CONSTRUCTION RECORD DRAWINGS WHATCOM PHYSICAL THERAPY

CARLETTI ARCHITECTS

FERNDALE, WASHINGTON FEBRUARY 2013

LEGAL DESCRIPTION:

AS PER CHICAGO TITLE INSURANCE COMPANY, ALTA HOME OWNER'S PLUS POLICY NO.321155

LOTS 1, 2 AND THE SOUTH HALF OF LOT 3, BLOCK 3, FERNDALE HEIGHTS ADDITION, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 6 OF PLATS, PAGE 44B, RECORDS OF WHATCOM COUNTY

SITUATE IN WHATCOM COUNTY, WASHINGTON.

SUBJECT TO AND/OR TOGETHER WITH ALL EASEMENTS, COVENANTS, RESTRICTIONS AND/OR AGREEMENTS OF RECORD, OR OTHERWISE.

SURVEYORS NOTES:

1. "O" DENOTES 5/8 INCH REBAR WITH 1 INCH PLASTIC CAP MARKED "NWS & GPS 21423 & 49276" SET BY THIS SURVEY IN JANUARY OF 2013.

2. "●" DENOTES 5/8 INCH REBAR WITH 1 INCH PLASTIC CAP MARKED "NWS & GPS 21423"

3. "★" DENOTES CALCULATED POINT ONLY.

4. THIS REVISED TOPOGRAPHY SURVEY WAS PERFORMED BY STANDARD FIELD TRAVERSE USING A NIKON NPL-352 TOTAL STATION WITH A CARLSON EXPLORER 600+ COLLECTOR/FIELD COMPUTER IN JANUARY OF 2013.

5. THIS SURVEY TIED INTO CONTROL POINTS FROM OUR (NORTHWEST SURVEYING) PREVIOUS WORK WITHIN THE AREA, STREET MONUMENTATION AND LOT CORNERS AND RELIED UPON RECORD OF SURVEY FILED UNDER A.F. No. 940810023 FOR EXTERIOR BLOCK DIMENSIONS.

6. THIS SURVEY WAS COMPLETED WITH THE BENEFIT OF AN ALTA HOMEOWNERS PLUS POLICY FROM CHICAGO TITLE INSURANCE. DATED MARCH 19, 2010 BUT WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO SHOW ANY OR ALL EASEMENTS THAT A CURRENT TITLE REPORT MIGHT

7. VERTICAL DATUM IS PER THE CITY OF FERNDALE SURVEY MONUMENT NETWORK (NGVD 29). HORIZONTAL DATUM IS PER THE CITY OF FERNDALE SURVEY MONUMENT NETWORK (NAD 83/91).

8. CONTOUR INTERVALS ARE 1 FOOT. CONTOURS ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY.

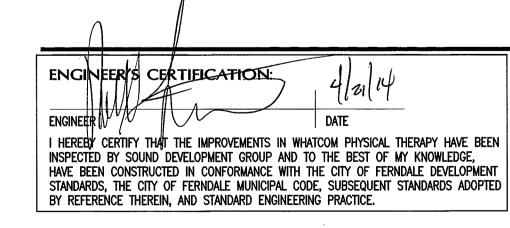
9. NORTHWEST SURVEYING & GPS INC. ASSUMES NO LIABILITY FOR ANY SUBSURFACE CONDITIONS OR

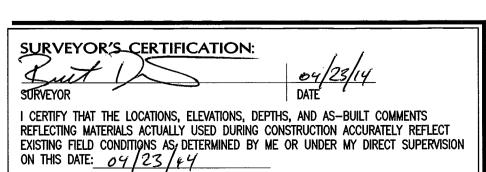
10. THE CONCRETE CURB LYING ALONG THE WESTERLY LINE OF HAMLYN AVENUE IS MADE OF CONCRETE PARKING CURBS/STOPS LYING END TO END AND ANCHORED BY REBARS.

SITE INFORMATION

UTILITIES NOT SHOWN HEREON.

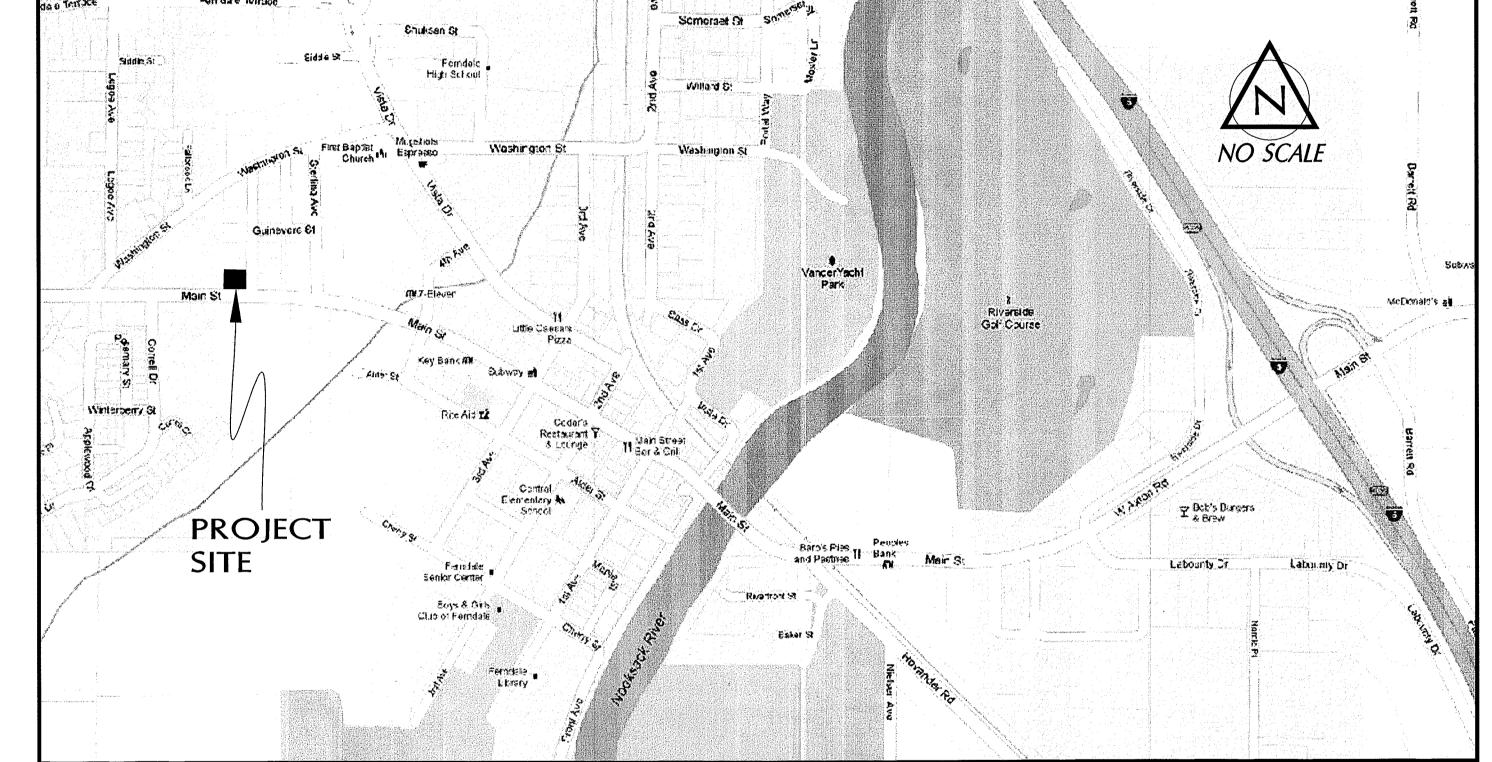
5709 HAMLIN AVENUE INTERSECTION OF MAIN STREET & HAMLIN AVENUE FERNDALE. WA 98248







	1	04.29.13	REVISED PER CITY COMMENTS	P.LAU	P.SEVERIN
	2	06.03.13	REVISED PER CITY COMMENTS	P.LAU	P.SEVERIN
CALL 40 LICHIDG	3	04.11.14	CONSTRUCTION RECORD DRAWINGS	P.LAU	P.SEVERIN
CALL 48 HOURS					
BEFORE YOU DIG					
	NO.	DATE	<i>REVISIONS</i>	BY	APRVD



VICINITY MAP

UTILITIES SERVING THE SITE

WA	TER:
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ENGINEER:

PAT SEVERIN, P.E.

P.O. BOX 1705

SOUND DEVELOPMENT GROUP, L.L.C.

MOUNT VERNON, WA 98273

PHONE: (360) 404-2010

FAX: (360) 404–2013

EMAIL: pat@sdg-llc.com

CITY OF FERNDALE CONTACT: PUBLIC WORKS (360) 685-2379

SANITARY SEWER: CITY OF FERNDALE CONTACT: PUBLIC WORKS (360) 685-2376

TELEPHONE:

VERIZON CONTACT: CHRIS PARMETER (360) 707-0641

> CABLE: COMCAST CONTACT: BILL INAMA

OWNER:

P.O. BOX 120

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WHATCOM PHYSICAL THERAPY

ALAN AND JONI FINSTON

(360) 527-8241

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CASCADE NATURAL GAS CONTACT: GORDON VAN CORBACH (360) 303-2020

POWER:

PUGET SOUND ENERGY CONTACT: STEPHEN GATES (360) 766-5696

ARCHITECT:

116 E. FIR STREET, SUITE A

MOUNT VERNON, WA 98273

PHONE: (360) 424-0394

CARLETTI ARCHITECTS

DAVID WILSON

SHEET INDEX SHEET NUMBER SHEET TITLE COVER SHEET 1 OF 7 EXISTING CONDITIONS, DEMOLITION & TESC PLAN TESC NOTES & DETAILS PROPOSED GRADING, DRAINAGE & UTILITY PLAN 5 OF 7 PROPOSED HAMLIN AVENUE PLAN & PROFILE 6 OF 7 DETAILS 7 OF 7 | SPECIFICATIONS

LEGEND

EXISTING RIGHT OF WAY LINE	
ASBUILT ROAD CENTERLINE	
EXISTING ROAD CENTERLINE	
EXISTING PROPERTY LINE	
EXISTING PROPERTY CORNER	
EXISTING STORM DRAIN	
EXISTING TYPE 2 CB	
EXISTING TYPE 1 CB	
EXISTING SANITARY SEWER	
EXISTING SANITARY MANHOLE	•
EXISTING WATERLINE	
EXISTING WATER VALVE	
EXISTING FIRE HYDRANT	
EXISTING GAS LINE	
EXISTING POWERLINE	
EXISTING FENCELINE	
EXISTING EDGE OF ASPHALT	
EXISTING CURB & GUTTER	Mar mir a
EXISTING CONCRETE	
EXISTING ASPHALT	
EXISTING GRAVEL	
EXISTING CONTOUR	
PROPOSED CONTOUR	\$1.50°
	ASBUILT ROAD CENTERLINE EXISTING ROAD CENTERLINE EXISTING PROPERTY LINE EXISTING PROPERTY CORNER EXISTING STORM DRAIN EXISTING TYPE 2 CB EXISTING SANITARY SEWER EXISTING SANITARY MANHOLE EXISTING WATERLINE EXISTING WATER VALVE EXISTING FIRE HYDRANT EXISTING FOWERLINE EXISTING POWERLINE EXISTING EDGE OF ASPHALT EXISTING CONCRETE EXISTING ASPHALT EXISTING GRAVEL EXISTING CONTOUR

— — — PROPOSED PROPERTY LINE (INTERIOR) PROPOSED SIGN PROPOSED STORM DRAIN PROPOSED STORM CATCH BASIN TYPE II PROPOSED STORM CATCH BASIN PROPOSED SANITARY SEWER PROPOSED SANITARY MANHOLE PROPOSED SANITARY SEWER CLEANOUT PROPOSED WATERLINE PROPOSED WATER VALVE PROPOSED FIRE HYDRANT PROPOSED AIR-VAC RELEASE ASSEMBLY PROPOSED BLOW-OFF ASSEMBLY PROPOSED UTILITY TRENCH ---- PROPOSED GAS LINE PROPOSED POWERLINE PROPOSED CURB AND GUTTER PROPOSED CONCRETE PROPOSED ASPHALT

PROPOSED GRAVEL

CONSTRUCTION RECORD DRAWING

CONSTRUCTION RECORD NOTE: THESE DRAWINGS ARE PREPARED USING A COMBINATION OF CONTRACTOR PROVIDED REDLINES AND A CONSTRUCTION RECORD SURVEY PERFORMED BY NORTHWEST SURVEYING & GPS IN APRIL 2014. THE CONSTRUCTION RECORDS OF SAID DRAWINGS WERE PERFORMED BY SOUND DEVELOPMENT GROUP 04.11.14. CONSTRUCTION RECORD LEGEND 102.02 -INDICATES CONSTRUCTED AS DESIGNED

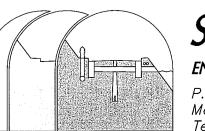
102.00 102.02 -INDICATES CONSTRUCTION RECORD

