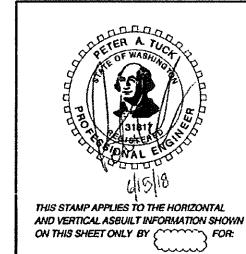
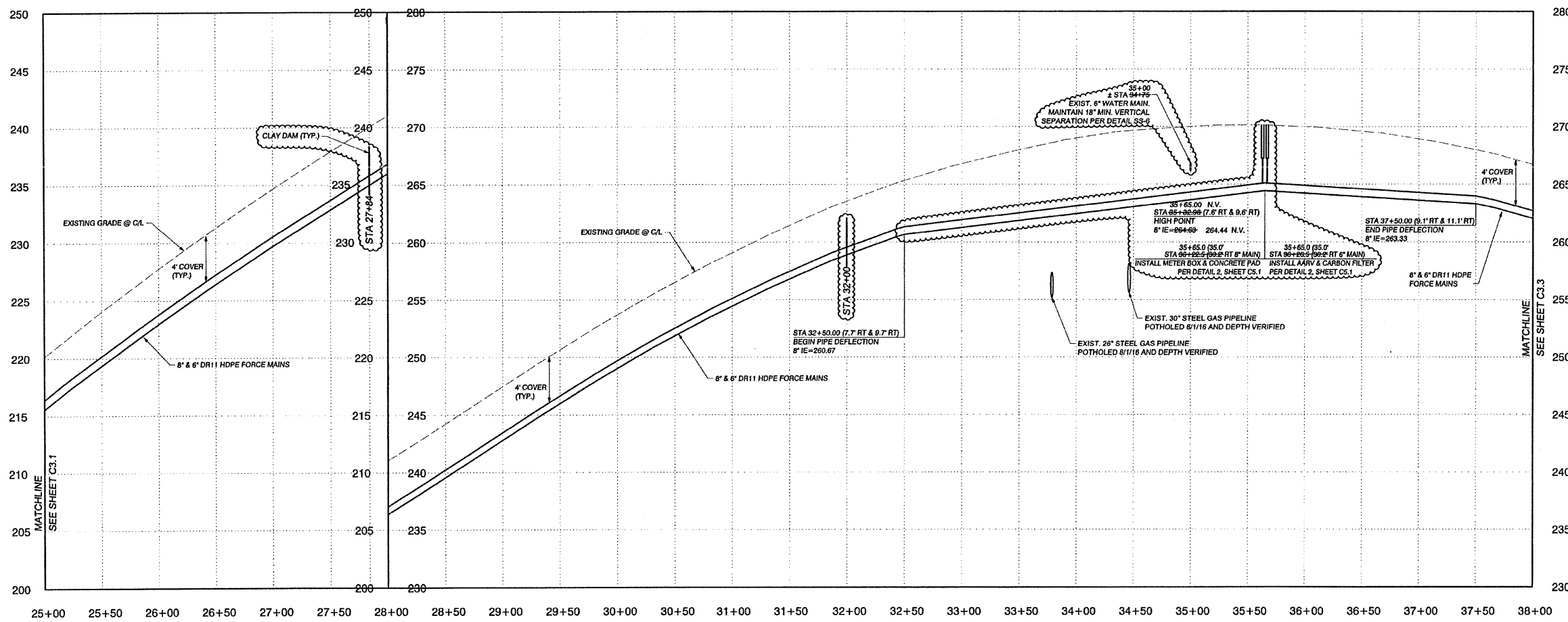
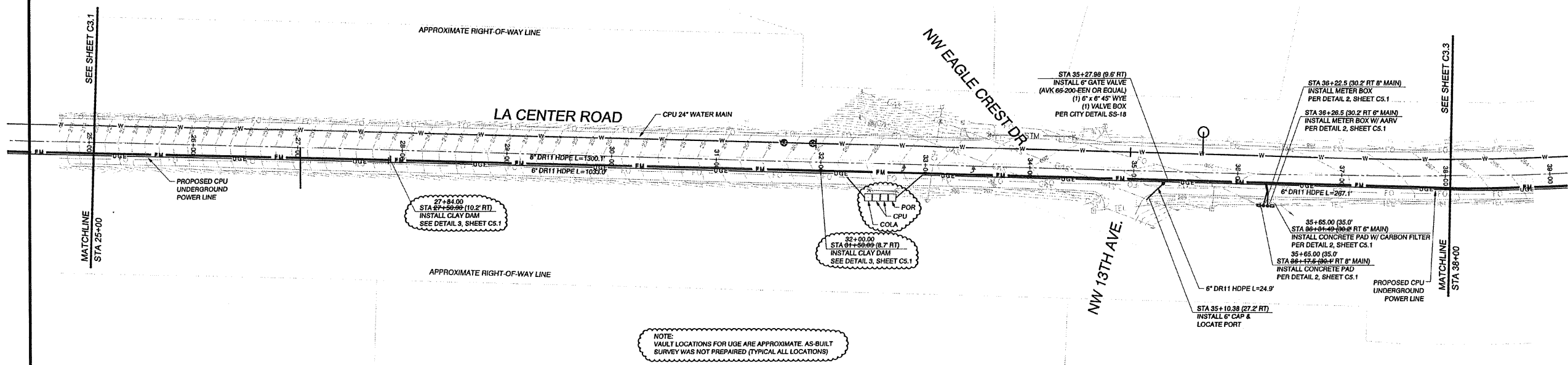
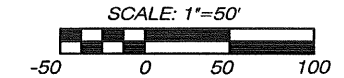




