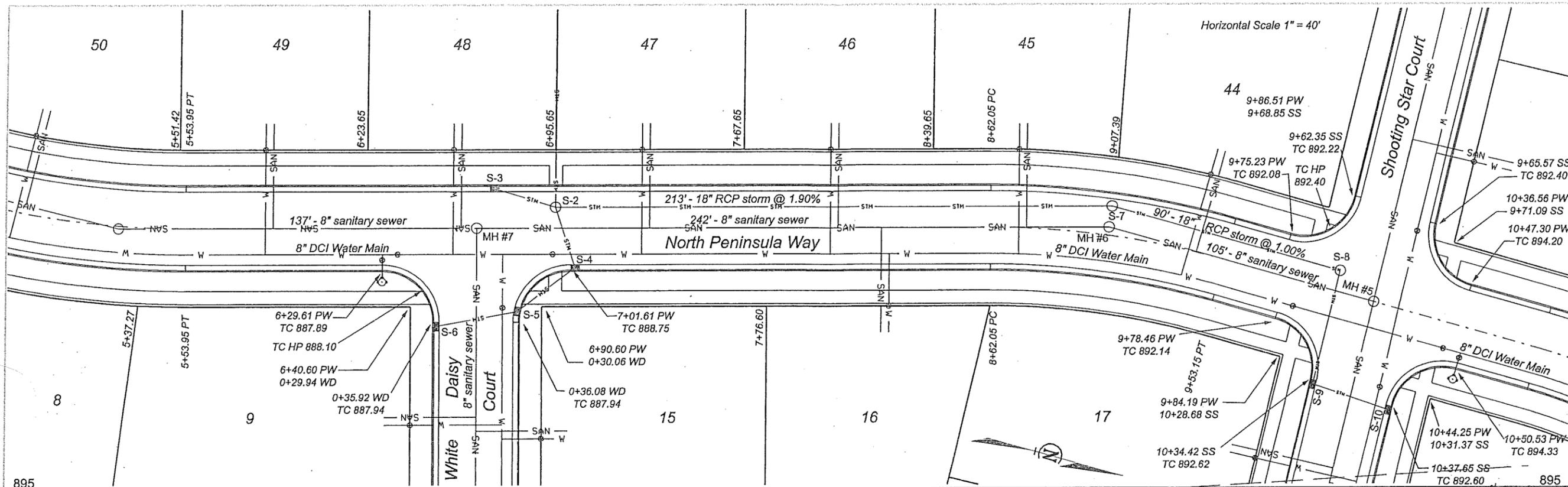
Revisions

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Prairie Place

North Peninsula Way

∞

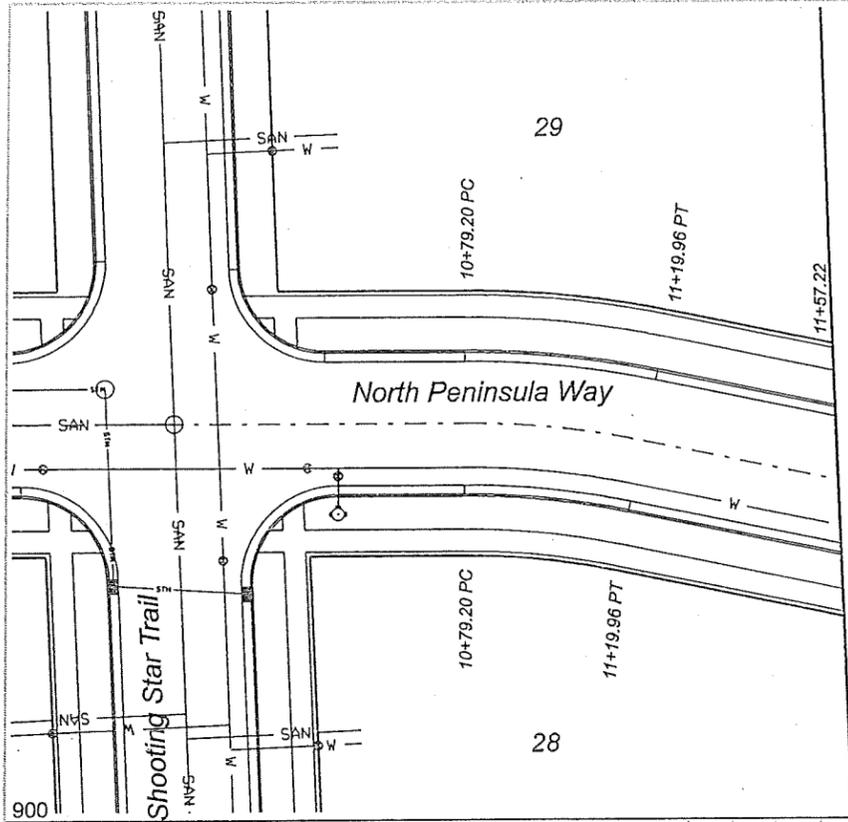


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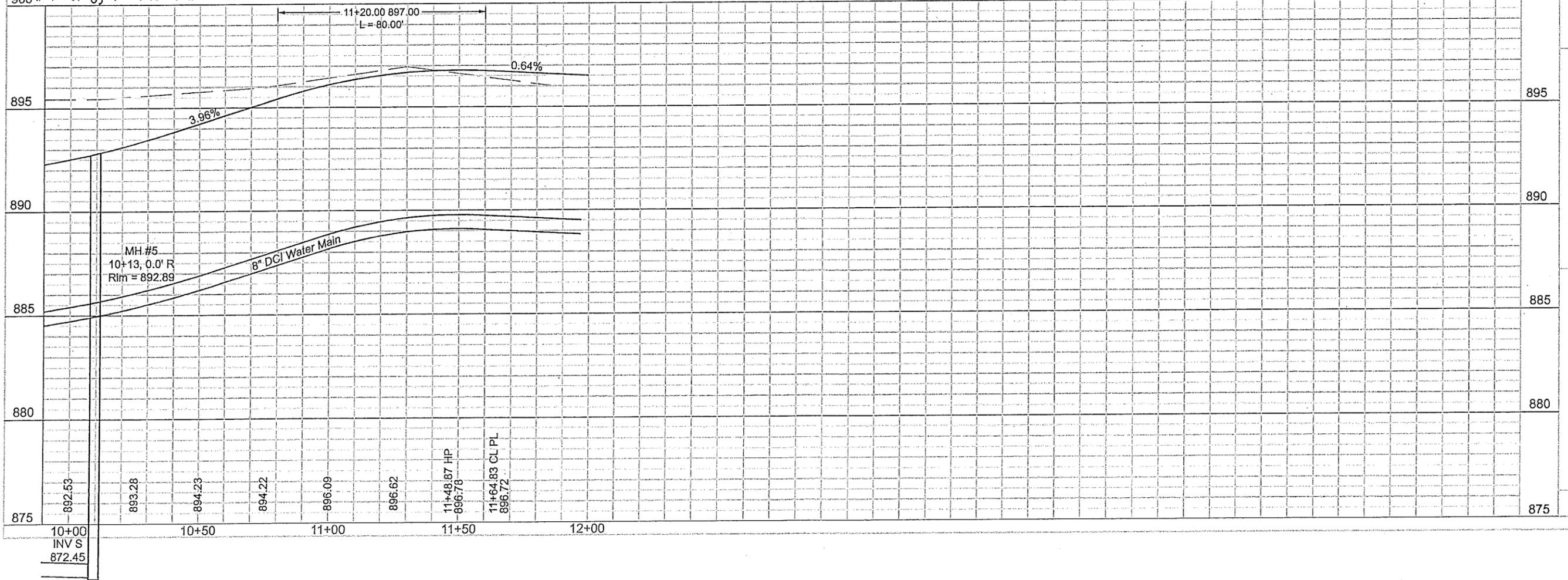
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Prairie Place

Peninsula Way



Horizontal Scale 1" = 40'
900



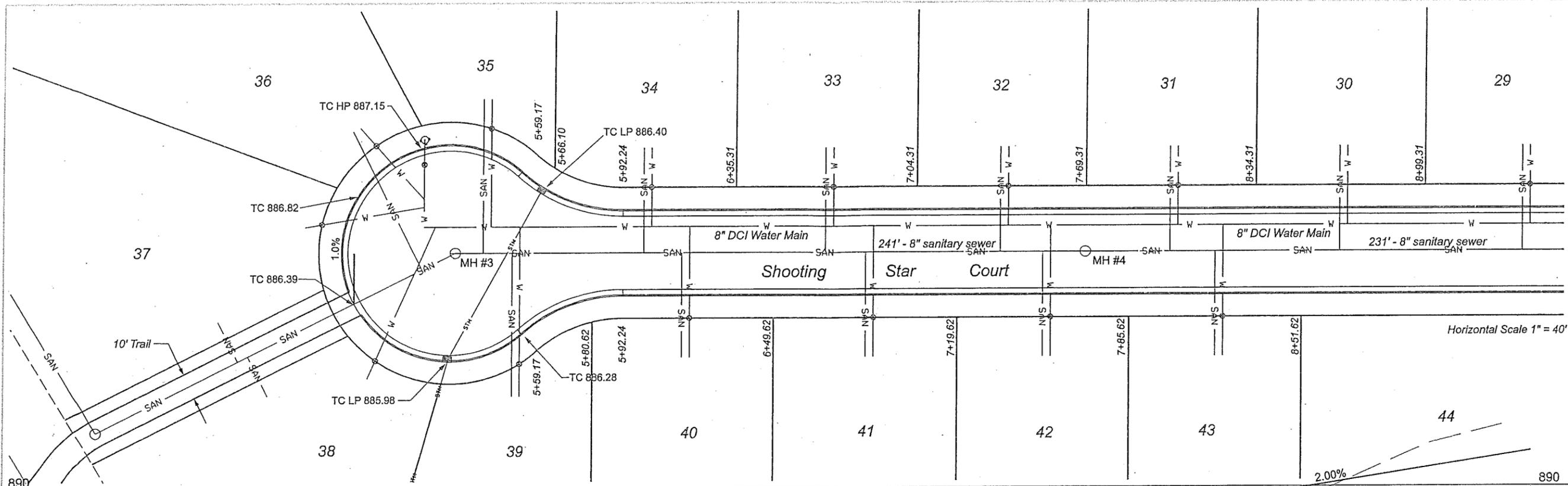
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Prairie Place

Peninsula Way

10



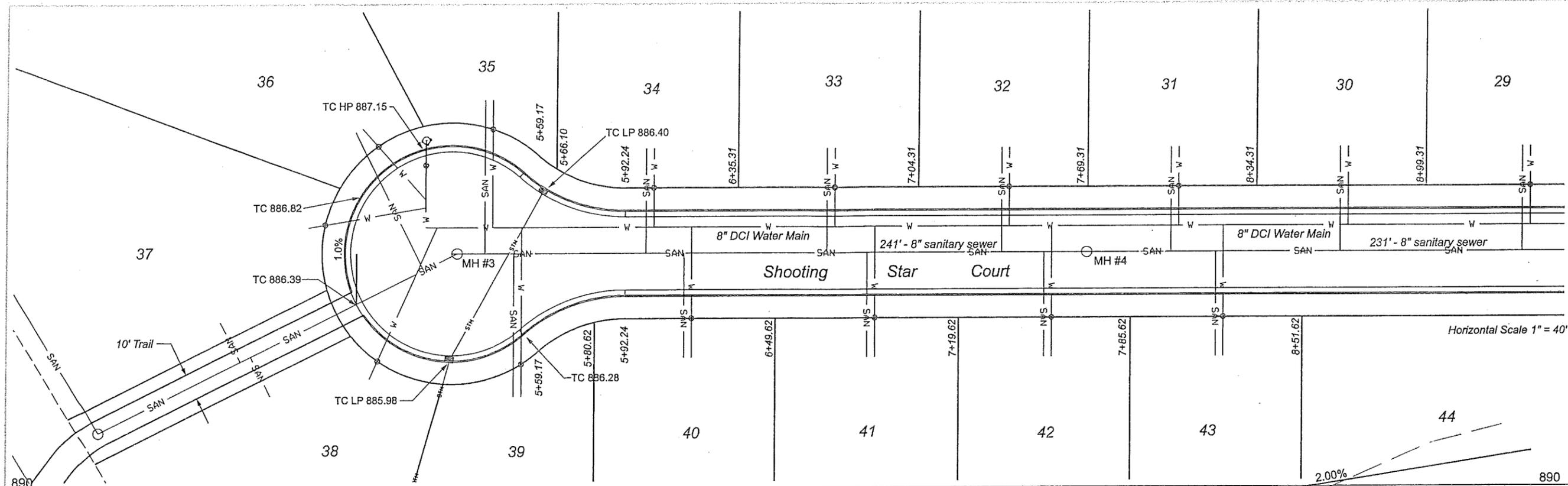
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Prairie Place

