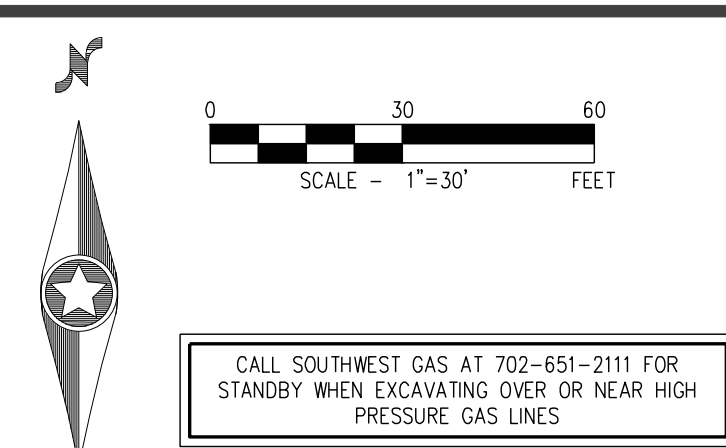




SURVEY NOTE
OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBLISCURED DURING CONSTRUCTION.

ELEVATION NOTE
ADD 2700 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2701.00)

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/02/21
UPDATED SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/09/22

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 70,007 CU YDS
FILL= 193,847 CU YDS
EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE
1) EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE, TO PROPOSED EDGE OF PAVEMENT OR PROJECTED UP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES
1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
2. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
3. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
4. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
5. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
6. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
7. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLETING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
8. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

STORMWATER RUNOFF MANAGEMENT
1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF THE CITY OF LAS VEGAS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER, AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE LVMC 14.18.130 AND CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT'S HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL SECTION 1500 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY, REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE, AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

NOTE
ALL PRIVATE STREETS ARE P.U.E., PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY H.O.A.
ALL ONSITE STORM DRAIN FACILITIES WITHIN THIS DEVELOPMENT SHALL BE PRIVATELY MAINTAINED BY THE H.O.A.
POST-CONSTRUCTION BMPs (PCBMPs)/CONTROL MEASURES NOTED ON THE GRADING PLANS ARE MANDATORY PERMANENT REGULATORY STORMWATER POLLUTION CONTROLS. THESE PCBMPs MUST BE INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.



GRADING NOTES
1) CONTRACTOR SHALL PROTECT IN PLACE EXISTING IMPROVEMENTS (E/UTILITY STRUCTURE, CURB & GUTTER) IN PLACE DURING CONSTRUCTION. ANY DAMAGE TO EXISTING STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE AT NO COST TO OWNER. (ANY LANDSCAPING REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN KIND.)
2) CONSTRUCT CASE I SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOME OR EQUIVALENT PER CCAUSD #235.
3) CONSTRUCT 'L' TYPE CURB & GUTTER PER CCAUSD #216.
4) CONSTRUCT ROLL TYPE CURB & GUTTER PER CCAUSD #217.51.
5) CONSTRUCT 'L' TO ROLL CURB TRANSITION PER DETAIL 26 ON SHEET D-2.
6) CONSTRUCT 5' SIDEWALK PER CCAUSD #234.
7) CONSTRUCT CROSS UTTER PER CCAUSD #228.
8) CONSTRUCT SIDEWALK UNDERDRAIN AND DRAINAGE OUTLET PER CCAUSD #236 AND DETAIL 27 ON SHEET D-2.
9) CONSTRUCT 2' AC OVER 4" TYPE II AGGREGATE BASE, SEE SOILS REPORTS.
10) CONSTRUCT 48" TYPE II SDMH PER CCAUSD #401 & 405.
11) CONSTRUCT TYPE 'CM2' D.I. PER CCAUSD #412.1 & 421 L=5.0' (1 GRATE), DEPTH PER PLAN.
12) CONSTRUCT TYPE 'CM2' D.I. PER CCAUSD #412.1 & 421 L=17.5' (6 GRATE), DEPTH PER PLAN.
13) CONSTRUCT TYPE 'CM2' D.I. PER CCAUSD #412.1 & 421 L=12.5' (4 GRATE), DEPTH PER PLAN.
14) CONSTRUCT 'A' TYPE CURB & GUTTER PER CCAUSD #219.

QUANTITIES		PRIVATE
1. 48" TYPE II STORM DRAIN MANHOLE	EA	25
2. 5.0' TYPE 'CM2' DROP INLET	EA	2
3. 12.5' TYPE 'CM2' DROP INLET	EA	1
4. 15.0' TYPE 'CM2' DROP INLET	EA	2
5. 17.5' TYPE 'CM2' DROP INLET	EA	2
6. 8' WIDE CONCRETE VALLEY GUTTER	SF	2,787
7. SIDEWALK UNDERDRAIN	EA	2
8. RIPRAP D50=12", THK=24"	SF	300
9. 18" RCP STORM DRAIN	LF	75
10. 24" RCP STORM DRAIN	LF	894
11. 30" RCP STORM DRAIN	LF	486
12. 36" RCP STORM DRAIN	LF	1,602
13. 42" RCP STORM DRAIN	LF	81
14. 48" RCP STORM DRAIN	LF	34

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY 222222 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
DERICK YORO, P.E. 16396 DATE: 7/18/22

BENCHMARK
MONUMENT ID: USDA (1934) 19
U.S. DEPARTMENT OF AGRICULTURE BRASS DISC AT SOUTHWEST CORNER OF U.S. 95 AND KYLE CANYON ROAD
ELEVATION = 2871.61 FEET, 858.810 METERS
NAVD 88 DATUM
PER THE CITY OF LAS VEGAS BENCHMARK BOOK-2008 ADJUSTMENT (UPDATED 05/24/2010)

BASIS OF BEARINGS
NORTH 000°15'0" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, W.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF IN FILE 151, PAGE 14 OF SURVEYS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C7335, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

FAST
Call before you Dig
UnderGround
1-702-432-5300
FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.)

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CALL BEFORE YOU DIG OVERHEAD
1-702-227-2929

Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
Call 811
OR
1-800-642-2444

Westwood
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

CITY OF LAS VEGAS, NEVADA

SHLP

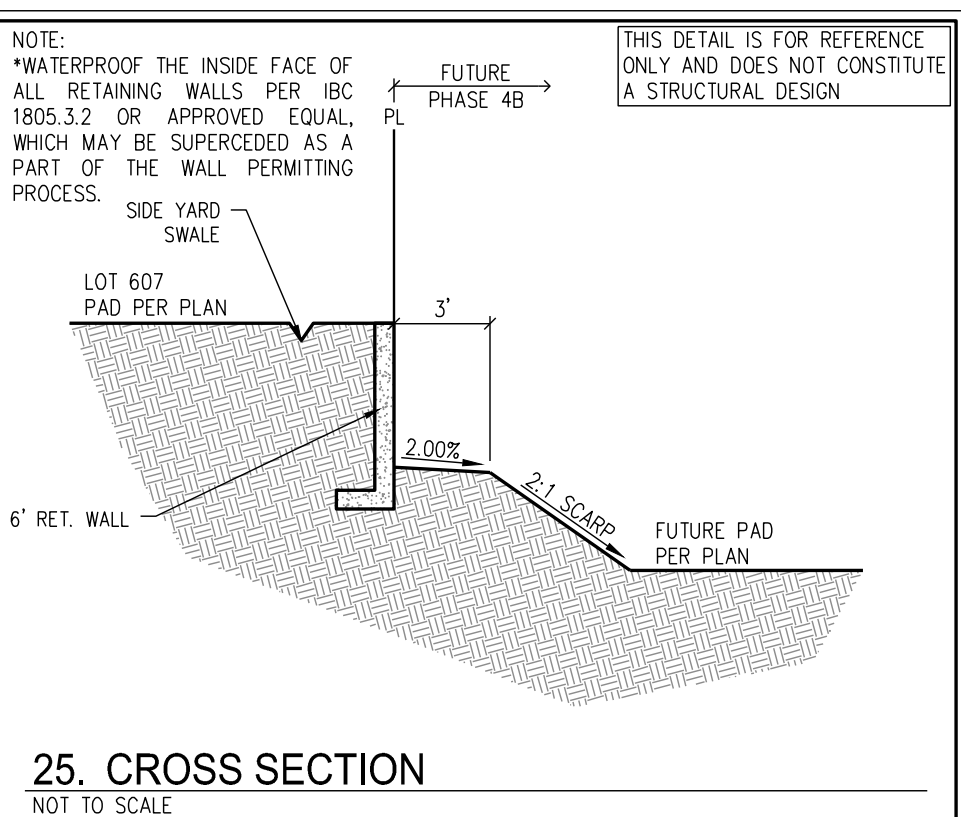
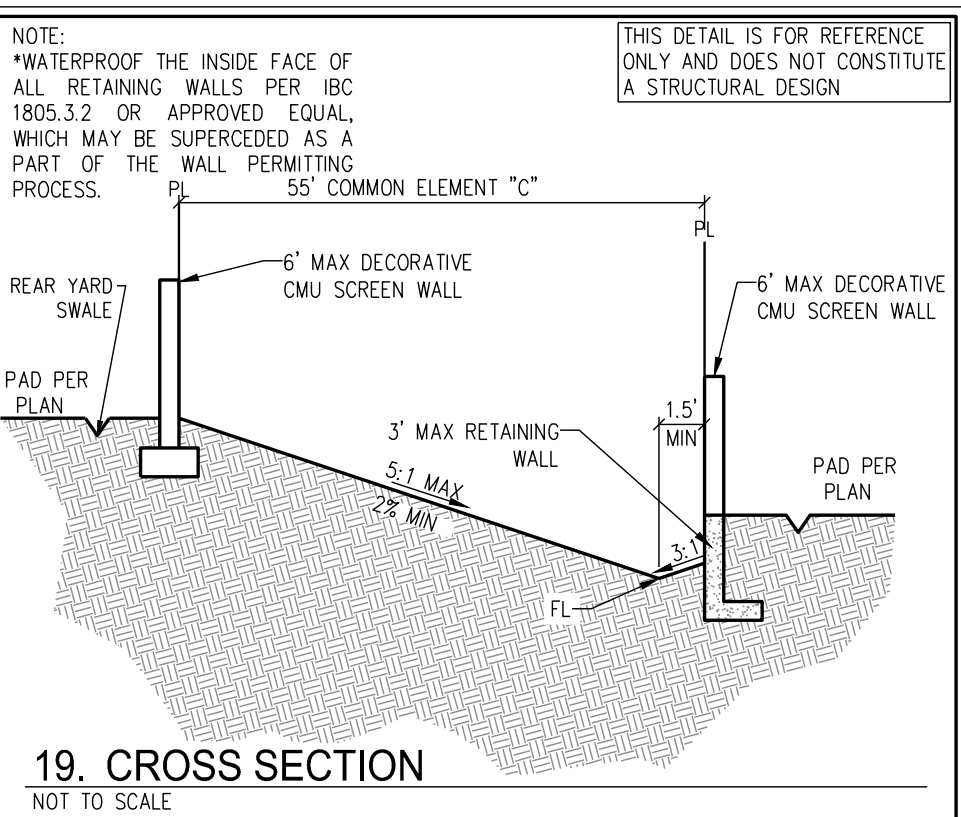
