

JOSEPH GREIF ARCHITECTS pllc

October 2017

Dear Robin,

Attached are response from the Civil Engineer, Geotechnical Engineer, Wet Lands biologist, Arborist, and myself as Architect to your 3 following questions.

1. Critical Area Study, describing how the impacts to critical areas are mitigated to the greatest extent reasonably feasible so that there is no net loss in critical area function.

DRIVEWAY

1. The requirement of a 20% maximum slope for the drive way affects the garage slab elevation by lowering the house approximately 14 -15 feet below existing grade, creating a condition that the main floor level is 4-5 feet below grade for a viewless outdoor terrace area. The curvilinear horizontal alignment of the proposed driveway increases the finished floor elevations by roughly 4-5 feet providing a cooperative building vertical integration with the existing topography
2. The house access road cannot be installed between the wet land buffer and the north property line because there is only approximately 12' or less of space. The fire marshal has directed a need for a 16' paved drive.
3. Landscape site improvements constructed by the northerly adjacent parcel encroach onto the subject property.
4. A *'No disturbance in wetland boundary'* note has been added to civil plan set.

STORM WATER DETENTION

Storm water detention piping has been placed in locations that limit the amount of temporary disturbance as required for installation and construction. Proposed storm water utility placement does not increase the limits of permanent disturbance to the wetland buffers (i.e. proposed locations of storm water utilities are located in areas of disturbance that is necessary for the driveway horizontal alignment).

HOUSE POSITIONING ON THE SITE

1. The north side of the house has to be located 20' away from the north property line so that the geotechnical requirements for layback areas and permanent 2H:1V (maximum) slopes can be maintained.
2. The house has been located to the west so that the back out and turn around dimensions needed to egress the garage and drive downhill are met. This requirement locates the house such that the hill side on the east side of the house has to be terraced or sloped in accordance with the geotechnical recommendations.
3. The positioning of the house within the setback restrains provides an approximately 1500 sf foot print for a 37,350-sf lot. The proposed reduced footprint minimizes disturbance to the site.

2. Information on how the driveway and side sewer are designed and located to mitigate impacts to critical areas consistent with best available science (this can be included in the Critical Area Study.

SIDE SEWER horizontal alignment is positioned so that the wetland temporary trench disturbance is limited to maximum amount feasible as necessary for a fully functional gravity sewer. Temporary trench disturbance and impacts to the wetland for side sewer improvements are less than 100 SF. Trench will be restored to the native condition. As obvious, disturbance to the wetland is necessary as the existing side sewer is located in the wetland area.

DRIVEWAY The curvilinear horizontal alignment of the proposed driveway increases the finished floor elevations by roughly 4-5 feet providing a cooperative building vertical integration with the existing topographic contours.

3. Information on how the construction is consistent with best management practices

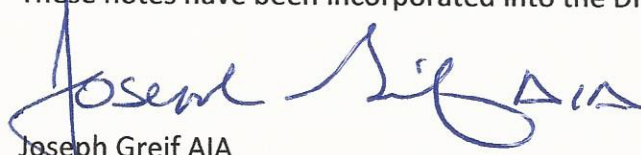
1. A soldier pile shoring wall will be utilized around the north and east sides of the proposed basement excavation to maintain slope stability and limit the area of site disturbance compared to an open excavation. A permanent soldier pile wall will be located to the south of the house instead of a cast-in-place wall or open excavation, which would disturb more site area, to allow for the proposed patio area. Temporary erosion control measures are planned to be implemented during construction to maintain site stability and reduce the potential of off-site erosion. Permanent erosion control measures including re-vegetation of disturbed areas of the site, will be included in the project to reduce the risk of long term erosion.

- 2 Side Sewer - Trenching methods are low disturbance – trench widths are less than 5'.
Permanent erosion control meth

Driveway – proposed horizontal and vertical alignment is chosen to provide the least amount of disturbance to the existing topography, minimizing the grading impacts required to meet existing grade.

Disturbed landscaped areas will use BMP T5.13 post construction soil quality and depth or better. Wetland protective fencing will be installed prior to grading efforts to reduce the potential for construction impacts to the wetland that are not permitted.

These notes have been incorporated into the Drawings and Reports submitted here.



Joseph Greif AIA