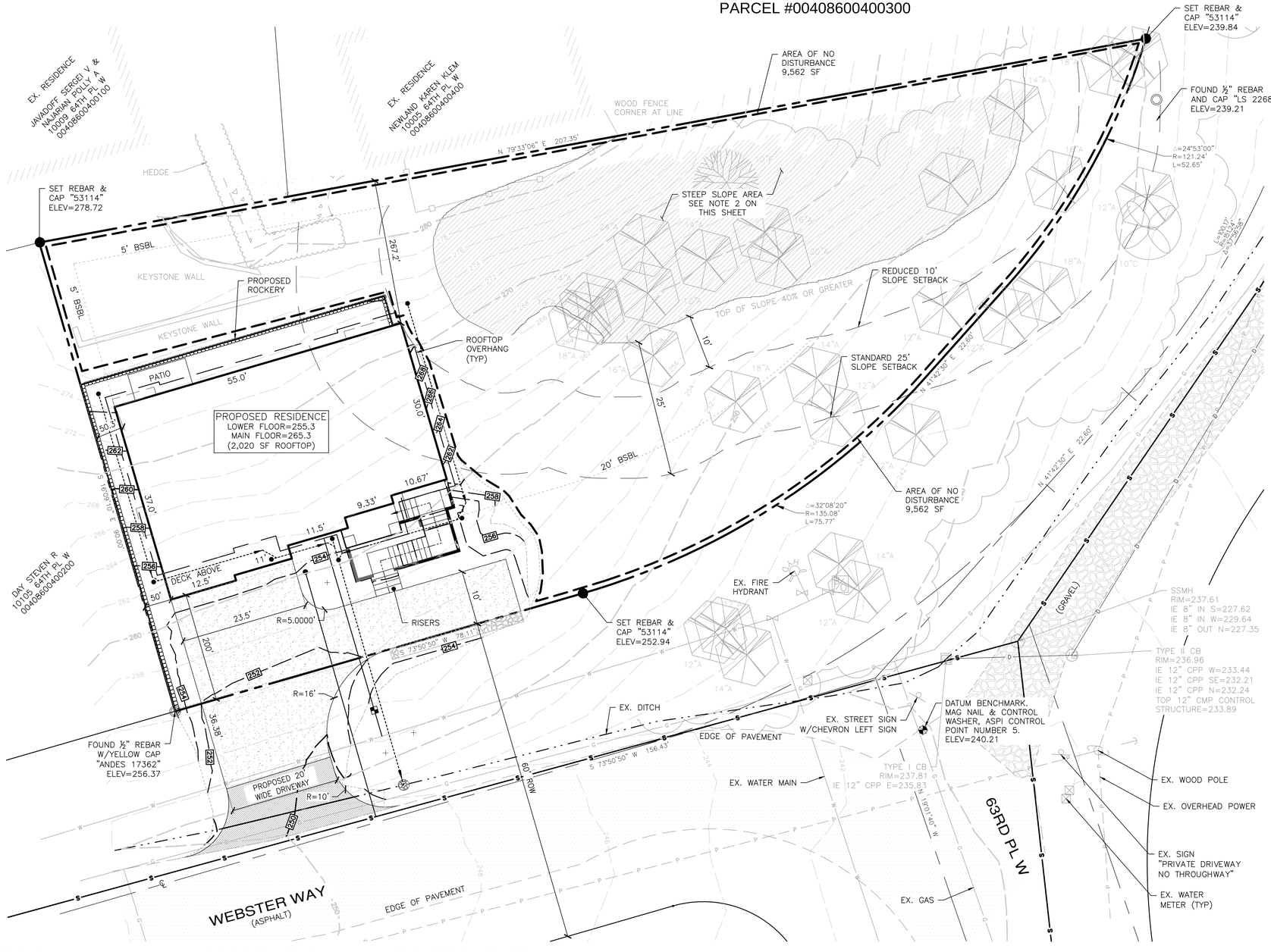
CALL 48 HOURS BEFORE YOU DIG 811

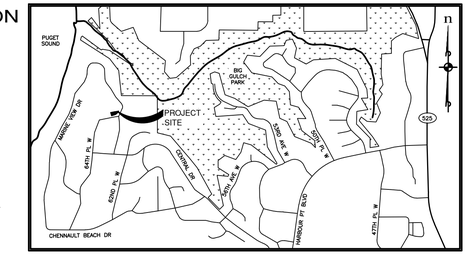
A PORTION OF THE NE 1/4 OF SECTION 20, TWP. 28NW, RGE. 4E, W.M., CITY OF MUKILTEO, SNOHOMISH COUNTY, WASHINGTON

ESTES RESIDENCE

SITE AND DRAINAGE PLAN

PARCEL #00408600400300





VICINITY MAP
NTS

SCALE: 1" = 10'