Shooting Star Court

11



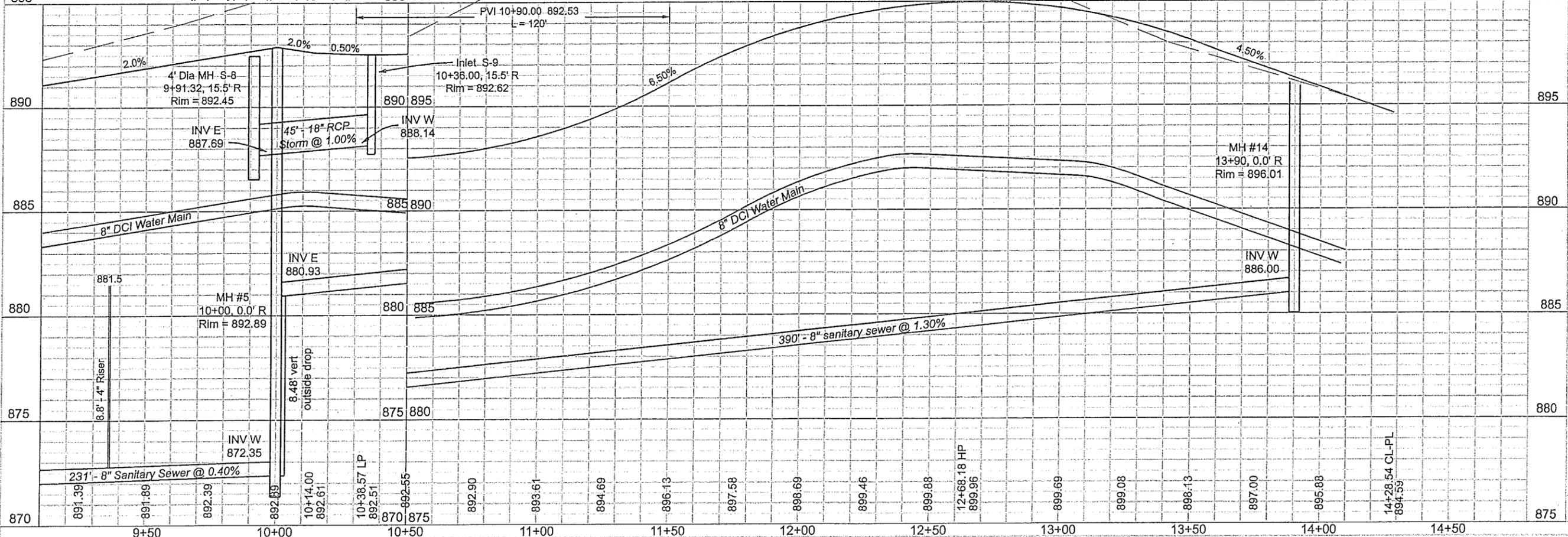
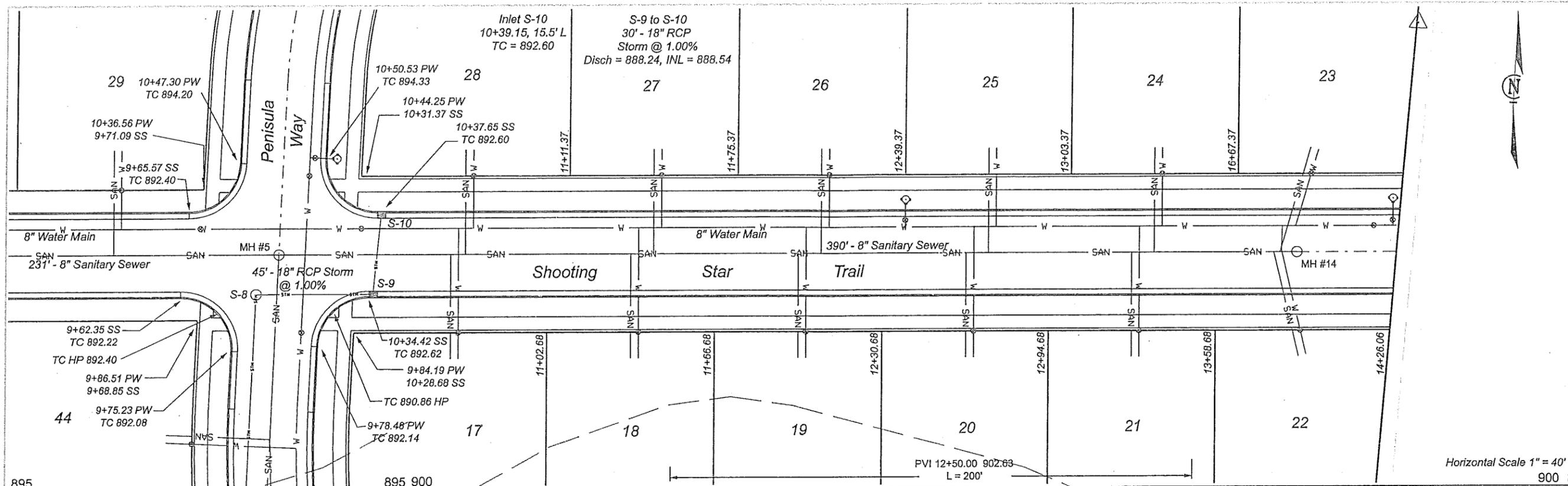
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Prairie Place

Shooting Star Court

11



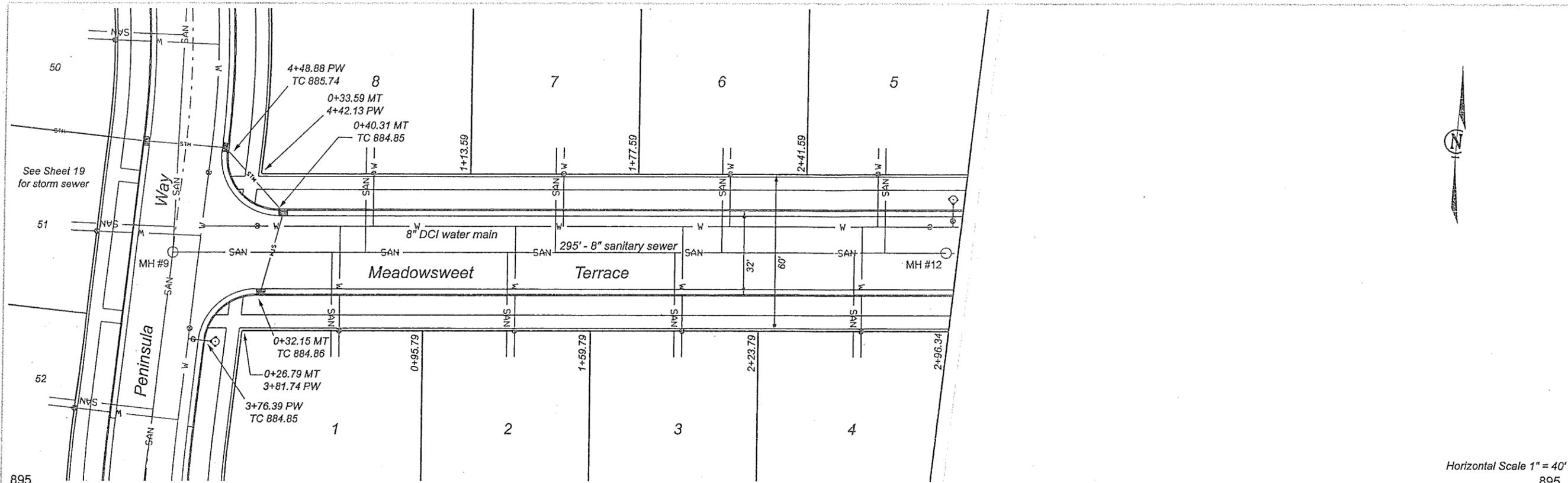
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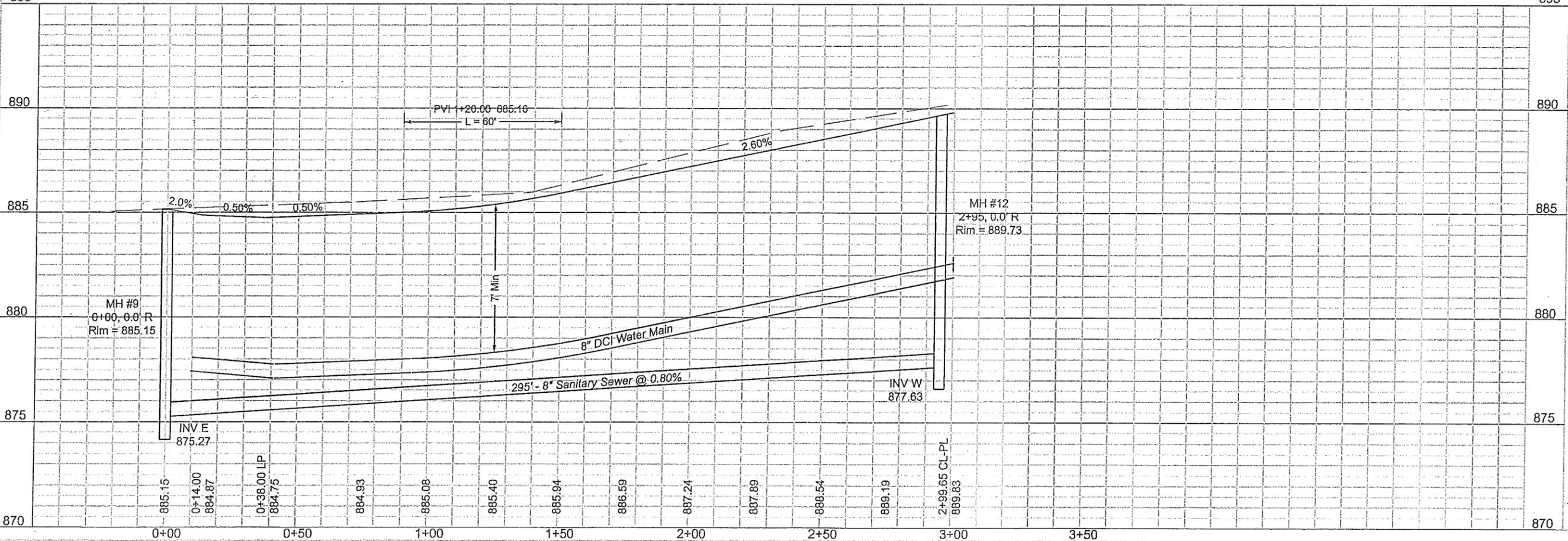
Prairie Place

Shooting Star Trail

12



Horizontal Scale 1" = 40'



