



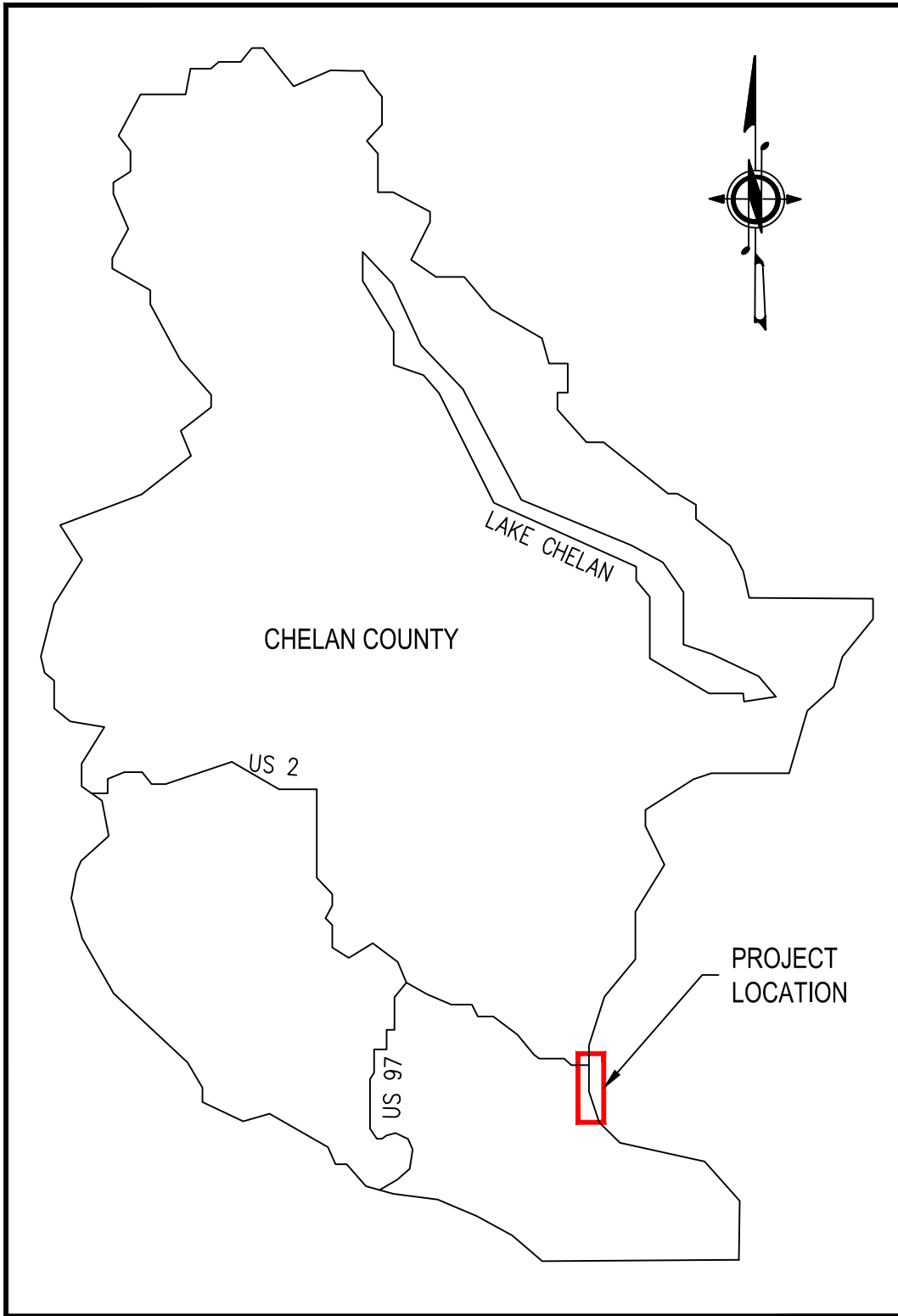
CHELAN COUNTY PUBLIC WORKS

SQUILCHUCK OUTFALL

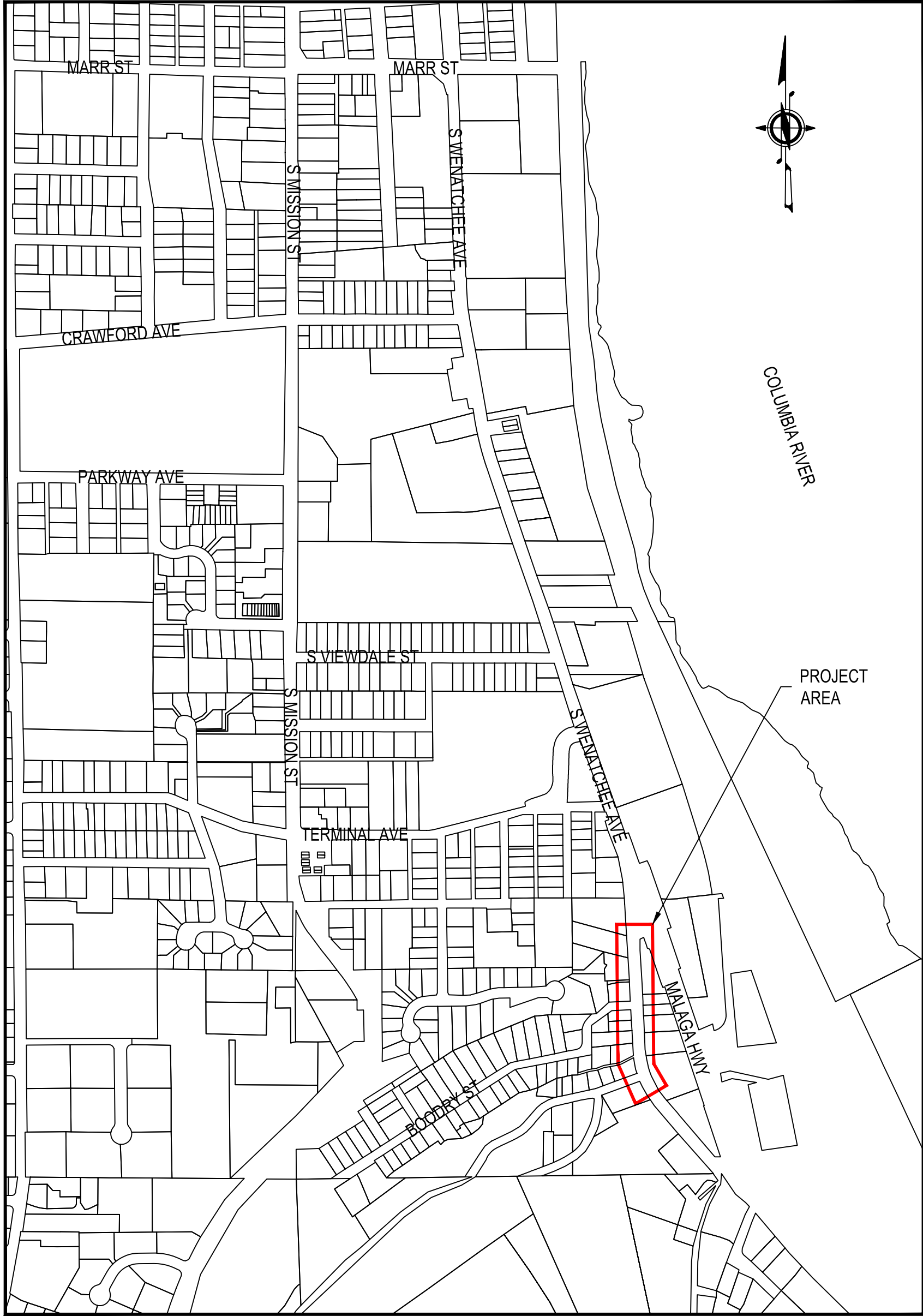
SD2008

90% PLANS

VICINITY MAP



PROJECT LOCATION



DRAWING INDEX

| Sheet Number | Sheet Title |
|--------------|--|
| 1 | COVER |
| 2 | SUMMARY OF QUANTITIES |
| 3 | SITE, DEMOLITION, AND SURVEY CONTROL NORTH |
| 4 | SITE, DEMOLITION, AND SURVEY CONTROL SOUTH |
| 5 | PROPOSED SITE PLAN NORTH |
| 6 | PROPOSED SITE PLAN SOUTH |
| 7 | STORMWATER DETAILS |
| 8 | VORTECHS 9000 DETAILS |
| 9 | RESTORATION DETAILS |
| 10 | TRAFFIC CONTROL PLAN |

CONTACT PERSONNEL

| CONTACT | AGENCY | PHONE (509) |
|-----------------------------------|-----------------|--------------|
| ANGI WALIGORSKI (PROJECT MANAGER) | RH2 ENGINEERING | 509-886-6765 |
| MICHAEL VOTH (STAFF ENGINEER) | RH2 ENGINEERING | 509-886-6789 |

