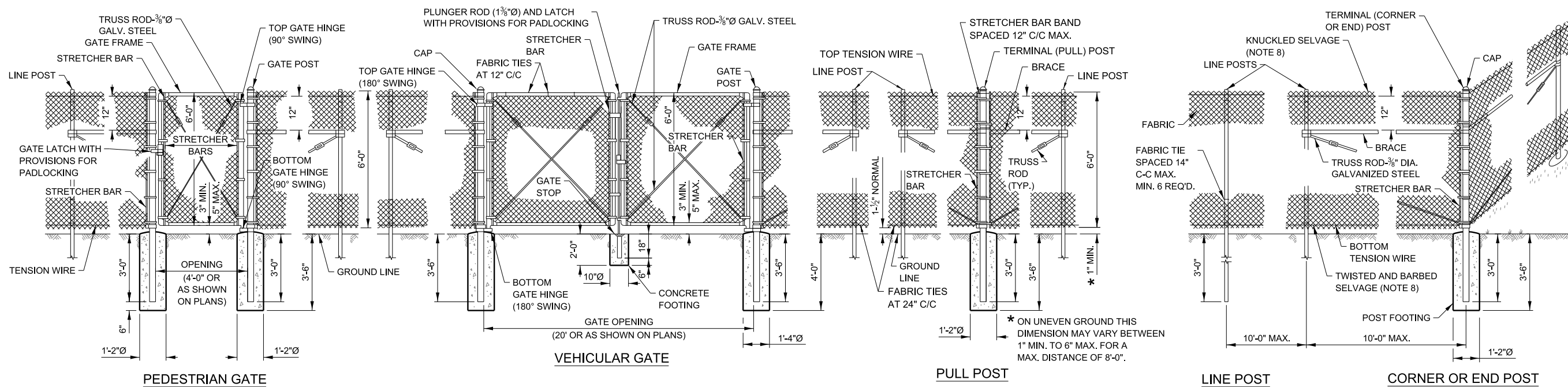


Illinois Tollway Standard Drawing Revisions
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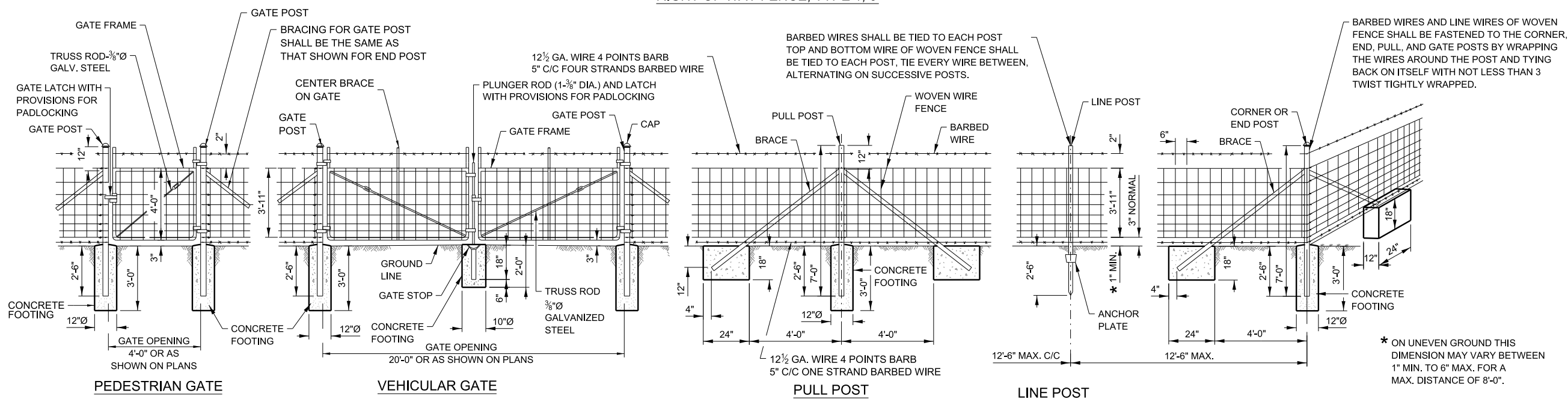
Section D		Roadway Appurtenances	
Drawing	Modification Summary	Effective: 03-01-2026	
D1-07	RIGHT OF WAY FENCE		
Sheet 3	Clarification on gate requirements for 'INSTALLATION AROUND HEADWALL' detail.		
D5-12	PERMANENT PAVEMENT MARKING MAINLINE		
Sheet 1	Reference to Note 3 added to the "12" Diagonal Line, White" shoulder call out.		
D6-12	PERMANENT PAVEMENT MARKING RAMPS		
Sheet 1	Removed dotted line at the merge taper in "EXIT - SINGLE LANE RAMP, LANE THREE TERMINATION" detail.		
	Revised 'Note 1' in 'General Notes' to provide clarification.		
	Added "OR AUX LANE >= 1/2 MILE IN LENGTH" to "EXIT - SINGLE LANE RAMP - LANE DROP" detail title and "(AUX LANE < 1/2 MILE IN LENGTH)" to "EXIT - SINGLE LANE RAMP WITH AUX LANE - TAPER TYPE" detail title.		
Sheet 2	Removed 'Note 1' reference from 'END RUMBLE STRIP' callout in "EXIT - SINGLE LANE RAMP - LANE DROP....." detail. Added 'Note 1' reference to 'END RUMBLE STRIP' callout in "EXIT - SINGLE LANE RAMP WITH AUX LANE - TAPER TYPE..." detail.		
Sheet 2	Revised "ENTRANCE - TWO LANE RAMP" detail to include '6" Solid Line, White' at merge point to be consistent with 'Roadway Signing and Pavement Marking Guidelines Manual'.		

 **New Sheet**

 **Retired Standard**



RIGHT OF WAY FENCE, TYPE 1, 6'



RIGHT OF WAY FENCE, TYPE 2, 4'

GENERAL NOTES

- ON STRAIGHT RUNS OF FENCE, PULL POSTS SHALL BE USED AT 500' CENTERS FOR TYPE 1 AND 330' CENTERS FOR TYPE 2.
- WHERE R.O.W. FENCE FOLLOWS R.O.W. LINE IT SHALL BE INSTALLED PARALLEL TO AND 6" INSIDE THE R.O.W. LINE ON ILLINOIS TOLLWAY PROPERTY.
- LINE POSTS AND BRACES SHALL BE ON ILLINOIS TOLLWAY SIDE OF FENCE FABRIC.
- WHEN THE TENSION OF THE FENCE TENDS TO PULL THE POSTS FROM THE GROUND, THE LINE POSTS SHALL BE ANCHORED WITH ANCHORAGE SPECIFIED FOR CORNER POSTS.
- WHEN THE FENCE LINE HAS A CHANGE IN DIRECTION OF 10° OR MORE, A CORNER POST SHALL BE PLACED AT THE POINT OF CHANGE. WHERE THE ANGLE OF CHANGE IS LESS THAN 10° A PULL POST SHALL BE USED.
- WHERE GRADE LINE HAS A CHANGE IN SLOPE OF 10° OR MORE, A CORNER POST WITH BRACING AS REQUIRED SHALL BE PLACED. WHERE ANGLE IS LESS THAN 10° LINE POST MAY BE USED.
- WHERE RIGHT-OF-WAY FENCE, TYPE 1 IS USED, THE FABRIC SHALL BE KNUCKLED SELVAGE ON TOP AND TWISTED AND BARBED SELVAGE ON BOTTOM.
- PLACEMENT OF BRACED END POSTS OR CORNER POSTS WITHIN THE CLEAR ZONE SHALL BE AVOIDED.

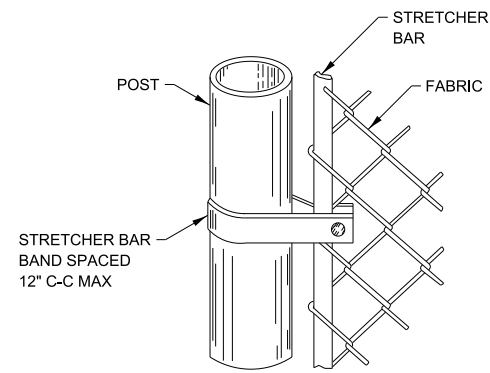
APPROVED BY: *Manar Nashif*
 CHIEF ENGINEERING OFFICER
 DATE: 03/01/2026

REVISIONS	
DATE	DESCRIPTION
03-01-2026	REVISED CALLOUT IN HEADWALL DETAIL
03-01-2020	ADDED GATE TO HEADWALL DETAIL
03-31-2017	REVISED NOTES
03-11-2015	REVISED NOTES
03-31-2014	REVISED ROLLED FORM SECTIONS
11-01-2012	REVISED NOTES

Illinois Tollway

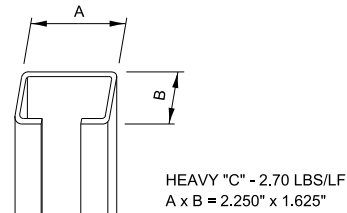
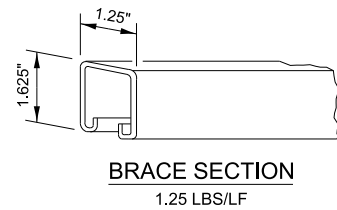
RIGHT OF WAY FENCE

VERSION: 2026-03 STANDARD: D1-07 SHEET: 1 OF 3

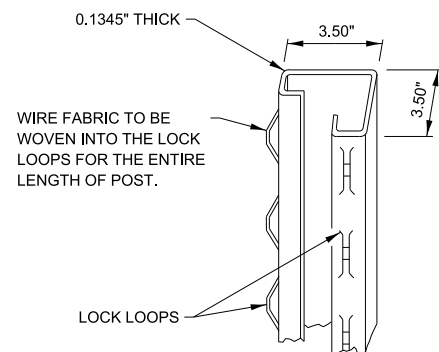


STRETCHER BARS SHALL BE GALVANIZED FLAT STEEL BAR NOT LESS THAN 1/4" x 3/4" AND THE STRETCHER BAR BANDS SHALL BE GALVANIZED FLAT STEEL BAR NOT LESS THAN 1/8" x 1" WITH A 3/8" GALVANIZED CARRIAGE BOLT.

METHOD OF FASTENING STRETCHER BAR TO POST

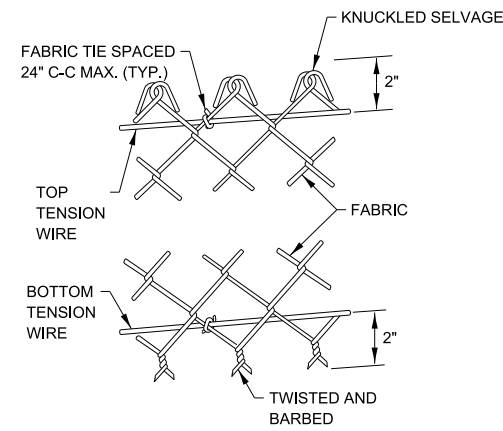


LINE POST 'C' SECTION

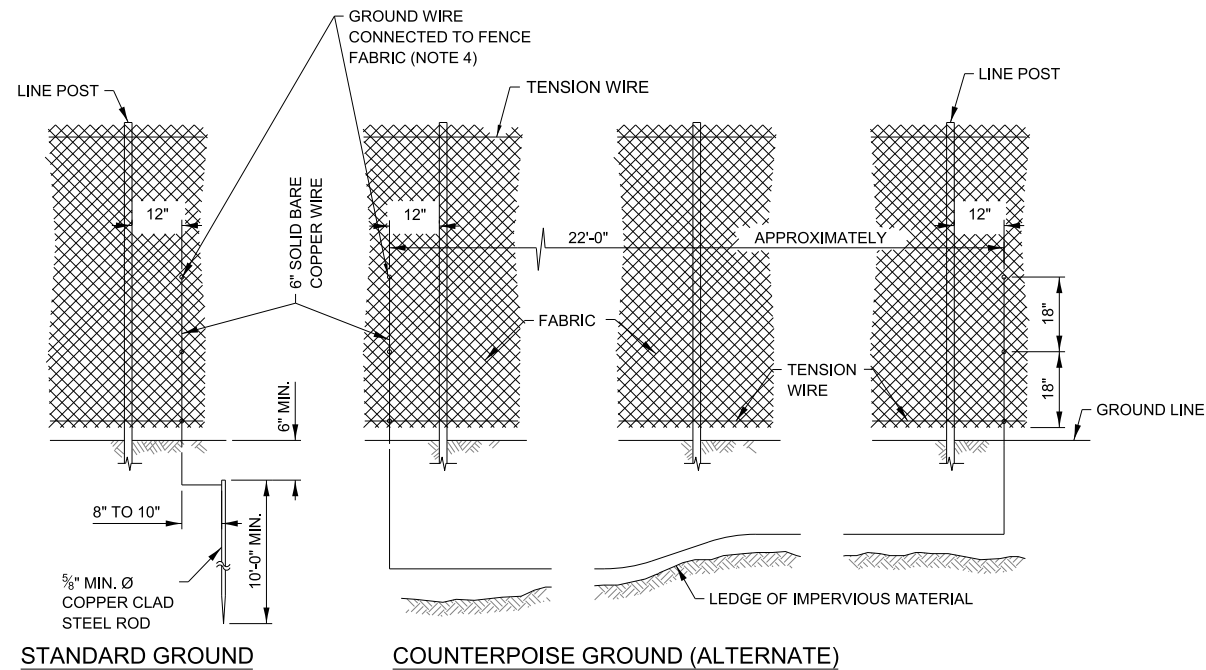


TERMINAL POST SECTION
5.10 LBS/LF

DETAILS OF ROLL FORMED SECTIONS



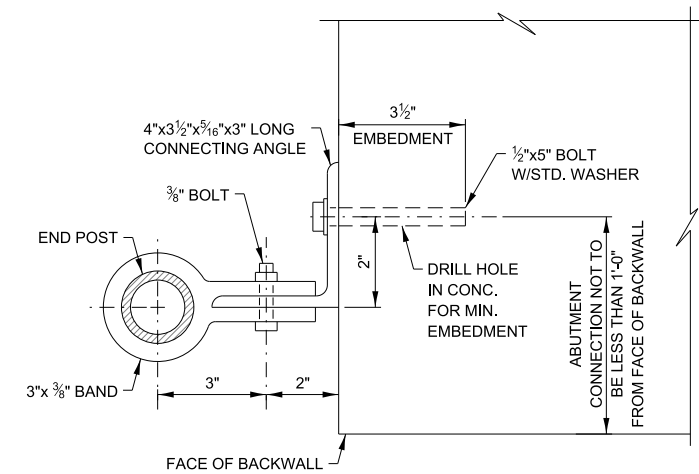
METHOD OF TYING FABRIC TO TENSION WIRES



NOTES FOR STANDARD AND COUNTERPOISE GROUND:

1. THE INTERVALS FOR GROUNDING CONTINUOUS FENCING SHALL NOT EXCEED 500 FEET IN URBAN AREAS AND 1000 FEET IN RURAL AREAS. FENCE ADJACENT TO A GATE SHALL BE GROUNDED A MAXIMUM DISTANCE 100 FEET EACH SIDE OF THE GATE.
2. FENCE CROSSING UNDER A POWER LINE SHALL BE GROUNDED, ONCE DIRECTLY UNDER THE CROSSING AND ONE ON EACH SIDE AT 25 TO 50 FEET AWAY. FENCE LOCATED DIRECTLY UNDER A TELEPHONE WIRE OR CABLE CROSSING SHALL HAVE A SINGLE GROUND.
3. COUNTERPOISE GROUNDS SHALL BE USED AT LOCATIONS WHERE GROUND RODS CAN NOT BE DRIVEN DUE TO IMPERVIOUS EARTH MATERIALS.
4. THE GROUND WIRES SHALL BE CONNECTED TO FENCE FABRIC AND GROUND ROD BY STAINLESS STEEL BOLTS AND WASHERS. THE LOWER CONNECTION OF THE GROUND WIRE SHALL BE MADE TO THE BOTTOM TENSION WIRE.

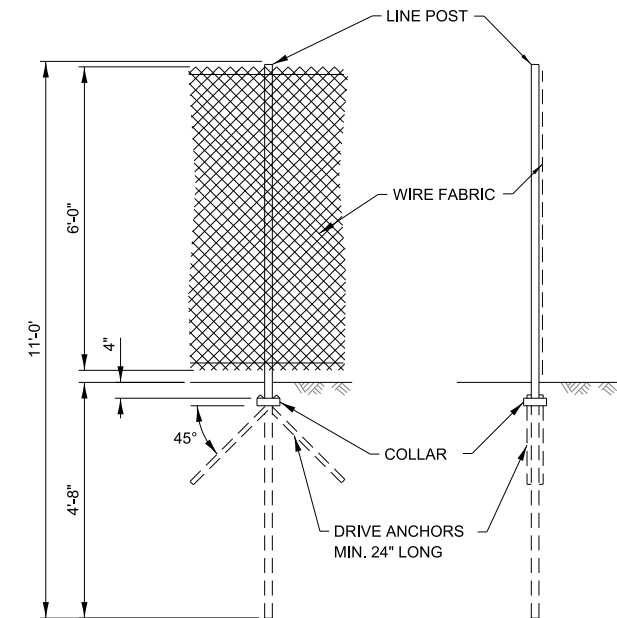
ELECTRICAL GROUNDING DETAILS



ABUTMENT CONNECTION DETAIL

NOTES FOR ABUTMENT CONNECTION:

1. WHEN ROLL FORMED SECTION IS USED IN LIEU OF PIPE AS END POST, THE POST SHALL BE BOLTED DIRECTLY TO THE ABUTMENT WALL WITH 2 1/2\"/>



ALTERNATE DRIVEN LINE POST ANCHORAGE WITH OR WITHOUT DRIVE ANCHORS

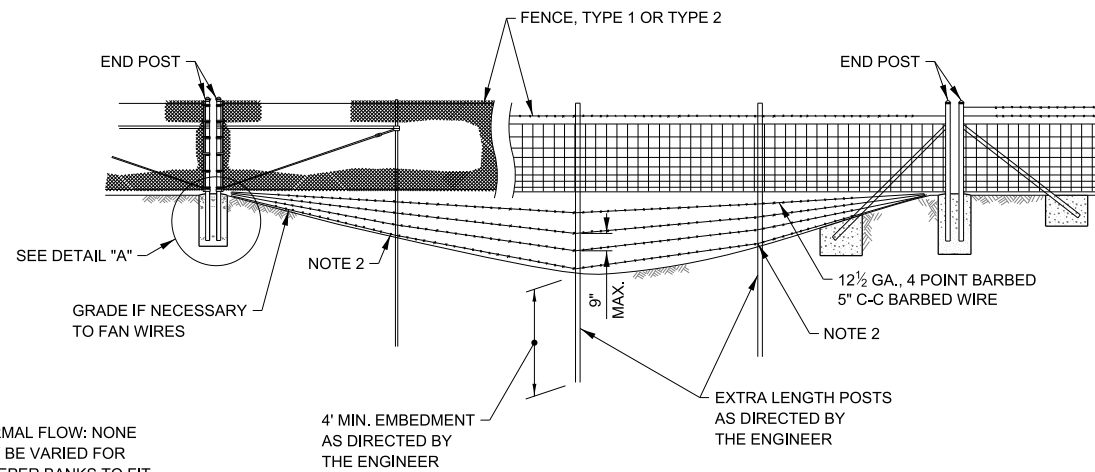
NOTE FOR FENCE POST:

ALTERNATE DRIVEN LINE POST ANCHORAGE IS OPTIONAL. DRIVEN LINE POST ANCHORAGE WITHOUT DRIVE ANCHORS MAY BE USED IN AVERAGE TO GOOD SOIL CONDITIONS. WHEN SOIL IS WEAKER (Qu < 1.25 TONS/ SQ. FT.) AND STABILITY OF THE POST IS QUESTIONABLE, DRIVE ANCHORS SHALL BE USED. TYPES, SHAPES, DIMENSIONS AND COATING REQUIREMENTS OF DRIVE ANCHORS (ANCHOR BLADES AND COLLARS) FOR DIFFERENT TYPE OF POSTS SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

APPROVED BY: *Manar Nashif*
CHIEF ENGINEERING OFFICER
DATE: 03/01/2026



RIGHT OF WAY FENCE

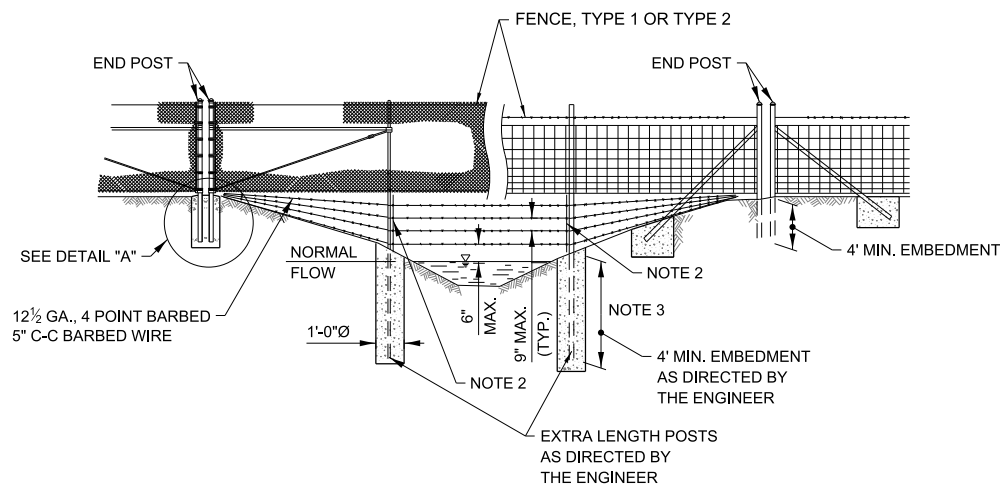


NORMAL FLOW: NONE
MAY BE VARIED FOR
STEEPER BANKS TO FIT
VARIOUS CHANNEL SECTIONS.

