

WALL GENERAL NOTES:

REFER TO THE FOLLOWING ODOT SUPPLEMENTAL SPECIFICATIONS: 800 DATED 01-17-2025 870 DATED 01-17-2025

SPECIFICATIONS AND STANDARD CONSTRUCTION DRAWINGS: THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIALS SPECIFICATIONS, DATED JANUARY 1, 2023, AND THE NOTED STANDARD CONSTRUCTION DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN THIS IMPROVEMENT WHEREVER THE WORD "STATE" OCCURS, IT IS TO MEAN CITY OF LOVELAND, OHIO. WHEREVER THE WORD "DEPARTMENT" OCCURS, IT IS TO MEAN THE BOARD OF CITY COMMISSIONERS OF LOVELAND, OHIO, AND WHEREVER THE WORD "DIRECTOR" OCCURS, IT IS TO MEAN CITY ENGINEER, AND/OR THEIR DESIGNATED REPRESENTATIVE, LIMITED TO THE PARTICULAR DUTIES ENTRUSTED TO THEM.

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2019, THE ODOT BRIDGE DESIGN MANUAL, 2020.

MAINTENANCE OF TRAFFIC: SEE THE ROADWAY PLAN FOR MAINTENANCE OF TRAFFIC REQUIREMENTS.

WALL 1 GENERAL NOTES:

REFER TO THE FOLLOWING ODOT STANDARD DRAWINGS: HL-50.21 DATED 01/16/2026

DESIGN DATA: CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

PROPOSED WORK: THE PROPOSED WORK CONSISTS OF CAST-IN-PLACE REINFORCED CONCRETE TOE WALL ALONG SIDEWALK.

FOUNDATION BEARING RESISTANCE: RETAINING WALL 1 FOOTINGS PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 2.63 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 4.67 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 9 KIPS PER SQUARE FOOT.

ITEM SPECIAL - FORMLINER:

THIS WORK CONSISTS OF USING FORMLINERS THAT SIMULATES THE APPEARANCE FOR REAL MASONRY BLOCKS. PERFORM WORK TO LIMITS DETAILED IN THE PLANS AT RETAINING WALL 1.

PATTERN: THE FORMLINER PATTERN SHALL CLOSELY MATCH

#127a SPLIT-FACE BLOCK BY SCOTT SYSTEM 109 GENERAL FELLOWS ROAD GREENWICH, NY 12834 518-886-3371

OR AN EQUAL APPROVED BY THE CITY OF LOVELAND ENGINEER.

FOLLOW THE MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR HANDLING, STORAGE, PREPARATION, AND INSTALLATION OF FORMLINER. DESIGN AND PATTERNING OF THE SIMLATED BLOCK SHALL FOLLOW THE MANUFACTURER'S STANDARD DRAWING. SEAM LINES OR MATCH LINES CAUSED BY TWO OR MORE MOLDS COMING TOGETHER SHALL NOT BE APPARENT WHEN VIEWING THE FINAL INSTALLATION.

MOCK-UP: THIS WORK ALSO COSISTS OF CONSTRUCTION OF A FULL SCALE MOCK-UP USING PROJECT SPECIFIC APPLICATIONS, MATERIALS, METHODS, AND WORKMANSHIP. THE MINIMUM SIZE OF MOCK-UP SHALL BE 25 SQ. FT. THE MOCK-UP SHALL INCORPORATE CONCRETE MIX, FORMING SYSTEM, JOINTS, TEXTURES, PROFILES, REINFORCEMENT, RELEASE AGENT, PLACEMENT RATE, VIBRATING, AND STRIPING PRACTICES THAT WILL BE REPRESENTATIVE OF THE FINAL WORK. THE MOCK-UP SHALL INCORPORATE A 2 FT X 2 FT AREA OF TEXTURED CONCRETE DEMONSTRATING PATCHING AND REPAIR PROCEDURES. A REPRESENTATIVE FROM THE CITY OF LOVELAND SHALL EVALUALTE THE MOCK-UP AND DETERMINE ACCEPTABILITY OF THE WORKMANSHIP AND AESTHETICS. IF A MOCK-UP IS NOT ACCEPTABLE TO THE CITY REPRESENTATIVE, THE CONTRACTOR SHALL MAKE CHANGES TO MATERIALS AND/OR METHODS AND PRODUCE ADDITIONAL MOCK-UPS UNTIL AN ACCEPTABLE MOCK-UP IS PRODUCED. THE ACCEPTED MOCK-UP WILL BE THE STANDARD BY WHICH THE REMAINING WORK SHALL BE EVALUATED. ANY SUBSEQUENT CHANGES IN MATERIALS OR METHODS SHALL REQUIRE APPROVAL OF A NEW MOCK-UP.

