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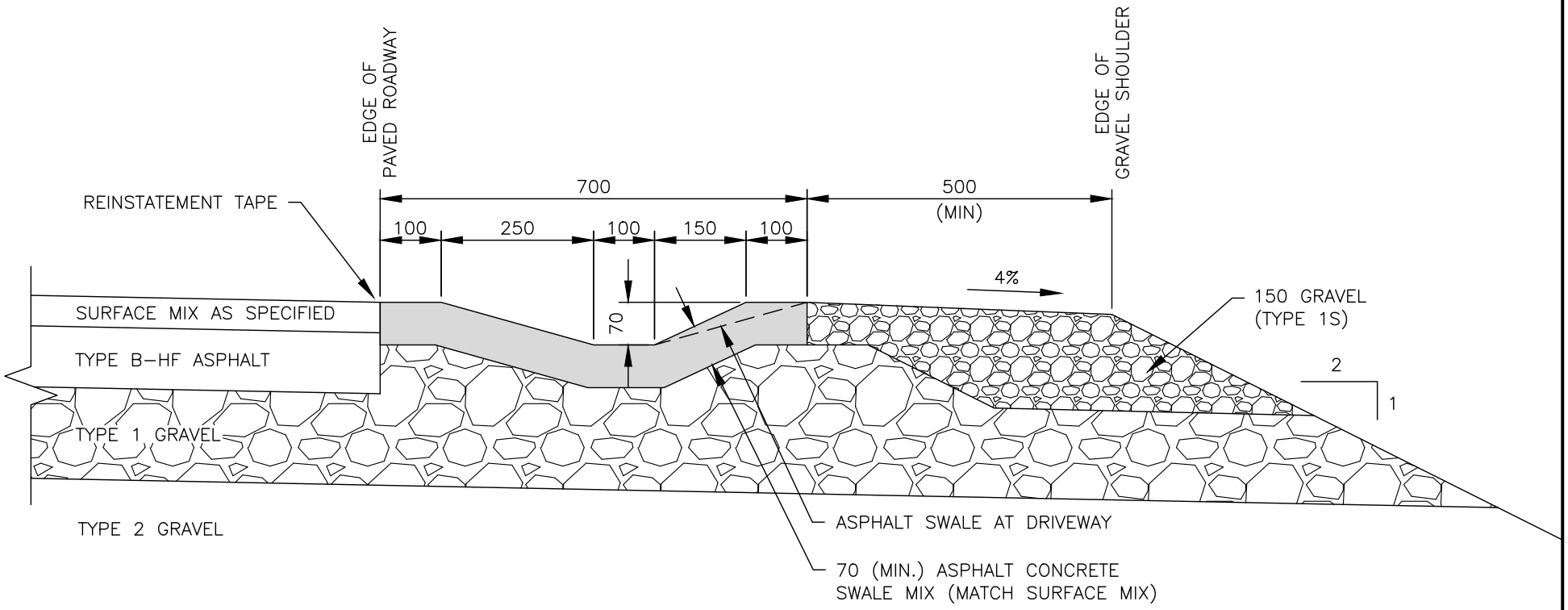


NOTE:

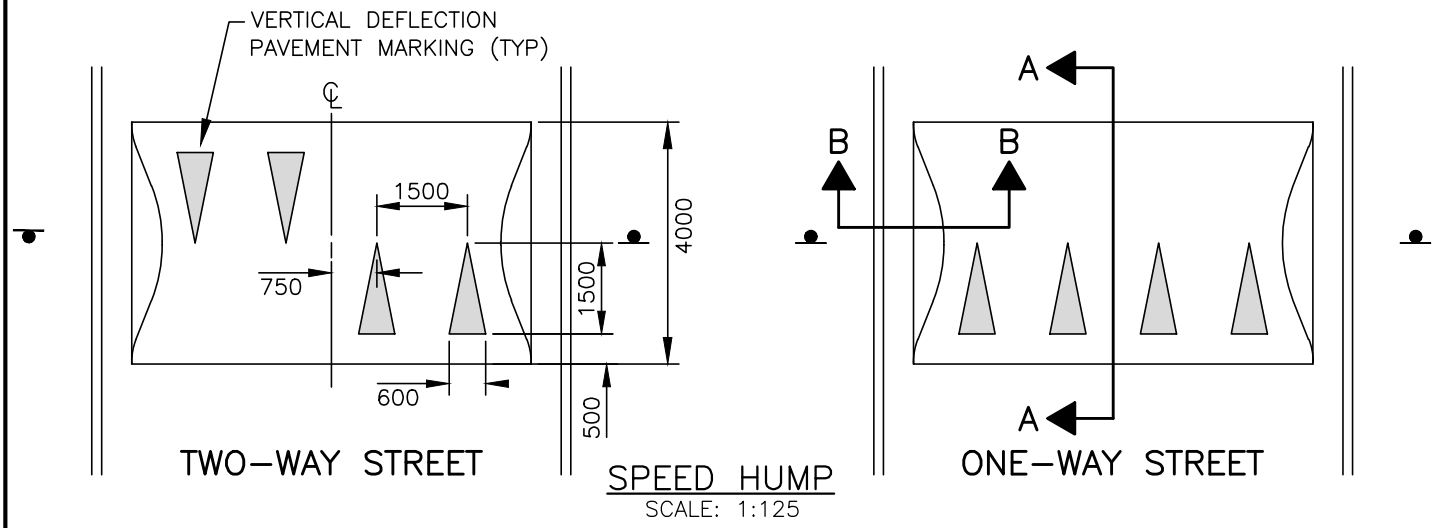
1. FOR ALL RURAL ROADS HAVING A GRADE EXCEEDING 7%, ASPHALT SWALES ARE REQUIRED ON EACH SIDE OF THE ROAD (ABUTTING THE ASPHALT TRAVELLED WAY) ASPHALT SWALE RUNOFF TO THE DITCH EVERY 30m OR UPSTREAM AT DRIVEWAYS.
2. ASPHALT SWALE SHALL EXTEND TO THE EDGE OF SHOULDER AND DOWN THE SLOPE BY 1 m MINIMUM.
3. MINIMUM SWALE CROSSFALL TO MATCH THE EXISTING SLOPE OF THE ROAD.
4. ASPHALT SWALE TO BE MACHINE PLACED.
5. 1 m ASPHALT APRON REQUIRED AT GRAVEL DRIVEWAYS.
6. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

ASPHALT SWALE

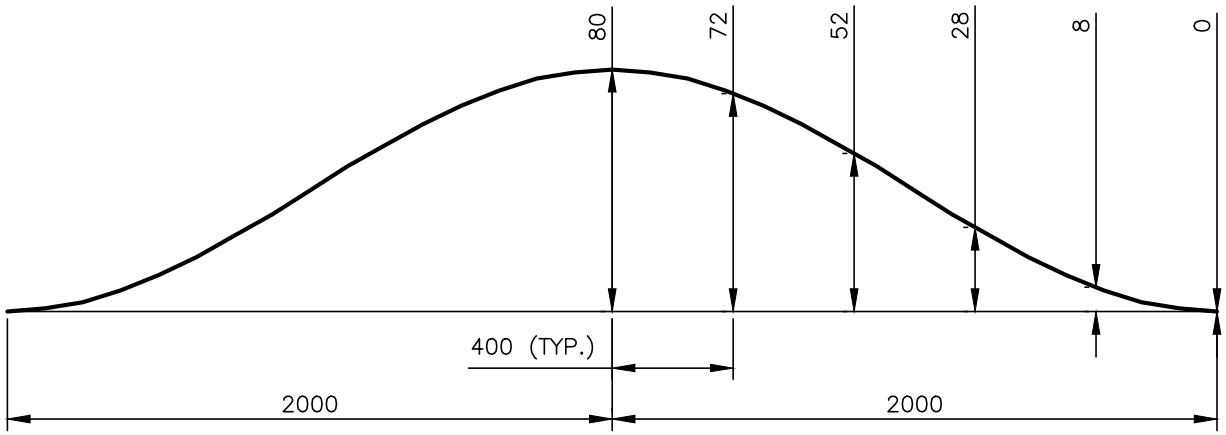
DATE: 2021	REFERENCE	APPROVED
SCALE: 1:10		FIG No.: HRM 30



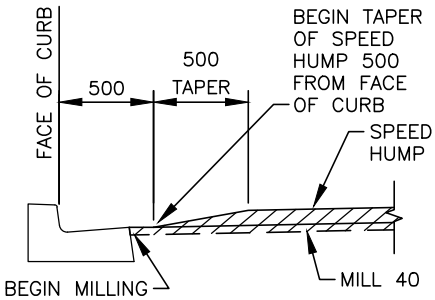
TWO–WAY STREET

SPEED HUMP
SCALE: 1:125

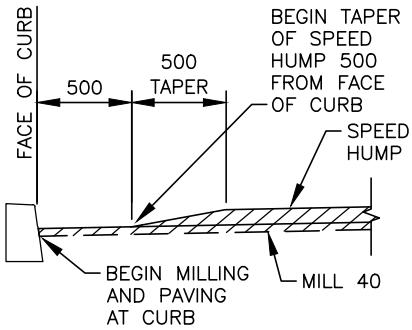
ONE–WAY STREET



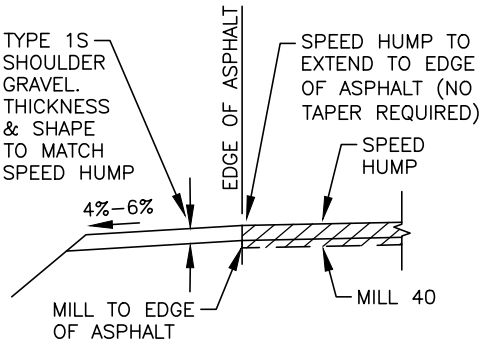
SECTION A–A
SCALE: Horz. 1:25 , Vert. 1:2.5



CURB & GUTTER
SECTION B–B
SCALE: 1:40



CURB ONLY
SECTION B–B
SCALE: 1:40



RURAL–GRAVEL SHOULDER
SECTION B–B
SCALE: 1:40

NOTES:

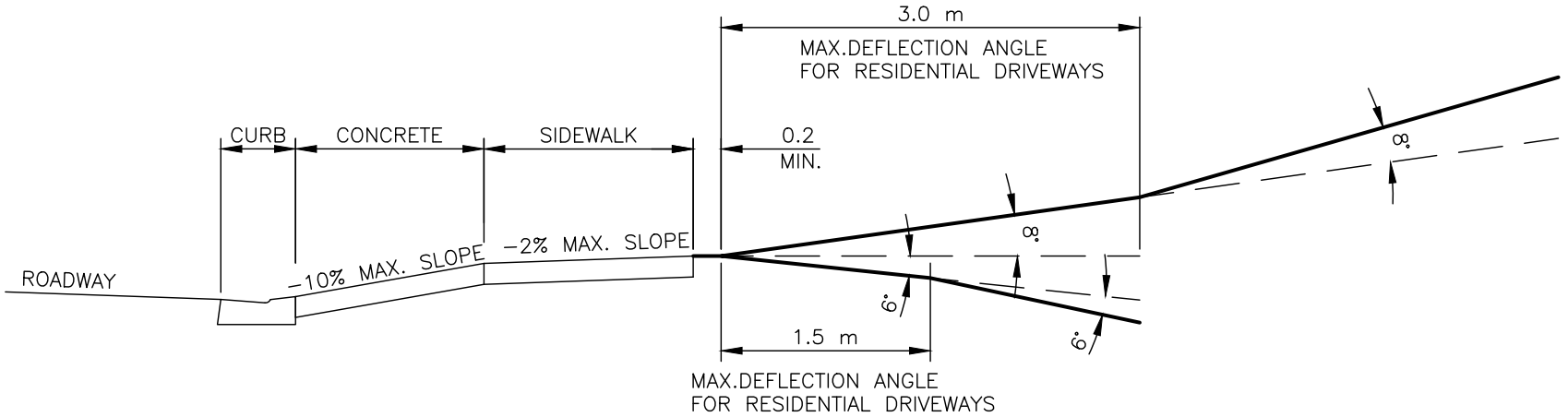
1. TOLERANCE FOR CONSTRUCTION IS +/– 10mm RELATIVE TO THE CURVE.
2. THE EXISTING ASPHALT SURFACE TO BE MILLED TO A DEPTH OF 40mm WHEN RETROFITTING.
3. SPEED HUMPS TO BE CONSTRUCTED USING TYPE D–HF ASPHALT (UNLESS OTHERWISE APPROVED BY HRM).
4. WHERE SPECIFIED, EXISTING UTILITY POLE OR EXISTING SIGN POSTS MAY BE USED FOR SIGNAGE.
5. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

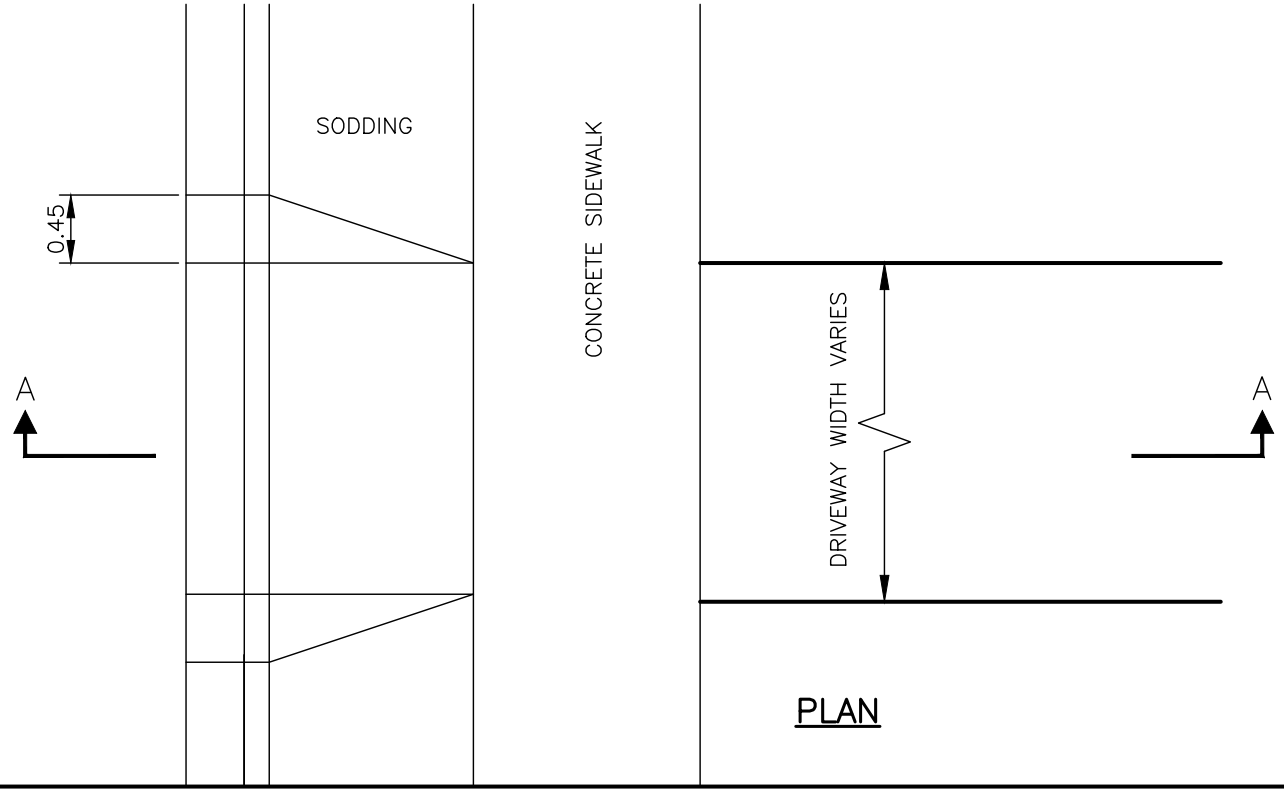
STANDARD DETAIL

SPEED HUMP

DATE: 2023	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 31



SECTION A–A



PLAN

NOTE:

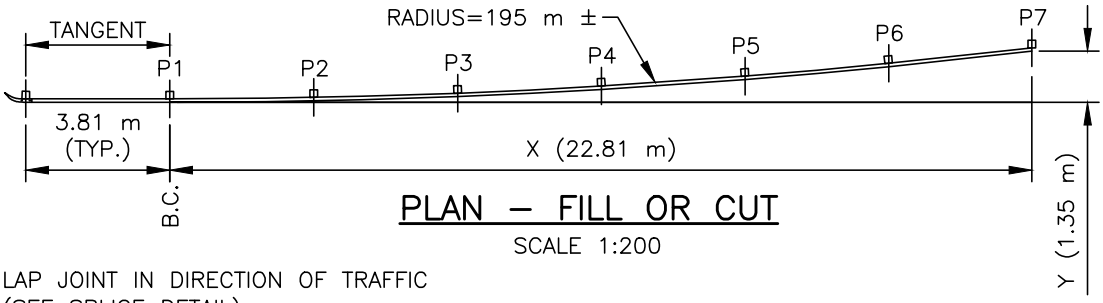
THIS DETAIL IS INTENDED FOR RETROFIT SITUATIONS, I.E. WHERE EXISTING DRIVEWAY GRADES MUST BE ADJUSTED TO MATCH NEW CONDITIONS IN THE STREET RIGHT–OF–WAY.

HALIFAX

STANDARD DETAIL

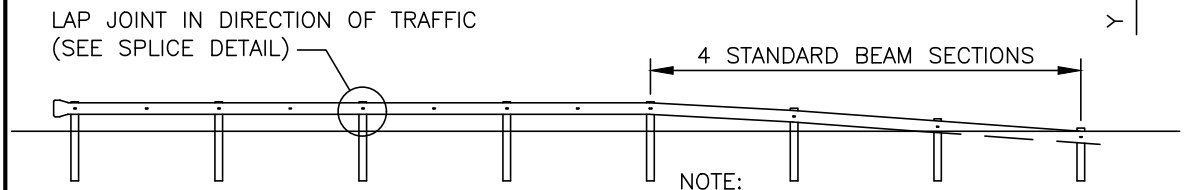
DRIVEWAY DEFLECTION ANGLES & GRADES

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:50		FIG No.: HRM 32



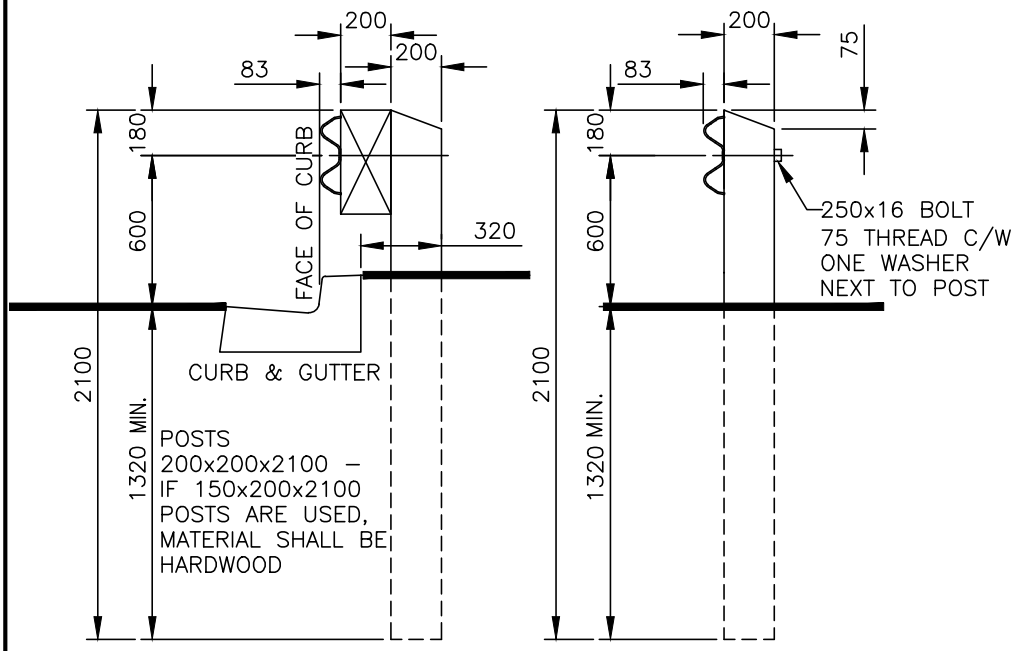
POST OFFSET TABLE		
POST #	X	Y
P1–P2	3.81	0.04
P1–P3	7.62	0.15
P1–P4	11.42	0.34
P1–P5	15.22	0.60
P1–P6	19.02	0.94
P1–P7	22.81	1.35

PLAN – FILL OR CUT
SCALE 1:200

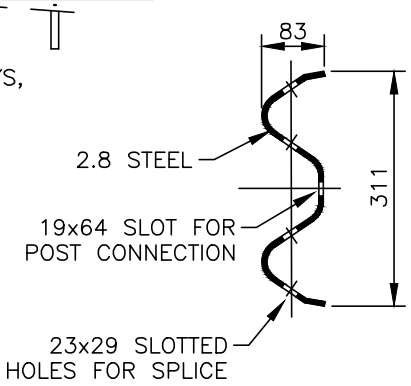


NOTE:
FOR 2 LANE/2 WAY ROADWAYS, BURY BOTH ENDS.

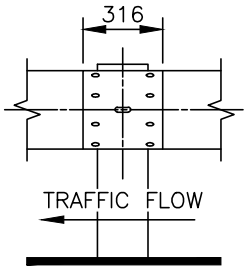
ELEVATION
SCALE 1:200



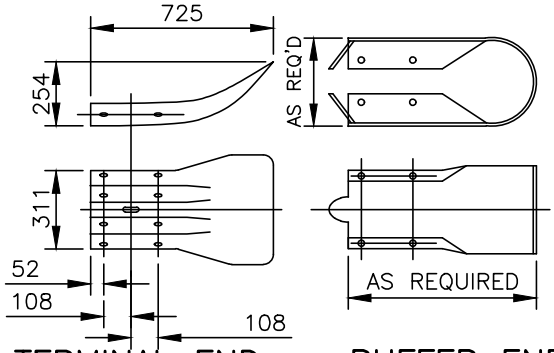
SECTION
SCALE 1:30



BEAM SECTION (TYP.)
SCALE 1:10



SPLICE DETAIL
SCALE 1:30



TERMINAL END
SCALE 1:30

BUFFER END
SCALE 1:30

NOTES:

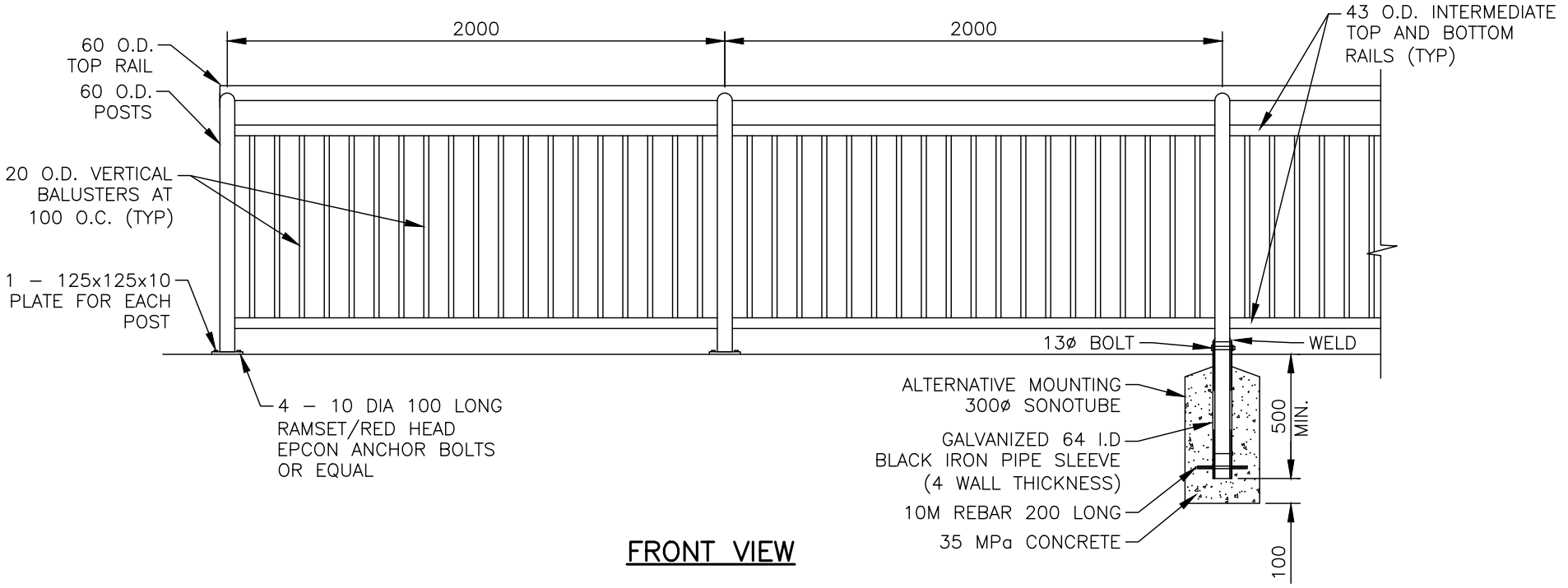
1. TWO 50x75 DELINEATORS ARE REQUIRED FOR EACH POST.
2. A WHITE DELINEATOR SHALL BE PLACED ON THE SIDE OF THE POST FACING TRAFFIC.
3. A YELLOW DELINEATOR SHALL BE PLACED ON THE OPPOSITE SIDE.
4. THE DELINEATOR SHALL BE PLACED ON THE OPPOSITE SIDE.
5. THE DELINEATOR SHALL BE LOCATED AT THE EDGE OF THE POST NEAREST THE ROAD, VERTICAL, WITH THE TOP 75 BELOW THE LOWEST POINT OF THE GUIDE RAIL PANEL.
6. THE DELINEATOR SHALL BE ATTACHED WITH GALVANIZED NAILS.

HALIFAX

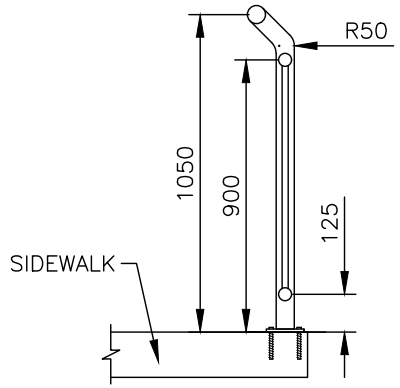
STANDARD DETAIL

GUIDE RAIL INSTALLATION

DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 36



FRONT VIEW



SIDE VIEW

NOTE:

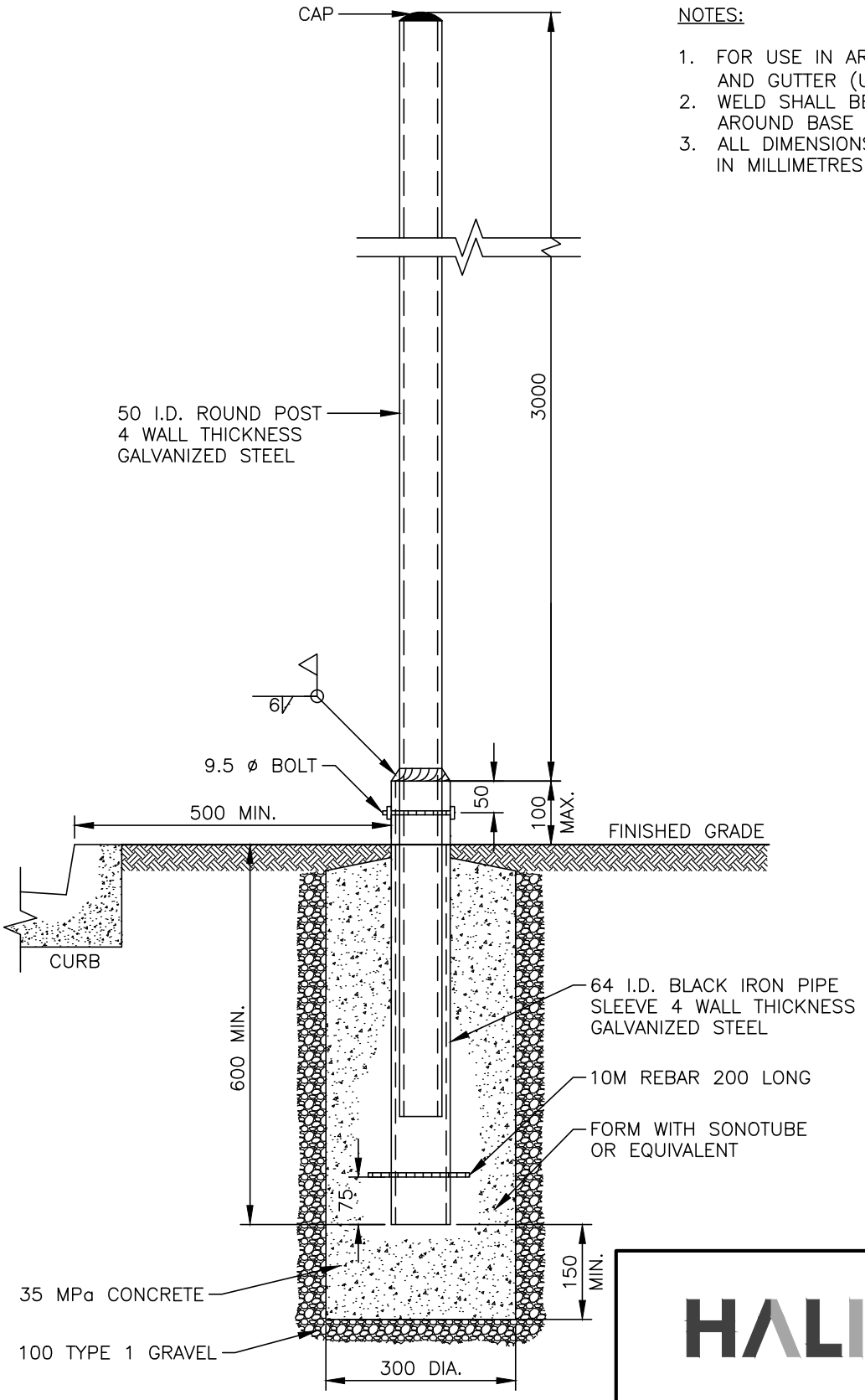
RAILING SYSTEM TO BE HOT DIPPED GALVANIZED AFTER FABRICATION. FIELD WELDS, IF NECESSARY SHALL BE PROTECTED WITH COLD GALVANIZING.

HALIFAX

STANDARD DETAIL

RAILING

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 37



NOTES:

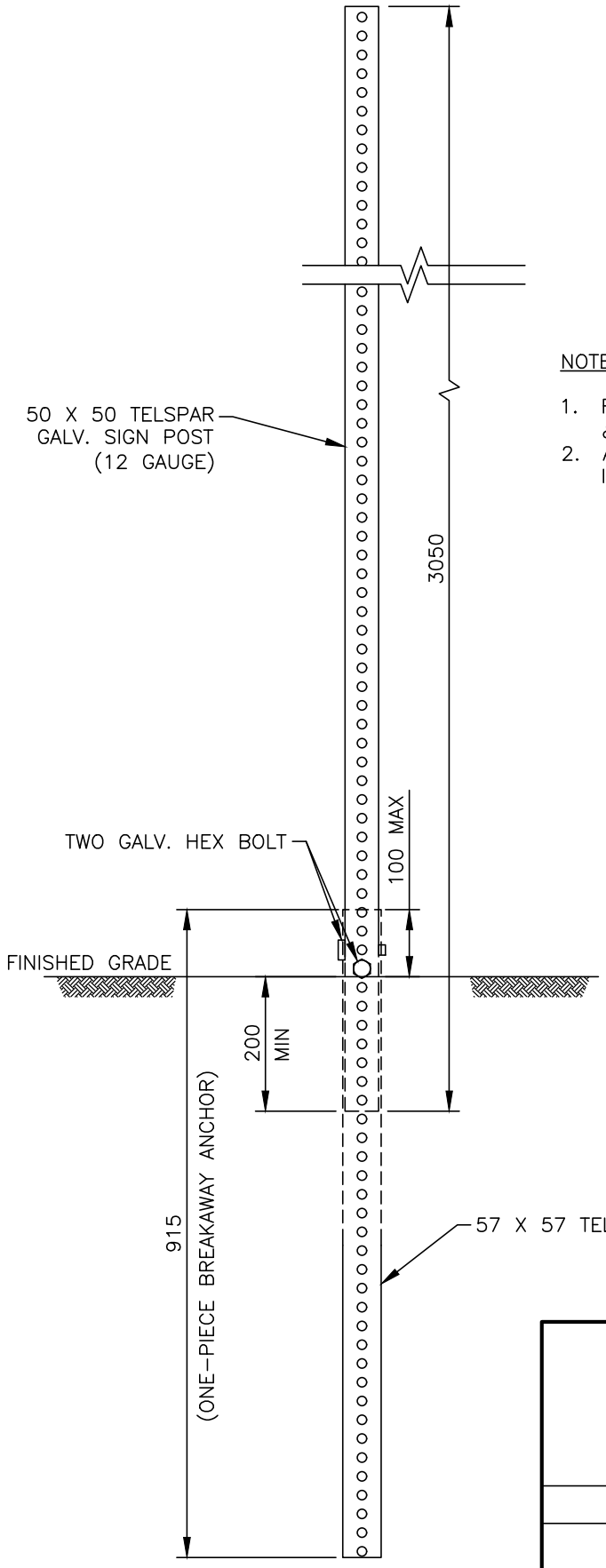
1. FOR USE IN AREAS WITH CURB AND GUTTER (URBAN LOCATIONS)
2. WELD SHALL BE COMPLETED AROUND BASE AND POST.
3. ALL DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

URBAN TRAFFIC SIGN POST

DATE: 2023	REFERENCE	APPROVED
SCALE: 1:10		FIG No.: HRM 38



NOTES:

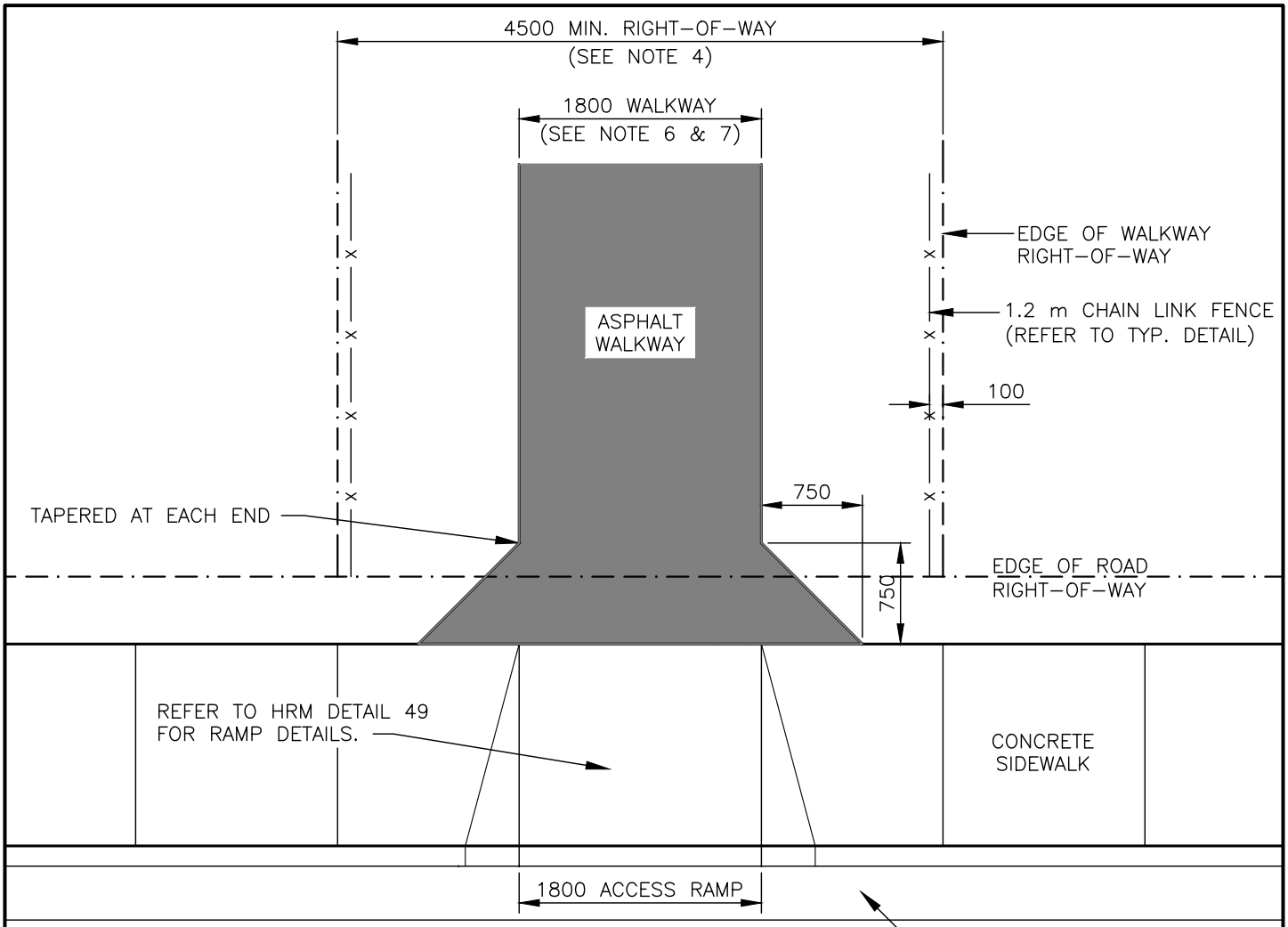
1. FOR USE IN AREAS WITHOUT CURB & GUTTER (RURAL LOCATIONS)..
2. ALL DIMENSIONS ARE IN MILLIMETRES

HALIFAX

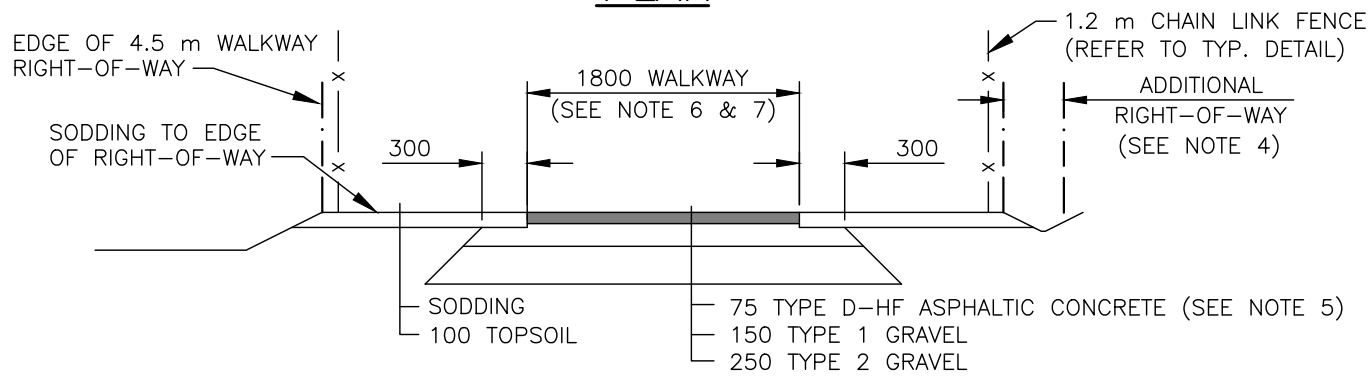
STANDARD DETAIL

RURAL TRAFFIC SIGN POST

DATE: 2023	REFERENCE	APPROVED
SCALE: 1:10		FIG No.: HRM 39



PLAN



PROFILE

NOTES:

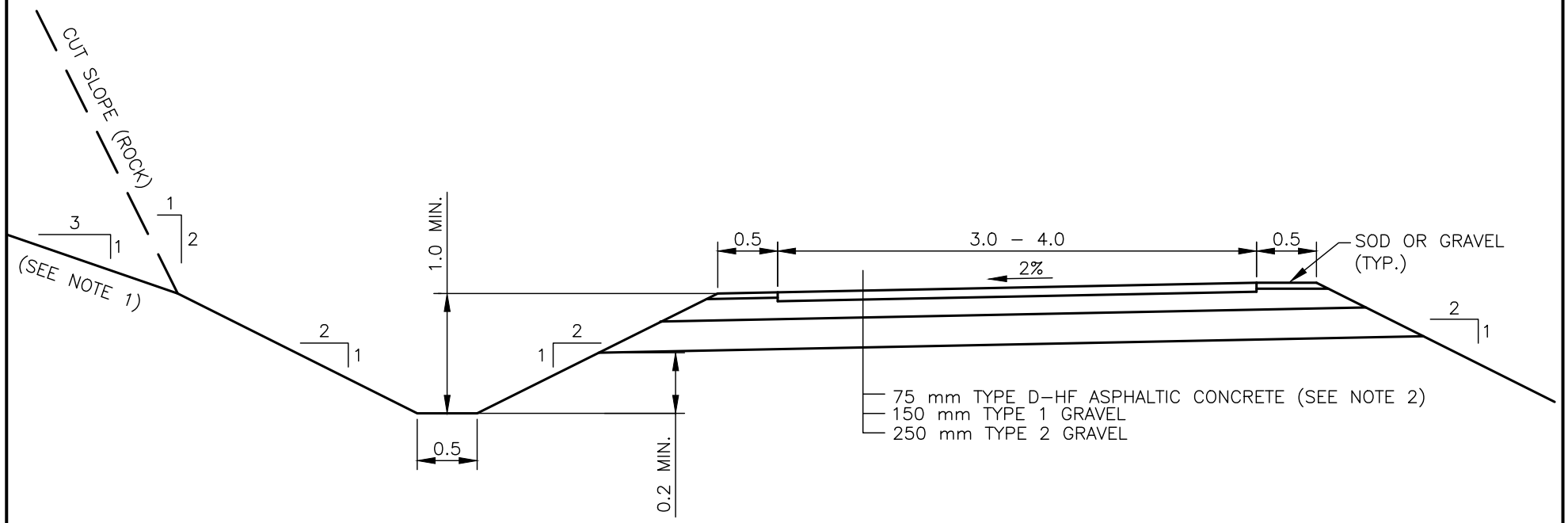
1. WALKWAY CROSSFALL TO BE 2% WITH NO CROWN.
2. THE ENGINEER MAY REQUIRE OR PERMIT USE OF LOW MAINTENANCE MATERIALS IN PLACE OF SODDING.
3. WHERE MUNICIPAL SERVICE SYSTEMS ARE REQUIRED THE MIN. R.O.W. IS TO BE INCREASED TO 6.0 m. THE CHAIN LINK FENCE SHALL BE LOCATED 100 FROM THE EDGE OF THE INCREASED 6.0 m R.O.W..
4. TO ACCOMMODATE SWALE OR CUT/FILL SLOPES ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED.
5. SURFACE MATERIAL TO BE ASPHALTIC CONCRETE UNLESS DIRECTED BY THE ENGINEER.
6. GRADE AS DIRECTED BY THE ENGINEER.
7. TO BE PLACED WITH SPREADER.

HALIFAX

STANDARD DETAIL

TYPICAL WALKWAY

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:50		FIG No.: HRM 40



NOTES:

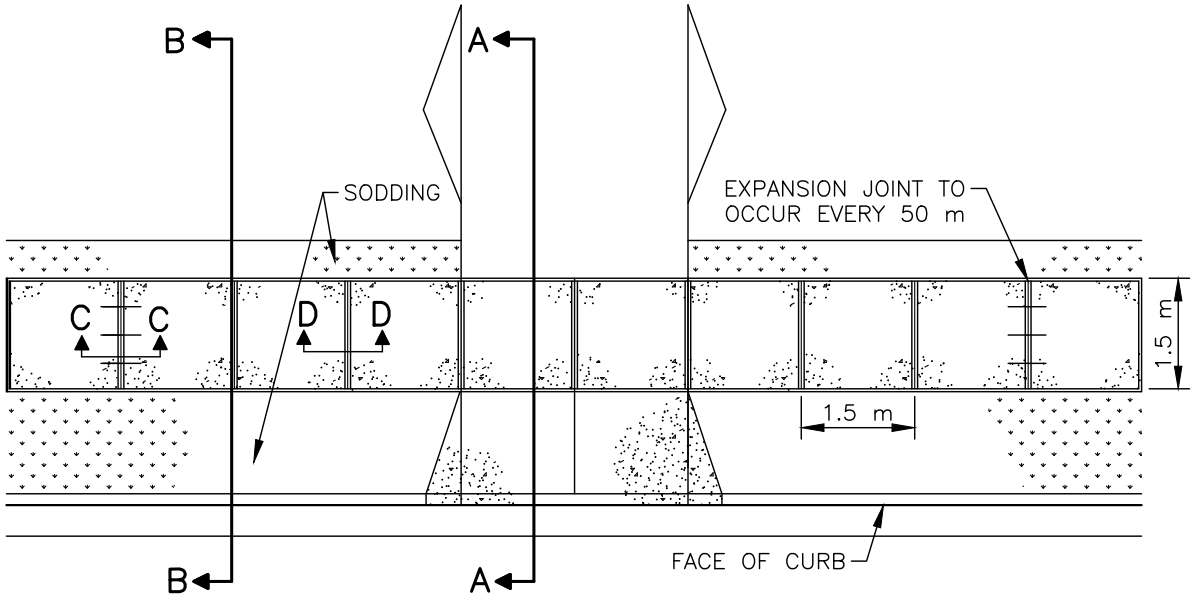
1. ADDITIONAL SLOPE STABILIZATION AS PER GEOTECHNICAL REPORT.
2. SURFACE MATERIAL TO BE ASPHALTIC CONCRETE UNLESS DIRECTED BY THE ENGINEER.
3. RAILING REQUIRED IN FILL GREATER THAN 1.5 m, OR ADJACENT TO WATER.
4. FALSE DITCH REQUIREMENTS SHALL MEET HALIFAX WATER SPECIFICATIONS.
5. MINIMUM 3.0 m CLEAR WIDTH.

