

# FORT BLISS, TEXAS

## NEW A.D.A. RAMP AT BLDG. 11148

### INDEX OF DRAWINGS

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- 8 = RAMP AND CURB DETAILS
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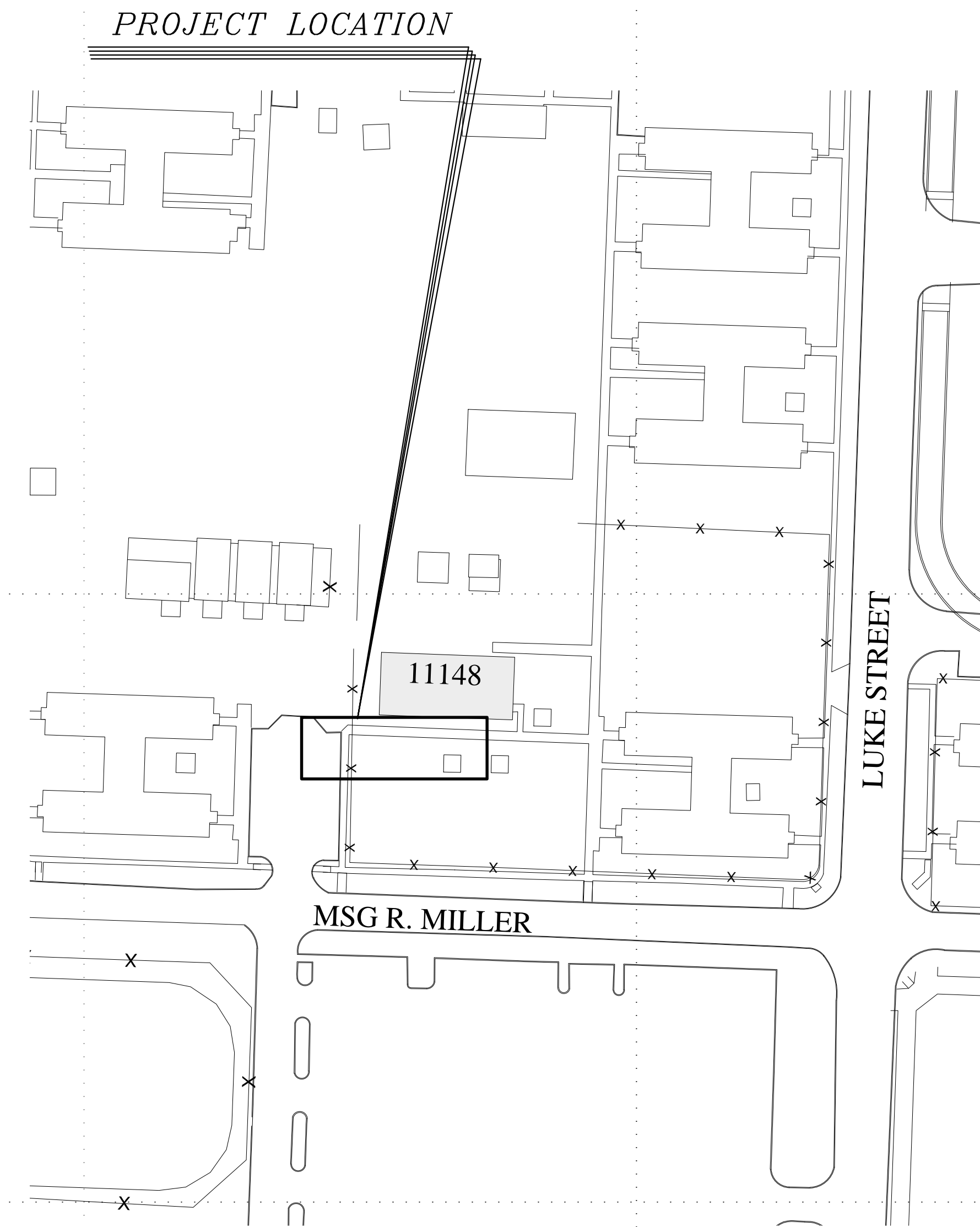
#### CONCURRENCES

USING AGENCY	DATE
FIRE DEPARTMENT	DATE
SAFETY OFFICER	DATE
PHYSICAL SECURITY OFFICER	DATE
INDUSTRIAL HYGIENE	DATE
NEC	DATE
ENVIRONMENTAL DIVISION	DATE
ANTI-TERRORISM/FORCE PROTECTION	DATE
MASTER PLANNING DIVISION	DATE
OPERATIONS & MAINTENANCE DIVISION	DATE

NOTES:  
SIGNATURES INDICATE THAT THOSE SIGNING HAVE REVIEWED PROJECT PLANS AND SPECIFICATIONS AND ARE IN CONCURRENCE WITH THEM.

APPROVED BY: \_\_\_\_\_  
CHIEF, DESIGN BRANCH, ESD, DPW

APPROVED BY: \_\_\_\_\_  
CHIEF, ENGINEERING SERVICES DIVISION, DPW



PROJECT LOCATION MAP

MARK	DESCRIPTION	DATE

DESIGNED BY:	DATE:	4/18/2019
DRAWN BY:	W.O. #	LM
REVIEWED BY:	SPEC. #	JJA
SCALE:	NTS	

**FORT BLISS DPW**

DIRECTORATE OF PUBLIC WORKS  
FORT BLISS, TEXAS

NEW A.D.A. RAMP AT BUILDING 11148

COVER SHEET

SHEET NUMBER:  
C-100

1 OF 9

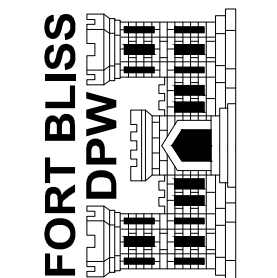


**NOTES**

1. STOW ALL FLAMMABLE MATERIALS IN ACCORDANCE WITH LATEST VERSION OF EM 385-1-1, 15, SECTION 9 OF THE U.S. ARMY CORE OF ENGINEERS SAFETY AND HEALTH REQUIREMENTS MANUAL, EXCEPT FLAMMABLE LIQUIDS SHALL NOT BE STORED ON SITE UNLESS IN AN APPROVED FLAMMABLE STORAGE LOCKER PER NFPA AND 29 CFR 1910.
2. PRIOR TO ANY CHANGE OR MODIFICATION TO THESE DRAWINGS DUE TO ACTUAL CONDITIONS, DPW REPRESENTATIVES SHALL BE NOTIFIED FOR REVIEW AND APPROVAL.
3. COMPLY WITH THE REQUIREMENTS OF NFPA 241 FOR FIRE PREVENTION DURING CONSTRUCTION.
4. CONTRACTOR SHALL COMPLY WITH CX-LOG FROM DPW ENVIRONMENTAL.
5. CONSTRUCTION PROJECTS WHICH REQUIRE ANY TYPE OF DISTURBANCE OF THE SOIL MUST OBTAIN AN EXCAVATION REQUEST.
6. CONSTRUCTION AND DEMOLITION DIVERSION: FORT BLISS REQUIRES A MINIMUM OF 60% OF CONSTRUCTION AND DEMOLITION MATERIAL AND DEBRIS FROM LANDFILL. IF CONTRACTOR HAS A VALID REASON FOR NOT BEING ABLE TO MEET THIS DIVERSION GOAL, THE CONTRACTOR NEEDS TO PRESENT THEIR REASONING IN WRITING TO DPW-ENVIRONMENTAL.
7. OBTAIN ALL REQUIRED FEDERAL, STATE & LOCAL PERMITS REQUIRED FOR THIS PROJECT AT NO ADDITIONAL COST TO THE GOVERNMENT.
8. LAY-DOWN AREA SHALL BE DESIGNATED PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL CO-ORDINATE WITH DPW MASTER PLANNING.
9. THE CONTRACTOR SHALL RESTORE ANY ACCESS ROADS AD LAY-DOWN AREAS USED BACK TO THEIR ORIGINAL STABILIZED CONDITION OR BETTER.
10. IF BONE IS ENCOUNTERED, STOP DIGGING IMMEDIATELY AND CONTACT MARTHA YDUARTE, ARCHEOLOGIST AT (915) 568-7015.
11. THE CONTRACTOR SHALL NOTIFY GOVERNMENT REPRESENTATIVE IF ANY SOIL DISCOLORATION, ODOR, RUBBISH AND/ OR ANY ENVIRONMENTAL CONCERNS BE UNCOVERED THE CONTRACTOR SHALL SUSPEND WORK ON THE SITE OF THE DISCOVERY A AND CONTINUE OPERATIONS IN ALL OTHER AREAS.
12. CONTRACTOR SHALL PROPERLY SECURE THE CONSTRUCTION LIMITS TO PREVENT FACILITY USERS FROM ACCESSING THE SITE..

