



CONTRACT SPECIFICATIONS

THE JANUARY 1, 2023 CONSTRUCTION AND MATERIAL SPECIFICATIONS, AS PUBLISHED BY THE OHIO DEPARTMENT OF TRANSPORTATION, SHALL GOVERN ALL ASPECTS OF THE CONTRACT WORK. THE CONTRACTOR SHOULD BE FAMILIAR WITH THESE SPECIFICATIONS AND THEIR PROCEDURAL REQUIREMENTS.

STANDARD DRAWINGS

BP-5.1 DATED 7-15-22
MGS-1.1 DATED 7-21-21
MGS-2.1 DATED 1-19-18
MGS-4.3 DATED 1-18-13

O.U.P.S CALL:

THE CONTRACTOR IS RESPONSIBLE FOR CALLING THE OHIO UTILITIES PROTECTION SERVICE AT LEAST TWO DAYS BEFORE DIGGING. THE TOLL-FREE NUMBER IS (800) 362-2764.

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.

UTILITY LINES

ALL EXPENSES INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITY(IES). THE CONTRACTOR AND UTILITY ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING OPERATIONS ON THIS PROJECT, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER, THE REGISTERED UTILITY PROTECTION AGENCY/SERVICE, AND THE OWNERS OF ANY OTHER UTILITIES (PUBLIC AND/OR PRIVATE) THAT MAY HAVE UTILITY LINES OR FACILITIES WITHIN THE VICINITY OF THIS PROJECT BUT WHO ARE NOT MEMBERS OF THE REGISTERED UTILITY PROTECTION SERVICE.

OHIO811: 1-800-382-2784 (CONTACT NON-MEMBERS DIRECTLY).

WORK LIMITS

ALL PHYSICAL WORK SHALL BE COMPLETED WITHIN THE TOWNSHIP RIGHT-OF-WAY ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

ROAD CLOSED/MAINTENANCE OF TRAFFIC

RIVER STREET WILL BE CLOSED FOR A MAXIMUM OF 45 DAYS. LOCAL TRAFFIC WILL BE DETOURED. CONTRACTOR TO SUBMIT PLANS TO CITY ENGINEER FOR REVIEW.

ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48" X 30" - "ROAD CLOSED" SIGNS, SIGN SUPPORTS, BARRICADES, GATES, GATES AND LIGHTS, AS DETAILED IN STANDARD CONSTRUCTION DRAWING MT-101.60 AT LOCATIONS NEAR THE SLIPS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC.

ITEM 659 - SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE EASEMENT LINES. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 201 - CLEARING AND GRUBBING

CONTRACTORS SHOULD INSPECT THE AREAS WHERE THE RETAINING WALLS ARE TO BE CONSTRUCTED TO FIND THE BULK OF THIS WORK. SPECIFIC TREES TO BE REMOVED HAVE NOT BEEN NOTED ON THESE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE SCOPE OF WORK REQUIRED TO CLEAR THE AREAS NEEDED TO CONSTRUCT THE VARIOUS ELEMENTS OF THIS PROJECT.

ITEM 507 - STEEL PILES, MISC.: SOLDIER PILES W24X62

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLDIER PILES INTO DRILLED HOLES. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBER THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50. DO NOT FIELD WELD OR SPLICE SOLDIER PILES; WITH PANEL SEATS BEING THE EXCEPTION.

MEASUREMENT FOR PAYMENT WILL BE LIMITED TO THE DISTANCE BETWEEN THE TOP OF WALL ELEVATION AND THE BOTTOM OF THE DRILLED SHAFT, AS DETERMINED BY THE ENGINEER. THE DEPARTMENT WILL PAY FOR SOLDIER PILES AT THE CONTRACT UNIT PRICE PER FOOT OF ITEM 507 - STEEL PILES, MISC.: SOLDIER PILES - HP10X42.

ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, PLUG PILES, AS PER PLAN

THESE SHAFTS ARE TO BE UN-REINFORCED NON-STRUCTURAL "PLUG PILES".

THIS WORK SHALL BE PER ITEM 524 EXCEPT REINFORCING WILL NOT BE USED IN THE SHAFT. EACH PLUG PILE SHALL BE CENTERED BETWEEN EACH REINFORCED 30" DIAMETER DRILLED SHAFT AND DRILLED TO THE TOP OF ROCK PER THE PLUG PILE DRILLED SHAFT DETAILS ON SHEET 9 AND SUMMARY ON SHEET 10, AND BACKFILLED WITH UN-REINFORCED CLASS OCI CONCRETE.

SEQUENCE OF INSTALLATION

THE INSTALLATION SEQUENCE SHALL BE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AND OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN A 48 HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THIS REQUIREMENT IS PERMISSIBLE.

PROTECTION OF UNATTENDED OPEN SHAFT CARE SHALL BE EXERCISED AS TO COVER UNATTENDED OPEN SHAFTS. TEMPORARY COVERS SHALL BE OF ADEQUATE STRENGTH TO PREVENT A PERSON OR ANIMAL FROM FALLING IN. NO DRILLED SHAFT EXCAVATION SHALL BE LEFT UN-POURED OVERNIGHT.

ACCESS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS. ANY TEMPORARY GRADING, AGGREGATE, DRAINAGE, SHEETING ETC. NEEDED FOR ACCESS TO THE WORK AREA SHALL BE INCLUDED IN THE BID PRICE FOR THE DRILLED SHAFTS. THE COST OF ANY EXCAVATION AND SUBSEQUENT REPLACEMENT OF EMBANKMENT (PER ITEM 203 EMBANKMENT) SHALL BE INCLUDED IN THE VARIOUS BID ITEMS FOR THE DRILLED SHAFT AND NO SEPARATE PAYMENT WILL BE MADE. PAYMENT IS FULL COMPENSATION FOR CONSTRUCTING THE DRILLED SHAFTS, INCLUDING FURNISHING AND PLACING CONCRETE AND ANY SONOTUBE REQUIRED FOR FORMING THE TOPS OF THE SHAFTS. PAYMENT FOR SOIL OVERBURDEN DRILLING, WHICH IS GROUND LEVEL TO THE TOP OF THE SHAFT, SHALL BE INCLUSIVE OF

ITEM 524 DRILLED SHAFTS, 30" DIAMETER, PLUG PILES, AS PER PLAN.

MEASUREMENT FOR PAYMENT FOR DRILLED SHAFTS, AS PER PLAN, WILL BE MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF THE SHAFT TO THE BOTTOM OF THE SHAFT, AS DETERMINED BY THE ENGINEER.

ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN
ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, INTO BEDROCK, AS PER PLAN

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR SLOPE STABILIZATION. THE 30" DRILLED SHAFTS ARE REINFORCED WITH SOLDIER PILES INSTEAD OF REINFORCING STEEL CASES. FURNISHES AND INSTALL DRILLED SHAFTS IN ACCORDANCE WITH CMS 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

EXCAVATE THE HOLE FOR THE SHAFTS WITHIN 3 INCHES OF THE PLAN LOCATION IN THE HORIZONTAL PLANE. IF FIELD CONDITIONS INDICATE GREATER DEPTHS, NOTIFY THE ENGINEER FOR FURTHER EVALUATION. PLACE THE SOLDIER PILE VERTICALLY WITHIN THE HOLE SO IT IS NOT INCLINED MORE THAN 1" BETWEEN THE TOP AND BOTTOM.

PLACE THE SOLDIER PILE SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF CONSTRUCTION. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES. SUPPORT THE SOLDIER PILE SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT.

USE CLASS OCI CONCRETE ACCORDING TO CMS 511. THE CONTRACTOR MAY PLACE CONCRETE USING THE FREE FALL METHOD PROVIDED THE DEPTH OF GROUNDWATER IS LESS THAN 6 INCHES AND THE CONCRETE FALLS WITHOUT STRIKING THE SIDES OF THE HOLE. POURING CONCRETE ALONG THE WEB OF THE SOLDIER PILE IS ACCEPTABLE.

CHECK THE POSITION, THE VERTICAL ALIGNMENT, AND ORIENTATION OF THE SOLDIER PILE IMMEDIATELY AFTER CONCRETE PLACEMENT. MAKE CORRECTIONS AS NECESSARY TO MEET THE ABOVE TOLERANCES.

SEQUENCE OF INSTALLATION

THE INSTALLATION SEQUENCE SHALL BE SUCH THAT NO REINFORCED DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN 24 HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THIS CRITERIA IS PERMISSIBLE. NO EXCAVATION SHALL BE PERFORMED IN FRONT OF THE WALL FOR 3 DAYS AFTER PLACING OF CONCRETE.

PROTECTION OF UNATTENDED OPEN SHAFTS

CARE SHALL BE EXERCISED AS TO COVER UNATTENDED OPEN SHAFTS. TEMPORARY COVERS SHALL BE OF ADEQUATE STRENGTH TO PREVENT A PERSON OR ANIMAL FROM FALLING IN.

ACCESS

ANY TEMPORARY GRADING, CRANE MATS, AGGREGATE, DRAINAGE, ETC. NEEDED FOR ACCESS TO THE WORK AREA SHALL BE INCLUDED IN THE BID PRICE FOR THE DRILLED SHAFTS. ANY FORM WORK REQUIRED TO CONSTRUCT THE TOPS OF THE DRILLED SHAFTS SHALL BE INCLUDED IN PAYMENT FOR THIS ITEM.

MEASUREMENT FOR PAYMENT OF DRILLED SHAFTS ABOVE BEDROCK, AS PER PLAN, WILL BE MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF THE SHAFT TO THE TOP OF BEDROCK, AS DETERMINED BY THE ENGINEER. MEASUREMENT FOR PAYMENT OF DRILLED SHAFTS INTO BEDROCK, AS PER PLAN, WILL BE MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF BEDROCK TO THE BOTTOM OF SHAFT, AS DETERMINED BY THE ENGINEER.

EROSION CONTROL

ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND OTHER AREAS AS SHOWN ON PLANS SHALL BE PROPERLY RESTORED WITH 4" OF TOPSOIL, SEEDING AND MULCHING PER THE SPECIFICATIONS.

IN ALL DISTURBED AREAS, THE CONTOURS WILL BE RESTORED IN A MANNER THAT MAINTAINS EXISTING DRAINAGE PATTERNS. FOLLOWED BY SEEDING AND MULCHING. IF, DUE TO WEATHER, FINAL GRADING CANNOT BE ACCOMPLISHED IMMEDIATELY, TEMPORARY SEEDING, WITHIN THIRTY DAYS, WILL BE USED UNTIL FINAL RESTORATION CAN OCCUR.

SILT FENCING SHALL BE EXTRA STRENGTH SYNTHETIC FILTER FABRIC HAVING A MINIMUM FLOW RATE OF 0.3 GAL./SQ. FT./MINUTE AND SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0°F. TO 120°F. SEE DETAIL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING INSPECTIONS OF ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER ALL STORMS THAT PRODUCE MORE THAN ONE-HALF (1/2") INCH TOTAL RAINFALL. ANY NEEDED REPAIRS SHALL BE PERFORMED IMMEDIATELY. THE CONTRACTOR SHALL DOCUMENT ALL INSPECTIONS AND ANY REPAIRS THAT ARE DONE TO MAINTAIN EFFICIENCY.

CONTRACTOR SHALL REMOVE DAILY ALL MUD, SOIL, AND DEBRIS THAT MAY BE TRACKED ONTO EXISTING STREETS, DRIVES OR WALKS BY HIS EQUIPMENT OR THAT OF SUBCONTRACTORS OR SUPPLIERS.

THE INSTALLED EROSION CONTROL FEATURES MUST NOT ACT IN A MANNER THAT CAUSES THE AREA TO FLOOD.

THE CONTRACTOR IS TO PLUG ANY OPEN ENDS OF INSTALLED STORM SEWER AND ALL OTHER CONNECTING PIPES NOT PROTECTED BY EROSION CONTROLS, SUCH THAT AGGREGATES DO NOT CLOG THE NEW SEWER SYSTEM.

ITEM 832 - EROSION CONTROL

EROSION CONTROL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE OF LUMPS SUM.

ABBREVIATIONS:

@ - AT
CL - CENTERLINE
CLR. - CLEAR, CLEARANCE
CY - CUBIC YARD
D.S. - DRILLED SHAFT
DIA. - DIAMETER
EOP - EDGE OF PAVEMENT
EQ. SPA. - EQUAL SPACES
EX. - EXISTING
F.F. - FAR FACE
FT. - FEET
GAL - GALLONS
LS - LUMP SUM
LT. - LEFT
MIN. - MINIMUM
MISC. - MISCELLANEOUS
N.F. - NEAR FACE
N.P.C.P.P. - NON-PERFORATED CORRUGATED PLASTIC PIPE
P.C.P.P. - PERFORATED CORRUGATED PLASTIC PIPE
RT. - RIGHT
SQ. - SQUARE
STA. - STATION
SY - SQUARE YARD
TR - TOWNSHIP ROAD
TYP. - TYPICAL

THE PRIMARY UTILITIES WITHIN THE CITY OF WILLOUGHBY AREA:

STORM AND SANITARY SEWERS:

CITY OF WILLOUGHBY
ONE PUBLIC SQUARE
WILLOUGHBY, OH 44094
PHONE: 440-951-2800
CONTACT: RICH PALMISANO

TELECOM:

AT&T OHIO
13630 LORAIN AVE.
CLEVELAND, OH 44125
PHONE: 216-476-6067
CONTACT: SCOTT DIBINSKI

ELECTRIC:

THE ILLUMINATING COMPANY
7757 AUBURN ROAD, UNIT 24
PAINESVILLE, OH 44077
PHONE: 440-358-4991
CONTACT: MICHAEL SANDERS

WATER MAINS:

LAKE COUNTY DEPARTMENT OF UTILITIES
ADMINISTRATION BUILDING
105 MAIN STREET
PAINESVILLE, OH 44077
PHONE: 440-350-2652
CONTACT: RANDY ROTHLSBERGER

GAS:

DOMINION ENERGY
ATTN: 2ND FLOOR RELOCATION DESIGN
320 SPRINGSIDE DR. SUITE 320
AKRON, OHIO 44333
EMAIL: RELOCATION@DOMINIONENERGY.COM
PHONE: 330-664-2409

Table with 5 columns: ITEM NO., ITEM DESCRIPTION, QUANTITY, UNIT, SHEET REFERENCE. Contains 832 rows of construction items and quantities.

