Southside Street Imp. Dist. 213
Project #2018-07

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Public Involvement Meeting
Mandan, North Dakota
November 14, 2018

City Engineering Dept – Justin Froseth, PE, Andrew Larson, PE & Kim Fettig, P.M.
Moore Engineering, Inc. - Jerod Klabunde, PE & Jim Jackson, PE

Presentation Outline

- Project Team
- Map of Project Areas
- Goals
- Need for Improvements
- Estimated Schedule, Scope and Costs
- Procedure and Protest Period
- Assessments, Past Projects & Policy
- Questions and Answers

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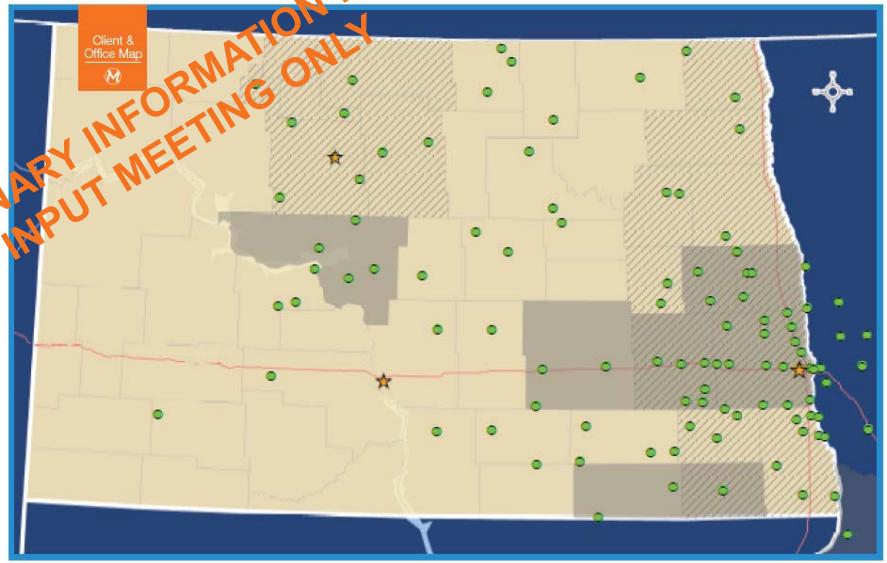
About Moore Engineering

- **Mission:**
  - "Improving lives by building strong communities."
- **Engineer for:**
  - 92 cities in North Dakota
  - 30 cities in Minnesota
  - 20,000 Projects since 1961



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Map of Project Areas

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Public Involvement Mtg. Goals

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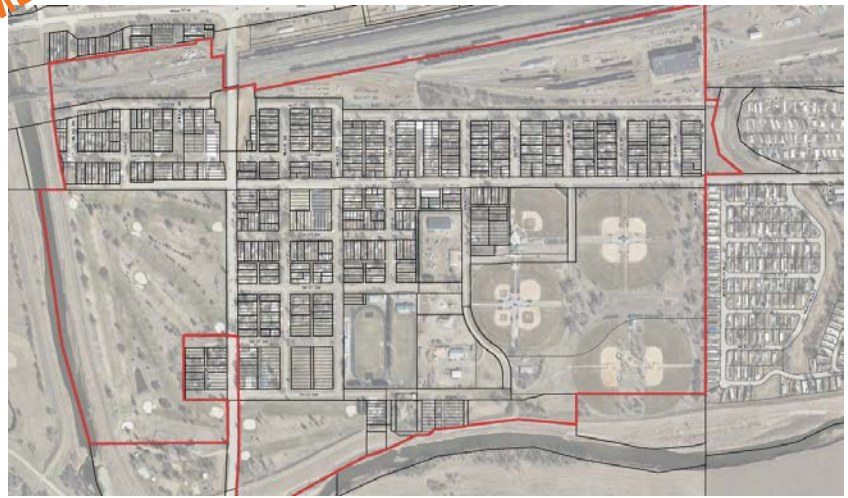
- **City's Goals:**
  - Provide safe, reliable infrastructure
  - Long-term street improvements
  - Involve the public
  - Hear your ideas/concerns



- **Southside Neighborhood Involvement:**
  - This is your community.
  - What are your priorities?