10 5 0 10 20

SHEET INDEX

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT CITY OF MUKILTEO DEVELOPMENT STANDARDS; THE CURRENT EDITION OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION; AND THE ADOPTED EDITION OF THE WASHINGTON STATE DEPARTMENT OF ECOLOGY STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON.
2. ALL WORK WITHIN THE PLAT AND CITY RIGHT-OF-WAY SHALL BE SUBJECT TO THE INSPECTION OF THE CITY.
3. PRIOR TO ANY SITE CONSTRUCTION INCLUDING CLEARING/LOGGING OR GRADING, THE SITE CLEARING LIMITS SHALL BE LOCATED AND FIELD IDENTIFIED BY THE PROJECT SURVEYOR (OR PROJECT ENGINEER) AS REQUIRED BY THESE PLANS. THE PROJECT SURVEYOR'S NAME AND PHONE NUMBER IS AARON TYSON (425) 252-1884.
4. THE DEVELOPER, CONTRACTOR AND PROJECT ENGINEER IS RESPONSIBLE FOR WATER QUALITY AS DETERMINED BY THE MONITORING PROGRAM ESTABLISHED BY THE PROJECT ENGINEER. THE PROJECT ENGINEER'S NAME AND PHONE NUMBER IS BRANDON LOUCKS (253) 838-6113.
5. PRIOR TO ANY SITE WORK, THE CONTRACTOR SHALL CONTACT THE CITY OF MUKILTEO COMMUNITY DEVELOPMENT DEPARTMENT AT 425-263-8000 TO SCHEDULE A PRECONSTRUCTION CONFERENCE.
6. ENGINEERED AS-BUILT DRAWINGS IN ACCORDANCE WITH THE CURRENT ADOPTED INTERNATIONAL BUILDING CODE SHALL BE REQUIRED PRIOR TO FINAL SITE APPROVAL.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS FOR UTILITY, ROAD, AND RIGHT-OF-WAY CONSTRUCTION. THE CONTRACTOR FOR THIS PROJECT IS
   CONTACT PERSON: _____
   PHONE: _____
   MOBILE: _____
   24-HOUR EMERGENCY CONTACT AND PHONE: _____
8. THE CONSTRUCTION STORMWATER POLLUTION PREVENTION (SWPP) FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED SWPPP PLANS PRIOR TO ANY GRADING OR LAND CLEARING. THESE FACILITIES MUST BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION AND LANDSCAPING IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED. SEDIMENT LADEN WATERS SHALL NOT ENTER THE NATURAL DRAINAGE SYSTEM.
9. A CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL) OR SWPPP SUPERVISOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION SWPP FACILITIES, AS OUTLINED IN THE APPROVED SWPPP, OR AS MODIFIED FROM TIME TO TIME. CONTACT INFORMATION FOR THE CESCL (OR SWPPP SUPERVISOR) FOR THE PROJECT SHALL BE GIVEN TO THE CITY.
10. NONCOMPLIANCE WITH THE REQUIREMENTS FOR EROSION CONTROLS, WATER QUALITY AND CLEARING LIMITS MAY RESULT IN REVOCATION OF PROJECT PERMITS, PLAN APPROVAL, AND BOND FORECLOSURES.
11. TRENCH BACKFILL OF NEW UTILITIES AND STORM DRAINAGE FACILITIES SHALL BE COMPACTED TO 95% MAXIMUM DENSITY (MODIFIED PROCTOR) UNDER ROADWAYS AND 90% MAXIMUM DENSITY (MODIFIED PROCTOR) OFF ROADWAYS. COMPACTION SHALL BE PERFORMED IN ACCORDANCE WITH SECTIONS 7-08.3(3) AND 2-03.3(14) D OF THE WSDOT STANDARD SPECIFICATIONS.
12. THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. LOCATION OF UTILITIES SHOWN ON CONSTRUCTION PLANS ARE BASED ON BEST RECORDS AVAILABLE AND ARE SUBJECT TO VARIATION. FOR ASSISTANCE IN UTILITY LOCATION, CALL 811.
13. PRIOR TO CONSTRUCTION THE OWNER AND/OR CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE PUBLIC WORKS DIRECTOR WHEN CONFLICTS EXIST BETWEEN THE PLANS AND FIELD CONDITIONS. CONFLICTS SHALL BE RESOLVED (INCLUDING PLAN AND PROFILE REVISIONS) AND RESUBMITTED FOR APPROVAL PRIOR TO PROCEEDING WITH CONSTRUCTION.
14. THE CONTRACTOR SHALL KEEP TWO SETS OF PLANS ON SITE AT ALL TIMES FOR RECORDING AS-BUILT INFORMATION; ONE SET SHALL BE SUBMITTED TO THE PROJECT ENGINEER, AND ONE SET SHALL BE SUBMITTED TO THE CITY AT COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE OF WORK.
15. A GRADING PERMIT ISSUED PURSUANT TO THE CURRENT ADOPTED INTERNATIONAL BUILDING CODE, AND APPROVAL OF THE TEMPORARY EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE OBTAINED FROM THE COMMUNITY DEVELOPMENT DEPARTMENT PRIOR TO ANY ON-SITE GRADING WORK NOT EXPRESSLY EXEMPT BY THE CURRENT ADOPTED INTERNATIONAL BUILDING CODE.

SITE DATA

PARCEL NUMBER:	00408600400300
LEGAL DESCRIPTION:	CHENNAULT BEACH BLK 004 D-00 - ALL LOT 3
ADDRESS:	XXX WEBSTER WAY MUKILTEO, WA 98275
PARCEL AREA:	13,652 SF (0.31 AC)
ZONING:	RD-12.5S
LOT COVERAGE:	3,748 SF / 13,652 SF = 27.5%
DISTURBED AREA:	4,090 SF / 13,652 SF = 30%
TOTAL HOUSE SF INCLUDING GARAGE:	5,005 SF

PROJECT AREAS

TOTAL PROJECT IMPACT:	
TOTAL DISTURBED AREA	4,090 SF
ONSITE UNDISTURBED AREA	9,562 SF
ONSITE IMPERVIOUS:	
ROOFTOP	2,020 SF
DECK	114 SF
BACK PATIO	35 SF
FRONT PATIO & STEPS	339 SF
DRIVEWAY	1,240 SF
	TOTAL 3,748 SF

PROJECT CONTACTS

OWNER/APPLICANT
CHRIS ESTES
6116 CHENNAULT BEACH DR
MUKILTEO, WA 98275

ENGINEER
ESM CONSULTING ENGINEERS
33400 8TH AVE SOUTH, SUITE 205
FEDERAL WAY, WA 98003
(253) 838-6113
CONTACT: BRANDON LOUCKS, P.E.

ARCHITECT
NASH & ASSOCIATES ARCHITECTS
11644 NE 80TH ST
KIRKLAND, WA 98033
(425) 828-4117
CONTACT: GARY NASH

SURVEYOR
ASPI
5205 S 2ND AVE SUITE A
EVERETT, WA 98203
(425) 252-1884
CONTACT: AARON TYSON, P.L.S.

