

MEETING MINUTES
PUBLIC WORKS COUNCIL COMMITTEE
West Des Moines City Hall Training Room
September 14, 2015

Attending:

Council Member – Rick Messerschmidt	Development Services Planner – Linda Schemmel
Council Member – Kevin Trevillyan	Parks & Rec Superintendent – Sally Ortgies
City Manager – Tom Hadden	Parks Maintenance Supervisor – Brian Fowler
Finance Director – Tim Stiles	Communications Specialist – Lucinda Stephenson
Assistant City Attorney – Greta Truman	Guest Andrew Tulp, OPN Architects
Parks & Rec Director – Gary Scott	Guest Nevin Sudarth, Alvine Engineering
Assistant City Attorney – Greta Truman	Guest Luis Leon, LT Leon & Associates
Public Works Director – Bret Hodne	Guest Donald Hole, Resident
Deputy Public Works Director – Joe Cory	Guest Marc Abels, Simpson, Jensen, Abels, Fisher, Bouslog, P.C
Principal Engineer – Ben McAlister	Guest Bill Lowry, Hidden Creek LLC

Meeting called to order at 11:32 AM.

1. Community Center Interior Renovations – Water Supply Issues

Issue Summary:

Development Services Planner Linda Schemmel reported that during the demolition phase for the project a majority of the plumbing has been exposed in the building and it was discovered that the current water supply system is not adequate or installed to code requirements and the issues need addressed before the project can move forward. Ms. Schemmel introduced guests Andrew Tulp from OPN Architects and Nevin Sudarth from Alvine Engineering to provide an overview of the issue.

Mr. Sudarth explained that the majority of the piping is currently under the floor and the pipes for both hot and cold water that service the second floor bathrooms are undersize. For the entire second floor the pipe serving cold water is 1 inch and ¾ inch for hot water. For the second floor, Mr. Sudarth recommends a 2 inch pipe for cold water service and a 1 inch pipe for hot water service. Current water service to the entire building is 1 ½ inches. Recommendation for water service for the entire building is a 3 inch pipe. In addition, there is currently no backflow preventer installed which would also be required due to code. Council Member Kevin Trevillyan questioned why a backflow preventer would be required and stated he would follow up with West Des Moines Water Works staff for further clarification and provide that information to Mr. Sudarth. Code also requires a master mixing valve to provide hot water service within 74 seconds to reach the farthest lavatory. There was discussion regarding the contributing factors to the water supply issues as well as concerns about the old water distribution system being under the concrete floor of the building.

There would be a substantial cost to repair the water supply issues. Staff does not yet have pricing or details on how this would impact the project schedule because the design is still being worked on.

Staff will obtain an estimated cost and schedule impact and follow up with the Council members once the information is available.

Direction: Information Only.

2. **Snow Removal Services Contract**

Issue Summary:

Public Works Director Bret Hodne reported on the challenge the Public Works and Parks departments have experienced over the past couple of years maintaining existing service levels during snow events as lane miles and other responsibilities continue to increase. Since the opportunity to add staff and equipment proportionate to the growth of the City has been challenging, the City is looking at more contracting opportunities. Public Works staff has met several times with Parks & Rec staff over the last few months to redevelop the snow and ice program to establish priorities and collaborate existing staff from both departments for snow removal. In the past, the City has attempted to utilize part-time employees to assist with snow removal, but that has been a challenge due to the time and effort of training coupled with the challenge of temporary employees quitting mid-season. In order to utilize staff from both departments to get the highest priority areas plowed first, it was determined that contracting out snow removal for certain areas of the City would be beneficial. Such areas include Valley Junction business district parking lots, City building entrances in Valley Junction, sidewalks in various locations, and crossing guard areas. Staff developed a Request for Proposal (RFP) for the contract and held a pre-proposal meeting to provide potential bidders an opportunity to ask questions. While the proposal was sent out to 23 regional companies, the response was minimal with only one interested party at the pre-proposal meeting. Follow up calls were made to some of the non-proposers and discussion included the possible reasons why there was such a low response to the RFP. There was also discussion on the City's responsibility for snow removal for crossing guard areas; Police Chief LaDue has been working with the school district regarding this issue.

The contract would be executed on a per-season basis with the contract price based on annual snowfall totals as well as labor costs, equipment, and potential deicer product. For annual snowfall totals between 29-45 inches, the contract price would be \$73,890. The contract allows for adjustments to the price dependent on annual snowfall totals. If the annual amount is below 29 inches or below there would be a price deduction and if the annual amount is over 45 inches there would be an increase in the price. Further discussion included monitoring and the priority expectations for the contracted areas.

Direction: The PWCC concurs with staff recommendations for the snow removal services contract.

