



DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
ENVIRONMENTAL COORDINATOR
11511 MAIN ST., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 10-103543-LA
Project Name/Address: Clearwire - Lochmoor, 626 174th Place NE
Planner/Phone: Mike Upston/ 425-452-2970
Minimum Comment Period: 4/1/10 (5:00 pm)

Materials included in this Notice:

- Blue Bulletin
- Checklist
- Vicinity Map
- Plans
- Other: Staff Report

ENVIRONMENTAL CHECKLIST

10/9/2009

Thank you in advance for your cooperation and adherence to these procedures. If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call Development Services (425-452-6800) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service). ...

INTRODUCTION**Purpose of the Checklist:**

The State Environmental Policy Act (SEPA), Chapter 43.21c RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City of Bellevue identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the City decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer or if a question does not apply to your proposal, write "do not know" or "does not apply." Giving complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the Planner in the Permit Center can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. Include reference to any reports on studies that you are aware of which are relevant to the answers you provide. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

Use of a Checklist for Nonproject Proposals: *A nonproject proposal includes plans, policies, and programs where actions are different or broader than a single site-specific proposal.*

For nonproject proposals, complete the Environmental Checklist even though you may answer "does not apply" to most questions. In addition, complete the Supplemental Sheet for Nonproject Actions available from Permit Processing.

For nonproject actions, the references in the checklist to the words *project*, *applicant*, and *property* or *site* should be read as *proposal*, *proposer*, and *affected geographic area*, respectively.

Attach an 8 ½" x 11 vicinity map which accurately locates the proposed site.

Received
JAN 29 2010
Permit Processing

BACKGROUND INFORMATION

Property Owner: **Puget Sound Energy**

Proponent: **ClearWire, LLC**

Contact Person: **Steven W. Topp, AICP**

(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: **12566 SW Bridgeview Ct. – Tigard, OR**

Phone: **503-708-7337**

Proposal Title: **ClearWire WA-SEA0655-D (Lochmoor Bellevue)**

Proposal Location: **RoW adjacent to 626 174th Place NE**

(Street address and nearest cross street or intersection) Provide a legal description if available.

Please attach an 8 ½" x 11" vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal's scope and nature:

1. General description: **Replace existing 38.5' power pole with 53.5' pole, install antennas and equipment.**
2. Acreage of site: **public right of way – no acreage specified**
3. Number of dwelling units/buildings to be demolished: **none**
4. Number of dwelling units/buildings to be constructed: **none**
5. Square footage of buildings to be demolished: **0**
6. Square footage of buildings to be constructed: **0**
7. Quantity of earth movement (in cubic yards): **~3**
8. Proposed land use: **Wireless Communication Facility**
9. Design features, including building height, number of stories and proposed exterior materials:
Replacement pole will be glue-lam composition, 53.5' in height. Antennas flush mounted to top of pole. Equipment on ground to the north of pole.
10. Other

Estimated date of completion of the proposal or timing of phasing:

Construction should commence within 30 days of permitting and approvals, completion within 60 days.

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

No additions or expansions are currently anticipated. However, as service needs associated with this area increase, expansion/addition at this existing site would be primary consideration.

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

None

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

Application has been submitted for Administrative CUP and a RoW permit.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

City of Bellevue Administrative CUP and RoW permit. Approval by Puget Sound Electric.

Please provide one or more of the following exhibits, if applicable to your proposal.
(Please check appropriate box(es) for exhibits submitted with your proposal):

- Land Use Reclassification (rezone) Map of existing and proposed zoning
- Preliminary Plat or Planned Unit Development
Preliminary plat map
- Clearing & Grading Permit
Plan of existing and proposed grading
Development plans
- Building Permit (or Design Review)
Site plan
Clearing & grading plan
- Shoreline Management Permit
Site plan

A. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site: Flat Rolling Hilly Steep slopes Mountains Other
- b. What is the steepest slope on the site (approximate percent slope)? **45%**
- c. What general types of soil are found on the site (for example, clay, sand, gravel, peat, and muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Seattle silty loam

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

yes, the slope has demonstrated instability.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source

of fill.

No fill involved. Existing pole will be replaced with new pole, which will involve minimal grading over a 3' x 3' surface area. The equipment cabinet will be placed on a slab on grade, with some depression into the ground area to comply with the 30" above grade limitation. Access from the road area to the pole will be via (portable) ladder brought by technician.

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

Possibility, but all reasonable care will be taken.

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

The proposal is in the RoW, and therefore the increase in overall % of coverage will be insignificant

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

An erosion control plan will be submitted for review and approval prior to construction.

2. AIR

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

Construction vehicle emissions will occur during construction, but fairly minimal. After the facility is operating, no air emissions occur.

