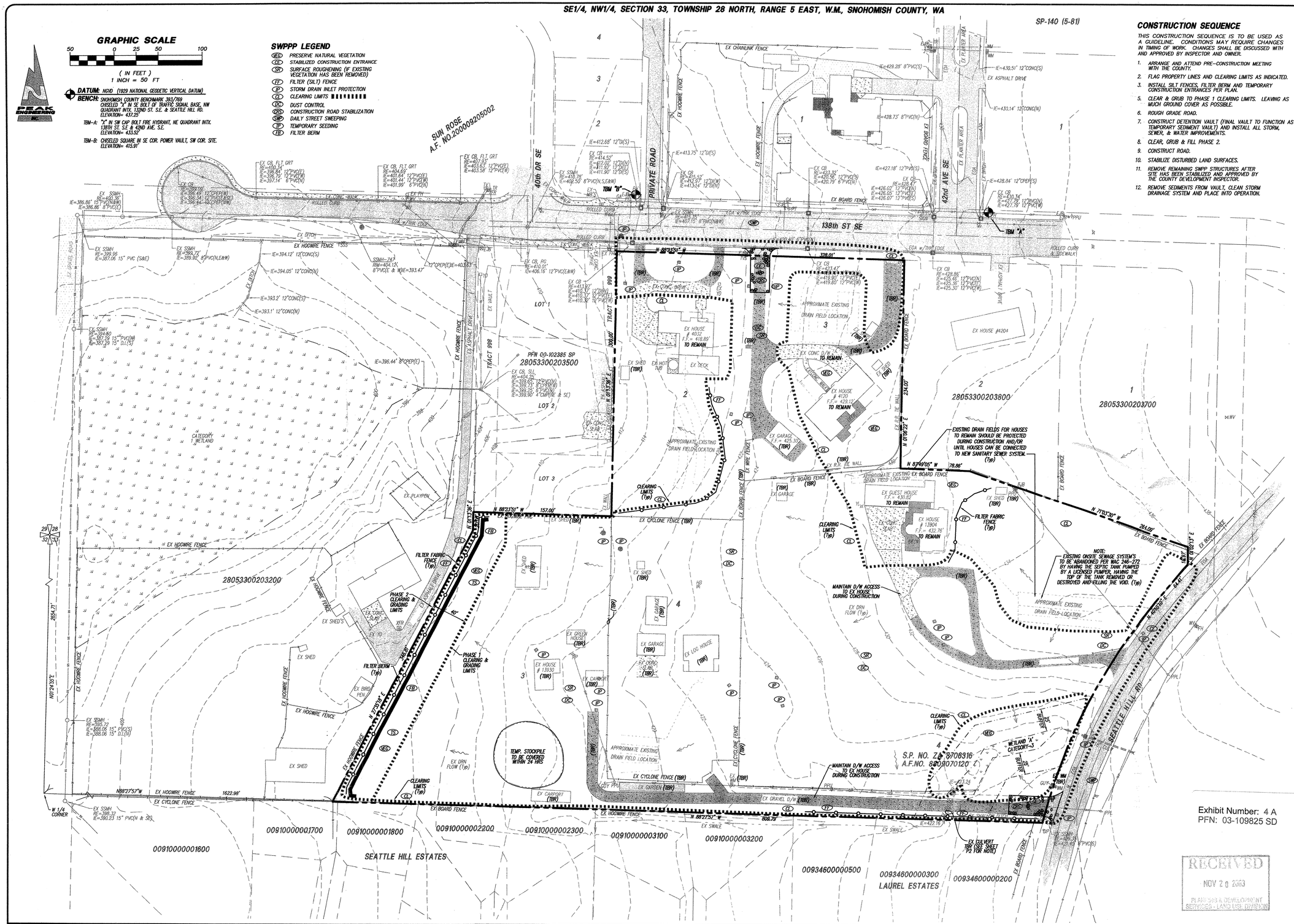
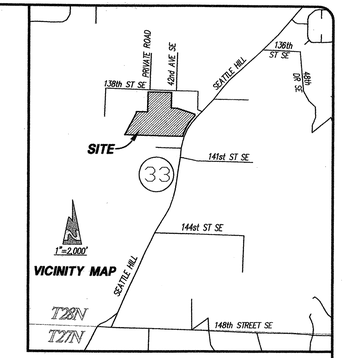
SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA



CONSTRUCTION SEQUENCE

THIS CONSTRUCTION SEQUENCE IS TO BE USED AS A GUIDELINE. CONDITIONS MAY REQUIRE CHANGES IN TIMING OF WORK. CHANGES SHALL BE DISCUSSED WITH AND APPROVED BY INSPECTOR AND OWNER.

1. ARRANGE AND ATTEND PRE-CONSTRUCTION MEETING WITH THE COUNTY.
2. FLAG PROPERTY LINES AND CLEARING LIMITS AS INDICATED.
3. INSTALL SILT FENCES, FILTER BERM AND TEMPORARY CONSTRUCTION ENTRANCES PER PLAN.
5. CLEAR & GRUB TO PHASE 1 CLEARING LIMITS. LEAVING AS MUCH GROUND COVER AS POSSIBLE.
6. ROUGH GRADE ROAD.
7. CONSTRUCT DETENTION VAULT (FINAL VAULT TO FUNCTION AS TEMPORARY SEDIMENT VAULT) AND INSTALL ALL STORM, SEWER, & WATER IMPROVEMENTS.
8. CLEAR, GRUB & FILL PHASE 2.
9. CONSTRUCT ROAD.
10. STABILIZE DISTURBED LAND SURFACES.
11. REMOVE REMAINING SWPP STRUCTURES AFTER SITE HAS BEEN STABILIZED AND APPROVED BY THE COUNTY DEVELOPMENT INSPECTOR.
12. REMOVE SEDIMENTS FROM VAULT, CLEAN STORM DRAINAGE SYSTEM AND PLACE INTO OPERATION.



LEGAL DESRIPTION:

PARCEL A:

LOT 2 OF SHORT PLAT 316 (10-83) RECORDED UNDER RECORDING NUMBER 8401180232, BEING A PORTION OF LOT 2 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL B:

LOT 3 OF SHORT PLAT 316 (10-83) RECORDED UNDER RECORDING NUMBER 8401180232, BEING A PORTION OF LOT 2 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL C:

LOT 4 OF SHORT PLAT 316 (10-83) RECORDED UNDER RECORDING NUMBER 8401180232, BEING A PORTION OF LOT 2 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL D:

LOT 3 OF SHORT PLAT ZA8706316SP RECORDED UNDER RECORDING NUMBER 8805090123, BEING A PORTION OF LOT 1 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL E:

LOT 4 OF SHORT PLAT ZA8706316SP RECORDED UNDER RECORDING NUMBER 8805090123, BEING A PORTION OF LOT 1 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

SITE DATA:

EXISTING ZONING:	R-9600
PROPOSED ZONING:	R-7200
TOTAL SITE AREA:	375,842 SF, 8.63Ac
WATER DISTRICT:	SILVERLAKE WATER DISTRICT
SEWAGE DISPOSAL:	SILVERLAKE WATER DISTRICT
SCHOOL DISTRICT:	EVERETT
FIRE DISTRICT:	FPD 11

OWNERS OF RECORD:

STEVEN & PEGGY LEFLEY
4032 138th SE
SNOHOMISH, WA 98290
425-338-1458

GARY & KATHRYN FONTES
13904 SEATTLE HILL ROAD
SNOHOMISH, WA 98290
425-338-4878

JAMES LOMAX
13928 SEATTLE HILL ROAD
SNOHOMISH, WA 98290
425-316-8653

BABETTE JUEOKE
13930 SEATTLE HILL ROAD
SNOHOMISH, WA 98290

SITE ADDRESS'S:

13904 SEATTLE HILL ROAD SE, 13928 SEATTLE HILL ROAD SE, 13930 SEATTLE HILL ROAD SE, 4120 138th STREET SE & 4032 138th STREET SE, SNOHOMISH, WA 98290

TAX PARCEL NO.S:

28053300200900 & 28053300203400
28053300203100 & 28053300203900
28053300203600

TEMPORARY EROSION CONTROL NOTE:

TEMPORARY EROSION CONTROL MEASURES ON THIS PLAN ARE INTENTED AS A GUIDE. ADDITIONAL BMP's MAY BEREQUIRED FOR THIS DEVELOPMENT AS SITE & WEATHER CONDITIONS CHANGE ON SITE. THE CONTRACTOR/DEVELOPER SHALL COORDINATE WITH THE SITE INSPECTOR & THE PROJECT ENGINEER AS NEEDED FOR EROSION CONTROL RECOMMENDATIONS.

EROSION CONTROL CONCEPT

ALL DISTURBED AREAS SHALL BE PREPARED AND MAINTAINED TO CONTROL EROSION. LEAVE VEGETATIVE BUFFER AROUND PERIMETER OF SITE AND EXISTING GOURND COVER AS LONG AS POSSIBLE. SEE SHEET T4 OF 4 FOR SWPPP NOTES.
A SWPPP WILL BE PREPARED AT THE CONSTRUCTION PLAN STAGE.

RISK ASSESSMENT: HIGH

Exhibit Number: 4 A
PFN: 03-109825 SD

RECEIVED
NOV 20 2003
PLANNING & DEVELOPMENT SERVICES - LAND USE DIVISION

DATE	REVISION/ISSUED
11/14/03	ISSUED

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART
STATE OF WASHINGTON
20726
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/16/2005
DATE: 11/18/03

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:
MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
JOB #03055

APPLICANT/OWNER
GORDON REYKDAL
8908 EASTVIEW AVENUE
EVERETT, WA 98208
425-337-2429

CONTACT
TOBIASON & CO. INC.
110 THIRD AVE N, STE 101
EDMONDS, WA 98020
(425) 778-5044
ATTN: LAUREY TOBIASON

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN: 03-109825

APPLETREE NORTH
TARGETED DRAINAGE PLAN
EXISTING CONDITIONS & SWPP PLAN

PROJECT NO. 03496

DWG P1 OF 4

H/DEV- 2145

SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA

GRAPHIC SCALE

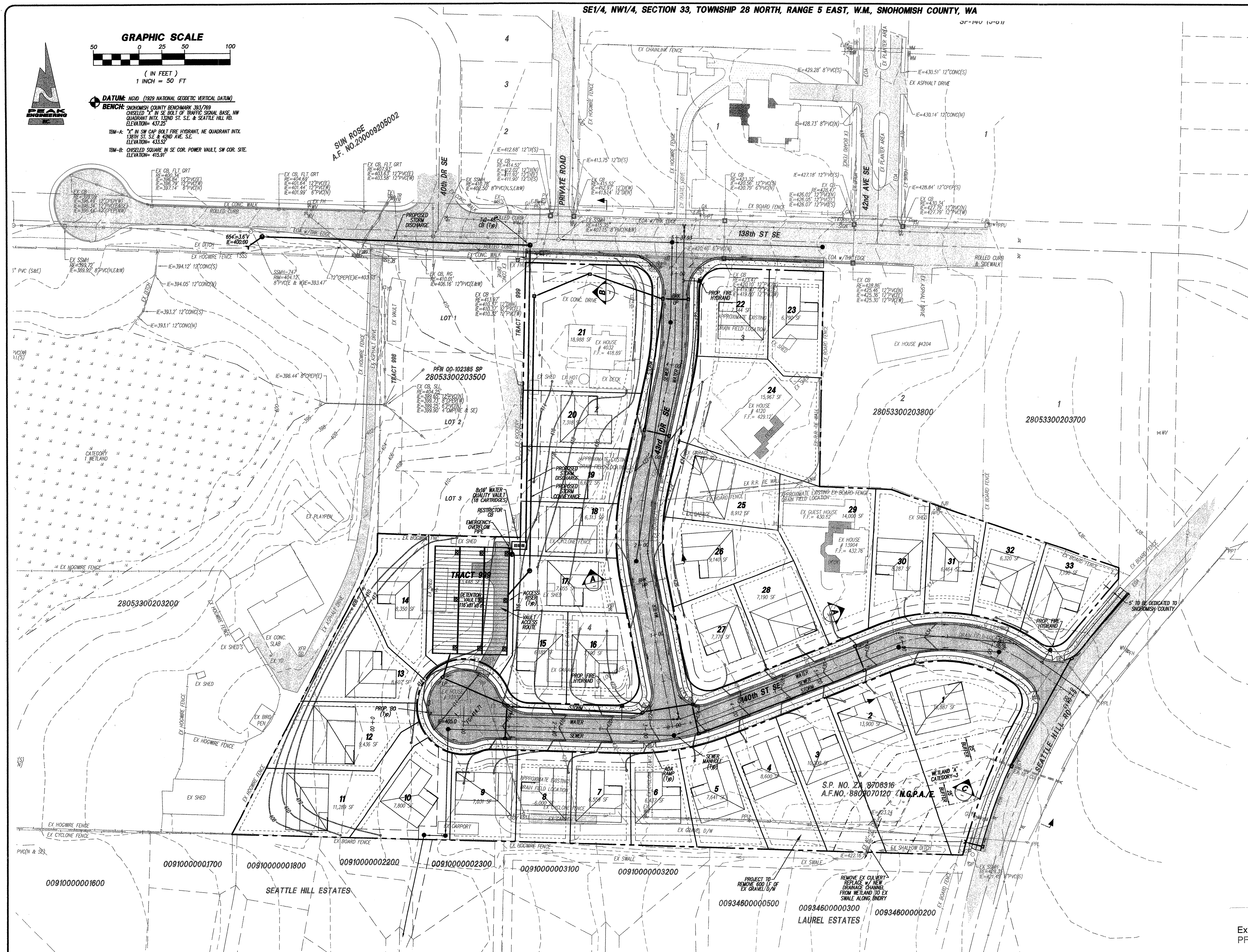
(IN FEET)
1 INCH = 50 FT

DATUM: NGVD (1929 NATIONAL GEODETIC VERTICAL DATUM)

BENCH: SNOHOMISH COUNTY BENCHMARK 393/769
CHISELED "X" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD.
ELEVATION= 437.25'

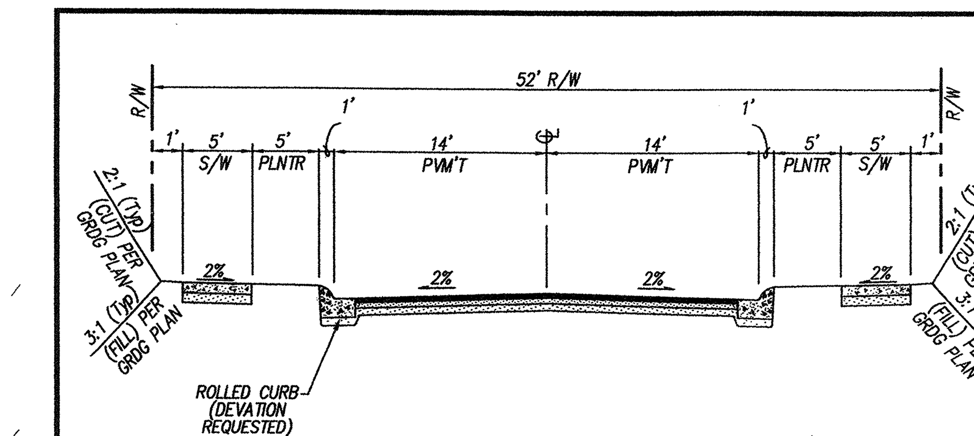
TBM-A: "X" IN SW CAP BOLT FIRE HYDRANT, NE QUADRANT INTX. 138TH ST. S.E & 42ND AVE. S.E.
ELEVATION= 433.52'

TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE.
ELEVATION= 415.91'



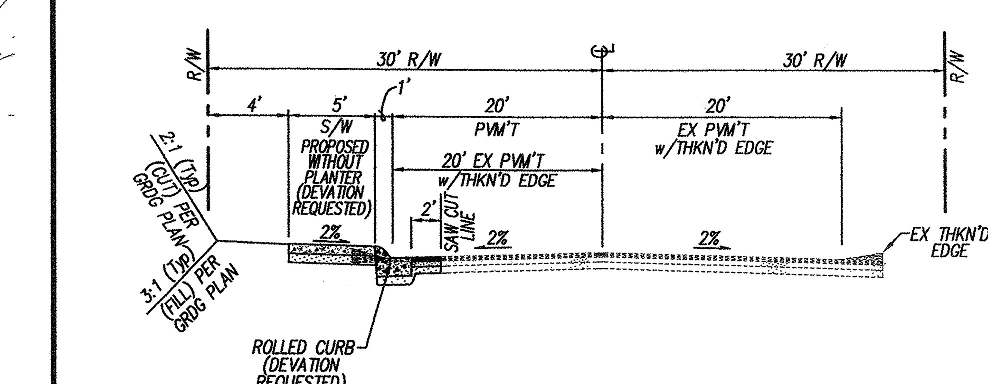
DRAINAGE NOTES:

1. THE EXISTING SITE SLOPES EAST TO WEST AT APPROX. 4.0%.
2. SOILS ON SITE ARE ALDERWOOD URBAN COMPLEX, HYDROLOGIC SOIL GROUP "C".
3. EXISTING COVER:
   0.81 AC – RESIDENCES, D/W's & OUT BUILDINGS
   7.20 AC – PASTURE/GRASS w/SOME TREES
4. DEVELOPED CONDITION:
   3.32 AC GRASS/LANDSCAPING
   4.69 AC IMPERVIOUS (ROAD & FRONTAGE, RESIDENCES, & D/W'S)
5. RUNOFF FROM IMPERVIOUS SURFACES WILL BE COLLECTED AND CONVEYED TO THE DETENTION VAULT AND WATER QUALITY VAULT.
6. OUTFLOW FROM THE VAULT WILL BE NORTHERLY TO 138th ST SE WHERE A NEW STORM SYSTEM (DEEPER THAN EXISTING) WILL DIRECT RUNOFF WEST TO THE OFFSITE WETLAND.
7. SEE "TARGETED DRAINAGE REPORT, DOWNSTREAM ANALYSIS AND EROSION RISK ASSESSMENT" DATED OCT. 28, 2003, PREPARED BY PEAK ENGINEERING, INC.
8. LOTS 1, 2 & 3 ARE TO PROVIDE SPLASH BLOCKS.



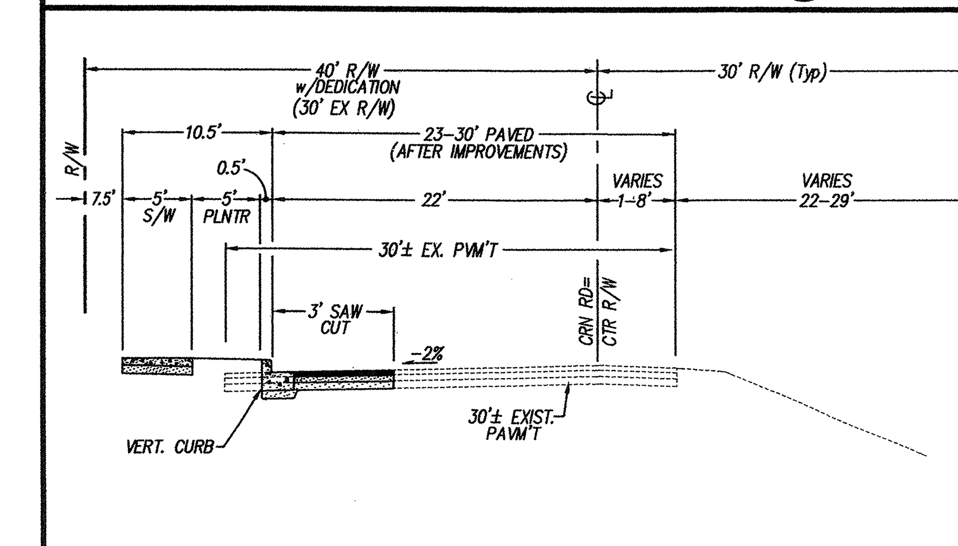
RESIDENTIAL–DESIGN SPEED 25 MPH
(PARKING ONE SIDE ONLY)

43rd DR SE & 140th ST SE SECTION (A)
N.T.S.



COLLECTOR–DESIGN SPEED 30 MPH
(PARKING ONE SIDE ONLY)

138th ST SE SECTION (B)
N.T.S.



MINOR ARTERIAL–DESIGN SPEED 35 MPH
SEATTLE HILL ROAD SECTION (C)
N.T.S.

DATE	REVISION/ISSUED
11/14/03	ISSUED

Exhibit Number: 4 B
PFN: 03-109825 SD

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART, STATE OF WASHINGTON, 29726 REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/16/2005
DATE: 11/18/03

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:

MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
JOB #03055

GRADING ESTIMATE

CUT: 8,000 CY's
FILL: 8,000 CY's

THE GRADING ESTIMATE PROVIDED FOR THESE PLANS IS APPROXIMATE, ACTUAL GRADING VOLUMES MAY VARY. CALCULATIONS DO NOT ACCOUNT FOR VARIOUS VOLUMETRIC CHANGES DURING THE EARTH WORK PROCESS.

GRADING ESTIMATE PRODUCED USING LAND DEVELOPMENT DESKTOP REL. 2 SURFACE MODEL. EXISTING GROUND AND PROPOSED FINISHED GRADE SURFACE MODEL COMPARED USING THE AVERAGE END AREA METHOD WITH SECTION SAMPLING @ 10' INTERVALS.

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN: APPLETREE NORTH

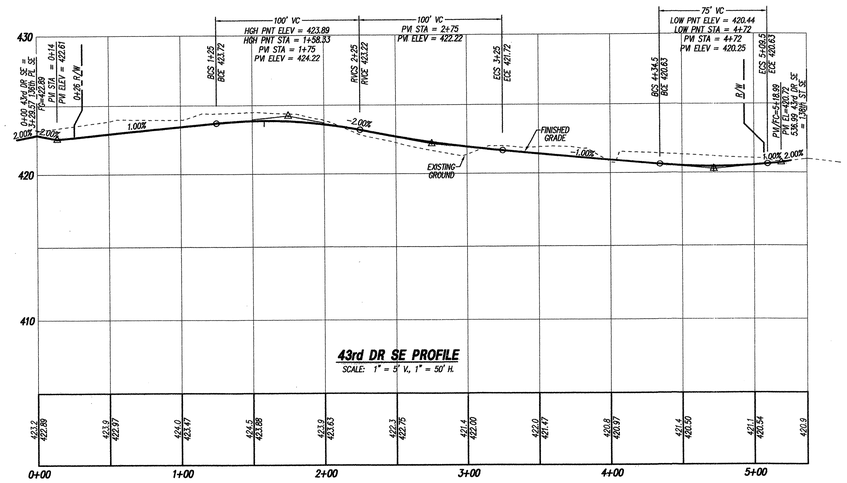
TARGETED DRAINAGE PLAN

GRADING & DRAINAGE PLAN

PROJECT NO. 03496

DWG P2 OF 4

HDEV-2146



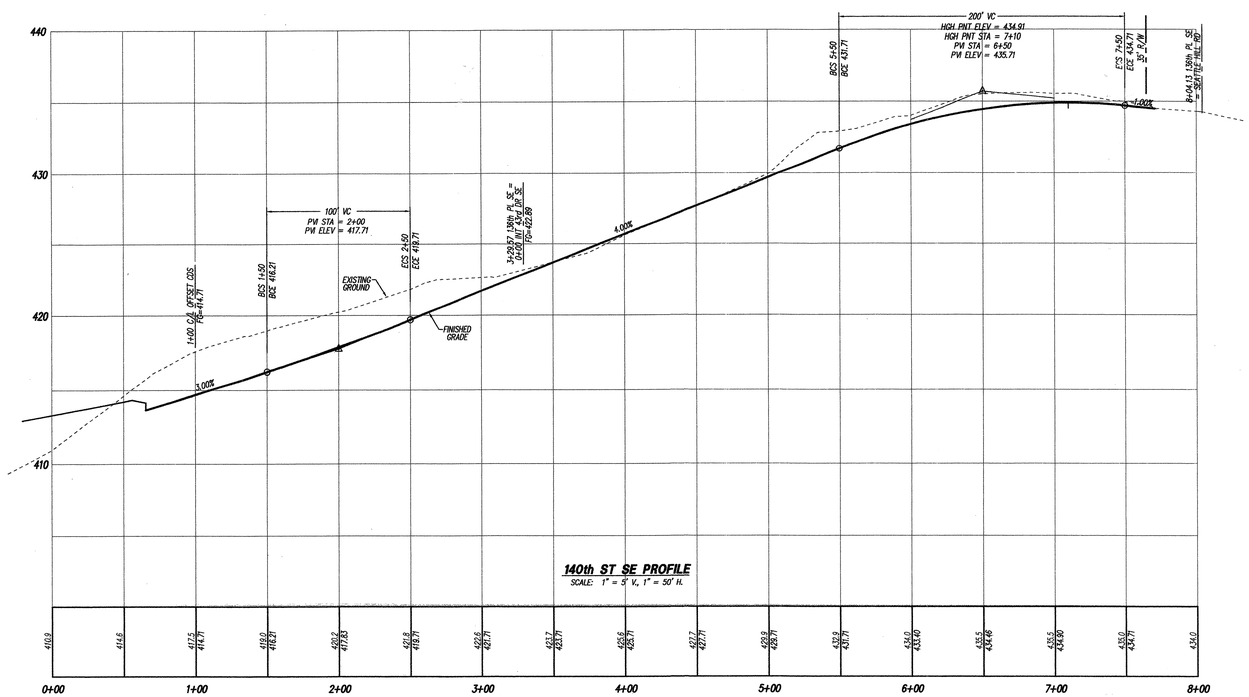


Exhibit Number: 4 C
PFN: 03-109825 SD

DATE	REVISION/ISSUED
11/14/03	ISSUED

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART — STATE OF WASHINGTON — 29726 — REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/16/2005
DATE: 11/18/03

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:

MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
JOB #03055

DATUM: NGVD (1929 NATIONAL GEODETIC VERTICAL DATUM)
BENCH: SNOHOMISH COUNTY BENCHMARK 393/769
CHISELED "X" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD.
ELEVATION= 437.25'
TBM-A: "X" IN SW CAP BOLT FIRE HYDRANT, NE QUADRANT INTX. 136TH ST. S.E. & 42ND AVE. S.E.
ELEVATION= 433.52
TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE.
ELEVATION= 415.91

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555
THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN:
APPLETREE NORTH
TARGETED DRAINAGE PLAN
ROAD PROFILES

PROJECT NO. 03496
DWG P3 OF 4

HDEV-2147

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SNOHOMISH COUNTY STANDARDS AND SPECIFICATIONS, (EDDS) WASHINGTON STATE DEPARTMENT OF TRANSPORTATION CURRENT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION AND THE CURRENT WSDOT HYDRAULICS MANUAL.
2. ALL WORK WITHIN THE PLAT AND COUNTY RIGHT-OF-WAY SHALL BE SUBJECT TO THE INSPECTION OF THE COUNTY ENGINEER OR HIS DESIGNATED REPRESENTATIVE.
3. PRIOR TO ANY SITE WORK, THE CONTRACTOR SHALL CONTACT THE CHIEF INSPECTOR FOR LAND DEVELOPMENT DIVISION AT (425) 388-3385 TO SCHEDULE A PRECONSTRUCTION CONFERENCE. FIELD CHANGES REQUIRING REDESIGN SHALL BE SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION. ENGINEERED AS-BUILTS SHALL BE REQUIRED PRIOR TO SITE APPROVAL.
4. SEDIMENT LADEN WATERS SHALL NOT ENTER THE NATURAL DRAINAGE SYSTEM.
5. 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, AS SPECIFIED IN SECTION 2-03.3(14)C COMPACTING EARTH EMBANKMENTS METHOD B.
6. THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION 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 AID IN UTILITY LOCATION CALL 1-800-424-5555.
7. THE CONTRACTOR SHALL NOTIFY PEAK ENGINEERING, INC. AND THE COUNTY INSPECTOR WHEN CONFLICTS BETWEEN THE PLANS AND FIELD CONDITIONS EXIST PRIOR TO CONSTRUCTION AND SAID CONFLICTS SHALL BE RESOLVED PRIOR TO PROCEEDING WITH CONSTRUCTION.
8. THE CONTRACTOR SHALL KEEP TWO SETS OF APPROVED PLANS ON SITE AT ALL TIMES FOR RECORDING AS-BUILT INFORMATION. ONE SET SHALL BE SUBMITTED TO PEAK ENGINEERING AT COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE OF WORK.
9. A GRADING PERMIT ISSUED PURSUANT TO TITLE 30.63B SCC AND CHAPTER 33 UBC AND APPROVAL OF THE TEMPORARY EROSION AND SEDIMENTATION CONTROL PLAN SHALL HAVE BEEN OBTAINED FROM PLANNING & DEVELOPMENT SERVICES FOR ANY ON SITE GRADING WHICH IS NOT EXPRESSLY EXEMPT BY SECTION 30.63B.020 S.C.C.
10. LOT LINES SHOWN HEREON ARE APPROXIMATE, ACTUAL PLATTED DIMENSIONS AND/OR DEEDED LOCATIONS SHALL TAKE PRECEDENCE.
11. A COPY OF THESE APPROVED PLANS, WSDOT CURRENT STANDARD SPECIFICATIONS AND SNOHOMISH COUNTY PUBLIC WORKS ENGINEERING DESIGN AND DEVELOPMENT STANDARDS SHALL BE ON THE JOB SITE WHENEVER WORK IS IN PROGRESS.
12. WORK IN THE COUNTY RIGHT-OF-WAY MAY REQUIRE A LANE CLOSURE RIGHT-OF-WAY USE PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS.