APPROVED

JOB No. 12076

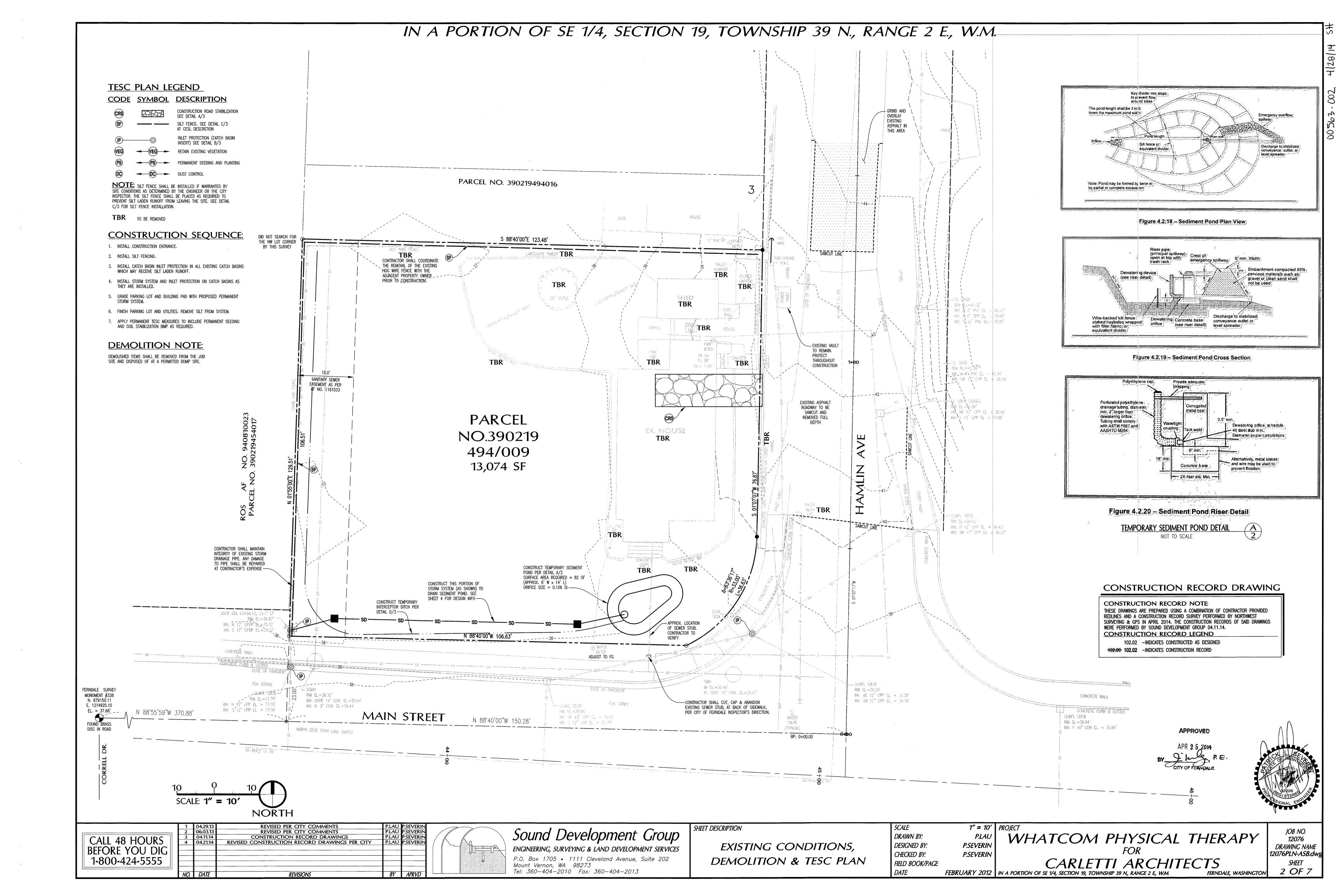
SURVEYOR

NORTHWEST SURVEYING & GPS INC. 407 5th STREET LYNDEN, WA 98264 PHONE: (360) 354-1950



Sound Development Group

ENGINEERING, SURVEYING & LAND DEVELOPMENT SERVICES P.O. Box 1705 • 1111 Cleveland Avenue, Suite 202 Mount Vernon, WA 98273 Tel: 360-404-2010 Fax: 360-404-2013



IN A PORTION OF SE 1/4, SECTION 19, TOWNSHIP 39 N., RANGE 2 E., W.M.

ESC-1 STANDARD ESC NOTES

APPROVAL OF THIS EROSION AND SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES,

- AS DIRECTED BY PUBLIC WORKS DIRECTOR PRIOR TO COMMENCING CONSTRUCTION, ALL CRITICAL AREAS, INCLUDING WETLAND BUFFERS, STREAM CORRIDOR, LANDFILL AREAS, AND STEEP SLOPES SHALL BE CONTINUOUSLY DEMARCATED IN THE FIELD USING FLAGGING TAPE OR FENCING.
- EROSION CONTROL METHODS AND MATERIALS SHALL MEET REQUIREMENTS OF SECTION 8-01 OF THE APWA/WASHINGTON STATE DEPARTMENT OF TRANSPORTATION 2012 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION. AND REQUIREMENTS SET FORTH IN VOLUME II OF THE "STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (THE TECHNICAL MANUAL)", BY THE WASHINGTON STATE DEPARTMENT OF ECOLOGY, CURRENT EDITION. THE CONTRACTOR SHALL FOLLOW RECOMMENDATIONS MADE BY SUPPLIERS AND MANUFACTURERS OF MATERIALS AND EQUIPMENT USED.
- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS. AND MUST BE INSTALLED AND IN OPFRATION PRIOR TO ANY GRADING OR LAND CLEARING. WHEREVER POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G., ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS. ADDITIONALLY, MORE ESC FACILITIES MAY BE REQUIRED TO ENSURE COMPLETE SILTATION CONTROL. THEREFORE, DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES OVER AND ABOVE THE MINIMUM REQUIREMENTS AS MAY BE NEEDED.
- ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE PERMANENT FACILITY IS TO FUNCTION LIFTMATELY AS AN INFILTRATION OR DISPERSION SYSTEM. THE FACILITY SHALL NOT BE USED AS A TEMPORARY SETTLING BASIN. NO UNDERGROUND DETENTION TANK, DETENTION VAULT, OR SYSTEM, WHICH BACKS UNDER OR INTO A POND, SHALL BE USED AS A TEMPORARY SETTLING BASIN.
- WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (EXAMPLE: ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).
- WHERE STRAW MULCH IS REQUIRED FOR TEMPORARY EROSION CONTROL, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF TWO (2) INCHES.
- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF FERNDALE STANDARDS AND SPECIFICATIONS.
- THE ESC FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THE APPROVED PLANS. LOCATIONS MAY BE MOVED TO SUIT FIELD CONDITIONS. SUBJECT TO APPROVAL BY THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR AND CITY OF FERNDALE INSPECTOR.
- 10. A COPY OF THE APPROVED EROSION CONTROL PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- 11. ALL LOTS ADJOINING OR HAVING ANY NATIVE GROWTH PROTECTION EASEMENTS (NGPE) SHALL HAVE A FOUR (4) FOOT HIGH TEMPORARY CONSTRUCTION FENCE (CYCLONE OR PLASTIC MESH) SEPARATING THE LOT (OR BUILDABLE PORTIONS OF THE LOT) FROM THE AREA RESTRICTED BY THE NGPE AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR CLEARING AND REMAIN IN PLACE UNTIL A DWELLING IS CONSTRUCTED AND OWNERSHIP TRANSFERRED TO THE FIRST OWNER/OCCUPANT.
- A CLEARING CONTROL FENCE SHALL BE INSTALLED AT THE DRIP LINE OF TREES TO BE SAVED WHEREVER THE TREE CANOPIES EXTEND INTO THE AREA TO BE CLEARED. ON-SITE SUPERVISION SHALL BE PROVIDED WHENEVER EQUIPMENT MUST OPERATE UNDER TREE CANOPIES, AND FENCING SHALL BE REPLACED WHEN NECCESARY. THE CLEARING CONTROL FENCE SHALL CONSIST OF A SINGLE STRAND OF WIRE ATTACHED ABOUT THREE (3) FEET HIGH TO WOOD LATH AT A TWELVE (12) FOOT MAXIMUM SPACING AND FLAGGED WITH SURVEY RIBBON AT FOUR (4) FOOT INTERVALS.
- OFF-SITE STREETS MUST BE KEPT CLEAN AT ALL TIMES. IF DIRT IS DEPOSITED ON THE PUBLIC STREET SYSTEM. THE STREET SHALL BE IMMEDIATELY CLEANED WITH POWER SWEEPER OR OTHER EQUIPMENT. ALL VEHICLES SHALL LEAVE THE SITE BY WAY OF THE CONSTRUCTION ENTRANCE AND SHALL BE CLEANED OF ALL DIRT THAT WOULD BE DEPOSITED ON THE PUBLIC STREETS.
- ANY CATCH BASINS COLLECTING RUNOFF FROM THE SITE, WHETHER THEY ARE ON OR OFF THE SITE, SHALL HAVE THEIR GRATES COVERED WITH FILTER FABRIC DURING
- 15. THE WASHED GRAVEL BACKFILL ADJACENT TO THE FILTER FABRIC FENCE SHALL BE REPLACED AND THE FILTER FABRIC CLEANED IF IT IS NONFUNCTIONAL BY EXCESSIVE SILT ACCUMULATION AS DETERMINED BY THE CITY OF FERNDALE. ALSO, ALL INTERCEPTOR SWALES SHALL BE CLEANED IF SILT ACCUMULATION EXCEEDS ONE-QUARTER DEPTH.
- ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO DEPTH OF ONE (1) FOOT AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4" - 8" ROCK/40%-70% PASSING: 2"-4" ROCK/30%-40% PASSING; AND 1"-2" ROCK/10%-20% PASSING.
- 17. IF ANY PART (S) OF THE CLEARING LIMIT; BOUNDARY OR TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN IS/ARE DAMAGED, IT SHALL BE REPAIRED
- ALL PROPERTIES ADJACENT TO THE PROJECT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND RUNOFF.DO NOT FLUSH CONCRETE BY-PRODUCTS OR TRUCKS NEAR OR INTO THE STORM DRAINAGE SYSTEM. IF EXPOSED AGGREGATE IS FLUSHED INTO THE STORM SYSTEM, IT COULD MEAN RECLEANING THE ENTIRE DOWNSTREAM STORM SYSTEM, OR POSSIBLY RELAYING THE STORM LINE.
- 19. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS
- THE ESC SUPERVISORS NAME IS: EDDIE TJEERDSMA, 24 HR. CONTACT NUMBER: 360.661.2227.
- THE APPLICANT'S NAME IS: DAN MITZEL, 24 HR. CONTACT NUMBER: 360.661.2237.
- THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY A CONTINUOUS LENGTH OF SURVEY TAPE (OR FENCING, IF REQUIRED) PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION
- 23. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF THE MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPT. 30).
- ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
- 25. ANY AREA NEEDING ESC MEASURES NOT REQUIRING IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
- 26. THE ESC FACILITIES ON ACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM
- 27. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT -LADEN WATER INTO THE DOWNSTREAM SYSTEM.

- 28. OFFSITE STORMWATER AND/OR GROUNDWATER TO BE DIVERTED AWAY FROM SLOPES & DISTURBED AREAS WITH INTERCEPTOR DIKES, PIPES, OR SWALES. OFFSITE STORMWATER SHALL BE MANAGED DIFFERENTLY FROM STORMWATER GENERATED ONSITE.
- 29. EXCAVATED MATERIAL TO BE PLACED ON UPHILL SIDE OF TRENCH.
- 30. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- ANY PERMANENT FLOW CONTROL FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY, IF THE FACILITY IS TO FUNCTION AS ULTIMATELY AS AN INFILTRATION SYSTEM. THE TEMPORARY FACILITY MUST BE GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE
- 32. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE CITY INSPECTOR. THE CITY INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS. ADJACENT PROPERTIES. OR DRAINAGE FACILITIES.

ESC-2 WET SEASON SPECIAL PROVISIONS (OCTOBER 1 - APRIL 30)

- THE ALLOWED TIME THAT A DISTURBED AREA CAN REMAIN UNWORKED WITHOUT COVER MEASURES IS REDUCED TO TWO DAYS, RATHER THEN SEVEN.
- STOCKPILES AND STEEP CUT AND FILL SLOPES ARE TO BE PROTECTED IF UNWORKED FOR MORE THAN 12 HOURS.
- 3. COVER MATERIALS SUFFICIENT TO COVER ALL DISTURBED AREAS SHALL BE
- STOCKPILED ON SITE.
- WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON.
- MULCH IS REQUIRED TO PROTECT ALL SEEDED AREAS.

4. ALL AREAS THAT ARE TO BE UNWORKED DURING THE WET SEASON SHALL BE SEEDED

- 6. FIFTY LINEAR FEET OF SILT FENCE (AND THE NECESSARY STAKES) PER ACRE OF
- DISTURBANCE MUST BE STOCKPILED ON SITE.
- CONSTRUCTION ROAD AND PARKING LOT STABILIZATION ARE REQUIRED FOR ALL SITES UNLESS THE SITE IS UNDERLAIN BY COARSE-GRAINED SOIL.
- SEDIMENT RETENTION IS REQUIRED UNLESS NO OFFSITE DISCHARGE IS ANTICIPATED FOR THE SPECIFIC DESIGN FLOW.
- 9. SURFACE WATER CONTROLS ARE REQUIRED UNLESS NO OFFSITE DISCHARGE IS ANTICIPATED FOR THE SPECIFIED DESIGN FLOW.
- 10. PHASING AND MORE CONSERVATIVE BMP'S MUST BE EVALUATED FOR CONSTRUCTION ACTIVITY NEAR SURFACE WATERS.
- 11. ANY RUNOFF GENERATED BY DEWATERING SHALL BE TREATED THROUGH CONSTRUCTION OF A SEDIMENT TRAP WHEN THERE IS SUFFICIENT SPACE OR BY RELEASING THE WATER TO A WELL-VEGETATED. GENTLY SLOPING AREA. SINCE PUMPS ARE USED FOR DEWATERING. IT MAY BE POSSIBLE TO PUMP THE SEDIMENT-LADEN WATER WELL AWAY FROM THE SURFACE WATER SO THAT VEGETATION CAN BE MORE EFFECTIVELY UTILIZED FOR TREATMENT. A STRAW BALE FILTER SHALL BE PLACED AROUND THE DISCHARGE FROM THE DEWATERING PUMP. IF THERE IS NOT SPACE FOR A SEDIMENT TRAP OR 25 FEET OF SUITABLE VEGETATION, OTHER FILTRATION METHODS SHALL BE REQUIRED.
- 12. THE FREQUENCY OF MAINTENANCE REVIEW INCREASES FROM MONTHLY TO WEEKLY.
- 13. SOILS SHALL BE STABILIZED AT THE END OF THE SHIFT, BEFORE A HOLIDAY OR WEEKEND IF NEEDED, BASED ON THE WEATHER FORECAST.

