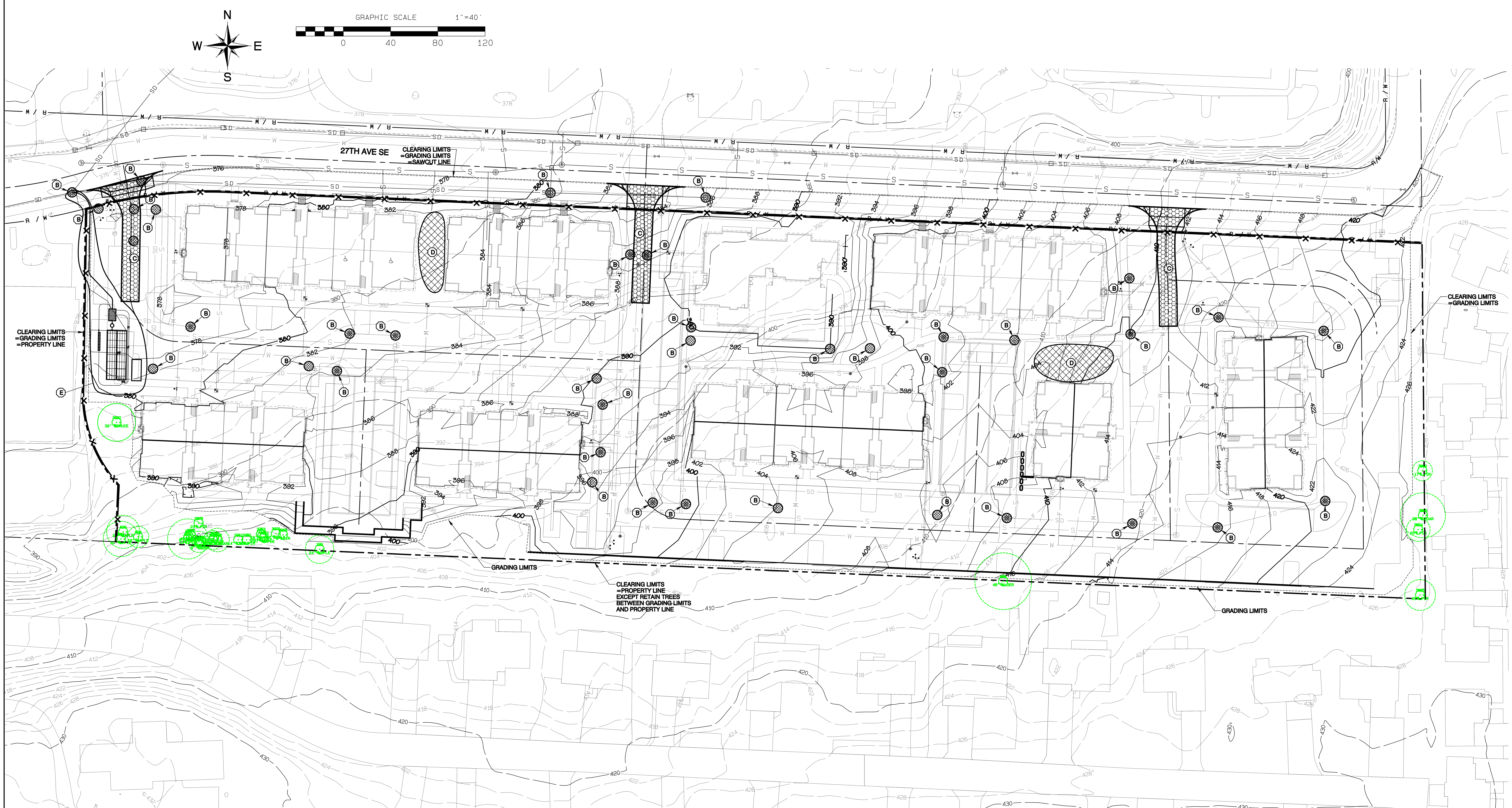
Bradley Heights

Section 3, Township 19 N, Range 4 E, Willamette Meridian, Pierce County, Washington

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic



ESC KEY NOTES

- (A) INSTALL SILT FENCE PER STD 02.03.02, SHEET C-6
- (B) INSTALL BAG FILTER, SEE DETAIL SHEET C-6
- (C) INSTALL CONSTRUCTION ENTRANCE, SEE STD 05.01.01, SHEET C-6
- (D) STOCKPILE AREA
- (E) BAKER TANK SYSTEM WITH SAND FILTER AND RECIRC.

