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October 14, 2009

Ms. Rebecca Horner
Sarpy County Planning Department
1210 Golden Gate Drive
Papillion, NE 68046

REFERENCE: SID 284 (Southern Pines) – Replat One
Revised Preliminary and Final Plat
LRA Job No. 0105087.01-004

Dear Ms. Horner:

This letter is written in response to comments associated with your review of the Southern Pines Revised Preliminary and Final Plat application materials.

Revised Preliminary Plat

1. **Comment:** This is a request to amend an existing plat to increase the number of single family lots from 113 to 186, a net increase of 73.

Response: N/R

2. **Comment:** The existing zoning is RS-72, which requires a minimum lot size of 7,200 square feet. The existing zoning requires a minimum average lot width of 60 feet. The proposed lots meet these requirements, with the exception of Lot 141. Lot 141 needs to be revised to meet the average minimum width requirement.

Response: Lot 141 was missing a second dimension on the plat; however, the lot width at the required setback is equal to 60 feet. The dimension is shown on the attached plat drawing.

3. **Comment:** Right of way for Giles and 168th Streets were dedicated in 2006 with the original preliminary and final plats. The general street pattern is very similar to the original plat. Street connectivity is provided to all areas abutting the plat.

Response: N/R

4. **Comment:** The plat conforms to the new storm water regulations. (still verifying)

Response: LRA addressed stormwater comments attached.

5. **Comment:** A couple of the blocks exceed the maximum 800 feet length due to existing drainage ways.

Response: N/R

6. **Comment:** Blocks that are longer than 500 feet may be required to include pedestrian walks to facilitate circulation. Most of the blocks are not more than 500 feet. Those blocks that exceed this requirement have steep slopes that inhibit pedestrian walks.

Response: N/R

7. **Comment:** A landscape plan needs to be provided for review and comment.

Response: A revised landscape plan has been provided for review and comment.

8. **Comment:** With revision including staff comments the plat meets the Zoning and Subdivision Regulation minimum design standards.

Response: N/R

Final Plat:

1. **Comment:** The final plat conforms to the proposed preliminary plat.

Response: Concur.

2. **Comment:** The final plat needs to be revised to include required amendments of the preliminary plat.

Response: Concur.

3. **Comment:** A vacation of the existing streets is also being requested of the County Surveyor's department in order to plat the amended street pattern. (Verify this is being requested of the surveyor) I spoke to Tom and he said that they have not requested a vacation. (Rebecca to ask Mike Smith how this was done in the past)

Response: A street vacation request was included on the final plat.

4. **Comment:** The final plat is required to include the following information:

- i. Square footage of all lots;

Response: Square footage of all lots has been added to the final plat.

- ii. Revised dedication to indicate monuments are set at all lot corners or a performance bond is provided (Section 12.4, Subdivision regulations)

Response: The required dedication has been included on the final plat.

5. **Comment:** With revision including staff comments the plat meets the Zoning and Subdivision Regulations.

Response: N/R

Water Quality

1. **Comment:** As Sarpy County is a member of the Papillion Creek Watershed Partnership, the Post Construction Stormwater Management Plan (PCSMP) provisions adopted by the Partnership apply. The required documents and forms need to be submitted for review, including an application form, conceptual PCSMP, and Stormwater Management Maintenance Agreement. We recommend following the forms created for the Partnership by the City of Omaha for this submittal.

Response: Concur – the required documents and forms will be submitted prior to scheduling to County Board.

2. **Comment:** Verify water quality pond and silt pond are allowed in Outlot C underneath OPPD power lines and are not prohibited per the existing OPPD easement.

Response: LRA is coordinating with OPPD and their Transmission Engineering Department.

3. **Comment:** Verify swale volumes listed include volumes only to top of pond elevation.

Response: For final grading design, swale volumes will be calculated only to top of pond elevation.

4. **Comment:** Show location of swale in basin C-2 within the boundary of the development.

Response: The swale in basin C-2 is located within the boundary of the development.

5. **Comment:** Submit plans to the Papio-Missouri River Natural Resource District showing the overflow paths for storm water from the water quality ponds during larger storm events.

