

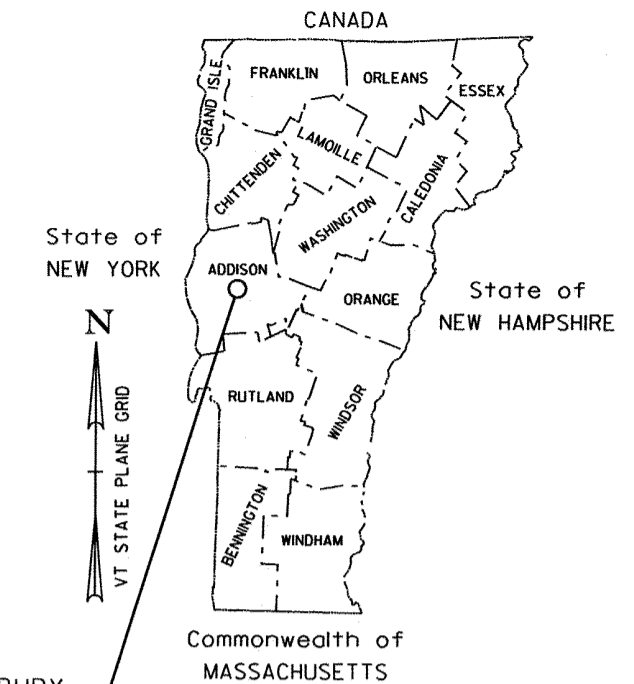
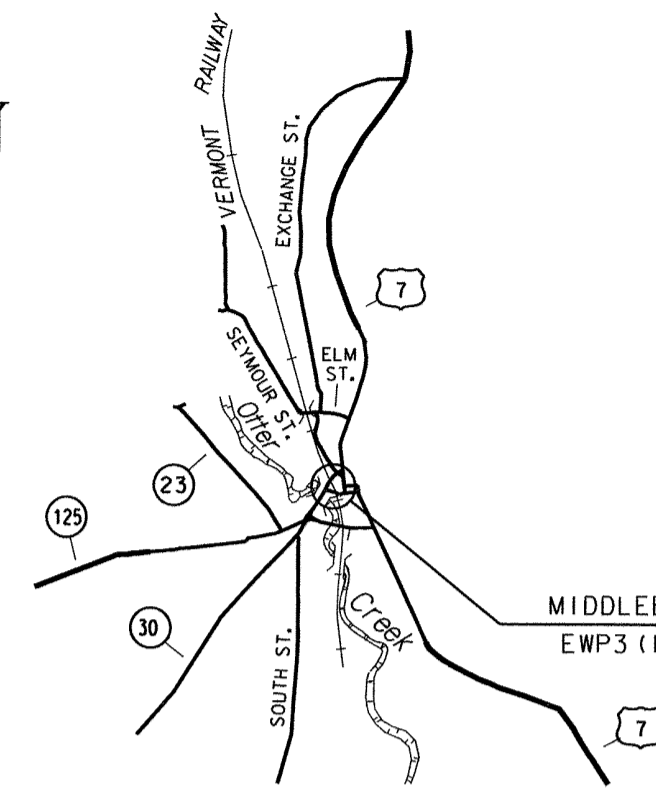
STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT

TOWN OF MIDDLEBURY
COUNTY OF ADDISON

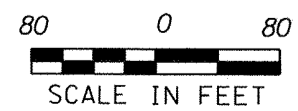
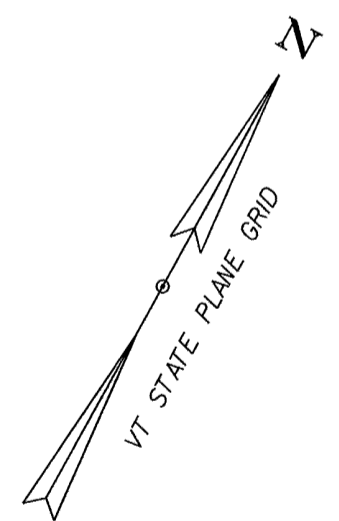
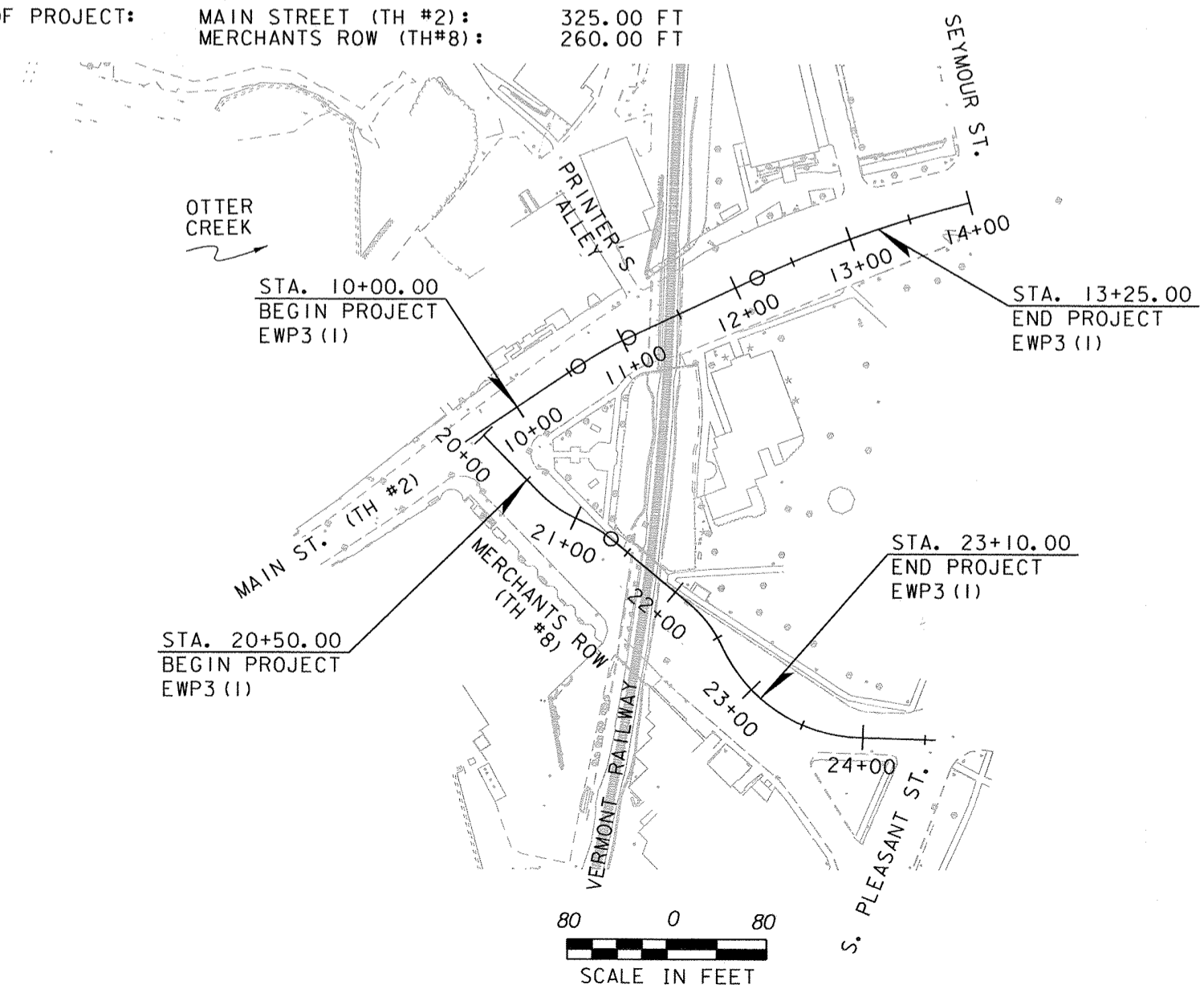
MAIN ST (MINOR ARTERIAL), BRIDGE NO. 102 - MERCHANTS ROW (MAJOR COLLECTOR), BRIDGE NO. 2



PROJECT LOCATION: LOCATED IN THE COUNTY OF ADDISON, TOWN OF MIDDLEBURY, ON MAIN STREET (TH #2); BRIDGE NO. 102 OVER VERMONT RAILWAY, APPROXIMATELY 400 FT SOUTHWEST OF THE INTERSECTION OF MAIN STREET AND US ROUTE 7, AND ON MERCHANTS ROW (TH #8); BRIDGE NO. 2 OVER VERMONT RAILWAY, APPROXIMATELY 230 FT WEST OF THE INTERSECTION OF MERCHANTS ROW AND SOUTH PLEASANT STREET (TH #47).

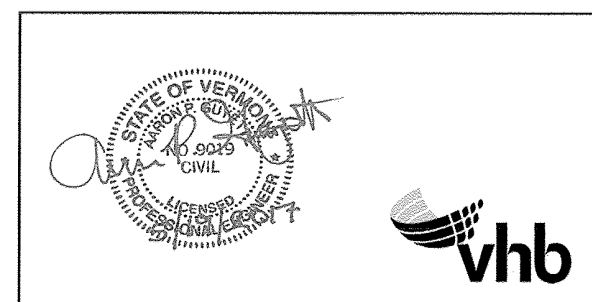
PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL AND REPLACEMENT OF BRIDGE NO. 102 AND BRIDGE NO. 2 WITH TEMPORARY BRIDGES, CONSTRUCTION OF A PEDESTRIAN BRIDGE ALONG MAIN STREET, CONSTRUCTION OF APPROACH RETAINING WALLS, ROADWAY APPROACHES TO NEW BRIDGES, NEW SIDEWALK, NEW DRAINAGE, SIGNAGE, STRIPING, AND OTHER ROADWAY RELATED ITEMS.

LENGTH OF PROJECT:
 MAIN STREET (TH #2): 325.00 FT
 MERCHANTS ROW (TH#8): 260.00 FT



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL 1	
SURVEYED BY :	VHB
SURVEYED DATE :	MAY 2013
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83



DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATOR	
APPROVED	DATE May 25, 2017
DIRECTOR OF PROJECT DELIVERY	
APPROVED	DATE 5/22/17
PROJECT MANAGER : JOEL PERRIGO	
PROJECT NAME : MIDDLEBURY	
PROJECT NUMBER : EWP3 (1)	
SHEET 1 OF 54 SHEETS	

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46	TCP - PHASE 4 - PEDESTRIAN DETOUR
47	TCP - S. PLEASANT STREET DETOUR
48-54	CROSS SECTIONS

VAOT STANDARDS

A-76	03-03-2003
B-12	06-01-1994
B-71	07-08-2005
C-2A	10-14-2005
C-2B	10-14-2005
C-3A	3-10-2008
C-3B	3-10-2008
C-10	2-11-2008
D-8	1-3-2000
D-9	6-1-1994
D-11	6-1-1994
D-15	6-1-1994
D-16	6-1-1994
E-121	8-8-1995
E-136B	8-8-1995
E-191	2-1-1999
E-193	8-18-1995
T-1	4-25-2016
T-2	4-25-2016
T-10	8-6-2012
T-17	8-6-2012
T-28	8-6-2012
T-30	8-6-2012
T-35	8-6-2012
T-36	8-6-2012
T-42	4-9-2014
T-44	4-9-2014
T-45	1-2-2013
T-56	10-26-2015
T-70	04-25-2016
T-92	10-26-2015
T-93	10-26-2015

HISTORICAL LIGHTING RECORD DRAWINGS (FOR REFERENCE)

1R	PROPOSED GENERAL PLAN	12-6-2004
2R	DETAILS AND NOTES	12-6-2004
3R	DETAILS AND NOTES W/ESC	12-6-2004

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_IND.dgn	PLOT DATE: 5/19/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: B.M. ROBERTS
DESIGNED BY: D.M. PECK	CHECKED BY: E.P. DETRICK
INDEX OF SHEETS	SHEET 2 OF 54



PROJECT NOTES

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, AND ITS LATEST REVISIONS.
2. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
3. FOR INFORMATION REGARDING UTILITIES, SEE THE PROJECT SPECIAL PROVISIONS.
4. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL BURIED AND AERIAL UTILITIES AND POLES PRIOR TO STARTING THE WORK. SOME UTILITIES HAVE BEEN RELOCATED DURING THE PREPARATION OF THESE PLANS AND THE CONTRACTOR WILL NEED TO COORDINATE WITH ALL UTILITY OWNERS TO CONFIRM ACUTAL LOCATIONS PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS AND NOTIFY THE RESIDENT ENGINEER OF ANY DISCREPANCIES.
6. ALL WORK SHALL BE COMPLETED WITH THE TOWN AND RAILROAD ROWS.

TRAFFIC CONTROL

7. THE TRAFFIC CONTROL PLANS (TCP) PROVIDED IN THIS PLANSET ALONG WITH THE TRANSPORTATION MANAGEMENT PLAN (TMP) ARE THE VTRANS APPROVED TRAFFIC CONTROL PLANS AND SHALL BE USED BY THE CONTRACTOR FOR THEIR TRAFFIC CONTROL FOR ALL STAGES OF CONSTRUCTION.
8. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).
9. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL TEMPORARY ON AND OFF PROJECT SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK WILL BE INCLUDED IN ITEM 641.10, "TRAFFIC CONTROL".
10. FULL ACCESS TO ALL DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES, EXCPET AS IDENTIFIED IN THE CONTRACT DOCUMENTS.
11. AS PART OF THIS PROJECT, PRINTERS ALLEY SHALL BE CLOSED TO VEHICULAR TRAFFIC. PRINTERS ALLEY SHALL REMAIN OPEN TO PEDESTRIAN TRAFFIC FOR THE DURATION OF THE PROJECT. DURING PERIODS OF TIME WHEN CONSTRUCTION ACTIVITES WILL REQUIRE THE CLOSURE OF PRINTERS ALLEY TO PEDESTRIANS, SHORT TERM CLOSURES WILL BE PERMITTED WITH PRIOR COORDINATION. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, THE TOWN OF MIDDLEBURY PROJECT LIAISON, AND THE NATIONAL BANK OF MIDDLEBURY A MINIMUM OF 24-HOURS IN ADVANCE OF CLOSING PRINTERS ALLEY TO PEDESTRIANS.
12. THE BATTELL BLOCK ACCESS DRIVE SHALL REMAIN OPEN FOR THE DURATION OF CONSTRUCTION. SHORT TERM CLOSURES UP TO 4 HOURS WILL BE PERMITTED WITH PRIOR COORDINATION. DURING PERIODS WHEN EQUIPMENT OR CONSTRUCTION ACTIVITIES REQUIRE THE CLOSURE OF THE BATTELL BLOCK DRIVE, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, THE TOWN OF MIDDLEBURY PROJECT LIAISON, AND THE MANAGER OF THE BATTELL BLOCK A MINIMUM OF 24-HOURS IN ADVANCE OF THE CLOSURE.
13. UNLESS OTHERWISE COVERED UNDER INDIVIDUAL PAY ITEMS OR NOTED OTHERWISE, ALL COSTS FOR TEMPORARY TRAFFIC CONTROL WILL BE INCLUDED IN ITEM 641.10, "TRAFFIC CONTROL".

REMOVAL OF STRUCTURES

14. THE ENTIRE SUPERSTRUCTURE AND PIERS OF THE EXISTING MAIN STREET AND MERCHANTS ROW BRIDGES SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE. MATERIALS REMOVED OR DEMOLISHED SHALL BE DISPOSED OF AT AN APPROVED LOCATION. COSTS FOR DEMOLITION AND REMOVAL OF MATERIALS SHALL BE PAID FOR UNDER ITEM 529.20, "PARTIAL REMOVAL OF STRUCTURE".
15. EXISTING PIERS SHALL BE REMOVED TO THE ELEVATION OF THE EXISTING GROUND AT EACH PIER LOCATION.

16. THE EXISTING ABUTMENTS SHALL NOT BE REMOVED OR MODIFIED EXCEPT THE ASHLAR BLOCKS FROM THE EXISTIG BRIDGE ABUTMENTS SHALL ONLY BE REMOVED TO THE EXENT WHICH FACILITATES CONSTRUCTION OF THE TEMPORARY BRDIGE ABUTMENTS. ASHLAR BLOCKS THAT ARE REMOVED SHALL BE PROTECTED FROM DAMAGE AND SHALL BE STOCKPILED AT THE TOWN OF MIDDLEBURY STUMP DUMP FOR FUTURE USE. COSTS FOR REMOVAL, PROTECTION, TRASNPORTING, AND STOCKPILING OF ASHLAR BLOCKS WILL BE INCLUDED IN ITEM 529.20, "PARTIAL REMOVAL OF STRUCTURE".

TEMPORARY BRIDGES

17. TEMPORARY BRIDGES SHALL BE INSTALLED ON MAIN STREET AND MERCHANTS ROW AS IDENTIFIED IN THE CONTRACT DOCUMENTS. VTRANS WILL SUPPLY THE TEMPORARY BRIDGES FOR CONTRACTOR USE PER THE SPECIAL PROVISIONS.
18. PAYMENT FOR TEMPORARY BRIDGES WILL BE MADE UNDER THE LUMP SUM ITEMS IDENTIFIED IN THE CONTRACT DOCUMENTS. THE LUMP SUM ITEMS WILL INCLUDE ALL ITEMS IDENTIFIED IN SECTION 528, WITH THE EXCEPTION OF PAVEMENT MARKINGS, WHICH WILL BE PAID FOR SEPERATELY UNDER THEIR RESPECTIVE ITEMS IN THE CONTRACT.
19. TIMBER USED IN THE CONSTRUCTION OF THE TEMPORARY PEDESTRIAN BRIDGE SHALL MEET THE REQUIREMENTS OF SECTION 709.01 OF THE SPECIFICATIONS. ALL TIMBER SHALL BE NO. GRADE OR BETTER AND SHALL BE TREATED.

DRAINAGE

20. EXISTING DRAINAGE INLET STRUCTURES SHALL BE ADJUSTED SO THEIR RIM ELEVATIONS ARE AT FINISHED GRADE AS SHOWN ON THE PLANS. IF THE DRAINAGE STRUCTURE IS TO BE MODIFIED UNDER ANOTHER ITEM, THE ADJUSTMENT OF THE RIM ELEVATION WILL BE INCLUDED IN THE COST FOR THAT OTHER ITEM. WHEN NO OTHER MODIFICATIONS TO DRAINAGE INLET STRUCTURES ARE PROPOSED, PAYMENT FOR THIS WORK WILL BE INCLUDED UNDER ITEM 640.40, "CHANGING ELEVATION OF DROP INLETS, CATCHBASINS, OR MAHHOLES".
21. PROPOSED DRAINAGE INFRASTRUCTURE INCLUDES NEW PENETRATIONS INTO EXISTING DRAINAGE INLET STRUCTURES. AT STRUCTURES WHERE NEW PENETRATIONS ARE TO BE CONSTRUCTED, THE WORK FOR CREATING THE NEW PENETRATION AS WELL AS ANY WORK REQUIRED FOR CHANGING THE ELEVATION OF THE STRUCTURE RIM WILL BE PAID FOR UNDER ITEM 604.415, "REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS II".

PROJECT NAME: MIDDLEBURY

PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_IND.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: A.P. GUYETTE
NOTES SHEET

PLOT DATE: 5/19/2017
DRAWN BY: J.D. KEENER
CHECKED BY: S.E. BURBANK
SHEET 3 OF 54



GENERAL INFORMATION

SYMBOLGY LEGEND NOTE

THE SYMBOLGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLGY. THE SYMBOLGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R. O. W. ABBREVIATIONS (CODES) & SYMBOLS

POINT CODE	DESCRIPTION
CH	CHANNEL EASEMENT
CONST	CONSTRUCTION EASEMENT
CUL	CULVERT EASEMENT
D&C	DISCONNECT & CONNECT
DIT	DITCH EASEMENT
DR	DRAINAGE EASEMENT
DRIVE	DRIVEWAY EASEMENT
EC	EROSION CONTROL
HWY	HIGHWAY EASEMENT
I&M	INSTALL & MAINTAIN EASEMENT
LAND	LANDSCAPE EASEMENT
R&RES	REMOVE & RESET
R&REP	REMOVE & REPLACE
SR	SLOPE RIGHT
UE	UTILITY EASEMENT
(P)	PERMANENT EASEMENT
(T)	TEMPORARY EASEMENT
■	BNDNS BOUND SET
□	BNDNS BOUND TO BE SET
●	IPNS IRON PIN SET
⊙	IPNS IRON PIN TO BE SET
⊠	CALC EXISTING ROW POINT
○	PROW PROPOSED ROW POINT
[LENGTH]	LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT CODE	DESCRIPTION
⊕	APL BOUND APPARENT LOCATION
◻	BM BENCHMARK
◻	BND BOUND
□	CB CATCH BASIN
⊕	COMB COMBINATION POLE
□	DITHR DROP INLET THROATED DNC
⊕	EL ELECTRIC POWER POLE
◊	FPOLE FLAGPOLE
○	GASFIL GAS FILLER
○	GP GUIDE POST
×	GSO GAS SHUT OFF
◊	GUY GUY POLE
◊	GUYW GUY WIRE
×	GV GATE VALUE
⊕	H TREE HARDWOOD
△	HCTRL CONTROL HORIZONTAL
▲	HVCTRL CONTROL HORIZ. & VERTICAL
◇	HYD HYDRANT
◊	IP IRON PIN
●	IPIPE IRON PIPE
⊕	LI LIGHT - STREET OR YARD
⊕	MB MAILBOX
○	MH MANHOLE (MH)
■	MM MILE MARKER
■	PM PARKING METER
■	PMK PROJECT MARKER
○	POST POST STONE/WOOD
⊕	RRSIG RAILROAD SIGNAL
⊕	RRSL RAILROAD SWITCH LEVER
⊕	S TREE SOFTWOOD
⊕	SAT SATELLITE DISH
⊕	SHRUB SHRUB
⊕	SIGN SIGN
⊕	STUMP STUMP
⊕	TEL TELEPHONE POLE
◊	TIE TIE
⊕	TSIGN SIGN W/DOUBLE POST
⊕	VCTRL CONTROL VERTICAL
◊	WELL WELL
×	WSO WATER SHUT OFF
⊕	DMH (P) PROPOSED DRAINAGE MANHOLE

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLGY

UNDERGROUND UTILITIES

— UT —	UTILITY (GENERIC-UNKNOWN)
— UE —	TELEPHONE
— UE —	ELECTRIC
— UC —	CABLE (TV)
— UEC —	ELECTRIC+CABLE
— UET —	ELECTRIC+TELEPHONE
— UCT —	CABLE+TELEPHONE
— UECT —	ELECTRIC+CABLE+TELEP.
— G —	GAS LINE
— W —	WATER LINE
— S —	SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

— T —	UTILITY (GENERIC-UNKNOWN)
— E —	TELEPHONE
— C —	CABLE (TV)
— EC —	ELECTRIC+CABLE
— ET —	ELECTRIC+TELEPHONE
— AER E&T —	ELECTRIC+TELEPHONE
— CT —	CABLE+TELEPHONE
— ECT —	ELECTRIC+CABLE+TELEP.
—	UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLGY

