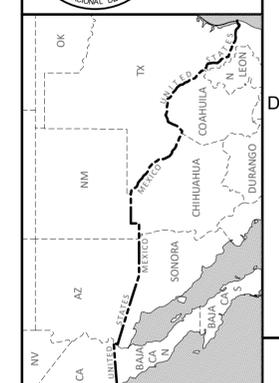


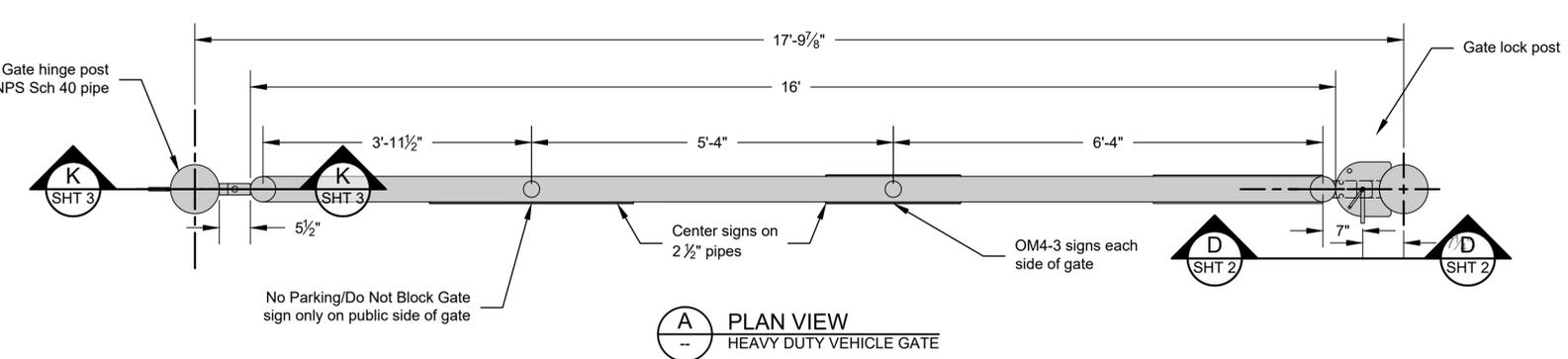
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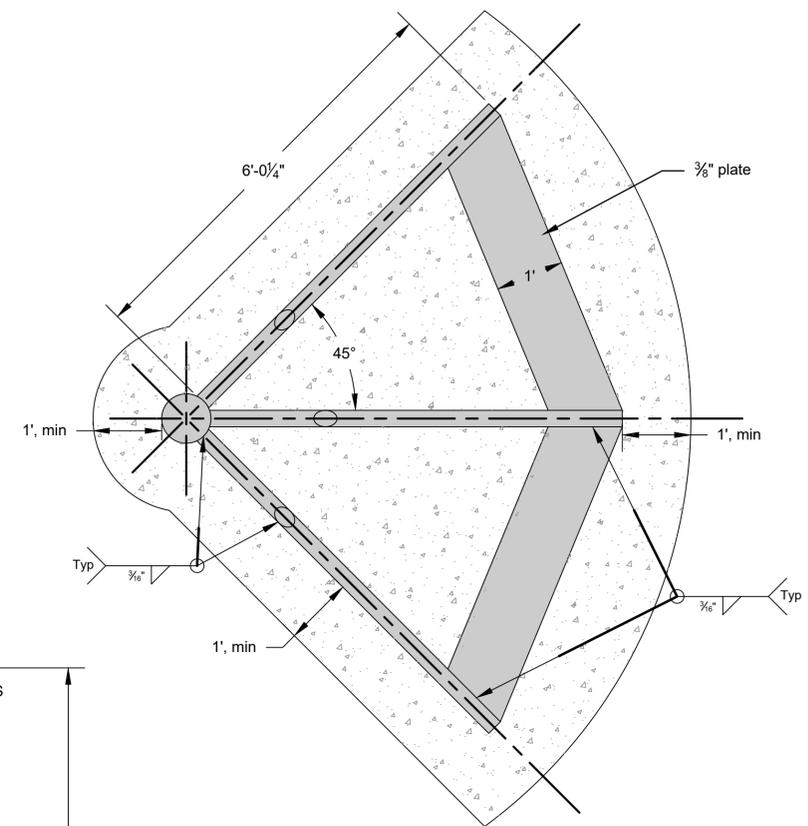
INTERNATIONAL BOUNDARY AND WATER COMMISSION  
 UNITED STATES AND MEXICO  
 STANDARD DRAWING  
 LOWER RIO GRANDE FLOOD CONTROL PROJECT  
 HEAVY DUTY VEHICULAR GATE