CLIENT:  
 COVALTZ INDIAN TRIBE  
 ATTN: WILLIAM YALL  
 TRIBAL CHAIRMAN  
 1035 9TH AVE. STE. B  
 LONGVIEW, WA 98632  
 PH: (360) 597-8140

**SANITARY SEWER CONSTRUCTION NOTES:**

1. GENERAL SANITARY SEWER NOTES PER CITY OF LA CENTER DETAIL SS-1 SHALL BE FOLLOWED.
2. ALL SANITARY SEWER MANHOLES SHALL BE PER CITY OF LA CENTER DETAILS SS-7, SS-10, AND SS-11
3. TRENCH BACKFILL AND PIPE BEDDING SHALL BE PER CITY OF LA CENTER DETAILS SS-4 AND SS-5.
4. ALL SANITARY SEWER FORCE MAIN SHALL BE DR11 HDPE WITH FUSED FITTINGS UNLESS OTHERWISE SPECIFIED.
5. ALL SANITARY SEWER FORCE MAIN SHALL TONING WIRE AND LOCATOR TAPE PER CITY OF LA CENTER DETAIL SS-20.



THIS STAMP APPLIES TO THE HORIZONTAL AND VERTICAL AS-BUILT INFORMATION SHOWN ON THIS SHEET ONLY BY: [Signature]

LEGEND:  
 GRADING  
 STORM SEWER  
 SANITARY SEWER  
 WATER  
 OTHER UTILITIES  
 LOCATIONS FOR WATER VALVES, SERVICES AND FIRE HYDRANTS CONFIRMED BY VISUAL INSPECTION

NOTE:  
 N.V. INDICATES DATA NOT VERIFIED IN THE FIELD.

AS-BUILT

**LA CENTER ROAD  
 PUMP STATION & SANITARY SEWER**

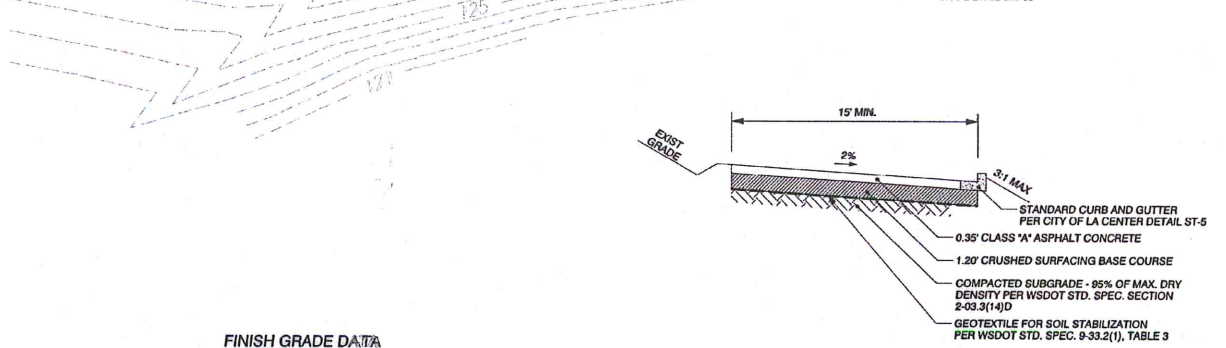
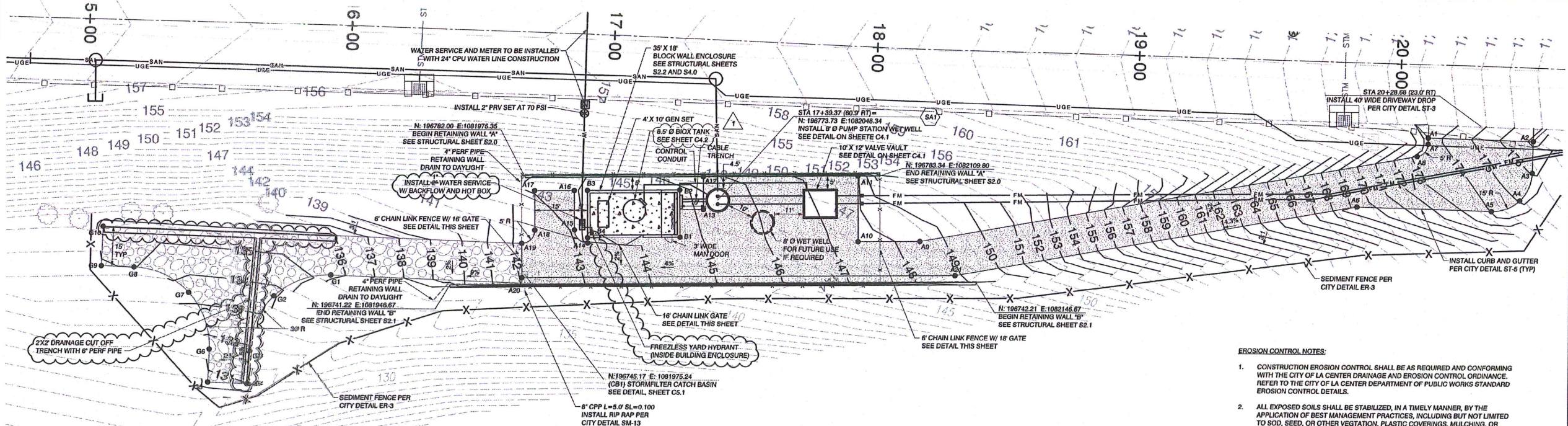
OLSON LAND SURVEYORS  
 ENGINEERS  
 ENGINEERING INC. 222 E. EVERGREEN, VANCOUVER, WA 98660