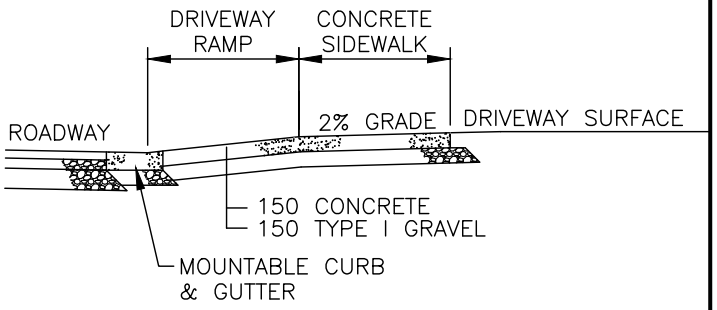
HALIFAX

STANDARD DETAIL

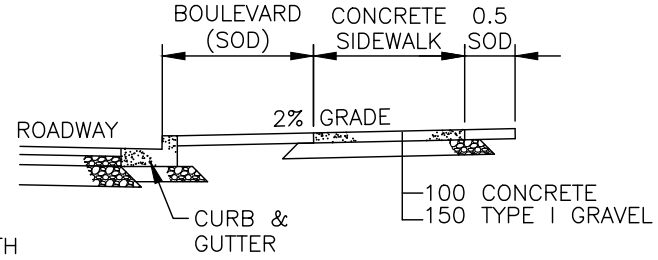
ACTIVE TRANSPORTATION OFF ROAD TRAIL

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:50		FIG No.: HRM 41





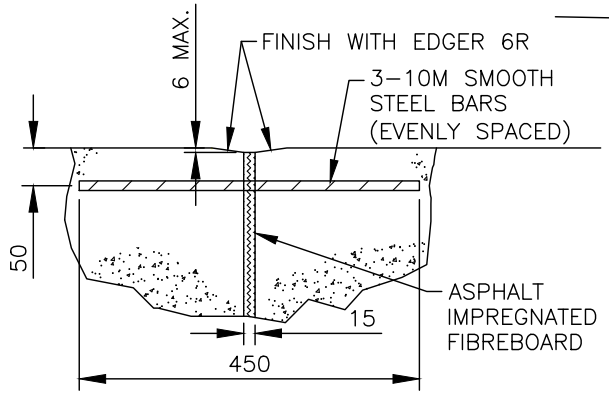
SECTION A–A
(DRIVEWAY CROSS–SECTION)



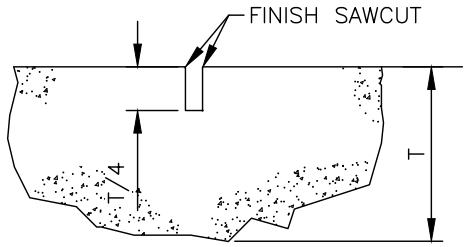
SECTION B–B
(SIDEWALK CROSS–SECTION)

NOTES:

1. CONCRETE SIDEWALK AT COMMERCIAL DRIVEWAY TO BE 150 THICK WITH 150x150 WELDED WIRE MESH.
2. CRUSHED ROCK BASE TO EXTEND 150 BEYOND EDGE OF SIDEWALK STRUCTURE.
3. CONTROL JOINTS ARE TO BE SAW CUT.
4. SIDEWALK ABUTTING HIGH DENSITY AREAS SHALL HAVE FULL WIDTH (3 m) SIDEWALKS.
5. SIDEWALKS ABUTTING COMMERCIAL AREAS ARE TO BE FULL WIDTH (3 m) AND 150 mm THICKNESS.
6. EXPANSION JOINT BARS ARE TO BE GREASED ON ONE SIDE OF THE JOINT.
7. DURING CONSECUTIVE POURS, THE END OF EACH POUR IS TO OCCUR AT AN EXPANSION JOINT. WHERE THIS IS NOT FEASIBLE, AN ADDITIONAL EXPANSION JOINT IS TO BE INSTALLED.
8. INSTALL A 9 m LONG CONCRETE LANDING PAD AT ALL BUS STOP LOCATIONS. INCREASE THIS TO 14.5 m FOR ARTICULATED BUS ROUTES.
9. WHEN BOULEVARD IS LESS THAN 1.5 m OR WHEN THE SIDEWALK ABUTS THE CURB & GUTTER, REFER TO HRM 133.
10. SEE HRM 48 FOR SIDEWALK WITHIN 6 m OF TREES.
11. DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.



SECTION C–C
(EXPANSION JOINT)



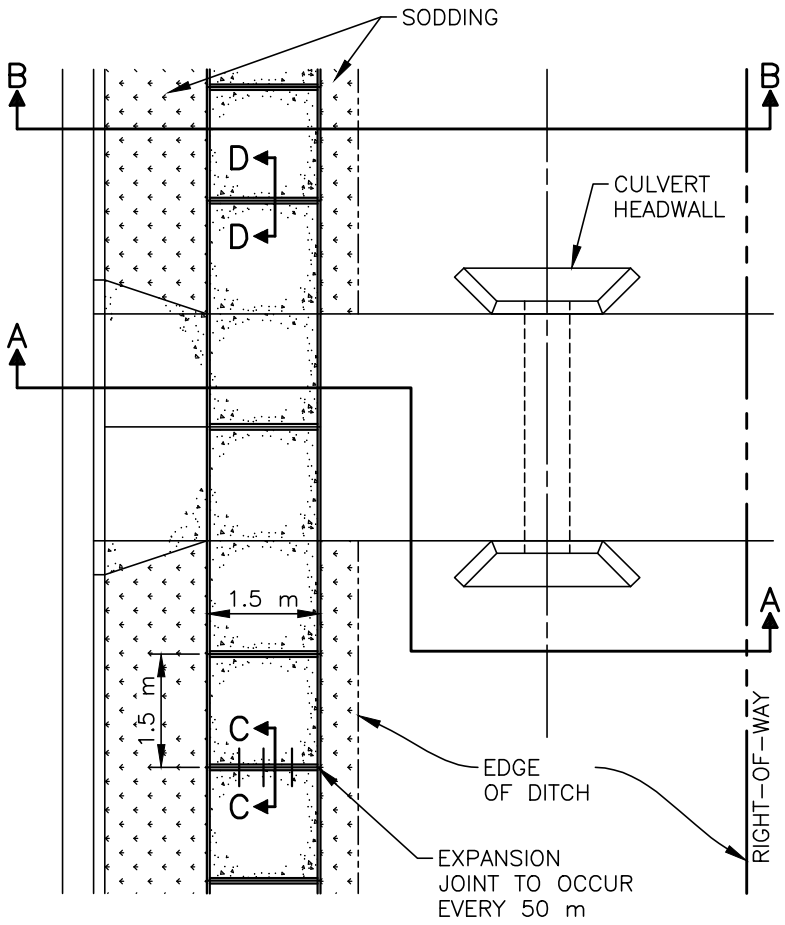
SECTION D–D
(CONTROL JOINT)

HALIFAX

STANDARD DETAIL

URBAN SIDEWALK

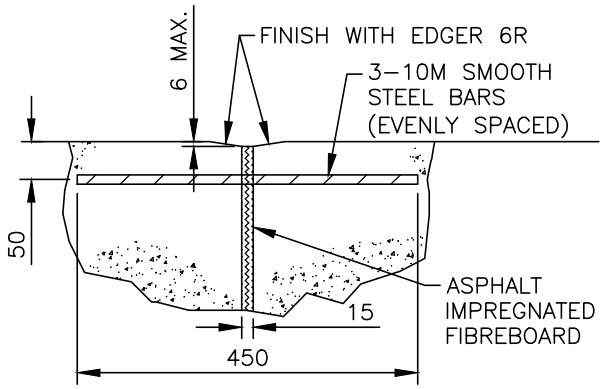
DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 44



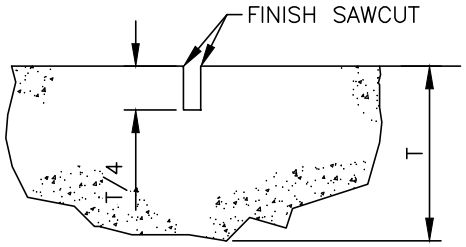
PLAN

NOTES:

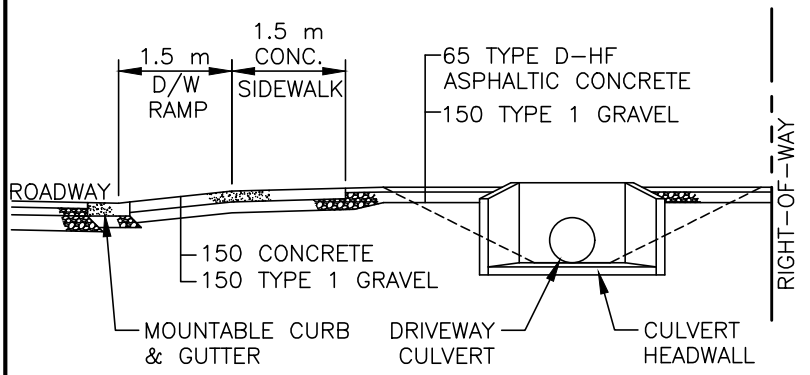
1. CONCRETE SIDEWALK AT COMMERCIAL DRIVEWAY TO BE 150 THICK WITH 150 x 150 WELDED WIRE MESH.
2. CRUSHED ROCK BASE TO EXTEND 150 BEYOND EDGE OF SIDEWALK STRUCTURE.
3. CONTROL JOINTS ARE TO BE SAW CUT.
4. SIDEWALKS ABUTTING COMMERCIAL AREAS ARE TO BE FULL WIDTH (3 m) AND 150 mm THICKNESS.
5. EXPANSION JOINT BARS ARE TO BE GREASED ON ONE SIDE OF THE JOINT.
6. DURING CONSECUTIVE POURS, THE END OF EACH POUR IS TO OCCUR AT AN EXPANSION JOINT. WHERE THIS IS NOT FEASIBLE, AN ADDITIONAL EXPANSION JOINT IS TO BE INSTALLED.
7. INSTALL A 9 m LONG CONCRETE LANDING PAD AT ALL BUS STOP LOCATIONS. INCREASE THIS TO 14.5 m FOR ARTICULATED BUS ROUTES.
8. WHEN BOULEVARD IS LESS THAN 1.5 m OR WHEN THE SIDEWALK ABUTS THE CURB & GUTTER, REFER TO HRM 133.
9. DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.



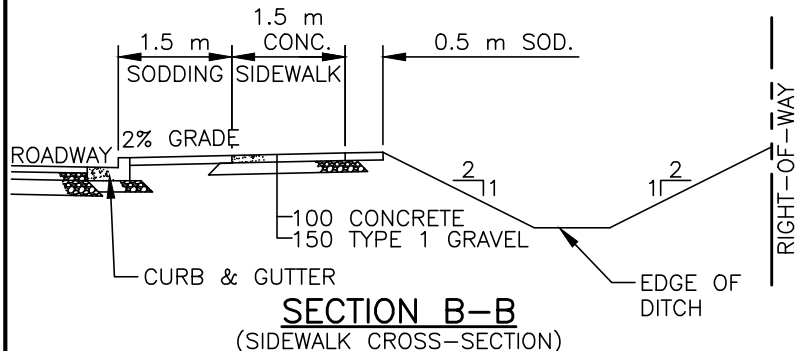
SECTION C-C
(EXPANSION JOINT)



SECTION D-D
(CONTROL JOINT)



SECTION A-A
(DRIVEWAY CROSS-SECTION)



SECTION B-B
(SIDEWALK CROSS-SECTION)

HALIFAX

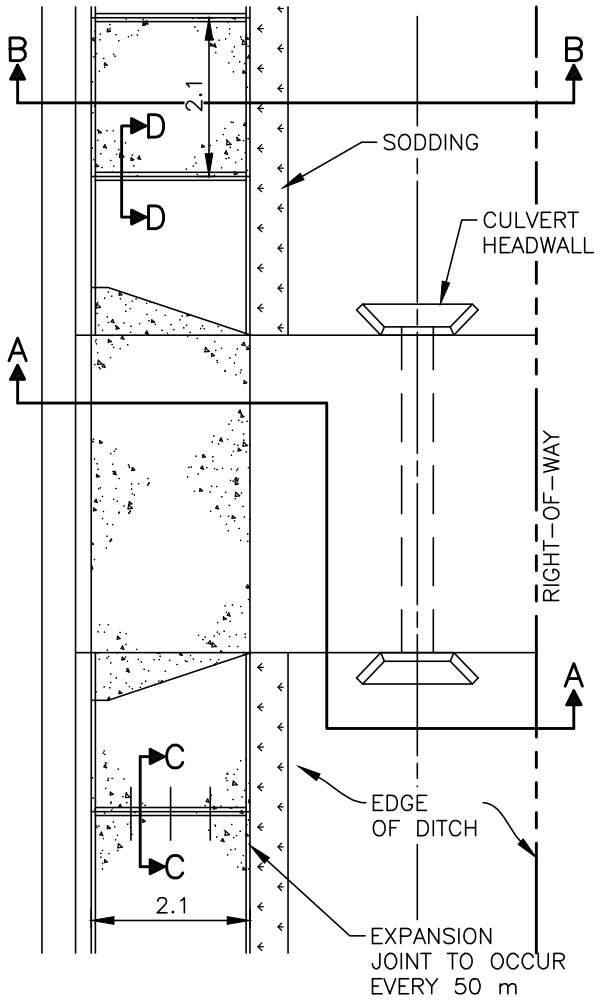
STANDARD DETAIL

RURAL TYPE I SIDEWALK

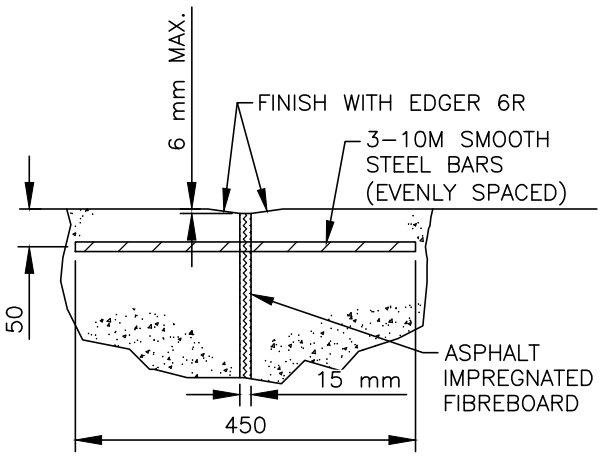
DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 45

NOTES:

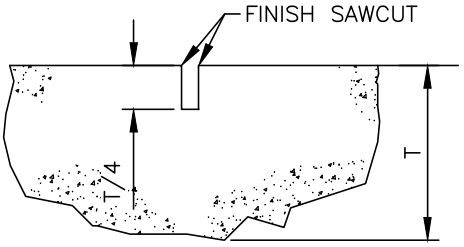
1. CONCRETE SIDEWALK AT COMMERCIAL DRIVEWAY TO BE 150 THICK WITH 150x150 WELDED WIRE MESH.
2. CRUSHED ROCK BASE TO EXTEND 150 BEYOND EDGE OF SIDEWALK STRUCTURE.
3. CONTROL JOINTS ARE TO BE SAW CUT.
4. SIDEWALKS ABUTTING COMMERCIAL AREAS ARE TO BE FULL WIDTH (3 m) AND 150 mm THICKNESS.
5. EXPANSION JOINT BARS ARE TO BE GREASED ON ONE SIDE OF THE JOINT.
6. DURING CONSECUTIVE POURS, THE END OF EACH POUR IS TO OCCUR AT AN EXPANSION JOINT. WHERE THIS IS NOT FEASIBLE, AN ADDITIONAL EXPANSION JOINT IS TO BE INSTALLED.
7. INSTALL A 9 m LONG CONCRETE LANDING PAD AT ALL BUS STOP LOCATIONS. INCREASE THIS TO 14.5 m FOR ARTICULATED BUS ROUTES.
8. WHEN BOULEVARD IS LESS THAN 1.5 m OR WHEN THE SIDEWALK ABUTS THE CURB & GUTTER, REFER TO HRM 133.



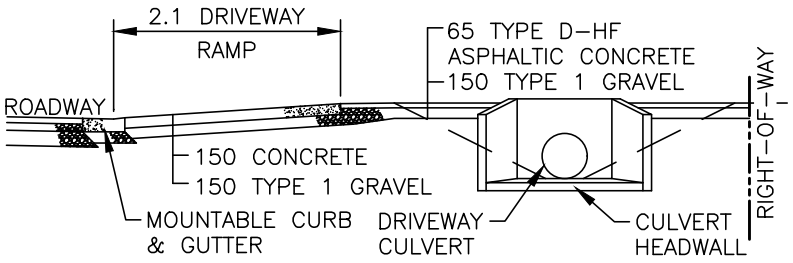
PLAN



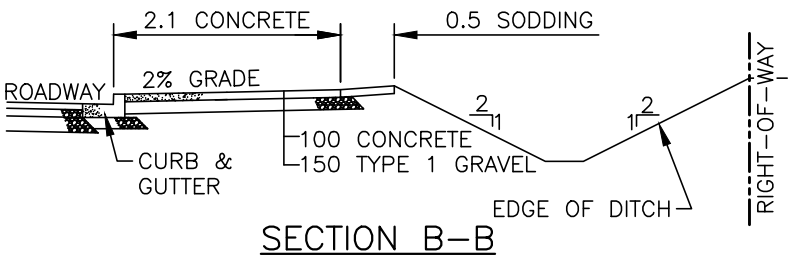
SECTION C-C
(EXPANSION JOINT)



SECTION D-D
(CONTROL JOINT)



SECTION A-A
(DRIVEWAY CROSS-SECTION)



SECTION B-B
(DRIVEWAY CROSS-SECTION)

HALIFAX

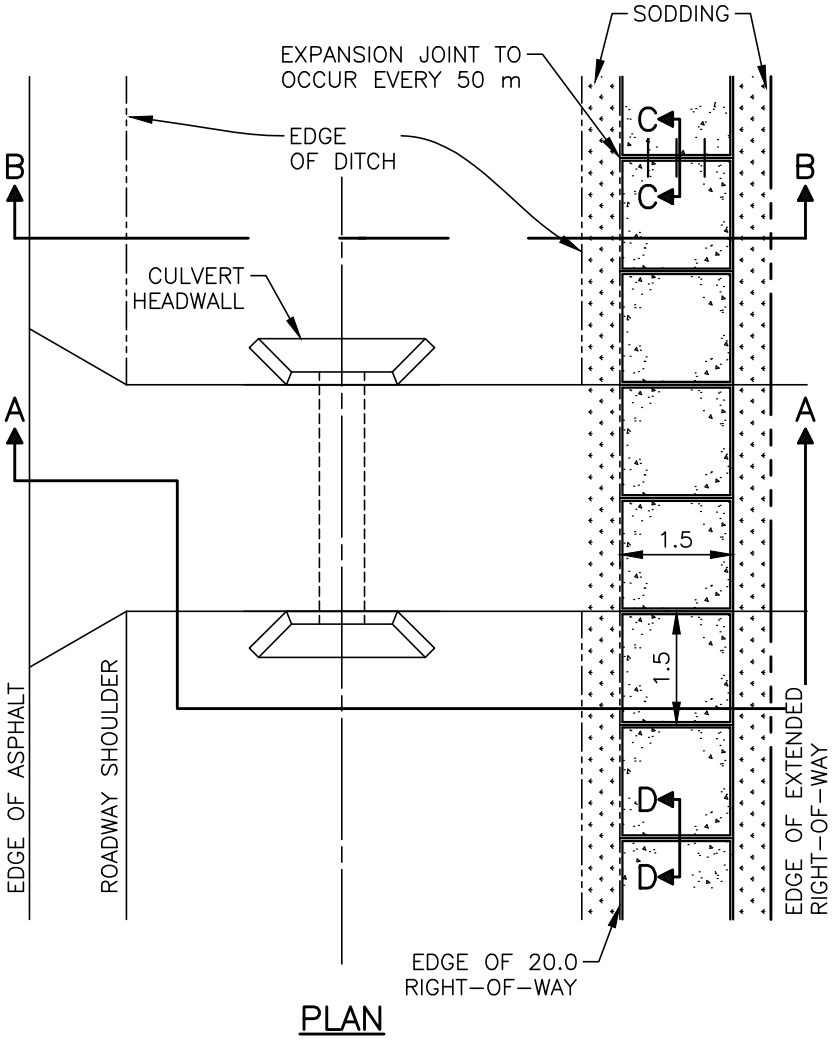
STANDARD DETAIL

RURAL TYPE II SIDEWALK

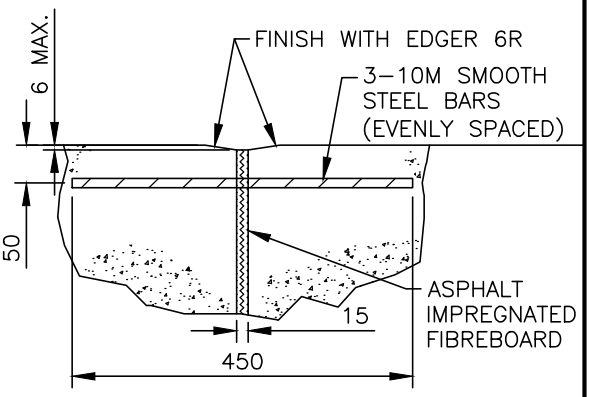
DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 46

NOTES:

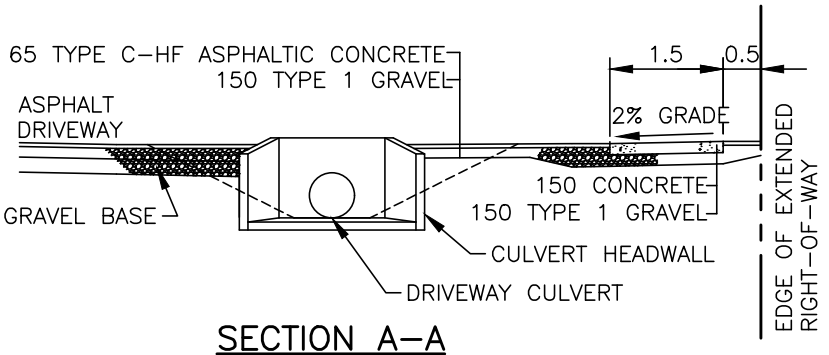
1. CONCRETE SIDEWALK AT COMMERCIAL DRIVEWAY TO BE 150 THICK WITH 150 x 150 WELDED WIRE MESH.
2. CRUSHED ROCK BASE TO EXTEND 150 BEYOND EDGE OF SIDEWALK STRUCTURE.
3. CONTROL JOINTS ARE TO BE SAW CUT.
4. SIDEWALKS ABUTTING COMMERCIAL AREAS ARE TO BE FULL WIDTH (3 m) AND 150 mm THICKNESS.
5. EXPANSION JOINT BARS ARE TO BE GREASED ON ONE SIDE OF THE JOINT.
6. DURING CONSECUTIVE POURS, THE END OF EACH POUR IS TO OCCUR AT AN EXPANSION JOINT. WHERE THIS IS NOT FEASIBLE, AND ADDITIONAL EXPANSION JOINT IS TO BE INSTALLED.
7. INSTALL A 9 m LONG CONCRETE LANDING PAD AT ALL BUS STOP LOCATIONS. INCREASE THIS TO 14.5 m FOR ARTICULATED BUS ROUTES.



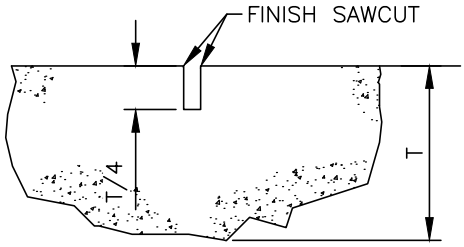
PLAN



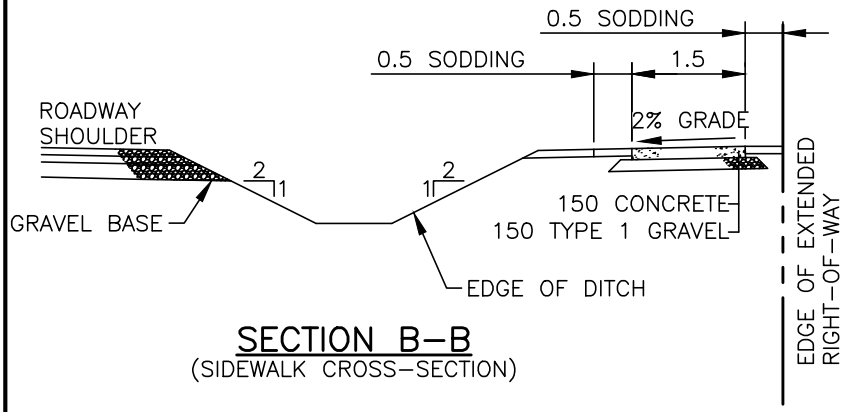
SECTION C-C
(EXPANSION JOINT)



SECTION A-A
(DRIVEWAY CROSS-SECTION)



SECTION D-D
(CONTROL JOINT)



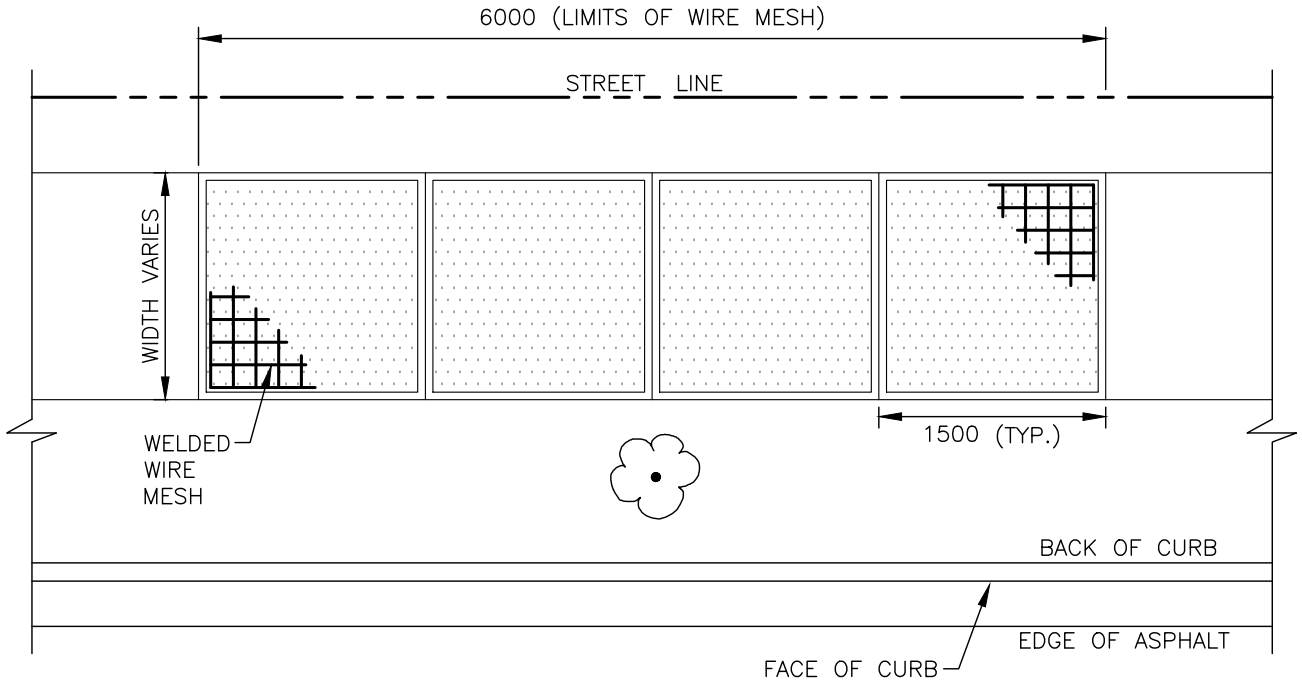
SECTION B-B
(SIDEWALK CROSS-SECTION)

HALIFAX

STANDARD DETAIL

RURAL TYPE III SIDEWALK

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 47



PLAN

NOTES:

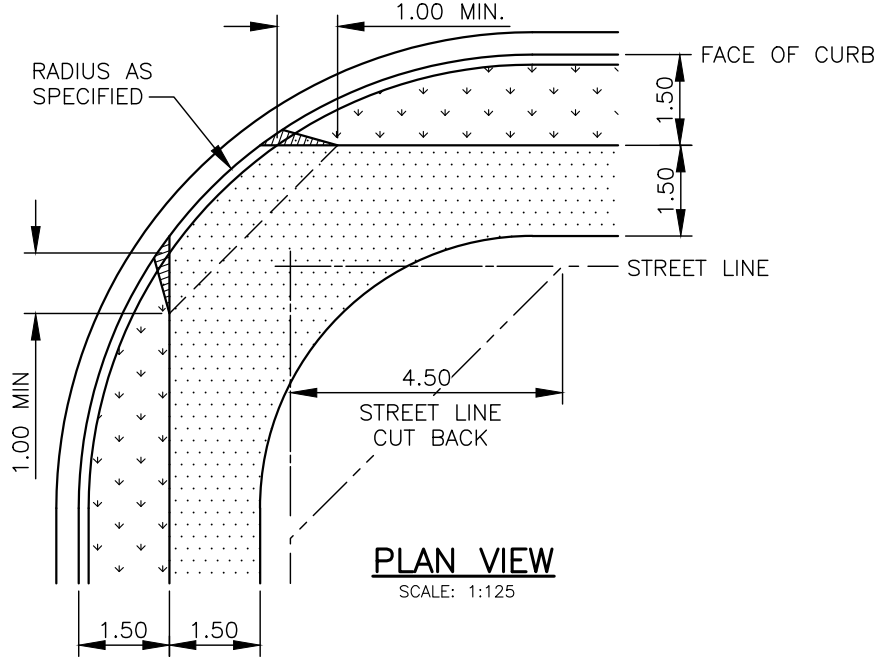
1. WELDED WIRE MESH TO BE 150 X 150 – M.W. 18.7 X M.W. 18.7 (WELDED WIRE FABRIC 4.88 MM DIA.)
2. PLACED 3000 EACH SIDE FROM CENTRE OF TREE AT 1/2 THE SLAB DEPTH, FULL SIDEWALK WIDTH, CHAIRS REQUIRED TO ACHIEVE 1/2 DEPTH PLACEMENT OF WWF.
3. NO TREE ROOTS TO BE REMOVED WITHOUT HRM APPROVAL.
4. ALL DIMENSIONS IN MILLIMETRES.

HALIFAX

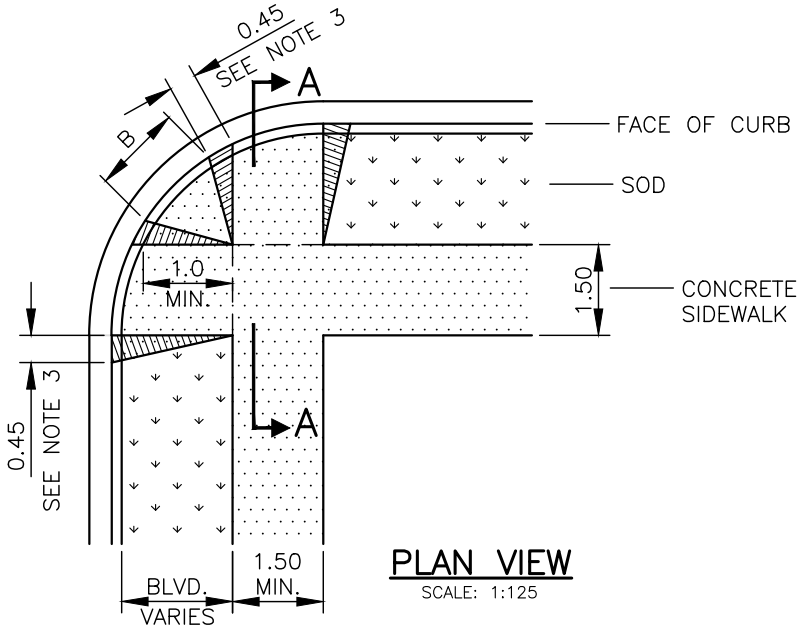
STANDARD DETAIL

CONCRETE SIDEWALK REINFORCING

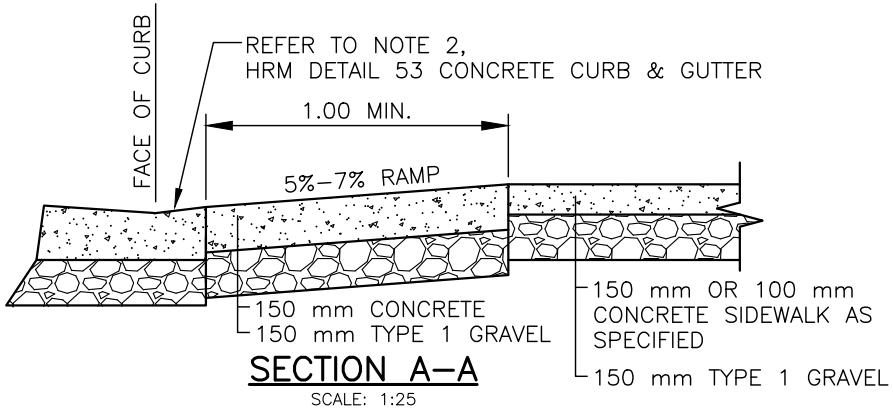
DATE: 2023	REFERENCE	APPROVED
SCALE: 1:50		FIG No.: HRM 48



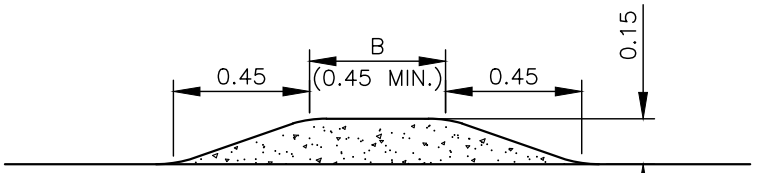
PLAN VIEW
SCALE: 1:125



PLAN VIEW
SCALE: 1:125



SECTION A–A
SCALE: 1:25



PEDESTRIAN RAMP DIVIDER VIEW
SCALE: 1:25

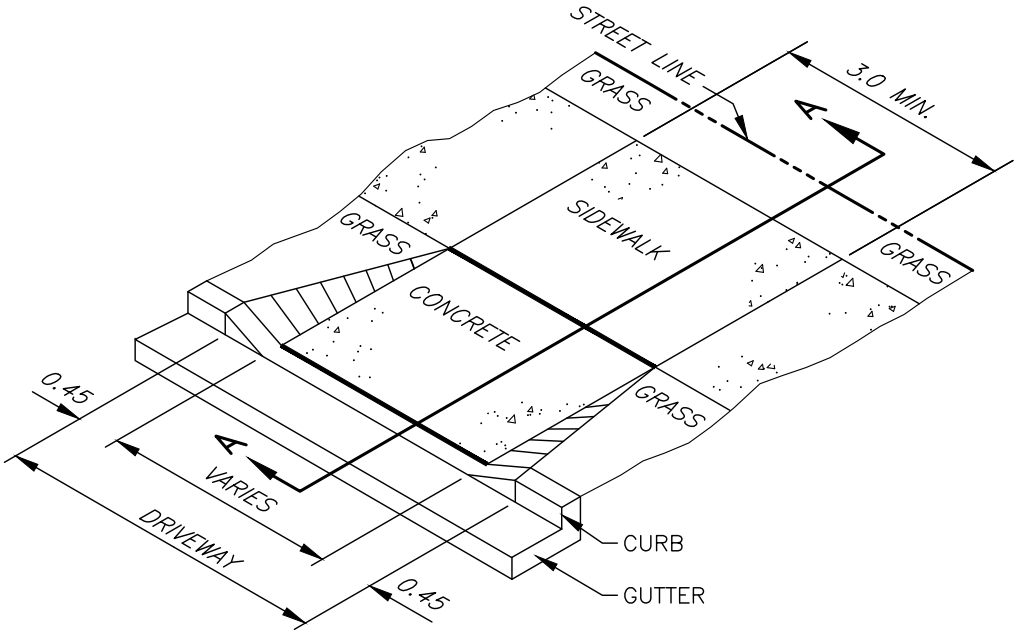
NOTES:
1. PEDESTRIAN RAMPS SHALL BE ALIGNED WITH THE SIDEWALK INSIDE EDGE.
2. INSTALL RAMP DIVIDER ONLY WHEN (B) WILL BE GREATER THAN 0.45 m.
3. WHERE THE BOULEVARD IS LESS THAN 1.5 m, A 1.3 m CURB TRANSITION TAPER IS REQUIRED.
4. IF THE DISTANCE FROM BACK OF CURB TO BACK OF SIDEWALK IS LESS THAN 2 m, SLOPE AT 5% FROM BACK OF CURB TO BACK OF SIDEWALK.
5. TACTILE WALKING SURFACE INDICATOR PLATES REQUIRED AT ALL NEW RAMPS AS PER HRM DETAIL 131.
6. FOR STREETS OF LESS THAN 8%, TRANSITION CURB AND SIDEWALK TO MAXIMUM GRADE OF 8%, OR TIE IN AT 3 m. FOR SIDEWALK, 1.3 m FOR CURB.
7. PEDESTRIAN RAMP OPENING TO BE 1.7 m MINIMUM, MEASURED FROM 0.1 m BEYOND THE EXTENSION OF THE SIDEWALK TO THE CURB.
8. DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.

HALIFAX

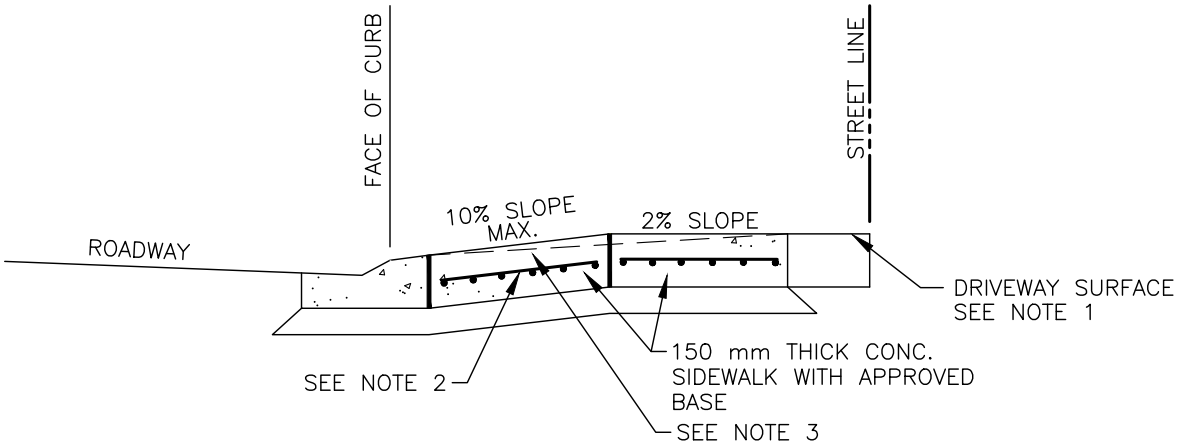
STANDARD DETAIL

PEDESTRIAN RAMP ALIGNMENT

DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 49



VIEW PLAN



SECTION A–A

NOTES:

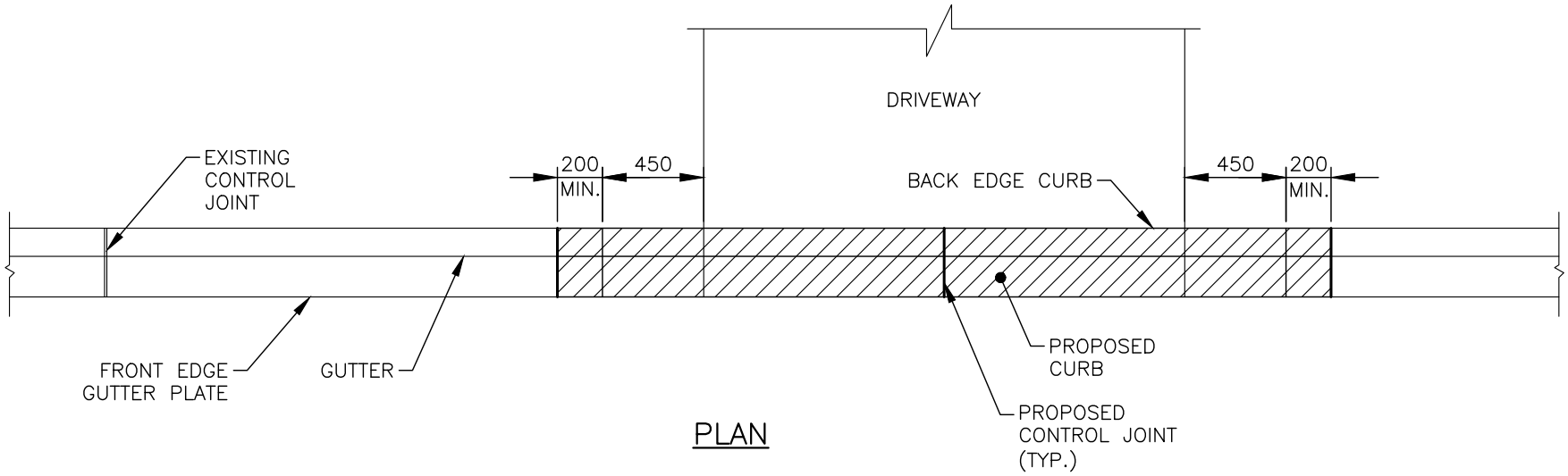
1. GRAVEL DRIVEWAYS ARE TO BE PAVED 1 m BEHIND THE SIDEWALK OR TO THE STREETLINE WHICHEVER IS LESS. IF NO SIDEWALK EXISTS, 1 m ASPHALT PAVING IS REQUIRED.
2. FOR COMMERCIAL AND INDUSTRIAL DRIVEWAYS PLACE 150 x 150 – M.W. 18.7 x M.W. 18.7 PLACED 50 mm FROM BOTTOM OF CONCRETE RAMP AND SIDEWALK.
3. WHEN BOULEVARD IS LESS THAN 1.5 m OR WHEN THE SIDEWALK ABUTS THE CURB & GUTTER, REFER TO HRM 133.
4. MINIMUM DISTANCE BETWEEN CONTROL JOINTS IS 1.2. PROVIDE CONTROL JOINTS WITHIN 150 mm OF CHANGE IN CROSS SECTION OF CURB.
5. DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.

