

MEETING MINUTES
PUBLIC WORKS COUNCIL COMMITTEE
West Des Moines City Hall Training Room
May 13, 2015

Attending:

Council Member – Rick Messerschmidt	Public Works Deputy Director – Joe Cory
Council Member – Kevin Trevillyan	Principal Engineer – Jason Schlickbernd
City Manager – Tom Hadden	Principal Engineer – Ben McAlister
Finance Director – Tim Stiles	Development Services Planner – Linda Schemmel
Assistant City Attorney – Jason Wittgraf	Traffic Engineer – Jim Dickinson
City Engineer – Duane Wittstock	Bob Veenstra – Veenstra & Kimm, Inc.
Public Works Director – Bret Hodne	Communication Specialist – Lucinda Stephenson

Meeting called to order at 1:00 PM.

1. Barnes Heights Sanitary Sewer Fee District

Issue Summary:

Bob Veenstra from Veenstra & Kimm, Inc. reported on the history of the project to date. The first feasibility study to analyze gravity sewer alternatives was conducted from June through the fall of 2012. The first meeting with property owners was held on November 15, 2012. Those in attendance primarily consisted of residents from the 63rd Street corridor; there was not much attendance from residents along Ashworth Road. Throughout the process, participation from property owners along the 63rd Street corridor has been greater than those along Ashworth Road. The first citizen survey was sent out by staff in December 2012 with the results indicating not much interest from residents. The project was put on hold at that point. Property owner's main concerns included a combination of cost and property disruption. In the summer of 2014 as a result of the Pemberley Heights development there was renewed interest in the project. A second meeting with property owners was held in August 2014 to discuss the overall interest of the fee district and additional alternatives. The consensus was to move forward with reviewing additional alternatives that included a gravity sewer to the south, a low pressure alternative and a mixed alternative with a combination of a gravity sewer and a low pressure sewer. This study was completed in November 2014. A third meeting with property owners was held in December 2014 and the consensus was there was more interest in the low pressure sewer alternative. A second survey was sent out by staff in December 2014 to determine interest in the various alternatives. The survey results indicated that respondents preferred the low pressure sewer option in the City ROW. These results were presented at the January 5, 2015, PWCC meeting. Staff recommendation at that time was to establish a sanitary sewer connection fee district based on a low pressure sanitary sewer system constructed in the street ROW. At the time of hook-up individual property owners would be required to install on-site improvements since they would not be included in the project's scope.

Mr. Veenstra explained the role of the Dallas County Environmental Health department in the process for determining when a property owner can perform maintenance or replace an onsite private sewage treatment system. Dallas County Environmental Health follows the requirements of Chapter 69 of the Iowa Administrative Code and defers to the City of West Des Moines relative to the distance requirements for connection to the sanitary sewer system. The City's requirement is more restrictive than the Iowa Administrative Code requirements, therefore, connection would be required if sanitary

sewer is located within 400 feet of the property line. A copy of the letter received by Veenstra & Kimm, Inc. from Dallas County Environmental Health was distributed to council members (Item 1). There was discussion regarding potential issues for property owners, such as requirements from mortgage lenders to replace an onsite treatment system before sale of a property, if the decision is made to put the project on hold again. Mr. Veenstra explained how installation of the system is conducted in response to Council Member Messerschmidt's question about system install. Mr. Veenstra and staff responded to questions from the council members regarding cost and ongoing expenses for the various alternatives and displayed a table showing the different costs (Item 1.1).

A public hearing on the establishment of the connection fee district was held at the May 4, 2015, Council meeting. There were several questions posed by property owners at the public hearing and there are still a significant number of residents in favor of not moving forward with establishing a connection fee district. A discussion was held on the concerns that have been raised regarding the abutting developers requirements to provide sewer availability to Barnes Heights and issues with the City providing financial incentives and financing alternatives. Tim Stiles, Finance Director, noted several concerns for the City if Council considers offering a long-term installment payment plan for property owners in Barnes Heights.

Direction: The PWCC's recommendation is to continue with the establishment of the connection fee district and for staff to send property owners the answers to questions that were addressed at the May 4, 2015, Council meeting. The Committee did not recommend any changes to the fee district proposal or financing arrangements.

2. Update on Dixie Acres Fee District

Issue Summary:

Jason Schlickbernd, Principal Engineer, reported that a public meeting for the Dixie Acres Fee District was conducted on February 26, 2015. Veenstra & Kimm, Inc. completed a draft engineering report on April 24, 2015, and a second public meeting with property owners was held on May 5, 2015, with the following alternatives with costs presented and discussed:

- Alternative 1 – Gravity sewer along 54th Street flowing to the south
- Alternative 2 – Gravity sewer in backyards flowing to the south
- Alternative 3 – Low pressure sewer along 54th Street discharging to the north
- Alternative 4 – Low pressure sewer in backyards discharging to the north
- Alternative 5 – Combination of gravity sewer and low pressure sewer along 54th Street flowing to the south

Mr. Schlickbernd presented a table illustrating the costs for each alternative (Item 2). The property owners met without staff on May 11, 2015, and the consensus from the group was that seven of the eight were in favor of Alternative 1. Staff recommends to proceed with the establishment of the Dixie Acres connection fee district for Alternative 1.

Direction: The PWCC concurs with staff recommendation.

3. Polk Countywide FEMA Mapping Project

Issue Summary:

Mr. Schlickbernd reported that FEMA has a contractor updating all the FEMA maps for Polk County. Maps were sent out by FEMA on April 22nd which staff has reviewed and commented on. A packet

was provided to council members with the staff comments (Item 3). Mr. Schlickbernd asked the council members to review the packet and provide staff with any additional comments so that staff can respond by May 18th.

Direction: Information only.

4. Review of Mid-American Energy Surface Restoration Product

Issue Summary:

Joe Cory, Public Works Deputy Director, reported that last July and August, Mid-American Energy had requested to test an alternative product to sod. The alternative product is Futerra Environet (Item 4). The areas where this product was used last summer indicate positive results. Mr. Cory discussed the results of the product with some residents in the test areas. Those residents indicated they liked the product and it appeared to work better than traditional sodding. Discussion included the best way to implement the use of the product with several CIP projects already in process that have sodding in the contract, as well as residents who may still prefer sod. Staff recommends allowing this product to be used for utility projects but to continue the use of sod for CIP projects. Staff also recommends that if residents request sod for utility projects, the utility company comply with that request.

Direction: The PWCC concurs with staff recommendation.

5. Cody Drive – No Parking

Issue Summary:

Jim Dickinson, Traffic Engineer, reported that there is one resident along Cody Drive, west of Jordan Creek Parkway, that has requested parking be allowed on one side of the street. Currently Cody Drive is designated as a minor collector street with no parking on either side. In addition, there are mailboxes on both sides of Cody Drive. Mr. Dickinson is seeking direction from the PWCC on how to respond to the resident's request.

Direction: The PWCC recommends staff notify the resident that more interest from other residents along Cody Drive to allow parking on one side of the street would be needed before a change is considered.

6. Review of Public Works Items for Council Meeting (May 18, 2015)

A. Approval of Proclamation – National Public Works Week

B. Approval of Traffic Code Amendments (1st Reading)

i. Special Stops Recommended Due to Visibility Issues

a. 63rd Street & Orchard Drive

b. 65th Street & Orchard Drive

ii. No Parking Zones – 13th Street – Locust Street to Walnut Street – West Side

C. Approval of Professional Services Agreements

i. Law Enforcement Center Roof Replacement – Linda Schemmel, City Planner, distributed two reports for the Law Enforcement Center roof. One report was done by the commissioning agent and the other report was done by the architect that has been working on some other City projects. With these evaluations, staff was seeking answers to some concerns with the roof:

1) Replacing the flat roof sections of the building and how it connected with the rest of the building.