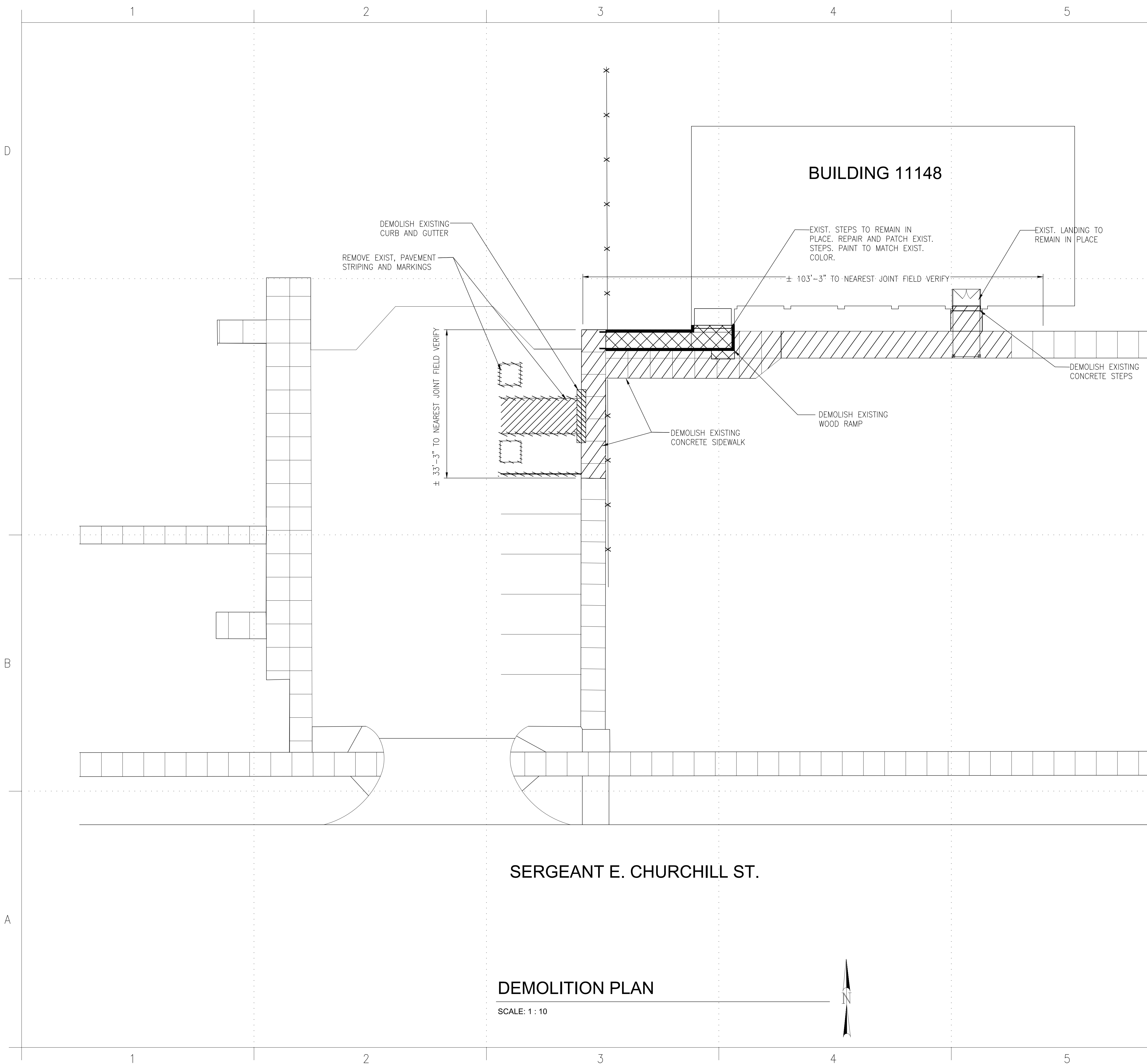
MARK	DESCRIPTION	DATE

DESIGNED BY: JJA	DATE: 4/18/2019
DRAWN BY: LM	W.O. # PT1 10204 7J
REVIEWED BY: JJA	SPEC. #
SCALE: AS SHOWN	


  
 DIRECTORATE OF PUBLIC WORKS  
 FORT BLISS, TEXAS

NEW A.D.A. RAMP AT BUILDING 11148  
 SITE LOCATION MAP

SHEET NUMBER:  
**C-101**  
 2 OF 9



**GENERAL NOTES**

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK.
2. EXISTING PAVEMENTS AND ALL OTHER AREAS ADJACENT TO THE SITE SHALL BE KEPT CLEAN AT ALL TIMES. DO NOT ALLOW BUILDUP OF SOIL, MUD, DUST OR OTHER DEBRIS.
3. CONTRACTOR SHALL BE AWARE OF ONGOING CONSTRUCTION ON ADJACENT SITES AND COORDINATE WHEN NEEDED WITH OTHER CONTRACTORS.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHETHER INDICATED ON THE DRAWING OR NOT TO VERIFY THE LOCATION, DEPTH, AND CONDITION OF ALL EXISTING UTILITIES AND SUBSTRUCTURES AND PROTECT THEM FROM ANY DAMAGE.
5. PROMPTLY NOTIFY THE DPW REPRESENTATIVE OF ANY DISCREPANCIES AND/OR CONDITIONS WHICH PREVENT FULFILLING THE TERMS OF THE CONTRACT.
6. ITEMS AND MATERIALS TO BE REMOVED SHALL BE DONE IN SUCH A MANNER AS TO PREVENT DAMAGES TO ITEMS AND MATERIALS THAT REMAIN. SUCH DAMAGES SHALL BE REPAIRED TO THE SATISFACTION OF THE DPW REPRESENTATIVE AND AT NO ADDITIONAL COST TO THE GOVERNMENT.
7. ALL SAW CUT WORK SHALL BE IN A NEAT WORKMAN LIKE MANNER, AS APPROVED BY DPW REPRESENTATIVE. WHERE CONCRETE DEMOLITION IS REQUIRED, CONTRACTOR SHALL USE A SAW CUT AT THE LIMITS OF DEMOLITION OR NEAREST JOINT TO OBTAIN A CLEAN VERTICAL EDGE.
8. MARKING REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH TxDOT SPECIFICATION ITEM 677. APPROVED METHODS INCLUDE: FLAILING, WATER BLASTING, AND SANDBLASTING. "PAINTING OUT" MARKING BY COVERING OVER OLD PAVEMENT MARKING WITH BLACK PAINT IS NOT ACCEPTABLE REMOVAL TECHNIQUE.
9. CONSTRUCTION AND DEMOLITION DIVERSION: FORT BLISS REQUIRES A MINIMUM OF 60% OF CONSTRUCTION AND DEMOLITION MATERIALS AND DEBRIS FROM LANDFILLS. IF THE CONTRACTOR HAS A VALID REASON FOR NOT BEING ABLE TO MEET THIS DIVERSION GOAL, THE CONTRACTOR NEEDS TO PRESENT THEIR REASONING IN WRITING TO DPW-ENVIRONMENTAL.

**LEGEND**

- EXISTING SIDEWALK
- DEMOLISH EXISTING SIDEWALK
- REMOVE EXIST. PAVEMENT STRIPING AND MARKING
- EXISTING CHAIN LINK FENCE TO REMAIN IN PLACE
- DEMOLISH EXISTING RAMP

DATE	DESCRIPTION

DESIGNED BY:	J/A	DATE:	4/18/2019
DRAWN BY:	J/A	W.O. #	WB-10030-5P
REVIEWED BY:	J/A	SPEC. #	
SCALE:		1:10	

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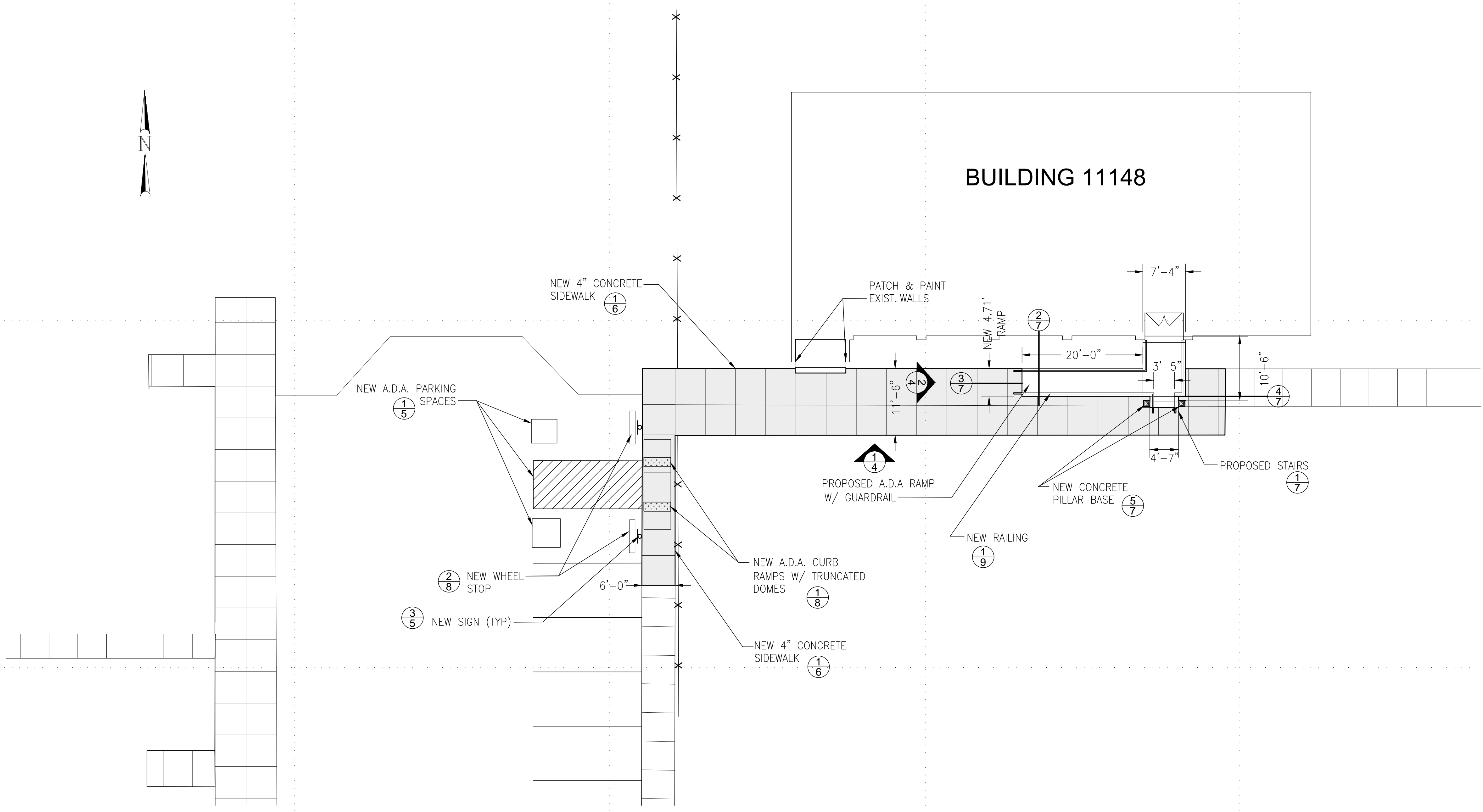
NEW A.D.A. RAMP AT BUILDING 1148  
 DEMOLITION PLAN

SHEET  
 NUMBER:  
**C-102**  
 3 OF 9

**DEMOLITION PLAN**

SCALE: 1 : 10





**PROPOSED NEW WORK**

SCALE: 1 : 10

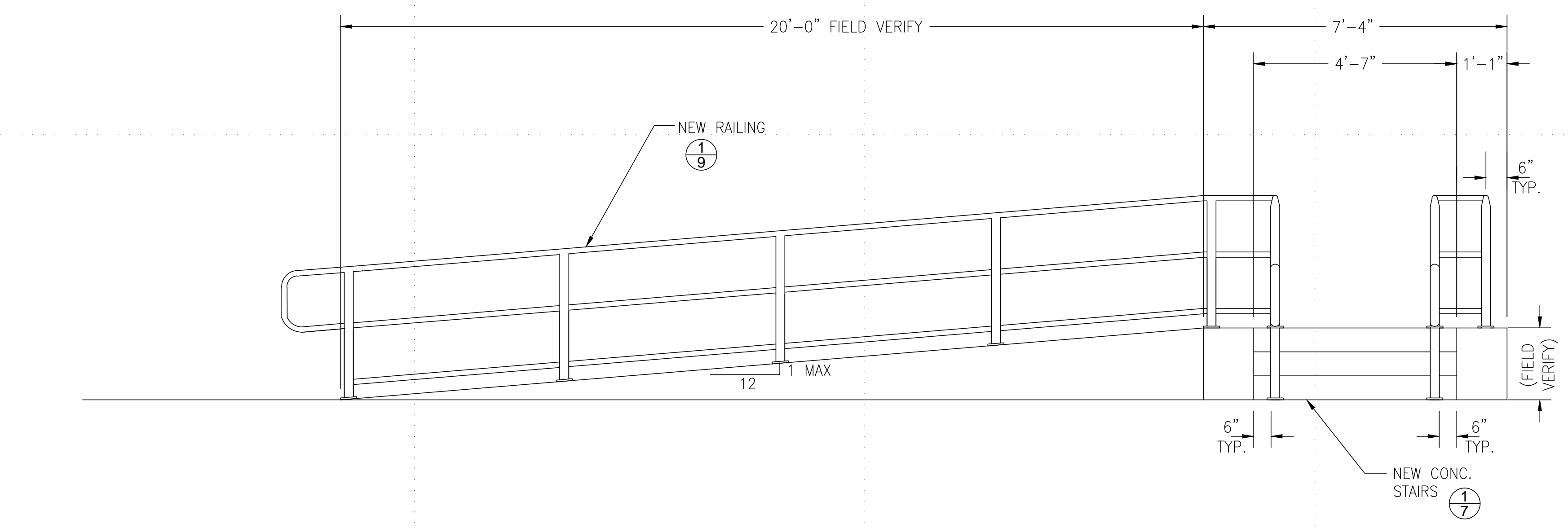
**GENERAL NOTES**

1. CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI-318-02
2. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF F'C=4000 PSI IN 28 DAYS, UNLESS NOTED ALL OTHERWISE.
3. ALL STEEL REINFORCING BARS SHALL CONFORM TO ASTM A-615-4 GRADE 60 STEEL.
4. CONCRETE SLUMP SHALL BE 3.0" ± 1.0".
5. CONCRETE AIR-ENTRANCE SHALL BE: 2.5% TO 4.5%.
6. PROPOSED CONCRETE SLAB SHALL BE SET FLUSH WITH FINISHED PAVEMENT.
7. CONTRACTION JOINTS SHOULD HAVE A MINIMUM DEPTH OF ¼ THE THICKNESS OF THE SLAB, BUT NOT LESS THAN 1 INCH. INSTALL EXPANSION JOINTS WITH THICKENED EDGE AND HOT POURED JOINT SEALER WHERE CONCRETE ABUTS WITH OTHER STRUCTURES IN PAVEMENT UNLESS NOTED OTHERWISE.
8. NEAT SAW CUT LINE REQUIRED ALONG EXISTING PERIMETER JOINTS.
9. STRIPING IS SHOWN "NOT TO SCALE" FOR CLARITY.
10. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE THERMOPLASTIC (REFER TO DMS-8220) TEMPORARY STRIPING AND PAVEMENT MARKINGS ARE TO BE PAINTED.
11. EXISTING CANOPY SHALL BE REMOVED AND REINSTALLED AS NEEDED TO CONSTRUCT NEW RAMP

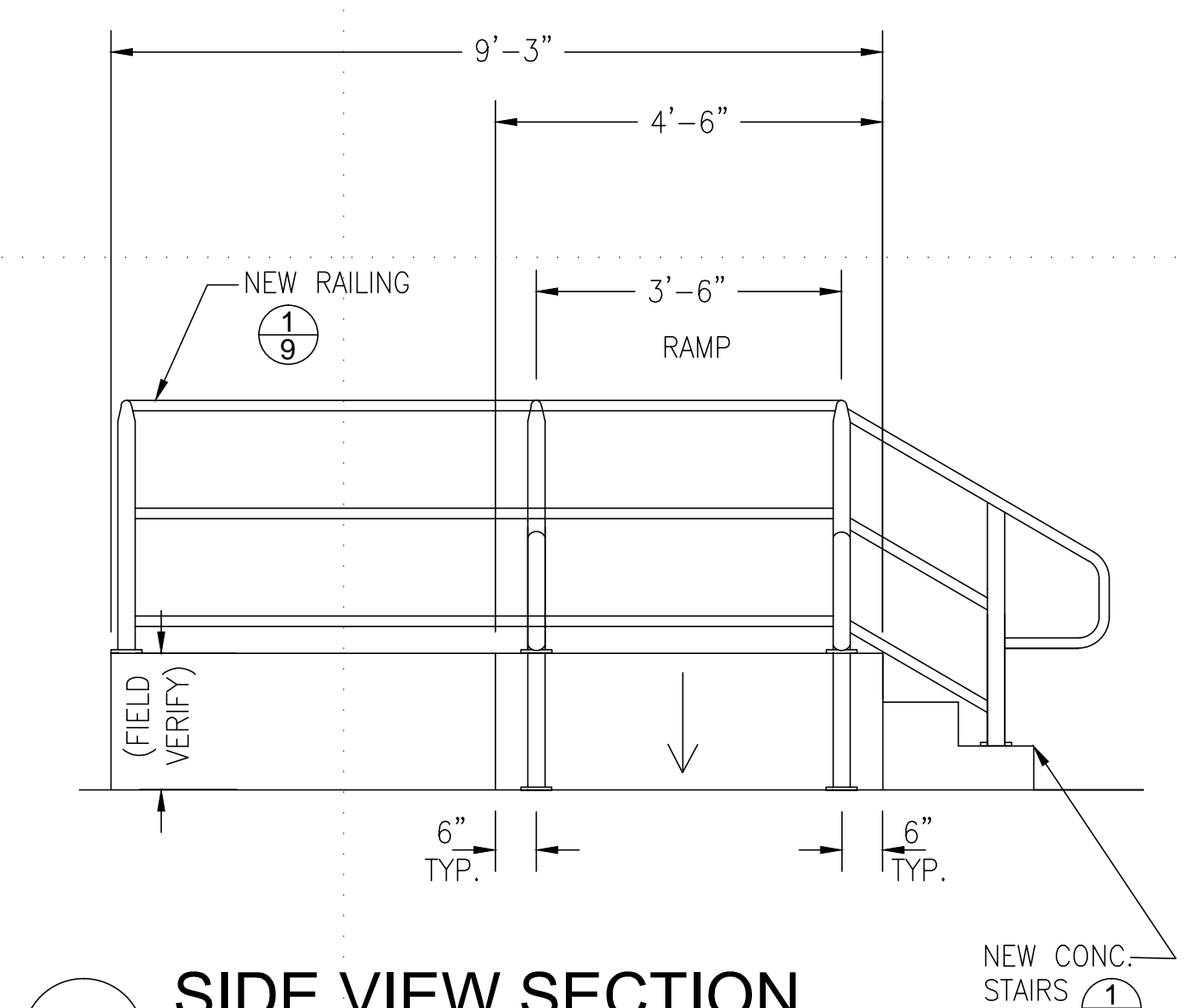
**LEGEND**

- EXISTING SIDEWALK
- EXIST. CHAIN LINK FENCE
- NEW CONCRETE SIDEWALK
- NEW WHEEL STOP
- NEW SIGN
- NEW CONCRETE PILLAR BASE

