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2015 INGLEWOOD DRIVE IMPROVEMENTS

CITY PROJECT NO. 4105

FEASIBILITY REPORT

Council Approval Date: March 17, 2015

Prepared for
City of Baxter

WSN No. 0102B0364.000

2015 INGLEWOOD DRIVE ROADWAY IMPROVEMENTS

MUNICIPAL PROJECT NO. 4105

FEASIBILITY REPORT

Prepared for
City of Baxter

WSN No. 0102B0364.000

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.



Aric Welch
Professional Engineer

41983

License Number

03/17/2015

Date

2015 INGLEWOOD DRIVE ROADWAY IMPROVEMENTS FEASIBILITY STUDY

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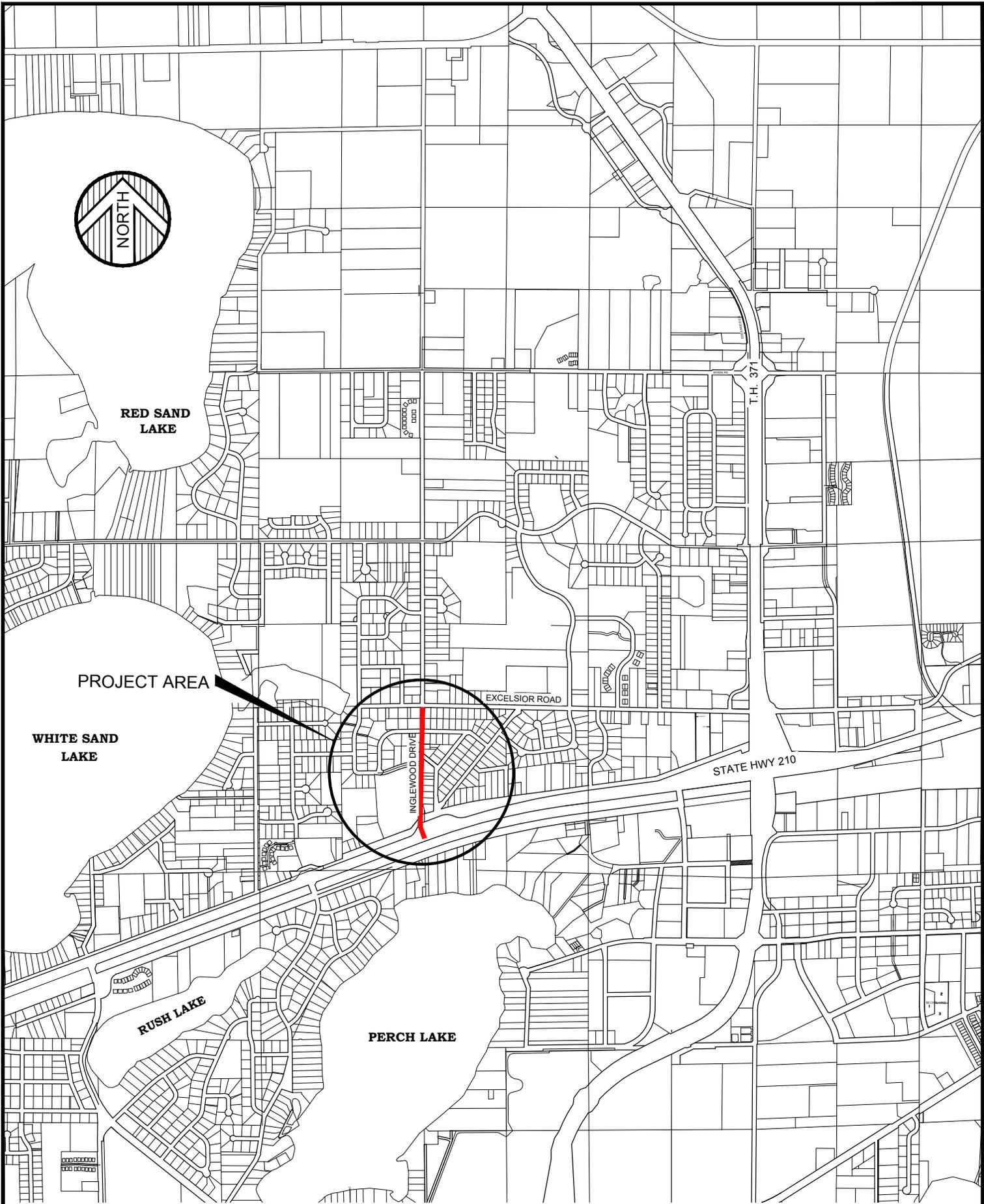
STATEMENT OF PURPOSE

The purpose of this report is to study the feasibility of reconstructing Inglewood Drive from TH 210 to Excelsior Road. The project area is shown in Exhibit A.

The City has been considering this improvement for a few years based on the current long range transportation plan to relocate the TH 210 signalized intersection and BNSF railway crossing from Knollwood Drive to Inglewood Drive. Improvements to Inglewood Drive from TH 210 to Excelsior road are necessary to set up the roadway for a future TH 210 signalized intersection and railway crossing and to upgrade and improve the roadway section on Inglewood Drive from TH 210 to Excelsior Road.

In 2014 the Utilities Commission and City Council identified the Inglewood Drive project area as a potential project for 2015. On January 20, 2015, the City Council authorized WSN to complete a Feasibility Study of the project area.

This report will review existing conditions, propose feasible improvements, estimate project costs, discuss project implementation and present conclusions and recommendations for the project area.



RED SAND LAKE

PROJECT AREA

WHITE SAND LAKE

EXCELSIOR ROAD

INGLEWOOD DRIVE

STATE HWY 210

RUSH LAKE

PERCH LAKE

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WIDSETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MN

ARIC WELCH

DATE: LIC. NO. 41983

DATE	REV#	REVISIONS DESCRIPTION	BY

DATE: MARCH, 2015
SCALE: NONE
DRAWN BY: P.M.B.
CHECKED BY: A.L.W.
JOB NUMBER: 0102B0364

2015 INGLEWOOD DRIVE IMPROVEMENTS
CITY OF BAXTER
BAXTER MINNESOTA
EXHIBIT A - PROJECT AREA

SHEET NO.
SHEET OF

EXISTING CONDITIONS

The project area is located along Inglewood Drive between TH 210 and Excelsior Road. Zoning in the project area is currently Low Density Residential (R1) and Public Benefit (PB). The draft Comprehensive Plan shows the land use in the project area remaining the same. Public right-of-way in the project area is 66-feet.

Existing Roadway

Inglewood Drive is currently a 24' wide bituminous surfaced roadway constructed as part of the 1989 Sewer and Water Improvements, Municipal Project No. 87-2. The roadway is currently on the Municipal State Aid System (MSAS) as route number 107.

The City of Baxter "Comprehensive Pavement Management System" indicates existing bituminous surface conditions in 2013 varied from fair to good. Recommended roadway improvements include a combination of mill and overlay and full depth reclamation. Detailed PASER ratings by roadway segment are as follows:

<u>Roadway Segment</u>	<u>PASER Rating</u>	<u>Description</u>
TH 210 – Fairview Road	6	Good
Fairview to 180' north	5	Fair
180' north of Fairview Road to John Street	4	Fair
John Street to Mary Street	5	Fair
Mary Street to Excelsior Road	5	Fair

Inglewood Drive north of Excelsior road is a 40' wide urban roadway with concrete curb & gutter. This roadway segment was constructed in 2004 and is in good condition.

Existing Drainage and Storm Sewer Systems

Inglewood Drive is currently a rural roadway and drainage is handled via shallow drainage swales located on either side of the roadway. The roadway profile drops as you proceed north from TH 210 and south from Excelsior Road with two low areas; the first located 800' north of Fairview Road and other located just south of Cherrywood Drive and Mary Street. The majority of the drainage in the project area is directed in westerly direction to a large wetland complex located along the west side of Inglewood Drive.