4' MIN. EMBEDMENT
AS DIRECTED BY
THE ENGINEER

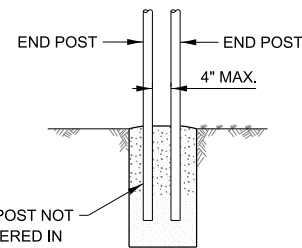
EXTRA LENGTH POSTS
AS DIRECTED BY
THE ENGINEER

STREAM CROSSING, TYPE 1



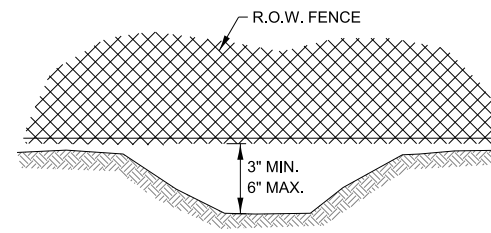
NOTES FOR STREAM CROSSING TYPE 1 AND TYPE 2:

1. THESE INSTALLATION CONDITIONS ARE TYPICAL AND ARE NOT TO BE CONSTRUED AS REPRESENTATIVE OF ALL CONDITIONS WHICH WILL BE ENCOUNTERED. CONSTRUCTION WILL BE VARIED AS REQUIRED OR DIRECTED TO MEET FIELD CONDITIONS.
2. FOR STREAM CROSSING OF THE TYPE REQUIRED THE BOTTOM BARBED WIRE SHALL BE ANCHORED TO CONCRETE FOOTING OR TO HOLES DRILLED IN POSTS, AND INTERMEDIATE WIRES SHALL BE TIED TO THE BOTTOM WIRE AND TO POSTS IN AN EVENLY SPACED FASHION TO PREVENT SLIPPAGE.
3. CONCRETE AND FITTINGS FOR ALL TYPES OF FENCE SHALL BE AS DETAILED FOR SIMILAR CONDITIONS PER STANDARD DRAWING.

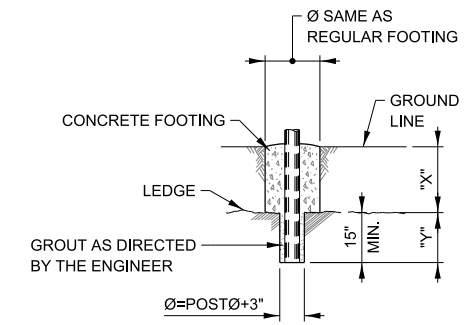


THE FENCE FABRIC SHALL BE REPLACED BY BARBED WIRE STRANDS AT 12\"/>

DETAIL A

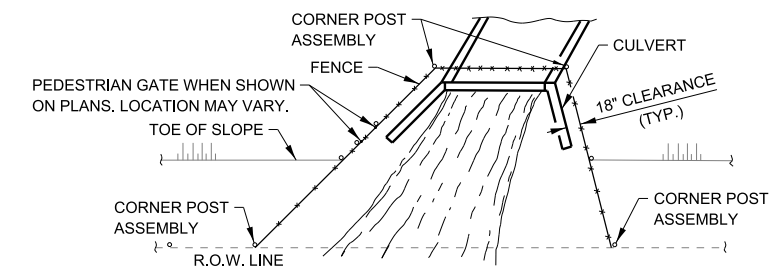


FENCE INSTALLATION OVER DITCH

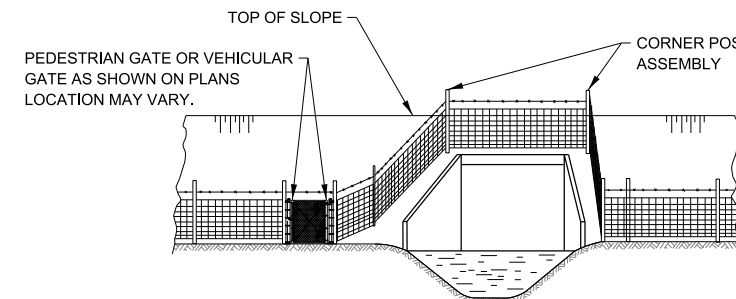


NOTE:
"X" + "Y" SHALL NOT EXCEED 30" WHEN "X" IS 0" TO 15" "Y" = 15", AND THE POST SHALL BE SHORTENED AS REQUIRED. WHEN "X" EXCEEDS 15" "Y" SHALL BE DECREASED ACCORDINGLY.

FOOTING FOR POST WHEN ROCK LEDGE IS ENCOUNTERED



PLAN AT HEADWALL



ELEVATION

NOTES FOR INSTALLATION AROUND HEADWALL:

1. THIS TYPE OF INSTALLATION IS TO BE USED ONLY WHEN SPECIFICALLY CALLED FOR IN THE CONTRACT PLANS.
2. WHEN THE WIDTH OF THE CULVERT MAKES IT NECESSARY TO ANCHOR A POST TO THE TOP OF THE CULVERT, A CAST IRON SHOE OR OTHER DEVICE APPROVED BY THE ENGINEER SHALL BE USED.

INSTALLATION AROUND HEADWALL

APPROVED BY: *Manar Nashif* DATE: 03/01/2026
CHIEF ENGINEERING OFFICER



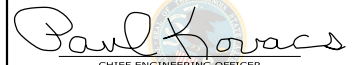
RIGHT OF WAY FENCE

SURVEY AND ROADWAY ITEMS


<u>EXISTING</u>	<u>PROPOSED</u>	
		CONSTRUCTION JOINT W/DOWEL BARS
		BENCHMARK
		CANTILEVER SIGN STRUCTURE
		BUTTERFLY SIGN STRUCTURE
		DOUBLE COLUMN GROUND MOUNTED SIGN
		SINGLE COLUMN GROUND MOUNTED SIGN
		SPAN TYPE SIGN STRUCTURE
		TRIPLE COLUMN GROUND MOUNTED SIGN
		RUMBLE STRIP

DRAINAGE AND UTILITY ITEMS; ROADWAY LIGHTING AND SIGNS

<u>EXISTING</u>	<u>PROPOSED</u>	
		BOX CULVERT WITH HEADWALL
		CABLE IN DUCT W/O GROUND
		LOW POINT
		OVERHEAD ELECTRICAL
		OVERHEAD TELEPHONE
		PIPE CULVERT
		LAKE OR POND
		QUARRY
		STREAM
		SWAMP
		CABLE OR CONDUIT TAG
		ELECTRICAL MANHOLE
		LIGHT-DUTY BOX
		ROADWAY LUMINAIRE
		STEEL TOWER
		TELEPHONE MANHOLE
		UNDERPASS LUMINAIRE
		WATER POINT
		WATERMAIN VALVE VAULT
		WATER WELL
		WOOD POLE

APPROVED BY:  DATE: 03/31/2016
CHIEF ENGINEERING OFFICER

REVISIONS	
DATE	DESCRIPTION
03-31-2016	UPDATED DITCH CHECK SYMBOL
03-11-2015	ADDED NEW SYMBOL
11-01-2012	ADDED NEW SYMBOLS
07-01-2009	REVISED SYMBOLS & PATTERNS



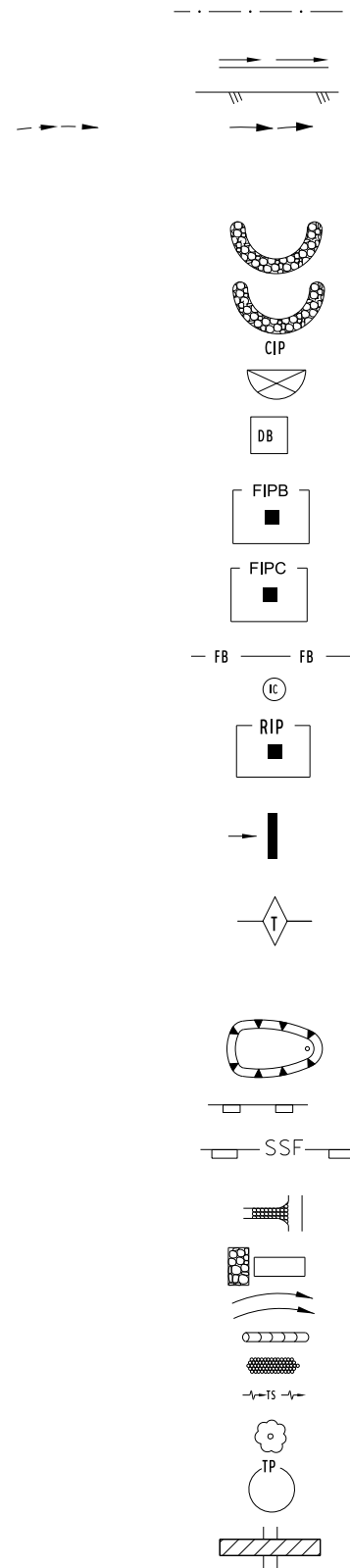
SYMBOLS AND PATTERNS

<small>VERSION:</small> 2016-03	<small>STANDARD:</small> D2-04	<small>SHEET:</small> 1 OF 4
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EROSION & SEDIMENT CONTROL, LANDSCAPING ITEMS

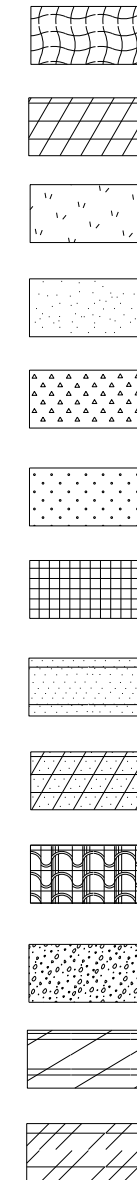
EXISTING

PROPOSED



- · · · · · CLEARING & GRADING LIMITS
(LIMITS OF CONSTRUCTION)
- ====>>> DIVERSION DIKE
- ====/ / / / / DRAINAGE DIVIDE
- >>> DRAINAGE PATH
- SEDIMENT BASIN
- AGGREGATE BERM
- CULVERT INLET
PROTECTION-STONE
- CULVERT INLET
PROTECTION-FENCE
- DEWATERING BASIN
- FILTER FABRIC
INLET PROTECTION, BASKET TYPE
- FILTER FABRIC
INLET PROTECTION, COVER TYPE
- FB — FB — FLOTATION BOOM
- INITIAL CONSTRUCTION ITEM
- RECTANGULAR INLET
PROTECTION
- TEMPORARY ROCK CHECK DAM
- TEMPORARY DITCH CHECK
- SEDIMENT BASIN
- SILT FENCE
- SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- STONE OUTLET STRUCTURE
- SEDIMENT TRAP
- STREAM DIVERSION
- TEMPORARY PIPE SLOPE DRAIN
- TEMPORARY RIPRAP
- TEMPORARY SWALE
- TREES AND STUMP
- TREE PROTECTION
- TEMPORARY STREAM CROSSING

PROPOSED



- EROSION CONTROL BLANKET
- OVER SEEDING CLASS B1
- OVER SEEDING CLASS B2
- SEEDING CLASS A1
- SEEDING CLASS A2
- SEEDING CLASS A3
- SEEDING CLASS A4
- SEEDING CLASS A5
- SEEDING CLASS A6
- SEEDING CLASS D1
- SODDING (SALT TOLERANT)
- TEMPORARY GROUND COVER
- TURF REINFORCEMENT MAT



SYMBOLS AND PATTERNS

ELECTRICAL AND MECHANICAL ITEMS

				EXISTING	PROPOSED	
	HOME RUN TO PANEL AS NOTED		STANDBY GENERATOR	_____ A _____	_____ A _____	COMPRESSED AIR (A)
	INDICATES CIRCUIT TURNING DOWN		PANEL CIRCUIT BREAKER	_____ AR _____	_____ AR _____	ACID RESISTANT WASTE OR DRAIN
	INDICATES CIRCUIT TURNING UP		MECHANICALLY HELD LIGHTING COIL	_____ ARV _____	_____ ARV _____	ACID RESISTANT VENT
	GROUND ROD		CONTROL RELAY COIL	_____ DS _____	_____ DS _____	STORM SEWER (DOWNSPOUT)
	GROUNDING TRIAD		SINGLE-POLE SWITCH	_____ G _____	_____ G _____	GAS LINE
	TRANSFORMER		DUPLEX RECEPTACLE	_____ HG _____	_____ HG _____	HOT GAS BYPASS LINE (HG)
	MOTOR		4P, 4W, WEATHERPROOF RECEPTACLE WITH SPRING DOOR, BACK BOX, & ANGLE ADAPTER	_____ HHWR _____	_____ HHWR _____	HEATING HOT WATER RETURN (HHWR)
	AUTOMATIC TRANSFER SWITCH (ATS)		4P, 4W, WEATHERPROOF RECEPTACLE WITH SPRING DOOR & BACK BOX	_____ HHWS _____	_____ HHWS _____	HEATING HOT WATER SUPPLY (HHWS)
	JUNCTION BOX		DUPLEX RECEPTACLE WITH GROUND FAULT PROTECTION	_____ IA _____	_____ IA _____	DRY COMPRESSED AIR (IA-INSTRUMENT AIR)
	DISCONNECT SWITCH		CONTROL BUILDING LIGHTING 1' X 4' INDUSTRIAL FLUORESCENT FIXTURE, PORCELAIN REFLECTOR, ELECTRONIC BALLAST.	_____ P _____	_____ P _____	PROCESS WATER ("P" WATER) LINE
	CIRCUIT BREAKER		COMPACT WALL-MOUNTED LOW WATTAGE HPS FIXTURE WITH WIRE GUARD & SINGLE FACTORY INSTALLED FUSE	_____ PW _____	_____ PW _____	PROTECTED WATER OR PLANT WATER (PW)
	MANUAL TRANSFER SWITCH		EMERGENCY LIGHT UNIT WITH 2-6 VOLT, 12 WATT SEALED BEAM HALOGEN LAMPS WITH WALL MOUNTING BRACKET	_____ RD _____	_____ RD _____	REFRIGERANT DISCHARGE LINE (RD)
	SELF CONTAINED UTILITY METERING		LANE LIGHTING - HEAVY DUTY ALUMINUM HOUSING WITH ENCLOSED REFLECTOR & TEMPERED GLASS LENS W/AUTO REGULATOR BALLAST. ASYMMETRIC PATTERN	_____ RS _____	_____ RS _____	REFRIGERANT SUCTION LINE (RS)
			WIRE	_____ V _____	_____ V _____	VENT LINE (V)
			CONDUIT			

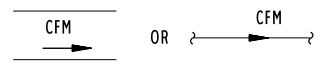
NOTE:

ALL SYMBOLS AND PATTERNS ON THIS DRAWING ARE PROPOSED UNLESS OTHERWISE NOTED.

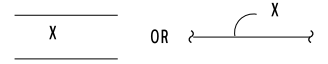


SYMBOLS AND PATTERNS

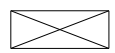
ELECTRICAL AND MECHANICAL ITEMS



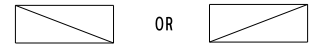
QUANTITY AND DIRECTION OF THE AIR FLOW



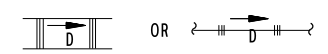
DUCT SIZE (FIRST FIGURE SIZE OF SHOWN, SECOND FIGURE SIZE OF SIDE NOT SHOWN.)



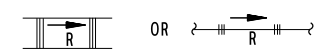
SUPPLY DUCT SECTION



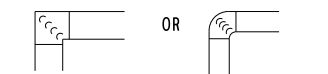
RETURN OR EXHAUST DUCT SECTION



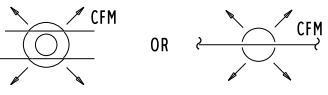
DUCT DROPS IN THE DIRECTION OF FLOW



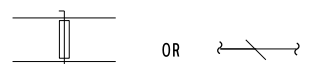
DUCT RISES IN THE DIRECTION OF FLOW



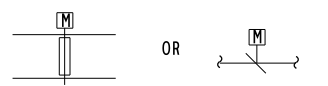
TURNING VANES



8" THROAT DIAMETER CEILING DIFFUSER; AIR FLOW - 100 CFM



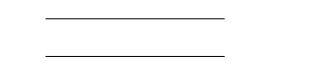
BALANCING OR VOLUME DAMPER



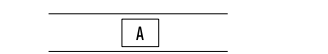
MOTOR OPERATED DAMPER



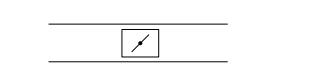
FLEXIBLE DUCT



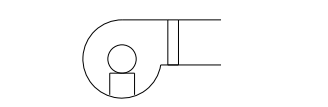
FIRE DAMPER



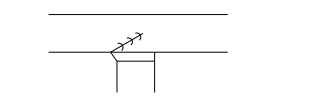
SOUND ATTENUATOR



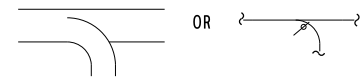
ZONE DAMPER



FLEXIBLE CONNECTION AT FAN OR EQUIPMENT



EXTRACTOR



SPLITTER DAMPER



PLUG VALVE WITH MEMORY STOP (BALANCING)



PLUG VALVE



SOLENOID VALVE



TEMPERATURE CONTROL VALVE



THREE-WAY TEMPERATURE CONTROL VALVE DIAPHRAGM



THREE-WAY TEMPERATURE CONTROL VALVE TOP VIEW



PRESSURE REDUCING VALVE (NOS = INITIAL AND FINAL PRESSURE - PSIG)



AIR PRESSURE REDUCING STATION (NO. CORRESPONDS WITH AIR PRESSURE REDUCER SCHEDULE)



SAFETY VALVE (NOS. = PRESSURE SETTING - PSIG)



FLOAT OPERATED VALVE



QUICK COUPLING (QC)



HORIZONTAL UNIT HEATER (NO. CORRESPONDS WITH UNIT HEATER SCHEDULE)



VERTICAL UNIT HEATER (NO. CORRESPONDS WITH UNIT HEATER SCHEDULE)



CABINET TYPE UNIT HEATER (NO. CORRESPONDS WITH UNIT HEATER SCHEDULE)



THERMOSTAT OR ROOM TEMPERATURE SENSOR



GATE VALVE



FLOW SWITCH



VENTURI FLOW METER AND FLOW TO BE INDICATED



CONNECTION BETWEEN NEW AND EXISTING



GLOBE VALVE



BUTTERFLY VALVE



CHECK VALVE



ANGLE GATE VALVE



CONCENTRIC REDUCER



ECCENTRIC REDUCER



ORIFICE FLANGE



CROSSOVER



PIPE GUIDE



EXPANSION JOINT (SLIP TYPE)



EXPANSION JOINT (BELLOWS TYPE)



AIR ELIMINATOR (AIR VENT)



PIPE CAP



STRAIGHT CROSS



90° ELBOW



90° ELBOW TURNED DOWN



90° ELBOW TURNED UP



SIDE OUTLET ELBOW TURNED DOWN



SIDE OUTLET ELBOW TURNED UP



LATERAL



TEE



TEE OUTLET UP



TEE OUTLET DOWN



UNION

STRAINER

PIPE ANCHOR

THERMOMETER (NOS. = RANGE IN DEGREES FAHRENHEIT)

PRESSURE, VACUUM OR COMPOUND GAUGE

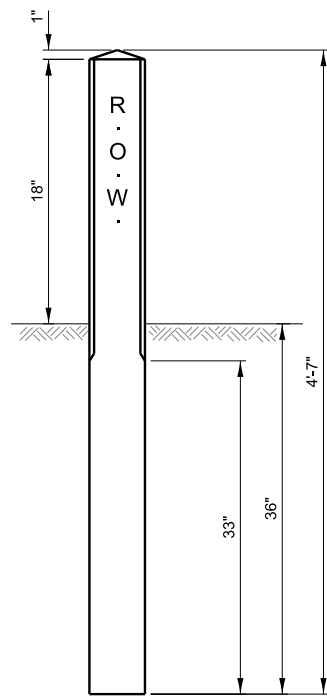
NOTE:

ALL SYMBOLS AND PATTERNS ON THIS DRAWING ARE PROPOSED UNLESS OTHERWISE NOTED.

