

- TOPO NOTES:**
- THIS TOPOGRAPHIC SURVEY WAS PERFORMED AND PREPARED IN ACCORDANCE WITH WAC 332-130-145.
 - DATA FOR THIS SURVEY WAS GATHERED BY FIELD TRAVERSE UTILIZING ELECTRONIC DATA COLLECTION IN JANUARY & FEBRUARY 2022.
 - EQUIPMENT USED: THEOMAT 00'D1.5" EDM: ± 2 PPM, ± 3 MM
 - HORIZONTAL DATUM: NAD 83/98 WASHINGTON STATE PLANE NORTH ZONE PER CITY OF BELLINGHAM 2005 HORIZONTAL CONTROL NETWORK.
 - VERTICAL DATUM: NAVD88 PER CITY OF BELLINGHAM PUBLISHED BENCHMARKS.
SITE BENCH MARK: PSE CONTROL ON-SITE, AS SHOWN
 - CONTOURS DEPICTED HEREON MEET OR EXCEED NATIONAL MAPPING STANDARDS FOR 1-FOOT ACCURACY TOPOGRAPHIC SURVEYS AND HAVE BEEN COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.
 - CONDUCTIBLE UNDERGROUND UTILITY LOCATES SERVICES WERE PERFORMED AND PAINTED ON-SITE BY WASHINGTON STATE ONE-CALL UTILITY LOCATE SERVICES AND SURVEYED BY PSE FIELD CREWS IN FEBRUARY 2022. UTILITIES ARE KNOWN TO EXIST WITHIN THE LIMITS OF THIS SURVEY THAT WERE UNDETECTABLE. ADDITIONAL UTILITY VERIFICATION MAY BE WARRANTED IN AREAS CONSIDERED FOR CONSTRUCTION.
 - UTILITY LOCATION AREAS AND LEVEL OF LOCATE ACCURACY WERE DETERMINED BY SURVEYOR AND CLIENT PRIOR TO COMMENCEMENT OF FIELD SURVEY WORK.
 - THIS MAP IS NOT INTENDED TO REPRESENT A FORMAL BOUNDARY SURVEY, NOR DOES IT REFLECT ELEMENTS THAT A BOUNDARY SURVEY MAY DISCLOSE. BOUNDARY RELATED ELEMENTS DEPICTED HEREON ARE SHOWN PER AVAILABLE RECORD INFORMATION.
 - A CURRENT TITLE REPORT WAS NOT PROVIDED FOR THIS SURVEY. EASEMENTS AND/OR TITLE ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.

PRIMARY SURVEY CONTROL TABLE				
POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
120	645143.1848	1262725.7196	328.55	SET NAIL & FLASHER
130	645525.2561	1262604.7422	326.06	SET #4 REBAR & ORANGE PLASTIC CAP
140	645809.8741	1262461.5843	317.80	SET #4 REBAR & ORANGE PLASTIC CAP
150	646063.1327	1262405.8485	318.94	SET #4 REBAR & ORANGE PLASTIC CAP
154	646032.8915	1262333.8115	317.02	SET #4 REBAR & ORANGE PLASTIC CAP
160	646042.9233	1262677.0744	342.29	SET MAG NAIL
170	646584.1677	1262165.5241	330.53	SET #4 REBAR & ORANGE PLASTIC CAP

Date	No	Revision	By
4/25/24	4	90% Design	
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6/12/23	2	60% Design	
1/17/23	1	30% Design	

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CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION

SCALE
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 Vert. N/A

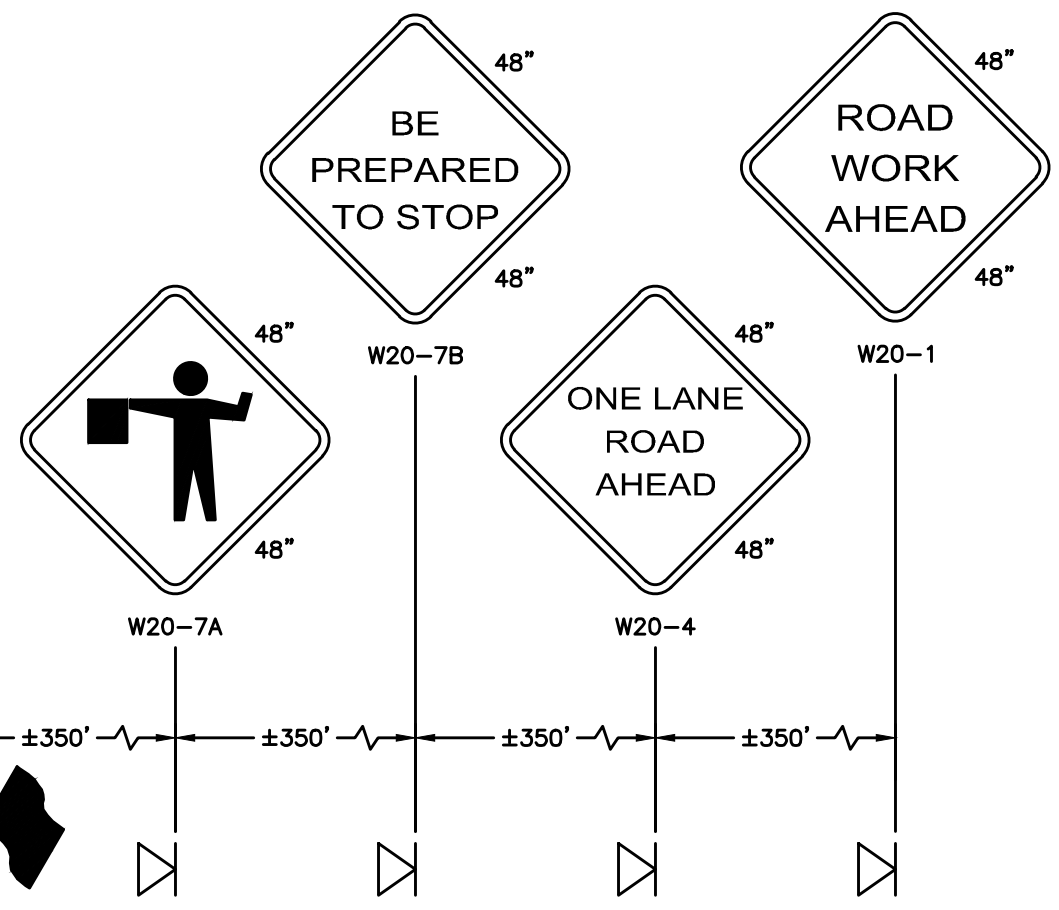
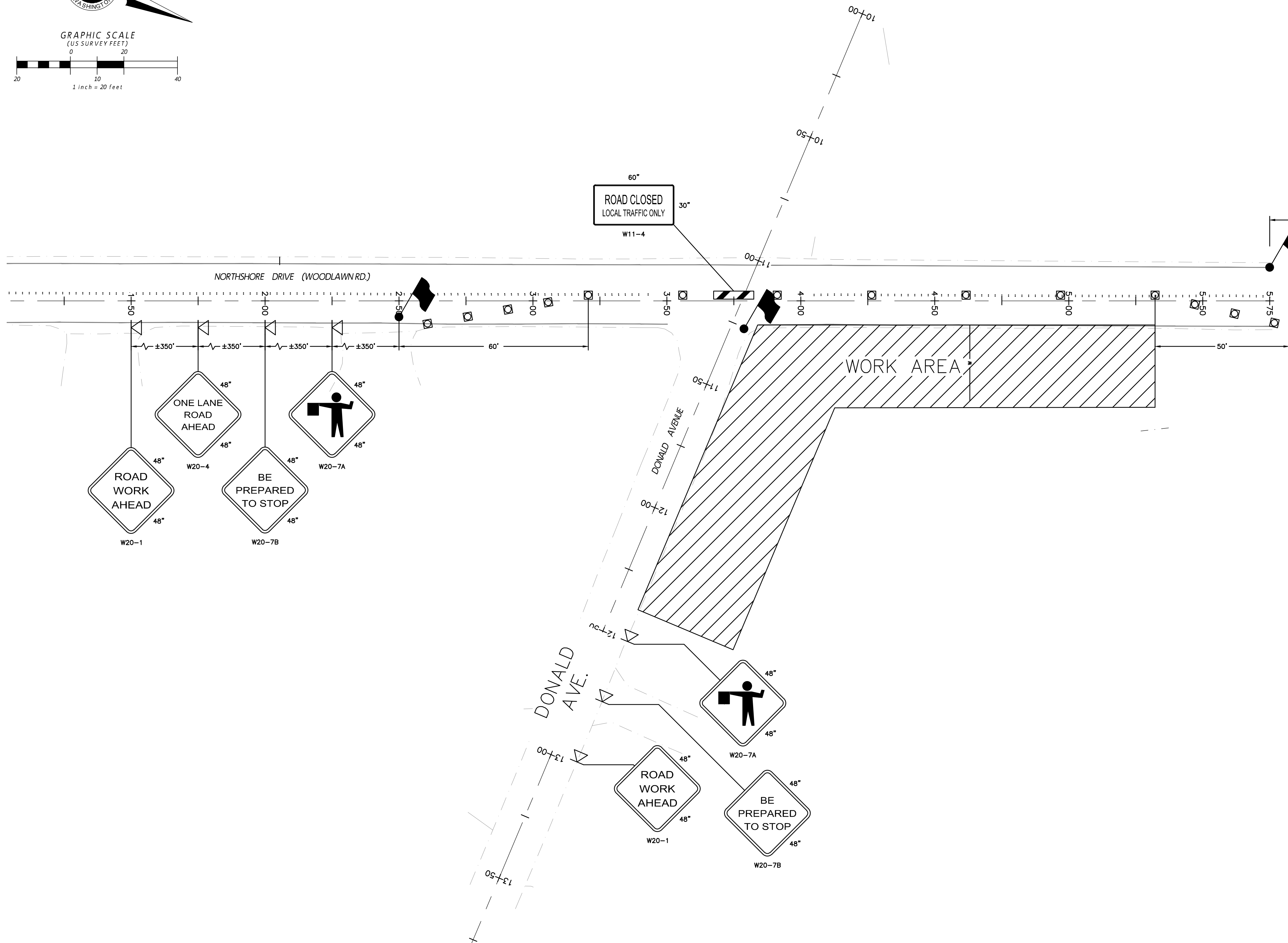
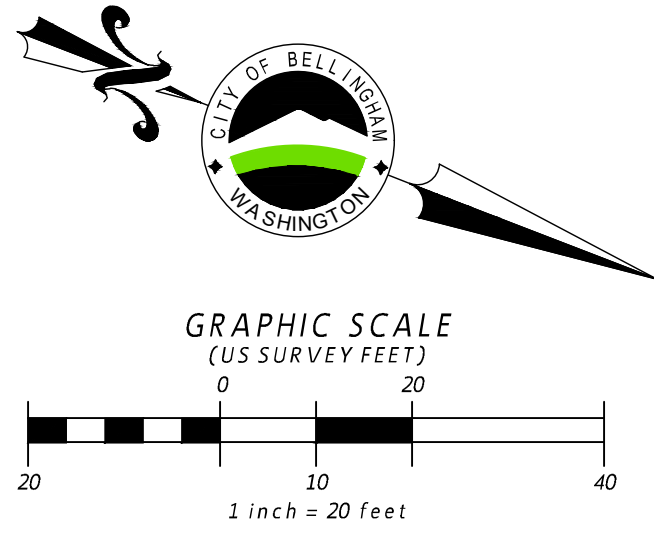
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Job No. EV-0171
Date 10/13/2023
Field Bk. 1062 SERIES

DONALD AVE. WATER QUALITY RETROFIT
 SURVEY CONTROL & EXISTING CONDITIONS

SHEET 03 **OF** 15





LEGEND

- FLAGGING STATION
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- TYPE 3 BARRICADE

CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35/40	30	60
25/30	20	40

- NOTE:
- NOTIFY AFFECTED BUSINESSES & RESIDENTS A MINIMUM OF 48 HOURS IN ADVANCE OF PROPOSED TRAFFIC CONTROL OR ACCESS INTERRUPTIONS.
 - ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS & DRIVEWAYS.
 - THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.
 - ALL SIDEWALKS, DRIVEWAYS, EXITS & EGRESSSES SHALL BE COMPLETELY CLEAR UNLESS OTHERWISE INDICATED.
 - ALL SIGNS SHALL BE BLACK ON ORANGE UNLESS OTHERWISE SPECIFIED.
 - ALL SIGNS SHOWN SHALL BE CLASS B CONSTRUCTION SIGNS UNLESS OTHERWISE SPECIFIED.
 - TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.



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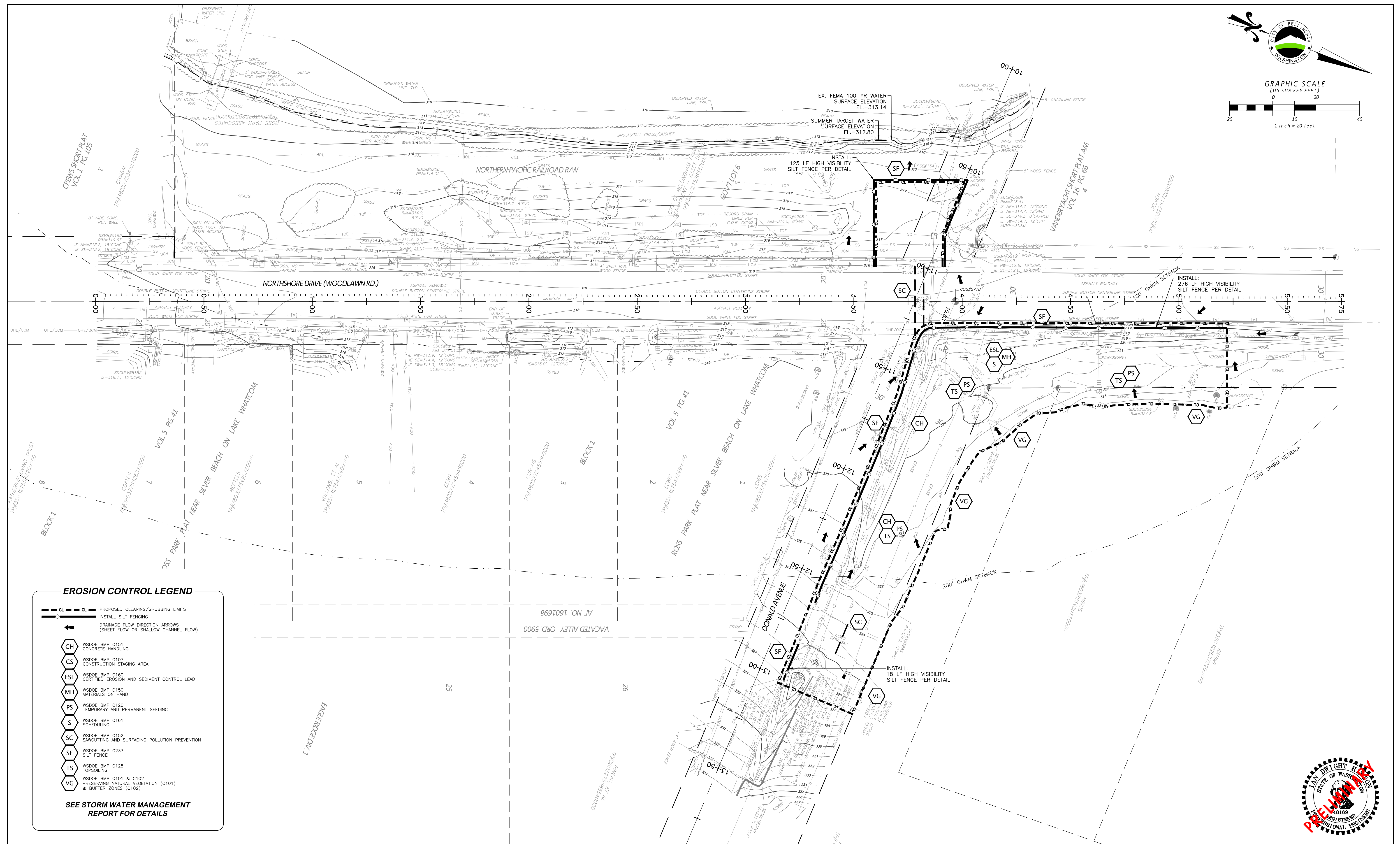
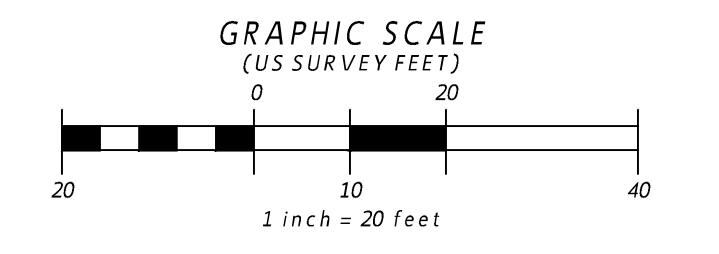
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DONALD AVE. WATER QUALITY RETROFIT
TRAFFIC CONTROL PLAN

SHEET 04 OF 15



EROSION CONTROL LEGEND

- PROPOSED CLEARING/GRUBBING LIMITS
- INSTALL SILT FENCING
- DRAINAGE FLOW DIRECTION ARROWS (SHEET FLOW OR SHALLOW CHANNEL FLOW)
- WSDOE BMP C151 CONCRETE HANDLING
- WSDOE BMP C107 CONSTRUCTION STAGING AREA
- WSDOE BMP C160 CERTIFIED EROSION AND SEDIMENT CONTROL LEAD
- WSDOE BMP C150 MATERIALS ON HAND
- WSDOE BMP C120 TEMPORARY AND PERMANENT SEEDING
- WSDOE BMP C161 SCHEDULING
- WSDOE BMP C152 SAWCUTTING AND SURFACING POLLUTION PREVENTION
- WSDOE BMP C233 SILT FENCE
- WSDOE BMP C125 TOPSOILING
- WSDOE BMP C101 & C102 PRESERVING NATURAL VEGETATION (C101) & BUFFER ZONES (C102)

SEE STORM WATER MANAGEMENT REPORT FOR DETAILS



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DONALD AVE. WATER QUALITY RETROFIT
 TESC PLAN

SHEET 05 OF 15

STORMWATER POLLUTION PREVENTION PLAN - 13 ELEMENTS

ELEMENT #1: – PRESERVE VEGETATION / MARK CLEARING LIMITS:

PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES, INCLUDING CLEARING & GRADING, ALL CLEARING LIMITS, SENSITIVE AREAS & THEIR BUFFERS, & TREES THAT ARE TO BE PRESERVED WITHIN THE CONSTRUCTION AREA SHOULD BE CLEARLY MARKED, BOTH IN THE FIELD & ON THE PLANS, TO PREVENT DAMAGE & OFFSITE IMPACTS. PLASTIC, METAL, OR STAKE WIRE FENCE MAY BE USED TO MARK THE CLEARING LIMITS.