ITEM 517 - RAILING, MISC.: WALL MOUNTED DECORATIVE RAILING:

ALUMINUM RAILING SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS. THE ALUMINUM SHALL BE FABRICATED ACCORDING TO ITEM 517. RAILING AND ITS CONENCTION TO WALL 1 SHALL BE DESIGNED PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 2020, SECTION 13.8.2. RAILINGS SHALL HAVE BLACK FINISH WITH EITHER BAKED-ON OR POWDER COATED POLYESTER ENAMEL.

PEDESTRIAN RAILING SHALL BE DESIGNED FOR LIVE LOAD PER AASHTO 13.8.2.

POSTS AND BASE PLATES SHALL BE DESIGNED FOR AN EQUIVALENT POINT OF 200LBS + 50LB/FT APPLIED TRANSVERSELY AT THE TOP OF RAIL CONNECTION.

CONTRACTOR SHALL SUBMIT SHOP DRAWING PER CMS 501.

RAILING SHALL BE GROUNDED PER ODOT STANDARD DRAWING HL-50.21

POSTS AND PICKETS SHALL BE PLUMB, RAILINGS SHALL MATCH THE GRADE OF THE TOP OF WALL. SIZE OF RAILING MEMBERS SHOWN MAY BE CHANGED BASED ON THE DESIGN.

ALL LABOR, EQUIPMENT, AND MATERIALS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED WITH ITEM 517 - RAILING MISC. FOR PAYMENT.

WALL 2 GENERAL NOTES:

PROPOSED WORK: THE PROPOSED WORK CONSISTS OF PREFABRICATED MODULAR GRAVITY TYPE RETAINING WALLS ALONG PROPOSED LOVELAND SIDEWALK.

DESIGN SPECIFICATIONS: THIS RETAINING WALL CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

WALLS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 870.

DESIGN LOADING: UNIT WEIGHT: RETAINED = 120 PCF BEARING = 120 PCF

Ka=0.297* COEFFICIENT OF FRICTION = 0.3 FACTORED BEARING RESISTANCE = 3,375 PSF

* COEFFICIENT OF ACTIVE EARTH PRESSURE (Ka) BASED ON INTERNAL FRICTION ANGLE OF 30°.

ADHESIVE ANCHOR/DOWEL SYSTEM:

INSTALL ADHESIVE ANCHORS/DOWELS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PUBLISHED IN THE ICC-ES REPORTS LISTED BELOW.

THE HOLES FOR THE ADHESIVE ANCHORS SHALL BE DRILLED WITH A HAMMER DRILL AND CARBIDE BIT PRIOR TO THE INSTALLATION OF THE ANCHORS, CLEAN AND DRY THE HOLES IN A MANNER CONSISTENT WITH THE MANUFACTURER'S REQUIREMENTS FOR DRY CONCRETE.

HTTPS://ICC-ES.ORG/EVALUATION-REPORT-PROGRAM/REPORTS-DIRECTORY/

SELECT FROM ONE OF THE FOLLOWING APPROVED PRODUCTS: HILTI HIT-HY 200 V3 ADHESIVE ANCHORS - ICC ES ESR-4868 DEWALT PURE110+ EPOXY ADHESIVE ANCHORS - ICC ES ESR-3298 FACTORED ANCHOR/DOWEL LOADS: TENSION - 2.7 KIPS SHEAR - 0.09 KIPS

THE CONTRACTOR MAY USE A SUBSTITUTE ADHESIVE ANCHOR/DOWEL SYSTEM THAT MEETS THE ACCEPTANCE CRITERIA OF ICEES AC308 - POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE ELEMENTS. THE SUBSTITUTE ANCHORS SHALL MEET OR EXCEED THE CAPACITY OF THE ADHESIVE ANCHOR/DOWEL SYSTEMS LISTED ABOVE.