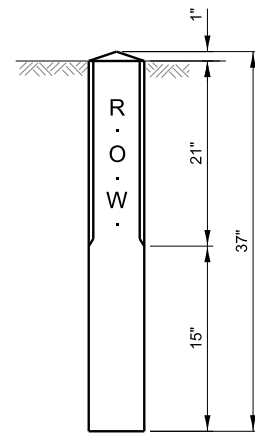


SYMBOLS AND PATTERNS

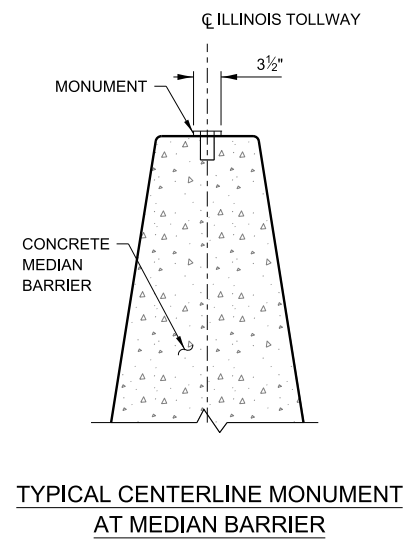
APPROVED BY: *Paul Kovacs* CHIEF ENGINEERING OFFICER DATE: 03/31/2016



RIGHT OF WAY MARKER



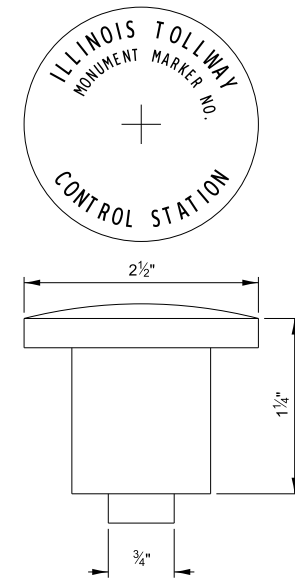
RIGHT OF WAY MARKER (SPECIAL)



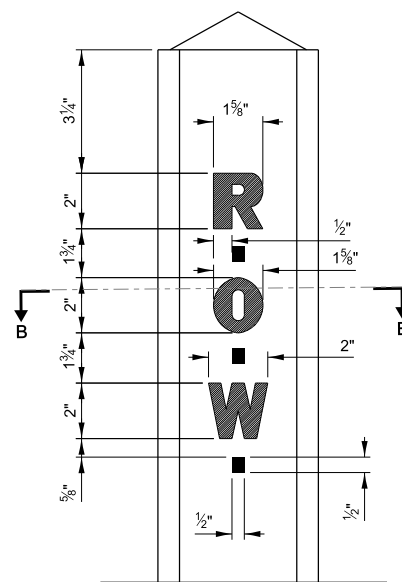
TYPICAL CENTERLINE MONUMENT AT MEDIAN BARRIER



ACCESS COVER (RECESSED HINGE)

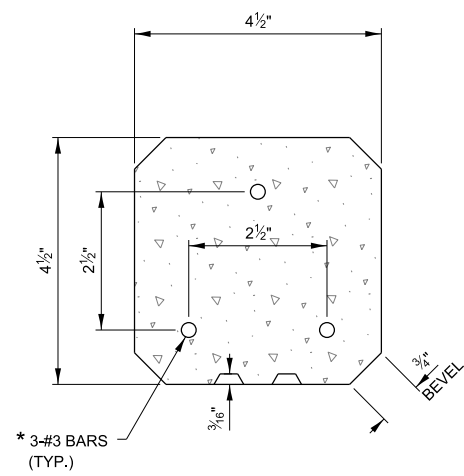


ALUMINUM DOMED CAP



LETTERING DETAIL

RIGHT OF WAY MARKER



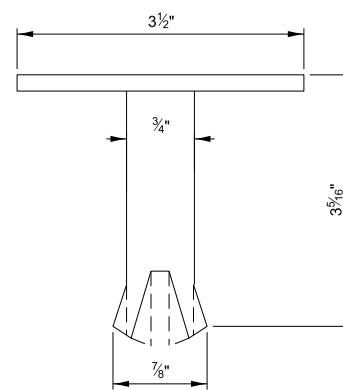
* 3-#3 BARS (TYP.)

* METHOD A- 4'-2" LONG BARS
* METHOD B- 2'-6" LONG BARS

SECTION B-B

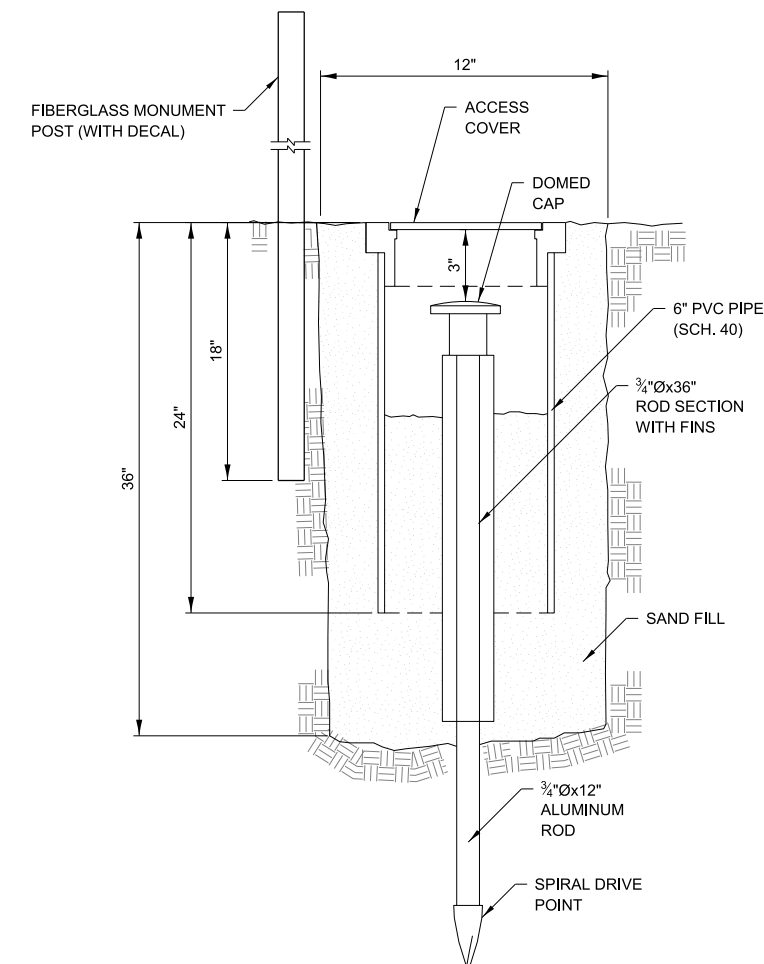


TOP VIEW

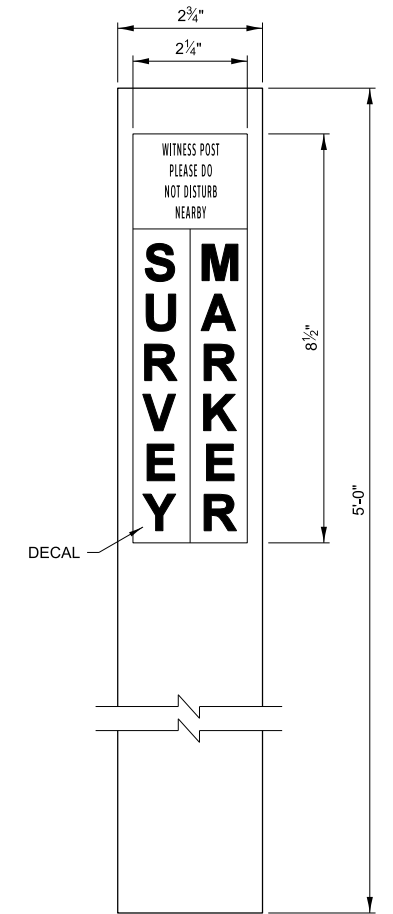


BRONZE DOMED CAP

PERMANENT SURVEY MONUMENT



PERMANENT SURVEY MONUMENT (SPECIAL)




MONUMENT POST



PERMANENT SURVEY MONUMENTS AND RIGHT-OF-WAY MARKERS

REVISIONS	
DATE	DESCRIPTION
03-01-2019	CHANGED TO CONSTANT-SLOPE MEDIAN BARRIER
07-01-2010	NEW MONUMENT AND BARRIER MARKERS

VERSION: 2019-03 STANDARD: D3-02 SHEET: 1 OF 1

APPROVED BY:  DATE: 03/01/2019
CHIEF ENGINEERING OFFICER

PERMANENT DELINEATION SPACING				
REFLECTORS	MAINLINE		RAMP	
	TANGENT	CURVE	TANGENT	CURVE
* GUARDRAIL	100'	100'	100'	100' (R >= 1,050') 50' (R < 1,050')
* BARRIER WALL (DOUBLE FACE)	100'	100'	100'	100' (R >= 1,050') 50' (R < 1,050')
* BARRIER WALL (SINGLE FACE)	100'	100'	100'	100' (R >= 1,050') 50' (R < 1,050')
SHOULDER NARROWING	3 @ 15'	3 @ 15'	3 @ 15'	3 @ 15'
BRIDGE APPROACHES	3 @ 15'	3 @ 15'	3 @ 15'	3 @ 15'
* BRIDGE OR RETAINING WALL PARAPET	50'	50'	50'	50'
* CRASHWORTHY NOISE ABATEMENT WALL OR RETAINING WALL AT EDGE OF SHOULDER	100'	100'	100'	100' (R >= 1,050') 50' (R < 1,050')
ROADWAY DELINEATORS				
	MAINLINE		RAMP	
	TANGENT	CURVE	TANGENT	CURVE
POST MOUNTED DELINEATOR	200'	200'	100' **	TABLE A **
POST MOUNTED DELINEATOR (RAMP TAPERS AND TANGENTS)	100' **	100' **	NA	NA
TEMPORARY DELINEATION SPACING				
	TANGENT	REVERSE CURVE	SHIFT	TAPER
	50'	25'	25'	25'
<p>* WHEN ADJACENT SHOULDER IS USED AS A TRAVELED LANE, USE SPACING REQUIREMENTS AS SHOWN FOR TEMPORARY DELINEATION.</p> <p>** IN ADDITION TO CRYSTAL/AMBER REFLECTORS, RED REFLECTORS SHALL BE INSTALLED (FACING OPPOSITE TRAFFIC FLOW) ONLY ALONG TOLLWAY EXIT RAMP TO CROSSROADS WHERE THE EXIT RAMP TERMINAL IS LOCATED AT A STOP CONTROLLED, SIGNALIZED OR ROUNDABOUT INTERSECTION. THE LOCATIONS OF THE RED REFLECTORS SHALL BE IN ACCORDANCE WITH THE INTERCHANGE RAMP PLACEMENT PLAN ON SHEET 2 OF THIS STANDARD.</p>				

TABLE A	
REFLECTOR SPACING ON RAMP - CURVES	
RADIUS OF CURVE (FT.)	SPACING ALONG CURVE (FT.)
LESS THAN 140	25
140-249	30
250-349	40
350-699	50
700-1200	75
MORE THAN 1200	100

GENERAL NOTES:

- EMERGENCY TURNAROUNDS DELINEATION - THE FOLLOWING DELINEATION SHOULD BE INSTALLED ON THE LEFT SIDE OF THE PAVEMENT APPROACHING EMERGENCY TURNAROUNDS.
 - ONE-HALF OF A MILE IN ADVANCE OF THE EMERGENCY TURNAROUNDS ONE WHITE REFLECTOR UNIT OVER THREE AMBER REFLECTOR UNITS.
 - ONE-FOURTH OF A MILE IN ADVANCE OF THE EMERGENCY TURNAROUNDS ONE WHITE REFLECTOR UNIT OVER TWO AMBER REFLECTOR UNITS.
 - AT A POINT NEAR THE INTERSECTION OF THE EDGE OF THE LEFT SHOULDER AND NEAR EDGE OF THE EMERGENCY TURNAROUNDS ONE WHITE REFLECTOR UNIT OVER ONE AMBER REFLECTOR UNIT.
- ALL REFLECTORS FACING OPPOSITE TRAFFIC FLOW SHALL BE RED.

NOTES FOR ROADWAY DELINEATORS, POST MOUNTED INSTALLATION:


- MAINLINE-SINGLE WHITE REFLECTOR UNITS SHALL BE PLACED CONTINUOUSLY ON THE RIGHT AND SINGLE AMBER REFLECTOR UNITS SHALL BE PLACED ON THE LEFT ON MAIN LINE SECTIONS WITHOUT BARRIER WALL.
 - RAMPS-SINGLE REFLECTOR UNITS SHALL BE PLACED ON THE OUTSIDE OF ALL CURVED SECTIONS OF RAMPS, SINGLE WHITE SHALL BE PLACED ON THE RIGHT SIDE AND AMBER ON THE LEFT SIDE. THE DELINEATORS SHALL BE OVERLAPPED FOR A SHORT DISTANCE TO CLEARLY INDICATE WHERE DELINEATION ON ONE SIDE OF THE RAMP ENDS AND DELINEATION ON THE OTHER SIDE APPEARS.
 - DOUBLE WHITE REFLECTOR UNITS SHALL BE PLACED ON THE RIGHT AT ALL ACCELERATION AND DECELERATION LANES.
 - THE LOCATION OF THE REFLECTORS SHALL BE IN ACCORDANCE WITH THE INTERCHANGE RAMP PLACEMENT PLAN ON SHEET 2 OF THIS STANDARD.
- REFLECTORS SHALL BE MOUNTED ON SUPPORTS SUCH THAT THE BOTTOM OF REFLECTORS IS FOUR FEET ABOVE THE ROADWAY EDGE AND TWO FEET OUTSIDE THE OUTER EDGE OF THE PAVED SHOULDER OR TWO FEET MINIMUM AND SIX FEET MAXIMUM OUTSIDE THE BACKS OF CURBS OR GUTTERS.
- IN ALL CASES, THE COLOR OF THE REFLECTORS SHALL BE THE SAME AS THE ADJACENT EDGE LINE EXCEPT AS SPECIFIED IN GENERAL NOTES.
- POST MOUNTED REFLECTORS SHALL BE PLACED CONTINUOUSLY AS NOTED ABOVE IN CONJUNCTION WITH GUARDRAIL INSTALLED.
- THE PLACEMENT OF ROADWAY DELINEATOR "CIRCULAR REFLECTORS" SHALL BE USED FOR ALL MINOR PROJECTS WHICH HAVE A LENGTH OF LESS THAN 5 MILES. THE PLACEMENT OF ROADWAY DELINEATOR "RECTANGULAR REFLECTORS" SHALL BE USED FOR ALL MAJOR PROJECTS WHICH HAVE A LENGTH GREATER THAN 5 MILES. ALL ROADWAY DELINEATORS WITHIN A ROADWAY SEGMENT SHALL BE OF THE SAME TYPE.

NOTES FOR GUARDRAIL AND BARRIER WALL REFLECTOR:

- REFLECTORS TYPE B AND TYPE C SHALL HAVE REFLECTIVE SURFACE ON ONE SIDE ONLY. WHERE DOUBLE BACK REFLECTOR IS INDICATED, A SINGLE RED REFLECTOR SHALL BE INSTALLED BACK TO BACK WITH THE APPROACHING TRAFFIC FACING REFLECTOR.

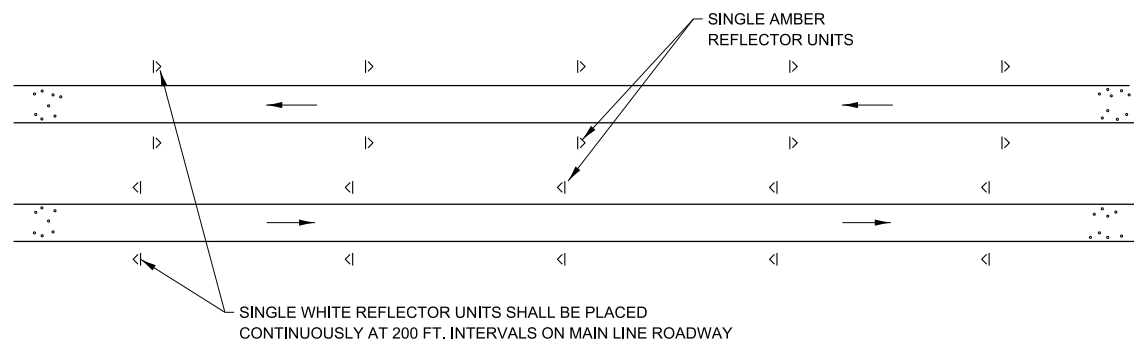
APPROVED BY:  DATE: 03/01/2025
 CHIEF ENGINEERING OFFICER

REVISIONS	
DATE	DESCRIPTION
03-01-2025	DELINEATOR SPACING AND MOUNTING HEIGHT REVISED AND RED REFLECTORS ONLY ON SPECIFIED RAMPS
03-01-2024	ADDED DETAIL FOR REFLECTOR AT NAW & RETAINING WALL

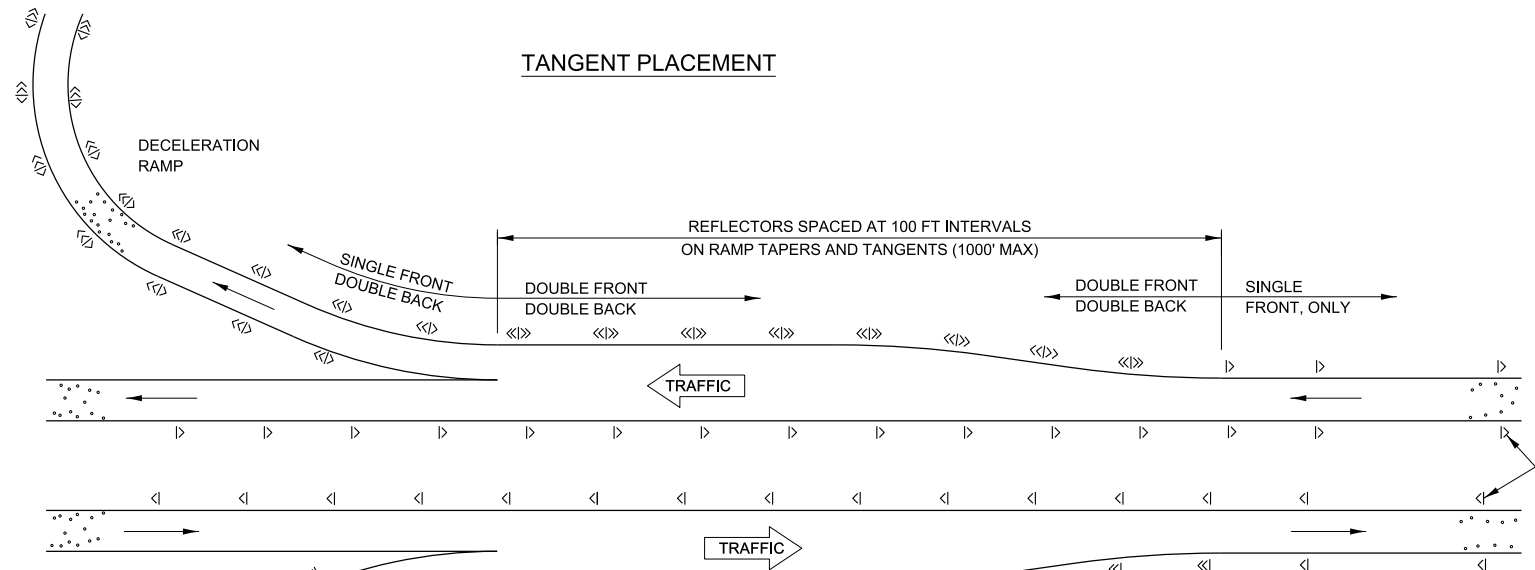


ROADWAY DELINEATORS AND REFLECTORS

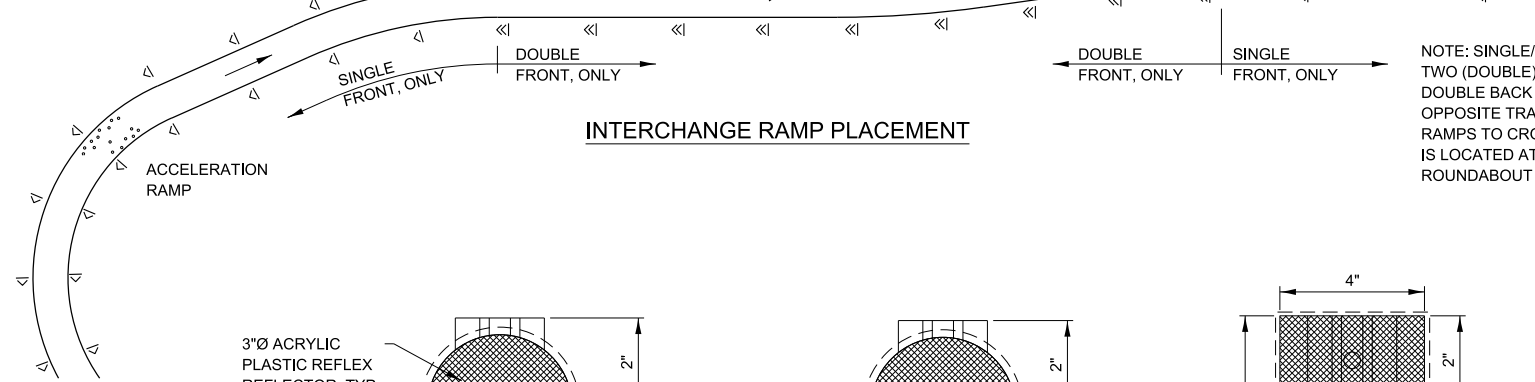
VERSION: 2025-03 STANDARD: D4-10 SHEET: 1 OF 3