ELEMENT #2: – ESTABLISH CONSTRUCTION ACCESS:

- (A) CONSTRUCTION VEHICLE ACCESS & EXIT SHALL BE LIMITED TO ONE ROUTE IF POSSIBLE.
- (B) ACCESS POINTS SHALL BE STABILIZED WITH QUARRY SPALL OR CRUSHED ROCK TO MINIMIZE THE TRACKING OF SEDIMENT ONTO PUBLIC ROADS.
- (C) WHEEL WASH OR TIRE BATHS SHOULD BE LOCATED ON SITE, IF APPLICABLE.
- (D) PUBLIC ROADS SHALL AT A MINIMUM BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR PICKUP SWEEPING & SHALL BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. STREET WASHING WILL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- (E) STREET WASH WASTEWATER SHALL BE CONTROLLED BY PUMPING BACK ON-SITE, OR OTHERWISE BE PREVENTED FROM DISCHARGING INTO SYSTEMS TRIBUTARY TO STATE SURFACE WATERS.

ELEMENT #3: – CONTROL FLOW RATES:

- (A) PROPERTIES & WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN THE VOLUME, VELOCITY, & PEAK FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE. PROPERTIES SUBJECT TO MINIMUM REQUIREMENT #5 AND/OR #7 SHALL IMPLEMENT CONTROLS AS EARLY IN THE DEVELOPMENT AS IS PRACTICABLE TO MITIGATE FOR FLOW RATES.
- (B) DOWNSTREAM ANALYSIS IS NECESSARY IF CHANGES IN FLOWS COULD IMPAIR OR ALTER CONVEYANCE SYSTEMS, STREAM BANKS, BED SEDIMENT OR AQUATIC HABITAT. SEE THE ECOLOGY MANUAL FOR OFFSITE ANALYSIS GUIDANCE.
- (C) WHERE NECESSARY TO COMPLY WITH MINIMUM REQUIREMENT #7, STORMWATER RETENTION/DETENTION FACILITIES SHALL BE CONSTRUCTED AS ONE OF THE FIRST STEPS IN GRADING. DETENTION FACILITIES SHALL BE FUNCTIONAL PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS (E.G. IMPERVIOUS SURFACES).
- (D) IF PERMANENT INFILTRATION PONDS ARE USED FOR FLOW CONTROL DURING CONSTRUCTION, THESE FACILITIES SHOULD BE PROTECTED FROM SILTATION DURING THE CONSTRUCTION PHASE.

ELEMENT #4: – INSTALL SEDIMENT CONTROLS

- (A) THE DUFF LAYER, NATIVE TOPSOIL, & NATURAL VEGETATION SHALL BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT PRACTICABLE.
- (B) PRIOR TO LEAVING A CONSTRUCTION SITE, OR PRIOR TO DISCHARGE TO AN INFILTRATION FACILITY, STORMWATER RUNOFF FROM DISTURBED AREAS SHALL PASS THROUGH A SEDIMENT POND OR OTHER APPROPRIATE SEDIMENT REMOVAL BMP. RUNOFF FROM FULLY STABILIZED AREAS MAY BE DISCHARGED WITHOUT A SEDIMENT REMOVAL BMP, BUT MUST MEET THE FLOW CONTROL PERFORMANCE STANDARD OF ELEMENT 3. FULL STABILIZATION MEANS CONCRETE OR ASPHALT PAVING, QUARRY SPALLS USED AS DITCH LINING, OR THE USE OF ROLLED EROSION PRODUCTS, A BONDED FIBER MATRIX PRODUCT, OR VEGETATIVE COVER IN A MANNER THAT WILL FULLY PREVENT SOIL EROSION. SEDIMENT PONDS, VEGETATED BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, & OTHER BMPs INTENDED TO TRAP SEDIMENT ON-SITE SHALL BE CONSTRUCTED AS ONE OF THE FIRST STEPS IN GRADING. THESE BMPs SHALL BE FUNCTIONAL BEFORE OTHER LAND DISTURBING ACTIVITIES TAKE PLACE.
- (C) EARTHEN STRUCTURES SUCH AS DAMS, DIKES, & DIVERSIONS SHALL BE SEEDED & MULCHED ACCORDING TO THE TIMING INDICATED IN ELEMENT 5 BELOW.

ELEMENT #5 – STABILIZE SOILS

- (A) ALL EXPOSED & UNWORKED SOILS SHALL BE STABILIZED BY APPLICATION OF EFFECTIVE BMPs THAT PROTECT THE SOIL FROM THE EROSION FORCES OF RAINDROP IMPACT & FLOWING WATER, & WIND EROSION.
- (B) FROM OCTOBER 1 THROUGH APRIL 30 OF EACH YEAR, NO SOILS SHALL REMAIN EXPOSED & UNWORKED FOR MORE THAN 2 DAYS. FROM MAY 1 TO SEPTEMBER 30 OF EACH YEAR, NO SOILS SHALL REMAIN EXPOSED & UNWORKED FOR MORE THAN 7 DAYS. THIS CONDITION APPLIES TO ALL SOILS ON SITE, WHETHER AT FINAL GRADE OR NOT.
- (C) APPLICABLE PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY & PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, SOIL APPLICATION OF POLYACRYLAMIDE (PAM), EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED, & DUST CONTROL.
- (D) SOIL STABILIZATION MEASURES SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, ESTIMATED DURATION OF USE, & POTENTIAL WATER QUALITY IMPACTS THAT STABILIZATION AGENTS MAY HAVE ON DOWNSTREAM WATERS OR GROUND WATER.
- (E) SOIL STOCKPILES MUST BE STABILIZED & PROTECTED WITH SEDIMENT TRAPPING MEASURES.
- (F) WORK ON LINEAR CONSTRUCTION SITES & ACTIVITIES, INCLUDING RIGHT-OF-WAY & EASEMENT CLEARINGS, ROADWAY DEVELOPMENT, PIPELINES, & TRENCHING FOR UTILITIES, SHALL NOT EXCEED THE CAPABILITY OF THE INDIVIDUAL CONTRACTOR FOR HIS PORTION OF THE PROJECT TO INSTALL THE BEDDING MATERIALS, ROADBEDS, STRUCTURES, PIPELINES, AND/OR UTILITIES, & TO RE-STABILIZE THE DISTURBED SOILS, MEETING THE TIMING CONDITIONS LISTED ABOVE.
- (G) IN ADDITION, AT THE DISCRETION OF THE PUBLIC WORKS DIRECTOR, THOSE SITES UNABLE TO MAINTAIN THE QUALITY OF THEIR STORMWATER DISCHARGE MAY BE REQUIRED TO PROVIDE SOIL STABILIZATION TO ALL EXPOSED SOIL AREAS REGARDLESS OF THE WORKING STATUS OF THE AREA. UPON WRITTEN NOTIFICATION, THE PROPERTY OWNER SHALL PROVIDE FULL STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 24 HOURS.

ELEMENT #6 – PROTECT SLOPES

- (A) CUT & FILL SLOPES SHALL BE DESIGNED & CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION.
- (B) CONSIDER SOIL TYPE & ITS POTENTIAL FOR EROSION.
- (C) REDUCE SLOPE RUNOFF VELOCITIES BY REDUCING THE CONTINUOUS LENGTH OF SLOPE WITH TERRACING & DIVERSIONS, REDUCE SLOPE STEEPNESS, & ROUGHEN SLOPE SURFACE.
- (D) DIVERT UPSLOPE DRAINAGE & RUN-ON WATERS FROM OFF-SITE WITH INTERCEPTORS AT TOP OF SLOPE. OFF-SITE STORMWATER SHOULD BE HANDLED SEPARATELY FROM STORMWATER GENERATED ON THE SITE. DIVERSION OF OFF-SITE STORMWATER AROUND THE SITE MAY BE A VIABLE OPTION. DIVERTED FLOWS SHALL BE REDIRECTED TO THE NATURAL DRAINAGE LOCATION AT OR BEFORE THE PROPERTY BOUNDARY.
- (E) CONTAIN DOWN SLOPE COLLECTED FLOWS IN PIPES, SLOPE DRAINS, OR PROTECTED CHANNELS.
- (F) PROVIDE DRAINAGE TO REMOVE GROUND WATER INTERSECTING THE SLOPE SURFACE OF EXPOSED SOIL AREAS.
- (G) EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES, CONSISTENT WITH SAFETY & SPACE CONSIDERATIONS.
- (H) CHECK DAMS SHALL BE PLACED AT REGULAR INTERVALS WITHIN TRENCHES THAT ARE CUT DOWN A SLOPE.
- (I) STABILIZE SOILS ON SLOPES, AS SPECIFIED IN ELEMENT #5.

ELEMENT #7 – PROTECT DRAIN INLETS

- (A) ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT STORMWATER RUNOFF SHALL NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENT.
- (B) ALL APPROACH ROADS SHALL BE KEPT CLEAN, & STREET WASH WATER SHALL NOT BE ALLOWED TO ENTER STORM DRAINS WITHOUT PRIOR & ADEQUATE TREATMENT UNLESS TREATMENT IS PROVIDED BEFORE THE STORM DRAIN DISCHARGES TO WATERS OF THE STATE.

ELEMENT #8 – STABILIZE CHANNELS AND OUTLETS

- (A) ALL TEMPORARY ON-SITE CONVEYANCE CHANNELS SHALL BE DESIGNED, CONSTRUCTED & STABILIZED TO PREVENT EROSION FROM THE EXPECTED VELOCITY OF FLOW FROM A 2 YEAR, 24-HOUR FREQUENCY STORM FOR THE DEVELOPED CONDITION.
- (B) STABILIZATION, INCLUDING ARMORING MATERIAL, ADEQUATE TO PREVENT EROSION OF OUTLETS, ADJACENT STREAM BANKS, SLOPES & DOWNSTREAM REACHES SHALL BE PROVIDED AT THE OUTLETS OF ALL CONVEYANCE SYSTEMS.

ELEMENT #10 – CONTROL DEWATERING

- (A) ALL FOUNDATION, VAULT, & TRENCH DEWATERING WATER, WHICH HAS SIMILAR CHARACTERISTICS TO STORMWATER RUNOFF AT THE SITE, SHALL BE DISCHARGED INTO A CONTROLLED CONVEYANCE SYSTEM, PRIOR TO DISCHARGE TO A SEDIMENT TRAP OR SEDIMENT POND. CHANNELS MUST BE STABILIZED, AS SPECIFIED IN ELEMENT #8.
- (B) CLEAN, NON-TURBID DEWATERING WATER, SUCH AS WELL-POINT GROUND WATER, CAN BE DISCHARGED TO SYSTEMS TRIBUTARY TO STATE SURFACE WATERS, AS SPECIFIED IN ELEMENT #8, PROVIDED THE DEWATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF THE RECEIVING WATERS. THESE CLEAN WATERS SHOULD NOT BE Routed THROUGH SEDIMENT PONDS WITH STORMWATER.
- (C) HIGHLY TURBID OR OTHERWISE CONTAMINATED DEWATERING WATER, SUCH AS FROM CONSTRUCTION EQUIPMENT OPERATION, CLAMHELL DIGGING, CONCRETE TREMIE POUR, OR WORK INSIDE A COFFERDAM, SHALL BE HANDLED SEPARATELY FROM STORMWATER AT THE SITE.
- (D) OTHER DISPOSAL OPTIONS, DEPENDING ON SITE CONSTRAINTS, MAY INCLUDE, BY WAY OF EXAMPLE: 1) INFILTRATION, 2) TRANSPORT OFF-SITE IN VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS, 3) ON-SITE TREATMENT USING CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES.

ELEMENT #11 – MAINTAIN BMPs

- (A) ALL TEMPORARY & PERMANENT EROSION & SEDIMENT CONTROL BMPs SHALL BE MAINTAINED & REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL MAINTENANCE & REPAIR SHALL BE CONDUCTED IN ACCORDANCE WITH BMPs.
- (B) SEDIMENT CONTROL BMPs SHALL BE INSPECTED WEEKLY OR AFTER A RUNOFF-PRODUCING STORM EVENT DURING THE DRY SEASON & DAILY DURING THE WET SEASON. ALL PROJECTS THAT DISTURB AN AREA GREATER THAN ONE ACRE SHALL HAVE A CERTIFIED EROSION CONTROL LEAD AVAILABLE TO THE SITE. THIS EROSION CONTROL LEAD SHALL BE RESPONSIBLE TO PROVIDE OVERVIEW OF ONGOING DAY TO DAY EROSION CONTROL REQUIREMENTS. THE EROSION CONTROL LEAD SHALL (WITHIN 24 HOURS) REPORT TO THE CITY & DEPARTMENT OF ECOLOGY ANY SITE DISCHARGES THAT EXCEED STATE WATER QUALITY STANDARDS THAT HAVE OR ARE LIKELY TO HAVE ENTERED WATERS OF THE STATE.
- (C) ALL TEMPORARY EROSION & SEDIMENT CONTROL BMPs SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL OF BMPs OR VEGETATION SHALL BE PERMANENTLY STABILIZED.

ELEMENT #12 – MANAGE THE PROJECT

- (A) PHASING OF CONSTRUCTION – DEVELOPMENT PROJECTS SHALL BE PHASED WHERE FEASIBLE IN ORDER TO PREVENT, TO THE MAXIMUM EXTENT PRACTICABLE, THE TRANSPORT OF SEDIMENT FROM THE DEVELOPMENT SITE DURING CONSTRUCTION. REVEGETATION OF EXPOSED AREAS & MAINTENANCE OF THAT VEGETATION SHALL BE AN INTEGRAL PART OF THE CLEARING ACTIVITIES FOR ANY PHASE.
- (B) WHEN ESTABLISHING THESE PERMITTED CLEARING & GRADING AREAS, CONSIDERATION SHOULD BE GIVEN TO MINIMIZING REMOVAL OF EXISTING TREES & MINIMIZING DISTURBANCE/COMPACTION OF NATIVE SOILS EXCEPT AS NEEDED FOR BUILDING PURPOSES. PERMITTED CLEARING & GRADING AREAS & ANY OTHER AREAS REQUIRED TO PRESERVE CRITICAL OR SENSITIVE AREAS, BUFFERS, NATIVE GROWTH PROTECTION EASEMENTS, OR TREE RETENTION AREAS, SHALL BE DELINEATED ON THE SITE PLANS & THE DEVELOPMENT SITE.
- (C) COORDINATION WITH UTILITIES & OTHER CONTRACTORS – THE PRIMARY PROJECT PROPONENT SHALL EVALUATE, WITH INPUT FROM UTILITIES & OTHER CONTRACTORS, THE STORMWATER MANAGEMENT REQUIREMENTS FOR THE ENTIRE PROJECT, INCLUDING THE UTILITIES, WHEN PREPARING THE CONSTRUCTION SWPPP.
- (D) INSPECTION & MONITORING – ALL BMPs SHALL BE INSPECTED, MAINTAINED, & REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
- (E) FOR ANY PROJECT DISTURBING MORE THAN ONE ACRE, A CERTIFIED PROFESSIONAL IN EROSION & SEDIMENT CONTROL SHALL BE IDENTIFIED IN THE CONSTRUCTION SWPPP & SHALL BE ON-SITE OR ON-CALL AT ALL TIMES. CERTIFICATION MAY BE THROUGH THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION/ASSOCIATED GENERAL CONTRACTORS (WSDOT/AGC) CONSTRUCTION SITE EROSION & SEDIMENT CONTROL CERTIFICATION PROGRAM OR ANY EQUIVALENT LOCAL OR NATIONAL CERTIFICATION AND/OR TRAINING PROGRAM, IN THE CITY'S DISCRETION.
- (F) WHENEVER INSPECTION AND/OR MONITORING REVEALS THAT THE BMPs IDENTIFIED IN THE CONSTRUCTION SWPPP ARE INADEQUATE, DUE TO THE ACTUAL DISCHARGE OF OR POTENTIAL TO DISCHARGE A SIGNIFICANT AMOUNT OF ANY POLLUTANT, THE SWPPP SHALL BE MODIFIED, AS APPROPRIATE, IN A TIMELY MANNER.
- (G) MAINTENANCE OF THE CONSTRUCTION SWPPP – THE CONSTRUCTION SWPPP SHALL BE RETAINED ON-SITE. THE CONSTRUCTION SWPPP SHALL BE MODIFIED WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY BMP.

ELEMENT #13 – PROTECT LOW IMPACT DEVELOPMENT BMPs

- (A) PROTECT ALL BIORETENTION BMPs FROM SEDIMENTATION THROUGH INSTALLATION & MAINTENANCE OF EROSION & SEDIMENT CONTROL BMPs ON PORTIONS OF THE SITE THAT DRAIN INTO THE BIORETENTION AND/OR RAIN GARDEN BMPs. RESTORE THE BMPs TO THEIR FULLY FUNCTIONING CONDITION IF THEY ACCUMULATE SEDIMENT DURING CONSTRUCTION. RESTORING THE BMP MUST INCLUDE REMOVAL OF SEDIMENT & ANY SEDIMENT-LADEN BIORETENTION SOILS, & REPLACING THE REMOVED SOILS WITH SOILS MEETING THE DESIGN SPECIFICATION.
- (B) PREVENT COMPACTING BIORETENTION BMPs BY EXCLUDING CONSTRUCTION EQUIPMENT & FOOT TRAFFIC. PROTECT COMPLETED LAWN & LANDSCAPING AREAS FROM COMPACTION DUE TO CONSTRUCTION EQUIPMENT.
- (C) KEEP ALL HEAVY EQUIPMENT OFF EXISTING SOILS UNDER LID FACILITIES THAT HAVE BEEN EXCAVATED TO FINAL GRADE TO RETAIN INFILTRATION RATES OF THE SOILS.