- 2) How long the current sloped metal roof structure would last with evidence of aging and anticipated maintenance issues.
- 3) Determine the cause of the leaking in the metal roof area.

Several maintenance issues were identified for the metal roof, but if maintenance is conducted the roof could last approximately 15-20 years. The leakage issue was narrowed down to the edge of the roof and how the flashing was originally installed. Staff recommends proceeding with a low roof replacement and continue to look at the best plan of action to address the maintenance issues and roof leaks. Council Member Messerschmidt requested that staff outline the maintenance history of the roof on the documentation that is submitted to Council.

ii. Law Enforcement Center Garage

iii. Public Services Facility Master Plan Study and Grading Plan

D. Order Construction - Alluvion Yellow Fiber Route

E. Accepting Public Improvements – Maple Grove West 4 and 5

F. Approval of Change Order #8 – Library and Law Enforcement Center HVAC Improvements

Ms. Schemmel reported that the Library chiller replacement needs a larger enclosure than initially anticipated, which will encroach into existing parking spaces. Staff proposes to re-work the parking spaces to be parallel instead of front end parking to accommodate the larger enclosure. The cost for this change and the additional length of the enclosure fence is approximately \$26,000 and will require a budget amendment. In addition, due to the time needed for ordering material and fabrication delays, the contractor won't be able to start the work until June 8th so staff is recommending a change to the contract date from the end of May to Friday, July 10th.

G. 139 6th Street – Renovation (Human Services Building)

Ms. Schemmel reported that the contractor has requested early release of partial retainage on the project. With the exception of touch-up painting on the windows, construction is complete. Once the painting is completed, inspections will be conducted. Staff has received all the paperwork for the project, with the exception of the maintenance bond. The contractor is requesting 95% of retainage be paid. Staff recommends approval of the early release of the partial retainage.

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

7. Staff Updates

- A. 2015 Annual Spring Clean-Up Event – Bret Hodne, Public Works Director, reported that City staff and the Metro Waste Authority have taken significant action in educating residents on the new guidelines for the 2015 Annual Spring Clean-Up Event by providing information in a variety of media and sources. During the event, code enforcement will be patrolling the areas to ensure adherence to the guidelines. The hauler will also stake a notice next to items that aren't collected to inform residents on how to properly dispose of the items (Item 7). Council Member Messerschmidt requested that staff report back to the PWCC on the number of notices that are served.

Direction: Information only.

Meeting adjourned at 2:55 PM. The next Public Works City Council Subcommittee meeting is scheduled for May 26, 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

Wednesday, May 13, 2015 – 1:00 PM

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

1. Barnes Heights Sanitary Sewer Fee District
2. Update on Dixie Acres Fee District
3. Polk Countywide FEMA Mapping Project
4. Review of Mid-American Energy Surface Restoration Product
5. Cody Drive – No Parking
6. Review of Public Works Items for Council Meeting (May 18, 2015)
7. Staff Updates
 - A. 2015 Annual Spring Clean-Up Event
8. 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:

Printed Name & Organization	Address / E-mail	Day time phone #	Topic
Bob Ueenstra Ueenstra & Kinney Inc	3000 Westtown Pkwy West Des Moines, IA 50266 bueenstra@v-kinet	225-8000	Barnes Heights



May 13, 2015

Duane Wittstock
City Engineer
City of West Des Moines
Public Services Dept/Engineering
4200 Mills Civic Parkway
P.O. Box 65320
West Des Moines, Iowa 50265

WEST DES MOINES, IOWA
BARNES HEIGHTS CONNECTION FEE DISTRICT
DALLAS COUNTY ENVIRONMENTAL HEALTH

On May 13, 2015 the writer spoke with Ted Trewin the Director of Dallas County Environmental Health concerning the procedures and requirement used by Dallas County Environmental Health in determining whether a property owner can perform maintenance or replace an onsite private sewage treatment system. Ted Trewin indicates Dallas County Environmental Health follows the requirements of Chapter 69 of the Iowa Administrative Code and defers to the City of West Des Moines relative to the distance requirements for connection to the sanitary sewer system.

Property owners with an onsite treatment system are allowed to perform routine maintenance on their onsite treatment systems. Property owners that need to replace or perform major maintenance on the septic tank, distribution box and lateral field would be subject to the Chapter 69 requirements for connection to the sanitary sewer system if they fall within the required distance.

Chapter 69 of the Iowa Administrative Code indicates public sewer is available if it is located within 200 feet of the building. Section 7-8A-3 of the City of West Des Moines Code of Ordinances provides a connection is required if public sewer is located within 400 feet of the property line of the subject property. Ted Trewin indicated the policy of his office would be to defer to the City requirements, unless that requirement is less than the Iowa Administrative Code requirement. In this instance, the West Des Moines requirement is more restrictive than the Iowa Administrative Code requirement and Dallas County Environmental Health would require a connection if sewer is located within 400 feet of the property line.

Duane Wittstock
May 13, 2015
Page 2

The Iowa Administrative Code provides the administrator is the final authority whether a connection to the sanitary sewer system is required. There has long been recognition in some instances there are topographic or other factors that would override the requirement for sewer, even if the sewer is located within 200 feet of a particular property. The West Des Moines Code section does not specifically include this administrative discretion.

In the case of Barnes Heights the administrative discretion probably is not likely to be an issue as the types of constraints that would normally be considered in waiving the requirement for sanitary sewer connection would not be present.

In summary, based on the conversation with Ted Trewin it appears Dallas County Environmental Health would not permit major maintenance or replacement of an onsite treatment system in Barnes Heights if sewer is available within 400 feet of the property line. This requirement would apply based on the location of the sewer system at the time of each application.

If you have any questions or comments concerning the project, please contact us at 225-8000.

VEENSTRA & KIMM, INC.



H. R. Veenstra Jr.

HRVjr:pjh
102199

Duane Wittstock
 October 2, 2014
 Page 13

fee applying to the gravity sewer area and a separate fee being applied to the low pressure sewer area. The City used the split fee concept in the Thornwood area. Use of the Thornwood area concept would vary slightly if it is applied to Alternative 4A because the Thornwood area included the grinder pump while Alternative 4A does not include a grinder pump.

The following tabulation shows the summary of connection fees for the five basic alternatives and the two alternatives without grinder pumps. In the tabulation Alternative 4A is shown as a single connection fee and as a split connection fee.

<u>Alternative</u>	<u>Project Cost</u>	<u>Number of Properties</u>	<u>Cost per Property</u>
1 – Original Rear Yard Alignment	\$445,180	18	\$24,732
2 – Original Front Yard Alignment	\$486,430	18	\$27,024
3 – Gravity Sewer 63 rd Outlet	\$420,680	18	\$23,371
4 – Gravity Sewer on 63 rd Street Low Pressure on Ashworth Road	\$396,988	18	\$22,055
4A – Gravity Sewer on 63 rd Street Low Pressure on Ashworth Road with no Grinder Pumps (single fee)	\$269,660	18	\$14,981
4A – Gravity Sewer on 63 rd Street Low Pressure on Ashworth Road with no Grinder Pumps (gravity sewer area)	\$219,850	10	\$21,985
4A – Gravity Sewer on 63 rd Street Low Pressure on Ashworth Road with no Grinder Pumps (low pressure sewer area)	\$49,810	8	\$6,226
5 – Low Pressure Sewer	\$430,793	18	\$23,933
5A – Low Pressure Sewer with no Grinder Pumps	\$133,127	18	\$7,396

If the City were to construct a gravity sewer system in the Barnes Heights area the least costly alternative is Alternative 3 with an estimated cost of \$23,371 per property owner.

