



PUYALLUP SCHOOL DISTRICT
ENVIRONMENTAL CHECKLIST
Project #25-01-16 - New Elementary Construction

A. BACKGROUND

1. Name of proposed project, if applicable:

New Elementary School, PSD Capital Project #25-01-16

2. Name of applicant:

Puyallup School District #3

3. Address and phone number of applicant and contact person:

**Brian Devereux
Director of Facilities Planning
302 – 2nd St SE
Puyallup, WA 98372**

4. Date checklist prepared:

June 9, 2017

5. Agency requesting checklist:

Puyallup School District #3 (the “District”)

6. Proposed timing or schedule (including phasing, if applicable):

**Construction: March 2018 – June 2019
Staff Move in: July 2019
School Start: September 2019**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Space will be allotted for four portable classrooms, but without any schedule for when these might be located at the site, if at all.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

**Geotechnical Site Investigation, Materials Testing & Consulting, Inc., November 15, 2016.
Fish and Wildlife Habitat Assessment, Soundview Consultants, May 15, 2017.
Traffic Impact Analysis, Transpo Group, June 2017.
Tree Conservation Plan, Weisman Design, March 8, 2017.
Site Plan, Coughlin Porter Lundeen Engineering, June 7, 2017.**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No.

10. List any governmental approvals or permits that will be needed for your proposal, if known.

Forest Practices Permit	WA Dept. of Natural Resources
Site Development Permit	Pierce County
Building Permit	Pierce County
NPDES Permit	WA Dept. of Ecology
School Design Review	Tacoma-Pierce County Health Department
Electrical Permit	Department of Labor and Industries

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

This project proposes to build a new elementary school of approximately 110,000 SF on a vacant wooded site of approximately 16.8 acres. The new school will have associated site amenities such as parking lots, bus drop-off, playgrounds, playfields and covered play areas. The school will have a kitchen and associated deliveries by truck. Some elements of the school will accommodate public uses in addition to their school function, such as the gymnasium, playfields and meeting spaces such as the library.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The address is 7911 144th Street East. It is on the north side of 144th Street East, in the Southwest quarter of the Southeast quarter of Section 17, Township 19 North, Range 4 East, Willamette Meridian, Pierce County, Washington. It is approximately 1.8 miles south of the Puyallup City limits and 1.2 miles west of Meridian Avenue East (SR 161).

B. ENVIRONMENTAL ELEMENTS

1. EARTH

- a. General description of the site (circle one); flat, rolling, hilly, steep slopes, mountainous, other:

Topography on the site slopes gently downward to the west with elevations ranging between approximately 490 feet and 470 feet above mean sea level.

- b. What is the steepest slope on the site (approximate percent slope?)

Approximately 10%.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat,

muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Typical site soil types, below plant and organic coverings, are typically weathered glacial till in the form of either silty sand (SM) or silty gravel with sand (GM), underlain by unweathered glacial till in the form of silty sand with gravel (SM). No known agricultural soils, or associated removal.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No known indications or history of unstable soils.

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

The existing site generally slopes from the east to the west. The proposed site will also slope from the east to the west, but at a shallower slope. As a result, generally speaking the eastern portion will require cut and western side of the development will require structural fill.

Most of the excavated material will be hauled offsite and fill material will be imported to the site. Overall the site will require 60,000 CY cut and 20,000 CY fill. Fill material will be directed by the on-site Geotechnical engineer during site work. Import structural fill will be from an approved source. Export material will be hauled off to an approved location.

All excavation and fill materials will be required by contract to be from legally permitted and authorized sites that have appropriate permits in place.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion could occur as a result of construction activities. However and Temporary Erosion Sedimentation Control (TESC) Plan and a Surface Water Pollution Prevention Plan (SWPPP) will be provided as part of the project design.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 50%.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The project will not be clearing the entire property, and only what is being required to develop the proposed program. The site disturbance will be greater than 1-acre, so it will be applying for an National Pollutant Discharge Elimination System (NPDES) permit, and will also be preparing a Surface Water Pollution Prevention Plan (SWPPP).