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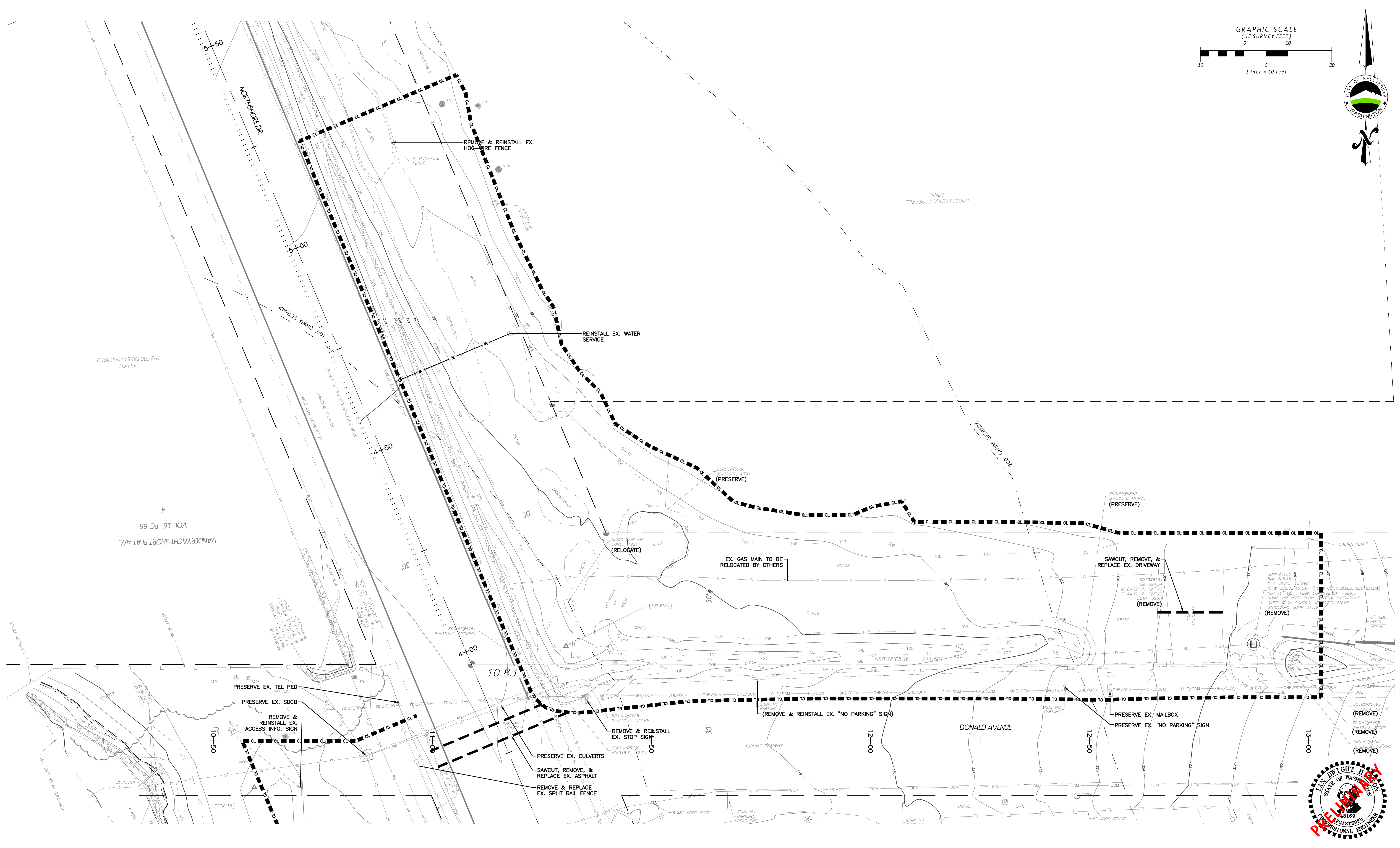
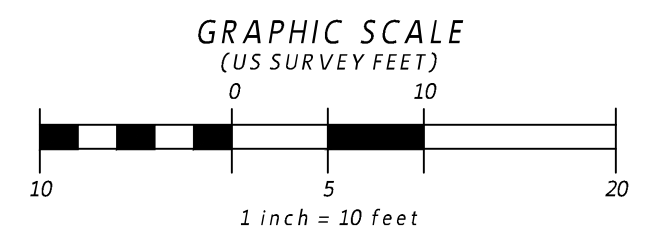
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DONALD AVE. WATER QUALITY RETROFIT
SWPP

SHEET	06	OF
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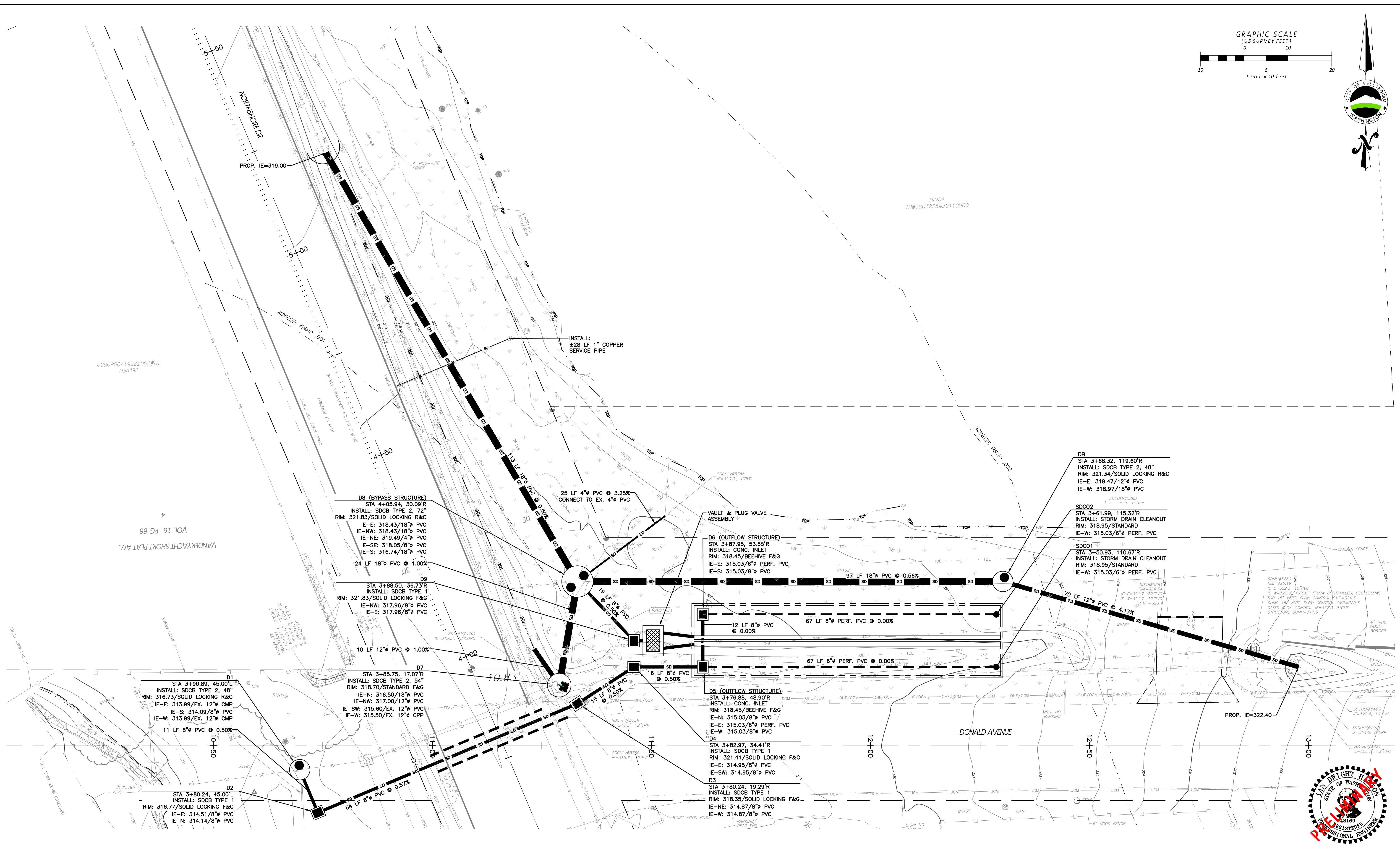
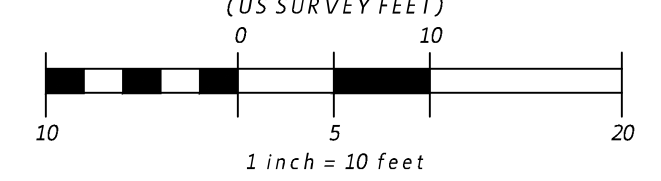
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Date 10/13/2023
Field Bk. 1062 SERIES

DONALD AVE. WATER QUALITY RETROFIT
DEMOLITION PLAN

SHEET 07 OF 15

GRAPHIC SCALE
(US SURVEY FEET)



4/25/24	4	90% Design	
10/13/23	3	Ecology Review Response	
6/12/23	2	60% Design	
1/17/23	1	30% Design	
Date	No	Revision	By

PROJECT ENGINEER I.D.H.
 DESIGNED/DRAWN I.D.H.
 INSPECTOR --

DIRECTOR PUBLIC WORKS E.C.J.
 CITY ENGINEER J.J.B.
 ASSISTANT DIRECTOR M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION

SCALE
 Horiz. 1"=10'
 Vert. 1"=4'

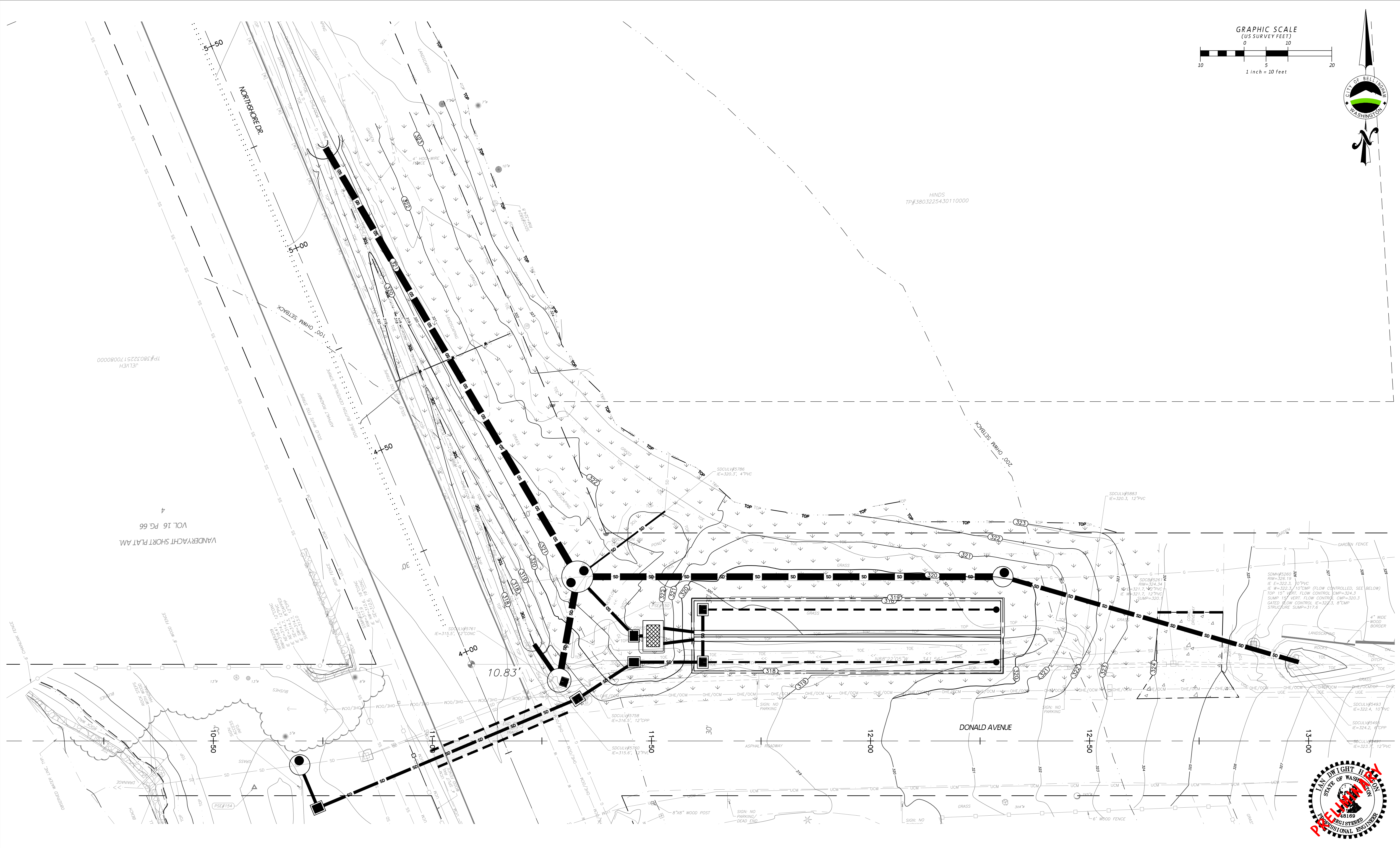
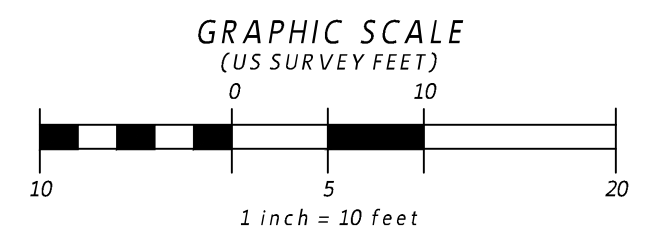
DATUM
 NAD 83/98
 NAVD 88

Job No. EV-0171
 Date 10/13/2023
 Field Bk. 1062 SERIES

DONALD AVE. WATER QUALITY RETROFIT
STORMWATER IMPROVEMENTS

SHEET 08 OF 15





VANDERYACHT SHORT PLAT AM
VOL 16 PG 66

HINDS
TP#3803225430110000

DONALD AVENUE



Date	No	Revision	By
4/25/24	4	90% Design	
10/13/23	3	Ecology Review Response	
6/12/23	2	60% Design	
1/17/23	1	30% Design	

PROJECT ENGINEER I.D.H.
DESIGNED/DRAWN I.D.H.
INSPECTOR --

DIRECTOR PUBLIC WORKS E.C.J.
CITY ENGINEER J.J.B.
ASSISTANT DIRECTOR M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

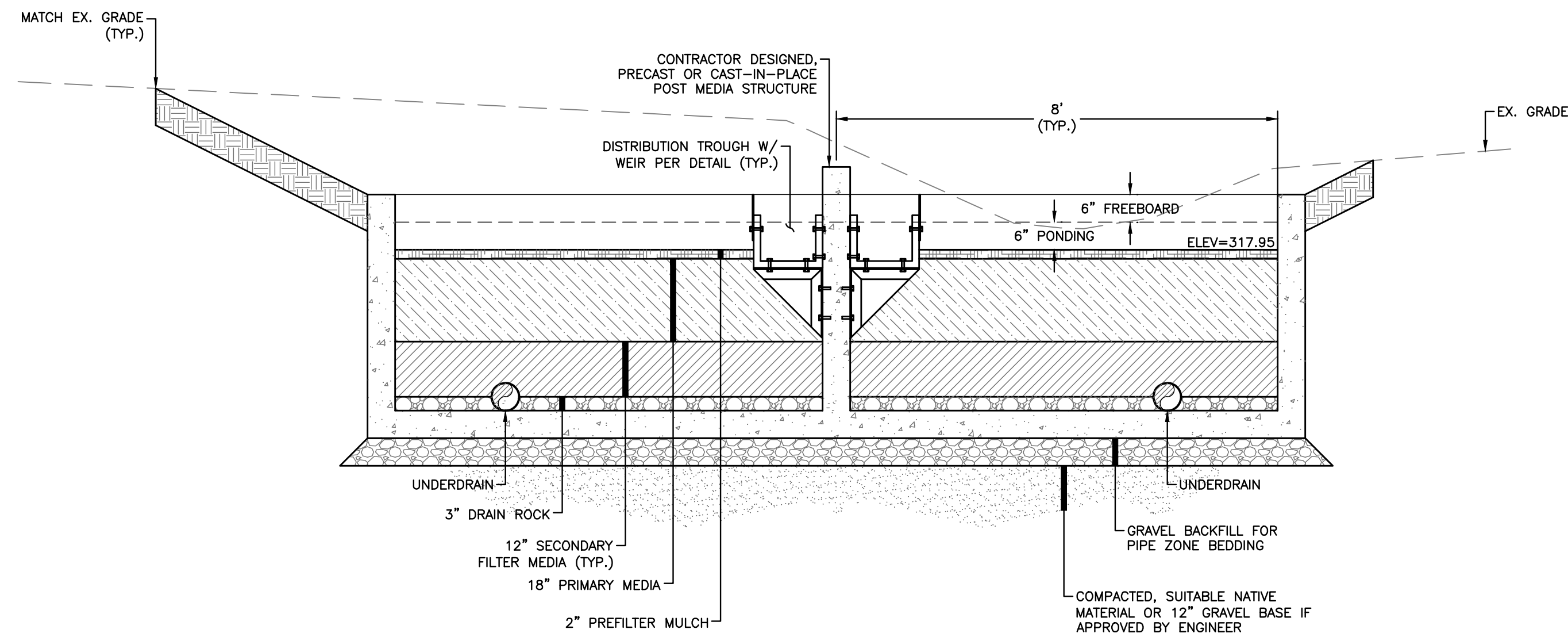
SCALE
Horiz. 1"=10'
Vert. 1"=4'

