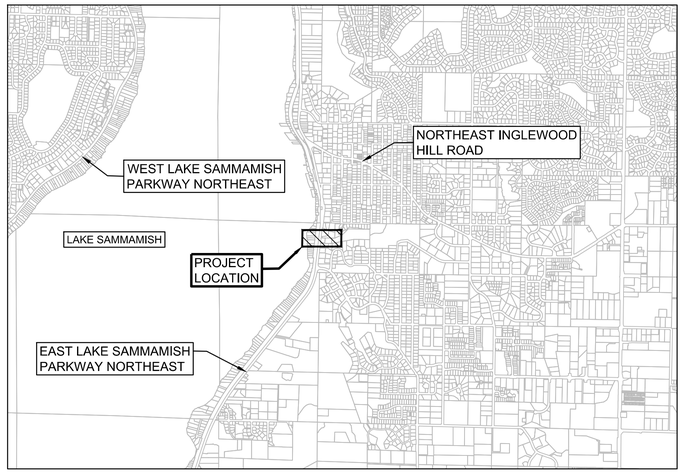
S32-T25N-R06E

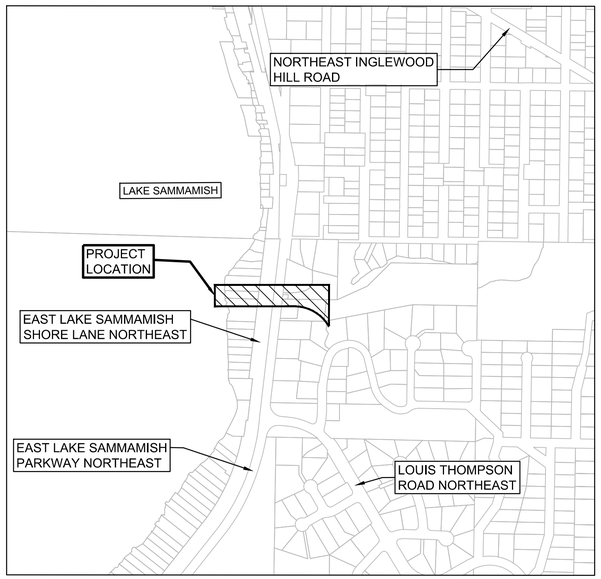
GEORGE DAVIS CREEK FISH PASSAGE PROJECT

CITY OF SAMMAMISH



SITE VICINITY MAP

SCALE: 1" = 2000' (@ 22X34)



SITE LOCATION MAP

SCALE: 1" = 500' (@ 22X34)

OWNER CONTACT INFORMATION:

OWNER:
CITY OF SAMMAMISH
801 228TH AVE SE
SAMMAMISH, WA 98075
PHONE: (425) 295-0500

MAYOR:
KAREN MORAN
EMAIL: KMORAN@SAMMAMISH.US

DEPUTY MAYOR:
CHRISTIE MALCHOW
EMAIL: CMALCHOW@SAMMAMISH.US

CITY COUNCIL:
JASON RITCHIE
KENT TREEN
CHRIS ROSS
KEN GAMBLIN
PAM STUART

CITY ENGINEER:
ANDREW ZAGARS, PE
EMAIL: AZAGARS@SAMMAMISH.US

ACTING DIRECTOR OF PUBLIC WORKS:
CHERYL PASTON, PE
EMAIL: CPASTON@SAMMAMISH.US

ENGINEER CONTACT INFORMATION:

CIVIL ENGINEER:
PBS ENGINEERING + ENVIRONMENTAL
1180 NW MAPLE STREET, SUITE 160
ISSAQUAH, WA 98027
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PROJECT MANAGER:
DAVE SEGAL, PE, PMP
E-MAIL: DAVE.SEGAL@PBSUSA.COM

PHONE NUMBERS:

FIRE / MEDIC 1 / POLICE	911
SAMMAMISH PUBLIC WORKS	(425) 295-0500
WATER (SAMMAMISH PLATEAU WATER & SEWER DISTRICT)	(425) 392-6256
SEWER (SAMMAMISH PLATEAU WATER & SEWER DISTRICT)	(425) 392-6256
POWER (PUGET SOUND ENERGY)	(425) 417-9188
GAS (PUGET SOUND ENERGY)	(425) 417-9188
COMMUNICATIONS (COMCAST)	(425) 263-5348
COMMUNICATIONS (CENTURY LINK)	(206) 261-1402
U.S. POST OFFICE, ISSAQUAH POSTMASTER	(425) 837-8795

Sheet Index

60% PLAN SET

No.	Revision	Date	By	App'd

PBS Engineering and Environmental Inc.
1180 NW Maple St. Ste 160
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COVER SHEET FOR:
GEORGE DAVIS CREEK FISH PASSAGE PROJECT
SAMMAMISH, WASHINGTON

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DESIGNED: DKE
CHECKED: DAS
MAY 2020
45015-004

SHEET ID
C-001
SHEET 1 OF 53

Filename: L:\Projects\45000\45015\45015-004\Civil\CAD\Working\Sheets\C-001 COVER SHEET.dwg Layout Tab: C-001 COVER SHEET User: Kaylan Smyth CAD Plot Date/Time: 5/24/2020 10:06:25 AM

Full Size Sheet Format Is 22x34; If Printed Size Is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale Is Not Accurate.

Existing Linetype Legend

Existing Sanitary Sewer Pipe	SS
Existing Storm Sewer Pipe	SD
Existing Water Pipe	WL
Existing Gas Line	G
Existing Curb	
Existing Gravel road	
Existing Paint Stripe	
Existing Right-of-way	
Existing Fence	
Existing Building	
Existing Property Line	
Existing Quarter Section	
Existing Wall	
Existing Contour	253
Existing Guardrail	
Existing Edge-of-pavement	
Existing Ordinary High Water	OHW

Proposed/Future Linetype Legend

Proposed Sawcut Line	
Proposed Paint Stripe	
Proposed Fence	
Proposed Contour	253
Proposed Water Pipe	WL
Proposed Gas Pipe	G
Proposed Guardrail	
Proposed Shoring	

Symbol Legend

Existing Water Valve	
Existing Fire Hydrant	
Existing Power Pole	
Existing Water Meter	
Existing Water Utility	
Existing Sanitary Manhole	
Existing Sign	
Existing Deciduous Tree	
Existing Coniferous Tree	
Existing Street Light	
Existing Septic Tank	
Existing Monitoring Well	MW
Existing Storm Structure	SD

Proposed Flow Arrow	
Proposed 90° Bend	
Proposed Fire Hydrant	
Proposed Sign	

Abbreviation Legend

Alignment	ALIGN	Lane	LN
Approximate / Approximately	APPROX	Left	LT
Bridge	BRG	Large Woody Debris	LWD
Centerline	℄	Maximum	MAX
Centerline	CL	Minimum	MIN
US Army Corps of Engineers	COE	Mechanical Joint	MJ
Crushed Surfacing Base Course	CSBC	Miles Per Hour	MPH
Court	CT	Northing	N
East	E	Northeast	NE
Easting	E	Ordinary High Water	OHW
Elevation	EL	Point Of Curve	PC
East Lake Sammamish Shore Lane	ELSSL	Parkway	PKWY
East Lake Sammamish Trail	ELST	Point Of Tangent	PT
Edge Of Pavement	EOP	Point Of Vertical Intersection	PVI
Existing	EXTG	Right Of Way	R/W
Foot / Feet	FT	Right Of Way	ROW
Hot Mixed Asphalt	HMA	Right	RT
Horizontal	HORIZ	Sanitary Sewer	SS
		Typical	TYP
		Vertical	VERT
		Washington State Department of Transportation	WSDOT
		Washington Department of Fish and Wildlife	VERT

Hatching Legend

- Asphalt Removal
- Proposed Hot Mixed Asphalt
- Proposed Cement Concrete
- Proposed Streambed Mix

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LEGEND FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

SAMMAMISH, WASHINGTON

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MAY 2020
45015-004

SHEET ID
C-002

SHEET 2 OF 53

60% PLAN SET

No.	Revision	Date	By	App'd

Full Size Sheet Format Is 22x34; If Printed Size Is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale Is Not Accurate.

Filename: L:\Projects\450004501\45015-004\Civil\CAD\Working\Sheets\C-001 COVER SHEET.dwg Layout Tab: C-002 LEGEND User: Kaylan Smyth CAD Plot Date/Time: 5/24/2020 10:21:31 AM

CITY OF SAMMAMISH GENERAL SITE PLAN NOTES:

1. ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PERMIT CONDITIONS, THE SAMMAMISH MUNICIPAL CODE (SMC), THE SAMMAMISH PUBLIC WORKS STANDARDS (PWS) AND THE CONDITIONS OF APPROVAL. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR AND THE PROFESSIONAL CIVIL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR DEVIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO THE CITY OF SAMMAMISH.
2. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THE CITY OF SAMMAMISH PUBLIC WORKS DEVELOPMENT REVIEW CHECKLIST. ANY DEVIATION FROM ADOPTED STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY IN WRITING PRIOR TO CONSTRUCTION.
3. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL OF UTILITIES NOT OWNED BY THE CITY (E.G. DOMESTIC WATER CONVEYANCE, SEWER CONVEYANCE, GAS, ELECTRICAL, ETC.).
4. PRIOR TO ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY, A PRECONSTRUCTION MEETING SHALL BE HELD BETWEEN THE CITY OF SAMMAMISH, THE APPLICANT(S), AND THE APPLICANT'S CONSTRUCTION REPRESENTATIVE.
5. A COPY OF THESE APPROVED PLANS SHALL BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
6. CONSTRUCTION HOURS ARE 7:00 AM TO 8:00 PM MONDAY THROUGH FRIDAY AND 9:00 AM TO 6:00 PM ON SATURDAYS. WORK IS NOT ALLOWED ON SUNDAYS AND SOME HOLIDAYS IN ACCORDANCE WITH SMC 16.05.030.
7. IT SHALL BE THE APPLICANT'S/CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL NECESSARY CONSTRUCTION EASEMENTS BEFORE INITIATING ANY OFF-SITE WORK.
8. VERTICAL DATUM SHALL BE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988) UNLESS OTHERWISE APPROVED BY THE CITY OF SAMMAMISH. HORIZONTAL DATUM SHALL BE IN THE WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, USING NORTH AMERICAN DATUM OF 1983 (NAD 83 (1991)) UNLESS OTHERWISE APPROVED BY THE CITY.
9. DEWATERING (GROUNDWATER) SYSTEM CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT WSDOT STANDARD SPECIFICATIONS.
10. OPEN CUTTING OF ROADWAYS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY AND NOTED ON THESE APPROVED PLANS.
11. 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. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL APPLY. WORK IN RIGHT-OF-WAY IS NOT AUTHORIZED UNTIL A TRAFFIC CONTROL PLAN IS APPROVED BY THE CITY.
12. ANY CHANGES TO THE APPROVED PLANS MUST BE SUBMITTED TO THE CITY IN WRITING. NO CONSTRUCTION ON THESE CHANGES SHALL BEGIN UNTIL APPROVED BY THE CITY.
13. PER RCW SECTION 19.122, CALL 811 BETWEEN TEN (10) AND TWO (2) BUSINESS DAYS BEFORE BEGINNING EXCAVATION WHERE ANY UNDERGROUND UTILITIES MAY BE LOCATED. FAILURE TO DO SO COULD MEAN BEARING SUBSTANTIAL REPAIR COSTS.
14. APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING UTILITY LOCATIONS WHETHER OR NOT THESE UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXERCISE ALL CARE TO AVOID DAMAGE TO ANY UTILITY. IF CONFLICTS WITH EXISTING UTILITIES ARISE DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS CONSTRUCTION INSPECTOR AND ANY CHANGES REQUIRED SHALL BE APPROVED BY THE CITY OF SAMMAMISH PUBLIC WORKS DEPARTMENT PRIOR TO COMMENCEMENT OF RELATED CONSTRUCTION ON THE PROJECT. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT UTILITY LOCATES ARE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
15. ALL DAMAGES INCURRED TO PUBLIC AND/OR PRIVATE PROPERTY BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPAIRED TO THE SATISFACTION OF THE PUBLIC WORKS CONSTRUCTION INSPECTOR BEFORE PROJECT APPROVAL AND/OR THE RELEASE OF THE PROJECT'S PERFORMANCE BOND.
16. ALL LANDSCAPED AREAS OF THE PROJECT SHALL INCLUDE A MINIMUM OF 8-INCHES OF COMPOSTED SOIL AMENDMENT ATOP A MINIMUM OF 4-INCHES SCARIFIED SOIL.
17. NO FINAL CUT OR FILL SLOPE SHALL EXCEED SLOPES OF TWO (2) HORIZONTAL TO ONE (1) VERTICAL WITHOUT STABILIZATION BY ROCKERY OR BY A STRUCTURAL RETAINING WALL, UNLESS DESIGNED AND COMPLETED UNDER THE SUPERVISION OF A LICENSED GEOTECHNICAL ENGINEER.
18. THESE PLANS ARE APPROVED FOR STANDARD ROAD AND DRAINAGE IMPROVEMENTS ONLY. STRUCTURES SUCH AS BRIDGES, VAULTS, AND RETAINING WALLS REQUIRE ADDITIONAL PERMITS FROM THE CITY PRIOR TO CONSTRUCTION.
19. NO MATERIALS OR EQUIPMENT SHALL BE PLACED OR STORED ON PUBLIC RIGHT-OF-WAY AT ANY TIME.
20. ANY CONSTRUCTION RESULTING IN A NEED FOR TRAFFIC CONTROL WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A RIGHT-OF-WAY PERMIT APPROVED BY THE CITY.
21. CONSTRUCTION NOISE SHALL BE LIMITED TO THE CONSTRUCTION HOURS AS STATED IN SMC 16.05.030.

CITY OF SAMMAMISH SWPPP PLAN NOTES:

1. ALL POLLUTANTS, INCLUDING WASTE MATERIALS, THAT OCCUR ONSITE SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.
2. COVER, CONTAINMENT, AND PROTECTION FROM VANDALISM SHALL BE PROVIDED FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND NON-INERT WASTES PRESENT ON THE SITE (SEE CHAPTER 173-304 WAC FOR THE DEFINITION OF INERT WASTE). ONSITE FUELING TANKS SHALL INCLUDE SECONDARY CONTAINMENT.
3. MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, SOLVENT AND DE-GREASING CLEANING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER RUNOFF MUST BE CONDUCTED USING SPILL PREVENTION MEASURES, SUCH AS DRIP PANS. CONTAMINATED SURFACES SHALL BE CLEANED IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT. EMERGENCY REPAIRS MAY BE PERFORMED ONSITE USING TEMPORARY PLASTIC PLACED BENEATH AND, IF RAINING, OVER THE VEHICLE.
4. APPLICATION OF AGRICULTURAL CHEMICALS, INCLUDING FERTILIZERS AND PESTICIDES, SHALL BE CONDUCTED IN A MANNER AND AT APPLICATION RATES THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO STORMWATER RUNOFF. MANUFACTURERS' RECOMMENDATIONS FOR APPLICATION RATES AND PROCEDURES SHALL BE FOLLOWED.
5. MEASURES SHALL BE USED TO PREVENT OR TREAT CONTAMINATION OF STORMWATER RUNOFF BY PH MODIFYING SOURCES. THESE SOURCES INCLUDE, BUT ARE NOT LIMITED TO, BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHING AND CURING WATERS, WASTE STREAMS GENERATED FROM CONCRETE GRINDING AND SAWING, EXPOSED AGGREGATE PROCESSES, AND CONCRETE PUMPING AND MIXER WASHOUT WATERS. STORMWATER DISCHARGES SHALL NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE WATER QUALITY STANDARD FOR PH IN THE RECEIVING WATER.

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PBS Engineering and Environmental Inc.
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GENERAL SITE AND SWPPS PLAN NOTES FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

SAMMAMISH, WASHINGTON

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45015-004

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C-003

SHEET 3 OF 53

CITY OF SAMMAMISH EROSION & SEDIMENT CONTROL PLAN NOTES:

1. APPROVAL OF THIS 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, UTILITIES, ETC.).

2. THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.

3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, DISTURBANCE BEYOND THE CLEARING LIMITS IS NOT PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.

4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT-OF-WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT.

5. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, FLOW CONTROL BMP LOCATIONS (EXISTING AND PROPOSED), AND ADJACENT PROPERTIES IS MINIMIZED.

6. 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 AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.) OR AS DIRECTED BY THE CITY.

7. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR DURING NON-RAINFALL PERIODS, EVERY HOUR (DAYLIGHT) DURING A RAINFALL EVENT, AND AT THE END OF EVERY RAINFALL, AND MAINTAINED TO ENSURE THEIR CONTINUED PROPER FUNCTIONING. IN ADDITION, TEMPORARY SILTATION PONDS AND ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPT 30).

8. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC COVER METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).

9. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.

10. THE ESC FACILITIES ON *INACTIVE* SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH (MORE FREQUENTLY AS REQUIRED BY THE PUBLIC WORKS CONSTRUCTION INSPECTOR) OR WITHIN TWENTY-FOUR (24) HOURS FOLLOWING A STORM EVENT.

11. 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.

12. 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 FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE PERMANENT FACILITY SHALL NOT BE USED AS A TEMPORARY SETTLING BASIN, ELSE THE TEMPORARY FACILITY MUST BE GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY. NO UNDERGROUND DETENTION TANK, DETENTION VAULT, OR SYSTEM WHICH BACKS UNDER OR INTO A POND SHALL BE USED AS A TEMPORARY SETTLING BASIN. FLOW CONTROL BMP AREAS (EXISTING OR PROPOSED) SHALL NOT BE USED AS TEMPORARY FACILITIES AND SHALL BE PROTECTED FROM SEDIMENTATION AND INTRUSION.

13. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE KING COUNTY SURFACE WATER DESIGN MANUAL.

14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCTOBER 1) OF EACH YEAR, ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. THE IDENTIFIED DISTURBED AREA SHALL BE SEEDED WITHIN ONE WEEK AFTER OCTOBER 1. A SKETCH MAP DEPICTING THE AREAS TO BE SEEDED AND THE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR. THE INSPECTOR MAY REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

15. ALL EROSION/SEDIMENTATION CONTROL PONDS WITH A DEAD STORAGE DEPTH EXCEEDING SIX INCHES (6") MUST HAVE A HIGHLY VISIBLE PERIMETER FENCE WITH A MINIMUM HEIGHT OF THREE FEET (3').

16. ALL LOTS ADJOINING OR HAVING ANY NATIVE GROWTH PROTECTION EASEMENTS (NGPE) OR SENSITIVE AREA TRACT SHALL HAVE A MINIMUM FOUR-FOOT (4') 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.

17. CLEARING LIMITS SHALL BE DELINEATED WITH A CLEARING CONTROL FENCE. THE CLEARING CONTROL FENCE SHALL CONSIST OF A FOUR-FOOT (4') HIGH TEMPORARY CONSTRUCTION FENCE. CLEARING CONTROL FENCES ALONG WETLAND OR STREAM BUFFERS OR UPSLOPE OF SENSITIVE SLOPES SHALL BE ACCOMPANIED BY TWO ROWS OF EROSION CONTROL FENCE. IF DETERMINED APPROPRIATE BY CITY OF SAMMAMISH A SIX-FOOT (6') HIGH CHAIN LINK FENCE MAY BE REQUIRED.

18. IF SEDIMENT IS TRACKED OFFSITE, PUBLIC ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY, OR MORE FREQUENTLY DURING WET WEATHER, IF NECESSARY TO PREVENT SEDIMENT FROM ENTERING WATERS OF THE STATE. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR PICKUP SWEEPING AND SHALL BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. STREET WASHING WILL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. STREET WASH WASTEWATER SHALL BE CONTROLLED BY PUMPING BACK ONSITE, OR OTHERWISE BE PREVENTED FROM DISCHARGING INTO DRAINAGE SYSTEMS TRIBUTARY TO SURFACE WATERS.

19. 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 CONSTRUCTION. CATCH BASINS DIRECTLY DOWNSTREAM OF THE CONSTRUCTION ENTRANCE OR ANY OTHER CATCH BASIN AS DETERMINED BY THE PUBLIC WORKS CONSTRUCTION INSPECTOR SHALL BE PROTECTED WITH A "FILTER FABRIC SOCK" OR EQUIVALENT. AT NO TIME SHALL MORE SEDIMENT THAN ONE-THIRD (1/3) OF THE AVAILABLE STORAGE BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN INSERT. SEE SECTION D.2.1.5.3 OF THE 2016 KCSWDM APPENDIX D.

20. 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 SAMMAMISH PUBLIC WORKS CONSTRUCTION INSPECTOR. ALL INTERCEPTOR SWALES SHALL BE CLEANED IF SILT ACCUMULATION EXCEEDS ONE-HALF FOOT (0.5') DEPTH.

21. ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF 1' AND MUST MEET WSDOT SPECIFICATIONS 4"-8" ROCK/40%-70% PASSING; 2"-4" ROCK/30%-40% PASSING; AND 1"-2" ROCK/10%-20% PASSING.

22. FLUSHING CONCRETE BY-PRODUCTS OR TRUCKS NEAR OR INTO THE STORM DRAINAGE SYSTEM SHALL NOT BE ALLOWED. IF EXPOSED AGGREGATE IS FLUSHED INTO THE STORM SYSTEM, IT MAY RESULT IN RE-INSPECTION AND RE-CLEANING THE ENTIRE AFFECTED DOWNSTREAM STORM SYSTEM, OR POSSIBLY RE-LAYING THE STORM LINE.

23. MAXIMUM RELEASE RATE FROM THE SITE AT ANY TIME DURING CONSTRUCTION AND DURING THE MAINTENANCE AND DEFECT PERIOD SHALL BE NO MORE THAN ONE-HALF OF THE 2-YEAR PEAK FLOW WHEN THE FLOW CONTROL STRUCTURE IS BYPASSED.

24. DURING THE WET SEASON (OCTOBER 1 - APRIL 30) NOTES:
    a. THE ALLOWED TIME THAT A DISTURBED AREA MAY REMAIN UNWORKED WITHOUT COVER MEASURES IS REDUCED TO TWO CONSECUTIVE WORKING DAYS, RATHER THAN SEVEN (SECTION D.2.1.2).
    b. STOCKPILES AND STEEP CUT AND FILL SLOPES ARE TO BE PROTECTED IF UNWORKED FOR MORE THAN 12 HOURS (SECTION D.2.1.2).
    c. COVER MATERIALS SUFFICIENT TO COVER ALL DISTURBED AREAS SHALL BE STOCKPILED ON SITE (SECTION D.2.1.2).
    d. ALL AREAS THAT ARE TO BE UNWORKED DURING THE WET SEASON SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON (SECTION D.2.1.2.6).
    e. MULCH IS REQUIRED TO PROTECT ALL SEEDED AREAS (SECTION D.2.1.2.2).
    f. FIFTY LINEAR FEET OF SILT FENCE (AND THE NECESSARY STAKES) PER ACRE OF DISTURBANCE MUST BE STOCKPILED ON SITE (SECTION D.2.1.3.1).
    g. CONSTRUCTION ROAD AND PARKING LOT STABILIZATION ARE REQUIRED FOR ALL SITES UNLESS THE SITE IS UNDERLAIN BY COARSE-GRAINED SOIL (SECTION D.2.1.4.2).
    h. SEDIMENT RETENTION IS REQUIRED UNLESS NO OFFSITE DISCHARGE IS ANTICIPATED FOR THE SPECIFIED DESIGN FLOW (SECTION D.2.1.5).
    i. SURFACE WATER CONTROLS ARE REQUIRED UNLESS NO OFFSITE DISCHARGE IS ANTICIPATED FOR THE SPECIFIED DESIGN FLOW (SECTION D.2.1.6).
    j. PHASING AND MORE CONSERVATIVE BMPS MUST BE EVALUATED FOR CONSTRUCTION ACTIVITY NEAR SURFACE WATERS (SECTION D.2.4.3).
    k. ANY RUNOFF GENERATED BY DEWATERING MAY BE REQUIRED TO DISCHARGE TO THE SANITARY SEWER (WITH APPROPRIATE DISCHARGE AUTHORIZATION), PORTABLE SAND FILTER SYSTEMS, OR HOLDING TANKS (SECTION D.2.2).
    l. WHEN LOCATED WITHIN AN ENVIRONMENTALLY CRITICAL AREA, A WET SEASON PERMIT IS REQUIRED.

25. A DETAILED CONSTRUCTION SEQUENCE IS REQUIRED TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE APPLIED AT THE APPROPRIATE TIMES. A CONSTRUCTION SEQUENCE TEMPLATE IS PROVIDED BELOW, TO BE UPDATED TO SPECIFICALLY MATCH THE PROJECT:
    a. PRE-CONSTRUCTION MEETING.
    b. POST SIGN WITH NAME AND PHONE NUMBER OF CSWPP/ESC SUPERVISOR.
    c. FLAG OR FENCE CLEARING LIMITS.
    d. INSTALL CATCH BASIN PROTECTION, IF REQUIRED.
    e. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
    f. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
    g. CONSTRUCT SEDIMENT PONDS AND TRAPS.
    h. GRADE AND STABILIZE CONSTRUCTION ROADS.
    i. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
    j. MAINTAIN EROSION CONTROL MEASURE IN ACCORDANCE WITH CITY PUBLIC WORKS STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
    k. RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY ESC MINIMUM REQUIREMENTS.
    l. COVER ALL AREAS WITHIN THE SPECIFIED TIME FRAME WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, CRUSHED ROCK OR EQUIVALENT.
    m. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN SEVEN (7) DAYS.
    n. SEED OR SOD ANY AREAS TO REMAIN UN-WORKED FOR MORE THAN THIRTY (30) DAYS.
    o. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BEST MANAGEMENT PRACTICES (BMPS) REMOVED IF APPROPRIATE.

60% PLAN SET

No.	Revision	Date	By	App'd

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EROSION & SEDIMENT CONTROL PLAN NOTES FOR:
GEORGE DAVIS CREEK FISH PASSAGE PROJECT
SAMMAMISH, WASHINGTON

811 Know what's below. Call before you dig.

DESIGNED: DKE
CHECKED: DAS
MAY 2020
45015-004
SHEET ID
C-004
SHEET 4 OF 53

CITY OF SAMMAMISH DRAINAGE PLAN NOTES:

1. PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO PUBLIC WORKS PRIOR TO THE CONSTRUCTION OF THE DRAINAGE FACILITIES, PREFERABLY AT THE PRECONSTRUCTION MEETING.

2. ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT SPECIFICATIONS. THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF THE FOUNDATION MATERIAL, AND ANY REQUIRED PIPE BEDDING, TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE.

3. A LICENSED SURVEYOR SHALL SURVEY AND STAKE ALL STORM DRAIN FACILITIES AND CONVEYANCE LINES WITH ASSOCIATED EASEMENTS AND DEDICATIONS NOT LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY. PUBLIC WORKS CONSTRUCTION INSPECTOR SHALL INSPECT AND VERIFY LOCATIONS PRIOR TO FINAL PLAT AND EASEMENT RECORDING.

4. STEEL PIPE SHALL BE ALUMINIZED, OR GALVANIZED WITH ASPHALT TREATMENT #1 OR BETTER INSIDE AND OUTSIDE.

5. ALL DRAINAGE STRUCTURES, SUCH AS CATCH BASINS AND MANHOLES, NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK, SHALL HAVE SOLID LOCKING LIDS. ALL DRAINAGE STRUCTURES ASSOCIATED WITH A PERMANENT RETENTION/DETENTION FACILITY SHALL HAVE SOLID LOCKING LIDS.

6. ALL DRIVEWAY CULVERTS LOCATED WITHIN SAMMAMISH RIGHT-OF-WAY SHALL BE OF SUFFICIENT LENGTH TO PROVIDE A MINIMUM 3:1 SLOPE FROM THE EDGE OF THE DRIVEWAY TO THE BOTTOM OF THE DITCH. CULVERTS SHALL HAVE BEVELED END SECTIONS TO MATCH THE SIDE SLOPE.

7. DRAINAGE OUTLETS (STUB-OUTS) SHALL BE PROVIDED FOR EACH INDIVIDUAL LOT, EXCEPT FOR THOSE LOTS APPROVED FOR INFILTRATION. STUB-OUTS SHALL CONFORM TO THE FOLLOWING:

    a. EACH OUTLET SHALL BE SUITABLY LOCATED AT THE LOWEST ELEVATION ON THE LOT, SO AS TO SERVICE ALL FUTURE ROOF DOWNSPOUTS AND FOOTING DRAINS, DRIVEWAYS, YARD DRAINS, AND ANY OTHER SURFACE OR SUBSURFACE DRAINS NECESSARY TO RENDER THE LOTS SUITABLE FOR THEIR INTENDED USE. EACH OUTLET SHALL HAVE FREE-FLOWING, POSITIVE DRAINAGE TO AN APPROVED STORMWATER CONVEYANCE SYSTEM OR TO AN APPROVED OUTFALL LOCATION.

    b. OUTLETS ON EACH LOT SHALL BE LOCATED WITH A FIVE-FOOT-HIGH, 2" X 4" STAKE MARKED "STORM" OR "DRAIN". THE STUB-OUT SHALL EXTEND ABOVE SURFACE LEVEL, BE VISIBLE, AND BE SECURED TO THE STAKE.

    c. PIPE MATERIAL SHALL CONFORM TO UNDERDRAIN SPECIFICATIONS DESCRIBED IN THE PUBLIC WORKS STANDARDS AND, IF NON-METALLIC, THE PIPE SHALL CONTAIN WIRE OR OTHER ACCEPTABLE DETECTION.

    d. DRAINAGE EASEMENTS ARE REQUIRED FOR DRAINAGE SYSTEMS DESIGNED TO CONVEY FLOWS THROUGH INDIVIDUAL LOTS.

    e. THE APPLICANT/CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS OF ALL STUB-OUT CONVEYANCE LINES WITH RESPECT TO THE UTILITIES (E.G. POWER, GAS, TELEPHONE, TELEVISION).

    f. ALL INDIVIDUAL STUB-OUTS SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE LOT HOMEOWNER.

8. ACCEPTABLE STORM PIPE MATERIAL IS AS FOLLOWS: PLAIN AND REINFORCED CONCRETE PIPE; CORRUGATED OR SPIRAL RIB ALUMINUM PIPE; CORRUGATED STEEL PIPE (ALUMINIZED OR GALVANIZED WITH TREATMENTS 1, 2 OR 5); SPIRAL RIB STEEL PIPE (ALUMINIZED OR GALVANIZED WITH TREATMENTS 1, 2 OR 5); DUCTILE IRON PIPE (WATER SUPPLY, CLASS 50 OR 52); POLYPROPYLENE CULVERT OR STORM SEWER PIPE (WSDOT SECTION 9-05.24), HIGH DENSITY POLYETHYLENE PIPE (HDPE, INCLUDING SOLID WALL POLYETHYLENE PIPE). REFER TO THE 2016 KING COUNTY SURFACE WATER DESIGN MANUAL SECTION 4.2 AND THE 2016 SAMMAMISH SURFACE WATER DESIGN MANUAL ADDENDUM CHAPTER 4 FOR DETAILS.

9. MINIMUM COVER OVER STORM DRAINAGE PIPES AND FACILITIES SHALL BE TWO FEET (2') UNLESS OTHERWISE SHOWN AND APPROVED.

10. THE MOST RECENTLY UPDATED WSDOT STANDARD PLANS SECTION B SHALL BE USED TO DETERMINE ACCEPTABLE DESIGN AND CONSTRUCTION STANDARDS FOR DRAINAGE STRUCTURES.

11. CATCH BASINS WITH A DEPTH OF OVER FIVE FEET (5') TO THE PIPE INVERT SHALL BE A TYPE II CATCH BASIN. TYPE II CATCH BASINS EXCEEDING FIVE FEET (5') IN DEPTH SHALL HAVE A STANDARD LADDER INSTALLED. ALL MANHOLE LADDERS SHALL BE FIRMLY ATTACHED AND EXTEND TO WITHIN 16" OF THE BOTTOM OF THE STRUCTURE. LADDERS REQUIRED WITHIN DRAINAGE STRUCTURES SHALL NOT BLOCK INLET OR OUTLET PIPES AND MUST BE ACCESSIBLE FROM STRUCTURE OPENING. REFER TO WSDOT STANDARD PLANS FOR DETAILS AND SPECIFICATIONS.

12. ALL CATCH BASIN INLETS LOCATED OUTSIDE OF SURFACE WATER FLOW LINE SHALL BE TYPE 2 WITH SOLID ROUND LOCKING COVERS. FOR STRUCTURES LOCATED IN ROADWAYS, LIDS SHALL NOT BE LOCATED WITHIN THE WHEEL PATH.

13. ALL INLET, MANHOLE, AND CATCH BASIN FRAMES AND GRATES SHALL NOT BE ADJUSTED TO GRADE UNTIL IMMEDIATELY PRIOR TO FINAL PAVING, EXCEPT CATCH BASIN INLETS LOCATED IN THE CURB FLOW LINE. ALL CATCH BASIN GRATES SHALL BE SET 0.10' BELOW PAVEMENT LEVEL.

14. ALL CATCH BASIN GRATES SHALL BE VANED GRATES OR SOLID LID COVERS. HERRINGBONE GRATES ARE NOT ALLOWED. ALL CATCH BASINS LOCATED IN UNPAVED AREAS MUST HAVE AT LEAST A TWO (2) FEET WIDE AND FOUR (4) INCH THICK ASPHALT RING AROUND THE PERIMETER.

15. 12-INCH IS THE MINIMUM NOMINAL SURFACE WATER CONVEYANCE PIPE DIAMETER TO BE MAINTAINED BY THE CITY.

16. MAXIMUM PIPE RUN BETWEEN STRUCTURES SHALL BE 300 FEET. FOR MAINTENANCE OF STRUCTURES, A TRUCK TURNAROUND SHALL BE PROVIDED. MAXIMUM DISTANCE BETWEEN MAINTENANCE VEHICLE ACCESS AND DRAINAGE STRUCTURE SHALL BE 150 FEET.

17. MINIMUM PIPE SLOPE SHALL BE 0.5%.

18. ONCE BACKFILL IS COMPLETE, THE LINE AND GRADE AT PIPE FLOW LINE LEAVING STANDING WATER GREATER THAN ONE-HALF INCH IN DEPTH SHALL NOT BE ACCEPTED AND MUST BE REPAIRED PRIOR TO ACCEPTANCE BY THE CITY.

19. ROOF AND FOOTING DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM SEPARATELY.

20. ALL PUBLIC STORMWATER FACILITIES SHALL BE DRAINED, JETTED, AND CLEANED PRIOR TO FINAL PLAT, PRIOR TO ACCEPTANCE INTO MAINTENANCE AND DEFECT PERIOD AND PRIOR TO THE RELEASE OF MAINTENANCE AND DEFECT INCLUDING ALL STORM PONDS, VAULTS, CATCH BASINS, AND CONVEYANCE PIPES.

21. ALL PRIVATE STORMWATER FACILITIES SHALL BE DRAINED, JETTED, AND CLEANED PRIOR TO FINAL OCCUPANCY.

22. ALL FILTER CARTRIDGES SHALL BE INSPECTED EVERY SIX MONTHS DURING THE MAINTENANCE AND DEFECT PERIOD TO PROVIDE PROPER FUNCTION AND SHALL BE REPLACED PRIOR TO RELEASE OF MAINTENANCE AND DEFECT.

23. PRIOR TO FINAL PAVING ALL STORMWATER PIPE LOCATED IN THE PUBLIC RIGHT-OF-WAY OR IDENTIFIED TO BE MAINTAINED BY THE CITY IN A PUBLIC EASEMENT SHALL BE RECORDED UNDER CLOSED CIRCUIT TELEVISION (CCTV). AN ELECTRONIC COPY SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT FOR REVIEW AND APPROVAL.

24. LOW IMPACT DEVELOPMENT (LID) INFILTRATION AND DISPERSION AREAS SHALL BE PROTECTED FROM COMPACTION AND SEDIMENT ACCUMULATION DURING CONSTRUCTION. SCARIFY BOTTOM OF ALL INFILTRATION FACILITIES INCLUDING RAIN GARDENS, BIORETENTION AREAS, POROUS PAVEMENTS, INFILTRATION TRENCHES, DRY WELLS, AND INFILTRATION FACILITIES MINIMUM 12-INCHES PRIOR TO BACKFILL WITH ROCK OR MEDIA. ALL BACKFILL SHALL BE MINIMALLY COMPACTED UP TO 85% DENSITY OR AS SPECIFIED ON PLANS.

25. ALL ROCKERY OR RETAINING WALL DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM, OR DAYLIGHTED TO AN ACCEPTABLE DISCHARGE LOCATION AS APPROVED BY THE CITY.

26. PRIOR TO FINAL PLAT APPROVAL, ALL PUBLIC AND PRIVATE STORMWATER FACILITIES SHALL BE CONSTRUCTED AND IN FULL OPERATION. THESE FACILITIES SHALL INCLUDE THE STORMWATER CONVEYANCE SYSTEM, DETENTION, WATER QUALITY, LOW IMPACT DEVELOPMENT BEST MANAGEMENT PRACTICES (LID BMPS) AND ANY REQUIRED MONITORING FACILITIES. THE CONVEYANCE SYSTEM SHALL INCLUDE ALL DRAINAGE STRUCTURES, PIPING, DITCHING, CURB, GUTTER, AND ROAD PAVING WITH THE EXCEPTION OF THE FINAL LIFT OF ASPHALT. UNLESS USED TO REDUCE THE SIZE OF DETENTION OR WATER QUALITY FACILITIES, LID BMPS SUCH AS BASIC DISPERSION AND INFILTRATION DEVICES LOCATED ON INDIVIDUAL SINGLE FAMILY RESIDENTIAL LOTS MAY BE CONSTRUCTED WITH SFR BUILDING PERMIT AND ARE NOT REQUIRED TO BE CONSTRUCTED PRIOR TO FINAL PLAT. IF SINGLE FAMILY LID BMPS WERE USED TO REDUCE THE SIZE OF DETENTION OR WATER FACILITIES (CREDIT GIVEN), LID BMPS SHALL BE CONSTRUCTED AND IN FULL OPERATION PRIOR TO FINAL PLAT APPROVAL.

27. THE DEVELOPER SHALL PURCHASE FROM THE CITY AND INSTALL STORM DRAIN MARKERS AND ADHESIVE, STATING "ONLY RAIN DOWN THE DRAIN", ON ALL CATCH BASINS. INSTALLATION INSTRUCTIONS ARE PROVIDED WITH THE DRAIN MARKERS. PLACEMENT ON ROADWAY ASPHALT SHALL BE AVOIDED.

28. THE 100-YEAR DESIGN ELEVATION OF DOWNSTREAM STORMWATER FACILITIES SUCH AS STORMWATER PONDS OR VAULTS SHALL BE AT OR BELOW ALL PIPE INVERTS. EXCEPTION TO THIS STANDARD IS THE PIPE FROM THE FIRST CATCH BASIN JUST UPSTREAM OF THE STORMWATER FACILITY MAY BE SUBMERGED TO ALLOW PIPE INLET TO FACILITY TO BE SUBMERGED.

29. IMPROVEMENTS AND/OR BUILDINGS SHALL NOT BE INSTALLED UNTIL DRAINAGE FACILITIES ARE "IN OPERATION", (SMC 13.20.060).

60% PLAN SET

No.	Revision	Date	By	App'd

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PBS

DRAINAGE PLAN NOTES FOR:
GEORGE DAVIS CREEK FISH PASSAGE PROJECT
SAMMAMISH, WASHINGTON

811 Know what's below. Call before you dig.

DESIGNED: DKE
CHECKED: DAS
MAY 2020
45015-004

SHEET ID
C-005

SHEET 5 OF 53

Full Size Sheet Format Is 22x34; If Printed Size Is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale Is Not Accurate.

Filename: L:\Projects\45000\45015\45015-004\Civil\CAD\Working\Sheets\C-001 COVER SHEET.dwg Layout Tab: C-005 DRAINAGE PLAN NOTES User: Kaylan Smyth CAD Plot Date/Time: 5/24/2020 10:08:34 AM

CITY OF SAMMAMISH ROADWAY PLAN NOTES:

1. ALL CONCRETE FOR SIDEWALKS AND CURB AND GUTTER MUST BE 4,000-PSI MINIMUM AND FOUR (4) INCHES THICK WHEN NOT VEHICLE ACCESSIBLE AND SIX (6) INCHES THICK WHEN ACCESSIBLE TO VEHICLES OR EIGHT (8) INCHES THICK IN COMMERCIAL DRIVEWAYS.

2. IN THE CASE OF NEW ROAD CONSTRUCTION OR RECONSTRUCTION REQUIRING MAILBOXES TO BE MOVED OR REARRANGED, THE APPLICANT/CONTRACTOR SHALL COORDINATE WITH THE U.S. POSTAL SERVICE FOR THE NEW LOCATION OF THE MAILBOX STRUCTURE, AND SHALL NOTIFY THE CITY PUBLIC WORKS CONSTRUCTION INSPECTOR AND MAILBOX USER(S) OF THE CHANGE A MINIMUM OF TWO (2) WEEKS BEFORE IT OCCURS.

3. ANY ROADWAY SIGNAGE OR STRIPING THAT IS DAMAGED, REMOVED, OR TEMPORARILY RELOCATED BY THE CONTRACTOR SHALL BE RESTORED TO MEET THE CURRENT CITY OF SAMMAMISH PUBLIC WORKS STANDARDS.

4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY TRAFFIC CONTROL TO ENSURE TRAFFIC SAFETY DURING CONSTRUCTION ACTIVITIES. THEREFORE, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY PUBLIC WORKS CONSTRUCTION INSPECTOR AT LEAST 48 HOURS PRIOR TO STARTING ANY WORK IN THE RIGHT-OF-WAY. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) OR AS APPROVED BY THE TRAFFIC ENGINEER.

5. WHERE A SIDEWALK IS TO BE CONSTRUCTED ABOVE A SLOPE OR ADJACENT TO A ROCKERY OR RETAINING WALL WHERE THE LOWEST FINISHED ELEVATION OF THE SLOPE, ROCKERY, OR RETAINING WALL IS TO BE THIRTY INCHES (30") OR MORE BELOW THE FINISHED ELEVATION OF THE SIDEWALK, A SAFETY RAILING SHALL BE REQUIRED WHEN: (A) THE VERTICAL WALL FACE IS LESS THAN FOUR FEET IN HORIZONTAL DISTANCE FROM THE NEAR SIDE FACE OF THE FACILITY; (B) THE VERTICAL WALL FACE IS GREATER THAN FOUR FEET HORIZONTALLY TO THE NEAR SIDE FACE OF THE FACILITY AND THE SLOPE TO THE WALL IS STEEPER THAN 1V:3H; (C) THE SLOPES ADJACENT TO THE FACILITY AVERAGE GREATER THAN 1V:2H. SEE FIGURE 15.3 OF THE PUBLIC WORKS STANDARDS.

6. DEAD-END STREETS SHALL BE SIGNED IN ACCORDANCE WITH THE MUTCD. WHERE A ROADWAY CONNECTION IS PLANNED, SIGNAGE SHALL BE PROVIDED TO DESIGNATE A FUTURE ROADWAY EXTENSION.

7. SIDEWALK AND CURB AND GUTTER CANNOT BE POURED MONOLITHICALLY. THERE MUST BE A FULL DEPTH EXPANSION JOINT BETWEEN THEM.

8. THE DEVELOPER SHALL COORDINATE WITH PUGET SOUND ENERGY FOR THE DESIGN AND INSTALLATION OF STREETLIGHTS ON ALL NEWLY CREATED PUBLIC ROADWAYS AND EXISTING ROADWAYS THAT ARE LOCAL STREETS. NEW STREETLIGHTS ON ARTERIAL STREETS SHALL BE DESIGNED BY CONSULTANT ENGINEER AND APPROVED BY THE CITY.