ESC-3 SENSITIVE AREAS SPECIAL PROVISIONS

- WHENEVER POSSIBLE, PHASE ALL OR PART OF THE PROJECT SO THAT IT OCCURS DURING THE DRY SEASON. IF THIS IS IMPOSSIBLE. NOVEMBER THROUGH FEBRUARY SHALL BE AVOIDED SINCE THIS IS THE MOST LIKELY PERIOD FOR LARGE, HIGH-
- ALL PROJECTS SHALL BE COMPLETED AND STABILIZED AS QUICKLY AS POSSIBLE LIMITING THE SIZE AND DURATION OF A PROJECT IS PROBABLY THE MOST EFFECTIVE FORM OF EROSION CONTROL.
- WHERE APPROPRIATE, SANDBAGS OR AN EQUIVALENT BARRIER SHALL BE CONSTRUCTED BETWEEN THE PROJECT AREA AND THE SURFACE WATER IN ORDER TO ISOLATE THE CONSTRUCTION AREA FROM HIGH WATER THAT MIGHT RESULT DUE TO PRECIPITATION.
- ADDITIONAL PERIMETER PROTECTION SHALL BE CONSIDERED TO REDUCE THE LIKELIHOOD OF SEDIMENT ENTERING THE SURFACE WATERS. SUCH PROTECTION MIGHT INCLUDE MULTIPLE SILT FENCES, SILT FENCES WITH A HIGHER AOS, CONSTRUCTION OF A BERM. OR A THICK LAYER OF ORGANIC MULCH UPSLOPE OF A SILT FENCE.
- IF WORK IS TO OCCUR WITHIN THE ORDINARY HIGH WATER MARK OF A STREAM, MOST PROJECTS MUST ISOLATE THE WORK AREA FROM THE STREAM BY DIVERTING THE STREAM OR CONSTRUCTING A COFFERDAM, CERTAIN SMALL PROJECTS THAT PROPOSE ONLY A SMALL AMOUNT OF GRADING MAY NOT REQUIRE ISOLATION SINCE DIVERSIONS TYPICALLY RESULT IN DISTURBANCE AND THE RELEASE OF SOME SEDIMENT TO THE STREAM. FOR SUCH SMALL PROJECTS THE POTENTIAL IMPACTS FROM CONSTRUCTION WITH AND WITHOUT A DIVERSION MUST BE WEIGHTED.
- 6. IF A STREAM MUST BE CROSSED, A TEMPORARY BRIDGE SHALL BE CONSIDERED RATHER THAN ALLOWING EQUIPMENT TO UTILIZE THE STREAMBED FOR A CROSSING.
- 7. ANY RUNOFF GENERATED BY DEWATERING SHALL BE TREATED THROUGH CONSTRUCTION OF A SEDIMENT TRAP WHEN THERE IS SUFFICIENT SPACE OR BY RELEASING THE WATER TO A WELL-VEGETATED, GENTLY SLOPING AREA. SINCE PUMPS ARE USED FOR DEWATERING, IT MAY BE POSSIBLE TO PUMP THE SEDIMENT-LADEN WATER WELL AWAY FROM THE SURFACE WATER SO THAT VEGETATION CAN BE MORE FFFECTIVELY UTILIZED FOR TREATMENT. A STRAW BALE FILTER SHALL BE PLACED AROUND THE DISCHARGE FROM THE DEWATERING PUMP. IF THERE IS NOT SPACE FOR A SEDIMENT TRAP OR 25 FEET OF SUITABLE VEGETATION, OTHER FILTRATION METHODS SHALL BE REQUIRED.

ESC-4 FINAL SITE STABILIZATION NOTES

TO OBTAIN FINAL CONSTRUCTION APPROVAL, THE FOLLOWING CONDITIONS MUST BE MET:

- ALL DISTURBED AREAS OF THE SITE SHALL BE VEGETATED OR OTHERWISE PERMANENTLY STABILIZED. AT A MINIMUM. DISTURBED AREAS SHALL BE SEEDED AND MULCHED WITH A HIGH LIKELY HOOD THAT SUFFICIENT COVER WILL DEVELOP SHORTLY AFTER FINAL APPROVAL, MULCH WITHOUT SEEDING IS NOT ADEQUATE TO ALLOW FINAL APPROVAL OF THE PERMIT. EXCEPT FOR SMALL AREAS OF MULCH USED FOR LANDSCAPING. THE ONLY EXCEPTIONS TO THESE REQUIREMENTS ARE LOTS WITHIN A PLAT THAT ARE TO BE DEVELOPED UNDER AN APPROVED RESIDENTIAL PERMIT IMMEDIATELY FOLLOWING PLAT APPROVAL. IN THESE CASES, MULCH AND/OR TEMPORARY SEEDING ARE ADEQUATE FOR
- STRUCTURAL MEASURES SUCH AS, BUT NOT LIMITED TO, SILT FENCES, PIPE SLOPES DRAINS, CONSTRUCTION ENTRANCES, STORM DRAIN INLET PROTECTION, AND SEDIMENT TRAPS AND PONDS SHALL BE REMOVED FROM THE SITE. MEASURES THAT WILL QUICKLY DECOMPOSE, SUCH AS BRUSH BARRIERS AND ORGANIC MULCHES, MAY BE LEFT IN PLACE. IN THE CASE OF SILT FENCES, IT MAY BE BEST TO REMOVE FENCES IN CONJUNCTION WITH THE SEEDING, SINCE IT MAY BE NECESSARY TO BRING MACHINERY BACK IN TO REMOVE THEM. THIS WILL RESULT IN DISTURBED SOILS THAT WILL AGAIN. REQUIRE PROTECTION. THE DDES INSPECTOR MUST APPROVE AN APPLICANT'S PROPOSAL TO REMOVE FENCING PRIOR TO THE ESTABLISHMENT OF VEGETATION. IN SOME CASES, SUCH AS RESIDENTIAL BUILDING FOLLOWING PLAT DEVELOPMENT, IT MAY BE APPROPRIATE TO LEAVE SOME OR ALL ESC MEASURES FOR USE DURING SUBSEQUENT DEVELOPMENT. THIS SHALL BE DETERMINED ON A SITE-SPECIFIC BASIS.
- ALL PERMANENT SURFACE WATER FACILITIES, INCLUDING CATCH BASINS, MANHOLES, PIPES, DITCHES, CHANNELS, R/D FACILITIES, AND WATER QUALITY FACILITIES, SHALL BE CLEANED. ANY OFFSITE CATCH BASIN THAT REQUIRED PROTECTION DURING CONSTRUCTION SHALL ALSO BE CLEANED.
- IF ONLY THE INFRASTRUCTURE OF THE SITE HAS BEEN DEVELOPED (E.G. SUBDIVISIONS AND SHORT PLATS) WITH BUILDING CONSTRUCTION TO OCCUR UNDER A DIFFERENT PERMIT, THEN THE SENSITIVE AREA BUFFERS, SENSITIVE AREA TRACTS, OR SENSITIVE AREA SETBACK AREA SHALL BE CLEARLY MARKED IN ORDER TO ALERT FUTURE BUYERS AND BUILDERS.

ESC-5 ROAD AND UTILITIES E.S.C. NOTES

- PHASING THE PROJECT SO THAT THE SITE IS WORKED PROGRESSIVELY FROM END TO END, RATHER THAN CLEARING AND GRUBBING THE ENTIRE LENGTH OF THE PROJECT. THIS RESULTS IN SMALLER EXPOSED AREAS FOR SHORTER DURATION'S, THUS REDUCING THE EROSION RISK.
- MULCHING AND VEGETATING CUT AND FILL SLOPES AS SOON AS THEY ARE GRADED. FREQUENTLY, THIS IS DONE AT THE END OF CONSTRUCTION WHEN PAVING OR UTILITY INSTALLATION IS COMPLETE. VEGETATING THESE AREAS AT THE START OF THE PROJECT STABILIZES THOSE AREAS MOST SUSCEPTIBLE TO EROSION.
- PROTECTING ALL CATCH BASIN INLETS WITH CATCH BASIN INSERTS WHEN THESE DO NOT DRAIN TO PONDS OR TRAPS. THIS WILL NOT PROVIDE THE SAME LEVEL OF PROTECTION AS A SEDIMENT POND OR TRAP, BUT CAN REMOVE MOST OF THE SAND— SIZED MATERIAL ENTRAINED IN THE RUNOFF.
- PHASING THE PROJECT SO THAT ALL CLEARING AND GRADING IN SENSITIVE AREA BUFFERS OCCURS IN THE DRY SEASON. THIS SUBSTANTIALLY REDUCES THE CHANCE OF EROSION AND ALLOWS FOR RAPID REVEGETATION IN THE LATE SUMMER AND EARLY FALL.
- 5. USING FLOCCULENT TO REDUCE THE TURBIDITY OF WATER RELEASED FROM SEDIMENT PONDS, WHEN APPROVED BY THE DEPARTMENT OF ECOLOGY.

6. HIRING A PRIVATE CONSULTANT WITH EXPERTISE IN ESC TO REVIEW AND MONITOR THE SITE. **ESC-6 CONSTRUCTION SEQUENCE**

- ATTEND PRE-CONSTRUCTION MEETING.
- FLAG OR FENCE CLEARING LIMITS.
- POST SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR.
- INSTALL CATCH BASIN PROTECTION IF REQUIRED.
- GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
- 6. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
- CONSTRUCT SEDIMENT PONDS AND TRAPS.
- 8. GRADE AND STABILIZE CONSTRUCTION ROADS.
- CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
- MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH KING COUNTY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
- RELOCATE SURFACE WATER CONTROLS AND EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE KING COUNTY EROSION AND SEDIMENT CONTROL STANDARDS.
- COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING OR EQUIVALENT.
- 13. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN SEVEN DAYS.
- 14. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
- 15. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BMP'S REMOVED IF APPROPRIATE.

MITCHING

<u> </u>		
MULCH MATERIAL	QUALITY STANDARDS	APPLICATION RATES
STRAW	AIR-DRIED: FREE FROM UNDESIRABLE SEED AND COARSE MATERIAL	2"-3" THICK; 2-3 BALES 2-3 BALES PER 1000 SQ. FT. OR 2-3 TONS PER ACRE.
WOOD FIBER CELLULOSE	NO GROWTH INHIBITING FACTORS	APPROX. 25-30 LBS. PER 1000 SQ. FT. OR 1000-1500 LBS PER ACRE
COMPOST	NO VISIBLE WATER OR DUST DURING HANDLING. MUST BE PURCHASED FROM SUPPLIER WITH A SOLID WASTE HANDLING PERMIT.	2" THICK MIN.; APPROX. 100 TONS PER ACRE (APPROX. 800 LBS PER YARD)
CHIPPED SITE VEGETATION	AVERAGE SIZE SHALL BE SEVERAL INCHES.	2" MINIMUM THICKNESS

NOTE: MULCHING TO BE UTILIZED AS REQUIRED TO PREVENT EROSION AS DIRECTED BY THE ENGINEER.

- MULCHNG MAINTENANCE STANDARDS 1. THE THICKNESS OF THE COVER MUST BE MAINTAINED.
- 2. ANY AREAS THAT EXPERIENCE EROSION SHALL BE REMULCHED AND/OR PROTECTED WITH A NET OR BLANKET. IF THE EROSION PROBLEM IS DRAINAGE RELATED, THEN THE PROBLEM SHALL BE FIXED AND THE ERODED AREA REMULCHED.

SEED MIXES: THE SEED MIXES LISTED BELOW INCLUDE RECOMMENDED MIXES FOR TEMPORARY SEEDING. THESE MIXES, WITH THE EXCEPTION OF THE WETLAND MIX, SHALL BE APPLIED AT A RATE OF 120 LBS/ACRE. THIS RATE CAN BE REDUCED IF SOIL AMENDMENTS OR SLOW-RELEASE

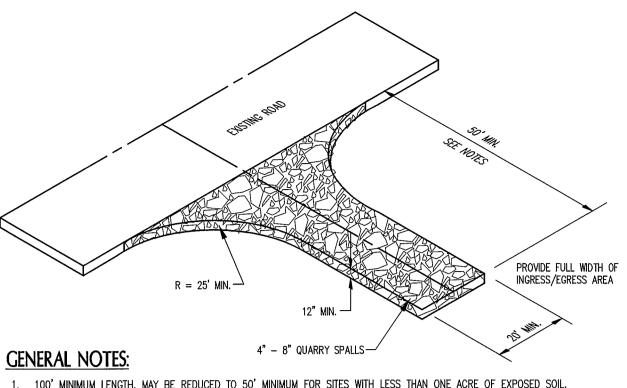
TEMPORARY EROSION CONTROL SEED MIX CHESINGS OR RED FESQUE	% WEIGHT 40	% PURITY 98	% GERMINATION 90
FESTUCA RUBRA VAR. COMMUTATA OR FESTUCA RUBRA			
ANNUAL OR PERENNIAL RYE	40	98	90
LOLIUM MULTIFLORUM OR LOLIUM PERENN			
REDTOP OR COLONIAL BENTGRASS	10	92	85
AGROSTIS ALBA OR AGROSTIS TENUIS			
WHITE DUTCH CLOVER	10	98	90
TRIFOLIUM REPENS			
- 1.4 AMADERIAS APAL -			
1.11 10910000000000000000000000000000000			

BIOSWALE SEED MIX (MODIFIED BRIARGREEN,	INC., HYDROSEEDING % WEIGHT	GUIDE WETLANDS % PURITY	SEED MIX) % GERMINATION
TALL OR MEADOW FESCUE	68	98	90
FESTUCA ARUNDINACEA OR FESTUCA ELATIC SEASIDE/CREEPING BENTGRASS	^{)R} 10	98	85
AGROSTIS PALUSTRIS MEADOW FOXTAIL	10	90	80
ALEPOCURUS PRATENSIS ALSIKE CLOVER	6	98	90
TRIFOLIUM HYBRIDUM REDTOP AGROSTIS ALBA	6	92	85

WETLANDS SEED MIX	% WEIGHT	% PURITY	% GERMINATION
RED FESCUE FESTUCA RUBRA	35	90	90
REDTOP AGROSTIS ALBA	35	92	85
MEADOW FOXTAIL ALEPOCURUS PRATENSIS	30	90	80

SEEDING MAINTENANCE STANDARDS

- 1. ANY SEEDED AREAS THAT FAIL TO ESTABLISH AT LEAST 80 PERCENT COVER WITHIN ONE MONTH SHALL BE RESEEDED. IF RESEEDING IS INEFFECTIVE, AN ALTERNATE METHOD, SUCH AS SODDING OR NETS/BLANKETS, SHALL BE USED. IF WINTER WEATHER PREVENTS ADEQUATE GRASS GROWTH, THIS TIME LIMIT MAY BE RELAXED. 2. AFTER ADEQUATE COVER IS ACHIEVED, ANY AREAS THAT EXPERIENCE EROSION SHALL BE RESEEDED AND
- 3. SEEDED AREAS SHALL BE SUPPLIED WITH ADEQUATE MOISTURE, BUT NOT WATERED TO THE EXTENT THAT IT

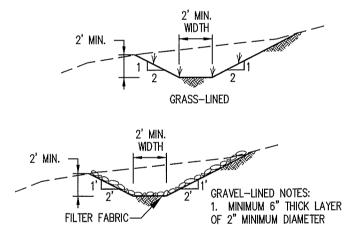


- 1. 100' MINIMUM LENGTH. MAY BE REDUCED TO 50' MINIMUM FOR SITES WITH LESS THAN ONE ACRE OF EXPOSED SOIL.
- 2. ALL MUD AND DEBRIS TRACKED ONTO EXISTING ASPHALTED ROADWAYS SHALL BE SWEPT/CLEANED UP AFTER EACH DAY'S WORK, OR AS REQUESTED BY THE PROJECT ENGINEER AND/OR CITY OF FERNDALE ENGINEERING DEPT.

