



## **Meeting Agenda**

4:30 – 6:00 PM, Wednesday January 5, 2022 Remote Zoom Meeting

UEB Zoom Meeting access link:

<https://us02web.zoom.us/j/83201655355?pwd=UVY3ODk0ZEhuc1pBWlJlVQmJSdDJVdz09>

Password: 972968 (New security feature may be required in future)

Or call: +1 346 248 7799

Meeting ID: 832 0165 5355

Password: 972968

1. Amendments to Agenda
2. Approve Minutes from December 15, 2021
  - a) See following content
3. Audience Business
4. Upcoming Meetings
5. Updates
  - a) Board of Trustees – Mike Karavas
  - b) Staff, Engineering – Aaron Caplan
  - c) UEB Chair – Jim Kerr
  - d) Member Updates
6. 2021 UEB Annual Report – Jim
7. Hotel (Moss Rock Development) Referral Request
8. Wastewater High Strength Side Streaming Allowance – Aaron
9. Storm Drainage Manual - Aaron



## UEB Meeting Minutes, December 15, 2021

**Meeting Time and Location:** Began at 4:30pm. Held remote via Zoom meeting.

**Attendance:** Jim Kerr, Lee Hall, Larry Quinn, Jerry Rotz, Chris Meline, Chris Cope, Mike Jackson

**Staff:** Aaron Kaplan

**Liaison:** Mike Karavas, not available

**Guests:** None

1. Amendments to Agenda

**None**

2. Approve Minutes from December 1, 2021

**Approved Unanimously**

3. Audience Business.

**None**

4. Upcoming Meetings

a) MEAN mtg in January

5. Updates

a) Board of Trustees, Not available

b) Staff, Engineering. Aaron Kaplan

- 1<sup>st</sup> Avenue notifying residences of impending increase in water pressure and warning that they need pressure relief valves installed. Current pressure of 45psi at hydrant on 1st Avenue versus 100 psi hydrant pressure at the top of Mountain View drive.
- Longs Peak waiting for bacteria testing before turning on lines. Electric conduit going up the hill should be completed early next week. Then onto stormwater drainage and will see when it can be paved - maybe mid January or wait until April.
- Welch Court sewer underway and hope to finish by Christmas but maybe end of the month.

- Bore crew 2<sup>nd</sup> avenue to fire station. Hope to finish by the end of week to get lines lowered.
- Electric meters – special key on commercial installations required to change to net to measure the amount of electricity drawn from the grid and amount sent to the grid.
- Remaining 3 phase commercial meters have arrived and hope to get installed. Then everyone except those who opted out of net metering will be finished.
- Planet Bluegrass not doing specific anything now. Hope to deal with UEB issues during permitting. Should require getting an overall master utility plan at least by the first permit.
- CDPHE and new permit ammonia concerns. JVA submitted study that said ammonia could be ok with eastern corridor. Permit ammonia limits will be increased by spring. If general permit updated, the town should be ok. BOT packet on Monday will explain.
- Longmont water line lining has been delayed. Some conflicts with town lines and pre-bid meeting on pump station project. Construction Feb.
- Corrugated pipe will be redone for 4th Ave pedestrian bridge headwall with concrete. Hope that they can get around Longmont water line. If we have to enlarge it is a bigger project.
- Hotel project is starting demolition January 3. Utility report required once they have sizing approved. New Gunbarrel hotel will be used for comparison. Other tenants will also affect utility requirements.
- Berm height of solar farm proposed at 9 feet. Room for trail between Bike Park and fence. Carroll's are now ok with the height now. Location from berm to farm should be 20-feet on east berm so they could drive out in emergencies. Should be formalized agreement and expedited. DOLA application still underway and no news but will ask DOLA if they need additional information concerning floodplain issues.
- Summit getting underway but not yet blasting. N Line electric doing updated quote and changing staging area. Public security bond not yet submitted. PVREA can re-route around when blasting.

c) UEB Chair – Jim Kerr

1. Solar Farm

Jim and Lee met with battery storage vendor Nikola Power and can raise up on 18 inches of concrete. Rather than cost \$800K could possibly do \$400K for a 250 KW 4 hour battery. Cost analysis balancing.