9. WHEN AN EXISTING ROADWAY IS TO RECEIVE A HALF-STREET OVERLAY, THE EXISTING ROADWAY MUST BE COLD PLANED AT THE EDGE OF THE GUTTER AND CENTERLINE. WHEN THE EXISTING ROADWAY IS TO RECEIVE A FULL-STREET OVERLAY, IT MUST BE COLD PLANED FOR THE FULL WIDTH OF THE ROADWAY.

10. ALL NEW CHANNELIZATION AND SIGNAGE SHALL BE PROVIDED AND LAID OUT CONSISTENT WITH THE CITY OF SAMMAMISH PUBLIC WORKS TRAFFIC ENGINEER APPROVAL. CONTACT THE CITY TRAFFIC ENGINEER AT LEAST ONE (1) WEEK PRIOR TO SCHEDULING CHANNELIZATION.

11. ALL NEW SIGNS REQUIRED IN THE PUBLIC RIGHT-OF-WAY MUST BE INSTALLED BY THE APPLICANT/CONTRACTOR PER CITY OF SAMMAMISH PUBLIC WORKS STANDARDS. PROCUREMENT AND INSTALLATION SHALL BE PAID FOR BY THE APPLICANT/CONTRACTOR. TO INITIATE SIGNAGE INSTALLATION, CONTRACTOR SHALL CONTACT THE PUBLIC WORKS INSPECTOR A MINIMUM OF SIX (6) WEEKS PRIOR TO FINAL PLAT/FINAL ACCEPTANCE. TEMPORARY STREET SIGNS MAY BE REQUIRED FOR INTERNAL PLAT ROADS FOR EMERGENCY VEHICLE ACCESS. ANY NO PARKING SIGNS SHALL BE INSTALLED PRIOR TO FINAL PLAT.

12. WHEN INSTALLING NEW SIDEWALK, THE AREA BEHIND THE SIDEWALK MUST BE GRADED SO THAT SURFACE WATER DOES NOT DRAIN OVER THE SIDEWALK.

13. ANY EXISTING PUBLIC IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED PRIOR TO RELEASE OF MAINTENANCE AND DEFECT.

14. OPEN CUT ROAD CROSSINGS FOR UTILITY TRENCHES ON EXISTING TRAVELED ROADWAY SHALL BE BACKFILLED ONLY WITH 5/8" MINUS CRUSHED ROCK AND MECHANICALLY COMPACTED (UNLESS OTHERWISE APPROVED BY THE CITY). FOR STREETS CLASSIFIED AS ARTERIALS, BACKFILL FOR CROSSINGS SHALL BE CDF. CUTS INTO THE EXISTING ASPHALT SHALL BE NEAT LINE CUT WITH SAW OR JACKHAMMER IN A CONTINUOUS LINE. A TEMPORARY COLD MIX PATCH MUST BE PLACED IMMEDIATELY AFTER BACKFILL AND COMPACTION. A PERMANENT HOT MIX PATCH SHALL BE PLACED WITHIN 30 DAYS AND SHALL BE A MINIMUM OF 1" THICKER THAN THE ORIGINAL ASPHALT WITH A MINIMUM THICKNESS OF 2".

15. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY (MODIFIED PROCTOR ASTM-D1557) IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 90 PERCENT DENSITY (MODIFIED PROCTOR ASTM-D1557) IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT (MODIFIED PROCTOR ASTM-D1557).

16. WHEN CONSTRUCTING NEW CURB AND GUTTER THAT DOES NOT ALIGN WITH THE EXISTING EDGE OF PAVEMENT, THE ROADWAY MUST BE TAPERED AND SHALL MEET THE CURRENT CITY PUBLIC WORKS STANDARDS.

17. WHEN AN EXISTING ROADWAY IS TO BE WIDENED, THE EXISTING PAVEMENT MUST BE SAW CUT AT LEAST ONE FOOT FROM THE EDGE TO PROVIDE A PROPER MATCH BETWEEN NEW AND EXISTING ASPHALT. WHEN THE EXISTING PAVEMENT CONDITION PREVENTS A STRAIGHT CUT, THE SAW CUT MUST BE MADE AT THE NEAREST LANE EDGE. ALL SAW CUTS SHALL BE PARALLEL OR PERPENDICULAR TO THE RIGHT-OF-WAY CENTERLINE.

18. ALL PEDESTRIAN ACCESS AREAS INCLUDING SIDEWALKS AND SIDEWALK RAMPS SHALL BE CONSISTENT WITH CURRENT ADA REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE ENGINEER, CONTRACTOR, AND APPLICANT TO ENSURE ALL PEDESTRIAN ACCESS MEET CURRENT ADA STANDARDS. WHEN THIS CANNOT BE MET, MAXIMUM EXTENT FEASIBLE (MEF) DOCUMENTATION SHALL BE SUBMITTED TO THE CITY PRIOR TO FINAL ACCEPTANCE.

19. PROOF ROLLING SHALL BE REQUIRED OF ALL SIDEWALKS, CURBS, AND ROADWAYS AT THE DISCRETION OF THE CITY PUBLIC WORKS CONSTRUCTION INSPECTOR TO ENSURE ADEQUATE COMPACTION.

60% PLAN SET

No.	Revision	Date	By	App'd

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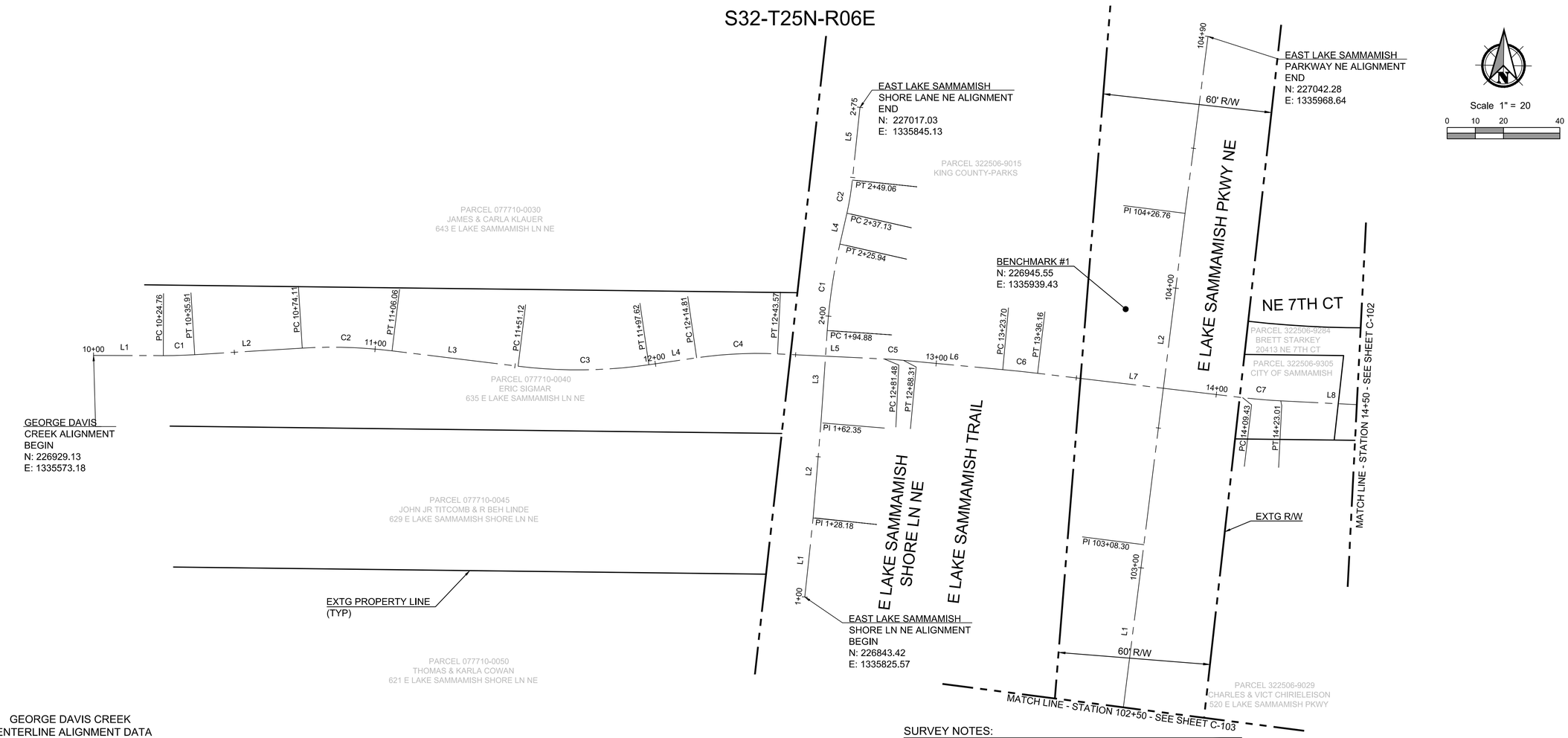
PBS

ROADWAY PLAN NOTES FOR:
GEORGE DAVIS CREEK FISH PASSAGE PROJECT
SAMMAMISH, WASHINGTON

811 Know what's below. Call before you dig.

DESIGNED: DKE
CHECKED: DAS
MAY 2020
45015-004

SHEET ID
C-006
SHEET 6 OF 53



GEORGE DAVIS CREEK
CENTERLINE ALIGNMENT DATA

CENTERLINE LINE DATA		
#	Length	Direction
L1	24.76	S89° 50' 51"E
L2	38.21	N86° 30' 13"E
L3	45.07	S83° 02' 16"E
L4	17.19	N81° 44' 27"E
L5	37.91	S87° 16' 21"E
L6	35.39	S84° 39' 50"E
L7	73.27	S83° 14' 09"E
L8	41.26	S87° 07' 35"E
L9	4.93	N79° 23' 47"E
L10	43.94	S76° 07' 54"E
L11	13.14	N67° 45' 48"E
L12	21.36	S27° 28' 20"E
L13	13.48	S12° 11' 40"E
L14	21.70	S43° 43' 55"E
L15	12.08	S69° 00' 44"E
L16	33.59	S86° 56' 50"E
L17	24.39	S89° 38' 26"E
L18	36.75	N67° 22' 07"E

GEORGE DAVIS STREAM
CENTERLINE ALIGNMENT DATA

CENTERLINE CURVE DATA				
#	Δ	R	L	T
C1	3°38'56"	175.00	11.14	5.57
C2	10°27'31"	175.00	31.94	16.02
C3	15°13'17"	175.00	46.49	23.38
C4	10°59'12"	150.00	28.76	14.43
C5	2°36'31"	150.00	6.83	3.42
C6	1°25'41"	500.00	12.46	6.23
C7	3°53'26"	200.00	13.58	6.79
C8	13°28'38"	40.00	9.41	4.73
C9	24°28'19"	40.00	17.08	8.67
C10	36°06'18"	20.00	12.60	6.52
C11	84°45'52"	20.00	29.59	18.25
C12	15°16'40"	60.00	16.00	8.05
C13	31°32'16"	50.00	27.52	14.12
C14	25°16'49"	80.00	35.30	17.94
C15	17°56'06"	60.00	18.78	9.47
C16	22°59'27"	60.00	24.08	12.20

EAST LAKE SAMMAMISH SHORE LN NE
CENTERLINE ALIGNMENT DATA

CENTERLINE LINE DATA		
#	Length	Direction
L1	28.18	N06° 01' 37"E
L2	34.17	N04° 40' 47"E
L3	32.53	N03° 53' 40"E
L4	11.20	N12° 47' 30"E
L5	25.94	N05° 57' 29"E

EAST LAKE SAMMAMISH SHORE LN NE
CENTERLINE ALIGNMENT DATA

CENTERLINE CURVE DATA				
#	Δ	R	L	T
C1	8°53'49"	200.00	31.06	15.56
C2	6°50'00"	100.00	11.93	5.97

EAST LAKE SAMMAMISH PKWY NE
CENTERLINE ALIGNMENT DATA

CENTERLINE LINE DATA		
#	Length	Direction
L1	308.30	N07° 12' 02"E
L2	118.46	N07° 05' 17"E

SURVEY NOTES:

1. HORIZONTAL DATUM: THE OVERALL HORIZONTAL DATUM FOR THIS PROJECT IS NAD 83/2011, WASHINGTON COORDINATE SYSTEM, NORTH ZONE, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.
2. VERTICAL DATUM: THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 88, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.
3. BENCHMARK LOCATIONS: BENCHMARK #1 = N:226945.55, E:1335939.43; BENCHMARK #2 = N:226712.87, E:1335909.95.
4. THE CONTOUR INTERVAL OF TWO-FEET WAS INTERPOLATED BY AN AUTOCAD-CALCULATED DIGITAL TERRAIN MODEL (DTM) USING FIELD-SURVEYED GROUND AND FEATURE ELEVATIONS.

   THE ELEVATIONS AND CONTOURS SHOWN HEREON ARE ASSUMED TO BE ACCURATE TO THE FOLLOWING:

   HARD-SURFACE SPOT ELEVATIONS = +/- 0.1-FEET.
   GROUND ELEVATIONS = +/- 0.2-FEET.
   CONTOURS = +/- ONE-HALF THE CONTOUR INTERVAL.
5. FIELD SURVEY METHODOLOGY: FIELD MEASUREMENTS FOR THIS SURVEY WERE PERFORMED USING A 5-SECOND OR BETTER ELECTRONIC TOTAL STATION.
6. THE UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM A COMBINATION OF: 1.) THE FIELD SURVEYED LOCATION OF VISIBLE SURFACE UTILITY STRUCTURES SUCH AS MANHOLE LIDS, CATCH BASIN GRATES, GAS AND WATER VALVE LIDS, ETC…, AND 2.) THE FIELD SURVEYED LOCATION OF PAINT OR OTHER MARKS OR MARKERS PLACED BY AN UNDERGROUND UTILITY LOCATOR SERVICE. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, NOR THAT THEY ARE IN THE EXACT LOCATION SHOWN. THE CONTRACTOR SHALL NOTIFY "ONE CALL" AT 1-800-424-5555 (OR 811) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. UTILITY INVERT ELEVATIONS AND PIPE / FLOW LINE DIAMETERS SHOWN HEREON ARE BASED ON OBSERVATIONS FROM THE TOP OF THE UTILITY STRUCTURE AND ARE APPROXIMATE ONLY. FOR SAFETY REASONS NO PHYSICAL ENTRY INTO THE UTILITY STRUCTURE WAS PERFORMED DURING THE COURSE OF THIS SURVEY.
7. THE PROPERTY AND RIGHT-OF-WAY LINES SHOWN HEREON ARE DERIVED FROM A VARIETY OF SOURCES OF VARIABLE ACCURACY. THEY ARE NOT THE RESULT OF A BOUNDARY OR RIGHT-OF-WAY DETERMINATION BY PLS, INC. AND SHOULD NOT BE RELIED UPON FOR ANY USE OTHER THAN GENERAL REFERENCE.

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ROW AND ALIGNMENT PLAN FOR:
GEORGE DAVIS CREEK FISH PASSAGE PROJECT
SAMMAMISH, WASHINGTON

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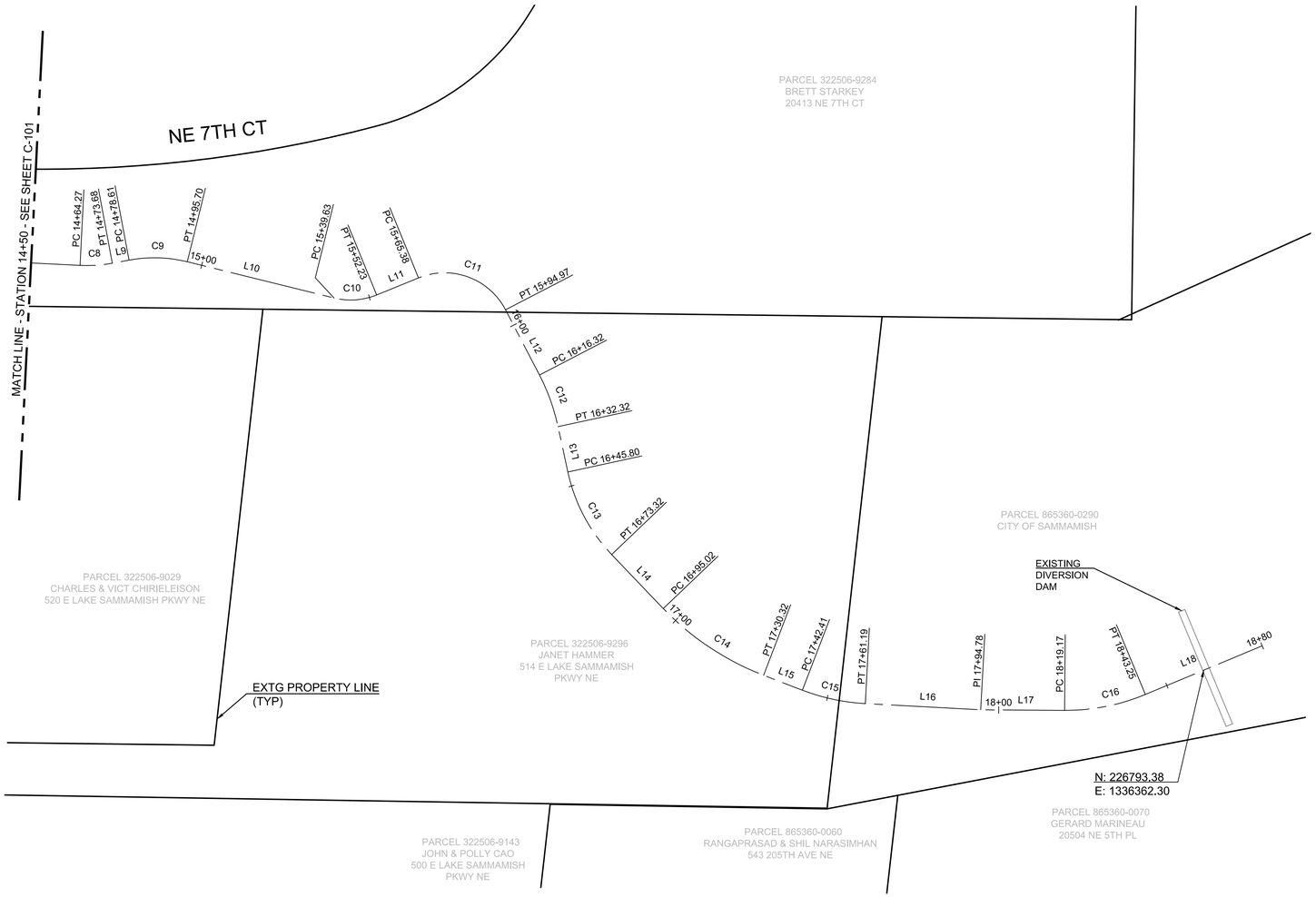
SHEET ID
C-101
SHEET 7 OF 53

S32-T25N-R06E



Scale 1" = 20

0 10 20 40

SURVEY NOTES:

1. HORIZONTAL DATUM: THE OVERALL HORIZONTAL DATUM FOR THIS PROJECT IS NAD 83/2011, WASHINGTON COORDINATE SYSTEM, NORTH ZONE, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.

2. VERTICAL DATUM: THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 88, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.

3. BENCHMARK LOCATIONS: BENCHMARK #1 = N:226945.55, E:1335939.43; BENCHMARK #2 = N:226712.87, E:1335909.95.

4. THE CONTOUR INTERVAL OF TWO-FEET WAS INTERPOLATED BY AN AUTOCAD-CALCULATED DIGITAL TERRAIN MODEL (DTM) USING FIELD-SURVEYED GROUND AND FEATURE ELEVATIONS.

   THE ELEVATIONS AND CONTOURS SHOWN HEREON ARE ASSUMED TO BE ACCURATE TO THE FOLLOWING:

   HARD-SURFACE SPOT ELEVATIONS = +/- 0.1-FEET.
   GROUND ELEVATIONS = +/- 0.2-FEET.
   CONTOURS = +/- ONE-HALF THE CONTOUR INTERVAL.

5. FIELD SURVEY METHODOLOGY: FIELD MEASUREMENTS FOR THIS SURVEY WERE PERFORMED USING A 5-SECOND OR BETTER ELECTRONIC TOTAL STATION.

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ROW AND ALIGNMENT PLAN FOR:
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SHEET ID
C-102

SHEET 8 OF 53

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SURVEY NOTES:

1. HORIZONTAL DATUM: THE OVERALL HORIZONTAL DATUM FOR THIS PROJECT IS NAD 83/2011, WASHINGTON COORDINATE SYSTEM, NORTH ZONE, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.

2. VERTICAL DATUM: THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 88, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.

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ROW AND ALIGNMENT PLAN FOR:
GEORGE DAVIS CREEK FISH PASSAGE PROJECT
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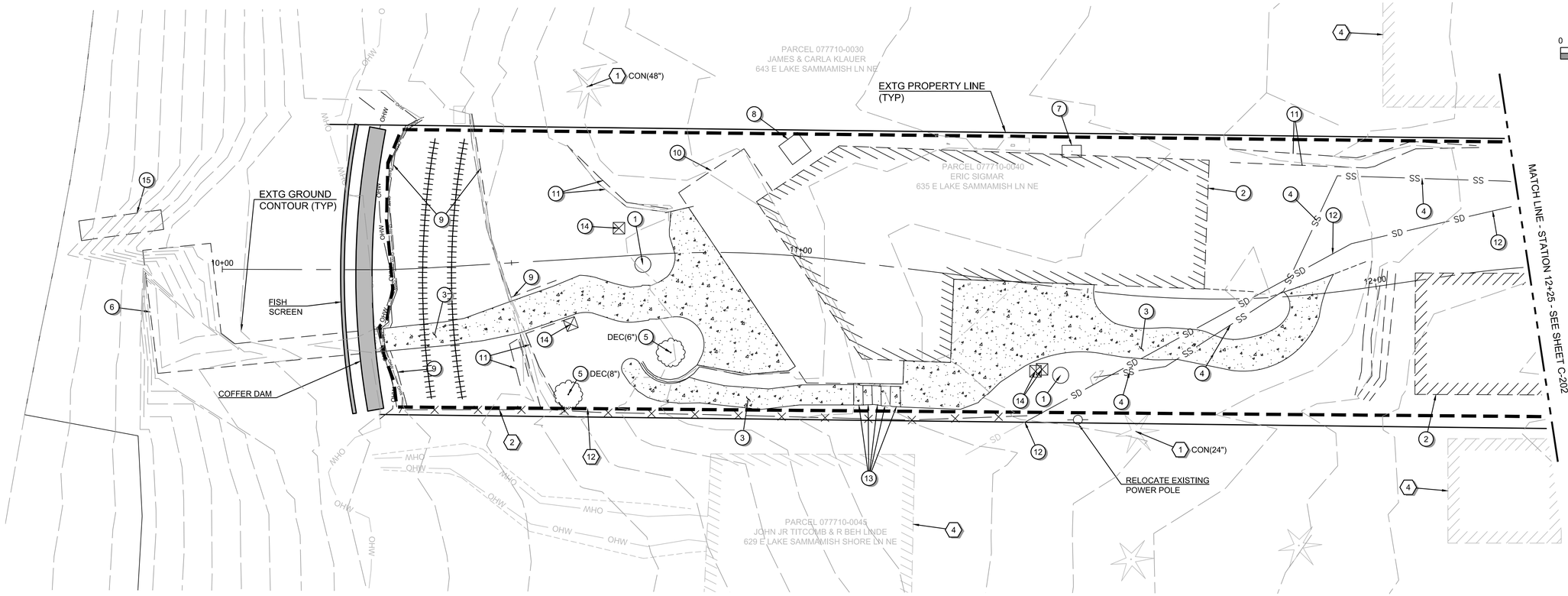
C-103

SHEET 9 OF 53

Filename: L:\Projects\45000\45015\45015-004\Civil\CAD\Working\Sheets\C-101 ROW AND ALIGNMENT PLAN.dwg Layout Tab: C-103 ROW AND ALIGNMENT PLAN User: Kaylan Smyth CAD Plot Date/Time: 5/24/2020 10:06:55 AM

S32-T25N-R06E



GENERAL NOTES:

1. PRESERVE AND PROTECT ALL IMPROVEMENTS THAT ARE TO REMAIN.
2. CONTRACTOR SHALL COORDINATE WORK PERFORMED BY OTHERS.
3. E LAKE SAMMAMISH TRAIL CULVERTS ARE BEING REPLACED BY KING COUNTY UNDER A SEPARATE PROJECT. FINAL DESIGN TO BE DETERMINED BASED ON COMMUNICATION WITH KING COUNTY.

DEMOLITION NOTES:

1. REMOVE SEPTIC TANK
2. REMOVE EXISTING BUILDING
3. REMOVE EXISTING CONCRETE WALKWAY
4. REMOVE EXISTING SEWER PIPE
5. REMOVE EXISTING TREE (PROTECT ALL OTHERS)
6. REMOVE EXISTING DOCK
7. REMOVE EXISTING GAS METER
8. REMOVE EXISTING A/C UNIT
9. REMOVE EXISTING RETAINING WALL
10. REMOVE EXISTING DECK
11. REMOVE EXISTING ROCKERY WALL
12. REMOVE EXISTING STORM PIPE UNDER PROPERTY. CAP PIPE AT PROPERTY LINE.
13. REMOVE EXISTING STEPS
14. REMOVE EXISTING WATER UTILITY
15. REMOVE EXISTING BOAT LIFT
16. REMOVE EXISTING HMA

PROTECTION NOTES:

1. PROTECT EXISTING TREE
2. PROTECT EXISTING FENCE
4. PROTECT EXISTING BUILDING
6. PROTECT EXISTING POWER POLE
12. CLEARING LIMITS

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DEMOLITION PLAN FOR:
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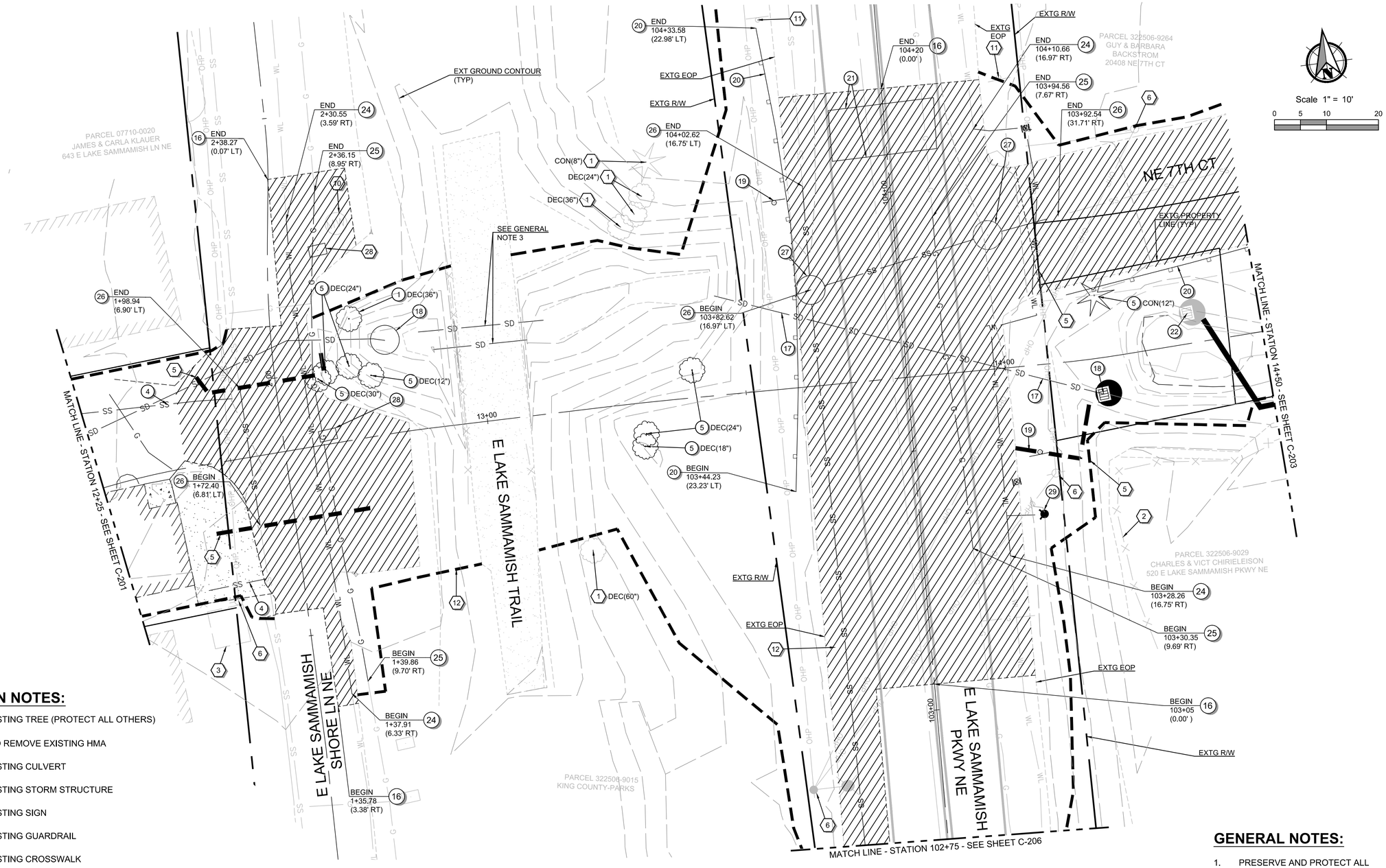
C-201
SHEET 10 OF 53



DEMOLITION NOTES:

5. REMOVE EXISTING TREE (PROTECT ALL OTHERS)
16. SAWCUT AND REMOVE EXISTING HMA
17. REMOVE EXISTING CULVERT
18. REMOVE EXISTING STORM STRUCTURE
19. REMOVE EXISTING SIGN
20. REMOVE EXISTING GUARDRAIL
21. REMOVE EXISTING CROSSWALK
22. EXISTING STORM STRUCTURE TO BE USED FOR STREAM BYPASS. REMOVE AFTER COMPLETION OF STREAM CONSTRUCTION.
24. REMOVE EXISTING 8" WATER MAIN
25. REMOVE EXISTING GAS MAIN
26. REMOVE EXISTING SEWER PIPE
27. REMOVE EXISTING SEWER MANHOLE
28. REMOVE EXISTING WATER METER
29. REMOVE EXISTING FIRE HYDRANT

PROTECTION NOTES:

1. PROTECT EXISTING TREE
2. PROTECT EXISTING FENCE
3. PROTECT EXISTING SHED
5. AREA OF POTENTIAL SHORING
6. PROTECT EXISTING POWER POLE
7. PROTECT EXISTING MANHOLE
10. PROTECT EXISTING MONITORING WELL
11. PROTECT EXISTING SIGN
12. CLEARING LIMITS

GENERAL NOTES:

1. PRESERVE AND PROTECT ALL IMPROVEMENTS THAT ARE TO REMAIN.
2. CONTRACTOR SHALL COORDINATE WORK PERFORMED BY OTHERS.
3. E LAKE SAMMAMISH TRAIL CULVERTS ARE BEING REPLACED BY KING COUNTY UNDER A SEPARATE PROJECT. FINAL DESIGN TO BE DETERMINED BASED ON COMMUNICATION WITH KING COUNTY.

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SHEET ID
C-202

SHEET 11 OF 53

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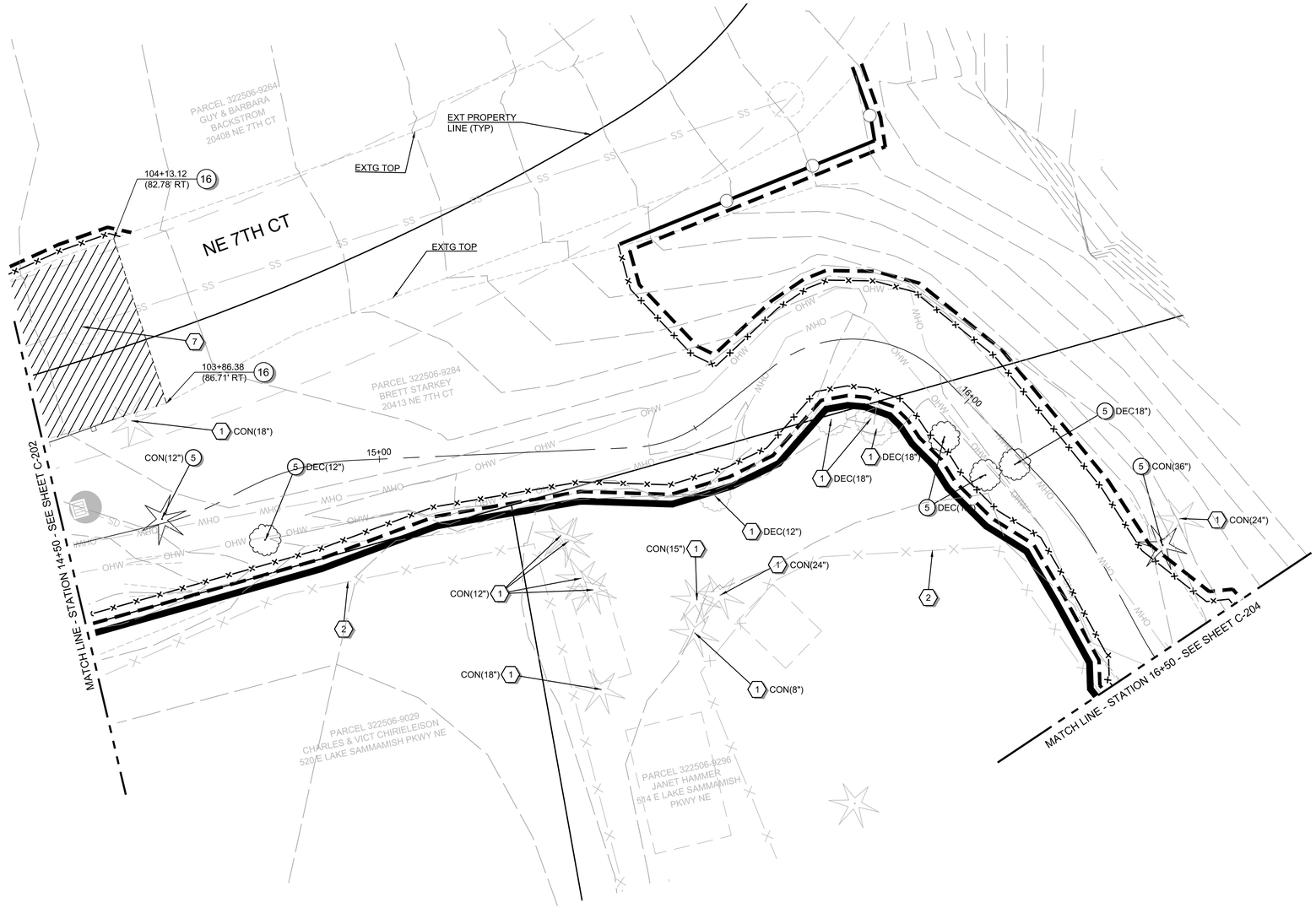
S32-T25N-R06E



Scale 1" = 10

0 5 10 20

GENERAL NOTES:

1. PRESERVE AND PROTECT ALL IMPROVEMENTS THAT ARE TO REMAIN.
2. CONTRACTOR SHALL COORDINATE WORK PERFORMED BY OTHERS.
3. E LAKE SAMMAMISH TRAIL CULVERTS ARE BEING REPLACED BY KING COUNTY UNDER A SEPARATE PROJECT. FINAL DESIGN TO BE DETERMINED BASED ON COMMUNICATION WITH KING COUNTY.

DEMOLITION NOTES:

(5) REMOVE EXISTING TREE (PROTECT ALL OTHERS)

PROTECTION NOTES:

(1) PROTECT EXISTING TREE

(2) PROTECT EXISTING FENCE

(7) PROTECT EXISTING MANHOLE

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SHEET ID
C-203

SHEET 12 OF 53

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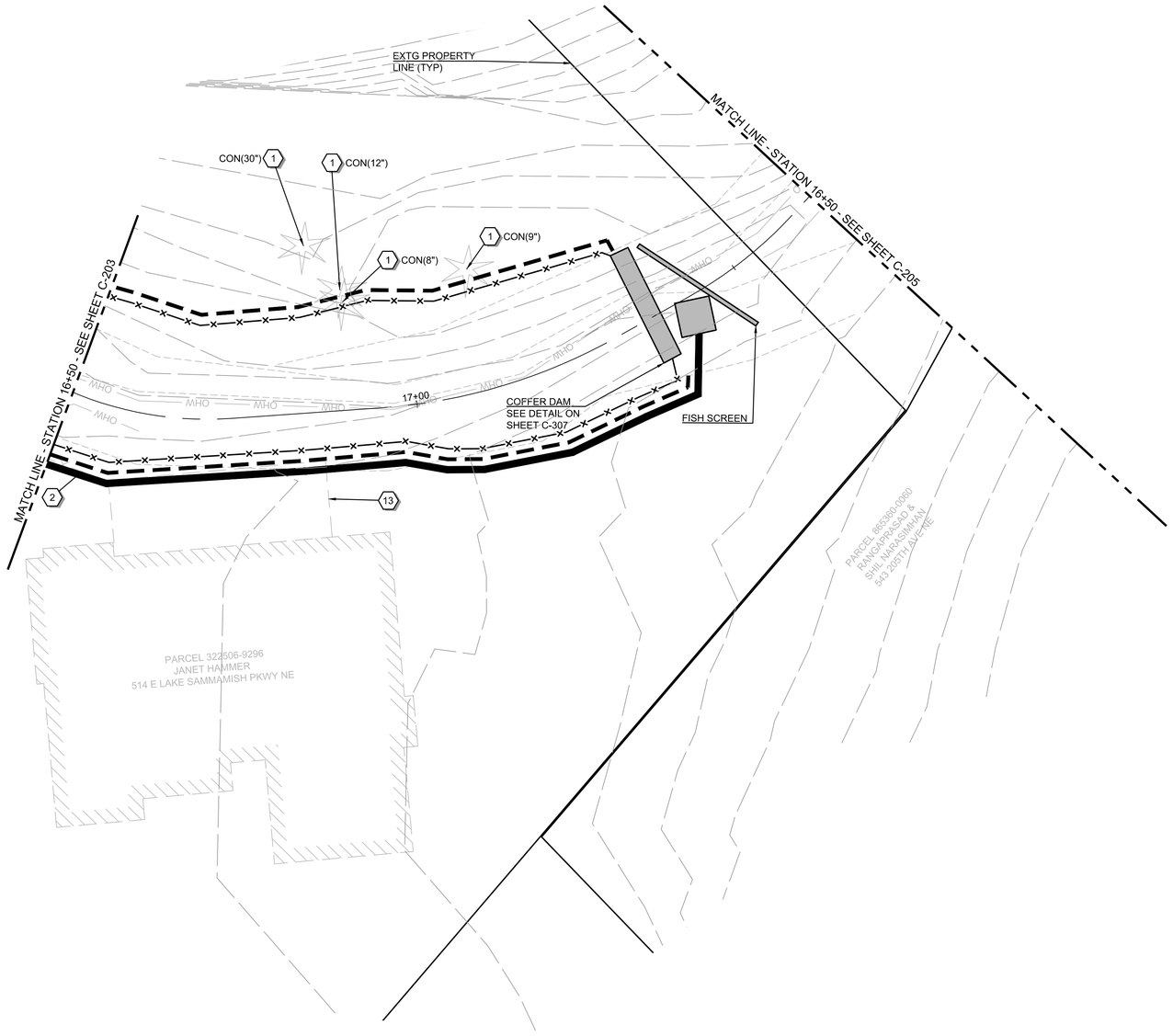

Scale 1" = 10

0 5 10 20

GENERAL NOTES:

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2. CONTRACTOR SHALL COORDINATE WORK PERFORMED BY OTHERS.
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DEMOLITION NOTES:

(5) REMOVE EXISTING TREE (PROTECT ALL OTHERS)

PROTECTION NOTES:

(1) PROTECT EXISTING TREE

(2) PROTECT EXISTING FENCE

(13) PROTECT EXISTING DECK

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SHEET ID
C-204

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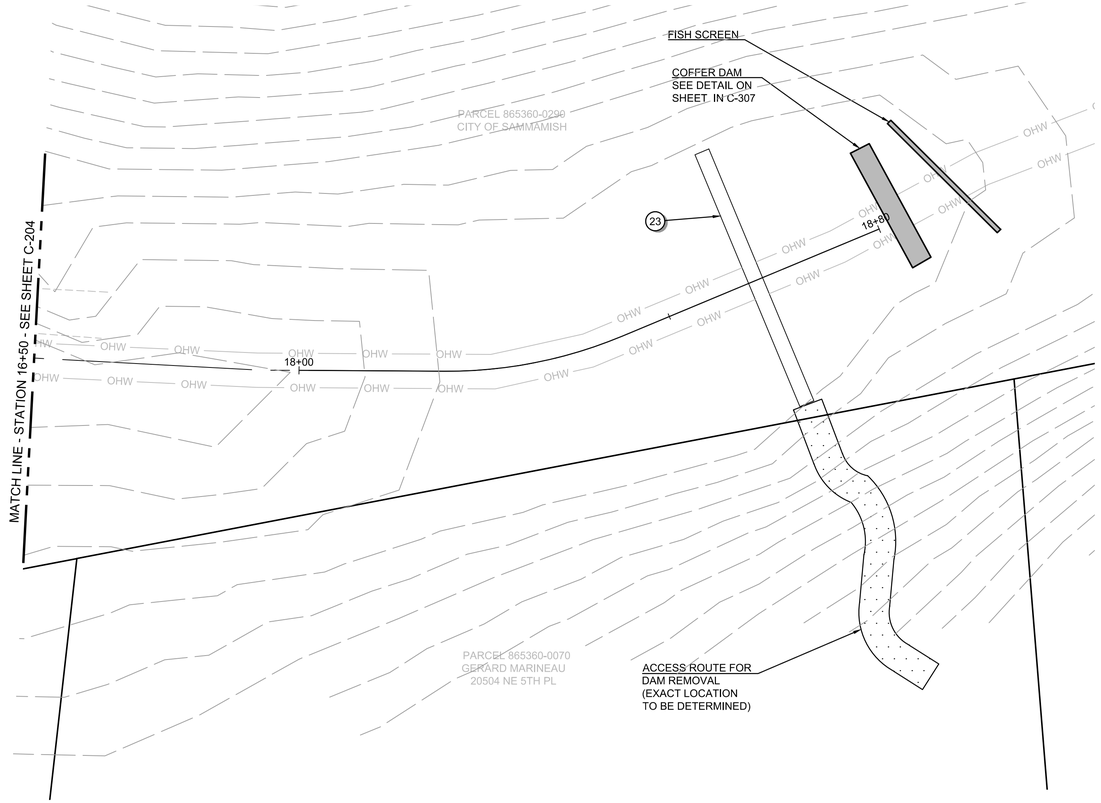

Scale 1" = 10'

0 5 10 20

GENERAL NOTES:

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DEMOLITION NOTES:

(23) REMOVE EXISTING CONCRETE DAM. LOCATION SHOWN IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO START OF CONSTRUCTION.