CHANGES / REVISIONS	
DESCRIPTION:	DATE:
ADD CLAY DAMS	4/19/17
SHIFT AARVs	8/31/17
DESIGNED: PAT	
DRAWN: SMW	
CHECKED: PAT	
DATE: JULY 2016	
SCALE: H: 1"=50' V:	
COPYRIGHT 2016, OLSON ENGINEERING, INC.	
LA CENTER ROAD SEWER SYSTEM	
JOB NO.: 7714.02.01	
SHEET	
C3.2	



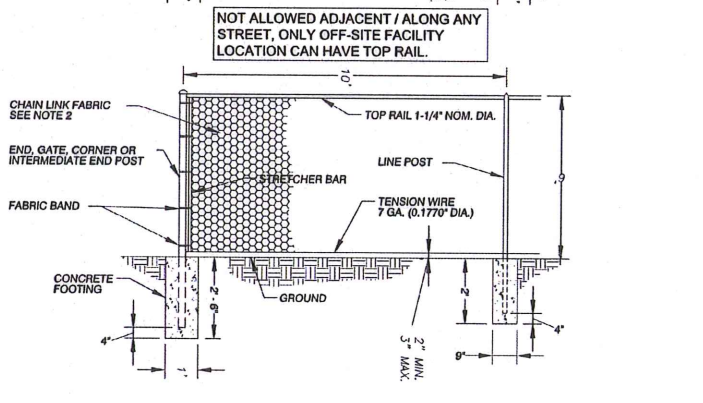
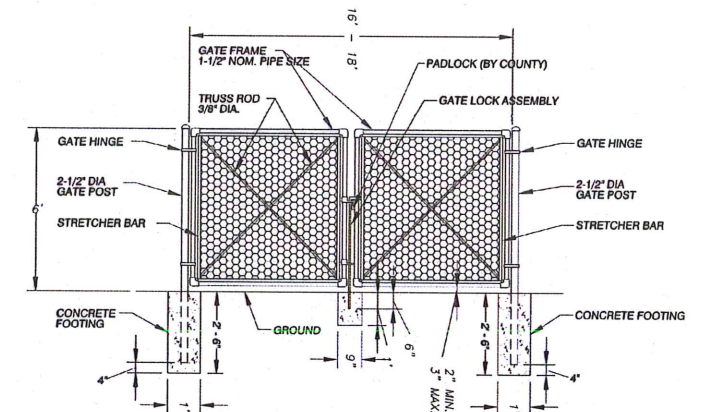
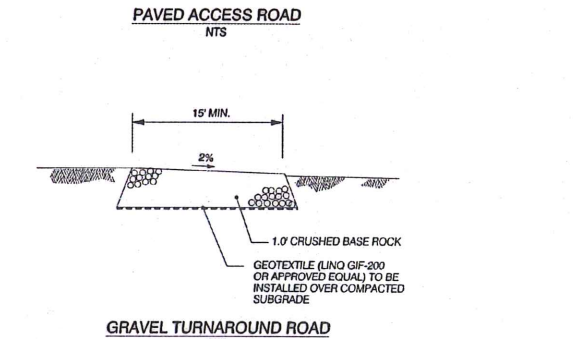