**1 FRONT VIEW SECTION**  
SCALE: N.T.S.



**2 SIDE VIEW SECTION**  
SCALE: N.T.S.



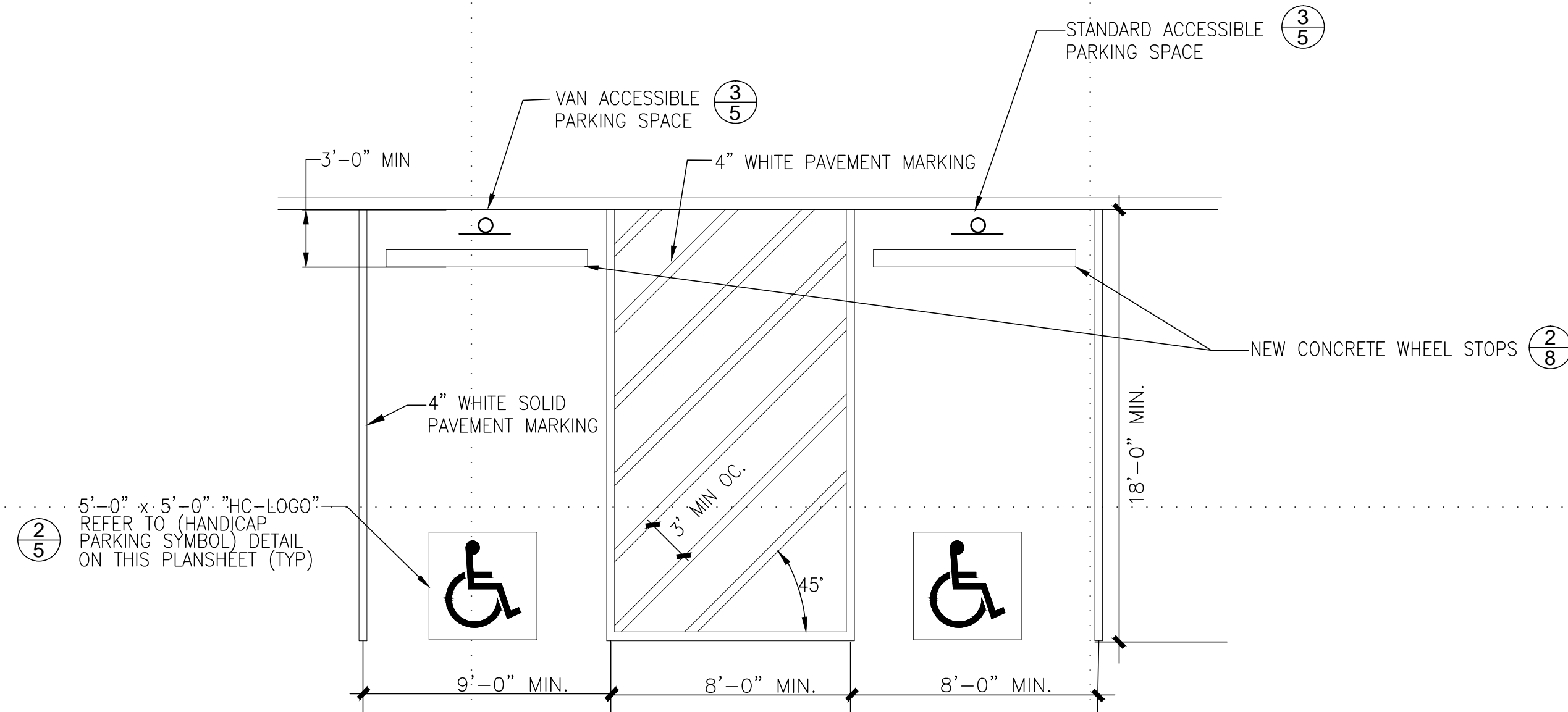
DATE	MARK	DESCRIPTION

DESIGNED BY: JFA	DATE: 4/18/2018	W.O. # WB-10030-5P
DRAWN BY: LM		SPEC. #
REVIEWED BY: JFA		
SCALE: 1:10		

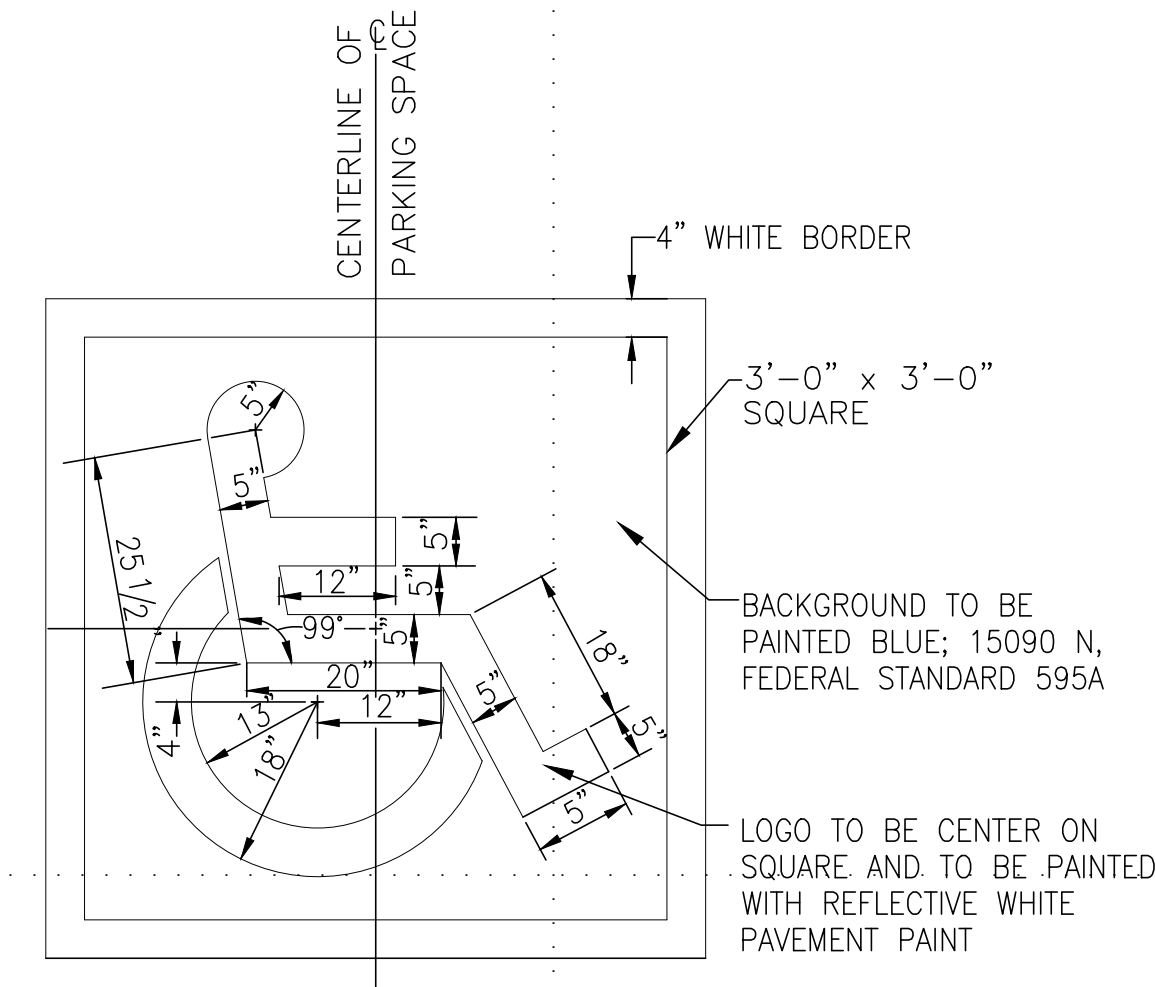
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FORT BLISS, TEXAS

NEW A.D.A. RAMP AT BUILDING 11148  
**PROPOSED WORK PLAN**

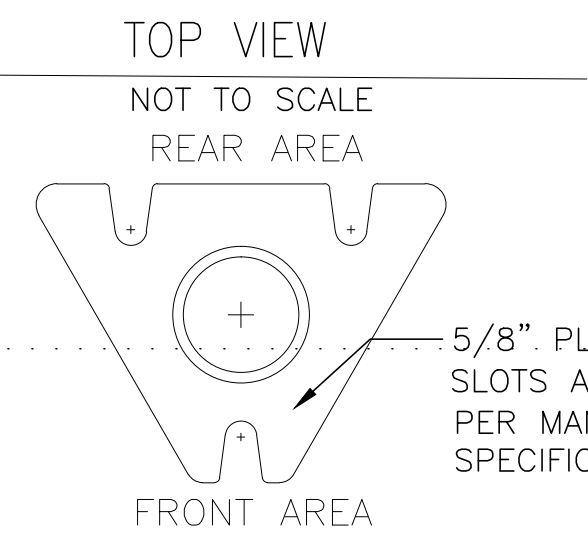
SHEET NUMBER: <b>C-103</b>
4 OF 9



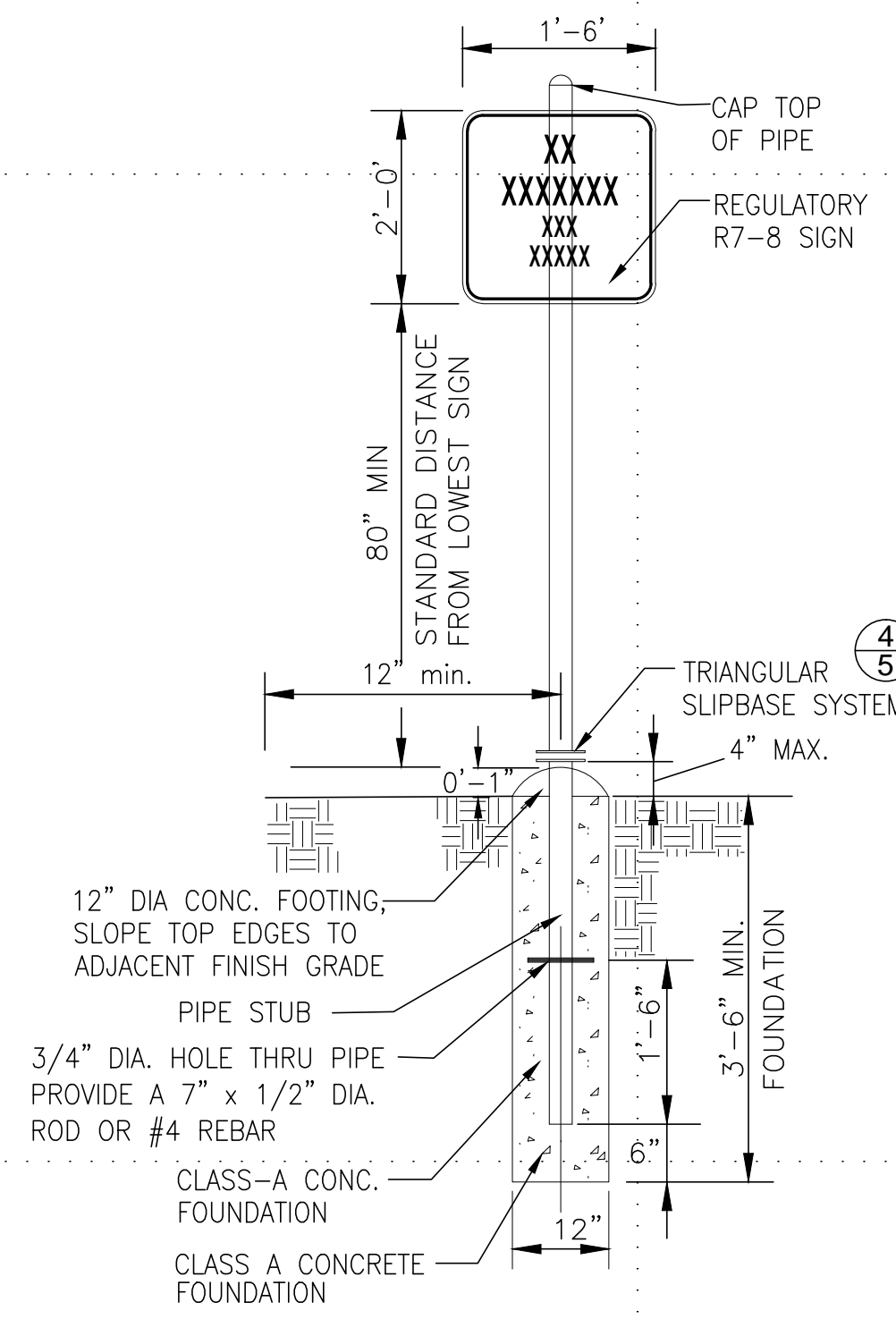
1 A.D.A. PARKING SPACE DETAIL  
 NOT TO SCALE



