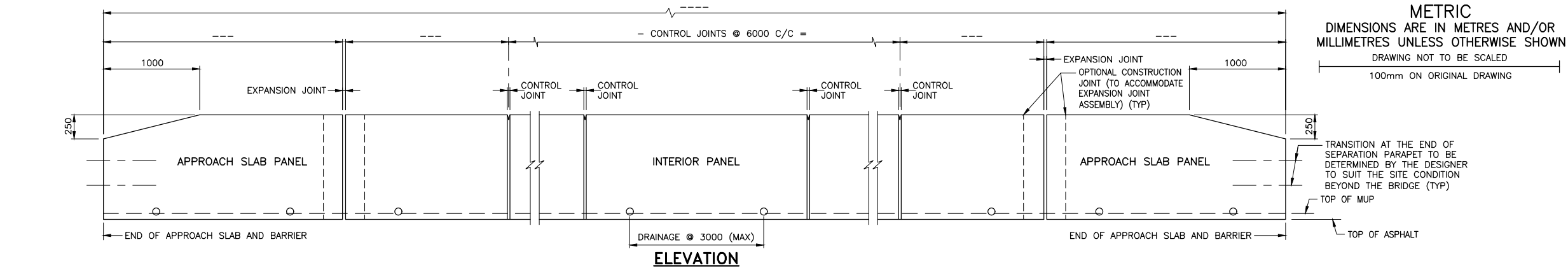


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 MINISTRY OF TRANSPORTATION OF ONTARIO STRUCTURAL ANS1 D FRAME 2020-05

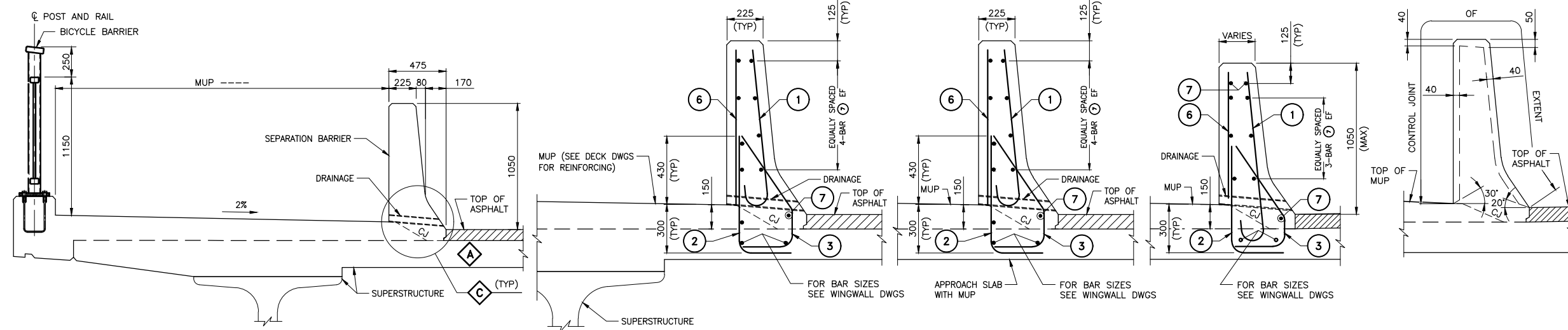
Ontario Ministry of Transportation
 CONT WP **DRAFT**
 SHEET
 MULTI USE PATH (MUP) SEPARATION BARRIER, TL-5

METRIC DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN
 DRAWING NOT TO BE SCALED
 100mm ON ORIGINAL DRAWING



- NOTES:**
- SYSTEM CONFIGURATION MEETS THE REQUIREMENTS OF NCHRP 350.
 - CHASE REQUIRED ON HIGH AND LOW SIDE OF CROSSFALL.
 - CONCRETE COVER TO REINFORCING STEEL 60 ±10mm EXCEPT AS NOTED.
 - REINFORCING STEEL SHALL BE STAINLESS TYPE 316LN OR DUPLEX 2205 WITH A MINIMUM YIELD STRENGTH OF 500 MPa.
 - BAR LAP SPLICE FOR HORIZONTAL REINFORCEMENT MUST NOT LAP THROUGH CONTROL JOINT.
 - MINIMUM BAR LAP SPLICE TO BE 550mm.
 - LENGTH OF HORIZONTAL BAR TO SUIT CONTRACTOR'S OPERATIONS.
 - DRAIN PIPES SHALL BE SCHEDULE 20 OR 40 PVC PIPE.
 - CONTROL JOINT TO BE FORMED. CONTROL JOINT FORM HARDWARE NOT TO BE LEFT IN PLACE.
 - SAWCUTS NOT PERMITTED.
 - OPTIONAL CONSTRUCTION JOINTS TO BE LOCATED WITHIN LIMITS OF CONCRETE DAMS ON DECK OR BALLAST WALL.