PROJECT DESIGN & LAYOUT SYMBOLGY

— CZ —	CLEAR ZONE
—	PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

—	TOP OF CUT SLOPE
—	TOE OF FILL SLOPE
—	STONE FILL
—	BOTTOM OF DITCH
—	CULVERT PROPOSED
—	STRUCTURE SUBSURFACE
PDF	PROJECT DEMARCATION FENCE
BF	BARRIER FENCE
XXXXXX	TREE PROTECTION ZONE (TPZ)
////	STRIPING LINE REMOVAL
~~~~	SHEET PILES

**CONVENTIONAL BOUNDARY SYMBOLGY**

**BOUNDARY LINES**

— TOWN LINE —	TOWN BOUNDARY LINE
— COUNTY LINE —	COUNTY BOUNDARY LINE
— STATE LINE —	STATE BOUNDARY LINE
—	PROPOSED STATE R.O.W. (LIMITED ACCESS)
—	PROPOSED STATE R.O.W.
—	STATE ROW (LIMITED ACCESS)
—	STATE ROW
—	TOWN ROW
—	PERMANENT EASEMENT LINE (P)
—	TEMPORARY EASEMENT LINE (T)
—	SURVEY LINE
P	PROPERTY LINE (P/L)
L	
SR	SLOPE RIGHTS
6f	6F PROPERTY BOUNDARY
4f	4F PROPERTY BOUNDARY
HAZ	HAZARDOUS WASTE

**EPSC LAYOUT PLAN SYMBOLGY**

**EPSC MEASURES**

—	FILTER CURTAIN
—	SILT FENCE
—	SILT FENCE WOVEN WIRE
—	CHECK DAM
—	DISTURBED AREAS REQUIRING RE-VEGETATION
—	EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLGY

**ENVIRONMENTAL RESOURCES**

—	WETLAND BOUNDARY
—	RIPARIAN BUFFER ZONE
—	WETLAND BUFFER ZONE
—	SOIL TYPE BOUNDARY
— T&E —	THREATENED & ENDANGERED SPECIES
HAZ	HAZARDOUS WASTE AREA
AG	AGRICULTURAL LAND
HABITAT	FISH & WILDLIFE HABITAT
FLOOD PLAIN	FLOOD PLAIN
OHW	ORDINARY HIGH WATER (OHW)
—	STORM WATER
—	USDA FOREST SERVICE LANDS
—	WILDLIFE HABITAT SUIT/CONN

**ARCHEOLOGICAL & HISTORIC**

— ARCH —	ARCHEOLOGICAL BOUNDARY
— HISTORIC DIST —	HISTORIC DISTRICT BOUNDARY
— HISTORIC —	HISTORIC AREA
(H)	HISTORIC STRUCTURE

**CONVENTIONAL TOPOGRAPHIC SYMBOLGY**

**EXISTING FEATURES**

—	ROAD EDGE PAVEMENT
—	ROAD EDGE GRAVEL
—	DRIVEWAY EDGE
—	DITCH
—	FOUNDATION
—	FENCE (EXISTING)
—	FENCE WOOD POST
—	FENCE STEEL POST
—	GARDEN
—	ROAD GUARDRAIL
—	RAILROAD TRACKS
—	CULVERT (EXISTING)
—	STONE WALL
—	WALL
—	WOOD LINE
—	BRUSH LINE
—	HEDGE
—	BODY OF WATER EDGE
—	LEDGE EXPOSED

PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016.legend.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	VTRANS
CONVENTIONAL SYMBOLGY LEGEND SHEET	
PLOT DATE:	5/19/2017
DRAWN BY:	VTRANS
CHECKED BY:	E.P. DETRICK
SHEET	4 OF 54

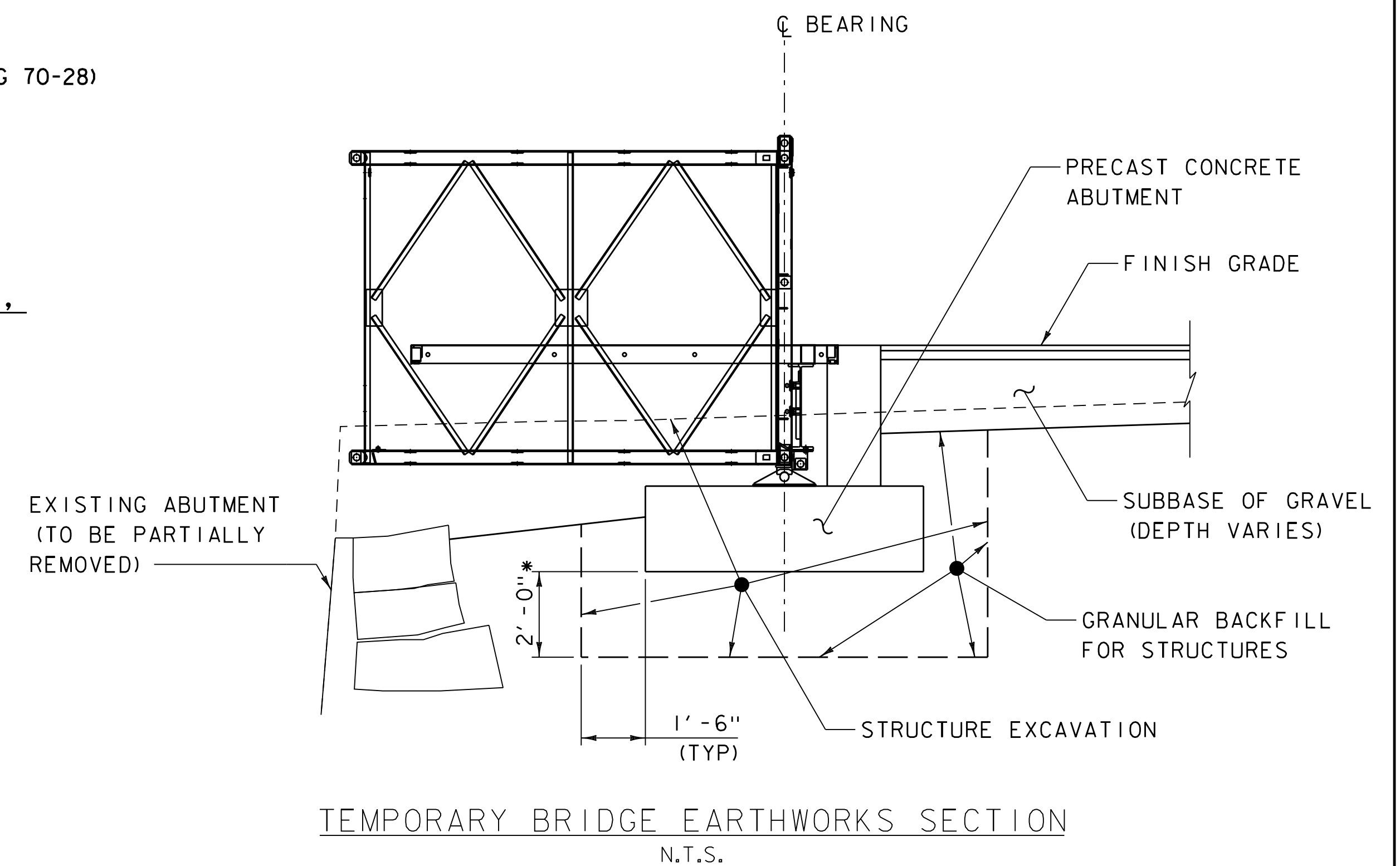
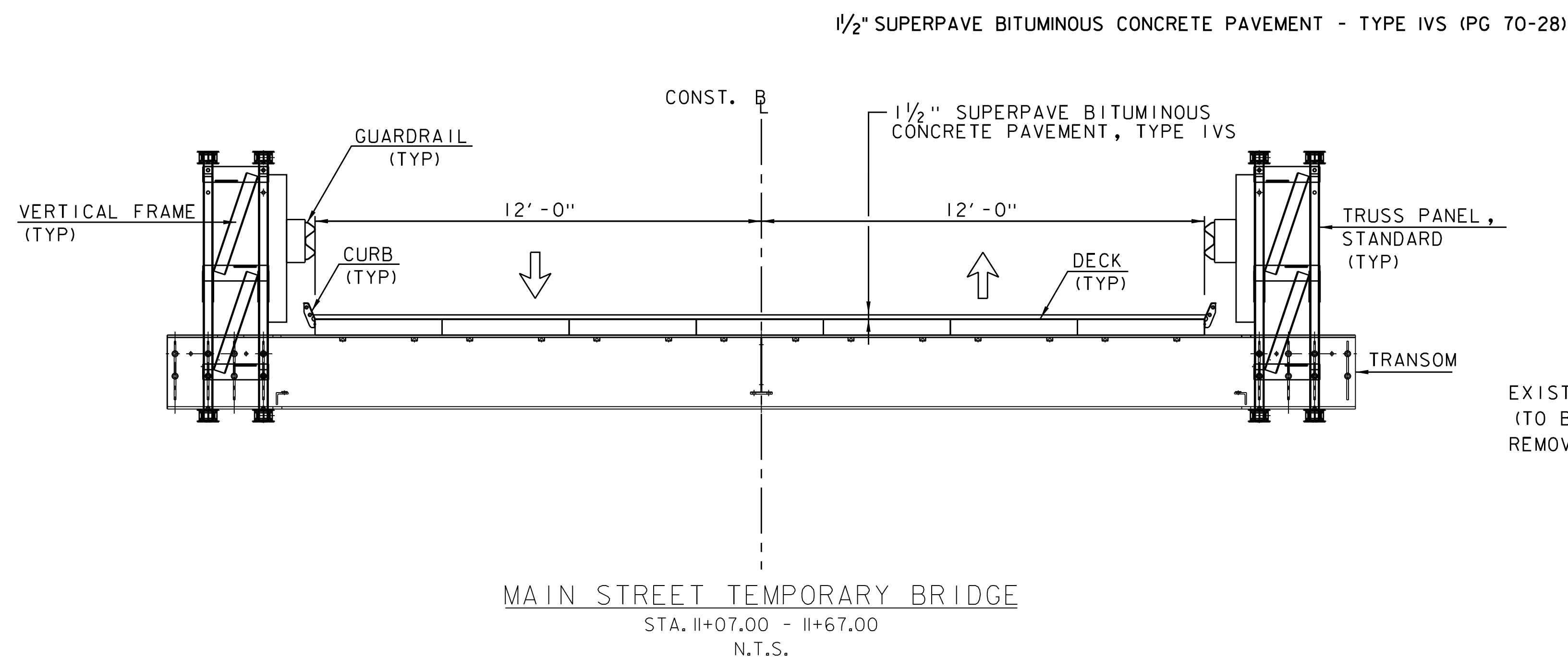
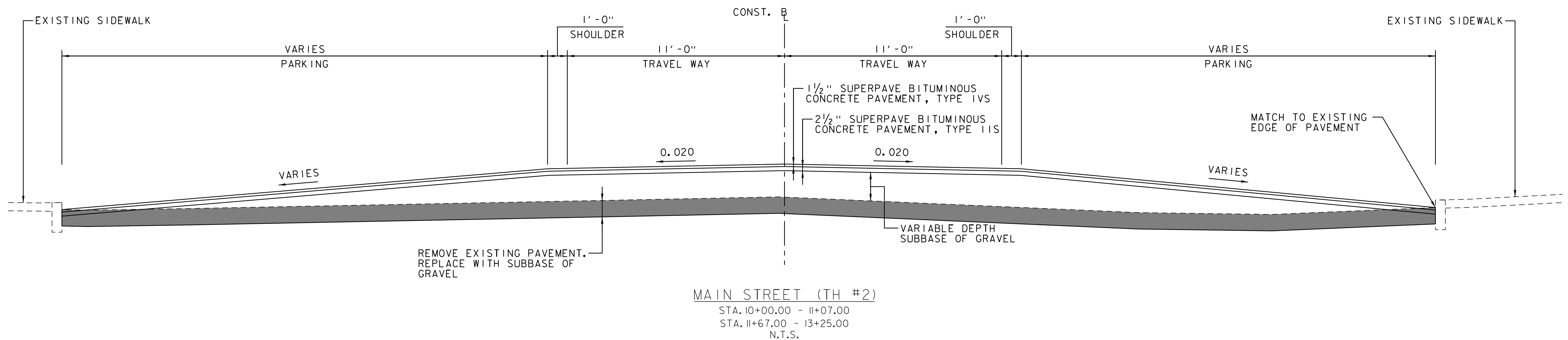




MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (FULL DEPTH)	± 1/4" (TOTAL THICKNESS)
SUBBASE	± 1"
SAND BORROW	± 1"

# TYPICAL SECTIONS

1/2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT - TYPE IVS (PG 70-28)  
 2 1/2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT - TYPE IIS (PG 70-28)  
 SUBBASE OF GRAVEL



**NOTES**

- SIDEWALK RAMP DETECTABLE WARNING SURFACES SHALL BE TRUNCATED DOME DETECTABLE WARNING CAST IRON PLATES FROM THE VTRANS APPROVED PRODUCTS LIST.
- SAWCUT OF EXISTING PAVEMENT, CONCRETE BASE, OR SIDEWALK SHALL BE INCIDENTAL TO TEMPORARY BRIDGE ITEMS (TYP).
- TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT AN APPLICATION RATE OF 0.040 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AND ON COLD-PLANED BITMINOUS SURFACES AS DIRECTED BY THE ENGINEER.

* IF MATERIAL ENCOUNTERED IS DETERMINED TO BE UNSUITABLE BY THE ENGINEER.

PROJECT NAME: MIDDLEBURY

PROJECT NUMBER: EWP3(I)

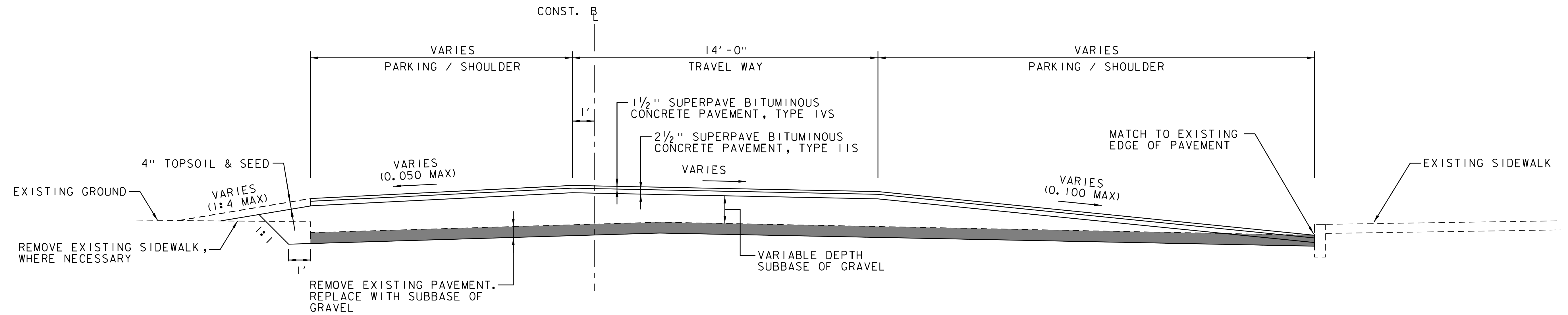
FILE NAME: z17b016_TYP.dgn  
 PROJECT LEADER: A.P. GUYETTE  
 DESIGNED BY: D.M. PECK  
 TYPICAL SECTIONS SHEET 1

PLOT DATE: 5/19/2017  
 DRAWN BY: D.M. PECK  
 CHECKED BY: E.P. DETRICK  
 SHEET 5 OF 54



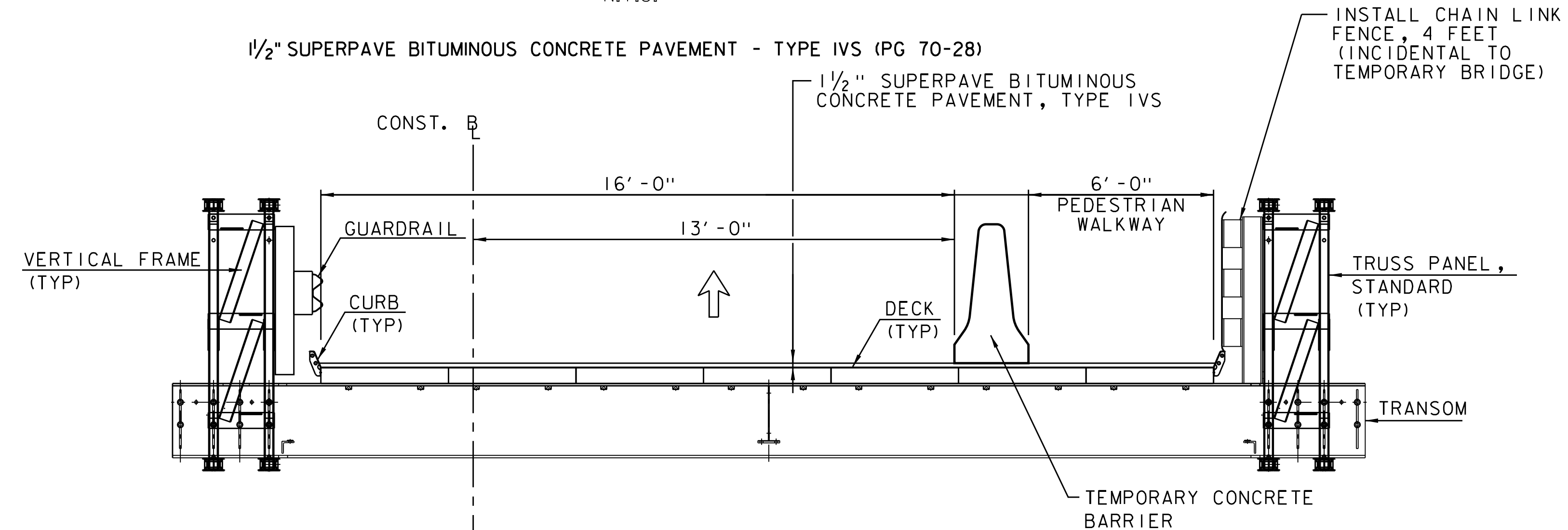
# TYPICAL SECTIONS

1/2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT - TYPE IVS (PG 70-28)  
 2 1/2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT - TYPE IIS (PG 70-28)  
 SUBBASE OF GRAVEL



## MERCHANTS ROW (TH #8)

STA. 20+50.00 - 21+44.00  
 STA. 22+04.00 - 23+10.00  
 N.T.S.



## MERCHANTS ROW TEMPORARY BRIDGE

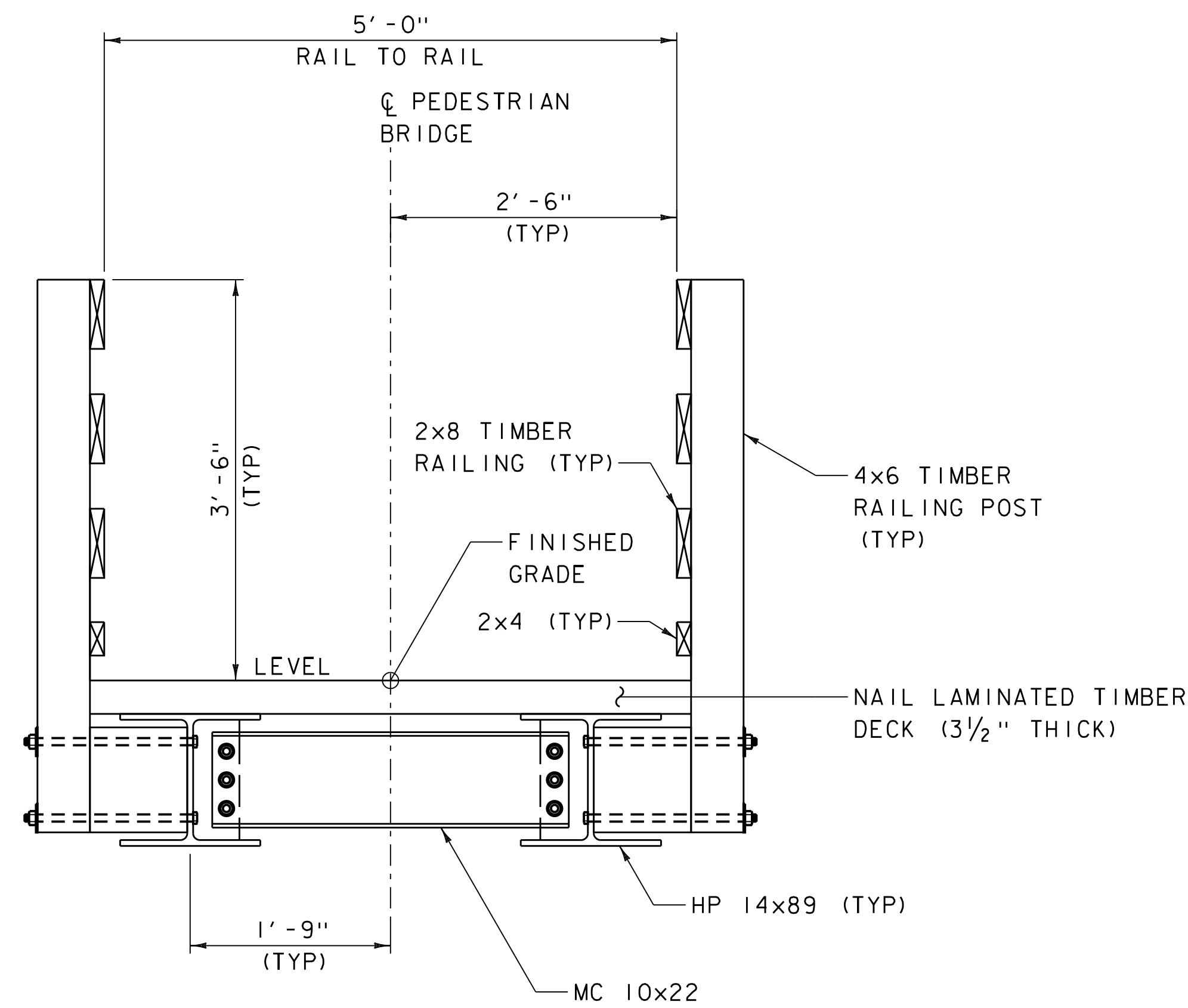
STA. 21+44.00 - 22+04.00  
 N.T.S.

PROJECT NAME: MIDDLEBURY  
 PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_TYP.dgn  
 PROJECT LEADER: A.P. GUYETTE  
 DESIGNED BY: D.M. PECK  
 TYPICAL SECTIONS SHEET 2

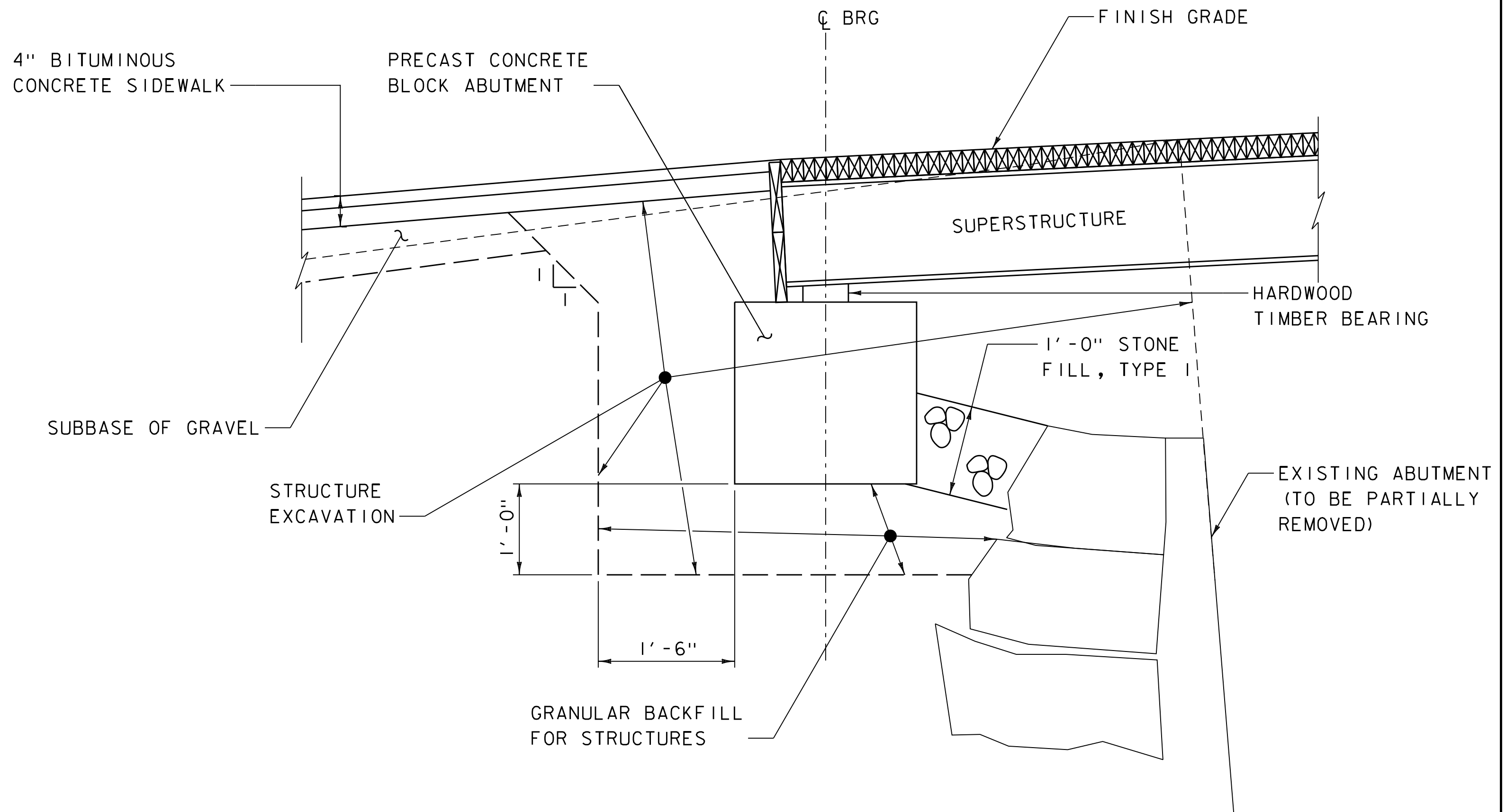
PLOT DATE: 5/19/2017  
 DRAWN BY: D.M. PECK  
 CHECKED BY: E.P. DETRICK  
 SHEET 6 OF 54





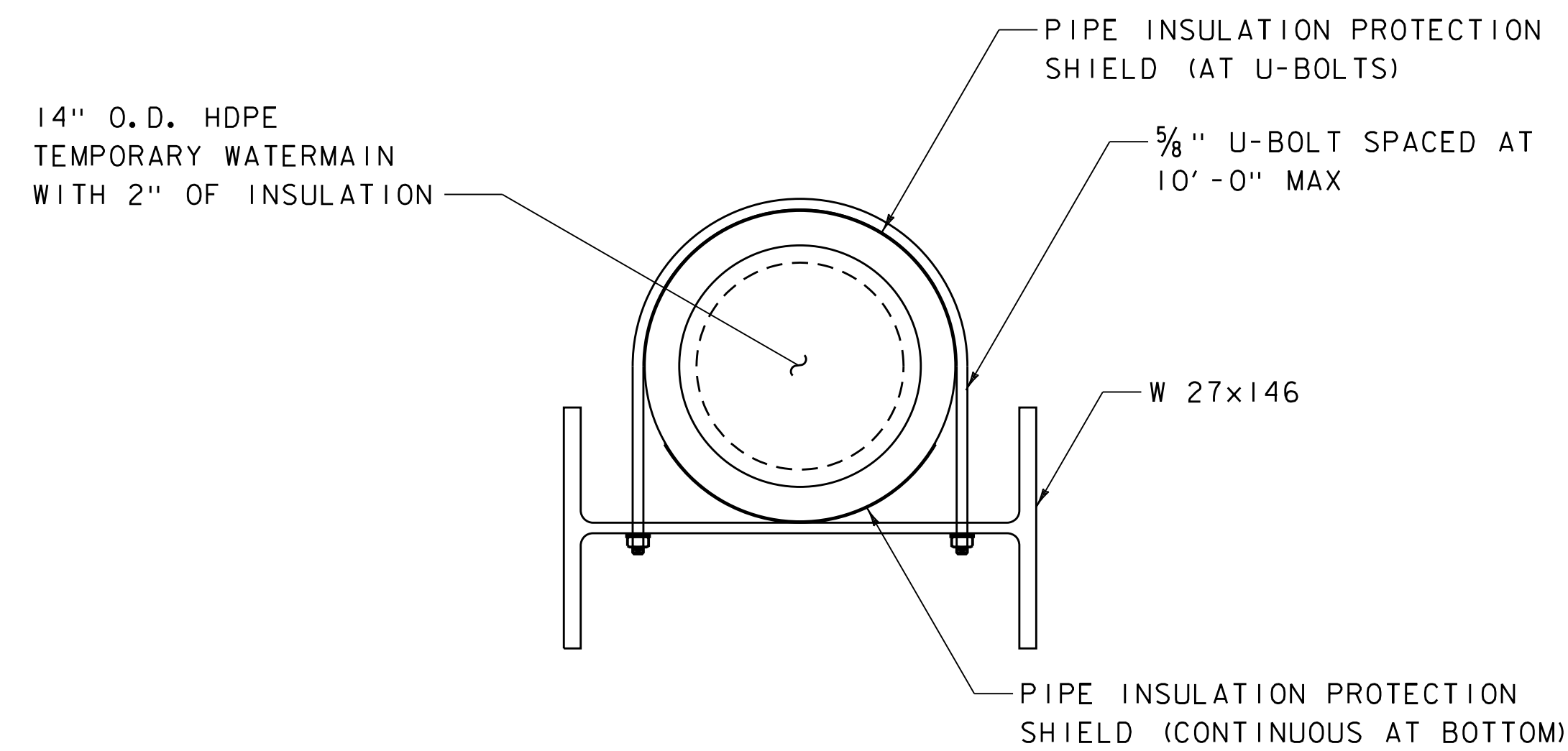
TYPICAL TEMPORARY PEDESTRIAN BRIDGE SECTION

SCALE 1"=1'-0"



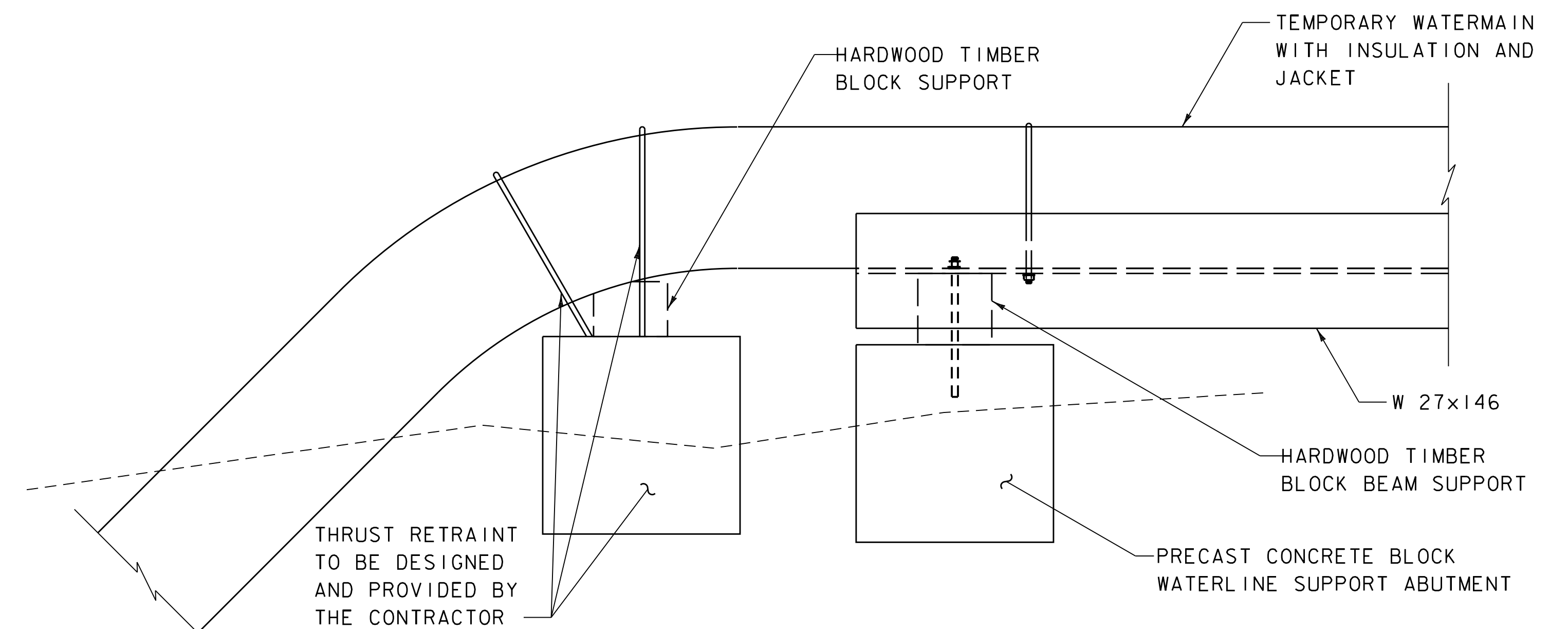
TEMPORARY PEDESTRIAN BRIDGE  
ABUTMENT EARTHWORKS TYPICAL SECTION

SCALE 1"=1'-0"



TYPICAL TEMPORARY WATERMAIN SUPPORT SECTION

SCALE 1/2"=1'-0"



TEMPORARY WATERMAIN SUPPORT END DETAIL

SCALE 1"=1'-0"

PROJECT NAME: MIDDLEBURY

PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_TYP_PedBridge.dgn

PROJECT LEADER: A.P. GUYETTE

DESIGNED BY: R.H. BARNES

TYPICAL SECTIONS SHEET 3

PLOT DATE: 5/19/2017

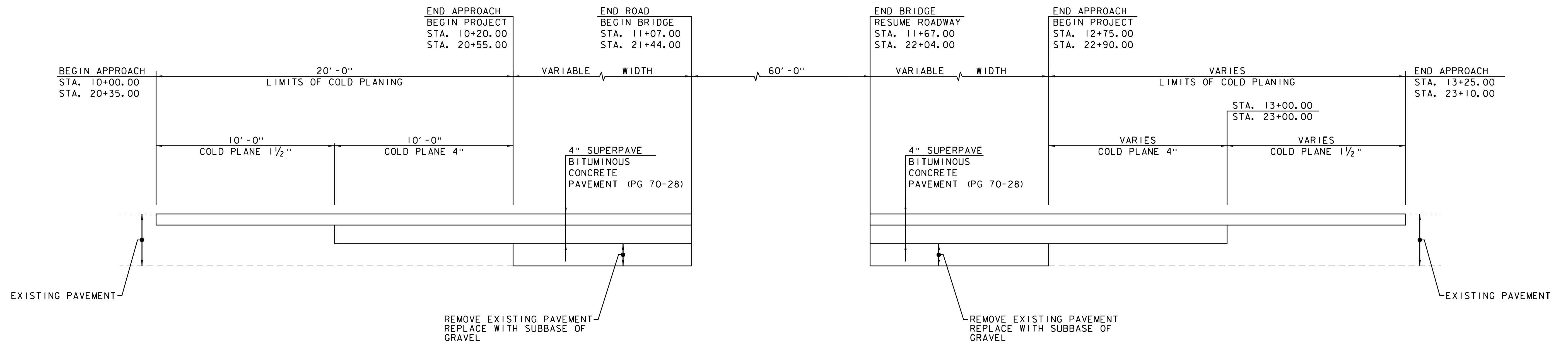
DRAWN BY: R.H. BARNES

CHECKED BY: S.E. BURBANK

SHEET 7 OF 54



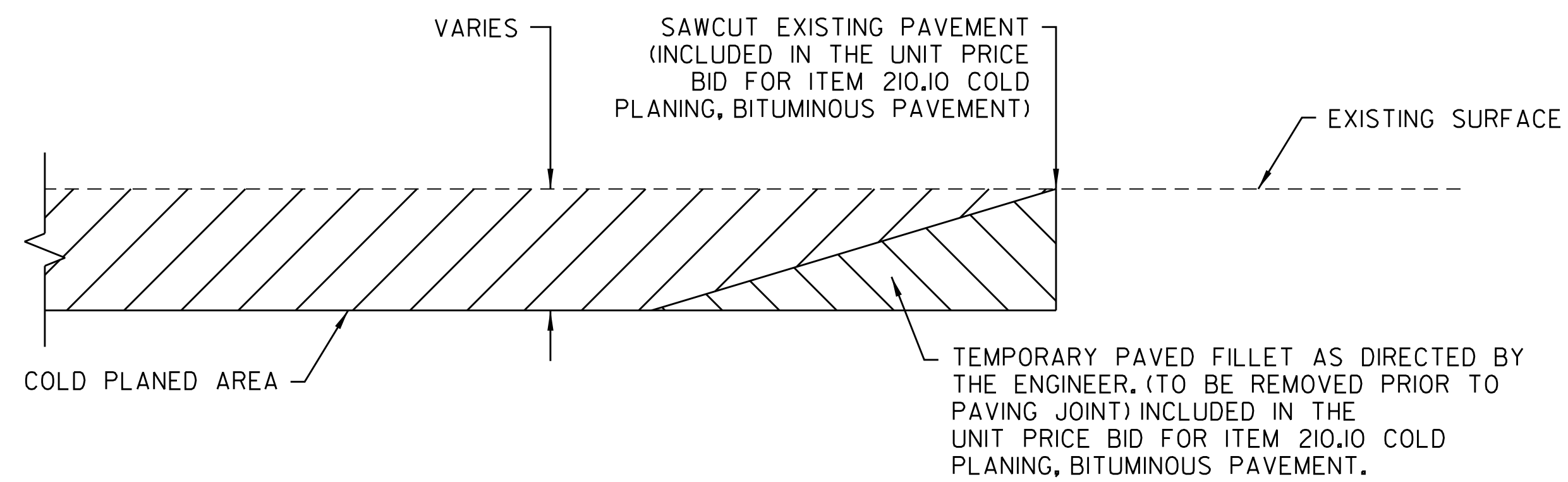




NOTE:  
 EMULSIFIED ASPHALT TO BE APPLIED AT A RATE  
 OF 0.040 GAL/SY BETWEEN LIFTS OF BITUMINOUS  
 CONCRETE PAVEMENT.

PAVEMENT TRANSITION DETAIL

MAIN STREET  
 MERCHANTS ROW  
 N.T.S.

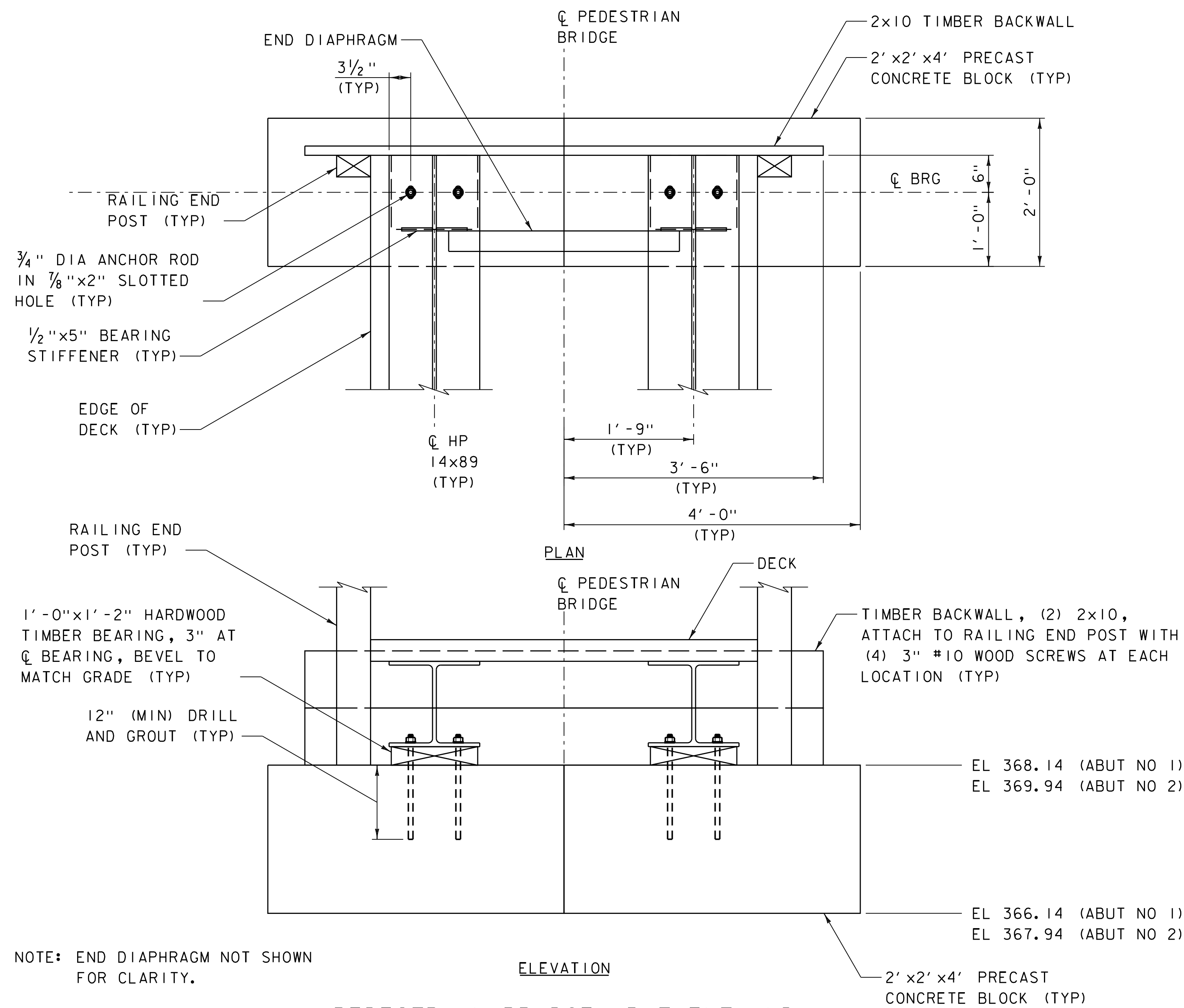


VERTICAL COLD PLANE JOINTS DETAIL

N.T.S.

PROJECT NAME: MIDDLEBURY	PLOT DATE: 5/19/2017
PROJECT NUMBER: EWP3(I)	DRAWN BY: B.M. ROBERTS
FILE NAME: z17b016_DET.dgn	CHECKED BY: E.P. DETRICK
PROJECT LEADER: A.P. GUYETTE	SHEET 8 OF 54
DESIGNED BY: D.M. PECK	
DETAILS SHEET	





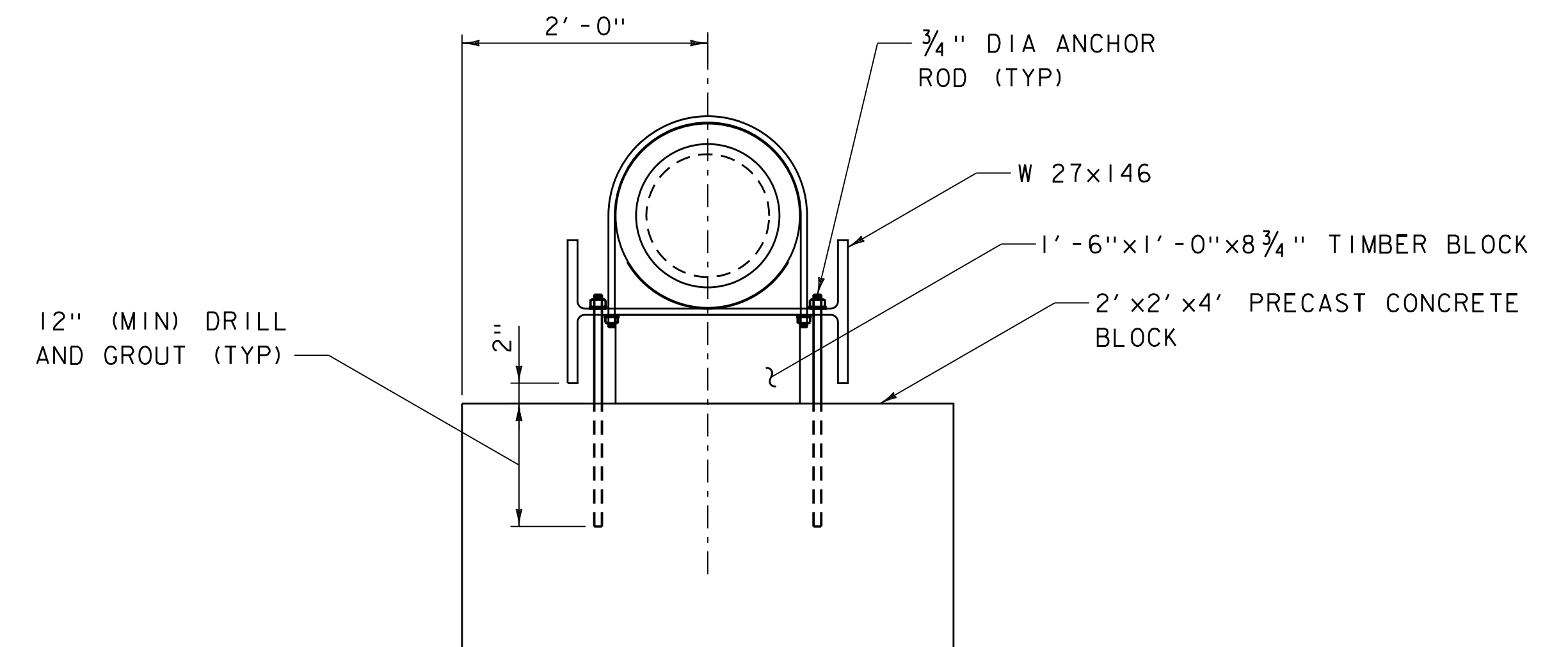
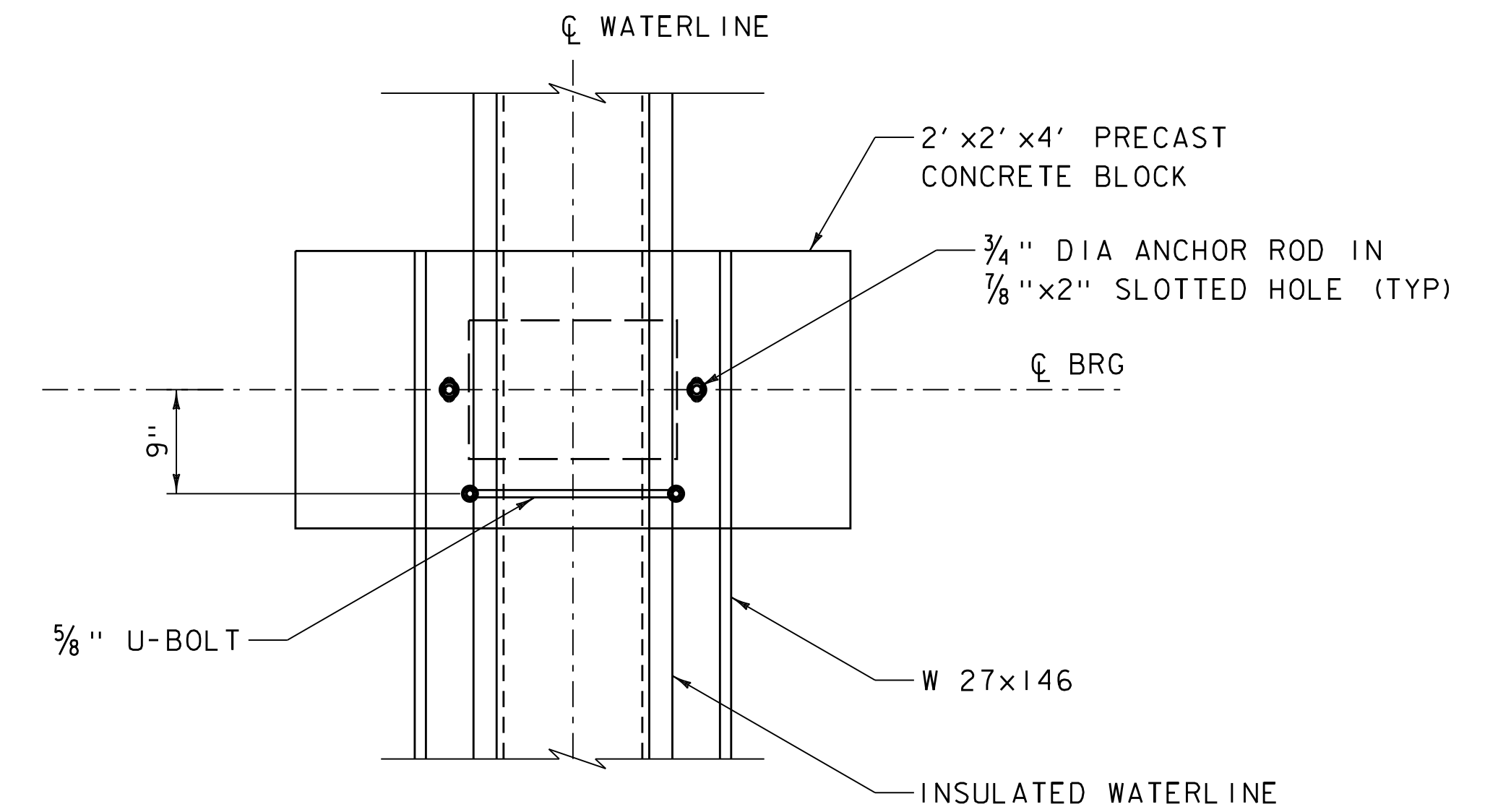
PEDESTRIAN BRIDGE ABUTMENT AND BRIDGE END DETAILS

SCALE 1"=1'-0"

NOTE: END DIAPHRAGM NOT SHOWN FOR CLARITY.

**NOTES:**

1. PRECAST CONCRETE BLOCKS SHALL BE OF THE DIMENSIONS SHOWN WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.
2. ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 36.
3. HOLES FOR ANCHOR RODS SHALL BE DRILLED TO A MINIMUM OF 1" LARGER DIAMETER THAN THE ROD AND SET WITH MORTAR, TYPE IV.



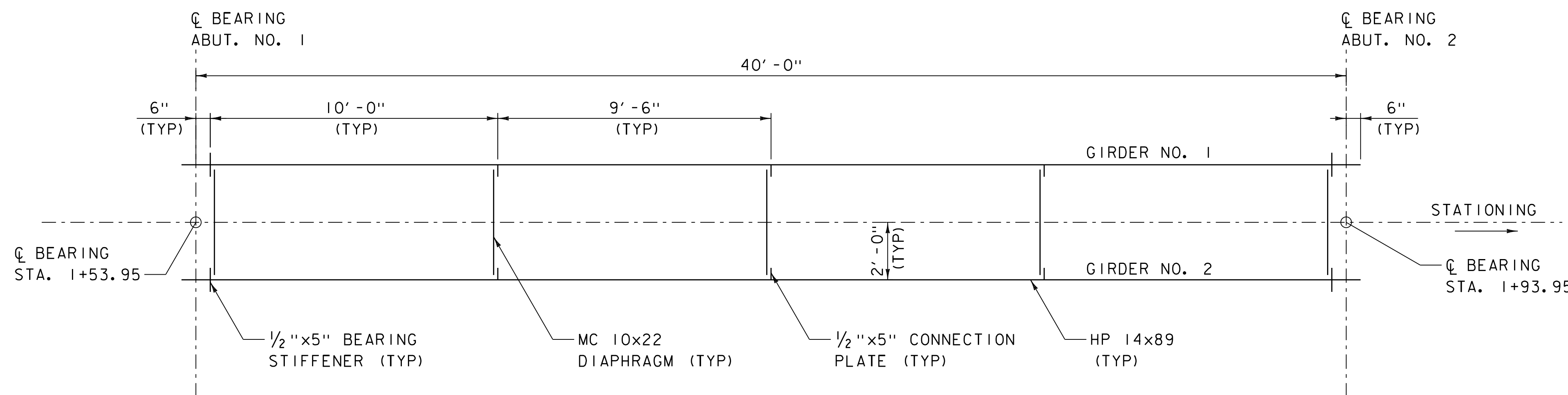
WATERLINE SUPPORT ABUTMENT DETAILS

SCALE 1"=1'-0"

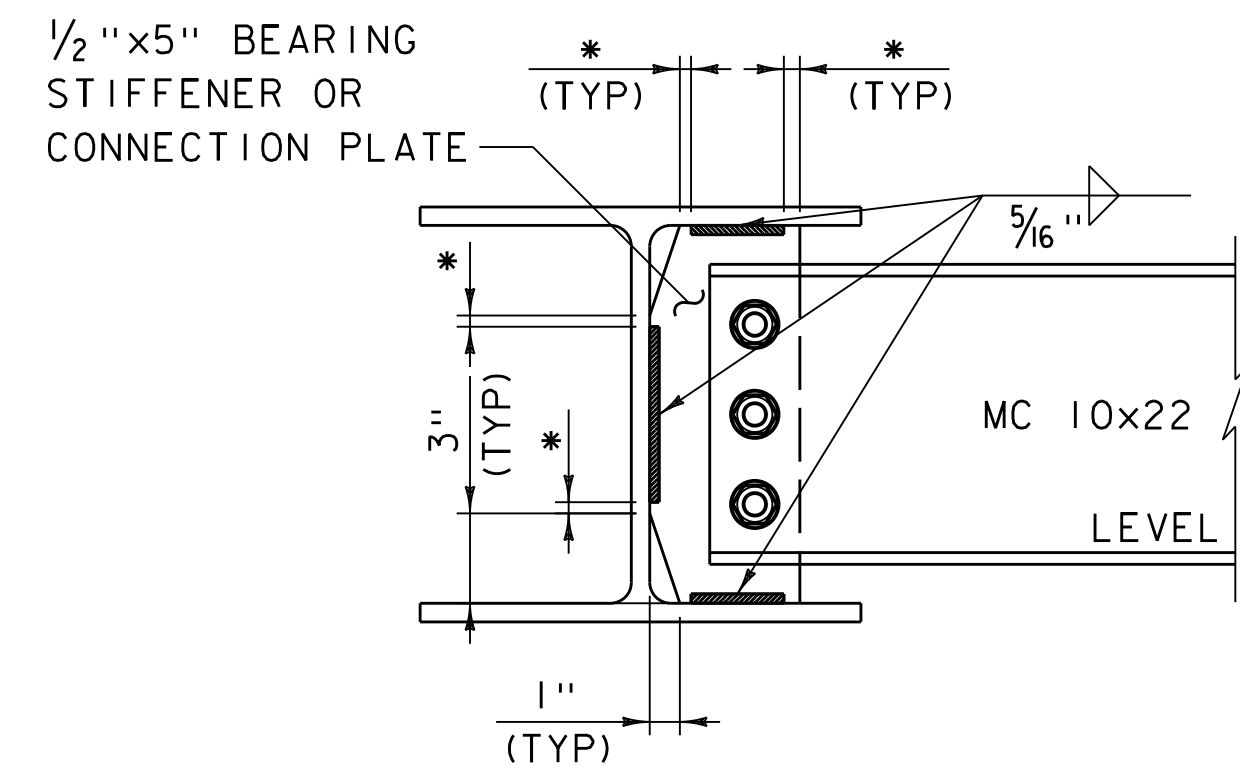
PROJECT NAME: MIDDLEBURY  
 PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_TYP_PedBridge.dgn PLOT DATE: 5/19/2017  
 PROJECT LEADER: A.P. GUYETTE DRAWN BY: R.H. BARNES  
 DESIGNED BY: R.H. BARNES CHECKED BY: E.P. DETRICK  
 PED. BRIDGE & WATERLINE ABUTMENT DETAILS SHEET 9 OF 54



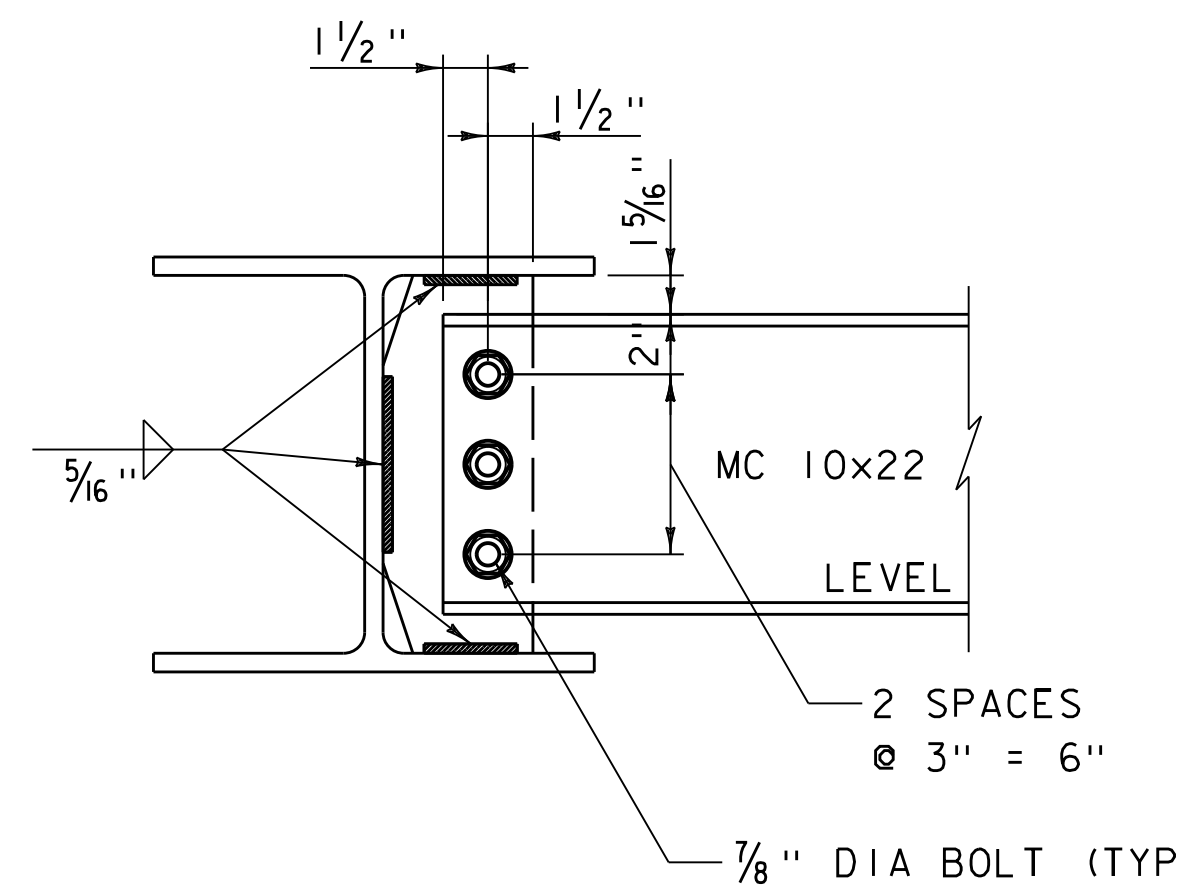


FRAMING PLAN  
SCALE: 3/8" = 1'-0"

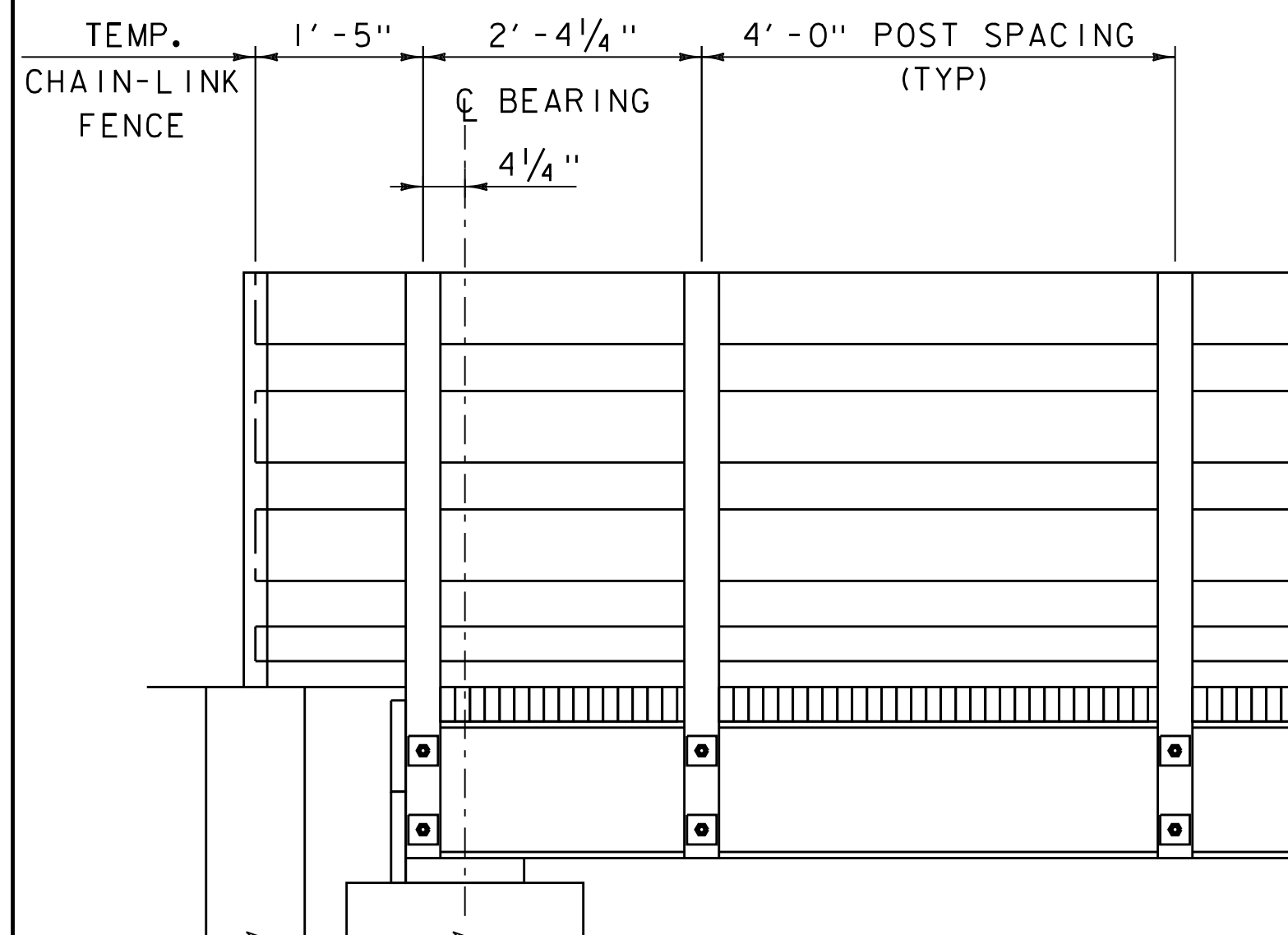


WELD TERMINATION AND COPING DETAIL  
NOT TO SCALE

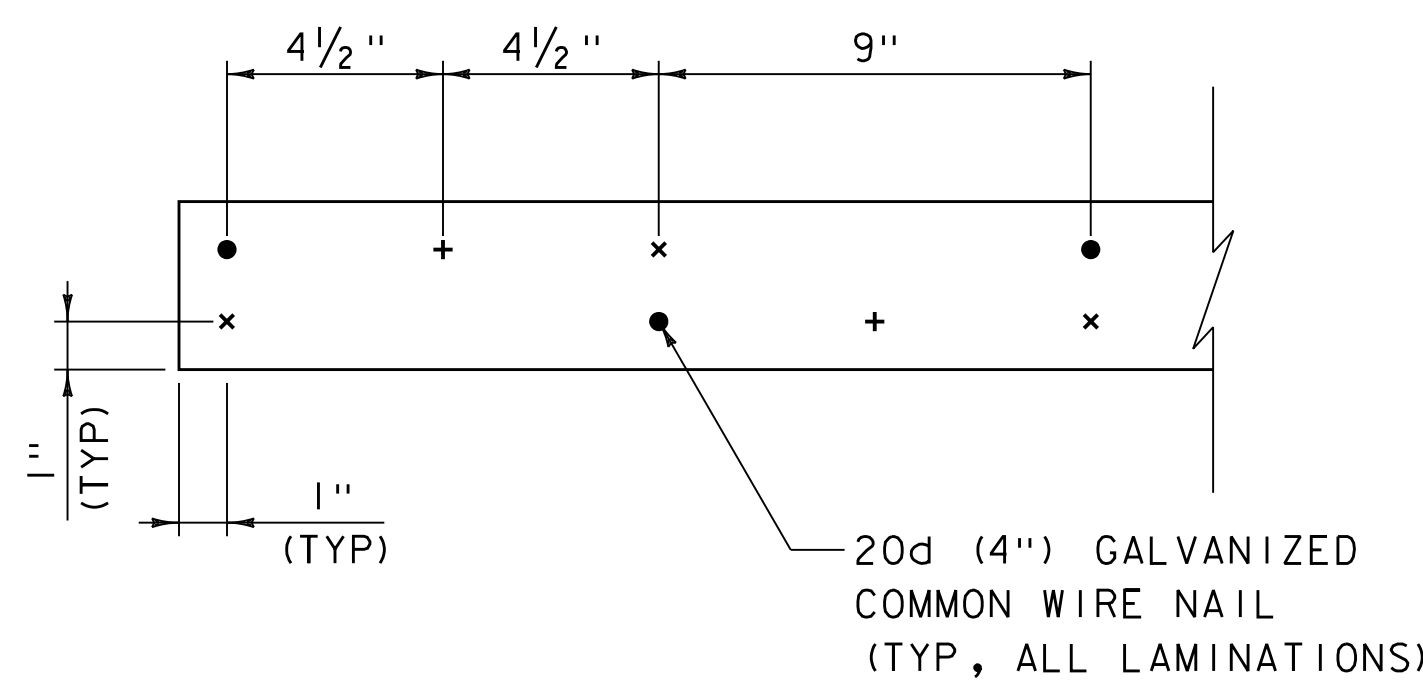
* NO WELD FOR 3/8" MIN, 7/8" MAX



DIAPHRAGM CONNECTION DETAIL  
NOT TO SCALE

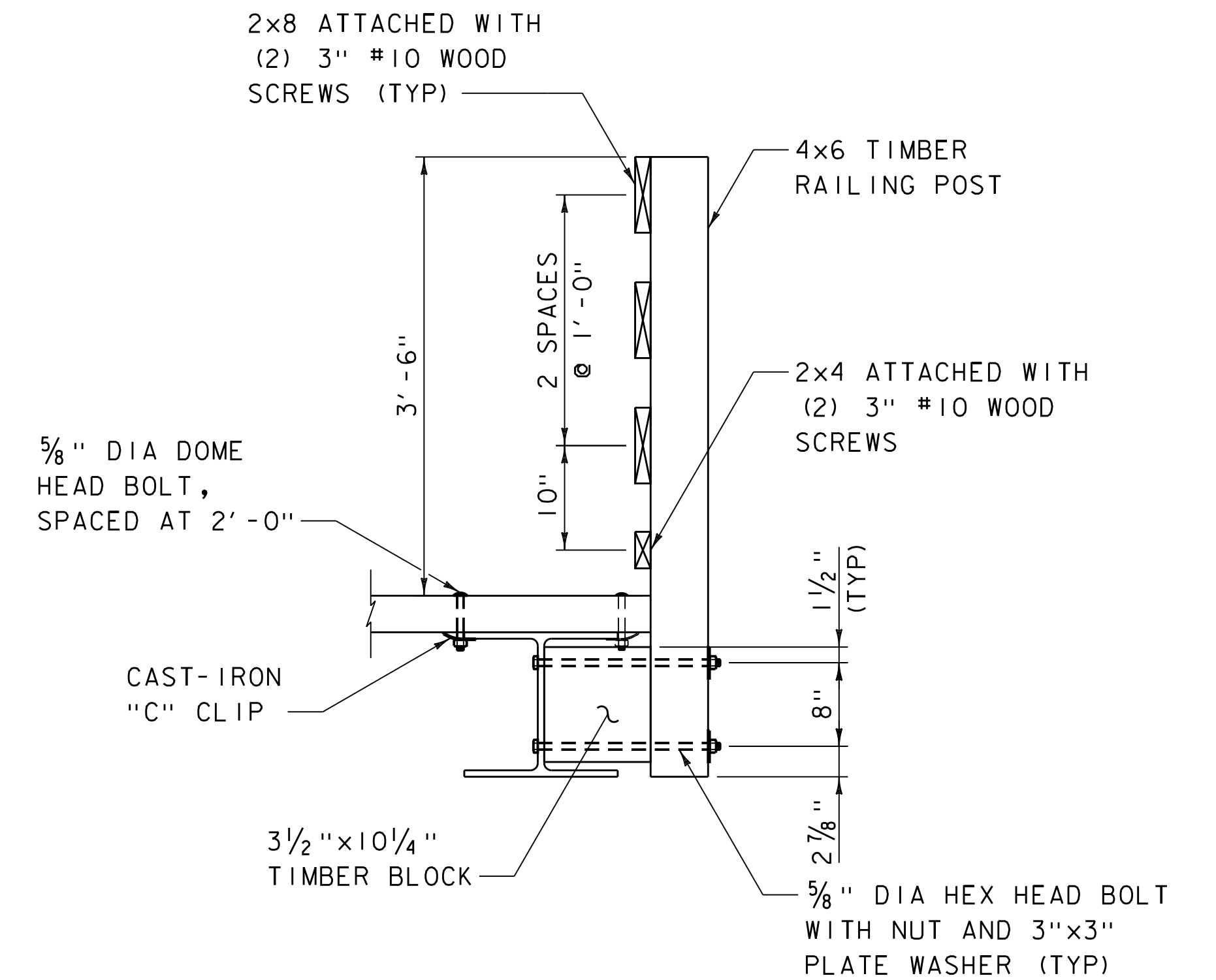


POST SPACING END DETAIL  
SCALE: 3/4" = 1'-0"

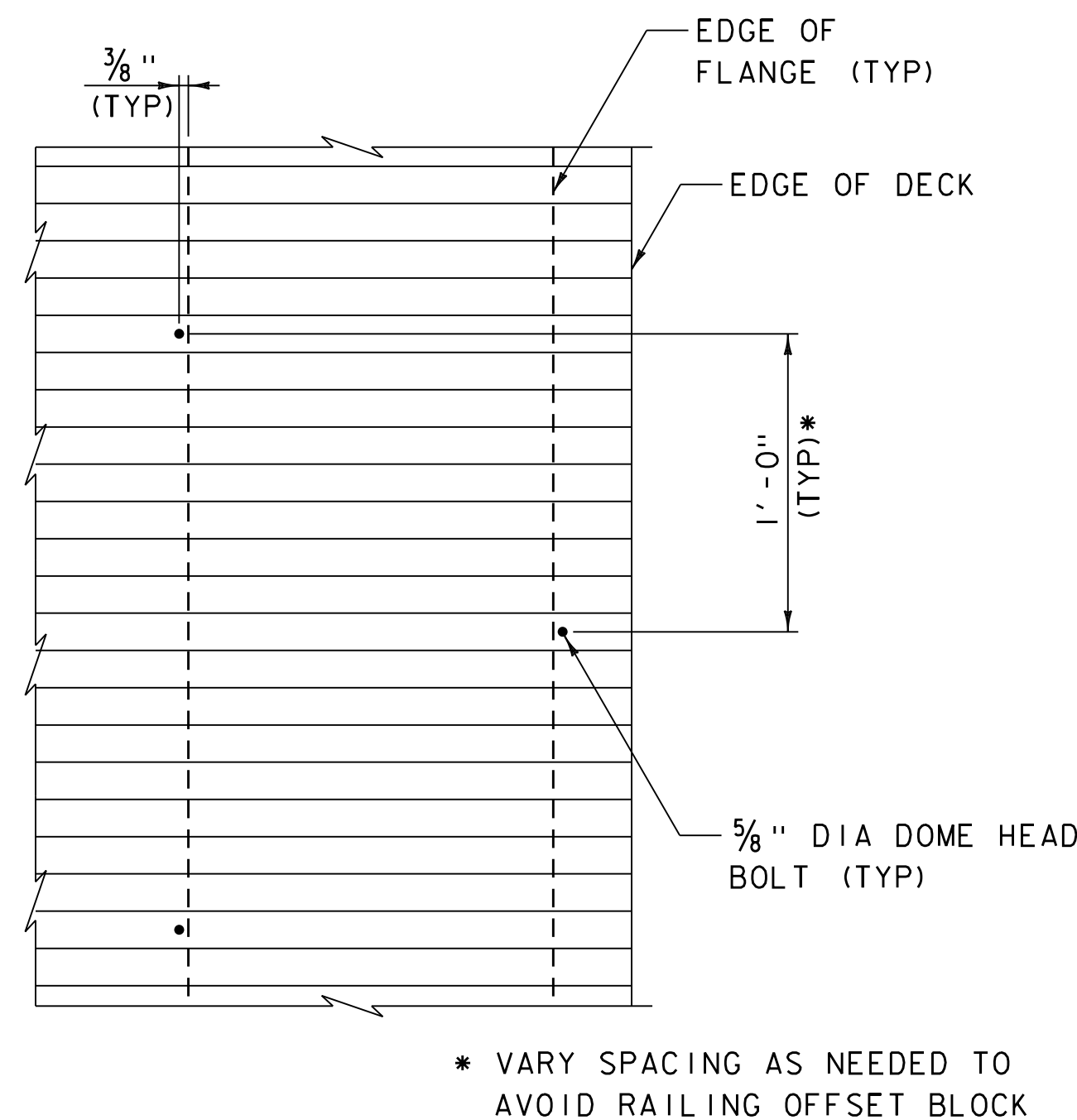


● INDICATES NAILS IN FIRST LAMINATION  
+ INDICATES NAILS IN SECOND LAMINATION  
x INDICATES NAILS IN THIRD LAMINATION

NAIL PLACEMENT PATTERN  
NOT TO SCALE



PEDESTRIAN BRIDGE RAILING DETAIL  
SCALE: 1" = 1'-0"



DECK CLIP BOLT PLACEMENT DETAIL  
NOT TO SCALE

* VARY SPACING AS NEEDED TO AVOID RAILING OFFSET BLOCK

NOTES:

1. ALL STRUCTURAL STEEL FOR THE TEMPORARY PEDESTRIAN BRIDGE SHALL MEET THE REQUIREMENTS OF AASHTO M270M/M270 GRADE 50.
2. ALL BOLTS FOR STRUCTURAL STEEL SHALL CONFORM TO ASTM A325.
3. ALL TIMBER SHALL MEET THE REQUIREMENTS OF SECTION 709.01 OF THE SPECIFICATION. TIMBER SHALL BE SOUTHERN PINE, NO. 1 GRADE OR BETTER AND SHALL BE TREATED. FINISH SHALL BE DRESSED.
4. ALL TIMBER SIZES ARE NOMINAL AND SURFACED FOUR SIDES (S4S) UNLESS NOTED WITH THE ACTUAL DIMENSIONS.
5. ALL CONNECTION HARDWARE USED FOR TIMBER MATERIALS SHALL MEET THE REQUIREMENTS OF SECTION 709.01 (H) OF THE SPECIFICATIONS.

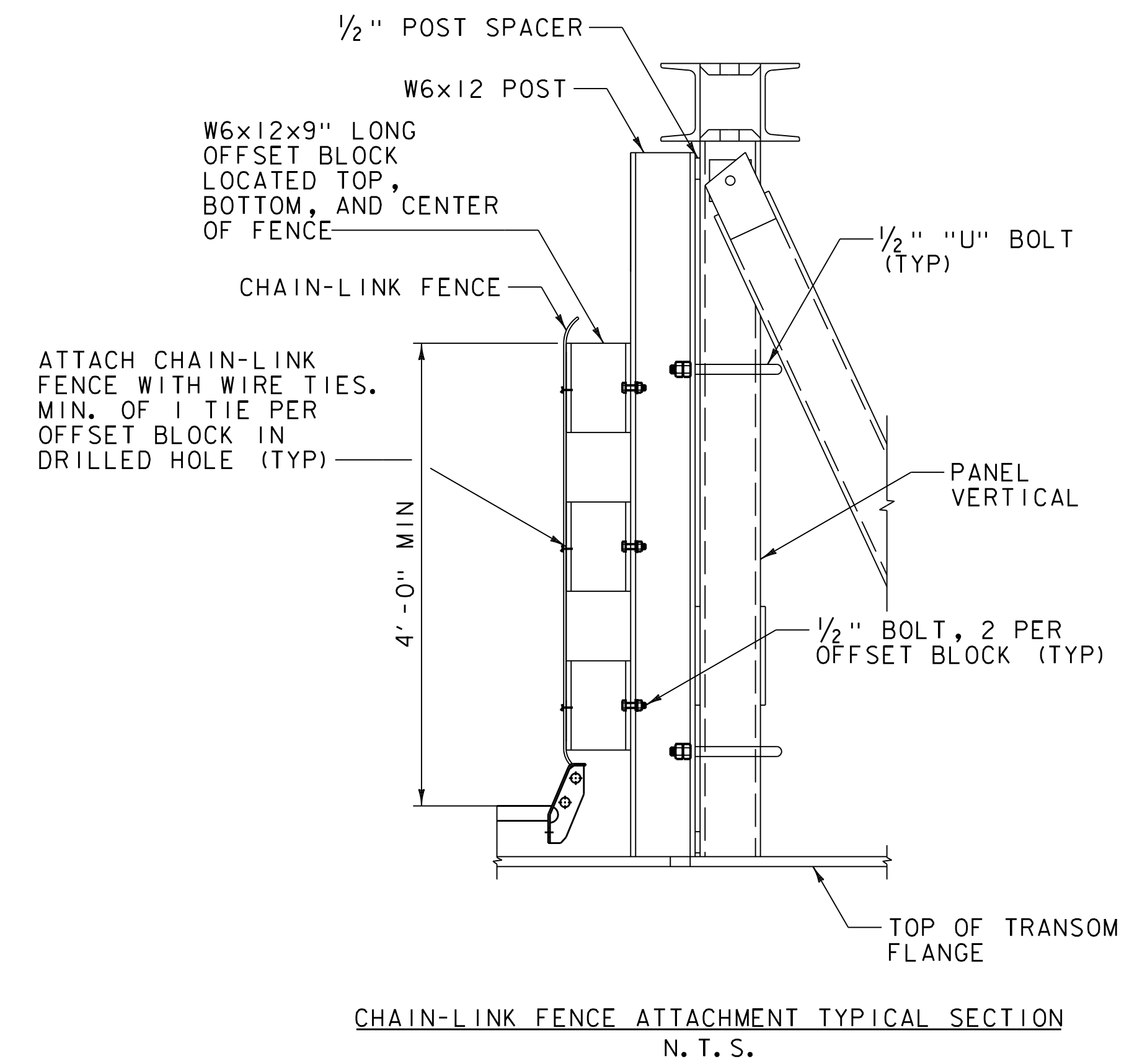
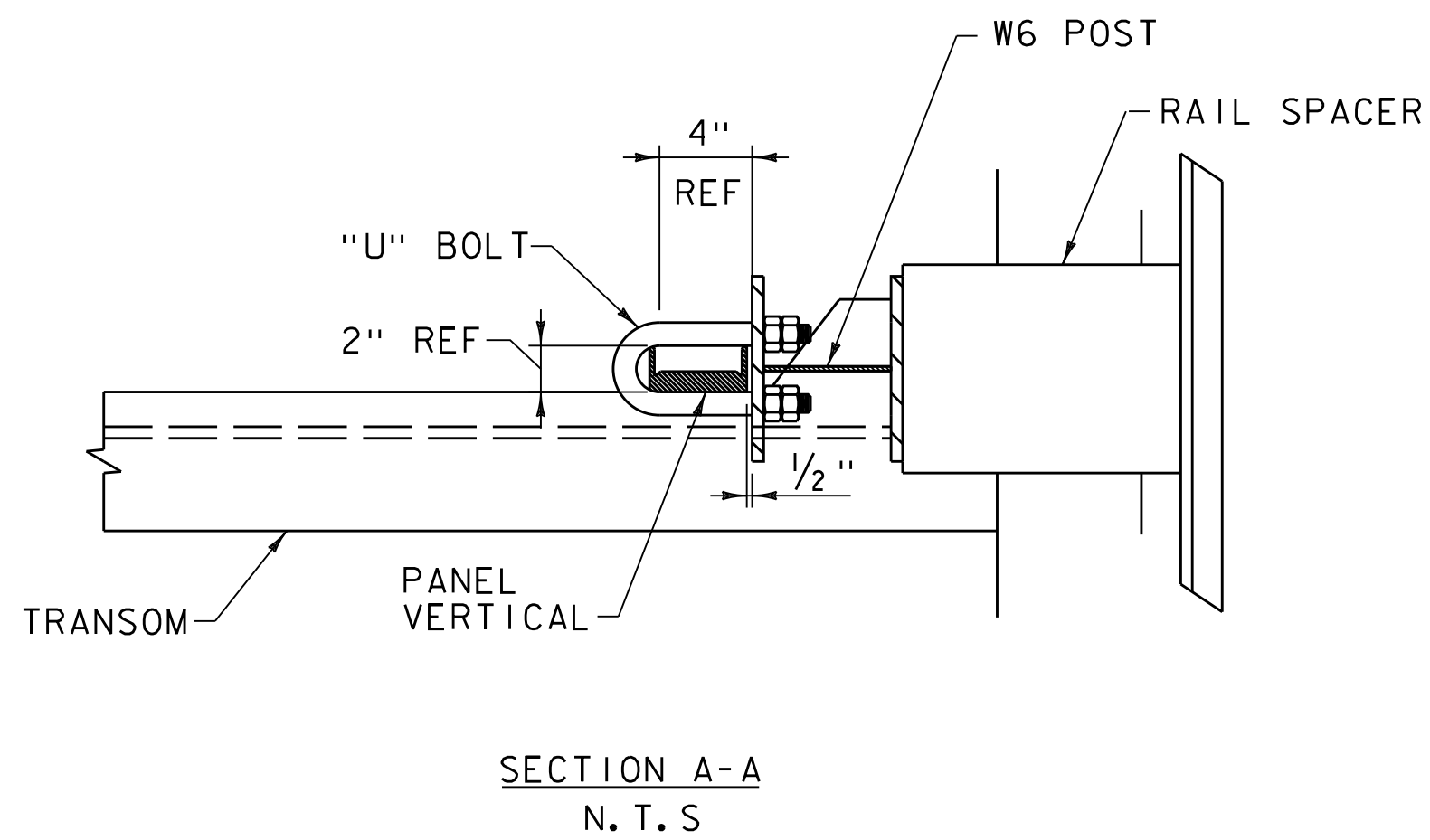
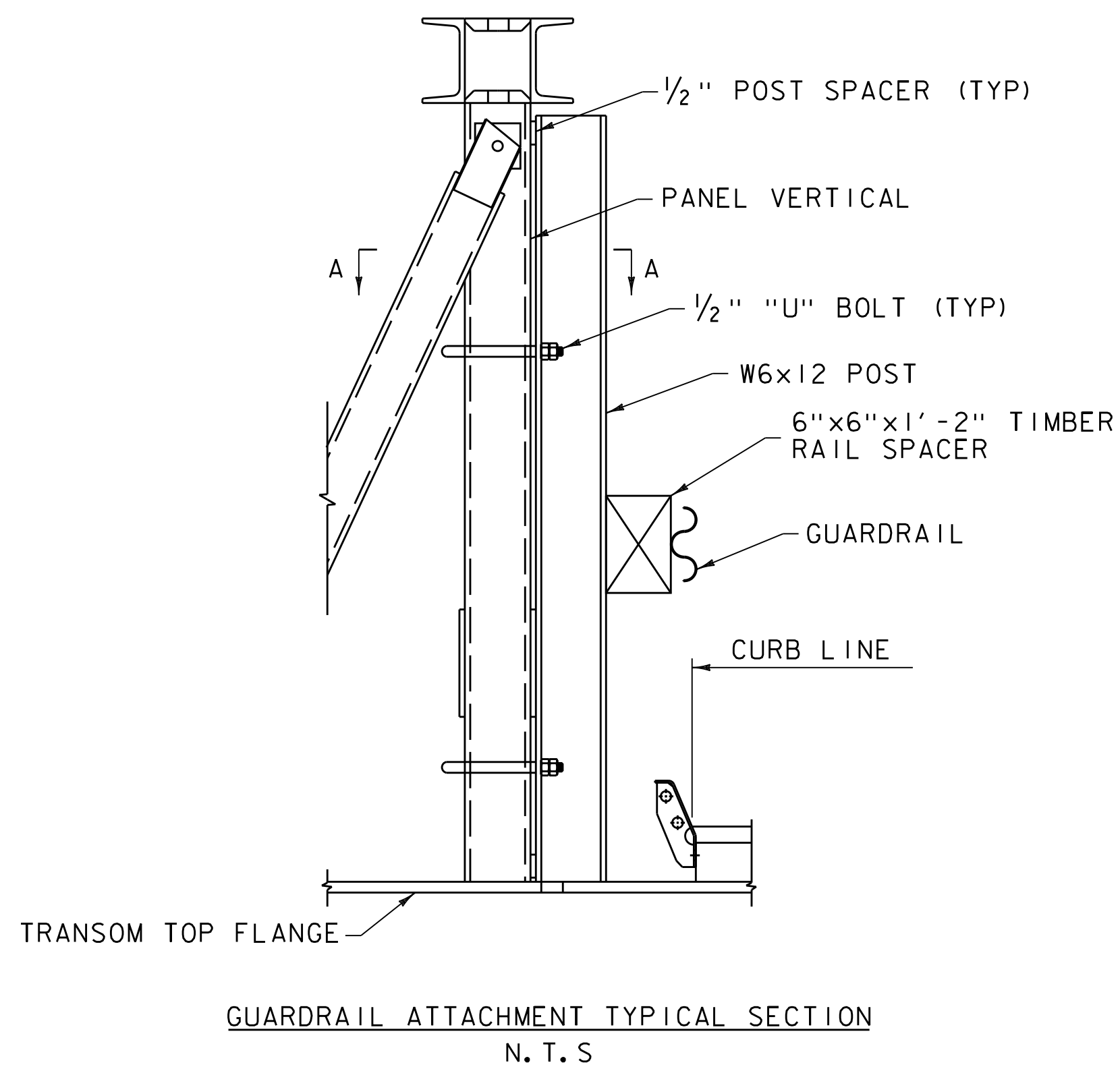
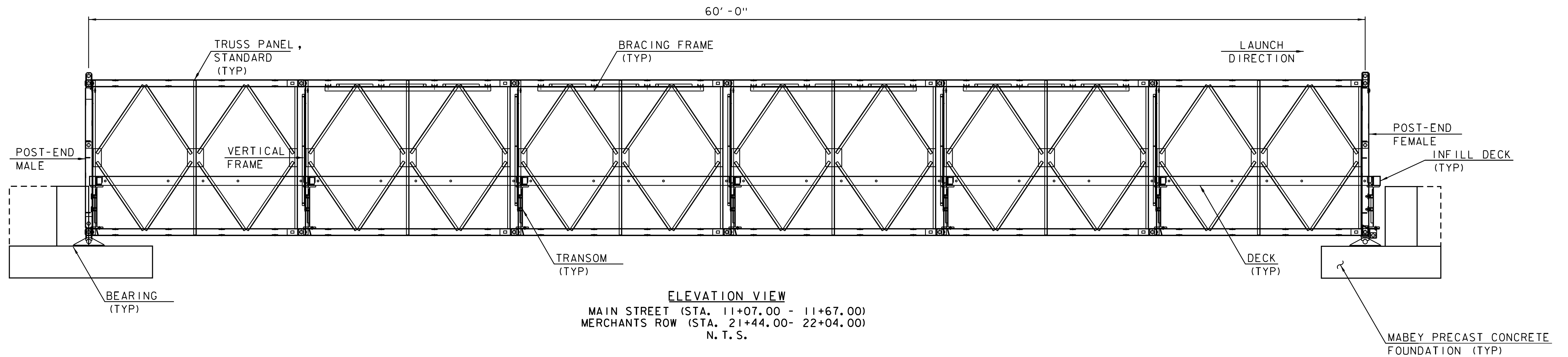
NOTE: NAIL LAMINATED DECK PANELS SHALL BE A MINIMUM OF 18" IN LENGTH WITH A 1/2" GAP BETWEEN PANELS



PROJECT NAME: MIDDLEBURY  
PROJECT NUMBER: EWP3(I)  
FILE NAME: z17b016_PedSup.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: R.H. BARNES  
PEDESTRIAN BRIDGE DETAILS

PLOT DATE: 5/19/2017  
DRAWN BY: R.H. BARNES  
CHECKED BY: S.E. BURBANK  
SHEET 10 OF 54



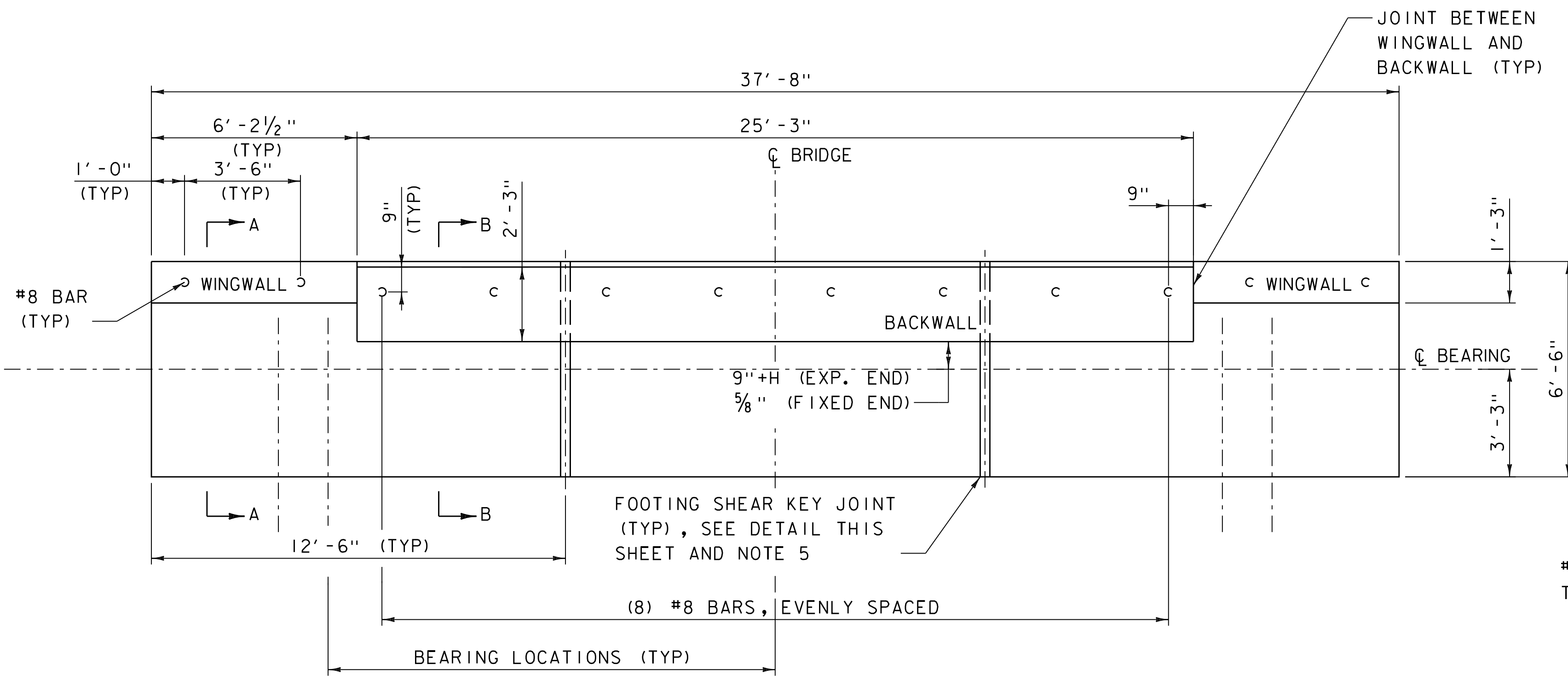


PROJECT NAME: MIDDLEBURY  
PROJECT NUMBER: EWP3(I)

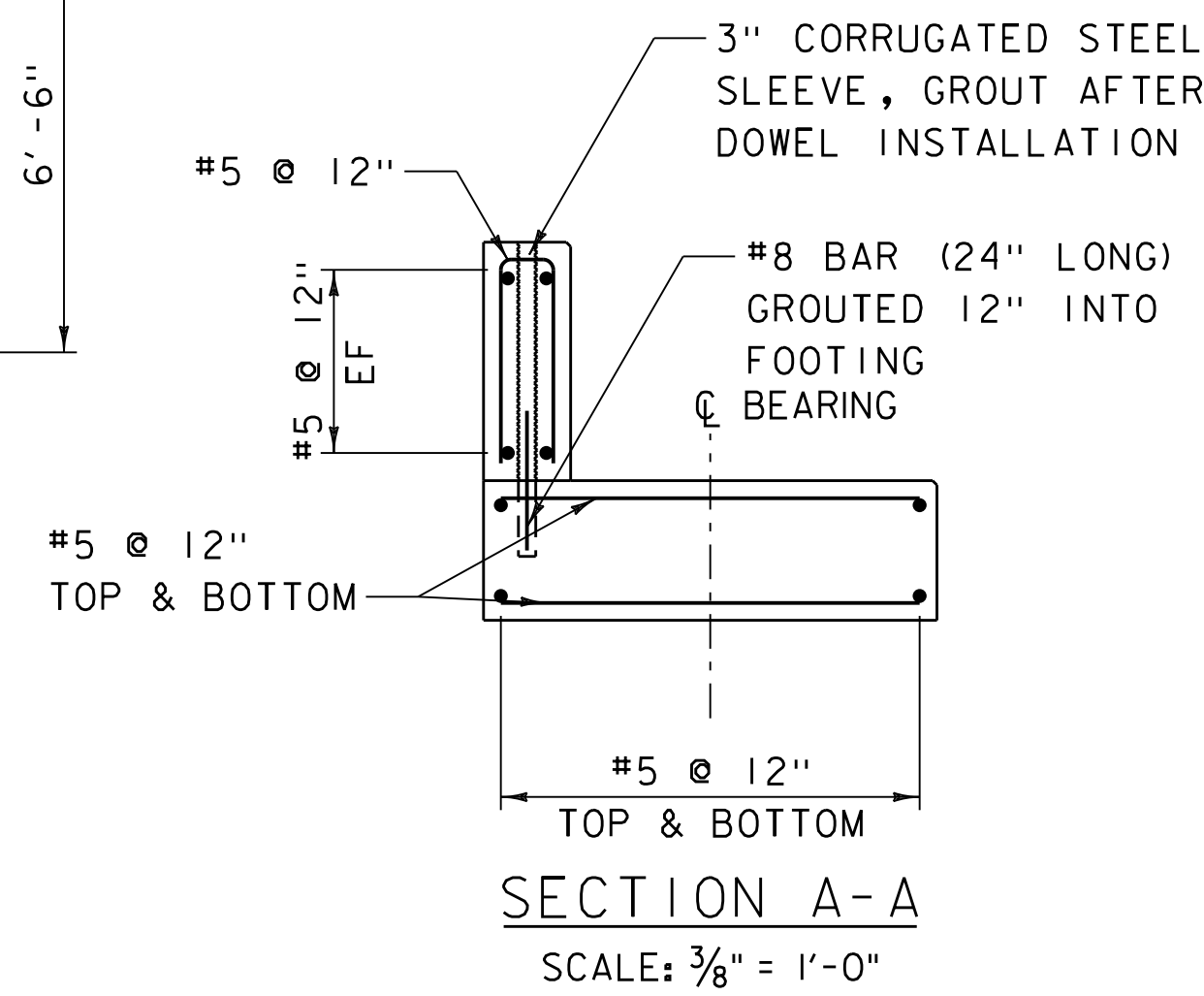
FILE NAME: z17b016_DET.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: MABEY  
MABEY BRIDGE DETAIL SHEET

PLOT DATE: 5/19/2017  
DRAWN BY: VTRANS  
CHECKED BY: VHB  
SHEET 11 OF 54

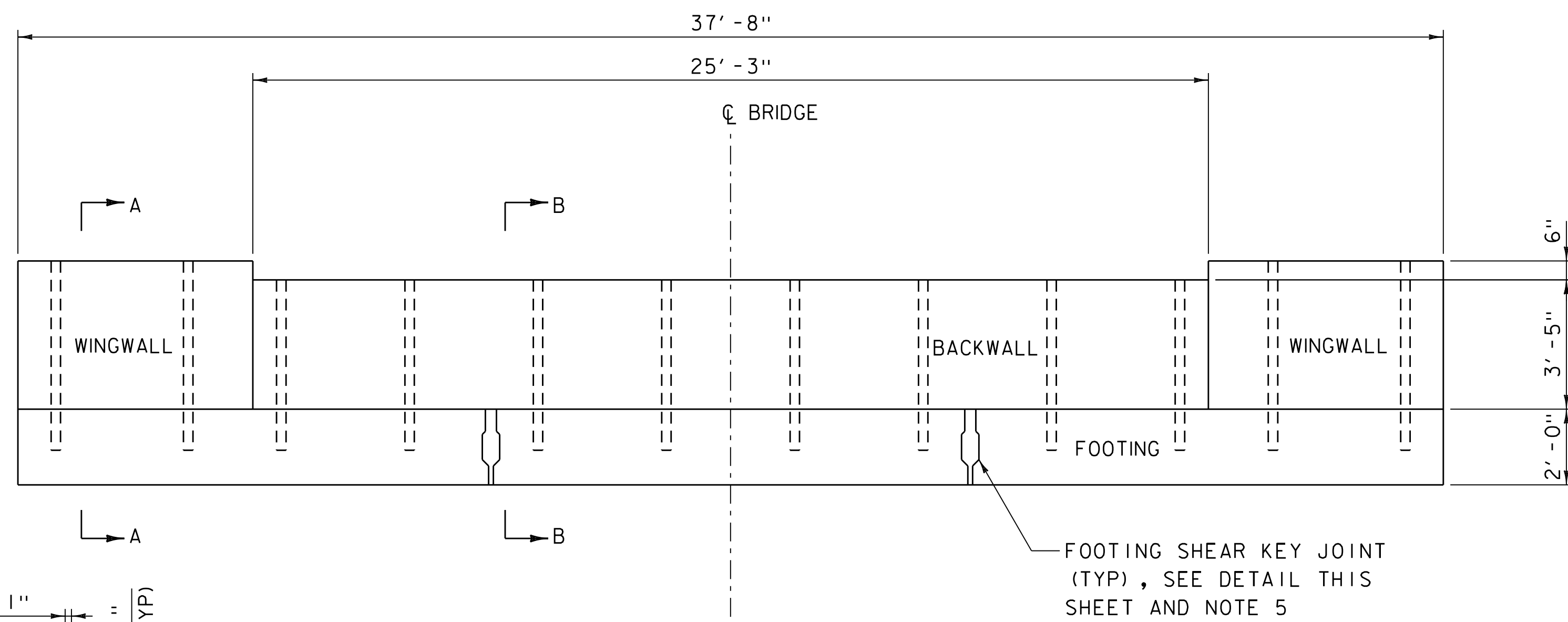




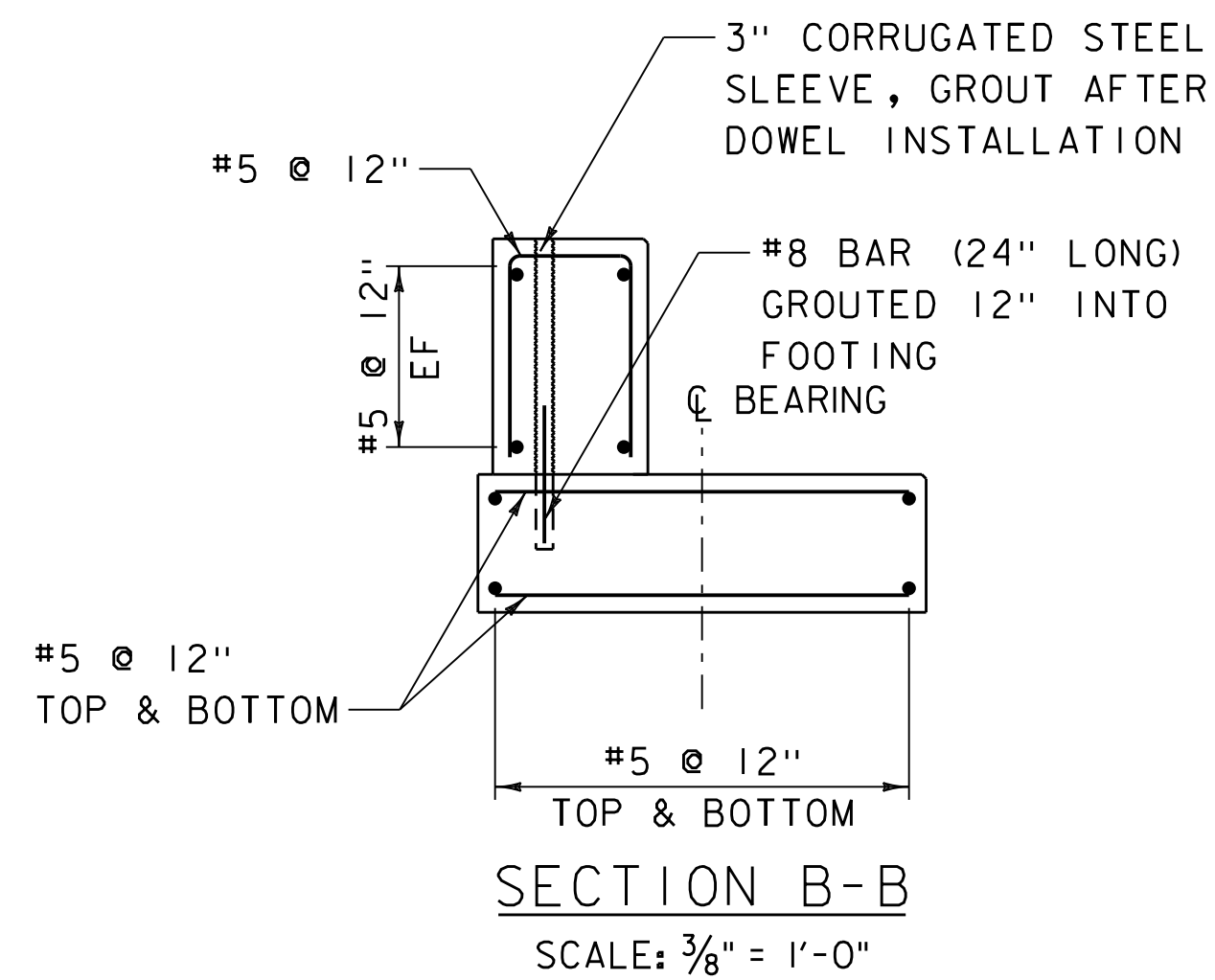
PRECAST CONCRETE FOUNDATION PLAN  
SCALE: 3/8" = 1'-0"



SECTION A-A  
SCALE: 3/8" = 1'-0"



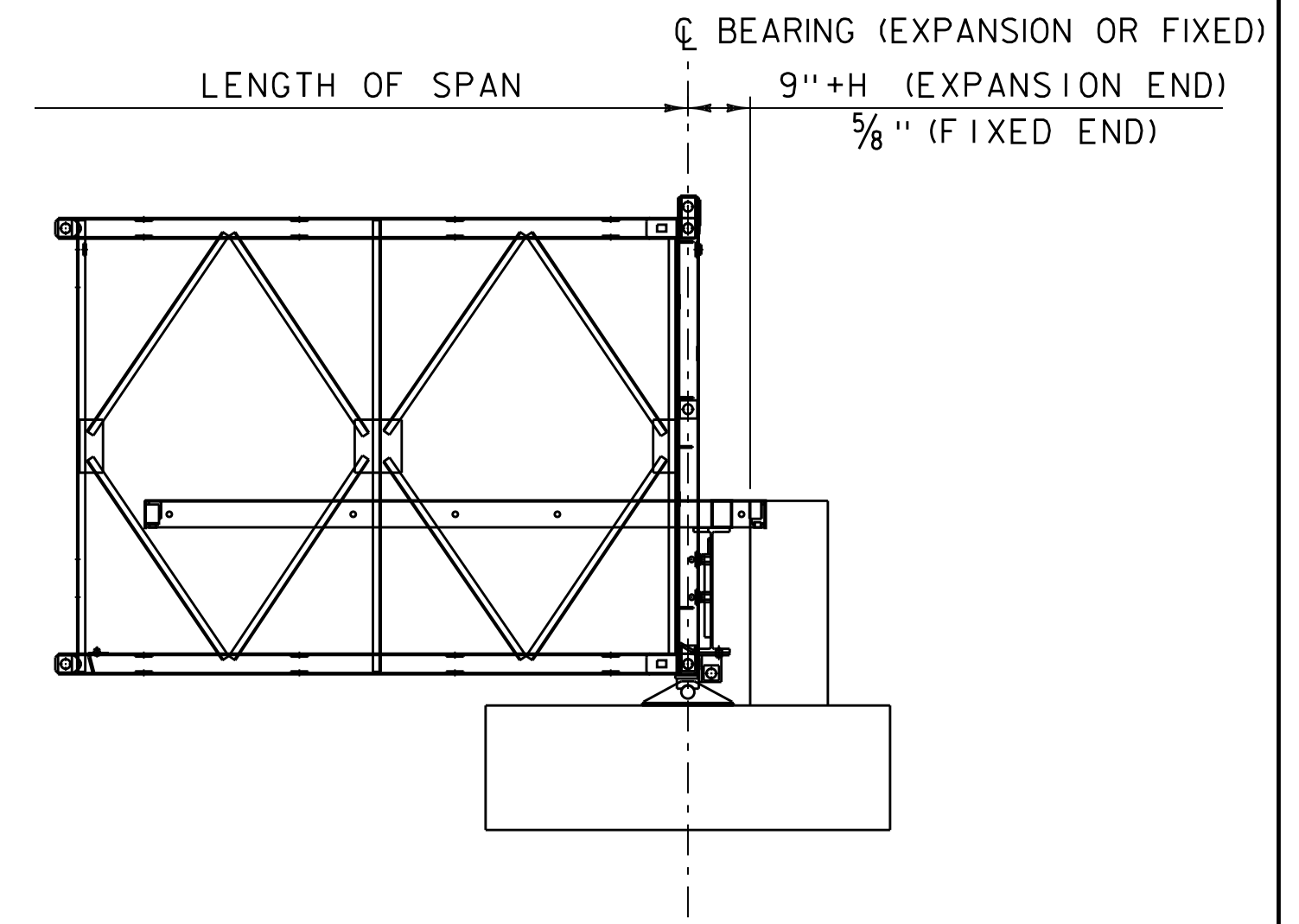
PRECAST CONCRETE FOUNDATION ELEVATION  
SCALE: 3/8" = 1'-0"



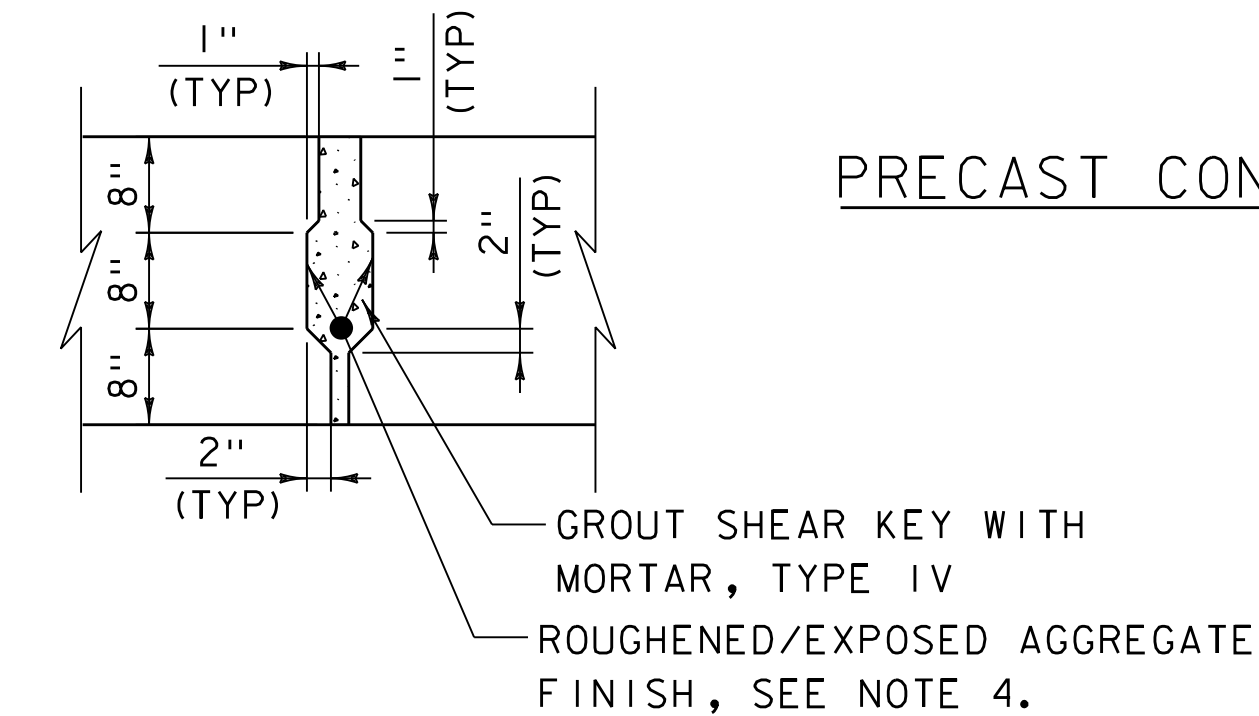
SECTION B-B  
SCALE: 3/8" = 1'-0"

EXPANSION GAP TEMPERATURE ADJUSTMENT

TEMP (°F)	"H" DISTANCE (IN)
0	1 5/8
15	1 1/2
30	1 5/16
45	1 3/16
60	1 1/16
75	5/8
90	3/4
105	5/8



BACKWALL PLACEMENT DETAIL  
NOT TO SCALE



SHEAR KEY DETAIL  
NOT TO SCALE

NOTE:

- NF = NEAR FACE
- FF = FAR FACE
- EF = EACH FACE
- ▲ = CUT TO FIT
- 3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

NOTES:

1. THE BRIDGE FOUNDATION MUST BE PLACED ON SUITABLE MATERIAL AS DETERMINED BY THE ENGINEER. IF THE FOUNDATION MATERIAL ENCOUNTERED IS DETERMINED TO BE UNSUITABLE BY THE ENGINEER, THE MATERIAL SHALL BE UNDERCUT 2'-0" AND REPLACED WITH GRANULAR BACKFILL FOR STRUCTURES.
2. THE WINGWALLS SHALL NOT BE INSTALLED UNTIL THE BRIDGE HAS BEEN LAUNCHED AND JACKED DOWN INTO POSITION ON THE BEARINGS.
3. PRECAST CONCRETE LIFTING POINTS AND LIFTING DEVICES SHALL BE DETERMINED BY THE FABRICATOR.
4. THE CONCRETE EDGES OF THE SHEAR KEY SHALL BE TREATED TO PROVIDE A ROUGHENED/EXPOSED AGGREGATE FINISH OF A MINIMUM 1/8" AMPLITUDE. FINISH SHALL BE COMPLETE PRIOR TO ERECTION OF FOOTING PIECES.
5. THE FOOTING SHEAR KEY JOINT MAY ALTERNATELY BE LOCATED AT THE CENTERLINE OF BRIDGE FOR THE FOOTING TO BE IN 2 PIECES. THE NUMBER AND/OR LOCATION OF JOINTS MAY BE ALTERED IN ANOTHER WAY WITH A MAXIMUM OF 2 JOINTS, WHILE MAINTAINING CLEARANCE FROM BEARING LOCATIONS.



PROJECT NAME: MIDDLEBURY  
PROJECT NUMBER: EWP3(I)  
FILE NAME: z17b016_AbutDtlis.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: R.H. BARNES  
MABEY BRIDGE FOUNDATION DETAILS

PLOT DATE: 5/19/2017  
DRAWN BY: R.H. BARNES  
CHECKED BY: S.E. BURBANK  
SHEET 12 OF 54

# QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
							ROADWAY	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
							1				1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10				
							25				25		CY	SOLID ROCK EXCAVATION	203.16				
							100				100		CY	TRENCH EXCAVATION OF EARTH	204.20				
							10				10		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22				
							100				100		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30				
									1		1		LS	ONE-WAY TEMPORARY BRIDGE (MERCHANTS ROW)	528.10				
									1		1		LS	TWO-WAY TEMPORARY BRIDGE (MAIN STREET)	528.11				
									1		1		LS	TEMPORARY PEDESTRIAN BRIDGE (MAIN STREET)	528.12				
									1		1		EACH	PARTIAL REMOVAL OF STRUCTURE (MAIN STREET)	529.20				
									1		1		EACH	PARTIAL REMOVAL OF STRUCTURE (MERCHANTS ROW)	529.20				
							70				70		LF	18" CPEP(SL)	601.2615				
							3				3		EACH	PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE	604.18				
							7				7		EACH	CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES	604.40				
							2				2		EACH	REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS II	604.415				
							2				2		EACH	CHANGING ELEVATION OF SEWER MANHOLES	604.42				
							80				80		LF	CAST-IN-PLACE CONCRETE CURB, TYPE B	616.28				
							30				30		LF	REMOVAL OF EXISTING CURB	616.41				
							25				25		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	618.10				
							10				10		TON	BITUMINOUS CONCRETE SIDEWALK	618.15				
							40				40		SF	DETECTABLE WARNING SURFACE	618.30				
							160				160		LF	CHAIN-LINK FENCE, 4 FEET	620.11				
							15				15		EACH	BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 4 FEET	620.20				
							60				60		LF	REMOVING AND RESETTING FENCE	620.50				
							360				360		LF	TEMPORARY TRAFFIC BARRIER	621.90				
							2				2		EACH	GATE VALVE WITH VALVE BOX (12-INCH)	629.27				
							1000				1000		HR	FLAGGERS	630.15				
							1				1		LS	MOBILIZATION/DEMOBILIZATION	635.11				
							1				1		LS	TRAFFIC CONTROL	641.10				
							6				6		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15				
							3700				3700		LF	4 INCH WHITE LINE	646.20				
							1000				1000		LF	4 INCH YELLOWLINE	646.21				
							60				60		LF	8 INCH WHITE LINE	646.22				
							70				70		LF	8 INCH YELLOWLINE	646.23				
							320				320		LF	12 INCH WHITE LINE	646.24				
							40				40		LF	24 INCH STOP BAR	646.26				
							8				8		EACH	LETTER OR SYMBOL	646.30				
							325				325		LF	TEMPORARY 4 INCH WHITE LINE, TEMPORARY PAVEMENT MARKING TAPE	646.6011				
							1250				1250		LF	TEMPORARY 4 IN YELLOW LINE, TEMPORARY PAVEMENT MARKING TAPE	646.6111				
							111				111		SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85				
							1875				1875		SF	PAVEMENT MARKING MASK	646.86				

PROJECT NAME: MIDDLEBURY  
PROJECT NUMBER: EWP3(I)



FILE NAME: z17b016_QSS.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: D.M. PECK  
QUANTITY SUMMARY SHEET 1

PLOT DATE: 5/19/2017  
DRAWN BY: D.M. PECK  
CHECKED BY: J.D. KEENER  
SHEET 13 OF 54



# QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
							ROADWAY	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
								10			10		LB	SEED	651.15				
								30			30		LB	FERTILIZER	651.18				
								0.1			0.1		TON	HAY MULCH	651.25				
								15			15		CY	TOPSOIL	651.35				
								1			1		LS	EPSC PLAN	652.10				
								24			24		HR	MONITORING EPSC PLAN	652.20				
								1			1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30				
								10			10		EACH	INLET PROTECTION DEVICE, TYPE I	653.40				
							100				100		SF	TRAFFIC SIGNS, TYPE A	675.20				
							240				240		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341				
							29				29		EACH	REMOVING SIGNS	675.50				
							7				7		EACH	ERECTING SALVAGED SIGNS	675.60				
							150				150		LF	WMED CONDUIT (4 INCH PVC)	678.23				
							2				2		EACH	REMOVE STREET LIGHT ASSEMBLY	679.24				
										30000	30000		DL	SPECIAL PROVISION (MAINTENANCE OF RAILROAD TRAFFIC N.A.B.I.)	900.615				
							8000				8000		DL	SPECIAL PROVISION (UNIFORMED TRAFFIC OFFICERS)(N.A.B.I.)	900.615				
										4	4		EACH	SPECIAL PROVISION (CPM SCHEDULE)	900.620				
									10		10		HR	SPECIAL PROVISION (MINIPILE OBSTRUCTION DRILLING AND REMOVAL)	900.630				
								900			900		LF	SPECIAL PROVISION (MINIPILE IN EARTH)	900.640				
								200			200		LF	SPECIAL PROVISION (MINIPILE IN ROCK)	900.640				
								1			1		LS	SPECIAL PROVISION (FURNISHING EQUIPMENT FOR INSTALLING MINIPILES)	900.645				
										1	1		LS	SPECIAL PROVISION (INDIRECT COSTS)	900.645				
										1	1		LS	SPECIAL PROVISION (SURVEY INSTRUMENTATION AND MONITORING)	900.645				
							1				1		LS	SPECIAL PROVISION (TEMPORARY WATER MAIN)	900.645				

PROJECT NAME: MIDDLEBURY  
PROJECT NUMBER: EWP3(I)



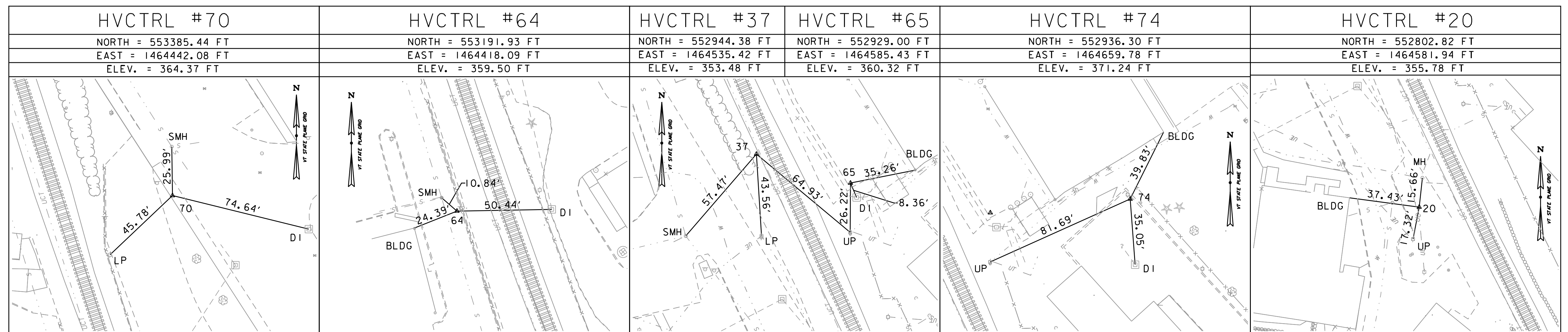
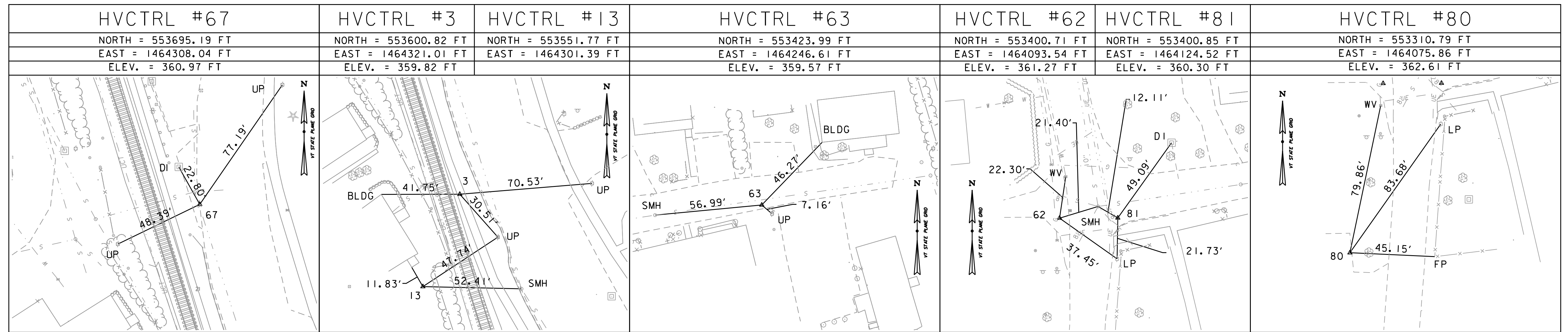
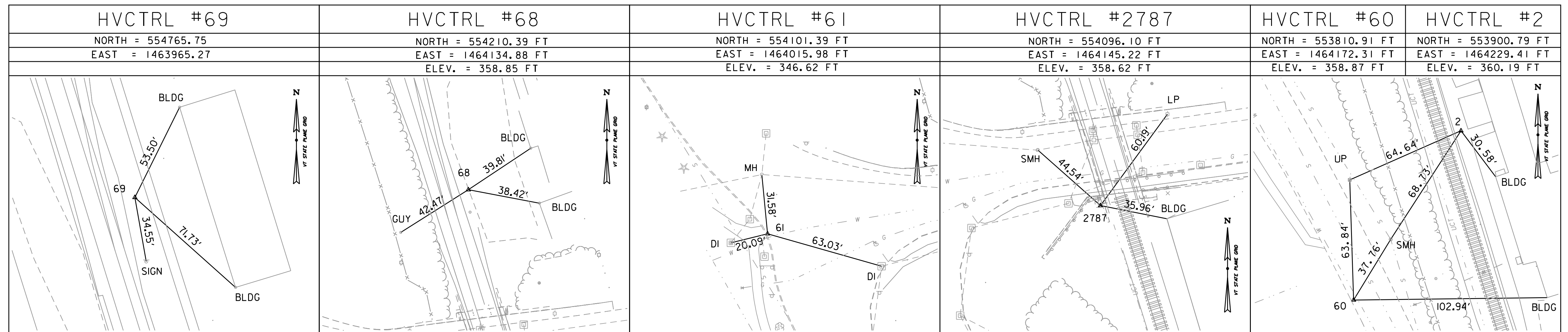
FILE NAME: z17b016_QSS.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: D.M. PECK  
QUANTITY SUMMARY SHEET 2

PLOT DATE: 5/19/2017  
DRAWN BY: D.M. PECK  
CHECKED BY: J.D. KEENER  
SHEET 14 OF 54

TRAVERSE TIES

TRAVERSE TIES

TRAVERSE TIES

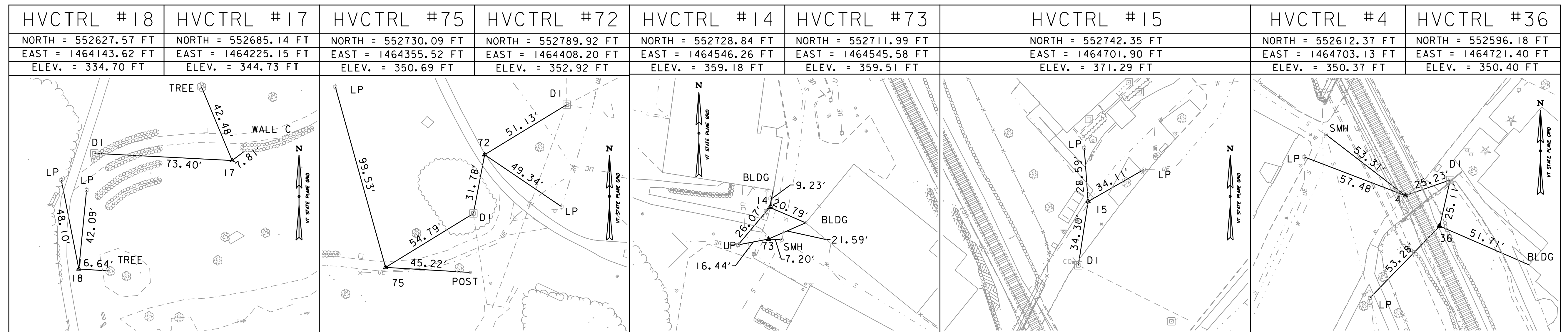


DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD83

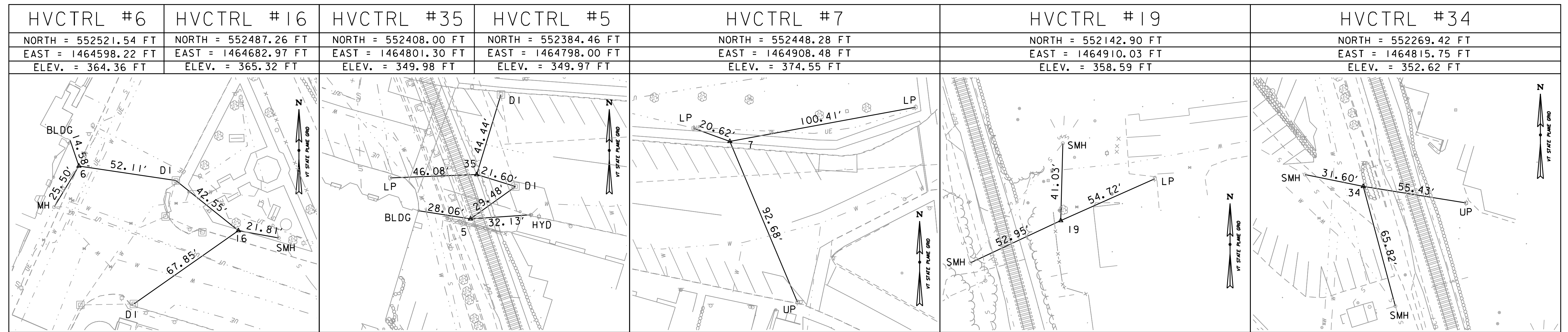
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: EWP3(I)	
FILE NAME: z17b016_TieSheet.dgn	PLOT DATE: 5/19/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: J.F. VEAR	CHECKED BY: D.M. PECK
TIE SHEET (1 OF 3)	SHEET 15 OF 54



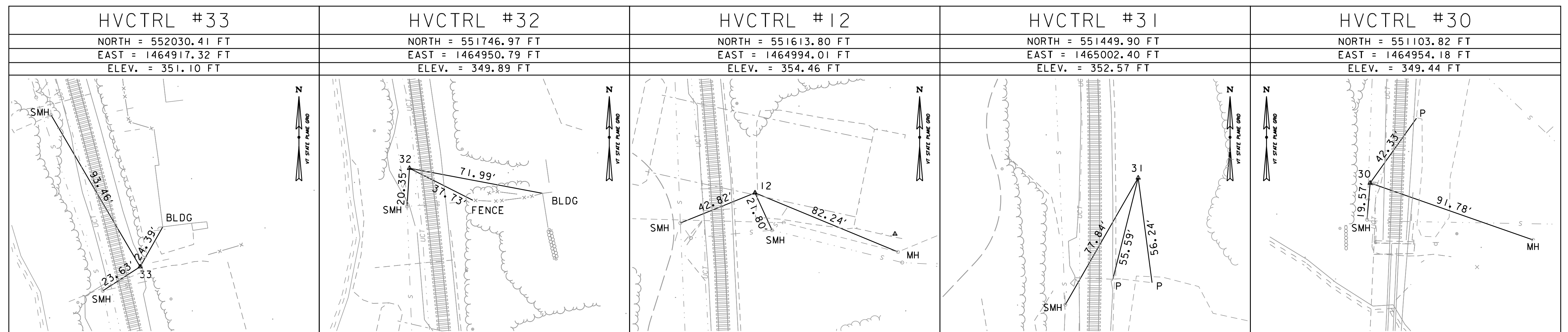
TRAVERSE TIES



TRAVERSE TIES



TRANSVERSE TIES



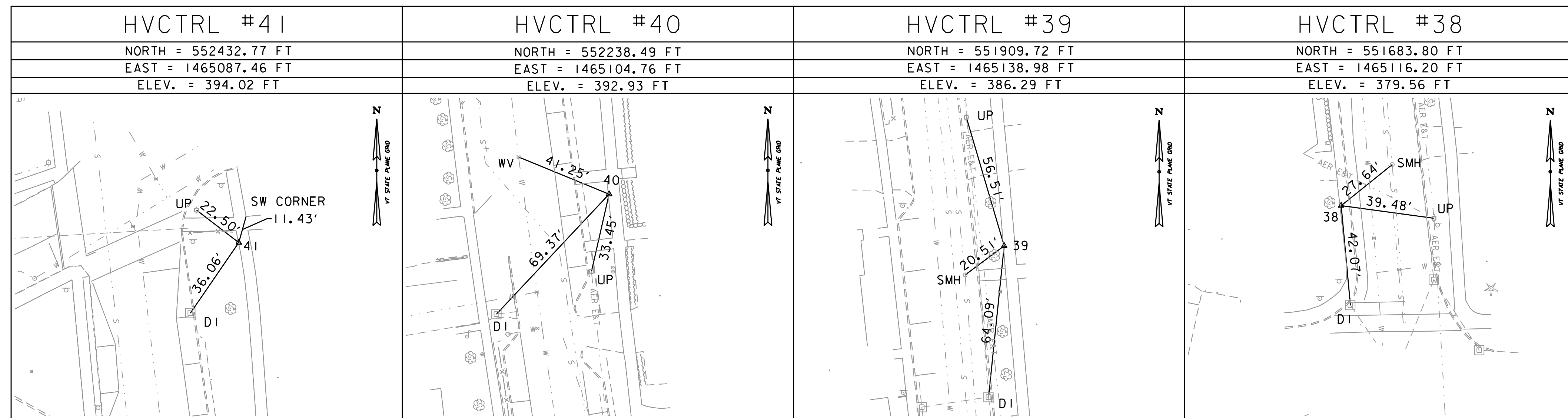
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD83



PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: EWP3(I)	
FILE NAME: z17b016-TieSheet.dgn	PLOT DATE: 5/19/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: J.F. VEAR	CHECKED BY: D.M. PECK
TIE SHEET (2 OF 3)	SHEET 16 OF 54



TRAVERSE TIES



DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD83



PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: EWP3(I)	
FILE NAME: z17b016_TieSheet.dgn	PLOT DATE: 5/19/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: J.F. VEAR	CHECKED BY: D.M. PECK
TIE SHEET (3 OF 3)	SHEET 17 OF 54

MAIN STREET

POINT TYPE	STATION	NORTHING	EASTING
POB	9+50.00	552476.4414	1464595.5649
PC	10+58.97	552573.2350	1464645.6148
PI	10+82.28	552593.9418	1464656.3218
PT	11+05.50	552612.7461	1464670.0990
PC	12+19.12	552704.3993	1464737.2500
PI	12+99.55	552769.2829	1464784.7878
PT	13+79.58	552824.9327	1464842.8638
POE	14+00.00	552839.0606	1464857.6076

CURVE #6  
 STA 12+99.55  
 N = 552769.28  
 E = 1464784.79  
 R = 920.00'  
 $\Delta = 9^{\circ}59'36''$   
 D =  $6^{\circ}13'40''$   
 L = 160.46'  
 T = 80.43'  
 E = 3.51'

CURVE #5  
 STA 10+82.28  
 N = 552593.94  
 E = 1464656.32  
 R = 300.00'  
 $\Delta = 8^{\circ}53'11''$   
 D =  $19^{\circ}05'55''$   
 L = 46.53'  
 T = 23.31'  
 E = 0.90'

CURVE #2  
 STA 21+20.79  
 N = 552468.55  
 E = 1464723.57  
 R = 100.00'  
 $\Delta = 17^{\circ}50'28''$   
 D =  $57^{\circ}17'45''$   
 L = 31.14'  
 T = 15.70'  
 E = 1.22'

CURVE #3  
 STA 22+35.33  
 N = 552447.43  
 E = 1464836.41  
 R = 100.00'  
 $\Delta = 26^{\circ}09'24''$   
 D =  $57^{\circ}17'45''$   
 L = 45.65'  
 T = 23.23'  
 E = 2.66'

CURVE #1  
 STA 20+84.58  
 N = 552463.91  
 E = 1464687.05  
 R = 100.00'  
 $\Delta = 23^{\circ}51'25''$   
 D =  $57^{\circ}17'45''$   