Need for Improvements

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- Aging Pavements Need Replacement
- Water Main Replacement
- ADA & Pedestrian Compliance
- Storm Sewer Extension to change drainage basins
- Drainage Improvements to extend pavement life
- Sanitary Sewer Extension

City of Mandan - Major Planning Efforts:

- Storm Sewer Master Study
- 2018 & 2019 Water Main Replacement
- School Safety Study
- Sanitary Sewer Extension
- Lighting Needs
- Combine projects: PW, park and city.
- Complete larger projects, economy of scale

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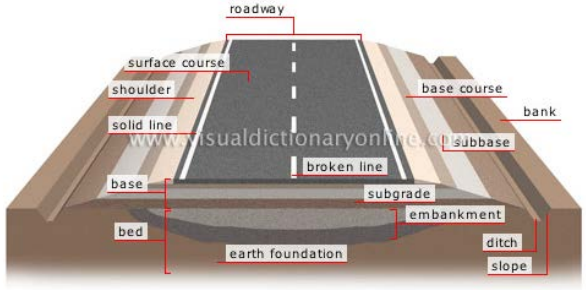
Need for Improvements

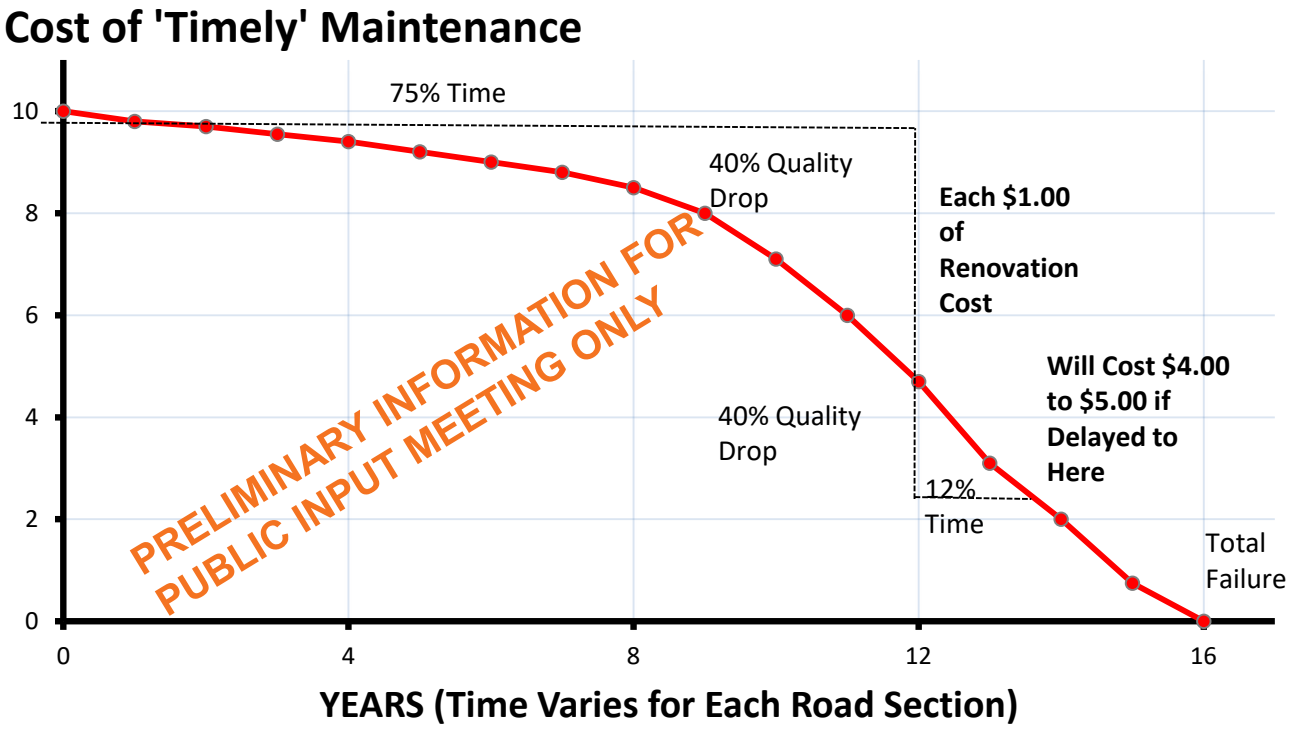
- **Flexible Pavement – Hot Bituminous Pavement (HBP)**
  - Ingredients in flexible pavement
  - Aggregates
  - Asphalt Cement Binder

Why do pavements fail?