2. AIR

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Dust and dirt particles, as well as exhaust from typical construction vehicles may be present during the project construction. Only vehicle exhaust similar to what travels on public roads are anticipated after the project is completed.

- b. Are there any off-site sources of emission or odor that may affect your proposal? If so, generally describe.

Off-site sources of emissions or odor are limited to vehicular traffic on 144th Street E. We do not anticipate that emissions or odors will affect the proposed school.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Construction activities will comply with Northwest Clean Air Agency regulations, including reasonable controls such as applying water to suppress dust during dry weather, and vehicle washing and street cleaning to prevent dirt, mud and other debris deposits on public roadways.

3. WATER

a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

None.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

No.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Runoff from the paved driving and parking surfaces will be treated to Pierce County required standards, and then discharged to surface waters as allowed by current development codes.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Groundwater will not be withdrawn for drinking water or other purposes.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Sanitary Waste for the project will be collected and conveyed to the public sewer system located in 144th Street East.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters, If so, describe.

Surface water, including runoff from roofs, paving, and maintained landscaped areas will be captured in a combination of surface swales, catch basins and underground pipes. The runoff will be routed to an on-site storm drainage flow control (detention) facility which will slowly release runoff to the existing point of discharge, at rates allowed by the Pierce County development codes.

- 2) Could waste material enter ground or surface waters? If so, generally describe.

Waste materials are not anticipated to enter ground or surface waters.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Drainage will be collected and discharged from the site as allowed by the applicable Pierce County development codes, with the intention to mimic existing drainage patterns.

- d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The project will be providing all Pierce County required drainage improvements. This will include both water quality and flow control.

4. PLANTS

- a. Check the types of vegetation found on the site:
 deciduous tree: alder, maple, aspen, other
 evergreen tree: fir, cedar, pine, other
 shrubs
 grass
 pasture
 crop or grain
 Orchards, vineyards or other permanent crops.
 wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
 water plants: water lily, eel grass, milfoil, other
 other types of vegetation

Vegetation on the subject property is dominated by a semi-mature overstory of Douglas fir, Western red cedar, big-leaf maple, Western hemlock, red alder, and black cottonwood with an understory of vine maple, salmonberry, osoberry, western swordfern, bracken fern, stinging nettle, snowberry, and Himalayan blackberry.

- b. What kind and amount of vegetation will be removed or altered?

Existing trees and underbrush will be removed and replaced at the area of the proposed school building, parking, drives and play areas. Some larger trees will need to be removed in accordance with the Pierce County tree preservation requirements. Approximately 13 acres of landscape area will be altered and /or replaced with new landscape.

- c. List threatened or endangered species known to be on or near the site.

None known.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Lawn and planting areas around the new school will be planted with grass and with native and drought resistant plantings of shrubs and groundcover. New specimen trees will be planted on site where feasible and or required by local ordinance.

- e. List all noxious weeds and invasive species known to be on or near the site.

None known.

5. ANIMALS

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

A comprehensive list of birds and mammals observed onsite is included in the Fish and Wildlife Habitat Assessment by Soundview Consultants dated May 15, 2017.

Examples include:

Birds: hawk, heron, eagle, songbirds, other _____

Mammals: deer, bear, elk, beaver, other _____

Fish: bass, salmon, trout, herring, shellfish, other _____

- b. List any threatened or endangered species known to be on or near the site.

No threatened or endangered species protected under the Endangered Species Act (ESA) or other State or Federal regulations have been observed or known to be onsite.

Evidence suggests the pileated woodpecker has a presence within the site. The pileated woodpecker is a Washington State listed Candidate species, but is not a federally or state protected species.

- c. Is the site part of a migration route? If so, explain

Pacific Flyway.

- d. Proposed measures to preserve or enhance wildlife, if any:

The project has been designed to comply with all applicable tree conservation standards outline under Pierce County Code 18J.15.030 – Tree Conservation, including the proposed retention of 31.5% of the existing “significant trees” identified onsite which exceeds Pierce County’s minimum tree density requirements. Within these tree retention areas, existing standing snags and downed woody debris will also be retained to the greatest extent practicable in order to preserve the onsite pileated woodpecker habitat. New plantings will incorporate mostly native plants which will provide numerous habitat opportunities on site as well as educational value to the students.