DATUM
NAD 83/98
NAVD 88

Job. No. EV-0171
Date 10/13/2023
Field Bk. 1062 SERIES

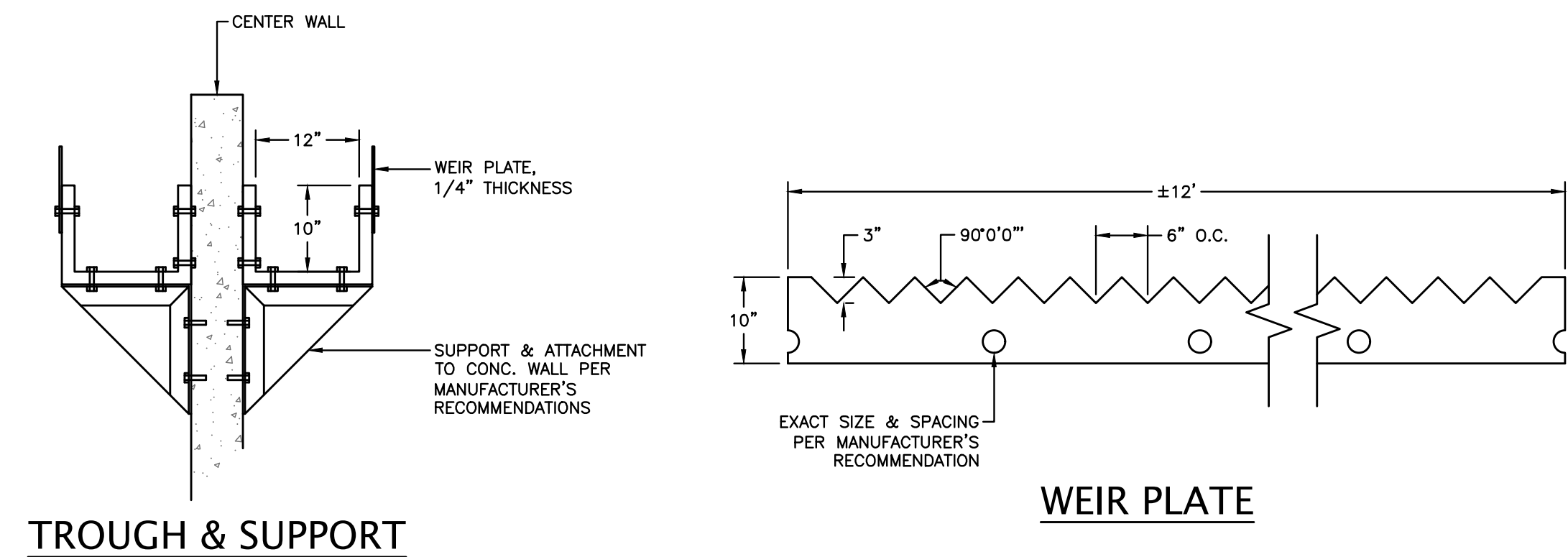
DONALD AVE. WATER QUALITY RETROFIT
GRADING & RESTORATION

SHEET 09 OF 15



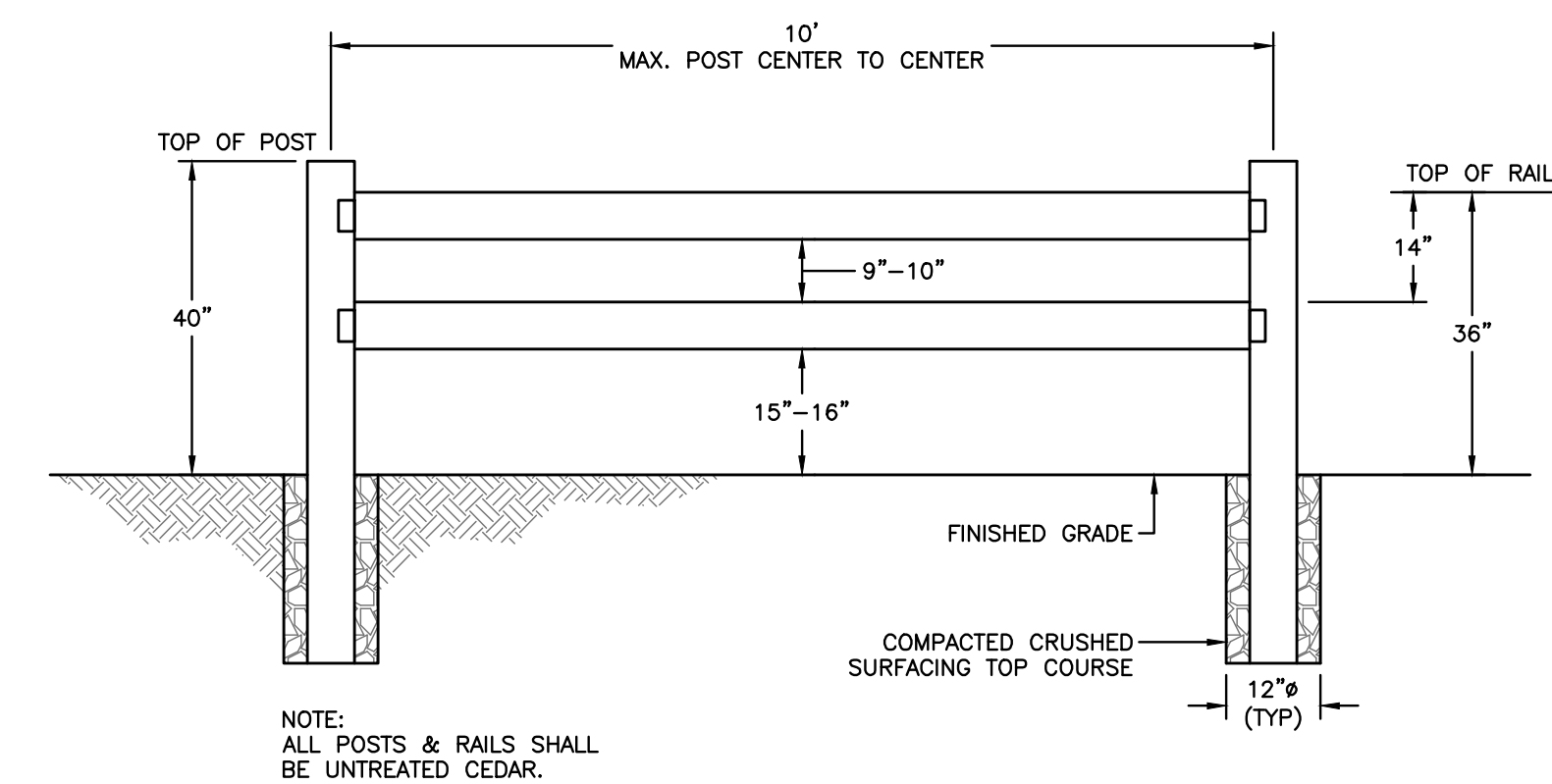
POST MEDIA, STACKED CONFIGURATION

NTS



DISTRIBUTION TROUGH & WEIR

NTS



WOODEN SPLIT RAIL FENCE

NTS



Date	No	Revision	By
4/25/24	4	90% Design	
10/13/23	3	Ecology Review Response	
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PROJECT ENGINEER I.D.H.
 DESIGNED/DRAWN I.D.H.
 INSPECTOR --

DIRECTOR PUBLIC WORKS E.C.J.
 CITY ENGINEER J.J.B.
 ASSISTANT DIRECTOR M.A.O.

CITY OF BELLINGHAM, WASHINGTON
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION

SCALE
 Horiz. N/A
 Vert. N/A

DATUM
 NAD 83/98
 NAVD 88

Job No. EV-0171
 Date 10/13/2023
 Field Bk. 1062 SERIES

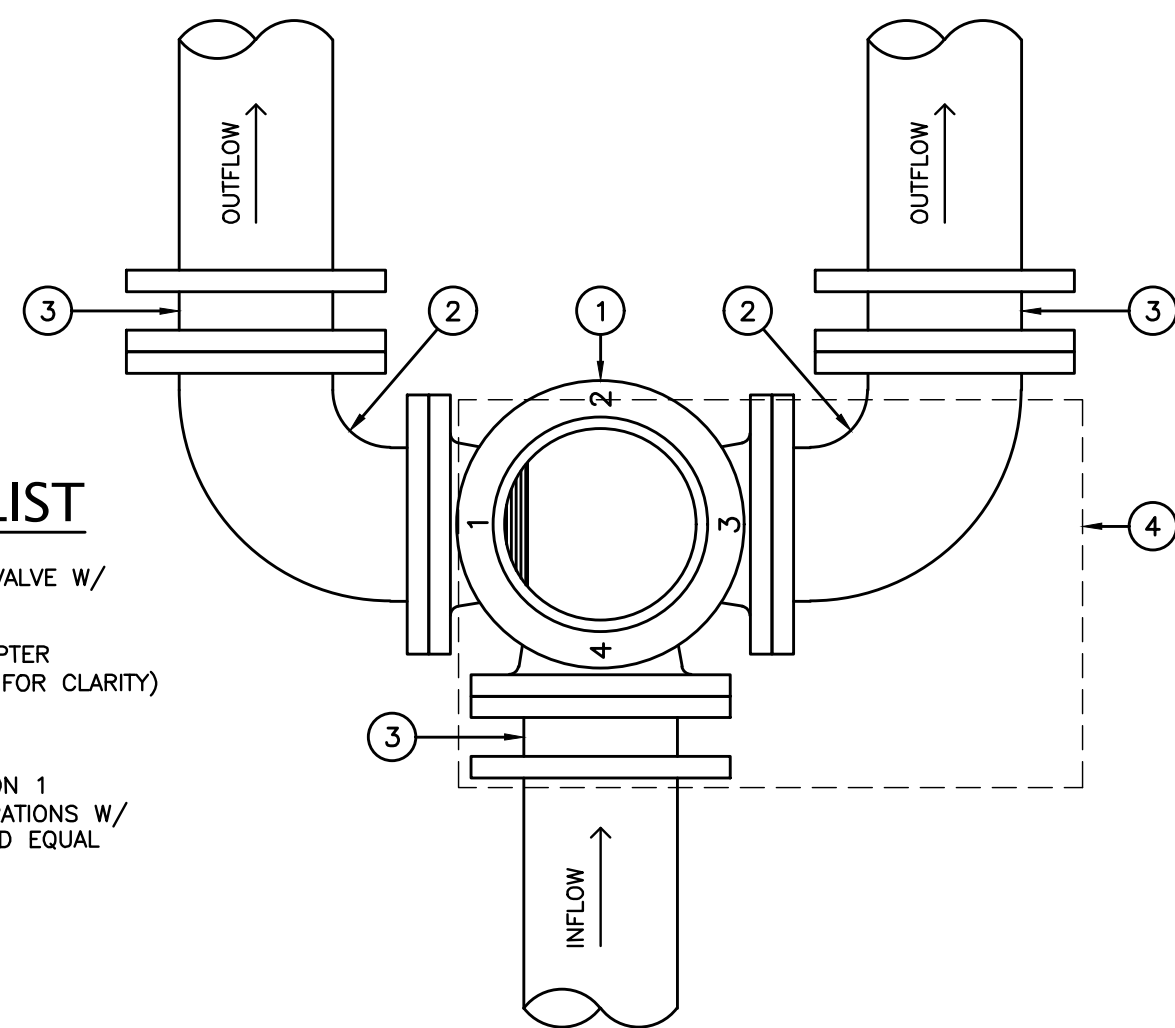
DONALD AVE. WATER QUALITY RETROFIT
 DETAILS

SHEET
 10 OF
 15

EQUIPMENT LIST

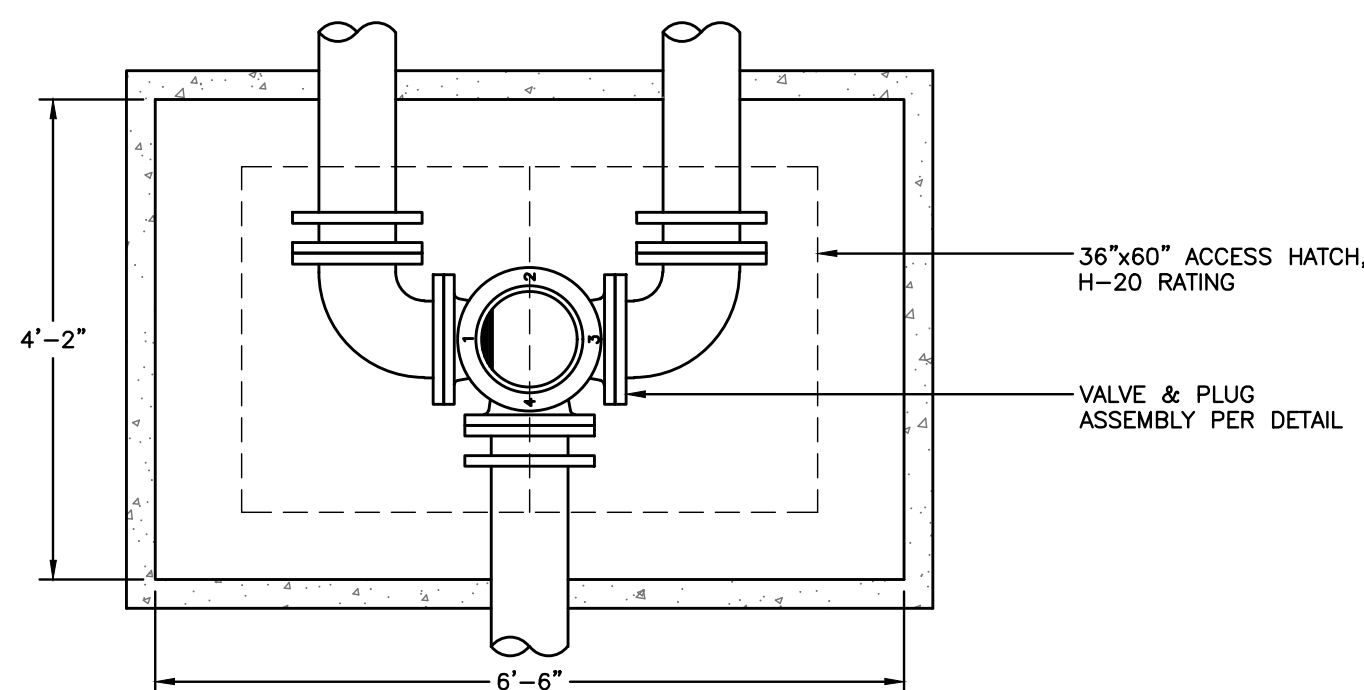
1. 3-WAY TAPERED PLUG VALVE W/ WORM GEAR ACTUATOR
2. 90° BEND
3. FLANGED COUPLING ADAPTER
4. ACTUATOR (NOT DRAWN FOR CLARITY)