- LEGEND:**
- EF - DENOTES EACH FACE
 - IF - DENOTES INSIDE FACE
 - OF - DENOTES OUTSIDE FACE
 - CJ - DENOTES CONSTRUCTION JOINT
 - MUP - DENOTES MULTI USE PATH



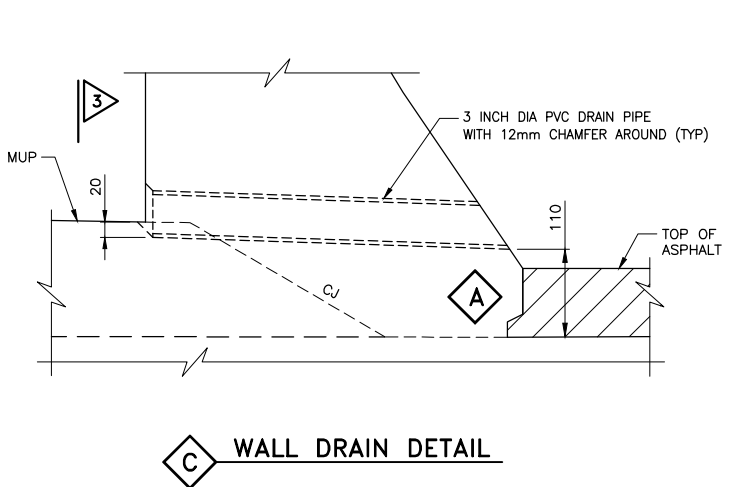
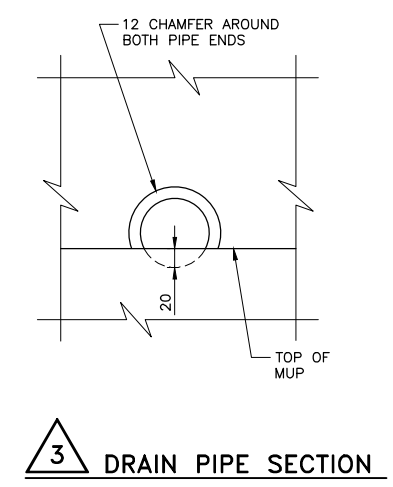
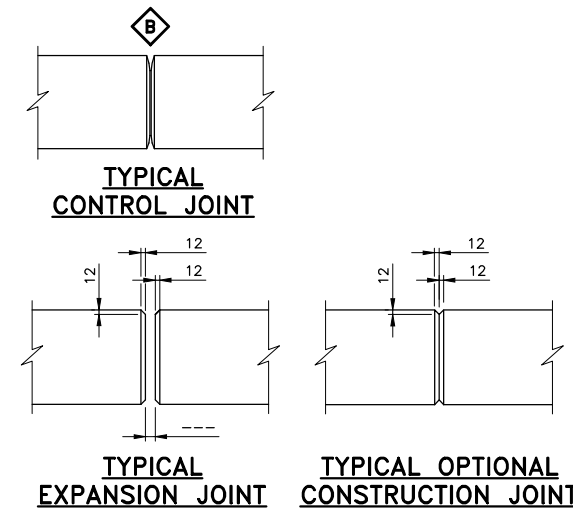
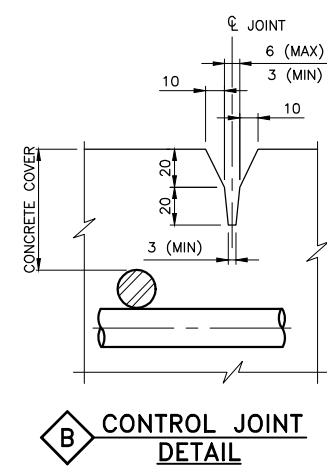
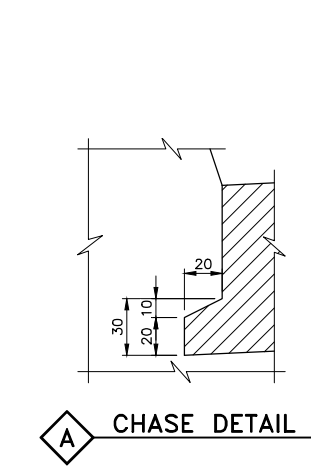
SEPARATION BARRIER ON STRUCTURE FOR MULTI USE PATH