2. SFC wants Lyons Energy Action Plan  
XCEL Partners in Energy can do plan.

3. UEB Annual Report due 15 January  
Review draft January 3 UEB meeting.

#### d) Other UEB Members

Lee Hall reviewed Solar Farm financial analysis. With 75% DOLA grant, breakeven period at 14.9 years. Applied for 1.4M but now showing about a \$1M grant. At 55% matching grant, payback period goes to 24.7 years with town cost goes of \$486K. BOT budgeted \$264K in 2022. Lee suggested communicating to DOLA and that the estimated battery cost portion is reduced so the grant can be reduced from \$1.4M. MEAN awarded PPA contract for member solar farms very cheap but it is not clear if the Lyons project cost can be reduced by using a DOLA grant.

Gunnison County has done one county project 1/3 MW separate from MEAN in 2020 and no grant. Currently under construction with City for 1MW, working with MEAN and DOLA. Ownership transfer at the end of 25 year PPA and DOLA was fine with that. Will review their PPA agreement.

#### 6. Wastewater High Strength Side Streaming Allowance - Aaron

Idea is that an entity that is side-streaming from the wastewater stream, should be able to reduce the wastewater bill by that amount. This includes production quantities not going into wastewater stream.

Will have to verify quantities with receipts, and also provide documentation that it is being disposed of at an approved location.

Aaron will develop draft code language for UEB review.

#### 7. Red Gulch Stormwater Drainage

- See the Stormwater Master Plan
- <https://iconengineering.github.io/lyons-stormwater-masterplan/assets/LyonsDraftReport.pdf>

Solar farm batteries will be raised as high as possible to avoid stormwater drainage issues.

Anecdotal observations include: 1) home on southwest corner of Welch Drive along Bohn park received 1.5 feet of water on outside of house during 2013 flood coming around dog park and 2) Larry Quinn, 40 year resident of CR 69, noting that Red Gulch flooding often cascades north down CR 69 towards the river.

Boulder County should consider upstream control in open space and Lyons Park Estates. Boulder County has historically been against this.

ICON master plan states that plan is not adequate for formal floodplain delineation for FEMA adoption.

## 8. Storm Drainage Manual

- Consider adopting the following Boulder County Storm Drainage Manual
- <https://www.bouldercounty.org/transportation/floodplain-management/storm-drainage-criteriamanual/>
- ICON master plan referenced UDFCD guidelines.  
(<https://mhfd.org/resources/criteria-manual/>)
  
- Aaron has a draft checklist and will supplement with references to Urban Drainage District manuals.

Meeting ended: 6 pm. Minutes Submitted by: Larry Quinn

## 6. 2021 UEB Annual Report – Jim

### Utilities and Engineering Board

The Lyons Utilities and Engineering Board (UEB) is an advisory committee to the Board of Trustees and works with the Utilities and Engineering Director to review and make recommendations to the Town regarding utility rates, capital projects and other matters related to the Town utilities and engineering projects. See Municipal Code Sec. 2-8-190 for details.

#### 2020 Activities/Accomplishments/Issues

Notable activities of the UEB in 2021 were:

Monitored the financials of the Town's utility funds to ensure they are solvent. Fortunately, no rate increases were determined necessary this past year. The wastewater portion of the water and wastewater fund is our primary concern at this time and will likely require an increase in 2022. The ultimate recommendations may be contingent upon the resolution of the Honeywell lawsuit.

Drafted changes to the Net Metering policy that were adopted by the BOT through town ordinance. Lyons has a relatively large percentage of its energy generated by rooftop solar which is highly subsidized by non-solar customers. The UEB recommended the subsidy be reduced to match other renewable sources of electricity to reduce the cost burden on those rate payers who do not have solar generation. The change eliminates net metering for new solar installations and instead pays the renewable wind rate for excess energy produced and sent to the Lyons electric grid. It also adds in a meter fee of \$2.50 per month to cover the cost of a production meter required by our wholesale energy provider. Prior installations continue on the previous net metering policy until 2030.

Continued pursuing development of a solar farm to be built in Lyons. Worked with UC Denver group on a feasibility study which held two open meetings to develop recommendations for a site location and refine the cost analysis. The 1.5 acre site chosen was in Bohn Park just west of bike park which required a Town vote. The vote allowing use of the park land was held as part of the regular normal November election ballot and passed by a nearly 2 to 1 margin. Recommended inclusion of battery storage as part of the solar farm development.