Follow Best Management Practices recommended in the Fish and Wildlife Habitat Assessment by Soundview Consultants dated May 15, 2017.

- e. List any invasive animal species known to be on or near the site.

None known.

6. ENERGY AND NATURAL RESOURCES

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Natural gas for heating; electricity for cooling, lighting and plug loads.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

In accordance with the current WA Non-Residential Energy Code, the building will have continuous insulation at exterior walls, R-38 roof insulation, and insulated glazing. The mechanical system will include heat recovery. Lighting controls will include daylight harvesting and vacancy sensors.

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

1) Describe any known or possible contamination at the site from present or past uses.

None known.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid natural gas transmission pipelines located within the project area and in the vicinity.

None known.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Typical construction equipment and materials will be present on site during construction. The new school will store supplies consistent with normal operations of a school building.

4) Describe special emergency services that might be required.

None beyond standard police, fire, and medical services.

5) Proposed measures to reduce or control environmental health hazards, if any:

None anticipated.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Existing noise generators are mainly those associated with traffic traveling on 144th Street E. There are also residences and residential uses that may contribute to the background noise levels that exist adjacent to the site.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Short Term: Typical building and construction impacts during business hours, including truck traffic, heavy machinery, power tools and hand tools. Construction hours will be consistent with permitting parameters.

Long term: Typical noise commensurate with an elementary school including, bells, student voices, regular vehicle traffic, as well as building mechanical equipment. Mechanical equipment is located in the building or surrounded by a wall to attenuate sound. Noise will generally occur during normal school hours, though there is some use of the play fields by the community on the weekends.

- 3) Proposed measures to reduce or control noise impacts, if any:

The building's insulated envelope will provide noise attenuation for both students/staff and the surrounding uses. Mechanical equipment will be located inside the building in mechanical mezzanines, which will provide noise attenuation and limit impacts to adjacent uses.

Vehicular drives and play areas will generate typical noise levels for elementary schools during use. Play areas will not be lit for nighttime use and will be set back from the property edge, which will provide some noise attenuation to adjacent uses.

8. LAND AND SHORELINE USE

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe

The site is currently vacant. The proposed school will serve the adjacent residential uses.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

- c. Describe any structures on the site.

None.

- d. Will any structures be demolished? If so, what?

No.

- e. What is the current zoning classification of the site?

Moderate Density Single Family Residential (MSF). Elementary and Middle/Junior High Schools are permitted outright in this MSF zones.

- f. What is the current comprehensive plan designation of the site?

Moderate Density Single Family Residential (MSF) in the South Hill Community Plan, a component of the Pierce County comprehensive plan.

- g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Site is within the county's open space corridor.

- i. Approximately how many people would reside or work in the completed project?

Approximately 100 people will work in the school. The new school will have a designed capacity for up to 1,030 students.

- j. Approximately how many people would the completed project displace?

None.

- k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

There is no existing use. The proposed school is compatible with the existing surrounding single-family residential use, which is planned to continue per the South Hill Community Plan.

- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

Project will comply with applicable county open space corridor standards.

9. HOUSING

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

- c. Proposed measures to reduce or control housing impacts, if any:

Not applicable.

10. AESTHETICS

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed.

**Max. Height: 42' at Mechanical Penthouses
Exterior materials are concrete masonry veneer and painted cement fiberboard siding, fiberglass windows, and aluminum and glass storefront glazing.**

- b. What views in the immediate vicinity would be altered or obstructed?

There is potential that territorial views of the local valley may be impeded from some residences east of the site, but the majority of these views are already blocked by the existing trees on site.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

There will be a landscaped buffer around the site. The building is set back substantially from all property lines. The scale of the building will be articulated with patterning of the façade and fenestration.

11. LIGHT AND GLARE

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Site lighting will be designed to be contained on the site. The building will be illuminated when occupied and during the evening hours for security as needed, but the setback of the building will help to disperse any light from inside of the building before it reaches neighboring properties.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

Site lights will have cut off shields, and building lighting will be controlled by a system that will turn off building lights when not occupied or needed for security purposes.