 L = 41.64'  
 T = 21.13'  
 E = 2.21'

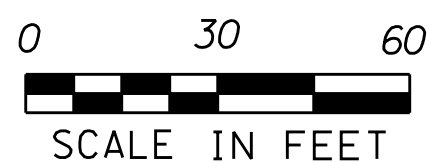
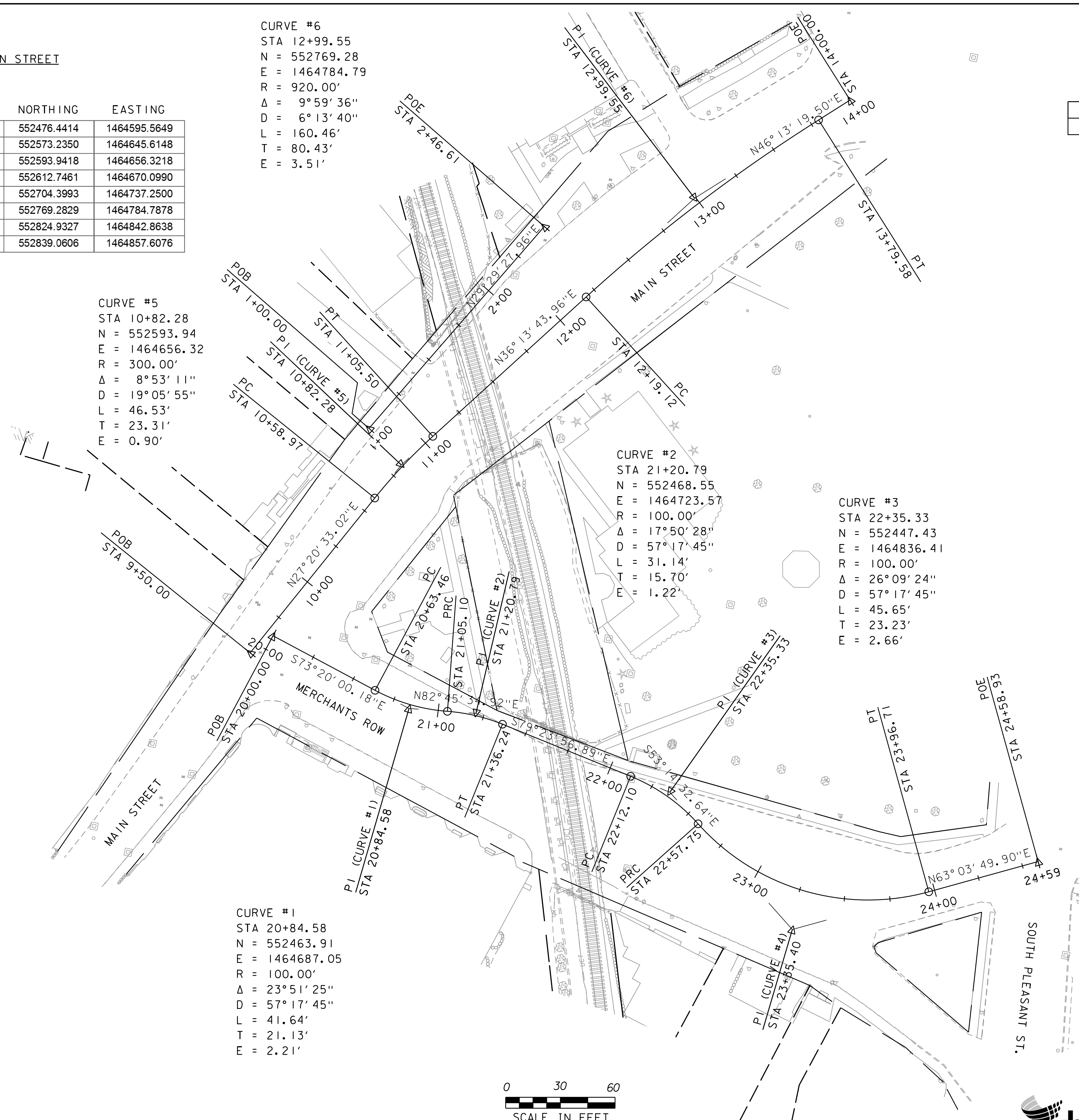
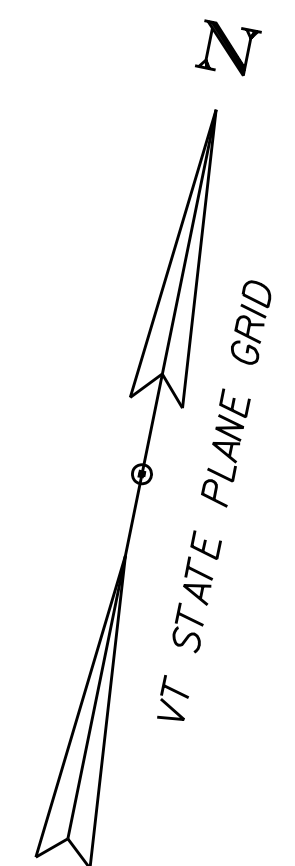
CURVE #4  
 STA 23+35.40  
 N = 552387.07  
 E = 1464917.23  
 R = 125.00'  
 $\Delta = 63^{\circ}41'37''$   
 D =  $45^{\circ}50'12''$   
 L = 138.96'  
 T = 77.64'  
 E = 22.15'

PEDESTRIAN BRIDGE

POINT TYPE	STATION	NORTHING	EASTING
POB	1+00.00	552610.0718	1464634.9249
POE	2+46.61	552737.6817	1464707.0969

MERCHANTS ROW

POINT TYPE	STATION	NORTHING	EASTING
POB	20+00.00	552488.0989	1464605.9941
PC	20+63.46	552469.9516	1464666.8037
PI	20+84.58	552463.9105	1464687.0467
PRC	21+05.10	552466.5729	1464708.0035
PI	21+20.79	552468.5512	1464723.5747
PT	21+36.24	552465.6636	1464739.0032
PC	22+12.10	552451.7072	1464813.5722
PI	22+35.33	552447.4335	1464836.4066
PRC	22+57.75	552433.5314	1464855.0187
PI	23+35.40	552387.0663	1464917.2258
PT	23+96.71	552422.2392	1464986.4472
POE	24+58.93	552450.4254	1465041.9184



PROJECT NAME: MIDDLEBURY

PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_BDR.dwg  
 PROJECT LEADER: A.P. GUYETTE  
 DESIGNED BY: D.M. PECK  
 ALIGNMENT LAYOUT PLAN SHEET

PLOT DATE: 5/19/2017  
 DRAWN BY: D.M. PECK  
 CHECKED BY: E.P. DETRICK  
 SHEET 18 OF 54

4 INCH DOUBLE YELLOW LINE

STA. 10+00 - 12+75, BL  
STA. 12+83 - 13+50, BL

4 INCH WHITE LINE

STA. 10+00 - 11+11, RT (PARKING)  
STA. 10+61 - 11+67, RT  
STA. 11+77 - 12+80, RT (PARKING)  
STA. 12+86 - 13+67, RT (PARKING)  
STA. 10+00 - 10+28, LT (PARKING)  
STA. 10+28 - 11+67, LT  
STA. 11+74 - 12+72, LT (PARKING)  
STA. 12+77 - 13+08, LT (PARKING)

12 INCH WHITE LINE

STA. 12+75 - 12+83 (CROSSWALK)

TEMPORARY BRIDGE

STA. 11+07 - 11+67

CHANGING ELEVATIONS OF SEWER MANHOLES

STA. 11+26, LT

BITUMINOUS CONCRETE SIDEWALK

STA. 11+11 - 11+35, LT  
STA. 11+77 - 11+90, LT

TEMPORARY PEDESTRIAN BRIDGE

STA. 11+36 - 11+76, LT

CHANGING ELEVATION OF DROP INLETS,  
CATCH BASINS OR MANHOLES

STA. 10+08, RT  
STA. 11+98, LT  
STA. 12+04, RT

TEMPORARY TRAFFIC BARRIER

STA. 10+83 - 11+06, RT  
STA. 11+29 - 11+36, LT  
STA. 11+33 - 11+48, RT  
STA. 11+63 - 11+73, LT

TEMPORARY WATERMAIN

STA. 11+05 - 12+13, LT

GATE VALVE WITH BOX

STA. 11+05, LT  
STA. 12+13, LT

CHAIN LINK FENCE, 4 FEET

STA. 11+28 - 11+35, LT  
STA. 11+77 - 12+03, LT  
STA. 11+77 - 11+99, LT

SOLID ROCK EXCAVATION

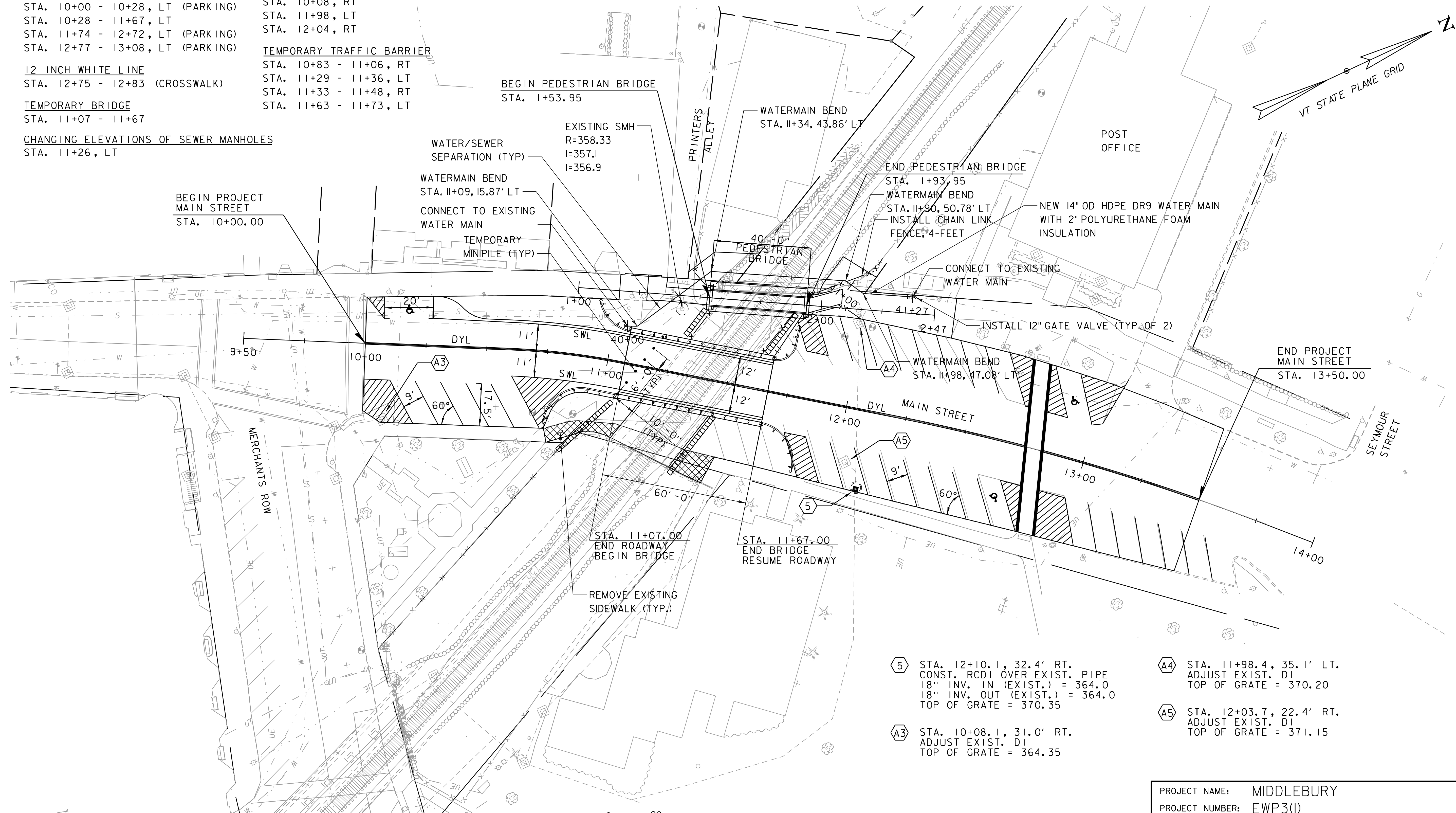
STA. 10+76 - 11+11, RT  
STA. 11+33 - 11+51, RT

TEMPORARY MINIPILE

STA. 10+94 - 11+37  
16 PILES, LOCATIONS  
SHOWN APPROXIMATELY  
IN PLAN VIEW

LETTER OR SYMBOL

STA. 10+18, LT (HANDICAP)  
STA. 12+68, RT (HANDICAP)  
STA. 12+90, LT (HANDICAP)

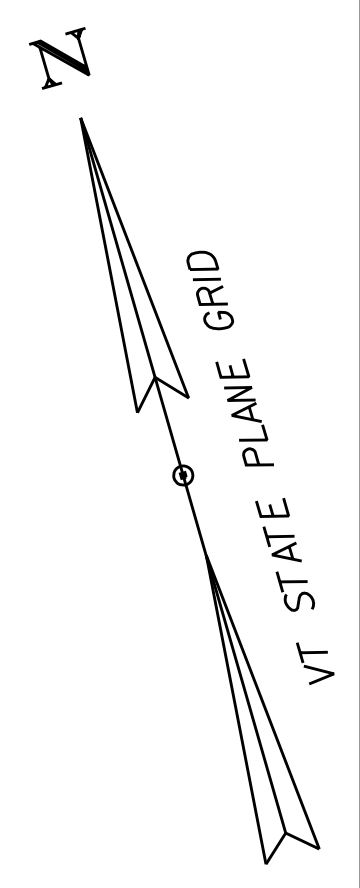


- (5) STA. 12+10.1, 32.4' RT.  
CONST. RCDI OVER EXIST. PIPE  
18" INV. IN (EXIST.) = 364.0  
18" INV. OUT (EXIST.) = 364.0  
TOP OF GRATE = 370.35
- (A3) STA. 10+08.1, 31.0' RT.  
ADJUST EXIST. DI  
TOP OF GRATE = 364.35

- (A4) STA. 11+98.4, 35.1' LT.  
ADJUST EXIST. DI  
TOP OF GRATE = 370.20
- (A5) STA. 12+03.7, 22.4' RT.  
ADJUST EXIST. DI  
TOP OF GRATE = 371.15

PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_BDR_nul_MAIN.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	B.M. ROBERTS
MAIN STREET LAYOUT PLAN SHEET	
PLOT DATE:	5/19/2017
DRAWN BY:	B.M. ROBERTS
CHECKED BY:	E.P. DETRICK
SHEET	19 OF 54





**TEMPORARY BRIDGE**  
 STA. 21+44 - 22+04

**CHANGING ELEVATION OF DROP INLETS,  
 CATCH BASINS, OR MANHOLES**  
 STA. 20+35, LT  
 STA. 20+56, LT  
 STA. 21+39, RT (TMH)  
 STA. 22+04, LT (TMH)

**CHANGING ELEVATION OF SEWER MANHOLE**  
 STA. 21+03, LT.

**SOLID ROCK EXCAVATION (EX. SIDEWALK REMOVAL)**  
 STA. 20+80 - 21+40, LT  
 STA. 21+86 - 22+04, LT  
 STA. 22+23 - 22+55, LT  
 STA. 23+53 - 23+56, RT

**DETECTABLE WARNING SURFACE**  
 STA. 21+40, RT.  
 STA. 22+50, RT.  
 STA. 23+54, RT.  
 STA. 23+69, RT.

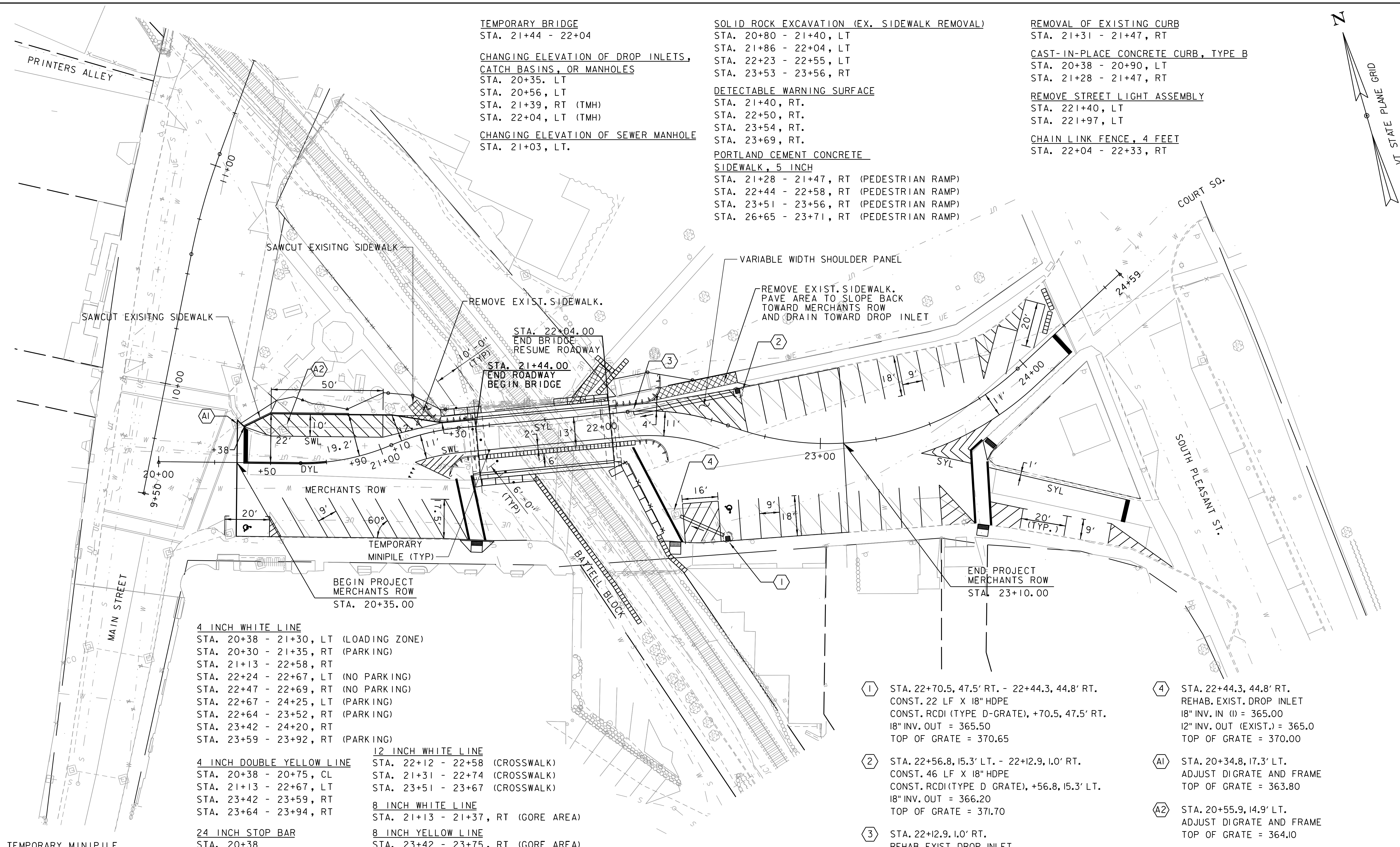
**PORTLAND CEMENT CONCRETE  
 SIDEWALK, 5 INCH**  
 STA. 21+28 - 21+47, RT (PEDESTRIAN RAMP)  
 STA. 22+44 - 22+58, RT (PEDESTRIAN RAMP)  
 STA. 23+51 - 23+56, RT (PEDESTRIAN RAMP)  
 STA. 26+65 - 23+71, RT (PEDESTRIAN RAMP)

**REMOVAL OF EXISTING CURB**  
 STA. 21+31 - 21+47, RT

**CAST-IN-PLACE CONCRETE CURB, TYPE B**  
 STA. 20+38 - 20+90, LT  
 STA. 21+28 - 21+47, RT

**REMOVE STREET LIGHT ASSEMBLY**  
 STA. 221+40, LT  
 STA. 221+97, LT

**CHAIN LINK FENCE, 4 FEET**  
 STA. 22+04 - 22+33, RT



- 4 INCH WHITE LINE**  
 STA. 20+38 - 21+30, LT (LOADING ZONE)  
 STA. 20+30 - 21+35, RT (PARKING)  
 STA. 21+13 - 22+58, RT  
 STA. 22+24 - 22+67, LT (NO PARKING)  
 STA. 22+47 - 22+69, RT (NO PARKING)  
 STA. 22+67 - 24+25, LT (PARKING)  
 STA. 22+64 - 23+52, RT (PARKING)  
 STA. 23+42 - 24+20, RT  
 STA. 23+59 - 23+92, RT (PARKING)

- 4 INCH DOUBLE YELLOW LINE**  
 STA. 20+38 - 20+75, CL  
 STA. 21+13 - 22+67, LT  
 STA. 23+42 - 23+59, RT  
 STA. 23+64 - 23+94, RT

- 24 INCH STOP BAR**  
 STA. 20+38  
 STA. 24+17  
 STA. 23+89

- 12 INCH WHITE LINE**  
 STA. 22+12 - 22+58 (CROSSWALK)  
 STA. 21+31 - 22+74 (CROSSWALK)  
 STA. 23+51 - 23+67 (CROSSWALK)

- 8 INCH WHITE LINE**  
 STA. 21+13 - 21+37, RT (GORE AREA)
- 8 INCH YELLOW LINE**  
 STA. 23+42 - 23+75, RT (GORE AREA)

- LETTER OR SYMBOL**  
 STA. 21+06 - 21+11, RT (YIELD MARKINGS)  
 STA. 20+39, RT (HANDICAP)  
 STA. 22+68, RT (HANDICAP)

**TEMPORARY MINIPILE**  
 STA. 21+31 - 21+71, LT & RT  
 14 PILES, LOCATIONS  
 SHOWN APPROXIMATELY  
 IN PLAN VIEW

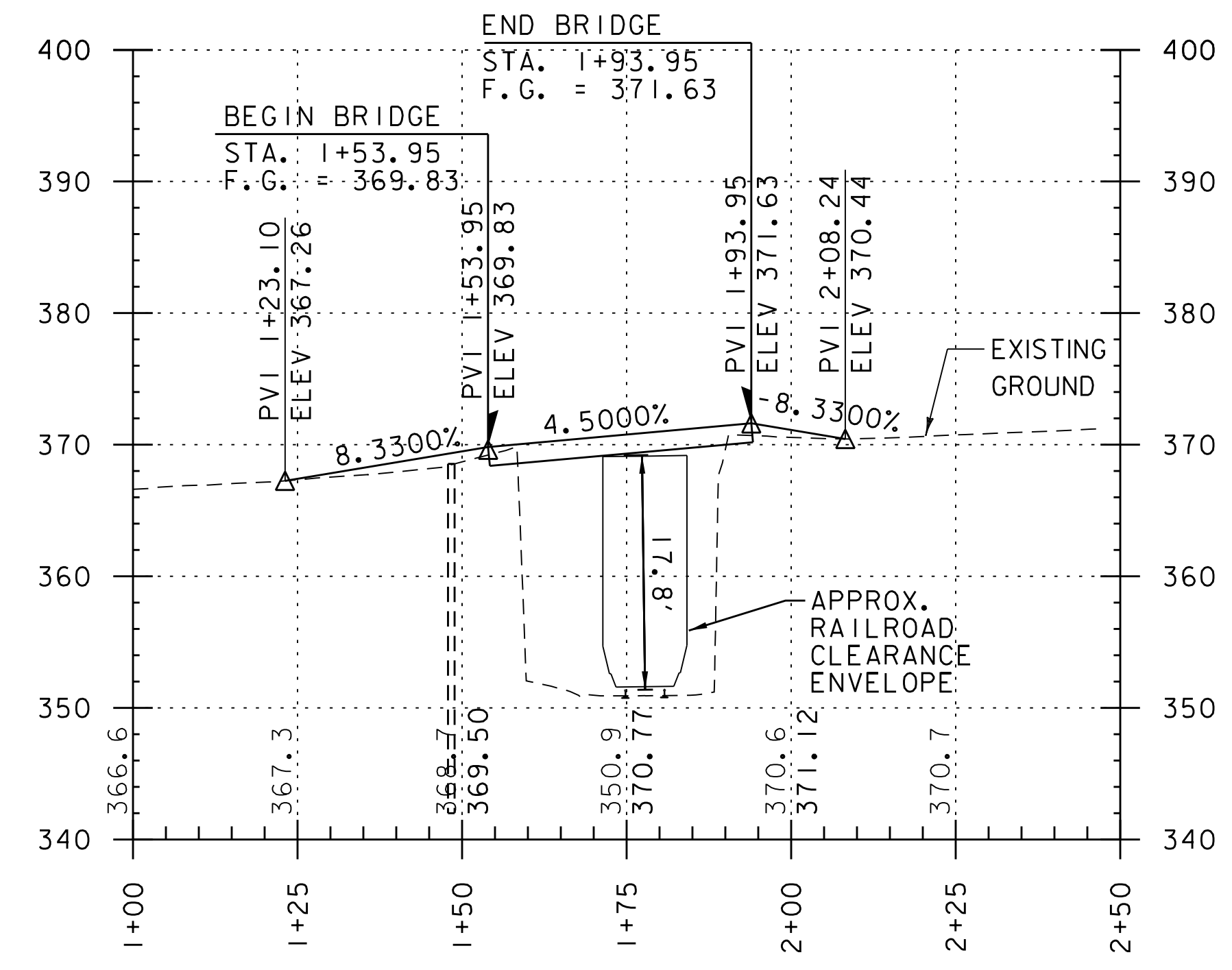
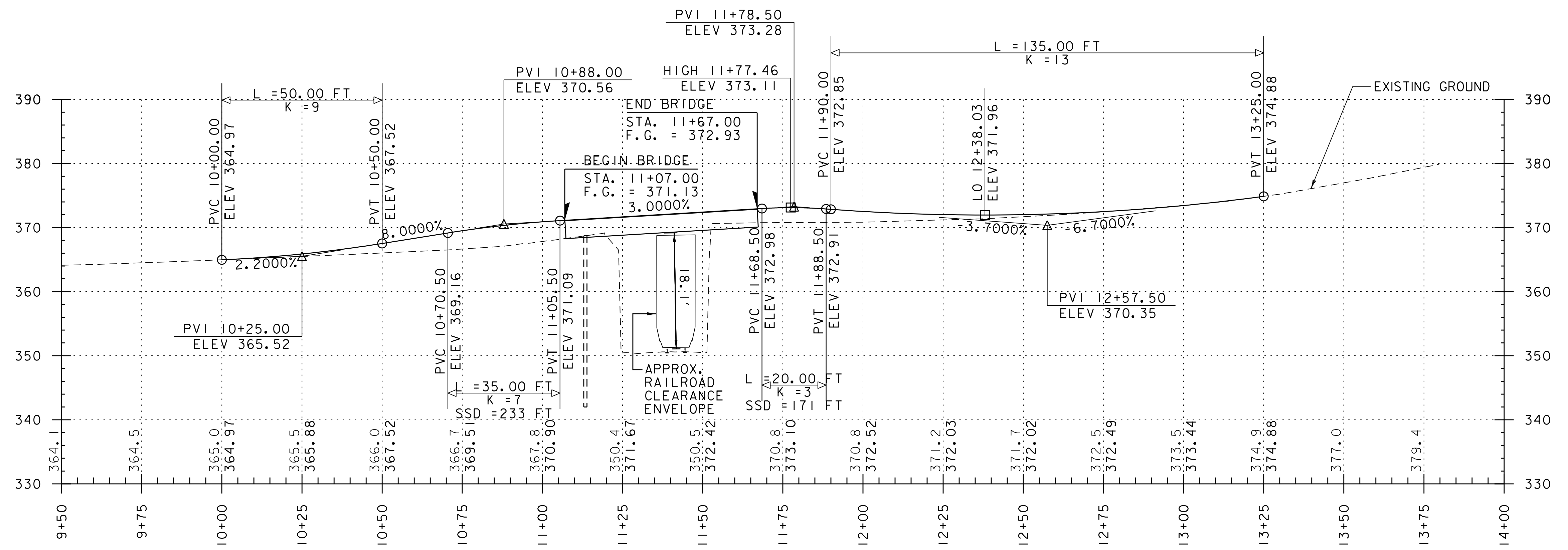
- ① STA. 22+70.5, 47.5' RT. - 22+44.3, 44.8' RT.  
 CONST. 22 LF X 18" HDPE  
 CONST. RCDI (TYPE D-GRATE), +70.5, 47.5' RT.  
 18" INV. OUT = 365.50  
 TOP OF GRATE = 370.65
- ② STA. 22+56.8, 15.3' LT. - 22+12.9, 1.0' RT.  
 CONST. 46 LF X 18" HDPE  
 CONST. RCDI (TYPE D GRATE), +56.8, 15.3' LT.  
 18" INV. OUT = 366.20  
 TOP OF GRATE = 371.70
- ③ STA. 22+12.9, 1.0' RT.  
 REHAB. EXIST. DROP INLET  
 18" INV. IN (2) = 365.50  
 12" INV. OUT (EXIST.) = 365.4  
 TOP OF GRATE = 372.75

- ④ STA. 22+44.3, 44.8' RT.  
 REHAB. EXIST. DROP INLET  
 18" INV. IN (1) = 365.00  
 12" INV. OUT (EXIST.) = 365.0  
 TOP OF GRATE = 370.00
- AI STA. 20+34.8, 17.3' LT.  
 ADJUST DIGRATE AND FRAME  
 TOP OF GRATE = 363.80
- A2 STA. 20+55.9, 14.9' LT.  
 ADJUST DIGRATE AND FRAME  
 TOP OF GRATE = 364.10



PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_BDR_nul.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
MERCHANTS ROW LAYOUT PLAN SHEET	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	20 OF 54





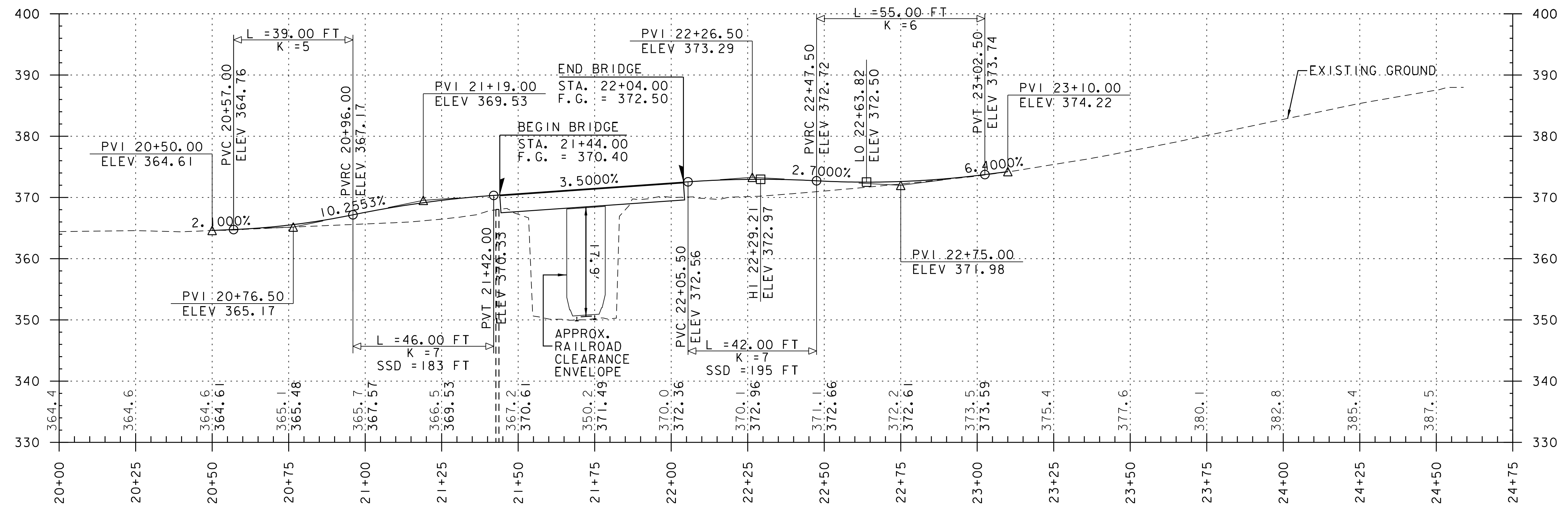
MAIN STREET TEMPORARY BRIDGE PROFILE

TEMPORARY PEDESTRIAN BRIDGE PROFILE

NOTE:  
 GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND  
 GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED FINISHED GRADE



MAIN STREET	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016.MAIN PR0.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	B.M. ROBERTS
PROFILE SHEET (1 OF 2)	
PLOT DATE:	5/19/2017
DRAWN BY:	B.M. ROBERTS
CHECKED BY:	E.P. DETRICK
SHEET	21 OF 54



MERCHANTS ROW TEMPORARY BRIDGE PROFILE

NOTE:

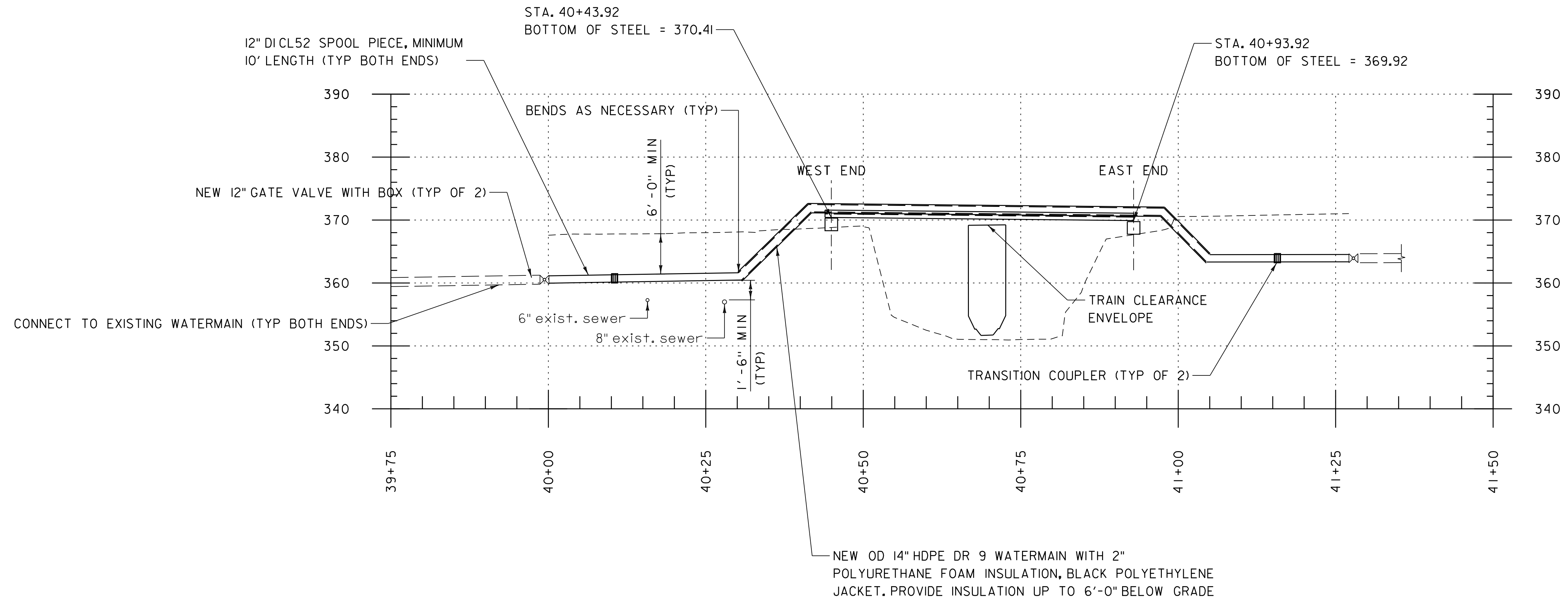
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND  
 GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED FINISHED GRADE

MERCHANTS ROW

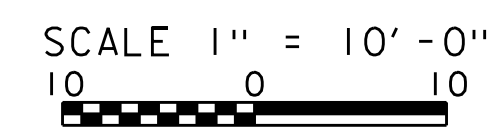
PROJECT NAME: MIDDLEBURY	PLOT DATE: 5/19/2017
PROJECT NUMBER: EWP3(I)	DRAWN BY: D.M. PECK
FILE NAME: z17b016_pro.dgn	CHECKED BY: E.P. DETRICK
PROJECT LEADER: A.P. GUYETTE	SHEET 22 OF 54
DESIGNED BY: D.M. PECK	
PROFILE SHEET (2 OF 2)	







TEMPORARY WATERMAIN PROFILE



NOTES:

- I. PROVIDE THRUST RESTRAINT/THRUST BLOCKS AT ALL PIPE BENDS, 22.5 DEGREE AND GREATER.



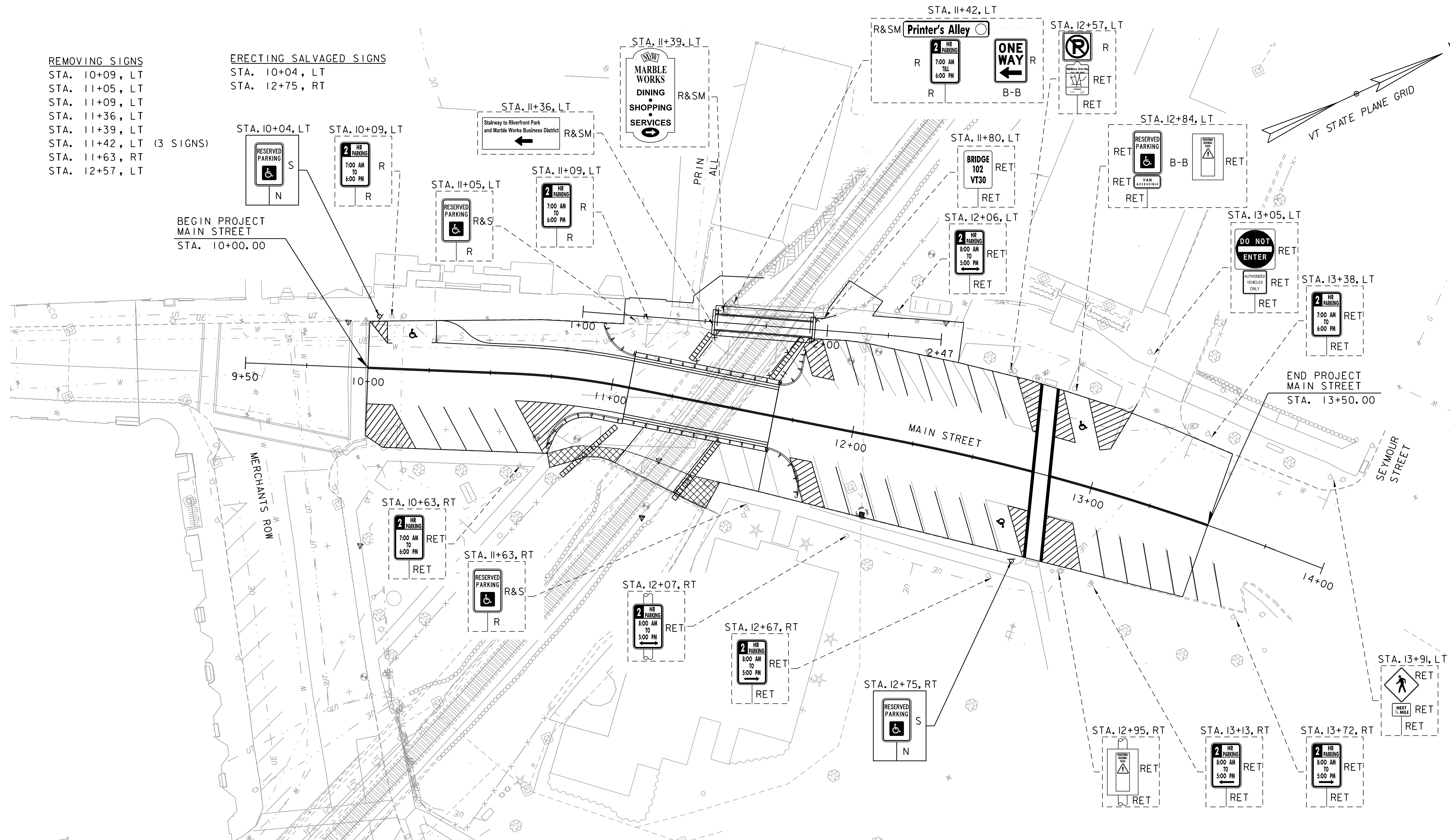
PROJECT NAME: MIDDLEBURY	PLOT DATE: 5/19/2017
PROJECT NUMBER: EWP3(I)	DRAWN BY: K.C. BARRY
FILE NAME: z17b016_WATERLINE_PRO.dgn	CHECKED BY: A.P. GUYETTE
PROJECT LEADER: A.P. GUYETTE	SHEET 23 OF 54
DESIGNED BY: R. MARVIN	
WATERLINE PROFILE	

**REMOVING SIGNS**

- STA. 10+09, LT
- STA. 11+05, LT
- STA. 11+09, LT
- STA. 11+36, LT
- STA. 11+39, LT
- STA. 11+42, LT (3 SIGNS)
- STA. 11+63, RT
- STA. 12+57, LT

**ERECTING SALVAGED SIGNS**

- STA. 10+04, LT
- STA. 12+75, RT

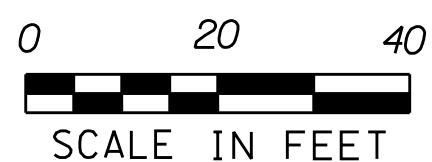


BEGIN PROJECT  
MAIN STREET  
STA. 10+00.00

END PROJECT  
MAIN STREET  
STA. 13+50.00

**NOTE**

1. SEE MAIN STREET LAYOUT PLAN SHEET FOR ADDITIONAL INFORMATION RELATED TO PAVEMENT MARKINGS.
2. IF A SIGN NOTED AS RETAIN MUST BE REMOVED BY THE CONTRACTOR, THE SIGN SHALL BE REMOVED AND RELOCATED ONCE THE CONSTRUCTION IS CLEAR OF THE SIGN LOCATION. (SUBSIDIARY)



**SIGNING LEGEND**

- N = NEW
- R = REMOVE
- R&S = REMOVE AND SALVAGE
- R&SA = REMOVE AND SALVAGE TO ACTR
- R&SM = REMOVE AND SALVAGE TO TOWN OF MIDDLEBURY
- RET = RETAIN
- S = SALVAGED SIGN
- B-B = BACK TO BACK

PROJECT NAME: MIDDLEBURY

PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_BDR_Sign_MAIN.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: B.M. ROBERTS  
MAIN STREET SIGNS PLAN SHEET

PLOT DATE: 5/19/2017  
DRAWN BY: B.M. ROBERTS  
CHECKED BY: E.P. DETRICK  
SHEET 24 OF 54



ERECTING SALVAGED SIGNS  
 STA. 20+40, LT (4 SIGNS)  
 STA. 22+72, RT

REMOVING SIGNS  
 STA. 20+49, LT (5 SIGNS)  
 STA. 20+63, RT (2 SIGNS)  
 STA. 21+31, LT  
 STA. 21+84, LT  
 STA. 21+97, RT (2 SIGNS)  
 STA. 22+24, LT (3 SIGNS)  
 STA. 22+78, RT  
 STA. 23+66, RT (2 SIGNS)  
 STA. 23+84, RT  
 STA. 24+17, RT

STA. 22+24, LT  
 R&SA  
 R&SM  
 R&SA  
 R

STA. 22+25, RT  
 N  
 ONE WAY B-B ONE WAY N  
 DO NOT ENTER N

STA. 24+48, LT  
 RET DO NOT ENTER RET  
 B-B RET  
 ONE WAY RET

STA. 24+95, RT  
 RET  
 RET

STA. 24+74, RT  
 STOP RET  
 RET

STA. 24+19, RT  
 ONE WAY N  
 ONE WAY N  
 ONE WAY N  
 DO NOT ENTER N

STA. 23+84, RT  
 STOP N  
 N

STA. 23+96, RT  
 ONE WAY N  
 ONE WAY N  
 ONE WAY N  
 DO NOT ENTER N

STA. 24+07, RT  
 2 HR PARKING 7 AM TO 6 PM RET  
 RET

STA. 23+15, RT  
 2 HR PARKING 8:00 AM TO 5:00 PM RET  
 RET

STA. 23+30, RT  
 2 HR PARKING 8:00 AM TO 5:00 PM RET  
 RET

STA. 23+31, RT  
 TWO HOUR PARKING RET  
 RET

STA. 23+66, RT  
 YIELD B-B  
 R

STA. 22+72, RT  
 RESERVED PARKING RET  
 N

STA. 22+78, RT  
 RESERVED PARKING RET  
 R&S

STA. 22+02, RT  
 WARNING PERMIT PARKING ONLY RET  
 RET

STA. 20+63, RT  
 2 HR PARKING 7:00 AM TO 6:00 PM R&SM  
 COMPACT CARS ONLY R

STA. 21+97, RT  
 PERMIT PARKING ONLY B-B  
 NO LEFT TURN R  
 ACTR Bus Stop R&SA  
 RET

STA. 20+98, RT  
 2 HR PARKING 8:00 AM TO 5:00 PM RET  
 RET

STA. 20+39, RT  
 RESERVED PARKING RET  
 RET

STA. 20+55, RT  
 2 HR PARKING 8:00 AM TO 5:00 PM RET  
 RET

STA. 21+31, RT  
 ONE WAY B-B ONE WAY N  
 N

STA. 20+55, LT  
 NO PARKING LOADING ZONE N

STA. 21+08, LT  
 NO PARKING LOADING ZONE N

STA. 21+31, LT  
 2 HR PARKING 7:00 AM TO 6:00 PM R&SM  
 R

STA. 21+36, LT  
 ONE WAY N

STA. 21+84, LT  
 NO PARKING BUS STOP R&SM  
 R

STA. 22+37, LT  
 ONE WAY N  
 DO NOT ENTER N

STA. 24+16, RT  
 STOP N

STA. 24+17, RT  
 YIELD R

STA. 24+47, LT  
 NO LEFT TURN N

STA. 20+40, LT  
 S  
 MERCHANTS ROW  
 S  
 MAIN ST  
 S  
 STOP  
 N  
 0300 0111 0168  
 S  
 N

STA. 20+49, LT  
 R&S  
 MERCHANTS ROW  
 R&S  
 MAIN ST  
 R&S  
 STOP  
 R&SM  
 R&S  
 0300 0111 0168  
 R

STA. 9+44, LT  
 N  
 N

**SIGNING LEGEND**  
 N = NEW  
 R = REMOVE  
 R&S = REMOVE AND SALVAGE  
 R&SA = REMOVE AND SALVAGE TO ACTR  
 R&SM = REMOVE AND SALVAGE TO TOWN OF MIDDLEBURY  
 RET = RETAIN  
 S = SALVAGED SIGN  
 B-B = BACK TO BACK

**NOTE**  
 1. SEE MERCHANTS ROW LAYOUT PLAN SHEET FOR ADDITIONAL INFORMATION RELATED TO PAVEMENT MARKINGS.  
 2. IF A SIGN NOTED AS RETAIN MUST BE REMOVED BY THE CONTRACTOR, THE SIGN SHALL BE REMOVED AND RELOCATED ONCE THE CONSTRUCTION IS CLEAR OF THE SIGN LOCATION. (SUBSIDIARY)















0 20 40  
 SCALE IN FEET



PROJECT NAME: MIDDLEBURY  
 PROJECT NUMBER: EWP3(I)  
 FILE NAME: z17b016_BDR_Sign.dgn  
 PROJECT LEADER: A.P. GUYETTE  
 DESIGNED BY: D.M. PECK  
 MERCHANTS ROW SIGNS PLAN SHEET  
 PLOT DATE: 5/19/2017  
 DRAWN BY: D.M. PECK  
 CHECKED BY: E.P. DETRICK  
 SHEET 25 OF 54



# TRAFFIC SIGN SUMMARY SHEET

MILE MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST- POST RE- TAIN SAL- VAGE	NO. OF POSTS	NEW SIGN POSTS											RE- FRU- STRU- CTURE	REMARKS	SIGN DETAIL												
		EA	WIDTH (IN)	HEIGHT (IN)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (IN)			TUBULAR ALUMINUM Ø (IN)			WOOD POST (LF)			W-SHAPE STEEL			DETAIL ON SHEET NUMBER	STD. SHEET NUMBER								
											LB/FT		1.75	2.0	2.5	3.0	4.0	4.0 MOD	COLLAR	TYPE 1			TYPE 2	FTG. SIZE				WEIGHT	POST SIZE						
											1.2	2.0	3.0	1.88	2.42	3.35	1.3	1.7						1.7	24"					30"					
OPTION ITEMS																																			
MAIN STREET																																			
9+44, LT		1	24	24	4.00				1						X		X															SHSM R3-2			
10+04, LT									1						X		X															EXISTING SIGN REMOVE AND SALVAGE ON NEW POST FROM STA 11+05, LT			
12+75, RT									1						X		X															EXISTING SIGN REMOVE AND SALVAGE ON NEW POST FROM STA 11+63, RT			
MERCHANTS ROW																																			
20+40, LT									1																							EXISTING SIGN REMOVE AND SALVAGE ON NEW POST FROM STA 20+49, LT			
20+40, LT									1																							EXISTING SIGN REMOVE AND SALVAGE ON NEW POST FROM STA 20+49, LT			
20+40, LT									1						X		X															EXISTING SIGN REMOVE AND SALVAGE ON NEW POST FROM STA 20+49, LT			
20+40, LT		1	24	24	4.00																												SHSM R3-2 MOUNT BELOW SALVAGED R1-1		
20+40, LT									1																							EXISTING SIGN REMOVE AND SALVAGE ON NEW POST FROM STA 20+49, LT			
20+55, LT		1	12	18	1.50										X		X																SHSM R7-6R		
21+08, LT		1	12	18	1.50										X		X																SHSM R7-6L		
21+31, RT		1	36	12	3.00																												SHSM R6-1L MOUNT ABOVE R4-8		
21+31, RT		1	36	12	3.00																												SHSM R6-1R MOUNT BACK TO BACK WITH R6-1L		
21+31, RT		1	24	30	5.00										X		X																SHSM R4-8		
21+36, LT		1	36	12	3.00										X		X																SHSM R6-1R		
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE ROADWAY, TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."		<b>TOTALS</b>	SF 25.00	SF 6	EA. 6						FT 120	FT 120		EA. 6	EA. 6	EA. 6	EA. 6			WOOD POSTS (FT)		EA. 6	EA. 6	EA. 6	EA. 6	EA. 6	EA. 6								

WOG = WHITE LEGEND ON GREEN BACKGROUND - PLAQUE  
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND  
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK  
(WITH 2012 SUPPLEMENT)

POST LENGTH AVERAGES 15 FEET  
POST LENGTH WITH '+' AVERAGES 20 FEET



PROJECT NAME: MIDDLEBURY  
PROJECT NUMBER: EWP3(I)  
FILE NAME: z17b016_TSSS.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: D.M. PECK  
TRAFFIC SIGN SUMMARY SHEET 1

PLOT DATE: 5/19/2017  
DRAWN BY: D.M. PECK  
CHECKED BY: E.P. DETRICK  
SHEET 26 OF 54

**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

**TRAFFIC SIGN SUMMARY SHEET**

MILE MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN	NO. OF POSTS	NEW SIGN POSTS														REMARKS	SIGN DETAIL																
										FLANGED CHANNEL			SQUARE STEEL (IN)			TUBULAR ALUMINUM (IN)			WOOD POST (LF)		W-SHAPE STEEL				RE FRAM E D S I G N S	D E T A I L O N S H E E T N U M B E R	S T D. S H E E T N U M B E R														
										LB/FT		1.75	2.0	2.5	3.0	4.0	4.0	TYPE 1		TYPE 2	FTG. SIZE		WEIGHT					POST SIZE													
										1.2	2.0	3.0	1.88	2.42	3.35	1.3	1.7	1.7	24"	30"																					
OPTION ITEMS									COLLAR																																
MERCHANTS ROW																																									
21+97, RT		1	24	24	4.00																SHSM R3-1 MOUNT TO EXISTING POST																				
22+25, RT		1	36	12	3.00																SHSM R6-1R MOUNT ABOVE R5-1																				
22+25, RT		1	36	12	3.00																SHSM R6-1L MOUNT BACK TO BACK WITH R6-1R																				
22+25, RT		1	30	30	6.25				1			X		X							SHSM R5-1																				
22+37, LT		1	36	12	3.00																SHSM R6-1R MOUNT ABOVE R5-1																				
22+37, LT		1	30	30	6.25				1			X		X							SHSM R5-1																				
22+72, RT									1			X		X							EXISTING SIGN REMOVED AND RESET ON NEW POST FROM STA 22+78, RT																				
23+84, RT		1	30	30	6.25				1			X		X							SHSM R1-1																				
23+96, RT		2	36	12	6.00																SHSM R6-1L SEE DETAIL FOR MOUNTING																				
23+96, RT		1	36	12	3.00																SHSM R6-1R SEE DETAIL FOR MOUNTING																				
23+96, RT		1	30	30	6.25				1			X		X							SHSM R5-1 SEE DETAIL FOR MOUNTING																				
24+16, RT		1	30	30	6.25				1			X		X							SHSM R5-3																				
24+19, RT		2	36	12	6.00																SHSM R6-1L SEE DETAIL FOR MOUNTING																				
24+19, RT		1	36	12	3.00																SHSM R6-1R SEE DETAIL FOR MOUNTING																				
24+19, RT		1	30	30	6.25				1			X		X							SHSM R5-1 SEE DETAIL FOR MOUNTING																				
<p>FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE ROADWAY, TRAFFIC &amp; SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."</p>										EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA												
<b>TOTALS</b>																																									
68.50																																									

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 (WITH 2012 SUPPLEMENT)

POST LENGTH AVERAGES 15 FEET  
 POST LENGTH WITH '+' AVERAGES 20 FEET



PROJECT NAME:	MIDDLEBURY	PLOT DATE:	5/19/2017
PROJECT NUMBER:	EWP3(I)	DRAWN BY:	D.M. PECK
FILE NAME:	z17b016_TSSS.dgn	DESIGNED BY:	D.M. PECK
PROJECT LEADER:	A.P. GUYETTE	TRAFFIC SIGN SUMMARY SHEET 2	CHECKED BY: E.P. DETRICK
			SHEET 27 OF 54



# TRAFFIC SIGN SUMMARY SHEET

MILE MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST RETAINED SALVAGED	NO. OF POSTS	NEW SIGN POSTS												REQUIREMENTS	REMARKS	SIGN DETAIL																				
		EA	WIDTH (IN)	HEIGHT (IN)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (IN)			TUBULAR ALUMINUM Ø (IN)			WOOD POST (LF)				W-SHAPE STEEL			DETAIL ON SHEET NUMBER	STD. SHEET NUMBER																
