



# **City of Grand Island**

**Tuesday, July 16, 2019**

**Study Session**

## **Item -4**

### **Review Capital Improvement Projects for FY 2019/2020**

**Staff Contact: John Collins, P.E. - Public Works Director**

### 210 Capital Improvement Program Preliminary 10 Year Plan

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Eddy Underpass Rehab	\$ 103,000	\$ 636,540									
Custer Ave; Forrest St to Old Potash Hwy	\$ 77,250	\$ 530,450									
Webb Road Paving Assessment	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000						
5 Points Intersection Improvements	\$ 102,000	\$ 800,000									
Annual Curb Ramp Installation	\$ 154,500	\$ 159,135	\$ 163,909	\$ 168,826	\$ 463,710	\$ 477,621	\$ 491,950	\$ 506,708	\$ 521,909	\$ 537,567	\$ 553,694
Pavement Condition Survey			\$ 163,909			\$ 179,108			\$ 195,716		
Highway 2 Resurfacing			\$ 198,000								
Highway 30 Bridges			\$ 227,000								
Broadwell Ave Grade Separation			\$ 546,364	\$ 562,754						\$ 2,000,000	\$ 2,000,000
Highway 34/281 Overlay				\$ 900,407							
Highway 30 Realignment				\$ 1,000,000							
Locust St Reconstruction; Koenig St to Fonner Park Road				\$ 450,204	\$ 2,898,185	\$ 2,985,131					
Stolley Park Rd; State Fair Entrance to Stuhr Road				\$ 393,928	\$ 1,738,911	\$ 835,837					
Independence Ave; Capital Ave to Manchester/Macron					\$ 463,710	\$ 1,343,309	\$ 1,383,608				
Old Potash Highway/ North Road Bond Payment					\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000
Brookline St Paving						\$ 29,851	\$ 184,481				
State St; Lafayette Ave to Broadwell Ave							\$ 368,962	\$ 2,280,186			
Highway 281 Corridor Study; Diers Ave to Webb Rd							\$ 491,950				
Webb Rd; Old Potash Highway to Union Pacific Railroad Crossing								\$ 633,385	\$ 3,914,320	\$ 4,031,749	
Non-Regional Projects							\$ 614,937	\$ 506,708	\$ 521,909		\$ 553,694
	\$ 566,750	\$ 2,256,125	\$ 1,429,182	\$ 3,606,119	\$ 7,294,516	\$ 7,450,856	\$ 5,135,887	\$ 5,526,987	\$ 6,753,854	\$ 8,169,316	\$ 4,707,387

# Capital Projects 2019/2020



## 2019 Projects

- ☛ Pavement Condition Survey
- ☛ Five Points Intersection Improvements
- ☛ 13<sup>th</sup> Street Improvements
- ☛ Annual Curb Ramp Installation
- ☛ South Front Street Bridge Replacement & Sycamore St Underpass Rehabilitation
- ☛ Webb Road Paving Assessments (City share)
- ☛ Stolley Park Rd Restriping/Rehabilitation
- ☛ Old Potash Highway; North Road to E of Webb Road
- ☛ Broadwell Avenue/UPRR Grade Separation
- ☛ US Highway 281 Lighting (Stolley Park Rd to US Highway 30 overpass)
- ☛ Traffic Services Evaluation- Various Locations
- ☛ US Highway 281 Signal Timing
- ☛ North Road; 13<sup>th</sup> Street to Highway 2
- ☛ North Road; Old Potash Highway to 13<sup>th</sup> Street
- ☛ Northwest Flood Control Project
- ☛ North Broadwell Avenue Drainage
- ☛ Sugar Beet Ditch Drainage
- ☛ Kaufman Detention Cell Outlet
- ☛ Moores Creek Drain Extension
- ☛ William Street Realignment