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

none

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

none

3. WATER

- a. Surface

- (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.

no "surface water bodies", but the site is near drainage ditches and swales.

- (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.

Not within 200' of a surface water body.

- (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.

none

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

none

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

not that applicant is aware of.

- (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.

none

b. Ground

- (1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.

no

- (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.

none

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.

The minimal amount of runoff that will come from the replacement pole and equipment (~49 s.f. surface area), will flow to the surrounding ground/grass and into the drainage system.

(2) Could waste materials enter ground or surface waters? If so, verbally describe.

no waste materials created from this installation.

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

none

4. Plants

a. Check or circle 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

wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

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

minimal grass surrounding the existing pole.

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

none

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

The equipment cabinet is located at the top of a slope, with a fence behind. The equipment cabinet will be no more than 30" above grade in limited ground space. The application does not address landscaping of the cabinet, due to the additional need for a noise barrier. The applicant will either install a noise barrier with landscaping or place the equipment inside a faux rock/boulder – final determination to be made as part of the land use review process.

5. ANIMALS

a. Check or circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

Birds: hawk, heron, eagle, songbirds, other: **misc. birds**

Mammals: deer, bear, elk, beaver, other: **squirrels, field mice**

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

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

None

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

Not that applicant is aware of

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

Wildlife protection guidelines with respect to wireless facilities favor monopole design, with flush mounting if feasible. The proposed design is substantially the preferred design.

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 need? Describe whether it will be used for heating, manufacturing, etc.

This facility only requires electricity.

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 the proposal? List other proposed measures to reduce or control energy impacts, if any:

No large expenditures of energy associated with the facility. No specific features identified.

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.

No

(1) Describe special emergency services that might be required.

Remote possibility of fire services.

(2) Proposed measures to reduce or control environmental health hazards, if any.

No health hazards identified, no measures proposed.

b. Noise

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

Ambient traffic noise.

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

The equipment cabinet has an HVAC unit that comes on automatically based upon the heat exposure of the unit. The ambient noise level at this location is 67 dBA. A noise study prepared for this site finds that the noise level at the property line will be 49 dBA, and recommends a noise barrier to reduce this to 44 dBA. This will need to be incorporated into the drawings.

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

The applicant will incorporate a recommended sound barrier into the design of the site in concert with the final determination of landscaping/fencing or placement of the cabinet inside a faux rock/boulder.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

RoW with public facilities, surrounding use is Residential.

b. Has the site been used for agriculture? If so, describe.

No

c. Describe any structures on the site.

Existing 38.5' utility pole

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

Existing 38.5' utility pole

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

R-3.5

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

Single Family Residential

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 an "environmentally sensitive" area? If so, specify.

Not that applicant is aware of.

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

0

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

0

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

None needed, none proposed.

i. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **Utilizing an existing power pole, and swapping out with a taller pole that meets separation requirements between the power lines and the antennas falls within the hierarchy of preferred sites under the City's wireless communications facility code section. The antennas will be painted brown to match the replacement pole, and all wires/cables will be internal to the pole. The equipment cabinet will be either screened by a wood fence and landscaping or placed**

inside a faux rock/boulder.

9. Housing

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

0

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

0

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

None needed, none proposed.

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?

53.5'. Pole will be a glue-lam material.

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

The existing RoW has numerous trees aligning the edge. No views will be obstructed by the addition of 15' to the existing utility pole's height of 38.5'

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

Applicant is proposing to increase the height by only 15', the minimum necessary to achieve coverage objective. The antennas will be flush-mounted to the pole and painted brown to match. The equipment cabinet will be placed behind a fence/landscape screen or inside a faux rock/boulder. Coax/Wiring will be internal to the pole.

11. Light and Glare

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

None

- 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 or glare impacts, if any:

None needed, none proposed.

12. Recreation

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

**Lake Sammamish is to the east. A small wooded area is located ¼ mile to the NW.
Crossroads Park, Ivanhoe Neighborhood Park, Tam Oshanter Park are nearby.**

- 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:

**Locating antenna on a replacement utility pole in the RoW and painting to match.
Placing equipment cabinet behind fence/landscaping or inside faux rock/boulder.**

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No

- b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.

None

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

Locating antenna on a replacement utility pole in the RoW and painting to match. Placing equipment cabinet behind fence/landscaping or inside faux rock/boulder.

14. Transportation

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

Facility is in RoW of Northup Way.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

Yes

- c. How many parking spaces would be completed project have? How many would the project eliminate?

None

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

No

- e. Will the project 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? If known, indicate when peak volumes would occur.

After construction complete, site will be visited 1-2 times per YEAR for maintenance.

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

None

15. Public Services

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

No

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

None

16. Utilities

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

All available – only electricity required for the facility.