											LB/FT	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0 MOD	TYPE 1	TYPE 2			24"	30"	WEIGHT			POST SIZE															
OPTION ITEMS																																												
MERCHANTS ROW																																												
24+47, LT		1	24	24	4.00				1								X	X													SHSM R3-1													
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE ROADWAY, TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."											FT	FT	FT	FT	FT	FT	EA	LB	LB	LB		TYPE 1	TYPE 2																					
										<b>TOTALS TSSS 3</b>	SF	SF	EA.	SF			FT	FT	15			EA.	WOOD POSTS (FT)	EA.	EA.	LB																		
										<b>TOTALS TSSS 2</b>	SF	SF	EA.	SF			FT	FT	105			EA.	WOOD POSTS (FT)	EA.	EA.	LB																		
										<b>TOTALS TSSS 1</b>	SF	SF	EA.	SF			FT	FT	120			EA.	WOOD POSTS (FT)	EA.	EA.	LB																		
										<b>TOTALS</b>	SF	SF	EA.	SF		FT	FT	240				EA.	WOOD POSTS (FT)	EA.	EA.	LB																		

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POST LENGTH AVERAGES 15 FEET  
POST LENGTH WITH '+' AVERAGES 20 FEET



PROJECT NAME:	MIDDLEBURY	PLOT DATE:	5/19/2017
PROJECT NUMBER:	EWP3(I)	DRAWN BY:	D.M. PECK
FILE NAME:	z17b016_TSSS.dgn	DESIGNED BY:	D.M. PECK
PROJECT LEADER:	A.P. GUYETTE	CHECKED BY:	E.P. DETRICK
TRAFFIC SIGN SUMMARY SHEET 3		SHEET	28 OF 54

**GENERAL TRAFFIC CONTROL, DETOUR, AND PHASING NOTES:**

1. THE FOLLOWING TRAFFIC CONTROL INFORMATION AND PHASING PLAN IS INTENDED TO BE AN OUTLINE FOR HOW THE WORK WILL PROCEED.
2. THE RECONSTRUCTION OF THE MAIN STREET AND MERCHANTS ROW BRIDGES WILL INCLUDE THE USE OF DETOUR ROUTES. TRAFFIC WILL BE MAINTAINED BY USING A COMBINATION OF VEHICLE AND PEDESTRIAN DETOURS AS OUTLINED IN THE PROJECT PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, ERECTING, MAINTAINING, AND REMOVING ALL TEMPORARY AND DETOUR SIGNING ALONG THE DETOUR ROUTES AS SHOWN IN THE PLANS, AS REQUIRED BY SITE SPECIFIC WORK, AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, AND REMOVING TEMPORARY PAVEMENT MARKINGS AS REQUIRED FOR THE PROJECT. SITE SPECIFIC TRAFFIC CONTROLS SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION AND LATEST REVISIONS.
3. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) TYPE VII, VIII OR IX REQUIREMENTS, UNLESS OTHERWISE NOTED.
4. ALL SIGNS SHALL BE LOCATED SO THEY ARE VISIBLE AND ABLE TO BE READ BY THE TRAVELING PUBLIC. SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS. ALL SIGN STANDS AND POST INSTALLATIONS SHALL BE "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 COMPLIANT. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POST(S). WHEN ANCHORS ARE INSTALLED, STUBS SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND. FIXED SIGNS SHALL BE SET SECURELY IN THE GROUND. THE BOTTOM OF A SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE EDGE OF PAVEMENT.
5. BEFORE THE DEMOLITION OF THE MAIN STREET AND MERCHANTS ROW BRIDGES, DETOUR PLANS SHALL BE ESTABLISHED TO MAINTAIN THE CONTINUITY OF VEHICLE AND PEDESTRIAN TRAFFIC THROUGH THE IMPACTED AREA. DETOUR SIGNS FOR EACH CONSTRUCTION PHASE SHALL BE IN PLACE PRIOR TO THE BEGINNING OF WORK FOR THE RESPECTIVE CONSTRUCTION PHASE AS SHOWN ON THE DETOUR PLANS AND AS DIRECTED BY THE ENGINEER. SIGNS SHALL BE COVERED UNTIL WORK COMMENCES AND UPON COMPLETION OF THE WORK. THE CONTRACTOR SHALL MAINTAIN ALL DETOURS, TEMPORARY SIGNING, AND OTHER SUPPORTING TRAFFIC CONTROLS THROUGHOUT CONSTRUCTION. INSTALLING, MAINTAINING, ADJUSTING, MODIFYING, AND REMOVING THE DETOUR AND TRAFFIC CONTROLS SHALL BE INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL. DETOUR ROUTE MARKER ASSEMBLIES SHALL BE INSTALLED ADJACENT TO THE EXISTING ROUTE MARKER ASSEMBLIES AT THE INTERSECTIONS.
6. ANY CONFLICTING PAVEMENT MARKINGS SHALL BE BLACKED OUT OR REMOVED BY BURNING OR GRINDING. EXISTING PAVEMENT MARKINGS THAT ARE TO REMAIN FOR LATER USE SHALL BE BLACKED OUT WITH TEMPORARY TAPE.
7. THE CONSTRUCTION PHASES SHOW VEHICULAR TRAFFIC ADJACENT TO CONSTRUCTION WORK AREAS. REFLECTORIZED DRUMS OR CONES SHALL BE USED TO DELINEATE THE WORK ZONE FROM THE TRAVELED WAY.
8. EXISTING SIGNS SHALL REMAIN, WITH COVERING AS NECESSARY, UNTIL THEY ARE NO LONGER REQUIRED. TEMPORARY SIGNS SHALL BE INSTALLED, AS SHOWN IN THE PLANS AND AS REQUIRED BY THE MUTCD. ALL PROPOSED SIGNING SHALL BE INSTALLED AND ALL SIGNS TO BE REMOVED SHALL BE REMOVED PRIOR TO THE APPLICATION OF THE FINAL PAVEMENT MARKINGS.
9. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AS NOTED IN THE TRAFFIC CONTROL PLANS. PEDESTRIAN ACCESS SHALL MEET APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS TO THE MAXIMUM EXTENT FEASIBLE. CONTRACTOR SHALL COORDINATE WORK ADJACENT TO COMMERCIAL ACCESS AREAS WITH THE LAND/BUSINESS OWNER PRIOR TO STARTING WORK IN THE AREA.
10. SPECIAL CARE MUST BE TAKEN TO PROVIDE ACCESS THROUGH THE WORK ZONES FOR EMERGENCY VEHICLES. THE CONTRACTOR SHALL COORDINATE WITH BOTH POLICE AND FIRE DEPARTMENTS TO DETERMINE THEIR MINIMUM ACCESS REQUIREMENTS. CONTRACTOR SHALL ENSURE THAT ACCESS IS AVAILABLE TO ALL PROPERTIES AT ALL TIMES FOR EMERGENCY VEHICLES.
11. ACTR HAS BEEN NOTIFIED THAT THEY WILL NEED TO REMOVE AND RELOCATE THE EXISTING BUS STOP ON MERCHANTS ROW PRIOR TO PHASE 2A.

**TRAFFIC MANAGEMENT SEQUENCING:**

1. THE DEMOLITION OF THE EXISTING BRIDGES AND CONSTRUCTION OF TEMPORARY REPLACEMENTS FOR THE MAIN STREET AND MERCHANTS ROW BRIDGES IS EXPECTED TO TAKE SIX WEEKS. THE FOLLOWING PARAGRAPHS DESCRIBE THE PROPOSED PHASES OF CONSTRUCTION FOR THIS WORK. PHASES HAVE BEEN DEVELOPED BASED ON MAINTAINING TRAFFIC THROUGHOUT THE PROJECT WHILE MINIMIZING THE IMPACTS TO ADJACENT COMMERCIAL, RESIDENTIAL, AND MUNICIPAL PROPERTIES. EACH PHASE HAS A SPECIFIC CONSTRUCTION AND DETOUR SIGNING PLAN. (ALL STATION REFERENCES ARE APPROXIMATE; ACTUAL BEGIN AND END STATIONS WILL BE DETERMINED BY THE CONTRACTOR AND THE ENGINEER IN THE FIELD.)
2. CONSTRUCTION PHASE I  
 CONTRACTOR SHALL PREPARE FOR DEMOLITION OF THE EXISTING MAIN STREET BRIDGE DURING THIS INITIAL PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL INSTALL SUPPORT OF EXCAVATION (SOE) TO PREPARE FOR THE TEMPORARY BRIDGE BACKWALLS AND ABUTMENTS FOR THE MAIN STREET BRIDGE AND CONSTRUCT THE TEMPORARY WATER MAIN ON MAIN STREET DURING THE TWO SUBPHASES, PHASE IA AND PHASE IB. THE TRAFFIC CONTROL REQUIRED FOR BOTH SUBPHASES IS DETAILED IN THE FOLLOWING SUBPHASE DESCRIPTIONS. ALL PHASE I SIGNING, PAVEMENT MARKINGS, AND TRAFFIC CONTROL DEVICES SHALL BE INSTALLED, OR ON-SITE, PRIOR TO COMMENCEMENT OF PHASE IA.
3. PHASE IA STA 10+75 TO STA 12+75, PRELIMINARY WORK PRIOR TO MAIN STREET BRIDGE DEMOLITION
  - A. ON MAIN STREET, BETWEEN TRIANGLE PARK AND THE EXISTING MIDBLOCK CROSSWALK IN FRONT OF THE MIDDLEBURY POST OFFICE, TWO-WAY VEHICULAR TRAFFIC SHALL BE MAINTAINED AND PUSHED TOWARD THE WEST-SIDE CURB OF THE MAIN STREET BRIDGE. THE WEST SIDE SIDEWALK SHALL REMAIN OPEN TO PEDESTRIANS ACROSS THE BRIDGE WHILE THE EAST SIDE SIDEWALK WILL BE CLOSED FROM MERCHANTS ROW TO APPROXIMATE STA 11+75. PRINTERS ALLEY SHALL REMAIN OPEN TO ALL VEHICLE AND PEDESTRIAN TRAFFIC.
  - B. THE EXISTING NORTHBOUND TRAVEL LANE AND PARKING SPACES ALONG THE EAST-SIDE CURB OF THE MAIN STREET BRIDGE SHALL BE CLOSED USING TYPE III BARRICADES FROM BOTH DIRECTIONS. THE EXISTING PARKING SPACES ALONG THE WEST-SIDE CURB OF THE MAIN STREET BRIDGE SHALL BE USED AS THE PHASE IA SOUTHBOUND TRAVEL LANE. THE EXISTING SOUTHBOUND TRAVEL LANE SHALL BE USED AS THE PHASE IA NORTHBOUND TRAVEL LANE. A TEMPORARY CENTERLINE OF CHANNELIZING DEVICES SHALL BE PLACED BETWEEN BOTH TRAVEL LANES AND A MINIMUM OF 11 FOOT TRAVEL LANES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE TRANSITION TO PHASE IB.
4. PHASE IB STA 10+75 TO STA 12+75, PRELIMINARY WORK PRIOR TO MAIN STREET BRIDGE DEMOLITION
  - A. ON MAIN STREET, BETWEEN TRIANGLE PARK AND THE EXISTING MIDBLOCK CROSSWALK IN FRONT OF THE MIDDLEBURY POST OFFICE, TWO-WAY VEHICULAR TRAFFIC SHALL BE MAINTAINED AND PUSHED TOWARD THE EAST-SIDE CURB OF THE MAIN STREET BRIDGE. THE EAST SIDE SIDEWALK SHALL REMAIN OPEN AND ACCESSIBLE TO PEDESTRIANS. THE WEST SIDE SIDEWALK WILL BE CLOSED FROM PRINTERS ALLEY TO APPROXIMATE STA 12+00. PRINTERS ALLEY SHALL REMAIN OPEN TO PEDESTRIAN TRAFFIC ONLY.
  - B. THE EXISTING SOUTHBOUND TRAVEL LANE AND PARKING SPACES ALONG THE WEST-SIDE CURB OF THE MAIN STREET BRIDGE SHALL BE CLOSED USING TYPE III BARRICADES FROM BOTH DIRECTIONS. THE EXISTING PARKING SPACES ALONG THE EAST-SIDE CURB OF THE MAIN STREET BRIDGE SHALL REMAIN CLOSED FROM PHASE IA AND USED AS THE PHASE IB NORTHBOUND TRAVEL LANE. THE EXISTING NORTHBOUND TRAVEL LANE SHALL BE USED AS THE PHASE IB SOUTHBOUND TRAVEL LANE. A TEMPORARY CENTERLINE OF CHANNELIZING DEVICES SHALL BE PLACED BETWEEN BOTH TRAVEL LANES AND A MINIMUM OF 11 FOOT TRAVEL LANES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE TRANSITION TO PHASE 2.
  - C. AT THE END OF PHASE IB, MAIN STREET TRAFFIC AND PARKING PATTERNS SHALL BE RETURNED TO PRE-EXISTING CONDITIONS UNTIL PHASE 3.

**TRAFFIC MANAGEMENT SEQUENCING (CONT.):**

5. CONSTRUCTION PHASE 2  
 THE CONTRACTOR SHALL INSTALL SOE TO PREPARE MERCHANTS ROW FOR THE TEMPORARY BRIDGE WORK DURING THE TWO SUBPHASES, PHASE 2A AND PHASE 2B. THE TRAFFIC CONTROL REQUIRED FOR BOTH SUBPHASES IS DETAILED IN THE FOLLOWING SUBPHASE DESCRIPTIONS.
6. PHASE 2A STA 20+25 TO STA 24+25, PRELIMINARY WORK PRIOR TO MERCHANTS ROW BRIDGE DEMOLITION.
  - A. MERCHANTS ROW WILL BE GENERALLY LIMITED TO ONE WAY TRAFFIC EASTBOUND FROM MAIN STREET TO S. PLEASANT STREET. THE EASTBOUND TRAVEL LANE WILL BE PUSHED TO THE NORTH SIDE OF THE MERCHANTS ROW BRIDGE. THE NORTH SIDE SIDEWALK SHALL REMAIN OPEN TO PEDESTRIANS ACROSS THE BRIDGE WHILE THE SOUTH SIDE SIDEWALK WILL BE CLOSED FROM THE EAST END OF THE BATTELL BUILDING TO APPROXIMATELY STA 22+75. THE DRIVE AISLE TO THE PARKING LOT BEHIND THE BATTELL BUILDING SHALL REMAIN OPEN AND ACCESSIBLE THROUGHOUT CONSTRUCTION. SHORT DURATION CLOSURES OF THE BATTELL BLOCK DRIVE WILL BE PERMITTED WITH PRIOR COORDINATION BETWEEN THE CONTRACTOR, THE ENGINEER, THE TOWN OF MIDDLEBURY PROJECT LIASON, AND THE BATTELL BLOCK MANAGER.
  - B. APPROXIMATELY ONE-HALF OF THE PARKING SPACES IN FRONT OF THE BATTELL BUILDING WILL BE CLOSED. THE PARALLEL PARKING SPACES ADJACENT TO TRIANGLE PARK WILL BE CLOSED. MOST OF THE PARKING SPACES EAST OF THE MERCHANTS ROW BRIDGE WILL BE CLOSED AT LEAST PART OF THE TIME DURING PHASE 2A.
7. PHASE 2B STA 20+25 TO STA 24+25, PRELIMINARY WORK PRIOR TO MERCHANTS ROW BRIDGE DEMOLITION.
  - A. MERCHANTS ROW WILL CONTINUE TO BE LIMITED TO ONE WAY TRAFFIC EASTBOUND FROM MAIN STREET TO S. PLEASANT STREET. THE EASTBOUND TRAVEL LANE WILL BE RETURNED TO ITS PRE-EXISTING POSITION SOUTH OF THE DOUBLE YELLOW LINE ALONG MERCHANTS ROW. THE NORTH SIDE SIDEWALK SHALL BE CLOSED TO PEDESTRIANS FROM TRIANGLE PARK TO APPROXIMATELY STA 23+50. THE SOUTH SIDE SIDEWALK SHALL REMAIN OPEN TO PEDESTRIANS IN FRONT OF THE BATTELL BUILDING, ACROSS THE MERCHANTS ROW BRIDGE, AND EAST TO S. PLEASANT STREET. THE DRIVE AISLE TO THE PARKING LOT BEHIND THE BATTELL BUILDING WILL BE OPEN, RESTRICTING TRAFFIC TO A RIGHT-IN, RIGHT-OUT CONDITION.
  - B. THE PARALLEL PARKING SPACES ADJACENT TO TRIANGLE PARK WILL CONTINUE TO BE CLOSED, AS WILL PARKING FROM THE MERCHANTS ROW BRIDGE TO STA 23+50 ALONG THE NORTH SIDE CURB. PARKING ALONG THE SOUTH SIDE CURB SHALL REMAIN OPEN THROUGHOUT PHASE 2B.
  - C. AT THE END OF PHASE 2B, MERCHANTS ROW TRAFFIC AND PARKING PATTERNS SHALL RETURN TO PRE-EXISTING CONDITIONS UNTIL PHASE 4.
8. CONSTRUCTION PHASE 3  
 THE CONTRACTOR SHALL CLOSE MAIN STREET AND ESTABLISH DELINEATION, PAVEMENT MARKINGS, WORKER AND PUBLIC PROTECTIONS, AND DETOURS NECESSARY TO DEMOLISH THE EXISTING MAIN STREET BRIDGE. FOLLOWING DEMOLITION, THE CONTRACTOR SHALL CONSTRUCT THE TEMPORARY MAIN STREET VEHICULAR AND PEDESTRIAN BRIDGES AS INDICATED IN THE PLANS. THE TRAFFIC CONTROL REQUIRED IS DETAILED IN THE FOLLOWING TWO SUBPHASE DESCRIPTIONS.

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: EWP3(I)	
FILE NAME: z17b016_TCP_notes.dgn	PLOT DATE: 5/19/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: D.M. PECK
DESIGNED BY: D.M. PECK	CHECKED BY: E.P. DETRICK
TCP - NOTES SHEET (1 OF 2)	SHEET 29 OF 54



TRAFFIC MANAGEMENT SEQUENCING (CONT.):

9. PHASE 3A STA 10+00 TO STA 12+75, FIRST WEEKEND / MAIN STREET BRIDGE DEMOLITION

- A. THIS PHASE SHALL CONSIST OF THE MAIN STREET BRIDGE CLOSURE AND DEMOLITION. TYPE III BARRICADES SHALL BE INSTALLED ALONG THE NORTH CROSSWALK AT THE INTERSECTION OF MAIN STREET AT MERCHANT'S ROW AND ALONG THE MIDBLOCK CROSSWALK IN FRONT OF THE MIDDLEBURY POST OFFICE. PEDESTRIAN ACCESS TO BOTH CROSSWALKS SHALL BE MAINTAINED.
- B. MAIN STREET NORTHBOUND THROUGH TRAFFIC SHALL BE DETOURED ALONG CROSS STREET, COURT STREET, COURT SQUARE, AND NORTH PLEASANT STREET. MAIN STREET SOUTHBOUND THROUGH TRAFFIC SHALL BE DETOURED ALONG SEYMOUR STREET, NORTH PLEASANT STREET, COURT SQUARE, COURT STREET, AND CROSS STREET. VEHICLE ACCESS FOR PRINTERS ALLEY FROM MAIN STREET WILL BE PROHIBITED DURING THE MAIN STREET BRIDGE DEMOLITION WORK. PRINTERS ALLEY VEHICULAR TRAFFIC SHALL BE DETOURED ALONG CROSS STREET, COURT STREET, COURT SQUARE, NORTH PLEASANT STREET, SEYMOUR STREET, ELM STREET, MIDDLE SEYMOUR STREET, AND MAPLE STREET.
- C. THE EAST-SIDE SIDEWALK OF MAIN STREET SHALL BE CLOSED BETWEEN THE INTERSECTION OF MAIN STREET AND MERCHANT'S ROW AND THE NORTHSIDE OF THE MAIN STREET BRIDGE. THE EAST-SIDE SIDEWALK FROM THE SIDE ENTRANCE OF THE SAINT STEPHEN'S CHURCH NORTH SHALL REMAIN OPEN. THE WEST-SIDE SIDEWALK SHALL BE OPEN ONLY FROM MERCHANTS ROW TO SOUTH OF PRINTERS ALLEY AND CLOSED FROM THE SOUTH SIDE OF PRINTERS ALLEY TO THE MIDDLEBURY POST OFFICE.

10. PHASE 3B STA 10+00 TO STA 12+75, BETWEEN FIRST AND SECOND WEEKEND

- A. THIS PHASE SHALL CONSIST OF STAGING AND CONSTRUCTION OF THE MAIN STREET TEMPORARY VEHICULAR BRIDGE AND TEMPORARY PEDESTRIAN BRIDGE. THIS PHASE SHALL MAINTAIN THE TRAFFIC CONTROL MEASURES FROM PHASE 3A; HOWEVER, PRINTERS ALLEY SHALL BE OPEN TO PEDESTRIAN TRAFFIC ONLY. THE WEST-SIDE SIDEWALK SHALL REMAIN CLOSED FROM THE NORTH SIDE OF PRINTERS ALLEY TO THE MIDDLEBURY POST OFFICE.

11. CONSTRUCTION PHASE 4

THE CONTRACTOR SHALL INSTALL THE TEMPORARY MAIN STREET VEHICULAR AND PEDESTRIAN BRIDGES, COMPLETE MAIN STREET CONSTRUCTION, AND RE-OPEN MAIN STREET TO TWO-WAY TRAFFIC, AS INDICATED IN THE PLANS. THE CONTRACTOR SHALL CLOSE MERCHANTS ROW AND ESTABLISH DELINEATION, PAVEMENT MARKINGS, WORKER AND PUBLIC PROTECTIONS, AND DETOURS NECESSARY TO DEMOLISH THE EXISTING MERCHANTS ROW BRIDGE. FOLLOWING DEMOLITION, THE CONTRACTOR SHALL CONSTRUCT AND INSTALL THE TEMPORARY MERCHANTS ROW BRIDGE AS INDICATED IN THE PLANS. THE TRAFFIC CONTROL REQUIRED IS DETAILED IN THE FOLLOWING THREE SUBPHASE DESCRIPTIONS.

12. PHASE 4A STA 10+00 TO STA 12+75 AND STA 20+25 TO STA 24+25, SECOND WEEKEND AND WEEK / MAIN STREET TEMPORARY BRIDGE INSTALLATION / MERCHANTS ROW BRIDGE DEMOLITION

- A. THIS PHASE SHALL CONSIST OF MOVING THE COMPLETED MAIN STREET TEMPORARY VEHICULAR BRIDGE AND TEMPORARY PEDESTRIAN BRIDGE INTO THEIR FINAL POSITIONS ACROSS THE EXISTING RAILROAD TRACKS. THE CONTRACTOR SHALL FINALIZE GRADING BETWEEN THE EXISTING ROADWAY AND SIDEWALK AND THEIR RESPECTIVE TEMPORARY BRIDGE.
- B. THIS PHASE SHALL CONSIST OF THE MERCHANTS ROW BRIDGE CLOSURE AND DEMOLITION. TYPE III BARRICADES SHALL BE INSTALLED ALONG THE EAST CROSSWALK AT THE INTERSECTION OF MAIN STREET AT MERCHANTS ROW AND ALONG THE CROSSWALKS AT THE INTERSECTIONS OF MERCHANTS ROW AT SOUTH PLEASANT STREET. ALL VEHICULAR TRAFFIC SHALL BE PROHIBITED ON MERCHANTS ROW DURING PHASE 4A.
- C. PEDESTRIAN ACCESS SHALL BE LIMITED TO ONLY PARTS OF THE SOUTH SIDE OF MERCHANTS ROW. THE NORTH-SIDE SIDEWALK ON MERCHANTS ROW SHALL BE CLOSED. THE SOUTH-SIDE SIDEWALK SHALL BE OPEN ONLY FROM MAIN STREET TO THE FARTHEST BUSINESS DOOR EAST ON THE BATTELL BLOCK AND FROM SOUTH PLEASANT STREET WEST TO THE CLOSEST BUSINESS TO THE MERCHANTS ROW BRIDGE.

- D. STARTING IN PHASE 4A SOUTH PLEASANT STREET SHALL BE RESTRICTED TO SOUTHBOUND TRAFFIC ONLY. NORTHBOUND TRAFFIC ON SOUTH PLEASANT STREET SHALL BE DETOURED FROM CROSS STREET TO COURT STREET. SEE SOUTH PLEASANT STREET DETOUR PLAN. "DO NOT ENTER" R5-1 AND "ONE WAY" R6-1 SIGNS SHALL BE PLACED WITH TYPE III BARRICADES AS SHOWN IN PLANS ALONG SOUTH PLEASANT STREET TO PREVENT NORTHBOUND VEHICULAR TRAFFIC.

- E. THE END OF THIS PHASE REESTABLISHES TWO-WAY TRAFFIC FLOW OVER THE MAIN STREET TEMPORARY VEHICULAR BRIDGE AND PEDESTRIAN TRAFFIC OVER THE TEMPORARY PEDESTRIAN BRIDGE. ALL MAIN STREET ROADWAY SURFACES SHALL BE PAVED TO FINISHED GRADE TO THE LIMITS SHOWN IN THE PLANS. FINAL PAVEMENT MARKINGS, FINAL SIGNING AND GUARDRAIL SHALL BE INSTALLED. THE MAIN STREET DETOUR SHALL BE REMOVED. PRINTERS ALLEY SHALL REMAIN CLOSED TO VEHICLE TRAFFIC WHILE PEDESTRIAN TRAFFIC ON PRINTERS ALLEY SHALL BE MAINTAINED.

13. PHASE 4B STA 20+25 TO STA 24+25, BETWEEN SECOND AND THIRD WEEKEND

- A. PHASE 4B SHALL MAINTAIN THE OVERALL TRAFFIC CONTROL MEASURES FROM PHASE 4A ALONG MERCHANTS ROW, WITH SOME MODIFICATIONS OF THE WORK ZONE. MERCHANTS ROW SHALL REMAIN CLOSED AT THE MERCHANTS ROW BRIDGE FOR BOTH VEHICULAR AND PEDESTRIAN TRAFFIC. THE TYPE III BARRICADES AT THE INTERSECTION OF MERCHANTS ROW AND SOUTH PLEASANT STREET SHALL BE MOVED WEST TO APPROXIMATELY STA 23+25. THIS SHALL ALLOW FOR LOCAL TRAFFIC TO ACCESS SIX (6) PARKING SPACES ON THE EAST END OF MERCHANTS ROW.
- B. BARRIERS AT THE INTERSECTION OF MERCHANTS ROW AND MAIN STREET SHALL BE MOVED NORTH AND EAST TO ALLOW VEHICULAR ACCESS TO THE PARKING BEHIND BATTELL BLOCK AND FOUR (4) TEMPORARY PARKING SPACES. ALTERNATING ONE-WAY TRAFFIC SHALL BE MAINTAINED FROM MAIN STREET TO THE BATTELL BLOCK REAR PARKING LOT.

14. PHASE 4C STA 200+25 TO STA 204+10, THIRD WEEKEND / MERCHANTS ROW TEMPORARY BRIDGE INSTALLATION