The nearest storm sewer systems/piping are located at TH 210 and Excelsior Road. The storm sewer system at TH 210 consists of an 18" RC pipe culvert directing stormwater westerly across Inglewood Drive to a shallow stormwater basin located directly south of Fairview Road. The basin outlets through a pipe culvert under Fairview Road to the north into the large wetland area. The system was designed and constructed by MnDOT in 1998 with the improvement of TH 210.

The storm sewer system at Excelsior Road was constructed in 2004 as part of the Inglewood Drive Improvements, SAP 230-107-01. The system drains to the north into a stormwater basin along the east side of Inglewood Drive approximately 750' north of Excelsior Road. The catch basins located in the southwest and southeast curb lines are shallow and the system does not have adequate depth to be extended any further south along Inglewood Drive.

There are two known stormwater issues in the project area. The first is located in the southwest corner of the Inglewood Drive and Cherrywood Drive intersection. This area experiences minor flooding that results in standing water on the roadway and the formation of potholes. The second is in the rear yard of 6519 John Street. Stormwater from the John Street and Madeline Drive intersection flows through the property and sits in the natural low area along Inglewood Drive. At times this area experiences minor flooding as well with surface water encroaching on a three season porch. The City is aware of a 12" pipe culvert that is plugged on the west end.

Existing Sanitary Sewer Collection System

Sanitary sewer service was extended to the project area as part of the 1989 Sewer and Water Improvements, Municipal Project No. 87-2. The sanitary sewer collection system consists of 10" and 12" PVC sanitary sewer mains that drain to Lift Station No. 3 located along the west side of the roadway just north of Fairview Road. There are six existing manholes located in the project area. Lift Station No. 3 was reconstructed in 2011.

No problems with the existing sanitary sewer system in the project area are known.

Existing Water Distribution System

Municipal water service was extended into the project area with the 1979 Water Improvements. The system consists of a 12" watermain that crosses Inglewood Drive just north of Fairview Road and continues south along the west side of Inglewood Drive and west along the north side of Fairview Road. An 8" watermain is located on Inglewood Drive from John Street north with connections to existing mains on Cherrywood Drive, Mary Street and Excelsior Road.

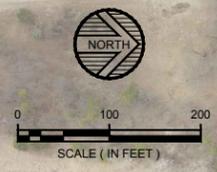
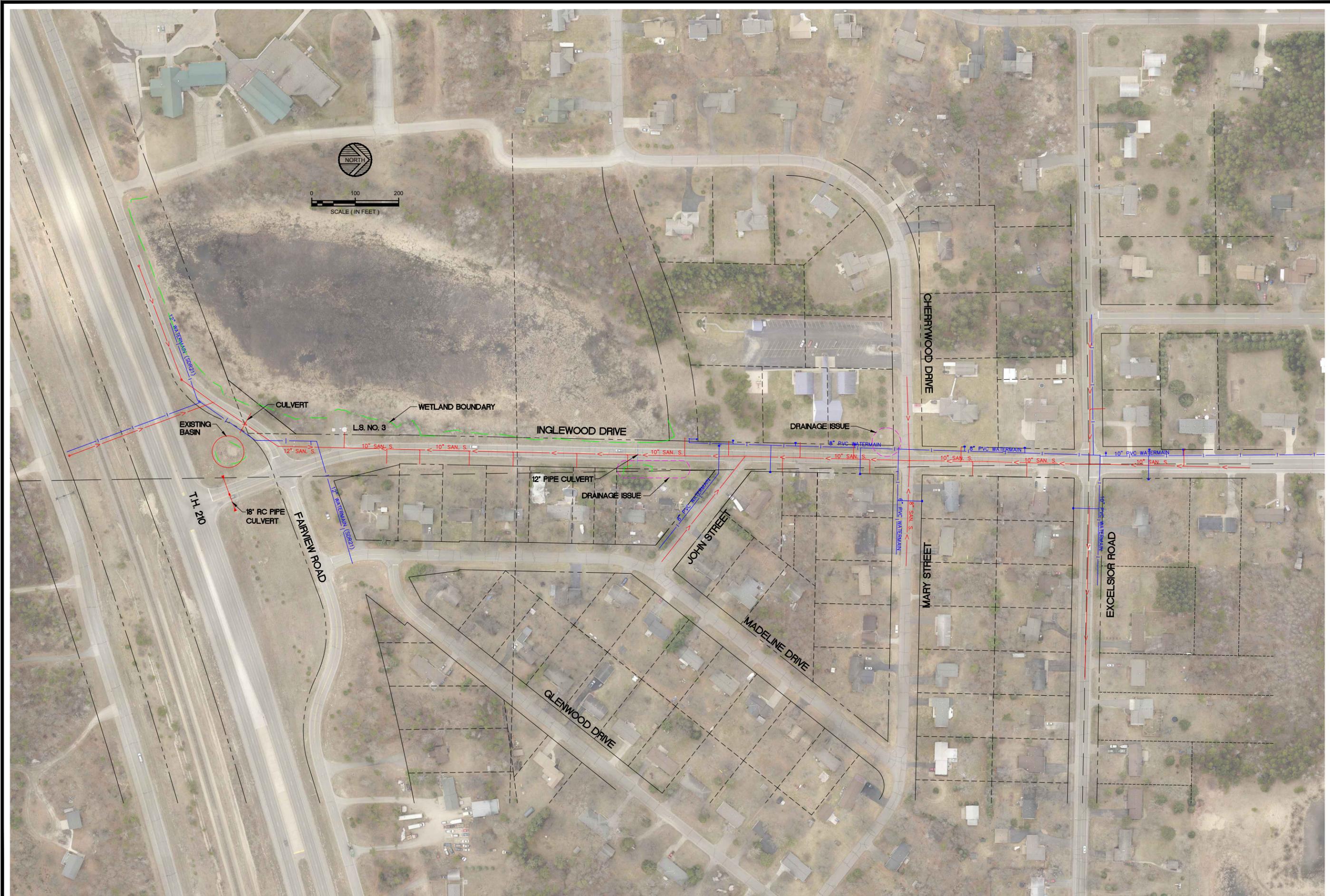
No problems with the existing water distribution system in the project area are known.

Wetlands

In 2014, WSN delineated two wetlands located in the project area. The first is a large wetland complex located along the west side of Inglewood Drive that extends from the north side of Fairview Road to 520' south of Cherrywood Drive. The second is a small wetland located along the east side of Inglewood Drive approximately 820' north of Fairview Road. The wetland delineation report has been approved by Crow Wing County

In 2005 the City of Baxter restored approximately 26,816 sf of wetland in the large wetland complex located along the west side of Inglewood Drive. The restoration was completed to mitigate wetlands disturbed as part of the extension of Edgewood Drive from Novotny Road to CSAH 77.

Exhibit "B" shows the existing conditions in the project area.



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DATE: _____ DATE: _____
 PRC: HELCH DATE: _____ LIC. NO.: 41683

REVISIONS DESCRIPTION	BY	DATE	REV

DATE: MARCH 2015
 SCALE: AS SHOWN
 DRAWN BY: A.L.W.
 CHECKED BY: A.L.W.
 JOB NUMBER: 0102B0364.000

2015 INGLEWOOD DRIVE IMPROVEMENTS
 CITY OF BAXTER
 BAXTER, MINNESOTA
EXHIBIT B - EXISTING CONDITIONS

PROPOSED IMPROVEMENTS

Proposed improvements include roadway reconstruction, turn lanes, trail/pedestrian facilities and all related restoration.