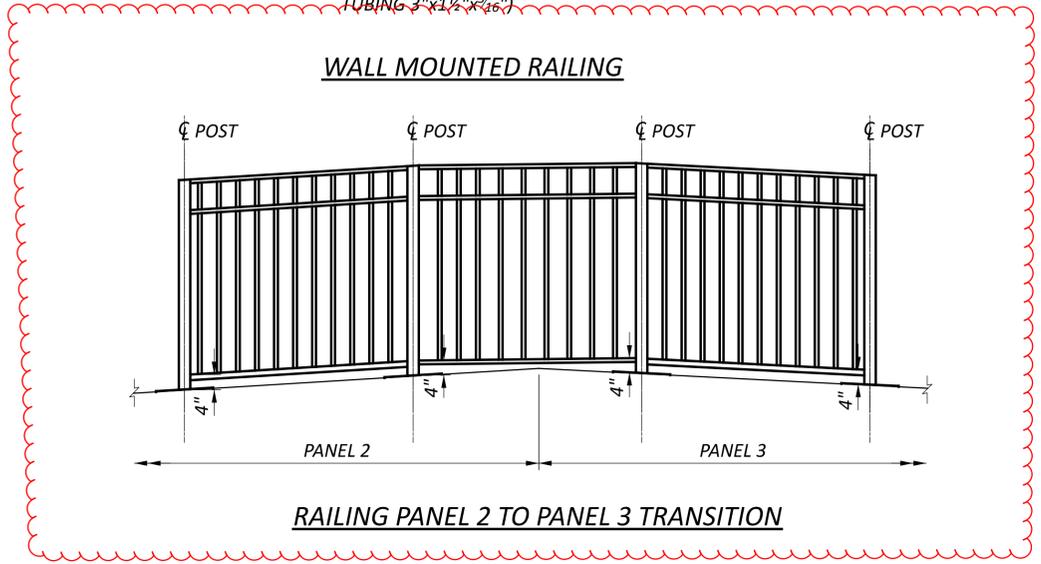
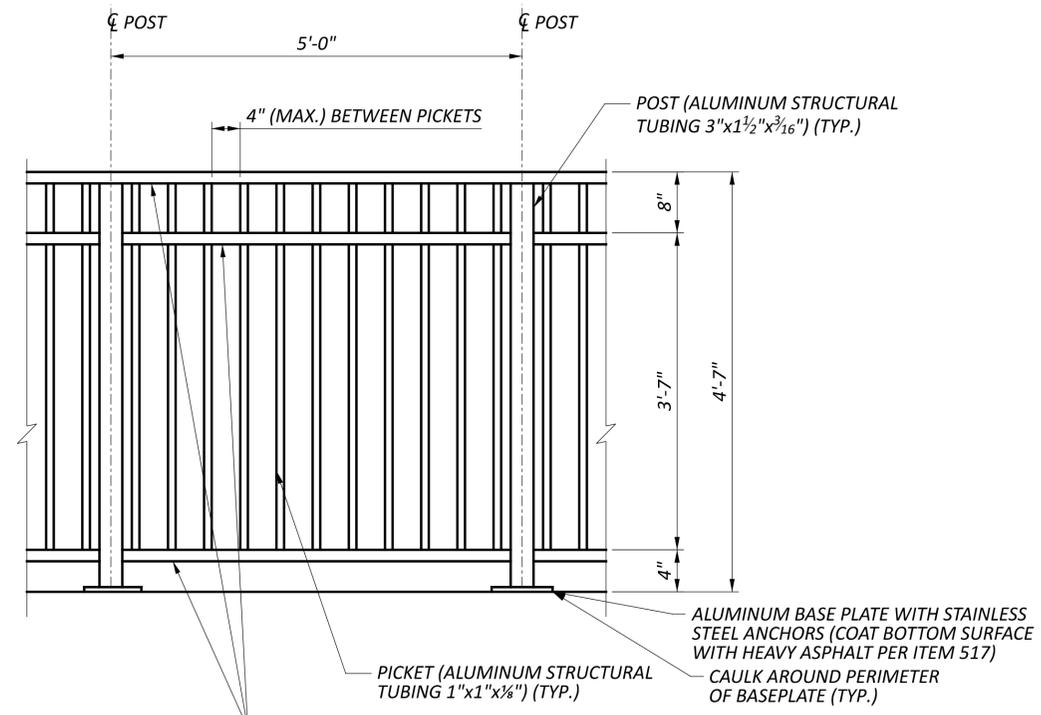
CONTRACTOR SHALL LOCATE REINFORCING PRIOR TO DRILLING AND AVOID DRILLING THROUGH REINFORCING. CONTRACTOR MAY SUBSTITUTE WITH MECHANICAL ANCHORS AT NO ADDITIONAL COST TO THE PROJECT.

