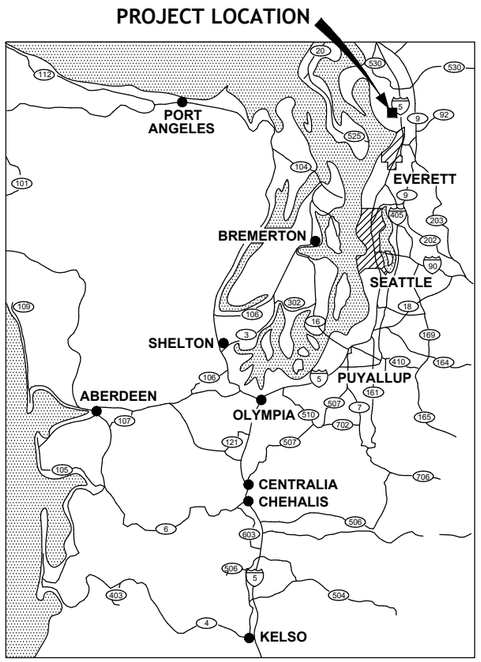
TULALIP TRIBES

UNDERGROUND INJECTION CONTROL (UIC) TRENCH RESTORATION

QUIL CEDA BLVD
TULALIP, WASHINGTON

TULALIP TRIBES PROJECT NO. 19-008



DRAWING INDEX		
DWG NO.	**SHT NO.**	**SHEET TITLE**
GENERAL		
1	G1	COVER SHEET, DRAWING INDEX, LOCATION AND VICINITY MAPS
2	G2	LEGEND, ABBREVIATIONS, AND GENERAL NOTES
3	G3	TESC AND RESTORATION GENERAL NOTES
CIVIL		
4	EC1	TESC DETAILS
5	UT1	UIC TRENCH TESC AND CONSTRUCTION
6	UT2	UIC TRENCH TESC AND CONSTRUCTION
7	UT3	UIC TRENCH LAYOUT
8	DT1	EXISTING UIC TRENCH DETAILS
9	DT2	PROPOSED UIC TRENCH DETAILS
10	DT3	PROPOSED UIC TRENCH DETAILS

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

	REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS1598120G-01-03
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND — STATE OF WASHINGTON — 36939 — REGISTERED PROFESSIONAL ENGINEER
12/9/19

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC) TRENCH RESTORATION
QUIL CEDA BLVD
TULALIP, WASHINGTON

COVER SHEET, DRAWING INDEX, LOCATION AND VICINITY MAPS

DRAWING NO. 1 OF 10
G1

LAYOUT: G1 PATH: U:\PS\Projects\Clients\1598-TulalipTribes\216-1598-120 WWTP Discharge Eval\99Svcs\CADD\DWG\ PLOTTED BY: vassemar DATE: Thursday, December 19, 2019 10:29:27 AM

LEGEND

DESCRIPTION	EXISTING	PROPOSED
MONITORING WELL		
FOUND SURFACE MONUMENT		
FOUND REBAR AND CAP		
SET HUB & TACK		
SET MAG NAIL		
SET NAIL		
SET REBAR WITH CAP		
SET SPIKE/PMX		
POWER POLE		
POWER POLE W/ DROP LINE		
POWER POLE W/ TRANSFORMER		
POWER POLE W/ DROP LINE, TRANSFORMER		
GUY ANCHOR		
GUY POLE	OP	
POWER JUNCTION BOX		
POWER METER		
POWER PANEL / VAULT	P	
STREET LIGHT		
FLOOD LIGHT		
CATCH BASIN		
SOLID LID CATCH BASIN		
STORM MANHOLE		
ROOF DRAIN		
CLEAN OUT		
SEWER MANHOLE	S	
TELEPHONE RISER	TR	
TELEPHONE HAND HOLE		
TELEPHONE PANEL		
CABLE TV RISER	TV	
TDS VAULT		
HOSE BIBB		
IRRIGATION VALVE		
STAND PIPE		
FIRE HYDRANT		
WATER METER		
WATER VAULT	W	
WATER VALVE		
AIR RELEASE VALVE		
SIGN		
MAIL BOX	MB	
POST		
DECIDUOUS TREE		
CONIFER TREE		
MAJOR CONTOUR		
MINOR CONTOUR		
GRAVEL		
ASPHALT		
CONCRETE		
DITCH		
CULVERT		
CHAIN LINK FENCE		
WOOD FENCE		
WIRE FENCE		
VEGETATION LINE		
UNDERGROUND TELEPHONE	T	
STORM DRAIN	SD	
SEWER	SS	
SEWER FORCE MAIN	FM	
OVERHEAD POWER	OP	
UNDERGROUND POWER	P	
GAS	G	
WATER	W	

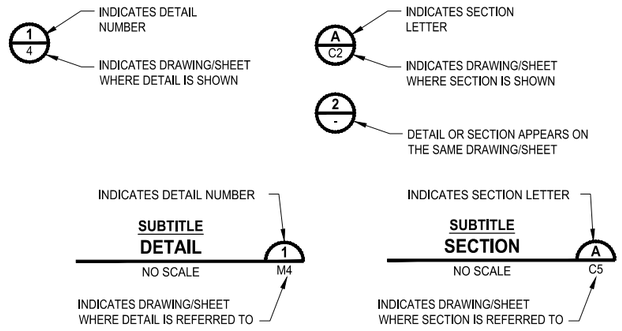
ABBREVIATIONS

ARV	AIR RELEASE VALVE
BF	BLIND FLANGE
BND	BEND
BP	BEGINNING POINT
BV	BUTTERFLY VALVE
CB	CATCH BASIN
CDF	CONTROLLED DENSITY FILL
DI	DUCTILE IRON
DIPRA	DUCTILE IRON PIPE RESEARCH ASSOCIATION
E	EASTING, EAST
ECC	ECCENTRIC
EL	ELEVATION
EX, EXIST	EXISTING
FCA	FLANGE COUPLING ADAPTOR
FCA-R	FLANGE COUPLING ADAPTOR, RESTRAINED
FL	FLANGE
FIPT	FEMALE IRON PIPE THREAD
GALV	GALVANIZED
GI	GALVANIZED IRON
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HH	HAND HOLD
HORIZ	HORIZONTAL
HYD	HYDRANT
IE	INVERT ELEVATION
LF	LINEAL FEET
LT	LEFT
MJ	MECHANICAL JOINT
MIN	MINIMUM
MIPT	MALE IRON PIPE THREAD
N	NORTHING, NORTH
NIC	NOT IN CONTRACT
OP	OVERHEAD POWER
P	POWER
PE	PLAIN END
PRV	PRESSURE REDUCING VALVE
PVC	POLYVINYL CHLORIDE
RT	RIGHT
SCH	SCHEDULE
SD	STORM DRAIN
SHT	SHEET
SL	SLEEVE
SOC	SOCKET JOINT
SS	SANITARY SEWER
SSFM	SANITARY SEWER FORCE MAIN
SST	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
T	TELEPHONE
TEMP	TEMPORARY
TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
TH	THREAD
TYP	TYPICAL
VERT	VERTICAL
W	WATER, WEST
WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
UIC	UNDERGROUND INJECTION CONTROL

SURVEY NOTE

NO PROJECT-SPECIFIC TOPOGRAPHIC SURVEY WAS PERFORMED FOR THIS PROJECT. THE PROJECT BASE MAP IS DERIVED FROM THE RECOVERED DRAWINGS FOR THE UIC TRENCH DATED 5/29/03 AND MAY NOT REFLECT CURRENT CONDITIONS IN ALL LOCATIONS. CONSTRUCTION ACTIVITIES DESCRIBED IN THESE CONTRACT DOCUMENTS SHALL BE PERFORMED ON THE EXISTING IMPROVEMENTS IN THEIR AS-CONSTRUCTED LOCATIONS UNLESS SPECIFICALLY NOTED OTHERWISE.

DETAIL AND SECTION DESIGNATION



	REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY

FILE NAME PS1598120G-01-03
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND
STATE OF WASHINGTON
36939
REGISTERED PROFESSIONAL ENGINEER
12/9/19

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC)
TRENCH RESTORATION
QUIL CEDA BLVD
TULALIP, WASHINGTON

LEGENDS, ABBREVIATIONS, AND GENERAL NOTES

DRAWING NO.
2 OF 10
G2

LAYOUT: G2 PATH: U:\PS\Projects\Clients\1598-TulalipTribes\216-1598-120 WWTP Discharge Eval\99Sv\cad\CADD\DWG\ PLOTTED BY: vassemar DATE: Thursday, December 19, 2019 10:29:30 AM

TEMPORARY EROSION AND SEDIMENT CONTROL NOTES:

1. THE CONTRACTOR SHALL USE ALL REASONABLE MEASURES TO MINIMIZE THE IMPACTS OF CONSTRUCTION ACTIVITY ON WATERS OF THE TRIBE AND THE STATE. WATER QUALITY CONSTITUENTS OF PARTICULAR CONCERN ARE TURBIDITY, SUSPENDED SEDIMENTS, SETTLEABLE SOLIDS.

2. THE CONTRACTOR SHALL USE PROPER EROSION AND SEDIMENT CONTROL PRACTICES ON THE CONSTRUCTION SITE AND ADJACENT CONSTRUCTION STAGING AREAS TO PREVENT EROSION IN AND DOWNHILL OF DISTURBED AREAS, AND TO PREVENT THE DISCHARGE OF UPLAND SEDIMENTS OR SEDIMENT-LADEN WATER INTO THE WETLANDS, WATER BODIES, AND LOCAL DRAINAGE DITCHES. EXCEPT FOR TEMPORARILY SIDECAST OR TRENCH EXCAVATION, ALL STOCKPILES SHALL BE LOCATED NO CLOSER THAN 100 FEET FROM THE BOUNDARY OF ANY CRITICAL AREA AND SHALL NOT BE PLACED IN ANY UNDISTURBED AREA.

3. THE CONTRACTOR SHALL SUBMIT AND HAVE A DETAILED IMPLEMENTATION PLAN ACCEPTED, BY THE ENGINEER AND SHALL INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (TESC's) PRIOR TO PERFORMING ANY CLEARING OR OTHER EARTH DISTURBING ACTIVITIES AT THE PROJECT SITE.