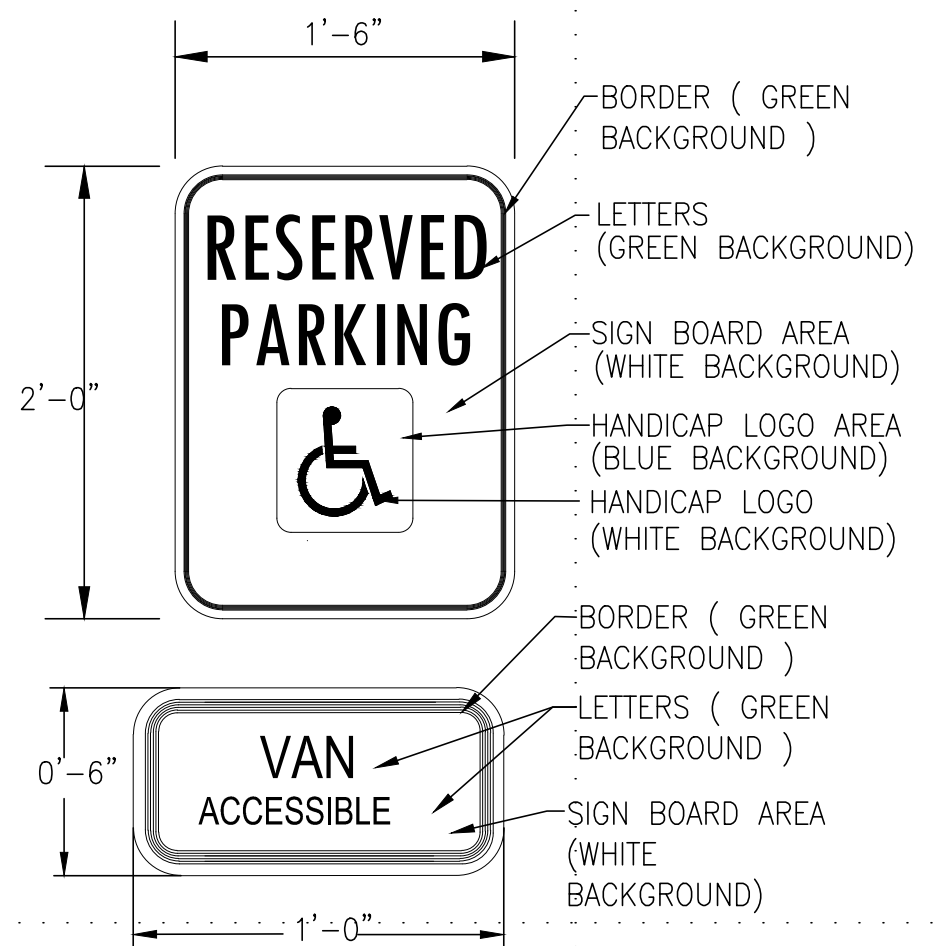
2 ACCESSIBLE PARKING SYMBOL  
 NOT TO SCALE



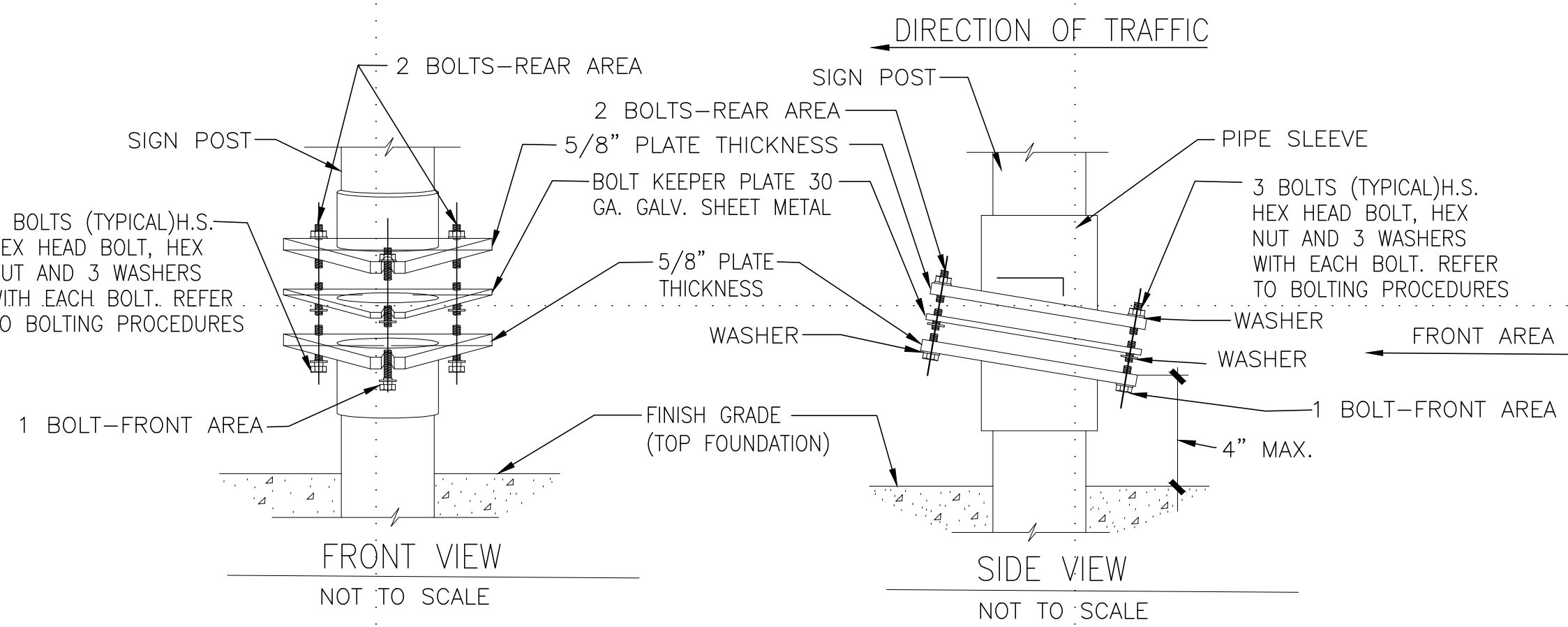
- TRIANGULAR SLIPBASE ASSEMBLY-BOLTING PROCEDURES:
1. ASSEMBLE SIGN POST, BOLT KEEPER PLATE AND STUB POST WITH BOLTS AND THREE FLAT WASHERS PER BOLT AS SHOWN.
  2. SHIM AS REQUIRED TO PLUMB POST.
  3. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12 TO 15 INCH WRENCH TO CLEAN BOLTS THREADS AND TO BED WASHERS AND SHIMS.
  4. LOOSEN EACH BOLT IN SEQUENCE AND RE-TIGHTEN BOLTS IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. DO NOT OVER TIGHTEN.
  5. TO PREVENT NUT LOOSENING, BURR THREADS OF BOLT AT JUNCTION WITH NUT USING A CENTER PUNCH.



3 SIGN POST DETAIL  
 NOT TO SCALE



NOTE: "VAN ACCESSIBLE" SIGN REQUIRED AT STALLS ADJACENT TO 8' ACCESSIBLE AISLES  
 R7-8 SIGN  
 NOT TO SCALE



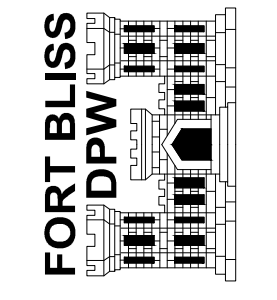
NOTE:  
 THERE ARE VARIOUS DEVICES APPROVED FOR THE TRIANGULAR SLIPBASE SYSTEM. THE DEVICES SHALL BE INSTALLED PER MANUFACTURE'S SPECIFICATIONS AND RECOMMENDATIONS. INSTALLATION PROCEDURES SHALL BE PROVIDED TO THE GOVERNMENT REPRESENTATIVE BY CONTRACTOR.

4 TRIANGULAR SLIPBASE SYSTEM  
 NOT TO SCALE

MARK	DESCRIPTION	DATE

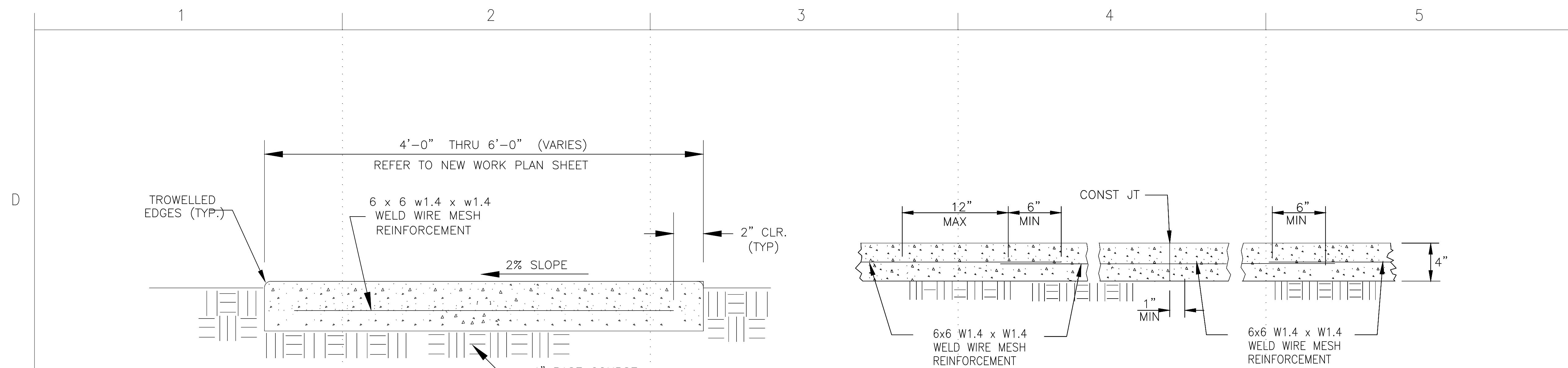
DESIGNED BY:	JrA	DATE:	4/18/2018
DRAWN BY:	LM	W.O. #	WB-10030-5P
REVIEWED BY:	JrA	SPEC. #	
SCALE:			

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 FORT BLISS, TEXAS



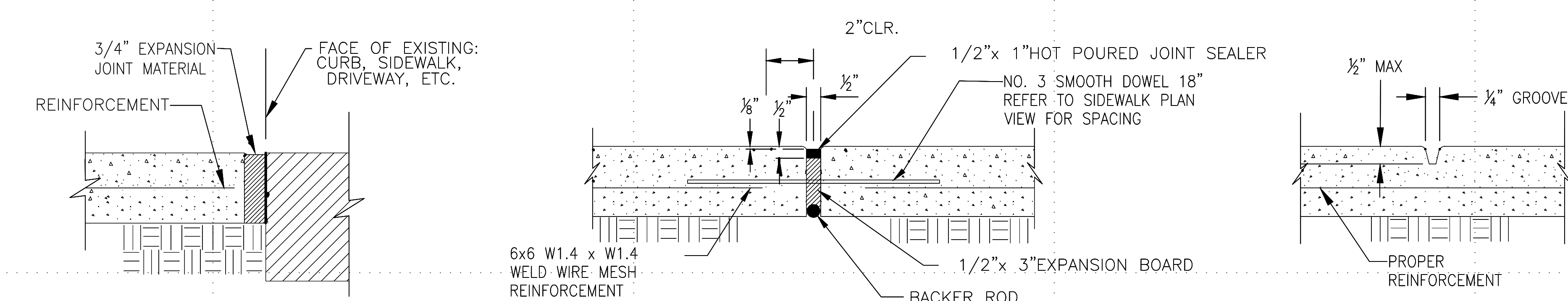
NEW A.D.A. RAMP AT BUILDING 11148  
 PARKING SPACE DEDTAILS

