



Meeting Agenda

4:30 – 6:00 PM, Wednesday January 19, 2022 Remote Zoom Meeting

UEB Zoom Meeting access link:

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

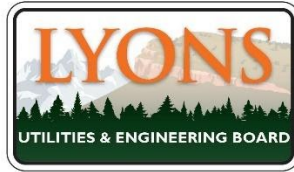
Password: 972968 (New security feature may be required in future)

Or call: +1 346 248 7799

Meeting ID: 832 0165 5355

Password: 972968

1. Amendments to Agenda
2. Approve Minutes from January 5, 2021
 - a) See following content
3. Audience Business
4. Upcoming Meetings
5. Updates
 - a) Board of Trustees – Mike Karavas
 - b) Staff, Engineering – Aaron Caplan
 - 18 Jan BOT utility update:
<https://www.townoflyons.com/AgendaCenter/ViewFile/Item/9702?fileID=19921>
 - Additional utility issues on the 18 Jan BOT agenda:
<https://www.townoflyons.com/AgendaCenter/ViewFile/Item/9720?fileID=19898>
 - c) UEB Chair – Jim Kerr
 - d) Member Updates
6. Solar & Battery Storage Facility Next Steps
7. Utility Emergency Preparedness
8. Storm Drainage Manual - Aaron



UEB Meeting Minutes, January 5, 2022

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

Guests: None

1. Amendments to Agenda

None

2. Approve Minutes from December 15, 2021

Approved Unanimously

3. Audience Business.

None

4. Upcoming Meetings

a) MEAN mtg in a couple of weeks, and Jim Kerr attending.

5. Updates

a) Board of Trustees, Mike Karavas

- Looking at plan for undergrounding power lines.
- Report requested by Mike for protocol for utility shutdowns. UEB may be asked to review. This is for all utilities.
- Awarded third round of DOLA funds, \$42K for public works facilities.
- Special BOT meeting tomorrow on request by Summit on change to bank LOC instead of performance bond.
- First Avenue fire hydrant testing this week scheduled but not sure if pressure reducing valves all in place.
- Legal update on Honeywell. Panel of three Arbitrators have been selected.
- Callahan site has issues of unpermitted work.
- Yoder property still in courts.

b) Staff, Engineering. Aaron Caplan (no report - arrived later)

c) UEB Chair – Jim Kerr

Required solar production hourly data has now been uploaded to MEAN for the months May through November. Required Sensus files stopped auto generating at the beginning of December and Sensus is working on the issue.

d) Other UEB Members - no reports

6. 2021 UEB Annual Report – Jim

Recommended changes of team

- Small edits by UEB members

Motion: Publish annual report as drafted with minor edits discussed.

Approved Unanimously

7. Hotel (Moss Rock Development) Referral Request

Aaron, Town code aspects review.

[Stormwater was early focus but need to go with current code now.]

Chapter 16, zoning, Article 17 site plan and development plan review process

- Development plan review requires PCDC and BOT on top of staff review.
- Detailed flowchart
- Item 5, site plan and development plan map plus details. There is not much on what town expects for any of these.
- 5f, existing and proposed utility systems. Usually this is done afterwards but Lyons wants information early. Applicant says more detail at building permit process but then additional review time required.
- 5g, grading and drainage.
- Demo permit did not require anything on plan to move forward since it is by right.
- Article 6 includes commercial and mixed use design standards. This includes more site planning requirements and stormwater. There is not much more on utilities.

Discussion:

- Separate fire suppression line proposed beyond 2” service.
- Not much included on affect to town electric, water and wastewater.
- Looking at undergrounding of electric to rear.
- Sewer service connection on 4th 8-inch line.
- Hotel is use by right there. When approved, building permit process would include the detailed engineering before proceeding.

- Water use should use peaking factor of 4. Rated capacity of WWTP under this scenario should be evaluated.
- Even without restaurant, other restaurants in town would increase loads in town.
- Laundry said to be sent to Longmont.
- Existing two ¾ inch taps are on site and will need to supplement water rights to get up to the proposed 2-inch tap. Lake Macintosh, 5 or 6 shares required.
- Stormwater report has somewhat questionable impervious areas, before and after project calling engineering qualifications into question. How can imperviousness improve with increased impervious surfaces? Can request that area be mapped and engineering calculations.
- Fire flow for fire suppression is being addressed by Fire Department but no current need for ladder truck anticipated.
- Different service lines for hotel versus other uses of bars, etc. Would seem that separate businesses would want own meter, but it could be post town meter.
- Hotel may be considered mid strength wastewater based on Wee Casa, but they Wee Casa does own cooking and cleaning. Laundry would be high strength.