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.

PSE will provide electricity directly from the pole on which the equipment is located.

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.....

Date Submitted... **01/27/10**



ACOUSTICS

ACOUSTICS

ACOUSTICS

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December 7, 2009

Mr. Steven Topp
For Clearwire
4400 Carillon Point
Kirkland, WA 98033

Re: Acoustical Report – Clearwire WA-SEA0655 Lochmoor Bellevue
Site: Adjacent to 626 174th Place NE, Bellevue, WA 98008

Dear Steven,

This report presents a noise survey performed in the immediate vicinity of the proposed Clearwire telecommunications facility adjacent to 626 174th Place NE in Bellevue, Washington. This noise survey extends from the proposed equipment to the nearest properties. The purpose of this report is to document the existing conditions and the impacts of the acoustical changes due to the proposed equipment. This report contains data on the existing and predicted noise environments, impact criteria and an evaluation of the predicted sound levels as they relate to the criteria.

Ambient Conditions

Existing ambient noise levels were measured on site with a Larson-Davis 824 spectrum analyzer sound level meter on December 3, 2009. Measurements were conducted as close to the proposed location as possible and the property lines in accordance with the State of Washington code for Maximum Environmental Noise Levels WAC 173-60-020. The average ambient noise level was 67 dB(A), due to traffic noise on Northup Way. The weather during the measurements was clear and the roads were dry.

Code Requirements

The site is located in a Right of Way within the City of Bellevue Zoning jurisdiction within a Residential district. The receiving properties are all zoned S-1.

The proposed new equipment consists of equipment support cabinets, which are expected to run 24 hours a day.

Bellevue City Code Chapter 9.18.020 identifies S-1 as Class A EDNA. Under Bellevue City Code 9.18.030, noise from equipment on a Class A EDNA property is limited as follows:

Class A EDNA Receiver: Noise is limited to 55 dB(A) during daytime hours. During nighttime, defined as the hours between 10 p.m. and 7 a.m., maximum sound levels are reduced by 10 dB(A) for receiving properties within Class A EDNA's. Since the support cabinets are expected to operate 24 hours a day, they must meet the 45 dB(A) nighttime limit.

SSA Acoustics, LLP
222 Etruria Street, Ste 100
Seattle, Washington 98109
t. 206.839.0819 f. 206.839.0824

Received
JAN 29 2010
Permit Processing

Predicted Equipment Sound Levels

24-Hour Operation Equipment

The proposed equipment includes one Clearwire DDB Unlimited cabinet. Clearwire cabinets utilize the DDB Unlimited IQ-400VS cabinet cooling units, which produced 55 dB(A) at 5 feet¹.

To predict equipment noise levels at the receiving properties, this survey used the methods established by ARI Standard 275-97. Application factors such as location, height, and reflective surfaces are accounted for in predicting the sound level at the nearest receivers.

The nearest receiving property is 4 feet west of the equipment location. The proposed equipment is to be within the right of way of Norhtup Way at the top of an embankment on a 3 feet by 4 feet concrete slab. The predicted sound level at the nearest property is shown in Table 1 below.

Table 1
Application Factors and Predicted Noise Levels
Proposed New Equipment

Line	Application Factor	North
1	Combined Sound Pressure Level at 5 ft. (dB(A)), Lp1	55
2	Distance Factor (DF) Inverse-Square Law (Free Field): $DF = 20\log(d1/d2)$	+1 (4 ft)
3	Noise Barrier Effect of Cabinet & Existing Cedar Fence HVAC unit on east side of cabinet & existing cedar plank fence	-7
4	New Equipment Sound Pressure Level at Receiver, Lpr (Add lines 1 – 3)	49

As shown in Table 1, the combined sound pressure level from the proposed equipment cabinets at the nearest receiving property is 49 dB(A) which exceeds the 45 dB(A) code limit. To meet the Bellevue City noise code the following mitigation must be implemented.

¹ Noise data provided by DDB Unlimited for the IQ-400VS cooling units.

Mitigation: Noise Barrier

- Improve or add a noise barrier at one of the locations shown in Figure 1. Option 1 is a noise barrier improvement to the existing fence and Option 2 is a new noise barrier to be constructed around the proposed equipment.