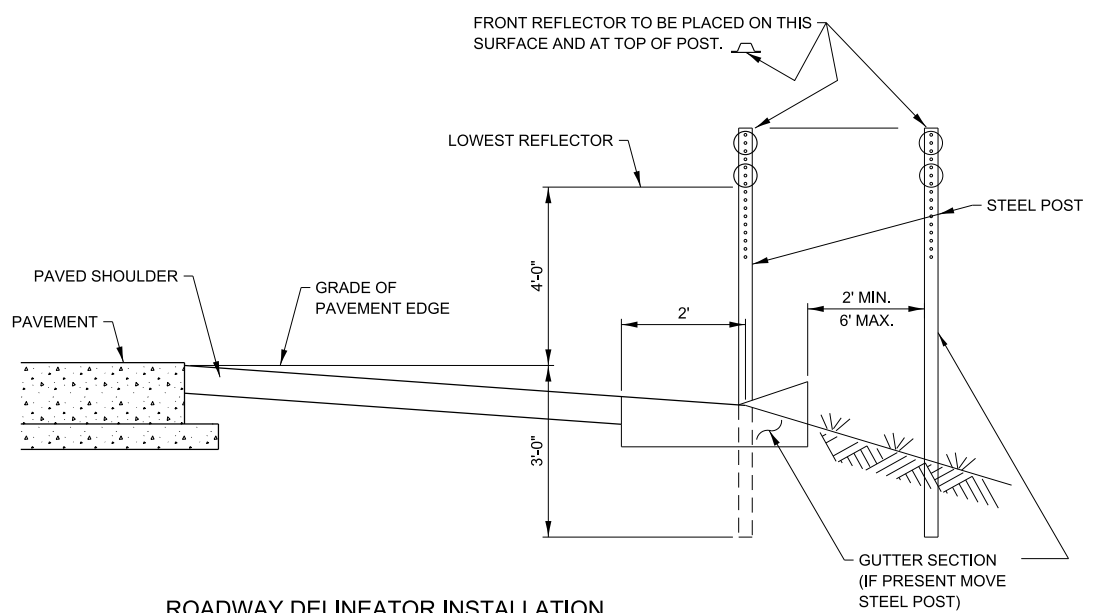
TANGENT PLACEMENT



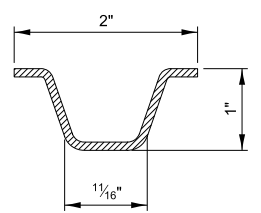
INTERCHANGE RAMP PLACEMENT



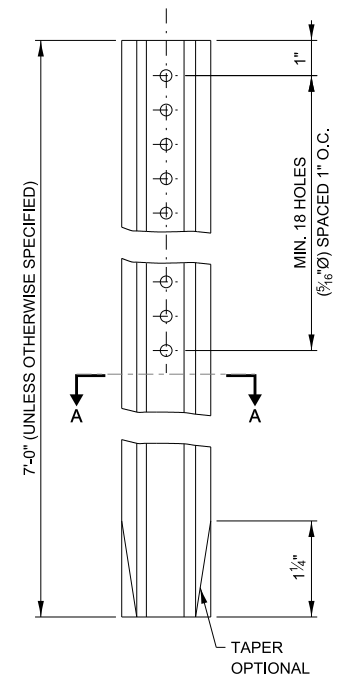
NOTE: SINGLE/DOUBLE FRONT INDICATES ONE (SINGLE) OR TWO (DOUBLE) REFLECTORS FACING APPROACHING TRAFFIC. DOUBLE BACK INDICATES TWO RED REFLECTORS FACING OPPOSITE TRAFFIC FLOW. APPLYING ONLY TO TOLLWAY EXIT RAMP TO CROSSROADS WHERE THE EXIT RAMP TERMINAL IS LOCATED AT A STOP CONTROLLED, SIGNALIZED OR ROUNDABOUT INTERSECTION.



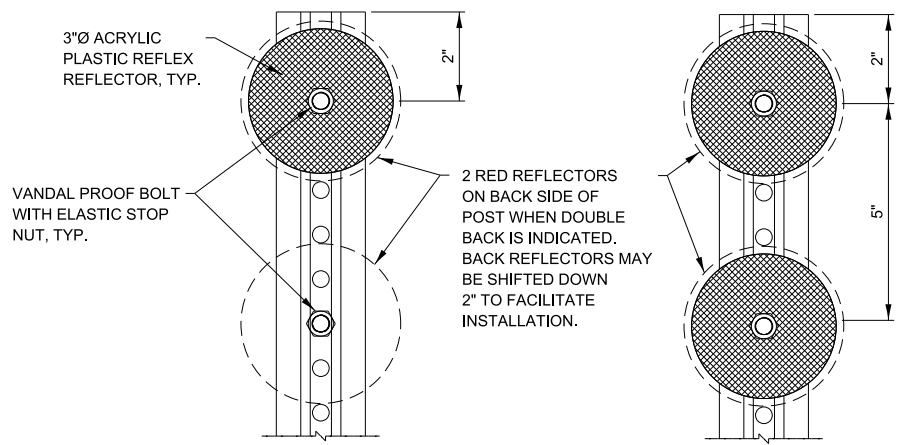
ROADWAY DELINEATOR INSTALLATION



SECTION A-A
STEEL- 1.12 LBS/FT.



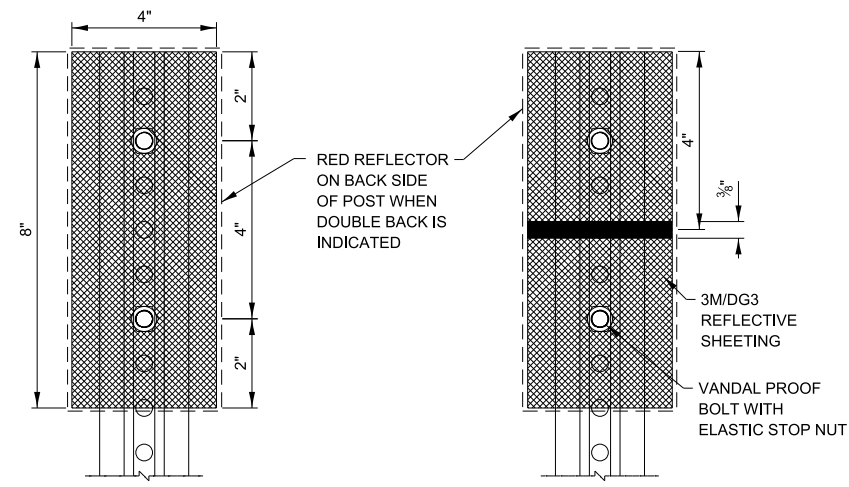
STEEL POST



SINGLE FRONT

DOUBLE FRONT

CIRCULAR REFLECTORS



SINGLE FRONT

DOUBLE FRONT

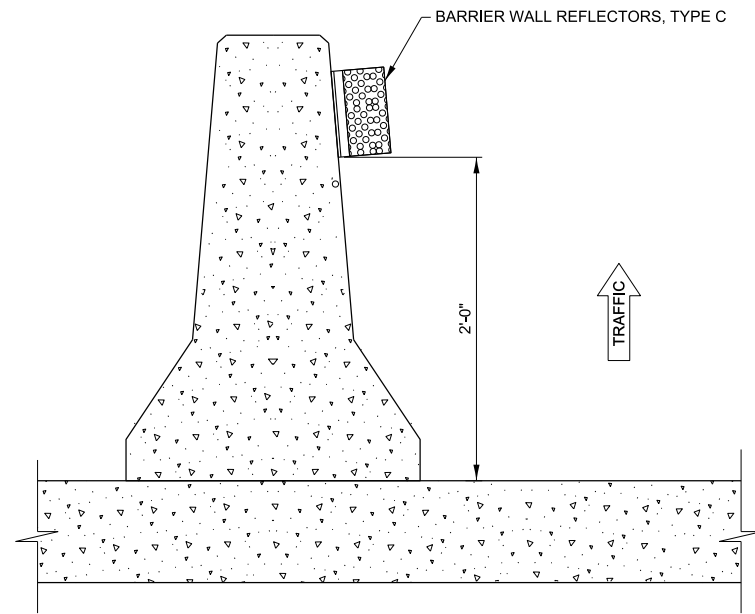
RECTANGULAR REFLECTORS

NOTE:
SEE SHEET 1 OF THIS
SERIES FOR NOTES.

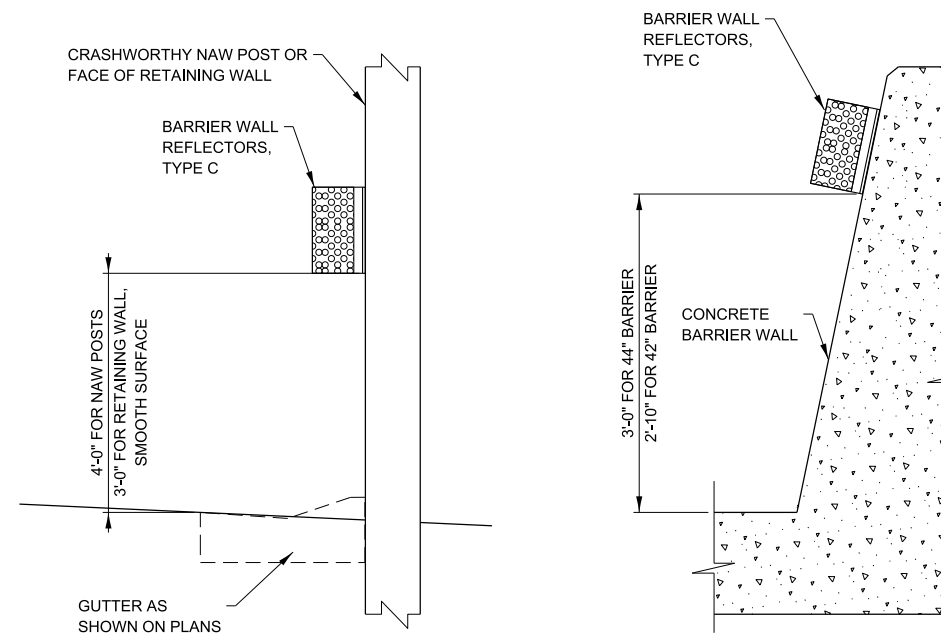
APPROVED BY: *Manar Nashif*
CHIEF ENGINEERING OFFICER
DATE: 03/01/2025

ROADWAY DELINEATORS AND REFLECTORS

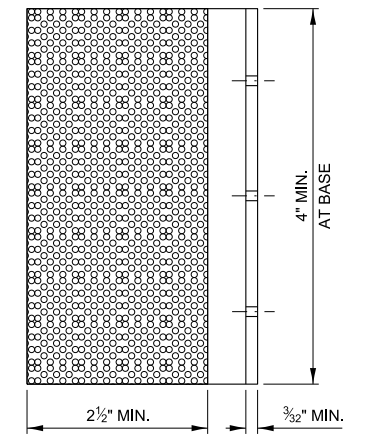
VERSION: 2025-03	STANDARD: D4-10	SHEET: 2 OF 3
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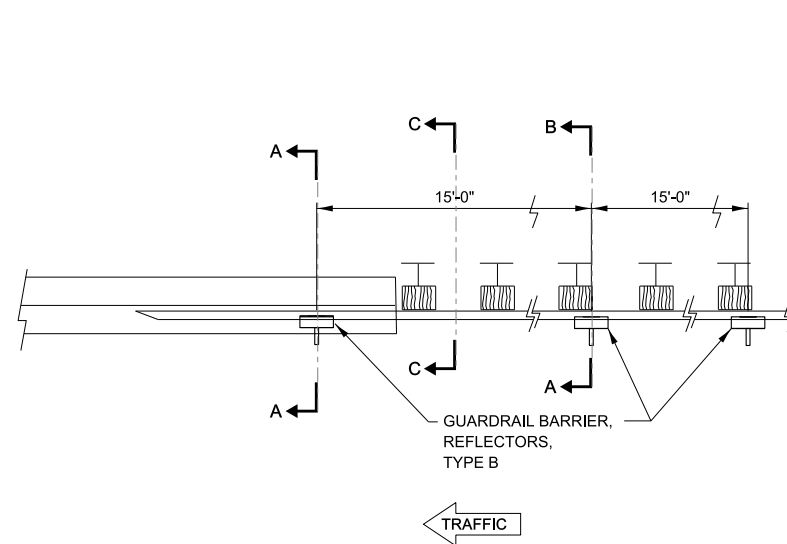
CROSS-SECTION
TEMPORARY CONCRETE BARRIER



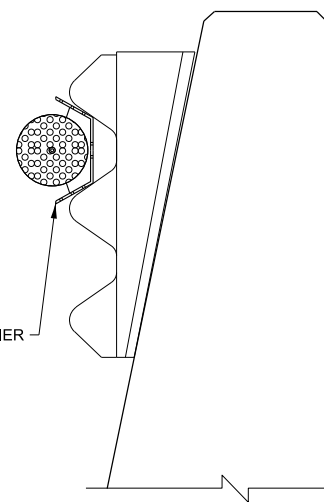
VERTICAL WALL, BARRIER OR PARAPET
REFLECTOR INSTALLATION



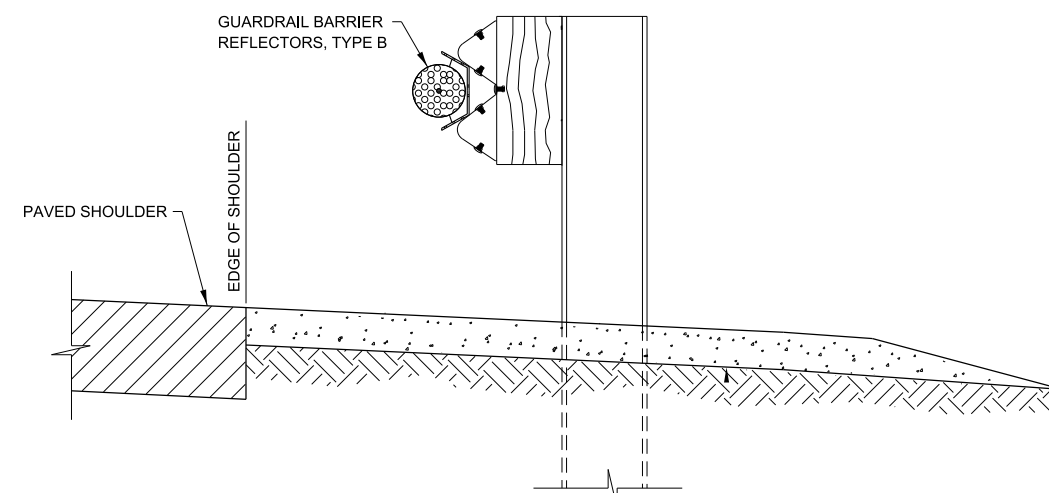
REFLECTOR, TYPE C



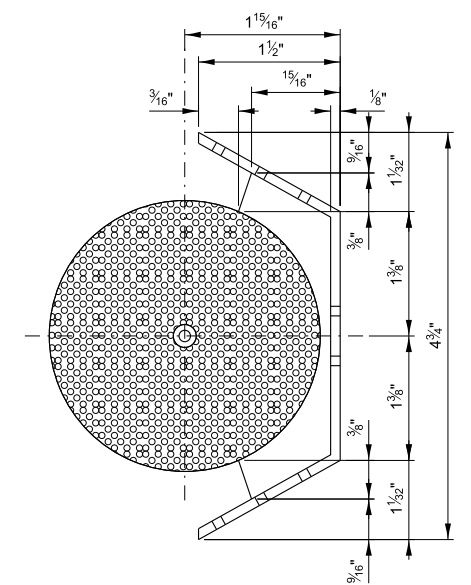
PLAN



SECTION A-A

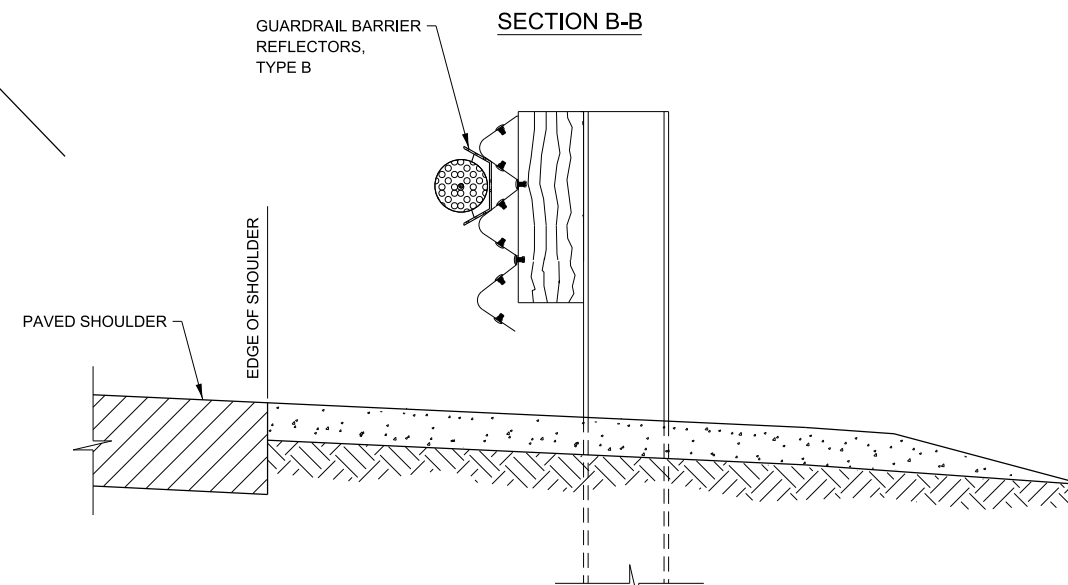


SECTION B-B



REFLECTOR, TYPE B

REFLECTOR INSTALLATION ON GUARDRAIL
AT BRIDGE APPROACHES
ALSO SEE SHEET 1 IN THIS SERIES
FOR ADDITIONAL INFORMATION



SECTION C-C

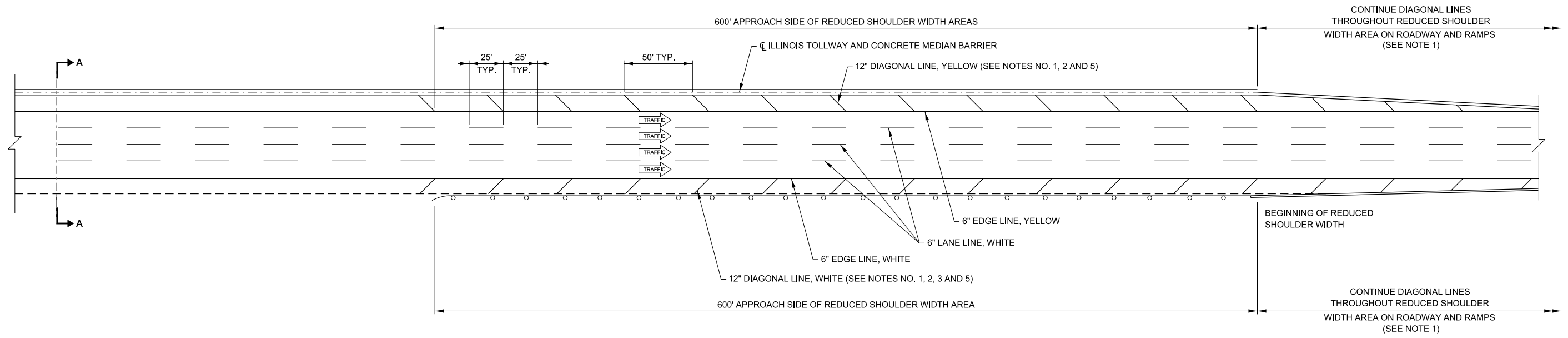
NOTE:
SEE SHEET 1 OF THIS SERIES FOR NOTES.