NOTE:
 • PLUG SHOWN IN POSITION 1
 • SEAL ALL VAULT PENETRATIONS W/ LINK-SEAL OR APPROVED EQUAL

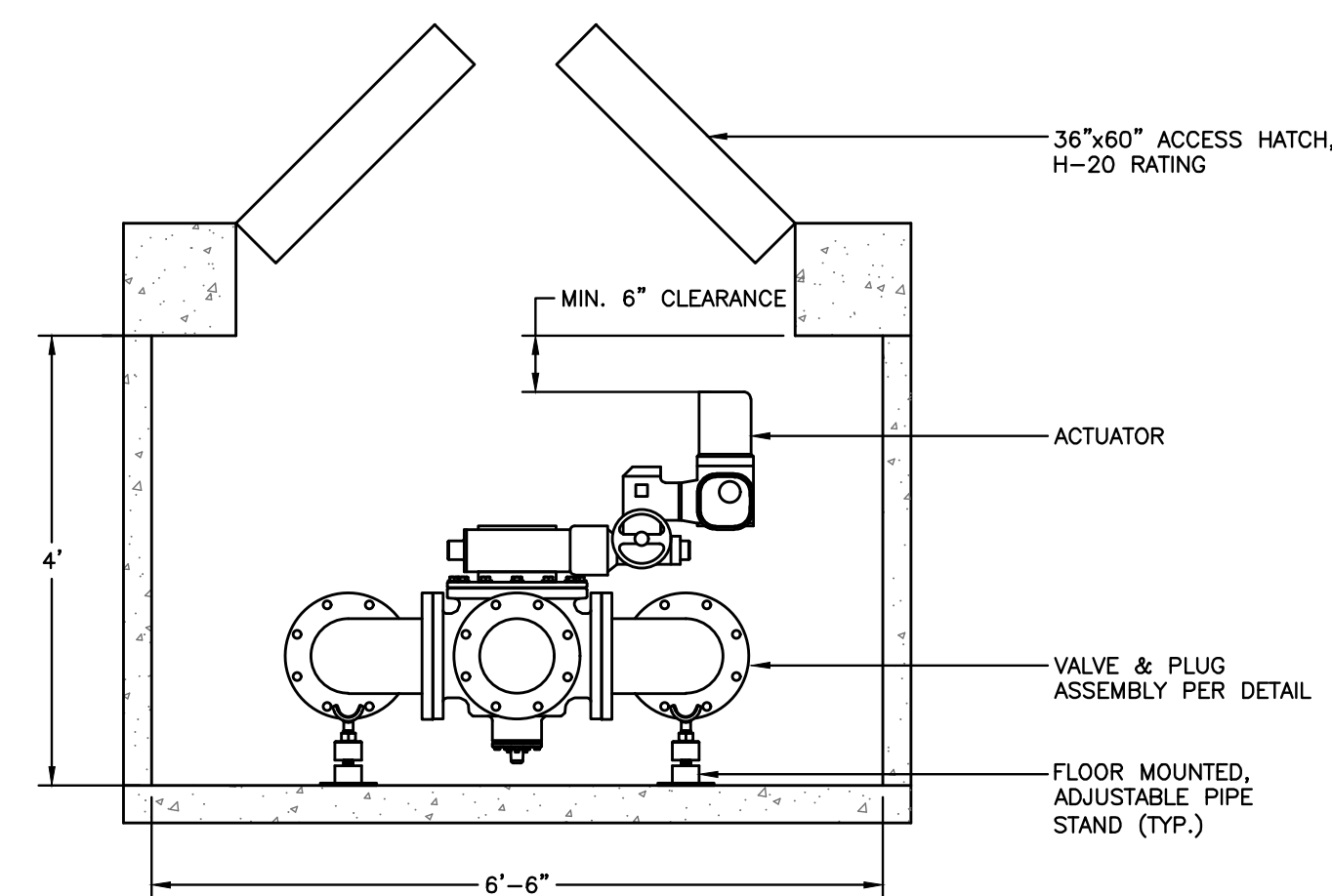


PLUG VALVE ASSEMBLY

NTS



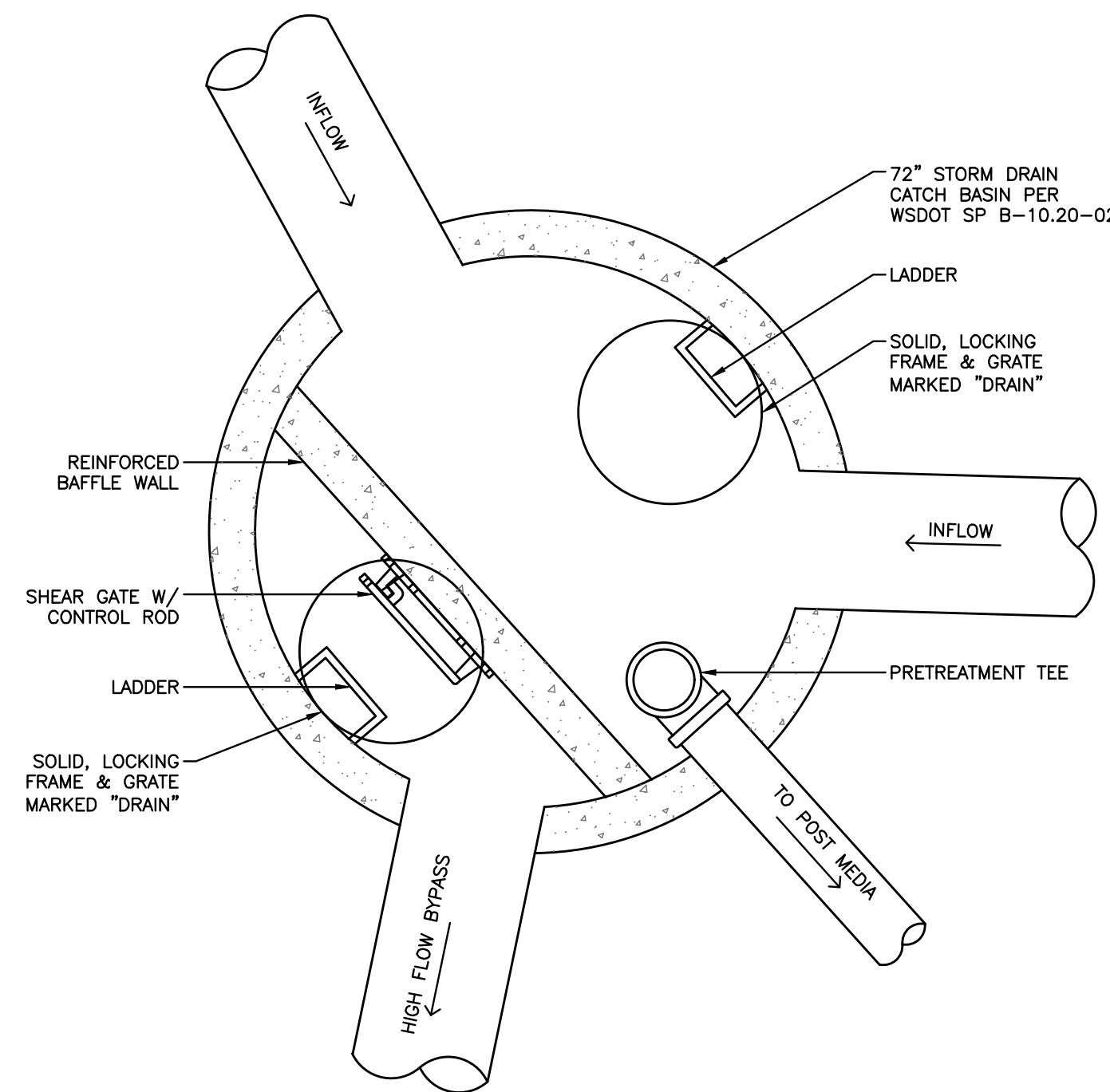
PLAN VIEW



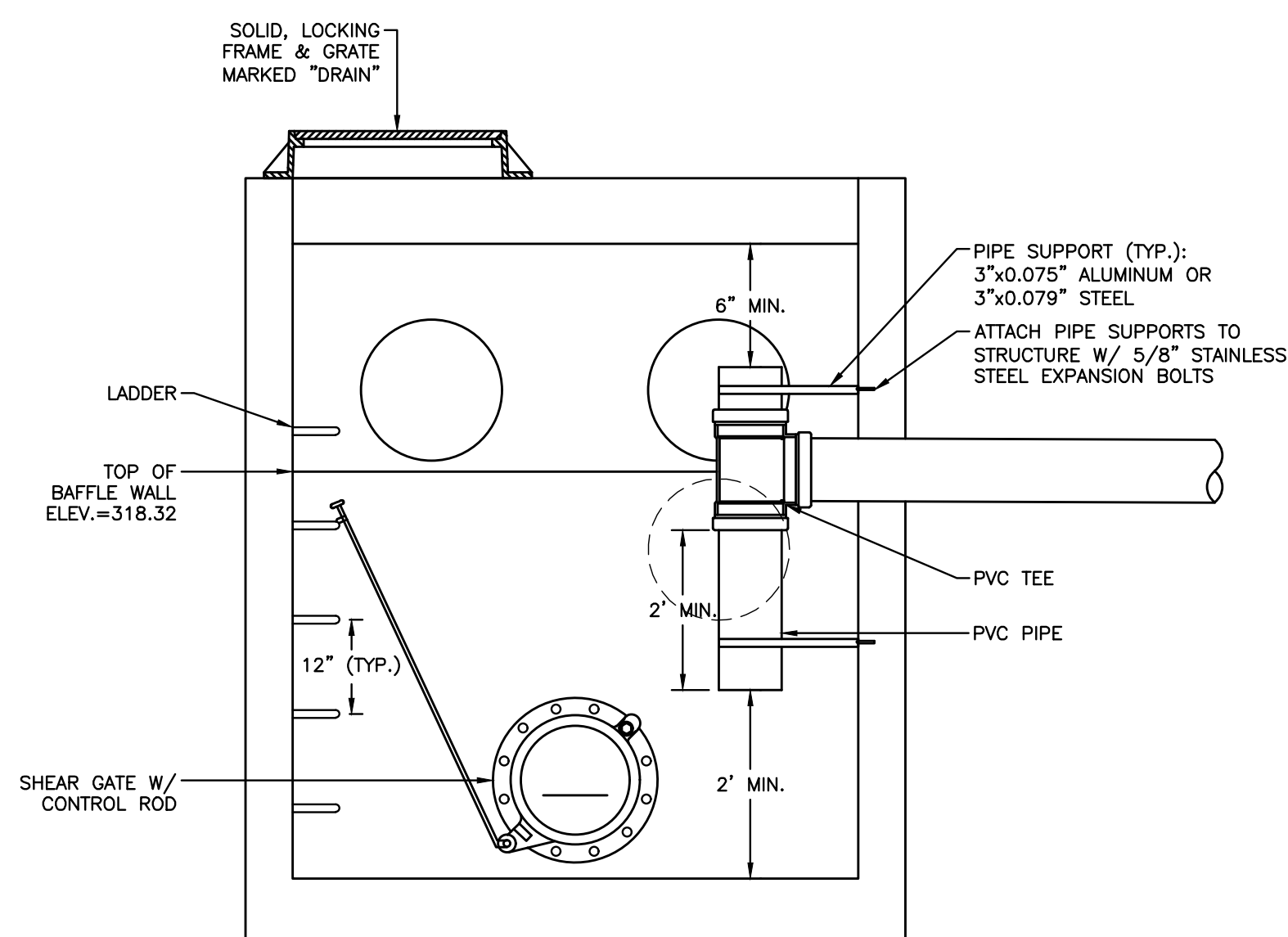
SECTION VIEW

PLUG VALVE VAULT

NTS



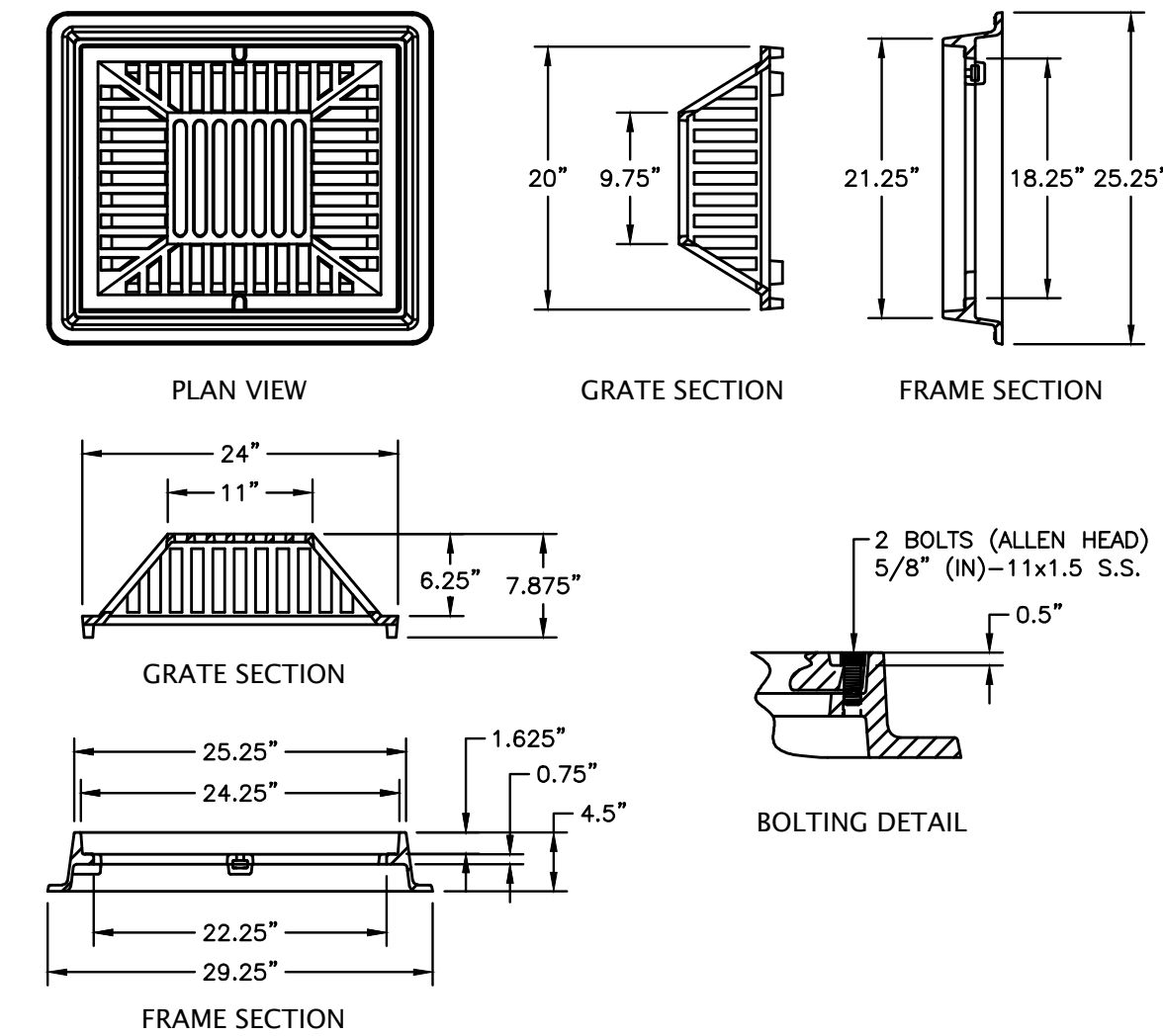
PLAN VIEW



SECTION VIEW

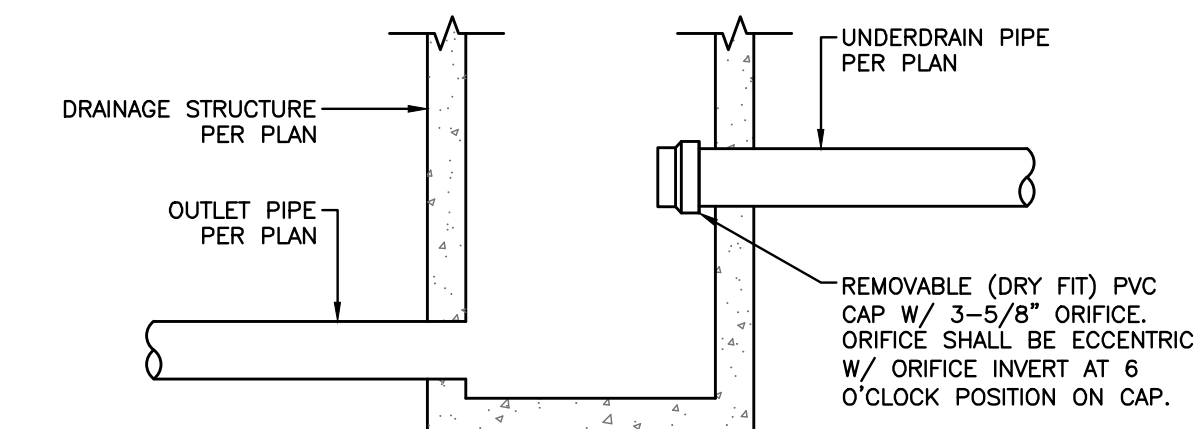
BYPASS STRUCTURE

NTS



BEEHIVE FRAME & GRATE

NTS



OUTFLOW STRUCTURE

NTS

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1/17/23	1	30% Design	

PROJECT ENGINEER	I.D.H.
DESIGNED/DRAWN	I.D.H.
INSPECTOR	--

DIRECTOR PUBLIC WORKS	E.C.J.
CITY ENGINEER	J.J.B.
ASSISTANT DIRECTOR	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION

SCALE
 Horiz. N/A
 Vert. N/A

DATUM
 NAD 83/98
 NAVD 88

Job. No. EV-0171
 Date 10/13/2023
 Field Bk. 1062 SERIES

DONALD AVE. WATER QUALITY RETROFIT
 DETAILS

SHEET
 11 OF
 15



BEDDING SPECIFICATIONS FOR PVC PIPE

THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS ARE TO BE USED IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, CURRENT EDITION:

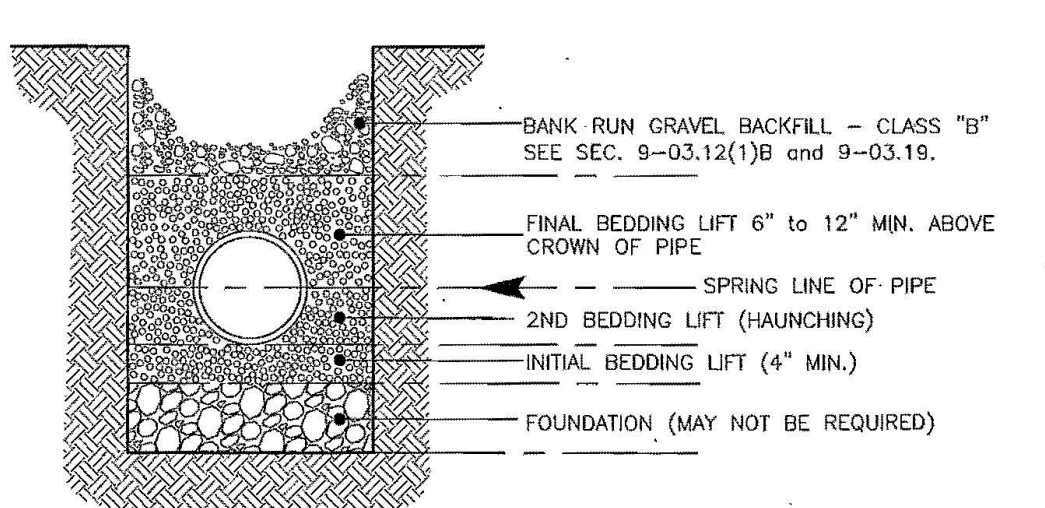
BEDDING FOR SEWERS, DRAINS AND CULVERTS FOR PVC PIPE--

BEDDING MATERIAL FOR PVC PIPE SHALL BE PEA GRAVEL CONFORMING TO THE FOLLOWING SPECIFICATIONS.

PEA GRAVEL -- PEA GRAVEL BEDDING SHALL BE A CLEAN MIXTURE FREE FROM ORGANIC MATTER AND CONFORMING TO THE FOLLOWING GRADATION WHEN TESTED IN ACCORDANCE WITH ASTM D422:

U.S. STANDARD SIEVE SIZE	PERCENT PASSING, BY WT.
1/2"	100
3/4"	95-100
#5	0-10
#200	0-3

BACKFILL -- WHEREVER A TRENCH IS EXCAVATED IN THE EXISTING OR PROPOSED ROADWAY, SIDEWALK OR OTHER AREAS WHERE SETTLEMENT WOULD BE DETRIMENTAL, THE ENTIRE TRENCH SHALL BE BACKFILLED WITH IMPORTED GRAVEL AND COMPACTED TO 95% OF MAXIMUM DENSITY.