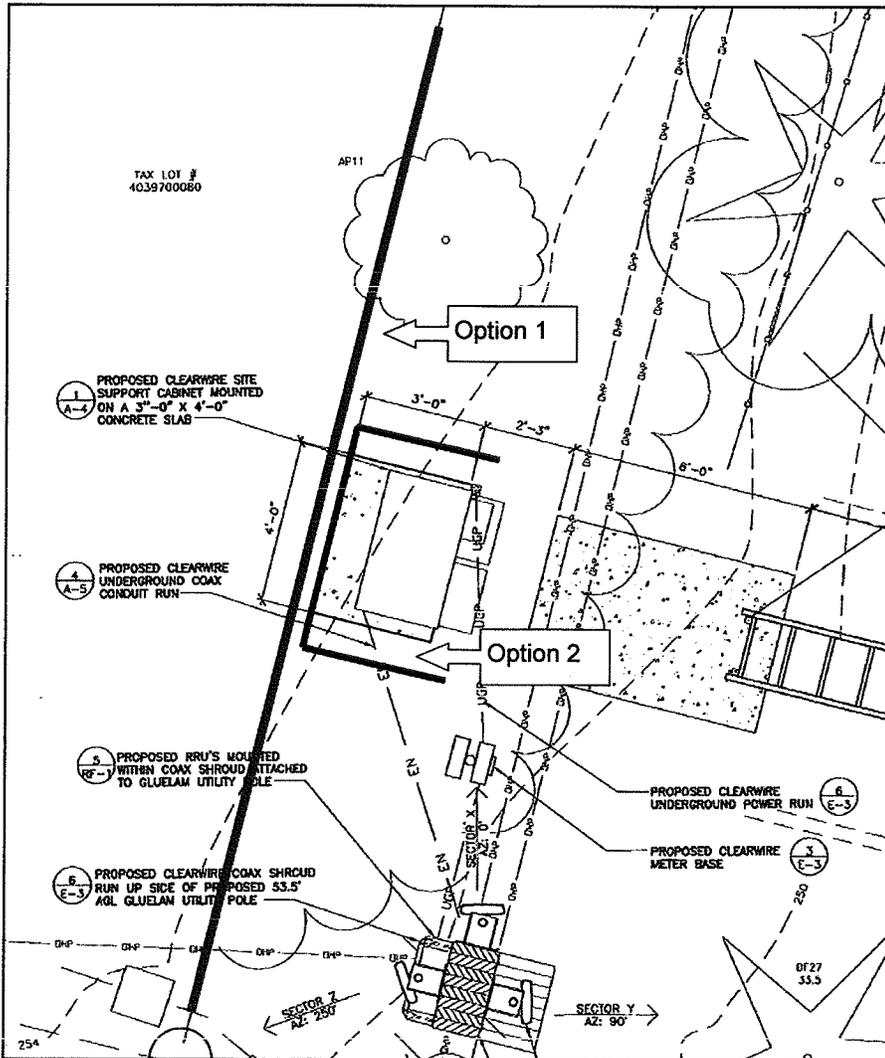


Figure 1: Barrier Improvement Options

- The top of the noise barrier shall be 6'-0" above grade.
- Option 1: Add 3/4-inch plywood to exterior for length shown in red, this can include additional aesthetic improvements over the 3/4-inch plywood (such as new cedar boards, paint, or other changes that do not require creating open holes in the plywood).
- Option 2: Construct the noise barrier of a solid material, shown in blue, that will meet the following transmission loss requirements:

Table 1
Transmission Loss Requirements (2.5 lbs/sq ft)

Frequency (Hz)	63	125	250	500	1000	2000	4000
TL (dB)	13	16	21	25	21	24	33

Materials that have a surface mass of 2.5 lbs/sq ft will meet these requirements. The following are common barrier materials that meet the mass and transmission loss requirements:

- 3/4-inch exterior grade plywood
 - 16-gauge sheet metal
 - HardiPanel Vertical Siding or HardieBacker 1/2-inch
 - Durock 1/2-inch Cement Board
- Barrier shall be continuous, all gaps or joints shall be sealed with 20-year non-hardening caulk.
 - Maximum bottom gap is 1-inch for drainage.

Table 3
 Application Factors and Predicted Noise Levels
 Proposed New Equipment with Improved Noise Barrier

Line	Application Factor	North
1	Combined Sound Pressure Level at 5 ft. (dB(A)), Lp1	55
2	Distance Factor (DF) Inverse-Square Law (Free Field): $DF = 20\log(d1/d2)$	+1 (4 ft)
3	Noise Barrier Effect of Cabinet & Modified Noise Barrier HVAC unit on east side of cabinet & either Option 1 or Option 2 noise barrier installation or modification	-12
4	New Equipment Sound Pressure Level at Receiver, Lpr (Add lines 1 – 3)	44

As shown in Table 1, the combined sound pressure level from the proposed equipment cabinets at the nearest receiving property is 44 dB(A) which meets the 45 dB(A) code limit.

Please contact us if you have any questions or require further information.

Sincerely,
 SSA Acoustics, LLP



Erik Miller-Klein
 Acoustical Consultant

Clearwire – Lochmoor
626 174th Place NE
10-103543-LA