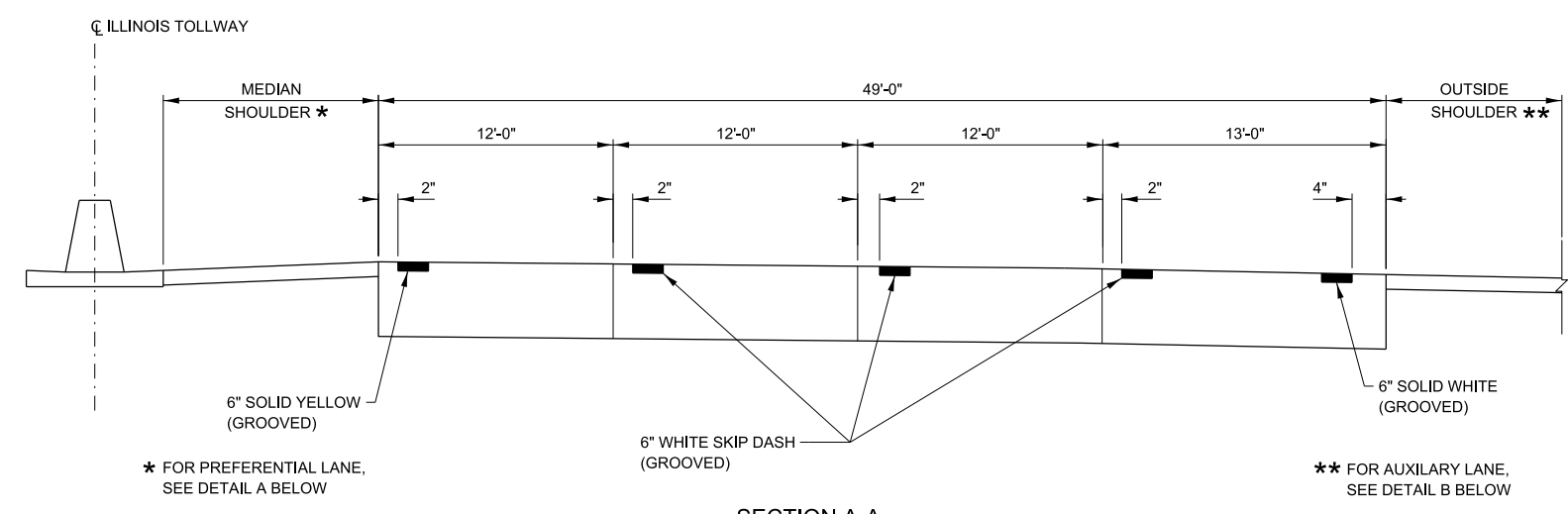
ROADWAY DELINEATORS AND
REFLECTORS

VERSION: 2025-03 STANDARD: D4-10 SHEET: 3 OF 3

APPROVED BY: *Manar Nashif*
CHIEF ENGINEERING OFFICER
DATE: 03/01/2025

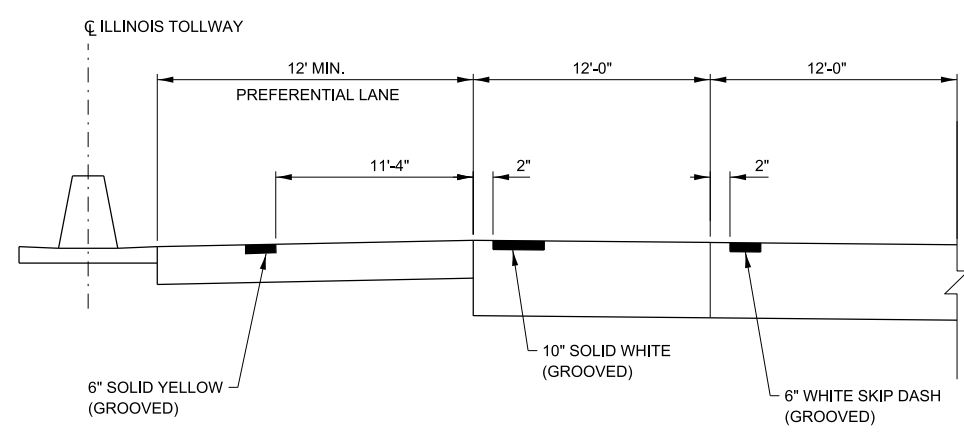


PLAN

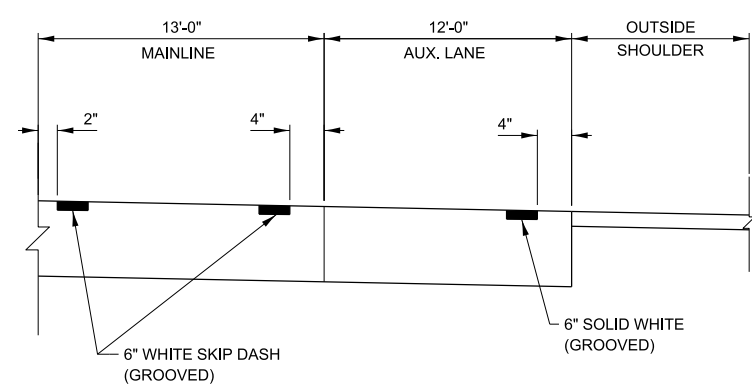


SECTION A-A
ROADWAY AND SHOULDER STRIPING - NEW CONSTRUCTION

FOR RUMBLE STRIP DETAILS
SEE STANDARD DRAWING D7



DETAIL A - PREFERENTIAL LANE STRIPING



DETAIL B - AUXILIARY LANE STRIPING

GENERAL NOTES:

1. DIAGONAL SHOULDER STRIPING REQUIRED WHERE THE SHOULDER WIDTH IS LESS THAN STANDARD EXCEPT ON SHOULDERS LESS THAN 4 FEET.
2. ROADWAY MARKING MATERIALS TO BE USED ON FINISHED CONCRETE SURFACE AND ASPHALT SURFACE SHALL BE AS SHOWN ON THE PLANS.
3. WHERE THE GUARDRAIL ENCROACHES ON THE SHOULDER THE DIAGONAL MARKINGS SHALL EXTEND AS CLOSE TO THE FACE OF THE RAIL AS POSSIBLE.
4. ALL PERMANENT LANE LINES AND EDGE LINES SHALL BE GROOVED, ON ROADWAY SURFACES, UNLESS OTHERWISE NOTED.
5. DIAGONAL STRIPING SHALL BE SURFACE APPLIED.
6. GORE STRIPING (CHEVRON) SHALL BE SURFACE APPLIED.
7. ALL LANE LINES AND EDGE LINES SHALL BE SURFACE APPLIED ON BRIDGES.
8. ALL LANE LINES AND EDGE LINES SHALL BE SURFACE APPLIED ON CONTINUOUSLY REINFORCED CONCRETE (CRC) PAVEMENT AT TOLL PLAZAS.

REVISIONS	
DATE	DESCRIPTION
03-01-2026	REVISED CALL OUT '12" DIAGONAL LINE, WHITE ...' TO ADD NOTE NO. '3'
03-01-2025	REVISED NOTE 1
03-01-2023	ADDED AUX. LANE STRIPING DETAIL
03-01-2022	REVISED EDGE LINES TO 6"
03-01-2021	ADDED PREF. LANE STRIPING

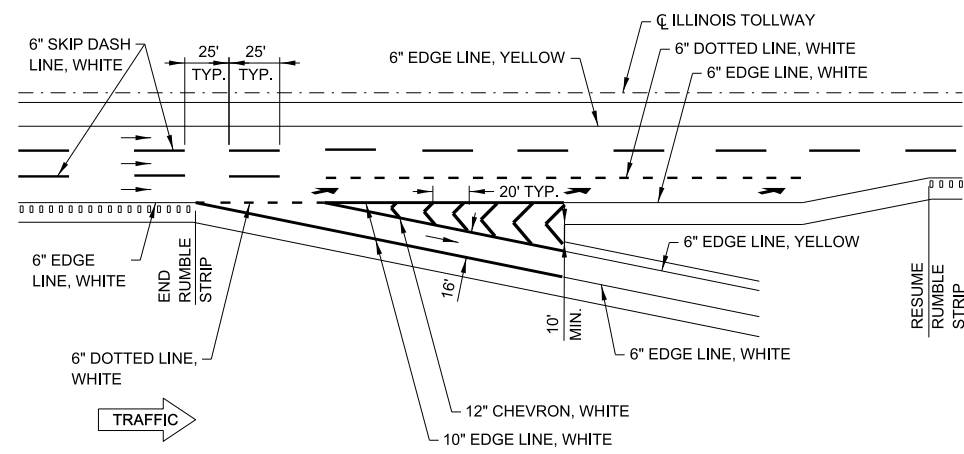


PERMANENT PAVEMENT MARKINGS MAINLINE

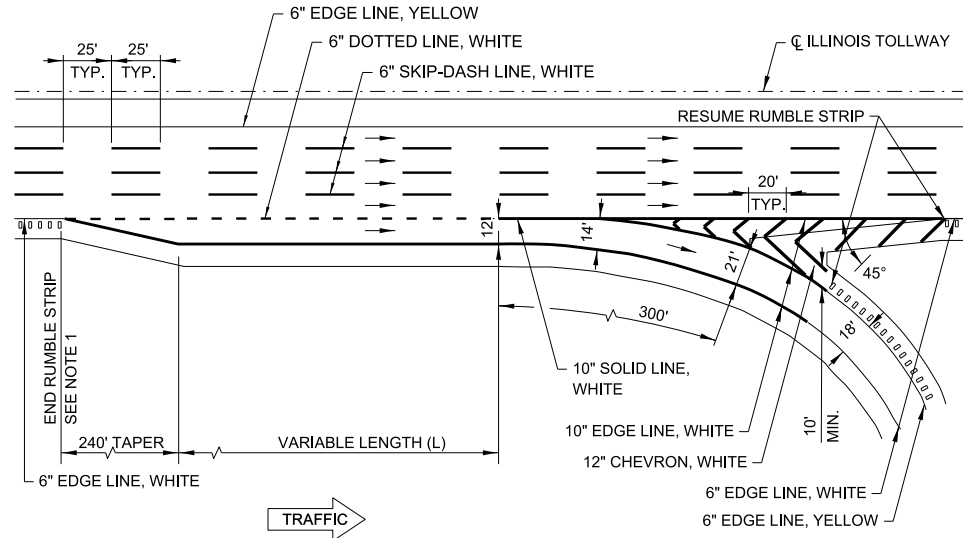
VERSION: 2026-03 STANDARD: D5-12 SHEET: 1 OF 1

APPROVED BY: *Manar Nashif*
CHIEF ENGINEERING OFFICER

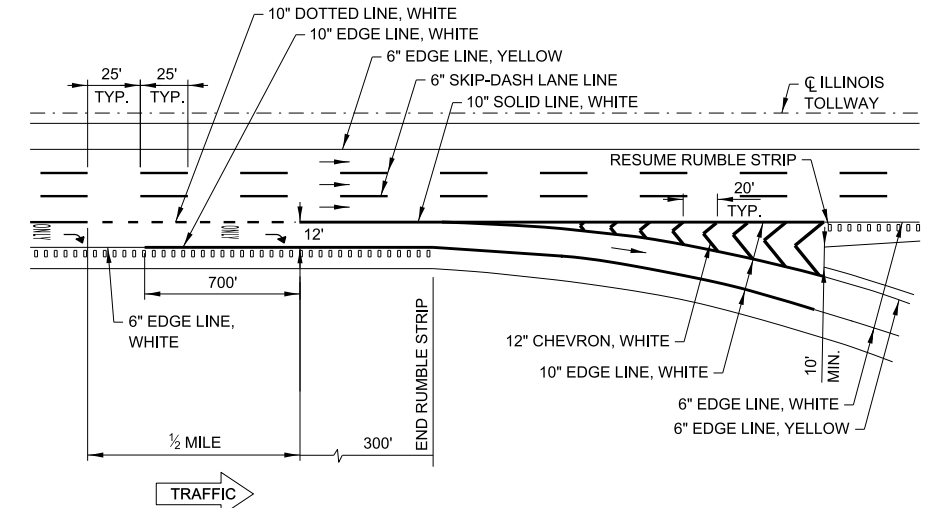
DATE: 03/01/2026



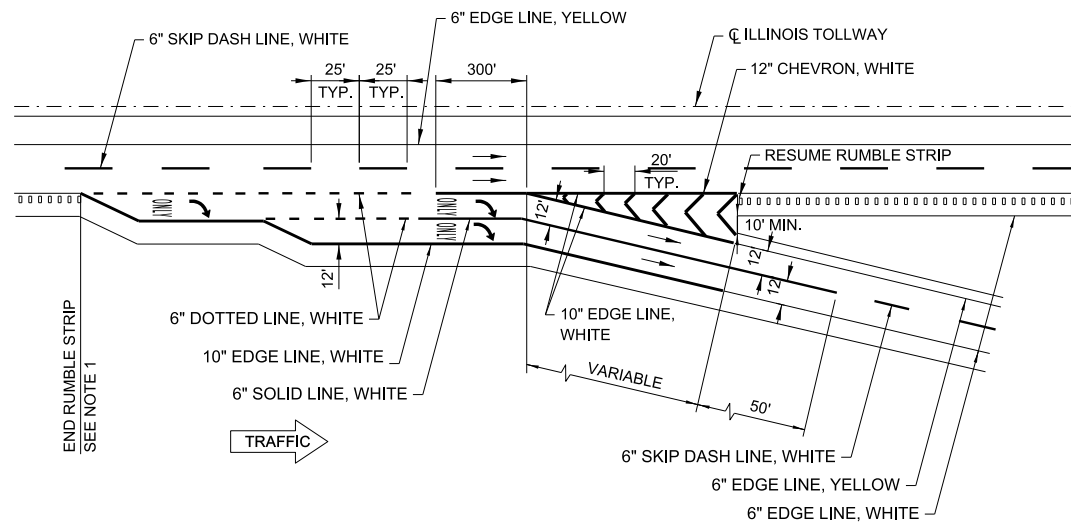
**EXIT - SINGLE LANE RAMP
LANE THREE TERMINATION**



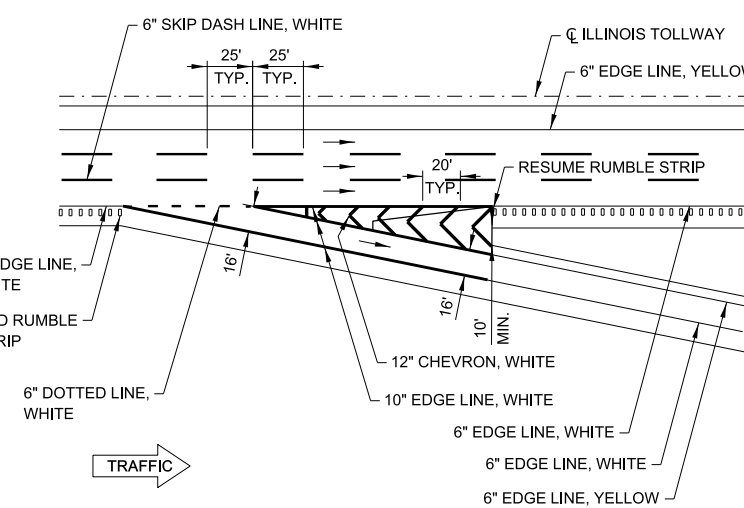
EXIT - SINGLE LANE LOOP RAMP - PARALLEL TYPE
SEE SHEET 4 FOR SPEED REDUCTION MARKINGS



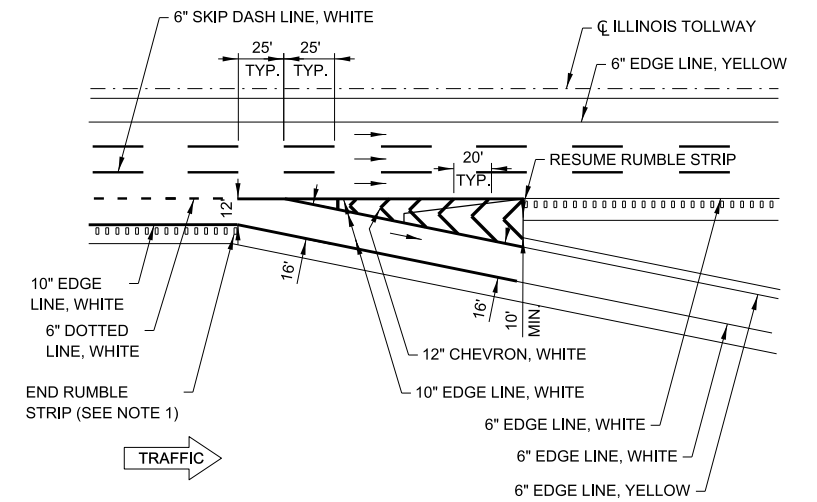
**EXIT - SINGLE LANE RAMP - LANE DROP
OR AUX LANE \geq 1/2 MILE IN LENGTH**



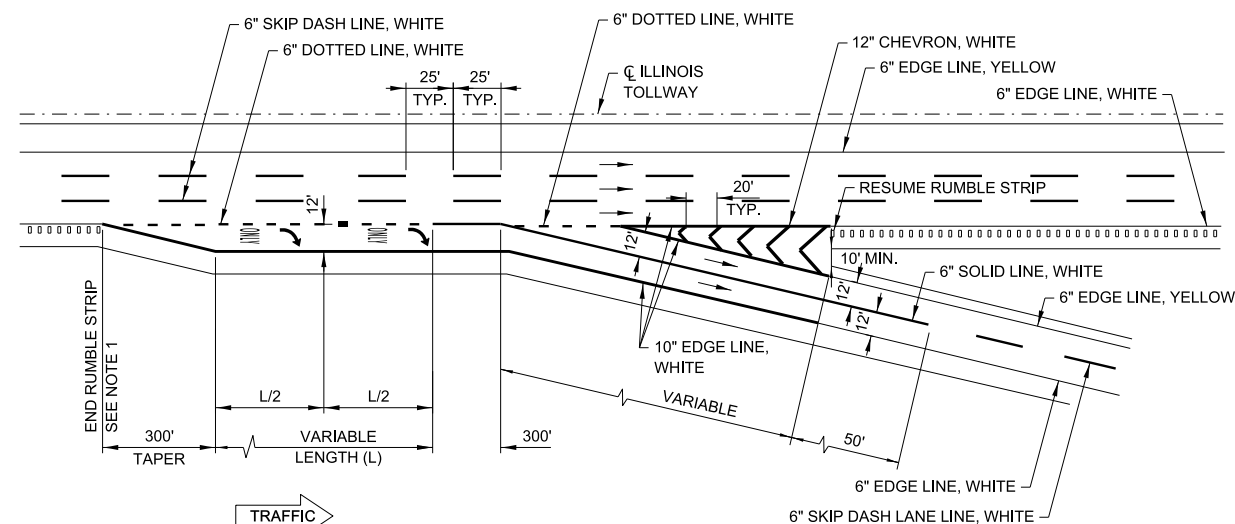
EXIT - TWO LANE PARALLEL RAMP



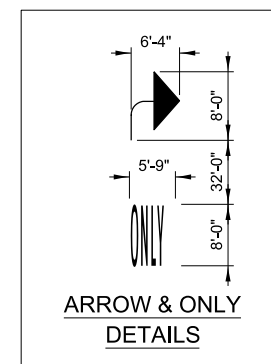
EXIT - SINGLE LANE RAMP - TAPER TYPE



**EXIT - SINGLE LANE RAMP WITH AUX LANE - TAPER TYPE
(AUX LANE $<$ 1/2 MILE IN LENGTH)**



EXIT - TWO LANE RAMP



NOTE:
PAVEMENT MARKING LETTERS AND SYMBOLS-ONLY AND ARROW ARE TO BE TYPICALLY PLACED AT 1/2 MILE EXIT ONLY GUIDE SIGN, AT GORE EXIT GUIDE SIGN AND APPROXIMATELY HALFWAY BETWEEN THE TWO.

GENERAL NOTES:

1. RUMBLE STRIPS SHALL BE OMITTED ALONG THE RIGHT SHOULDER ADJACENT TO THE EXIT AUXILIARY LANE WHEN THE EXIT LANE LENGTH IS LESS THAN 1000 FEET.
2. ROADWAY MARKING MATERIALS TO BE USED ON FINISHED CONCRETE SURFACE AND ASPHALT SURFACE SHALL BE AS SHOWN ON THE PLANS.
3. ALL LANE LINES AND EDGE LINES SHALL BE GROOVED.
4. GORE STRIPING (CHEVRON) SHALL BE SURFACE APPLIED.
5. LETTERS AND SYMBOL MARKING SHALL BE SURFACE APPLIED.
6. DOTTED LINES SHALL CONSIST OF 3' LINE AND 9' GAPS.
7. PAVEMENT MARKINGS SHALL NOT BE GROOVED ON THE CONTINUOUSLY REINFORCED CONCRETE (CRC) PAVEMENT SECTION AT TOLL PLAZAS.