4. THE MEASURES SHOWN ON THESE PLANS ARE THE MINIMUM THAT ARE REQUIRED FOR THE ANTICIPATED SITE CONDITIONS. THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES AS NEEDED DUE TO WEATHER, AND/OR FIELD CONDITIONS, AND/OR CONSTRUCTION ACTIVITIES, AND/ OR AS DIRECTED BY THE ENGINEER.

5. THE CONTRACTOR SHALL FOLLOW AND IMPLEMENT ALL SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL SPECIFIED IN THE CONTRACT DOCUMENTS. ADJUSTMENTS TO PLANNED EROSION AND SEDIMENT CONTROL MAY BE NECESSARY TO SUCCESSFULLY CONTROL SILTATION FROM THE SITE WHICH IS NOT COVERED UNDER THIS TEMPORARY EROSION AND SEDIMENT CONTROL PLAN.

6. THE CONTRACTOR SHALL NOT DISCHARGE TURBID WATER GENERATED FROM CONSTRUCTION ACTIVITIES, INCLUDING TURBID DEWATERING WATER, DIRECTLY TO TULALIP BAY OR TO ANY OF THE DRAINAGE DITCHES THAT DRAIN TO TULALIP BAY BEFORE THE SOLIDS HAVE SETTLED OUT OF THE WATERS. ALL SURFACE WATER FLOWS IN DITCHES, OR CULVERTS SHALL BE MAINTAINED, SUCH THAT FLOW IS NOT DISRUPTED DURING OR AFTER CONSTRUCTION. ALL DISCHARGE SHALL COMPLY WITH THE TULALIP TRIBES WATER QUALITY STANDARDS.

7. RESTORE, PLANT AND HYDROSEED ALL DISTURBED WETLAND, WETLAND BUFFER, STREAM, AND STREAM BUFFER AREAS AS SHOWN ON THE DRAWINGS AND PER SPECIFICATIONS.

8. THE TESC SHALL REMAIN IN PLACE THROUGHOUT THE PIPELINE WORK. INSTALLED EROSION AND SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED UPON STABILIZATION OF DISTURBED AREAS AND WITH THE APPROVAL OF THE ENGINEER.

9. THE CONTRACTOR SHALL SEED, PLANT, COVER WITH PLASTIC, MULCH, OR PROVIDE SOME OTHER EQUIVALENT TYPE OF PROTECTION AGAINST EROSION TO ALL EARTHEN AREAS DISTURBED OR NEWLY CREATED BY THE PROJECT CONSTRUCTION.

10. THE CONTRACTOR SHALL PROVIDE REGULAR INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT ALL TIMES. THE CONTRACTOR SHALL REPAIR, REPLACE, AND INSTALL ADDITIONAL MEASURES SO THAT THEY ARE EFFECTIVE IN PREVENTING EROSION AND SEDIMENTATION.

11. AFTER ANY SIGNIFICANT RAINFALL, THE CONTRACTOR SHALL INSPECT SEDIMENT CONTROL STRUCTURES FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND REPAIRED IMMEDIATELY.

12. FOLLOWING CONSTRUCTION, THE CONTRACTOR SHALL RESTORE TO ORIGINAL CONDITION, THE DISTURBED AREAS, AND ACHIEVE AN ADEQUATE VEGETATIVE COVER BEFORE REMOVING ANY SEDIMENT TRAPS OR SETTLING BASINS AND THEIR ASSOCIATED TEMPORARY DIVERSION DITCHES. THE CONTRACTOR SHALL CLEAN OUT TEMPORARY SETTLING BASINS (SEDIMENT TRAPS) AND REMOVE THE SETTLED SEDIMENTS OR HYDROSEED THE AREA (IF IN BARE PASTURE LAND) BEFORE REMOVING THE SETTLING BASINS. SETTLED SEDIMENTS SHALL NOT BE ALLOWED TO ENTER ANY STREAM OR DITCH AS A RESULT OF RUNOFF THAT MAY OCCUR AFTER CONSTRUCTION IS COMPLETED.

13. ALL TEMPORARY SURFACING OR OTHER APPROVED MATERIAL USED FOR TEMPORARY SURFACING OF THE CONSTRUCTION STAGING AND WORK AREAS SHALL BE REMOVED AND DISPOSED OF AT THE COMPLETION OF THE PROJECT. RESTORATION OF THE GROUND SURFACE SHALL BE COMPLETED IMMEDIATELY AFTER REMOVAL OF MATERIAL.

14. THE CONTRACTOR SHALL SET ASIDE A SEPARATE AREA ON SITE WHICH DOES NOT HAVE ANY POSSIBILITY OF DRAINING TO SURFACE WATERS, FOR THE WASH-OUT OF CONSTRUCTION EQUIPMENT AND TOOLS.

15. THE CONTRACTOR SHALL NOT DISCHARGE ANY CLEANING SOLVENTS OR CHEMICALS UTILIZED FOR TOOL OR EQUIPMENT CLEANING TO THE GROUND. REFUELING OF EQUIPMENT SHALL BE CONDUCTED AWAY FROM THE DRAINAGE DITCHES AND CRITICAL AREAS AND DONE IN SUCH A MANNER AS TO PREVENT SPILLS FROM ENTERING THE GROUNDWATER OR WATERBODIES (INCLUDING WETLANDS) ALL MOBILE EQUIPMENT SHALL NOT BE REFUELED WITHIN THE CONSTRUCTION LIMITS OF THE AGRICULTURAL FIELDS OR WETLANDS.

16. THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL CONSTRUCTION DEBRIS IN AN APPROVED AND PERMITTED LANDFILL FACILITY. EXCESS EXCAVATED MATERIAL SHALL BE TAKEN OFFSITE TO AN APPROVED AND PERMITTED LOCATION OR TO A COMMERCIAL SOIL PROCESSING COMPANY.

17. THE CONTRACTOR SHALL TAKE EXTREME CARE TO PREVENT ANY PETROLEUM PRODUCTS, CHEMICALS, OR OTHER TOXIC OR DELETERIOUS MATERIALS FROM ENTERING THE GROUNDWATER IN ANY MANNER. CONTRACTOR SHALL SUPPLY AND STOCK CHEMICAL SPILL KITS AT PROJECT SITE AT ALL TIMES.

18. FIVE (5) DAYS ADVANCE NOTIFICATION MUST BE GIVEN TO THE TULALIP NATURAL RESOURCES DEPARTMENT BY THE CONTRACTOR BEFORE WORK NEAR ANY WATERWAY COMMENCES.

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL FINES LEVIED AGAINST THE PROJECT BY FEDERAL, STATE, OR LOCAL AGENCIES FOR NON- COMPLIANCE WITH PERMIT REQUIREMENTS AND/OR CODE VIOLATIONS.

20. THE ENGINEER HAS THE AUTHORITY TO HALT CONSTRUCTION IF EROSION CONTROLS ARE NOT MAINTAINED PROPERLY OR IF A VIOLATION HAS NOT BEEN CORRECTED. THE CONTRACTOR SHALL BEAR ALL RISK AND ALL COSTS OF ANY WORK DELAYS CAUSED BY THESE ACTIONS.

21. ALL SOIL STOCKPILES EXPOSED FOR A PERIOD OF OR GREATER THAN 24 HOURS SHALL BE COVERED OR MULCHED TO PREVENT SOIL LOSS.

22. ALL STOCKPILING OF SOILS, GRAVEL, GEOSYNTHETIC MATERIALS, AND ROCK AGGREGATE MATERIALS SHALL OCCUR IN PAVED OR UPLAND AREAS. WETLAND AREAS SHALL NOT BE USED FOR STOCKPILING SOILS, GRAVEL, GEOSYNTHETIC MATERIALS, AND ROCK AGGREGATE MATERIALS. RESTORATION OF CRITICAL AREAS AND BUFFERS SHALL BE CONSISTENT WITH THE FINAL APPROVED MITIGATION / RESTORATION PLAN.

23. ALL GROUNDWATER PUMPED FROM EXCAVATED TRENCHES SHALL BE TREATED IN PORTABLE STORAGE TANKS AND RELEASED AT LESS THAN 5 NTU'S ABOVE THE LEVEL OF THE RECEIVING WATER BODY. PORTABLE STORAGE TANKS SHALL BE LOCATED OUTSIDE OF WETLANDS. DIRECT DISCHARGES FROM DEWATERING SHALL AVOID ANY DISCHARGES TO SURFACE WATER CHANNELS OR OPEN WATER BODIES.

24. INSTALL BARRIER FENCE AND SILT PROTECTION (PER DETAILS, SHEET DT1) ALONG PERIMETER OF WORK SITE AS SHOWN ON PLANS.

25. DURING THE WET SEASON, FROM OCTOBER 1 THROUGH APRIL 30, FOR PROJECT AREAS OUTSIDE OF DESIGNATED WETLANDS THE PROJECT WILL FOLLOW SPECIAL EROSION CONTROL MEASURES AS SHOWN BELOW. THESE INCLUDE:

- EMPLOY A CERTIFIED PROFESSIONAL TESC CONTRACTOR WHO HAS DOCUMENTED PRIOR EXPERIENCE IN THE LATEST MECHANICAL AND CHEMICAL TESC METHODS.
- SUPPLY A 24-HOUR-PER-DAY, 7-DAYS-PER-WEEK LOCAL ESC LEAD. THE ESC LEAD (AND/OR ALTERNATE) WILL BE AVAILABLE AND IDENTIFIED AT THE PRE-CONSTRUCTION CONFERENCE. THE ESC LEAD (AND/OR ALTERNATE) WILL HAVE THE AUTHORITY TO AUTHORIZE AND DIRECT TESC WORK AND TESC EXPENDITURES ON SITE. THE ESC LEAD SHALL BE A CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL) HAVING COMPLETED APPROVED TRAINING BY THE DEPARTMENT OF ECOLOGY.
- DENUDED AREAS AND SOILS EXPOSED FOR A PERIOD OF GREATER THAN 48 HOURS SHALL BE PROTECTED FROM POSSIBLE EROSION BY THE APPLICATION OF A COVER, MULCH OR OTHER SATISFACTORY METHOD OF STABILIZATION.
- ALL INSTALLED EROSION CONTROL MEASURES , INCLUDING SILT FENCING, SEDIMENT TRAPS, CHECK DAMS AND STORMWATER DIVERSION BERMS/SWALES, SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER ANY RAINFALL EVENT GREATER THAN ONE INCH IN A 24-HOUR PERIOD. ACCUMULATED SEDIMENT SHALL BE REMOVED IMMEDIATELY AND REPAIRS MADE TO ANY DAMAGED OR MALFUNCTIONING EROSION CONTROL DEVICES.