TEMPORARY CONSTRUCTION ENTRANCE MAINTENANCE STDS:

- 1. QUARRY SPALLS SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
- 2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING OR AN INCREASE IN THE DIMENSIONS OF THE
- 3. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, THE CONSTRUCTION OF A SMALL SUMP OR POND SHALL BE CONSTRUCTED AND THE SEDIMENT
- 4. ANY ROCK SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY.
- 5. 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 PLANS. IF WASH RACKS ARE USED, THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- 6. 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 a public road. Wash water must be carried away from THE ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT
- 7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE A 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.





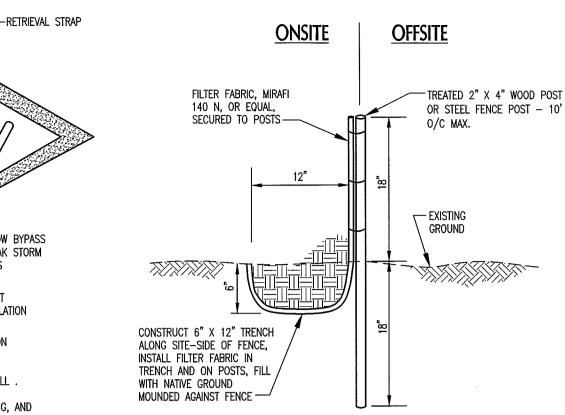
GENERAL NOTES:

ALL TEMPORARY DITCHES SHALL HAVE POSITIVE DRAINAGE TO THE DISCHARGE LOCATION INDICATED ON THE PLANS.

DRAIN ROCK.

2. DITCH TO BE GRAVEL LINED WHEN SLOPE GREATER THAN 5.00%.

TEMPORARY INTERCEPTOR DITCH DETAIL NOT TO SCALE



GENERAL NOTES: 1. INSERT SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN. 2. SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES ONE THIRD FULL

—OVERFLOW BYPASS

VOLUMES

ACCUMULATION

FOR PEAK STORM

3. SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN. CATCH BASIN INLET PROTECTION DETAIL

TRIM TO WITHIN 3" - 5" OF GRATE

GEOTEXTILE FABRIC

CONSTRUCTION RECORD DRAWING

CONSTRUCTION RECORD NOTE:

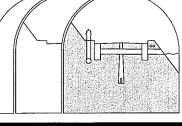
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CONSTRUCTION RECORD LEGEND 102.02 -INDICATES CONSTRUCTED AS DESIGNED 102.00 102.02 -INDICATES CONSTRUCTION RECORD



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

REVISED PER CITY COMMENTS CONSTRUCTION RECORD DRAWINGS P.SEVERI REVISED CONSTRUCTION RECORD DRAWINGS PER CITY P.LAU P.SEVERIN REVISIONS



Sound Development Group ENGINEERING, SURVEYING & LAND DEVELOPMENT SERVICES

P.O. Box 1705 • 1111 Cleveland Avenue, Suite 202

Tel: 360-404-2010 Fax: 360-404-2013

Mount Vernon, WA 98273

SHEET DESCRIPTION

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SCALE:

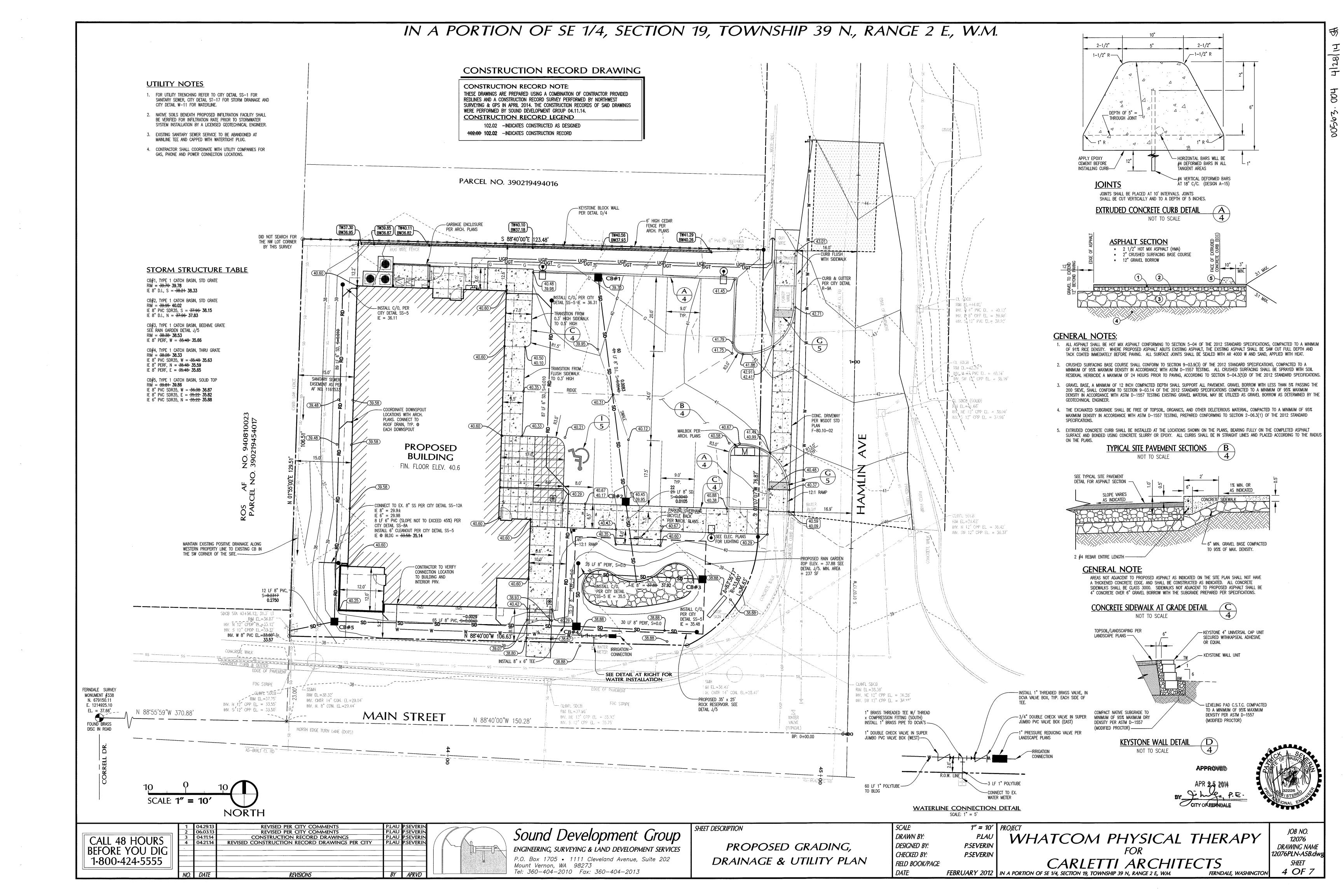
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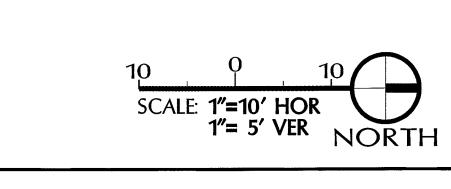
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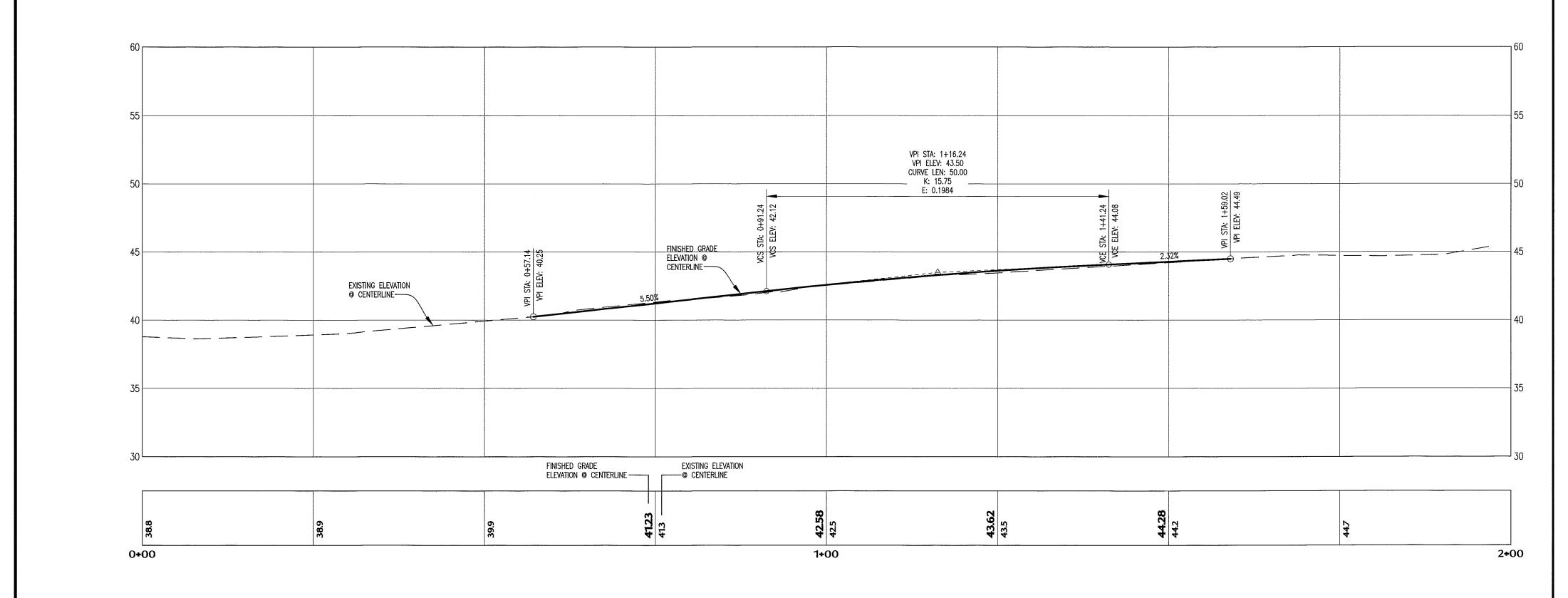
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JOB NO. 12076 DRAWING NAME 12076PLN-ASB.dwg 3 OF 7 FERNDALE, WASHINGTON





LANDSCAPE WALL



APPROVED

APR 2 5 2014

BY P.E.

CONSTRUCTION RECORD DRAWING

CONSTRUCTION RECORD NOTE:

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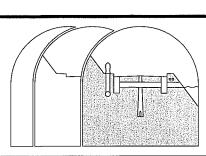
102.02 —INDICATES CONSTRUCTED AS DESIGNED

102.00 102.00 —INDICATES CONSTRUCTION RECORD



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Mount Vernon, WA 98273

Tel: 360-404-2010 Fax: 360-404-2013

PROPOSED HAMLIN AVENUE PLAN & PROFILE

SHEET DESCRIPTION

SCALE: H: 1" = 10' - V: 1" = 5'

DRAWN BY: P.LAU

DESIGNED BY: P.SEVERIN

CHECKED BY: P.SEVERIN

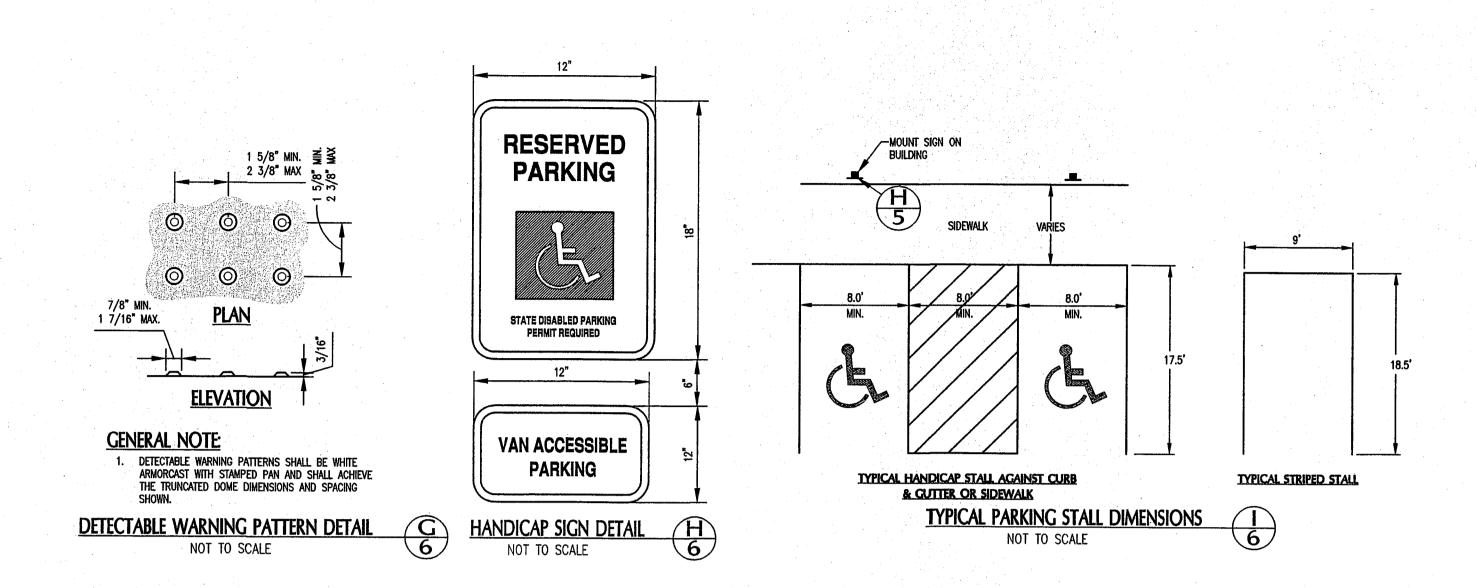
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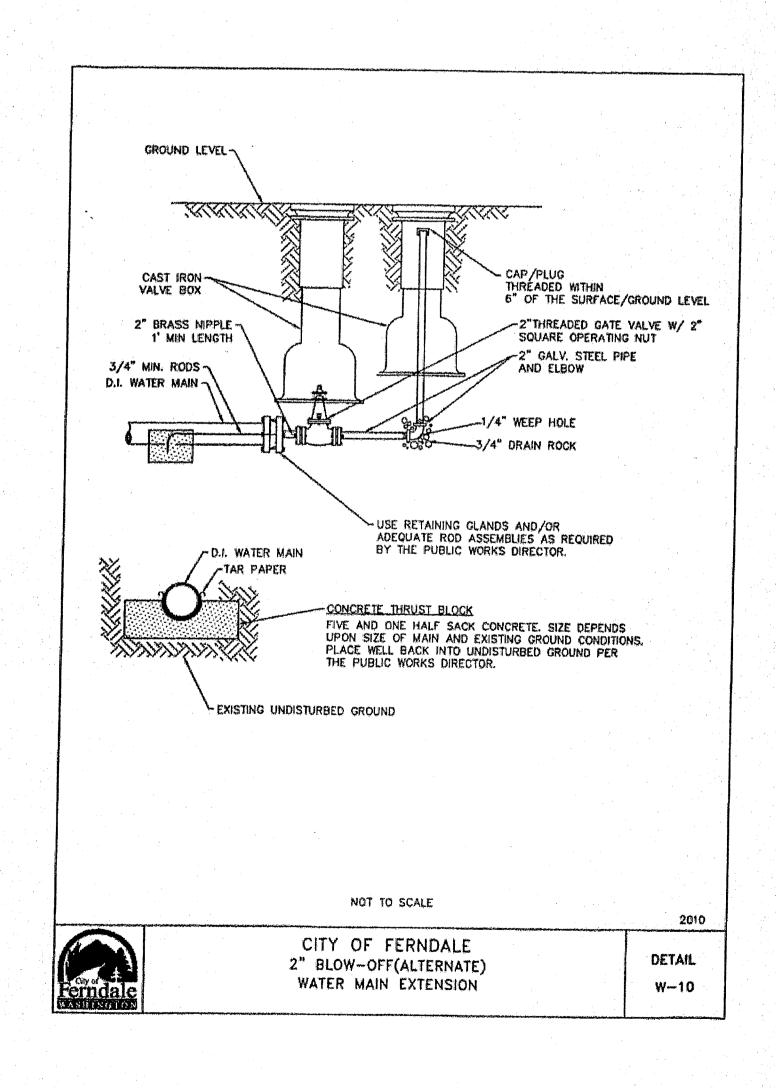
WHATCOM PHYSICAL THERAPY
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CARIFTTI ARCHITECTS