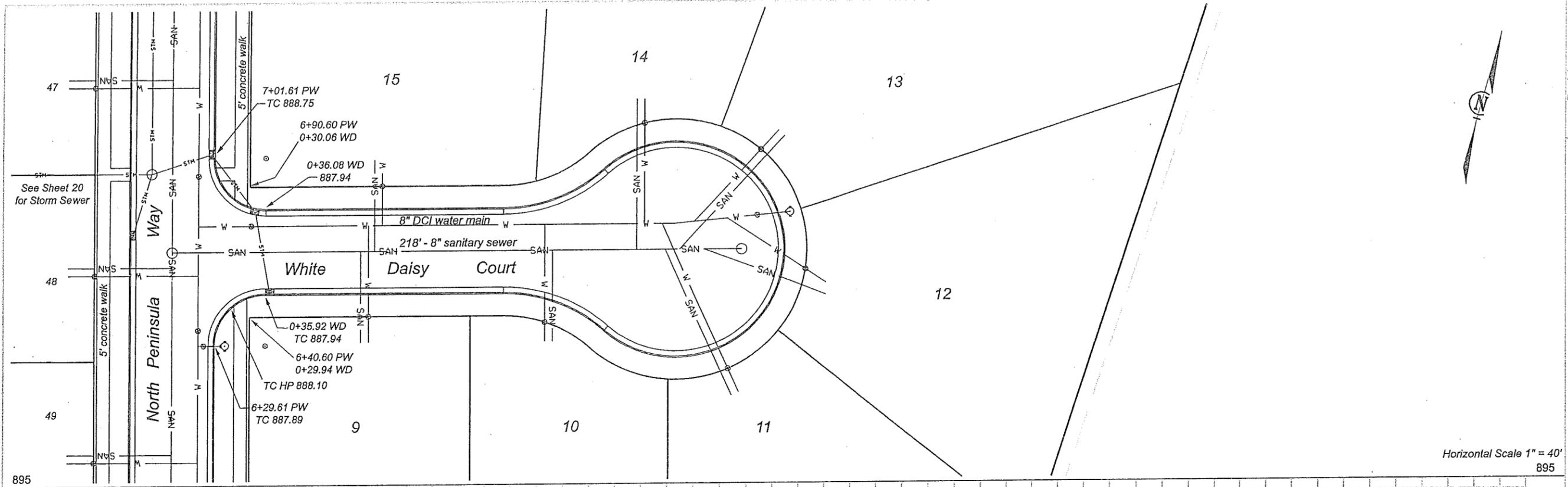
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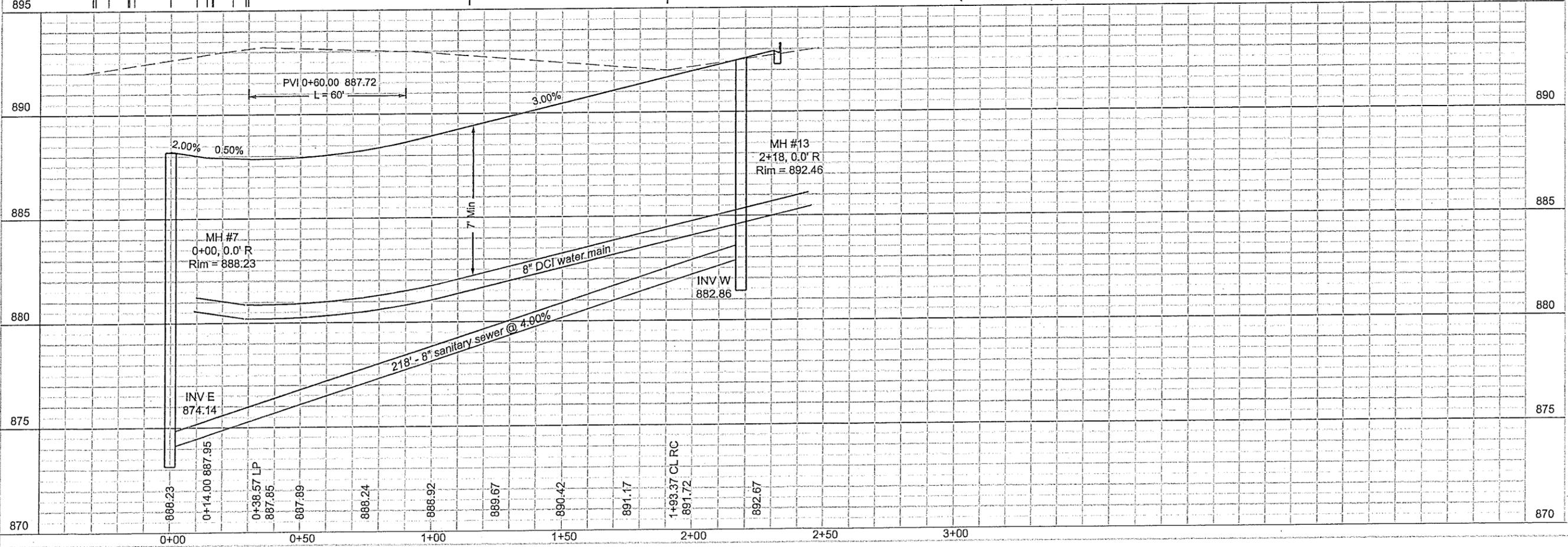
Prairie Place

Meadowsweet Terrace

13



Horizontal Scale 1" = 40'
895



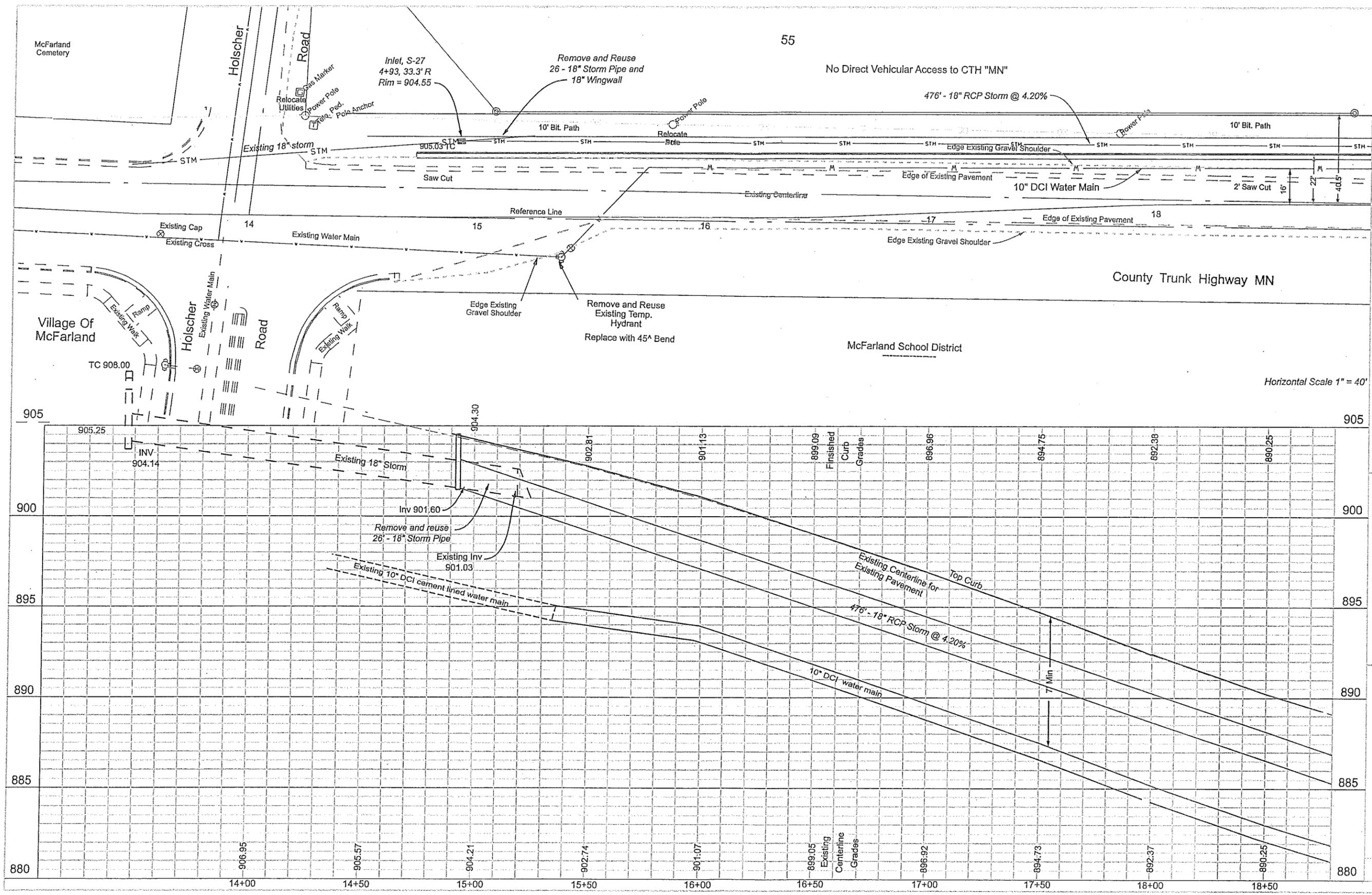
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Prairie Place

White Daisy Court

14



55

No Direct Vehicular Access to CTH "MN"

476' - 18" RCP Storm @ 4.20%

County Trunk Highway MN

McFarland School District

Horizontal Scale 1" = 40'

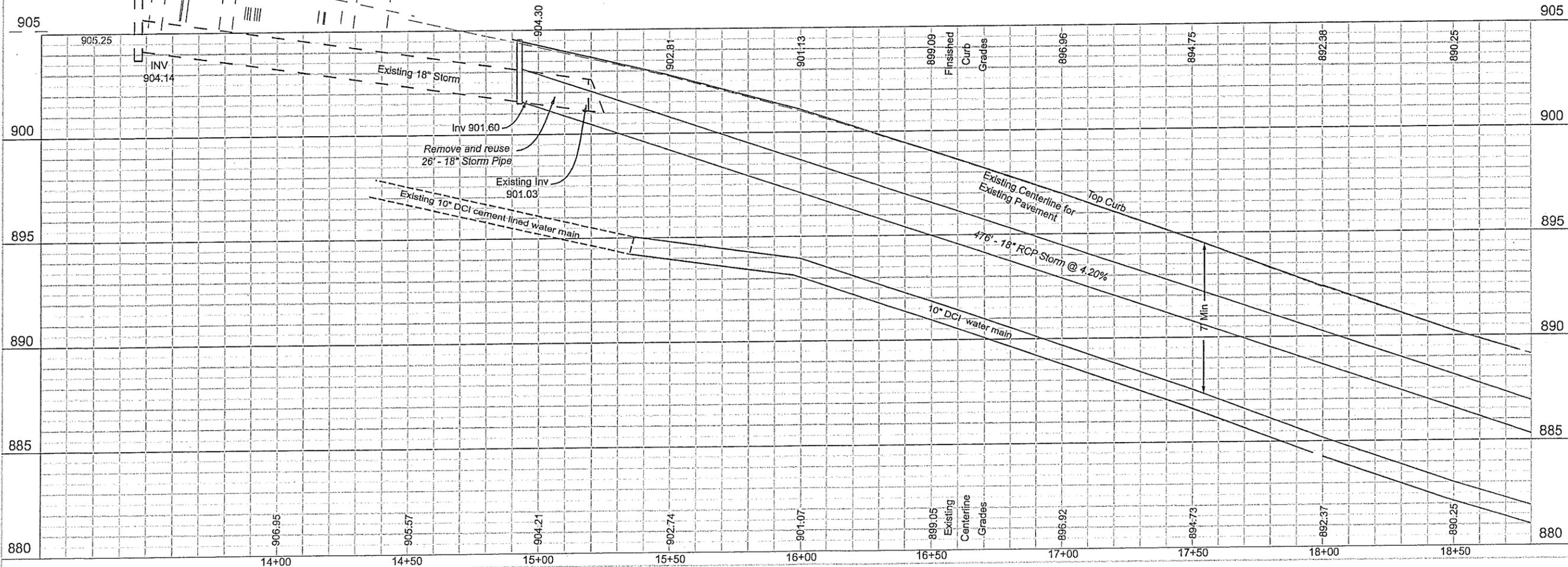
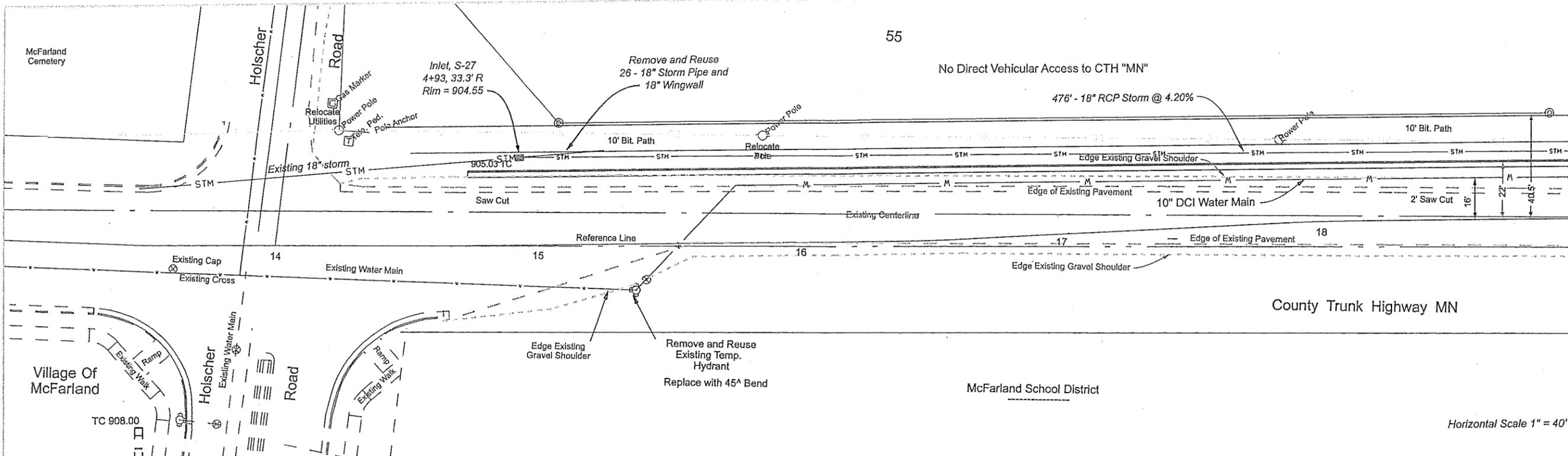
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Prairie Place

CTH MN

15



Revisions

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Prairie Place

CTH MN

15

55

No Direct Vehicular Access to CTH "MN"