Proposed Roadways

Proposed roadway improvements include the construction of a 40' wide urban roadway from Fairview Road to Excelsior Road to match the existing roadway section north of Excelsior Road. The 40' roadway section would accommodate two 12' traffic lanes and two 8' bike/pedestrian lanes.

At Fairview Road, the roadway would be widened to accommodate a thru/right turn lane and left turn lane in the southbound direction. The roadway section between TH 210 and Fairview Road is proposed to be constructed with a median and be further widened to accommodate three lanes of traffic in the southbound direction consisting of a left turn, thru and right turn lane. The lanes and median would be designed to align with the future BNSF rail way crossing as shown in Exhibit C.

The roadway profile will need to be adjusted to accommodate the construction of a storm sewer system. Grade changes of approximately 4' feet may be necessary in the current low area approximately 800' north of Fairview Road. The City should be aware that this grade change will require the filling of existing wetlands (see wetland discussion).

The roadway is proposed to meet a 10-ton design strength with pavement markings meeting State-Aid design requirements.

Trail and Pedestrian Facilities

A separated 12' bituminous multimodal trail has been requested by the City from Fairview Road to Cherrywood Drive along with the 8' bike/pedestrian lanes on the roadway. The trail would be located along the west side of Inglewood Drive with a 4' or greater boulevard area between the trail and curb. An additional 7' of right-of-way would need to be acquired from Christ Evangelical Lutheran Church to accommodate the trail. South of the Church, the trail would lie within the existing right-of-way and City Public Benefit property. The City should be aware that construction of the separated trail as proposed would have additional impacts to the adjacent wetlands (see

wetland discussion).

Proposed Storm Sewer System

The proposed urban roadway section will require the installation of a storm sewer system. The proposed system includes the construction of a wet sedimentation basin located in the southeast bulb out of the Fairview Road intersection. The basin will need to be excavated to a depth approximately 3' lower than the surrounding groundwater elevation. Overflows from the wet sedimentation basin will be directed to the 18" RC pipe culvert that eventually drains to the wetland located on west Inglewood Drive and north of Fairview Road. It should be noted that MnDOT approval will be necessary to construct the wet basin and overflow as proposed.

Storm sewer pipe ranging in diameter from 24" to 12" will be extended north along Inglewood Drive for approximately 1,530' with catch basins located approximately every 300'. The proposed system collects stormwater runoff for the entire roadway section from TH 210 to Excelsior Road.

Please note, the roadway profile and storm sewer system as proposed would direct all of the stormwater runoff from the roadway to one treatment location at the south end of the project. As mentioned previously, the roadway grade must be raised significantly to accomplish this.

The City may want to consider alternate designs such as splitting the drainage areas and constructing an additional stormwater outlet in the vicinity of the current low area approximately 800' north of Fairview Road. The outlet will require treatment before discharging into the wetland west of the roadway.

The existing 66' wide right-of-way, wetland areas and groundwater elevation limits available treatment options to the construction of a wet sedimentation basin or mechanical stormwater treatment unit. A wet sedimentation basin constructed along the east side of the roadway will require the acquisition of property from the existing residential area. Construction of the basin on the west side of the roadway will result in additional wetland impacts. Construction of a mechanical unit will not require additional property and would result in no additional wetland impacts; however, mechanical units are not recognized as an acceptable form of treatment by the NPDES General Stormwater Permit for Construction Activity, thus requiring the City to provide additional treatment capacity elsewhere in the system.

Wetlands

Constructing the roadway and trail as proposed will result in impacts to existing wetland areas. The estimated wetland impact area by improvement type is as follows:

<u>Improvement</u>	<u>Estimated Wetland Impact</u>
40' Wide Urban Roadway	1,860 sf
Separated 12' Trail	<u>7,690 sf</u>
Total	9,550 sf

Preliminary discussions with Crow Wing County and the Technical Evaluation Panel (TEP) indicate the roadway portion of the project may qualify for the Minnesota Local Government Road Wetland Replacement Program (LGRWRP) but the trail improvements may not. To be eligible for this program, the City must demonstrate the improvements are necessary for the health and safety of the traveling public.

It can be argued that widening the roadway with designated bike/pedestrian lanes with the additional separated trail will increase the overall safety of the roadway by minimizing conflicts between vehicles and pedestrians. We recommend the City move forward with the LGRWRP application with the trail included. If the TEP does not approve the trail portion of the application, the City could look at the following options:

- Find an alternate separated trail alignment that does not impact existing wetlands.
- Center the roadway and trail section in the existing 66' wide right-of-way. The project as proposed has the 40' wide roadway centered in the right-of-way with the trail extended to the west. Centering the section in the right-of-way would move the trail approximately 8' farther away from the wetland. It should be noted that this would have significant impacts on the private residential property located along the east side of Inglewood Drive.
- Reduce roadway and trail widths.
- Remove the separated trail through the wetland area and direct all pedestrian and bike traffic to the 8' bike/pedestrian lanes of the roadway (same section as provided north of Excelsior Road). A trail could be added at the south end of the project just before the southbound right turn lane to direct pedestrian and bike traffic off the roadway and onto the trail prior to the Fairview Road and TH 210 intersections.
- Switch to a rural roadway section with 8' paved bike/pedestrian lanes. With this option, the wetland impacts would be greatly reduced and roadway grade changes would be

kept to a minimum.

Sanitary Sewer and Water Improvements

Major improvements to the sanitary sewer and water system are not being proposed with this project. During design, all manholes, mainline sewers, service lines, hydrants and valves should be inspected to determine if any repairs or modifications are required.

Dewatering

Based on a previous soil investigation reports and visual observation, dewatering will likely be required to install the storm sewer system as proposed. Ground water elevations vary significantly over time, and the extent of dewatering required will depend on ground water elevations at the time of construction.