APPROVED

BY: ____________
CITY OF PUYALLUP
DEVELOPMENT SERVICES

DATE: ____________

NOTE:

THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.

THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.

FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE ENGINEERING SERVICES MANAGER.

2/22/2024
ROBERT A. TRIVITT
STATE OF WASHINGTON
43715
REGISTERED PROFESSIONAL ENGINEER

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

JOB NO: 3227
DATE: February 22, 2024
DESIGNED BY: Rob Trivitt
DRAWN BY: Rob Trivitt
CHECKED BY: Paul Green
APPROVED BY: Paul Green

AZURE | GREEN CONSULTANTS
+feasibility +planning +engineering +surveying
409 East Pioneer, Suite A - Puyallup, WA 98372 phone: 253.770.3144 fax: 253.770.3142

TESC Plan

Bradley Heights

Timberlane Partners
1816 11th Ave Unit C
Seattle, WA, 98122
Phone
Fax

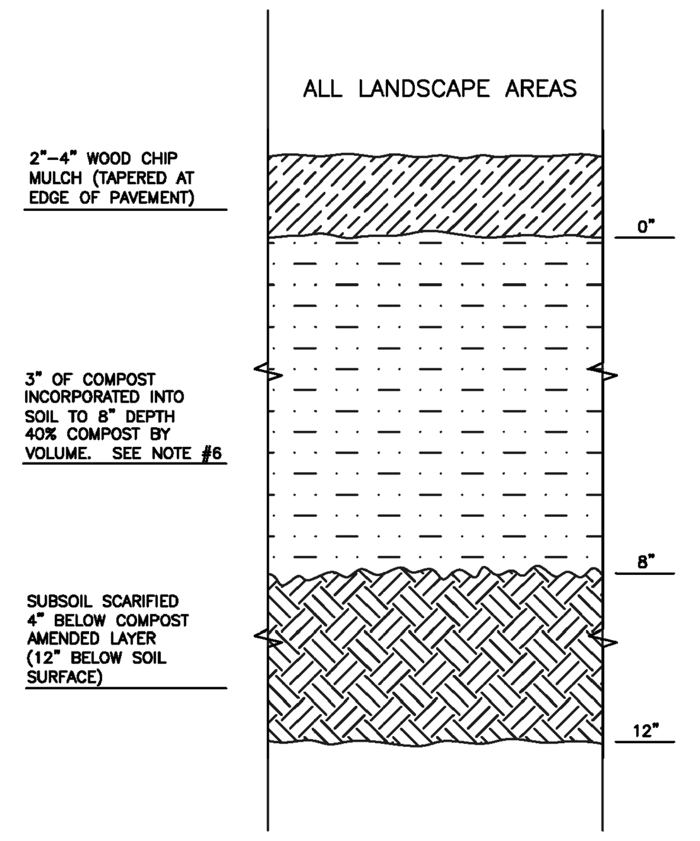
DRAWING

C-5

SHEET 12
OF 43

Bradley Heights

Section 3, Township 19 N, Range 4 E, Willamette Meridian, Pierce County, Washington