1 SEPARATION BARRIER WALL ON DECK

2 SEPARATION BARRIER WALL ON APPROACH SLAB

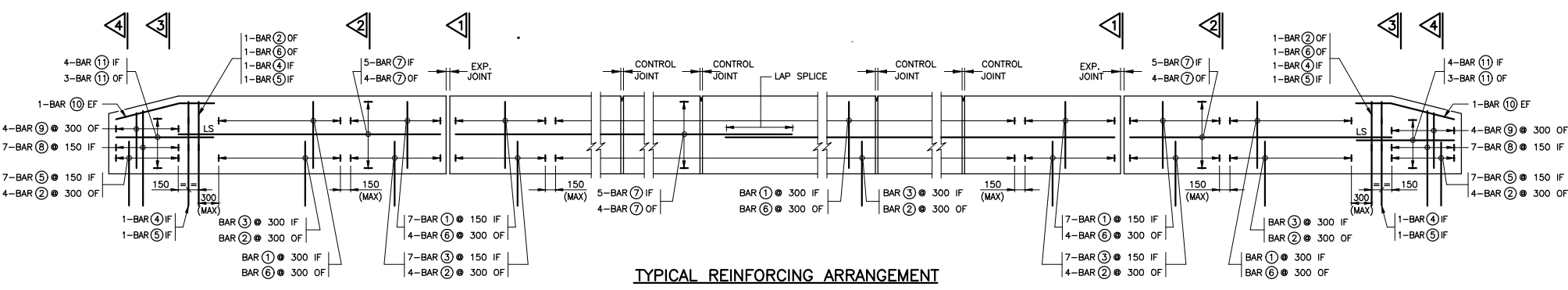
3 EXTENT OF CONTROL JOINT IN BARRIER WALL

BAR MARK	SIZE	SHAPE
①	S15M	
②	S10M	
③	S15M	
④	S15M	
⑤	S15M	
⑥	S10M	STRAIGHT
⑦	S15M	STRAIGHT
⑧	S15M	
⑨	S10M	STRAIGHT, LENGTH VARIES
⑩	S15M	
⑪	S15M	STRAIGHT



REFER TO THE STRUCTURAL MANUAL FOR PROFESSIONAL ENGINEER STAMPING REQUIREMENTS.

NOTES TO DESIGNER:
 1. BICYCLE BARRIER IS SHOWN FOR ILLUSTRATION ONLY AND SHALL BE DESIGNED AS PER CSA-S6. FOR BRIDGES WITH PEDESTRIAN ONLY PATH, A PEDESTRIAN BARRIER SHALL BE DESIGNED AS PER CSA-S6.
 2. DESIGNER SHALL DISCUSS THE ENERGY ATTENUATOR ANCHORAGE DETAILS WITH HIGHWAY DESIGN ENGINEER.
 3. THIS DRAWING IS MEANT ONLY TO SHOW SEPARATION BARRIER DETAILS. OTHER COMPONENTS SHOWN ON THIS DRAWING SHALL BE DESIGNED BY THE DESIGNER AND DETAILS SHALL BE SHOWN ELSEWHERE.
 4. DESIGNER SHALL PERFORM DRAINAGE ANALYSIS OF MUP/SIDEWALK TO EVALUATE DRAINAGE DETAIL SHOWN ON THIS DRAWING FOR SITE CONDITIONS. ADDITIONAL MEASURES MAY BE REQUIRED.
 5. THE 'NOTES TO DESIGNER' SHALL BE DELETED FROM THIS DRAWING PRIOR TO ISSUING.



STANDARD DRAWING FEBRUARY 2022 **SS110-111**
MULTI USE PATH (MUP) SEPARATION BARRIER, TL-5

REVISIONS	DATE	BY	DESCRIPTION

DESIGN	CHK	CODE CSA S6-19/LOAD	DATE JAN 2022
DRAWN	CHK	SITE	DWG