SHEET NUMBER:  
 C-104  
 5 OF 9

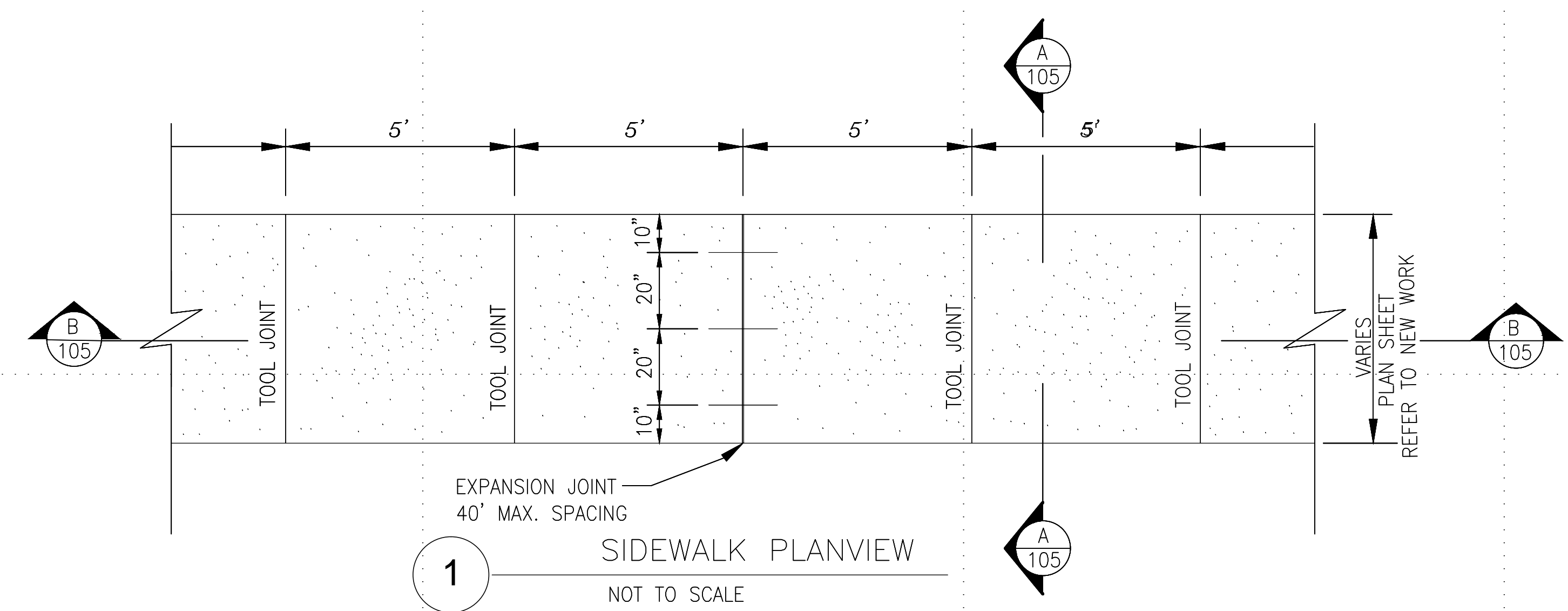


**A** TYPICAL SIDEWALK SECTION A - A  
C105 NOT TO SCALE

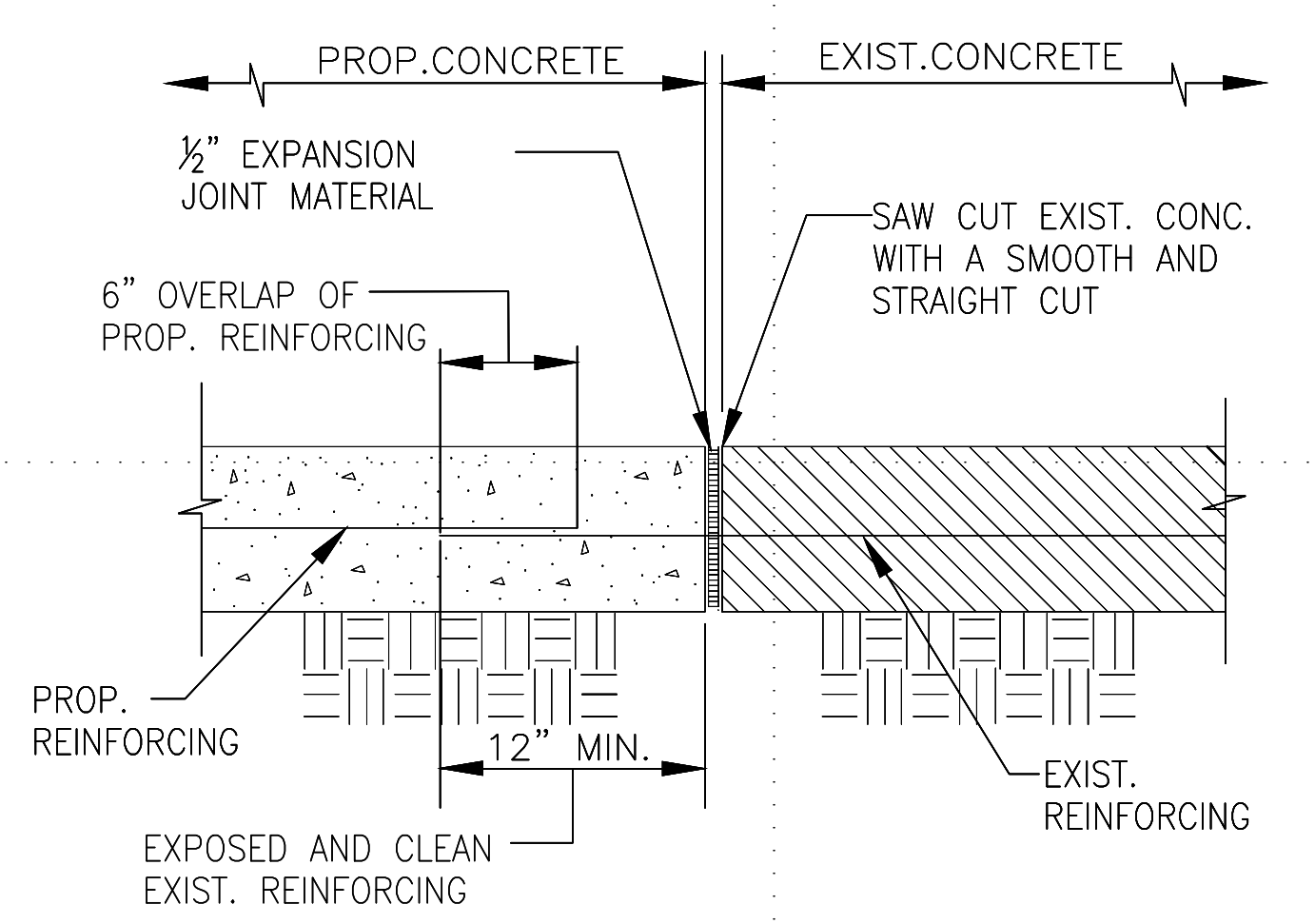
**B** SIDEWALK SECTION B - B  
C105 NOT TO SCALE



**C** EXPANSION & CONTRACTION JOINTS DETAILS  
C105 NOT TO SCALE



**1** SIDEWALK PLANVIEW  
NOT TO SCALE



**E** SAWCUT DETAIL  
C105 NOT TO SCALE

**GENERAL NOTES**

1. REINFORCING FOR SIDEWALK SHALL BE 6 x 6 w1.4 x w1.4 WELD WIRE MESH AND REINFORCING FOR CONCRETE CURBS SHALL BE AS INDICATED ON DETAILS.
2. REINFORCING STEEL BARS SHALL CONFORM TO ASTM A-615-A GRADE 60.
3. ALL WELDED WIRE FABRIC SHALL CONFORM TO SPECIFICATIONS FOR "STEEL WELDED WIRE FABRIC, PLAIN, FOR CONCRETE REINFORCEMENT" ASTM A-185.
4. ALL REINFORCEMENT BARS SHALL BE DELIVERED TO THE JOB SITE FREE OF CORROSION.
5. ALL REINFORCING STEEL BARS SHALL BE PLACED AND OR STOPPED A MINIMUM OF 2" CLEARANCE FROM EDGE OF PROPOSED CONCRETE. REINFORCING BARS SHALL MEET ALL THE REQUIREMENTS FOR CONCRETE PLACEMENT.

**CONCRETE GENERAL NOTES**

1. REINFORCING FOR CONCRETE SHALL BE THE SAME AS INDICATED IN THE DETAILS.
2. ALL CONCRETE AREA SHALL HAVE AN EXPANSION JOINT OF 1/2" PRE-MOLDED ASPHALT BOARD EVERY 20' IN ADDITION, ALL SIDEWALK AND CURB SHALL BE GROOVED 1/2" DEEP TO FORM A PLANE OF WEAKNESS (CONTRACTION JOINT) EVERY 4' FOR SIDEWALK AND EVERY 10' FOR CURB.
3. THE CONCRETE SURFACE FOR RAMP SHALL HAVE A ROUGH NON-SKID TYPE FINISH AS DIRECTED BY THE ENGINEER.
4. A WHITE PIGMENTED MEMBRANE CURING SHALL BE USED FOR THE SIDEWALK, DRIVEWAYS & CURB OR AS DIRECTED BY THE ENGINEER.
5. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318-02.
6. CONCRETE SLUMP SHALL BE NO MORE THAN 4"
7. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF =4000 psi IN 28 DAYS UNLESS OTHERWISE NOTED.

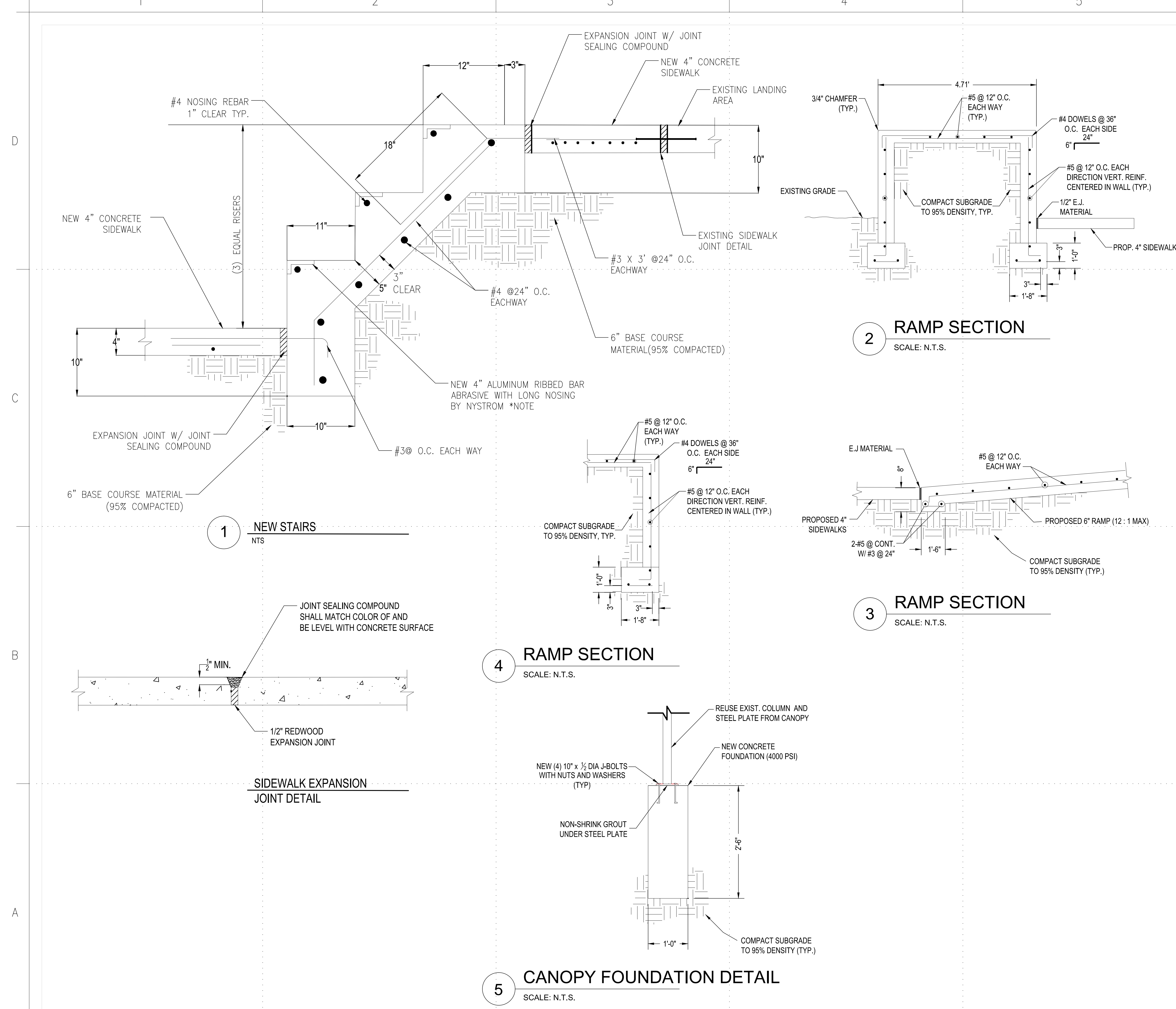
DATE	DESCRIPTION

DESIGNED BY: J/A	DATE: 4/18/2018
DRAWN BY: LM	W.O. # WB-10030-5P
REVIEWED BY: J/A	SPEC. #
SCALE:	

DIRECTORATE OF  
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FORT BLISS, TEXAS

NEW A.D.A. RAMP AT BUILDING 11148  
**CONCRETE DETAILS**

SHEET NUMBER:  
**C-105**  
6 OF 9



### GENERAL NOTES

1. THE MENTION OF A MANUFACTURER'S PRODUCT BY NAME AND PART NUMBER IS NOT INTENDED TO CLOSE THAT SPECIFICATION, BUT RATHER IT IS INTENDED TO ESTABLISH A MINIMUM LEVEL OF PRODUCT QUALITY AND OPERATION.
2. BACKFILL SHALL BE PLACED IN LIFTS WITH A MAXIMUM LOOSE THICKNESS OF 8". SOIL SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY. A MINIMUM OF ONE DENSITY TEST SHALL BE PERFORMED ON EACH LIFT OF BACKFILL PLACED.
3. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF F'C=4000 PSI IN 28 DAYS.