HALIFAX

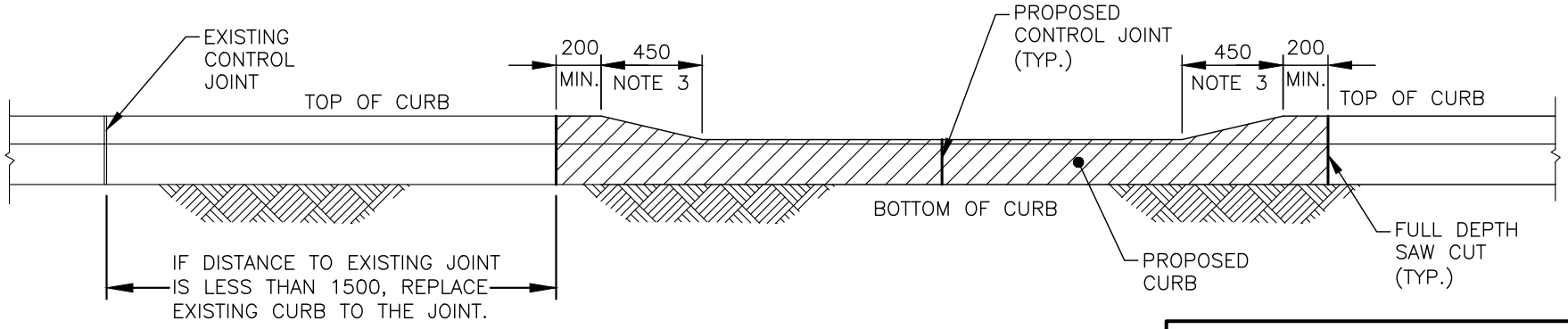
STANDARD DETAIL

DRIVEWAY RAMP

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 50



PLAN



ELEVATION

NOTES:

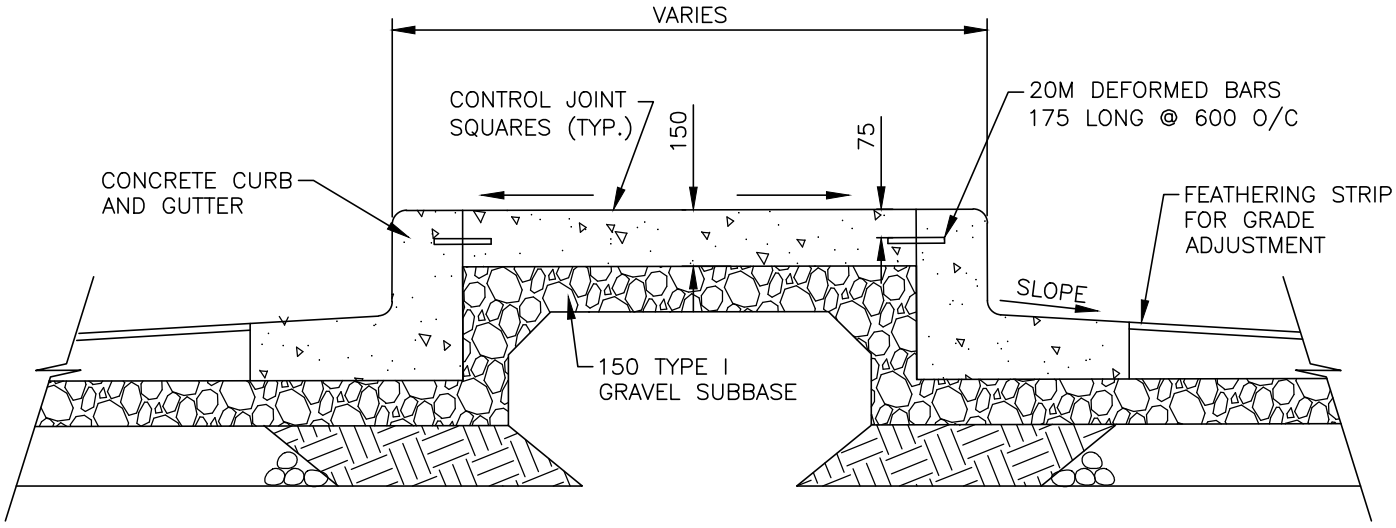
1. MINIMUM DISTANCE BETWEEN CONTROL JOINTS IS 1200 mm.
2. PROVIDE CONTROL JOINTS WITHIN 150 mm OF CHANGE IN CROSS SECTION OF CURB.
3. IF SIDEWALK ABUTS THE CURB, THE TAPER SHALL BE 1300 mm.
4. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

DRIVEWAY ACCESS IN EXISTING FULL-DEPTH CURB

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:30		FIG No.: HRM 51



TYPICAL CONCRETE ISLAND CROSS SECTION

NOTES:

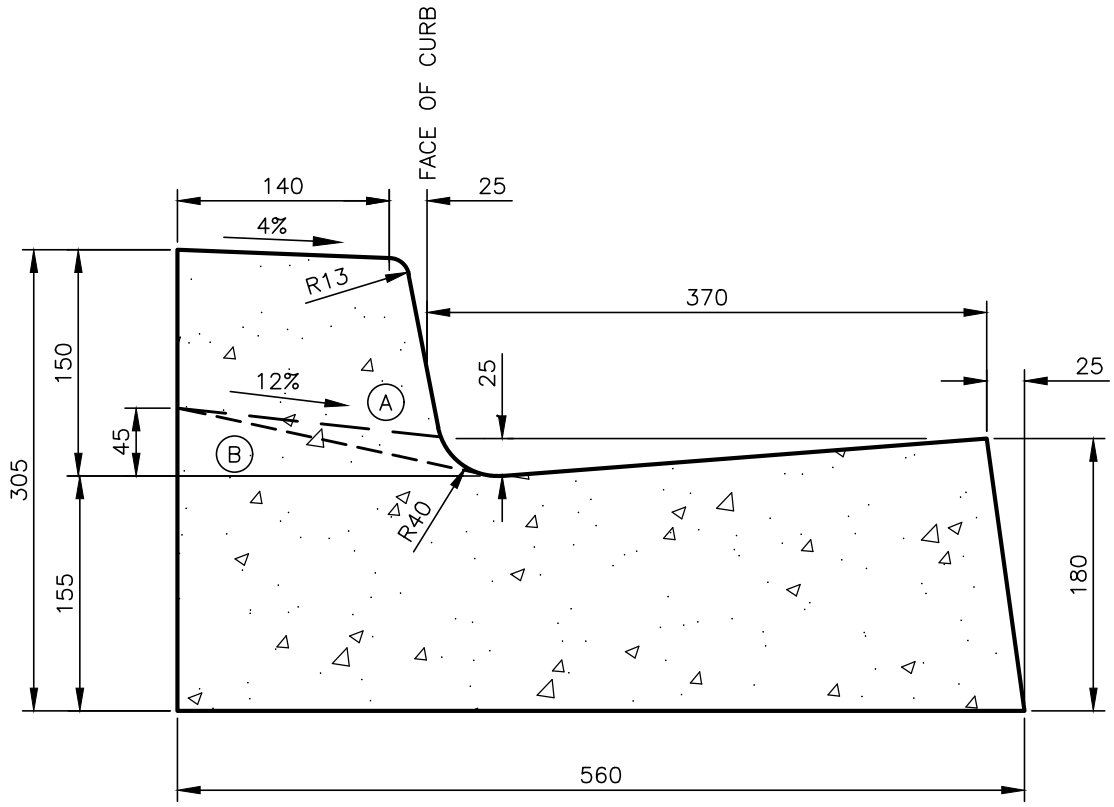
1. MAXIMUM SPACING FOR CONTROL JOINTS IS TO BE 2.5 m.
2. SLOPE SLAB TO FACILITATE DRAINAGE.
3. SLOPE GUTTER TO MATCH STREET CROSS SECTION.
4. ENDS AND CORNERS OF TRAFFIC ISLANDS TO HAVE HIGH BACK CONCRETE CURB AND GUTTER.
5. GEOMETRIC DESIGN OF CONCRETE ISLANDS TO BE AS PER PART A OF THE MUNICIPAL DESIGN GUIDELINES AND/OR THE TAC GEOMETRIC DESIGN GUIDE.
6. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

CONCRETE TRAFFIC ISLAND

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:20		FIG No.: HRM 52



CURB & GUTTER SECTION

NOTES:

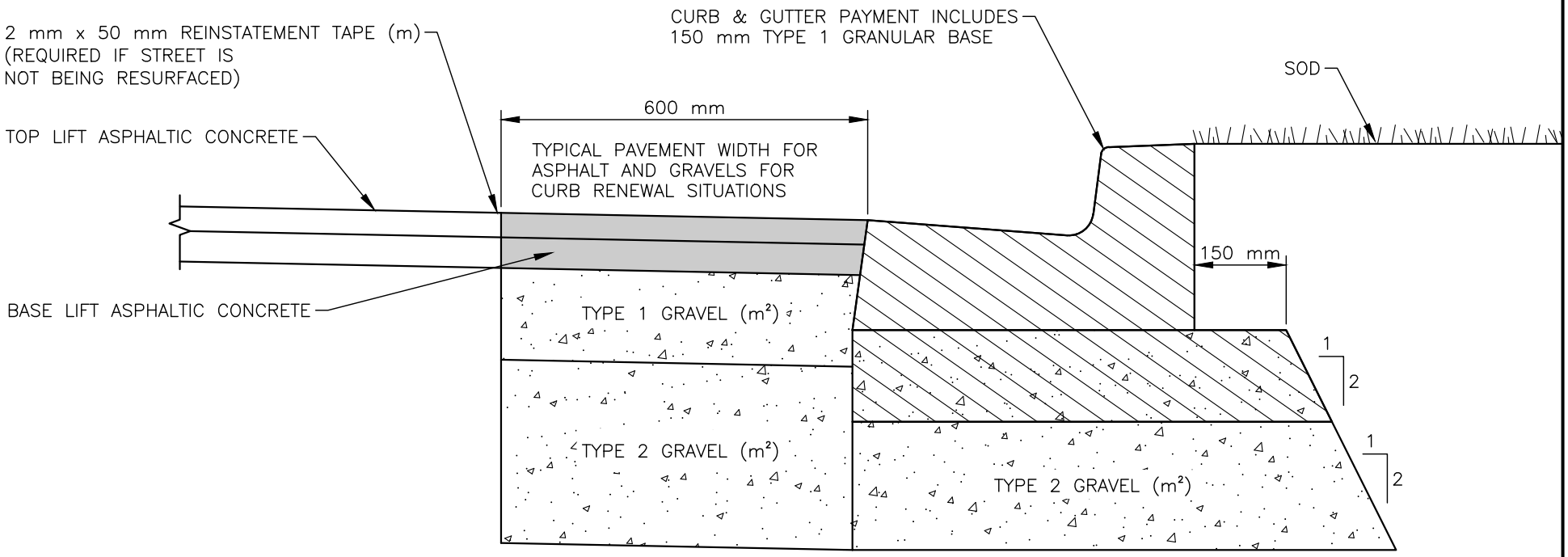
1. DASHED LINE "A" INDICATES CURB AT DRIVEWAYS.
2. DASHED LINE "B" INDICATES CURB AT PEDESTRIAN RAMPS.
3. TRANSITION TAPERS SHALL BE PROVIDED AT DRIVEWAYS AND PEDESTRIAN RAMPS AS PER THE "PEDESTRIAN RAMP ALIGNMENT" DETAIL AND "DRIVEWAY RAMP" DETAIL.
4. DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

HALIFAX

STANDARD DETAIL

CONCRETE CURB & GUTTER

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:5		FIG No.: HRM 53



NOTES:

1. CURB AND GUTTER PAYMENT INCLUDES A GRANULAR BASE OF 150 mm OF TYPE 1 GRAVEL, OR AS INDICATED ON DRAWINGS.

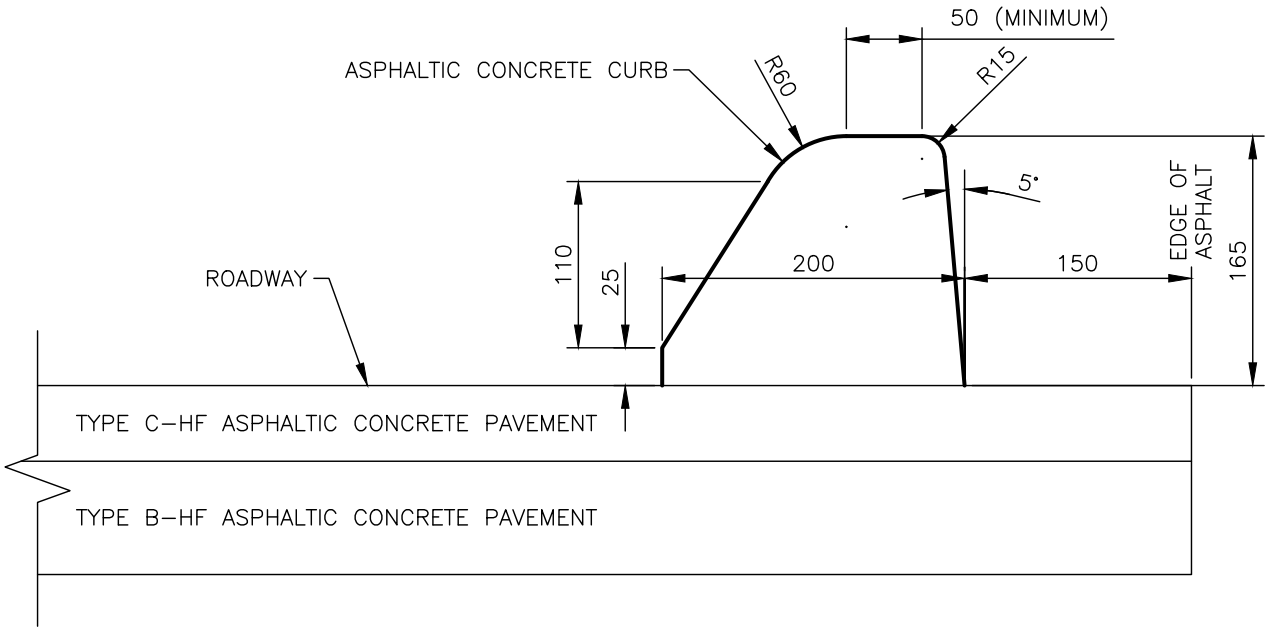
2. PAVEMENT STRUCTURE THICKNESS AS INDICATED ON DRAWINGS.

HALIFAX

STANDARD DETAIL

CURB RENEWAL/PAYMENT

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:10		FIG No.: HRM 54

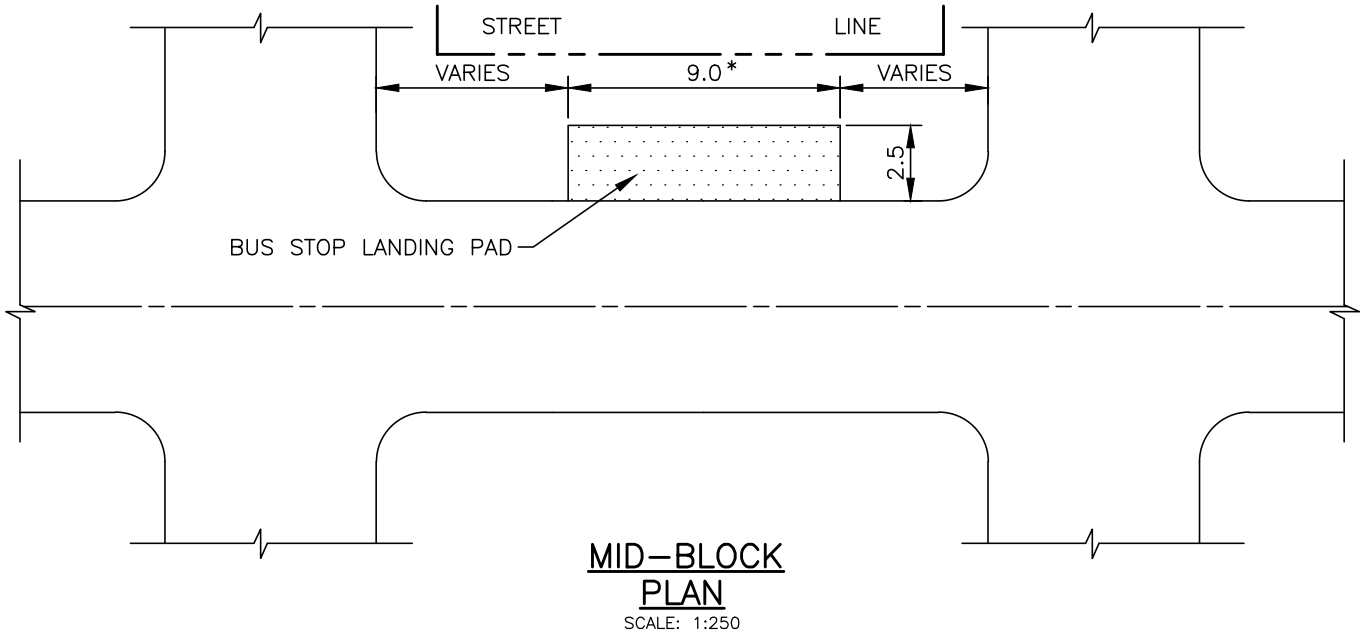


HALIFAX

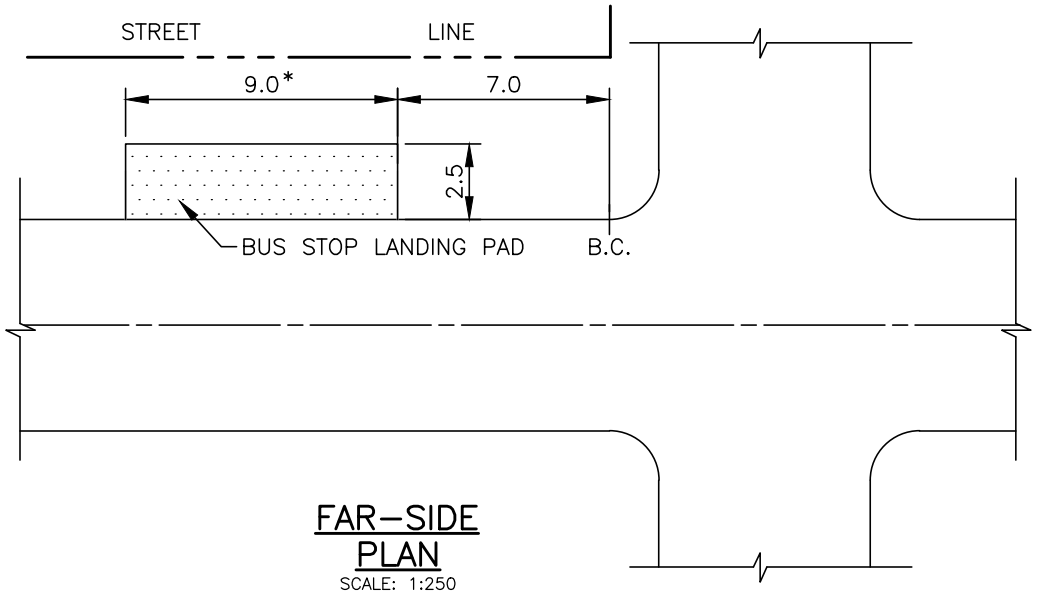
STANDARD DETAIL

ASPHALT CURB

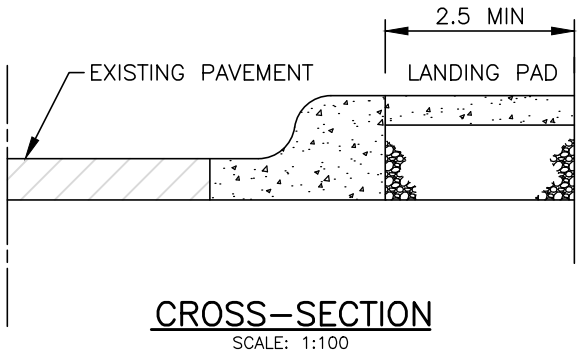
DATE: 2021	REFERENCE	APPROVED
SCALE: 1:5		FIG No.: HRM 55



MID–BLOCK
PLAN
SCALE: 1:250



FAR–SIDE
PLAN
SCALE: 1:250



CROSS–SECTION
SCALE: 1:100

NOTES:

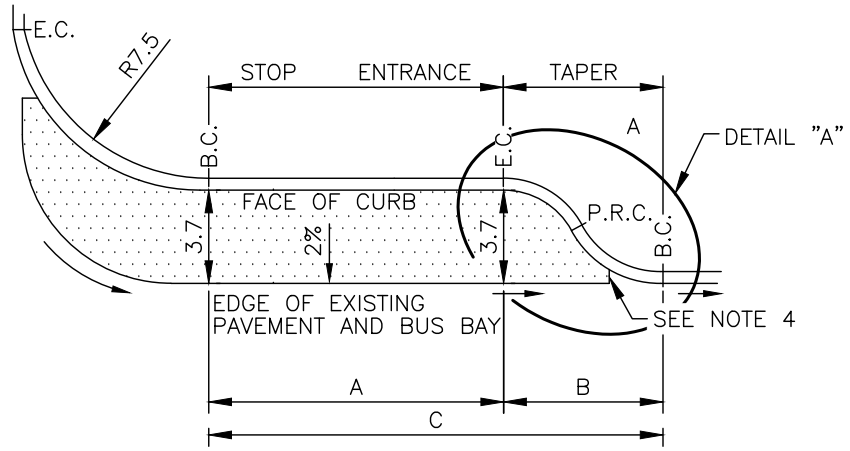
1. * FOR ARTICULATED BUS ROUTES INCREASE TO 14.5 m.
2. THE 2.5 m LANDING PAD MAY INCLUDE PORTION OF SIDEWALK.

HALIFAX

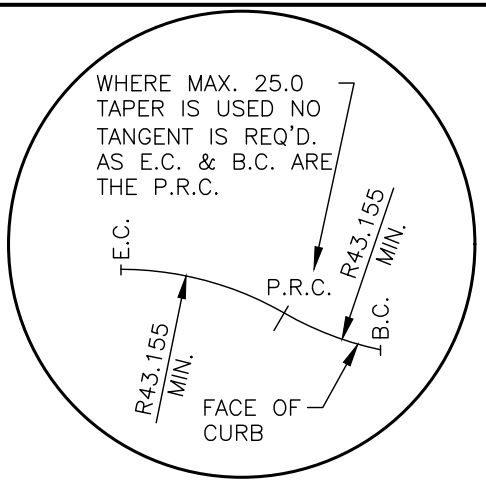
STANDARD DETAIL

CONCRETE BUS STOP LANDING PAD

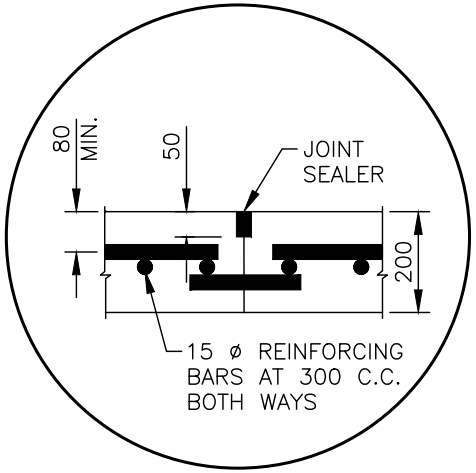
DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 56



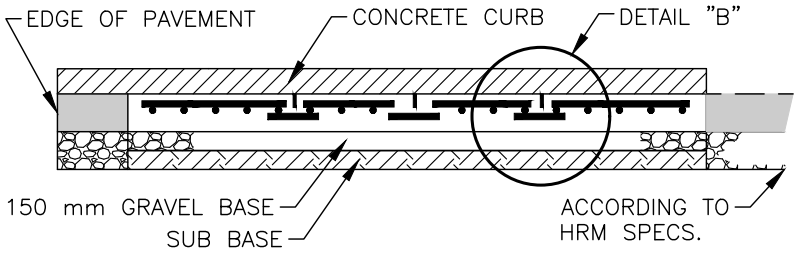
PLAN



DETAIL "A"

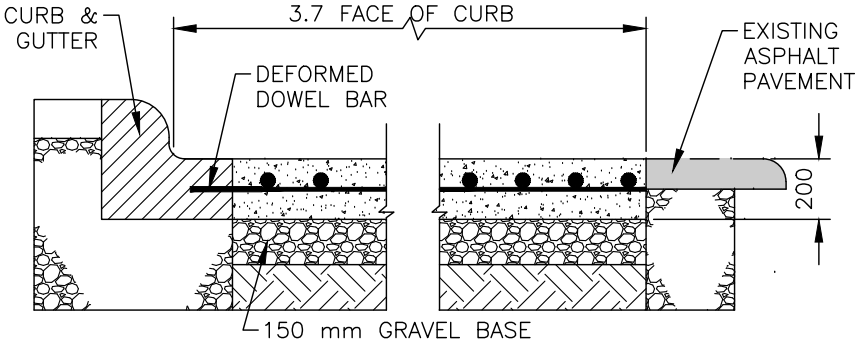


DETAIL "B"
(CONTRACTION JOINT)



LONGITUDINAL SECTION

	SINGLE BUS BAY (MINIMUM DIMENSION)	DOUBLE BUS BAY (MINIMUM DIMENSION)
A	16	34
B	25	25
C	41	59



TRANSVERSE SECTION

NOTES:

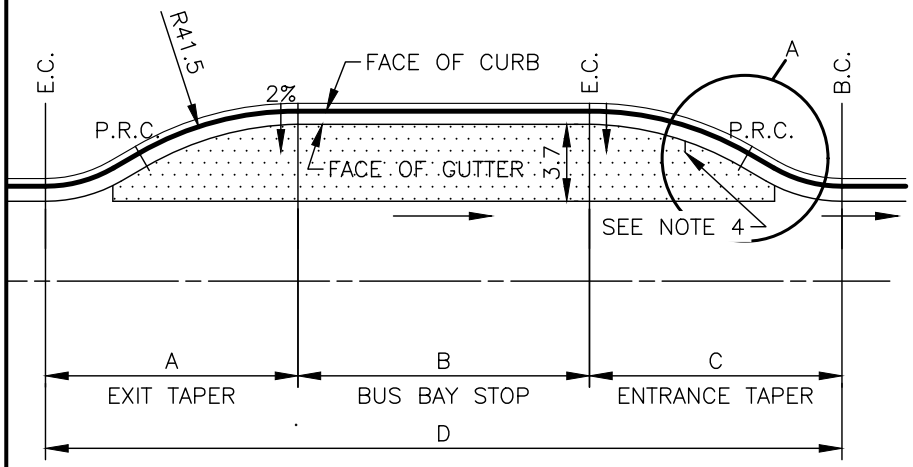
1. 15M BARS AT 300 mm C.C. BOTH WAYS.
2. CONTROL JOINTS TO BE AT A DEPTH OF 1/4 OF PAD THICKNESS & SEALED ACCORDING TO HRM SPECS.
3. CONTROL JOINT EVERY 4.0 m MAXIMUM.
4. MINIMUM WIDTH OF CONCRETE BASE IS 0.6 m.

HALIFAX

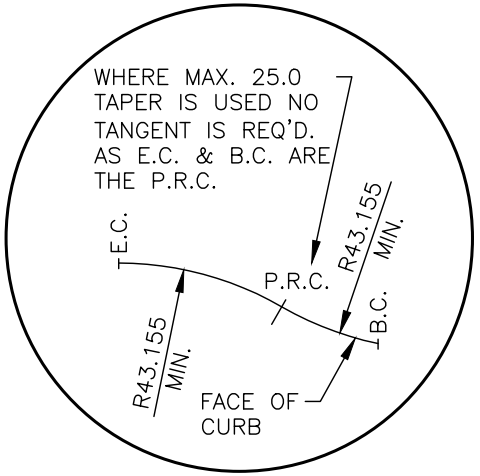
STANDARD DETAIL

CONCRETE BUS BAY PAD – END BLOCK

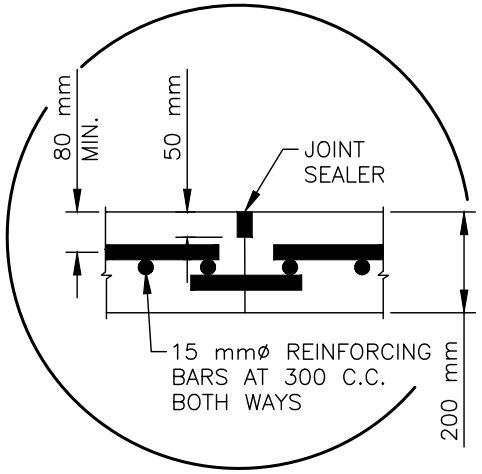
DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 57



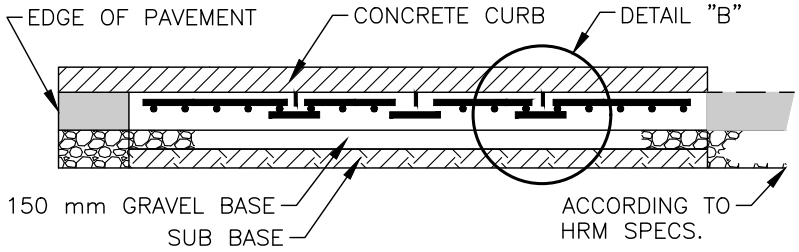
PLAN



DETAIL "A"

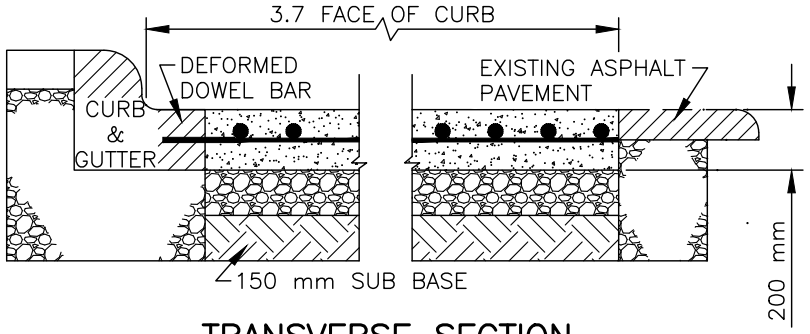


DETAIL "B"
(CONTRACTION JOINT)



LONGITUDINAL SECTION

	SINGLE BUS BAY MINIMUM DIMENSION	DOUBLE BUS BAY MINIMUM DIMENSION
A	25	25
B	16	32
C	25	25
D	66	82



TRANSVERSE SECTION

NOTES:

1. 15M BARS AT 300 mm C.C. BOTH WAYS.
2. CONTROL JOINTS TO BE AT A DEPTH OF 1/4 OF PAD THICKNESS & SEALED ACCORDING TO HRM SPECS.
3. CONTROL JOINT EVERY 4.0 m MAXIMUM.
4. MINIMUM WIDTH OF CONCRETE BASE IS 0.6 m.
5. DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.

HALIFAX

STANDARD DETAIL

CONCRETE BUS BAY PAD – MID BLOCK

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 58

TRENCH BACKFILL AND REINSTATEMENT – TESTING REQUIREMENTS

TEST REQUIRED	COMPACTION REQUIRED	MINIMUM TEST FREQUENCY	
		TRENCH LESS THAN 1.5m WIDE	TRENCH GREATER THAN 1.5m WIDE
COMPACTION OF BEDDING, HAUNCH AND COVER MATERIALS (ASTM D698) *SEE NOTE 3	95% MINIMUM AT 3% ± OF OPTIMUM MOISTURE. (SEE NOTES)	1 PER 25 m AT THE CENTRELINE OF THE TRENCH (AND EACH BENCH OR SECTION OF TRENCH LESS THAN 25 m IN LENGTH) FOR EACH 600 VERTICAL DEPTH OF BACKFILL MATERIAL A MINIMUM OF 3 TESTS PER TRENCH SHALL BE PERFORMED.	3 PER 25 m (AND EACH BENCH OR SECTION OF TRENCH LESS THAN 25 m IN LENGTH) FOR EACH 600 VERTICAL DEPTH OF BACKFILL MATERIAL 1 TEST SHALL BE TAKEN AT THE CENTRELINE OF THE TRENCH (SET BACK AT LEAST 300 mm FROM THE EDGE OF THE TRENCH). A MINIMUM OF 3 TESTS PER TRENCH SHALL BE PERFORMED.
COMPACTION OF STRUCTURAL FILL TO SUBGRADE ELEVATION (ASTM D698) *SEE NOTE 3	TOP 300 98% COMPACTION MINIMUM AT 3% ± OF OPTIMUM MOISTURE. (SEE NOTES)		
	BELOW 300 95% COMPACTION MINIMUM AT 3% ± OF OPTIMUM MOISTURE. (SEE NOTES)		
COMPACTION OF TYPE 1 & TYPE 2 BASE & SUB–BASE MATERIALS (ASTM D698)	100% COMPACTION MINIMUM AT 3% ± OF OPTIMUM MOISTURE (SEE NOTES)	FOR EACH MATERIAL, 1 PER 25 m AT THE CENTRELINE OF THE TRENCH (AND EACH BRANCH OR SECTION OF THE TRENCH LESS THAN 25 m IN LENGTH) FOR EACH 300 VERTICAL DEPTH OF BACKFILL MATERIAL. A MINIMUM OF 3 TESTS PER TRENCH SHALL BE PERFORMED.	FOR EACH MATERIAL, 3 PER 25 m (AND EACH BRANCH OR SECTION OF TRENCH LESS THAN 25 m IN LENGTH) FOR EACH 300 VERTICAL IN DEPTH OF BACKFILL MATERIAL. 1 TESTS SHALL BE TAKEN AT THE CENTRELINE OF THE TRENCH AND 1 AT EACH EDGE OF THE TRENCH (SET BACK AT LEAST 300 mm FROM THE EDGE OF THE TRENCH). A MINIMUM OF 3 TESTS PER TRENCH SHALL BE PERFORMED.
COMPACTION OF HOT MIX ASPHALT PAVEMENT (ASTM D3549 & 2726)	95% OF MAXIMUM THEORETICAL DENSITY OF COMPARATIVE MARSHALL LABORATORY SAMPLE.	ONE TEST FOR EACH 75 m^2 OF PAVEMENT SURFACE. A MINIMUM OF 1 TEST PER TRENCH.	ONE TEST FOR EACH 75 m^2 OF PAVEMENT SURFACE. A MINIMUM OF 1 TEST PER TRENCH.

NOTES:

1. THE TRENCH WIDTH FOR DETERMINATION OF THE TEST SHALL BE THE WIDTH OF THE TRENCH AT THE LEVEL OF THE TEST BEING PERFORMED.
2. IF MINIMUM MOISTURE DENSITY REQUIREMENTS ARE NOT MET BY THESE TESTS, THE CONTRACTOR SHALL RECOMPACT THE TRENCH AS NEEDED TO ACHIEVE THE SPECIFIED COMPACTION. SUCH RECOMPACTION SHALL EXTEND ON BOTH SIDES OF THE FAILED TEST SECTION A DISTANCE EQUAL TO 1/2 THE DISTANCE FROM WHERE THE LAST TEST WAS TAKEN OR 50 m, WHICHEVER IS LEAST. AN ALTERNATIVE PROCEDURE WOULD BE TO MORE CLEARLY DEFINE THE LIMITS OF THE FAILED AREA TO ADDITIONAL TESTS.
3. TESTING FOR BEDDING, HAUNCH AND STRUCTURAL FILL ARE NOT ONLY REQUIRED WHEN THE TOTAL LENGTH OF TRENCH EXCEEDS 100 m, OR WHEN REQUESTED BY THE HRM INSPECTOR.

HALIFAX

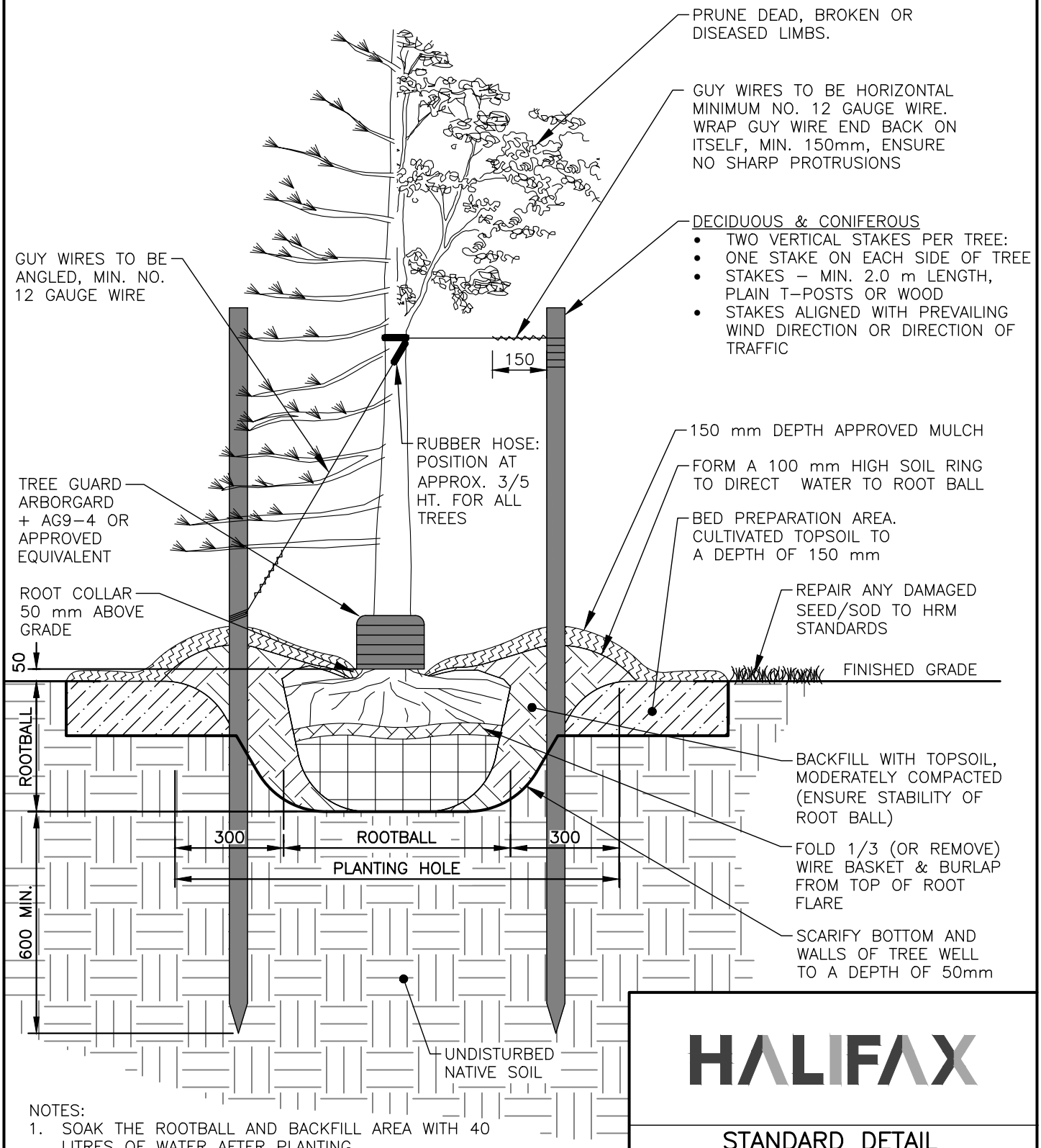
STANDARD DETAIL

TRENCH BACKFILL & REINSTATEMENT–TESTING

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 61

CONIFEROUS
1.8–2 m HEIGHT

DECIDUOUS
60 mm CALIPER



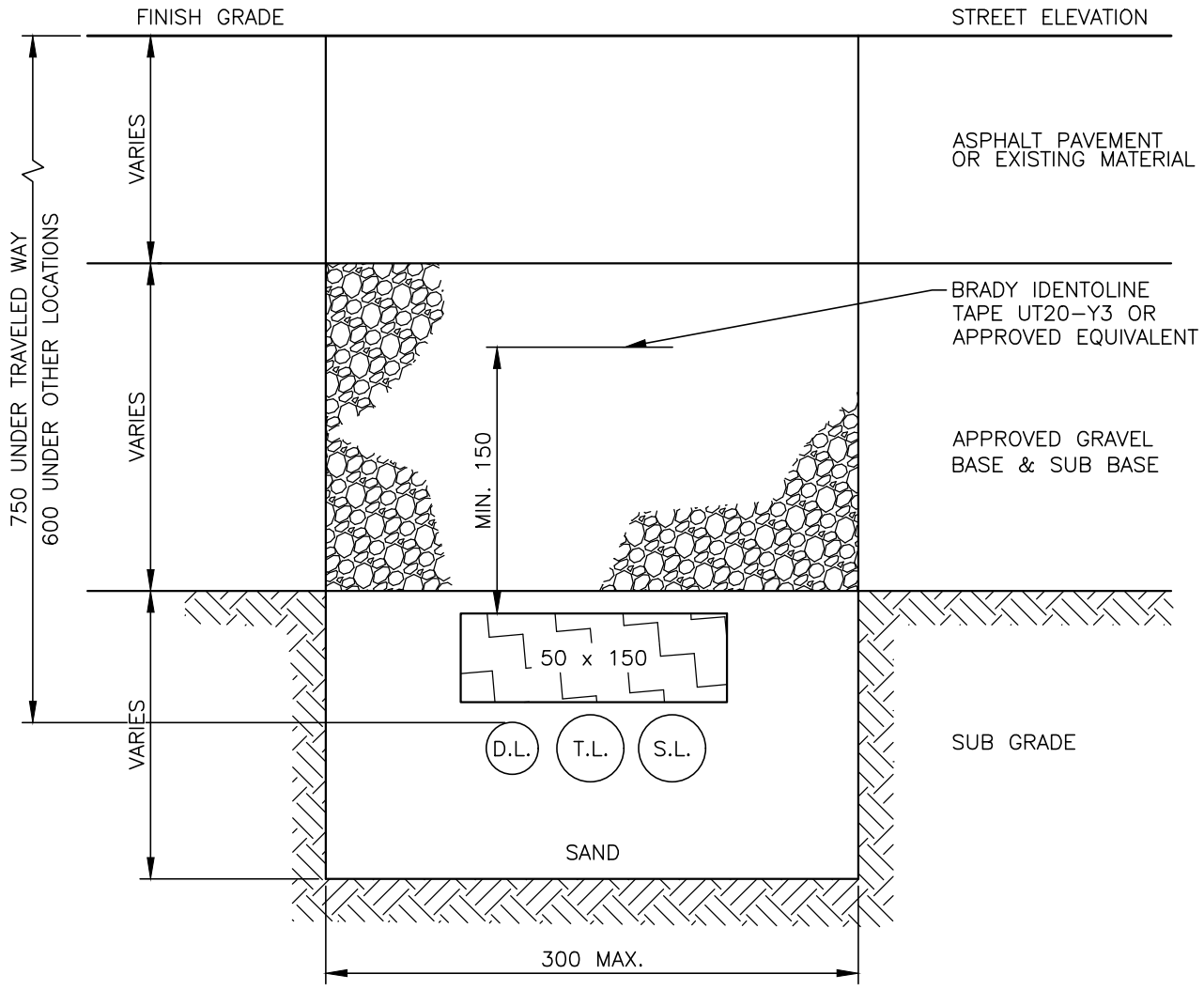
NOTES:
1. SOAK THE ROOTBALL AND BACKFILL AREA WITH 40 LITRES OF WATER AFTER PLANTING
2. CUT AND REMOVE ALL WIRE, ROPE, BURLAP AND TWINE FROM THE TOP 1/3 OF THE ROOTBALL
3. PRUNE AT PLANTING TO CAREFULLY REMOVE DEAD, BROKEN AND DAMAGED BRANCHES
4. ROOT BALL MIN. SIZE AS PER CNLA STANDARDS FOR NURSERY STOCK.
5. DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

HALIFAX

STANDARD DETAIL

TREE PLANTING IN PARKS/OPEN SPACE

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:15		FIG No.: HRM 66



SIZE AND CONFIGURATION OF PVC CONDUIT INDICATED ON DRAWINGS

NOTES:

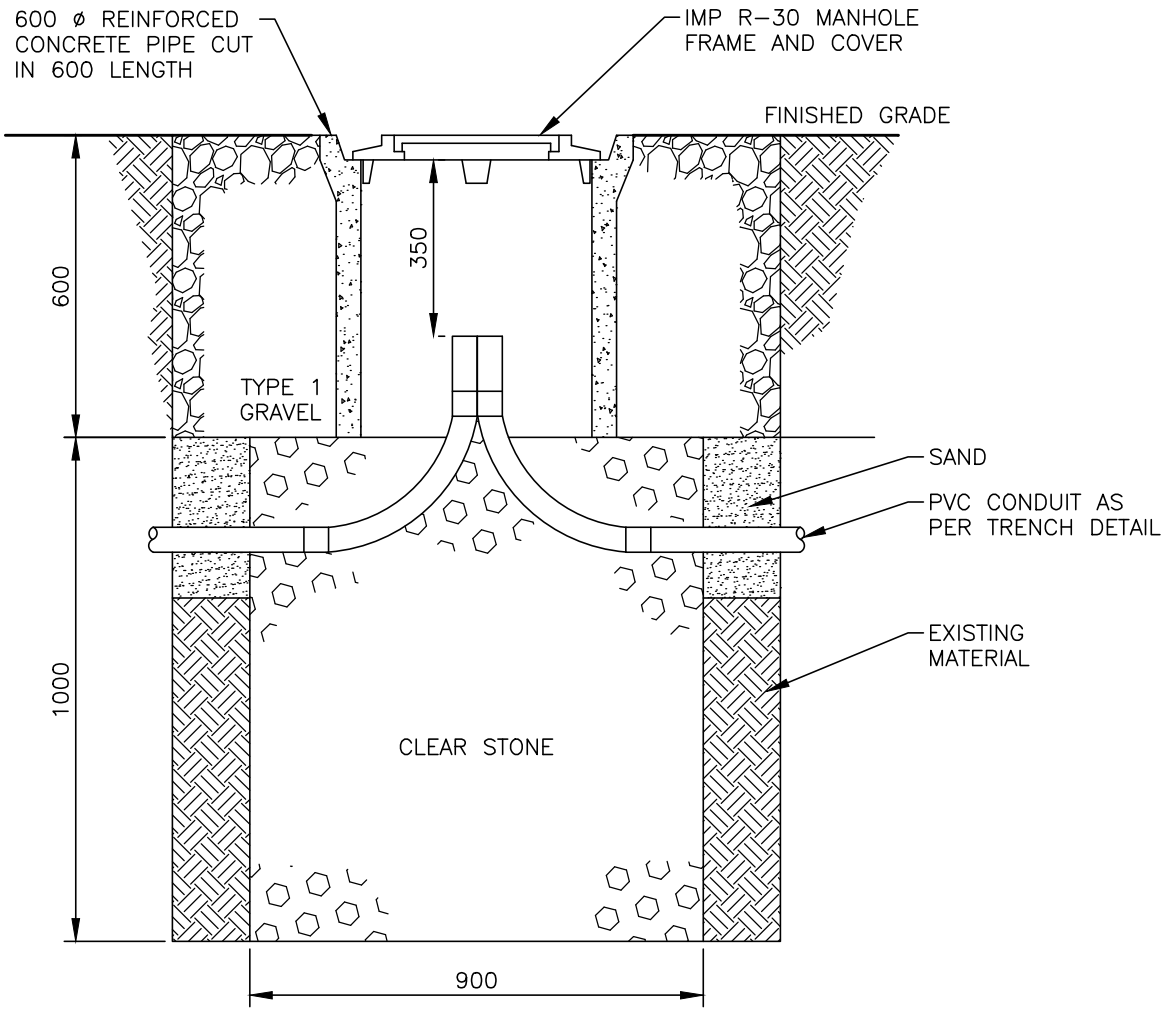
1. 50 mm x 150 mm WOOD PLANK TO BE PRESSURE TREATED WOOD.
2. "CAUTION BURIED ELECTRICAL LINE" TAPE TO BE PLACED OVER CONDUIT 150 mm TO 250 mm BELOW FINISHED GRADE.
3. SURROUND SAND WITH GEOTEXTILE SEPARATOR IN AREAS OF HIGH GROUNDWATER MOVEMENT (PERVIOUS SUB GRADE).

HALIFAX

STANDARD DETAIL

UNDERGROUND CONDUIT

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 78

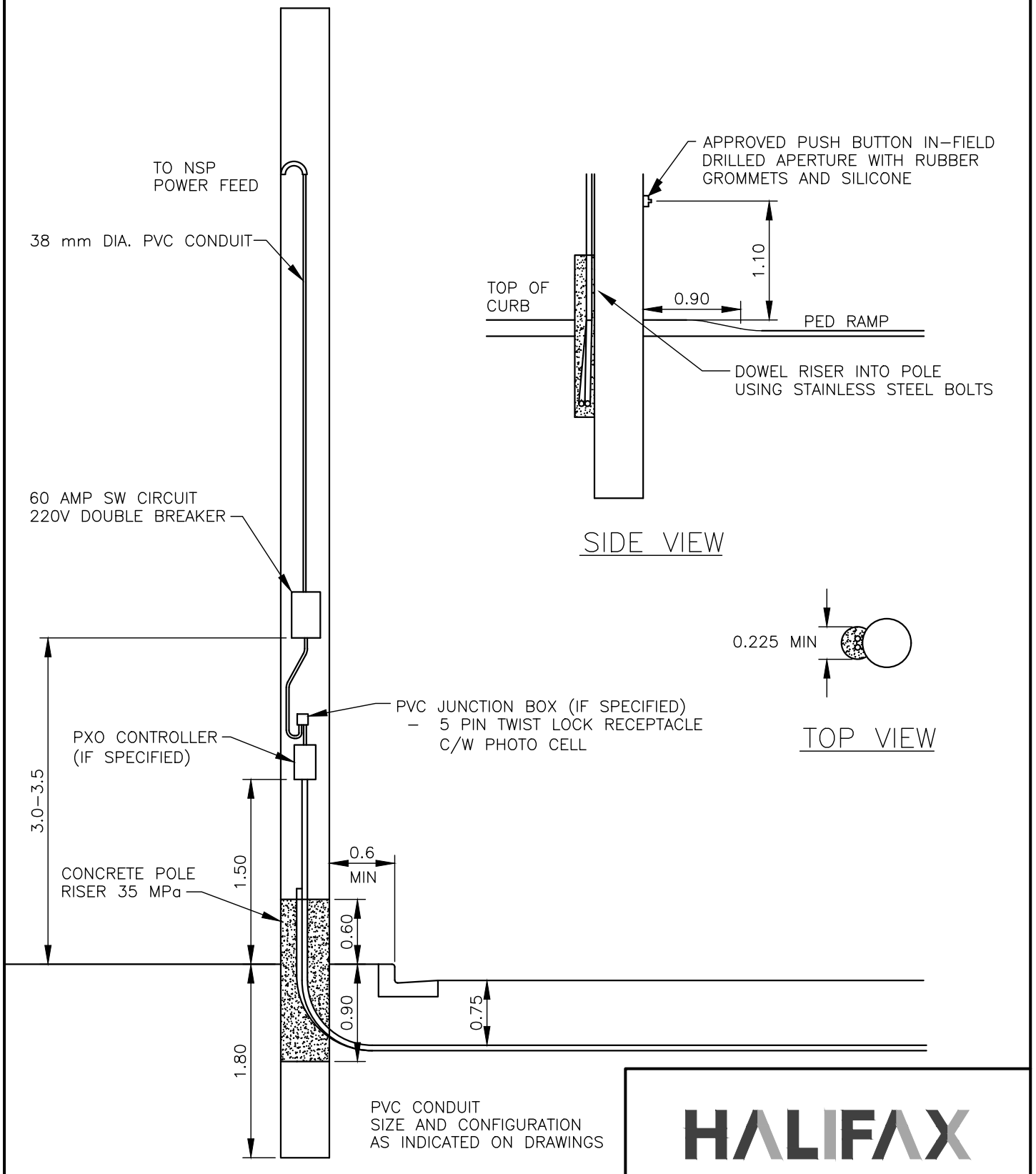


HALIFAX

STANDARD DETAIL

PULL PIT

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:15		FIG No.: HRM 79



NOTE:

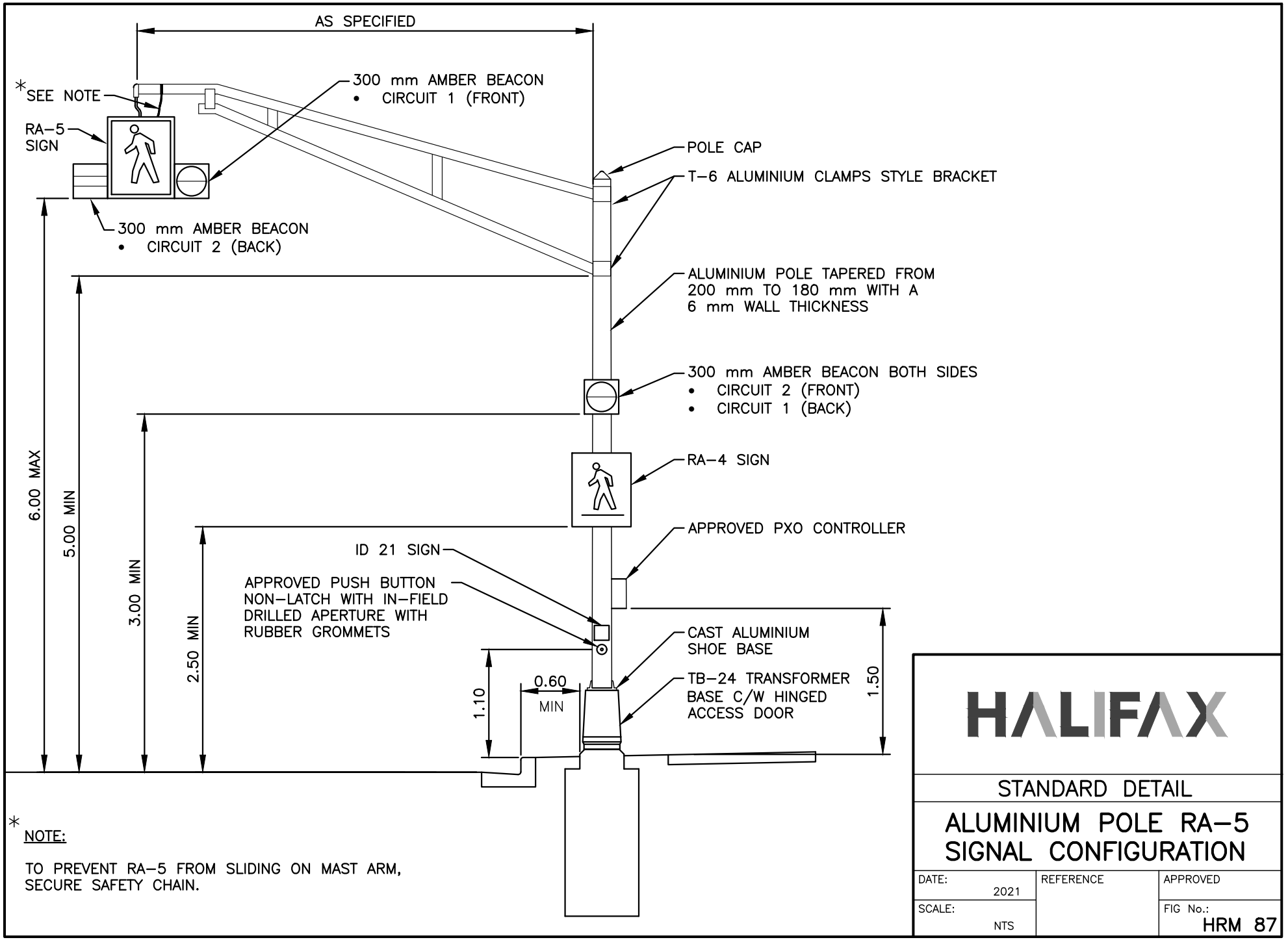
1. PLUG DUCTS NOT IN USE.
2. DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.