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SHEET ID
C-205
SHEET 14 OF 53

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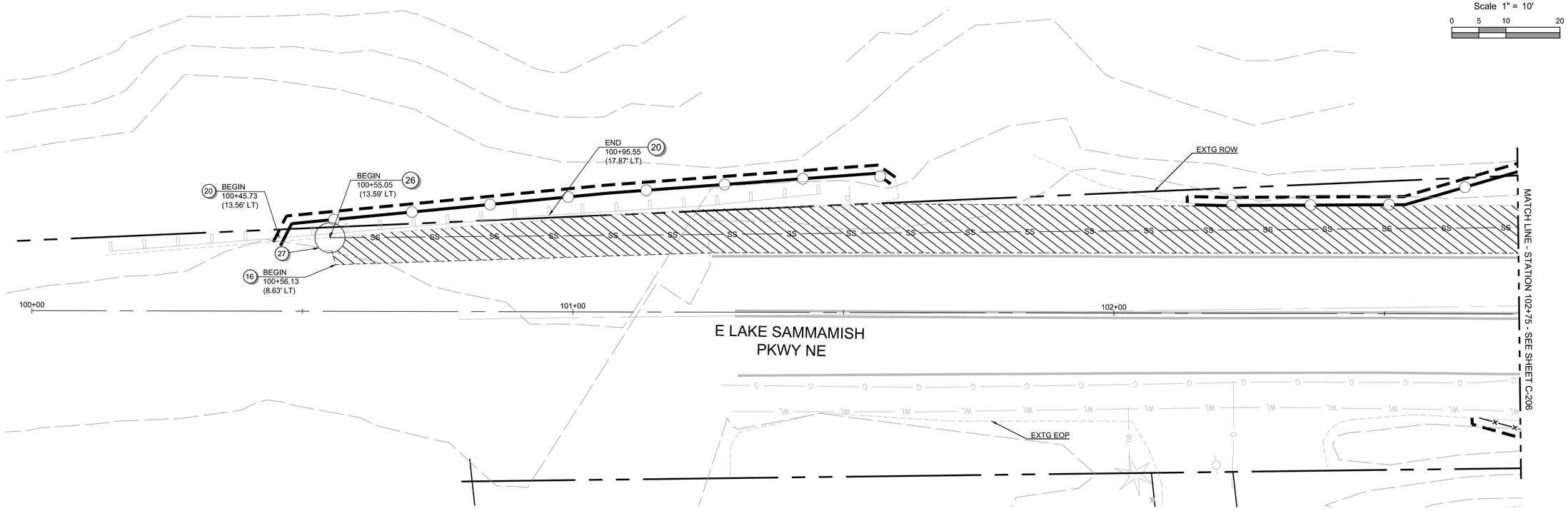

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DEMOLITION NOTES:

(16) SAWCUT AND REMOVE EXISTING HMA

(20) REMOVE EXISTING GUARDRAIL

(26) REMOVE EXISTING SEWER PIPE

(27) REMOVE EXISTING MANHOLE

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SHEET ID
C-206
SHEET 15 OF 53

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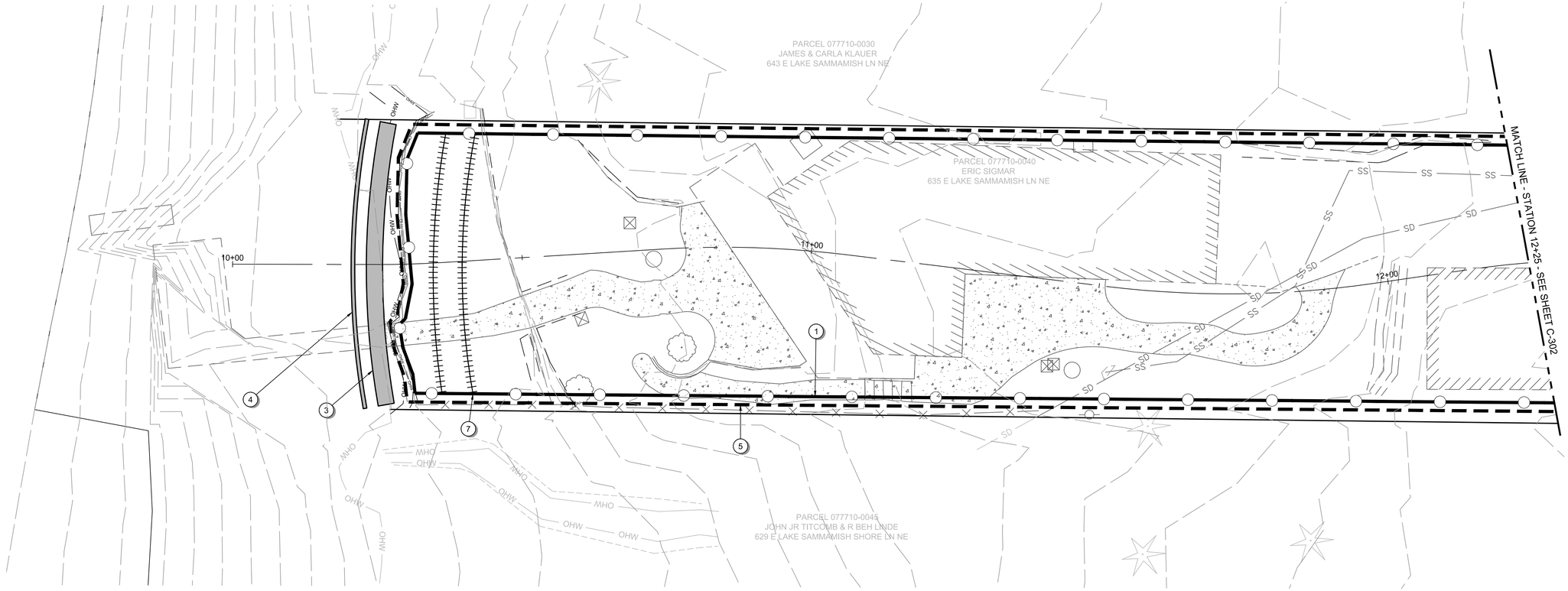

Scale 1" = 10'

0 5 10 20

GENERAL NOTES:

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4. THE CONTRACTOR SHALL COMPLY WITH THE CITY OF SAMMAMISH AND WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOLOGY) EROSION AND SEDIMENT CONTROL REQUIREMENTS AND ALL OTHER PERMIT REQUIREMENTS. ALL WORK SHALL BE DONE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS.
5. EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES SHALL BE INSTALLED BEFORE DEMOLITION OR CONSTRUCTION ACTIVITIES BEGIN.

EROSION CONTROL NOTES:

1. HIGH VISIBLE SILT FENCE. SEE DETAIL ON SHEET C-307.
2. HIGH VISIBLE FENCE. SEE DETAIL ON SHEET C-307.
3. COFFERDAM. SEE DETAIL ON SHEET C-307.
4. FISH SCREEN
7. WATTLES

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EROSION AND SEDIMENT CONTROL PLAN FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

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45015-004

SHEET ID
C-301
SHEET 16 OF 53

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5. EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES SHALL BE INSTALLED BEFORE DEMOLITION OR CONSTRUCTION ACTIVITIES BEGIN.
6. EXISTING STORMWATER STRUCTURE SHALL BE USED TO DIVERT UPSTREAM FLOW AND BYPASS CONSTRUCTION ACTIVITIES.

EROSION CONTROL NOTES:

1. HIGH VISIBLE SILT FENCE. SEE DETAIL ON SHEET C-307.
2. HIGH VISIBLE FENCE. SEE DETAIL ON SHEET C-307.
5. CLEARING LIMIT
6. BYPASS PIPELINE

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EROSION AND SEDIMENT CONTROL PLAN FOR: GEORGE DAVIS CREEK FISH PASSAGE PROJECT

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45015-004

SHEET ID
C-302

SHEET 17 OF 53

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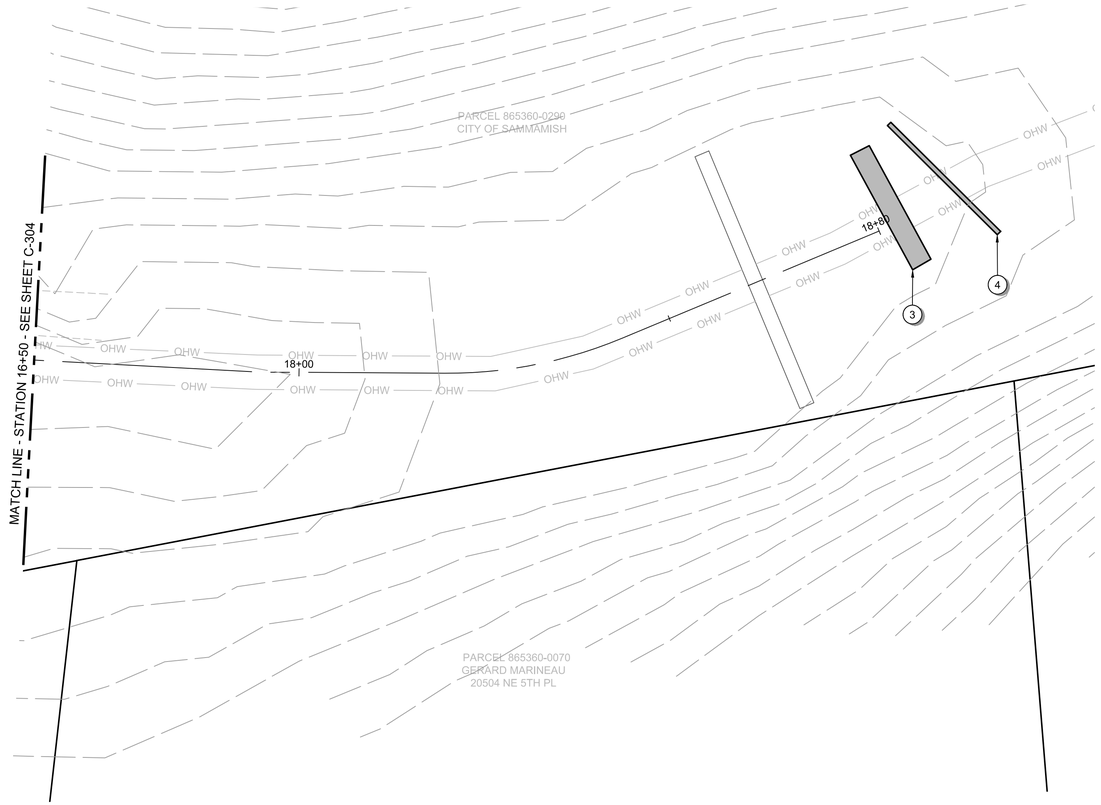
S32-T25N-R06E



Scale 1" = 10'

0 5 10 20

GENERAL NOTES:

1. PRESERVE AND PROTECT ALL IMPROVEMENTS THAT ARE TO REMAIN.
2. CONTRACTOR SHALL COORDINATE WORK PERFORMED BY OTHERS.
3. E LAKE SAMMAMISH TRAIL CULVERTS ARE BEING REPLACED BY KING COUNTY UNDER A SEPARATE PROJECT. FINAL DESIGN TO BE DETERMINED BASED ON COMMUNICATION WITH KING COUNTY.
4. THE CONTRACTOR SHALL COMPLY WITH THE CITY OF SAMMAMISH AND WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOLOGY) EROSION AND SEDIMENT CONTROL REQUIREMENTS AND ALL OTHER PERMIT REQUIREMENTS. ALL WORK SHALL BE DONE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS.
5. EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES SHALL BE INSTALLED BEFORE DEMOLITION OR CONSTRUCTION ACTIVITIES BEGIN.

EROSION CONTROL NOTES:

(3) COFFERDAM. SEE DETAIL ON SHEET C-307.

(4) FISH SCREEN

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No.	Revision	Date	By	App'd

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EROSION AND SEDIMENT CONTROL PLAN FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

SAMMAMISH, WASHINGTON

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DESIGNED: DKE
CHECKED: DAS
MAY 2020
45015-004

SHEET ID
C-303

SHEET 20 OF 53

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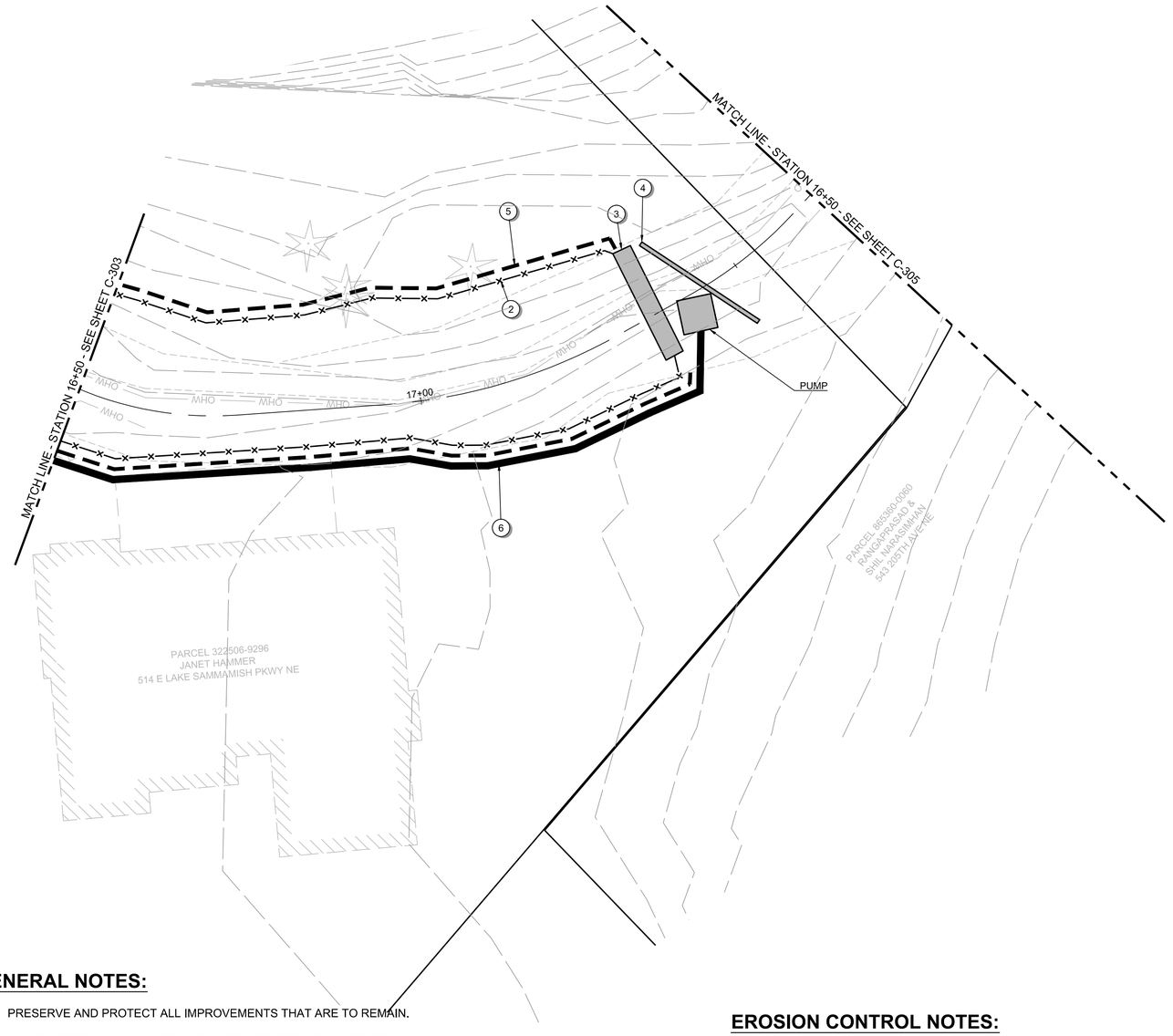

Scale 1" = 10

0 5 10 20

GENERAL NOTES:

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2. CONTRACTOR SHALL COORDINATE WORK PERFORMED BY OTHERS.
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EROSION CONTROL NOTES:

(2) HIGH VISIBLE FENCE. SEE DETAIL ON SHEET C-307.

(3) COFFERDAM. SEE DETAIL ON SHEET C-307.

(4) FISH SCREEN

(5) CLEARING LIMIT

(6) BYPASS PIPELINE

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EROSION AND SEDIMENT CONTROL PLAN FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

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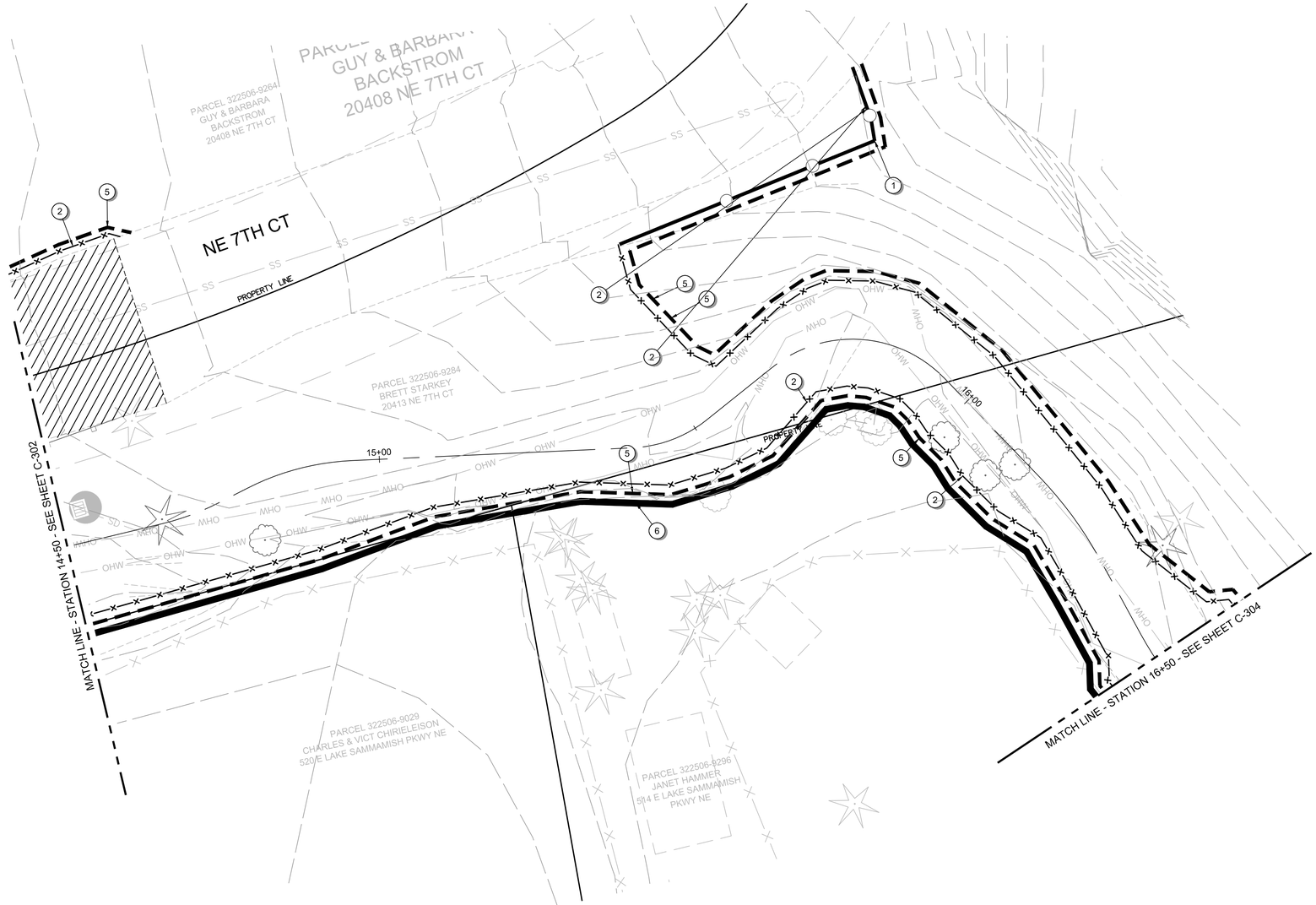

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GENERAL NOTES:

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EROSION CONTROL NOTES:

1. HIGH VISIBLE SILT FENCE. SEE DETAIL ON SHEET C-307.
2. HIGH VISIBLE FENCE. SEE DETAIL ON SHEET C-307.
3. COFFERDAM. SEE DETAIL ON SHEET C-307.
4. FISH SCREEN
5. CLEARING LIMIT
6. BYPASS PIPELINE

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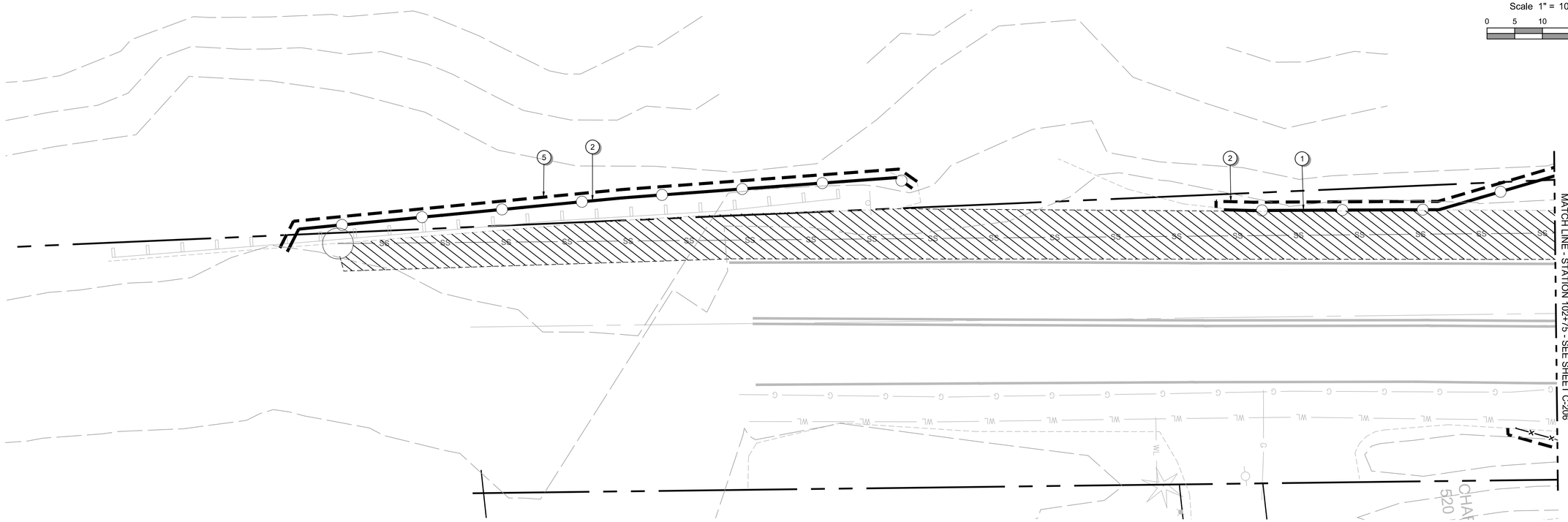

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EROSION CONTROL NOTES:

1. HIGH VISIBLE SILT FENCE. SEE DETAIL ON SHEET C-307.
2. HIGH VISIBLE FENCE. SEE DETAIL ON SHEET C-307.
5. CLEARING LIMIT

60% PLAN SET

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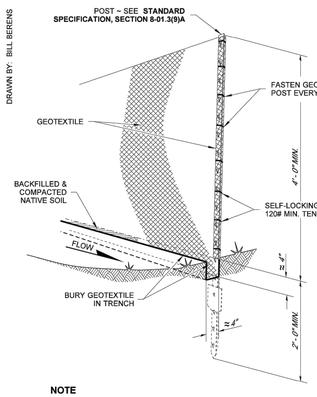
C-306

SHEET 21 OF 53

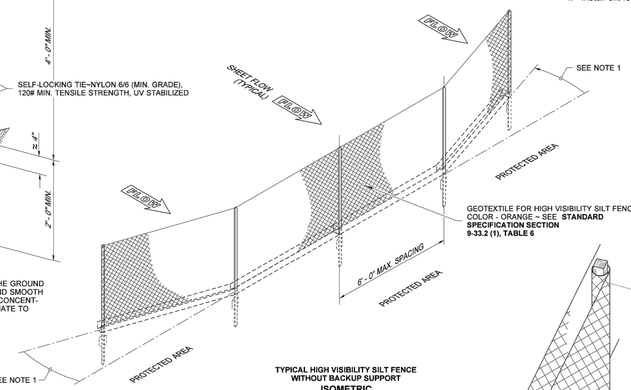
DRAWN BY: BILL BERENS



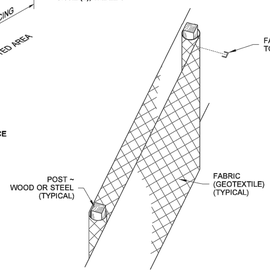
NOTE

DURING EXCAVATION, MINIMIZE DISTURBING THE GROUND AROUND TRENCH AS MUCH AS IS FEASIBLE, AND SMOOTH SURFACE FOLLOWING EXCAVATION TO AVOID CONCENTRATING FLOWS. COMPACTION MUST BE ADEQUATE TO PREVENT UNDERCUTTING FLOWS.

TYPICAL INSTALLATION DETAIL
(STEEL POSTS SHOWN)



TYPICAL HIGH VISIBILITY SILT FENCE WITHOUT BACKUP SUPPORT
ISOMETRIC
(STEEL POSTS SHOWN)



SPLICED FENCE SECTIONS SHALL BE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP. JOINING SECTIONS SHALL NOT BE PLACED IN LOW SPOTS OR IN SUMP LOCATIONS.

SPLICE DETAIL
(WOOD POSTS SHOWN)

NOTES

1. Angle Terminal end uphill 24" (in) to 48" (in) to prevent flow around fence (Typical).
2. Perform maintenance in accordance with **Standard Specification, Sections 8-01.3(9)A and 8-01.3(15)**.
3. Splices shall never be placed in low spots or sump locations. If splices are located in low or sump areas, the fence may need to be reinstalled unless the Project Engineer approves the installation.
4. Install silt fencing parallel to mapped contour lines.

STATE OF WASHINGTON
JULI DEE HARTWIG
NO. 1422 EXP. 08/21/2021
LANDSCAPE ARCHITECT

Hartwig, Juli
Jun 4 2019 10:48 AM

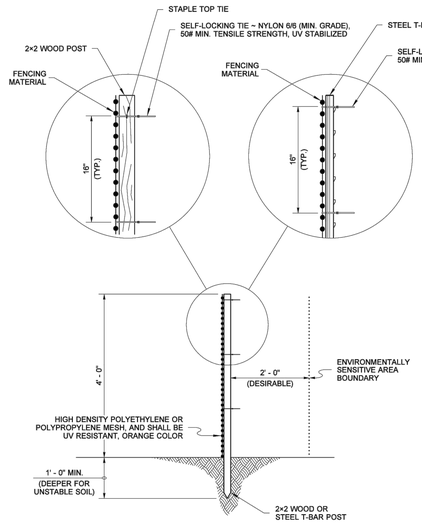
HIGH VISIBILITY SILT FENCE

STANDARD PLAN I-30.17-01

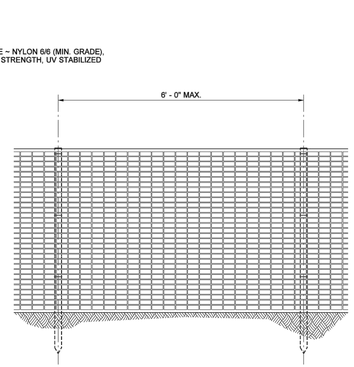
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Nosek, Steve
Jun 12 2019 7:42 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

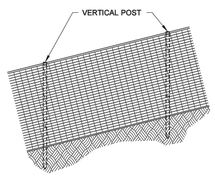
DRAWN BY: BILL BERENS



TYPICAL SECTION



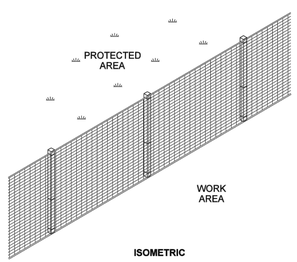
ELEVATION



ELEVATION
FENCE ON SLOPE

NOTE

1. Post shall have sufficient strength and durability to support the fence through the life of the project.



ISOMETRIC

STATE OF WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT
MARK W. MAURER
CERTIFICATE NO. 000598

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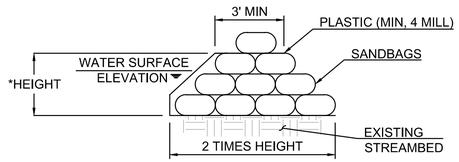
HIGH VISIBILITY FENCE

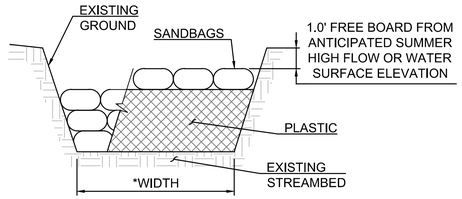
STANDARD PLAN I-10.10-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III *08-11-09*
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation



PROFILE VIEW



SECTION VIEW

NOTES:

1. SANDBAGS SHALL BE USED IN ACCORDANCE WITH APPLICABLE PERMITS.
2. INSTALL COFFER DAM AND DEWATER SITE PRIOR TO CONSTRUCTION.
3. WATER BLADDERS, SUPER SACKS, OR APPROVED EQUAL CAN BE USED AS ALTERNATIVES TO COFFERDAMS.
4. PROVIDE 1.0' FREEBOARD.

*HEIGHT AND WIDTH OF COFFER DAM SHALL BE DETERMINED BY THE WATER SURFACE ELEVATION AT THE TIME OF CONSTRUCTION.

3 **COFFERDAM**
NOT TO SCALE

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EROSION AND SEDIMENT CONTROL DETAILS FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

SAMMAMISH, WASHINGTON

811 Know what's below. Call before you dig.

DESIGNED: DKE
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MAY 2020
45015-004

SHEET ID
C-307
SHEET 22 OF 53

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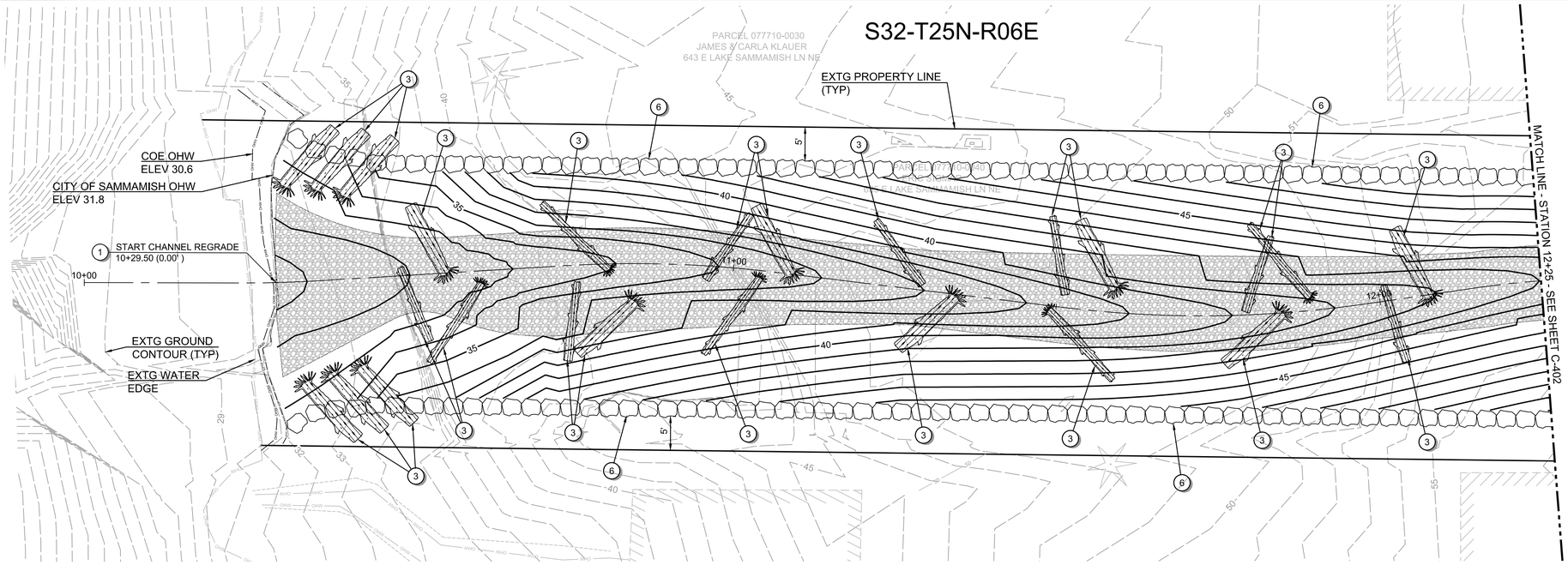

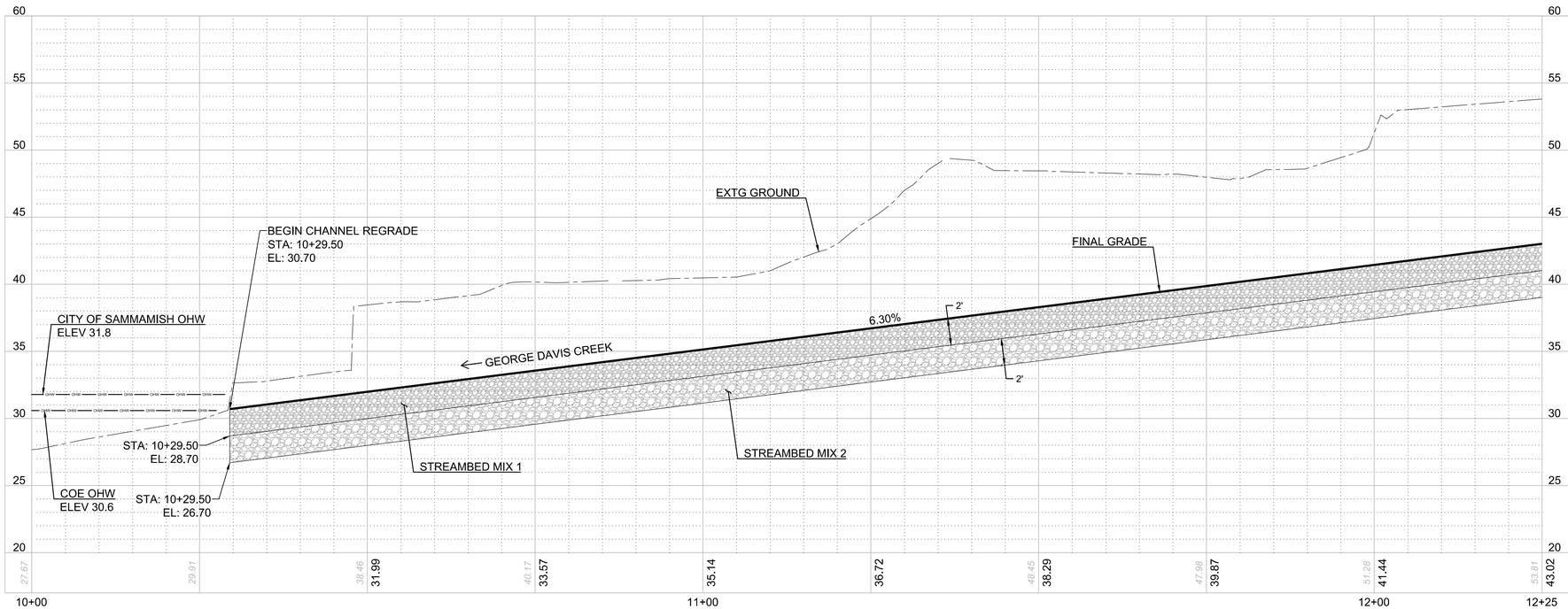

GENERAL NOTES:

1. THALWEG AND WOODY DEBRIS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE LOG FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
2. SEE RESTORATION PLANS FOR FINAL STABILIZATION REQUIREMENTS.

CONSTRUCTION PLAN NOTES:

(1) RECONSTRUCT STREAM CHANNEL PER DETAIL, SEE SHEET C-703

(3) INSTALL LARGE WOODY DEBRIS FEATURES PER DETAIL, SEE SHEET C-703

(6) INSTALL ROCKERY PER DETAIL, SEE SHEET C-708. HEIGHT VARIES FROM 1.0' TO 4.5'.

HORIZ: 1" = 10'
VERT: 1" = 5'

Scale 1" = 10'
0 5 10 20

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GEORGE DAVIS CREEK FISH PASSAGE PROJECT

GEORGE DAVIS CREEK PLAN AND PROFILE FOR:

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SHEET 23 OF 53

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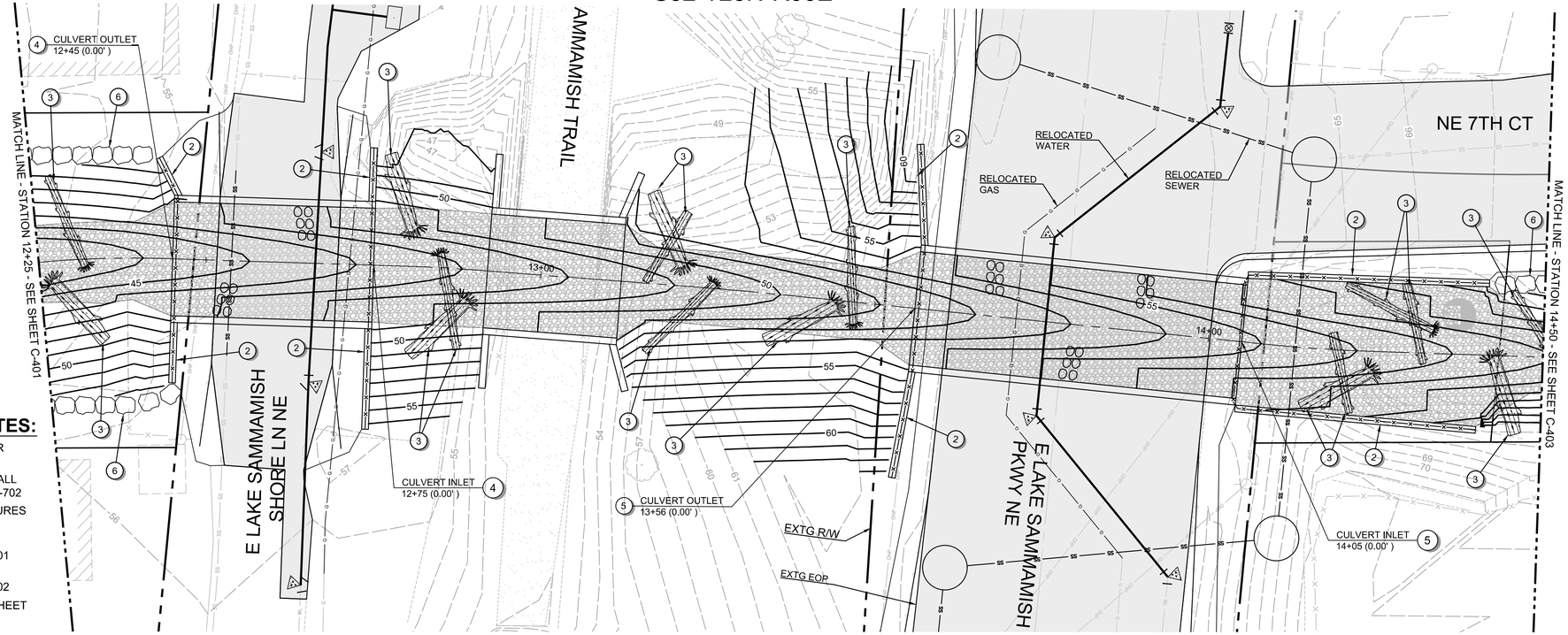


Scale 1" = 10'

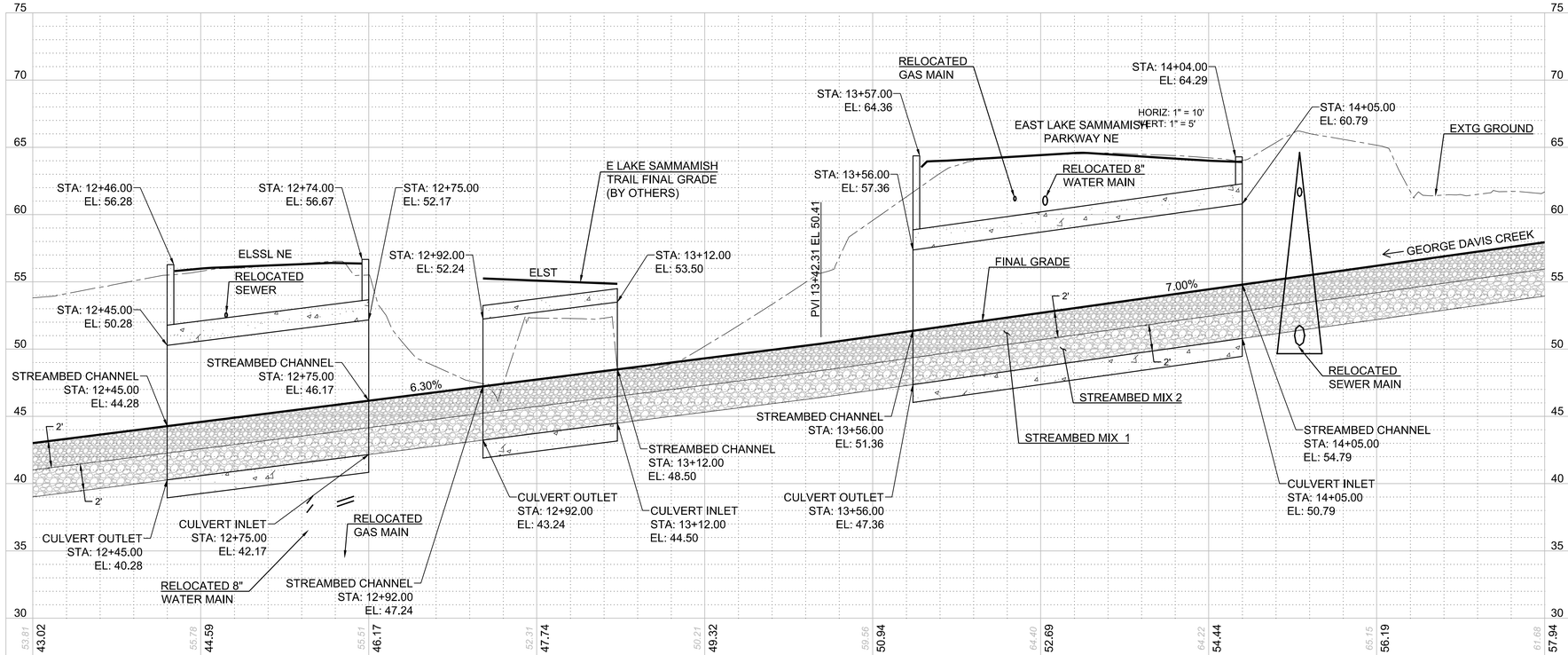
0 5 10 20

CONSTRUCTION PLAN NOTES:

1. RECONSTRUCT STREAM CHANNEL PER DETAIL, SEE SHEET C-703
2. INSTALL PRECAST CONCRETE WINGWALL PER DETAIL, SEE SHEETS C-701 AND C-702
3. INSTALL LARGE WOODY DEBRIS FEATURES PER DETAIL, SEE SHEET C-703
4. INSTALL 30 LF 17-FT x 10-FT SPLIT BOX CULVERT PER DETAIL, SEE SHEET C-701
5. INSTALL 49 LF 17-FT x 10-FT SPLIT BOX CULVERT PER DETAIL, SEE SHEET C-702
6. INSTALL ROCKERY PER DETAIL, SEE SHEET C-708

GENERAL NOTES:

1. THALWEG AND WOODY DEBRIS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE LOG FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
2. FILL AREA BETWEEN THE BACK/SIDE OF WINGWALLS AND EXCAVATION WITH SELECT BORROW.
3. FILL AREA BETWEEN THE FRONT OF WINGWALLS AND EXCAVATION WITH STREAMBED MIX.
4. SEE RESTORATION PLANS FOR FINAL STABILIZATION REQUIREMENTS.