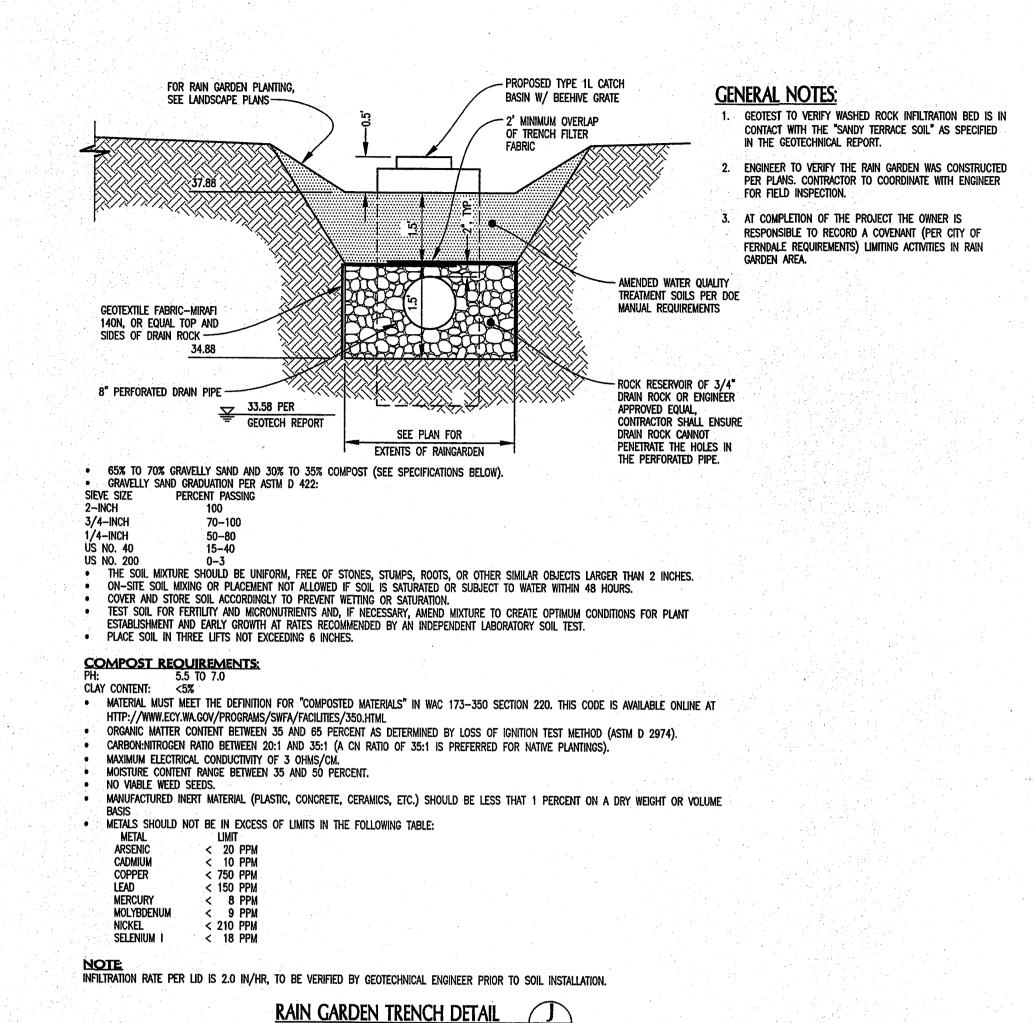
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FERNDALE, WASHINGTON
5 OF 7

IN A PORTION OF SE 1/4, SECTION 19, TOWNSHIP 39 N., RANGE 2 E., W.M.



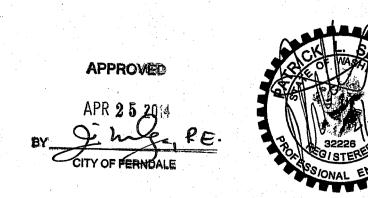




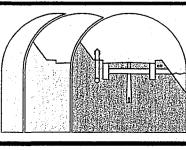
NOT TO SCALE

CONSTRUCTION RECORD DRAWING

CONSTRUCTION RECORD NOTE: THESE DRAWINGS ARE PREPARED USING A COMBINATION OF CONTRACTOR PROVIDED REDLINES AND A CONSTRUCTION RECORD SURVEY PERFORMED BY NORTHWEST SURVEYING & GPS IN APRIL 2014. THE CONSTRUCTION RECORDS OF SAID DRAWINGS WERE PERFORMED BY SOUND DEVELOPMENT GROUP 04.11.14. CONSTRUCTION RECORD LEGEND 102.02 -INDICATES CONSTRUCTED AS DESIGNED 102:00 102.02 -INDICATES CONSTRUCTION RECORD



	1	04.29.13	REVISED PER CITY COMMENTS	P.LAU	P.SEVERIN	
	2	06.03.13	REVISED PER CITY COMMENTS		P.SEVERIN	
CALL 40 LICIDS	3	04.11.14	CONSTRUCTION RECORD DRAWINGS	P.LAU	P.SEVERIN	,
CALL 48 HOURS	4	04.21.14	REVISED CONSTRUCTION RECORD DRAWINGS PER CITY	P.LAU	P.SEVERIN	/
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	NO.	DATE	REVISIONS	BY	APRVD	L



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SHEET DESCRIPTION

AS NOTED PROJECT P.LAU P.SEVERIN P.SEVERIN

WHATCOM PHYSICAL THERAPY

DRAWING NAME 12076PLN-ASB.dwg FERNDALE, WASHINGTON

DETAILS

FIELD BOOK/PAGE

DRAWN BY:

DESIGNED BY:

CHECKED BY:

CARLETTI ARCHITECTS FEBRUARY 2012 IN A PORTION OF SE 1/4, SECTION 19, TOWNSHIP 39 N., RANGE 2 E, WM.

6 OF 7

JOB NO.

12076

IN A PORTION OF SE 1/4, SECTION 19, TOWNSHIP 39 N., RANGE 2 E., W.M.

GENERAL CONSTRUCTION NOTES

- 1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE 2012 STANDARD SPECIFICATIONS FOR ROAD. BRIDGE, AND MUNICIPAL CONSTRUCTION AS PREPARED BY WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND THE AMERICAN PUBLIC WORKS ASSOCIATION (WSDOT/APWA), HEREIN REFERRED TO AS THE "STANDARD SPECIFICATIONS". REFERENCES WILL BE MADE TO THE STANDARD SPECIFICATIONS MANUAL AND THE STANDARD PLANS BOOK.
- EXISTING UTILITIES HAVE BEEN TAKEN FROM AVAILABLE FIELD AND OFFICE RECORDS. THE CONTRACTOR IS RESPONSIBLE FOR UTILIZING THE ONE-CALL UTILITY LOCATE SERVICE, 1-800-424-5555, A MINIMUM OF TWO WORKING DAYS PRIOR TO ANY CONSTRUCTION. DAMAGES TO THE EXISTING UTILITIES RESULTING FROM THIS CONSTRUCTION SHALL BE REPAIRED BY AND AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL VERIFY ANY POTENTIAL UTILITY CONFLICTS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL MAKE DAILY EFFORTS TO KEEP THE SITE IN A NEAT AND ORDERLY CONDITION TO THE SATISFACTION OF THE OWNER, ENGINEER, AND THE CITY OF FERNDALE ENGINEERING DEPARTMENT. IF CONSTRUCTION OCCURS DURING RAINY WEATHER CONDITIONS, THEREBY CAUSING DEBRIS TO BE TRACKED ONTO THE EXISTING ASPHALT, THE CONTRACTOR SHALL CONSTRUCT A QUARRY SPALL ROADWAY 20-FEET WIDE BY 100-FEET LONG MINIMUM. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGES TO EXISTING IMPROVEMENTS RESULTING FROM THIS CONSTRUCTION.
- 4. DURING ALL PHASES OF CONSTRUCTION, THE CONTRACTOR SHALL SWEEP AND REMOVE ALL DEBRIS TRACKED ONTO THE EXISTING ROADS. FAILURE TO KEEP ROAD FREE FROM DEBRIS OFF EXISTING ROADWAY MAY CAUSE WORK STOPPAGE. THE CONTRACTOR SHALL ALSO WATER THE SITE (IF REQUIRED) TO REDUCE CONSTRUCTION
- 5. AT ALL TIMES, TRAFFIC LANES SHALL BE MAINTAINED ON EXISTING ROADS. TEMPORARY AND PARTIAL ROAD CLOSURE SHALL BE APPROVED BY THE CITY OF FERNDALE ENGINEERING. FIRE. AND POLICE DEPARTMENTS PRIOR TO CONSTRUCTION. DURING CONSTRUCTION WITHIN THE RIGHT-OF-WAYS, THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT FOR TRAFFIC CONTROL AND CONSTRUCTION WARNING/CONTROL SIGNS.
- 6. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS CONCERNING DISPOSAL OF MATERIALS. ALL ASPHALT, CONCRETE, BRICK, AND STRUCTURES REMOVED FROM THIS SITE SHALL BE DISPOSED OF IN AN APPROVED SITE OBTAINED BY THE CONTRACTOR.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND APPLYING FOR ALL PERMITS ASSOCIATED WITH THIS CONSTRUCTION, NOT OBTAINED BY THE OWNER AND/OR ENGINEER.
- 8. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCY IN PLANS AND EXISTING CONDITIONS IS DISCOVERED
- 9. THE CONTRACTOR SHALL STOCKPILE CLEAN, NATIVE TOPSOIL MATERIALS, FREE OF SOD AND DEBRIS LARGER THAN TWO INCHES. TO BE USED AS FILL IN THE PROPOSED LANDSCAPE AREAS. THE CONTRACTOR SHALL STOCKPILE EXCESS NATIVE MATERIAL ON THE SITE AS DIRECTED BY THE OWNER LINSUITABLE NATIVE MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED DUMPSITE RETAINED BY THE CONTRACTOR. DEBRIS AND STRUCTURES SHALL BE REMOVED FROM SITE AND DISPOSED AT AN APPROVED DISPOSAL SITE RETAINED BY THE CONTRACTOR.
- 10. ALL PORTIONS OF THE SITE UNDER THE PROPOSED ASPHALT SHALL BE EXCAVATED TO EXPOSE A NON-ORGANIC MATERIAL SUITABLE FOR CONSTRUCTION. THE SUBGRADE SHALL BE PREPARED CONFORMING TO SECTION 2-06.3(1), AND COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY WITH A MINIMUM TEN-TON SELF-PROPELLED VIBRATORY ROLLER ANY AREAS THAT INDICATE PUMPING, UNSTABLE, OR YIELDING SOIL CONDITIONS SHALL BE OVER EXCAVATED AND REPLACED WITH TWO INCH TO FOUR- INCH QUARRY SPALLS. STOCKPILED MATERIAL SHALL BE PROTECTED FROM OVER- SATURATION BY RAINFALL OR PONDED WATER. FINAL GRADED CONDITIONS SHALL BE RAKED TO REMOVE ALL DEBRIS LARGER THAN ONE-INCH FROM THE

11. ORGANIC MATERIAL AND NON SUITABLE NATIVE MATERIAL DISCOVERED DURING SUBGRADE EXCAVATION AND SITE PREPARATION SHALL BE ENTIRELY REMOVED AND DISPOSED OF BY THE CONTRACTOR AT THE CONTRACTOR'S