STORM DRAINAGE NOTES

1. UNLESS OTHERWISE NOTED, ALL STORM SEWER PIPE SHALL BE SMOOTH WALLED STORM DRAIN (SD). SD SHALL BE REINFORCED CONCRETE PIPE (RCP), CORRUGATED POLYETHYLENE PIPE (CPP), POLYETHYLENE VINYL CHLORIDE PIPE (PVC), OR RIBBED PVC. CPP SHALL BE HIGH DENSITY CORRUGATED POLYETHYLENE SMOOTH INTERIOR PIPE AND SHALL BE MANUFACTURED IN CONFORMITY WITH THE LATEST AASHTO SPECIFICATIONS FOR M 294 TYPE S AND THE MATERIAL COMPOUND SHALL CONFORM TO ASTM D 3350. PIPE JOINTS AND FITTINGS SHALL CONFORM TO AASHTO M 294. COUPLINGS SHALL BE INTEGRAL BELL AND SPIGOT OR DOUBLE BELL SEPARATE COUPLINGS. SPLIT COUPLINGS WILL NOT BE ALLOWED. POLYETHYLENE VINYL CHLORIDE PIPE (PVC) SHALL CONFORM TO SDR35, ASTM D3034. RIBBED PVC SHALL COMPLY WITH ASTM F794 AND BE MADE FROM PVC CONFORMING TO THE REQUIREMENTS OF ASTM D1784, CELL CLASS 12364B. GASKET MATERIAL SHALL COMFORM WITH ASTM F477 & THE JOINT SHALL BE AN INTEGRAL-BELL GASKETED JOINT CONFORMING WITH ASTM D3212. CORRUGATED METAL PIPE (CMP) IS TO BE GALVANIZED STEEL WITH TREATMENT 1 ASPHALT COATING OR BETTER, OR CORRUGATED ALUMINUM PIPE, OR AASHTO M274-70 ALUMINIZED STEEL.

   MINIMUM COVERAGE REQUIREMENTS FOR 12" PIPE IN TRAFFIC AREAS

   < 1.5' REQUIRES RCP (REINFORCED CONCRETE PIPE) MINIMUM
   > 1.5' REQUIRES 16 GAUGE CMP, OR CCP MINIMUM
2. ALL PIPE SHALL BE PLACED ON STABLE EARTH, OR IF IN THE OPINION OF THE COUNTY INSPECTOR, THE EXISTING FOUNDATION IS UNSATISFACTORY, THEN IT SHALL BE EXCAVATED BELOW GRADE AND BACKFILLED WITH A GRAVEL MATERIAL TO SUPPORT THE PIPE.
3. THE BACKFILL SHALL BE PLACED EQUALLY ON BOTH SIDES OF THE PIPE OR PIPE-ARCH IN LAYERS WITH A LOOSE AVERAGE DEPTH OF 6", MAXIMUM DEPTH 9", THOROUGHLY TAMPING EACH LAYER. THESE COMPACTED LAYERS MUST EXTEND FOR ONE DIAMETER ON EACH SIDE OF THE PIPE OR TO THE SIDE OF THE TRENCH. MATERIALS TO COMPLETE THE FILL OVER PIPE SHALL BE THE SAME AS DESCRIBED. (REFER TO WSDOT STANDARD SPECIFICATION 7-04.3(3) AND STANDARD SPECIFICATION 2-03.2(14)C, METHOD B&C.
4. ALL GRATES (INLET AND CATCH BASIN) SHALL BE DEPRESSED 0.1 FEET BELOW PAVEMENT LEVEL. GRATE ELEVATIONS SHOWN ON PLANS ARE PAVEMENT LEVEL.
5. ALL CATCH BASINS TO BE TYPE 1, UNLESS OTHERWISE NOTED.
6. ALL CATCH BASINS WITH A DEPTH OVER 5.0 FEET TO THE FLOW LINE SHALL BE A TYPE II CB (MANHOLE).
7. ALL TYPE II CATCH BASIN MANHOLES AND ALL INLET AND CATCH BASINS SHALL HAVE LOCKING LIDS. ROLLED GRATES ARE NOT APPROVED FOR OUTSIDE OF COUNTY RIGHT-OF-WAY OR FOR USE WITH TYPE II MANHOLE.
8. STANDARD LADDER STEPS SHALL BE PROVIDED IN ALL CATCH BASINS/MANHOLES EXCEEDING 5 FEET IN DEPTH.
9. CATCH BASIN FRAME AND GRATES SHALL BE OLYMPIC FOUNDRY MODEL SM60 LOCKING TYPE OR APPROVED EQUAL. TYPE II CATCH BASIN FRAME AND GRATES SHALL BE OLYMPIC FOUNDRY MODEL MH30, MH26 OR APPROVED EQUAL.
10. DETENTION PONDS WITH SIDE SLOPES STEEPER THAN 3:1 SHALL REQUIRE A PERIMETER FENCE PER SNOHOMISH COUNTY CODE. SIDE SLOPE AVERAGING SHALL NOT BE ALLOWED.
11. CMP PIPE SPECIFICATIONS: (MAY BE USED FOR POND CONTROL STRUCTURE BUT NOT INTENDED FOR USE AS CONVEYANCE PIPE.)

STEEL			ALUMINUM		
2-2/3 x 1/2 in. Corrugation			2-2/3 x 1/2 in. Corrugation		
Pipe Diameter (inches)	Gage Band		Pipe Diameter (inches)	Gage Band	
12 - 54	16	12"	12 - 27	16	12"

12. ALL NON-PERFORATED METAL PIPE SHALL HAVE NEOPRENE GASKETS AT THE JOINTS. O-RING GASKETS MAY BE USED FOR TYPE F COUPLING BAND.
13. THE CULVERT ENDS SHALL BE BEVELED TO MATCH THE SIDE SLOPE. FIELD CUT OF CULVERT ENDS IS PERMITTED, WHEN APPROVED BY THE INSPECTOR.
14. ALL FIELD CUT CULVERT PIPE SHALL BE TREATED WITH TREATMENT AS SHOWN IN THE STANDARD SPECIFICATIONS OR GENERAL SPECIAL PROVISIONS.
15. BACKFILL AROUND PIPE MUST BE COMPACTED TO A SPECIFIED AASHTO T-99 DENSITY OF 90% USE REASONABLE CARE IN HANDLING AND INSTALLATION.
16. CORRUGATED ALUMINUM PIPE AND COUPLING BANDS SHALL MEET THE REQUIREMENTS OF AASHTO M196 AND M197.
17. PRIOR TO SIDEWALK CONSTRUCTION, CONSTRUCT THE LOT DRAINAGE AND STUB-OUTS AND OR BEHIND THE SIDEWALK DRAINS AS REQUIRED. STUB-OUTS SHALL BE MARKED WITH A 2" X 4" AND LABELED "STORM". LOCATIONS OF THESE INSTALLATIONS SHALL BE PLACED ON THE AS-BUILT CONSTRUCTION PLANS AND SUBMITTED TO THE COUNTY.
18. STORM WATER RETENTION/DETENTION FACILITIES STORM DRAINAGE PIPE AND CATCH BASINS SHALL BE FLUSHED AND CLEANED PRIOR TO SNOHOMISH COUNTY ACCEPTANCE.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL MANHOLE, INLET, AND CATCH BASIN FRAMES AND GRATES JUST PRIOR TO POURING OF CURBS AND PAVING.
20. YARD BASINS WITH MULTIPLE CONNECTIONS SHALL EITHER HAVE MULTIPLE KNOCKOUTS OR BE CORE-DRILLED. BROKEN BASINS SHALL NOT BE ACCEPTED.
21. THE SIDES OF THE DETENTION POND SHALL BE SEEDED WITH A SUITABLE GRASS MIXTURE DOWN TO THE PERMANENT WATER SURFACE ELEVATION.

SITE GRADING AND T.E.S.C. NOTES

1. EROSION AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF SCC SECTION 30.63. NONCOMPLIANCE WITH THE EROSION CONTROL REQUIREMENTS, WATER QUALITY REQUIREMENTS AND CLEARING LIMITS VIOLATIONS MAY RESULT IN REVOCATION OF PROJECT PERMITS, PLAN APPROVAL AND BOND FORECLOSURES.
2. PRIOR TO ANY SITE CONSTRUCTION TO INCLUDE CLEARING/LOGGING OR GRADING THE SITE/LOT CLEARING LIMITS SHALL BE LOCATED AND FIELD IDENTIFIED BY THE PROJECT SURVEYOR AS REQUIRED BY THESE PLANS. THE PROJECT SURVEYOR'S NAME AND PHONE NUMBER ARE METRON AND ASSOCIATES AT (360) 435-3777.
3. THE TEMPORARY EROSION/SEDIMENTATION CONTROL BMP'S SHALL BE CONSTRUCTED PRIOR TO ANY GRADING OR EXTENSIVE LAND CLEARING IN ACCORDANCE WITH THE APPROVED TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN. THESE FACILITIES MUST BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION AND LANDSCAPING IS COMPLETED AND POTENTIAL FOR ON-SITE EROSION HAS PASSED. SEDIMENT LADEN WATERS SHALL NOT ENTER THE NATURAL DRAINAGE SYSTEM.
4. THE DEVELOPER/ENGINEER IS RESPONSIBLE FOR THE WATER QUALITY AS DETERMINED BY THE MONITORING PROGRAM, ESTABLISHED BY THE ENGINEER. THE PROJECT ENGINEER'S NAME AND PHONE NUMBER ARE: PEAK ENGINEERING, INC. @ (360) 658-6986.
5. ALL SITE WORK MUST COMPLY TO CHAPTER 30.10 OF THE UNIFORM BUILDING CODE AND TITLES 30.63A AND 30.63B OF THE SNOHOMISH COUNTY CODE (LATEST EDITIONS).
6. ALL EARTH WORK SHALL BE PERFORMED IN ACCORDANCE WITH COUNTY STANDARDS.
7. 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 FOLLOW COUNTY SPECIFICATIONS AND TO BE DESIGNED AND CERTIFIED BY A CIVIL ENGINEER EXPERIENCED IN SOILS MECHANICS.
8. STOCKPILES ARE TO BE LOCATED SUCH THAT SEDIMENT WILL NOT LEAVE SITE. TEMPORARY COVER (BMP's) SHALL CONSIST OF HYDROSEEDING, MULCHING, OR COVERING DISTURBED AREAS AND STOCK PILES WITH PLASTIC SHEETING.
9. ALL STRUCTURAL FILLS SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY BY MODIFIED PROCTOR TEST.
10. A GEOTECHNICAL CONSULTANT SHALL PROVIDE TESTING OF ALL FILLS AND SHALL SEND THE RESULTS TO SNOHOMISH COUNTY. SAID CONSULTANT SHALL CERTIFY THAT ALL GRADING ACTIVITIES WERE DONE UNDER HIS/HER DIRECTION.
11. 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 RUNNING THE COMPACTOR OVER THE SLOPE AS EACH FILL LIFT IS BEING PLACED. ALL SLOPES SHALL BE COMPACTED BY THE END OF EACH WORKING DAY.
12. EARTH QUANTITIES (CUTS & FILLS) SHOWN ON PLANS ARE ESTIMATES ONLY AND ARE NOT ADJUSTED FOR EXPANSION OR COMPACTION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ACTUAL QUANTITIES AS REQUIRED.
13. AREAS TO RECEIVE FILL SHALL BE PREPARED BY REMOVING UNSUITABLE MATERIAL SUCH AS CONCRETE SLABS, TREE STUMPS, BRUSH, AND TRASH.
14. FILL MATERIALS SHALL BE AS SPECIFIED IN GENERAL NOTE 1., UNLESS SHOWN OTHERWISE ON PLANS.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

1. INSTALLATION: THE AREA OF THE ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. THE GRAVEL SHALL BE PLACED TO THE SPECIFIED DIMENSIONS. 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. AGGREGATE: 4" TO 6" CRUSHED BALLAST ROCK.
3. A SEPARTION GEOTEXTILE SHALL BE PLACED UNDER THE SPALLS TO PREVENT FINE SEDIMENT FROM PUMPING UP INTO THE ROCK PAD. THE GEOTEXTILE SHALL MEET THE FOLLOWING STANARDS:

GRAB TESILE STRENGTH (ASTM D4751)	200 PSI MIN.
GRAB TENSILE ELONGATION (ASTM D4632)	30% MAX.
MULLEN BURST STRENGTH (ASTM D3786-80a)	400 PSI MIN.
AOS (ASTM D4751)	20-45 (U.S. STANDAR SIEVE SIZE)

4. ENTRANCE DIMENSIONS: THE AGGREGATE LAYER MUST BE AT LEAST 12 INCHES THICK. IT MUST EXTEND THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF THE ENTRANCE MUST BE AT LEAST 50 FEET.
5. WASHING: IF CONDITIONS ON THE SITE ARE SUCH THAT MOST OF THE MUD IS NOT REMOVED FROM VEHICAL TIRES BY CONTACT WITH THE GRAVEL, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER THE PUBLIC ROAD. WASH WATER MUST BE CARRIED AWAY FROM ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH 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.

PERMANENT COVER BMP (HYDROSEEDING GENERAL NOTES)

1. CONSTRUCTION ACCEPTANCE: WILL BE SUBJECT TO A WELL ESTABLISHED GROUND COVER THAT FULFILLS THE REQUIREMENT OF THE APPROVED CONSTRUCTION PLANS AND TITLE 30.63, SNOHOMISH COUNTY DRAINAGE ORDINANCE.
2. ALL DISTURBED AREAS SUCH AS DETENTION FACILITIES, ROADWAY BACK-SLOPES, ETC. SHALL BE SEEDED WITH A PERENNIAL GROUND COVER GRASS TO MINIMIZE EROSION. GRASS SEEDING WILL BE DONE USING AN APPROVED HYDROSEEDER OR AS OTHERWISE APPROVED BY SNOHOMISH COUNTY.
3. PREPARATION OF SURFACE: ALL AREAS TO BE SEEDED SHALL BE CULTIVATED TO THE SATISFACTION OF THE COUNTY INSPECTOR. THIS MAY BE ACCOMPLISHED BY DISCING, RAKING, HARROWING OR OTHER ACCEPTABLE MEANS.
4. IMMEDIATELY FOLLOWING FINISH GRADING, PERMANENT VEGETATION (CONSISTING OF RAPID, PERSISTENT AND LEGUME) WILL BE APPPLIED. (MINIMUM 80# PER ACRE). THIS IS TO INCLUDE THE FOLLOWING: 20% ANNUAL, PERENNIAL OR HYBRID RYE GRASS, 40% CREEPING RED FESCUE, 40% WHITE CLOVER. HYDROSEED REQUIRED.
5. FERTILIZER: SHALL BE APPLIED AT 400# PER ACRE OF 10-20-20 (10 lb. PER 1,100 SQUARE FEET) OR EQUIVALENT.

MAINTENANCE OF SILTATION BARRIERS

1. SILTATION BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BARRIERS, END RUNS AND UNDERCUTTING BENEATH BARRIERS. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

BMP NOTES:

1. COVER PRACTICES:
   THE EXISTING VEGETATION SHOULD BE LEFT UNDISTURBED WHERE POSSIBLE TO LIMIT EROSION. DISTURBED AREAS SHALL BE COVERED WITH MULCH AND/OR MATTING. STOCKPILES OR SLOPES STEEPER THAN 2:1 SHALL BE COVERED WITH PLASTIC SHEETING HELD IN PLACE WITH SAND BAGS.
   STRUCTURAL PRACTICES:
   SILT FENCES AROUND THE PERIMETER WILL PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE.

STAND PIPE AND SEDIMENT POND MAINTENANCE

1. THE EMBANKMENT OF THE BASIN SHOULD BE CHECKED REGULARLY TO INSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. THE EMERGENCY SPILLWAY SHOULD BE CHECKED REGULARLY TO INSURE THAT ITS LINING IS WELL ESTABLISHED AND EROSION-RESISTANT. THE SILTATION BASIN SHOULD BE CHECKED AFTER EACH RUNOFF-PRODUCING RAINFALL FOR SEDIMENT CLEAN OUT. WHEN THE SEDIMENT REACHES THE CLEAN OUT LEVEL, IT SHALL BE REMOVED AND PROPERLY DISPOSED.

ABREVIATIONS TABLE

(A/P)	= ANGLE POINT	(MCSE)	= MIN CRAWL SPACE ELEV.
(BC)	= BOTTOM OF CURB-F/L	(OWS)	= OIL WATER SEPARATER
(BW)	= BOTTOM OF WALL	(PC)	= POINT OF CURVATURE
(BO)	= BLOWOFF	(PI)	= POINT OF INTERSECTION
(BRK)	= BREAK/GRADE BREAK	(PL)	= PROPERTY LINE
(CB)	= CATCH BASIN	(PP)	= POWER/UTILITY POLE
(CBU)	= COLLECTION BOX UNITS	(PT)	= POINT OF TANGENCY
(CE)	= CULVERT END	(PVMT)	= PAVEMENT
(CL)	= CENTER LINE	(RE)	= RIM ELEVATION
(CO)	= CLEANOUT	(SD)	= STORM DRAIN
(CSBC)	= CR. SURF'G BASE COURSE	(SLL)	= SOLID LOCKING LID
(CSTC)	= CR. SURF'G TOP COURSE	(SS)	= SANITARY SEWER
(CTR)	= CENTER	(SSMH)	= SEWER MANHOLE
(DIP)	= DUCTILE IRON PIPE	(STRCTR)	= STRUCTURE
(DRNG)	= DRAINAGE	(TBR)	= TO BE REMOVED
(EL)	= ELEVATION	(TC)	= TOP OF CURB
(EOA)	= EDGE OF ASPHALT	(TO)	= THRU CURB INLET
(EOC)	= EDGE OF GRAVEL	(TOB)	= TOP OF BANK
(ESMT)	= EASEMENT	(TW)	= TOP OF WALL
(EX)	= EXISTING	(Typ)	= TYPICAL
(G.L)	= GUTTER LINE OF CURB	(Ty-X)	= TYPE-CB/MH
(GRT)	= GRATE	(Ty-1)	= TYPE 1 CB
(GRVL)	= GRAVEL	(YD)	= YARD DRAIN
(FH)	= FIRE HYDRANT	(VG)	= VANED GRATE
(FOC)	= FACE OF CURB	(W)	= WATER/WATER MAIN
(IE)	= INVERT ELEVATION	(WCR)	= WHEEL CHAIR RAMP
(INT)	= INTERSECTION	(WM)	= WATER METER
(LL)	= LOT LINE	(WV)	= WATER VALVE
(MB)	= MAILBOX	(1/x a)	= 1/parts DELTA

LEGEND

EXISTING	DESCRIPTION	PROPOSED
BSBL	BLDG SETBACK LINE (BSBL)	BSBL
	BLOW-OFF (BO)	
	CATCH BASIN (Ty-1)	
	CATCH BASIN (Ty-2)	w/GRATE w/ROUND SOLID LID
	CASE MONUMENT	
	CONCRETE MON	
SD	CULVERTS (CE=CULV END)	X'-12" SD
	DRAINAGE DITCH/SWALE	
	DRAINAGE FLOW PATTERNS	
	D/W CURBCUT	
	EASEMENTS (ESMT)	
EOA	EDGE PAVEMENT (EOA)	EOA
	FIRE HYDRANT (FH)	
	LOT LINE (L/L)	L/L
MB	MAILBOXES (MB, CBU)	
P/L	PROPERTY LINE (P/L)	P/L
R/W	RIGHT OF WAY (R/W)	R/W
C/L	ROAD CENTER (CTR) LINE	C/L
S	SANITARY SEWER MANHOLE	
	SECTION CORNER	
	SEWER STUBOUT	
SD	STORM PIPE (SD)	X'-12" SD
	STORM STUBOUT	
PP	UTILITY POLE (PP, UP)	PP
8"W	WATER LINE	X'-8" D.I.P.
	WATER SERVICE (WS)	
	WATER VALVE (WV)	
	WHEEL CHAIR RAMP (WCR)	
	YARD BASIN (YD)	

DATE	REVISION/ISSUED
11/14/03	ISSUED

Exhibit Number: 4 D
PFN: 03-109825 SD

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART, STATE OF WASHINGTON, 29726, REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/16/2005
DATE: 11/10/03

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:
MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
JOB #03055

DATUM: NGVD (1929 NATIONAL GEODETIC VERTICAL DATUM)
BENCH: SNOHOMISH COUNTY BENCHMARK 393/769 CHISELED "X" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD. ELEVATION= 437.25'
TBM-A: "X" IN SW CAP BOLT FIRE HYDRANT, NE QUADRANT INTX. 138TH ST. S.E. & 42ND AVE. S.E. ELEVATION= 433.52'
TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE. ELEVATION= 415.91'

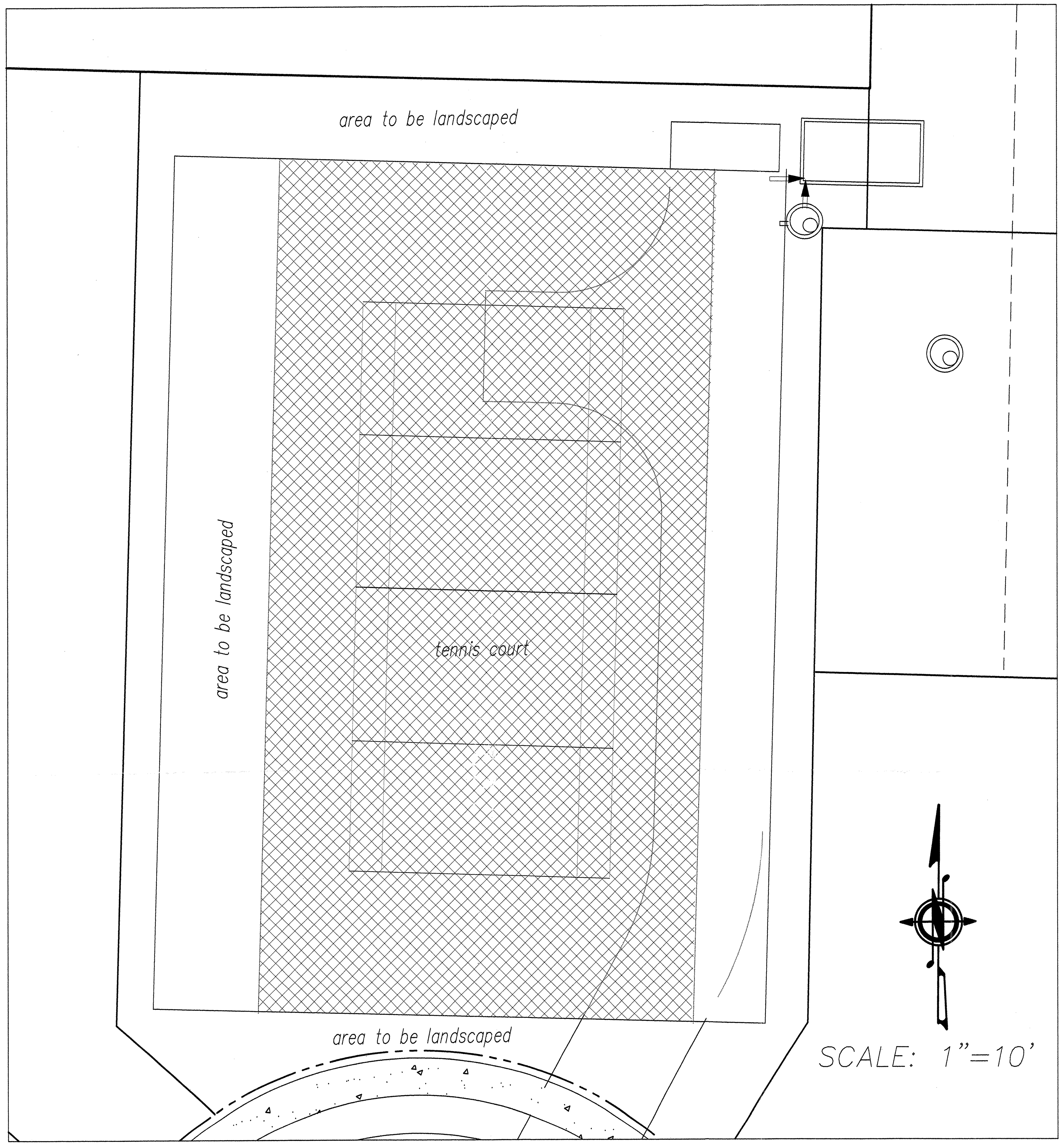
CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555
THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN: APPLETREE NORTH
TARGETED DRAINAGE PLAN
NOTES & DETAILS

PROJECT NO. 03496
DWG P4 OF 4

HDEV-2148

NW 1/4 33 28 5



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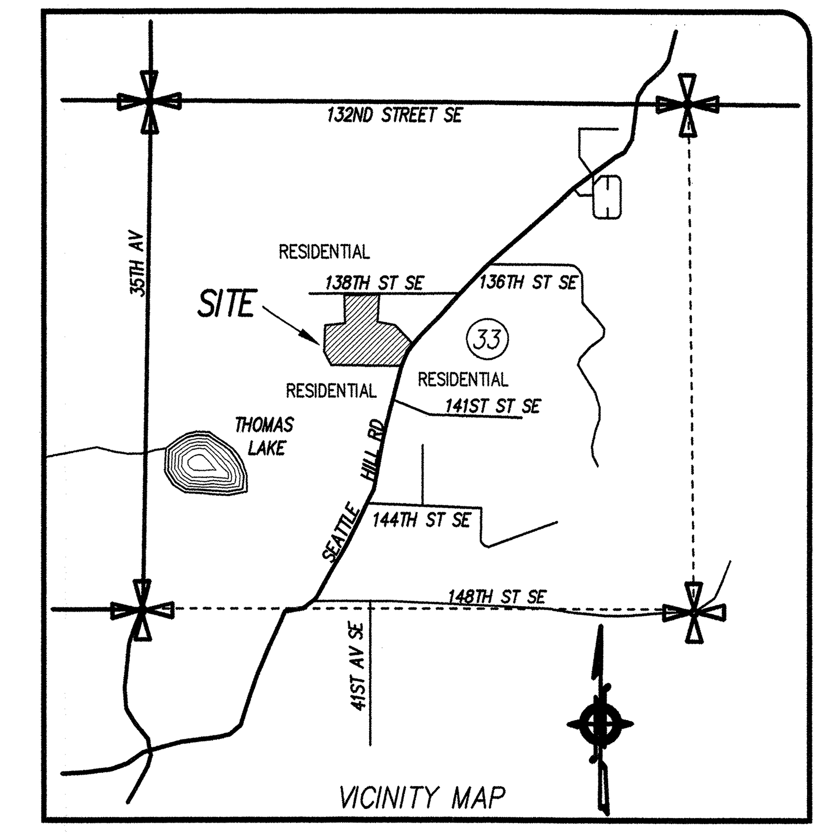

03-109825

RECEIVED
NOV 20 2003
PLANNING & DEVELOPMENT SERVICES LAND USE DIVISION

APPLETREE NORTH

GENERAL PROJECT INFORMATION

PROJECT INFORMATION

APPLICANT/OWNER
GORDON REYKDAL
8908 EASTVIEW AVE
EVERETT, WA 98208
425-337-2429

CONTACT
LAUREY TOBIASON
TOBIASON & CO, INC
506 NE 73RD ST. SUITE 1A
SEATTLE, WA 98115
206-522-1024

SURVEYOR
MEAD GILMAN & ASSOCIATES
PO BOX 289
WOODINVILLE WA 98072
425-486-1252

ENGINEER
PEAK ENGINEERING INC.
1720 GROVE STREET
MARYSVILLE, WA 98270
360-658-6986

OWNERS OF RECORD
STEVEN & PEGGY LEFLEY
4032 138TH SE
SNOHOMISH, WA 98290
425-338-1458

JAMES LOMAX
13928 SEATTLE HILL ROAD
SNOHOMISH, WA 98290
425-316-8653

GARY & KATHRYN FONTES
13904 SEATTLE HILL ROAD
SNOHOMISH, WA 98290
425-338-4878

BABETTE JUEOKE
13930 SEATTLE HILL ROAD
SNOHOMISH, WA 98290

SITE DATA

EXISTING ZONING:	R-9600
PROPOSED ZONING:	R-7200
TOTAL SITE AREA:	375,842 SF
PROPOSED LOTS:	33
LOTS PER ACRE:	3.8
AVERAGE LOT SIZE:	8,904 SF
SMALLEST PROPOSED LOT:	6,000 SF
DUPLEX PROPOSED:	NONE
WATER DISTRICT:	SILVER LAKE WATER DISTRICT
SEWAGE DISPOSAL:	SILVER LAKE WATER DISTRICT
SCHOOL DISTRICT:	EVERETT
FIRE DISTRICT:	FPD 11

OPEN SPACE DATA

TOTAL:	13,200 SF
PERCENT OF SITE:	3.5

SLOPE DATA

0-15% SLOPE:	375,842 SF
15-20% SLOPE:	
20-25% SLOPE:	
25-33% SLOPE:	
>33% SLOPE:	

ROAD DATA

LINEAGE:	12,435 LF
ACREAGE:	1.57 (INCL 10' DEDICATION)
PERCENT OF SITE:	18 (INCL 10' DEDICATION)

TAX ASSESSOR NO.
280533-002-031-00
280533-002-034-00
280533-002-036-00
280533-002-039-00
280533-002-009-00

SITE ADDRESS
13904 SEATTLE HILL ROAD SE, 13928 SEATTLE HILL ROAD SE, 13930 SEATTLE HILL ROAD, 4120 138TH STREET SE & 4032 138TH STREET SE, SNOHOMISH, WA 98290

CLEARING LIMITS
ENTIRE SITE, WITH EXCEPTION OF NGPA WILL BE CLEARED.