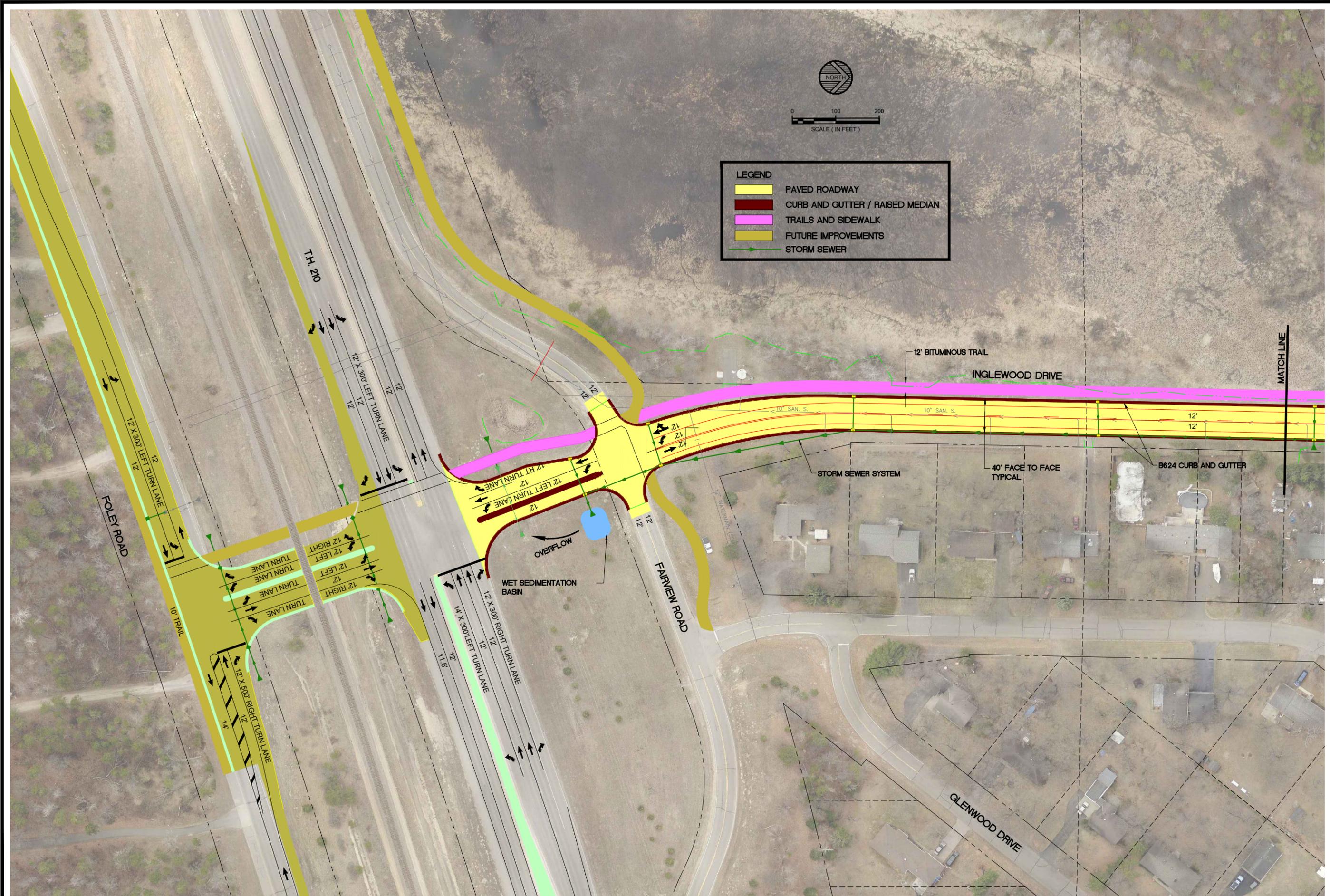
Restoration

Turf restoration is proposed utilizing 4-inches of topsoil and a combination of seed and sod. Seed is proposed in disturbed areas that are currently undeveloped and no maintained yards currently exist. Sod and erosion protection blankets will be incorporated during construction where developments have existing mowed and maintained areas or in locations where steeper grades have the potential to create erosion problems.

Alternatives

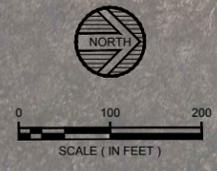
The only other option considered as part of this report was the “Do Nothing” approach. This option was eliminated since it does not accomplish any of the utility or transportation goals for the area or provide any benefit to property owners in the project area.

Exhibit “C” and “D” show the proposed improvements and Exhibit “E” shows the proposed typical roadway section.



LEGEND

- PAVED ROADWAY
- CURB AND GUTTER / RAISED MEDIAN
- TRAILS AND SIDEWALK
- FUTURE IMPROVEMENTS
- STORM SEWER



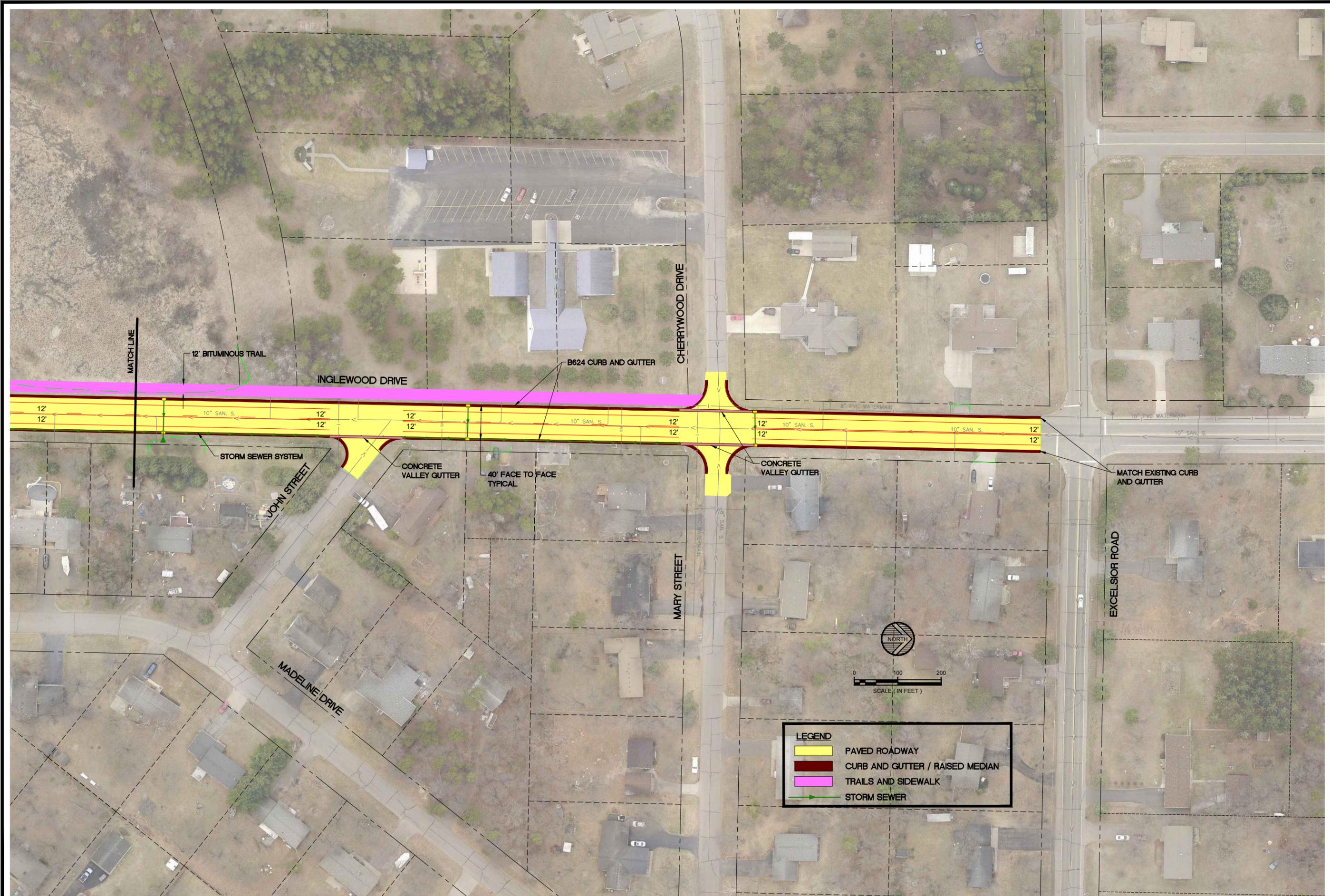
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DATE: _____
 LIC. NO.: 41683
 PRC HELCI

DATE	REV	DESCRIPTION
MARCH 2015 <td>AS SHOWN <td></td> </td>	AS SHOWN <td></td>	
	ALL	
	ALL	

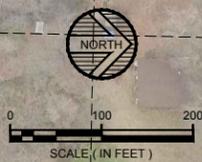
DATE: MARCH 2015
 SCALE: AS SHOWN
 DRAWN BY: A.L.W.
 CHECKED BY: A.L.W.
 JOB NUMBER: 0102B0364.000

2015 INGLEDWOOD DRIVE IMPROVEMENTS
 CITY OF BAXTER
 BAXTER, MINNESOTA
EXHIBIT C - PROPOSED IMPROVEMENTS



LEGEND

- PAVED ROADWAY
- CURB AND GUTTER / RAISED MEDIAN
- TRAILS AND SIDEWALK
- STORM SEWER



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DATE: _____
 BY: _____
 TITLE: _____