EXISTING LEGEND

| | |
|--|------------------------------|
| | ELECTRICAL PEDESTAL |
| | TELEPHONE STRUCTURE |
| | TELEVISION STRUCTURE |
| | POWER POLE & COMM. STRUCTURE |
| | WATER VALVE |
| | WATER METER |
| | WATER WELL |
| | STORM MANHOLE |
| | STORM DRAIN |
| | SEWER MANHOLE |
| | SIGN |
| | MAILBOX |
| | TREE |
| | RIGHT OF WAY |
| | RIGHT OF WAY CENTERLINE |
| | LOT LINE |
| | ROADWAY CENTERLINE |
| | MINOR TOPO |
| | MAJOR TOPO |
| | TOP OF SLOPE |
| | TOE OF SLOPE |
| | EDGE OF PAVEMENT |
| | EDGE OF CONCRETE |
| | UNDERGROUND TELEPHONE |
| | OVERHEAD POWER |
| | WATER LINE |
| | SEWER LINE |
| | STORM SEWER LINE |
| | IRRIGATION LINE |
| | GAS LINE |
| | GUARDRAIL |
| | FENCE |

PROPOSED LEGEND

| | |
|--|--|
| | PROPOSED STORM PIPE |
| | PROPOSED PERFORATED STORM PIPE |
| | TRENCH DAM |
| | PROPOSED STRUCTURE |
| | PROPOSED STRUCTURE WITH WATER TIGHT BOOT CONNECTIONS |
| | PROPOSED STRUCTURE WITH EXTENDED BASE |
| | MANHOLE WITH CHANNEL |
| | EXISTING STRUCTURE |
| | CONTECH VORTECHS 9000 |

GENERAL NOTES

NO CONSTRUCTION RELATED ACTIVITY SHALL CONTRIBUTE TO THE DEGRADATION OF THE ENVIRONMENT, ALLOW MATERIAL TO ENTER SURFACE OR GROUND WATERS, OR ALLOW PARTICULATE EMISSIONS TO THE ATMOSPHERE, WHICH EXCEED STATE OR FEDERAL STANDARDS. ANY ACTIONS THAT POTENTIALLY ALLOW A DISCHARGE TO STATE WATERS MUST HAVE PRIOR APPROVAL OF THE WASHINGTON STATE DEPARTMENT OF ECOLOGY.

CALL 48 HOURS BEFORE YOU DIG
ONE CALL 811

REPORT ALL SPILLS
DEPT. OF ECOLOGY 1-800-258-5990



| SUMMARY OF QUANTITIES | | | |
|------------------------------|----------------|------|--|
| Item No. | Total Quantity | Unit | Description |
| PREPARATION | | | |
| 1 | 1 | L.S. | MOBILIZATION |
| 2 | 1 | L.S. | REMOVAL OF STRUCTURES AND OBSTRUCTIONS |
| STORM SEWER | | | |
| 3 | 3 | EACH | MANHOLE 72 IN. DIAM. TYPE 3 |
| 4 | 1 | EACH | FLOW SPLITTER CATCH BASIN 84 IN. DIAM. TYPE 2 W/ ANTIFL. LIP |
| 5 | 1 | EACH | MANHOLE 72 IN. DIAM. TYPE 3 W/ ANTIFL. LIP |
| 6 | 1 | EACH | MANHOLE 84 IN. DIAM. TYPE 3 |
| 7 | 1 | EACH | MANHOLE 84 IN. DIAM. TYPE 3 W/ ANTIFL. LIP |
| 8 | 1 | EACH | WEIR CATCH BASIN 72 IN. DIAM. TYPE 2 |
| 9 | 1 | EACH | WYE CATCH BASIN 84 IN. DIAM. TYPE 2 |
| 10 | 1 | EACH | VORTECHS 9000 TREATMENT SYSTEM |
| 11 | 1 | EACH | INSERTION TEE 12 IN. DIAM. |
| 12 | 1 | EACH | MANHOLE BOOT CONNECTION 12 IN. DIAM. |
| 13 | 4 | EACH | MANHOLE BOOT CONNECTION 18 IN. DIAM. |
| 14 | 4 | EACH | MANHOLE BOOT CONNECTION 36 IN. DIAM. |
| 15 | 1 | EACH | MANHOLE BOOT CONNECTION 48 IN. DIAM. |
| 16 | 205 | L.F. | PERFORATED CMP STORM SEWER PIPE 36 IN. DIAM |
| 17 | 75 | L.F. | PERFORATED CMP STORM SEWER PIPE 48 IN. DIAM |
| 18 | 60 | L.F. | CORRUGATED POLYETHYLENE STORM SEWER PIPE 12 IN. DIAM. |
| 19 | 60 | L.F. | CORRUGATED POLYETHYLENE STORM SEWER PIPE 18 IN. DIAM. |
| 20 | 450 | L.F. | CORRUGATED POLYETHYLENE STORM SEWER PIPE 36 IN. DIAM. |
| 21 | 180 | L.F. | CORRUGATED POLYETHYLENE STORM SEWER PIPE 48 IN. DIAM. |
| 22 | 30 | C.Y. | QUARRY SPALLS |
| SURFACING | | | |
| 23 | 830 | TON | CRUSHED SURFACING BASE COURSE |
| HOT MIX ASPHALT | | | |
| 24 | 340 | TON | HMA CL.1/2 IN. PG 64-28 |
| EROSION CONTROL AND PLANTING | | | |
| 25 | 12 | DAY | ESC LEAD |
| 26 | 5,000 | DOL | EROSION/WATER POLLUTION CONTROL |
| 27 | 1 | EACH | INLET PROTECTION |
| TRAFFIC | | | |
| 28 | 500 | L.F. | PAINT LINE |
| 29 | 1 | L.S. | PROJECT TEMPORARY TRAFFIC CONTROL |
| OTHER ITEMS | | | |
| 30 | 1 | L.S. | DEWATERING |
| 31 | 1 | L.S. | SHORING OR EXTRA EXCAVATION CLASS A |
| 32 | 1 | L.S. | SHORING OR EXTRA EXCAVATION CLASS B |
| 33 | 5,000 | EST | UNKNOWN UTILITY REPAIR |
| 34 | 5,000 | EST | ROADSIDE CLEANUP |
| 35 | 1 | L.S. | ROADWAY SURVEYING |
| 36 | 1 | L.S. | SPCC PLAN |



CHELAN COUNTY PUBLIC WORKS

SQUILCHUCK OUTFALL

REBEL MINING

ENGINEER: MLV

REVIEWED: AMW

DATE: Jan 12, 2015

DATE: Jan 12, 2015

CLIENT: CCD

FILENAME: SQUIP-COV.DWG

JOB NO.: 215-132

REVISIONS

| NO. | DATE | DESCRIPTION | BY | REVIEW |
|-----|------|-------------|----|--------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

SCALE: SHOWN

0"

1"


2"

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: G01

SHEET NO.: 2

10



RH2

REGISTERED PROFESSIONAL ENGINEER

PLANNERS

SCIENTISTS

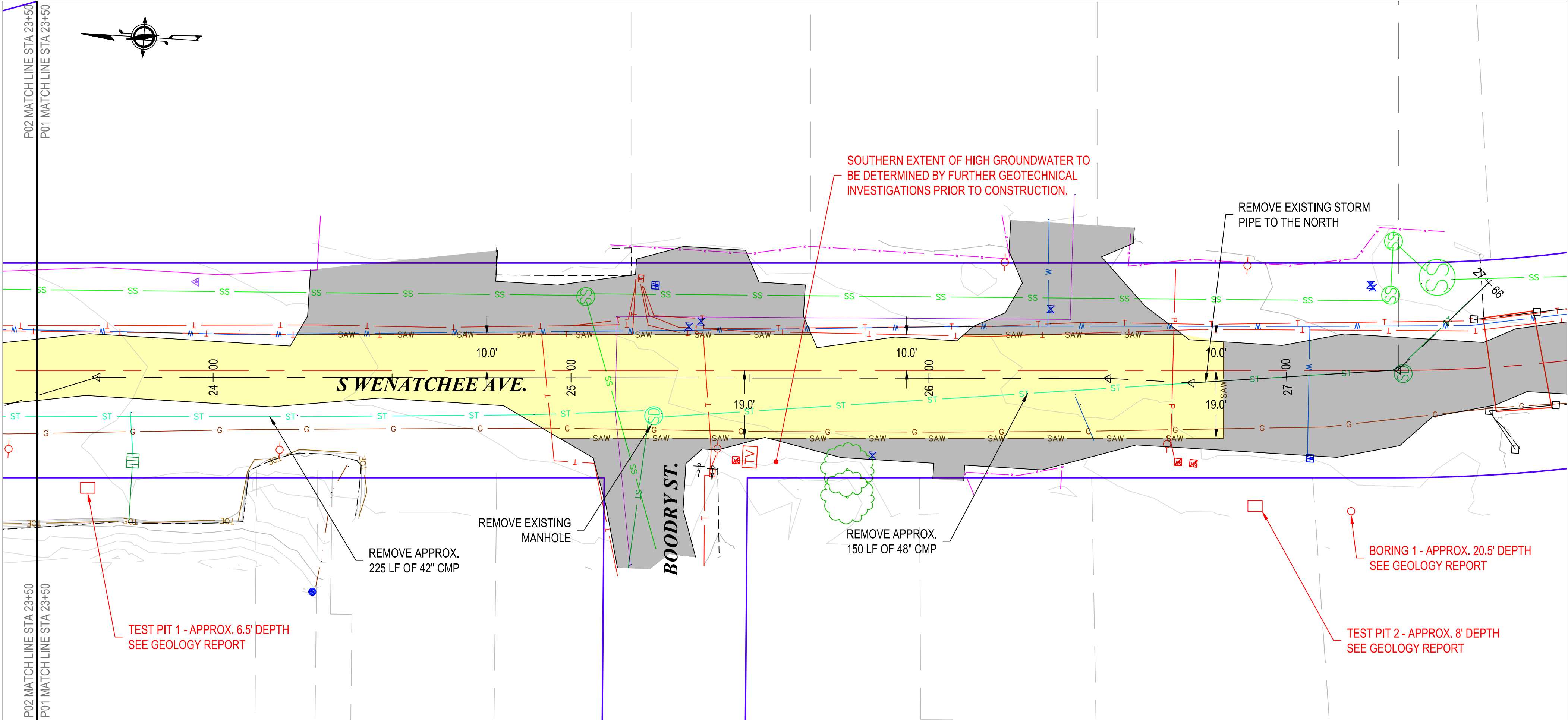
RH2 ENGINEERS, INC.

