CITY OF Apple Valley

MEMO

Public Works

TO: Kathy Bodmer, Planner

FROM: Brandon S. Anderson, City Engineer

DATE: August 31, 2017

SUBJECT: Cedar Park Elementary School Addition Final Plat

Alex,

The following are comments regarding the Cedar Park Elementary School Addition site plans dated June 13, 2017. Please include these items as conditions to approval.

**General**

1. All work and infrastructure within public easements or right of way shall be to City standards.
2. Provide a narrative of how the buildings will be constructed and any impacts prior to building permit authorization. The narrative shall include the following:
    a. Shoring (if applicable)
    b. Material Storage.
    c. Haul routes to and from the site.
    d. Phasing

**Permits**

3. Provide a copy of the executed Minnesota Department of Health, Minnesota Pollution Control Agency, Met Council, Department of Labor and any other required permits.
4. A right of way permit will be required for all work within public easements or right of way.
5. A Natural Resource Management Permit (NRMP) will be required prior to any land disturbing activity commences.

**Site**

6. Proposed access to Existing Parking 1 is recommended to be relocated west to better align with existing drive aisle into the site and create further spacing from Cedar Avenue. The existing driveway entrance should be utilized.
7. Stop signs should be provided at driveways leaving the site and indicated on plans.
8. Additional direction striping is recommended in the existing parking lot 1 and 2 to better direct parent drop off/pick up routing.
9. Site Statistics table should be updated with correct information on sheet C1.21 and C1.31.
10. Provide additional dimensions on site plan indicating radiuses, drive lane widths, etc…

11. Provide setback lines on site plan.
12. Provide additional drawing showing Auto turn turning movements to verify site circulation and layout requirements for planned vehicle usage to be used onsite. Please indicate (or show vehicle) stacking distances on the plan as circulation indicates potential for vehicles to back up onto public roadways at exit and entrance access' to the site. Show truck movement with Auto turn entering site to ensure emergency and service vehicle can maneuver directly to front entrance.
13. A commercial driveway entrance is required at all access points to public roadways per AV Plate No. STR-4 or STR-5.
14. Provide pedestrian curb ramps per STR-10.
15. Temporary traffic control plan will be required to be submitted for review and approval for driveway connections in Whitney Drive prior to building permit authorization.
16. 12 Ft. Chain Link Backstop and Gaga ball pit as shown per sheet C1.11 is not indicated to be removed or relocated, but remains to be located in infiltration area and proposed hard surface play.
17. Clarify on sheet C1.21 if existing play equipment is to be relocated to proposed hard surface play area.
18. Provide additional sidewalk/trail connection from bus loop/hard surface play to proposed 8' pathway along west site of site.
19. No Parking changes may be necessary along with additional striping and signage along Whitney Drive for site lines for new bus loop entrance.

**Grading, Drainage and Erosion Control**

20. Final Grading Plans shall be reviewed and approved by City Engineer.
21. Additional details are required to indicate how drainage from proposed bus loop will be directed to proposed infiltration area. Pre-treatment is required.
22. Final Storm water Management Plan shall be reviewed and approved by City Engineer.
23. Approximate Erosion Control Device Quantities shall include updated quantities on sheet C1.51.
24. Erosion control measures shall be installed prior to beginning grading operations.
25. A construction entrance shall be provided at all proposed entrances to be utilized for erosion control purposes.
26. Street sweeping shall be performed as necessary to address material tracking from the site.
27. The location and elevation of the site emergency overflow(s) (EOF) shall be identified on the plans. All critical HP and LP shall be identified along with drainage arrows.
28. 2% minimum grades are required in all landscaped areas.
29. Provide the overall site composite Curve Number (CN) along with the impervious % on the area tabulation
30. Lowest floor levels shall be 1.0' above the EOF.
31. Silt Fence locations in NW corner of site should correctly reflect grading limits.
32. Soil borings/testing shall be provided in the area of infiltration features prior to building permit authorization.

**Sanitary Sewer, Water Main and Storm Sewer**

33. Final locations and sizes of Sanitary & Storm Sewer and Water main shall be reviewed with the final construction plans and approved by City Engineer.
34. Proposed water main as shown to be relocated for building addition 1 shall be privately owned and maintained.
35. Proposed CB-5 should be routed to Proposed CB-3 in lieu of connecting to existing CB-4 in Cedar Avenue.
36. Proposed CB-2 should be routed to SMH in lieu of connecting to existing CB-1 in Whitney Avenue.
37. Existing 18" storm sewer that runs thru proposed infiltration basin shall be relocated due to proposed ±4' of cut proposed above pipe for construction of infiltration basin.
38. Adjustment of Sanitary Sewer and Storm Sewer structures are required where grade changes are shown.
39. Remove references to unused detail plates from sheets C2.11- C2.13.