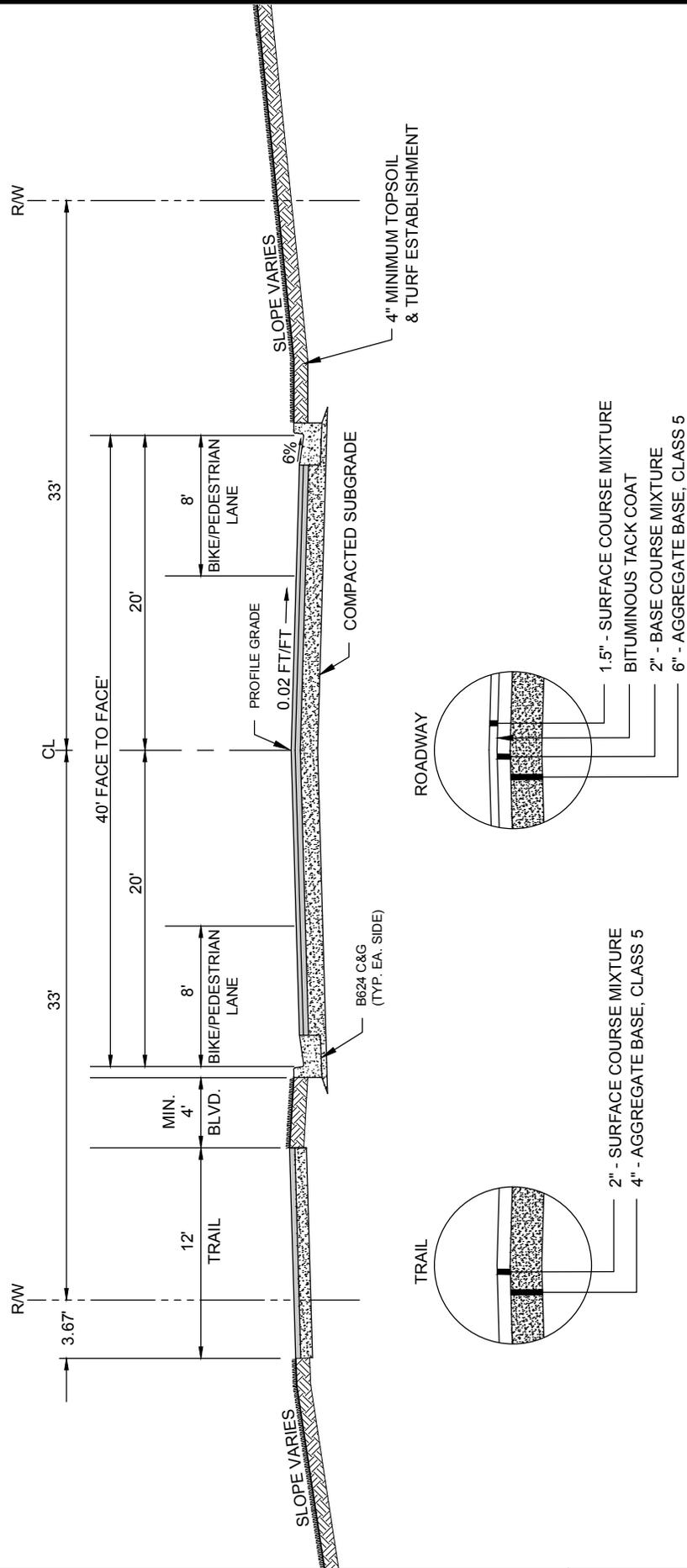
REVISION DESCRIPTION	DATE	BY

DATE: MARCH 2015
 SCALE: AS SHOWN
 DRAWN BY: A.L.W.
 CHECKED BY: A.L.W.
 JOB NUMBER: 0102B0364.000

2015 INGLEWOOD DRIVE IMPROVEMENTS
 CITY OF BAXTER
 BAXTER, MINNESOTA

EXHIBIT D - PROPOSED IMPROVEMENTS

PROPOSED TYPICAL ROADWAY SECTION INGLEWOOD DRIVE



2015 INGLEWOOD DRIVE IMPROVEMENTS CITY OF BAXTER BAXTER, MINNESOTA	DATE: MARCH, 2015 SCALE: AS SHOWN DRAWN BY: P.M.B. CHECKED BY: A.L.W.	DATE: _____ REV: _____ REVISIONS DESCRIPTION: _____ BY: _____	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
	JOB NUMBER: 010280364.000	ARIC WELCH	DATE: _____ LIC. NO. 41983

EXHIBIT E - TYPICAL ROADWAY SECTIONS



WIDSATH SMITH NOLTING
 Engineering | Architecture | Surveying | Environmental

11/10/2015 10:41 AM C:\Users\pmb\Documents\Projects\2015\INGLEWOOD DRIVE IMPROVEMENTS\DWG\010280364.000.dwg PLOT DATE: 3/11/2015 10:41 AM PLOT BY: P.M.B. PLOT SCALE: 1"=20'

ESTIMATED PROJECT COSTS

Estimated costs for the improvements to Inglewood Drive from TH 210 to Excelsior Road are as follows:

Roadway Improvements:	\$483,050
Storm Sewer / Drainage Improvements:	\$168,600
Trail Improvements:	<u>\$85,320</u>
ESTIMATED TOTAL PROJECT COST:	\$736,970

The costs estimated herein are intended to convey a general and approximate picture of the costs that would probably be incurred today in carrying out the proposed work. Costs can vary widely depending upon many factors such as weather, economic conditions, size of project, and the workload of available contractors. Actual costs can only be determined by bidding the project. Detailed breakdowns of the estimates are provided in the Appendix. Costs estimated above include estimated construction costs, 10% contingencies, and soft costs including engineering, administration, financing, and legal fees.

The costs are calculated in 2015 dollars and need to be updated in the future based on the current economic conditions at the time the project is being considered.

PROJECT IMPLEMENTATION

Funding for improvements in the study areas will be obtained from City of Baxter contributions and assessments to benefitted property owners. Assessments were estimated based on the current City of Baxter policy utilizing the “Front Footage Assessment Method”. A detailed description of the assessment methods utilized by the City of Baxter can be found in the most recent version of the “City of Baxter – Assessment Policy for Public Initiated Improvements”.

Due to the unique nature of the project and area, the following adjustments to the current City assessment policy are proposed:

1. Benefitting property owners are proposed to be assessed only for the cost to mill and overlay the roadway in accordance with the recommendations in the “Comprehensive Pavement Management Plan”. Even though the project includes complete roadway reconstruction, stormwater improvements and trail improvements, the adjustment is being proposed for the following reasons:
 - The City initiated the project based on a long range transportation objective.
 - The roadway is considered a major collector.
 - The adjacent zoning is R1 and costs associated with roadway width in excess of 26’, storm sewer and trail are not assessable as per the City Assessment Policy.

2. The roadway contains a significant amount of un-assessable frontage in the form of wetland/City property and residential side and rear yard frontage. Therefore it is being proposed that the City pick up an additional share of the project in the form of per foot assessments for the properties that would normally be assessed in accordance with the City’s assessment policy.