DESIGNED	ANDREA GLOVER
DRAWN	ANDREA GLOVER
CHECKED	
TECHNICAL APPROVAL	
ADMIN APPROVAL	
USIBWC HQ-CON	1-4-2022
REV. NO.	DESCRIPTION/DATE
1	Updated to USIBWC drawing border and to match URG gates August 18, 2023 Andrea Glover, PE

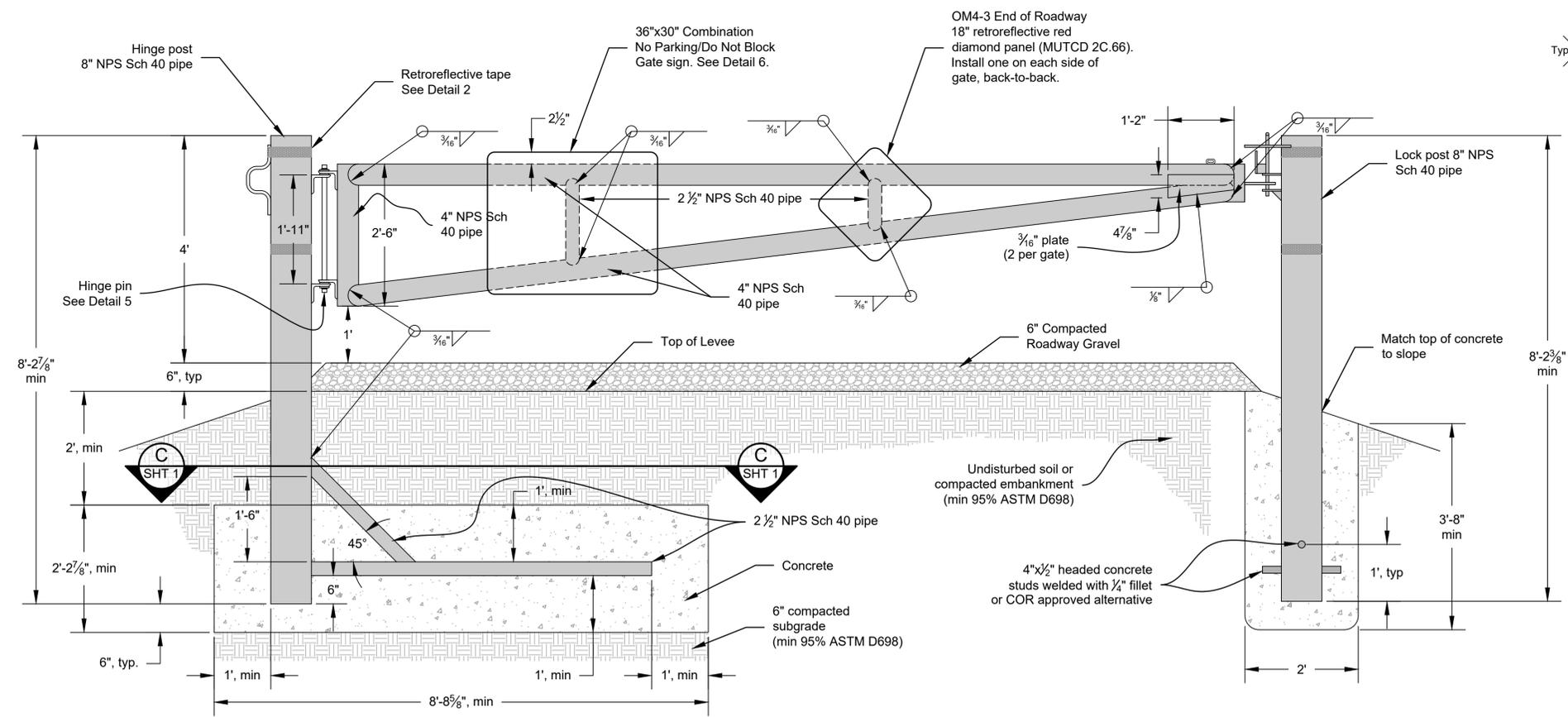
GATE MANUFACTURE AND INSTALLATION	
IFB/RFP NUMBER	CONTRACT NUMBER
CONTRACTOR/DESIGNER DRAWING NUMBER	
USIBWC DRAWING NUMBER	
<b>26422-001-01</b>	



