

**Joint Public Works and
Public Utilities Committees**

Tuesday, August 10, 2021

6:00 PM

**McFarland Municipal Center
Community Room**

AGENDA

You are invited to this meeting through a Zoom webinar. The Public is strongly encouraged to watch and participate in these meetings remotely through either the webinar or telephone options listed below.

PLEASE CLICK THE LINK BELOW TO JOIN THE ZOOM WEBINAR:

<https://us02web.zoom.us/j/87997214181>

Or by Telephone: +1 (312) 626-6799

Webinar ID: 879 9721 4181

1. CALL TO ORDER, ROLL CALL.
2. PUBLIC APPEARANCES.
 - a. This is an opportunity for members of the public to address the Village Board. Please remember this is a virtual meeting conducted through the Zoom online meeting platform. Zoom meeting attendees wishing to address the board may do so using the Question and Answer feature within the Zoom online meeting platform. You may state your name, address, and provide your comments to the board for their consideration. Members of the public who are present in person and wish to address the board should fill out a public comment form and turn into the meeting chairperson. Members of the public may speak during public appearances or during their selected agenda item as they designate on the public comment form. Please adhere to the 3-minute time limit. Additionally, you may send your public comments to aimee.irwin@mcfarland.wi.us to be included as part of the meeting.
3. BUSINESS.
 - a. Discussion and action to make a recommendation to the Village Board regarding the Paving and Utility Improvement Plan.
 - b. Discussion and action to make a recommendation to the Village Board regarding Town and Country's proposal for design services for the 2022 Paving and Utility Improvement projects.
 - c. Update and discussion regarding sewer rates and the sewer rate study
 - d. Discussion and action to make a recommendation to the Village Board regarding the utility's meter reading and installation process.
 - e. Presentation of the Public Works monthly report.
4. SCHEDULE NEXT MEETING DATE.

- a. Public Works: Tuesday, September 14, 2021 at 6:00 p.m.
Public Utilities: Tuesday, September 21, 2021 at 6:00 p.m.

5. ADJOURNMENT.

This meeting notice constitutes an official meeting of the above referenced group and was posted in accordance with all applicable laws related to Open Meetings Law. It is possible that members of and possibly a quorum of members of other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals. For additional information or to request this service, contact the McFarland Municipal Center at (608) 838-3153 or cassandra.suettinger@mcfarland.wi.us.


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Tuesday, August 10, 2021

SECTION: Business

DEPARTMENT: Public Works

CONTACT:

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding the Paving and Utility Improvement Plan.

PREVIOUS ACTION:

None.

ISSUE SUMMARY:

The Public Works and Public Utilities committees reviewed the initial draft of the long term CIP plan related to pavement and utility improvements at their July 2021 meetings. Staff along with Town & Country Engineering have further reviewed the plan and have included a revised copy for review this evening. Town & Country Engineering will review the changes that have occurred since the previous draft and provide additional details related to identified projects. The packet includes the updated Long Term CIP for Paving and Utility Improvements along with GIS maps showing the identified locations.

FINANCIAL/BUDGET IMPACT:

Year to year cost implications are included within the enclosed plan. Once the plan is accepted, this information will be integrated into the next 5 Year Capital Improvement Plan.

VILLAGE PLAN REFERENCE:

None.

ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommend to the Village Board the approval of the Paving and Utility Improvement Plan.

ATTACHMENTS:

1. Long Range CIP
2. Long Range CIP Map- Overall
3. Long Range CIP Map- West Side

Village of McFarland
 Conceptual Project List in Approximate Priority Order
Long Range ROW Infrastructure Improvements Plan
 7/9/2021

Notes:

1. Pavement scores are WISLR output. The Village will almost certainly want/need to adjust this to accommodate other priorities.
2. WISLR does not do "first worst" ordering, but takes into account many other factors. (0-10 rating, 10 = new)
3. WISLR Model makes broad assumptions about curb repair and driveway aprons, nor does it factor in sidewalks or any underground needs.
4. Costs shown assumed entire scope described, and will need adjustment if scope is changed.
5. This list includes projects funded by TID/TIF sources.
6. This list assumes an approximate annual general fund expenditure of \$500,000.
7. PR= Pavement Rehabilitation, SSR= Storm Sewer Rehabilitation, PUR= Pavement and Utility Rehabilitation, WR= Water Main Replacement, W= New Watermain, RC= Rural Conversion
8. Project costs assume that 50% of street replacement costs for projects that include water main replacement will be funded by the Water Utility.
9. Project costs assume 25% curb replacement.

Project Point Scoring System

10. 0= Rating above 6, 1= Rating 5 or 6, 2= Rating of 4, 3= Rating 3 or lower
11. 1= Projects with known sewer replacement needs
12. 1= Projects with known water replacement needs, water main greater than 50 years old, or main size 6-inches or less
13. 1= Projects with known storm sewer issues and needs
14. 1= Project with bicycle and pedestrian system needs identified in the Comprehensive Plan.

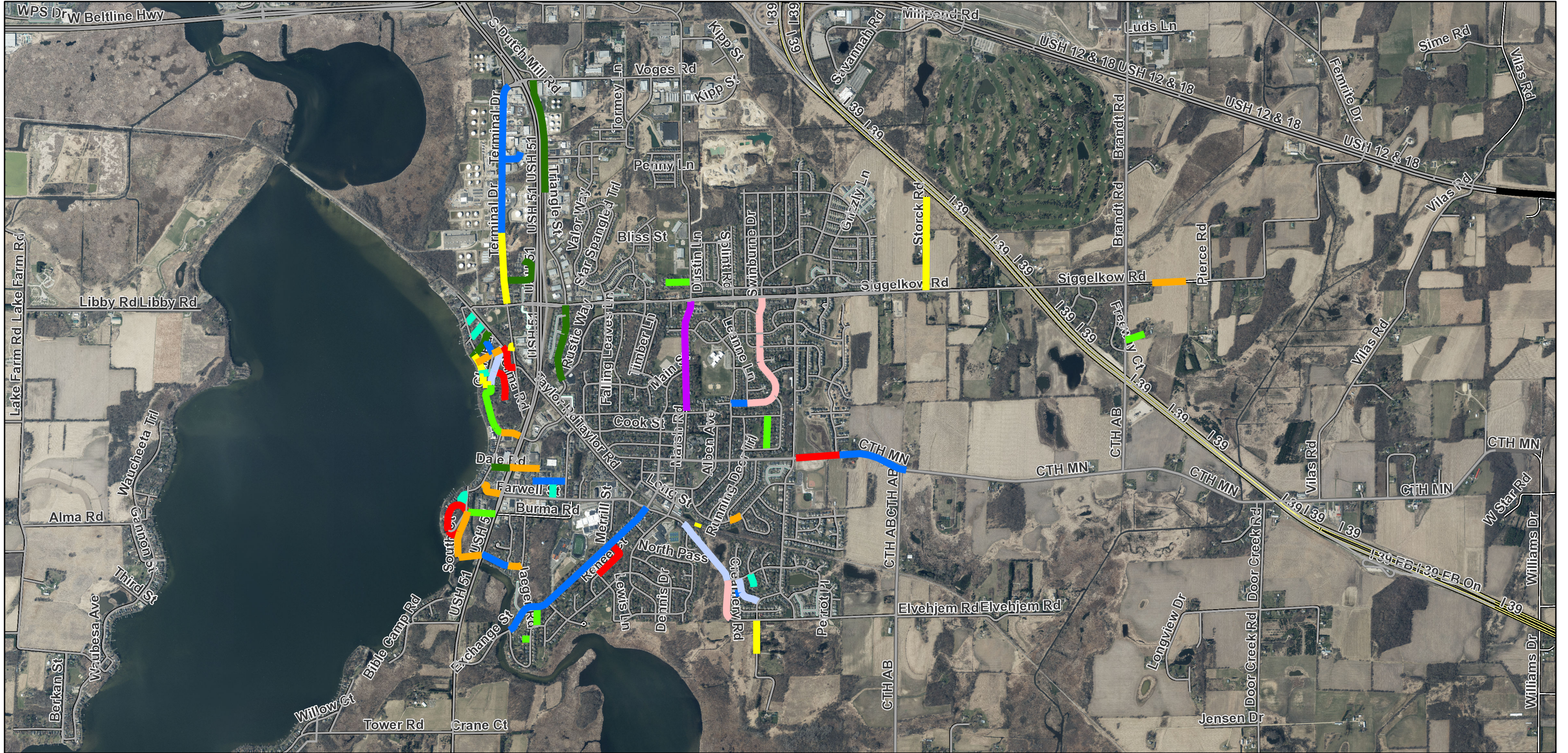
Year	Street	From	To	Length	Width	Rating	Action ⁷	PROJECT COSTS						PROJECT SCORING					General Comments					
								Street	TIF/TID Street	Sewer	Water	Storm	TIF/TID Non-Street	Total	Street ¹⁰	Sewer ¹¹	Water ¹²	Storm ¹³		Ped and Bike ¹⁴	Total			
2021	Renee Ct	Lewis Ln	Exchange St	1056	30	5	PR	\$204,800								1					1			
2021	Broadhead Street/CTH MN Phase 4A	Holscher Rd	N Peninsula Way	1050	37	6	RC	\$263,000			\$40,000	\$57,700				1			1	1	3	Partially paid for by Dane County. Amounts represent Village expenditures.		
2021	Norma Rd	Termini	Bremer Rd / Wisconsin Ave	898	36	4	PR	\$42,500								2					2	This represents an estimate of the cost if this work were to be added to the scope of the 2021 Street and Storm Sewer Improvements contract.		
2021	Overlook Dr	Burma Rd / South Ct	South Ct	1373	18	3	PR	\$61,600								3					3	This represents an estimate of the cost if this work were to be added to the scope of the 2021 Street and Storm Sewer Improvements contract.		
2021	Erling Ave	Terminal Dr	Bremer Road	700	28	2	PR	\$30,800								3					3	This represents an estimate of the cost if this work were to be added to the scope of the 2021 Street and Storm Sewer Improvements contract.		
Year Total								\$510,300	\$0	\$0	\$40,000	\$57,700	\$0	\$608,000										
2022	S Terminal Drive	Lift Station 4	Siggelkow Road	1715	32	5	RC		\$1,219,700				\$338,100	\$1,557,800	1				1		2			
2022	Osborn Pond	Behind 557x Osborn Drive					SSR					\$75,000	\$75,000	0				1			1			
2022	Terminal Drive	Railroad bridge					SSR					\$35,000	\$35,000	0				1			1			
2022	Hidden Farm Rd	Elvehjem Road	Orchard Hill Park Entrance	785	18	3	PR	\$393,250					\$393,300	3							3	This estimate amount assumes a 36' wide face-face road which would allow for parking on both sides of the road, with room for approximately 60 vehicles. The estimate also includes an 8-foot off-street path.		
2022	Card Ave	Larson Street	Bellevue Ct	1050	10	4	PUR	\$144,500			\$313,600		\$458,100	2			1				3	This estimate assumes the replacement of existing concrete pavement with asphalt.		
2022	Bellevue Ct	Card Ave / Termini	Bremer Rd	211	29	5	PUR	\$26,900			\$139,400		\$166,300	1			1				2	This project pairs well with Card Avenue.		
2022	Storck Rd	Siggelkow Rd	Termini	2227	18	2	PR	\$145,000					\$145,000	3							3	This estimate includes a 2" layer of surface asphalt with minimal base improvements		
Year Total								\$709,650	\$1,219,700	\$0	\$453,000	\$110,000	\$338,100	\$2,830,500										

