



Council Request Update

January 31, 2019

Council Request: 18-125

Requested by: Council Member Barrentine

Request: Did the solar panels on the roof of the civic center damage to the roof membrane

Assigned to: Public Works

Response: Please see the response from Public Works Director Maria D'Andrea

Council Request: 18-126

Requested by: Council Member Barrentine

Request: Why did the cost increase so much on the Civic Center roof in such a short period of time?

Assigned to: Public Works

Response: Please see the response from Public Works Director Maria D'Andrea.

Council Request: 18-133

Requested by: Mayor Olson

Request: Report on the money spent on the repair of the Civic Center Roof.

Assigned to: Public Works

Response: Please see the response from Public Works Director Maria D'Andrea.

Council Request: 18-156

Requested by: Mayor Olson

Request: What improvements need to be made to the Civic Center building and when would these need to be done?

Assigned to: Public Works

Response: Please see the response from Public Works Director Maria D'Andrea.

Council Request: 18-166

Requested by: Mayor Olson

Request: Update on the Flood Study.

Assigned to: Public Works

Response: Please see the response from Public Works Director Maria D'Andrea.

Council Request: 18-169

Requested by: Council Member Martinez

Request: Has the mattress been removed from the alley in the 4600 block between Acoma and Bannock in the flood area?

Assigned to: Public Works

Response: Please see the response from Public Works Director Maria D'Andrea.

Council Request: 18-214

Requested by: Mayor Olson

Request: Names of individuals who Ms. Hoffman spoke with who did not get a flood survey. Please ensure they get surveys to complete.

Assigned to: Public Works

Response: Please see the response from Public Works Director Maria D'Andrea.

Council Request: 18-234

Requested by: Mayor Olson

Request: Information on gabions used in drainage system.

Assigned to: Public Works

Response: Please see the response from Public Works Director Maria D'Andrea. *

*Due to formatting issues, the Flood Survey will be provided at a later date.



DATE: January 31, 2019

TO: Mayor Olson and City Councilmembers

THROUGH: Dorothy Hargrove, Interim City Manager

FROM: Maria D'Andrea, Director of Public Works

SUBJECT: Request No. 18-125: Damage to Civic Center Roof from Solar Panels
Request No. 18-126: Cost Increase for Civic Center Roof
Request No. 18-133: Civic Center Roof Repair Costs
Request No. 18-156: Needed Civic Center Building Improvements

Request No. 18-125: Have the solar panels on the Civic Center roof damaged the roof membrane?

In approximately 2008-2009, a coating was installed on the roof to address leaks. In 2009, the city entered into a contract with Ameresco to reduce electricity costs by installing solar panels on the roofs of various city buildings. Ameresco installed solar panels on the Civic Center roof which eventually began to wear through the coating. Damage to the roof from the solar panels was noted as early as 2010. At that time, Ameresco put a second coating under the solar panel arrays. This second coating did not bond to the initial coating which was what necessitated the need for Ameresco to install slip sheets under the mounting blocks in 2015.

Slip sheets are a sheet material such as reinforced kraft paper or polyethylene sheeting which is placed between two components of a roof assembly to ensure that no adhesion occurs and to prevent possible damage from wearing or abrasion of the membrane. In this case, the slip sheets were used to allow the solar panel arrays to move without penetrating the roof itself.

Request No. 18-126: Why has the cost of the Civic Center Roof replacement increased so much in such a short period of time?

\$500,000 was included in the 2018 Budget from the Capital Improvement Fund to begin to set aside funds for this significant repair. An assessment of the roof and a cost estimate was prepared in early 2018 which determined that 1) the roof should be replaced, and 2) the estimated cost of replacement was \$1.6M. Assuming engineering costs of 8% and a contingency of 10%, brings the total estimated cost to:

Item	Estimated Cost
Roof Replacement (construction)	\$1,600,000
Solar Panel Removal & Re-install	\$100,000
Engineering/Design (8%)	\$136,000
Contingency (10%)	\$255,000
Total	\$2,091,000

Request No. 18-133: Report on the money spent on the repair of the Civic Center Roof

In 2003, the roof had a coating put on it to address leaks at a cost of \$59,940. Since that time, the roof has received numerous patches/repairs by both city staff and roofing contractors. Most recently, in 2018, \$1,661 was expended on leaks near some of the skylights. Repairs are made as they are discovered, typically as a result of leaks or bi-yearly inspections conducted by the city's roofing contractor. No maintenance to the roof has been deferred other than the need for complete replacement.

Request No. 18-156: What improvements need to be made to the Civic Center building and when would these need to be completed?