3. **Fairmeadows Culvert**

Issue Summary:

Principal Engineer Ben McAlister reported that staff has received numerous complaints over the last several years of sinkholes in Fairmeadows Park. LT Leon Associates was hired to conduct a study of the culvert to determine the cause of the frequent sinkholes. LT Leon Associates developed several alternatives for a solution but each alternative has some associated risks. Staff is seeking input from the Council on which alternative to pursue.

Luis Leon from LT Leon Associates was in attendance to summarize the alternatives. In the Fairmeadows Creek watershed there are approximately 375 acres of drainage area that come into the Fairmeadows culvert. The culvert runs under 22nd Street and discharges into Fairmeadows Park, then runs south to EP True Parkway and Grand Avenue and eventually runs to the river through the levee system. The existing culvert utilizes a 72 inch corrugated metal pipe, is 460 feet long and was built in the 1950's. With the drainage study it was determined that the hydraulic capacity does not meet SUDAS design standards for road culverts, there are pipe condition issues, there are issues at the inlet and outlet of the culvert, and a steep embankment on the south side of 22nd Street. The source of water in the culvert is mostly residential and street drainage. There are enough critical observations and conditions that necessitate immediate action. A slide presentation outlining the various deficiencies was reviewed (Item 3).

Mr. Leon summarized the six alternatives as shown in the slide presentation:

- 1) Alternative One - Do nothing
- 2) Alternative Two - 22nd Street Low Point Improvements – This would include mitigation of local drainage at 22nd street, re-grading the embankment, and constructing an emergency spillway.
- 3) Alternative Three - Repair – In addition to the low point improvements, spot repairs along the culvert would be conducted and the last 60 feet of the culvert that has significant deflection would be replaced.
- 4) Alternative Four - Rehabilitation – In addition to the low point improvements, the entire culvert would be lined, with the exception of the last 60 feet which would be replaced.
- 5) Alternative Five - Replacement – In addition to the low point improvements, the entire culvert would be replaced with concrete pipe.
- 6) Alternative Six - Replacement – In addition to the low point improvements, full removal and replacement of the culvert with an 8'x4' concrete box culvert would be conducted as well as excavating part of the south end of the park for additional storage volume. This alternative would meet SUDAS standards at 22nd Street, but no longer at EP True Parkway.

A table showing the cost summary of each alternative was shown illustrating what deficiencies would remain with each option. Mr. Leon explained the various risks associated with each alternative as illustrated in the slide presentation. Sally Ortgies, Parks & Rec Superintendent, expressed a desire for LT Leon Associates to consider another alternative that would involve an open channel in the park before a final decision is made. Staff informed the PWCC there is \$460,000 budgeted for the project and they are seeking a solution that's a balance point between risks and benefits. Staff recommends Alternative Five with some additional options provided such as auguring in an additional pipe at EP True Parkway.

Direction: The PWCC concurs with staff recommendation.

4. Ashworth Road Improvements

Issue Summary:

Mr. McAlister reported that the design of Phase I is proceeding for the project. The preliminary design is complete and a public information meeting is being held on September 22, 2015. There was discussion regarding the project being a TIF area and how it was approved in the budget cycle as a general obligation bond.

Direction: Information Only.

5. Review of Public Works Items for Council Meeting (September 21, 2015)

- A. Accepting Purchase of Equipment – Flashing Yellow Arrow Traffic Signal Conversion Project
- B. Approval of 1st Reading – Sugar Creek Stormwater Connection Fee District
- C. Approval of Preliminary Plat and Schedule – Coachlight Drive Street Improvements – South 88th Street West
- D. Approval to Purchase Wetland Credits - Maffit Lake Road Extension – Veterans Parkway to South 8th Street
- E. Order Construction:
 - i. 2015 Intake Repair Program
 - ii. Public Safety Station 17 HVAC Improvements
- F. Award Contract:
 - i. 2015 Citywide Energy Savings
 - ii. Dixie Acres Sanitary Sewer
- G. Establish Just Compensation and Approve Acquisition of Property:
 - i. Ashworth Road Improvements
 - ii. Walnut Creek Outfall Storm Sewer
 - iii. 50th Street Widening Project

Direction: The PWCC concurs with staff recommendations on the Council agenda items.

6. Staff Updates

- A. Mid-American LED Conversion – Deputy Public Works Director Joe Cory reported that staff reviews light outages in the City on a quarterly basis and provides that information to Mid-American Energy. A map was provided showing all the light outages and Mr. Cory reminded the PWCC that the replacements would be LED light fixtures (Item 6A).

Direction: Information Only

- B. Maintenance Bonds – Mr. Cory reported that at the September 8, 2015, Council meeting, the contractor for the 2015 Sidewalk Program requested that a two year maintenance bond be provided for the project instead of a four year maintenance bond. The contractor had said the City of Urbandale accepted a two year maintenance bond for a similar project. Mr. Cory contacted the City of Urbandale and reported their project was under \$25,000 which is why they accepted the two year maintenance bond. The majority of surrounding agencies require four year maintenance bonds. Staff does not recommend acceptance of maintenance bonds under four years.