Year	Street	From	To	Length	Width	Rating	Action ⁷	PROJECT COSTS						PROJECT SCORING					General Comments					
								Street	TIF/TID Street	Sewer	Water	Storm	TIF/TID Non-Street	Total	Street ¹⁰	Sewer ¹¹	Water ¹²	Storm ¹³		Ped and Bike ¹⁴	Total			
2023	Triangle Street	Siggelkow Rd plus 2700 feet	Voges	2609	40	6	RC	\$1,075,800					\$233,900	\$1,309,700	1			1	1	3	This estimate amount includes the installation of a new path for the length of the entire project.			
2023	Dale Rd	Lake Edge Rd	USH 51	375	37	5	PUR	\$46,400			\$162,200			\$208,600	1		1			2				
2023	Paulson Rd	Termini	Siggelkow Road / Triangle Street	1600	24	3	PUR	\$394,600		\$123,500	\$773,800	\$134,300		\$1,426,200	3	1	1	1		6	This project includes a connection at current Termini that would allow for through-traffic.			
2023	Larson St	Erling Ave	Termini	751	28	4	PUR	\$113,400			\$188,500			\$301,900	2		1			3				
2023	Ivywood Trl	Terminal Dr	Termini	264	36	5	PR	\$41,000						\$41,000	1					1				
Year Total								\$595,400	\$1,075,800	\$123,500	\$1,124,500	\$134,300	\$233,900	\$3,287,400										
2024	Exchange Street	Sleepy Hollow Road	Farwell St			5	PUR	\$1,100,000		\$802,000	\$702,000	\$666,000		\$3,270,000	1	1	1	1	1	5	Partially funded by STP-URBAN grant. Amounts represent Village expenditures. Not included in year total where noted.			
2024	N Terminal Drive	Lift Station 4	USH 51	3500	32	5	RC	\$318,100					\$3,333,800	\$3,651,900	1			1		2				
2024	Broadhead Street/CTH MN Phase 4B	North Peninsula Way	CTH AB	1958	36	6	RC	\$290,300			\$617,900	\$273,600		\$1,181,800	1			1	1	3	Partially paid for by Dane County. Amounts represent Village expenditures.			
2024	Glen Rd	Larson St	Lakeview St	850	21	5	PUR	\$73,300			\$257,700			\$331,000	1		1			2				
2024	Yahara Dr	USH 51	Rivercrest Dr	581	32	5	PR	\$80,100						\$80,100	1				1	2				
2024	Dale St	Badger St	Termini	528	32	5	PUR	\$72,800			\$142,700			\$215,500	1		1			2				
2024	Dale St	Badger St	Lexington St	317	19	5	PUR	\$27,100			\$137,100			\$164,200	1		1			2				
2024	McFarland Ct	Terminal Dr	Termini	634	32	4	PR	\$87,500						\$87,500	2					2				
2024	Bird Song Ct	Morning Dove Dr	Termini	158	32	5	PR	\$21,800						\$21,800	1					1				
2024	Black Walnut Dr	Black Walnut Ct / Leanne Ln plus 316 ft	Wild Cherry Ln	106	36	5	PR	\$16,500						\$16,500	1					1				
Year Total (Including Exchange Street)								\$1,390,300	\$318,100	\$802,000	\$1,319,900	\$939,600	\$3,333,800	\$8,103,700										
Year Total (Excludes Exchange Street)								\$669,400	\$318,100	\$0	\$1,155,400	\$273,600	\$3,333,800	\$5,750,300										
2025	Marsh Rd	Red Oak Trl / Wellington Cir	Siggelkow Rd	739	44	5	PR	\$235,100						\$235,100	1				1	2	This estimate includes concrete pavement replacement at the intersection with Siggelkow			
2025	Marsh Rd	Eighmy Rd	Red Oak Trl / Wellington Cir	2000	42	5	PR	\$361,200						\$361,200	1					1				
Year Total								\$596,300	\$0	\$0	\$0	\$0	\$0	\$596,300										

Year	Street	From	To	Length	Width	Rating	Action ⁷	PROJECT COSTS						PROJECT SCORING					General Comments			
								Street	TIF/TID Street	Sewer	Water	Storm	TIF/TID Non-Street	Total	Street ¹⁰	Sewer ¹¹	Water ¹²	Storm ¹³		Ped and Bike ¹⁴	Total	
2026	Lakeview Ave	Bremer Rd	Termini	686	22	3	PUR	\$79,900			\$235,300			\$315,200	3		1			4		
2026	South Ct	Burma Rd	Overlook Dr plus 600 ft	1200	18	3	PUR	\$145,400			\$330,200			\$475,600	3		1			4		
2026	Larson Beach Rd	Crossover USH 51	Bremer Rd / Lake Edge Rd	422	35	5	PR	\$65,800						\$65,800	1					1		
2026	Dale Curtian Rd	USH 51	Termini	600	32	5	PR	\$51,000						\$51,000	1					1		
2026	Osborn Dr	Running Deer Trl	Oak Hollow Dr	158	36	5	PR	\$24,600						\$24,600	1					1		
2026	Siggelkow Rd	CTH AB / Siggelkow Rd plus 601 ft	Pierce Rd / Siggelkow Rd	676	20	5	PR	\$58,200						\$58,200	1					1		
2026	Yahara Dr	Rivercrest Dr	Indian Mound Dr	422	32	5	PR	\$58,200						\$58,200	1					1		
2026	USH 51 prep	Dale Rd Xing & along USH 51					WR				\$681,100			\$681,100	0		1			1		
2026	South Ct	Overlook Dr plus 600 ft	Yahara Drive	550			W				\$121,000			\$121,000	0		1					
2026	Severson Rd	Lake Edge Rd	Farwell St	650	32	5	PUR	\$80,700			\$108,400			\$189,100	1		1			2		
Year Total								\$563,800	\$0	\$0	\$1,476,000	\$0	\$0	\$2,039,800								
2027	Overlook Dr	Burma Rd / South Ct	South Ct	1373	18	3	PUR	\$141,300			\$370,800			\$512,100	3		1			4		
2027	Wisconsin Ave	Bremer Rd / Norma Rd	Termini	318	20	3	PUR	\$46,800			\$90,300			\$137,100	3		1			4		
2027	Field Ave	Erling Ave	Card Ave	650	42	4	PUR	\$96,100			\$158,400			\$254,500	2		1			3		
2027	Erling Ave	Bremer Rd	Terminal Dr	700	36	2	PUR	\$69,300			\$161,200			\$230,500	3		1			4		
2027	Wild Flower Ct	Country Walk / Forest Ridge Ct	Termini	264	32	5	PR	\$36,400						\$36,400	1					1		
2027	Lake Edge Dr	South Ct	loop	400	35	6	PUR	\$45,400			\$147,800			\$193,200	1		1			2		
2027	Beckler	Card Ave	Erling Ave	264	26	5	PR	\$29,600						\$29,600	1					1		
2027	Badger St	Dale St	Farwell St	350	32	5	PR	\$58,100						\$58,100	1					1		
Year Total								\$523,000	\$0	\$0	\$928,500	\$0	\$0	\$1,451,500								