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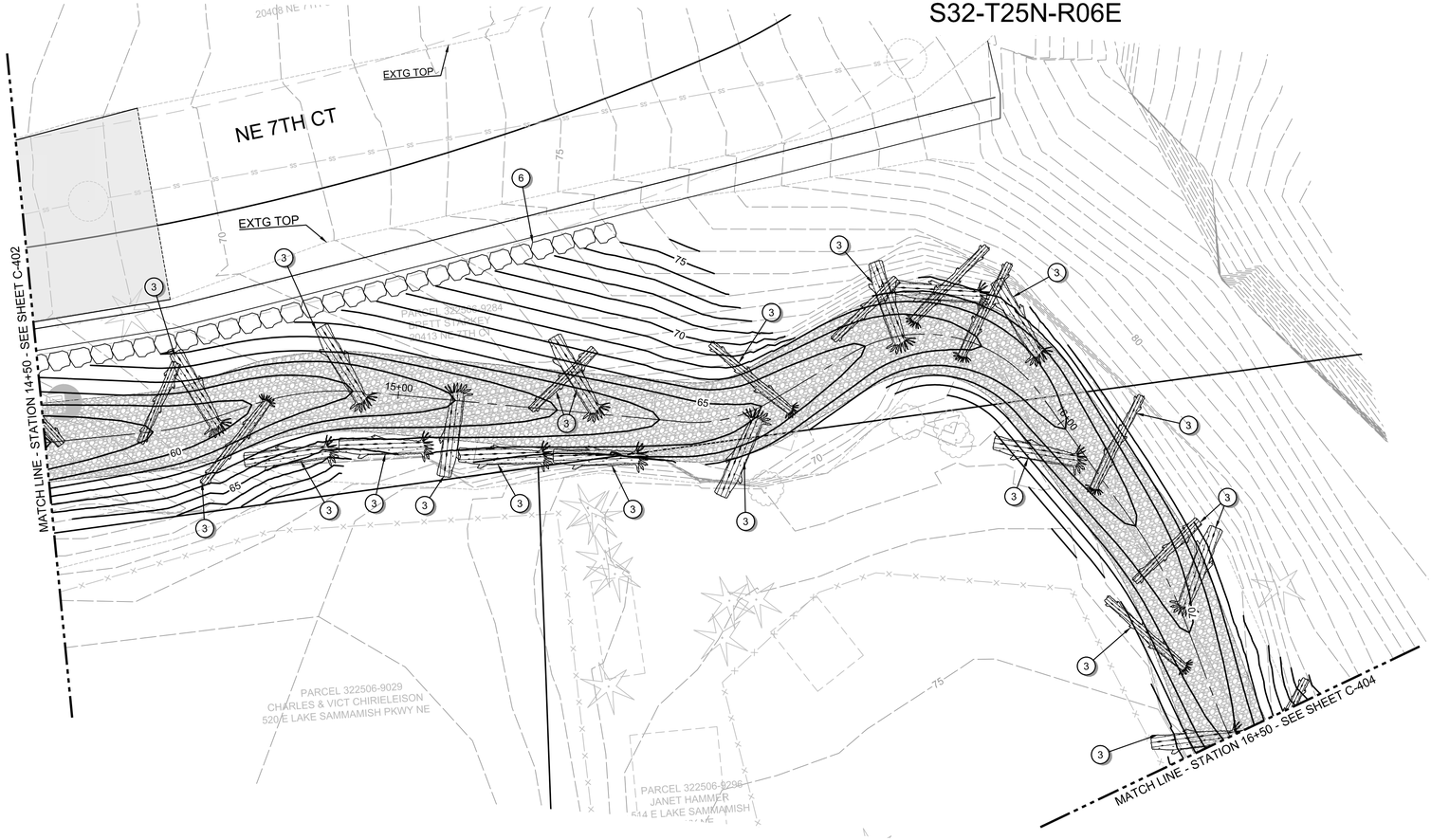

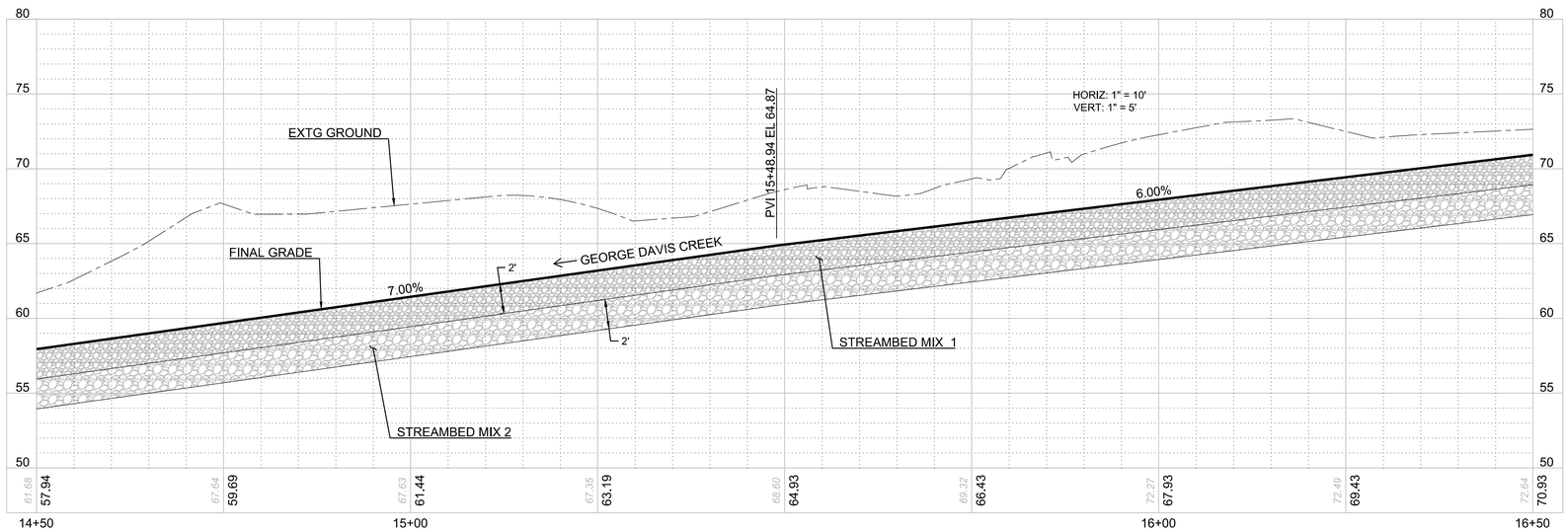

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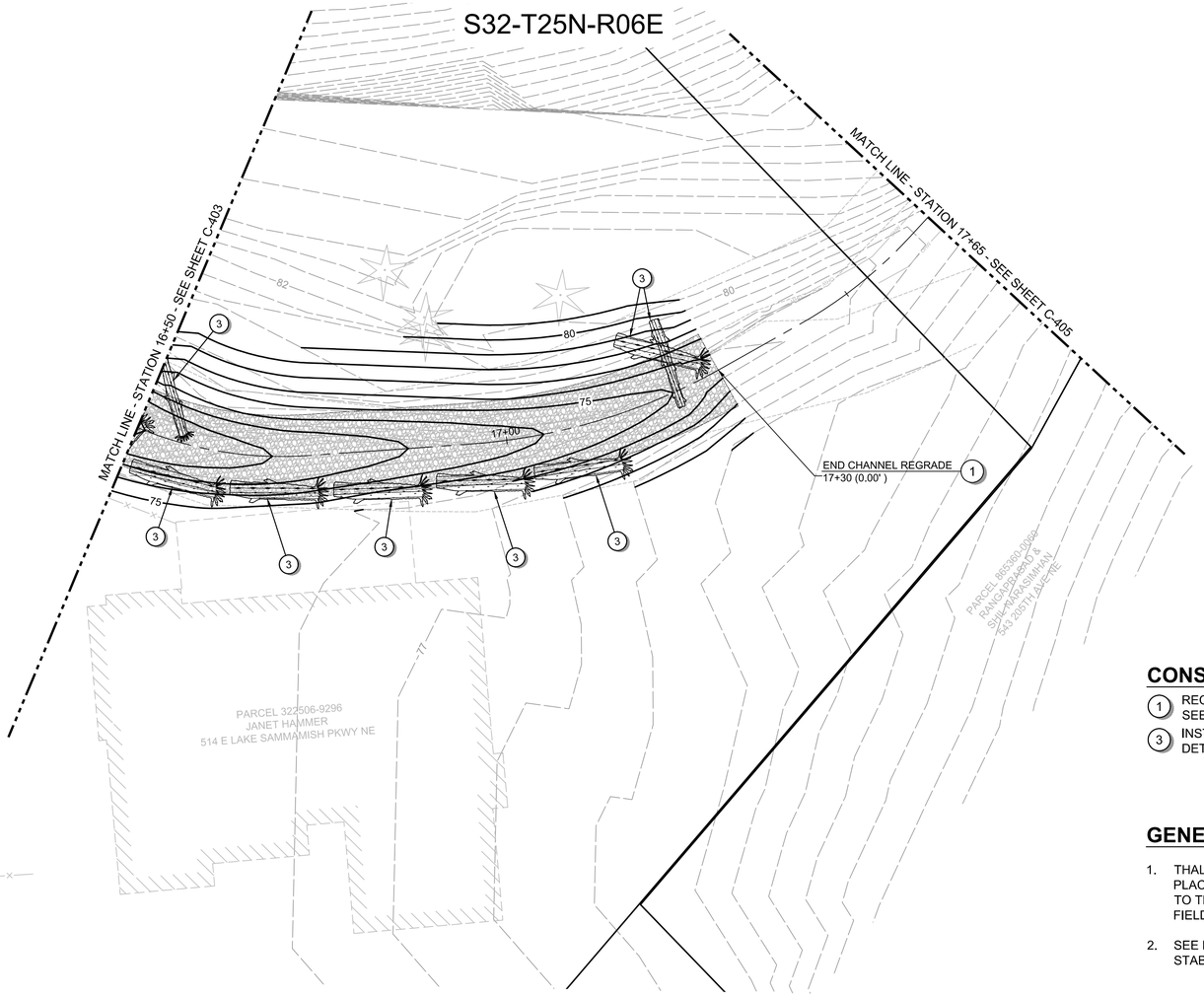

Scale 1" = 10

0 5 10 20

CONSTRUCTION PLAN NOTES:

1. RECONSTRUCT STREAM CHANNEL PER DETAIL, SEE SHEET C-703
3. INSTALL LARGE WOODY DEBRIS FEATURES PER DETAIL, SEE SHEET C-703

GENERAL NOTES:

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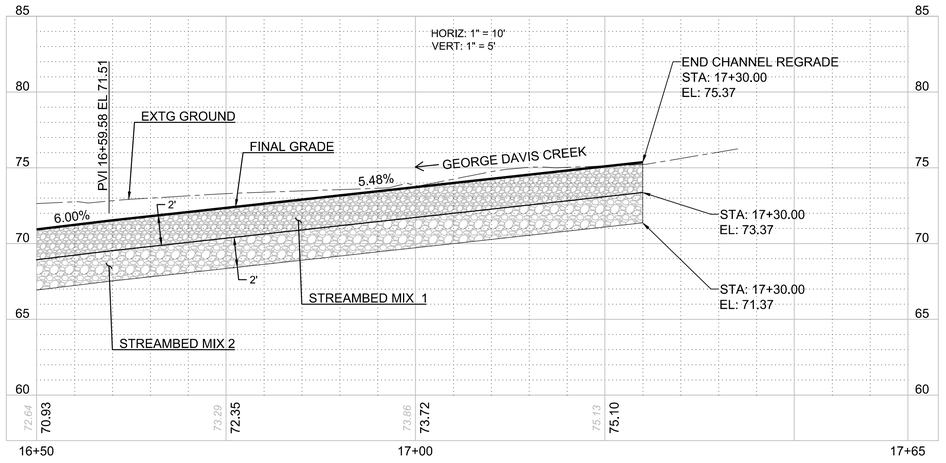

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GEORGE DAVIS CREEK PLAN AND PROFILE FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

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C-404
SHEET 26 OF 53

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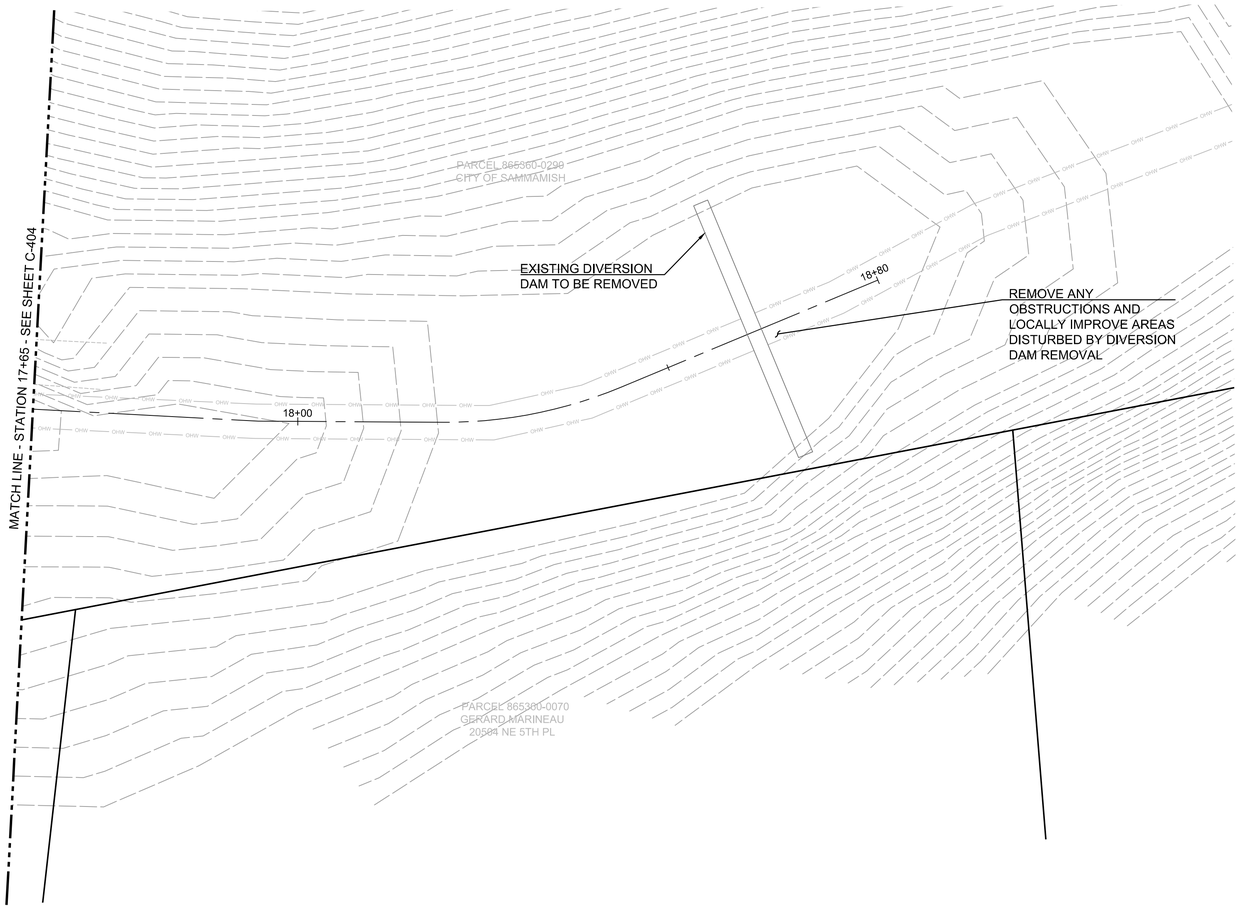

Scale 1" = 10'

0 5 10 20

GENERAL NOTES:

1. THALWEG AND WOODY DEBRIS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE LOG FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
2. SEE RESTORATION PLANS FOR FINAL STABILIZATION REQUIREMENTS.

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GEORGE DAVIS CREEK PLAN AND PROFILE FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

SAMMAMISH, WASHINGTON

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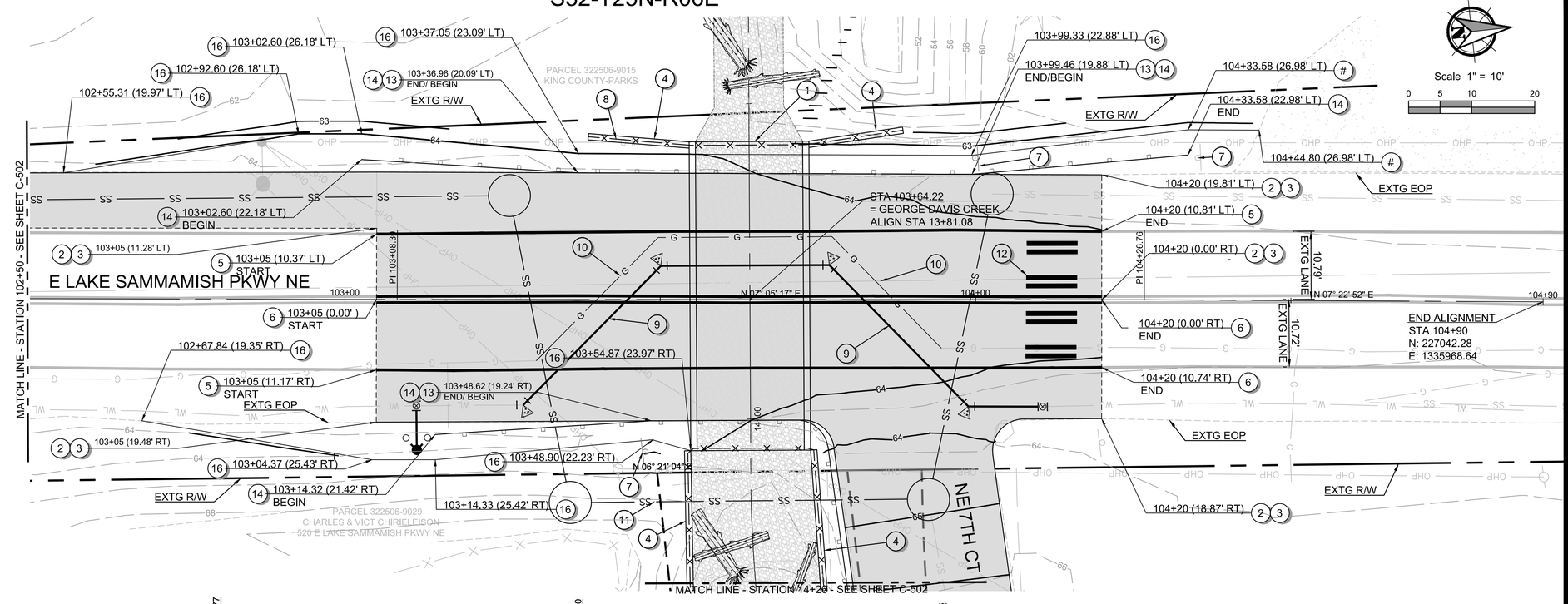
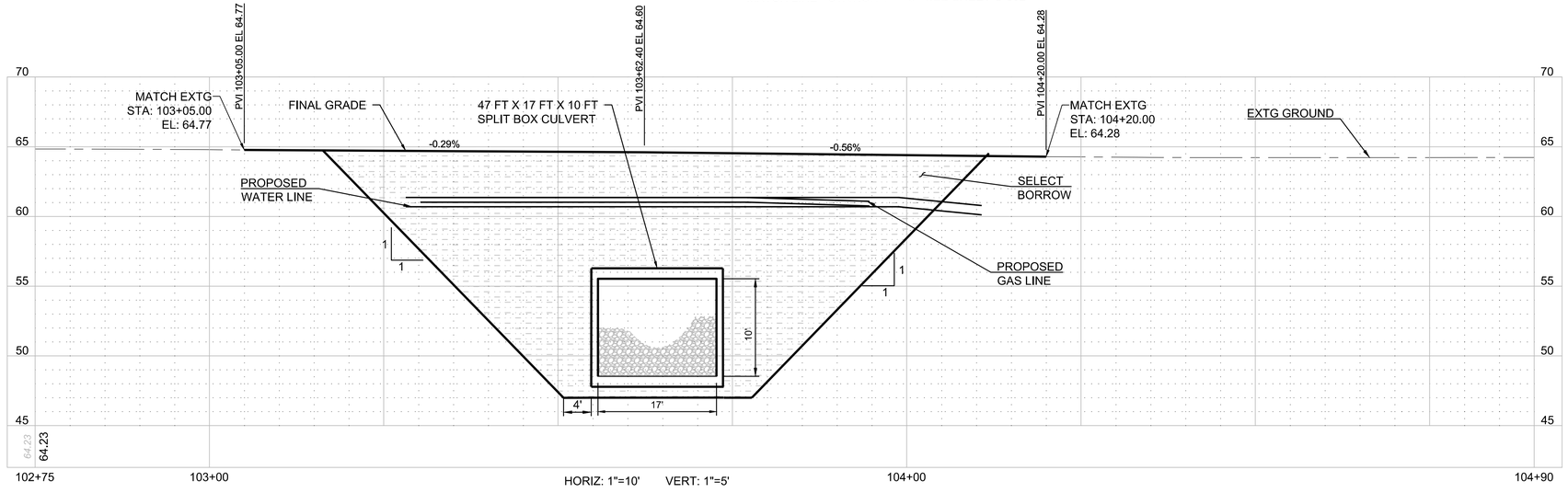
SHEET 27 OF 53

Filename: L:\Projects\45000\45015\45015-004\Civil\CAD\Working\Sheets\C-401 CREEK PLAN AND PROFILE.dwg Layout Tab: C-405 GEORGE DAVIS CREEK PLAN AND PROFILE User: Dave Segal CAD Plot Date/Time: 5/24/2020 2:25:31 PM





GENERAL NOTES:

1. SPEED LIMIT FOR E LAKE SAMMAMISH PKWY NE IS 35 MPH.
2. ROADWAY PROFILE OF ROAD IS MAINTAINED FOR CONTINUITY WITH EXISTING ROADWAY.

CONSTRUCTION PLAN NOTES:

1. 47 FT X 17 FT X 10 FT SPLIT BOX CULVERT PER DETAIL, SHEET C-501
2. HMA PAVEMENT
3. SAWCUT
4. CONCRETE WINGWALL
5. PAINT LINE (WHITE)
6. PAINT LINE (DOUBLE CENTER YELLOW)
7. REPLACE EXISTING SIGN
8. PROPOSED FENCE
9. RELOCATION OF WATERLINE (SEE SHEET C-603, FOR DETAILS)
10. RELOCATION OF GAS (SEE SHEET C-603, FOR DETAILS)
11. RELOCATION OF SANITARY SEWER (SEE SHEET C-603, FOR DETAILS)
12. CROSSWALK
13. BEAM GUARDRAIL (TYPE 31) ANCHOR TYPE 10, PER WSDOT STD PLAN C-23.60-04
14. BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL (POSTED SPEED 45MPH AND BELOW), PER WSDOT STD PLAN C-22.45-04
15. ROCKERY WALL, SEE SHEET C-701 FOR DETAILS
16. GRAVEL SHOULDER

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E LAKE SAMMAMISH PKWY NE PLAN AND PROFILE FOR: GEORGE DAVIS CREEK FISH PASSAGE PROJECT

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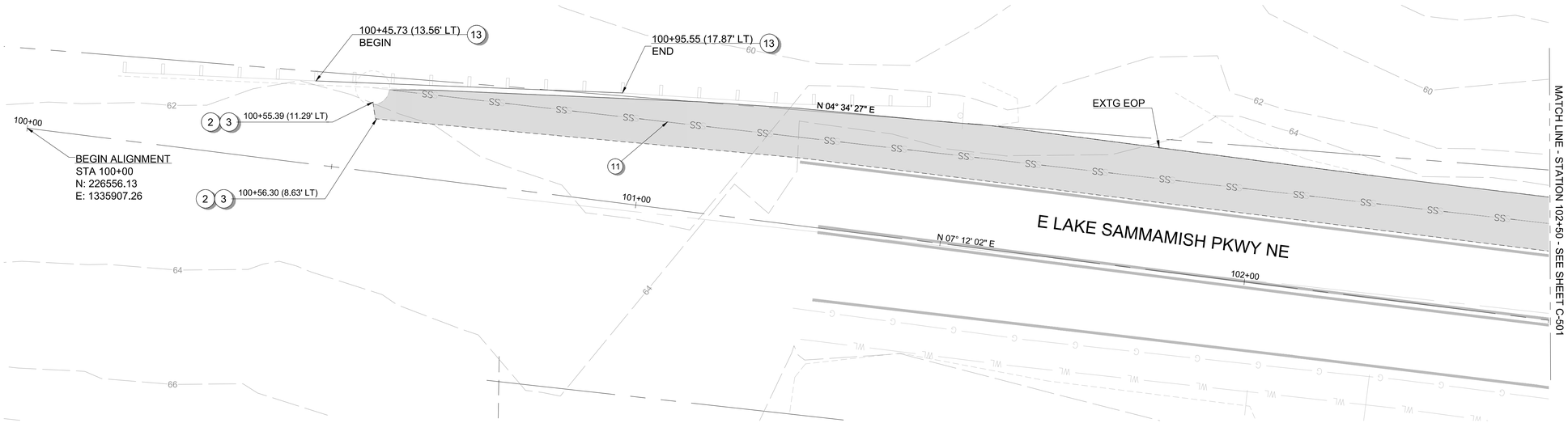
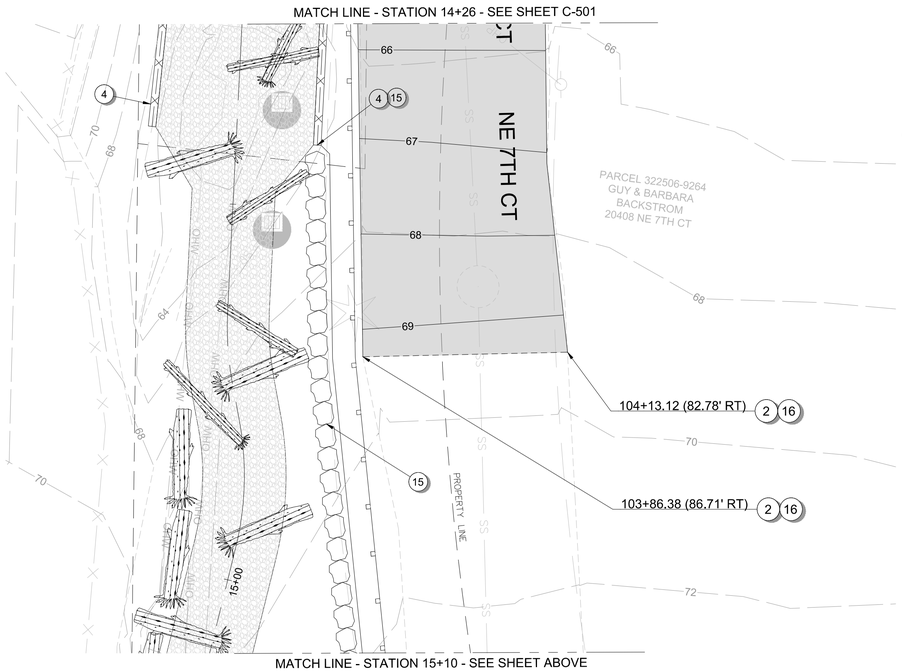
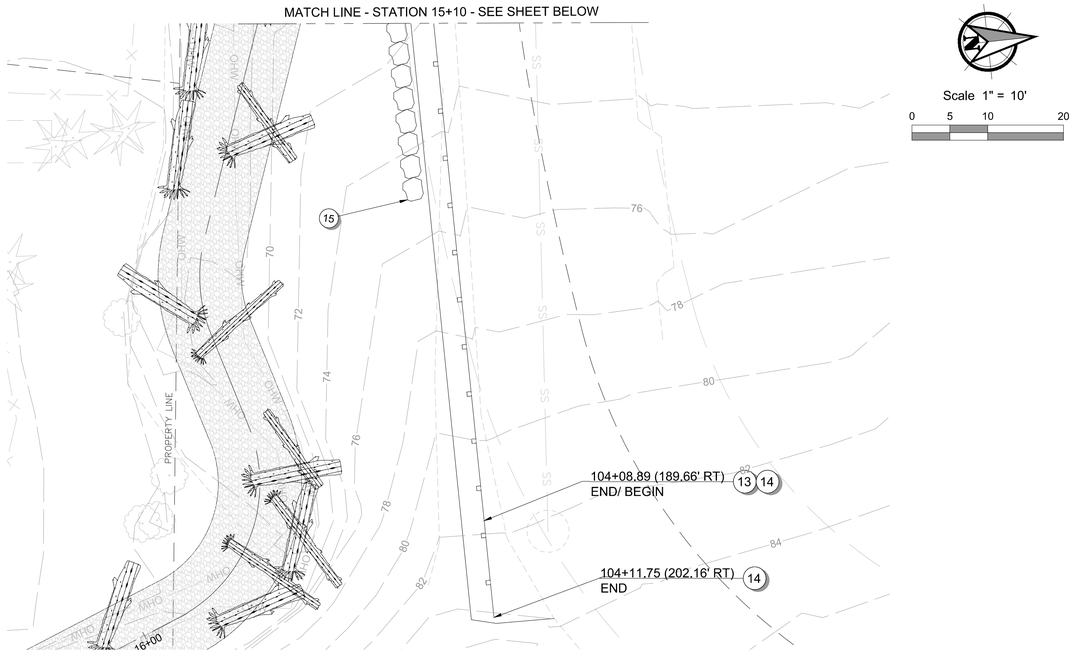
SHEET ID
C-501

SHEET 28 OF 53







CONSTRUCTION PLAN NOTES:

1. 47 FT X 17 FT X 7 FT SPLIT BOX CULVERT PER DETAIL, SHEET C-501
2. HMA PAVEMENT (MATCH EXISTING DEPTH)
3. SAWCUT
4. CONCRETE WINGWALL
5. PAINT LINE (WHITE)
6. PAINT LINE (DOUBLE CENTER YELLOW)
7. REPLACE EXISTING SIGN
8. PROPOSED FENCE
9. RELOCATION OF WATERLINE (SEE SHEET C-603, FOR DETAILS)
10. RELOCATION OF GAS (SEE SHEET C-603, FOR DETAILS)
11. RELOCATION OF SANITARY SEWER (SEE SHEET C-603, FOR DETAILS)
12. CROSSWALK
13. BEAM GUARDRAIL (TYPE 31) ANCHOR TYPE 10, PER WSDOT STD PLAN C-23.60-04
14. BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL (POSTED SPEED 45MPH AND BELOW), PER WSDOT STD PLAN C-22.45-04
15. ROCKERY WALL. SEE SHEET C-701 FOR DETAIL
16. HMA PAVEMENT PER N 7TH CT. SEE SHEET C-710 FOR DETAIL

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C-502
SHEET 29 OF 53

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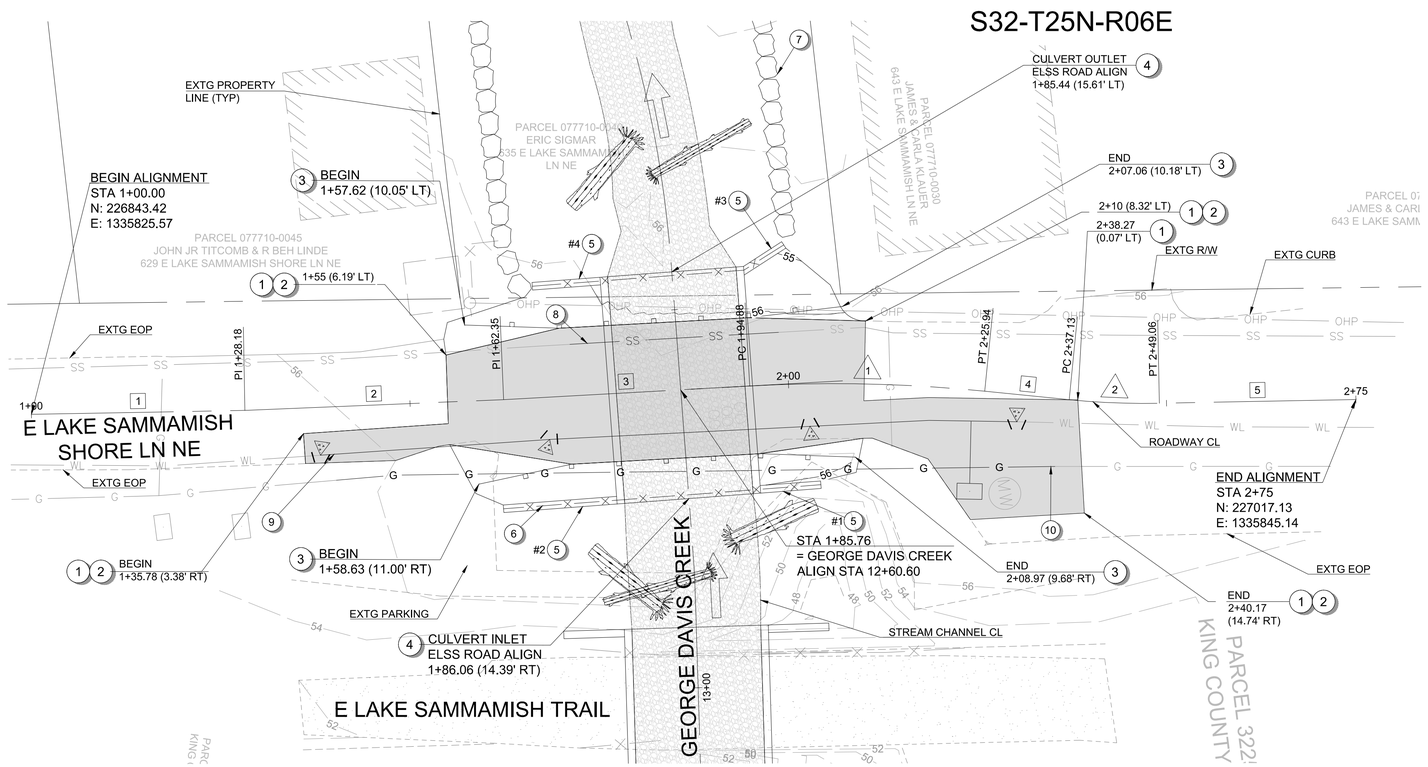

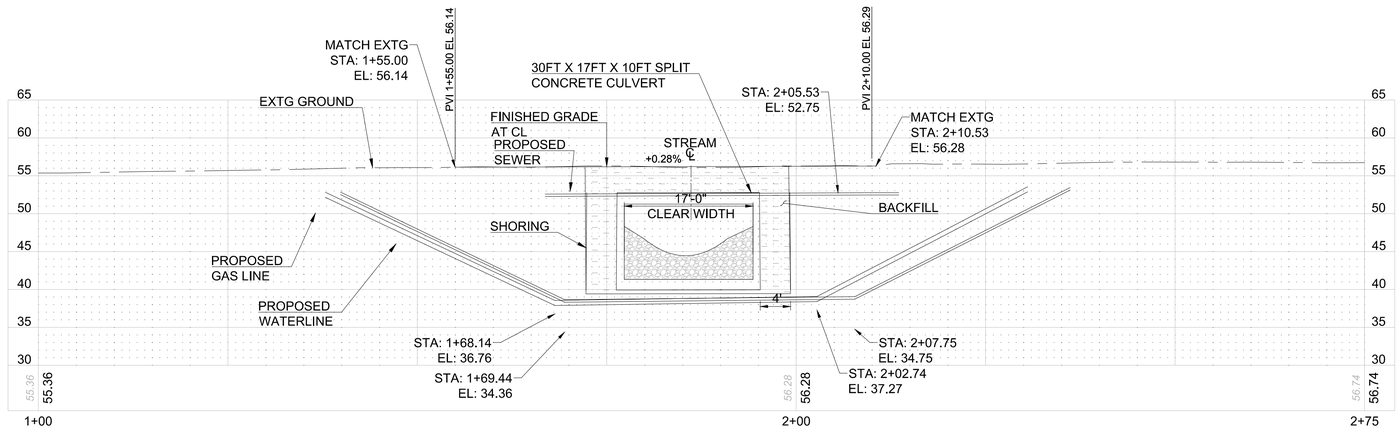

HORIZ: 1"=10' VERT: 1"=10'

Scale 1" = 10'

0 5 10 20

GENERAL NOTES:

1. ROADWAY PROFILE OF ROAD IS MAINTAINED FOR CONTINUITY WITH EXISTING ROADWAY.

CONSTRUCTION PLAN NOTES:

1. HMA PAVEMENT PER N 7TH CT DETAIL. SEE SHEET C-710 FOR DETAIL.
2. SAWCUT
3. BEAM GUARDRAIL (TYPE 31) ANCHOR TYPE 10, PER WSDOT STD PLAN C-23.60-04
4. 30-LF PRECAST SPLIT BOX CULVERT PER DETAIL, SEE SHEET C-701
5. CONCRETE WINGWALL
6. PROPOSED FENCE
7. ROCKERY WALL, SEE SHEET C-701 FOR DETAILS
8. RELOCATION OF SANITARY SEWER (SEE SHEET C-603, FOR DETAILS)
9. RELOCATION OF WATERLINE (SEE SHEET C-603, FOR DETAILS)
10. RELOCATION OF GAS (SEE SHEET C-603, FOR DETAILS)

CENTERLINE LINE DATA

#	Length	Direction
1	28.177	N06° 01' 36.92"E
2	34.170	N04° 40' 46.53"E
3	32.533	N03° 53' 40.19"E
4	11.198	N12° 47' 29.66"E
5	25.943	N05° 57' 29.19"E

CENTERLINE CURVE DATA

#	Δ	R	L	T
1	8°53'49"	200.00	31.06	15.56
2	6°50'00"	100.00	11.93	5.97

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C-503

SHEET 30 OF 53

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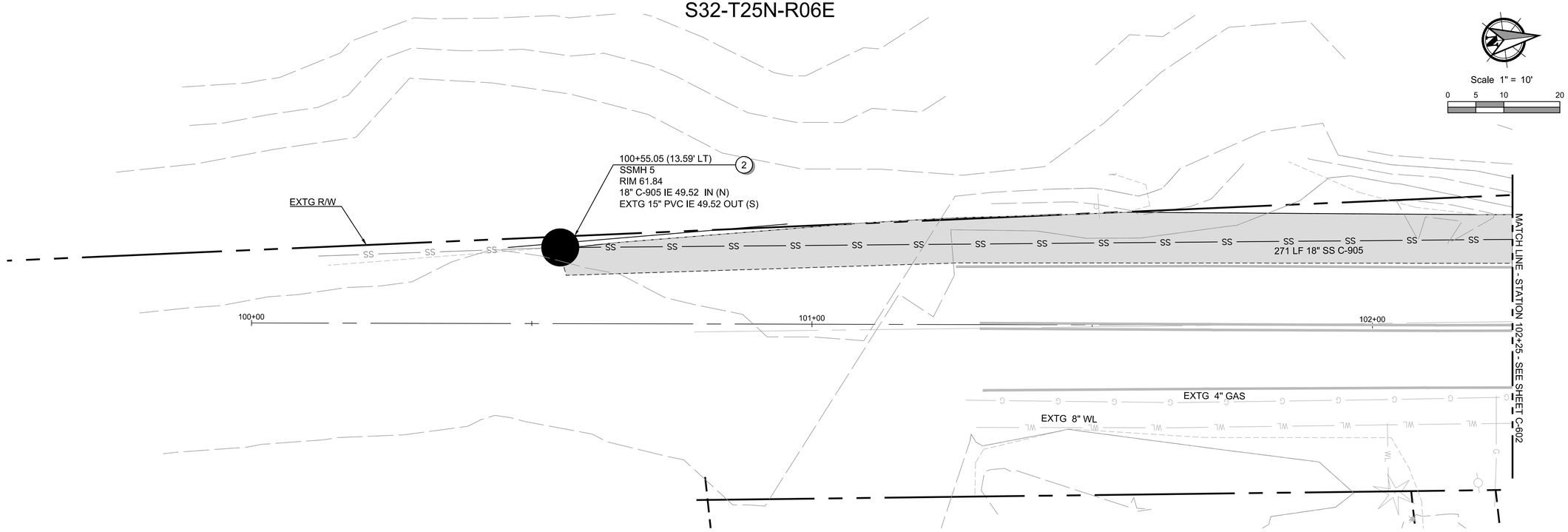

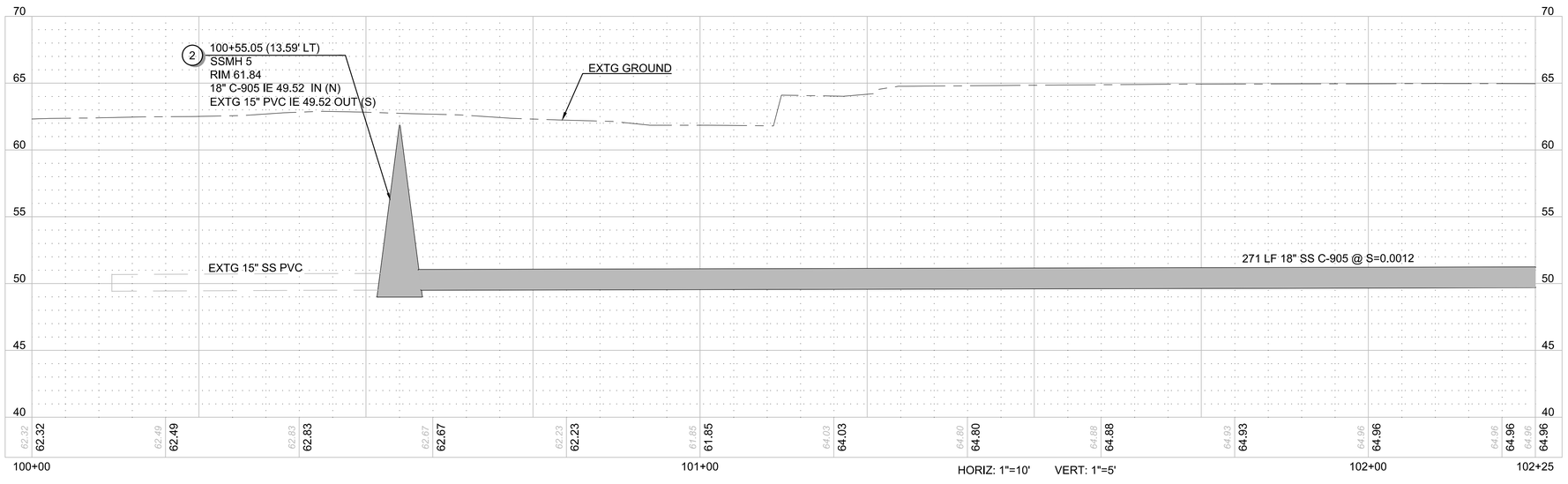

GENERAL NOTES:

1. ALL WATER AND GAS PIPES SHALL BE CEMENT-LINED, CLASS 52 DUCTILE IRON.
2. ALL SEWER PIPES SHALL BE C-905.
3. SEE DEMOLITION PLANS, SHEETS C-201 - C-206 FOR EXISTING UTILITIES (AND LIMITS) TO BE REMOVED.
4. CONTRACTOR SHALL CONFIRM EXISTING PIPE SIZES, MATERIALS, AND DEPTHS PRIOR TO CONSTRUCTION.

CONSTRUCTION PLAN NOTES:

1. 49 FT X 17 FT X 10 FT SPLIT BOX CULVERT PER DETAIL, SHEET C-701.
2. 72-INCH SANITARY SEWER MANHOLE PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-704.
3. FIRE HYDRANT ASSEMBLY PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-706.
4. 8-INCH 45° MJ BEND WITH THRUST BLOCK PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-707.
5. CONNECT TO EXISTING WATER MAIN. COORDINATE WITH SAMMAMISH PLATEAU WATER AND SEWER DISTRICT.
6. CONNECT TO EXISTING GAS MAIN.
7. 31 LF 24" PIPE CASING FOR SEWER MAIN.
8. 8-INCH GATE VALE FOR WATER MAIN PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-707.
9. INSTALL FIRE HYDRANT BOLLARD PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-706.