1807 12th Ave. S.E.

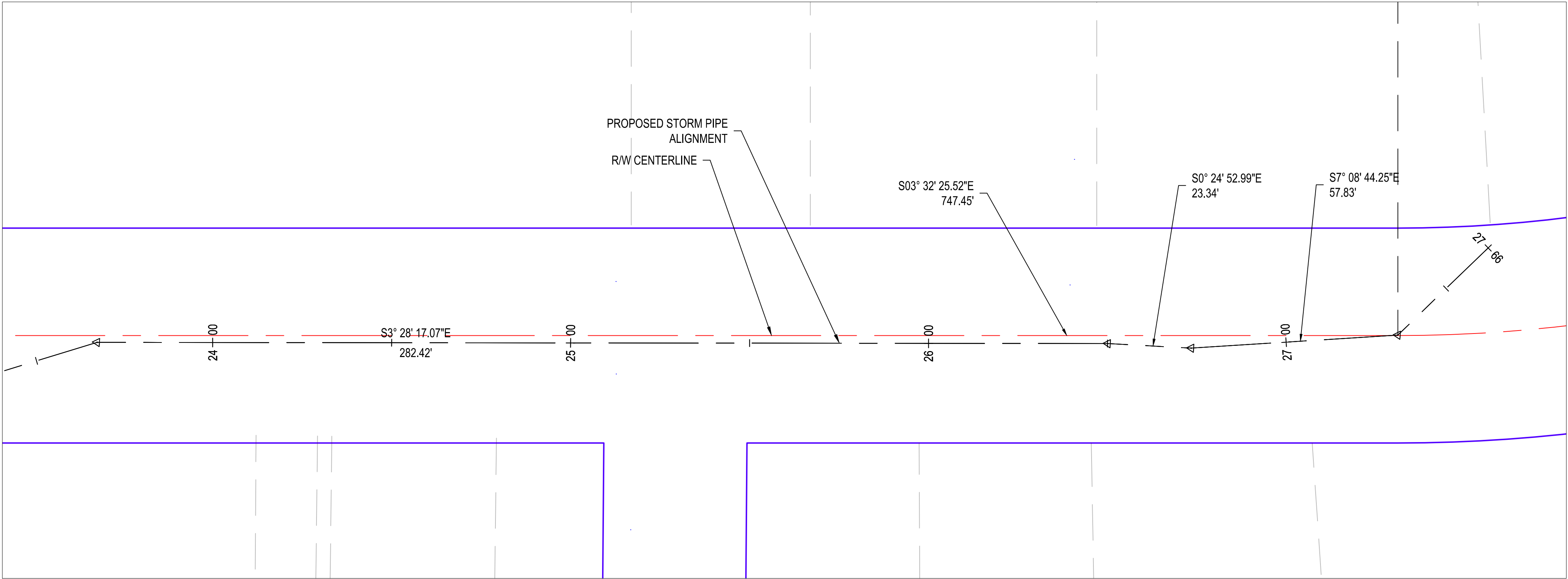
EAST WENATCHEE, WA

300 Simon Street, Suite 5

90% PLANS



DEMOLITION PLAN
1" = 20'



SURVEY CONTROL
1" = 20'

DEMOLITION NOTES

- 1) EXISTING 36", 42", AND 48" CMP AND STORM STRUCTURES THAT CONFLICT WITH THE PROPOSED SHALL BE REMOVED BY THE CONTRACTOR.



CHELAN COUNTY PUBLIC WORKS




SQUILCHUCK OUTFALL



SITE DEMOLITION, AND SURVEY CONTROL SOUTH

| REVISIONS | | DATE | | DESCRIPTION | |
|-----------|------|------|--------|-------------|--|
| NO. | DATE | BY | REVIEW | | |
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SCALE: SHOWN


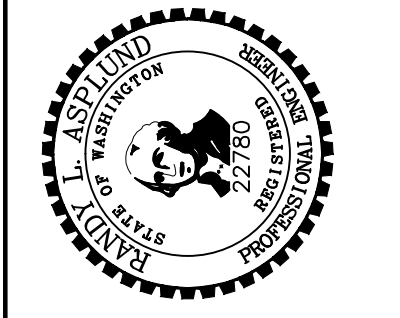



DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: P02

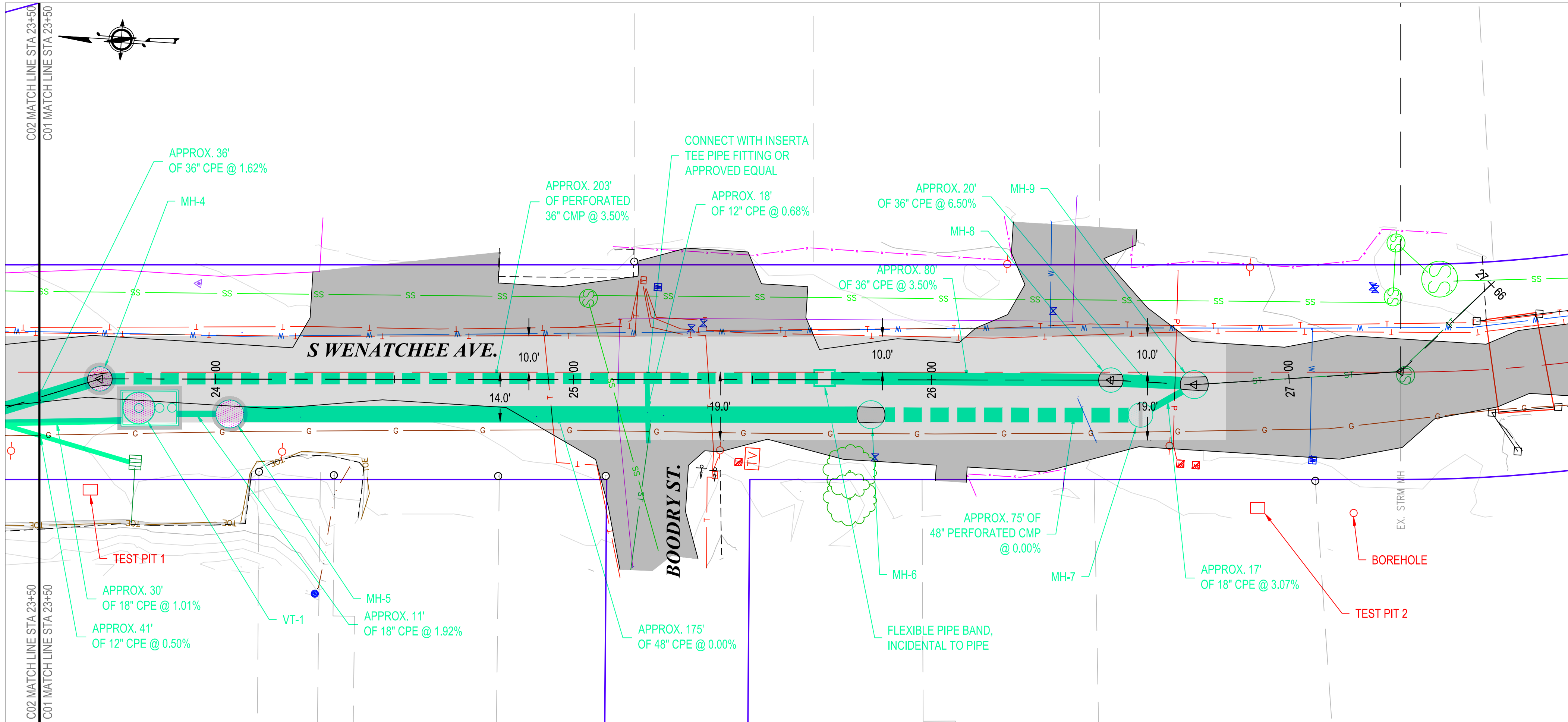
SHEET NO.: 4

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RH2 ENGINEERS INC.
REGISTERED PROFESSIONAL ENGINEERS
PLANNERS
SCIENTISTS
1807 12th Ave S
East Wenatchee, WA
300 Simon Street, Suite 5