Year	Street	From	To	Length	Width	Rating	Action ⁷	PROJECT COSTS						PROJECT SCORING					General Comments								
								Street	TIF/TID Street	Sewer	Water	Storm	TIF/TID Non-Street	Total	Street ¹⁰	Sewer ¹¹	Water ¹²	Storm ¹³		Ped and Bike ¹⁴	Total						
2028	Morning Dove Dr	Hidden Farm Rd plus 422 ft	Country Walk / Spring Pond Ct	423	32	5	PR	\$58,400							\$58,400	1					1						
2028	Morning Dove Dr	Hidden Farm Rd	Bird Song Ct	320	32	5	PR	\$58,200							\$58,200	1						1					
2028	N Bremer Road	Erling Ave	Bellevue Ct	1000	32	6	PUR	\$152,000			\$325,700				\$477,700	1		1				2					
2028	Creamery Road	Creamery Court plus 350 ft	Country Walk	352	28	5	RC	\$307,065				\$187,744			\$494,900	1							1				
Year Total								\$575,665	\$0	\$0	\$325,700	\$187,744	\$0	\$1,089,200													
2029	Creamery Road	Country Walk	Country Walk plus 1000 ft	1000	28	5	RC	\$173,737							\$173,800	1							1				
2029	Black Walnut Dr	Wild Cherry Ln	Smith Ridge Rd	1267	36	6	PR	\$196,200							\$196,200	1							1				
2029	Black Walnut Dr	Smith Ridge Rd	Siggelkow Rd / Carncross Dr	1900	36	6	PR	\$294,200							\$294,200	1							1				
Year Total								\$664,137	\$0	\$0	\$0	\$0	\$0	\$664,200													
2030	Burma Rd	Overlook Dr / South Ct	USH51	640	32	4	PR	\$88,100							\$88,100	2							2				
2030	Ahren Ln	Meredith Way	Exchange St	528	32	7	PR	\$72,700							\$72,700	0							0				
2030	S Bremer Road	Larson Beach Rd plus 200 ft	Bellevue Ct	1200	32	7	PUR	\$190,800			\$512,400				\$703,200	0		1					1				
2030	Brandt Rd	CTH AB	Termini	528	16	4	PR	\$36,400							\$36,400	2							2				
2030	Brendan Ct	Termini	Meredith Way	211	32	7	PR	\$29,100							\$29,100	0							0				
2030	Cardinal Dr	Curtis St	Sauk Ln	739	36	6	PR	\$114,400							\$114,400	1							1				
2030	Calico Ct	Marsh Rd / Calico Dr	Termini	580	32	5	PR	\$79,900							\$79,900	1							1				
2030	Norma Rd	Termini	Bremer Rd / Wisconsin Ave	898	36	4	PUR	\$105,921			\$298,505				\$404,500	2		1					3				
Year Total								\$717,321	\$0	\$0	\$810,905	\$0	\$0	\$1,528,300													
TOTAL FOR YEARS 0-9 (Excludes Exchange Street)								\$6,124,974	\$2,613,600	\$123,500	\$6,314,005	\$763,344	\$3,905,800	\$19,845,500													
TOTAL FOR YEARS 0-9 (Includes Exchange Street)								\$6,845,874	\$2,613,600	\$925,500	\$6,478,505	\$1,429,344	\$3,905,800	\$22,198,900													

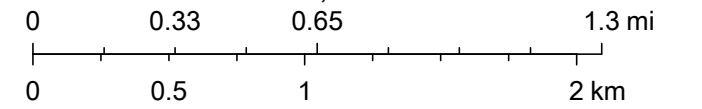
Long Range ROW CIP Map



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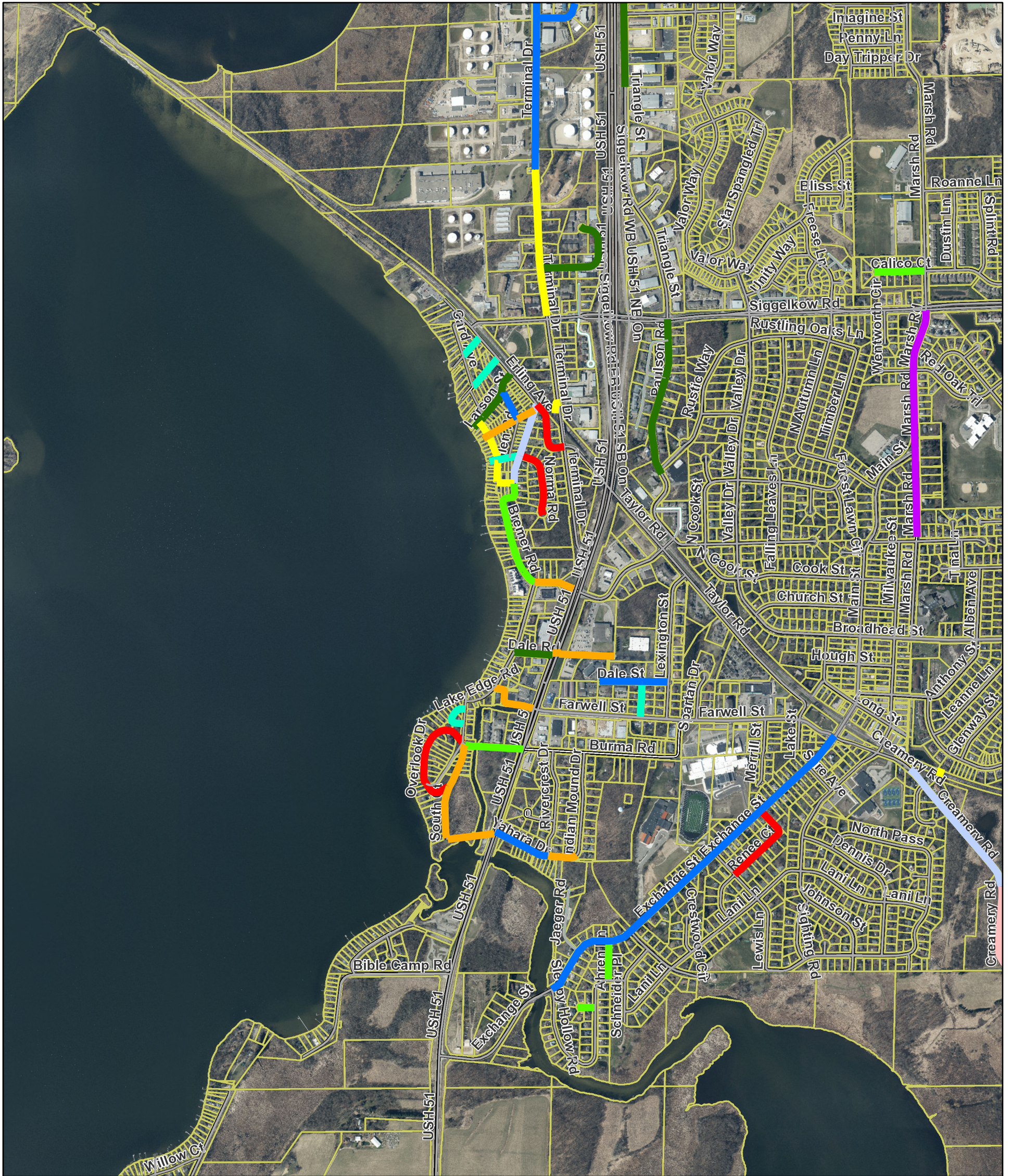
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|-----------|------|--------------------|--------------------|
| Draft CIP | 2025 | 2030 | County Highway |
| 2021 | 2026 | Road Centerlines | Local Road |
| 2022 | 2027 | Interstate Highway | Restricted Access |
| 2023 | 2028 | US Highway | Ramp |
| 2024 | 2029 | State Highway | Named Private Road |

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Long Range ROW CIP Map- West Side Streets

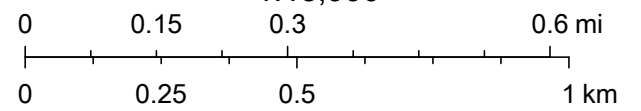


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- Draft CIP
- 2021
 - 2022
 - 2023
 - 2024
 - 2025
 - 2026
 - 2027
 - 2028
 - 2029
 - 2030

- State Highway
- County Highway
- Local Road
- Restricted Access
- Ramp
- Named Private Road
- Parcels

1:18,990



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VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Tuesday, August 10, 2021

SECTION: Business

DEPARTMENT: Public Works

CONTACT:

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding Town and Country's proposal for design services for the 2022 Paving and Utility Improvement projects.