**(A) PLAN VIEW**  
HEAVY DUTY VEHICLE GATE



**(C) PLAN VIEW**  
GATE POST FOOTING



**(B) PROFILE**  
HEAVY DUTY VEHICLE GATE

**NOTES:**

- All concrete shall be finished to drain water away from posts.
- Minimum 3,000 psi concrete shall be used to install posts.
- Top of gate shall be horizontal and both gate posts shall be of equal height above the levee.
- All posts shall be installed plumb.
- All pipe shall be Schedule 40 and shall meet ASTM A53 (Grade A or B), ASTM A106 (Grade A, B, or C), or ASTM F1083 (regular or high strength).
- Welds shall meet American Welding Society (AWS) D1.1.
- OM4-3 End of Roadway signs shall conform to Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition with revisions 1 and 2.
- No Parking/Do Not Block Gate sign shall conform to Detail 6 on Sheet 3 based upon MUTCD and Standard Highway Signs (SHS), 2004 Edition.
- Sign sheeting shall meet or exceed ASTM D4956-09 Type III, IV, VIII, or IX. Engineer Grade material is not allowed.
- No more than two 3/8" Ø holes may be drilled through each 2 1/2" NPS Sch 40 pipe to install the signs.
- Prismatic reflective tape shall meet Federal Motor Vehicle Safety Standard 217 (49 CFR 571.217) and shall be yellow, fluorescent yellow, or school bus yellow in color. Tape shall have a minimum 10 year warranty or expected life span.
- Prismatic reflective tape shall be installed on all posts after paint has completely dried. Tape shall be wrapped completely around posts with a minimum 1" overlap.

Additional notes on Sheet 2.