Based on the previously described methodology, the following assessments were determined:

Roadway Improvements

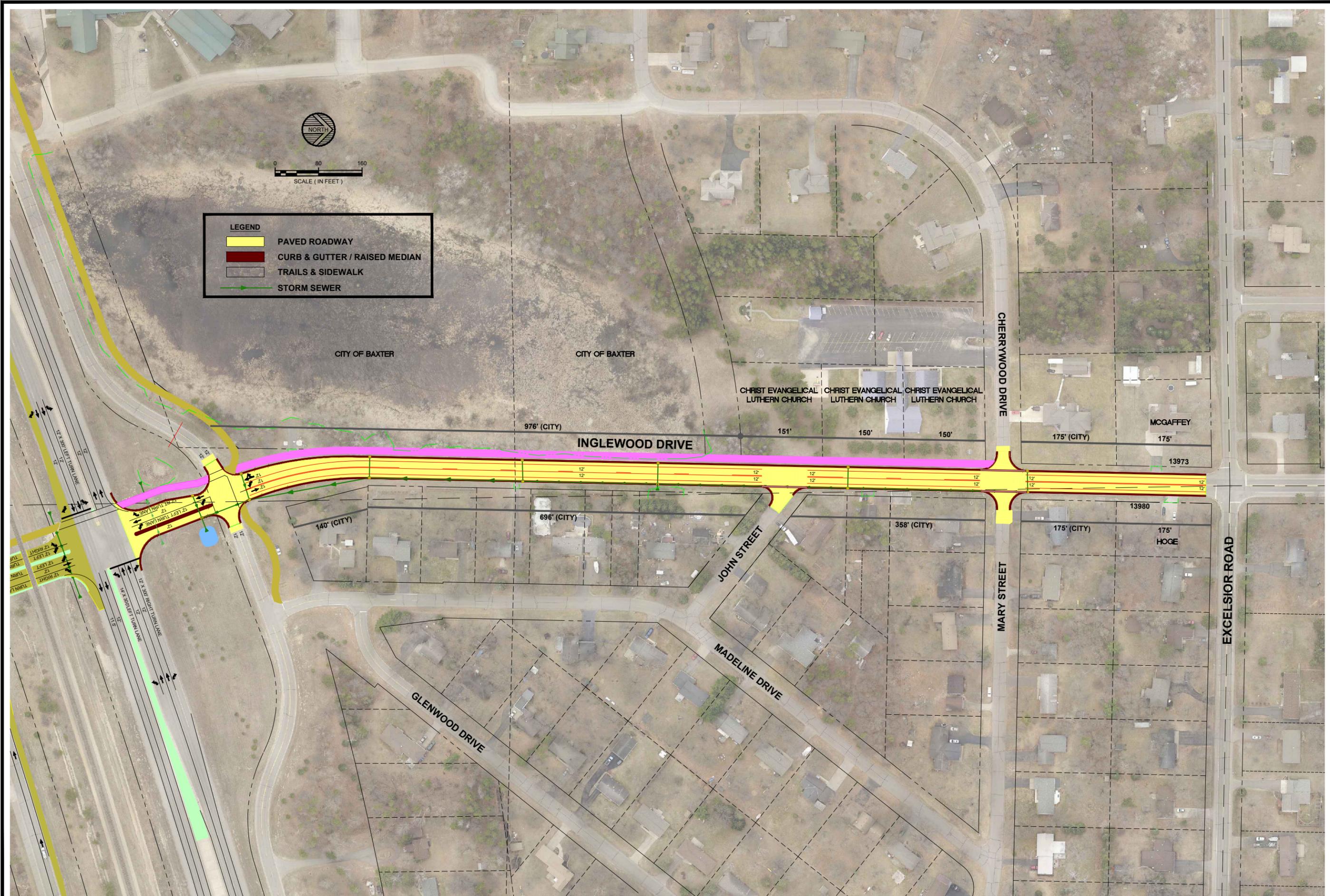
Total Estimated Project Costs:	\$483,050
City Project Costs:	\$412,610
Assessed Mill and Overlay Costs:	\$70,440
Total Assessable Front Footage (all property):	3,321
Cost per Assessable Front Foot:	\$21.21

<u>Assessment Summary</u>	<u>Frontage</u>	<u>Assessment</u>
City of Baxter	2,520'	\$53,450
Christ Evangelical Lutheran Church	451'	\$9,570
McGaffey	175'	\$3,710
Hoge	<u>175'</u>	<u>\$3,710</u>
Total	3,321'	\$70,440

Project Cost Summary

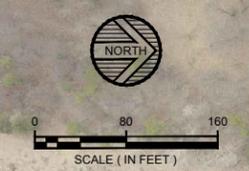
Initial City Project Costs	\$666,530	90.1%
City Assessable Costs:	<u>\$53,450</u>	7.3%
Total City Project Cost:	\$719,980	97.7%
Assessed Costs (non City):	<u>\$16,990</u>	2.3%
Total Project Cost	\$736,970	

Exhibit "F" shows the estimated assessment distances used for assessment calculation purposes. Detailed City cost and assessment calculations are shown in the preliminary cost estimate included in the Appendix.



LEGEND

- PAVED ROADWAY
- CURB & GUTTER / RAISED MEDIAN
- TRAILS & SIDEWALK
- STORM SEWER



2015 INGLEWOOD DRIVE IMPROVEMENTS
CITY OF BAXTER
BAXTER, MINNESOTA

EXHIBIT F - ASSESSMENT EXHIBIT

SHEET NO. _____

DATE: MARCH 2015
SCALE: AS SHOWN
DRAWN BY: A.L.W.
CHECKED BY: A.L.W.
JOB NUMBER: 0102B0364.000

REV#	DATE	DESCRIPTION

BY: _____
DATE: _____
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ARC: HELCI
DATE: _____
LIC. NO.: 41683

WIDSETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental

CONCLUSIONS AND RECOMMENDATIONS

This report has studied the feasibility of providing roadway, stormwater and trail improvements to Inglewood Drive between TH 210 and Excelsior Road. The proposed improvements are consistent with the City's comprehensive plan and necessary to meet the City's long range transportation needs.

The estimated project cost is \$736,970. Funding for the improvements is proposed to be obtained through City contributions and assessments to benefitted properties. Assessable project costs were determined using the estimated cost to mill and overlay the roadway in accordance with the "Comprehensive Pavement Management Plan". Assessable costs were calculated using the per foot assessment method and were determined to be \$16,990 or 2.3% of the total project cost. The City cost was determined to be \$719,980 or 97.7% of the total project cost.

The project as proposed creates significant impacts to adjacent wetland areas. The City may need to consider alternate designs depending on the outcome of the LGRWRP application. For the purposes of this report, project costs have been calculated assuming the roadway and trail can be constructed as proposed. It should be noted that any future modifications required by permitting agencies or requested by the City will not affect the assessment methodology or calculations presented in this report. Assessable costs are based solely on a mill and overlay project and any modifications to the roadway or trail design will only affect City costs.

As with all street projects, minor inconveniences such as construction noise, dust, detours, traffic disturbance and interruption of mail service can be expected. These situations would be temporary in nature and we would anticipate the project to take approximately two months to complete.

In conclusion, the improvements as proposed are feasible and no major construction obstacles were noted. We do not foresee any major problems with construction of roadway, stormwater system or trail with the exception of dewatering, underground utilities (gas, electric, telephone, cable TV, etc.) and wetland permitting. Dewatering may be a concern depending on the condition of the existing soils and elevation of the groundwater table at the time of construction. Conflicts with underground utilities in developed areas such as this can become a real problem

and we strongly recommend utility companies be informed of the project as soon as possible so any potential conflicts can be dealt with during the design phase and prior to construction. Wetland permitting should be reviewed with permitting agency early in the design process to determine if the proposed trail improvements are feasible.

We recommend the City proceed as follows:

1. Review report and provide concerns or comments, as desired.
2. Review estimated assessments and adjustment for conformance assessment policy.
3. Review the estimated project schedule.
4. Modify the report, if necessary.
5. Determine if the proposed improvements are justified.
6. Conduct a financial review of the project to determine impacts to City finances.
7. Conduct meetings or hearings with affected parties to obtain public input.
8. Revise long-range capital improvement plans, if necessary.
9. Update estimated costs as necessary.
10. Proceed with other requirements associated with an assessment project, if desired.