90% PLANS

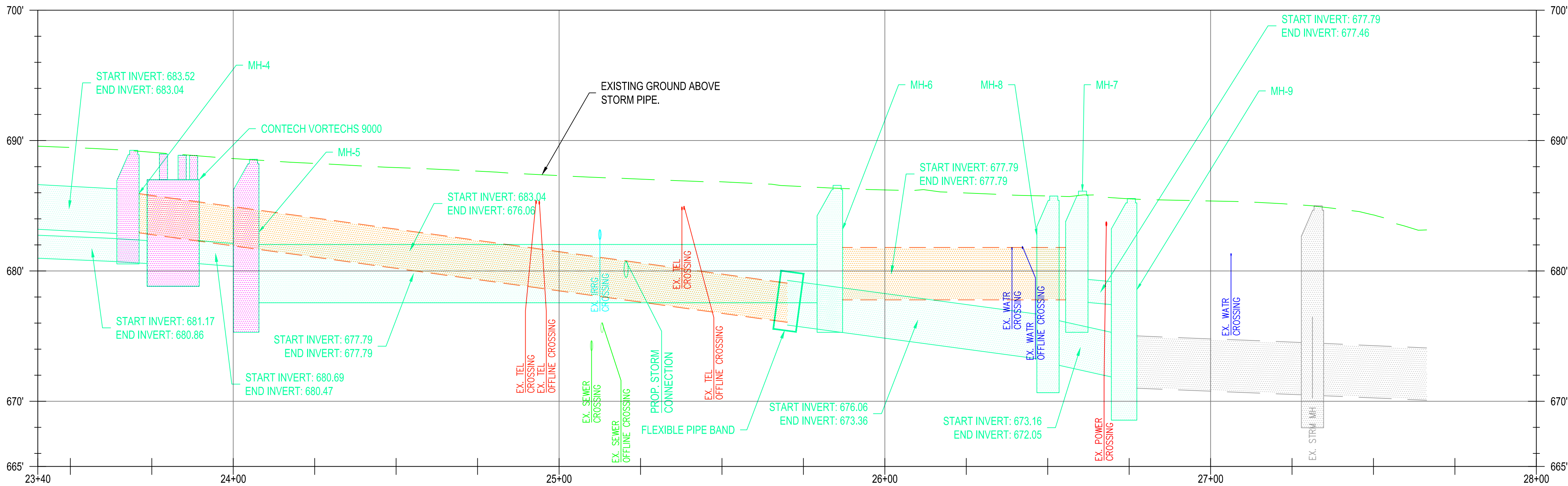


ROADWAY PLAN
1" = 20'

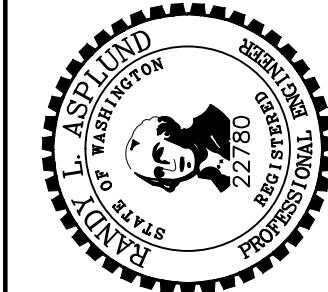
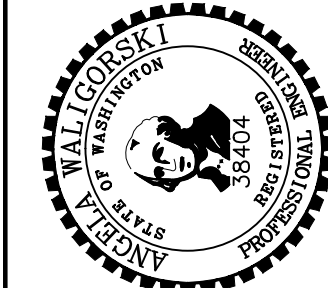
GENERAL NOTES

- EXISTING UTILITIES HAVE NOT BEEN POTHOLED TO IDENTIFY LOCATION, MATERIAL, SIZE, OR GEOMETRY.
- ALL MANHOLES AND CATCH BASINS TO HAVE SOLID LIDS.

| STORM STRUCTURE TABLE | | | | |
|-----------------------|---|----------------|--------------|---|
| NAME | TYPE | STATION | RIM | PIPES IN |
| MH-4 | MH 72" DIAM. TYPE 3 W/ ANTIFL. LIP (10' MIN DIAM. BASE) | 23+67.7, 0.0 | ELEV. 689.25 | I.E. 683.04, N I.E. 683.04, S |
| MH-5 | MH 84" DIAM. TYPE 3 W/ ANTIFL. LIP (13' MIN DIAM. BASE) | 24+04.0, 9.8 R | ELEV. 688.56 | I.E. 680.47, N I.E. 677.79, S |
| MH-6 | MH 84" DIAM. TYPE 3 | 25+83.1, 9.7 R | ELEV. 686.57 | I.E. 677.79, N I.E. 677.79, S |
| MH-7 | WEIR CB 72" DIAM. TYPE 2 | 26+58.9, 9.3 R | ELEV. 686.13 | I.E. 677.79, N I.E. 677.79, SE |
| MH-8 | MH 72" DIAM. TYPE 3 | 26+50.1, 0.0 | ELEV. 685.75 | I.E. 673.36, N I.E. 673.16, S |
| MH-9 | WYE CB 84" DIAM. TYPE 2 | 26+73.4, 0.0 | ELEV. 685.56 | I.E. 672.05, N I.E. 677.46, NW I.E. 671.05, S |
| VT-1 | VORTECHS 9000 TREATMENT SYSTEM (2' BASE EXTENTION ALL SIDES) | 23+78.6, 8.1 R | ELEV. 688.95 | I.E. 680.86, N I.E. 680.69, S |



STORM PIPE PROFILE
H: 1" = 20', V: 1" = 5'