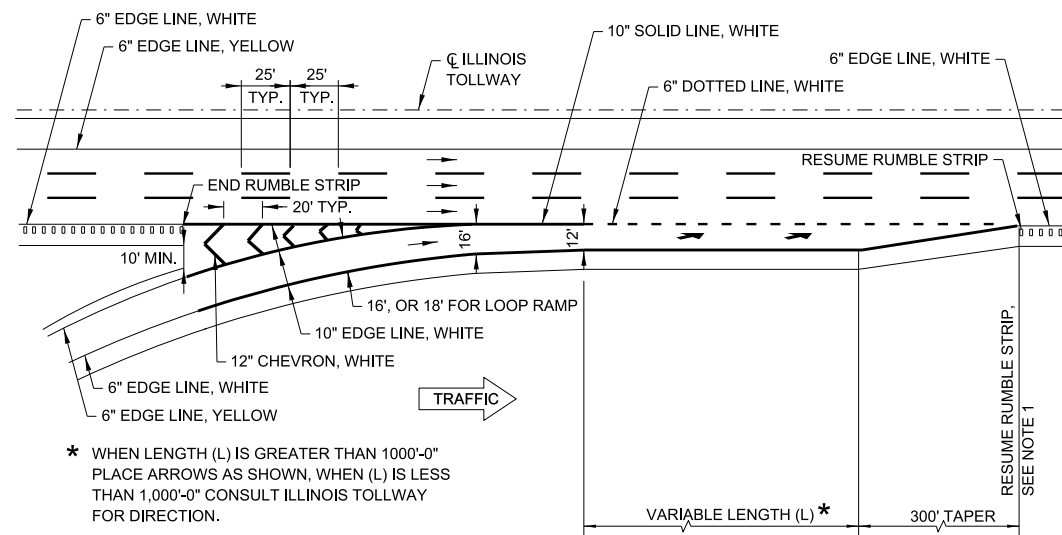
REVISIONS	
DATE	DESCRIPTION
03-01-2026	REMOVED DOTTED LINE AT THE MERGE TAPER IN '...RAMP LANE THREE TERMINATION' DETAIL AND ADDED NOTE '8' REVISED DETAIL TITLES FOR THE 'EXIT - SINGLE LANE RAMP - ...'

Illinois Tollway

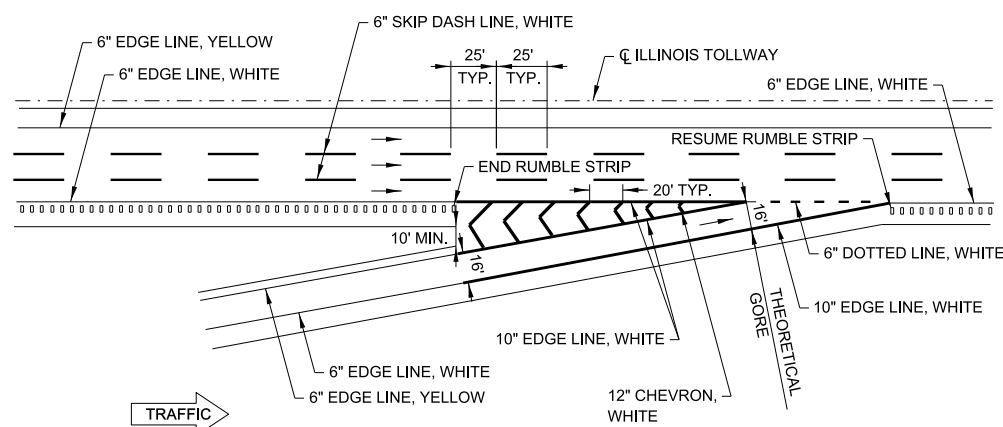
PERMANENT PAVEMENT MARKINGS RAMPS

VERSION: 2026-03	STANDARD: D6-12	SHEET: 1 OF 4
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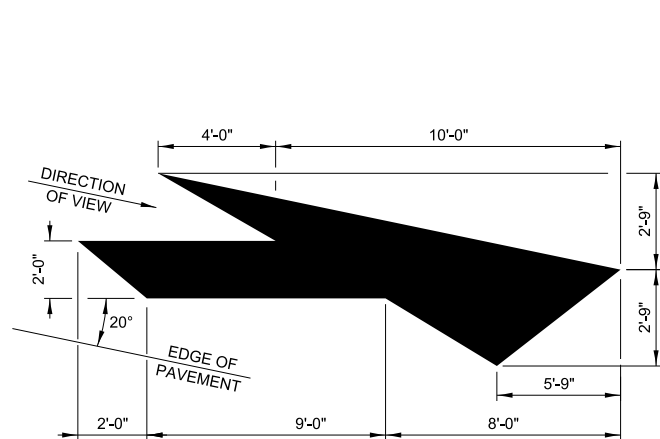
APPROVED BY: *Manar Nashif* CHIEF ENGINEERING OFFICER
DATE: 03/01/2026



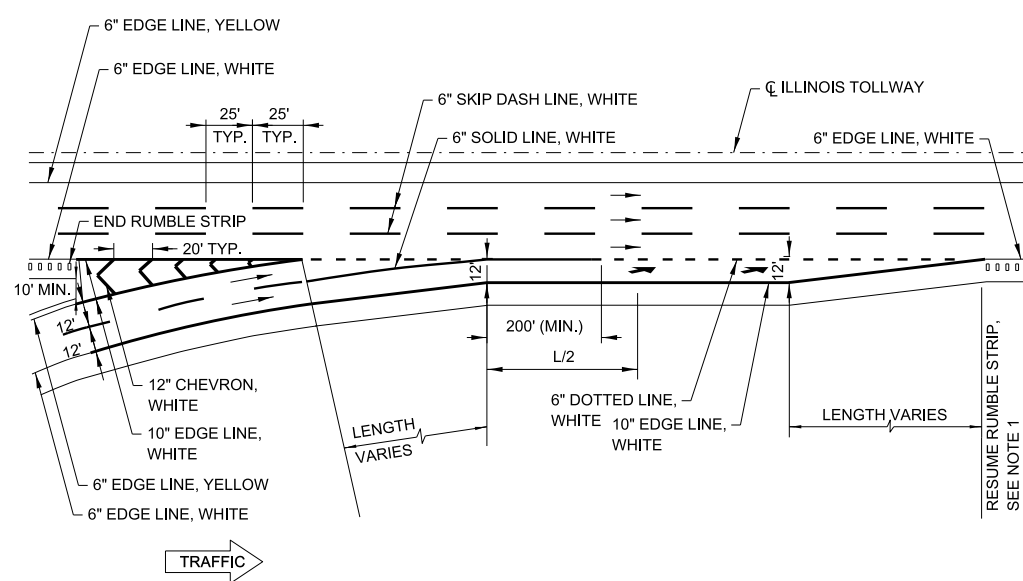
ENTRANCE - SINGLE LANE RAMP - PARALLEL TYPE



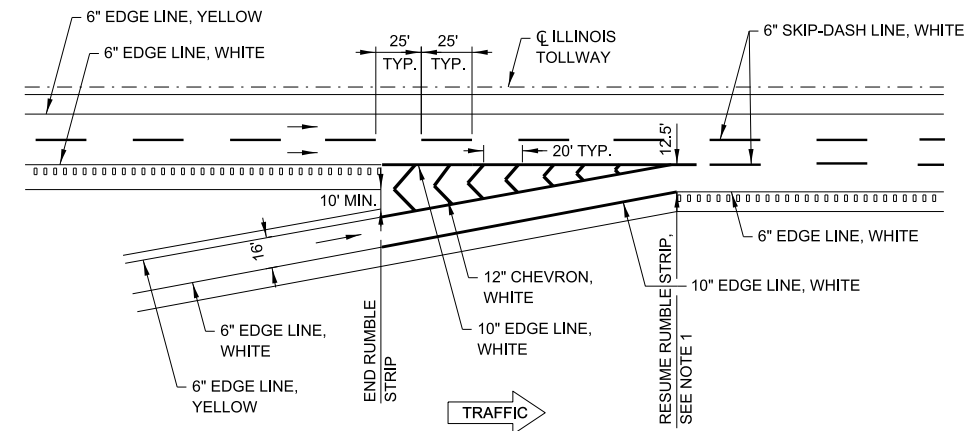
ENTRANCE - SINGLE LANE RAMP - TAPER TYPE



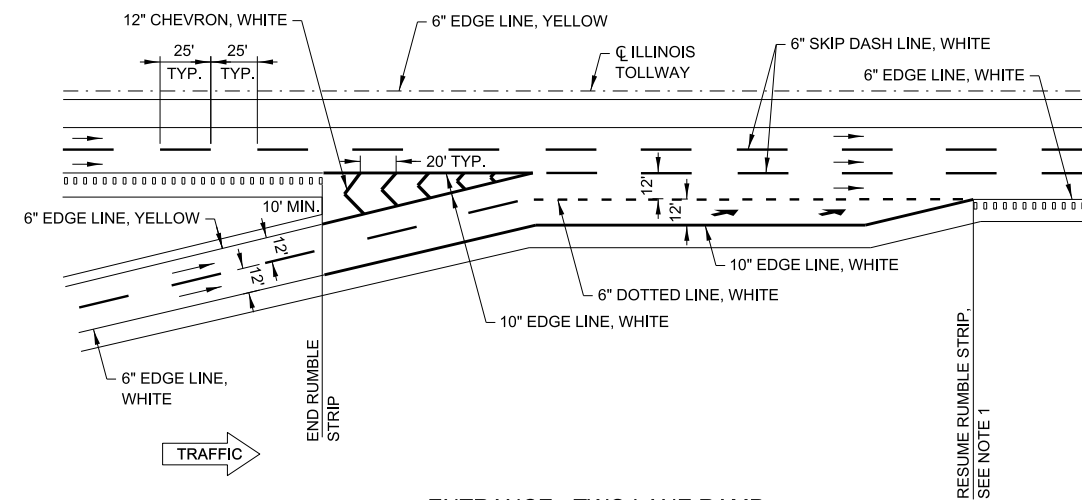
LANE-REDUCTION ARROW
RIGHT LANE-REDUCTION ARROW SHOWN.
USE MIRROR IMAGE FOR LEFT LANE.



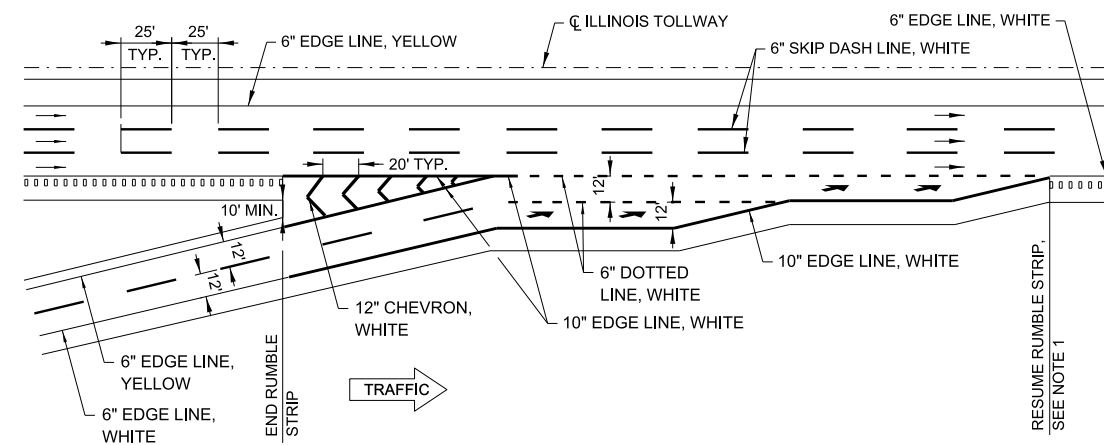
ENTRANCE - TWO LANE RAMP



ENTRANCE - SINGLE LANE RAMP
WITH ADDED MAINLINE LANE



ENTRANCE - TWO LANE RAMP
WITH ADDED MAINLINE LANE



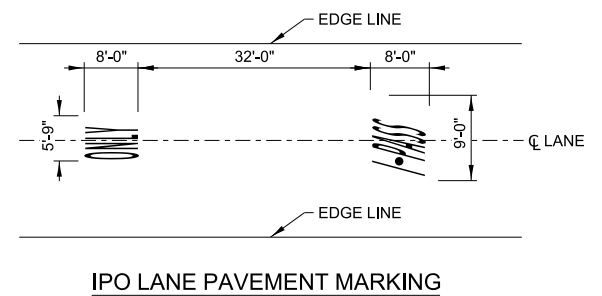
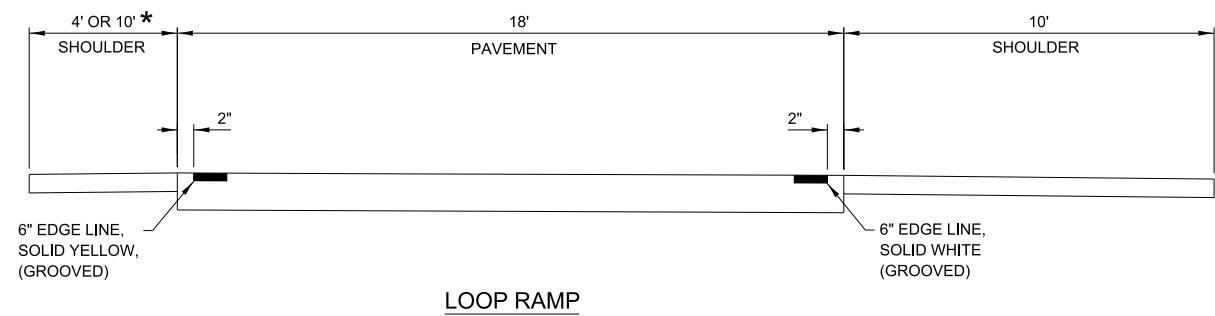
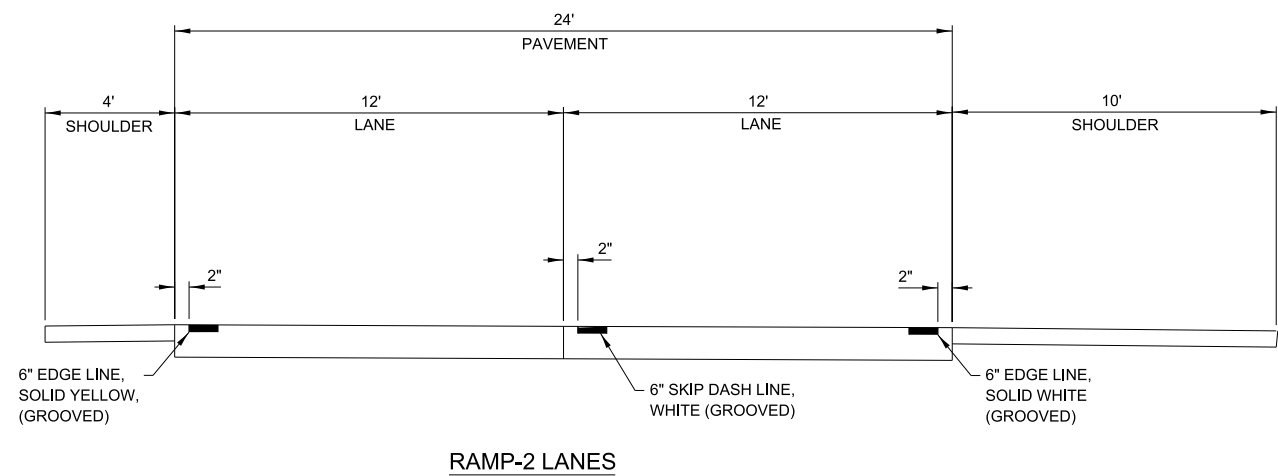
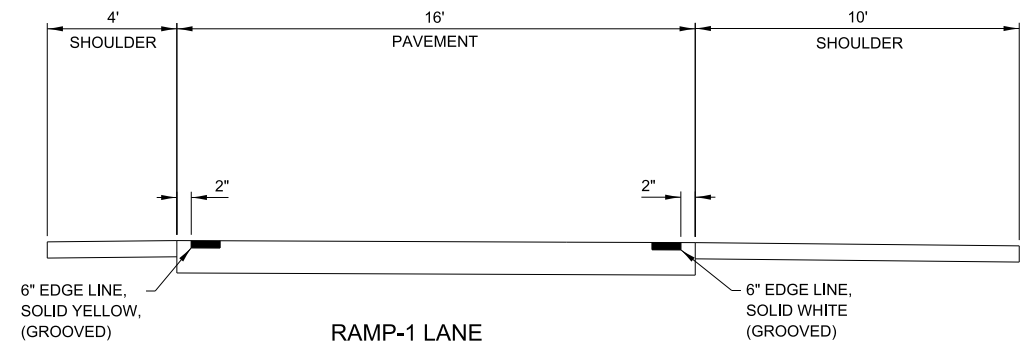
ENTRANCE - TWO LANE PARALLEL RAMP

APPROVED BY: *Manar Nashif*
CHIEF ENGINEERING OFFICER
DATE: 03/01/2026

SEE SHEET 1 IN
THIS SERIES FOR
GENERAL NOTES.

**PERMANENT PAVEMENT
MARKINGS RAMPS**

VERSION: 2026-03	STANDARD: D6-12	SHEET: 2 OF 4
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* RUMBLE STRIP SHALL BE ADDED WHEN ALONG EXIT LOOP RAMP AND LEFT SHOULDER IS 10' WIDE

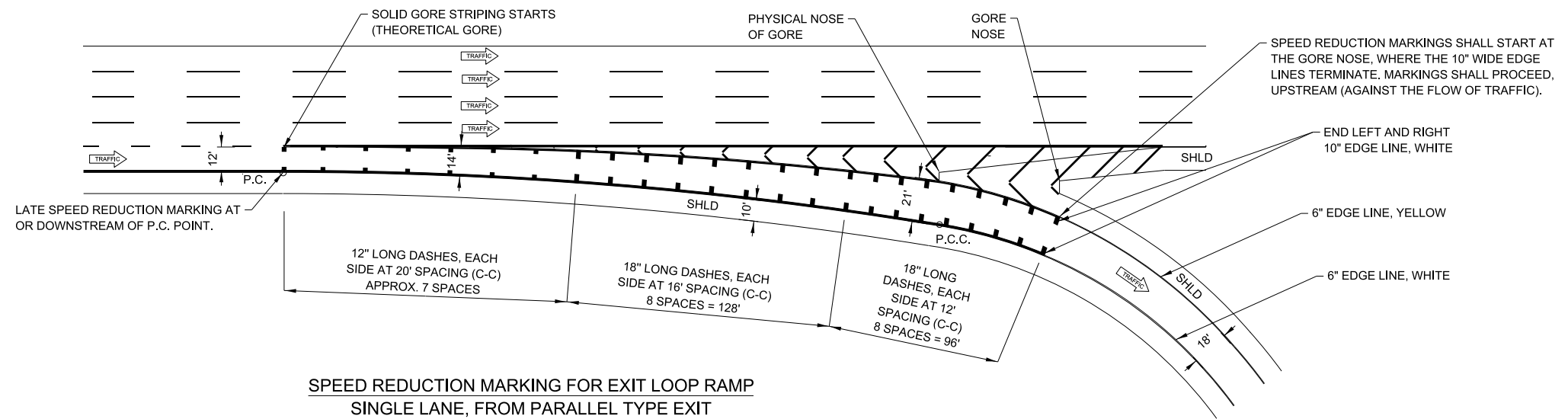
APPROVED BY: *Manar Nashif* DATE: 03/01/2026
 CHIEF ENGINEERING OFFICER

SEE SHEET 1 IN THIS SERIES FOR GENERAL NOTES.