GENERAL RESTORATION NOTES

1. AT THE ENGINEER'S DISCRETION, PRIOR TO COMMENCING ANY CONSTRUCTION, PHOTOGRAPHS DEPICTING PRE-EXISTING CONDITIONS WILL BE REQUIRED EVERY 50 FEET AND ANY OTHER LOCATION AS SPECIFIED BY THE ENGINEER.

2. SIGNING, FLAGGING AND TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THESE STANDARDS: THE WSDOT TRAFFIC MANUAL AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE TULALIP PERMITTING DEPARTMENT AND RECEIVE APPROVAL PRIOR TO COMMENCING TRAFFIC CONTROL.

3. ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL REMAIN OPEN AT ALL TIMES. THE ROAD SHALL BE FULLY RESTORED TO TWO-WAY TRAFFIC WITH NO LANE CLOSURES AT THE END OF EACH WORKING DAY EXCEPT DURING TOTAL ROADWAY CLOSURES, IF PERMITTED.

4. EXISTING DRAINAGE DITCHES, CULVERTS, ETC, SHALL BE KEPT CLEAN AT ALL TIMES. TEMPORARY DIVERSION OF ANY DRAINAGE SYSTEM WILL NOT BE PERMITTED WITHOUT THE CONSENT OF THE ENGINEER. ANY DRAINAGE CULVERT, CATCH BASIN, MANHOLE OR OTHER DRAINAGE STRUCTURE DISTURBED BY EXCAVATION SHALL BE REPLACED WITH NEW MATERIAL OR REPAIRED TO THE SATISFACTION OF THE ENGINEER. TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES SHALL BE EMPLOYED TO PROTECT ADJACENT PROPERTY AND STORM DRAINAGE FACILITIES.

5. SHOULDERS DISTURBED BY EXCAVATION SHALL BE GRADED SMOOTH AND PROVIDED WITH A MINIMUM OF 4 INCHES GRAVEL BACKFILL FOR DRYWELLS.

6. IF IN THE OPINION OF THE ENGINEER, WEATHER CONDITIONS DETERIORATE TO THE POINT WHERE THE TRAVELED ROADWAYS ARE UNSAFE FOR THE PUBLIC OR DETRIMENTAL TO THE RESTORATION OF THE ROADWAY, EXCAVATION SHALL CEASE IMMEDIATELY AND CLEANUP SHALL BE PROMPTLY ACCOMPLISHED.

7. ALL PIPE OR OTHER MATERIAL STORED ALONG ROADWAY RIGHT-OF-WAY MUST BE PLACED AT A SAFE DISTANCE FROM THE TRAVELED ROADWAY IN SUCH A MANNER AS TO AVOID FALLING ONTO THE ROADWAY.

8. NO EXCESS OR UNSUITABLE MATERIAL SHALL BE WASTED ON TULALIP TRIBAL PROPERTY. DISPOSE OF ALL SUCH MATERIAL AT AN APPROVED AND PERMITTED LOCATION.

9. STREET SURFACES SHALL BE CLEANED AT THE END OF EACH DAY'S OPERATION WITH A POWER BROOM OR OTHER APPROVED MEANS.

10. PRESERVE AND PROTECT ALL EXISTING ROADWAY SURFACING, UTILITIES, CURB, GUTTER AND FENCING.

11. AT THE END OF EACH DAY, ALL TRENCHES MUST BE BACKFILLED OR COVERED WITH STEEL PLATES AND BARRICADED WITH FLASHING WARNING LIGHTS TO PREVENT PEOPLE OR ANIMALS FROM FALLING INTO THE TRENCH.

12. FINAL CLEANUP INCLUDING COMPLETE RESTORATION OF SHOULDERS, CLEANING OF DITCHES, CULVERTS AND CATCHBASINS, AND REMOVAL OF LOOSE MATERIAL FROM BACK SLOPES OF DITCHES SHALL NOT EXCEED 250 LF BEHIND EXCAVATING OPERATIONS OR AS REQUIRED BY THE ENGINEER.

TESC CONSTRUCTION SEQUENCE

THE FOLLOWING CONSTRUCTION SEQUENCE PROVIDES A CONCEPTUAL APPROACH TO THE CONSTRUCTION ACTIVITIES REQUIRED BY THIS PROJECT. THE CONTRACTOR IS REQUIRED TO SUBMIT A MORE DETAILED CONSTRUCTION SCHEDULE AS PART OF THE TESC PLAN AS DEFINED IN THE CONTRACT DOCUMENTS. THE SEQUENCE OF CONSTRUCTION INCLUDES PRECONSTRUCTION ACTIVITIES AND TESC CONSTRUCTION.

PRECONSTRUCTION TESC ACTIVITIES

1. PREPARE ESC IMPLEMENTATION PLAN
2. PREPARE SPILL PREVENTION, CONTROL AND COUNTER MEASURE PLAN
3. PREPARE CONTROL OF WATER PLAN
4. ATTEND PRECONSTRUCTION CONFERENCE.

TESC CONSTRUCTION

1. INSTALL TEMPORARY SILT FENCING AS SHOWN ON THE DRAWINGS.
2. INSTALLINLET PROTECTION AND CHECK DAMS AS SHOWN ON THE DRAWINGS.
3. UPON COMPLETION OF EACH DISCHARGE PORT STABILIZE ALL DISTURBED AREAS.
4. PERFORM FINAL CLEAN UP.
5. REMOVE AND DISPOSE OF TESC BMPS.

LAYOUT: G3 PATH: U:\PSO\Projects\Clients\1598-Tulalip\Tribes\216-1598-120 WWTP Discharge Eval\99Svcs\CADD\DWG PLOTTED BY: vassemar DATE: Thursday, December 19, 2019 10:29:35 AM

	REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

FILE NAME PS1598120G-01-03
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND — STATE OF WASHINGTON — 36939 — REGISTERED PROFESSIONAL ENGINEER
12/9/19

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC)
TRENCH RESTORATION
QUIL CEDA BLVD
TULALIP, WASHINGTON

TESC AND RESTORATION GENERAL NOTES

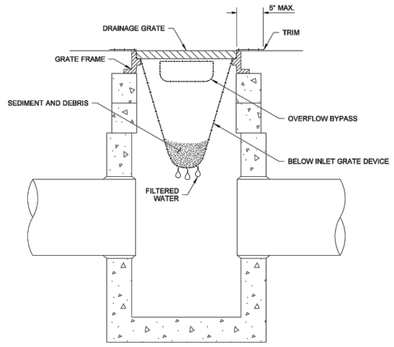
DRAWING NO. 3 OF 10

G3

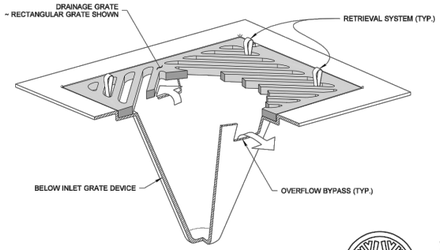
DRAWN BY: LISA CYFORD

NOTES

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



SECTION VIEW
NOT TO SCALE



ISOMETRIC VIEW

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

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST

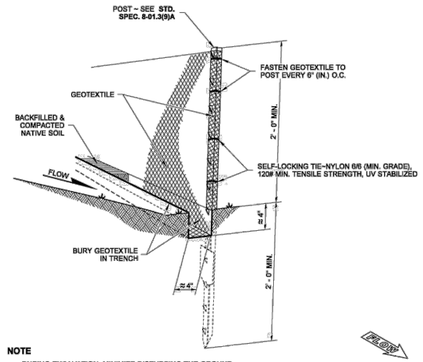
STORM DRAIN INLET PROTECTION

STANDARD PLAN I-40.20-00

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 09-20-07
STATE DESIGN ENGINEER — DATE
Washington State Department of Transportation

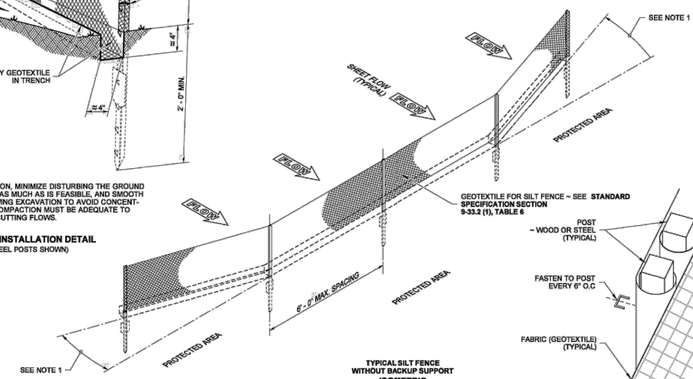
DRAWN BY: BILL BERENS



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)



GEOTEXTILE FOR SILT FENCE – SEE **STANDARD SPECIFICATION SECTION 9-33.2 (1), TABLE 6**

TYPICAL 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.