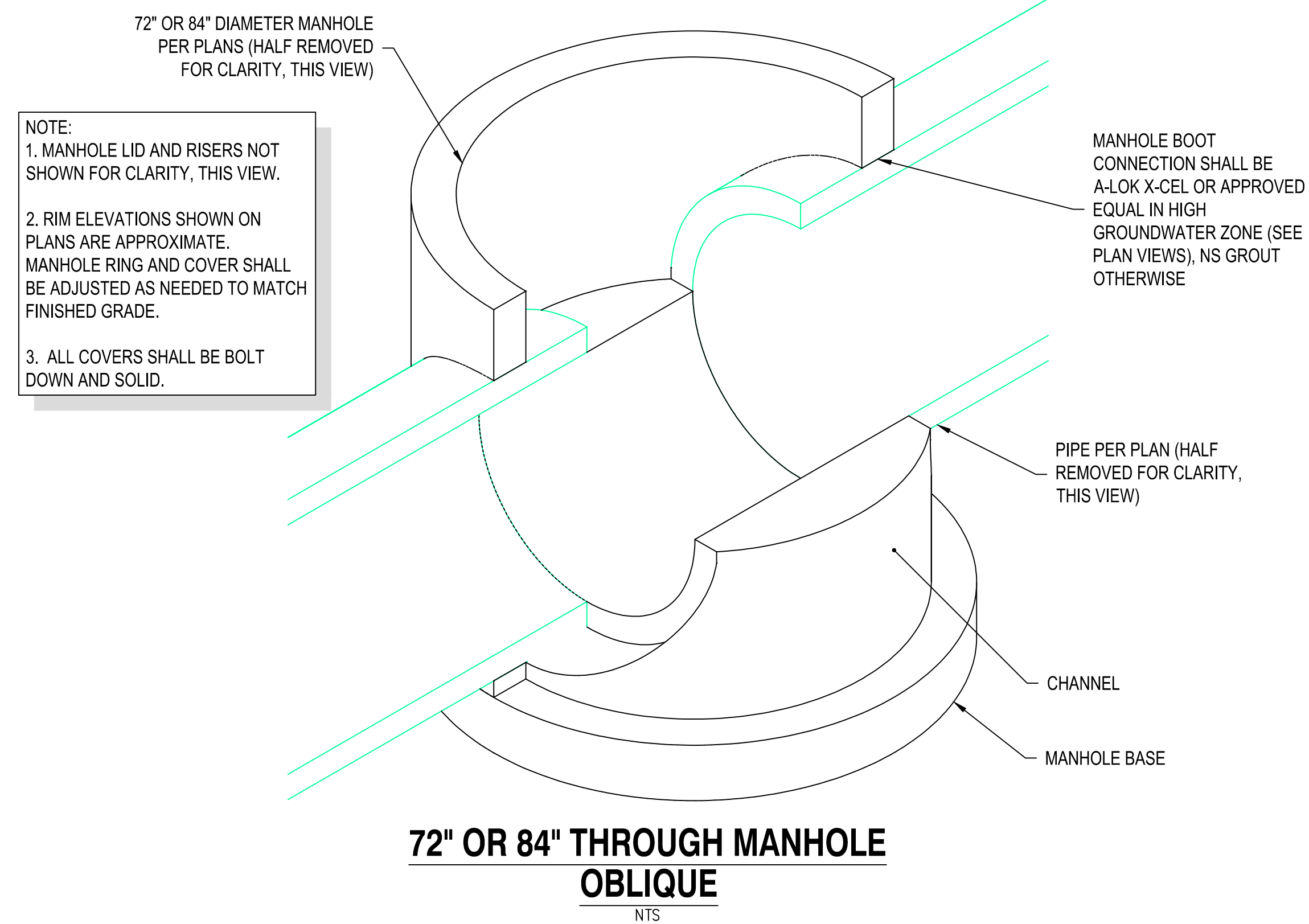
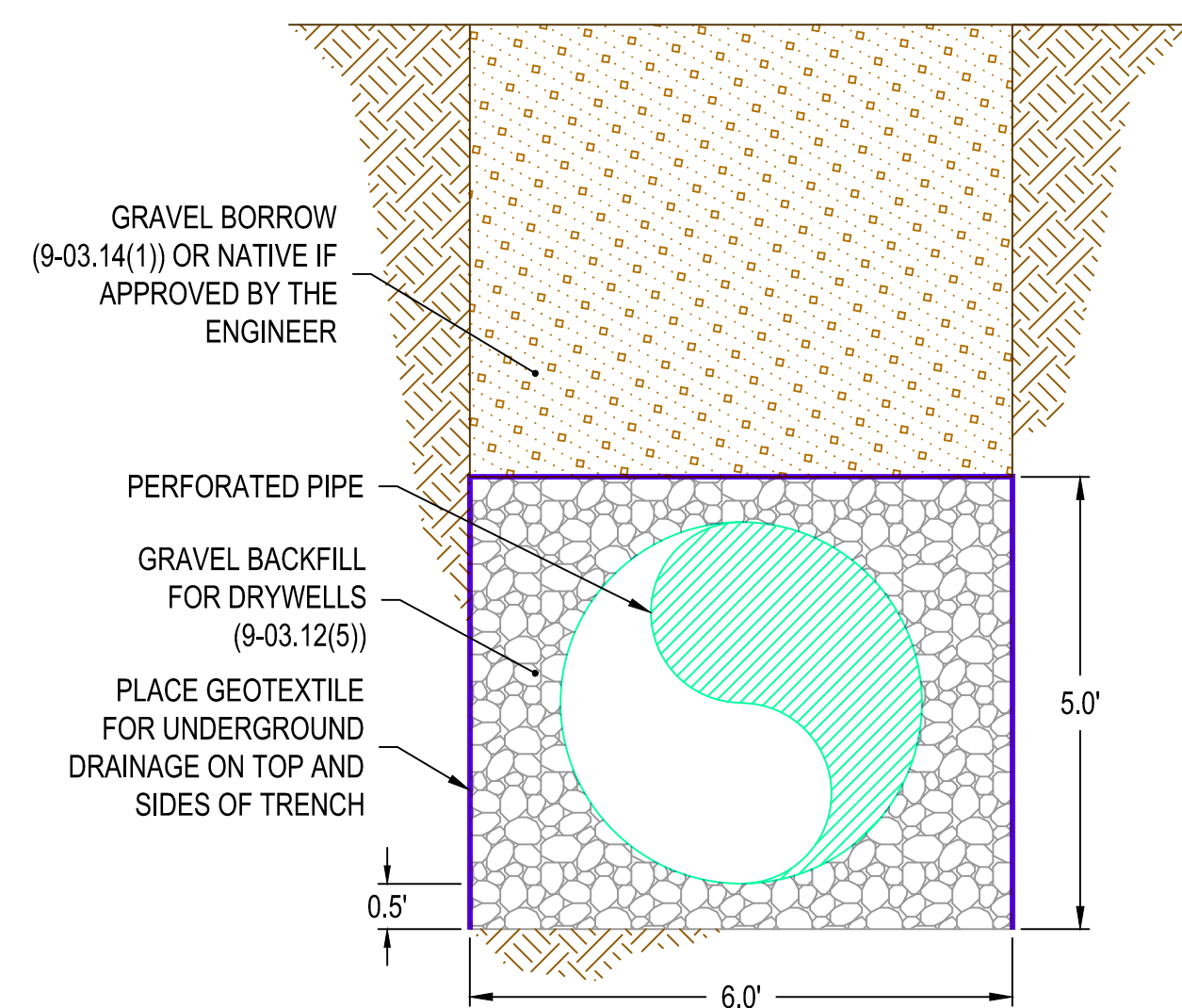
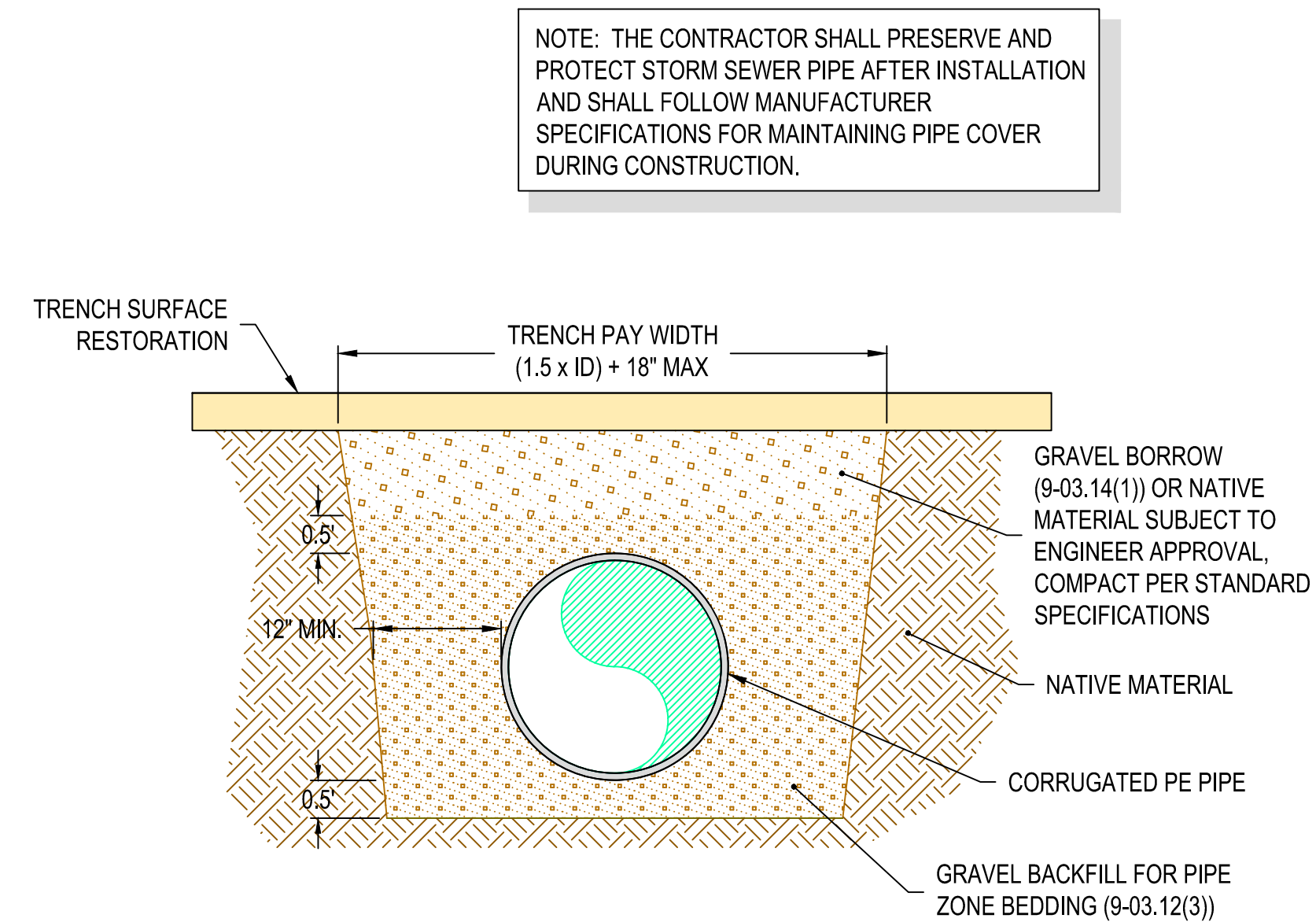