# 2019 Capital Improvement Projects

## Funded by Gas Tax Money

	2019 Budget	2019 Forecast
Pavement Condition Survey	\$ 150,000	\$ 168,471
13 <sup>th</sup> Street Improvements	\$ 1,317,299	\$ 1,325,511
2019 Annual Curb Ramp Installation	\$ 150,000	\$ 160,000
South Front Street Bridge Replacement & Sycamore Underpass Rehab	\$ 2,200,000	\$ 1,839,000
Webb Road Paving Assessments (City share)	\$ 130,001	\$ 119,687
Stolley Park Road Reconfiguration & Rehabilitation	\$ 0	\$ 8,431
Five Points Intersection Improvements	\$ 170,000	\$ 100,000
Old Potash Highway: North Road to East of Webb Road	\$ 643,000	\$ 1,275,000
William Street	\$ 155,000	\$ 158,026
Broadwell Avenue/UPRR Grade Separation	\$ 125,000	\$ 120,000
US Highway 281 Lighting (Stolley Park Rd to US Highway 30 overpass)	\$ 95,000	\$ 95,000
Traffic Services Evaluation - Various Locations	\$ 100,000	\$ 55,286
US Highway 281 Corridor Signal Timing	\$ 0	\$ 77,574
North Road; 13 <sup>th</sup> Street to Highway 2	\$ 0	\$ 690,000
North Road: Old Potash Highway to 13 <sup>th</sup> Street	\$ 0	\$ 96,524
<b>TOTAL</b>	<b>\$ 5,235,300</b>	<b>\$ 6,288,510</b>

# 2019 Capital Improvement Projects

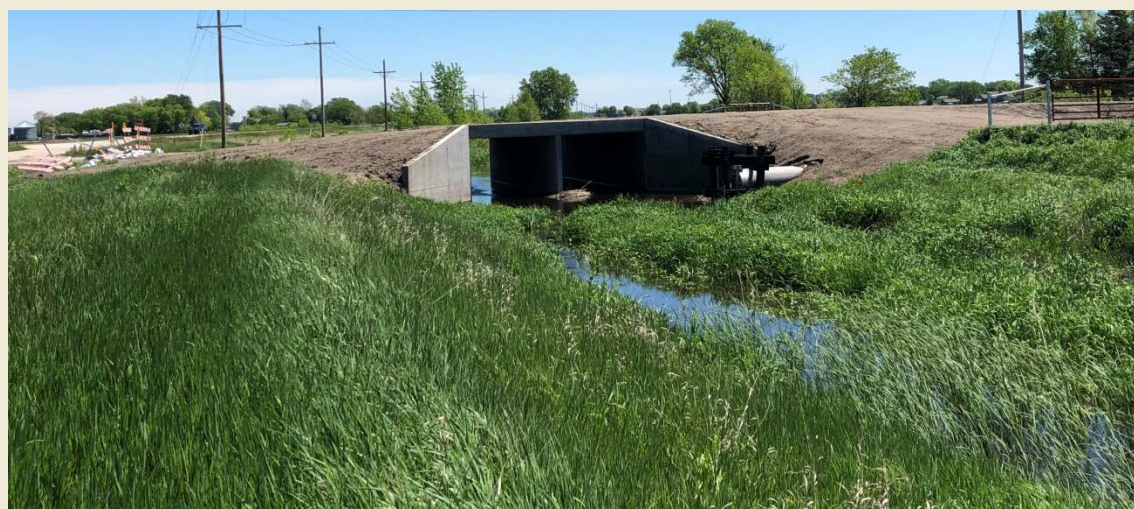
## Funded by General Fund & Special Assessments

	2019 Budget	2019 Forecast
Northwest Flood Control Project	\$ 641,355	\$ 563,000
North Broadwell Avenue Drainage	\$ 200,000	\$ 247,981
Sugar Beet Ditch Drainage	\$ 200,000	\$ 97,319
Kaufman Detention Cell Outlet	\$ 500,000	\$ 350,000
Moores Creek Drain Extension	\$ 0	\$ 415,000
<b>TOTAL</b>	<b>\$ 1,541,355</b>	<b>\$ 1,673,300</b>



# Summary of Capital Improvement Projects

	2019 Budget	2019 Forecast
Funded by Gas Tax Money	\$ 5,235,300	\$ 6,288,510
Funded by General Fund & Special Assessments	\$ 1,541,355	\$ 1,673,300
<b>TOTAL CAPITAL REQUESTS</b>	<b>\$ 6,776,655</b>	<b>\$ 7,961,810</b>



## Proposed Capital Projects for 2019/2020

- Old Potash Highway; North Road to E of Webb Road
- Annual Curb Ramp Installation
- Broadwell Avenue/UPRR Grade Separation
- North Road: 13<sup>th</sup> Street to Highway 2
- North Road: Old Potash Highway to 13<sup>th</sup> Street
- North Road: US Highway 30 to Old Potash Highway
- Five Points Intersection Improvements
- South Front St Bridge Replacement & Sycamore St Underpass Rehab
- Capital Avenue; Moores Creek to North Road
- Custer Avenue: Forrest Street to Old Potash Highway
- Eddy Street Underpass Rehabilitation
- Webb Road Paving Assessments (City share)
- Kaufman Detention Cell Outlet
- Storm Sewer Mapping
- North Moores Creek 80 Wetland Detention Design