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GEORGE DAVIS CREEK FISH PASSAGE PROJECT

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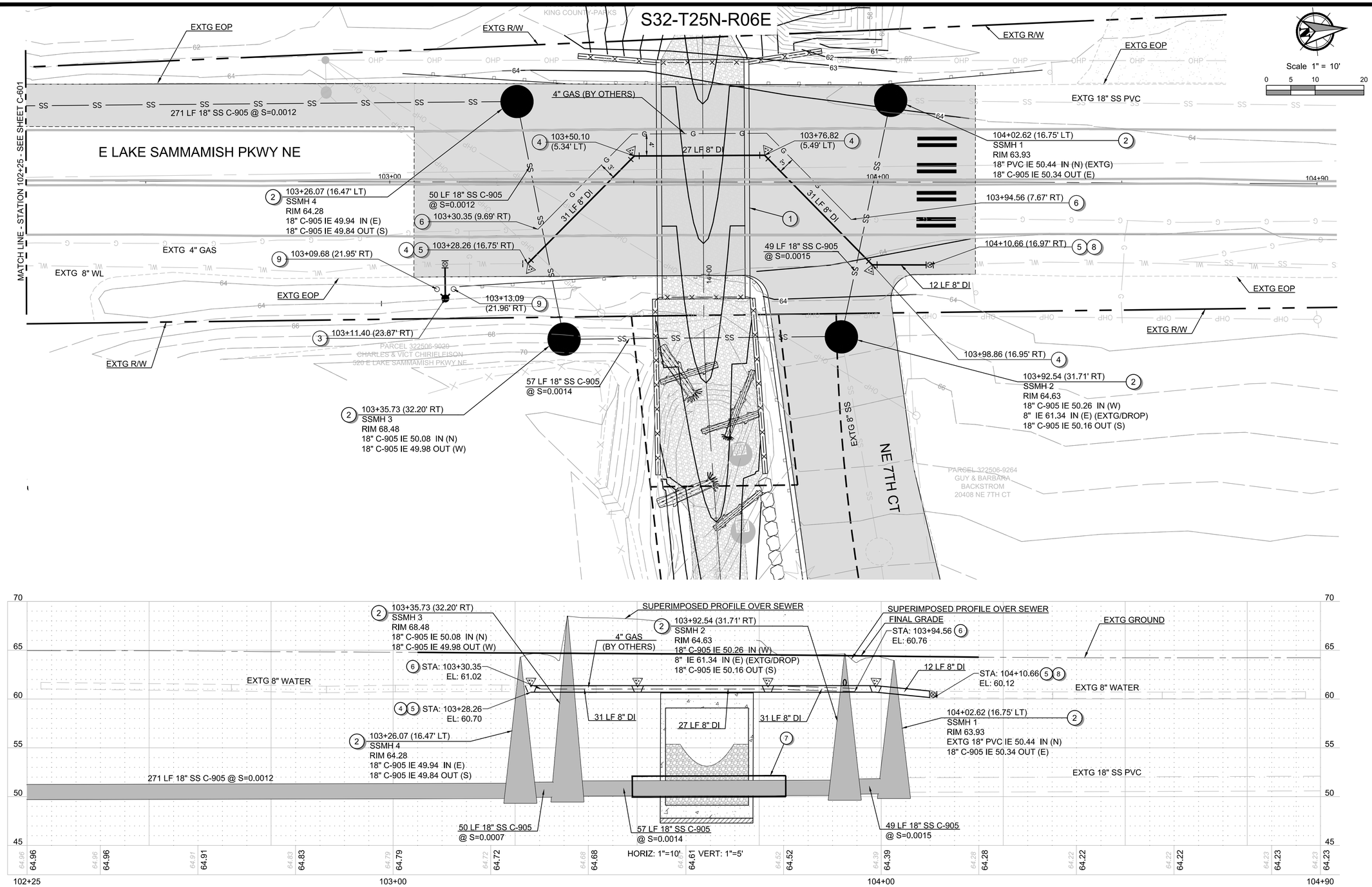

GENERAL NOTES:

1. ALL WATER AND GAS PIPES SHALL BE CEMENT-LINED, CLASS 52 DUCTILE IRON.
2. ALL SEWER PIPES SHALL BE C-905.
3. SEE DEMOLITION PLANS, SHEETS C-201 - C-206 FOR EXISTING UTILITIES (AND LIMITS) TO BE REMOVED.
4. CONTRACTOR SHALL CONFIRM EXISTING PIPE SIZES, MATERIALS, AND DEPTHS PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL PLACE ETHAFOAM BETWEEN BOTTOM OF PIPES AND TOP OF SPLIT BOX CULVERT.

CONSTRUCTION PLAN NOTES:

1. 49 FT X 17 FT X 10 FT SPLIT BOX CULVERT PER DETAIL, SHEET C-701.
2. 72-INCH SANITARY SEWER MANHOLE PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-704.
3. FIRE HYDRANT ASSEMBLY PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-706.
4. 8-INCH 45° MJ BEND WITH THRUST BLOCK PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-707.
5. CONNECT TO EXISTING WATER MAIN. COORDINATE WITH SAMMAMISH PLATEAU WATER AND SEWER DISTRICT.
6. CONNECT TO EXISTING GAS MAIN.
7. 31 LF 24" PIPE CASING FOR SEWER MAIN.
8. 8-INCH GATE VALE FOR WATER MAIN PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-707.
9. INSTALL FIRE HYDRANT BOLLARD PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-706.

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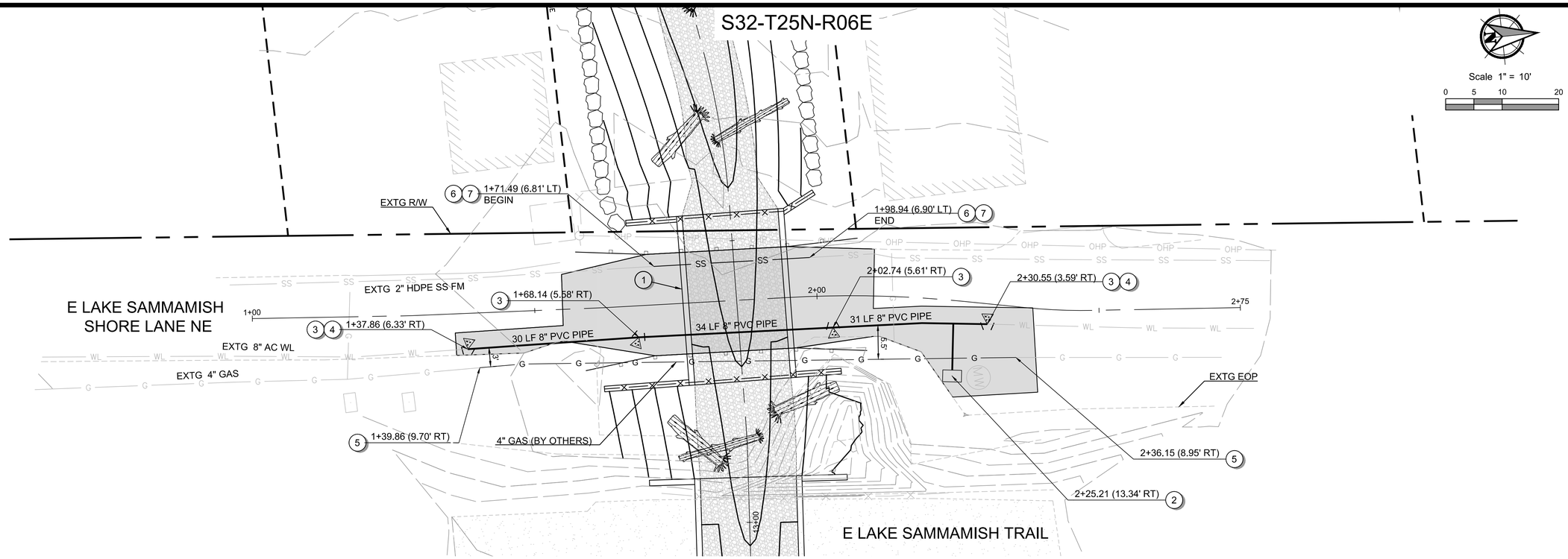

GENERAL NOTES:

1. PIPE ANCHORS SHALL BE PLACED EVERY 16-FEET O.C. ALONG 45° VERTICAL STRETCHES FOR BOTH WATER AND GAS RELOCATED MAINS.
2. HILL HOLDERS SHALL BE PLACED FOR BOTH WATER AND GAS RELOCATED MAINS.
3. ALL WATER AND GAS PIPES SHALL BE CEMENT-LINED, CLASS 52 DUCTILE IRON.
4. SEE DEMOLITION PLANS, SHEETS C-201 - C-206 FOR EXISTING UTILITIES (AND LIMITS) TO BE REMOVED.
5. CONTRACTOR SHALL CONFIRM EXISTING PIPE SIZES, MATERIALS, AND DEPTHS PRIOR TO CONSTRUCTION.
6. CONTRACTOR SHALL PLACE ETHAFOAM BETWEEN BOTTOM OF PIPES AND TOP OF SPLIT BOX CULVERT.

CONSTRUCTION PLAN NOTES:

1. 30 FT X 17 FT X 10 FT SPLIT BOX CULVERT PER DETAIL, SHEET C-701.
2. WATER METER PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-706.
3. 8-INCH 45° VERTICAL MJ BEND WITH THRUST BLOCK PER SAMMAMISH PLATEAU STANDARD DETAIL, SHEET C-707.
4. CONNECT TO EXISTING 8" AC WATER MAIN. COORDINATE WITH SAMMAMISH PLATEAU WATER AND SEWER DISTRICT.
5. CONNECT TO EXISTING GAS MAIN.
6. CONNECT TO EXISTING 2-INCH HDPE SEWER FORCE MAIN.
7. 2-INCH HDPE SEWER PIPE.
8. 30 LF 18" PIPE CASING FOR WATER MAIN.
9. 30 LF 14" PIPE CASING FOR GAS MAIN.

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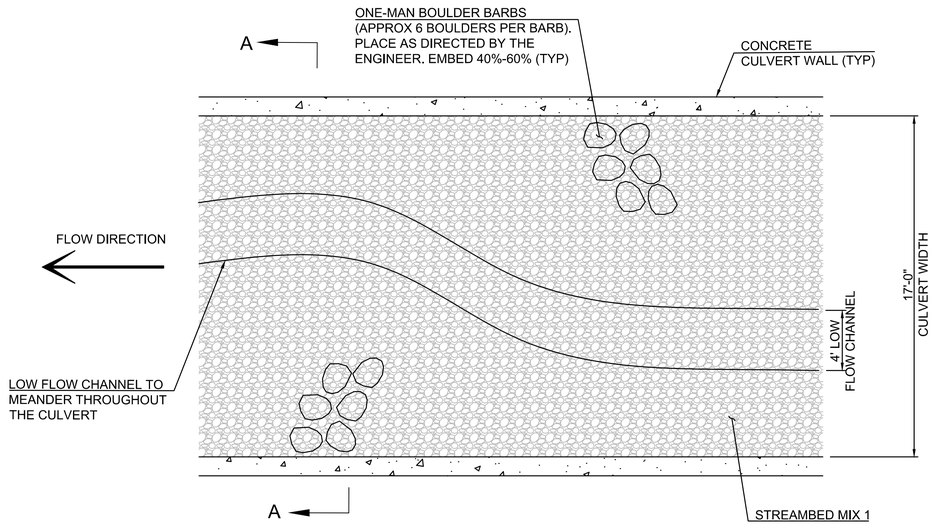
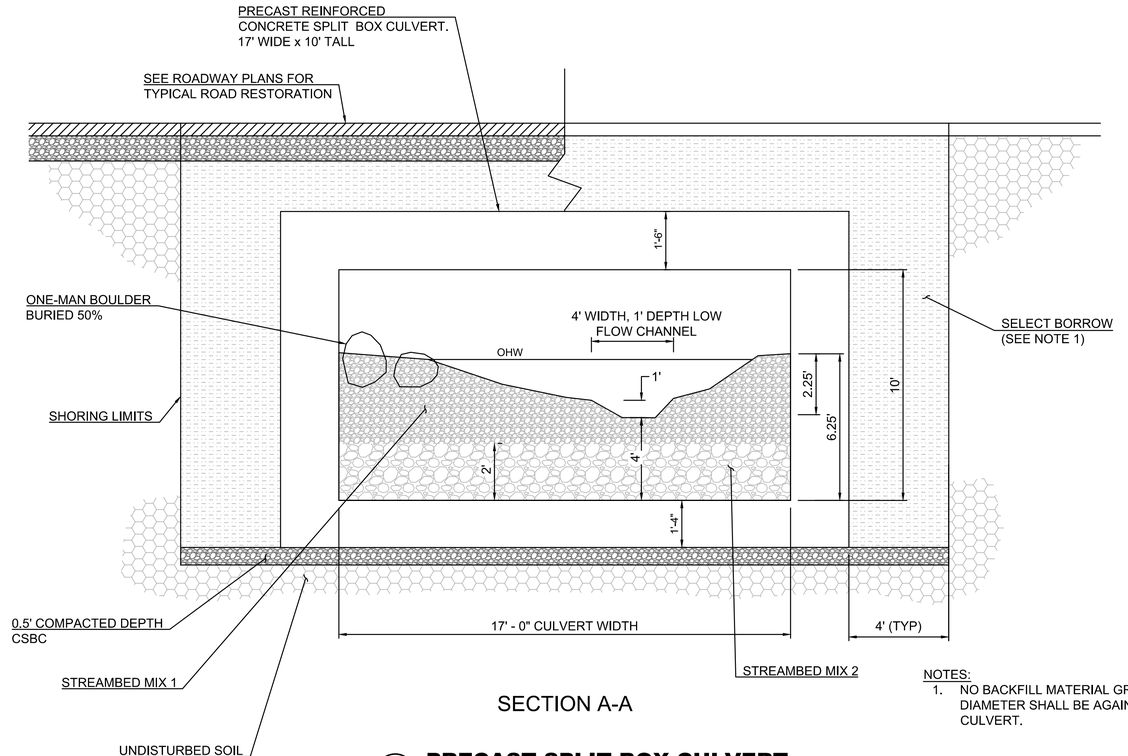


PLAN VIEW



SECTION A-A

NOTES:
1. NO BACKFILL MATERIAL GREATER THAN 3" DIAMETER SHALL BE AGAINST THE BOX CULVERT.

1 PRECAST SPLIT BOX CULVERT
NOT TO SCALE

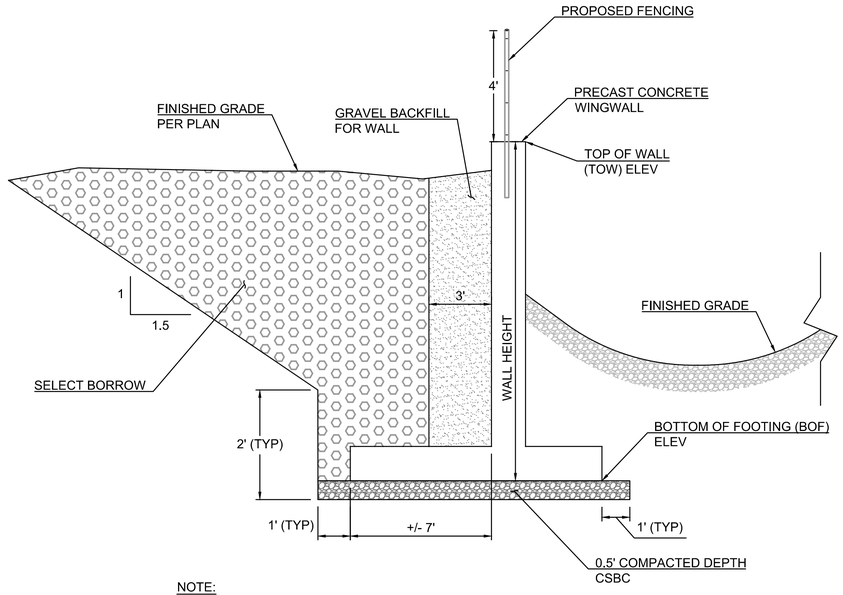
GENERAL NOTES:

1. LARGE WOODY DEBRIS FEATURES, ONE-MAN BOULDERS, AND THALWEG LOCATIONS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE WOOD FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
2. STREAMBED MIX 1: THREE PARTS 12" COBBLES SHALL BE MIXED THOROUGHLY WITH TWO PARTS STREAMBED SEDIMENT.
3. STREAMBED MIX 2: ONE PART ONE-MAN AND ONE PART TWO-MAN STREAMBED BOULDERS SHALL BE MIXED THOROUGHLY WITH STREAMBED SEDIMENT WASHED INTO THE BOULDER MATRIX.
4. STREAMBED SEDIMENT IS TO PROVIDE STABILITY TO THE STREAMBED MIX AND BE PLACED IN AREA OF VOIDS TO CREATE A UNIFORM, NON-POROUS BED.

WINGWALL TABLE

WINGWALL NO.	LENGTH (FT)	ANGLE TO CULVERT OPENING (DEGREES)	BEGIN HEIGHT (FT)	END HEIGHT (FT)	BOF ELEV
1 (NE)	7	161	15.83	15.33	40.84
2 (SE)	7	161	15.83	15.33	40.84
3 (NW)	8	180	17.33	16.00	38.95
4 (SW)	8	180	17.33	17.33	38.95

* HEIGHT OF WALL INCLUDES ASSUMED 16" THICK FOOTING. MATCH BOTTOM OF FOOTING WITH CULVERT BOTTOM.



NOTE:
1. PRECAST WINGWALL TO BE DESIGNED AND PROVIDED BY CULVERT SUPPLIER. ENGINEER TO APPROVE DESIGN PRIOR TO CONSTRUCTION.

2 PRECAST CONCRETE WINGWALL
NOT TO SCALE

60% PLAN SET

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E LAKE SAMMAMISH SHORE LANE CULVERT DETAILS FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

SAMMAMISH, WASHINGTON

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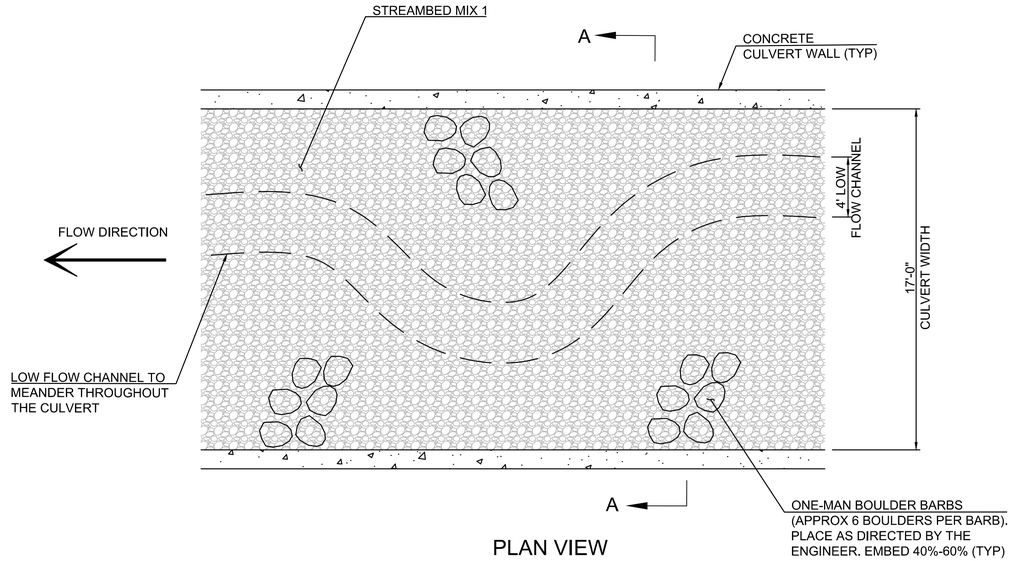


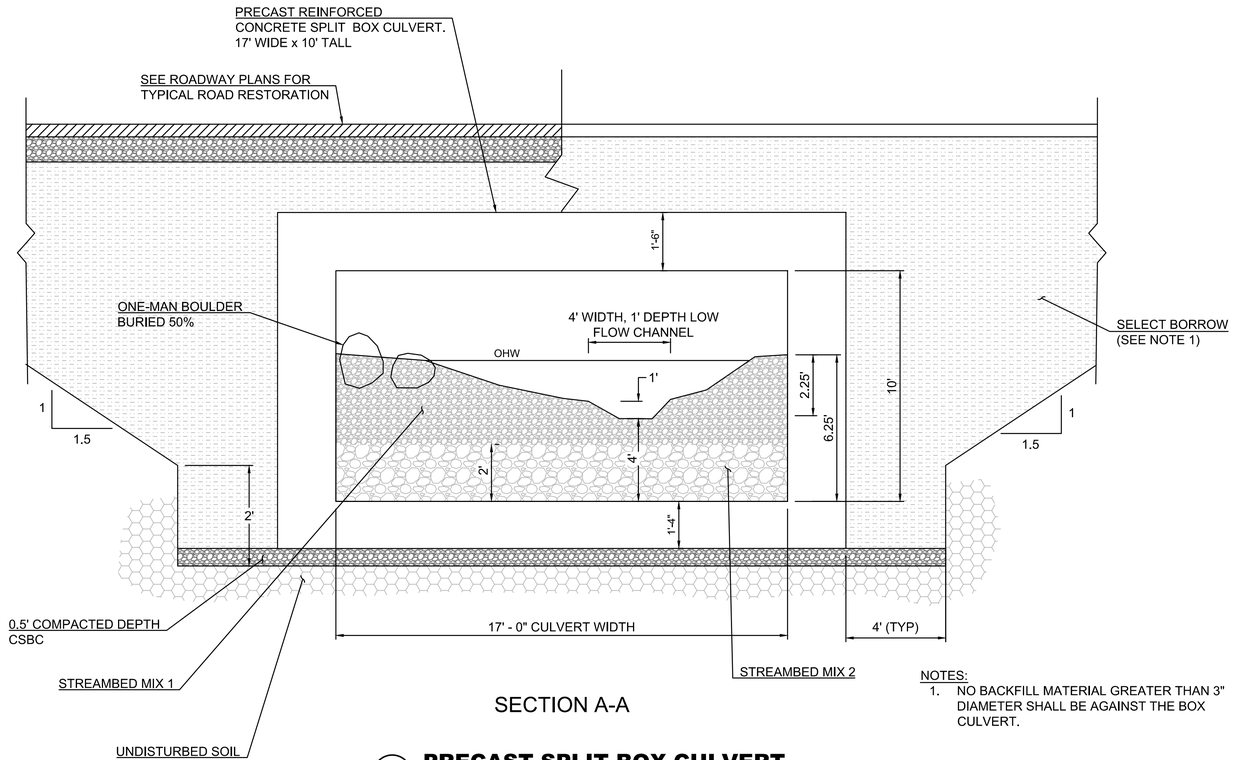
PLAN VIEW

GENERAL NOTES:

1. LARGE WOODY DEBRIS FEATURES, ONE-MAN BOULDERS, AND THALWEG LOCATIONS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE WOOD FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
2. STREAMBED MIX 1: THREE PARTS 12" COBBLES SHALL BE MIXED THOROUGHLY WITH TWO PARTS STREAMBED SEDIMENT.
3. STREAMBED MIX 2: ONE PART ONE-MAN AND ONE PART TWO-MAN STREAMBED BOULDERS SHALL BE MIXED THOROUGHLY WITH STREAMBED SEDIMENT WASHED INTO THE BOULDER MATRIX.
4. STREAMBED SEDIMENT IS TO PROVIDE STABILITY TO THE STREAMBED MIX AND BE PLACED IN AREA OF VOIDS TO CREATE A UNIFORM, NON-POROUS BED.

WINGWALL TABLE					
WINGWALL NO.	LENGTH (FT)	ANGLE TO CULVERT OPENING (DEGREES)	BEGIN HEIGHT (FT)	END HEIGHT (FT)	BOF ELEV
1 (NE)	36	94	14.83	16.50	49.46
2 (SE)	36	90	14.83	16.00	49.46
3 (NW)	15	172	18.33	16.25	46.03
4 (SW)	16	175	18.33	17.00	46.03

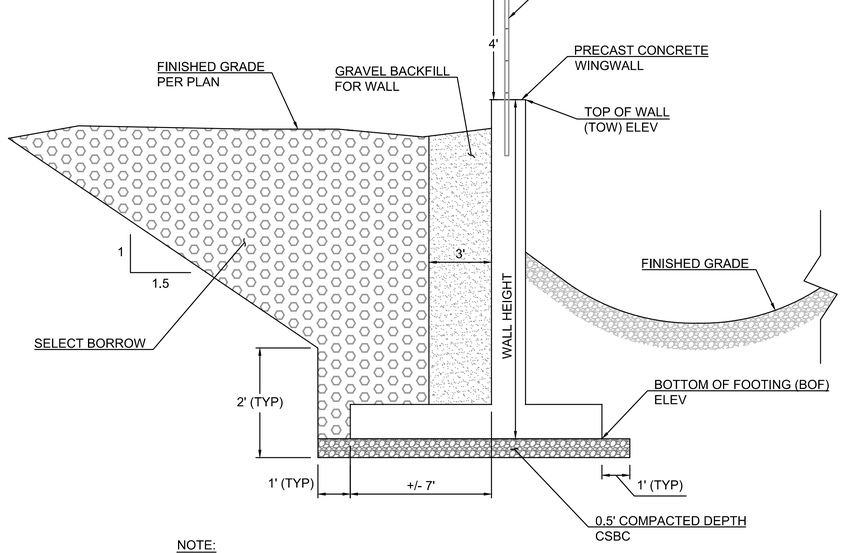
* HEIGHT OF WALL INCLUDES ASSUMED 16" THICK FOOTING. MATCH BOTTOM OF FOOTING WITH CULVERT BOTTOM.



SECTION A-A

NOTES:
1. NO BACKFILL MATERIAL GREATER THAN 3" DIAMETER SHALL BE AGAINST THE BOX CULVERT.

1 **PRECAST SPLIT BOX CULVERT**
NOT TO SCALE



NOTE:
1. PRECAST WINGWALL TO BE DESIGNED AND PROVIDED BY CULVERT SUPPLIER. ENGINEER TO APPROVE DESIGN PRIOR TO CONSTRUCTION.

2 **PRECAST CONCRETE WINGWALL**
NOT TO SCALE

60% PLAN SET

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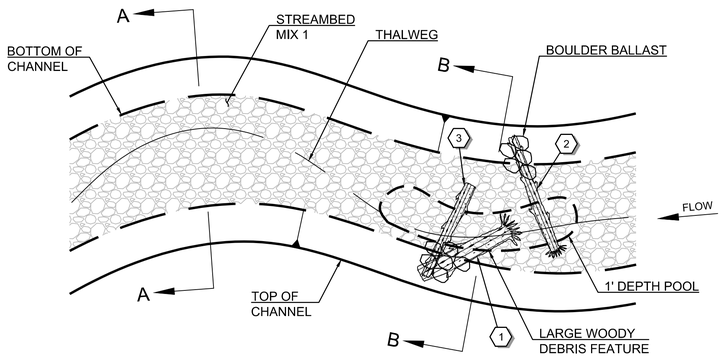
PBS

E LAKE SAMMAMISH PKWY NE CULVERT DETAILS FOR:
GEORGE DAVIS CREEK FISH PASSAGE PROJECT
SAMMAMISH, WASHINGTON

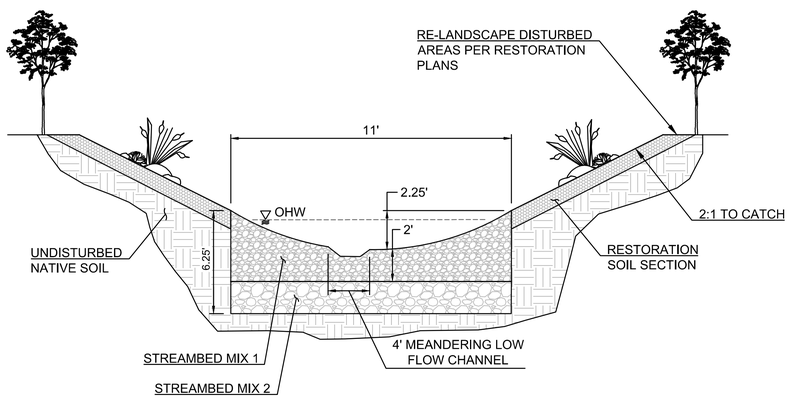
811 Know what's below. Call before you dig.

DESIGNED: DKE
CHECKED: DAS
MAY 2020
45015-004

SHEET ID
C-702
SHEET 35 OF 53



CHANNEL PLAN



CHANNEL SECTION A-A

1 GEORGE DAVIS CREEK CHANNEL

NOT TO SCALE

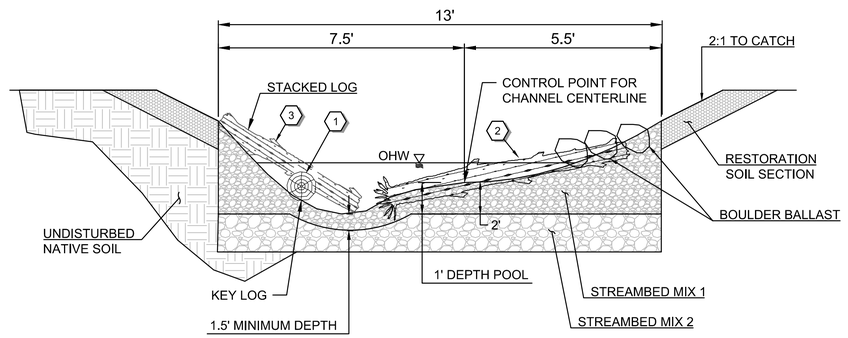
STREAMBED BOULDER SIZING	
ROCK SIZE	**APPROXIMATE SIZE**
ONE-MAN	**12" - 18"**
TWO-MAN	**18" - 28"**

12" STREAMBED COBBLES GRADATION	
APPROXIMATE SIZE	**% PASSING**
12"	**99 - 100**
10"	**70 - 90**
5"	**30 - 60**
3/4"	**10 MAX**

STREAMBED SEDIMENT GRADATION	
SIEVE SIZE	**% PASSING**
2.5"	**99 - 100**
2"	**65 - 95**
1"	**50 - 85**
U.S. NO. 4	**26 - 44**
U.S. NO. 40	**16 MAX**
U.S. NO. 200	**5.0 - 9.0**

LOG SCHEDULE					
LOG (#)	LOG LENGTH (FT)	LOG DIAMETER (FT)	ROOTWAD LENGTH (FT)	ROOTWAD DIAMETER (FT)	VOLUME (FT^3)
1*	12	2	2	3.5	37.7
2	15	1.25	2	3	18.4
3	12	1.25	-	-	14.7

* KEY LOG (VOLUME > 35 FT^3)



LARGE WOODY DEBRIS SECTION B-B

2 LARGE WOODY DEBRIS FEATURE

NOT TO SCALE

GENERAL NOTES:

1. LARGE WOODY DEBRIS FEATURES, ONE-MAN BOULDERS, AND THALWEG LOCATIONS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE WOOD FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
2. STREAMBED MIX 1: THREE PARTS 12" COBBLES SHALL BE MIXED THOROUGHLY WITH TWO PARTS STREAMBED SEDIMENT.
3. STREAMBED MIX 2: ONE PART ONE-MAN AND ONE PART TWO-MAN STREAMBED BOULDERS SHALL BE MIXED THOROUGHLY WITH STREAMBED SEDIMENT WASHED INTO THE BOULDER MATRIX.
4. STREAMBED SEDIMENT IS TO PROVIDE STABILITY TO THE STREAMBED MIX AND BE PLACED IN AREA OF VOIDS TO CREATE A UNIFORM, NON-POROUS BED.

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STREAM DETAILS FOR:
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SAMMAMISH, WASHINGTON

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MAY 2020
45015-004

SHEET ID
C-703

SHEET 36 OF 53

60% PLAN SET

No.	Revision	Date	By	App'd

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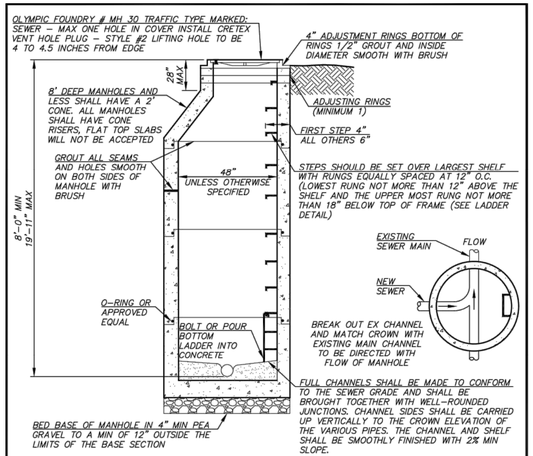
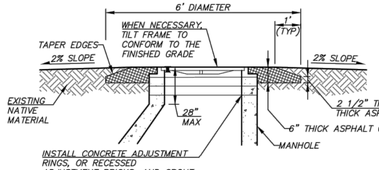


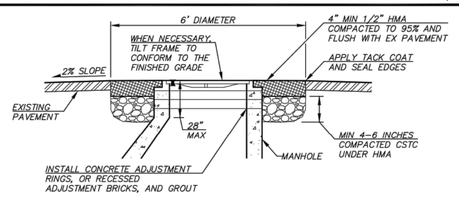
NOTES

1. BACKFILLING AND MECHANICAL COMPACTION SHALL BE PERFORMED CAREFULLY SO THAT NO DAMAGE IS IS DONE TO THE PIPE OR TO ITS ALIGNMENT. THE DISTRICT MAY DIRECT THE CONTRACTOR TO USE SPECIAL BACKFILL TECHNIQUES WHEN THE DISTRICT DEEMS IT NECESSARY. COMPACTION IS TO MEET KING COUNTY REQUIREMENTS.
2. MANHOLES SET IN PAVED STREETS OR OTHER PAVED AREAS SHALL BE SET TO FINISHED GRADE OF THE PAVING, AND WHEN REQUIRED THE MANHOLE FRAME SHALL BE TILTED TO CONFORM TO THE GRADE OF THE PAVED SURFACE. REMOVE ASPHALT FROM COVER AFTER PAVING.
3. ASPHALT PATCH WILL BE REQUIRED ON ALL MANHOLES INSTALLED ON THE SHOULDER OF THE ROADWAY. (SEE SANITARY MANHOLE ASPHALT PATCH DETAIL).
4. IF MANHOLE IS INSTALLED ON UNIMPROVED GROUND SET MANHOLE TOP 6" ABOVE GRADE WITH LOCKING COVER AND FRAME (OLYMPIC FOUNDRY #MH 30 D/T) AND ASPHALT PATCH (SEE MANHOLE ASPHALT ASPHALT COLLAR DETAIL).
5. BASE SECTION OPENINGS TO RECEIVE PIPE SHALL BE CIRCULAR CORE-DRILLED OR KNOCK-OUTS. KOR-N-SEAL CONNECTOR REQUIRED.
6. HORIZONTAL DISTANCE BETWEEN MANHOLES SCALED FROM WORKSHEETS AND ROADWAY PLAN AND PROFILES. ACTUAL DISTANCES TO THE COMPUTED AT TIME OF STAKING.
7. MANHOLES BETWEEN 6-FEET AND 8-FEET DEEP REQUIRE WRITTEN DISTRICT APPROVAL. MANHOLES LESS THAN 6 FEET DEEP ARE NOT ALLOWED.
8. MANHOLES 20' AND GREATER IN DEPTH SHALL BE 60" DIAMETER. FOR PIPE 15" OR GREATER DIAMETER, MANHOLES SHALL BE 72" DIAMETER.

STANDARD SANITARY MANHOLE REV. 10/19/17



MANHOLE ASPHALT COLLAR FOR NON-PAVED AREAS REV. 10/19/17



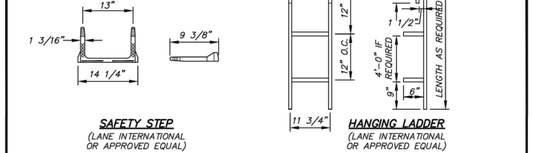
MANHOLE PAVEMENT PATCH FOR PAVED AREAS REV. 10/19/17

NOTES

1. CONTRACTOR SHALL WARRANTY MANHOLE ADJUSTMENT AREA FREE FROM LEAKS FOR ONE YEAR.
2. IN PAVED AREAS, MANHOLE FRAMES SHALL BE RAISED TO GRADE AFTER PLACEMENT OF THE ASPHALT'S FINAL LIFT AND WITHIN 48 HOURS UNLESS OTHERWISE APPROVED BY THE DISTRICT.
3. IN PAVED AREAS, NEATLY REMOVE ASPHALT AROUND EXISTING MANHOLE FRAME.
4. INSTALL CHANNEL BOARD IN MANHOLE PRIOR TO ANY WORK, AND REMOVE AFTER FINAL ADJUSTMENT.
5. PRIOR TO ADJUSTMENT, NOTIFY DISTRICT IF THE FINAL MANHOLE NECK WILL EXCEED 28".
6. IN PAVED AREAS, EXCAVATE AROUND EXISTING MANHOLE FRAME TO A MIN. DEPTH OF 12".
7. REMOVE FRAME AND COVER, AND INSTALL ADJUSTMENT RINGS, TILTING FRAME AS NECESSARY TO MATCH EXISTING GRADE. ADJUSTMENT BRICKS RECESSED FOR GROUTING, CAN BE UTILIZED. REINSTALL FRAME AND COVER.
8. IN PAVED AREAS BACKFILL WITH CRUSHED SURFACING TOP COURSE (CSTC) COMPACTED TO 95% (MODIFIED PROCTOR).
9. IN NON-PAVED AREAS, BACKFILL WITH APPROVED BACKFILL MATERIAL COMPACTED TO 95%
10. IN PAVED AREAS, INSTALL 1/2" HMA IN 2-INCH LIFTS, TO A COMPACTED DEPTH EQUAL TO THE EXISTING PAVEMENT OR A MINIMUM OF 4", WHICHEVER IS GREATER. TACK ALL EDGES AND SEAL FINISH JOINTS WITH TAR AND SAND.
11. IN UN-PAVED AREAS, INSTALL ASPHALT PATCH TO A MINIMUM COMPACTED DEPTH OF 6" AS SHOWN ABOVE.
12. GROUT MANHOLE NECK. "JETSET" NOT ALLOWED. DO NOT RUN GROUT ONTO MANHOLE FRAME.

REV. 10/19/17

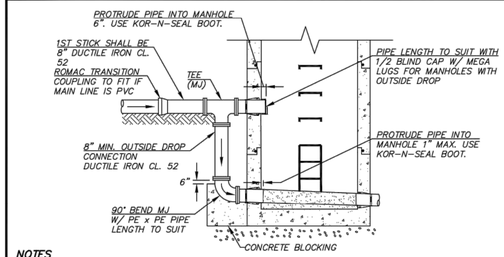
GENERAL NOTES FOR ASPHALT COLLAR/PATCHES AROUND MANHOLES



NOTES

1. POLYPROPYLENE PLASTIC STEPS SHALL BE A POLYPROPYLENE PLASTIC STEP INJECTION MOLDED AROUND A 1/2 INCH DIAMETER ASTM A-615, GRADE 60, STEEL REINFORCING BAR. INSTALLATION AS PER THE MANUFACTURER'S SPECIFICATIONS.
2. POLYPROPYLENE PLASTIC LADDER SHALL HAVE A POLYPROPYLENE PLASTIC STEP INJECTION MOLDED AROUND A 1/2 INCH DIAMETER ASTM A-615, GRADE 60, STEEL REINFORCING BAR, AND A POLYPROPYLENE PLASTIC RAIL INJECTION MOLDED AROUND A 9/16 INCH DIAMETER ASTM C-1018, COLD DRAWN BAR. INSTALLATION AS PER THE MANUFACTURER'S SPECIFICATION.

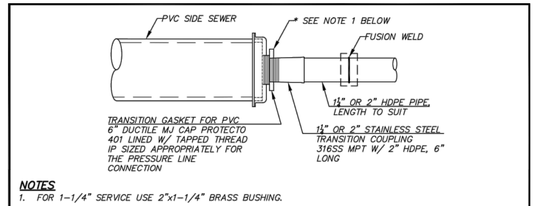
MANHOLE STEP AND LADDER REV. 10/19/17



NOTES

1. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE PROTECTO 401 LINED.
2. DROP MANHOLE SHALL MEET ALL REQUIREMENTS AS STATED IN THE STANDARD MANHOLE DETAIL, MATERIALS AND CONSTRUCTION NOTES.
3. DROP MANHOLES SHALL ONLY BE USED IN STRAIGHT FLOW-THROUGH LOCATIONS (NO 90° TURNS).
4. ALL DUCTILE IRON FITTINGS WITH MEGA-LUGS.
5. VERTICAL BEND MAY BE REQUIRED DUE TO PIPE SLOPE CONDITIONS AT DUCTILE IRON TEE.

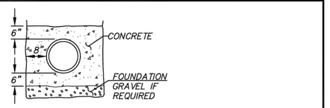
DROP MANHOLE REV. 10/19/17



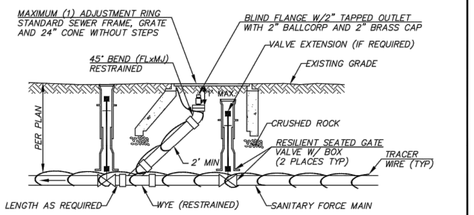
NOTES

1. FOR 1-1/4" SERVICE USE 2"x1-1/4" BRASS BUSHING.
2. FOR 2" SERVICE, OMIT BUSHING.

PRESSURE LINE CONNECTION REV. 10/19/17



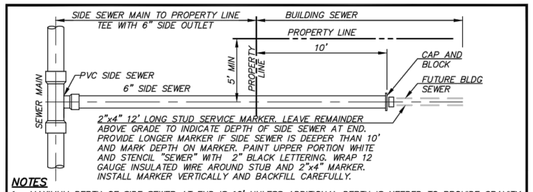
CONCRETE ENCASEMENT FOR SANITARY SEWERS REV. 10/19/17



NOTES

1. VALVES, VALVE BOXES AND VALVE EXTENSIONS SHALL MEET THE SAME REQUIREMENTS AS SHOWN IN THE STANDARD WATER DETAILS. VALVE BOX COVERS SHALL OLYMPIC FOUNDRY 940 OR EQUAL MARKED "SEWER".
2. VALVE MARKER POSTS SHALL MEET THE SAME REQUIREMENTS AS SHOWN IN THE WATER DETAILS AND BE PAINTED AS SPECIFIED IN THE STANDARD CONSTRUCTION NOTES.
3. ALL D.I. PIPE AND FITTINGS SHALL BE PROTECTOR 401 EPOXY COATED. ALL PIPE AND FITTINGS SHALL BE RESTRAINED JOINT.

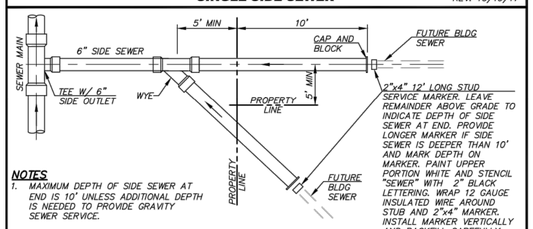
SANITARY FORCE MAIN CLEANOUT TYPE II REV. 10/19/17



NOTES

1. MAXIMUM DEPTH OF SIDE SEWER AT END IS 10' UNLESS ADDITIONAL DEPTH IS NEEDED TO PROVIDE GRAVITY SEWER SERVICE.
2. FOR MULTI-FAMILY AND/OR COMMERCIAL PROJECTS, SIDE SEWERS MAY BE EXTENDED, AT THE DISTRICT'S DISCRETION, FROM THE EDGE OF THE ROAD OR PROPERTY LINE TO WITHIN 3 FEET OF THE BUILDING FOUNDATION.

SINGLE SIDE SEWER REV. 10/19/17



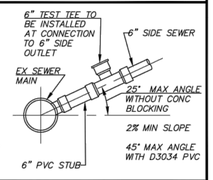
NOTES

1. MAXIMUM DEPTH OF SIDE SEWER AT END IS 10' UNLESS ADDITIONAL DEPTH IS NEEDED TO PROVIDE GRAVITY SEWER SERVICE.
2. POSITION WYE IN DIRECTION OF FLOW.