IBWC Border V20210903

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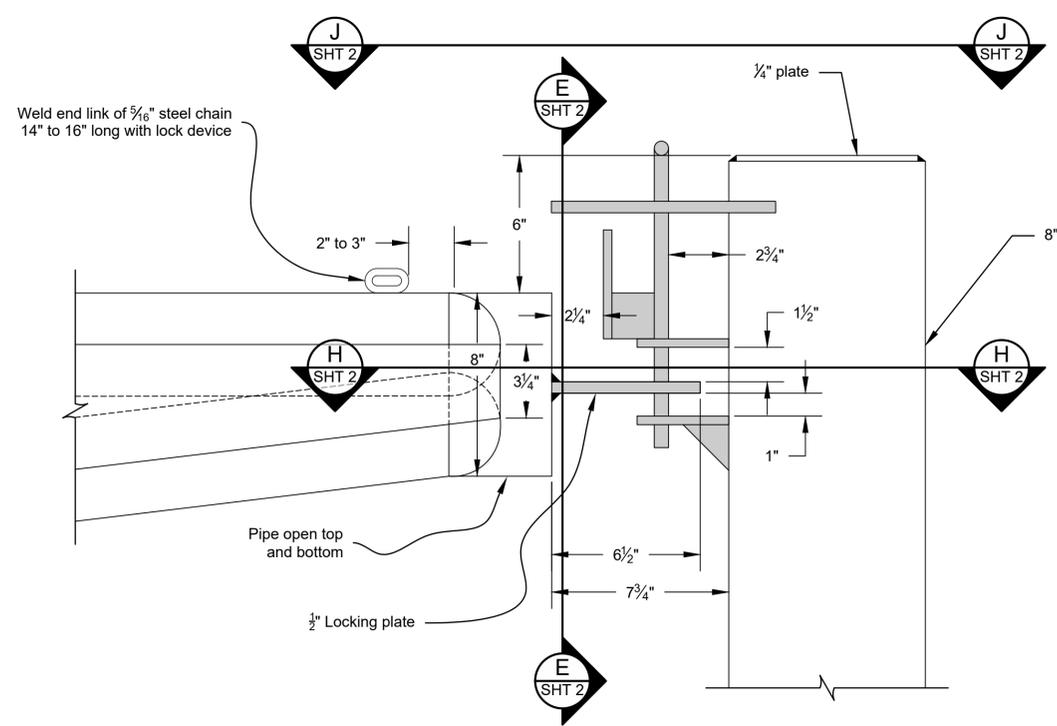
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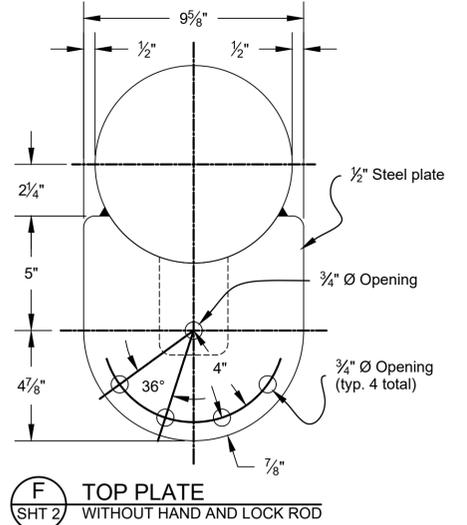
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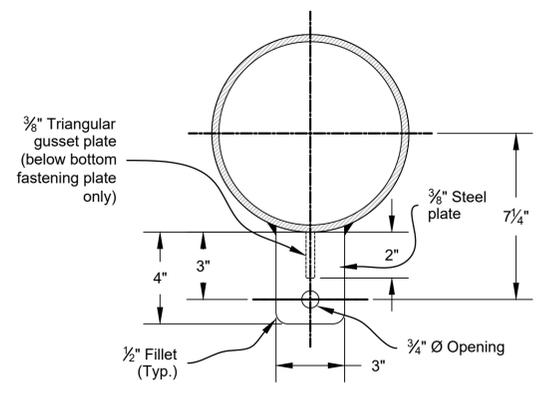
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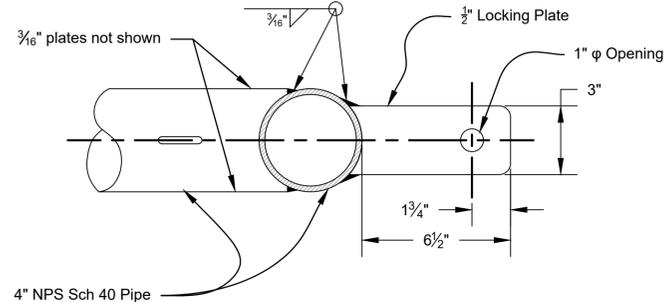
**D** FULL LOCKING MECHANISM  
SHT 1 GATE AND LOCK POST



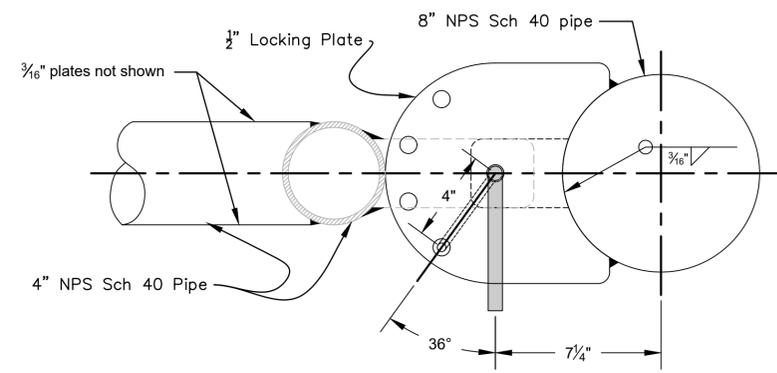
**F** TOP PLATE  
SHT 2 WITHOUT HAND AND LOCK ROD