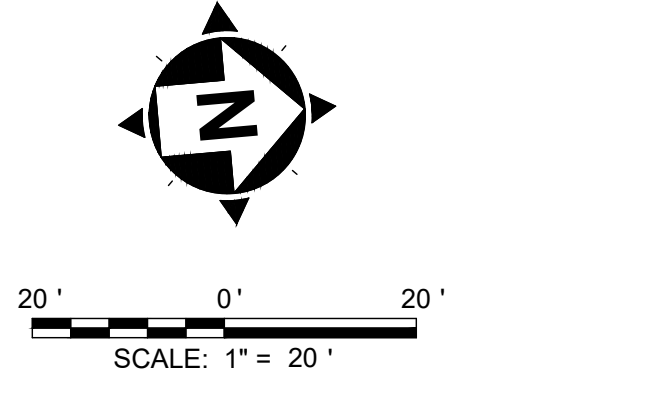
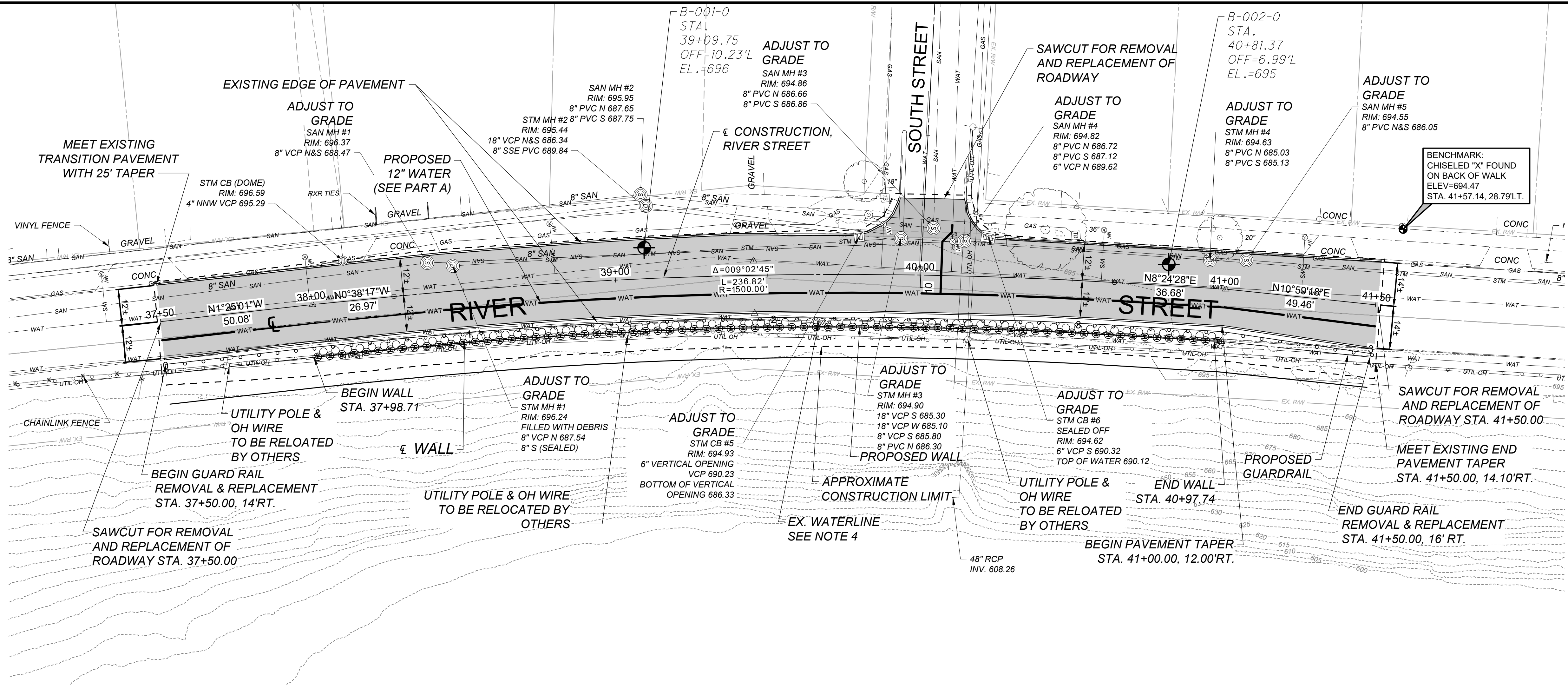
\* SEE PART 'A' DRAWINGS AND SPECIFICATIONS FOR CONSTRUCTION.



Table with 5 columns: NO, REVISION, DATE, SCALE, AS SHOWN, DATE, DESIGNED BY, DRAWN BY, CHECKED BY.

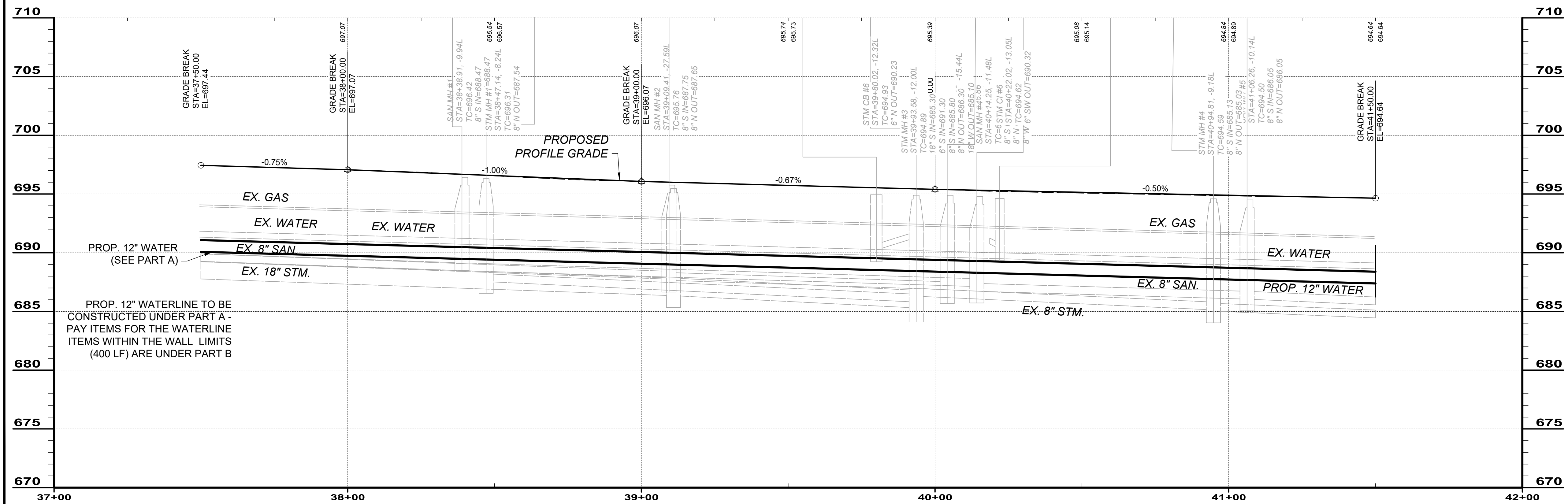
CITY OF WILLOUGHBY
RIVER STREET - PART B
SOIL STABILIZATION
NOTES & QUANTITIES

Table with 2 columns: PROJECT NO., DRAWING NAME, SHEET, OF.



- PLAN LEGEND:**
- PROPOSED PAVEMENT
  - BORING LOCATION

- NOTES**
1. FOR DRILLED SHAFT ELEVATION TABLE SEE SHEET 18 OF 18.
  2. FOR DRILLED SHAFTS DETAILS, SEE SHEET 16 OF 18.
  3. FOR QUANTITIES SEE SHEET 2 OF 18.
  4. REMOVE EXISTING ABANDONED WATERLINE TO THE EXTENTS NECESSARY TO CONSTRUCT WALL. A QUANTITY OF 200 FT HAS BEEN PROVIDED IN THE ESTIMATED QUANTITIES TO BE PAID FOR UNDER ITEM 202 - PIPE REMOVED.



**RIVER STREET PROFILE (3)**  
 1" = 5' V  
 1" = 20' H

NO	REVISION	DATE

SCALE: AS SHOWN	DATE: 7/31/24	DESIGNED BY: MPS	DRAWN BY: TMK	CHECKED BY: TAB
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**CITY OF WILLOUGHBY**  
**RIVER STREET - PART B**  
**SOIL STABILIZATION**

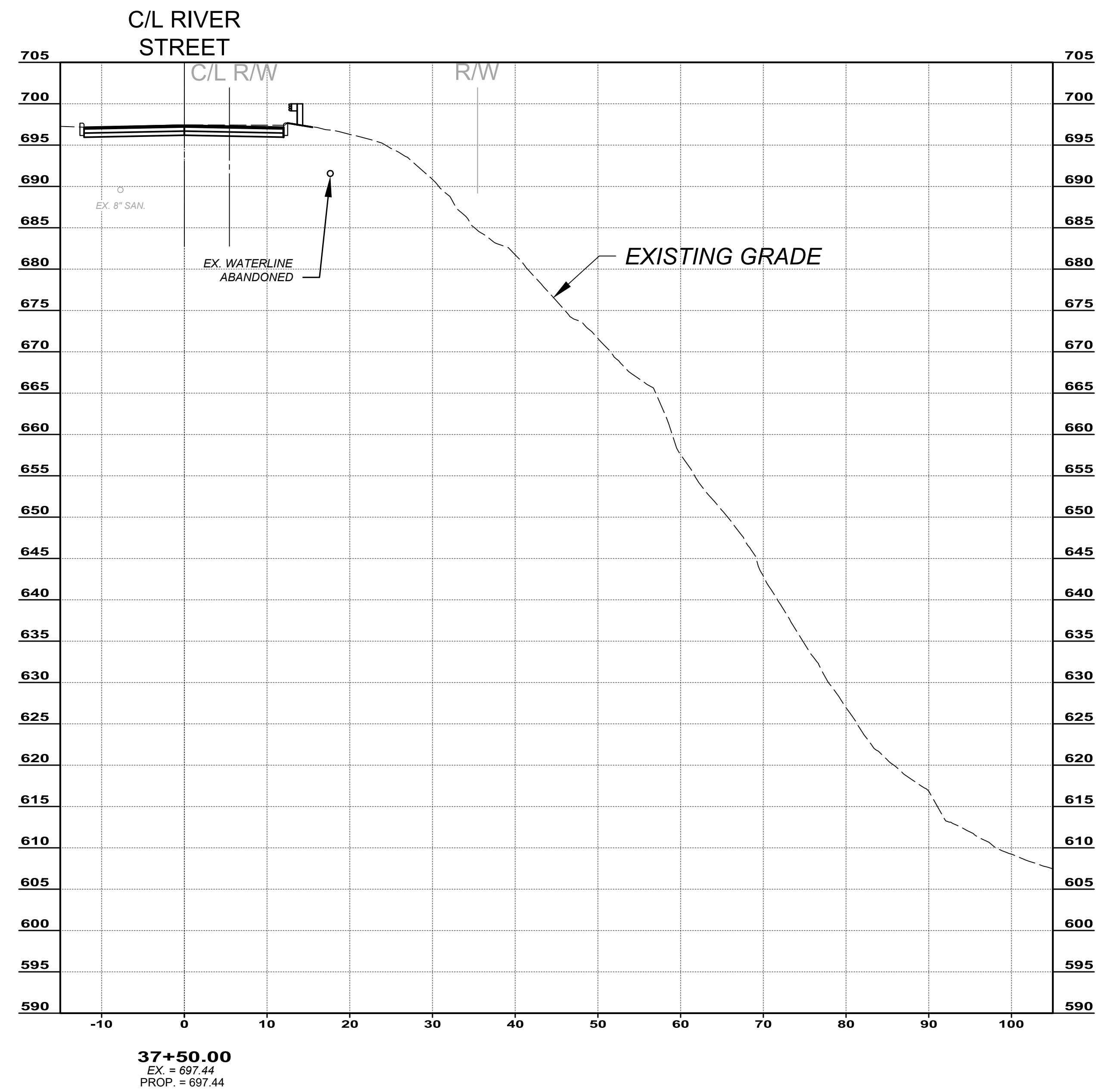
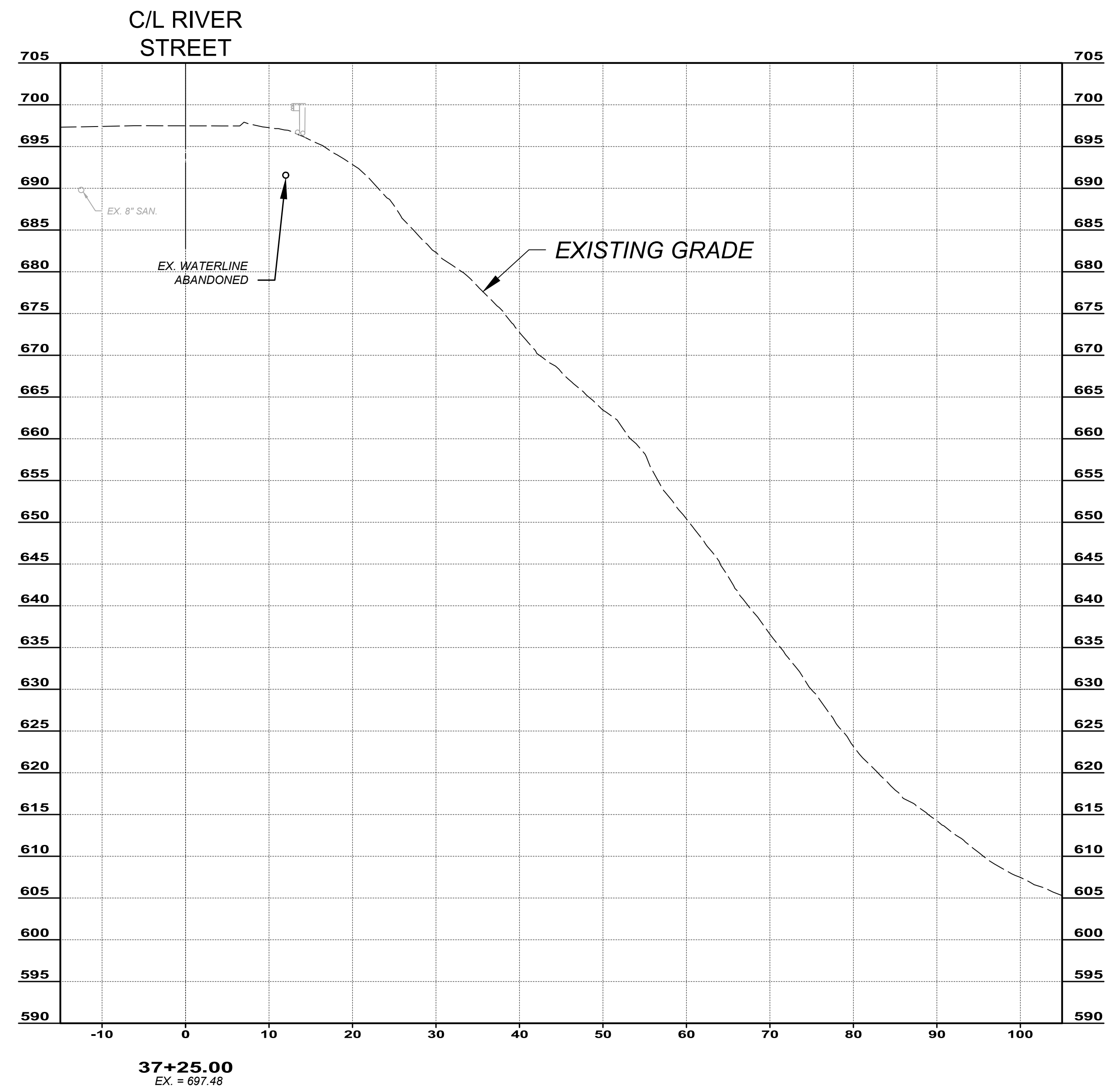
**PLAN AND PROFILE - ROAD**  
**STA. 37+00.00 TO STA. 42+00.00**