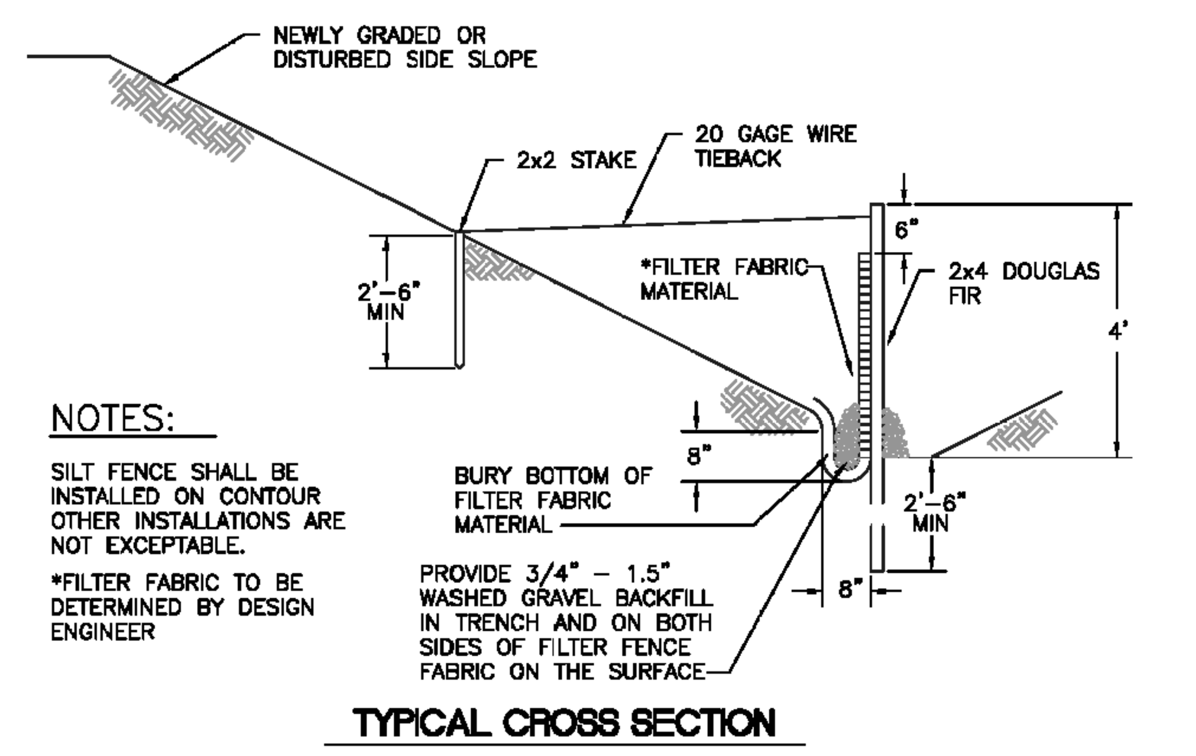
NOTES:

1. ALL SOIL AREAS DISTURBED OR COMPACTED DURING CONSTRUCTION, AND NOT COVERED BY BUILDINGS OR PAVEMENT, SHALL BE AMENDED WITH COMPOST AS DESCRIBED BELOW.
2. SUBSOIL SHOULD BE SCARIFIED (LOOSENED) 4 INCHES BELOW AMENDED LAYER, TO PRODUCE 12-INCH DEPTH OF UN-COMPACTED SOIL, EXCEPT WHERE SCARIFICATION WOULD DAMAGE TREE ROOTS OR AS DETERMINED BY THE ENGINEER. SEE NOTE BELOW REGARDING PLANTING STEPS FOR STREET TREES.
3. COMPOST SHALL BE TILLED IN TO 8 INCH DEPTH INTO EXISTING SOIL, OR PLACE 8 INCHES OF COMPOST-AMENDED SOIL, PER SOIL SPECIFICATION.
4. PLANTING BEDS SHALL RECEIVE 3 INCHES OF COMPOST TILLED IN TO 8-INCH DEPTH, OR MAY SUBSTITUTE 8" OF IMPORTED SOIL CONTAINING 35-40% COMPOST BY VOLUME. MULCH AFTER PLANTING, WITH 4 INCHES OF ARBORIST WOOD CHIP MULCH OR APPROVED EQUAL (6" OF LOOSE WOOD CHIPS AT THE TIME OF PLANTING TO ALLOW SETTLING TO 4").
5. SETBACKS: TO PREVENT UNEVEN SETTLING, DO NOT COMPOST-AMEND SOILS WITHIN 3 FEET OF UTILITY INFRASTRUCTURES (POLES, VAULTS, METERS ETC.). WITHIN ONE FOOT OF PAVEMENT EDGE, CURBS AND SIDEWALKS SOIL SHOULD BE COMPACTED TO APPROXIMATELY 95% PROCTOR TO ENSURE A FIRM SURFACE.
6. SEE SECTION 8.2(B) OF THE VMS FOR SOIL AMENDMENT AND INSTRUCTION PROCEDURES FOR STREET TREE PLANTER STRIPS. ALL STREET TREE PLANTER STRIPS SHALL RECEIVE 40% COMPOST AMENDED SOIL TO THE FULL DEPTH OF THE STREET TREE ROOTBALL.