APPROVED <i>[Signature]</i> City Engineer	11/8/07 Date	CITY OF BELLINGHAM PVC PIPE BEDDING DETAILS	DRAWING DR-538
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BEDDING SPECIFICATIONS FOR PVC PIPE

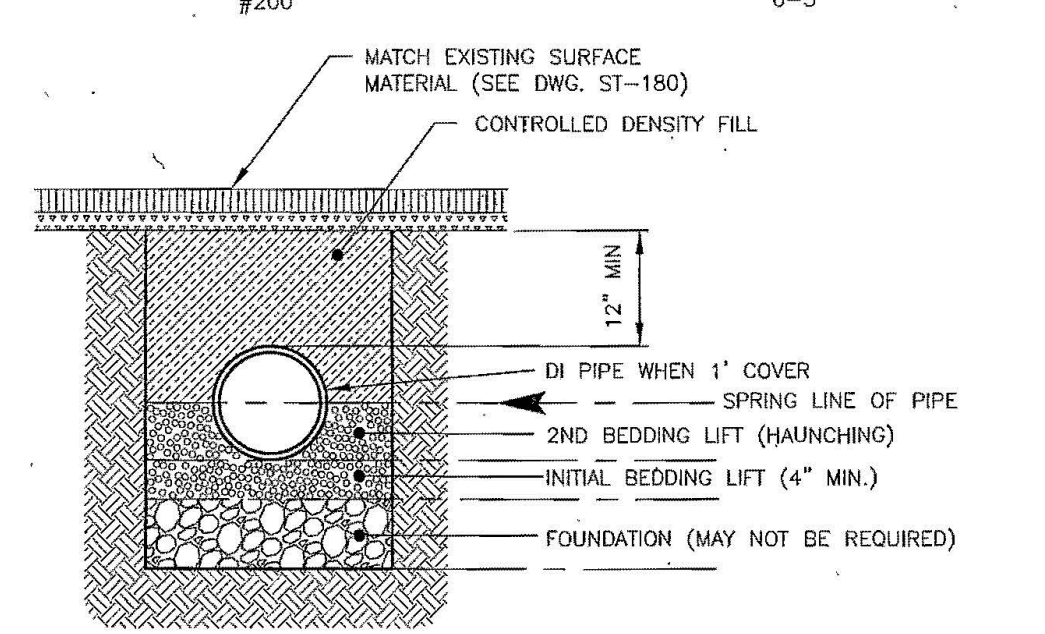
THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS ARE TO BE USED IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, CURRENT EDITION:

BEDDING FOR SEWERS, DRAINS AND CULVERTS FOR PVC PIPE--

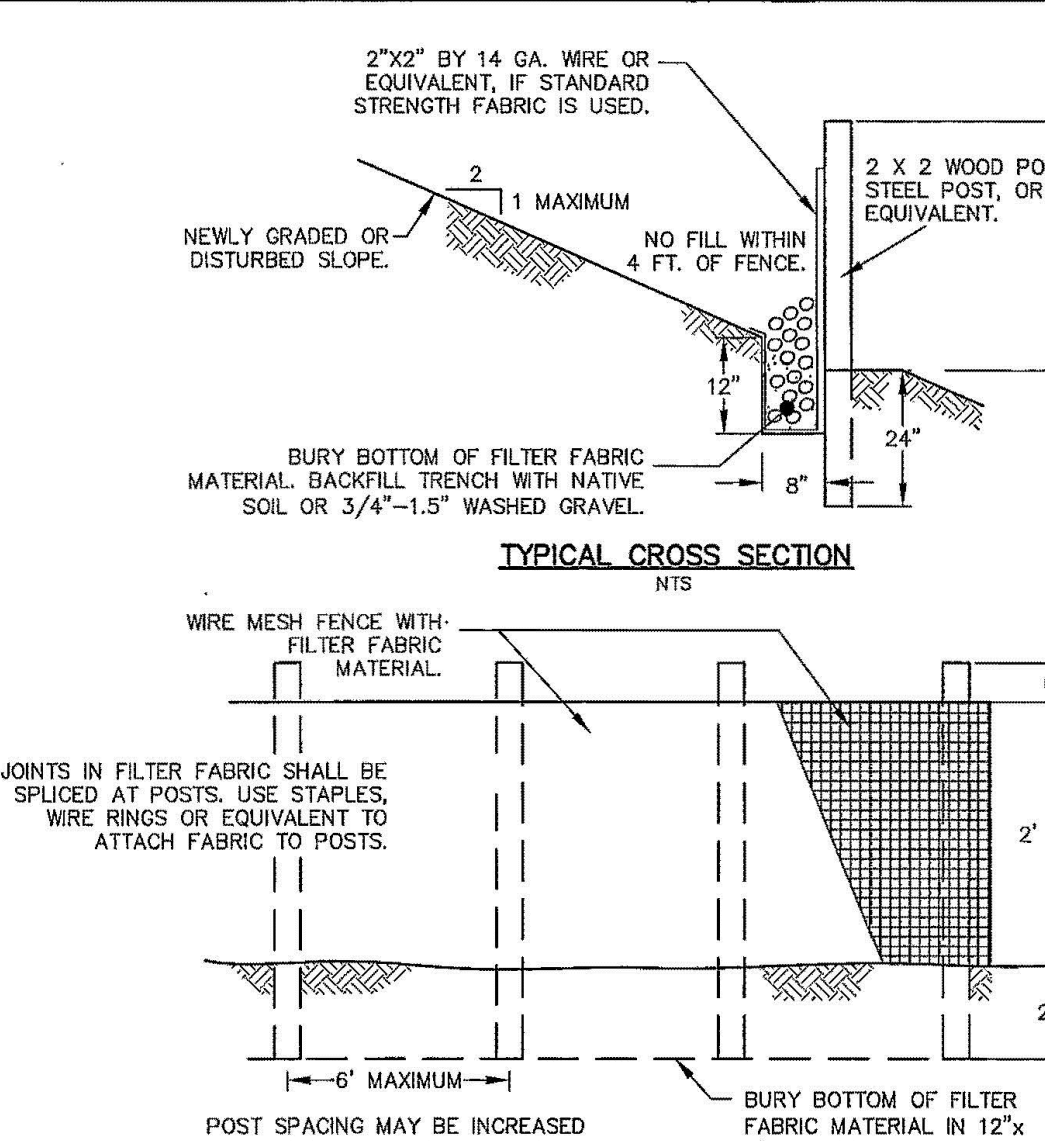
BEDDING MATERIAL FOR PVC PIPE SHALL BE PEA GRAVEL CONFORMING TO THE FOLLOWING SPECIFICATIONS.

PEA GRAVEL -- PEA GRAVEL BEDDING SHALL BE A CLEAN MIXTURE FREE FROM ORGANIC MATTER AND CONFORMING TO THE FOLLOWING GRADATION WHEN TESTED IN ACCORDANCE WITH ASTM D422:

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1/2"	100
3/4"	95-100
#5	0-10
#200	0-3



APPROVED <i>[Signature]</i> City Engineer	11/8/07 Date	CITY OF BELLINGHAM PIPE BEDDING DETAILS FOR 2' OR LESS OF COVER	DRAWING DR-539
---	-----------------	---	-------------------



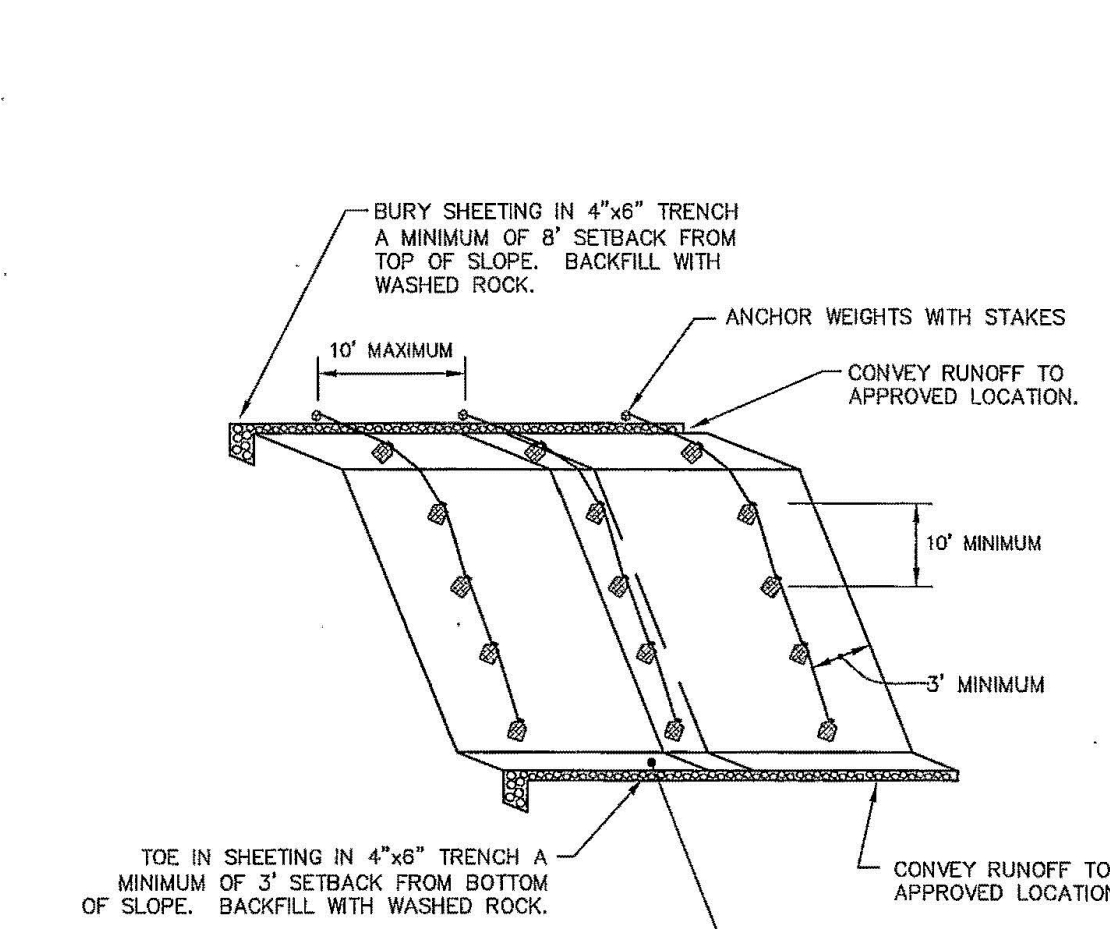
TYPICAL CROSS SECTION
NTS

ELEVATION
NTS

NOTES:

- FENCE SHALL NOT BE INSTALLED ON SLOPES STEEPER THAN 2:1.
- JOINTS IN FILTER FABRIC SHALL BE OVERLAPPED 6 INCHES AT POST.
- USE STAPLES, WIRE RINGS, OR EQUIVALENT, TO ATTACH FABRIC TO WIRE FENCE.
- REMOVE SEDIMENT WHEN IT REACHES 1/3 FENCE HEIGHT.

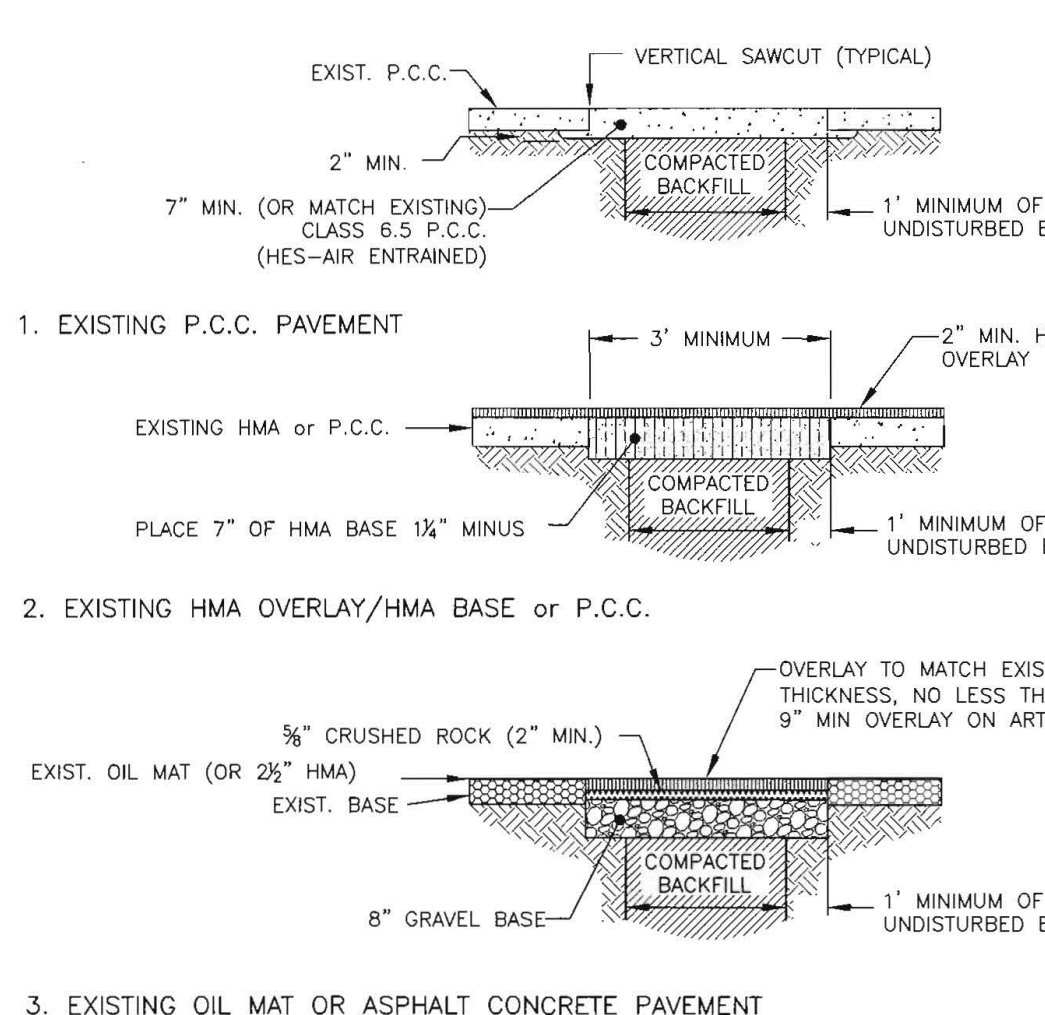
APPROVED <i>[Signature]</i> City Engineer	11/29/04 Date	CITY OF BELLINGHAM REINFORCED SILT FENCE	DRAWING EC-615
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NOTES:

- TIRES, SANDBAGS, OR EQUIVALENT MAY BE USED TO WEIGH DOWN PLASTIC SHEETING.
- SEAMS BETWEEN SHEETS MUST OVERLAP A MINIMUM OF 12" AND BE WEIGHTED OR TAPED.
- PLASTIC SHEETING SHALL HAVE A MINIMUM THICKNESS OF 6 MIL.
- DUE TO RAPID RUNOFF CAUSED BY PLASTIC SHEETING, THIS METHOD SHALL NOT BE USED UPSLOPE OF AREAS THAT MIGHT BE ADVERSELY IMPACTED BY CONCENTRATED RUNOFF.
- CONSTRUCT BERM OR SWALE AT TOP OF SLOPE AS DIRECTED BY THE CLEARING AND GRADING INSPECTOR.
- CONSTRUCT DITCH AT BASE OF SLOPE AS REQUIRED BY CITY, AND DISCHARGE TO APPROVED LOCATION.

APPROVED <i>[Signature]</i> City Engineer	11/29/04 Date	CITY OF BELLINGHAM PLASTIC COVERING FOR SLOPES AND STOCKPILES	DRAWING EC-650
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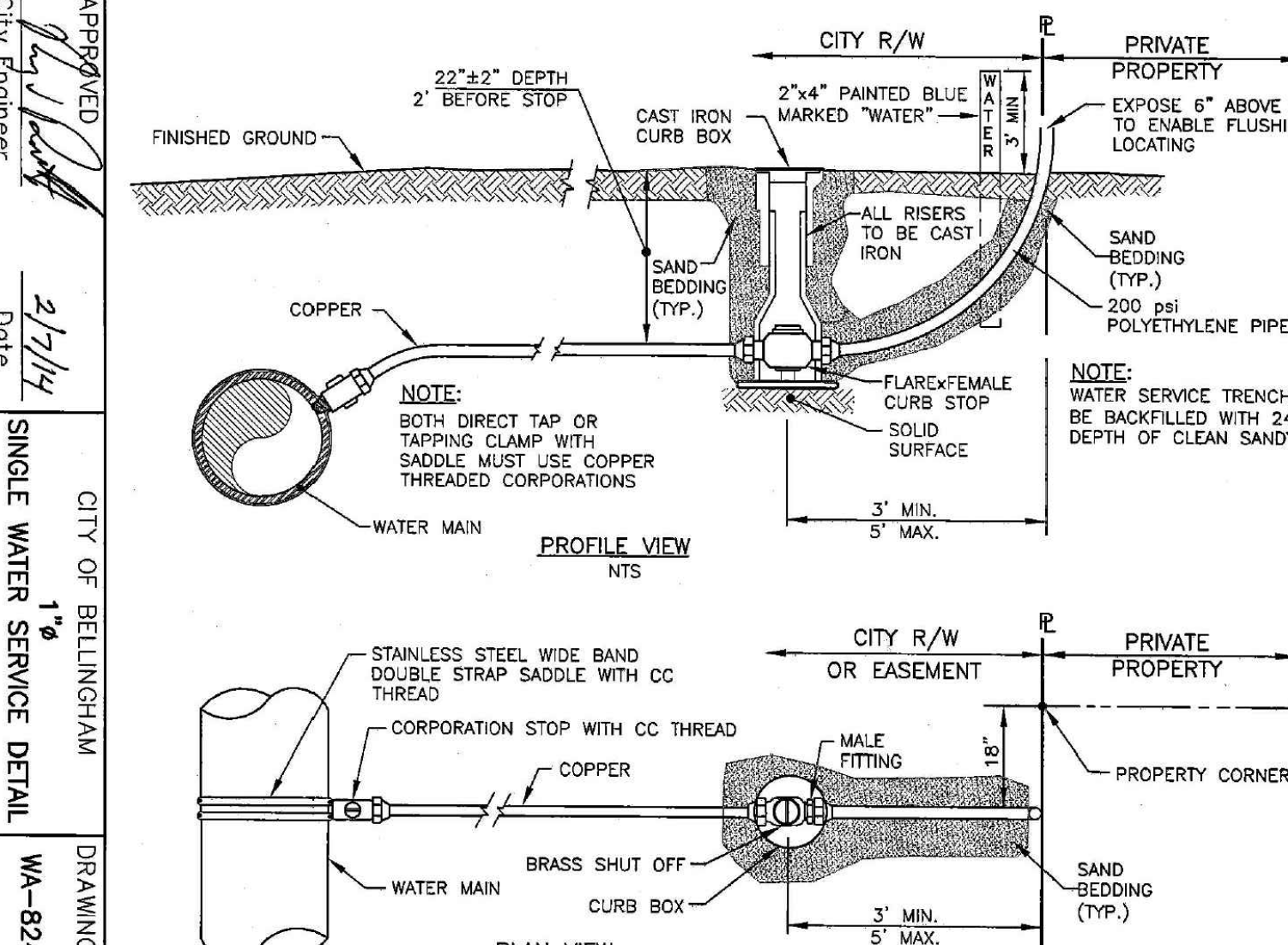
NOTES:

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF BELLINGHAM'S STANDARD SPECIFICATIONS FOR UTILITY CUTS IN STREET AREA.