EARTHWORK QUANTITIES

CUT:	1,371 CU YD
FILL:	23 CU YD
NET:	1,348 CU YD

NOTES

1) REFER TO THE SITE PLAN PREPARED BY THE PROJECT ARCHITECT FOR FURTHER SITE/BUILDING DETAILS.
2) THE STEEP SLOPES SHOWN ON THIS PLAN ARE DEPICTED PER THE SITE PLAN BY NASH ASSOCIATES ARCHITECTS DATED MARCH 19, 2021. THE ASSOCIATED AND PROPOSED REDUCED STEEP SLOPE SETBACK IS ACCORDING TO THE GEOTECHNICAL STUDY BY GEO GROUP NORTHWEST, INC. DATED DECEMBER 18, 2020.

CITY OF MUKILTEO

Received by Email
10/10/2022

REVISIONS			
NO.	DESCRIPTION/DATE	BY
1	REVISED PER CITY 8/18/21 COMMENTS	ESM

BRANDON M. LOUCKS — STATE OF WASHINGTON — 50085 — REGISTERED PROFESSIONAL ENGINEER
10/10/2022

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Federal Way, WA 98003
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EVERETT (425) 297-9900
www.esmcivil.com
ESM
Civil Engineering
Public Works
Land Planning
Landscape Architecture
Land Surveying
Project Management

CHRIS ESTES

ESTES RESIDENCE

SITE PLAN

CITY OF MUKILTEO WASHINGTON

JOB NO.:	2211-001-021
DWG. NAME:	
DESIGNED BY:	BML
DRAWN BY:	HAF
CHECKED BY:	
DATE:	06/10/2022
DATE OF PRINT:	

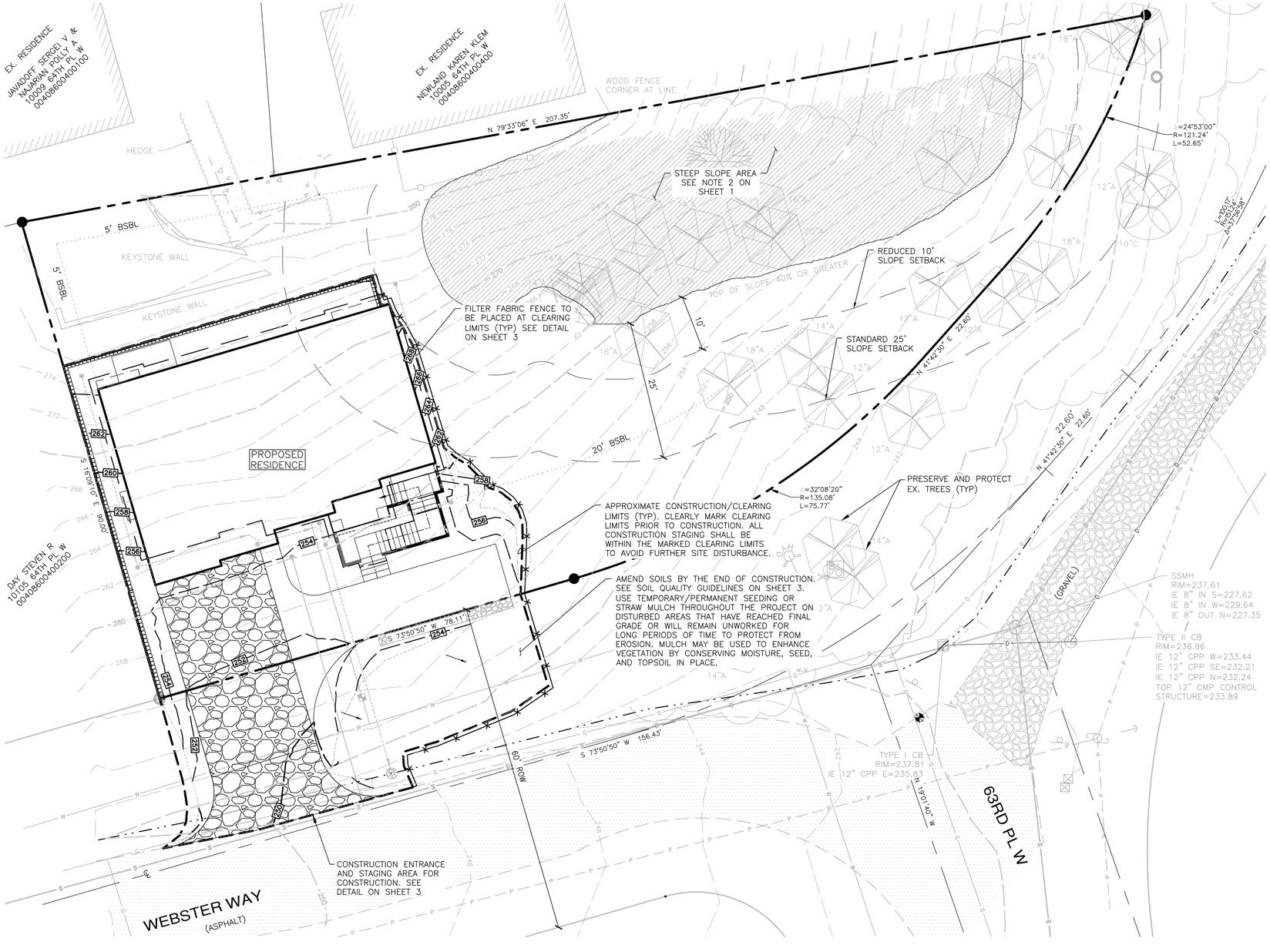
C1

1 OF 4 SHEETS

File: \\esm-fs\ENGR_ESM - JOBS\2211\001\021\plot\Estes Residence_Civil 2021-10-01.dwg
Plotted: 10/10/2022 10:29 AM Plotted By: Brandon Loucks

CALL 48 HOURS BEFORE YOU DIG 811

A PORTION OF THE NE 1/4 OF SECTION 20, TWP. 28NW, RGE. 4E, W.M., CITY OF MUKILTEO, SNOHOMISH COUNTY, WASHINGTON



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SCALE: 1" = 10'