APPENDICES

Preliminary Cost Estimate
Estimated Project Schedule

ENGINEER'S ESTIMATE
2015 INGLEWOOD DRIVE IMPROVEMENTS
BAXTER, MN
Friday, March 06, 2015

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	MILL AND OVERLAY		ROADWAY		STORM SEWER		TRAIL		PROJECT TOTAL	
					ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST
1	2021.501	MOBILIZATION	LUMP SUM	\$15,000.00	0.1	\$1,500.00	0.55	\$8,250.00	0.25	\$3,750.00	0.1	\$1,500.00	1	\$15,000.00
2	2101.501	CLEARING	ACRE	\$2,500.00			0.5	\$1,250.00			0.5	\$1,250.00	1	\$2,500.00
3	2101.506	GRUBBING	ACRE	\$2,500.00			0.5	\$1,250.00			0.5	\$1,250.00	1	\$2,500.00
4	2104.505	REMOVE BITUMINOUS PAVEMENT	SQ YD	\$1.25			2200	\$2,750.00					2200	\$2,750.00
5	2104.505	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	\$10.00			55	\$550.00					55	\$550.00
6	2104.509	REMOVE SIGN TYPE C	EACH	\$50.00			9	\$450.00					9	\$450.00
7	2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	\$5.50			30	\$165.00					30	\$165.00
8	2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	\$3.00			450	\$1,350.00					450	\$1,350.00
9	2104.523	SALVAGE PIPE APRON	EACH	\$275.00			2	\$550.00					2	\$550.00
10	2104.523	SALVAGE SIGN	EACH	\$30.00			8	\$240.00					8	\$240.00
11	2104.523	SALVAGE MAILBOX	EACH	\$30.00	4	\$120.00							4	\$120.00
12	2105.501	COMMON EXCAVATION (P)	CU YD	\$9.00			2310	\$20,790.00	550	\$4,950.00	305	\$2,745.00	3165	\$28,485.00
13	2105.505	MUCK EXCAVATION	CU YD	\$12.00							1200	\$14,400.00	1200	\$14,400.00
14	2105.522	SELECT GRANULAR BORROW	CU YD	\$9.00			750	\$6,750.00			1480	\$13,320.00	2230	\$20,070.00
15	2105.601	DEWATERING	LUMP SUM	\$10,000.00					1	\$10,000.00			1	\$10,000.00
16	2123.501	COMMON LABORERS	HOUR	\$65.00	5	\$325.00	5	\$325.00	10	\$650.00	5	\$325.00	25	\$1,625.00
17	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	\$130.00	2	\$260.00	2	\$260.00	2	\$260.00	1	\$130.00	7	\$910.00
19	2211.503	AGGREGATE BASE (CV) CLASS 5 (P)	CU YD	\$24.00			2010	\$48,240.00			265	\$6,360.00	2275	\$54,600.00
21	2232.501	MILL BITUMINOUS SURFACE (2 IN)	SQ YD	\$1.20	5000	\$6,000.00							5000	\$6,000.00
22	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (2,C)	TON	\$67.50	575	\$38,812.50	1525	\$102,937.50			235	\$15,862.50	2335	\$157,612.50
23	2501.511	18" RC PIPE CULVERT	LIN FT	\$24.00					24	\$576.00			24	\$576.00
24	2501.515	24" RC PIPE APRON	EACH	\$650.00					1	\$650.00			1	\$650.00
25	2501.573	INSTALL PIPE APRON	EACH	\$250.00					2	\$500.00			2	\$500.00
26	2503.541	12" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	\$30.00					577	\$17,310.00			577	\$17,310.00
27	2503.541	15" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	\$32.00					350	\$11,200.00			350	\$11,200.00
28	2503.541	18" RC PIPE SEWER DESIGN 3006 CLASS III	LIN FT	\$36.00					250	\$9,000.00			250	\$9,000.00
29	2503.541	21" RC PIPE SEWER DESIGN 3006 CLASS III	LIN FT	\$40.00					281	\$11,240.00			281	\$11,240.00
30	2503.541	24" RC PIPE SEWER DESIGN 3006 CLASS III	LIN FT	\$45.00					339	\$15,255.00			339	\$15,255.00
31	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN SD-48	LIN FT	\$350.00					30	\$10,500.00			30	\$10,500.00
32	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020	LIN FT	\$375.00					30	\$11,250.00			30	\$11,250.00
33	2506.522	ADJUST FRAME AND RING CASTING	EACH	\$300.00	7	\$2,100.00							7	\$2,100.00
34	2506.516	CASTING ASSEMBLY	EACH	\$700.00					10	\$7,000.00			10	\$7,000.00
35	2511.501	RANDOM RIPRAP CLASS III	CU YD	\$100.00					9.2	\$920.00			9.2	\$920.00
36	2511.515	GEOTEXTILE FILTER TYPE IV	SQ YD	\$2.50					33.4	\$83.50			33.4	\$83.50
37	2531.501	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	\$13.75			4150	\$57,062.50					4150	\$57,062.50
38	2531.503	CONCRETE MEDIAN	SQ YD	\$60.00			101	\$6,060.00					101	\$6,060.00
39	2531.507	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	\$60.00			60	\$3,600.00					60	\$3,600.00
40	2540.602	MAIL BOX SUPPORT	EACH	\$100.00	4	\$400.00							4	\$400.00
41	2540.602	TEMPORARY POSTAL SERVICE	EACH	\$30.00			4	\$120.00					4	\$120.00
42	2531.604	8" CONCRETE VALLEY GUTTER	SQ YD	\$60.00			50	\$3,000.00					50	\$3,000.00
43	2531.618	TRUNCATED DOMES	SQ FT	\$33.00							48	\$1,584.00	48	\$1,584.00
44	2563.601	TRAFFIC CONTROL	LUMP SUM	\$2,000.00	0.1	\$200.00	0.55	\$1,100.00	0.25	\$500.00	0.1	\$200.00	1	\$2,000.00
45	2564.602	INSTALL SIGN	EACH	\$30.00			2	\$60.00					2	\$60.00
46	2564.602	INSTALL SIGN PANEL TYPE C	EACH	\$50.00			6	\$300.00			4	\$200.00	10	\$500.00
47	2564.602	FURNISH TYPE C SIGNS	EACH	\$120.00			9	\$1,080.00					9	\$1,080.00
48	2572.505	PRUNE TREES	HOUR	\$100.00			4	\$400.00					4	\$400.00
49	2573.502	SILT FENCE, TYPE MS	LIN FT	\$2.25			1200	\$2,700.00					1200	\$2,700.00
50	2573.530	STORM DRAIN INLET PROTECTION	EACH	\$150.00			10	\$1,500.00					10	\$1,500.00
51	2573.535	STABILIZED CONSTRUCTION EXIT	LUMP SUM	\$400.00			0.34	\$136.00	0.33	\$132.00	0.33	\$132.00	1	\$400.00
52	2573.550	EROSION CONTROL SUPERVISOR	LUMP SUM	\$1,500.00			0.34	\$510.00	0.33	\$495.00	0.33	\$495.00	1	\$1,500.00
53	2574.508	FERTILIZER TYPE 1	POUND	\$1.00			280	\$280.00					280	\$280.00
54	2574.525	COMMON TOPSOIL BORROW	CU YD	\$15.00			750	\$11,250.00					750	\$11,250.00
55	2575.501	SEEDING	ACRE	\$750.00			1.5	\$1,125.00					1.5	\$1,125.00
56	2575.502	SEED MIXTURE 22-111	POUND	\$3.50			56	\$196.00					56	\$196.00
57	2575.502	SEED MIXTURE 25-131	POUND	\$4.50			400	\$1,800.00					400	\$1,800.00
58	2575.502	SEED MIXTURE 33-361	POUND	\$35.00			35	\$1,225.00					35	\$1,225.00
59	2575.511	MULCH MATERIAL TYPE 3	TON	\$400.00			3	\$1,200.00					3	\$1,200.00
60	2575.519	DISK ANCHORING	ACRE	\$200.00			1.5	\$300.00					1.5	\$300.00
61	2575.523	EROSION CONTROL BLANKETS CATEGORY 3	SQ YD	\$2.75			300	\$825.00					300	\$825.00
62	2575.533	SEDIMENT CONTROL LOG TYPE COMPOST	LIN FT	\$2.00			500	\$1,000.00					500	\$1,000.00
63	2575.562	HYDRAULIC MATRIX TYPE MULCH	POUND	\$1.20			2940	\$3,528.00					2940	\$3,528.00