- 12. DURING PERIODS OF RAINFALL, THE CONTRACTOR SHALL PREVENT WATER FROM STANDING ON THE SUBGRADE OR ON THE PREPARED GRAVEL SUBGRADE. THE CONTRACTOR IS RESPONSIBLE FOR SUBGRADE PROTECTION, REPAIR AND REPLACEMENT OF SUBGRADE MATERIALS SHALL BE PAID FOR BY AND AT THE CONTRACTOR'S EXPENSE. STORM RUNOFF SHALL BE DISCHARGED TO THE STORM SYSTEM OR ON SITE LOCATION THAT WILL NOT IMPACT THE NEIGHBORING PROPERTIES, THIS PROJECT, DOWNSTREAM CONVEYANCE SYSTEM. THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY DITCHING AND PUMPS TO REMOVE ALL STANDING WATER FROM THE WORK AREA.
- 13. AGGREGATE FOR GRAVEL BORROW SHALL COMPLY WITH SECTION 9-03.14 OF THE 2012 STANDARD SPECIFICATIONS. GRAVEL BORROW SHALL CONSIST OF WELL- GRADED SAND AND GRAVEL CONFORMING TO THE REQUIRED SPECIFICATIONS. THE PERCENT PASSING THE US NO. 200 SIEVE SHALL NOT EXCEED 5%. ALL GRAVEL BORROW IMPORTED TO THE SITE SHALL HAVE A CONSISTENT GRADATION. PRIOR TO IMPORTING ANY GRAVEL BORROW MATERIAL. THE CONTRACTOR SHALL PROVIDE GRADATION AND TEST RESULTS TO THE ENGINEER FOR APPROVAL. GRADATION AND PROCTOR TEST RESULTS SHALL BE SUPPLIED BY THE CONTRACTOR PER 2000 TONS OF IMPORTED MATERIAL. THE CONTRACTOR SHALL RETAIN LICENSED PERSONNEL TO PERFORM COMPACTION TESTS FOR THE FOLLOWING:
- A. TOP OF PREPARED GRAVEL BORROW WITHIN THE PARKING LOT AND ROAD SECTION ON A 50-FOOT GRID/INTERVAL FOR GRAVEL FILLS GREATER THAN TWO FEET.
- B. ONE TEST ADJACENT TO ALL STRUCTURES WITHIN THE ASPHALT.
- C. TRENCHES WITH THREE FEET OR LESS OF GRAVEL TRENCH BACKFILL: TOP CENTER OF UTILITY TRENCH AT 50-FEET INTERVALS.
- TRENCHES WITH MORE THAN THREE FEET OF GRAVEL TRENCH BACKFILL: TOP CENTER OF UTILITY TRENCH AND MID-DEPTH OF TRENCH, BOTH AT 50- FEET INTERVALS. ALL TEST RESULTS SHALL MEET OR EXCEED THE SPECIFICATIONS. ALL AREAS THAT DO NOT MEET THE REQUIRED SPECIFICATIONS SHALL BE RE-COMPACTED AND RETESTED AT NO ADDITIONAL COST TO THE OWNER.
- 14. CRUSHED SURFACING TOP COURSE SHALL CONFORM TO SECTION 9-03.9(3) OF THE 2012 STANDARD SPECIFICATIONS. EACH LIFT SHALL BE MECHANICALLY COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY AS DETERMINED BY ASTM D- 1557 TESTING PROCEDURE. PLACEMENT AND GRADING OF COMPACTED CRUSHED TOP COURSE MATERIAL WITHIN THE ASPHALT AREAS SHALL HAVE A TOLERANCE OF PLUS OR MINUS ONE-HALF INCH FROM THE DESIGNATED TOP OF CRUSHED SURFACING TOP COURSE. THE CONTRACTOR SHALL PROVIDE GRADATION AND DEGRADATION TEST RESULTS TO THE ENGINEER FOR APPROVAL OF SITE MATERIAL.
- 15. ASPHALT CONCRETE PAVEMENT SHALL CONFORM TO SECTION 5-04 OF THE 2012 STANDARD SPECIFICATIONS.
- **ASPHALT SECTION:** 2 1/2" HOT MIX ASPHALT
- 2" CRUSHED SURFACING TOP COURSE
- 12" GRAVEL BORROW (OR ENGINEER APPROVED EQUAL)
- THE FINAL GRADING OF CRUSHED SURFACING TOP COURSE WILL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO ASPHALT PAVING. ALL ABUTTING EDGES OF EXISTING ASPHALT SHALL BE SAW CUT FULL DEPTH TO PROVIDE A NEAT STABLE EDGE FOR THE NEW ASPHALT, ALL SAW CUT FACES SHALL BE TACK COATED AS WELL AS ALL STRUCTURES THAT ABUT ASPHALT. THE SURFACE JOINT BETWEEN EXISTING AND NEW ASPHALT MUST BE SEALED WITH HEAT-APPLIED CSS- 1 AND SAND COAT. ASPHALT SURFACE THAT HAS LOOSE MATERIAL OR POROUS CONDITIONS AS DETERMINED BY THE ENGINEER SHALL BE SEALED ACCORDING TO SECTION 5-04.3(5)C CRACK SEALING, AT NO ADDITIONAL COST TO THE OWNER, WITHIN 24 HOURS PRIOR TO PAVING. SOIL RESIDUAL HERBICIDE SHALL BE APPLIED TO ALL CRUSHED TOP COURSE SURFACES WITHIN
- ASPHALT SHALL BE MECHANICALLY COMPACTED TO A MINIMUM OF 91% OF THE RICE DENSITY, COMPACTION SHALL OCCUR BETWEEN THE TEMPERATURES OF 180 DEGREES FAHRENHEIT AND 300 DEGREES FAHRENHEIT. DURING COLD WEATHER CONDITIONS, AS DETERMINED BY THE ENGINEER, ALL TRUCKLOADS OF ASPHALT SHALL BE COVERED SO AS TO RETAIN HEAT, THE CONTRACTOR SHALL RETAIN LICENSED MATERIALS—TESTING PERSONNEL TO PROVIDE COMPACTION TESTS AT 50- FOOT GRID/INTERVAL THROUGHOUT THE PARKING LOT AND ROAD SECTION. IF COMPACTION TEST RESULTS OF HOT MIX ASPHALT INDICATE LESS THAN 91% THE CONTRACTOR MAY, AT HIS EXPENSE, HAVE CORE SAMPLES TAKEN AND ANALYZED TO SUBSTANTIATE DENSITY. HOT MIX ASPHALT THAT DOES NOT MEET THE REQUIRED COMPACTION, SHALL EITHER BE REMOVED BY THE CONTRACTOR AT HIS EXPENSE OR SHALL HAVE EQUAL THE INTENDED DESIGN. ADDITIONAL TESTING AND ASPHALT TO COMPENSATE FOR UNACCEPTABLE COMPACTION TEST RESULTS SHALL BE THE EXPENSE OF THE CONTRACTOR. NO ASPHALT PAVING OR ROLLING COMPACTION OF ASPHALT IS ALLOWED AFTER DARK. ALL ROLLING SHALL BE COMPLETED BY SUNSET TIME.

16. HOT MIX ASPHALT SHALL BE PLACED AT THE LOCATIONS AND DEPTHS INDICATED ON THE PLANS, HOT MIX

STORM SEWER

- 17. THE FOLLOWING MATERIALS ARE ACCEPTABLE FOR THE STORM SEWERS IDENTIFIED ON THE PLANS:
- A. PVC PIPE (POLYVINYL CHLORIDE) SHALL CONFORM TO SECTION 9-05.12(1) MEETING THE REQUIREMENTS OF ASTM D3034,SDR35. PVC PIPE 12" IN DIAMETER AND UNDER SHALL CONFORM TO SECTION 9-05.12(1) OF THE STANDARD SPECIFICATIONS MEETING THE REQUIREMENTS OF ASTM D 3034 TYPE S.
- B. CORRUGATED POLYETHYLENE PIPE (CPP) SHALL HAVE A SMOOTH BARREL INTERIOR, CORRUGATED EXTERIOR, CONFORMING TO SECTION 9-05.20 MEETING THE REQUIREMENTS OF AASHTO M294.
- C. PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN (CPP) SHALL HAVE A SMOOTH INTERIOR, CORRUGATED EXTERIOR CONFORMING TO SECTION 9-05.2(7) FOR UP TO 10-INCH. PERFORATION SHALL BE OF THE SLOTTED TYPE WHICH ARE SIZED SUCH THAT THE SMALLEST ROCK DIAMETER IS LARGER THAN THE PERFORATION.
- ALL PIPES SHALL HAVE GASKETED JOINTS.

18. INFILTRATION TRENCH MATERIAL SHALL CONSIST OF WASHED DRAIN ROCK MATERIAL, DRAIN ROCK SHALL BE SIZED SUCH THAT THE MINIMUM SIZE OF ROCK SHALL BE LARGER THAT THE PERFORATIONS IN THE

- PERFORATED PIPE, BUT SHALL NOT BE SMALLER THAN 1/2" IN DIAMETER. 19. STORM CATCH BASINS AS INDICATED ON THE PLANS SHALL CONFORM TO: TYPE 1 CATCH BASIN PER WSDOT STD PLAN B-1 TYPE 1L CATCH BASIN PER WSDOT STD. PLAN B-1A TYPE II CATCH BASIN PER WSDOT STD.
- 20. ALL PIPE KNOCKOUTS SHALL BE NEATLY MUDDED INSIDE AND OUTSIDE OF THE STRUCTURE FLUSH WITH THE STRUCTURE WALL, ALL PVC PIPE CONNECTIONS SHALL BE MADE TO STRUCTURES USING PVC SAND COLLARS.
- 21. UPON INSTALLATION OF ALL PIPES TO STORM STRUCTURES, THE KNOCKOUT AREA SHALL BE NEATLY MUDDED INSIDE AND OUT OF THE CATCH BASIN USING A NON-SHRINK CONCRETE GROUT.
- 22. UPON COMPLETION OF ALL CRUSHED TOP COURSE GRADING AND PREPARATION FOR ASPHALT PAVING. ALL CATCH BASIN STRUCTURES SHALL BE CORRECTLY ADJUSTED SO AS TO BE FLUSH WITH THE PROPOSED FINISH
- 23. CLEANOUTS SHALL BE INSTALLED TO MATCH FINISH GRADE WITHIN CONCRETE AND STALL AREAS.

SANITARY SEWER - GRAVITY

- 24. THE LOCATION OF THE SANITARY SEWER SERVICE IS INDICATED ON THE PLANS. SEWER SERVICE SHALL BE INSTALLED AT THE SLOPE AND LOCATION AS INDICATED ON THE CIVIL PLANS.
- 25. SEWER PIPE SHALL BE PVC CONFORMING TO ASTM D 3034, SDR 35 AND SECTION 9-05.12 OF THE 2012 STANDARD SPECIFICATIONS. JOINTS SHALL BE BELL AND SPIGOT WITH A RUBBER GASKET. MATERIALS AND CONSTRUCTION SHALL CONFORM TO SECTION 7-17 WSDOT/APWA.
- 26. CLEANOUTS SHALL BE INSTALLED TO MATCH FINISH GRADE WITHIN CONCRETE AND ASPHALT AREAS.
- 27. AIR PRESSURE TESTING, IF REQUIRED BY THE CITY OF FERNDALE PUBLIC WORKS, SHALL BE PERFORMED BY THE CONTRACTOR ON ALL PROPOSED SEWER LINES. THE PRESSURE TEST SHALL BE PERFORMED IN THE PRESENCE OF THE FERNDALE SEWER DEPARTMENT, AT FIVE PSI FOR TEN MINUTES WITH NO SIGNIFICANT GAUGE DROP. ADEQUATE TIME (TWO MINUTES MIN) SHALL ELAPSE BEFORE THE PRESSURE TEST IS PERFORMED TO ALLOW THE PRESSURE TO STABILIZE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VIDEO TAPING, IF REQUIRED BY THE CITY OF FERNDALE PUBLIC WORKS, THE SEWER SERVICES AND PROVIDING A COPY OF THE TAPE TO THE CITY OF FERNDALE PUBLIC WORKS FOR THEIR REVIEW. THE SEWER LINE WILL NOT BE APPROVED UNTIL THE CITY OF FERNDALE HAS REVIEWED THE VIDEO TAPE AND SATISFACTORY PRESSURE TESTING HAS BEEN WITNESSED BY THE CITY OF FERNDALE PUBLIC WORKS AND THE ENGINEER, ALL SANITARY SEWER TESTING COSTS SHALL BE INCLUDED IN THE UNIT PRICE FOR SEWER PIPE.
- 29. SANITARY SEWER MANHOLES TO BE GROUTED INSIDE AND OUT.

UTILITY TRENCHES

- 30. ALL TRENCHES SHALL BE EXCAVATED TO PROVIDE A MINIMUM WIDTH OF EIGHT INCHES ON EITHER SIDE OF THE PROPOSED UTILITY AS INDICATED ON THE UTILITY TRENCH DETAIL WITHIN THE CIVIL DRAWINGS. ALL SEWER PIPES SHALL BE BEDDED WITH PEA GRAVEL. STORM SEWER TRENCHES SHALL BE BEDDED WITH SAND, BUCKSHOT OR GRAVEL WITH 100% PASSING THE 1/4-INCH SCREEN. BEDDING MATERIAL SHALL ALSO BE USED TO COVER THE PIPE TO A MINIMUM OF SIX INCHES ABOVE THE TOP OF THE PIPE. THE CONTRACTOR SHALL CAREFULLY TAMP AND HAND COMPACT BEDDING AND COVER MATERIAL TO ASSURE ADEQUATE SUPPORT UNDER THE BARREL OF THE PIPE.
- TRENCH BACKFILL MATERIAL SHALL CONSIST OF COMPACTED GRAVEL BORROW PLACED IN LOOSE LIFTS NOT EXCEEDING EIGHT INCHES AND COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557 TESTING PROCEDURE. THE INITIAL LIFT OF GRAVEL TRENCH BACKFILL OVER THE PIPE SHALL NOT EXCEED 18 INCHES IN ORDER TO PROTECT THE PIPE. GRAVEL BORROW SHALL BE USED AS TRENCH BACKFILL IN ALL TRENCHES UNDER PROPOSED ASPHALT, CONCRETE, CONSTRUCTION TRAFFIC AREAS, AND WITHIN FIVE FEET BEYOND IMPERVIOUS SURFACES. NATIVE SOIL MATERIALS MAY BE USED AS TRENCH BACKFILL ONLY AT LOCATIONS BEYOND THOSE REQUIRING GRAVEL STRUCTURAL FILL. THE USE OF NATIVE SOIL MATERIALS AS TRENCH BACKFILL, WITHIN THOSE AREAS REQUIRING GRAVEL, MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER AND OWNER PRIOR TO THE WORK BEING PERFORMED. THE USE OF NATIVE SOILS WITHIN TRENCHES REQUIRING GRAVEL WILL ONLY BE ACCEPTED WITH THE APPROVAL OF THE GEOTECHNICAL ENGINEER, AND THE NATIVE SOILS MUST BE COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM DRY DENSITY. THE USE OF NATIVE SOILS AS TRENCH BACKFILL SHALL NOT PRECLUDE THE MINIMUM ASPHALT SECTION REQUIREMENTS AS IDENTIFIED ON THE CIVIL PLANS. NO NATIVE MATERIAL MAY BE USED AS TRENCH BACKFILL IN THE PUBLIC RIGHT OF WAY.
- 32. THE BOTTOM OF UTILITY TRENCHES SHALL HAVE A STABLE NON-YIELDING SOIL CONDITION SUITABLE FOR SUPPORTING THE DESIGN LOADS. WHERE THE BOTTOM OF TRENCH CONDITIONS EXHIBIT PUMPY YIELDING CONDITIONS, THE BOTTOM OF TRENCH SHALL BE OVER EXCAVATED TO EXPOSE FIRM STABLE MATERIAL, AND BACKFILLED WITH TWO INCH TO FOUR INCH SHOT ROCK MATERIAL. WHERE OVER EXCAVATING EXPOSES SIMILAR UNSTABLE CONDITIONS, TRENCH OVER EXCAVATION SHALL BE DONE TO TWO FEET BELOW THE PIPE BEDDING MATERIAL AND BACKFILLED WITH TWO INCH TO FOUR INCH SHOT ROCK MATERIAL.