If the City were to consider the low pressure sewer alternative and include grinder pumps as part of the low pressure sewer alternative the least costly alternative appears to be Alternative 4 with gravity sewer on 63rd Street and the low pressure sewer along Ashworth Road.

Duane Wittstock
 April 24, 2015
 Page 14

For Alternative 3 and Alternative 5 the properties with a low pressure sewer and grinder pump would incur the cost for a grinder pump and approximately 130 feet of service, or a cost of approximately \$15,100. For Alternative 4 with the rear yard location of the low pressure sewer the average service length would be 80 feet. The combined cost for the grinder pump and service line would be \$14,100.

The following table shows an approximate comparison of the overall cost of the alternatives, including both the public improvements and the estimated cost for the private onsite improvements.

<u>Alternative</u>	<u>Public Improvement Cost per Property</u>	<u>Onsite Improvement</u>	<u>Total</u>
1	\$27,509	\$6,000	\$33,509
2	\$34,162	\$3,200	\$37,362
3	\$8,975	\$15,100	\$24,075
4	\$10,005	\$14,100	\$24,105
5 - Gravity Sewer	\$18,478	\$6,000	\$24,478
5 - Low Pressure Sewer	\$18,478	\$15,100	\$33,578

The general practice of the City providing sewer service to existing unsewered neighborhoods is to establish a connection fee district to fund the public improvements. The connection fee is established to spread the estimated cost for the public improvements over the number of properties that could potentially be served by the sewer. For the Dixie Acres area the connection fee would be the cost of the public improvements under each of the alternatives.

The historic methodology of spreading the cost uniformly to all of the properties would be the procedure for Alternative 1, Alternative 2, Alternative 3 and Alternative 4.

The City has not previously addressed how to allocate the cost for a combination alternative, such as Alternative 5. The illustration set forth above assumes the overall cost for the public improvements would be divided uniformly between the eight lots. This allocation procedure significantly increases the cost to the six lots with low pressure sewer as they experience a much higher cost for the grinder pump and service line compared to the cost for a traditional gravity sewer service that would be available to the two lots adjoining Ashworth Road.

**FLOOD HAZARD REVIEW SUMMARY
CITY OF WEST DES MOINES - 190231
MAY 18, 2015**

The Federal Emergency Management Agency (FEMA) is conducting a Countywide Flood Hazard Mapping Project for government agencies in Polk County. Since the City of West Des Moines is in Polk County, FEMA has provided flood mapping for areas of West Des Moines in Dallas, Madison, and Warren Counties as well. Preliminary flood maps were issued electronically to the City of West Des Moines for review on April 22, 2015. Comments have been requested by May 18, 2015. Preliminary flood maps are tentatively scheduled to be made available to the public in June 2015.

ATTACHMENTS – PRELIMINARY FLOOD MAPS DATED MAY 11, 2015.

The following comments will be provided to FEMA:

All Maps

- 'Notes To Users' mentions that 2013 photography was used to create base map. However, aerial photography does not appear to be taken in 2013.
- Determine whether 500-year flood information should be included for Zone A mapping. Typically only shown with Zone AE.

Panel 0280 (Map No. 19153C0280F)

- Update jurisdiction boundary and include appropriate flood mapping.
- Review accuracy of inclusion of two ponds on Des Moines Golf and Country Club property near NW 141st Street and University Avenue (City of Clive).
- Approximate 9-foot hydraulic drop downstream of EP True Parkway structure along Jordan Creek may need additional review – varies significantly from 2006 FIS. Flood area in between 81st Street and EP True Parkway appears to be larger because of this.

Panel 0285 (Map No. 19153C0285F)

- No comments.

Panel 0290 (Map No. 19153C0290F)

- Update jurisdiction boundary and include appropriate flood mapping.

Panel 0295 (Map No. 19153C0295F)

- Update jurisdiction boundary and include appropriate flood mapping.
- Jurisdiction boundary along Dallas/Polk County line south of Raccoon River is incorrect. Jurisdiction boundary along Polk/Warren County line west of I-35 is incorrect.
- A LOMR has been approved for 6000 Raccoon River Drive and needs to be taken into account.
- Review mapped area west of South 35th Street and south of Hidden Creek for accuracy.
- Review mapped area near cross section 'AJ' south of the Raccoon River floodway and north of Army Post Road. 2006 mapping excluded buildings in this area.

Panel 0301 (Map No. 19153C0301F)

- Review limits of mapped area near 22nd Street and University Avenue intersection for accuracy.

Panel 0302 (Map No. 19153C0302F)

- No comments.

Panel 0303 (Map No. 19153C0303F)

- It is believed that Blue Creek theoretically overtops 22nd Street south of I-235. Verify flood mapping in this area.
- It is believed that Blue Creek theoretically overtops 20th Street south of I-235. Verify flood mapping in this area.
- Take into account approximately 48 approved LOMCs along Fairmeadows Creek.
- Determine accuracy of flood mapped area in Hy-Vee parking lot north of Railroad Avenue and east of Grand Avenue.
- Determine accuracy of flood mapped area southeast of Railroad Avenue and Grand Avenue intersection in Western Village.
- Determine accuracy of flood mapped area south of Lincoln Street and east of South 16th Street.

Panel 0304 (Map No. 19153C0304F)

- Examine flood limits southwest of railroad north of levee near 8th Street and Office Park Road.
- Zone X from approximately Grand Avenue to the north is substantially different than 2006 flood mapping and may need to be revisited.

Panel 0315 (Map No. 19153C0315F)

- The City of West Des Moines' South Area Lift Station along the '821' water surface elevation near the south edge of the Raccoon River floodway was constructed above the 100-year flood elevation (finished floor ~ 824).
- Determine accuracy of flood mapped area east of Grand Avenue near railroad. The newest facility for Chow's Gymnastics within this area was theoretically constructed above the 100-year flood elevation.



Futerra[®]
F4NETLESS

Futerra[®]
ENVIRONET



EnvironmEntally FriEndly BlankEts
For Growth EstabliShmEnt and Erosion Control



Your Trusted Partner In Soil Solutions 

COMPREHENSIVE, CUSTOMIZED SOLUTIONS FOR YOUR SITE

Profile Erosion Control solutions (PECs™) combines the industry's most comprehensive assortment of erosion and sediment control technologies and innovative Green Design Engineering™ to help you maximize erosion control and vegetation establishment on slopes, channels, shorelines, fine turf areas and environmentally sensitive sites. Our dedicated team of erosion and sediment control experts will work with you to create and implement a complete solution, utilizing a range of proven Profile products.

PECs is a unique, fully integrated approach to your site, including:



- IN THE GROUND** → Agronomic solutions that promote rapid seed germination and long-term vegetation establishment.
- ON THE GROUND** → Innovative products that prevent erosion on slopes, channels, shorelines, streambanks and wetlands while minimizing risk to the environment.
- BY YOUR SIDE** → Green Design Engineering™ ensures unfailing support from our agronomic and erosion control experts, to help select and install the right products for maximum results.



**WHISKEY CREEK
GOLF CLUB
IJAMSVILLE, MD**

MOST SPECIFIED BLANKET FOR THE GOLF INDUSTRY

Futerra® is the ideal choice for establishing thick turf and native areas on golf courses. Futerra is a flexible, environmentally friendly solution, allowing you to use an assortment of specified plant varieties across the course—without special equipment. Futerra is easy to install, providing immediate erosion control and rapid vegetation establishment, even on fine turf areas. And, it costs less than half the price of installed sod while creating a smoother, more aesthetically pleasing playing surface for golfers.