Analyzed cost of peak energy consumers such as electric vehicle charge stations and air conditioners and the savings potential of peak shaving using a town battery storage system.

Encouraged the electric smart meter installations that were completed in 2021. Developed an application that reformats the Sensus raw daily production reports on solar installations into a format that can be uploaded into the MEAN distributed generation system.

Provided advice to the town in regard to the wastewater treatment plant (WWTP). The UEB continued to agree with the town's decisions to move to a CDPHE general permit, pursue rerating of WWTP capacity and the need for additional blower motors.

Recommended the BOT not waive the tap fees and water rights dedication requirements for the proposed Summit affordable housing development.

Coordinated with development of the new Comprehensive Plan. This included the evaluation of utility opportunities and constraints to potential development areas.

## **Plans for 2021**

### Electric Utility

1. Review electric system master planning and connect to town GIS as feasible. Determine anything that requires updating and potential priority projects.
2. Continue work on the Lyons solar farm.
3. Establish residential street lighting standards and develop a plan to upgrade to LED residential street lighting.
4. Begin assessing possible electric rate restructuring such as time of use and or demand pricing based on newly implemented electric smart meter data. As part of the new rate restructuring consider changing the previous net metering policy for prior customers from an annual to monthly reconciliation.
5. Research alternatives on how Lyons can cost effectively increase its share of renewable energy.

### Water Utility

1. Review water system master planning. Determine anything that requires updating and potential priority projects.
2. Review water system zone and pressure issues. Monitor the recently completed First Ave project to see if water pressures improve as projected and adequately address the hydrant flows/pressures.
3. Make recommendations on how to assess the potential existence of lead piping in service lines relative to potential contamination.

### Wastewater Utility

1. Review wastewater system master planning. Determine anything that requires updating and potential priority projects.
2. Review planning for WWTP rerating and CDPHE general permit issues and work with town staff on implementation program in conjunction with Honeywell negotiations.
3. Recommend municipal code changes to provide for a Wastewater High Strength Side Streaming Allowance. Wastewater charges are based on water usage, but with side streaming this water is diverted and may not be appropriate to be included in the calculation of high strength waste.
4. Revisit the high strength wastewater charging program reexamining the cost to treat such wastewater above normal domestic strength wastewater.

5. Monitor the Welch court project to ensure it gets completed as expected and performs up to specifications.
6. Make recommendations on the adequacy and monitoring of grease traps in local businesses.

#### Stormwater Utility

1. Review stormwater system master planning. Determine anything that requires updating and potential priority projects.
2. Determine feasibility and costs for addressing the Red Gulch stormwater potential impacts to Lyons Valley Park.
3. Work with Ecology Advisory Board on potential water quality improvement measures at stormwater outlets.
4. Assess the effectiveness of the recently completed High Street stormwater project.

#### General

1. Review and comment on Utility Financials
2. Coordinate with the update the Lyons Comprehensive Plan (Plan) to ensure that utility and engineering issues are adequately addressed.
3. Make recommendations on how GIS can be further be improved.

#### **Meeting dates**

The UEB meets on the first and third Wednesday of each month from 4:30 - 6:00 virtually using the Zoom meeting application. Meeting agenda with Zoom link is posted on the Town's website at least 24 hours prior to each meeting. The public are always welcome and encouraged to attend.

#### **Members:**

Jim Kerr - Chair  
Chris Meline - Vice Chair  
Larry Quinn – Vice Vice Chair  
Lee Hall  
Jerry Rotz  
Mike Jackson  
Chris Cope  
BOT liaison: Mike Karavas  
Staff liaison: Aaron Caplan

## **7. Hotel (Moss Rock Development) Referral Request**

The UEB will review the following hotel development request. You should be able to use the links to see all the applicable documents.

**REFERRAL REQUEST**

Project Name: Lyons Hotel Development Plan Review  
 Today's Date: 12/22/2021  
 Comments Due By: 01/12/2022

**The Town of Lyons has received the following item for review:**

Applicant: Moss Rock Development, LLC  
 Zoning District: Commercial Downtown  
 Location: 343, 347, and 349 Main Street Lyons, Co

Project Description: The applicant is requesting a development plan to a 79 room hotel. Currently a public hearing is being scheduled and will be noticed when confirmed. The Town has received a substantially complete application. **To view the application**

[https://townoflyonsco-my.sharepoint.com/:f/g/personal/pstrom\\_townoflyons\\_com/Egimz53ZZexDkOSvqsNgBfQB8tHqXqpUCr2YJGo636R8EA?e=cy4VC2](https://townoflyonsco-my.sharepoint.com/:f/g/personal/pstrom_townoflyons_com/Egimz53ZZexDkOSvqsNgBfQB8tHqXqpUCr2YJGo636R8EA?e=cy4VC2)

The application is submitted to you for review and comments. Please reply by the above-listed date so that we may give full consideration to your recommendation. Any response not received before or on this date will be deemed to be a neutral response.