				MILL AND OVERLAY	ROADWAY	STORM SEWER	TRAIL	PROJECT TOTAL		
64	2582.501	PAVEMENT MESSAGE	EACH	\$150.00						
65	2582.502	4" SOLID LINE YELLOW-EPOXY	LIN FT	\$0.35	900	\$315.00				
66	2582.502	8" SOLID LINE WHITE-EPOXY	LIN FT	\$0.70						
67	2582.502	4" BROKEN LINE YELLOW-EPOXY	LIN FT	\$0.35						
68	2582.502	4" DOUBLE SOLID LINE YELLOW-EPOXY	LIN FT	\$0.65	270	\$94.50				
69	2600.4D	INSULATION (4' x 8' x 2" THICK)	SQ YD	\$25.00	1159	\$753.35				
70	2611.4G	ADJUST VALVE BOX	EACH	\$175.00						
					2	\$350.00		256	\$6,400.00	

ESTIMATED CONSTRUCTION COST:	\$533,681.85	9.60%	\$51,230.35	56.23%	\$300,076.50	22.98%	\$122,621.50	11.20%	\$59,753.50	100.00%	\$533,681.85
CONTINGENCIES (10%):	\$53,368.19		\$5,123.04		\$30,007.65		\$12,262.15		\$5,975.35		\$53,368.19
SUBTOTAL:	\$587,050.04		\$56,353.39		\$330,084.15		\$134,883.65		\$65,728.85		\$587,050.04
ENGINEERING, ADMINISTRATION, LEGAL, ETC. (25%):	\$146,762.51		\$14,088.35		\$82,521.04		\$33,720.91		\$16,432.21		\$146,762.51
PROPERTY ACQUISITION COSTS:	\$3,157.00								\$3,157.00		\$3,157.00
ESTIMATED TOTAL:	\$736,969.54		\$70,441.73		\$412,605.19		\$168,604.56		\$85,318.06		\$736,969.54

ASSESSMENT CALCULATIONS

INITIAL CITY PROJECT COSTS:	\$0.00		\$0.00		\$412,605.19		\$168,604.56		\$85,318.06		\$666,527.81
REMAINING ASSESSABLE COSTS:	\$70,441.73		\$70,441.73		\$0.00		\$0.00		\$0.00		\$70,441.73
ASSESSABLE FOOTAGE:	3321		3321								3321
COST PER ASSESSABLE FOOT:	\$21.21		\$21.21								\$21.21

ASSESSMENT SUMMARY

	ASSESSABLE FRONTAGE	ASSESSMENT
CITY OF BAXTER:	2520	\$53,451.72
CHRIST EVANGELICAL LUTHERAN CHURCH:	451	\$9,566.16
MCGAFFEY:	175	\$3,711.93
HOGUE:	175	\$3,711.93
TOTALS	3321	\$70,441.73

PROJECT COST SUMMARY

INITIAL CITY PROJECT COSTS:	90.44%	\$666,527.81
CITY ASSESSABLE COSTS:	7.25%	\$53,451.72
TOTAL CITY PROJECT COST:	97.69%	\$719,979.53
ASSESSABLE COSTS:	2.31%	\$16,990.01
TOTAL PROJECT COST:		\$736,969.54

PROJECT SCHEDULE
DELLWOOD DRIVE, NOVOTNY ROAD, INGLEWOOD DRIVE AND INDEPENDENCE ROAD IMPROVEMENTS
BAXTER, MN
3/3/2015

TASK DESCRIPTION	DATES	NOTES
Dellwood/Novotny Draft Feasibility Report	Thursday, January 15, 2015	
Dellwood/Novotny Right-of-Way	Ongoing	
Review of Draft Dellwood/Novotny Feasibility Report	Tuesday, January 20, 2015	Council Workshop
Resolution Receiving Dellwood/Novotny Report and Calling Improvement Hearing	Tuesday, January 20, 2015	Second Council Meeting in January
First Published Notice for Dellwood/Novotny Improvement Hearing	Friday, February 13, 2015	Twice in local newspaper, one week apart, last notice must be at least three days prior to hearing.
Mailed Notice for Dellwood/Novotny Improvement Hearing	Friday, February 13, 2015	One notice at least 10 days prior to hearing
Second Published Notice for Dellwood/Novotny Improvement Hearing	Friday, February 20, 2015	
Dellwood/Novotny Improvement Hearing	Thursday, March 05, 2015	Special Council Meeting in March
Inglewood Draft Feasibility Study and Design	Wednesday, March 11, 2015	
Review of Draft Inglewood Feasibility Study	Tuesday, March 17, 2015	Council Workshop
Present Preliminary Financial Staff Recommendations		
Approve Financial Plan		
Resolution Receiving Inglewood Report and Calling Improvement Hearing	Tuesday, March 17, 2015	Second Council Meeting in March
Resolution authorization preparation of final Dellwood/Novotny Plans and Specifications		
First Published Notice for Inglewood Improvement Hearing	Friday, March 20, 2015	Twice in local newspaper, one week apart, last notice must be at least three days prior to hearing.
Mailed Notice for Inglewood Improvement Hearing	Friday, March 20, 2015	One notice at least 10 days prior to hearing
Second Published Notice for Inglewood Improvement Hearing	Friday, March 27, 2015	
Recommendation to approve Plans and Specifications	Wednesday, April 08, 2015	April Utilities Meeting
Inglewood Improvement Hearing		
Resolution Authorization Preparation of Final Plans and Specifications	Thursday, April 09, 2015	Special Council Meeting in April
Resolution Approving Plans and Advertisement for Bids		
Resolution Calling Dellwood/Novotny, Inglewood Drive and Independence Road Assessment Hearing	Tuesday, May 05, 2015	First Council meeting in May
Bidding Publication	Friday, May 08, 2015	Publication must be made at least three weeks before last day to submit bids, at least once in official newspaper and once in trade paper or First Class city newspaper.
Published Notice for Dellwood/Novotny, Inglewood Drive and Independence Road Assessment Hearing	Thursday, May 21, 2015	Once in local newspaper at least two weeks prior to hearing.
Mailed Notice for Dellwood/Novotny, Inglewood Drive and Independence Road Assessment Hearing	Thursday, May 21, 2015	One notice at least two weeks prior to hearing
Bid Opening	Tuesday, June 02, 2015	By default bid remains subject to acceptance for 60 days after the Bid opening.
Assessment Hearing - Dellwood/Novotny, Inglewood Drive and Independence Road	Thursday, June 04, 2015	Special Council Meeting in June (Hearings held back-to-back)
Resolution Adopting Assessment Rolls		
Bid review with Utilities Commission	Wednesday, June 17, 2015	Special Utilities Meeting in June
End of Assessment Appeal Period	Saturday, July 04, 2015	Appeals to district court must be made within 30 days after adoption of the assessment roll.
Notice of Award	Tuesday, July 07, 2015	First Council meeting in July. Contractor has 15 days to deliver signed agreement, bonds and insurance certificates.
Begin Construction	Monday, July 27, 2015	
Construction Complete	Friday, October 30, 2015	