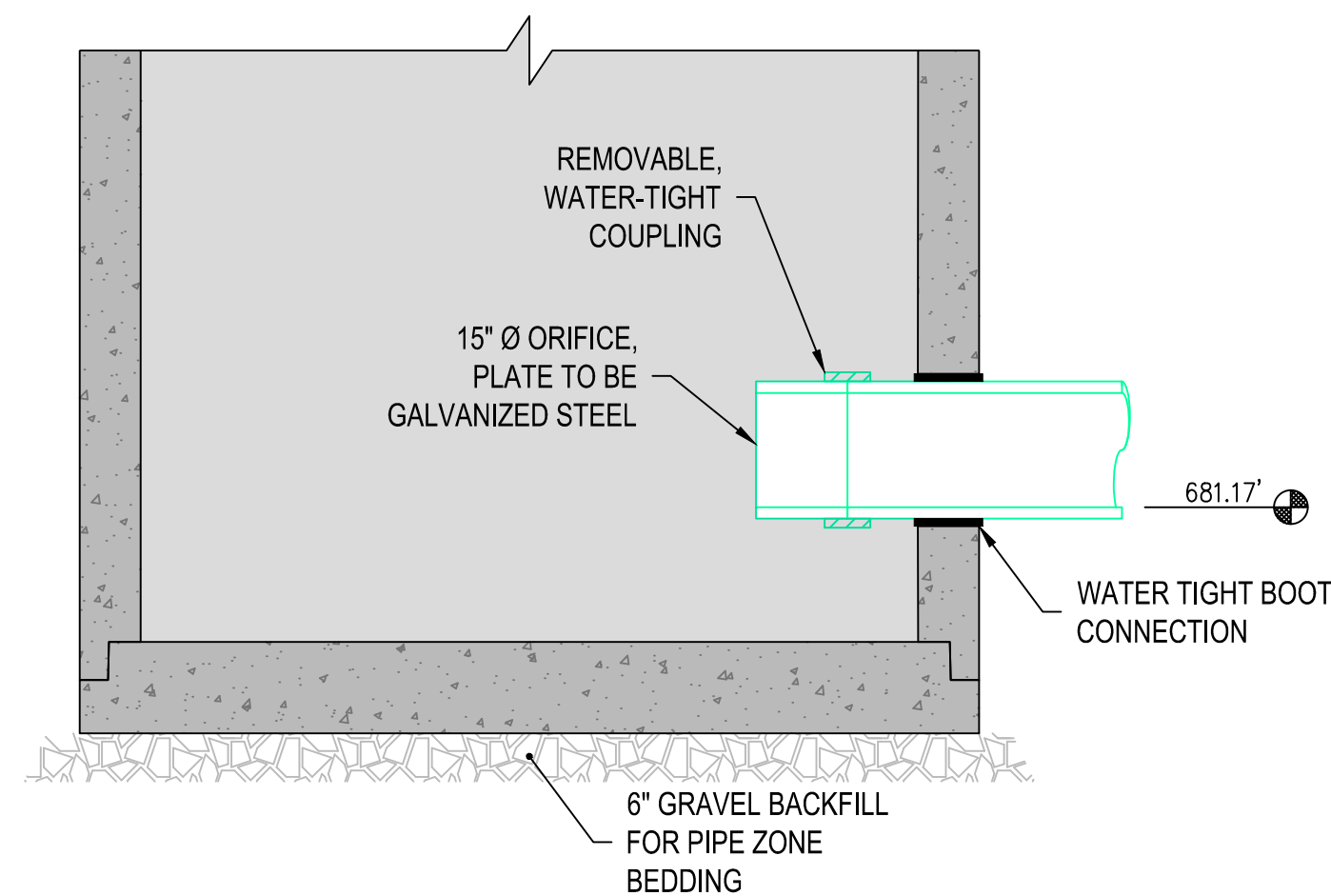
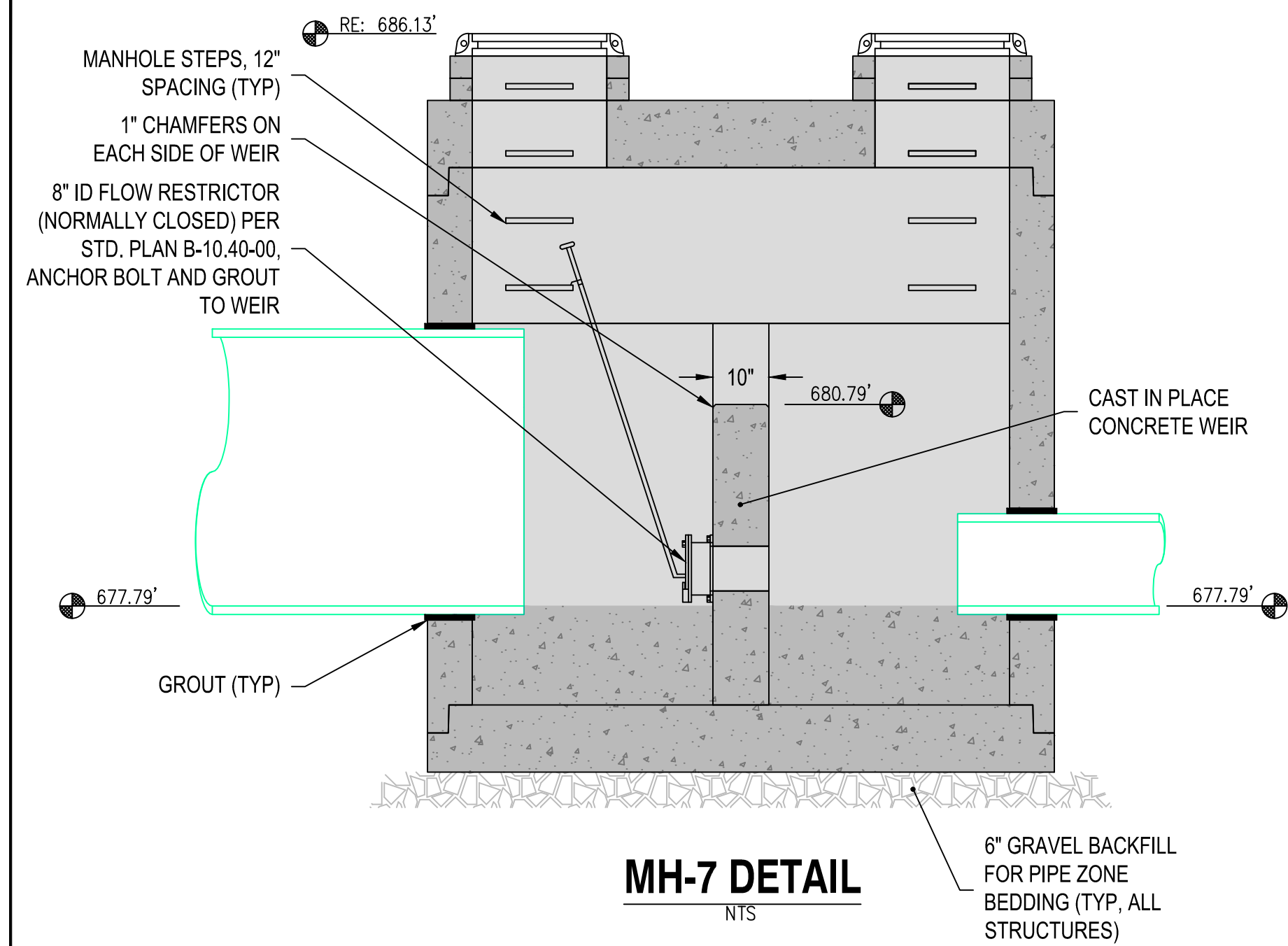
CHELAN COUNTY PUBLIC WORKS
SQUILCHUCK OUTFALL
PROPOSED SITE PLAN SOUTH