CLIENT:  
COWLITZ INDIAN TRIBE  
ATTN: WILLIAM WALL  
TRIBAL CHAIRMAN  
1055 9TH AVE. STE. B  
LONGVIEW, WA 98632  
PH: (360) 937-8140



**FINISH GRADE DATA**

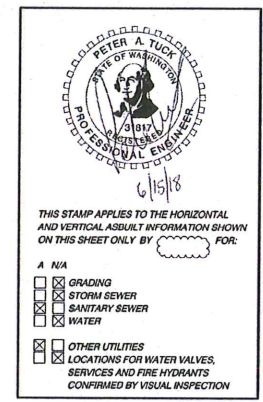
ID	NORTHING	EASTING	ELEV	DESCRIPTION
A1	196799.01	108219.14	173.54	EOP/BACK OF DRIVEWAY
A2	196797.87	108235.92	177.19	BEGIN CURB AND GUTTER
A3	196785.83	108235.83	176.09	CURB FC
A4	196775.31	108235.15	175.06	CURB MID
A5	196771.20	108234.40	174.05	CURB FT
A6	196772.71	108229.20	169.32	CURB ANGLE POINT
A7	196796.75	108219.08	173.50	EOP FC
A8	196791.28	108214.95	173.30	EOP FT
A9	196758.49	1082125.23	148.39	EOP ANGLE POINT
A10	196758.26	1082101.80	147.45	EOP ANGLE POINT
A11	196783.26	1082101.55	147.95	EOP/ROT OF WALL
A12	196783.07	1082044.82	145.78	EOP/ROT OF WALL
A13	196770.37	1082045.04	145.24	EOP ANGLE POINT
A14	196757.24	1081999.00	143.84	EOP FC
A15	196762.19	1081993.95	143.07	EOP FT
A16	196771.19	1081993.80	143.62	EOP ANGLE POINT
A17	196771.04	1081978.80	143.05	EOP ANGLE POINT
A18	196762.04	1081978.95	142.45	EOP FC
A19	196758.99	1081974.00	142.35	EOP FACE CURB/ROT OF GRAVEL
A20	196743.99	1081974.13	142.09	END FACE CURB/ROT OF GRAVEL
A21	196745.63	1082138.61	148.69	FACE CURB/GUTTER ANGLE POINT
B1	196750.50	1082033.89	144.50	BUILDING CORNER
B2	196777.89	1082033.80	144.86	BUILDING CORNER
B3	196777.24	1081998.80	144.86	BUILDING CORNER
B4	196758.24	1081998.98	144.50	BUILDING CORNER
G1	196744.71	1081901.34	135.50	GRAVEL EDGE FC
G2	196738.72	1081879.81	133.67	GRAVEL EDGE FT
G3	196715.85	1081870.24	131.84	GRAVEL EDGE FC
G4	196703.30	1081868.77	131.00	GRAVEL EDGE END
G5	196703.93	1081854.78	130.70	GRAVEL EDGE END
G6	196716.42	1081855.26	131.54	GRAVEL EDGE FC
G7	196737.24	1081847.26	133.49	GRAVEL EDGE MID
G8	196741.52	1081836.39	133.05	GRAVEL EDGE FC
G9	196747.89	1081813.90	134.95	GRAVEL EDGE END
G10	196762.89	1081814.46	135.25	GRAVEL EDGE END



**NOTES:**

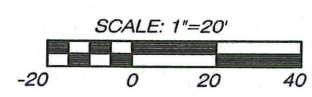
- ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.
- CHAIN LINK FENCE FABRIC TO MEET OR EXCEED REQUIREMENTS OF WSDOT STANDARD SPECIFICATIONS 9-16.1(1)(B) FOR TYPE 1 FENCE @ GA 2\"/>