476' - 18" RCP Storm @ 4.20%

County Trunk Highway MN

McFarland School District

Horizontal Scale 1" = 40'

McFarland Cemetery

Village Of McFarland

Holscher Road

Road

Inlet, S-27
 4+93, 33.3' R
 Rim = 904.55

Remove and Reuse
 26' - 18" Storm Pipe and
 18" Wingwall

Relocate
 Pole

Relocate
 Pole

10" DCI Water Main

Reference Line

Remove and Reuse
 Existing Temp.
 Hydrant
 Replace with 45° Bend

TC 908.00

904.30

905

900

895

890

885

880

14+00

14+50

15+00

15+50

16+00

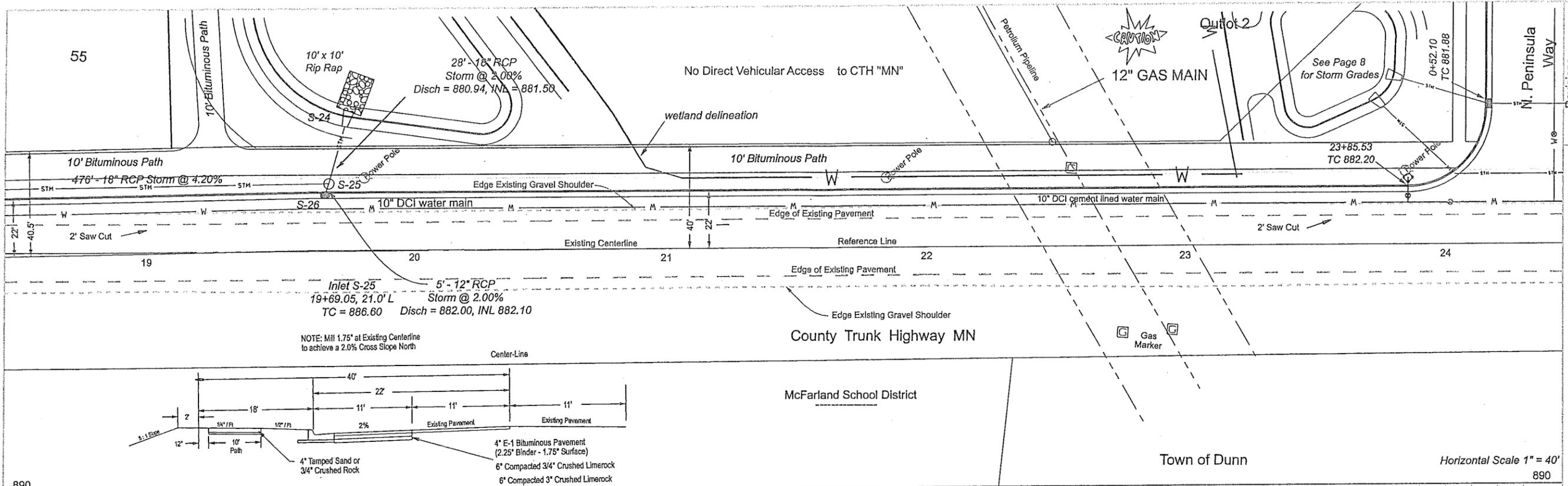
16+50

17+00

17+50

18+00

18+50



NOTE: Mill 1.75" at Existing Centerline to achieve a 2.0% Cross Slope North

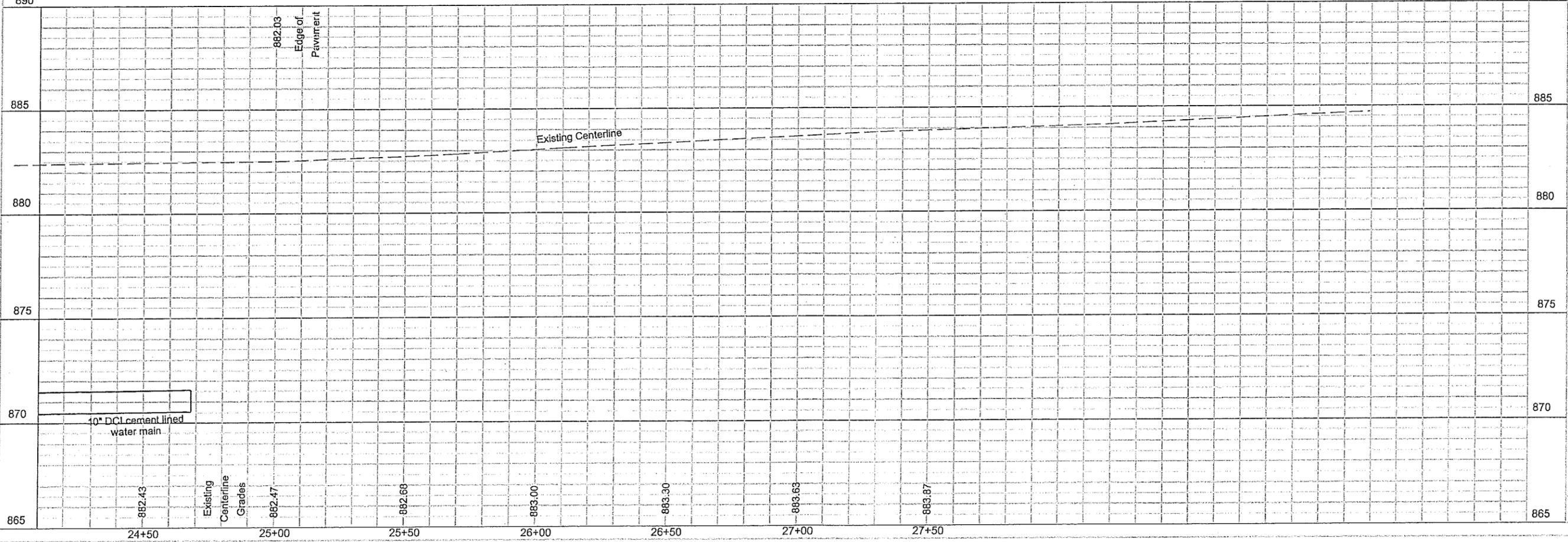
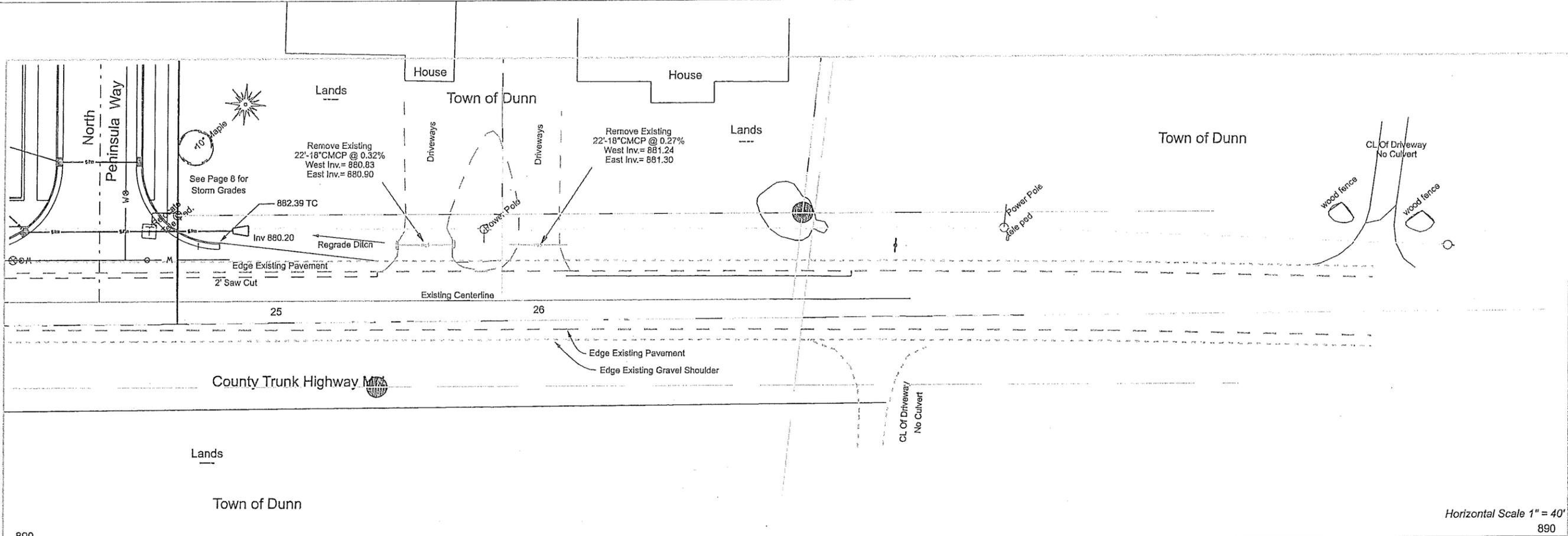
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Prairie Place

CTH MN

16



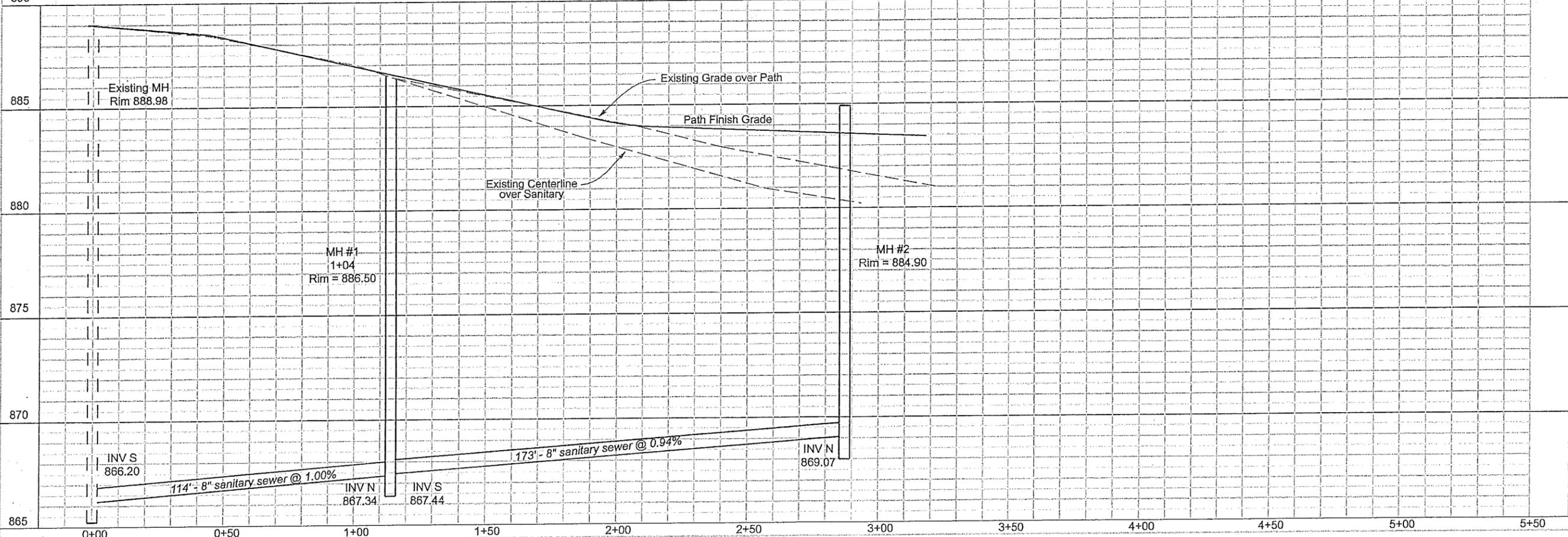
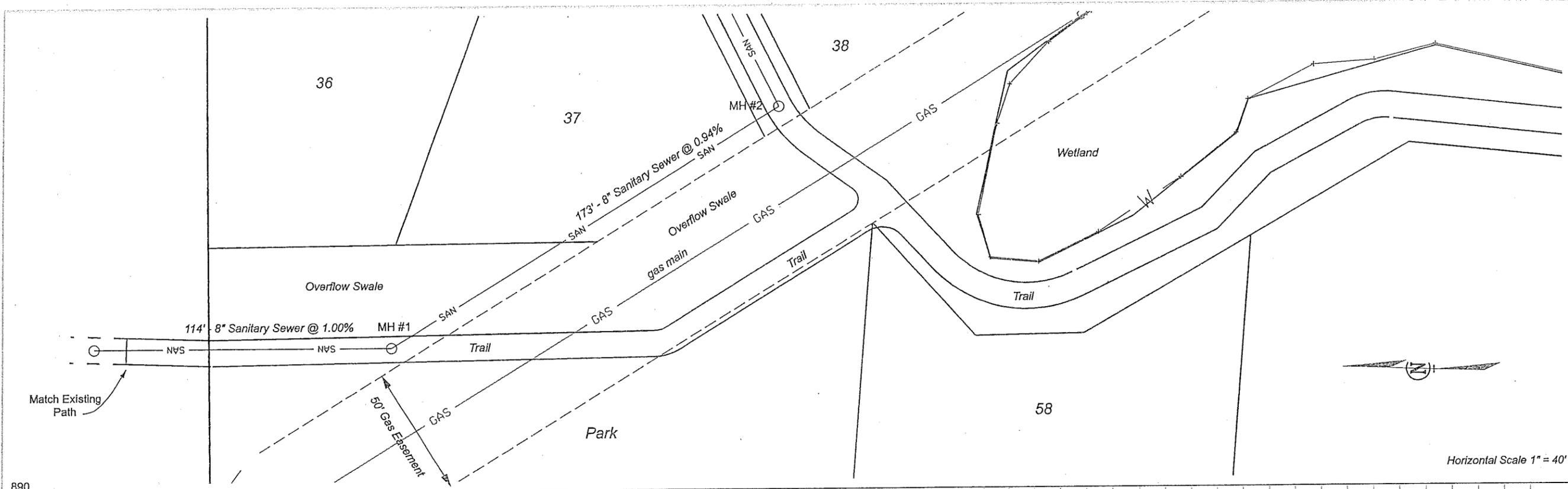
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Prairie Place

