



CITY OF MELROSE

DEPARTMENT OF PUBLIC WORKS

Administration-Engineering-Water-Sewer-Facilities
Parks-Forestry-Highway-Sanitation-Cemetery-Fleet

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MEMORANDUM

To: Lori Massa, Senior Planner

From: Jay Coy, P.E. PMP, Deputy City Engineer

cc: Denise Gaffey, Director and City Planner, Office of Planning and Community Development
Elena Proakis Ellis, DPW Director
Vonnie Reis, City Engineer

Date: 3/22/2024
Revised 4/17/2024
Revised 4/26/2024

Re: 22 Montvale Street – Slope Protection Permit
DPW Comments

This memorandum summarizes comments from the Department of Public Works on the proposed single family home, based on the plans and documentation received by this office on January 17, 2024, response by the applicant to original email comments provided by Lori Massa in **RED**, and revised plans and documentation received on March 20, 2024 and follow up comments from DPW in **BLUE**. This memorandum was further revised based on plans and documentation received by email on 4/11/2024 and even further revised based on documents received on 4/26/2024. The applicants' comments are in **GREEN** with subsequent DPW comments in **BLUE**.

The following issues, concerns, and considerations have been identified during the course of our review:

1. The site at the rear of the property needs to be shown as 75 Feet min.

Response: Sheet C-1 has been revised to include the 75-FT minimum width dimension.

2. Drainage calculations hydrocad report using NOAA Atlas 14 rainfall data and watershed maps (watersheds should be divided into sub-watersheds for the neighboring properties) including an infiltration calculations and backup;

Response: The Drainage Memo has been revised using the NOAA Atlas 14 rainfall data.

DPW Response: No further comment.

Applicant Response: A 500-gallon above ground water tank is proposed to store the rooftop runoff. A detail of the tank is provided on Sheet C-2.

DPW Response: While the draft Stormwater Handbook allows for a reduction in effective impervious cover if a rain barrel or cistern is sized to capture the 1-inch water quality volume, this only allows for the impervious areas to be deducted from Standard 3 (groundwater recharge) and Standard 4 (Pollutant Removal). It does not allow for removal from Standard 2 (peak flow attenuation). DPW therefore, will not approve this method as a way to attenuate peak flows. An alternative method to attenuate peak flows should be explored.

Applicant Response: See Response to DPW letter dated 4-24-24

DPW Response: We have no further comment on the design but we do stress the importance of continuous dewatering of the rain barrels in between storms.

3. Provide a detail of the proposed stormwater management area;

Response: By increasing the subwatershed area, the post-development peak flow now equals the predevelopment peak flow; therefore, no stormwater management area is needed.

DPW Response: We request the calculations be revised to only include the subject property in the stormwater calculations. Since there is an increase in impervious area, there will likely be an increase in runoff that needs to be mitigated. Please revise.

DPW Response: Applicant revised the watershed calculations. No further comments.

4. Indicate where the roof drains will flow.

Response: Sheet C-2 has been revised to show the roof drain.

DPW Response: Please provide details and calculations for the FES riprap outlet.

Applicant Response: The FES outlet has been removed from the revised design.

5. Detail civil site plans showing all walkways, hardscape, utilities, stormwater management, etc.

Response: The site plans have been revised to include walkways, hardscape, and utilities.

DPW Response: Please add a permeable paver walkway detail. Note, this area should be calculated as impervious area in the runoff calculations.

Applicant Response: The permeable paver walkway detail is on Sheet C-1. A curve number of 80 has been assigned to the permeable pavers since we are not taking credit for the storage below the pavers.

DPW Response: This is acceptable.

6. A description of how utilities will be brought to the house.

Response: Sheet C-3 has been added to the plan set, which includes details on the proposed water, sewer, and electric service lines.

DPW Response: Please locate the water shut off close to the property line. The new sewer connection will require a new sewer connection fee, and an infiltration and inflow fee. Both sewer and water utilities will require trench permits with the Engineering Division.

Applicant Response: The water shut-off has been moved closer to the property line. See revised Sheet C-3.

DPW Response: No further comments.

7. Provide a structural engineers stamp for the retaining wall along the southern edge stormwater management basin which appears to be 5-feet tall on one end and provide a detail showing how this wall will be waterproofed to not allow seepage from the stormwater basin.

Response: See attached detail of retaining wall drawing sheet T4.

DPW Response: the plan needs to be stamped by a structural engineer, not a registered architect.

Applicant Response: See revised drawing sheet T4

DPW Response: Sheet T4 has been stamped by a civil engineer.

8. Provide the retaining wall details when they are available.

Response: See attached detail of retaining wall drawing sheet T4.

DPW Response: No further comment as long as approved by structural engineer.

Applicant Response: See revised drawing sheet T4

DPW Response: No further comments.

9. Test pit data on the soil conditions and groundwater level.

Response: See attached Geotechnical Report Memorandum.

DPW Response: The report mentions soil/boring logs. Please provide those for review.

Applicant Response: There are no soil/boring logs. See revised Memo note end of page 7.

DPW Response: No further comments.

10. Proposed site plan with the slope protected area shown.

Response: See attached drawing sheet T2 on the drawing set.

DPW Response: No further comment.

11. A plan with the limit of work designated and a demonstration of how the rest of the site will not be impacted during construction.

Response: See attached drawing sheet T3.

DPW Response: LOW is shown.

12. A landscape plan
 1. Identify location of the new trees (Red Maples, Hickory, Grey Birch, and Black Cherry) that will replace the eight Norway Maples that will be removed.
 2. Identify where the plants will be added on plans with details.
 3. Identify materials and details of path that connects both sets of stairs landing.

Response: See attached Landscape Plan drawing sheet L1 and L2 on the drawing set.

DPW Response: A landscape plan was provided.

13. An update to the construction management plan with information about the extent of hammering or blasting that will be required, construction vehicle access and parking, and a staging plan.

Response: See updated Construction Management Plan and Staging Plan dated 3/5/24.

DPW Response: The CMP confirms no blasting will take place. However, it does not show or describe the extent of rock removal.

Applicant Response: There is minimal rock removal if necessary for access stairs. See attached photo describing profile of stair and profile of rock and access stair site plan for location. See added note on green on updated CMP.

DPW Response: No further comments.

14. Construction details of how the house will be pinned to the rock.

Response: See attached Geotechnical Report Memorandum page 7 and 8 where it states a #5 rebar embedded 12 inches into the rock and staggered at 24 inches spacing. Also see sheet drawing T4.

DPW Response: The Geotech memo demonstrates anchoring.

15. Rendering of the proposed house.

Response: See attached rendering.

DPW Response: Rendering provided.