THE CONTRACTOR SHALL SUPPLY DOCUMENTATION SEALED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER ENSURING THAT THE SUBSTITUTE ANCHOR/DOWEL SYSTEM PROVIDES SUFFICIENT CAPACITY FOR THIS APPLICATION IN ACCORDANCE WITH AASHTO LRFD SECTION 5.13. INSTALL THE ANCHORS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PUBLISHED IN THE ICC-ES REPORT.

PAYMENT FOR ANCHORS/DOWELS FOR THE VANDAL PROTECTION FENCE SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT FOR ITEM SPECIAL 517E16000 WALL MOUNTED DECORATIVE FENCE.

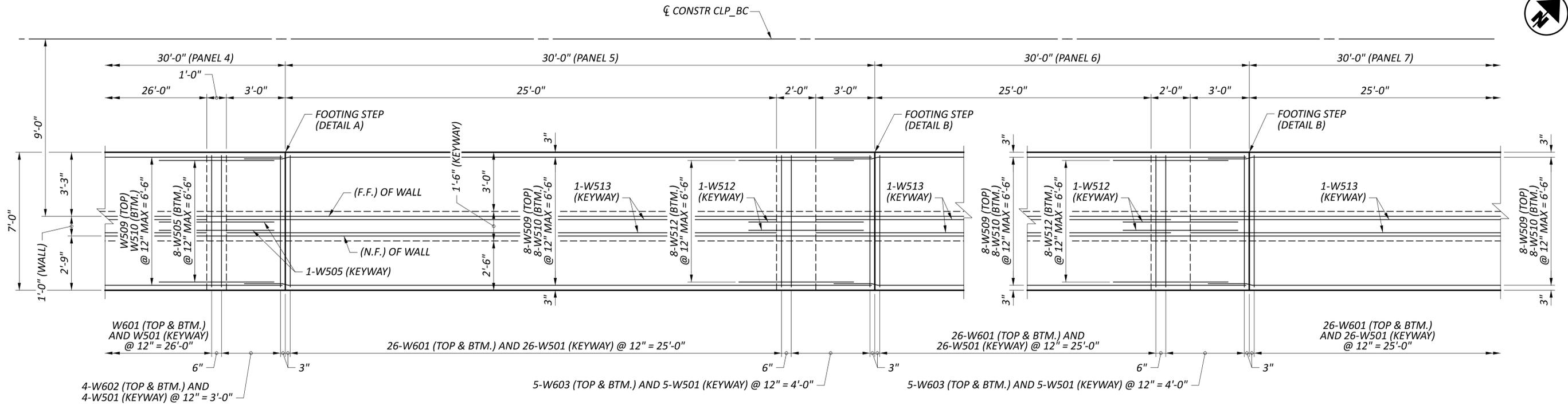
ABBREVIATIONS:

Table with 2 columns: Abbreviation and Full Name. Includes terms like ABUT., APPR., BTM., BRG., BRGS., C/C, C.I., C.J., CLR., CMS, CONC., CONST., CU YD., DIA., E.F., ELEV., EQ., EX., EXP., F.A., F.F., F/F, F.S., FT/FT, FTG., FWD., GEN., LF, LT., MAX., MIN., MISC., MOT, N.F., N.P.C.P.P., NO./#, O/O, P.C.P.P., CORRUGATED PLASTIC PIPE, PEJF, PG, PGL, PROP., PT, PVC, CURVATURE, INTERSECTION, TANGENCY, R.A., RCP, RF, RT, R/W, SAN., SER., SHT., S.O., SPA., SR, STA., STD., STM., STR., TBM, TEMP., T.O.S., T/PARAPET, T/T, U.G., VAR., VC, VERT., W/O.