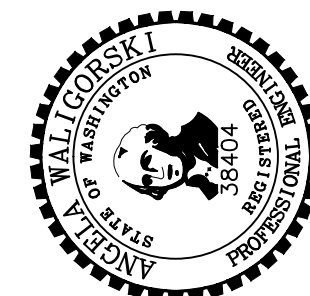
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|---------------|---------------------------|-------------------------|------------------|--------|
| REVIEWED: AMW | PLOT DATE: Jan 12, 2015 | FILE NAME: SQUIP-QV/DWG | | |
| NO. | DATE | DESCRIPTION | BY | REVIEW |
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| SCALE: SHOWN | |
|--|--------------|
| 0' | 1' |
| DRAWING IS FULL SCALE WHEN BAR MEASURES 2" | |
| DWG NO.: C02 | SHEET NO.: 6 |

90% PLANS



90% PLANS

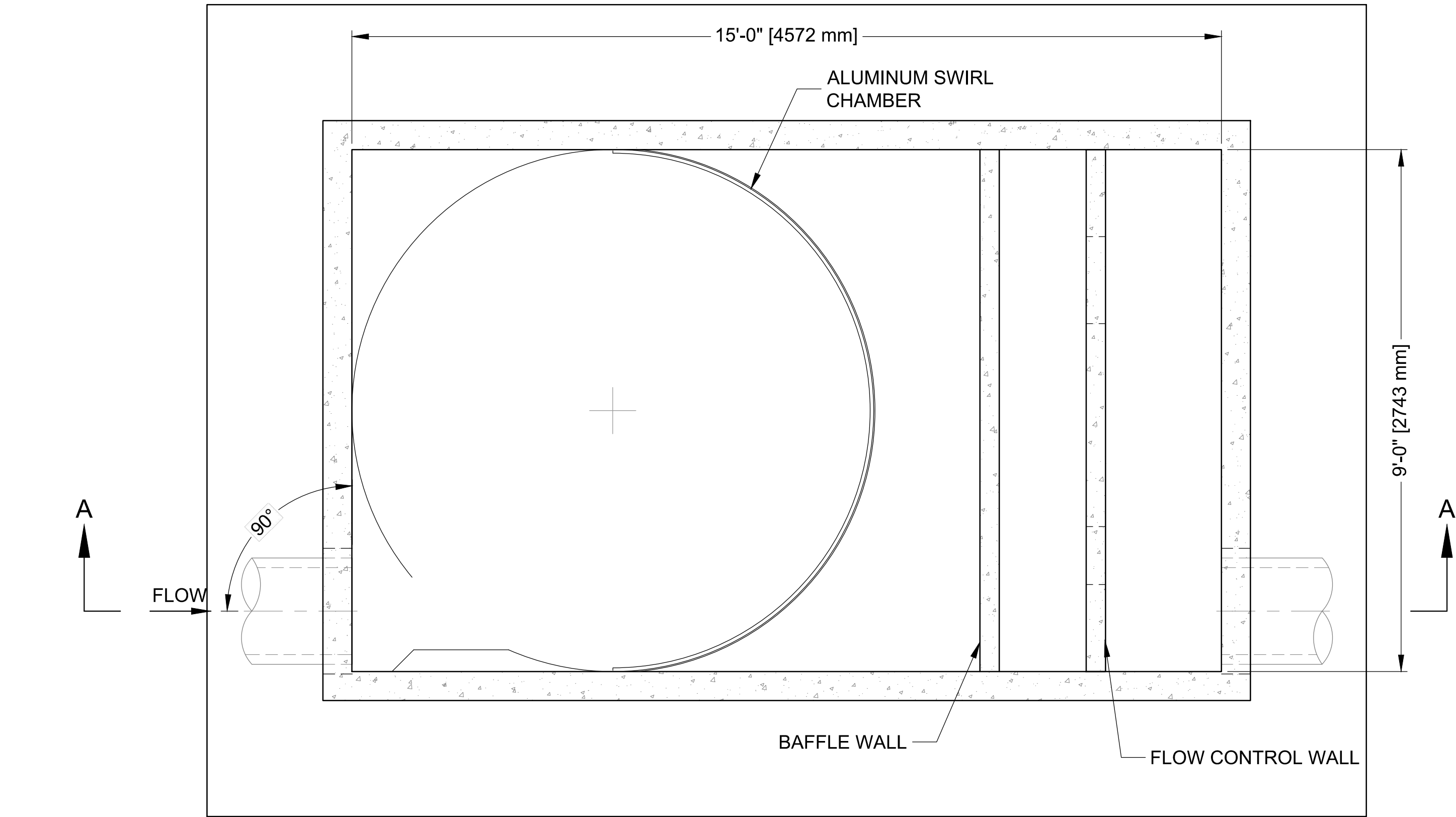


CHELAN COUNTY PUBLIC WORKS

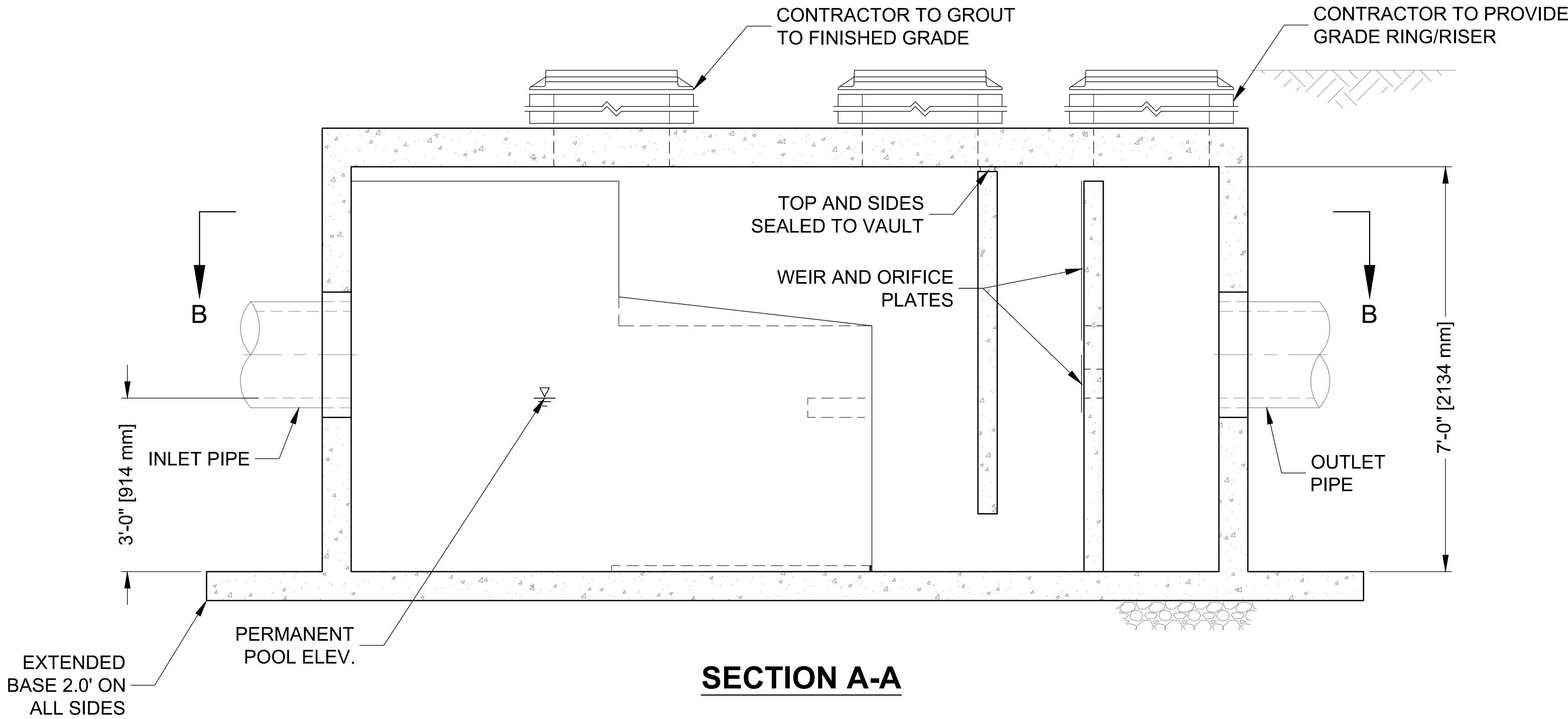
SQUILCHUCK OUT ALL

STORMWATER DETAILS

[illegible]



SECTION B-B



SECTION A-A

VORTECHS 9000 DESIGN NOTES

VORTECHS 9000 RATED TREATMENT CAPACITY IS 5.0 CFS, OR PER LOCAL REGULATIONS. IF THE SITE CONDITIONS EXCEED RATED TREATMENT CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD INLET/OUTLET CONFIGURATION IS SHOWN. FOR OTHER CONFIGURATION OPTIONS, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.contechES.com

SITE SPECIFIC
DATA REQUIREMENTS

| | |
|----------------------------------|------|
| STRUCTURE ID | VT-1 |
| WATER QUALITY FLOW RATE (CFS) | 0.35 |
| PEAK FLOW RATE (CFS) | 5.0 |
| RETURN PERIOD OF PEAK FLOW (YRS) | 2-5 |

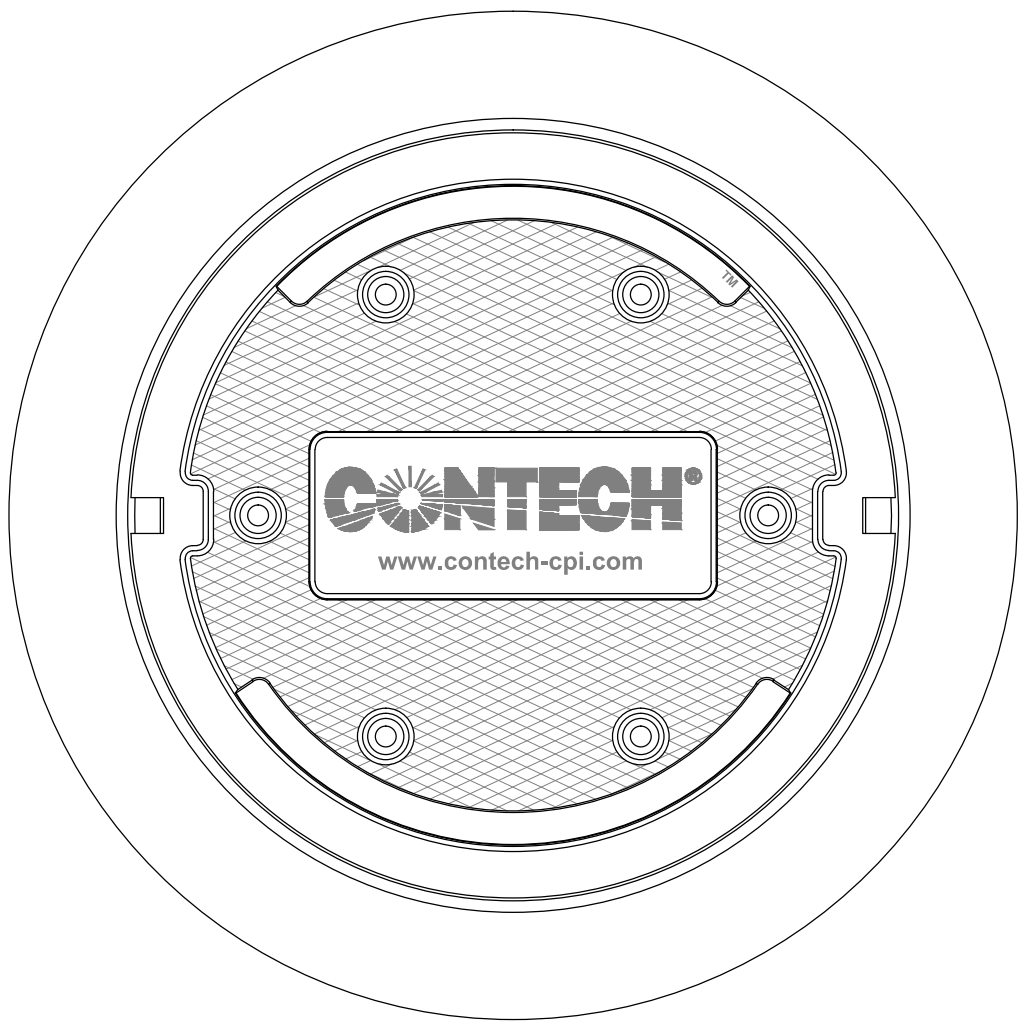
| PIPE DATA: | I.E. | MATERIAL | DIAMETER |
|--------------|--------|----------|----------|
| INLET PIPE 1 | 680.86 | CPEP | 18" |
| INLET PIPE 2 | - | - | - |
| OUTLET PIPE | 680.69 | CPEP | 18 |

| | |
|---------------|--------|
| RIM ELEVATION | 688.85 |
|---------------|--------|

| | | |
|------------------------|-----|-----|
| ANTI-FLOTATION BALLAST | TBD | TBD |
| | TBD | TBD |

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.contechES.com
- VORTECHS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- INLET PIPE(S) MUST BE PERPENDICULAR TO THE VAULT AND AT THE CORNER TO INTRODUCE THE FLOW TANGENTIALLY TO THE SWIRL CHAMBER. DUAL INLETS NOT TO HAVE OPPOSING TANGENTIAL FLOW DIRECTIONS.
- OUTLET PIPE(S) MUST BE DOWN STREAM OF THE FLOW CONTROL BAFFLE AND MAY BE LOCATED ON THE SIDE OR END OF THE VAULT. THE FLOW CONTROL WALL MAY BE TURNED TO ACCOMODATE OUTLET PIPE KNOCKOUTS. ON THE SIDE OF THE VAULT.