- EROSION CONTROL NOTES:**
- CONSTRUCTION EROSION CONTROL SHALL BE AS REQUIRED AND CONFORMING WITH THE CITY OF LA CENTER DRAINAGE AND EROSION CONTROL ORDINANCE. REFER TO THE CITY OF LA CENTER DEPARTMENT OF PUBLIC WORKS STANDARD EROSION CONTROL DETAILS.
  - ALL EXPOSED SOILS SHALL BE STABILIZED, IN A TIMELY MANNER, BY THE APPLICATION OF BEST MANAGEMENT PRACTICES, INCLUDING BUT NOT LIMITED TO SOIL SEED, OR OTHER VEGETATION, PLASTIC COVERINGS, MULCHING, OR APPLICATION OF CRUSHED AGGREGATE ON THOSE AREAS TO BE PAVED.
  - WHEN EXCAVATION OCCURS IN ROADSIDE DITCHES, EXCAVATE AND KEY INTO DITCH ONE BIOFILTER BAG CHECK DAM PER 100' OF DITCH, OR WHERE NOTED ON THE PLANS. REMOVE SILT WHEN IT IS EVEN WITH THE TOP OF THE CHECK DAM. REPLACE OR ADD BIOFILTER BAGS AS NECESSARY TO PROPERLY FILTER THE STORM WATER.
  - INSTALL BIOFILTER BAGS (POLYESTER FABRIC PILLOW (ASTM-D101 OR EQUAL) FILLED W/ 15-16 LBS. OF WOOD CHIPS) AT EACH INLET. REMOVE SILT AND ADD BIOFILTER BAGS AS NECESSARY TO PROPERLY FILTER THE STORM WATER.
  - IF SEDIMENT IS TRANSPORTED ONTO THE ROAD SURFACE, THE ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF THE WORKDAY, OR MORE IF NECESSARY. SIGNIFICANT SOIL DEPOSITS SHALL BE REMOVED FROM THE ROAD BY SHOVELING OR SWEEPING.
  - THE LENGTH OF THE TRENCH OPEN AT ONE TIME SHALL BE MINIMIZED AND WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATION, EXCAVATED MATERIALS SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
- SANITARY SEWER CONSTRUCTION NOTES:**
- GENERAL SANITARY SEWER NOTES PER CITY OF LA CENTER DETAIL SS-1 SHALL BE FOLLOWED.
  - ALL SANITARY SEWER MANHOLES SHALL BE PER CITY OF LA CENTER DETAILS SS-7, SS-10, AND SS-11
  - TRENCH BACKFILL AND PIPE BEDDING SHALL BE PER CITY OF LA CENTER DETAILS SS-4 AND SS-5.
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  - ALL SANITARY SEWER FORCE MAIN SHALL HAVE TONING WIRE AND LOCATOR TAPE PER CITY OF LA CENTER DETAIL SS-20.



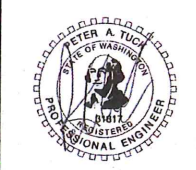
THIS STAMP APPLIES TO THE HORIZONTAL AND VERTICAL AS-BUILT INFORMATION SHOWN ON THIS SHEET ONLY BY \_\_\_\_\_ FOR:

- N/A
  - GRADING
  - STORM SEWER
  - SANITARY SEWER
  - WATER
  - OTHER UTILITIES
  - LOCATIONS FOR WATER VALVES, SERVICES AND FIRE HYDRANTS
- CONFIRMED BY VISUAL INSPECTION



AS-BUILT  
PUMP STATION SITE PLAN FOR:  
**LA CENTER ROAD  
PUMP STATION & SANITARY SEWER**

**OLSON**  
LAND SURVEYORS  
ENGINEERS  
ENGINEERING INC. 222 E. EVERGREEN, VANCOUVER, WA 98660  
360-685-1385  
360-338-8909