10 5 0 10 20

REVISIONS			
NO.	DESCRIPTION/DATE	BY
1	REVISED PER CITY 8/18/21 COMMENTS	ESM

BRANDON MICHAEL LOUKS
STATE OF WASHINGTON
90085
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05/10/2022

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CHRIS ESTES

ESTES RESIDENCE

TESC PLAN

CITY OF MUKILTEO WASHINGTON

JOB NO.:	2211-001-021
DWG. NAME:	
DESIGNED BY:	BML
DRAWN BY:	HAF
CHECKED BY:	
DATE:	06/10/2022
DATE OF PRINT:	

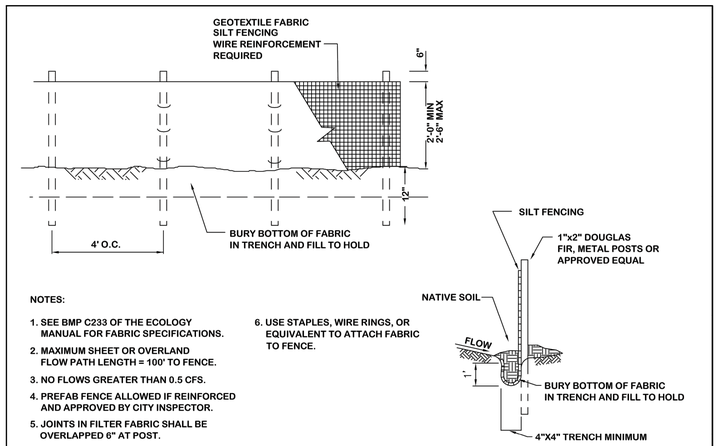
C2

2 OF 4 SHEETS

File: \\esm8\LNGR\ESM-0085\2211\001\021\plots\Estes Residence_CIVIL 2021-10-01.dwg
Plotted: 6/7/2022 3:01 PM Plotted By: Hugo Farias

CALL 48 HOURS BEFORE YOU DIG 811

A PORTION OF THE NE 1/4 OF SECTION 20, TWP. 28NW, RGE. 4E, W.M., CITY OF MUKILTEO, SNOHOMISH COUNTY, WASHINGTON



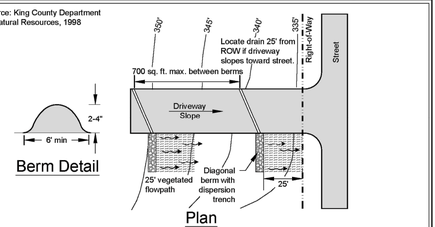
NOTES:

1. SEE BMP C233 OF THE ECOLOGY MANUAL FOR FABRIC SPECIFICATIONS.
2. MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH = 100' TO FENCE.
3. NO FLOWS GREATER THAN 0.5 CFS.
4. PREFAB FENCE ALLOWED IF REINFORCED AND APPROVED BY CITY INSPECTOR.
5. JOINTS IN FILTER FABRIC SHALL BE OVERLAPPED 6" AT POST.
6. USE STAPLES, WIRE RINGS, OR EQUIVALENT TO ATTACH FABRIC TO FENCE.

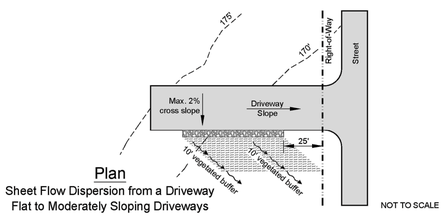
CITY OF MUKILTEO	REVISION DATE	APPROVED FOR PUBLICATION	SILT FENCE DETAIL
	11/18/2016 DATE	CITY ENGINEER 11/22/2016 DATE	STANDARD PLAN NO. EC-001

Figure V-3.2: Sheet Flow Dispersion for Driveways

Source: King County Department of Natural Resources, 1998



Driveway Dispersion Trench
Driveway Slope Varies and Slopes Toward Street

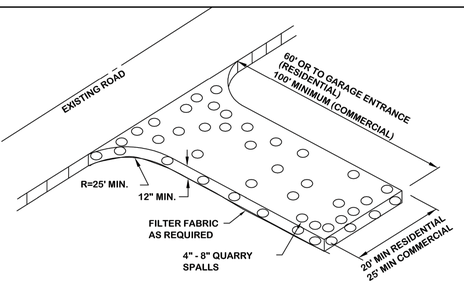


Sheet Flow Dispersion from a Driveway Flat to Moderately Sloping Driveways

NOT TO SCALE

DEPARTMENT OF ECOLOGY State of Washington

Sheet Flow Dispersion for Driveways
Revised December 2016



NOTES:

1. THE TEMPORARY CONSTRUCTION ENTRANCE SHALL BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHOULD BE CONSTRUCTED ACCORDING TO SPECIFICATIONS IN THE PLAN. IF WASH RACKS ARE USED, THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. GRAVEL SHALL BE CRUSHED BALLAST ROCK, 4" TO 8" IN DIAMETER; INSTALLED 8" TO 12" IN DEPTH ACROSS THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF ENTRANCE SHALL BE A MINIMUM OF 100 FEET FOR COMMERCIAL SITES; AND 60 FEET FOR RESIDENTIAL SITES. CRUSHED CONCRETE IS NOT ALLOWED AS BALLAST.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY AND ANY STORM DRAINAGE FACILITIES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2" STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAY OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
4. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED BY SHOVELING OR STREET SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN HIGH EFFICIENCY SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, THE CONSTRUCTION OF A SMALL SUMP TO CONTAIN THE WASH WATER SHALL BE CONSIDERED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP WHERE IT CAN BE CONTROLLED.
5. PERFORM STREET SWEEPING BY HAND OR WITH A HIGH EFFICIENCY SWEEPER. DO NOT USE A NON-HIGH EFFICIENCY MECHANICAL SWEEPER BECAUSE THIS CREATES DUST AND THROWS SOILS INTO STORM SYSTEMS OR CONVEYANCE DITCHES.

