

# Memorandum

**TO:** Nick Johnson

City of Bloomington Planner 1800 West Old Shakopee Road

Bloomington, MN 55431

FROM: Ben Jore

Civil Site Group

**DATE:** 08/26/2020

RE: Furlong at 8525 and 8545 Penn Avenue South, Bloomington, MN 55431

Nick,

Below are your written comments regarding the Furlong at 8525 and 8545 Penn Avenue South project, in Bloomington, dated 08/21/2020. I have included my response below each guestion in red.

Ben Jore Civil Site Group Bjore@civilsitegroup.com 763-370-0003

#### **CSG RESPONSES SHOWN IN BOLD RED BELOW**

Planning Review: Nick Johnson at nmjohnson@BloomingtonMN.gov, (952) 563-8925

- 1) A detailed construction phasing plan must be provided. Contractor staging, parking and deliveries must be considered. Access must be maintained throughout all phases of construction. Plan will be put together by contractor.
- 2) A Comprehensive Plan Amendment also requires the approval of the Metropolitan Council following City Council action. The Metropolitan Council is allowed a minimum of 60 days upon receipt to process such an application. Noted.
- 3) Three guest parking spaces is not adequate. Please work with Planning staff to discuss methods to increase guest parking. Additional parking has been added.
- 4) Proposed access must be reviewed and approved by Hennepin County. Necessary County access and right-of-way permits must be obtained prior to construction activity. Noted.
- 5) The maximum residential density in the R-3 zoning district is 8 units/acre. The proposed residential density is 7.98 units/acre, thus complying with the maximum density of the R-3 zoning district. Noted.

- 6) City Code requires sidewalk connections from the public sidewalk network to the primary entrance of all buildings (Sec. 21.301.04(b)(2)(A)). Please confirm you are seeking a deviation for the eastern townhome building, we are requesting a deviation for the eastern townhomes
- 7) Provide confirmation that the site complies with the minimum 20 percent accessible and landscaped open space requirement for townhome sites (Sec. 21.302.08(c)(13)(A)). Areas have been updated on the site plan. We are in compliance with a minimum of 20 percent greenspace.
- 8) Areas for snow storage should be identified on future plans. Areas have been identified on the site plan.

## Building Department Review: Duke Johnson at djohnson@BloomingtonMN.gov, (952) 563-8959

- 1) SAC review by MET council will be required. Noted.
- 2) Must meet 2020 MN State Building Code. Noted.
- 3) Provide a code analysis with the plans. Plans will be provided at time of permit.

### Environmental Health Review Contact: Erik Solie at esolie@BloomingtonMN.gov, (952) 563-8978

Two (2) known wells on the property. One (1) by house has approved sealing record. Second well located on the property must be abandoned PRIOR to demo of any property or construction. See attached well location maps located in Documents and images tab or contact this office for clarification

#### Fire Department Review: Laura McCarthy at Imccarthy@BloomingtonMN.gov, (952) 563-8965

- 1) Provide adequate turning radius to accommodate BFD Ladder 1
- 2) All units required to be sprinklered. Noted.
- 3) Additional review of hydrant coverage is needed. 1 hydrant provided in the complex with the next closest hydrant at the corner of 86th and Penn. One additional hydrant has been added to the project for coverage.
- 4) Minimum 20' access road width if no parking allowed. Recommend parking spaces be provided to reduce the risk of illegal parking on the access road. Noted.

#### Construction/Infrastructure: Brian Hansen at bhansen@BloomingtonMN.gov, (952) 563-4543

- 1) Sawcut limits must be out of vehicle wheel paths on all streets. Noted.
- 2) This is an odd configuration for the sidewalk near the intersection and will be hard to maintain. Use radiuses similar to the existing condition. Sidewalk configuration has been updated.
- 3) Include spot elevations and percent grades near the pedestrian ramp location to show that it is ADA compliant. Added to plans.
- 4) Install a non-residential driveway entrance, per City of Bloomington detail. Also include the detail with the plan set. City detail has been added to plans.
- 5) Use the City's Non-Residential Driveway Approach and Include Detail. City detail has been added to plans.
- 6) Provide change of direction ADA landings for sidewalk connections. Plans have been updated.