**CHANGES / REVISIONS**

NO.	DESCRIPTION	DATE
1	REVISE BIOXIDE TANK SIZE	3/9/17
2	MOVE CURB AND CB 2'	8/16/17

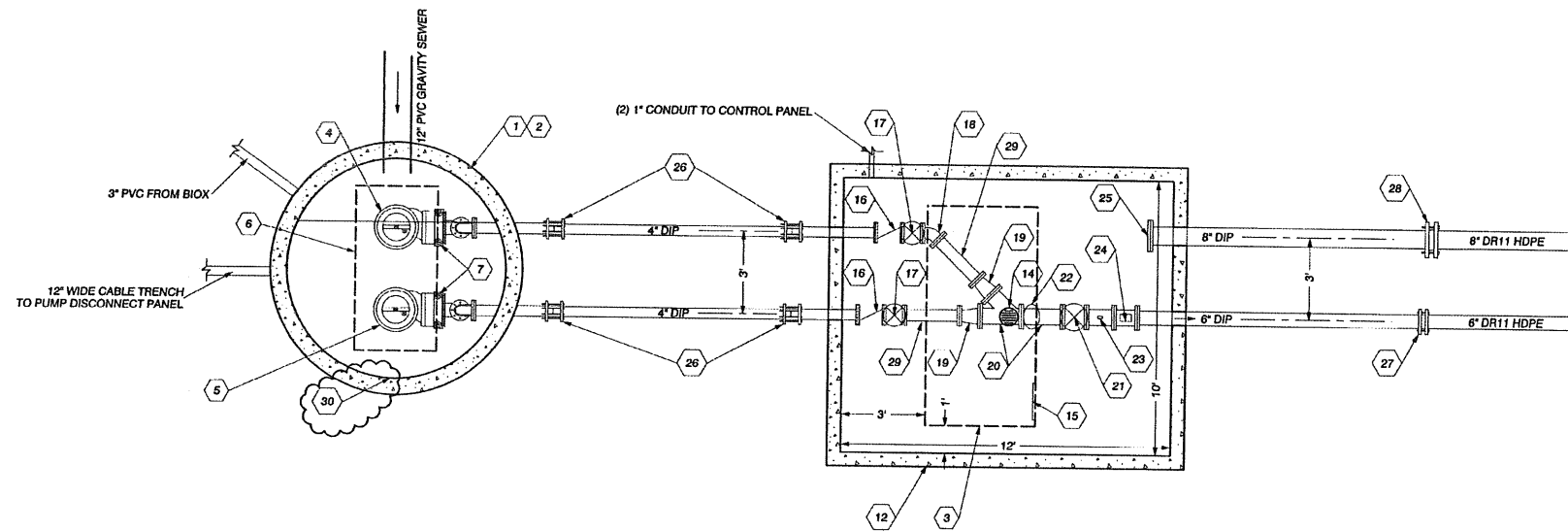
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DRAWN: SMW  
CHECKED: PAT  
DATE: JULY 2016  
SCALE: H: 1"=20'  
V:  
COPYRIGHT 2016, OLSON ENGINEERING, INC.  
LA CENTER ROAD SEWER SYSTEM  
JOB NO: 7714.02.01  
**SHEET**  
**C4.0**

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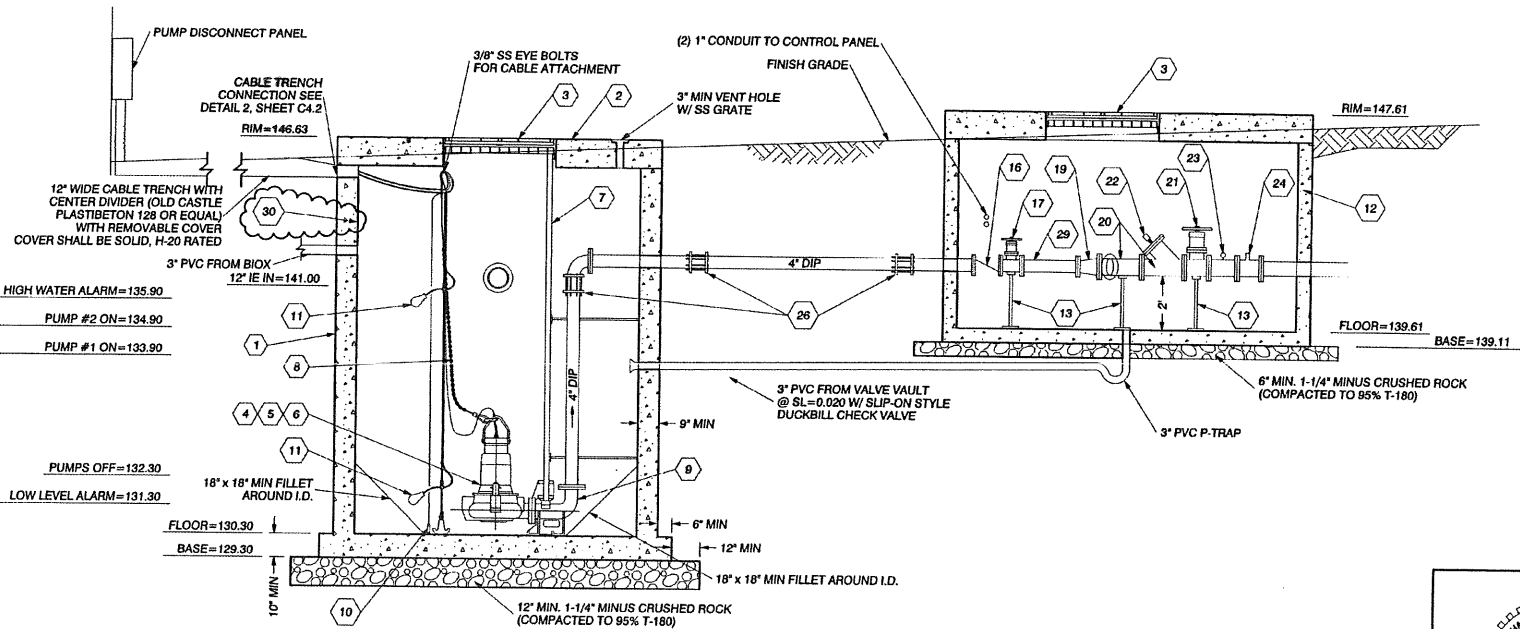
CLIENT:  
COWLITZ INDIAN TRIBE  
ATTN: WILLIAM KYALL  
TRIBAL CHAIRMAN  
1855 9TH AVE. STE. B  
LONGVIEW, WA 98632  
PH: (360) 597-8140