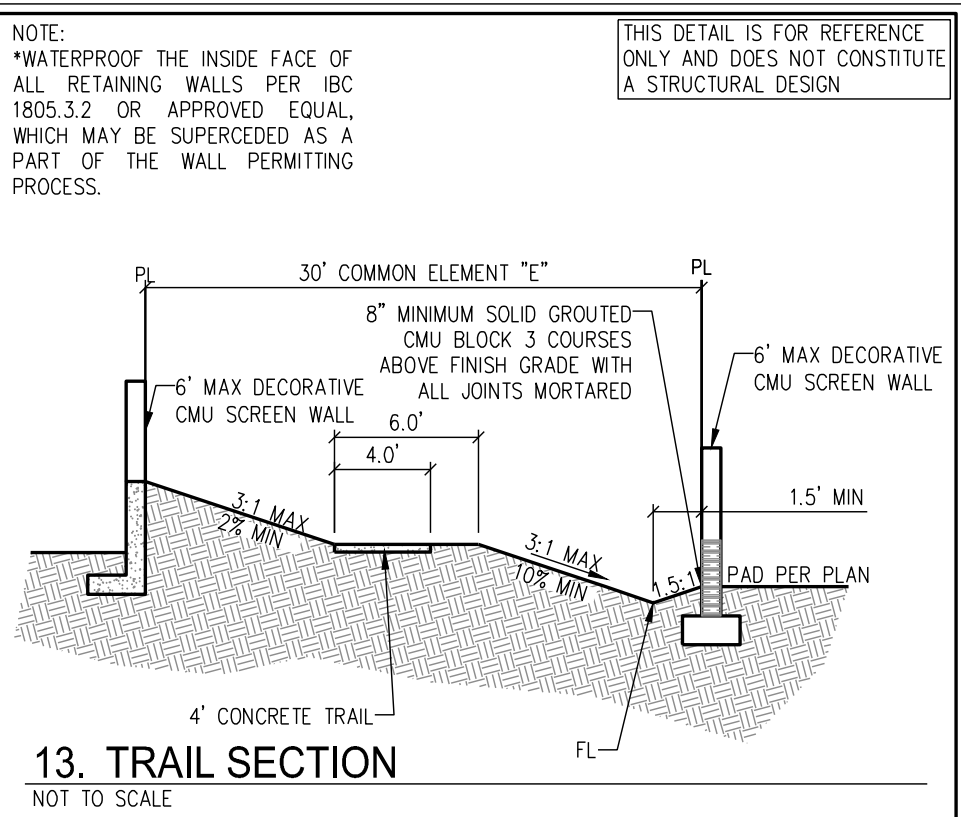
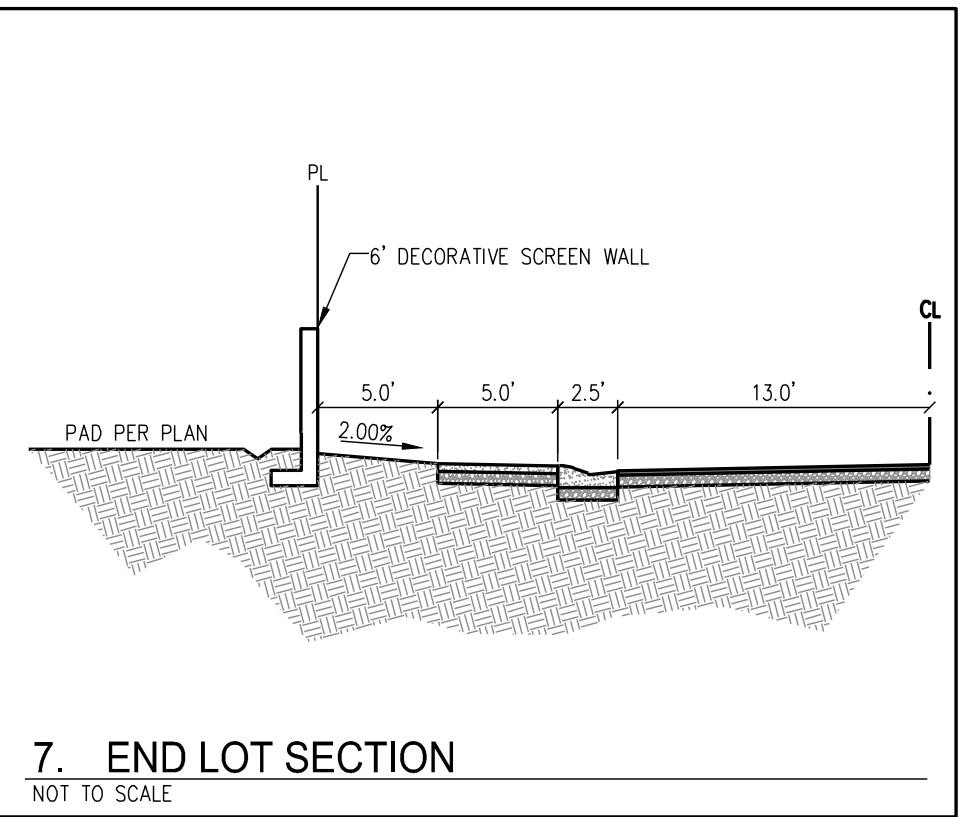
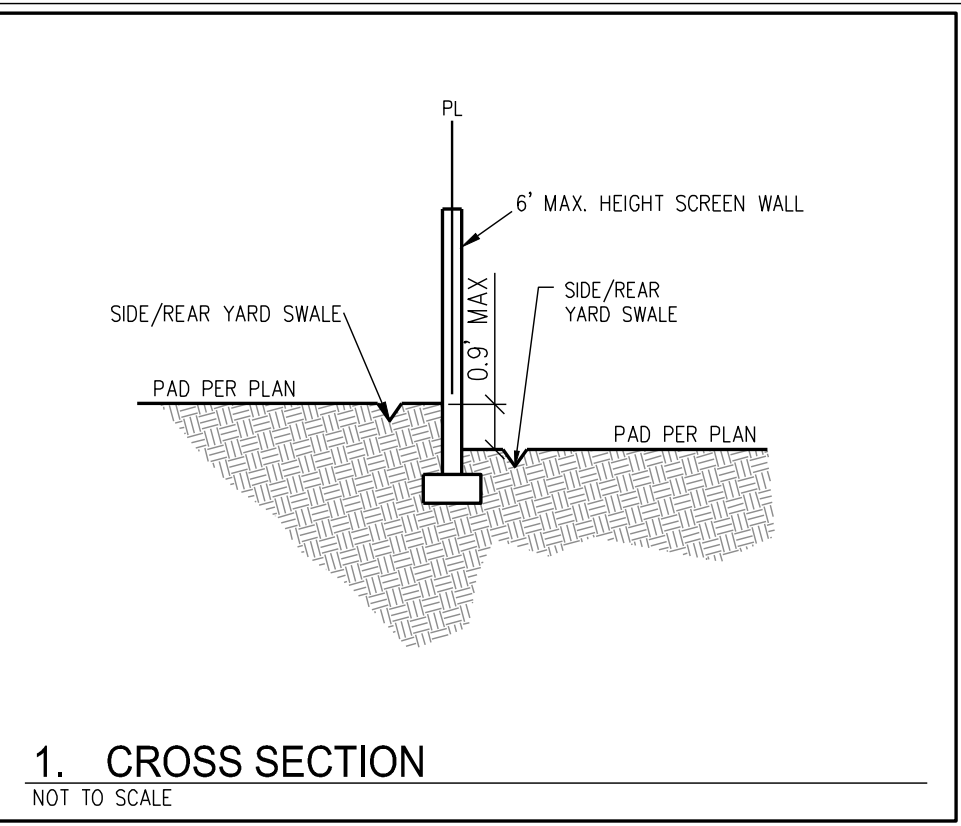
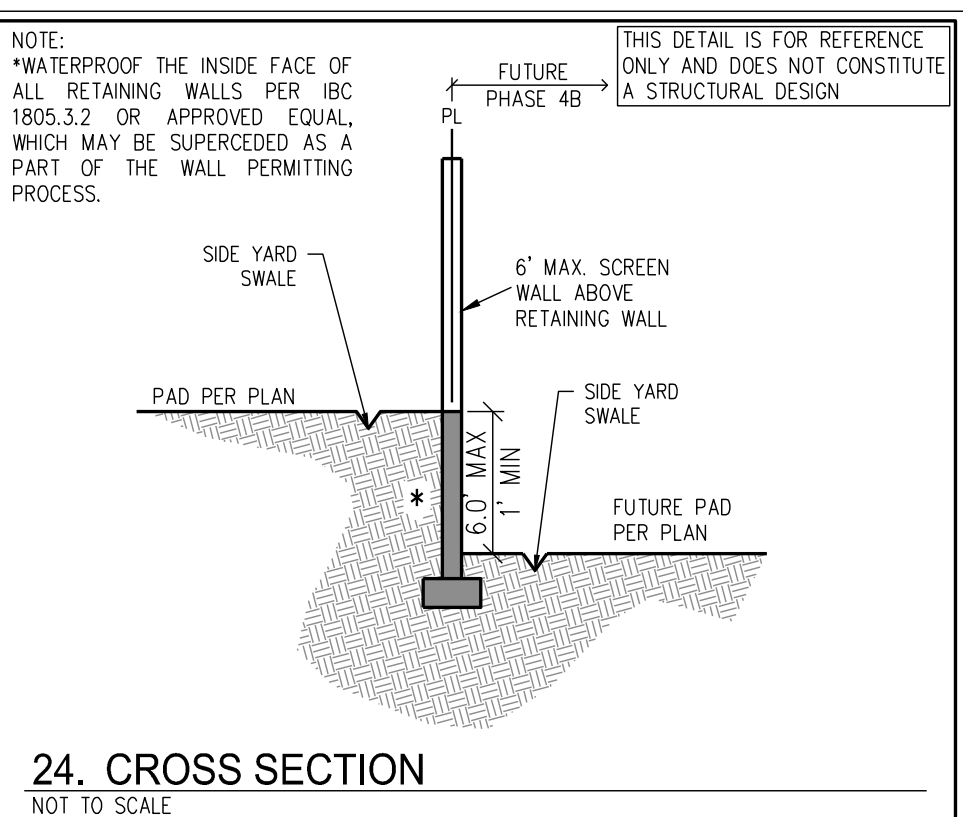
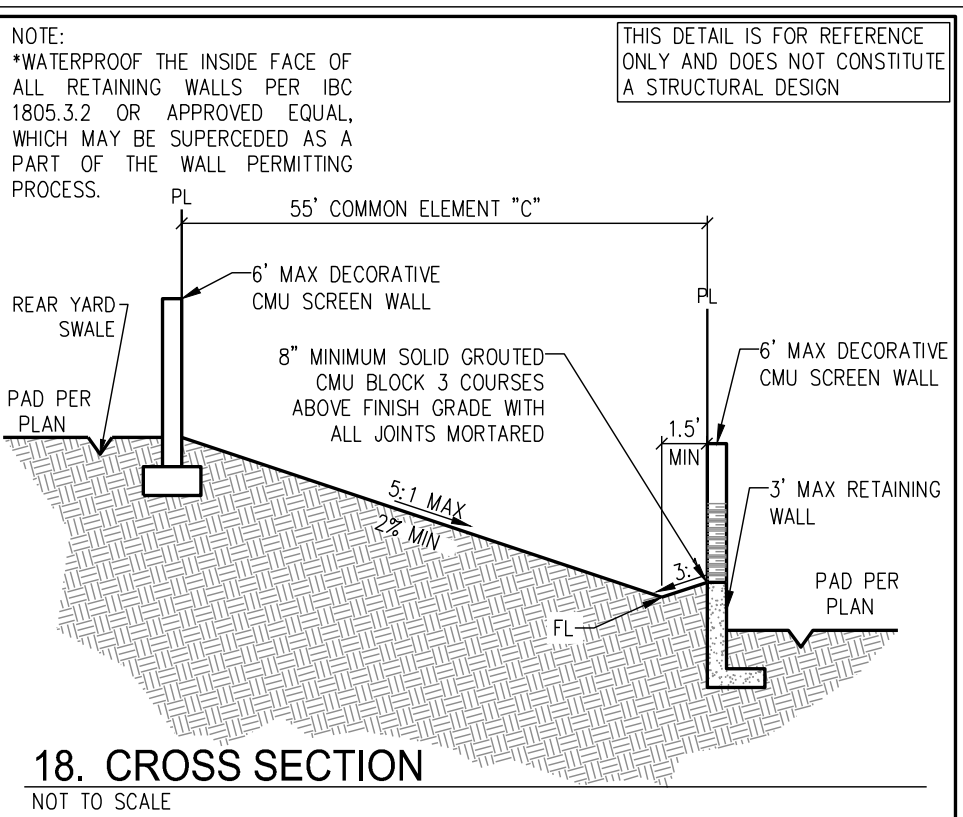
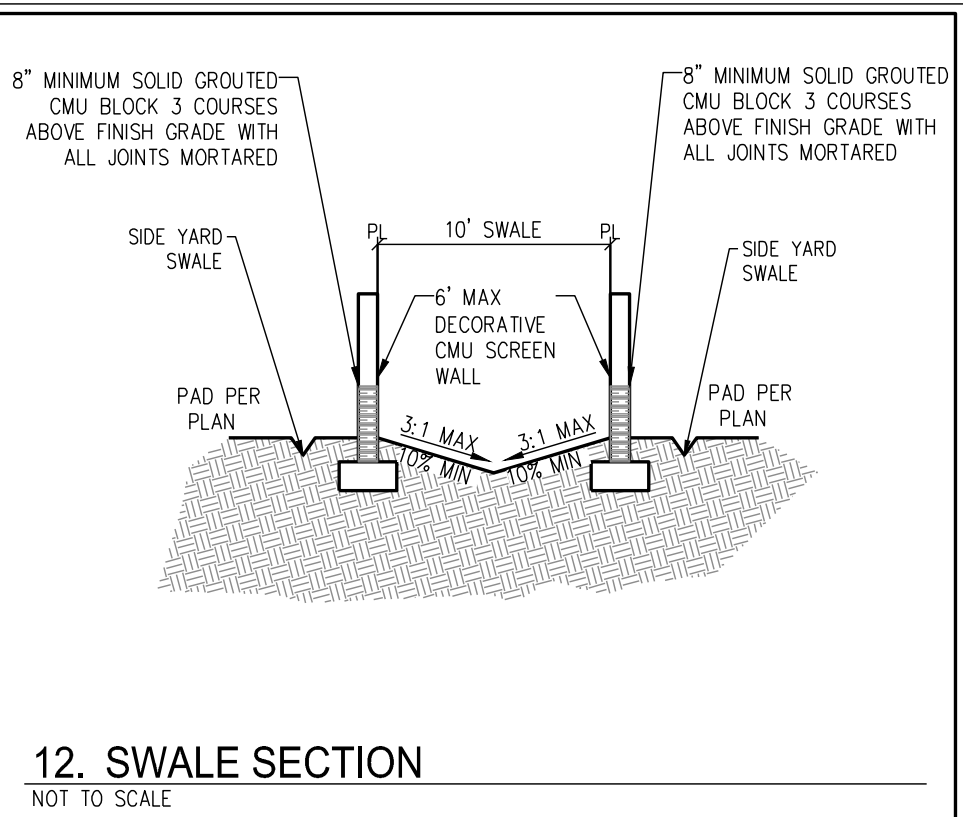
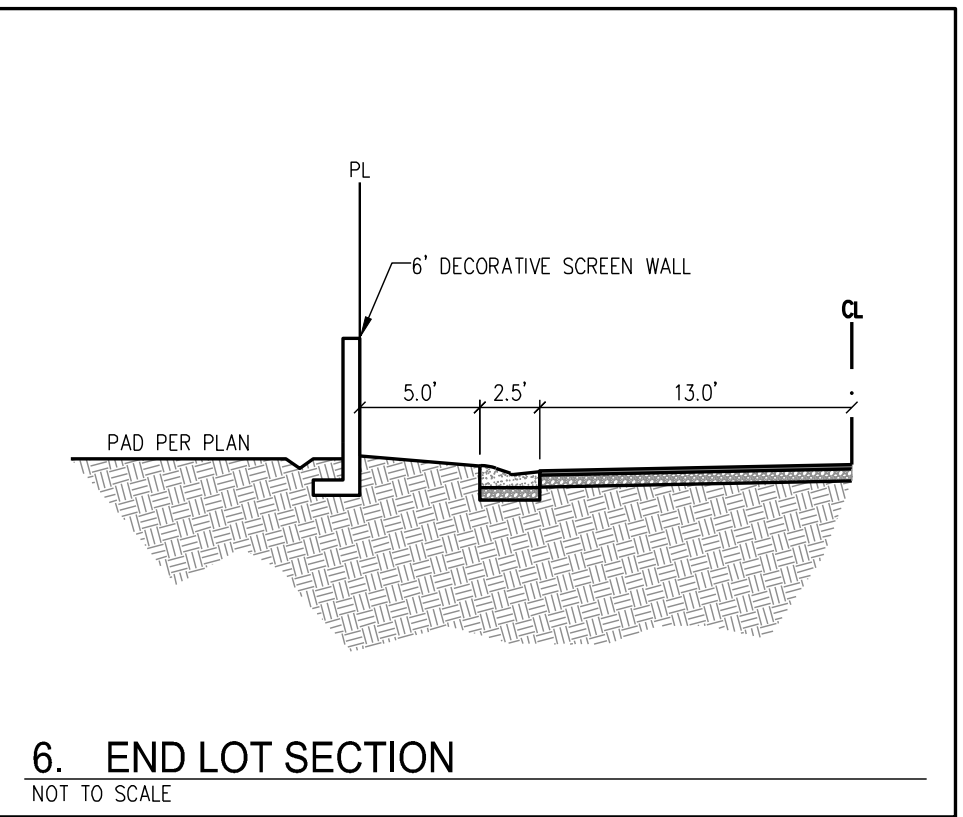