CUT/FILL CALCULATIONS/ANALYSIS
8000 CY CUT
8000 CY FILL
FILL MATERIAL WILL BE FROM ON SITE
EXCESS CUT MATERIAL WILL BE LEGALLY DISPOSED OFFSITE

MIN. NET DENSITY CALCULATIONS

GROSS AREA:	375,842 SF
LESS ROADS:	68,245 SF
LESS CRITICAL AREAS & BUFFERS:	12,811 SF
LESS DETENTION AREAS/BIO-SWALES:	0
	294,786 SF

DIV. BY 43,560 = 6.77 AC.
33 LOTS DIV. BY 6.77 ACRES= 4.87 DU PER ACRE

LOT SIZE AVERAGE CALCULATIONS

TOTAL ALL LOTS:	293,594 SF
PLUS DETENTION TRACT 999	13,438 SF

NET AREA 307,032 SF DIV. BY 33 LOTS = 9,304 SF

EDWARD D. ANDERSON
STATE OF WASHINGTON
32434
REGISTERED
PROFESSIONAL LAND SURVEYOR
EXPIRES 9/9/04
11/20/03

LEGAL DESCRIPTION

PARCEL A:

LOT 2 OF SHORT PLAT 316 (10-83) RECORDED UNDER RECORDING NUMBER 8401180232, BEING A PORTION OF LOT 2 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL B:

LOT 3 OF SHORT PLAT 316 (10-83) RECORDED UNDER RECORDING NUMBER 8401180232, BEING A PORTION OF LOT 2 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL C:

LOT 4 OF SHORT PLAT 316 (10-83) RECORDED UNDER RECORDING NUMBER 8401180232, BEING A PORTION OF LOT 2 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL D:

LOT 3 OF SHORT PLAT ZA8706316SP RECORDED UNDER RECORDING NUMBER 8805090123, BEING A PORTION OF LOT 1 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL E:

LOT 4 OF SHORT PLAT ZA8706316SP RECORDED UNDER RECORDING NUMBER 8805090123, BEING A PORTION OF LOT 1 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

MATTERS OF RECORD

(THE FOLLOWING MATTERS OF RECORD COORESPOND TO SCHEDULE C OF AMENDED SECOND REPORT SUBDIVISION GUARANTEE ISSUED BY PACIFIC NORTHWEST TITLE CO. OF SNOHOMISH COUNTY, ORDER NO. 150267-1, DATED OCTOBER 28, 2003)

1. SUBJECT TO RIGHT TO MAKE NECCESSARY SLOPES FOR CUTS AND FILLS UPON PROPERTY HEREIN DESCRIBED AS GRANTED IN DEED UNDER RECORDING NO. 1626885. (PARCEL E)

2. SUBJECT TO RIGHT TO MAKE NECCESARY SLOPES FOR CUTS AND FILLS UPON PROPERTY HEREIN DESCRIBED AS GRANTED IN DEED RECORDED UNDER RECORDING NO. 1626886.

3. SUBJECT TO EASEMENT AND THE TERMS AND CONDITIONS THEREOF TO P.U.D. NO. 1 OF SNOHOMISH COUNTY & WEST COAST TELEPHONE CO. FOR ELECTRIC TRANSMISSION AND DISTRIBUTION LINE, RECORDED UNDER RECORDING NO. 1632603, THE DESCRIPTION CONTAINED THEREIN IS NOT SUFFICIENT TO DETERMINE ITS EXACT LOCATION WITHIN THE PROPERTY HEREIN DESCRIBED.

4. SUBJECT TO RIGHT TO MAKE NECCESARY SLOPES FOR CUTS AND FILLS UPON PROPERTY HEREIN DESCRIBED AS GRANTED IN DEED RECORDED UNDER RECORDING NO. 2092684.

5. SUBJECT TO EASEMENT AND THE TERMS AND CONDITIONS THEREOF TO P.U.D. NO. 1 OF SNOHOMISH COUNTY FOR ELECTRIC DISTRIBUTION LINE, RECORDED UNDER RECORDING NO. 2374052, THE DESCRIPTION CONTAINED THEREIN IS NOT SUFFICIENT TO DETERMINE ITS EXACT LOCATION WITHIN THE PROPERTY HEREIN DESCRIBED.

8. SUBJECT TO COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS CONTAINED IN SHORT PLAT RECORDED UNDER RECORDING NO. 8401180232.

9. SUBJECT TO CONDITIONS, COVENANTS AND RESTRICTIONS IN DECLARATION OF RESTRICTIONS RECORDED UNDER RECORDING NO. 8407230041.

10. SUBJECT TO COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS CONTAINED IN SHORT PLAT RECORDED UNDER RECORDING NO. 8805090127.

11. SUBJECT TO EASEMENT AND THE TERMS AND CONDITIONS THEREOF FOR DRAINAGE PURPOSES, RECORDED UNDER RECORDING NO. 9311100077.

job no.	drawn	checked	date	no.	revision	date
			11-20-03			

APPLETREE NORTH
PRELIMINARY PLAT/REZONE
DEVELOPER: GORDON REYKDAL
8908 EASTVIEW AVE., EVERETT WA. 98208 425-337-2429

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
LAUREY TOBIASON
CERTIFICATE No. 305

TOBIASON & COMPANY, Inc.
Land Use Consulting· Landscape Architecture
506 NE 73RD ST SUITE 1A
SEATTLE, WA 98115
(206) 522-1024
(206) 522-1049
Laurey@TobiasonandCo.com

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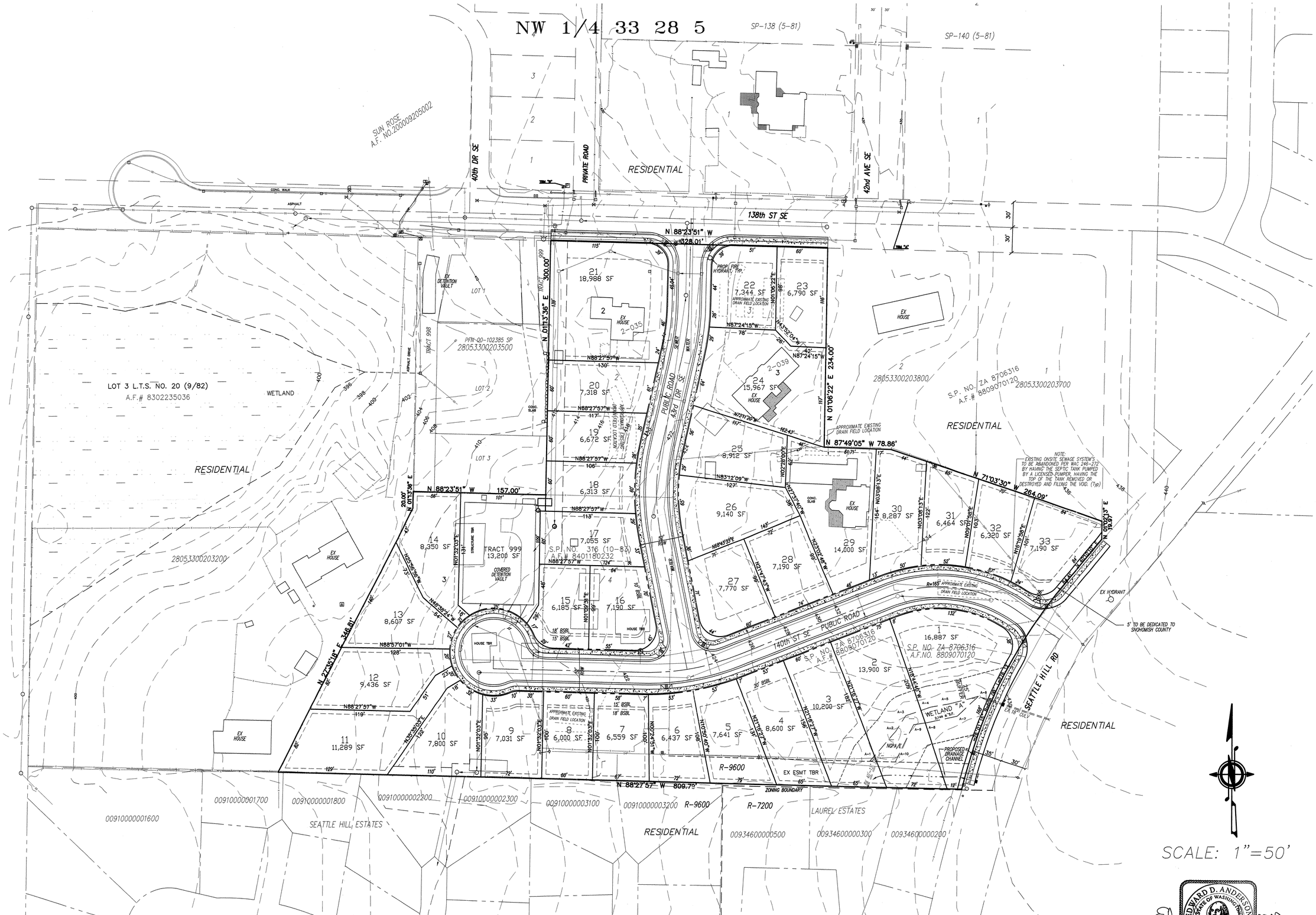
HDEV-2149



MERIDIAN

PLAT OF BLUEGRASS MEADOWS, AUDITOR'S FILE NO. 200101315002, RECORDS OF SNOHOMISH COUNTY, WASHINGTON.

DATUM

NGVD 29

CONTOUR INTERVAL = 2'

EQUIPMENT & PROCEDURES

A TOPCON 5" ELECTRONIC TOTAL STATION WAS USED FOR THIS FIELD TRAVERSE SURVEY. ACCURACY MEETS OR EXCEEDS W.A.C. 332-130-090.

BENCHMARKS

ORIGINAL BM: SNOHOMISH COUNTY BENCHMARK 393/769
CHISELED "X" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD.
ELEVATION= 437.95'

TBM-A: "X" IN SW CAP-BOLT FIRE HYDRANT, NE QUADRANT INTX. 138TH ST. S.E & 42ND AVE. S.E.
ELEVATION= 433.52'

TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE.
ELEVATION= 415.91'

GENERAL NOTES

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. UNDERGROUND UTILITIES WERE LOCATED BASED ON THE SURFACE EVIDENCE OF UTILITIES (IE. PAINT MARKS, SAW CUTS IN PAVEMENT, COVERS, LIDS ETC.) THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

job no.	
drawn	
checked	
date	11-20-03

no.	revision	date

APPLETREE NORTH

PRELIMINARY PLAT/REZONE

DEVELOPER: GORDON REYKDAL
8908 EASTVIEW AVE., EVERETT WA. 98208 425-337-2429

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
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CERTIFICATE No. 305

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laurey@TobiasonandCo.com

EDWARD D. ANDERSON
STATE OF WASHINGTON
32434
REGISTERED
PROFESSIONAL LAND SURVEYOR
EXPIRES 9/01
11/21/03

Sheet
P-2

HDEV-2150

SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 INCH = 50 FT.

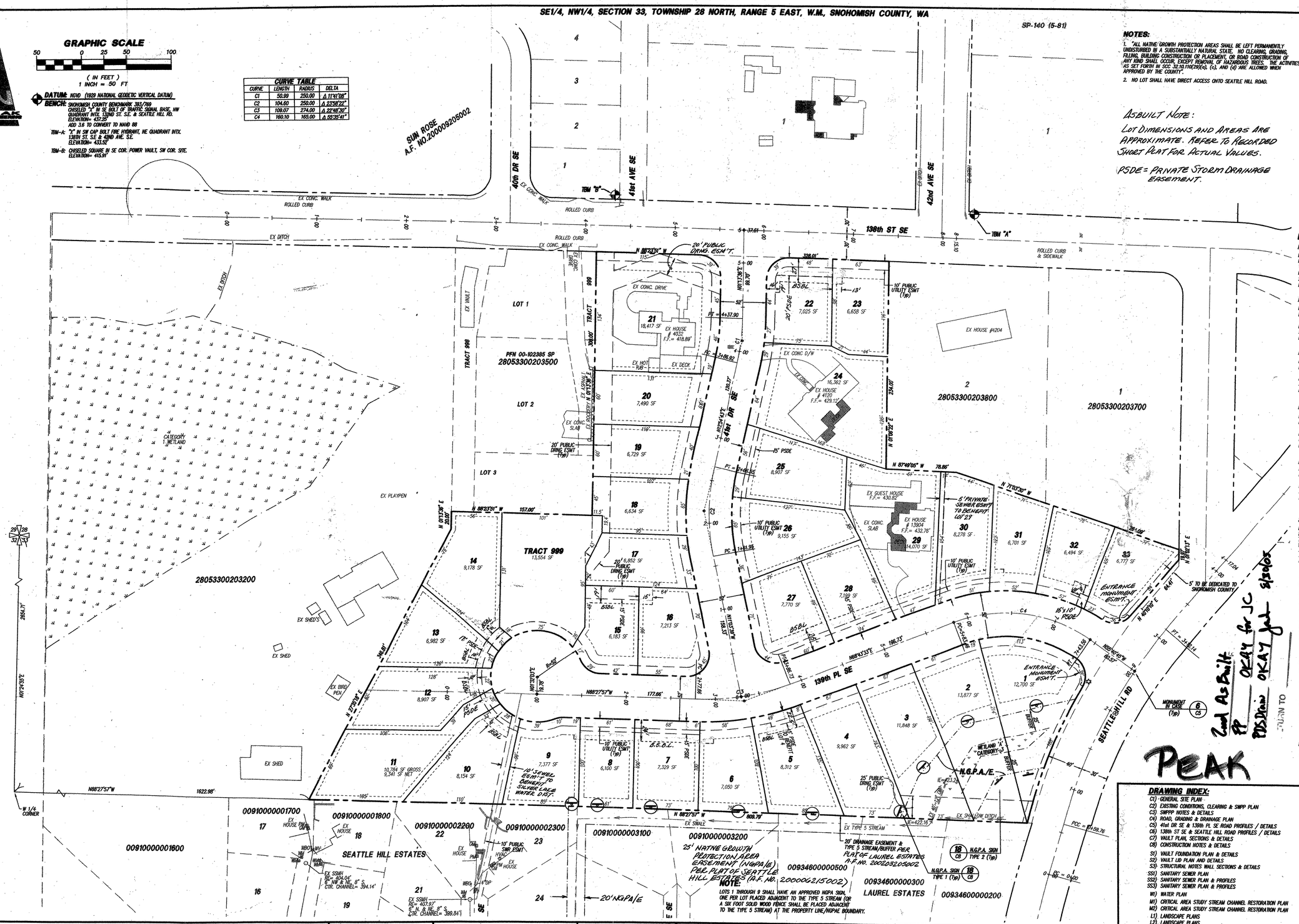
DATUM: NGVD (1929 NATIONAL GEODETIC VERTICAL DATUM)

BENCH: SNOHOMISH COUNTY BENCHMARK 393/769
CHISELED "X" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD.
ELEVATION= 437.25'
ADD 3.6 TO CONVERT TO NAVD 88

TBM-A: "X" IN SW CAP BOLT FIRE HYDRANT, NE QUADRANT INTX. 138TH ST. S.E & 42ND AVE. S.E.
ELEVATION= 433.92'

TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE.
ELEVATION= 415.91'

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	50.99	250.00	Δ 11°41'08"
C2	104.60	250.00	Δ 23°58'22"
C3	109.07	274.00	Δ 22°48'30"
C4	160.10	165.00	Δ 55°35'41"

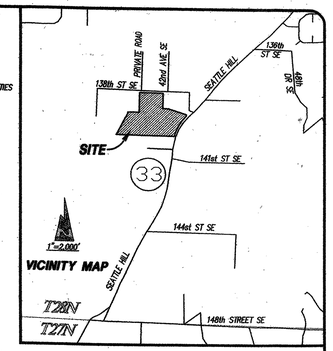


NOTES:

1. "ALL NATIVE GROWTH PROTECTION AREAS SHALL BE LEFT PERMANENTLY UNDISTURBED IN A SUBSTANTIALLY NATURAL STATE. NO CLEARING, GRADING, FILLING, BUILDING CONSTRUCTION OR PLACEMENT, OR ROAD CONSTRUCTION OF ANY KIND SHALL OCCUR, EXCEPT REMOVAL OF HAZARDOUS TREES. THE ACTIVITIES AS SET FORTH IN SCC 32.10.110(29)(a), (c), AND (d) ARE ALLOWED WHEN APPROVED BY THE COUNTY".
2. NO LOT SHALL HAVE DIRECT ACCESS ONTO SEATTLE HILL ROAD.

ASBUILT NOTE:
LOT DIMENSIONS AND AREAS ARE APPROXIMATE. REFER TO RECORDED SHORT PLAT FOR ACTUAL VALUES.

PSDE = PRIVATE STORM DRAINAGE EASEMENT.



LEGAL DESRIPTION:

PARCEL A:
LOT 2 OF SHORT PLAT 316 (10-83) RECORDED UNDER RECORDING NUMBER 8401180232, BEING A PORTION OF LOT 2 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL B:
LOT 3 OF SHORT PLAT 316 (10-83) RECORDED UNDER RECORDING NUMBER 8401180232, BEING A PORTION OF LOT 2 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL C:
LOT 4 OF SHORT PLAT 316 (10-83) RECORDED UNDER RECORDING NUMBER 8401180232, BEING A PORTION OF LOT 2 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL D:
LOT 3 OF SHORT PLAT ZA87063165SP RECORDED UNDER RECORDING NUMBER 8805080123, BEING A PORTION OF LOT 1 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

PARCEL E:
LOT 4 OF SHORT PLAT ZA87063165SP RECORDED UNDER RECORDING NUMBER 8805080123, BEING A PORTION OF LOT 1 AS DESIGNATED ON THAT CERTAIN SURVEY RECORDED IN VOLUME 14 OF SURVEYS, PAGE 53 UNDER RECORDING NUMBER 8302235036, RECORDS OF SNOHOMISH COUNTY, WASHINGTON, LOCATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M. IN SNOHOMISH COUNTY, WASHINGTON.

SITE DATA:

EXISTING ZONING:	R-9600
PROPOSED ZONING:	R-7200
TOTAL SITE AREA:	375,843 SF, 8.63Ac
WATER DISTRICT:	SILVERLAKE WATER DISTRICT
SEWAGE DISPOSAL:	SILVERLAKE WATER DISTRICT
SCHOOL DISTRICT:	EVERETT
FIRE DISTRICT:	FPD 11

OWNERS OF RECORD:

STEVEN & PEGGY LEFLEY
4032 139th SE
SNOHOMISH, WA 98290
425-338-1458

JAMES LOMAX
13928 SEATTLE HILL ROAD
SNOHOMISH, WA 98290
425-316-8653

GARY & KATHRYN FONTES
13904 SEATTLE HILL ROAD
SNOHOMISH, WA 98290
425-338-4878

BABETTE JUEDKE
13930 SEATTLE HILL ROAD
SNOHOMISH, WA 98290

SITE ADDRESS'S:

13904 SEATTLE HILL ROAD SE, 13928 SEATTLE HILL ROAD SE, 13930 SEATTLE HILL ROAD SE, 4120 138th STREET SE & 4032 138th STREET SE, SNOHOMISH, WA 98296

TAX PARCEL NO.S:

28053300200900 & 28053300203400
28053300203100 & 28053300203900
28053300203600

NPDES NOTE:

ALL SITE WORK SHALL COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NO. S03005704 ISSUED FOR THE PROJECT DATED JUNE 7, 2004.

RECEIVED
JUL 14 2004
PLANNING & DEVELOPMENT SERVICES - LAND USE DIV.

2nd As Built
RP
PDSDrain OKAY for JC
OKAY for JC 8/25/05

PEAK

APPROVED AS-BUILTS

DRAWING INDEX:

C1) GENERAL SITE PLAN
C2) EXISTING CONDITIONS, CLEARING & SWPP PLAN
C3) SWPPP NOTES & DETAILS
C4) ROAD, GRADING & DRAINAGE PLAN
C5) 41st DR SE & 139th PL SE ROAD PROFILES / DETAILS
C6) 138th ST SE & SEATTLE HILL ROAD PROFILES / DETAILS
C7) VAULT PLAN, SECTIONS & DETAILS
C8) CONSTRUCTION NOTES & DETAILS
S1) VAULT FOUNDATION PLAN & DETAILS
S2) VAULT LID PLAN AND DETAILS
S3) STRUCTURAL NOTES WALL SECTIONS & DETAILS
SS1) SANITARY SEWER PLAN
SS2) SANITARY SEWER PLAN & PROFILES
SS3) SANITARY SEWER PLAN & PROFILES
W1) WATER PLAN
M1) CRITICAL AREA STUDY STREAM CHANNEL RESTORATION PLAN
M2) CRITICAL AREA STUDY STREAM CHANNEL RESTORATION PLAN
L1) LANDSCAPE PLANS
L2) LANDSCAPE PLANS

SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES APPROVED FOR CONSTRUCTION

BY: FOR RANDOLPH R. SUBLETT, P.E., C.E.S. 7/6/2004

R/W PERMIT NO.: 04-114872

DATE	REVISION/ISSUED
4/1/04	ISSUED
6/18/04	PER COUNTY REVIEW
7/13/04	PER COUNTY REVIEW
7/18/05	AS-BUILT
8/22/05	REVISED PER SNO.CO 1ST AB REVIEW

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART, STATE OF WASHINGTON, 29775, REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/16/2005
DATE: 7/12/04

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:
MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
FAX: 425-486-6108
JOB #03055

APPLICANT
GORDON REYDAL
8908 EASTVIEW AVENUE
EVERETT, WA 98208
425-337-2429

PLANNER
TOBIASON & CO. INC.
505 N.E. 73rd St., SUITE 1A
SEATTLE, WA 98115
(206) 522-1024
ATTN: LAUREY TOBIASON

AS-BUILT DECLARATION
WE HEREBY DECLARE THAT ROAD AND STORM DRAINAGE IMPROVEMENTS ARE LOCATED AS SHOWN ON THESE RECORD DRAWINGS.

BY: PROJECT ENGINEER / SURVEYOR — DATE: 8-25-05
BY: PLAT DEVELOPER / OWNER — DATE: 8/25/05

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN: 03-109825 AS-BUILT

APPLETREE NORTH

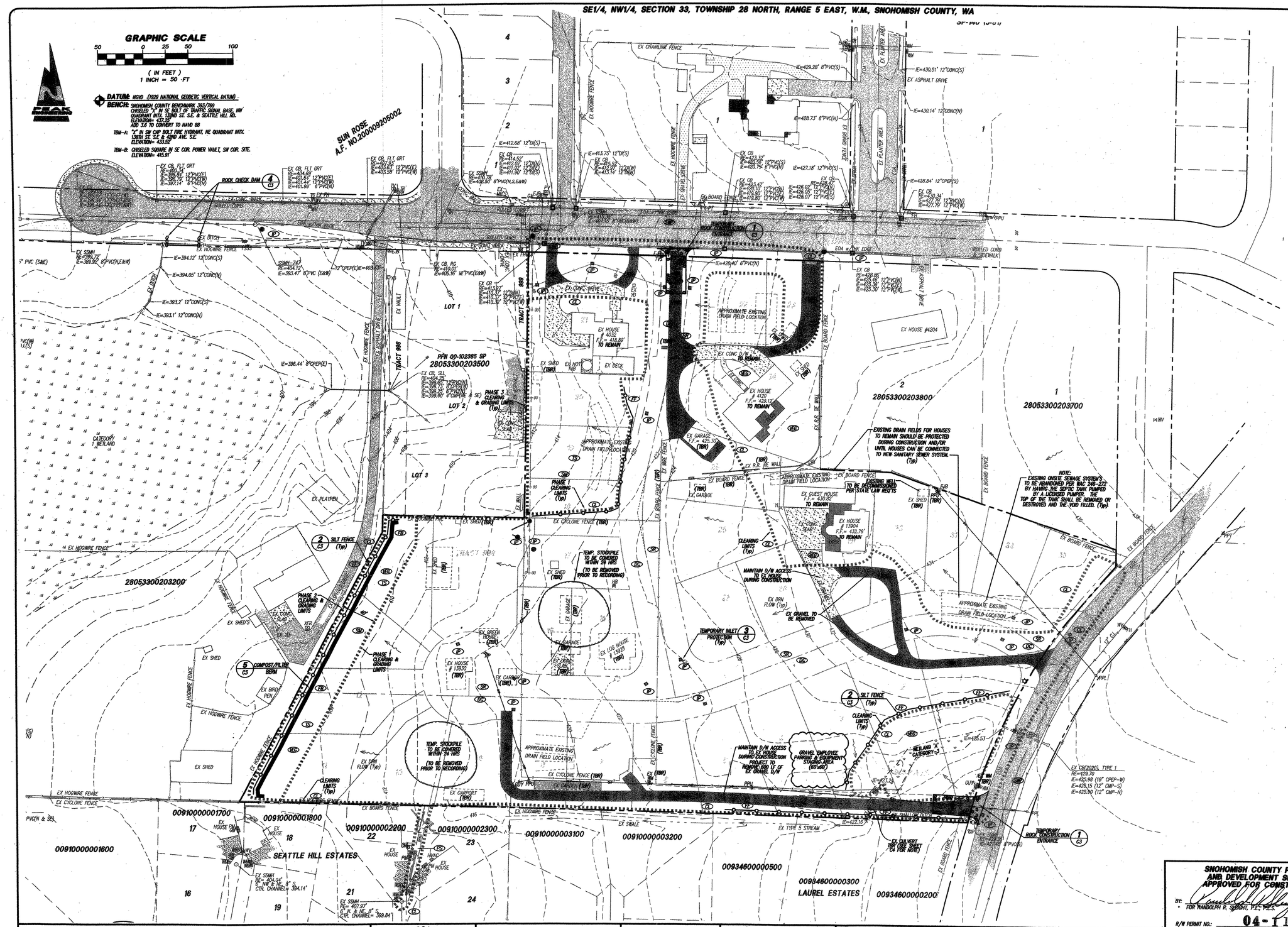
GENERAL SITE PLAN

PROJECT NO. 03496

DWG C1 OF 8

AS-BUILTS APPLETREE NORTH HDEV-2160

SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA



CONSTRUCTION SEQUENCE

THIS CONSTRUCTION SEQUENCE IS TO BE USED AS A GUIDELINE. CONDITIONS MAY REQUIRE CHANGES IN TIMING OF WORK. CHANGES SHALL BE DISCUSSED WITH AND APPROVED BY INSPECTOR AND OWNER.

1. ARRANGE AND ATTEND PRE-CONSTRUCTION MEETING WITH THE COUNTY.
2. FLAG PROPERTY LINES AND CLEARING LIMITS AS INDICATED.
3. INSTALL SILT FENCES, FILTER BERM AND TEMPORARY CONSTRUCTION ENTRANCES PER PLAN.
4. CLEAR & GRUB TO PHASE 1 CLEARING LIMITS. LEAVING AS MUCH GROUND COVER AS POSSIBLE.
5. ROUGH GRADE ROAD.
6. CONSTRUCT DETENTION VAULT (FINAL VAULT TO FUNCTION AS TEMPORARY SEDIMENT VAULT) AND INSTALL ALL STORM, SEWER, & WATER IMPROVEMENTS.
7. CLEAR, GRUB & FILL PHASE 2. SEED AND COVER WITH STRAW MULCH.
8. CONSTRUCT ROAD.
9. STABILIZE DISTURBED LAND SURFACES.
10. ABANDON EXISTING DRAINFIELDS AFTER HOUSES ARE CONNECTED TO SANITARY SEWER.
11. CLEAR, GRUB AND FILL PHASE 3. SEED AND COVER WITH STRAW MULCH.
12. REMOVE REMAINING SWPP STRUCTURES AFTER SITE HAS BEEN STABILIZED AND APPROVED BY THE COUNTY DEVELOPMENT INSPECTOR.
13. CLEAN STORM DRAINAGE SYSTEM, REMOVED SEDIMENTS FROM VAULT, INSTALL STORM FILTER(TM) CARTRIDGES, AND PLACE INTO OPERATION.

TEMPORARY EROSION CONTROL NOTE:

TEMPORARY EROSION CONTROL MEASURES ON THIS PLAN ARE INTENTED AS A GUIDE. ADDITIONAL BMP'S MAY BEREQUIRED FOR THIS DEVELOPMENT AS SITE & WEATHER CONDITIONS CHANGE ON SITE. THE CONTRACTOR/DEVELOPER SHALL COORDINATE WITH THE SITE INSPECTOR & THE PROJECT ENGINEER AS NEEDED FOR EROSION CONTROL RECOMMENDATIONS.

EROSION CONTROL CONCEPT

ALL DISTURBED AREAS SHALL BE PREPARED AND MAINTAINED TO CONTROL EROSION. LEAVE VEGETATIVE BUFFER AROUND PERIMETER OF SITE AND EXISTING GOURND COVER AS LONG AS POSSIBLE. SEE SHEET C3 OF 8 FOR SWPPP NOTES.