PREVIOUS ACTION:

None.

ISSUE SUMMARY:

Enclosed within your packet is a proposal from the Village Engineer in order to design and bid the paving construction for the identified 2022 projects. The identified projects were included within the Long Term CIP Paving and Utility Improvement Plan presented prior to this business item. Assuming the plan is accepted, the next step will be for the Engineer to design these improvements over the course of the next several months. Bidding will take place in the first quarter of next year with construction to be determined sometime in the second and third quarter of next year.

FINANCIAL/BUDGET IMPACT:

The proposed cost of the work is \$200,080 for design engineering and bidding services. This would be paid out of Contractual Services within the Capital Projects fund.

VILLAGE PLAN REFERENCE:

None.

ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommendation for approval to the Village Board regarding Town & Country's proposal for design services for the 2022 Paving and Utility Improvement projects.

ATTACHMENTS:

1. 2022 Engineering Services Proposal

August 5, 2021

Mr. Matthew Schuenke, Administrator
Village of McFarland
5915 Milwaukee Street
P.O. Box 110
McFarland, WI 53558

Subject: Engineering Proposal for Design and Construction Services; Village of McFarland
2022 ROW Infrastructure Improvements Plan

Dear Matt:

Thank you for the opportunity to provide a proposal for design and construction services for the Village's planned work in 2022. The Village has recently been working towards a plan for future ROW infrastructure improvements. The plan has been discussed at Public Utilities and Public Works Committees, and has been reviewed in detail by staff. To that end, we have been requested to propose services for year 2022 of the plan. The following items are included in our proposed scope of services:

- **Topographic Site Survey:** We will call Digger's Hotline and record all existing features along the project area needed for completion of design and construction. This will include but is not limited to curbs, sidewalks, driveways, utilities (as marked by utilities), property corners that are able to be found, inverts of existing sanitary and storm sewer structures along with existing pipe diameters, and identify any conflicts between the surveyed conditions and the Village's existing utility maps for resolution with Village staff. We anticipate that some field survey will be via unmanned aircraft system (UAS) and be supplemented by ground survey where tree cover and additional accuracy requires.
- **Engineering Plans:** As part of the engineering plan development we anticipate providing 35% complete plans for Village review and comment, and again at 95% for Village review and comment, prior to completing the final plans. The plans will contain plan/profile sheets of both underground and above ground improvements. Plans will be provided in both hard copy and digital format (PDF and/or AutoCAD DWG).
- **Specifications:** Construction specifications will include a complete bidding package for anticipated late 2020/early 2021 construction that will be used to obtain bids and provide guidance during construction of the project. This will include the Advertisement for Bid, Instruction to Bidders, Bidders Proof of Responsibility, all bidding documents themselves (bid proposal form, affidavit of organization, bid bond), and standard construction contract documents as published by the EJCDC. We will also provide technical specifications outlining the materials and performance that will be required of the contractor. It is anticipated that one bid will be needed with a single general contractor.
- **Bidding Services:** We will answer questions from bidders and suppliers regarding plans and specifications. We will attend the bid openings, analyze the bids received, and attend a meeting with Village officials to formally recommend award for each of the bids.

- Construction Administration: We will review and comment on shop drawings submitted by the contractor. We will work with Village staff to resolve any change order requests and to prepare and process pay requests throughout the project. This will also include projecting and tracking costs for use in preparing a recommended method to recoup project costs from the benefitted developers.
- Construction Staking: We will provide construction staking for the contractor generally as requested. This is anticipated to include: actual and offset stakes for all sanitary sewer structures and piping at 50-foot intervals and elevation stakes for the anticipated access path above the sewer.
- Construction Management: We will administer a pre-construction meeting at Village offices, hold progress meetings on-site as necessary (likely weekly), answer questions during construction and visit the site approximately one to two times per week to verify the project conforms to the plans and specifications.
- Resident Project Representative Services: A resident project representative will observe all underground construction and communicate with Village and Town & Country staff during the project as questions and issues arise. We understand that this may also be provided by Village staff.
- Project Close-Out: We will prepare a punch list at substantial completion of the project. The project will be inspected along with Village staff prior to the end of the warranty period to ensure that any necessary repairs are completed by the contractor. Final payment requests will be prepared and presented to the Village.
- Record Drawings: Record drawings will be prepared in AutoCAD format from construction records showing actual locations of valves, fittings, bends, curb stops, sewer manholes, pipes, laterals, and appurtenances. The Village's GIS maps will be updated accordingly, along with the water system map. Once complete, these will be transmitted to the Village in both electronic (PDF and/or AutoCAD DWG) and paper format.

The estimated costs for these services are tabulated and attached to this letter. These costs are offered on a project-by-project basis so that the Village may elect to remove projects from this scope if planning changes. The observation costs assume full-time resident observation. This could be reduced if you elect to use your own staff. These figures are all considered not-to-exceed without prior authorization from the Village.

It should be noted that, if needed, the following services are anticipated to be carried out by a third party and invoiced directly to the Village separate from this agreement:

- Wetland determinations and delineations. There are portions of the project site containing wetland indicators, though one of the developers has already completed a recent delineation covering some of the route.
- Soil borings and reports.
- Archeology services and/or endangered species studies or services, if needed.
- Trench and soil compaction tests during construction.
- Boundary surveys for easements
- Negotiation and purchasing of easements

Our work will be done on a time and materials basis using our current charge-out rates, attached for your reference.

Please indicate Village acceptance by signing below and returning a copy for our files.

Thank you again for the opportunity to work with the Village. We very much appreciate our relationship and look forward to a successful project.

Very truly yours,
TOWN & COUNTRY ENGINEERING, INC.

Tim J. Stieve, P.E., ENV-SP

Matthew Schuenke
Village Administrator

TJS:sai

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**Engineering Services For
2022 Capitol Improvements Plan
Village of McFarland
8/5/2021**

Street	From	To	Total Project Estimate	Design Engineering Through Bidding	Construction Administration	Resident Construction Observation	Proposed Engineering Services Total
S Terminal Drive	Lift Station 4	Siggelkow Road	\$1,557,800	\$109,050	\$77,890	\$62,320	\$249,260
Osborn Pond	Behind 557x Osborn Drive		\$75,000	\$6,750	\$4,500	\$3,000	\$14,250
Terminal Drive	Railroad bridge		\$35,000	\$3,150	\$2,100	\$1,400	\$6,650
Hidden Farm Rd	Elvehjem Road	Orchard Hill Park Entrance	\$393,250	\$27,530	\$19,670	\$15,730	\$62,930
Card Ave/Bellvue Ct	Larson Street	Bremer Road	\$620,600	\$43,450	\$31,030	\$24,830	\$99,310
Storck Rd	Siggelkow Rd	Termini	\$145,000	\$10,150	\$7,250	\$5,800	\$23,200

Town & Country Engineering, Inc.
500 Series

Principal/Senior Project Manager	\$145.00 per hour
Water Specialist	\$140.00 per hour
Senior Project Engineer	\$125.00 per hour
Project Engineer II.....	\$115.00 per hour
Project Engineer I.....	\$110.00 per hour
Branch Office Engineer	\$105.00 per hour
Staff Engineer II	\$95.00 per hour
Staff Engineer I	\$85.00 per hour
Senior Engineering Technician	\$85.00 per hour
Engineering Technician II.....	\$75.00 per hour
Engineering Technician I.....	\$65.00 per hour
Resident Inspector II	\$80.00 per hour
Resident Inspector I	\$65.00 per hour
Grant Writer.....	\$70.00 per hour
Secretary II.....	\$55.00 per hour
Secretary I.....	\$50.00 per hour
Mileage.....	\$0.65 per mile
Total Station/GPS Survey Equipment	\$20.00 per hour of actual use
Computer used for CADD	\$15.00 per hour of actual use
Plotter.....	\$15.00 per plan page


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Tuesday, August 10, 2021

SECTION: Business

DEPARTMENT: Public Works

CONTACT:

AGENDA ITEM: Update and discussion regarding sewer rates and the sewer rate study

PREVIOUS ACTION:

Public Utilities committee approved an increase of 22% to sanitary sewer rates on February 18, 2020. The Village Board approved the rate increase on February 24, 2020.