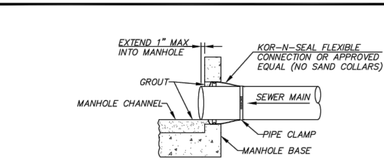
DOUBLE SIDE SEWER REV. 10/19/17

NOTES

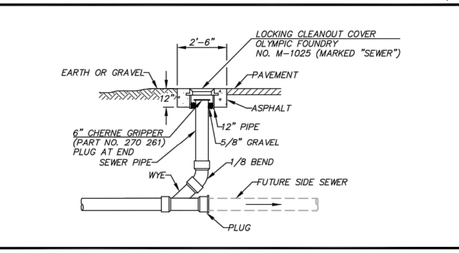
1. CONNECTION OF NEW SIDE SEWER TO EXISTING MAIN MAY USE EITHER:
   - CUT IN TEE W/ PVC SLIP COUPLINGS.
   - ROMAC SST STAINLESS STEEL TAPPING SLEEVE W/ FL X MJ ADAPTER AND GASKET SIZED FOR D3034 PVC SIDE SEWER. ROMAC SIDE SEWER SADDLE, MODEL CB, IS NOT ALLOWED.
2. UNLESS OTHERWISE SHOWN ON PLAN, MINIMUM COVER FOR SIDE SEWERS (WHICHEVER IS LOWER):
   - 18" - PRIVATE PROPERTY
   - 3' - AT PROPERTY LINE
   - 2'-6" IF CROSSING A DITCH IN PUBLIC RIGHT OF WAY LOWER THAN THE LOWEST HOUSE ELEVATION



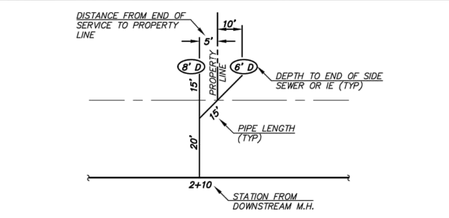
SIDE SEWER DETAILS REV. 10/19/17



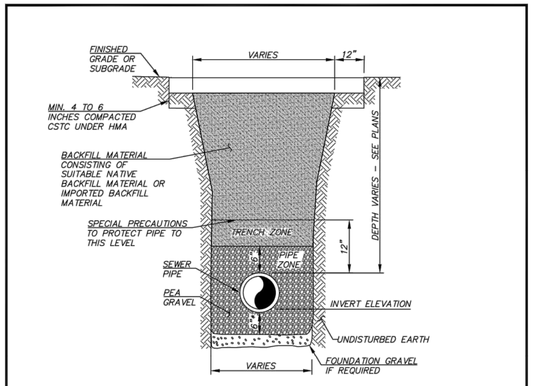
SANITARY MANHOLE INLET CONNECTION REV. 10/19/17



SIDE SEWER CLEANOUT REV. 10/19/17



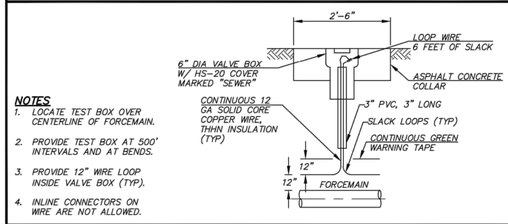
SIDE SEWER AS-BUILT REV. 10/19/17



NOTES

1. * FOR PIPE DEEPER THAN 18', PIPE BEDDING SHALL EXTEND 18" ABOVE CROWN OF PIPE
2. NOT TO SCALE

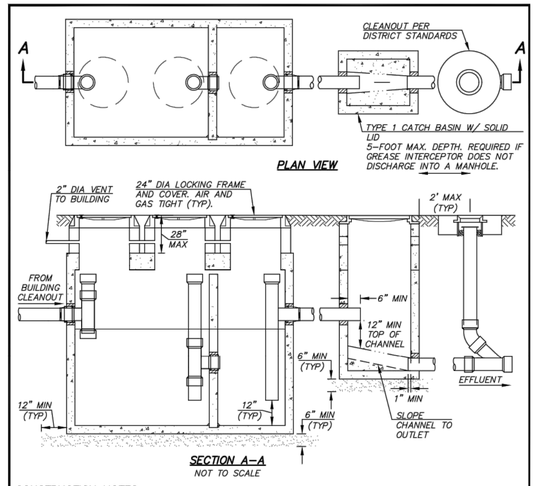
SANITARY SEWER TRENCH SECTION REV. 10/30/17



NOTES

1. LOCATE TEST BOX OVER CENTERLINE OF FORCEMAIN.
2. PROVIDE TEST BOX AT 500' INTERVALS AND AT BENDS.
3. PROVIDE 12" WIRE LOOP INSIDE VALVE BOX (TYP).
4. INLINE CONNECTORS ON WIRE ARE NOT ALLOWED.

FORCEMAIN TRACER WIRE LOCATE STATION REV. 10/19/17



SECTION A-A
NOT TO SCALE

CONSTRUCTION NOTES

1. VAULT SHALL BE UTILITY VAULT GREASE INTERCEPTOR (1000 GALLON MINIMUM). VAULT SIZING CALCULATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO THE DISTRICT PRIOR TO APPROVAL OF CONSTRUCTION. LOCATED 50-FT MAX. FROM POINT OF ENTRY.
2. THE EXTERIOR OF VAULTS BELOW GRADE SHALL BE PAINTED WITH TWO (2) COATS OF BLACK BITUMASTIC SOLUTION. NO MOISTURE SHALL BE PRESENT DURING APPLICATION OF COATINGS.
3. NO MORE THAN 1-FOOT OF RISER RINGS FROM FINISHED GRADE. ADDITIONAL SECTIONS SHALL BE PROVIDED AS NECESSARY.
4. CLEAN OUTS PROVIDED 2-FOOT MAXIMUM AWAY FROM TYPE 1 CATCH BASIN.
5. MINIMUM OF 6-INCHES OF PEA GRAVEL BELOW STRUCTURES. EXTEND 12-INCHES BEYOND EDGES OF STRUCTURES.
6. ALL PIPING SHOWN IS 6" # PVC PER DISTRICT STANDARDS.

INSPECTION REQUIREMENTS

1. CONSTRUCTION WILL BE INSPECTED IN ACCORDANCE WITH THE DISTRICT'S SIDE SEWER STANDARDS. DOUBLE INSPECTION SHALL BE REQUIRED.
2. LEAK TESTING: VAULT MUST BE FILLED WITH WATER TO TEST FOR LEAKS. VAULT AND TYPE 1 CATCH BASIN MUST HOLD WATER FOR 10-MINUTES.
3. ALL PIPING PENETRATIONS MUST BE INSPECTED. ALL PENETRATIONS MUST BE PROVIDED WITH A KOR-N-SEAL ADAPTER, UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
4. TRENCHES SHALL BE LEFT OPEN SO ALL STRUCTURES, PIPING, AND BEDDING CAN BE INSPECTED AND THE SIDE SEWER AS-BUILT DRAWING PROVIDED BY THE CONTRACTOR CAN BE CONFIRMED BY THE INSPECTOR.
5. INSPECTION IS REQUIRED AT THE EXISTING SIDE SEWER STUB OF WHERE THE FINAL CONNECTION WILL OCCUR.

REV. 10/19/17

STANDARD GREASE INTERCEPTOR (1,000 GALLON MIN)

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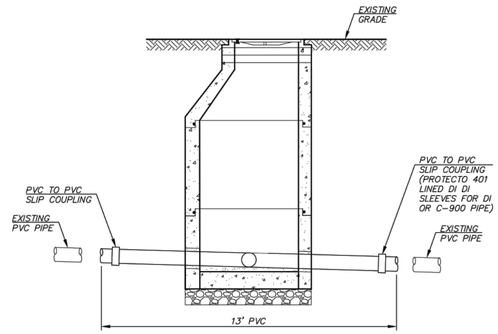
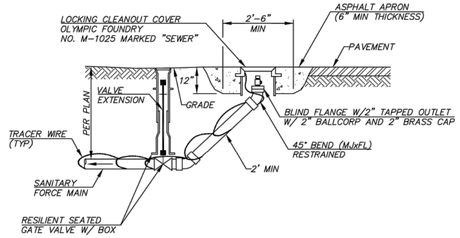


NOTES

1. PRIOR TO CUTTING THE EXISTING SEWER MAIN, THE CONTRACTOR SHALL HAVE EXACT MEASUREMENTS OF THE EXISTING PIPE INVERTS AND LENGTH MEASUREMENTS FOR INSTALLATION OF THE NEW MANHOLE AND NEW SEWER MAIN.
2. THE CONTRACTOR'S EXCAVATION SHALL BE ADEQUATE TO INSTALL THE SADDLE MANHOLE PRIOR TO CUTTING THE EXISTING SEWER MAIN.
3. THE CONTRACTOR SHALL BYPASS PUMP THE SEWER FLOW DURING THIS INSTALLATION.
4. THE CONTRACTOR SHALL HAVE A VACTOR TRUCK AVAILABLE FOR THIS CONSTRUCTION WORK.
5. SEE DISTRICT STANDARD MANHOLE DETAIL FOR OTHER SPECIFIC INSTALLATION REQUIREMENTS.
6. FOR A 72-INCH MANHOLE USE ROMAC DUCTILE IRON (DI) / PVC COUPLING TO CONNECT NEW PIPE TO EXISTING PIPE. USE 15-FOOT PIPE SEGMENT THROUGH MANHOLE.

CUT-IN ("SADDLE") MANHOLE REV. 10/19/17



NOTES

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2. VALVE MARKER POSTS SHALL MEET THE SAME REQUIREMENTS AS SHOWN IN THE WATER DETAILS AND BE PAINTED AS SPECIFIED IN THE STANDARD CONSTRUCTION NOTES.
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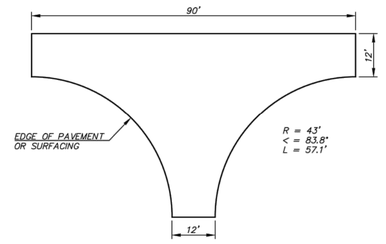
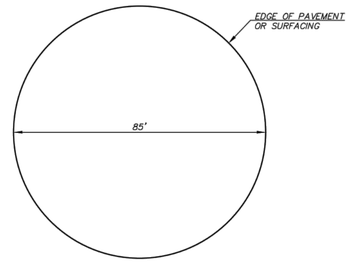
SANITARY FORCE MAIN CLEANOUT, TYPE II REV. 10/19/17

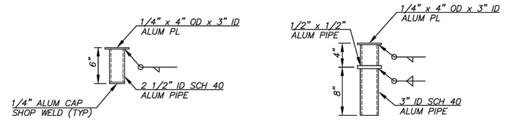


REV. 10/19/17

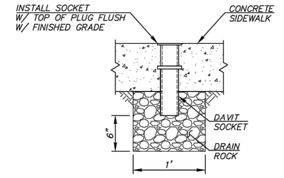
VACTOR TRUCK MINIMUM HAMMERHEAD TURNAROUND



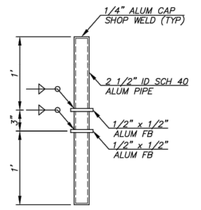
VACTOR TRUCK MINIMUM CIRCULAR TURNAROUND REV. 10/19/17



RECESSED SOCKET REV. 10/19/17



DAVIT SOCKET INSTALLATION SECTION REV. 10/19/17



DAVIT SPINDLE REV. 10/19/17

PBS Engineering and Environmental Inc.
1180 NW Maple St. Ste 160
Issaquah, WA 98027
425.654.8775
pbsusa.com

PBS

SEWER DETAILS FOR: GEORGE DAVIS CREEK FISH PASSAGE PROJECT

SAMMAMISH, WASHINGTON

811 Know what's below. Call before you dig.

DESIGNED: DKE
CHECKED: DAS
MAY 2020
45015-004

SHEET ID
C-705

SHEET 38 OF 53

60% PLAN SET

No.	Revision	Date	By	App'd

Full Size Sheet Format Is 22x34; If Printed Size Is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale Is Not Accurate.

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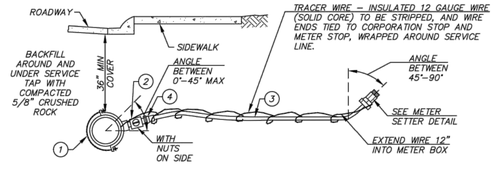


ITEM	DESCRIPTION	FORD PART NO	MUELLER PART NO	A.Y. MCDONALD	OTHER PART NO.	QTY
①	1" SADDLE I.P.T.	N/A	N/A	N/A	ROMAC 202S	1
②	1" CORPSTOP (MIP×MIP)	FB500–4	B2996	3131B1	N/A	1
③	1" HDPE PIPE	——ORISCOPLEX 5100 ULTRA LINE SDR7 200 PSI IPS OR PW EAGLE——				1
④	1" FIPxCOMPRESSION ADAPTOR W/ STAINLESS STEEL STIFFENER	C16–44P INSERT 53–72	H15454.10 505142	4754–33 6136	N/A N/A	2

* QUICK JOINT ACCEPTABLE, GRIP JOINT NOT ACCEPTABLE

1" SERVICE LINE

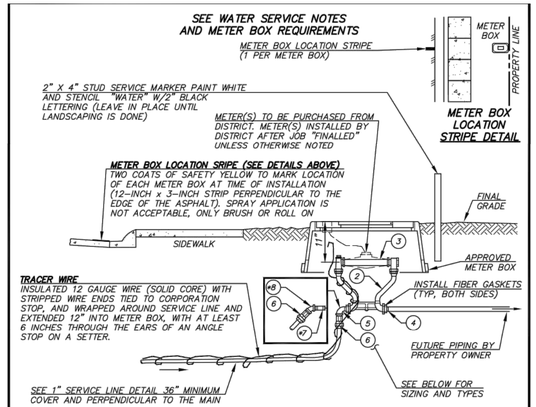
REV. 10/19/17

NOTES

1. ALL PIPE AND FITTINGS TO BE ASSEMBLED WITH TEFLON TAPE AND PIPE DOPE UNLESS OTHERWISE NOTED.
2. SERVICE LINES SHALL BE INSTALLED PERPENDICULAR TO THE WATER MAIN.
3. THE SERVICE LINE SHALL BE INSTALLED TO ALLOW FOR THE FAR SIDE OF THE METER BOX TO BE INSTALLED ON THE R/O/W AND CENTERED ON THE PROPERTY LINE OR EASEMENT LINE, UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
4. THE METER BOX SHALL BE INSTALLED WITH THE FAR SIDE OF THE METER BOX (BACK SIDE) ON THE R/O/W, PROPERTY LINE OR EASEMENT LINE, IN LANDSCAPED (NON–TRAFFIC, NON–CRUSHED SURFACING TOP COARSE, NON–CONCRETE) AREAS.
5. BACKFILL AROUND METER BOXES AND SETTERS SHALL BE WITH IMPORTED BACKFILL, OR WITH NATIVE MATERIAL THAT MEETS THE REQUIREMENTS FOR IMPORTED BACKFILL, EXCEPT THAT 100% SHALL PASS 2" SQUARE. PEA GRAVEL OR SAND ARE NOT ALLOWED.
6. PROVIDE AT LEAST 18–INCHES CLEARANCE FROM ALL OTHER UTILITIES, BUSHES, AND OBSTRUCTIONS. PROVIDE AT LEAST 5–FEET FROM ALL TREES, AND STRUCTURES. NO FENCES OR ROCKERIES SHALL BE PLACED BETWEEN THE METER BOX AND THE MAIN.
7. METER BOXES LOCATED WITHIN 2 FEET OF DRIVEWAYS, PAVED AREAS, OR AREAS WHERE THE BOX CAN BE SUBJECTED TO VEHICULAR TRAFFIC, SHALL BE A TRAFFIC BEARING METER BOX AS NOTED BELOW. LOCATING A METER BOX IN AN AREA SUBJECT TO VEHICULAR TRAFFIC REQUIRES WRITTEN DISTRICT APPROVAL DURING DESIGN. METER BOXES THAT BECOME LOCATED IN TRAFFIC AREAS DURING OR AFTER CONSTRUCTION WITHOUT DISTRICT WRITTEN APPROVAL DURING DESIGN SHALL BE ABANDONED AT THE MAIN AND A NEW SERVICE SHALL BE INSTALLED TO A LANDSCAPED (NON–TRAFFIC) AREA.
8. WHERE TRAFFIC BEARING METER BOXES ARE USED WITHIN A CONCRETE SURFACE, A 5/8 INCH EXPANSION JOINT SHALL BE PROVIDED AROUND THE BOX WITH AN EIGHTEEN (18) INCH GAP BETWEEN THE EXPANSION JOINT AND METER BOX ON ALL SIDES.
9. APPROVED METER BOXES SHALL BE AS FOLLOWS:
   A) APPROVED METER BOXES FOR SINGLE SERVICES IN NON–TRAFFIC AREAS: CARSON 1220–12
   B) FOR SINGLE SERVICE IN TRAFFIC AREAS: FOGTITE B10 W/ALUMINUM LID.
10. MAINTAIN AND LEAVE SERVICE MARKER IN PLACE UNTIL LANDSCAPING IS DONE.
11. ANY DEVIATION FROM THESE ABOVE STANDARDS SHALL REQUIRE A WRITTEN VARIANCE REQUEST TO THE DISTRICT FOR REVIEW AND CONSIDERATION.

REV. 10/27/17

WATER SERVICE NOTES AND METER BOX REQUIREMENTS



SINGLE 3/4" METER SETTER

ITEM	DESCRIPTION	FORD PART NO	MUELLER PART NO	A.Y. MCDONALD	OTHER PART NO.	QTY
①	NOT REQUIRED					
②	3/4" METER SETTER	VBH72–12W–11–33–NL	N/A	N/A	N/A	1
③	1" x 7–1/2" IDLER W/WASHERS		PVC SCH 80			1
④	3/4" PVC PLUG		PVC SCH 40/80			1
⑤	3/4" BRASS 90° STREET ELL					1
⑥	3/4" MIP x 1" IPS PAC JOINT W/ STIFFENER	FOC8634	H15429	473–CP	N/A	1
*⑦	3/4" x 3" BRASS NIPPLE (OPTIONAL)					1
*⑧	3/4" BRASS 45° BEND OR ELL (OPTIONAL)					1

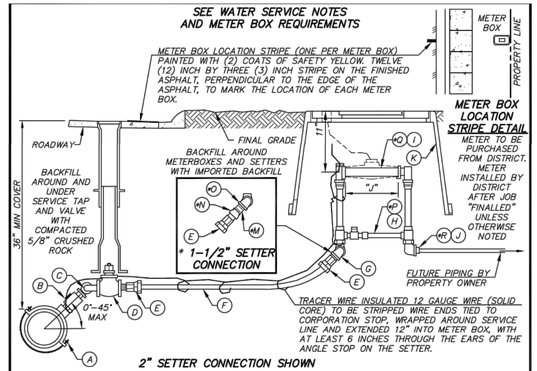
SINGLE 1" METER SETTER

ITEM	DESCRIPTION	FORD PART NO	MUELLER PART NO	A.Y. MCDONALD	OTHER PART NO.	QTY
①	NOT REQUIRED					–
②	1" METER SETTER	VBH74–12W–11–44–NL	N/A	N/A	N/A	1
③	1–1/4" x 11" IDLER W/WASHERS		PVC SCH 80			1
④	1" PVC PLUG		PVC SCH 40/80			1
⑤	1" BRASS 90° STREET ELL					1
⑥	1" MIP x 1" IPS PAC JOINT W/ STIFFENER	FOC8644	H15429	473–CP	N/A	1
*⑦	1" x 3" BRASS NIPPLE (OPTIONAL)					1
*⑧	1" BRASS 45° BEND OR ELL (OPTIONAL)					1

* OPTIONAL — T

3/4" AND 1" METER SETTER

REV. 10/27/17



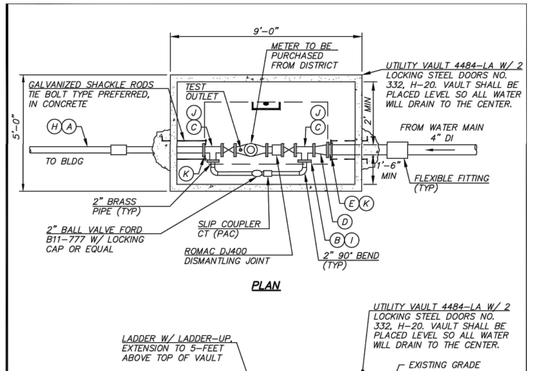
NOTES

1. ALL PIPE AND FITTINGS TO BE ASSEMBLED WITH TEFLON TAPE AND PIPE DOPE UNLESS OTHERWISE NOTED.
2. METER BOXES LOCATED WITHIN 2 FEET OF DRIVEWAYS, PAVED AREAS, OR AREAS WHERE THE BOX CAN BE SUBJECTED TO VEHICULAR TRAFFIC OR AT THE DIRECTION OF THE DISTRICT, SHALL BE A FOGTITE TYPE 2 METER BOX WITH A STEEL REINFORCED LID.
3. WHERE TRAFFIC BEARING METER BOXES ARE USED WITHIN A CONCRETE SURFACE, A 5/8 INCH EXPANSION JOINT SHALL BE PROVIDED AROUND THE BOX WITH AN EIGHTEEN (18) INCH GAP BETWEEN THE EXPANSION JOINT AND METER BOX ON ALL SIDES.
4. METER BOXES TO BE INSTALLED IN NON TRAFFIC AREAS. ALTERNATIVE LOCATIONS REQUIRE WRITTEN DISTRICT APPROVAL.
5. METER BOXES SHALL BE INSTALLED WITH THE FAR SIDE OF THE BOX (BACK SIDE) ON THE R/O/W, PROPERTY OR EASEMENT LINE, UNLESS OTHERWISE DIRECTED BY THE DISTRICT. SERVICES SHALL BE INSTALLED PERPENDICULAR TO THE WATER MAIN.

ITEM	QTY	DESCRIPTION
A	1	2" ROMAC SADDLE IPT, STYLE #202S, DOUBLE STRAP
B	1	2" CORPORATION STOP MIP X MIP, W/ NUT ON TOP (FORD# FB500, MUELLER# B2996, A.Y. MCDONALD# 3131B)
C	2	2" BRASS STREET ELBOW (SWING JOINT)
D	1	2" (RSSV) GATE VALVE X FIP W/SQUARE OPERATING NUT W/ CAST IRON VALVE BOX AND LONG SKIRT LID
E	1	2" PACK JOINT W/STAINLESS STEEL STIFFENER X MIP. (FORD# C86–77, MUELLER # E15929)
F	VARIOUS	DRISCOPLEX 5100 ULTRA LINE OR PW EAGLE, 2" HIMOL POLY PIPE SDR–7 200 PSI
G	2	2" 90° BRASS STREET ELBOW
H	1	2" METER SETTER, FORD NO. VBH 87–12B–11–77 (ONLY) W/ BRASS STREET 90
I	1	2" IDLER SCH. 80 (J= 17") W/WASHERS
J	1	2" PVC PLUG, SCHEDULE 40/80
K	–	METER BOX – CARSON JUMBO #1730 W/PSL METER READING LID AND INSPECTION PLATE (MARKED FOR WATER) FOR NON TRAFFIC AREAS. WITH WRITTEN DISTRICT APPROVAL FOGTITE TYPE 2 (MARKED FOR WATER) W/ STEEL REINF. LID FOR TRAFFIC AREAS.
+M	1	1–1/2" x 3" BRASS NIPPLE
+N	1	1–1/2" x 2" BELL REDUCER
+O	2	1–1/2" 90° BRASS STREET ELBOW
+P	1	1–1/2" METER SETTER, FORD NO. VBH 86–12B–11–66 W/ BRASS STREET 90 OR VBH 76–12B
+Q	1	1–1/2" IDLER SCH. 80 (J=13") W/ WASHERS
+R	1	1–1/2" PLUG, SCHEDULE 40/80

1-1/2" AND 2" METER SETTER

REV. 10/19/17

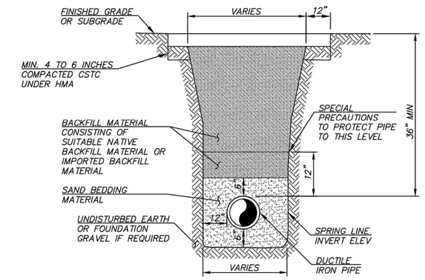


NOTES

1. SEE 3" AND 4" METER NOTES AND MATERIALS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.
2. DISTRICT SUPPLIED METER IS A 3" OR 4" WITH TRPL REGISTER (TOUCH PAD MOUNTED IN VAULT LID).

3" AND 4" METER

REV. 10/20/17



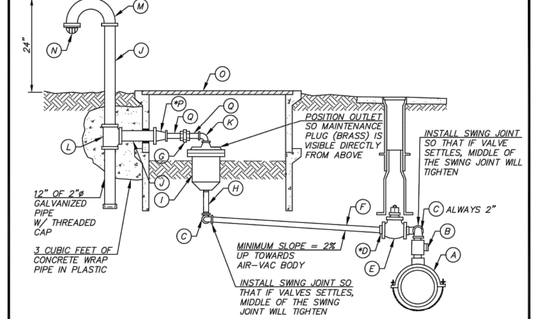
WATER MAIN TRENCH SECTION

REV. 10/30/17

◯	3" METER (ONLY)	◯	4" METER (ONLY)
A	3" GALV	H	4" DI
B	3" BLIND FLG TAPPED 2" (2 PLACES TYP)	I	4" BLIND FLANGE TAPPED 2" (2 PLACES TYP)
C	3" TEE (FLG)	J	4" TEE (FLG) (TYP)
D	4" x 3" REDUCER (FLxFL)	K	4" FCA (TYP)
E	4" FCA (TYP)	L	4" GATE VALVE (FLG) W/HAND WHEEL OPERATOR (TYP)
F	3" GATE VALVE (FLG) W/HAND WHEEL OPERATOR (TYP)	M	4" ADJUSTABLE PIPE SADDLE SUPPORT GRINNELL #264
G	3" ADJUSTABLE PIPE SADDLE SUPPORT GRINNELL #264		

NOTES

1. VAULT COVER SHALL MATCH EXISTING GRADE OR 6" ABOVE IN UNIMPROVED AREAS.
2. PAINT SCHEDULE:
   EXTERIOR OF VAULT – BELOW GRADE TWO COATS OF BLACK BITUMASTIC SOLUTION (VAULT SHOULD BE DRIED WITH NO MOISTURE PRESENT PRIOR TO APPLICATION OF COATINGS)
   PAINT INTERIOR PIPING (NON BRASS) – ONE (1) COAT RUST RESISTOR PRIMER TWO (2) COATS SAFETY BLUE SEMI GLOSS PAINT
3. IF POSITIVE DRAINAGE FROM VAULT CANNOT BE ACHIEVED A SUMP PUMP SYSTEM WILL BE REQUIRED WITH DISTRICT APPROVAL. POWER SHALL BE SUPPLIED AND MAINTAINED BY THE DEVELOPMENT.
4. FLEXIBLE FITTING WHEN ENTERING AND EXITING VAULT WITHIN 5 FEET OF VAULT. IF (MJ) BELL CONNECTION IS WITHIN 5 FEET OF THE VAULT, FITTING MAY BE OMITTED (2 PLACES TYPICAL).
5. CORE DRILL 1–3/4" HOLE IN ONE OF THE HATCHES NEAR CENTER FOR INSTALLATION OF A ANTENNAE MOUNT, WHEN NOT IN TRAFFIC AREA.
6. USE 2" THREADED BRASS AND UNION AS NEEDED.

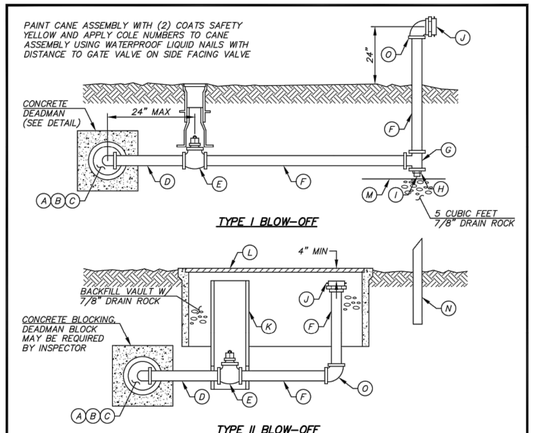


NOTES

1. ALL PIPE AND FITTINGS TO BE GALVANIZED EXCEPT WERE NOTED AND ASSEMBLED WITH TEFLON TAPE AND PIPE DOPE.
2. LOCATION OF THE AIR AND VACUUM RELIEF ASSEMBLY AS SHOWN ON THE PLANS IS APPROXIMATE.
3. INSTALLATION OF THE VALVE SHALL BE SET AT THE HIGH POINT OF THE LINE.
4. PAINT CANE ASSEMBLY WITH TWO (2) COATS OF SAFETY YELLOW AND APPLY COLE LETTERS TO CANE ASSEMBLY WITH FOOTAGE TO VALVE ON SIDE FACING ROADWAY IN 1.5" COLE NUMBERS. APPLY WITH WATER PROOF LIQUID NAILS.
5. PROVIDE 5–FOOT OF CLEARANCE FROM TREES, AND STRUCTURES, 18–INCHES FROM BUSHES.

MK	QTY	ITEM
A	1	2" ROMAC SADDLE I.P.T., DOUBLE STRAP STYLE 202S
B	1	2" CORPORATION STOP MIP X MIP, WITH NUT ON SIDE (NOT UNDER VALVE)
C	4	1" OR 2" BRASS STREET ELBOW, BRASS SWING JOINT W/ COUPLING OR 90° BEND
*D	1	2" X 1" BRASS BUSHING
E	1	2" GATE VALVE (FIP x FIP) W/2" SQUARE OPERATING NUT AND CAST IRON VALVE BOX AND LONG SKIRT LID
F	–	1" OR 2" THREADED BRASS PIPE (LENGTH TO SUIT) ON FIRM SUBGRADE
G	2	1" OR 2" GALVANIZED UNION
H	1	1 OR 2" BRASS NIPPLE
I	1	1" OR 2" APCO AIR AND VACUUM RELIEF VALVE (#143–C FOR 1" AND #145–C FOR 2") OR DISTRICT APPROVED EQUAL (REPLACE IRON ACCESS PLUG WITH BRASS PLUG)
J	–	2" GALVANIZED SCH. 40 PIPE (LENGTH TO SUIT)
K	1	1" OR 2" GALVANIZED STREET 90° ELBOW
L	1	2" TEE
M	1	2" RETURN BEND, SCH. 40 GALVANIZED
N	1	BEEHIVE STRAINER GREENBURG P–24–08, MALE FOR 2" PIPE
O	2	FOGTITE TYPE II CONCRETE BOX WITH STEEL LID, REINFORCED FOUR SIDES OR DISTRICT APPROVED EQUAL MARKED "A.V."
*P	1	2" X 1" GALVANIZED BELL REDUCER (NOT REQUIRED WITH A 2" ASSEMBLY)
Q	2	1" OR 2" GALVANIZED NIPPLE (ONLY ONE REQUIRED WITH 2")

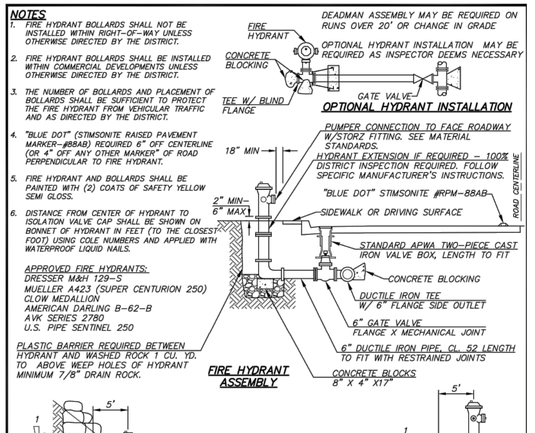
* DENOTES ITEMS NOT REQUIRED WITH A 2" ASSEMBLY



NOTE

1. ALL PIPE AND FITTINGS TO BE GALVANIZED EXCEPT WHERE NOTES AND ALL ASSEMBLED WITH TEFLON TAPE AND PIPE DOPE.

ITEM	TYPE I QTY	TYPE II QTY	DESCRIPTION
A	1	1	CAP W/ 2" IPS TAP
B	1	1	2" X 6" BRASS NIPPLE
C	1	1	2" 90° BRASS BEND
D	–	–	2" BRASS PIPE (LENGTH TO SUIT)
E	1	1	2" GATE VALVE W/SQUARE OPERATING NUT
			TYPE I REQUIRES CAST IRON VALVE BOX W/ DEEP SKIRT LID, TYPE II WITH 6" PVC PIPE ONLY
F	–	–	2" GALVANIZED IRON PIPE (LENGTH TO SUIT)
G	1	0	2" X 2" TEE
H	1	0	2" X 1/2" BUSHING
I	1	0	AUTOMATIC DRAIN VALVE – WEATHERMATIC 910
J	1	1	2" MIP X 2 1/2" NST FIRE HOSE ADAPTOR W/CAP
			TYPE 1 (MIP) , TYPE II (FIP) W/ 2" COUPLER
K	0	1	6" PVC (LENGTH TO SUIT)
L	0	1	FOGTITE TYPE 2 METER BOX W/ 3/8" SOLID STEEL TRAFFIC COVER (REINFORCED ON FOUR SIDES) AND H–20 LOADING MARKED "D.O."
M	–	–	FABRIC OR PLASTIC BARRIER
N	0	1	VALVE MARKER POST
O	1	1	2" 90° GALV. BEND



60% PLAN SET

No.	Revision	Date	By	App'd

PBS Engineering and Environmental Inc.
1180 NW Maple St. Ste 160
Issaquah, WA 98027
425.654.8775
pbsusa.com

PBS

WATER DETAILS FOR:
GEORGE DAVIS CREEK FISH PASSAGE PROJECT
SAMMAMISH, WASHINGTON

811 Know what's below. Call before you dig.

DESIGNED: DKE
CHECKED: DAS
MAY 2020
45015-004

SHEET ID
C-706
SHEET 39 OF 53

Full Size Sheet Format Is 22x34; If Printed Size Is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale Is Not Accurate.

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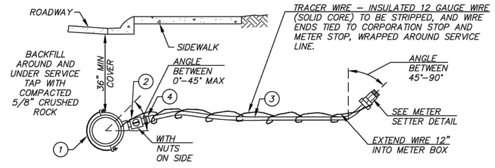


ITEM	DESCRIPTION	FORD PART NO	MUELLER PART NO	A.Y. MCDONALD	OTHER PART NO.	QTY
1	1" SADDLE I.P.T.	N/A	N/A	N/A	ROMAC 202S	1
2	1" CORPSTOP (MIP×MIP)	FB500–4	B2996	3131B1	N/A	1
3	1" HDPE PIPE	——ORISCOPLEX 5100 ULTRA LINE SDR7 200 PSI IPS OR PW EAGLE——				1
4	1" FIPxCOMPRESSION ADAPTOR W/ STAINLESS STEEL STIFFENER	C16–44P INSERT 53–72	H15454.10 505142	4754–33 6136	N/A N/A	2

* QUICK JOINT ACCEPTABLE, GRIP JOINT NOT ACCEPTABLE

1" SERVICE LINE

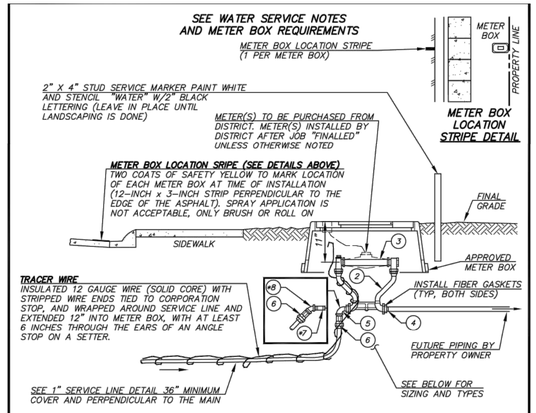
REV. 10/19/17

NOTES

1. ALL PIPE AND FITTINGS TO BE ASSEMBLED WITH TEFLON TAPE AND PIPE DOPE UNLESS OTHERWISE NOTED.
2. SERVICE LINES SHALL BE INSTALLED PERPENDICULAR TO THE WATER MAIN.
3. THE SERVICE LINE SHALL BE INSTALLED TO ALLOW FOR THE FAR SIDE OF THE METER BOX TO BE INSTALLED ON THE R/O/W AND CENTERED ON THE PROPERTY LINE OR EASEMENT LINE, UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
4. THE METER BOX SHALL BE INSTALLED WITH THE FAR SIDE OF THE METER BOX (BACK SIDE) ON THE R/O/W, PROPERTY LINE OR EASEMENT LINE, IN LANDSCAPED (NON–TRAFFIC, NON–CRUSHED SURFACING TOP COARSE, NON–CONCRETE) AREAS.
5. BACKFILL AROUND METER BOXES AND SETTERS SHALL BE WITH IMPORTED BACKFILL, OR WITH NATIVE MATERIAL THAT MEETS THE REQUIREMENTS FOR IMPORTED BACKFILL, EXCEPT THAT 100% SHALL PASS 2" SQUARE. PEA GRAVEL OR SAND ARE NOT ALLOWED.
6. PROVIDE AT LEAST 18–INCHES CLEARANCE FROM ALL OTHER UTILITIES, BUSHES, AND OBSTRUCTIONS. PROVIDE AT LEAST 5–FEET FROM ALL TREES, AND STRUCTURES. NO FENCES OR ROCKERIES SHALL BE PLACED BETWEEN THE METER BOX AND THE MAIN.
7. METER BOXES LOCATED WITHIN 2 FEET OF DRIVEWAYS, PAVED AREAS, OR AREAS WHERE THE BOX CAN BE SUBJECTED TO VEHICULAR TRAFFIC, SHALL BE A TRAFFIC BEARING METER BOX AS NOTED BELOW. LOCATING A METER BOX IN AN AREA SUBJECT TO VEHICULAR TRAFFIC REQUIRES WRITTEN DISTRICT APPROVAL DURING DESIGN. METER BOXES THAT BECOME LOCATED IN TRAFFIC AREAS DURING OR AFTER CONSTRUCTION WITHOUT DISTRICT WRITTEN APPROVAL DURING DESIGN SHALL BE ABANDONED AT THE MAIN AND A NEW SERVICE SHALL BE INSTALLED TO A LANDSCAPED (NON–TRAFFIC) AREA.
8. WHERE TRAFFIC BEARING METER BOXES ARE USED WITHIN A CONCRETE SURFACE, A 5/8 INCH EXPANSION JOINT SHALL BE PROVIDED AROUND THE BOX WITH AN EIGHTEEN (18) INCH GAP BETWEEN THE EXPANSION JOINT AND METER BOX ON ALL SIDES.
9. APPROVED METER BOXES SHALL BE AS FOLLOWS:
   A) APPROVED METER BOXES FOR SINGLE SERVICES IN NON–TRAFFIC AREAS: CARSON 1220–12
   B) FOR SINGLE SERVICE IN TRAFFIC AREAS: FOGTITE B10 W/ALUMINUM LID.
10. MAINTAIN AND LEAVE SERVICE MARKER IN PLACE UNTIL LANDSCAPING IS DONE.
11. ANY DEVIATION FROM THESE ABOVE STANDARDS SHALL REQUIRE A WRITTEN VARIANCE REQUEST TO THE DISTRICT FOR REVIEW AND CONSIDERATION.

REV. 10/27/17

WATER SERVICE NOTES AND METER BOX REQUIREMENTS



METER SETTER PROFILE VIEW

SINGLE 3/4" METER SETTER

ITEM	DESCRIPTION	FORD PART NO	MUELLER PART NO	A.Y. MCDONALD	OTHER PART NO.	QTY
1	NOT REQUIRED					–
2	3/4" METER SETTER	VBH72–12W–11–33–NL	N/A	N/A	N/A	1
3	1" x 7–1/2" IDLER W/WASHERS		PVC SCH 80			1
4	3/4" PVC PLUG		PVC SCH 40/80			1
5	3/4" BRASS 90° STREET ELL					1
6	3/4" MIP x 1" IPS PAC JOINT W/ STIFFENER	FOC8634	H15429	473–CP	N/A	1
*7	3/4" x 3" BRASS NIPPLE (OPTIONAL)					1
*8	3/4" BRASS 45° BEND OR ELL (OPTIONAL)					1

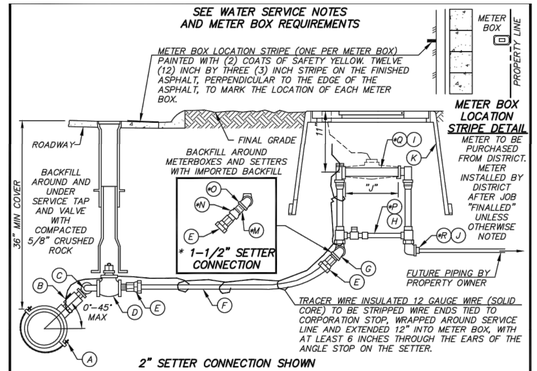
SINGLE 1" METER SETTER

ITEM	DESCRIPTION	FORD PART NO	MUELLER PART NO	A.Y. MCDONALD	OTHER PART NO.	QTY
1	NOT REQUIRED					–
2	1" METER SETTER	VBH74–12W–11–44–NL	N/A	N/A	N/A	1
3	1–1/4" x 11" IDLER W/WASHERS		PVC SCH 80			1
4	1" PVC PLUG		PVC SCH 40/80			1
5	1" BRASS 90° STREET ELL					1
6	1" MIP x 1" IPS PAC JOINT W/ STIFFENER	FOC8644	H15429	473–CP	N/A	1
*7	1" x 3" BRASS NIPPLE (OPTIONAL)					1
*8	1" BRASS 45° BEND OR ELL (OPTIONAL)					1

* OPTIONAL

3/4" AND 1" METER SETTER

REV. 10/27/17



2" SETTER CONNECTION SHOWN

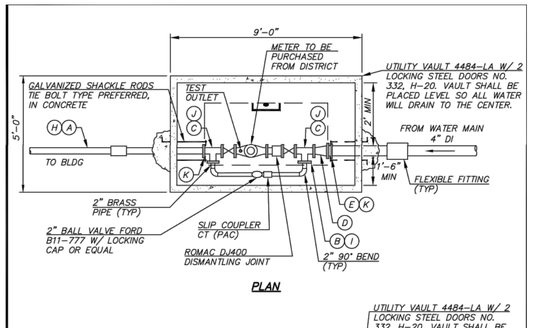
NOTES

1. ALL PIPE AND FITTINGS TO BE ASSEMBLED WITH TEFLON TAPE AND PIPE DOPE UNLESS OTHERWISE NOTED.
2. METER BOXES LOCATED WITHIN 2 FEET OF DRIVEWAYS, PAVED AREAS, OR AREAS WHERE THE BOX CAN BE SUBJECTED TO VEHICULAR TRAFFIC OR AT THE DIRECTION OF THE DISTRICT, SHALL BE A FOGTITE TYPE 2 METER BOX WITH A STEEL REINFORCED LID.
3. WHERE TRAFFIC BEARING METER BOXES ARE USED WITHIN A CONCRETE SURFACE, A 5/8 INCH EXPANSION JOINT SHALL BE PROVIDED AROUND THE BOX WITH AN EIGHTEEN (18) INCH GAP BETWEEN THE EXPANSION JOINT AND METER BOX ON ALL SIDES.
4. METER BOXES TO BE INSTALLED IN NON TRAFFIC AREAS. ALTERNATIVE LOCATIONS REQUIRE WRITTEN DISTRICT APPROVAL.
5. METER BOXES SHALL BE INSTALLED WITH THE FAR SIDE OF THE BOX (BACK SIDE) ON THE R/O/W, PROPERTY OR EASEMENT LINE, UNLESS OTHERWISE DIRECTED BY THE DISTRICT. SERVICES SHALL BE INSTALLED PERPENDICULAR TO THE WATER MAIN.