### Water Resources Review: Brian Hansen at jblumers@BloomingtonMN.gov, (952) 563-4543

- 1) City requires 1.1" for volume reduction
  The project provides 10,881 cubic feet of storage which is greater than the required 4,216 cubic feet.
- 2) City requires 90% TSS

  Per sheet 8 pf the stormwater report the project is treating 97% TSS.

- 3) Review City Surface Water Plan for recurrence interval rainfall depths. 2-yr = 2.83, 10-yr = 4.24, 100-yr = 7.5
  - The model has been updated per the City of Bloomington requirements.
- 4) HDPE pipe connections into all concrete structures must be made with water tight materials utilizing an A-Lok or WaterStop gasket or boot, cast-in-place rubber boot, or approved equal. Where the alignment precludes the use of the above approved watertight methods, Conseal 231 WaterStop sealant, or approved equal will only be allowed as approved by the Engineer.

  See note 1 under City of Bloomington utility notes on sheet C4.0.
- 5) An erosion control bond is required.
  - Noted. Once a contractor is selected the contractor will be responsible to submit an erosion control bond.
- 6) Utility permits are required for connections to the public storm, sanitary, and water system. Contact Utilities (952-563-8777) for permit information. Noted. The City of Bloomington will be contacted for additional information on permits.
- 7) Show erosion control BMP locations on the plan
  Erosion control is shown on SW1.1 and has been updated per the construction limits adjustment.
  Additionally inlet protection has been shown at all inlet locations.
- 8) Storm discharge rate to Penn Avenue significantly increasing. Evaluate proposed discharge for impacts on allowable roadway spread as well as inlet capacity and flood potential at low point at Penn Circle. Discharge rates to Penn Avenue are increased by less than 0.5cfs for all rainfall events. 0.5cfs is within the tolerances of the HydroCAD model. Note that in the existing conditions model EX2 and EX4 drain directly to Penn Avenue and in the proposed conditions model PR2 and 5R drain to Penn Avenue. If more information is required, please contact Ben Jore at bjore@civilsitegroup.com
- 9) Utility as-builts must be provided prior to issuance of Certificate of Occupancy. Noted. As-builts will be provided by the contractor once the project is completed.
- 10) Provide a turf establishment plan

  See landscape plan on sheet L1.0 for turf establishment plan. Landscape plan includes sod which will be used for turf establishment.
- 11) Submit a copy of Nine Mile Creek Watershed District permit and comments prior to issuance of City of Bloomington permits (<a href="www.ninemilecreek.org">www.ninemilecreek.org</a>)
  Noted. Once received the watershed permit will be forwarded to the City of Bloomington.
- 12) List erosion control maintenance notes on the plan.

  See erosion control notes on sheets SW1.3 SW1.4 for erosion control schedule and maintenance.
- Provide stormwater management plan meeting the requirements of Bloomington Comprehensive Surface Water Management Plan.
  See stormwater management plan on sheets SW1.1 – SW1.5.
- 14) A maintenance agreement must be signed by the property owner and recorded at Hennepin County. Noted. A maintenance plan will be submitted when completed.
- 15) A National Pollutant Discharge Elimination System (NPDES) construction site permit and Storm Water Pollution Prevention Plan (SWPPP) must be provided.

  Noted. A NPDES permit will be provided once completed.
- 16) Protect all cbs
  - All catch basins are protected with inlet protection as shown on sheet SW1.1.
- 17) Show protection for infiltration basins during construction activity Erosion control has been added surrounding all surface BMPs see sheet SW1.1.

#### Traffic Review: Brian Hansen at bhansen@BloomingtonMN.gov, (952) 563-4543

- 1) Add non-residential driveway detail. City detail has been added to plans.
- 2) Replace curb cut from existing driveway using City detail. Plans have been updated.