- **Two main causes of deterioration**
  - Environmental - Weathering & Aging (Residential)
  - Structural - Traffic Loadings (Oil Fields)



Pavement deterioration



Street Improvement Schedule:

- Typical Design Life is 15 years
- Neighborhood has gotten +25 years

Deterioration Progression

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Typical 5-10 Year Old Pavement

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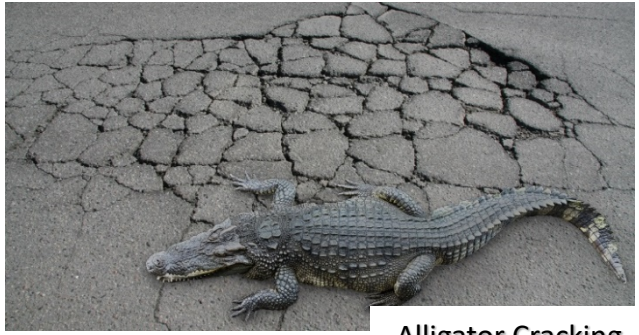
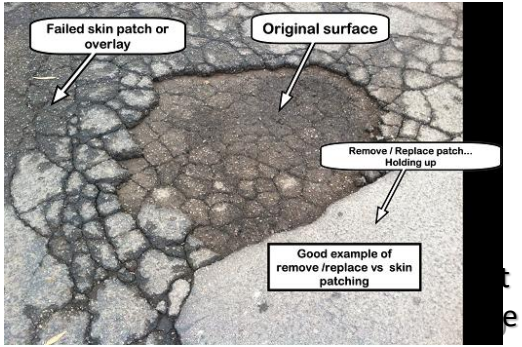
Typical 10-15 Year Old Pavement



Alligator Cracking

Failed Pavement



Pavement Conditions

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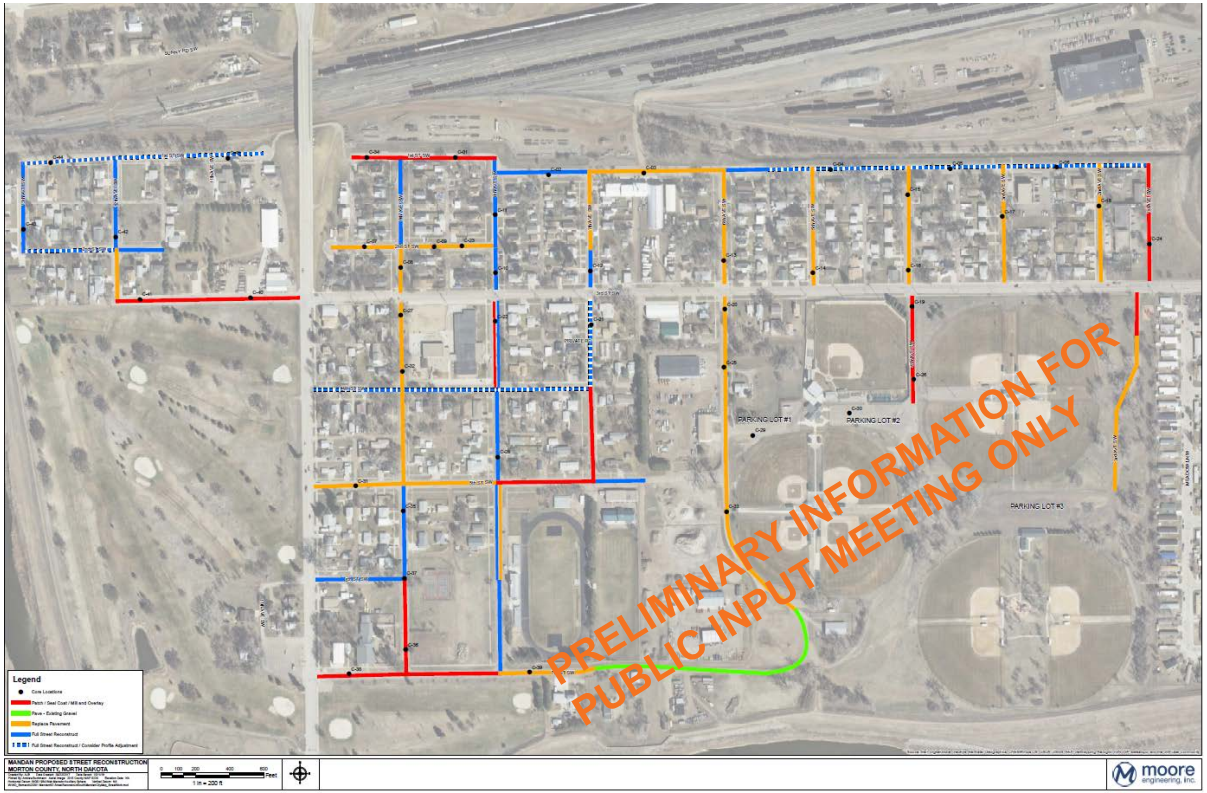
Pavement Recommendations – Preliminary