CTH MN

17



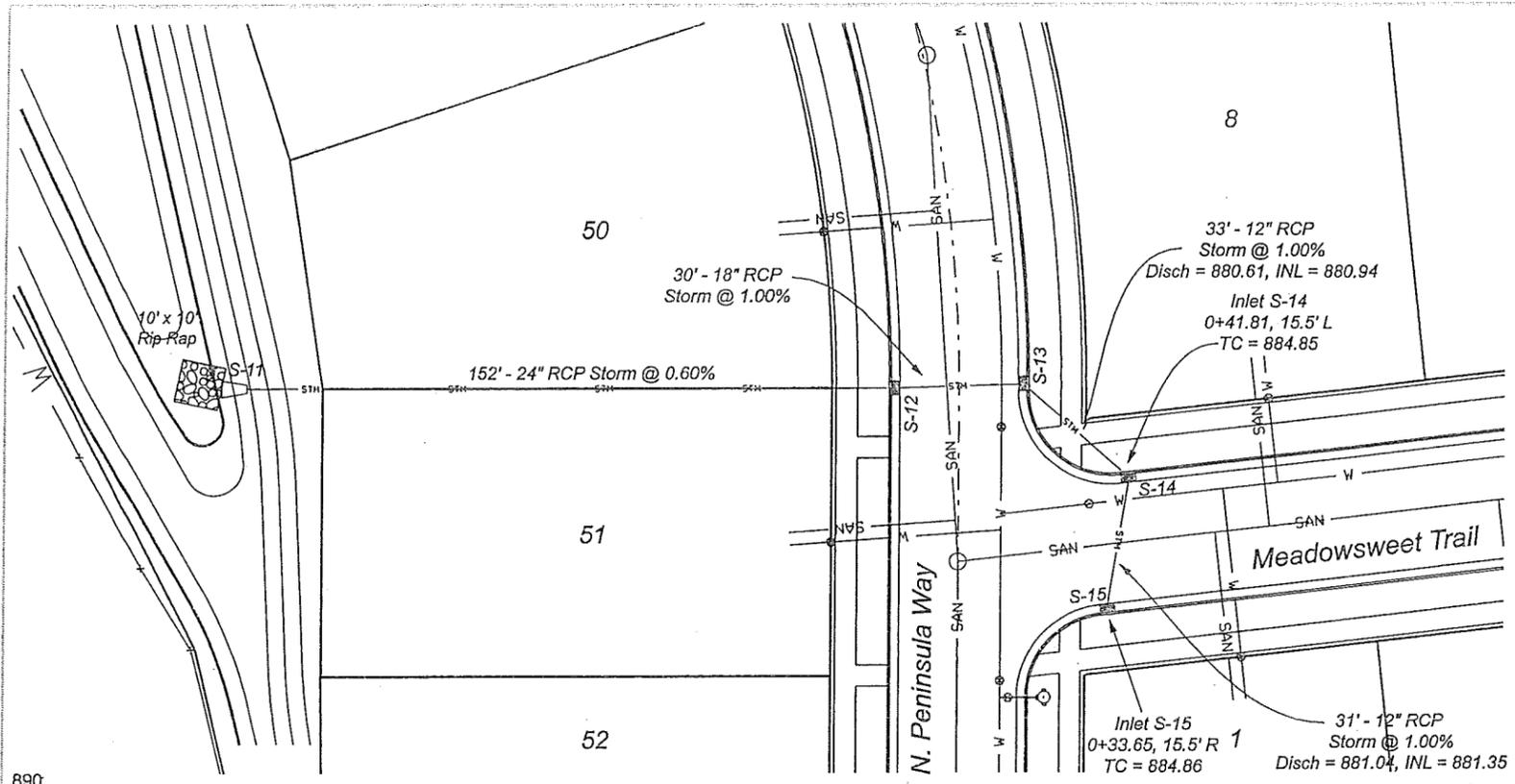
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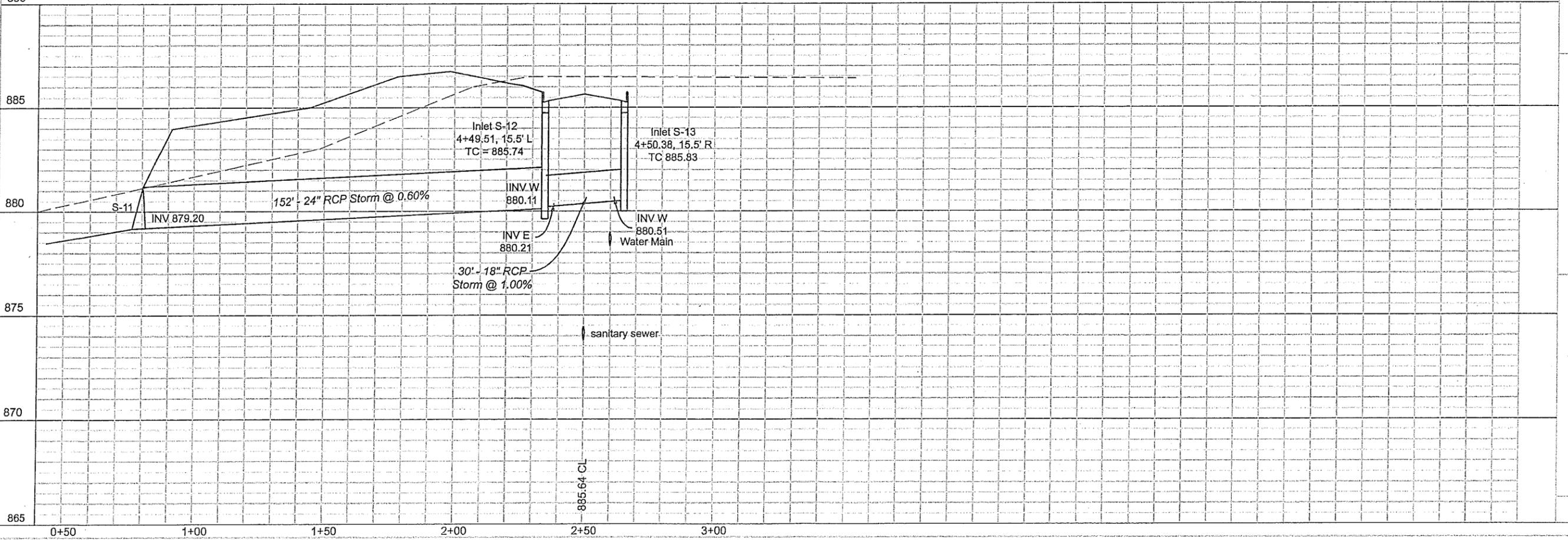
Prairie Place

Sanitary Sewer

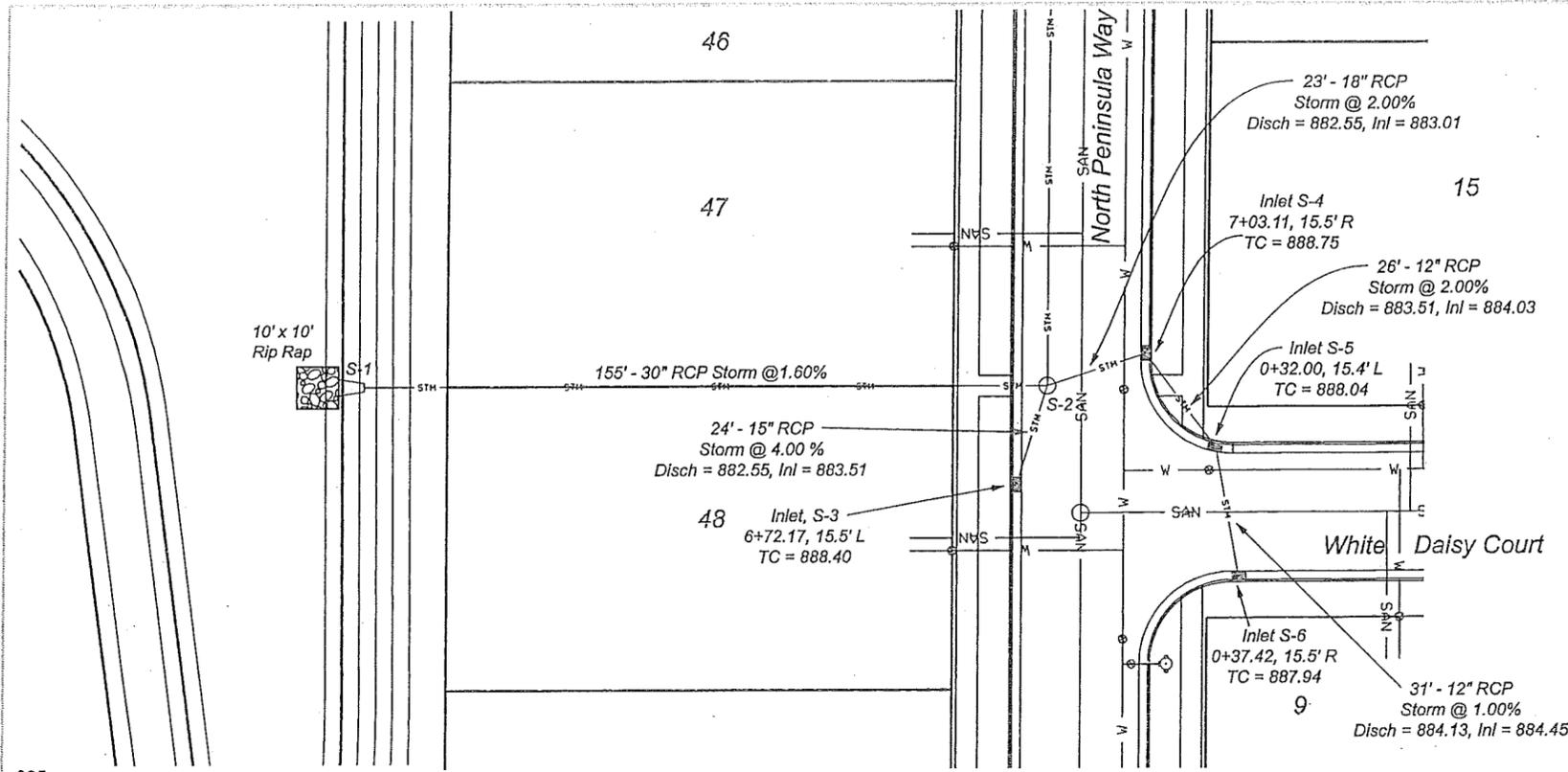
18



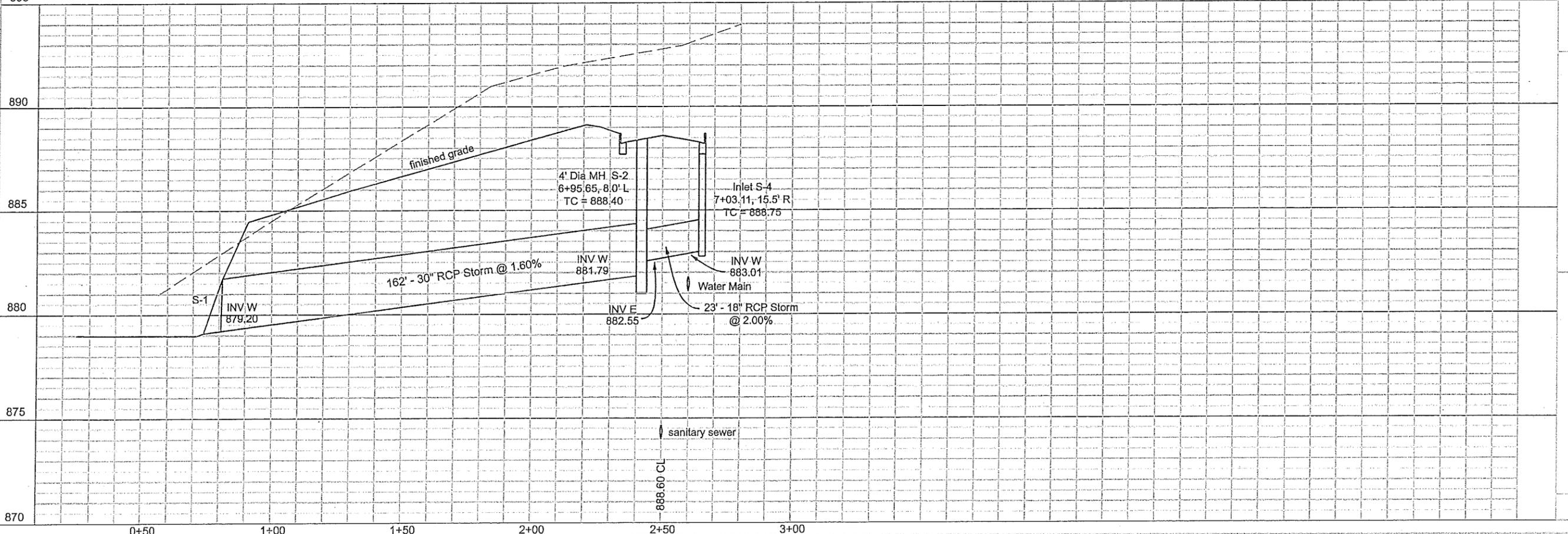
Horizontal Scale 1" = 40'