Profile Products proudly supports:



Charter Affiliate



Charter Member

THE FUTERRA® FAMILY: PROVEN 99.9% EFFECTIVE

Profile Products brings you the Futerra® family of erosion control and revegetation blankets—to minimize soil erosion while rapidly establishing vegetation. Futerra blankets provide greater aesthetic appeal, are easier to install and provide an unparalleled 99.9% erosion control effectiveness and faster germination than traditional stitch-bonded straw, coconut and excelsior blankets that are plagued by dangerous and unsightly loose nettings and threads.

Through a proprietary and patented process, Futerra uses thermally refined™ wood and degradable man-made fibers that are intertwined into a dimensionally stable composite matrix that conforms to the soil surface, preventing washouts and seed migration. This innovative technology allows Futerra to rapidly absorb water and hold it in place for enhanced germination and growth.

FUTERRA® F4 NETLESS®

Futerra F4 netless employs a lightweight, yet lofty matrix that provides high levels of slope protection and vegetative establishment for fine turf and environmentally sensitive applications.

With weed-free and environmentally friendly F4 netless, there are no nets or threads to entangle plants and animals or snare maintenance equipment.

Photo courtesy of Lucinda Austin



minimize
Environmental risks



Eliminate Unsightly
nets or threads



Reduce maintenance
issues and downtime

FUTERRA® ENVIRONET™

Building on the superior erosion control and turf establishment qualities of F4 netless, Profile created Environet for slopes and environmentally sensitive sites where windy conditions and/or higher levels of installation stress may be encountered.

Environet features a thermally fused matrix, reinforced with a quick degrading, rectangular netting that minimizes wildlife entanglement and improves site safety.



Unique strand Configuration
maximizes degradation



shown above – traditional nets
can trap wildlife



designed to Protect
Environmentally sensitive sites

1
**designed
for the
environment**

Fully photo and biodegradable, minimizing wildlife hazards and eliminating clean up after the job.

2
**accelerated
germination**

Faster seed germination compared to alternative products.

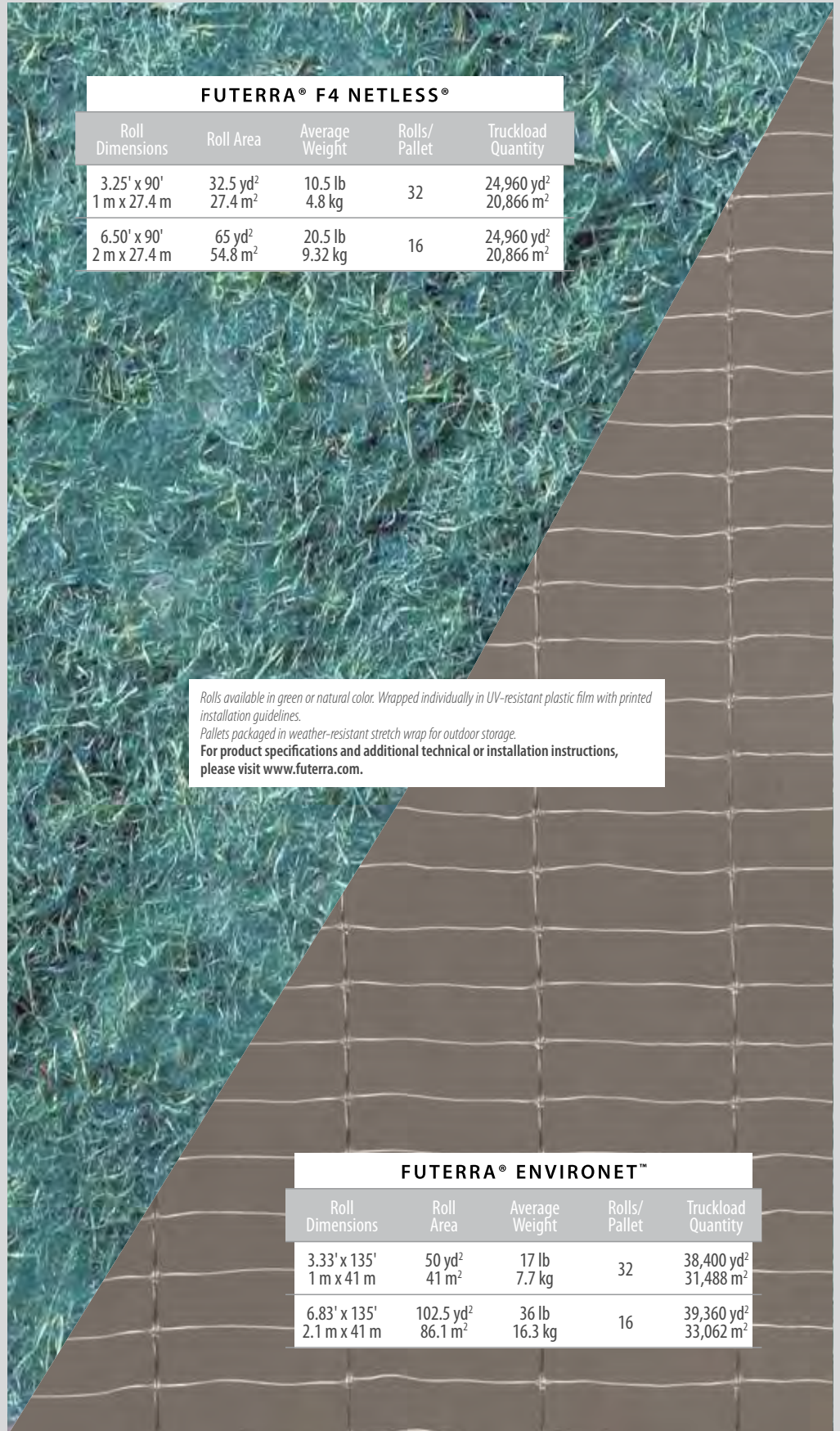
3
**conforms to
soil**

Prevents rilling and seed migration.

4
**Light Weight
design**

Half the weight of excelsior blankets, allowing for faster installation.

Packaging information and instructions for Futerra® F4 Netless® and Futerra® Environet™ can be found behind the products samples to the right.



FUTERRA® F4 NETLESS®

Roll Dimensions	Roll Area	Average Weight	Rolls/Pallet	Truckload Quantity
3.25' x 90' 1 m x 27.4 m	32.5 yd ² 27.4 m ²	10.5 lb 4.8 kg	32	24,960 yd ² 20,866 m ²
6.50' x 90' 2 m x 27.4 m	65 yd ² 54.8 m ²	20.5 lb 9.32 kg	16	24,960 yd ² 20,866 m ²

Rolls available in green or natural color. Wrapped individually in UV-resistant plastic film with printed installation guidelines.

Pallets packaged in weather-resistant stretch wrap for outdoor storage.

For product specifications and additional technical or installation instructions, please visit www.futerra.com.

FUTERRA® ENVIRONET™

Roll Dimensions	Roll Area	Average Weight	Rolls/Pallet	Truckload Quantity
3.33' x 135' 1 m x 41 m	50 yd ² 41 m ²	17 lb 7.7 kg	32	38,400 yd ² 31,488 m ²
6.83' x 135' 2.1 m x 41 m	102.5 yd ² 86.1 m ²	36 lb 16.3 kg	16	39,360 yd ² 33,062 m ²

BLANKETS DESIGNED TO OUTPERFORM— EVEN ON ENVIRONMENTALLY SENSITIVE SITES



Protects the earth

Futerra® blankets are proven to keep soil in place with 99.9% effectiveness. When compared to traditional blankets and nets, Futerra clearly provides better slope protection with faster, thicker vegetative establishment.

easier to install

Futerra® F4 netless® and Environet™ are lighter and easier to cut, shape and deploy than other blankets. They require fewer man-hours and offer quick coverage for even the toughest landscape challenges.

enhanced site safety

Both F4 netless and new Environet are designed to minimize danger to wildlife or maintenance equipment. No nets mean no entanglement and in those areas where netting is needed, the rapidly degrading, open aperture of the Environet netting provides a reliable and safe alternative.

easily replaces sod

Futerra is routinely installed on golf courses, parks, commercial projects and home building sites in lieu of sod for the following reasons:

- saves valuable dollars—costs less than half the price of installed sod, including seed and fertilizer
- saves installation time—it takes one man-hour to lay 3,000 square feet of Futerra versus one man-hour to lay 500 square feet of sod
- improves site logistics—one truckload of Futerra Environet covers eight acres, compared to a truckload of sod that only covers one-quarter of an acre
- Flexible—allows recently released seed varieties to be used versus sod monoculture

nature-friendly anchors

As a part of Profile Erosion Control solutions (PECS™), we offer a complete line of Futerra stakes and staples. Biodegradable Futerra stakes™ are a safer, more environmentally friendly alternative for securing blankets. Futerra staple Guns™ and Futerra staples™ improve installation efficiencies while reducing labor time and costs.