RISK ASSESSMENT: HIGH

SWPPP LEGEND

- CE STABILIZED CONSTRUCTION ENTRANCE
- CL CLEARING LIMITS
- RS CONSTRUCTION ROAD STABILIZATION
- DC DUST CONTROL
- FB FILTER BERM
- FF FILTER (SILT) FENCE
- IP STORM DRAIN INLET PROTECTION
- SM STRAW MULCH
- SR SURFACE ROUGHENING (IF EXISTING VEGETATION HAS BEEN REMOVED)
- SWP DAILY STREET SWEEPING
- TS TEMPORARY SEEDING
- VEG PRESERVE NATURAL VEGETATION

SOIL TYPE:

ENTIRE SITE IS ALDERWOOD GRAVELLY LOAM

VEGETATIVE COVER:

LAWN & NATIVE LANDSCAPE WITH 2nd & 3rd GROWTH FOREST

SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES APPROVED FOR CONSTRUCTION

BY: FOR RANDOLPH R. SCHMIT, P.E., P.L.S. 7/18/2004

R/W PERMIT NO.: 04-114872

DATE	REVISION/ISSUED
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AS-BUILT DECLARATION

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BY: PROJECT ENGINEER: SURVEYOR — DATE: 8-25-05

BY: PLAT DEVELOPER / OWNER — DATE: 8/25/05

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THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN: 03-109825 AS-BUILT

APPLETREE NORTH

EXISTING CONDITIONS, CLEARING & SWPP PLAN

PROJECT NO. 03496

DWG C2 OF 8

AS-BUILTS APPLETREE NORTH HDEV-2161

SITE GRADING AND SWPPP NOTES

1. EROSION AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF SCC SECTION TITLE 25. NONCOMPLIANCE WITH THE EROSION CONTROL REQUIREMENTS, WATER QUALITY REQUIREMENTS AND CLEARING LIMITS VIOLATIONS MAY RESULT IN REVOCATION OF PROJECT PERMITS, PLAN APPROVAL AND BOND FORECLOSURES.
2. PRIOR TO ANY SITE CONSTRUCTION TO INCLUDE CLEARING/LOGGING OR GRADING THE SITE/LOT CLEARING LIMITS SHALL BE LOCATED AND FIELD IDENTIFIED BY THE PROJECT SURVEYOR AS REQUIRED BY THESE PLANS. THE PROJECT SURVEYOR'S NAME AND PHONE NUMBER ARE MEAD GILMAN & ASSOCIATES AT (425) 486-1252.
3. THE TEMPORARY EROSION/SEDIMENTATION CONTROL BMP'S SHALL BE CONSTRUCTED PRIOR TO ANY GRADING OR EXTENSIVE LAND CLEARING IN ACCORDANCE WITH THE APPROVED TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN. THESE FACILITIES MUST BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION AND LANDSCAPING IS COMPLETED AND POTENTIAL FOR ON-SITE EROSION HAS PASSED. SEDIMENT LADEN WATERS SHALL NOT ENTER THE NATURAL DRAINAGE SYSTEM.
4. THE DEVELOPER/ENGINEER IS RESPONSIBLE FOR THE WATER QUALITY AS DETERMINED BY THE MONITORING PROGRAM, ESTABLISHED BY THE ENGINEER. THE PROJECT ENGINEER'S NAME AND PHONE NUMBER ARE: PEAK ENGINEERING, INC. @ (360) 658-6986.
5. ALL SITE WORK MUST COMPLY TO CHAPTER 30.10 OF THE UNIFORM BUILDING CODE AND TITLES 30.63A AND 30.63B OF THE SNOHOMISH COUNTY CODE (LATEST EDITIONS).
6. ALL EARTH WORK SHALL BE PERFORMED IN ACCORDANCE WITH COUNTY STANDARDS.
7. 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 FOLLOW COUNTY SPECIFICATIONS AND TO BE DESIGNED AND CERTIFIED BY A CIVIL ENGINEER EXPERIENCED IN SOILS MECHANICS.
8. STOCKPILES ARE TO BE LOCATED SUCH THAT SEDIMENT WILL NOT LEAVE SITE. TEMPORARY COVER (BMP's) SHALL CONSIST OF HYDROSEEDING, MULCHING, OR COVERING DISTURBED AREAS AND STOCK PILES WITH PLASTIC SHEETING.
9. ALL STRUCTURAL FILLS SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY BY MODIFIED PROCTOR TEST. FIELD DATA TEST RESULTS WILL BE SUBMITTED WITH "AS-BUILT" PLANS.
10. A GEOTECHNICAL CONSULTANT SHALL PROVIDE TESTING OF ALL STRUCTURAL FILLS AND SHALL SEND THE RESULTS TO SNOHOMISH COUNTY. SAID CONSULTANT SHALL CERTIFY THAT ALL GRADING ACTIVITIES WERE DONE UNDER HIS/HER DIRECTION.
11. 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 RUNNING THE COMPACTOR OVER THE SLOPE AS EACH FILL LIFT IS BEING PLACED. ALL SLOPES SHALL BE COMPACTED BY THE END OF EACH WORKING DAY.
12. EARTH QUANTITIES (CUTS & FILLS) SHOWN ON PLANS ARE ESTIMATES ONLY AND ARE NOT ADJUSTED FOR EXPANSION OR COMPACTION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ACTUAL QUANTITIES AS REQUIRED.
13. AREAS TO RECEIVE FILL SHALL BE PREPARED BY REMOVING UNSUITABLE MATERIAL SUCH AS CONCRETE SLABS, TREE STUMPS, BRUSH, AND TRASH.
14. FILL MATERIALS SHALL BE AS SPECIFIED IN GENERAL NOTE 1., UNLESS SHOWN OTHERWISE ON PLANS.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

1. INSTALLATION: THE AREA OF THE ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. THE GRAVEL SHALL BE PLACED TO THE SPECIFIED DIMENSIONS. 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. AGGREGATE: 4" TO 6" CRUSHED BALLAST ROCK.
3. A SEPARATION GEOTEXTILE SHALL BE PLACED UNDER THE SPALLS TO PREVENT FINE SEDIMENT FROM PUMPING UP INTO THE ROCK PAD. THE GEOTEXTILE SHALL MEET THE FOLLOWING STANARDS:

GRAB TESILE STRENGTH (ASTM D4751)	200 PSI MIN.
GRAB TENSILE ELONGATION (ASTM D4632)	30% MAX.
MULLEN BURST STRENGTH (ASTM D3786-80a)	400 PSI MIN.
AOS (ASTM D4751)	20-45 (U.S. STANDAR SIEVE SIZE)

4. ENTRANCE DIMENSIONS: THE AGGREGATE LAYER MUST BE AT LEAST 12 INCHES THICK. IT MUST EXTEND THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF THE ENTRANCE MUST BE AT LEAST 50 FEET.
5. WASHING: IF CONDITIONS ON THE SITE ARE SUCH THAT MOST OF THE MUD IS NOT REMOVED FROM VEHICLE TIRES BY CONTACT WITH THE GRAVEL, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER THE PUBLIC ROAD. WASH WATER MUST BE CARRIED AWAY FROM ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH 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.

MAINTENANCE OF SILTATION BARRIERS

1. SILTATION BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BARRIERS, END RUNS AND UNDERCUTTING BENEATH BARRIERS. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

SWALE PLANTING NOTES

1. FINAL CONSTRUCTION APPROVAL AND/OR ISSUANCE OF CERTIFICATE OF OCCUPANCY IS CONTINGENT OF SWALE INSPECTION BY SNOHOMISH COUNTY COMMUNITY DEVELOPMENT.
2. INSPECTION MUST BE REQUESTED BY CALLING CHIEF INSPECTOR OF LAND DEVELOPMENT DIVISION AT 388-3385 AT LEAST 24 HOURS PRIOR TO INSPECTION DATE.
3. CONSTRUCTION:
   a. IF POSSIBLE, DIVERT RUNOFF FROM SWALES UNTIL VEGETATION IS ESTABLISHED.
   b. IF RUNOFF DIVERSION IS NOT POSSIBLE, COVER GRADED AND SEEDED AREAS WITH A SUITABLE EROSION CONTROL SLOPE COVERING MATERIAL (STRAW, MULCH, ETC.)
   c. AVOID COMPACTION OF SWALES DURING CONSTRUCTION. IF COMPACTION OCCURS, TILL BEFORE PLANTING TO RESTORE LOST SOIL INFILTRATION CAPACITY.
4. SEED MIX:

6% FOWL MANNAGRASS (GLYCERIA STRIATA)
60% RED FESCUE (FESTUCA RUBRA)
10% REDTOP BENTGRASS/COLONIAL BENTGRASS (AGROSTIS ALBA/TENIUS)
10% MEADOW FOXTAIL (ALOPECURUS PRATENSIS)
8% TUFTED HAIRGRASS (DESCHAMPSIA CESPITOSA)
6% WHITE CLOVER (TRIFOLIUM REPENS)

PLANT LIST FOR DRAINAGE SWALES AND POND SIDE SLOPES (WET-TOLERANT):

SLOUGH SEDGE (CAREX OBNUPTA)
BUR-REED (SPARGANIUM EMERSUM)
SMALL FRUITED BULRUSH (SCIRPUS MICROCARPUS)

BMP NOTES:

1. COVER PRACTICES:
THE EXISTING VEGETATION SHOULD BE LEFT UNDISTURBED WHERE POSSIBLE TO LIMIT EROSION. DISTURBED AREAS SHALL BE COVERED WITH MULCH AND/OR MATTING. STOCKPILES OR SLOPES STEEPER THAN 2:1 SHALL BE COVERED WITH PLASTIC SHEETING HELD IN PLACE WITH SAND BAGS.

STRUCTURAL PRACTICES:
SILT FENCES AND/OR COMPOST BERM AS SHOWN WILL MINIMIZE SEDIMENT LADEN WATER FROM LEAVING THE SITE. ADDITIONAL BMP'S ARE SHOWN ON THIS SHEET WHICH MAYBE USED AS SITE CONDITIONS CHANGE.

STAND PIPE AND SEDIMENT POND MAINTENANCE

1. THE EMBANKMENT OF THE BASIN SHOULD BE CHECKED REGULARLY TO INSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. THE EMERGENCY SPILLWAY SHOULD BE CHECKED REGULARLY TO INSURE THAT ITS LINING IS WELL ESTABLISHED AND EROSION-RESISTANT. THE SILTATION BASIN SHOULD BE CHECKED AFTER EACH RUNOFF-PRODUCING RAINFALL FOR SEDIMENT CLEAN OUT. WHEN THE SEDIMENT REACHES THE CLEAN OUT LEVEL, IT SHALL BE REMOVED AND PROPERLY DISPOSED.

PERMANENT COVER BMP (HYDROSEEDING GENERAL NOTES)

1. CONSTRUCTION ACCEPTANCE: WILL BE SUBJECT TO A WELL ESTABLISHED GROUND COVER THAT FULFILLS THE REQUIREMENT OF THE APPROVED CONSTRUCTION PLANS AND TITLE 30.63, SNOHOMISH COUNTY DRAINAGE ORDINANCE.
2. ALL DISTURBED AREAS SUCH AS DETENTION FACILITIES, ROADWAY BACK-SLOPES, ETC. SHALL BE SEEDED WITH A PERENNIAL GROUND COVER GRASS TO MINIMIZE EROSION. GRASS SEEDING WILL BE DONE USING AN APPROVED HYDROSEEDER OR AS OTHERWISE APPROVED BY SNOHOMISH COUNTY.
3. PREPARATION OF SURFACE: ALL AREAS TO BE SEEDED SHALL BE CULTIVATED TO THE SATISFACTION OF THE COUNTY INSPECTOR. THIS MAY BE ACCOMPLISHED BY DISCING, RAKING, HARROWING OR OTHER ACCEPTABLE MEANS.
4. IMMEDIATELY FOLLOWING FINISH GRADING, PERMANENT VEGETATION (CONSISTING OF RAPID, PERSISTENT AND LEGUME) WILL BE APPPLIED. (MINIMUM 80# PER ACRE). THIS IS TO INCLUDE THE FOLLOWING: 20% ANNUAL, PERENNIAL OR HYBRID RYE GRASS, 40% CREEPING RED FESCUE, 40% WHITE CLOVER. HYDROSEED REQUIRED.
5. FERTILIZER: SHALL BE APPLIED AT 400# PER ACRE OF 10-20-20 (10 lb. PER 1,100 SQUARE FEET) OR EQUIVALENT.

WET WEATHER GRADING NOTES

1. THE CONSTRUCTION SEQUENCE SHALL BE MODIFIED TO MINIMIZE THE AREA OF SOIL EXPOSED.
2. EARTHEN AREAS THAT ARE SUBJECT TO CONTRIBUTING SEDIMENTS DURING STORM EVENTS AND WHERE EARTH MOVEMENT IS NOT ANTICIPATED FOR 48-HOURS SHALL BE STABILIZED USING THE FOLLOWING BMPS: HYDROSEEDING & MULCHING (4" THICK STRAW) OR COVERING DISTURBED AREAS AND STOCK PILES WITH PLASTIC SHEETING.
3. WET WEATHER TESC MEASURES WILL BE EXPANDED TO INCLUDE CONSTRUCTION AREA STABILIZATION, (EXTEND CONSTRUCTION ENTRANCE), SEDIMENT TRAPS, AND ADDITIONAL SILT FENCES, IF NECESSARY. WINTER CONDITIONS TEMPORARY EROSION & SEDIMEN CONTROL BMP'S: FROM OCTOBER 1 TO MARCH 31. NO SOIL MAY REMAIN EXPOSED FOR MORE THAN 2 DAYS, OTHERWISE NO SOIL MAY REMAIN EXPOSED FOR MORETHAN 7 DAYS. COVER PRACTICES: THE EXISTING VEGETATION SHOULD BE LEFT UNDISTURBED WHERE POSSIBLE TO LIMIT EROSION. DISTURBED AREAS SHALL BE COVERED WITH MULCH, SOD, PLASTIC OR MATTING. STOCKPILES OR SLOPES STEEPER THAN 2:1 SHALL BE COVERED WITH PLASTIC SHEETING HELD IN PLACE WITH SAND BAGS. STRUCTURAL PRACTICES: SILT FENCES AROUND THE PERIMETER WILL PREVENT SEDIMENT LADEN WHERE ACTIVE GRADING IS IN PROGRESS, THE DIRECTOR MAY EXTEND THE DEADLINE FOR SOIL STABILIZATION UPON DETERMINING THAT THE LIKELIHOOD OF EROSION IMPACTS IS LOW BASED ON THE TYPE AND AMOUNT OF SOIL EXPOSED, SITE TOPOGRAPHY, THE POTENTIAL FOR DISCHARGE TO CRITICAL AREAS AND LAKES, AND OTHER FACTORS. DISTURBED AREAS SHALL BE COVERED WITH MULCH, SOD, PLASTIC OR MATTING. GRADING CONSTRUCTION SHALL BE TIMED AND CONDUCTED IN STAGES TO MINIMIZE SOIL EXPOSURE.
4. SOILS SHALL NOT BE DISTURBED EXCEPT FOR ACTUAL CONSTRUCTION ACTIVITIES. PARKING IS ALLOWED ONLY ON PAVED AND/OR GRAVEL SURFACES.
5. SLOPES 8% AND GREATER WITHOUT ESTABLISHED GROUNDCOVER WILL BE STABILIZED WITH PLASTIC SHEETING, 6-MIL (MINIMUM). THE SHEETING SHALL BE ANCHORED WITH SAND BAGS LOCATED 5-FEET APART ON THE PERIMETER AND 10-FEET ON CENTER ON THE REMAINDER OF THE SHEETING. A MINIMUM OF 2-FEET OVERLAP IS REQUIRED FOR OVERLAPPING SHEETS.
6. WATER DISCHARGED FROM THE SITE WILL BE MONITORED FOR TURBIDITY. THE MAXIMUM ALLOWABLE TURBIDITY OF DISCHARGED WATER WILL BE 5 NTU OVER BACKGROUND.
7. WHEN RAINFALL IS HEAVY (DEFINED AS RAINFALL HARD ENOUGH TO PRODUCE SEDIMENT RUN-OFF FROM EXPOSED DIRT), ALL EXPOSED EARTHWORK SHALL BE COVERED. NO OTHER CONSTRUCTION ACTIVITY SHALL OCCUR ON PERVIOUS SURFACES DURING THESE PERIODS OF HEAVY RAIN.
8. ALL DRAINAGE SWALES SHALL BE FULLY VEGETATED. SWALES SHALL BE SODDED IF THE VEGETATION GROWING IN THE SWALE IS INSUFFICIENT TO PROVIDE WATER QUALITY AND TO PREVENT EROSION OF THE SWALE.
9. FILTER FABRIC (GEOTEXTILE FABRIC) SHALL BE INSTALLED BENEATH THE ENTIRE CONSTRUCTION ENTRANCE.
10. IF THERE IS A MEASURABLE INCREASE IN THE TURBIDITY OF THE RECEIVING WATER GREATER THAN 5 NTU'S, THE WATER IN THE TEMPORARY SEDIMENTATION POND SHALL BE PUMPED TO UNDISTURBED VEGETATION ON SITE.

LEVEL 3 CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NOTES

THE PROPOSED PROJECT WAS EVALUATED PER DRAFT SNOHOMISH COUNTY POLICY AND PROCEDURE 3044 TO DETERMINE THE EROSION RISK CATEGORY AND THE CORRESPONDING SWPPP. THE SOIL ON THE PROPOSED SITE IS ALDERWOOD TYPE SOIL, WHICH HAS AN EROSION HAZARD RISK CATEGORIZATION OF MEDIUM. THE PROJECT SITE IS LOCATED WITHIN ¼ MILE OF A CRITICAL AREA, WHICH IS CLASSIFIED AS HIGH RISK. FINALLY, THE PROPOSED PROJECT MAY BE CONSTRUCTED IN THE WINTER, WHICH IS CATEGORIZED AS HIGH. PER THE DISCUSSION MATRIX IN DRAFT PRO-3044 (SEE BELOW), A LEVEL 3 CONSTRUCTION SWPPP IS REQUIRED.

POTENTIAL POLLUTANTS

THERE ARE THREE TYPES OF POTENTIAL POLLUTANTS THAT THIS SWPPP IS INTENDED TO ADDRESS:

1. HAZARDOUS CHEMICALS
2. PETROLEUM PRODUCTS
3. SEDIMENT

REASONABLE CARE AND DISCRETION SHALL BE EXERCISED TO PREVENT DAMAGING THE ENVIRONMENT THROUGH A RELEASE OF ANY OF THE THREE TYPES OF POLLUTION. THIS SWPPP IS TO BE CONSIDERED A GUIDE, AND REPRESENTS ONLY THE MINIMUM STANDARD OF CARE TO BE PRACTICED DURING THE CONSTRUCTION PHASE OF THIS PROJECT. AN EROSION CONTROL OFFICER SHALL BE RESPONSIBLE FOR EVALUATING THE CONDITIONS AND POLLUTION POTENTIAL ON THE PROJECT SITE AT ALL TIMES AND DETERMINING WHAT ADDITIONAL MEASURES NEED TO BE ENACTED TO PROTECT THE ENVIRONMENT. THIS MAY INCLUDE STOPPING CONSTRUCTION UNTIL CONDITIONS CHANGE SUCH THAT THE DANGER TO THE ENVIRONMENT HAS BEEN MINIMIZED.

HAZARDOUS CHEMICALS
HAZARDOUS CHEMICALS, SUCH AS CLEANING AGENTS AND SOLVENTS, SHALL BE STORED IN AN APPROVED CHEMICAL STORAGE FACILITY(IES), LOCATED IN THE EQUIPMENT STAGING AREA. WHEN USING CHEMICALS DURING CONSTRUCTION ACTIVITY, CARE SHALL BE TAKEN TO GUARD AGAINST SPILLAGE. IN THE EVENT OF A CHEMICAL RELEASE, THE APPROPRIATE AUTHORITIES ARE TO BE NOTIFIED AND THE SPILL IS TO BE CLEANED UP IMMEDIATELY.

PETROLEUM PRODUCTS
THE CONSTRUCTION SITE IS TO BE PROTECTED AGAINST EXCESSIVE PETROLEUM POLLUTION. ALL CONSTRUCTION EQUIPMENT AND VEHICLES SHALL HAVE A REGULAR MAINTENANCE SCHEDULE, AS RECOMMENDED BY THE PRODUCT MANUFACTURER, WHICH PARTICULAR ATTENTION/CARE BEING PAID TO LOCATIONS THAT ARE COMMONLY KNOWN TO LEAK LUBRICANTS. UPON DISCOVERY OF AN UNSATISFACTORY PART, THAT VEHICLE/EQUIPMENT SHALL NOT BE OPERATED UNTIL IT HAS BEEN FIXED. ADDITIONALLY, ALL OIL AND REFUELING OPERATIONS ARE TO BE CONDUCTED IN A DESIGNATED AREA THAT HAS BEEN PREPARED TO PREVENT THE LOSS OF SPILLED OIL/FUEL TO THE ENVIRONMENT THROUGH THE USE OF A LINER, SPILL TRAP OR OTHER MEANS.

SEDIMENT
THE RELEASE OF SEDIMENT TO THE ENVIRONMENT SHALL BE PREVENTED AT ALL TIMES. THE FOLLOWING BMP'S ARE TO BE CONSIDERED THE MINIMUM PROTECTION MEASURES:

1. THE DISTRIBUTION/TRACKING OF MUD/SEDIMENT ONTO ROADS FROM CONSTRUCTION EQUIPMENT/VEHICLES SHALL BE PREVENTED. THE CONSTRUCTION SITE SHALL BE ACCESSED VIA A ROCK CONSTRUCTION ENTRANCE, UNDERLAIN BY A GEO-TEXTILE FABRIC. THE CONSTRUCTION ENTRANCE SHALL BE EXTENDED IF NECESSARY TO PROVIDE ACCESS TO THE EMPLOYEE PARKING AND EQUIPMENT STAGING AREAS. PRIOR TO LEAVING THE CONSTRUCTION SITE, CONSTRUCTION EQUIPMENT/VEHICLES SHALL BE INSPECTED FOR MUD/SEDIMENT AND ALL WHEELS AND SURFACES ARE TO BE BRUSHED/CLEANED/WASHED AS NECESSARY PRIOR TO LEAVING THE CONSTRUCTION SITE. ADDTIONALLY, THE EXISTING PAVEMENT SHALL BE WEPT ALONG 138TH ST SE AND SEATTLE HILL ROAD ADJACENT TO THE SITE.
2. COVER MATERIALS (I.E. STRAW, MULCH OR PLASTIC SHEETING) SHALL BE STORED ON SITE IN SUFFICIENT QUANTITIES SUCH THAT ALL PORTIONS OF EXPOSED EARTH CAN BE COMPLETELY COVERED TO PREVENT EROSION.
3. THE PLANNED CONSTRUCTION ACTIVITIES SHALL BE EVALUATED ON A DAILY BASIS, TAKING INTO CONSIDERATION THE LATEST WEATHER FORECAST. THE WEATHER FORECAST SHALL DICTATE WHETHER LARGE-SCALE EARTH MOVING OPERATIONS SHALL COMMENCE OR CONTINUE. IF PRECIPITATION OCCURS DURING CONSTRUCTION ACTIVITY, AND IS INTENSE ENOUGH TO GENERATE RUNOFF, ALL EARTH MOVING ACTIVITIES SHALL CEASE AND EXPOSED EARTH SHALL BE COVERED TO PREVENT EROSION. WHILE PRECIPITATION PERSISTS, THE ONLY CONSTRUCTION ACTIVITY THAT SHALL BE ALLOWED ARE THOSE ACTIVITIES REQUIRED TO MAINTAIN EXISTING EROSION CONTROL MEASURES, INSTALL NEW EROSION CONTROL BMP'S AS NECESSARY AND NON-EROSION/SEDIMENT GENERATING ACTIVITIES.

MAINTENANCE, INSPECTION & PROJECT MANAGEMENT

PRIOR TO ANY SITE DEVELOPMENT WORK TAKING PLACE, A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR, OWNER ENGINEER (PEAK ENGINEERING, INC.), EROSION CONTROL OFFICER, PDS REPRESENTATIVE AND COUNTY INSPECTOR SHALL BE HELD. THE PROPOSED CONSTRUCTION ACTIVITIES SHALL BE MONITORED BY THE EROSION CONTROL OFFICER, AFTER EVERY RAINSTORM OR, AT A MINIMUM, WEEKLY, FOR COMPLIANCE WITH THE SWPPP GUIDELINES/OBJECTIVES. THE OWNER SHALL DESIGNATE AN EROSION CONTROL OFFICER FOR THE PROJECT. THE EROSION CONTROL OFFICER MUST HAVE RECEIVED TRAINING (D.O.E. EROSION CONTROL SEMINAR FOR EXAMPLE) OR HAVE HAD SUFFICIENT EXPERIENCE WITH EROSION CONTROL TECHNIQUES TO IMPLEMENT THE SWPPP. THE EROSION CONTROL OFFICER SHALL BE RESPONSIBLE FOR ENSURING THAT THE WATER QUALITY OBJECTIVES OF THE SWPPP ARE ACHIEVED. THE OFFICER SHALL BE RESPONSIBLE FOR INSPECTING THE CONSTRUCTION SITE TO ENSURE THAT ALL CONSTRUCTION SWPPP MEASURES ARE FUNCTIONING AS INTENDED. THE OFFICER SHALL HAVE THE AUTHORITY TO ALLOCATE RESOURCES TO REPAIR ALL EROSION CONTROL STRUCTURES THAT ARE IN NEED OF MAINTENANCE. ADDITIONALLY, THE EROSION CONTROL OFFICER SHALL BE RESPONSIBLE FOR MONITORING THE CONSTRUCTION SITE TO ENFORCE COMPLIANCE WITH THE APPROVED CONSTRUCTION SWPPP. IF, DURING THE COURSE OF THE WORKDAY, IT STARTS TO PRECIPITATE, IT SHALL BE THE EROSION CONTROL OFFICER WHO EVALUATES THE INTENSITY OF THE RAINFALL, AND THE POTENTIAL TO GENERATE RUNOFF/EROSION. SHOULD THE EROSION CONTROL OFFICER DETERMINE THAT RUNOFF IS OCCURRING, HE SHALL HAVE THE AUTHORITY TO REDIRECT CONSTRUCTION ACTIVITIES TO COVERING ALL EXPOSED SOIL, MAINTENANCE OF EXISTING SWPPP ELEMENTS, AND CONSTRUCTING ADDITIONAL POLLUTION PREVENTION SYSTEMS DEEMED NECESSARY TO PROTECT THE ENVIRONMENT.

ADDITIONALLY, THE SWPP CONTROL OFFICER SHALL BE RESPONSIBLE FOR MONITORING WATER QUALITY FOR ANY STORM DRAINAGE THAT LEAVES THE SITE. DURING PRECIPITATION EVENTS THAT GENERATE RUNOFF, WATER QUALITY MEASURES SHALL BE TAKEN PERIODICALLY WHILE CONSTRUCTION ACTIVITIES ARE ONGOING. FOR RUNOFF GENERATING EVENTS THAT OCCUR DURING THE EVENING HOURS, WATER QUALITY SHALL BE MONITORED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES THE FOLLOWING DAY. IF THERE IS NO MEASURABLE DEGRADATION OF WATER QUALITY, THEN THE CONSTRUCTION CAN CONTINUE AS SCHEDULED. IF THERE IS A MEASURED INCREASE IN THE TURBIDITY OF THE STREAM BY GREATER THAN 5 NTU'S, THEN THE ONLY CONSTRUCTION ACTIVITIES THAT SHALL BE ALLOWED ARE THE REPAIR OF EXISTING EROSION CONTROL STRUCTURES, INSTALLATION OF ADDITIONAL BMP'S TO MINIMIZE THE TRANSPORT OF SEDIMENT OFFSITE, OR THOSE ACTIVITIES THAT DO NOT DISTURB EXPOSED EARTH AND HAVE THE POTENTIAL TO GENERATE ADDITIONAL SEDIMENT.

THE TWELVE ELEMENTS OF A CONSTRUCTION SWPPP

1. CLEARING LIMITS: THE CLEARING LIMITS ARE INDICATED ON THE PLAN SHEET. FURTHERMORE, CLEARING AND GRADING WILL BE LIMITED TO ONLY AREAS THAT NEED TO BE DISTURBED FOR GRADING/CONSTRUCTION. FIELD MARKING THE CLEARING LIMITS SHALL BE COMPLETED PRIOR TO CLEARING AND GRUBBING ACTIVITIES.
   BMP'S: PRESERVE NATURAL VEGETATION (VEG)
   FIELD MARKING CLEARING LIMITS (CL)
2. ACCESS TO THE CONSTRUCTION SITE SHALL BE LIMITED TO THE ROCK CONSTRUCTION ENTRANCES. THE CONSTRUCTION ENTRANCES SHALL BE EXTENDED TO PROVIDE ACCESS TO THE CONSTRUCTION VEHICLE/EQUIPMENT STAGING AND EMPLOYEE PARKING AREAS.
   BMP'S: STABILIZED CONSTRUCTION ENTRANCE (CE)
3. STORM WATER DETENTION: DETENTION OF STORM WATER FLOWS WILL BE PROVIDED BY THE DETENTION POND.
4. SEDIMENT CONTROL WILL BE PROVIDED WITH SILT FENCE AND/OR COMPOST BERMS LOCATED ALONG THE DOWN SLOPE OF THE CONSTRUCTION ACTIVITY. TEMPORARY SEDIMENT POND(S) WILL BE UTILIZED AND RUNOFF WILL BE PUMPED BACK UP TO THE VEGETATED LAWN AREA ON THE SHORT PLAT. IF NECESSARY, CHITOSON SOCK WILL BE USED AT THE DISCHARGE OF THE PUMP LINE.
   BMP'S: SILT FENCE (SF)
   TEMPORARY SEDIMENT POND (SB)
   ROCK CHECK DAMS (RCD)
   SILT FENCE (SF)
   TEMPORARY SEDIMENT POND
   COMPOST FILTER BERM (CFB)
5. TEMPORARY AND PERMANENT SOIL STABILIZATION WILL BE PROVIDED. TEMPORARY STABILIZATION WILL BE PROVIDED THROUGH THE APPLICATION OF STRAW AND/OR PLASTIC SHEETING TO EXPOSED, WORKED EARTH. STABILIZE EXPOSED SOIL WITHIN TIME FRAMES INDICATED IN WET WEATHER NOTES ON THIS SHEET. PERMANENT SOIL STABILIZATION SHALL CONSIST OF ESTABLISHING VEGETATION BY SEEDING OR PLANTING.
   BMP'S: STRAW COVERING
   PLASTIC SHEETING
   HYDROSEEDING
6. SLOPES SHALL BE PROTECTED FROM EROSION THROUGH COVER AND PREVENTION OF CONCENTRATED SURFACE RUNOFF FLOWS:
   BMP'S: STRAW COVERING
   PLASTIC SHEETING
   INTERCEPTOR SWALES
   DISPERSION TRENCH
7. INLET PROTECTION SHALL BE INSTALLED IN ALL CATCH BASINS AND REMAIN UNTIL CONSTRUCTION OF ALL THE RESIDENCES WITHIN THE DEVELOPMENT HAS BEEN COMPLETED. NO UNFILTERED STORM WATER SHALL BE ALLOWED TO ENTER THE CLOSED CONVEYANCE SYSTEM. INLET PROTECTION SHALL BE INSPECTED REGULARLY AND THE FILTER FABRIC CLEANED/REPLACED AS NECESSARY. WHEN PROVIDING MAINTENANCE TO THE INLET PROTECTION, THE FABRIC SHALL BE REMOVED IN SUCH A WAY AS TO NOT ALLOW THE RETAINED SEDIMENT TO FALL INTO THE CATCH BASIN.
   BMP'S: INLET PROTECTION (IP)
8. ALL CHANNEL SLOPES SHALL BE CONSTRUCTED AND PROTECTED AGAINST EROSION IN ACCORDANCE WITH SNOHOMISH COUNTY E.D.D.S.
   BMP'S: RIP RAP (QUARRY SPALLS)
   STRAW BALES
9. POLLUTANTS SHALL BE CONTROLLED AS DESCRIBED IN THE POTENTIAL POLLUTANTS SECTION OF THIS SWPPP.
10. DE-WATERING: INTERCEPTION OF THE WATER TABLE IS NOT EXPECTED TO OCCUR. HOWEVER, SHOULD GROUND WATER FLOWS BE ENCOUNTERED, THE FLOWS CAN BE DIRECTED TO THE INTERCEPTOR SWALES AND CONVEYED TO THE TEMPORARY SEDIMENTATION PONDS.
   BMP'S: INTERCEPTOR SWALES
   TEMPORARY SEDIMENTATION POND
   DISPERSION TRENCH
11. ALL BMP'S AND SWPP ELEMENTS SHALL BE INSPECTED DAILY AND MAINTAINED AS REQUIRED.
12. PROJECT MANAGEMENT: THE PROJECT SHALL BE MANAGED IN A COOPERATIVE EFFORT BY THE PROJECT MANAGER, CONTRACTOR, ENGINEER AND THE COUNTY INSPECTOR. DURING THE CONSTRUCTION PROCESS, IF UNFORESEEN ISSUES ARISE THAT CANNOT BE RESOLVED ON SITE, CONSTRUCTION ACTIVITY (OTHER THAN SWPP MAINTENANCE) SHALL BE HALTED AND THE COUNTY INSPECTOR AND THE PROJECT ENGINEER ARE TO BE CONTACTED AND INFORMED OF THE SITUATION.