CITY OF PUYALLUP
DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

SOIL AMENDMENT AND DEPTH

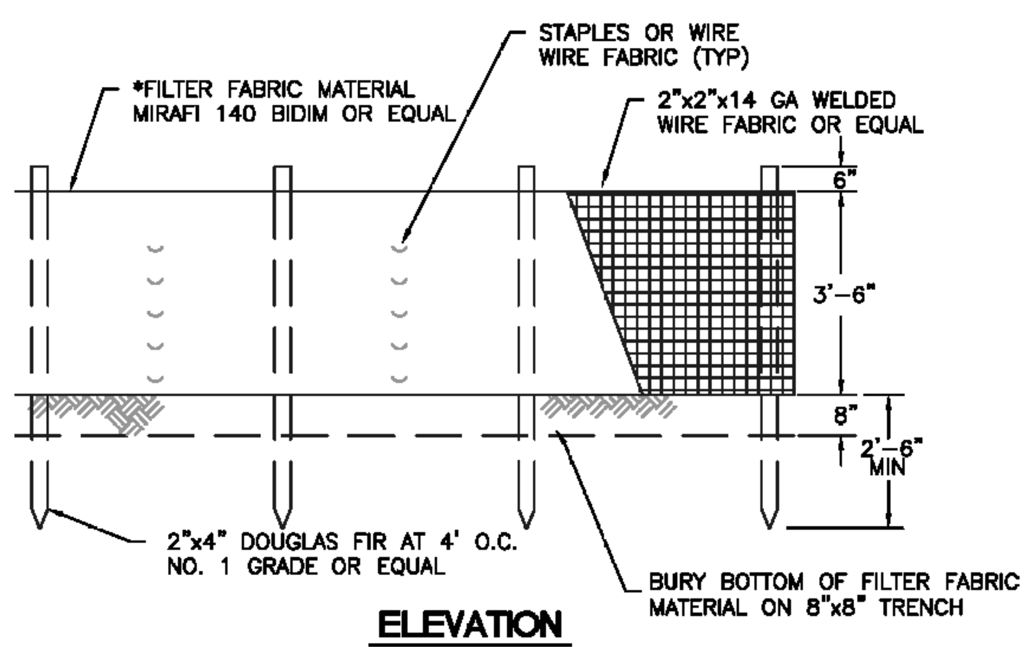
CITY STANDARD 01.02.08a



NOTES:

SILT FENCE SHALL BE INSTALLED ON CONTOUR OTHER INSTALLATIONS ARE NOT EXCEPTABLE.

