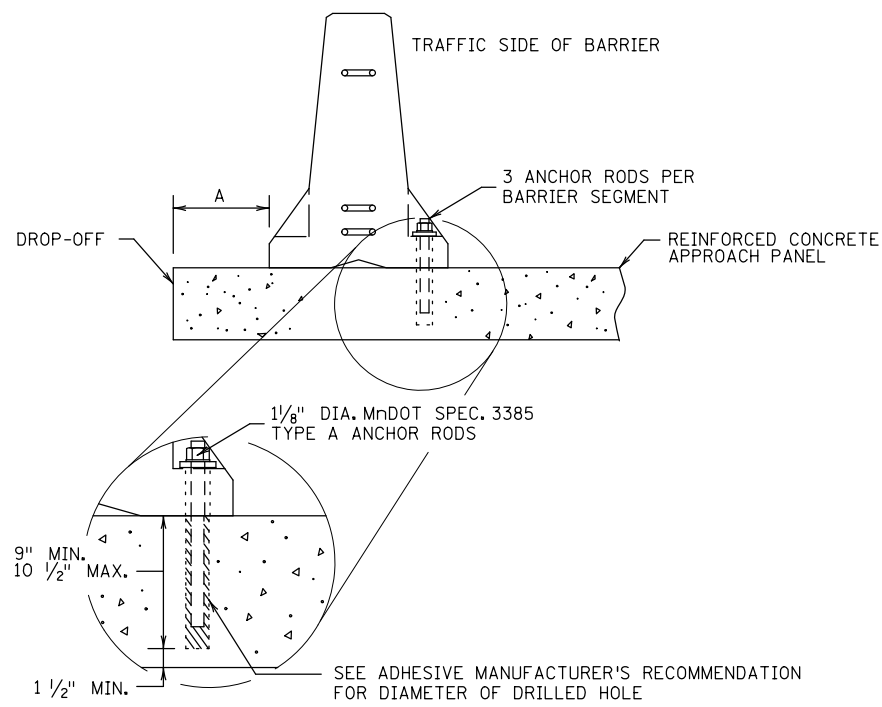
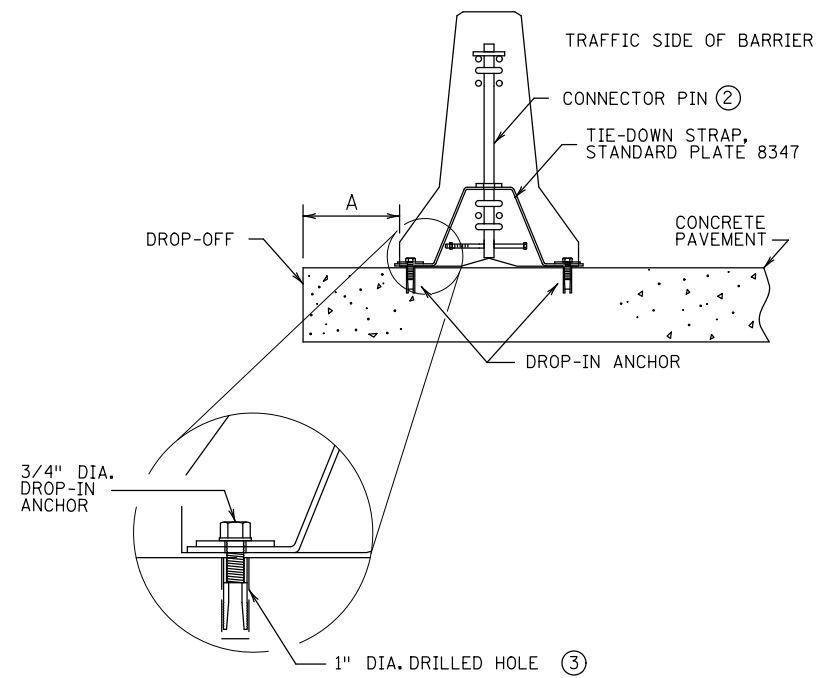