DATE	DESCRIPTION

DESIGNED BY: JJA	DATE: 4/18/2018
DRAWN BY: LM	W.O. #: PT1 10204 7J
REVIEWED BY: JJA	SPEC. #:
SCALE:	

**DIRECTORATE OF  
PUBLIC WORKS  
FORT BLISS, TEXAS**

**NEW A.D.A. RAMP AT BUILDING 11148**  
**STAIR AND RAMP DETAILS**

SHEET NUMBER:  
**C-106**  
 7 OF 9

D

C

B

A

D

C

B

A

GENERAL NOTES

- 1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED. ADJUST CURB RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS AS DIRECTED.
- 2. LANDINGS SHALL BE 5'-0" x 5'-0" MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION.
- 3. MANEUVERING SPACE AT THE BOTTOM OF THE CURB RAMPS SHALL BE A MINIMUM OF 4'-0" x 4'-0" WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
- 4. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND CURB RAMP SURFACES IS 2%.
- 5. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT "ADA STANDARDS FOR ACCESSIBLE DESIGN."
- 6. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE STREET.
- 7. CURBS SHOWN WITHIN THE LIMITS OF PAYMENT ARE CONSIDERED PART OF THE CURB FOR PAYMENT, WHETHER IT IS CONCRETE CURB, GUTTER, OR COMBINED CURB AND GUTTER.
- 8. FLARE SLOPE NOT EXCEED 10% MEASURED ALONG CURB LINE.

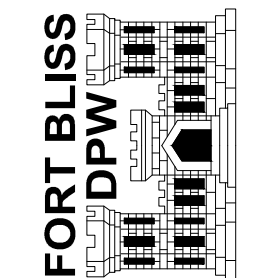
DETECTABLE WARNING SURFACES

- 1. CURB RAMPS MUST CONTAIN A DETECTABLE WARNING SURFACE THAT CONSIST OF RAISED TRUNCATED DOMES COMPLYING WITH SECTION 4.29 OF THE TEXAS ACCESSIBILITY STANDARDS (TAS). THE SURFACE MUST CONTRAST VISUALLY WITH ADJOINING SURFACES, INCLUDING SIDE FLARES. FURNISH DARK RED DETECTABLE WARNING SURFACE ADJACENT TO UNCOLORED CONCRETE, UNLESS SPECIFIED ELSEWHERE IN THE PLANS.
- 2. DETECTABLE WARNING SURFACES MUST BE SLIP RESISTANT AND NOT ALLOW WATER TO ACCUMULATE.
- 3. ALIGN TRUNCATED DOMES IN THE DIRECTION OF PEDESTRIAN TRAVEL WHEN ENTERING THE STREET.
- 4. SHADED AREAS ON DETAILS, INDICATE THE APPROXIMATE LOCATION FOR THE DETECTABLE WARNING SURFACE FOR EACH CURB RAMP TYPE.
- 5. DETECTABLE WARNING SURFACES SHALL BE A MINIMUM OF 24" IN DEPTH IN THE DIRECTION OF PEDESTRIAN TRAVEL, AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR LANDING WHERE THE PEDESTRIAN ACCESS ROUTE ENTERS THE STREET.
- 6. DETECTABLE WARNING SURFACES SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS A MINIMUM OF 6" AND A MAXIMUM OF 10" FROM THE EXTENSION OF THE FACE OF CURB. DETECTABLE WARNING SURFACES MAY BE CURVED ALONG THE CORNER RADIUS.