Direction: The PWCC concurs with staff recommendation.

7. Other Matters

A. Surplus City ROW at Veterans Parkway

Don Hole, resident at 2070 S. 4th Street, was in attendance to discuss the surplus City ROW that is directly west of Veterans Parkway. Mr. Hole stated he represents all residents on 4th Street whose property abuts the surplus ROW on the west side of Veterans Parkway. Mr. Hole is seeking confirmation that access would not be allowed off of the streets to these parcels. There was discussion about whether or not there would be accesses built off of Veterans Parkway or the side streets. Staff indicated access could be accommodated off of the side streets but full access should not be provided off of Veterans parkway due to the proximity to the street intersections. Staff is in the process of retaining an appraiser for the parcels and the accessibility of the tracts will need to be determined in order to obtain an accurate appraisal.

Mr. Hole stated the residents on 4th Street have continuously discussed acquiring the excess property and have the City subdivide the area and add it to each adjacent resident's property. Council Member Trevillyan explained the City will offer the property as the parcels currently exist, it would not be subdivided into separate lots. Mr. Hole was in agreement that it is the obligation of the residents to reach a consensus if they wanted to purchase the entire property. The parcel will be offered back to the original owner first. If the original owner does not buy back the property, the City will offer the property for sale on the open market.

Direction: The PWCC recommends that access be allowed off of the side streets, but not off of Veterans Parkway and that the property be offered for sale as the tracts currently exist.

- B. No Parking Signs – Council Member Trevillyan requested that Mr. Hodne meet with staff regarding the City's 'No Parking' signs. Currently the 'No Parking' signs have an arrow to indicate a no parking zone. Council Member Trevillyan has received complaints from numerous residents that the arrow is unclear and he recommends using wording such as 'No Parking Here To Corner' instead of the arrow.

Direction: Mr. Hodne will meet with staff to discuss options and report back to the PWCC.

- C. Coachlight Drive Special Assessment – Marc Abels from Simpson, Jensen, Abels, Fisher, Bouslog, P.C. and Bill Lowry from Hidden Creek LLC were in attendance to discuss the amendment to the special assessment to install a water main for Coachlight Drive, which was not part of the original project. Mr. Abels and Mr. Lowry met with Dianna Wilson from West Des Moines Water Works to discuss if the water main project could be limited to the portions that go under the street. Staff stated there is a proposal to have an alternative special assessment document which includes the water mains that the Council can consider at the dais.

Direction: Information Only.

Meeting adjourned at 1:10 PM. The next Public Works City Council Subcommittee meeting is scheduled for September 28, 2015.

Copies of handouts are available at Public Works upon request. A recording was made. Respectfully submitted by Kim Pinegar, Secretary.



PUBLIC WORKS COUNCIL COMMITTEE MEETING AGENDA

Monday, September 14, 2015 – 11:30 AM

Location: West Des Moines City Hall – Training Room
4200 Mills Civic Parkway

1. Community Center Interior Renovations – Water Supply Issues (LS)
Guests - Andrew Tulp, OPN Architects & Nevin Sudarth, Alvine Engineering
2. Snow Removal Services Contract (RBH/SO)
3. Fairmeadows Culvert (DCW)
4. Ashworth Road Improvements (DCW)
5. Review of Public Works Items for Council Meeting (September 21, 2015)
 - A. Accepting Purchase of Equipment – Flashing Yellow Arrow Traffic Signal Conversion Project
 - B. Order Construction – Public Safety Station 17 HVAC Improvements
 - C. Award Contract:
 - i. 2015 Citywide Energy Savings
 - ii. Dixie Acres Sanitary Sewer
 - D. Approval of 1st Reading – Sugar Creek Stormwater Connection Fee District
 - E. Approval of Preliminary Plat and Schedule – Coachlight Drive Street Improvements – South 88th Street West
6. Staff Updates
 - A. Mid-American LED Conversion (JCC)
 - B. Maintenance Bonds (JCC)
7. Other Matters

This agenda is created for planning purposes and is subject to change.

Any discussion, feedback or recommendation by Sub-committee member(s) should not be construed or understood to be an action or decision by or for the West Des Moines City Council.

All visitors to the Public Works Council Committee meetings are asked to sign in.

Thank you!