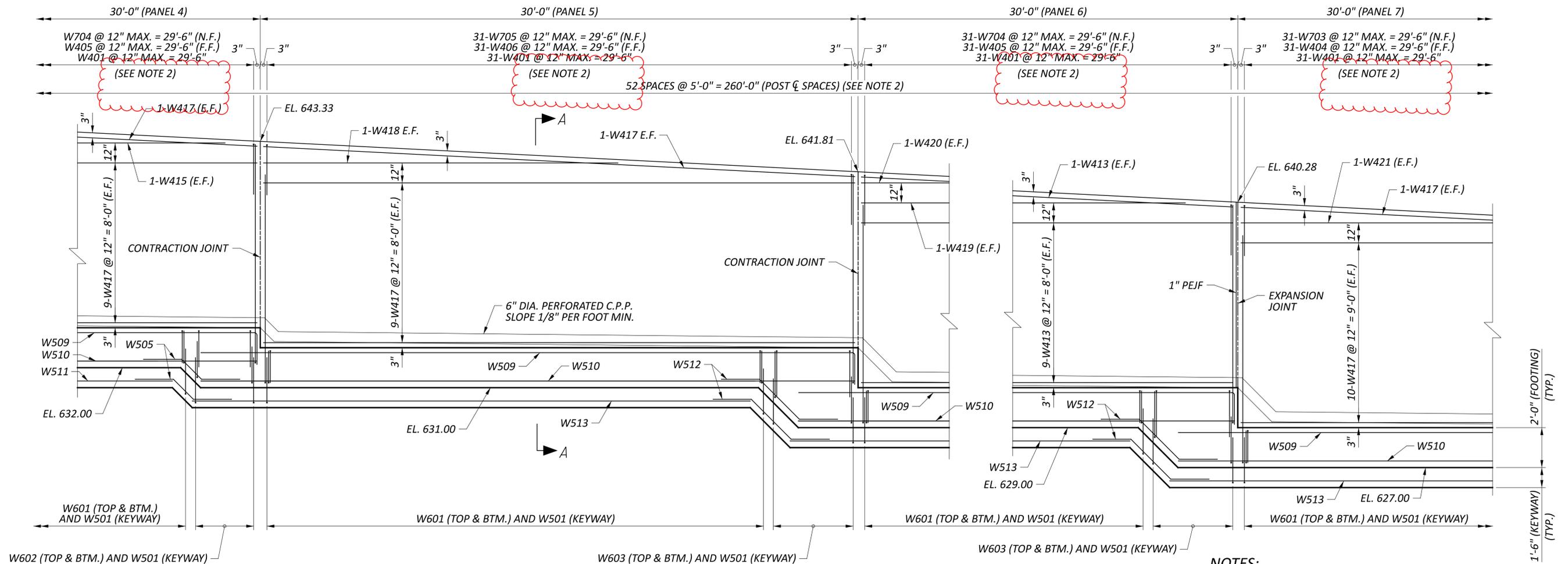


WALL NOTES WALLS NO. 1 & 2 STA. 40+50.00 TO 43+15.17 & STA. 44+65.00 TO 48+76.28

Table with project information: SFN (N/A), DESIGN AGENCY (B&N burgessniple.com), DESIGNER (MES), CHECKER (XAC), REVIEWER (BCS), PROJECT ID (119757), SUBSET (1 of 11), SHEET (P.69 of 103).



