

February 25, 2016

Kathy Thompson, City Planner
City of Buckley
P. O. Box 1960
Buckley, WA 98321

Re: Kuehn LDA
G&O #13241.00



Dear Kathy:

Regarding comments in the letter of January 22, 2016:

GENERAL

1. Sheet 4 shows the landscaping. No building is proposed. Consistent, then, with direction and judgment from the City and G-O received in 2013 for the nearly-identical WS Contractors site across the street, no frontage landscaping or buffer landscaping, or irrigation or designated parking is required at this time. Only grass planting is required until such time as a building is proposed. Notes to that effect are included on Sheet 4. However, the owner has indicated a probable intention to install trees around the pond anyway, as shown on Sheet 4.
2. Noted.
3. Noted.
4. Noted.
5. A note has been added to the cover sheet.
6. A note has been added to the cover sheet.
7. The following excerpt is from the ITE Trip Generation Manual, 9th edition.

**INSTITUTE OF TRANSPORTATION ENGINEERS
COMMON TRIP GENERATION RATES (PM Peak Hour)**

(Trip Generation Manual, 9th Edition)

Code	Description	Unit of Measure	Trips Per Unit
PORT AND TERMINAL			
90	Park and Ride Lot with Bus Service	Parking Spaces	0.62
INDUSTRIAL			
110	General Light Industrial	1,000 SF	0.97
120	General Heavy Industrial	Acres	2.18
130	Industrial Park	1,000 SF	0.85
140	Manufacturing	1,000 SF	0.73
150	Warehousing	1,000 SF	0.32
151	Mini-Warehouse	1,000 SF	0.26
152	High-Cube Warehouse	1,000 SF	0.12
170	Utilities	1,000 SF	0.76
RESIDENTIAL			
210	Single-Family Detached Housing	Dwelling Units	1.00
220	Apartment	Dwelling Units	0.62
221	Low-Rise Apartment	Dwelling Units	0.58
230	Residential Condominium / Townhouse	Dwelling Units	0.52
240	Mobile Home Park	Dwelling Units	0.59
251	Senior Adult Housing - Detached	Dwelling Units	0.27
252	Senior Adult Housing - Attached	Dwelling Units	0.25
253	Congregate Care Facility	Dwelling Units	0.17
254	Assisted Living	Beds	0.22
255	Continuing Care Retirement Community	Dwelling Units	0.16
LODGING			
310	Hotel	Rooms	0.60
320	Motel	Rooms	0.47
330	Resort Hotel	Rooms	0.42
RECREATIONAL			
411	City Park	Acres	0.19
412	County Park	Acres	0.09
413	State Park	Acres	0.07
415	Beach Park	Acres	1.30
416	Campground / Recreation Vehicle Park	Camp Sites	0.27
417	Regional Park	Acres	0.20
430	Golf Course	Berths	0.19
431	Miniature Golf Course	Acres	0.30
		Holes	0.33
Code Description			
432	Golf Driving Range	Tees / Driving Positions	1.25
433	Balling Cages	Cages	2.22
435	Multi-Purpose Recreational Facility	Acres	5.77
437	Bowling Alley	1,000 SF	1.71
441	Live Theater	Seats	0.02
443	Movie Theater without Matinee	1,000 SF	6.16
444	Movie Theater with Matinee	1,000 SF	3.80
445	Multiplex Movie Theater	1,000 SF	4.91
452	Horse Race Track	Acres	4.30
454	Dog Race Track	Attendance Capacity	0.15
460	Arena	Acres	3.33
473	Casino / Video Lottery Establishment	1,000 SF	13.43
480	Amusement Park	Acres	3.95
488	Soccer Complex	Fields	17.70
490	Tennis Courts	Courts	3.88
491	Racquet / Tennis Club	Courts	3.35
492	Health / Fitness Club	1,000 SF	3.53
493	Athletic Club	1,000 SF	5.96
495	Recreational Community Center	1,000 SF	1.45
INSTITUTIONAL			
520	Elementary School	1,000 SF	1.21
522	Middle School / Junior High School	1,000 SF	1.19
530	High School	1,000 SF	0.97
536	Private School (K-12)	Students	0.17
540	Junior / Community College	1,000 SF	2.54
560	Church	1,000 SF	0.55
565	Daycare Center	1,000 SF	12.46
566	Cemetery	Acres	0.84
571	Prison	1,000 SF	2.81
580	Museum	1,000 SF	0.18
590	Library	1,000 SF	7.30
591	Lodge / Fraternal Organization	Members	0.03
MEDICAL			
610	Hospital	1,000 SF	0.93
620	Nursing Home	1,000 SF	0.74
630	Clinic	1,000 SF	5.18
640	Animal Hospital / Veterinary Clinic	1,000 SF	4.72

Use #150, Warehousing, is the closest match to the site's intended use a construction equipment storage yard. The corresponding rate is $0.32 \text{ trips/peak hour/1000 sf} * 78 \text{ thousand square feet usable} = 25 \text{ peak hour trips}$.

8. A note has been added to the cover sheet.

9. Noted.

10. Noted.

STORMWATER CONTROL PLAN report

11. The WWHM12 computer calcs done in accordance with the 2005 Manual are found in Paragraph 5.

12. The computer output gives dimensions but also gives total volume. It would be extremely time consuming - and in fact may not be possible - to get the WWHM12 calcs to spit out the exact dimensions that are needed in design in addition to the required volume. Therefore, the volume of the pond is calculated based on the frustum formula, and dimensions are tweaked until the required volume as determined by the WWHM12 is met.