**PUBLIC WORKS COUNCIL COMMITTEE MEETING
GUEST ATTENDANCE**

Date: 9/14/15

Printed Name & Organization	Address / E-mail	Day time phone #	Topic
Luis Leon, LT Leon	500 E. Locust Street Ste 400 Des Moines, IA 50309 lleon@tleon.com	515-422-7016	Fairmeadows Park Culvert
Donald Hole	2070 S. 4th St West Des Moines, IA	515-480-2686	Veterans Play - Surplus Property
ANDREW TULP OPIN ARCHITECT	1005 CONIST AVE #100 ATWYB ONAREARCH.COM	515-290-7688	WDM COMMUNITY CENTER
Nevin Suddarth Alvine Engineering	400 E. Court Ave Ste. 130 Des Moines, IA 50309	515-243-0509	West Des Moines Community Center
Marc Abels Simpson Jenson Abels	622 Locust St 222 DSM IA 50309	515 288-1000	Whisper Ridge / Coachlight

All visitors to the Public Works Council Committee meetings are asked to sign in.

Thank you!

**PUBLIC WORKS COUNCIL COMMITTEE MEETING
GUEST ATTENDANCE**

Date: 9/14/15

Printed Name & Organization	Address / E-mail	Day time phone #	Topic
<i>Bill Lowry Hidden Creek - LLC</i>	<i>wlowry@AOC-Com</i>	<i>515 491 0127</i>	<i>Coachlight # 88th + Whisper Ridge</i>



Fairmeadows Park Culvert Improvements

Public Works Council Committee Meeting

City of West Des Moines

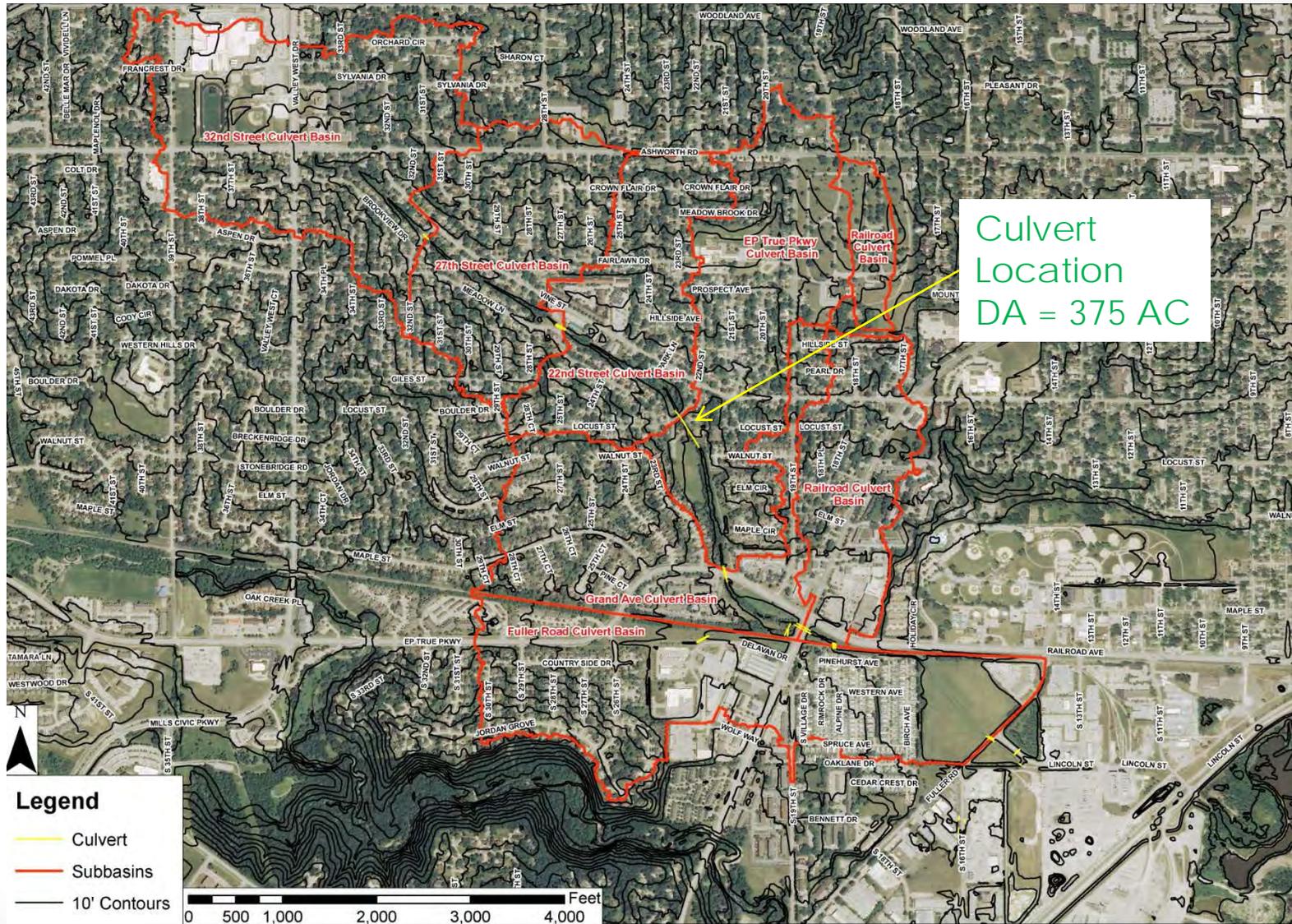
September 14, 2015

Presentation Overview

- Problem Description
 - Existing Conditions
 - Potential Failure Concerns
 - Hydraulic Capacity and Downstream Concerns
 - Alternatives Evaluated
 - Do Nothing
 - Repair – Patch in Place
 - Rehabilitate – Pipe Liner
 - Replace
 - Risk Assessment and Pro/Cons of Alternatives
-