Response: Concur- The required plans and calculations will be submitted prior to scheduling to County Board.

Grading and Improvements

1. **Comment:** Provide easements or additional right-of-way at street intersections to allow for the installation of handicap ramps meeting ADA codes.

Response: Concur – the plat has been modified to accommodate the additional right-of-way required for the installation of handicap ramps meeting ADA codes.

2. **Comment:** Modify grades at end of 171st Street north of Greenfield Street where street meets adjoining Tax Lot 11 to the west. The street and temporary turn-arounds appear to be on a steep slope.

Response: Concur – the paving limits have been adjusted to the base of the slope.

3. **Comment:** Review grades where Meadows Boulevard terminates at Tax Lot 11 to the west; it appears as though there is a drainage channel through the street at the temporary turn-arounds.

Response: Concur – the paving limits have been adjusted to the base of the slope.

4. **Comment:** Consider alternative grading on Lots 56 thru 59. It appears as though drainage from Lots 56 –59 and Lots 45 – 47 drain toward the daylight / walkout houses.

Response: Concur – grading has been revised and will be reviewed again at the time of final grading design.

5. **Comment:** Consider alternative grading on Lots 107 thru 110. It appears as though drainage from Lots 107 – 109 and Lots 111 – 113 drain toward the daylight / walkout houses.

Response: Concur – grading has been revised and will be reviewed again at the time of final grading design.

6. **Comment:** Provide grading plans around Ponds 1, 2, & 3 to verify volumes shown can be obtained and ponds can discharge to existing drainageways. Existing contours are not shown on the basin map, and contours on the preliminary grading plan don't appear to match actual existing conditions.

Response: Concur – ponds 1, 2 & 3 have been graded to verify that volumes shown can be obtained and ponds can discharge to existing drainageways. Existing contours are now shown on the basin map. Contours on the preliminary grading plan are reflective of the existing conditions.

7. **Comment:** Submit cross section information to Sarpy County for review that shows the relationship of the proposed site grading to the existing and future improvements of Giles Road.

Response: The proposed site grading ties into the future Giles Road profile at the property line. Cross sections will be submitted prior to scheduling to County Board.

8. **Comment:** Provide easements for storm sewer and grading on Tax Lot 11 West of Southern Pines at Meadows Boulevard.

Response: Easements have been created and are shown on the preliminary plat exhibits. Easement documents will be recorded prior to the commencement of construction.

9. **Comment:** Provide letter from Sarpy County Emergency Management & Communications Agency that no civil defense sirens are necessary in this development.

Response: LRA is coordinating with the Sarpy County Emergency Management & Communications Agency to determine the necessity of civil defense sirens for this development.

10. **Comment:** Provide for the use, ownership, and maintenance of the outlots in the subdivision agreement.

Response: Concur – the required information shall be included prior to scheduling to County Board.

Drainage

1. **Comment:** Provide calculations for 10, 50, and 100-year flows contributing to culvert crossing under Giles Road. Provide delineation of watershed area and characteristics, including any drainage from off-site.

Response: Calculations for the 10, 50 and 100-year flows contributing to the culvert under Giles Road have been included. Delineation of the watershed area, including off-site drainage, has been shown on the Storm Sewer Drainage Area Map.

2. **Comment:** Provide 100-year storm path and calculations.

Response: 100-year storm path and calculations have been included.

3. **Comment:** Proposed 60 inch culvert under Giles Road overtops at 160 cubic square feet +/- at elevation 121.50 (Shown as 122.5 in cross section) according to HY-8 output, which is below the 10-year discharge shown in the drainage report of 300.5 cubic square feet +/- and does not include any off-site drainage. This culvert appears to need to be re-designed to accommodate design flows. Verify 100-year flow overtops Giles Road by less than 6 inches with adjusted culvert design.

Response: Concur – revised HY-8 culvert analysis has been included. Proposed culvert size is 2-6 feet x5 feet RCB (a double 6 feet (Span) x 5 feet (Rise) reinforced concrete box culvert).

4. **Comment:** Use computer methods to model culvert crossing under Giles Road, including the drop immediately upstream of culvert for hydraulics and scour potential due to inlet characteristics.