HALIFAX

STANDARD DETAIL

WOODEN POLE POWER FEED (FOR TRAFFIC SIGNALS)

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 86



* NOTE:

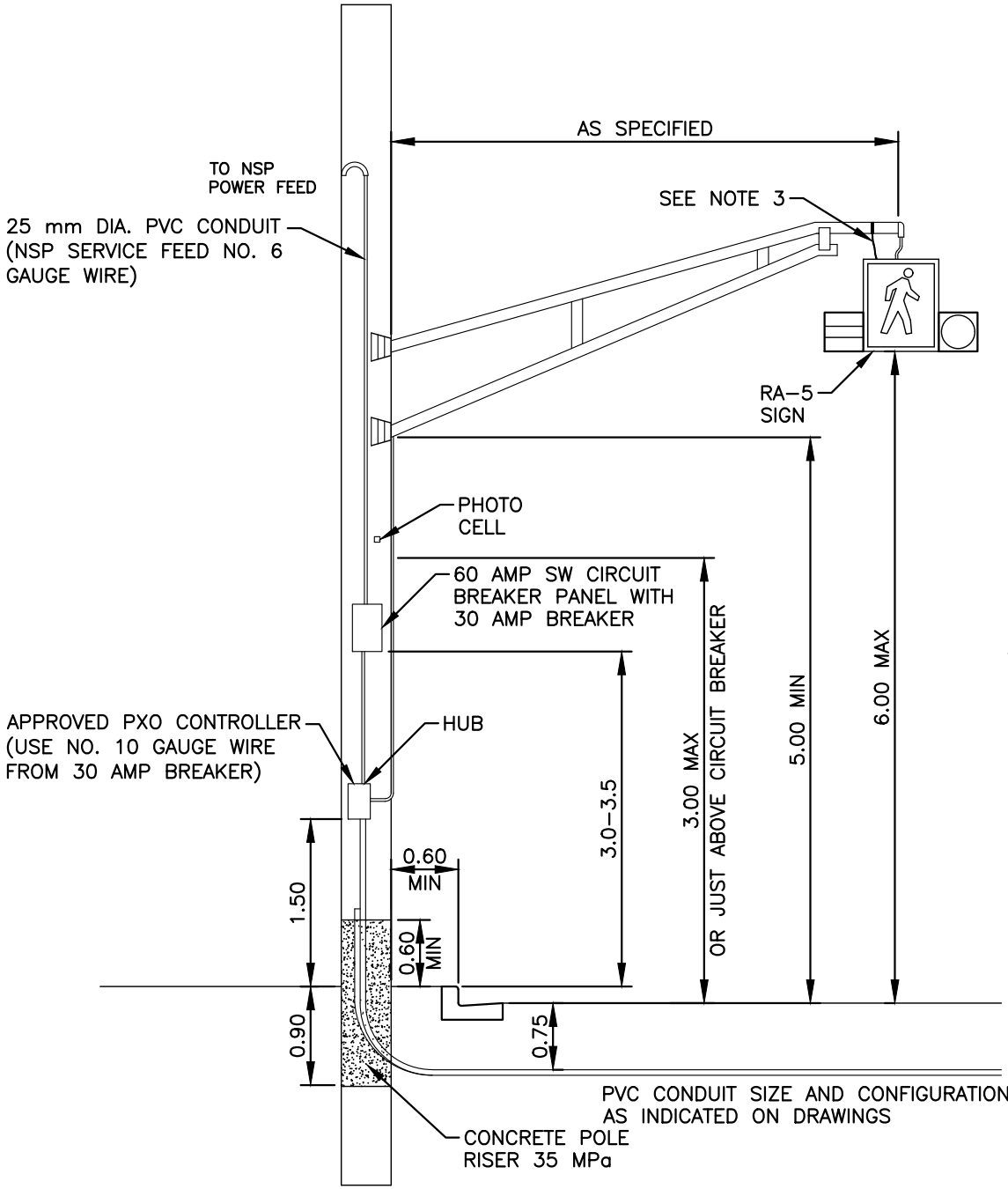
TO PREVENT RA–5 FROM SLIDING ON MAST ARM, SECURE SAFETY CHAIN.

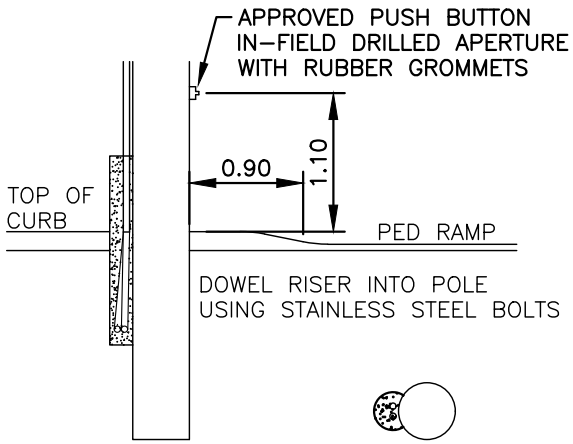
HALIFAX

STANDARD DETAIL

ALUMINIUM POLE RA–5 SIGNAL CONFIGURATION

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 87





SIDE VIEW TOP VIEW

NOTES:

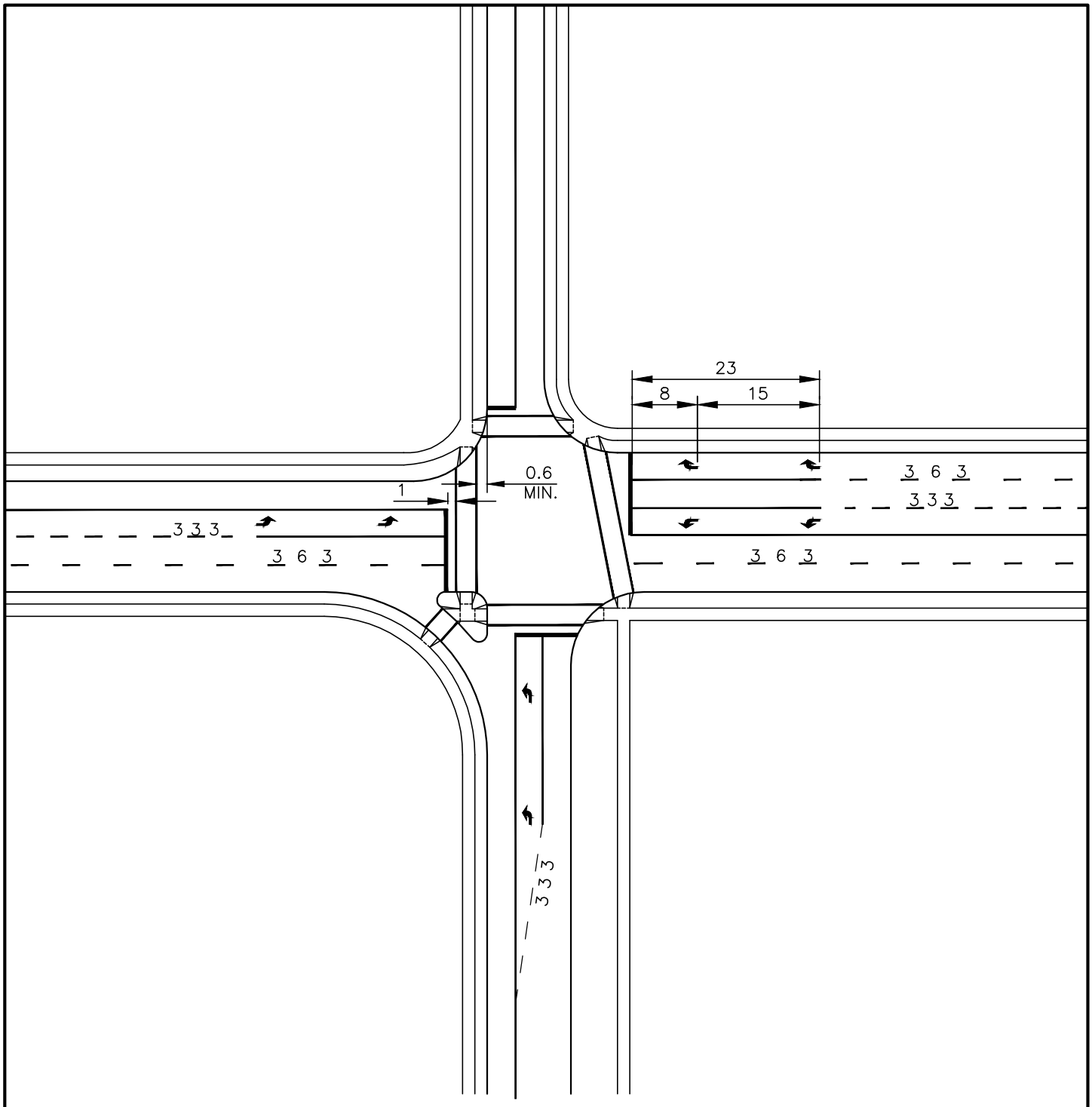
1. PLUG DUCTS NOT IN USE
2. INSTALL MUTCD ID21 SIGN JUST ABOVE PUSH BUTTON
3. TO PREVENT RA-5 FROM SLIDING ON MAST ARM, SECURE SAFETY CHAIN.
4. DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.

HALIFAX

STANDARD DETAIL

WOODEN POLE RA-5 TRAFFIC SIGNAL WITH POWER FEED CONFIGURATION

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 88



NOTES:

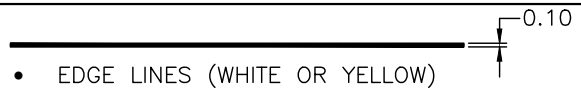
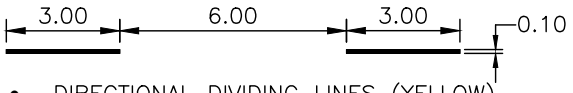
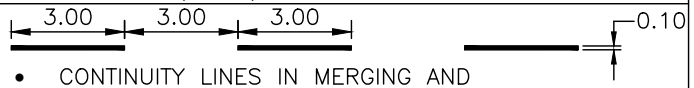
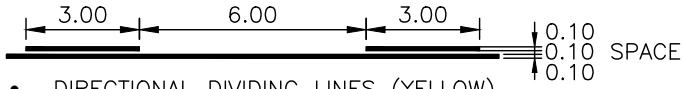
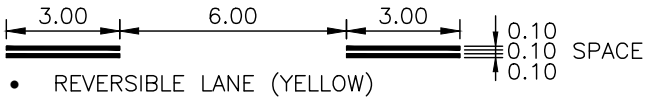
1. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH HRM STANDARD DETAILS.
2. WHEN REQUIRED, THIRD AND SUBSEQUENT ARROWS TO BE SPACED AT 15.0 m INTERVALS.

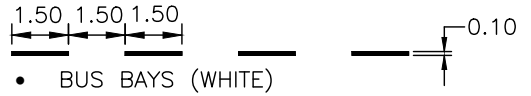
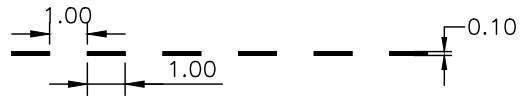
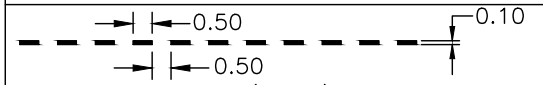
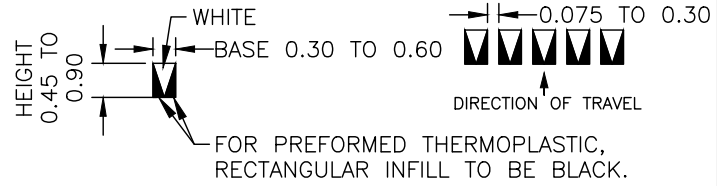
HALIFAX

STANDARD DETAIL

STANDARD INTERSECTION PAVEMENT MARKING LAYOUT

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 89

NAME OF LINE	
SOLID	 • EDGE LINES (WHITE OR YELLOW) • DIRECTIONAL DIVIDING LINES (YELLOW) • LANE LINES, PROHIBITING LINES (WHITE) • BIKE LINES (WHITE)
3 m x 6 m BROKEN	 • DIRECTIONAL DIVIDING LINES (YELLOW) • LANE LINES (WHITE)
3 m x 3 m	 • CONTINUITY LINES IN MERGING AND DIVERGING AREAS AND TAPERS FOR LEFT–TURN AND RIGHT–TURN LANES.
SIMULTANEOUS SOLID & BROKEN	 • DIRECTIONAL DIVIDING LINES (YELLOW) • TWO–WAY LEFT TURN LINES (YELLOW)
DOUBLE SOLID	 • DIRECTIONAL DIVIDING LINES (YELLOW)
DOUBLE BROKEN 3 m x 6 m	 • REVERSIBLE LANE (YELLOW)
YIELD	 • SINGLE LANE ROUNDABOUT YIELD LINES (WHITE) 0.60 m x 0.60 m
	 • DOUBLE LANE ROUNDABOUT YIELD LINES (WHITE) 1.00 m x 0.60 m

NAME OF LINE	
1.8 m x 1.8 m	 • LANE LINES WITHIN MULTI–LANE ROUNDABOUT (WHITE)
1.5 m x 1.5 m	 • BUS BAYS (WHITE)
DASHED 1.0 m x 1.0 m	
0.5 m x 0.5 m	 • GUIDING LINES (WHITE)
ADVANCED YIELD TO PEDESTRIANS LINE	
STOP BAR	 • INTERSECTION STOP BAR (WHITE)

NOTE:

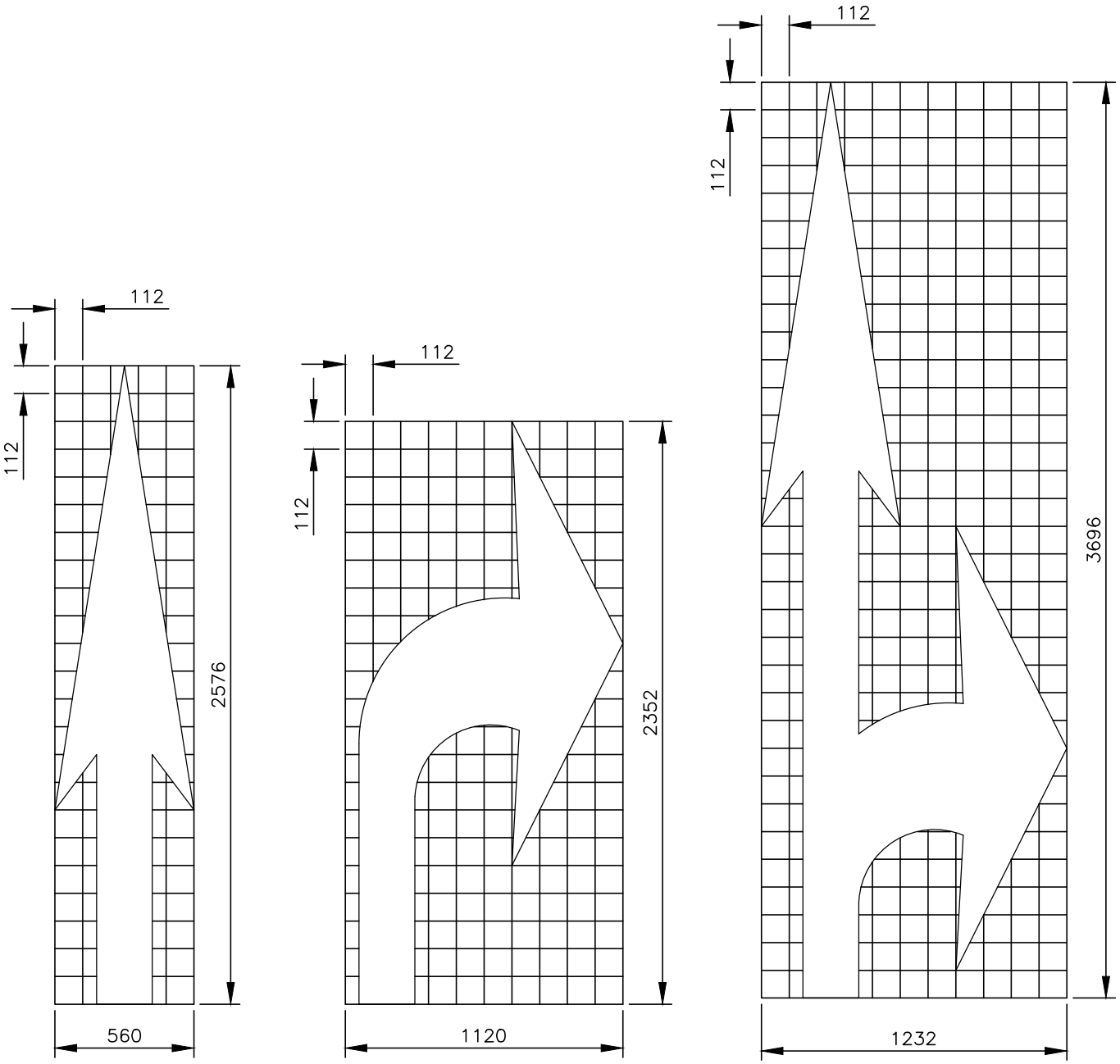
1. DIMENSIONS ARE IN METRES.

HALIFAX

STANDARD DETAIL

LONGITUDINAL & TRANSVERSE PAVEMENT MARKINGS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 90



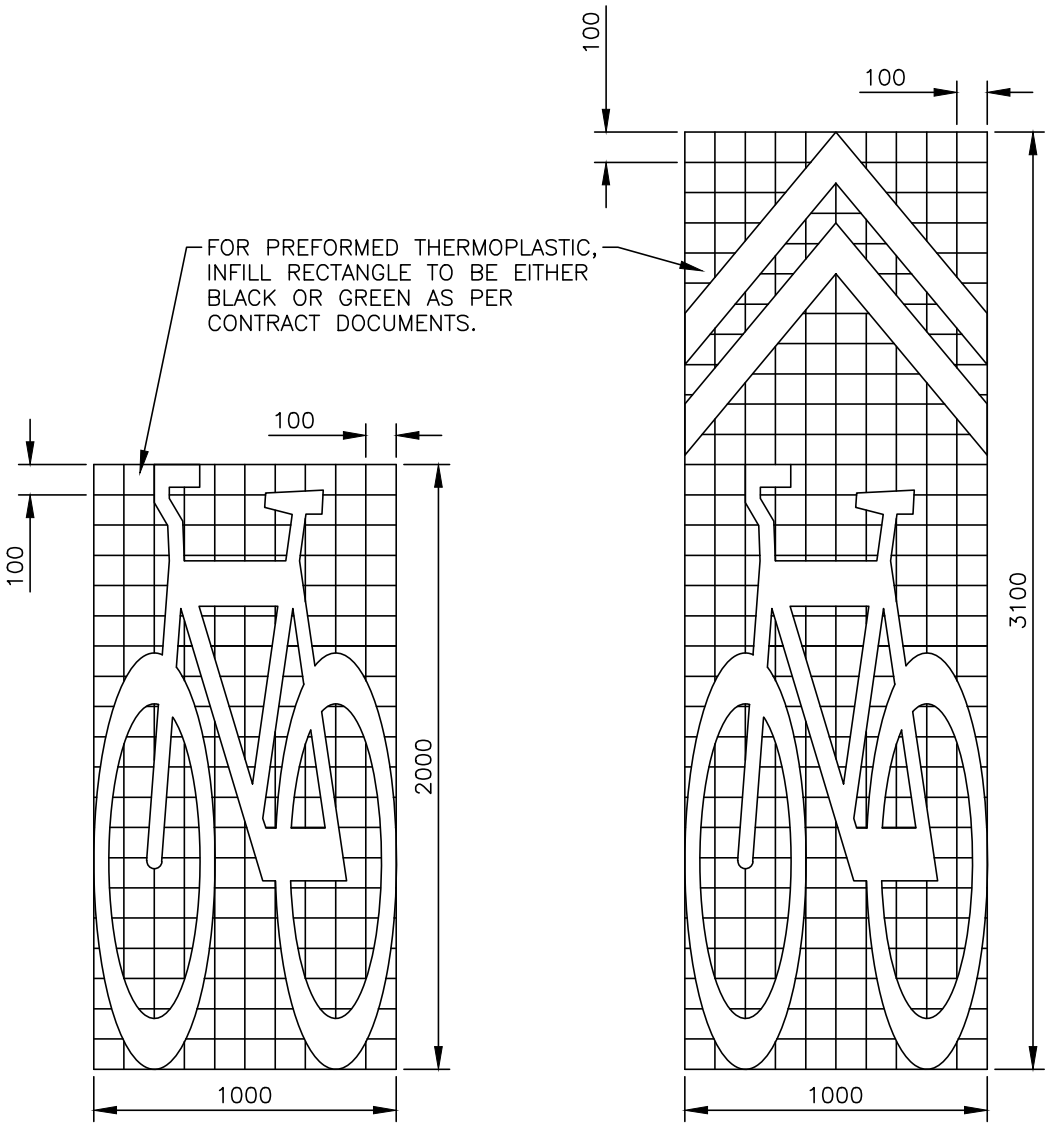
NOTE:
1. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

PAVEMENT ARROWS

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 91



BICYCLE SYMBOL

SHARED USE LANE SYMBOL

NOTE:

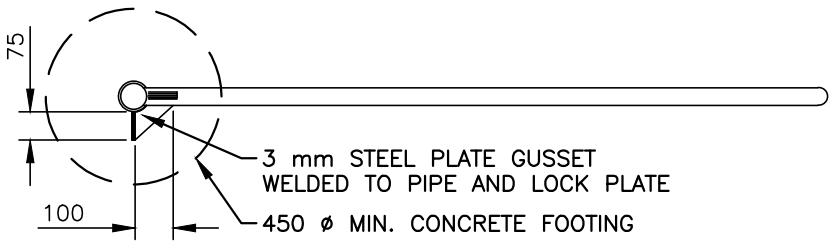
1. DIMENSIONS MAY BE SLIGHTLY ALTERED FOR THERMOPLASTIC IF APPROVED BY THE ENG.
2. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

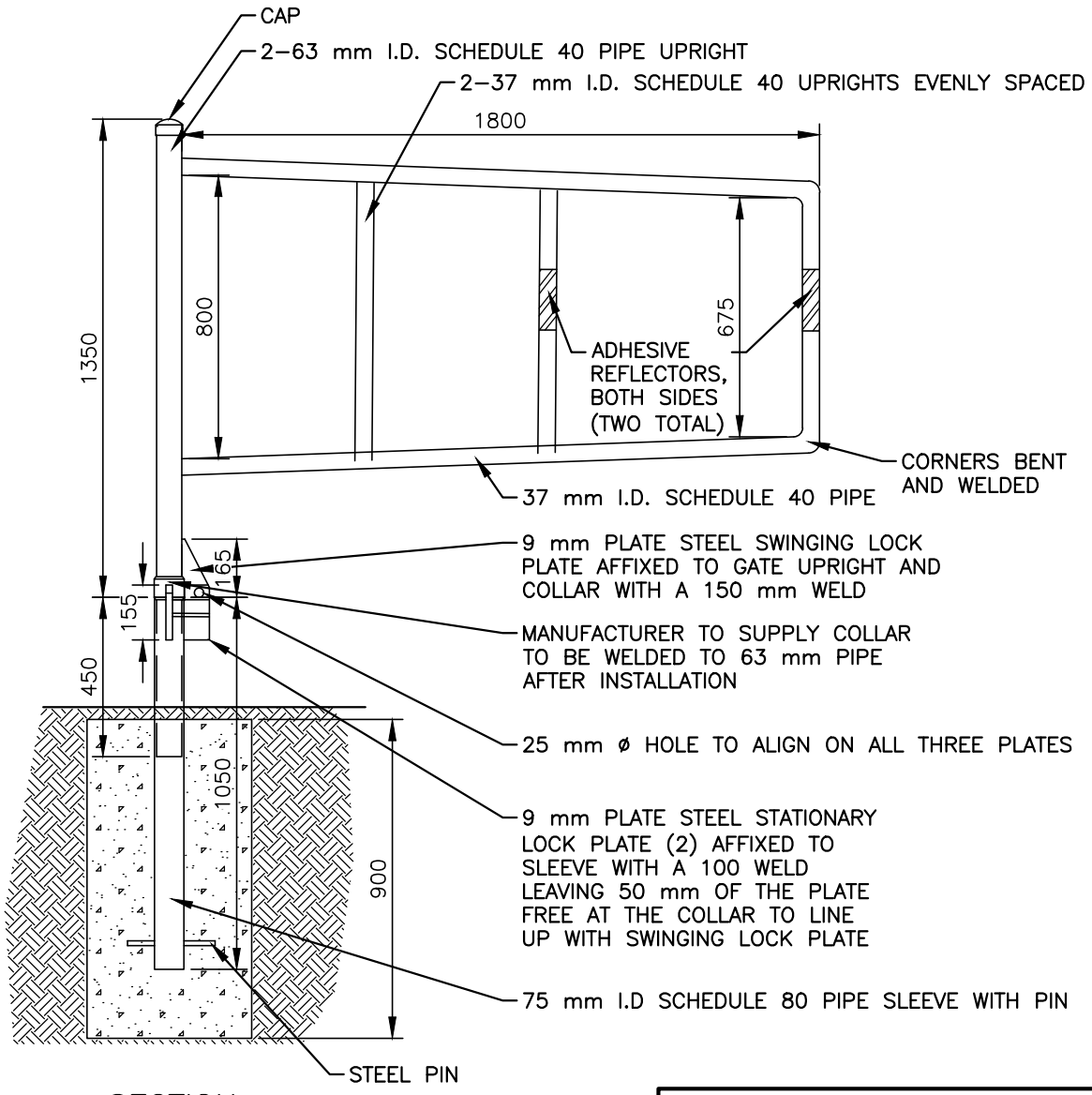
STANDARD DETAIL

BICYCLE SYMBOL & SHARED USE LANE SYMBOL

DATE: 2023	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 92



PLAN



SECTION

NOTES:

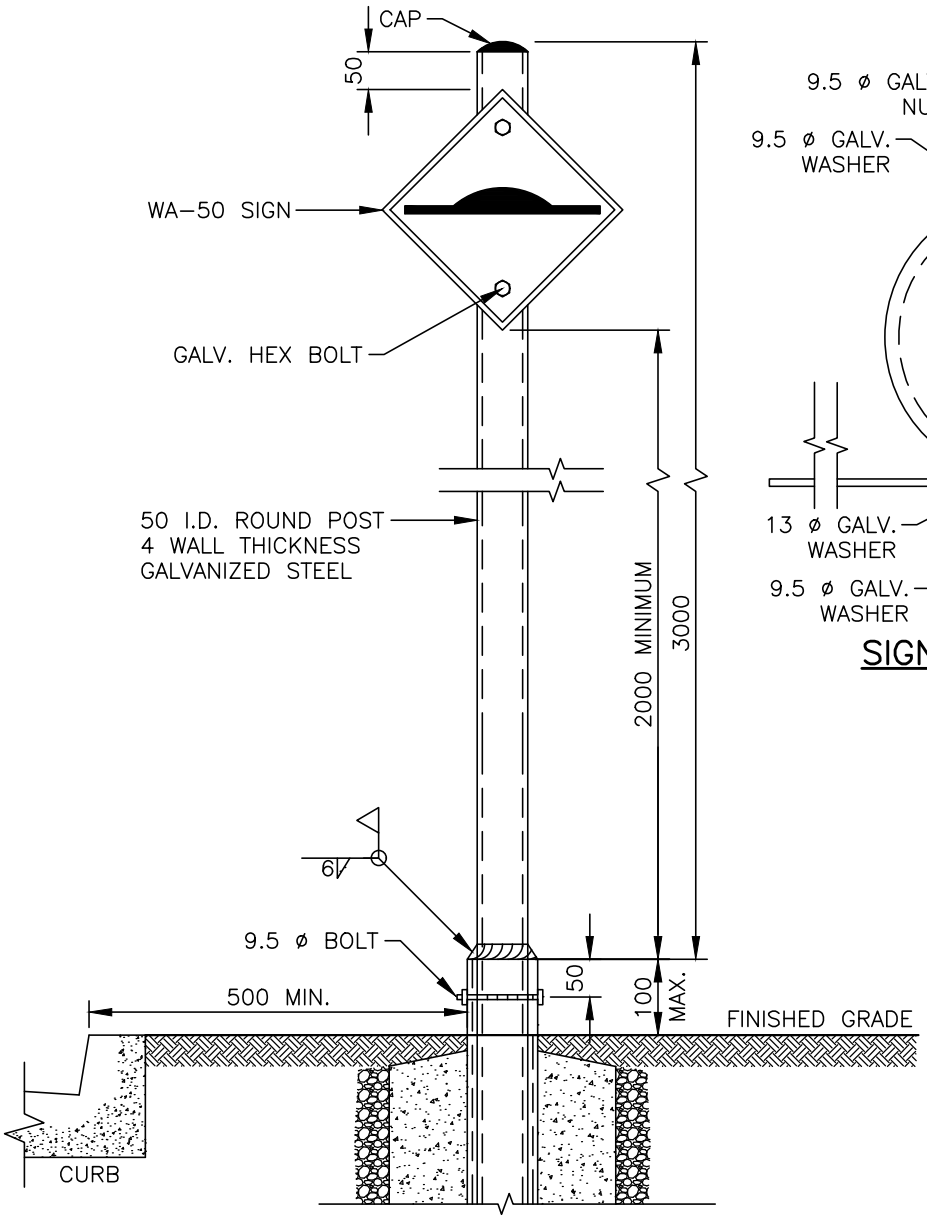
1. ALL PIPE TO BE GALVANIZED EXCEPT 75 mm GROUND SLEEVE (BLACK IRON)
2. ALL WORK TO BE DONE ACCORDING TO HRM SPECIFICATIONS
3. ALL METAL TO RECEIVE ONE COAT OF RUST INHIBITING PRIMER AND TWO COATS OF R&M PAINT E1245 CODE L (HOLLY GREEN) ENAMEL AUTOMOTIVE PAINT OR EQUIVALENT.

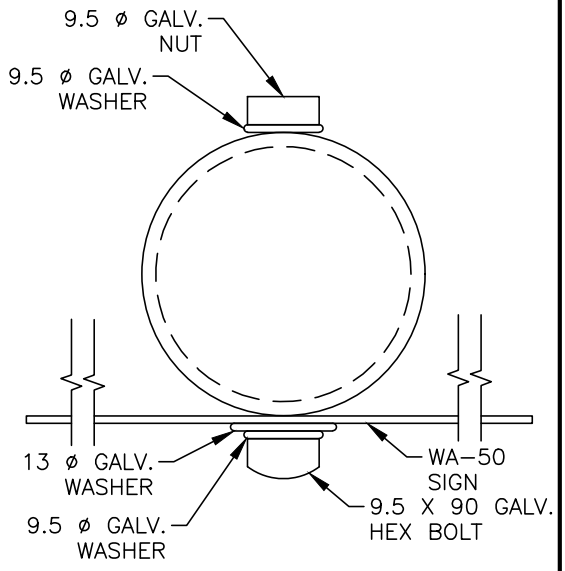
HALIFAX

STANDARD DETAIL

PEDESTRIAN GATE

DATE: 2023	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 119





SIGN CONNECTION

NOTES:

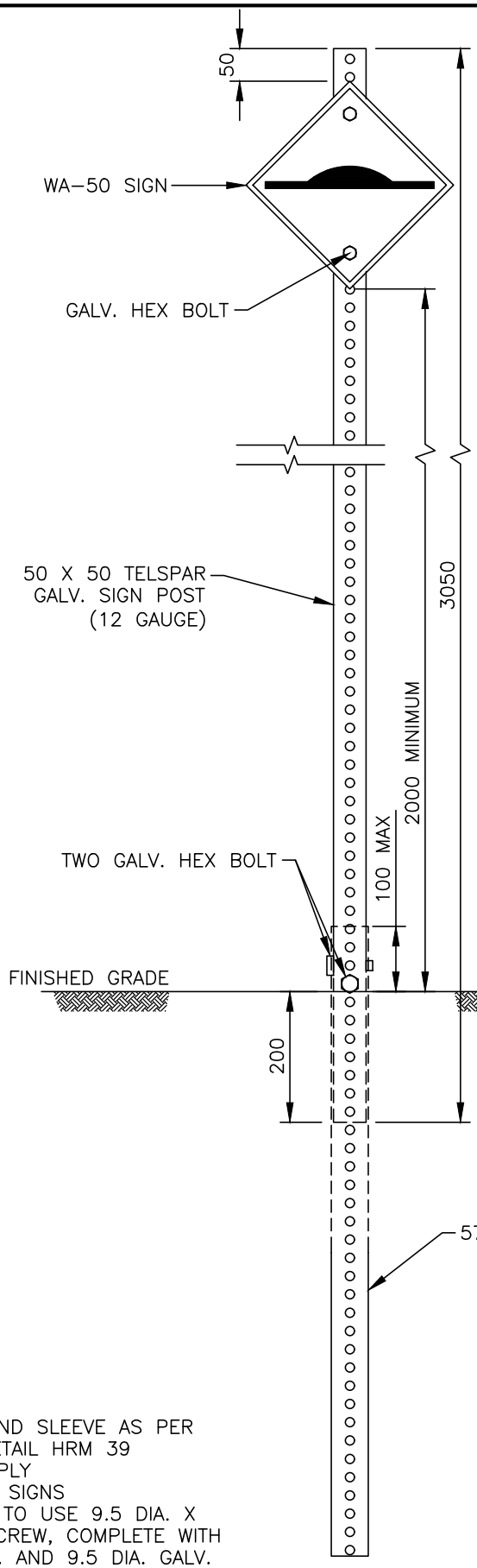
1. SIGN POST AND BASE AS PER STANDARD DETAIL HRM 38
2. HRM TO SUPPLY APPROPRIATE SIGNS.
3. CONTRACTOR TO USE 9.5 DIA. X 75mm LAG SCREW, COMPLETE WITH 13 DIA. GALV. AND 9.5 DIA. GALV. WASHERS WHEN INSTALLING SIGN TO UTILITY POLE.
4. WELD SHALL BE COMPLETED AROUND BASE AND POST.
5. ALL DIMENSIONS ARE IN MILLIMETRES.

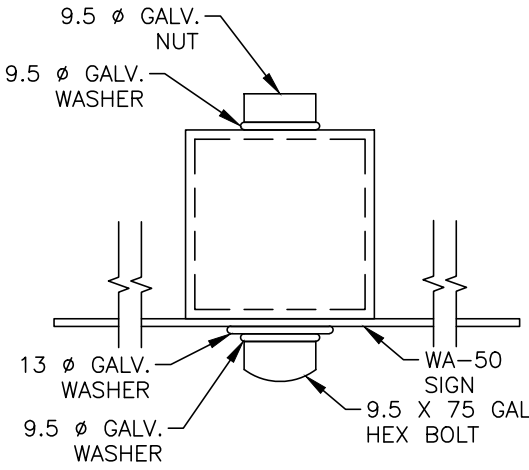
HALIFAX

STANDARD DETAIL

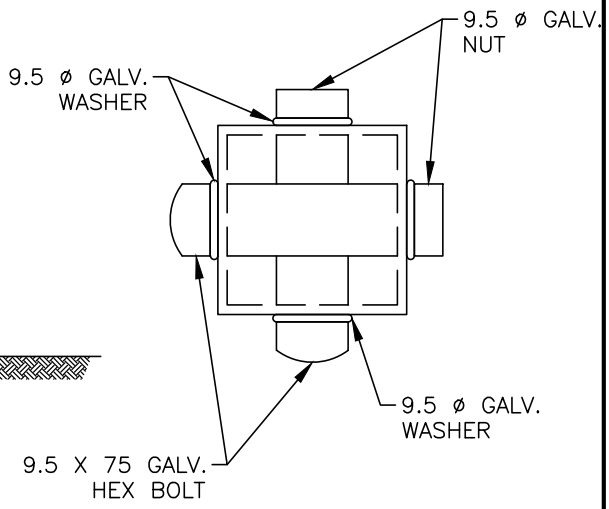
URBAN TRAFFIC SIGN INSTALLATION

DATE: 2023	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 129





SIGN CONNECTION



TWO HEX BOLT LOCK

NOTES:

1. SIGN POST AND SLEEVE AS PER STANDARD DETAIL HRM 39
2. HRM TO SUPPLY APPROPRIATE SIGNS
3. CONTRACTOR TO USE 9.5 DIA. X 75MM LAG SCREW, COMPLETE WITH 13 DIA. GALV. AND 9.5 DIA. GALV. WASHERS WHEN INSTALLING SIGN TO UTILITY POLE.
4. ALL DIMENSIONS ARE IN MILLIMETRES

HALIFAX

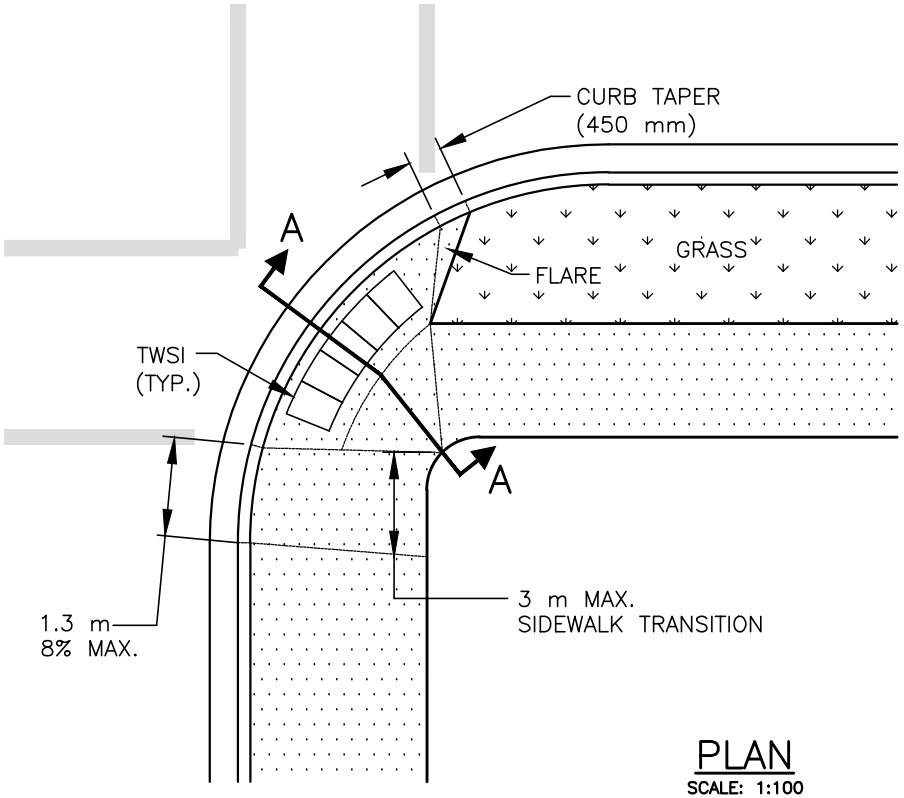
STANDARD DETAIL

RURAL TRAFFIC SIGN INSTALLATION

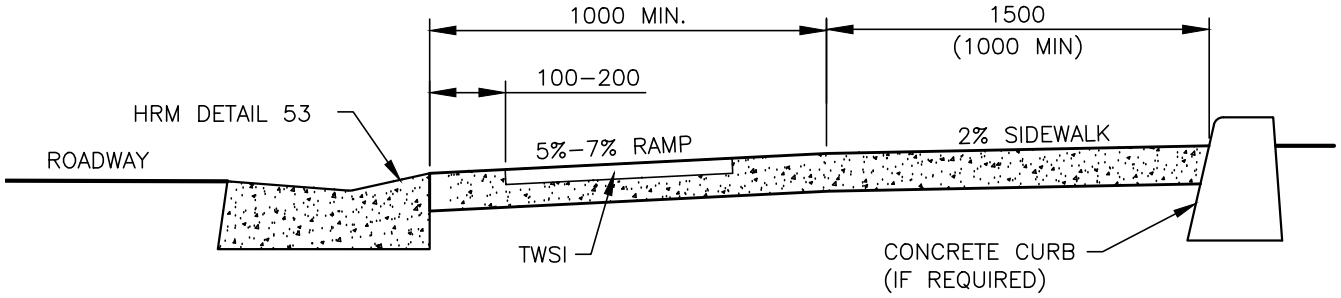
DATE: 2023	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 130

NOTES:

1. NATURAL CAST IRON ATTENTION TWSI (TACTILE WALKING SURFACE INDICATOR) PLATES. TO CSA B651, AND AS INDICATED IN THE PROJECT DOCUMENTS.
2. NO GAP BETWEEN ADJACENT PLATES.
3. MAXIMUM DISTANCE FROM CURB TAPER TO BE 100mm.
4. PLATES SHALL BE PLACED WITH THE TOP OF THE BASE PLATE (BOTTOM OF DOMES) LEVEL WITH CONCRETE SURFACE.
5. ALL PLATES TO BE 610mm LONG.
6. TO BE READ IN CONJUNCTION WITH HRM DETAIL 49 PEDESTRIAN RAMP ALIGNMENT.
7. SIZE AND SHAPE OF PLATES TO MANUFACTURER'S SPECIFICATION.
8. CONCRETE THICKNESS AT PEDESTRIAN RAMPS TO BE 150 mm.
9. DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.



PLAN
SCALE: 1:100



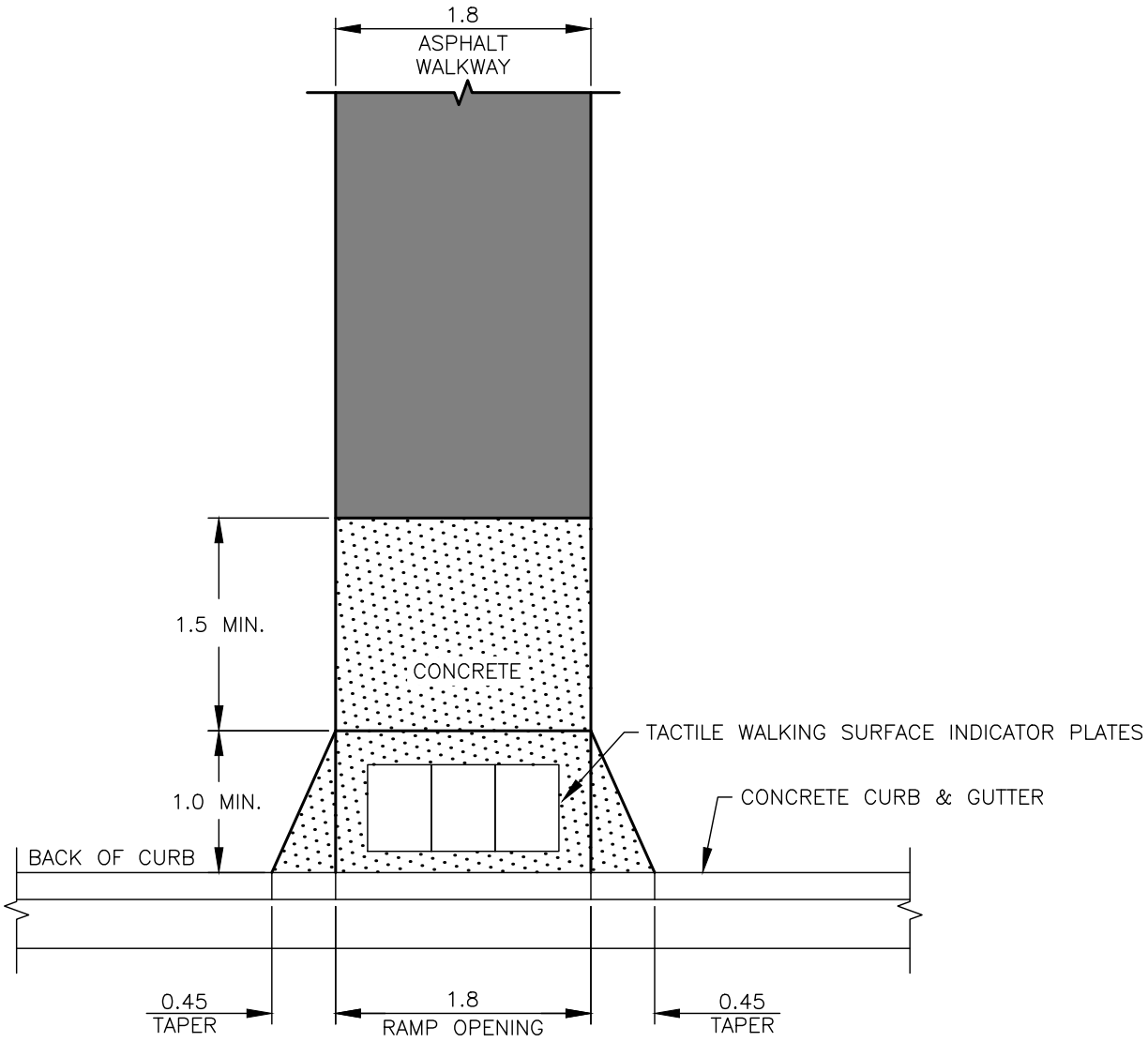
CROSS SECTION A–A
SCALE 1:20

HALIFAX

STANDARD DETAIL

TACTILE WALKING SURFACE INDICATOR RAMP PLACEMENT

DATE: 2023	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 131



NOTES:

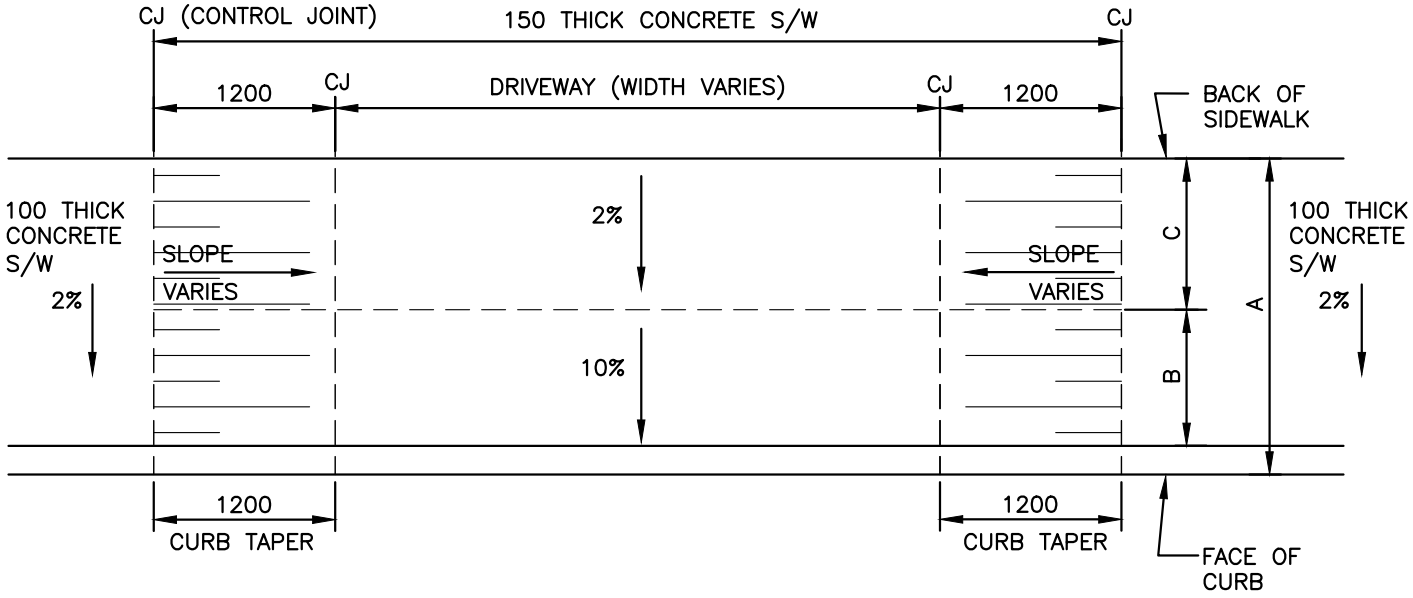
1. CONCRETE PEDESTRIAN RAMP TO HRM DETAIL 49.
2. CONCRETE CURB & GUTTER TO HRM DETAIL 53.
3. TACTILE WALKING SURFACE INDICATOR PLATES TO HRM DETAIL 131.
4. ASPHALT WALKWAY TO HRM DETAIL 40.