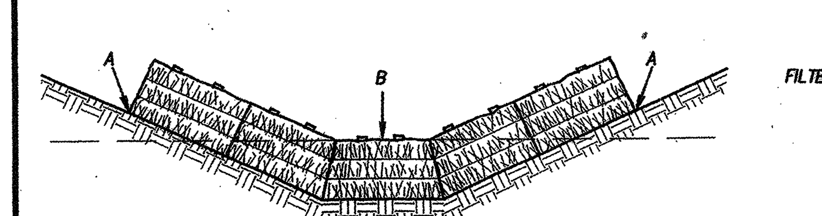
CONSENSUS

PRIOR TO CONSTRUCTION, THE PROJECT ENGINEER (PEAK ENGINEERING, INC.), PROJECT MANAGER, GENERAL CONTRACTOR, COUNTY INSPECTOR AND COUNTY PLAN REVIEWER MUST ALL AGREE THAT THE PROPOSED PLAN IS FEASIBLE. IF A CONSENSUS CANNOT BE REACHED, THE PDS DIRECTOR OR COUNTY ENGINEER SHALL APPOINT A THREE-PERSON COMMITTEE TO RESOLVE THE ISSUES.

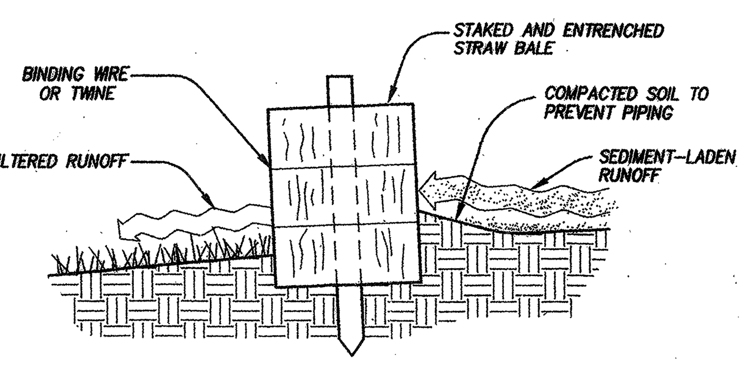
SWPPP RISK ASSESSMENT DECISION MATRIX

	LOW	MED.	**HIGH**	VERY HIGH
WINTER GRADING PROPOSED	NO OR YES	NO OR YES	**MAYBE** REQUIRES LEVEL III	NOT ALLOWED
AREA DISTURBED	LESSTHAN 1 ACRE	1 TO 5 ACRES	**5 TO 20 ACRES**	MORETHAN 20 ACRES
SLOPE	**AVERAGE LESS THAN 8%**	AVERAGE MORE THAN 8% BUT ALL AREAS ARE LESS THAN 15%	AVERAGE MORE THAN 8% BUT LESS THAN 15% NO SLOPE GREATER THAN 33%	AVERAGE MORE THAN 15%
SOIL EROSION HAZARED PER APPENDIX "A" POL-3044;	LOW SCS SOIL TYPE A (PERMEABLE SOIL)	LOW A OR TYPE B	**MEDIUM TYPE C&D**	HIGH TYPE D
CRITICAL AREAS DOWN SLOPE OF DOWNSTREAM OF DISCHARGE POINT;	GREATER THAN 1/4 MILE	GREATER THAN 1/4 MILE	**LESS THAN 1/4 MILE**	LESS THAN 1/4 MILE FLOWS DIRECTLY TO ESA STREAM
LEVEL SWPPP REQUIRED	LEVEL I	LEVEL II	**LEVEL III**	LEVEL III

NOTE: **BOLD** INDICATES THE CATEGORY THAT THIS PROJECT FALLS IN.

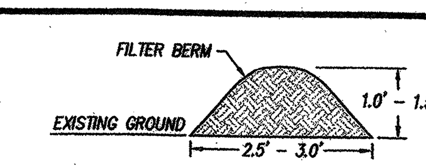


PROPER PLACEMENT OF STRAW BALE BARRIER IN DRAINAGE WAY



CROSS-SECTION OF PROPERLY INSTALLED STRAW BALE BARRIER

STRAW BALE BARRIER
N.T.S.



1. FILTER BERMS SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS.
2. FILTER BERMS SHALL BE COMPRISED OF PACIFIC GARDEN MULCH (PGM) PRODUCED BY PACIFIC TOPSOIL INC., OR EQUAL.
3. PGM SHALL MEET THE FOLLOWING SPECIFICATIONS:
MULCH PRODUCED ON A STATIC COMPOST PILE
RETAINED ON A 1/2 INCH SCREEN <5%
THE FOLLOWING DATA IS ON THE PORTION THAT PASSED THROUGH THE 1/2" SCREEN.

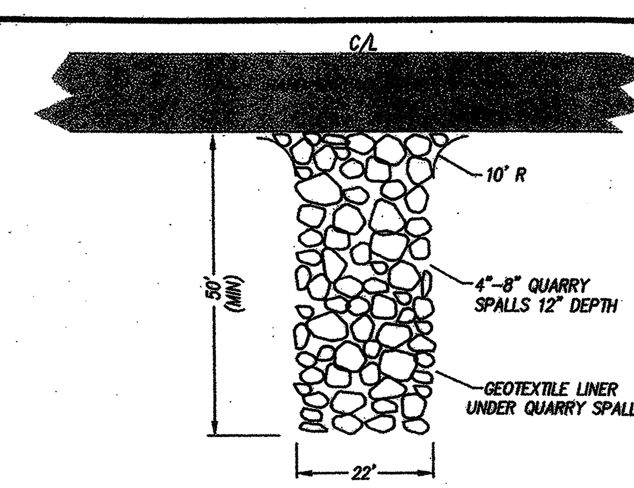
C/N RATIO	20-80
MOISTURE CONTENT	30%-52%
ORGANICS	25%-50%
BULK DENSITY	1100-1500 LBS/CY (1)

PARTICLE SIZE, PERCENT THAT CAN PASS THROUGH THE SCREEN SIZE BELOW

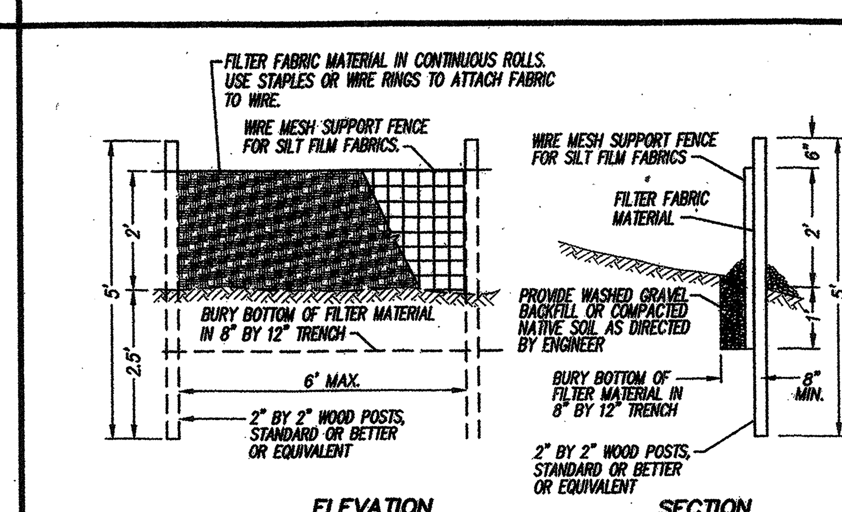
9.51 MM	80 TO 100%
6.35 MM	70 TO 100%
4.75 MM	60 TO 90%
2.38 MM	30 TO 80%
1.00 MM	10 TO 60%
0.5 MM	0 TO 40%

4. APPLICATION OF PGM SHALL BE BY BLOWER.
5. PILED BRUSH SHALL BE REMOVED WHERE FILTER BERMS ARE TO BE CONSTRUCTED.
6. PGM FOR CONSTRUCTION OF THE FILTER BERM MAY BE APPLIED UP TO 300' FROM THE TRUCK.
7. THE CONTRACTOR SHALL MAINTAIN THE EROSION CONTROL FILTER BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED. THE CONTRACTOR SHALL IMMEDIATELY CORRECT ALL DEFICIENCIES. THE CONTRACTOR SHALL MAKE A DAILY REVIEW OF THE LOCATION OF THE BERM IN AREAS WHERE CONSTRUCTION ACTIVITY CAUSES DRAINAGE RUNOFF TO ENSURE THAT THE BERM IS PROPERLY LOCATED FOR EFFECTIVENESS. WHERE DEFICIENCIES EXIST, ADDITIONAL BERM MATERIAL SHALL BE INSTALLED IMMEDIATELY.
8. THE CONTRACTOR SHALL REMOVE SEDIMENT RETAINED BY THE BERM ONCE IT HAS REACHED 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE ENGINEER.

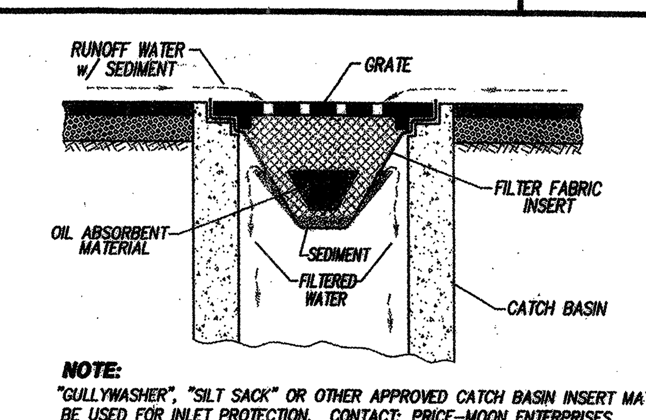
COMPOST FILTER BERM DETAIL (5/C2)
N.T.S.



ROCK CONSTRUCTION ENTRANCE (1/C2)
N.T.S.

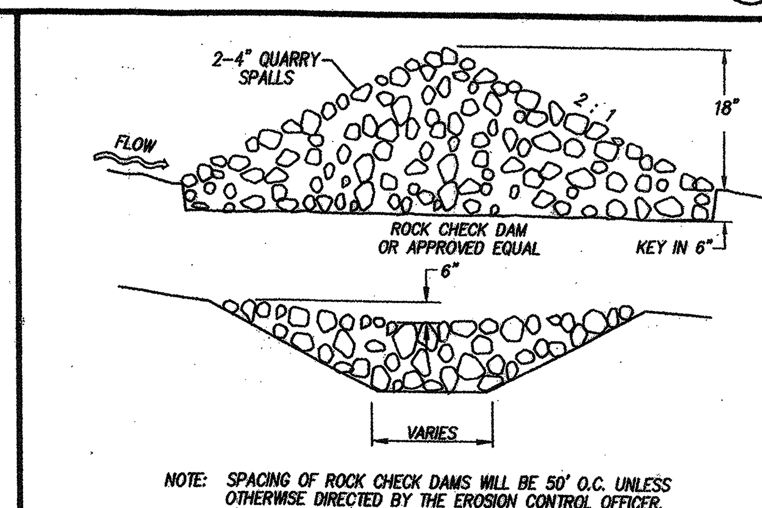


SILT FENCE DETAIL (2/C2)
N.T.S.



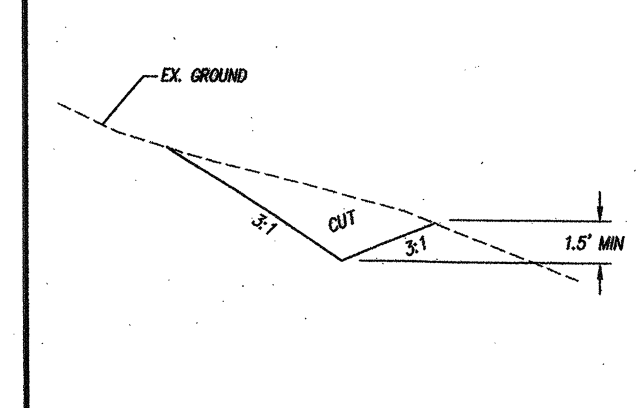
NOTE:
"GULLYWASHER", "SILT SACK" OR OTHER APPROVED CATCH BASIN INSERT MAY BE USED FOR INLET PROTECTION. CONTACT: PRICE-MOON ENTERPRISES PH: 360-563-6709 OR, "SILTSACK" BY ACF ENVIRONMENTAL AT PH: 1-800-644-9223 (OR APPROVED EQUAL).

(FOR ALL CB's w/GRATES)
TEMPORARY INLET PROTECTION DETAIL (3/C2)
N.T.S.



NOTE: SPACING OF ROCK CHECK DAMS WILL BE 50' O.C. UNLESS OTHERWISE DIRECTED BY THE EROSION CONTROL OFFICER.

ROCK CHECK DAM DETAIL (4/C2)
N.T.S.



TEMPORARY INTERCEPTOR TRENCH DETAIL
N.T.S.

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART, STATE OF WASHINGTON, 29726, REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/16/2005 7
DATE: 6/21/04

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:
MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
FAX: 425-486-6108
JOB #03055

AS-BUILT DECLARATION
WE HEREBY DECLARE THAT ROAD AND STORM DRAINAGE IMPROVEMENTS ARE LOCATED AS SHOWN ON THESE RECORD DRAWINGS.
BY: [signature] 8-25-05
PROJECT ~~ENGINEER~~ SURVEYOR — DATE
BY: [signature] 8/25/05
PLAT DEVELOPER / OWNER — DATE

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555
THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

DATE	REVISION/ISSUED
4/1/04	ISSUED
6/18/04	PER COUNTY REVIEW
7/13/04	PER COUNTY REVIEW
7/13/05	AS-BUILT
8/22/05	REVISED PER SNO. CO. 1ST AB REVIEW

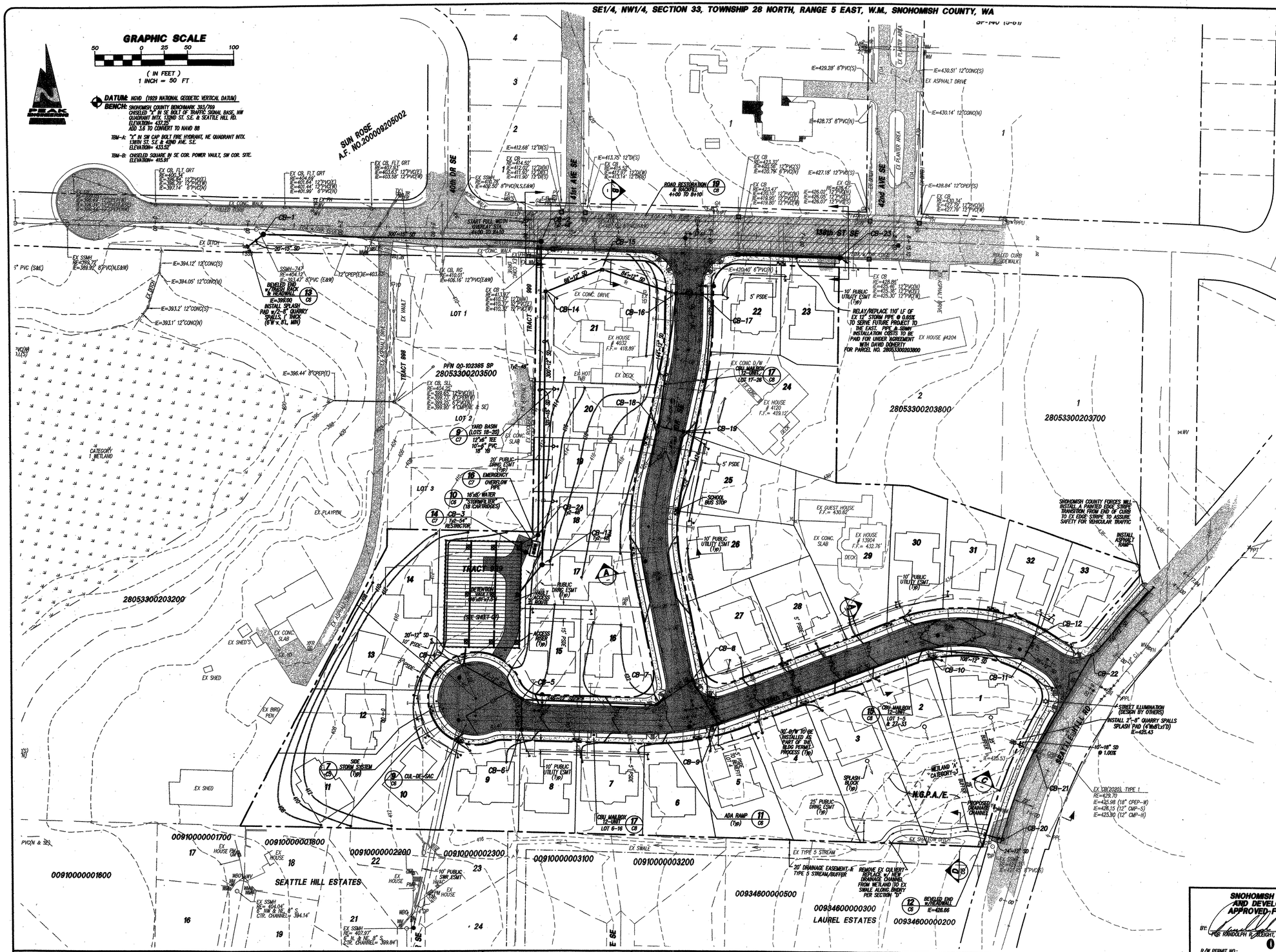
SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES APPROVED FOR CONSTRUCTION
BY [signature] 7/19/2004
FOR RANDOLPH R. SLEIGHT, P.E., P.L.S.
R/W PERMIT NO. 04-114872

PFN: 03-109825 AS-BUILT
APPLETREE NORTH
SWPPP NOTES & DETAILS

PROJECT NO. 03496
DWG C3 OF 8

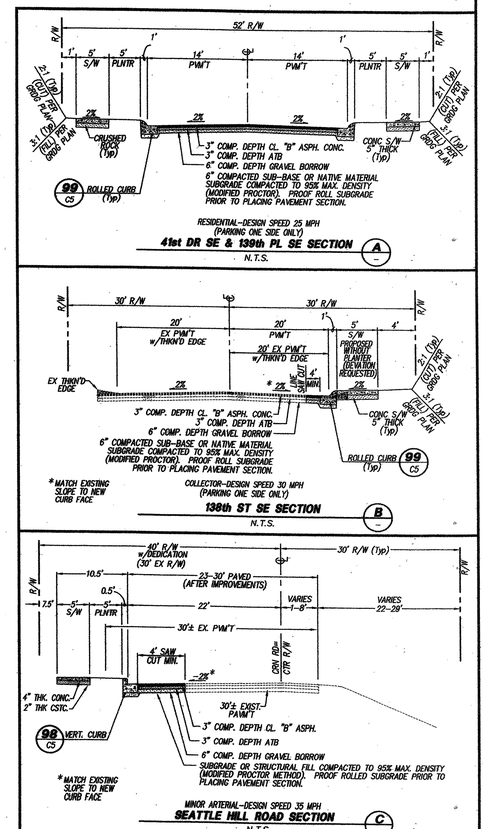
AS-BUILTS APPLETREE NORTH HDEV-2162

SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA



DRAINAGE NOTES:

1. THE EXISTING SITE SLOPES EAST TO WEST AT APPROX. 4.0%.
2. SOILS ON SITE ARE ALDERWOOD URBAN COMPLEX, HYDROLOGIC SOIL GROUP "C".
3. EXISTING COVER:
   0.81 AC – RESIDENCES, D/W's & OUT BUILDINGS
   7.20 AC – PASTURE/GRASS w/SOME TREES
4. DEVELOPED CONDITION:
   3.32 AC GRASS/LANDSCAPING
   4.69 AC IMPERVIOUS (ROAD & FRONTAGE, RESIDENCES, & D/W'S)
5. RUNOFF FROM IMPERVIOUS SURFACES WILL BE COLLECTED AND CONVEYED TO THE DETENTION VAULT AND WATER QUALITY VAULT.
6. OUTFLOW FROM THE VAULT WILL BE NORTHERLY TO 138th ST SE WHERE A NEW STORM SYSTEM (DEEPER THAN EXISTING) WILL DIRECT RUNOFF WEST TO THE OFFSITE WETLAND.
7. SEE "FULL DRAINAGE REPORT, DOWNSTREAM ANALYSIS AND EROSION RISK ASSESSMENT" DATED APRIL 1, 2004, PREPARED BY PEAK ENGINEERING, INC.
8. LOTS 1, 2 & 3 ARE TO PROVIDE SPLASH BLOCKS.



SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES APPROVED FOR CONSTRUCTION

BY: RANDOLPH R. BLEIGHT, P.E., P.L.S. 7/13/2004

R/W PERMIT NO.: 04-114872

DATE	REVISION/ISSUED
4/1/04	ISSUED
6/16/04	PER COUNTY REVIEW
7/13/04	PER COUNTY REVIEW
7/13/05	AS-BUILT
8/22/05	REVISED PER SNO. CO. 1ST AB REVIEW

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART — STATE OF WASHINGTON — 29726 — REGISTERED PROFESSIONAL ENGINEER

EXPIRES 07/16/2005

DATE: 4/13/04

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:

MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
FAX: 425-486-6108
JOB #03055

GRADING ESTIMATE

CUT: 8,000 CY's
FILL: 8,000 CY's

THE GRADING ESTIMATE PROVIDED FOR THESE PLANS IS APPROXIMATE, ACTUAL GRADING VOLUMES MAY VARY. CALCULATIONS DO NOT ACCOUNT FOR VARIOUS VOLUME/TRC CHANGES DURING THE EARTH WORK PROCESS.

GRADING ESTIMATE PRODUCED USING LAND DEVELOPMENT DESKTOP REL. 2 SURFACE MODEL. EXISTING GROUND AND PROPOSED FINISHED GRADE SURFACE MODEL COMPARED USING THE AVERAGE END AREA METHOD WITH SECTION SAMPLING @ 10' INTERVALS.

US POSTAL SERVICE

APPROVED FOR MB LOCATION

BY: DONNA K. SMYTH
US POSTMASTER
(ORIGINAL SIGNATURE IN FILE)

DATE: 4/2/04

AS-BUILT DECLARATION

WE HEREBY DECLARE THAT ROAD AND STORM DRAINAGE IMPROVEMENTS ARE LOCATED AS SHOWN ON THESE RECORD DRAWINGS.

BY: PROJECT ENGINEER / SURVEYOR — DATE 8-25-05

BY: PLAT DEVELOPER / OWNER — DATE 8/25/05

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN: 03-109825

AS-BUILT

APPLETREE NORTH

ROAD, GRADING & DRAINAGE PLAN

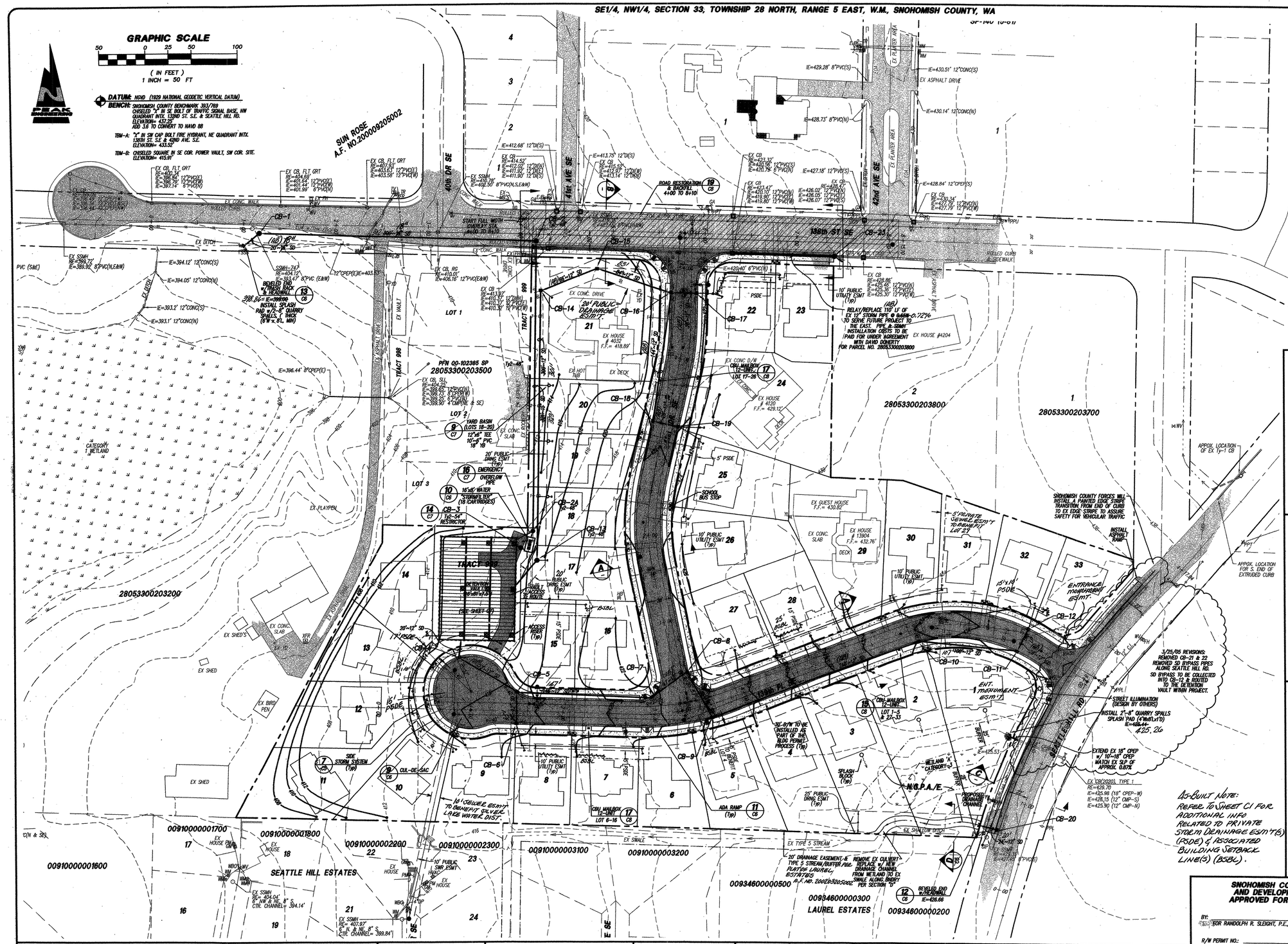
REFER TO SHT. C4.4

PROJECT NO. 03496

DWG C4 OF 8

AS-BUILTS APPLETREE NORTH HDEV-2163

SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA



SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES APPROVED FOR CONSTRUCTION	DATE	REVISION/ISSUED
BY: FOR RANDOLPH R. SLEIGHT, P.E., P.L.S.	4/1/04	ISSUED
	6/18/04	PER COUNTY REVIEW
	3/25/05	PER SD/GAS MAIN CONFLICTS
R/W PERMIT NO.:	7/13/05	AS-BUILT
	8/22/05	REVISED PER SNO. CO. 1ST AB REVIEW

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART — STATE OF WASHINGTON — 29728 — REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/18/2005
DATE: 3/25/05

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:
MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
FAX: 425-486-6108
JOB #03055

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FILL: 8,000 CY's
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GRADING ESTIMATE PRODUCED USING LAND DEVELOPMENT DESKTOP REL. 2 SURFACE MODEL. EXISTING GROUND AND PROPOSED FINISHED GRADE SURFACE MODEL COMPARED USING THE AVERAGE END AREA METHOD WITH SECTION SAMPLING @ 10' INTERVALS.