WET WELL & VALVE VAULT PLAN VIEW

PUMP STATION CONSTRUCTION NOTES:

- 1 WET WELL SHALL BE 8' MIN. DIAMETER REINFORCED CONCRETE MEETING ASTM C478 AND ACI-318-11.
- 2 WET WELL LID SHALL BE 12" MIN. THICKNESS AND H-20 RATED
- 3 DOUBLE LEAF ACCESS HATCH AND FRAME, 48" x 96" MINIMUM OPENING. HATCH SHALL BE ALUMINUM, WITH DIAMOND PLATE, H20 RATED, AND SPRING ASSISTED WITH RECESSED PADLOCK CLIP FOR LOCKING WITH STANDARD PADLOCK. INSTALL GRATED FALL PREVENTION SYSTEM INTEGRAL WITH THE HATCH. ALIGN HATCH OVER PUMPS AND RAILS PER PUMP MANUFACTURERS RECOMMENDATIONS WITH HINGES ON SHORT SIDES OF OPENING.
- 4 PUMP #1: FLYGT NP3153 SH 3-274
- 5 PUMP #2: FLYGT NP3153 SH 3-274
- 6 DOUBLE LEAF ACCESS HATCH AND FRAME, 36" x 72" MINIMUM OPENING. HATCH SHALL BE ALUMINUM, WITH DIAMOND PLATE, H20 RATED, AND SPRING ASSISTED WITH RECESSED PADLOCK CLIP FOR LOCKING WITH STANDARD PADLOCK. INSTALL GRATED FALL PREVENTION SYSTEM INTEGRAL WITH THE HATCH. ALIGN HATCH OVER PUMPS AND RAILS PER PUMP MANUFACTURERS RECOMMENDATIONS WITH HINGES ON SHORT SIDES OF OPENING.
- 7 INSTALL STAINLESS STEEL RAIL AND SUPPORT(S) AT REQUIRED SPACING PER PUMP MANUFACTURERS RECOMMENDATIONS.
- 8 POLY ROPE (5/8" SLACK) ATTACHED TO 8" STAINLESS STEEL LIFTING CHAIN, GRIP EYE, AND BOW SHACKLE WITH SCREW PIN FOR EACH PUMP.
- 9 QUICK DISCONNECT DISCHARGE ELBOW PER PUMP MANUFACTURER.
- 10 PRESSURE LEVEL SENSOR (SEE ELECTRICAL SHEETS FOR MORE DETAIL).
- 11 FLOAT SWITCH (SEE ELECTRICAL SHEETS FOR MORE DETAIL).
- 12 VALVE VAULT SHALL BE 10'W x 12'L x 7'D.
- 13 ADJUSTABLE PIPE SUPPORT (STANDON MODEL S92 OR EQUAL).
- 14 3" BRASS FLOOR DRAIN.
- 15 ALUMINUM LADDER WITH RECESSED EXTENSION.
- 16 4" SWING CHECK VALVE W/EXTERNAL SPRING AND LEVER (FLG) (VALMATIC MODEL 7804LS OR APPROVED EQUAL), WITH (2) LIMIT SWITCHES.
- 17 4" PLUG VALVE (FLG) W/HANDWHEEL (CLOW MODEL 2639 OR APPROVED EQUAL).
- 18 4" DIP 45° BEND (FLG).
- 19 6" x 4" DIP CONCENTRIC REDUCER (FLG).
- 20 6" x 6" DIP 45° WYE (FLG).
- 21 6" PLUG VALVE (FLG) W/HANDWHEEL (CLOW MODEL 2639 OR APPROVED EQUAL).
- 22 6" BLIND FLG TO BE TAPPED & THREADED W/4" NIPPLE & QUICK CONNECT CAM LOCK HOSE CONNECTION.
- 23 6" x 12" DIP (FLG) SPOOL, PRESSURE GAUGE ON TYPE 1 DIAPHRAM, 1/4" BALL VALVE, & PIPE SADDLE WITH BUSHING.
- 24 MAGNETER SHALL BE TOSHIBA MODEL LF250KL1BCAAAF (6") MAG FLOW TUBE W/TOSHIBA MODEL LF20FAA211E MAG CONVERTER CONNECTED BY TOSHIBA 2A SIGNAL CABLE & TOSHIBA 3A EXCITATION CABLE OR APPROVED EQUAL.
- 25 8" BLIND FLG.
- 26 RESTRAINED COUPLING (EBAA 3800, SMITH-BLAIR MAXI-GRIP, OR APPROVED EQUAL).
- 27 6" DR11 HDPE FLG x FUSED JOINT ADAPTOR WITH DUCTILE IRON BACKING RING.
- 28 8" DR11 HDPE FLG x FUSED JOINT ADAPTOR WITH DUCTILE IRON BACKING RING.
- 29 4" x 24" DIP (FLG) SPOOL.
- 30 COAT INSIDE OF WET WELL WITH RAVEN 405 EPOXY COATING.