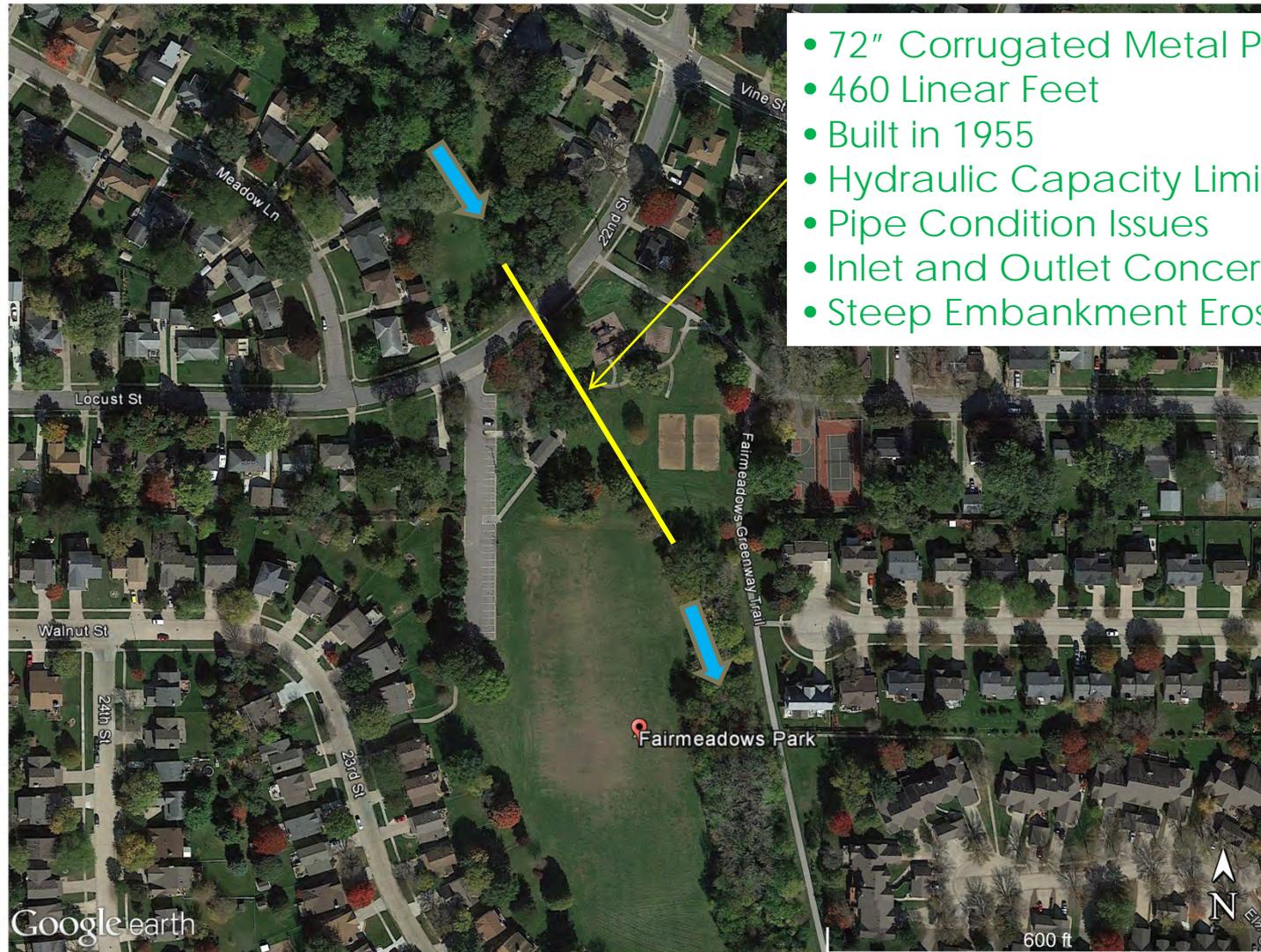
Fairmeadows Creek Watershed

3



Fairmeadows Park Culvert

3



- 72" Corrugated Metal Pipe Culvert
- 460 Linear Feet
- Built in 1955
- Hydraulic Capacity Limitations
- Pipe Condition Issues
- Inlet and Outlet Concerns
- Steep Embankment Erosion

Hydraulic Capacity Limitations

3

- Existing Capacity – Restricts flow downstream to EP True Pkwy and Grand Ave.
 - Overtops 22nd Street at 100-YR Rainfall Event
 - Does not meet current SUDAS design standards for road culvert
- Increasing capacity of culvert to avoid overtopping or provide 1' freeboard for the 100-YR rainfall would create capacity concerns at EP True Pkwy and Grand Ave.