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE VORTECHS STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

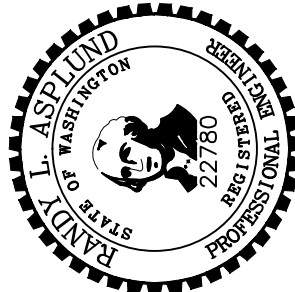
CONTECH
ENGINEERED SOLUTIONS LLC
www.contechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX



THIS PRODUCT MAY BE PROTECTED BY THE FOLLOWING
U.S. PATENT: 5,759,415; RELATED FOREIGN PATENTS.

90% PLANS



CHELAN COUNTY PUBLIC WORKS
SQUILCHUCK OUTFALL
BELLEVILLE



| REVISIONS | DATE | BY | REVIEW |
|-----------|------|----|--------|
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SCALE: SHOWN
0" 1" 2"

DRAWING IS FULL SCALE WHEN
BAR MEASURES 2"

DWG NO.: D02 SHEET NO.: 8 10

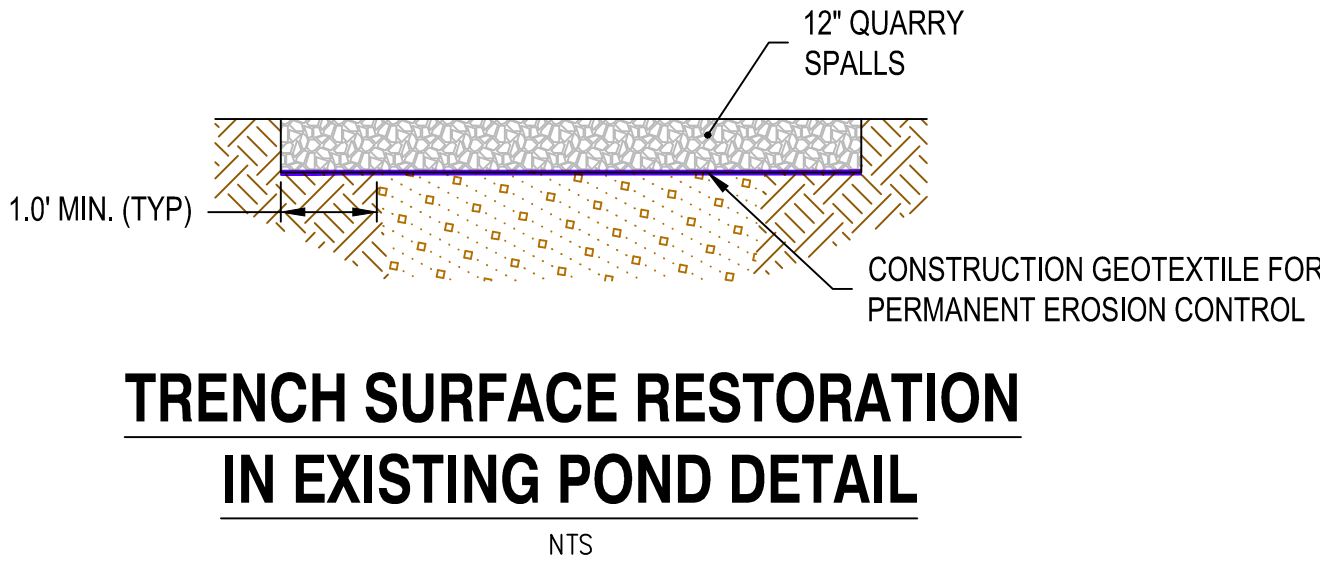
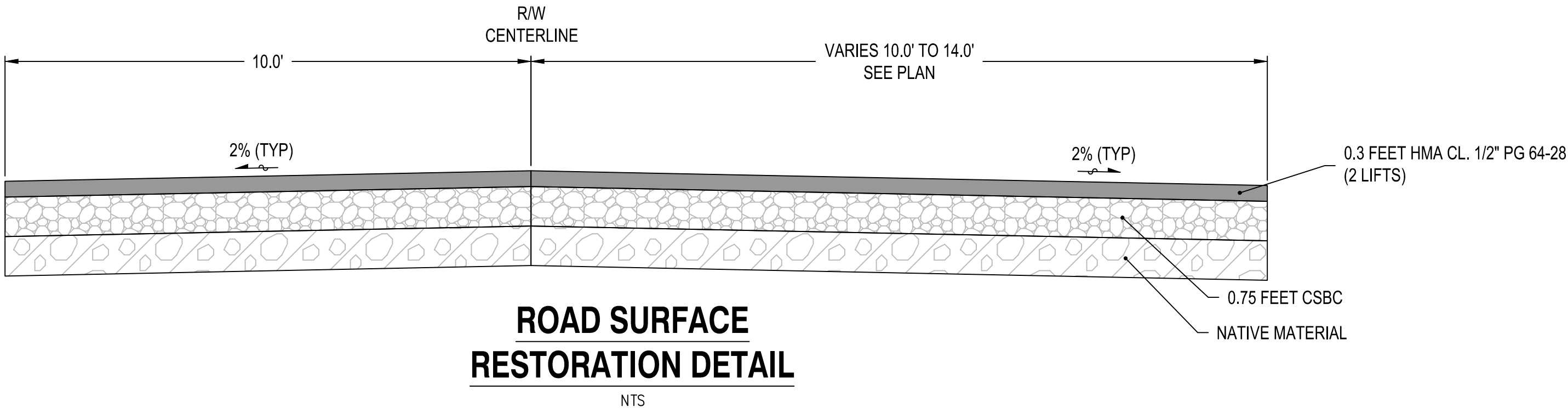
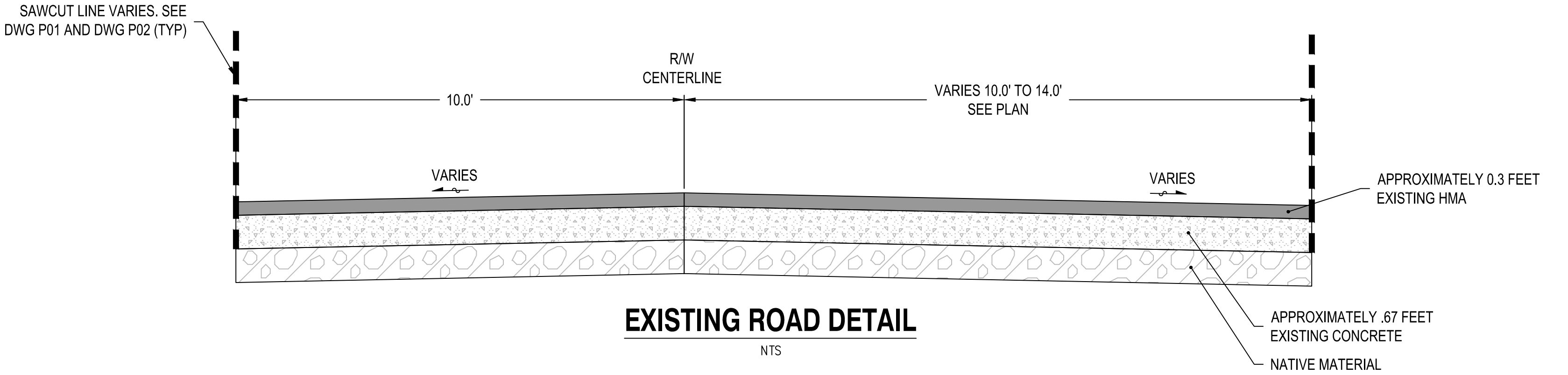
NOTES

1.

EXISTING ROADWAY MATERIAL DEPTHS ARE UNKNOWN. QUANTITIES SHOWN ARE ESTIMATES.

2.

REMOVE EXISTING CONCRETE PANEL AND ASPHALT PER DWG P01 AND DWG P02.



90% PLANS

CHELAN COUNTY PUBLIC WORKS

SQUILCHUCK OUTFALL

PRELIMINARY

RESTORATION DETAILS

| | | | | | | | | | |
|---------------|-------------------------|-----------------------------|------------------|-----------|--|--|--|--|--|
| ENGINEER: MLV | DATE: Jan 12, 2015 | CLIENT: CCD | JOB NO.: 215-132 | REVISIONS | | | | | |
| REVIEWED: AMW | PLOT DATE: Jan 12, 2015 | FILE NAME: SQUICH-DT1LS.DWG | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| NO. | DATE | DESCRIPTION | BY | REVIEW | | | | | |

SCALE: SHOWN

0'

1'

2'

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: D03

SHEET NO.: 9

10

