220 E. Buffalo Street Milwaukee, WI 53202





February 6, 2025

Ben Lang Veridian Acquisition, LLC 6801 S. Towne Rd Madison, WI 53713

Re: Winterberry Reserve

Dear Mr. Lang,

On behalf of the City of Waukesha, we have reviewed the application documents dated 01/27/2025 submitted by Excel Engineering for Winterberry Reserve.

#### **Project Description**

Veridian Homes is proposing a residential PUD and preliminary plat for the development of 79 homes. The intent of the PUD overlay would be to establish certain standards to allow more diverse and cost efficient owner-occupied housing types in accordance with the goals set forth in the City of Waukesha's Comprehensive plan and housing study.

The Following review comments shall be addressed prior to approval of construction documents.

#### General

- 1. Depending on the final design, the below listed permits or approvals may be needed. Please submit digital copies of permits to City for filing prior to starting construction.
  - a. City of Waukesha Storm Water Erosion Control Permit if disturbance over 3,000 sf
  - b. Wisconsin DNR NOI, and NOI for fill site, if disturbance over 1 acre
  - c. City of Waukesha Engineering Division Construction Permit for all RW work.
- 2. Additional required submittals, fees, financial guaranties needed prior to issuance of building permit include:
  - a. Financial guaranties
  - b. Impact Fees
  - c. Applicable sewer connection charges per Chapter 29.11(c) will be owed to the City for this project.
  - d. City Storm Water Permit. This permit will need to be obtained prior to starting work, and obtaining a building permit.
- 3. The construction drawings, and financial guarantees should be reviewed and approved prior to the construction being started and building permit issued. If the location of any work needs to be changed as a result of the approved construction drawings, the drawings should be updated to reflect the needed changes.
- 4. In accordance with Wisconsin Administrative Code A-E 2.02(4): Each sheet of plans, drawings, documents, specifications and reports for architectural, landscape architectural, professional engineering, design or land surveying practice should be signed, sealed, and dated by the registrant or permit holder who prepared, or directed and controlled preparation of, the written material.
- 5. Add note that all work within City right of way and City easements to be in accordance with current City Standard Specifications and details.
- 6. Review all City sidewalk adjoining the property limits with a City Engineering representative. If the sidewalk meets replacement criteria due to cracking, missing pieces, or displacement, then the sidewalk will need to be removed and replaced.
- 7. Add note: Notify City Engineering Dept. 5 days prior to work in City right of way.

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- 8. Add note to drawings: Limits of final City Street pavement and curb and gutter removal and replacements to be marked by City Engineering staff in field.
- 9. Horizontal datum should be updated to NAD 1983/2011. See Existing Condition Survey, and City design guidelines.
- 10. Submit all required checklists for Development Submittals. See City's Development Handbook.
- 11. Developers Agreement will need to be prepared by the City and approved prior to the start of construction.
- 12. In subdivision, provide location for CBU mailbox structure on private outlot owned and maintained by the HOA.
- 13. See all other comments included below & in TRAKiT software response.
- Provide plan and profile sheet for existing sanitary main & structures along the east property line, Lots 43-45 & OL 1, to confirm modification do not affect bury depth (Within sanitary sewer easement per Doc No 2576442)
- 15. Summit Ave is a Medium Priority location for Sidewalk within the City's Sidewalk Plan. Sidewalk was proposed during Springs at Meadowbrook development. Identify existing sidewalk & include proposed sidewalk along Summit Ave.
- 16. All sanitary inverts greater than 0.25' difference across the sanitary manhole shall incorporate outside drop.
- 17. Provide storm system design and labels on plans: sizing, rim elevation, invert elevations, slope, etc.
- 18. Provide storm hydraulic capacity calculations.
- 19. City of Waukesha Developers Handbook 3.1.1 Storm Sewer Provide 3' minimum cover over storm pipe.
- 20. It appears the intent is to eliminate existing lift station & force main to the north of the site on Winterberry Drive. Plans shall provide details for abandonment & capping of existing pipes.
- 21. Plans indicate Storm Bypass infrastructure by CPCI at the intersection of Winterberry & Summit. Provide approved plans and as-built data for this work to confirm location & status.
- 22. Provide intersection detail at Madison St. and Overton Ave. I.e. pavement match points and etc.
- 23. Add Seasonal High Ground Water Table Elevation Summary including Lot #, Proposed basement floor elevation, seasonal high water table elevation, source of water table information, soil pit/boring log reference #. Submit source information for filing.
- 24. 23.06 (1)(a)4. No land shall be subdivided for residential use which is determined by the Plan Commission to be unsuitable for such use by reason of flooding or bad drainage, adverse earth or rock formation, topography, or any other feature likely to be harmful to the health, safety or welfare of the future residents in the proposed subdivision of the City.
- 25. Reference City of Waukesha Developer Handbook for current subdivision design requirements.
- 26. Street grades and radii should follow Subdivision and Platting Ordinance Chapter 23.06 (5).
- 27. Sanitary sewer connection in Winterberry Drive shall require proper pavement replacement per the City of Waukesha Standard Construction Specifications.
- 28. A clean edge shall be sawcut in the existing pavement at all street connection points to match new HMA pavement.

# C4.0

29. There appears to be (2) existing surfaces shown near the intersection of Summit Ave. Update to show accurate existing conditions.

# C4.2

- 30. Crosswalks & ramps required at intersections.
- 31. Provide inlets at sag points.