HALIFAX

STANDARD DETAIL

WALKWAY WITH PEDESTRIAN RAMP

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:50		FIG No.: HRM 132



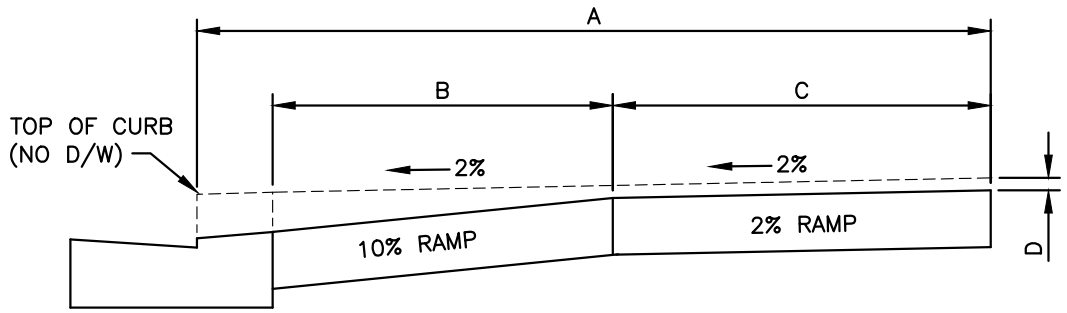
PLAN

SCALE 1:50

A	B	C	D
1800	600	1000	57
1900	700	1000	49
2000	800	1000	41
2100	900	1000	33
2200	900	1100	33
2300	900	1200	33
2400	900	1300	33
2500	900	1400	33
2600	900	1500	33
2700	1000	1500	24
2800	1100	1500	16
2900	1200	1500	8
3000	1300	1500	0

NOTES;

1. WHEN ADJACENT DRIVEWAYS ARE LESS THAN 2.4 METERS APART, DO NOT TAPER CURB AND SIDEWALK BETWEEN DRIVEWAYS.
2. AREA BEHIND DROPPED S/W MAY REQUIRE BUILD UP WITH PAVEMENT OR CURB TO PREVENT ENTRY OF STORM WATER DURING MAJOR STORM.



℄ DRIVEWAY CROSS SECTION

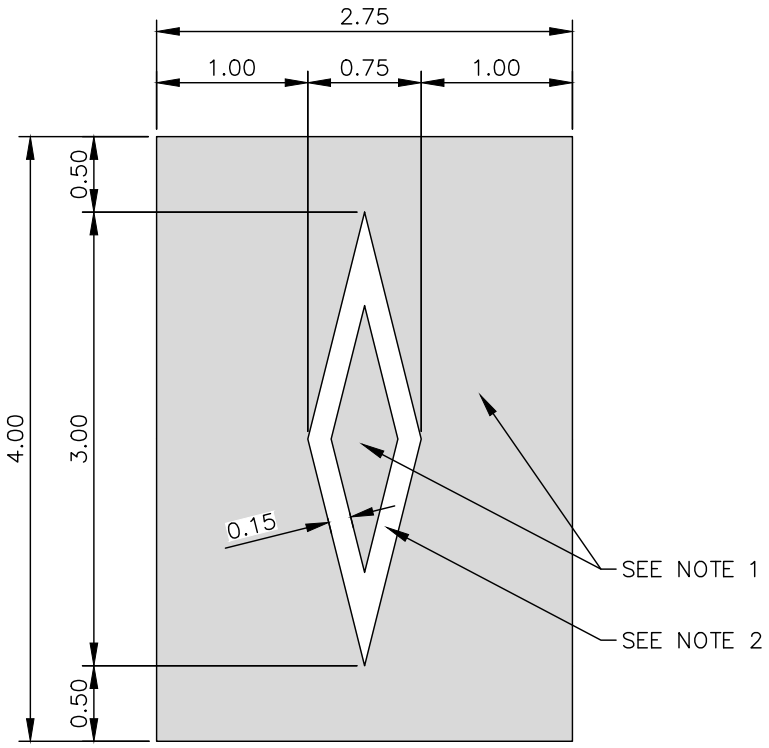
SCALE 1:20

HALIFAX

STANDARD DETAIL

CONCRETE SIDEWALK ADJACENT CURB

DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 133



NOTE:

1. PERMANENT PAVEMENT MARKING FOR IN–LAY SHALL BE RED.
2. PERMANENT PAVEMENT MARKING FOR RESERVED LANE SYMBOL SHALL BE WHITE.
3. DIMENSIONS ARE IN METRES.

HALIFAX

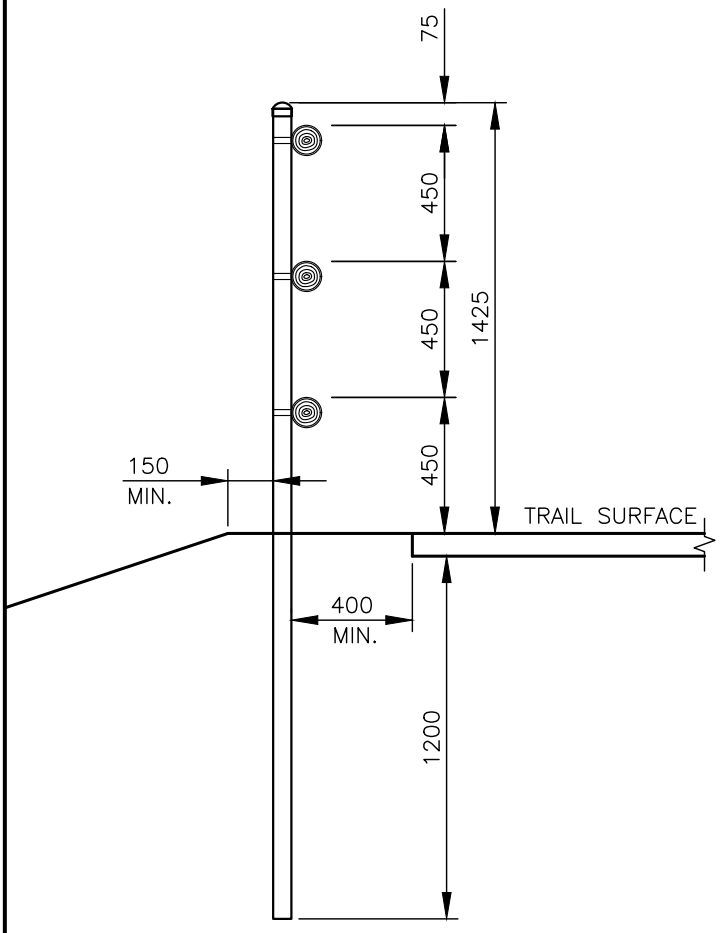
STANDARD DETAIL

RED IN–LAY RESERVED LANE

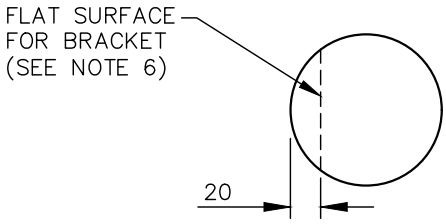
DATE: 2021	REFERENCE	APPROVED
SCALE: 1:50		FIG. NO. HRM 134

NOTES:

1. POSTS 60 mm O.D. HOT DIPPED GALVANIZED COLD ROLLED STEEL (ASTM A53 GRADE A, SCHEDULE 40), ZINC–COATED AT MINIMUM 550 G/SM.
2. UNLESS OTHERWISE APPROVED BY ENGINEER, DRILL POST HOLES WITH 125 mm MAXIMUM DIAMETER BIT. STABILIZE GROUND AROUND POSTS WITH CEMENT GROUT AND MECHANICAL COMPACTOR.
3. THERE SHALL BE NO EXPOSED (NON–GALVANIZED) STEEL, EXCEPT THE TOP OF THE POSTS (PRIOR TO PLACEMENT OF CAPS).
4. POST SPACING OF 2.4 m EXCEPT LESS ON TIGHT TURNS TO MAINTAIN TRAIL WIDTH.
5. GALVANIZED STEEL CAPS TO BE SET SECURELY OVER TOP OF POSTS (WELDING NOT PERMITTED).
6. RAILS 95–115 mm DIAMETER SMOOTH UNTREATED HEMLOCK WOOD (NO CHECKS, SPLITS OR WIND SHAKES). OUTSIDE EDGES OF ABUTTING ENDS OF RAILS SHALL BE FLUSH (WITHIN 5 mm). PROVIDE FLAT SURFACE FOR FASTENERS 20 mm FROM BACK OF RAILS WHICH CAN BE THE FULL LENGTH OF THE RAILS.
7. ENDS OF RAILS SHALL LINE UP WITH CENTRE OF POSTS EXCEPT AT END POSTS WHERE THE RAILS SHALL EXTEND 100 mm PAST THE CENTRE OF POSTS.
8. FENCE BRACKETS TO BE GALVANIZED STEEL AND DESIGNED TO ATTACH WOODEN FENCE RAILS WITH A FLAT FASTENING SURFACE TO 60 mm O.D. FENCE POSTS. BRACKETS TO HAVE A BASE AND STRAP. BRACKETS TO HAVE 8 mm LAG SCREWS (38 mm LONG) FOR FASTENING BRACKET BASE TO WOOD RAIL, AND 8 mm CARRIAGE BOLTS WITH NUTS FOR FASTENING BRACKET BASE AND STRAP AROUND POST. BASE TO BE BENDABLE TO ALLOW FOR VARIED HORIZONTAL ANGLES BETWEEN SUCCESSIVE RAILS.
9. PRE–DRILL WOODEN RAILS FOR INSTALLATION OF BRACKETS.
10. BEND FLANGES OF BRACKETS TO ANGLE REQUIRED WHEN FENCE IS ON A HORIZONTAL CURVE.
11. MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE NOVA SCOTIA BUILDING CODE REGULATIONS AND THE NATIONAL BUILDING CODE OF CANADA.
12. DIMENSIONS ARE IN MILLIMETRES.



FENCE SECTION



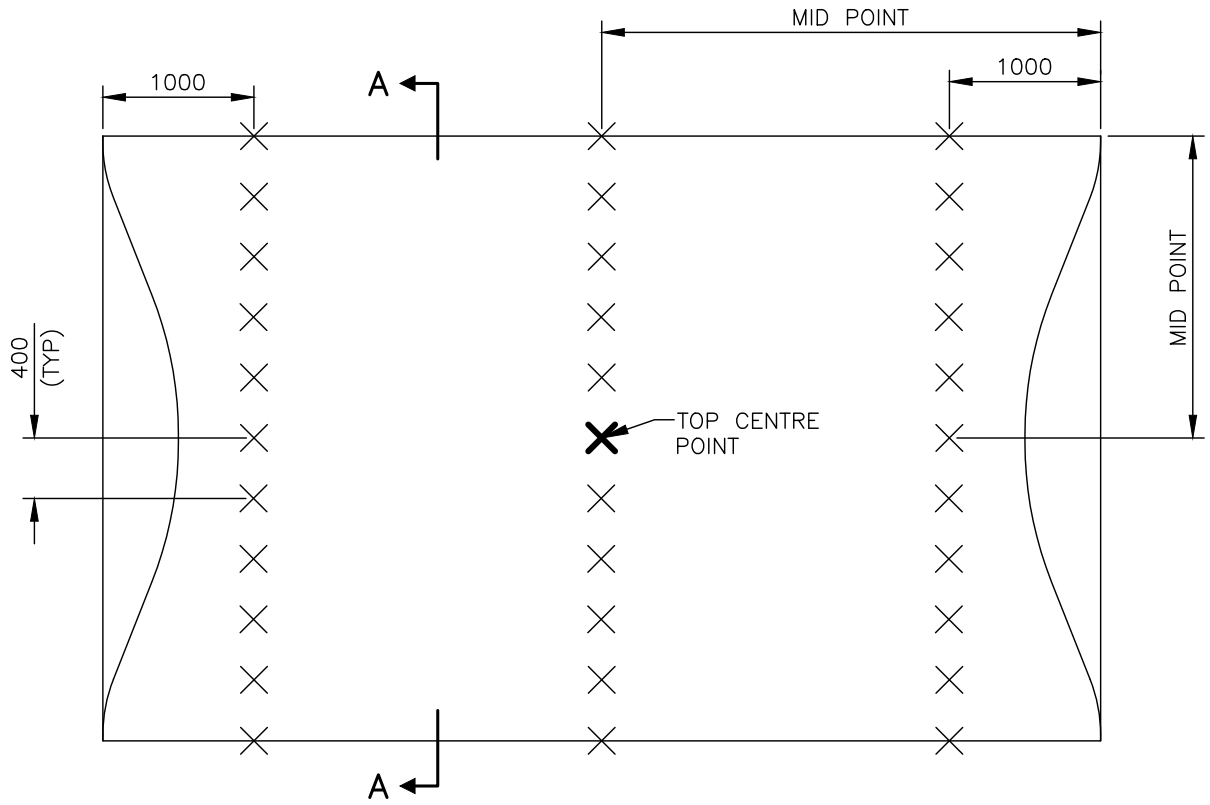
WOODEN RAIL SECTION AT POST

HALIFAX

STANDARD DETAIL

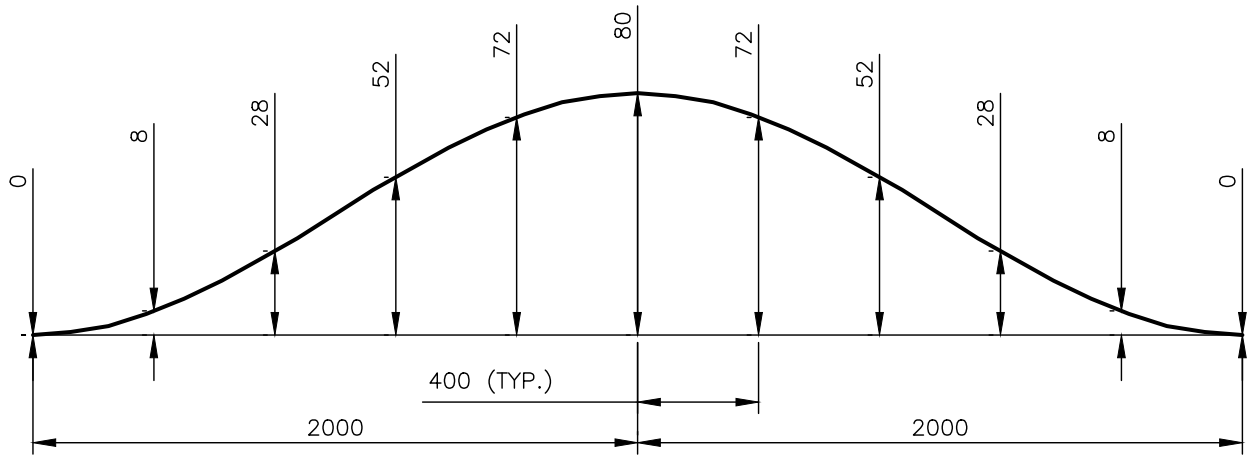
FENCE DETAIL (ROUND WOODEN RAILS & STEEL POSTS)

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG. NO. HRM 135



SPEED HUMP

SCALE: 1:50



SECTION A–A

SCALE: Horz. 1:25
Vert. 1:2.5

NOTES:

1. 33 SURVEY SHOTS ELEVATION REQUIRED.
2. COORDINATES REQUIRED AT THE TOP CENTRE OF THE SPEED HUMP.
3. DIMENSIONS ARE IN MILLIMETRES.

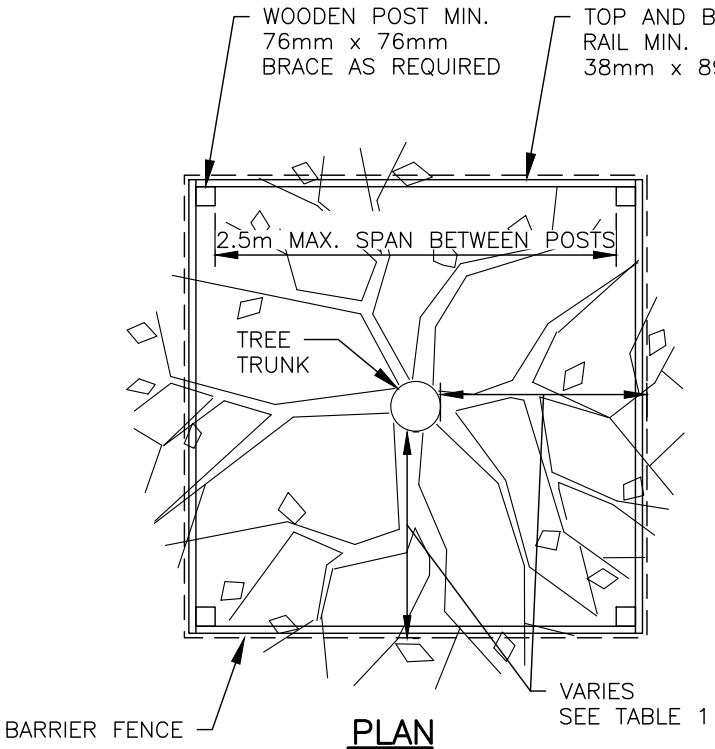
TOP CENTRE POINT COORDINATES:
NORTHING: .....
EASTING: .....

HALIFAX

STANDARD DETAIL

SPEED HUMP SURVEY VERIFICATION

DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 136

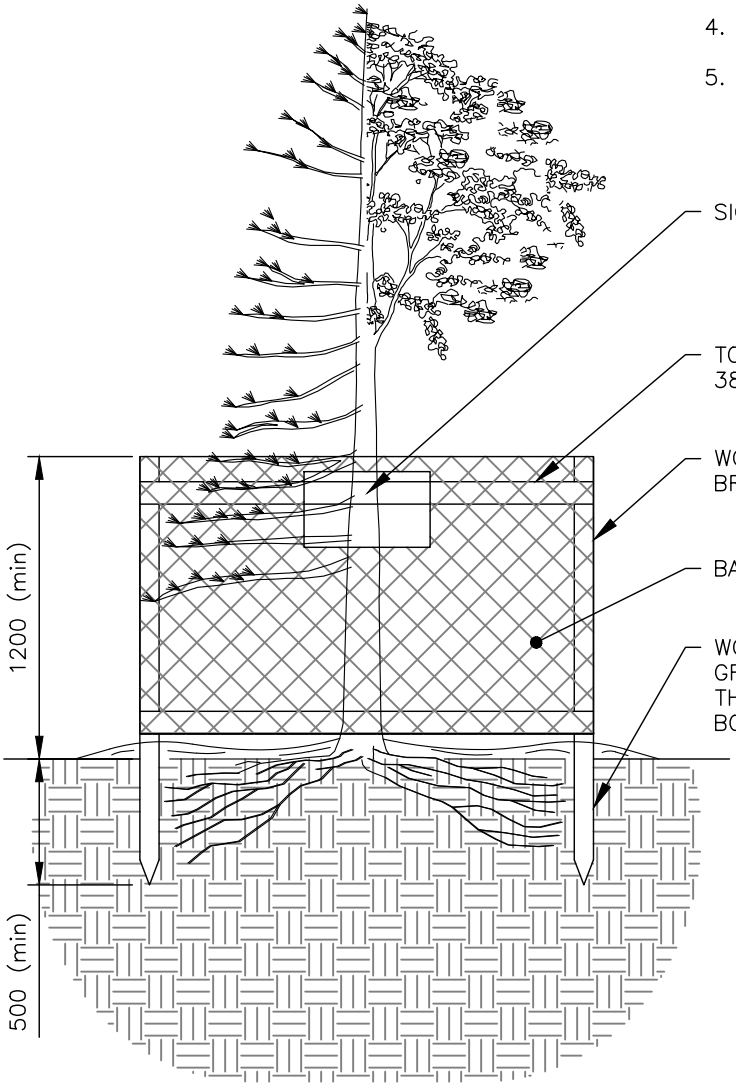


PLAN

TABLE 1

TREE PROTECTION ZONE CALCULATION TABLE	
TRUNK DIAMETER (DBH)	MINIMUM PROTECTION DISTANCE REQUIRED (MEASURE FROM THE OUTSIDE EDGE OF TREE TRUNK)
10 CM & UNDER	1.2 METERS
11 – 30 CM	2.0 METERS
31 – 40 CM	3.4 METERS
41 – 50 CM	4.6 METERS
51 – 60 CM	6.0 METERS
61 – 70 CM	7.0 METERS
71 – 80 CM	8.0 METERS
>80 CM	9.0 METERS

NOTES:
1. WOOD POST: (MIN. 76mm WIDTH) INSTALLED TO A DEPTH OF 500mm. TOP AND BOTTOM RAIL: (MIN. 38 x 89mm CONSTRUCTION, MAX. SPAN 2.5m), CROSS BRACING AS REQUIRED.
2. NO GROUND DISTURBANCE WITHIN 1.2 METER OF THE TREE TRUNK (I.E. POST INSTALLATION)
3. POSTS SET BACK FROM SIDEWALK AND CURB: MIN 300mm
4. FENCE MATERIAL: MINIMUM ORANGE BARRIER FENCE OR METAL CHAIN LINK FENCE
5. ATTACH A SIGN ON TWO SIDES OF THE TREE "PROTECTION ZONE DO NOT REMOVE FENCE DURING CONSTRUCTION"



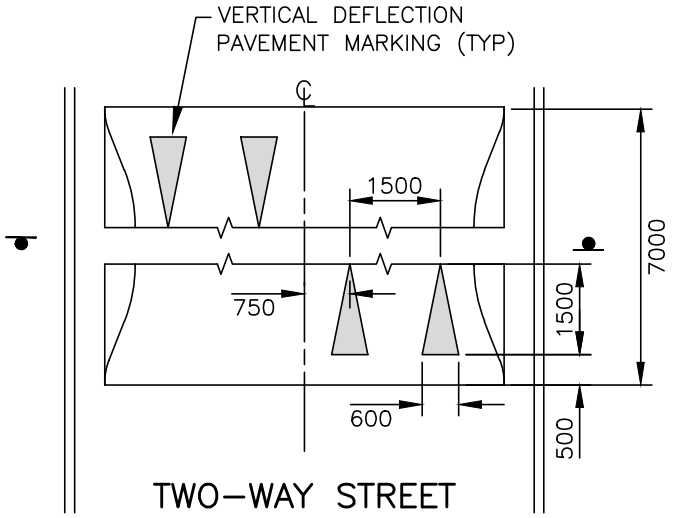
PROFILE

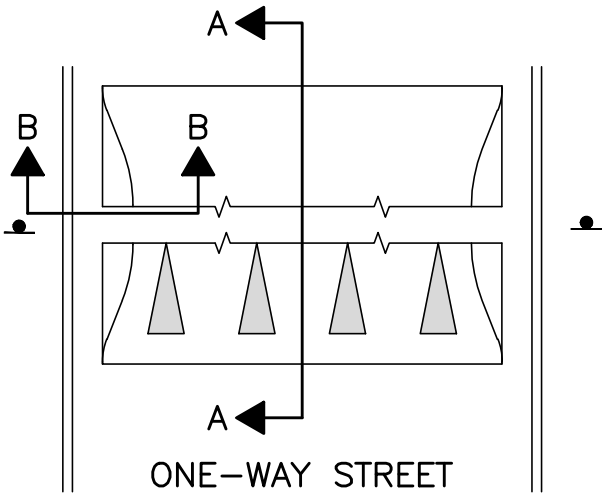
HALIFAX

STANDARD DETAIL

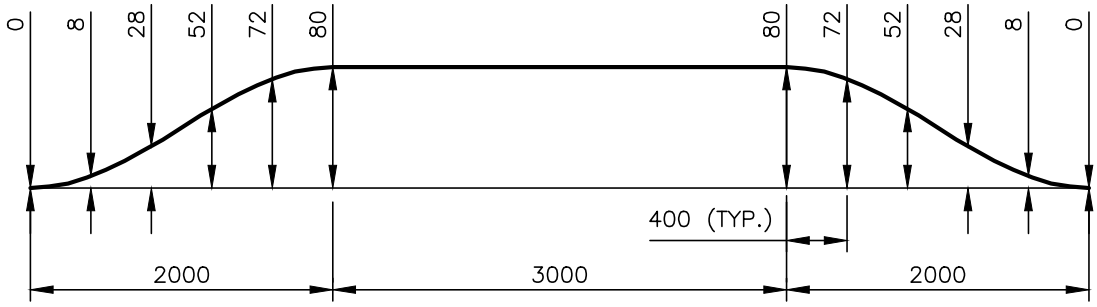
TREE PROTECTION ZONE & BARRIER

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 140

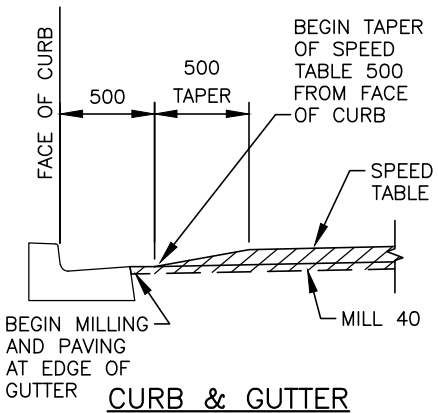




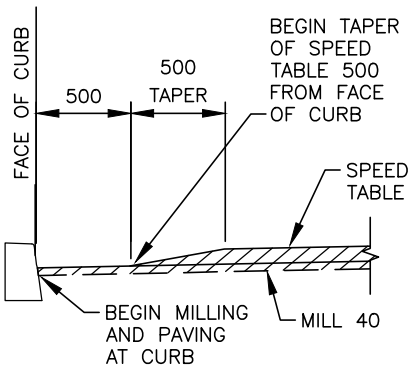
SPEED TABLE
SCALE: 1:125



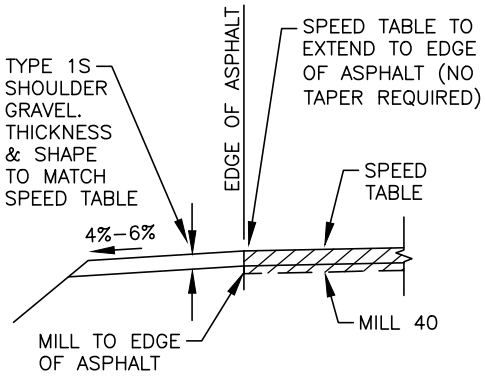
SECTION A–A
SCALE: Horz. 1:50 , Vert. 1:5



CURB & GUTTER
SECTION B–B
SCALE: 1:40



CURB ONLY
SECTION B–B
SCALE: 1:40



RURAL–GRAVEL SHOULDER
SECTION B–B
SCALE: 1:40

NOTES:

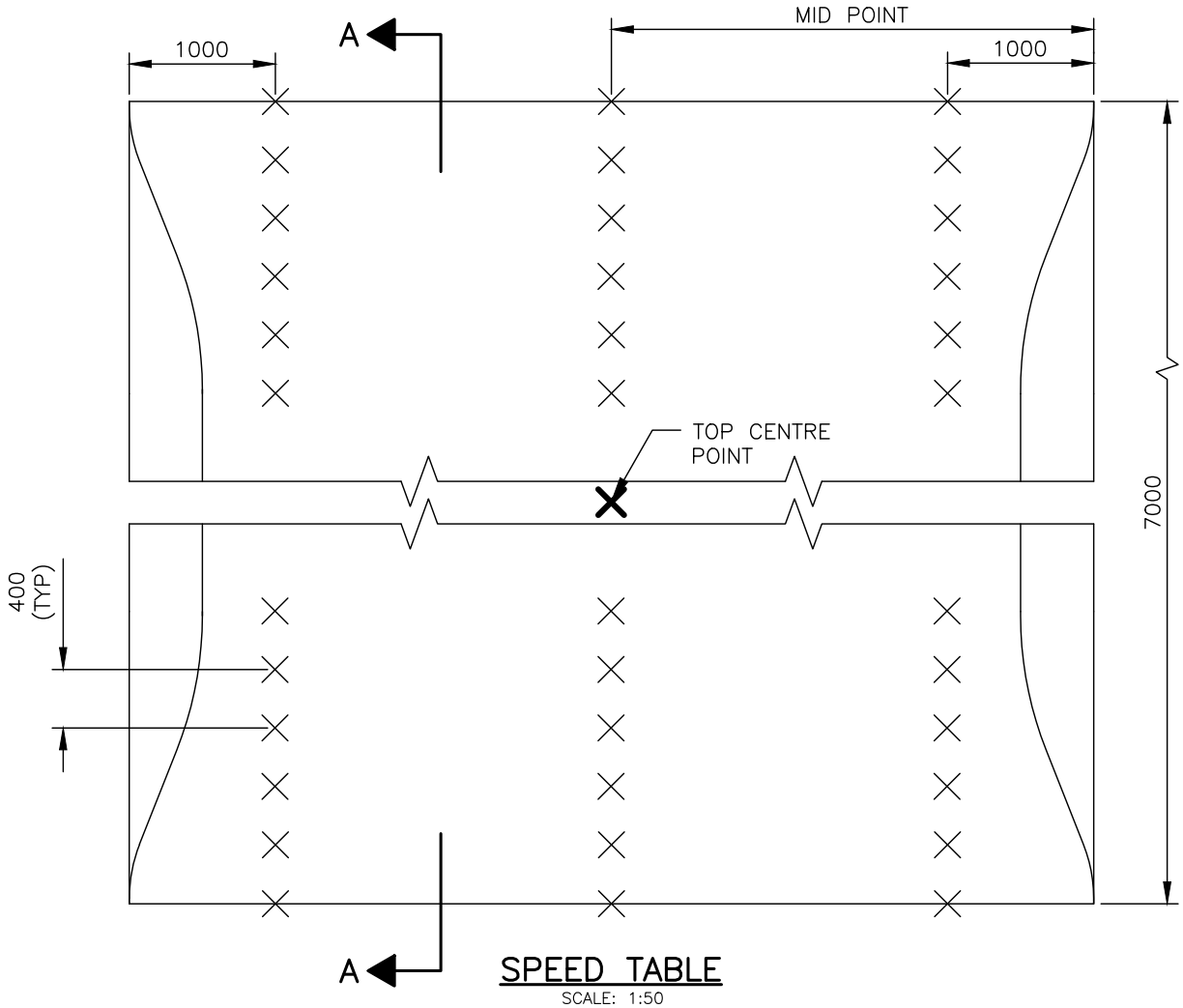
1. TOLERANCE FOR CONSTRUCTION IS +/– 10mm RELATIVE TO THE CURVE.
2. THE EXISTING ASPHALT SURFACE TO BE MILLED TO A DEPTH OF 40mm WHEN RETROFITTING.
3. SPEED TABLES TO BE CONSTRUCTED USING TYPE D–HF ASPHALT (UNLESS OTHERWISE APPROVED BY HRM).
4. WHERE SPECIFIED, EXISTING UTILITY POLE OR EXISTING SIGN POSTS MAY BE USED FOR SIGNAGE.
5. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

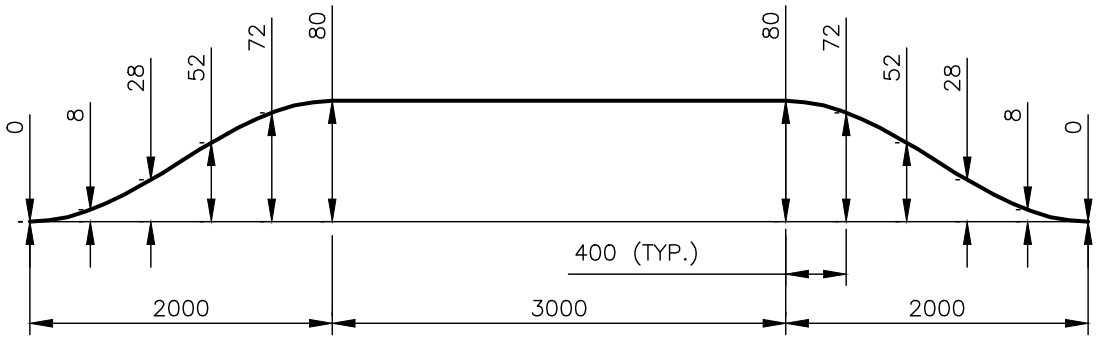
STANDARD DETAIL

SPEED TABLE

DATE: 2023	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 143



SPEED TABLE
SCALE: 1:50



SECTION A–A
SCALE: Horz. 1:50
Vert. 1:5

NOTES:

1. 36 SURVEY SHOTS ELEVATION REQUIRED.
2. COORDINATES REQUIRED AT THE TOP CENTRE OF THE SPEED TABLE.
3. DIMENSIONS ARE IN MILLIMETRES.

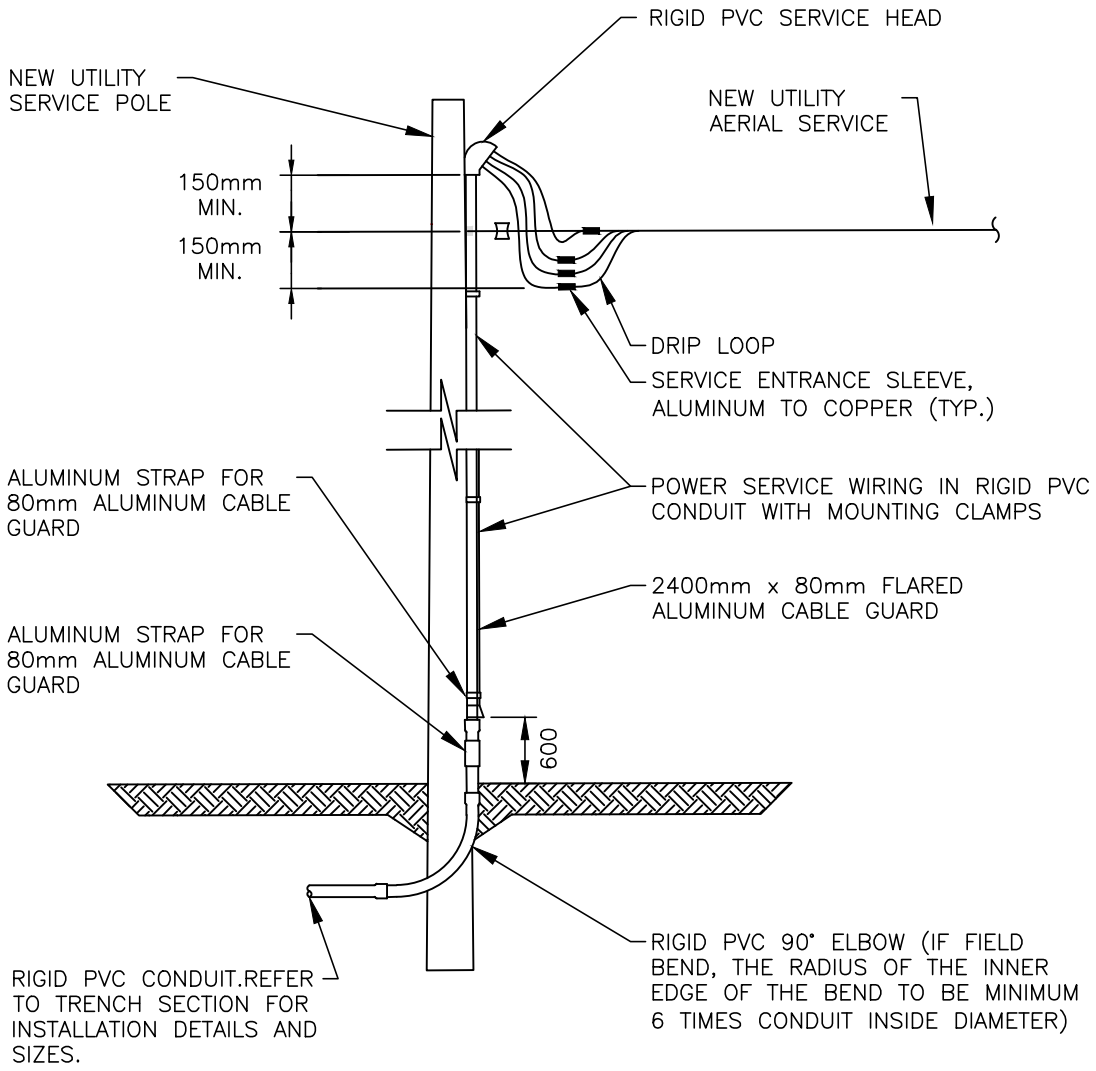
TOP CENTRE POINT COORDINATES:
NORTHING: .....
EASTING: .....

HALIFAX

STANDARD DETAIL

SPEED TABLE SURVEY VERIFICATION

DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 144



NOTES:

1. BREAKER MUST BE A DOUBLE POLE, NO SPARE SERVICE WIRES ARE ALLOWED.
2. CIRCUITS RATED AT MORE THAN 15Amps REQUIRE A CONTACTOR.
3. ALL WORK MUST BE IN COMPLIANCE WITH THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE AND INSPECTED BY NSPI
4. UNDERGROUND SERVICE CONDUIT AND GROUND MUST BE PROTECTED BY A U-GUARD AND BONDED AS PER CEC.
5. ALL SCREWS IN THE SERVICE SWITCH ARE TO BE NEVER SEIZED, AND MOUNTING SCREWS ARE TO BE STAINLESS STEEL ONLY.

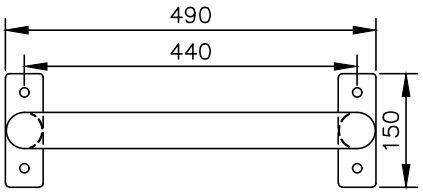
HALIFAX

STANDARD DETAIL

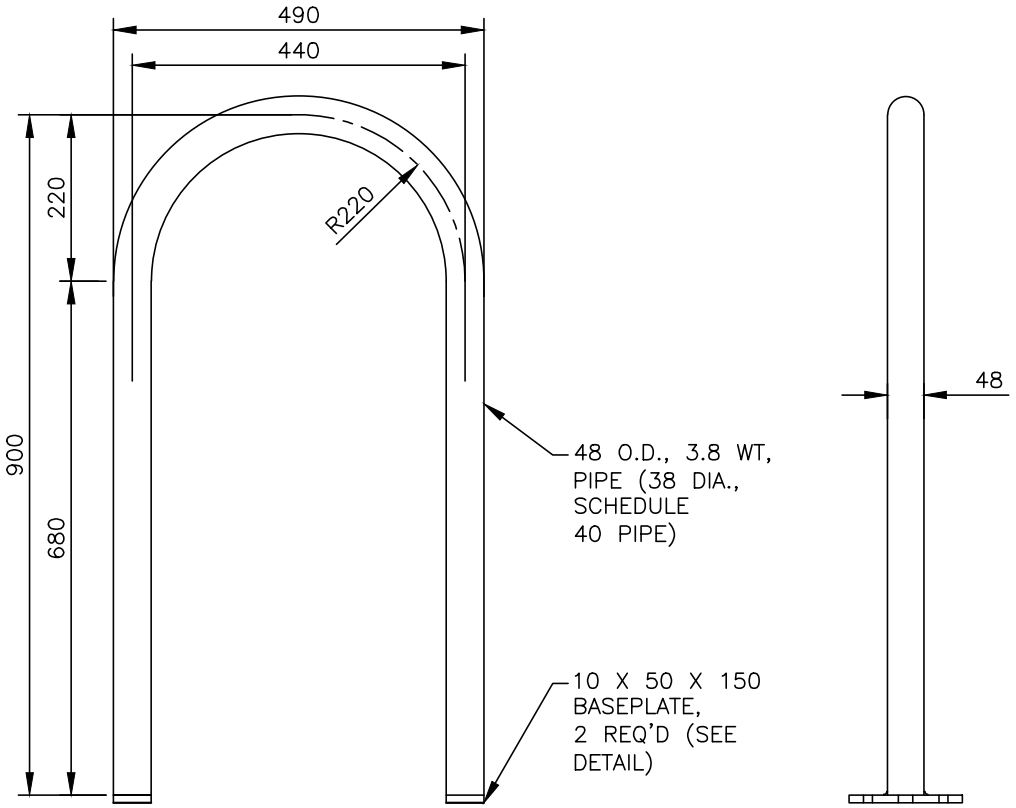
UTILITY POLE SERVICE DETAIL

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 160

HOT–DIPPED GALVANIZED STEEL OR
HOT–DIPPED GALVANIZED STEEL
WITH BLACK POWDER COAT



PLAN VIEW

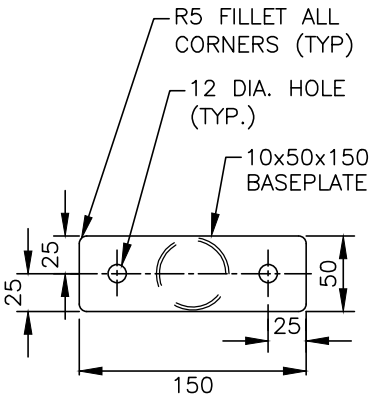


PROFILE VIEW

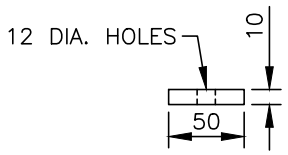
SECTION

NOTES:

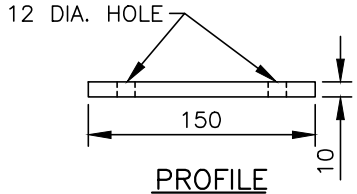
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. VARIATION OF THE DIMENSIONS PROVIDED ARE PERMITTED, BUT MUST BE SHOWN ON SUBMITTED DRAWINGS.
3. BIKE RACKS TO BE ANCHORED TO POURED IN PLACE CONCRETE SURFACE WITH 10 mmø X 125 mm EPOXY EXPANSION BOLTS (100 mm EMBEDMENT) OR APPROVED EQUIVALENT.