**If you have any questions regarding this application please call the Planner Philip Strom at 303-823-6622 x25** or email him at [pstrom@townoflyons.com](mailto:pstrom@townoflyons.com). Please note that only a portion of the submitted documents have been enclosed. If you desire to review the entire file please call the Deputy Town Clerk Marissa Davis at 303-823-6622 x 21.

DOUBLE GATEWAY  
TO THE ROCKIES

**Please check the appropriate response below or send a letter.**

	We have reviewed the proposal and have no conflicts.
	See attached letter for comments regarding this
	Please note the following concern: _____
	_____
	_____
	_____

Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Printed Name/Agency: \_\_\_\_\_

**Please mail you comments to:** Town of Lyons, PO Box 49, Lyons, CO 80540, ATTN. Marissa Davis **or fax them to:** 303.823.8257 **or email them to:** [mdavis@townoflyons.com](mailto:mdavis@townoflyons.com).

TELEPHONE

303.823.6622

FACSIMILE

303.823.8257

## **8. Wastewater High Strength Side Streaming Allowance – Aaron**

Here is the LMC that allows a customer who has been placed in the High Surcharge category to reduce their surcharge.

Sec 13-4-80 (e)(2) High Surcharge Businesses and Significant Industrial users may reduce the water usage for the BOD surcharge calculation by providing the Town documentation of the number of gallons of water diverted from the sanitation system. The Town Administrator or designee will determine the amount of the production credit to be used in calculating BOD surcharge.

Documentation from a waste hauler and follow up verification from staff that the waste being hauled is coming from side-streaming would fall under this part of the code and could therefore be submitted by a high surcharge customer for this purpose.

Some additional questions to think about.

Would there be a benefit to broadening the scope of this deduction to encourage customers such as restaurants and bars to side-stream?

Based on the hauling costs submitted by one company it would not appear to be a financial incentive for customers to side stream on their own.

Should the current reduction also include reducing the standard wastewater usage charge? The documentation is showing water that is not going down the sewer system.

Should commercial accounts be allowed to meter the water they use for irrigation and then have that deducted from their wastewater usage charge?

There could then be requests from businesses that serve glasses of water or make and serve coffee and those could not easily be documented.

## 9. Storm Drainage Manual – Aaron

The previous Town Planner had asked me to work on more detailed documentation with regard to Stormwater, Drainage and Development Planning. Currently chapter 16 Zoning includes **Sec. 16-17-30. Site plan and/or development plan review process**. This section lists the submission process for development that requires either a site plan or development plan review. The portion pertaining to drainage and stormwater follows.

- (5) Site plan or development plan map. The site plan and/or development plan map sheets shall be a minimum of twenty-four (24) inches by thirty-six (36) inches, prepared at a scale of one (1) inch = twenty (20) feet, unless otherwise approved by staff. The Town Administrator shall determine which of the following must be submitted, based on the complexity of the site plan or development plan proposal:

...

- g. Existing and proposed grading, stormwater management and site drainage:
1. Existing and proposed one-foot contours.
  2. Existing waterways on or adjacent to the site, with regulatory wetlands, floodway and one hundred-year floodplain delineated where present.
  3. Location of detention/retention areas and storm sewer infrastructure with the required drainage easements.
  4. Existing and proposed drainage channels, stormwater management facilities and detention areas, including tributary areas, drainage facilities and erosion control devices, with nomographs and calculations.
  5. Critical spot elevations controlling flowlines for all curbs and gutters, swales and storm drains.
  6. On-site detention location, layout and typical design details and materials.
  7. Stormwater drainage systems for streets (curbs, gutters and cross-pans, with materials noted).

(7) Certified drainage report. A certified drainage report per Town standards, including an erosion control study and plan.