PROOF FUTERRA® OUTPERFORMS THE COMPETITION

WE KEEP THE EARTH FROM MOVING

Comparative data from the demanding testing protocol developed at the Utah water research laboratory (Uwrl) demonstrates that Futerra® F4 netless® and Environet™ took erosion control effectiveness ratings to unprecedented levels. Percent effectiveness compares erosion amounts of a slope treated with an erosion control device versus the same unprotected slope when subjected to carefully controlled rainfall events. Slope gradient, length, soil type, rainfall intensity, raindrop kinetic energy and event duration are the most commonly evaluated parameters when comparing erosion control devices. Percent effectiveness is determined by subtracting the soil loss ratio of the treated surface versus an untreated control surface ("C" Factor) from one and multiplying by 100 percent.



* Soil loss/acre calculation based upon extrapolation of soil loss to a one acre site disturbance

NEARLY PERFECT PERFORMANCE

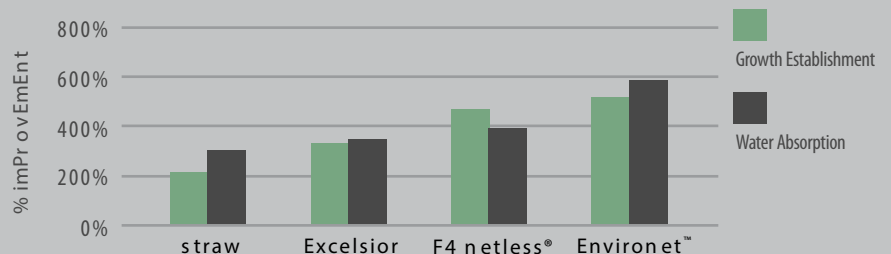
Futerra blankets have been proven to deliver the fastest germination and highest effectiveness rating when compared to traditional straw and excelsior blankets. They have been evaluated under the standard growth establishment testing protocol developed and endorsed by the Erosion Control Technology Council (ECTC)—the technical and marketing trade association for rolled erosion control products. Comparative growth establishment data derived from standard test methods ASTM D1117—water absorption and ASTM D7322—Growth Establishment, verified clear agronomic superiority of Futerra F4 netless and Environet over stitch-bonded straw and excelsior blankets.

FUTERRA PROVEN 99.9% EFFECTIVE

	C-Factor ¹	Effectiveness rating	soil loss/Plot ²
Futerra® EnviroNet™	0.0007	99.9+%	0.2 lb
Futerra® F4 Netless®	0.001	99.9%	0.4 lb
Single-Net Straw Blanket	0.073	92.7%	28.9 lb
Single-Net Excelsior Blanket	0.075	92.5%	29.8 lb
Bare Soil Control	1.000	0.0%	397.0 lb

¹ Test Conditions — UWRL Rainfall Simulator, Slope Gradient — 2.5H:1V
Soil Type — Sandy Loam; Rainfall Event — 5"/hr; Test Duration — 1 hr; ²Plot size 4' by 19.5'

ABSORBS MORE WATER, SPEEDS GERMINATION



Average values of industry leading single-net straw and excelsior blankets as detailed in public AASHTO-NITPEP reports and independent laboratory testing using standard test methods ASTM D1117 and D7322

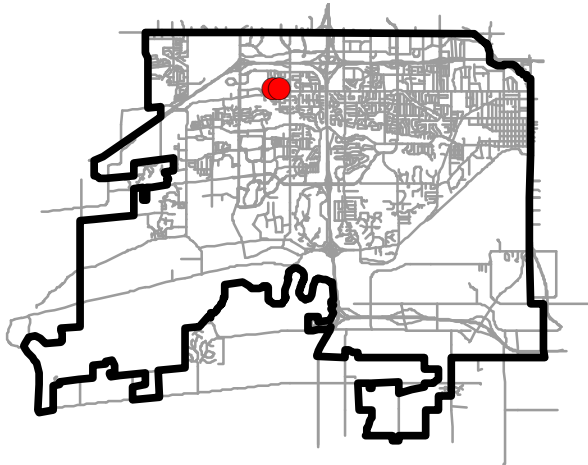


For technical information, distributor location and customer service call (800) 508-8681.
©2007 PROFILE Products LLC, all rights reserved.
Futerra F4 Netless and Futerra are registered trademarks of PROFILE Products LLC.
EnviroNet, Green Design Engineering, PECS, Thermally Refined, Futerra Stakes, Futerra Staple Guns and Futerra Staples are trademarks of PROFILE Products LLC.
750 Lake Cook Road • Suite 440 • Buffalo Grove, IL 60089





VICINITY MAP



LEGEND

PROJECT LOCATION ●



**DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION**

560 S. 16TH STREET (515)222-3475
WEST DES MOINES, IOWA 50265
FAX NO. (515)222-3478

PROJECT:

**Approval of Traffic Code Amendment
Special Stops Required**

LOCATION:

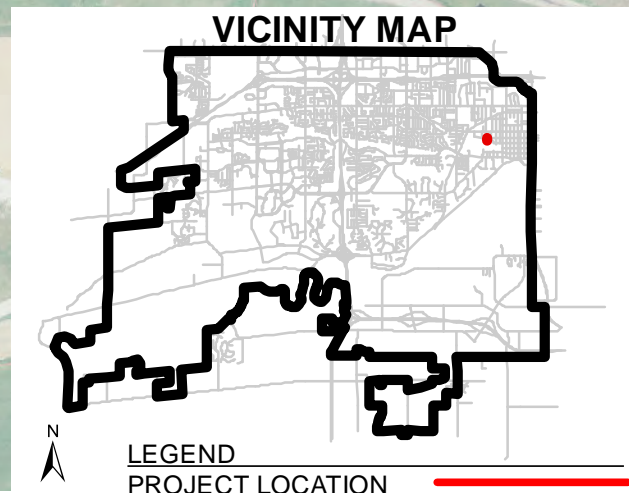
Orchard Drive with 63rd Street and 65th Street

DRAWN BY: MJA

DATE: 5/11/2015

SHT. 1 OF 1

6.B.ii.



**DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION**

560 S. 16TH STREET (515)222-3475
WEST DES MOINES, IOWA 50265
FAX NO. (515)222-3478

PROJECT:	Traffic Code Amendment No Parking Zones	
LOCATION:	13th Street - Locust Street to Walnut Street - West Side	
DRAWN BY:	MJA	DATE: 5/11/15
		SHT. 1 OF 1

April 23, 2015

Linda Schemmel

City of West Des Moines
4200 Mills Civic Parkway Suite 2D
West Des Moines, IA 50265

Re: Law Enforcement Center Reroofing Study

Dear Linda,

The following is a synopsis of our explorations and recommendations regarding a reroofing project for the Law Enforcement Center.