STRIPING & SIGNAGE

- 1. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING SLEEVES WITHIN THE PUBLIC CONCRETE SIDEWALKS AT LOCATIONS WHERE SIGNS ARE TO BE RELOCATED. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF MOUNT VERNON TO ESTABLISH THE PROPER SETBACK FROM THE FACE OF CURB TO THE CENTERLINE OF THE SIGN POST AND THE TYPE OF SLEEVE OR BASE THAT IS REQUIRED TO ACCOMMODATE THE CITY'S
- ALL STRIPING SHALL CONFORM TO WSDOT SECTION 8-22 AND THE CITY OF FERNDALE'S REQUIREMENTS.
- PARKING SIGNS SHALL BE INSTALLED FOR THE HANDICAP ACCESSIBLE STALLS, AND ARE LOCATION AT THE HEAD END OF EACH STALL.
- PAINT STRIPING SHALL BE APPLIED FOR ROAD MARKING. PAINT APPLICATION SHALL CONFORM TO SECTION 8-22.3(3) OF THE 2010 STANDARD SPECIFICATIONS. STANDARD STALLS SHALL BE STRIPED WITH FOUR-INCH WIDE WHITE PAINT. NO PARKING/ACCESS AREAS SHALL BE STRIPED WITH A 4 INCH WIDE WHITE PAINT AT A 45 DEGREE ANGLE TO THE PROPOSED STRIPING AT ONE FOOT ON CENTER AS INDICATED. CROSSWALK MARKINGS SHALL BE HOT APPLIED THERMOPLASTICS. REFLECTORIZED. IN ACCORDANCE WITH SECTION 8-22 OF THE 2010 STANDARD SPECIFICATIONS (CMVES 3-18i).
- 5. SIGNS ONSITE SHALL BE INSTALLED AT THE LOCATIONS INDICATED ON THE PLAN. SIGNS SHALL BE MOUNTED ON TWO INCH OUTSIDE DIAMETER GALVANIZED STEEL POSTS. POSTS SHALL BE SET A MINIMUM OF TWO FEET INTO THE GROUND IN A CONCRETE-FILLED BASE WITH A SEVEN FEET OF CLEARANCE BETWEEN THE BOTTOM OF THE SIGN AND THE FINISHED GRADE.
- ACCESS PARKING SPACE SYMBOL SHALL BE WHITE WHEN APPLIED TO ASPHALT AND SURROUNDED BY A BLUE BACKGROUND WITH A WHITE BORDER WHEN INSTALLED ON CEMENT CONCRETE SURFACES AND SHALL CONFORM TO SECTION 8-22.1 OF THE 2010 STANDARD SPECIFICATIONS AND STANDARD PLAN

CONFLICT NOTE

ALL CONSTRUCTION WITH IN CITY RIGHT OF WAY SHALL BE IN COMPLIANCE WITH THE CITY OF FERNDALE CONSTRUCTION STANDARDS. IN THE EVENT THAT THERE IS A CONFLICT BETWEEN THE PROJECT PLANS AND SPECIFICATIONS, THE CITY OF FERNDALE CONSTRUCTION STANDARDS/NOTES SHALL BE USED.

CITY OF FERNDALE CONSTRUCTION STANDARDS

GENERAL REQUIREMENTS:

- 1. ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE "STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION' (WSDOT SPECS.), THE CITY OF FERNDALE DEVELOPMENT STANDARDS (COFDS) AND THE 2005 VERSION OF THE DEPARTMENT OF ECOLOGY STORM WATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (DOE MANUAL). IN CASE OF A CONFLICT BETWEEN PLANS, REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
- 2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER CONSTRUCTION DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES. THROUGHOUT THE PERIOD OF CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH THE TERMS OF ALL PERMITS.
- 3. THE CONTRACTOR MUST HAVE A FULL SET OF CITY CONTRACT DOCUMENTS ON THE SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- 4. CONSTRUCTION NOISE SHALL BE LIMITED TO BETWEEN 7 A.M. TO 8 P.M., MONDAY THROUGH SATURDAY.
- 5. THE CONTRACTOR SHALL CONTACT THE UTILITIES UNDERGROUND LOCATION CENTER AT LEAST 72 HOURS PRIOR TO STARTING CONSTRUCTION. PHONE: 1-800-424-5555. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL OF THE VARIOUS UTILITY COMPANIES TO ARRANGE FOR FIELD LOCATIONS OF ALL EXISTING UTILITY FACILITIES PRIOR TO STARTING CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COSTS INCURRED BECAUSE OF DAMAGE DONE TO EXISTING FACILITIES BY THE CONTRACTOR'S WORK FORCE, INCLUDING COSTS FOR REPAIRS, WHICH WILL BE CONTRACTOR'S SOLE RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EXISTING UTILITIES AND TO NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT BETWEEN THE APPROVED PLANS AND THE LOCATION OF ANY EXISTING UTILITIES. 6. THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.
- 6. THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE ONSITE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
- 8. SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL ABOVE GROUND AND BURIED DEBRIS AND WASTE THAT MAY BE
- 9. THE CONTRACTOR SHALL OBTAIN REVOCABLE ENCROACHMENT PERMITS FROM THE CITY OF FERNDALE AND/OR WHATCOM COUNTY PRIOR TO COMMENCING WORK WITHIN THE PUBLIC RIGHTS-OF-WAY.
- 10. THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH REPRESENTATIVES OF THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT AND THE ENGINEER OF RECORD A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE CITY WILL SCHEDULE THE MEETING.
- 11. ALL WORK AND MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT, REPRESENTATIVES FROM THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT MUST INSPECT ALL WORK IDENTIFIED ON THE PLANS, BOTH PUBLIC AND PRIVATE. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS AS
- A. PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES.
- B. CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES. C.P.LACEMENT OF WATER MAIN AND BACKFILLING OF WATER MAIN TRENCH WITHIN ROAD RIGHTS-OF-WAY OR IN WATERLINE EASEMENT
- TO BE DEDICATED TO THE CITY OF FERNDALE.
- D. PLACMENT AND BACKFILLING OF UNDERGROUND UTILITIES, STORM SEWER AND SANITARY SEWER WITHIN ROAD RIGHTS-OF-WAY, IN EASEMENTS TO BE DEDICATED TO THE CITY OF FERNDALE. OR OTHER PUBLICLY SHARED FACILITIES. E. GRADING OF PUBLIC OR PRIVATE ROADWAY AT:
- 1. COMPLETION OF EXCAVATION TO SUBGRADE.
- COMPLETION OF BALLAST COURSE PLACEMENT. 3. COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT.
- F. POURING OF CURB AND GUTTER AND SIDEWALK IN PUBLIC OR PRIVATE ROADWAY.
- G. ASPHALT PAVING IN PROGRESS IN PUBLIC OR PRIVATE ROADWAY.
- H.OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT.
- I. END OF MAINTENANCE PERIOD.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC. AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR, ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO PERFORMING THE WORK. ALL SECTIONS OF THE WSDOT SPECS., 1-07.23- TRAFFIC CONTROL, SHALL APPLY.
- 13. THE CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF ANY PROPOSED DEVIATION FROM THE APPROVED PLANS PRIOR TO CONSTRUCTION OF THE REVISED IMPROVEMENTS. THE CONTRACTOR SHALL KEEP RECORDS OF ALL DEVIATIONS AND SHALL FORWARD THEM TO THE ENGINEER AND TO THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT.
- 14. AS-BUILT DATA SHALL BE PROVIDED TO THE CITY OF FERNDALE UPON COMPLETION OF CONSTRUCTION AND PROVIDED IN CITY OF FERNDALE DATUM - VERTICAL (NGVD 29) AND HORIZONTAL (NAD 83/91). CONTACT THE CITY FOR MORE INFORMATION ON

UNDERGROUND UTILITIES CONSTRUCTION:

- 1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ENGINEER OF RECORD TO ASSURE ACCURATE AND TIMELY COLLECTION OF ALL REQUIRED AS-BUILT DATA. THIS DATA MUST ACCURATELY REFLECT THE LOCATIONS OF ALL UNDERGROUND UTILITIES, BOTTOM OF PIPE ELEVATIONS, INVERT ELEVATIONS, MANHOLE LOCATIONS, WATER SERVICE TAPS, BLOW-OFF LOCATIONS AND INVERTS OF SERVICE CONNECTIONS (BOTH AT PIPE AND AT PROPERTY LINE), VERTICAL AND HORIZONTAL BENDS, SERVICE BOXES AND METERS, VALVES AND HYDRANTS. CALL THE ENGINEER OF RECORD AT LEAST 48-HOURS BEFORE BURYING UNDERGROUND PIPE TO ASSURE AND FACILITATE REQUIRED AS-BUILT SURVEY.
- 2. THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA:
- a) NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME.
- b) where consistent with safety and space considerations, excavated material shall be placed on the uphill side
- c) Trench Dewatering Devices Shall discharge into Sediment Traps or Sediment Ponds. d) WHERE PRACTICAL, INSTALL GRAVITY PIPE UTILITIES PRIOR TO INSTALLATION OF OTHER UTILITIES.
- 3. UTILITY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.
- 4. TESTING OF NEW WATER AND SANITARY SEWER MAINS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT UTILITIES HAVE BEEN
- 5. OPEN CUTTING OF EXISTING ROADWAYS IS ONLY ALLOWED AS APPROVED AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH THE COF STANDARD TRENCH DETAIL.

EARTHWORK:

Mount Vernon, WA 98273

- 1. THE CONTRACTOR SHALL CLEAR, GRUB AND CLEAN UP THOSE AREAS SHOWN ON THE PLANS.
- 2. THE CONTRACTOR SHALL RAZE, REMOVE AND DISPOSE OF ALL BUILDING AND FOUNDATIONS, STRUCTURES, FENCES AND OTHER OBSTRUCTIONS THAT LIE WHOLLY OR PARTIALLY WITHIN THE PROJECT LIMITS.
- 3. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL EXISTING UN-COMPACTED OR POORLY COMPACTED FILL SOILS WITHIN THE ROAD PRISM AT THE DIRECTION OF THE ENGINEER.
- 4. THE CONTRACTOR SHALL EXCAVATE AND GRADE TO THE ALIGNMENT, GRADE AND CROSS-SECTIONS SHOWN IN THE PLANS OR ESTABLISHED BY THE ENGINEER.

- 5. UNSUITABLE MATERIAL FOUND AND NOT FIT FOR USE AS A SUB-GRADE SHALL BE EXCAVATED TO THE BOUNDARIES SET BY THE ENGINEER AND REPLACED WITH A SUITABLE BACKFILL MATERIAL.

BASE COURSES & CRUSHED SURFACING:

6. THE ENGINEER IS REQUIRED TO CERTIFY SUBGRADE, IN WRITING, PRIOR TO PAVING.

- 1. GRAVEL BASES AND BALLAST MATERIAL GRADATION SHALL MEET THE CURRENT EDITION OF WSDOT STANDARD SPECIFICATIONS.
- 2. BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY.
- 3. THE GRADED AND COMPACTED SURFACE OF THE CRUSHED SURFACING TOP COURSE SHALL BE WITHIN ½ INCH OF FINISHED GRADE.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIAL AND COMPACTION TESTING. PRIOR TO IMPORTING OF MATERIAL FOR BASE AND CRUSHED SURFACING TOP COURSE THE CONTRACTOR SHALL PROVIDE EVIDENCE OF SATISFACTORY PASSING GRADING AND DEGRADATION TEST RESULTS TO THE ENGINEER.

STORM DRAINAGE

- 1. THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF STORM DRAIN IMPROVEMENTS:
- CATCH BASINS TYPE 1, 1L OR 2 WSDOT STD. DETAILS B-5.20, B-5.40 OR B-10.20 "RESIDENTIAL SERVICE LINE" CATCH BASINS COFSD ST-7
- THRU-CURB INLET FRAME & GRATE COFSD R-8
- SIDEWALK DRAINS COFSD ST-15 POSITIVE LOT DRAINS COFSD ST-16 CHAIN LINK FENCE WITH TOP RAIL WSDOT FS-2
- 2. STORM SEWER PIPE HAVING DIAMETERS GREATER THAN 8" SHALL BE CORRUGATED POLYETHYLENE PIPE (CPEP) OR SOLID WALL POLYVINYL CHLORIDE (PVC) PER SECTION 7-04 OF THE WSDOT SPECS. ALL OTHER STORM SEWER PIPE SHALL BE PVC UNLESS
- 3. ALL DRAINAGE STRUCTURES, INCLUDING THOSE INSTALLED FOR A STORMWATER POND, SHALL HAVE A LOCKING GRATE OR SOLID LOCKING LID.
- 4. ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS".
- 5. CONTROL DENSITY FILL SHALL BE USED IN AREAS WHERE LESS THAN 18" OF COVER IS MAINTAINED OVER THE PROPOSED STORM PIPES (PIPE IS IN ROAD BASE SECTION), AS SHOWN IN THE PLANS. DUCTILE IRON PIPE MAY BE USED FOR STORM PIPES WITH LESS THAN 18" OF COVER IF APPROVED BY THE CITY.
- 6. COVER OVER PIPES SHALL BE MAINTAINED DURING CONSTRUCTION. DEPTH OF COVER REQUIRED SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS AND WILL VARY WITH THE VEHICLE LOADS TRAVELING OVER THE PIPE. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR DAMAGE TO PIPE DURING CONSTRUCTION ACTIVITIES.
- 7. AT THE END OF ALL SITE CONSTRUCTION, THE CONTRACTOR SHALL CLEAN DEBRIS FROM ALL NEW AND AFFECTED CATCH BASINS AND STORMWATER CONVEYANCES. DEBRIS SHALL NOT BE ALLOWED TO ENTER STREAMS OR OFF-SITE STORMWATER SYSTEMS.