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Prairie Place
Storm Sewer - Lots 50-51
19



Horizontal Scale 1" = 40'



895

890

885

880

875

870

0+50 1+00 1+50 2+00 2+50 3+00

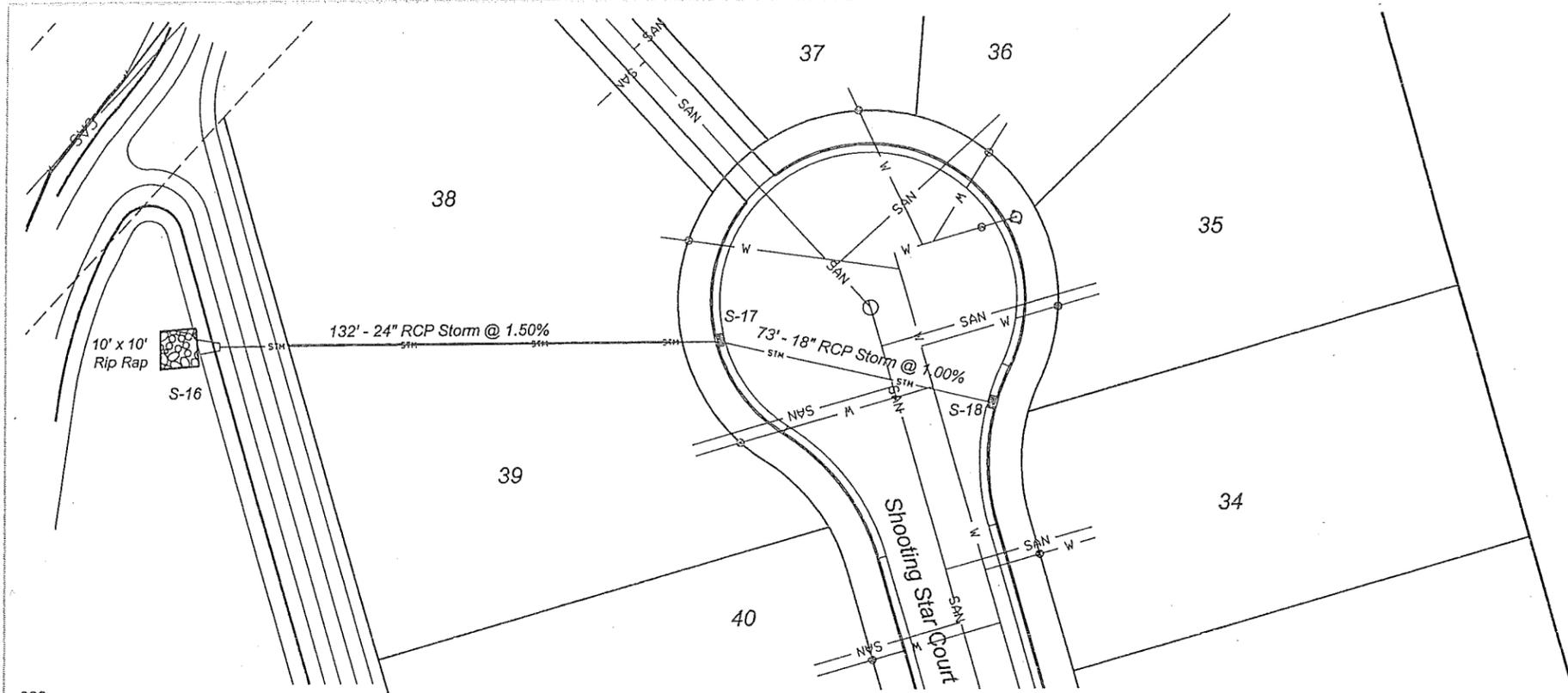
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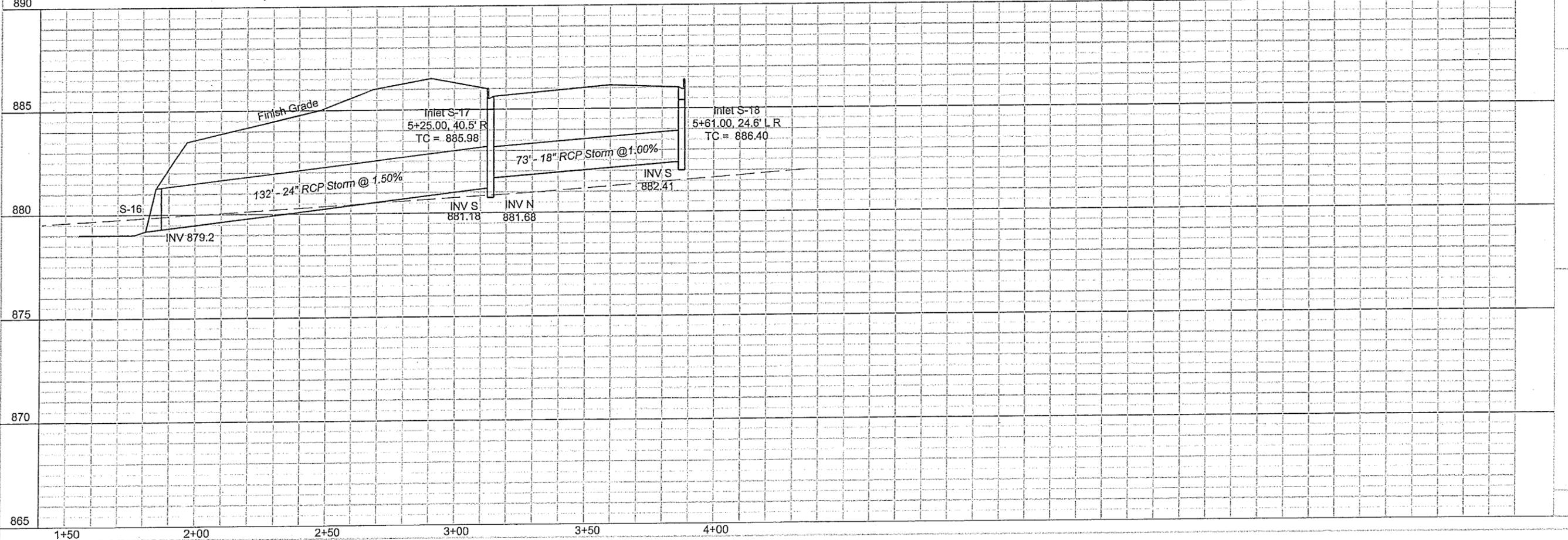
Prairie Place

Storm Sewer 47-48

20



Horizontal Scale 1" = 40'



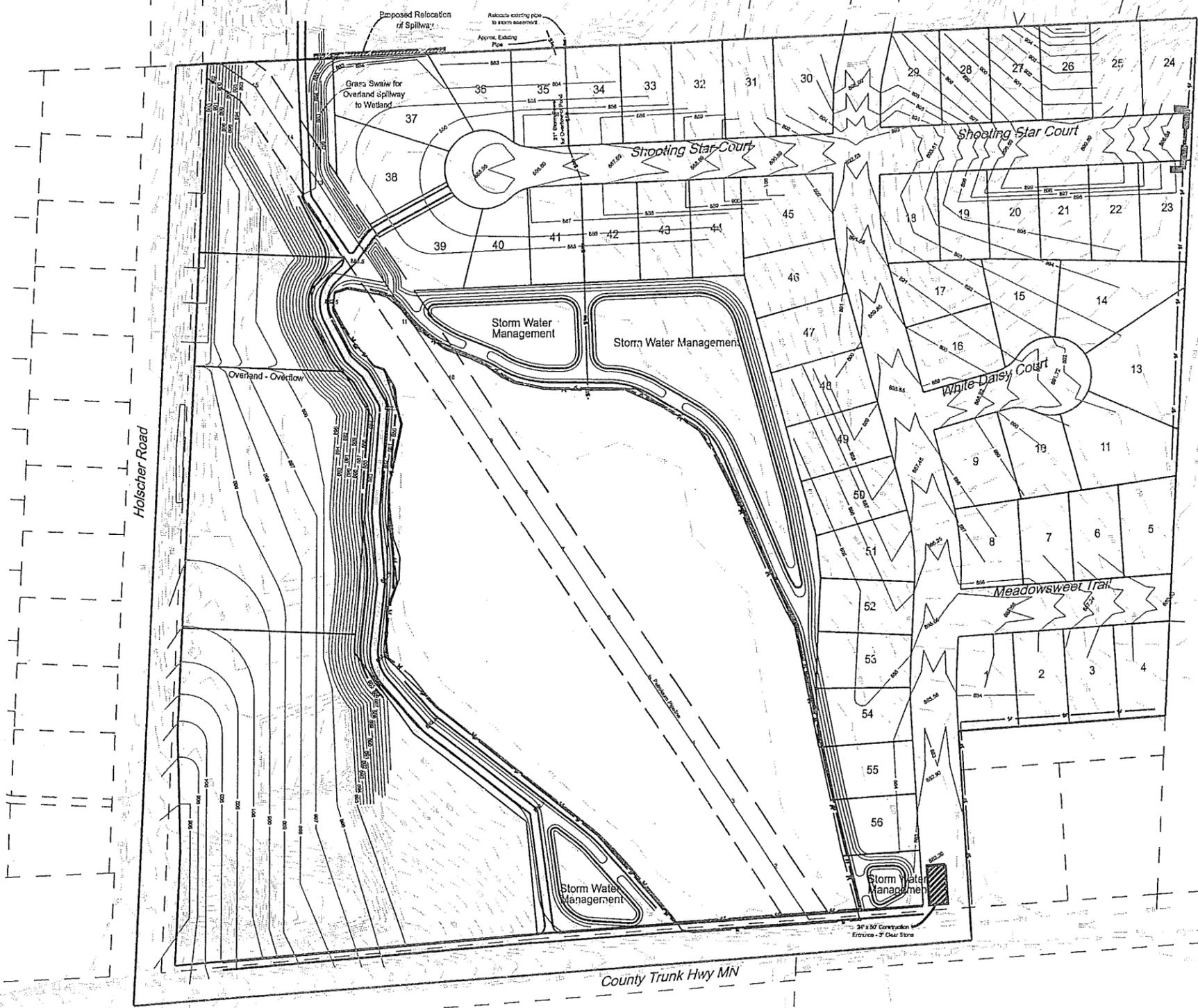
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Prairie Place