PLOTTED/REVISED: 4-APR-2018

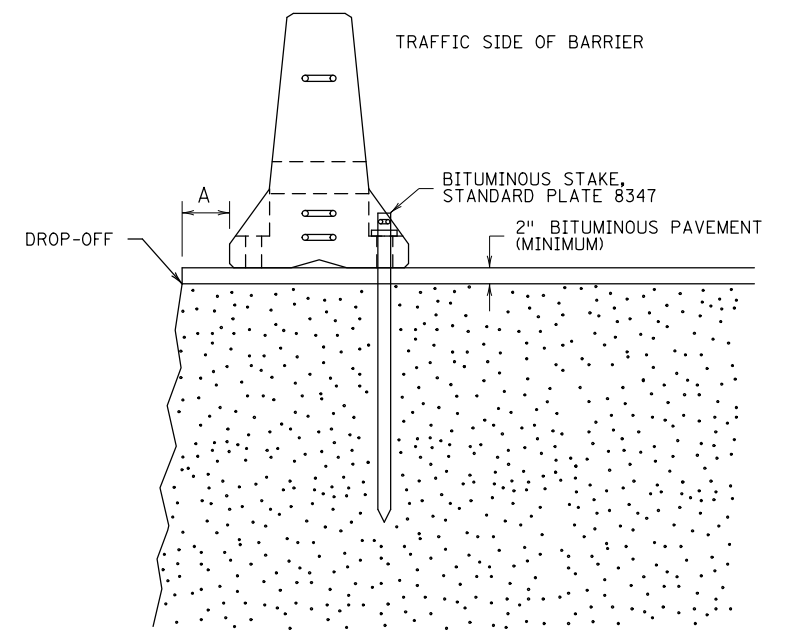
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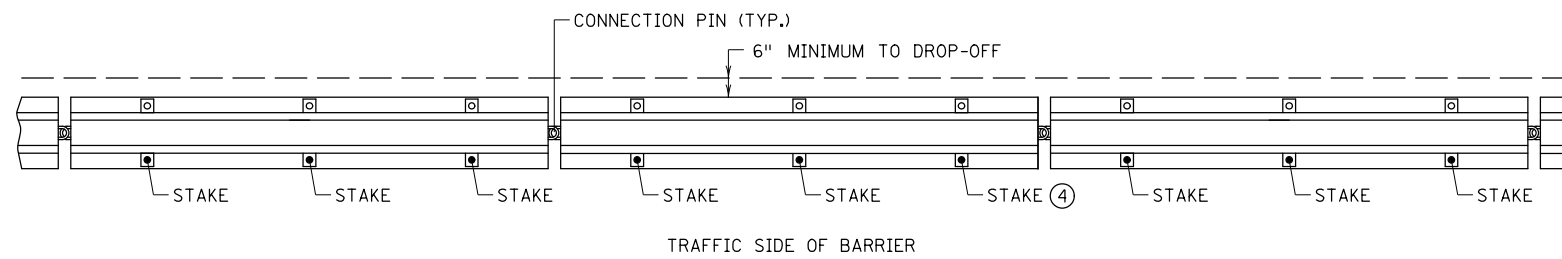
APPROACH PANEL BOLT-DOWN ANCHOR



TIE-DOWN STRAP ANCHOR

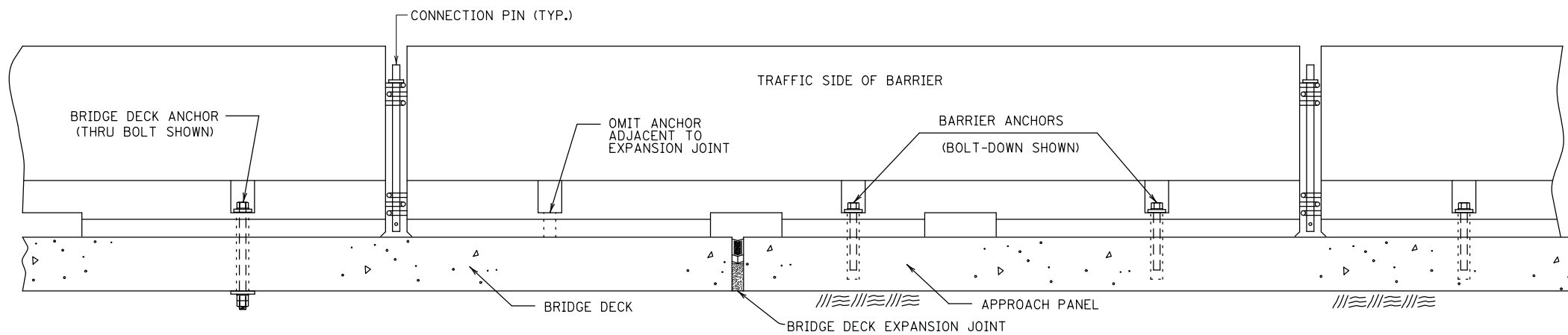


BITUMINOUS ANCHORAGE



BITUMINOUS ANCHORAGE AT VERTICAL CUT

PORTABLE CONCRETE BARRIER ANCHORAGES		
BARRIER OFFSET "A" ①	PAVEMENT TYPE	ANCHORAGE TYPE
$1" \leq A < 2'$	CONCRETE	3 BOLT-DOWN ANCHORS ON TRAFFIC FACE ON APPROACH PANEL
$6" \leq A < 2'$	CONCRETE	TIE-DOWN STRAP ANCHOR
6" MINIMUM	BITUMINOUS	3 BITUMINOUS STAKES ON TRAFFIC SIDE
$A \geq 2'$	CONCRETE	NO ANCHORAGE REQUIRED



