



STRUCTURAL PERMIT CORRECTIONS

May 5, 2022

McCullough Architects
Devlin Rose
5601 6th Ave S, Suite 371
Seattle, WA 98108

RE Permit corrections for Koneru Residence at 6610 E Mercer Way, Mercer Island, WA 98040, Permit No. 2112-250

We have received and reviewed the STRUCTURAL comments regarding the 6610 E Mercer Way project, permit number 2112-250. Below are the corresponding responses to the structural comments for the correction notice prepared by Crystal Kolke, Kolke Consulting Group, Inc dated April 12, 2022:

Geotechnical:

3. Post align with the pin pile and the isolated footing/pile cap will be poured monolithic with the 6" structural slab, thus potential eccentric loading will not be critical.

Structural:

General:

1. By Architect/Owner.
2. Detail 5/S3.1 has now been revised to match architectural details.
3. Special inspection requirement for pile installation and testing has now been noted on S1.0.
4. 2" diam. pipe pile notes have now been removed on S1.0.
5. Quality Assurance Note #13 on S1.0 has now been revised; 2500 psi concrete strength has been used in the design - concrete testing is not required.
6. By Architect/Owner.
7. 18" minimum bottom of all footings below lowest adjacent grade has been specified on plans and details to stay above the groundwater table.
8. Pool slab reinforcing has been modified to #4 at 10"oc to match design calculations.
9. Detail 20/S3.1 has now been revised.
10. Calculations for 4-foot spa retaining wall have now been added in the revised calcs packet.

Gravity:

11. Stair and bridge connection details are shown on sheet A16. Bridge joists to beam welding connection has now been called out on plan sheet A6, and also typical bridge guardrail post required connection has now been called out on 13/S5.1.

12. Grade beam over pin pile has now been added under bottom of stair.
13. Bridge beams will be supported by the flush glulam beam. Foundation grade beam has been added to support beam end reaction above and detail 13/S5.1 has been revised to show required beam end connections.
14. Pin piles supporting W8x21 column have now been revised.
15. Beam #121 - 5-1/2x21 is adequate to resist the design load, please see revised beam calculations.
16. ASC DG-2WHF steel pan deck roof over patio has now been called out on plan, please see revised plan on sheet A6.


Lateral:

17. Redundancy factor, Rho has now been evaluated, please see revised lateral calculations on sheets L-2 and L-4.
18. Although minimum DF#2 species were used for all framing members, the nominal capacity of shearwall "SW4" used in the analysis and design remained at 700 plf. No revisions are required at this time.
19. Detail 10/S4.2 has now been revised.
20. Required lateral load for truss drag strut has now been called out on plans.
21. Missing CS16 strap(s) holdown have now been called out on plan.
22. Plan legend has now been revised and shearwall callouts have now clearly indicated extent of shearwall segment used in the design.
23. Extent of shearwall segment has now been clarified, please see revised plan on sheet A6.
24. Holdowns have now been called out on plan.
25. Detail 20/S4.1 has now been revised to address shear transfer truss blocking required capacity.
26. Holdowns have now been called out on plan.
27. Detail 13/S4.2 has been added to address the required shear transfer connections at the lower roof diaphragm over high capacity shearwall.
28. Detail 13/S5.1 has now been revised to tie each end of the bridge beam into the upper floor diaphragm.

We trust that this addresses all the structural concerns. Please give us a call if you have any further questions.

Sincerely,

**MALSAM TSANG STRUCTURAL
ENGINEERING CORPORATION**


Joseph Marquez PE
Project Engineer