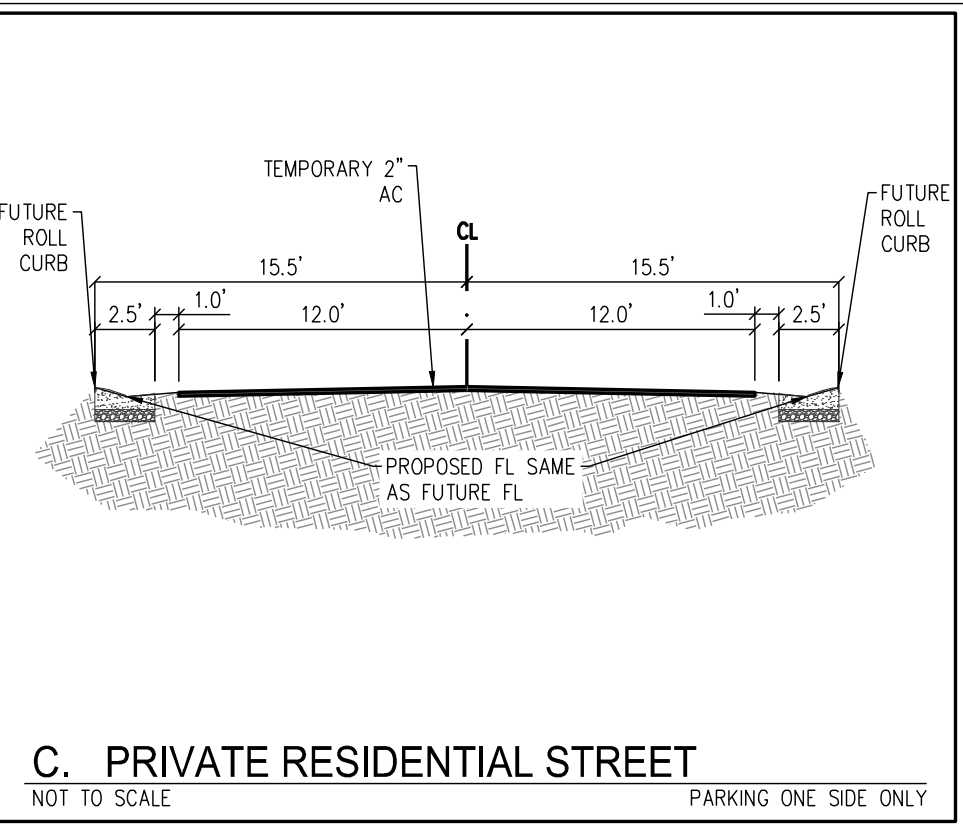
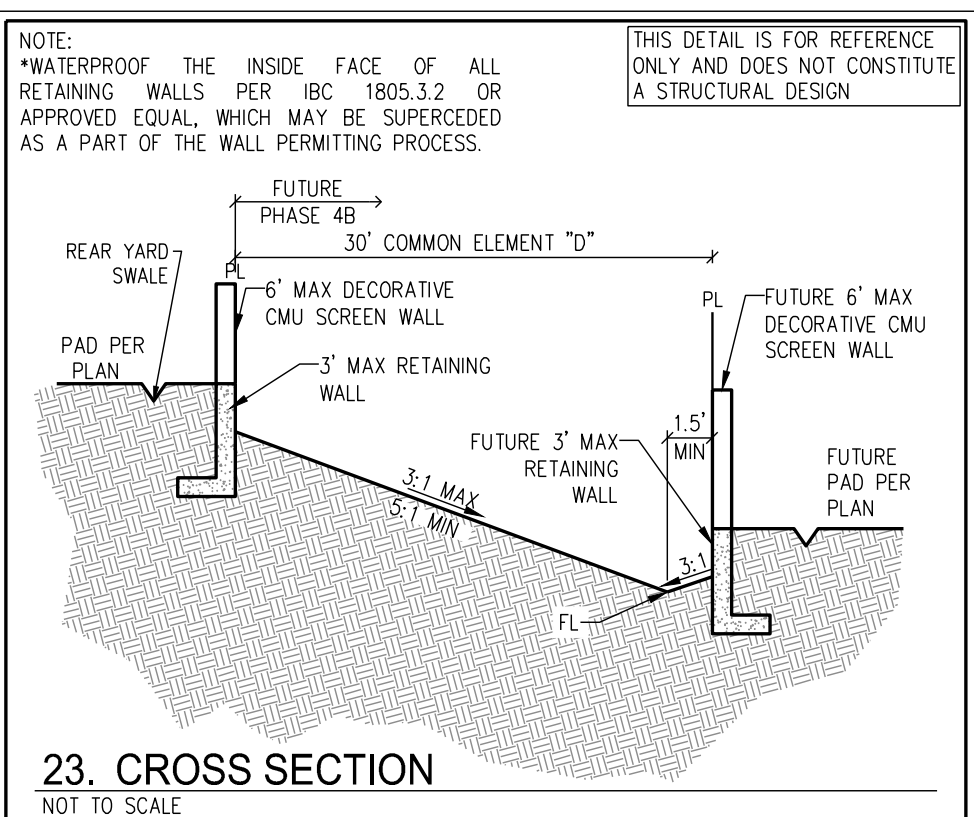
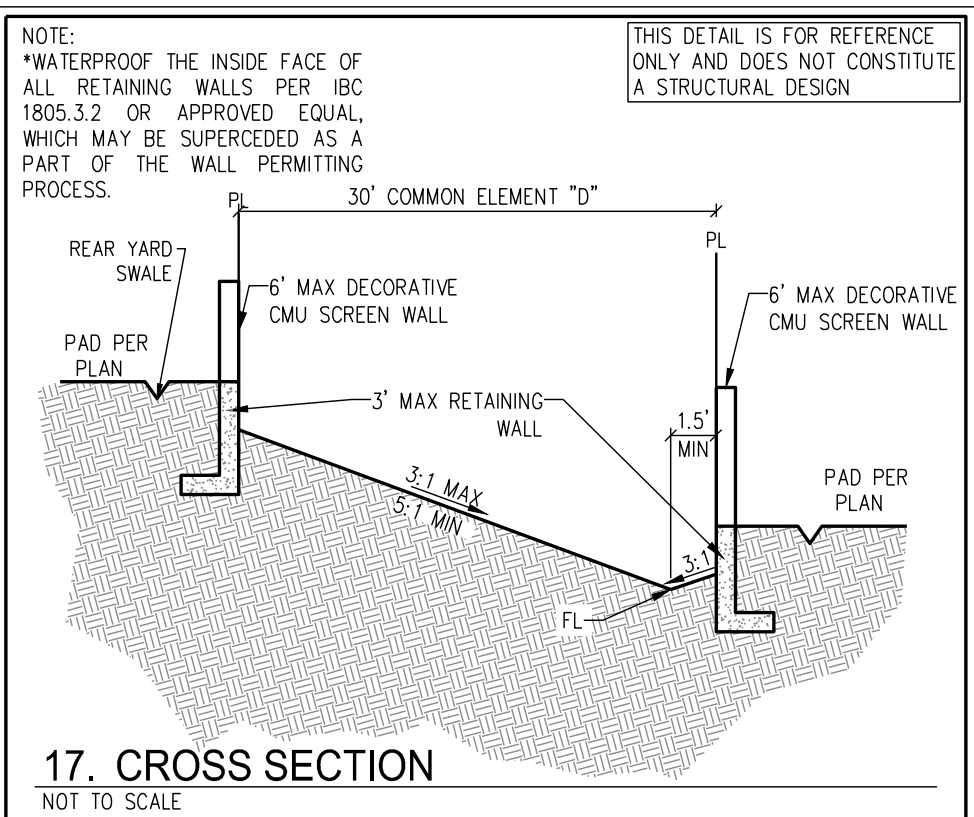
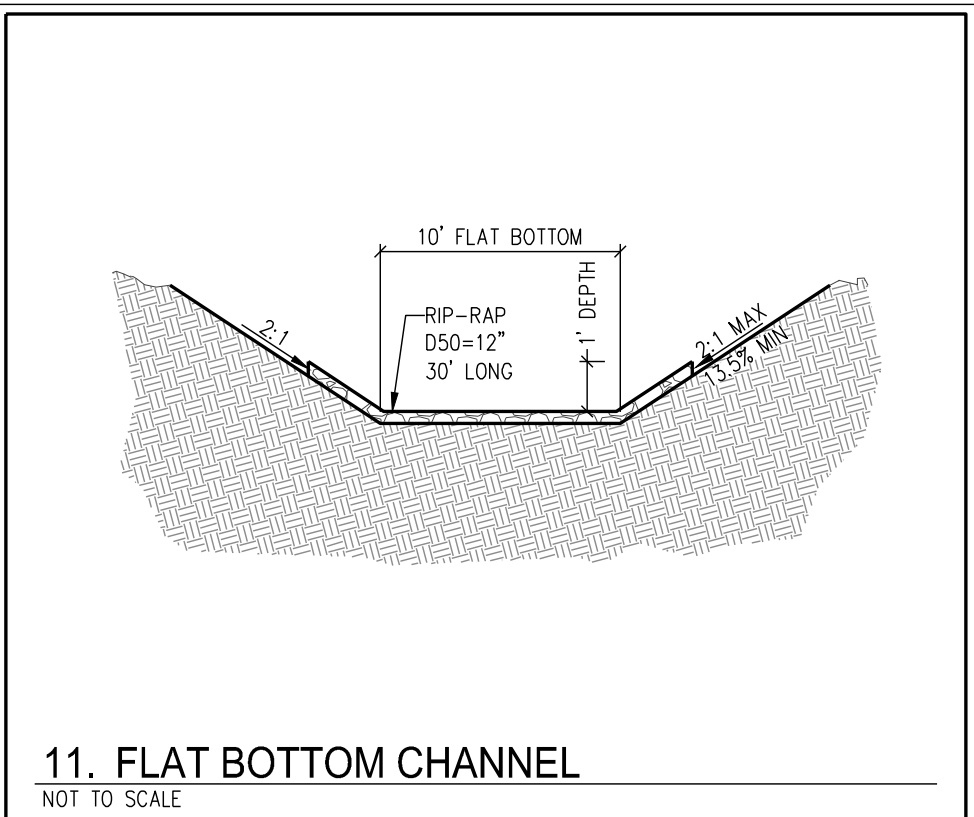
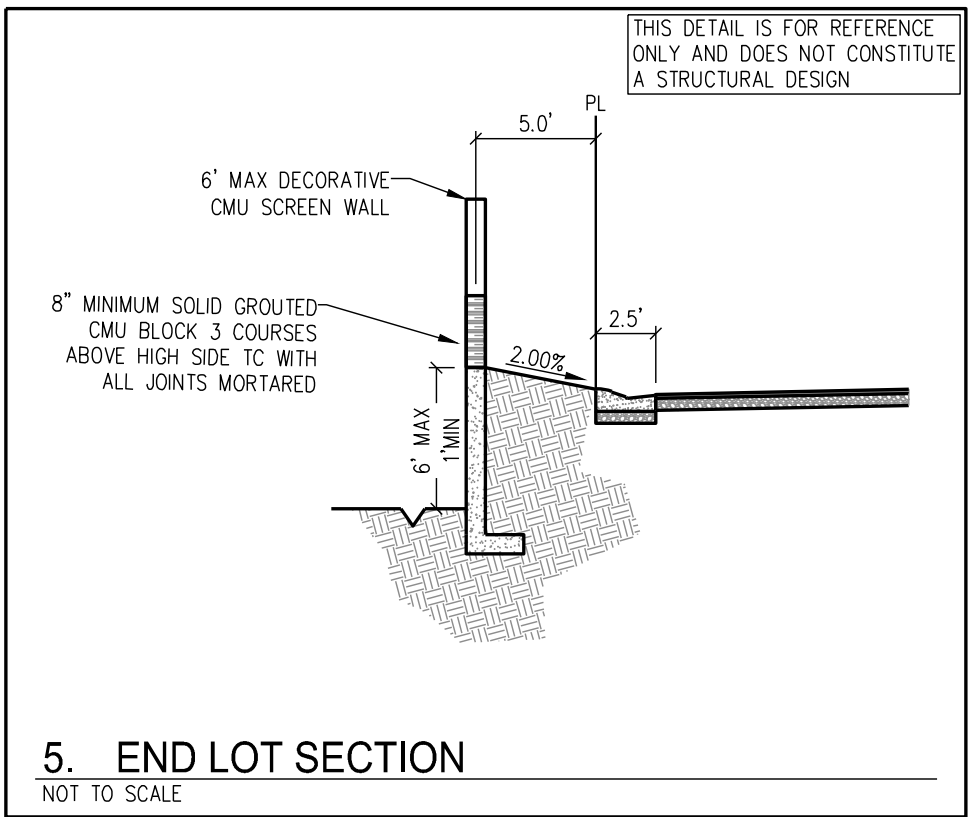
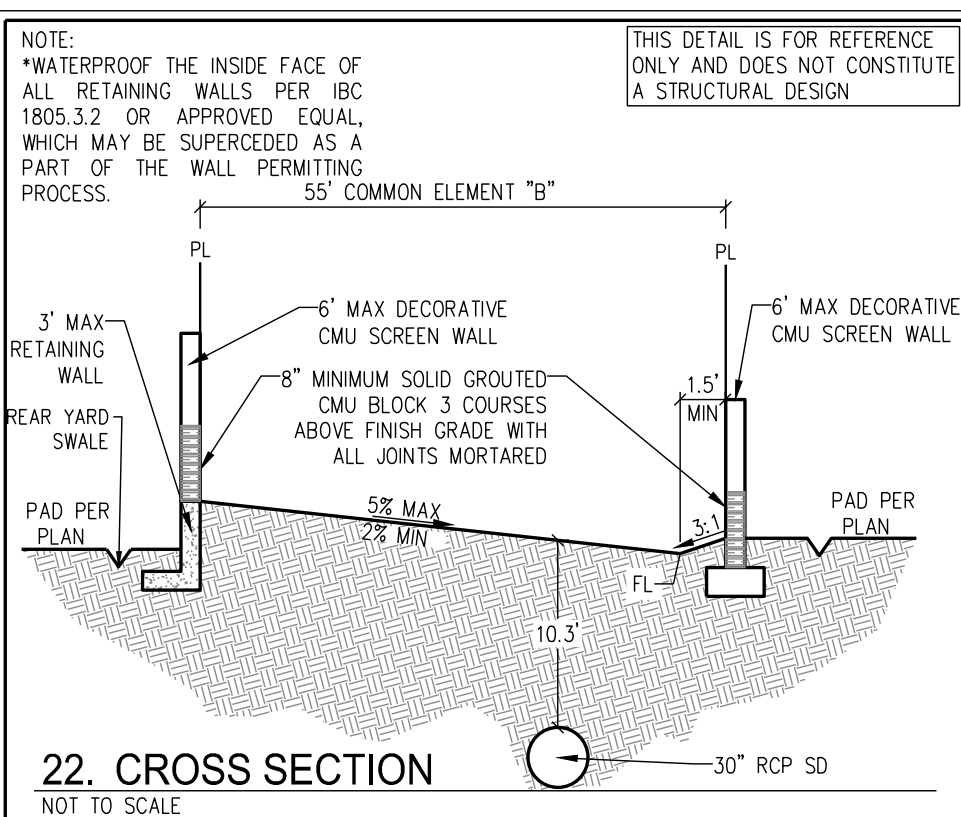
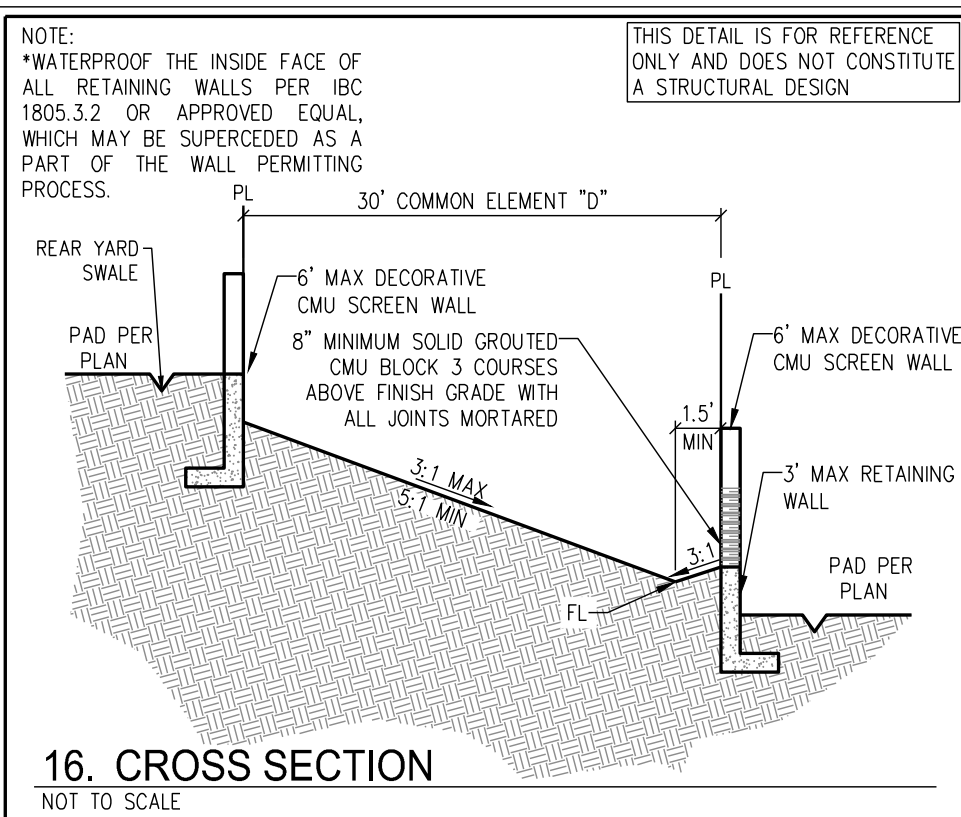