CITY OF MUKILTEO	REVISION DATE	APPROVED FOR PUBLICATION	CONSTRUCTION ENTRANCE
	11/18/2016 DATE	CITY ENGINEER 11/22/2016 DATE	STANDARD PLAN NO. EC-006

SITE GRADING & CONSTRUCTION SWPPP NOTES

1. PRIOR TO ANY SITE WORK, INCLUDING CLEARING, LOGGING OR GRADING, THE SITE CLEARING LIMITS SHALL BE LOCATED AND FIELD IDENTIFIED BY THE PROJECT SURVEYOR (OR PROJECT ENGINEER) AS REQUIRED BY THESE PLANS. THE PROJECT SURVEYOR'S NAME AND PHONE NUMBER IS .
2. SOILS IN MUKILTEO OFTEN CONTAIN FINER PARTICLES WHICH WILL PASS THROUGH SEDIMENT TRAPS UNTREATED AND HAVE EXTREMELY LONG SETTLING TIMES. THEREFORE, THE NEED TO CONTROL EROSION FROM THE SITE IS THE FIRST PRIORITY AND SHOULD BE EMPHASIZED.
3. THE CONSTRUCTION STORMWATER POLLUTION PREVENTION FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED SWPPP PRIOR TO ANY GRADING OR EXTENSIVE LAND CLEARING. AN INSPECTION BY THE CITY OF THESE FACILITIES SHALL BE ARRANGED FOR BY THE CONTRACTOR PRIOR TO ANY GRADING. THESE FACILITIES MUST BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION AND LANDSCAPING IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED.
4. STOCKPILES ARE TO BE LOCATED IN SAFE AREAS AND ADEQUATELY PROTECTED BY TEMPORARY SEEDING AND MULCHING. HYDROSEEDING IS PREFERRED.
5. THE DEVELOPER (OR PROJECT ENGINEER) IS RESPONSIBLE FOR WATER QUALITY AS DETERMINED BY THE MONITORING PROGRAM ESTABLISHED BY THE PROJECT ENGINEER. THE PROJECT ENGINEER'S NAME AND PHONE NUMBER IS _____ .
6. IF THE PROJECT WILL DISTURB MORE THAN ONE (1) ACRE OF LAND, THEN A CONSTRUCTION NPDES PERMIT IS REQUIRED AND A CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL) SHALL BE ASSIGNED TO THE SITE. THE CESCL'S NAME, PHONE NUMBER, AND CESCL CERTIFICATE NUMBER IS _____
7. ALL SITE WORK MUST BE PERFORMED IN ACCORDANCE WITH THE CURRENT CITY ADOPTED INTERNATIONAL BUILDING CODE.
8. ALL EARTH WORK SHALL BE PERFORMED IN ACCORDANCE WITH CITY STANDARDS. A PRECONSTRUCTION SOILS INVESTIGATION MAY BE REQUIRED TO EVALUATE SOILS STABILITY.
9. IF CUT AND FILL SLOPES EXCEED A MAXIMUM OF TWO FEET HORIZONTAL TO ONE FOOT VERTICAL, A ROCK OR CONCRETE RETAINING WALL MAY BE REQUIRED. ALL ROCK RETAINING WALLS GREATER THAN FOUR (4) FEET IN HEIGHT ARE TO BE DESIGNED AND CERTIFIED BY A PROFESSIONAL ENGINEER EXPERIENCED IN SOIL MECHANICS.
10. THE SURFACE OF ALL SLOPES SHALL BE COMPACTED. THIS MAY BE ACCOMPLISHED BY OVER-BUILDING THE SLOPES, THEN CUTTING BACK TO FINAL GRADES; OR BY COMPACTING EACH LIFT AS THE SLOPE IS BEING CONSTRUCTED. ALL SLOPES SHALL BE COMPACTED BY THE END OF EACH WORKING DAY.
11. ALL STRUCTURAL FILLS SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY IN THE UPPER 4 FEET & 90% MAXIMUM DENSITY BELOW 4 FEET AS DETERMINED BY MODIFIED PROCTOR.
12. NONCOMPLIANCE WITH THE EROSION CONTROL REQUIREMENTS, WATER QUALITY REQUIREMENTS AND CLEARING LIMITS VIOLATIONS MAY RESULT IN REVOCATION OF PROJECT PERMITS AND PLAN APPROVAL AND BOND FORECLOSURES.
13. UPON COMPLETION OF WORK, FINAL REPORTS MUST BE SUBMITTED TO THE CITY IN CONFORMANCE WITH THE CURRENT CITY ADOPTED INTERNATIONAL BUILDING CODE.
14. A WET WEATHER EROSION CONTROL PLAN MUST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL ON OR BEFORE SEPTEMBER 1, IF THE PROJECT IS PROPOSING TO ACTIVELY CLEAR, GRADE, OR OTHERWISE DISTURB 1,000 SQUARE FEET OR MORE OF SOIL DURING THE PERIOD BETWEEN OCTOBER 1 AND APRIL 30. OTHER THRESHOLDS FOR A WET WEATHER EROSION CONTROL PLAN INCLUDE PROJECTS THAT:
    A. HAVE AREA(S) THAT DRAIN, BY PIPE, OPEN DITCH, SHEET FLOW, OR A COMBINATION OF THESE TO A TRIBUTARY WATER, AND THE TRIBUTARY WATER IS ONE-QUARTER MILE OR LESS DOWNSTREAM; OR
    B. HAVE SLOPES STEEPER THAN 15 PERCENT ADJACENT OR ON-SITE; OR
    C. HAVE HIGH POTENTIAL FOR SEDIMENT TRANSPORT, AS DETERMINED BY THE CONSTRUCTION SITE SEDIMENT TRANSPORT POTENTIAL WORKSHEET; OR
    D. HAVE A CRITICAL AREA OR CRITICAL AREA BUFFER ON-SITE, OR WITHIN 50 FEET OF THE SITE; OR
    E. E. HAVE HIGH GROUNDWATER TABLE OR SPRINGS.