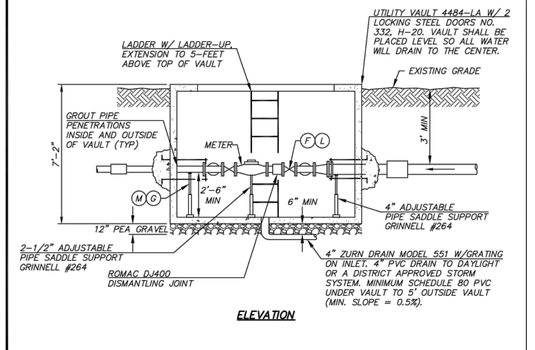
ITEM	QTY	DESCRIPTION
A	1	2" ROMAC SADDLE IPT, STYLE #202S, DOUBLE STRAP
B	1	2" CORPORATION STOP MIP X MIP, WITH NUT ON TOP (FORD# FB500, MUELLER# B2996, A.Y. MCDONALD# 3131B)
C	2	2" BRASS STREET ELBOW (SWING JOINT)
D	1	2" (RSSV) GATE VALVE X FIP W/SQUARE OPERATING NUT W/ CAST IRON VALVE BOX AND LONG SKIRT LID
E	1	2" PACK JOINT W/STAINLESS STEEL STIFFENER X MIP. (FORD# C86–77, MUELLER # E15929)
F	VARIOUS	DRISCOPLEX 5100 ULTRA LINE OR PW EAGLE, 2" HIMOL POLY PIPE SDR–7 200 PSI
G	2	2" 90° BRASS STREET ELBOW
H	1	2" METER SETTER, FORD NO. VBH 87–12B–11–77 (ONLY) W/ BRASS STREET 90
I	1	2" IDLER SCH. 80 (J= 17") W/WASHERS
J	1	2" PVC PLUG, SCHEDULE 40/80
K	–	METER BOX – CARSON JUMBO #1730 W/PSL METER READING LID AND INSPECTION PLATE (MARKED FOR WATER) FOR NON TRAFFIC AREAS. WITH WRITTEN DISTRICT APPROVAL FOGTITE TYPE 2 (MARKED FOR WATER) W/ STEEL REINF. LID FOR TRAFFIC AREAS.
*M	1	1–1/2" x 3" BRASS NIPPLE
*N	1	1–1/2" x 2" BELL REDUCER
*O	2	1–1/2" 90° BRASS STREET ELBOW
*P	1	1–1/2" METER SETTER, FORD NO. VBH 86–12B–11–66 W/ BRASS STREET 90 OR VBH 76–12B
*Q	1	1–1/2" IDLER SCH. 80 (J=13") W/ WASHERS
*R	1	1–1/2" PLUG, SCHEDULE 40/80

1-1/2" AND 2" METER SETTER

REV. 10/19/17



PLAN



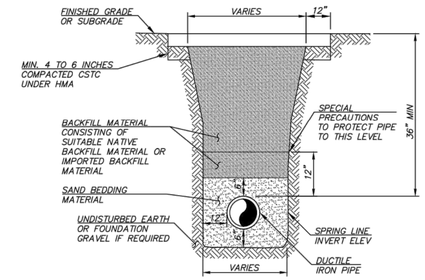
ELEVATION

NOTES

1. SEE 3" AND 4" METER NOTES AND MATERIALS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.
2. DISTRICT SUPPLIED METER IS A 3" OR 4" WITH TRPL REGISTER (TOUCH PAD MOUNTED IN VAULT LID).

3" AND 4" METER

REV. 10/20/17



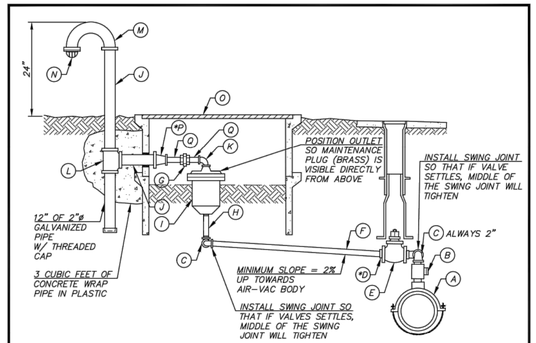
WATER MAIN TRENCH SECTION

REV. 10/30/17

◯	3" METER (ONLY)	◯	4" METER (ONLY)
A	3" GALV	H	4" DI
B	3" BLIND FLG TAPPED 2" (2 PLACES TYP)	I	4" BLIND FLANGE TAPPED 2" (2 PLACES TYP)
C	3" TEE (FLG)	J	4" TEE (FLG) (TYP)
D	4" x 3" REDUCER (FLxFL)	K	4" FCA (TYP)
E	4" FCA (TYP)	L	4" GATE VALVE (FLG) W/HAND WHEEL OPERATOR (TYP)
F	3" GATE VALVE (FLG) W/HAND WHEEL OPERATOR (TYP)	M	4" ADJUSTABLE PIPE SADDLE SUPPORT GRINNELL #264
G	3" ADJUSTABLE PIPE SADDLE SUPPORT GRINNELL #264		

NOTES

1. VAULT COVER SHALL MATCH EXISTING GRADE OR 6" ABOVE IN UNIMPROVED AREAS.
2. PAINT SCHEDULE:
   EXTERIOR OF VAULT – BELOW GRADE TWO COATS OF BLACK BITUMASTIC SOLUTION (VAULT SHOULD BE DRIED WITH NO MOISTURE PRESENT PRIOR TO APPLICATION OF COATINGS)
   PAINT INTERIOR PIPING (NON BRASS) – ONE (1) COAT RUST RESISTOR PRIMER TWO (2) COATS SAFETY BLUE SEMI GLOSS PAINT
3. IF POSITIVE DRAINAGE FROM VAULT CANNOT BE ACHIEVED A SUMP PUMP SYSTEM WILL BE REQUIRED WITH DISTRICT APPROVAL. POWER SHALL BE SUPPLIED AND MAINTAINED BY THE DEVELOPMENT.
4. FLEXIBLE FITTING WHEN ENTERING AND EXITING VAULT WITHIN 5 FEET OF VAULT. IF (MJ) BELL CONNECTION IS WITHIN 5 FEET OF THE VAULT, FITTING MAY BE OMITTED (2 PLACES TYPICAL).
5. CORE DRILL 1–3/4" HOLE IN ONE OF THE HATCHES NEAR CENTER FOR INSTALLATION OF A ANTENNAE MOUNT, WHEN NOT IN TRAFFIC AREA.
6. USE 2" THREADED BRASS AND UNION AS NEEDED.



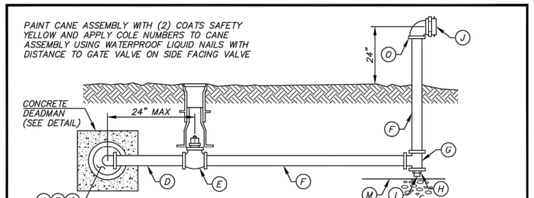
NOTES

1. ALL PIPE AND FITTINGS TO BE GALVANIZED EXCEPT WERE NOTED AND ASSEMBLED WITH TEFLON TAPE AND PIPE DOPE.
2. LOCATION OF THE AIR AND VACUUM RELIEF ASSEMBLY AS SHOWN ON THE PLANS IS APPROXIMATE.
3. INSTALLATION OF THE VALVE SHALL BE SET AT THE HIGH POINT OF THE LINE.
4. PAINT CANE ASSEMBLY WITH TWO (2) COATS OF SAFETY YELLOW AND APPLY COLE LETTERS TO CANE ASSEMBLY WITH FOOTAGE TO VALVE ON SIDE FACING ROADWAY IN 1.5" COLE NUMBERS. APPLY WITH WATER PROOF LIQUID NAILS.
5. PROVIDE 5–FOOT OF CLEARANCE FROM TREES, AND STRUCTURES, 18–INCHES FROM BUSHES.

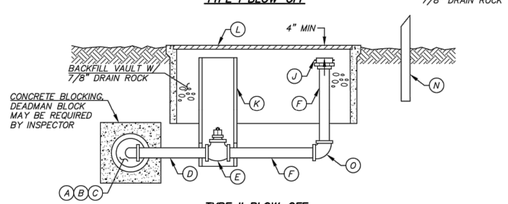
MK	QTY	ITEM
A	1	2" ROMAC SADDLE I.P.T., DOUBLE STRAP STYLE 202S
B	1	2" CORPORATION STOP MIP X MIP, WITH NUT ON SIDE (NOT UNDER VALVE)
C	4	1" OR 2" BRASS STREET ELBOW, BRASS SWING JOINT W/ COUPLING OR 90° BEND
*D	1	2" X 1" BRASS BUSHING
E	1	2" GATE VALVE (FIP x FIP) W/2" SQUARE OPERATING NUT AND CAST IRON VALVE BOX AND LONG SKIRT LID
F	–	1" OR 2" THREADED BRASS PIPE (LENGTH TO SUIT) ON FIRM SUBGRADE
G	2	1" OR 2" GALVANIZED UNION
H	1	1 OR 2" BRASS NIPPLE
I	1	1" OR 2" APCO AIR AND VACUUM RELIEF VALVE (#143–C FOR 1" AND #145–C FOR 2") OR DISTRICT APPROVED EQUAL (REPLACE IRON ACCESS PLUG WITH BRASS PLUG)
J	–	2" GALVANIZED SCH. 40 PIPE (LENGTH TO SUIT)
K	1	1" OR 2" GALVANIZED STREET 90° ELBOW
L	1	2" TEE
M	1	2" RETURN BEND, SCH. 40 GALVANIZED
N	1	BEEHIVE STRAINER GREENBURG P–24–08, MALE FOR 2" PIPE
O	2	FOGTITE TYPE II CONCRETE BOX WITH STEEL LID, REINFORCED FOUR SIDES OR DISTRICT APPROVED EQUAL MARKED "A.V."
*P	1	2" X 1" GALVANIZED BELL REDUCER (NOT REQUIRED WITH A 2" ASSEMBLY)
Q	2	1" OR 2" GALVANIZED NIPPLE (ONLY ONE REQUIRED WITH 2")

* DENOTES ITEMS NOT REQUIRED WITH A 2" ASSEMBLY

PAINT CANE ASSEMBLY WITH (2) COATS SAFETY YELLOW AND APPLY COLE NUMBERS TO CANE ASSEMBLY USING WATERPROOF LIQUID NAILS WITH DISTANCE TO GATE VALVE ON SIDE FACING VALVE



TYPE I BLOW–OFF



TYPE II BLOW–OFF

NOTE

1. ALL PIPE AND FITTINGS TO BE GALVANIZED EXCEPT WHERE NOTES AND ALL ASSEMBLED WITH TEFLON TAPE AND PIPE DOPE.

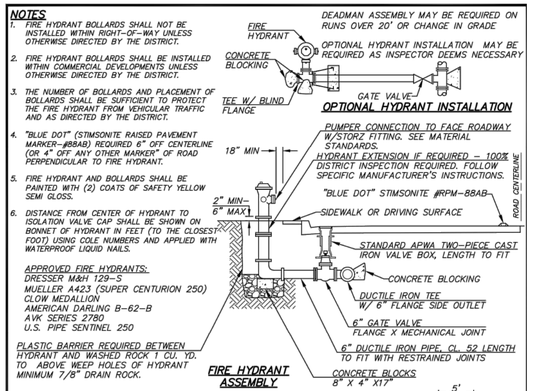
ITEM	TYPE I QTY	TYPE II QTY	DESCRIPTION
A	1	1	CAP W/ 2" IPS TAP
B	1	1	2" X 6" BRASS NIPPLE
C	1	1	2" 90° BRASS BEND
D	–	–	2" BRASS PIPE (LENGTH TO SUIT)
E	1	1	2" GATE VALVE W/SQUARE OPERATING NUT
F	–	–	TYPE I REQUIRES CAST IRON VALVE BOX W/ DEEP SKIRT LID, TYPE II WITH 6" PVC PIPE ONLY 2" GALVANIZED IRON PIPE (LENGTH TO SUIT)
G	1	0	2" X 2" TEE
H	1	0	2" X 1/2" BUSHING
I	1	0	AUTOMATIC DRAIN VALVE – WEATHERMATIC 910
J	1	1	2" MIP X 2 1/2" NST FIRE HOSE ADAPTOR W/CAP TYPE 1 (MIP) , TYPE II (FIP) W/ 2" COUPLER
K	0	1	6" PVC (LENGTH TO SUIT)
L	0	1	FOGTITE TYPE 2 METER BOX W/ 3/8" SOLID STEEL TRAFFIC COVER (REINFORCED ON FOUR SIDES) AND H–20 LOADING MARKED "D.O."
M	–	–	FABRIC OR PLASTIC BARRIER
N	0	1	VALVE MARKER POST
O	1	1	2" 90° GALV. BEND

NOTES

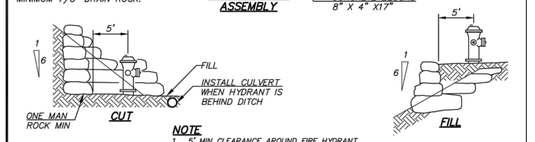
1. FIRE HYDRANT BOLLARDS SHALL NOT BE INSTALLED WITHIN RIGHT–OF–WAY UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
2. FIRE HYDRANT BOLLARDS SHALL BE INSTALLED WITHIN COMMERCIAL DEVELOPMENTS UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
3. THE NUMBER OF BOLLARDS AND PLACEMENT OF BOLLARDS SHALL BE SUFFICIENT TO PROTECT THE FIRE HYDRANT FROM VEHICULAR TRAFFIC AND AS DIRECTED BY THE DISTRICT.
4. "BLUE DOT" (STIMSONITE RAISED PAVEMENT MARKER–#88AB) REQUIRED 6" OFF CENTERLINE (OR 4" OFF ANY OTHER MARKER" OF ROAD PERPENDICULAR TO FIRE HYDRANT.
5. FIRE HYDRANT AND BOLLARDS SHALL BE PAINTED WITH (2) COATS OF SAFETY YELLOW SEMI GLOSS.
6. DISTANCE FROM CENTER OF HYDRANT TO ISOLATION VALVE CAP SHALL BE SHOWN ON BONNET OF HYDRANT IN FEET (TO THE CLOSEST FOOT) USING COLE NUMBERS AND APPLIED WITH WATERPROOF LIQUID NAILS.

APPROVED FIRE HYDRANTS:
DRESSER M&H 129–S
MUELLER A423 (SUPER CENTURION 250) CLOW MEDALLION
AMERICAN DARLING B–62–B
AVK SERIES 2780
U.S. PIPE SENTINEL 250

PLASTIC BARRIER REQUIRED BETWEEN HYDRANT AND WASHED ROCK 1 CU. YD. TO ABOVE WEEP HOLES OF HYDRANT MINIMUM 7/8" DRAIN ROCK.



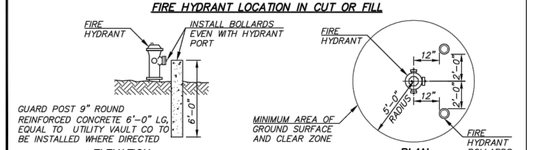
FIRE HYDRANT ASSEMBLY



NOTE

1. 5' MIN CLEARANCE AROUND FIRE HYDRANT

FIRE HYDRANT LOCATION IN CUT OR FILL



FIRE HYDRANT BOLLARDS INSTALLATION

60% PLAN SET

No.	Revision	Date	By	App'd

PBS Engineering and Environmental Inc.
1180 NW Maple St. Ste 160
Issaquah, WA 98027
425.654.8775
pbsusa.com

PBS

WATER DETAILS FOR:
GEORGE DAVIS CREEK FISH PASSAGE PROJECT
SAMMAMISH, WASHINGTON

811 Know what's below. Call before you dig.

DESIGNED: DKE
CHECKED: DAS
MAY 2020
45015-004

SHEET ID
C-707
SHEET 40 OF 53

Filename: L:\Projects\45000\45015\45015-004\Civil\CAD\Working\Sheets\C-703 DETAILS.dwg Layout Tab: C-707 WATER DETAILS User: Kaylan Smyth CAD Plot Date/Time: 5/24/2020 10:14:14 AM

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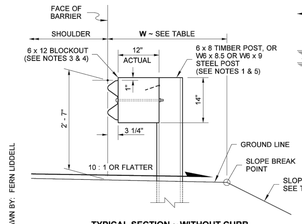
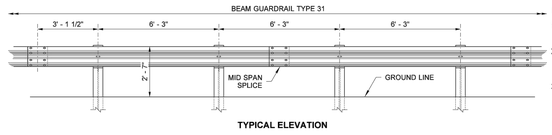
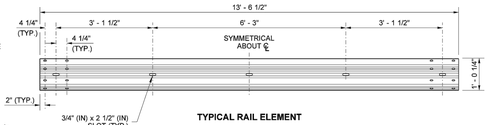


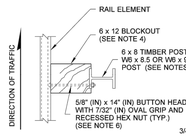
TYPICAL SECTION ~ WITHOUT CURB
(6' - 0" POSTS)



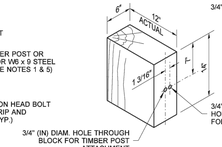
TYPICAL ELEVATION



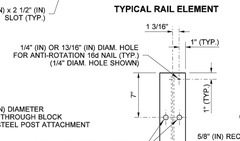
TYPICAL RAIL ELEMENT



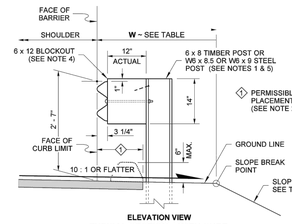
PLAN VIEW



WOOD BLOCK

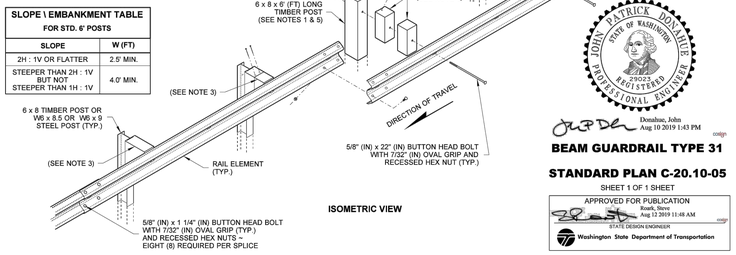


STEEL POST



ELEVATION VIEW
TYPICAL SECTION ~ WITH CURB
(6' - 0" LONG POSTS)

SLOPE \ EMBANKMENT TABLE FOR STD. 6' POSTS	
SLOPE	W (FT)
2H : 1V OR FLATTER	2.5' MIN.
STEEPER THAN 2H : 1V BUT NOT STEEPER THAN 1H : 1V	4.0' MIN.



ISOMETRIC VIEW

NOTES

1. Refer to **Standard Plan C-1b** and **C-20.11** for additional details not shown on this plan.
2. Extend shoulder pavement to provide a base for the extruded curb. See Contract Plans for exceptions to distances shown.
3. Use a single block or combination of blocks (no more than two (2) to achieve the actual 12" (in) offset. See **Standard Specification, Section 9-16.3(2)**. Wood blocks shall be secured to the posts with anti-rotation nails. If combination blocks are used, the adjacent blocks shall be toenailed with two 16d galvanized nails to prevent block rotation.
4. Wood blocks are shown. Blocks of an approved alternative material may be used. See **Standard Specification, Section 9-16.3(2).**
5. All posts for any standard barrier run shall be of the same type: timber or steel.
6. Attach blockouts to steel posts using bolt holes on approaching traffic side of post web.

DRAWN BY: FERN LODDELL

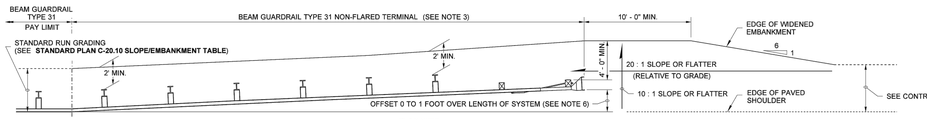
Donahue, John
Aug 10 2019 1:43 PM

BEAM GUARDRAIL TYPE 31

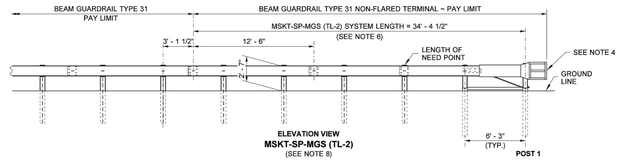
STANDARD PLAN C-20.10-05

SHEET 1 OF 1 SHEET

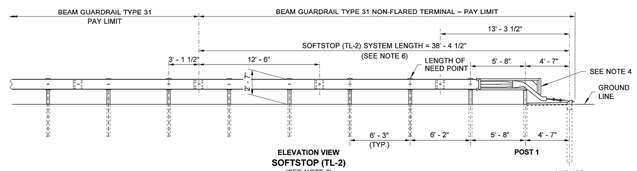
APPROVED FOR PUBLICATION
Roark, Steve
Aug 12 2019 11:48 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation



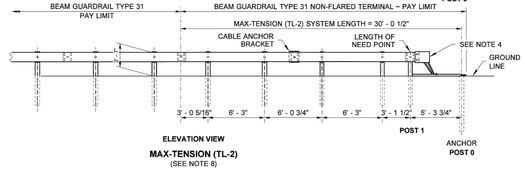
PLAN VIEW
(MSKT-SP-MGS (TL-2) SHOWN)



ELEVATION VIEW
MSKT-SP-MGS (TL-2)
(SEE NOTE 8)



ELEVATION VIEW
SOFTSTOP (TL-2)
(SEE NOTE 8)



ELEVATION VIEW
MAX-TENSION (TL-2)
(SEE NOTE 8)

NOTES

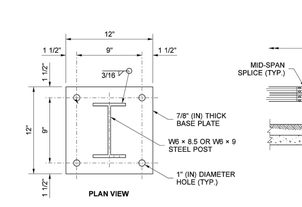
1. The Implementation of the Manual for Assessment of Safety Hardware (MASH) criteria may result in the acceptance of guardrail terminal systems currently not shown on this plan. Non-Flared terminals shall be selected from the WSDOT Qualified Products List (QPL) or approved through the WSDOT Request for Approval of Materials (RAM) process.
2. This terminal is MASH compliant at Test Level Two (TL-2) and may be used in applications with posted speed of 45 mph or less.
3. An MSKT-SP-MGS (TL-2) as manufactured by Road Systems, Inc, SOFTSTOP (TL-2) as manufactured by Trinity Highway Products, LLC, or MAX-TENSION (TL-2) as manufactured by Lindsay Transportation Solutions, shall be installed according to manufacturer's recommendations.
4. A reflectorized object marker shall be installed according to manufacturer's recommendations.
5. Snow trail rail washers shall not be installed within the terminal limits.
6. Provide an offset between 0 to 1 foot so that the impact head does not encroach onto the paved shoulder. The offset is provided over the length of the terminal system from the center of the last post splice to either: (1) The face of the impact head at its leading edge (MSKT-SP-MGS), or (2) The center of anchor **Post 0** (Softstop or Max-Tension). Provide the maximum offset where practicable.
7. For terminal details, see WSDOT approved manufacturer's drawings.
8. These terminals are supplied with steel posts only. They can be used with beam guardrail Type 31 runs, composed of steel or wood guardrail posts.

Donahue, John
Aug 10 2019 2:01 PM

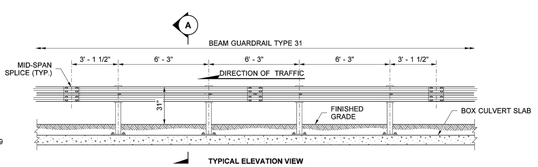
BEAM GUARDRAIL TYPE 31
NON-FLARED TERMINAL
(POSTED SPEED 45 MPH AND BELOW)
STANDARD PLAN C-22.45-04

SHEET 1 OF 1 SHEET

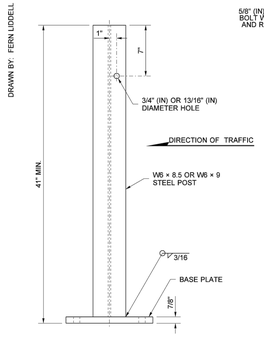
APPROVED FOR PUBLICATION
Roark, Steve
Aug 12 2019 11:52 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation



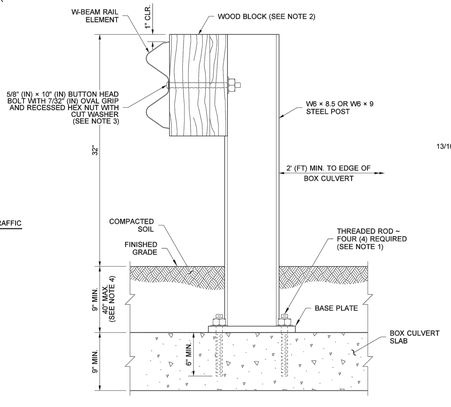
PLAN VIEW



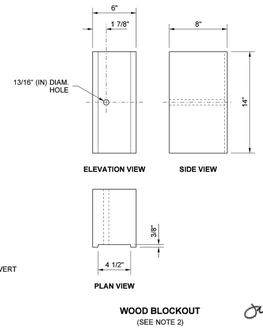
TYPICAL ELEVATION VIEW



BOX CULVERT POST
ELEVATION VIEW



SECTION (A)
BOX CULVERT GUARDRAIL STEEL POST TYPE 31



ELEVATION VIEW **SIDE VIEW**

PLAN VIEW

WOOD BLOCKOUT
(SEE NOTE 2)

NOTES

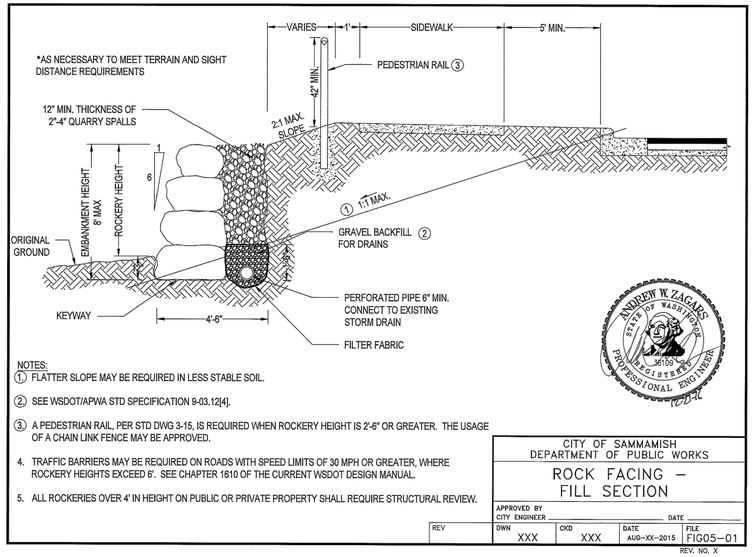
1. Attach Guardrail Post to Box Culvert with 7/8" (in) diameter high-strength threaded rods 8 1/2" (in) in length with resin-bonded anchors.
2. Wood blocks are shown. Blocks of an approved alternative may be used. See **Standard Specification, Section 9-16.3(2)**.
3. Attach blockouts to steel posts using bolt holes on approaching traffic side of post web.
4. For fill depths greater than 40 inches, drive standard guardrail posts and install guardrail per **Standard Plan C-20.10**.

Donahue, John
Aug 10 2019 1:57 PM

BOX CULVERT GUARDRAIL STEEL POST ~ TYPE 31
STANDARD PLAN C-20.41-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Roark, Steve
Aug 12 2019 11:51 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation



NOTES:
(1) FLATTER SLOPE MAY BE REQUIRED IN LESS STABLE SOIL.
(2) SEE WSDOT/APWA STD SPECIFICATION 9-03.12[4].
(3) A PEDESTRIAN RAIL, PER STD DWG 3-15, IS REQUIRED WHEN ROCKERY HEIGHT IS 2'-6" OR GREATER. THE USAGE OF A CHAIN LINK FENCE MAY BE APPROVED.
4. TRAFFIC BARRIERS MAY BE REQUIRED ON ROADS WITH SPEED LIMITS OF 30 MPH OR GREATER, WHERE ROCKERY HEIGHTS EXCEED 6'. SEE CHAPTER 1610 OF THE CURRENT WSDOT DESIGN MANUAL.
5. ALL ROCKERIES OVER 4' IN HEIGHT ON PUBLIC OR PRIVATE PROPERTY SHALL REQUIRE STRUCTURAL REVIEW.

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ROCK FACING – FILL SECTION

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	XXX	XXX	AUG-XX-2015	FIG05-01

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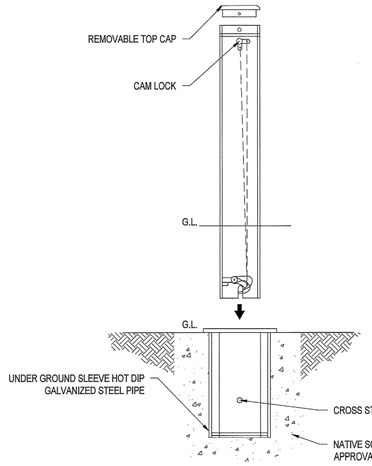

NOTES:
1. NUTS, BOLTS, AND WASHERS CONFORM TO ASTM A307.
2. ALL STEEL PIPES SHALL BE GALVANIZED.
3. CONCRETE SHALL BE CLASS C.
4. BOLLARD PLACEMENT SHALL BE APPROVED BY THE DIRECTOR OR DESIGNEE.

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BOLLARDS

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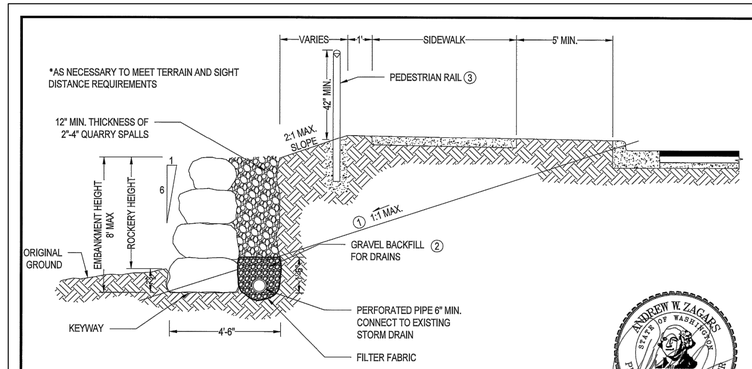
REV	DWN	CKD	DATE	FILE
	XXX	XXX	AUG-XX-2015	FIG05-03

REV. NO. X



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(2) SEE WSDOT/APWA STD SPECIFICATION 9-03.12[4].
(3) A PEDESTRIAN RAIL, PER STD DWG 3-15, IS REQUIRED WHEN ROCKERY HEIGHT IS 2'-6" OR GREATER. THE USAGE OF A CHAIN LINK FENCE MAY BE APPROVED.
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5. ALL ROCKERIES OVER 4' IN HEIGHT ON PUBLIC OR PRIVATE PROPERTY SHALL REQUIRE STRUCTURAL REVIEW.

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ROCK FACING – FILL SECTION

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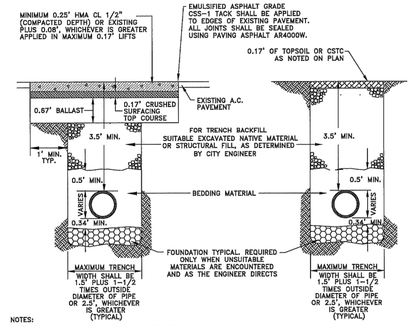
REV	DWN	CKD	DATE	FILE
	XXX	XXX	AUG-XX-2015	FIG05-01

REV. NO. X



NOTES:
1. DIMENSIONS SHOWN ARE MINIMUM; GREATER THICKNESS MAY BE REQUIRED BY CITY ENGINEER.
2. ALL MATERIALS EXCEPT A.C.P. AND BEDDING MATERIAL SHALL BE COMPACTED IN 6-INCH MAXIMUM LIFTS TO 95% DENSITY.
3. BEDDING SHALL CONFORM TO SECTION 9-03.16 OF STANDARD SPECIFICATIONS.
4. COMPACTION: BEDDING SHALL BE COMPACTED TO 95% MAX. AS DETERMINED BY ASTM D1557. BACKFILL SHALL BE COMPACTED TO 85% IN UNPAVED AREA AND 95% IN PAVED OR SHOULDER AREAS AS DETERMINED BY ASTM D1557.
5. ALL MATERIALS, WORKMANSHIP, AND INSTALLATION SHALL BE IN CONFORMANCE WITH THE LATEST VERSION OF WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.
6. KEEP TRENCH BOTTOM COMPACTED WITH UNIFORM GRADE. A BELL JOINT SHALL BE REQUIRED AT EACH JOINT FOR PROPER SUPPORT. NO TEMPORARY SUPPORTS, I.E. BLOCKS, WILL BE ALLOWED TO SUPPORT PIPE. TRENCH BOTTOM SHALL BE TO GRADE PRIOR TO PIPE INSTALLATION.

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TRENCH–PAVEMENT RESTORATION DETAIL

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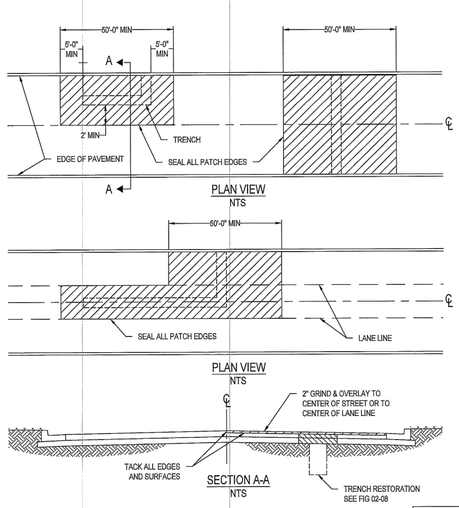
	XXX	XXX	AUG-XX-2015	FIG02-05a

REV. NO. X



NOTES:
1. THIS DETAIL APPLIES TO ALL PAVEMENT CUTS.
2. DIMENSIONS SHOWN ARE MINIMUM. LIMITS MAY BE INCREASED TO MATCH NEARBY PAVING LIMITS OR OTHER PATCHES.
3. OVERLAY LIMITS MAY BE REDUCED BY CITY ON PAVEMENT IN FAIR CONDITION OR WORSE. SEE PAVEMENT CONDITION MAP FOR LOCATIONS.
4. REPAIR PAVEMENT PER WSDOT STANDARD SPECIFICATIONS SECTION 5-04.
5. HMA SHALL BE PLACED BY PAVERS MEETING THE REQUIREMENTS OF SECTION 5-04.3(3). ROLLERS SHALL MEET THE REQUIREMENTS OF SECTION 5-04.3(4)
6. LOWER ALL UTILITY CASTING PRIOR TO OVERLAY. ADJUST UTILITY CASTINGS TO FINISH GRADE AND RESTORE CHANNELIZATION AND LOOP DETECTORS.

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HMA PAVEMENT OVERLAY FOR TRENCH REPAIR

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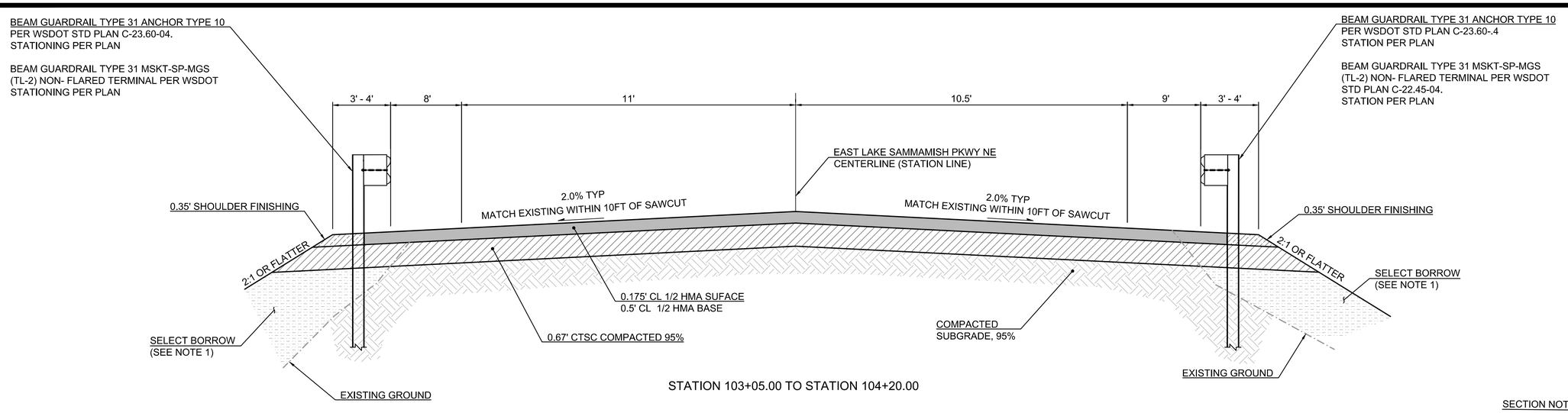
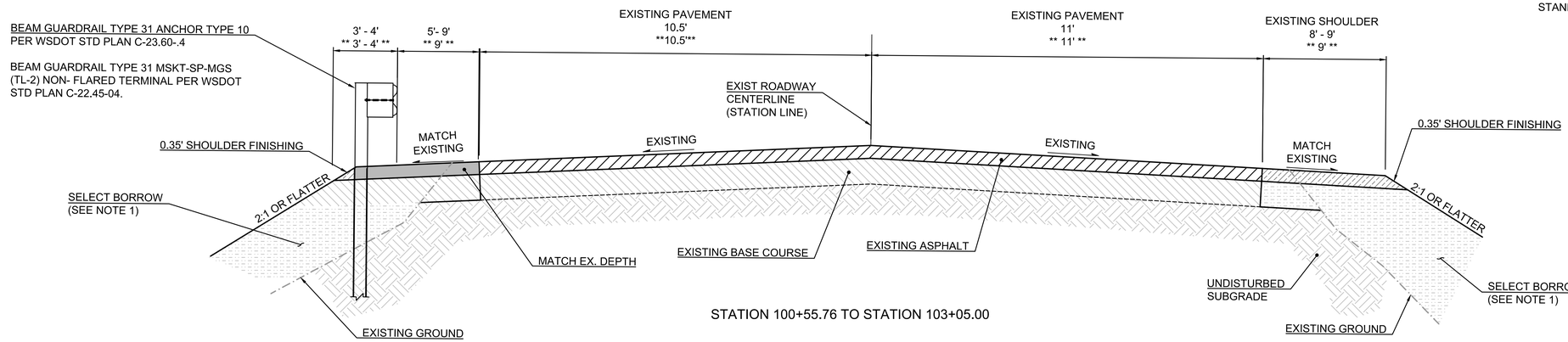


STATION 103+05.00 TO STATION 104+20.00

SECTION NOTES:

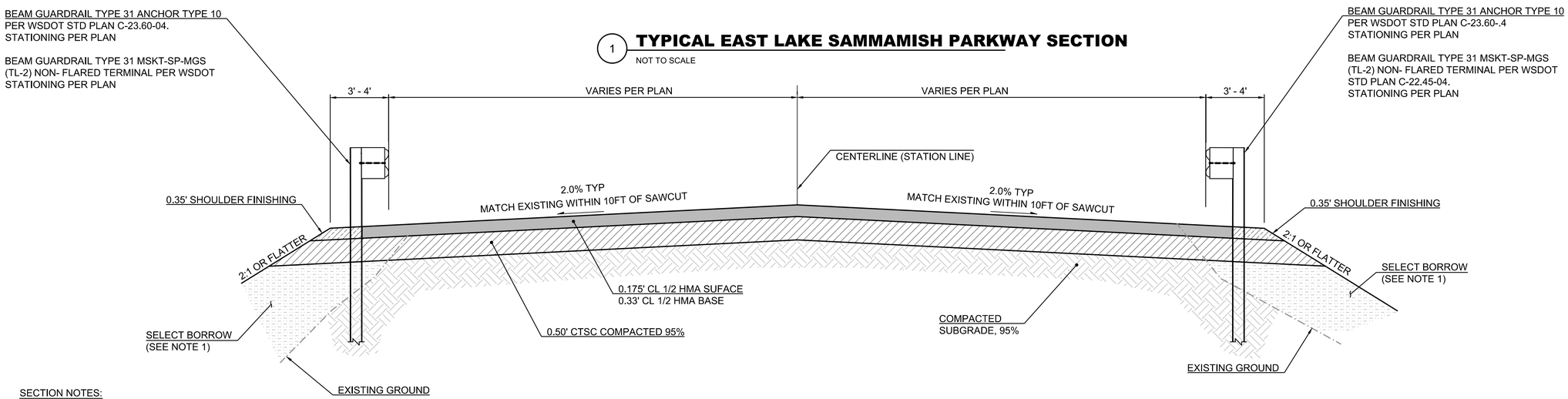
1. BENCH INTO EXISTING SIDE SLOPE PER WSDOT STANDARD SPECIFICATION 2-03.3(14).



STATION 100+55.76 TO STATION 103+05.00

1 TYPICAL EAST LAKE SAMMAMISH PARKWAY SECTION

NOT TO SCALE



SECTION NOTES:

1. BENCH INTO EXISTING SIDE SLOPE PER WSDOT STANDARD SPECIFICATION 2-03.3(14).

2 N 7TH CT & ELSSL SECTION

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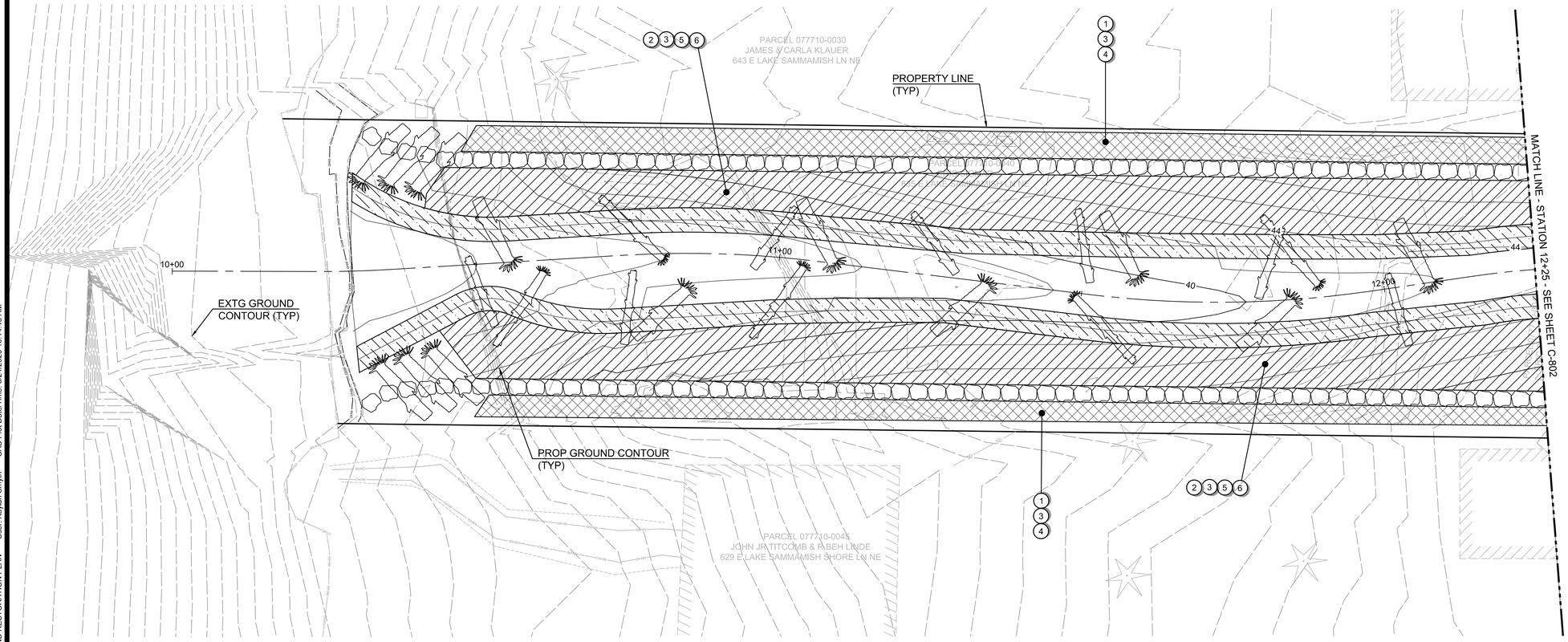

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0 5 10 20

PLANTING NOTES:

1. SEEDING AREA PREPARATION
2. PLANTING AREA PREPARATION. AREAS SHALL BE DECOMPACTED TO A DEPTH OF 18" WHERE CONSTRUCTION ACTIVITIES HAVE TAKEN PLACE AND IN EXISTING PAVEMENT AREAS.
3. TOPSOIL TYPE 'A' - 6 INCH DEPTH.
4. SEEDING, FERTILIZER AND MULCHING - SITE RESTORATION
5. FINE COMPOST - 3 INCH DEPTH.
6. BARK OR WOOD CHIP MULCH - 3 INCH DEPTH.