ANCHOR TREATMENT AT BRIDGE DECK EXPANSION JOINT ⑤  
 (EXPANSION LESS THAN 1-1/2")

**NOTES:**

- BARRIER SECTIONS SHALL NOT BE PERMANENTLY INCORPORATED INTO CONSTRUCTION OR MAINTENANCE PROJECTS.
- ALL BARRIERS ARE DESIGN 8337. SEE STANDARD PLATE 8337.
- BARRIERS SHALL HAVE CONNECTION PINS.
- ① OFFSET DISTANCE TO DROP-OFF.
- ② RETAINER BOLT AND NUT REQUIRED.
- ③ OR ANCHOR MANUFACTURER'S RECOMMENDED DIAMETER.
- ④ 3 STAKES REQUIRED PER BARRIER SECTION, PLACED ON TRAFFIC SIDE OF BARRIER, WHEN ADJACENT TO DROP-OFF.
- ⑤ REFER TO MnDOT BRIDGE STANDARD DETAIL B920 FOR ANCHORING BARRIER ONTO BRIDGE.



STANDARD PLAN 5-297.680

1 OF 2

**PORTABLE PRECAST CONCRETE BARRIER ANCHORING**

APPROVED: 5-27-2014  
 REVISED:

*Christine Ry*  
 STATE DESIGN ENGINEER

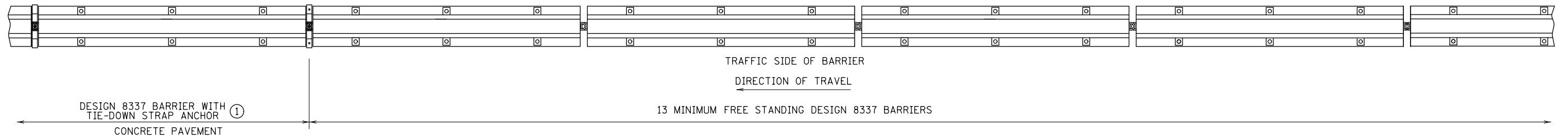
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(T.H. )

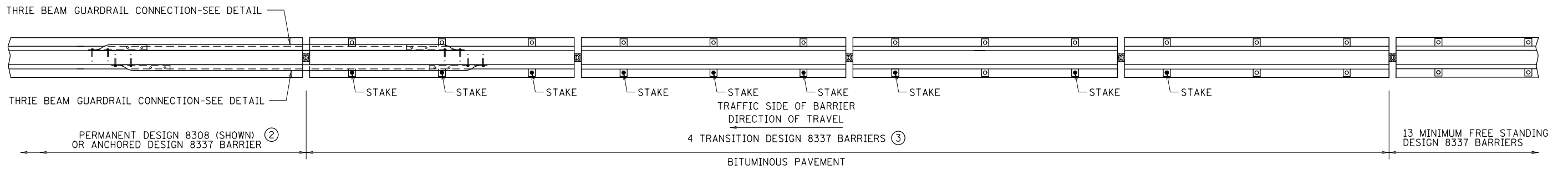
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PLOTTED/REVISED: 4-APR-2018

