

To: Michael McKinney
Administrator/Clerk
Village of Yorkville
925 15th Avenue
Union Grove, WI 53182

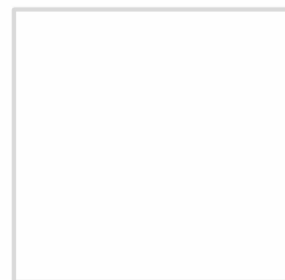
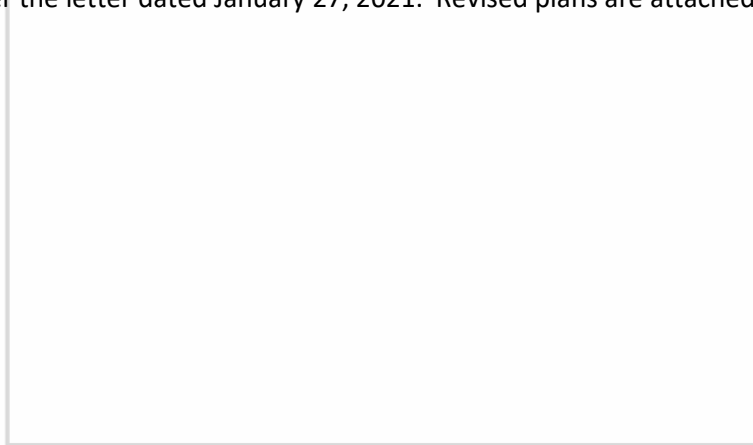
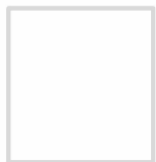
From: Aaron Koch, P.E.
Pinnacle Engineering Group
20725 Watertown Road | Suite 100
Brookfield, WI 53186

Date: 3-02-2021

Subject: Yorkshire Highlands (50th Road) Comment Response

Dear Mr. McKinney,

Please see the attached responses for the Yorkshire Highlands (50th Road) development. We have made the necessary edits per the letter dated January 27, 2021. Revised plans are attached for your review, thank you.



PRELIMINARY PLAT REVIEW COMMENTS

- We were provided “Checklist #2: Application for review and Approval of Preliminary Plat”. My comments on the checklist are noted on the copy provided and is attached for reference. No comment
- No Subdivision name or Road name is indicated. Not Addressed
Subdivision name is Yorkshire Highlands and road name is Highland Way, this has been added to the plans.
- The proposed lots are over one acre with a minimum of 150 feet of frontage. I can find no reference, in the Ordinance, that the lot frontage can be reduced to 150 feet. C-2 zoning requires 300 feet of frontage. Previous “Conservation” subdivisions - Stonecrest Shores and Woodland Waters – were approved with 150 foot minimum frontage. For Board consideration as a Modification.
Per County comments this does not apply.
- Setbacks are indicated as 50 feet for street and rear yard and 15 feet for side yards. C-2 setbacks are 100 feet for street and rear yard with 25 foot side yards. Stonecrest Shores was approved with 75 foot street, 25 foot rear and 25 foot side yards. For Board consideration as a Modification.
Per County comments this does not apply.
- Outlot use is not identified. To be determined as part of the conservation plan.
Not Addressed
The outlot will be managed by the HOA (managing on a daily basis and collecting dues), a land trust will be involved for oversight and inspection.
- 12 foot easements on each lot, for utilities, not shown. Utility easement location is typically dictated by We-Energies. Needs to be indicated on final plat.
Not Addressed
There has been a 12’ utility easement added along the front of the lots.
- Suggest 25’ “no mow” zones be incorporated for wetlands.
Not Addressed
There has been a 25’ “no mow” zone suggested for the wetland areas.
- Stonecrest Shores had a 75 foot wide public access easement along the East Branch Root River Canal. Should the same be incorporated here?
Not Addressed
If necessary this easement will be shown on the final plat.

- Existing drain tiles are not indicated.

Not Addressed on Preliminary plat, shown on preliminary design plans.

The existing through draintiles are shown on the preliminary plat. The draintile that dead ends on the proposed lots will be modified with no disturbance to the offsite water passing through the site.

- Provide WDNR concurrence on “Artificial” wetlands.

Not Addressed

Please see the attached letter designating the artificial wetlands on-site.

GENERAL PLAN REVIEW COMMENTS

- Provide additional drawings to the final plan set for overall site existing conditions, overall site plan with drainage easements, demolition plan, erosion control plans and road cross sections and drainage swale cross sections.

Partially Addressed

- All property lines to be shown with the appropriate bearing and distances calls. **Plans have been updated.**
- Show the owners and addresses of the adjacent properties. **Plans have been updated.**
- Label the East Branch Root River Canal on all necessary sheets **Plans have been updated.**
- Add line/hatch legends to each sheet. **Plans have been updated.**
- Drain Tiles are shown on the plans. Some are addressed with notes, but an overall plan to address tile drainage is not provided. **An overall drain tile intent plan has been provided.**

PLAN AND PROFILE SHEETS (C-2 & C-3)

- Add left and right proposed road ditch profiles to the plan sheets Not Addressed

East and west ditch profiles have been added.

- Update the Road “A” intersection with 50th road to include typical WisDOT Type “C” intersection.

The intersection has been updated to include a typical type ‘C’ intersection.