Pipe Condition Issues

- FHWA culvert assessment used
 - **Critical** – Possible imminent failure, immediate action recommended
 - Excessive Deformation (>10% deflection) – 25% of total length
 - Invert Deterioration
 - **Poor** – Significant deterioration requiring repair action soon
 - Invert Deterioration
 - Pipe Deformation
 - **Fair** – Some deterioration, but structurally sound and functionally adequate
 - Displaced Joints
 - Bulging
 - Deformation
 - Minor Rust
- 

Pipe Condition Issues

Table 1 – Fairmeadows Culvert Existing Condition Summary

Observation #	Station	Assessment Rating	Main Concern	Photo #
1	0+00 – Outlet	Fair	-	1-3
2	0+13	Critical	Excessive Deformation to STA. 0+61	4
3	0+30	Critical		5
4	0+38	Critical		6
5	0+50	Critical		7
6	0+61	Fair		Displaced Joint
7	0+81	Critical	Invert Deterioration to STA. 1+22	10-14
8	1+22	Fair	Displaced Joint	15-19
9	1+37	Fair	Bulging	20
10	1+58	Poor	Invert Deterioration	21
11	1+69	Critical	Invert Deterioration to STA. 1+88	22-25
12	1+88	Fair	Deformation	26
13	2+19	Critical	Invert Deterioration to STA. 2+33	27-32
14	2+49	Poor	Invert Deterioration	33
15	2+60	Poor	Deformation	34
16	2+80	Poor	Invert Deterioration	35
17	3+16	Fair	Deformation	36
18	3+57	Fair	Deformation	37
19	3+88	Fair	Minor Rust	38
20	4+19	Fair	Minor Rust	39
21	4+43	Poor	Deformation	40-41
22	4+60 – Inlet	Fair	-	42
23 – 48" CMP	0+00 – Outlet	Critical	Invert Deterioration to STA. 0+20	43-44

Red = CRITICAL
 Yellow = POOR
 Green = FAIR

Critical Issues

3



Excessive Deformation



Invert Deterioration

Inlet and Outlet Concerns

3

- Inlet
 - Gabion Baskets w/ stones requires ongoing maintenance
 - Large inlet guard a safety concern

- Outlet
 - Scour hole and streambank erosion



Steep Embankment

- Maintenance and Safety Concern
- Limited inlet capacity and storm sewer on 22nd Street creates overflows that run down embankment



Alternatives

3

- Alternative 1 – Do Nothing
 - Not recommended due to public safety concerns
- Alternative 2 – 22nd Low Point Improvements
 - Replace existing intakes
 - Add additional set of intakes
 - Re-grade south embankment
 - Construct emergency spillway



Alternative 3 - Repair

3

- Low point improvements (Alt. 2)
- Spot repairs along the culvert length
- Outlet improvements
- Replacement of last 61' of 72" culvert at severe deformation area
- Replacement of failed 48" culvert section



