

July 31, 2022

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Reference: Engineering Services Walker Rd. – Lot 3 724 Walker Rd. Bunn Level, NC 28323 TE&D Project No.: 2201-020538 A

To Whom It May Concern;

As requested, a representative of Tyndall Engineering & Design, PA (TE&D) was on-site to observe the following items:

- 1) Bearing of right end of front girder behind garage.
- 2) Bearing of right end of rear girder behind garage.
- 3) Bearing of left end of rear girder at bumpout.
- 4) Bearing of left end of middle girder.
- 5) Bearing of left end of front girder behind porch.
- 6) Bearing of right end of front girder at garage wall.

The following conclusions and recommendations were noted:

- 1) We observed a new 4 x 8 pilaster was installed for girder support. The construction of the pilaster in regards to the footing and tie in to the foundation was unknown to TE&D. The (2) 2 x 10 girder extended into the pony wall and was supported with (2) 2 x 4 jacks and (2) 2 x 4 king studs. The girder was notched to accommodate for the pony wall top plate. Based on our observations and analysis, the existing girder requires modification. The girder is to be increased to a (4) 2 x 10 girder from the adjacent pier to the pony wall. The new plys are to be added on each side and fastened with (3) rows of 16d nails at 4" o.c. New plys may be notched at the pony wall. The entire new girder is to be supported with (4) 2 x 4 jacks and (2) 2 x 4 kings at the pony wall. The pilaster is not providing significant structural support to the girder and may remain or be removed if required.
- 2) We observed a new 4 x 8 pilaster was installed for girder support. The construction of the pilaster in regards to the footing and tie in to the foundation was unknown to TE&D. The (2) 2 x 10 girder extended into the pony wall and was supported with (2) 2 x 4 jacks and (2) 2 x 4 king studs. The girder was notched to accommodate for the pony wall top plate. Based on our observations and analysis, the existing girder remains suitable to support the anticipated loading conditions. The existing jacks are to be removed and replaced with tightly fitting members. The pilaster is not providing significant structural support to the girder and may remain or be removed if required.



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- 3) We observed a new 4 x 8 pilaster was installed for girder support. The construction of the pilaster in regards to the footing and tie in to the foundation was unknown to TE&D. Bearing of left end of middle girder. We also observed the girder was supported with a (3) 2 x 6 dropped header. Based on our observations and analysis, the existing girder and supporting framing remains suitable. No structural modification required. The pilaster is not providing significant structural support to the girder and may remain or be removed if required.
- 4) We observed a new 4 x 8 pilaster was installed for girder support. The construction of the pilaster in regards to the footing and tie in to the foundation was unknown to TE&D. The (2) 2 x 10 girder extended into the pony wall and was supported with (2) 2 x 4 jacks and (2) 2 x 4 king studs. Based on our observations and analysis, the existing girder remains suitable to support the anticipated loading conditions. The pilaster is not providing significant structural support to the girder and may remain or be removed if required.
- 5) We observed a new 4 x 8 pilaster was installed for girder support. The construction of the pilaster in regards to the footing and tie in to the foundation was unknown to TE&D. The (2) 2 x 10 girder extended onto the pilaster; however, did not have full bearing. Based on our observations and analysis, the existing girder requires modification. The girder is to be increased to a (4) 2 x 10 girder from the adjacent pier to the pony wall. The new plys are to be added on each side and fastened with (3) rows of 16d nails at 4" o.c. Due to the minimal imposed load to the pilaster, the existing pilaster remains suitable as constructed.
- 6) We observed a new 4 x 8 pilaster was installed for girder support. The construction of the pilaster in regards to the footing and tie in to the foundation was unknown to TE&D. The (2) 2 x 10 girder extended onto the pilaster; however, did not have full bearing. Based on our observations and analysis, the existing girder requires modification. The girder is to be increased to a (4) 2 x 10 girder from the adjacent pier to the pony wall. The new plys are to be added on each side and fastened with (3) rows of 16d nails at 4" o.c. Due to the minimal imposed load to the pilaster, the existing pilaster remains suitable as constructed.

Upon completion, the framing repairs listed above will provide the required support for the anticipated loading conditions. We appreciate being able to assist you during this phase of the project. If you need further assistance or require additional information, please do not hesitate to contact us.

Sincerely, Tyndall Engineering & Design

Tripp Anos

Tripp Amos TA | 2201-020538_A

Prentice Tyndall Jr., P.E.







Item #1 – New plys to be added to each side of girder



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Item #2 – Jacks to be installed tightly

Item #3 – Girder remains suitable





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Item #4 - Girder remains suitable

Item #6 - New plys to be added to each side of girder





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Item #7 - New plys to be added to each side of girder