PROJECT NO: <b>231093</b>	
DRAWING NAME: <b>PNP</b>	
SHEET <b>3</b>	OF <b>18</b>







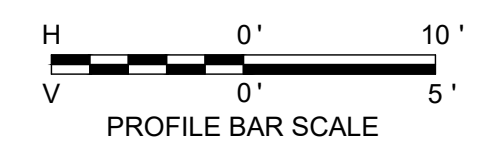
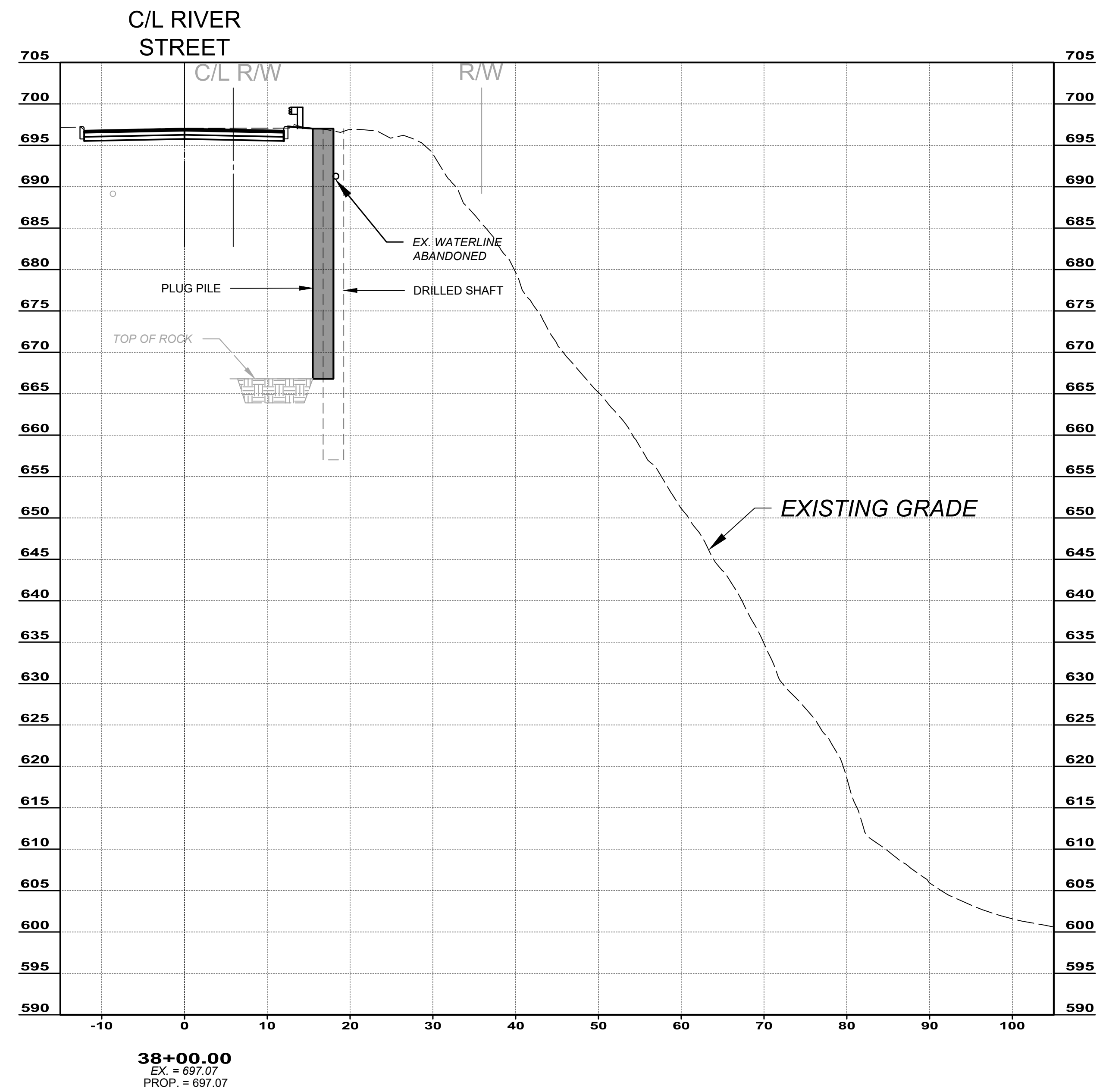
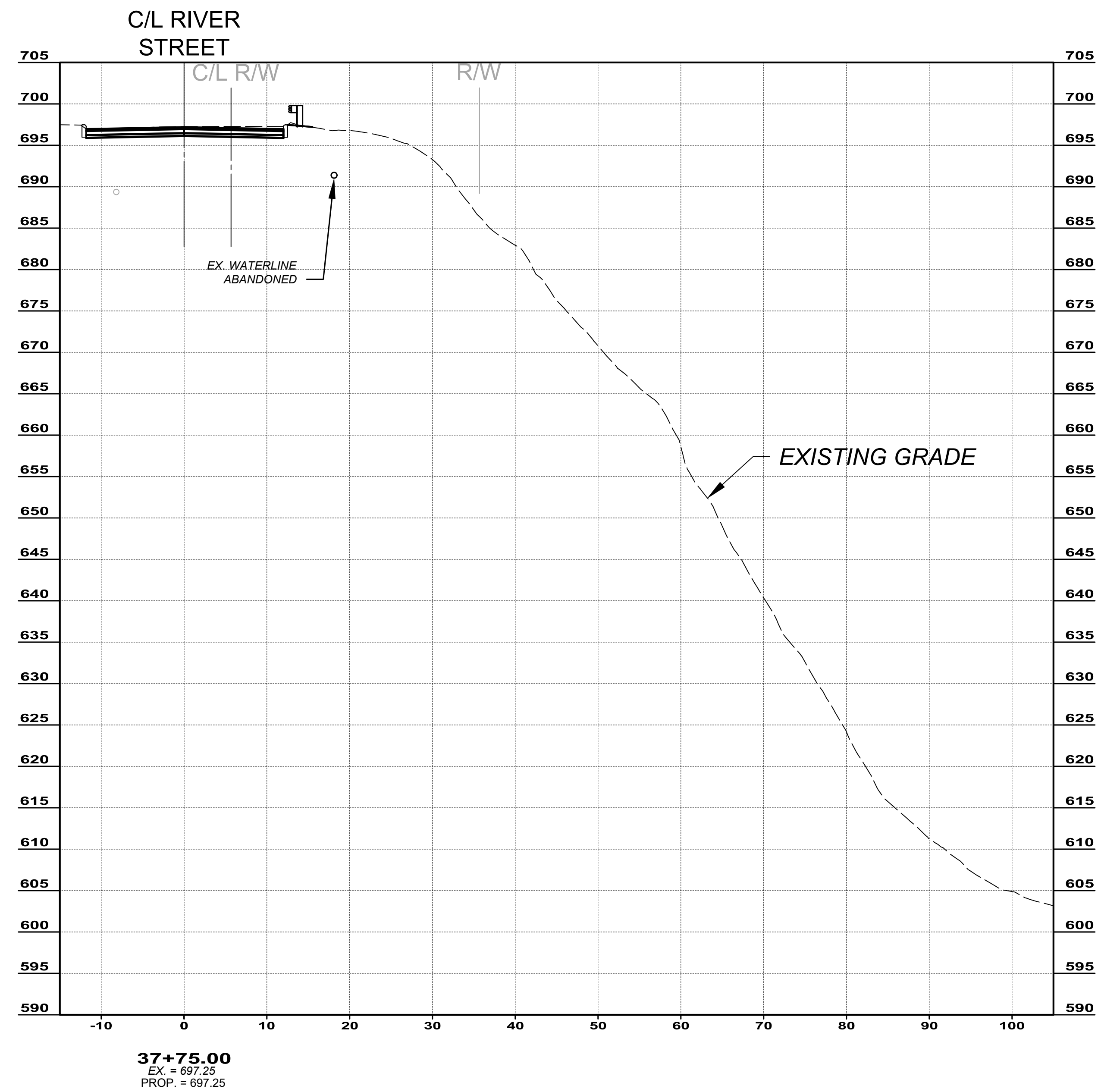


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**CITY OF WILLOUGHBY**  
**RIVER STREET - PART B**  
**SOIL STABILIZATION**  
**CROSS SECTIONS**  
**STA. 1+75.00 TO STA. 2+00.00**

