

February 22, 2021

City of Waukesha
Engineering Department
130 Delafield Street
Waukesha, WI 53188



Attn: Mr. David Buechl, P.E.
Civil Engineer – Engineering Department

Re: Engineering Comments dated 12/18/2020
Glen at Standing Stone

Dear Mr. Buechl,

Enclosed you will find the updated Engineering Plans and supporting documents for the Aspen Overlooks project. Our responses to the December 18, 2020 review comments are provided in bold lettering below.

Sanitary Sewer

1. Sanitary sewers shown are considered private.
 - **All proposed sanitary sewer has been called out as private.**
2. Building 8 & 9 share a lateral. Waukesha Development Handbook 2.1.2.2.6 states “Each habitable building shall have a separate lateral connection to the sewer main.”
 - **Plans have been revised to show laterals servicing each building and connecting to a proposed manhole.**
3. Can Building 8 utilize the existing lateral connection?
 - **No, the existing invert is too high.**
4. The detail on page C4.0 states “City of Waukesha” “DPW” on the lid. These are reserved for public sanitary manholes only.
 - **The note as been revised no longer call out items listed above.**
5. Sanitary sewers and laterals shall be televised per Waukesha Development Handbook 2.3.4.1.2 “All sewers, leads, and laterals shall be televised with in the project and/or disturbed area limits by an independent televising inspection service. Televising shall be in accordance with Division 3 Standard Construction Specifications, Section 5.3.10”
 - **Above note has been added to the plans.**
6. A record drawing of sanitary/storm sewer facilities sealed by a professional engineer or registered land surveyor shall be submitted to the Engineering Division. **An As-built plan set with the requested information will be provided upon completion of project.**

At minimum the drawing should include:

- Rim/Cover elevation
- Invert elevation
- Distances
- Slopes
- Materials
- Contractor
- Installation dates (month and year completed)
- Any notes related to major field changes (ie additional/deleted structures, etc)

- Signed and sealed by professional engineer or registered land surveyor
- Autocad drawing for importing into GIS

A redlined copy of the plans with the proposed information crossed out and the actual information next to it is acceptable and helps the review process.

Storm Sewer

1. Storm sewers and laterals shall be televised per Waukesha Development Handbook 2.3.4.1.2 "All sewers, leads, and laterals shall be televised within the project and/or disturbed area limits by an independent televising inspection service. Televising shall be in accordance with Division 3, Standard Construction Specifications, Section 5.3.10".
2. A record drawing of sanitary/storm sewer facilities sealed by a professional engineer or registered land surveyor shall be submitted to the Engineering Division. **An As-built plan set with the requested information will be provided upon completion of project.**

At minimum the drawing should include:

- Rim/Cover elevation
- Invert elevation
- Distances
- Slopes
- Materials
- Contractor
- Installation dates (month and year completed)
- Any notes related to major field changes (i.e. additional/deleted structures, etc.)
- Signed and sealed by professional engineer or registered land surveyor
- Autocad drawing for importing into GIS

A redlined copy of the plans with the proposed information crossed out and the actual information next to it is acceptable and helps the review process.

Street Lighting

1. City owned street lighting is within the proposed project limits. Developer is responsible for moving and costs of any street light facility that conflicts with the proposed project.
 - **Note regarding City owned lighting was added to the general notes on the title page.**
2. There is no City owned fiber within the project limits.
 - **Noted**
3. All work required for re-locating City owned street lights must be done to current City standards, contact Jeffery Hernke, 262-524-3592 or jhernke@waukesha-wi.gov
 - **Note regarding re-location of City owned lighting was added to the general notes on the title page.**
4. No pull boxes in drive approaches. Re-locate if necessary.
5. Street light poles cannot be within 4 feet of proposed drive approach, relocate if necessary.

General Engineering

Notes: For complete application, please submit:

1. Project submittal checklists from Developers Handbook and Application.
 - **Checklist included as part of the submittal.**

General:

- Depending on the final design, the below listed permits or approvals may be needed.

Please submit digital copies of permits of permits to City for filing. **All necessary permits and approvals will be applied for.**

- City of Waukesha Storm Water Erosion Control Permit if disturbance is over 3,000 sf.
- Wisconsin DNR, NOI
- DNR Sanitary sewer extension
- State of Wisconsin Private sanitary sewer approval – Private streets.
- City of Waukesha – Engineering Division Construction Permit if working in right of way.
- Wetland disturbance permit for backslopes of Tenny Avenue extension.
- DNR water main extension.
- Additional required submittals, fees, financial guarantees needed prior to issuance of building permit include: **Maintenance agreement will be prepared and submitted.**
- Easement: prepare storm water maintenance agreement; label existing storm sewer easement across from Garfield Ave.; obtain title report for property to show all existing easements on property.
- A Developer's Agreement of PUD Agreement will need to be prepared by the City, and approved prior to start of construction.
- List impact fees
- List letter of credits
- Applicable sewer connections charges per Chapter 29.11(c) will be owed to the City for this project.
- Sewer assessments
- Deferred pump station assessment of \$100 per developed acre. Engineering Dept. staff to verify final amount.
- Deferred sanitary sewer interceptor assessment of \$500 per developed acre. Engineering staff to verify final amount.
- The storm water management plan, construction drawings, storm water facility maintenance agreement, easements, Developer's Agreement, and financial guarantees should be reviewed and approved prior to the construction being started and building permit issued. If the location of any units need to be changed as a result of the approved construction drawings, the Plat should be updated to reflect the needed changes. **All listed items will be submitted for review an approval.**
- Provide pdf copy of Conominium Plat for City filing prior to issuance of building permits. **Plat to be submitted.**