PAVEMENT OVERLAYS No. 2 AND 3, TACK ALL EDGES AND HMA BASE SURFACE BEFORE PLACING HMA PAVEMENT. SEAL ALL JOINTS WITH HOT ASPHALT (AR-4000W) BETWEEN EXISTING AND NEW HMA PAVEMENT IMMEDIATELY AFTER FINISH ROLLING.

CONTRACTOR SHALL MATCH EXISTING SURFACES THAT ARE COLORED, TEXTURED, STAMPED OR INLAID WITH BRICK.

APPROVED <i>[Signature]</i> City Engineer	12/16/09 Date	CITY OF BELLINGHAM HORIZONTAL PAVEMENT REPAIR (STREET CROSSINGS)	DRAWING ST-180
---	------------------	--	-------------------



PROFILE VIEW
NTS

PLAN VIEW
NTS

NOTE: BOTH DIRECT TAP OR TAPPING CLAMP WITH SADDLE MUST USE COPPER THREADED CORPORATIONS

NOTE: WATER SERVICE TRENCH TO BE BACKFILLED WITH 24" MIN. DEPTH OF CLEAN SANDY FILL

APPROVED <i>[Signature]</i> City Engineer	2/7/14 Date	CITY OF BELLINGHAM 1" Ø SINGLE WATER SERVICE DETAIL	DRAWING WA-824
---	----------------	---	-------------------

Date	No	Revision	By
4/25/24	4	90% Design	
10/13/23	3	Ecology Review Response	
6/12/23	2	60% Design	
1/17/23	1	30% Design	

PROJECT ENGINEER I.D.H.
DESIGNED/DRAWN I.D.H.
INSPECTOR --

DIRECTOR PUBLIC WORKS E.C.J.
CITY ENGINEER J.J.B.
ASSISTANT DIRECTOR M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

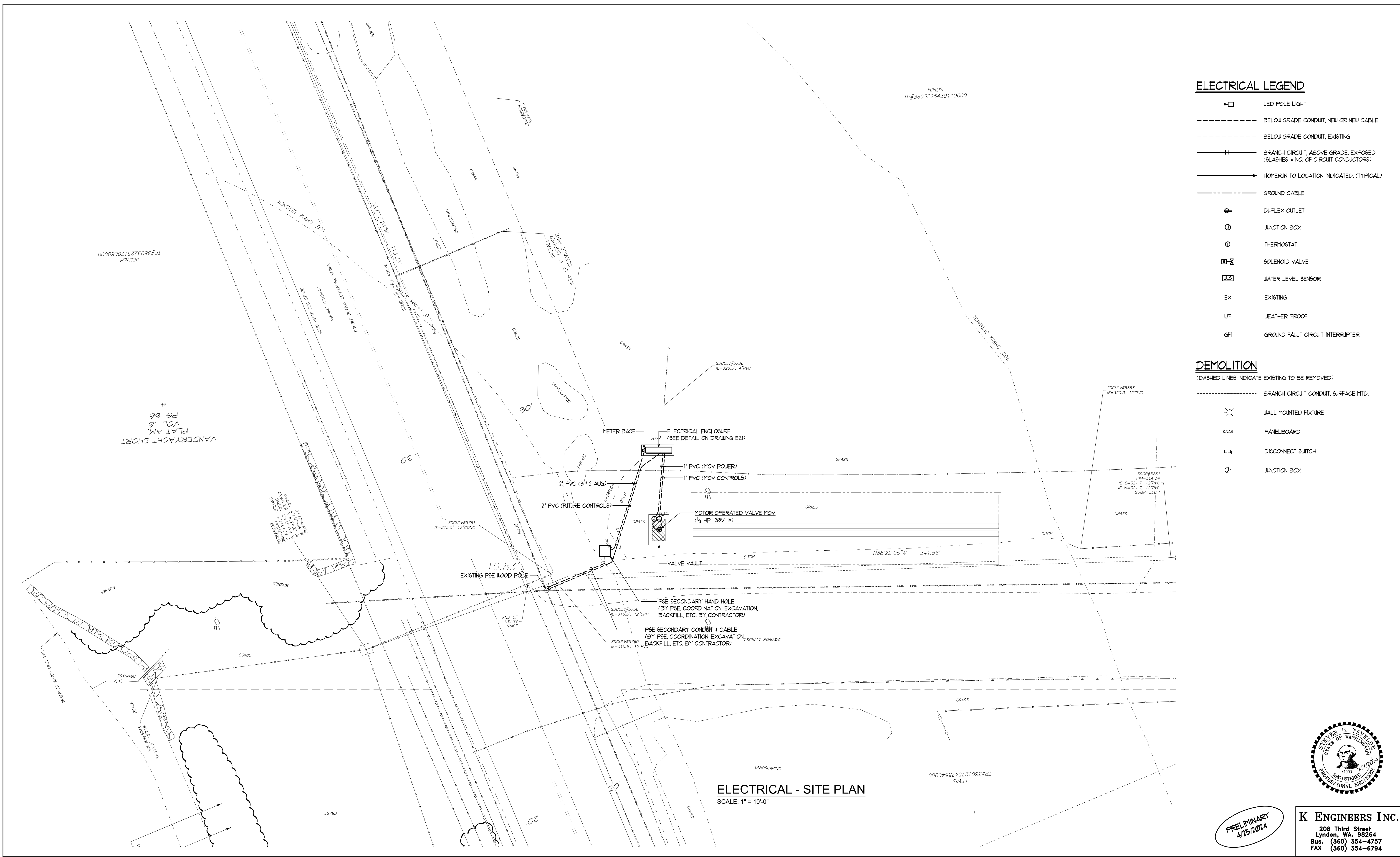
SCALE
Horiz. N/A
Vert. N/A

DATUM
NAD 83/98
NAVD 88

Job. No. EV-0171
Date 10/13/2023
Field Bk. 1062 SERIES

DONALD AVE. WATER QUALITY RETROFIT
CITY OF BELLINGHAM STANDARD DETAILS

SHEET
12 OF
15



- ELECTRICAL LEGEND**
- LED POLE LIGHT
 - BELOW GRADE CONDUIT, NEW OR NEW CABLE
 - BELOW GRADE CONDUIT, EXISTING
 - +--- BRANCH CIRCUIT, ABOVE GRADE, EXPOSED (SLASHES = NO. OF CIRCUIT CONDUCTORS)
 - HOMERUN TO LOCATION INDICATED, (TYPICAL)
 - GROUND CABLE
 - ⊖ DUPLEX OUTLET
 - ⊙ JUNCTION BOX
 - ⊙ THERMOSTAT
 - ⊖⊖ SOLENOID VALVE
 - ⊖⊖ WATER LEVEL SENSOR
 - EX EXISTING
 - UP WEATHER PROOF
 - GFI GROUND FAULT CIRCUIT INTERRUPTER

- DEMOLITION**
(DASHED LINES INDICATE EXISTING TO BE REMOVED)
- BRANCH CIRCUIT CONDUIT, SURFACE MTD.
 - ⊖ WALL MOUNTED FIXTURE
 - ⊖ PANELBOARD
 - ⊖ DISCONNECT SWITCH
 - ⊖ JUNCTION BOX

ELECTRICAL - SITE PLAN
SCALE: 1" = 10'-0"



PRELIMINARY
4/25/2024

K ENGINEERS INC.
208 Third Street
Lynden, WA. 98264
Bus. (360) 354-4757
FAX (360) 354-6794

Date	No	Revision	By
4/25/2024	4	90% Design	
10/13/23	3	Ecology Review Response	
6/12/23	2	60% Design	
1/17/23	1	30% Design	

PROJECT ENGINEER STV
DESIGNED/DRAWN KL
INSPECTOR --

DIRECTOR PUBLIC WORKS E.C.J.
CITY ENGINEER J.J.B.
ASSISTANT DIRECTOR M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

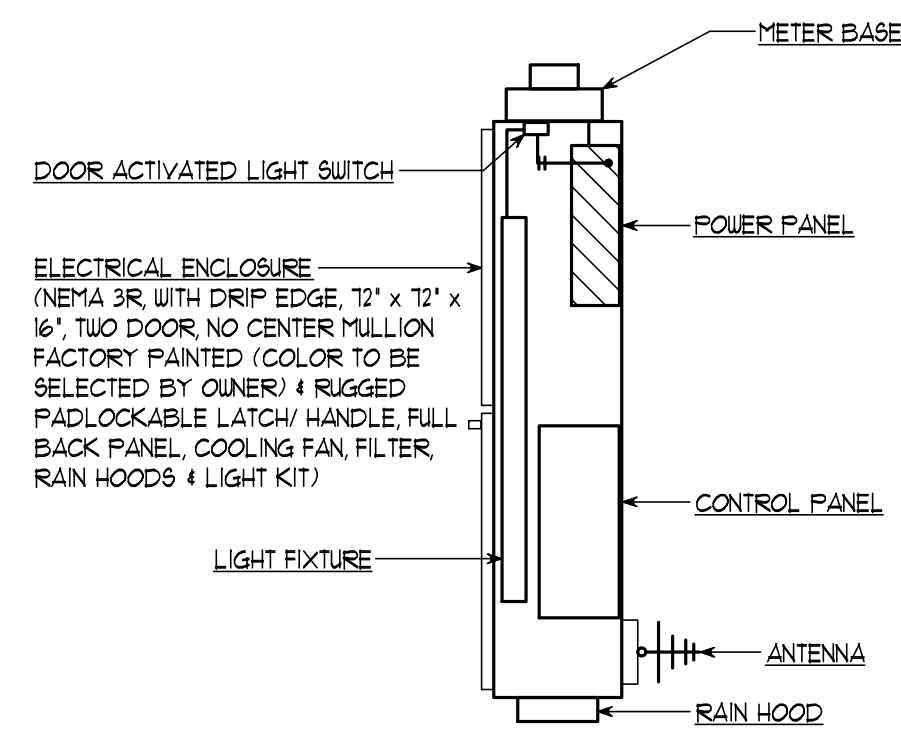
SCALE
Horiz. _____
Vert. _____

DATUM
NAD 83/98
NAVD 88

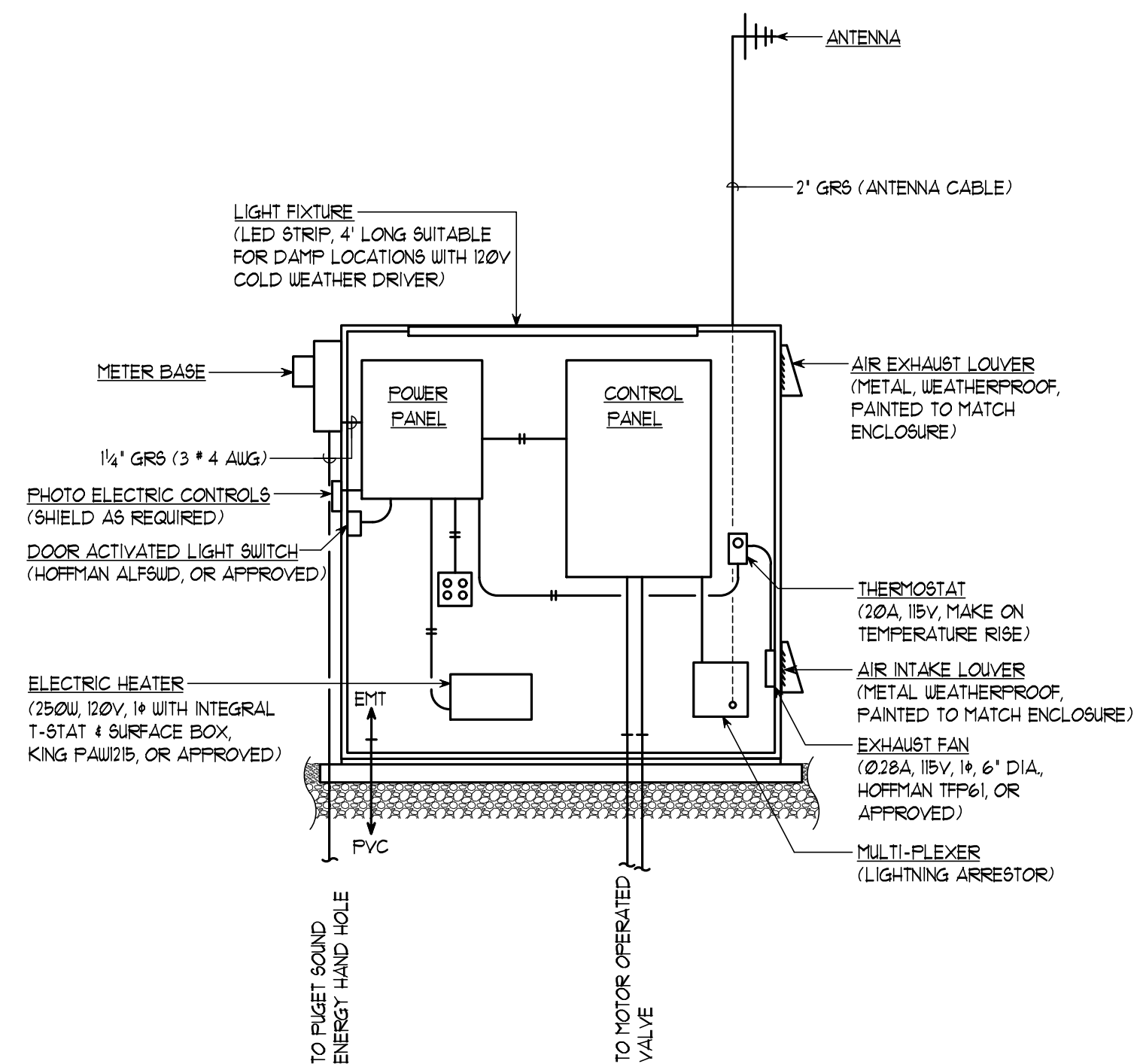
Job No. 2348
Date 10/13/2023
Field Bk. 1062 SERIES