SPLICE DETAIL
(WOOD POSTS SHOWN)

NOTES

1. Install the ends of the silt fence to point slightly upslope to prevent sediment from flowing around the ends of the fence.
2. Perform maintenance in accordance with **Standard Specifications 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 REGISTERED LANDSCAPE ARCHITECT
SANDRA L. SALISBURY
CERTIFICATE NO. 000860

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST

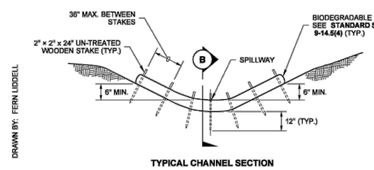
SILT FENCE

STANDARD PLAN I-30.15-02

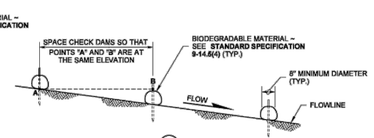
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 3/22/13
STATE DESIGN ENGINEER — DATE
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



TYPICAL CHANNEL SECTION



CHANNEL PROFILE – SECTION (B)

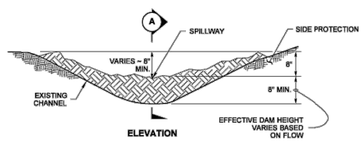
BIODEGRADABLE CHECK DAM

BIODEGRADABLE CHECK DAM NOTE

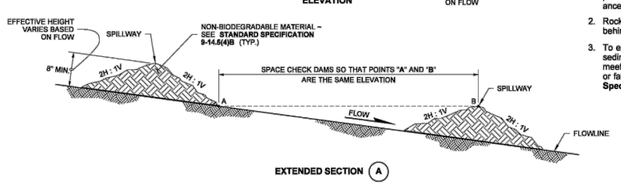
1. Biodegradable Check Dams may need additional or modified staking to prevent undercutting or scouring.

GENERAL NOTES

1. Check Dams shall meet the requirements of **Standard Specifications 8-01.3(6) and 9-14.5(4).**
2. In channels, install the sloped ends of the Check Dam a minimum of 6" higher than the spillway to ensure water flows over the dam and not around it.
3. Perform maintenance in accordance with **Standard Specification 8-01.3(15).**
4. Remove Check Dams in accordance with **Standard Specification 8-01.3(16).**



ELEVATION



EXTENDED SECTION (A)

NON-BIODEGRADABLE CHECK DAM

NON-BIODEGRADABLE CHECK DAM NOTES

1. Non-Biodegradable Manufactured Check Dam devices approved for use under **Standard Specification 9-14.5(4)** shall be installed per manufacturer's recommendations and shall perform in accordance with **Standard Specification 8-01.3(6).**
2. Rock Check Dams shall be placed outside of the clear zone or behind traffic barrier.
3. To ensure adequate damming time, Rock Check Dams used as sediment control may need to be enhanced with plastic that meets the requirements of **Standard Specification 9-14.5(3)** or fabric that meets the geotextile requirements of **Standard Specification 9-33.2(1), Table 6.**

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
Sandra L. Salisbury
SANDRA L. SALISBURY
LICENSE NO. 860
DATE: June 6, 2013

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST

CHECK DAMS ON CHANNELS

STANDARD PLAN I-50.20-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 6/10/13
STATE DESIGN ENGINEER — DATE
Washington State Department of Transportation

	REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

FILE NAME PS1598120DT-
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND — STATE OF WASHINGTON — 36938 — REGISTERED PROFESSIONAL ENGINEER
12/9/19

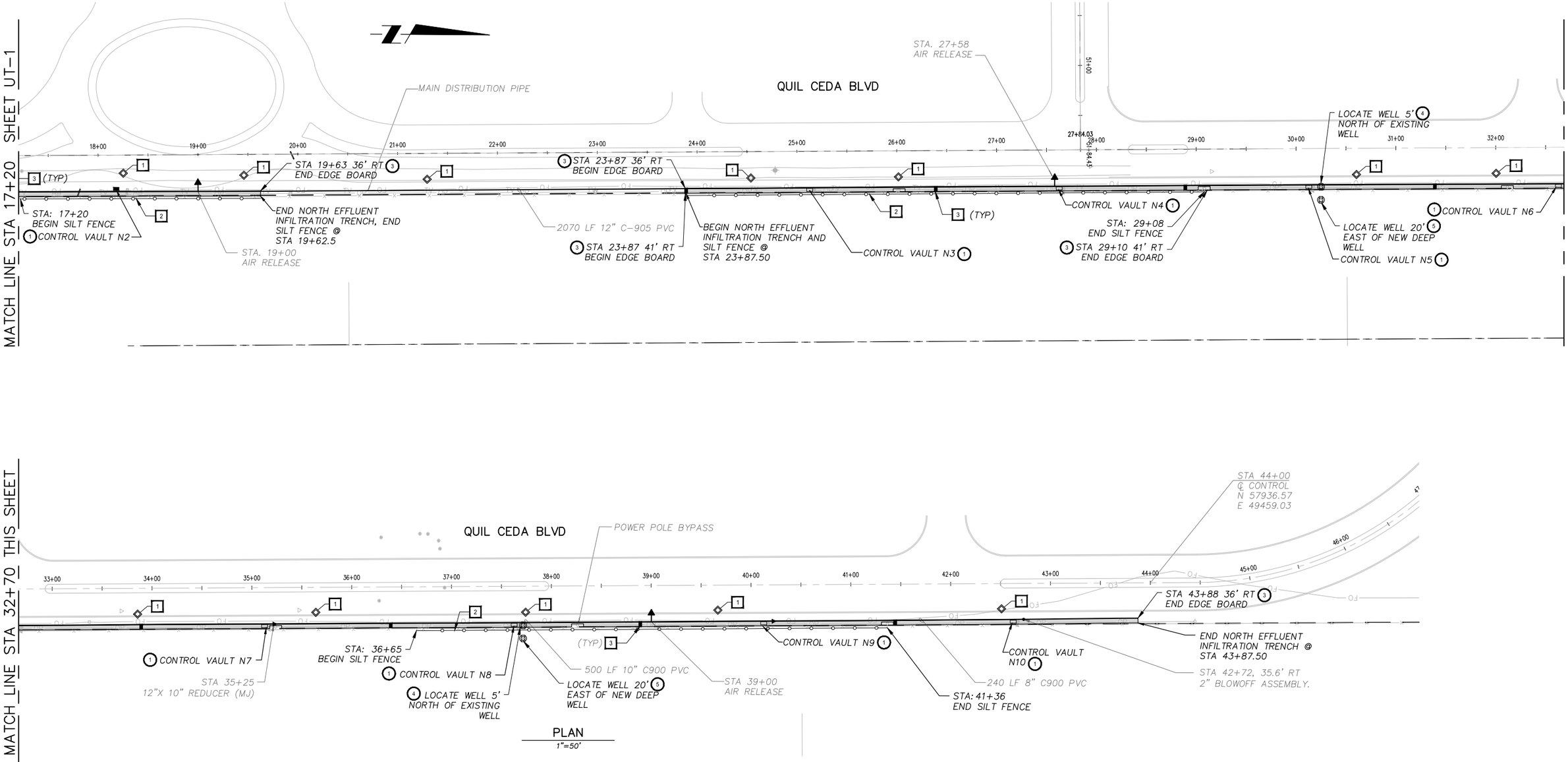
Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC) TRENCH RESTORATION QUIL CEDA BLVD
TULALIP, WASHINGTON

TESC DETAILS

DRAWING NO. 4 OF 10
EC1

LAYOUT: DT4 PATH: U:\PSO\Projects\Clients\1598-Tulalip Tribes\216-1598-120 WWTP Discharge Eval\99Svcs\CAD\DWGs\ PLOTTED BY: vassemar DATE: Thursday, December 19, 2019 10:29:42 AM



PLAN
1"=50'

NOTES:

1. FOR HORIZONTAL PIPE LOCATION, AND BRANCH DISTRIBUTION PIPING SEE TYPICAL DETAIL 1, SHEET DT1.
2. SEE SHEET UT3 FOR TRENCH DATA FOR LOCATION OF IMPROVEMENTS.
3. USE APPROPRIATE PRECAUTIONS WHEN WORKING AROUND OVERHEAD POWER

CONSTRUCTION KEY NOTES:

1. PARTIALLY DEMOLISH EXISTING DISCHARGE PORTS, SEE DETAIL (4/DT2)
   REPLACE DISCHARGE PORTS SEE DETAIL (5/DT2)
2. REPLACE EXISTING PRV IN CONTROL VAULT SEE DETAIL (3/DT2)
3. REMOVE AND REPLACE TRENCH EDGE BOARD SEE DETAIL (6/DT3)
4. INSTALL NEW DEEP MONITORING WELL SEE DETAIL (7/DT3)
5. INSTALL NEW SHALLOW MONITORING WELL SEE DETAIL (7/DT3) WSDOT PERMIT REQUIRED

TESC KEY NOTES:

1. INLET PROTECTION PER WSDOT STD PLAN I-40.20-00, SEE SHEET EC1.
2. SILT FENCE PER WSDOT STD PLAN I-30.15-02, SEE SHEET EC1.
3. BIODEGRADABLE CHECK DAMS ONLY PER WSDOT STD PLAN I-50.20-01, SECTION B, SEE SHEET EC1. WHEN SPECIFIED BY ENGINEER.

TESC / RESTORATION LEGEND

- INLET PROTECTION
- EAST CONSTRUCTION LIMIT / RIGHT-OF-WAY
- SILT FENCE
- BIODEGRADABLE CHECK DAMS
- TRENCH AREA RESTORATION

EXISTING CONDITIONS NOTE:

UTILITIES AND EXISTING SURFACE FEATURES SHOWN ARE BASED OFF GIS AND RECORD DRAWINGS AND MAY NOT REPRESENT ACTUAL LOCATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY VERTICAL AND HORIZONTAL LOCATIONS OF EXISTING UTILITIES AND MARK EXISTING UTILITIES IN THE FIELD. ALL MEANS AND METHODS TO RESEARCH AND VERIFY EXISTING UTILITY LOCATIONS SHALL BE INCIDENTAL TO THE ASSOCIATED WORK.

	REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS1598120EC-07-08
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND
STATE OF WASHINGTON
36939
REGISTERED PROFESSIONAL ENGINEER
12/9/19

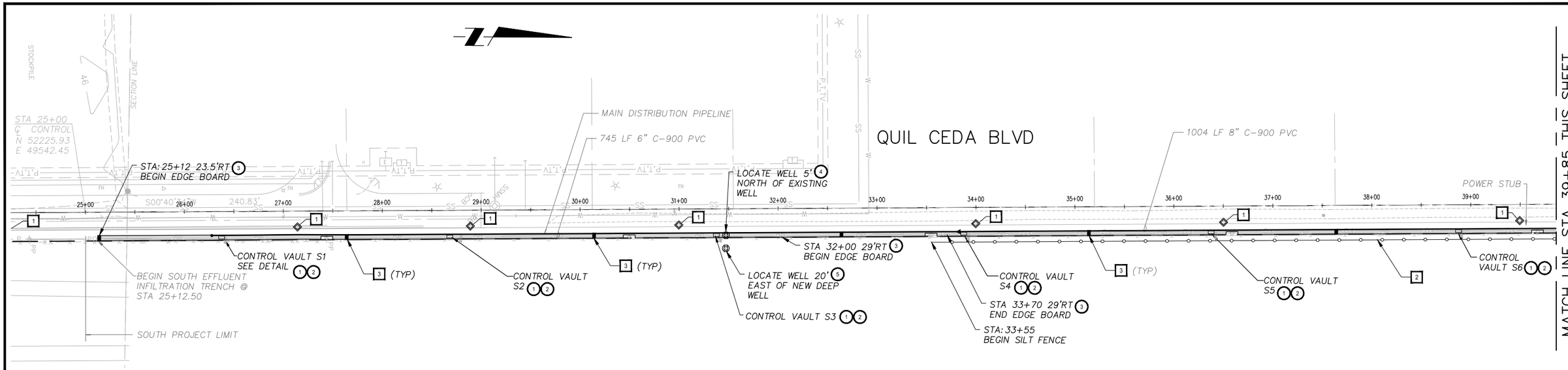
Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

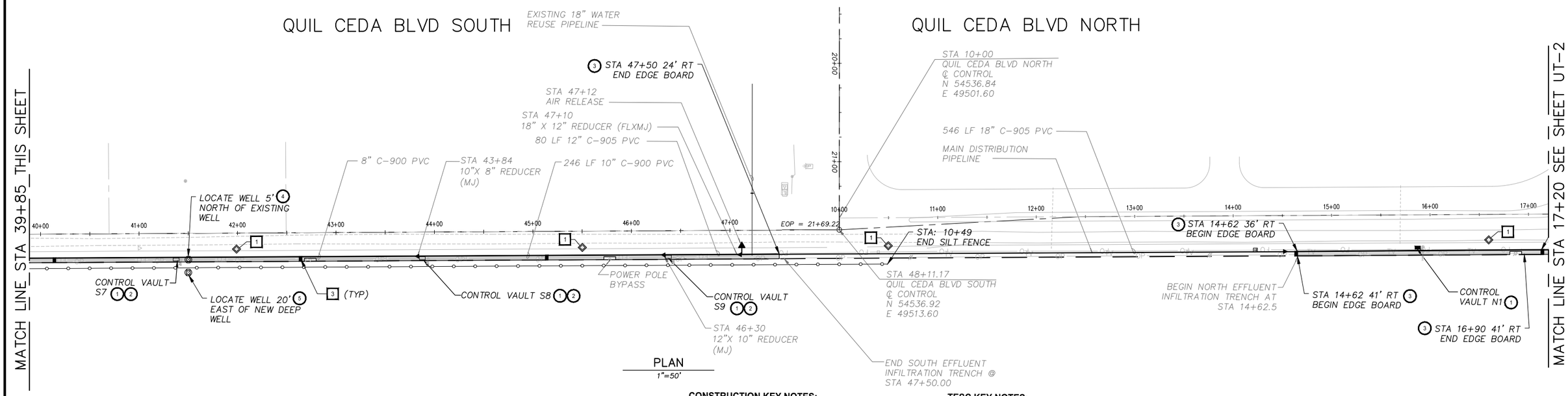
PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC) TRENCH RESTORATION
QUIL CEDA BLVD
TULALIP, WASHINGTON

UIC TRENCH TESC AND CONSTRUCTION

DRAWING NO. 6 OF 10
UT2

LAYOUT: 6 PATH: U:\PSO\Projects\Clients\1598-TulalipTribes\216-1598-120 WWTP Discharge Eval\99Svcs\CADD\DWG\ PLOTTED BY: vassema DATE: Thursday, December 19, 2019 10:29:53 AM





PLAN
1"=50'

NOTES:

1. FOR HORIZONTAL PIPE LOCATION, AND BRANCH DISTRIBUTION PIPING SEE TYPICAL DETAIL 1, SHEET DT1.
2. SEE SHEET UT3 FOR TRENCH DATA FOR LOCATION OF IMPROVEMENTS.
3. USE APPROPRIATE PRECAUTIONS WHEN WORKING AROUND OVERHEAD POWER

CONSTRUCTION KEY NOTES:

1. PARTIALLY DEMOLISH EXISTING DISCHARGE PORTS, SEE DETAIL 4/DT2
   REPLACE DISCHARGE PORTS SEE DETAIL 5/DT2
2. REPLACE EXISTING PRV IN CONTROL VAULT SEE DETAIL 3/DT2
3. REMOVE AND REPLACE TRENCH EDGE BOARD SEE DETAIL 6/DT3
4. INSTALL NEW DEEP MONITORING WELL SEE DETAIL 7/DT3
5. INSTALL NEW SHALLOW MONITORING WELL SEE DETAIL 7/DT3
   WSDOT PERMIT REQUIRED

TESC KEY NOTES:

1. INLET PROTECTION PER WSDOT STD PLAN I-40.20-00, SEE SHEET EC1.
2. SILT FENCE PER WSDOT STD PLAN I-30.15-02, SEE SHEET EC1.
3. BIODEGRADABLE CHECK DAMS ONLY PER WSDOT STD PLAN I-50.20-01, SECTION B, SEE SHEET EC1. WHEN SPECIFIED BY ENGINEER.

TESC / RESTORATION LEGEND

- INLET PROTECTION
- EAST CONSTRUCTION LIMIT / RIGHT-OF-WAY
- SILT FENCE
- BIODEGRADABLE CHECK DAMS
- TRENCH AREA RESTORATION

EXISTING CONDITIONS NOTE:

UTILITIES AND EXISTING SURFACE FEATURES SHOWN ARE BASED OFF GIS AND RECORD DRAWINGS AND MAY NOT REPRESENT ACTUAL LOCATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY VERTICAL AND HORIZONTAL LOCATIONS OF EXISTING UTILITIES AND MARK EXISTING UTILITIES IN THE FIELD. ALL MEANS AND METHODS TO RESEARCH AND VERIFY EXISTING UTILITY LOCATIONS SHALL BE INCIDENTAL TO THE ASSOCIATED WORK.

	REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY
FILE NAME PS1598120EC-07-08
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND
STATE OF WASHINGTON
36939
REGISTERED PROFESSIONAL ENGINEER
12/9/19

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC)
TRENCH RESTORATION
QUIL CEDA BLVD
TULALIP, WASHINGTON

UIC TRENCH TESC AND CONSTRUCTION

DRAWING NO. 5 OF 10
UT1

LAYOUT: 5 PATH: U:\PSO\Projects\Clients\1598-Tulalip Tribes\216-1598-120 WWTP Discharge Eval\99Svcs\CADD\DWG\ PLOTTED BY: vassema DATE: Thursday, December 19, 2019 10:29:59 AM

SOUTH UIC TRENCH

Branch	Item	No.	Station	Trench Bottom Elevation (ft)	Pipe Invert Elevation (ft)	PP Station
S1	End of Trench		25 + 12.50	43.4		
	Discharge Pt.	1	25 + 25.00			
	Discharge Pt.	2	25 + 50.00	43.0		
	Discharge Pt.	3	25 + 75.00			
	Discharge Pt.	4	26 + 0.00	42.6		
	Discharge Pt.	5	26 + 25.00			
	Branch Connection		26 + 37.50			
	Discharge Pt.	6	26 + 50.00	42.1		
	Discharge Pt.	7	26 + 75.00			
	Discharge Pt.	8	27 + 0.00	41.6		
	Discharge Pt.	9	27 + 25.00			
	Discharge Pt.	10	27 + 50.00	41.9		27+43.5
	Check Dam		27 + 62.50			
S2	Discharge Pt.	1	27 + 75.00			
	Discharge Pt.	2	28 + 0.00	42.3		
	Discharge Pt.	3	28 + 25.00			
	Discharge Pt.	4	28 + 50.00	42.8		
	Discharge Pt.	5	28 + 65.00			
	Branch Connection		28 + 75.00			
	Discharge Pt.	6	29 + 0.00	43.2		
	Discharge Pt.	7	29 + 25.00			
	Discharge Pt.	8	29 + 50.00	44.0		
	Discharge Pt.	9	29 + 75.00			
	Discharge Pt.	10	30 + 0.00	44.7		
	Check Dam		30 + 12.50			
S3	Discharge Pt.	1	30 + 25.00			
	Discharge Pt.	2	30 + 50.00	45.4		30+49
	Discharge Pt.	3	30 + 75.00			
	Discharge Pt.	4	31 + 0.00	45.7		
	Discharge Pt.	5	31 + 25.00			
	Branch Connection		31 + 37.50			
	Discharge Pt.	6	31 + 50.00	45.8		
	Discharge Pt.	7	31 + 75.00			
	Discharge Pt.	8	32 + 0.00	46.2		
	Discharge Pt.	9	32 + 25.00			
	Discharge Pt.	10	32 + 50.00	46.4		
	Check Dam		32 + 62.50			
S4	Discharge Pt.	1	32 + 75.00			
	Discharge Pt.	2	33 + 0.00	46.5		
	Discharge Pt.	3	33 + 25.00			
	Discharge Pt.	4	33 + 50.00	46.5		33+54
	Discharge Pt.	5	33 + 75.00			
	Branch Connection		33 + 87.50			
	Discharge Pt.	6	34 + 0.00	46.5		
	Discharge Pt.	7	34 + 25.00			
	Discharge Pt.	8	34 + 50.00	46.3		
	Discharge Pt.	9	34 + 75.00			
	Discharge Pt.	10	35 + 0.00	46.7		
	Check Dam		35 + 12.50			
S5	Discharge Pt.	1	35 + 25.00			
	Discharge Pt.	2	35 + 50.00	47.0		
	Discharge Pt.	3	35 + 75.00			
	Discharge Pt.	4	36 + 0.00	47.2		
	Discharge Pt.	5	36 + 25.00			
	Branch Connection		36 + 37.50			
	Discharge Pt.	6	36 + 50.00	47.3		36+58
	Discharge Pt.	7	36 + 75.00			
	Discharge Pt.	8	37 + 0.00	47.5		
	Discharge Pt.	9	37 + 25.00			
	Discharge Pt.	10	37 + 50.00	47.6		
	Check Dam		37 + 62.50			