PLAN



SECTION



PROFILE

BASEPLATE DETAIL

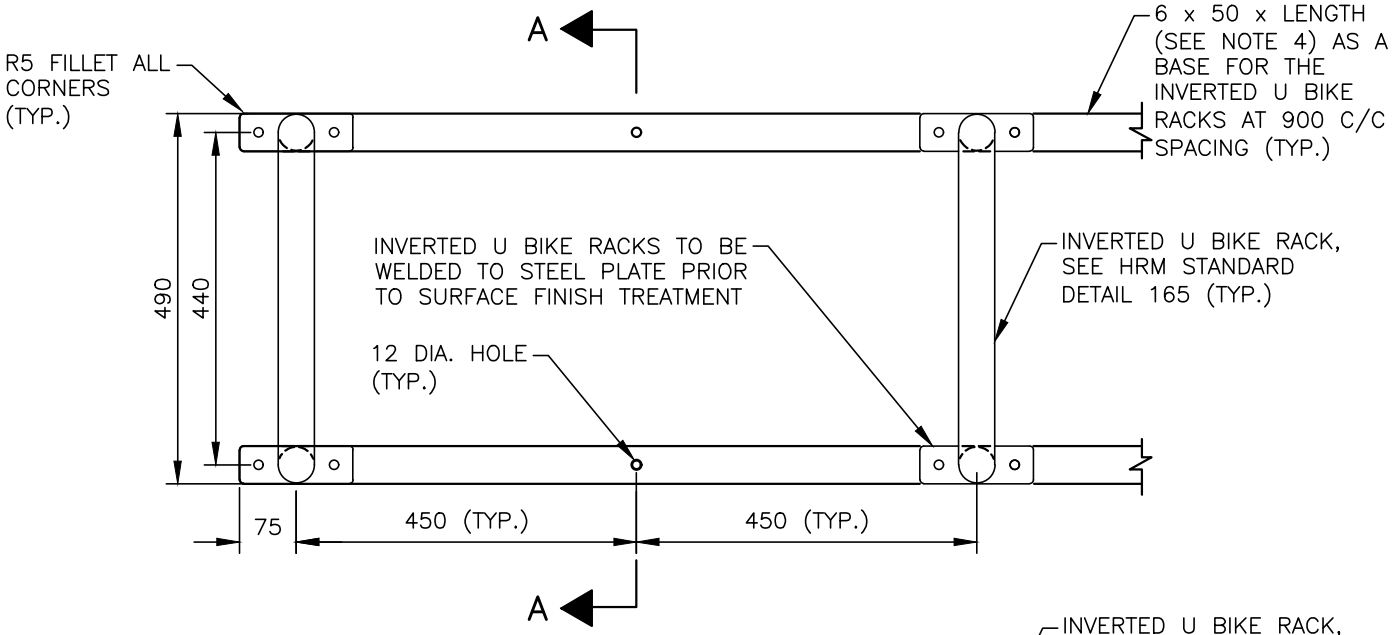
HALIFAX

STANDARD DETAIL

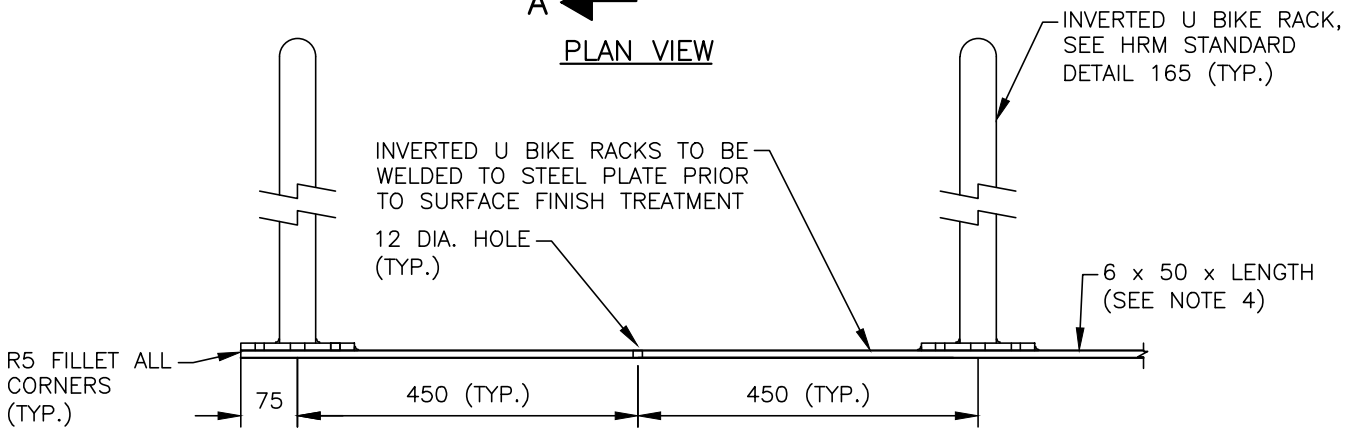
INVERTED U BIKE RACK

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 165

HOT–DIPPED GALVANIZED STEEL OR
HOT–DIPPED GALVANIZED STEEL WITH BLACK POWDER COAT



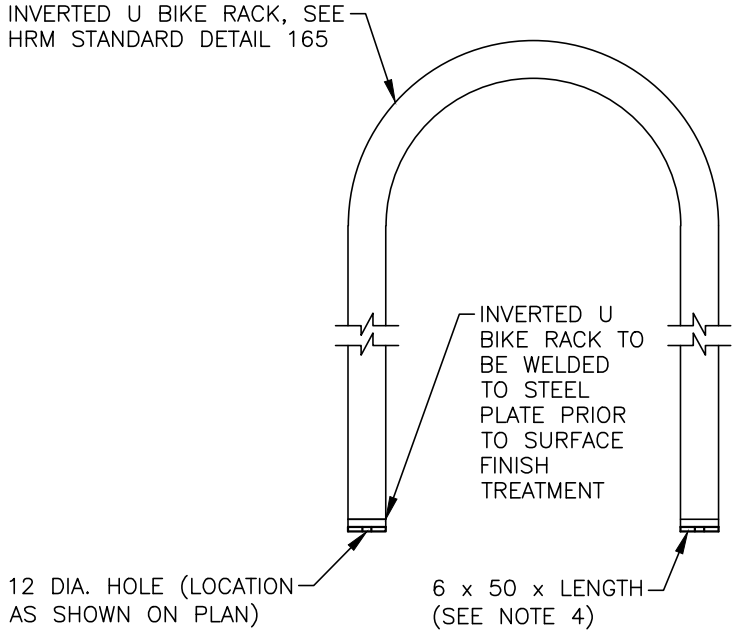
PLAN VIEW



PROFILE VIEW

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. VARIATION OF THE DIMENSIONS PROVIDED ARE PERMITTED, BUT MUST BE SHOWN ON SUBMITTED DRAWINGS.
3. BIKE RACKS TO BE ANCHORED TO POURED IN PLACE CONCRETE SURFACE WITH 10 mmø X 125 mm EPOXY EXPANSION BOLTS (100 mm EMBEDMENT) OR APPROVED EQUIVILANT.
4. MULTI BIKE RACK LENGTH WILL VARY FOR SERIES OF 2 TO 5 INVERTED U BIKE RACKS (AS REQUIRED).



SECTION A–A

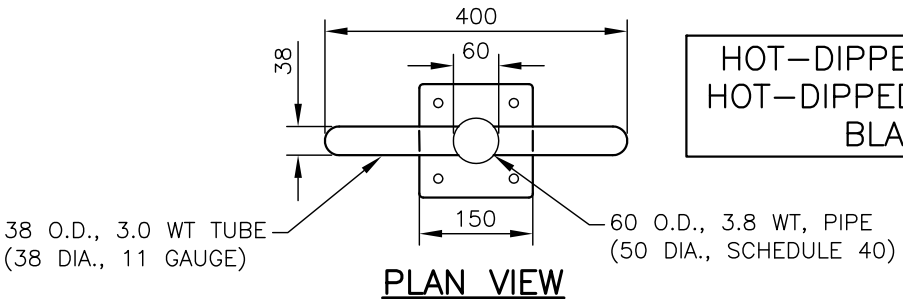
HALIFAX

STANDARD DETAIL

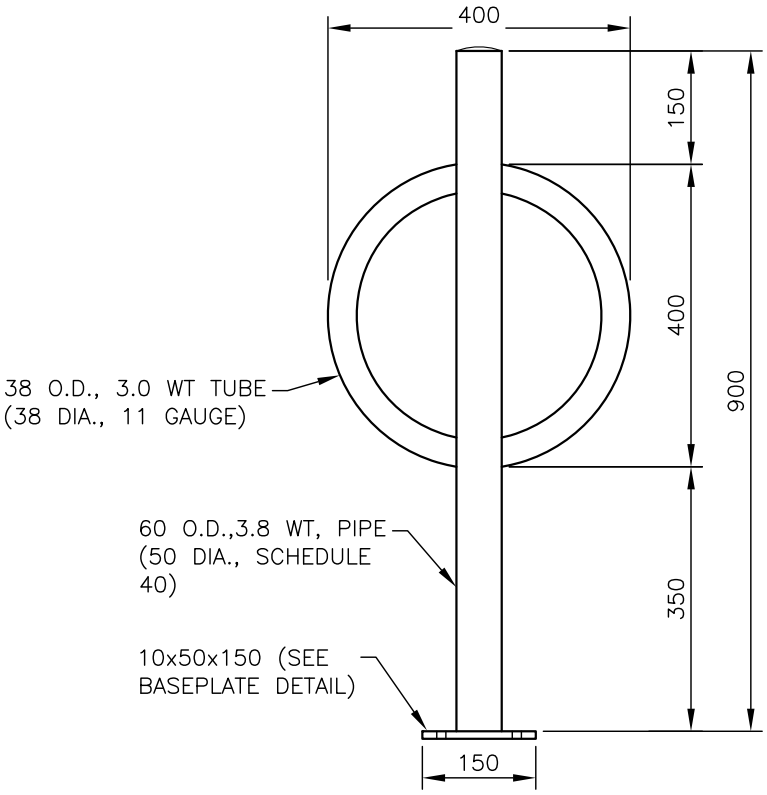
MULTI INVERTED U BIKE RACK

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 166

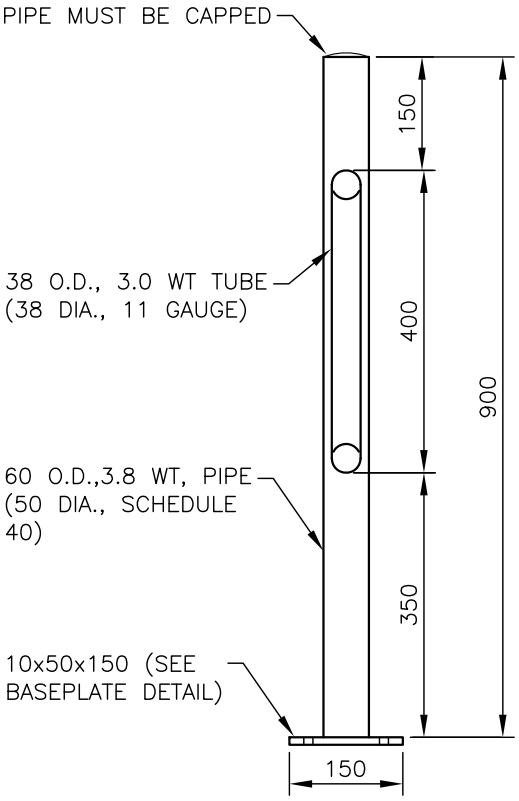
HOT–DIPPED GALVANIZED STEEL OR HOT–DIPPED GALVANIZED STEEL WITH BLACK POWDER COAT



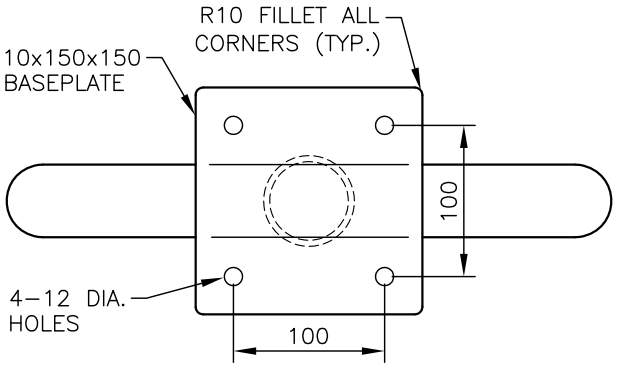
PLAN VIEW



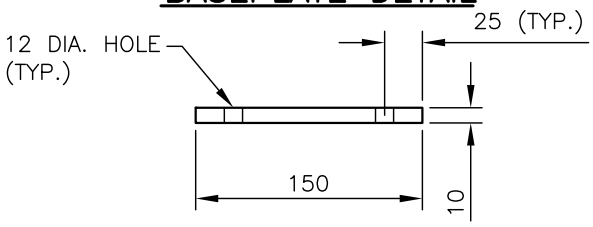
PROFILE VIEW



SECTION



BASEPLATE DETAIL



BASEPLATE SECTION

NOTES:

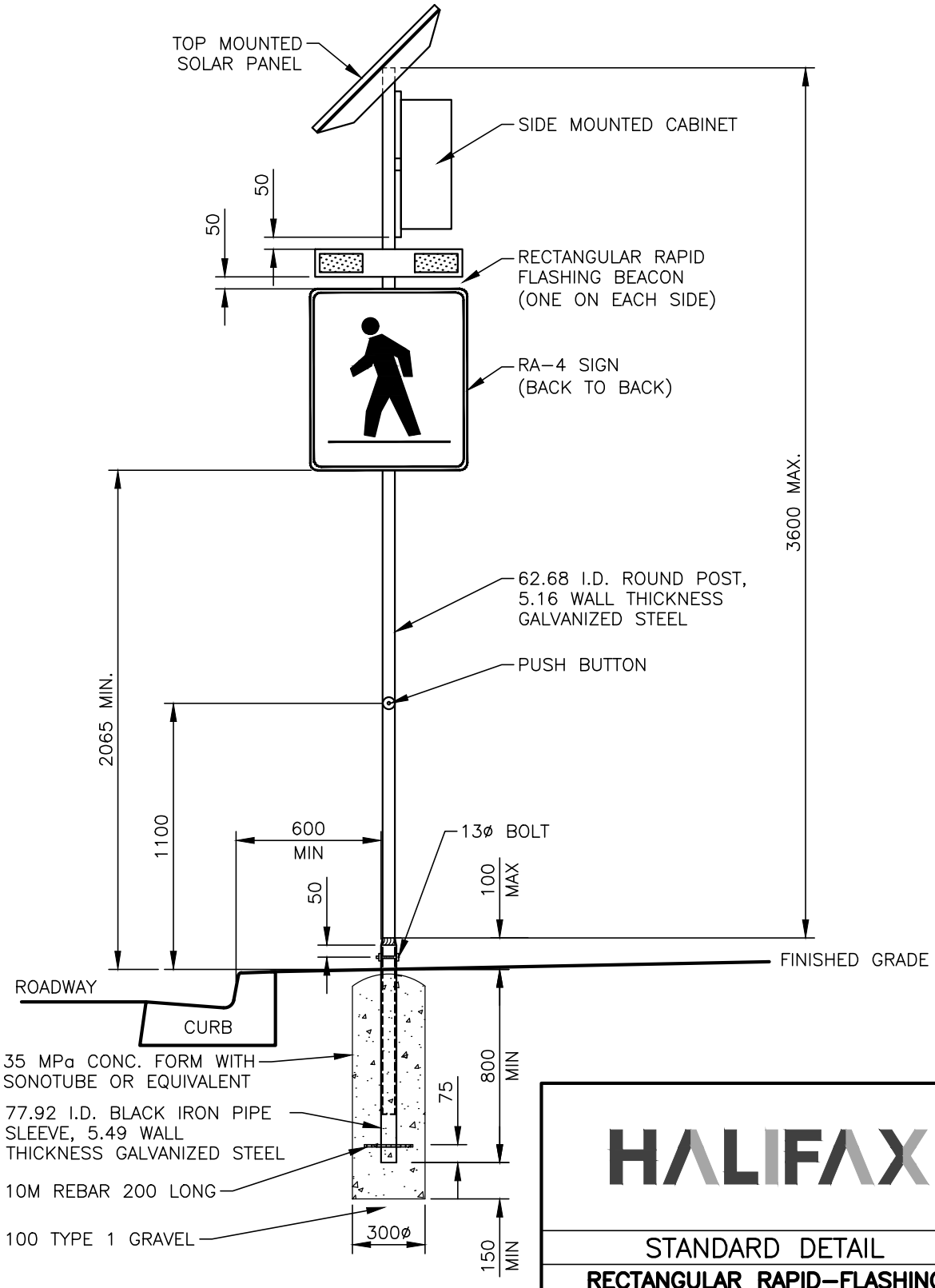
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. VARIATION OF THE DIMENSIONS PROVIDED ARE PERMITTED, BUT MUST BE SHOWN ON SUBMITTED DRAWINGS.
3. BIKE RACKS TO BE ANCHORED TO POURED IN PLACE CONCRETE SURFACE WITH 10 mmø X 125 mm EPOXY EXPANSION BOLTS (100 mm EMBEDMENT).

HALIFAX

STANDARD DETAIL

POST & RING BIKE RACK

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 167



NOTE:

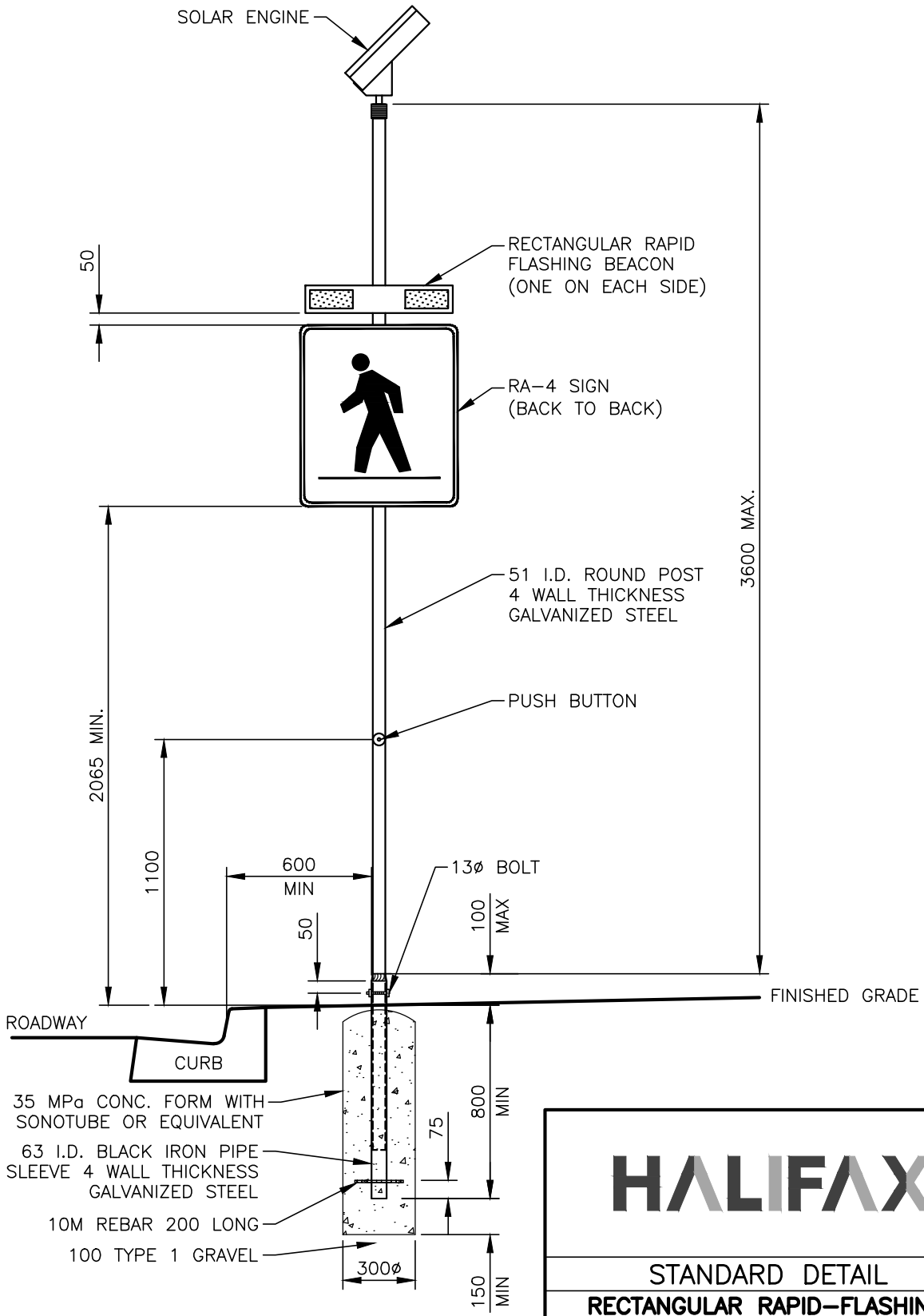
1. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

RECTANGULAR RAPID–FLASHING BEACON SIGNAL CONFIGURATION (SOLAR CABINET–BASED)

DATE: 2023	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 172



NOTE:

1. DIMENSIONS ARE IN MILLIMETRES.

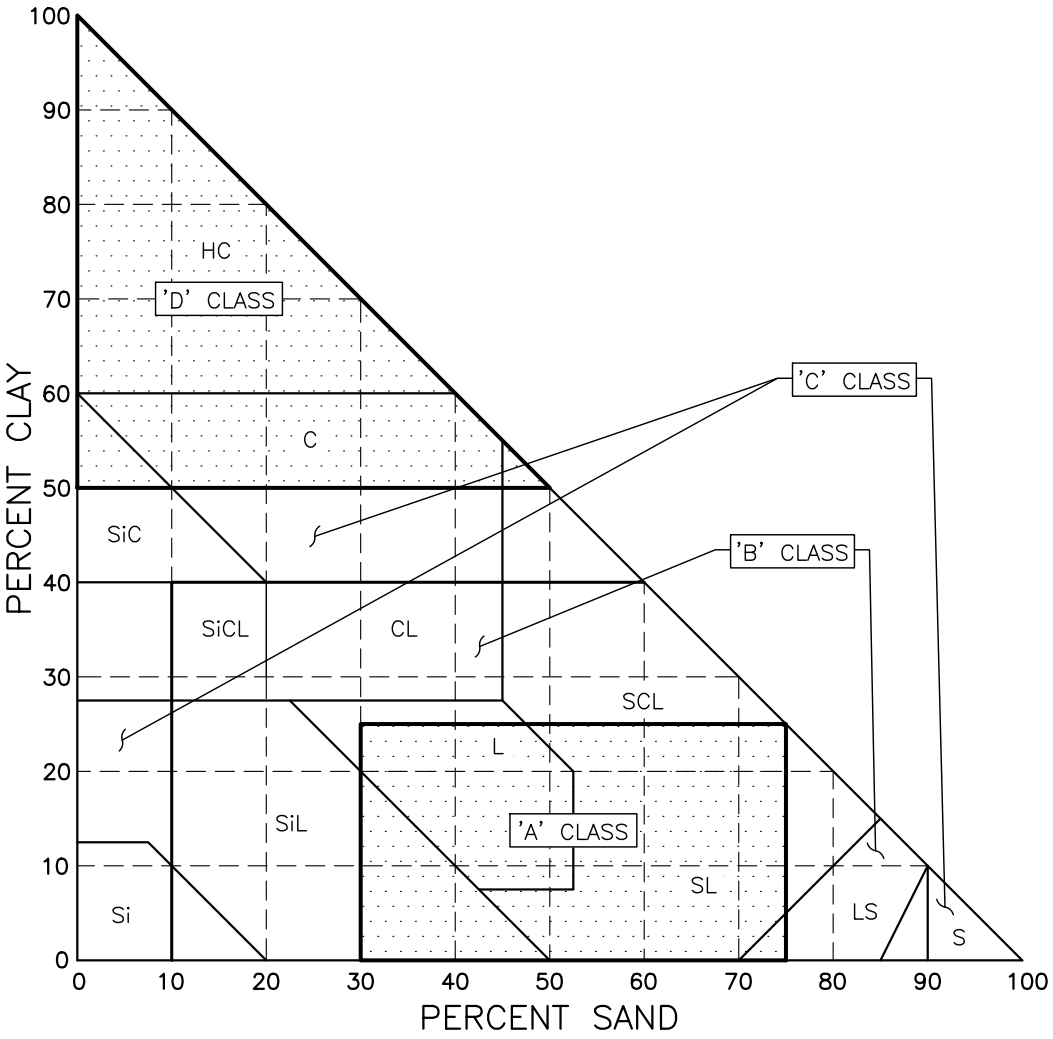
HALIFAX

STANDARD DETAIL

RECTANGULAR RAPID–FLASHING BEACON SIGNAL CONFIGURATION (SOLAR SELF–CONTAINED)

DATE: 2023	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 180

PROPOSED SOIL GROUPINGS



NOTES:

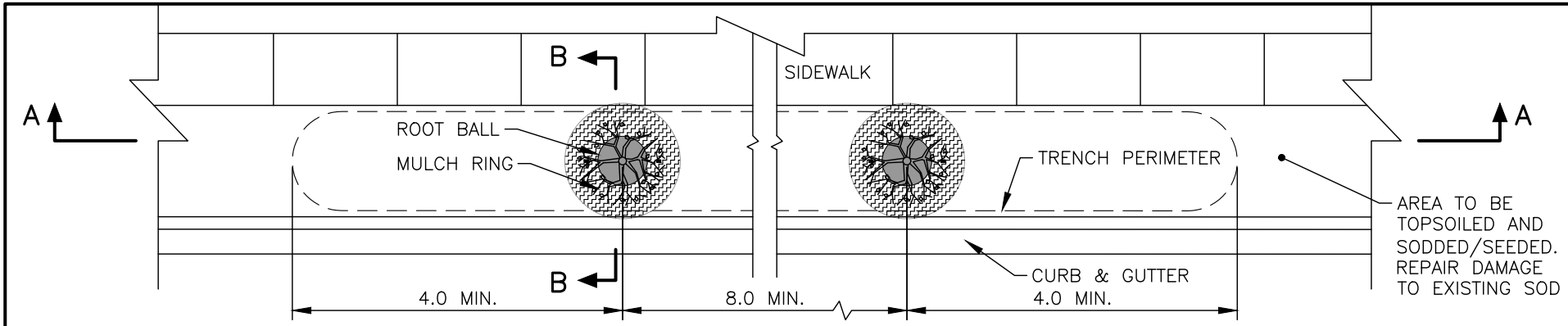
1. SOIL TEXTURE CLASSES. PERCENTAGES OF CLAY AND SAND IN THE MAIN TEXTURAL CLASSES OF SOIL; THE REMAINDER OF EACH CLASS IS SILT.

HALIFAX

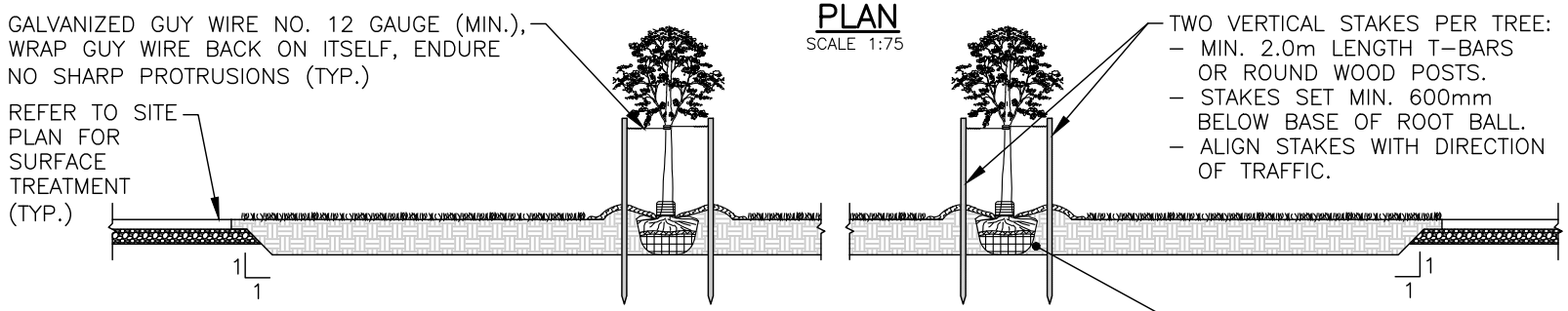
STANDARD DETAIL

SOIL TEXTURE TRIANGLE

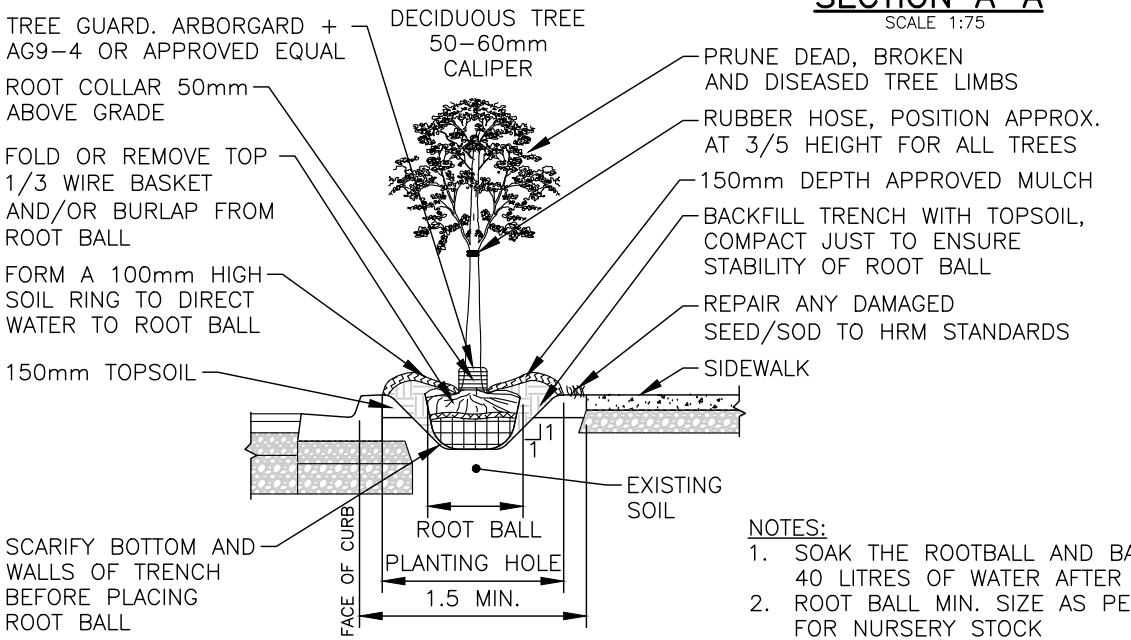
DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 181



PLAN
SCALE 1:75



SECTION A–A
SCALE 1:75



SECTION B–B
SCALE 1:50

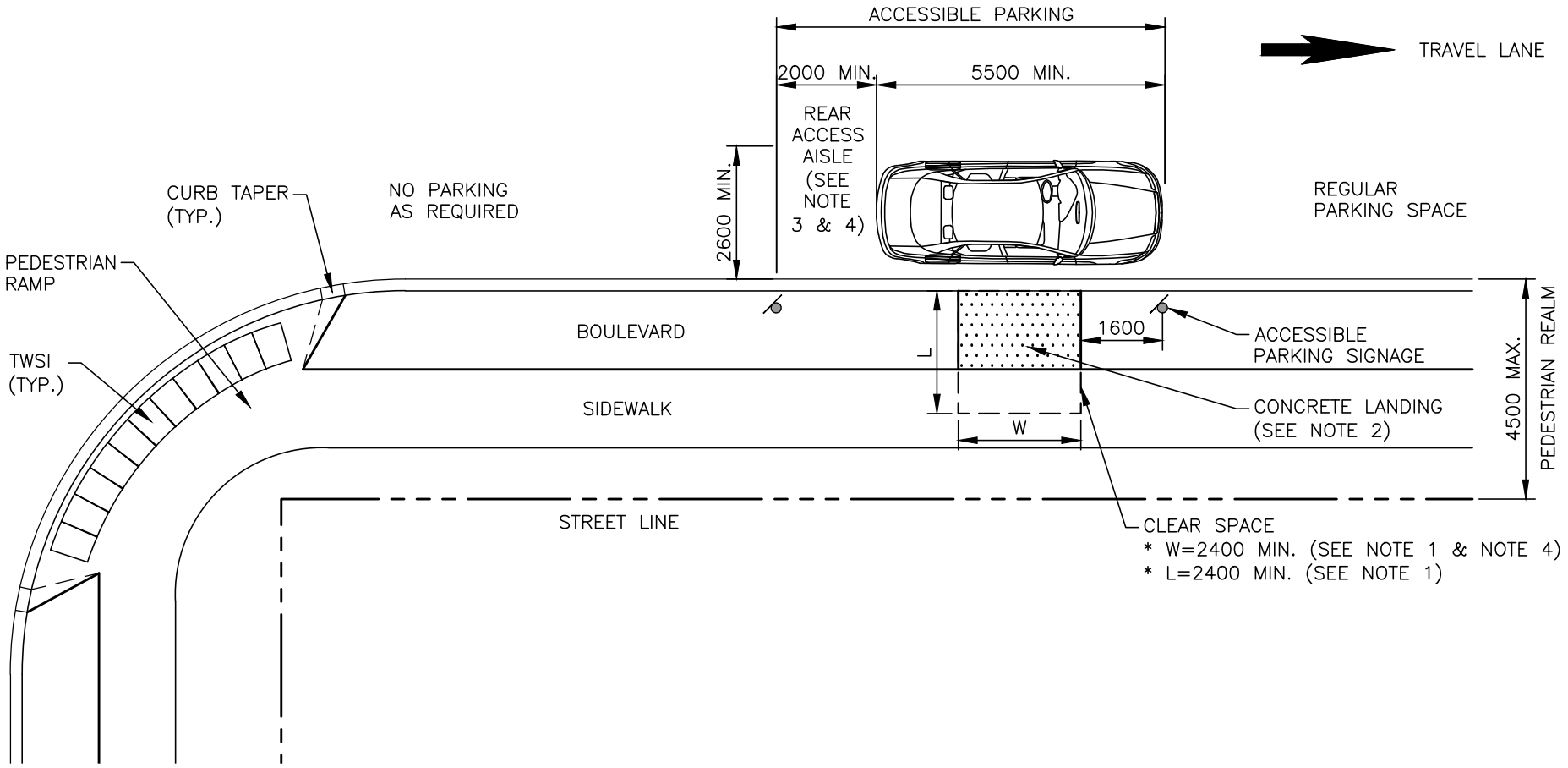
NOTES:
1. SOAK THE ROOTBALL AND BACKFILL AREA WITH 40 LITRES OF WATER AFTER PLANTING
2. ROOT BALL MIN. SIZE AS PER CNLA STANDARDS FOR NURSERY STOCK
3. MINIMUM TRENCH LENGTH: 8m PER TREE UNLESS APPROVED BY URBAN FORESTER

HALIFAX

STANDARD DETAIL

TREE PLANTING IN SOD BOULEVARD

DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 182



NOTES:

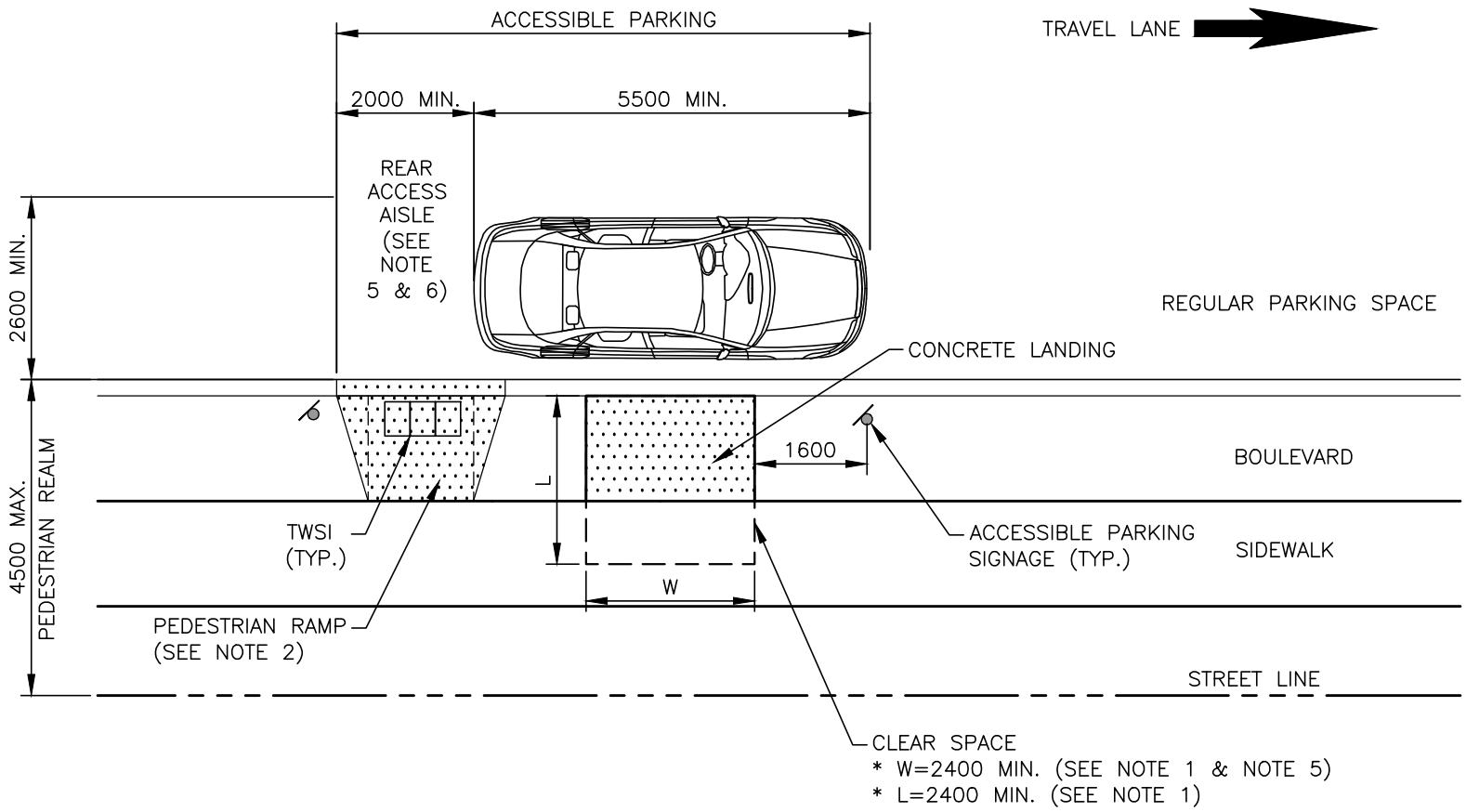
1. CLEAR SPACE SHALL BE PROVIDED WITH NO OBSTRUCTIONS AT PASSENGER SIDE DOOR LOCATIONS.
2. CONCRETE LANDING SHALL BE INSTALLED WITH NEW CONSTRUCTION, STREET/SIDEWALK REHABILITATION WHEN GRASS BOULEVARD SEPARATES PARKING AND ADJACENT SIDEWALK.
3. IN ABSENCE OF SIGN POST INSTALLATION, UNMARKED REAR ACCESS AISLE CAN BE REDUCED TO 1500 MIN WHERE 2000 MIN. IS NOT FEASIBLE.
4. IN RETROFIT SITUATIONS WHERE IT IS NOT TECHNICALLY FEASIBLE TO PROVIDE THE REQUIRED WIDTH FOR THE REAR ACCESS AISLE OR CLEAR SPACE LENGTH DUE TO TREE OR UTILITY POLE LOCATIONS, WIDTH MAY BE REDUCED TO 1500 MIN.
5. WHERE SIDEWALK ABUTS THE CURB THE ADJACENT SIDEWALK SHALL BE 2400 MINIMUM WIDTH.

HALIFAX

STANDARD DETAIL

ACCESSIBLE PARALLEL PARKING BEGINNING OF BLOCK – PEDESTRIAN REALM 4.5m OR LESS

DATE: 2023	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 193



NOTES:

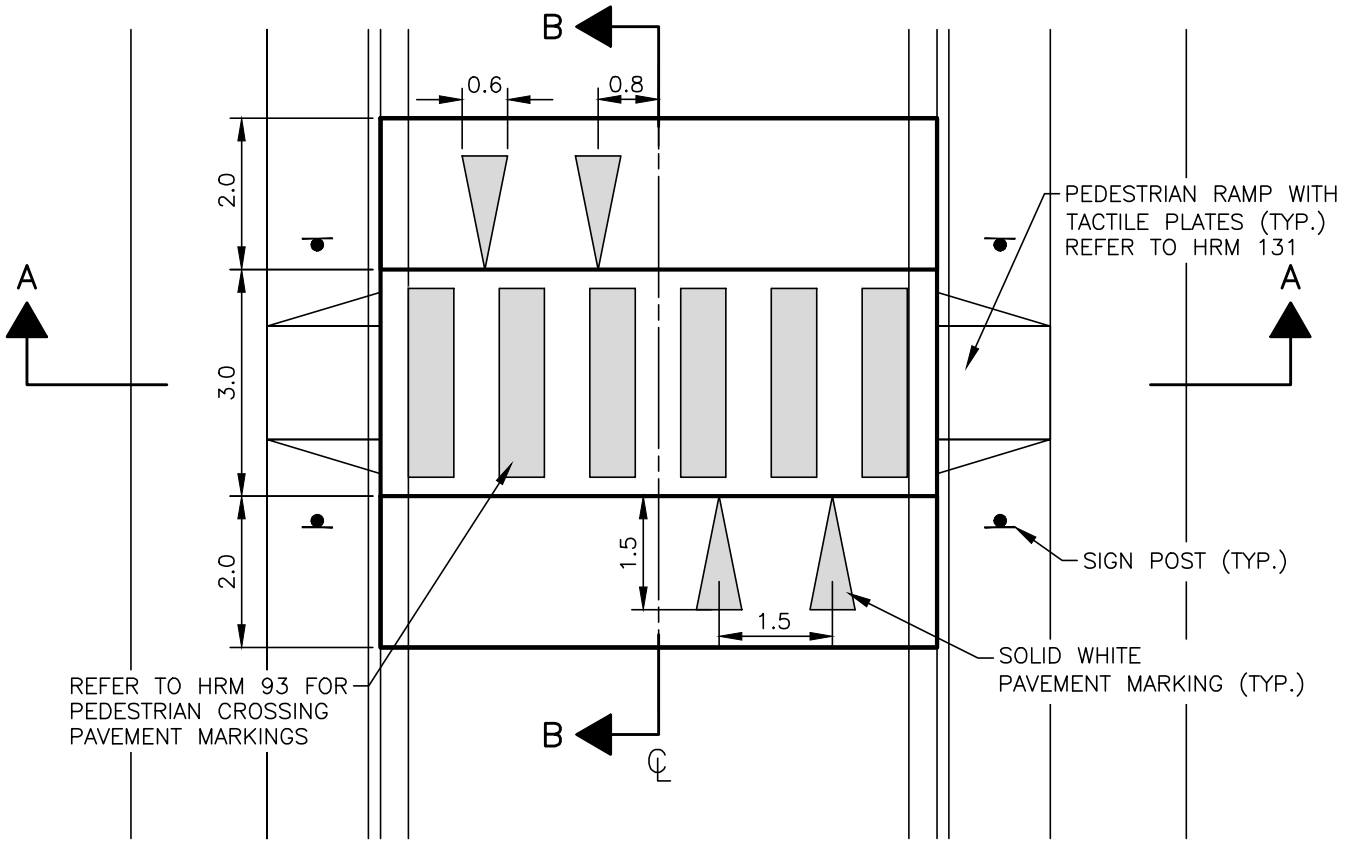
1. CLEAR SPACE SHALL BE PROVIDED WITH NO OBSTRUCTIONS AT PASSENGER SIDE DOOR LOCATIONS.
2. REFER TO HRM DETAIL 49 FOR CURB RAMP DETAILS.
3. TACTILE WALKING SURFACE INDICATOR (TWSI) PLATES REQUIRED AT ALL NEW RAMPS AS PER HRM DETAIL 131.
4. CONCRETE LANDING SHALL BE INSTALLED WITH NEW CONSTRUCTION, STREET/SIDEWALK REHABILITATION WHEN GRASS BOULEVARD SEPARATES PARKING AND ADJACENT SIDEWALK.
5. IN RETROFIT SITUATIONS WHERE IT IS NOT TECHNICALLY FEASIBLE TO PROVIDE THE REQUIRED WIDTH FOR THE REAR ACCESS AISLE OR CLEAR SPACE LENGTH DUE TO TREE OR UTILITY POLE LOCATIONS, WIDTH MAY BE REDUCED TO 1500 MIN.
6. IN ABSENCE OF SIGN POST INSTALLATION, UNMARKED REAR ACCESS AISLE CAN BE REDUCED TO 1500 MIN WHERE 2000 MIN IS NOT FEASIBLE.
7. WHEN DRIVEWAY USED AS SIDEWALK ACCESS INSTEAD OF CURB RAMP, NO TWSI PLATES SHALL BE REQUIRED.
8. WHERE SIDEWALK ABUTS THE CURB THE ADJACENT SIDEWALK SHALL BE 2400 MINIMUM WIDTH.

HALIFAX

STANDARD DETAIL

ACCESSIBLE PARALLEL PARKING MID-BLOCK AND END OF BLOCK – PEDESTRIAN REALM 4.5 m OR LESS

DATE: 2023	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 194

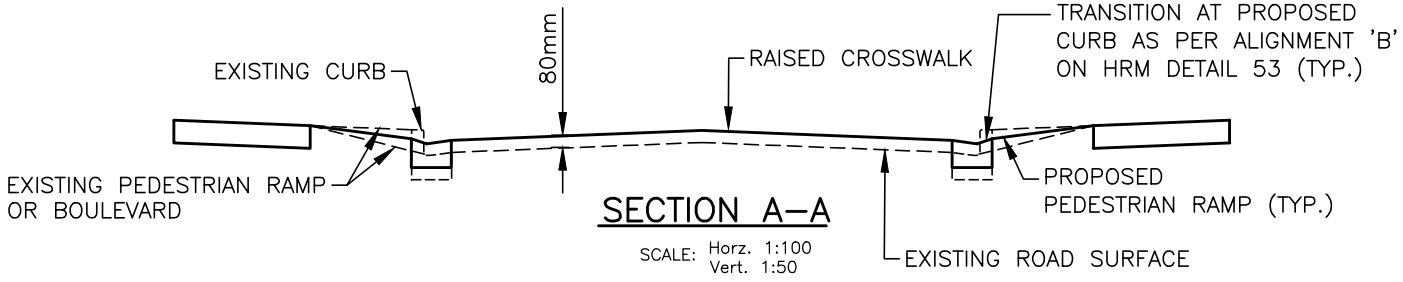


RAISED CROSSWALK (MIDBLOCK)

SCALE: 1:100

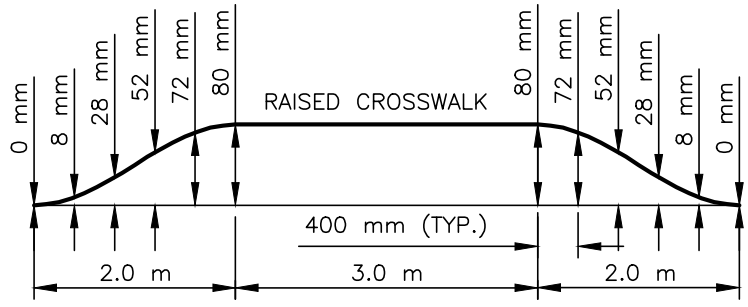
NOTES:

1. THE EXISTING ASPHALT SURFACE TO BE MILLED TO A DEPTH OF 40 mm WHEN RETROFITTING.
2. CATCH BASINS ARE REQUIRED ON THE UPHILL SIDE OF THE RAISED CROSSWALK AS INDICATED ON PLANS.
3. POSITIVE DRAINAGE TO NEAREST CATCHBASIN TO BE CONFIRMED BY THE ENGINEER AND ADJUSTED AS REQUIRED.
4. RAISED CROSSWALKS TO BE CONSTRUCTED USING TYPE D–HF ASPHALT (UNLESS OTHERWISE APPROVED BY HRM).
5. ALL DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.