Evaluation & Recommendations:

- Visual Inspection
- Pacer Ratings
- Geotechnical Investigation
  - Street section coring
  - Asphalt thickness
  - Aggregate thickness
  - Subgrade soil properties
- Review traffic conditions
- Review drainage deficiencies
- Construction History

Scope of Improvements

Step #1: Milling of Surface

Step #2: Asphalt Pavement

Step #3: Chip Sealing Surface

Other Asphalt Treatments to be used:

- Patching
- Cement Treated Base
- Reconstruction

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Timing: Other Needs

- Infrastructure Replacement

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School Crossing Improvements

- Tripping Hazards

- Inadequate ADA Clearance

U.S. Department of Justice
Civil Rights Division
Disability Rights Section

U.S. Department of Transportation
Federal Highway Administration

Department of Justice/Department of Transportation Joint Technical Assistance[1] on the Title II of the Americans with Disabilities Act Requirements to Provide Curb Ramps when Streets, Roads, or Highways are Altered through Resurfacing

Scope of Improvements

- **Curb & Gutter**
  - Spot Repairs
  - ADA Ramps & Drainage Imp's

- **Sidewalks:**
  - Spot Repairs
  - ADA Ramps
  - Add Cross Walks

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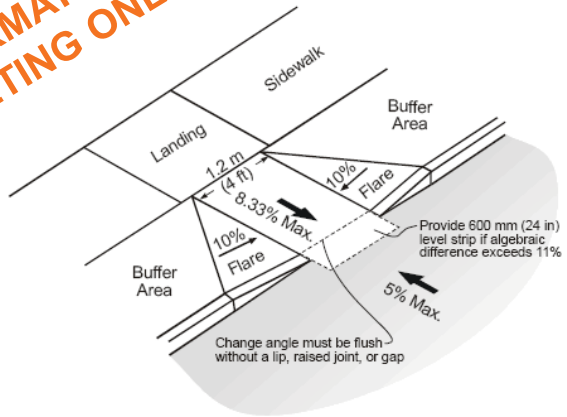

Storm Water & Drainage (Preliminary)