Not Addressed

- Update the proposed roadway vertical curves K values so that they are closer to a 30 m.p.h. design factor.

Crest curves, especially, are currently too “flat”. Addressed

- All road culverts are to be reinforced concrete pipe with endwalls Not Addressed

Note has been added.

- The road culvert at station 10+36 to be aligned with the existing 50th road ditch Partially Addressed

The road culvert has been aligned with the existing 50th road ditch.

- All proposed road culverts to be designed perpendicular to the centerline of road. Addressed
- Provide plan and profile sheets for all drainage swales within drainage easements. Not Addressed

Plan and profiles for swales within drainage easements have been added to the plan set.

- Explain the reasoning for the two road culverts at stations 19+80 and 21+81. It seems that one crossing would be required at the low point in the road at 20+00.

One crossing is for water coming from offsite to bypass our pond as to not adversely impact our stormwater goals.

INTERIM GRADING PLAN SHEETS (C-4 THRU C-6)

- All drainage swales to be labeled with length and slope. Minimum centerline slope to be 0.80%.

There have been labels added to the swales, the minimum centerline slope are all above 0.80%.

- The retention basin discharge pipes are to be reinforced concrete pipe and the last three pipe lengths to be tie bolted. Rip rap is to be added to all retention basin discharge points.

Riprap has been added to all retention basin discharge points.

There is a note in our standard specifications calling for the last 3 pipe sections to have joint restraints and detail has been added.

- Add grading plan explanation note from master grading plan sheets to all sheets

The note was on some sheets; it has been added to all grading sheets.

MASTER GRADING PLAN SHEETS (C-7 THRU C-9)

- Tie in all proposed contours to the shared property lines.

Contours have been updated to tie into the shared property lines.

- Will need to retest the soils for a new mound location on Lot 4 due to building pad conflict. Addressed

- Recommend modifying the Lot 15 grading plan to eliminate the proposed 12" CMP. Addressed
- Provide chart of proposed driveway culvert sizes for each lot. Not Addressed

A chart for proposed driveway culvert sizes has been provided.

- Lots 2-8 have proposed finish yard grades below the centerline of road elevation. General practice is to have these grades a minimum of 1 foot above the road centerline.

Lots have been raised to be 1' above the centerline.

CONSTRUCTION DETAIL SHEET (C-10)

- Provide typical sections or details for the following:

Cul-de-sac details

There has been a cul-de-sac detail provided for Highland Way.

All retention basins and outlet structures Road entrance detail

Details have been provided for retention basins and outlet structures, and the road entrance.

Storm sewer tie bolt detail Typical swale detail

Storm sewer tie bolt detail has been provided and along with swale cross sections and profiles.

STORM WATER MANAGEMENT PLAN POND 1P (SOUTH POND)

- The regulatory floodplain elevation associated with East Branch Root River Canal varies along the site. At the location of the proposed Pond 1P outlet, the 100-year floodplain elevation is approximately 715.5 feet NAVD88, which is above the currently proposed NWL of 713.0. Either the pond outlet and design NWL should be raised above the 100-year floodplain elevation or the pond routing should assume a tailwater elevation of 715.5 feet NAVD88 and that no pond storage would be available below the tailwater elevation.

NWL Addressed

- Water surface ponding elevations would encroach on Lots 4 and 5 during rainfall events of one-year and greater. It is recommended that the 100-year water surface ponding area be restricted to an Outlot.

Partially Addressed

Grading has been updated so that 100-yr ponding is contained within the outlot.

POND 2P (NORTH POND)

- The surface area of Pond 2P at elevation 719.0 feet is listed as 53,698 sq. ft. in the HydroCAD output and as 1.051 ac. (45,780 sq. ft.) in the WinSLAMM output. Revise as necessary.

See New SWMP Comments

- Some of the Pond 2P outlet details as shown on the plans and in the HydroCAD output are not reflected in the WinSLAMM output details. The weir crest length should be revised and the two 15" culverts should be added to the WinSLAMM modeling.

See New SWMP Comments

STORMWATER CONVEYANCE MODELING

- If the 12" CMP (Culvert 6C) in Lot 15 remains as currently proposed, Culverts 5C and 6C should be modeled based on the master grading plan instead of the interim grading plan. The subbasin delineations would be revised and the Pond 6C storage would be reduced as compared to the interim grading.

No Longer Applies

- The Tc for Subbasin PR-2A is listed as direct entry. If the Tc is not explicitly modeled for this subbasin, a direct entry value less than the Tc modeled for Subbasin OFF-2A should be selected.

See New SWMP Comments

GENERAL STORM WATER MANAGEMENT PLAN COMMENTS (NEW)

- Provide time of concentration flow paths and explicit calculations for both existing and proposed conditions. **Time of concentration flow paths and calculations have been provided for existing and proposed conditions.**
- Some of the ponds' outlet details and surface areas are not consistent between the HydroCAD and WinSLAMM models. **The middle pond 719.0 surface area was updated in the WinSLAMM model to match HydroCAD modeling. The north pond outlet data was updated for Orifice Set 1.**
- For the WinSLAMM analysis, control of TSS from tributary offsite area generally does not count toward meeting the standard. Tributary offsite runoff can be accounted for by using the "Other Control Device" option in WinSLAMM.

We are not using the offsite to achieve our goals, with this area included we are getting 80% in addition to our site removal.