History and Goal

Our involvement in this project dates back over the past several years. It began in the previous locker room project where, for a period of time we were planning to do some spray foam sealant work in the attic in order to minimize high moisture conditions periodically present in the attic/plenum. Since that time, a mechanical project was undertaken by another designer and we hear informally that conditions have improved since that time. But we also hear that there are times, particularly within about 2 days of a significant rain, when high humidity conditions occur.



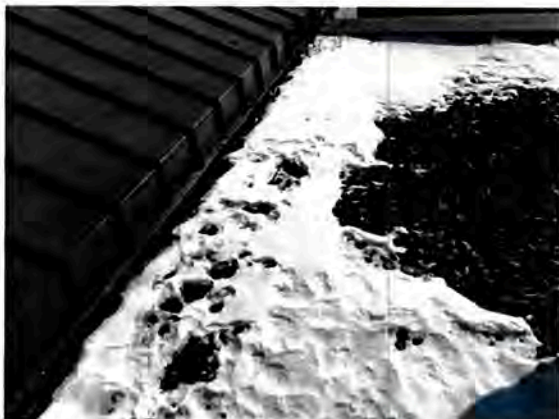
We are aware that the low slope EPDM roofs on the project have reached or gone beyond their useful life and are due for replacement in the near term.

We believe the goal with our effort in this abbreviated study was to attempt to determine if there were any correctable issues with the existing standing seam roof or wall which enclose the attic. We believe we were challenged to come up with a big picture plan and budget information to deal with the roofs and upper walls at the Law Enforcement Center.

Summary of Conclusions

We recommend the low slope EPDM roofs be replaced as soon as an appropriate project can be designed, bid, and installed. There has been some understandable hesitancy to proceed with this replacement project until analysis of the metal roof and walls was done. We have determined conclusively that the low slope roof project can proceed without significant issues involving the metal roof and walls. Suitable details have been resolved to

separate the low slope roof replacement from any potential work on the metal roof and walls.



During this study we worked alongside SystemWorks, which has been working directly with the City to help understand issues that may be occurring with the building envelope. As a part of Systemworks' effort, a reputable sheet metal roofing company, Exterior Sheet Metal, spent some time and effort on site, doing some destructive evaluations and giving experienced opinions. Those observations and recommendations from SystemWorks are contained in their separate report. But based upon their observations and report, and our collaboration, it is believed that some leakage of water into the metal roof and wall areas is occurring through gaps in the upper metal roof copings and through joints in base flashings which can be somewhat easily addressed. We believe the existing metal roof and wall issues can be addressed with minor maintenance type work which will allow the metal roof and walls to serve the building effectively for another 15 to 20 years. This maintenance

type work can either be a part of the low slope roof project, or a separate project.

Methods

The low slope roof project will need to have new and thicker insulation installed as a part of the project. This thicker insulation has the potential to create undesirably tight details where the low slope roof meets vertical components. But through analysis and creative thinking by participants, we believe the low slope roof project can proceed by cutting off the bottom ten to twelve inches of the metal roof panels above the low slope roofs in order to create appropriate layering of materials and flashings.



We believe the existing metal copings on the low slope roof should be removed and replaced during the project with more straight forward roof edge details. We believe mechanical units should be raised and other details adjusted as are typically done in these types of replacements.

We recommend the existing lightning protection system be removed and reinstalled with better detailing which will be more compatible with the new roof.

We recommend the low slope roof be replaced with an adhered PVC roof at concrete substrates and a mechanically fastened PVC roof at steel substrates. This will replace the existing ballasted EPDM roof. We believe PVC is a better material than EPDM and the workmanship we have experienced with PVC installations is better than EPDM.



We believe the gaps in the metal roof coping should be addressed by application of newer rubber butyl sealants and/or suitable joint covers which were not applied on the original project. We recommend the issues with metal roof edge flashings and gutters be addressed in this project or a parallel project.

Timing and Costs

The anticipated construction cost for the low slope roof replacement project on both the Law Enforcement Center Building and the Pistol Range Facility, plus the remediation of the issues with the existing metal roof is \$390,000. Of that total, \$16,500 can be attributed to the maintenance and repair of the metal roof joints and flashing and battens as discussed above.

We believe that the city should budget \$870,000, in today's dollars, for the future replacement of the existing metal roofing and walls. This should be planned for approximately 15 to 20 years in the future. This future project will involve increasing insulation, a different type of wall panel system, and likely new doors and windows at the roof level.

We recommend the City plan to replace the new PVC roof being installed this year in approximately 20 to 25 years. The cost will be approximately the same as its replacement cost today, but obviously escalated to that future cost.



As we previously explained, the scope of this report was intentionally abbreviated in order to reduce its costs. Thank you for the opportunity to work on this project.

Sincerely,
Design Alliance, Inc.

A handwritten signature in blue ink that reads "David Harrison".

David Harrison, AIA

6.C.i.

Existing Roof Observation Report

**City of West Des Moines
Law Enforcement Center**
West Des Moines, Iowa

Prepared for:
Linda Schemmel, AIA



SystemWorks_{LLC}
Commissioning Sustainable Buildings

SystemWorks LLC

409 Fifth Street, West Des Moines, IA 50265

515.975.0575 (phone); 515.255.1155 (fax)

Summary of Site Visit

Project: Law Enforcement Center Roof Replacement

Location: West Des Moines, Iowa

Date: 4/14/2015

Prepared By: Jeremy Carroll

Pictures taken by: Jeremy Carroll

Items Noted:

The material installation matched the original construction documents at this location. The Tee-Panel standing seam metal roofing system has a snap-on seam cap with a vinyl weather seal, Figure 1. This snap-on seam cap is located under the Mansard panels. Exterior Sheet Metal (ESM) disassembled one Mansard panel at the EPDM roof line, Figure 2. ESM was unable to remove the snap-on cap without damaging the vinyl weather seal, Figure 3. If the Tee-Panel system needs to be removed to install the new flat roofing system, the snap-on caps and vinyl weather seals will need replaced.

A best practice roofing termination bar installation height requires an 8 inch minimum height from the finished roof deck elevation. To achieve an 8 inch termination bar height, both the Mansard and the vertical wall panels (Figure 4) will need to be field cut. The new roof will terminate directly below the shorten panels. The finished length of both panel systems will be determined by the type of flashings required by the selected roofing manufacturer. SystemWorks recommends reviewing this detail with the selected roofing manufacturer prior to cutting the panels. **Note:** the Tee-Panel's exposed edge may corrode; the corrosion may cause staining at both locations.

The internal gutter system was reviewed with David Harrison and ESM, Figure 6. With the addition of the box-gutter, the internal gutter may be removed. If the internal gutter stays, the new roofing membrane will need to be installed under this system. A new Lead Coated Copper system could be fabricated and installed after the new membrane is installed. To avoid removing the Tee-Panels, the aprons on the existing system would need to be field cut and soldered over the top of the new Lead Coated Copper system.

The stone coping caps are starting to deteriorate, Figure 7. To avoid damage to the new roofing system, SystemWorks recommends removing or replacing the stone caps.