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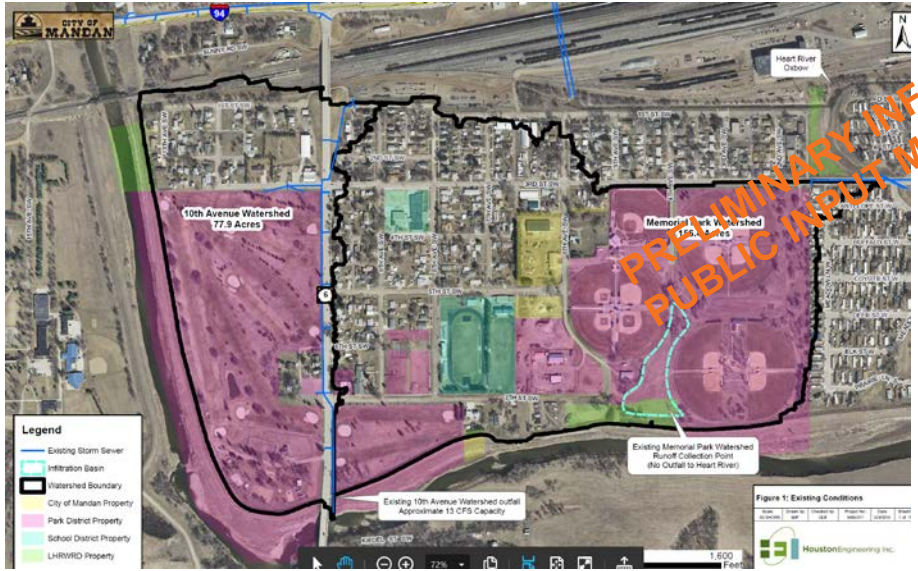
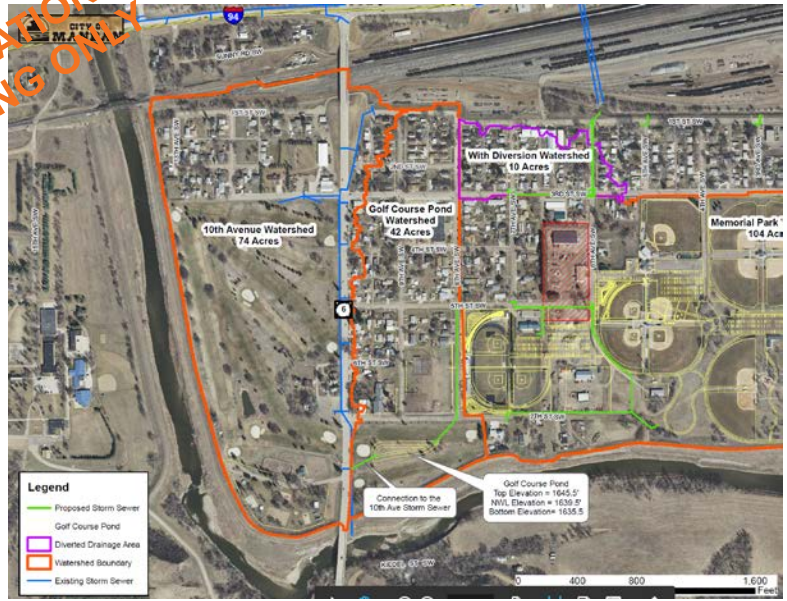


Existing Drainage Basins



Proposed Improvements

Why?

1. **Inadequate drainage leads to premature pavement failures.**
2. **Long term solution to manage community's storm water.**

Costs, Funding and Repayment

- **Assessment District Policy**
  - Street Improvement:
    - Interior Lots – Full Front Footage
    - Corner Lots – Assessed for half front and side yard
  - Alleys – Front Footage
    - Interior – Full Front Footage
    - Corner - Assessed for half front and side yard
  - Storm Sewer – Contributing area
  - Water Main – City Utility Fund
  - Sanitary Sewer – # of hookups
  - Lighting – Front Footage
  - Public Facilities – Not assessed to neighborhoods

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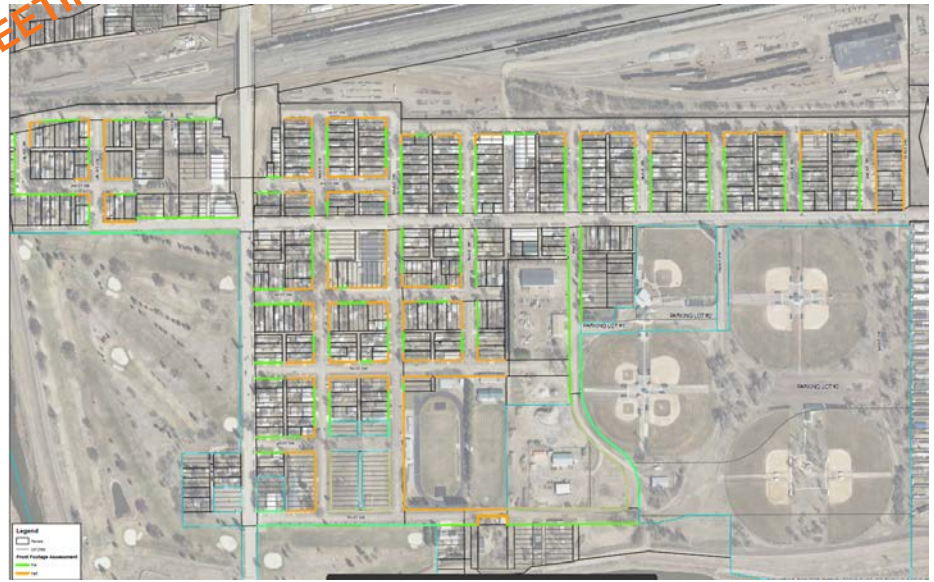