PROJECT NO:	
231093	
DRAWING NAME	
XS1	
SHEET	OF
6	18



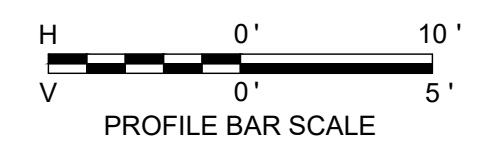
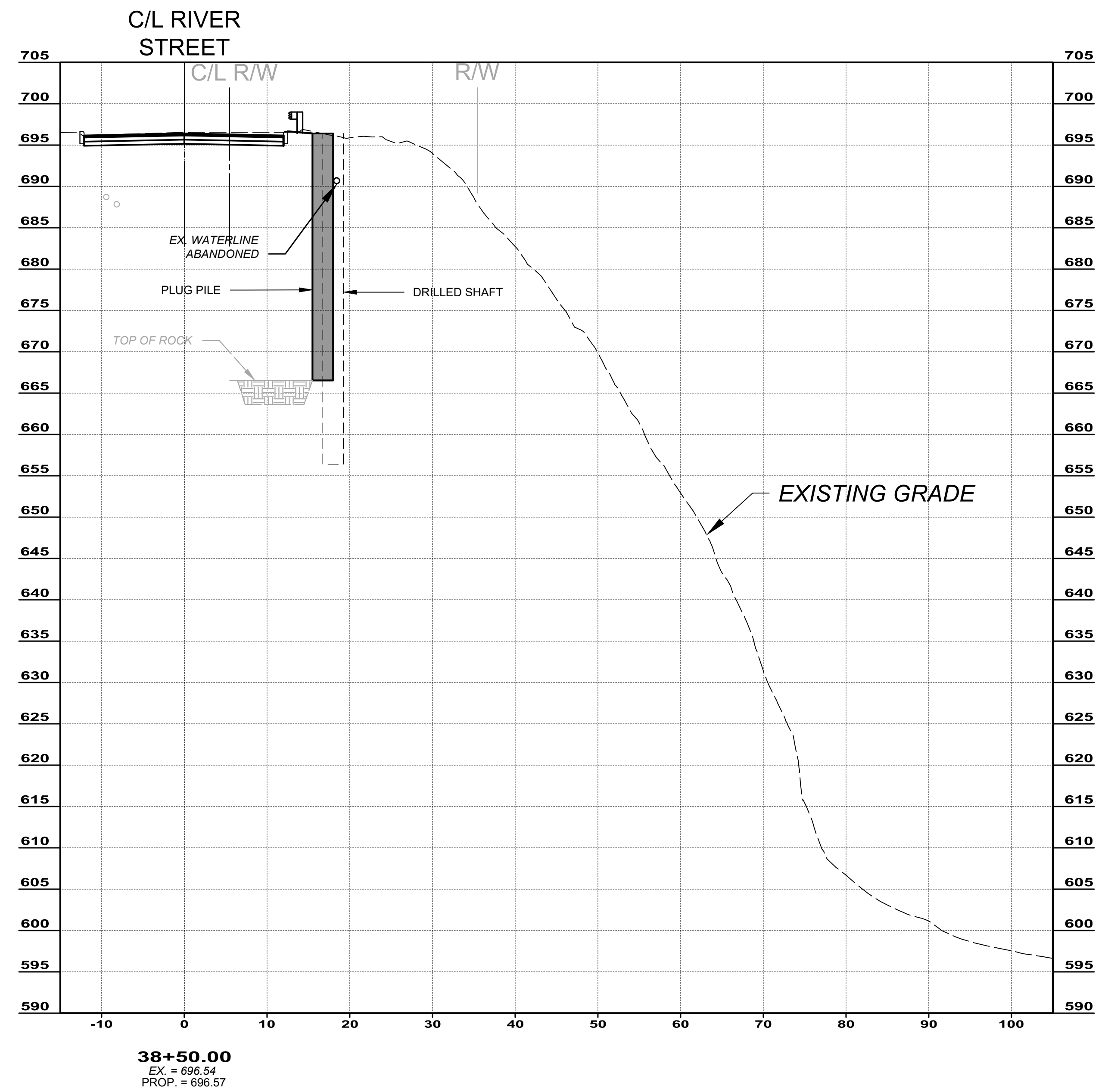
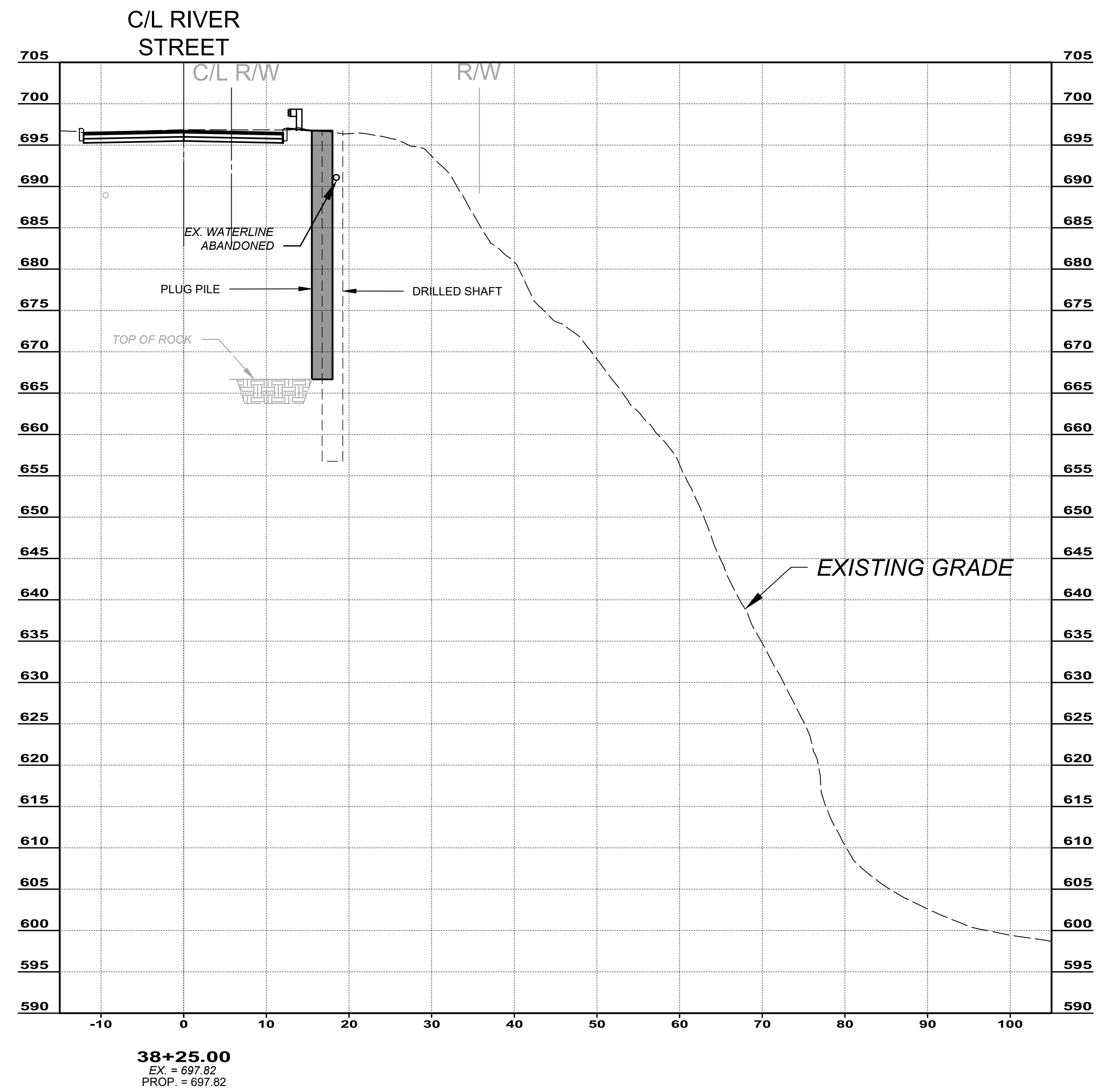
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**CITY OF WILLOUGHBY**  
**RIVER STREET - PART B**  
**SOIL STABILIZATION**

**CROSS SECTIONS**  
**STA. 2+25.00 TO STA. 2+50.00**

PROJECT NO:	
231093	
DRAWING NAME	
XS2	
SHEET	OF
7	18



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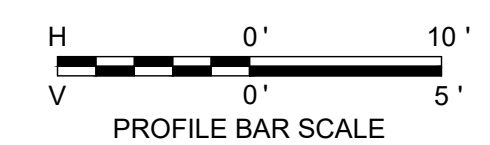
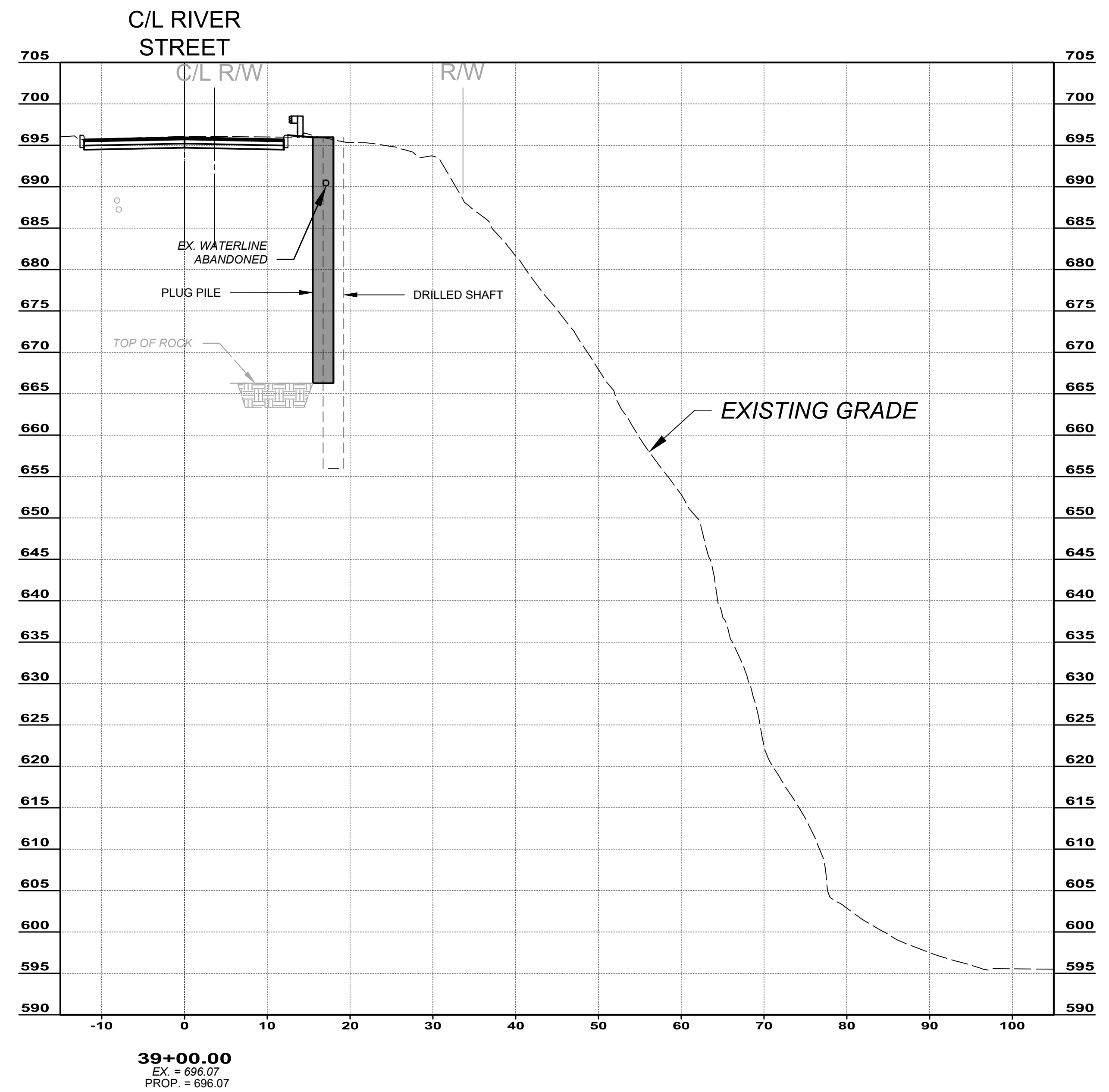
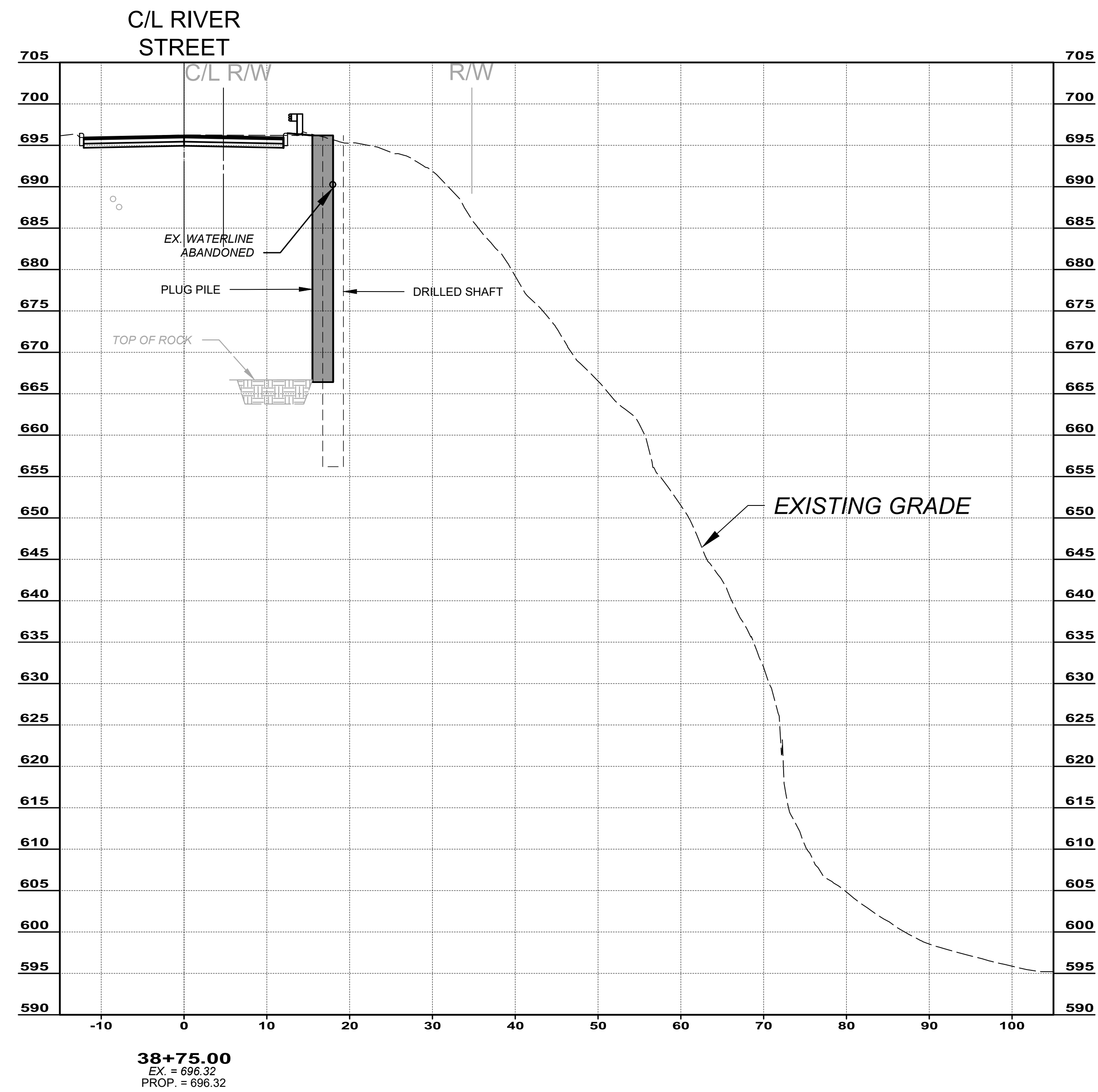
  

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**CITY OF WILLOUGHBY**  
**RIVER STREET - PART B**  
**SOIL STABILIZATION**  
**CROSS SECTIONS**  
**STA. 2+75.00 TO STA. 3+00.00**