This doesn't give any specific requirements or details as to what the Town is looking for. It is just a list of details that must be included and looks to it then appears the Town decides if they like the submission or not with no reference to anything. There is a much more detailed set of requirements and standards on stormwater and drainage that was added for the Commercial and Mixed Use Design Standards in Sec 16-6-20. I have included that as a separate document. These requirements only pertain to development located in a couple of specific zoning categories.

We also have the Stormwater Section of our Construction Design Manual. However, that only applies to construction of the public improvements portion of development.

<https://www.townoflyons.com/DocumentCenter/View/561/SECTION-2---Storm-Drainage-System>

Before I found the detailed information in Sec 16-6-20 I had started to combine part of 16-17-30 with the Construction Design Manual requirements so that would apply to private property also. I have included that as a 3<sup>rd</sup> document.

When I saw the Boulder County Storm Drainage Criteria Manual, <https://assets.bouldercounty.org/wp-content/uploads/2017/03/storm-drainage-manual-full-version.pdf>, I thought Lyons should work with something that has already been developed.

Larry then sent the City of Boulders Chapter on Stormwater Design from their Construction and Design Standards that all development must meet, <https://bouldercolorado.gov/media/4706/download?inline> .

I then noticed the drainage report for the new hotel mentions Longmont's manual <https://www.longmontcolorado.gov/departments/departments-n-z/planning-and-development-services/development-services/storm-drainage-criteria-manual> .

The Town should have something more than the current code in 16-17-30. What should we use as a starting point? We could amend 16-17-30 with the code in 16-6-20 and reference our construction design manual or we could start with code from Boulder or Longmont. For this meeting I just wanted to review the process to make the changes and give my thoughts.

We may then want to make some updates to the stormwater utility portion of our municipal code, [https://library.municode.com/co/lyons/codes/municipal\\_code?nodeId=CH13MUUT\\_ART7STUT](https://library.municode.com/co/lyons/codes/municipal_code?nodeId=CH13MUUT_ART7STUT) . I think this can be a separate undertaking and may only require reference to the manual or standards we put together.

Boulder's municipal code is referenced in their standards and can be found at [https://library.municode.com/co/boulder/codes/municipal\\_code?nodeId=TIT11UTAI\\_CH5STFLMAUT](https://library.municode.com/co/boulder/codes/municipal_code?nodeId=TIT11UTAI_CH5STFLMAUT) .

Please submit

A site plan and/or development plan map of existing and proposed grading, stormwater management and site drainage including:

1. Existing and proposed one-foot contours.
2. Existing waterways on or adjacent to the site, with regulatory wetlands, floodway and 100-year floodplain delineated where present.
3. Location of detention/retention areas and storm sewer infrastructure with the required drainage easements.
4. Existing and proposed drainage channels, stormwater management facilities and detention areas, including tributary areas, drainage facilities and erosion control devices, with nomographs and calculations.
5. Critical spot elevations controlling flowlines for all curbs and gutters, swales and storm drains.
6. On-site detention location, layout and typical design details and materials.
7. Stormwater drainage systems for streets (curbs, gutters and cross-pans, with materials noted).

A certified drainage report including an erosion control study and plan. The purpose of the storm drainage report is to present a conceptual plan for the proposed storm drainage system prior to actual sizing of facilities. The preliminary drainage report shall include, but not be

limited to the following:

- a) A map of the watershed in which the development is located with sufficient detail to identify the flow-paths of storm drainage to and from the development to a major drainage way.
- b) Identify nearby irrigation ditches and reservoirs to be affected by storm drainage from the development.
- c) Coefficients and calculations for determining historical and developed flows for the minor (2-year) and the major (100 year) storm.
- d) The storm drainage public improvement plans which shall include:
  1. The drainage area boundary and drainage sub-area boundaries in which the subdivision is located.
  2. Existing and proposed contours at two foot intervals where the average cross slope is less than ten percent and at five foot intervals where the cross slope exceeds ten percent.
  3. Finish grade for all lots and streets indicating flow directions.
  4. Existing drainage facilities and structures including irrigation ditches, roadside ditches, drainageways and culverts.
  5. Proposed drainage facilities and structures including piping and open drainageways, inlets, manholes, culverts and other appurtenances.
  6. The proposed outfall points for runoff from the subdivision.
  7. Routing and accumulative flows at various critical points for the minor and the major storm runoff.