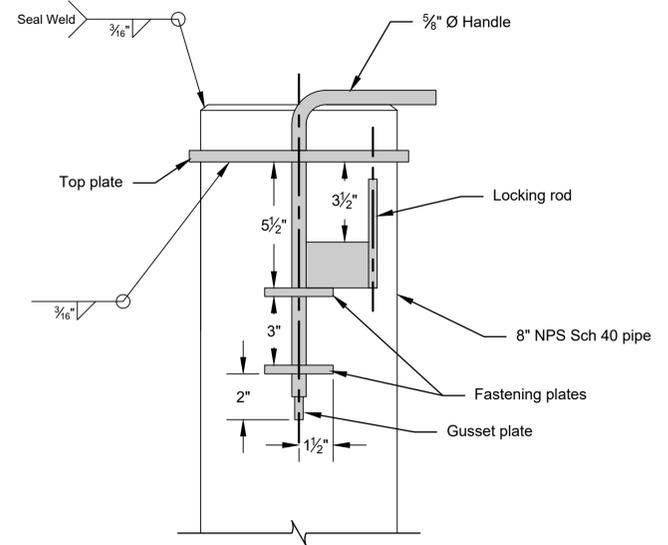
**G** FASTENING PLATE  
SHT 2 WITHOUT HAND AND LOCK ROD



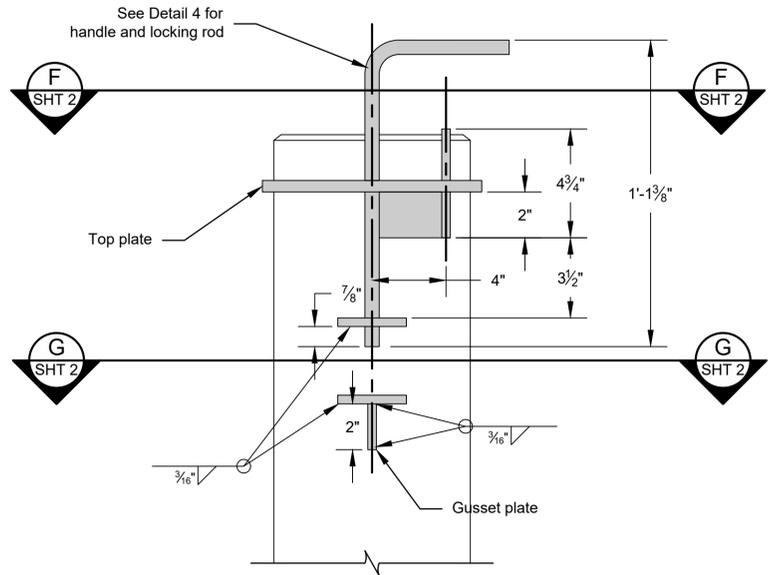
**H** LOCKING PLATE  
SHT 2 LOCK POST AND MECHANISM NOT SHOWN



**J** LOCK POST PLAN VIEW  
SHT 2



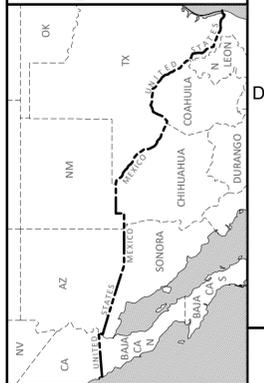
**E** LOCKING MECHANISM  
SHT 2 CLOSED POSITION  
GATE LOCKING PLATE NOT SHOWN



**E** LOCKING MECHANISM  
SHT 2 OPEN POSITION  
GATE LOCKING PLATE NOT SHOWN

- NOTES:**  
Continued from Sheet 1.
17. The gate and all posts shall be painted. Locking device, hinge pin, snaps, and chains shall not be painted.
    - 17.1. To ensure the greatest adhesion with the concrete, the portions of the gate being embedded in concrete shall not be painted. An overlap on one to two inches of concrete onto the paint is acceptable to ensure that primer is not exposed to the elements.
  18. Coating System (Paint) Requirements
    - 18.1. Color shall be ANSI Z535.1 safety red (Pantone 186C), gloss or high-gloss finish.
    - 18.2. Based upon South Florida, Central Arizona, ASTM D4141, ASTM D4364, or ASTM D7869 testing representing a five (5) year minimum test cycle, coating shall meet the following requirements:
 