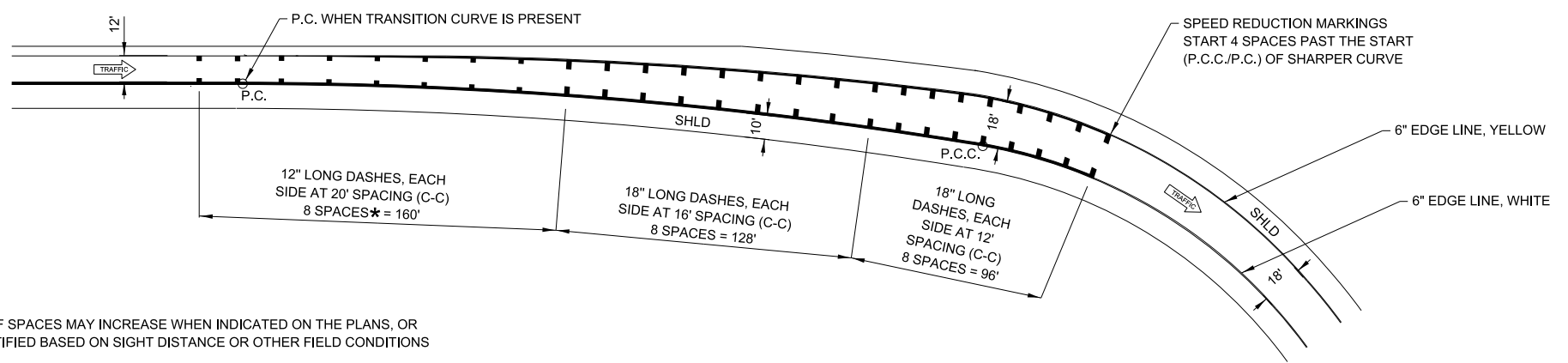


PERMANENT PAVEMENT MARKINGS RAMPS

VERSION: 2026-03	STANDARD: D6-12	SHEET: 3 OF 4
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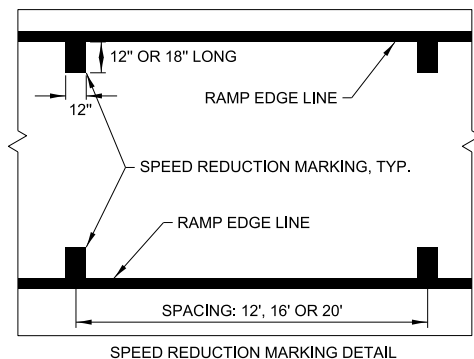


**SPEED REDUCTION MARKING FOR EXIT LOOP RAMP
SINGLE LANE, FROM PARALLEL TYPE EXIT**



**SPEED REDUCTION MARKING FOR EXIT LOOP RAMP
SINGLE LANE, FROM C-D ROAD**

* NUMBER OF SPACES MAY INCREASE WHEN INDICATED ON THE PLANS, OR WHEN JUSTIFIED BASED ON SIGHT DISTANCE OR OTHER FIELD CONDITIONS



SPEED REDUCTION MARKING NOTES:

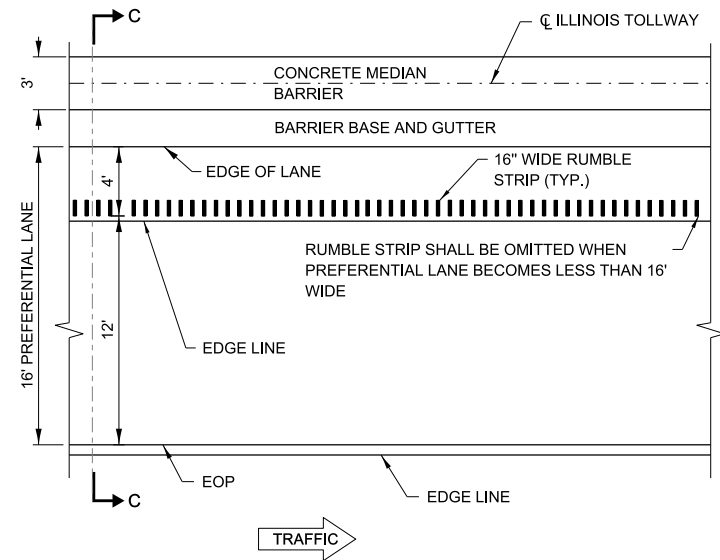
- SR-1. SPEED REDUCTION MARKINGS SHALL BE WHITE IN COLOR, BE 12" WIDE AND BE PLACED PERPENDICULAR TO THE EDGE LINE. THE MARKINGS SHALL TOUCH THE EDGE LINE AND EXTEND INTO THE LANE BY THE LENGTH INDICATED. THE MARKINGS ARE NOT GROOVED INTO THE PAVEMENT.
- SR-2. SPACINGS SHALL VARY FROM LONGER SPACES TO SHORTER SPACES IN THE DIRECTION OF TRAFFIC. THE SPACES SHALL BE MEASURED ALONG THE RAMP BASELINE AND SHALL BE AS INDICATED ON THE DETAIL.
- SR-3. SPEED REDUCTION MARKINGS SHALL ONLY BE USED ON EXIT LOOP RAMP. PAYMENT FOR SPEED REDUCTION MARKINGS WILL BE FOR PAVEMENT MARKING LINE, 12" OF THE PERMANENT PAVEMENT MARKING TYPE USED ON THE RAMP.
- SR-4. THIS DETAIL SHOWS PLACEMENT OF SPEED REDUCTION MARKINGS. FOR PLACEMENT AND TYPE OF EDGE LINES AND OTHER RAMP PAVEMENT MARKINGS, REFER TO OTHER DETAILS ON THE STANDARD DRAWINGS AND PLANS.

APPROVED BY: *Manar Nashif*
CHIEF ENGINEERING OFFICER
DATE: 03/01/2026



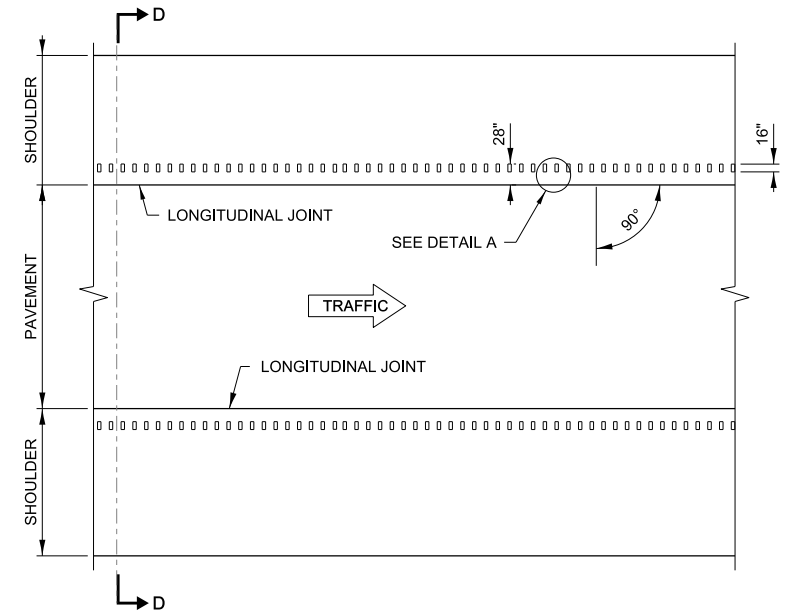
PERMANENT PAVEMENT MARKINGS RAMPS

VERSION: 2026-03 STANDARD: D6-12 SHEET: 4 OF 4

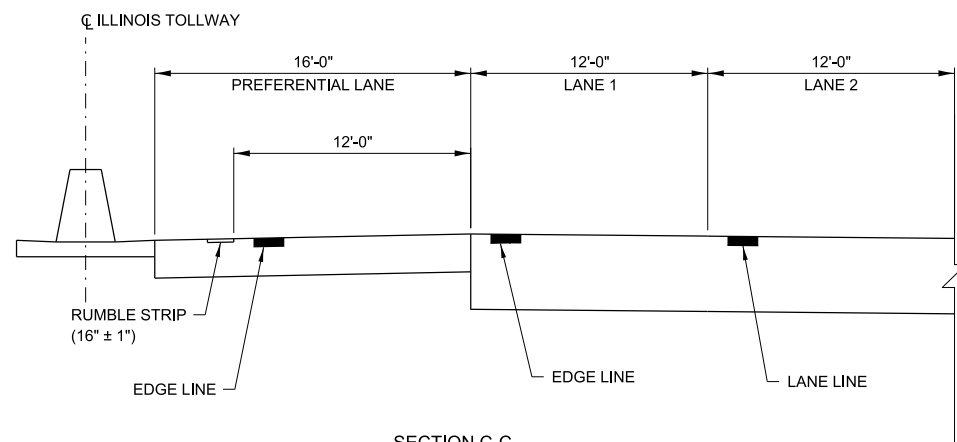


PREFERENTIAL LANE RUMBLE STRIP PLACEMENT - PLAN VIEW

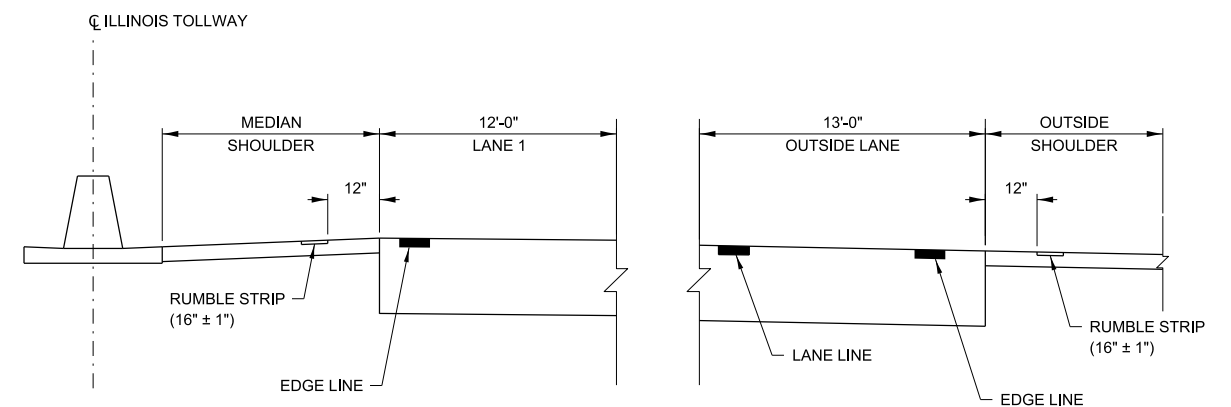
USE WHEN SHOWN ON PLANS, MAINLINE MEDIAN SHOULDER IS AT LEAST 16' WIDE AND USED AS PREFERENTIAL LANE



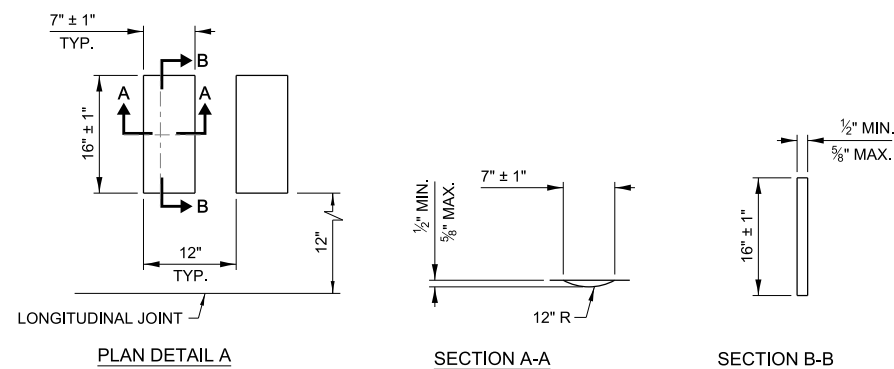
TYPICAL MAINLINE RUMBLE STRIP PLACEMENT - PLAN VIEW



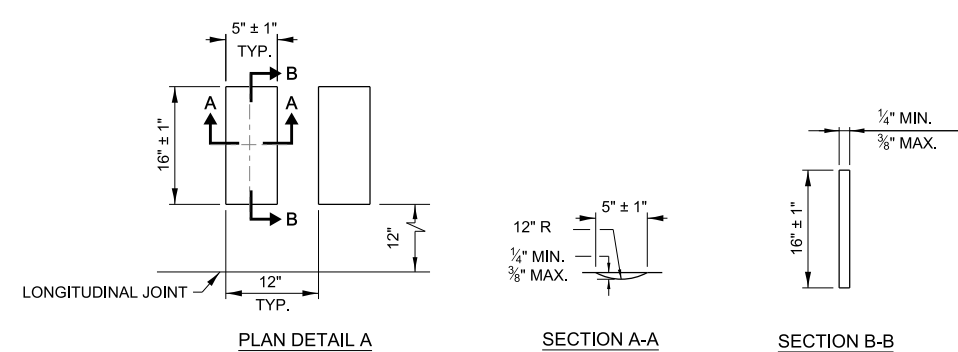
PREFERENTIAL LANE RUMBLE STRIP PLACEMENT - SECTION VIEW



TYPICAL MAINLINE RUMBLE STRIP PLACEMENT - SECTION VIEW



ASPHALT SHOULDER RUMBLE STRIP DETAILS



CONCRETE SHOULDER RUMBLE STRIP DETAILS

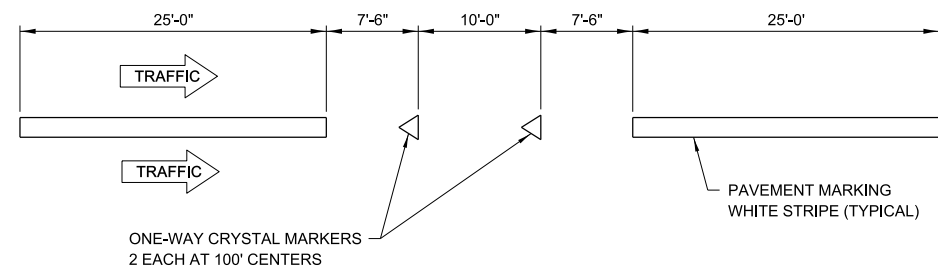


REVISIONS	
DATE	DESCRIPTION
03-01-2022	REVISED EDGE LINES ON SECTIONS C-C & D-D

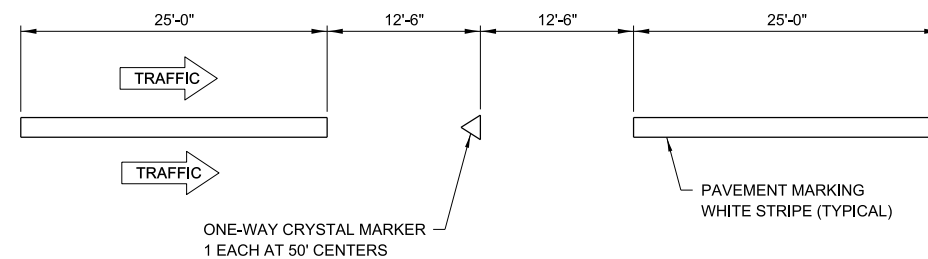
SHOULDER RUMBLE STRIP DETAILS

VERSION: 2022-03 STANDARD: D7-01 SHEET: 1 OF 1

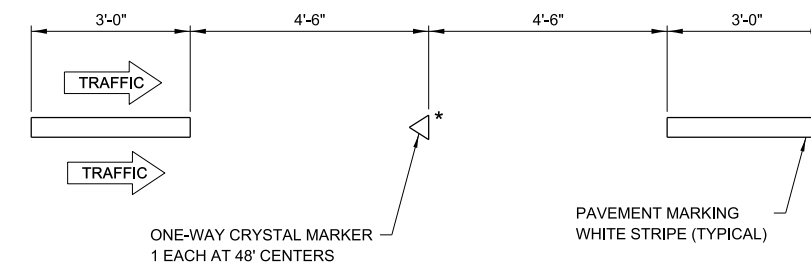
APPROVED BY: *Paul Kovacs* DATE: 03/01/2022
 CHIEF ENGINEERING OFFICER



DETAIL A

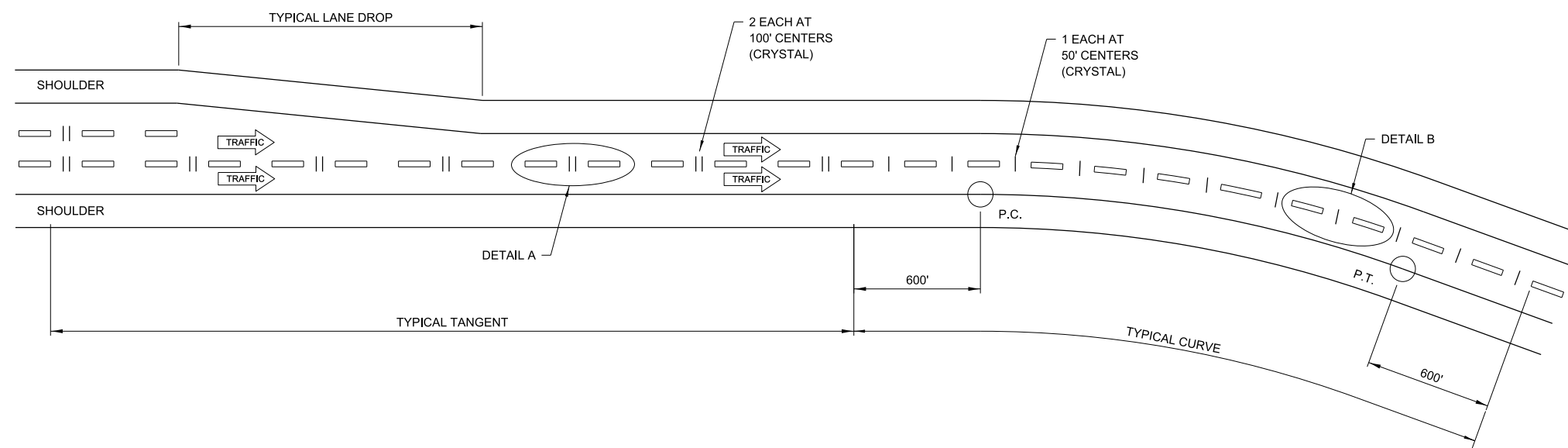


DETAIL B



DETAIL C

* MARKER TO BE INSTALLED WHEN LENGTHS OF AUXILIARY LANES ARE GREATER THAN 1000'.



MAINLINE

RAISED PAVEMENT LANE MARKER DETAILS

NOTES:

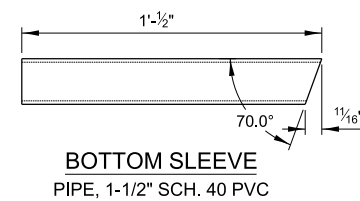
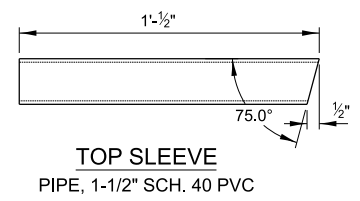
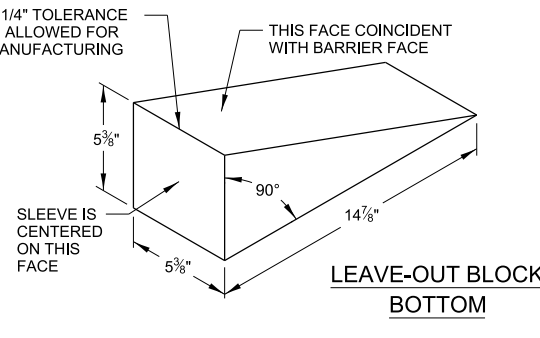
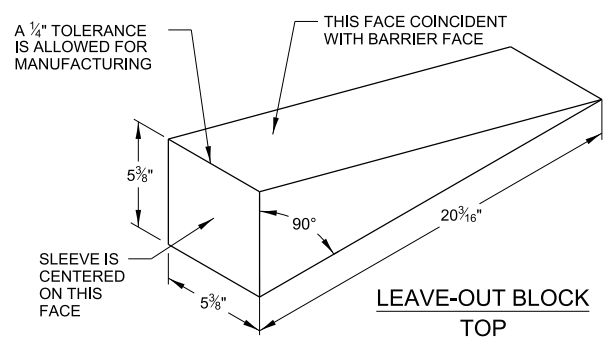
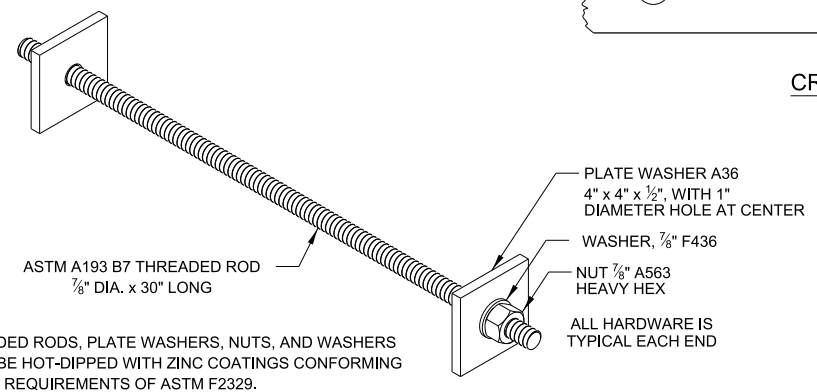
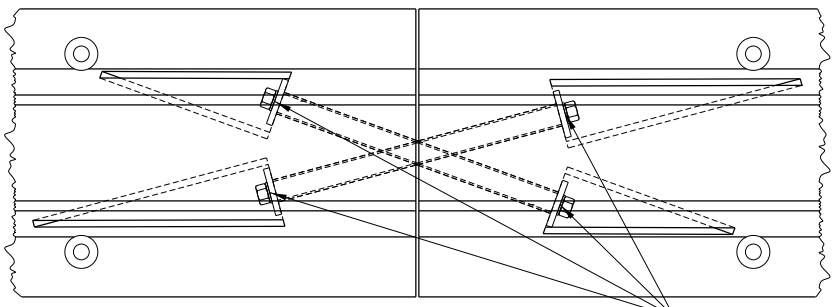
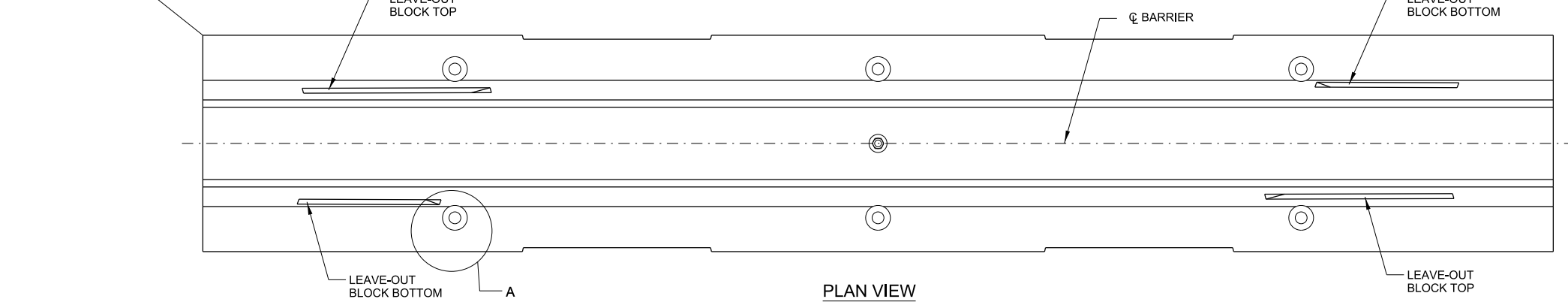
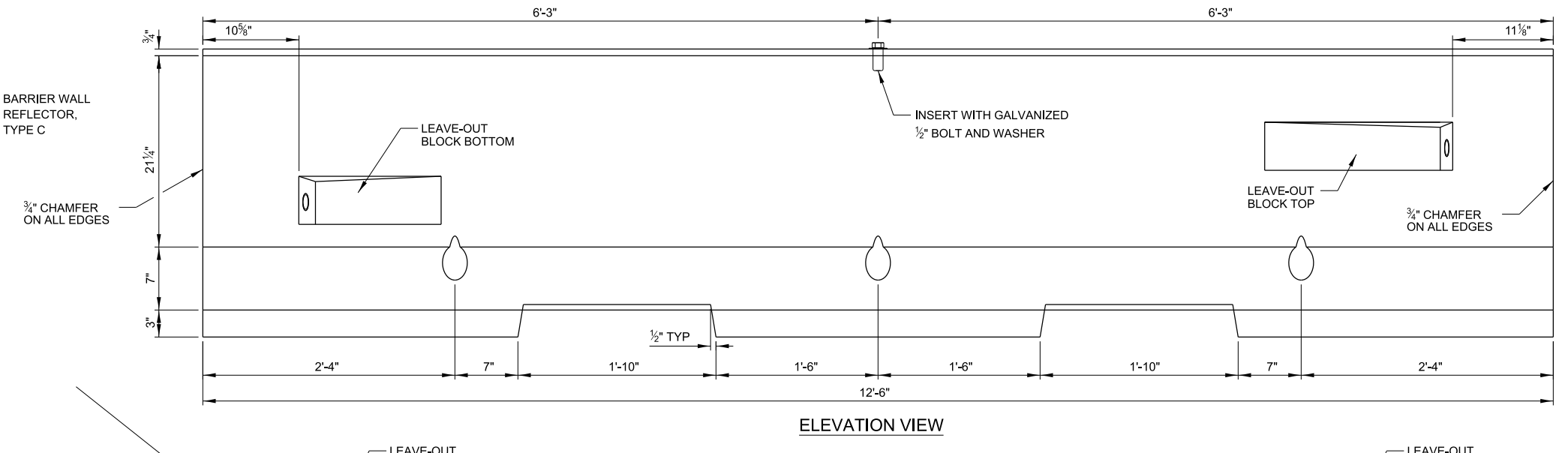
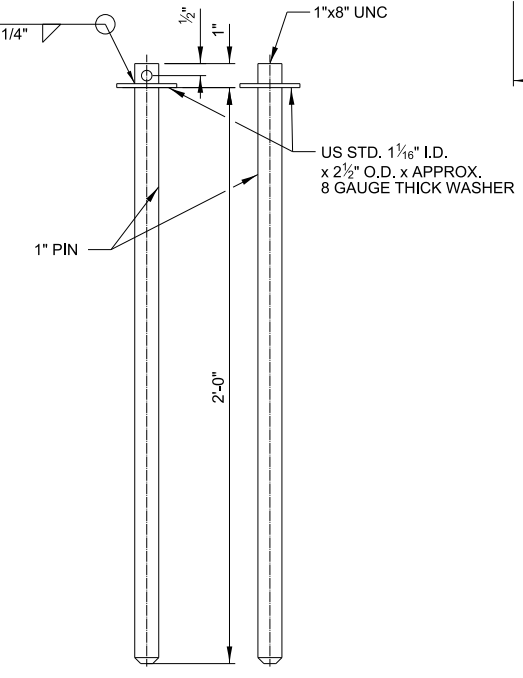
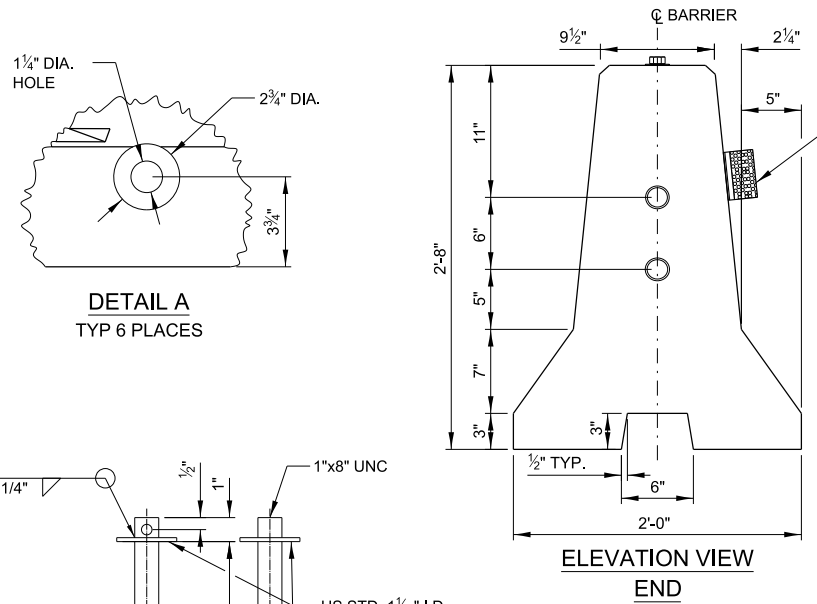
1. USE OF RAISED PAVEMENT LANE MARKERS SHALL BE IN ACCORDANCE WITH THE IL TOLLWAY, ROADWAY SIGNING AND PAVEMENT MARKING GUIDELINES.
2. FOR COLLECTOR-DISTRIBUTOR (C-D) ROADWAYS, PLACE ONE-WAY CRYSTAL MARKER, 2 EACH AT 100' CENTERS. USE DETAIL A.
3. FOR MULTI LANE DIRECTIONAL RAMPS, PLACE ONE-WAY CRYSTAL MARKER, 1 EACH AT 50' CENTERS. USE DETAIL B.
4. FOR AUXILIARY LANES, PLACE ONE-WAY CRYSTAL MARKER, 1 EACH AT 48' CENTERS. USE DETAIL C.

APPROVED BY: *Paul Kovacs* CHIEF ENGINEERING OFFICER
 DATE: 03/01/2019

REVISIONS	
DATE	DESCRIPTION
03-15-2019	ADDED NEW NOTE 1
03-31-2016	REVISED NOTES 1.
11-01-2012	REVISED DETAIL C.

RAISED PAVEMENT LANE MARKER

VERSION: 2019-03 STANDARD: D8-03 SHEET: 1 OF 1



- NOTES:**
- EACH F SHAPE BARRIER UNIT SHALL BE CLEARLY MARKED WITH "IL TOLLWAY F SHAPE", THE PRODUCER'S MARK AND THE DATE OF MANUFACTURE. THE MARKING SHALL BE RECESSED IN THE BARRIER BY 1/2" OR PAINTED THEREON WITH WATERPROOF PAINT/INK.
 - THE INSERT FOR THE 1/2" BOLT AT THE TOP OF THE BARRIER SHALL BE CAPABLE OF 3000 LB PULL-OUT STRENGTH.
 - AT LOCATIONS WHERE THE BARRIER SEPARATES OPPOSING FLOWS OF TRAFFIC, TYPE C REFLECTORS SHALL BE ON BOTH SIDES OF BARRIER. SEE STANDARD D4 FOR DIMENSIONS OF TYPE C REFLECTOR.
 - ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER, EXCEPT WHERE SHOWN OTHERWISE.
 - REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.
 - REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 315.
 - REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
 - COVER (CL.) IS 1-1/2" UNLESS OTHERWISE INDICATED.
 - CONCRETE SHALL BE PORTLAND CEMENT CONCRETE, CLASS PS (4000 PSI).
 - TWO OF EACH LEAVE-OUT BLOCK AND TWO OF EACH SLEEVE NEEDED FOR EACH BARRIER.

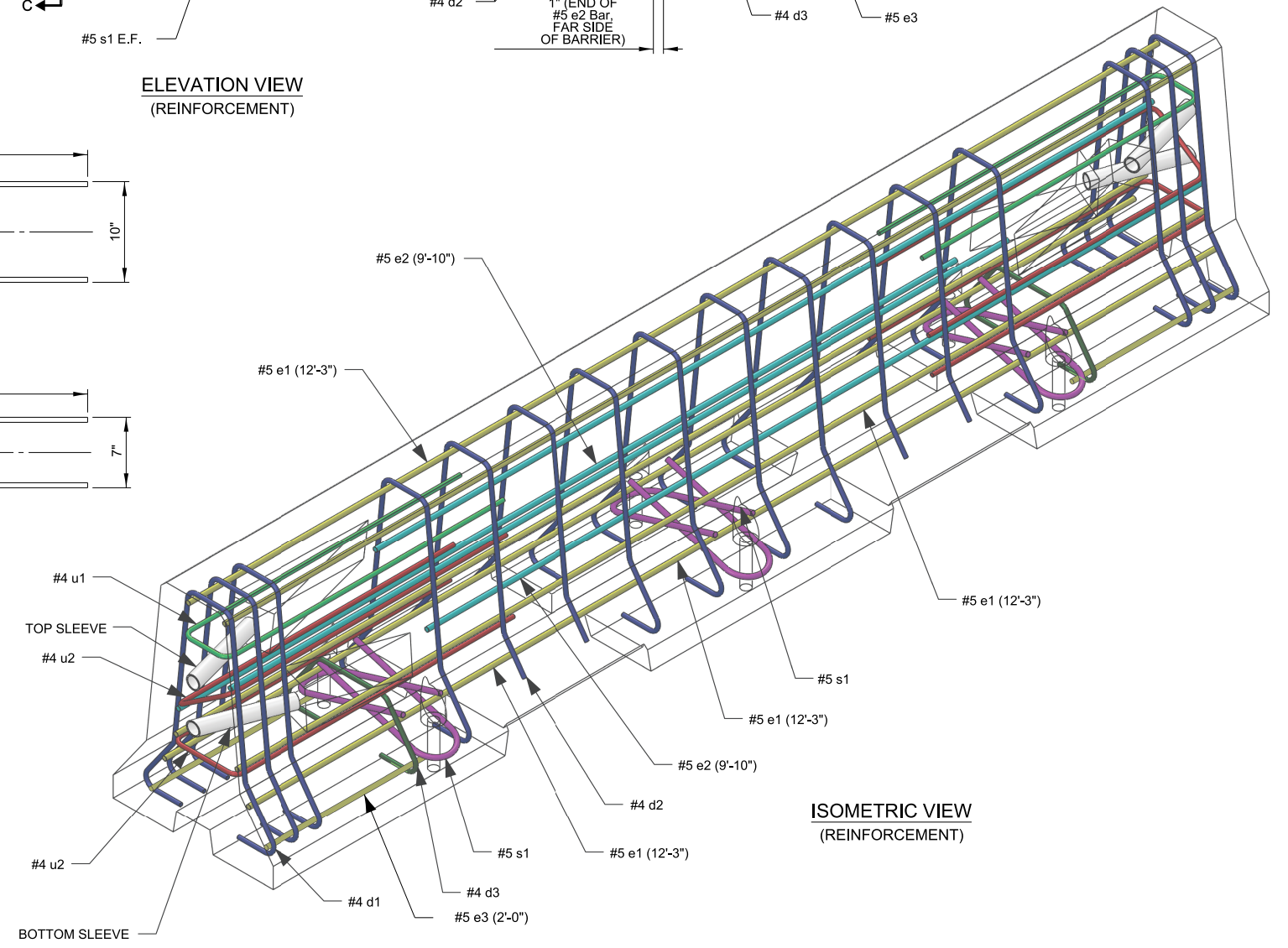
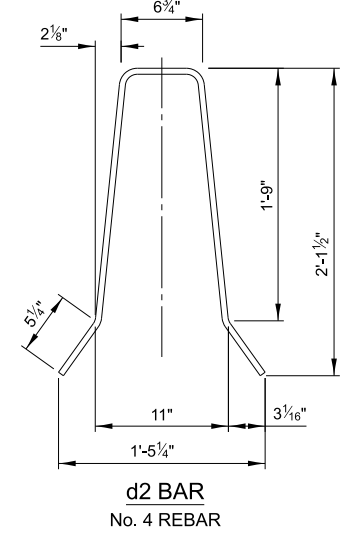
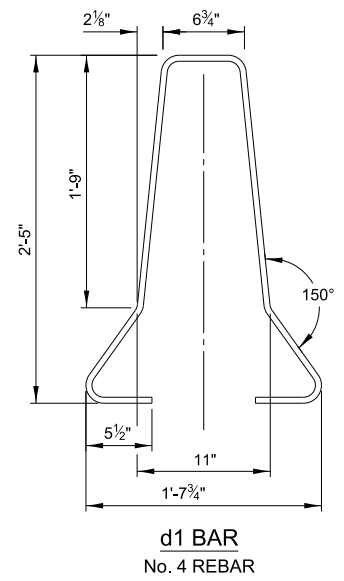
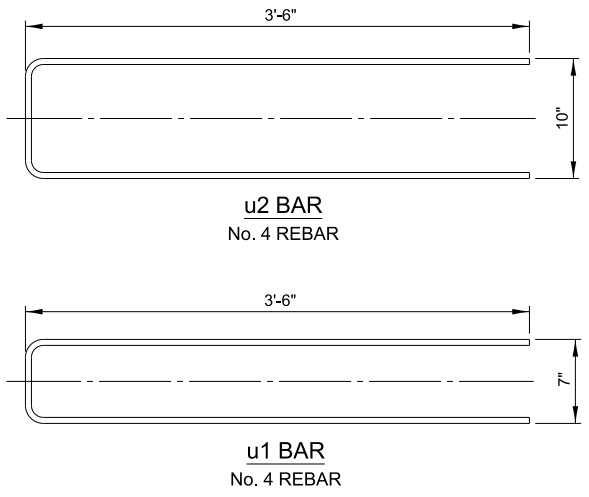
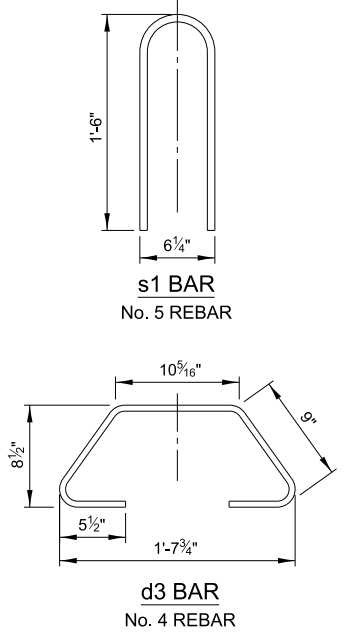
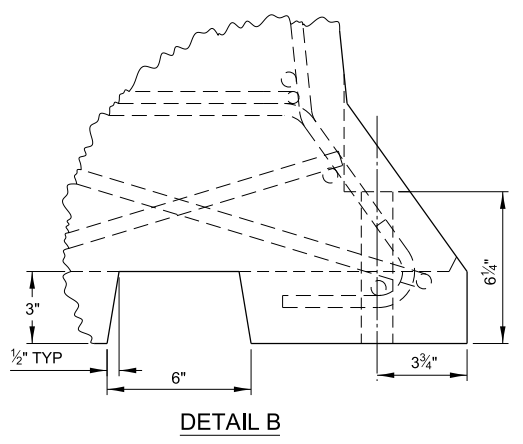
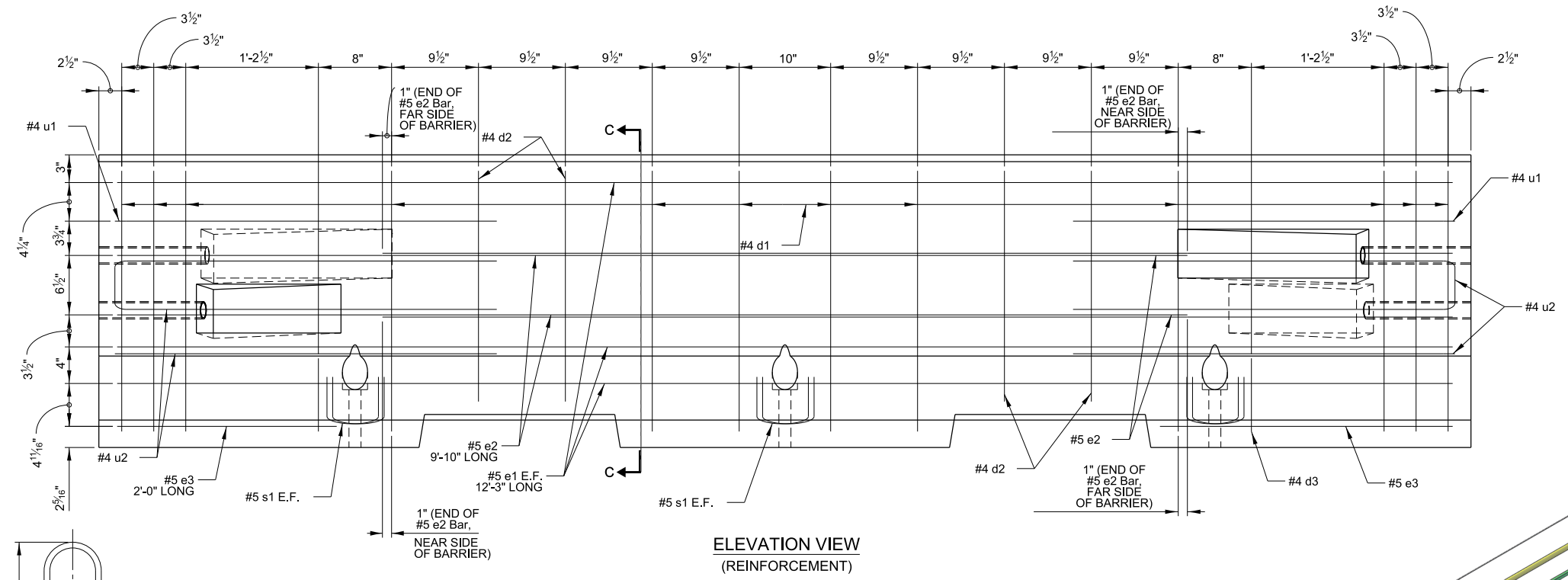
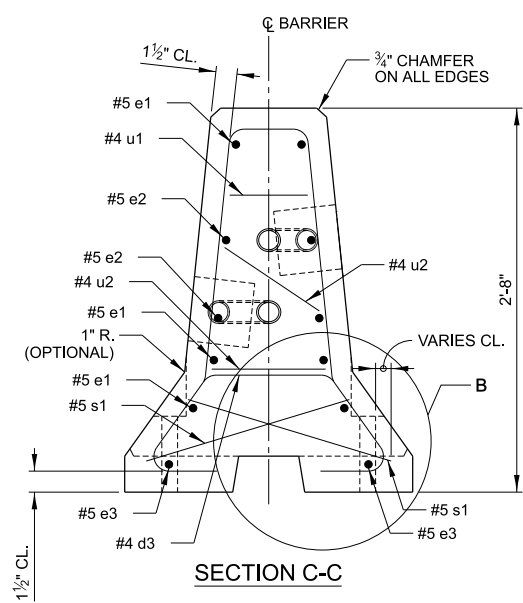
CROSS-BOLT CONNECTION HARDWARE
2 SETS OF HARDWARE NEEDED FOR EACH BARRIER

APPROVED BY: *Manar Nashif*
CHIEF ENGINEERING OFFICER
DATE: 03/01/2023

REVISIONS	
DATE	DESCRIPTION
03-01-2025	ALL CONNECTION HARDWARE SHALL BE ZINC COATED.
03-01-2023	ADDED DIMENSION & LEAVE-OUT BLOCKS TO SECTION C-C, MOVED DETAIL B.
03-01-2022	REVISED NOTE 2.

TEMPORARY CONCRETE BARRIER WITH CROSS-BOLT CONNECTION

VERSION: 2025-03	STANDARD: D10-04	SHEET: 1 OF 2
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APPROVED BY: *Manar Nashif* DATE: 03/01/2023
CHIEF ENGINEERING OFFICER

TEMPORARY CONCRETE BARRIER WITH CROSS-BOLT CONNECTION

VERSION: 2025-03	STANDARD: D10-04	SHEET: 2 OF 2
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