Other major improvements to the Civic Center that have been identified over the next 5 year period include:

Item	Estimated Cost
Building Envelope Seams & Window Repairs	\$300,000
Freight Elevator Upgrade/ Modernization	\$130,000
Carpet Replacement	\$325,000
HVAC Controls Upgrade	\$50,000
HVAC fan motors & variable frequency drives	\$300,000
Employee Elevator Upgrade/ Modernization	\$150,000
Bathroom Remodel	\$130,000
Total	\$1,385,000



DATE: January 31, 2019
TO: Mayor Olson and City Councilmembers
THROUGH: Dorothy Hargrove, Interim City Manager
FROM: Maria D'Andrea, Director of Public Works
SUBJECT: Request No. 18-169: Mattress Removal in Alleys

Request No. 18-169: Has mattress been removed from alley in the 4600 block between Acoma and Bannock in flood area?

A request was received to remove mattresses in the alley near 3951 S. Washington Street on September 24, 2018. City staff removed the mattresses in the public right-of-way on September 26, 2018.

A separate request was received on October 29, 2018 for a mattress in the 4600 block between Acoma and Bannock Streets. The mattress was picked up by City staff on November 6, 2018.



DATE: January 31, 2019

TO: Mayor Olson and City Councilmembers

THROUGH: Dorothy Hargrove, Interim City Manager

FROM: Maria D'Andrea, Director of Public Works *MAD*

SUBJECT: Request No. 18-166: Flood Study Update
Request No. 18-214: Flood Survey Notification
Request No. 18-234: Gabion Use in Storm Drains

Request No. 18-166: Provide an update on the Flood Study

Staff is preparing for an update to City Council on February 11, 2019. There were three parts to the study:

- 1) Life Safety Assessment & Flood-Proofing Report
- 2) Oxford Avenue Pipe Conditions Assessment Report
- 3) Outfall Systems Plan Update & Capital Project Prioritization

To date, Calibre has completed the following elements of the study:

- Performed an inspection in the Oxford Avenue storm sewer pipe.
- Completed the draft report for Oxford Avenue, including recommendations.
- Collected information from citizens and property owners in a survey; notice was sent to over 4,300 notices were sent to both property owners and tenants (as determined by the County Assessor information).
- Evaluated survey data from 54 respondents and followed up with those who wished to discuss further. A copy of the survey responses is attached.
- Performed a sidewalk assessment of 701 properties and ranked them into Critical, High, Mid and Low Risk from both a life risk and property risk perspective.
- Conducted several meetings with property owners at their homes to learn more about the flooding they experienced not only in July but in previous years; more meetings are planned in the near future.

A public meeting open house is scheduled for Thursday, February 21 from 4 p.m. to 7 p.m. for property owners to learn more about possible floodproofing options for their property.

At the February 11 meeting, staff will be proposing an option whereby the city would participate in the cost of floodproofing of private property. This would be in addition to any planned infrastructure improvements that Calibre recommends in the final study which is planned for completion in May 2019.

Request No. 18-214: Names of individuals who Ms. Hoffman spoke with who did not get flood survey

Staff sent an email to Ms. Hoffman on November 26, 2018 to inquire about the individuals in her area who had not received the flood survey postcard. Ms. Hoffman replied that she had forwarded the survey link to the other two homes that did not receive the postcard. She asked to have a meeting with the engineering firm, Calibre, and provided her mailing address in Centennial. The email string is attached.

Request No. 18-234: Information on gabions used in drainage systems

Staff and City Council received an email from Ms. Hoffman on December 13, 2018, which included photos of gabions near I-25 & Dry Creek, (see attached). These items are called gabions and are used in various applications for landscaping, erosion control, and soil stabilization. Generally, gabions are wire mesh baskets, logs or cages filled with stones. The stone size varies based on the application. In this case, wire logs filled with stones are being used as inlet protection to prevent sediment from the construction site entering into the storm sewer.

Without grass, trees or other vegetation to anchor the soil, storm water runoff can erode the soil and carry it away into the storm sewer. By placing the gabion around the inlet, water drains through it to filter out sand and sediment.

While this application is appropriate for large construction sites, the down side to this type of installation in an alley or other permanent location is that the unit would need to be installed down inside the catch basin or inlet, otherwise vehicles would run over it and potentially be damaged. The other significant factor is that these types of devices reduce the water velocity as it enters the pipe. Storm water is intended to build up around the sides of the gabion and allow time to run through the stones like a colander. Collecting water runoff behind the gabion would reduce the effectiveness of the pipe which is meant to carry water away from the site. Ponding water could further exacerbate flooding on private property.