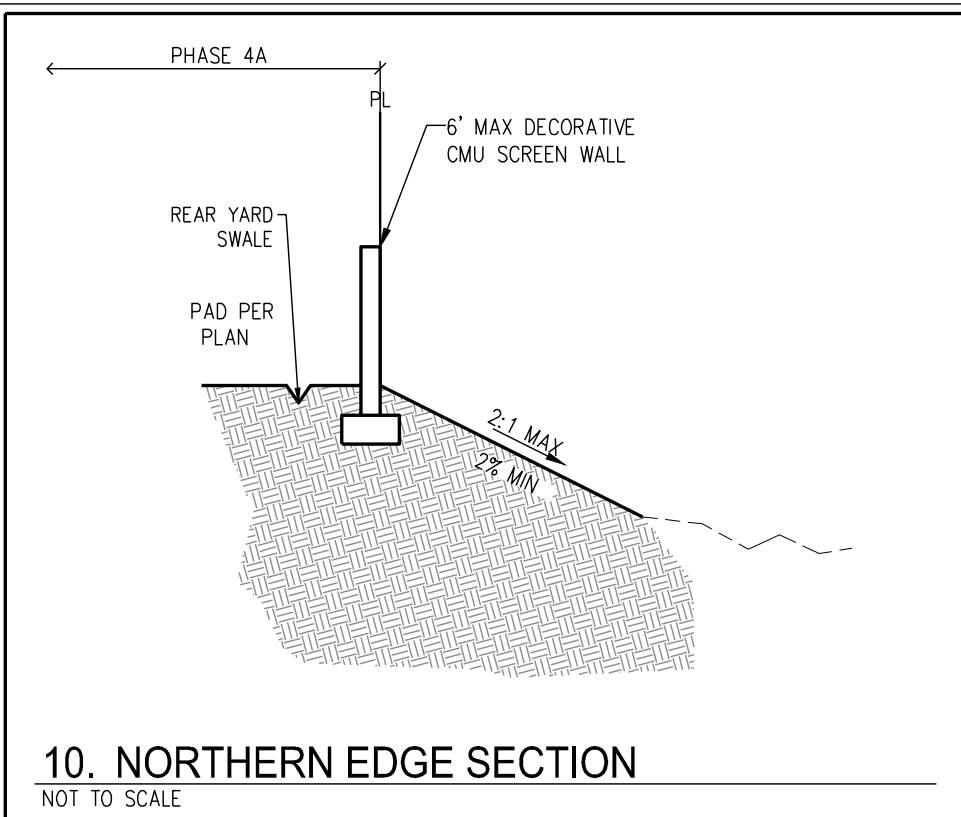
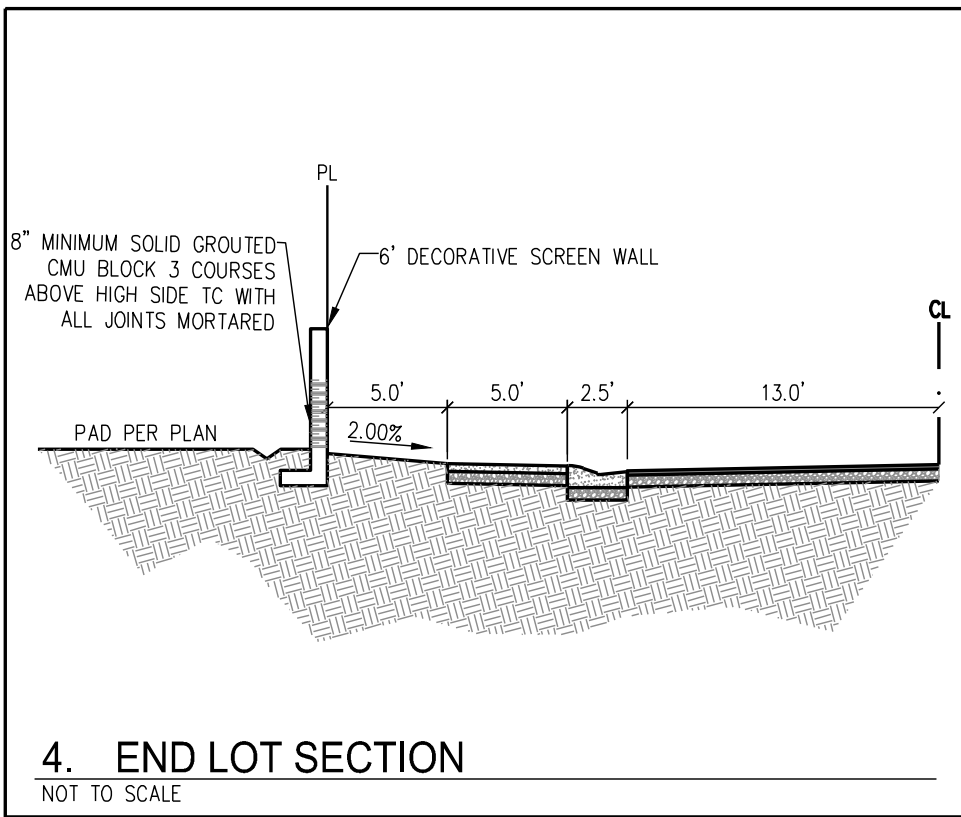
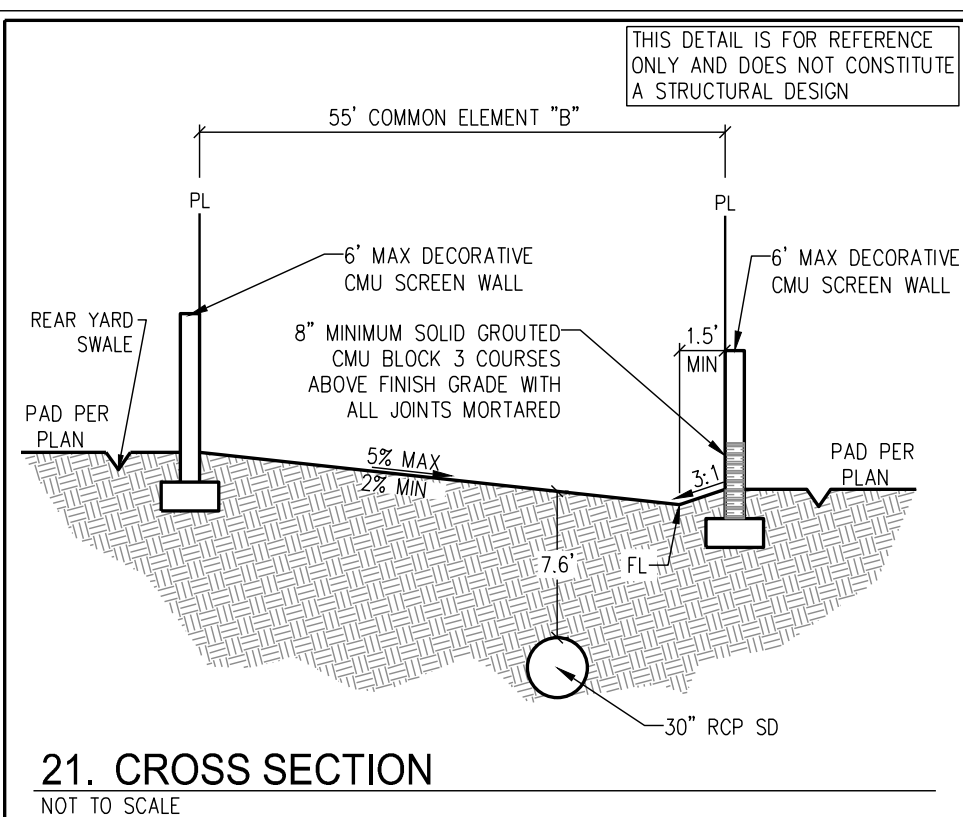
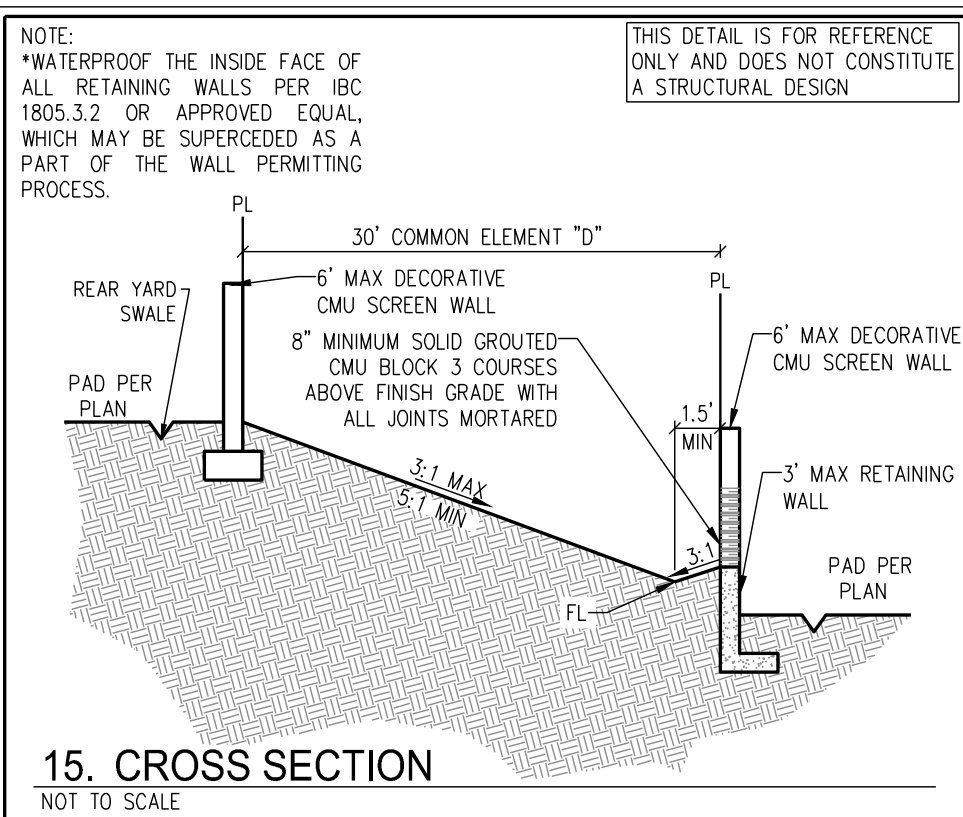
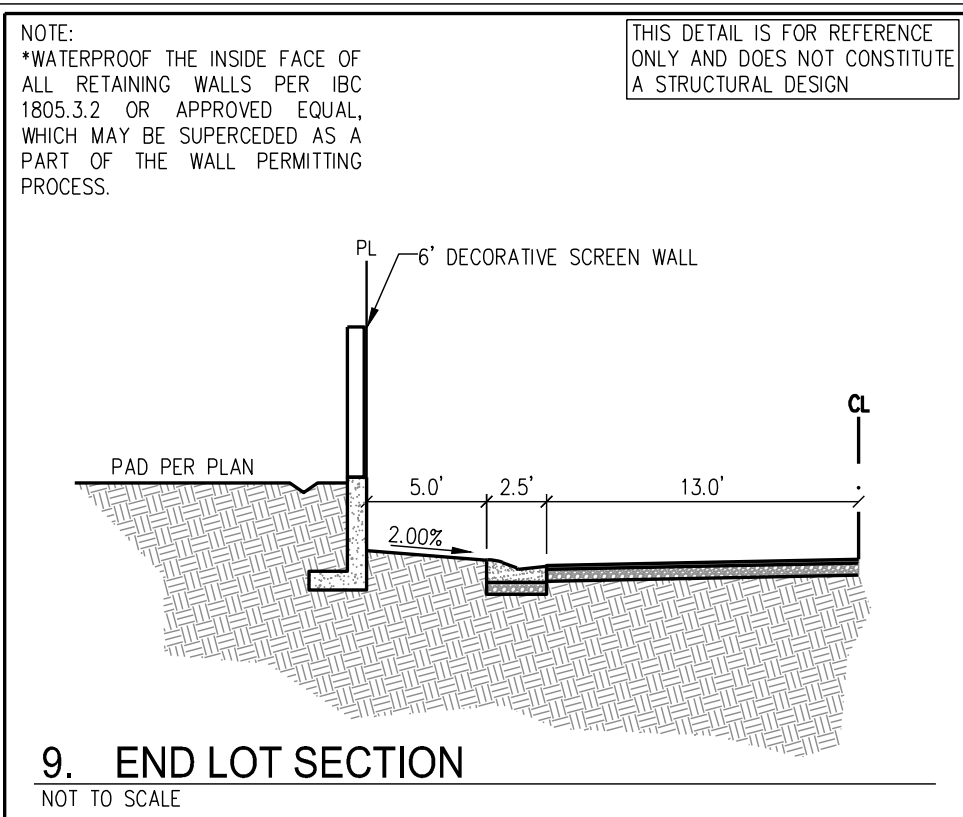
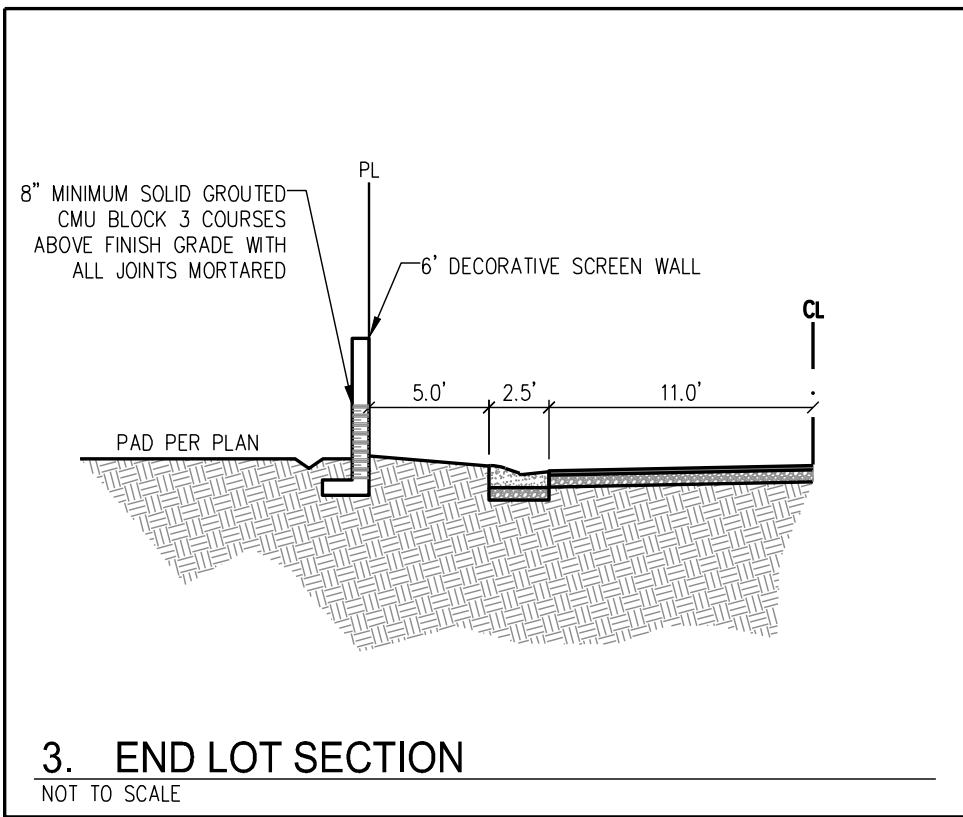
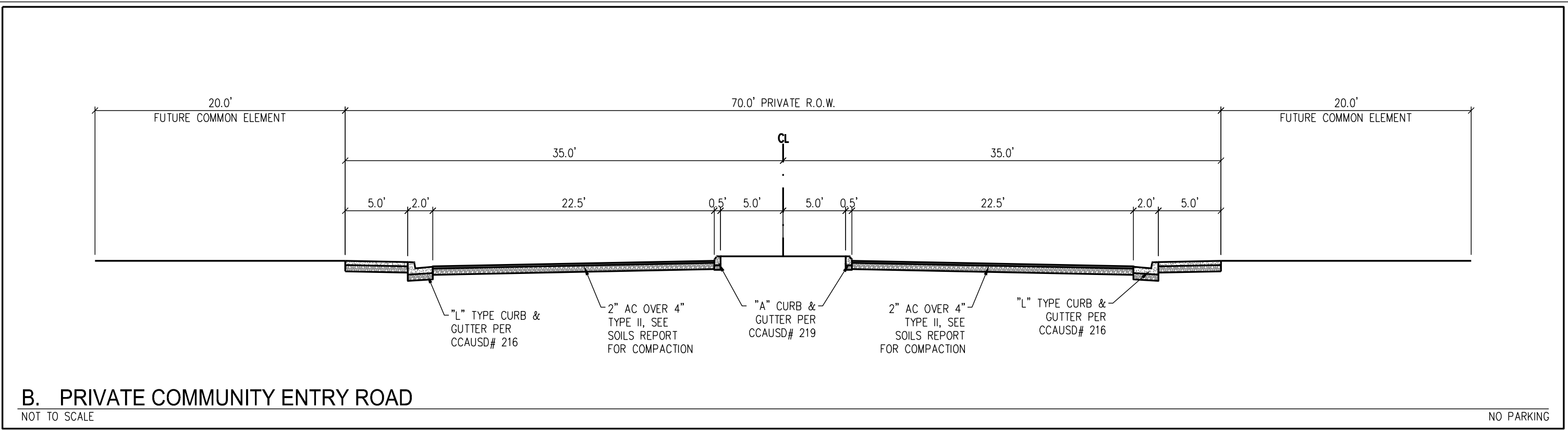