Alternative 4 - Rehabilitation

3

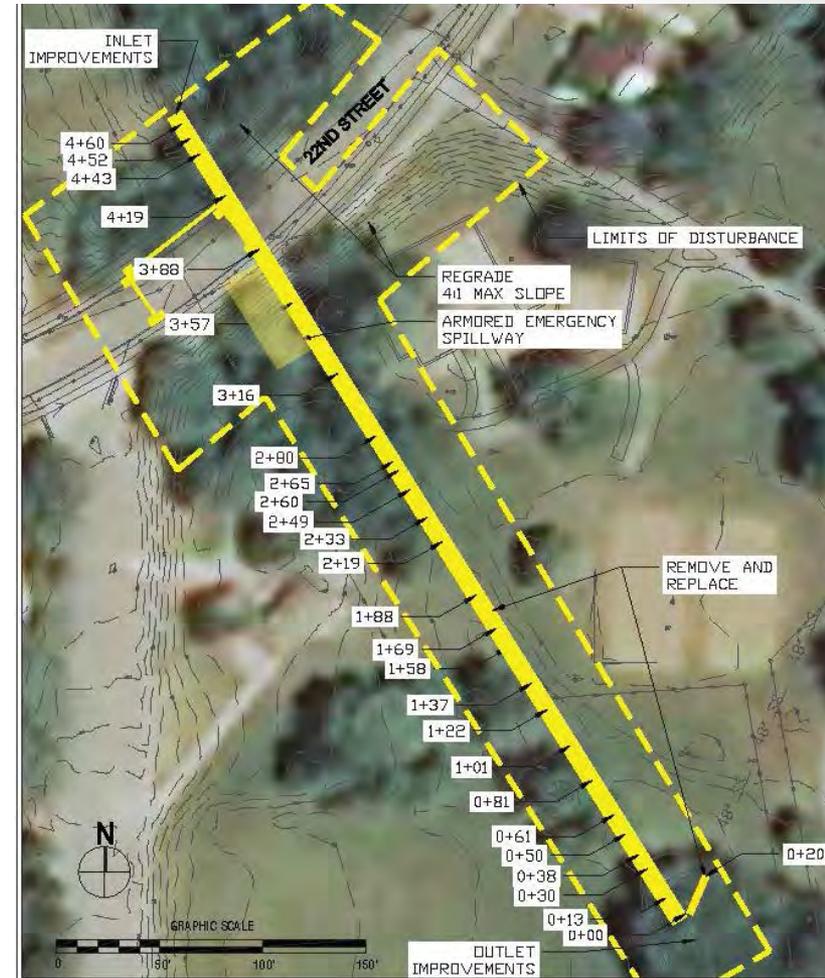
- Low point improvements (Alt. 2)
- 66-inch liner + replacement of last 61' of ex. culvert
- Inlet & outlet improvements
- Replacement of failed 48" culvert section



Alternative 5 – Replacement (72" Diameter)

3

- Low point improvements (Alt. 2)
- Full removal and replacement with new 72" concrete culvert
- Inlet & outlet improvements
- Replacement of failed 48" culvert section



Alternative 6 – Replacement (8'x4' Box Culvert)

3

- Low point improvements (Alt. 2)
- Full removal and replacement with new 8'x4' concrete box
- Inlet & outlet improvements
- Excavate additional storage volume
- Replacement of failed 48" culvert section



Fairmeadows Park Culvert Alternatives Summary

3

Table 6 – Deficiency Summary – Proposed Fairmeadows Culvert Alternatives

Alternatives	Cost Estimate	Deficiency					EP True Freeboard
		Minor Storm 22 nd Road Overtopping	Culvert Material	Culvert Structure	Major Storm 22 nd Road Overtopping	22 nd Non-Compliant with SUDAS	
1. Do Nothing	-	X	X	X	X	X	1
2. Low Point	\$120,000		X	X	X	X	1
3. Repair	\$220,000			X	X	X	1
4. Rehabilitation	\$350,000				X	X	1
5. Replacement	\$470,000					X	1
6. Replacement w/ Storage	\$730,000						0.1

Alternatives Risk Assessment

3

- **Alternative 1 – Do Nothing**

- Structural issues not addressed
- Capacity Issues at culvert and 22nd Street lowpoint
- Emergency response may be required during flood event due to road overtopping
- Flooding may impact approx. 8 garage structures upstream
- Ongoing maintenance due to embankment erosion

- **Alternative 2 – Low Point Improvements**

- Reduces minor flooding and erosion at 22nd Street lowpoint for minor rainfall events
 - Emergency spillway protects embankment if road is overtopped
 - Structural issues not addressed
 - Capacity not addressed
 - Emergency response may be required during flood event due to road overtopping
 - Flooding may impact approx. 8 garage structures upstream
- 