PROJECT NO:	
231093	
DRAWING NAME	
XS3	
SHEET	OF
8	18



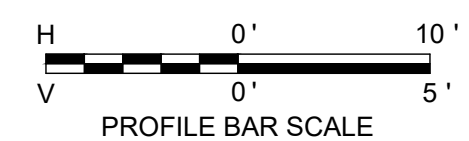
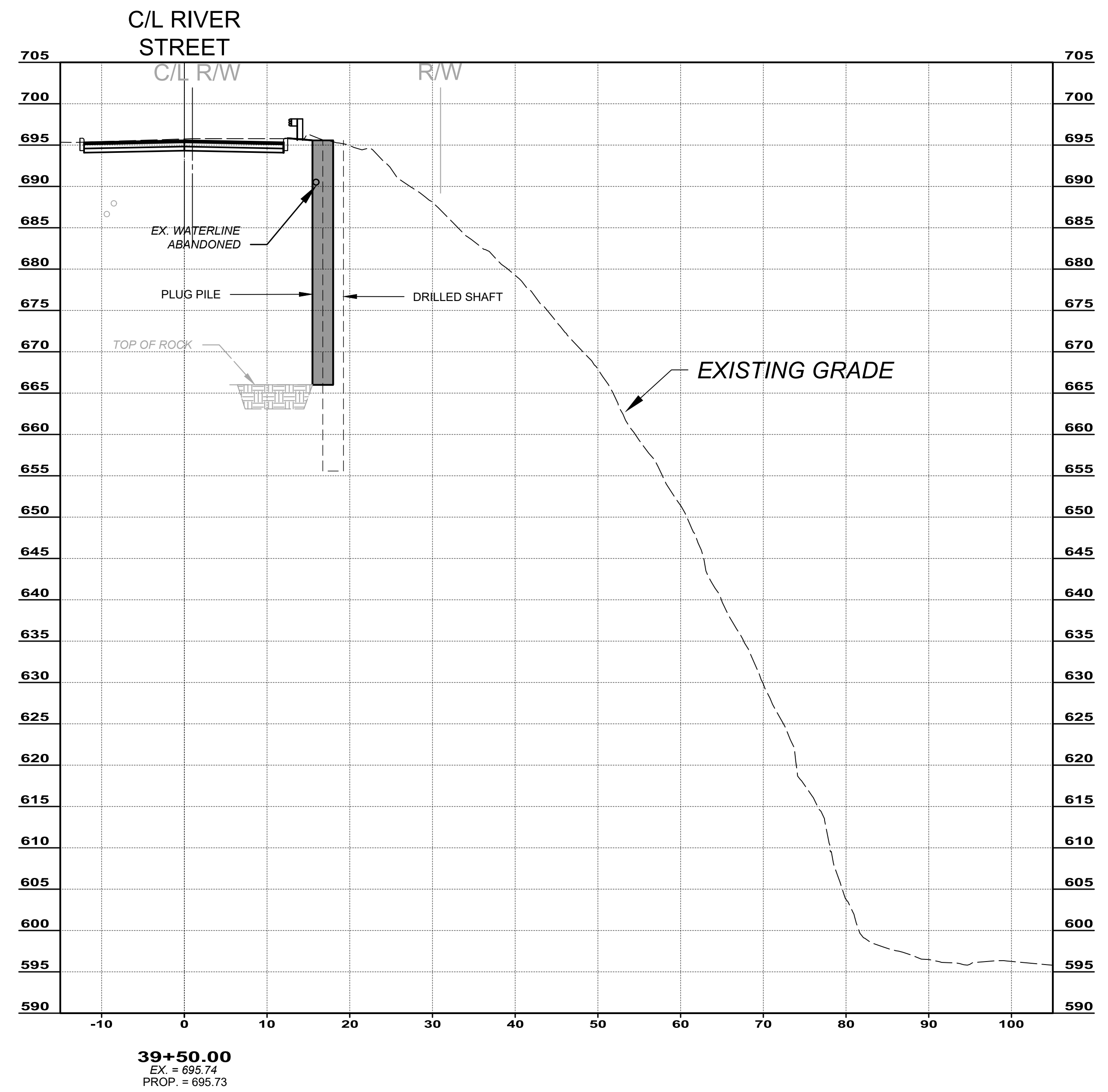
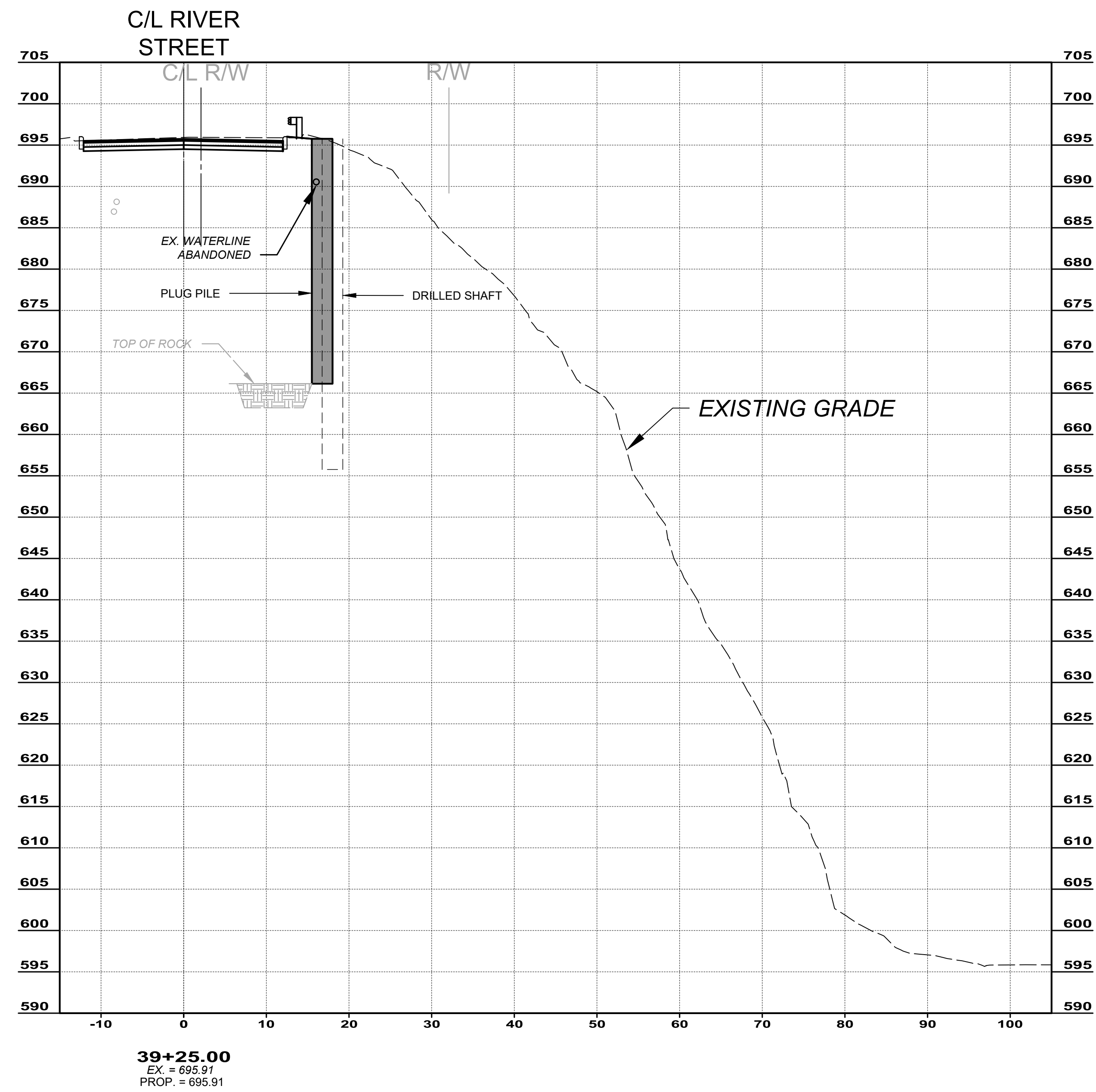


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**CITY OF WILLOUGHBY**  
**RIVER STREET - PART B**  
**SOIL STABILIZATION**  
**CROSS SECTIONS**  
**STA. 3+25.00 TO STA. 3+50.00**

PROJECT NO:	231093
DRAWING NAME	XS4
SHEET	9
OF	18

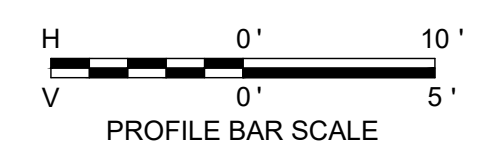
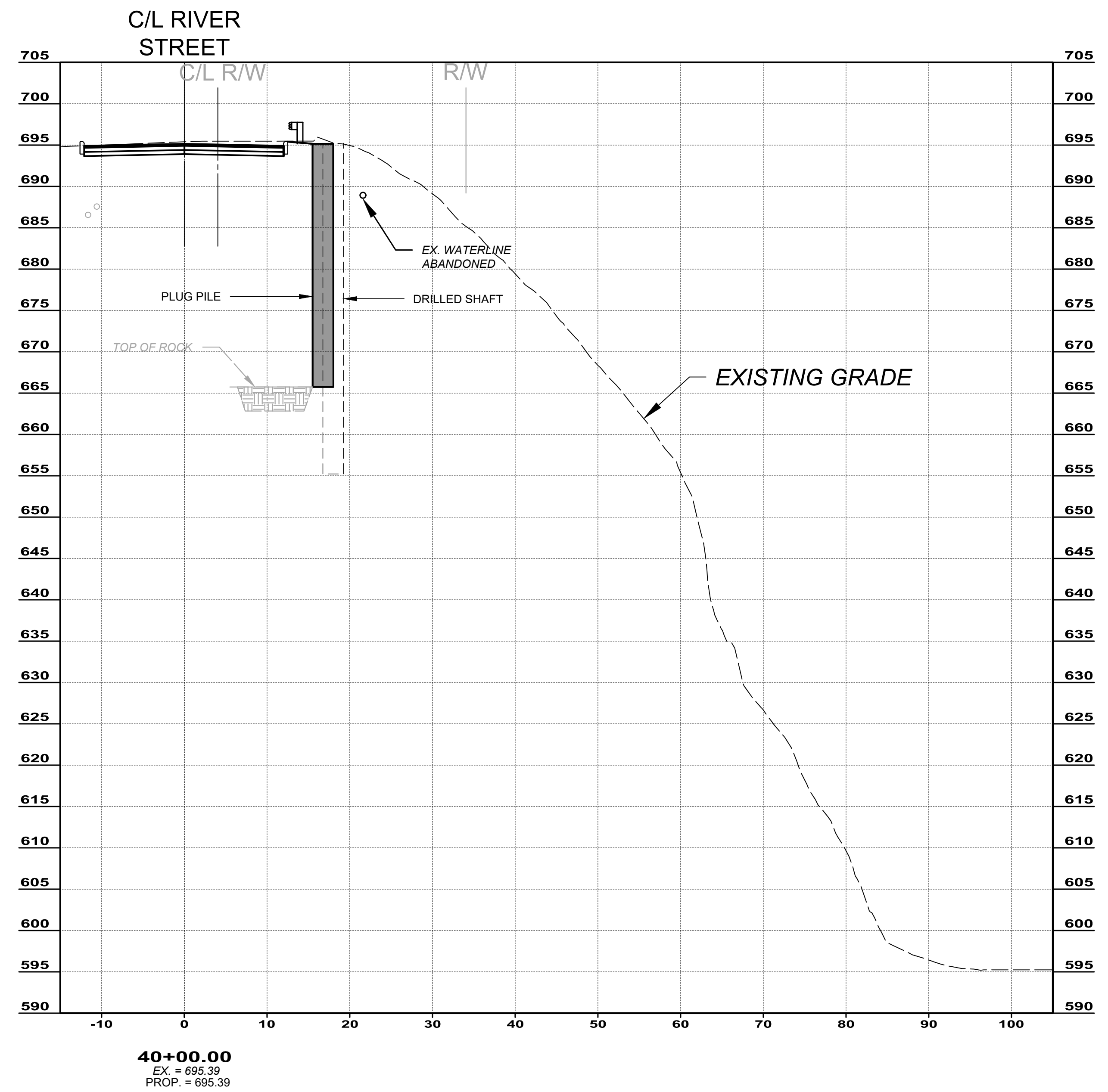
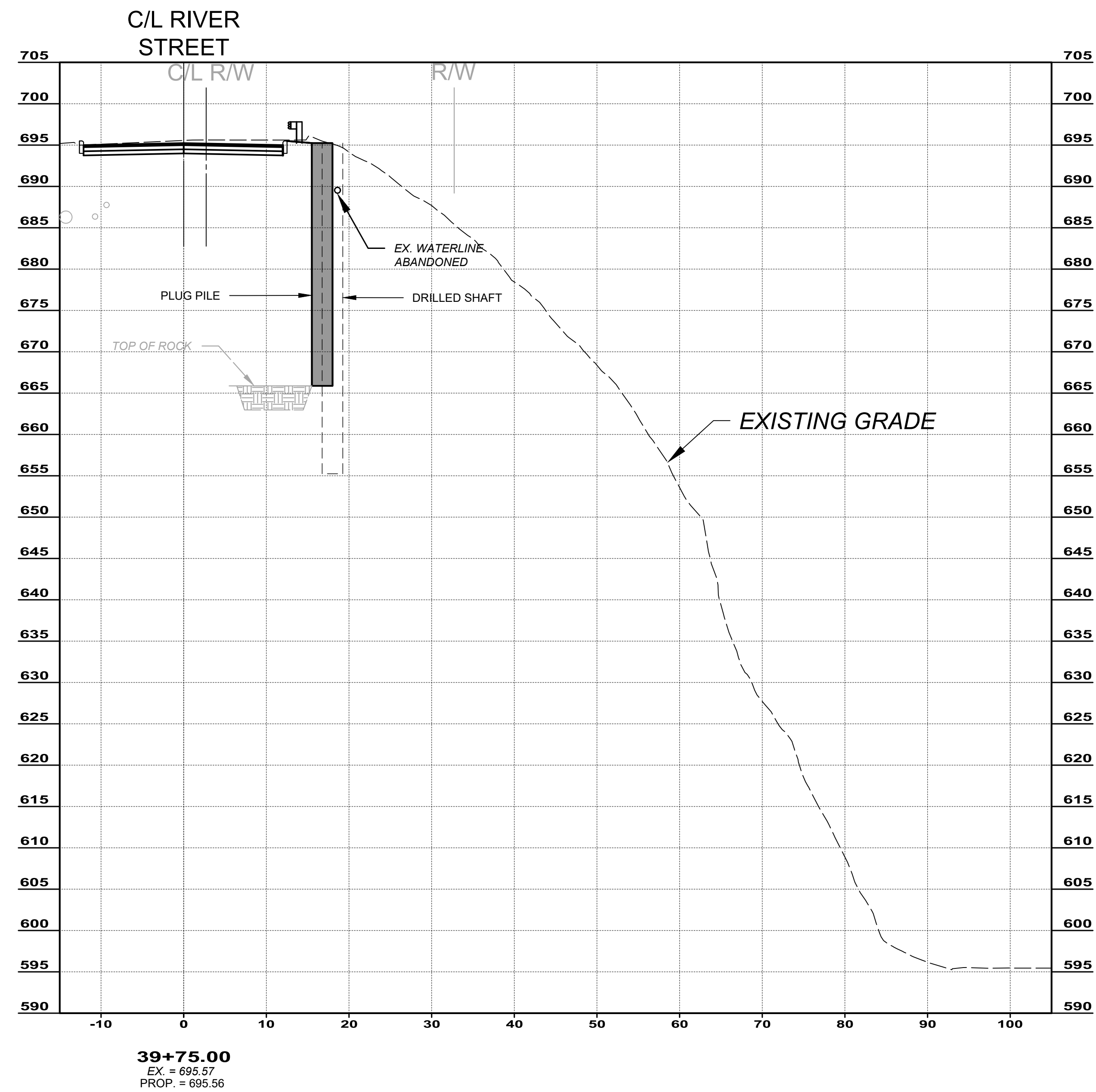