Site Plan:

- 1) Add sidewalk along Big Bend Road. Include detailed grading plan for sidewalk, grading, sport grades, and storm sewer, inlet, and addressing drainage sizing.
 - **Sidewalk has been added and detailed.**
- 2) Runoff from lands being developed drains toward a field inlet located east of the intersection of Big Bend Road and Garfield. Verify if grading and improved storm inlet collection is needed depending on analysis. Include basin mapping to check proper storm pipe and inlet sizing.
 - **Runoff from the site will be captured by the proposed ditch line and directed to the proposed wet pond and infiltration basing.**
- 3) Units within this development which are deemed eligible for City solid waste and recycle service may pursue such service. Units not eligible for City solid waste and recycle service must procure services at their own expense. Confirm garbage pickup type with Dustin Nolan of Engineering.
 - **Noted.**

- 4) Add remnant parcel to development site plan along Big Bend Road across from Garfield Ave.
 - **Parcel added.**
- 5) Label all existing easements.
 - **Easements have been labelled.**
- 6) Individual condo association will be separate.
 - **Noted.**
- 7) Snow plowing areas; also must clear sidewalk along Big Bend Road; Note in PUD.
 - **Snow storage areas labelled. Will be noted in PUD.**
- 8) Verify overland flow path ok, and pipes sized ok at south; Confirm if tailwater elevation exists in 2-year, 10-year, and 100-year storm event for storm pipe discharge.
 - **Overland flow path drawn and labelled. Calculations will be provided in storm water management plan.**
- 9) Dustin (Engineering staff) to verify garbage pick up requirement; large overall site vs. 1 lot.
 - **Noted.**
- 10) Label date and firm who performed wetland delineation on site plan.
 - **Delineator and delineation date called out on plans.**
- 11) Confirm lowest elevation of infiltration ponds versus lowest basement floor elevation of condos to the south for review. Will any measures be need to minimize or eliminate basements receiving drainage from ponds.
 - **Proposed buildings to the south with take necessary measures to minimize that risk.**
- 12) Previous plan for Glen at Standing Stone showed existing retaining walls along Tenny Ave. in vicinity of wetlands. Have these retaining walls been removed? Proposed grading of roadway should be shown without retaining walls.
 - **Grading details along Tenny Ave. will be shown on plans for development to the south. Currently no retaining walls shown along Tenny.**
- 13) Include drawing showing and labelling path for overland drainage emergency path will safely make turn around condos to south.
 - **Overland flow path has been added and labelled.**
- 14) Show dumpster pads.
 - **No dumpster pads associated with this project.**
- 15) Confirm if storm sewer easement needed on property to south.
 - **Proposed easements for detention and storm sewer have been added and labelled.**

CSM/Plat Review & Closure

Notes:

Boundary of plat must note create gaps, overlaps, and remnant parcel pieces without being specifically notes.

-Check property line near the intersection of Garfield and Big Bend – CSM 11932 shows this lot extending to the East line of Big Bend Road

- **Property line has been updated near intersection.**

CSM/Plat Review & Closure

1. All checklists should be included with the application.
2. Site plan should include entire property out on Big Bend Road
 - **Property line updated.**

3. Architecture should include a variety of materials and textures.
 - **Done by others**
4. Landscape plan needs to be in color, plantings along the Tenny Ave.. sidewalk shall be setback at least 5 feet. Plantings north of the middle driveway shall be adjusted westerly to allow clear views of vehicles along sidewalk.
 - **Done by others.**
5. Pedestrian paved access through site, including access to dog area, should be indicated.
 - **Pathways have been labelled on plans.**
6. Exterior lighting details, including cut sheets and photometrics should be provided.
 - **Will be provided as part of the landscaping plans.**
7. Explore reorienting the buildings to minimize facing of garage doors onto Tenny Ave.
 - **Reorientation of the buildings was looked in to, but it was decided to leave them as is.**
8. Is the dog area fenced in? Perimeter landscaping needed.
 - **Fence only proved along the west edge. Landscaping will be provided.**
9. Management plan for the prairie planted areas is needed.
 - **Will be provided by others.**
10. Are garage doors glass, rendering unclear.
 - **Will be shown on architect plans.**
11. Provide walkway from the entry doors to the Tenny Ave. sidewalk for buildings 1, 8, and 9.
 - **Walkways shown and labelled.**

Please feel free to contact me with any questions, comments or to further discuss the construction plans.

Sincerely,



Matthew Bailey, P.E.

Trio Engineering