- A. THIS PHASE SHALL CONSIST OF MOVING THE COMPLETED MERCHANTS ROW TEMPORARY VEHICULAR AND PEDESTRIAN BRIDGE INTO ITS FINAL POSITION. THE CONTRACTOR SHALL FINALIZE GRADING BETWEEN THE EXISTING ROADWAY AND SIDEWALK TO THE TEMPORARY BRIDGE. THIS PHASE SHALL REESTABLISH THE TRAFFIC CONTROL MEASURES FROM PHASE 4A. THIS REMOVES ACCESS TO THE TEMPORARY PARKING SPACES ON THE EAST AND WEST ENDS OF MERCHANTS ROW AND REMOVES THE ACCESS TO THE BATTELL BLOCK REAR PARKING LOT.
- B. BEGINING IN PHASE 4B AND COMPLETED IN PHASE 4C, THE CONTRACTOR SHALL FINALIZE THE CONSTRUCTION OF THE LOADING ZONE ADJACENT TO TRIANGLE PARK ON THE WEST SIDE OF THE MERCHANTS ROW TEMPORARY BRIDGE.

15. PHASE 5 AFTER THIRD WEEKEND / INCORPORATING TRAFFIC ONTO MERCHANTS ROW TEMPORARY BRIDGE FINAL CONDITIONS

- A. THIS PHASE SHALL CONSIST OF THE OPENING OF MERCHANTS ROW FOR ONE-WAY VEHICULAR TRAFFIC FLOW EASTBOUND AND TWO-WAY VEHICULAR TRAFFIC FLOW ONLY ON THE WEST SIDE OF THE CROSSING PROVIDING ACCESS TO AND FROM BATTELL BLOCK REAR PARKING. LEFT TURNS FROM MERCHANTS ROW AT MAIN STREET SHALL BE PROHIBITED. PEDESTRIAN ACCESS SHALL BE OPENED USING THE PROTECTED PEDESTRIAN WALKWAY ON THE SOUTH SIDE OF THE TEMPORARY BRIDGE. THE EXISTING NORTH SIDEWALK SHALL BE CLOSED FROM STA 20+30 TO STA 22+75.
- B. THIS PHASE SHALL INCLUDE THE REMOVAL OF ALL DETOUR SIGNING AND OTHER TRAFFIC CONTROL DEVICES. FINAL TRAFFIC PATTERNS WILL BE ESTABLISHED INCLUDING SOUTH PLEASANT STREET ONE-WAY SOUTHBOUND TRAFFIC FLOW AND PRINTERS ALLEY DETOUR SIGNS. ALL LANDSCAPING WILL BE COMPLETED. ALL ROADWAY SURFACES SHALL BE PAVED TO FINISHED GRADE TO THE LIMITS SHOWN IN THE PLANS. FINAL PAVEMENT MARKINGS SHALL BE APPLIED AND FINAL SIGNING SHALL BE INSTALLED.

PROJECT NAME: MIDDLEBURY  
PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_TCP_notes.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: D.M. PECK  
TCP - NOTES SHEET (2 OF 2)

PLOT DATE: 5/19/2017  
DRAWN BY: D.M. PECK  
CHECKED BY: E.P. DETRICK  
SHEET 30 OF 54



IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	NUMBER OF SIGNS REQ'D	REMARKS
	WIDTH (IN)	HEIGHT (IN)			
D3-1	42	9	<b>Printers Alley</b>	12	MOUNT ABOVE M4-9 OR MI-5
D3-2	42	9	<b>s Pleasant St</b>	9	MOUNT ABOVE M4-9
G20-2	36	18	<b>END ROAD WORK</b>	5	MOUNT ON ONE POST
M1-5	24	24	<b>VERMONT 30</b>	17	MOUNT ON ONE POST
M3-3	24	12	<b>SOUTH</b>	1	MOUNT ABOVE MI-5
M4-8	24	12	<b>DETOUR</b>	19	MOUNT ABOVE MI-5
M4-8A	24	18	<b>END DETOUR</b>	1	MOUNT ON ONE POST
M4-9L	30	24	<b>DETOUR</b> ←	3	MOUNT ON ONE POST
M4-9R	30	24	<b>DETOUR</b> →	3	MOUNT ON ONE POST
M4-9S	30	24	<b>DETOUR</b> ↑	3	MOUNT ON ONE POST
M4-9bL	30	24	<b>DETOUR</b> ↑ ←	3	MOUNT ON ONE POST
M4-9bR	30	24	<b>DETOUR</b> ↑ →	4	MOUNT ON ONE POST
M4-9-bT	30	24	<b>DETOUR</b> ↑	3	MOUNT ON ONE POST
M4-10L	48	18	<b>DETOUR</b> ←	1	MOUNT ON TYPE III BARRICADE
M5-1L	21	15	<b>←</b>	2	MOUNT BELOW MI-5
M5-1R	21	15	<b>→</b>	1	MOUNT BELOW MI-5
M6-1L	21	15	<b>←</b>	6	MOUNT BELOW MI-5

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	NUMBER OF SIGNS REQ'D	REMARKS
	WIDTH (IN)	HEIGHT (IN)			
M6-1R	21	15	<b>→</b>	3	MOUNT BELOW MI-5
M6-2R	21	15	<b>↗</b>	2	MOUNT BELOW MI-5
M6-3	21	15	<b>↑</b>	5	MOUNT BELOW MI-5
R3-1R	24	24	<b>⊘</b>	1	MOUNT ON ONE POST
R3-1L	24	24	<b>⊘</b>	2	MOUNT ON ONE POST
R4-8	24	12	<b>↑</b>	1	MOUNT ON ONE POST
R5-1	30	30	<b>DO NOT ENTER</b>	4	MOUNT ON ONE POST
R6-1L	48	18	<b>← ONE WAY</b>	4	MOUNT ON ONE POST
R6-1R	48	18	<b>ONE WAY →</b>	5	MOUNT ON ONE POST
R7-1L	12	18	<b>NO PARKING ANY TIME</b>	1	MOUNT BELOW R5-1
R7-1R	12	18	<b>NO PARKING ANY TIME</b>	2	MOUNT BELOW R5-1 MOUNT ON ONE POST
R8-3	30	30	<b>Ⓡ</b>	2	MOUNT ON ONE POST
R9-9	24	12	<b>SIDEWALK CLOSED</b>	4	MOUNT ON ONE POST OR TYPE III BARRICADE
R9-9A	24	12	<b>SIDEWALK OPEN</b>	2	MOUNT ON ONE POST
R9-9B	24	18	<b>SIDEWALK CLOSED AHEAD</b>	1	MOUNT ON ONE POST
R9-10	24	12	<b>SIDEWALK CLOSED USE OTHER SIDE</b>	1	MOUNT ON ONE POST
R9-11L	24	18	<b>SIDEWALK CLOSED AHEAD CROSS HERE</b>	1	MOUNT ON ONE POST

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	NUMBER OF SIGNS REQ'D	REMARKS
	WIDTH (IN)	HEIGHT (IN)			
R9-11R	24	18	<b>SIDEWALK CLOSED AHEAD CROSS HERE</b>	1	MOUNT ON ONE POST
R9-11aL	24	12	<b>SIDEWALK CLOSED CROSS HERE</b>	1	MOUNT ON ONE POST
R9-11aR	24	12	<b>SIDEWALK CLOSED CROSS HERE</b>	1	MOUNT ON ONE POST
R11-2	48	30	<b>ROAD CLOSED</b>	5	MOUNT ON TYPE III BARRICADE
R11-2A	60	30	<b>BUSINESSES OPEN</b>	2	MOUNT ON TYPE III BARRICADE
R11-3AM	60	30	<b>ROAD CLOSED LOCAL TRAFFIC ONLY</b>	2	MOUNT ON TWO POSTS
R11-3C	48	54	<b>50 MAIN ST CLOSED AT SEYMOUR ST FOLLOW DETOUR</b>	1	MOUNT ON TWO POSTS
R11-3D	48	36	<b>30 MAIN ST CLOSED FOLLOW DETOUR</b>	3	MOUNT ON TWO POSTS
R11-3E	60	30	<b>TO s Pleasant St FOLLOW DETOUR</b>	1	MOUNT ON TWO POSTS
R11-3F	60	42	<b>50 MAIN ST CLOSED AT MERCHANTS ROW FOLLOW DETOUR</b>	1	MOUNT ON TWO POSTS
R11-4	60	30	<b>ROAD CLOSED TO THRU TRAFFIC</b>	3	MOUNT ON TYPE III BARRICADE

**NOTES:**

- COLORS FOR THE M1-5 SIGNS SHALL MATCH THE COLORS SHOWN ON VTRANS STD. E-136B.
- COLORS FOR THE M5-1, M6-1, M6-2, AND THE M6-3 SIGNS SHALL BE A BLACK ARROW AND BORDER ON RETROREFLECTIVE ORANGE BACKGROUND.
- THE M1-5 SIGNS SHALL BECOME THE PROPERTY OF THE STATE AFTER THEY ARE REMOVED FROM THE DETOUR. THE CONTRACTOR SHALL DELIVER THE SIGNS TO THE TOWN AT THE TOWN GARAGE. ALL COSTS ASSOCIATED WITH PROVIDING THE SIGNS TO THE TOWN SHALL BE INCIDENTAL TO ITEM 641.10 "TRAFFIC CONTROL".
- COLORS FOR THE M4-9, D3-1, AND D3-2 SIGNS SHALL BE A BLACK ARROW, TEXT, AND BORDER ON RETROREFLECTIVE ORANGE BACKGROUND.

PROJECT NAME: MIDDLEBURY

PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016-TCP_TSSS.dgn

PROJECT LEADER: A.P. GUYETTE

DESIGNED BY: D.M. PECK

TCP - SIGN SUMMARY SHEET 1





PLOT DATE: 5/19/2017

DRAWN BY: D.M. PECK

CHECKED BY: E.P. DETRICK

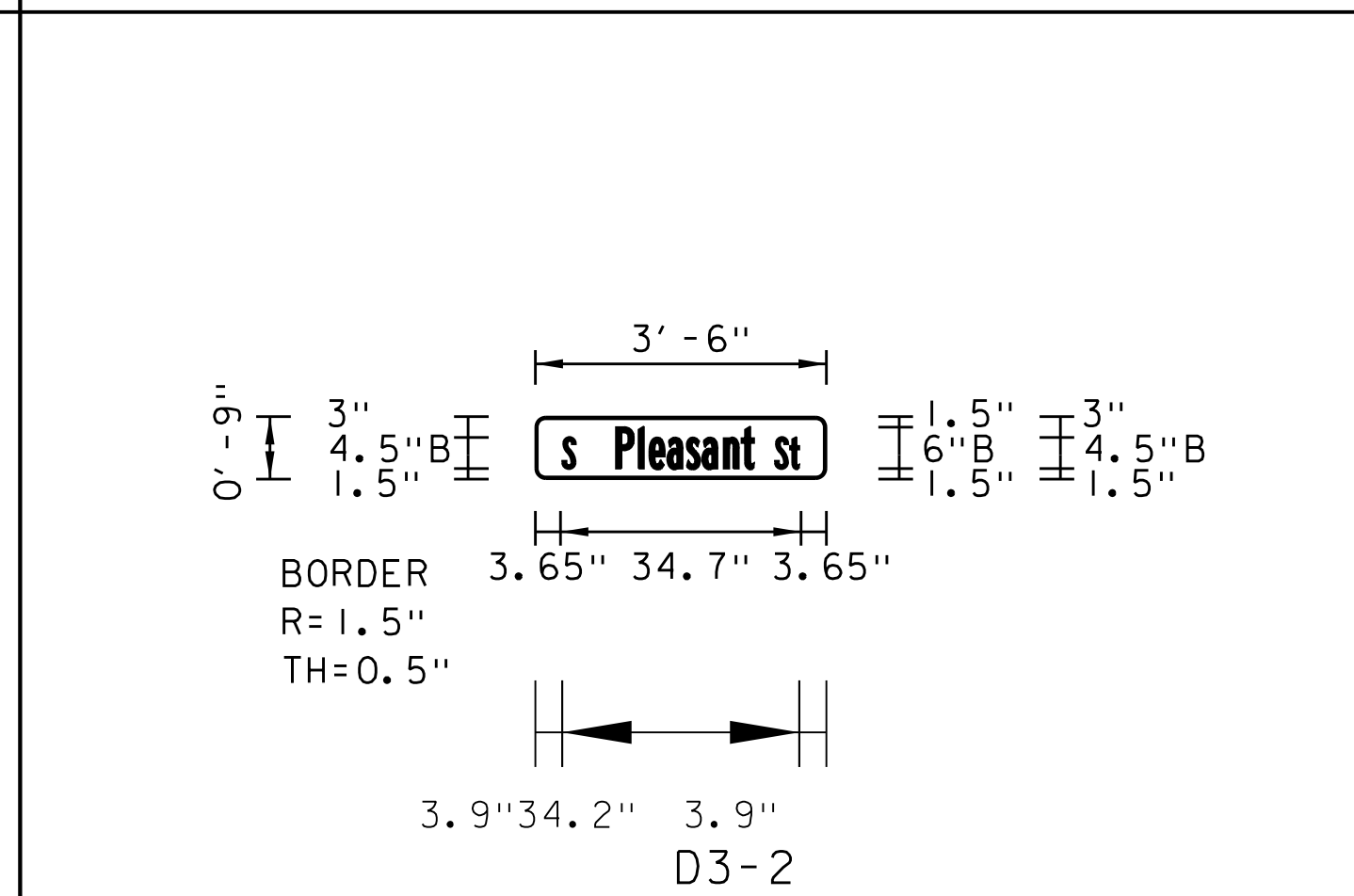
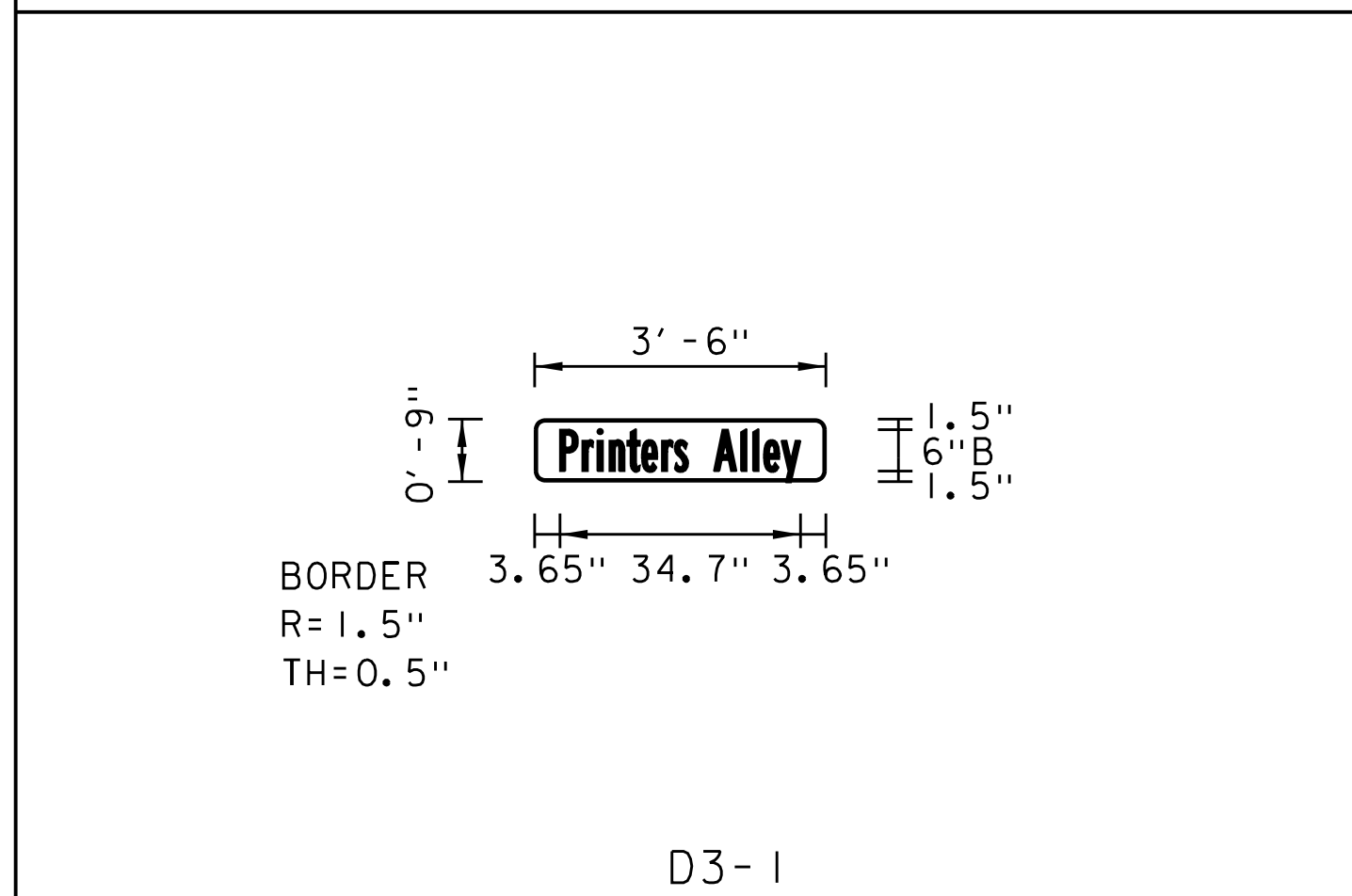
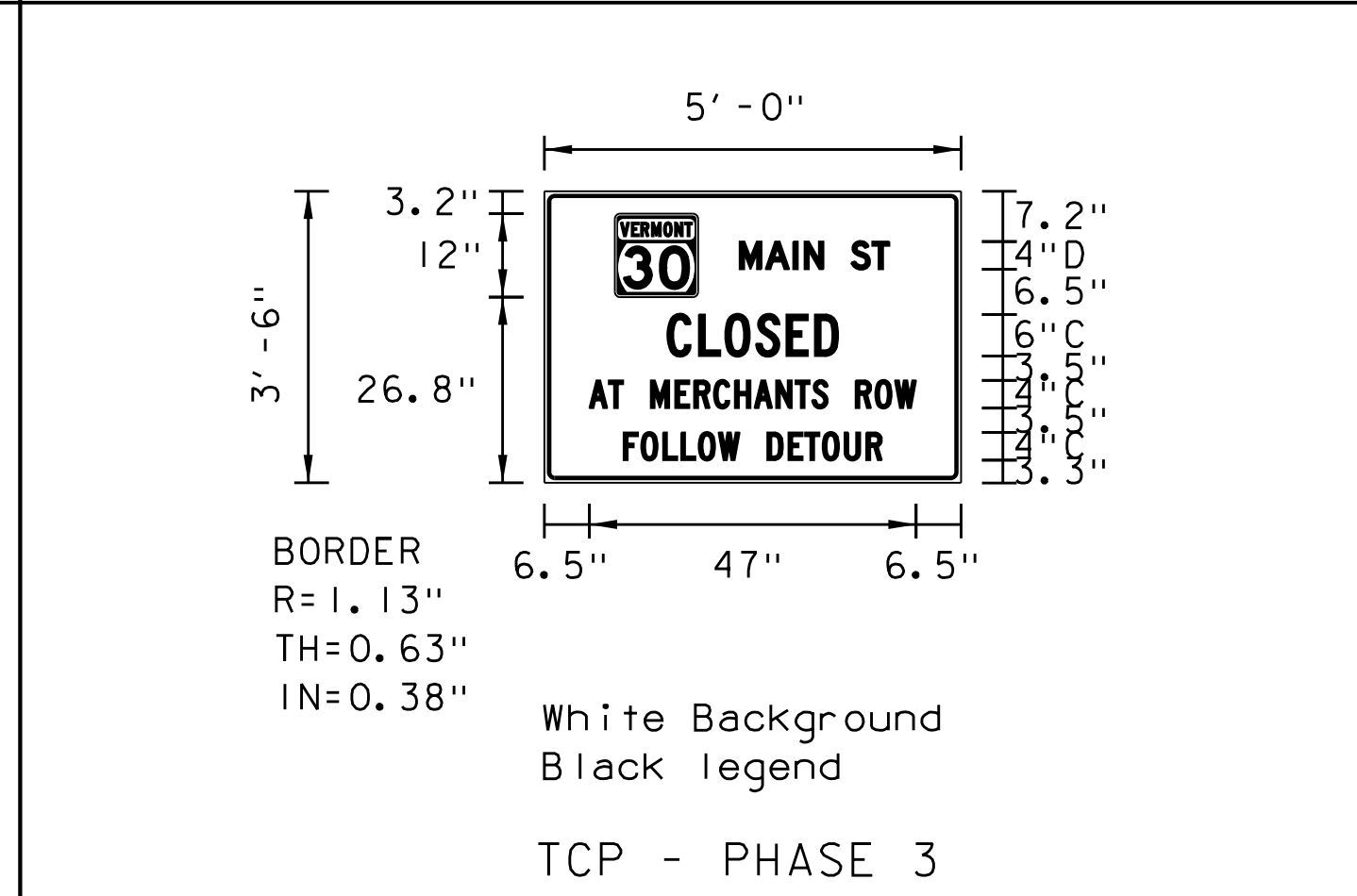
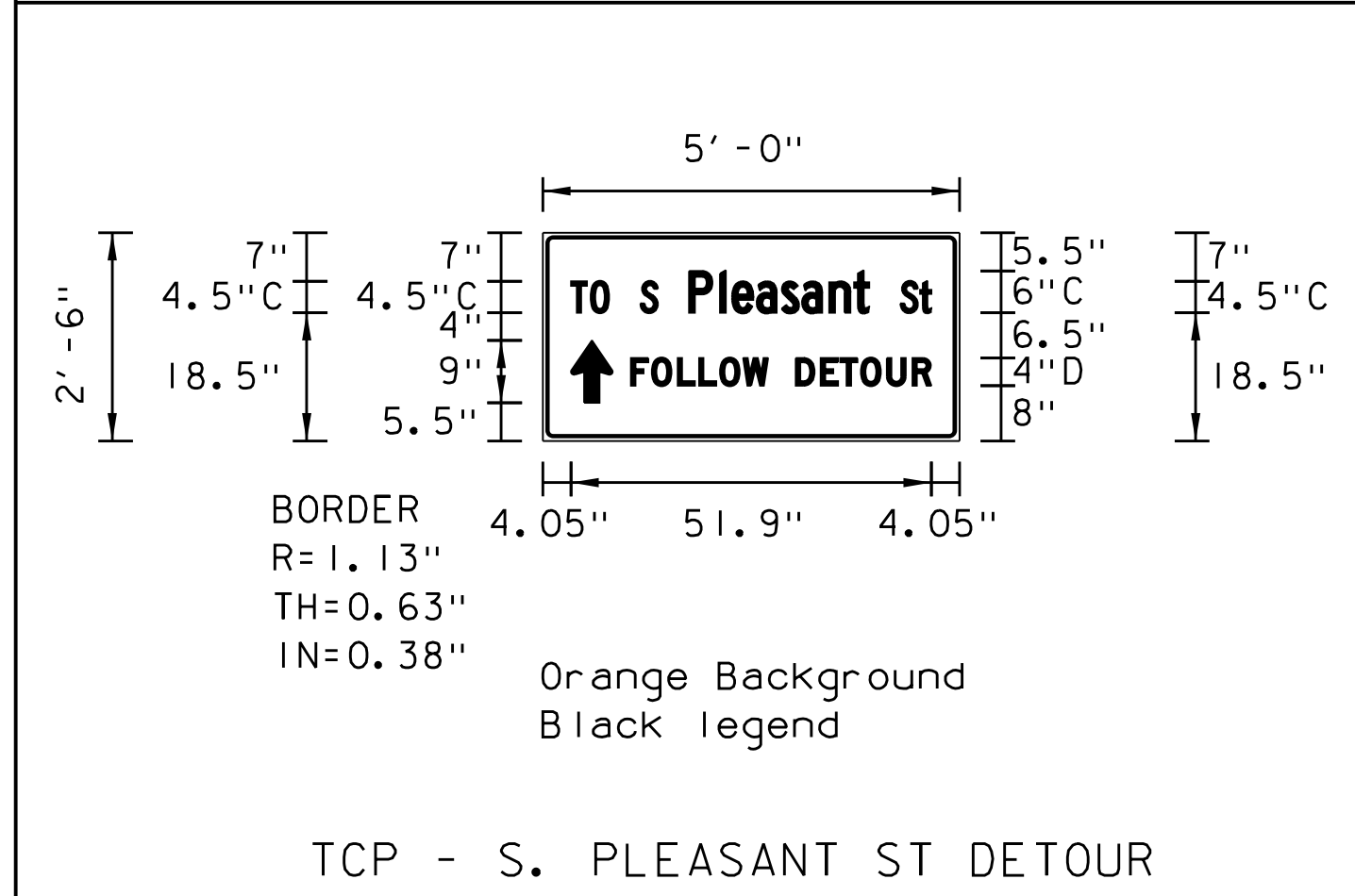
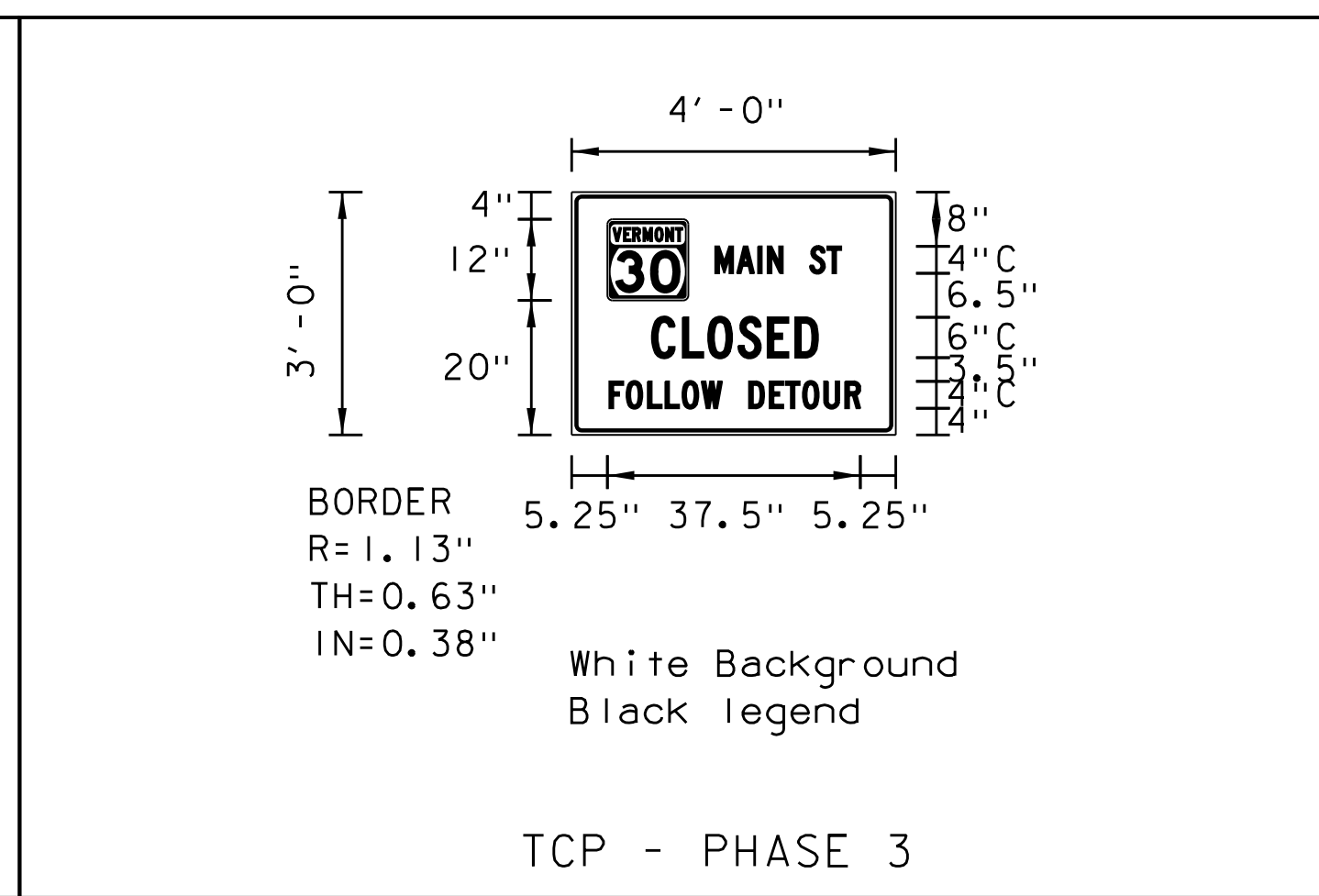
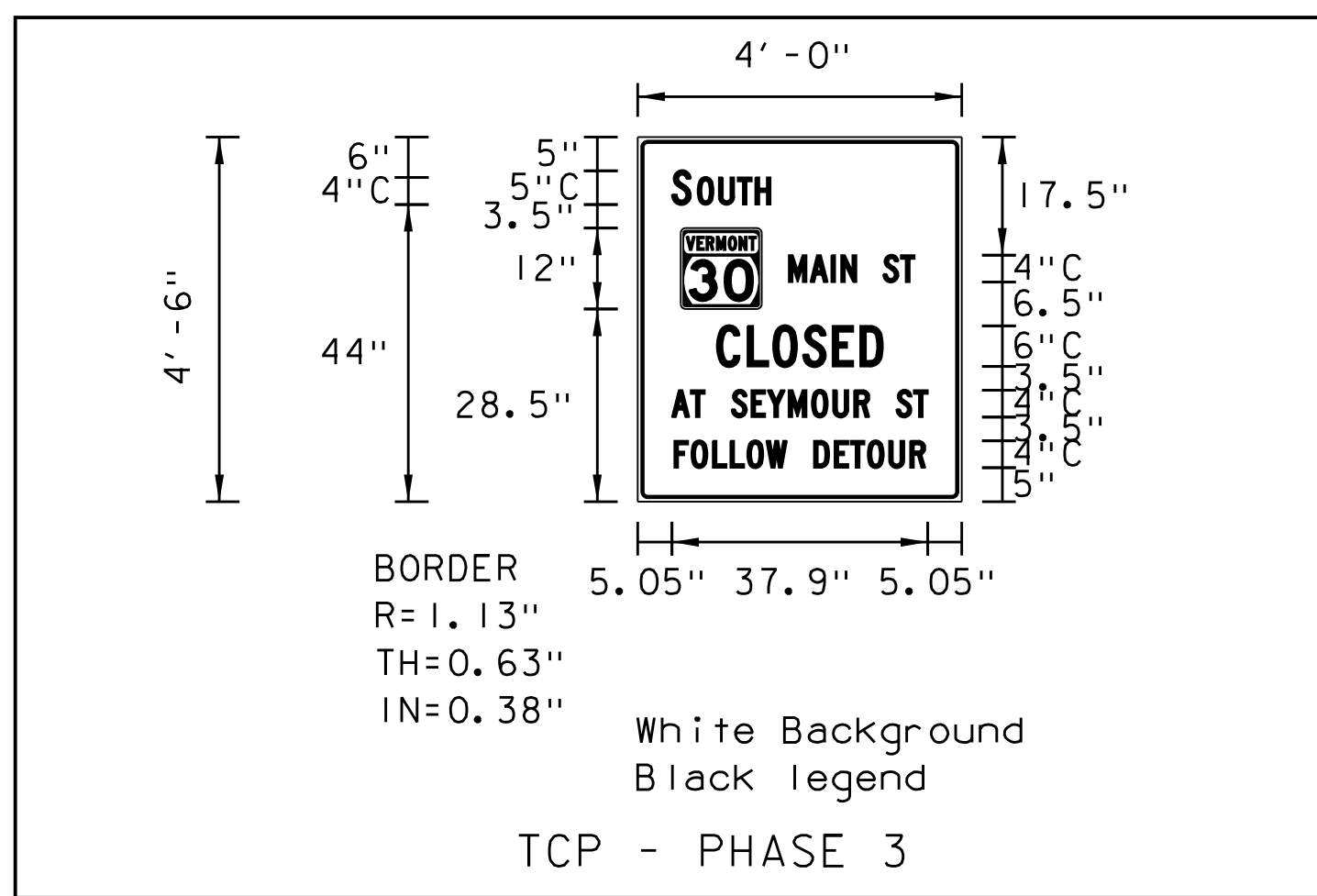
SHEET 31 OF 54



IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	NUMBER OF SIGNS REQ'D	REMARKS
	WIDTH (IN)	HEIGHT (IN)			
W1-4 (R)	36	36		1	MOUNT ON ONE POST
W1-4 (L)	36	36		1	MOUNT ON ONE POST
W1-6	48	24		1	MOUNT ON TYPE III BARRICADE
W20-1	36	36		5	MOUNT ON ONE POST

**NOTES:**

1. COLORS FOR THE M1-5 SIGNS SHALL MATCH THE COLORS SHOWN ON VTRANS STD. E-136B.
2. COLORS FOR THE M5-1, M6-1, M6-2, AND THE M6-3 SIGNS SHALL BE A BLACK ARROW AND BORDER ON RETROREFLECTIVE ORANGE BACKGROUND.
3. THE M1-5 SIGNS SHALL BECOME THE PROPERTY OF THE STATE AFTER THEY ARE REMOVED FROM THE DETOUR. THE CONTRACTOR SHALL DELIVER THE SIGNS TO THE TOWN AT THE TOWN GARAGE. ALL COSTS ASSOCIATED WITH PROVIDING THE SIGNS TO THE TOWN SHALL BE INCIDENTAL TO ITEM 641.10 "TRAFFIC CONTROL".
4. COLORS FOR THE M4-9, D3-1, AND D3-2 SIGNS SHALL BE A BLACK ARROW, TEXT, AND BORDER ON RETROREFLECTIVE ORANGE BACKGROUND.



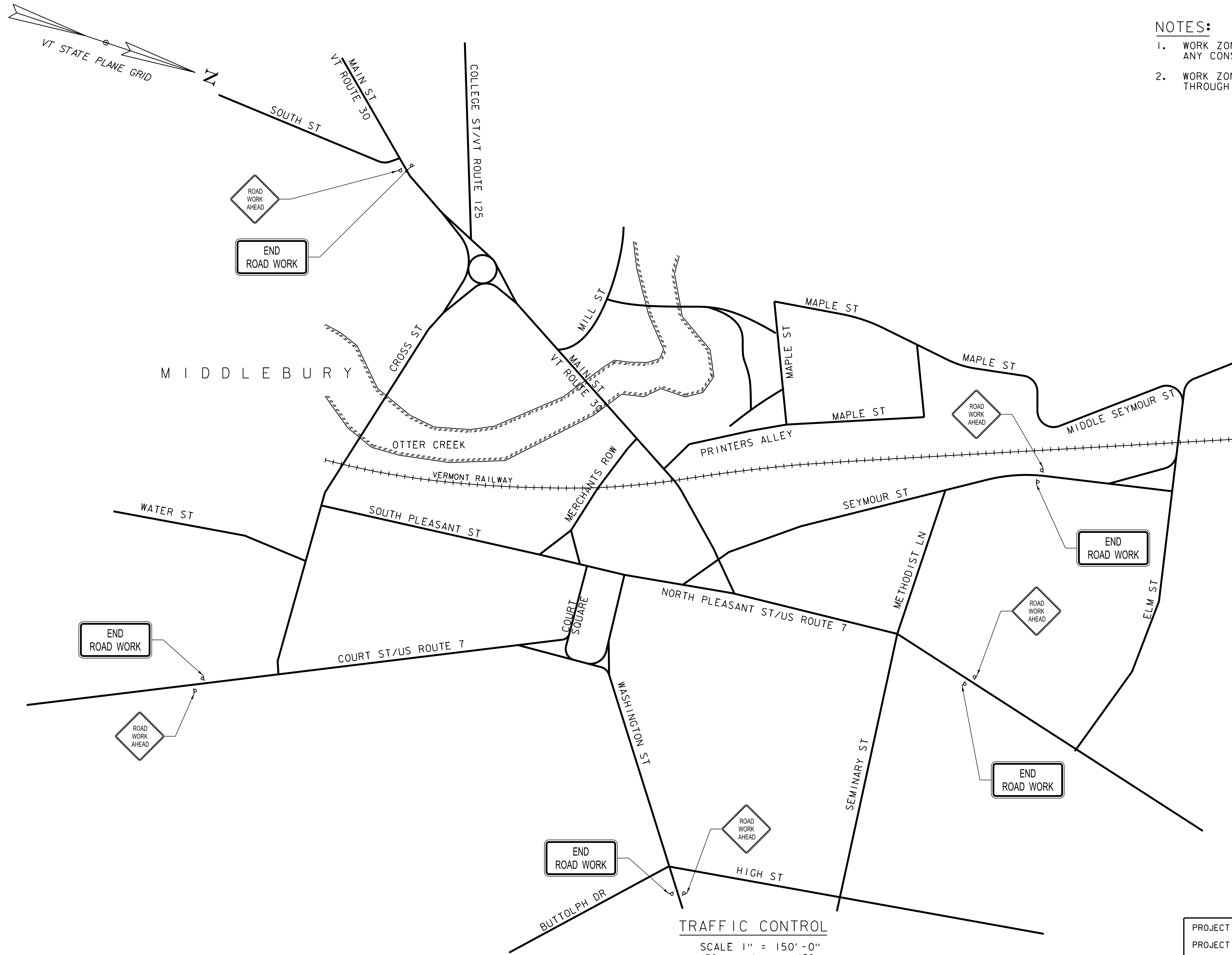
PROJECT NAME: MIDDLEBURY	PLOT DATE: 5/19/2017
PROJECT NUMBER: EWP3(I)	DRAWN BY: D.M. PECK
FILE NAME: z17b016_TCP_TSSS.dgn	CHECKED BY: E.P. DETRICK
PROJECT LEADER: A.P. GUYETTE	SHEET 32 OF 54
DESIGNED BY: D.M. PECK	
TCP - SIGN SUMMARY SHEET 2	





**NOTES:**

1. WORK ZONE LIMIT SIGNS SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES
2. WORK ZONE LIMIT SIGNS SHALL REMAIN IN PLACE THROUGH THE DURATION OF THIS CONTRACT.



END ROAD WORK

END ROAD WORK

END ROAD WORK

END ROAD WORK

END ROAD WORK

TRAFFIC CONTROL

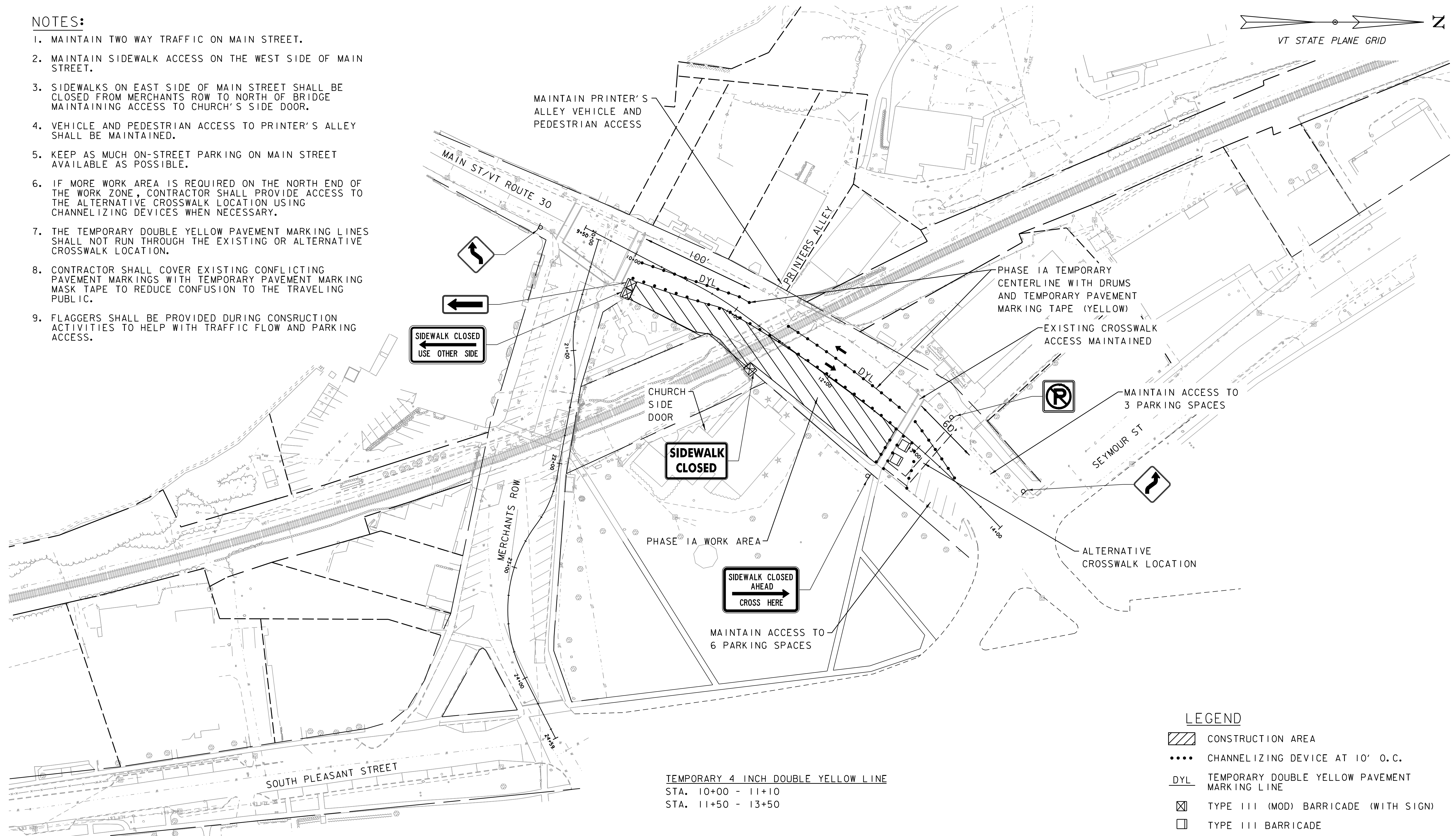
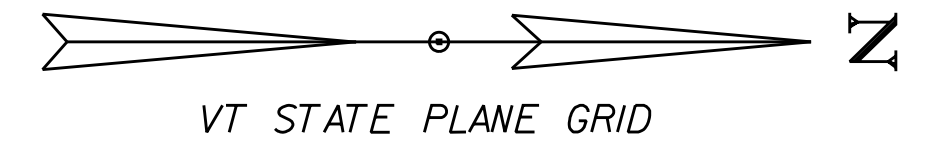
SCALE 1" = 150'-0"  
150 0 150

PROJECT NAME: MIDDLEBURY	PLOT DATE: 5/19/2017
PROJECT NUMBER: EWP3(I)	DRAWN BY: D.M. PECK
FILE NAME: z17b016-TCP_Workzone.dgn	CHECKED BY: E.P. DETRICK
PROJECT LEADER: A.P. GUYETTE	SHEET 33 OF 54
DESIGNED BY: D.M. PECK	TCP - WORKZONE LIMITS



**NOTES:**

1. MAINTAIN TWO WAY TRAFFIC ON MAIN STREET.
2. MAINTAIN SIDEWALK ACCESS ON THE WEST SIDE OF MAIN STREET.
3. SIDEWALKS ON EAST SIDE OF MAIN STREET SHALL BE CLOSED FROM MERCHANTS ROW TO NORTH OF BRIDGE MAINTAINING ACCESS TO CHURCH'S SIDE DOOR.
4. VEHICLE AND PEDESTRIAN ACCESS TO PRINTER'S ALLEY SHALL BE MAINTAINED.
5. KEEP AS MUCH ON-STREET PARKING ON MAIN STREET AVAILABLE AS POSSIBLE.
6. IF MORE WORK AREA IS REQUIRED ON THE NORTH END OF THE WORK ZONE, CONTRACTOR SHALL PROVIDE ACCESS TO THE ALTERNATIVE CROSSWALK LOCATION USING CHANNELIZING DEVICES WHEN NECESSARY.
7. THE TEMPORARY DOUBLE YELLOW PAVEMENT MARKING LINES SHALL NOT RUN THROUGH THE EXISTING OR ALTERNATIVE CROSSWALK LOCATION.
8. CONTRACTOR SHALL COVER EXISTING CONFLICTING PAVEMENT MARKINGS WITH TEMPORARY PAVEMENT MARKING MASK TAPE TO REDUCE CONFUSION TO THE TRAVELING PUBLIC.
9. FLAGGERS SHALL BE PROVIDED DURING CONSTRUCTION ACTIVITIES TO HELP WITH TRAFFIC FLOW AND PARKING ACCESS.

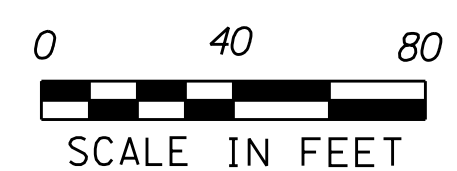


TEMPORARY 4 INCH DOUBLE YELLOW LINE  
 STA. 10+00 - 11+10  
 STA. 11+50 - 13+50

**LEGEND**

- CONSTRUCTION AREA
- CHANNELIZING DEVICE AT 10' O.C.
- TEMPORARY DOUBLE YELLOW PAVEMENT MARKING LINE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE

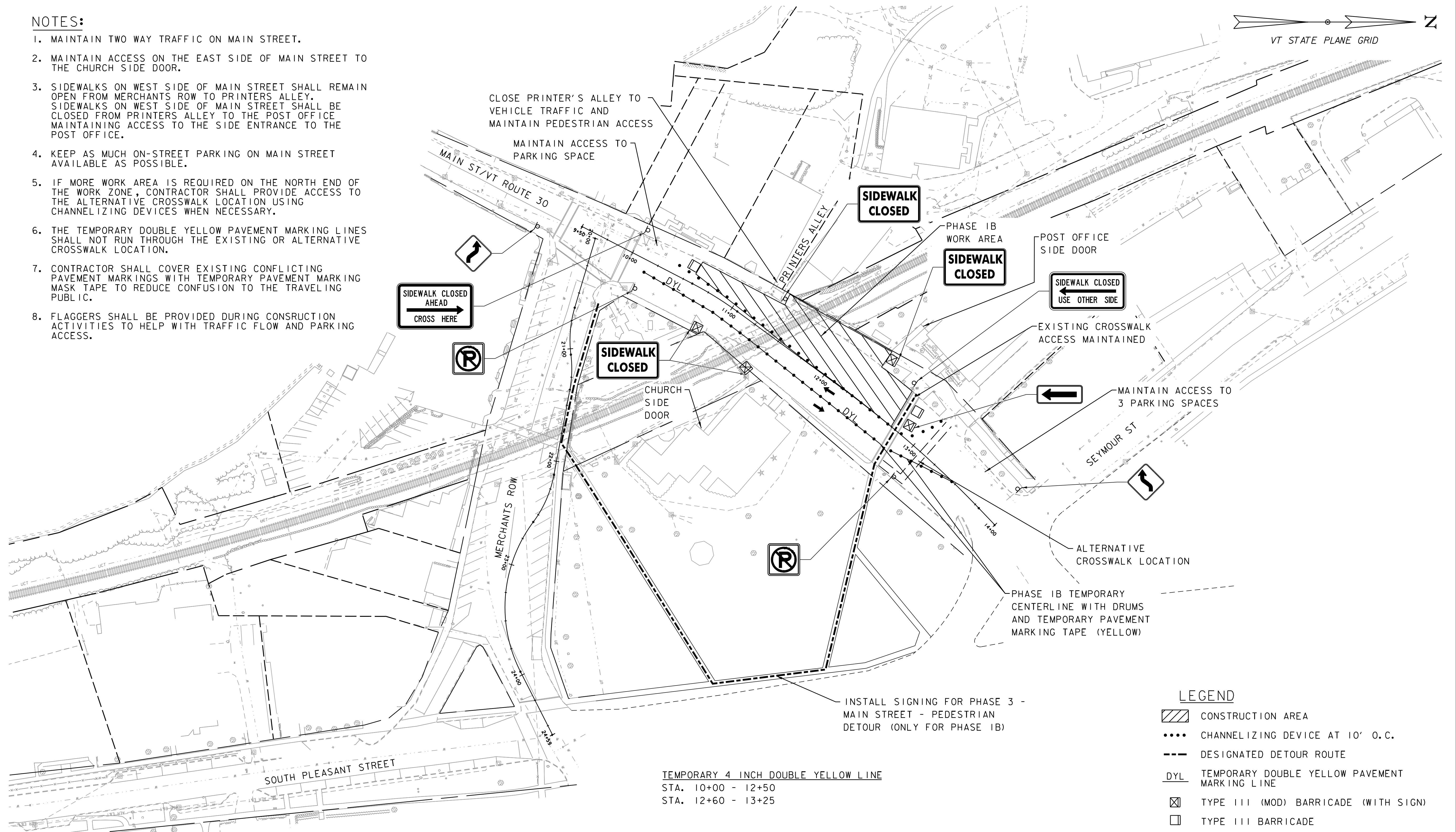
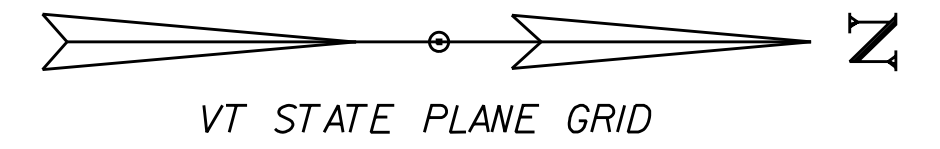
PHASE IA	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_TCP_IA.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
TCP - PHASE IA	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	34 OF 54





**NOTES:**

1. MAINTAIN TWO WAY TRAFFIC ON MAIN STREET.
2. MAINTAIN ACCESS ON THE EAST SIDE OF MAIN STREET TO THE CHURCH SIDE DOOR.
3. SIDEWALKS ON WEST SIDE OF MAIN STREET SHALL REMAIN OPEN FROM MERCHANTS ROW TO PRINTERS ALLEY. SIDEWALKS ON WEST SIDE OF MAIN STREET SHALL BE CLOSED FROM PRINTERS ALLEY TO THE POST OFFICE MAINTAINING ACCESS TO THE SIDE ENTRANCE TO THE POST OFFICE.
4. KEEP AS MUCH ON-STREET PARKING ON MAIN STREET AVAILABLE AS POSSIBLE.
5. IF MORE WORK AREA IS REQUIRED ON THE NORTH END OF THE WORK ZONE, CONTRACTOR SHALL PROVIDE ACCESS TO THE ALTERNATIVE CROSSWALK LOCATION USING CHANNELIZING DEVICES WHEN NECESSARY.
6. THE TEMPORARY DOUBLE YELLOW PAVEMENT MARKING LINES SHALL NOT RUN THROUGH THE EXISTING OR ALTERNATIVE CROSSWALK LOCATION.
7. CONTRACTOR SHALL COVER EXISTING CONFLICTING PAVEMENT MARKINGS WITH TEMPORARY PAVEMENT MARKING MASK TAPE TO REDUCE CONFUSION TO THE TRAVELING PUBLIC.
8. FLAGGERS SHALL BE PROVIDED DURING CONSTRUCTION ACTIVITIES TO HELP WITH TRAFFIC FLOW AND PARKING ACCESS.



**LEGEND**

- CONSTRUCTION AREA
- CHANNELIZING DEVICE AT 10' O.C.
- DESIGNATED DETOUR ROUTE
- TEMPORARY DOUBLE YELLOW PAVEMENT MARKING LINE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE

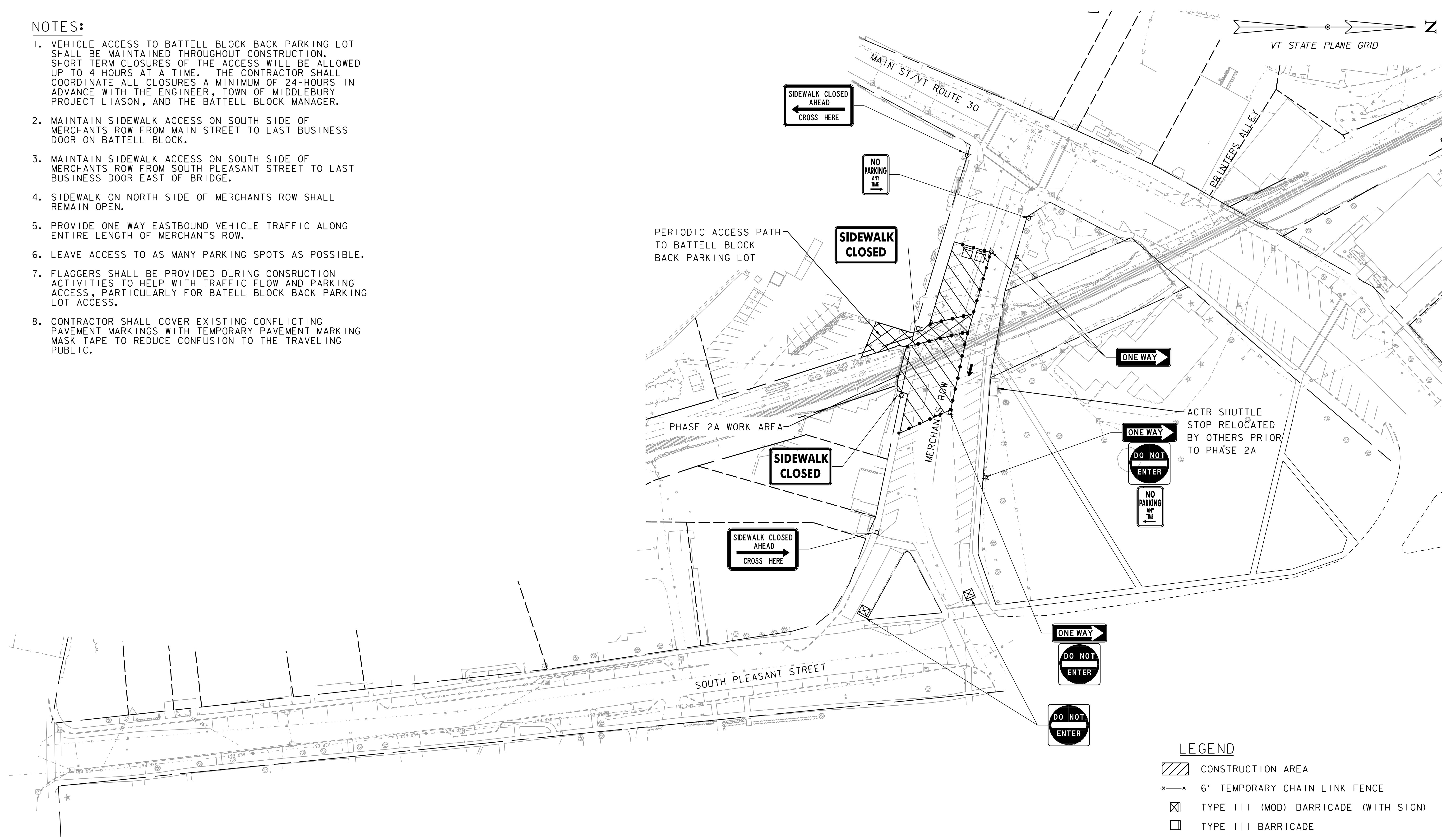
**TEMPORARY 4 INCH DOUBLE YELLOW LINE**  
 STA. 10+00 - 12+50  
 STA. 12+60 - 13+25



PHASE IB	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_TCP_IB.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
TCP - PHASE IB	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	35 OF 54

**NOTES:**

1. VEHICLE ACCESS TO BATTELL BLOCK BACK PARKING LOT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. SHORT TERM CLOSURES OF THE ACCESS WILL BE ALLOWED UP TO 4 HOURS AT A TIME. THE CONTRACTOR SHALL COORDINATE ALL CLOSURES A MINIMUM OF 24-HOURS IN ADVANCE WITH THE ENGINEER, TOWN OF MIDDLEBURY PROJECT LIASON, AND THE BATTELL BLOCK MANAGER.
2. MAINTAIN SIDEWALK ACCESS ON SOUTH SIDE OF MERCHANTS ROW FROM MAIN STREET TO LAST BUSINESS DOOR ON BATTELL BLOCK.
3. MAINTAIN SIDEWALK ACCESS ON SOUTH SIDE OF MERCHANTS ROW FROM SOUTH PLEASANT STREET TO LAST BUSINESS DOOR EAST OF BRIDGE.
4. SIDEWALK ON NORTH SIDE OF MERCHANTS ROW SHALL REMAIN OPEN.
5. PROVIDE ONE WAY EASTBOUND VEHICLE TRAFFIC ALONG ENTIRE LENGTH OF MERCHANTS ROW.
6. LEAVE ACCESS TO AS MANY PARKING SPOTS AS POSSIBLE.
7. FLAGGERS SHALL BE PROVIDED DURING CONSTRUCTION ACTIVITIES TO HELP WITH TRAFFIC FLOW AND PARKING ACCESS, PARTICULARLY FOR BATELL BLOCK BACK PARKING LOT ACCESS.
8. CONTRACTOR SHALL COVER EXISTING CONFLICTING PAVEMENT MARKINGS WITH TEMPORARY PAVEMENT MARKING MASK TAPE TO REDUCE CONFUSION TO THE TRAVELING PUBLIC.

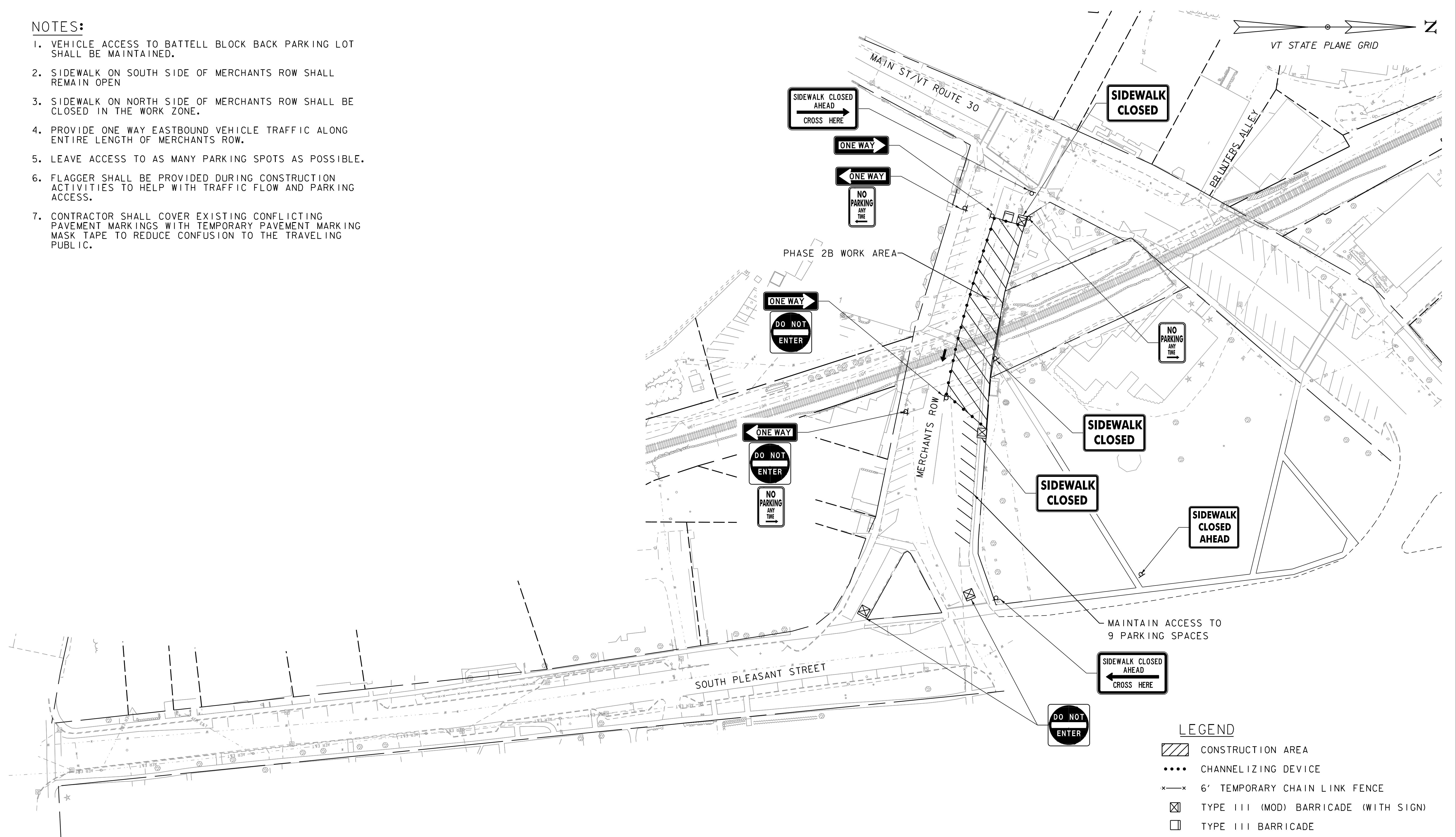


PHASE 2A	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016-TCP_2A.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
TCP - PHASE 2A	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	36 OF 54



**NOTES:**

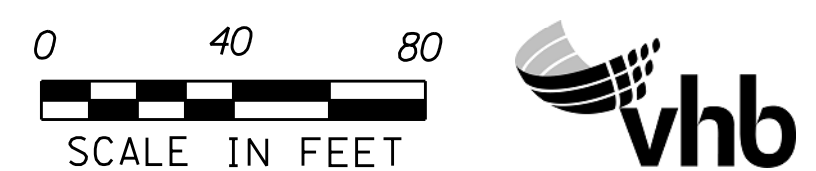
1. VEHICLE ACCESS TO BATTELL BLOCK BACK PARKING LOT SHALL BE MAINTAINED.
2. SIDEWALK ON SOUTH SIDE OF MERCHANTS ROW SHALL REMAIN OPEN
3. SIDEWALK ON NORTH SIDE OF MERCHANTS ROW SHALL BE CLOSED IN THE WORK ZONE.
4. PROVIDE ONE WAY EASTBOUND VEHICLE TRAFFIC ALONG ENTIRE LENGTH OF MERCHANTS ROW.
5. LEAVE ACCESS TO AS MANY PARKING SPOTS AS POSSIBLE.
6. FLAGGER SHALL BE PROVIDED DURING CONSTRUCTION ACTIVITIES TO HELP WITH TRAFFIC FLOW AND PARKING ACCESS.
7. CONTRACTOR SHALL COVER EXISTING CONFLICTING PAVEMENT MARKINGS WITH TEMPORARY PAVEMENT MARKING MASK TAPE TO REDUCE CONFUSION TO THE TRAVELING PUBLIC.



**LEGEND**

	CONSTRUCTION AREA
	CHANNELIZING DEVICE
	6' TEMPORARY CHAIN LINK FENCE
	TYPE III (MOD) BARRICADE (WITH SIGN)
	TYPE III BARRICADE

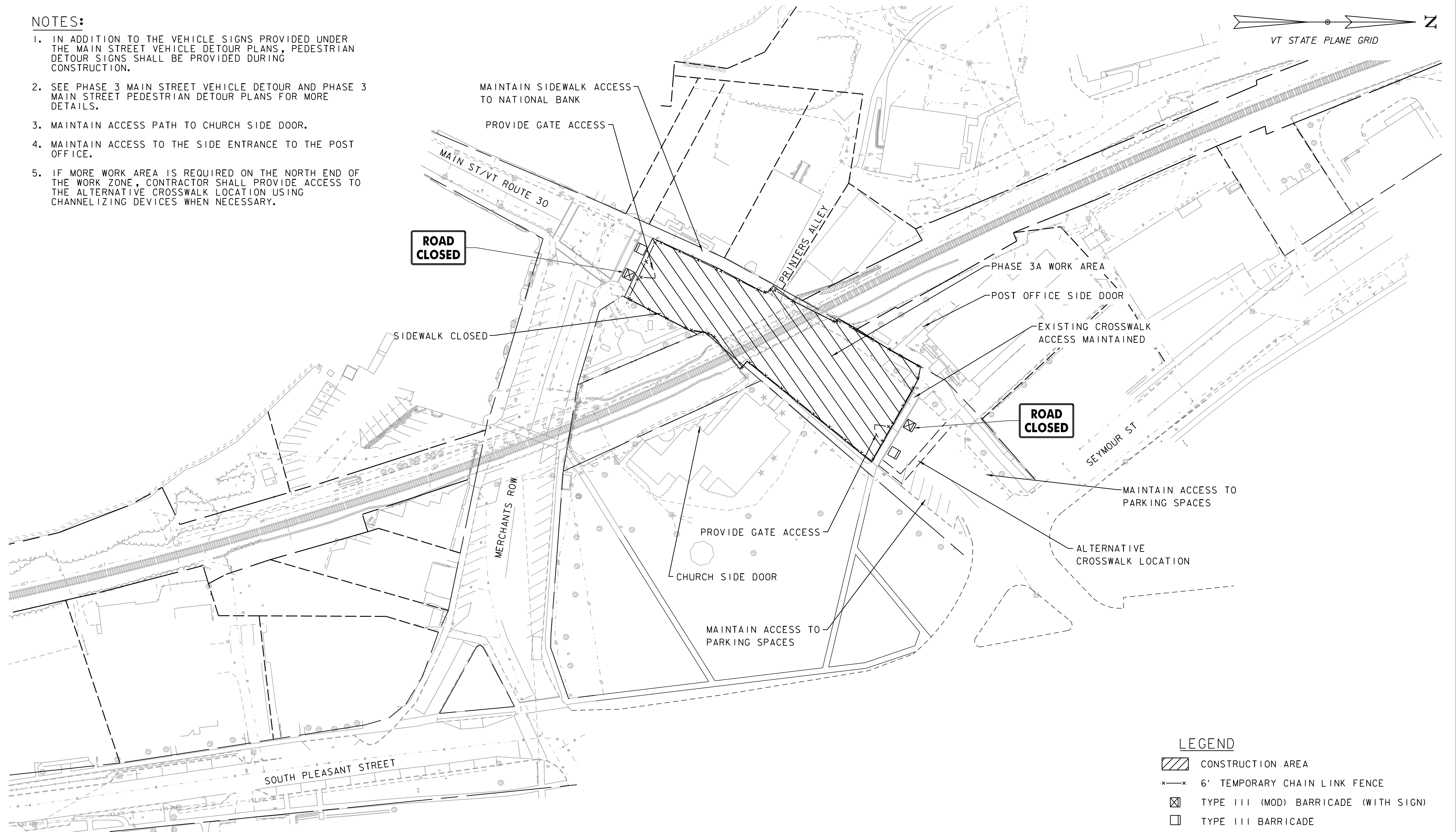
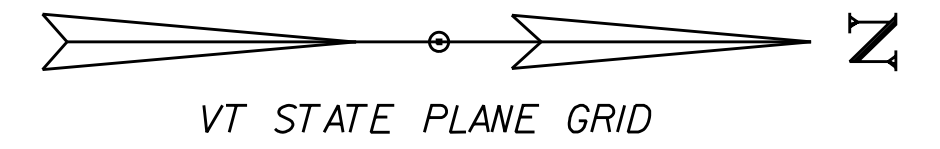
PHASE 2B	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016-TCP_2B.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
TCP - PHASE 2B	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	37 OF 54





**NOTES:**

1. IN ADDITION TO THE VEHICLE SIGNS PROVIDED UNDER THE MAIN STREET VEHICLE DETOUR PLANS, PEDESTRIAN DETOUR SIGNS SHALL BE PROVIDED DURING CONSTRUCTION.
2. SEE PHASE 3 MAIN STREET VEHICLE DETOUR AND PHASE 3 MAIN STREET PEDESTRIAN DETOUR PLANS FOR MORE DETAILS.
3. MAINTAIN ACCESS PATH TO CHURCH SIDE DOOR.
4. MAINTAIN ACCESS TO THE SIDE ENTRANCE TO THE POST OFFICE.
5. IF MORE WORK AREA IS REQUIRED ON THE NORTH END OF THE WORK ZONE, CONTRACTOR SHALL PROVIDE ACCESS TO THE ALTERNATIVE CROSSWALK LOCATION USING CHANNELIZING DEVICES WHEN NECESSARY.



**LEGEND**

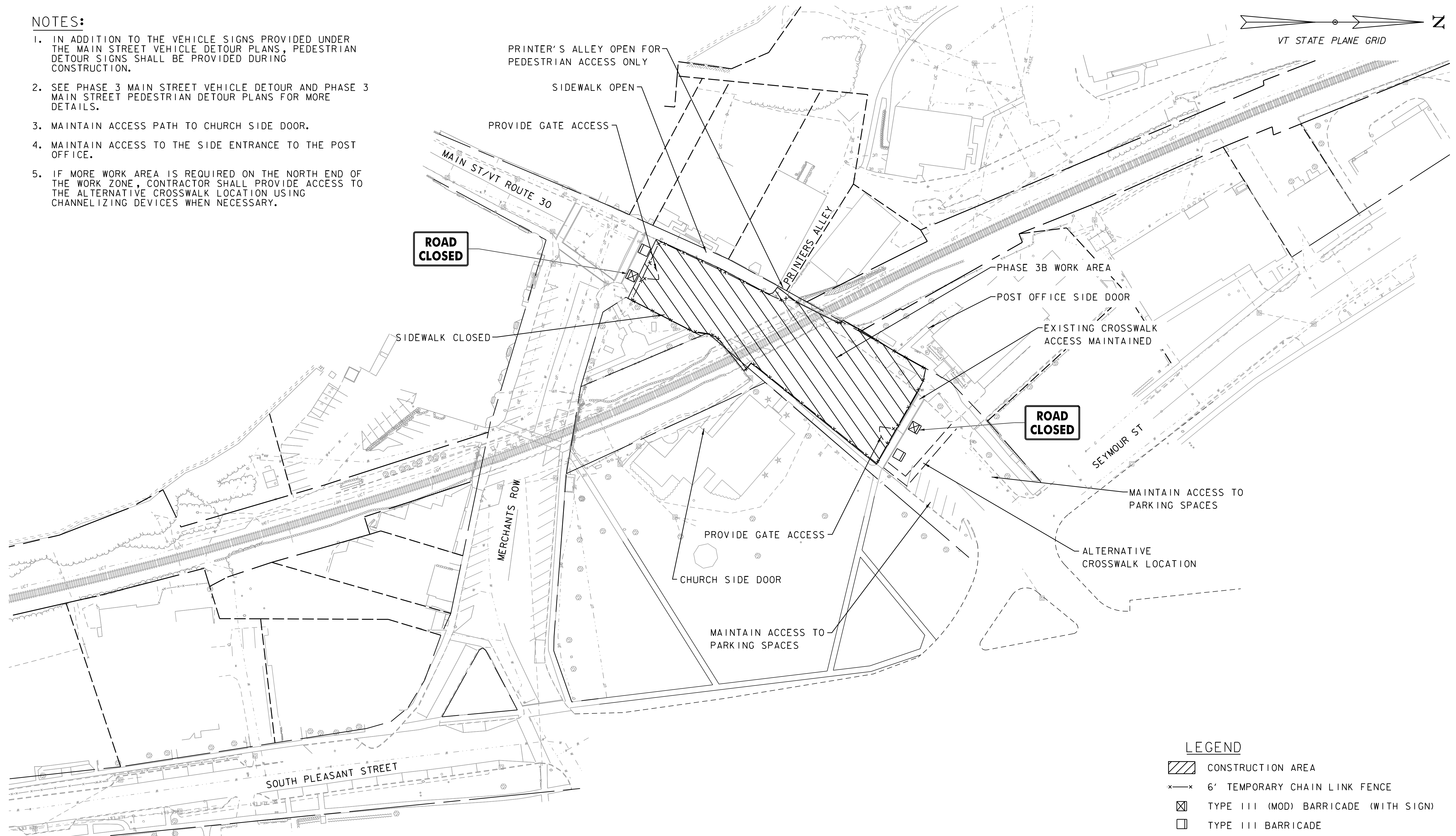
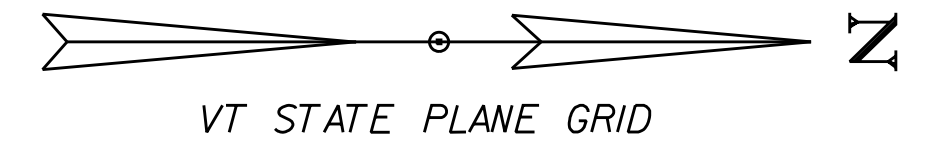
- CONSTRUCTION AREA
- 6' TEMPORARY CHAIN LINK FENCE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE



PHASE 3A	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016-TCP_3A.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
TCP - PHASE 3A	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	38 OF 54

**NOTES:**

1. IN ADDITION TO THE VEHICLE SIGNS PROVIDED UNDER THE MAIN STREET VEHICLE DETOUR PLANS, PEDESTRIAN DETOUR SIGNS SHALL BE PROVIDED DURING CONSTRUCTION.
2. SEE PHASE 3 MAIN STREET VEHICLE DETOUR AND PHASE 3 MAIN STREET PEDESTRIAN DETOUR PLANS FOR MORE DETAILS.
3. MAINTAIN ACCESS PATH TO CHURCH SIDE DOOR.
4. MAINTAIN ACCESS TO THE SIDE ENTRANCE TO THE POST OFFICE.
5. IF MORE WORK AREA IS REQUIRED ON THE NORTH END OF THE WORK ZONE, CONTRACTOR SHALL PROVIDE ACCESS TO THE ALTERNATIVE CROSSWALK LOCATION USING CHANNELIZING DEVICES WHEN NECESSARY.



**LEGEND**

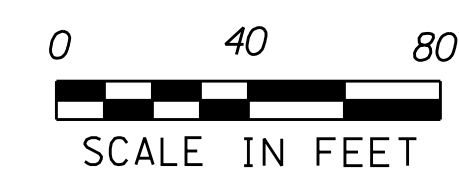
- CONSTRUCTION AREA
- 6' TEMPORARY CHAIN LINK FENCE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE

**PHASE 3B**

PROJECT NAME: MIDDLEBURY  
 PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016-TCP_3B.dgn  
 PROJECT LEADER: A.P. GUYETTE  
 DESIGNED BY: D.M. PECK  
 TCP - PHASE 3B

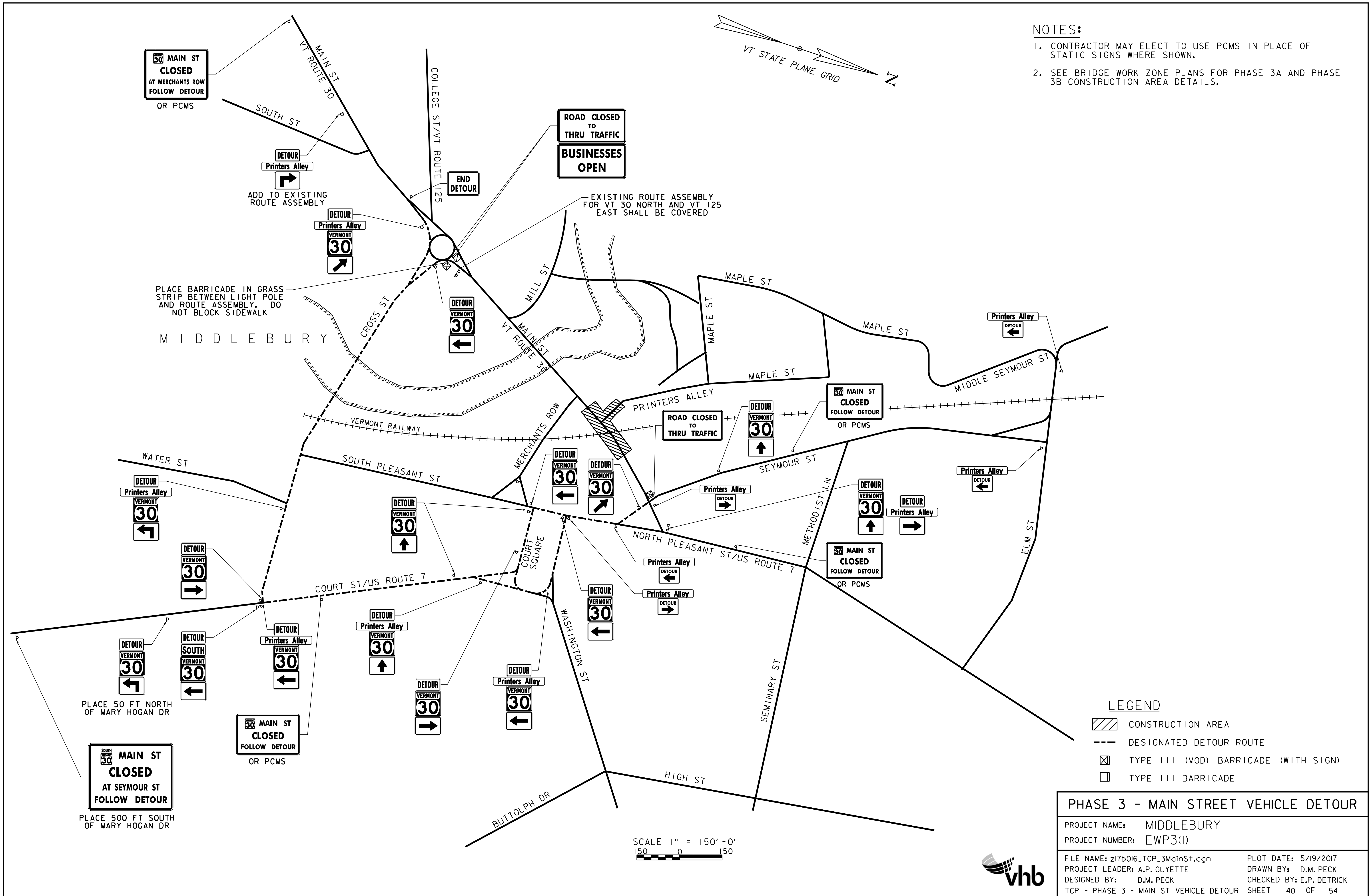
PLOT DATE: 5/19/2017  
 DRAWN BY: D.M. PECK  
 CHECKED BY: E.P. DETRICK  
 SHEET 39 OF 54





**NOTES:**

1. CONTRACTOR MAY ELECT TO USE PCMS IN PLACE OF STATIC SIGNS WHERE SHOWN.
2. SEE BRIDGE WORK ZONE PLANS FOR PHASE 3A AND PHASE 3B CONSTRUCTION AREA DETAILS.



**LEGEND**

- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE

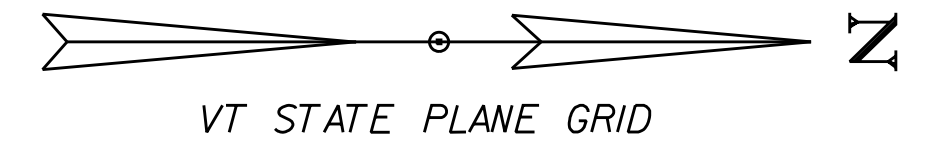
**PHASE 3 - MAIN STREET VEHICLE DETOUR**

PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_TCP_3MainSt.dgn
PLOT DATE:	5/19/2017
PROJECT LEADER:	A.P. GUYETTE
DRAWN BY:	D.M. PECK
DESIGNED BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
TCP - PHASE 3 - MAIN ST VEHICLE DETOUR	SHEET 40 OF 54



**NOTES:**

1. MAIN STREET PEDESTRIAN PHASE 3 DETOUR SHALL BE PROVIDED DURING CONSTRUCTION PHASES 1B, 3A, AND 3B AT THE SAME TIME AS THE VEHICLE DETOURS AND OTHER TRAFFIC CONTROL.



SIGN ON SOUTH SIDE OF PRINTERS ALLEY FOR PHASE 3A  
MOVE SIGN TO NORTH SIDE OF PRINTERS ALLEY FOR PHASE 3B

**SIDEWALK CLOSED**

**SIDEWALK CLOSED**



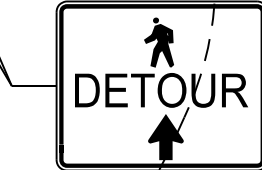
**SIDEWALK CLOSED AHEAD**  
CROSS HERE



**SIDEWALK CLOSED**

**SIDEWALK CLOSED**  
CROSS HERE

MOUNT TO FENCE



**LEGEND**

- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- 6' TEMPORARY CHAIN LINK FENCE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE

**PHASE 3 - MAIN ST - PEDESTRIAN DETOUR**

PROJECT NAME: MIDDLEBURY

PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016-TCP_3Ped.dgn

PROJECT LEADER: A.P. GUYETTE

DESIGNED BY: D.M. PECK

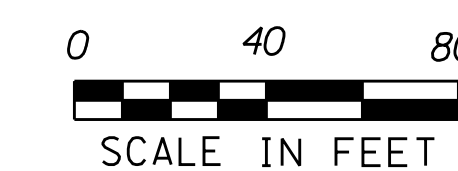
TCP - PHASE 3 - MAIN ST - PED DETOUR

PLOT DATE: 5/19/2017

DRAWN BY: D.M. PECK

CHECKED BY: E.P. DETRICK

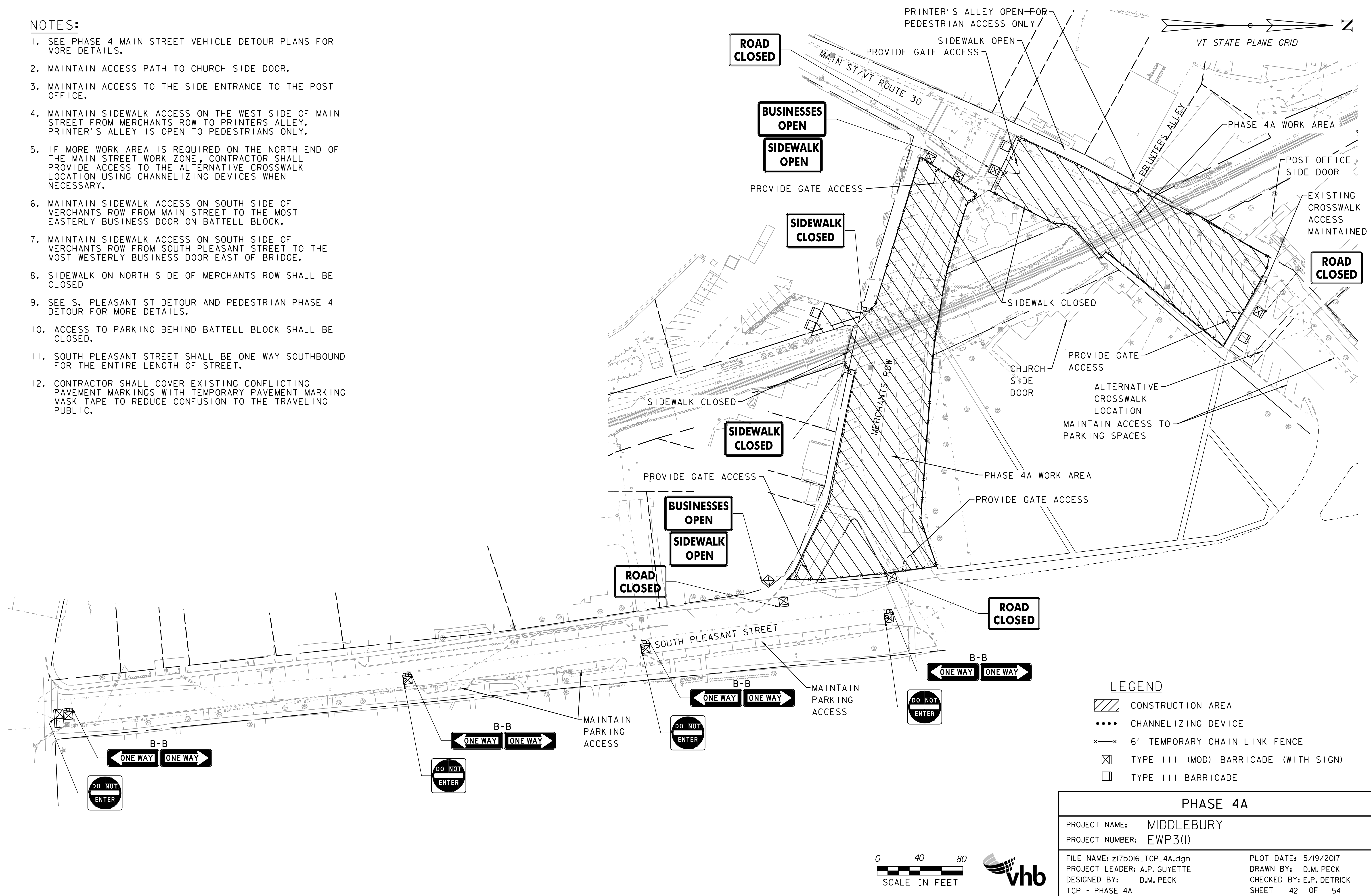
SHEET 41 OF 54





**NOTES:**

1. SEE PHASE 4 MAIN STREET VEHICLE DETOUR PLANS FOR MORE DETAILS.
2. MAINTAIN ACCESS PATH TO CHURCH SIDE DOOR.
3. MAINTAIN ACCESS TO THE SIDE ENTRANCE TO THE POST OFFICE.
4. MAINTAIN SIDEWALK ACCESS ON THE WEST SIDE OF MAIN STREET FROM MERCHANTS ROW TO PRINTERS ALLEY. PRINTER'S ALLEY IS OPEN TO PEDESTRIANS ONLY.
5. IF MORE WORK AREA IS REQUIRED ON THE NORTH END OF THE MAIN STREET WORK ZONE, CONTRACTOR SHALL PROVIDE ACCESS TO THE ALTERNATIVE CROSSWALK LOCATION USING CHANNELIZING DEVICES WHEN NECESSARY.
6. MAINTAIN SIDEWALK ACCESS ON SOUTH SIDE OF MERCHANTS ROW FROM MAIN STREET TO THE MOST EASTERLY BUSINESS DOOR ON BATTELL BLOCK.
7. MAINTAIN SIDEWALK ACCESS ON SOUTH SIDE OF MERCHANTS ROW FROM SOUTH PLEASANT STREET TO THE MOST WESTERLY BUSINESS DOOR EAST OF BRIDGE.
8. SIDEWALK ON NORTH SIDE OF MERCHANTS ROW SHALL BE CLOSED
9. SEE S. PLEASANT ST DETOUR AND PEDESTRIAN PHASE 4 DETOUR FOR MORE DETAILS.
10. ACCESS TO PARKING BEHIND BATTELL BLOCK SHALL BE CLOSED.
11. SOUTH PLEASANT STREET SHALL BE ONE WAY SOUTHBOUND FOR THE ENTIRE LENGTH OF STREET.
12. CONTRACTOR SHALL COVER EXISTING CONFLICTING PAVEMENT MARKINGS WITH TEMPORARY PAVEMENT MARKING MASK TAPE TO REDUCE CONFUSION TO THE TRAVELING PUBLIC.