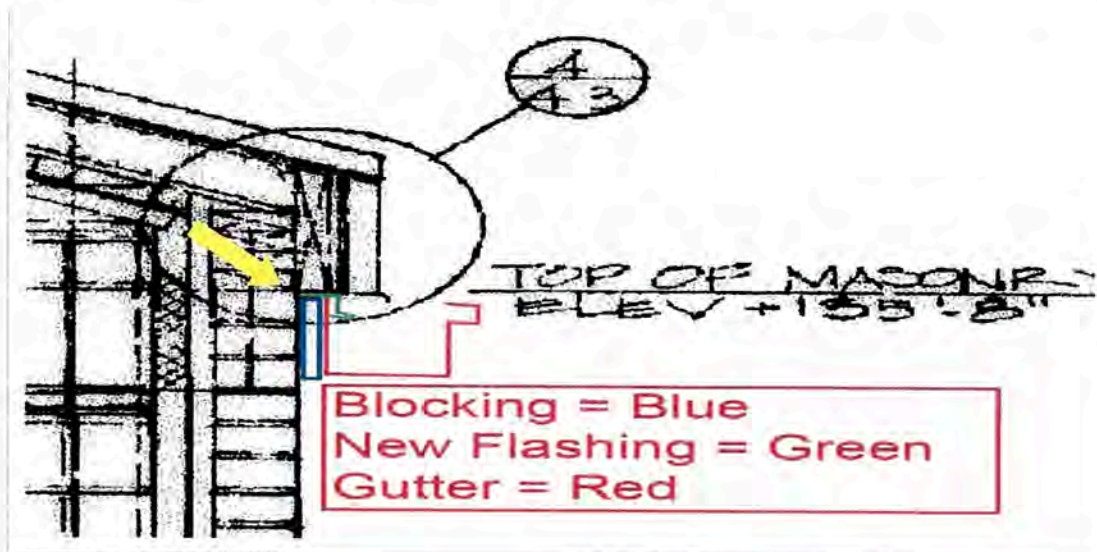
A large two piece flashing system is installed at the ridge of the Tee-Panel system, Figure 8. This ridge flashing is part of the vertical Tee-Panel termination as well. The majority of the field joints are open and not permanently sealed, Figure 9. There are two field joints ever 10 feet. These open joints are likely allowing moisture to migrate under the Tee-Panel system. If the building is operating under a negative pressure, moisture could be pulled into the condition spaces.

The existing lightning protection system is significantly deteriorated, Figure 10, Figure 11, and Figure 12. Areas where the lightning protection system enters the building are not permanently sealed, Figure 10 and Figure 12. David Harrison will review a replacement system that would reduce penetrations. If the existing system remains, SystemWorks recommends moving all penetrations into the flat roof system. These penetrations can likely be incorporated into the roof's 20 year warranty. The sealant joint shown in Figure 10 is likely to fail in 5 to 7 years.



The removal of the existing EPDM system will cause uncontrolled movement around the roof drains, Figure 13. To avoid delayed issues, SystemWorks recommends replacing all the primary and overflow roof drains prior to installing the new roof. There also appears to be existing roof curbs (Figure 15) and penetrations that are abandoned or no longer in service, Figure 14. The owner will assist in identifying items that can be removed during construction.

A large amount of staining is reoccurring along the North elevation. SystemWorks and ESM reviewed the new box style gutter along this elevation. This is not a seamless system. The gutter is manufactured in 10 foot lengths and assembled in the field using rivets, Figure 16. It appears ice buildup has damaged multiple joints. The damaged joint shown in Figure 16 is above the large stained area on the North elevation; however, the damaged gutter joints are not the sole cause of the staining. The box gutter has been installed over a 1 inch sacrificial blocking. A flat piece of flashing was installed over the blocking and down the back of the gutter apron, Detail 1. It appears the Mansard sill flashing joints (Figure 17) are allowing moisture to migrate behind the sacrificial blocking (area shown by yellow arrow in Detail 1).



Detail 1: Box gutter installation detail (not to scale).

General Maintenance

A few general maintenance items were noticed during our site visit. It appears a urethane based sealant was used for the majority of the exterior control joints. Most urethane sealants that are exposed to the elements will last about 10 years. The control joints around the East elevation windows are separated at multiple locations. The vertical masonry control joint are in similar condition.

To achieve the desired 50 year life expectancy of the Tee-Panel system and with the constant expansion and contraction that this system will endure due to seasonal changes, an annual maintenance program for the entire system would greatly reduce unnecessary wear and tear. The snap-on caps are not securely fastened in multiply locations, Figure 19.



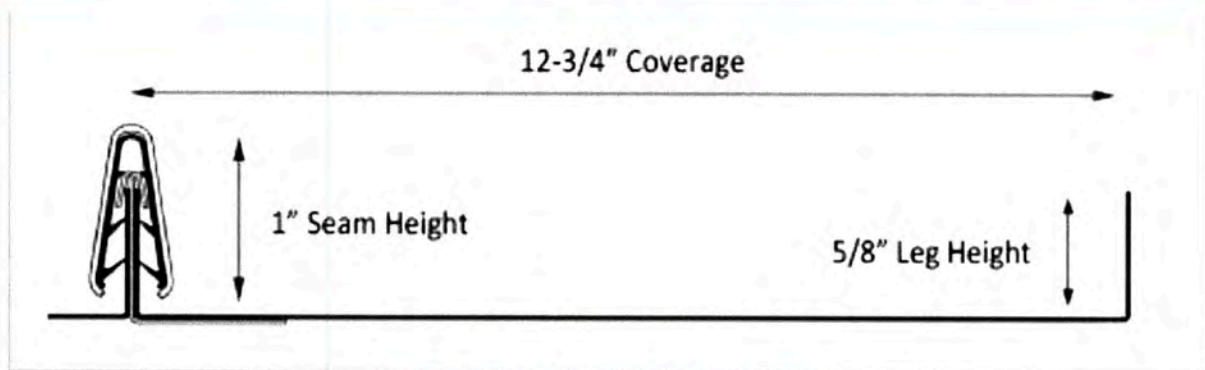


Figure 1: Tee-Panel profile (not to scale).



Figure 2: One Mansard panel was removed to review the sill flashing installation and the EPDM membrane termination.



Figure 3: The vinyl weather seal was very brittle and split during the removal of the seam cap (area shown with red arrow).





Figure 4: East Elevation, these vertical Tee-Panels will need to be field cut to allow for the installation of the new roofing system.



Figure 5: The Mansard panels sit on the sill flashing shown above my hand; the EPDM membrane terminates behind the treaded lumber.





Figure 6: The internal gutter system that is located at the main entrance of the LEC.



Figure 7: Sally Port Roof, the concrete coping caps are starting to deteriorate.





Figure 8: Two-piece ridge cap flashing, the exterior control joint sealant is completely separated.



Figure 9: Additional image of the two-piece ridge cap flashing. The majority of the field joints are not permanently sealed.



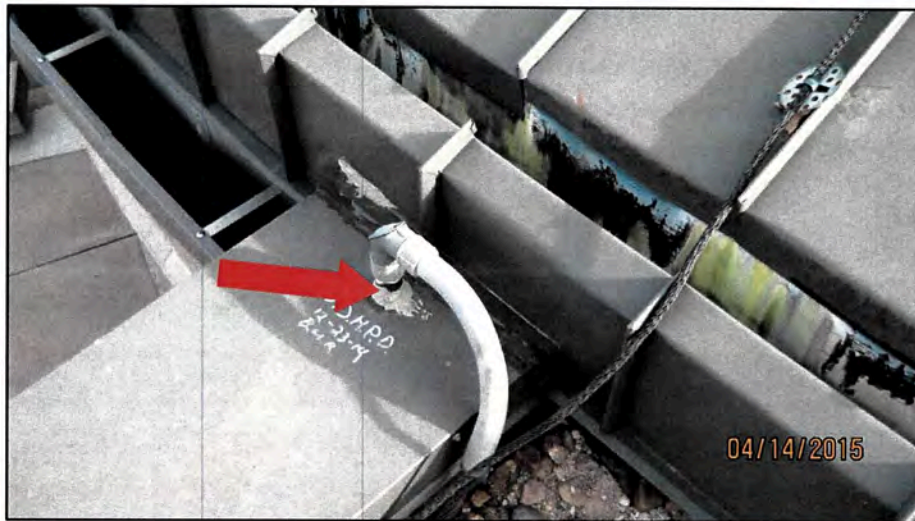


Figure 10: The existing lightning protection system is installed through the center of the coping cap. The sealant at the base of the penetration is starting to fail (area shown with red arrow).