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**CITY OF WILLOUGHBY**  
**RIVER STREET - PART B**  
**SOIL STABILIZATION**  
**CROSS SECTIONS**  
**STA. 3+75.00 TO STA. 4+00.00**

PROJECT NO: <b>231093</b>	
DRAWING NAME <b>XS5</b>	
SHEET <b>10</b>	OF <b>18</b>

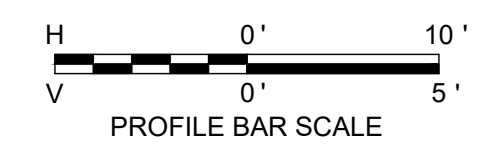
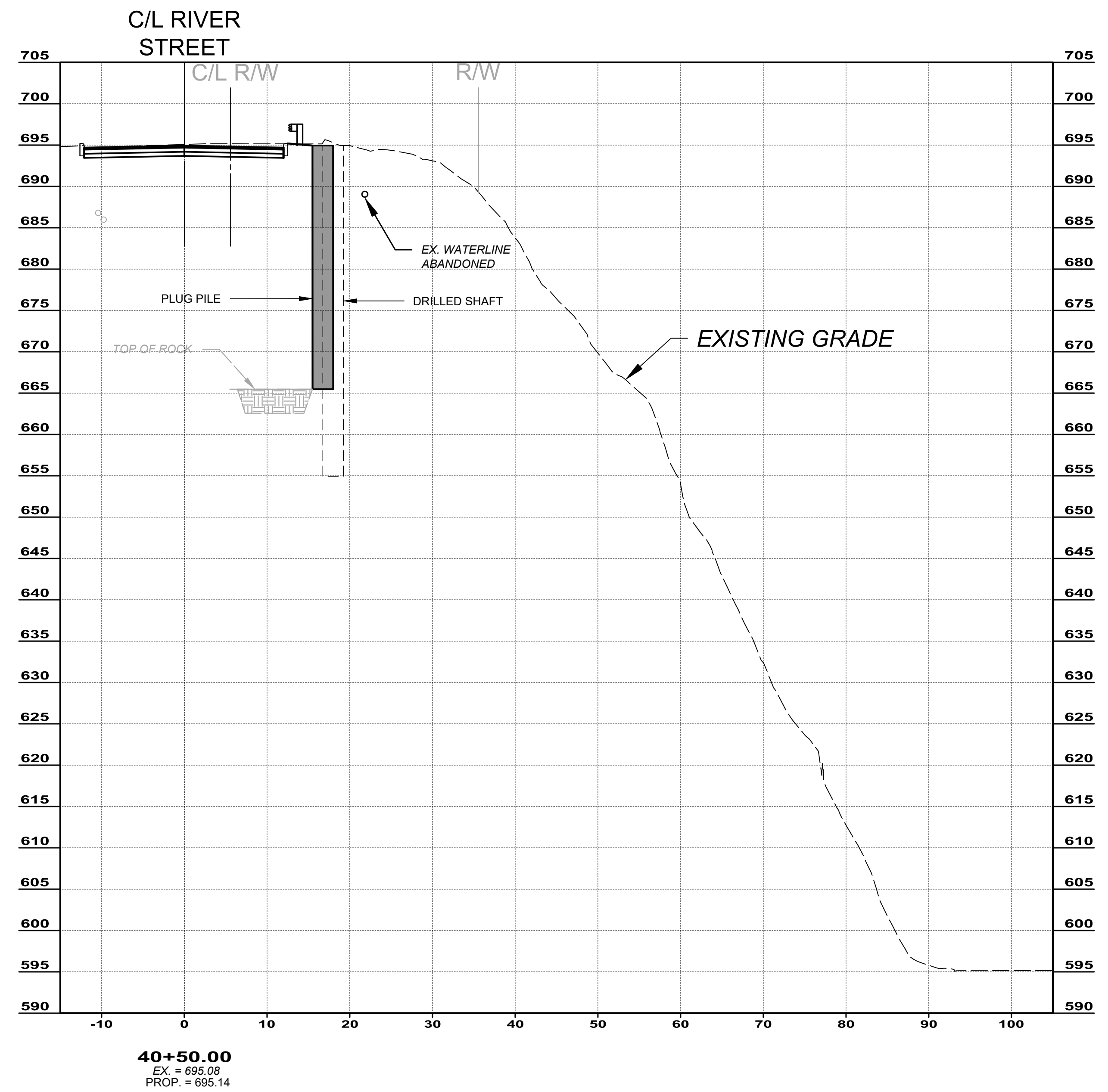
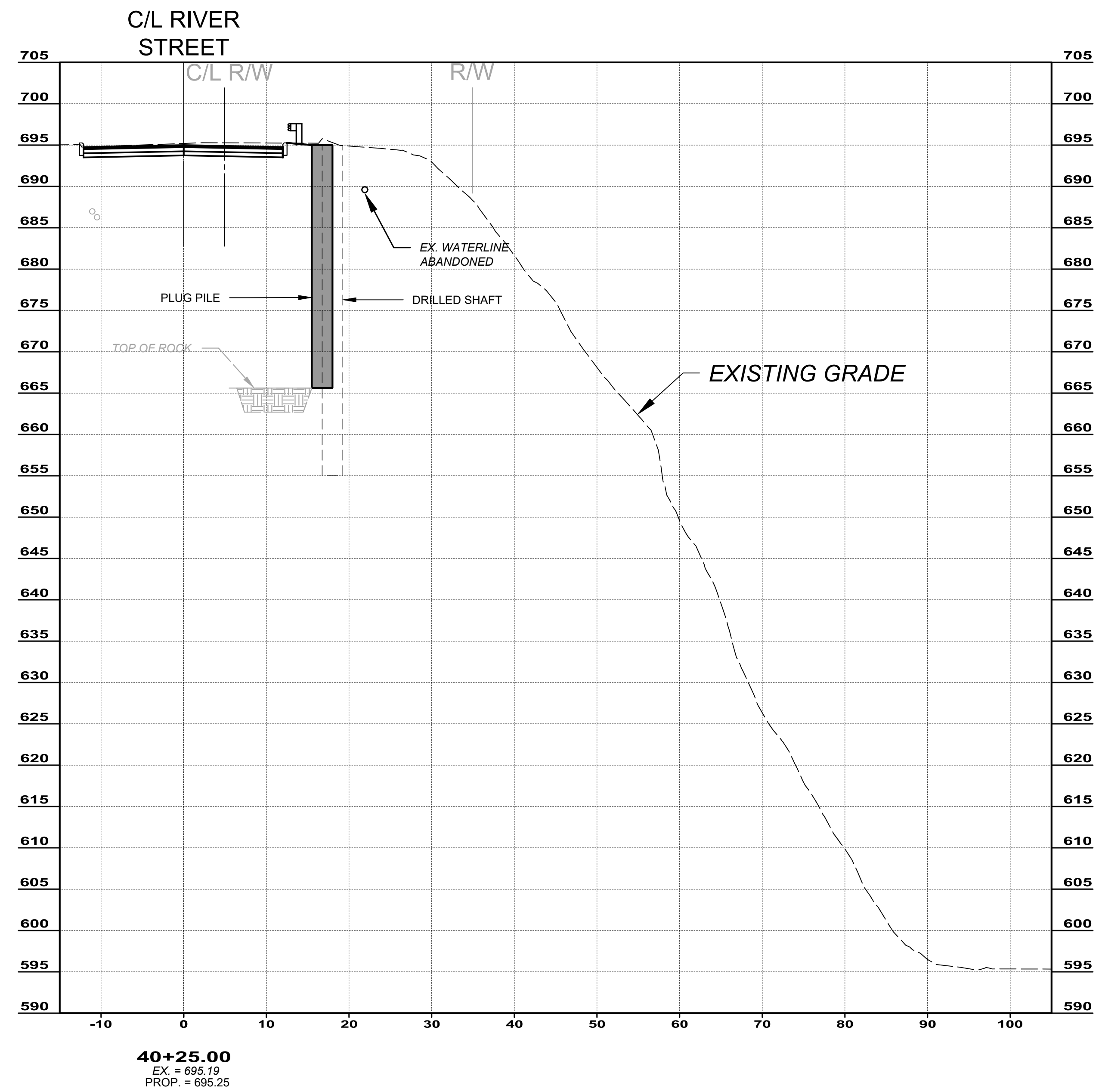


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**SOIL STABILIZATION**  
**CROSS SECTIONS**  
**STA. 3+75.00 TO STA. 4+00.00**