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## C4.3

- 32. Unable to review grading & storm pipe crossing Winterberry Drive at Summit Ave intersection
  - a. Multiple surfaces
  - b. Proposed surface on south side Lot 1 does not appear to tie into existing surface
  - c. Grading does not connect E/W pipe to N/S pipe to direct pond outfall to roadside ditch
- 33. Provide clarification of SE basin in OL 1 function and sizing design. Temporary storage for offsite flow? Doesn't appear to provide onsite quality/quantity treatment and does not connect to an existing onsite basin.
- 34. Consider placing outlet invert from SE basin pipe further west along Summit Drive. This would allow lowering the basin & swale to address 3001 Windsor Place flooding concerns mentioned in comment below.
- 35. Proposed grading traps water on north side of Windsor Place. Provide connection to Winterberry Reserve drainage swale.
- 36. Proposed grading south of Windsor Place connection
  - a. Current grading plan and flow pattern is not acceptable in this area. Approximately 8 acres of residential runoff flows to the culvert at 3001 Windsor Place. Explore potential for additional structure in terrace at pipe crossing Windsor Place @ ~STA 102+25 with pipe & endwall extending east to collect offsite water & direct into drainage swale.
  - b. See SWMP comments below.
  - c. Provide swale capacity calculations to verify depth of water in swale.
  - d. Explore possibility of lowering swale elevations or berming along property line to provide additional flow capacity to avoid ponding onto 3001 Windsor Place.

## C6.0

- 37. At existing MH 0.1 on Summit Ave, proposed main shall match existing invert (plan shows Ex Inv W = 893.00)
- 38. Confirm connections. Plan shows (2) North inverts.
- 39. Existing correspondence with City for this parcel indicates main shall run north under Winterberry Drive @ 0.50% with 0.25' invert jump at each manhole. Connect to existing manhole on Winterberry Drive stub.

## C6.2

40. Profile view shows MH 3 as Structure (209)

## C6.3

41. Extend alignment east along Windsor Place. Confirm smooth road profile transition from existing centerline profile to proposed profile.

#### **Preliminary Plat**

- 42. Lot numbering Lots 61 and 62 are flipped from being in order. (Engineering plans shown in correct order)
- 43. PUD zoning is being requested for the reduced lot areas and lot sizes. Provide engineering with Final PUD Agreement prior to approval.
- 44. Proposed utilities are not on the preliminary plat but included in the engineering documents with submittal.

#### Stormwater Management Plan

45. Please provide and reference all existing files referenced in this memo including:

- a. Approved permits
- b. Approved SWMP
- c. Exhibits and plans including watershed delineations

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- 46. There has been stormwater management modeling completed for this project, but none appears to be included with the stormwater memo. Provide files including inputs and outputs to appropriately analyze the results shown in the memo.
- 47. 'Filter strips' are shown in the WinSLAMM diagram as serving off-site areas. Provide files showing input & output to confirm application of the filter strips.
- 48. The report summary indicates a high degree of rate control (flows reduced by 20% to 40% relative to existing, depending on the event). Provide files including inputs and outputs to appropriately analyze the calculations.

## **Storm Sewer Design**

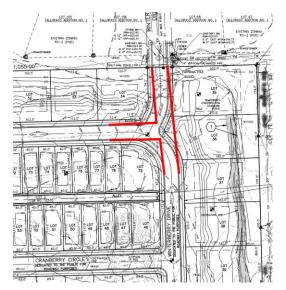
- 49. No calculations were included. Provide storm calcs including overland flow routing.
- 50. The site is somewhat rolling and there are high spots and low spots that won't necessarily encourage 100-yr flows to travel in the direction that storm sewers are routed.
- 51. Bypasses (at least 2 of which will go off-site without control (Windsor Place, Winterberry Drive) could cause problems for off-site drainage systems.
- 52. Accumulations at sag points (between lots 24 and 25 on the loop and opposite lot 1) may not safely collect 100-yr flows and/or safely overflow them to the proposed ponds.

### **Off-Site Bypass Swale Design**

- 53. There is not enough technical data provided to fully review this area.
- 54. Review of topographic maps show a large off-site watershed draining toward the existing terminus of Windsor Place. No design is incorporated to collect this flow and is currently shown collecting at the natural sag point on 3001 Windsor Place and then finding its way to the swale running along the backs of lots 43, 44, 45
- 55. Provide all calculations for swale capacity, ponding elevation and pipe capacities.
- 56. The offsite water flows into a proposed pond on the SE corner of the site before outletting to the roadside swale. Providing SWMP models will allow review of the modeling of this offsite water's impact on the ponds performance.
- 57. Recommend routing outlet pipes under Winterberry diagonally to Summit Ave ditch to avoid needing to make the channel bend (not shown on grading but assumed to be intended)

## Traffic

58. Modify alignment of Winterberry Drive to remove turn going into T-intersection Cranberry Circle. Winterberry Drive alignment shall be straight north/south from Summit Ave intersection to connection with existing Winterberry Drive stub. This will result in (2) traditional T-intersections with Cranberry Circle.



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### Final

Nothing set forth in this review of the construction and development documents by the City Engineer shall be construed as, nor intended to be, a waiver or release of any obligations imposed on the Developer or relieve the Developer from compliance with the City of Waukesha's ordinances, standards and policies or any other applicable state statute or administrative rule.

Plans for future improvements and additions must be reviewed by MSA prior to construction. Future improvements and additions must be in accordance with City requirements and ordinances in effect at the time of construction.

Please review this letter and address these issues at your earliest convenience. Contact me for clarification on any comments at (262) 295-7787. Construction shall not begin until the City of Waukesha has approved the plan set for the proposed improvements.

### Sincerely,

MSA Professional Services, Inc.

Josh Meyerhofer, P.E. Senior Project Engineer <u>jmeyerhofer@msa-ps.com</u> | (262) 295-7787

Cc: Brandon Schwenn, City of Waukesha