*FILTER FABRIC TO BE DETERMINED BY DESIGN ENGINEER



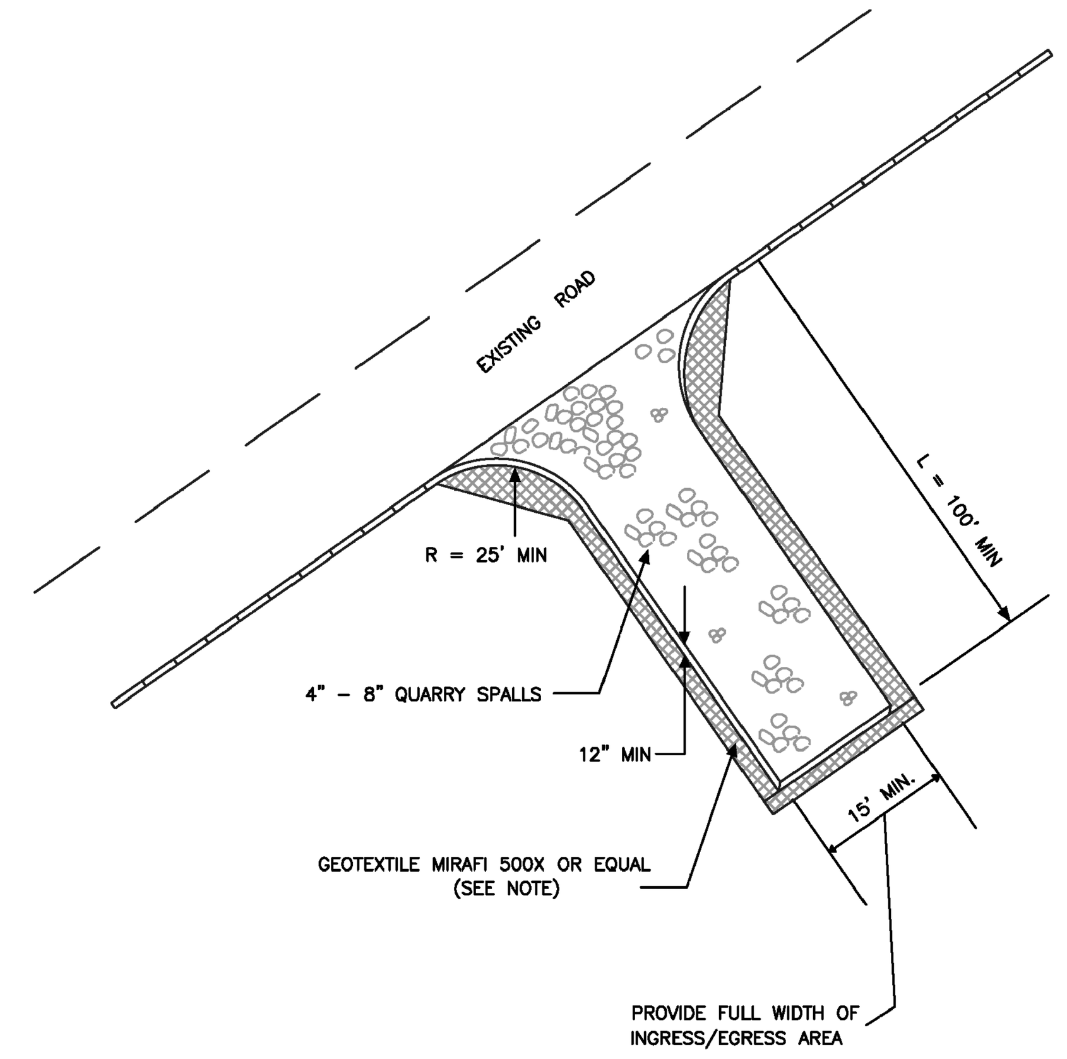
CITY OF PUYALLUP
DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

SILTATION FENCE

CITY STANDARD 02.03.02

NOTE:

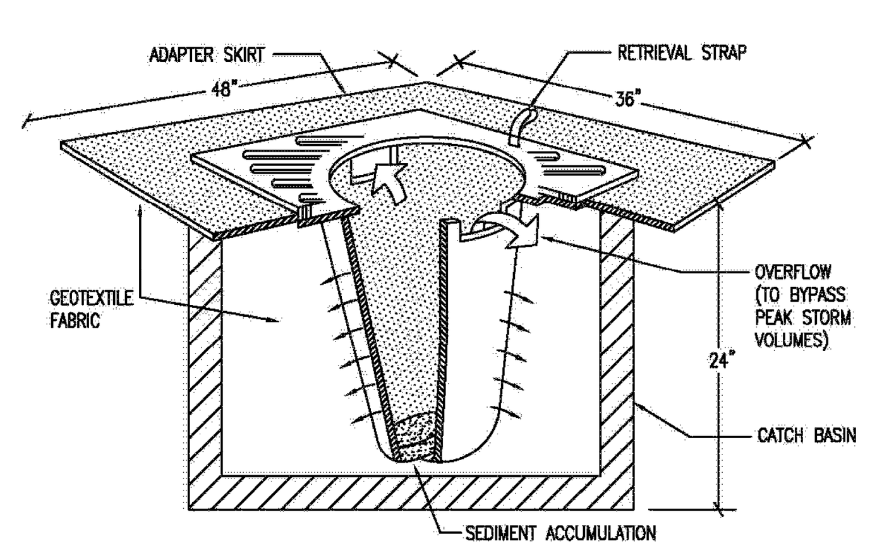
1. GEOTEXTILE MIRAFI 500 X OR APPROVED EQUAL SHALL BE PLACED UNDER THE ENTIRETY OF THE TEMPORARY ENTRANCE.
2. ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY TO MAINTAIN PROPER FUNCTION OF THE PAD.
3. IF THE PAD DOES NOT ADEQUATELY REMOVE THE MUD FROM THE VEHICLE'S WHEELS, THE WHEELS SHALL BE HOSED OFF BEFORE THE VEHICLE ENTERS A PAVED STREET. THE WASHING SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK AND WASH WATER SHALL DRAIN TO A SEDIMENT RETENTION FACILITY OR THROUGH A SILT FENCE.