Costs, Funding and Repayment

- **Assessment Area – 30,000 FF**
  - Park District (4,000LF)
  - School District
  - Railroad Property (4,500LF)
  - Public Works Facilities (1,050LF)
  - Residential Areas
- **Project Funding**
  - Low Interest Loans for Streets
    - Infrastructure Revolving Loan from Bank of ND (2% Interest)
  - Repayment – Maximum of 20 years
  - Can Pay off day 1 with zero interest

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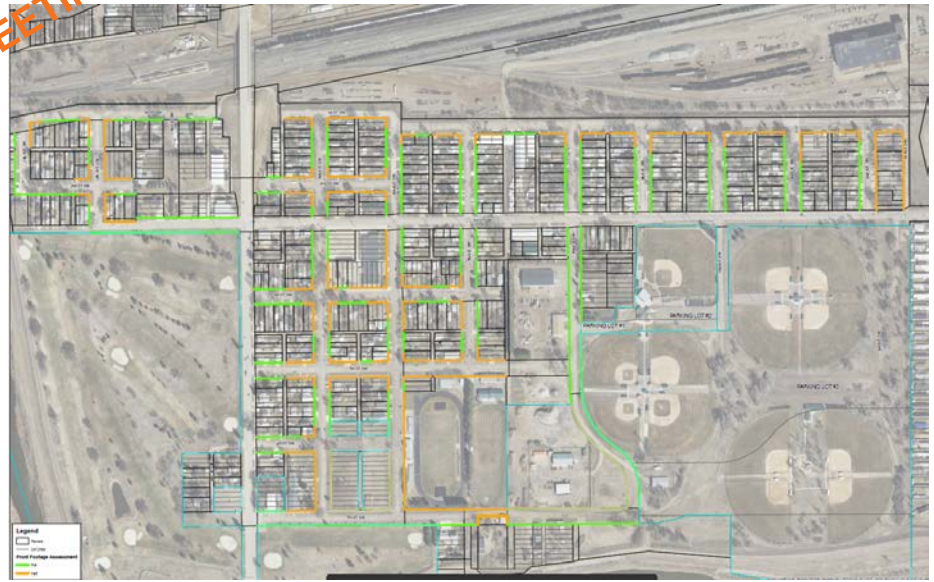

Engineer's Opinion of Project Cost

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Scope of the Improvement	Lot Size	Estimated Assess. (1 Time Payment)	Yearly Payment (20 Years)
Street, Storm & ADA	50'	$9,500 - $10,500	$670 - $740
* Cost: $190-210/FF	100'	$19,000 - $21,000	$1,340 - $1,480
Optional Add On's			
Lighting Replacement	50'	$2,000 - $2,500	$140 - 175
* Cost : $40-50/FF	100'	$4,000 - $5,000	$280 - $350
Alley Reconstruction	50'	$900 - $1,300	$65 - $95
*Cost : $18-26/FF	100'	$1,800 - $2,600	$130 - $190
Other Needs?			

Mandan – Other projects

2015 Street Impr. Dist. #199

(Estimated Costs)