NOTES

1. DURING CONSTRUCTION THE CONTRACTOR SHALL PROVIDE INLET PROTECTION TO EXISTING DOWNSTREAM STORM DRAINAGE STRUCTURES, AS SHOWN ON THE PLAN.
2. FOLLOWING CONSTRUCTION THE CONTRACTOR SHALL REMOVE ANY SEDIMENT FROM THE DOWNSTREAM STORM DRAINAGE CONVEYANCE SYSTEM AS WELL AS ANY COLLECTED IN THE DOWNSTREAM STORM DRAINAGE FACILITIES.
3. THE GEOTECHNICAL ENGINEER SHALL BE NOTIFIED TO OBSERVE EXCAVATIONS IN STRUCTURAL AREAS TO ENSURE ADEQUATE BEARING CONDITIONS AT SUBGRADE ELEVATIONS.
4. NO CLEARING/GRADING WORK IS ALLOWED BEYOND THE APPROVED CLEARING LIMITS.
5. ALL EXCAVATED MATERIAL SHALL BE STOCK-PILLED ON-SITE WITHIN APPROVED CLEARING LIMITS.
6. REFER TO THE PROJECT CONSTRUCTION STORMWATER POLLUTION PREVENTION REPORT AND THE PROJECT GEOTECHNICAL REPORT FOR FURTHER TEMPORARY SEDIMENT CONTROL RECOMMENDATIONS.
7. COORDINATE WHICH TREES ARE TO BE RETAINED AND REMOVED WITH THE OWNER. PROTECT TREES TO REMAIN BY AVOIDING ROOT DISTURBANCE DURING EXCAVATION.

SOIL QUALITY GUIDELINES:

- SOIL RETENTION. RETAIN, IN A UNDISTURBED STATE THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCK-PILE THE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SIT WHERE FEASIBLE.
- SOIL QUALITY. ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:
    1. A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 5-10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A Ph FROM 6.0 TO 8.0 OR MATCHING THE pH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
    2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL
    3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
        A. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN ONLY BE MET USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION WITH THE EXCEPTION THAT THE COMPOST MUST HAVE AN ORGANIC MATTER CONTENT OF 40 PERCENT TO 65 PERCENT, AND A CARBON TO NITROGEN RATIO BETWEEN 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTING COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
        B. CALCULATED AMENDMENT RATES MAY BE ME THROUGH USE OF COMPOSTED MATERIALS AS DEFINED ABOVE, OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220

EXPOSED SOIL PROTECTION NOTES:

AREAS CLEARED FOR GRADING ACTIVITIES, BUILDING FOUNDATIONS OR UTILITY AND IRRIGATION PLACEMENT WILL BE TEMPORARILY STABILIZED BY ONE OF THE FOLLOWING METHODS WHICH ARE BASED ON PERIOD EXPOSED SOILS ARE LEFT UNWORKED:

- IF EXPOSED SOILS ARE LEFT UNWORKED FOR MORE THAN 7 DAYS DURING THE DRY SEASON AND 2 DAYS DURING THE WET SEASON BUT LESS THAN 30 DAYS, MULCHING SHALL BE APPLIED.
- IF EXPOSED SOILS ARE LEFT UNWORKED FOR MORE THAN 30 DAYS, TEMPORARY OR PERMANENT SEEDING SHALL BE APPLIED.

FOLLOWING FINAL OR FINE GRADING ACTIVITY IN THE FRONT YARD, SOD SHALL BE PLACED ON EXPOSED SOIL TO PROVIDE PERMANENT AND IMMEDIATE EROSION PROTECTION. DUST CONTROL WILL BE APPLIED AS NECESSARY DURING DRY PERIODS.

SOIL AMENDMENT OPTIONS:

- IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ON THIS SHEET CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW. SEE THE SEPARATE SOIL MANAGEMENT PLAN FOR SUGGESTED SOIL MANAGEMENT OPTIONS

    OPTION 1: LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.

    OPTION 2: AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE-APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.

    OPTION 3: STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED"RATE OR AT A CUSTOM CALCULATED RATE.

    OPTION 4: IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS.

- MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

REVISIONS

NO.	DESCRIPTION/DATE	BY
1	REVISED PER CITY 8/18/21 COMMENTS	ESM

BRANDON MICHAEL LOUCKS — STATE OF WASHINGTON — 50080 — REGISTERED PROFESSIONAL ENGINEER
06/10/2022

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CHRIS ESTES

ESTES RESIDENCE

TESC NOTES & DETAILS

CITY OF MUKILTEO WASHINGTON

JOB NO.: 2211-001-021
DWG. NAME:
DESIGNED BY: BML
DRAWN BY: HAF
CHECKED BY:
DATE: 06/10/2022
DATE OF PRINT:

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3 OF 4 SHEETS

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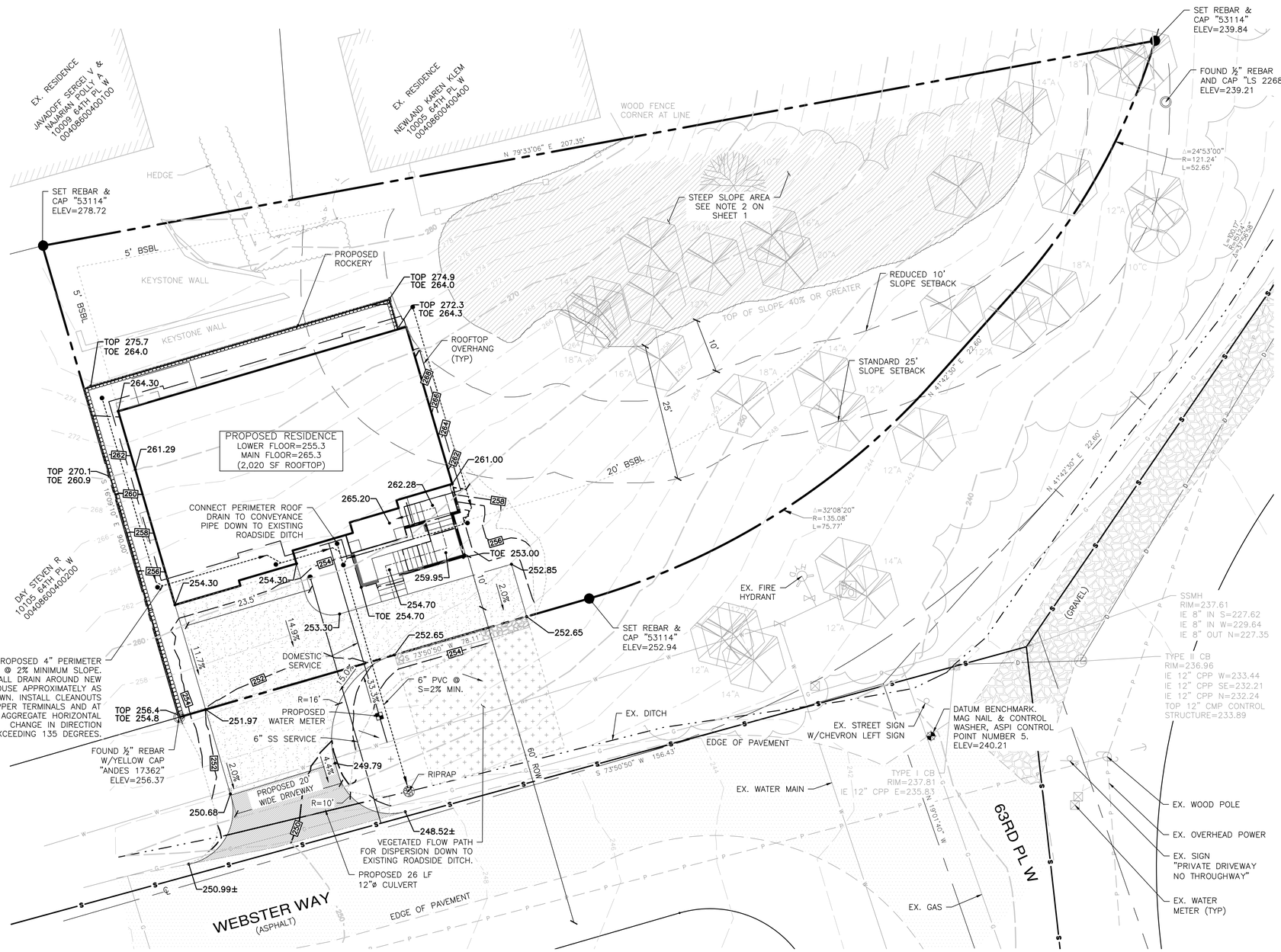
CALL 48 HOURS BEFORE YOU DIG 811

A PORTION OF THE NE 1/4 OF SECTION 20, TWP. 28NW, RGE. 4E, W.M., CITY OF MUKILTEO, SNOHOMISH COUNTY, WASHINGTON



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SCALE: 1" = 10'

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STORM DRAINAGE GENERAL NOTES