ISSUE SUMMARY:

In 2019, the Public Utilities committee and Village Board approved a proposal from Town & Country Engineering to study the rate structure of the Sanitary Sewer Utility. The Public Utilities committee approved an increase of 22% to sanitary sewer rates on February 18, 2020 with the Village Board approving this rate increase on February 24, 2020. The increased rates went into effect on August 5, 2020 (the delay in implementation was due to COVID).

Town & Country Engineering provided a true-up of data in October 2020 to the Public Utilities committee. The document prepared is included within the packet for reference. The data provided was unaudited and the full effect of the rate increase had likely not been seen yet. No changes occurred at that time. It was recommended to true-up the data again and present it to the committee in August of 2021. The utility provided data to Town & Country through July 31, 2021 and will be presenting their findings at the meeting related to projections. Our objective will be to make a recommendation to the Village Board on whether or not there should be a Sanitary Sewer Rate Increase in 2022. We will likely schedule this recommendation for action at the meeting in September.

FINANCIAL/BUDGET IMPACT:

VILLAGE PLAN REFERENCE:

None.

ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

None.

ATTACHMENTS:

1. October 2020 Cash Flow Projection



**VILLAGE OF McFARLAND - SEWER UTILITY
CASH FLOW PROJECTION - Projected rate increase
Approximate True-Up after 9/30/2020**

ASSUMPTIONS

INTEREST INCOME RATE ASSUMED	0.50%
O&M ANNUAL INCREASE	3.00%
MMSD ANNUAL INCREASE	3.00%

BUDGET ITEM	2018	2019	2020		2021	2022	2023	2024	2025	2026	2027	2028
			Planned	Actual (extrapolated)								
EXPENSES	Actual											
Loans												
2015 Notes	\$ 155,187	\$ 143,744	\$ 154,788	\$ 154,788	\$ 156,988	\$ 154,088	\$ 156,333	\$ 158,333	\$ -	\$ -	\$ -	\$ -
2017 Notes	\$ 7,177	\$ 32,631	\$ 39,663	\$ 39,663	\$ 38,875	\$ 38,088	\$ 37,300	\$ 41,600	\$ 40,800	\$ -	\$ -	\$ -
Proposed Lift Station Upgrade (\$1M, 10yr, 4%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 123,291	\$ 123,291	\$ 123,291	\$ 123,291	\$ 123,291	\$ 123,291	\$ 123,291
O&M												
Annual Operation and Maintenance	\$ 404,455	\$ 416,589	\$ 429,086	\$ 453,779.95	\$ 467,393	\$ 481,415	\$ 495,858	\$ 510,733	\$ 526,055	\$ 541,837	\$ 558,092	\$ 574,835
Annual MMSD Charge	\$ 665,562	\$ 685,529	\$ 706,095	\$ 769,854	\$ 792,950	\$ 816,738	\$ 841,241	\$ 866,478	\$ 892,472	\$ 919,246	\$ 946,824	\$ 975,228
Other Expenses												
Capital Lease (17.5% Share, 50/50 with water)	\$ 2,102	\$ 2,388	\$ 2,388	\$ 2,388	\$ 2,388	\$ 2,388	\$ 2,388	\$ 2,388	\$ 2,388	\$ 2,388	\$ 2,388	\$ 2,388
Proposed Replacement Funds												
Equipment Replacement Fund Deposit	\$ -	\$ -	\$ -	\$ -	\$ 22,023	\$ 22,023	\$ 22,023	\$ 22,023	\$ 22,023	\$ 22,023	\$ 22,023	\$ 22,023
Collection System Replacement Fund Deposit	\$ -	\$ -	\$ -	\$ -	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
TOTAL ANNUAL EXPENSES	\$ 1,234,483	\$ 1,280,880	\$ 1,332,019	\$ 1,420,472	\$ 1,605,616	\$ 1,763,030	\$ 1,803,432	\$ 1,849,845	\$ 1,732,029	\$ 1,733,785	\$ 1,777,617	\$ 1,822,765
REVENUES												
User Charge Revenues	\$ 1,074,576	\$ 1,133,403	\$ 1,134,904	\$ 1,287,358	\$ 1,469,444	\$ 1,511,817	\$ 1,513,698	\$ 1,565,771	\$ 1,567,713	\$ 1,569,656	\$ 1,608,068	\$ 1,610,056
Forfeited Discounts Revenue	\$ 7,901	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Income	\$ -	\$ 5,974	\$ 5,266	\$ 9,895	\$ 4,307	\$ 3,032	\$ 1,791	\$ 351	\$ (1,068)	\$ (1,895)	\$ (2,725)	\$ (3,586)
-\$400K Restricted Replacement Account [Not used as revenue]	\$ 25,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$78K Depreciation Reserve Account [Not used as revenue]	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL ANNUAL REVENUE	\$ 1,082,477	\$ 1,139,377	\$ 1,140,170	\$ 1,297,252	\$ 1,473,752	\$ 1,514,849	\$ 1,515,489	\$ 1,566,122	\$ 1,566,646	\$ 1,567,761	\$ 1,605,343	\$ 1,606,470
Cash and Equivalents - Beginning of Year	\$ 1,346,763	\$ 1,194,757	\$ 1,053,254	\$ 861,405	\$ 738,186	\$ 606,321	\$ 358,140	\$ 70,197	\$ (213,527)	\$ (378,910)	\$ (544,933)	\$ (717,207)
Annual Excess Revenue (Shortfall)	\$ (152,006)	\$ (141,503)	\$ (191,849)	\$ (123,220)	\$ (131,865)	\$ (248,181)	\$ (287,943)	\$ (283,723)	\$ (165,383)	\$ (166,023)	\$ (172,274)	\$ (216,295)
Total Available Carryover	\$ 1,194,757	\$ 1,053,254	\$ 861,405	\$ 738,186	\$ 606,321	\$ 358,140	\$ 70,197	\$ (213,527)	\$ (378,910)	\$ (544,933)	\$ (717,207)	\$ (933,502)
REVENUE DETAILS												
Equivalent Meters (EM) Added		13	5	68.4	5	5	5	5	5	5	5	5
Gallons/Year Added/EM @ 3500 gal/mo/EM (1000 gal)		546	210	2873.0	210	210	210	210	210	210	210	210
Monthly Usage Per EM	3,641											
Estimated Number of Equivalent Meters	3490	3503	3508	3572	3577	3582	3587	3592	3597	3602	3607	3612
Estimated Annual Sewer Usage (1000 gallons)*	172,633	173,179	173,389	190,100	190,310	190,520	190,730	190,940	191,150	191,360	191,570	191,780
ESTIMATED BI-MONTHLY USER CHARGES												
Fixed Charges on Debt												
Bi-Monthly Fixed Charge per EM Implemented	\$ 28.05	\$ 28.05	\$ 28.05	\$ 33.00	\$ 33.00	\$ 34.00	\$ 34.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.80	\$ 35.80
Annual Fixed Charge Revenue Generated	\$ 587,433	\$ 589,621	\$ 590,463	\$ 636,495	\$ 708,206	\$ 730,687	\$ 731,707	\$ 754,278	\$ 755,328	\$ 756,378	\$ 774,741	\$ 775,815
Variable Charges - O, M & R Costs (Cost per 1000 gallons)												
Variable Charge per 1000 Gallons Implemented	\$ 3.14	\$ 3.14	\$ 3.14	\$ 4.00	\$ 4.00	\$ 4.10	\$ 4.10	\$ 4.25	\$ 4.25	\$ 4.25	\$ 4.35	\$ 4.35
Annual Variable Charge Revenue Generated	\$ 542,067	\$ 543,781	\$ 544,441	\$ 650,863	\$ 761,238	\$ 781,130	\$ 781,991	\$ 811,493	\$ 812,385	\$ 813,278	\$ 833,327	\$ 834,241
TOTAL BI-MONTHLY USER CHARGE PER EM	\$ 50.92	\$ 50.92	\$ 50.92	\$ 62.13	\$ 62.13	\$ 63.86	\$ 63.86	\$ 65.95	\$ 65.95	\$ 65.95	\$ 67.48	\$ 67.48
REVENUE GENERATED BY RATES	\$ 1,129,500	\$ 1,133,403	\$ 1,134,904	\$ 1,287,358	\$ 1,469,444	\$ 1,511,817	\$ 1,513,698	\$ 1,565,771	\$ 1,567,713	\$ 1,569,656	\$ 1,608,068	\$ 1,610,056
DEBT COVERAGE RATIO	76.1%	75.6%	72.7%	76.9%	80.5%	81.4%	81.0%	81.1%	96.1%	100.0%	100.0%	100.0%


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Tuesday, August 10, 2021

SECTION: Business

DEPARTMENT: Public Works

CONTACT: Aimee Irwin, Assistant to the Public Works Director, Jim Hessling,
Public Works Director

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding the utility's meter reading and installation process.

