



Planning and Engineering
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September 1, 2018

Cesarina Darcy, Project Manager
City of Aurora, Office of Development Assistance
15151 E. Alameda Pkwy
Aurora, CO 80012

Re: Letter of Introduction for the Wemlinger Water Purification Facility CT Chamber Project (#1288389)

Dear Cesarina,

The Wemlinger Water Purification Facility CT Chamber Project is an Aurora Water project and includes the construction of a new chlorine contact chamber, pump and pipe galleries, and storage building with an electrical room. The improvements on the north side of E. Quincy Road require a Minor Site Plan Amendment. Overall, these improvements will ensure that we continue to meet local, state, and federal regulations for disinfection of treated water. The Aurora Water representative is Elizabeth Carter, Principal Engineer, City of Aurora, Planning and Engineering Services, located at 15151 E. Alameda Pkwy, Suite #3600, Aurora, CO 80012, phone (720) 859-4338.

The land is zoned PZWD for the water treatment facility. The addition of the chlorine contact chamber is consistent with the land use and comprehensive plan. The site complies with existing City Codes, except for the noise ordinance. The new facilities with mechanical equipment are located below grade and will not increase the noise levels at the site. Because the existing operations at the site do not comply with the noise ordinance, we are requesting a continuance of the variance granted to article 146-1804 in 2014 for the Wemlinger WPF Improvements Project to reflect the actual conditions at the site.

The impact to City infrastructure is to improve the ability to provide drinking water throughout the City. The existing views of adjacent homeowners have been taken into consideration and where possible, preserved and where not possible, mitigated. No wetlands were impacted and the trees will be protected on site. No new employees will be hired as a result of this project so no additional parking is needed. The new building will use materials to match the existing structures, specified to match the materials and colors used on the 2014 improvements project. CADD standards were followed for building and civil plan submittals.

Planning Department

Key Issues:

- ▶ Submit an Operations Plan to determine whether additional parking is necessary.
- ▶ Please inform neighborhood organizations of the potential and on-going development.
- ▶ Noise, vibration, & engine idling ordinances [Chapter 146, Sections 1800 - 1805]

Response

- Operations Plan – No additional employees will be hired as a result of this project.
 - Day shift is from 5 am to 5 pm – 1 employee
 - AM Shift is 11:30 pm to 11:30 am – 1 employee
 - PM Shift is 11:30 am to 11:30 pm – 1 employee
 - Lab hours vary from 6am to 6pm – 10 employees
- Elizabeth Lefebvre will mail the project notifications to the list provided on September 10, 2018.
- For the last Site Plan Amendment granted in 2014, Aurora Water was concerned about the potential noise issue associated with adding emergency power generators at the Wemlinger WPF site. As part of the effort to mitigate noise, we conducted a decibel survey of the site to determine the existing background noise level at various locations and times. The result of this investigation brought to our attention that the facility as it operates today is in violation of the City’s noise ordinance (greater than 55/evening 60/daytime dBA). A variance was requested and granted. The new facilities have been designed such that the noise levels will not increase beyond what they are today.

1. Zoning and Land Use Issues

1A. This site is currently zoned (PCZD), Planned Community Zone District Subzone Water Plant.

While the policy of the city is to no longer zone any land to the PCZD district, uses, buildings and structures must conform to the site plans previously approved for those sites. Development and design standards shall consist of those approved on such plans. The lot is bordered by Planned Community Zone District (PCZD) Subzone Single Family Detached on the east and west, PCZD Subzone School on the north and OPEN to the south.

Response: The new building will be constructed to match the existing facilities to meet the requirements of the approved site plan. The plans and specifications reflect the building materials used and approved for the 2014 Site Plan Amendment for the Wemlinger WPF Improvements Project.

2A. Parking

On-Site parking is required by Section 1504 of the Zoning Code. Based on the information you’ve provided, we are unable to determine whether additional parking will be needed for any new employees used in the operational elements of the water treatment chamber.