Storm Sewer 38-39

21

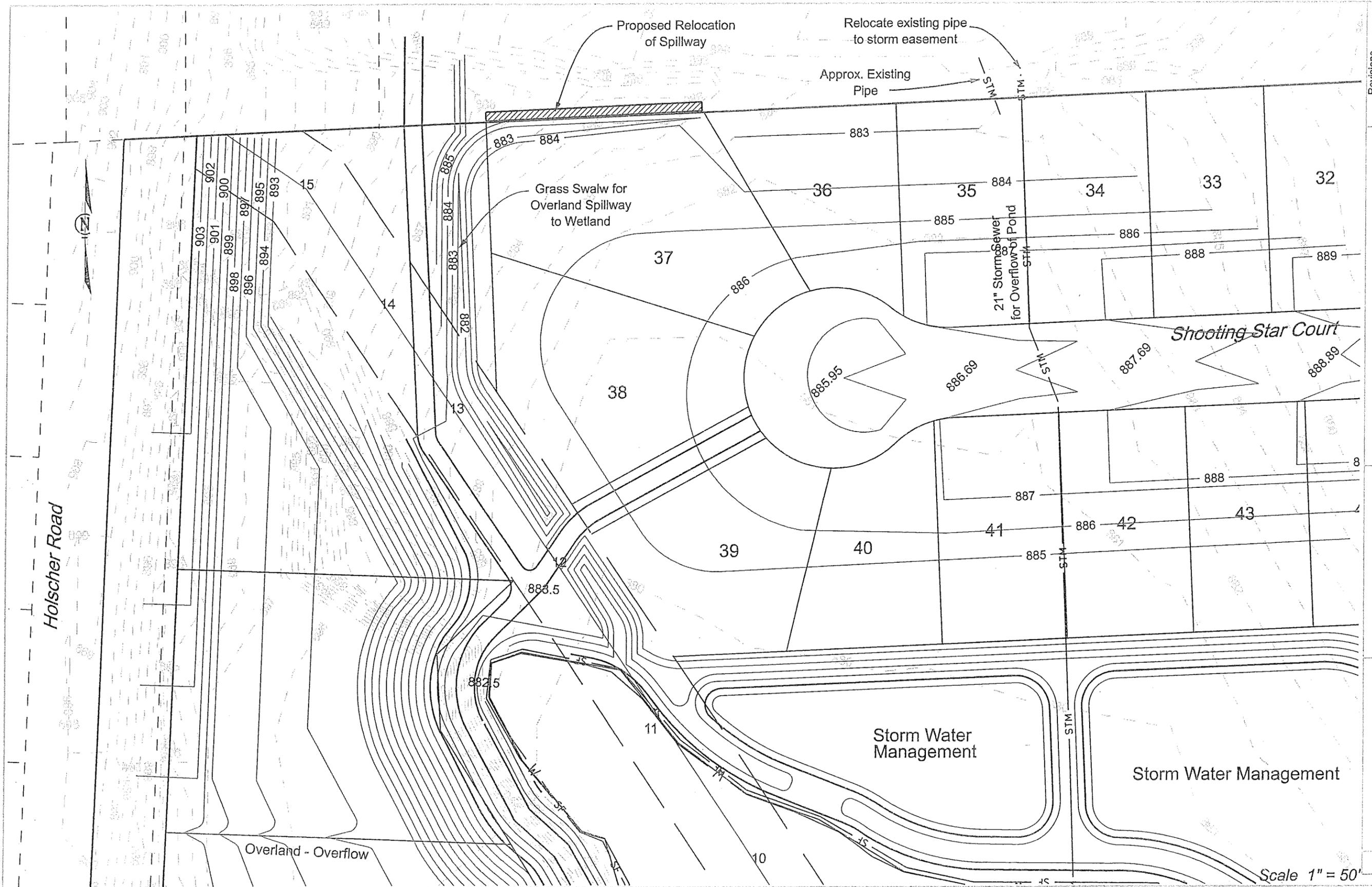


Overall Grading and
Erosion Control

Prairie Place

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Revisions



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Prairie Place

Grading and
 Erosion Control

23

Scale 1" = 50'



Earth Berm with Stone Weeper



Scale 1" = 50'

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Prairie Place
Grading and Erosion Control
24



Holscher Road

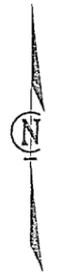
Scale 1" = 50'



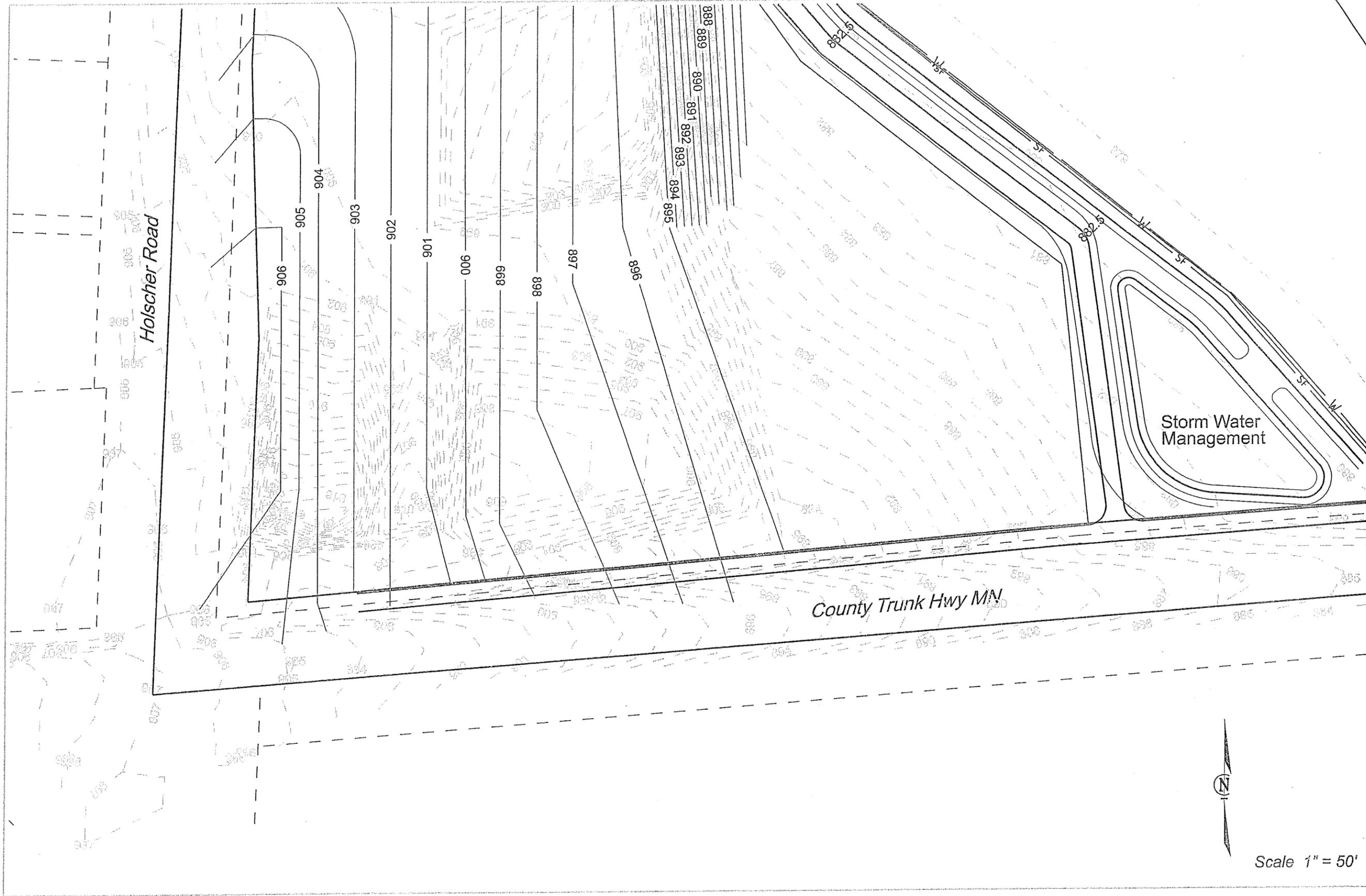
Revisions	Royal Oak & Associates Inc. 3678 Kinsman Blvd, Madison, Wisconsin 53704 Phone (608) 274-0500	Prairie Place	Grading and Erosion Control
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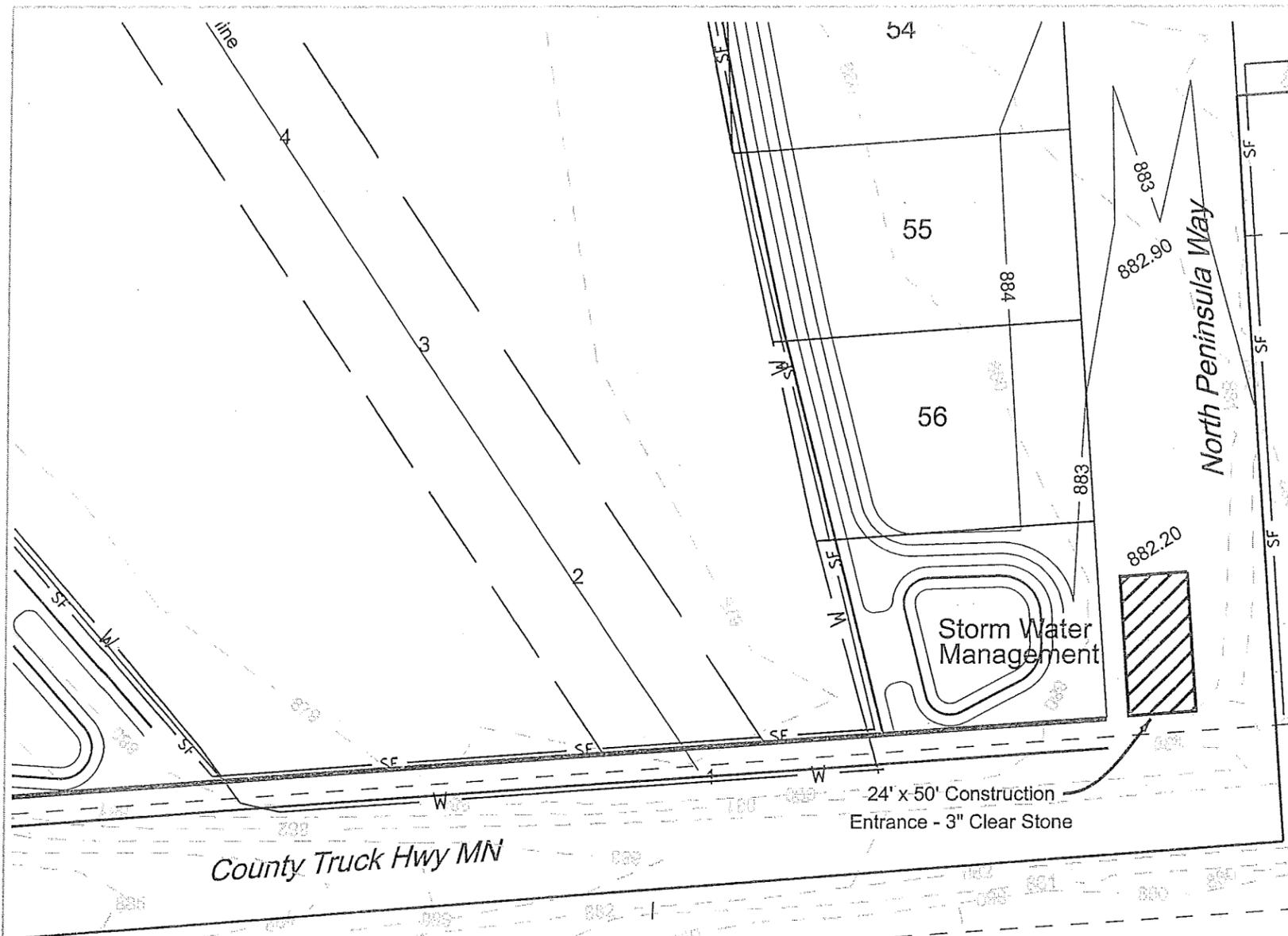


Scale 1" = 50'



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Prairie Place
Grading and Erosion Control
26





Project Narrative

This project is a small plat lying on the Southeast side of the Village of Oregon. This plat consists of 10 single family lots and one Outlot. The project will extend the streets of Perry Parkway and Fairfax Avenue. The Outlot will be used as park and stormwater management. The existing site conditions is cropped farmland with some trees along the south side of the project. The farmland around the plat will remain as farmland.