PREVIOUS ACTION:

None.

ISSUE SUMMARY:

Previously, the Public Utilities committee reviewed various options for the future of meter reading for the utility. The main reasons for reviewing the meter reading process include: 50W endpoints failing in the system due to battery life, the meter reading handheld no longer supported or sold, improving usage tracking data for the utility and customers. An endpoint is the part of the meter that transmits a signal to the handheld reader to report usage.

Three main options have been presented:

1. Take no action: 50W endpoints continue to fail, the meter reading handheld may fail and there is no technical support for the handheld after 2021. Replace failing 50W with 100W endpoints (if backstock is available). Replace the handheld with another temporary handheld for \$2,000
2. Improved Mobile Drive-By: Purchase hardware and software in the amount of \$14,500. Replacement of 50W endpoints due to failures and new software not able to read these endpoints. Create a timeline to replace the 60W and 100W endpoints to switch to the new hardware. Note: this approach is seen as temporary as the industry is moving away from this format.
3. Cellular Reading: Purchase hardware and software in the amount of \$12,500. Replacement of 50W endpoints due to failures and new software not able to read these endpoints. Create a timeline to replace the 60W and 100W endpoints to switch to cellular endpoints.

Grand Total to move to the second option is \$1,612,460.00 plus service costs, which are annual fees.

*Service costs per year for this approach are: \$4,073.64

Grand Total to move to the third option is \$1,654,002.00 plus service costs, which are annual fees.

*Service costs per year will adjust after each type of endpoint is replaced. After 50W replacements: \$12,828.12. After 60W replacements: \$17,980.92. After 100W replacements: \$20,115.48 OR \$32,431.08 (the two options depend on the available features offered)



If a change to option two or three is selected, a PSC Construction Authorization will be required. The approval from the PSC is required if "meter replacement includes an upgrade in technology from automatic meter reading (AMR) or advanced metering infrastructure (AMI), and/or an accelerated replacement schedule."

If desired to hire a contractor to complete the installation of replacements, estimated costs are below:

*50W replacement \$225,810.00 (replacing the endpoint and meter for 1737 meters)

*60W replacement \$125,840.00 (replacing the endpoint and meter for 968 meters)

*100W replacement \$93,080.00 (replacing the endpoint and meter for 716 meters)

Contracting out this type of service helps the public works department continue to complete their regular job duties, allowing for replacements after hours and efficiency in terms of scheduling the replacements.

Staff would recommend updating the meter reading to a cellular AMI approach and hiring a contractor for installation.

FINANCIAL/BUDGET IMPACT:

Anticipated that the 50W/60W/100W replacements occur over a three year period. The replacement and hardware/software costs would be funded by borrowed money as a capital project for water. If a contractor is hired for installation, these costs will be included within the borrowed money.

Service fees (annual fees) will be included in the Support Services line within the Utility. Current annual fees for existing software and hardware support amount to \$1,500.00 per year. These fees are paid quarterly to Itron and consist of Hardware Maintenance and Software Maintenance. The increase in annual fees from the existing amount to the new process amount will need to be included in the upcoming year's budget.

VILLAGE PLAN REFERENCE:

None.

ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommendation to the Village Board to upgrade the meter reading process for the utility to a cellular AMI format and to contract with a company for the installation process.

ATTACHMENTS:

1. Beacon Orion SE mobile drive by
2. Beacon Orion Cellular
3. Future Meter Reading options

6/11/2021

McFarland Metering System Upgrade

Itron to BEACON/ORION ME/SE

<u>2021</u>		<u>Quantity</u>	<u>Price</u>	<u>Extension</u>
Q3, Q4	Continued System Maintenance and Product Replacement			
	Badger M25 meters w/HRE Registers and Integral Itron (100W) transmitters	90		Current Budget
2022				
Q1	BEACON System Implementation: Itron to BEACON (per 3/2/21 quote)			
	BEACON interface, implementation, reading equipment, training	1	\$ 14,500.00	\$ 14,500.00
	Phase 1 "50W Replacement": complete replacement of meter/encoders/transmitters			
	<i>50W Meters</i>			
	M25B meters with HR-LCD, ORION ME/SE	1,665	\$ 249.00	\$ 414,585.00
	M55B meters with HR-LCD, ORION ME/SE	34	\$ 354.00	\$ 12,036.00
	M120 meters with HR-LCD, ORION ME/SE (1-1/2" meters)	28	\$ 729.00	\$ 20,412.00
	M170 meters with HROLCD, ORION ME/SE (2" meters)	9	\$ 994.00	\$ 8,946.00
	E-3 meters with ORION ME/SE (3" meters)	1	\$ 2,766.00	\$ 2,766.00
	Equipment Subtotal			\$ 458,745.00
	Installation: 3/4"-1" Meters	1,737	\$ 130.00	\$ 225,810.00
	Total BEACON Implementation and Phase 1 Field Hardware	1,737		\$ 473,245.00
	Total BEACON Implementation and Phase 1 Field Hardware with Installation	1,737		\$ 684,555.00
	BEACON Service Units (completed Phase 1)			
	Mobile Service Units (Itron 60W, 100W meters; 20,208 purchased annually)	20,208	\$ 0.07	\$ 1,414.56
	Mobile Read Annual License & User Login	1,200		\$ 1,200.00
	Annual ORION Mobile Service Unit Fee (increments of 24,000 purchased annually)	20,844	\$ 0.07	\$ 1,459.08
				\$ 4,073.64
Future	Phase 2 Updating Meters with 60W & 100W (Encoder and ORION Cellular Transmitter)			
	Phase 2A - 60W Meters			
	<i>60W Meters</i>			
	M25B meters with HR-LCD, ORION ME/SE	933	\$ 249.00	\$ 232,317.00
	M35B, 3/4" meters with HR-LCD, ORION ME/SE	1	\$ 294.00	\$ 294.00
	M55B meters with HR-LCD, ORION ME/SE	13	\$ 354.00	\$ 4,602.00
	M120 meters with HR-LCD, ORION ME/SE (1-1/2" meters)	8	\$ 729.00	\$ 5,832.00
	M170 meters with HROLCD, ORION ME/SE (2" meters)	3	\$ 994.00	\$ 2,982.00
	E-3 meters with ORION ME/SE (3" meters)	8	\$ 2,766.00	\$ 22,128.00
	E-4 meters with ORION ME/SE (4" meters)	2	\$ 3,364.00	\$ 6,728.00
	Installation: 3/4"-1" Meters w/60W	968	\$ 130.00	\$ 125,840.00
	Total Phase 2A Field Hardware	968		\$ 400,723.00
	Total Phase 2A Field Hardware with Installation	968		\$ 526,563.00
	BEACON Service Units (Completed Phase 2A)			
	Mobile Service Units (Itron 100W meters, purchased annually)	8,592	\$ 0.07	\$ 601.44
	Mobile Read Annual License & User Login	1,200		\$ 1,200.00
	Annual ORION Mobile Service Unit Fee (24,000 purchased annually)	32,460	\$ 0.07	\$ 2,272.20
				\$ 4,073.64
	Phase 2B - 100W Meters			
	<i>100W Meters</i>			
	M25B meters with HR-LCD, ORION ME/SE	698	\$ 265.00	\$ 184,970.00
	M25B meters with HR-LCD, ORION ME/SE	2	\$ 265.00	\$ 530.00
	M55B meters with HR-LCD, ORION ME/SE	5	\$ 354.00	\$ 1,770.00
	M120 meters with HR-LCD, ORION ME/SE (1-1/2" meters)	3	\$ 729.00	\$ 2,187.00
	(blank) M120 meter with HR-LCD, ORION ME/SE (1-1/2" meters)	1	\$ 729.00	\$ 729.00
	M170 meters with HROLCD, ORION ME/SE (2" meters)	5	\$ 994.00	\$ 4,970.00
	E-3 meters with ORION ME/SE (3" meters)	2	\$ 2,766.00	\$ 5,532.00
	Installation: 3/4"-1" Meters w/100W	716	\$ 130.00	\$ 93,080.00
	Total Phase 2B Field Hardware	716		\$ 293,768.00
	Total Phase 2B Field Hardware with Installation	716		\$ 386,848.00
	Completed Project Costs: Software Implementation and all Field Hardware			\$ 1,167,736.00
	Completed Project Costs: Field Installation			\$ 444,730.00
	Total Project, Installed			\$ 1,612,466.00
	Ongoing Annual Expenses			
	BEACON Service Units (completed Phase 2 - Project Completion)			
	Total Services	3,421		
	Annual ORION Mobile Service Unit Fee (41,040 purchased annually)	41,052	\$ 0.07	\$ 2,873.64
	Annual ORION MobileRead License Fee	1,200		\$ 1,200.00
				\$ 4,073.64
	Annual ORION SE Traditional Network Service Unit Fee (41,040 purchased annually) *	41,052	\$ 0.25	\$ 10,263.00
	* Requires the addition of ORION SE Gateway network			
	ORION SE Network Upgrade			
	ORION SE Gateways (est. 4) @ \$9,500 each = \$38,000 (budget replacement 5 years)			\$ 38,000.00
	ORION SE Network Annual Fees			
	ORION SE Gateway Data Backhaul (est. 4) @ \$350 each = \$1,400			\$ 1,400.00
	* Optional EyeOnWater			
	EyeOnWater Consumer Engagement (year one) = \$3,000			\$ 3,000.00
	EyeOnWater Consumer Engagement (annual fee) = \$1,500			
	Network Upgrade Summary			\$ 42,400.00