Response: The Operations Plan is indicated above. The site has adequate parking for the current staff and site visitors.

2B. Pedestrian Linkages

Section 146-1107 details pedestrian access standards applicable to all developments in the city of Aurora. These general standards dictate that sidewalks or walkways shall be constructed so that all primary access locations to non-residential buildings has direct access to a system of sidewalks and to the public right of way. Please show any existing or proposed pedestrian connections on site that could enhance pedestrian circulation.

Response: The water treatment facility is a secure facility with no public access allowed unless previously approved by the Chief Plant Operator. TS G-001 is attached and describes in detail the security procedures implemented at all City treatment facilities. Staff with the appropriate credentials for access to the buildings will have sidewalks and stairway access to the new building, with egress options as required by code.

2C. Site Lighting

[Section 146-1509\(H\)](#) governs the design of parking lot lighting. If parking is added to this site, lighting of the parking lot may need to be indicated, if there are any nighttime activities.

Please also show typical details of lighting on the plan and/or building elevations.

Response: No additional parking is included in this project. The exterior lighting is shown on attached drawings 55E22, 55E23, and 55E25.

3. Landscape Design issues: None

4. Architectural and Urban Design (labeled as Items 6A and 6B in letter)

6A. Design Standards

[Section 146-405\(F\) 8](#) of the Zoning Code establishes the approval criteria for building architecture and urban design. Building elevations will need to be included as part of your site plan, and should call out dimensions, exterior finishes and color schemes. We will also ask for color and material samples with the initial submittal. As a general rule, “high quality of design” usually means that architectural details should be continued on all four sides of all buildings open to view.

Response: The building materials will be manufactured to match the existing structures per the attached specifications.

6B. Screening of Mechanicals.

Please show the location of any mechanical equipment and vents greater than eight inches in diameter on the elevation drawings. All such equipment must be screened. Use drawings and notes to explain how this will be accomplished. Screening may be done either with an extended parapet wall, or a freestanding screen. In either case the screening must be at least as high as the equipment it hides. Please see Section 146-1300 for details on these requirements.

Response: There are several vents on the underground storage vessel. These vents are required to provide structural safety as the underground structure could over pressurize without adequate ventilation. The screening of vents has been addressed with the neighbors on a previous project. The neighbors have requested that we paint the vents dessert tan, per the attached emails exchanged with Elizabeth LeFebvre.

5. Mineral rights Notification Requirements

Response: Attached Mineral Rights Affidavit/Severed Mineral Rights Notice

6. New CAD Standards

Response: Standards were followed.

Parks, Recreation & Open Space Department (PROS)

Forestry Division

There are several trees on this property that may be impacted by development of a new facility. A couple of the trees are Russian-olive and will not require mitigation, but the others that are impacted will.

Response: No trees will be removed or added as a part of this project. Trees that will be protected are shown on attached sheets EC01 and EC02 and have the appropriate notes from the Parks, Recreation & Open Space Dedication and Development Criteria Manual.

Aurora Water

Key Issue(s):

- ▶ Civil plans will be required to be submitted for the addition of a fire hydrant, and a Storm Water Management Plan (SWMP) and report are required for this project.

Response: Civil plans were submitted and have been approved along with the SWMP (additional invoice paid 8/30/2018). Sanitary service will be provided for discharge from instrumentation. The estimated flow is 8 gpm. The last inspection of the sewer was reviewed. The sewer is only partially utilized and there is excess capacity in the existing sewer, sufficient for this small flow. Water service is provide as part of plant water and is metered through the Zone 5 line.

Public Works Department

Key Issue(s):

- ▶ Pending something unforeseen, such as public comment, Traffic Engineering will not require a Traffic Study at this time.

Response: The adjacent and opposing access points are unchanged with two entrances on Quincy, the main gate and the construction gate. Both are secured entrances. On site access is provided to the new storage building with a three point turn option that will not have any landscaping. An inside radius of 35 feet minimum is provided for emergency vehicles. The extended roadway is 20 feet wide. There are no public streets on this project. There are no stop signs or street signs that are needed on site.