## Old Potash Highway, North Road to Webb Rd

### \$2,365,000

- The interaction between the various traffic features is complex, prompting the creation of a master plan for the corridor to ensure that the individual street and intersection projects will function together
- Widening and reconfiguring Old Potash Highway, signal and geometric improvements at each intersection, and increased connectivity to roadway network
- Anticipated expenditures will include design engineering and property acquisition



# Annual Curb Ramp Installation

## \$154,500

Required by the Federal American Disabilities Act (ADA) Regulations – installation program follows the previous year's asphalt program and other priority corridors. Additional locations are added as funds allow.

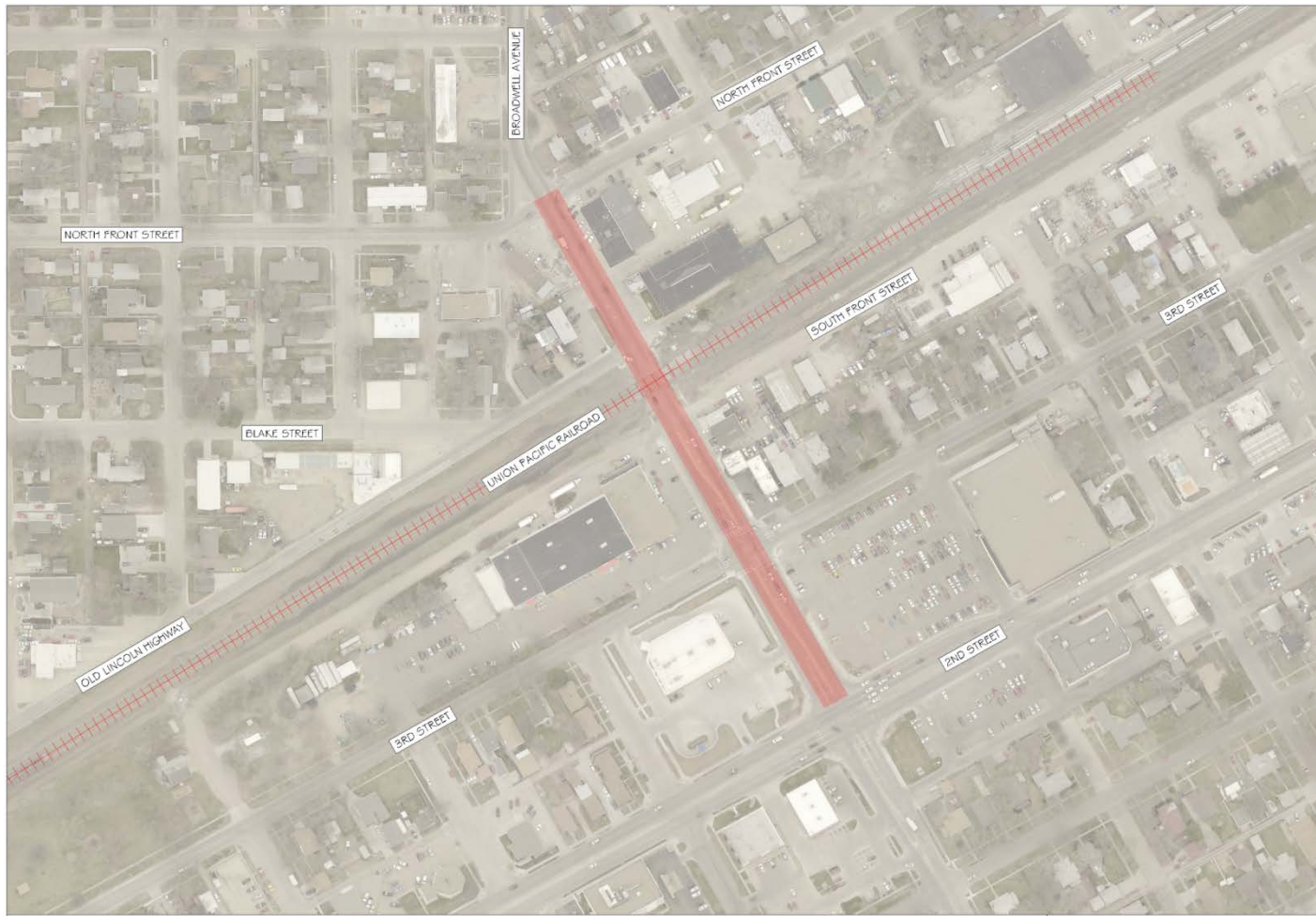


## Broadwell/UPRR Grade Separation Feasibility Study \$410,000

- Required report to become eligible for NDOT Rail Safety funds (90% of project cost)
- Assess potential solutions to vehicle traffic conflicts with railroad crossing
- Anticipate 10 year process to acquire funds







UNION PACIFIC RAILROAD & BRODWELL AVENUE GRADE SEPARATION FEASIBILITY STUDY

2018 - 2019 CAPITAL IMPROVEMENT PROJECTS



## North Road, 13<sup>th</sup> Street to Highway 2

**\$3,654,397**

- Improvements from the intersection of 13<sup>th</sup> Street and North Road to the intersection of Highway 2 and North Road
  - Capital Avenue to Hwy 2- Construction 2020
  - 13<sup>th</sup> Street to Capital Avenue- Design 2020
- Concrete curb and gutter roadway section with associated sidewalk, traffic control, drainage and other associated improvements

# North Road, Old Potash Highway to 13<sup>th</sup> Street

## \$100,000

- Improvements from the intersection of Old Potash Highway and North Road to the intersection of 13<sup>th</sup> Street and North Road
- Concrete curb and gutter section with associated sidewalk, traffic control, drainage and other associated improvements
- Final design 2020

## **North Road, US Highway 30 to Old Potash Highway**

### **\$90,000**

- Improvements from the intersection of US Highway 30 and North Road to the intersection of Old Potash Highway and North Road
- Concrete curb and gutter section with associated sidewalk, traffic control, drainage and other associated improvements
- Preliminary design 2020

## **Five Points Intersection Improvements**

### **\$102,000**

(Total Project Cost = \$2,676,375)

- 80% Federally funded safety project through Nebraska Department of Transportation (NDOT)
- Right size the lane configuration to optimize safety and efficiency, and meet the Federal Highway Administration (FHWA) safety program requirements
- Public comment scheduled for July 2019