Ms. Hoffman also provided a link to an item that the city and county of Denver is using, called gutter bins, to keep leaves and other debris out of storm inlets:

<https://denver.cbslocal.com/2018/11/27/gutter-bins-trash-south-platte/>

These appear to work very well at collecting debris. However, Denver has installed them in a park area where the potential for flooding impacts are minimal. Again, because they act to filter out materials, the water would back up while its being filtered and possibly cause additional or exacerbated flooding. However, in other areas of the city where water backup is not an issue, staff feels these are a very viable and low cost solution.

Maria D'Andrea

From: Vicki Hoffmann <vhoffmann123@comcast.net>
Sent: Monday, November 26, 2018 10:30 AM
To: Maria D'Andrea
Subject: Re: Flood Survey Postcards

[REDACTED]
[REDACTED]

Sent from Xfinity Connect App

----- Original Message -----

From: Maria D'andrea
To: Vicki Hoffmann
Sent: November 26, 2018 at 10:14 AM
Subject: RE: Flood Survey Postcards

Please send me your Centennial address and I will add it to the mailing list.

From: Vicki Hoffmann <vhoffmann123@comcast.net>
Sent: Monday, November 26, 2018 10:07 AM
To: Maria D'Andrea <mdandrea@englewoodco.gov>
Subject: Re: Flood Survey Postcards

Sorry I forgot to add how in the future can we receive this flood information at our home in Centennial?

Sent from Xfinity Connect App

----- Original Message -----

From: Maria D'andrea
To: Vicki Hoffmann
Sent: November 26, 2018 at 10:01 AM
Subject: RE: Flood Survey Postcards

Great! Thanks for passing on the survey.

As I mentioned previously, mailings were sent to both the property address and, if the owner listed had a different address, one was sent there as well. The addresses were compiled using the Arapahoe County Assessor's database.

There were three parts to the study:

- 1) Life Safety Assessment & Flood-Proofing Report
- 2) Outfall Systems Plan Update & Capital Project Prioritization
- 3) Oxford Avenue Pipe Conditions Assessment Report

The contract was signed in early-October. The flood-proofing report was to be completed within 90-120 days. Two public meetings are being planned for early December. The Oxford Avenue assessment was to take 90 days. Both of these are on-track and we anticipate bringing an update to Council in February 2019. The Outfall System Plan and Project Prioritization was scheduled to take until May 2019 to complete.

I will pass your contact information on to Calibre. While they cannot meet with everyone individually, we will note the issue of the bubbler and determine if an on-site meeting is needed.

Thanks,
Maria D'Andrea

From: Vicki Hoffmann <vhoffmann123@comcast.net>
Sent: Monday, November 26, 2018 8:54 AM
To: Maria D'Andrea <mdandrea@englewoodco.gov>
Subject: Re: Flood Survey Postcards

I have passed along the link to the other two homes that did not receive the postcard. I would recommend any future mailings be sent in a different way ie, not postcard style and mailing to actual properties as well as homeowners at their primary addresses so that everyone is in the know. Our primary address is different than our rental property address.

My biggest concern is that Acoma and Bannock were the hardest hit as well as Radcliff. Could you please refresh my memory as to what the next dates and phases of the survey are moving forward? I won't be filling out the survey so maybe you could pass along our information if someone wants to contact us if Calibre wants to walk our property?

The biggest problem is the bubbler in the alley of Acoma and Bannock needs to be connected to the culvert box.

Vicki/Greg Hoffmann
7202329691
Thank you

Sent from Xfinity Connect App

----- Original Message -----

From: Maria D'andrea

To: Vicki Hoffmann
Sent: November 26, 2018 at 8:24 AM
Subject: Flood Survey Postcards



Hello Ms. Hoffman,

I understand that you had mentioned that several of your neighbors did not receive the flood survey postcard. Please let me know the addresses and I will mail them a postcard and a hard copy of the survey.

Thanks,
Maria D'Andrea

Maria D'Andrea

From: Vicki Hoffmann <vhoffmann123@comcast.net>
Sent: Thursday, December 13, 2018 4:53 PM
To: Linda Olson; Rita Russell; Laurrett Barrentine; Dave Cuesta; Cheryl Wink; Amy Martinez; Othoniel Sierra
Cc: Maria D'Andrea
Subject: Drainage
Attachments: IMG_1114.JPG; IMG_1115.JPG

I saw this on the northbound ramp from Dry Creek onto I25 today. I stopped to take a picture. This is steel netting with rocks around the drain, the drain was completely clean. It's really unacceptable that Englewood does not implement any of these suggestions I've provided.

Hopefully none of you experience flooding. Please see attachment.

Vicki Hoffmann

Sent from Xfinity Connect App