DATE	DESCRIPTION

DESIGNED BY: JJA	DATE: 4/18/2019
DRAWN BY: LM	W.O. #: PT1 10204 7J
REVIEWED BY: JJA	SPEC. #:
SCALE: AS SHOWN	

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FORT BLISS, TEXAS

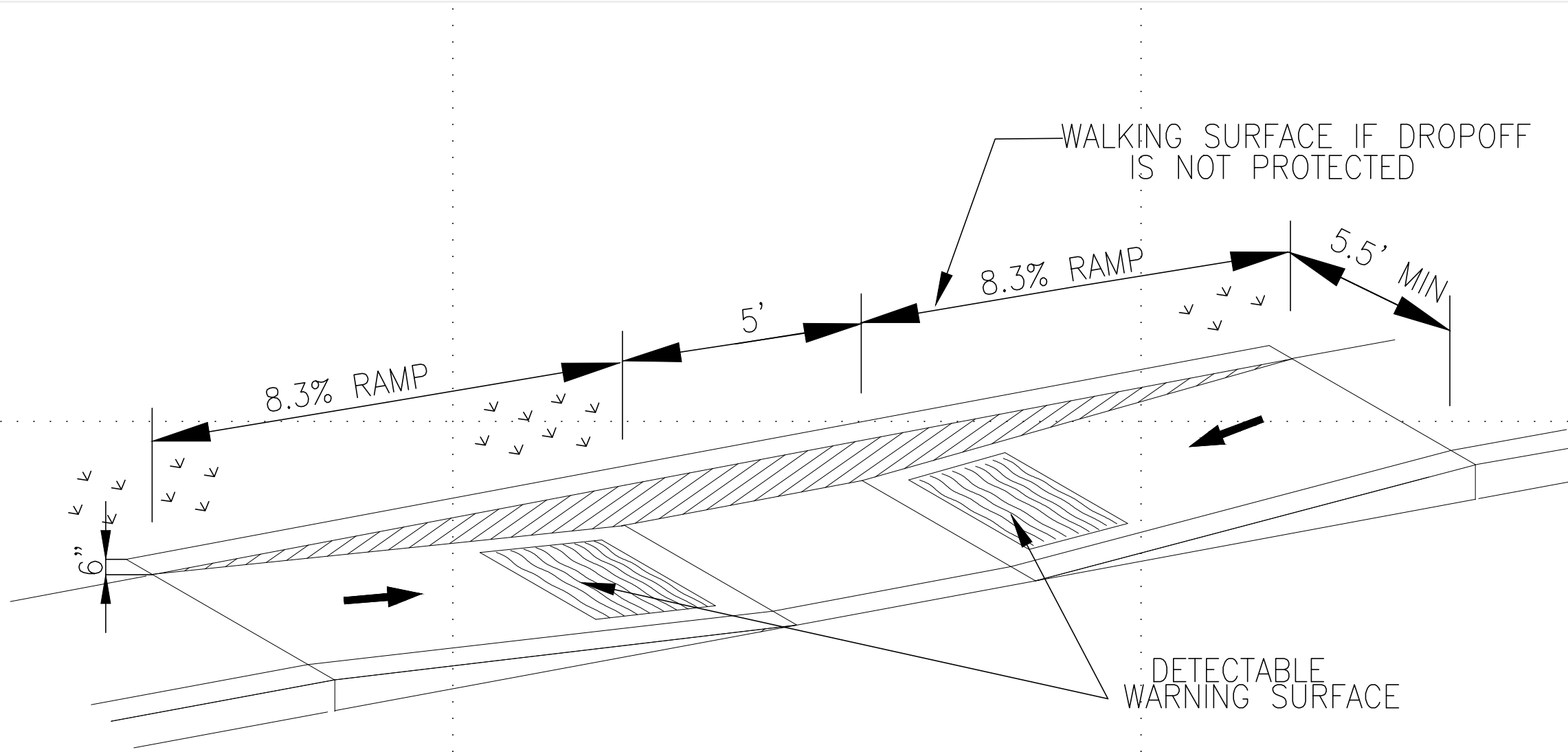


NEW A.D.A. RAMP AT BUILDING 11148

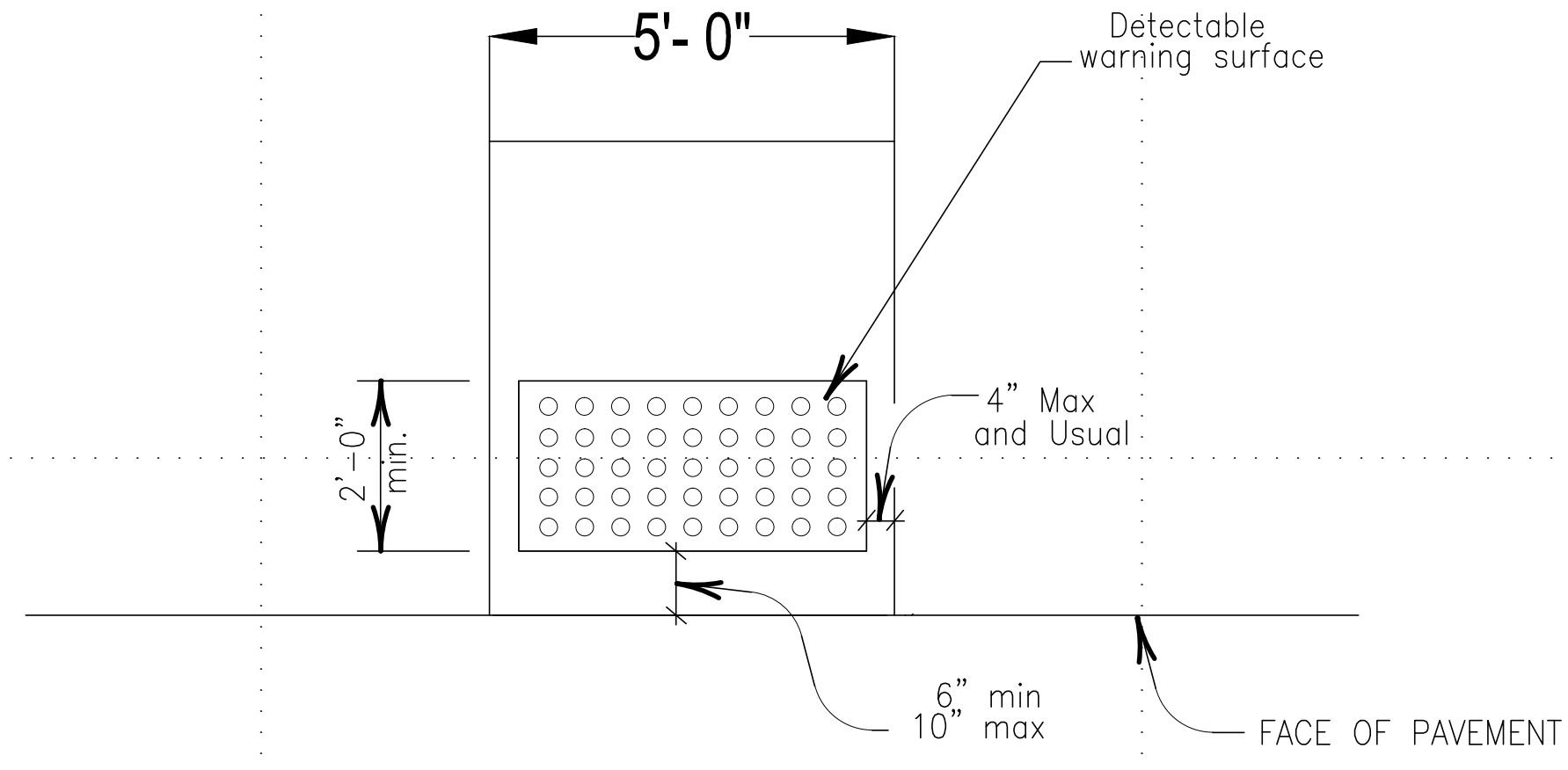
RAMP AND  
CURB DETAILS

SHEET  
NUMBER:  
**C-107**

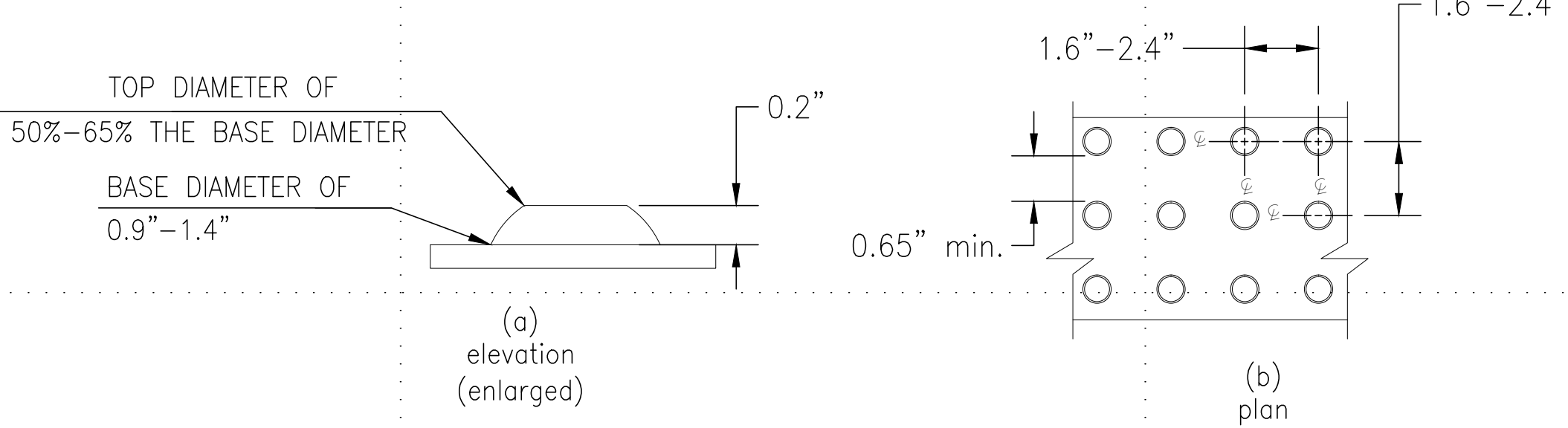
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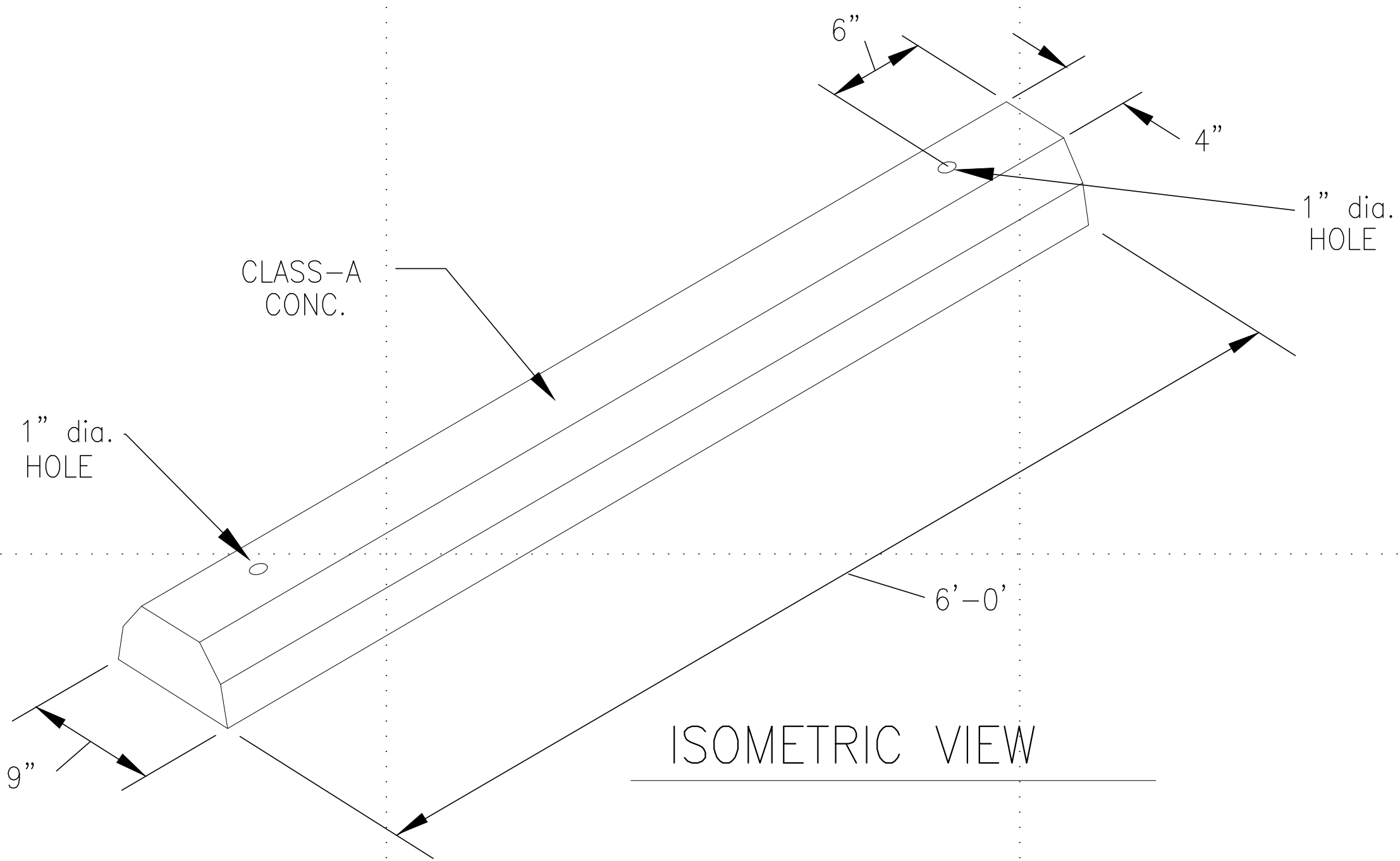
1 TYPE 2 ADA RAMP



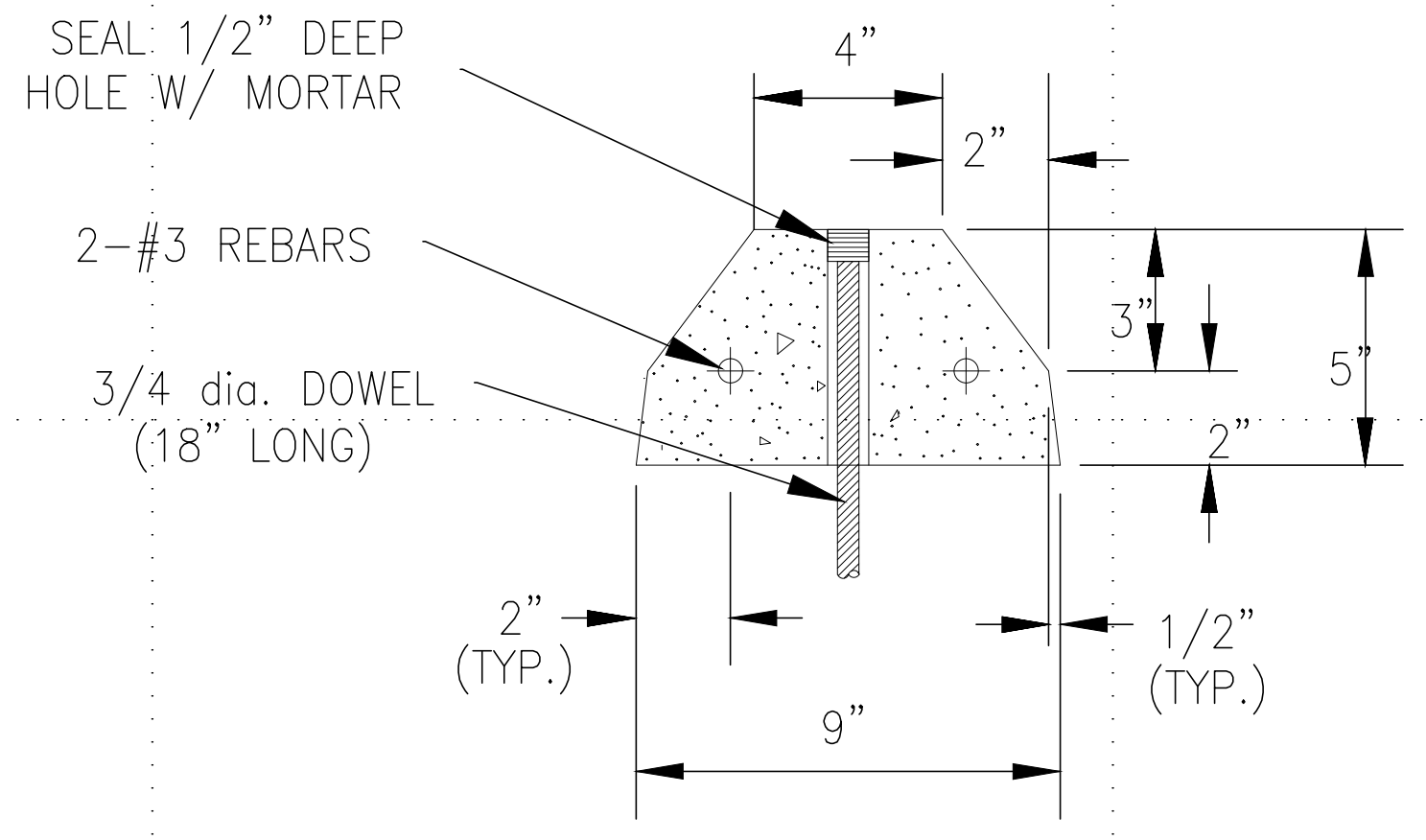
3 TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON LANDING AT STREET EDGE NOT TO SCALE