Response: Improved inlet calculations will be provided at the time of final storm sewer design.

5. **Comment:** Obtain drainage easement on abutting property for outlet protection of culverts / pipes discharging onto said properties.

Response: Concur – the required drainage easement will be obtained prior to the commencement of construction.

6. **Comment:** Tailwater slope shown in culvert output as 2.0 foot per foot. This needs to be corrected to 0.02 foot per foot, or actual downstream slope.

Response: Concur – the slope was originally entered incorrectly as 2.0 foot per foot and has been corrected to 0.02 foot per foot.

7. **Comment:** Tailwater velocity downstream of Giles culvert crossing is erosive. Please provide design for protection of downstream channels from erosive discharge.

Response: Correcting the tailwater slope from 2.0 foot per foot to 0.02 foot per foot has reduced the tailwater velocity. However, downstream channel protection will be provided as necessary at the time of final storm sewer design.

8. **Comment:** Provide outlet energy dissipation to slow discharge to non-erosive velocities and shear stresses at all outlet structures.

Response: Outlet energy dissipation will be evaluated and provided, as necessary, at the time of final storm sewer design.

GIS

1. **Comment:** Upon further review we would recommend that 169th Street in the NE corner of the proposed plat be re-named to 168th Avenue. This will alleviate any addressing issues or complications on addresses assigned to lots 80-83. 169th Street south of Aurora Street and Meadows Boulevard should remain 169th Street.

Response: 169th Street has been changed within the Southern Pines Replat boundary. However, 169th Street north of Meridian Street is outside of this replat boundary and falls within the commercial portion of the Southern Pines Plat. Changing 169th Street north of Meridian Street may require a county ordinance.

Sarpy County Surveyor

1. **Comment:** The S.I.D. should enter into an Interlocal Agreement with S.I.D. across the road to make improvements to 168th Street and Giles Road, together with a traffic signal at 168th Street and Giles Road.

Response: Concur.

General

1. **Comment:** Other department comments. We have received comments from the Surveyor, Gretna Fire and GIS. These are in the file.

Response: N/R

2. **Comment:** Comments were not received by the Natural Resources District. Revisions may be necessary based on NRD comments.

Response: Comments from the NRD have been received and are listed below:

- a. **Comment:** This project requires a Post Construction Stormwater Management Plan (PCSMP). A PCSMP application, along with all supporting documentation must be submitted. The application and guidance manual can be found at www.omahastormwater.org. The PCSMP should show on-site treatment of the first ½ inch of runoff as well as demonstrate a no-net peak flow increase from the 2-year storm event.
- b. **Response:** Concur- The application and supporting documentation will be submitted prior to scheduling to the County Board. The PCSMP shows on-site treatment of the first ½ inch of runoff. Per direction of Sarpy County, the development is not required to demonstrate a no-net peak flow increase from the 2-year storm event.
- a. **Comment:** The drainage study submitted with this project is incomplete. Please provide all supporting documentation as outlined in the drainage study checklist which can be found at www.omahastormwater.org.
- b. **Response:** Additional drainage study information has been included. A final drainage study will be completed at the time of final storm sewer design.

3. **Comment:** A subdivision agreement is required prior to scheduling to County Board.

Response: Concur.

Please call if you have any questions.

Sincerely,

LAMP, RYNEARSON & ASSOCIATES, INC.


Nancy D. Pridal, P.E.
Senior Project Manager

Enclosures

c: John Bachman
Jerry Torczon

Michelle Alfaro

From: Joe P. Zadina [Joe.Zadina@LRA-INC.com]
Sent: Friday, September 25, 2009 8:25 AM
To: Michelle Alfaro
Cc: Nancy L. Pridal; Southern Pines FILE
Subject: Southern Pines Replat One

Good morning Michelle,

Per our discussion yesterday, I would like to confirm, that following the plat approval, LRA fully intends to submit final improvement plans along with a final drainage study inclusive of all necessary design components. Submitting the plans and drainage study prior to the plat being approved would likely be counterproductive, should the layout change between now and plat approval. Please feel free to call me with any questions or concerns.

Thanks,

Joe

Joseph P. Zadina, PE, MBA

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