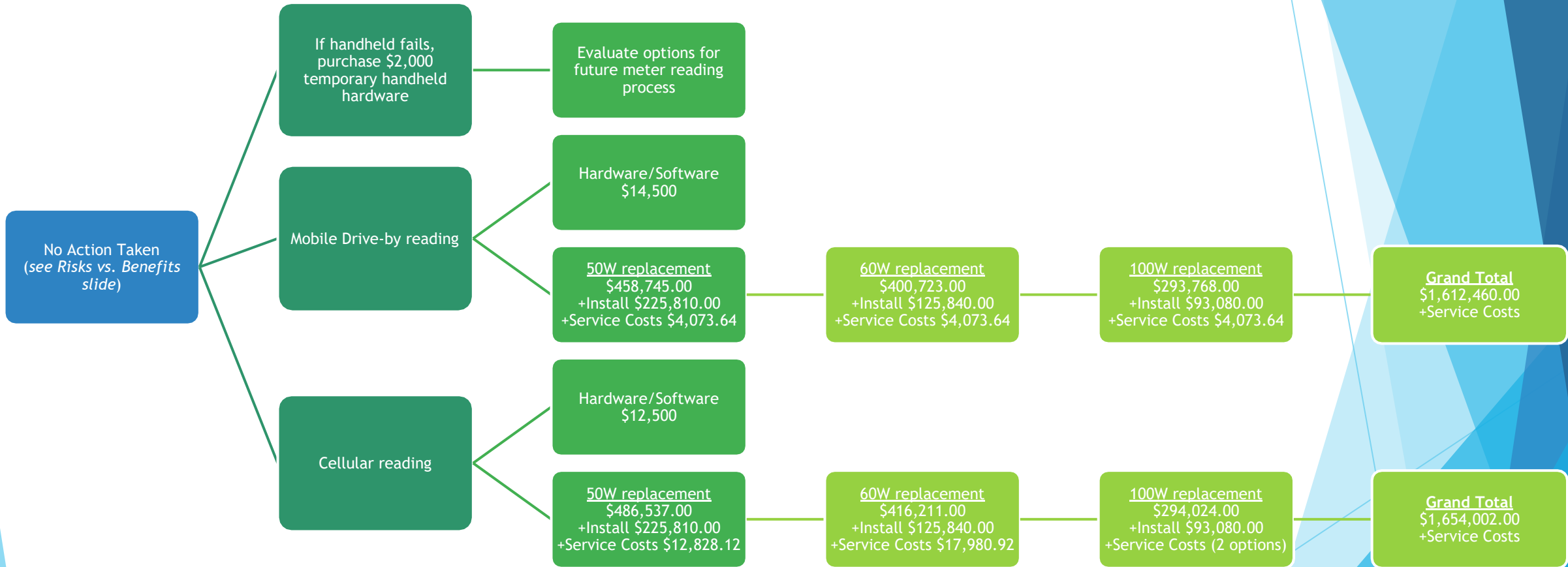
6/11/2021

McFarland Metering System Upgrade

Itron to BEACON/ORION Cellular

<u>2021</u>	<u>Quantity</u>	<u>Price</u>	<u>Extension</u>
Q3, Q4	Continued System Maintenance and Product Replacement		
	Badger M25 meters w/HRE Registers and Integral Itron (100W) transmitters	90	Current Budget
2022	BEACON System Implementation: Itron to BEACON (per 3/2/21 quote)		
Q1	BEACON interface, implementation, reading equipment, training	1	\$ 12,500.00 \$ 12,500.00
	Phase 1 "50W Replacement": complete replacement of meter/encoders/transmitters		
	<i>50W Meters</i>		
	M25B meters with HR-LCD, ORION Cellular	1,665	\$ 265.00 \$ 441,225.00
	M55B meters with HR-LCD, ORION Cellular	34	\$ 370.00 \$ 12,580.00
	M120 meters with HR-LCD, ORION Cellular (1-1/2" meters)	28	\$ 745.00 \$ 20,860.00
	M170 meters with HROLCD, ORION Cellular (2" meters)	9	\$ 1,010.00 \$ 9,090.00
	E-3 meters with ORION Cellular (3" meters)	1	\$ 2,782.00 \$ 2,782.00
	Equipment Subtotal		\$ 486,537.00
	Installation: 3/4"-1" Meters	1,737	\$ 130.00 \$ 225,810.00
	Total BEACON Implementation and Phase 1 Field Hardware	1,737	\$ 499,037.00
	Total BEACON Implementation and Phase 1 Field Hardware with Installation	1,737	\$ 712,347.00
	BEACON Service Units (completed Phase 1)		
	Mobile Service Units (Itron 60W, 100W meters; 20,208 purchased annually)	20,208	\$ 0.07 \$ 1,414.56
	Mobile Read Annual License & User Login	1,200	\$ 1,200.00
	Annual ORION Cellular Service Unit Fee (increments of 24,000 purchased annually) *	20,844	\$ 0.49 \$ 10,213.56
			\$ 12,828.12
Future	Phase 2 Updating Meters with 60W & 100W (Encoder and ORION Cellular Transmitter)		
	Phase 2A - 60W Meters		
	<i>60W Meters</i>		
	M25B meters with HR-LCD, ORION Cellular	933	\$ 265.00 \$ 247,245.00
	M35B, 3/4" meters with HR-LCD, ORION Cellular	1	\$ 310.00 \$ 310.00
	M55B meters with HR-LCD, ORION Cellular	13	\$ 370.00 \$ 4,810.00
	M120 meters with HR-LCD, ORION Cellular (1-1/2" meters)	8	\$ 745.00 \$ 5,960.00
	M170 meters with HROLCD, ORION Cellular (2" meters)	3	\$ 1,010.00 \$ 3,030.00
	E-3 meters with ORION Cellular (3" meters)	8	\$ 2,782.00 \$ 22,256.00
	E-4 meters with ORION Cellular (4" meters)	2	\$ 3,380.00 \$ 6,760.00
	Installation: 3/4"-1" Meters w/60W	968	\$ 130.00 \$ 125,840.00
	Total Phase 2A Field Hardware	968	\$ 416,211.00
	Total Phase 2A Field Hardware with Installation	968	\$ 542,051.00
	BEACON Service Units (Completed Phase 2A)		
	Mobile Service Units (Itron 100W meters, purchased annually)	8,592	\$ 0.08 \$ 687.36
	Mobile Read Annual License & User Login	1,200	\$ 1,200.00
	Annual ORION Cellular Service Unit Fee (24,000 purchased annually) *	32,844	\$ 0.49 \$ 16,093.56
			\$ 17,980.92
	Phase 2B - 100W Meters		
	<i>100W Meters</i>		
	M25B meters with HR-LCD, ORION Cellular	698	\$ 265.00 \$ 184,970.00
	M25B meters with HR-LCD, ORION Cellular	2	\$ 265.00 \$ 530.00
	M55B meters with HR-LCD, ORION Cellular	5	\$ 370.00 \$ 1,850.00
	M120 meters with HR-LCD, ORION Cellular (1-1/2" meters)	3	\$ 745.00 \$ 2,235.00
	(blank) M120 meter with HR-LCD, ORION Cellular (1-1/2" meters)	1	\$ 745.00 \$ 745.00
	M170 meters with HROLCD, ORION Cellular (2" meters)	5	\$ 1,010.00 \$ 5,050.00
	E-3 meters with ORION Cellular (3" meters)	2	\$ 2,782.00 \$ 5,564.00
	Installation: 3/4"-1" Meters w/100W	716	\$ 130.00 \$ 93,080.00
	Total Phase 2B Field Hardware	716	\$ 294,024.00
	Total Phase 2B Field Hardware with Installation	716	\$ 387,104.00
	Completed Project Costs: Software Implementation and all Field Hardware		\$ 1,209,272.00
	Completed Project Costs: Field Installation		\$ 444,730.00
	Total Project, Installed		\$ 1,654,002.00
	Ongoing Annual Expenses		
	BEACON Service Units (completed Phase 2 - Project Completion)		
	Total Services	3,421	
	Annual ORION Cellular HES Service Unit Fee (41,040 purchased annually) *	41,052	\$ 0.49 \$ 20,115.48
	Annual ORION Cellular Full-Featured Service Unit Fee (41,040 purchased annually)	41,052	\$ 0.79 \$ 32,431.08