WATER:

- 1. THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING WATER SUPPLY SYSTEM IMPROVEMENTS:
- PIPE BEDDING COFSD W-11 COFSD W-11 TRENCH BACKFILL FIRE HYDRANT ASSEMBLY COFSD W-1
- THRUST BLOCKING COFSD W-2, W-3 & W-4 WATER SERVICE COFSD W-5
- 2. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS, SECTIONS 702 AND 705 AND THE CURRENT EDITION OF THE WSDOT STANDARD SPECIFICATIONS.
- 3. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON PER SECTION 9-30.1(1) OF THE WSDOT SPECS., UNLESS OTHERWISE APPROVED BY

4. MATERIAL FOR FITTINGS SUCH AS CROSSES, TEES, BENDS, REDUCERS AND SLEEVES SHALL BE DUCTILE IRON. JOINTS SHALL BE

THE ENGINEER OF RECORD. BLOCKS SHALL BE INSTALLED AS SPECIFIED IN SECTION 7-09.3(21) OF THE WSDOT SPECS. NO

- M.J., FLANGED OR PUSH-ON JOINTS AND SHALL CONFORM TO SECTION 9-30.2(1) OF THE WSDOT SPECS. 5. CONCRETE BLOCKING SHALL BE AS SPECIFIED IN CITY OF FERNDALE STANDARD DETAILS W-2, W-3 AND W-4, OR AS DIRECTED BY
- 6. CONNECTIONS TO EXISTING WATER MAINS THE CONTRACTOR MUST NOTIFY THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF A PROPOSED CONNECTION AT LEAST FOUR WORKING DAYS IN ADVANCE.
- 7. ALL HYDROSTATIC TESTING AND DISINFECTION OF WATER MAINS SHALL CONFORM TO SECTION 7-09.3(23) AND SECTION 7-09.3(24) OF THE WSDOT SPECS. HYDROSTATIC TEST PRESSURE FOR WATER MAIN ACCEPTANCE SHALL BE 250 PSI AND SHALL BE DONE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. THE CITY OF FERNDALE LABORATORY SHALL CONDUCT ALL DISINFECTION AND BACTERIOLOGICAL TESTS. THE PIPE WILL NOT PASS TESTING UNLESS A ZERO BACTERIAL COUNT IS MEASURED ON TWO CONSECUTIVE

TESTS, CONDUCTED 24 HOURS APART. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE TESTING.

- 8. BACKFILL SHALL BE GRAVEL BASE, CLASS B, IN ALL STREET RIGHTS-OF-WAY, COMPACTED TO MINIMUM 95% OPTIMUM DENSITY. IN UNIMPROVED AREAS, MINIMUM COMPACTION SHALL BE 90% OF OPTIMUM DENSITY.
- 9. ALL PIPES SHALL HAVE A MINIMUM COVER OF 36".

PRE-CAST BLOCKS ARE ALLOWED.

- 10. ALL VALVES SHALL BE EITHER GATE OR BUTTERFLY TYPE VALVES AND SHALL BE INSTALLED WITH SLIP TYPE CAST IRON VALVE BOXES. GATE VALVES SHALL BE USED FOR LINES 2 INCHES THROUGH 10 INCHES IN DIAMETER. SHORT-BODY VALVES SUITABLE FOR A NON-SHOCK SHUT-OFF PRESSURE OF 130 PSI AND SUITABLE FOR DIRECT BURIAL ARE SPECIFIED. GATE VALVES SHALL BE RESILIENT SEATED IRON-BODY, FULL-BRONZE MOUNTED VALVES CONFORMING TO AWWA C509 AND SUITABLE FOR SERVICE WITH THE TYPE AND CLASS OF PIPE USED. ALL VALVES SHALL HAVE NON-RISING STEMS AND SHALL OPEN COUNTERCLOCKWISE AND SHALL BE EQUIPPED WITH A 2 INCH SQUARE OPERATING NUT. VALVES WILL BE FLANGE OR M.J. JOINTS. VALVE MARKERS SHALL BE LOCATED OUTSIDE OF PAVEMENT SECTIONS.
- 11. WATER SERVICE TAP INSTALLATIONS SHALL MEET THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.
- 12. FIRE HYDRANTS AND FIRE MAINS MUST CONFORM TO COFSD W-1 AND THE FOLLOWING STANDARDS:
- a. Fire hydrants shall have two individually valved 2-1/2" ports and one 5-1/4" main valve opening. A 4-1/2" NST PUMPER NOZZLE AND A 5" STORZ PORT WITH CAP AND AIRCRAFT CABLE SHALL BE SUPPLIED. HYDRANTS SHALL BE EITHER
- b. FIRE HYDRANTS SHALL HAVE THE STORZ PORT FACING THE REQUIRED ACCESS AND THE BASE FLANGE OF THE HYDRANT MUST NOT VARY MORE THAN 1 FOOT IN ELEVATION FROM THE GRADE LEVEL OF THE REQUIRED ACCESS. THE LOWEST STEM SHALL BE A MINIMUM OF 14" ABOVE THE GROUND.
- HYDRANT GUARD POSTS SHALL BE PROVIDED. NO OBSTRUCTIONS SHALL EXIST WITHIN A 3-FOOT WORKING AREA OF EACH REQUIRED ACCESS. HYDRANT SHUTOFF VALVES SHALL BE LOCATED BETWEEN 5' AND 20' FROM THE HYDRANT d. Underground supplies to fire hydrants must be inspected. Such inspection shall include visual inspection of

c. IF THE PUBLIC WORKS DIRECTOR DETERMINES THAT FIRE HYDRANTS ARE VULNERABLE TO VEHICULAR DAMAGE, APPROPRIATE

PIPING AND HYDROSTATIC PRESSURE TESTING TO A MIN. OF 250 PSI. A FLOW TEST WILL BE REQUIRED WHEN INSTALLATION IS

COMPLETE. e. FIRE HYDRANTS MUST BE MAINTAINED IN AN OPERABLE CONDITION AT ALL TIMES AND MUST BE REPAIRED OR REPLACED WHEN DEFECTIVE. HYDRANTS SHALL BE FULLY OPERABLE BEFORE CONSTRUCTION COMMENCES ABOVE GRADE LEVEL.

SCALE:

- 1. THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF THE STANDARD STREET SECTION:
 - TYPICAL STREET SECTION PER PROJECT
- PCC CURB AND GUTTER COFSD R-9 PCC SIDEWALKS COFSD R-12 (SEE CONSTRUCTION DOCUMENTS TYP. SECTION)
- PCC CURB RAMPS WSDOT STD. DETAIL F-40
- 2. ROADWAY EXCAVATION WITHIN THE ROADWAY PRISM SHALL BE CUT TO A UNIFORM GRADE. THE COMPLETED SUBGRADE SURFACE SHALL NOT VARY MORE THAN 0.10-FOOT FROM THE LOWER EDGE OF A 15-FOOT STRAIGHTEDGE PLACED ON THE SUBGRADE PARALLEL TO THE CENTERLINE UNLESS APPROVED BY THE ENGINEER.
- 3. THE OWNER SHALL PROVIDE TO THE ENGINEER A REPORT FROM A QUALIFIED GEOTECHNICAL FIRM CERTIFYING THE COMPACTION OF THE GRAVEL BASE UNDER ALL PAVING AREAS.
- 4. HOT MIX ASPHALT WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 5-04 OF THE WSDOT SPECS., EXCEPT AS MODIFIED HEREIN. CONNECTION TO EXISTING PAVEMENT SHALL BE TO A STRAIGHT NEATLY-TRIMMED LINE.
- 5. CRUSHED ROCK SURFACING FOR PAVEMENT SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 9-03.9(3);
- BALLAST PER SECTION 9-03.9(1).

6. CEMENT CONCRETE SHALL BE CLASS 3000 (WITH AIR ENTRAINMENT) IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION

7. CEMENT CONCRETE SIDEWALK SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER IN

THE ENGINEER IN ACCORDANCE WITH COFSD R-15. A 2- INCH LAYER OF 3/4 INCH DRAIN ROCK SHALL BE USED FOR DRIVEWAY

- 8. CEMENT CONCRETE DRIVEWAYS SHALL BE 6 INCHES THICK AND CONSTRUCTED WHERE SHOWN ON THE PLANS OR DESIGNATED BY
- 9. CEMENT CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED WHERE SHOWN ON THE PLANS OR AS DESIGNED BY THE ENGINEER, IN ACCORDANCE WITH WSDOT STANDARDS SPECIFICATIONS, SECTION 8-04 AND COFSD R-9. HANDICAP RAMPS SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS F-40. WHERE NEW CEMENT CONCRETE CURB AND GUTTER IS TO CONNECT TO EXISTING CURB AND GUTTER, ASSURE THAT NO ABRUPT OFFSETS IN LINE OR GRADE SHALL BE CONSTRUCTED WHICH WILL BE UNSIGHTLY OR IMPEDE FLOW IN THE GUTTER LINE.

10. PAVEMENT:

SIDE SEWERS

- a. SOIL RESIDUAL HERBICIDE SHALL BE PLACED WITHIN 24 HOURS OF PAVING.
- b. A TACK COAT OF ASPHALT SHALL BE APPLIED BETWEEN ALL COURSES OF ASPHALT. c. ALL PAVEMENT REPAIR SHALL BE SAW-CUT BEFORE REMOVAL. AR-4000W SHALL BE APPLIED TO ALL EDGES OF EXISTING
- PAVEMENT. WHERE NEWLY CONSTRUCTED PAVING MEETS EXISTING PAVING, THE APPLICANT SHALL PROVIDE A SMOOTH TRANSITION FROM EXISTING TO PROPOSED PAVING. CONTRACTOR SHALL COLD PLANE PER DIMENSIONS SPECIFIED ON THE PLANS, AND INSTALL A MINIMUM 2-FOOT WIDE PETROTAC PAVING FABRIC, OR EQUIVALENT, OVER JOINT BETWEEN PAVING LIFTS.

SANITARY SEWER SYSTEMS:

WAY SHALL BE SUBJECT TO APPROVAL BY THE CITY.

SIDE SEWERS SHALL HAVE A MINIMUM DIAMETER OF 4".

ACCORDANCE WITH CITY STANDARDS, COFSD R-12.

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING SANITARY SEWER IMPROVEMENTS:

COFSD SS-6, SS-8 & SS-13

PIPE BEDDING COFSD_SS-1 TRENCH BACKFILL COFSD SS-15 & COFSD SS-1 & WSDOT SPEC. 9-03.12

PRESENCE AND UNDER THE SUPERVISION OF A CITY OF FERNDALE REPRESENTATIVE.

- SS MANHOLE, TYPE 1-48" WSDOT STD. PLAN B-15.20-01
- SSMH RING & COVER, TYPE 2 WSDOT STD. PLAN B-30,70-03 SS CLEANOUTS COFSD SS-5
- 2. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF FERNDALE STANDARD SPECIFICATIONS AND DETAILS, AND WSDOT SPECS. SANITARY SEWER SYSTEM INSTALLATION, BOTH PUBLIC AND PRIVATE, IS SUBJECT TO CITY REVIEW AND APPROVAL.
- 3. ALL WORK MUST BE INSPECTED TO THE SATISFACTION OF THE CITY OF FERNDALE. 24 HOUR NOTICE MUST BE GIVEN PRIOR TO STARTING WORK. TESTING OF THE SEWER SYSTEM AND ALL CONNECTIONS TO EXISTING MAINS SHALL BE PERFORMED IN THE
- 4. SANITARY SEWER MAINS SHALL BE A MINIMUM 8 INCH DIAMETER PVC PIPE CONFORMING TO WSDOT SPEC 9-05.12(1) AND INSTALLED TO CITY SPECIFICATIONS.
- 5. SANITARY SEWER PIPE BEDDING SHALL BE PEA GRAVEL PER COFSD SS-1. ALL TRENCHES SHALL BE BACKFILLED WITH CLASS B BANK RUN GRAVEL WITHIN CITY RIGHT OF WAY AND TRAVELED WAYS OUTSIDE OF RIGHT OF WAY (ACCESS EASEMENTS) AND SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% MODIFIED PROCTOR. USE OF SUITABLE NATIVE BACKFILL OUTSIDE OF TRAVELED
- 6. ALL MANHOLES SHALL BE INSTALLED PER CITY OF FERNDALE STANDARD DETAILS AND SHALL BE PRE-CHANNELED. MANHOLE CONES
- ARE TO BE OFFSET SUCH THAT LADDER RUNGS ARE PARALLEL TO THE FLOW. 7. ALL SIDE SEWERS SHALL BE INSTALLED PER CITY OF FERNDALE STANDARD DETAILS SS-6, SS-8 OR SS-13, EXCEPT THAT SINGLE

INVERT INDICATED. THE LOCATION MARKER SHALL BE CONNECTED TO THE SERVICE STUB BY A #12 COPPER WIRE.

8. CONTRACTOR SHALL EXTEND SEWER STUBS 5 FEET BEYOND UTILITY CORRIDOR OR 15 FEET BEYOND RIGHT-OF-WAY LINE. 9. EACH SIDE SEWER STUB SHALL BE CAPPED WITH A WATERTIGHT PLUG. EACH STUB SHALL BE MARKED FOR LOCATION WITH A 2" DIA. PVC PIPE (MIN. SCHEDULE 40) WITH THE TOP 18" PAINTED GREEN AND STENCILED WITH THE WORD "SEWER" AND THE PIPE

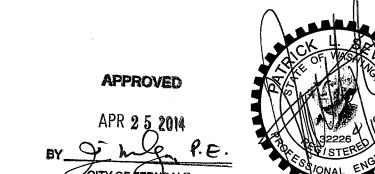
CONSTRUCTION RECORD DRAWING

- **CONSTRUCTION RECORD NOTE:** THESE DRAWINGS ARE PREPARED USING A COMBINATION OF CONTRACTOR PROVIDED REDLINES AND A CONSTRUCTION RECORD SURVEY PERFORMED BY NORTHWEST SURVEYING & GPS IN APRIL 2014. THE CONSTRUCTION RECORDS OF SAID DRAWINGS

WERE PERFORMED BY SOUND DEVELOPMENT GROUP 04.11.14.

102.00 102.02 -INDICATES CONSTRUCTION RECORD

CONSTRUCTION RECORD LEGEND 102.02 -INDICATES CONSTRUCTED AS DESIGNED



SHEET

CITY OF REBNIDALE

JOB NO. WHATCOM PHYSICAL THERAPY 12076 DRAWING NAME 12076PLN-ASB.dwg 7 OF 7 FERNDALE, WASHINGTON

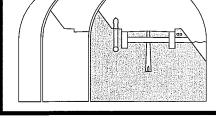
P.SEVERIN **DESIGNED BY: SPECIFICATIONS** CHECKED BY: P.SEVERIN CARLETTI ARCHITECTS FIELD BOOK/PAGE

AS NOTED | PROJECT

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

CONSTRUCTION RECORD DRAWINGS REVISED CONSTRUCTION RECORD DRAWINGS PER CITY SEVERIN NO. DATE **REVISIONS**

REVISED PER CITY COMMENTS



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Tel: 360-404-2010 Fax: 360-404-2013

SHEET DESCRIPTION

DRAWN BY:

FEBRUARY 2012 In a portion of se 1/4, section 19, township 39 n., range 2 e, w.m.