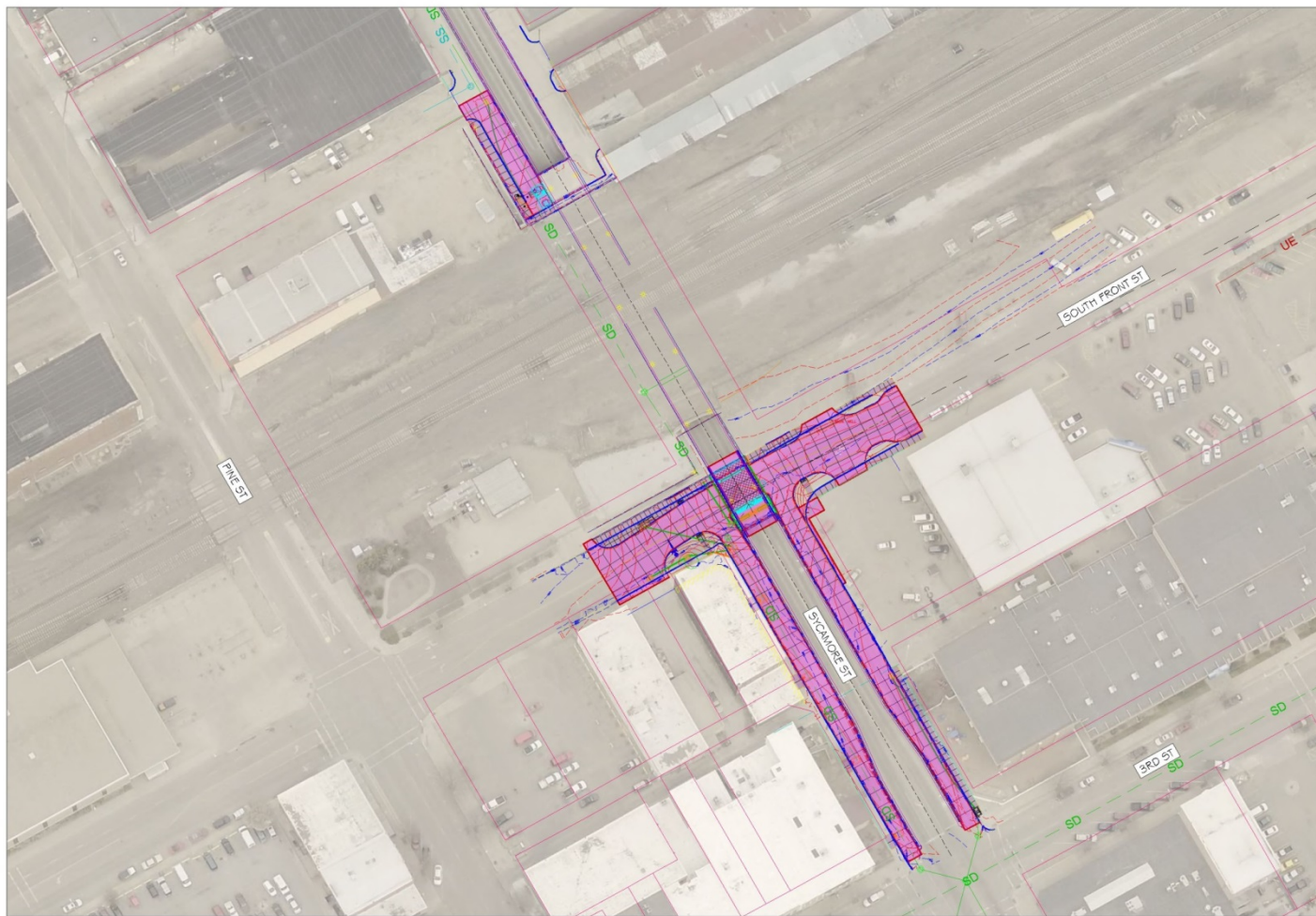


## South Front St Bridge Replacement & Sycamore St Underpass Rehab

### \$170,000

- Replace bridge deck, two (2) abutment walls, patch and seal retaining walls, improve drainage, and reconstruct pump station
- Construction anticipated to be complete September 2019





2017-U-1 SYCAMORE STREET UNDERPASS

2018 - 2019 CAPITAL IMPROVEMENT PROJECTS

# Capital Avenue, Moores Creek to North Road

## \$90,000

- Improvements from the Moores Creek Drainway at Capital Avenue to the intersection of North Road and Capital Avenue - continuation of the Capital Avenue widening
- Concrete curb and gutter section with associated sidewalk, traffic control, drainage and other associated improvements
- Preliminary design 2020