Branch	Item	No.	Station	Trench Bottom Elevation (ft)	Pipe Invert Elevation (ft)	PP Station
S6	Discharge Pt.	1	37 + 75.00			
	Discharge Pt.	2	38 + 0.00	48.0		
	Discharge Pt.	3	38 + 25.00			
	Discharge Pt.	4	38 + 50.00	48.3		
	Discharge Pt.	5	38 + 75.00			
	Branch Connection		38 + 87.50			
	Discharge Pt.	6	39 0.00	48.3		
	Discharge Pt.	7	39 + 25.00			
	Discharge Pt.	8	39 + 50.00	48.3		
	Discharge Pt.	9	39 + 75.00			39+67
	Discharge Pt.	10	40 + 0.00	48.5		
	Check Dam		40 + 12.50			
	Discharge Pt.	1	40 + 25.00			
	Discharge Pt.	2	40 + 50.00	48.7		
	Discharge Pt.	3	40 + 75.00			
	Discharge Pt.	4	41 + 0.00	48.7		
	Discharge Pt.	5	41 + 25.00			
	Branch Connection		41 + 37.50			
	Discharge Pt.	6	41 + 50.00	48.8		
S7	Discharge Pt.	7	41 + 75.00			
	Discharge Pt.	8	42 + 0.00	48.8		
	Discharge Pt.	9	42 + 25.00			
	Discharge Pt.	10	42 + 50.00	49.1		
	Check Dam		42 + 62.50			
	Discharge Pt.	1	42 + 75.00			42+73.5
	Discharge Pt.	2	43 + 0.00	49.1		
	Discharge Pt.	3	43 + 25.00			
	Discharge Pt.	4	43 + 50.00	49.2		
	Discharge Pt.	5	43 + 75.00			
	Branch Connection		43 + 87.50			
	Discharge Pt.	6	44 + 0.00	49.7		
S8	Discharge Pt.	7	44 + 25.00			
	Discharge Pt.	8	44 + 50.00	50.2		
	Discharge Pt.	9	44 + 75.00			
	Discharge Pt.	10	45 + 0.00	50.5	51.0	
	Check Dam		45 + 12.50			
	Discharge Pt.	1	45 + 25.00			
	Discharge Pt.	2	45 + 50.00	50.3	51.0	
	Discharge Pt.	3	45 + 75.00			45+78
	Discharge Pt.	4	46 + 0.00	50.5	51.0	
	Discharge Pt.	5	46 + 25.00			
	Branch Connection		46 + 37.50			
	Discharge Pt.	6	46 + 50.00	50.6	51.4	
S9	Discharge Pt.	7	46 + 75.00			
	Discharge Pt.	8	47 + 0.00	50.9	51.8	
	Discharge Pt.	9	47 + 25.00			
	Discharge Pt.	10	47 + 50.00	51.3		
	End of Trench		47 + 55.00	51.3		
			48 + 11.17		50.3	
			10 + 50.00		50.3	10+72
			11 + 0.00		50.1	
			11 + 50.00		49.8	
			12 + 0.00		49.6	
			12 + 50.00		48.7	
			13 + 0.00		48.5	
			13 + 50.00		48.6	
			14 + 0.00		48.9	13+76
			14 + 50.00	49.4		
	End of Trench		14 + 62.50	49.6		

NORTH UIC TRENCH

Branch	Item	No.	Station	Trench Bottom Elevation (ft)	Pipe Invert Elevation (ft)	PP Station
N1	Discharge Pt.	1	14 + 75.00			
	Discharge Pt.	2	15 + 0.00	50.0		
	Discharge Pt.	3	15 + 25.00			
	Discharge Pt.	4	15 + 50.00	50.5		
	Discharge Pt.	5	15 + 75.00			
	Branch Connection		15 + 87.50			
	Discharge Pt.	6	16 + 0.00	51.0		
	Discharge Pt.	7	16 + 25.00			
	Discharge Pt.	8	16 + 50.00	51.5		
	Discharge Pt.	9	16 + 75.00			
	Discharge Pt.	10	17 + 0.00	52.2		16+87
	Check Dam		17 + 12.50			
N2	Discharge Point	1	17 + 25.00			
	Discharge Point	2	17 + 50.00	53.0		
	Discharge Point	3	17 + 75.00			
	Discharge Point	4	18 + 0.00	53.1		
	Discharge Point	5	18 + 15.00			
	Branch Connection		18 + 25.00			
	Discharge Point	6	18 + 50.00	53.5		
	Discharge Point	7	18 + 75.00			
	Discharge Point	8	19 + 0.00	53.8		
	Discharge Point	9	19 + 25.00			
	Discharge Point	10	19 + 50.00	53.4		
N2	End of Trench		19 + 62.50	53.4		
			20 + 0.00		53.3	19+93
			20 + 50.00		52.8	
			21 + 0.00		52.1	
			21 + 50.00		51.8	
			22 + 0.00		52.1	
			22 + 50.00		52.6	
			23 + 0.00		53.1	22+98
			23 + 50.00		53.3	
N3	End of Trench		23 + 87.50	53.4		
	Discharge Point	1	24 + 0.00	53.7		
	Discharge Point	2	24 + 25.00			
	Discharge Point	3	24 + 50.00	54.2		
	Discharge Point	4	24 + 75.00			
	Discharge Point	5	25 + 0.00	54.7		
	Branch Connection		25 + 12.50			
	Discharge Point	6	25 + 25.00			
	Discharge Point	7	25 + 50.00	55.2		
	Discharge Point	8	25 + 75.00			
	Discharge Point	9	26 + 0.00	55.4		26+02
	Discharge Point	10	26 + 25.00			
	Check Dam		26 + 37.50			
N4	Discharge Point	1	26 + 50.00	55.7		
	Discharge Point	2	26 + 75.00			
	Discharge Point	3	27 + 0.00	55.8		
	Discharge Point	4	27 + 25.00			
	Discharge Point	5	27 + 50.00	56.0		
	Branch Connection		27 + 62.50			
	Discharge Point	6	27 + 75.00			
	Discharge Point	7	28 + 0.00	55.9		
	Discharge Point	8	28 + 25.00			
	Discharge Point	9	28 + 50.00	55.4		
	Discharge Point	10	28 + 75.00			
	Check Dam		28 + 87.50			

Branch	Item	No.	Station	Trench Bottom Elevation (ft)	Pipe Invert Elevation (ft)	PP Station
N5	Discharge Point	1	29 + 0.00	54.9		29+08
	Discharge Point	2	29 + 25.00			
	Discharge Point	3	29 + 50.00	54.4		
	Discharge Point	4	29 + 75.00			
	Discharge Point	5	30 + 0.00	54.0		
	Branch Connection		30 + 12.50			
	Discharge Point	6	30 + 25.00			
	Discharge Point	7	30 + 50.00	54.1		
	Discharge Point	8	30 + 75.00			
	Discharge Point	9	31 + 0.00	54.4		
	Discharge Point	10	31 + 25.00			
	Check Dam		31 + 37.50			
N6	Discharge Point	1	31 + 50.00	54.6		
	Discharge Point	2	31 + 75.00			
	Discharge Point	3	32 + 0.00	54.9		32+11
	Discharge Point	4	32 + 25.00			
	Discharge Point	5	32 + 50.00	55.1		
	Branch Connection		32 + 62.50			
	Discharge Point	6	32 + 75.00			
	Discharge Point	7	33 + 0.00	55.4		
	Discharge Point	8	33 + 25.00			
	Discharge Point	9	33 + 50.00	55.6		
	Discharge Point	10	33 + 75.00			
	Check Dam		33 + 87.50			
N7	Discharge Point	1	34 + 0.00	55.9		
	Discharge Point	2	34 + 25.00			
	Discharge Point	3	34 + 50.00	56.1		
	Discharge Point	4	34 + 75.00			
	Discharge Point	5	35 + 0.00	56.4		
	Branch Connection		35 + 12.50			
	Discharge Point	6	35 + 25.00			35+24
	Discharge Point	7	35 + 50.00	56.6		
	Discharge Point	8	35 + 75.00			
	Discharge Point	9	36 + 0.00	56.9		
	Discharge Point	10	36 + 25.00			
	Check Dam		36 + 37.50			
N8	Discharge Point	1	36 + 50.00	57.1		
	Discharge Point	2	36 + 75.00			
	Discharge Point	3	37 + 0.00	57.4		
	Discharge Point	4	37 + 25.00			
	Discharge Point	5	37 + 50.00	57.6		
	Branch Connection		37 + 62.50			
	Discharge Point	6	37 + 75.00			
	Discharge Point	7	38 + 0.00	57.9		
	Discharge Point	8	38 + 25.00			38+26
	Discharge Point	9	38 + 50.00	58.1		
	Discharge Point	10	38 + 75.00			
	Check Dam		38 + 87.50			
N9	Discharge Point	1	39 + 0.00	58.4		
	Discharge Point	2	39 + 25.00			
	Discharge Point	3	39 + 50.00	58.3		
	Discharge Point	4	39 + 75.00			
	Discharge Point	5	40 + 0.00	58.1		
	Branch Connection		40 + 12.50			
	Discharge Point	6	40 + 25.00			
	Discharge Point	7	40 + 50.00	58.1		
	Discharge Point	8	40 + 75.00			
	Discharge Point	9	41 + 0.00	57.9		
	Discharge Point	10	41 + 25.00			
	Check Dam		41 + 37.50			
N10	Discharge Point	1	41 + 50.00	57.6		
	Discharge Point	2	41 + 75.00			
	Discharge Point	3	42 + 0.00	57.3		
	Discharge Point	4	42 + 25.00			
	Discharge Point	5	42 + 50.00	57.3		
	Branch Connection		42 + 62.50			
	Discharge Point	6	42 + 75.00			
	Discharge Point	7	43 + 0.00	57.8		
	Discharge Point	8	43 + 25.00			
	Discharge Point	9	43 + 50.00	58.6		
	Discharge Point	10	43 + 75.00			
	End of Trench		43 + 87.50	59.1		

REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

FILE NAME PS1598120EC-09
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND
STATE OF WASHINGTON
36939
REGISTERED PROFESSIONAL ENGINEER
12/9/19

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC) TRENCH RESTORATION
QUIL CEDA BLVD
TULALIP, WASHINGTON

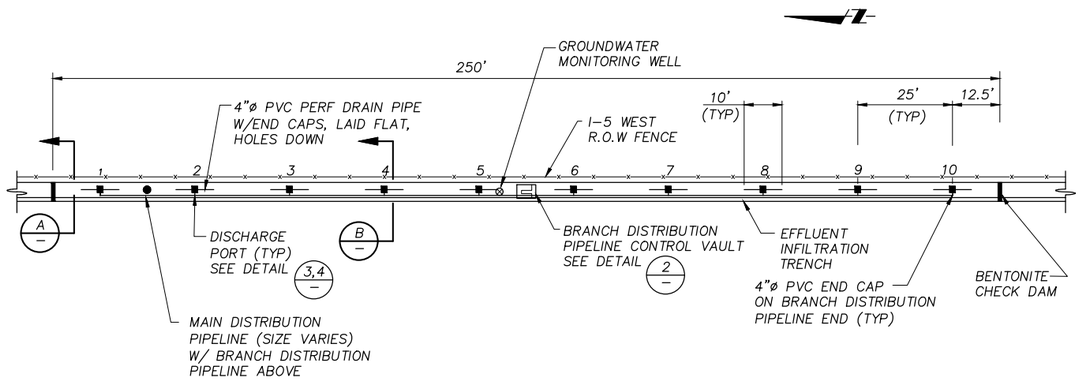
UIC TRENCH LAYOUT

DRAWING NO. 7 OF 10
UT3

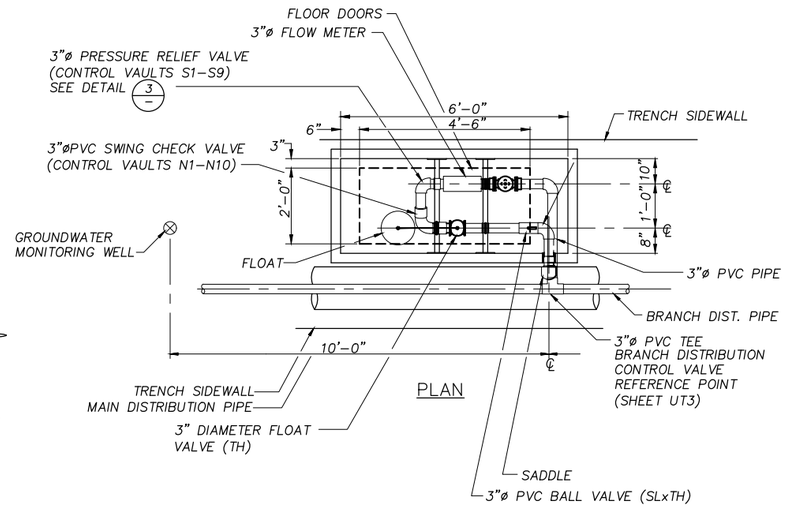
LAYOUT: 7 PATH: U:\PSO\Projects\Clients\1598-Tulalip Tribes\216-1598-120 WWTP Discharge Eval\99Svcs\CADD\DWG\ PLOTTED BY: vassemar DATE: Thursday, December 19, 2019 10:30:02 AM

NOTE:

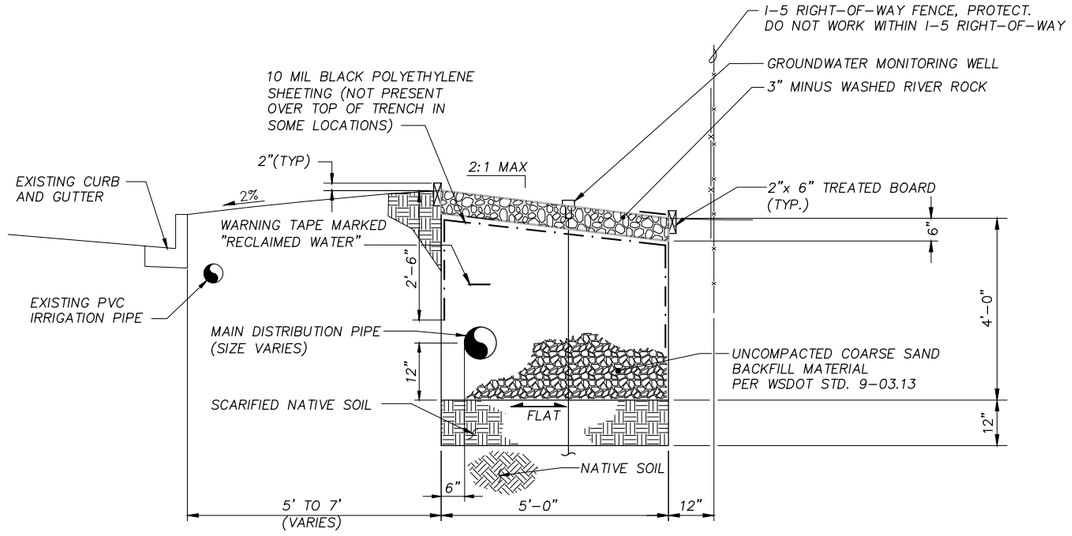
EXISTING DETAILS PROVIDED AS REFERENCE FOR CONSTRUCTION, REFER TO SHEET DT2 AND DT3 FOR PROPOSED CONSTRUCTION



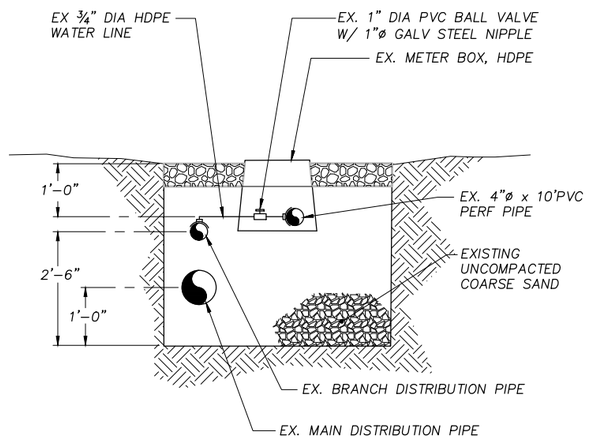
BRANCH DISTRIBUTION
TYPICAL EXISTING PIPING PLAN 1
SCALE: 1"=20'



BRANCH DISTRIBUTION CONTROL VAULT
EXISTING DETAIL 2
SCALE: 1"=2'



TYPICAL EXISTING EFFLUENT INFILTRATION TRENCH
EXISTING SECTION A
NOT TO SCALE



TYPICAL DISCHARGE PORT
EXISTING SECTION B
NOT TO SCALE

	REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS1598120EC-10-11
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND — STATE OF WASHINGTON — 36939 — REGISTERED PROFESSIONAL ENGINEER
12/9/19

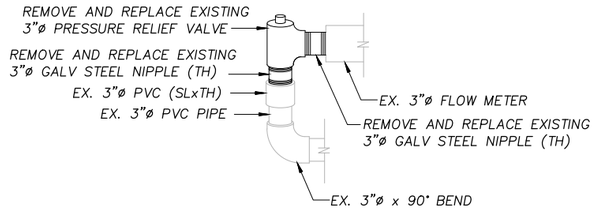
Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC) TRENCH RESTORATION
QUIL CEDA BLVD
TULALIP, WASHINGTON

EXISITNG UIC TRENCH DETAILS

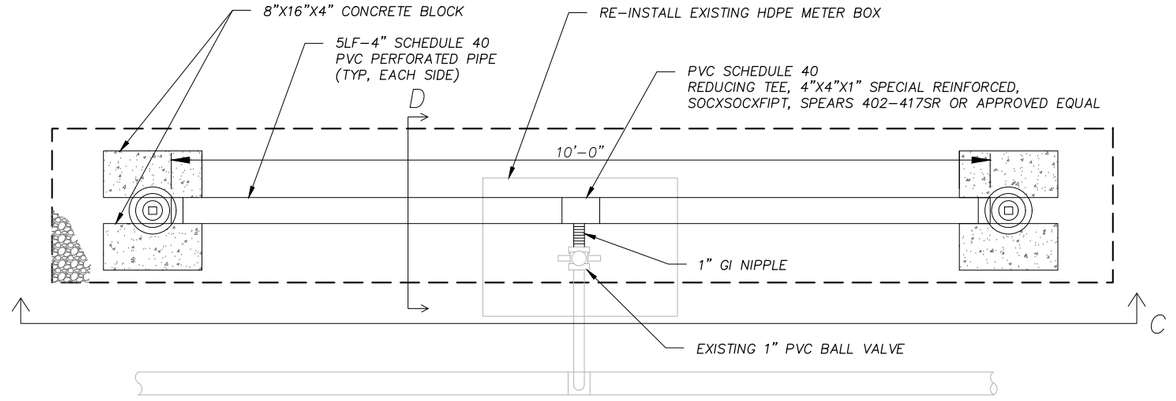
DRAWING NO. 8 OF 10
DT1

LAYOUT: 8 PATH: U:\PSO\Projects\Clients\1598-Tulalip Tribes\216-1598-120 WWTP Discharge Eval\99Svss\CADD\DWG\ PLOTTED BY: vassemar DATE: Thursday, December 19, 2019 10:30:07 AM