Figure 11: The adhesive base plates are not adhered to the Tee-Panels.





Figure 12: The lightning protection system conduit is not permanently sealed (area shown with red arrow).

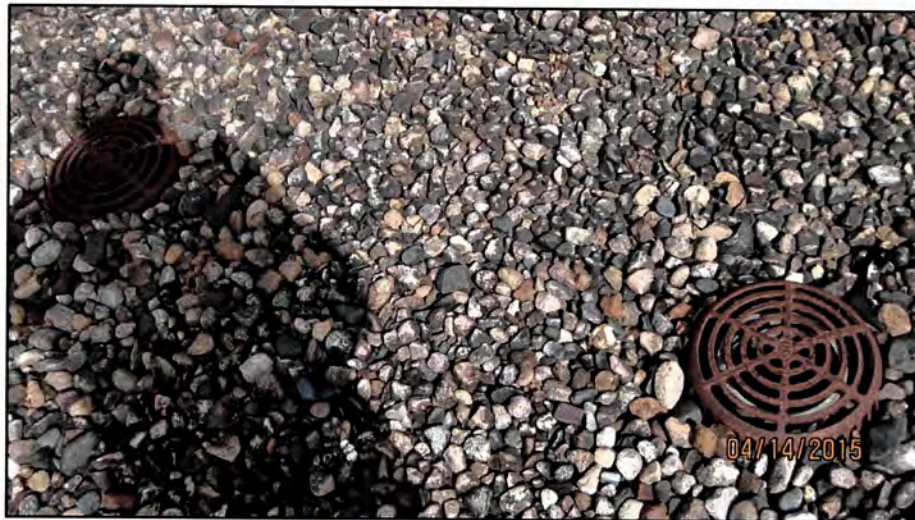


Figure 13: Recommend that all roof drain seals, including over flow drains, be replaced.





Figure 14: Some of the mechanical curb heights need to be raised.



Figure 15: East Elevation, vacant mechanical curb. Roof curbs and penetrations should be capped below the new system to reduce roof penetrations.





Figure 16: North Elevation, it appears ice buildup has damaged this joint.



Figure 17: North Elevation, the Mansard sill flashing joints (area shown with red arrow) are allowing moisture to migrate behind the box gutter (area outlined in red).



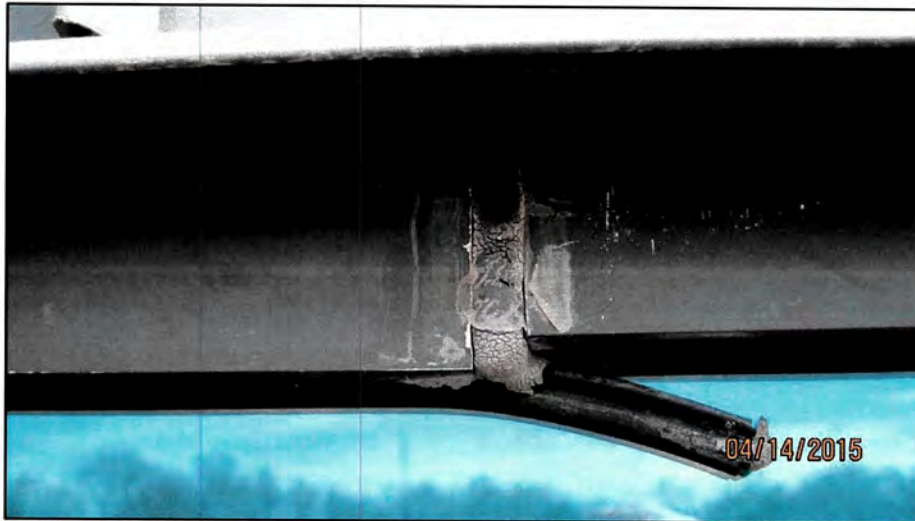


Figure 18: East Elevation, the control joints and gaskets around the exterior windows are separated in multiple locations.

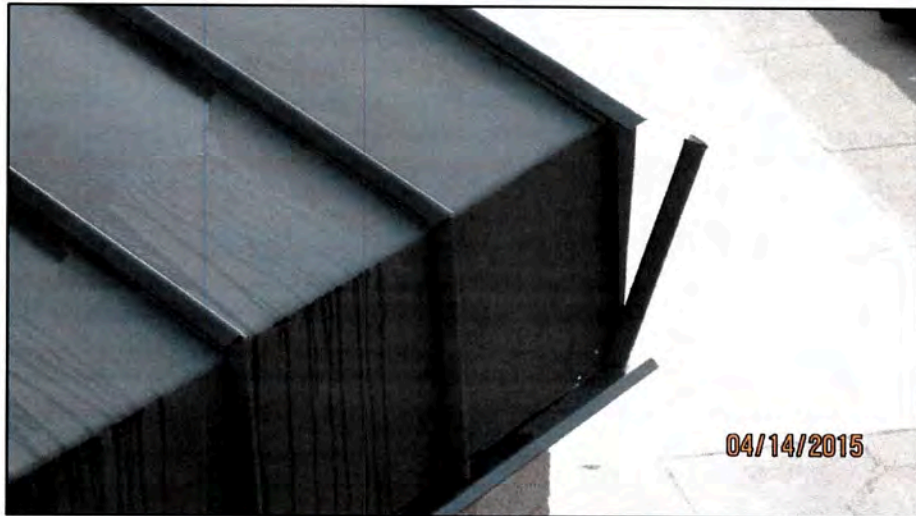


Figure 19: The Tee-Panel seams need repaired in multiply locations.



SPRING CLEANUP

Collection Status



Based on program guidelines, the item(s) on your curb were not collected because:

- Discarded items exceed what will fit in the bed of one pickup truck, which is approximately six (6) cubic yards.

SOLUTION: Rent a roll-off dumpster from a local garbage hauler.

- Your item is too large/heavy. Two people are unable to lift it.

SOLUTION: Call your garbage hauler and make special arrangements for your item to be collected, or self-haul to the landfill.

- Your construction and demolition item weighs too much. Each item must weigh less than 40 lbs.

SOLUTION: Visit www.WherelItShouldGo.com to learn where this material is accepted and the price.

- Appliances are not accepted.

SOLUTION: Buy seven (7) large item stickers from city hall or participating retail locations for curbside collection.

- No Bagged/Boxed items.

SOLUTION: These items will fit in your garbage cart during weekly collection.

- Other _____



Spring Cleanup is held annually by the city to provide residents with an opportunity to get rid of household items that do not fit in their garbage cart. For questions about collection, contact your garbage hauler, Waste Connections, at (515) 265-7374.

Pinegar, Kimberly

From: webinfo@wdm-ia.com
Sent: Monday, May 11, 2015 9:48 AM
To: Pinegar, Kimberly
Subject: West Des Moines: Public Works Council Committee Meeting

Public Works Council Committee Meeting

Re-scheduled from 5/11/15

Date: 5/13/2015 1:00 PM - 3:00 PM

Location: West Des Moines City Hall - Training Room

4200 Mills Civic Parkway

West Des Moines, Iowa 50265

Agenda: [05 13 15 PWCC Agenda](#)

To change your eSubscriptions preferences, click the following link:

<http://www.wdm.iowa.gov/index.aspx?page=340&subscriberguid=963f055f-7359-4858-805f-4b8e2f66a55c>

To unsubscribe from all West Des Moines eSubscriptions, please click the following link:

<http://www.wdm.iowa.gov/index.aspx?page=340&subscriberguid=963f055f-7359-4858-805f-4b8e2f66a55c&unsubscribe=1>