FOOTING PLAN



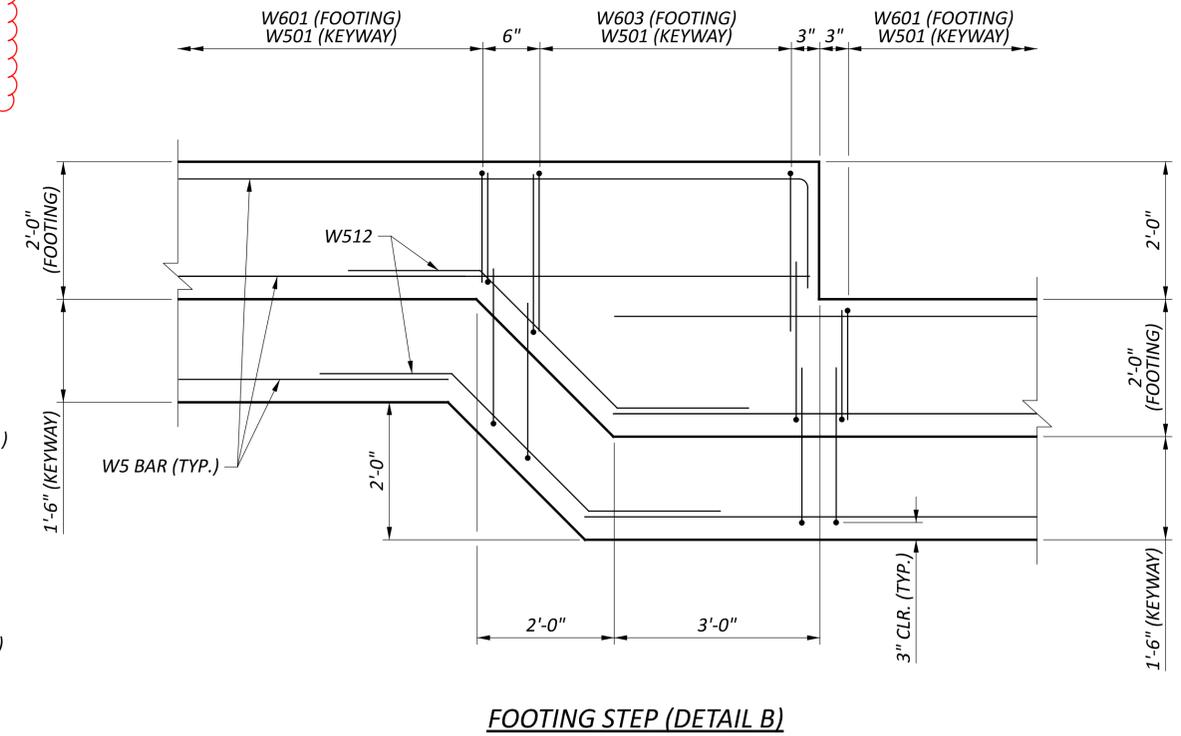
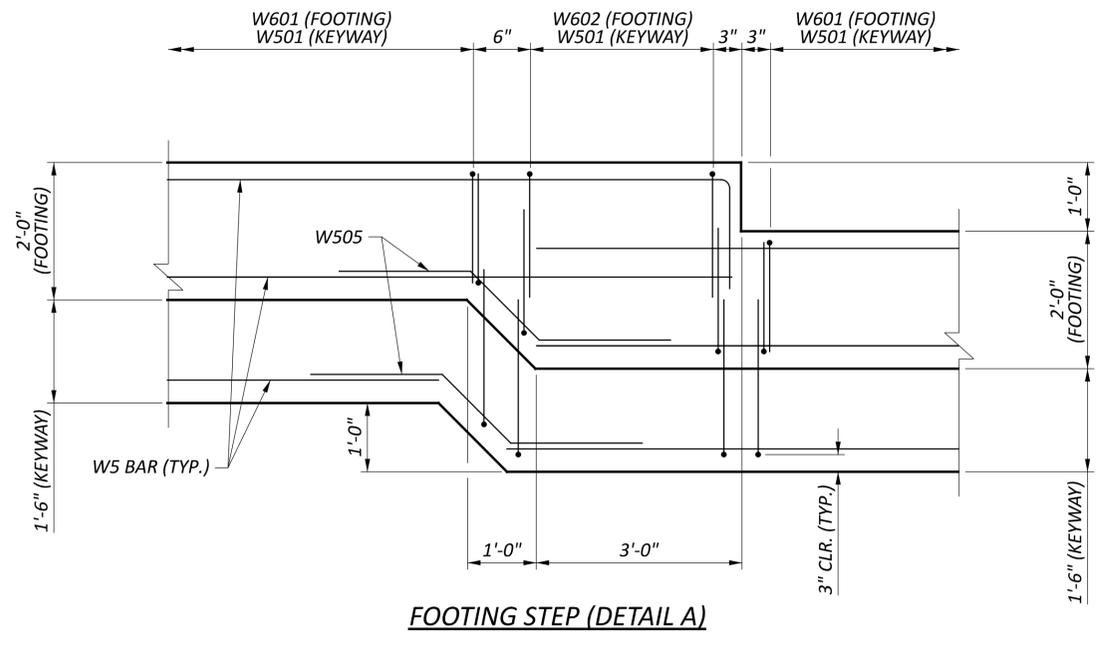
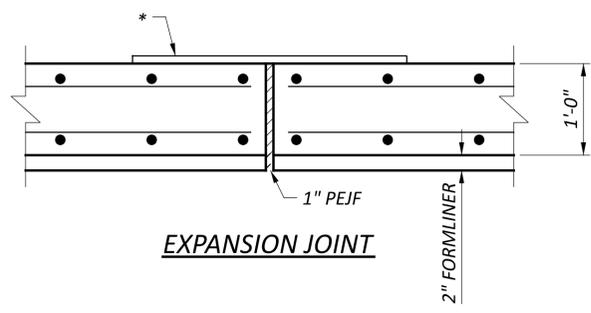
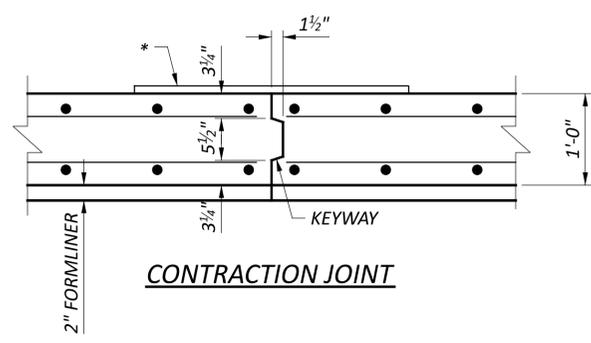