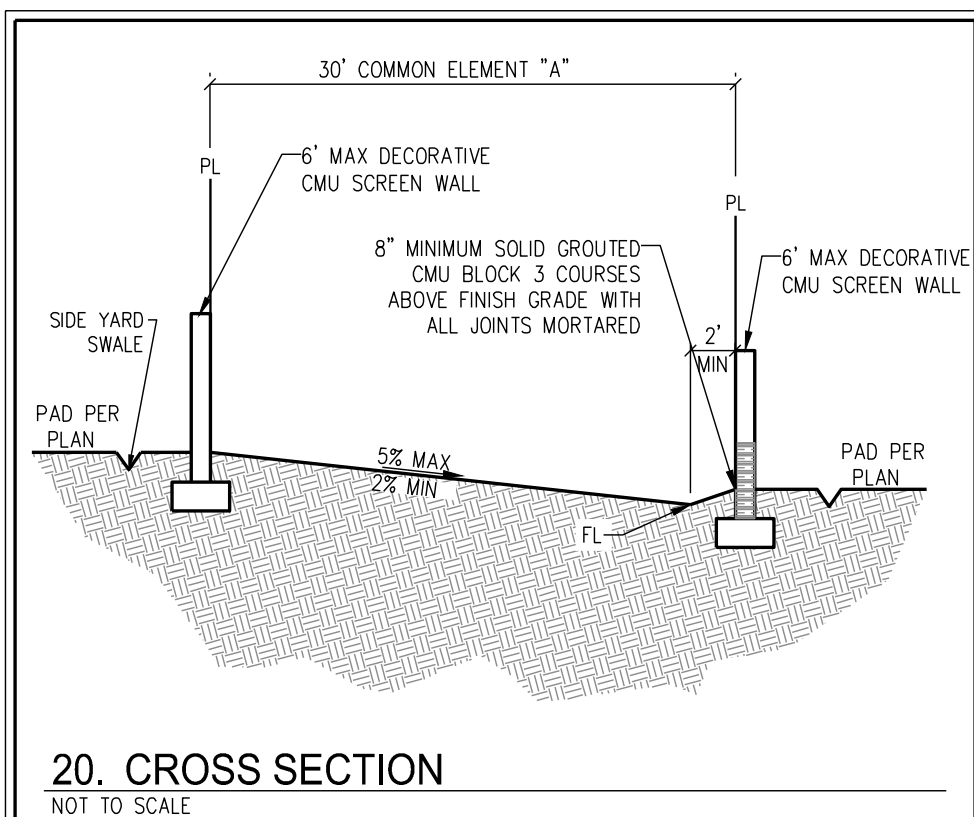
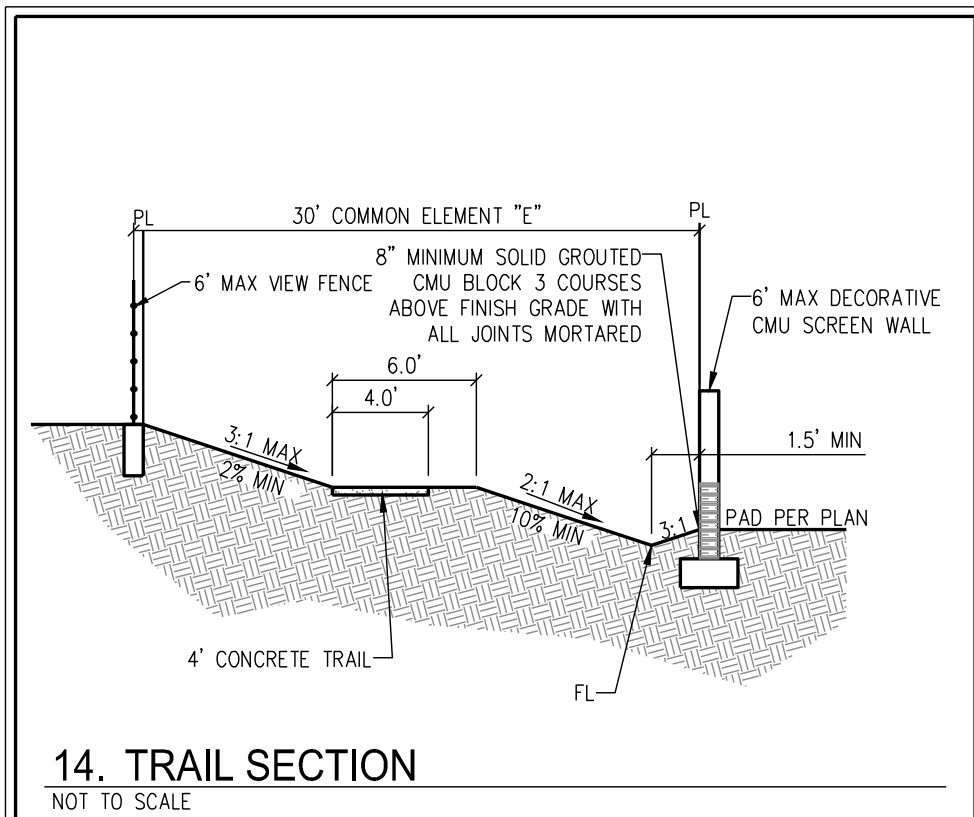
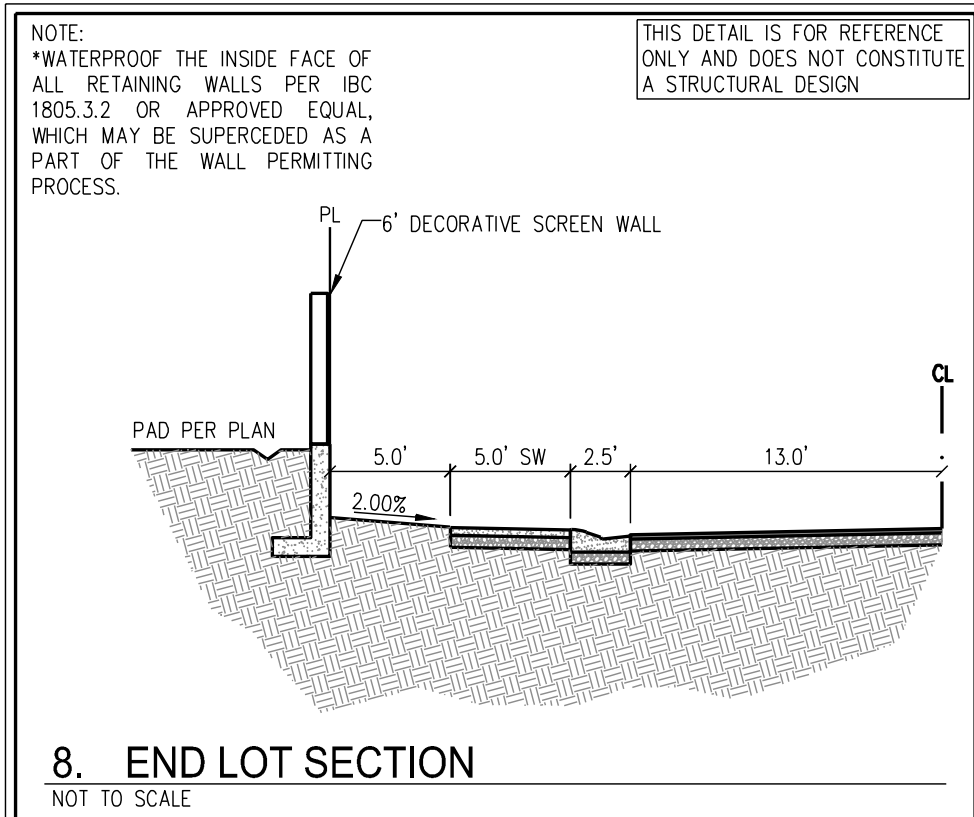
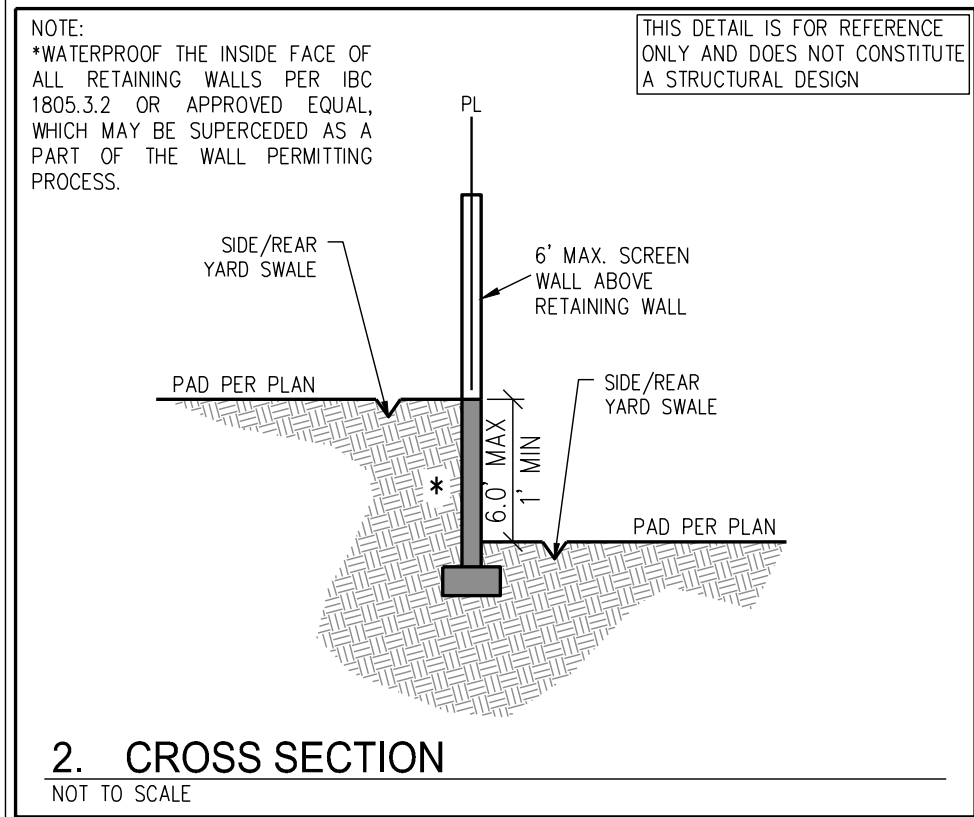
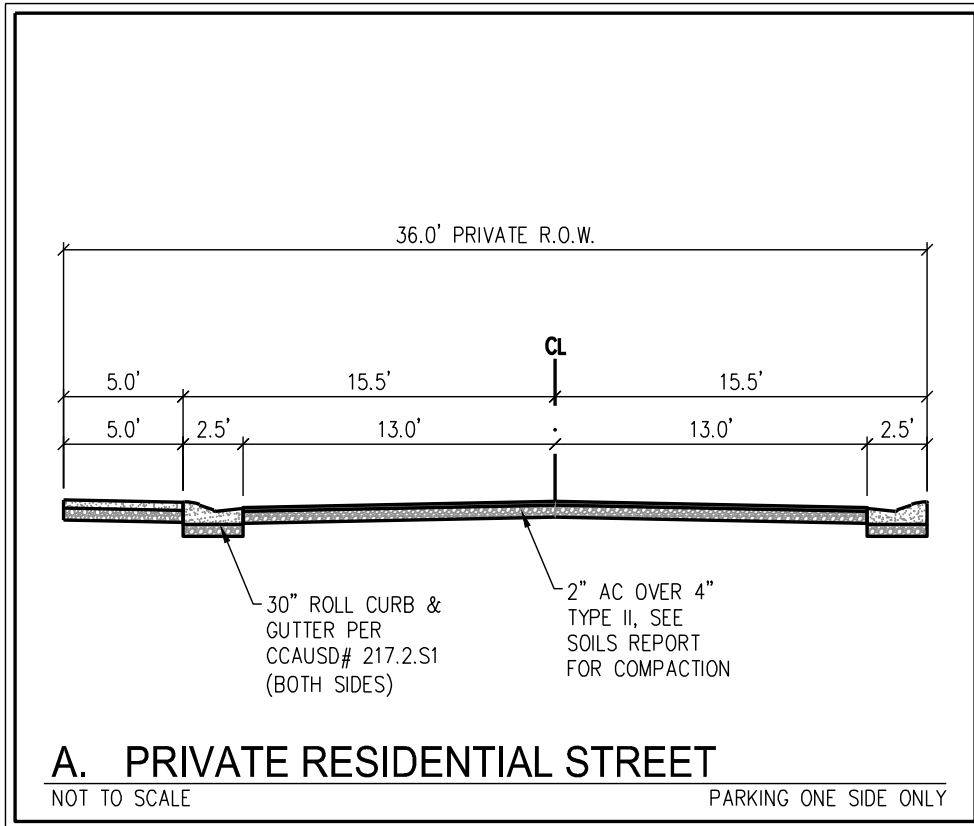
PARCEL 3 AT SUNSTONE PHASE 4A

GRADING SHEET VII

DATE: 7/18/22
DRAFTER: GM
DESIGNER: BD
CHECKED: DY
PROJECT NO. SHE1901-004

G-7
SHEET 11 OF 31

J:\shel901-004\trbony.sunstone.phase 4.dwg Improv.phase 4.dwg shel901-004.dwg 6/4/2022 1:58 PM Ben Johna Dorancl



Westwood

5725 W. Badura Ave.

Suite 100

Las Vegas, NV 89118

Phone (702) 284-5300

westwoodps.com

Westwood Professional Services, Inc.

DATE: 7/18/22

DRAWN BY: JLD

CHECKED BY: JLD

DESIGNED BY: JLD

PROJECT NO. SHE1901-004

PROJECT: SHE1901-004

DATE: 7/18/22

SHEET 17 OF 31

CITY OF LAS VEGAS, NEVADA

SHLP

PARCEL 3 AT SUNSTONE PHASE 4A

DETAIL SHEET I