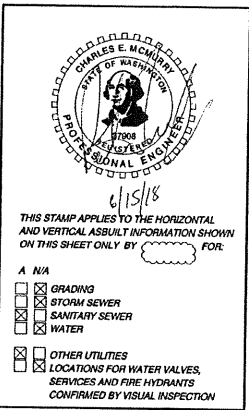
WET WELL & VALVE VAULT PROFILE VIEW

GENERAL CONSTRUCTION NOTES:

- ALL PIPE PENETRATIONS SHALL BE CORE DRILLED. NO PENETRATION SHALL BE MADE WITHIN 6" OF A WETWELL JOINT. A PIPE JOINT SHALL BE MADE WITHIN 12" OF THE OUTSIDE OF THE WET WELL. ALL CONNECTIONS SHALL BE MADE WITH FLEXIBLE SEALS. PENETRATIONS 4" AND LARGER SHALL BE SEALED USING KOR-N-SEAL BOOTS W/SS WEDGE AND PIPE CLAMPS. SMALLER PENETRATIONS SHALL BE SEALED USING LINK-SEAL MODEL S-316 OR APPROVED EQUAL.
- ALL PIPES AND FITTINGS SHALL BE FLANGED CEMENT LINED CLASS 52 DUCTILE IRON EXCEPT WHERE SPECIFIED.
- ALL MISCELLANEOUS HARDWARE (INCLUDING ANCHOR BOLTS) INSTALLED IN THE WET WELL AND VAULT SHALL BE TYPE 304 STAINLESS STEEL UNLESS OTHERWISE SPECIFIED ON THIS PLAN.
- ALL VALVE STANDS SHALL BE ADJUSTABLE.
- VALVE VAULT FLOOR SHALL BE SLOPED @ MIN. 2% TO SUMP DRAIN W/3" BRASS FLOOR DRAIN.

GENERATOR CONSTRUCTION NOTES:

- GENERATOR SHALL BE:
  - \* 300 MOUNTED
  - \* MOUNTED ON STRUCTURAL CHANNEL RAILS
  - \* ANCHORED TO CONCRETE PAD
  - \* PROVIDED WITH ENCLOSURE FOR 'QUIET' OPERATION (69 4B @ 23)
  - \* PROVIDED WITH A FUEL TANK CAPABLE OF HOLDING A 24-HOUR FUEL SUPPLY WITH ALL SAFETY AND VENTING EQUIPMENT REQUIRED BY CITY OF LA CENTER SPECIFICATIONS

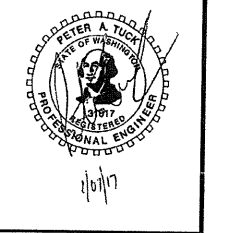


THIS STAMP APPLIES TO THE HORIZONTAL AND VERTICAL AS-BUILT INFORMATION SHOWN ON THIS SHEET ONLY BY \_\_\_\_\_ FOR:  
A. N/A  
[ ] GRADING  
[ ] STORM SEWER  
[ ] SANITARY SEWER  
[ ] WATER  
[ ] OTHER UTILITIES  
LOCATIONS FOR WATER VALVES, SERVICES AND FIRE HYDRANTS CONFIRMED BY VISUAL INSPECTION

AS-BUILT

PUMP STATION DETAILS FOR:  
**LA CENTER ROAD**  
**PUMP STATION & SANITARY SEWER**

LAND SURVEYORS  
**OLSON ENGINEERS**  
ENGINEERING, INC. 222 E. EVERGREEN, VANCOUVER, WA 98680



CHANGES / REVISIONS

DESCRIPTION:	DATE:
ADD PUMP INFORMATION	4/19/17

SCALE: H: N.T.S.  
V: \_\_\_\_\_

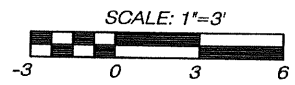
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LA CENTER ROAD SEWER SYSTEM

JOB NO: 7714.02.01

**SHEET**

**C4.1**



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