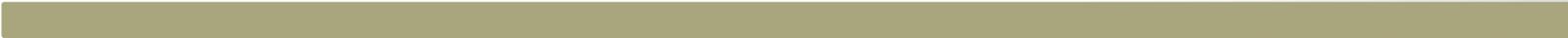
Alternatives Risk Assessment

3

- **Alternative 3 – Repair**

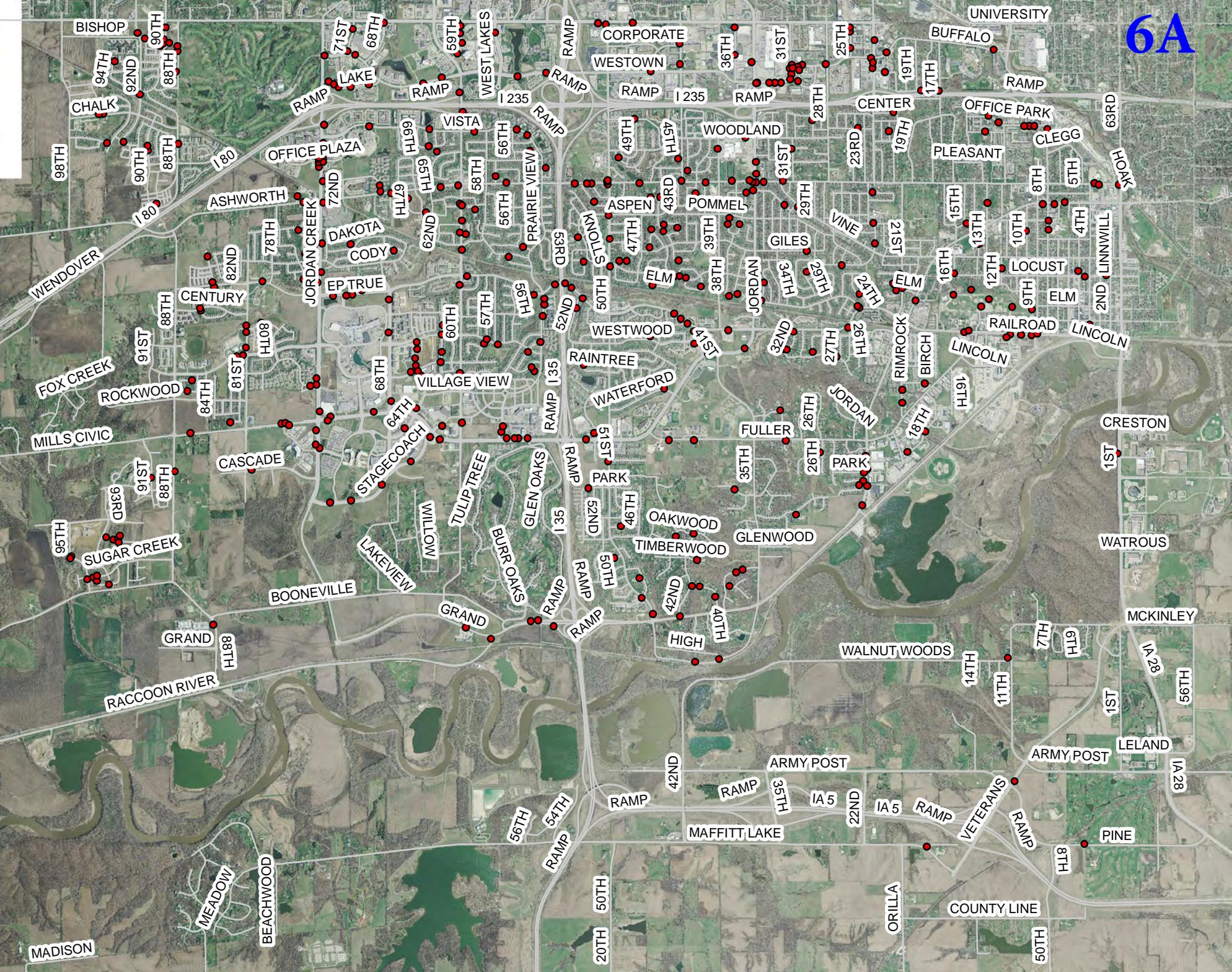
- Spot repairs buys time for future replacement or lining. Monitoring of these repairs will be required.
- Severe structural issues addressed
- Capacity not addressed
- Emergency response may be required during flood event due to road overtopping
- Flooding may impact approx. 8 garage structures upstream

- **Alternative 4 – Rehabilitation**

- Structural issues addressed
 - Capacity not addressed
 - Emergency response may be required during flood event due to road overtopping
 - Flooding may impact approx. 8 garage structures upstream
- 

Alternatives Risk Assessment

- **Alternative 5 – Replacement (72" Diameter)**
 - Structural issues addressed
 - 22nd Street does not overtop for 100-YR, but minimal freeboard provided (0.4')
 - Maintains 1' freeboard at EP True Pkwy
 - Flooding may impact approx. 6 garage structures upstream
- **Alternative 6 – Replacement (8'x4' Box Culvert)**
 - Structural issues addressed
 - Capacity addressed, 1' freeboard provided for 100-YR
 - Flooding may impact approx. 4 garage structures upstream
 - Impacts grass open playing field in Park
 - Reduces freeboard at EP True Pkwy to 0.1'
 - Most expensive option



Pinegar, Kimberly

From: West Des Moines, IA <webmaster@wdm.iowa.gov>
Sent: Friday, September 11, 2015 8:59 AM
To: Pinegar, Kimberly
Subject: West Des Moines, IA: Public Works Council Committee Meeting

Public Works Council Committee Meeting

- **Date:** 09/14/2015 11:30 AM - 1:30 PM
- **Location:** West Des Moines City Hall - Training Room
[4200 Mills Civic Parkway](#)
[West Des Moines, Iowa 50265](#)
- **Agenda:** [9.14.15 PWCC Agenda](#)

Having trouble viewing this email? [View on the website instead.](#)

[Change your eNotification preference.](#)

[Unsubscribe from all West Des Moines, IA eNotifications.](#)