4 SIZE AND SPACING OF TRUNCATED DOMES NOT TO SCALE

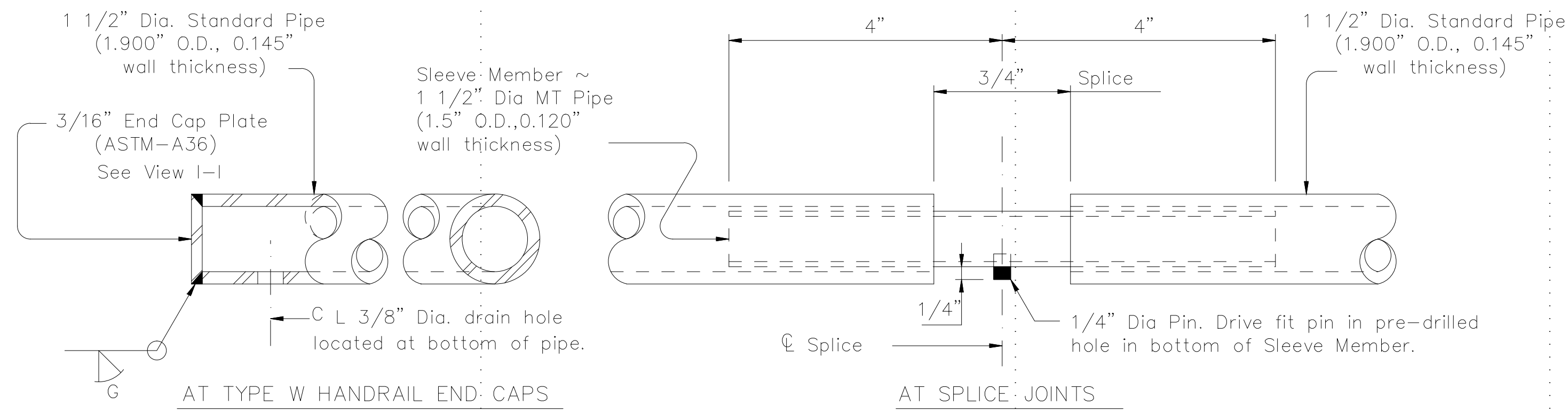


2 PRECAST CONCRETE WHEEL STOP NOT TO SCALE

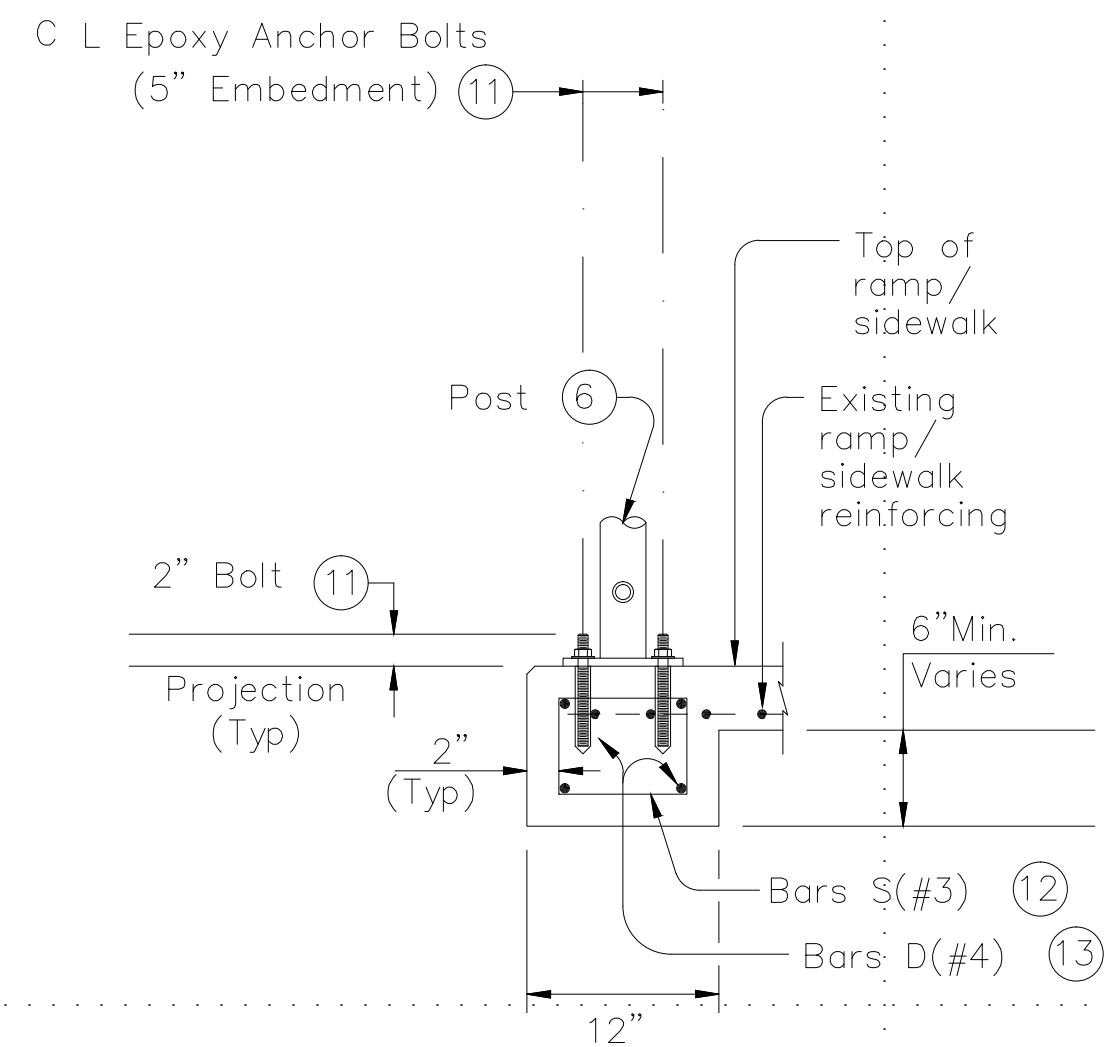


SECTION VIEW NOT TO SCALE





HANDRAIL FABRICATION DETAILS



SECTION AT RAIL POST FOUNDATIONS WITHOUT CURB

**GENERAL NOTES**

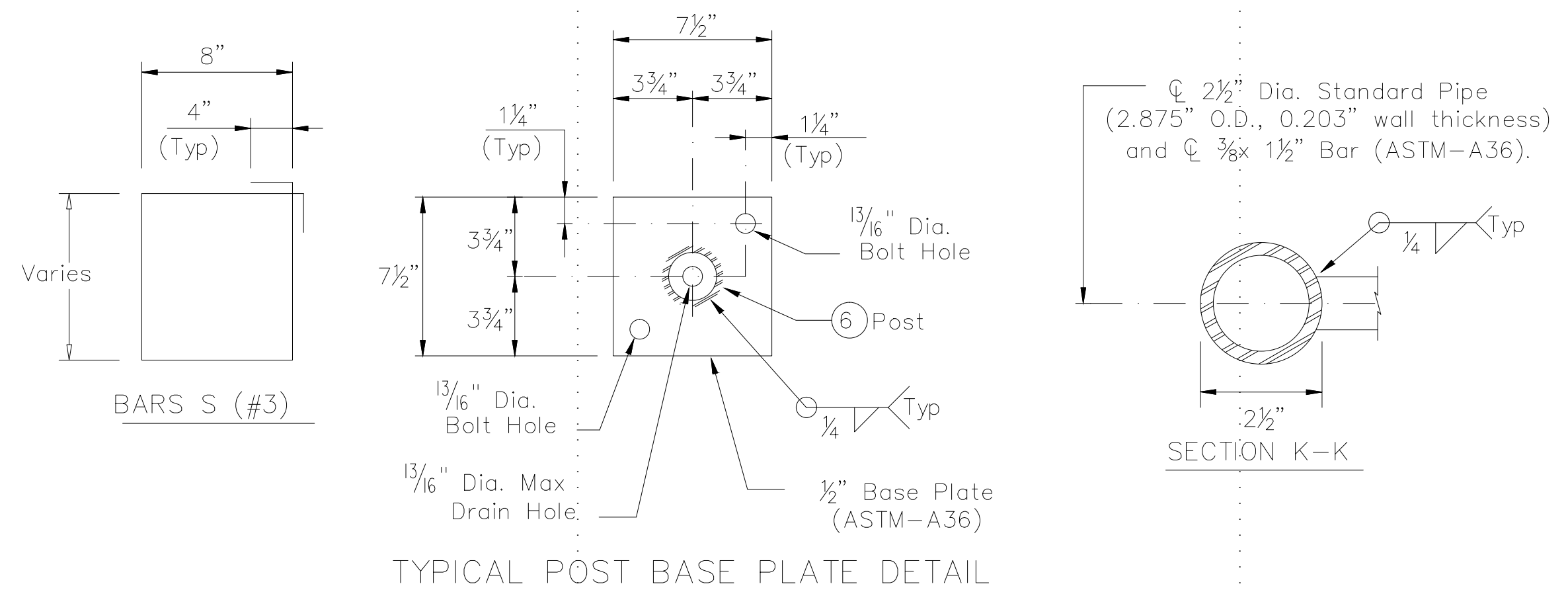
Designed according to ADAAG, Texas Accessibility Standards, Uniform Building Code, and AASHTO LRFD Specifications.

Pipe will conform to ASTM-A53 Grade B or A500 Grade B. Steel plates and steel bars will conform to ASTM-A36. Mechanical tubing (MT) will conform to ASTM A513 Grade 3015 or higher. Galvanize all steel components except reinforcing steel unless noted otherwise.

All reinforcing steel must be Grade 60. Bar laps, where required, will be as follows: Uncoated ~ #4 = 1'-5" Epoxy coated ~ #4 = 2'-1"

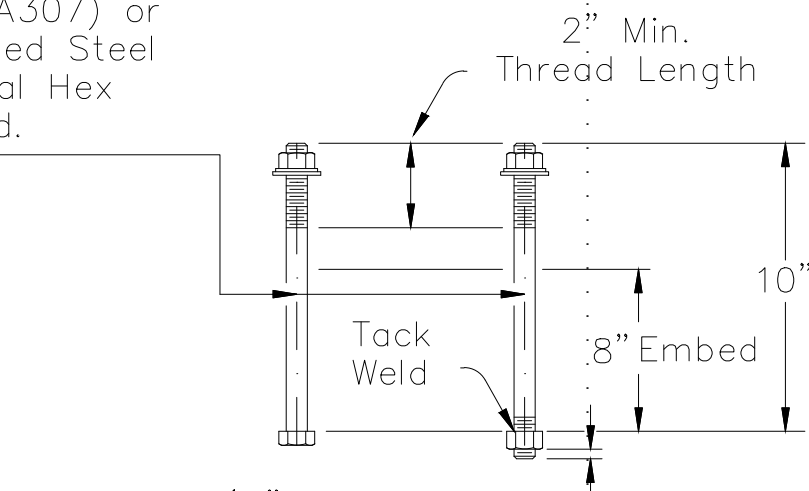
Handrails and/or other surface adjacent to them will be free of any sharp or abrasive elements.

All exposed edges will be rounded or chamfered to approximately 1/8" by grinding.



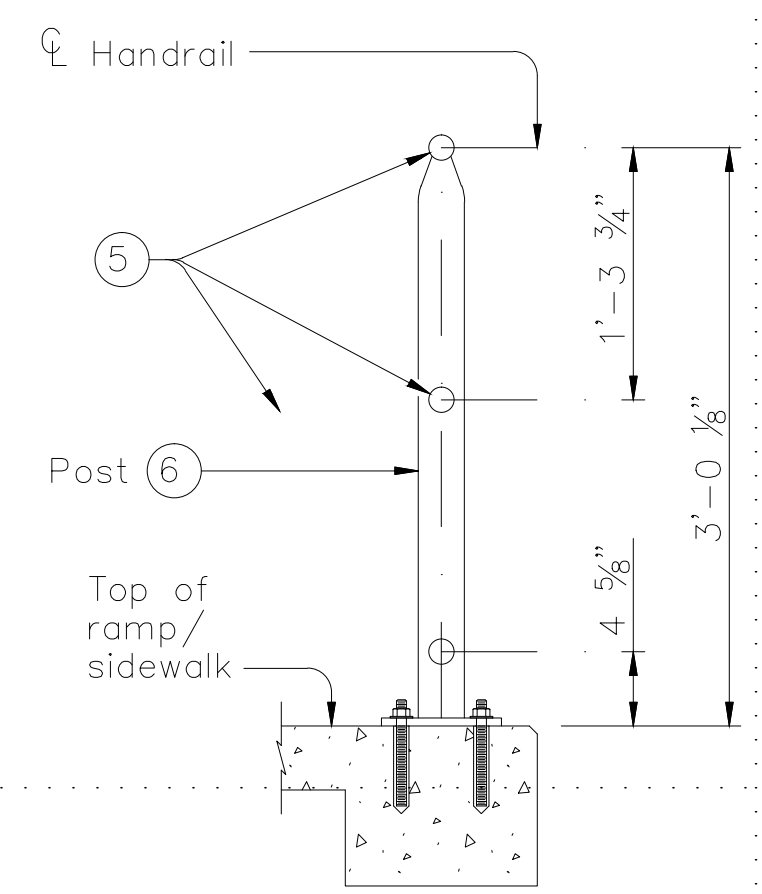
TYPICAL POST BASE PLATE DETAIL

5/8" Dia. Hex Head Anchor Bolt (ASTM-A307) or Threaded Rod (ASTM-A36) with one Hardened Steel Washer placed under Hex Nut. One additional Hex Nut will be furnished for each Threaded Rod.

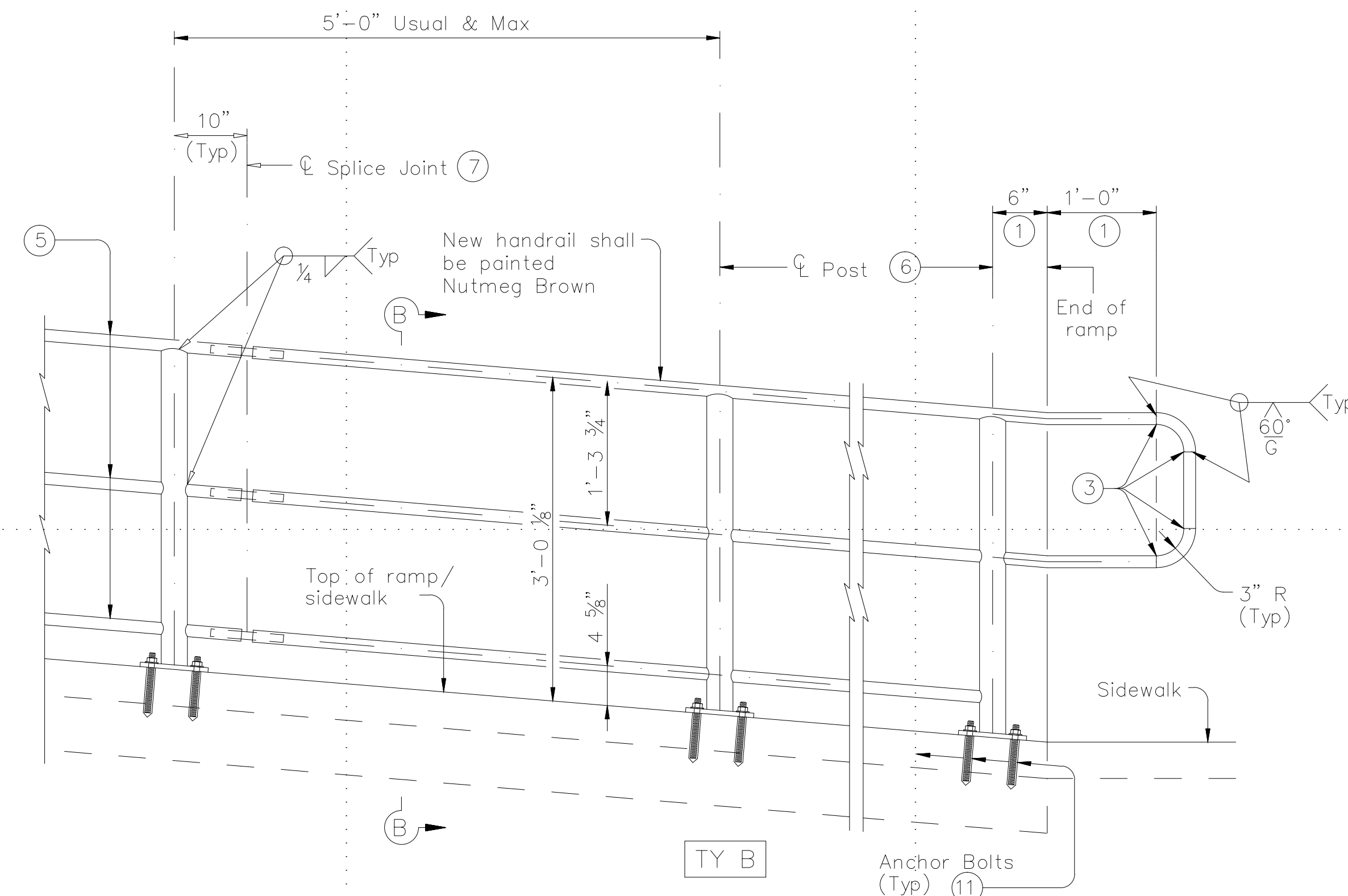


CAST-IN-PLACE ANCHOR BOLT OPTIONS  
(Used for Post Base Plate only)

POST MOUNT DETAILS



SECTION B-B (Showing Handrail TY B)



ELEVATION VIEW

(Shop Splices and Splice Joints only shown on one Type for clarity)

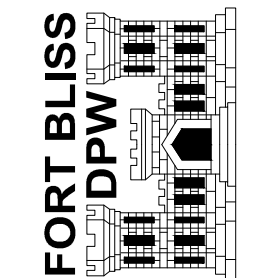
KEYED NOTES

- 1 Parallel to ground.
- 2 Not used on this sheet.
- 3 Shop splice is permitted with minimum 85 percent penetration. The weld may be square groove or single vee groove. Grind smooth.
- 4 Not used on this sheet.
- 5 1 1/2" Dia. Standard Pipe (1.900" O.D., 0.145" wall thickness). Parallel to ramp / sidewalk. Provide holes as needed in 1 1/2" Dia. pipe for galvanizing drainage and venting.
- 6 2 1/2" Dia. Standard Pipe (2.875" O.D., 0.203" wall thickness). See "Post Mount Detail" for crimping and trimming post to fit Dia. of top rail. Provide holes as needed in post for galvanizing drainage and venting. Plumb all posts.
- 7 See "Handrail Fabrication Details" for Splice Joints.
- 8 Not used on this sheet.
- 9 Not used on this sheet.
- 10 Not used on this sheet.
- 11 See "General Notes" for anchor bolt information.
- 12 Bars S(#3) spaced at 12" Max (Spaced 3" from outside edge of overall length of Ramp/Sidewalk).
- 13 Provide 1 1/2" end cover to Bars D(#4) from outside edge of overall length of Ramp/Sidewalk.

MARK	DESCRIPTION	DATE

DESIGNED BY:	JJA	DATE:	4/18/2019
DRAWN BY:	LM	W.O. #	PT1 10204 7J
REVIEWED BY:	JJA	SPEC. #	
SCALE:	AS SHOWN		

DIRECTORATE OF PUBLIC WORKS  
FORT BLISS, TEXAS



NEW A.D.A. RAMP AT BUILDING 11148  
HANDRAIL DETAILS

SHEET NUMBER:	C-108
9 OF 9	