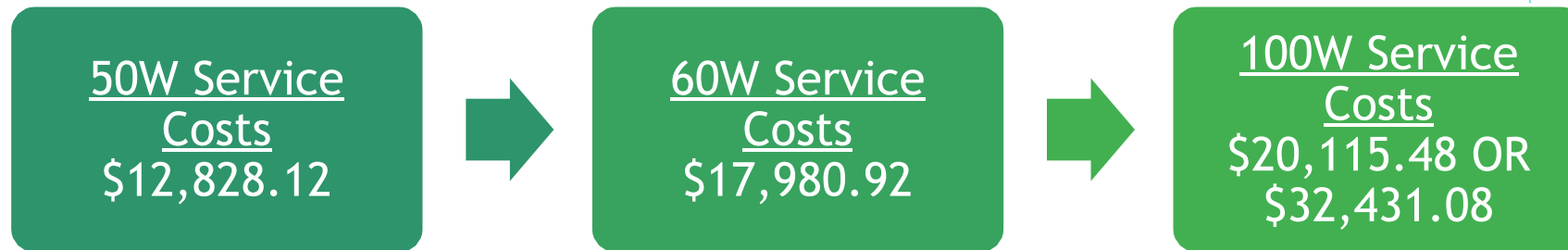
* Option Upon BMI Approval: Limited features/hourly meter reads. EyeOnWater, system pressure, system/meter temperature not available



Mobile Drive-by



Cellular data collection



Risk versus Benefit

Risk to Status Quo

- ◆ Failure of 50W endpoints
- ◆ Visual reads required (customers or staff)
- ◆ Meter reading accuracy
- ◆ Possible PSC implications
- ◆ Lost revenue
- ◆ Handheld failure
- ◆ System maintenance with current process (hardware & software costs)
- ◆ Customer inconvenience

Benefits to Improvements

- ◆ Meter reading remotely
- ◆ Improvements to meter change out and testing schedules
- ◆ Improved accuracy for usage
- ◆ Possible customer access to their usage data
- ◆ Badger software & Badger hardware (1 vendor)
- ◆ Possible early leak detection
- ◆ Support by Midwest Meter

Replacement details

- ◆ PSC approval of new meter reading process: 60-120 days (once filed with PSC) for cellular/fixed network approach
- ◆ Software/Hardware setup: 60-90 days
- ◆ 50W replacements (hired contractor): approximately 3 months

Details to keep in mind...

- ◆ Moving to the new format of mobile drive-by is a *temporary fix*...
 - ◆ Industry is moving away from this option to a fixed network which is why cellular is commonly chosen (*even with increased costs*)
 - ◆ Moving to our own fixed network will require additional equipment, ongoing maintenance and replacement of that equipment
 - ◆ Annual service fee \$10,263.00
 - ◆ Network Upgrade \$38,000.00 (budget replacement in 5 years)
 - ◆ Data Backhaul \$1,400.00
 - ◆ *Optional EyeOnWater—Year 1 \$3,000 with annual fee of \$1,500
 - ◆ **Total Network Upgrade Summary \$42,400.00 + Annual Service Fee \$10,263.00**


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Tuesday, August 10, 2021

SECTION: Business

DEPARTMENT: Public Works

CONTACT:

AGENDA ITEM: Presentation of the Public Works monthly report.

PREVIOUS ACTION:

ISSUE SUMMARY:

FINANCIAL/BUDGET IMPACT:

VILLAGE PLAN REFERENCE:

ORDINANCE REFERENCE:

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

ATTACHMENTS:

1. July 2021 Monthly Report

PUBLIC WORKS COMMITTEE

August 10, 2021

PUBLIC UTILITIES COMMITTEE

August 10, 2021

Public Works Directors Report

for

July 2021

The following is information concerning events and activities of the Public Works Department along with the Water and Sewer Utilities for the previous month. This information is provided in brief to provide an overview of the highlights.

Broadhead Street Reconstruction

Work for this year is completed and the street is open. We will be adding temporary striping. Surface asphalt will be completed in 2022 to help accommodate the new Public Safety Center.

GIS Update

The department continues to upgrade the villages GIS opportunities when possible. Personnel have been out in the field collecting data.

Valve Turner

As part of our equipment replacement, the department took delivery of a new valve turner last month. Training on this piece of equipment was held in July.

Antenna Upgrade Project

US Cellular is performing an ongoing antennae upgrade on the Burma Road water tower. As part of this work, a new safety railing system will be installed. Dixon Engineering is watching over this project.

Sewer Forcemain Repair at McDaniel Park

The department located a pinched sewer forcemain pipe at McDaniel Park. After several attempts, the pipe was repaired and cleaned before it was put back in service. Portable toilets were used to help facilitate continued use of the park while the work was underway.

Certification

Sayer Larson, Parks Superintendent passed his exam is now a Certified Playground Safety Inspector (CPSI). The CPSI certification program provides the most comprehensive and up-to-date training on playground safety issues including hazard identification, equipment specifications, surfacing requirements and risk management methods. Congratulations Sayer!

Meetings/Training/Seminars

All meetings were held by electronic means this month. Those meetings include:

- Salt Savers check in w/ MMSD - Irwin
- APWA monthly board meeting - Igl
- APWA Young Professionals meeting - Irwin
- APWA Lunch and Learn - Proactive Asphalt Pavement Maintenance - Igl

2021 WATER SYSTEM IMPACT FEES

Collected in Month	2021 Fees	2020 Fees	2021 Impact Fee Distribution		
			Tower	Main	Well
January	-	1,950.00	-	-	-
February	5,851.00	4,550.00	3,298.86	936.16	1,615.98
March	3,900.00	4,550.00	2,198.88	624.00	1,077.12
1st Quarter Total	9,751.00	11,050.00	5,497.74	1,560.16	2,693.10
April	1,950.00	10,402.00	1,099.44	312.00	538.56
May	650.00	1,950.00	366.48	104.00	179.52
June	1,950.00	3,250.00	1,099.44	312.00	538.56
2nd Quarter Total	4,550.00	15,602.00	2,565.36	728.00	1,256.64
July	650.00	3,900.00	366.48	104.00	179.52
August	-	2,600.00	-	-	-
September	-	1,950.00	-	-	-
3rd Quarter Total	650.00	8,450.00	366.48	104.00	179.52
October	-	1,950.00	-	-	-
November	-	9,101.00	-	-	-
December	-	18,701.16	-	-	-
4th Quarter Total	-	29,752.16	-	-	-

HISTORICAL WATER IMPACT FEE TOTALS

2021 Total	14,951.00		8,429.58	2,392.16	4,129.26
2020 Total	64,854.16		38,222.36	10,020.80	16,611.00
2019 Total	57,201.00		32,250.79	9,152.16	15,798.05
2018 Total	71,501.00		40,313.34	11,440.16	19,747.50
2017 Total	60,801.20		34,281.17	9,728.00	16,792.03
2016 Total	38,026.00		23,708.24	5,252.00	9,065.76
2015 Total	5,851.00		3,298.92	936.00	1,616.08
2014 Total	7,150.00		4,031.28	1,144.00	1,974.72
2013 Total	21,125.00		11,910.59	3,380.00	5,834.41
2012 Total	13,650.00		7,696.08	2,184.00	3,769.92
2011 Total	12,350.00		6,963.12	1,976.00	3,410.88
2010 Total	5,200.00		2,931.84	832.00	1,436.16
2009 Total	7,150.00		4,031.26	1,144.00	1,974.74
2008 Total	10,400.00		5,863.62	1,664.00	2,872.38
2007 Total	34,451.00		19,423.88	5,512.16	9,514.96
2006 Total	28,927.00		16,309.33	4,628.32	7,989.35
2005 Total	52,326.00		29,501.92	8,372.16	14,451.92
2004 Total	77,679.00		43,796.20	12,428.64	21,454.16
2003 Total	59,802.00		33,716.97	9,568.32	16,516.71
2002 Total	69,625.00		39,255.27	11,140.00	19,229.73
2001 Total	55,271.50		31,162.62	8,843.44	15,265.44
2000 Total	56,701.00		31,968.59	9,072.16	15,660.25
1999 Total	55,388.00		31,228.31	8,862.08	15,297.61
1998 Total	14,581.73		8,221.33	2,333.08	4,027.32
Grand Total	\$ 815,157.43	\$ -	\$ 461,864.67	\$ 129,592.68	\$ 223,700.08

\$650=	\$366.48	\$104.00	\$179.52
\$1300	\$732.96	\$208.00	\$359.04

Tower= .56381, Main=.16, Well=.27619