SECTION A–A

SCALE: Horz. 1:100
Vert. 1:50



SECTION B–B

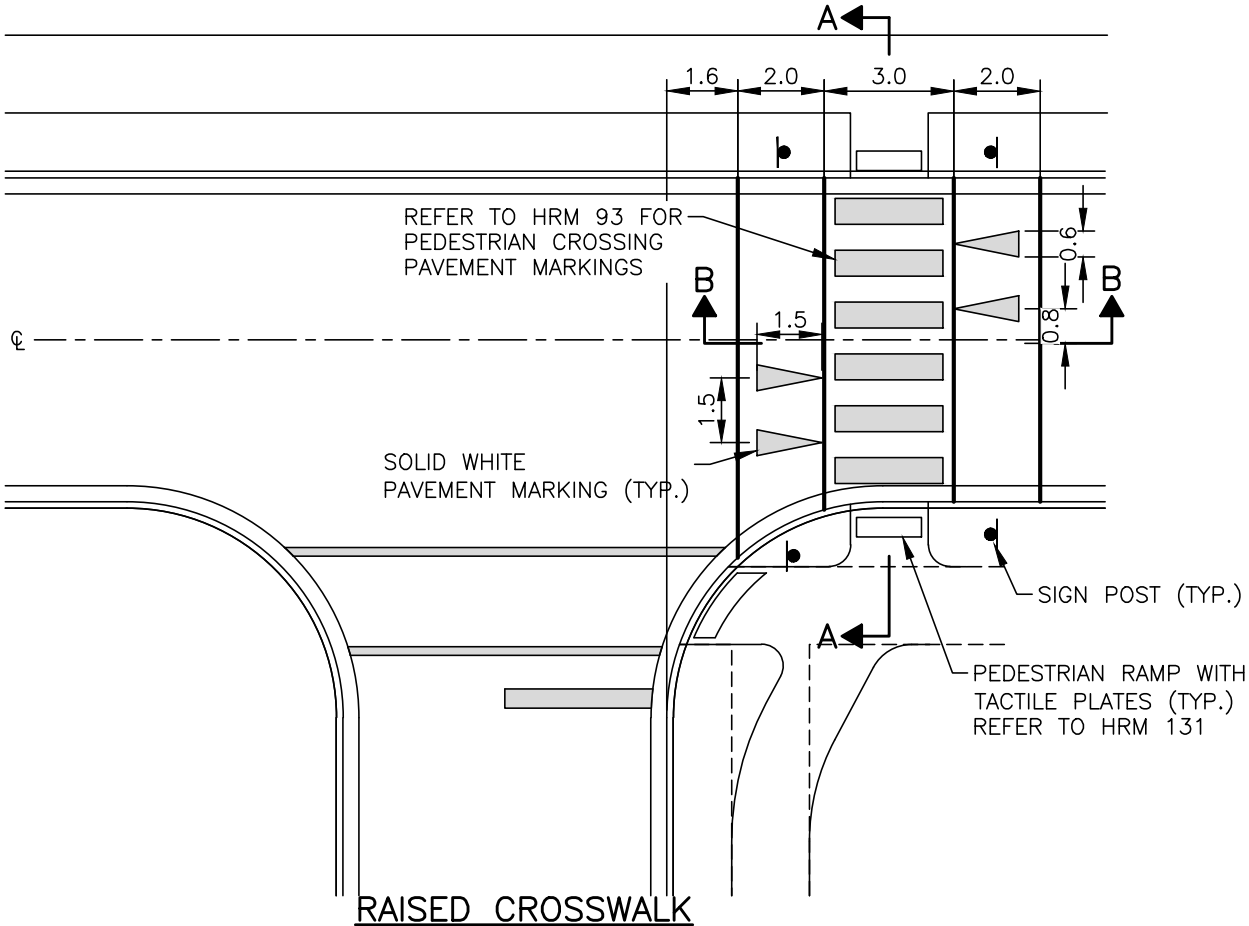
SCALE: 1:75

HALIFAX

STANDARD DETAIL

RAISED CROSSWALK (MIDBLOCK)

DATE: 2022	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 196

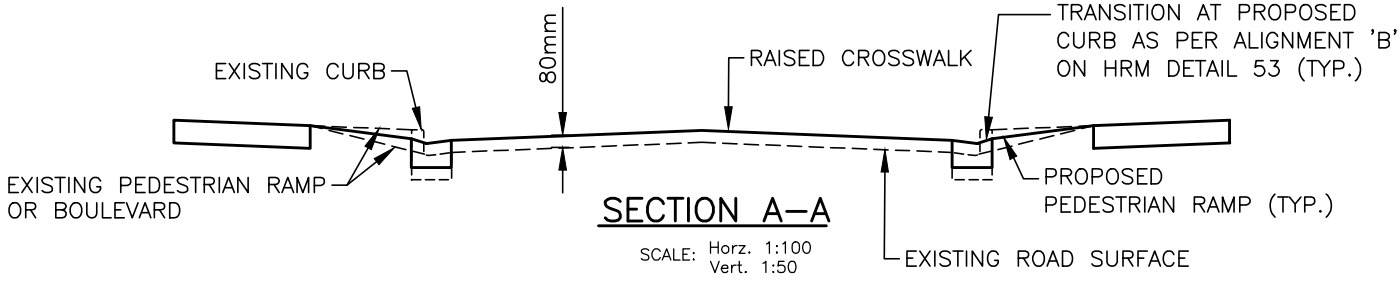


RAISED CROSSWALK (INTERSECTION – SCENARIO 2)

SCALE: 1:175

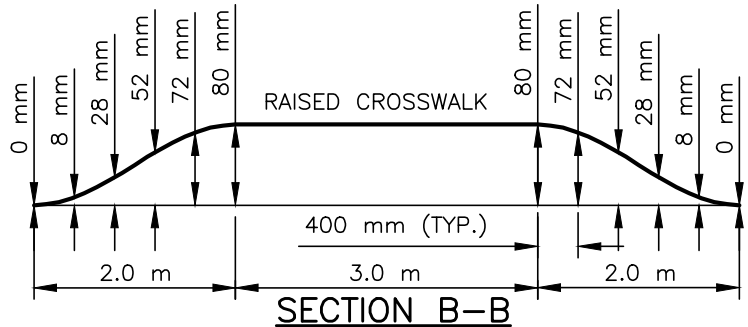
NOTES:

1. THE EXISTING ASPHALT SURFACE TO BE MILLED TO A DEPTH OF 40 mm WHEN RETROFITTING.
2. CATCH BASINS ARE REQUIRED ON THE UPHILL SIDE OF THE RAISED CROSSWALK AS INDICATED ON PLANS.
3. SIDEWALKS / TRAILS TO BE REALIGNED AS INDICATED ON PLANS.
4. POSITIVE DRAINAGE TO NEAREST CATCHBASIN TO BE CONFIRMED BY THE ENGINEER AND ADJUSTED AS REQUIRED.
5. RAISED CROSSWALKS TO BE CONSTRUCTED USING TYPE D–HF ASPHALT (UNLESS OTHERWISE APPROVED BY HRM).
6. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE INDICATED.



SECTION A–A

SCALE: Horz. 1:100
Vert. 1:50



SECTION B–B

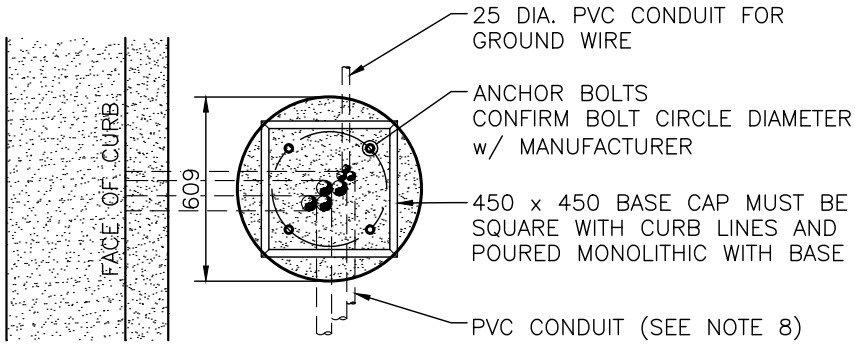
SCALE: 1:75

HALIFAX

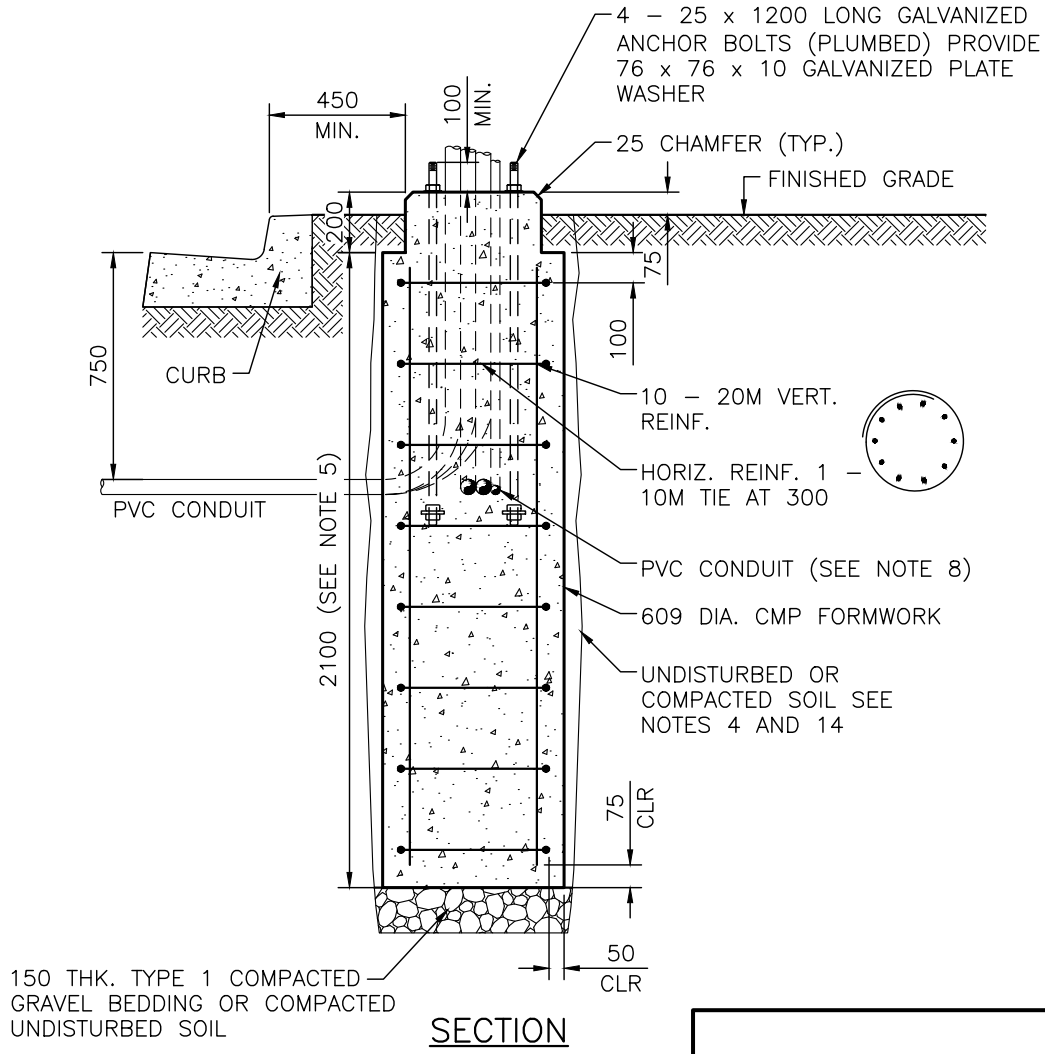
STANDARD DETAIL

RAISED CROSSWALK (INTERSECTION)

DATE: 2022	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 198



PLAN



SECTION

NOTES:

1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N1.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATION A

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 68

NOTES FOR SHAFT FOUNDATIONS ONLY:

1. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN.

2. CONCRETE 28 DAY STRENGTH TO BE 35 MPa, CLASS OF EXPOSURE 'C1', AIR CONTENT 5 – 8%.

3. ENGINEER TO CONFIRM SOIL PARAMETERS BEFORE PROCEEDING WITH WORK.

4. DESIGN IS FOR DRY SOIL CONDITIONS (NO GROUND WATER TABLE) WITH A MINIMUM γ_{SOIL} = 18 kN/m³, Kp = 3.5, ø = 34°.

5. WHERE SOUND BEDROCK IS ENCOUNTERED, FOUNDATION CONSTRUCTION MAY BE MODIFIED TO USE ROCK ANCHORS DOWELED INTO ROCK. REFER TO DRAWING No. 74B.1 AND 74B.2.

6. ANCHORS TO BE MINIMUM GRADE A307, PLATE WASHERS MINIMUM GRADE 300W.

7. CONTRACTOR TO CONFIRM ANCHOR BOLT DIAMETER, LENGTH AND BOLT CIRCLE PRIOR TO PROCEEDING WITH WORK.

8. PROPOSED PVC CONDUIT SIZE AND CONFIGURATION INDICATED ON DRAWINGS. CONDUITS ARE ASSUMED TO BE "BUNCHED" AND IN CENTRE OF PEDESTAL. FOR PEDESTAL WITH NOMINAL DIAMETER OF D–NOM, DIAMETER OF "BUNCHED" CONDUIT AT TOP OF CONCRETE SHALL BE D–B MAXIMUM. IF "BUNCHED" DIAMETER AT TOP OF CONCRETE IS GREATER THAN D–B, USE D–ADJ DIA. PEDESTAL.

D–NOM	D–B	D–ADJ
609	150	762
762	250	914
914	300	1067

9. CONCRETE MUST BE PLACED IN A SINGLE POUR.

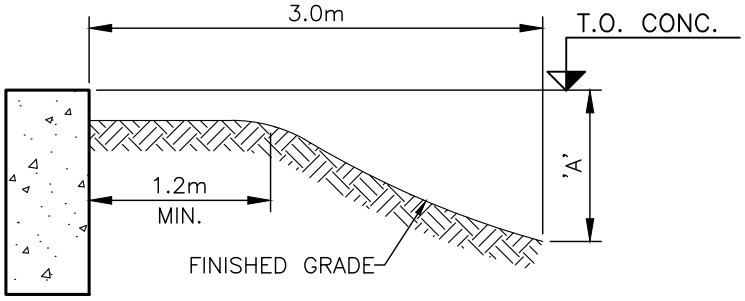
10. EMBEDMENT DEPTH OF THE FOUNDATION WAS DERIVED FROM THE ONTARIO MINISTRY OF TRANSPORTATION ENGINEERING STANDARDS BRANCH – GUIDELINES FOR THE DESIGN OF HIGH MAST POLE FOUNDATIONS, 4TH Ed. 2004.

11. TORSIONAL RESISTANCE OF THE FOUNDATION WAS COMPLETED BASED ON BROM'S TORSION LOADING ANALYSIS OF SHORT SINGLE SHAFT FOUNDATIONS.

12. RESIDUAL FRICTIONAL COEFFICIENT (μ) BETWEEN THE CIRCUMFERENCE OF THE FOUNDATION AND SOIL IS TO BE 0.3.

13. WHERE FINISHED GRADE IS LOWER NEAR POLE BASE, HEIGHT OF FOUNDATION TO BE INCREASED AS FOLLOWS:

- 'A' UP TO 0.3m, NO INCREASE.
- 'A' UP TO 0.6m, INCREASE HEIGHT BY 0.2m.
- 'A' UP TO 1.0m, INCREASE HEIGHT BY 0.4m.



14. ENSURE FULLY COMPACTED SOIL AROUND FOUNDATION.

HALIFAX

STANDARD DETAIL

STANDARD NOTES SHAFT FOUNDATIONS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 68N1

NOTES FOR SPREAD FOUNDATIONS ONLY:

1. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN.
2. CONCRETE 28 DAY STRENGTH TO BE 35 MPa, CLASS OF EXPOSURE 'C1', AIR CONTENT 5 – 8%.
3. ENGINEER TO CONFIRM SOIL PARAMETERS BEFORE PROCEEDING WITH WORK.
4. DESIGN IS FOR DRY SOIL CONDITIONS (NO GROUND WATER TABLE) WITH A MINIMUM γ_{SOIL} = 18 kN/m^3, Kp = 3.5, ϕ = 34°.
5. WHERE SOUND BEDROCK IS ENCOUNTERED, FOUNDATION CONSTRUCTION MAY BE MODIFIED TO USE ROCK ANCHORS DOWELED INTO ROCK. REFER TO DRAWING No. 74B.1 AND 74B.2.
6. ANCHORS TO BE MINIMUM GRADE A307, PLATE WASHERS MINIMUM GRADE 300W.
7. CONTRACTOR TO CONFIRM ANCHOR BOLT DIAMETER, LENGTH AND BOLT CIRCLE PRIOR TO PROCEEDING WITH WORK.
8. PROPOSED PVC CONDUIT SIZE AND CONFIGURATION INDICATED ON DRAWINGS. CONDUITS ARE ASSUMED TO BE "BUNCHED" AND IN CENTRE OF PEDESTAL. FOR PEDESTAL WITH NOMINAL DIAMETER OF D–NOM, DIAMETER OF "BUNCHED" CONDUIT AT TOP OF CONCRETE SHALL BE D–B MAXIMUM. IF "BUNCHED" DIAMETER AT TOP OF CONCRETE IS GREATER THAN D–B, USE D–ADJ DIA. PEDESTAL.

D–NOM	D–B	D–ADJ
609	150	762
762	250	914
914	300	1067

9. FOOTINGS SHALL BEAR ON UNDISTURBED SOIL, STRUCTURAL FILL OR BEDROCK WITH A MINIMUM SERVICEABILITY LIMIT STATES (SLS) BEARING CAPACITY OF 150kPa AND A MINIMUM ULTIMATE LIMIT STATES (ULS) BEARING CAPACITY OF 250kPa.
10. TORSIONAL RESISTANCE ANALYSIS WAS COMPLETED CONSIDERING PASSIVE SOIL PRESSURE AT THE VERTICAL FACE OF THE FOOTINGS AND A FRICTION (μ) BETWEEN THE UNDERSIDE OF THE FOOTING AND SOIL OF 0.4.
11. FINISHED GRADE ELEVATIONS SHALL NOT VARY MORE THAN 150mm OVER A DISTANCE EQUAL TO TWICE THE EMBEDMENT DEPTH.
12. AFTER CONSTRUCTION, CUT OFF TOP OF CMP FORMWORK TO 150mm BELOW FINISHED GRADE.

HALIFAX

STANDARD DETAIL

STANDARD NOTES SPREAD FOOTINGS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 68N2

TRAFFIC SIGNAL POLE BASE DESIGN SELECTION GUIDE FOR TYPE OF POLE BASE MAXIMUM DESIGN CRITERIA USED FOR DIFFERENT TYPES OF POLE BASES

CONFIGURATION	POLE TYPE			TRAFFIC SIGNAL EQUIPMENT				PEDESTRIAN HEADS	STREET LIGHTING	SIGNAGE AREA (m^2)	POLE BASE DESIGN TYPE	HRM STANDARD DETAIL NO.
				MAST ARMS			SIGNAL HEADS (PER POLE)					
	MATERIAL	BASE DIA. (mm)	TOTAL HEIGHT (m) (SEE NOTE 4)	NO.	LENGTH (m)	ORIENTATION						
A	ALUM.	203	5.2	0	N.A.	N.A.	2	2	1@0.4	0	1	68
B	ALUM.	203	5.8	1	4.6	N.A.	2	2	NONE	0.7	2	69
C	ALUM.	203	5.8	2	4.6, TOTAL	180°	2	2	NONE	0.7	2	69
D	ALUM.	203	5.8	2	3.1 EACH	90°	2	2	NONE	0.7	2	69
E	ALUM.	254	8.2	0	N.A.	N.A.	0	0	2@1.85	0	2	69
F	ALUM.	254	6.7	1	6.1	N.A.	2	2	NONE	0.7	3	70
G	ALUM.	254	6.7	2	6.1, TOTAL	180°	2	2	NONE	0.7	3	70
H	ALUM.	254	6.7	2	3.6 EACH	90°	2	2	NONE	0.7	3	70
I	ALUM.	254	6.7	1	7.6	N.A.	2	2	NONE	0.7	4	71
J	ALUM.	254	6.7	2	7.6, TOTAL	180°	2	2	NONE	0.7	4	71
K	ALUM.	254	6.7	2	4.6 EACH	90°	2	2	NONE	0.7	4	71
L	ALUM.	254	11.3	0	N.A.	N.A.	3	2	2@1.85	0	4	71
M	ALUM.	254	9.7	1	7.6	N.A.	2	2	1@1.8	0.7	4A	71A
N	STEEL	254	6.1	1	12.2	N.A.	4	2	NONE	0.7	5	72
O	STEEL	254	6.1	2	12.2, TOTAL	180°	5	2	NONE	0.7	5	72
P	STEEL	254	6.1	2	7.6 EACH	90°	5	2	NONE	0.7	5	72
Q	STEEL	343	10.7	1	12.2	N.A.	4	2	2@3.6m	0.7	5A	72A
R	STEEL	343	10.7	2	12.2, TOTAL	180°	5	2	2@3.6m	0.7	5A	72A
S	STEEL	343	10.7	2	7.6 EACH	90°	5	2	2@3.6m	0.7	5A	72A
T	STEEL	343	6.1	1	18.3	N.A.	4	2	NONE	0.7	6	73
U	STEEL	343	6.1	2	18.3, TOTAL	180°	5	2	NONE	0.7	6	73
V	STEEL	343	6.1	2	10.7 EACH	90°	5	2	NONE	0.7	6	73
W	STEEL	343	10.7	1	18.3	N.A.	4	2	2@3.6m	0.7	6A	73A
X	STEEL	343	10.7	2	18.3, TOTAL	180°	5	2	2@3.6m	0.7	6A	73A
Y	STEEL	343	10.7	2	10.7 EACH	90°	5	2	2@3.6m	0.7	6A	73A
Z	STEEL	343	6.1	1	21.3	N.A.	4	2	NONE	0.7	7	74
AA	STEEL	343	6.1	2	21.3, TOTAL	180°	5	2	NONE	0.7	7	74
AB	STEEL	343	6.1	2	12.2 EACH	90°	5	2	NONE	0.7	7	74
AC	STEEL	343	10.7	1	21.3	N.A.	4	2	2@3.6m	0.7	7A	74A
AD	STEEL	343	10.7	2	21.3, TOTAL	180°	5	2	2@3.6m	0.7	7A	74A
AE	STEEL	343	10.7	2	12.2 EACH	90°	5	2	2@3.6m	0.7	7A	74A
AF	ALUM.	254	13.4	0	N.A.	N.A.	0	0	2@3.6m	0.7	8	74X

NOTES

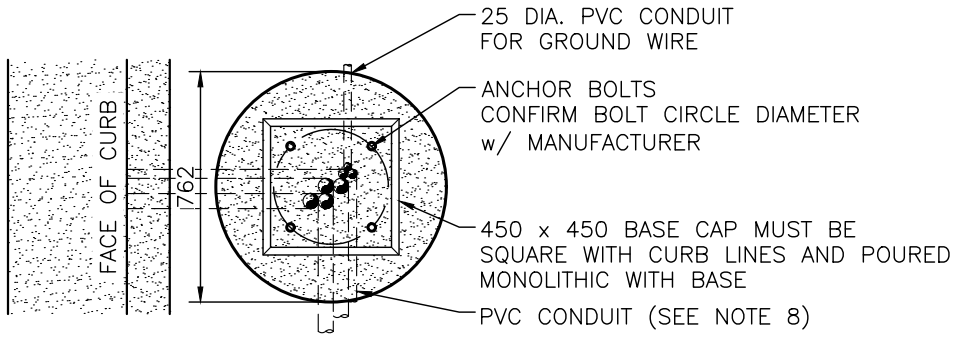
1. REFER TO HALIFAX STANDARD DRAWINGS 68 TO 74X FOR ADDITIONAL NOTES AND DESIGN CRITERIA.
2. SEE STANDARD DRAWING NO. HRM 74B FOR REVISED POLE BASE FOUNDATION DESIGN WHICH MAY BE PERMITTED IN ROCK CONDITIONS.
3. TRAFFIC SIGNAL POLE DESIGN CRITERIA MAY DIFFER FROM THAT AS SHOWN ON THIS TABLE. SHOULD THIS OCCUR, DESIGN ENGINEER SHALL BE CONSULTED FOR INTERPRETATION OF TABLE AND SELECTION OF POLE BASE TYPE, OR ADDITIONAL DESIGN IF REQUIRED.
4. TOTAL POLE HEIGHT INDICATED INCLUDES A 0.61 m HIGH TRANSFORMER BASE.

HALIFAX

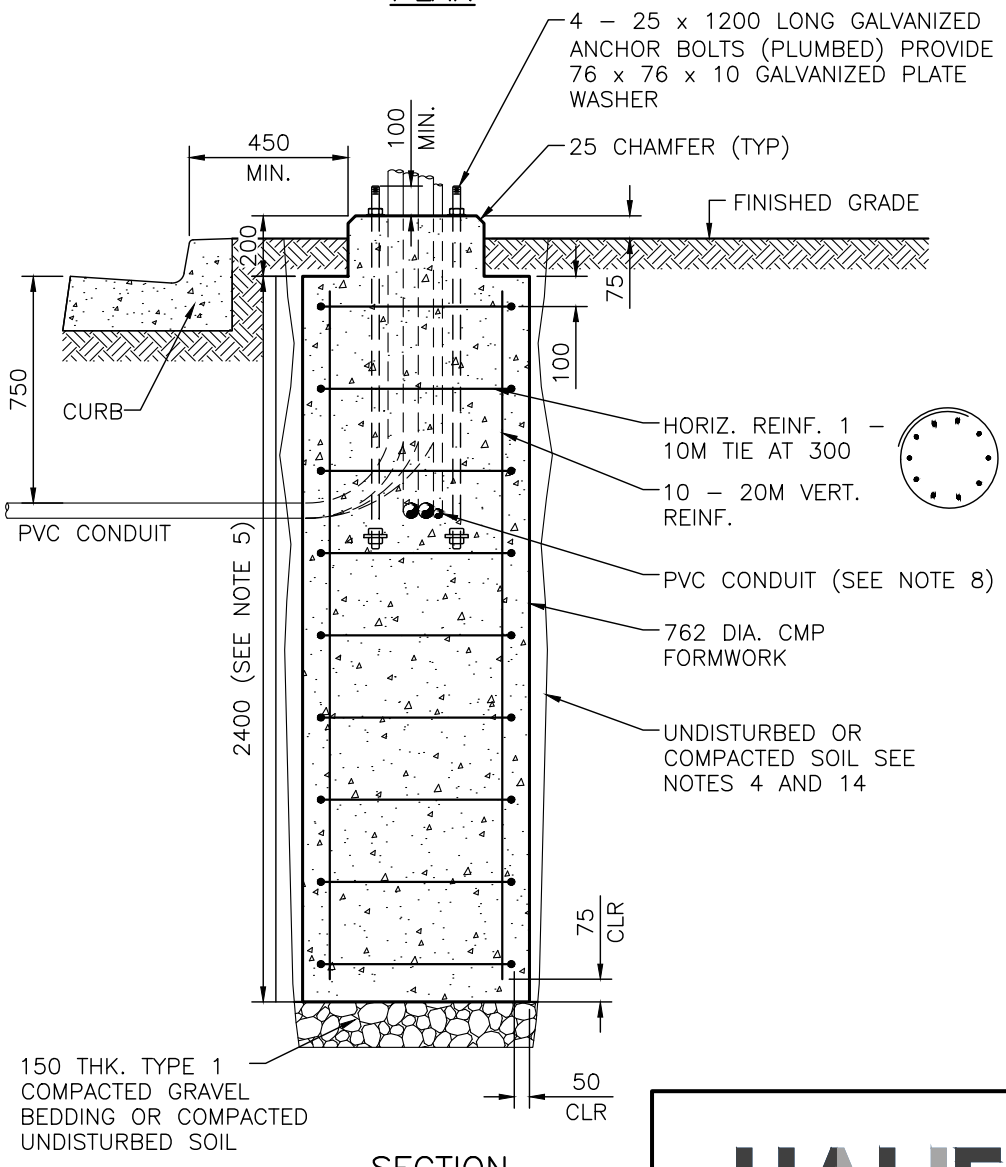
STANDARD DETAIL

POLE BASE SELECTION GUIDE

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 68N3



PLAN



SECTION

NOTES:

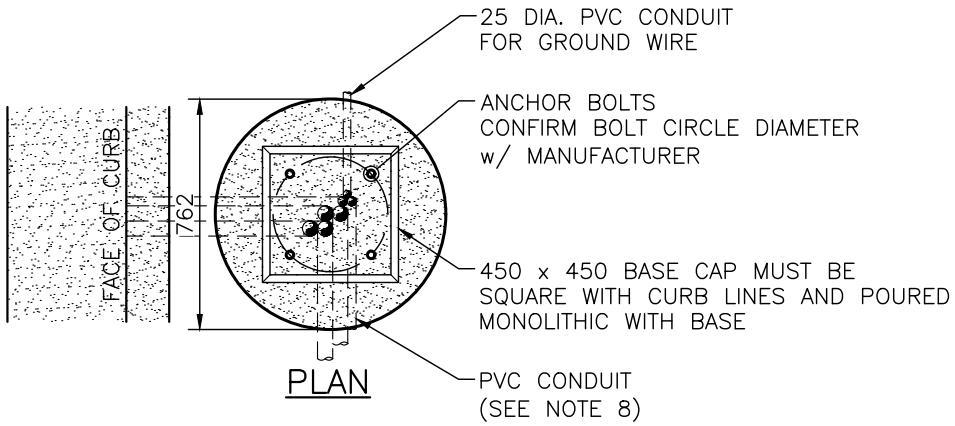
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N1.
3. DIMENSIONS ARE IN MILLIMETRES.

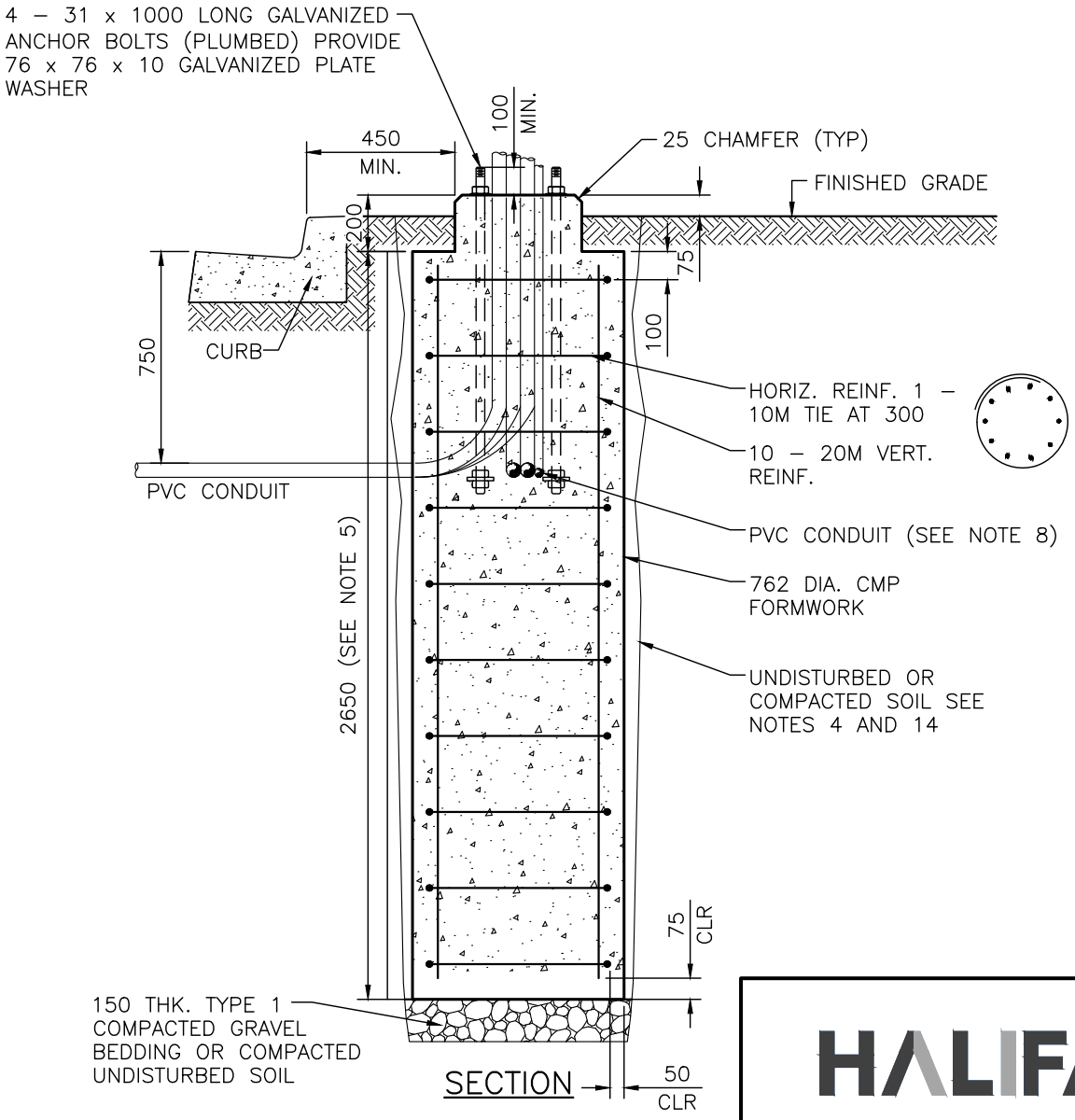
HALIFAX

STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATIONS B, C, D AND E

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 69





NOTES:

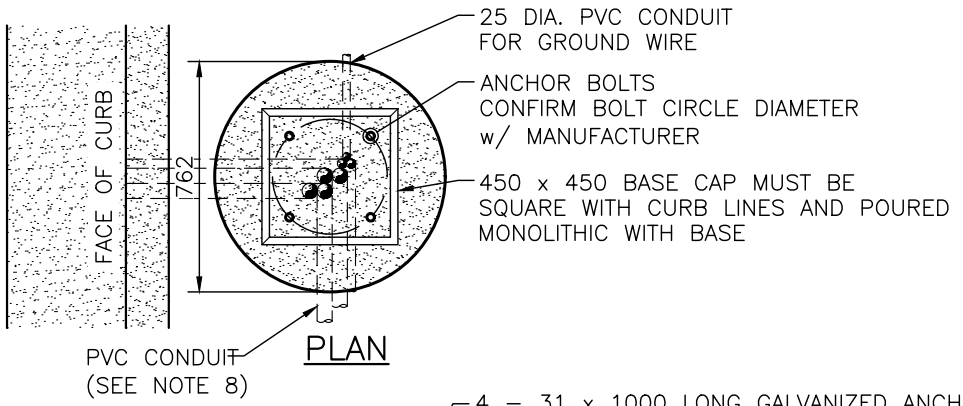
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N1.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

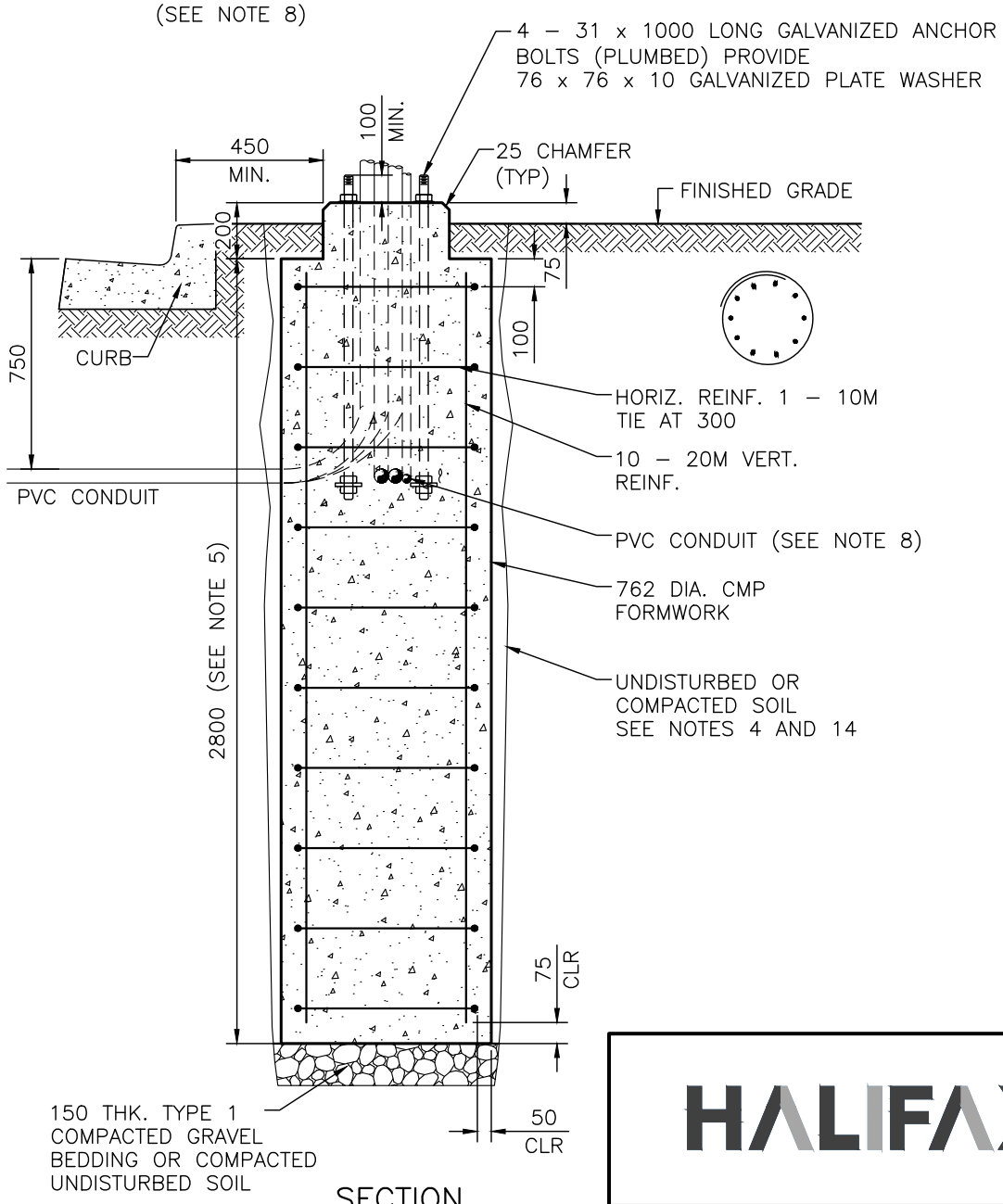
STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATIONS F, G AND H

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 70



PLAN



SECTION

NOTES:

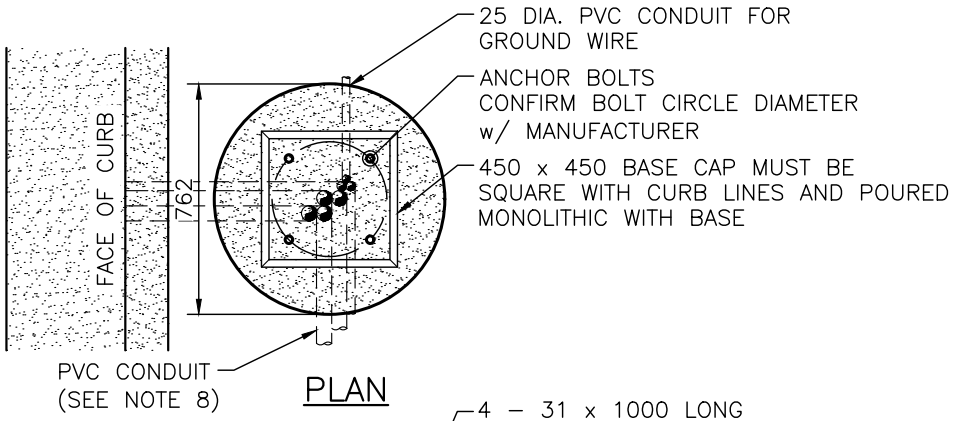
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N1.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

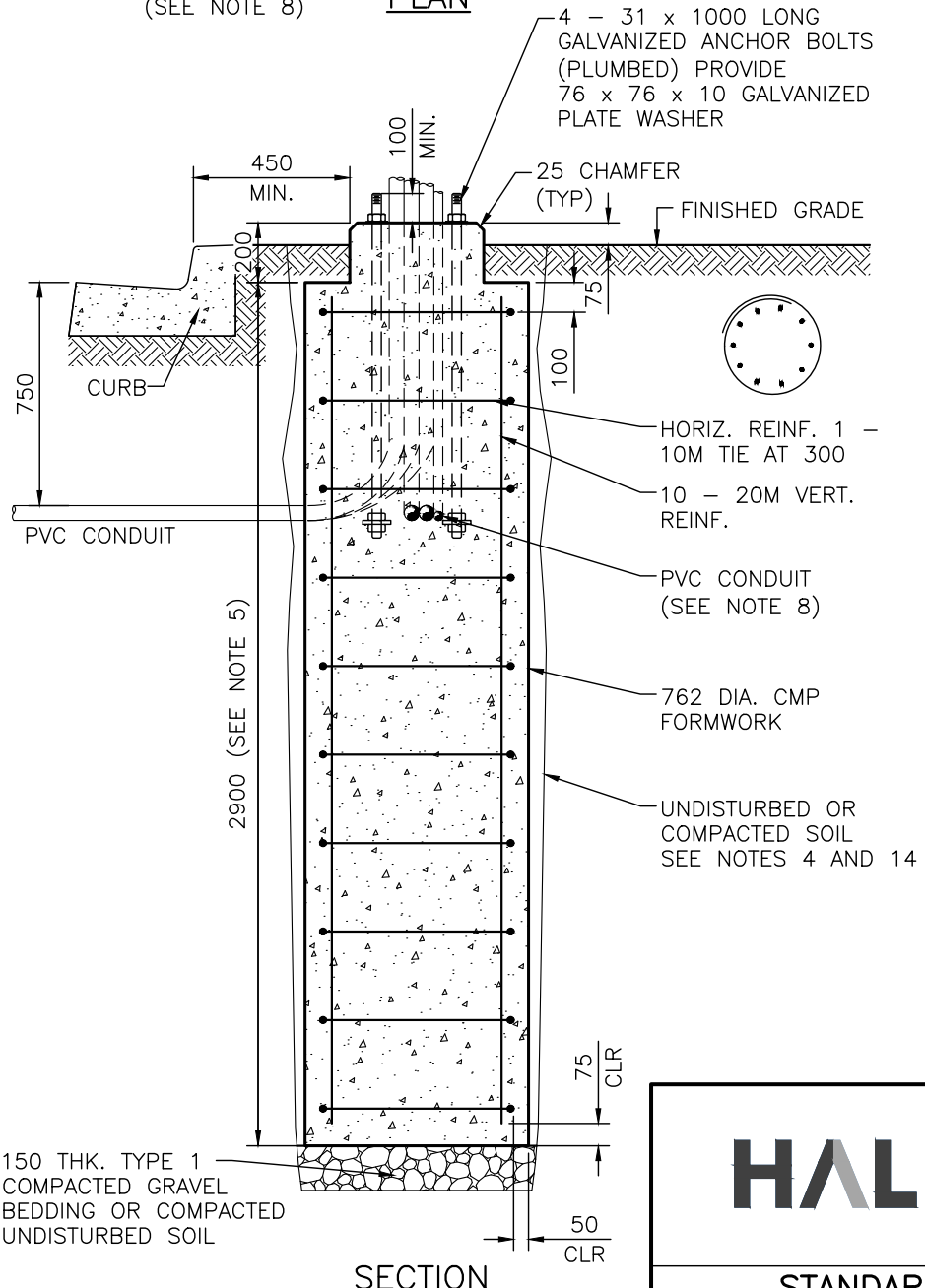
STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATION I, J. K AND L

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 71



PLAN



SECTION

NOTES:

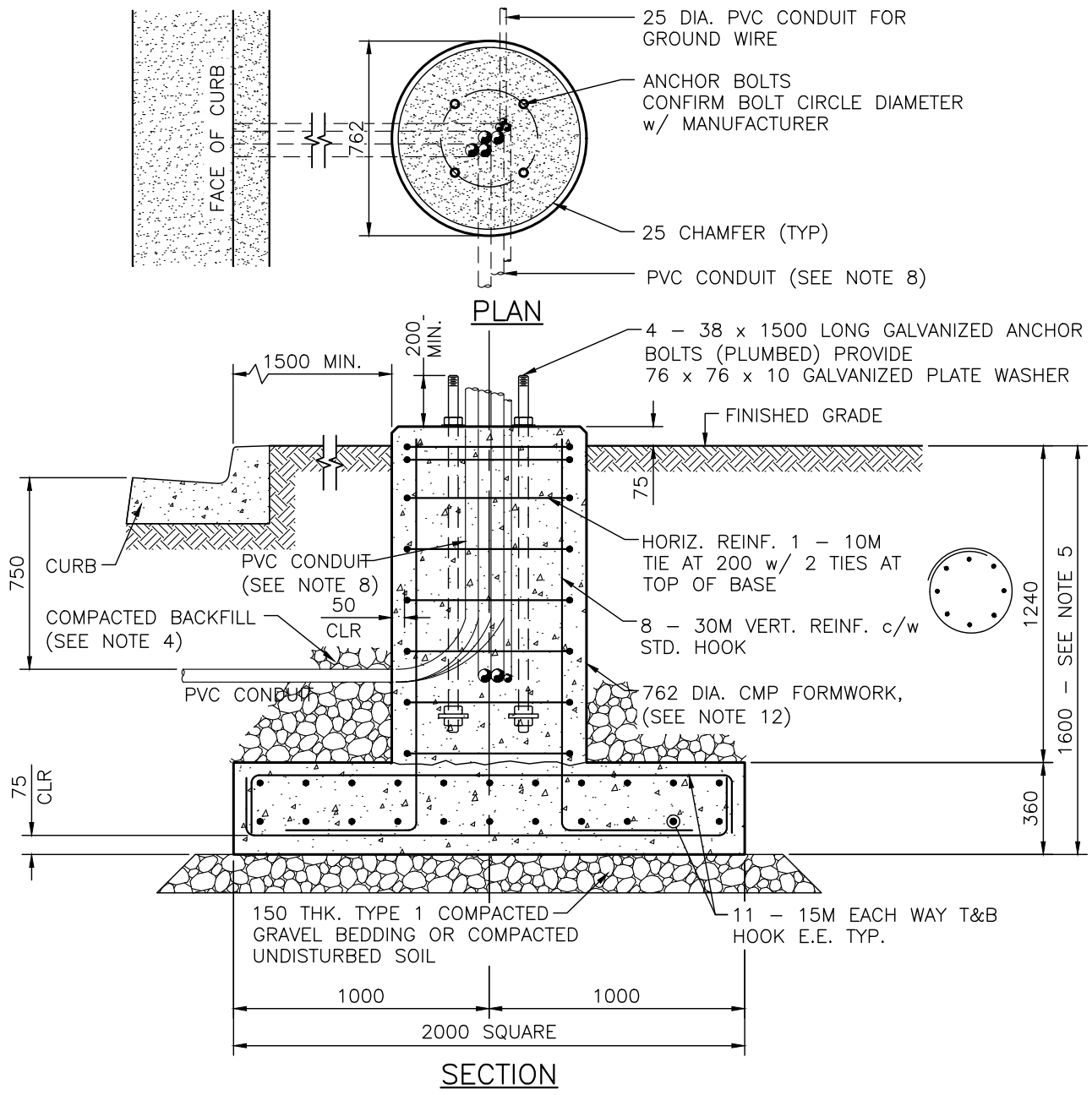
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N1.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATION M

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 71A



NOTES:

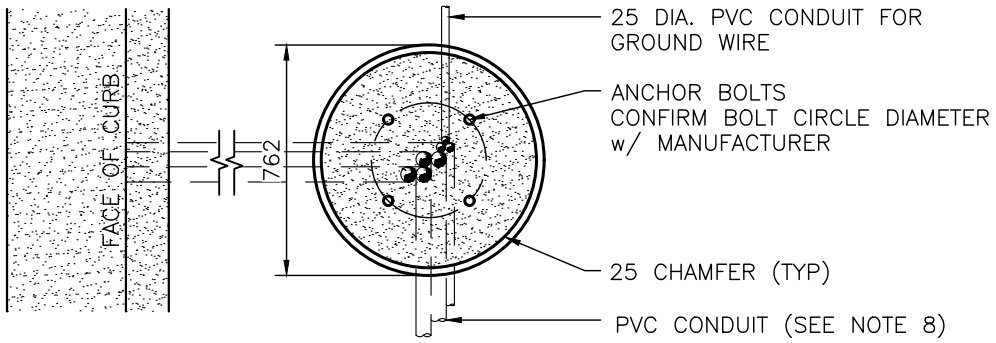
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N2.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