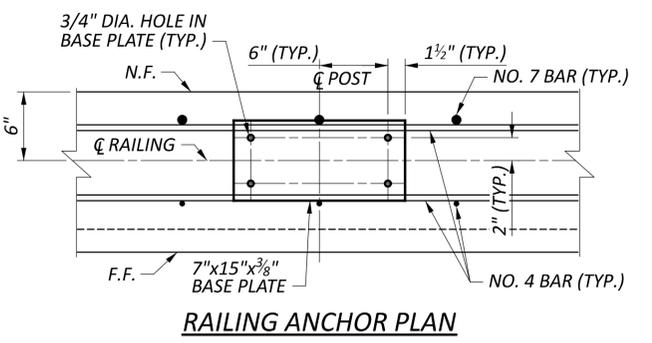
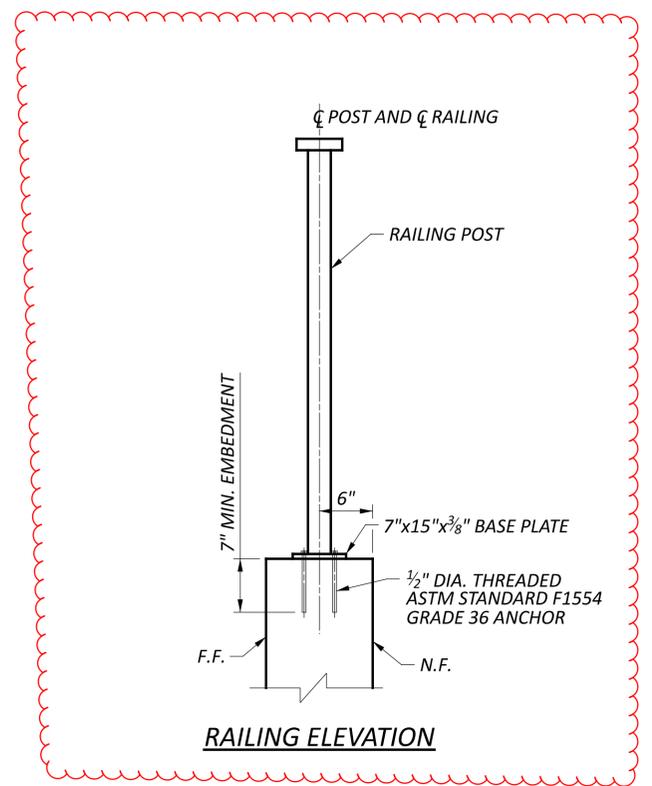
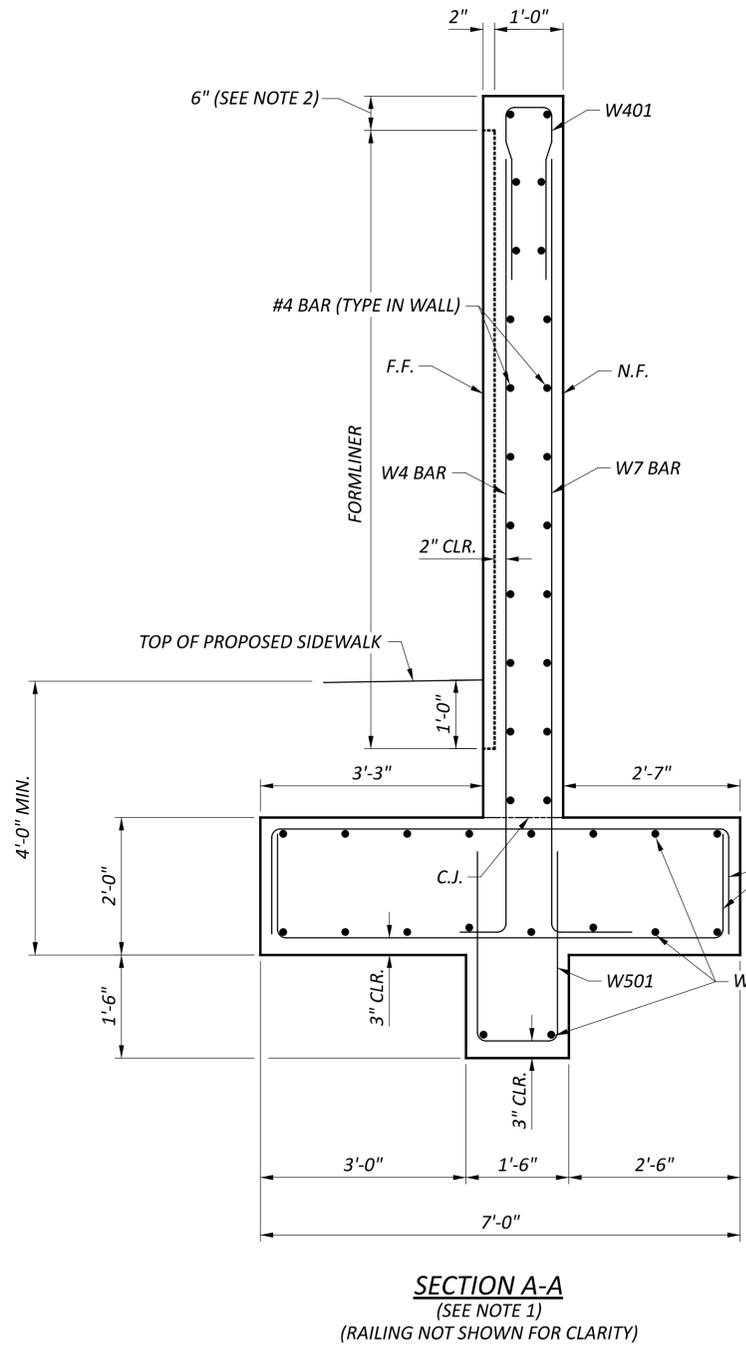
ELEVATION
 (FORMLINER NOT SHOWN FOR CLARITY)