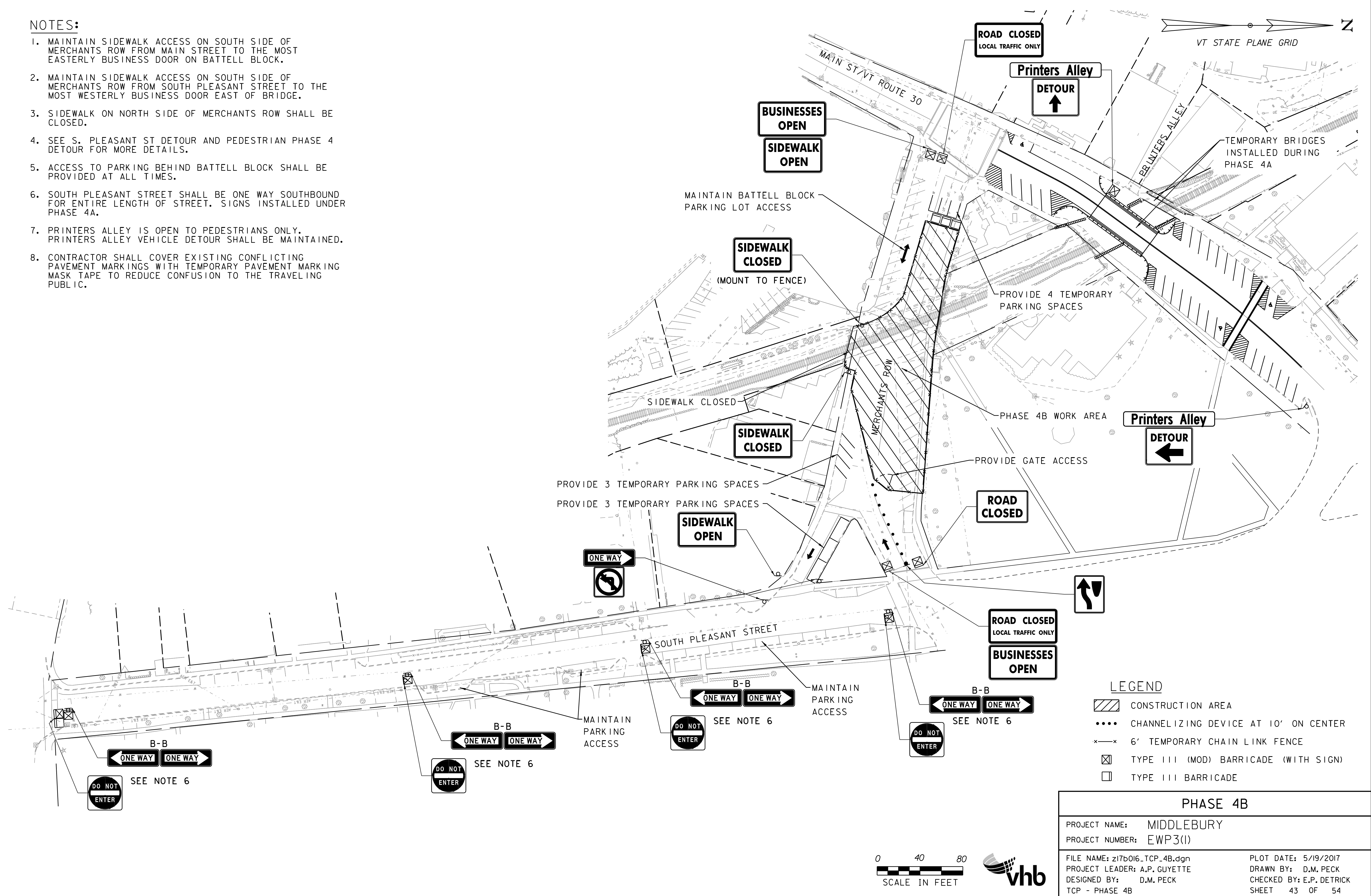
**LEGEND**

- CONSTRUCTION AREA
- CHANNELIZING DEVICE
- 6' TEMPORARY CHAIN LINK FENCE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE

PHASE 4A	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_TCP_4A.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
TCP - PHASE 4A	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	42 OF 54

**NOTES:**

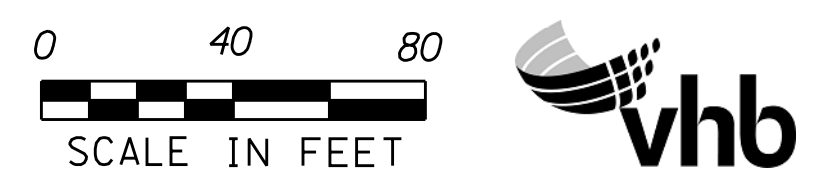
1. MAINTAIN SIDEWALK ACCESS ON SOUTH SIDE OF MERCHANTS ROW FROM MAIN STREET TO THE MOST EASTERLY BUSINESS DOOR ON BATTELL BLOCK.
2. MAINTAIN SIDEWALK ACCESS ON SOUTH SIDE OF MERCHANTS ROW FROM SOUTH PLEASANT STREET TO THE MOST WESTERLY BUSINESS DOOR EAST OF BRIDGE.
3. SIDEWALK ON NORTH SIDE OF MERCHANTS ROW SHALL BE CLOSED.
4. SEE S. PLEASANT ST DETOUR AND PEDESTRIAN PHASE 4 DETOUR FOR MORE DETAILS.
5. ACCESS TO PARKING BEHIND BATTELL BLOCK SHALL BE PROVIDED AT ALL TIMES.
6. SOUTH PLEASANT STREET SHALL BE ONE WAY SOUTHBOUND FOR ENTIRE LENGTH OF STREET. SIGNS INSTALLED UNDER PHASE 4A.
7. PRINTERS ALLEY IS OPEN TO PEDESTRIANS ONLY. PRINTERS ALLEY VEHICLE DETOUR SHALL BE MAINTAINED.
8. CONTRACTOR SHALL COVER EXISTING CONFLICTING PAVEMENT MARKINGS WITH TEMPORARY PAVEMENT MARKING MASK TAPE TO REDUCE CONFUSION TO THE TRAVELING PUBLIC.



**LEGEND**

	CONSTRUCTION AREA
	CHANNELIZING DEVICE AT 10' ON CENTER
	6' TEMPORARY CHAIN LINK FENCE
	TYPE III (MOD) BARRICADE (WITH SIGN)
	TYPE III BARRICADE

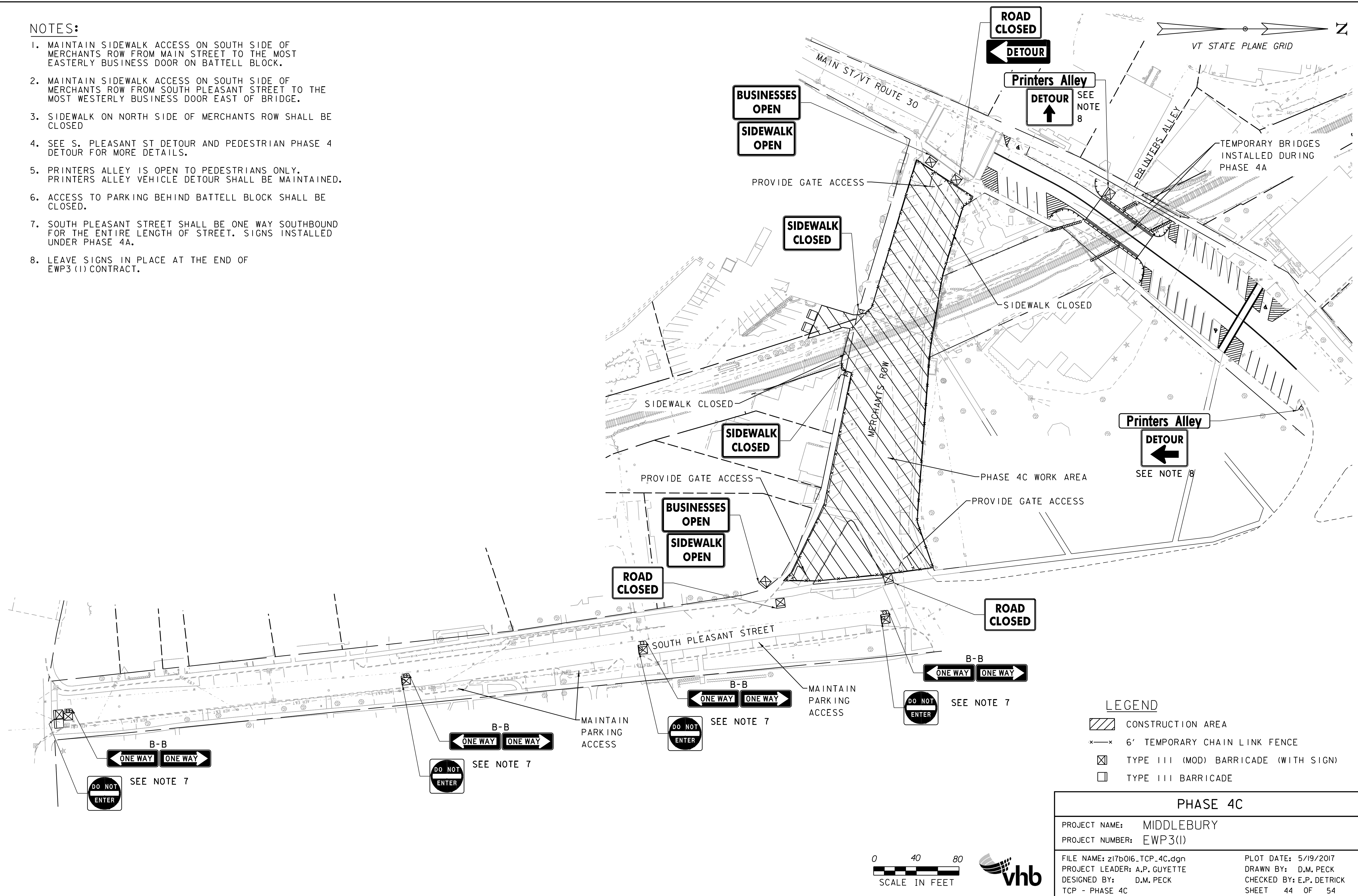
PHASE 4B	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_TCP_4B.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
TCP - PHASE 4B	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	43 OF 54





**NOTES:**

1. MAINTAIN SIDEWALK ACCESS ON SOUTH SIDE OF MERCHANTS ROW FROM MAIN STREET TO THE MOST EASTERLY BUSINESS DOOR ON BATTELL BLOCK.
2. MAINTAIN SIDEWALK ACCESS ON SOUTH SIDE OF MERCHANTS ROW FROM SOUTH PLEASANT STREET TO THE MOST WESTERLY BUSINESS DOOR EAST OF BRIDGE.
3. SIDEWALK ON NORTH SIDE OF MERCHANTS ROW SHALL BE CLOSED
4. SEE S. PLEASANT ST DETOUR AND PEDESTRIAN PHASE 4 DETOUR FOR MORE DETAILS.
5. PRINTERS ALLEY IS OPEN TO PEDESTRIANS ONLY. PRINTERS ALLEY VEHICLE DETOUR SHALL BE MAINTAINED.
6. ACCESS TO PARKING BEHIND BATTELL BLOCK SHALL BE CLOSED.
7. SOUTH PLEASANT STREET SHALL BE ONE WAY SOUTHBOUND FOR THE ENTIRE LENGTH OF STREET. SIGNS INSTALLED UNDER PHASE 4A.
8. LEAVE SIGNS IN PLACE AT THE END OF EWP3 (I) CONTRACT.



**PHASE 4C**

PROJECT NAME: MIDDLEBURY  
 PROJECT NUMBER: EWP3(I)

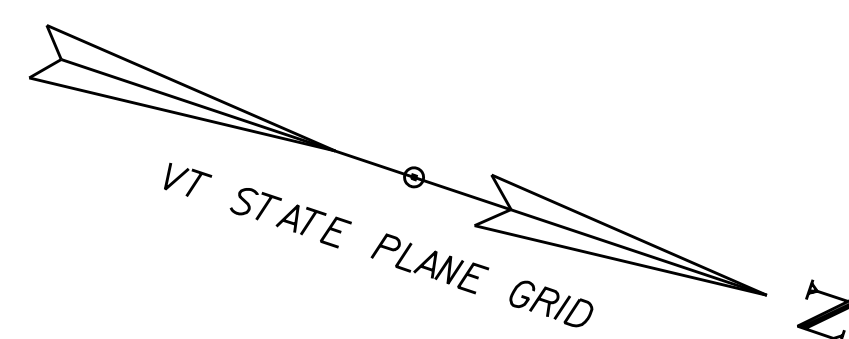
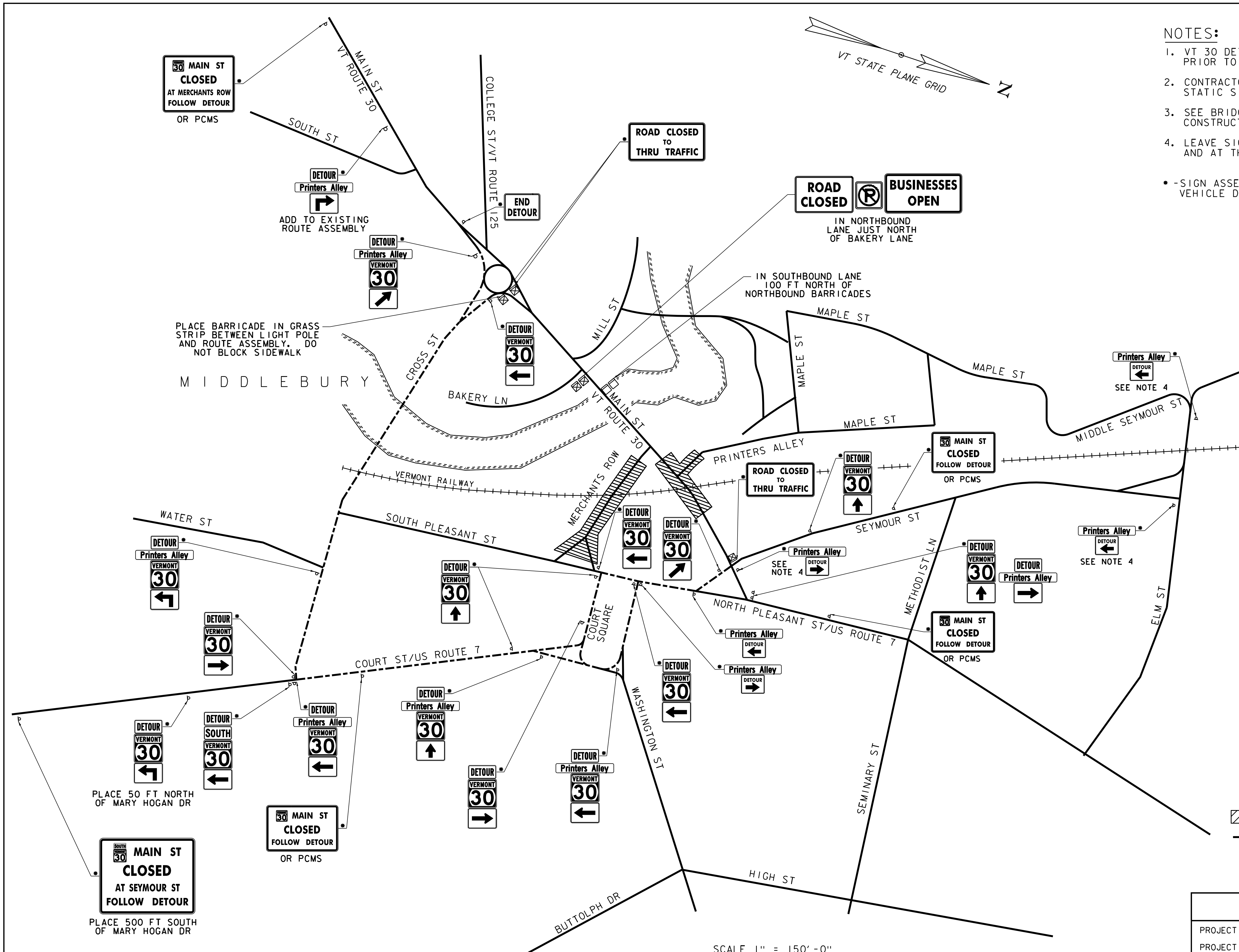
FILE NAME: z17b016-TCP_4C.dgn  
 PROJECT LEADER: A.P. GUYETTE  
 DESIGNED BY: D.M. PECK  
 TCP - PHASE 4C

PLOT DATE: 5/19/2017  
 DRAWN BY: D.M. PECK  
 CHECKED BY: E.P. DETRICK  
 SHEET 44 OF 54

**NOTES:**

1. VT 30 DETOUR SIGNS SHALL BE REMOVED OR COVERED PRIOR TO THE START OF PHASE 4B.
2. CONTRACTOR MAY ELECT TO USE PCMS IN PLACE OF STATIC SIGNS WHERE SHOWN.
3. SEE BRIDGE WORK ZONE PLANS FOR PHASE 4A CONSTRUCTION AREA DETAILS.
4. LEAVE SIGNS IN PLACE FOR THE REMAINDER OF PHASE 4 AND AT THE END OF EWP3 (I) CONTRACT.

* -SIGN ASSEMBLY INSTALLED UNDER PHASE 3 MAIN STREET VEHICLE DETOUR



PLACE BARRICADE IN GRASS STRIP BETWEEN LIGHT POLE AND ROUTE ASSEMBLY. DO NOT BLOCK SIDEWALK

IN SOUTHBOUND LANE 100 FT NORTH OF NORTHBOUND BARRICADES

**ROAD CLOSED** **BUSINESSES OPEN**  
IN NORTHBOUND LANE JUST NORTH OF BAKERY LANE

Printers Alley  
SEE NOTE 4

**ROAD CLOSED TO THRU TRAFFIC**

**30 MAIN ST CLOSED**  
FOLLOW DETOUR OR PCMS

Printers Alley  
SEE NOTE 4

**30 DETOUR VERMONT**  
↑

**30 MAIN ST CLOSED**  
FOLLOW DETOUR OR PCMS

Printers Alley  
SEE NOTE 4

**30 DETOUR VERMONT**  
↑

**30 MAIN ST CLOSED**  
FOLLOW DETOUR OR PCMS

**30 DETOUR VERMONT**  
←

**30 DETOUR VERMONT**  
→

**30 DETOUR VERMONT**  
←

**30 DETOUR VERMONT**  
←

**30 DETOUR VERMONT**  
←

**30 DETOUR VERMONT**  
↑

**30 DETOUR VERMONT**  
→

**30 DETOUR VERMONT**  
←

**30 DETOUR VERMONT**  
↑

**30 DETOUR VERMONT**  
→

**30 DETOUR VERMONT**  
←

**30 DETOUR VERMONT**  
→

**30 MAIN ST CLOSED**  
FOLLOW DETOUR OR PCMS

**30 MAIN ST CLOSED**  
FOLLOW DETOUR

SCALE 1" = 150'-0"  
150 0 150

**LEGEND**

- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE

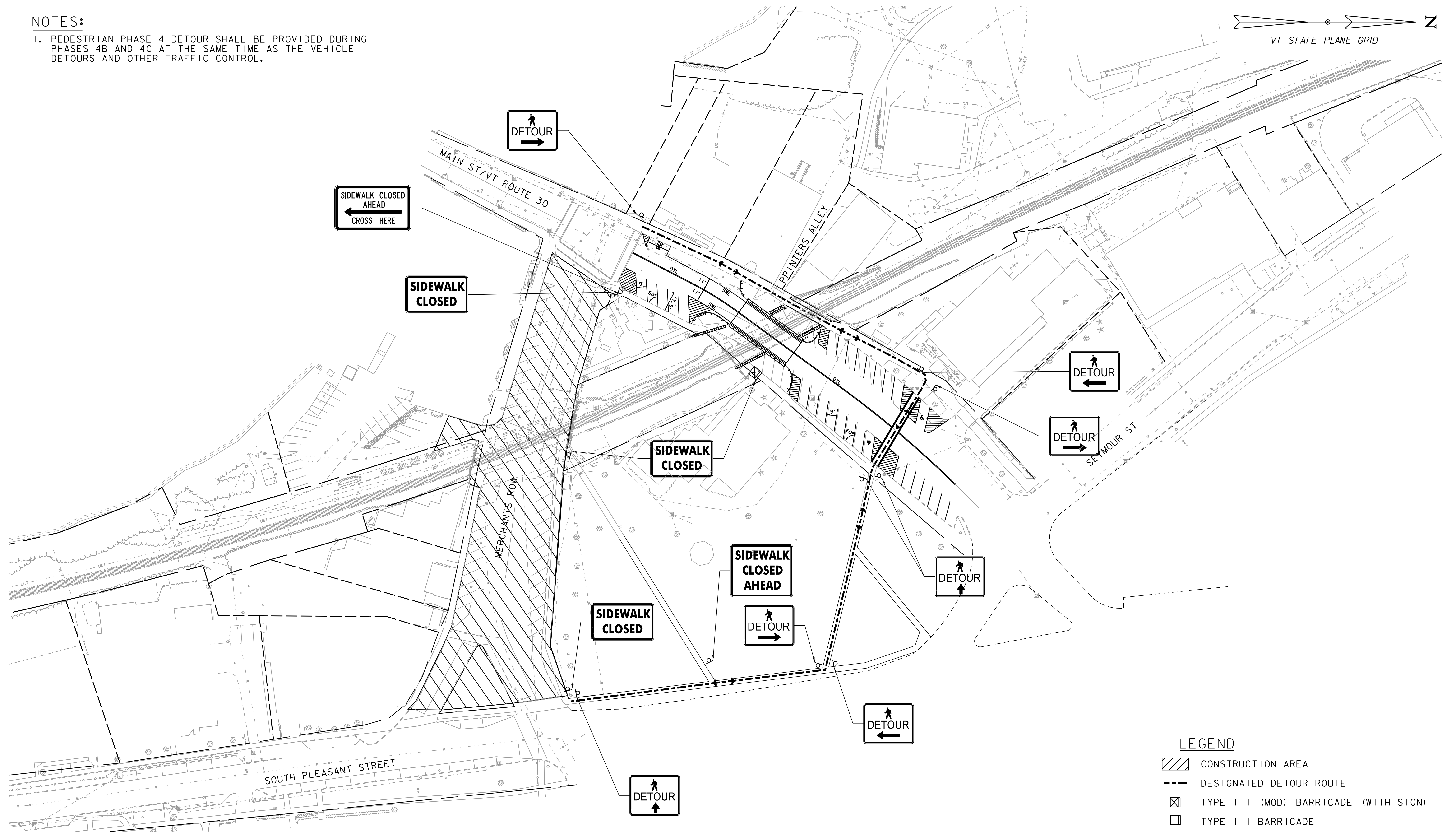
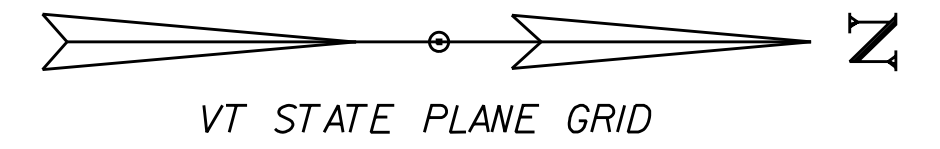
PHASE 4 - VEHICLE DETOUR	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_TCP_4MainSt.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
TCR - PHASE 4 - VEHICLE DETOUR	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	45 OF 54



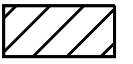





**NOTES:**

1. PEDESTRIAN PHASE 4 DETOUR SHALL BE PROVIDED DURING PHASES 4B AND 4C AT THE SAME TIME AS THE VEHICLE DETOURS AND OTHER TRAFFIC CONTROL.



**LEGEND**

-  CONSTRUCTION AREA
-  DESIGNATED DETOUR ROUTE
-  TYPE III (MOD) BARRICADE (WITH SIGN)
-  TYPE III BARRICADE

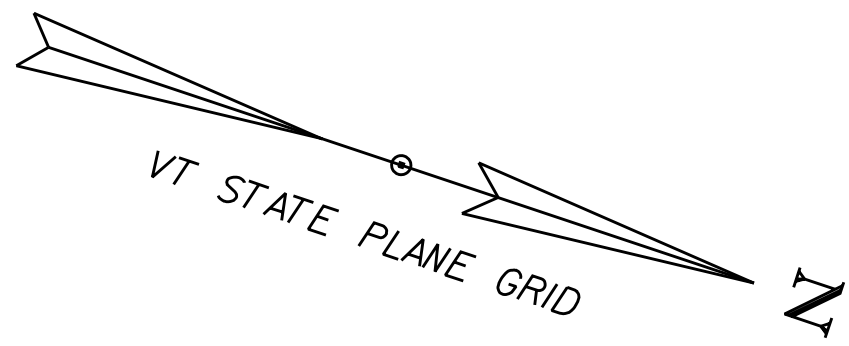
**PHASE 4 PEDESTRIAN DETOUR**

PROJECT NAME: MIDDLEBURY  
 PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_TCP_4Ped.dgn  
 PROJECT LEADER: A.P. GUYETTE  
 DESIGNED BY: D.M. PECK  
 TCP - PHASE 4 - PEDESTRIAN DETOUR

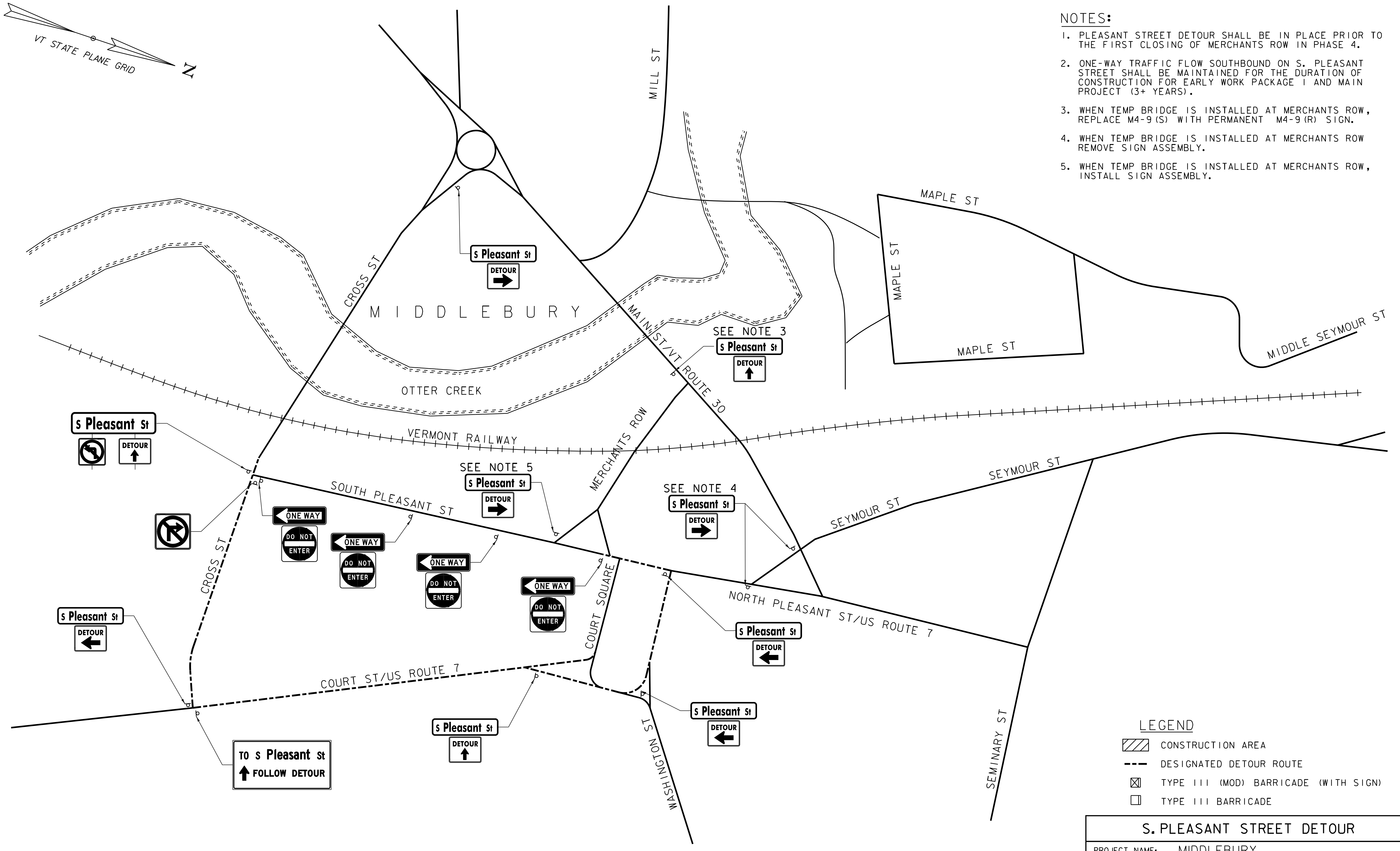
PLOT DATE: 5/19/2017  
 DRAWN BY: D.M. PECK  
 CHECKED BY: E.P. DETRICK  
 SHEET 46 OF 54





**NOTES:**

1. PLEASANT STREET DETOUR SHALL BE IN PLACE PRIOR TO THE FIRST CLOSING OF MERCHANTS ROW IN PHASE 4.
2. ONE-WAY TRAFFIC FLOW SOUTHBOUND ON S. PLEASANT STREET SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION FOR EARLY WORK PACKAGE 1 AND MAIN PROJECT (3+ YEARS).
3. WHEN TEMP BRIDGE IS INSTALLED AT MERCHANTS ROW, REPLACE M4-9 (S) WITH PERMANENT M4-9 (R) SIGN.
4. WHEN TEMP BRIDGE IS INSTALLED AT MERCHANTS ROW REMOVE SIGN ASSEMBLY.
5. WHEN TEMP BRIDGE IS INSTALLED AT MERCHANTS ROW, INSTALL SIGN ASSEMBLY.

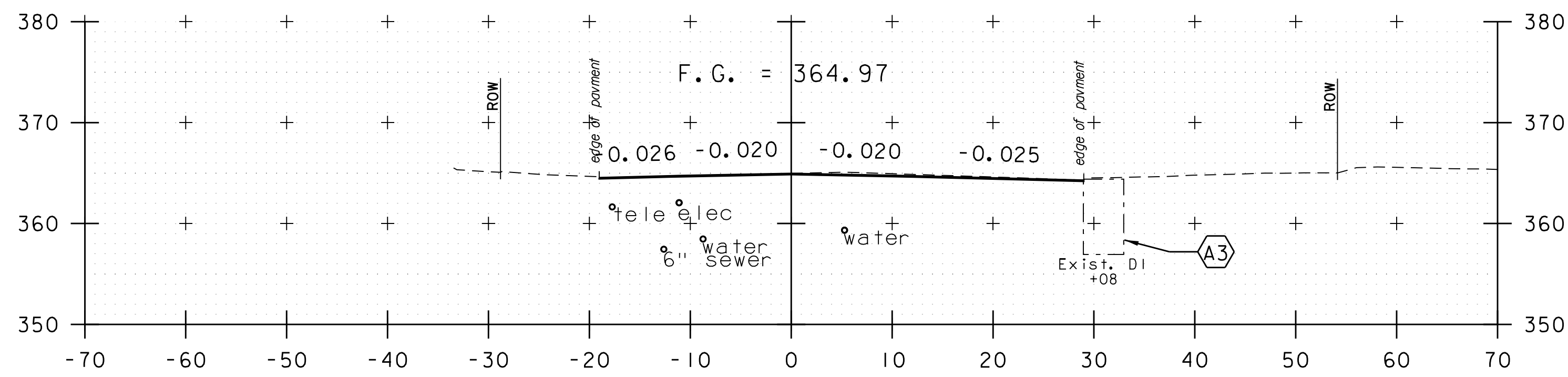


**LEGEND**

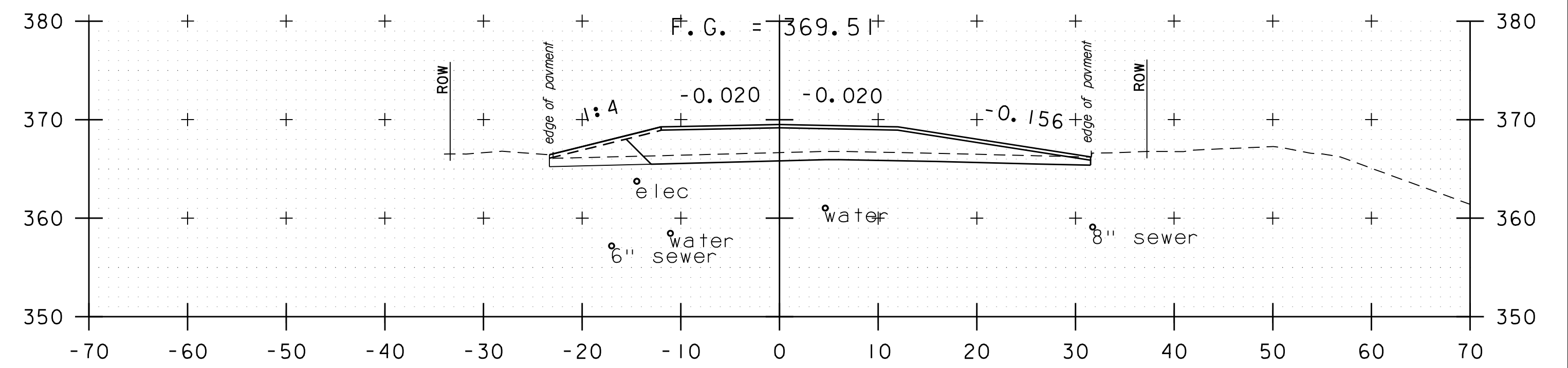
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE

S. PLEASANT STREET DETOUR	
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_TCP_S.PleasantSt.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
TCP - S. PLEASANT STREET DETOUR	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	47 OF 54

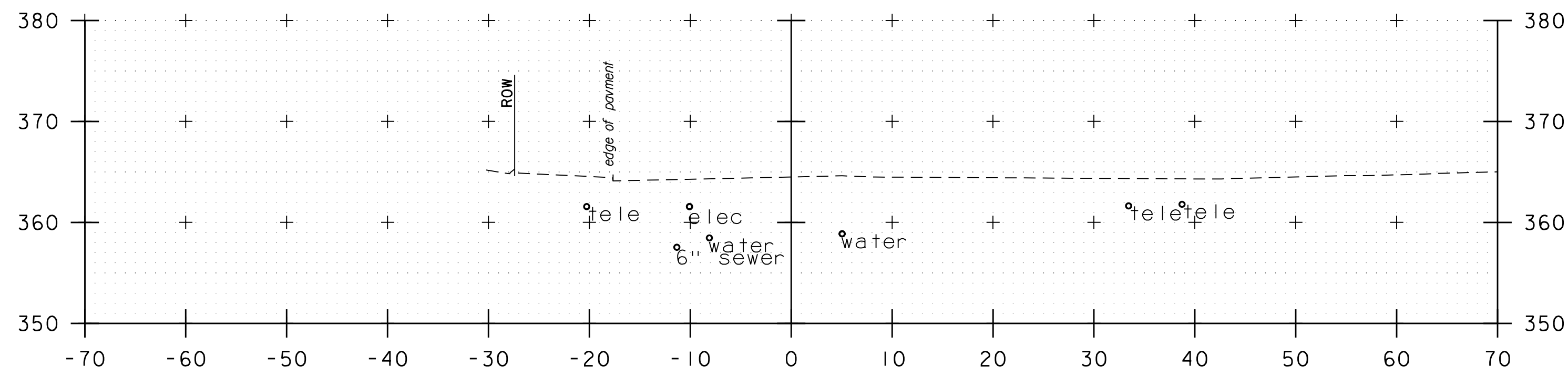




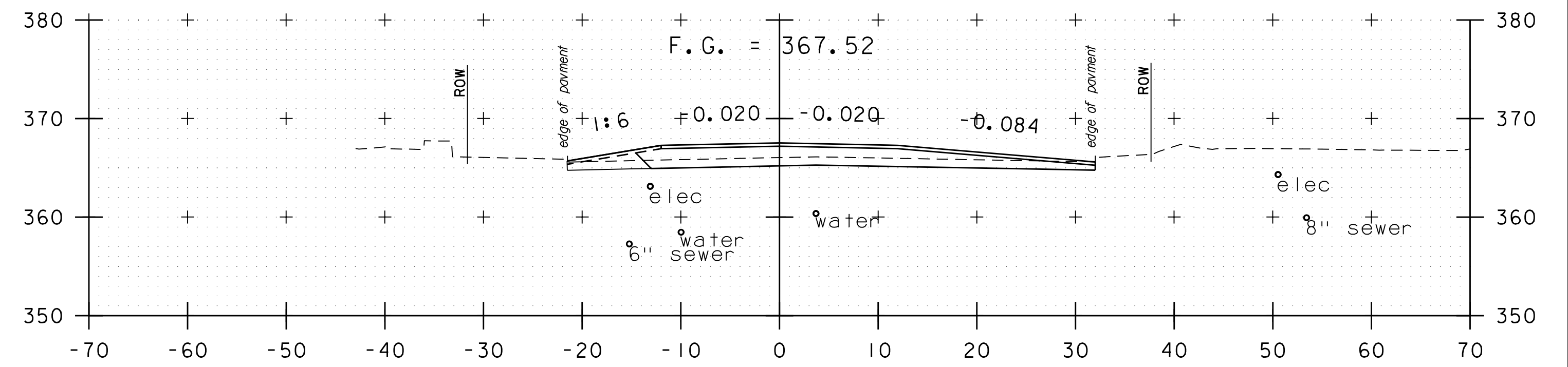
10+00



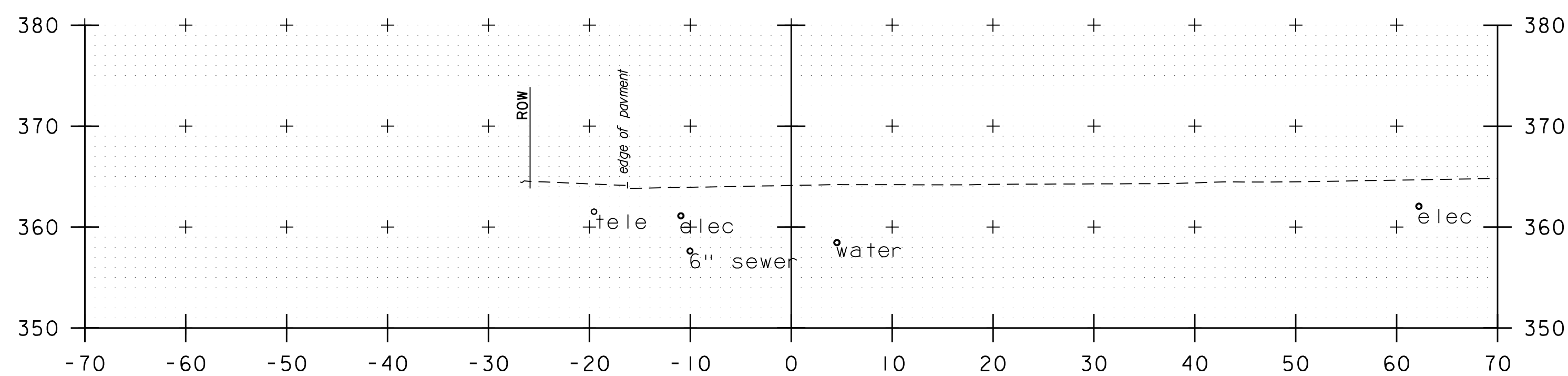
10+75



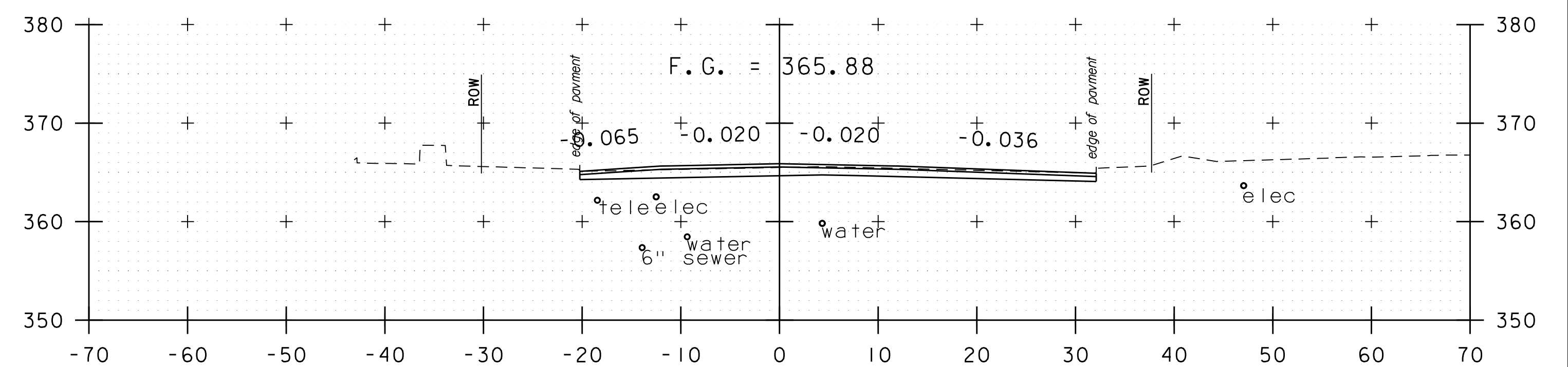
9+75



10+50



9+50

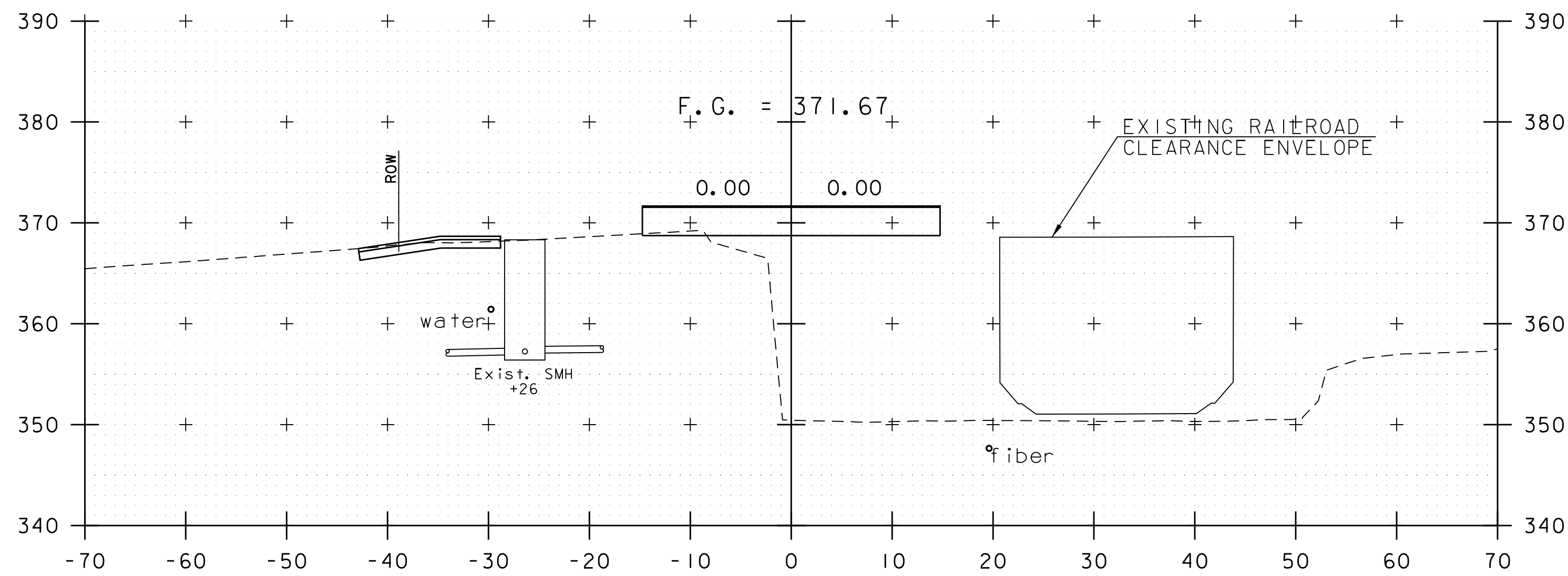


10+25

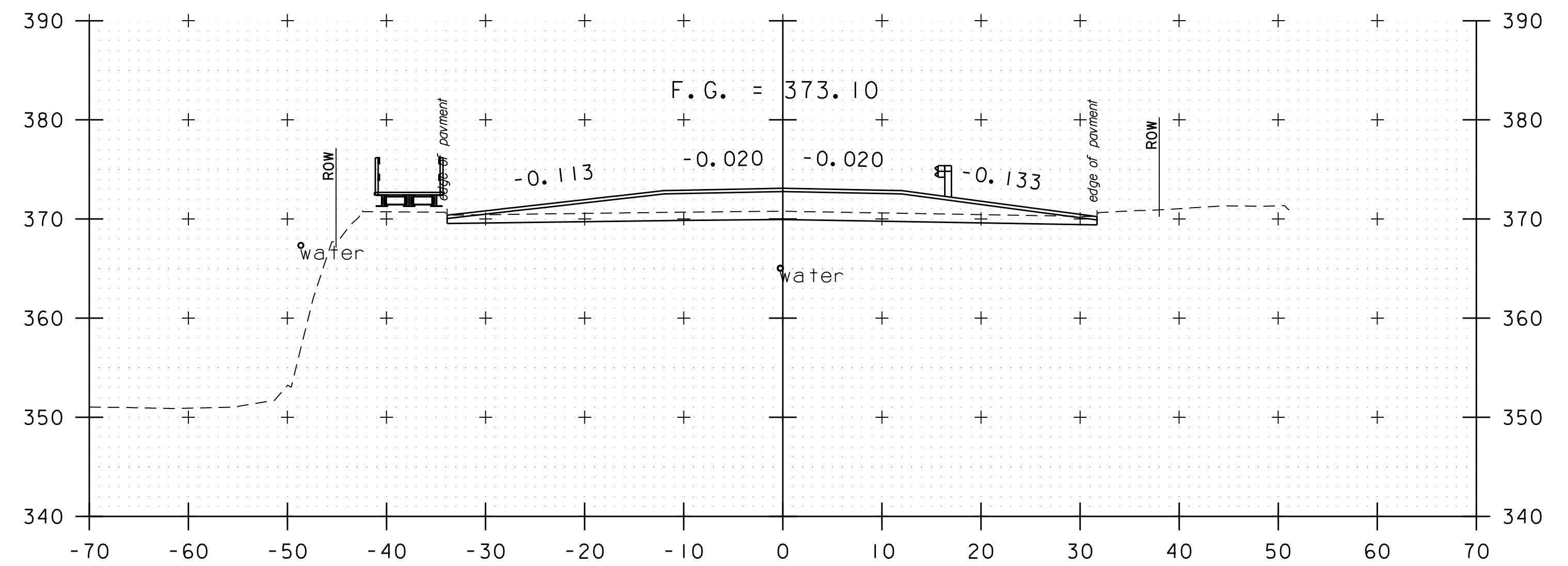
MAIN STREET

PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016-MAIN.XS.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	B.M. ROBERTS
CROSS SECTION (SHEET 1 OF 7)	
PLOT DATE:	5/19/2017
DRAWN BY:	B.M. ROBERTS
CHECKED BY:	E.P. DETRICK
SHEET	48 OF 54

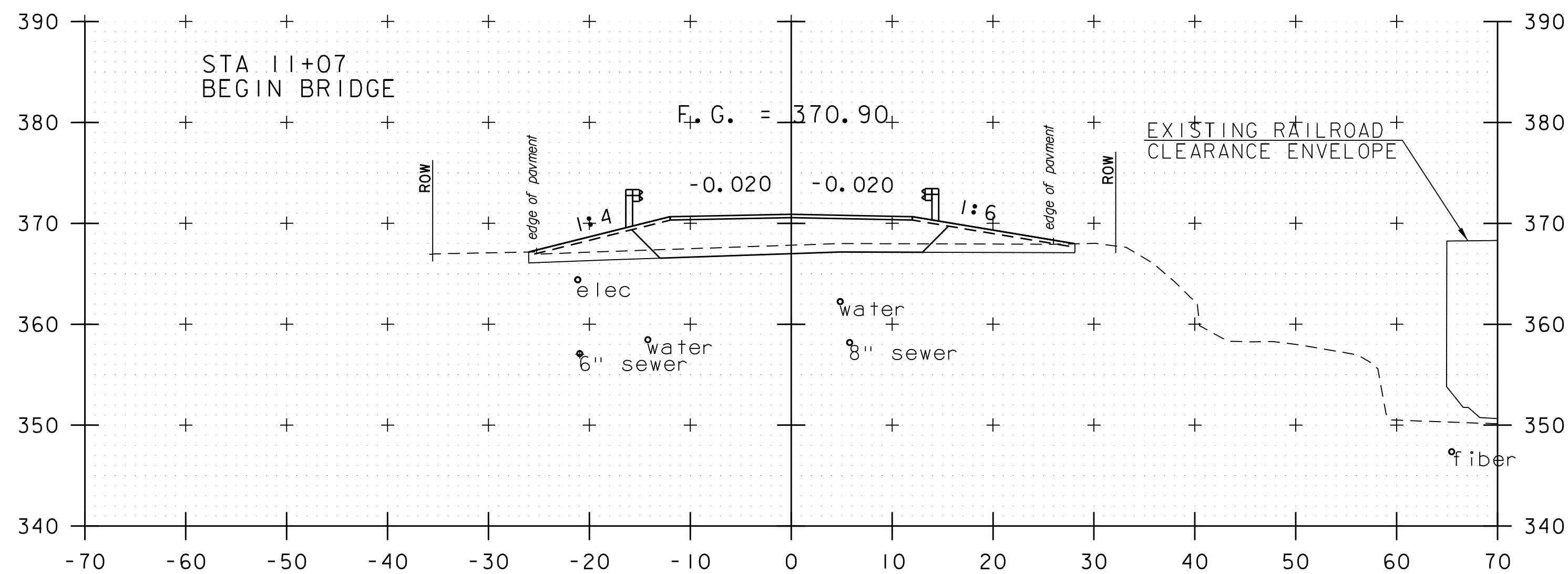




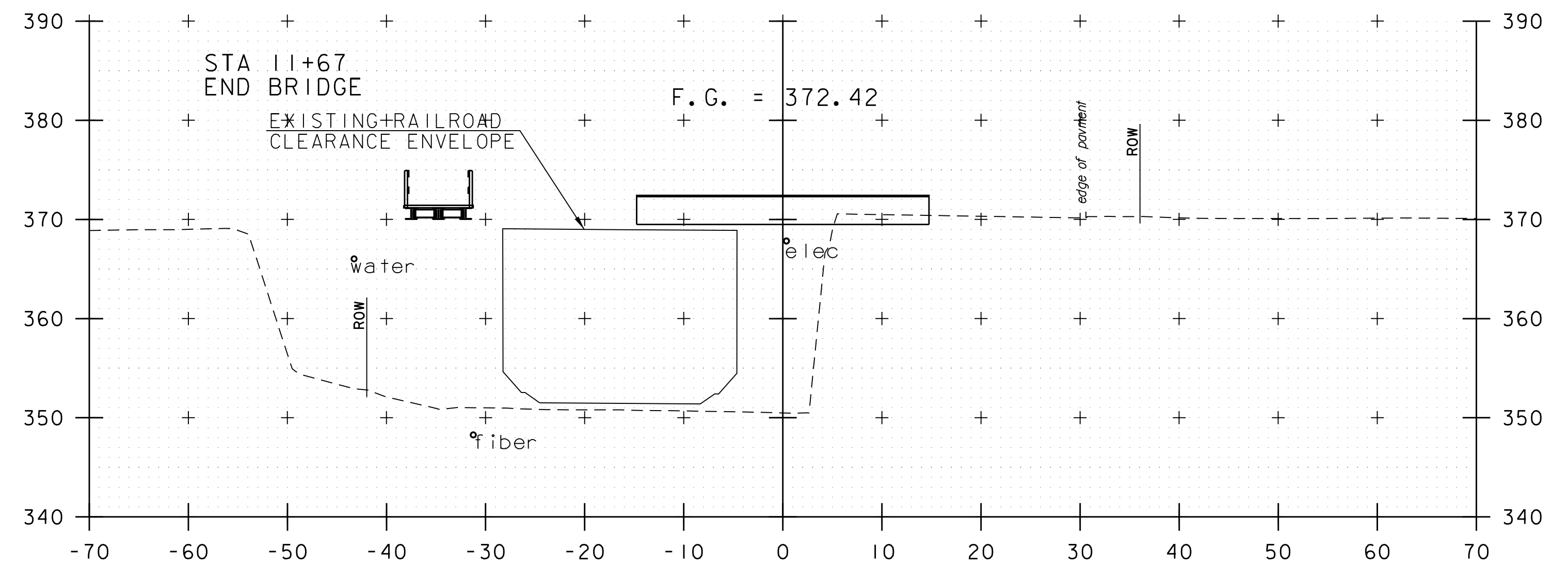
11+25



11+75



11+00



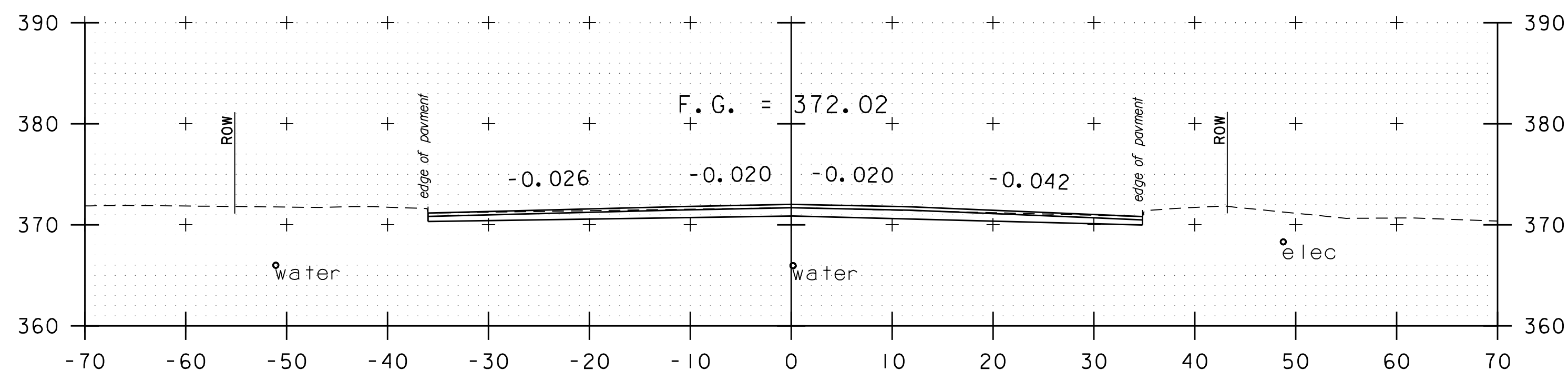
11+50

MAIN STREET

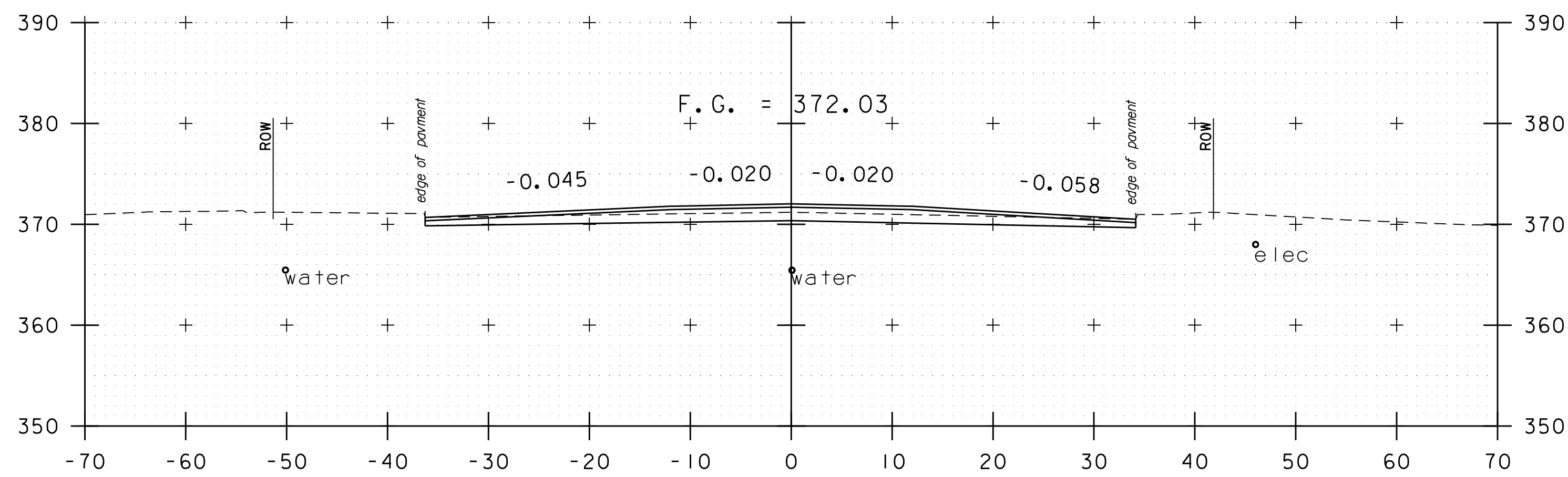
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_MAIN_XS.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	B.M. ROBERTS
CROSS SECTION (SHEET 2 OF 7)	
PLOT DATE:	5/19/2017
DRAWN BY:	B.M. ROBERTS
CHECKED BY:	E.P. DETRICK
SHEET	49 OF 54



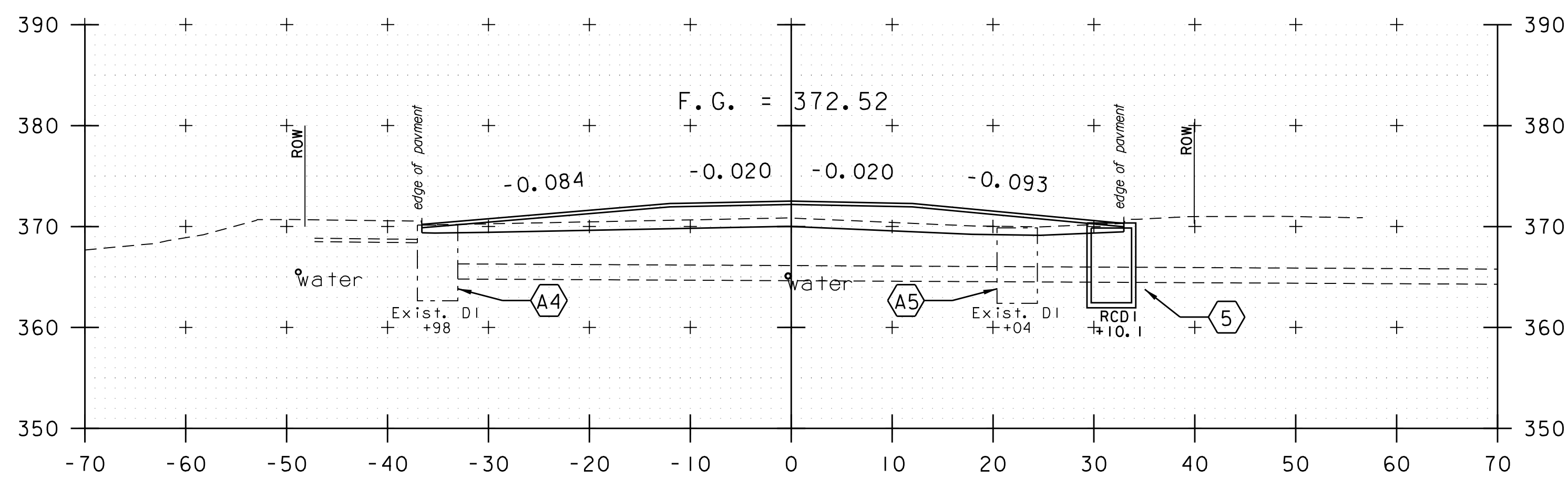




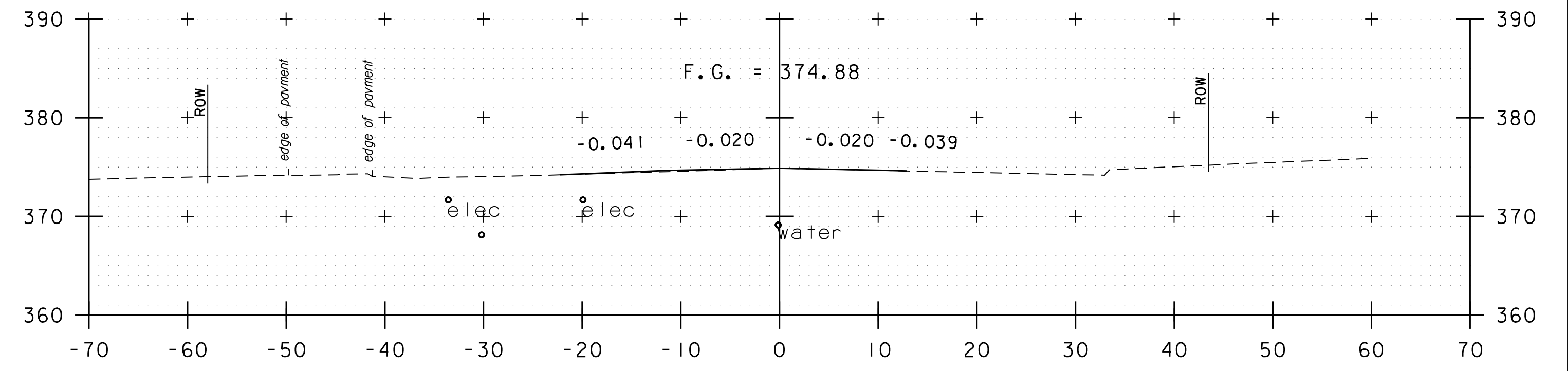
12+50



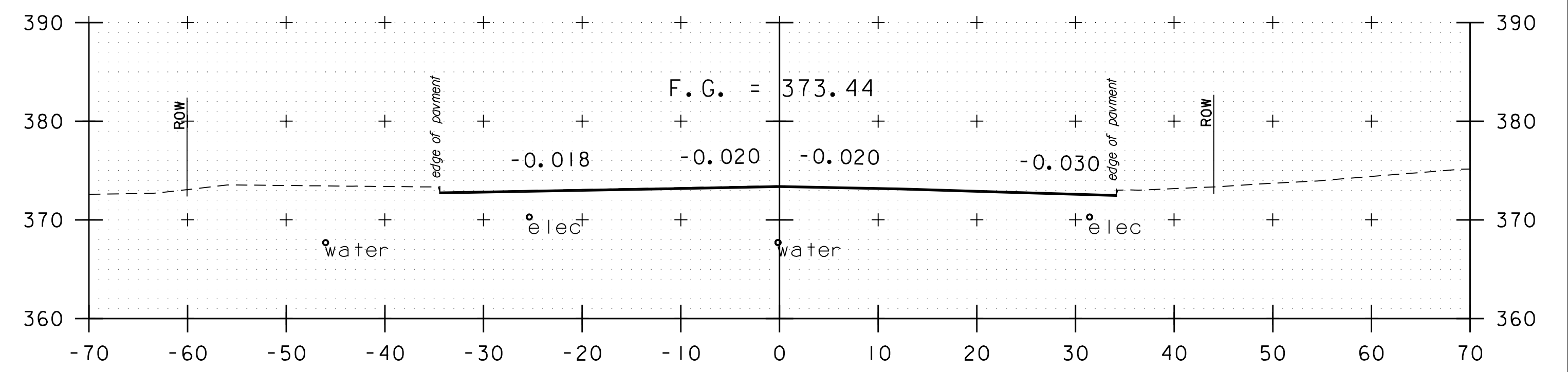
12+25



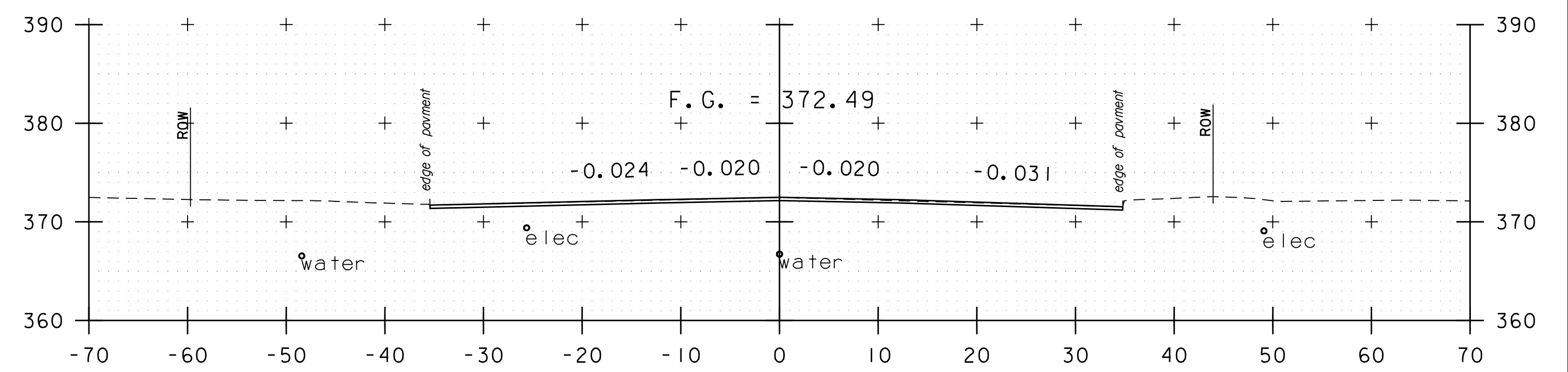
12+00



13+25



13+00



12+75

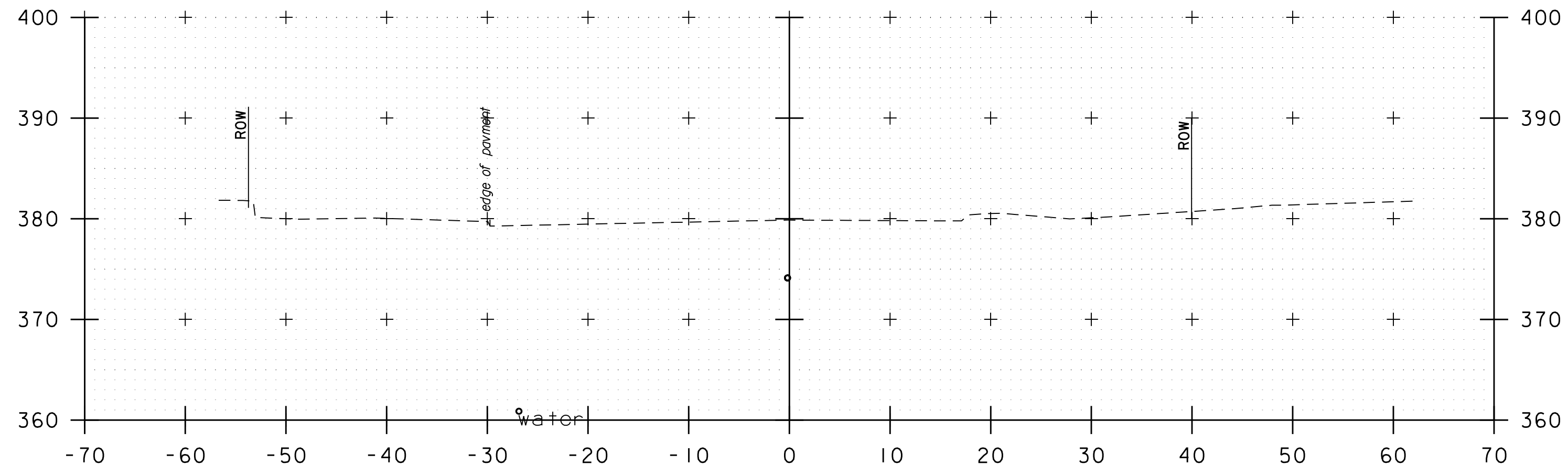
MAIN STREET

PROJECT NAME: MIDDLEBURY  
PROJECT NUMBER: EWP3(I)

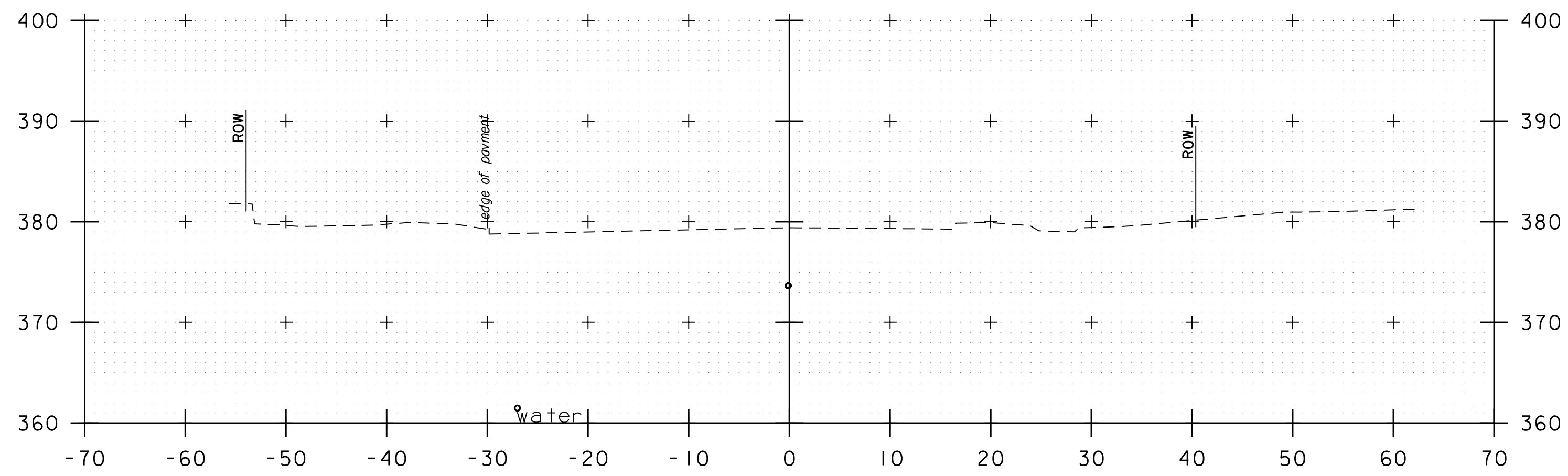
FILE NAME: z17b016.MAIN.XS.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: B.M. ROBERTS  
CROSS SECTION (SHEET 3 OF 7)



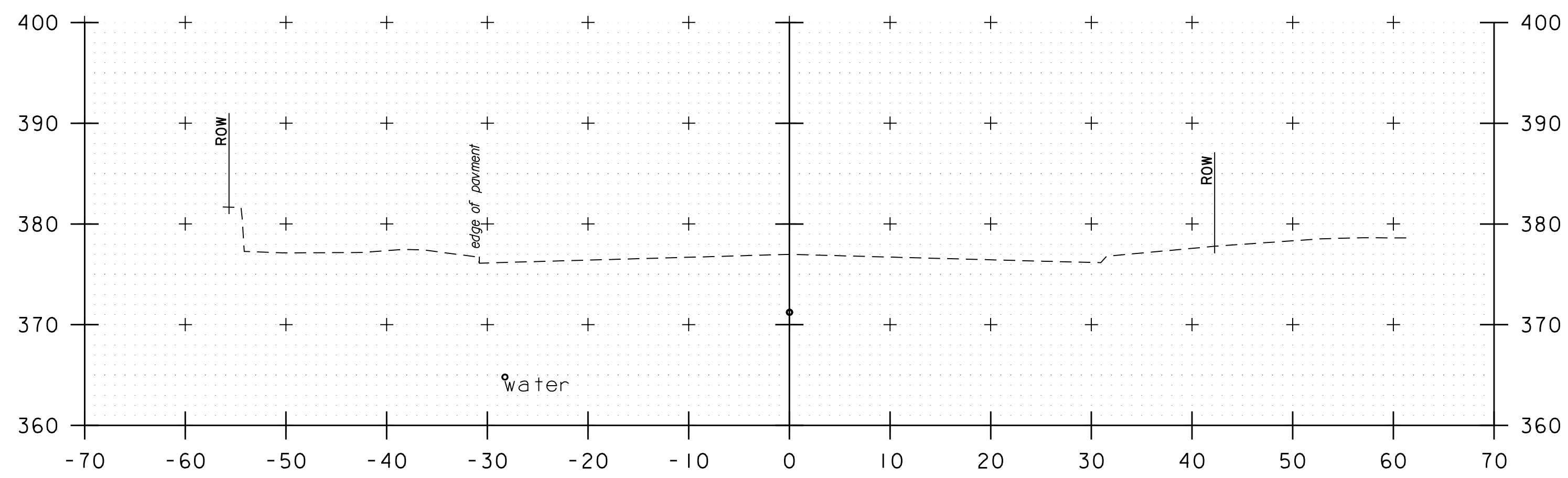
PLOT DATE: 5/19/2017  
DRAWN BY: B.M. ROBERTS  
CHECKED BY: E.P. DETRICK  
SHEET 50 OF 54



13+80



13+75



13+50

MAIN STREET

PROJECT NAME: MIDDLEBURY

PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_MAIN_XS.dgn

PROJECT LEADER: A.P. GUYETTE

DESIGNED BY: B.M. ROBERTS

CROSS SECTION (SHEET 4 OF 7)

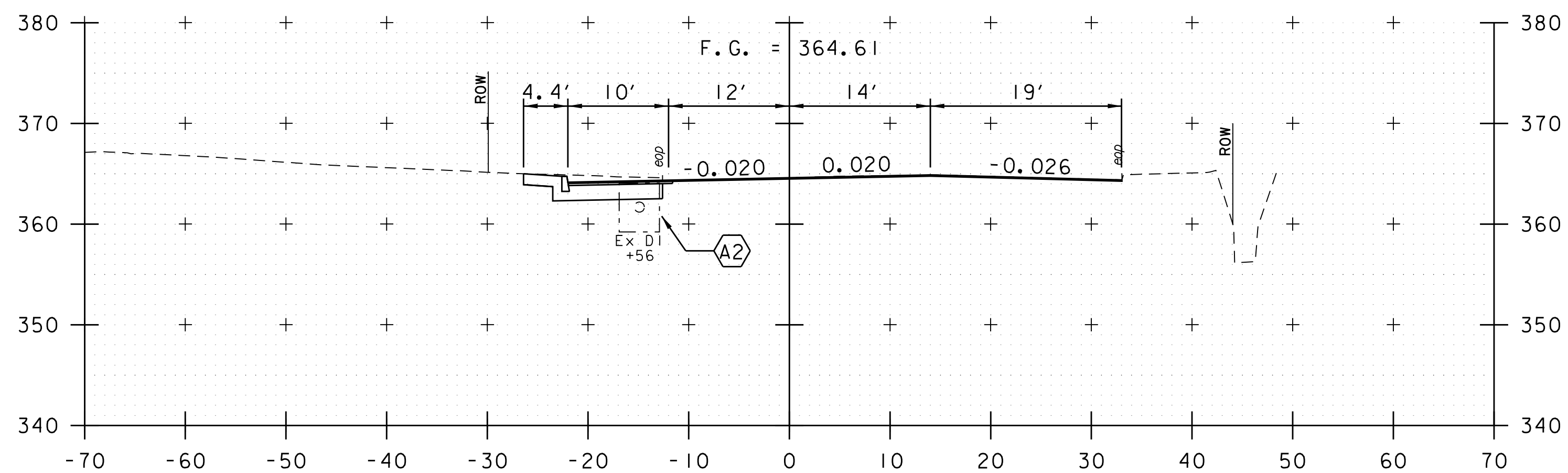
PLOT DATE: 5/19/2017

DRAWN BY: B.M. ROBERTS

CHECKED BY: E.P. DETRICK

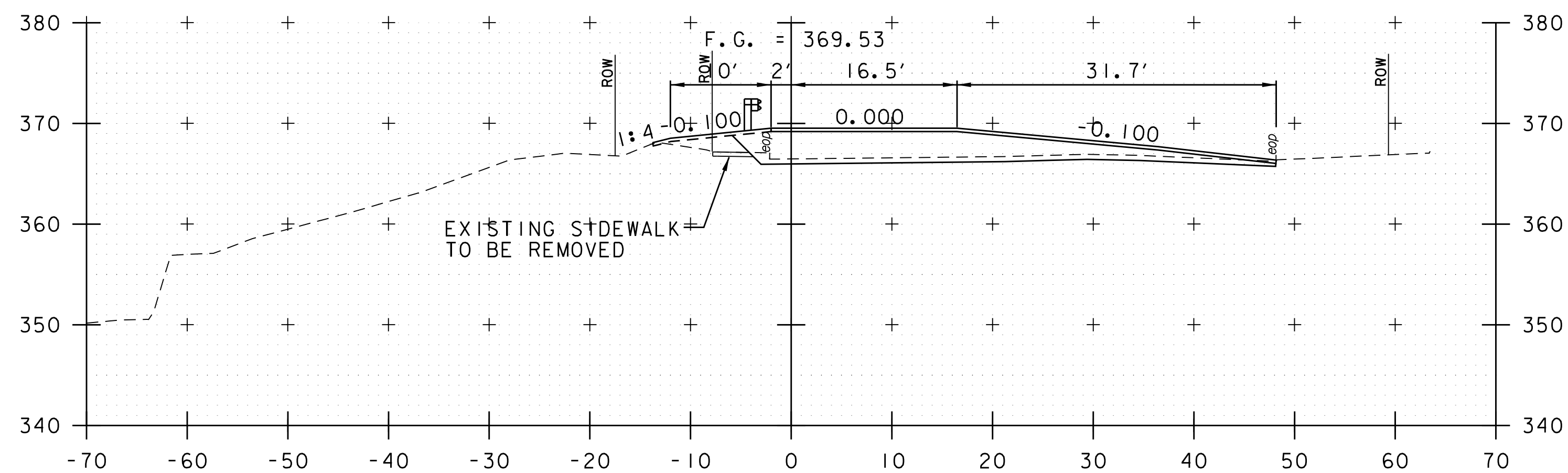
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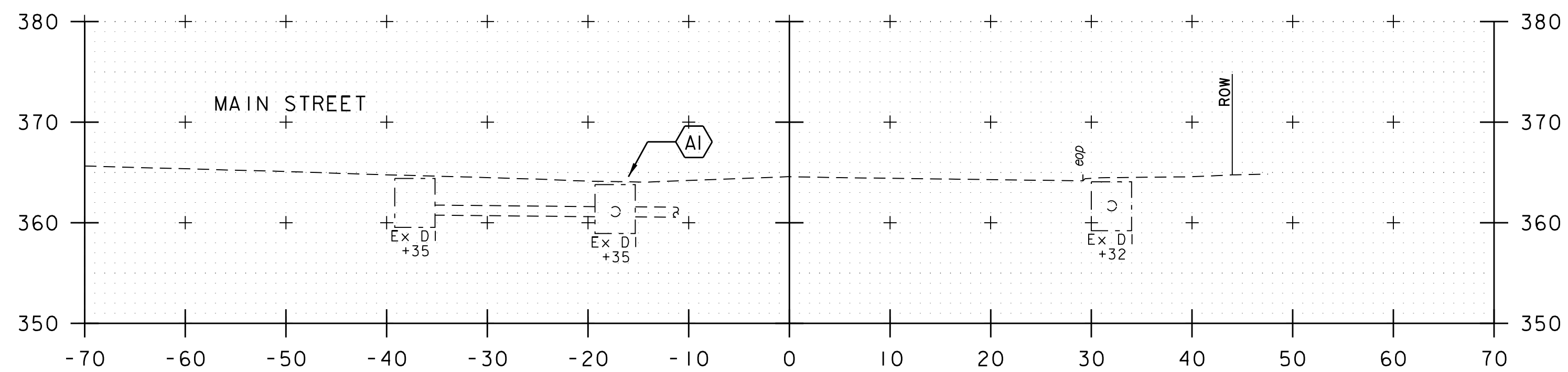


STA. 20+35.00  
BEGIN PROJECT

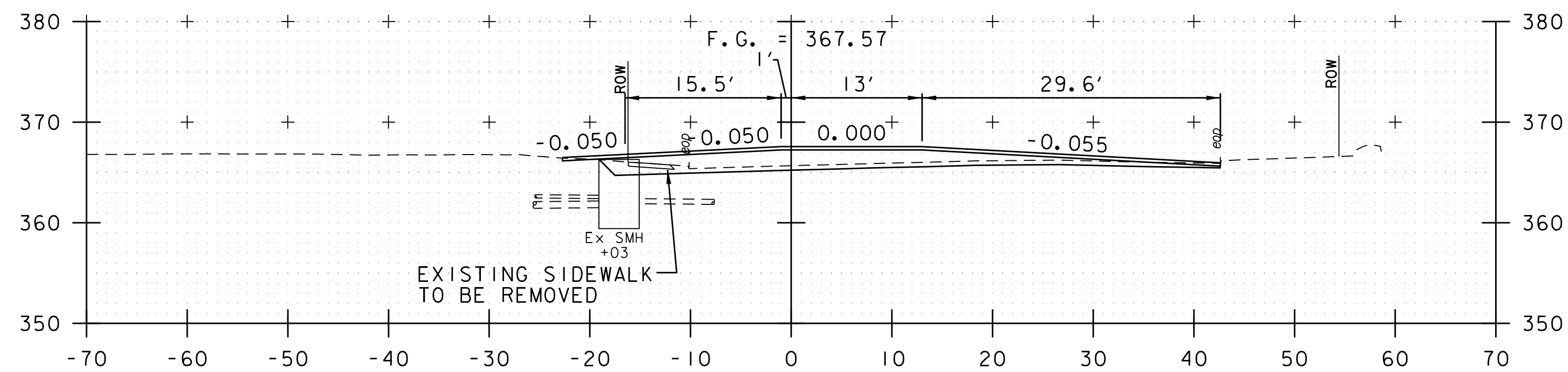
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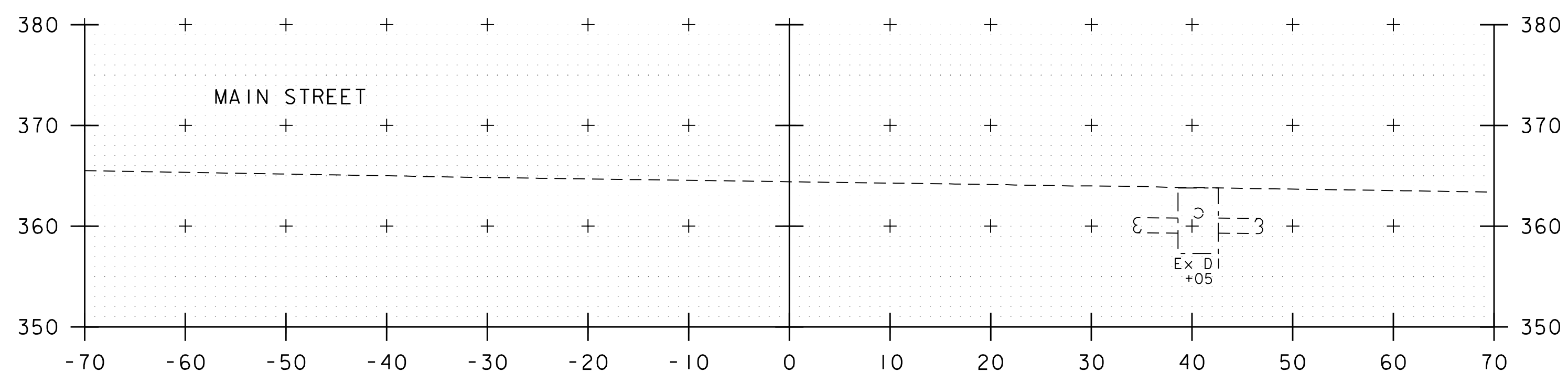
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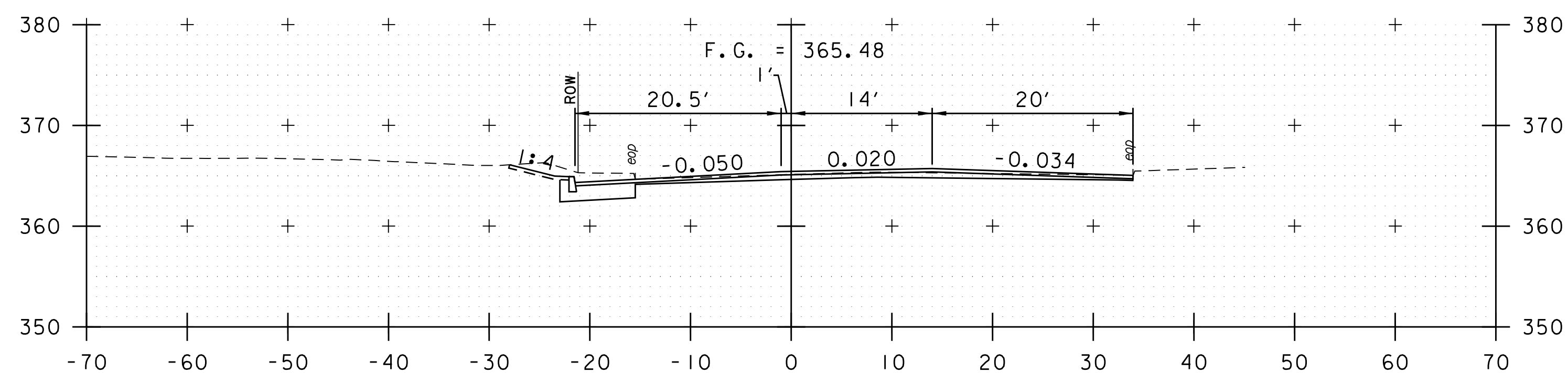
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21+00



20+00



20+75

MERCHANTS ROW

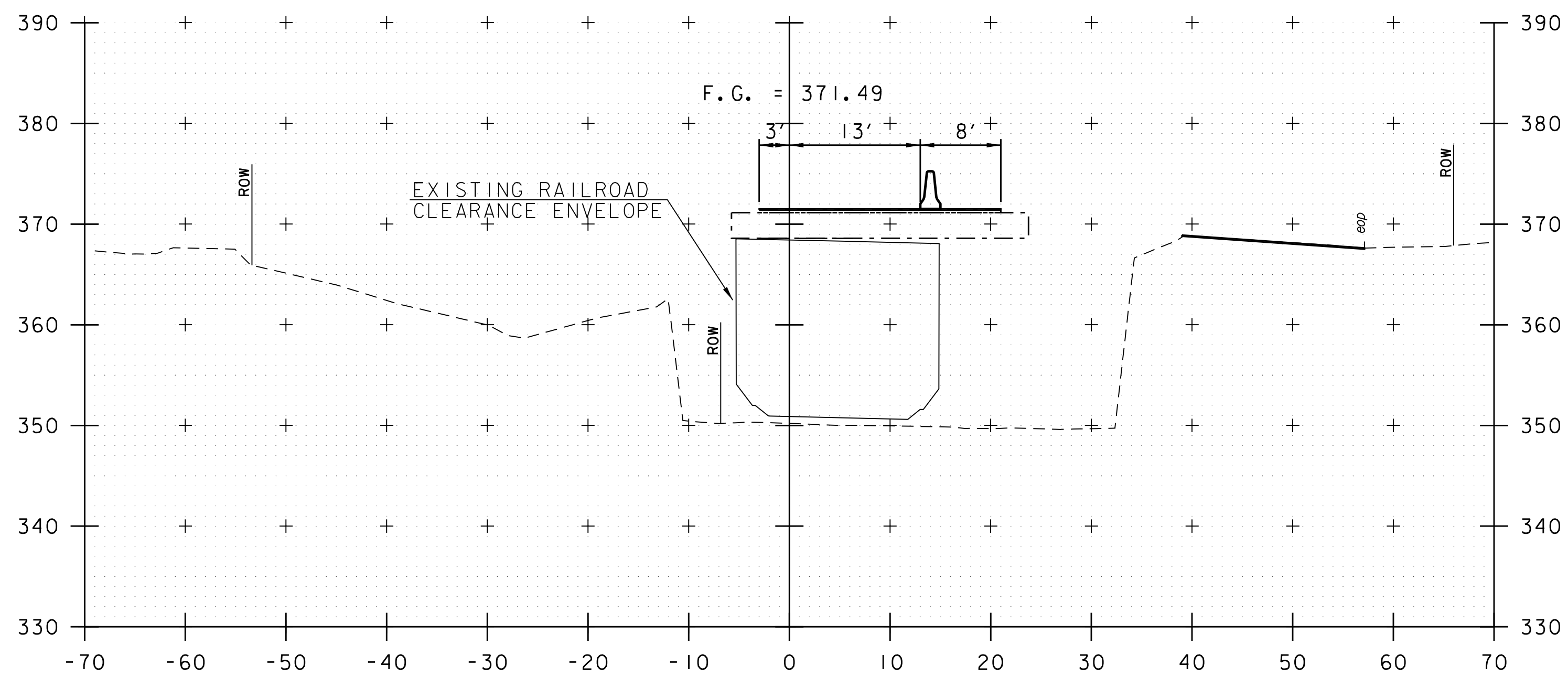
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PROJECT NUMBER: EWP3(I)

FILE NAME: z17b016_MERCHANTS.XS.dgn  
PROJECT LEADER: A.P. GUYETTE  
DESIGNED BY: D.M. PECK  
CROSS SECTIONS (SHEET 5 OF 7)

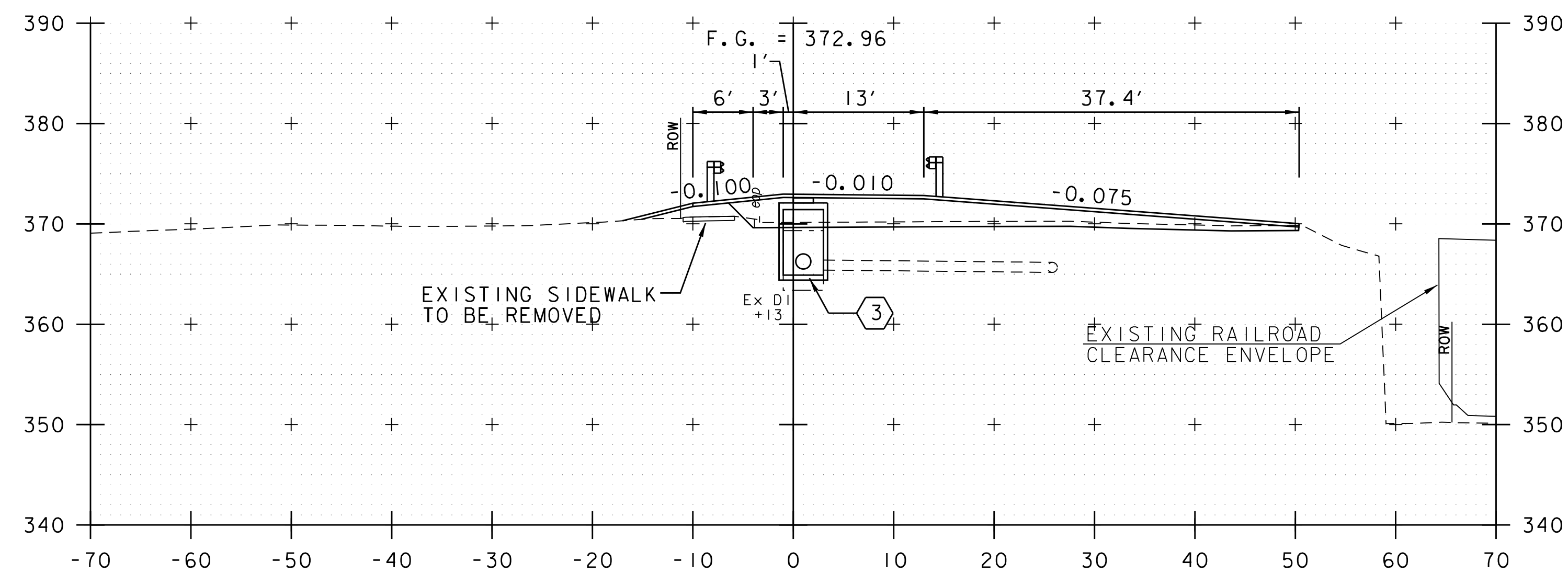
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DRAWN BY: D.M. PECK  
CHECKED BY: E.P. DETRICK  
SHEET 52 OF 54



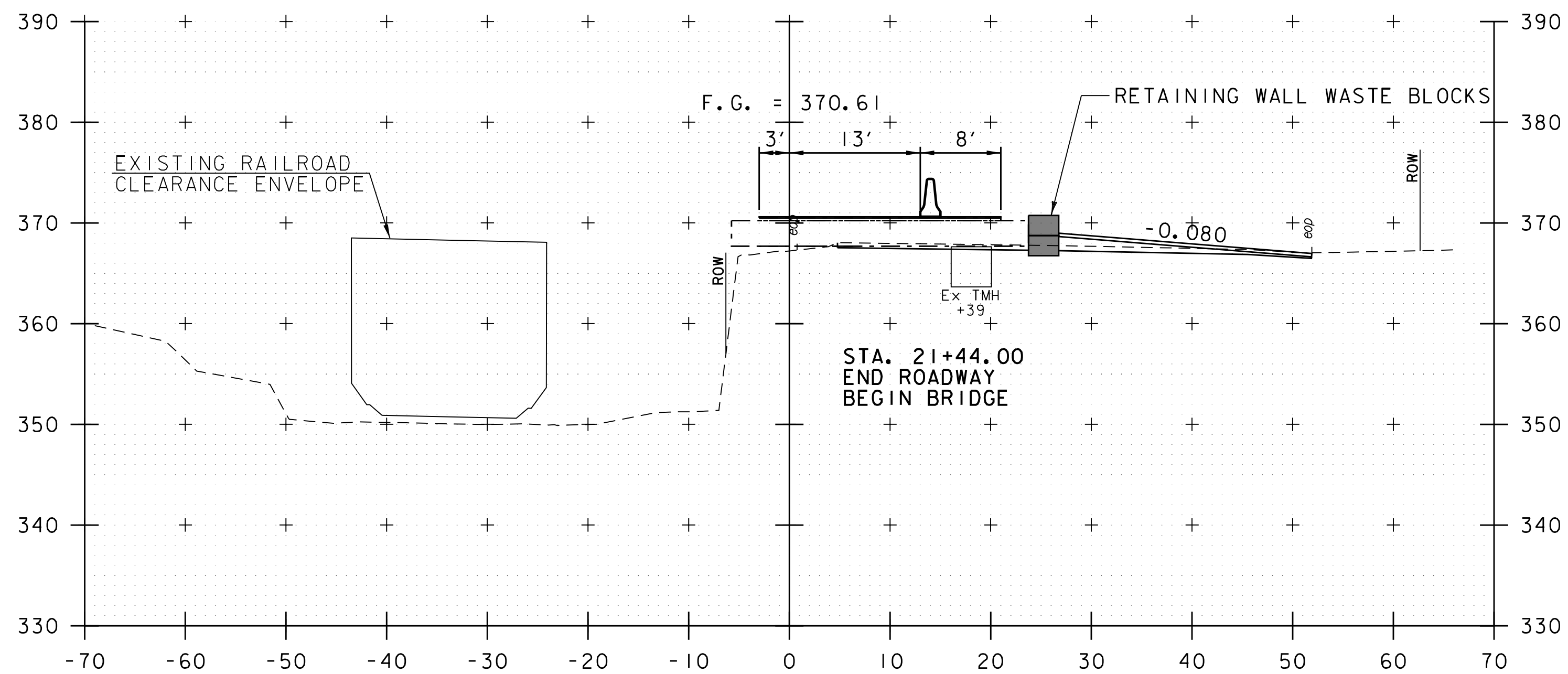




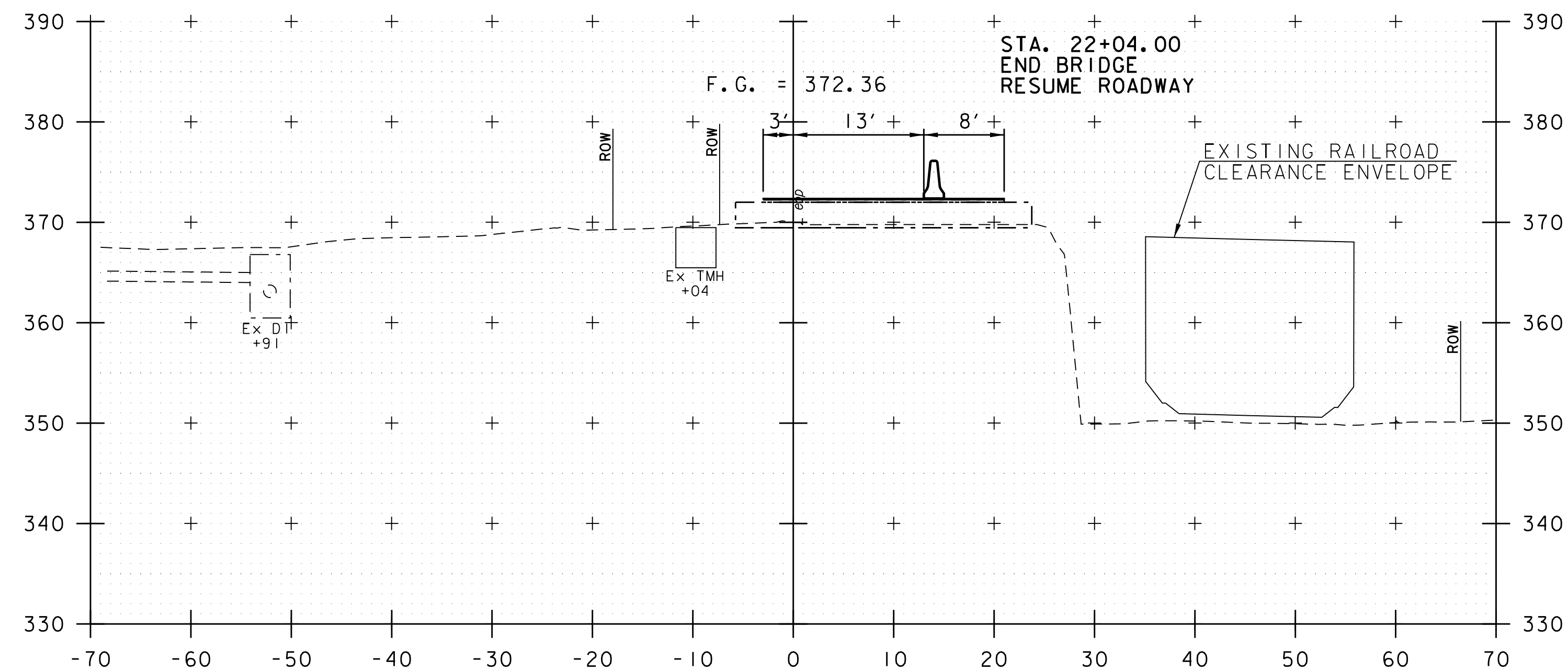
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22+25



21+50

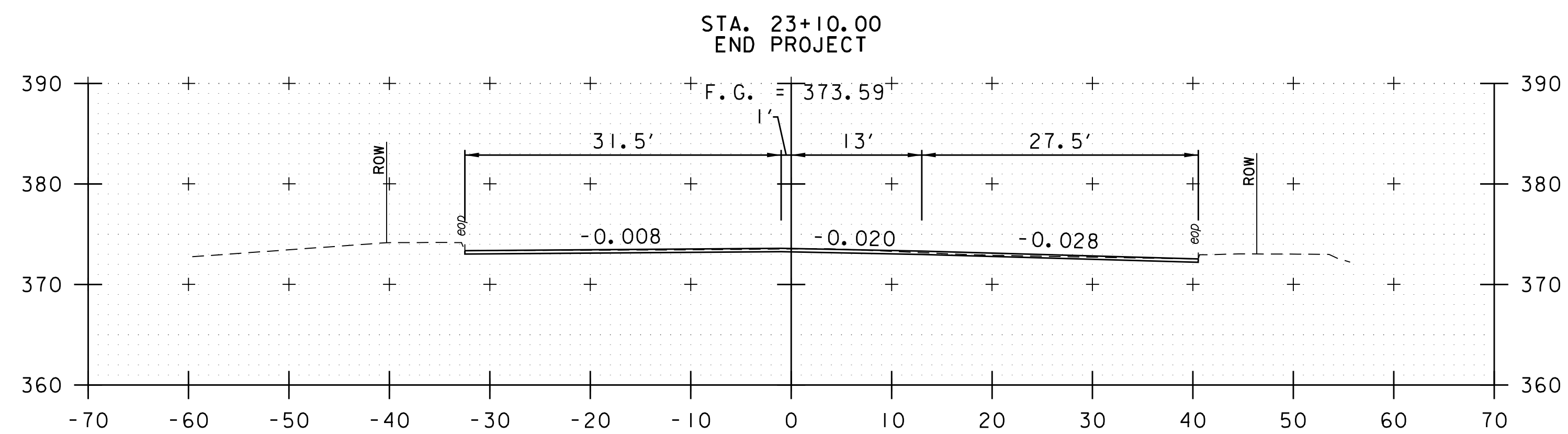


22+00

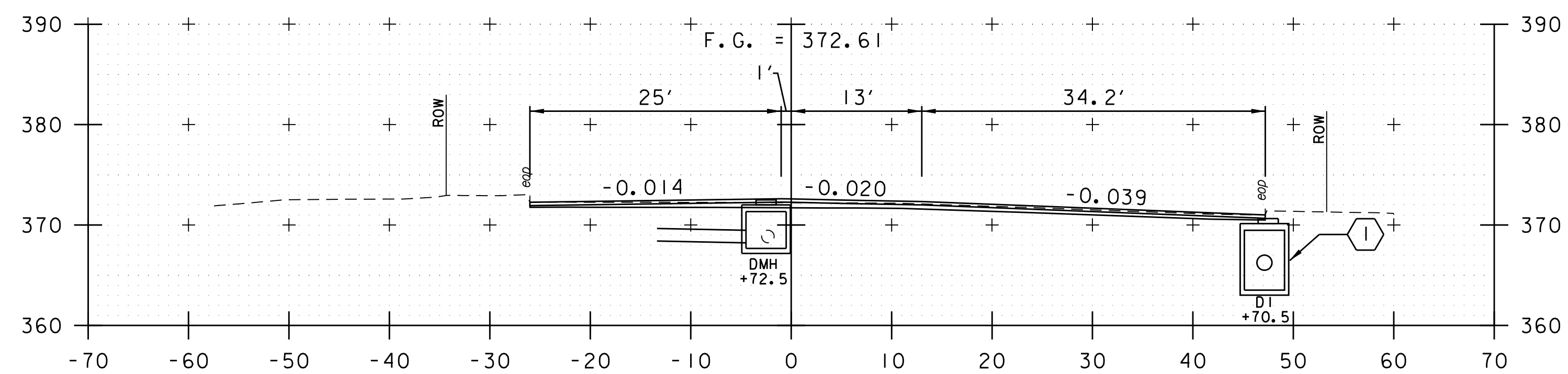
MERCHANTS ROW

PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_MERCHANTS.XS.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
CROSS SECTIONS (SHEET 6 OF 7)	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	53 OF 54

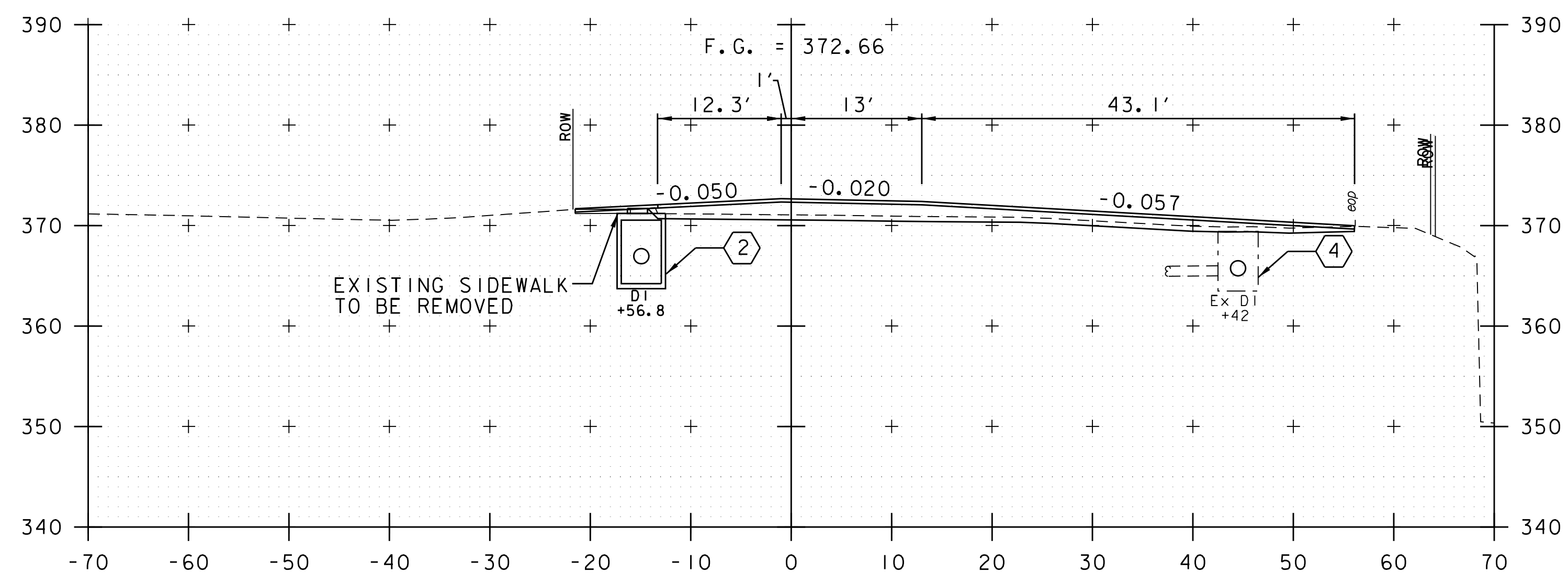




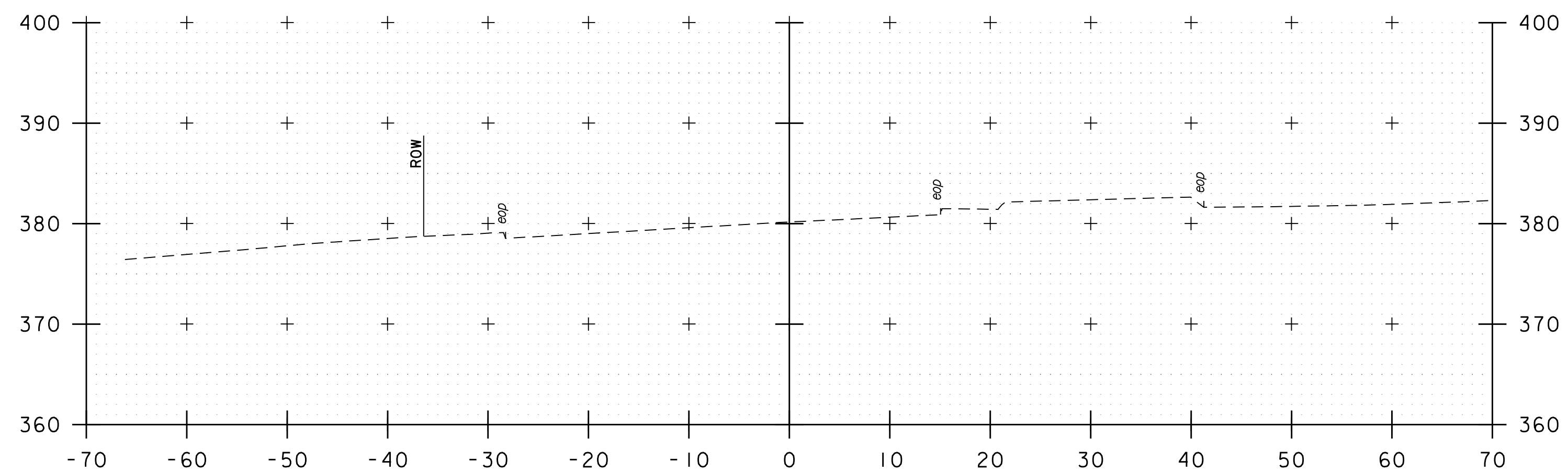
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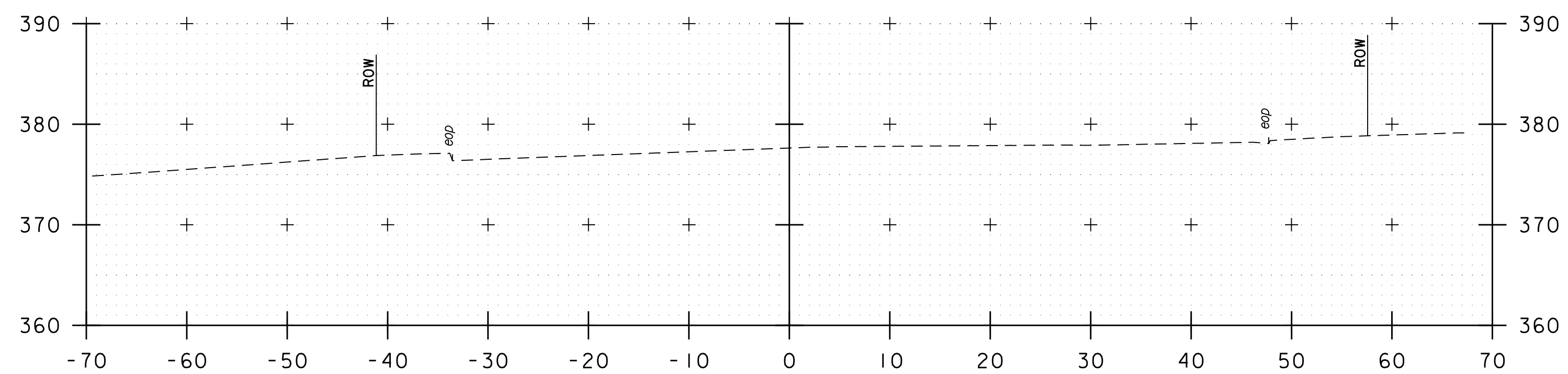
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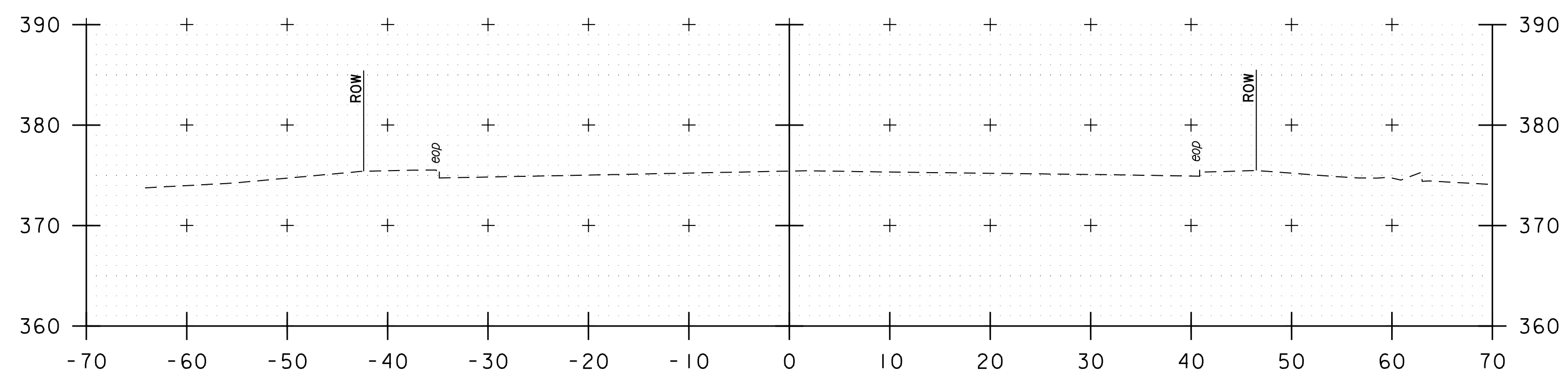
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23+75



23+50

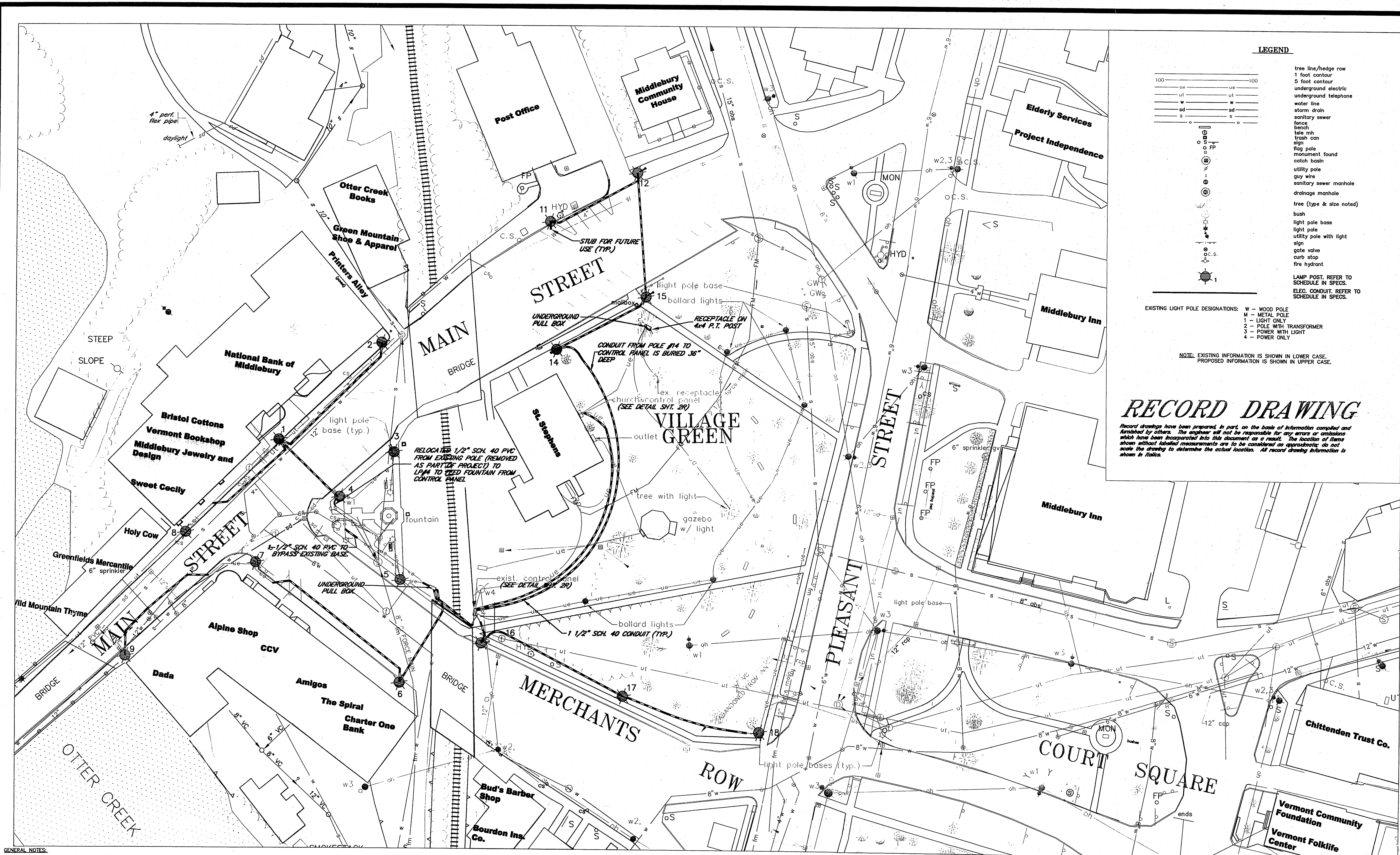


23+25

MERCHANTS ROW

PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I)
FILE NAME:	z17b016_MERCHANTS.XS.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	D.M. PECK
CROSS SECTIONS (SHEET 7 OF 7)	
PLOT DATE:	5/19/2017
DRAWN BY:	D.M. PECK
CHECKED BY:	E.P. DETRICK
SHEET	54 OF 54





**LEGEND**

100	ue	ue	100
ue	ue	ue	ue
ut	ut	ut	ut
w	w	w	w
sd	sd	sd	sd
s	s	s	s

tree line/hedge row  
1 foot contour  
5 foot contour  
underground electric  
underground telephone  
water line  
storm drain  
sanitary sewer  
fence  
bench  
tele. m/h  
trash can  
sign  
flag pole  
monument found  
catch basin  
utility pole  
guy wire  
sanitary sewer manhole  
drainage manhole  
tree (type & size noted)  
bush  
light pole base  
light pole  
utility pole with light  
sign  
gate valve  
curb stop  
fire hydrant

LAMP POST. REFER TO SCHEDULE IN SPECS.  
ELEC. CONDUIT. REFER TO SCHEDULE IN SPECS.

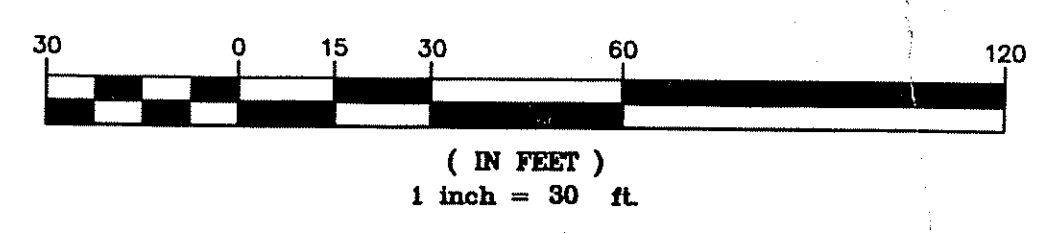
EXISTING LIGHT POLE DESIGNATIONS: W - WOOD POLE  
M - METAL POLE  
1 - LIGHT ONLY  
2 - POLE WITH TRANSFORMER  
3 - POWER WITH LIGHT  
4 - POWER ONLY

NOTE: EXISTING INFORMATION IS SHOWN IN LOWER CASE.  
PROPOSED INFORMATION IS SHOWN IN UPPER CASE.

# RECORD DRAWING

Record drawings have been prepared, in part, on the basis of information compiled and furnished by others. The engineer will not be responsible for any errors or omissions which have been incorporated into this document as a result. The location of items shown without labeled measurements are to be considered as approximate; do not scale the drawing to determine the actual location. All record drawing information is shown in *italics*.

- GENERAL NOTES:**
1. BASE MAP IS TOWN OF MIDDLEBURY UTILITY MAPS.
  2. TOWN GREEN AND TRIANGLE PARK AREA TOPOGRAPHIC INFORMATION FROM AN UNDATED PLAN FROM OTTER CREEK ENG.
  3. THIS IS NOT A BOUNDARY SURVEY.
  4. ELEVATIONS ARE BASED ON N.G.V.D 29 DATUM. HORIZONTAL POSITIONS ARE BASED ON AN ARBITRARY COORDINATE SYSTEM.
  5. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE.
  6. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
  7. CONTRACTORS SHALL COORDINATE WITH DIG-SAFE (1-888-344-7233) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION. DIG-SAFE SHALL BE NOTIFIED "FOR EXCAVATION ACTIVITIES CONDUCTED WITHIN 100 FEET OF AN UNDERGROUND UTILITY FACILITY." CONTRACTOR SHALL "PREMARK PROPOSED EXCAVATION AREAS BEFORE CALLING DIG-SAFE."



REVISIONS


STATE OF VERMONT  
PHILIP S. KIRBY  
REGISTERED PROFESSIONAL ENGINEER

THE DRAWINGS FOR THIS PROJECT SHALL NOT BE REUSED OR ALTERED IN ANY WAY WITHOUT THE WRITTEN APPROVAL AND AUTHORITY OF THE ENGINEER. ANY REVISIONS SHALL BE MADE BY THE ENGINEER AND NOTED IN THE REVISION BLOCK.

PHELPS ENGINEERING, INC.  
SCALE: 1" = 30'  
DATE: 12/8/04

DR. BY: JS/DP  
CK'D BY: JK

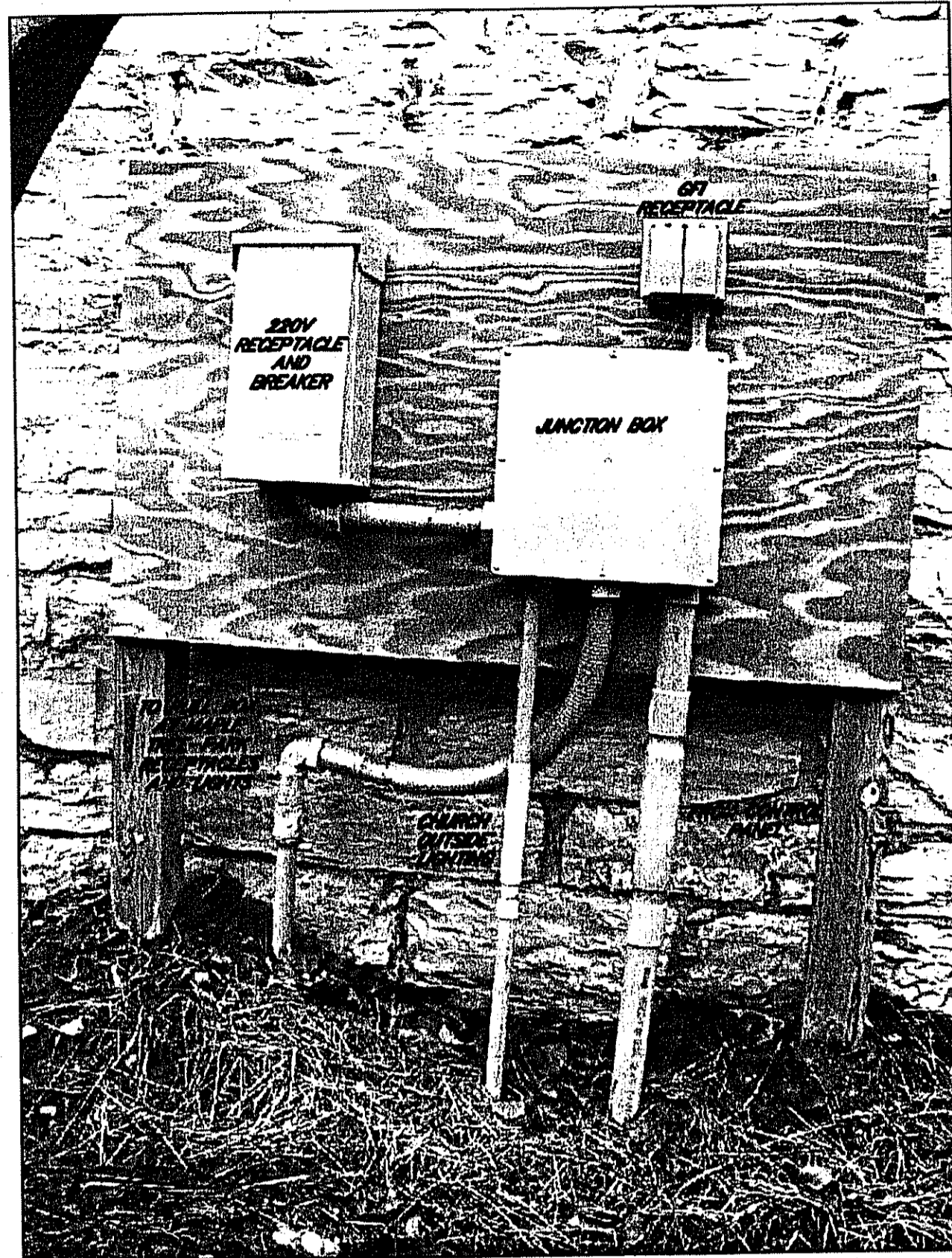
SHEET NO. 1R OF 3R  
DWG. NO. 200403-1R

PHELPS ENGINEERING, INC.  
3 HOLLOW HILL  
3 Mill St., P.O. Box 367  
Middlebury, Vt. 05753  
Telephone (802) 388-7829

TOWN OF MIDDLEBURY  
VILLAGE AREA  
HISTORICAL LIGHTING PLAN  
MIDDLEBURY, VERMONT

PROPOSED GENERAL PLAN





CHURCH PANEL DETAIL

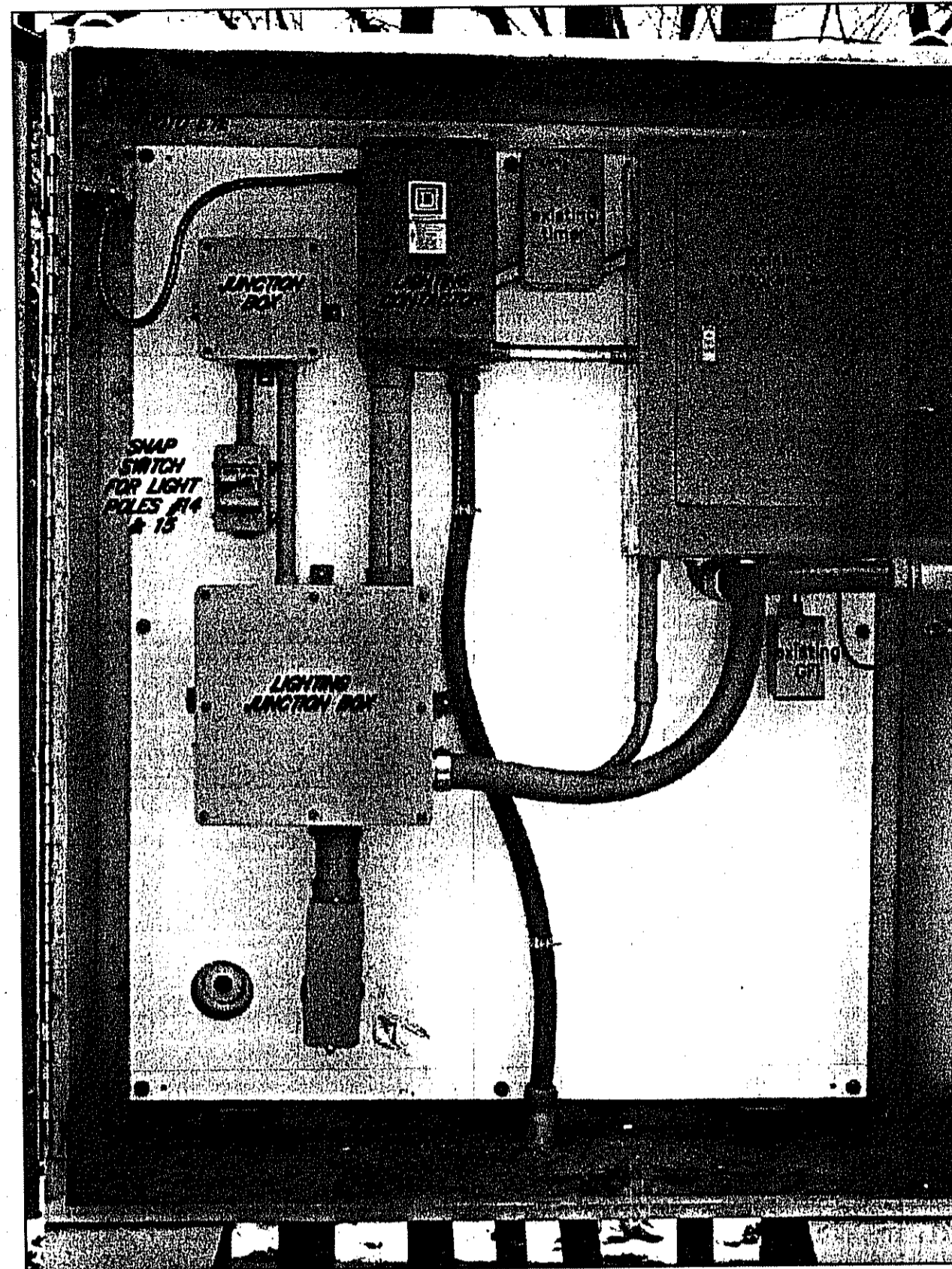
PROVIDE AND INSTALL (3) NEW 240V 20 AMP BREAKERS TO FIT EXISTING NQ00 120V PANEL. REFER TO LUMINAIRE SCHEDULE FOR CIRCUITING OF FIXTURES. ALL NEW CIRCUITS WILL BE CONTROLLED BY PHOTO EYE. (3) CIRCUIT BREAKERS SHALL BE PROVIDED FOR LUMINAIRE CIRCUITS.

PROVIDE NEW SNAP SWITCH TO DISCONNECT LUMINAIRES #14, #15, ALLOWING LUMINAIRES #11, #12 TO REMAIN ON.

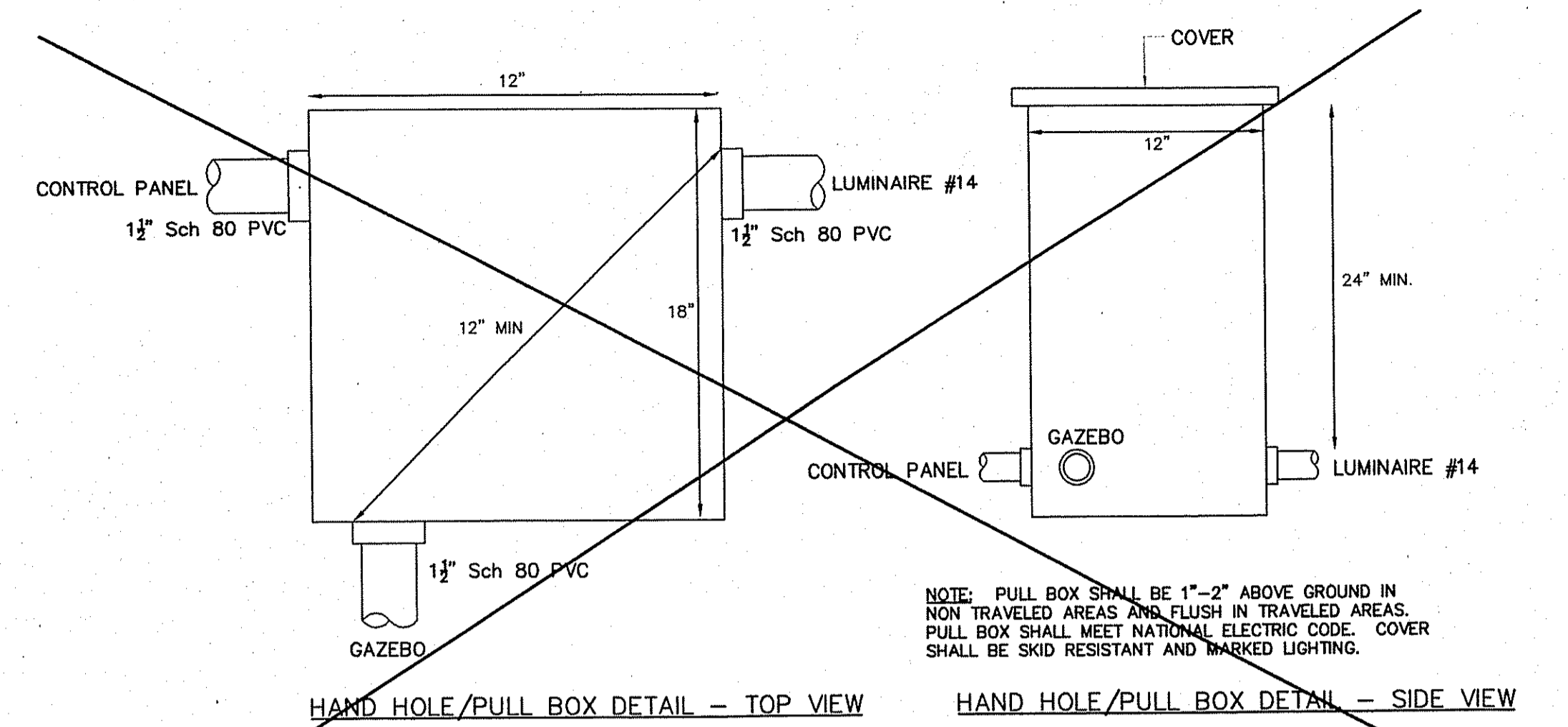
CALL 1-888-DIG SAFE PRIOR TO ALL EXCAVATION, AS WELL AS APPROPRIATE TOWN PERSONNEL FOR CONFIRMATION OF EXISTING UTILITIES.

A COMPLETE AS-BUILT DOCUMENT SHALL BE PROVIDED TO THE ENGINEER-OF-RECORD OF ALL LOCATIONS OF CONDUIT, CONDUIT SIZING AND WIRE SIZING.

RECEPTACLES ON LIGHT POLES ONLY ENERGIZED WHEN POLES ARE LIT.



CONTROL PANEL DETAIL



ELECTRICAL PANEL SCHEDULE: EXISTING

VOLTAGE: 240/120 Vac	LOCATION: TOWN GREEN	FED FROM: POWER PANEL
AMPERAGE: 100 A	MAKE: SQUARE D	FEED DATA: XXXXX
	CATALOG NO: NQDD12M100CU	

LOAD DESCRIPTION	CKT. BKR.	CKT. ND.	CKT. BKR.	LOAD DESCRIPTION
TIME CLOCK	1P-15A	1	2	1P-15A SPARE
SITE LIGHTS	1P-15A	4	4	1P-15A SPARE
SPARE	1P-15A	5	6	1P-15A GF1
SPARE	1P-20A	7	8	1P-20A SPARE
MAIN DISCONNECT	2P-100A	9	10	1P-20A SPARE
		11	12	1P-20A SPARE

NOTES:

LUMINAIRE SCHEDULE

Luminaire No.	Circuit No.	Pole Base	Notes
8	1	Existing. Recessed pole next to existing metal pole to be removed.	
1	1	New	
2	1	New	
3	1	Existing	
4	1	Existing	
5	1	Existing	
6	1	New	
7	1	Existing. Recessed.	
9	1	New	
11	2	New	
12	2	Existing wooden pole to be removed.	
14	2	New	Switched
15	2	New	Switched
16	3	New	
17	3	New	
18	3	Existing	

CONDUIT SCHEDULE

From Luminaire No.	To Luminaire No.	Conduit Size/Type	Conductors	Spare Conductors	Notes
8	1	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	
1	2	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	
1	4	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	
4	3	Existing	(3) #4, #4 GG	None	
4	5	Existing	(3) #4, #4 GG (3) #10, #12 GG	None	Power for Fountain included
5	Pull Box	Existing	(3) #4, #4 GG (3) #10, #12 GG	None	Power for Fountain included
Pull Box	6	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	
6	7	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	
7	9	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	
Pull Box	Existing Control Panel	1-1/2" Sch 80 PVC	(3) #4, #4 GG (3) #10, #12 GG	None	
11	12	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	
12	15	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	Stub for future
14	15	1-1/2" Sch 80 PVC	(6) #4, #4 GG	None	
14	Exist Control Panel	1-1/2" Sch 80 PVC	(6) #4, #4 GG	None	
Control Panel	Church Panel	1-1/2" Sch 80 PVC	(6) #6, #4 GG	None	
Church Panel	Pull Box	Existing	(2) #4, #4 GG	None	
Control Panel	16	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	
16	17	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	
17	18	1-1/2" Sch 80 PVC	(3) #4, #4 GG	None	

ELECTRICAL PANEL SCHEDULE: REWORKED PANEL

VOLTAGE: 240/120 Vac	LOCATION: TOWN GREEN	FED FROM: POWER PANEL
AMPERAGE: 100 A	MAKE: SQUARE D	FEED DATA: XXXXX
	CATALOG NO: NQDD12M100CU	

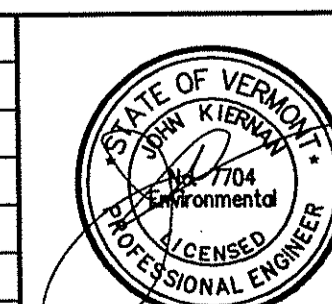
LOAD DESCRIPTION	CKT. BKR.	CKT. ND.	CKT. BKR.	LOAD DESCRIPTION
1A-TIME CLOCK/GFI	2020	1	2	
3A-POST AND MAPLE TREE RECEPTACLE	2020	3	4	220 SPLIT CIRCUIT/ CHURCH LIGHTS
SUB PANEL / CHURCH PANEL	250	5	6	220 MERCHANT RDW STREET LIGHTS
		7	8	
MAIN STREET, POST OFFICE STREET LIGHTS	220	9	10	220 FOUNTAIN PARK LIGHTS/ MAIN STREET
		11	12	
MAIN BREAKER	2100	13	15	

NOTES:

# RECORD DRAWING

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REVISIONS

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PHELPS ENGINEERING, INC.  
© 2004

SCALE: SHOWN  
DATE: 12/6/04

DR. BY: JS  
CK'D BY: JK

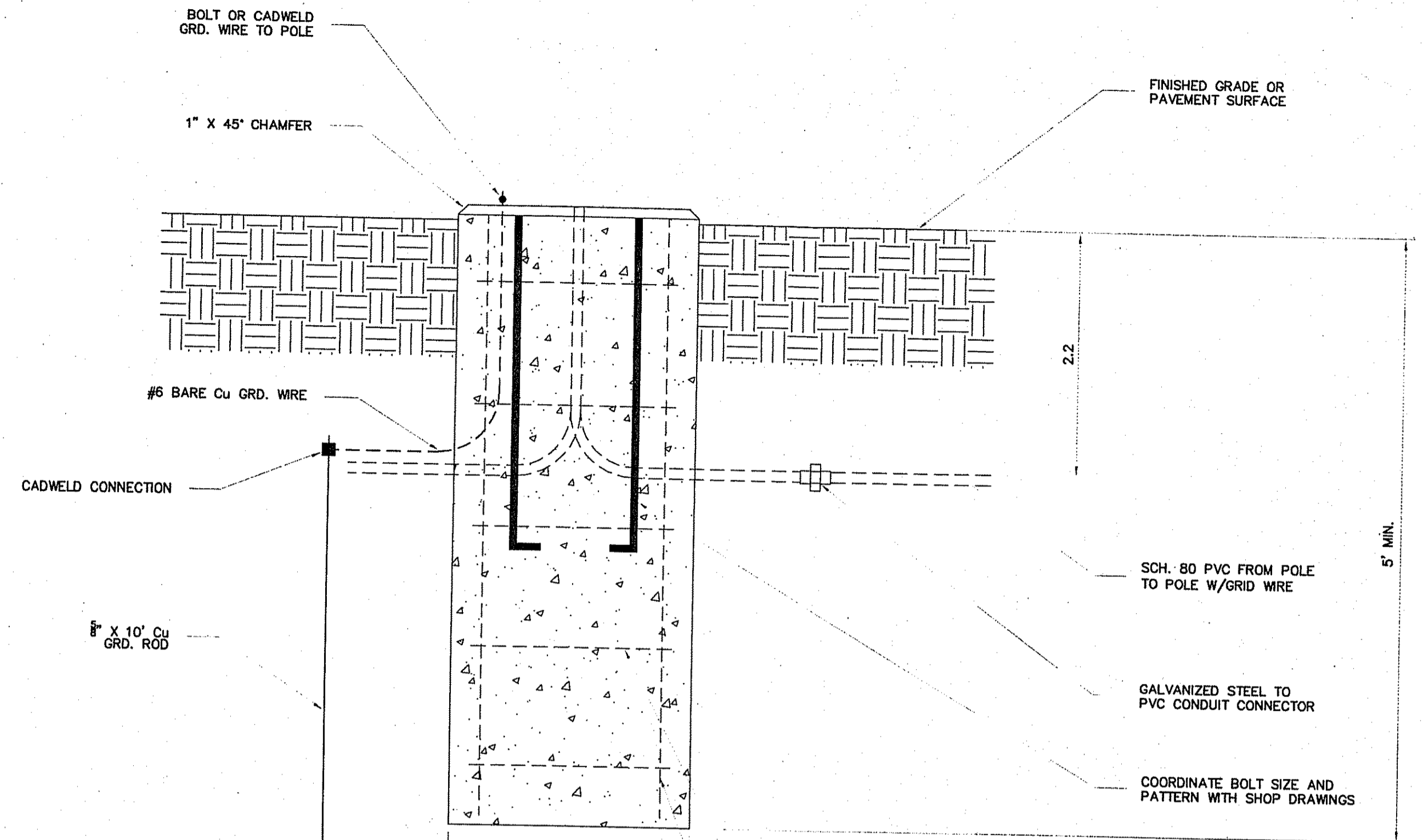
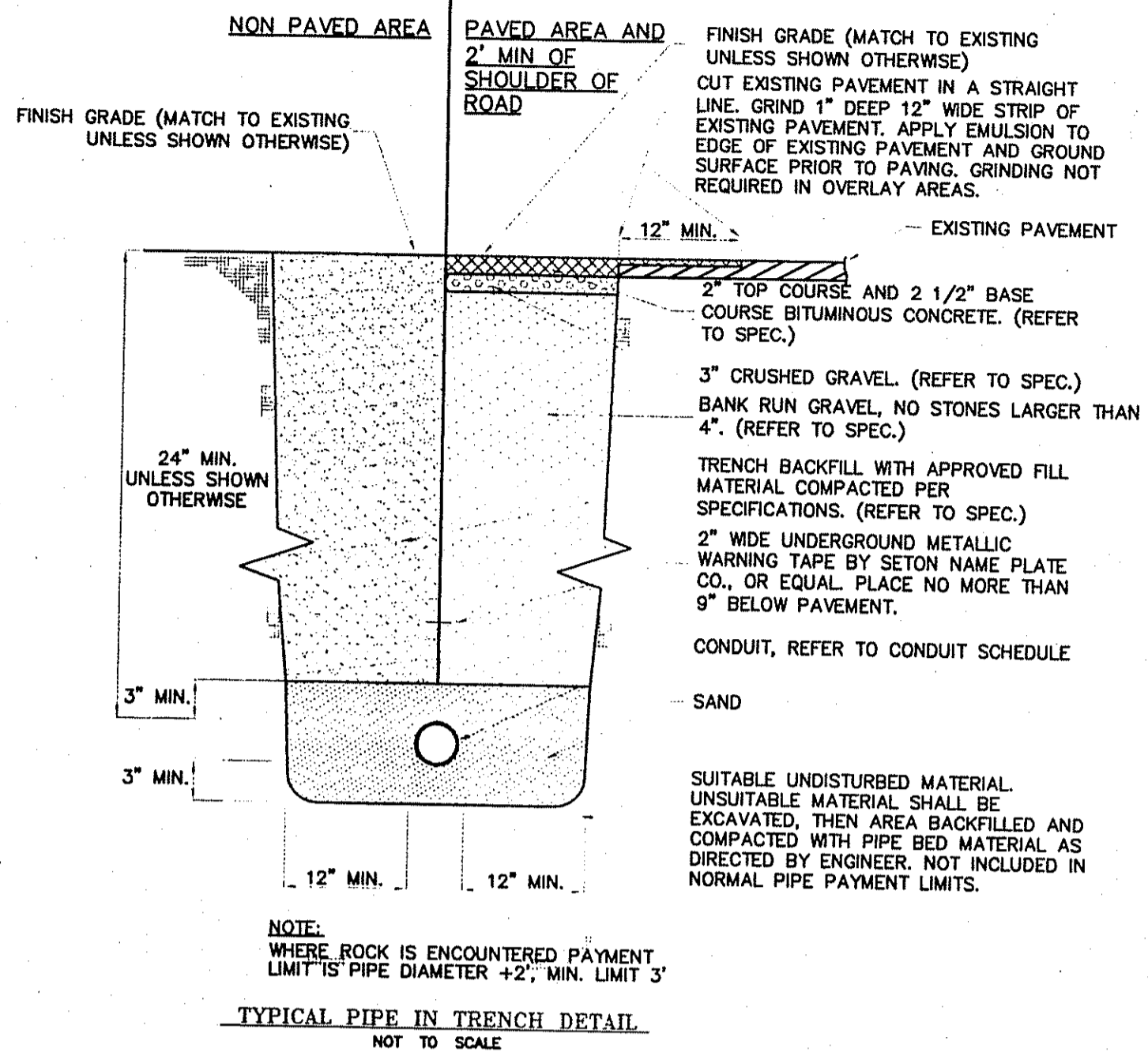
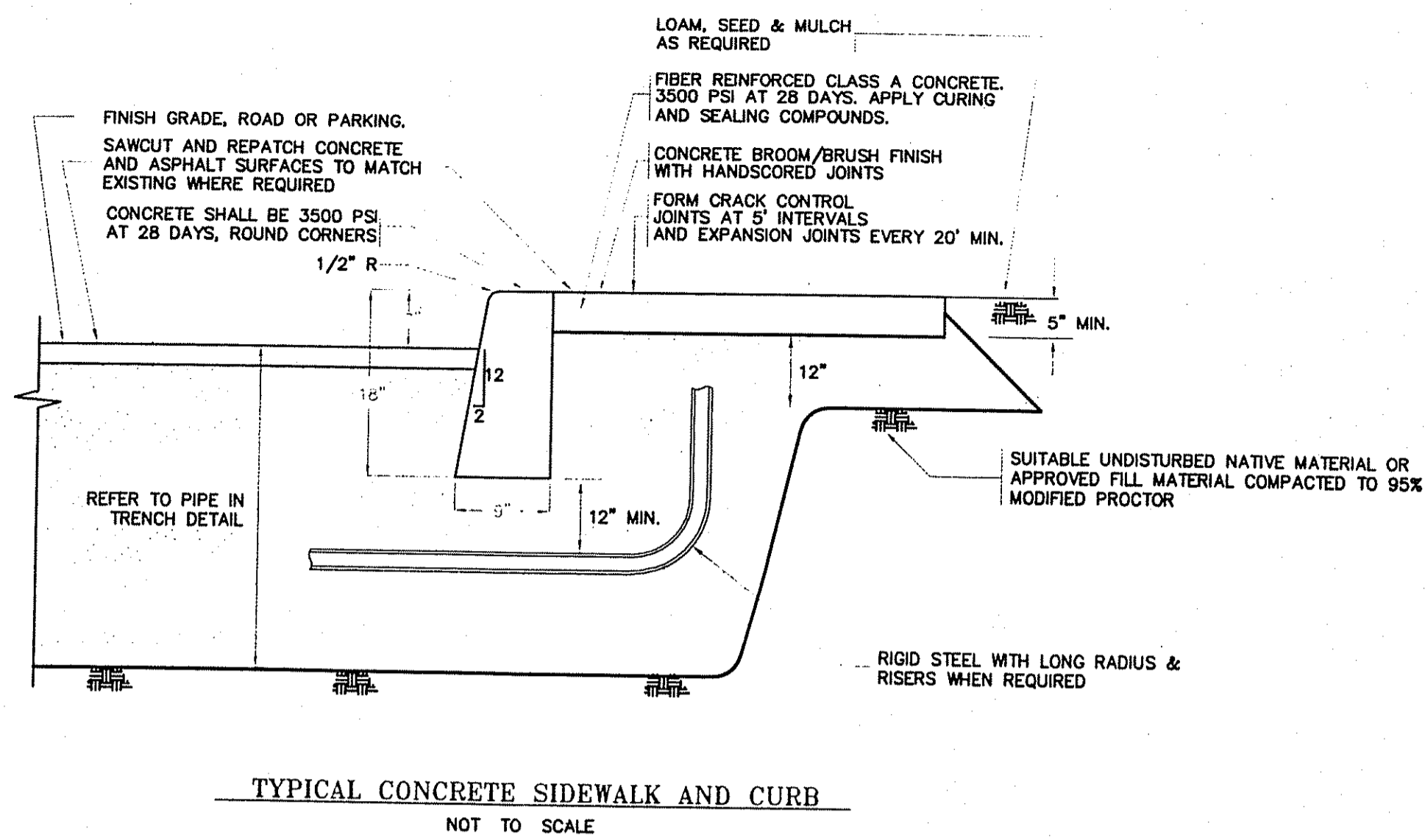
SHEET NO. 2R OF 3R  
DWG. NO. 200403-2R

PHELPS ENGINEERING, INC.  
FROG HOLLOW MILL  
3 Mill St., P.O. Box 367  
Middlebury, Vt. 05753  
Telephone (802) 388-7829

TOWN OF MIDDLEBURY  
VILLAGE AREA  
HISTORICAL LIGHTING PLAN  
MIDDLEBURY, VERMONT

DETAILS AND NOTES





**EROSION AND SEDIMENT CONTROL PLAN NARRATIVE**

**DESIGNER NARRATIVE**

**CONTRACTOR NARRATIVE**

**Project Description and Background**  
 This project is a continuation of two prior projects involving the downtown street lighting program in the Town of Middlebury, VT. One portion included the Cannon Park, Main Street and Park Street areas. This project includes the completion of bases for light fixtures, installation of underground power and placement of historic light fixtures, plus related sidewalk and other surface restoration and reconstruction. We understand there are existing light fixture bases within this project area that do not include fixtures and may have some portions of conduit already installed. This project will extend the street lighting program to the Town Green and Court Square. We understand this project is funded through the Agency of Transportation Enhancement Program, the Vermont Downtown Program Transportation Fund and local funding.