- Residential:
  - Street Assess: $188/FF
  - Alley Assess: $20/FF

- Commercial:
  - Street Asses: $227/FF
  - Alley Assess: $44/FF

Final Prices 15.4% under budget

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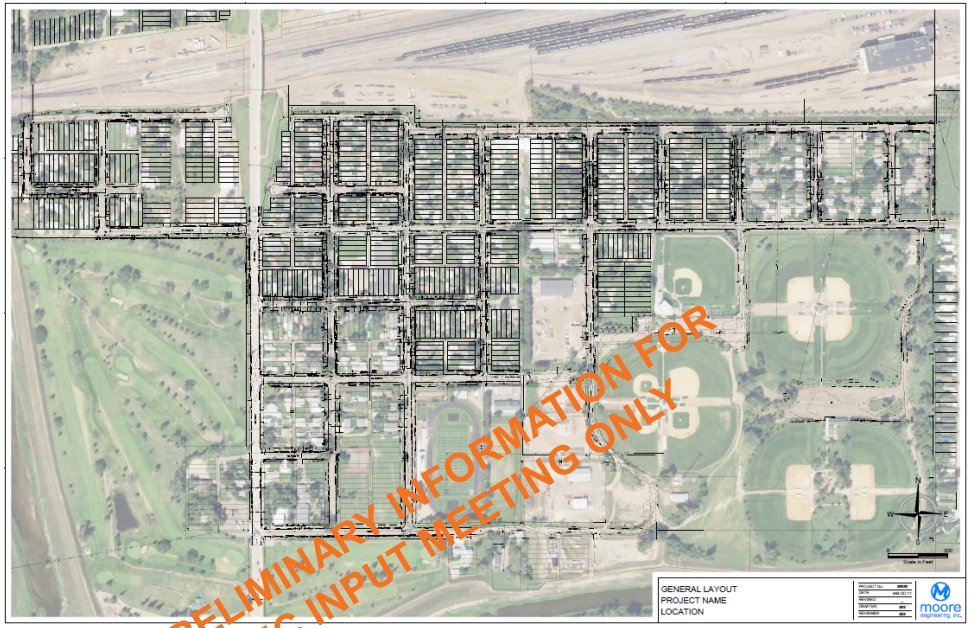
CITY OF MANDAN
"WHERE THE WEST BEGINS"

Project Schedule

- Prelim. evaluations, topo & geotechnical in Sept. 2018.
- Public Input Nov. 2018
- Final report due Nov. 28, 2018
- Resolution of necessity in December 2018.
- Design & bidding in Jan.- Mar 2019
- Construction begins spring 2019
- Final completion 6-12 months later



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Project Schedule

- **Anticipate City to approve report and create a special assessment district on Dec. 4, 2018.**

- Engineer's Report
- Preliminary Assessment List
- Resolution of Necessity
- Send Letter to Residents with approximate costs
- Tabulate Sufficiency of Protests

Project Process

- **Protests should be submitted in writing prior to the end of the protest period. NDCC 40-22-17.**
- **If a majority of property owners within the project area protest the project, the project cannot proceed.**
- **If the project does proceed, the intent would be to bid the project this winter in time for construction to begin in 2019.**

IMPROVEMENTS BY SPECIAL ASSESSMENT
CITY ATTORNEY CHECKLIST - IMPROVEMENT DISTRICT

	Create the improvement district by resolution. 40-22-08
	Direct the Engineer to prepare the Engineer's Report. 40-22-10
	Approve the Engineer's Report. 40-22-11
	Adopt a Resolution of Necessity (except water or sewer or petition of majority). 40-22-15
	Publish Resolution of Necessity one (1) week for two (2) weeks.
	30 days to file protests after date of first publication.
	Hearing at next meeting to determine sufficiency of protests and a majority of area protesting is bar to proceeding.
	Direct Engineer to prepare detailed plans and specifications. 40-22-11
	Approve plans and specifications and file with City Auditor. 40-22-11 and 14
	Check with Funding Agencies for Approval to Advertise for Bids.
	Direct City Auditor to Advertise for Bids in official newspaper and in trade publication. 40-22-19 and 48-01.-03
	Publish Ad for bids one (1) week for two (2) consecutive weeks. 40-22-19 and 48-01.1-03
	Bid opening not less than 14 days after 1st publication. 48-01.1-03
	Determination as to type of paving if applicable. 40-22-28
	Bidder's bond, 5% and contractor's license required. 48-01.1-05
	Bids opened on minutes and referred to Engineer for Statement of Estimated Costs. 40-22-29
	Accept bid and award contract (unless more than 40% over estimate) or reject all bids. 48-01.1-07
	Bond required for Performance and Payment. 48-02-06.2
	Construction contract. 40-22-35 and 36
	Issued improvement warrant/bonds. 40-24-10

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Looking for Public Input

- Questions?
- Concerns?
- General feelings?
- Are there other improvements desired?
  - Reconstruct alleys?
  - Decorative lighting?
  - Pedestrian trails?
- How can I provide feedback?
  - Survey Cards
  - Written Comments

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Written Comments:

Mandan City Hall
Attn: Engineering Dept.
205 Second Avenue NW
Mandan, ND 58554

Contact Engineer Directly:

Email: jklabunde@mooreengineeringinc.com
Telephone: 701.751.8380

Email: jfroseth@cityofmandan.com
Telephone: 701.667.3227