1. 1. ALL PIPE SHALL BE PLACED ACCORDING DIVISION 7 OF THE WSDOT STANDARD SPECIFICATIONS.
2. BACKFILL SHALL BE PLACED EQUALLY ON BOTH SIDES OF THE PIPE OR PIPE-ARCH IN 6' AVERAGE DEPTH LOOSE LIFTS. MAXIMUM LIFT DEPTH SHALL NOT EXCEED 9'. EACH LIFT SHALL BE THOROUGHLY COMPACTED. COMPACTED LIFTS MUST EXTEND AT LEAST ONE PIPE DIAMETER ON EACH SIDE OF THE PIPE OR TO THE SIDE OF THE TRENCH. BACKFILL OVER THE PIPE SHALL BE PERFORMED IN ACCORDANCE WITH SECTIONS 7- 08.3(3) THE WSDOT STANDARD SPECIFICATIONS.
3. ALL GRATES LOCATED IN THE GUTTER FLOW LINE (INLET AND CATCH BASIN) SHALL BE DEPRESSED 0.1 FEET BELOW PAVEMENT LEVEL.
4. ALL CATCH BASINS ARE TO BE TYPE I UNLESS OTHERWISE APPROVED BY THE CITY OR DESIGNATED REPRESENTATIVE. THE USE AND INSTALLATION OF INLETS IS NOT ALLOWED.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL MANHOLE, INLET AND CATCH BASIN FRAMES AND GRATES TO GRADE JUST PRIOR TO CURB INSTALLATION AND/OR PAVING.
6. ALL CATCH BASINS WITH A DEPTH OF 5 FEET OR GREATER TO THE FLOW LINE SHALL BE TYPE II CATCH BASINS.
7. VANED GRATES ARE REQUIRED ON ALL STORM STRUCTURES. ALL CATCH BASINS AND MANHOLES SHALL HAVE LOCKING LIDS. ROLLED GRATES ARE NOT APPROVED FOR USE.
8. POLYPROPYLENE SAFETY STEPS AND LADDER STEPS SHALL BE PROVIDED IN ALL MANHOLES AND SHALL BE POSITIONED CORRECTLY WITH THE BOLT AREAS ON THE RIM.
9. CATCH BASIN FRAMES AND GRATES SHALL BE OLYMPIC FOUNDRY MODEL SM60, SM52, OR SM44, LOCKING TYPE OR EQUIVALENT. MODEL SM52 SHALL BE REFERRED TO AS A "THROUGH CURB INLET" ON THE PLANS.
10. DETENTION PONDS WITH SIDE SLOPES STEEPER THAN 3:1 OR WITH A MAXIMUM WATER DEPTH GREATER THAN 3 FEET SHALL REQUIRE A VINYL COATED CHAIN LINK PERIMETER FENCE. SIDE SLOPE AVERAGING SHALL NOT BE ALLOWED. ALL INLET AND OUTFALL PIPES SHALL HAVE A TRASH RACK INSTALLED AND A MORTARED RIPRAP HEADWALL.
11. PRIOR TO SIDEWALK CONSTRUCTION; LOT DRAINAGE SYSTEMS, STUB-OUTS AND ANY BEHIND SIDEWALK DRAINS MUST BE INSTALLED AS REQUIRED. PIPE SHALL BE PVC 3034, OR SDR-35. STUB-OUTS SHALL BE MARKED WITH A 2' X 4" WITH 3 FEET VISIBLE ABOVE GRADE AND MARKED "STORM". LOCATIONS OF THESE INSTALLATIONS SHALL BE SHOWN ON THE AS-BUILT CONSTRUCTION PLANS SUBMITTED TO THE CITY.
12. STORM WATER RETENTION/DETENTION FACILITIES, STORM DRAINAGE PIPE AND CATCH BASINS SHALL BE FLUSHED AND CLEANED BY THE DEVELOPER PRIOR TO:
    A. CITY OF MUKILTEO FINAL ACCEPTANCE OF THE PROJECT AND;
    B. UPON COMMENCEMENT AND COMPLETION OF THE 2 YEAR WARRANTY PERIOD FOR THE STORM DRAINAGE SYSTEM. AN INVOICE DETAILING THE FLUSHING AND CLEANING SHALL BE PROVIDED TO THE CITY.
13. ALL PIPES SHALL BE INSTALLED WITH RUBBER GASKETS AS PER MANUFACTURER'S RECOMMENDATIONS.
14. COVERAGE REQUIREMENTS FOR 12" DIAMETER PIPE:
    - BACKFILL OVER PIPE LESS THAN 12" REQUIRES RCP CLASS IV.
    - BACKFILL OVER PIPE LESS THAN 24" REQUIRES RCP MINIMUM.
    - BACKFILL OVER PIPE GREATER THAN 24" REQUIRES 16 GAGE CMP MINIMUM.
15. CORRUGATED POLYETHYLENE PIPE (CPP):
    A. ALL PIPE SHALL BE SMOOTH INTERIOR. CPP SHALL BE DOUBLE-WALLED. ALL PIPE SHALL MEET AASHTO AND ASTM SPECIFICATIONS.
    B. UPON REQUEST BY THE CITY INSPECTOR, ALL PIPE RUNS SHALL PASS THE LOW PRESSURE AIR TEST REQUIREMENTS OF SECTION 7-04.3(1) E & F OF THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION. PIPE RUNS SHALL BE TESTED WITH PIPE LOADED AND COMPACTED TO FINISH GRADE.
    C. UPON REQUEST BY THE CITY INSPECTOR, PIPE SHALL BE SUBJECT TO MANDREL TESTING (MANDREL SIZE = 90% OF NOMINAL PIPE DIAMETER).
    D. PIPE SHALL BE STORED ON SITE IN SHIPPING BUNKS ON A FLAT LEVEL SURFACE. THIS REQUIREMENT WILL BE STRICTLY ENFORCED; FAILURE TO COMPLY MAY RESULT IN REJECTION OF THE PIPE AND/OR FUTURE RESTRICTION ON USE OF MATERIAL.
    E. MINIMUM DEPTH OF COVER SHALL BE 2 FEET.
    F. COUPLINGS SHALL BE INTEGRAL BELL AND SPIGOT OR DOUBLE BELL SEPARATE COUPLINGS. SPLIT COUPLINGS WILL NOT BE ALLOWED.
    G. BACKFILL SHALL COMPLY WITH SECTION 7-08.3(3) OF THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION WITH THE EXCEPTION THAT THE SECOND PARAGRAPH OF SECTION 7-08.3(3) IS DELETED AND REPLACED WITH:

    THE MATERIAL USED FOR BACKFILLING AROUND AND TO A POINT 1 FOOT ABOVE THE TOP OF THE PIPE SHALL BE CLEAN EARTH OR SAND, FREE FROM CLAY. ANY GRAVEL OR STONES INCLUDED IN THE BACKFILL SHALL PASS THROUGH A 1 INCH SIEVE.
16. ALL NON-PERFORATED METAL PIPE SHALL HAVE NEOPRENE GASKETS AT THE JOINTS. O-RING GASKETS MAY BE USED FOR TYPE-F COUPLING BAND.
17. CULVERT ENDS SHALL BE BEVELED TO MATCH SIDE SLOPES. FIELD CUTTING OF CULVERT ENDS IS PERMITTED WHEN APPROVED BY THE CITY.
18. ALL FIELD CUT CULVERT PIPE SHALL BE TREATED AS REQUIRED IN THE STANDARD SPECIFICATIONS OR GENERAL SPECIAL PROVISIONS.

FOOTING DRAINS

ALL FOOTINGS SHALL BE PROVIDED WITH A DRAIN AT THE BASE OF THE FOOTING ELEVATION. DRAINS SHOULD CONSIST OF RIGID PVC PIPE SURROUNDED BY WASHED PEA GRAVEL. THE LEVEL OF THE PERFORATIONS IN THE PIPE SHOULD BE SET AT OR SLIGHTLY BELOW THE BOTTOM OF THE FOOTING AND THE DRAINS SHOULD BE CONSTRUCTED WITH SUFFICIENT GRADIENT TO ALLOW GRAVITY DISCHARGE AWAY FROM THE BUILDING. DAYLIGHT FOOTING DRAIN DOWNSTREAM FROM HOUSE

REVISIONS

NO.	DESCRIPTION/DATE	BY
1	REVISED PER CITY 8/18/21 COMMENTS	ESM

BRANDON MICHAEL LOURKES — STATE OF WASHINGTON — 50088 — REGISTERED PROFESSIONAL ENGINEER

06/10/2022

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Land Planning
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Land Surveying
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CHRIS ESTES

ESTES RESIDENCE

GRADING/ DRAINAGE PLAN

CITY OF MUKILTEO WASHINGTON

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