US POSTAL SERVICE
APPROVED FOR MB LOCATION
BY: DONNA K. SMYTH
US POSTMASTER
(ORIGINAL SIGNATURE IN FILE)
DATE: 4/2/04

AS-BUILT DECLARATION
WE HEREBY DECLARE THAT ROAD AND STORM DRAINAGE IMPROVEMENTS ARE LOCATED AS SHOWN ON THESE RECORD DRAWINGS.
BY: PROJECT ENGINEER / SURVEYOR — DATE: 8-25-05
BY: PLAT DEVELOPER / OWNER — DATE: 8/25/05

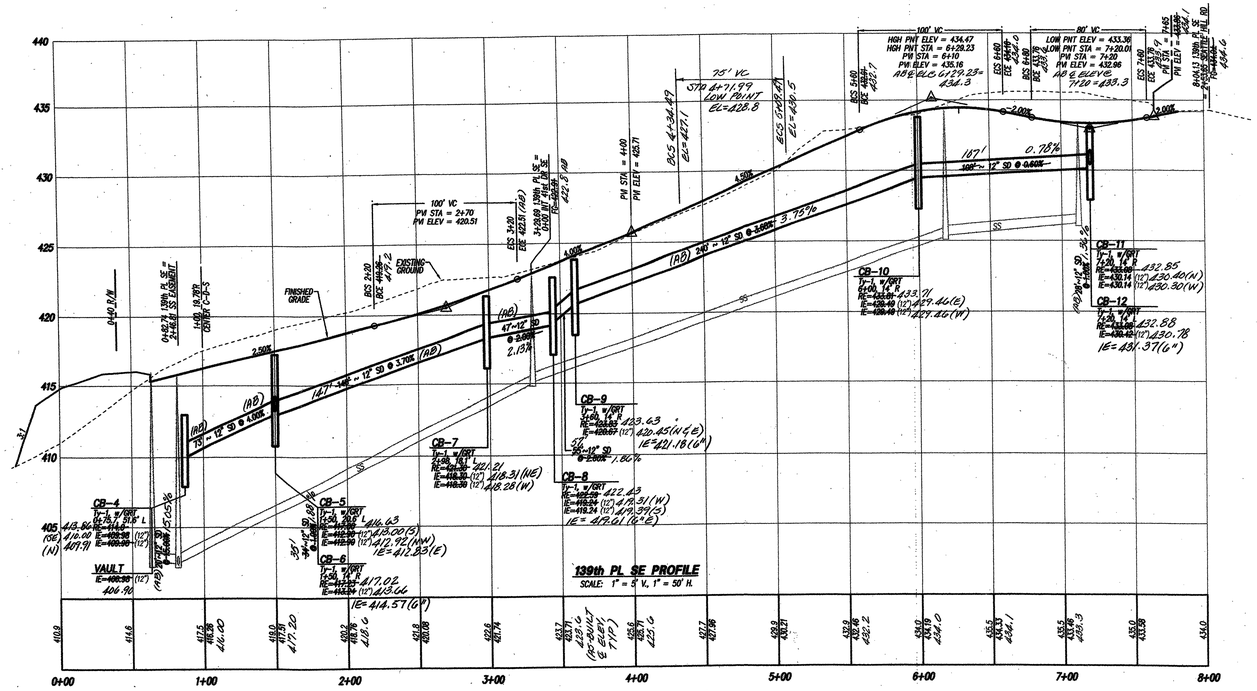
CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555
THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

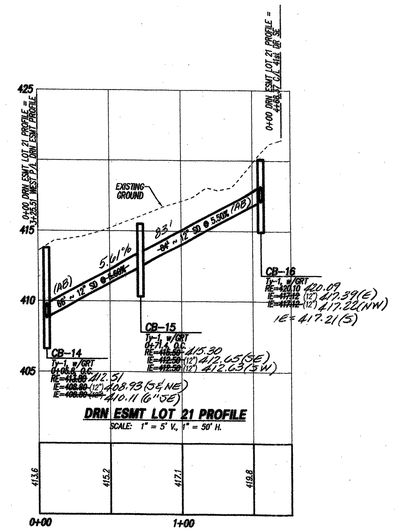
PFN: 03-109825 AS-BUILT
APPLETREE NORTH
SD/GAS CONFLICT REVISION TO ROAD, GRADING & DRAINAGE PLAN

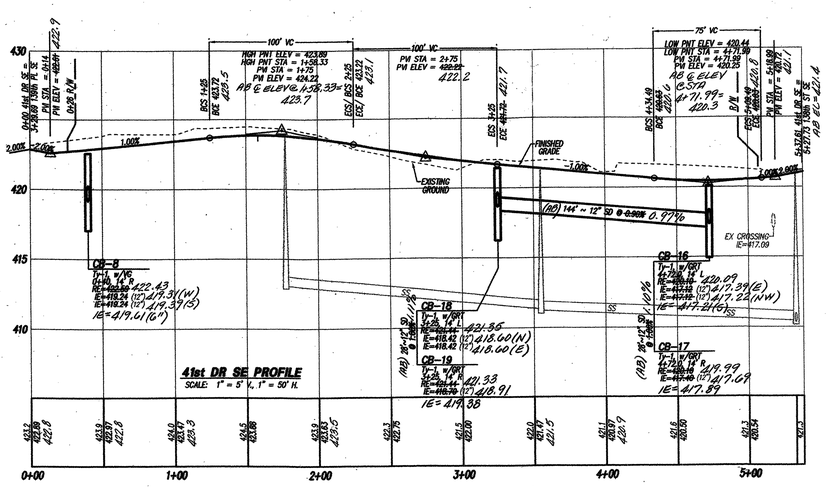
PROJECT NO. 03496
DWG C4A
OF 8

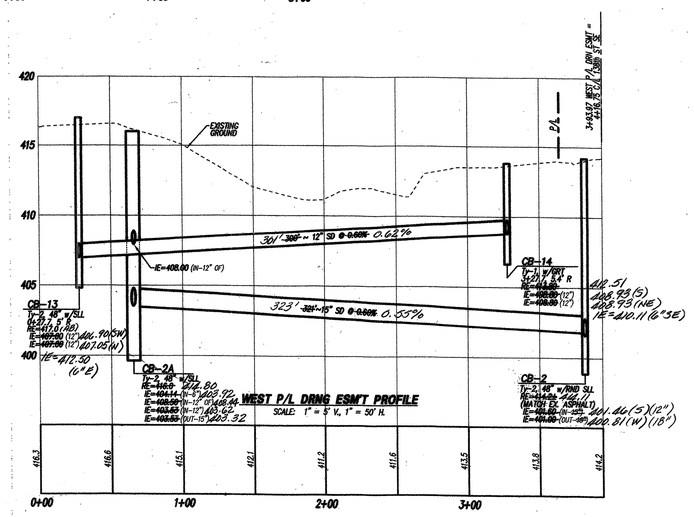
AS-BUILTS APPLETREE NORTH HDEV-2164

SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA

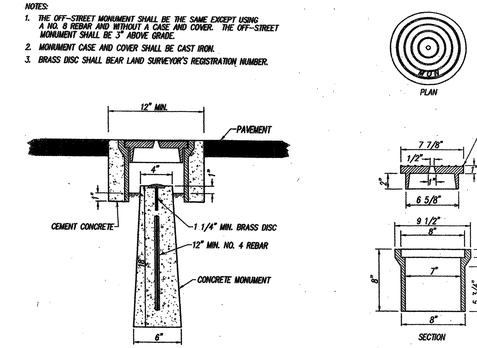




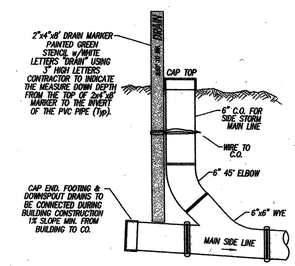




NOTES:
1. THE OFF-STREET MONUMENT SHALL BE THE SAME EXCEPT USING A NO. 6 REBAR AND WITHOUT A CASE AND COVER. THE OFF-STREET MONUMENT SHALL BE 3" ABOVE GRADE.
2. MONUMENT CASE AND COVER SHALL BE CAST IRON.
3. BRASS DISC SHALL BEAR LAND SURVEYOR'S REGISTRATION NUMBER.



MONUMENT IN CASE
N.T.S.
6 / C1

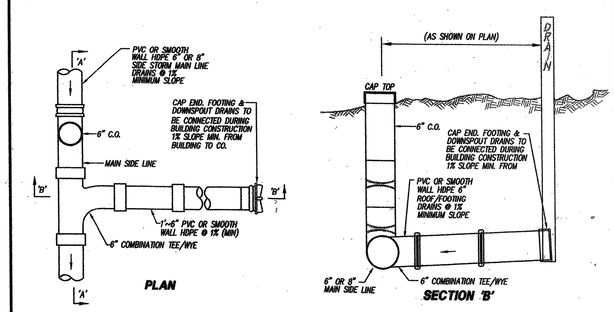


C.O., END-OF RUN W/FOOTING & DOWNSPOUT DRAIN
SECTION 'A'

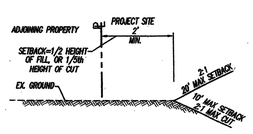
ALL INSPECTION PORTS TO BE AS-BUILT WITH STATION AND INVERT ELEVATION. CONTRACTOR TO RECORD DEPTH OF PIPE FROM TOP OF CAP TO INVERT AND PROVIDE THIS INFORMATION TO ENGINEER.

2"x4" DRAIN MARKER PAINTED GREEN STENCIL w/WHITE LETTERS "DRAIN" USING 3" HIGH LETTERS

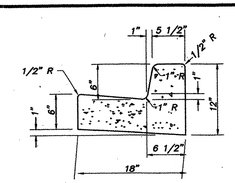
CONTRACTOR TO RECORD DEPTH TO IE ON 2"x4" DRAIN MARKER



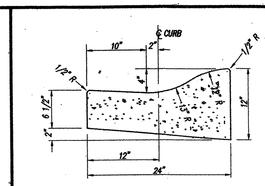
SIDE STORM SYSTEM DETAILS
N.T.S.
7 / C4



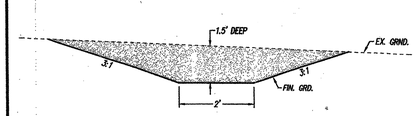
SETBACK FOR CUTS AND FILLS
N.T.S.



VERTICAL CURB SECTION
N.T.S.
98 / C4



ROLLED CURB SECTION
N.T.S.
99 / C4



DRAINAGE SWALE SECTION
N.T.S.
P / C4

SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES
APPROVED FOR CONSTRUCTION
BY: 7/5/2005
FOR RANDOLPH R. SLEIGH, P.E., C.E.
R/W PERMIT NO.: 04-118872

DATE	REVISION/ISSUED
4/1/04	ISSUED
6/18/04	PER COUNTY REVIEW
7/13/04	PER COUNTY REVIEW
7/13/05	AS-BUILT
8/22/05	REVISED PER SNO.CO EST AB REVIEW

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART, STATE OF WASHINGTON, 29726, REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/18/2005
DATE: 6/21/04

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:

MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
FAX: 425-486-6108
JOB #03055

DATUM: NGVD (1929 NATIONAL GEODETIC VERTICAL DATUM)
BENCH: SNOHOMISH COUNTY BENCHMARK 393/269 CHISELED "X" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD. ELEVATION= 437.25'
ADD 3.6 TO CONVERT TO NAVD 88
TBM-A: "X" IN SW CAP BOLT FIRE HYDRANT, NE QUADRANT INTX. 139TH ST. SE & 42ND AVE. S.E. ELEVATION= 433.52'
TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE. ELEVATION= 415.91'

AS-BUILT DECLARATION
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BY: PROJECT ENGINEER / SURVEYOR — DATE: 8-25-05
BY: PLAT DEVELOPER / OWNER — DATE: 8/25/05

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555
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PFN: 03-109825 AS-BUILT

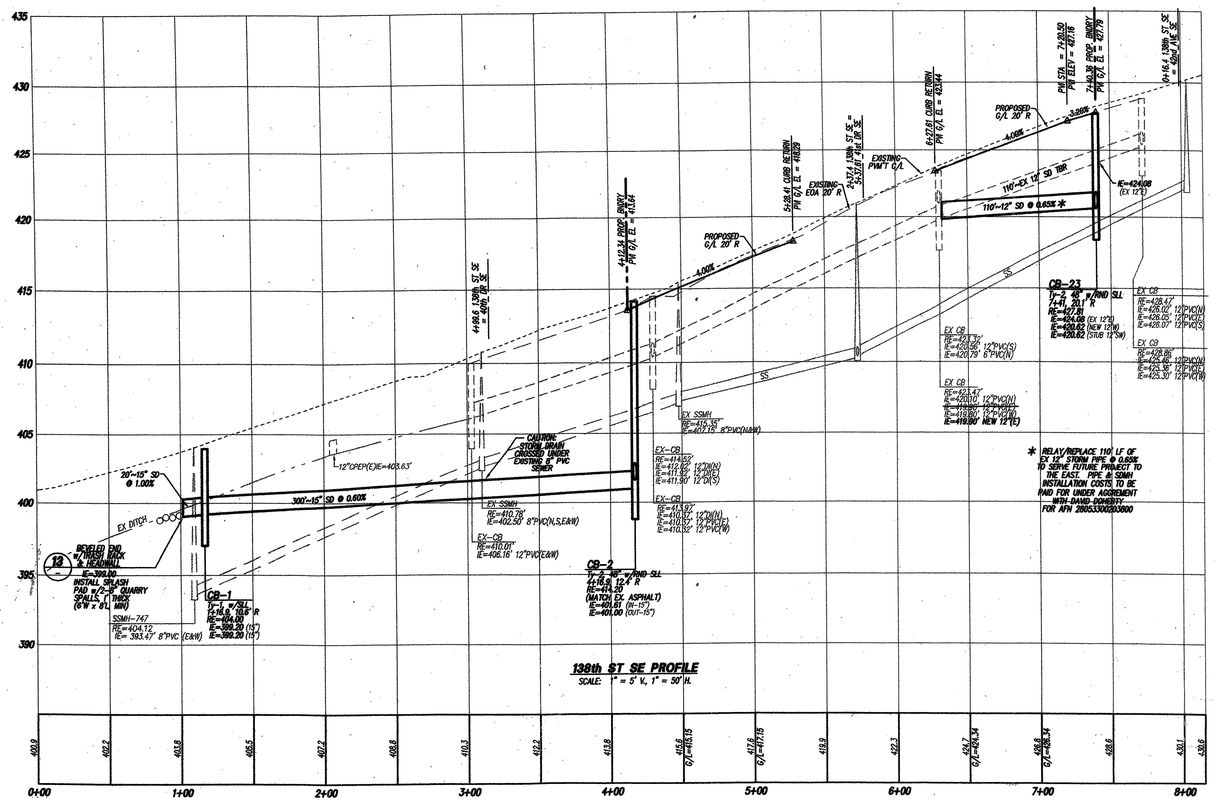
APPLETREE NORTH

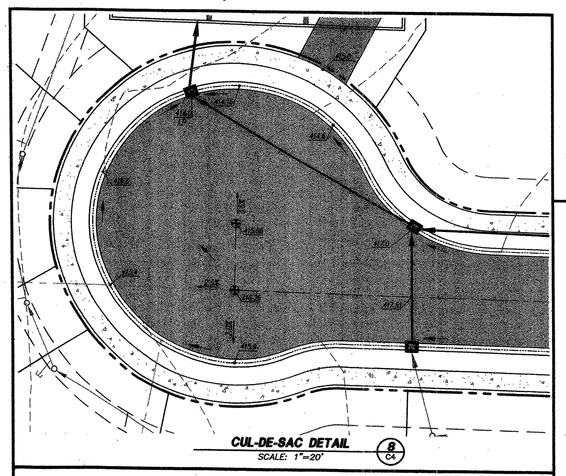
43rd DR SE & 140th ST SE
ROAD PROFILES / DETAILS

PROJECT NO. 03496
DWG C5 OF 8

AS-BUILTS APPLETREE NORTH HDEV-2165

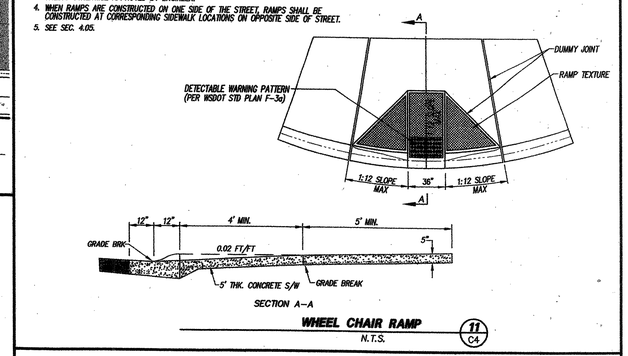
SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA



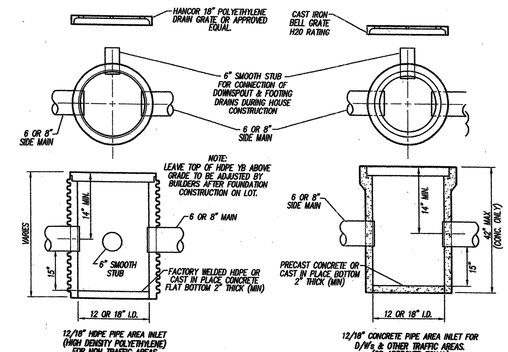


CUL-DE-SAC DETAIL 8 C4
SCALE: 1"=20'

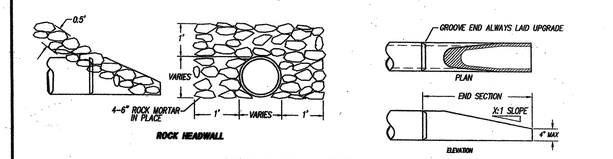
NOTES:
1. RAMP AND APPROACHES SHALL BE CLEAR OF OBSTACLES INCL. HYDRANTS, POLES, AND INLETS.
2. RAMP SHALL BE TEXTURED BY IMPRINT OF METAL GRID WITH 1/2" SPACING. RAMP SHALL HAVE A DETECTABLE WARNING PATTERN AS PER WSDOT STD PLAN F-3a.
3. RAMP CENTER-LINE SHALL BE PERPENDICULAR TO OR RADIAL TO CURB RETURNS UNLESS OTHERWISE APPROVED BY ENGINEER.
4. WHEN RAMPS ARE CONSTRUCTED ON ONE SIDE OF THE STREET, RAMPS SHALL BE CONSTRUCTED AT CORRESPONDING SIDEWALK LOCATIONS ON OPPOSITE SIDE OF STREET.
5. SEE SEC. 4.05.



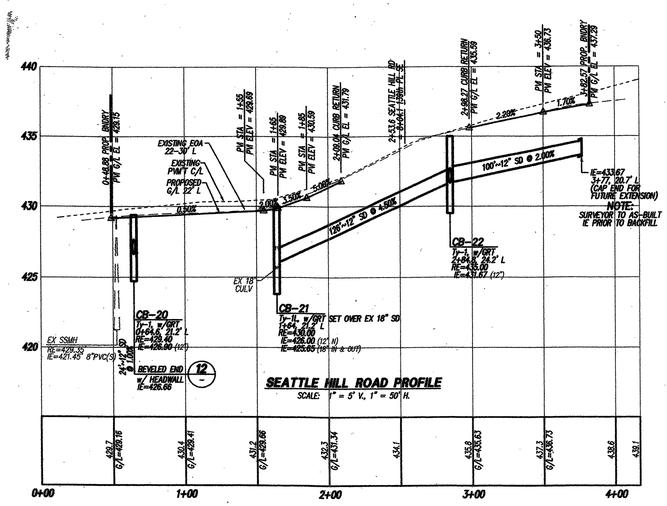
WHEEL CHAIR RAMP 11 C4
N.T.S.

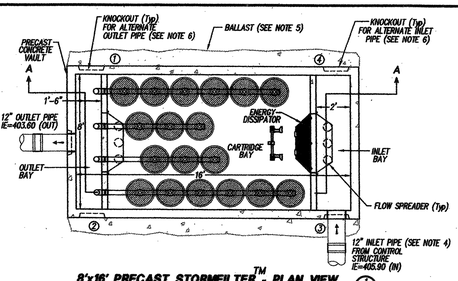


YARD BASIN DETAIL
(LOTS 18-20 ONLY) 9 C4
N.T.S.

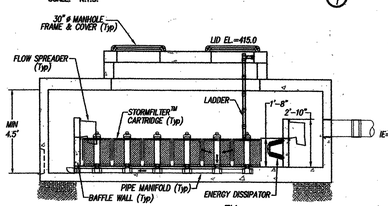


BEVELED END w/ROCK HEADWALL 12 C4
N.T.S.





8'x16' PRECAST STORMFILTER™ - PLAN VIEW 1
SCALE: N.T.S.



8'x16' PRECAST STORMFILTER™ - SECTION VIEW A-A 1
SCALE: N.T.S.

8' X 16' PRECAST STORMFILTER™ DATA

DESIGN WATER QUALITY FLOW (cfs)			0.06
PEAK FLOW (cfs)			5.44cfs
RETURN PERIOD OF PEAK FLOW (yrs)			6 MONTH
# OF CARTRIDGES REQUIRED			18 EA
MEDIA TYPE			PERLITE
(In-Out)=2.3' Min.	I.E.	MATERIAL	DIAMETER
INLET PIPE	405.90	N12	12"
OUTLET PIPE	403.60	N12	12"

NOTES/SPECIAL REQUIREMENTS:

RIM ELEVATION(S):
1 = 415.0, 2 = 415.0, 3 = 415.00, 4 = 415.00
FLOW 1 2 3 4

DOOR OPENING DIRECTION: 4:1 (FACING DOWNSTREAM - SEE FIGURE ABOVE)

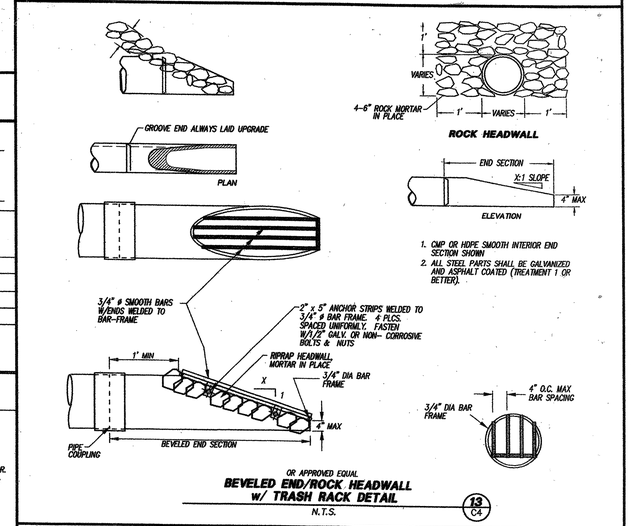
ADJUSTABLE LID		YES
LADDER		YES
ANTI-FLOATATION BALLAST (USE N/A IF NOT REQUIRED)	WIDTH	HEIGHT
	N/A	

STORMWATER MANAGEMENT INC.
StormFilter®
U.S. PATENT No. 5,322,629, No. 5,624,576, No. 5,707,527 AND OTHER U.S. AND FOREIGN PATENTS PENDING

OR APPROVED EQUAL
WATER QUALITY VAULT SECTIONS & DETAILS 10 C7
N.T.S.

GENERAL NOTES

1.) STORMFILTER BY STORMWATER MANAGEMENT, PORTLAND, OREGON (503-240-3393).
2.) ALL STORMFILTERS REQUIRE REGULAR MAINTENANCE. REFER TO OPERATION AND MAINTENANCE GUIDELINES FOR DETAILS.
3.) PRECAST CONCRETE VAULT TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C858.
4.) INLET AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
5.) ANTI-FLOATATION BALLAST TO BE SPECIFIED BY ENGINEER. BALLAST TO BE SET ALONG ENTIRE LENGTH OF BOTH SIDES OF VAULT. BALLAST MATERIALS TO BE PROVIDED BY CONTRACTOR.
6.) PRECAST STORMFILTER EQUIPPED WITH KNOCKOUTS AT ALT. INLET/OUTLET LOCATIONS. CORINGS AVAILABLE WHEN SPECIFIED.
7.) DETAIL REFLECTS DESIGN INTENT ONLY. ACTUAL VAULT DIMENSIONS AND CONFIGURATION WILL BE SHOWN ON THE PRODUCTION SHOP DRAWING.



BEVELED END/ROCK HEADWALL w/ TRASH RACK DETAIL 13 C4
N.T.S.

SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES APPROVED FOR CONSTRUCTION
BY: RANDOLPH R. WEIGHT, P.E., P.L.S. 7/19/2004
R/W PERMIT NO.: 04-114872

DATE	REVISION/ISSUED
4/1/04	ISSUED
6/18/04	PER COUNTY REVIEW
7/13/04	PER COUNTY REVIEW
7/13/05	AS-BUILT
8/22/05	REVISED PER SNO. CO. 1ST AB REVIEW

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART, STATE OF WASHINGTON, 25726, REGISTERED PROFESSIONAL ENGINEER
EXPIRES 01/16/2005
DATE: 7/12/04

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:
MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
FAX: 425-486-6108
JOB #03055

DATUM: NGVD (1929 NATIONAL GEODETIC VERTICAL DATUM)
BENCH: SNOHOMISH COUNTY BENCHMARK 393/769 CHISELED "X" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD. ELEVATION= 437.25' ADD 3.6 TO CONVERT TO NAVD 88
TBM-A: "X" IN SW CAP BOLT FIRE HYDRANT, NE QUADRANT INTX. 138TH ST. S.E & 42ND AVE. S.E. ELEVATION= 433.52'
TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE. ELEVATION= 415.91'

AS-BUILT DECLARATION
WE HEREBY DECLARE THAT ROAD AND STORM DRAINAGE IMPROVEMENTS ARE LOCATED AS SHOWN ON THESE RECORD DRAWINGS.
BY: PROJECT ENGINEER SURVEYOR 8-25-05 DATE
BY: PLAT DEVELOPER / OWNER 8/25/05 DATE

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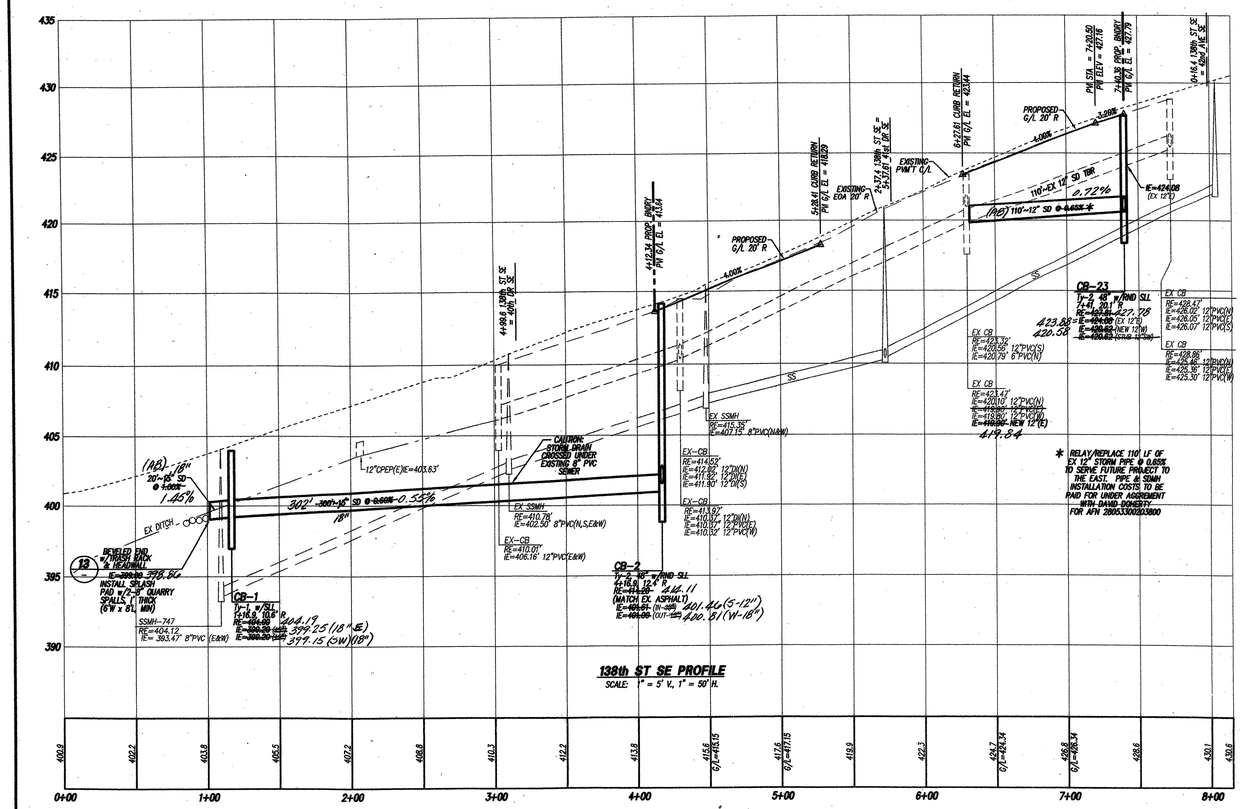
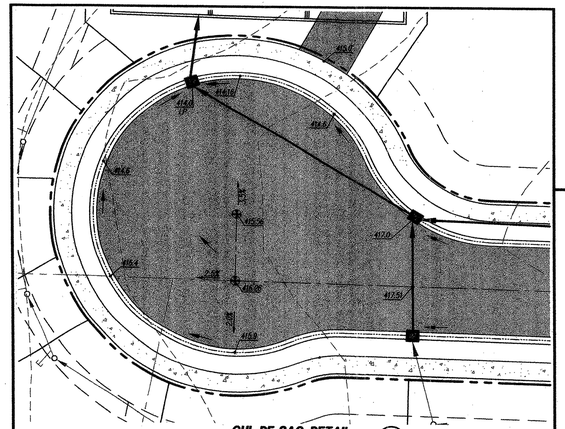
PFN: 03-109825 AS-BUILT
APPLETREE NORTH
138th ST SE & SEATTLE HILL ROAD PROFILES / DETAILS
REFER TO SHT. C4

PROJECT NO. 03496
DWG C6 OF 8

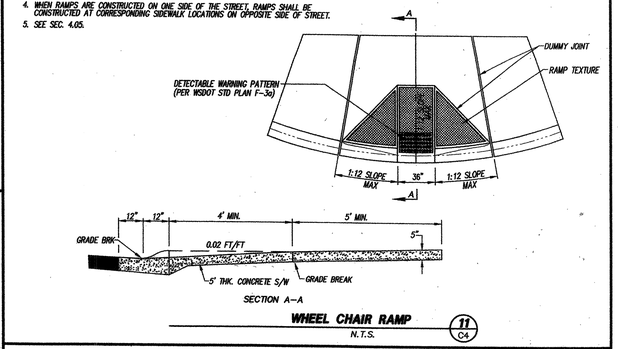
AS-BUILTS APPLETREE NORTH HDEV-2166

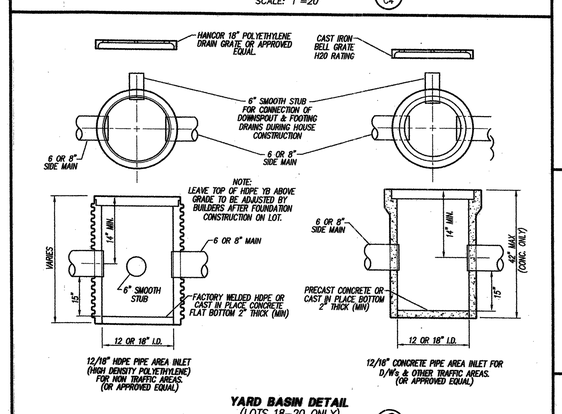
SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA

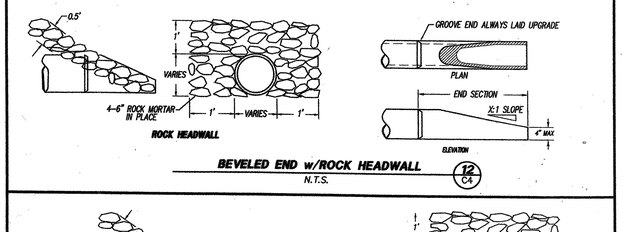


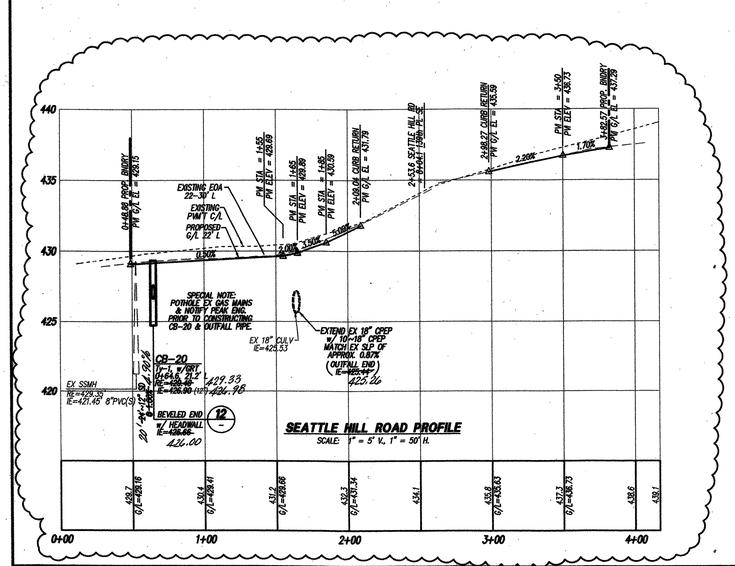


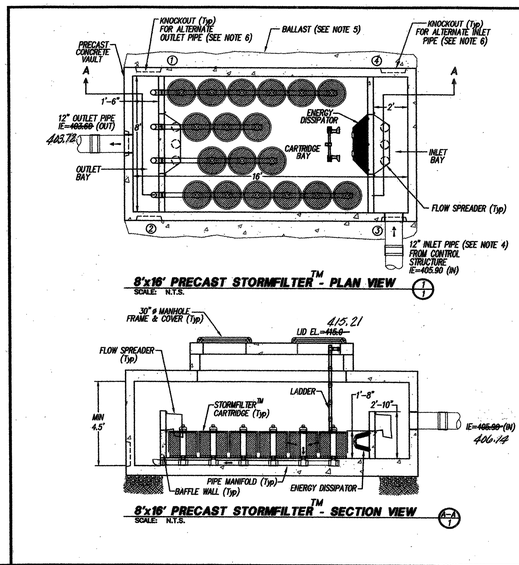
NOTES:
1. RAMP AND APPROACHES SHALL BE CLEAR OF OBSTACLES INCL. HYDRANTS, POLES, AND INLETS.
2. RAMP SHALL BE TEXTURED BY IMPRINT OF METAL GRID WITH 1/2" SPACING. RAMP SHALL HAVE A DETECTABLE WARNING PATTERN AS PER WSDOT STD PLAN F-3a.
3. RAMP CENTER LINE SHALL BE PERPENDICULAR TO OR RADIAL TO CURB RETURNS UNLESS OTHERWISE APPROVED BY ENGINEER.
4. WHEN RAMPS ARE CONSTRUCTED ON ONE SIDE OF THE STREET, RAMPS SHALL BE CONSTRUCTED AT CORRESPONDING SIDEWALK LOCATIONS ON OPPOSITE SIDE OF STREET.
5. SEE SEC. 4.05.