Motion:

The UEB requests that the following issues be addressed at time of building permit application for the project:

- Adequate water pressure for fire suppression system.
- Wastewater downstream lines and WWTP adequacy.
- Increased wastewater flows from town restaurants to feed hotel residents.
- Rather than 85% occupancy should use 100% occupancy and a standard Colorado peaking factor.
- Document that electrical transformer(s) proposed are adequate and if single phase or three phase required.
- Stormwater report needs to be updated with final design plan with calculations.
- Consider different water taps for different businesses since wastewater fee calculations vary by usage type.
- Confirmation that the project does not include food service or laundry facilities.

Approved Unanimously

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.

Code currently allows side streaming allowance so nothing more needed now.

Some additional questions to think about for future:

- 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

- 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/>)

This item was discussed very briefly due to limited time left in the meeting. Aaron has a draft checklist and will supplement with references to the Urban Drainage District manuals. These will be discussed in a future meeting.

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

6. Solar & Battery Storage Facility Next Steps

The following write-up by Aaron was in the packet for the 18 January BOT meeting:

The Town has been offered a grant award in the amount of \$1,000,000 for the Lyons Solar Farm & Battery Storage project. This is a grant under HB21-1253 awarded by DOLA.

If the Amendment to the Bradford Homestead Covenant and Agreement is passed, as drafted and signed by the Carroll's, then we have that concern taken care of.

We have two thirds vote of the Lyons voters to allow this facility in the location in Bohn Park to the southwest of the Dirt Jump Bike Park. Staff is requesting formal direction from the trustees on whether to proceed with the installation of the solar facility at this location. This site was recommended as the primary location by the CU Denver feasibility study, listed in the ballot question posed to the Lyons voters, and included in the Bradford Homestead Covenant and Agreement.

If so, the next step is to prepare an ordinance to amend the zoning code to allow solar facilities in areas zoned Parks and Open Space. Following that, a request for proposals for design and construction of the project would be advertised. If not, then the next step would be to determine a location for the facilities.

7. Utility Emergency Preparedness

The following write-up by Aaron was in the packet for the 18 January BOT meeting:

UtilityShutdown-The entire Town electric grid can be shutdown with the push of a button at a location not to be publicly announced. A phone call to N-Line should allow for it to shutdown in less than 30 minutes. I have asked to review this in case N-Line is not able to make it and there is an emergency need for Town staff to shut down power. We do not have anything in place to isolate different parts of town, but in an emergency, N-Line can come in and cut into lines in areas to do have that type of isolation if needed and then repair.

It would seem rare to want to turn off the entire water system. We do have valves at two locations (not to be disclosed for security reasons) where this could be done if that need developed. It would be much more likely to need to isolate certain parts of the system. We do have the ability to close valves at the six pressure reducing vaults isolating sections of town and then we can isolate individual blocks in some instances. The lack of valves having been installed in the past means we cannot isolate every individual block. When we do projects such as the ones at First Ave and Longs Peak we are adding valves to make us capable of shutting down each individual block. We can now turn off just 1st Ave, or Mountain View, Longs Peak, or 3rd Ave between the Cemetery and Longs Peak with the recent valves installed.

Undergrounding Electric – Staff have advised N-Line that the town would like to work with them to develop a capital improvements plan to underground the town's electric system. We have identified initial priorities; lines that go over grasslands, lines that do not have service lines, working from the end of lines backward, working with other projects to add undergrounding, and working with redevelopment projects. We also have Longmont and Poudre Valley REA electric lines that are active throughout town; these would need to be considered as well.

For 2022 we already have plans for undergrounding a portion of the line going up to Longs Peak Drive and have added the lines along Railroad Avenue between 2nd and the fire station with the Longmont Pump Station Project. I am also looking into costs to underground the lines along Broadway from 5th to 3rd since there will be some work with the Broadway project. We would need to find funding for this and there are a number of service lines to businesses that would need to remain unless those businesses are interested in undergrounding their service lines or they could find a source of funding.

8. 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 3rd 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 . 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 .

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.