18.2.1. Fading (ASTM D2244)	max, 5E color change
18.2.2. Chalking (ASTM D4214)	max, 8 chalk rating
18.2.3. Gloss retention (ASTM D523)	greater than 30%
18.2.4. Erosion (ASTM B244)	max, 10% loss
18.2.5. Dry Film Hardness (ASTM D3363)	F with no rupture
18.2.6. Film Adhesion (ASTM D3359)	4B or 5B
18.2.7. Abrasion Resistance (ASTM D968)	greater than 20
    - 18.3. To aid in comparisons between tests, a year shall be assumed to equal 275 MJ/m<sup>2</sup>.
    - 18.4. Paint that meets AAMA 2604 or AAMA 2605 (2017 or newer) meets these requirements.
  19. All gate metal shall be prepared per coating manufacturer's requirements prior to application of primer. If no metal preparation is specified by the coating manufacturer, clean gate metal per SSPC SP-10 or SP10 (WAB).
  20. Snap shall be at least 4 1/2" long with 1/2" opening. Snap may be open end snap installed on chain or rigid end with chain link welded closed around snap. Ensure snap will close completely around link welded to top of gate (see Section E).
  21. For general distance from crossroads for gate installation, see USIBWC Standard Drawing 26424-005-xx Detail 11. Gates are preferred approximately 75 feet from the crossroad to allow a semi truck and lowboy to park without extending into traffic. For locations where a semi truck and trailer cannot turn onto the levee, gates are preferred 50 feet from the crossroad to allow a pickup truck and flatbed trailer to park without extending into traffic.
  22. If it is required for the gate to only swing in one direction, rotate the lock post by 90°.
  23. Confirm number of locking holes in Top Plate before manufacture.



INTERNATIONAL BOUNDARY AND WATER COMMISSION  
UNITED STATES AND MEXICO  
UNITED STATES SECTION

LOWER RIO GRANDE FLOOD CONTROL PROJECT

STANDARD DRAWING  
HEAVY DUTY VEHICULAR GATE

REV.	DESCRIPTION OF REVISION	DATE	DESIGNED	DRAWN	CHECKED	APPROVED
1	Updated to USIBWC drawing border and to match URG gates	August 18, 2023	Andrea Glover, PE	Andrea Glover, PE		