8' X 16' PRECAST STORMFILTER™ DATA

DESIGN WATER QUALITY FLOW (cfs)				0.06
PEAK FLOW (cfs)				5.44cfs
RETURN PERIOD OF PEAK FLOW (yrs)				6 MONTH
# OF CARTRIDGES REQUIRED				18 EA
MEDIA TYPE				PERLITE
(In-Out)=2.3' Min.		LE.	MATERIAL	DIAMETER
INLET PIPE	406.14	405.90	N12	12"
OUTLET PIPE	403.72	403.60	N12	12"

NOTES/SPECIAL REQUIREMENTS:

RIM ELEVATION(S):
①= 415.0 ④= 415.00
②= 415.0 ③= 415.00
FLOW

DOOR OPENING DIRECTION: 4:1 (FACING DOWNSTREAM - SEE FIGURE ABOVE)

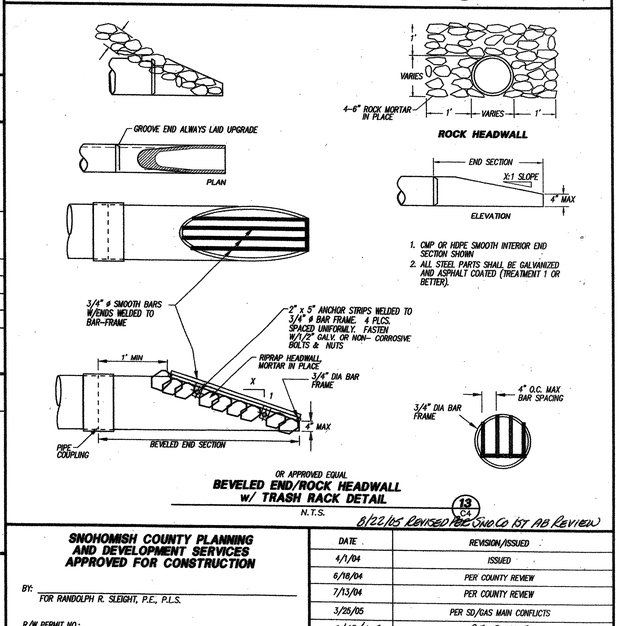
ADJUSTABLE LID	YES	
LADDER	YES	
ANTI-FLOATATION BALLAST (USE N/A IF NOT REQUIRED)	WIDTH	HEIGHT
	N/A	

STORMWATER MANAGEMENT INC.
StormFilter®
U.S. PATENT No. 5,322,629, No. 5,624,576, No. 5,707,527 AND OTHER U.S. AND FOREIGN PATENTS PENDING

OR APPROVED EQUAL
WATER QUALITY VAULT SECTIONS & DETAILS
10
C7
N.T.S.

GENERAL NOTES

1.) STORMFILTER BY STORMWATER MANAGEMENT, PORTLAND, OREGON (503-240-3393).
2.) ALL STORMFILTERS REQUIRE REGULAR MAINTENANCE. REFER TO OPERATION AND MAINTENANCE GUIDELINES FOR DETAILS.
3.) PRECAST CONCRETE VAULT TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C858.
4.) INLET AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
5.) ANTI-FLOATATION BALLAST TO BE SPECIFIED BY ENGINEER. BALLAST TO BE SET ALONG ENTIRE LENGTH OF BOTH SIDES OF VAULT. BALLAST MATERIALS TO BE PROVIDED BY CONTRACTOR.
6.) PRECAST STORMFILTER EQUIPPED WITH KNOCKOUTS AT ALT. INLET/OUTLET LOCATIONS. CORINGS AVAILABLE WHEN SPECIFIED.
7.) DETAIL REFLECTS DESIGN INTENT ONLY. ACTUAL VAULT DIMENSIONS AND CONFIGURATION WILL BE SHOWN ON THE PRODUCTION SHOP DRAWING.



8/22/05 REVISED PER SNO CO. 1ST AB REVIEW

SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES APPROVED FOR CONSTRUCTION

BY: _____ FOR RANDOLPH R. SLEIGHT, P.E., P.L.S.

R/W PERMIT NO.: _____

DATE	REVISION/ISSUED
4/1/04	ISSUED
6/18/04	PER COUNTY REVIEW
7/13/04	PER COUNTY REVIEW
3/28/05	PER SD/GAS MAIN CONFLICTS
7/18/05	AS-BUILT

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART, STATE OF WASHINGTON, 29728, REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/16/2005
DATE: 3/25/05

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:
MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
FAX: 425-486-6189
JOB #03055

DATUM: NGVD (1929 NATIONAL GEODETIC VERTICAL DATUM)
BENCH: SNOHOMISH COUNTY BENCHMARK 393/769 CHISELED "V" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD. ELEVATION= 437.25' ADD 3.6 TO CONVERT TO NAVD 88
TBM-A: "X" IN SW CAP BOLT FIRE HYDRANT, NE QUADRANT INTX. 138TH ST. S.E. & 42ND AVE. S.E. ELEVATION= 433.52'
TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE. ELEVATION= 415.91'

AS-BUILT DECLARATION
WE HEREBY DECLARE THAT ROAD AND STORM DRAINAGE IMPROVEMENTS ARE LOCATED AS SHOWN ON THESE RECORD DRAWINGS.
BY: _____ PROJECT ENGINEER DATE 8-25-05
BY: _____ PLAT DEVELOPER / OWNER DATE 8/25/05

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555
THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN: 03-109825 AS-BUILT

APPLETREE NORTH

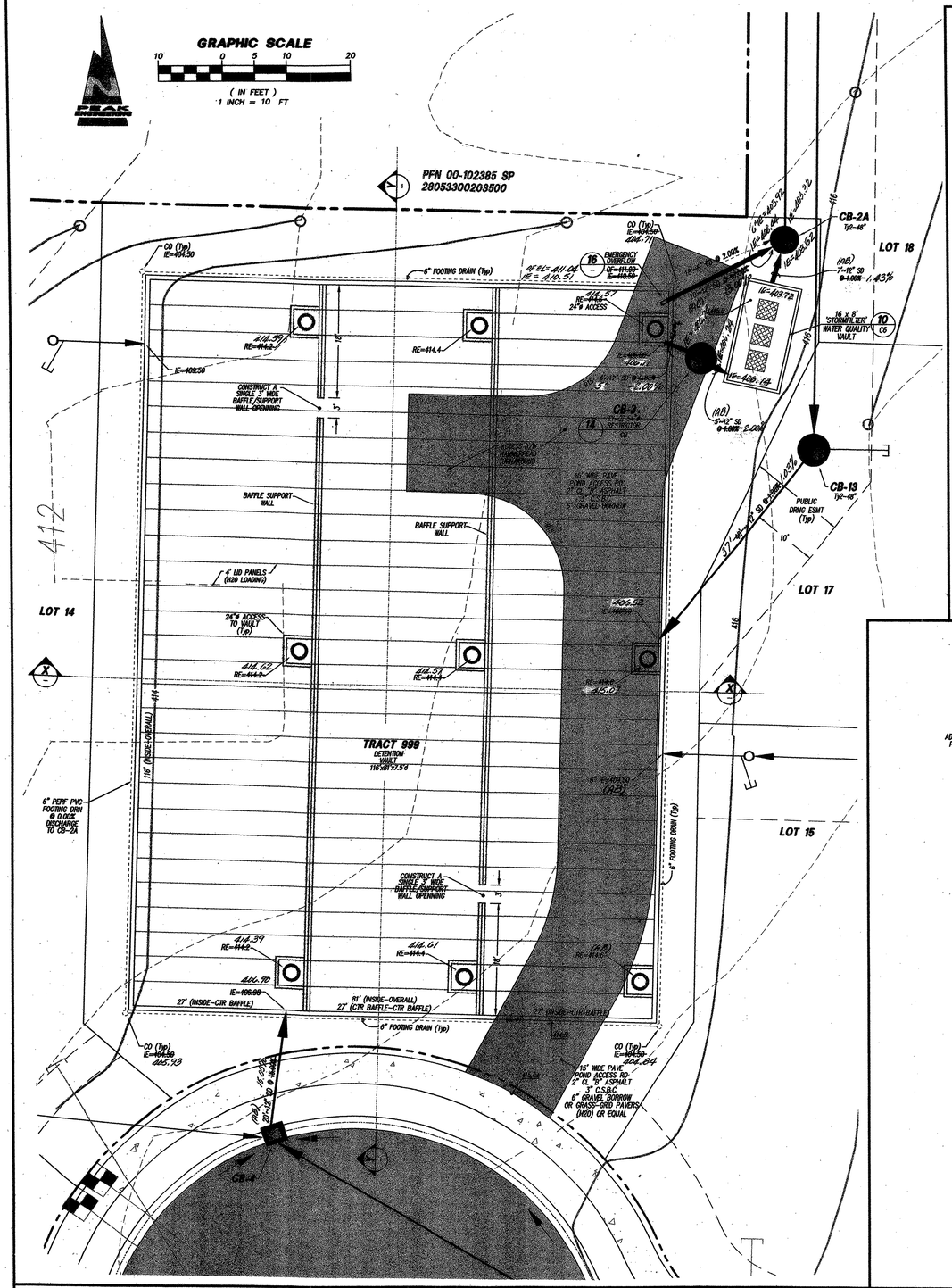
SD/GAS CONFLICT REVISION TO 138th ST SE & SEATTLE HILL ROAD PROFILES / DETAILS

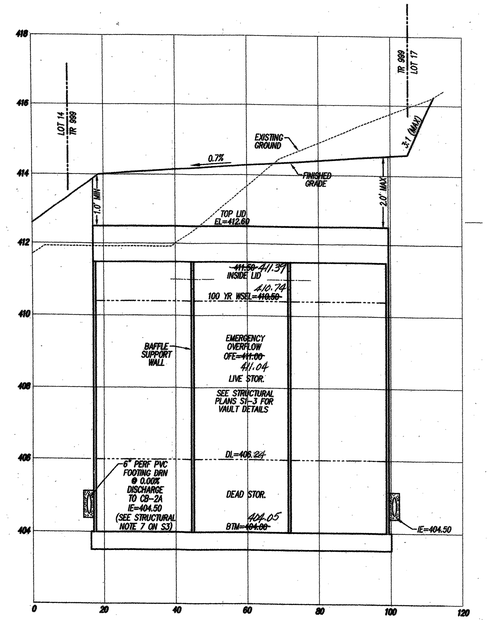
PROJECT NO. 03496

DWG C6A OF 8

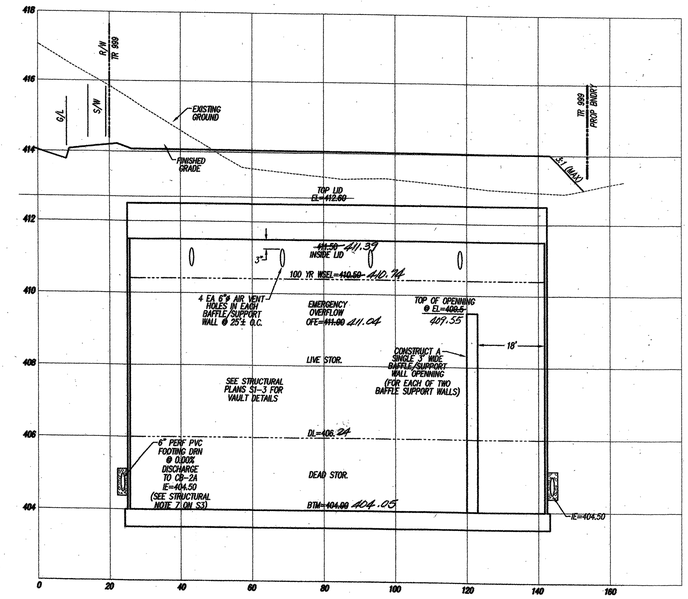
AS-BUILTS APPLETREE NORTH HDEV-2167

SE1/4, NW1/4, SECTION 33, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WA

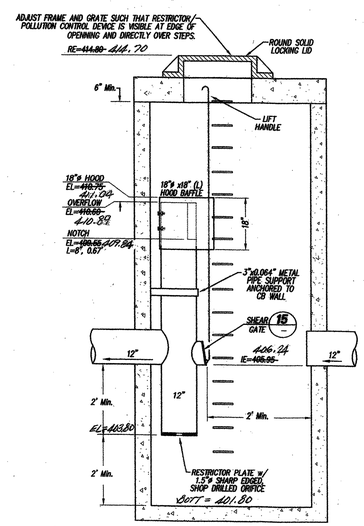




DETENTION TRACT 999 VAULT SECTION (X)
SCALE: 1" = 2' V., 1" = 20' H.

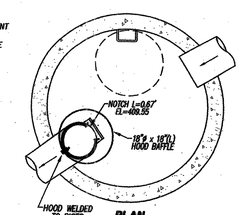


DETENTION TRACT 999 VAULT SECTION (Y)
SCALE: 1" = 2' V., 1" = 20' H.

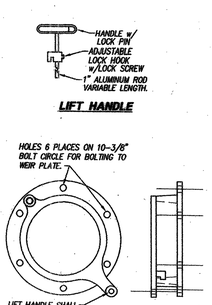


CB-3 Ty-2, 54" SECTION (14)
SCALE: 1/2" = 1.0'

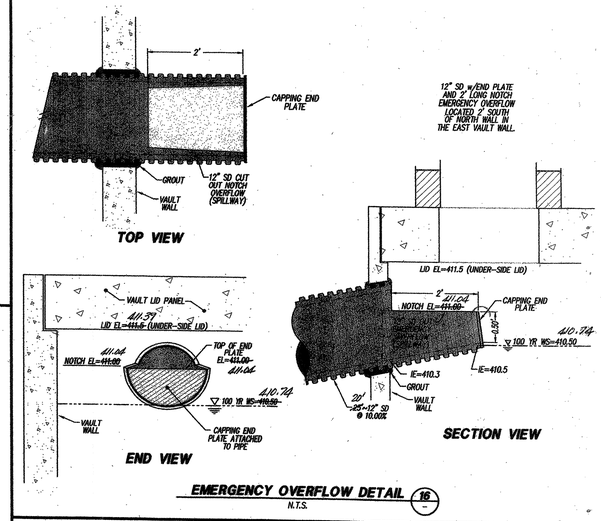
NOTE: ALL STEEL PARTS AND SURFACES MUST BE GALVANIZED AND ASPHALT COATED (TREATMENT #1 OR BETTER). COMPLETE CORROSION PROTECTION MUST BE ASSURED.



PLAN VIEW



CLEANOUT / SHEAR GATE (15)
N.T.S.



EMERGENCY OVERFLOW DETAIL (16)
N.T.S.

DETENTION SUMMARY CHART

STORM EVENT (YEAR)	LIVE STORAGE VOL. w/1.3 VCF (CF)			RELEASE RATE (CFS)					6 MONTH DEAD STORAGE VOLUME (CF)		
	REQUIRED	DESIGNED	AS-BUILT	REQUIRED	DESIGNED w/o VCF	DESIGNED w/ VCF	AS-BUILT		REQUIRED	DESIGNED	AS-BUILT
2 (1/2)	31,830 CF	31,950 CF	33,074 CF	0.11 CFS	0.11 CFS	0.10 CFS	0.10 CFS		16,910 CF	18,792 CF	
10	36,590 CF	36,740 CF	37,396 CF	0.65 CFS	0.55 CFS	0.42 CFS	0.44 CFS				
100	41,265 CF	41,440 CF	43,091 CF	1.50 CFS	1.47 CFS	1.03 CFS	1.06 CFS				

LOTS ROUTED TO DETENTION FACILITY: LOTS 4-33 DESIGN IMPERVIOUS AREA (SF/LOT): 4,000 SF/LOT (P.D.)

SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES APPROVED FOR CONSTRUCTION
BY: FOR RANDOLPH R. SUBOTI, DEPTS 7/19/2004
R/W PERMIT NO.: 04-124872

DATE	REVISION/ISSUED
4/1/04	ISSUED
6/18/04	PER COUNTY REVIEW
7/13/04	PER COUNTY REVIEW
7/13/05	AS-BUILT
8/22/05	REVISED PER SNO. CO. 1ST AB REVIEW

PEAK ENGINEERING INC.
1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART, STATE OF WASHINGTON, 29728, REGISTERED PROFESSIONAL ENGINEER
EXPIRES 07/16/2005
DATE: 6/21/04

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:
MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 299
WOODINVILLE, WA 98072
PH: 425-486-1252
FAX: 425-486-6108
JOB #03035

DATUM: NGVD (1929 NATIONAL GEODETIC VERTICAL DATUM)
BENCH: SNOHOMISH COUNTY BENCHMARK 353/789 CHISELED "X" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD. ELEVATION= 437.25' ADD 3.6 TO CONVERT TO NAVD 88
TBM-A: "X" IN SW CAP BOLT FIRE HYDRANT, NE QUADRANT INTX. 130TH ST. S.E. & 42ND AVE. S.E. ELEVATION= 433.52'
TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE. ELEVATION= 415.91'

AS-BUILT DECLARATION
WE HEREBY DECLARE THAT ROAD AND STORM DRAINAGE IMPROVEMENTS ARE LOCATED AS SHOWN ON THESE RECORD DRAWINGS.
BY: PROJECT ENGINEER SURVEYOR 8-25-05 DATE
BY: PLAT DEVELOPER / OWNER 8/25/05 DATE

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555
THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN: 03-109825 AS-BUILT

APPLETREE NORTH

VAULT PLAN, SECTIONS & DETAILS

PROJECT NO. 03496
DWG C7 OF 8

AS-BUILTS APPLETREE NORTH HDEV-2168

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SNOHOMISH COUNTY STANDARDS AND SPECIFICATIONS, (EDDS) WASHINGTON STATE DEPARTMENT OF TRANSPORTATION CURRENT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION AND THE CURRENT WSDOT HYDRAULICS MANUAL.
2. ALL WORK WITHIN THE PLAT AND COUNTY RIGHT-OF-WAY SHALL BE SUBJECT TO THE INSPECTION OF THE COUNTY ENGINEER OR HIS DESIGNATED REPRESENTATIVE.
3. PRIOR TO ANY SITE WORK, THE CONTRACTOR SHALL CONTACT THE CHIEF INSPECTOR FOR LAND DEVELOPMENT DIVISION AT (425) 388-3385 TO SCHEDULE A PRECONSTRUCTION CONFERENCE. FIELD CHANGES REQUIRING REDESIGN SHALL BE SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION. ENGINEERED AS-BUILTS SHALL BE REQUIRED PRIOR TO SITE APPROVAL.
4. SEDIMENT LADEN WATERS SHALL NOT ENTER THE NATURAL DRAINAGE SYSTEM.
5. 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, AS SPECIFIED IN SECTION 2-03.3(14)C COMPACTING EARTH EMBANKMENTS METHOD B.
6. THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION 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 AID IN UTILITY LOCATION CALL 1-800-424-5555.
7. THE CONTRACTOR SHALL NOTIFY PEAK ENGINEERING, INC. AND THE COUNTY INSPECTOR WHEN CONFLICTS BETWEEN THE PLANS AND FIELD CONDITIONS EXIST PRIOR TO CONSTRUCTION AND SAID CONFLICTS SHALL BE RESOLVED PRIOR TO PROCEEDING WITH CONSTRUCTION.
8. THE CONTRACTOR SHALL KEEP TWO SETS OF APPROVED PLANS ON SITE AT ALL TIMES FOR RECORDING AS-BUILT INFORMATION; ONE SET SHALL BE SUBMITTED TO PEAK ENGINEERING AT COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE OF WORK.
9. A GRADING PERMIT ISSUED PURSUANT TO TITLE 30.63B SCC AND CHAPTER 33 UBC AND APPROVAL OF THE TEMPORARY EROSION AND SEDIMENTATION CONTROL PLAN SHALL HAVE BEEN OBTAINED FROM PLANNING & DEVELOPMENT SERVICES FOR ANY ON SITE GRADING WHICH IS NOT EXPRESSLY EXEMPT BY SECTION 30.63B.020 S.C.C.
10. LOT LINES SHOWN HEREON ARE APPROXIMATE, ACTUAL PLATTED DIMENSIONS AND/OR DEEDED LOCATIONS SHALL TAKE PRECEDENCE.
11. A COPY OF THESE APPROVED PLANS, WSDOT CURRENT STANDARD SPECIFICATIONS AND SNOHOMISH COUNTY PUBLIC WORKS ENGINEERING DESIGN AND DEVELOPMENT STANDARDS SHALL BE ON THE JOB SITE WHENEVER WORK IS IN PROGRESS.
12. WORK IN THE COUNTY RIGHT-OF-WAY MAY REQUIRE A LANE CLOSURE RIGHT-OF-WAY USE PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS.
13. MONUMENTS AND PROPERTY CORNERS SHALL BE PROTECTED FROM DISTURBANCE DURING CONSTRUCTION. A LICENSED SURVEYOR SHALL OBTAIN A PERMIT FOR THE REMOVAL OR REPLACEMENT OF ANY R/W MONUMENTS, SURVEY MONUMENTS, OR PROPERTY CORNERS IN ACCORDANCE WITH STATE LAW AND WAC 332-120 PRIOR TO ANY DISTURBANCE TO THE CORNER. THE POINTS TO BE PROTECTED OR REPLACED SHALL BE LOCATED BY THE PROJECT SURVEYOR OR ENGINEER AND SHOWN ON THE CONSTRUCTION PLANS.
14. SURVEY MONUMENTS SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH SNOHOMISH COUNTY ENGINEERING DESIGN AND DEVELOPMENT STANDARDS (E.D.D.S.), CHAPTER 4-03, DETAIL 4-130, AND POL-5200.
15. BLUE STREET REFLECTORS SHALL BE INSTALLED APPROXIMATELY ONE FOOT OFFSET FROM ROAD CENTERLINE TO INDICATE LOCATION OF FIRE HYDRANTS, PER UDC CHAPTER 30.53A.330(12).

HYDRANT COLOR CODES

COLOR CODE FOR HYDRANT	LEVEL OF SERVICE
LIGHT BLUE	1,500 GPM OR GREATER
GREEN	1,000 TO 1,499 GPM
ORANGE	500 TO 999 GPM
RED	LESS THAN 500 GPM
BLACK	FOR DRAFTING USE ONLY (HARD SUCTION/STEAMER PORT)
WHITE	CROSS ON TOP OF HYDRANT FOR FILLING TANKERS ONLY

11. CMP PIPE SPECIFICATIONS: (MAY BE USED FOR POND CONTROL STRUCTURE BUT NOT INTENDED FOR USE AS CONVEYANCE PIPE.)

STEEL			ALUMINUM		
2-2/3 x 1/2 in. Corrugation			2-2/3 x 1/2 in. Corrugation		
Pipe Diameter (inches)	Gage	Band	Pipe Diameter (inches)	Gage	Band
12 - 54	16	12"	12 - 27	16	12"

12. ALL NON-PERFORATED METAL PIPE SHALL HAVE NEOPRENE GASKETS AT THE JOINTS. O-RING GASKETS MAY BE USED FOR TYPE F COUPLING BAND.
13. THE CULVERT ENDS SHALL BE BEVELED TO MATCH THE SIDE SLOPE. FIELD CUT OF CULVERT ENDS IS PERMITTED, WHEN APPROVED BY THE INSPECTOR.
14. ALL FIELD CUT CULVERT PIPE SHALL BE TREATED WITH TREATMENT AS SHOWN IN THE STANDARD SPECIFICATIONS OR GENERAL SPECIAL PROVISIONS.
15. BACKFILL AROUND PIPE MUST BE COMPACTED TO A SPECIFIED AASHTO T-99 DENSITY OF 90%. USE REASONABLE CARE IN HANDLING AND INSTALLATION.
16. CORRUGATED ALUMINUM PIPE AND COUPLING BANDS SHALL MEET THE REQUIREMENTS OF AASHTO M196 AND M197.
17. PRIOR TO SIDEWALK CONSTRUCTION, CONSTRUCT THE LOT DRAINAGE AND STUB-OUTS AND OR BEHIND THE SIDEWALK DRAINS AS REQUIRED. STUB-OUTS SHALL BE MARKED WITH A 2" X 4" AND LABELED "STORM". LOCATIONS OF THESE INSTALLATIONS SHALL BE PLACED ON THE AS-BUILT CONSTRUCTION PLANS AND SUBMITTED TO THE COUNTY.
18. STORM WATER RETENTION/DETENTION FACILITIES STORM DRAINAGE PIPE AND CATCH BASINS SHALL BE FLUSHED AND CLEANED PRIOR TO SNOHOMISH COUNTY ACCEPTANCE.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL MANHOLE, INLET, AND CATCH BASIN FRAMES AND GRATES JUST PRIOR TO POURING OF CURBS AND PAVING.
20. YARD BASINS WITH MULTIPLE CONNECTIONS SHALL EITHER HAVE MULTIPLE KNOCKOUTS OR BE CORE-DRILLED. BROKEN BASINS SHALL NOT BE ACCEPTED.
21. THE SIDES OF THE DETENTION POND SHALL BE SEEDED WITH A SUITABLE GRASS MIXTURE DOWN TO THE PERMANENT WATER SURFACE ELEVATION.

CHANNELIZATION AND SIGNING

APPROVED PERMANENT TRAFFIC CONTROL SIGNS AND MARKINGS WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) SHALL BE INSTALLED BY COUNTY FORCES. COUNTY FORCES WILL INSTALL CROSSWALK MARKINGS AT ALL INTERSECTIONS THAT HAVE CURB RADII'S 30' OR GREATER. THE DEVELOPER SHALL PAY FOR INSTALLATION OF ALL DEVICES. THE INSPECTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS (DPW). TRAFFIC OPERATIONS WHEN THE PROJECT IS READY FOR CHANNELIZATION AND SIGNING.

DURING PROJECT CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TEMPORARY CONSTRUCTION SIGNS, TRAFFIC CONTROL SIGNS, DELINEATORS AND TEMPORARY MARKINGS AS REQUIRED. ALL SIGNS, TRAFFIC CONTROL SIGNS, DELINEATORS AND TEMPORARY MARKINGS SHALL BE ACCORDING TO THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

ACCESS BY EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

AFTER WORK WITHIN THE TRAVELED ROADWAY IS COMPLETED AT THE END OF EACH DAY, THE ROAD SHALL BE CLEARED OF DEBRIS AND EQUIPMENT, AND COMPLETELY OPEN TO TRAFFIC (UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS OF THE COUNTY). LIGHTED BARRICADES OR BARRELS SHALL DELINEATE ALL AREAS WITHIN THE ROADWAY AFFECTED BY CONSTRUCTION (i.e. EDGE OF PAVEMENT, NEW CURB EDGES NOT ILLUMINATED BY STREET LIGHTS).