**Soil Description**  
 The native soil type on site is Vergennes Clay (VgB), soil class "D". Previously disturbed areas, such as roadways and sidewalks, will likely have some non-native soil materials such as bank-run and crushed gravel.

**Drainage Characteristics**  
 The project drainage area characteristics are from northeast to southwest. Existing catch basins and storm drains collect and transport stormwater from the drainage area to Otter Creek where it discharges.

**Existing Conditions**  
 The majority of the project area is bituminous concrete pavement in the roadways or concrete sidewalk and curbing within the walkways. The Village Green and Court Square are comprised mainly of vegetative grasses, shrubs and trees. The site has existing roads, buildings or utilities associated with downtown Middlebury. This area is not considered a sensitive resource area. This project is in close proximity to Otter Creek.

**Erosion and Sediment Control Devices**  
 The erosion and sediment control devices shall include, but not be limited to:  
 1. Silt Fencing  
 2. Seed and Mulch  
 3. Grate Inlet Protection

A. Silt fencing shall be used around designated stockpiles to prevent sediment runoff. Silt fencing is a temporary sediment control device that will be utilized during construction. Proposed silt fence locations are indicated on the plans. Details and installation instructions are provided on the detail sheet. A properly installed silt fence will help provide sediment control. Construction review and on-site inspections will ensure proper installation.

B. Disturbed areas with a slope less than 3:1 (3 horizontal to 1 vertical) shall be seeded and mulched. Seeding and mulching encourages vegetative cover on disturbed soils, and shall be done within 48 hours of work completion in that area. Areas that have been disturbed, and where construction is not complete, will be seeded and mulched every seven days. In areas where the seed and mulch do not take root, erosion control blankets shall be utilized.

C. Catch basins which collect stormwater from the project's disturbed areas will receive grate inlet protection. Sandbags filled with clean washed crushed stone shall be used along the perimeter of catch basin grates. The sandbags will reduce water velocities and the amount of sediment entering the catch basin. The Dandy Bag II a Mirafi product or a Silt Sack from SI Geosolutions shall be used to catch silt and sediment that enters the catch basin. These catch basin sediment capture devices shall be inspected and maintained, by the contractor, as per the manufacturer's recommendations.

**Final Erosion Control Measures**  
 All disturbed areas will be restored to preconstruction conditions. The vegetative areas shall have a strong vegetative growth that will provide a permanent erosion control. The remaining areas of disturbed pavement and concrete sidewalk will be restored to their original condition, which will provide permanent erosion control of these areas.

BS:kw  
 March 10, 2004

**Earth Disturbing Activities**  
 This project will include disturbed area resulting from:  
 1. Soil auger of proposed light pole bases (24" diameter auger)  
 2. Trench machine to cut a 6" wide trench for electrical conduit  
 3. Exploratory excavation to locate existing services, which will include an excavator and hand shoveling

In an effort to reduce disturbed areas, Kingsbury Construction Co., Inc. will use a soil auger and trencher. This method will greatly reduce the disturbed area compared to traditional methods of earth excavation. The disturbed areas outlined on plan sheet 4 of 6 are conservative.

**Waste, Borrow and Staging Areas**  
 The waste is to be hauled off site at the end of each workday. Kingsbury Construction owns a pit to dispose of clean construction debris such as removed concrete, asphalt and excess soils. Material will not be stockpiled on site. The Middlebury Police Department, located on Lucius Shaw Lane, will be the staging area for this project. Kingsbury Construction will store construction equipment and project building materials at this facility.

**Strategy of ESC Plan**  
 The reduction of disturbed areas by methods of construction discussed in the above section shall prevent sediment from leaving the construction site. Disturbed areas within the Village Green will be temporarily mulched within 48 hours of activity. Conduit trenches within paved areas or concrete surfaces shall be covered until which time the surface can be restored. Identified catch basin inlets shall receive sediment control devices, detail on sheet 6, prior to earthwork activities in that region. With erosion and sediment control devices, minimal disturbed areas, on-site coordinator and a well-developed plan, this project shall be effective in protecting water resources.

**Construction Phasing**  
 The earthwork for this project will take place in two phases. Phase 1 will include work within Town streets, see plan sheet 4 of 6. Phase 2 includes work inside of the Village Green. The construction schedule identifies the work performed in the streets with an "S1" and in the park with a "P1" after the activity description. Earthwork activities include auger and install light pole bases, trench and install conduit and locate existing utilities. (See construction schedule for date and phase.)

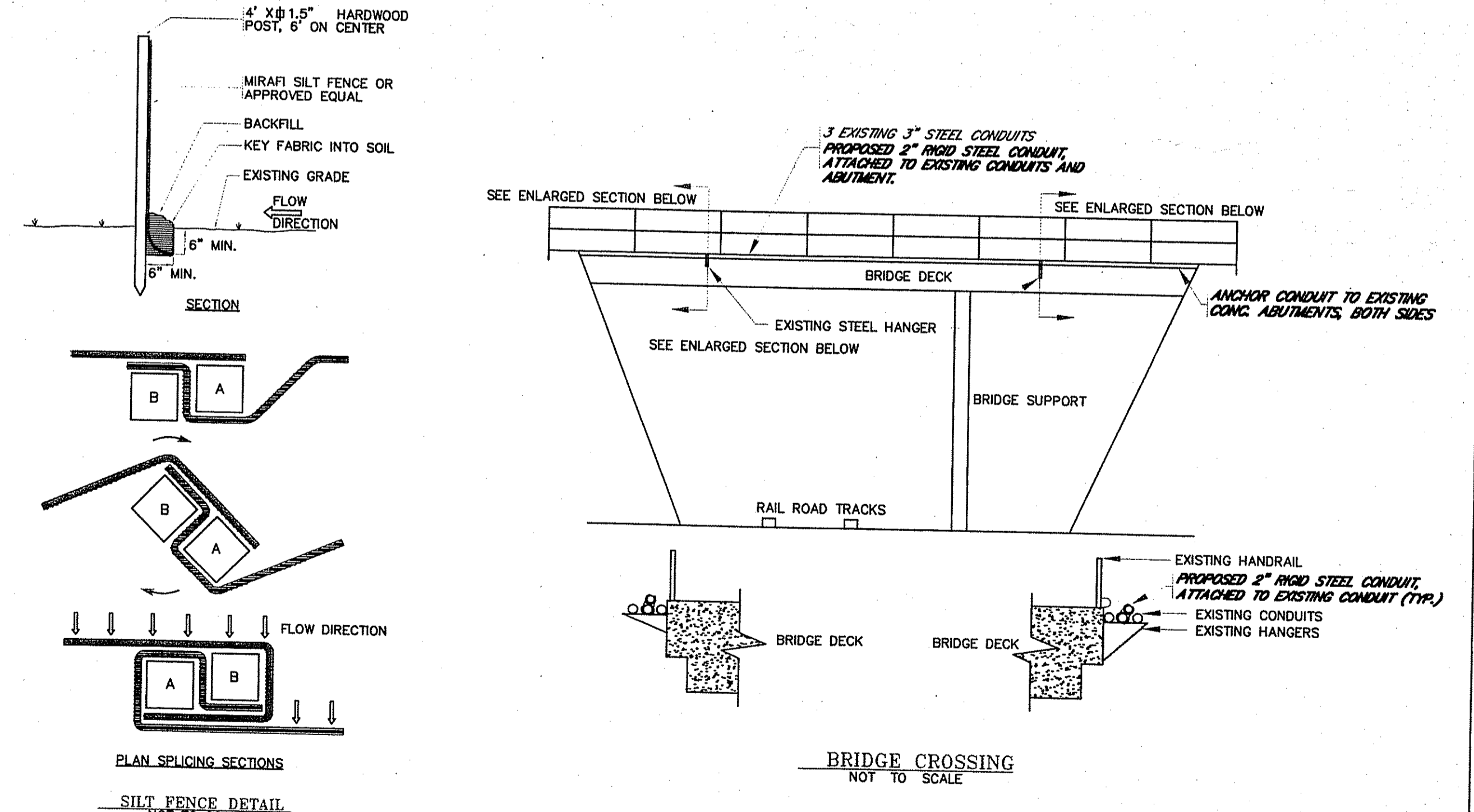
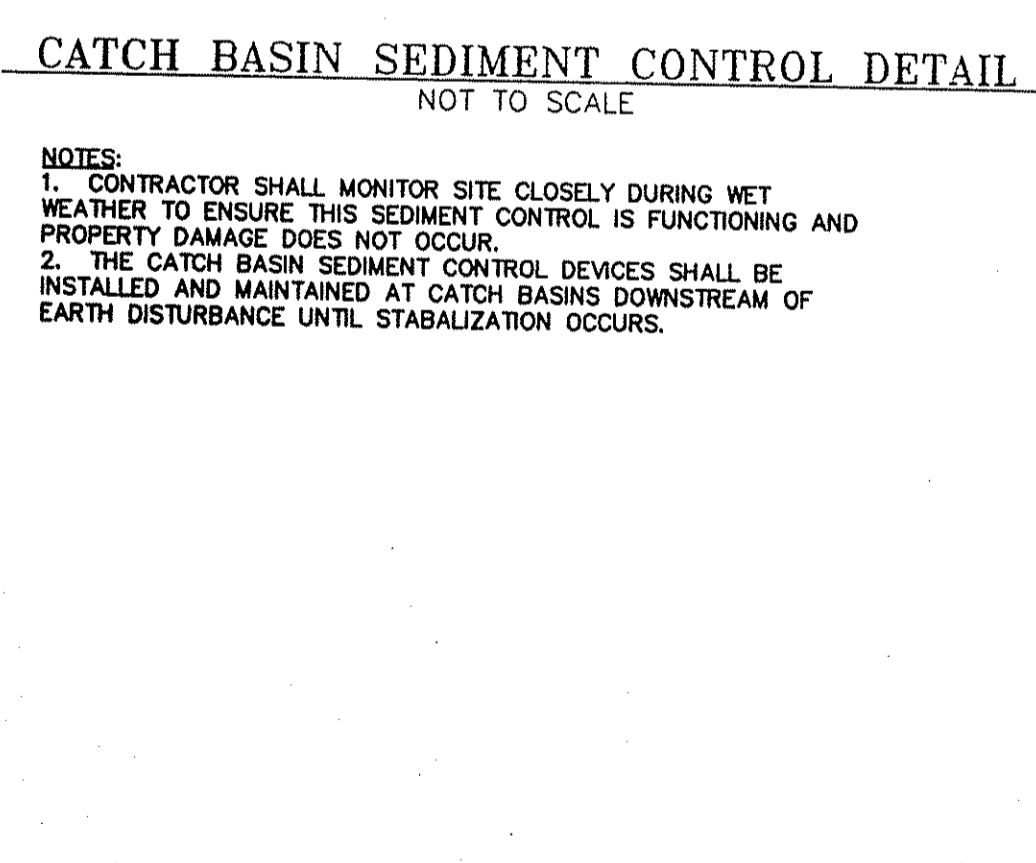
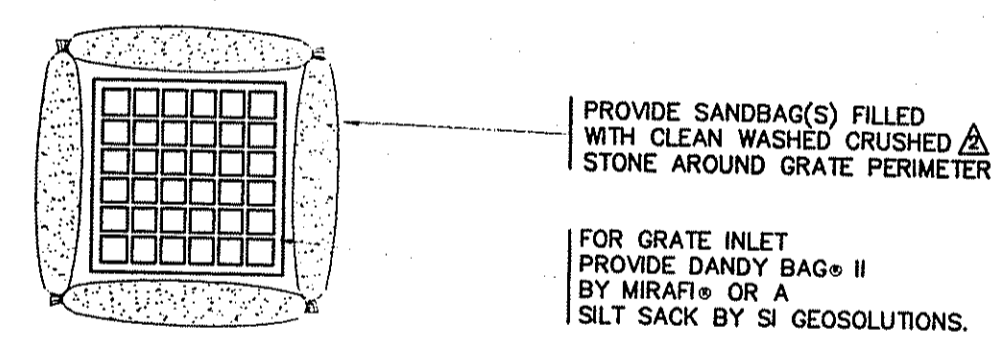
**Seeding and Mulching**  
 Previously grassed disturbed areas within the Village Green shall be seeded and mulched. Location of seeded areas is shown on plan sheet 4 of 6. Seed and mulch mixtures and application rates can be found in the technical specification section 02318 of the contract documents.

**On-Site Coordinator**  
 The on-site coordinator for this project is Bob Burbank of Kingsbury Construction. Bob Burbank (802-279-3412) is qualified for this position based on 10 years of construction experience and has had 20 hours training in erosion control as part of the Air National Guard. Bob has the authority to halt construction if deemed necessary. The on-site coordinator shall fill out the erosion prevention and sediment control weekly plan run-off. (Both inspection sheets are provided by AOT.) Erosion and sediment control measures shall be maintained throughout construction and deficiencies shall be rectified.

**Erosion and Sediment Control Plan Preparer**  
 Phelps Engineering, Inc. of Middlebury, Vermont has developed the contractor's portion of the erosion and sediment control plan in conjunction with Kingsbury Construction Co., Inc.  
 Phelps Engineering, Inc. phone (802) 388-7829  
 P.O. Box 367 fax (802) 388-9642  
 Middlebury, VT 05753

**Contacts**  
 John Kiernan, P.E., Project Manager  
 Brandon Stretcher, Project Engineer

BS:kw  
 May 06, 2004



**RECORD DRAWING**

Record drawings have been prepared, in part, on the basis of information compiled and furnished by others. The engineer will not be responsible for any errors or omissions which have been incorporated into this document as a result. The location of items shown without labeled measurements are to be considered as approximate; do not scale the drawing to determine the actual location. All record drawing information is shown in *italics*.

REVISIONS 1. REPLACE SAND WITH CRUSHED STONE 05/08/04 2. ADD CONTRACTOR NARRATIVE 05/08/04		THE DRAWINGS FOR THIS PROJECT SHALL NOT BE REUSED OR ALTERED IN ANY WAY WITHOUT THE WRITTEN APPROVAL AND AUTHORITY OF THE ENGINEER. ANY REVISIONS SHALL BE MADE BY THE ENGINEER AND NOTED IN THE REVISION BLOCK. PHELPS ENGINEERING, INC. SCALE: SHOWN DR. BY: BS DATE: 12/6/04 CK'D BY: JK	PHELPS ENGINEERING INC FROG HOLLOW MILL 3 Mill St., P.O. Box 367 Middlebury, Vt. 05753 Telephone (802) 388-7829	TOWN OF MIDDLEBURY VILLAGE AREA HISTORICAL LIGHTING PLAN MIDDLEBURY, VERMONT
SHEET NO. 3R OF 3R DWG. NO. 200403-3R			DETAILS AND NOTES W/ ESC	



## GENERAL NOTES FOR LOCAL ROADS

1. SUBBASE, SAND CUSHION AND SUBGRADE SHOULD BE CONSTRUCTED AND COMPACTED TO THE DIMENSIONS SHOWN IN ACCORDANCE WITH VAOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. WHERE LOCAL ORDINANCES HAVE BEEN ADOPTED RELATIVE TO ROAD DIMENSIONS AND CONSTRUCTION, THEY SHOULD GOVERN. THE DIMENSIONS SUGGESTED ARE INTENDED TO BE APPLIED ONLY IN LOW TRAFFIC VOLUME CONDITIONS (AVERAGE DAILY TRAFFIC LESS THAN 250 VEHICLES PER DAY), AND WHERE HEAVY TRUCK TRAFFIC IS INFREQUENT.

2. EXPOSED EARTH SLOPES SHOULD BE SEEDED, FERTILIZED AND MULCHED IN ACCORDANCE WITH VAOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

3. DRAINAGE:

ROADWAY - 18" MINIMUM DIAMETER, OF METAL, REINFORCED CONCRETE OR POLYETHYLENE PIPE, WITH DROP INLETS OR CATCH BASINS, AS REQUIRED. HYDRAULIC ANALYSIS TO DETERMINE APPROPRIATE PIPE DIAMETER IS RECOMMENDED FOR ALL LIVE STREAM CROSSINGS AND ELSEWHERE WHERE LARGE STORM FLOWS MAY BE EXPECTED.

DRIVES - 15" MINIMUM DIAMETER, OF METAL, REINFORCED CONCRETE OR POLYETHYLENE PIPE.

UNDERDRAIN - 6" MINIMUM DIAMETER, OF METAL, PVC PLASTIC OR POLYETHYLENE PIPE.

LOCATION, DEPTH AND CONSTRUCTION DETAILS SHOULD FOLLOW PRACTICE SPECIFIED BY LOCAL ORDINANCE OR THE VAOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

4. HORIZONTAL CURVATURE - THE FOLLOWING WILL APPLY:

DESIGN SPEED	MINIMUM RADII RURAL ①	MINIMUM RADII URBAN ②
25 MPH	185 FT.	180 FT.
30 MPH	275 FT.	300 FT.
35 MPH	380 FT.	460 FT.
40 MPH	510 FT.	675 FT.
45 MPH	660 FT.	945 FT.
50 MPH	835 FT.	1280 FT.

① BASED ON CROSS SLOPE = 6.0 %

② BASED ON MAINTAINING NORMAL CROWN SECTION THROUGHOUT CURVE : EFFECTIVE CROSS SLOPE = 2.0 %

FOR OTHER SUPERELEVATION RATES, SEE CHAPTER III OF THE AASHTO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" FOR APPROPRIATE CURVE RADII.

5. GRADIENT OF ROADS - 10% MAXIMUM GRADE SUGGESTED, ALTHOUGH GRADES UP TO 16 % MAY BE ALLOWED IN MOUNTAINOUS TERRAIN.

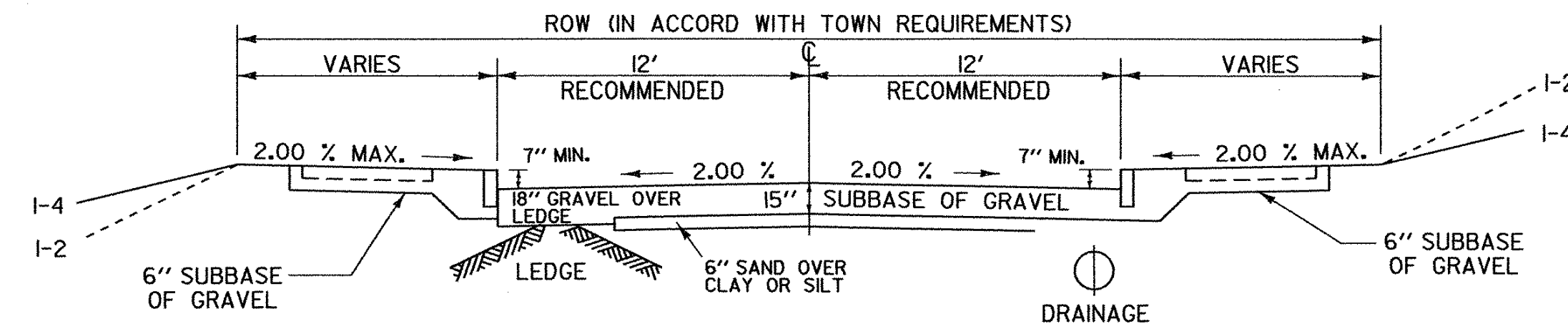
6. GUARD RAIL - PROVIDE GUARD RAIL WITH TREATED WOOD OR STEEL POSTS, OF A DESIGN IN ACCORDANCE WITH VAOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE AASHTO ROADSIDE DESIGN GUIDE, AND VAOT STANDARD DRAWINGS. GENERALLY, WHERE SLOPES ARE 1:3 OR STEEPER, AND THE HEIGHT OF DROPOFF AT EDGE OF SHOULDER EXCEEDS 5', GUARD RAIL SHOULD BE INSTALLED. ALSO, WHERE SLOPES ARE 1:3 OR FLATTER, GUARD RAIL MAY NOT BE NEEDED IF THE AREA AT THE BOTTOM OF THE SLOPE IS FREE OF HAZARDS. THE LOCAL VAOT DISTRICT TRANSPORTATION ADMINISTRATOR MAY BE CONTACTED FOR ASSISTANCE.

7. PAVING - ROADS WITH GRADES EXCEEDING 7% SHOULD BE PAVED UNLESS WAIVED BY THE LOCAL GOVERNING BODY. FOR TRAFFIC VOLUMES GREATER THAN, OR EQUAL TO, 250 VEHICLES PER DAY, OR WHERE HEAVY TRUCKS ARE COMMON, A PAVEMENT DESIGN SHOULD BE PERFORMED TO DETERMINE APPROPRIATE THICKNESSES OF SUBBASE AND PAVEMENT.

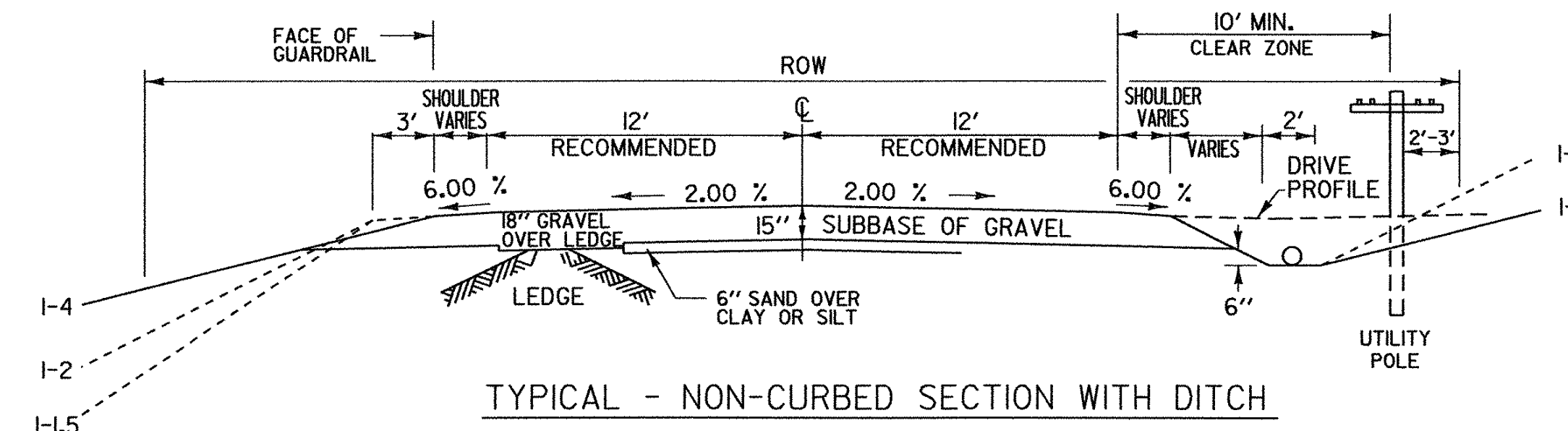
8. TRAVELED WAY AND SHOULDER WIDTHS - WIDTHS SHOWN ON THIS STANDARD ARE FOR LOW SPEED/LOW TRAFFIC VOLUME CONDITIONS. FOR ADDITIONAL GUIDANCE IN THE DESIGN OF LOCAL ROADS AND STREETS, SEE THE LATEST EDITION OF AASHTO'S PUBLICATION "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS", OR THE VAOT "VERMONT STATE STANDARDS".

9. UTILITY LINE LOCATION TO CONFORM TO LOCAL REQUIREMENTS.

## ROADWAY TYPICALS

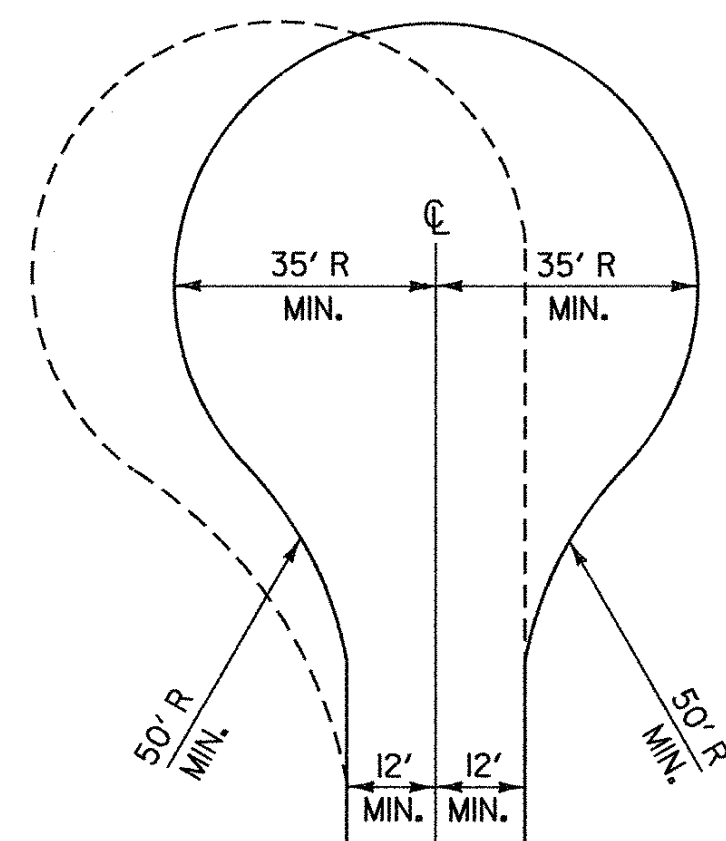


TYPICAL - CURBED SECTION WITH 5' SIDEWALKS

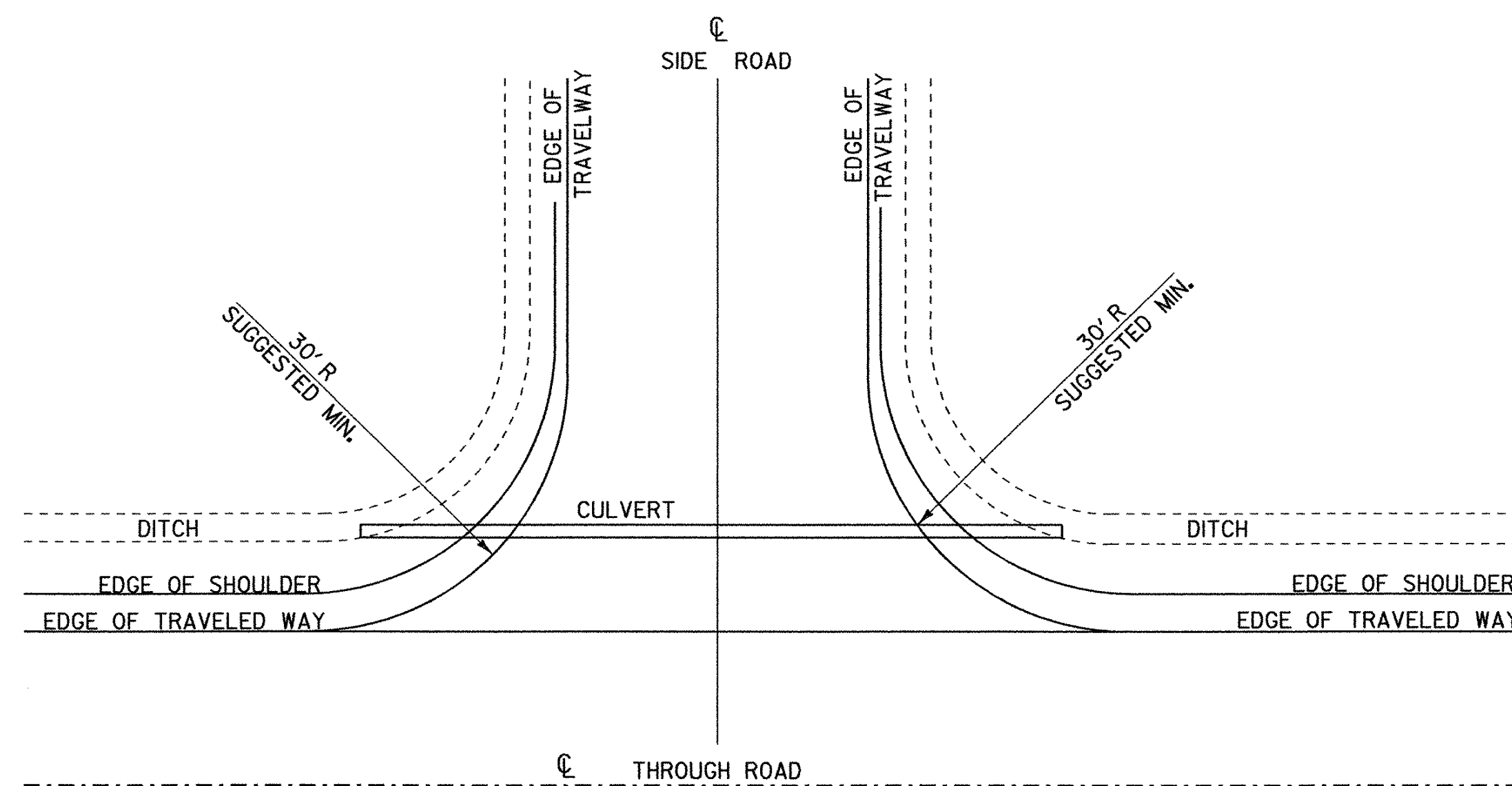


TYPICAL - NON-CURBED SECTION WITH DITCH

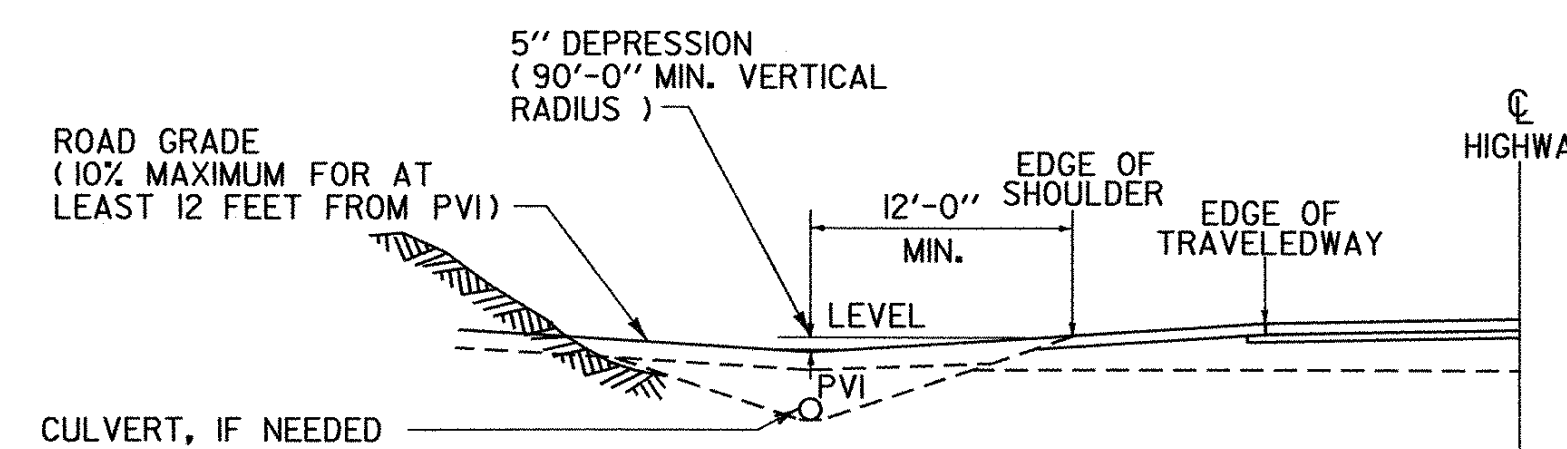
### CUL-DE-SAC FOR DEAD END ROADS



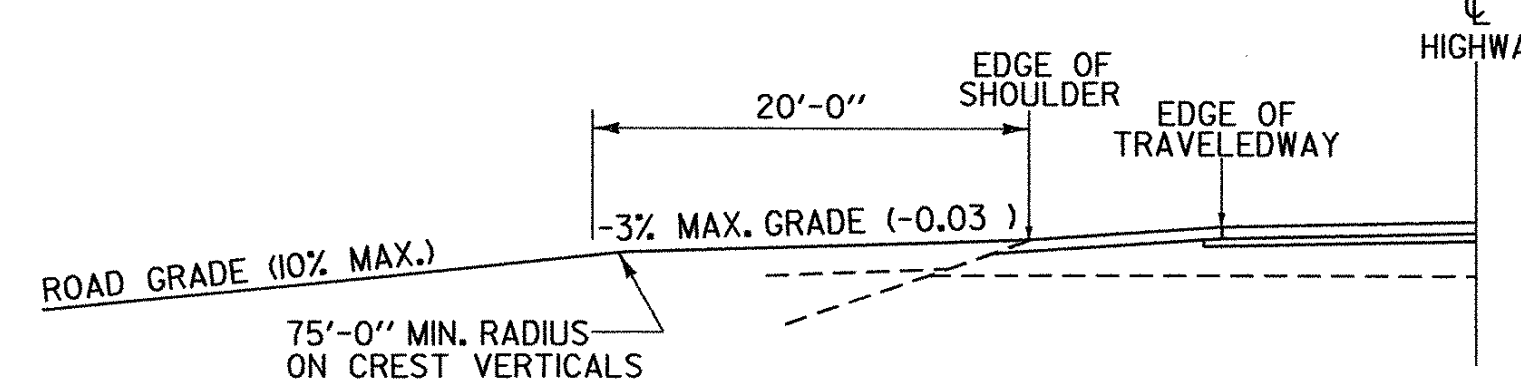
### INTERSECTION OF THROUGH ROAD AND SIDE ROAD



FOR THROUGH ROADS WITH SIDEWALKS & CURBING, SEE STANDARDS C2 & C3. PROVIDE DROP INLETS ON EACH SIDE OF SIDE ROAD AT INTERSECTION AS NECESSARY.



PROFILE OF INTERSECTION ( CUT SECTION )  
SHOWING 5' DEPRESSION



PROFILE OF INTERSECTION ( FILL SECTION )

#### REVISIONS AND CORRECTIONS

JAN. 21, 1971 - ORIGINAL DATE OF ISSUE  
 MAR. 12, 1971 - DIMENSIONS CHANGED ON TURN-A-ROUND  
 JULY 13, 1973 - INTERSECTION PROFILES ADDED  
 DEC. 7, 1993 - REVISED TO REFLECT CURRENT DESIGN CRITERIA  
 JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.  
 MAR. 10, 1995 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.  
 MARCH 3, 2003 - REVISED TO REFLECT CURRENT DESIGN CRITERIA

#### APPROVED

*[Signature]*  
 DIRECTOR OF PROGRAM DEVELOPMENT

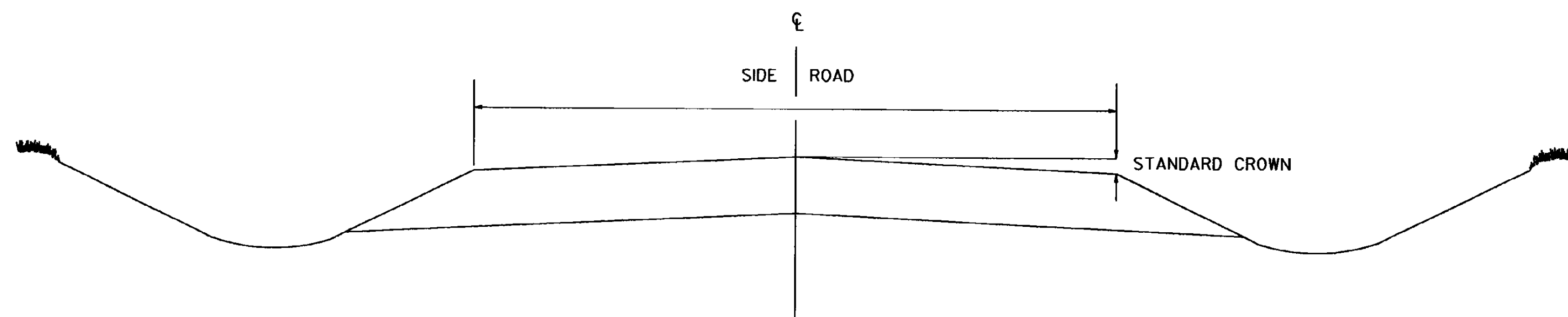
*[Signature]*  
 CHIEF OF UTILITIES

*[Signature]*  
 FEDERAL HIGHWAY ADMINISTRATION

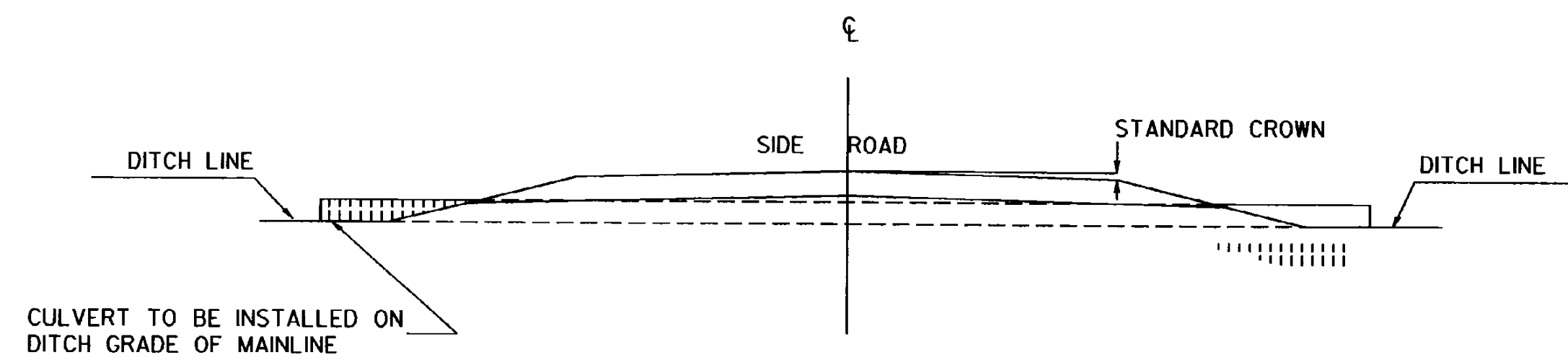
## STANDARDS FOR TOWN & DEVELOPMENT ROADS



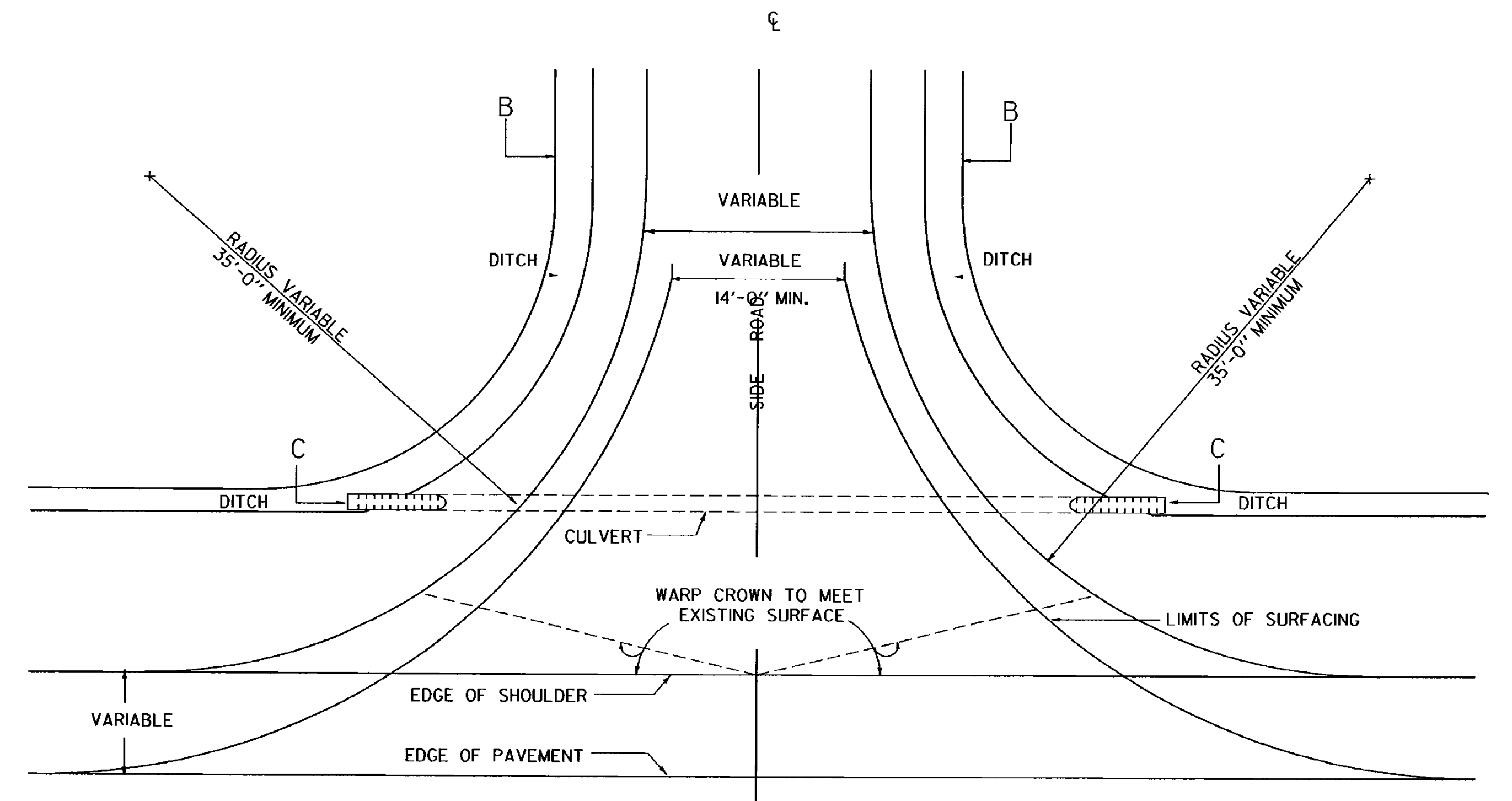
# STANDARD A-76



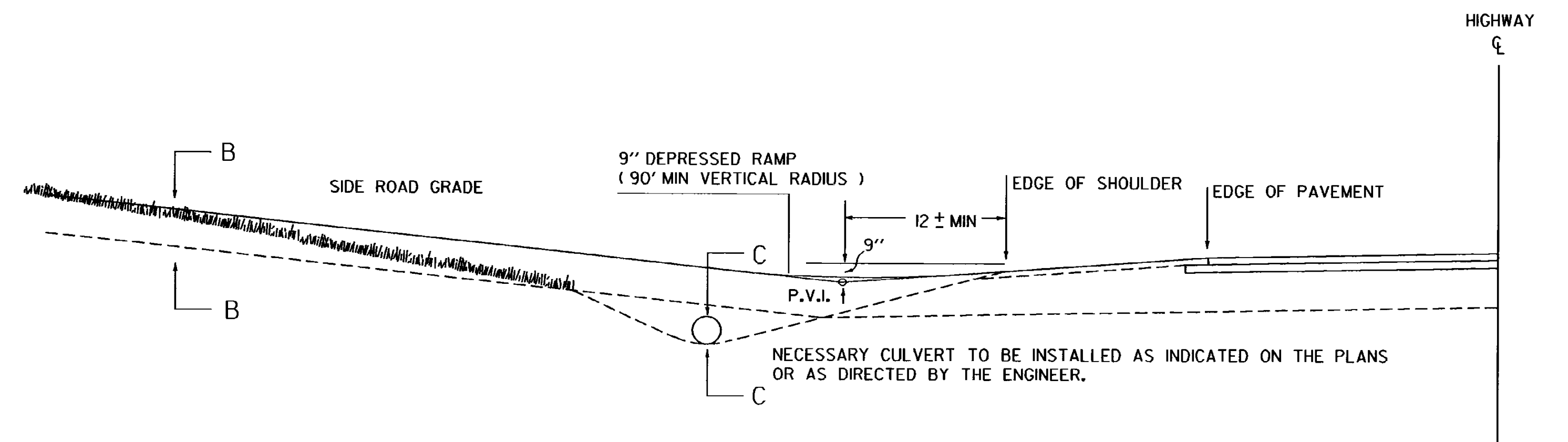
SECTION B - B



SECTION C - C



PLAN OF SIDE ROAD INTERSECTION



PROFILE OF SIDE ROAD INTERSECTION  
SHOWING 9" DEPRESSED RAMP

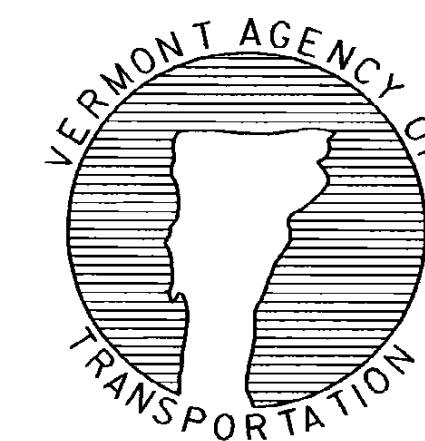
REVISIONS AND CORRECTIONS  
 DEC. 14, 1971 - ORIGINAL APPROVAL DATE  
 JUNE 1, 1994 - REISSUED, WITHOUT CHANGE,  
 UNDER NEW SIGNATURES.

APPROVED

APPROVED FOR THIS PROJECT  
 AND/OR DESIGN IMPLEMENTATION.  
 FHWA FINAL APPROVAL PENDING.

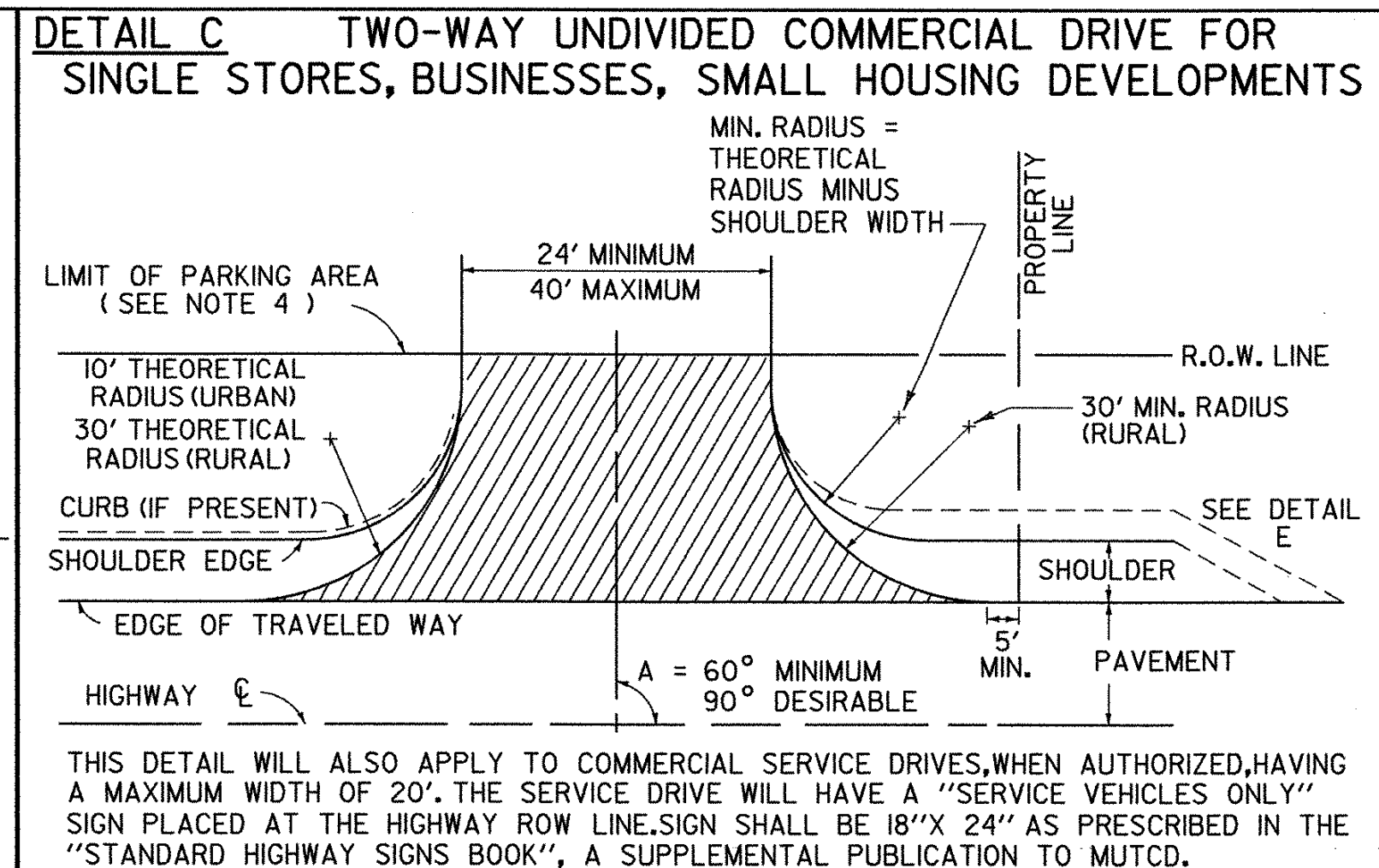
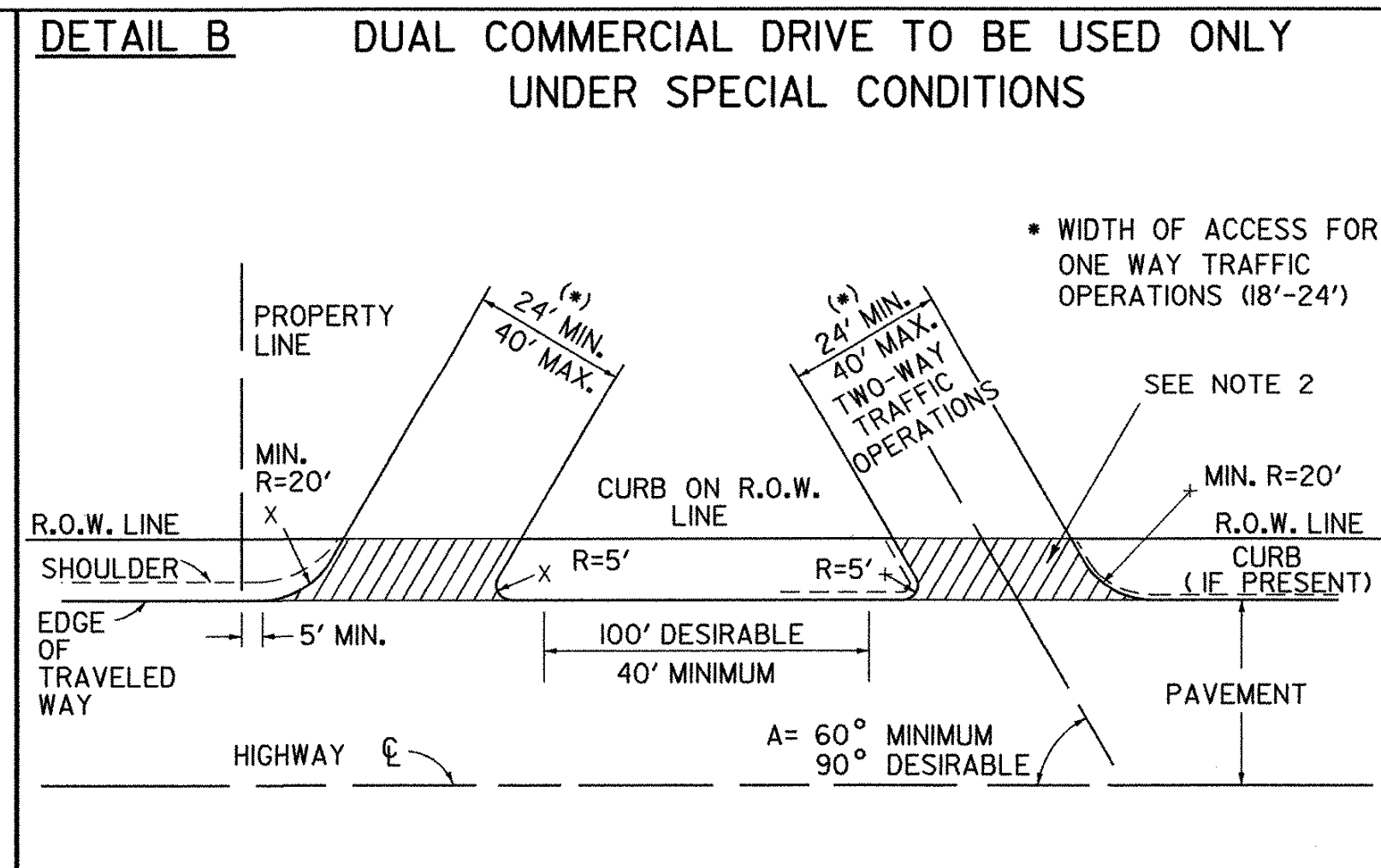
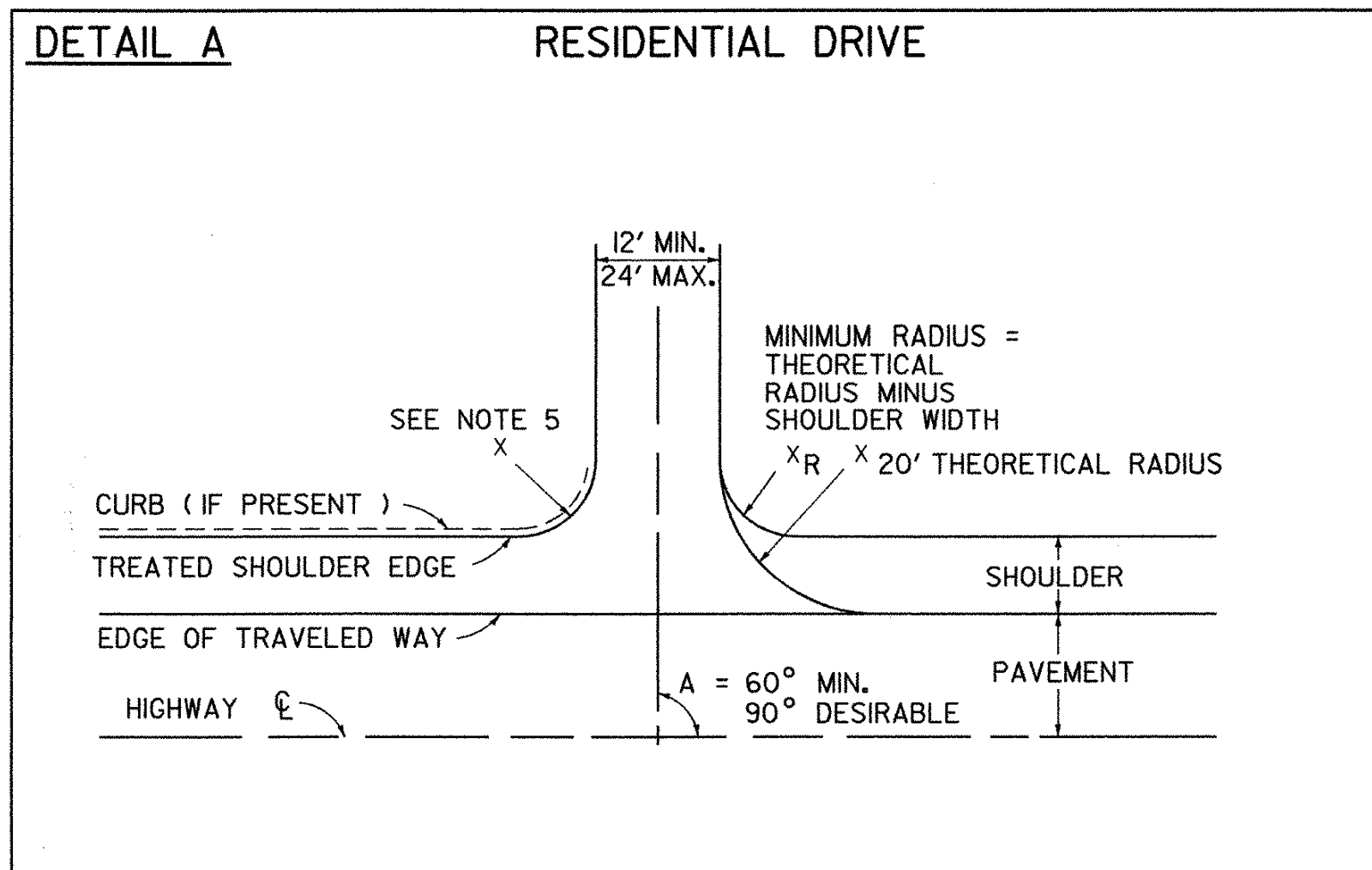
*Stephen D. MacCulloch, P.E.*  
 DIRECTOR OF ENGINEERING  
*Robert M. Munch, P.E.*  
 DESIGN ENGINEER

# SIDE ROAD INTERSECTION SHOWING DEPRESSED RAMP

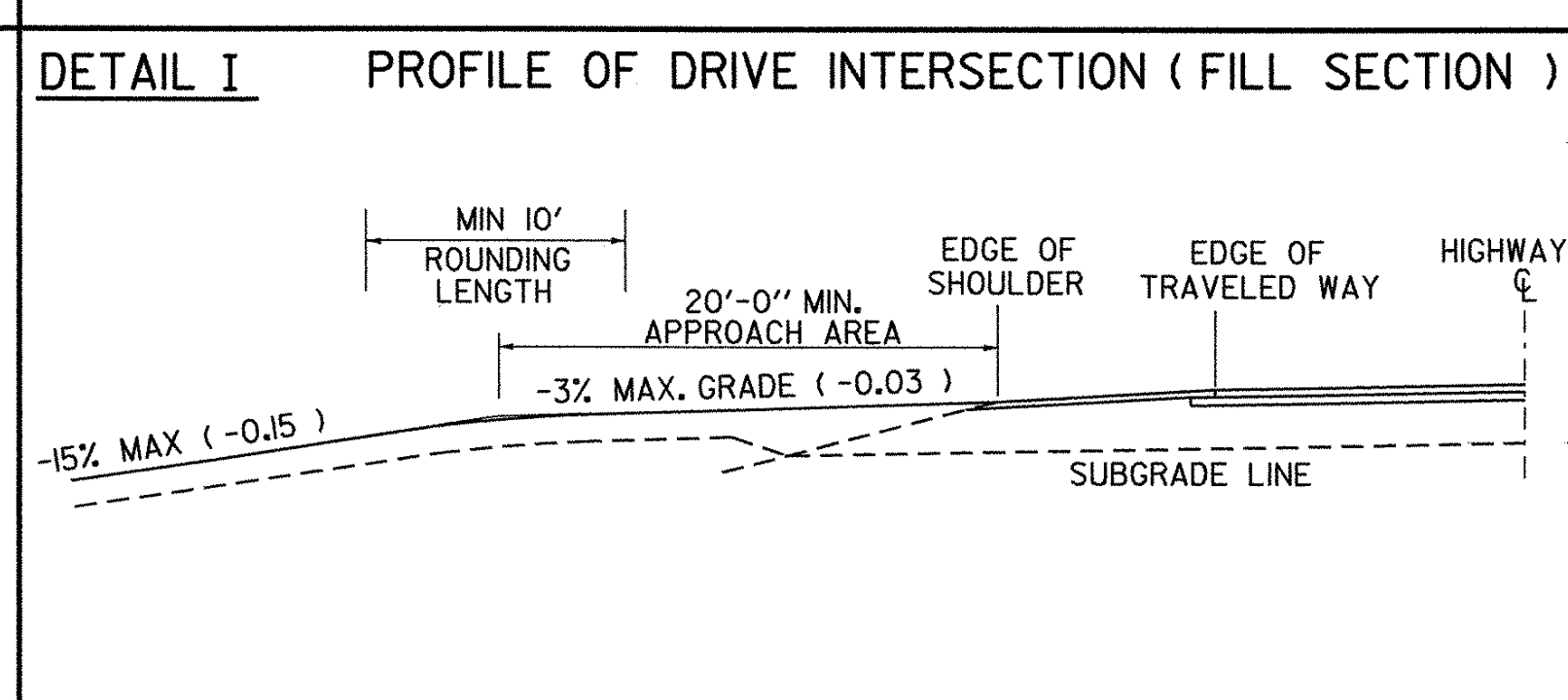
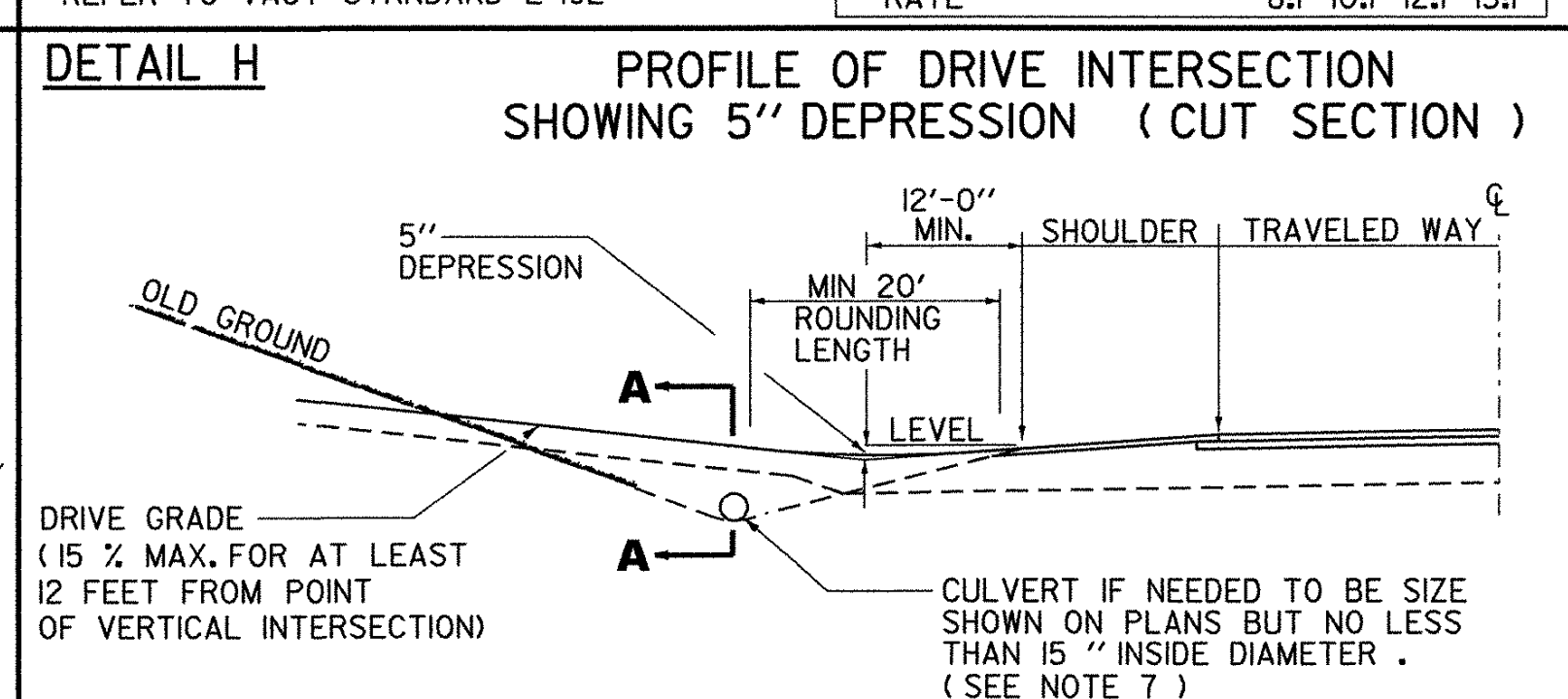
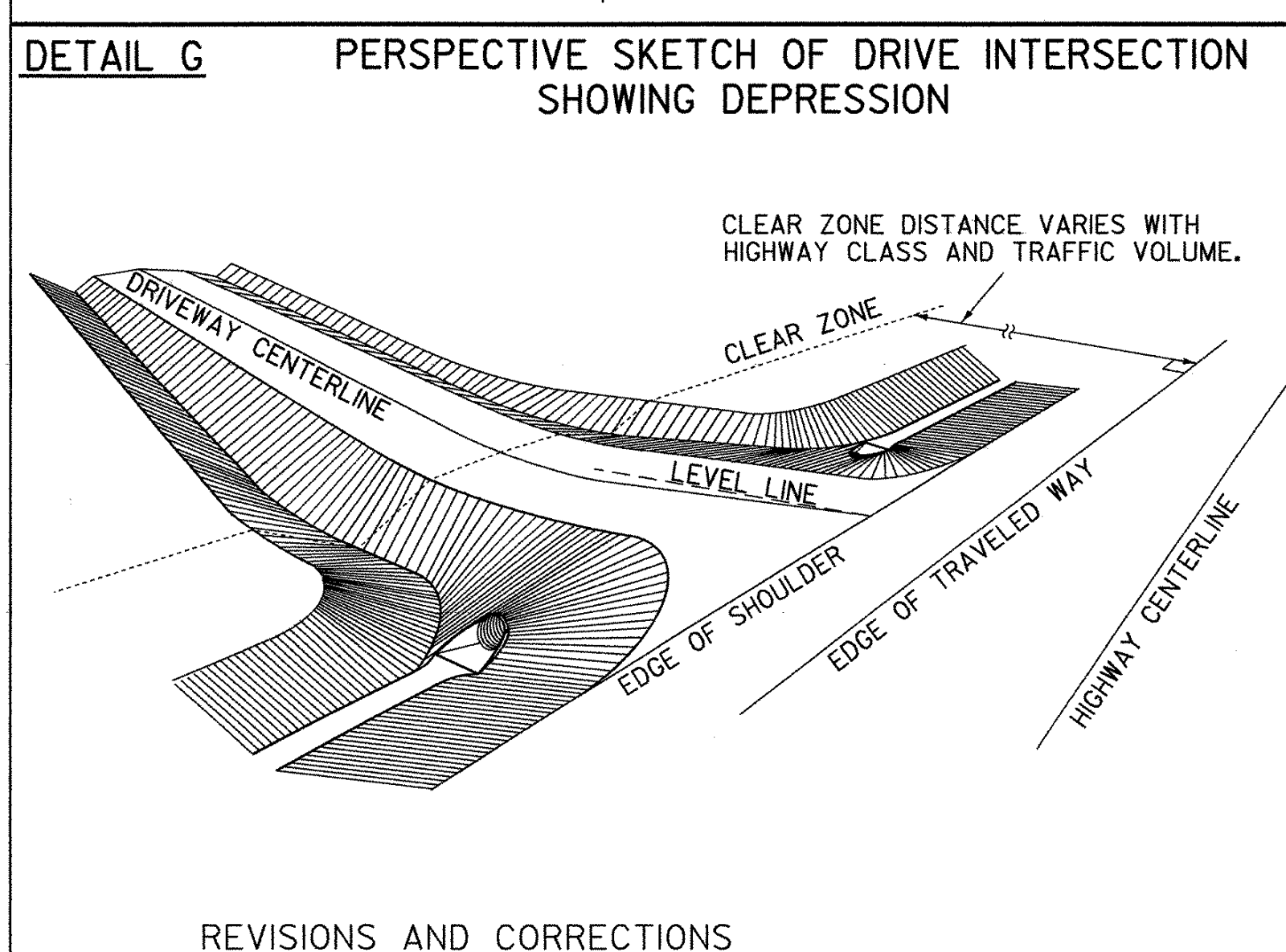
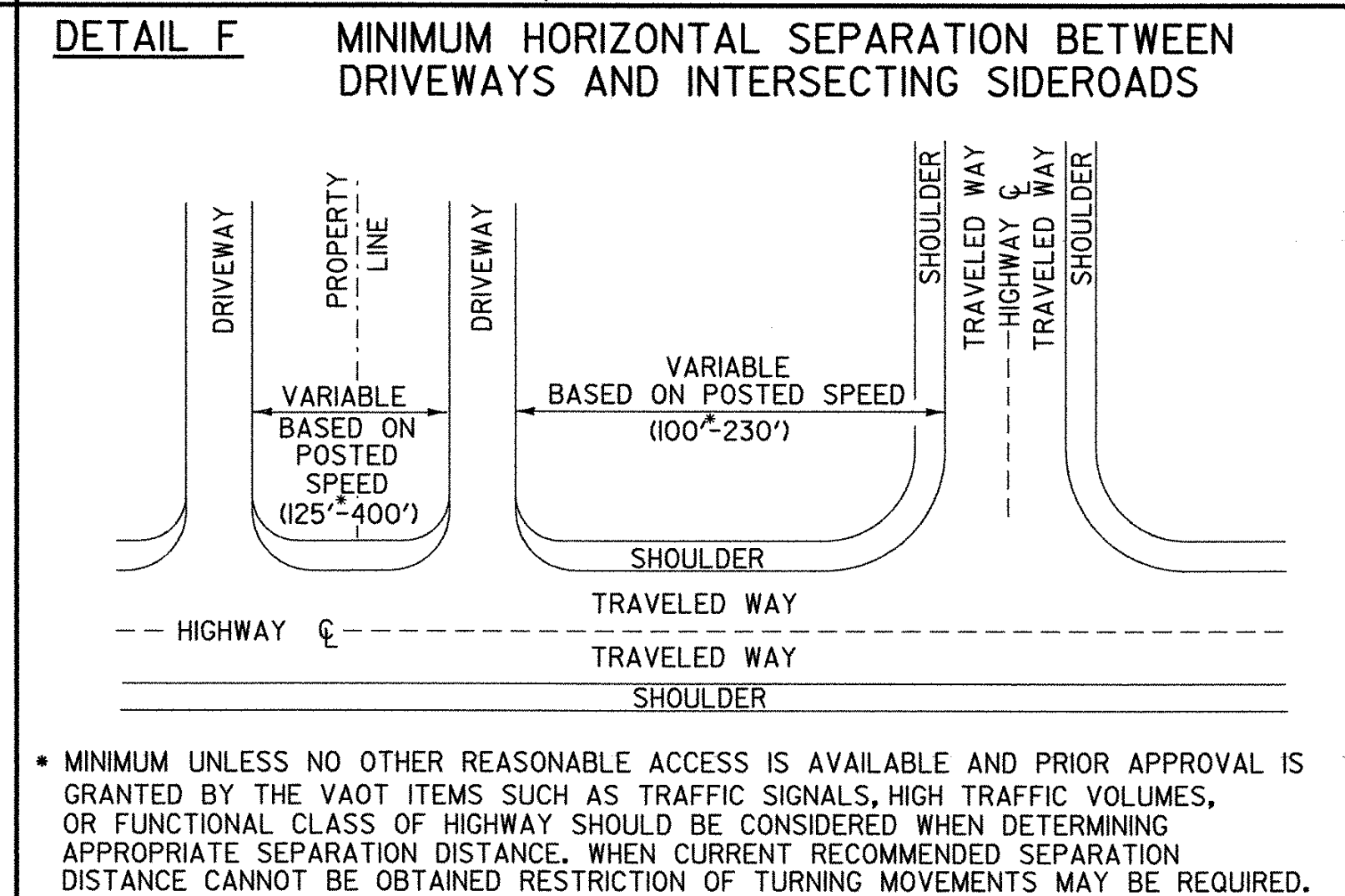
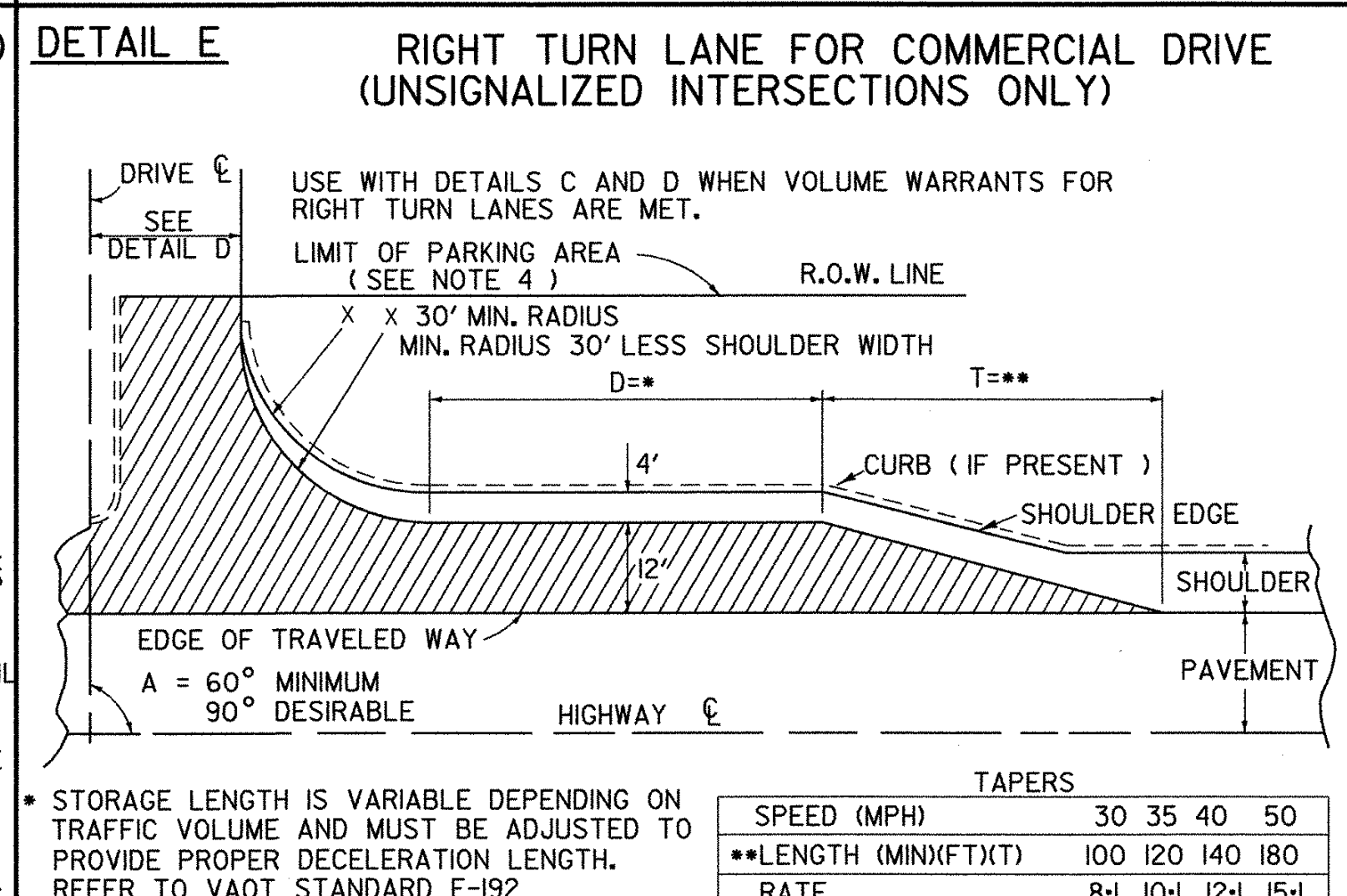
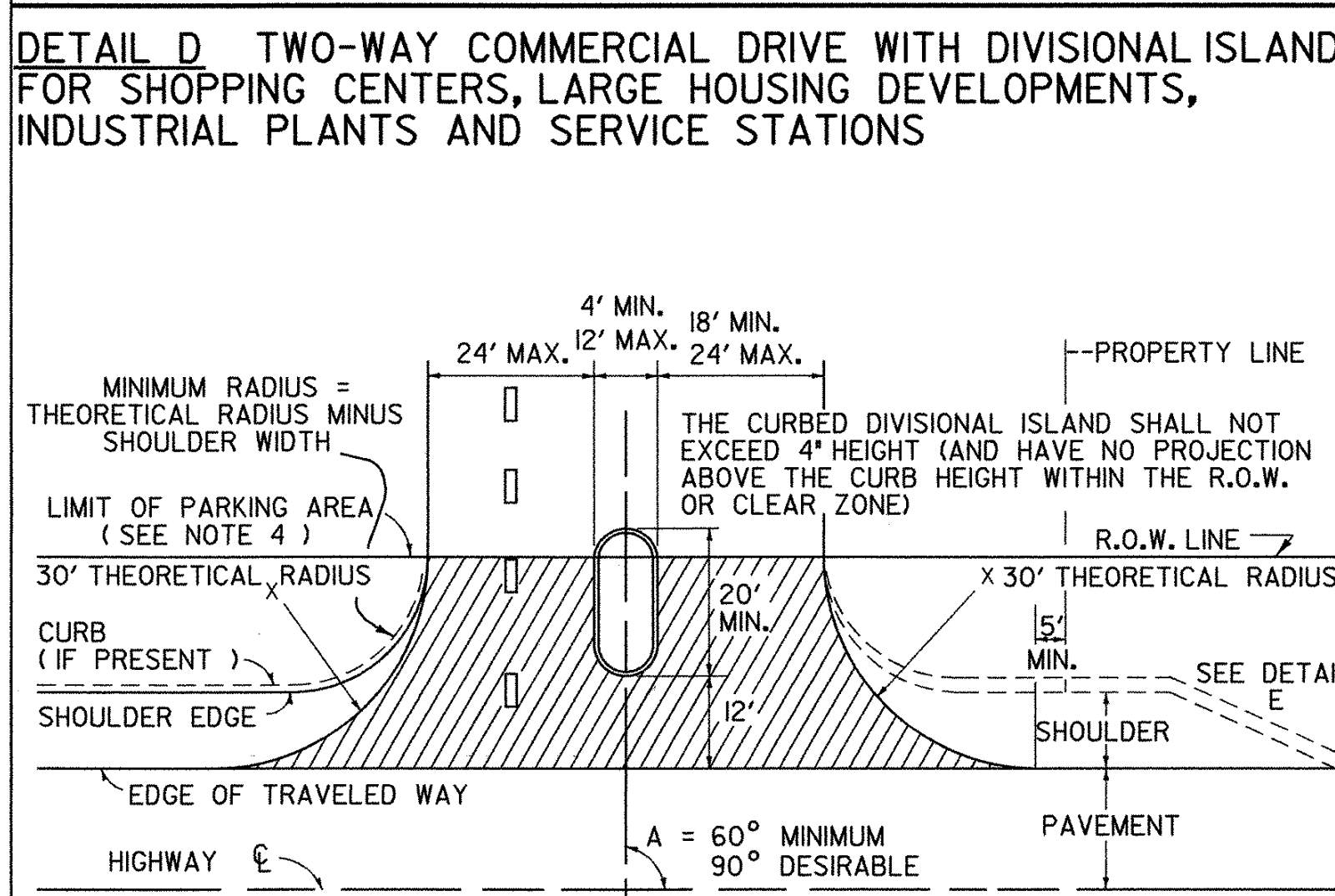


# STANDARD B-12





- #### NOTES:
- THIS SHEET IS INTENDED FOR USE BY DESIGNERS ON HIGHWAY PROJECTS AND IN CONJUNCTION WITH A PERMIT FOR WORK WITHIN HIGHWAY RIGHTS OF WAY (FORM TA 210). ALL CONSTRUCTION REQUIRED BY THE PERMIT AND INDICATED ON THIS SHEET SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND IS SUBJECT TO THE APPROVAL OF THE VT. AGENCY OF TRANSPORTATION. WHEN USED WITH THE PLANS FOR A HIGHWAY CONSTRUCTION PROJECT, THIS SHEET IS INTENDED TO BE A GUIDE FOR THE DESIGNER CONCERNING DRIVE WIDTHS, HORIZONTAL, VERTICAL AND GEOMETRIC CHARACTERISTICS.
  - ALL COMMERCIAL DRIVES SHALL BE PAVED FROM THE EDGE OF THE TRAVELED WAY TO THE HIGHWAY RIGHT-OF-WAY. TO THE FARTHEST POINT OF CURVATURE ON THE DRIVEWAY EDGE OR AS DIRECTED BY THE DISTRICT TRANSPORTATION ADMINISTRATOR. THIS PAVING IS INDICATED IN DETAILS (B THRU E) BY HATCHING.
  - DEPTH OF SUBBASE AND PAVEMENT TO BE THE SAME AS HIGHWAY OR AS SHOWN IN DETAIL J WITHIN THE LIMITS OF THE HIGHWAY RIGHT-OF-WAY.
  - VEHICULAR ACCESS FROM PARKING AREAS TO THE RIGHT-OF-WAY AT OTHER THAN APPROVED ACCESS POINTS WILL BE PREVENTED BY THE CONSTRUCTION OF CURBING OR OTHER SUITABLE PHYSICAL BARRIER.
  - IF CURB IS PRESENT, SEE APPROPRIATE CURB DETAIL STANDARD OR MATCH TOWN/CITY STANDARD CURB TREATMENT.
  - WHERE TRAFFIC VOLUME FOR A PROJECT IS SUBSTANTIAL THE AGENCY MAY REQUIRE SPECIAL LANES FOR TURNING, SIGNALS OR OTHER MODIFICATIONS. BASED ON TRAFFIC STUDIES THE AGENCY WILL DETERMINE SPECIFIC TREATMENT TO BE USED. ON DEVELOPER PROJECTS THE AGENCY WILL WORK WITH THE APPLICANT TO IMPLEMENT CHANGES TO THE STATE HIGHWAY.
  - CIRCULAR DRAINAGE CULVERTS UNDER DRIVES SHALL HAVE A MINIMUM INSIDE DIAMETER (I.D.) OF 15". PIPE ARCHES USED UNDER DRIVES SHALL HAVE A MINIMUM INSIDE CROSS-SECTIONAL AREA EQUIVALENT TO THAT PROVIDED BY A 15" CIRCULAR PIPE.
  - THE OFFSET BETWEEN THE PROPERTY LINE AND THE EDGE OF THE DRIVEWAY MAY BE GOVERNED BY LOCAL ZONING LAWS. DRIVEWAY WIDTH RESTRICTIONS SHOWN PERTAIN ONLY TO THE AREA WITHIN THE HIGHWAY R.O.W. OR THE END OF THE TURNING RADIUS WHICHEVER IS GREATEST.
  - DRIVEWAY GRADES STEEPER THAN THOSE SHOWN MAY BE ALLOWED AS LONG AS A 20' APPROACH AREA IS ACHIEVED FOR THE VEHICLE TO PAUSE BEFORE ENTERING THE HIGHWAY. (WHERE CURB & SIDEWALKS EXIST, SEE STANDARDS C-2A & C-2B)
  - INTERSECTION SIGHT DISTANCES, EQUAL TO OR GREATER THAN THOSE SHOWN BELOW, SHOULD BE PROVIDED IN BOTH DIRECTIONS FOR ALL DRIVES ENTERING ON PUBLIC HIGHWAYS, UNLESS OTHERWISE APPROVED BY THE AGENCY OF TRANSPORTATION. INTERSECTION SIGHT DISTANCE IS MEASURED FROM A POINT ON THE DRIVE AT LEAST 15 FEET FROM THE EDGE OF TRAVELED WAY OF THE ADJACENT ROADWAY AND MEASURED FROM A HEIGHT OF EYE OF 3.5 FEET ON THE DRIVE TO A HEIGHT OF 3.5 FEET ON THE ROADWAY.



#### SIGHT DISTANCE CHART

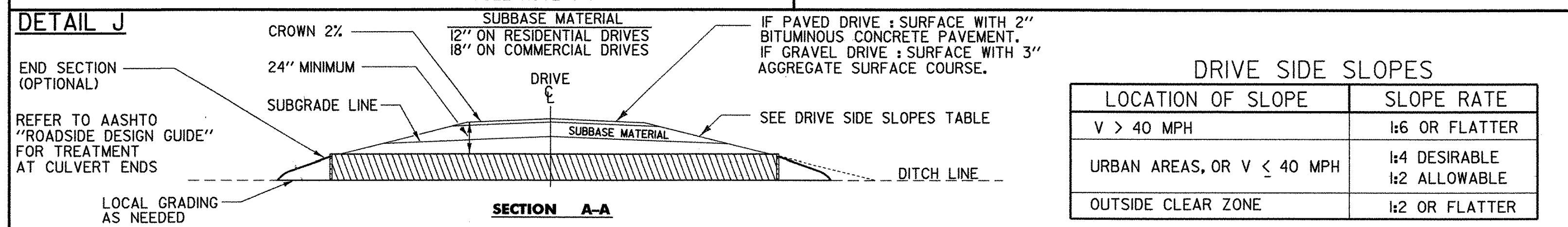
POSTED SPEED OR DESIGN SPEED (M.P.H.)	MINIMUM STOPPING SIGHT DISTANCE (FT)	MINIMUM INTERSECTION SIGHT DISTANCE (FT)
25	155	280
30	200	335
35	250	390
40	305	445
45	360	500
50	425	555
55	495	610
60	570	665
65	645	720

THE ABOVE VALUES ARE TAKEN FROM THE 2004 AASHTO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS & STREETS."

NOTE: ADVANCE WARNING SIGNS WILL BE REQUIRED IF OBTAINABLE INTERSECTION SIGHT DISTANCES ARE BELOW MINIMUM STOPPING SIGHT DISTANCES.

THE CHART IS ENTERED TO SELECT DESIGN VALUES BASED ON THE POSTED SPEED LIMIT IN MPH. VALUES FOR DESIGN ARE CALCULATED BASED ON THE DESIGN SPEED IN MPH.

* ASSUMES A GAP OF 7.5 SECONDS IN THE TRAFFIC STREAM ON THE HIGHWAY MAINLINE BASED ON THE HIGHWAY DESIGN SPEED IN MPH. THIS ALLOWS A STOPPED PASSENGER VEHICLE TO ENTER THE MAINLINE FROM THE DRIVE WITHOUT UNDULY INTERFERING WITH THE HIGHWAY OPERATIONS.



- #### REVISIONS AND CORRECTIONS
- DEC. 11, 1992 - THIS STANDARD SUPERCEDES B-71 (7/23/80R), B-71A (3/12/90), AND B-13 (12/14/71).
  - JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.
  - MAR. 10, 1995 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.
  - NOV. 16, 2000 - CHANGES MADE TO CONFORM WITH LANGUAGE AND DIMENSIONS IN ACCESS MANAGEMENT PROGRAM GUIDELINES.
  - FEB 1, 2004 - CHANGES MADE TO SIGHT DISTANCE CHART TO CONFORM WITH NEWEST AASHTO CRITERIA.