CITY OF PUYALLUP
DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

TEMPORARY CONSTRUCTION ENTRANCE

CITY STANDARD 05.01.01



INLET PROTECTION NOTES:

1. FILTERS SHALL BE INSPECTED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN 1/3 FULL.

BAG FILTER

NOT TO SCALE

Figure 2 - 20. Catchbasin Filter

GRADING, EROSION & SEDIMENTATION CONTROL NOTES:

1. All work in City right-of-way requires a permit from the City of Puyallup. Prior to any work commencing, the general contractor shall arrange for a preconstruction meeting at the Development Services Center to be attended by all contractors that will perform work shown on the engineering plans, representatives from all applicable Utility Companies, the project owner and appropriate City staff. Contact Engineering Services to schedule the meeting (253) 841-5568. The contractor is responsible to have their own approved set of plans at the meeting.

2. After completion of all items shown on these plans and before acceptance of the project, the contractor shall obtain a punch list prepared by the City s inspector detailing remaining items of work to be completed. All items of work shown on these plans shall be completed to the satisfaction of the City prior to acceptance of the water system and provision of sanitary sewer service.

3. All materials and workmanship shall conform to the Standard Specifications for Road, Bridge, and Municipal Construction (hereinafter referred to as the Standard Specifications), Washington State Department of Transportation and American Public Works Association, Washington State Chapter, latest edition, unless superseded or amended by the City of Puyallup City Standards for Public Works Engineering and Construction (herinafter referred to as the City Standards).

4. A copy of these approved plans and applicable city developer specifications and details shall be on site during construction.

5. Any revisions made to these plans must be reviewed and approved by the developer s engineer and the city engineer prior to any implementation in the field. The City shall not be responsible for any errors and/or omissions on these plans.

6. The contractor shall have all utilities verified on the ground prior to any construction. Call (811) at least two working days hours in advance. The owner and his/her engineer shall be contacted immediately if a conflict exists.

7. All limits of clearing and areas of vegetation preservation as prescribed on the plans shall be clearly flagged in the field and observed during construction.

8. All required sedimentation and erosion control facilities must be constructed and in operation prior to any land clearing and/or other construction to ensure that sediment laden water does not enter the natural drainage system. The contractor shall schedule an inspection of the erosion control facilities PRIOR to any land clearing and/or other construction. All erosion and sediment facilities shall be maintained in a satisfactory condition as determined by the City, until such time that clearing and/or construction is completed and the potential for on-site erosion has passed. The implementation, maintenance, replacement, and additions to the erosion and sedimentartion systems shall be the responsibility of the permitee.

9. The erosion and sedimentation control system facilities depicted on these plans are intended to be minimum requirements to meet anticipated site conditions. As construction progresses and unexpected or seasonal conditions dictate, facilities will be necessary to ensure complete siltation control on the site. During the course of construction, it shall be the obligation and responsibility of the permittee to address any new conditions that may be created by his activities and to provide additional facilities, over and above the minimum requirements, as may be needed to protect adjacent properties, sensitive areas, natural water courses, and/or storm drainage systems.

10. Approval of these plans is for grading, temporary drainage, erosion and sedimentation control only. It does not constitute an approval of permanent storm drainage design, size or location of pipes, restrictors, channels, or retention facilities.

