

HYDE PARK CITY – ENGINEERING PRE-REVIEW

CLIENT: HYDE PARK CITY

PROJECT NAME: PINE MEADOWS RETIREMENT COMMUNITY

PROJECT NUMBER: #S03807.051

TO: HYDE PARK CITY LUA

FROM: SCOTT ARCHIBALD

DATE: JUNE 23, 2020

Sunrise has reviewed the submitted final plat and construction drawings for the proposed Pine Meadows Retirement Community. This letter, the attached checklist, and the attached storm water review summarize our comments of items that need to be addressed.

Plat

- Provide a construction cost estimate for the city that can be reviewed.
- Clarify what is going on with the property lines on the east side of the property. It is difficult to identify the outside boundary of the subdivision and the area dedicated to the canal. The county parcel viewer shows a separate parcel for the canal.
- When checking the lengths and bearings of the subdivision boundary, we were 2.24' from closing the boundary. Check some of the lengths and bearings of the property lines.
- Open space with a minimum of 30% of the gross subdivision area needs to be provided per 12.250.060.H. Please provide justification for open space areas that meet the code reference. A note needs to be added on the plat for this open space which says, "Usable open space to remain in perpetuity".

Roadway

- Provide stationing/offsets of curb



- Improve owner's half of 450 North and 100 East Street to 66' ROW cross section per Hyde Park City's standard drawings. The 66' ROW is based off of both roads being collector roads per the Hyde Park City master road plan.
- Change 4" of crushed gravel in road cross section detail to 4" of road base per Hyde Park City Standard Drawing
- Specify curb return radii which must be greater than 25'.
- Provide stationing and dimensions on the plans to show that the road improvements meet requirements for cul-de-sac diameter and length of cul-de-sacs.
- Regrade the road so the last 100' before the intersections is less than 4% and so the intersection is 3% grade or less.
- A vertical curve is required where grade changes exceed 1%. There is a grade change greater than 1% at station 2+57.81 which will need to have a vertical curve designed to accommodate this grade change. Sag curves shall have a "k" value greater than 26 and crest curves shall have a "k" value greater than 12.
- Specify type of curb being used in the subdivision. Distinguish curb type at parking areas on end of cul-de-sac either rolled curb or curb cuts to allow access into the parking area.
- Flat curb needs to be provided where the swale is being used to direct drainage. Fix road cross section accordingly.
- Specify a grass or graveled swale. If the swale is graveled, the minimum gravel size is 1".
- Provide streetlights in subdivision in accordance with City Code.
- Show street sign locations
- Show proposed electrical, telephone, and gas utilities

Culinary Water

- Provide an isolation valve at the end of proposed 500 North street and two valves where tying to existing mains to be able to isolate each cul-de-sac and existing lines. Provide a valve before each fire hydrant as shown in Hyde Park City Standard Drawing "Fire Hydrant Assembly"
- Specify type of pipe that will be installed.

- Provide two valves where tying to existing mains to be able to isolate each cul-de-sac and existing lines

Sewer

- Location of sewer shall not be back lot. Sewer shall be in roadway with easement between cul-de-sacs in Lot 7.

Storm Water Drainage

- Provide a catch basin at the west end of the curb and gutter on the improved section of 450 North Street to catch runoff in the gutter and send to retention pond.
- Show drainage structures in profile view.
- Provide the justification for areas used in storm water calculations. The areas in the calculations total to 4.9 acres while the county shows that the entire subdivision area is 5.81 acres.
- Based on the acreage and curve numbers provided, we calculated different volumes for the 90th percentile and required detention volume. For Area A, 5945 cf of volume is required for 90th percentile and 7845.6 cf is required for detention. For Area B, 4737 cf is required for 90th percentile and 6267.9 cf is required for detention. Please provide additional information for your calculations.
- Provide actual volumes for the two ponds at total depth (detention storage) and at orifice flow line elevation (90th percentile).
- Provide a percolation test showing ponds will drain within 72 hours.

Details

- Provide a separate detail sheet(s) showing road cross sections, fire hydrant assembly, water service connection, sewer manhole, storm water catch basin, isolation gate valves, thrust blocks, type "A" trench, and any other applicable details to the subdivision according to city codes and standard drawings.