**Landcape and Natural Resources**

40. Restoration/Landscape plan should indicate required buffers and appropriate seed mixtures for infiltration area, aquatic bench and upland areas associated with any storm water basins.
41. Landscape plan should clearly indicate drainage and utility easements and property line.
42. No major tree plantings shall be located over any underground utilities. Clusters of trees shall be used near or around these areas instead of planting in a row. The Drainage and Utility Easement will require clearance around the underground utilities, or the expectation that trees may have to be removed for access when needed.
43. Plans show a sediment control log going through the infiltration basin through the eastern portion of the basin. Sediment controls should be around the entire basin and not through the basin to provide adequate protection during construction. Sediment controls placed at the base of infiltration basin slopes without erosion control on the basin slopes themselves is inadequate protection from sedimentation and clogging of the basin and does not comply with state or local standards.
44. Silt fence would provide more protection from equipment driving through the basin and improper material storage in the basin than sediment logs.
45. The treatment area appears to only address new impervious at the rear of the property. As this property is within the East Lake TMDL, an effort to treat some the existing hard surfaces should be considered.
46. The infiltration basin lies between a path & parking area and between a parking area & sporting fields. Add sidewalk or trail connection to redirect foot traffic around the infiltration basin, without cutting through as a short cut, to limit compaction and guarantee proper functioning of the infiltration basin. The City recommends changing the grass plantings in the basin to taller native plants or shrubs to discourage walking through the basin as a shortcut. Native plants would be consistent with the STEM focus of the school.
47. It is unclear that a mix of fescue will hold up to the conditions experienced within the basin. Additionally, mown grass tends to show more the sediment and trash collected in the basins over time.
48. Ensure tree removals do not jeopardize the School's Certified Forest status.
49. Quantities and locations of trees should be indicated on plan to show diversity of species. Some species appear on the Plant Schedule but not on the plan.

50. Some of the different details on the plans for the infiltration basins seem inconsistent. For example, some areas mention seeding, while others indicate the use of mulch (seed is unlikely to germinate with several inches of mulch covering it – that is part of the reason you use mulch – to guard against weeds germinating).
51. I would recommend against using seed to establish the basins. Seed provides a "fuzzier" less organized look for the basins. It makes it difficult to identify what is a weed and what is not. Shrubs are also a planting option for ease of maintenance. If seed is selected, a longer establishment maintenance schedule will be needed to keep the basin weed free and ensure vigorous growth; a year minimum after seeding is generally required. Also, timing for when seed will be installed will need to be indicated. There are certain times of year that installing native seed should be avoided.
52. Basins need to be kept off line (no water entering) until vegetation has been established. This timeline will be longer for seeded areas.
53. Staging of installation and protection of the area the basins are in needs more detail.
54. Shredded hardwood mulch should be used. Shredded hardwood much aids in the uptake of certain pollutants. Shredded hardwood mulch is better for plant health. Mulch should NOT be used if seeding; a blanket or hydro mulch should be used instead.
55. Absolutely no fabrics shall be installed in the basin: no protective weed barriers, no fabric over gravel around drain tile. Fabrics will clog will fine sediments. Socks around drain tile shall conform to Dakota County Low Impact Development Standard 2.44 p.7 http://www.dakotaswcd.org/pdfs/Dakota%20LID%20Standards%20Revised%2002-09-12.pdf.
56. A 3 year Maintenance plan is required from the proposed filtration basins.
    a. The property owner shall maintain healthy plants suitable for use in raingardens throughout the raingarden. The property owner shall replace dead or diseased vegetation with plants capable of tolerating conditions encountered in the raingardens.
    b. The raingarden shall be kept free of non-native invasive plant species and noxious weeds, including buckthorn.
    c. The overall areas of the raingarden shall not be reduced during the maintenance term.
    d. The raingarden shall be watered such that it receives 1 inch of water per week combined from rain and other sources during the first growing season.
    e. Fertilizers shall not be applied to any part of the raingarden.
    f. Insecticides and fungicides shall only be applied when damage from non-native species is of concern.
    g. Herbicides shall be limited to spot applications.
    h. The property owner may remove dried vegetation once a year in the spring prior to May 30th if desired.
    i. The property owner shall maintain at minimum a three inch layer of shredded hardwood mulch for the maintenance term.
    j. The raingarden must drain free of water within 48 hours after a rainstorm except for in times of frozen soils.
57. The property owner is responsible for locating all utilities prior to installation. The owner shall only hand dig within 2 feet of utility markings. The raingardens shall not be installed over any utilities.

City of Apple Valley

MEMO

Building Inspections

TO: Kathy Bodmer, Planner

FROM: George Dorn, Building Official

DATE: August 25, 2017

SUBJECT: 7500 Whitney Drive Cedar Park Elementary

- Separate sign permits are required.
- SAC determination is required from Met Council prior to permit issuance from the city.
- Geotechnical report boring log and Special Inspector Agreement is required prior to permit and soil corrections on site.
- The Department of Labor and Industry has jurisdiction with regards to plan review for the building and mechanical permits. The City of Apple Valley has a delegation agreement with the State of Minnesota to conduct the inspections for the Building, Mechanical and Electrical permits.
- The State of Minnesota Plumbing Division will conduct all plumbing, storm, sanitary and water review and do all required inspections.
- The plan set should be signed by the architect and engineer.