11. Any disturbed area which has been stripped of vegetation and where no further work is anticipated for a period of 30 days or more, must be immediately stabilized with mulching, grass planting, or other approved erosion control treatment applicable to the time of year in question. Grass seeding alone will be acceptable only during the months of April through September inclusive. Seeding may proceed outside the specified time period whenever it is in the interest of the permittee but must be augmented with mulching, netting, or other treatment approved by the City.

12. In case erosion or sedimentation occurs to adjacent properties, all construction work within the development that will further aggravate the situation must cease, and the owner/contractor will immediately commence restoration methods. Restoration activity will continue until such time as the affected property owner is satisfied.

13. No temporary or permanent stockpiling of materials or equipment shall occur within critical areas or associated buffers, or the critical root zone for vegetation proposed for retention.

PLASTIC COVERING NOTES:

1. Plastic sheeting shall have a minimum thickness of 6 mils and shall meet the requirements of the STATE STANDARD SPECIFICATIONS Section 9-14.5.
2. Covering shall be installed and maintained tightly in place by using sandbags or tires on ropes with a maximum 10-foot grid spacing in all directions. All seams shall be taped or weighted down full length and there shall be a least a 12 inch overlap of all seams.
3. Clear plastic covering shall be installed immediately on areas seeded between November 1 and March 31 and remain until vegetation is firmly established.
4. When the covering is used on un-seeded slopes, it shall be kept in place until the next seeding period.
5. Plastic covering sheets shall be buried two feet at the top of slopes in order to prevent surface water flow beneath sheets.
6. Proper maintenance includes regular checks for rips and dislodged ends.

CONSTRUCTION SEQUENCE

1. OBTAIN REQUIRED PERMITS AND HOLD A PRECONSTRUCTION MEETING WITH THE CITY.
2. ESTABLISH CLEARING AND GRADING LIMITS.
3. INSTALL SILT FENCE IF REQUIRED.
4. INSTALL CB INLET PROTECTION.
5. INSTALL CONSTRUCTION ENTRANCE.
6. SCHEDULE AN EROSION CONTROL INSPECTION WITH THE CITY.
7. IDENTIFY EROSION CONTROL MEASURES WHICH REQUIRE REGULAR MAINTENANCE. ENSURE EROSION CONTROL MEASURES IN PLACE ARE ADEQUATE, INSTALL ADDITIONAL MEASURES IF NECESSARY TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING SITE.
8. CLEAR AND REMOVE ORGANIC MATERIAL, PREP SUBGRADE FOR FOUNDATION AND PARKING LOT CONSTRUCTION.
9. MASS GRADE SITE AND CONSTRUCT RETAINING WALLS.
10. INSTALL SANITARY SEWER LINE.
11. INSTALL DETENTION VAULTS.
12. INSTALL STORM LINES.
13. INSTALL WATER MAIN.
14. INSTALL OTHER UTILITIES.
15. INSTALL BASE.
16. CONSTRUCT SIDEWALKS
17. INSTALL TOP COURSE.
18. CONSTRUCT BUILDINGS.
19. PAVE PARKING LOT.
20. BRING UTILITIES TO FINAL GRADE.
21. VEGETATE EXPOSED AREAS AND STABILIZE STOCKPILES AS SOON AS PRACTICAL AND AS NEEDED TO PREVENT EROSION.
22. HYDROSEED AND/OR INSTALL PERMANENT LANDSCAPING TO PROVIDE PERMANENT EROSION CONTROL.
23. REMOVE TEMPORARY EROSION CONTROL MEASURES WHEN SITE IS STABLE.

TEMPORARY ESC MEASURES REQUIRED

1. Temporary Siltation Fencing.
2. Vegetation and Stabilization of exposed surfaces
3. Catch Basin Inlet Protection
4. Addtional measures may be required, see note 9 of Grading, Erosion & Sedimentation Control notes and Stormwater Pollution Prevention Plan (SWPPP) prepared for this project.