LEGEND:

- RIPARIAN BUFFER MIX (RBM)
- LIVE STAKE MIX (LSM)
- SITE RESTORATION SEED MIX

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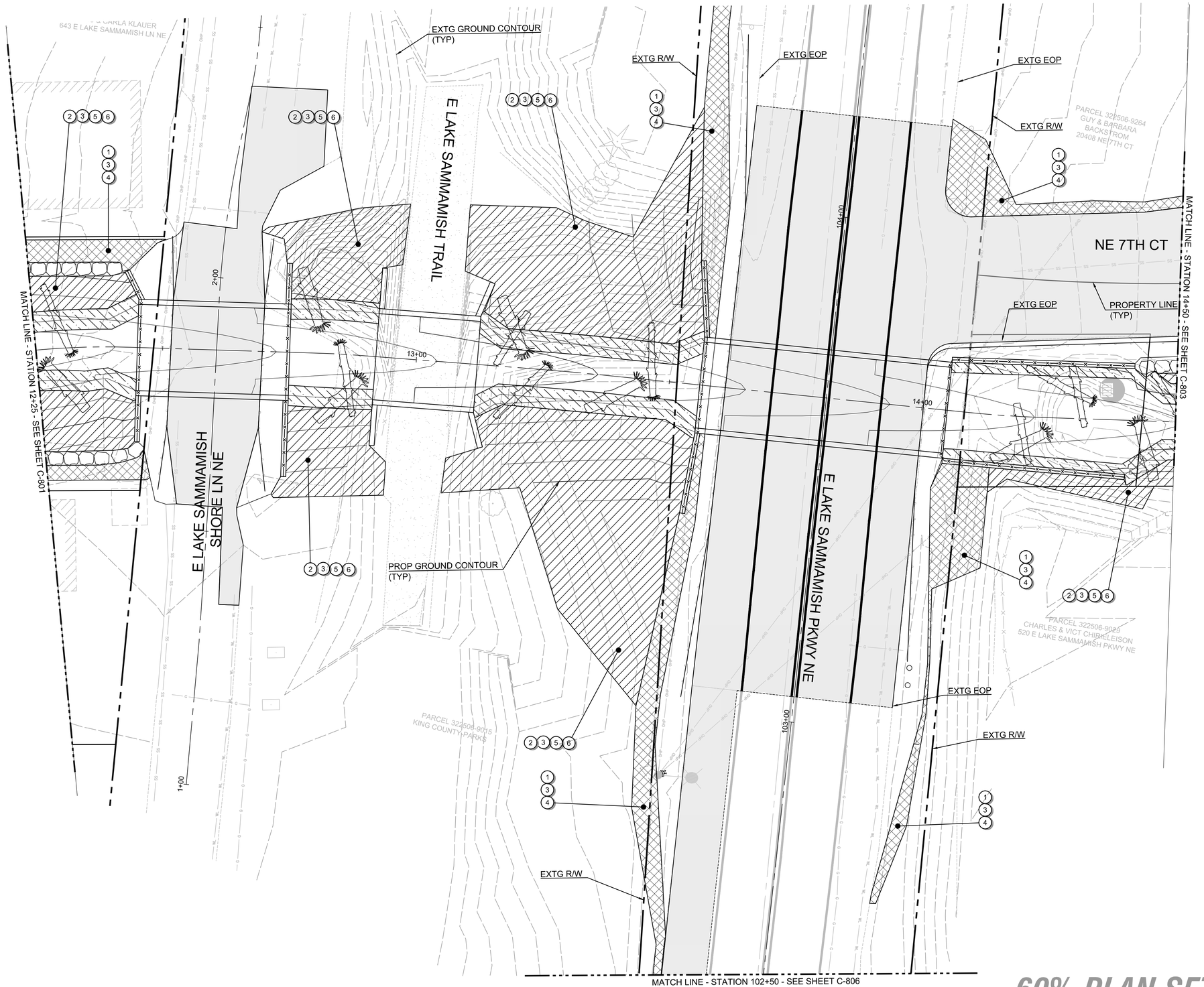

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LEGEND:

- RIPARIAN BUFFER MIX (RBM)
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PLANTING NOTES:

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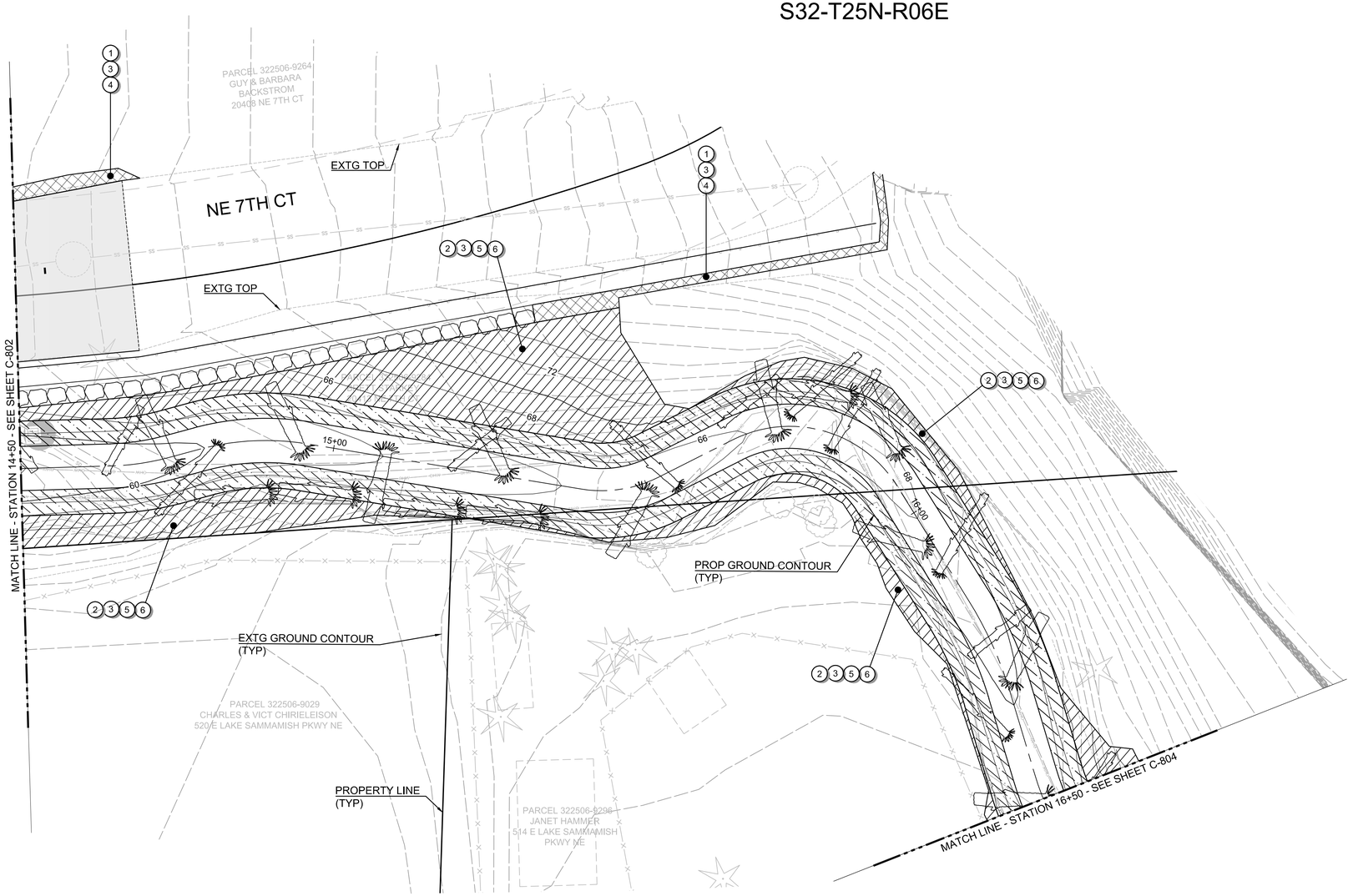

Scale 1" = 10

0 5 10 20

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LEGEND:

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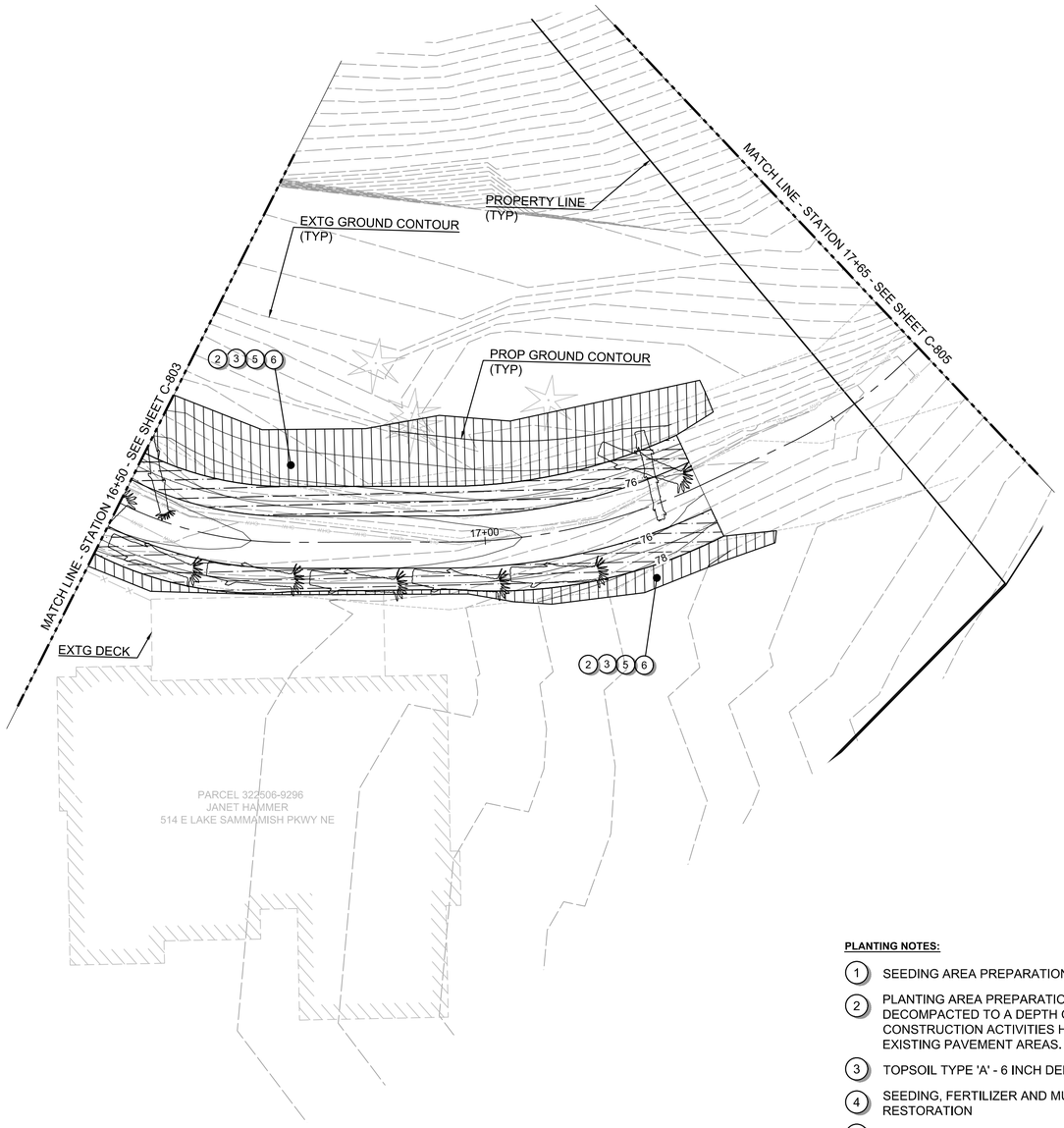

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- LIVE STAKE MIX (LSM)
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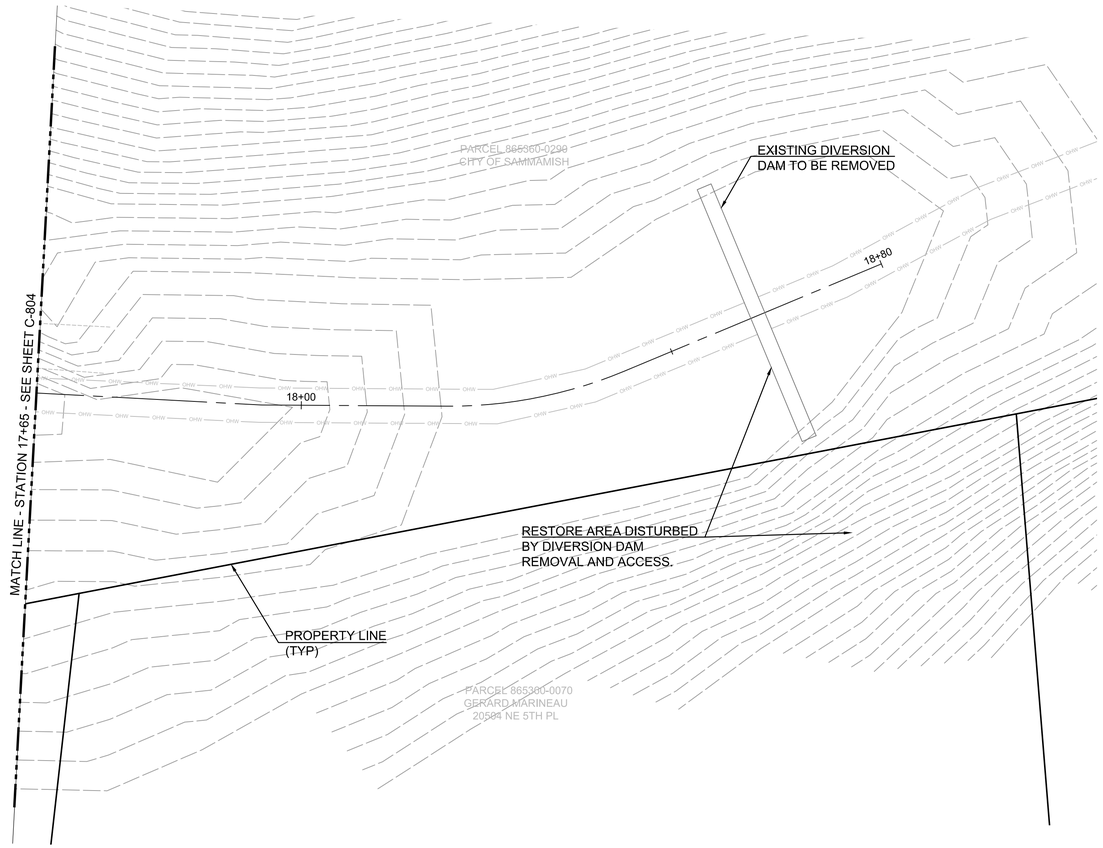

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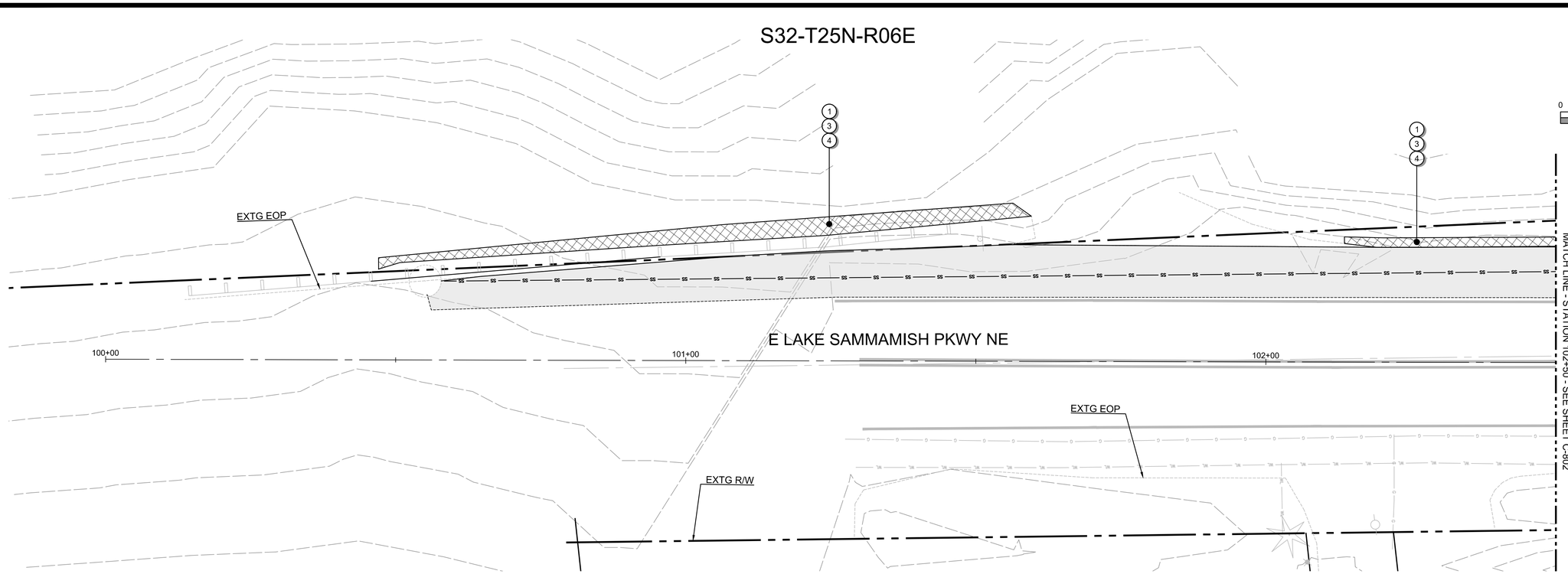

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C-806

SHEET 48 OF 53

Filename: L:\Projects\45000\45015\45015-004\Civil\CAD\Working\Sheets\C-801 RESTORATION PLAN.dwg Layout Tab: C-806 PLANTING AND RESTORATION PLAN User: Kaylan Smyth CAD Plot Date/Time: 5/24/2020 10:14:57 AM

PLANT LIST

BID ITEM	SYM	NAME	SIZE	CONDITION	SPACING
TREES					
PSIPE, VINE MAPLE, 4' HT, CONT.		*Acer circinatum* Vine Maple	4' min. height #5	Container Multi-stemmed	5' o.c.
PSIPE, BIG LEAF MAPLE 4' HT, CONT.		*Acer macrophyllum* Big Leaf Maple	4' min. height #5	Container	5' o.c.
PSIPE, DOUGLAS FIR 4' HT, CONT.		*Pseudotsuga menziesii* Douglas Fir	4' min. height #5	Container	5' o.c.
PSIPE, WESTERN RED CEDAR 4' HT, CONT.		*Thuja plicata* Western Red Cedar	4' min. height #5	Container	5' o.c.
SHRUBS					
PSIPE, RIPARIAN BUFFER MIX	(RBM)	*Corylus cornuta* Hazelnut	18" min. height	Bare root	5' o.c. randomly mixed
		Holodiscus discolor Oceanspray	18" min. height	Bare root	5' o.c. randomly mixed
		Polystichum munitum Western Sword Fern	#1	Container	3' o.c. randomly mixed
		Rosa gymnocarpa Wood Rose	18" min. height	Bare root	3' o.c. randomly mixed
		Sambucus racemosa Red Elderberry	18" min. height	Bare root	5' o.c. randomly mixed
		Symphoricarpos albus Common Snowberry	18" min. height	Bare root	3' o.c. randomly mixed
PSIPE, LIVE STAKE MIX	(LSM)	*Cornus stolonifera* Red Osier Dogwood	36" min. height, 1" diameter min.	Live Stake	2' o.c. randomly mixed
		Salix sitchensis Sitka Willow	36" min. height, 1" diameter min.	Live Stake	2' o.c. randomly mixed

SEEDING LIST

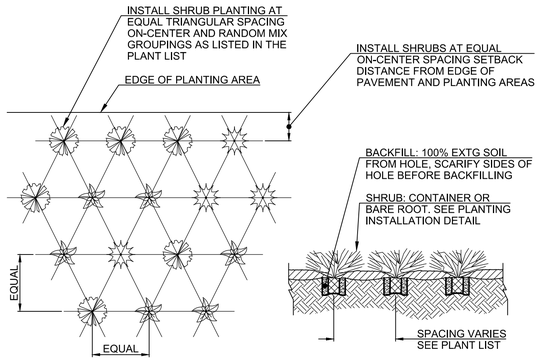
BID ITEM	SYM	SPECIES MIX
SEED MIX		
Seeding, Fertilizer & Mulch - Site Restoration		*Hordeum brachyantherum* Meadow Barley *Bromus carinatus* California Brome *Festuca rubra rubra* Native Red Fescue *Deschampsia cespitosa* Tufted Hairgrass *Agrostis exarata* Spike Bentgrass

GENERAL NOTES:

1. REFER TO CITY STANDARD PLANS AND SPECIFICATIONS WHERE APPLICABLE.
2. REFER TO CIVIL ENGINEER'S DRAWINGS FOR PROPOSED UTILITY INFORMATION; INCLUDING STORM DRAIN, SEWER, WATER, ELECTRICAL, GAS, TELEPHONE AND CABLE.
3. CONTRACTOR SHALL BE RESPONSIBLE TO CONSULT WITH CITY REPRESENTATIVE, APPROPRIATE AGENCIES AND PLANS, FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ALL DAMAGES CAUSED AS A RESULT OF THEIR WORK.
4. PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH ALL CONSTRUCTION OPERATIONS.
3. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT OBSTRUCTIONS, AREA DISCREPANCIES AND/OR GRADE DIFFERENCE EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.

PLANTING NOTES:

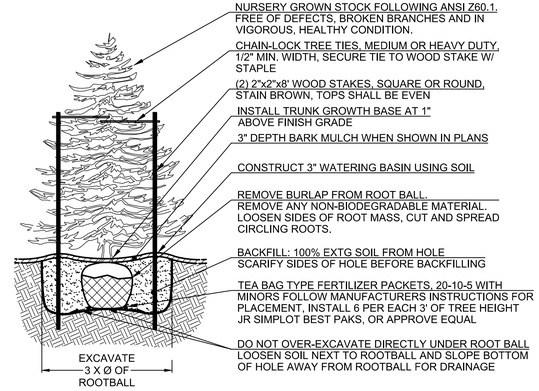
1. CONTRACTOR SHALL INSTALL PLANTINGS ACCORDING TO THESE PLANS, DETAILS, AND THE SPECIFICATIONS.
2. VERIFY LOCATIONS OF ALL PERTINENT SITE IMPROVEMENTS UNDER OTHER SECTIONS. IF ANY PART OF THIS PLAN CANNOT BE FOLLOWED DUE TO SITE CONDITIONS, CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE FOR INSTRUCTION PRIOR TO COMMENCING WORK.
3. LOCATIONS OF PLANT MATERIALS ESPECIALLY TREES SHALL BE REVIEWED BY LANDSCAPE ARCHITECT IN THE FIELD PRIOR TO INSTALLATION. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST PLANTS TO SITE CONDITIONS.
4. ALL PLANTS SHALL BE GROWN FOR THIS REGION OR SHALL BE ADEQUATELY CLIMATIZED AND FOLLOW THE LATEST STANDARDS OF ANSI Z60.
5. DO NOT MAKE SUBSTITUTIONS. IF SPECIFIED PLANTING MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY FROM AT LEAST FIVE (5) SOURCES TO THE LANDSCAPE ARCHITECT WITH PROPOSED SUBSTITUTION FOR EQUIVALENT MATERIAL FOR FINAL APPROVAL.
6. CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR PLANT MATERIAL INSPECTION AT LEAST 72 HOURS PRIOR TO INSTALLATION.
7. CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING LANDSCAPE AFFECTED BY CONSTRUCTION TO IT'S ORIGINAL CONDITION. CONTACT LANDSCAPE ARCHITECT IF ANY AREAS NOT ORIGINALLY LANDSCAPED, BECOME LANDSCAPE.



NOTE:
MAINTAIN A OUTSIDE SETBACK DISTANCE THROUGHOUT ENTIRE PLANTING AREA, USING THE CENTER FOR AREA ADJUSTMENT.

Shrub Restoration Mix Planting Layout

NOT TO SCALE

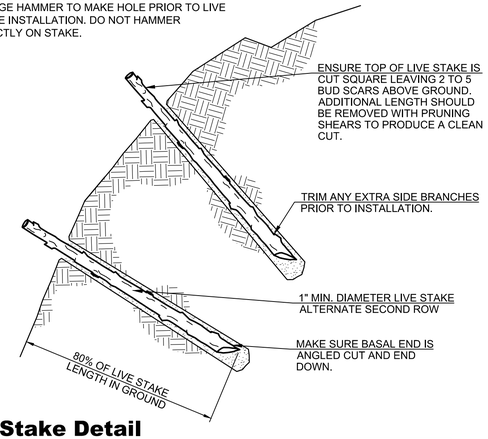


NOTE: THOROUGHLY WATER ROOTBALL REGARDLESS OF SEASON

Tree Detail - Staked

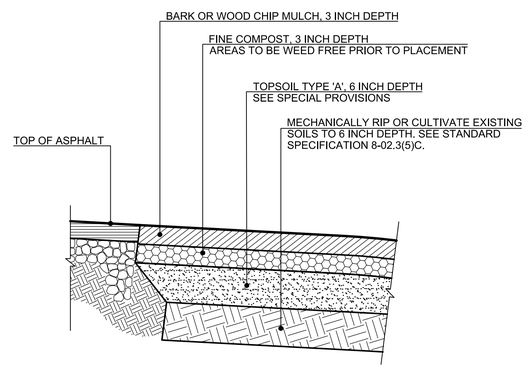
NOT TO SCALE

NOTE:
INSTALL LIVE STAKES BY PUSHING WITH HANDS. IF GROUND IS TOO SOLID, USE REBAR AND SLEDGE HAMMER TO MAKE HOLE PRIOR TO LIVE STAKE INSTALLATION. DO NOT HAMMER DIRECTLY ON STAKE.



Live Stake Detail

NOT TO SCALE



Topsoil, Compost, Bark Mulch Section

NOT TO SCALE

60% PLAN SET

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PLANTING AND RESTORATION DETAILS FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

SAMMAMISH, WASHINGTON

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MAY 2020
45015-004

SHEET ID
C-807
SHEET 49 OF 53

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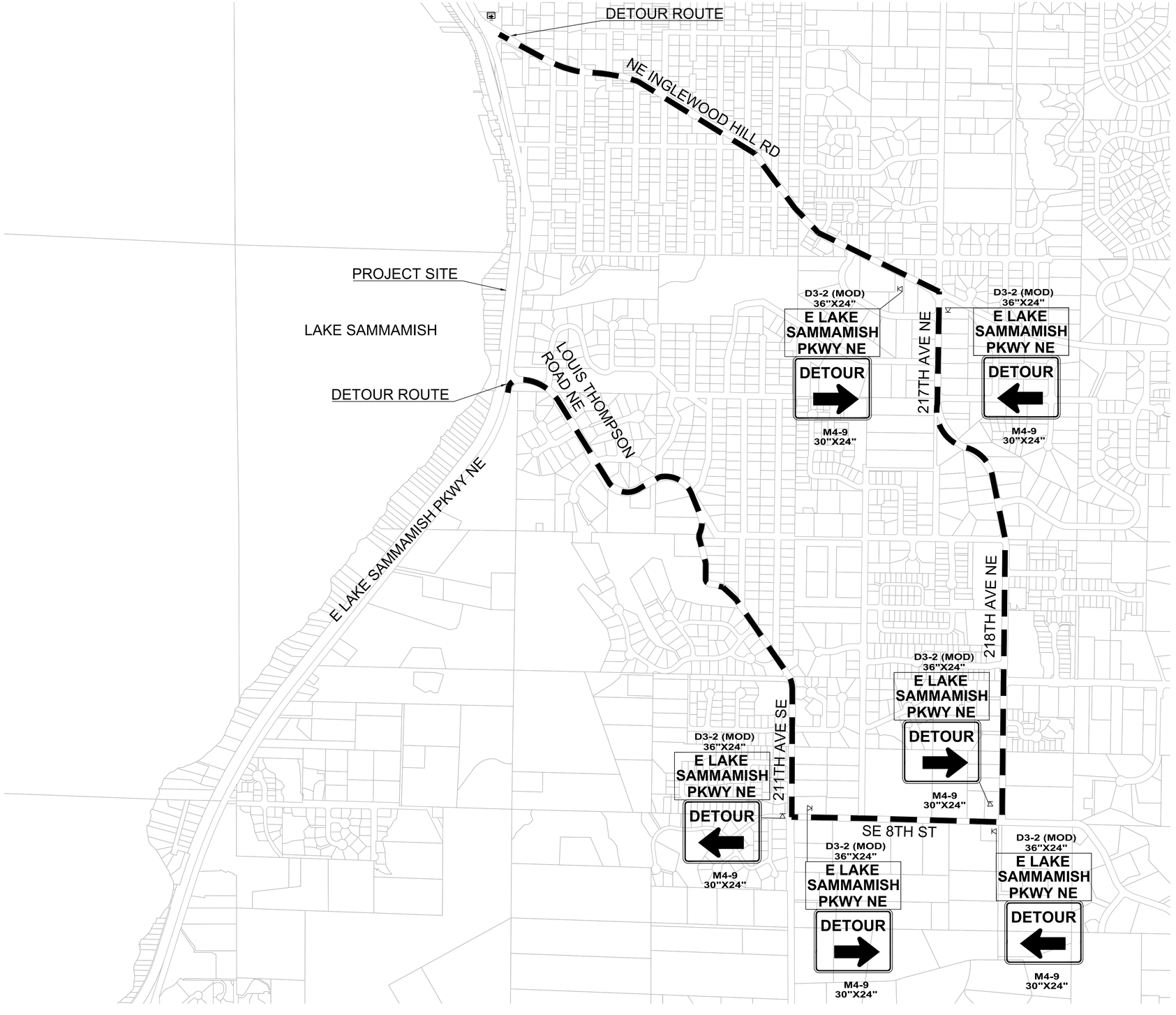
S32-T25N-R06E



Scale 1" = 500

0 250 500 1000

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TRAFFIC CONTROL DETOUR PLAN FOR:

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SAMMAMISH, WASHINGTON

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SHEET 50 OF 53

60% PLAN SET

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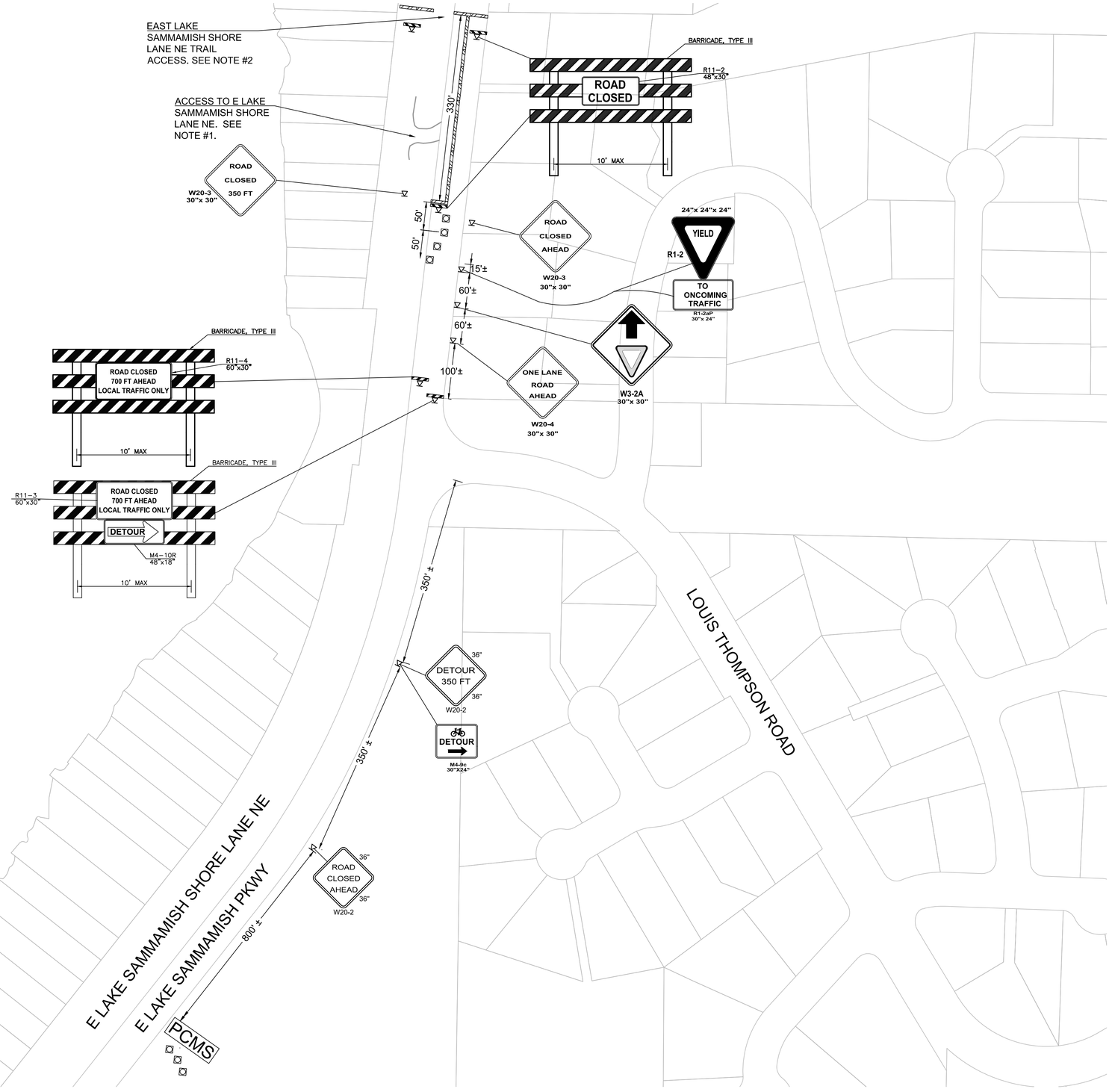

Scale 1" = 100

0 50 100 200

SIGN SPACING = X (1)		
RURAL HIGHWAYS	60 / 65 MPH	800' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS. (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		

LEGEND

- TEMPORARY SIGN LOCATION
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC CONE
- JERSEY BARRIER
- TYPE 3 BARRICADE

CONTRACTOR TO INDICATE ROAD CLOSURE DATES

PCMS #1	
1	2
ROAD CLOSURE	
2.0 SEC	2.0 SEC

FIELD LOCATE 7 DAYS IN ADVANCE OF CONSTRUCTION

PCMS #2	
1	2
ROAD CLOSURE AHEAD	LOCAL TRAFFIC ONLY
2.0 SEC	2.0 SEC

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS

GENERAL NOTES:

1. CONTRACTOR SHALL MAINTAIN AVAILABLE ACCESS TO EAST LAKE SAMMAMISH SHORE LANE NE FROM EAST LAKE SAMMAMISH PARKWAY NE AT ALL TIMES.
2. CONTRACTOR SHALL COORDINATE AND MANAGE PEDESTRIAN ACCESS ALONG EAST LAKE SAMMAMISH TRIAL.
3. CONTRACTOR SHALL MAINTAIN AVAILABLE ACCESS TO 7TH COURT FROM EAST LAKE SAMMAMISH PARKWAY NE AT ALL TIMES.

60% PLAN SET

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SHEET 51 OF 53

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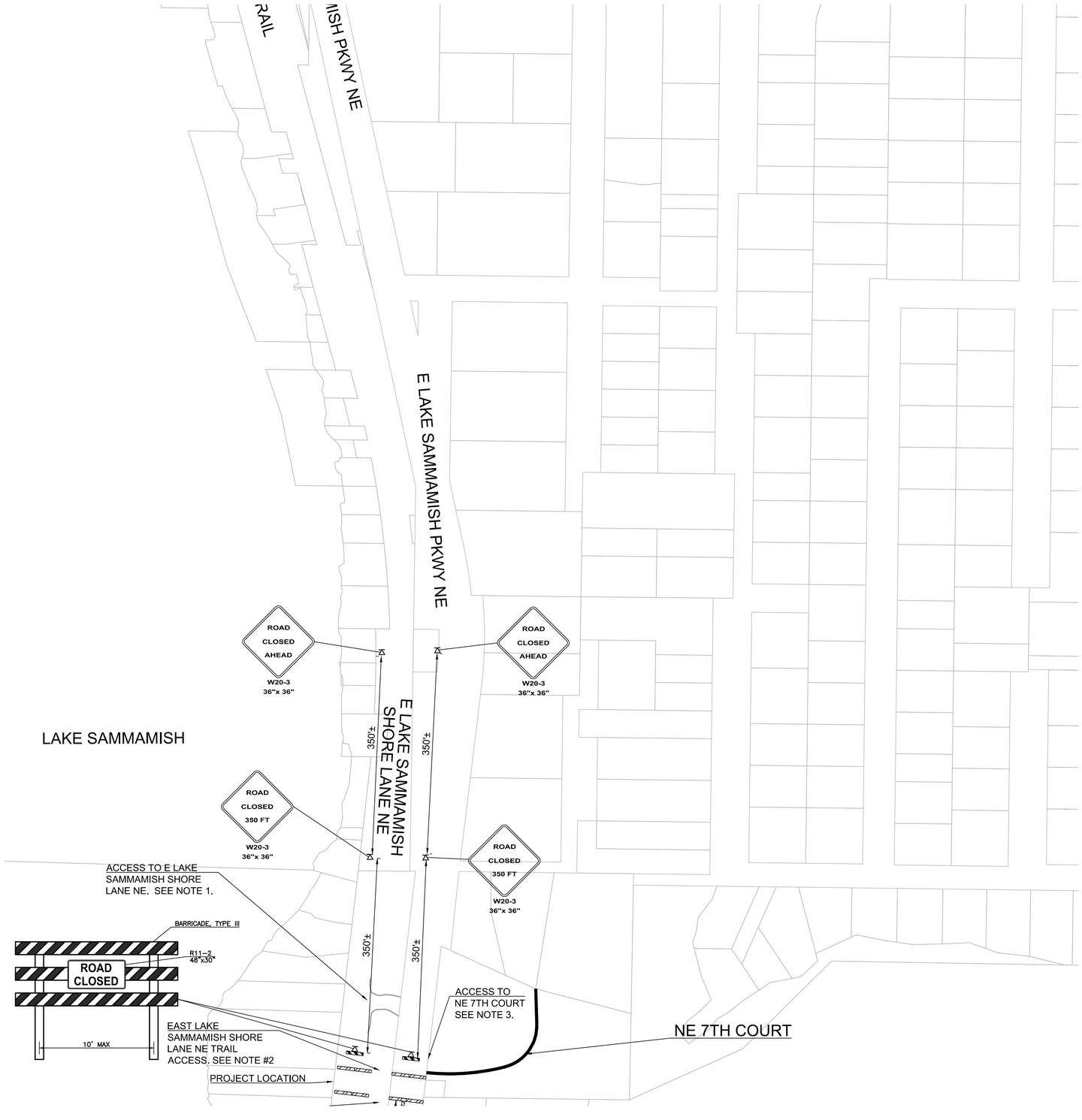

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- JERSEY BARRIER
- TYPE 3 BARRICADE

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PLAN FOR:

GEORGE DAVIS CREEK FISH PASSAGE PROJECT

TRAFFIC CONTROL DETOUR PLAN

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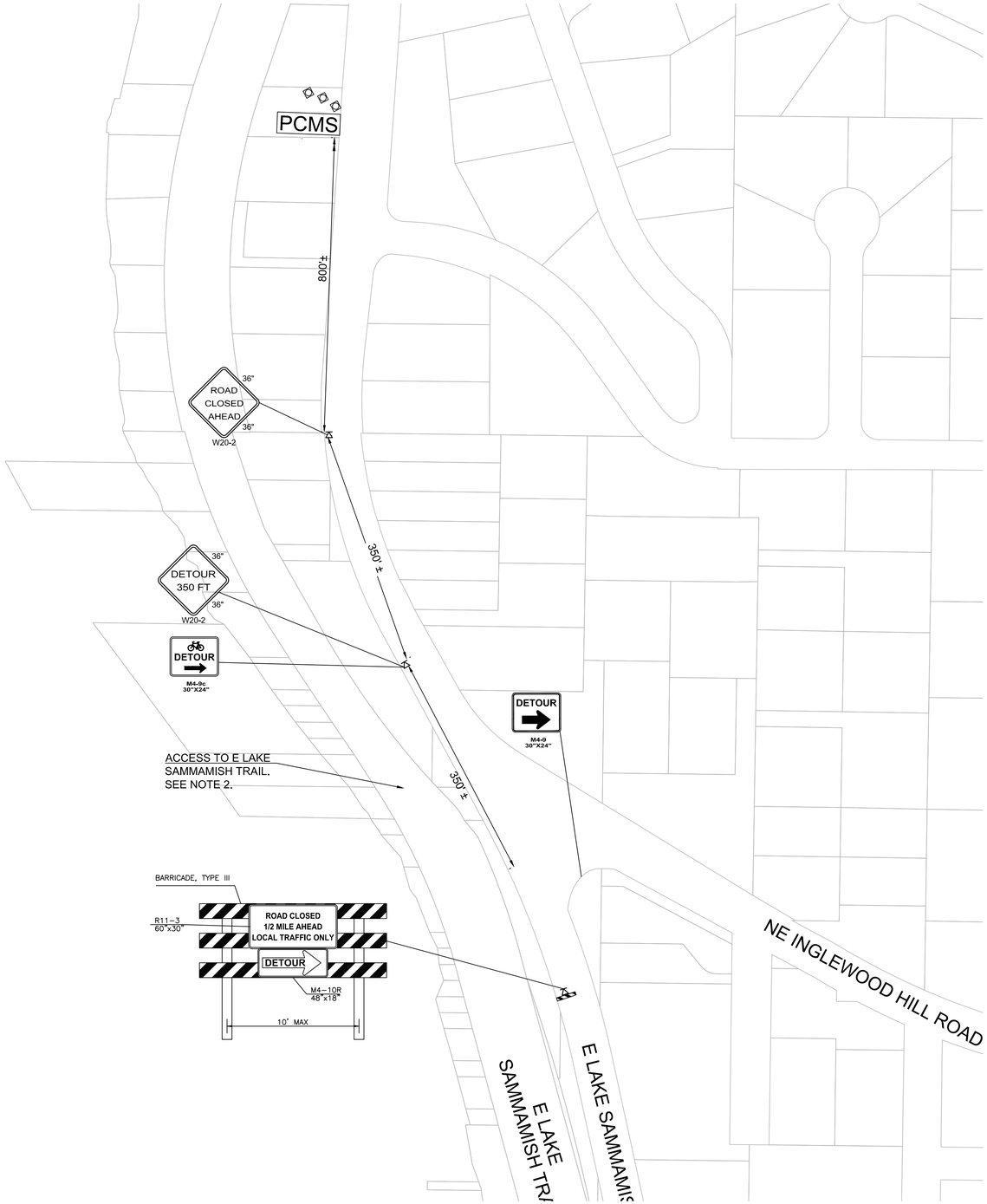

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SHEET 53 OF 53

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