3) Contractor shall obtain a Public Works permit for obstructions and concrete work within the right-ofway. Permit is required prior to removals or installation. Contact Paul Jarvis (952-563-4548, pjarvis@BloomingtonMN.gov) for permit information. Noted. Note added to sheet C1.0 & C3.0

### PW Admin Review: Brian Hansen at bhansen@BloomingtonMN.gov, (952) 563-4543

- 1) The sidewalk connections are steep at grades near 15%. Plans have been updated.
- 2) Public drainage/utility and easements must be provided on the plat. Easement in progress.
- 3) Private common utility easement/agreement must be provided. This needs to be in the form of a Common Interest Community declaration and plat. Noted.
- 4) Right-of-way dedication to 40' from center-line of Penn Ave and 86th St is required on the final plat. Noted.
- 5) A title opinion or title commitment that accurately reflects the state of the title of the property being platted, dated within 6 months of requesting City signatures, must be provided. Owner will provide.
- 6) See checklist of items that must be included on the preliminary plat per the Bloomington City Code, Chapter 22. Noted.
- 7) \$15 fee for certified copy of plat. Engineering staff will obtain a certified copy of the plat from Hennepin County. Noted.
- 8) Property must be platted per Chapter 22 of the City Code and the approved plat recorded at Hennepin County prior to the issuance of a foundation or building permit. Noted.
- 9) Private common driveway/access easement/agreement must be provided. This needs to be in the form of a Common Interest Community declaration and plat. Noted.
- 10) Consent to plat form is needed from any mortgage companies with property interest. Noted.
- 11) A 10-foot sidewalk/bikeway easement shall be provided along all street frontages. Developer/owner shall provide legal description and Engineering staff will prepare easement document. Noted.

#### Utility Review: Brian Hansen at bhansen@BloomingtonMN.gov, (952) 563-4543

- 1) All unused water services must be properly abandoned at the main. All unused sanitary sewer services must be properly abandoned at the property line.

  Noted. The project limits have been updated to include the removal of the existing watermain.
- 2) Install interior chimney seals on all sanitary sewer manholes.

  Note 8 has been added to the City of Bloomington notes on plan sheet C4.0.
- 3) Install hydrants to provide fire protection for entire building. Each hydrant covers 150-foot radius. A hydrant has been added between lots 2 and 3 which provides coverage for the norther portion of lot 1.
- 4) Loop water system (supply from two points) to provide increased reliability of service and reduction of head loss.
  - The current design shows two connection points into the existing watermain (West 86<sup>th</sup> Street and Penn Avenue South) thus a loop water system has been provided.
- 5) A Minnesota licensed civil engineer must design and sign all civil plans.
  Civil plans are signed by Matthew R. Pavek, a licensed Civil Engineer. Architecture plans are signed by Patrick Sarver, a licensed Architect.
- 6) Minnesota Pollution Control Agency (MPCA) sanitary sewer permit/review may be required. Provide a copy of MPCA approval letter or written confirmation from MPCA that no permit/approval is required.
  - Noted. The MPCA will be contacted and once a response is received it will be forwarded onto the City.
- 7) An inspection manhole is required on all commercial sewer services, install at main. Manholes will be added once connection points to the building have been finalized.