PERMANENT ESC MEASURES REQUIRED

1. Seeding and/or Landscaping of non-impervious surfaces

SPECIAL NOTES:

1. Contractor shall designate an erosion and sediment control leadperson, and shall comply with the stormwater pollution prevention plan prepared for the project.
2. Sediment-laden runoff shall not be allowed to discharge beyond the construction limits.
3. Exposed areas and soil stockpiles must be stabilized according to the following schedule:
   1. From April 1 to October 31 all disturbed areas at final grade and all exposed areas that are scheduled to remain unworked for more than 30 days shall be stabilized within 10 days.
   2. From November 1 to March 31 all exposed soils at final grade shall be stabilized immediately using permanent or temporary measures. Exposed soils with an area greater than 5,000 square feet that are scheduled to remain unworked for more than 24 hours and exposed areas of less than 5,000 square feet that will remain unworked for more than seven (7) days shall be stabilized immediately.

   All disturbed areas which are not planned to be constructed on within 90 days from time of clearing and grading shall be revegetated with the native vegetation.
4. No clearing, filling, grading or other alteration occurs within any critical areas or associated buffer unless specifically authorized pursuant to Chapter 21.06 Environmentally Critical Areas Management of the Puyallup Municipal Code.
5. If dewatering of excavations is required, dewatering must conform to the requirements of Section 504 of Puyallup City Standards.

MULCHING NOTES

1. Mulch materials used shall be hay or straw and shall be applied at a rate of 75-100 pounds per 1000 square feet, or 90-120 bales per acre to a min. depth of 2 inches.
2. Mulches shall be applied in all areas with exposed slopes greater than 2:1.
3. Mulching shall be used immediately after seeding or in areas which cannot be seeded because of the season.
4. All areas needed mulch shall be covered by November 1.

SEEDING NOTES (Erosion control seeding):

1. Seed mixture shall be 10% Redtop (92% purity, 90% germination); 40% Annual Rye (98% purity, 90% germination); 40% Chewing Fescue (97% purity, 80% germination); and 10% White dutch clover (96% purity, 90% germination) and shall be applied at the rate of 120 pounds per acre.
2. Seed beds planted between May 1 and October 31 will require irrigation and other maintenance as necessary to foster and protect the root structure.
3. For seed beds planted between October 31 and April 30, armoring of the seed bed will be necessary. (e.g., geotextiles, jute mat, clear plastic covering).
4. Before seeding, install needed surface runoff control measures such as gradient terraces, interceptor dikes, swales, level spreaders and sediment basins.
5. The seedbed shall be firm with a fairly fine surface, following surface roughening. Perform all operation across or at right angles to the slope.
6. Fertilizers are to be used according to suppliers recommendations. Amounts used should be minimized, especially adjacent to water bodies and wetlands.
7. Erosion control seeding shall not be used in areas subject to wear by construction traffic.
8. Erosion control seeding may be used in all areas of 5% or less slope. In areas between 5 and 10% slope, erosion control seeding may be used for a maximum horizontal distance of 100 feet. Use mulch or netting or other treatments for steeper and longer slopes.

SOIL STOCKPILE NOTES:

1. Stockpiles shall be stabilized (with plastic covering or other approved device) daily between November 1 and March 31.
2. In any season, sediment leaching from stock piles must be prevented.
3. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or when conditions exist that may otherwise be detrimental to proper grading or proposed sodding or seeding.
4. Previously established grades on the areas to be topsoiled shall be maintained according to the approved plan.
5. Stockpiles must be located more than 50 feet from all drainage features.

APPROVED

BY: ____________
CITY OF PUYALLUP
DEVELOPMENT SERVICES

DATE: ____________

NOTE:

THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.

THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.

FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE ENGINEERING SERVICES MANAGER.

AZURE GREEN CONSULTANTS
+feasibility +planning +engineering +surveying
409 East Pioneer, Suite A - Puyallup, WA 98372 phone: 253.770.3144 fax: 253.770.3142

JOB NO. 3227
DATE: February 22, 2024
DESIGNED BY: Rob Trivitt
DRAWN BY: Rob Trivitt
CHECKED BY: Paul Green
APPROVED BY: Paul Green

TESC Notes & Details

Bradley Heights

Timberlane Partners
1816 11th Ave Unit C
Seattle, WA, 98122
Phone
Fax

DRAWING

C-6