13. Page V-10-28

Criteria 2:

The volumes of the wetpool settling cell and cell 2 have been calculated and included in the Stormwater Plan report. The settling cell volume > 33% of the total volume. The total volume is considerably more than required because of the necessary side slopes and depth of pond, plus the need to provide a width at the bottom for access road.

Criteria 4:

The bottom 1' of the settling cell has been designated as silt storage on the cross section.

Criteria 7a:

The top of the berm is elevation 701, bottom of detained water is 702, so the berm is 1' submerged. The side slopes are 2.2:1. Consequently, this meets the requirements of 7a.

14. The stormwater wetland is already 60% larger than the calculated size requirement.

15. The site will not meet any of the four definitions of a "high-use site" (Vol 1 Glossary 23). No fueling operations are planned (fueling is done at a station in Enumclaw). The size of the operations are not anticipated to come close to meeting any of the other definitions.

The flow control structure is constructed with the exact features of a Spill Control Separator as shown on Figure 11.3 Vol IV 11-4.

16. The soils report from the previous project has been added to Section F.

17. Noted.

18. Noted.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

19. Noted.

20. The relevant Maintenance Standards have been added to Element 3.1.11

CONSTRUCTION PLANS

21. There is one utility crossing, that of the new pressure sewer over existing water within the right of way. A note on the Water and Sewer sheet calls for CDF for crossings less than 18 inches.

22. The grading is designed to direct all runoff from impervious surface toward the middle of the parcel, then north to the pond.

Runoff under existing conditions is directed by existing contours mostly to the west property line. No aggravation of any drainage problems is expected to result; rather, the runoff to neighboring properties is expected to be decreased by virtue of directing it to the pond.

23. A note has been added to the Grading & Storm Plan regarding contracting with PSE to extend the gas line. No building is planned at this time (only dreams), so no gas service is needed. In the future, this may change.
24. No building is planned at this time, so no mailbox is planned. In the event a building is erected, it is likely that mail will be delivered to a post office box.
25. Because no building is planned at this time, it is premature to show a trash and recycling enclosure now.

26. Noted. See answer to #1.

STREET

27. The frontage improvements are shown on the Grading and Storm plan. No disturbance of the existing drainage ditch will occur other than at the driveway.

28. The road classification has been added.

29. The City Standard has been added to the Grading and Storm plan.

30. Existing striping is shown on the Sections and Landscape sheet, which has been renamed to draw attention to the inclusion of the re-striping direction.

WATER

31. A profile of the water has been added to the Water and Sewer plan. Water is designed per instructions.

32. The water tap instructions have been replaced with reference to the City's Wet Tap Detail.

33. A water easement has been added.

34. Currently two of the neighboring commercial properties on SR 410 E have rolling gates - the public storage facility and LKQ. The Fire Dept was copied these comments. A note has been added to the cover sheet to require the owner to coordinate with the Fire Dept.

35. A second hydrant has been added so all hydrants are spaced at <300 ft, and all portions of the site are covered.

36. The length of the watermain has been labeled.

37. A connection to the water existing on the adjacent parcel has been added.

38. The required note has been added.

39. The entire site south of the pond is available for a future building. No one point on the water main is better than another point (as long as it is south of the pond.)

SEWER

40. An air release detail has been added to the Sewer Details sheet.

STORM

41. Staking requirements for storm have been added to the notes on the cover sheet.
42. Arrows have been added to the storm lines indicating direction of flow.
43. A note has been added to bevel the outlets to match embankment slopes.
44. The catch basin within SR 410 right-of-way that is referred to is to be new. No "adjustment" is necessary. Also, the catch basin need be only a Type I.
45. The Grading & Storm plan now calls for restoration of the ditch. A cross-section has been provided. Side slopes are 3:1.
46. Call-outs have been added calling for solid locking lids on two c.b.s.

POND PLAN

47. The emergency overflow has been re-routed to discharge onto the driveway. An asphalt wedge has been placed on the edge of the overflow to assure all water is routed properly.
48. The detail has been corrected to call out 6" pipe.
49. The slopes have been labeled.
50. The profile has been corrected to get the fill out of the ditch.
51. A debris barrier has been called out at the outlet.
52. The fence has been specified as 1-1/4" mesh (as opposed to 2") in order to prevent climbing. It has also been made 8 ft tall, rather than 6 ft. *The owner would like to go back to 6 ft if that is acceptable. Please let me know.*
53. The access road width has been labeled.
54. The access road gate has been changed to 16' wide.
55. The pad at the bottom of the pond has been made 25' long
56. The pipe has been moved out from under the access road.

TESC

57. A call-out has been added to remove the existing culvert.
58. The culverts and catch basin at the new driveway are shown on the TESC plan as being installed along with the construction entrance.
59. Catch basin protection has been shown on the two catch basins along the south property line.
60. The SWPPP has been edited to delete superfluous text.

DETAILS

61. The details have been added on two detail sheets.
62. The detail has been added on a detail sheet.

Respectfully,
Plat & Site Civil Design, LLC

A handwritten signature in black ink, appearing to read 'DA', is written over a light gray circular stamp.

Dennis Alfredson, P.E.