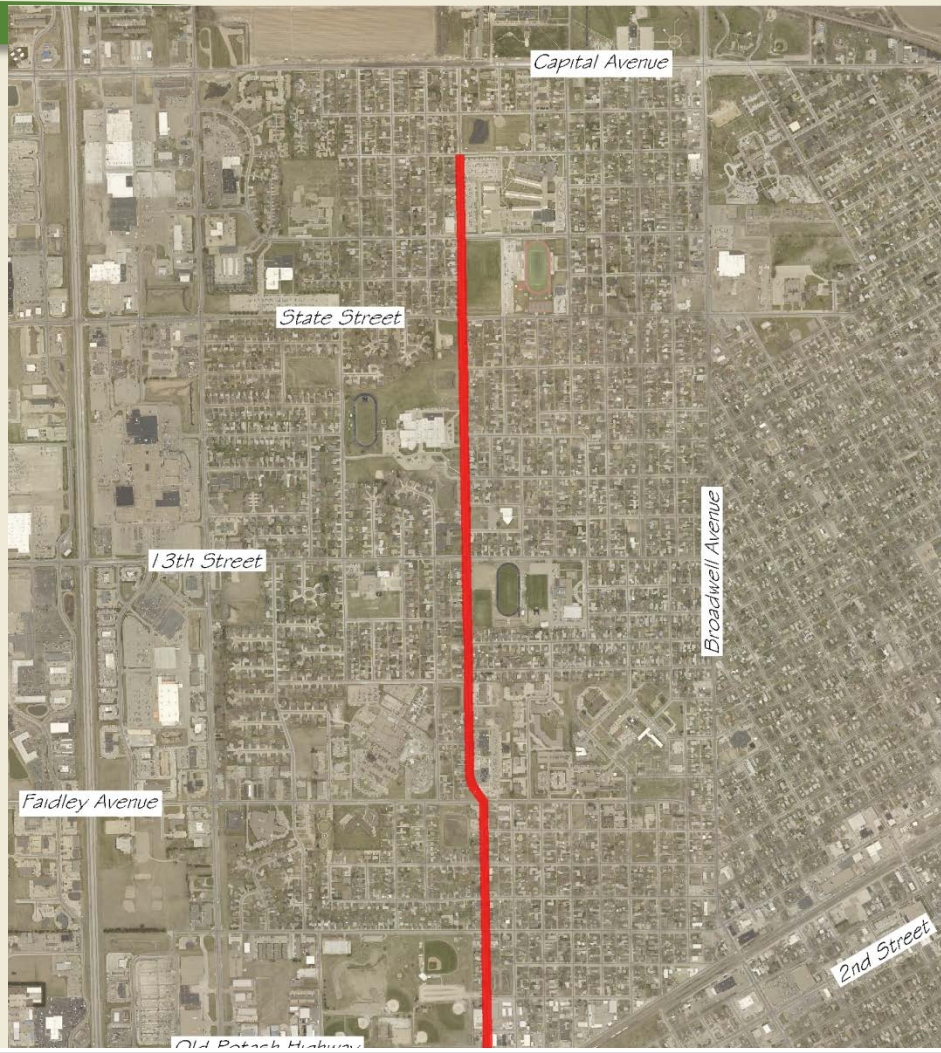


# **Custer Avenue, Forrest Street to Old Potash Highway**

## **\$77,250**

- This project will consider alternatives for driving lanes improvements/rehabilitation
- Full concrete replacement or asphalt overlay of driving lanes as well as other alternatives will be considered
- Engineering 2020, Construction 2021







# Eddy Street Underpass Rehabilitation

## \$103,000

- Evaluate condition of concrete structure and bridges to develop plan to complete maintenance on this structure
- Preventative concrete patching, wall surface treatments, bird netting and other items will be addressed
- Engineering 2020, Construction 2021 (anticipate lane closures, but not full closure)



## Webb Road Paving Assessment (City share) \$120,000

- ☛ The City portion of the Webb Road paving improvements under District No. 1260 were set at \$803,896.74
- ☛ Installments are set to be paid over the ten (10) year timeframe set by the Board of Equalization – 2019 is payment year four (4)