PRESSURE RELIEF VALVE REPLACEMENT FOR CONTROL VAULTS S1–S9

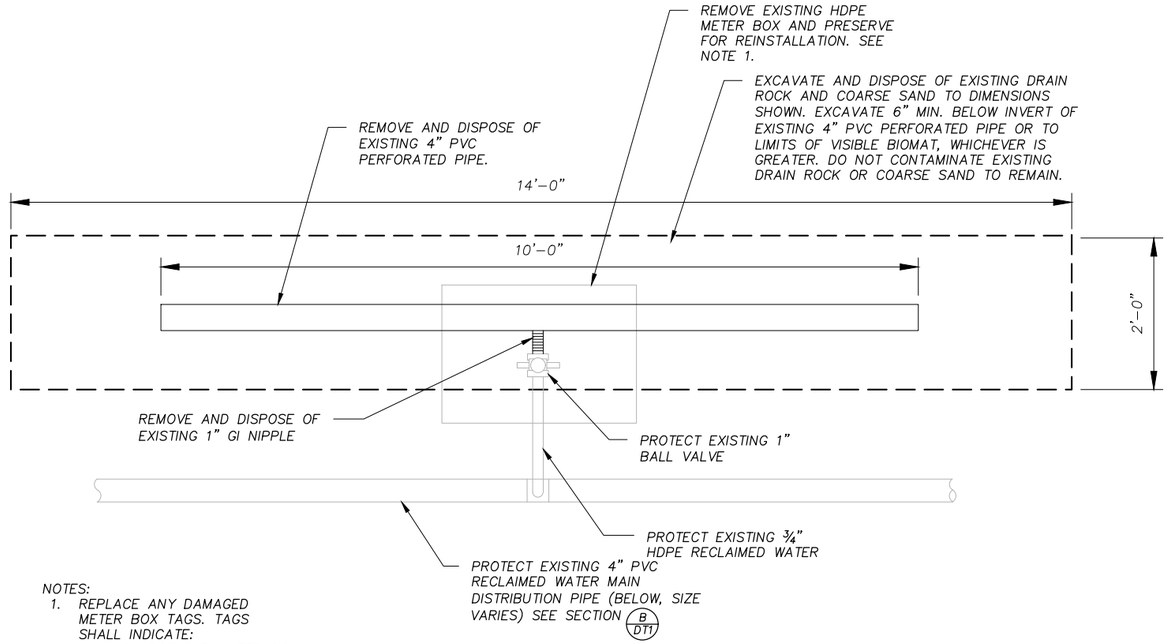
DETAIL 3 — NOT TO SCALE



PLAN

NEW DISCHARGE PORT

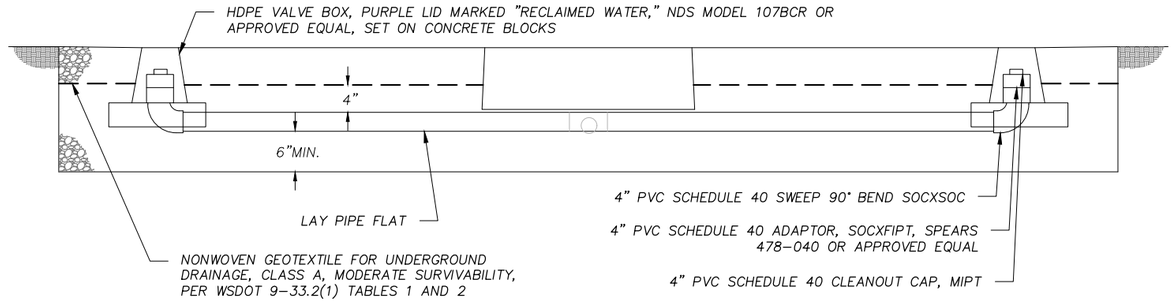
DETAIL 5 — NOT TO SCALE



NOTES:
1. REPLACE ANY DAMAGED METER BOX TAGS. TAGS SHALL INDICATE:
   1.A. "NON POTABLE WATER DO NOT DRINK"
   1.B. DISCHARGE POINT NO.
2. MATCH EXISTING TAG MATERIAL AND INSTALLATION

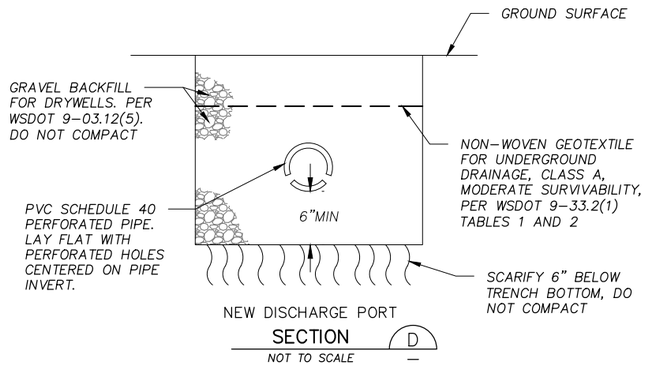
EXISTING DISCHARGE PORT DEMOLITION

DETAIL 4 — NOT TO SCALE



NEW DISCHARGE PORT

SECTION C — NOT TO SCALE



NEW DISCHARGE PORT

SECTION D — NOT TO SCALE

	REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

FILE NAME PS1598120EC-10-11
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND — STATE OF WASHINGTON — 36938 — REGISTERED PROFESSIONAL ENGINEER
12/9/19

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

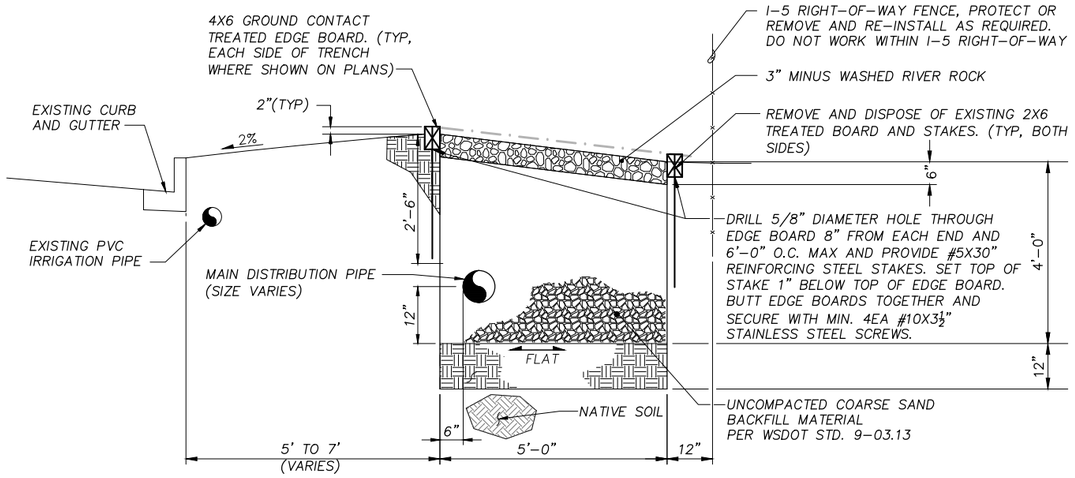
PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC) TRENCH RESTORATION
QUIL CEDA BLVD
TULALIP, WASHINGTON

PROPOSED UIC TRENCH DETAILS

DRAWING NO. 9 OF 10

DT2

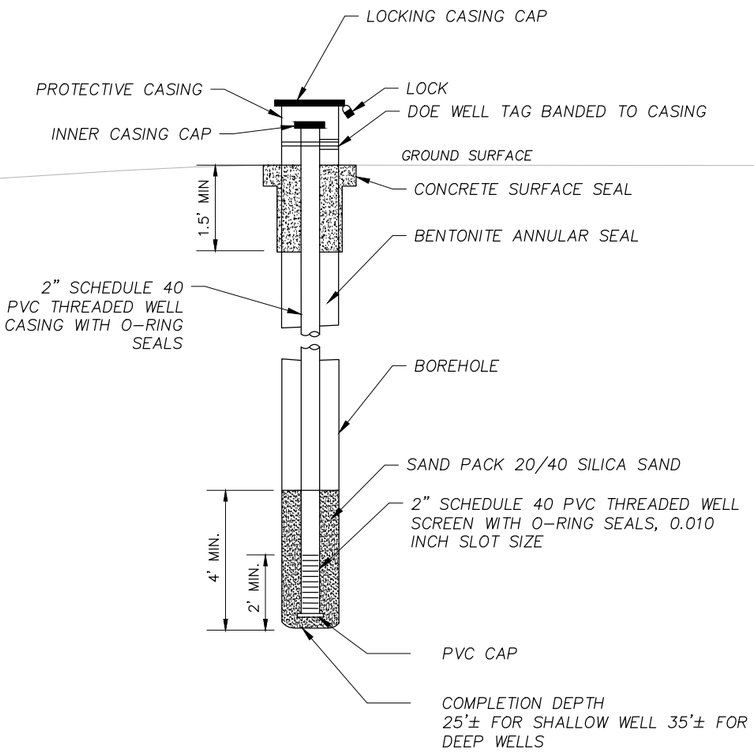
LAYOUT: 9 PATH: U:\PSO\Projects\Clients\1598-Tulalip Tribes\216-1598-120 WWTP Discharge Eval\99Svcs\CADD\DWG\ PLOTTED BY: vassemar DATE: Thursday, December 19, 2019 10:30:10 AM



EFFLUENT INFILTRATION TRENCH EDGE BOARD REPLACEMENT

DETAIL 6

NOT TO SCALE



MONITORING WELL INSTALLATION

DETAIL 7

NOT TO SCALE

LAYOUT: 10 PATH: U:\PSO\Projects\Clients\1598-TulalipTribes\216-1598-120 WWTP Discharge Eval\99Svcs\CADD\DWG\ PLOTTED BY: vassemar DATE: Thursday, December 19, 2019 10:30:15 AM

	REVISIONS	DATE	BY

DESIGNED R. RAYMOND
DRAWN M. VASSEY
CHECKED J. WRIGHT
APPROVED A. FISHER

ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY

FILE NAME PS1598120EC-10-11
JOB No. 216-1598-120
DATE DECEMBER 2019

RANDOLPH SCOT RAYMOND — STATE OF WASHINGTON — 39936 — REGISTERED PROFESSIONAL ENGINEER
12/9/19

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES
1019 39TH AVENUE SE, SUITE 100 | PUYALLUP, WA 98374
P 253.604.6600
WWW.PARAMETRIX.COM

PROJECT NAME
UNDERGROUND INJECTION CONTROL (UIC)
TRENCH RESTORATION
QUIL CEDA BLVD
TULALIP, WASHINGTON

PROPOSED UIC TRENCH DETAILS

DRAWING NO. 10 OF 10

DT3