PROJECT NO:	
231093	
DRAWING NAME	
XS6	
SHEET	OF
11	18

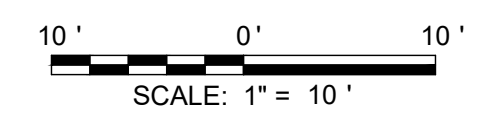
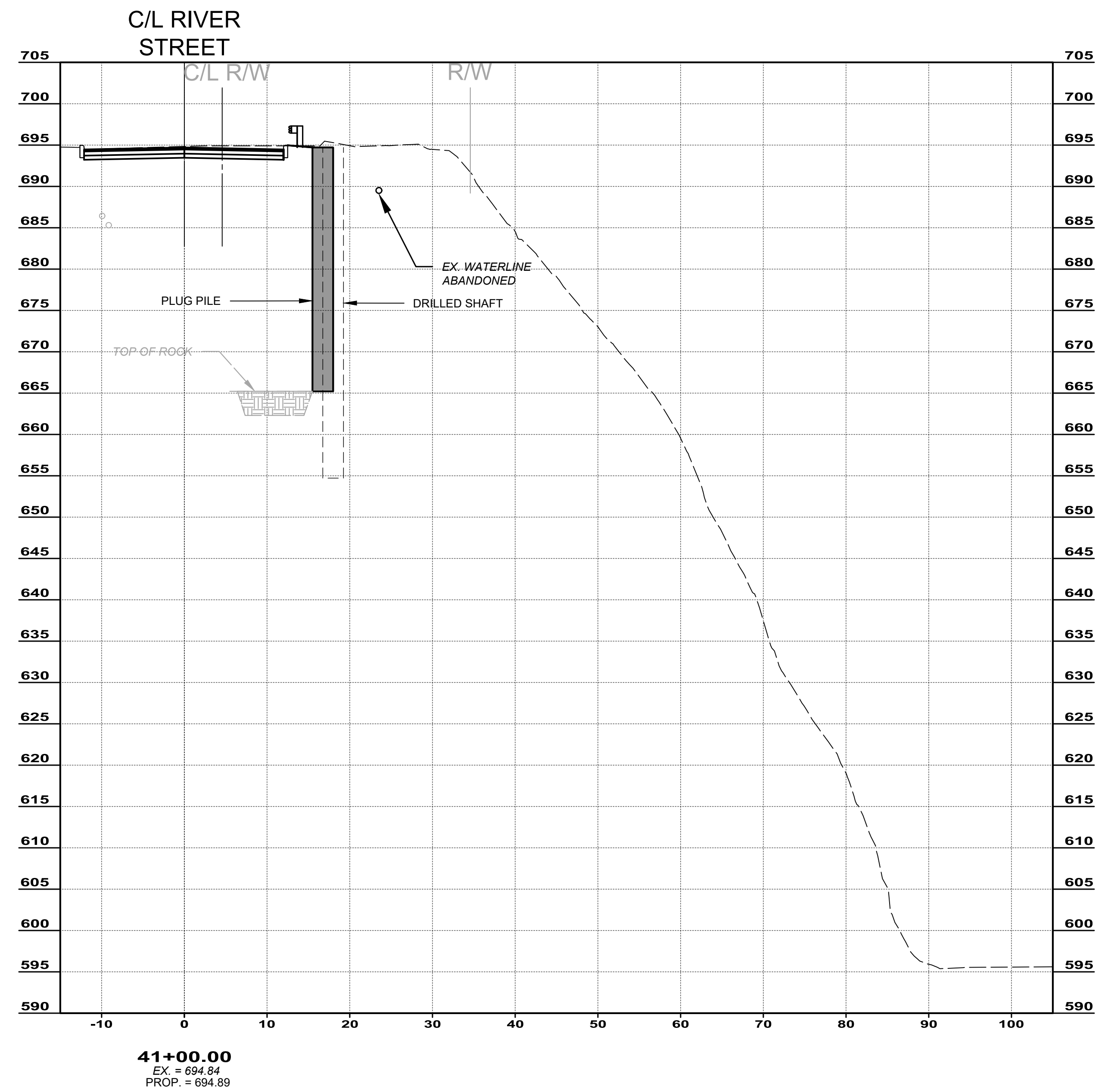
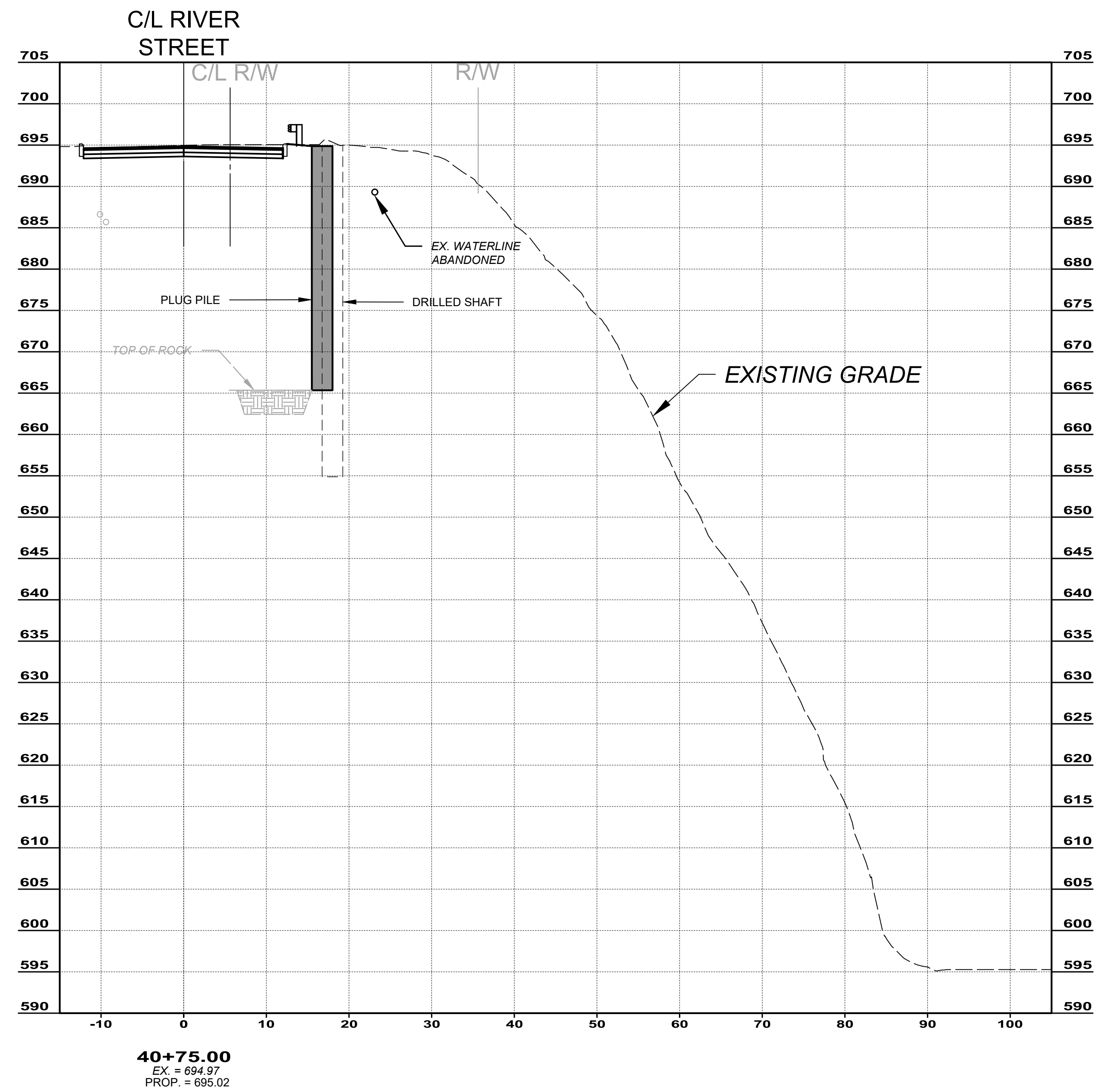


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**SOIL STABILIZATION**  
**CROSS SECTIONS**  
**STA. 3+75.00 TO STA. 4+00.00**

PROJECT NO:	
231093	
DRAWING NAME	
XS7	
SHEET	OF
12	18

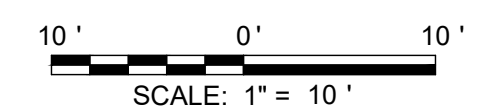
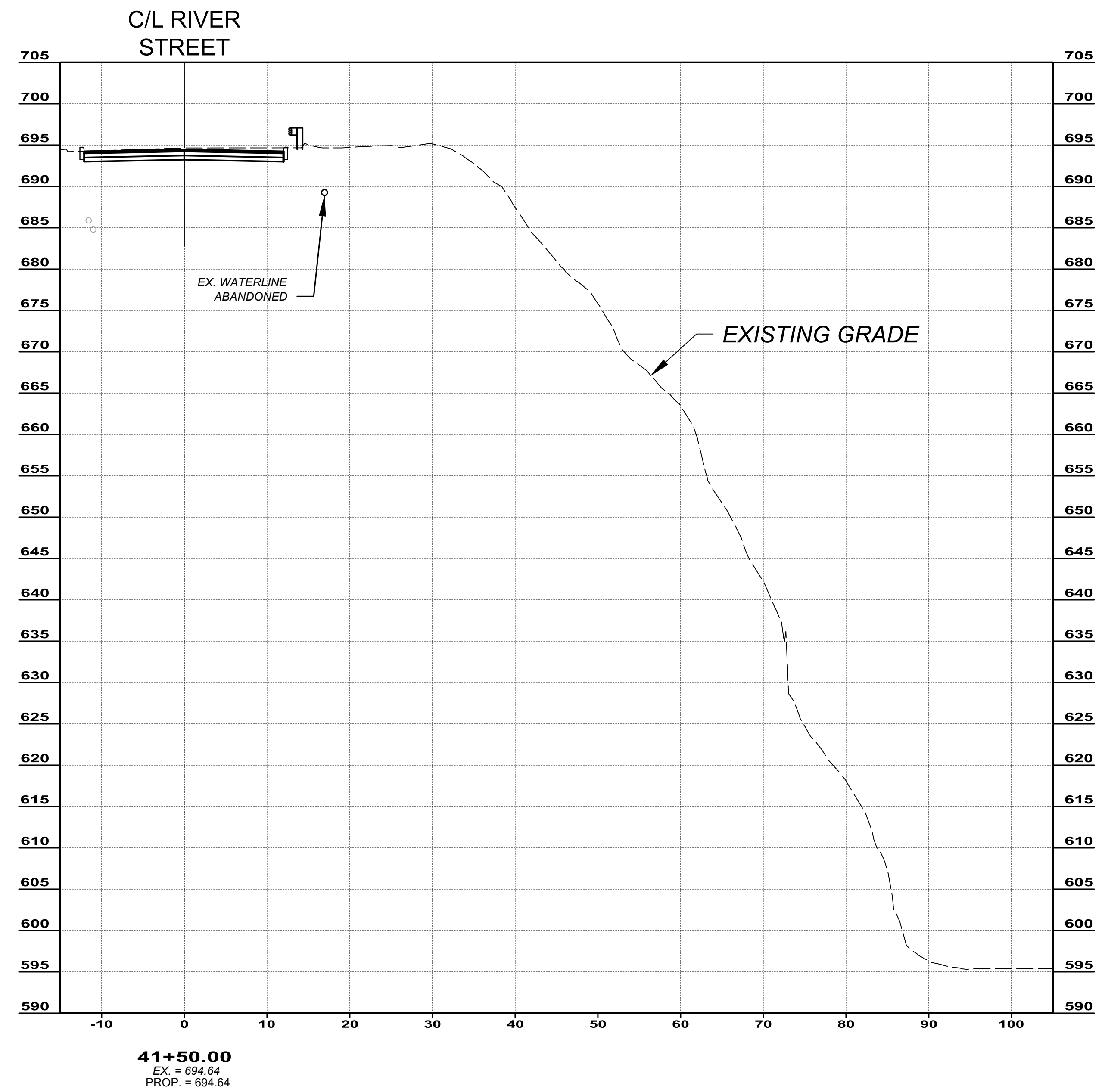
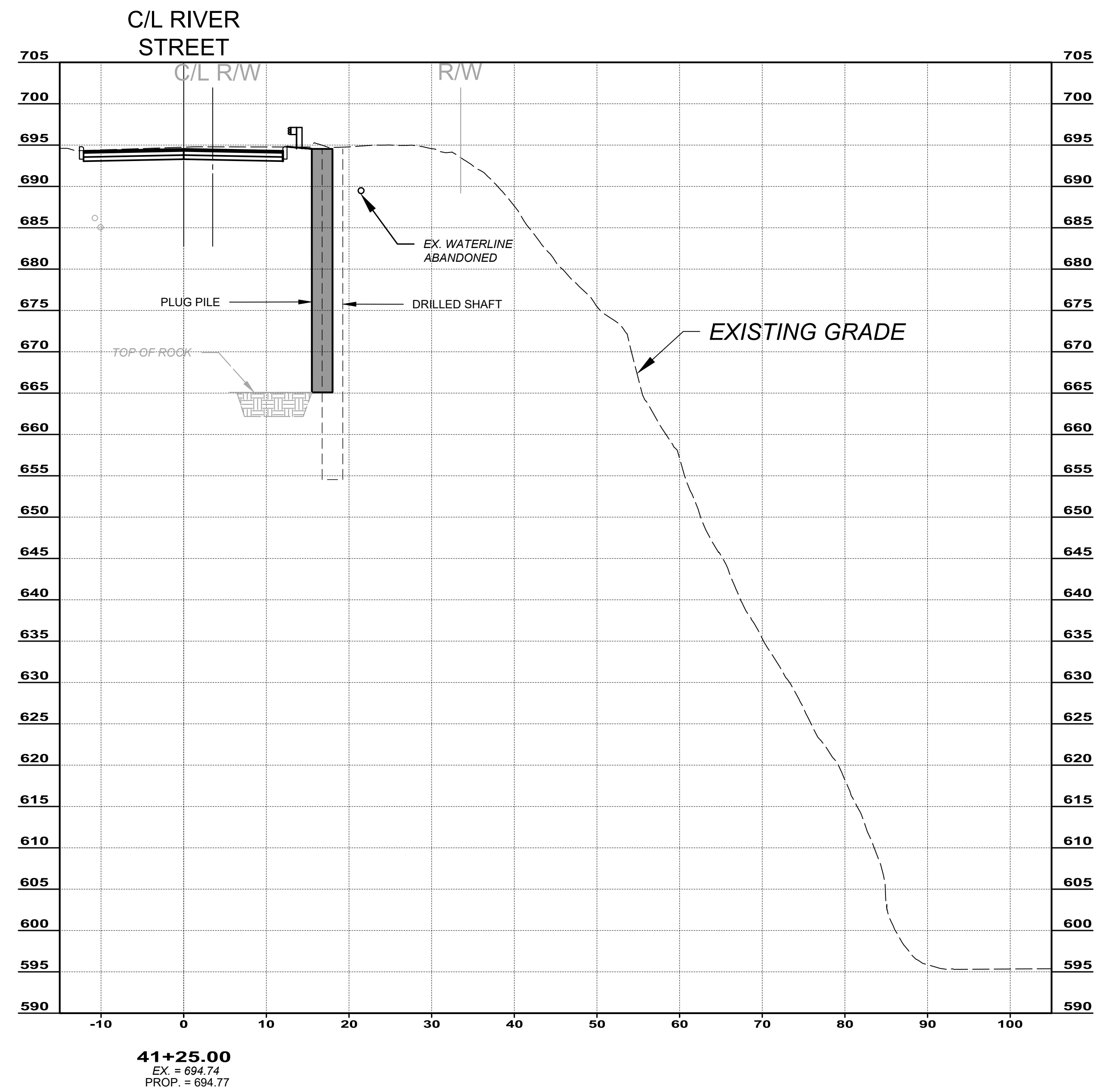


NO	REVISION	DATE

SCALE: AS SHOWN  
 DATE: 7/31/24  
 DESIGNED BY: MPS  
 DRAWN BY: TMK  
 CHECKED BY: TAB

**CITY OF WILLOUGHBY**  
**RIVER STREET - PART B**  
**SOIL STABILIZATION**  
**CROSS SECTIONS**  
**STA. 3+75.00 TO STA. 4+00.00**