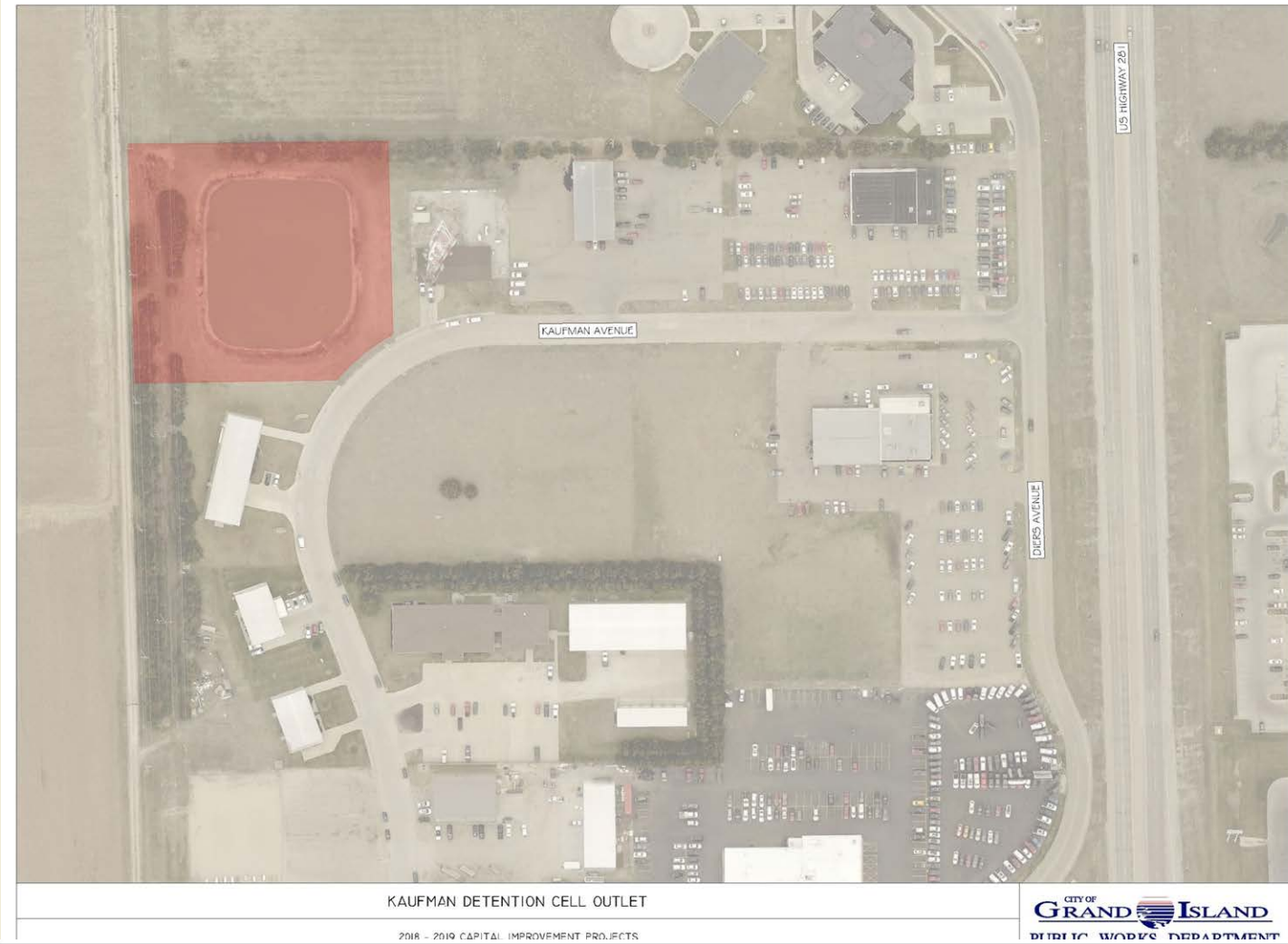


## Kaufman Detention Cell Outlet

### \$450,000

- Drainage in connection with Old Potash Highway improvements
- Additional impermeable surface due to development in area has increased the need for detention and drainage
- Reduce standing water



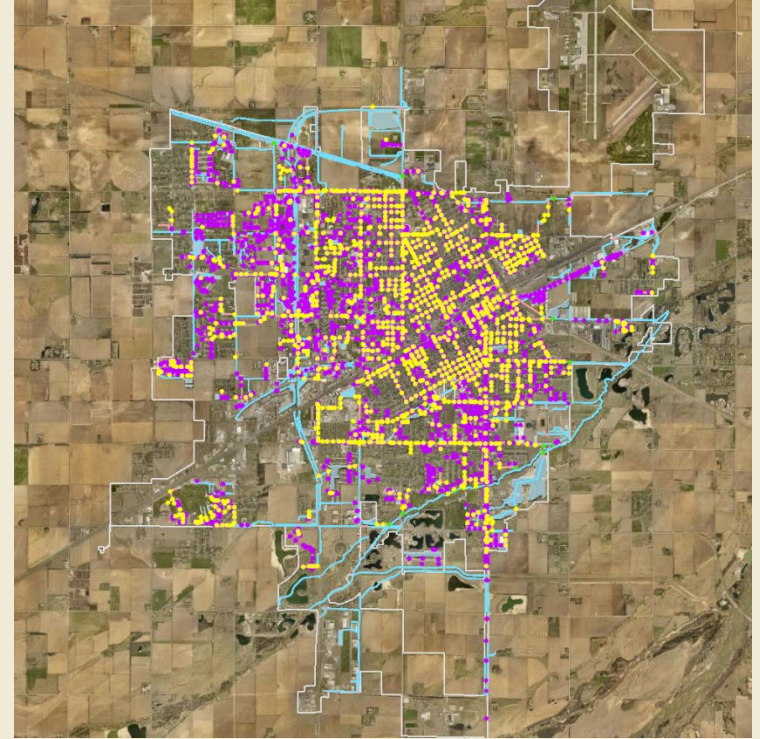




# Storm Sewer Mapping

## \$500,000

- Continue mapping of existing storm sewer infrastructure
- This will allow for future drainage performance evaluation as well as allow asset management for the system to be developed



# North Moores Creek 80 Wetland Detention Design

## \$200,000

- Begin evaluation of using site for a city owned wetland bank
- This will allow future wetland impacts due to improvement projects to be offset
- It is anticipated this will double as a detention cell to allow additional water storage on the north end of town
- Aid in moving drainage north through town more efficiently