- 8) Utility and mechanical contractors must coordinate the installation of all water and sewer service pipes into the building to accommodate city inspection and testing.
  Noted. The city will be contacted by the corresponding contractor during the construction of the project.
- 9) Provide a minimum of 8-feet and a maximum of 10-feet of cover over all water lines, valves, services, etc. See general utility note 14 and City of Bloomington utility note 6 on sheet C4.0.
- 10) All components of the water system, up to the water meter or fire service equipment must utilize protective internal coatings meeting current ANSI/AWWA standards for cement mortar lining or special coatings. The use of unlined or uncoated pipe is not allowed. See City of Bloomington utility note 4 on sheet C4.0.
- 11) Minnesota Department of Health (MDH) water permit/review may be required. Provide a copy of MDH approval letter or written confirmation from MDH that no permit/approval is required. Noted. Will provide once received.
- 12) Contractor shall obtain a Public Works permit for underground work within the right-of-way. Permit is required prior to removals or installation. Contact Utilities (952-563-4568) for permit information. Noted. Will provide once received.
- Combination fire and domestic services must terminate with a thread on flange or an MJ to flange adapter. See City of Bloomington utility note 7 on sheet C4.0.
- 14) Utility as-builts must be provided prior to issuance of Certificate of Occupancy.

  Noted. As-builts will be provided by the contractor once the project is completed.
- 15) A minimum 10-foot horizontal separation and 18-inch vertical separation is required between watermain and sewers.
  - A minimum of 10ft horizontal separation has been provided between watermain and sanitary sewer lines. The south crossing provides a minimum of 18" of separation between the watermain and sanitary sewer. The north crossing results in a conflict and the watermain must be looped under the sanitary sewer.
- Taps of live water mains are done by City forces and paid for and coordinated with the Contractor. The tap into the 30" PCCP requires a specialized contractor, 2-3 days and permit cost ~ \$13,000. Noted.
- 17) Contact Met Council (651-602-1378) for Sewer Availability Charge (SAC) determination. Noted. Will provide once received.
- 18) Private common utility easement/agreement must be provided. Noted. Utility easement will be provided once completed.
- 19) Use Class 52 DIP water main for pipe 12-inches in diameter and smaller. A minimum 8 mil polywrap is required on all DIP.
  - See note 6 of the general utility notes and note 5 of the City of Bloomington utility notes.
- 20) Sanitary sewer mainline, clean-outs, manholes, and services must be designed with adequate depth of cover or install high-density polystyrene insulation to prevent freezing.

  Noted.
- 21) Use standard short cone manholes without steps.

  Sanitary manhole has been updated per the City of Bloomington standard detail 400 on sheet C5.1.
- 22) Use schedule 40, SDR 26, or better for PVC sewer services. See note 7 of the general utility notes.
- Utility permits are required for connections to the public storm, sanitary, and water system. Contact Utilities (952-563-8777) for permit information.

  Noted. The City of Bloomington will be contacted regarding utility connections.

- Use updated city standard details for driveways, utilities, erosion control, etc. found on the website at www.bloomingtonmn.gov/information-sheets-and-handouts-engineering-division. Remove duplicate detail(s).
  - Details have been updated per the City of Bloomington.
- 25) Abandon Unused Water Services
  - The construction limits have been updated per comment 26. The existing water main will be removed per the comment on sheet C1.0.
- 25) Homeowners association agreement should include maintenance of sewer and water utilities\. Noted.
- 26) Expand construction limits to include water abandons
  - Construction limits have been updated to include the work required to abandon the exiting watermain.
- 27) Add inspection MH over existing main
  - Manholes will be added once connection points to the building have been finalized.
- Verify 18" Min. separation at sewer and water crossing(s)

  Separation of the south crossing is over 18" the north crossing watermain will be required to be looped
- under the sanitary line per the detail 316 on C5.1.

  Show proposed building sewer and domestic/fire water services and FFEs Noted. Will show services once received from the Architect.
- 30) See notes on C1.0 for water service abandons and comment on PCCP watermain tap.

  A note has been added for water service removals to meet city requirements. If there is a more specific note we need to add, please let us know what it should be.
- 31) Add MH at sewer dead end
  - Stub and end cap removed and replaced with manhole 2B at the west side of sanitary dead head.
- 32) Check sewer flow direction, looks like it is reversed South sanitary line has been revised to show correct orientation. All other piping orientation has been verified.
- Add hydrant at dead end watermain to aid maintenance and allow flushing. Hydrant has been added to end of watermain.