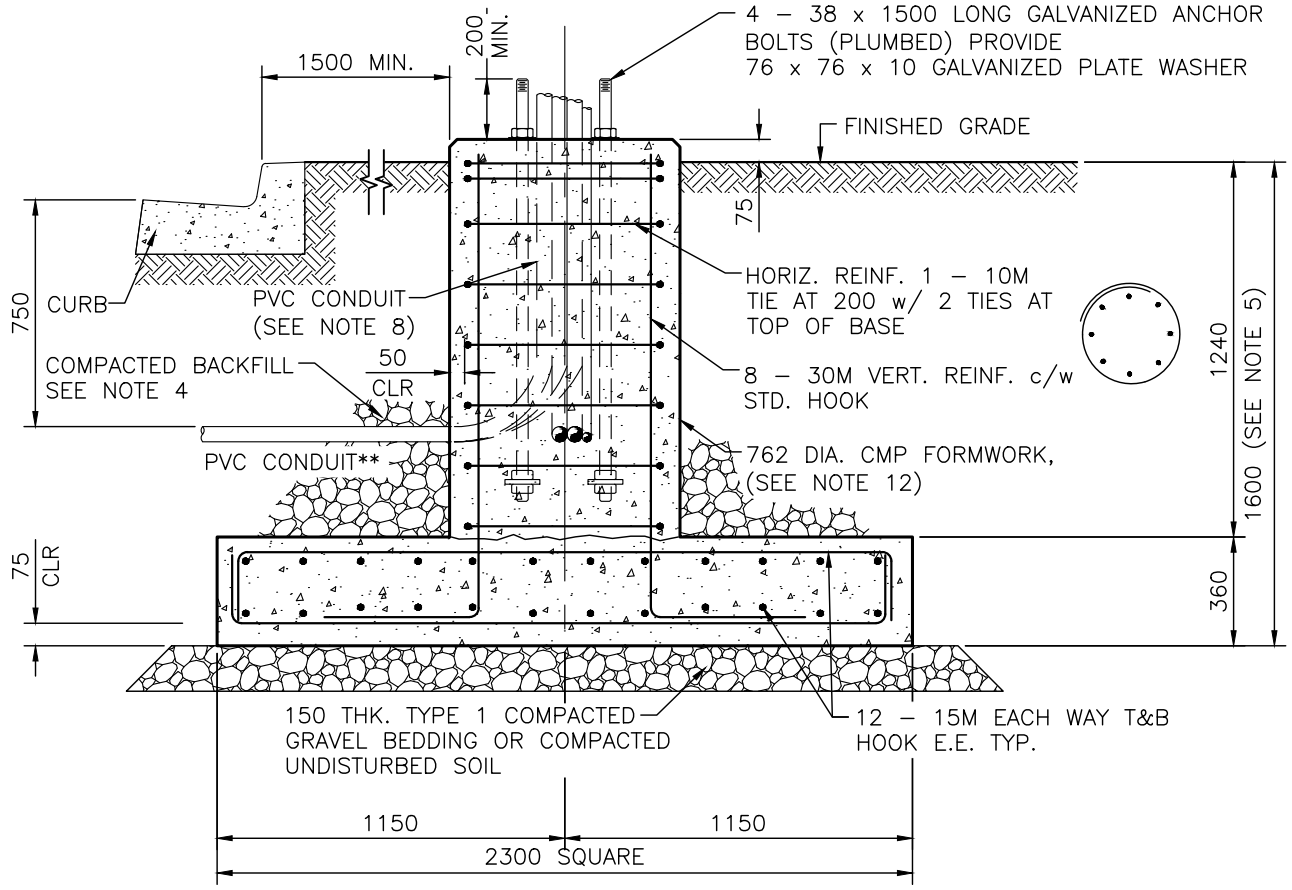
STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATION N, O AND P

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 72



PLAN



SECTION

NOTES:

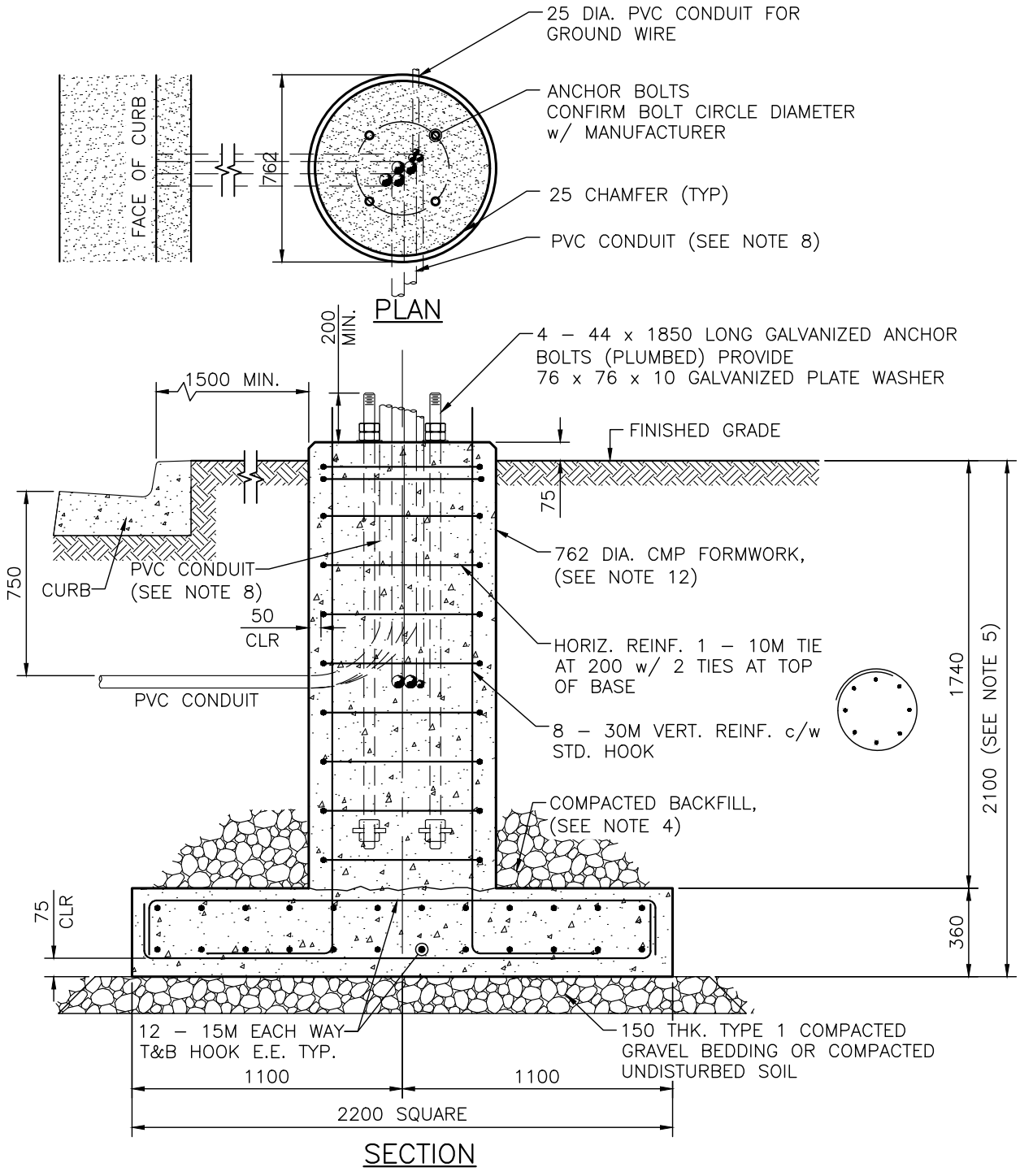
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N2.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATION Q, R AND S

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 72A



NOTES:

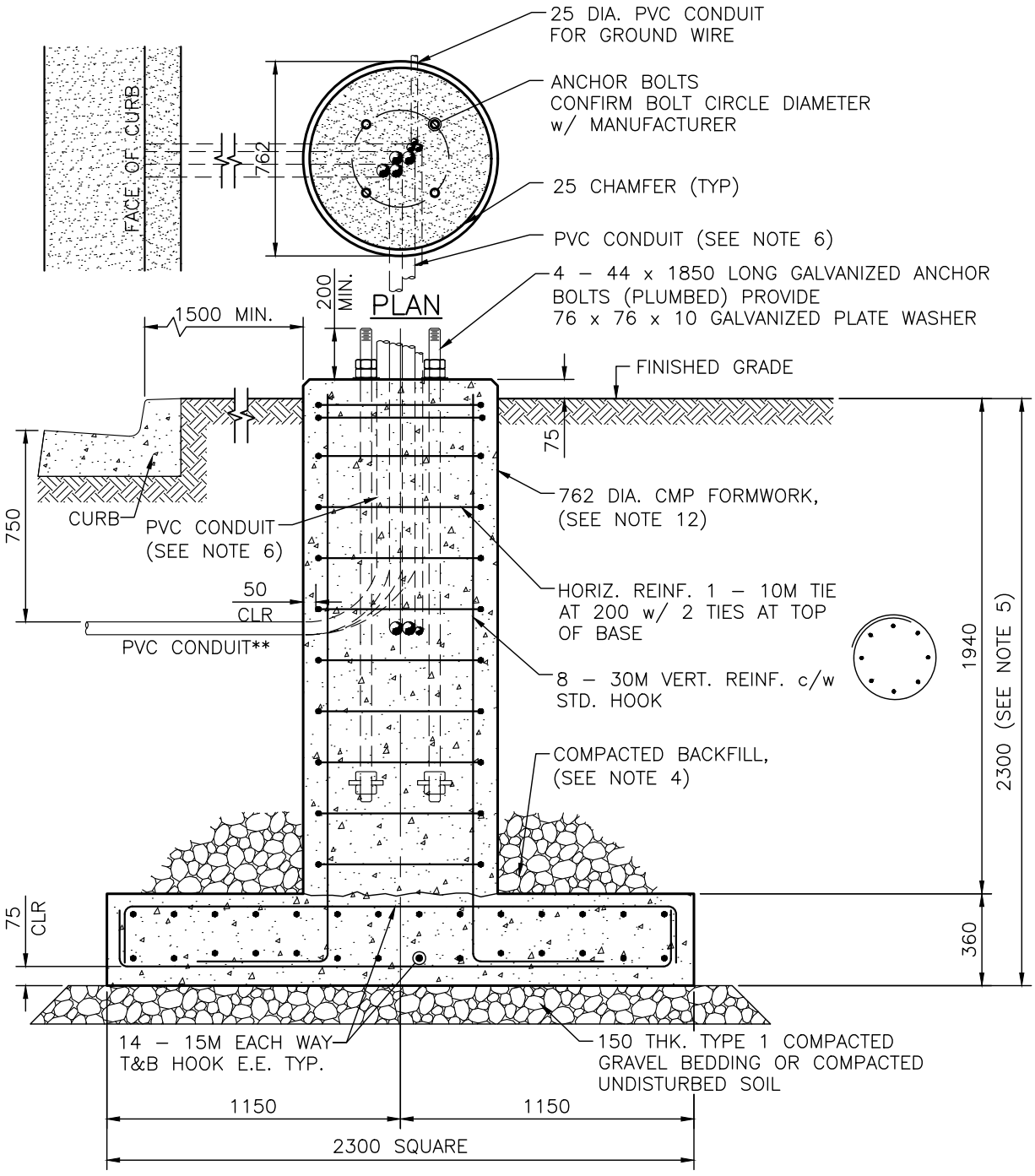
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N2.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATION T, U AND V

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 73



SECTION

NOTES:

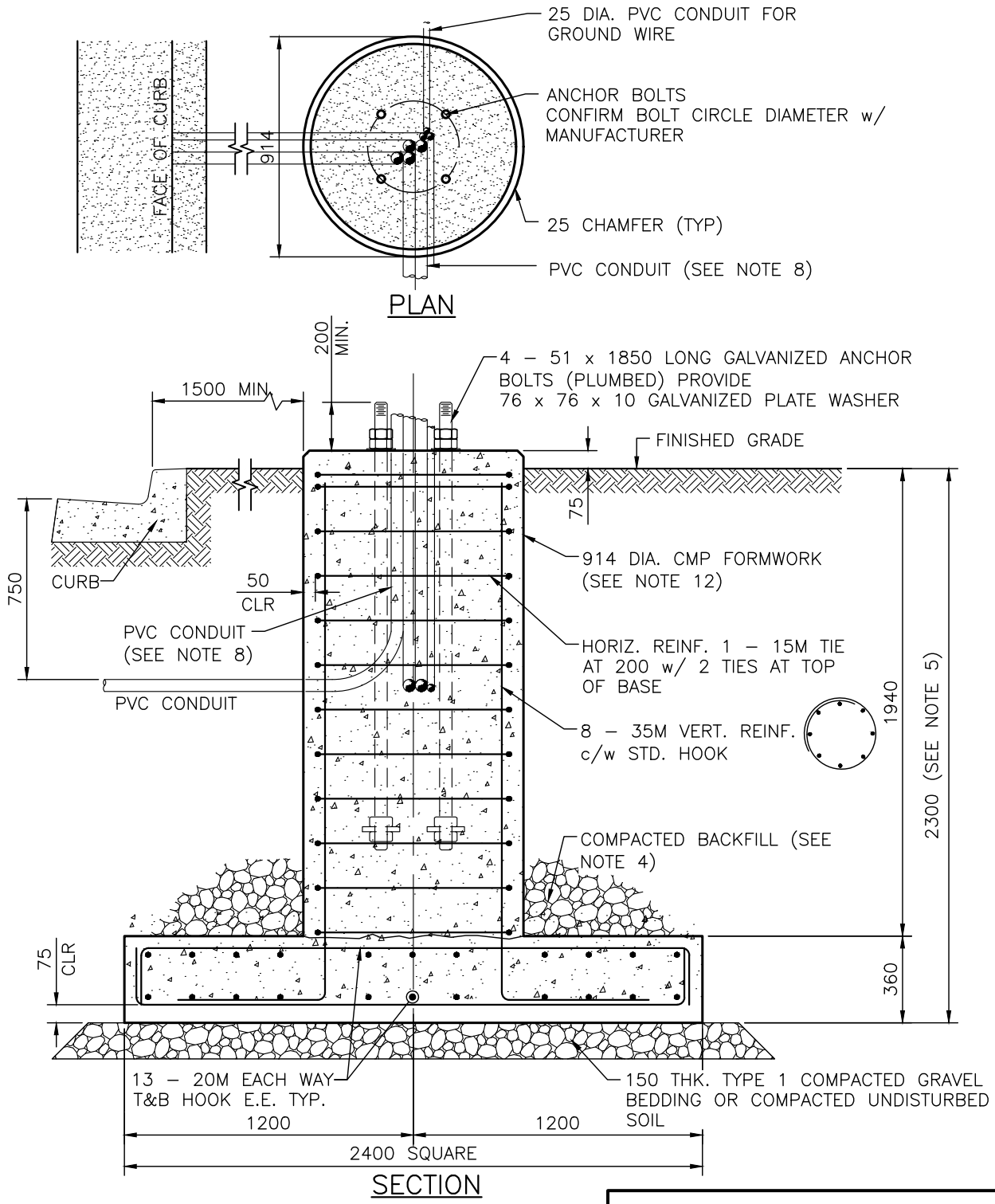
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N2.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATION W, X AND Y

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 73A



NOTES:

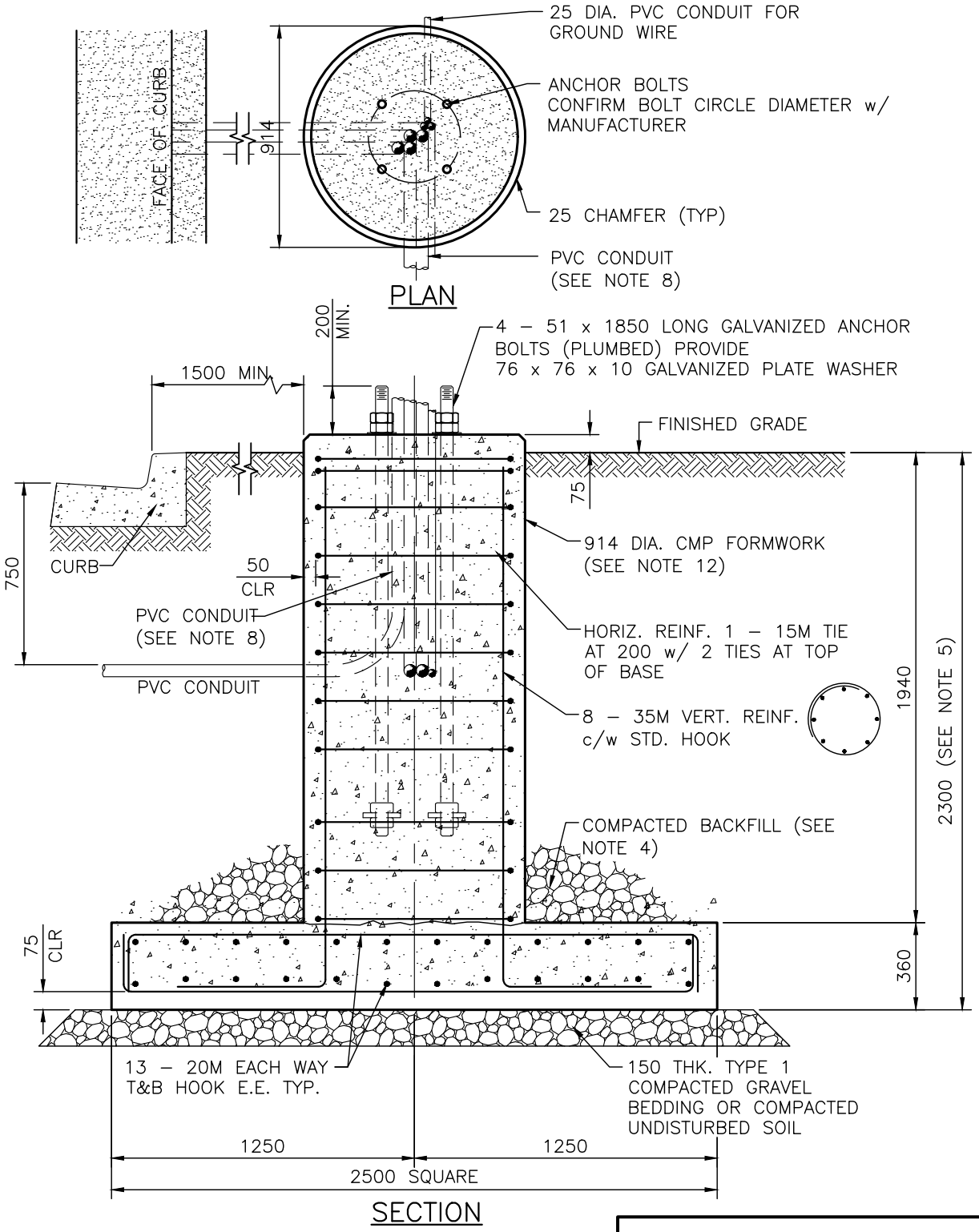
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N2.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATION Z, AA AND AB

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 74



NOTES:

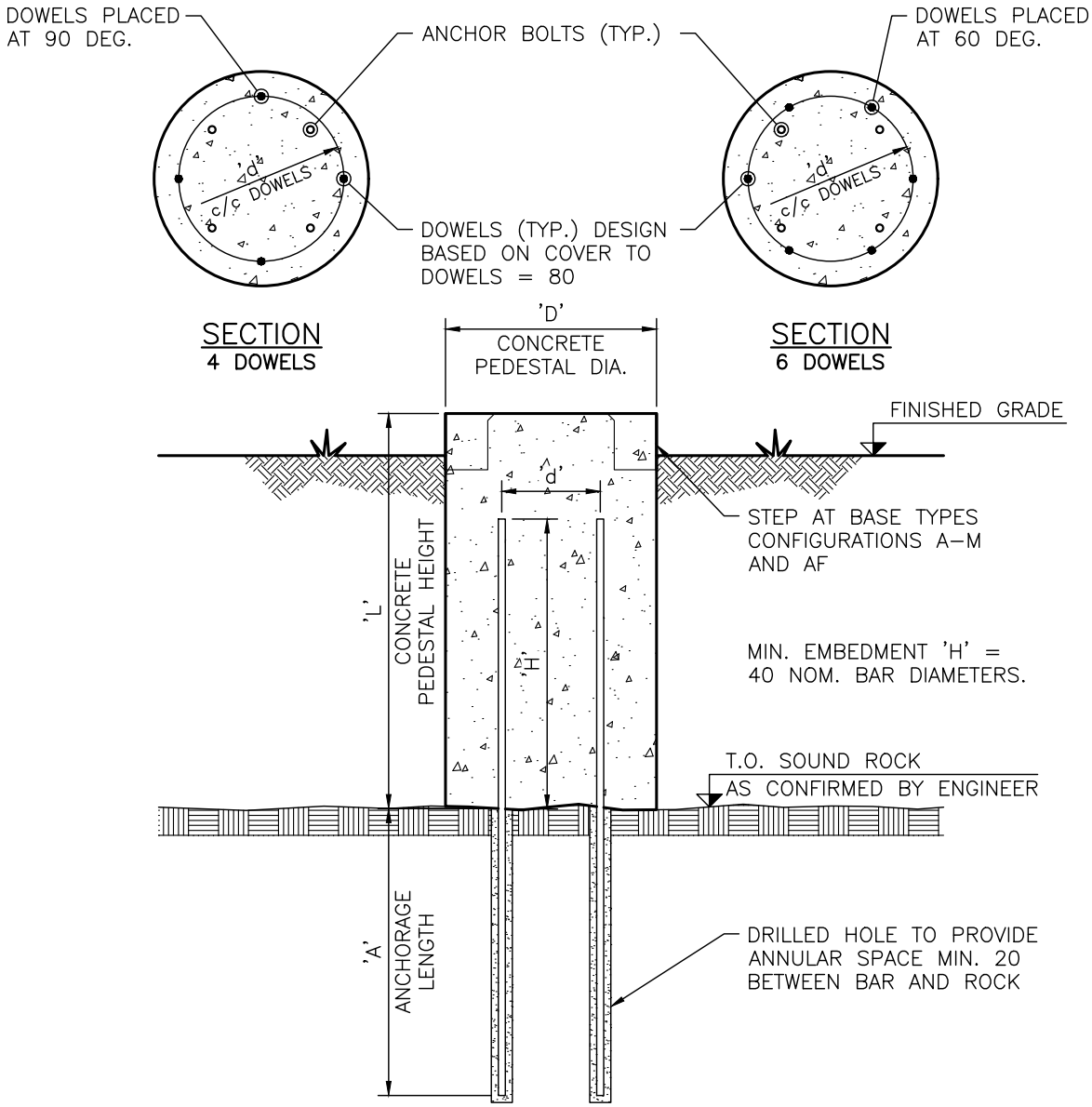
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N2.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

TRAFFIC SIGNAL BASE FOR CONFIGURATION AC, AD AND AE

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 74A



NOTE:

1. SEE HRM 74B.2 FOR ANCHORAGE DETAILS.
2. PEDESTAL REINFORCING NOT SHOWN FOR CLARITY.
3. ANCHOR BOLTS TO BE DESIGNED BY AND STAMPED BY AN ENGINEER LICENSED TO PRACTICE IN NS.

HALIFAX

STANDARD DETAIL

FOUNDATION REVISIONS FOR DOWELING INTO ROCK

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 74B.1

ANCHORAGE SCHEDULE					
REF. DWG.	'L' MIN.	'D'	'd'	'A' MIN	DOWELS
68	1200	610	425	2500	4 – 25M
69	1200	760	575	2500	4 – 25M
70, 71, 71A	1300	760	570	3000	4 – 30M
72, 72A	1500	760	565	3500	4 – 35M
73, 73A	1800	760	565	3500	6 – 35M
74, 74A	1800	910	715	4000	6 – 35M
74X	1300	760	570	3000	4 – 30M

NOTES:

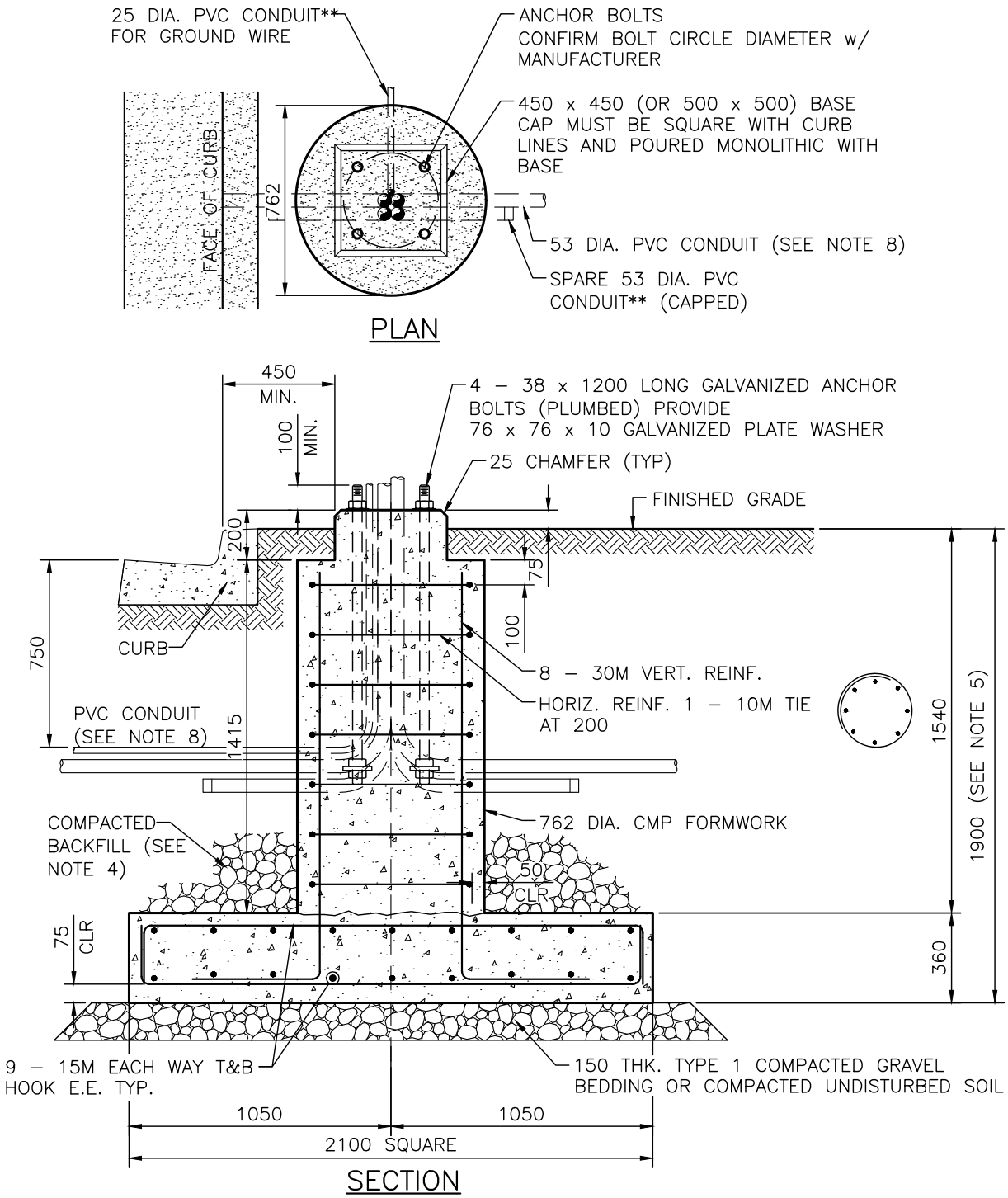
1. SOUND ROCK TO BE CONFIRMED BY ENGINEER.
2. MIN. LENGTH 'L' IS REQUIRED TO SUIT LENGTH OF ANCHOR BOLTS.
3. DRILLED HOLE IN ROCK TO BE CLEAN AND DRY BEFORE GROUTING. GROUT TO BE MASTERFLOW 816 CABLE GROUT OR APPROVED EQUAL, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.
4. THIS DRAWING TO BE USED IN CONJUNCTION WITH HRM 74B.1.
5. ANCHOR BOLTS TO BE DESIGNED BY AND STAMPED BY AN ENGINEER LICENSED TO PRACTICE IN NS.

HALIFAX

STANDARD DETAIL

FOUNDATION REVISIONS FOR DOWELING INTO ROCK

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: HRM 74B.2



NOTES:

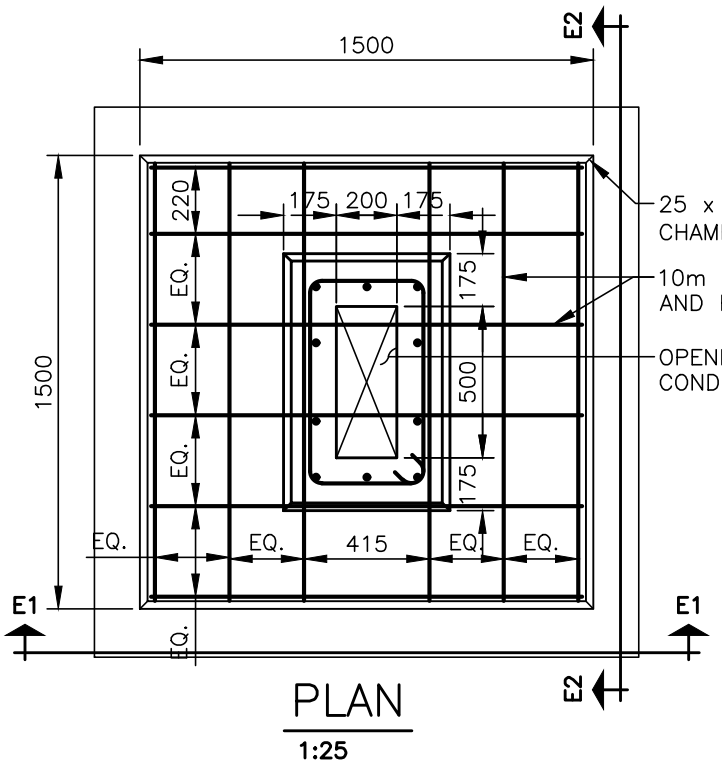
1. SEE HRM 68N3, SELECTION GUIDE, FOR PERMITTED POLES AND TRAFFIC SIGNAL EQUIPMENT.
2. FOR NOTES REFER TO HRM 68N2.
3. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

STANDARD DETAIL

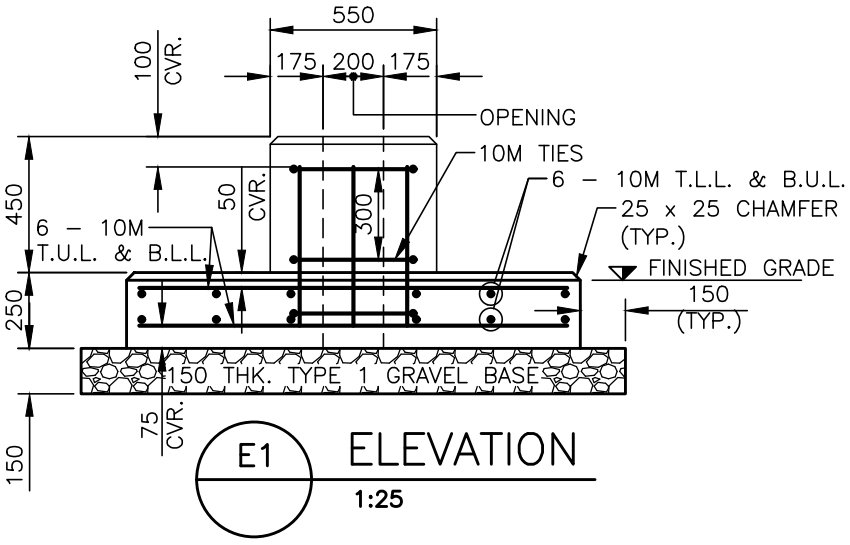
TRAFFIC SIGNAL BASE FOR CONFIGURATION AF

DATE: 2021	REFERENCE	APPROVED
SCALE: 1:25		FIG No.: HRM 74X



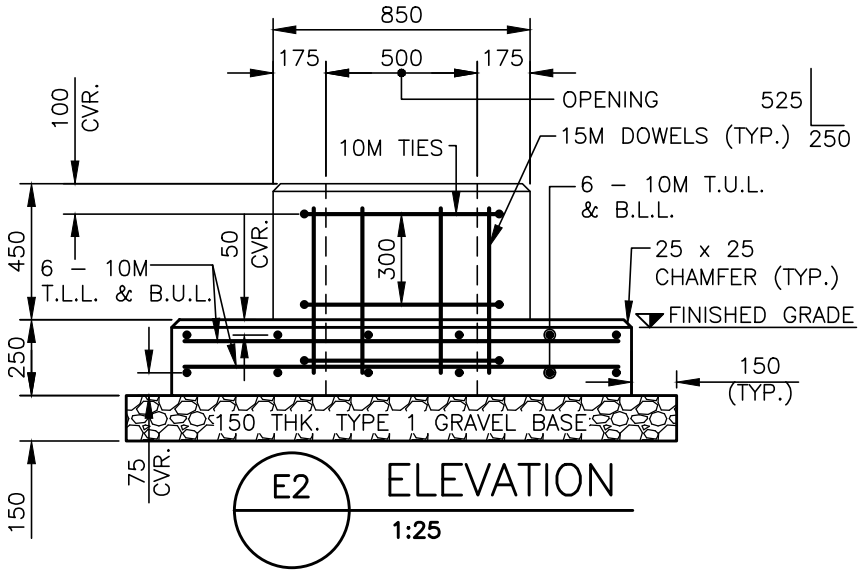
PLAN

1:25



E1 ELEVATION

1:25



E2 ELEVATION

1:25

NOTES:

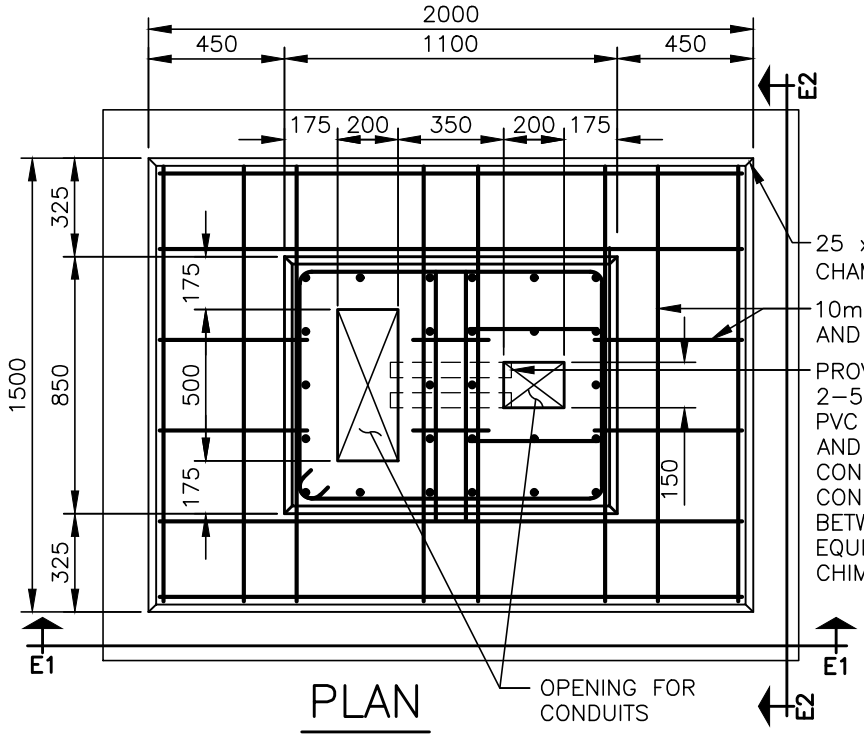
1. CONCRETE 28 DAY COMPRESSIVE STRENGTH TO BE 35 MPa.
2. PROVIDE MIN. 50 COVER FOR ALL REBAR (UNLESS NOTED OTHERWISE).
3. PROVIDE GROUNDING FOR CONTROLLER CABINET.
4. IN ADDITION TO CONDUITS SPECIFIED ON EQUIPMENT DRAWINGS/ SPECIFICATIONS, PROVIDE 2–50mm DIA. PVC CONDUIT AND STUB OUTSIDE OF BASE.
5. ALL CONDUIT FITTINGS SHALL BE TO CANADIAN ELECTRICAL CODE.
6. CONTROLLER CABINET ANCHORS ARE ASSUMED TO BE 20mm DIA. x 150mm LONG A304 STAINLESS STEEL THREADED ROD, WITH APPROVED CHEMICAL ADHESIVE, INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURERS GUIDELINES.
7. SUITABILITY OF ANCHORS IS TO BE CONFIRMED BY EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.
8. MAXIMIZE ANCHOR EDGE DISTANCES.
9. ALL DIMENSIONS IN MILLIMETERS.
10. REBAR TO CONFORM TO CAN/CSA G30.18–09 GRADE 400W DEFORMED BARS.

HALIFAX

STANDARD DETAIL

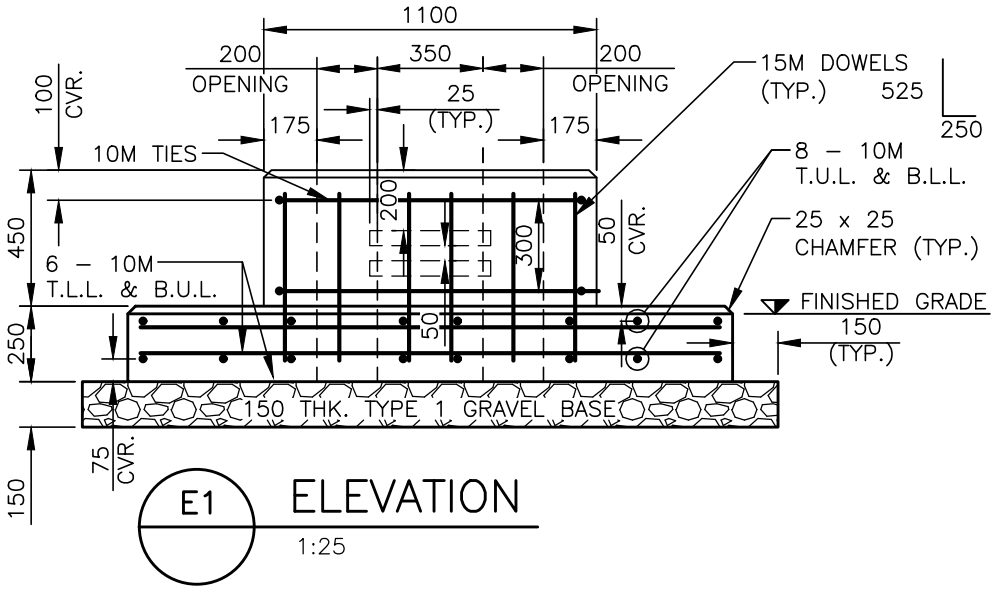
BASE MOUNTED TRAFFIC SIGNAL CONTROLLER CABINET

DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 175



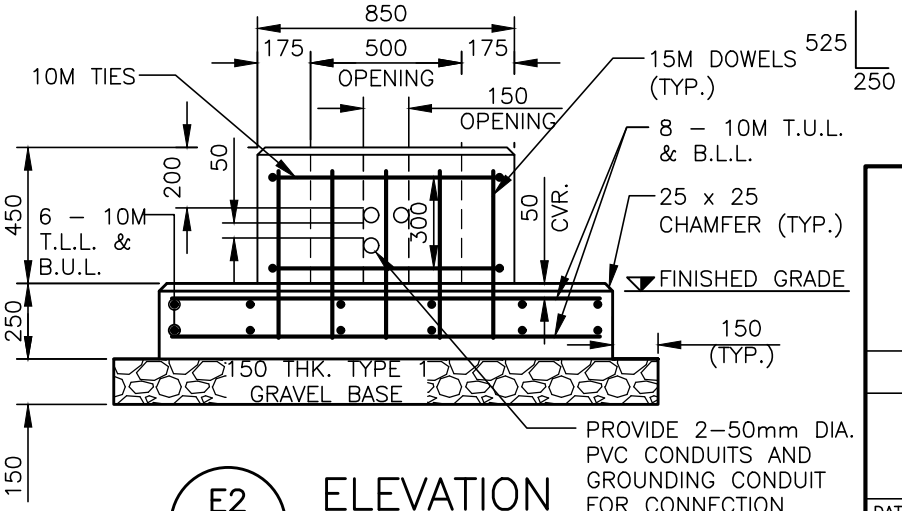
PLAN

1:25



E1 ELEVATION

1:25



E2 ELEVATION

1:25

NOTES:

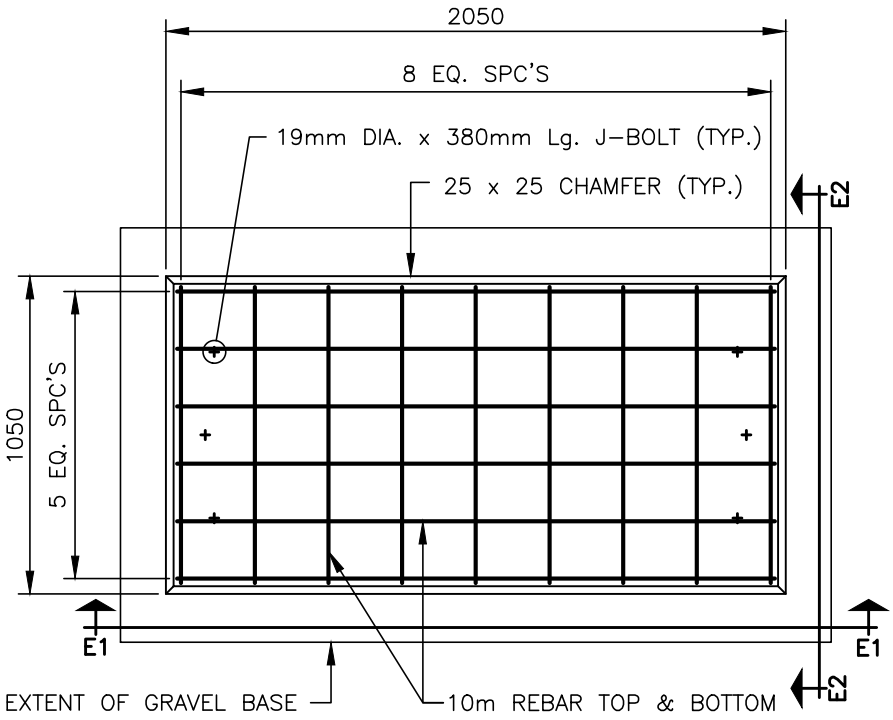
1. CONCRETE 28 DAY COMPRESSIVE STRENGTH TO BE 35 MPa.
2. PROVIDE MIN. 50 COVER FOR ALL REBAR (UNLESS NOTED OTHERWISE).
3. PROVIDE GROUNDING FOR CONTROLLER CABINET.
4. IN ADDITION TO CONDUITS SPECIFIED ON EQUIPMENT DRAWINGS/SPECIFICATIONS, PROVIDE 2–50mm DIA. PVC CONDUIT AND STUB OUTSIDE OF BASE.
5. ALL CONDUIT FITTINGS SHALL BE TO CANADIAN ELECTRICAL CODE.
6. CONTROLLER CABINET ANCHORS ARE ASSUMED TO BE 20mm DIA. x 150mm LONG A304 STAINLESS STEEL THREADED ROD, WITH APPROVED CHEMICAL ADHESIVE, INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURERS GUIDELINES.
7. BATTERY BACK–UP UNIT ANCHORS ARE ASSUMED TO BE 22mm DIA. x 150mm LONG A304 STAINLESS STEEL THREADED ROD, WITH APPROVED CHEMICAL ADHESIVE, INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURERS GUIDELINES.
8. SUITABILITY OF ANCHORS IS TO BE CONFIRMED BY EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.
9. MAXIMIZE ANCHOR EDGE DISTANCES.
10. ALL DIMENSIONS IN MILLIMETERS.
11. REBAR TO CONFORM TO CAN/CSA G30.18–09 GRADE 400W DEFORMED BARS.

HALIFAX

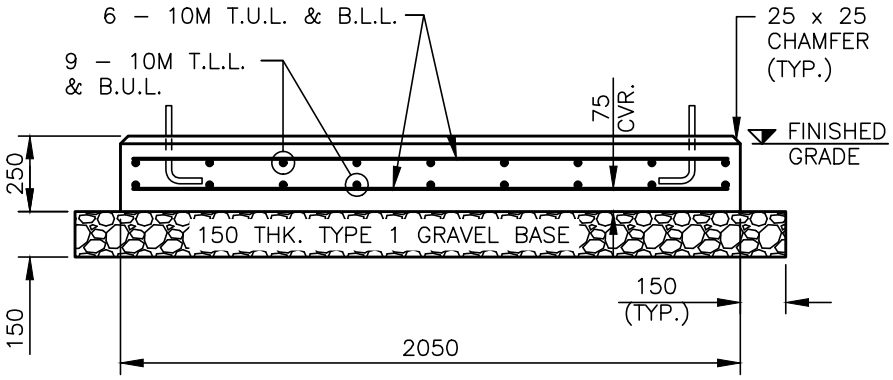
STANDARD DETAIL

BASE MOUNTED TRAFFIC SIGNAL CONTROLLER CABINET WITH BATTERY BACK–UP UNIT

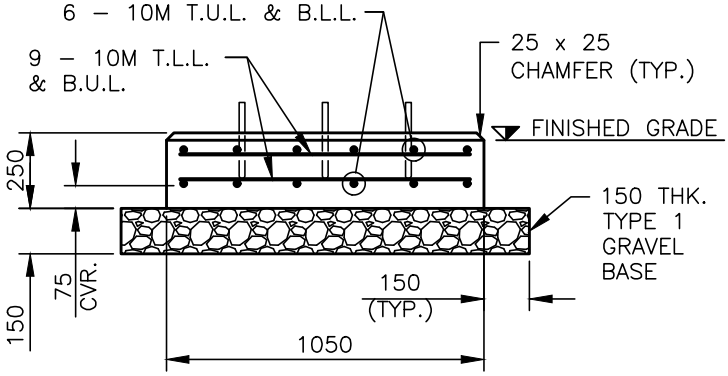
DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 176



PLAN
1:25



E1 ELEVATION
1:25



E2 ELEVATION
1:25

NOTES:

1. CONCRETE 28 DAY COMPRESSIVE STRENGTH TO BE 35 MPa.
2. PROVIDE MIN. 50mm COVER FOR ALL REBAR (UNLESS NOTED OTHERWISE).
3. PROVIDE GROUNDING PLATE FOR CABINET.
4. TYPICAL STREET LIGHT POWER ENCLOSURES ARE 610mm WIDE BY 1830mm LONG BY 1830mm HIGH. THE ENCLOSURE MUST BE CENTERED ON THE CONCRETE PAD AND THE CONDUIT LAYOUT MUST ALIGN WITH THE MOUNTING BACKBOARD INSIDE THE ENCLOSURE AS PER THE TYPICAL STREET LIGHT POWER ENCLOSURE "RED BOOK" DETAILS HRM 109–HRM 111.
5. ALL CONDUIT FITTINGS AND GROUNDING SHALL BE TO CANADIAN ELECTRICAL CODE.
6. CONTROLLER CABINET ANCHORS ARE ASSUMED TO BE 6–19mm DIA. x 380mm LONG A307 GALVANIZED STEEL J–BOLTS.
7. SUITABILITY OF ANCHORS IS TO BE CONFIRMED BY EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.
8. ALL DIMENSIONS IN MILLIMETERS.
9. REBAR TO CONFORM TO CAN/CSA G30.18–09 GRADE 400W DEFORMED BARS.
10. MAXIMUM CONDUIT DIAMETER = 150mm. PROVIDE AT LEAST 25mm CLEAR SPACE BETWEEN CONDUITS.
11. MAXIMUM NUMBER OF CONDUITS PER BASE = 10 x 150mm DIA. CONDUITS OR EQUIVALENT AREA OF SMALLER CONDUITS. (LOCALLY ADJUST REBAR SPACINGS IF NECESSARY).

HALIFAX

STANDARD DETAIL

STREET LIGHTING POWER ENCLOSURE BASE

DATE: 2021	REFERENCE	APPROVED
SCALE: AS NOTED		FIG No.: HRM 177