## North Front Street at Webb Road

- Streets Project; not CIP
- Smooth transition to intersection
- Delayed through Winter and Old Potash Traffic Count
- Scheduled to start shortly



# 2020 Capital Improvement Projects

## Funded with Gas Tax Money

	2020 Budget
Old Potash Highway; North Road to E of Webb Road	\$ 2,365,000
Annual Curb Ramp Installation	\$ 154,500
Broadwell Avenue/ UPRR Grade Separation	\$ 410,000
North Road; 13 <sup>th</sup> Street to Highway 2	\$ 3,654,697
North Road; Old Potash Highway to 13 <sup>th</sup> Street	\$ 100,000
North Road; US Highway 30 to Old Potash Highway	\$ 90,000
Five Points Intersection Improvements	\$ 102,000
South Front St Bridge Replacement & Sycamore St Underpass Rehabilitation	\$ 170,000
Capital Avenue; Moores Creek to North Road	\$ 90,000
Custer Avenue; Forrest Street to Old Potash Highway	\$ 77,250
Eddy Street Underpass Rehabilitation	\$ 103,000
Webb Road Paving Assessments (City share)	\$ 120,000
<b>TOTAL</b>	<b>\$ 7,436,447</b>



# 2020 Capital Improvement Projects

## Funded by Other Revenue

	2020 Budget
Kaufman Detention Cell Outlet	\$ 450,000
Storm Sewer Mapping	\$ 500,000
North Moores Creek 80 Wetland Detention Design	\$ 200,000
<b>TOTAL</b>	<b>\$ 1,150,000</b>



# 2020 Capital Improvement Budget Summary

	2020 Budget
Funded by Gas Tax Money (Streets)	\$ 2,646,388
Funded by 2018 Sales Tax (Streets)	\$4,790,059
Funded by Other Revenue (Drainage)	\$ 1,150,000
<b>TOTAL CAPITAL REQUESTS</b>	<b><u>\$ 8,586,447</u></b>

- *\$154,500 of capital dollars is mandated*
- *\$512,000 of capital dollars is funding Federal Aid projects*

## 2020 Funding Sources- 210 Fund

Balance Forward	\$ 1,972,599
State Gas Tax Fund	\$ 5,417,759
NDOT Buy Backs	\$ 937,841
½ Cent Sales Tax	\$ 4,790,059
Other Revenue	\$ 2,551,212
Transfer In	\$ 500,000

Total available funding	\$ 16,169,470
-------------------------	---------------

210 Fund Capital Projects	\$ 2,646,388
208 Fund Capital Projects	\$ 4,790,059
210 Streets Operating & Maintenance	\$ 4,435,424
210 Streets Non-Capital Projects	\$ 1,725,000
410 Fund Transfer- Streets Equipment	\$ 600,000

Total Expenses	\$ 14,196,871
----------------	---------------

<i>Ending Cash Balance in 210 Funds</i>	\$ 1,972,599
---	--------------

## 2020 Future Project Expenses

<i><b>Project</b></i>	<i><b>2021</b></i>	<i><b>2022</b></i>	<i><b>2023</b></i>	<i><b>2024</b></i>
Annual Curb Ramp Installation	\$ 159,135	\$ 163,909	\$ 168,826	\$ 463,710
Broadwell Avenue/ UPRR Grade Separation		\$ 546,364	\$ 562,754	
North Road; 13 <sup>th</sup> Street to Highway 2	\$3,505,303	\$2,854,000		
North Road; Old Potash Highway to 13 <sup>th</sup> Street	\$630,000	\$3,538,000	\$1,800,000	
North Road; US Highway 30 to Old Potash Highway		\$ 150,000	\$2,650,000	
Five Points Intersection Improvements	\$ 800,000			
Old Potash Highway; North Road to E of Webb Road	\$8,887,500	\$4,775,000		
Webb Road Paving Assessments (City share)	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000
Capital Avenue; Moores Creek to North Road		\$ 150,000	\$2,100,000	
Custer Avenue; Forrest Street to Old Potash Highway	\$ 530,450			
Eddy Street Underpass Rehabilitation	\$ 636,540			
<b>TOTALS</b>	<b>\$15,268,928</b>	<b>\$12,297,273</b>	<b>\$7,401,580</b>	<b>\$ 583,710</b>