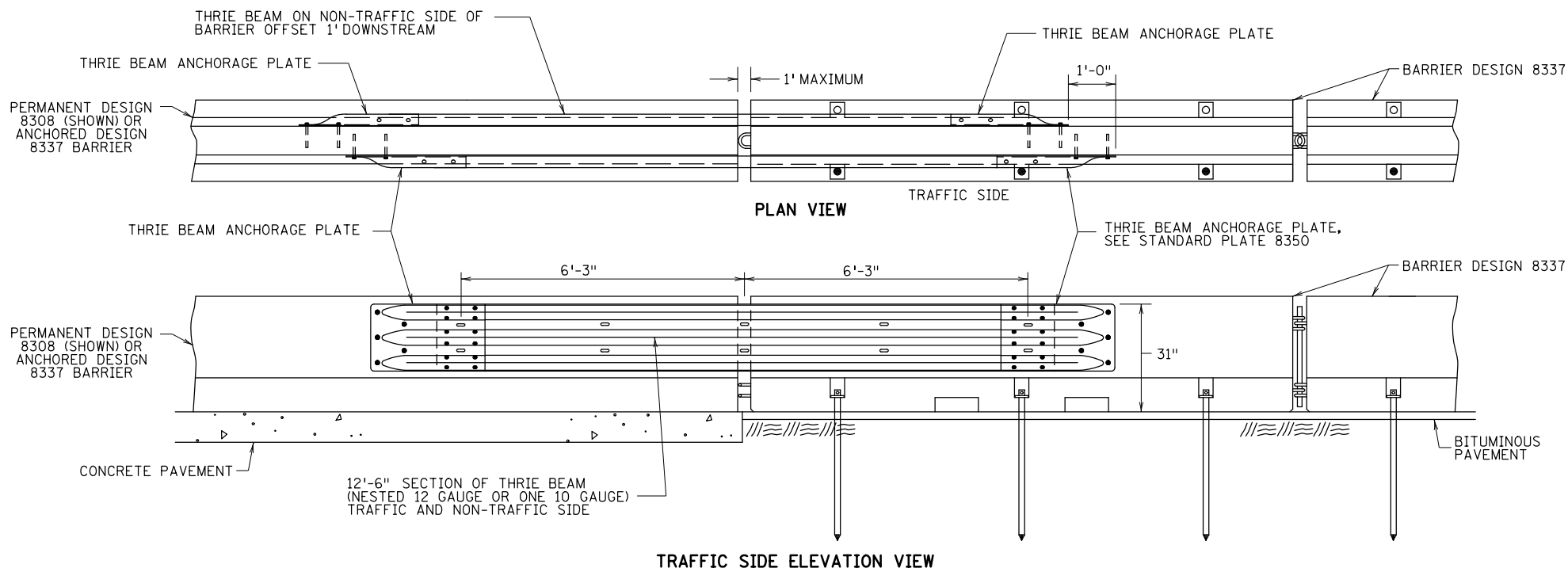
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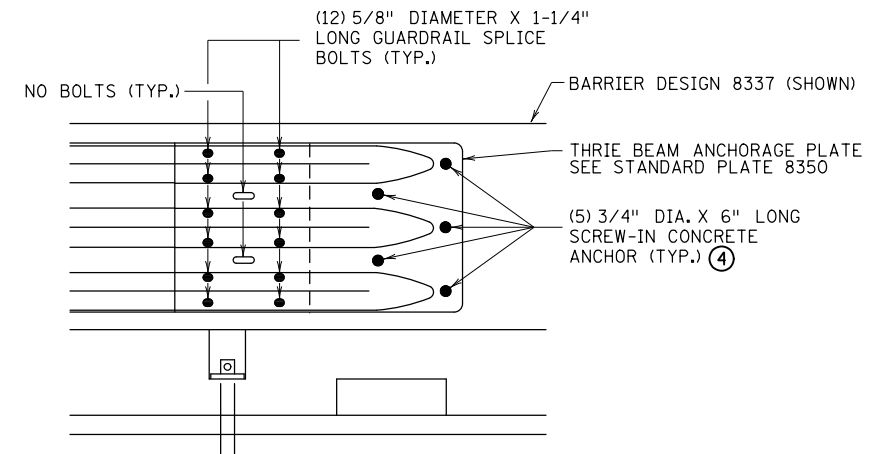
**TRANSITION FROM FREE STANDING BARRIER TO TIE-DOWN STRAP ANCHORED BARRIER**



**TRANSITION FROM FREE STANDING BARRIER TO PERMANENT BARRIER OR ANCHORED PORTABLE BARRIER**



**THRIE BEAM GUARDRAIL CONNECTION DETAIL**



**THRIE BEAM ANCHORAGE PLATE HARDWARE DETAIL**

**NOTES:**

- BARRIER SECTIONS SHALL NOT BE PERMANENTLY INCORPORATED INTO CONSTRUCTION OR MAINTENANCE PROJECTS.
- CONNECTION PINS REQUIRED WITH ALL DESIGN 8337 BARRIERS.
- THRIE BEAM SHALL CONFORM TO AASHTO M 180.
- ① WHEN FREE STANDING BARRIERS CONNECT TO TIE-DOWN STRAP ANCHORED BARRIERS, TRANSITION BARRIERS AND THRIE BEAM CONNECTION NOT REQUIRED.
- ② THRIE BEAM GUARDRAIL CONNECTION REQUIRED BETWEEN TRANSITION BARRIERS AND PERMANENT OR RIGID BARRIERS.
- ③ TRANSITION BARRIERS REQUIRED BETWEEN FREE STANDING DESIGN 8337 BARRIERS AND PERMANENT OR ANCHORED BARRIERS.
- ④ REINFORCEMENT STEEL WITHIN BARRIER SHALL NOT BE DISTURBED WHEN ANCHORS ARE PLACED.



STANDARD PLAN 5-297.680

2 OF 2

*Christopher Ry*  
STATE DESIGN ENGINEER

APPROVED: 5-27-2014  
REVISED:

**PORTABLE PRECAST CONCRETE BARRIER ANCHORING**  
(TRANSITION SYSTEMS)

STATE PROJ. NO.

(T.H. )

SHEET NO.

OF

SHEETS