PROJECT NO: <b>231093</b>	
DRAWING NAME <b>C6</b>	
SHEET <b>13</b>	OF <b>18</b>



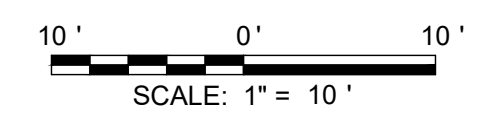
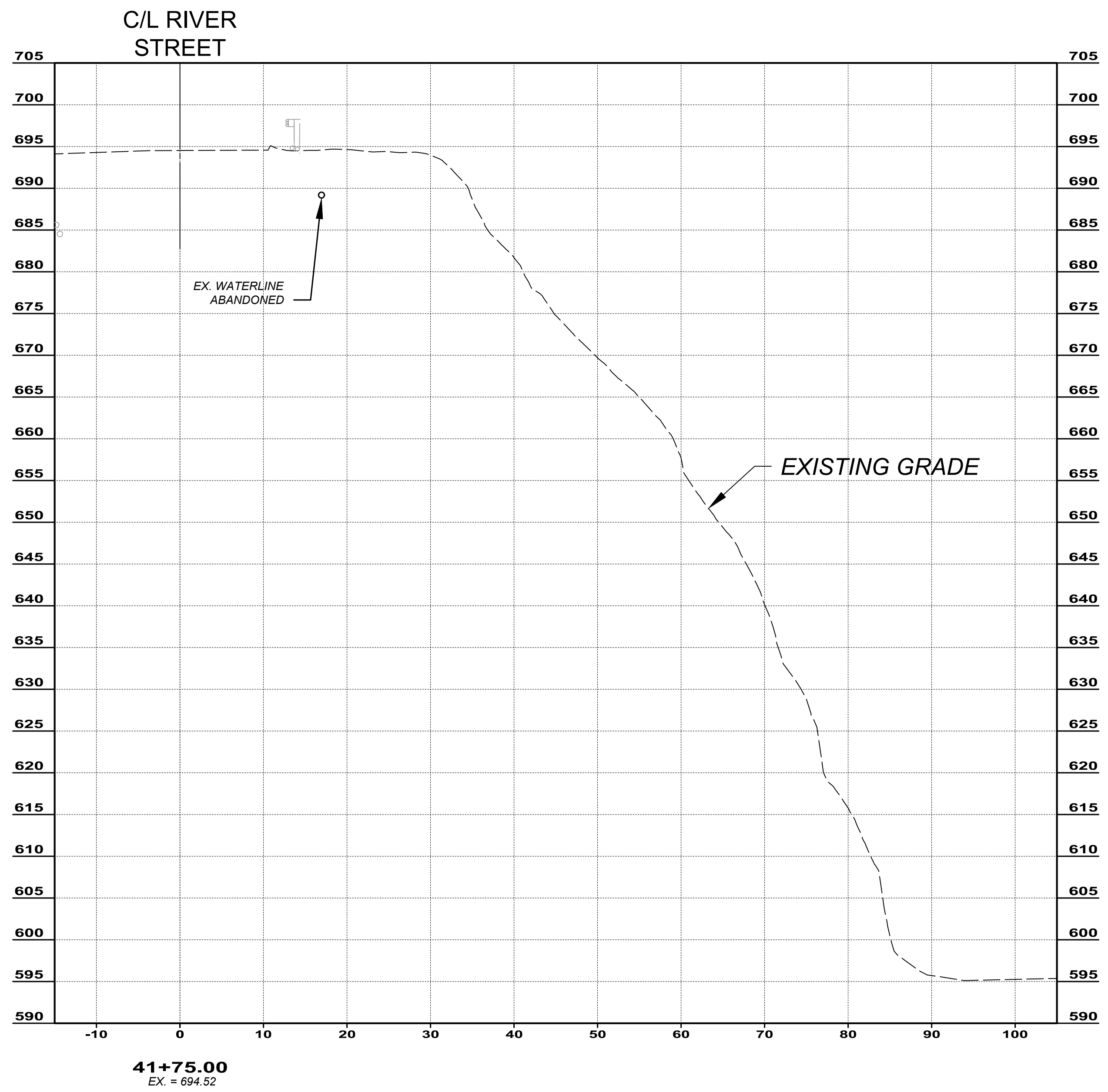
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**CITY OF WILLOUGHBY**  
**RIVER STREET - PART B**  
**SOIL STABILIZATION**

**CROSS SECTIONS**  
**STA. 3+75.00 TO STA. 4+00.00**

PROJECT NO:	
231093	
DRAWING NAME	
C6	
SHEET	OF
14	18



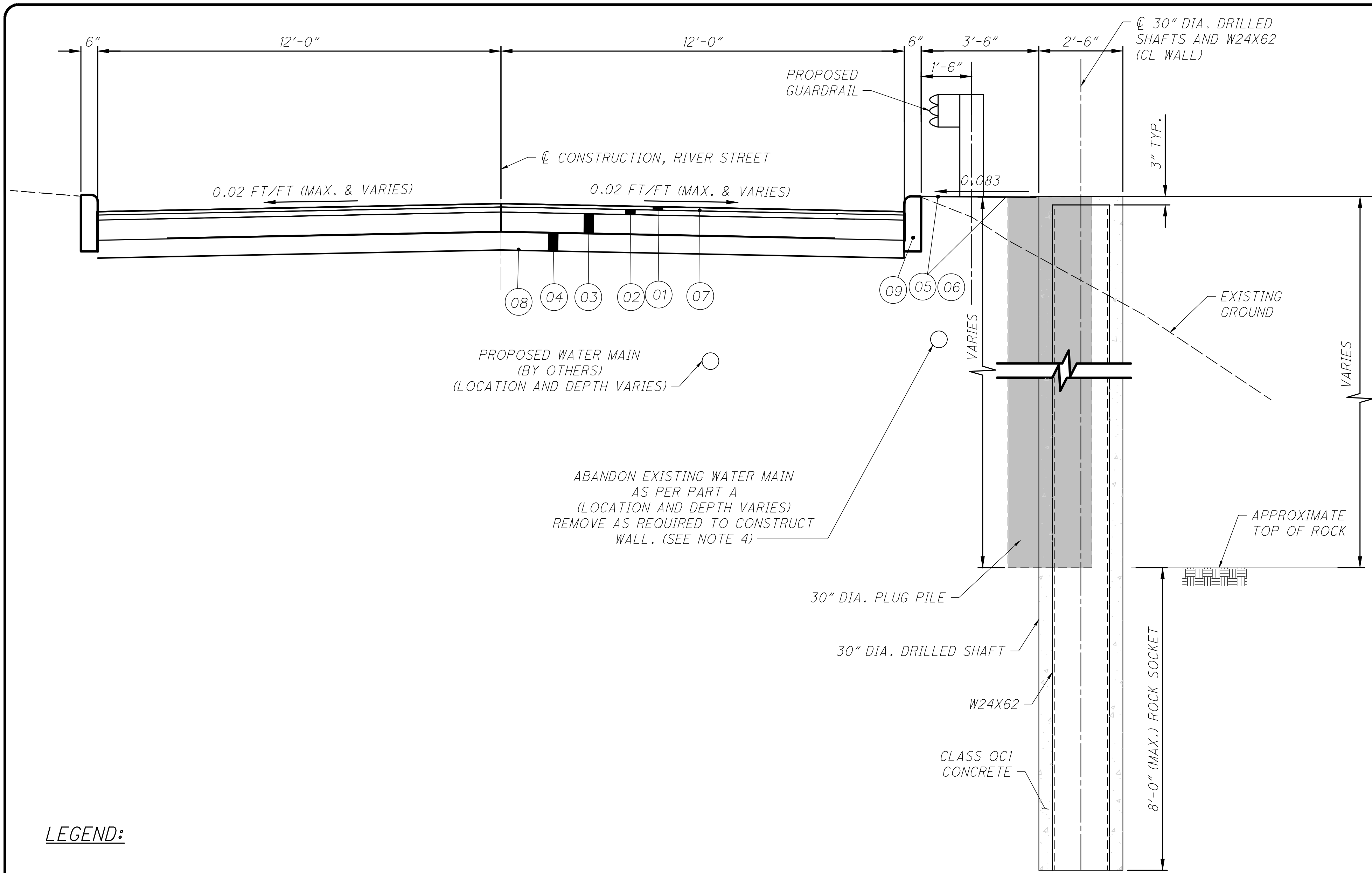
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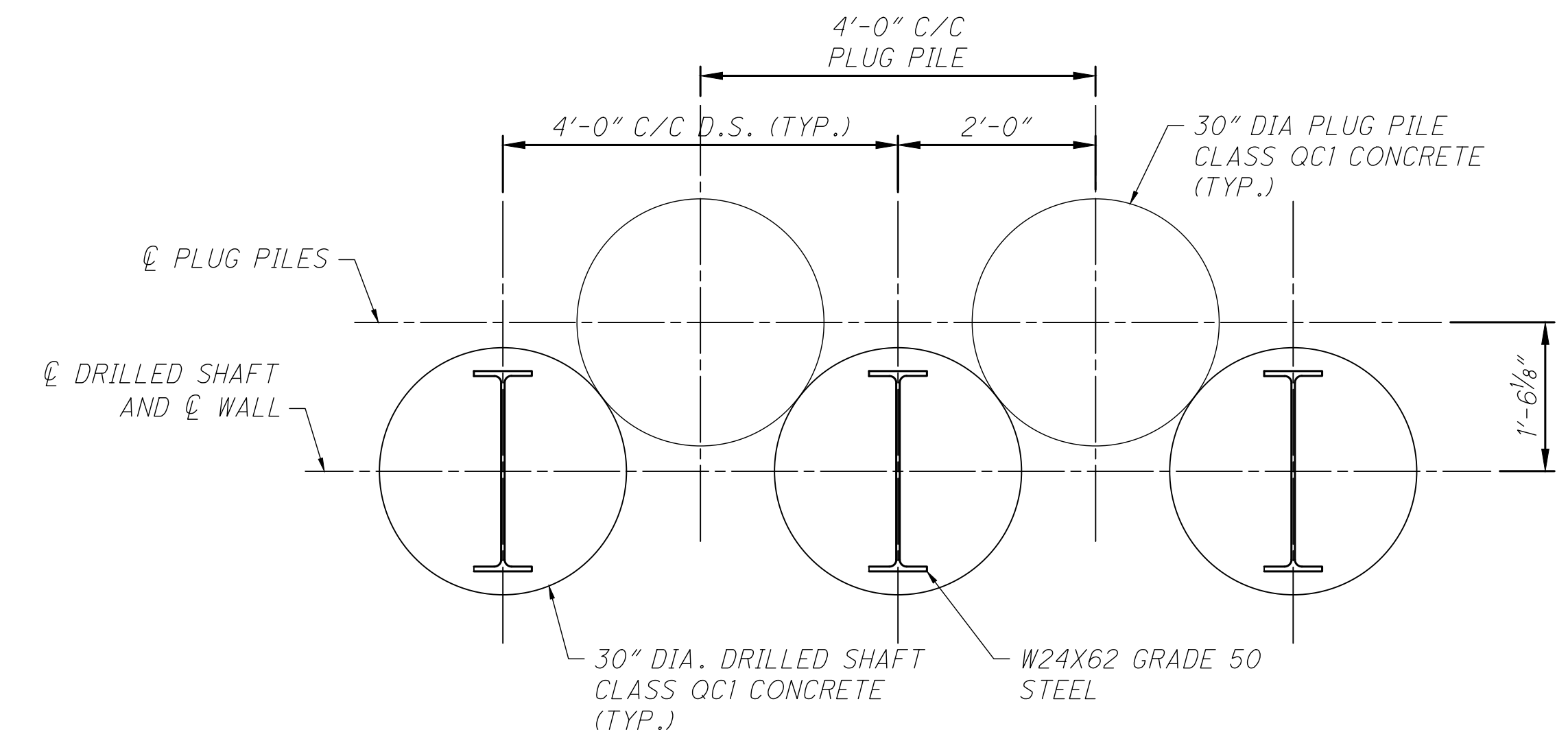
**CITY OF WILLOUGHBY**  
**RIVER STREET - PART B**  
**SOIL STABILIZATION**

**CROSS SECTIONS**  
**STA. 3+75.00 TO STA. 4+00.00**

PROJECT NO:	
231093	
DRAWING NAME	
C6	
SHEET	OF
15	18



TYPICAL RETAINING WALL SECTION



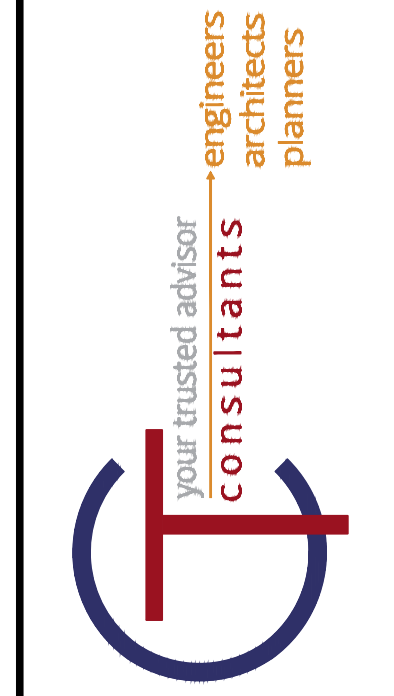
PARTIAL RETAINING WALL PLAN

**LEGEND:**

- 01 ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22
- 02 ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG 64-22
- 03 ITEM 301 - 6" ASPHALT CONCRETE BASE, PG 64-22
- 04 ITEM 304 - 6" AGGREGATE BASE
- 05 ITEM 653 - TOPSOIL, FURNISHED AND PLACED, 4" DEPTH
- 06 ITEM 659 - SEEDING AND MULCHING, TYPE 1
- 07 ITEM 407 - TACK COAT
- 08 ITEM 204 - SUBGRADE COMPACTION
- 09 ITEM 609 - CURB, TYPE 6 (TYP.)

**NOTES:**

1. FOR PLAN AND PROFILE OF WALL, SEE SHEET 4 & 5 OF 18.
2. FOR DRILLED SHAFTS ELEVATIONS, SEE SHEET 17 OF 18.
3. FOR GENERAL NOTES, SEE SHEET 2 OF 18.
4. REMOVE EXISTING ABANDON WATERLINE TO THE EXTENTS NECESSARY TO CONSTRUCT WALL. A QUANTITY OF 200 FT HAS BEEN PROVIDED IN THE ESTIMATED QUANTITIES TO BE PAID FOR UNDER ITEM 202 PIPE REMOVED



NO	REVISION	DATE

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 CHECKED BY: TAB

CITY OF WILLOUGHBY  
 RIVER STREET - PART B  
 SOIL STABILIZATION  
 RETAINING WALL DETAILS - 1

PROJECT NO: 231093	
DRAWING NAME DETAILS	
SHEET 16	OF 18