Water Resources Review: Jennifer Blumers at jblumers@BloomingtonMN.gov, (952) 563-8706

1) Assessing has calculated a park dedication fee for this plat at a total of \$79,800, which includes a credit for the existing house. Noted.

## Memorandum

TO: Brian Hansen

FROM: Patrick Sarver

Ben Jore

Civil Site Group

DATE: September 23, 2020

RE: Penn Lake City Homes - Additional Info Requested -19239

Dear Brian Hansen,

Below are the written comments regarding the Penn Lake City Homes project dated 09/16/2020. We have included our response below each question in bold red. Please feel free to contact me if you have any questions.

#### Stormwater

- 1. Proposed rates for 100-yr event do not appear to be accurately reflected in stormwater report, please review; see mark ups in portal for additional info.

  Civil Site Group does not have access to portal to view the additional info however the proposed model and plans have been updated. See the rate control sheet (page 6) of the stormwater report or the HydroCAD report for additional information.
- 2. Provide existing and proposed discharge rates to both Penn Avenue and 86th Street for all events.
  - Drainage rates have been reduced in all storm events for Penn Ave and 86<sup>th</sup> St. See the rate control sheet (page 6) of the stormwater report or the HydroCAD report for additional information.
- 3. Response to plan review comments states drainage area EX4 drains directly to Penn Avenue. Based on existing contour data this does not appear correct.

  Drainage area has been updated to drain to the north. See drainage maps on sheets 10 and 11 of the stormwater report or the HydroCAD report for additional information.
- 4. Address hints/warnings in model for summary reach 2R: Total Noted. The reach is simply to summarize the flow to a specific point and view the peak rates based off of each subcatchment/ponding node peak runoff. No change to the model.
- 5. Address hints/warnings in model for summary reach 1R:PR1
  Noted. The reach is simply to summarize the flow to a specific point and view the peak rates based off of each subcatchment/ponding node peak runoff. No change to the model.

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- 6. Address hints/warnings in model for summary reach 5R: PR3
  Noted. The reach is simply to summarize the flow to a specific point and view the peak rates based off of each subcatchment/ponding node peak runoff. No change to the model.
- 7. Address hints/warnings in model for summary reach 6R: Total Noted. The reach is simply to summarize the flow to a specific point and view the peak rates based off of each subcatchment/ponding node peak runoff. No change to the model.
- 8. Address hints/warnings in model for Summary for Pond 2P: OUTLET POND The outlet pond bounces and as a result has a higher water elevation than the upstream underground infiltration. As a result the HydroCAD displays a warning however this is in fact correct. The oscillations are a result of the pond bounce and are not expected to affect the model accuracy.
- 9. Address hints/warnings in model for Summary for Pond 3P: INF BASIN 2 + 3 The hints/warnings have been addressed.
- 10. Use correct zip code in MIDS calculator. The correct zip code is now in the MIDS calculator. As a result additional TSS removal was required and additional impervious was routed to the proposed BMPs. See drainage maps on sheets 10 and 11 of the stormwater report or the HydroCAD report for additional information.

## **Traffic**

1. Because of the significant elevation difference on the site we would request a vertical profile for the Penn Avenue and the 86th Street driveways, as they have been proposed in advance of the City Council meeting. The vertical profile for the driveways needs to be able to accommodate a fire apparatus without exceeding the allowable crossover angle (between the normal crown of the road and the grade of the driveway) for such a vehicle. Please be sure the proposed profile works for, and has considered the site grading and building elevations. Also, please prepare a plan view exhibit showing the sight triangles from the driveways using AASHTO standards (Greenbook). Include relevant structures including retaining walls and buildings that could impinge or fall close to or within sight distance triangles. For questions or details on these exhibits, please contact the Traffic & Transportation Engineer at 952-563-4915.

The existing grades of both Penn Ave and 86<sup>th</sup> St along with the entrance grades to the site have been added to the grading sheet C3.0. The steepest grade change results in a negative 5% grade meeting a positive 5% grade.

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