1. All grading and erosion control shall conform to the Village of McFarland ordinances.
2. Erosion control devices shall be installed prior to the start of grading.
3. Erosion control is the responsibility of the contractor until acceptance of this project. Erosion control measures as shown shall be the minimum precautions that will be allowed. The contractor shall be responsible for recognizing and correcting all the erosion control problems that are a result of construction activities.
4. Additional erosion control measures, as requested by the Village inspector or developers engineers, shall be installed within 24 hours.
5. All erosion control measures and structures serving the site must be inspected at least weekly and within 24 hours of the time 0.50 inches of rain is produced. All maintenance will follow and installed within 24 hours.
6. All trucks leaving site shall have clean tires. Prior to the start of grading, the contractor shall install a tracking pad. The tracking pad shall be 50' long, 24' wide, and 1' thick. The pad shall be constructed with 3" clear stone. The construction entrance shall be maintained by the contractor in a condition in which will prevent the tracking of mud onto the public street. All material deposited on public property shall be swept up daily.
7. Type "D" inlet protection shall be installed in the inlets downstream of the project. The inlet protection shall be inspected and maintained throughout the construction.
8. Once the site has finished graded and vegetation has been established and stabilized, the silt fence shall be removed and restored with seed, fertilizer and mulch.
9. See other plan and profiles for street grades, paved areas, and utilities
10. Electric and cables will be installed in easements shown on the plat. Finish grade, seed and mulch these areas after installation.
11. Topsoil shall be stockpiled on site and then used to finish lots and terraces.

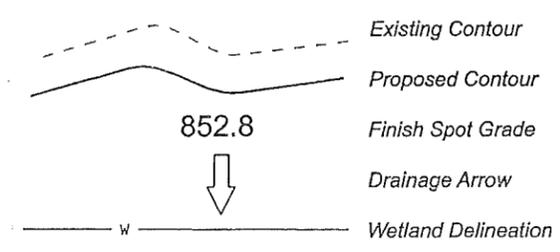
**Top Of Gas Main Elevations
(Corresponds To Numbers Along Gas Main)**

1. 875.6
2. 875.6
3. 875.5
4. 875.6
5. 876.0
6. 875.2
7. 875.3
8. 875.6
9. 876.5
10. 876.9
11. 877.4
12. 878.0
13. 881.1
14. 884.6
15. 889.4

Erosion Control Devices

1. Silt fence
2. Type "D" inlet bags installed in the downstream inlets.
3. A 50' long, 24' wide, 1' deep construction entrance pad located on N. Peninsula Way. The pad shall consist 3" clear stone.

Legend



Scale 1" = 50'

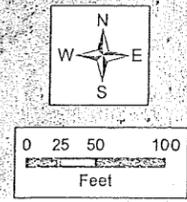
Revisions

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Phone (608) 274-0500

Prairie Place

Grading and Erosion Control

- Legend**
- No Mow Seed Mix
 - Bioretention Basin
 - Native Mesic Prairie Seed Mix
 - Wet Detention Seed Mix
 - Wet Mesic Prairie Seed Mix
 - Path
 - Multi Family
 - Single Family Residential
 - Proposed Storm Sewer
 - Wetland Boundary



PRAIRIE PLACE STORMWATER MANAGEMENT PLAN

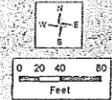
GANNON CONSTRUCTION, INC.
 PRAIRIE PLACE STORMWATER MANAGEMENT PLAN
 VILLAGE OF MCFARLAND
 DANE COUNTY, WISCONSIN



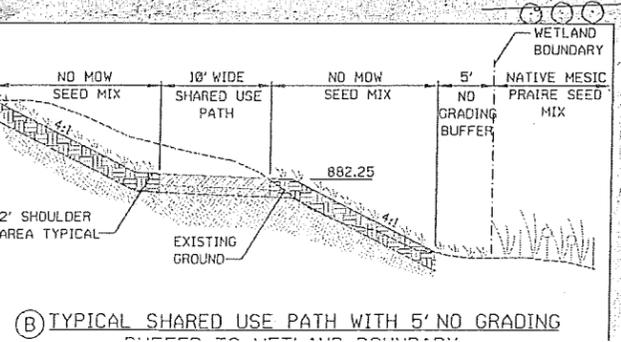
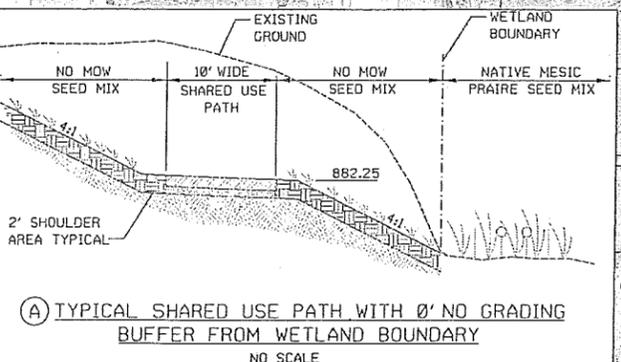
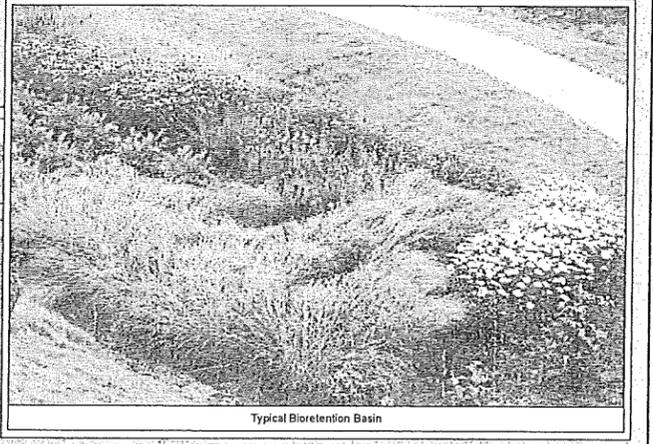
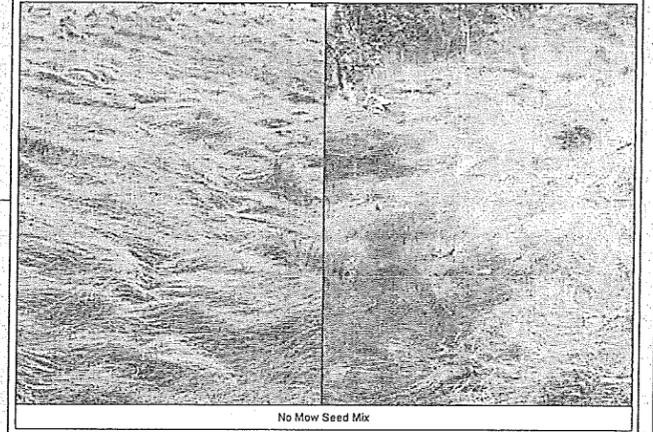
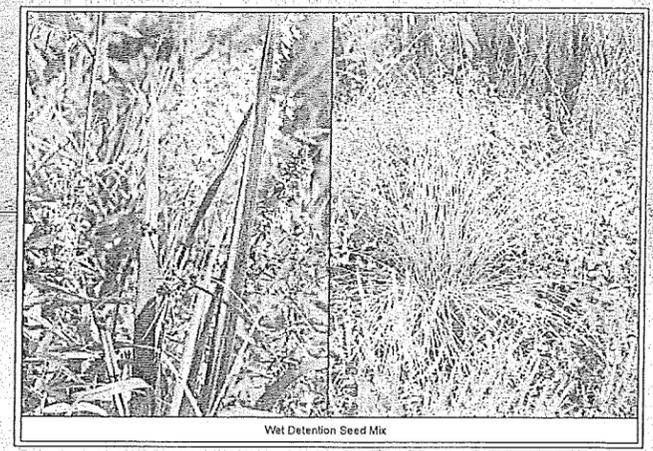
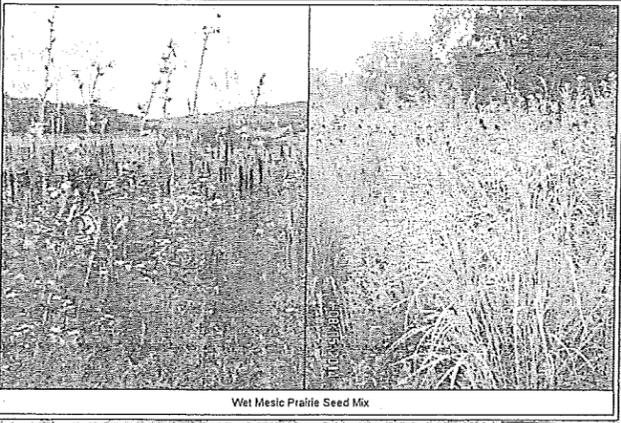
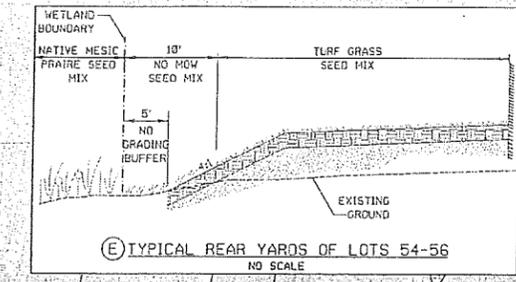
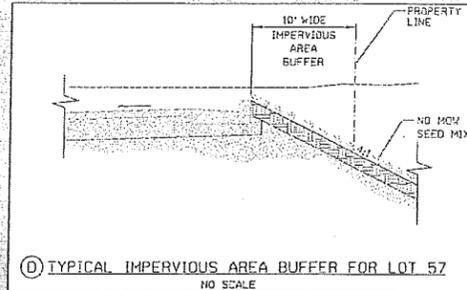
FIGURE 1
1809.002

Legend

Proposed 5' No Grading Wetland Buffer	Path
Proposed 10' Wide Impervious Area Buffer	Multi Family
No Mow Seed Mix	Single Family Residential
Bioretention Basin	Proposed Storm Sewer
Native Mesic Prairie Seed Mix	Wetland Boundary
Wet Detention Seed Mix	Prescribed 30' No Grading Wetland Buffer
Wet Mesic Prairie Seed Mix	Prescribed 75' No Impervious Area Wetland Buffer

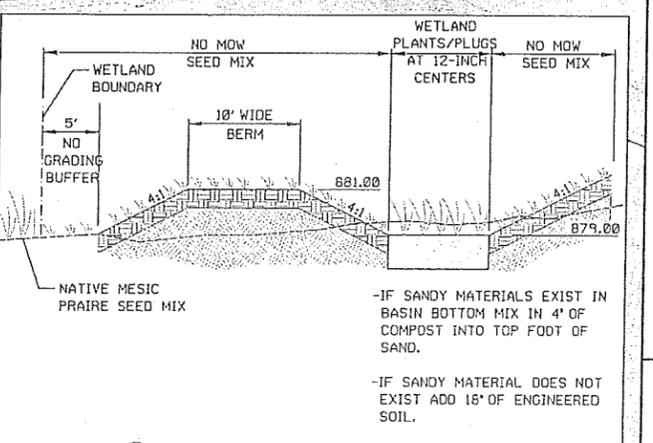


Event	High Water Elev. W/Infiltration (ft)	High Water Elev. W/Out Infiltration (ft)
1-Year	878.85	879.37
2-Year	879.00	879.52
10-Year	879.39	880.09
100-Year	880.34	881.35



- Prairie Place Wetland/Prairie Restoration - Implementation Plan and Schedule**
1. **Spring 2016** - Plant Roundup-Ready soybean crop for minimum stubble. Plant without additional grass or weed herbicides over entire limit of plot, including the 6.83-acre wetland.
 2. **Early Fall-October 2016** - Harvest soybean crop and minimize surface disturbance. Direct-seed/no-till seed native seed mixes and perform other needed site preparation for enhancement plantings within the 6.83-acre wetland as shown in the restoration plan.
 3. **Spring 2017** - Placement of silk fence around the perimeter of the enhanced/restored 6.83 acre wetland.
 4. **Spring 2017** - Anticipated start of construction of Prairie Place subdivision phase. Implement erosion control measures (temporary sediment basins at locations of future bioretention basins). Erosion control measures kept in place until development site is completed and stabilized. Install native plantings associated with cumulative development and restoration plan.
 5. **2017 Growing Season** - Perform maintenance mowing to prevent quick-growing weeds from reseeding, shading, or over-competing with new native seedlings. Mow each time weed growth reaches 10-12' and cut to height of 6".
 6. **2018 Growing Season** - Maintenance mow or spot-mow once or twice raising the cutting height to 6-12". Additional management to include: spot-spraying and selective invasive species and woody species removals.
 7. **2019 Growing Season and Beyond** - Spring/Summer/Fall reviews and assessment for needed management.

- Wetland Buffer Notes**
1. The minimum wetland buffers for proposed impervious surfaces shall be as follows: Lots 54 through 56 = 35', Lot 53 = 42', Lot 52 = 58' and Lot 51 = 62'. All other single family residential lots shall have a minimum wetland buffers for impervious surfaces of 75'. A minimum 10' no mow buffer shall be maintained for Lots 54 through 56.
 2. The proposed 10' wide shared use path shall be located a minimum distance of 10' from the wetland boundary.
 3. Proposed impervious surfaces on the multi-family lot (Lot 57) located within the 75' wetland buffer shall be setback a minimum of 10' off the property line adjacent to the wetlands and shall be designed to drain to a bioretention



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