A ROW USE PERMIT IS REQUIRED FROM THE DPW FOR ANY LANE/ROAD CLOSURES WITHIN THE SNOHOMISH COUNTY ROW. CONTACT DPW AT LEAST 15 DAYS PRIOR TO CONSTRUCTION ACTIVITY WITHIN THE PUBLIC ROW. SNOHOMISH COUNTY DOES NOT HAVE JURISDICTION ON STATE ROUTES OR ROADWAYS WITHIN INCORPORATED CITIES, PRIVATE ROADS OR PRIVATE PROPERTY. FOR ANY ACTIVITY ENCROACHING ON SUCH PROPERTY THE APPLICANT SHALL OBTAIN PERMISSION FOR THE APPROPRIATE AUTHORITY.

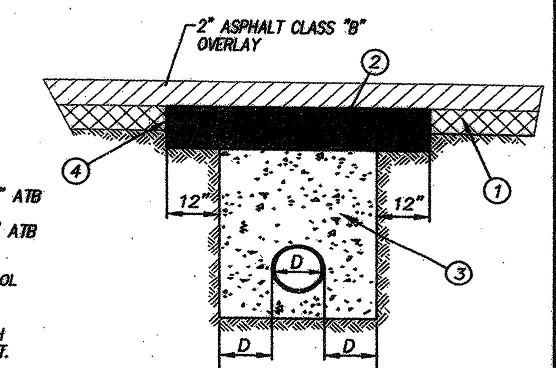
SIDE STORM SYSTEM TABLE

CB, YB OR CO NUMBERS = LOT NUMBER
SEE PIPE TABLE FOR LENGTH, SIZE, MTL & SLP
(CO's TO BE 6"ø UNLESS OTHERWISE SHOWN)

CO/YB/CB	TOP	INVERT	MCSE	CO/YB/CB	TOP	INVERT	MCSE	CO/YB/CB	TOP	INVERT	MCSE
CB-9	423.63	~~421.0~~ 421.18	-	~~CB-4~~	~~415.0~~	~~410.5~~	-	CB-8	422.59	~~419.5~~ 419.61	-
23' ~~25'~~~6" PVC @ ~~1.0%~~ 1.78%				~~35'~8" PVC @ 1.0%~~				45' ~~40'~~~8" PVC @ ~~5.0%~~ 9.20%			
CO-5	424.0	~~421.25~~ 421.59	~~422.5~~ 423.0	CO-14	415.5	~~410.85~~ 411.01	412.5 (AB)	CO-27	425.0	~~421.5~~ 420.94	423.0 (AB)
35' ~~45'~~~6" PVC @ ~~2.0%~~ 1.37%				23' ~~20'~~~8" PVC @ ~~1.0%~~ 2.17%				63' ~~70'~~~8" PVC @ ~~4.0%~~ 6.57%			
CO-4	425.5	~~422.15~~ 422.07	423.5 (AB)	CO-13	415.5	~~411.05~~ 411.51	~~412.5~~ 413.0	CO-28	428.5	~~424.3~~ 425.06	~~426.0~~ 426.5
				32' ~~20'~~~8" PVC @ ~~1.0%~~ 1.09%				74' ~~70'~~~6" PVC @ ~~3.0%~~ 4.38%			
CB-6	417.23	~~413.80~~ 414.57	-	CO-12	414.0	~~411.25~~ 411.86	~~413.0~~ 413.5	CO-29	432.0	426.4 428.32	~~428.0~~ 430.0
27' ~~25'~~~6" PVC @ ~~4.0%~~ 4.26%				31' ~~30'~~~6" PVC @ ~~1.0%~~ 0.78%				52' 60'~6" PVC @ ~~4.0%~~ 4.12%			
CO-8	418.0	~~414.8~~ 415.72	~~416.0~~ 417.0	CO-11	416.0	~~411.55~~ 412.10	~~413.5~~ 414.0	CO-30	433.5	428.8 430.46	~~431.0~~ 432.5
57' ~~60'~~~6" PVC @ ~~2.0%~~ 2.58%				19' ~~15'~~~6" PVC @ ~~1.0%~~ 0.16%				61' ~~60'~~~6" PVC @ ~~2.0%~~ 3.08%			
CO-7	420.0	~~416.8~~ 417.19	~~417.5~~ 418.5	CO-10	416.0	411.70 412.13	~~413.0~~ 413.5	CO-31	434.5	~~430.0~~ 432.34	431.5 434.0
77' 70'~6" PVC @ ~~3.0%~~ 2.99%				37' ~~40'~~~6" PVC @ ~~1.0%~~ 0.70%							
CO-6	422.0	~~418.1~~ 419.49	~~419.5~~ 421.0	CO-9	416.5	~~412.10~~ 412.39	413.5 (AB)	CB-17	420.1	~~417.0~~ 417.89	-
								17' ~~25'~~~6" PVC @ ~~4.0%~~ 7.06%			
~~VAULT~~	-	409.5	-	CB-13	417.0	~~411.0~~ 412.50	-	CO-22	423.0	~~418.9~~ 418.63	420.5 (AB)
15'~6" PVC @ 10.0%				14' 10'~6" PVC @ ~~10.0%~~ 30.00%				24' ~~25'~~~6" PVC @ ~~4.0%~~ 27.79%			
CO-14	413.0	~~411.0~~ 411.01	412.0 (AB)	CO-17	418.0	~~412.0~~ 416.70	~~414.0~~ 418.0	CO-22A	424.0	~~419.9~~ 419.56	-
								70' ~~60'~~~6" PVC @ ~~4.0%~~ 4.46%			
VAULT	-	409.5 (AB)	-	YB-18	416.0	~~413.0~~ 413.89	~~414.5~~ 415.5	CO-23	426.0	~~422.3~~ 422.18	423.5 (AB)
23' ~~15'~~~6" PVC @ ~~20.0%~~ 17.35%											
CO-15	416.0	~~412.5~~ 413.49	~~415.0~~ 416.0	YB-19	414.0	~~411.0~~ 412.20	~~412.5~~ 413.5	CB-19	421.44	~~419.0~~ 419.38	-
48' ~~63'~~~6" PVC @ ~~5.0%~~ 7.94%								23' ~~30'~~~6" PVC @ ~~5.0%~~ 3.87%			
CO-16	419.5	~~415.65~~ 417.30	~~417.0~~ 418.5	YB-20	413.5	~~410.5~~ 411.46	~~412.0~~ 413.0	CO-25	424.0	~~420.5~~ 420.82	~~422.0~~ 422.5
								82' 85'~6" PVC @ ~~2.0%~~ 0.99%			
CB-12	~~433.66~~ 432.88	~~431.0~~ 431.37	-	CB-14	413.8	~~409.3~~ 410.11	-	CO-26	425.5	~~422.2~~ 421.63	424.0 (AB)
19' ~~25'~~~6" PVC @ ~~2.0%~~ 1.68%				(AB) 10'~6" PVC @ ~~10.0%~~ 21.10%							
CO-32	434.0	~~431.5~~ 431.69	433.0 (AB)	CO-21	414.0	410.3 412.22	~~412.0~~ 414.0				
13' ~~15'~~~6" PVC @ ~~1.0%~~ 2.77%											
CO-33	434.0	~~431.85~~ 431.97	~~433.0~~ 433.5	CB-19	421.44	~~419.0~~ 419.38	-				
				22' ~~25'~~~6" PVC @ ~~5.0%~~ 4.05%							
				CO-24	425.0	~~420.25~~ 420.27	-				

NOTES:

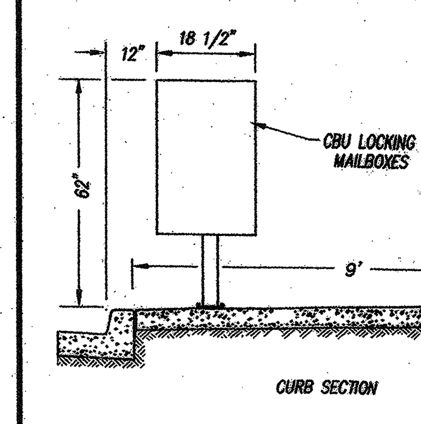
1. EXISTING PAVEMENT
2. LONGITUDINAL TRENCH - 6" ACP OR 2" ACP + 4" ATB
   SEE SEC. 10-03.B.1.C.
   TRANSVERSE TRENCH - 8" ACP OR 2" ACP + 6" ATB
   SEE SEC. 10-03.B.2.C.
3. NATIVE MATERIAL, BANK RUN GRAVEL, OR CONTROL DENSITY FILL. SEE SEC. 10-03 & 10-04.
4. NEAT LINE CUT, CLEAN, HEAT & TACK EDGES WITH SEALER SS-1 & SEAL WITH HOT ASPHALT CEMENT.
5. TEMPORARY RESTORATION OF TRENCHES FOR OVERNIGHT USE SHALL BE ACCOMPLISHED BY USING COLD MIX, ATB, OR STEEL PLATES.
6. PATCH SHALL BE MACHINE ROLLED FLUSH WITH EXISTING PAVEMENT AND SHALL BE PLACED PER SECTION 5-04 OF THE WSDOT/APWA SPECIFICATIONS.
7. LONGITUDINAL TRENCH - 2" ASPHALT CLASS B OVERLAY.
   SEE SEC. 10-03.B.1.D.
   TRANSVERSE TRENCH - 2" ASPHALT CLASS B OVERLAY WHERE MULTIPLE CROSSINGS BY SAME UTILITY.
   SEE SEC. 10-03.B.2.D.

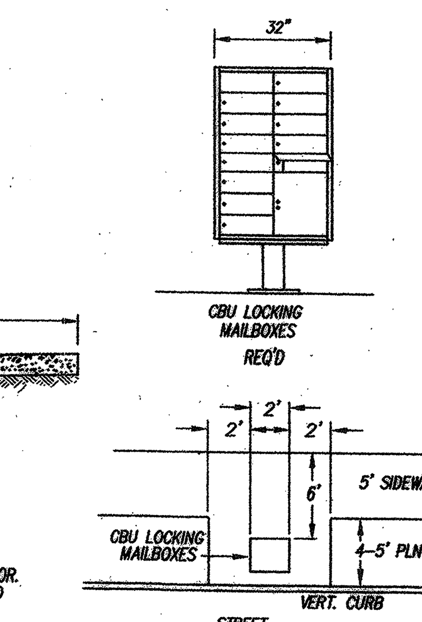


ROAD RESTORATION & BACKFILL

N.T.S.

19 / C4





NOTE:
NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS (CBU) INCLUDING PEDESTAL SHALL BE INSTALLED BY THE CONTRACTOR. BOLTS AND ASSOCIATED CONCRETE SLAB SHALL BE INSTALLED BY CONTRACTOR PER U.S.P.S. SPECIFICATIONS.

C.B.U. MAILBOX DETAIL

N.T.S.

17 / C4

ABREVIATIONS TABLE

(A/P)	= ANGLE POINT	(MCSE)	= MIN CRAWL SPACE ELEV.
(BC)	= BOTTOM OF CURB-F/L	(OWS)	= OIL WATER SEPARATER
(BW)	= BOTTOM OF WALL	(PC)	= POINT OF CURVATURE
(BO)	= BLOWOFF	(PI)	= POINT OF INTERSECTION
(BRK)	= BREAK/GRADE BREAK	(PL)	= PROPERTY LINE
(CB)	= CATCH BASIN	(PP)	= POWER/UTILITY POLE
(CBU)	= COLLECTION BOX UNITS	(PT)	= POINT OF TANGENCY
(CE)	= CULVERT END	(PVM'T)	= PAVEMENT
(CL)	= CENTER LINE	(RE)	= RIM ELEVATION
(CO)	= CLEANOUT	(SD)	= STORM DRAIN
(CSBC)	= CR. SURF'G BASE COURSE	(SLL)	= SOLID LOCKING LID
(CSTC)	= CR. SURF'G TOP COURSE	(SS)	= SANITARY SEWER
(CTR)	= CENTER	(SSMH)	= SEWER MANHOLE
(DIP)	= DUCTILE IRON PIPE	(STRCTR)	= STRUCTURE
(DRNG)	= DRAINAGE	(TBR)	= TO BE REMOVED
(EL)	= ELEVATION	(TC)	= TOP OF CURB
(EOA)	= EDGE OF ASPHALT	(TCI)	= THRU CURB INLET
(EOG)	= EDGE OF GRAVEL	(TOB)	= TOP OF BANK
(ESM'T)	= EASEMENT	(TW)	= TOP OF WALL
(EX)	= EXISTING	(Typ)	= TYPICAL
(G/L)	= GUTTER LINE OF CURB	(Ty-X)	= TYPE-CB/MH
(GRT)	= GRATE	(Ty-1)	= TYPE 1 CB
(GRVL)	= GRAVEL	(YD)	= YARD DRAIN
(FH)	= FIRE HYDRANT	(VG)	= VANED GRATE
(FOC)	= FACE OF CURB	(W)	= WATER/WATER MAIN
(IE)	= INVERT ELEVATION	(WCR)	= WHEEL CHAIR RAMP
(INT)	= INTERSECTION	(WM)	= WATER METER
(LL)	= LOT LINE	(WV)	= WATER VALVE
(MB)	= MAILBOX	(1/x Δ)	= 1/parts DELTA

LEGEND

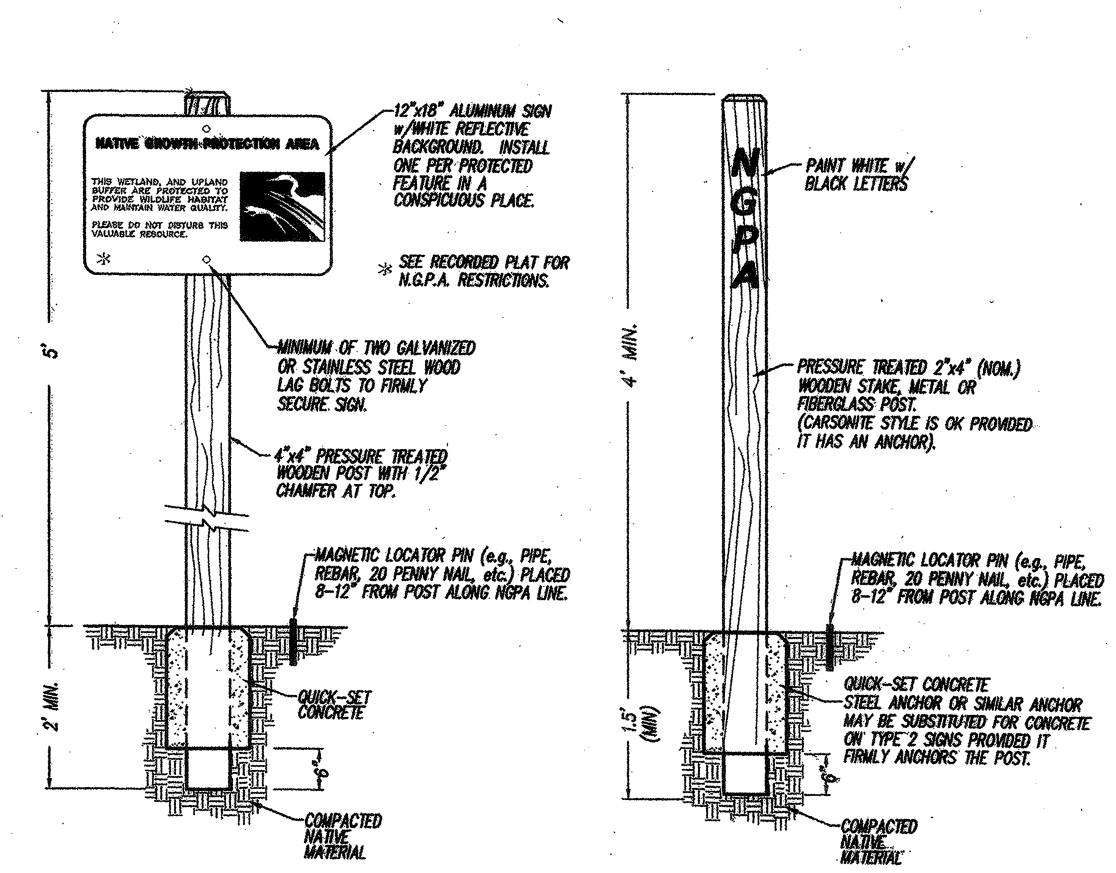
EXISTING	DESCRIPTION	PROPOSED
B.S.B.L.	BLDG SETBACK LINE (BSBL)	B.S.B.L.
	BLOW-OFF (BO)	
	CATCH BASIN (Ty-1)	
D	CATCH BASIN (Ty-2)	w/GRATE w/ROUND SOLID LID
	CASE MONUMENT	
	CONCRETE MON	
SD	CULVERTS (CE=CULV END)	X'~12" SD
	DRAINAGE DITCH/SWALE	
	DRAINAGE FLOW PATTERNS	
	D/W CURBCUT	
	EASEMENTS (ESM'T)	
EOA	EDGE PAVEMENT (EOA)	EOA
	FIRE HYDRANT (FH)	
L/L	LOT LINE (L/L)	L/L
MB	MAILBOXES (MB, CBU)	
P/L	PROPERTY LINE (P/L)	P/L
EX R/W	RIGHT OF WAY (R/W)	R/W
C/L	ROAD CENTER (CTR) LINE	C/L
S	SANITARY SEWER MANHOLE	
1 2 4 3	SECTION CORNER	1 2 4 3
	SEWER STUBOUT	
SD	STORM PIPE (SD)	X'~12" SD
	STORM STUBOUT	
PP	UTILITY POLE (PP, UP)	PP
8"W	WATER LINE	X'~8" D.I.P.
	WATER SERVICE (WS)	
	WATER VALVE (WV)	
	WHEEL CHAIR RAMP (WCR)	
	YARD BASIN (YD)	

STORM DRAINAGE NOTES

1. UNLESS OTHERWISE NOTED, ALL STORM SEWER PIPE SHALL BE SMOOTH WALLED STORM DRAIN (SD). SD SHALL BE REINFORCED CONCRETE PIPE (RCP), CORRUGATED POLYETHYLENE PIPE (CPP), POLYETHYLNE VINYL CHLORIDE PIPE (PVC), OR RIBBED PVC. CPP SHALL BE HIGH DENSITY CORRUGATED POLYETHYLENE SMOOTH INTERIOR PIPE AND SHALL BE MANUFACTURED IN CONFORMITY WITH THE LATEST AASHTO SPECIFICATIONS FOR M 294 TYPE S AND THE MATERIAL COMPOUND SHALL CONFORM TO ASTM D 3350. PIPE JOINTS AND FITTINGS SHALL CONFORM TO AASHTO M 294. COUPLINGS SHALL BE INTEGRAL BELL AND SPIGOT OR DOUBLE BELL SEPARATE COUPLINGS. SPLIT COUPLINGS WILL NOT BE ALLOWED. POLYETHYLENE VINYL CHLORIDE PIPE (PVC) SHALL CONFORM TO SDR35, ASTM D3034. RIBBED PVC SHALL COMPLY WITH ASTM F794 AND BE MADE FROM PVC CONFORMING TO THE REQUIREMENTS OF ASTM D1784, CELL CLASS 12364B. GASGET MATERIAL SHALL COMFORM WITH ASTM F477 & THE JOINT SHALL BE AN INTEGRAL-BELL GASKETED JOINT CONFORMING WITH ASTM D3212. CORRUGATED METAL PIPE (CMP) IS TO BE GALVANIZED STEEL WITH TREATMENT 1 ASPHALT COATING OR BETTER, OR CORRUGATED ALUMINUM PIPE, OR AASHTO M274-70 ALUMINIZED STEEL.

   MINIMUM COVERAGE REQUIREMENTS FOR 12" PIPE IN TRAFFIC AREAS

   < 1.5' REQUIRES RCP (REINFORCED CONCRETE PIPE) MINIMUM
   > 1.5' REQUIRES 16 GAUGE CMP, OR CCP MINIMUM
2. ALL PIPE SHALL BE PLACED ON STABLE EARTH, OR IF IN THE OPINION OF THE COUNTY INSPECTOR, THE EXISTING FOUNDATION IS UNSATISFACTORY, THEN IT SHALL BE EXCAVATED BELOW GRADE AND BACKFILLED WITH A GRAVEL MATERIAL TO SUPPORT THE PIPE.
3. THE BACKFILL SHALL BE PLACED EQUALLY ON BOTH SIDES OF THE PIPE OR PIPE-ARCH IN LAYERS WITH A LOOSE AVERAGE DEPTH OF 6", MAXIMUM DEPTH 9", THOROUGHLY TAMPING EACH LAYER. THESE COMPACTED LAYERS MUST EXTEND FOR ONE DIAMETER ON EACH SIDE OF THE PIPE OR TO THE SIDE OF THE TRENCH. MATERIALS TO COMPLETE THE FILL OVER PIPE SHALL BE THE SAME AS DESCRIBED. (REFER TO WSDOT STANDARD SPECIFICATION 7-04.3(3) AND STANDARD SPECIFICATION 2-03.2(14)C, METHOD B&C.
4. ALL GRATES (INLET AND CATCH BASIN) SHALL BE DEPRESSED 0.1 FEET BELOW PAVEMENT LEVEL. GRATE ELEVATIONS SHOWN ON PLANS ARE PAVEMENT LEVEL.
5. ALL CATCH BASINS TO BE TYPE 1, UNLESS OTHERWISE NOTED.
6. ALL CATCH BASINS WITH A DEPTH OVER 5.0 FEET TO THE FLOW LINE SHALL BE A TYPE II CB (MANHOLE).
7. ALL TYPE II CATCH BASIN MANHOLES AND ALL INLET AND CATCH BASINS SHALL HAVE LOCKING LIDS. ROLLED GRATES ARE NOT APPROVED FOR OUTSIDE OF COUNTY RIGHT-OF-WAY OR FOR USE WITH TYPE II MANHOLE.
8. STANDARD LADDER STEPS SHALL BE PROVIDED IN ALL CATCH BASINS/MANHOLES EXCEEDING 5 FEET IN DEPTH.
9. CATCH BASIN FRAME AND GRATES SHALL BE OLYMPIC FOUNDRY MODEL SM60 LOCKING TYPE OR APPROVED EQUAL. TYPE II CATCH BASIN FRAME AND GRATES SHALL BE OLYMPIC FOUNDRY MODEL MH30, MH26 OR APPROVED EQUAL.
10. DETENTION PONDS WITH SIDE SLOPES STEEPER THAN 3:1 SHALL REQUIRE A PERIMETER FENCE PER SNOHOMISH COUNTY CODE. SIDE SLOPE AVERAGING SHALL NOT BE ALLOWED.



TYPE 1

TYPE 2

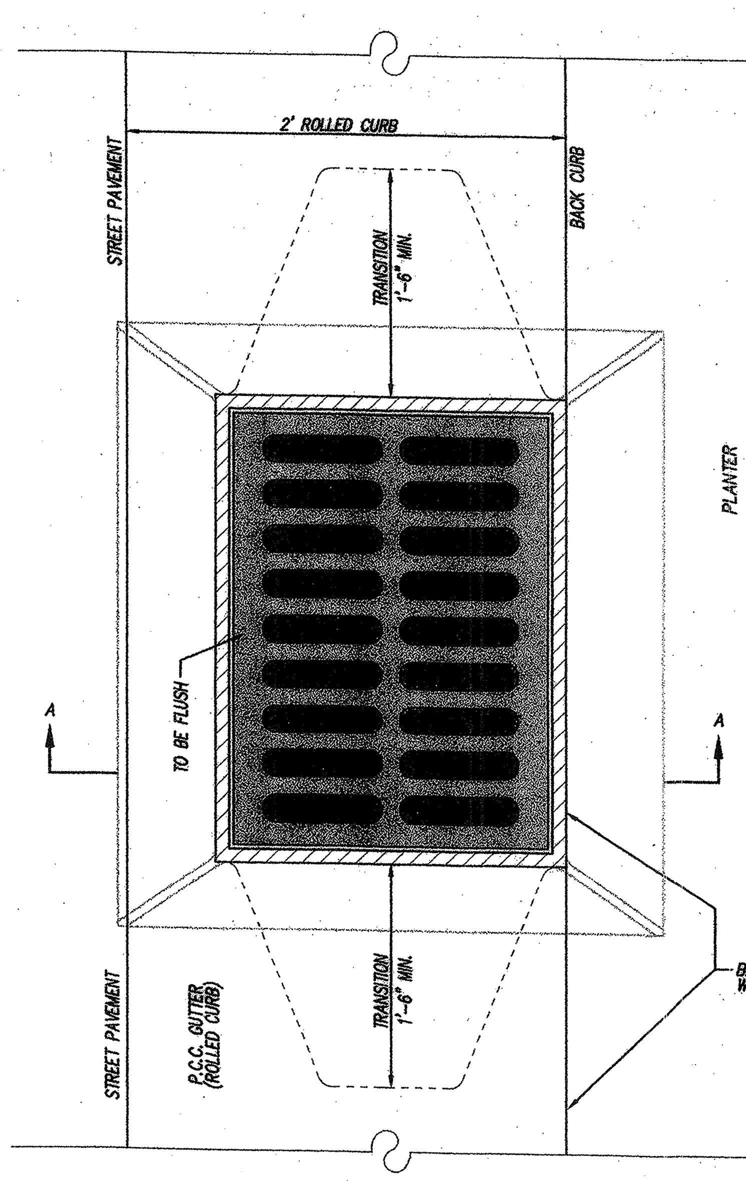
NOTE:
1. NGPA SIGNS SHALL BE PLACED NO GREATER THAN 100 FEET APART AROUND THE PERIMETER OF THE NATIVE GROWTH PROTECTION AREA. MINIMUM PLACEMENT SHALL INCLUDE ONE TYPE 1 SIGN PER WETLAND, AND AT LEAST ONE TYPE 1 SIGN SHALL BE PLACED IN ANY LOT THAT BORDERS THE NATIVE GROWTH PROTECTION AREA, UNLESS OTHERWISE APPROVED BY THE COUNTY BIOLOGIST.
2. SIGN PLACEMENT SHALL BE SUBJECT TO THE APPROVAL OF SNOHOMISH COUNTY. ALTERNATIVE SIGN DESIGNS MAY BE SUBMITTED TO SNOHOMISH COUNTY FOR APPROVAL.
3. PER SCC 32.10.240(8), ALL SIGNS MUST BE SECURE AND PERMANENT.

(OR APPROVED EQUAL)

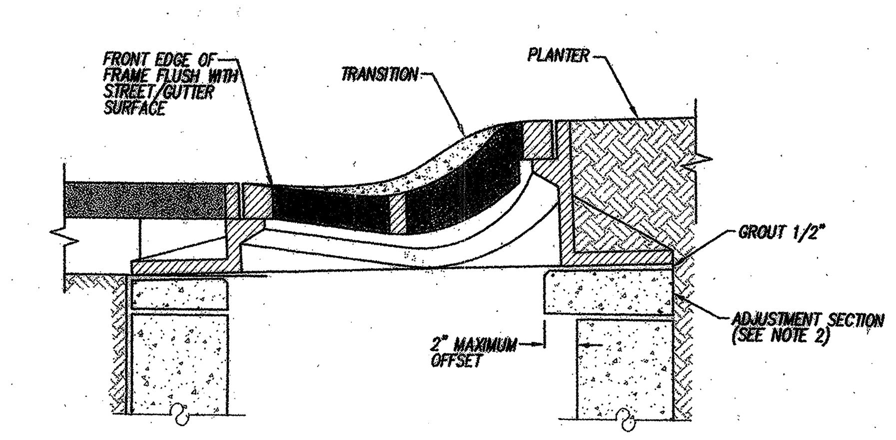
NGPA SIGN DETAIL

N.T.S.

18 / C1



PLAN



SECTION A-A

NOTES:

1. SET FRAME TO GRADE AND CONSTRUCT ROAD AND CURB TO BE FLUSH AT FRONT AND BACK OF FRAME.
2. MINIMUM 4" ADJUSTMENT SECTION BETWEEN BOTTOM OF GRATE AND TOP OF BASE SECTION.

ROLLED FRAME & GRATE SECTION

N.T.S.

SNOHOMISH COUNTY PLANNING AND DEVELOPMENT SERVICES APPROVED FOR CONSTRUCTION

BY: [signature] 7/19/2004
FOR RANDOLPH R. SLEIGHT, P.E., P.L.S.

R/W PERMIT NO.: 04-114872

DATE	REVISION/ISSUED
4/1/04	ISSUED
6/18/04	PER COUNTY REVIEW
7/13/04	PER COUNTY REVIEW
7/13/05	AS-BUILT
8/22/05	REVISED PER SNO. CO. 1ST AB REVIEW

PEAK ENGINEERING INC.

1720 GROVE STREET, MARYSVILLE, WASHINGTON 98270
(360) 658-6986 / FAX: (360) 658-7826

C. SCOTT STEWART · STATE OF WASHINGTON · 29726 · REGISTERED PROFESSIONAL ENGINEER [signature]

EXPIRES 07/16/2007

DATE: 6/24/04

SURVEY & TOPOGRAPHIC INFORMATION PROVIDED BY:

MEAD GILMAN & ASSOC.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425-486-1252
FAX: 425-486-6108
JOB #03055

DATUM: NGVD (1929 NATIONAL GEODETIC VERTICAL DATUM)

BENCH: SNOHOMISH COUNTY BENCHMARK 393/769
CHISELED "X" IN SE BOLT OF TRAFFIC SIGNAL BASE, NW QUADRANT INTX. 132ND ST. S.E. & SEATTLE HILL RD.
ELEVATION= 437.25'
ADD 3.6 TO CONVERT TO NAVD 88

TBM-A: "X" IN SW CAP BOLT FIRE HYDRANT, NE QUADRANT INTX. 138TH ST. S.E & 42ND AVE. S.E.
ELEVATION= 433.52'

TBM-B: CHISELED SQUARE IN SE COR. POWER VAULT, SW COR. SITE.
ELEVATION= 415.91'

AS-BUILT DECLARATION

WE HEREBY DECLARE THAT ROAD AND STORM DRAINAGE IMPROVEMENTS ARE LOCATED AS SHOWN ON THESE RECORD DRAWINGS.

BY: [signature] 8-25-05
PROJECT ~~ENGINEER~~ SURVEYOR — DATE

BY: [signature] 8/25/05
PLAT DEVELOPER / OWNER — DATE

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN: 03-109825 AS-BUILT

APPLETREE NORTH

CONSTRUCTION NOTES & DETAILS

PROJECT NO. 03496

DWG C8 OF 8

AS-BUILTS APPLETREE NORTH HDEV-2169