12. RECREATION

- a. What designated and informal recreational opportunities are in the immediate vicinity?

South Hill Community Park is approximately 1/3 mile to the east of the subject property along 144th Street E, and contains 2 soccer fields, playgrounds, walking trails and picnic tables. Nathan Chapman trail extends north from South Hill Park and connects with Heritage Recreation Center, that includes lighted playfields, a big toy and restroom facilities.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The new school will include a playfield and playground areas, which are anticipated to be available for community use during daylight hours, outside of school hours.

13. HISTORIC AND CULTURAL PRESERVATION

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

No.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None known.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The Washington Department of Archaeology and Historic Preservation (DAHP) WISAARD site (Washington Information for Architectural and Archaeological Records Data) was checked May 4, 2017 for any record of cultural or historic resources on or near the project site. None were identified.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

In the event that suspected historic or cultural artifacts, or objects of suspected archaeological value are discovered during the course of site development, activity in the immediate area will be stopped until a professional archaeologist can assess the discovery. If the professional archaeologist determines the discovery is archaeological material, the Washington State Department of Archaeology and Historic Preservation (DAHP) procedures would be followed.

14. TRANSPORTATION

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any

The project will be accessed from 144th Street East, between 78th Avenue East and 80th Avenue East. 144th Street East is paved two-lane road with gravel shoulders.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No. The closest routes are Pierce Transit Bus Route 402 (approximately 1.5 miles to the east) and Route 4 (approximately 1.75 miles to the north). The site will be served by school busses for students.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

The existing site has no parking spaces. The proposed project would add 150 parking spaces and eliminate no parking spaces.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Frontage improvements will include a center turn lane within 144th St E, in concert with Pierce County review and approval. Pedestrian connection improvements to existing pedestrian facilities to the east (on the north side of 144th St E) as well as a crosswalk across 144th St E near the 80th Ave E private drive to connect to the neighborhood to the south.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe

No.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The proposed project is anticipated to generate approximately 1,330 daily vehicular trips. Peak volumes were generally occur just before the proposed start time of the school (830 AM), the peak hour is anticipated to be from 745-845 AM. The percentage of trucks is expected to be 2 percent or less, which is based on traffic count data collected in the immediate vicinity.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

- h. Proposed measures to reduce or control transportation impacts, if any:

Improvements will be made along the frontage of the school site including a center turn lane within 144th St E. The future school will supervise a proposed new crosswalk across 144th St E near 80th Ave E to support Safe Routes to Schools, allowing Pierce County to establish a school speed zone along 144th St E related to the new school.

The applicant will work with Pierce County staff to consider additional pedestrian improvements that may potentially connect to existing sidewalk at the 144th St E / 74th Ave Ct E three-way intersection, that may be afforded within the scope and budget for this project. School bus service will be provided to students that reside outside the designated walk area for the new school, as long as they live within attendance area boundary.

15. PUBLIC SERVICES

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

The site is served by the Pierce County Fire and Sheriff Departments. The proposal would require the level of public services typical of an elementary school building of this size.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

The project site and building are designed in accordance with CPTED (Crime Prevention Through Environmental Design) and to accommodate fire truck access to the building. The new school building will be equipped with security systems, fire detection and alarms, and a complete wet sprinkler fire protection system. Battery backup will provide an emergency power source for egress lighting and alarm systems. Fire flow requirements will be met, as will requirements for emergency responder radio reception.

16. UTILITIES

- a. Circle utilities currently available at the site:
electricity, natural gas, water, refuse service, telephone, sanitary sewer ~~septic system, other~~

Franchise communication utilities are also available to the site.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

**Gas – Puget Sound Energy
Water – Firgrove Mutual
Storm – private**

**Electricity – Puget Sound Energy
Sewer – Pierce County**

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Brian Devereux

Name of signee: Brian Devereux

Position and Agency/Organization: Facilities Planning Director, Puyallup School District

Date Submitted: 6/9/2017