A.D.S./A.G. DESIGNED  
Andrea Glover  
DRAWN

CHECKED

TECHNICAL APPROVAL

ADMIN APPROVAL  
USIBWC HQ-CON 1-4-2022

**GATE MANUFACTURE AND INSTALLATION**

IBF/RFP NUMBER CONTRACT NUMBER

CONTRACTOR/DESIGNER DRAWING NUMBER

USIBWC DRAWING NUMBER  
**26422-002-01**



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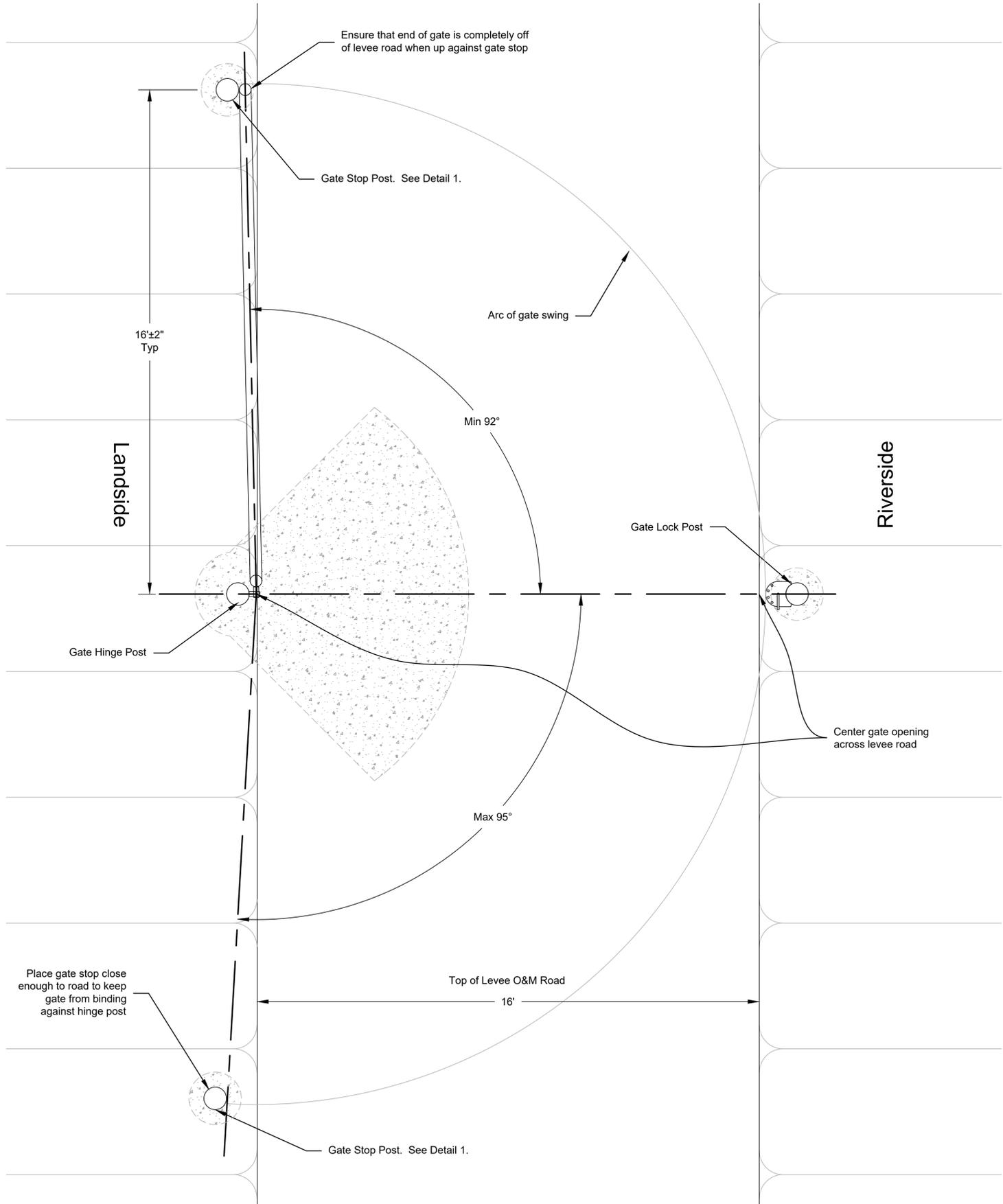
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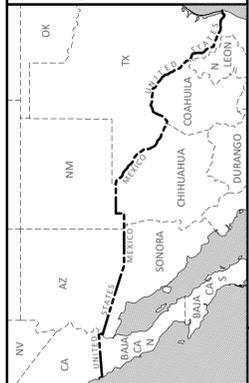
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**L** PLAN VIEW OF GATE INSTALLLATION

NOTES:  
See Sheets 1 and 2 for notes.



INTERNATIONAL BOUNDARY AND WATER COMMISSION  
UNITED STATES AND MEXICO  
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LOWER RIO GRANDE FLOOD CONTROL PROJECT

STANDARD DRAWING  
HEAVY DUTY VEHICULAR GATE

REV.	DESCRIPTION OF REVISION
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DESIGNED  
Andreas Glover  
DRAWN

CHECKED

TECHNICAL APPROVAL

ADMIN APPROVAL

USIBWC HQ-CON 1-4-2022

GATE MANUFACTURE AND INSTALLATION

IFB/RFP NUMBER CONTRACT NUMBER

CONTRACTOR/DESIGNER DRAWING NUMBER

USIBWC DRAWING NUMBER  
**26422-004-01**

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D

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IBWC Border V20210903