BROOKER ENGINEERING, PLLC

Brian Brooker, P.E.
Kenneth DeGennaro, P.E.
Eve Mancuso, P.E., C.M.E.
Stuart Strow, P.E.
Hadi Djohan, P.E.

Alan Garfinkel, P.E., P.P.
Glenn McCreedy, P.E., C.M.E.
John Bezuyen, L.S.
Louis A. Raimondi, P.E., L.S., C.M.E.

April 29, 2013

Narrative Summary
W.P. Faist Ambulance Corp
(Tax Lots 63.13-1-12 & 63.13-1-21)

This project was last reviewed at the April 9, 2013 CDRC meeting. The following discussions provide further detail and address specific questions that were raised at the CDRC meeting.

Parking Spaces

The zoning code requires parking spaces to be 9' x 20'. The Site Development Plan Rules and Regulations require 9' x 19' but allow a maximum overhang of 3 feet. The proposed parking spaces are 9' x 17' feet with a 3' overhang, bringing the total length to 20 feet. The paved area of the parking lot has been minimized by utilizing the maximum allowable overhang. This was done in an effort to maximize the yard area between the parking lot and the southerly property line. We think that the proposed dimensions comply with both the Zoning Code and the Site Development Plan Rules and Regulations.

The number of parking spaces proposed on the project site was determined on the basis of need and space limitations, as there are no minimum parking requirements in the Zoning Code for the proposed use. The proposed parking lot on the northerly side of the building is for the exclusive use of on-duty Ambulance Corps staff. The Corps has three ambulances, and each one is manned by 2 members. An ambulance could occasionally have a third staff member if there is a new trainee. The on-duty staff is typically 2 or 4 people. But factoring in shift changes and occasions where there are multiple calls, the proposed staff parking lot of 7 spaces is adequate.

The new facility includes various support spaces including basic living quarters, administrative offices, and a training room. The parking on the southerly side of the building is to be used by Ambulance Corps staff during administrative meetings and training sessions. It will also serve as the visitor and public access to the new facility. The 13 spaces provided in the southerly parking lot maximize the usable parking area on the south side of the building without encroaching any further into the rear yard of the property. The use of this parking lot is expected to be relatively infrequent, and it will adequately serve the needs of the Corps.

Lighting

The proposed lighting in the southerly parking lot has been intentionally minimized to reduce potential impacts from glare and reflection to the neighboring residential property to the south. The parking lot on the southerly side of the building will primarily be utilized by Corps members during scheduled administrative meetings and training sessions. The proposed lighting of the southerly parking lot is adequate in consideration of security and the safe movement of vehicles and people.

Emergency Generator

As part of the project, a new emergency generator will be installed. The generator has been located near the westerly end of the northerly parking lot. This location was specifically chosen to maximize the distance from the generator to the nearest residences, while still keeping it convenient to the new building. The generator requires testing once per week, and the Corps will adhere to a strict testing schedule that is proposed for every Monday at noon.

The generator will be fueled by natural gas, and will be housed in a weather and sound enclosure (Kohler model 60REZDB). The enclosure features acoustic insulation and exhaust silencers that reduce the sound pressure levels to 68 dB (decibels) at 60 Hz (cycles per second) at a distance of 23 feet.

For comparison, some commonly accepted noise levels are as follows:

- Lawn mower: 95 decibels
- Vacuum cleaner 85 decibels
- Telephone: 70 decibels
- Normal conversation: 60 decibels

The sound pressure level will be further attenuated by the proposed vinyl fence enclosure, and it is naturally attenuated as the distance from the source increases. Every time the distance from the generator is doubled, the noise level is reduced by 6 decibels. A 6 decibel reduction is defined as "clearly noticeable".

According to the Zoning Code, the maximum allowable sound pressure level at the property line at an octave band between 0 – 74 cycles per second is 66 decibels. The generator is located approximately 30 feet from the property line, and the combination of distance and sound attenuation measures will reduce the sound pressure level to a compliant level. The distance to the nearest building (the veterinary office to the north) is approximately 45 feet, which approximately doubles the reference distance of 23 feet. That distance will result in a 6 decibel reduction to a sound pressure level of 62 decibels at the outside of the nearest structure.

Site Plans

In response to the specific Site Plan comments received at the April CDRC meeting, the plans have been revised as follows:

1. Sidewalks have been eliminated between the southerly parking lot and the southerly face of the proposed building.
2. Dimensions of the sidewalks and driveway turnaround areas have been provided.
3. The bulk table has been revised as follows:
   - Proposed 215 foot lot width has been marked to require a variance.
   - The northerly side setback has been revised.
   - The maximum building height has been revised to indicate a maximum height of 35'.
   - The southerly side setback has been measured from the building overhang.
4. The typo on the parking calculation has been corrected.
5. The building overhang on the southerly side has been clarified.
6. The ADA compliant warning strip has been shown on the sidewalk ramp detail.
7. The sidewalk dimension on Red Schoolhouse Road has been provided.
8. The fence detail has been revised to provide a vinyl fence.
9. A legend has been added to the Grading and Utility Plan.
10. The grading in the back yard has been revised to provide a minimum slope of 1.5%.
11. The grading around the perimeter of the building has been revised to provide an emergency flow path in case the proposed drainage system becomes clogged.

12. The leader for the retaining wall elevations has been corrected.
13. The roof drain text has been enlarged.
14. The typos in the notes in the anti-tracking pad detail have been corrected.
15. The quantities on the landscaping table have been revised and corrected.
16. The abbreviations on the landscaping table have been revised and corrected.
17. The light symbols have been revised and corrected.
18. The enclosures for the trash and emergency generator have been noted to utilize the same material as the proposed perimeter vinyl fencing.
19. The sidewalk ramp detail has been revised.
20. The color of the retaining wall will match the building color, and that has been indicated on the wall detail.
21. The downstream manhole of the proposed outlet structure has been revised to provide an open grate, which will serve as the emergency overflow.
22. The underground detention system is not perforated, and the notation on the detail has been revised.
23. Note #32 on the Layout Plan indicates the proposed testing schedule for the emergency generator.
24. A sequence of major construction activities has been added to the plans.
25. A detail of the proposed ground mounted lighting has been added to the plans.

Drainage Analysis

The drainage analysis has been revised to include off-site contributing areas. The results of the revised analysis still indicate that the proposed underground detention system will adequately reduce peak discharges from the project site to levels below existing conditions. The analysis has also been revised to separate the existing condition and proposed condition models. The total disturbance area on the project site of 0.94 acres has been noted in the summary.

Long Form EAF

The building height on page 5 of the Long Form EAF has been revised to match the height denoted on the bulk table.

We look forwarded to discussing this project at the next CDRC meeting.

Sincerely,

Stuart Strow

Stuart Strow, P.E.
BROOKER ENGINEERING, P.L.L.C.