DONALD AVE. WATER QUALITY RETROFIT
ELECTRICAL - SITE PLAN

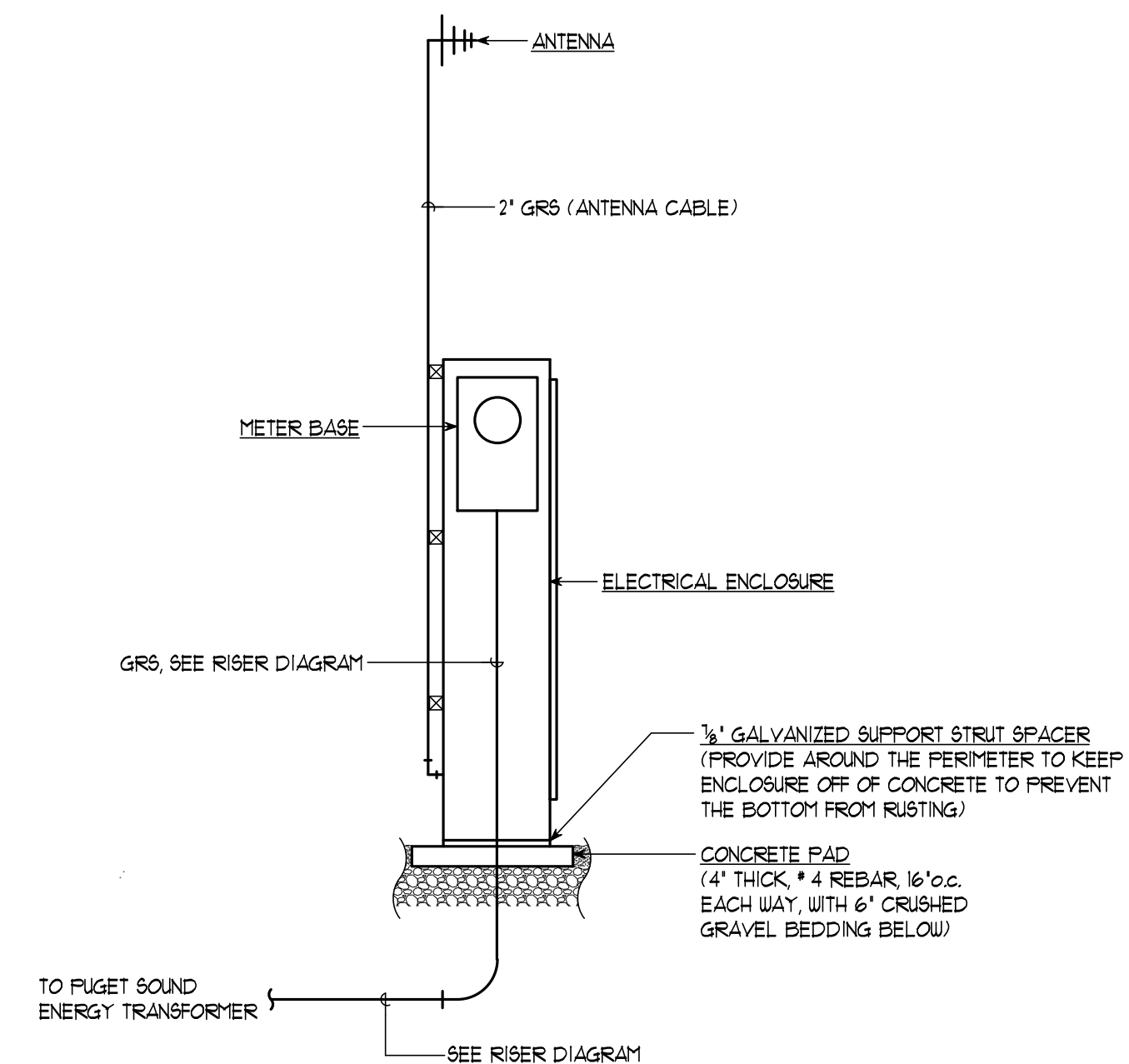
SHEET E1.1 OF
X



TOP VIEW



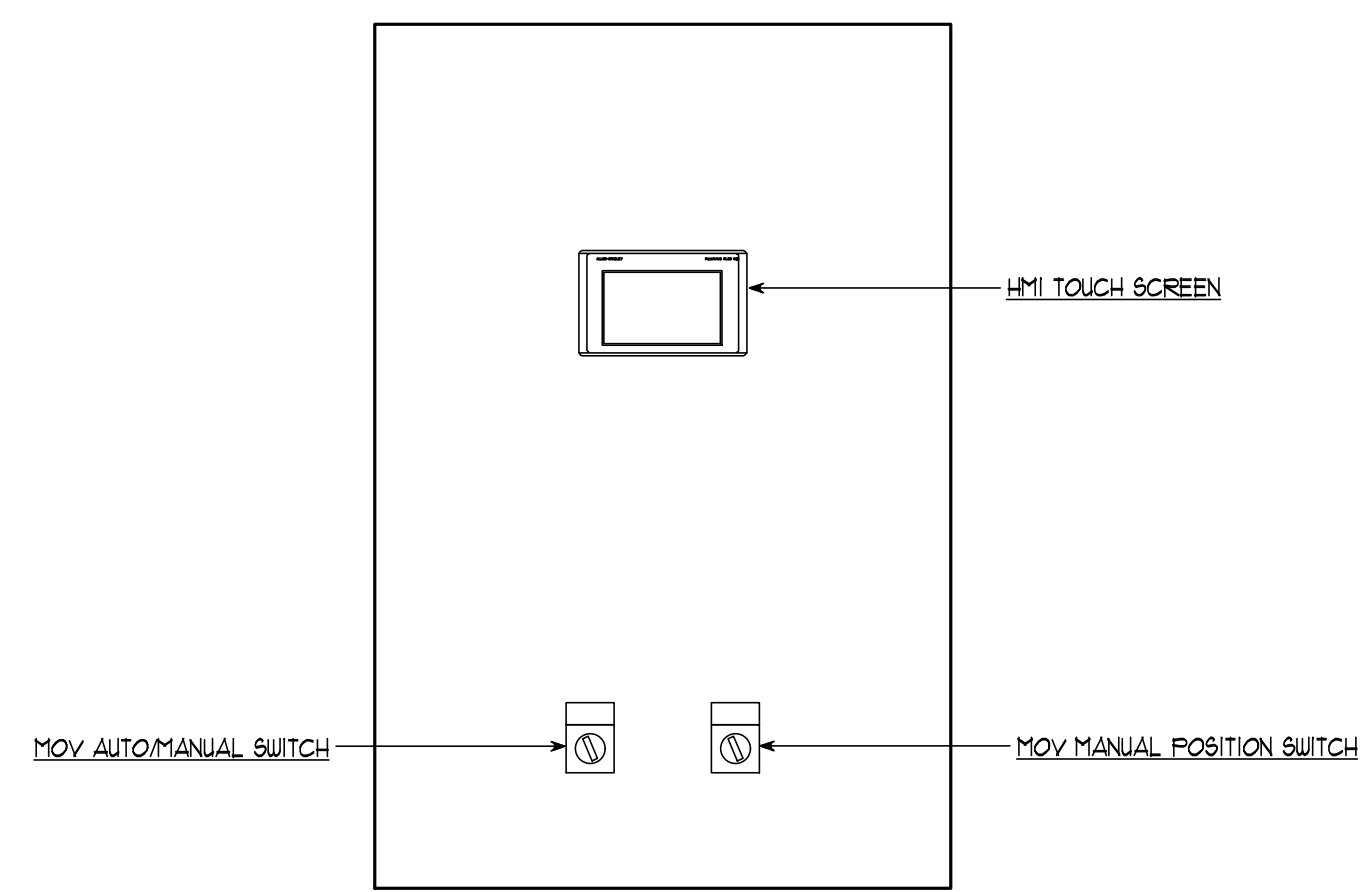
SECTION A



SECTION B

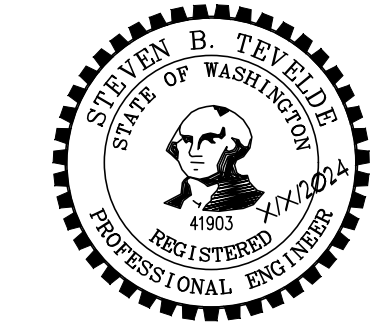
ELECTRICAL ENCLOSURE

SCALE: 1/2" = 1'-0"



DETAIL - CONTROL PANEL

SCALE: 1/2" = 1'-0"



PRELIMINARY
4/25/2024

K ENGINEERS INC.
208 Third Street
Lynden, WA. 98264
Bus. (360) 354-4757
FAX (360) 354-6794

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1/17/23	1	30% Design	
Date	No	Revision	By

PROJECT ENGINEER	STV
DESIGNED/DRAWN	KL
INSPECTOR	--

DIRECTOR PUBLIC WORKS	E.C.J.
CITY ENGINEER	J.J.B.
ASSISTANT DIRECTOR	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

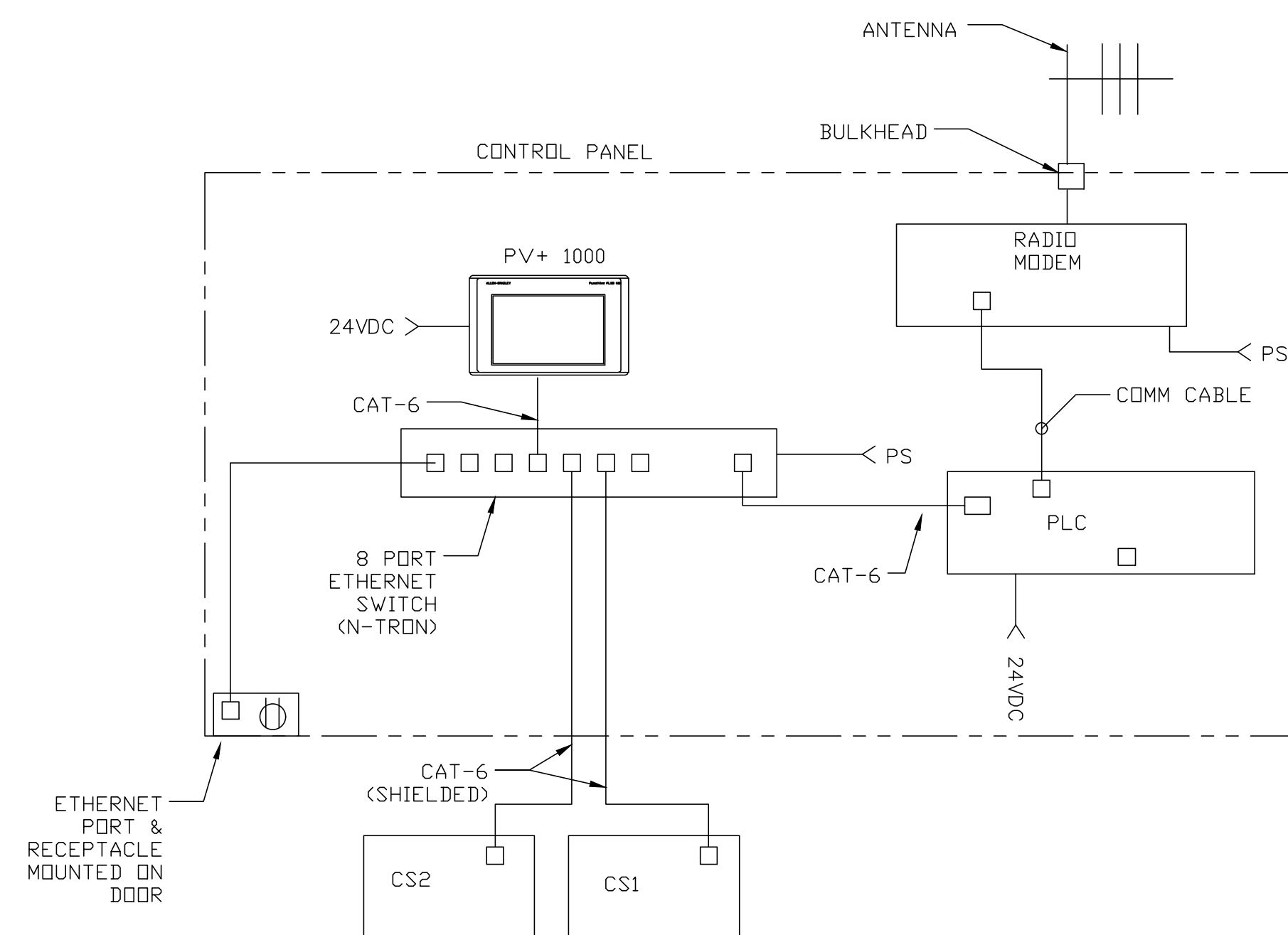
SCALE
Horiz. _____
Vert. _____

DATUM
NAD 83/98
NAVD 88

Job No. 2348
Date 10/13/2023
Field Bk. 1082 SERIES

DONALD AVE. WATER QUALITY RETROFIT
ELECTRICAL - DETAILS

SHEET
E2.1 OF
x



ELECTRICAL - NETWORK DIAGRAM
SCALE: 1" = 1"



PRELIMINARY
4/25/2024

K ENGINEERS INC.
208 Third Street
Lynden, WA. 98264
Bus. (360) 354-4757
FAX (360) 354-6794

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PROJECT ENGINEER	STV
DESIGNED/DRAWN	KL
INSPECTOR	--

DIRECTOR PUBLIC WORKS	E.C.J.
CITY ENGINEER	J.J.B.
ASSISTANT DIRECTOR	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE	
Horiz.	_____
Vert.	_____

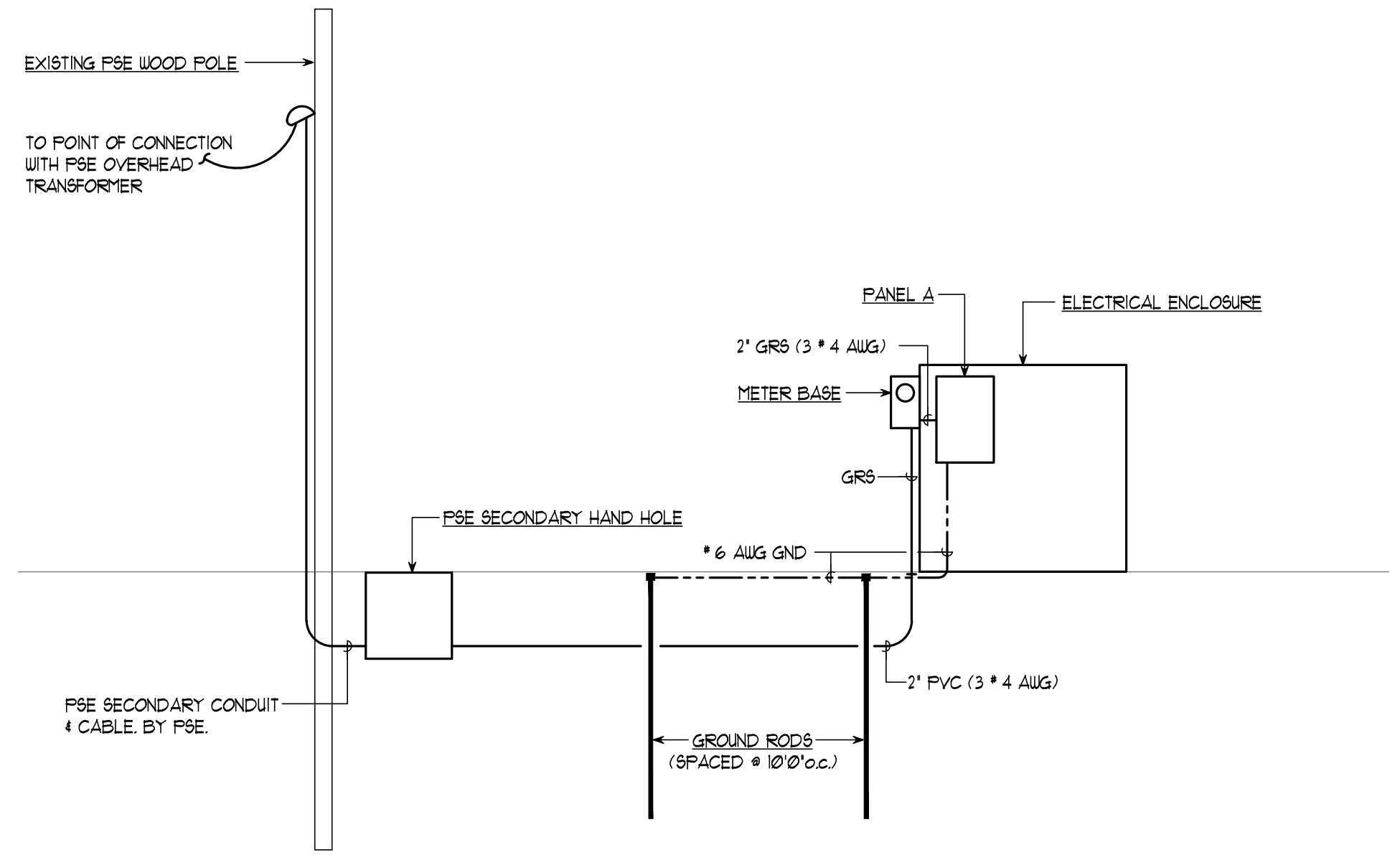
DATUM	
NAD 83/98	
NAVD 88	

Job No.	2348
Date	10/13/2023
Field Bk.	1062 SERIES

DONALD AVE. WATER QUALITY RETROFIT
ELECTRICAL -

SHEET	E2.2	OF	
			x

CONTACT PERSON: JESSICA BENNETT, P.E., PROJECT ENGINEER AT 778-7923



ELECTRICAL - POWER SYSTEM RISER DIAGRAM
SCALE: NONE

METER BASE		ELECTRICAL ENCLOSURE					
VOLTAGE: 120/240V, 1 PH, 3 W		ELECTRICAL LOAD CALCULATION		CONN. LOAD (VA)	DEMAND LOAD (VA)		
ENCLOSURE: NEMA 3R		EXIST.	NEW	TOTAL	DEMAND FACTOR		
MOUNTING: SURFACE							
CONTINUOUS RATING: 100 A							
PER PUGET SOUND ENERGY REQUIREMENTS							
SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT							
		Lighting	0.0	30.0	30.0	1.25	37.5
		Gen. Purpose Outlets (First 10 KVA)	0.0	360.0	360.0	1.00	360.0
		Gen. Purpose Outlets (Remainder)	0.0	0.0	0.0	0.50	0.0
		Special Purpose Outlets	0.0	0.0	0.0	1.00	0.0
		Mechanical Equipment	0.0	1332.2	1332.2	1.00	1332.2
		Kitchen Equipment & Appliances	0.0	0.0	0.0	1.00	0.0
		Miscellaneous	0.0	1127.0	1127.0	1.00	1127.0
		25% Largest Motor					281.8
		TOTAL LOAD	0.0	2849.2	2849.2		3138.5
		TOTAL AMPS	0.0	11.9	11.9		13.1

PANEL A		INSIDE ELECTRICAL ENCLOSURE					
VOLTAGE: 120/240V, 1 PH, 3 W		FEEDER/BRANCH CIRCUIT DEVICES: BOLT-ON CIRCUIT BREAKERS		ELECTRICAL LOAD CALCULATION		CONN. LOAD (VA)	DEMAND LOAD (VA)
TYPE: PANELBOARD		FULL AIC RATING: 10,000 A	SERIES AIC RATING: NONE	EXIST.	NEW	TOTAL	DEMAND FACTOR
ENCLOSURE: NEMA 1							
MOUNTING: SURFACE							
BUSING: MANUFACTURER'S STANDARD		SPECIAL PROVISIONS:					
CONTINUOUS RATING: 100 A		MASTER NAMEPLATE					
FULL AIC RATING: 10,000 A		GROUND BAR					
SERIES AIC RATING: NONE		SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT					
MAN: CIRCUIT BREAKER							
CONTINUOUS RATING: 75 A							
FULL AIC RATING: 10,000 A							
SERIES AIC RATING: NONE							
LOCATION: BOTTOM							
		TOTAL LOAD		0.0	2849.2	2849.2	3138.5
		TOTAL AMPS		0.0	11.9	11.9	13.1

CONN. LOAD (VA)	FEEDER/BRANCH CIRCUIT DESCRIPTION	NOTE	BKR AMP/P	CKT NO	BUS (PHASE)	NO	BKR AMP/P	FEEDER/BRANCH CIRCUIT DESCRIPTION	NOTE	CONN. LOAD (VA)
390.0	LTG & OUTLETS - ELECTRICAL ENCLOSURE		20/1	1	A	2	20/1	CONTROL PANEL		800.0
33.2	EXHAUST FAN - ELECTRICAL ENCLOSURE		20/1	3	A	4	20/1	MOTOR OPERATED VALVE		1127.0
500.0	HEATER - ELECTRICAL ENCLOSURE		20/1	5	A	6	20/1	SPARE		0.0
0.0	SPARE		20/1	7	A	8	20/1	SPARE		0.0
0.0	SPARE		20/1	9	A	10	20/1	SPARE		0.0
0.0	SPARE		20/1	11	A	12	20/1	SPARE		0.0
0.0	SPACE			13	A	14		SPACE		0.0
0.0	SPACE			15	B	16		SPACE		0.0
0.0	SPACE			17	A	18		SPACE		0.0
0.0	SPACE			19	B	20		SPACE		0.0
0.0	SPACE			21	A	22		SPACE		0.0
0.0	SPACE			23	B	24		SPACE		0.0
0.0	SPACE			25	A	26		SPACE		0.0
0.0	SPACE			27	B	28		SPACE		0.0
0.0	SURGE ARRESTOR		30/2	27	A	28		SPACE		0.0
0.0				29	A	30		SPACE		0.0
MAN CIRCUIT BREAKER										



PRELIMINARY
4/25/2024

K ENGINEERS INC.
208 Third Street
Lynden, WA. 98264
Bus. (360) 354-4757
FAX (360) 354-6794

4/25/2024	4	90% Design		
10/13/23	3	Ecology Review Response		
6/12/23	2	60% Design		
1/17/23	1	30% Design		
Date	No	Revision	By	

PROJECT ENGINEER STV
DESIGNED/DRAWN KL
INSPECTOR --

DIRECTOR PUBLIC WORKS E.C.J.
CITY ENGINEER J.J.B.
ASSISTANT DIRECTOR M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. _____
Vert. _____

DATUM
NAD 83/98
NAVD 88

Job No. 2348
Date 10/13/2023
Field Bk. 1062 SERIES

DONALD AVE. WATER QUALITY RETROFIT
ELECTRICAL - RISER DIAGRAM & SCHEDULES

SHEET
E6.1 OF
x