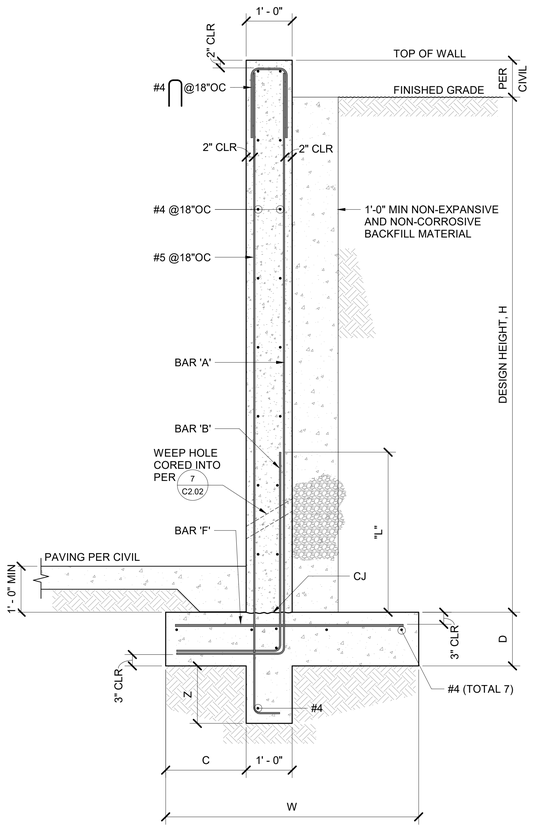
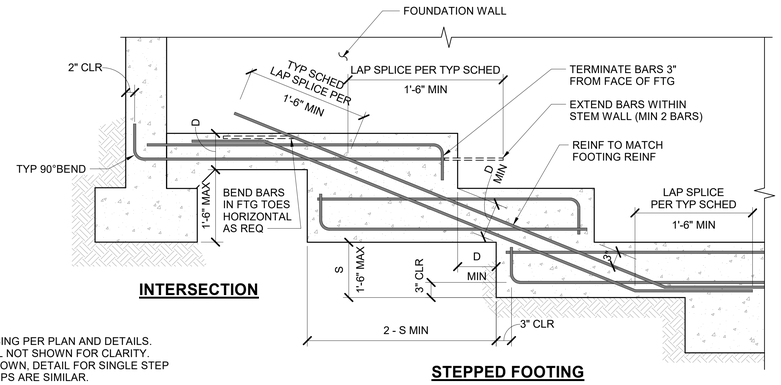


RETAINING WALL SCHEDULE OF DIMENSIONS AND REINFORCEMENT				
DESIGN HEIGHT, H	4'-0"	6'-0"	8'-0"	10'-0"
FOOTING WIDTH, W	3'-0"	4'-3"	5'-9"	7'-0"
FOOTING TOE, C	1'-0"	1'-3"	1'-9"	2'-3"
FOOTING DEPTH, D	1'-2"	1'-2"	1'-2"	1'-4"
BAR 'A'	#5@18"	#5@18"	#5@12"	#6@12"
BAR 'B'	NONE	NONE	#5@12"	#6@12"
BAR 'F'	#5@18"	#5@18"	#7@9"	#7@9"
DIMENSION "L"	-	-	3'-6"	4'-0"
FOOTING KEY, Z	6"	1'-3"	1'-3"	1'-6"

RETAINING WALL SCHEDULE AND SECTION 15
SCALE: 3/4" = 1'-0" S1.03



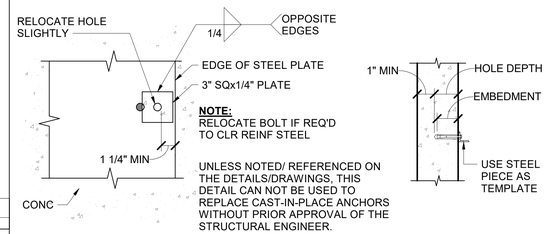
INTERSECTION

STEPPED FOOTING

NOTES:
1. FOOTING REINFORCING PER PLAN AND DETAILS.
2. TRANSVERSE STEEL NOT SHOWN FOR CLARITY.
3. TWO STEPS ARE SHOWN, DETAIL FOR SINGLE STEP OR ADDITIONAL STEPS ARE SIMILAR.

TYPICAL STEPPED FOOTING 5
DETAIL ID: CR-FTG-02 SCALE: NTS S1.03

TYPICAL CARBON STEEL ANCHOR INSTALLATION DESIGN AND TEST VALUES							
BOLT DIAMETER	3/8"	1/2"		5/8"		3/4"	
MIN. EMBEDMENT	2"	2"	3-1/4"	3-1/8"	4"	3-3/4"	4-3/4"
MIN. HOLE DEPTH	2-5/8"	2-5/8"	4"	3-7/8"	2-3/4"	4-5/8"	5-3/4"
MIN MEMBER THICKNESS	4"	4"	6"	5"	6"	6"	8"
INSTALLATION TORQUE	25 FT-LBS	40 FT-LBS		60 FT-LBS		110 FT-LBS	



ANCHOR RELOCATION DETAIL

ANCHOR AT WALL OR SLAB

INSTALLATION:

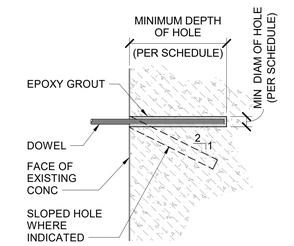
1. ALLOWABLE WEDGE ANCHOR TYPES: PER PRODUCT SCHEDULE ON SHEET S0.02.
2. UNO INSTALL ANCHORS PER MANUFACTURER'S RECOMMENDED SPECIFICATIONS.
3. THE TABULATED INSTALLATION AND TEST VALUES PERTAIN TO USE IN HARDROCK CONCRETE, LIGHT-WEIGHT CONCRETE AND CONCRETE FILL OVER METAL DECK. CONCRETE FILL OVER METAL DECK SHALL CONSIST OF 20GA. MIN. METAL DECK WITH EITHER HARD ROCK OR LIGHT WEIGHT CONCRETE. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI.
4. WHEN INSTALLING DRILLED-IN ANCHORS IN NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE REINFORCING BARS OR OTHER EMBEDDED ITEMS SUCH AS ELECTRICAL/TELECOMMUNICATIONS CONDUIT AND GAS LINES. WHEN INSTALLING DRILLED-IN ANCHORS INTO PRESTRESSED CONCRETE (PRE OR-POST-TENSIONED). LOCATE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR.
5. DRILLED EXPANSION TYPE ANCHOR BOLTS SHALL BE USED ONLY WHERE DETAILED OR FOR ATTACHMENT OF MECH, ELEC, OR MISC ACCESSORIES OR EQUIPMENT TO THE STRUCTURE.
6. WHERE EDGE DISTANCE AND SPACING IS NOT SHOWN ON DETAILS, REFER ICC ESR REPORT FOR MINIMUM VALUES.
7. SEE GENERAL NOTES SHEET S0.02, SECTION 016000 - PRODUCT SPECIFICATION. ACCEPTABLE PRODUCTS PER ICC ESR-2427, ESR-2502 OR ESR-3037.

TYPICAL CONCRETE POST-INSTALLED ANCHOR 2
DETAIL ID: CR-AB-01 SCALE: NTS S1.03

PROCEDURE:

1. DRILL HOLE OF PROPER DIAMETER AND DEPTH USING A CARBIDE TIPPED DRILL OR CORING BIT. AVOID ANY EXISTING REINFORCING STEEL BY RELOCATING HOLE SLIGHTLY.
2. CLEAN HOLE THOROUGHLY BY VACUUM OR AIR PRESSURE.
3. MAKE SURE THAT HOLE IS DRY AND CLEAN BEFORE GROUTING.
4. PLACE EPOXY GROUT IN HOLE WITH CAULKING GUN OR SIMILAR EQUIPMENT. STARTING AT BOTTOM, FILL HOLE APPROX 2/3 FULL.
5. COAT DOWEL WITH SAME EPOXY GROUT AND INSERT INTO HOLE. FORCING MATERIAL AROUND THE SIDES OF THE BAR AND COMPLETELY FILLING ALL VOIDS.
6. PROVIDE SUPPORT FOR DOWEL BY TYING TO REBAR OR OTHER ELEMENT UNTIL GROUT HAS CURED.
7. SEE GENERAL NOTES SHEET S0.02, SECTION 016000 - PRODUCT SPECIFICATION. ACCEPTABLE PRODUCTS PER ICC ESR-3187, ESR-3814, ESR-3037 AND ESR-3298 OR IAPMO ER-0263.
8. SPECIAL INSPECTION REQUIRED.

UNLESS NOTED/ REFERENCED ON THE DETAILS / DRAWINGS, THIS DETAIL CANNOT BE USED TO REPLACE CAST-IN-PLACE ANCHORS WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.



BOLT SIZE	BAR SIZE	MIN DIA	MIN DEPTH
3/8"	#3	1/2"	3"
1/2"	#4	5/8"	4"
5/8"	#5	3/4"	5"
3/4"	#6	1"	6"

TYPICAL CONCRETE ADHESIVE ANCHOR 3
DETAIL ID: CR-AB-02.1 SCALE: NTS S1.03

REVISIONS

1 ADDENDUM 1 02/01/2022

THIS APPROVAL IS FOR ITEMS WITHIN CLOUDED AREAS ONLY. FOR OTHER INFORMATION NOT CONTAINED WITHIN CLOUDED AREAS, REFER TO ORIGINAL DSA APPROVED PLANS.

DO NOT USE THESE PLANS AS SUBSTUTE FOR THE ORIGINAL DSA APPROVED PLANS

BRANDOW & JOHNSTON
STRUCTURAL & CIVIL ENGINEERS
700 S FLOWER ST #1800, LOS ANGELES, CA 90017
TEL: (213) 596-4500 FAX: (213) 596-4599
JOB #:S19-0231

REGISTERED PROFESSIONAL ENGINEER KIM CARATALTO No. 4896 STRUCTURAL STATE OF CALIFORNIA

DATE: 01/18/2022
FOR BRANDOW & JOHNSTON

NORWALK LA MIRADA UNIFIED SCHOOL DISTRICT
LA MIRADA HIGH SCHOOL NEW FOOTBALL STADIUM PROJECT
13520 ADELFA DRIVE, LA MIRADA, CA. 90638

DSA # 03-120551

NAC ARCHITECTURE

NAC NO. 161-19015
DATE 02/01/2022

DSA BACKCHECK SUBMISSION

TYPICAL CONCRETE DETAILS

S1.03

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