Engineering Division

Improvements:

Sections and details referenced in the Improvements section refer to the City's [Roadway Design and Construction Specifications \(Roadway Manual\)](#).

- Retaining walls shown on plans shall indicate material type and a height range or indicate a maximum height. Where appropriate, guard or hand rails may be required.
- If gates are incorporated into the design of the development they are required to be setback from the street flow line a minimum of 35-feet or one truck length, whichever is greater.

Response: The project does not include retaining walls or gates.

ROW/Easements/Plat:

- Please coordinate with the Real Property Division of Public Works for the dedication of any required corridors.
- If a plat will be prepared for this development, the plat can cover the required easements.
 - Utility corridors shall be required for any proposed water/sanitary sewer/public storm sewer located outside of public right-of-way.
 - Public access/fire lane corridor shall be required for fire lanes outside of public right-of-way. Please coordinate with Life Safety for their alignment.

Response: All work is occurring on the treatment plant site, outside of public right of way, designed as required to minimize hydraulic profile losses and to work within the constraints of the master plan that includes additional structures in the future. Other utilities do not cross the treatment plant site and utility corridors for other public utilities have not been established on site.

Drainage:

Drainage design standards can be found in the City's "Storm Drainage Design and Technical Criteria".

- A preliminary drainage letter may be submitted in lieu of a preliminary drainage study. It should state the approved drainage patterns will not be altered and the imperviousness will not change from the approved drainage study covering this development. It will need to be signed and stamped by a Professional Engineer licensed in the State of Colorado. The letter shall be submitted to Engineering at the time of the Planning Department application submittal. A review fee shall be paid to the City prior to acceptance of the letter.

Response: With the civil plans review, a variance was requested per the attached letter. All review fees have been paid as of August 30, 2018.

- A public storm sewer system appears to be located near this site. Please have your Engineer or Surveyor verify and tie your site drainage into it.
- Extend storm sewer through the site, including inlets, pipes, manholes, etc., as needed.

Response: The public storm sewer system is connected to the site through existing piping per the attached maps.

- Dust free surface. If some other surface is approved for a site that is not improved (concrete or asphalt pavement), it needs to be dust free and maintained in a dust free condition. As part of the site plan approval process, the applicant shall place on the site plan/contextual site plan a complete description of the material proposed to be used, any and all dust control additives or treatments, and the maintenance schedule of the periodic additives or treatments. Additionally, a note shall be added to the site plan/contextual site plan that: "The property owner/developer shall maintain the dust free surface as provided within the site plan/contextual site plan. Otherwise if the property owner/developer fails to maintain the dust free surface as identified within the site plan/contextual site plan and fails to correct the condition after notification of the condition, the property owner/ developer agrees to remove it and replace it with an improved surface such as concrete or asphalt within the specified time of the notification.

Response: The attached site plan and grading drawings GC01, C05, C06, C07, and C08 contain the "dust free surface" note requested.

Fire/Life Safety Comments – Building Division

Key Issue(s):

► The new Concrete Water Disinfection Contact Chamber is a water filled processing structure that is not habitable. The building construction plans are currently under review within the Aurora Building Division. Fire/Life Safety has no significant comments.

Thank you,

Elizabeth Carter, PMP, PE (CO)
Principal Engineer, City of Aurora
Planning and Engineering Department

Attachments:

1. TS G001, Site Security Standard Operating Procedure
2. Lighting plan sheets 55 E22, 55E23, and 55E25
3. Architectural sections and building elevation (from neighborhood view)
4. Building materials specifications
5. Vent issue – resolution with neighbors (paint color selection)
6. Mineral Rights affidavit
7. Sheets EC01 and EC02 (tree protection)
8. Drainage letter (submitted with civil plans)
9. Storm sewer connection maps
10. Site plan and grading drawings