NOTES:

- FOR SECTION A-A, EXPANSION AND CONTRACTION JOINT DETAILS, FOOTING STEP DETAIL A AND FOOTING STEP B, SEE SHEET 8/11
- POSTS ARE LAID OUT TO LINE UP DIRECTLY WITH VERTICAL REINFORCING IF VERTICAL REINFORCING IS SPACED AT 12" WITH A SMALLER SPACE AT THE END OF EACH PANEL.



SFN	N/A
DESIGN AGENCY	B&N burgessniple.com
DESIGNER	CHECKER
MES	XAC
REVIEWER	
BCS	10/17/24
PROJECT ID	119757
SUBSET	TOTAL
6	11
SHEET	TOTAL
P.74	103



LEGEND:
 * = TYPE 2 WATERPROOFING, 3'-0" WIDE, CENTERED ON JOINT, FROM TOP OF FOOTING TO BOTTOM OF PAVED GUTTER

NOTES:
 1. FOR ADDITIONAL NOTES AND DETAILS, SEE SHEET 4/11.
 2. 6" CAP SHALL EXTEND FULL LENGTH ALONG TOP OF WALL AND SHALL TURN VERTICAL FOR FULL HEIGHT OF WALL AT BEGINNING AND END OF THE WALL.

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DESIGNER	CHECKER
MES	XAC
REVIEWER	
BCS	10/17/24
PROJECT ID	119757
SUBSET	TOTAL
8	11
SHEET	TOTAL
P.76	103