  - JULY 8, 2005 - CHANGE MADE TO OBJECT HEIGHT TO CONFORM WITH NEWEST AASHTO CRITERIA

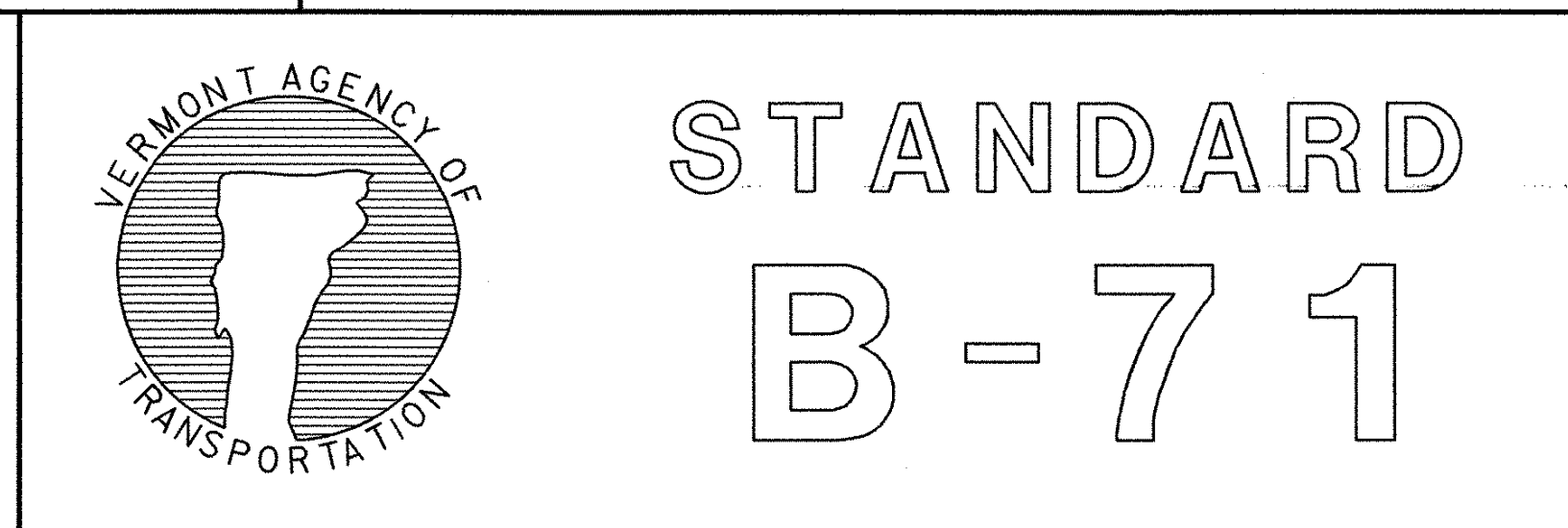
APPROVED

*Richard F. Stewart*  
DIRECTOR OF PROGRAM DEVELOPMENT

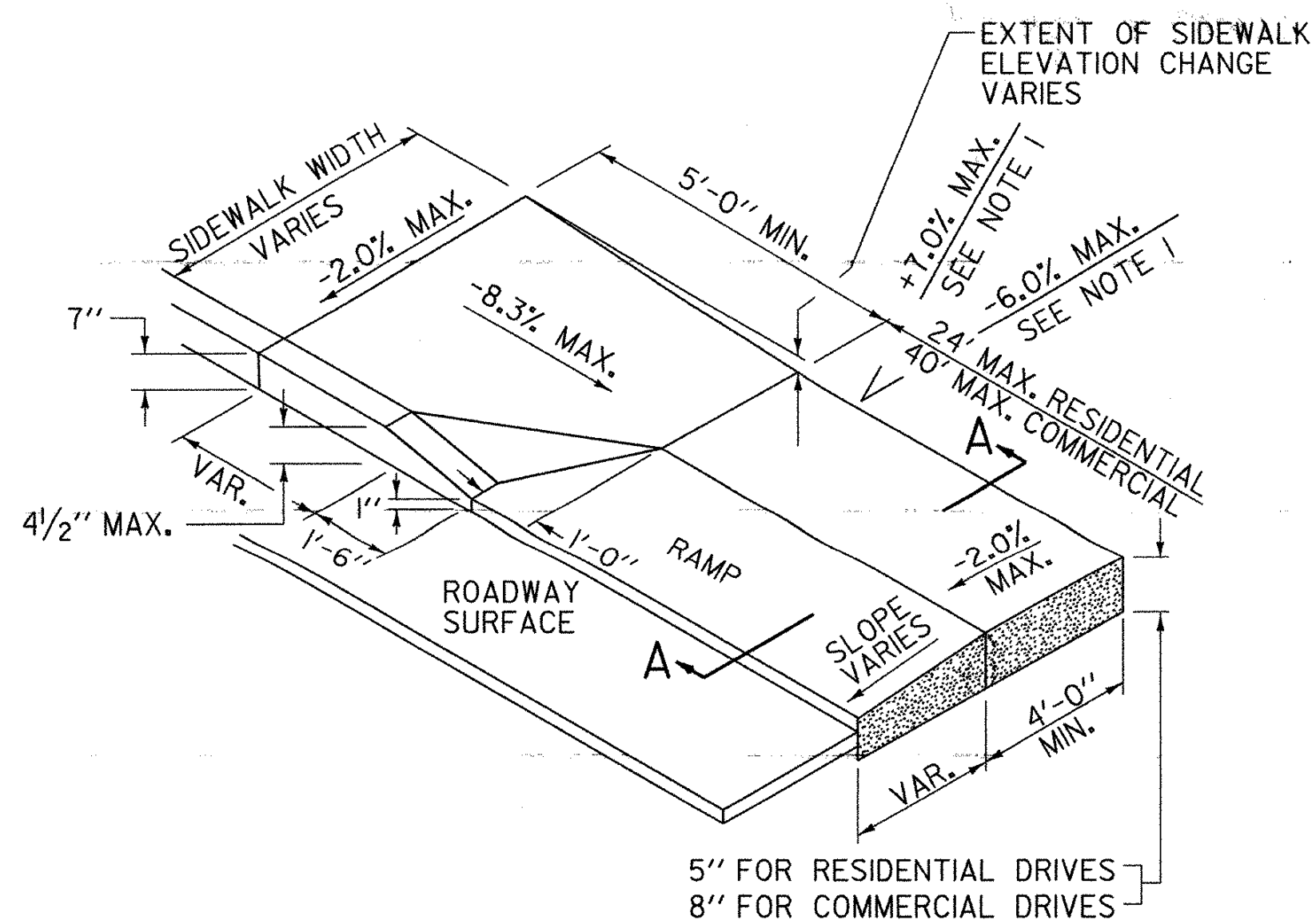
*Wm. S. Kelly*  
CHIEF OF UTILITIES AND PERMITS

*Michael Conroy*  
FEDERAL HIGHWAY ADMINISTRATION

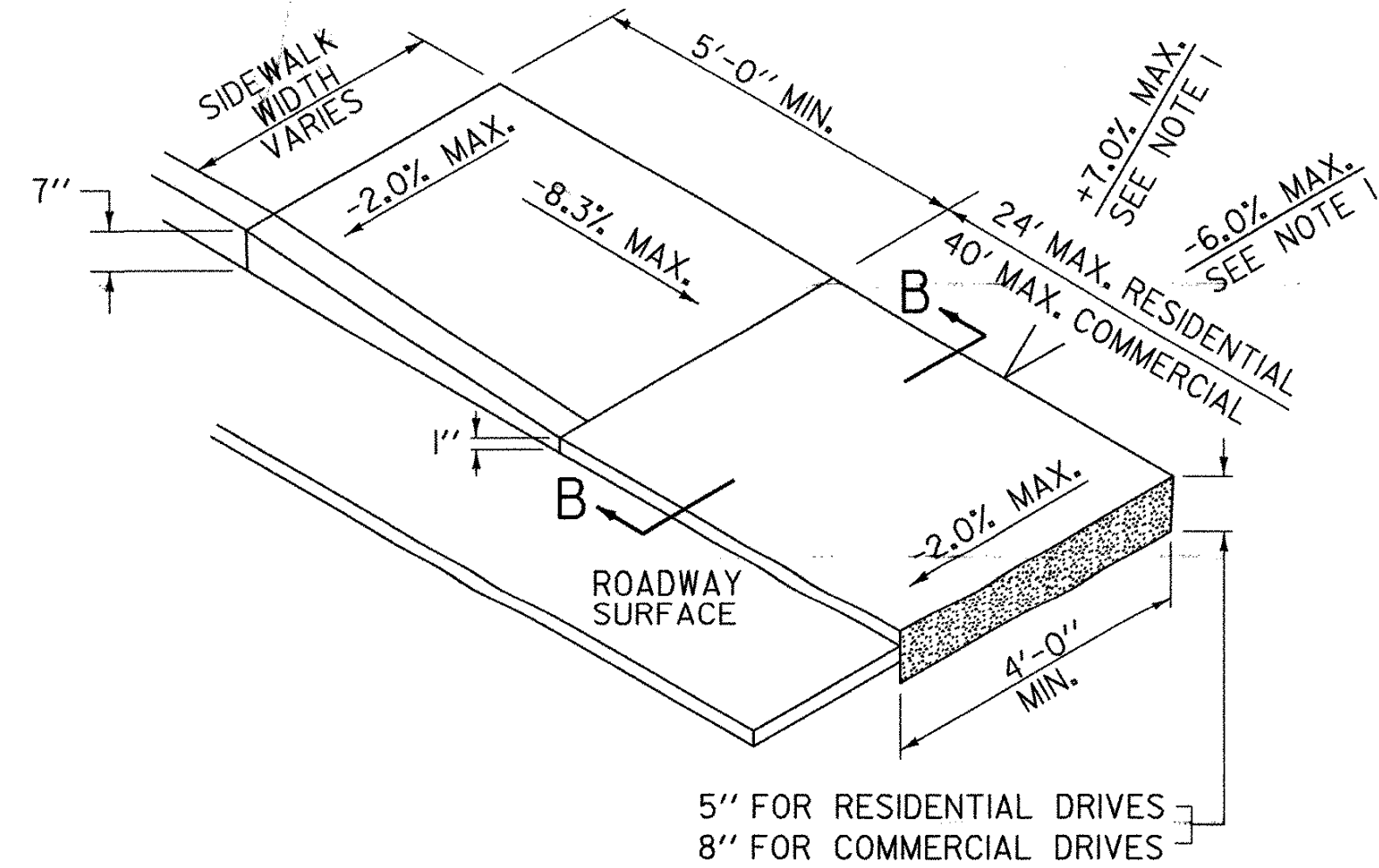
# STANDARDS FOR RESIDENTIAL AND COMMERCIAL DRIVES



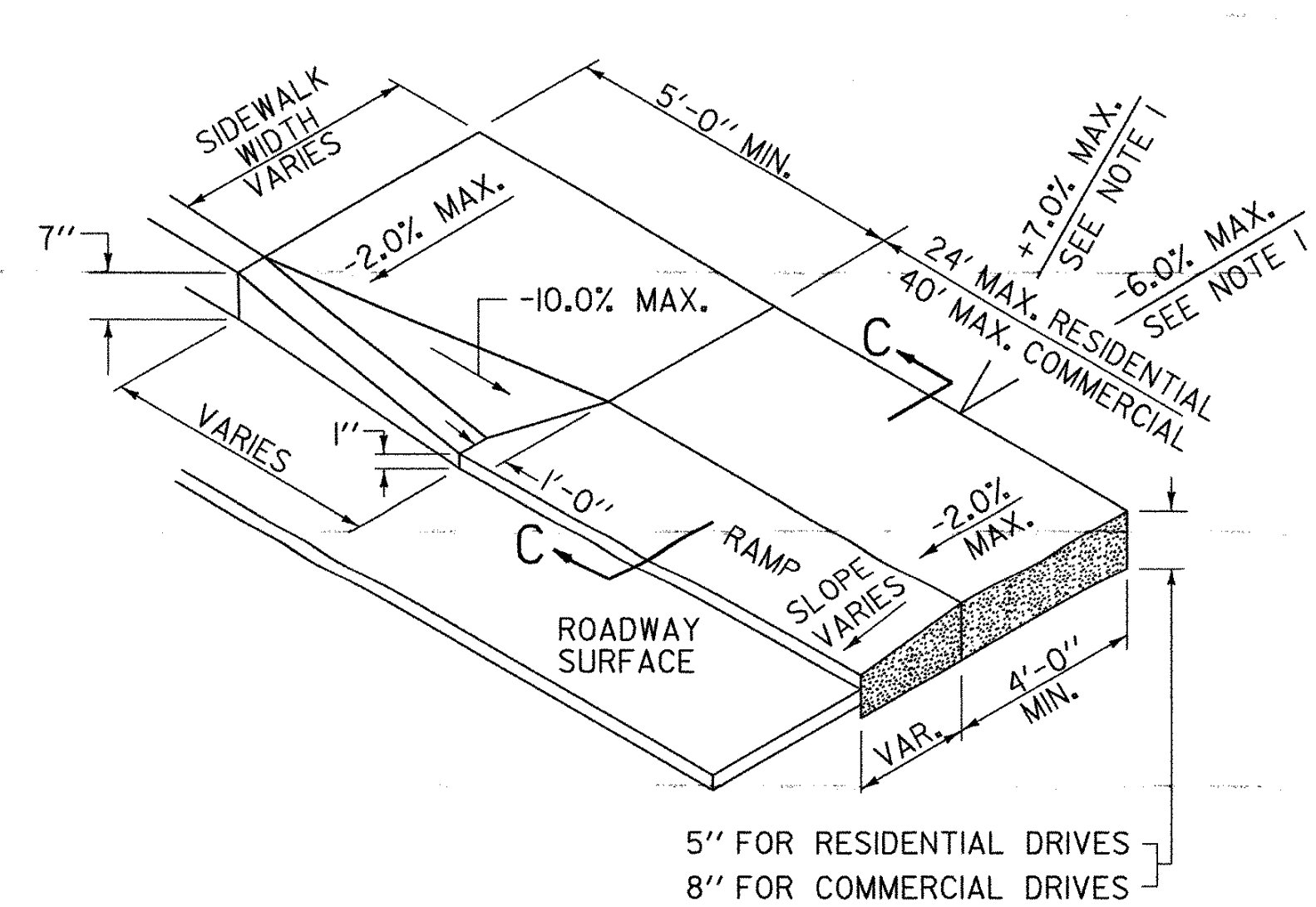




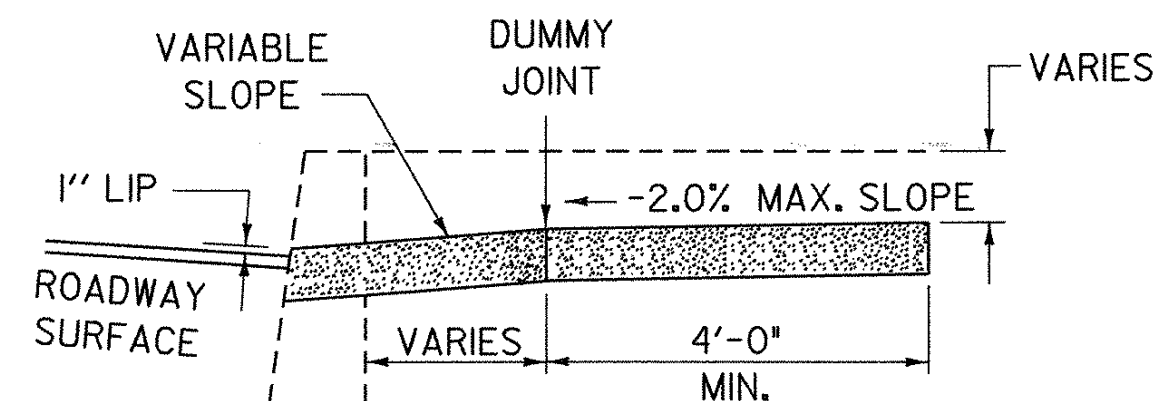
**TYPE 1 - COMBINATION CROSSING WITH FLARE**



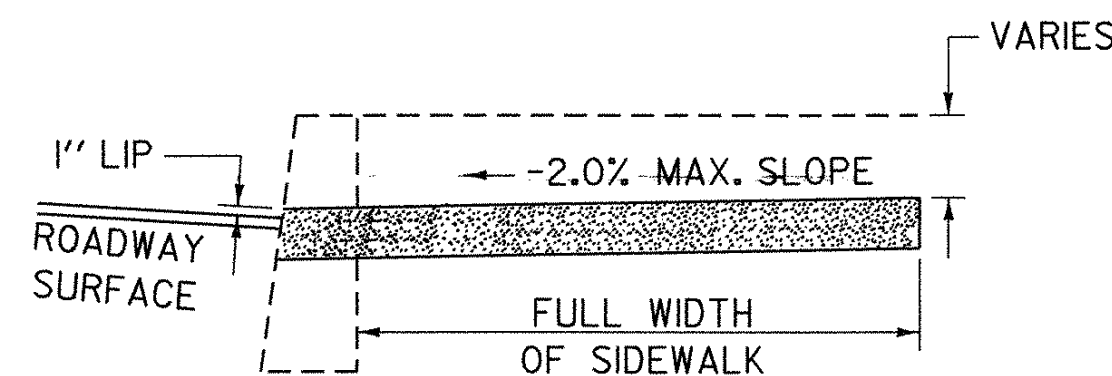
**TYPE 2 - PARALLEL CROSSING WITH LANDING**



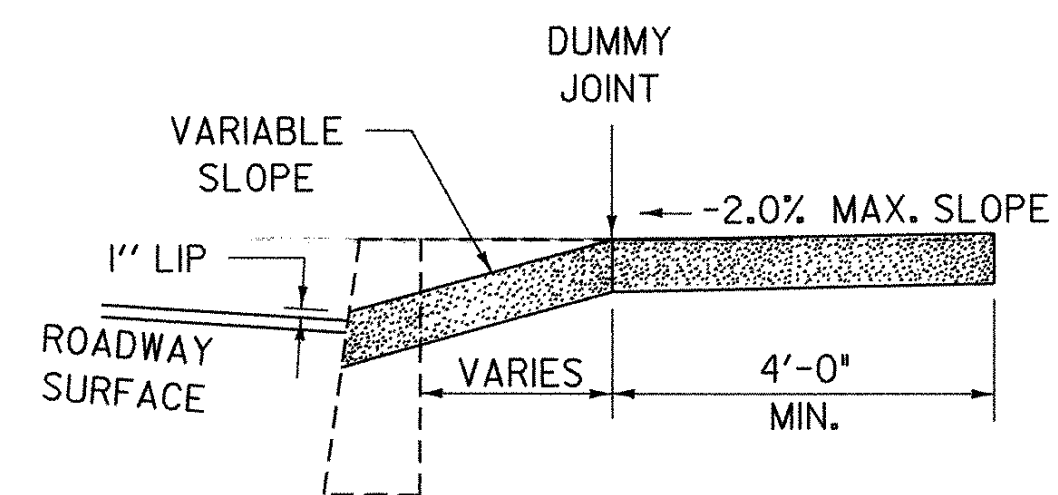
**TYPE 3 - LEVEL LANDING WITH FLARE**



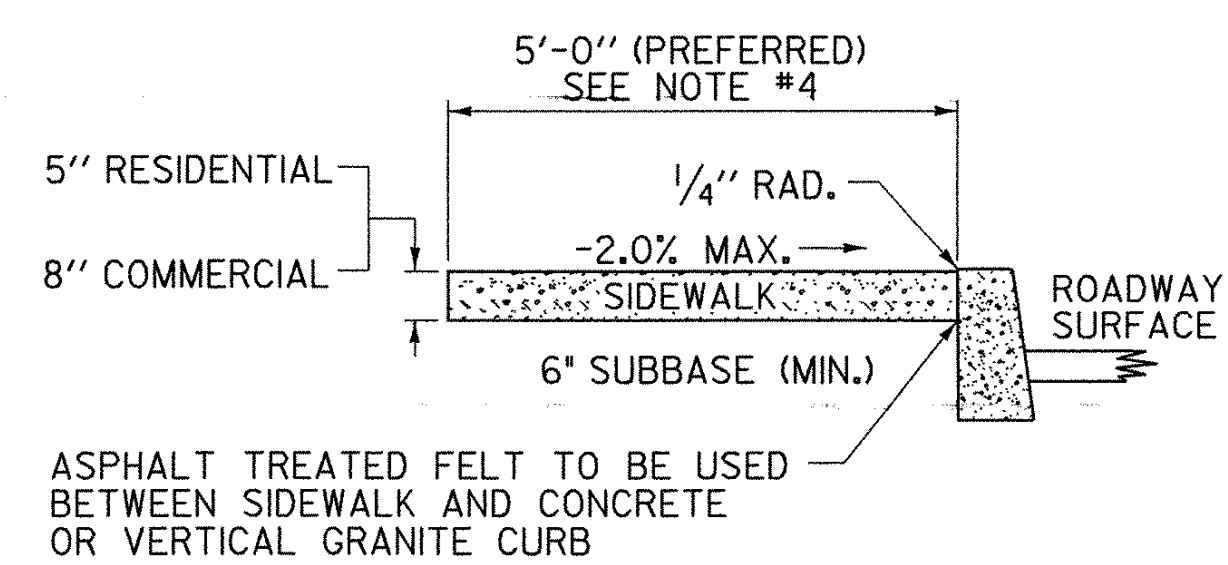
**SECTION A - A**



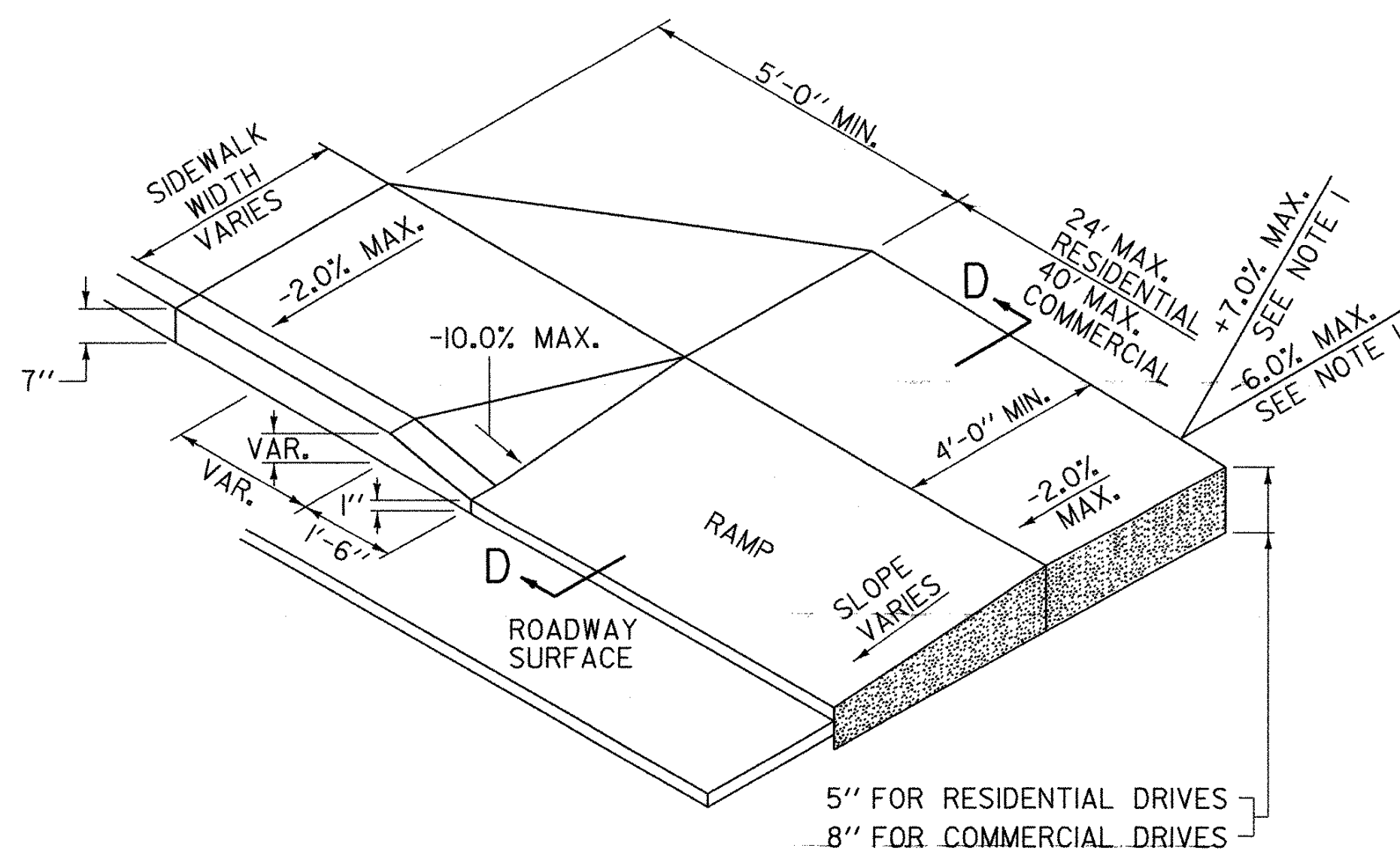
**SECTION B - B**



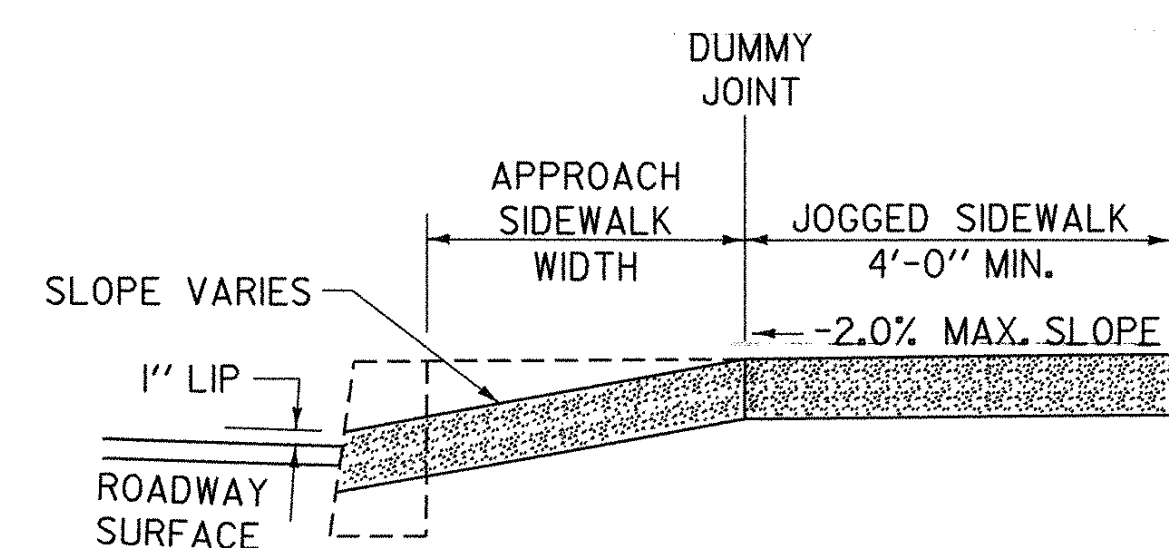
**SECTION C - C**



**PORTLAND CEMENT CONCRETE  
SIDEWALK**



**TYPE 4 - JOGGED CROSSING**



**SECTION D-D**

**GENERAL NOTES :**

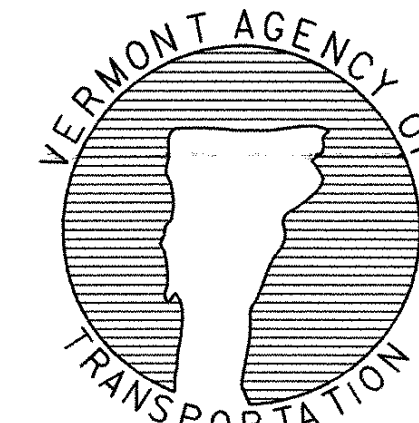
1. THESE TYPICALS APPLY WHERE GRADE OF DRIVE IS BETWEEN -6.0% AND +7.0%. FOR GRADES IN EXCESS OF THESE, ALTERNATIVE CROSS SECTION OF RAMP AND SIDEWALK MAY BE APPROVED BY THE ENGINEER.
2. DUMMY JOINTS SHALL BE PROVIDED AT TRANSITIONS (GRADE CHANGES) OF RAMPS AND FLARES.
3. DRIVEWAY RAMPS TO BE PAID FOR AS PORTLAND CEMENT CONCRETE SIDEWALK.
4. SIDEWALKS THAT ARE LESS THAN 5' WIDE REQUIRE 5' WIDE BY 5' LONG PASSING AREAS (NO GREATER THAN 2.0% CROSS SLOPE) AT INTERVALS NOT TO EXCEED 200'. DRIVEWAYS MEETING THESE REQUIREMENTS MAY BE USED AS A WHEELCHAIR PASSING AREA.
5. IN NO CASE SHALL THE CROSS SLOPE OF AN ACCESSIBLE ROUTE EXCEED 2.0%.

REVISIONS AND CORRECTIONS  
 DEC. 14, 1971 - ORIGINAL APPROVAL DATE  
 OCT. 25, 1985 - REVISED TO CONFORM TO 1986 SPECIFICATIONS  
 JUNE 1, 1994 - REISSUED WITHOUT CHANGE, UNDER NEW SIGNATURES.  
 JAN. 3, 2000 - UPDATED TO REFLECT METRIC STD. CHANGES.  
 OCT. 14, 2005 - UPDATED TO REFLECT REVISED ADAAG STANDARDS

APPROVED  
*James V. Dault*  
 Asst. DIRECTOR OF PROGRAM DEVELOPMENT  
*Kevin A. Marchia*  
 ROADWAY PROGRAM MANAGER  
*Michael J. ...*  
 FEDERAL HIGHWAY ADMINISTRATION

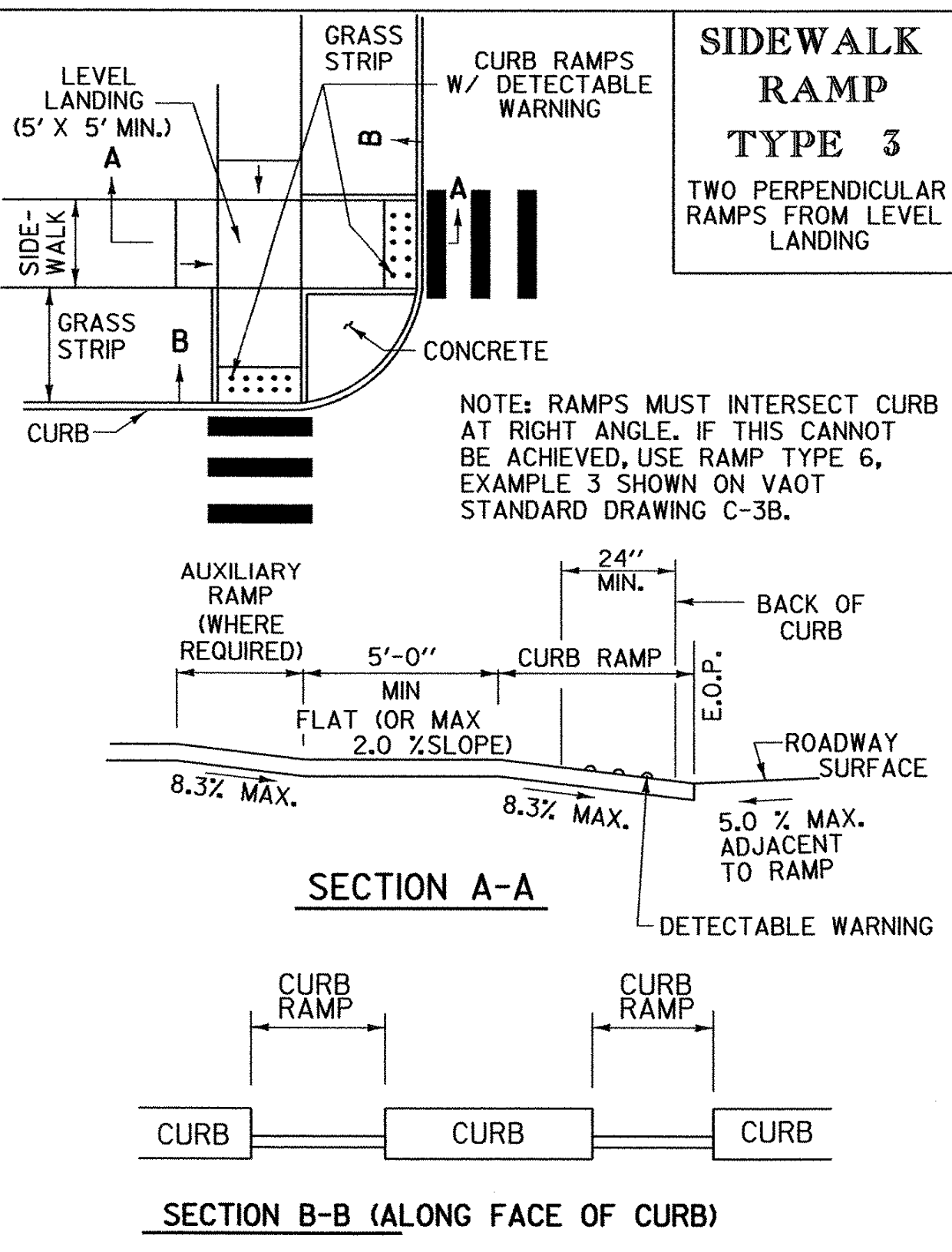
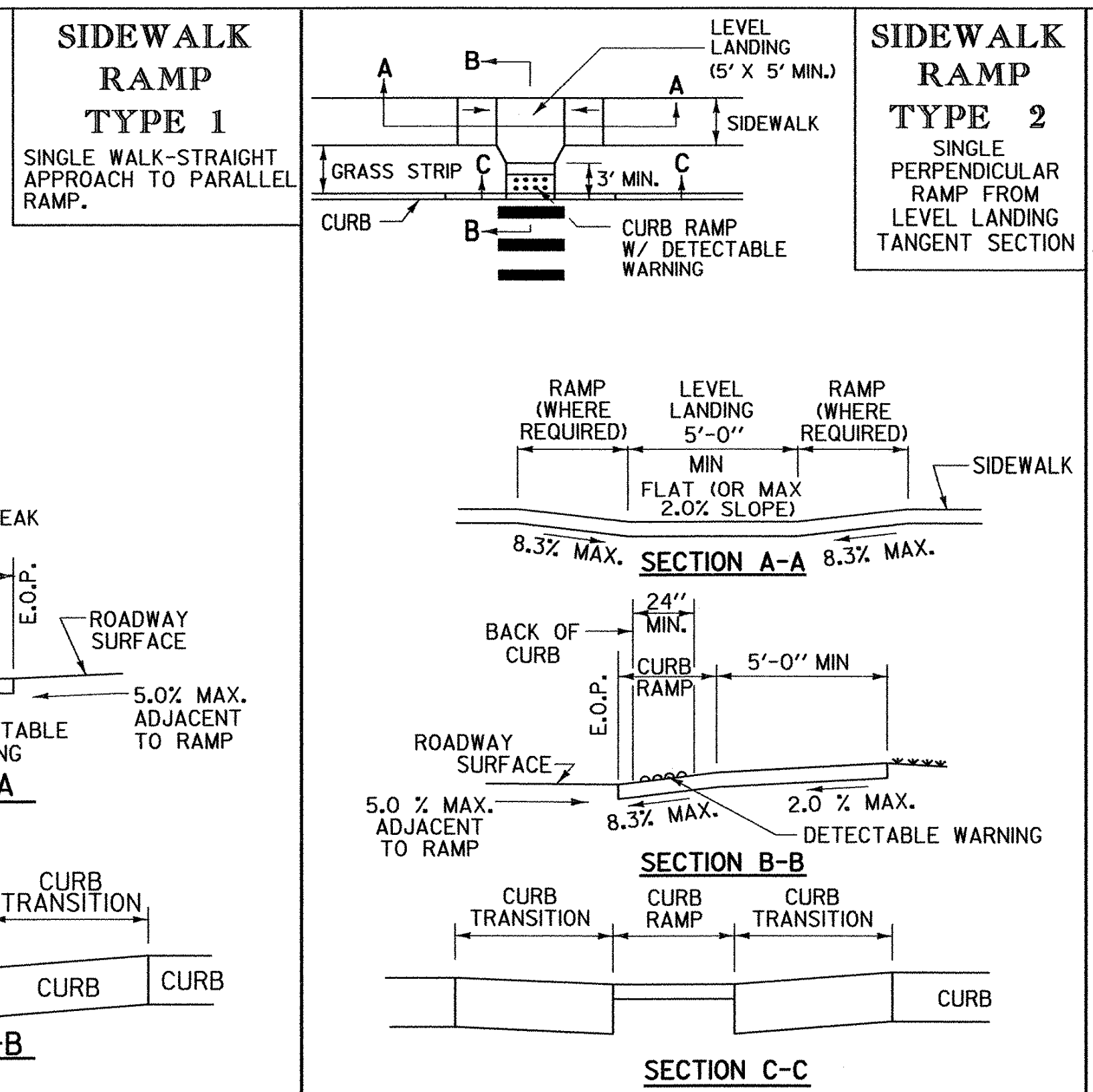
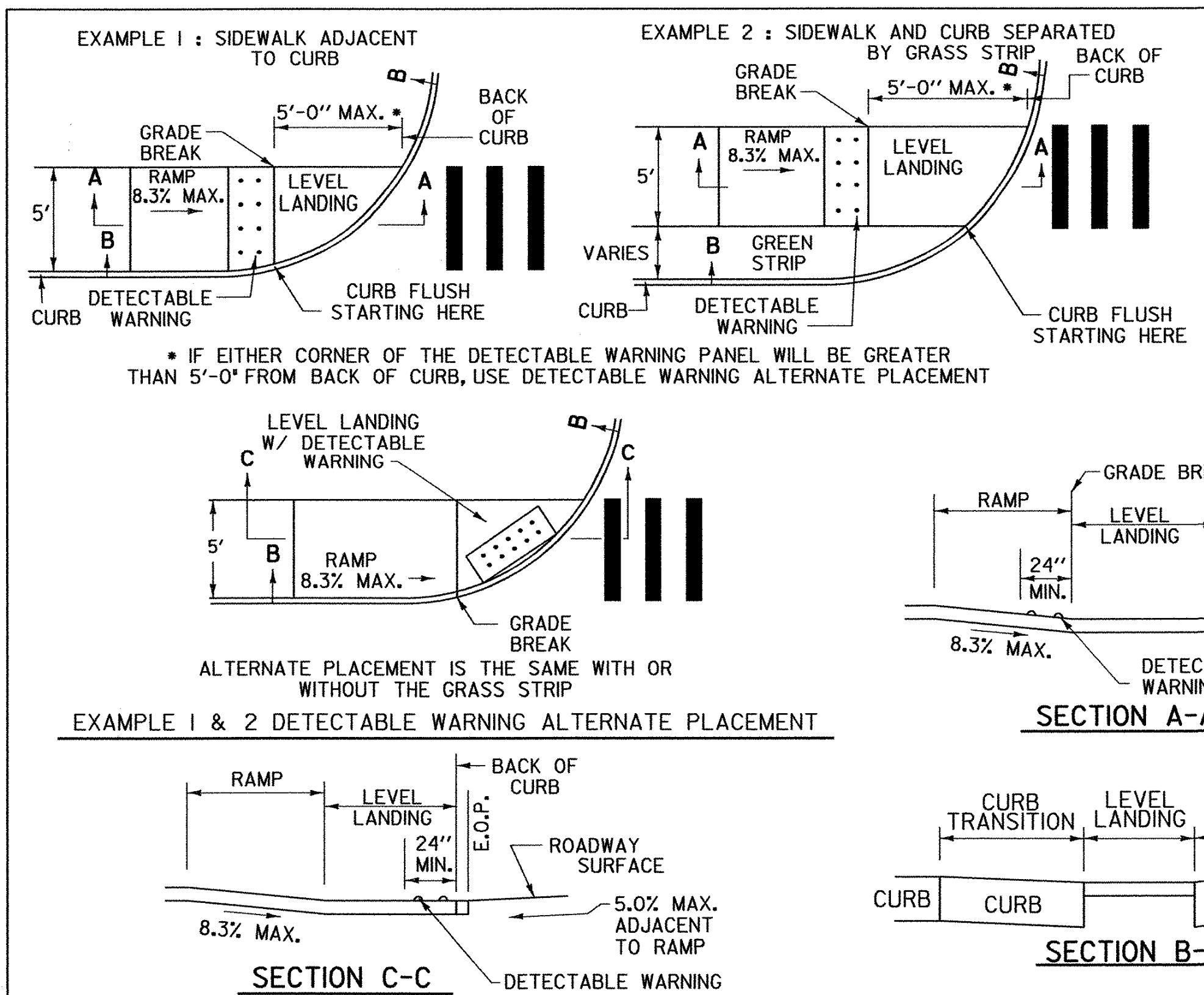
**PORTLAND CEMENT CONCRETE SIDEWALK  
 DRIVE ENTRANCES WITH SIDEWALK ADJACENT  
 TO CURB**

OTHER STANDARDS REQUIRED: B-71

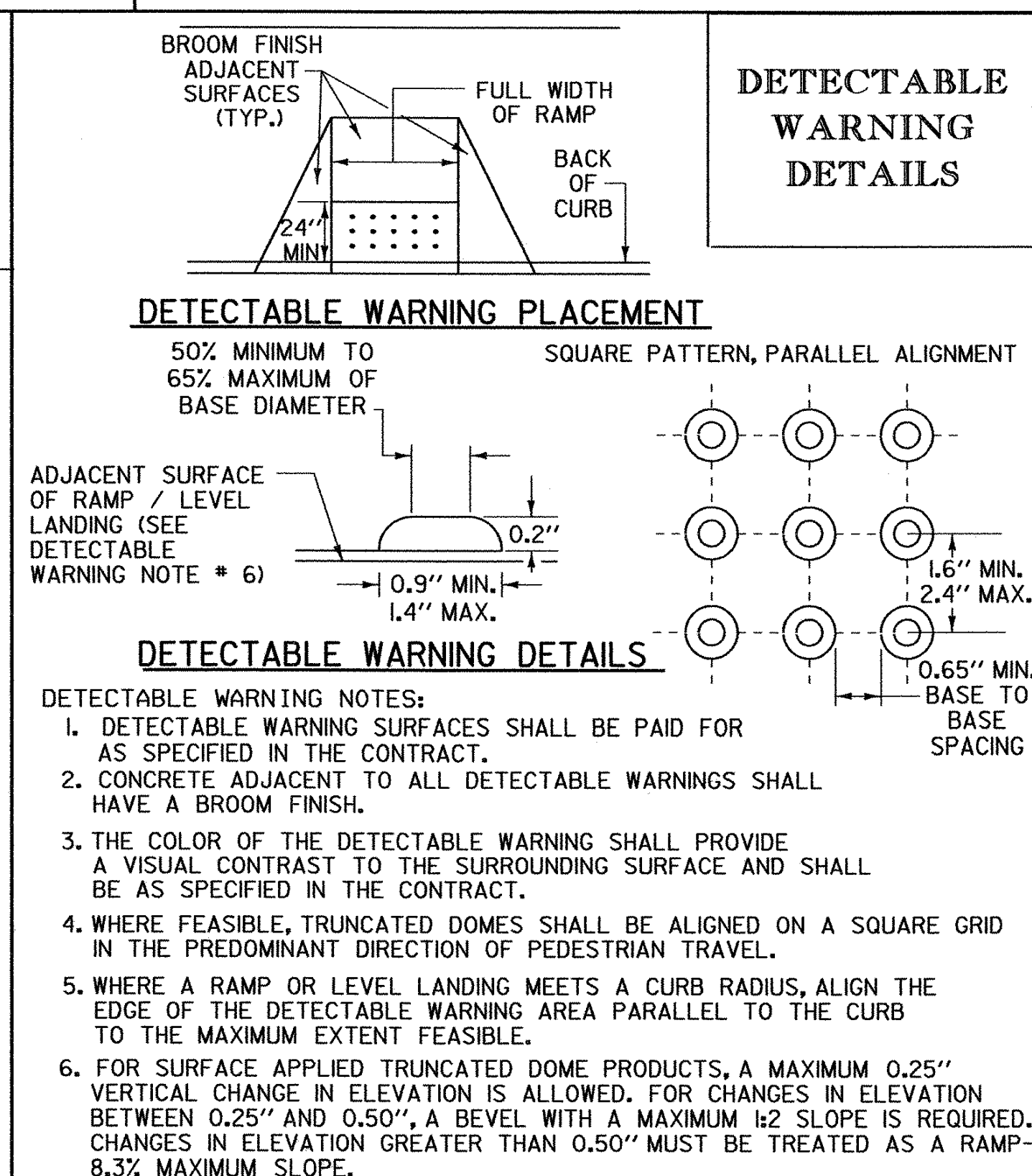
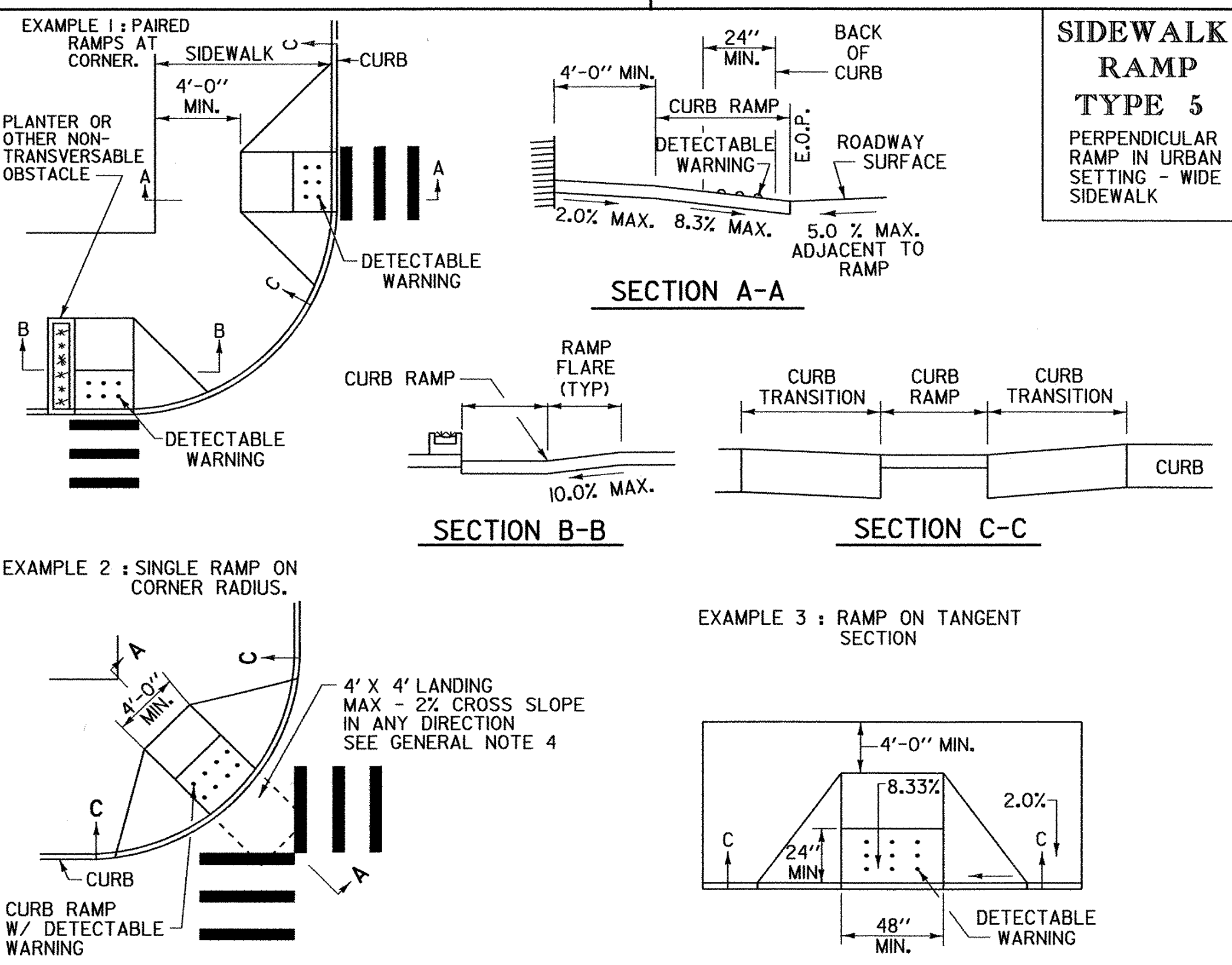
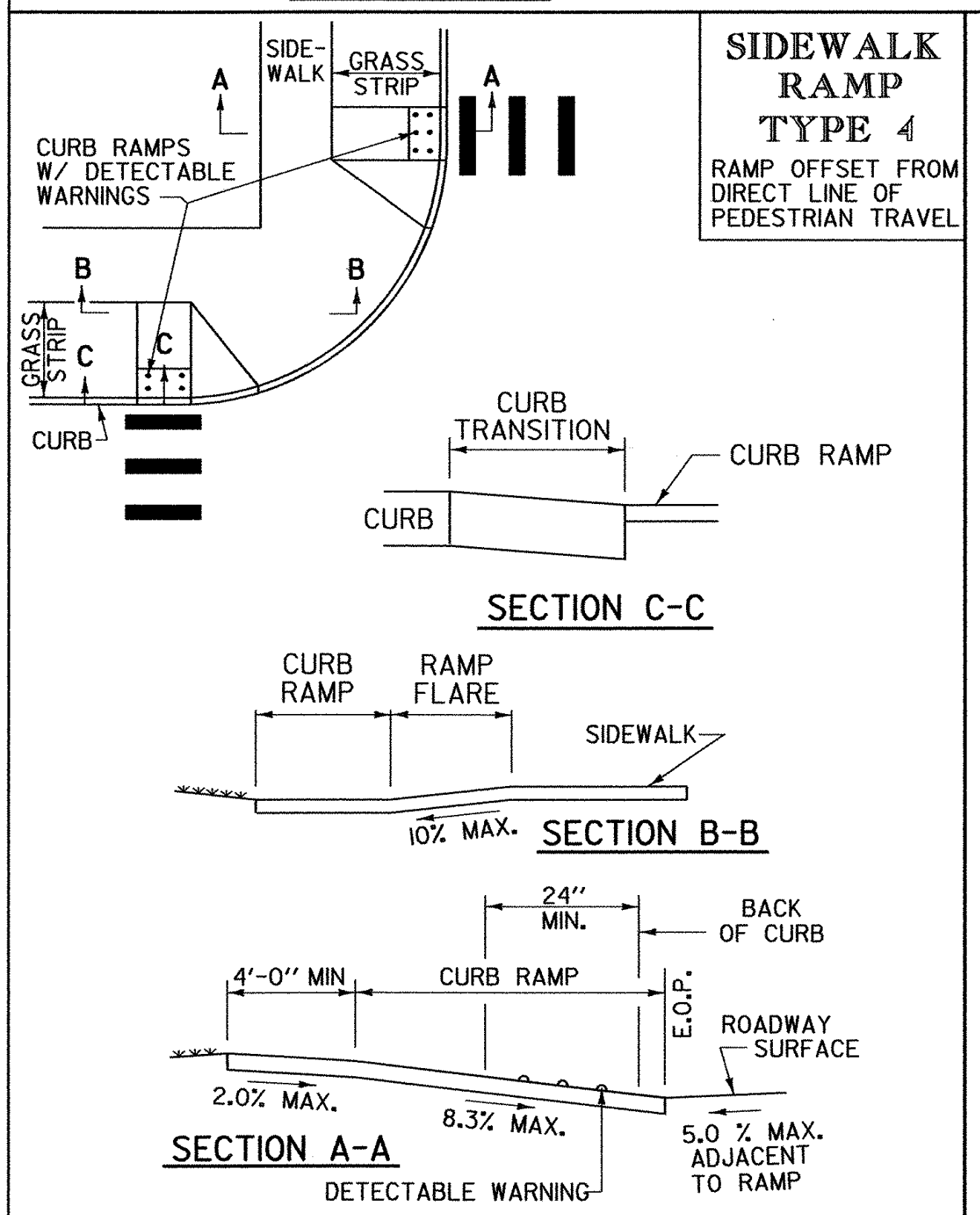


**STANDARD  
 C-2A**





- GENERAL NOTES:**
- THE DIMENSIONS AND GRADES SHOWN ON THIS STANDARD WILL BE ADHERED TO IN THE DESIGN AND THE CONSTRUCTION OF SIDEWALK RAMPS. WHERE SIDEWALKS RUN ADJACENT TO ROADWAYS ON STEEP (5% OR GREATER) GRADES, RAMP GRADES WILL BE AS FLAT AS POSSIBLE. (ON LOW SIDE OF DRIVES AND INTERSECTING SIDE STREETS, RAMPS SHALL SLOPE TOWARDS DRIVE OR SIDE STREET @ 2%.)
  - NOMINAL RAMP DIMENSIONS AND GRADES:  
RAMP WIDTH - 4'-0" MINIMUM  
RAMP SLOPE - 8.3% MAXIMUM  
FLARE SLOPE - 10% MAXIMUM  
RAMP CROSS SLOPE - 2.0% MAXIMUM
  - A LEVEL LANDING (NO GREATER THAN 2.0% SLOPE IN ANY DIRECTION) SHALL BE PROVIDED AT THE TOP OF SIDEWALK RAMPS TO ALLOW FOR STOPPING AND MANEUVERING OF WHEELCHAIRS.
  - LEVEL LANDINGS (NO GREATER THAN 2.0% SLOPE IN ANY DIRECTION) AT THE BOTTOM OF PERPENDICULAR RAMPS SHALL BE WHOLLY CONTAINED WITHIN MARKED CROSSWALKS.
  - DUMMY JOINTS SHALL BE PROVIDED AT TRANSITIONS (GRADE CHANGES) AT TOPS AND BOTTOMS OF RAMPS AND FLARES.
  - VERTICAL DROP-OFF EDGES TO RAMPS WILL NOT BE BUILT UNLESS THE RAMP ABUTS AN AREA WHICH WILL NOT BE USED BY PEDESTRIANS.
  - NO VERTICAL "LIP" OR "CURB REVEAL" WILL BE PROVIDED WHERE THE RAMP ADJOINS THE ROADWAY.
  - AT MARKED CROSSWALKS, THE FULL WIDTH OF THE RAMP OR LANDING SHALL BE CONTAINED WITHIN THE PAVEMENT MARKINGS.
  - WHERE POSSIBLE, RAMP FLARES SHOULD BE LOCATED OUTSIDE THE DIRECT LINE OF TRAVEL MOST LIKELY TO BE FOLLOWED BY THE VISUALLY IMPAIRED.
  - SIGNS, POLES, PLANTERS, MAILBOXES, ETC. SHALL NOT BE LOCATED WHERE THEY WILL INTERFERE WITH THE USE OF SIDEWALK RAMPS.
  - WHERE POSSIBLE, SIDEWALK RAMPS SHOULD NOT BE LOCATED WHERE USERS MUST CROSS DROP INLET GRATES, MANHOLE COVERS OR OTHER ACCESS LIDS. IF THIS CANNOT BE AVOIDED THEN GRATE DESIGN AND PLACEMENT SHALL CONFORM TO ADA REQUIREMENTS.
  - CURB DRAINAGE SHOULD BE CONSTRUCTED SO AS TO PRECLUDE THE FLOW OF WATER PAST THE SIDEWALK RAMP.
  - WHEREVER FEASIBLE, TWO SIDEWALK RAMPS ARE RECOMMENDED IN PREFERENCE TO A SINGLE RAMP.
  - JOINTS WILL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT SIDEWALK SPECIFICATIONS, HOWEVER EXPANSION JOINTS WITHIN THE SIDEWALK RAMP AREA WILL BE AVOIDED WHEREVER POSSIBLE.
  - SIDEWALKS THAT ARE LESS THAN 5' WIDE REQUIRE 5' WIDE BY 5' LONG PASSING AREAS (NO GREATER THAN 2.0% CROSS SLOPE) AT INTERVALS NOT TO EXCEED 200 FEET.
  - E.O.P. = EDGE OF PAVEMENT
  - THE PUBLIC SIDEWALK CURB RAMP STANDARDS DEPICTED HERE MAY NOT BE APPROPRIATE FOR ALL LOCATIONS. FIELD CONDITIONS AT INDIVIDUAL LOCATIONS MAY REQUIRE SPECIFIC DESIGNS. DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF THIS SHEET TO THE MAXIMUM EXTENT FEASIBLE ON ALTERATION PROJECTS AND WHEN STRUCTURALLY PRACTICABLE ON NEW CONSTRUCTION PROJECTS AS REQUIRED BY THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.



- OTHER STANDARDS REQUIRED: C-2A, C-2B, C-3B AND C-10**

**REVISIONS AND CORRECTIONS**

FEB. 2, 2004 - DATE OF ORIGINAL ISSUE

SEPT. 1, 2004 - MINOR REVISIONS TO COMPLY WITH ADAAG

MAR. 10, 2008 - MINOR REVISIONS TO COMPLY WITH ADA STANDARDS

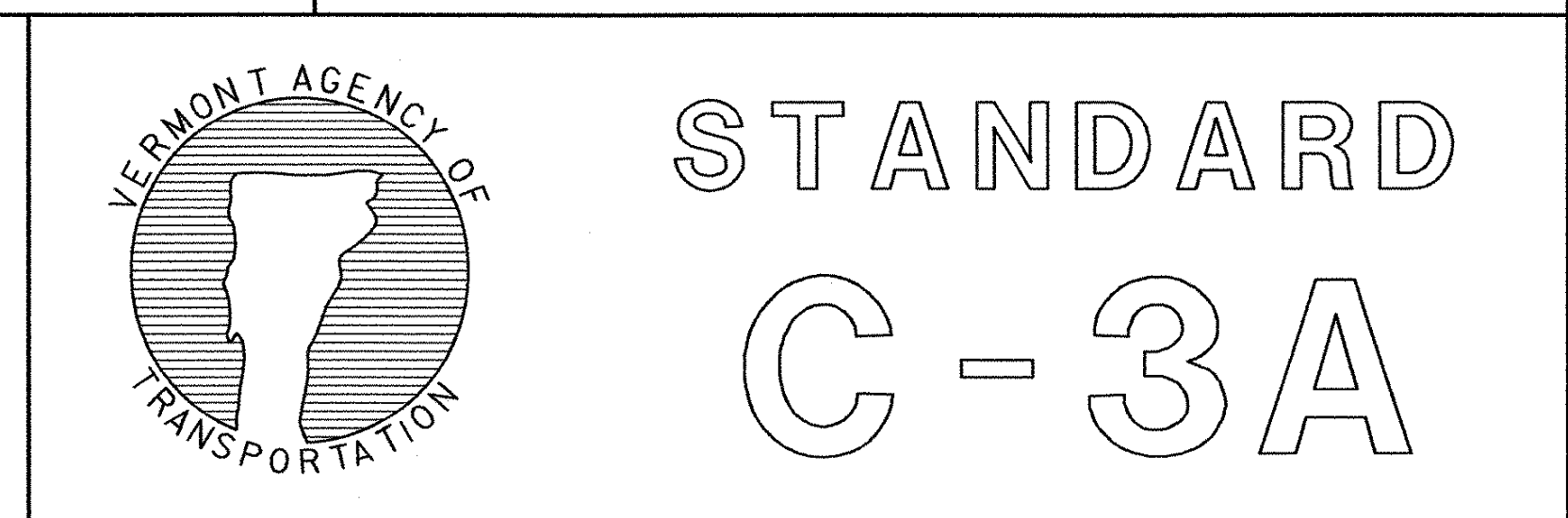
**APPROVED**

*Alan E. Newson*  
LOCAL TRANSPORTATION FACILITIES PROGRAM MANAGER

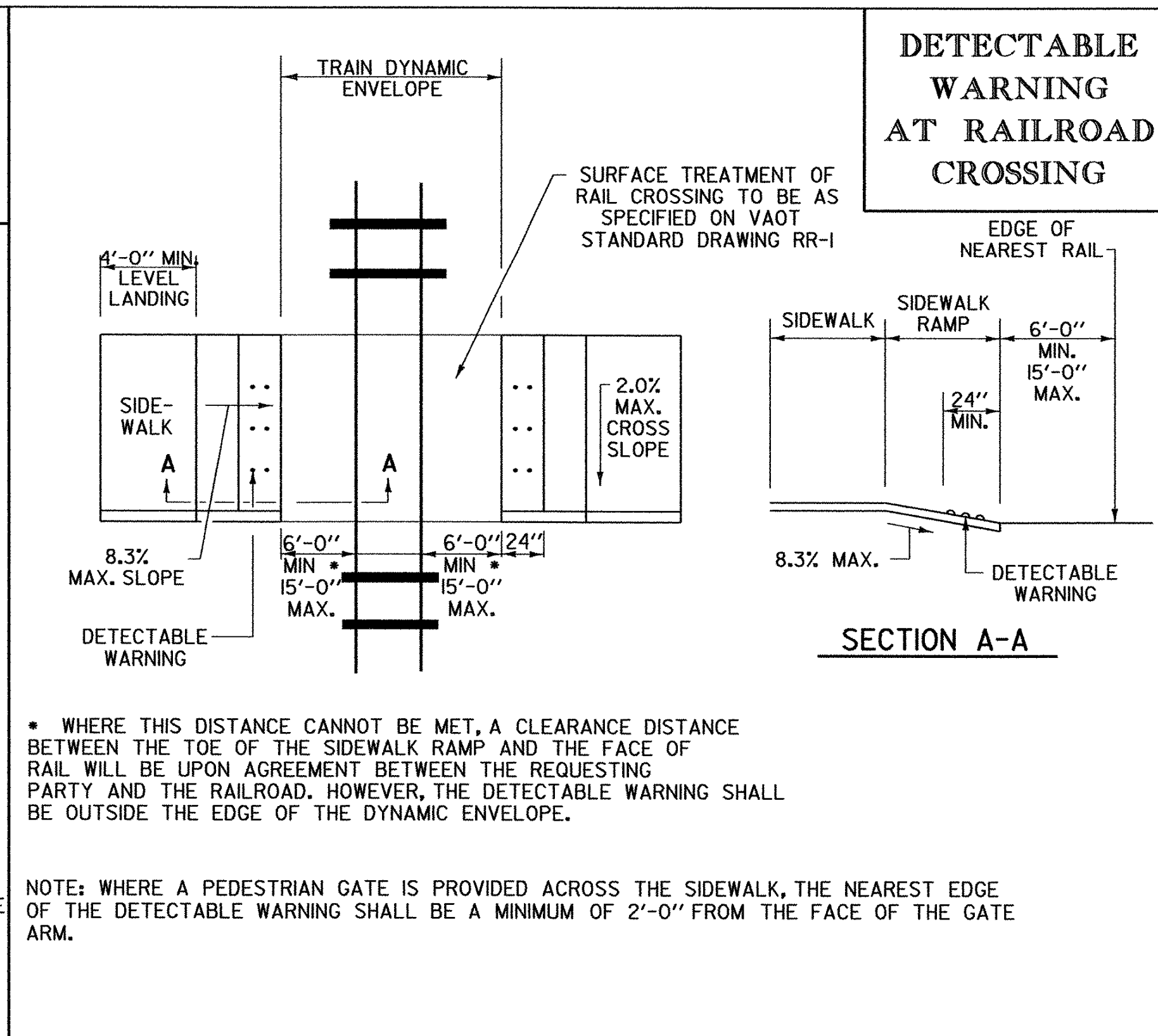
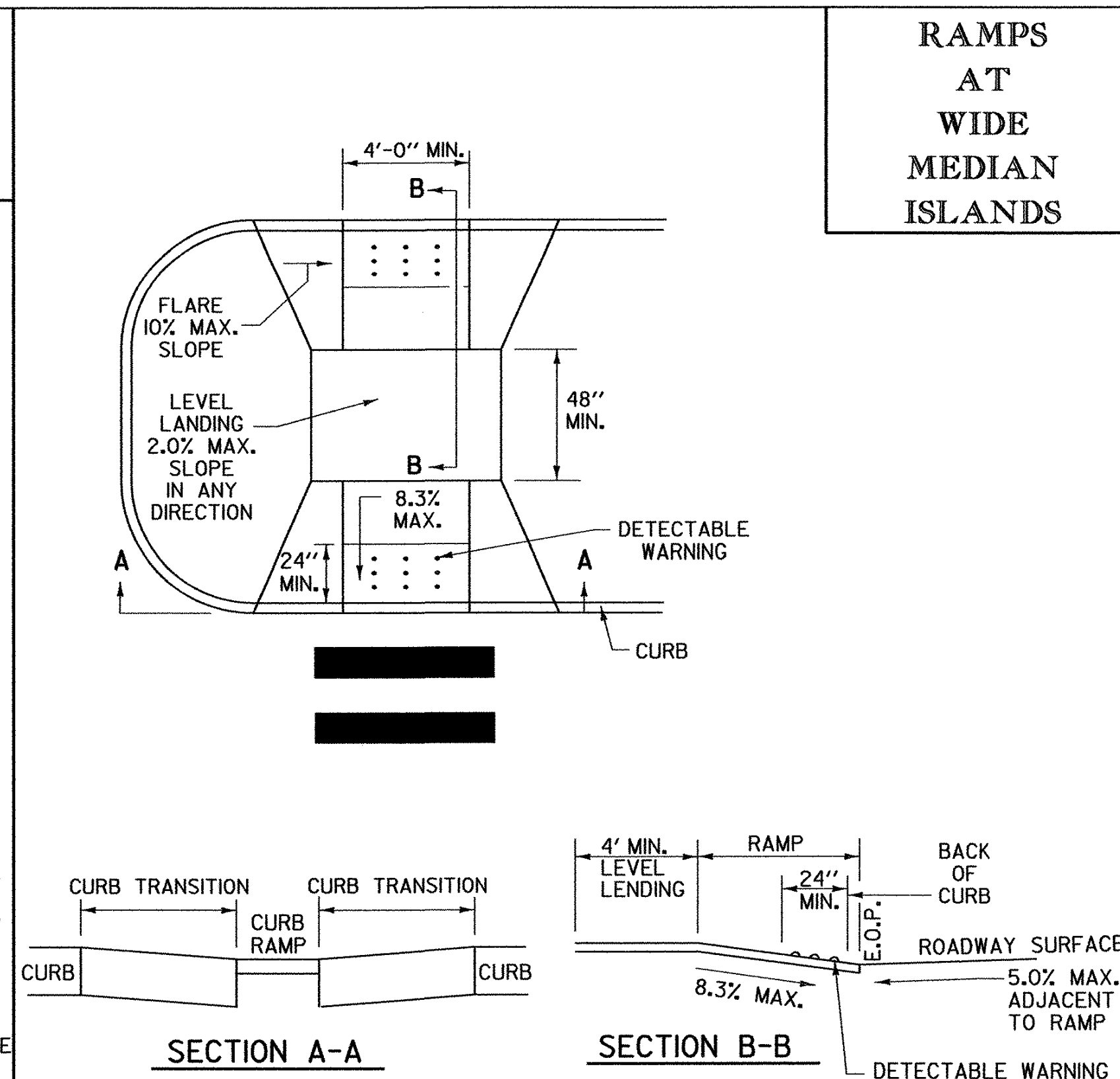
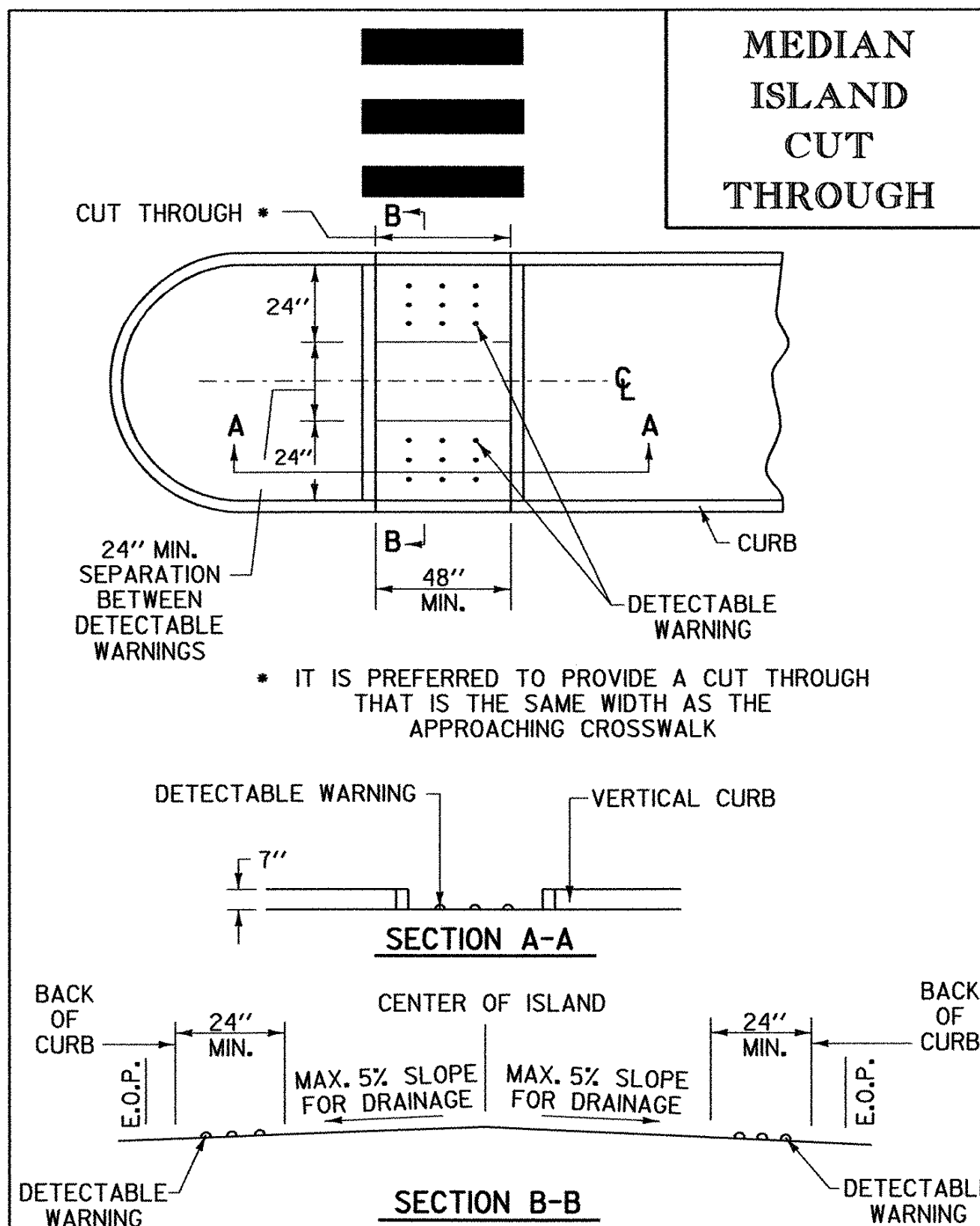
*Rudolf Fetscher*  
DIRECTOR OF PROGRAM DEVELOPMENT

*Mark D. Richter*  
FEDERAL HIGHWAY ADMINISTRATION

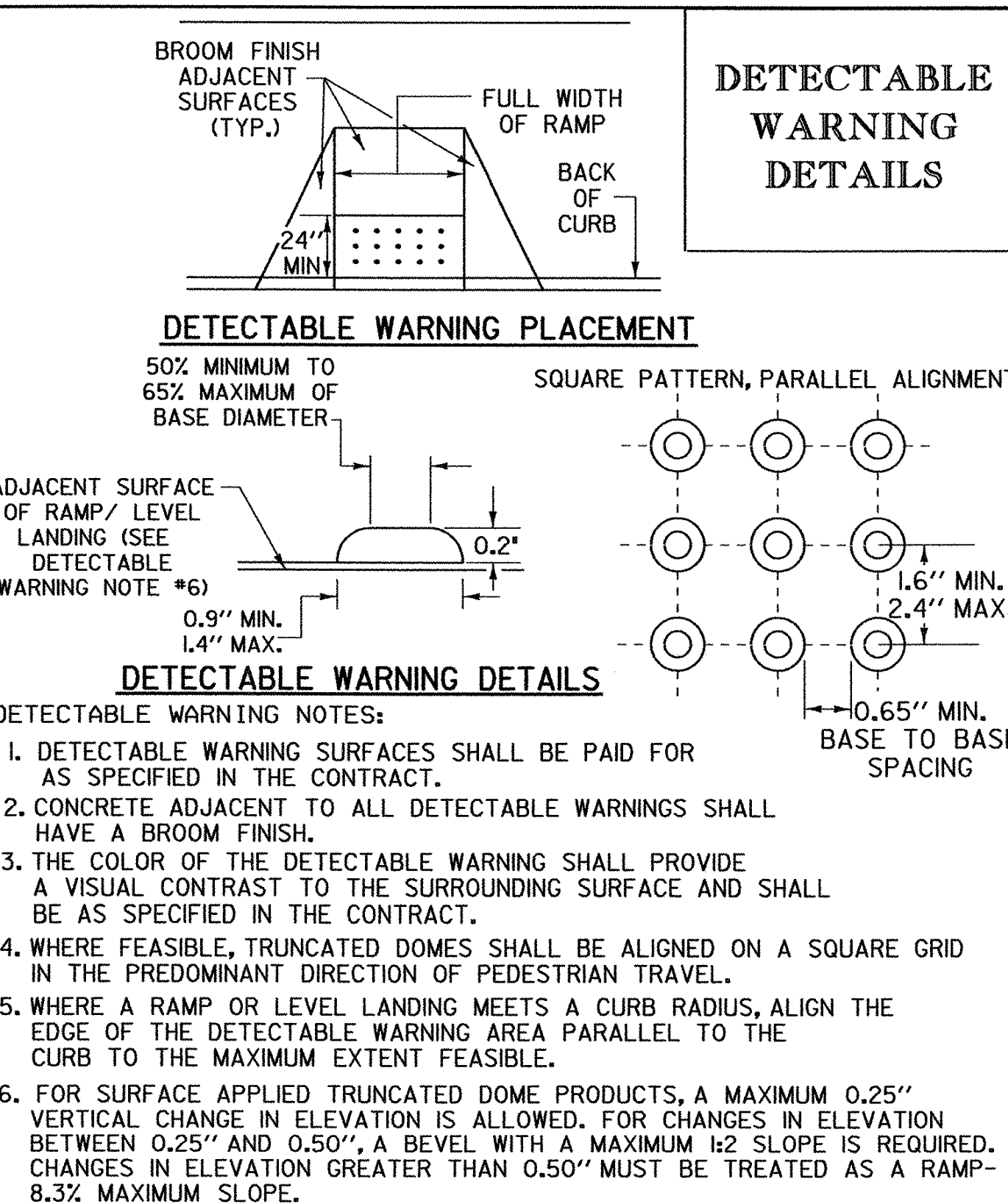
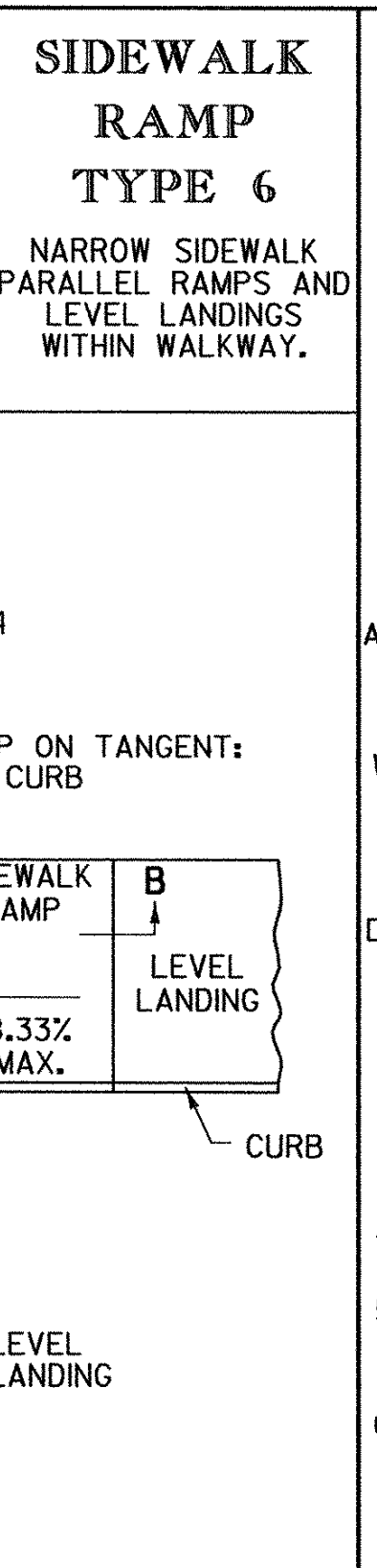
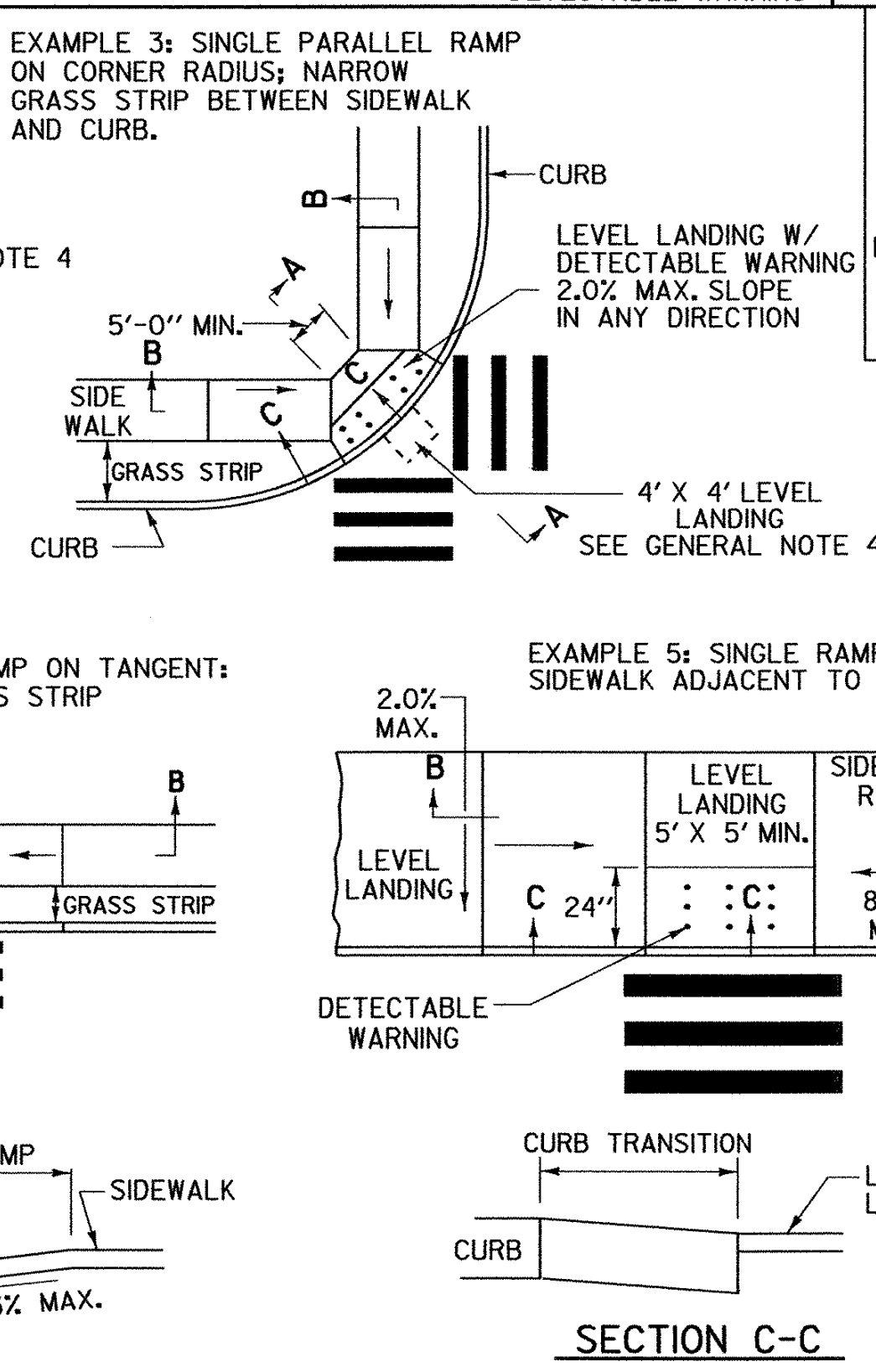
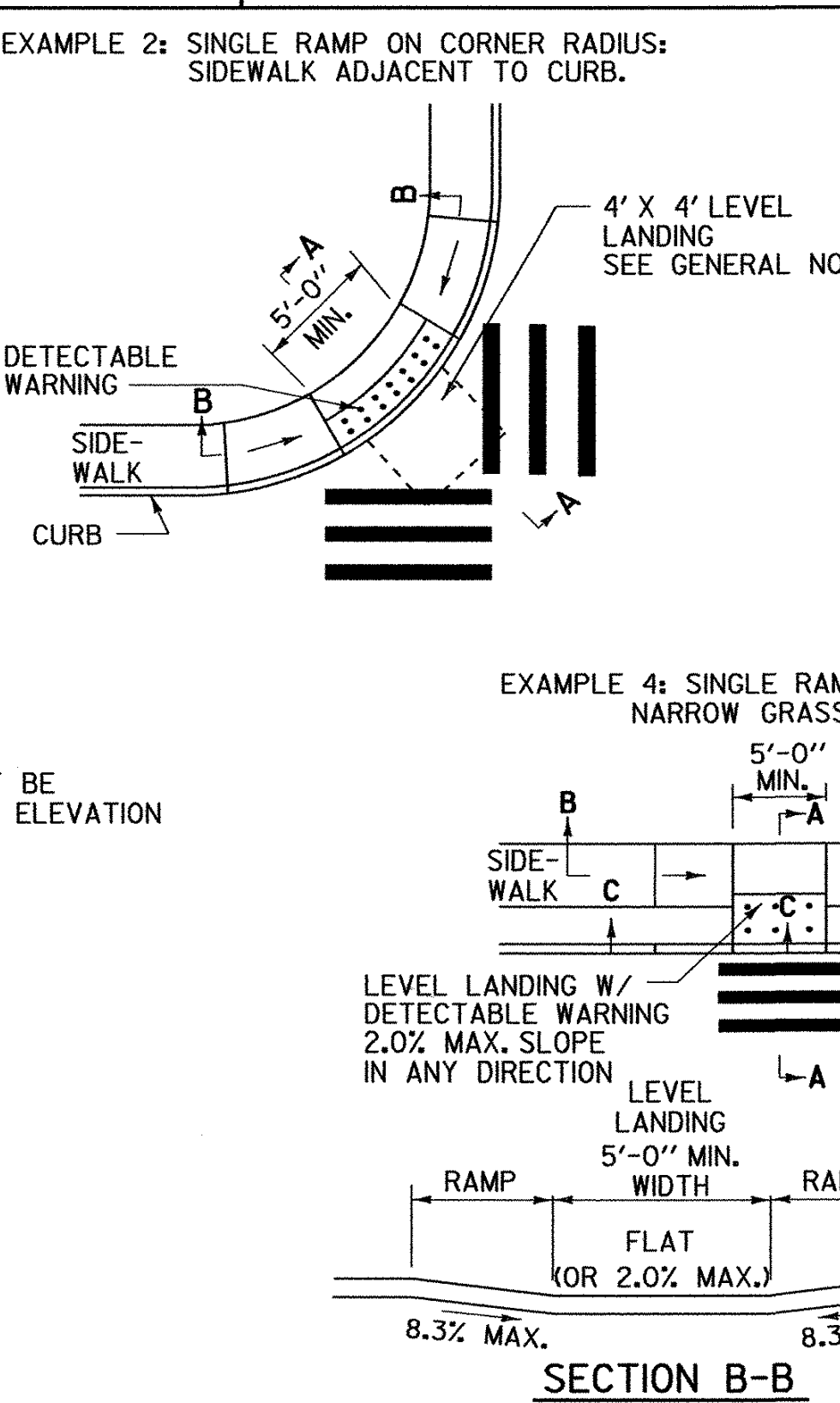
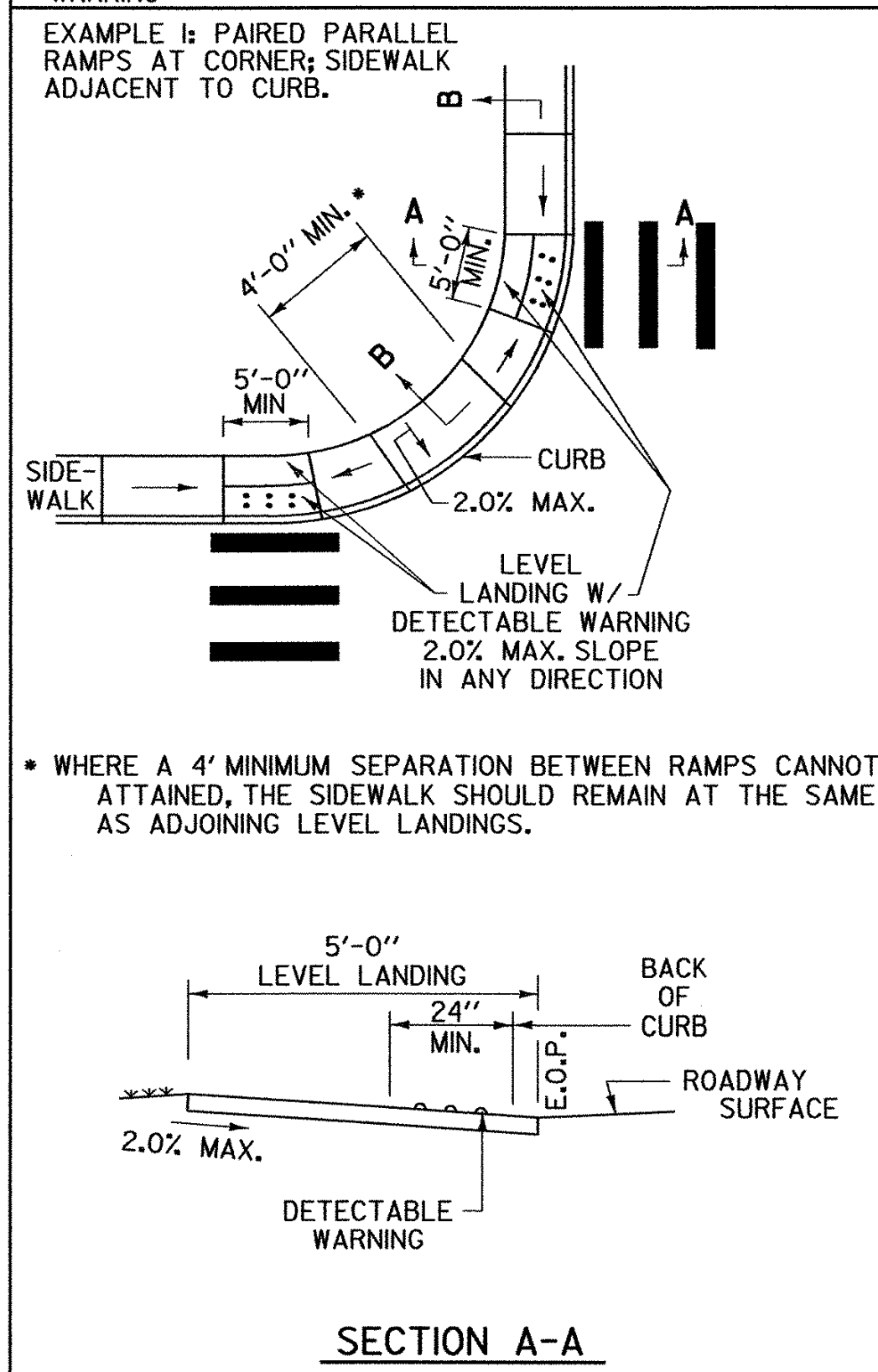
# SIDEWALK RAMPS





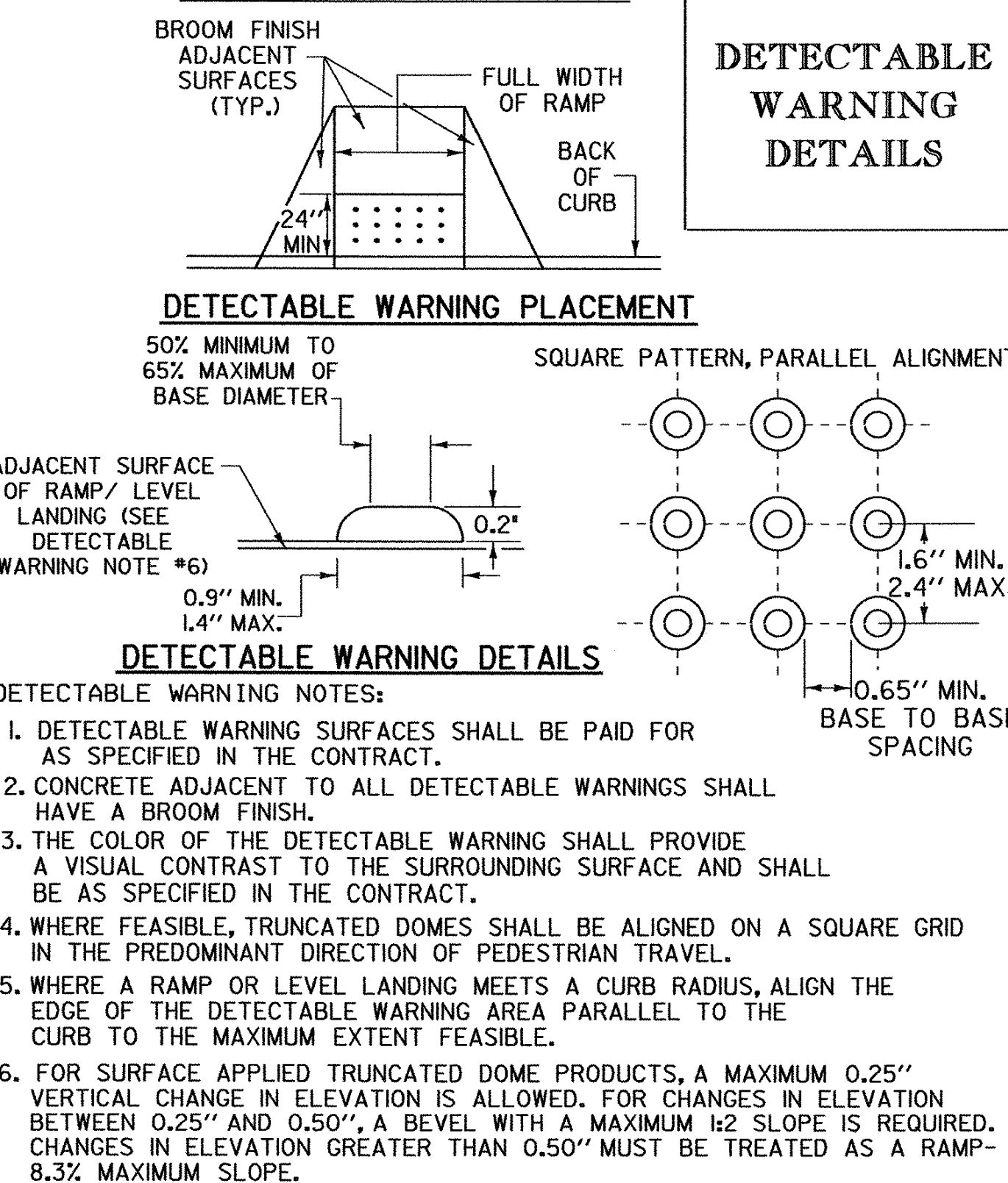


- ### GENERAL NOTES:
- THE DIMENSIONS AND GRADES SHOWN ON THIS STANDARD WILL BE ADHERED TO IN THE DESIGN AND THE CONSTRUCTION OF SIDEWALK RAMPS. WHERE SIDEWALKS RUN ADJACENT TO ROADWAYS ON STEEP (5% OR GREATER) GRADES, RAMP GRADES WILL BE AS FLAT AS POSSIBLE. (ON LOW SIDE OF DRIVES AND INTERSECTING SIDE STREETS, RAMPS SHALL SLOPE TOWARDS DRIVE OR SIDE STREET @ 2%)
  - NOMINAL RAMP DIMENSIONS AND GRADES:  
RAMP WIDTH - 4'-0" MINIMUM  
RAMP SLOPE - 8.3% MAXIMUM  
FLARE SLOPE - 10% MAXIMUM  
RAMP CROSS SLOPE - 2.0% MAXIMUM
  - A LEVEL LANDING (NO GREATER THAN 2.0% SLOPE IN ANY DIRECTION) SHALL BE PROVIDED AT THE TOP OF SIDEWALK RAMPS TO ALLOW FOR STOPPING AND MANEUVERING OF WHEELCHAIRS.
  - LEVEL LANDINGS (NO GREATER THAN 2.0% SLOPE IN ANY DIRECTION) AT THE BOTTOM OF PERPENDICULAR RAMPS SHALL BE WHOLLY CONTAINED WITHIN MARKED CROSSWALKS.
  - DUMMY JOINTS SHALL BE PROVIDED AT TRANSITIONS (GRADE CHANGES) AT TOPS AND BOTTOMS OF RAMPS AND FLARES.
  - VERTICAL DROP-OFF EDGES TO RAMPS WILL NOT BE BUILT UNLESS THE RAMP ABUTS AN AREA WHICH WILL NOT BE USED BY PEDESTRIANS.
  - NO VERTICAL "LIP" OR "CURB REVEAL" WILL BE PROVIDED WHERE THE RAMP ADJOINS THE ROADWAY.
  - AT MARKED CROSSWALKS, THE FULL WIDTH OF THE RAMP OR LANDING SHALL BE CONTAINED WITHIN THE PAVEMENT MARKINGS.
  - WHERE POSSIBLE, RAMP FLARES SHOULD BE LOCATED OUTSIDE THE DIRECT LINE OF TRAVEL MOST LIKELY TO BE FOLLOWED BY THE VISUALLY IMPAIRED.
  - SIGNS, POLES, PLANTERS, MAILBOXES, ETC. SHALL NOT BE LOCATED WHERE THEY WILL INTERFERE WITH THE USE OF SIDEWALK RAMPS.
  - WHERE POSSIBLE, SIDEWALK RAMPS SHOULD NOT BE LOCATED WHERE USERS MUST CROSS DROP INLET GRATES, MANHOLE COVERS OR OTHER ACCESS LIDS. IF THIS CANNOT BE AVOIDED THEN GRATE DESIGN AND PLACEMENT SHALL CONFORM TO ADA REQUIREMENTS.
  - CURB DRAINAGE SHOULD BE CONSTRUCTED SO AS TO PRECLUDE THE FLOW OF WATER PAST THE SIDEWALK RAMP.
  - WHEREVER FEASIBLE, TWO SIDEWALK RAMPS ARE RECOMMENDED IN PREFERENCE TO A SINGLE RAMP.
  - JOINTS WILL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT SIDEWALK SPECIFICATIONS, HOWEVER EXPANSION JOINTS WITHIN THE SIDEWALK RAMP AREA WILL BE AVOIDED WHEREVER POSSIBLE.
  - SIDEWALKS THAT ARE LESS THAN 5' WIDE REQUIRE 5' WIDE BY 5' LONG PASSING AREAS (NO GREATER THAN 2.0% CROSS SLOPE) AT INTERVALS NOT TO EXCEED 200 FEET.
  - E.O.P. = EDGE OF PAVEMENT
  - THE PUBLIC SIDEWALK CURB RAMP STANDARDS DEPICTED HERE MAY NOT BE APPROPRIATE FOR ALL LOCATIONS. FIELD CONDITIONS AT INDIVIDUAL LOCATIONS MAY REQUIRE SPECIFIC DESIGNS. DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF THIS SHEET TO THE MAXIMUM EXTENT FEASIBLE ON ALTERATION PROJECTS AND WHEN STRUCTURALLY PRACTICABLE ON NEW CONSTRUCTION PROJECTS AS REQUIRED BY THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.



### SIDEWALK RAMP TYPE 6

NARROW SIDEWALK PARALLEL RAMPS AND LEVEL LANDINGS WITHIN WALKWAY.



### REVISIONS AND CORRECTIONS

FEB. 2, 2004 - DATE OF ORIGINAL ISSUE

SEPT. 1, 2004 - MINOR REVISIONS TO COMPLY WITH ADAAG

MAR. 10, 2008 - MINOR REVISIONS TO COMPLY WITH ADA STANDARDS

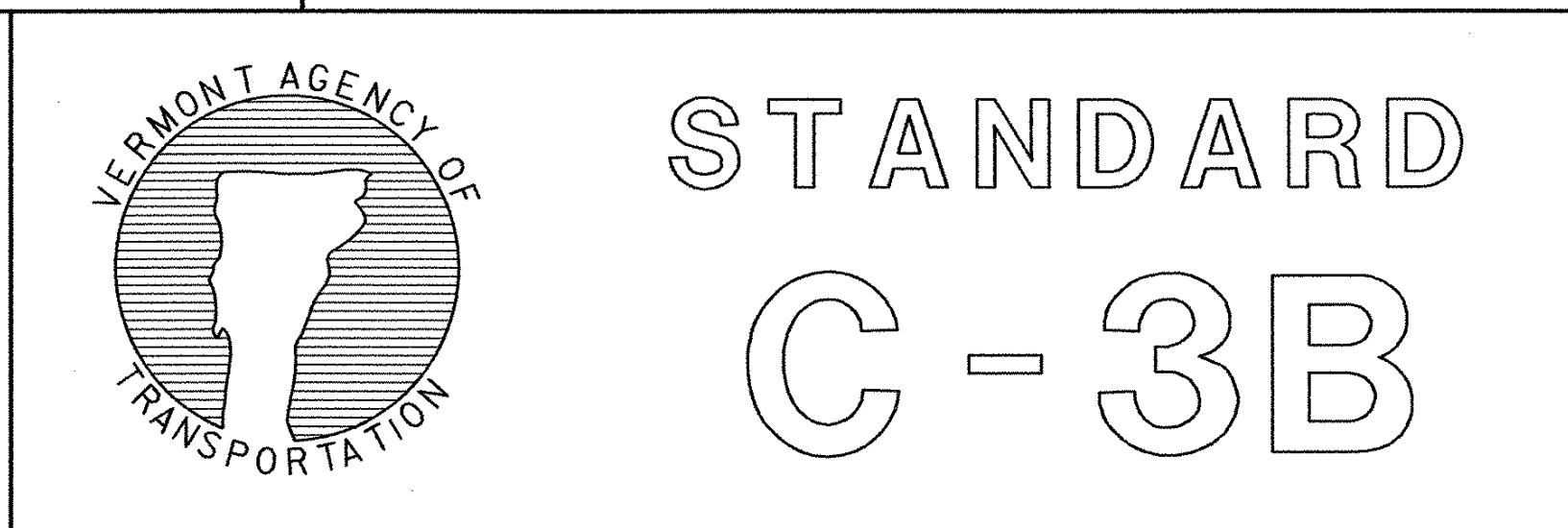
### APPROVED

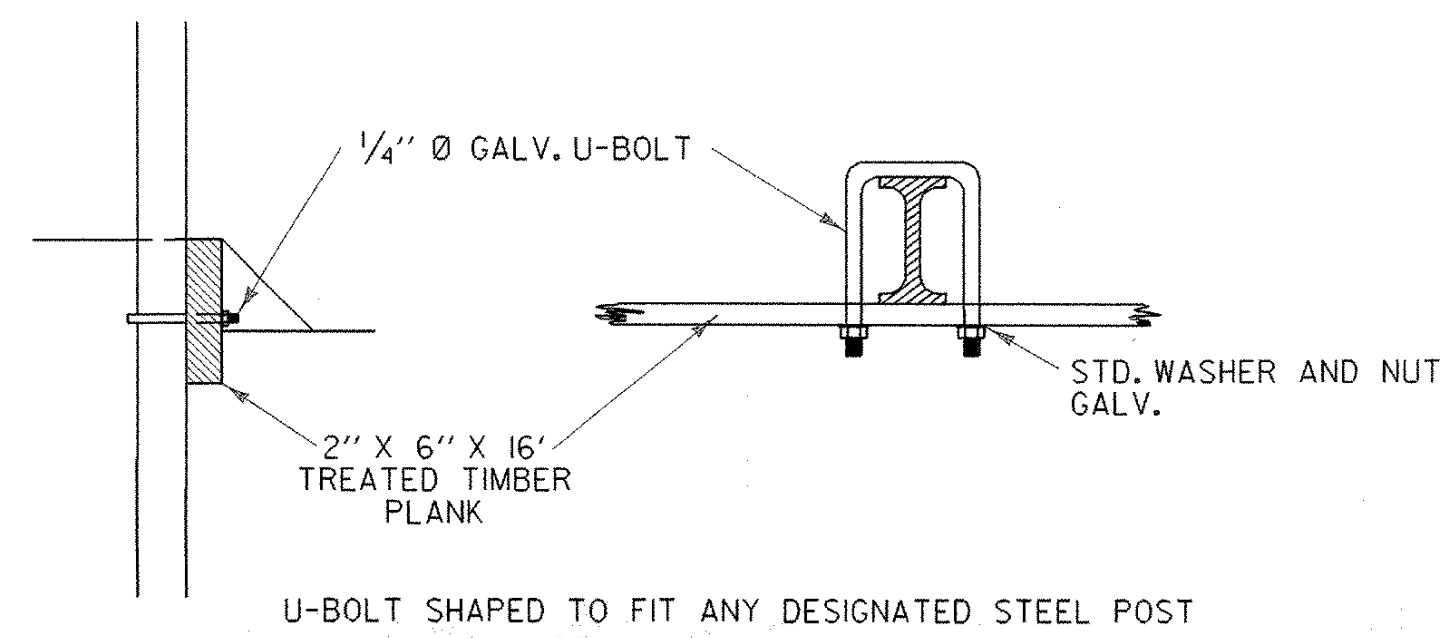
*Oliver E. Aureau*  
LOCAL TRANSPORTATION FACILITIES PROGRAM MANAGER

*Richard J. Fretwell*  
DIRECTOR OF PROGRAM DEVELOPMENT

*Mark D. Kibbler*  
FEDERAL HIGHWAY ADMINISTRATION

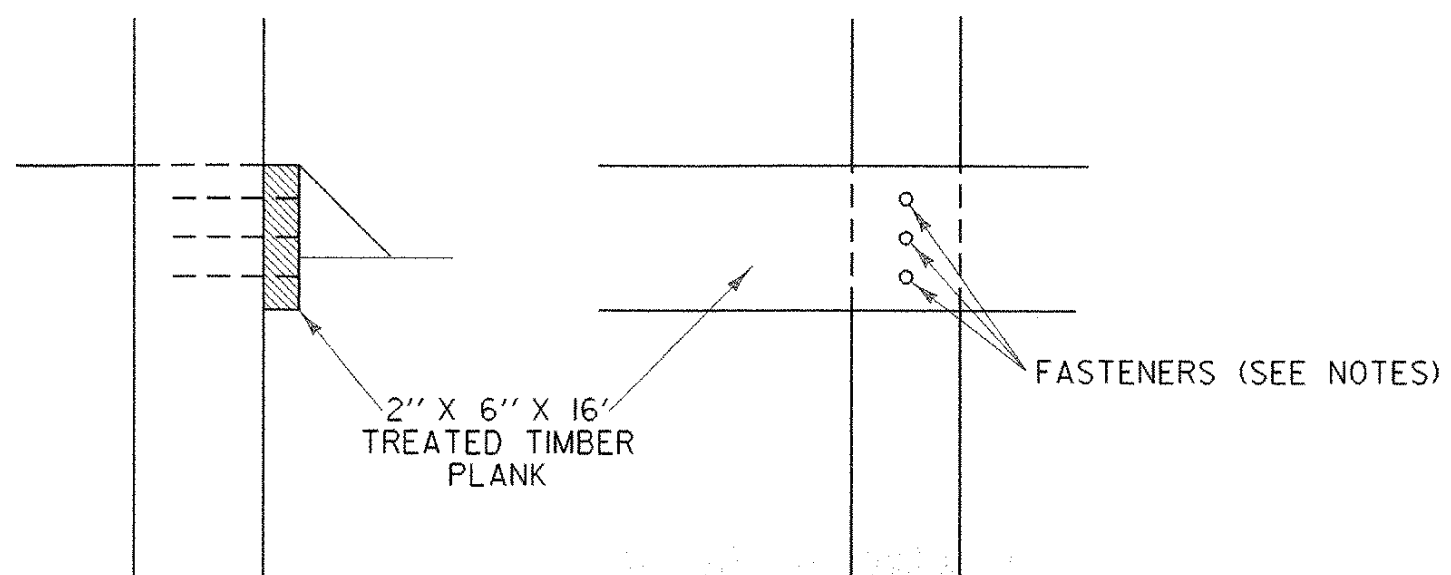
# SIDEWALK RAMPS AND MEDIAN ISLANDS



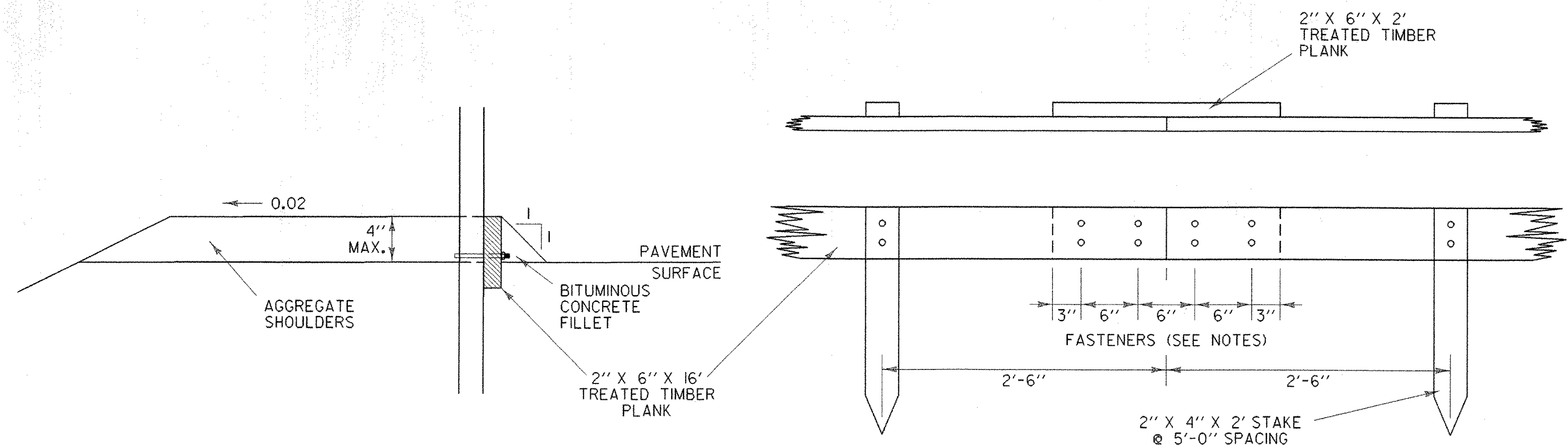


U-BOLT SHAPED TO FIT ANY DESIGNATED STEEL POST

WITH STEEL POSTS



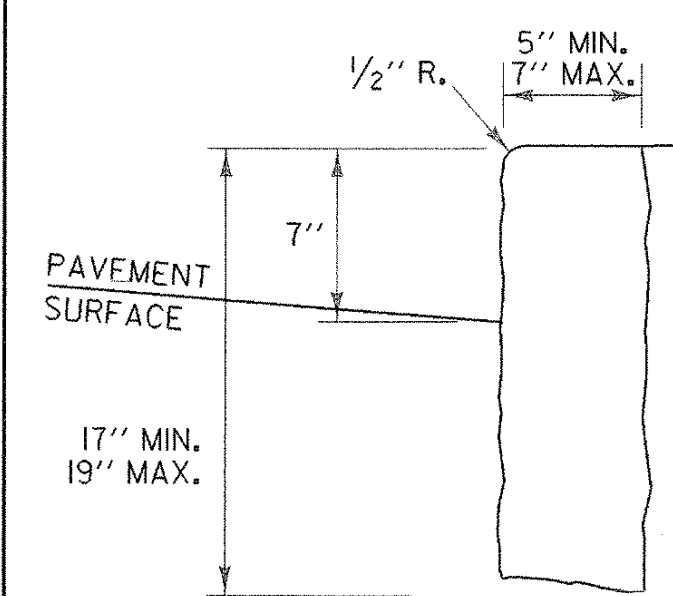
WITH WOOD POSTS (EXISTING CONDITION)



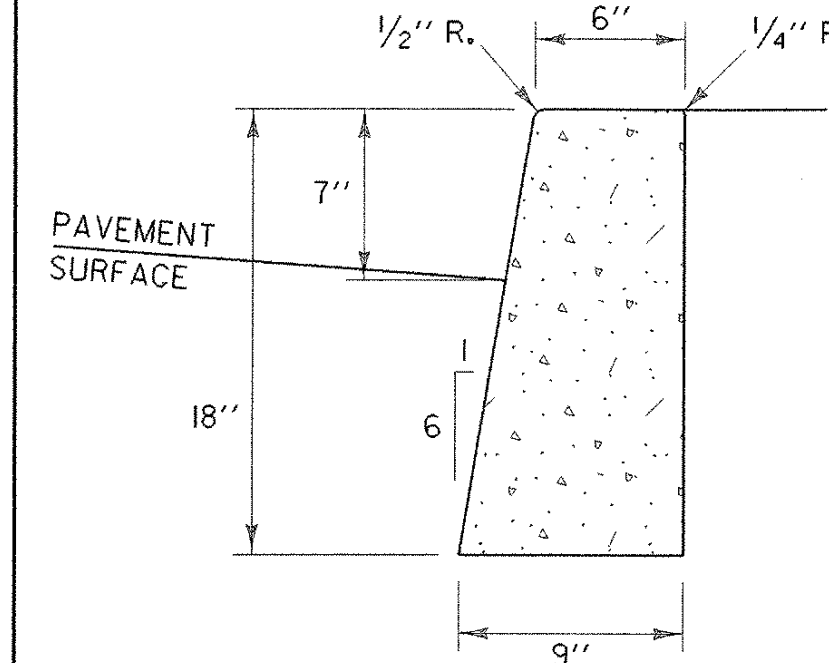
BITUMINOUS CONCRETE FILLET DETAIL

TREATED TIMBER CURB

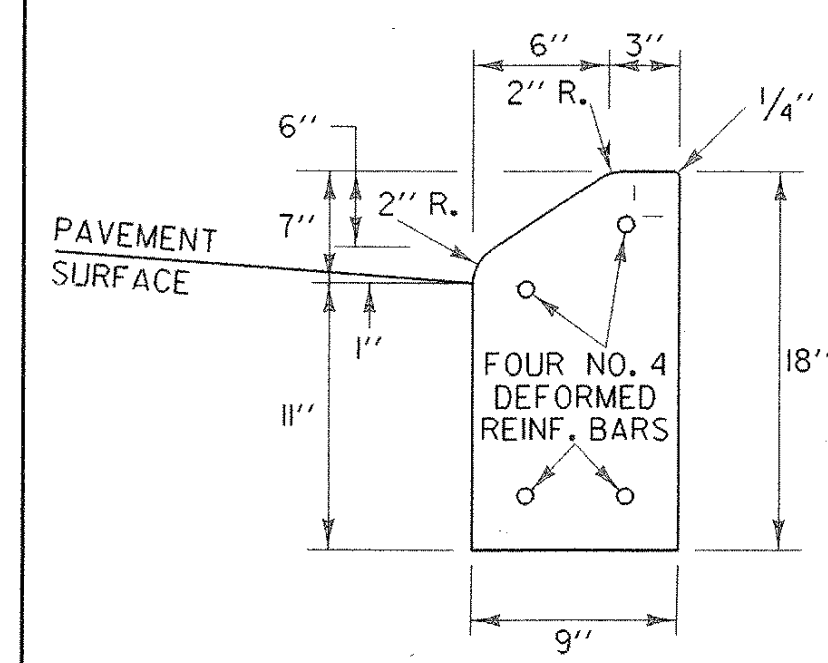
SPLICE DETAIL



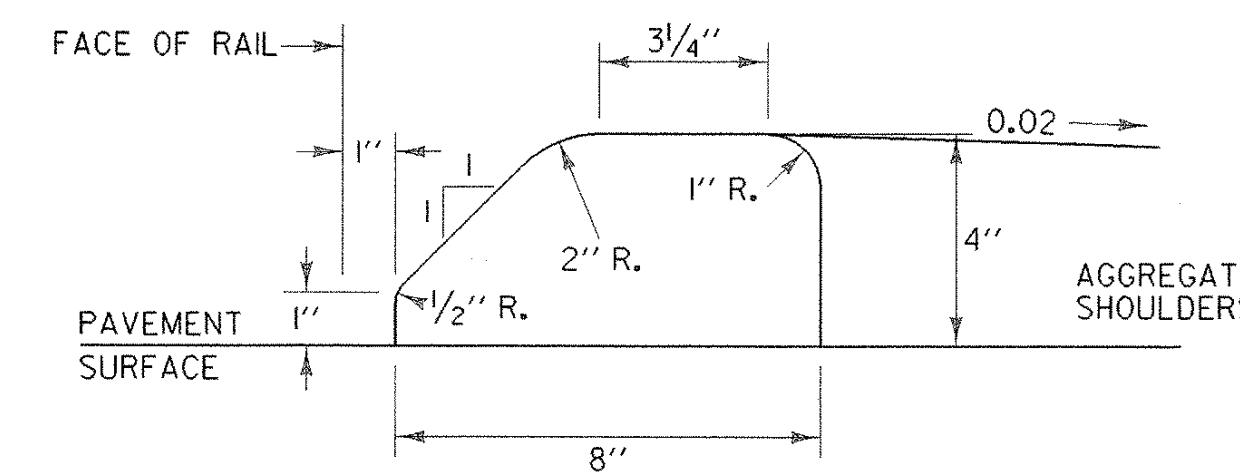
VERTICAL GRANITE CURB



CAST IN PLACE CONCRETE CURB, TYPE B

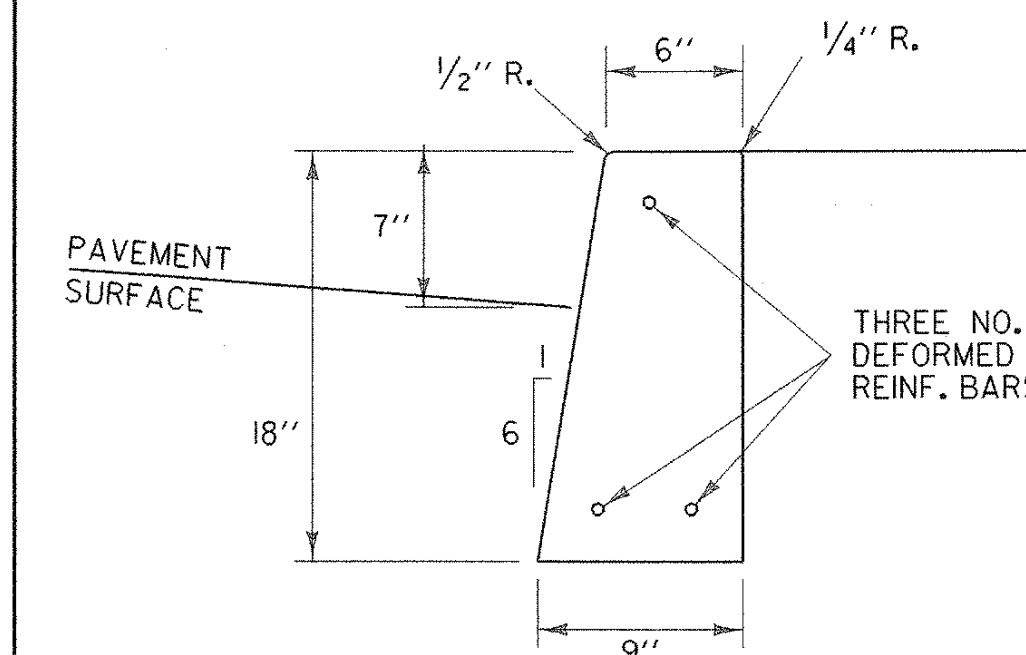


PRECAST REINFORCED CONCRETE CURB, TYPE A

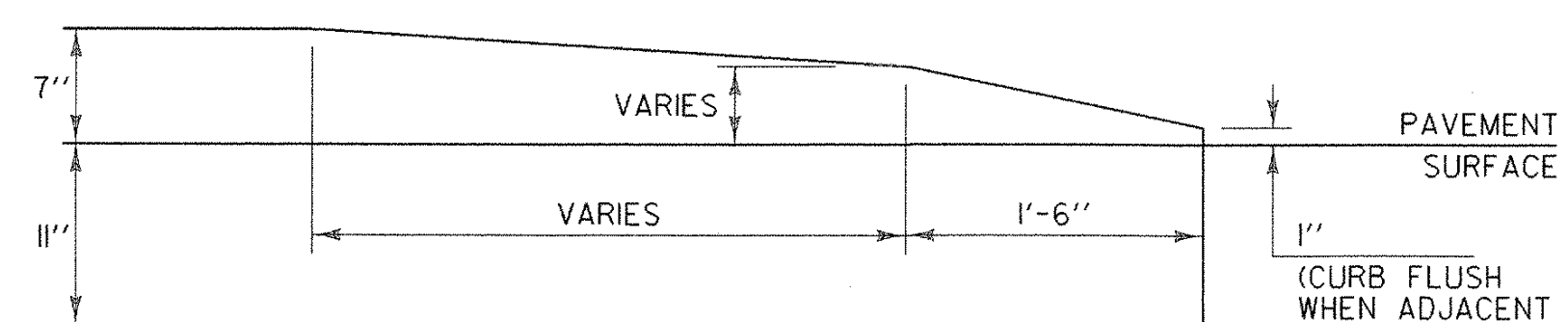


USE ONLY WITH STEEL BEAM GUARDRAIL

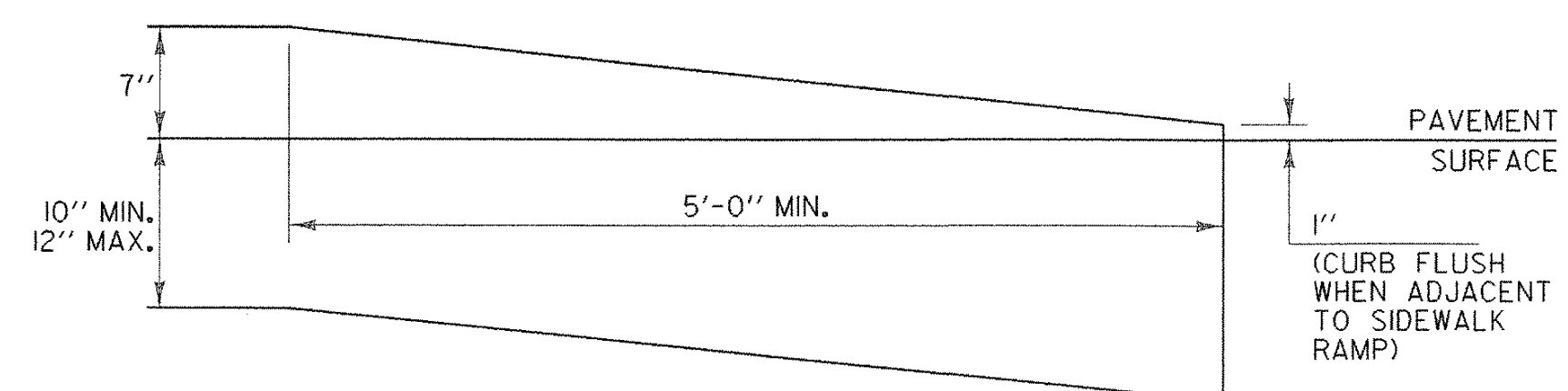
BITUMINOUS CONCRETE CURB, TYPE A



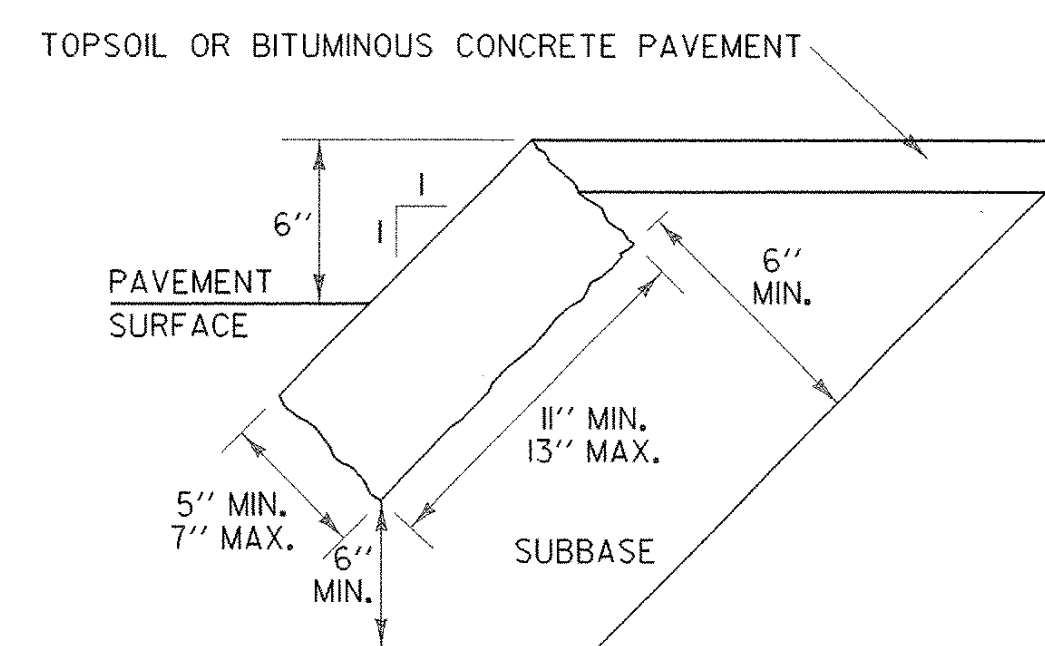
PRECAST REINFORCED CONCRETE CURB, TYPE B



CONCRETE CURB END



VERTICAL GRANITE CURB END



EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.

GRANITE SLOPE EDGING

**GENERAL NOTES:**

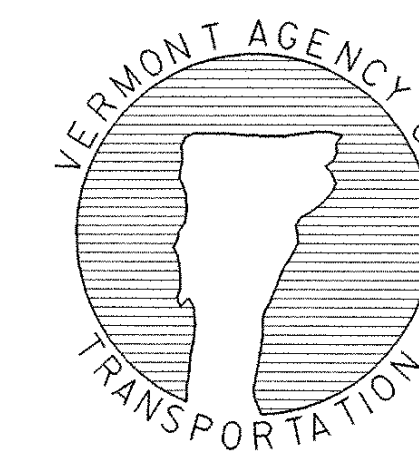
- HEIGHT OF REVEAL OF CURB SHALL NOT EXCEED FOUR INCHES WHERE DESIGN OR POSTED SPEED IS EQUAL TO OR GREATER THAN 40 MPH AND WHEN INSTALLED WITH GUARDRAIL (STANDARD SHAPE TO BE BURIED TO THIS DEPTH).
- WHEN CONCRETE SIDEWALK IS CONSTRUCTED ADJACENT TO CONCRETE OR VERTICAL GRANITE CURB, ASPHALT TREATED FELT SHALL BE PLACED BETWEEN THE SIDEWALK AND CURB FOR THE TOTAL DEPTH OF THE SIDEWALK.
- FASTENERS (20d NAILS OR SCREWS) SHALL BE CORROSION RESISTANT TO THE TREATED LUMBER.
- FOR SPECIFICATIONS FOR EXPANSION/CONTRACTION JOINTS AND LENGTHS OF SECTIONS, SEE SECTION 616.
- JOINTS BETWEEN CURB SECTIONS SHALL BE MORTARED IN CONFORMANCE WITH SECTION 616.
- BITUMINOUS CONCRETE AND TREATED TIMBER CURB SHALL BE IN CONFORMANCE WITH SECTION 616.
- TWO INCH MINIMUM CLEARANCE FROM FACE OF CONCRETE TO EDGE OF REINFORCING STEEL.

**OTHER STDS. REQUIRED: NONE**

REVISIONS AND CORRECTIONS  
FEB. II, 2008 - ORIGINAL APPROVAL DATE

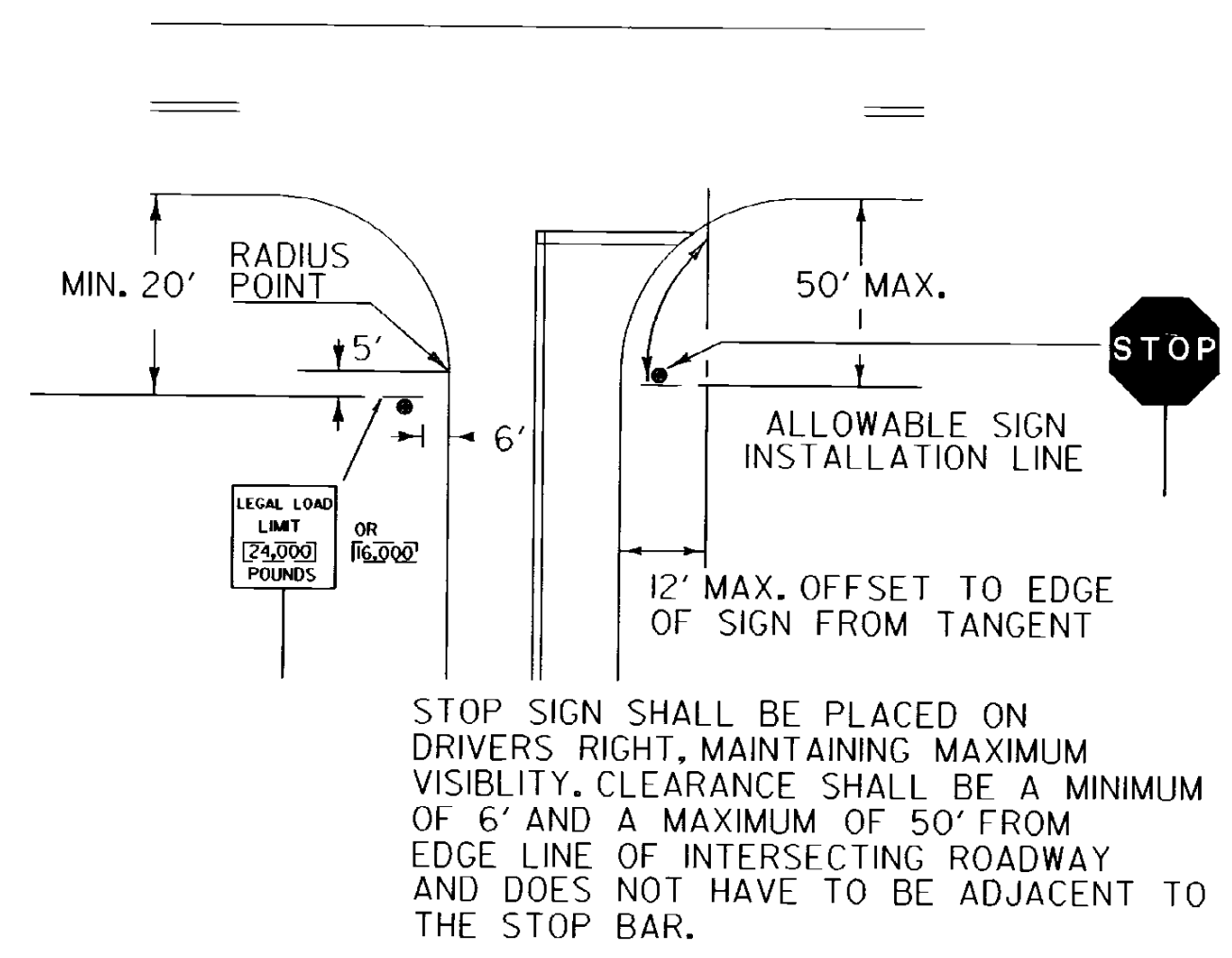
APPROVED  
*Kevin J. Marshie*  
ROADWAY, TRAFFIC & SAFETY ENGINEER  
*Richard Stearns*  
DIRECTOR OF PROGRAM DEVELOPMENT  
*Mark D. Kuebler*  
FEDERAL HIGHWAY ADMINISTRATION

**CURBING**

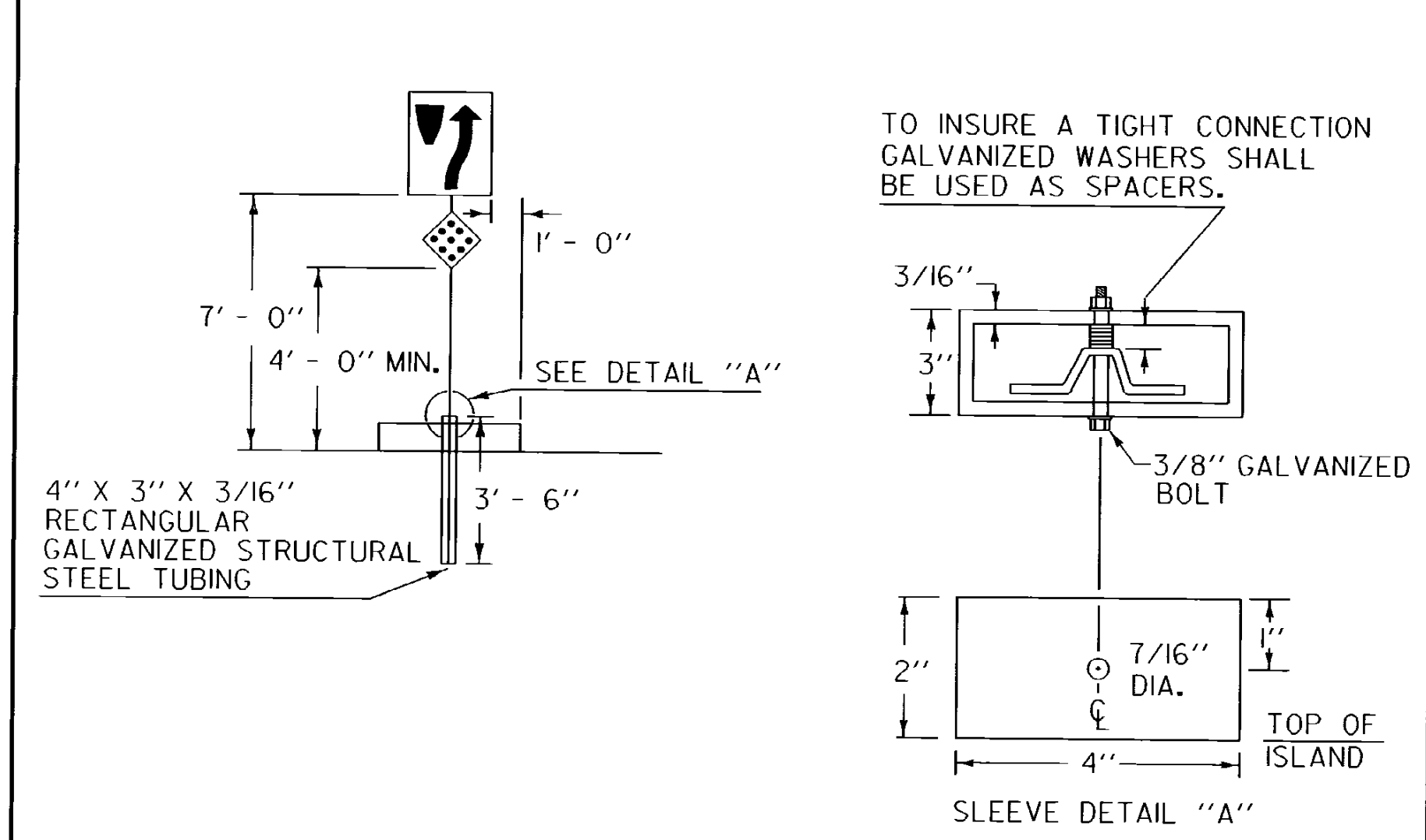


**STANDARD  
C-10**



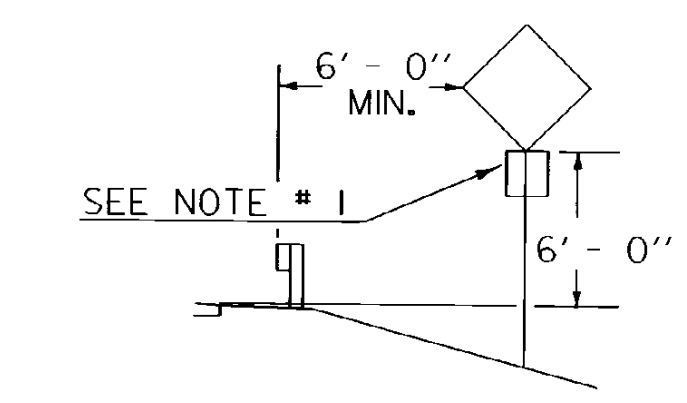
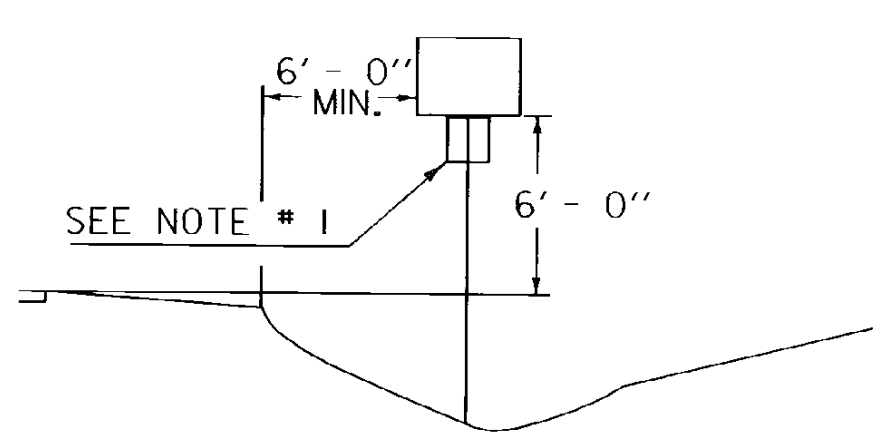
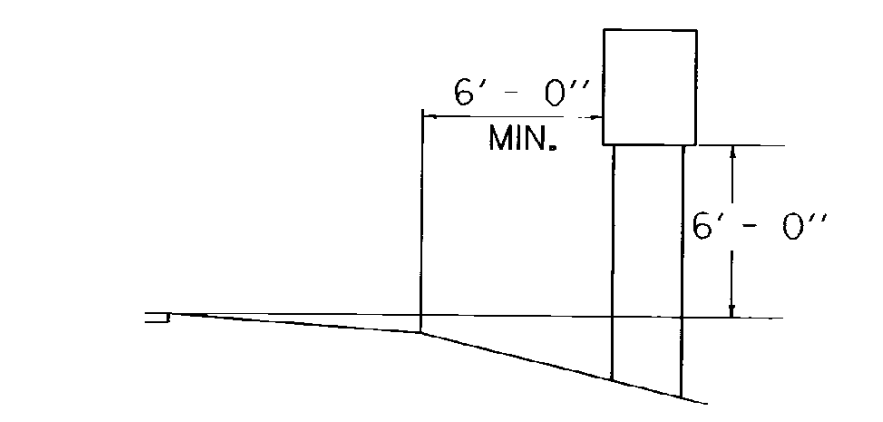


**LEGAL LOAD LIMIT AND STOP SIGNS AT INTERSECTIONS WITH TOWN HIGHWAYS**

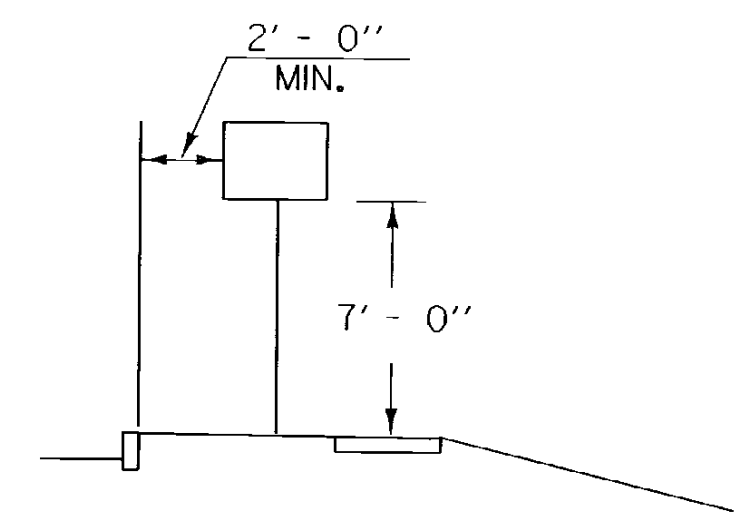
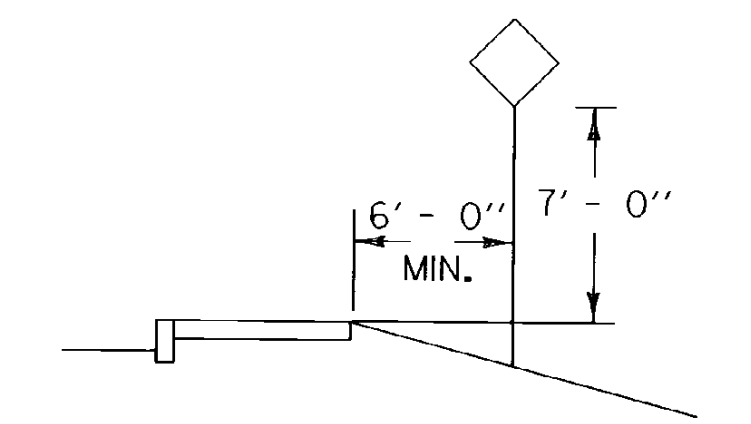


**SIGNS ON MEDIAN ISLANDS IN THE LINE OF TRAFFIC**

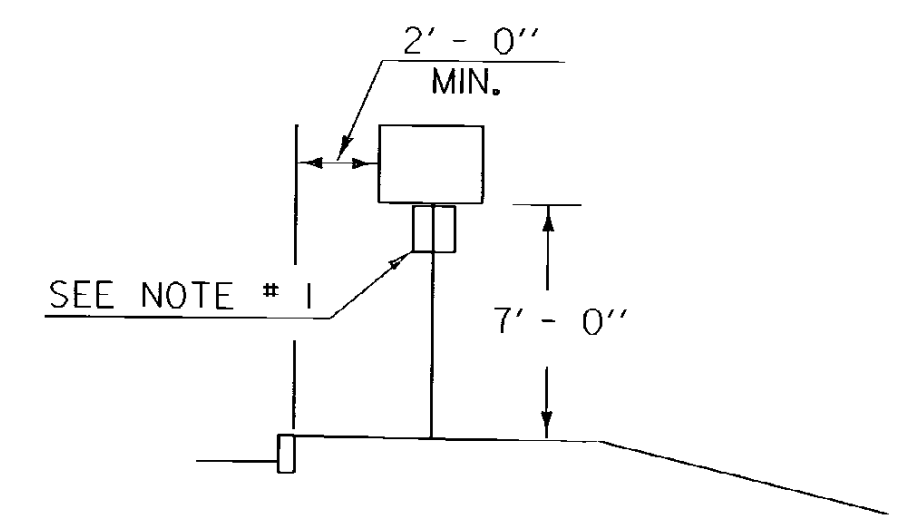
INCREASE VERTICAL CLEARANCE TO 7' IN AREAS OF FREQUENT ROADSIDE PARKING OR PEDESTRIAN ACTIVITY



**RURAL**



IF SUFFICIENT CLEARANCE IS NOT AVAILABLE BETWEEN CURB AND SIDEWALK MOUNT SIGN BEHIND SIDEWALK AS SHOWN AT TOP. CHECK FOR ADEQUATE R.O.W..



**URBAN**

**NOTES:**

1. IN BOTH RURAL AND URBAN LOCATIONS, IF A SECONDARY SIGN IS MOUNTED BELOW ANOTHER SIGN, THE MINIMUM CLEARANCE MAY BE REDUCED BY ONE FOOT.
2. IN RURAL AREAS WITH NO OR MINIMAL SHOULDER, THE LATERAL CLEARANCE TO THE EDGE OF A SIGN SHOULD BE A MINIMUM OF 12' FROM THE EDGE OF THE TRAVELED WAY.
3. ALSO SEE OTHER STANDARD SHEETS FOR MOUNTING CLEARANCE AND SPACING OF DESTINATION AND ROUTE MARKER ASSEMBLIES AND TOWN LINE SIGNS.

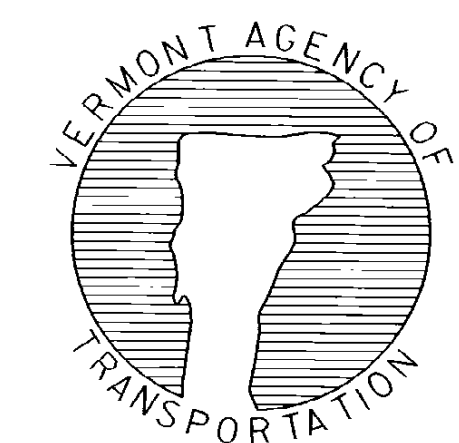
POST REFERENCE:  
REFER TO THE DETAILS ON THE APPROPRIATE STANDARD DRAWING FOR INFORMATION CONCERNING THE PROPER MOUNTING OF SIGNS ON APPROPRIATE POSTS.

**OTHER STDS. REQUIRED:** E-160 E-161 E-162 E-163 E-164

REVISIONS AND CORRECTIONS  
JAN. 23, 1995 - DATE OF ORIGINAL ISSUE  
AUG. 08, 1995 - VARIOUS MINOR NOTE REVISIONS

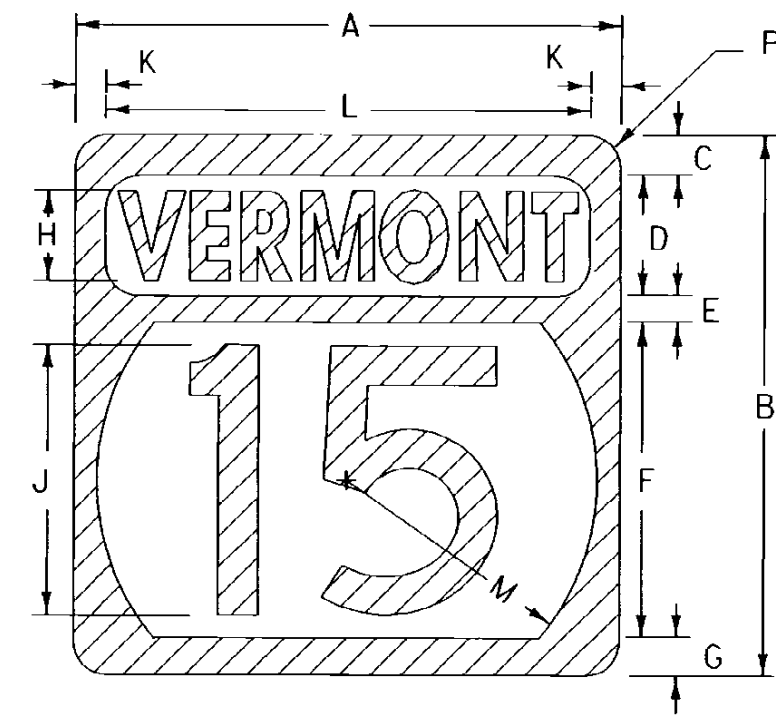
APPROVED  
*Stephen D. MacArthur*  
DIRECTOR OF ENGINEERING  
*David A. Ross*  
TRAFFIC AND SAFETY ENGINEER

**STANDARD SIGN PLACEMENT  
CONVENTIONAL ROAD**

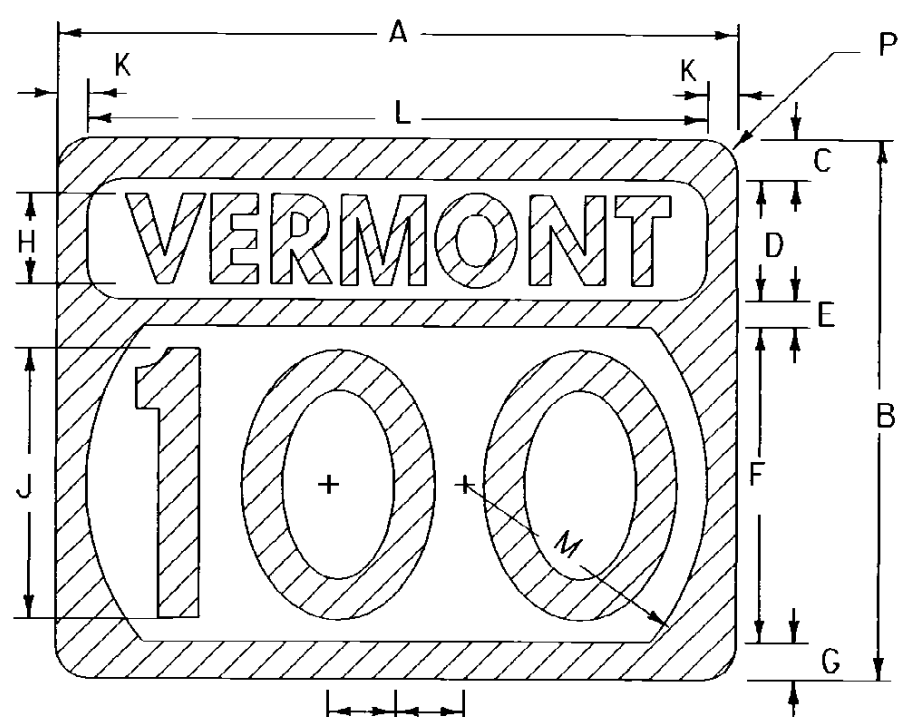


**STANDARD  
E-121**

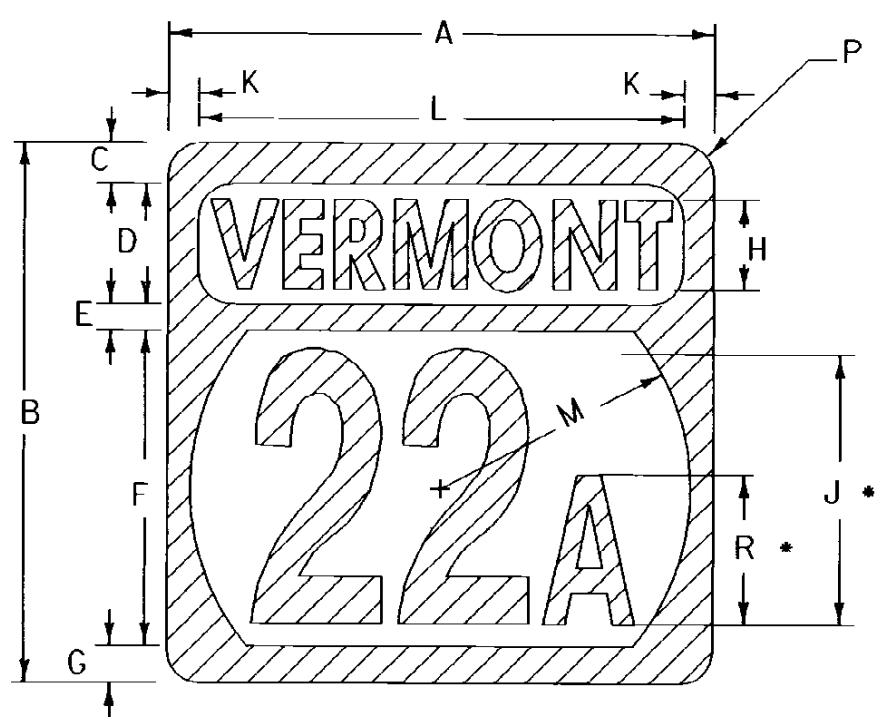
APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.



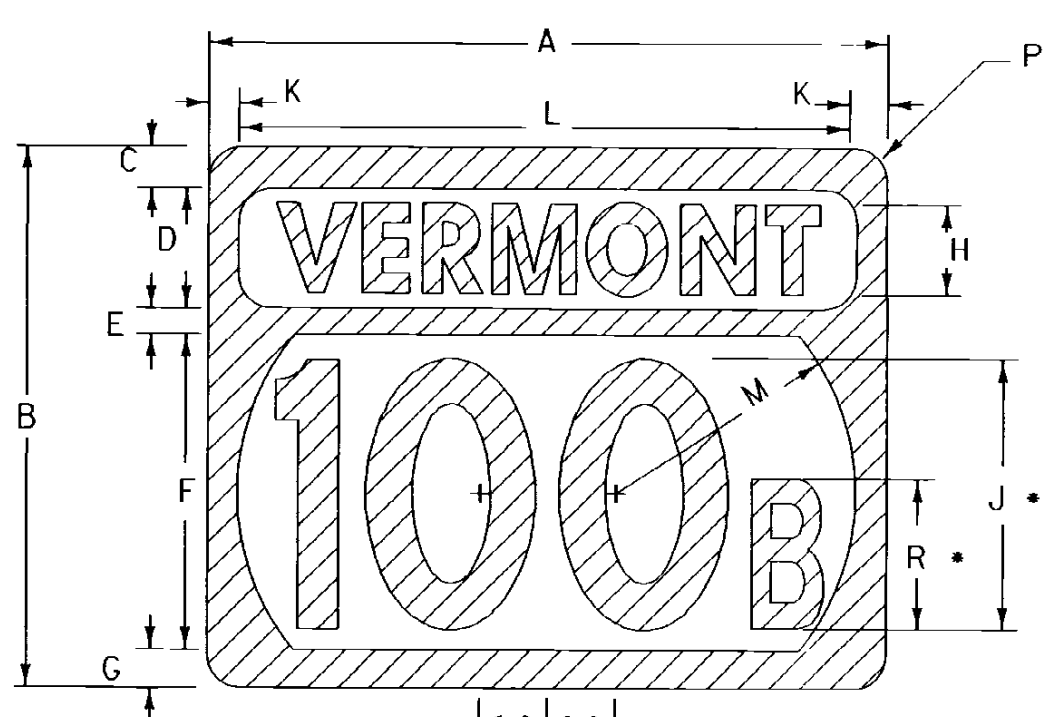
1 OR 2 DIGIT STATE ROUTE MARKER



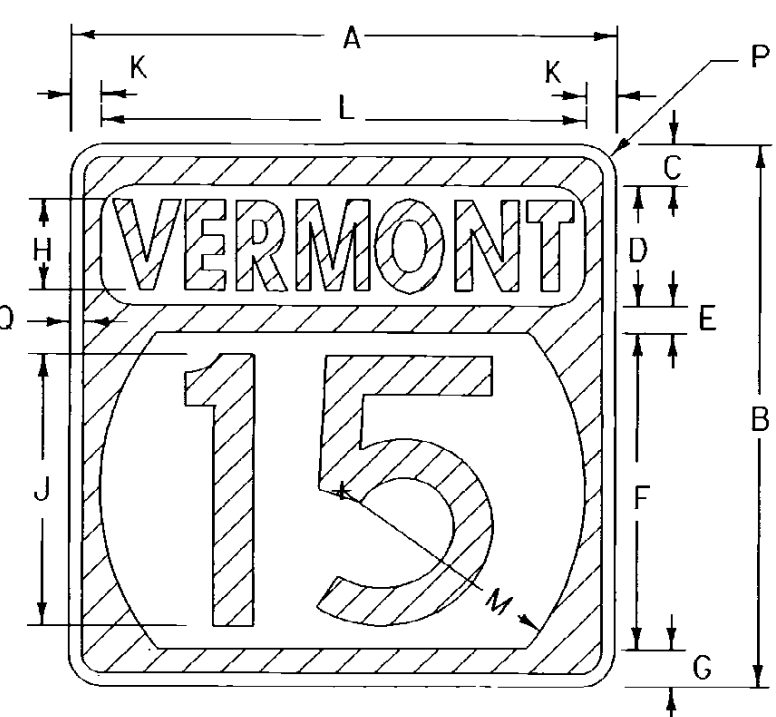
3 DIGIT STATE ROUTE MARKER



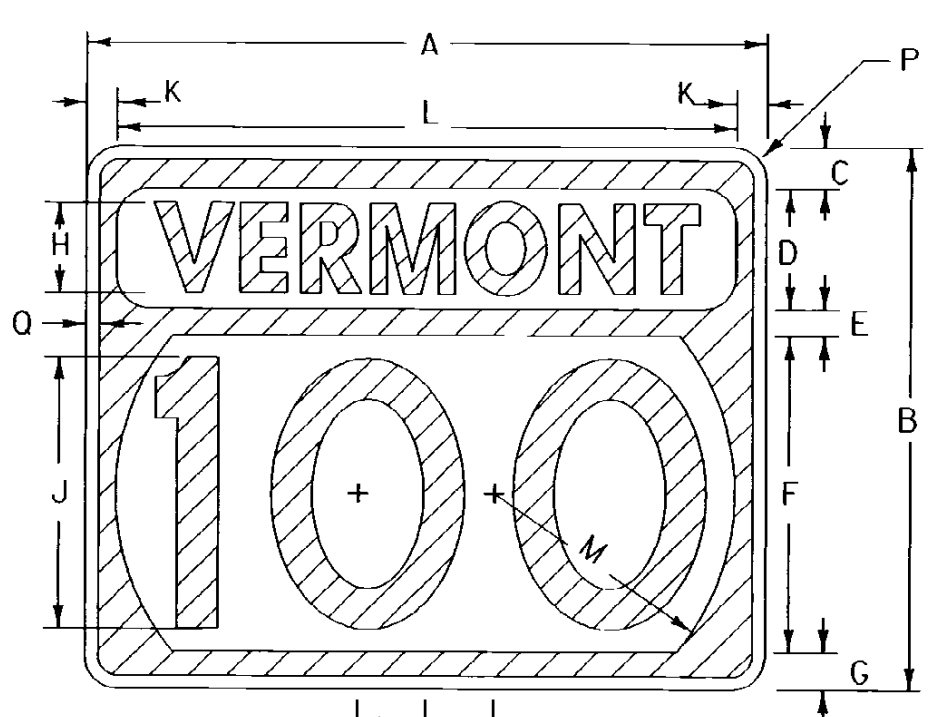
1 OR 2 DIGIT ALTERNATE STATE ROUTE MARKER



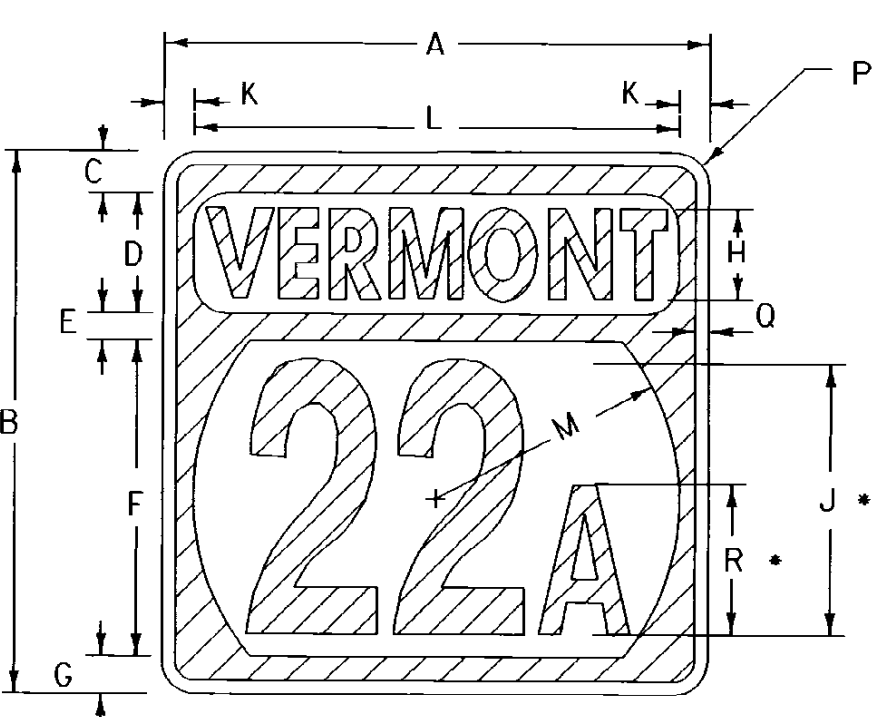
3 DIGIT ALTERNATE STATE ROUTE MARKER



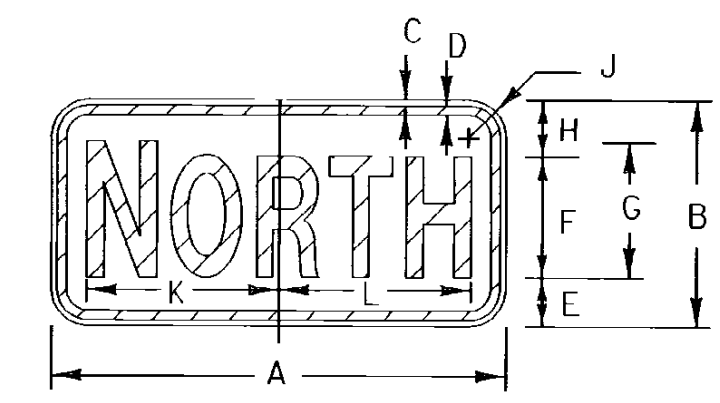
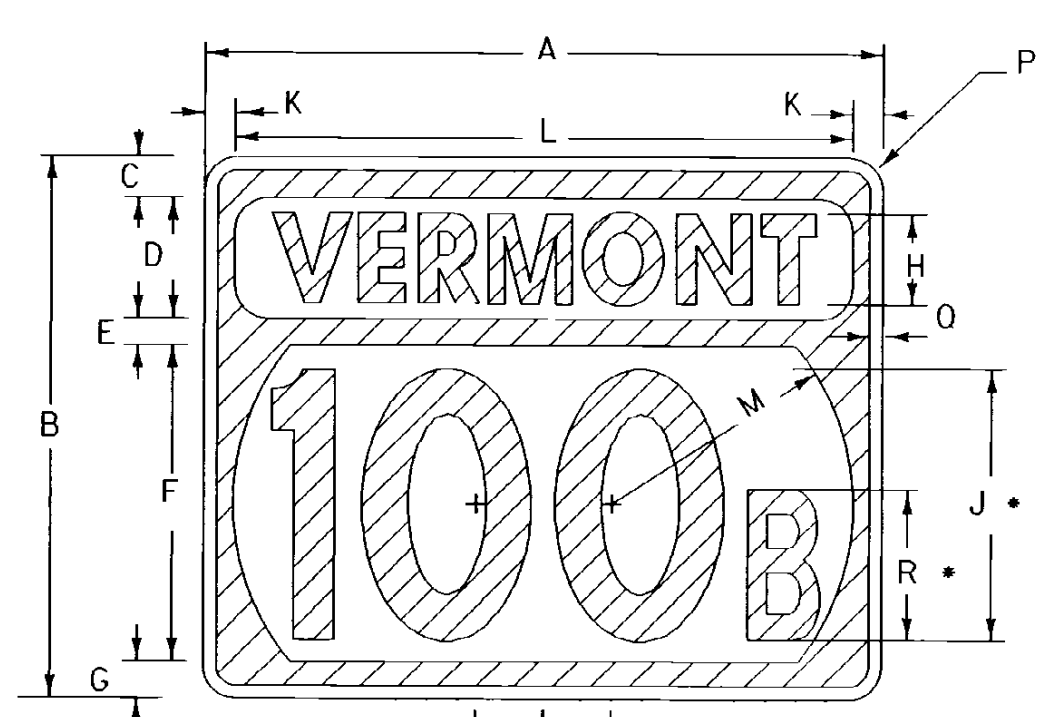
STATE ROUTE MARKER FOR GUIDE SIGN USE (INTERSTATE TYPICAL)



• ALTERNATE ROUTE SIGNS: OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTER-LINE AND REDUCE SPACING AS NECESSARY FOR EACH ROUTE



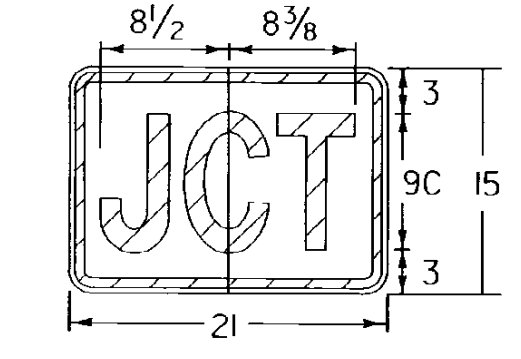
ALTERNATE STATE ROUTE MARKER FOR GUIDE SIGN USE (INTERSTATE TYPICAL)



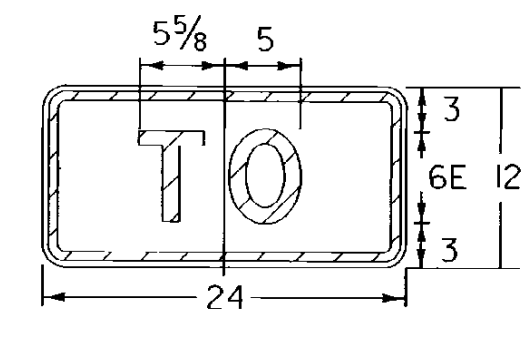
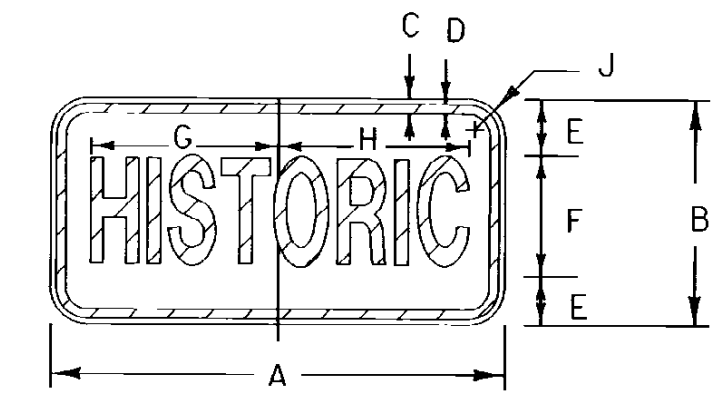
M3-1 M3-3 M3-2 M3-4

SIGN	DIMENSIONS (INCHES)										NORTH	SOUTH	EAST	WEST			
	A	B	C	D	E	F	G	H	J	K					L		
MIN. & STD.	24	12	3/8	5/8	2 3/4	6C	7C	3 3/4	1 1/2	10 1/4	10 1/4	10 1/4	9 3/4	7 7/8	8 3/8	8 3/4	8 3/4
SPECIAL	30	15	3/8	5/8	3 1/4	8C	9C	3 3/4	1 1/2	12 1/4	12 1/4	12 1/4	12 1/2	10 3/8	11 1/8	11 3/8	11 3/8

M2-1



CARDINAL DIRECTION MARKER



M4-5 TRAILBLAZER

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	J	
MIN. & STD.	24	12	3/8	5/8	3 1/2	5B	10 1/8	9 3/8	1 1/2	
SPECIAL	30	15	3/8	5/8	4	7B*	12 3/8	12 3/8	1 1/2	

* REDUCE SPACING 35%

**MATERIALS**

THE SIGN BASE MATERIAL MAY BE ANY OF THE FOLLOWING, WITH THE MINIMUM THICKNESSES AS NOTED:

FLAT SHEET ALUMINUM  
 LESS THAN 24" X 24" 0.060"  
 WHEN USED ON GUIDE SIGNS 0.060"  
 24" X 24" - 30" X 24" 0.080"  
 36" X 36" - 45" X 36" 0.100"

GALVANIZED FLAT SHEET STEEL  
 LESS THAN 24" X 24" 18 GAGE  
 WHEN USED ON GUIDE SIGNS 18 GAGE  
 24" X 24" - 30" X 24" 16 GAGE  
 36" X 36" - 45" X 36" 14 GAGE

THE REFLECTIVE MATERIAL SHALL BE WHITE REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND. THE TEXTS MAY BE LETTERING FILM, SILK SCREENED, OR HAND PAINTED.

**COLORS**

COLORS FOR GUIDE USE: TEXT AND SHIELD - GREEN (REFL.) BACKGROUND AND BORDER - WHITE (REFL.)  
 STATE ROUTE MARKERS SHALL HAVE REFLECTIVE GREEN TEXT AND BORDERS ON REFLECTORIZED WHITE BACKGROUNDS.  
 GREEN AREAS ARE INDICATED BY SINGLE LINE CROSSHATCHING

**LETTERING**

LETTERS AND DIGITS SHALL CONFORM WITH THE "STANDARD ALPHABET FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" ADOPTED BY THE U.S. DEPARTMENT OF TRANSPORTATION AND FHWA.

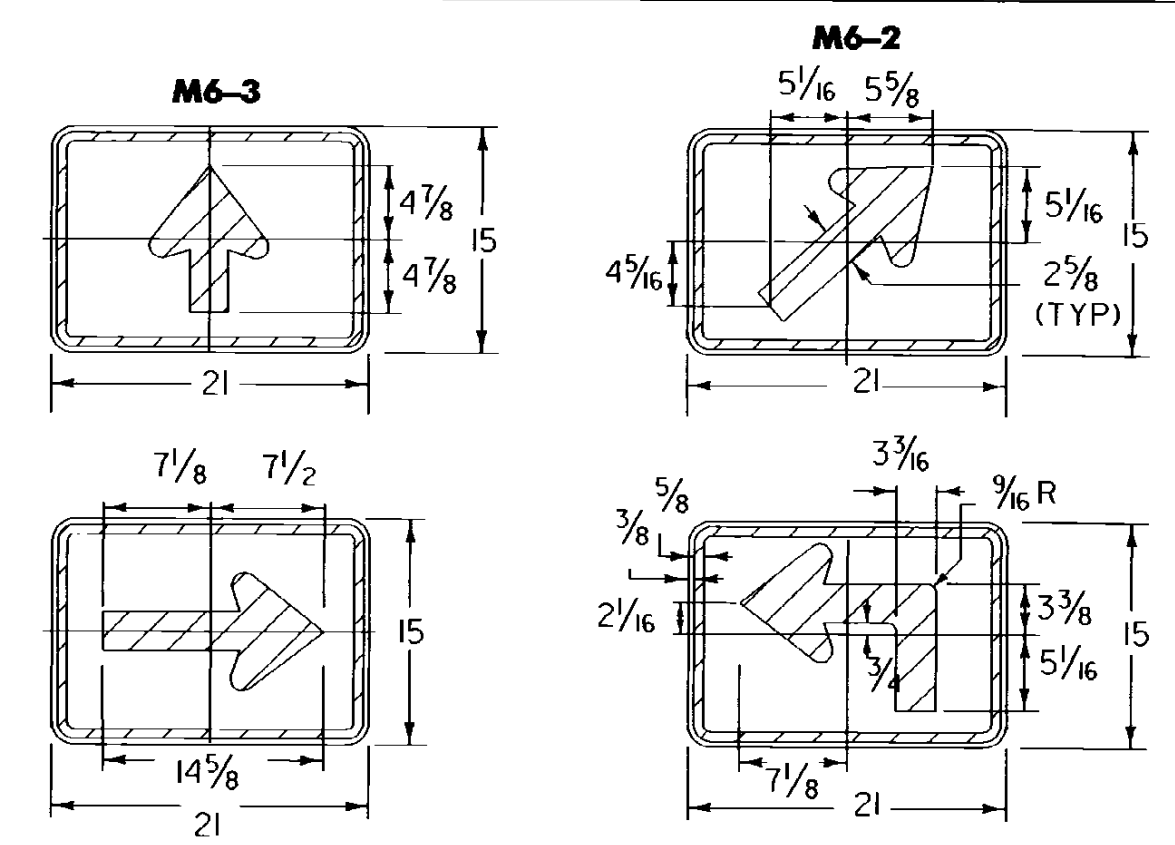
**SPECIFICATIONS**

STATE ROUTE MARKERS AND AUXILIARY ROUTE MARKERS SHALL MEET THE STANDARD STATE SPECIFICATIONS FOR TRAFFIC SIGNS.

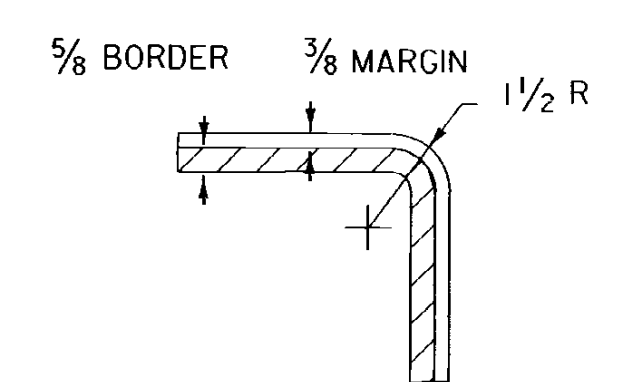
**DESIGNS**

THE DESIGNS OF STATE ROUTE MARKERS AND AUXILIARY MARKERS SHALL CONFORM WITH THE REQUIREMENTS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" ADOPTED BY THE U.S. DEPARTMENT OF TRANSPORTATION AND FHWA.

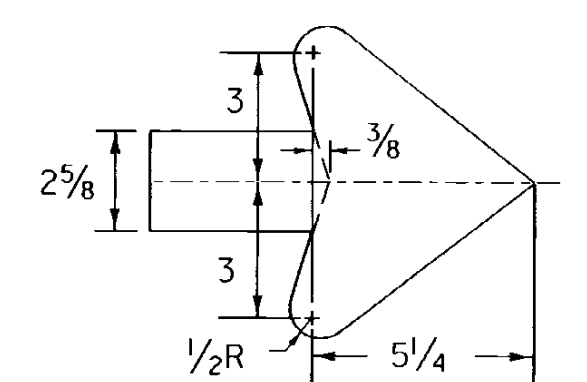
SIGN	DIMENSIONS (INCHES)																
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	
1,2-digits	24	24	1 1/2	6	1	14	1 1/2	4C	12D	1	22	11	-	1 1/2	1/2	7B	
1,2-digits	36	36	2 3/8	8	1 3/4	21	2 3/8	6C	18D	2	32	16 1/2	-	2 1/4	3/8	10B	
3,-digits	30	24	1 1/2	6	1	14	1 1/2	4D	12D	1	28	11	3	1 1/2	1/2	7B	
3,-digits	45	36	2 3/8	8	1 3/4	21	2 3/8	6D	18D	2	41	16 1/2	4 1/2	2 1/4	3/8	10B	



M6-1 M5-1 M6-2 M6-3 DIRECTION ARROW OR ADVANCE TURN ARROWS



TYPICAL RADIUS DETAIL



TYPICAL ARROW DETAIL

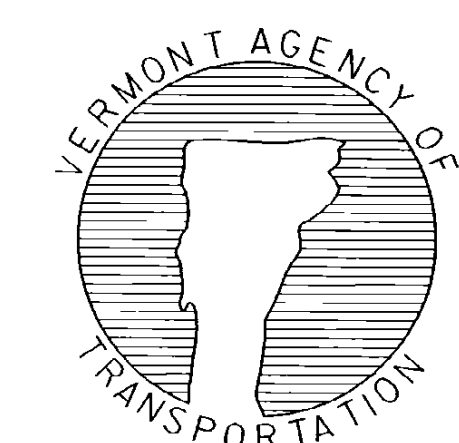
(ALL DIMENSIONS IN INCHES)

REVISIONS AND CORRECTIONS  
 AUG. 08, 1995 - DATE OF ORIGINAL ISSUE

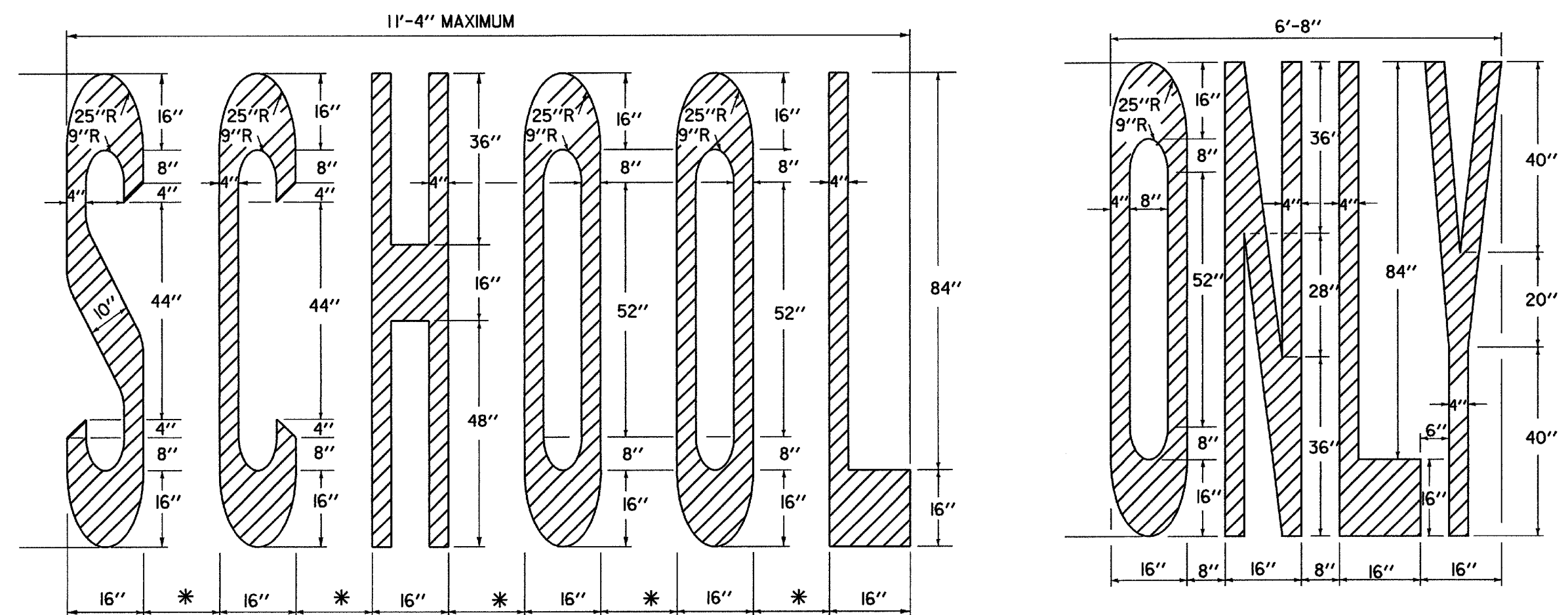
APPROVED  
*Ernest S. MacArthur*  
 DIRECTOR OF ENGINEERING  
  
*David A. Ross*  
 TRAFFIC AND SAFETY ENGINEER

STATE ROUTE MARKER SIGN DETAILS

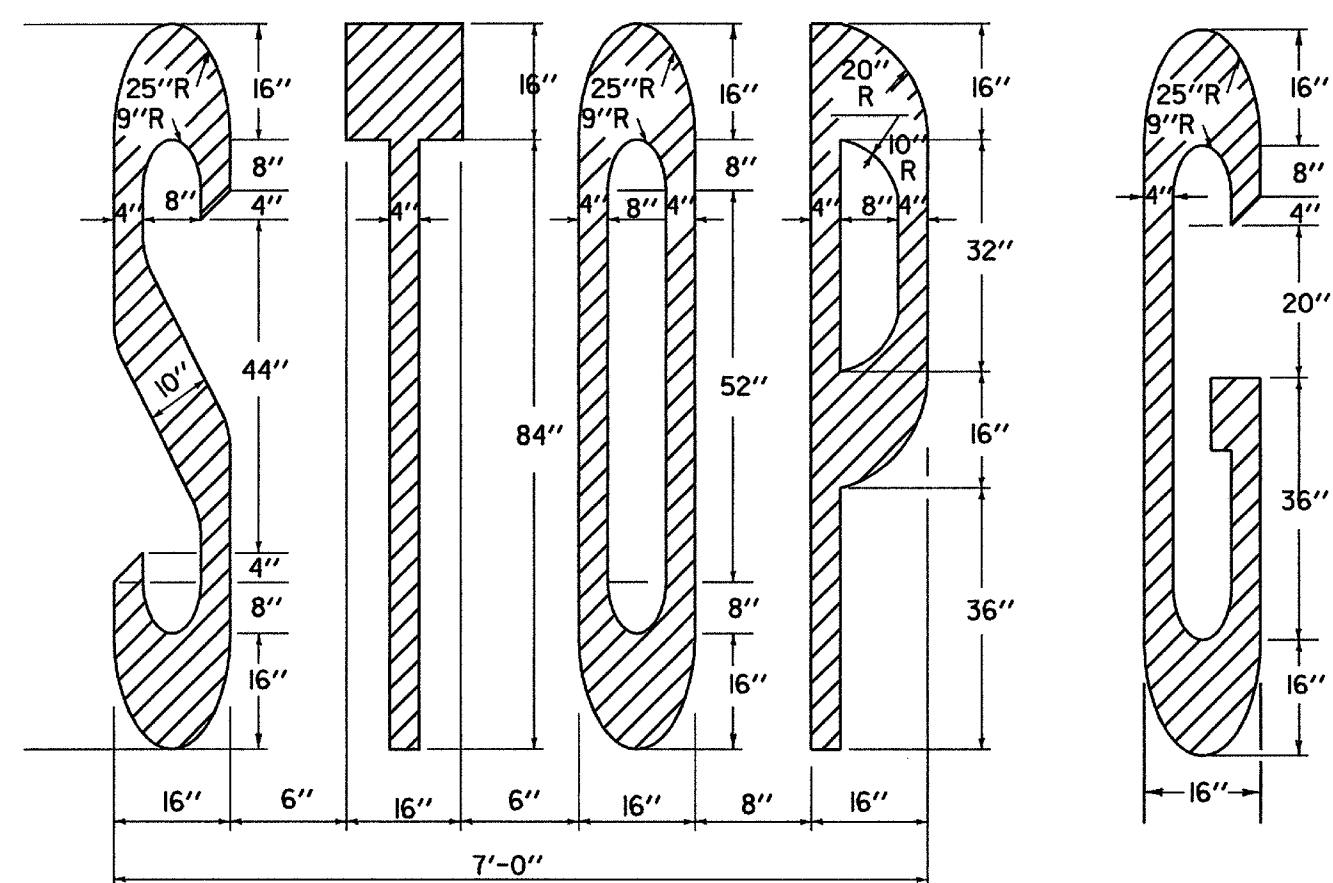
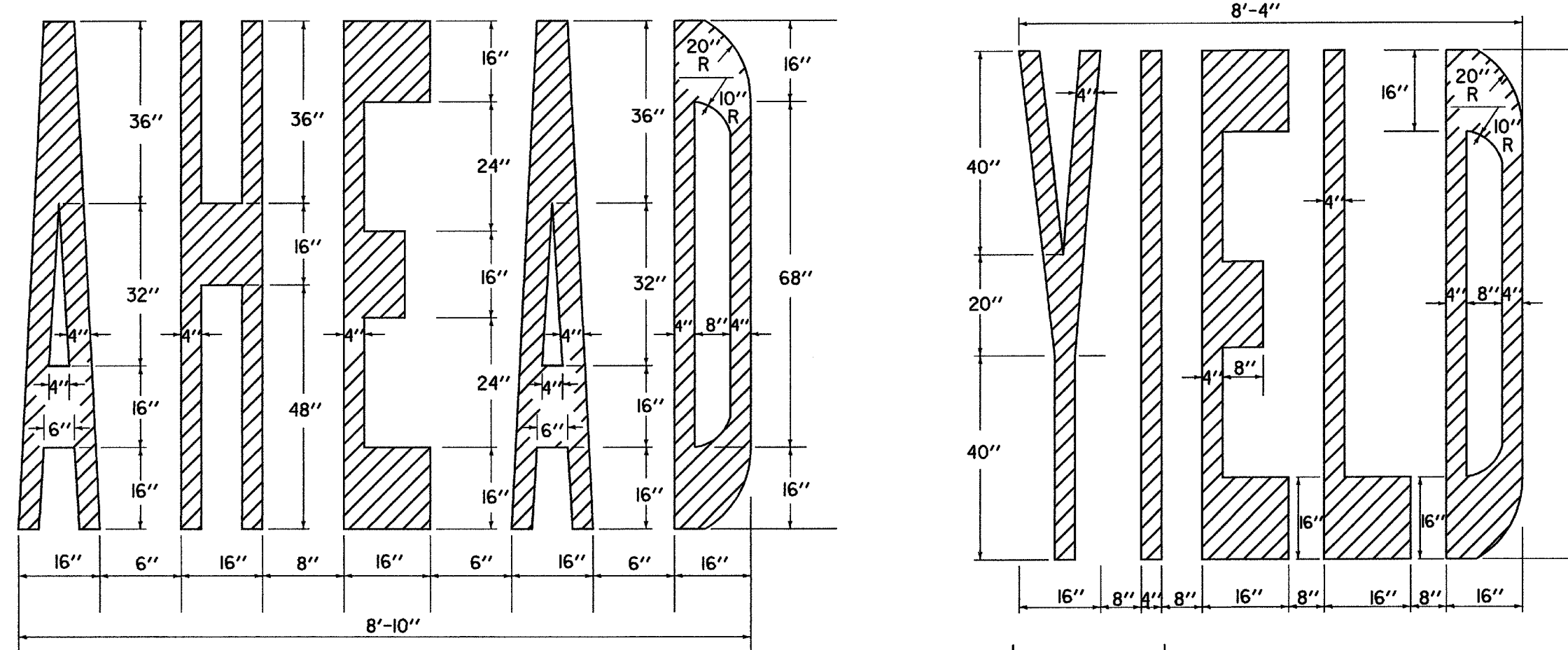
OTHER STDS. REQUIRED:



STANDARD E-136 B



* (4'-8'') - ADJUST TO AVAILABLE PAVEMENT WIDTH



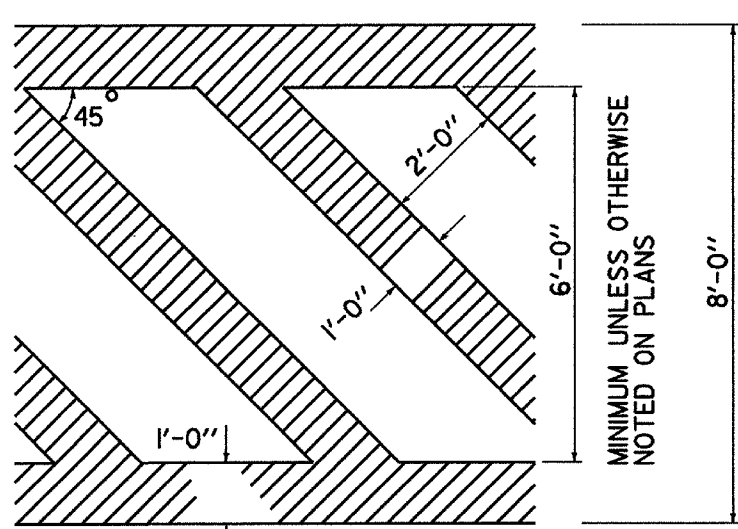
**LETTER IN WORD MARKING AND CROSSWALK DETAILS**

THE LETTER "G" PERTAINS TO THE WORD "SIGNAL" FOR OTHER LETTERS, SEE ABOVE.

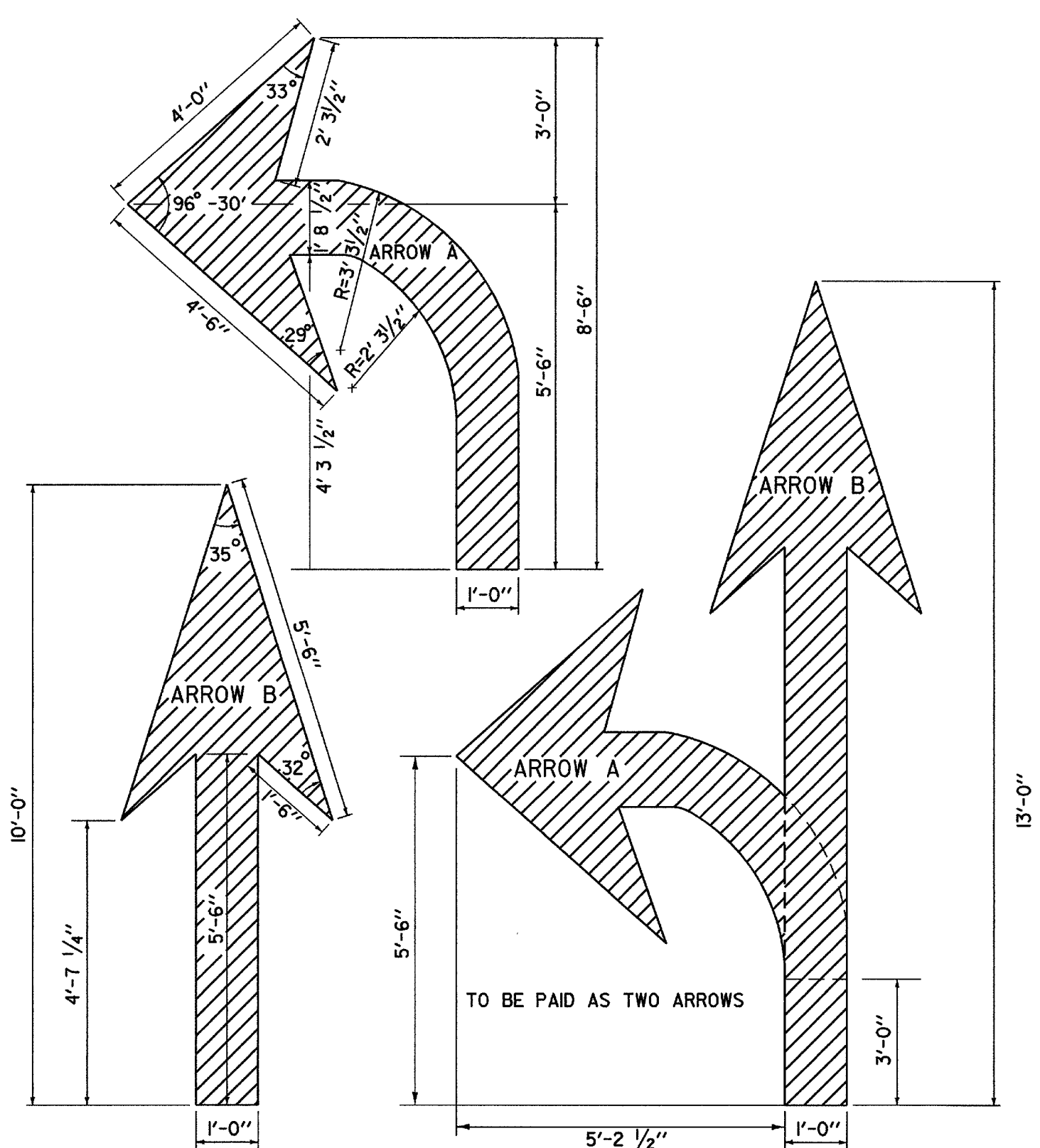
**SIGNAL**  
6" LETTER SPACING

**LETTER HEIGHT**

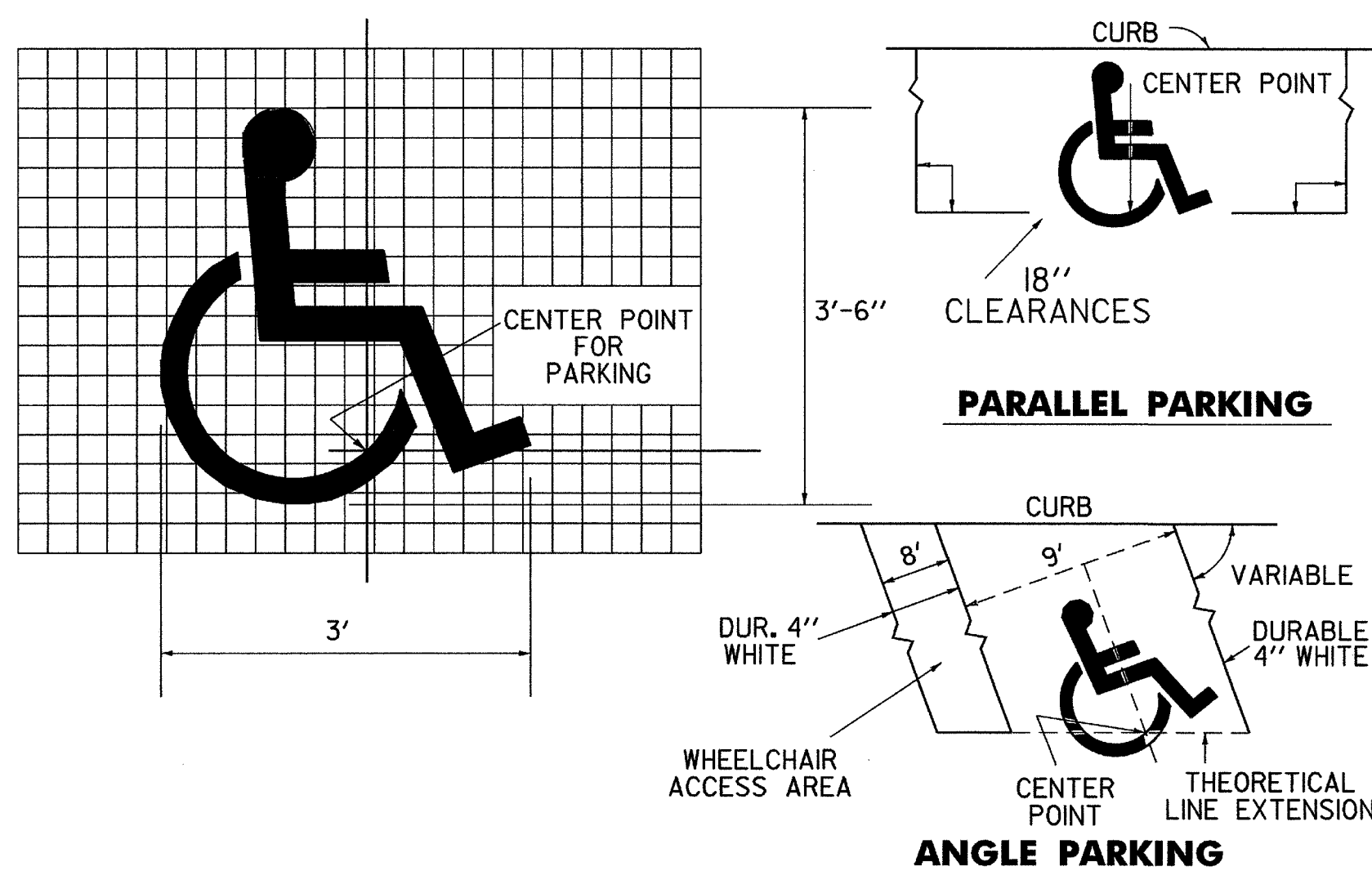
DIMENSIONS ARE FOR 8' - 4" LETTER HEIGHTS. A LESSER HEIGHT OF 8' - 0" IS ACCEPTABLE AS LONG AS THE DIMENSIONS ARE PROPORTIONAL TO THE DETAILS SHOWN. SEE NOTE BELOW.



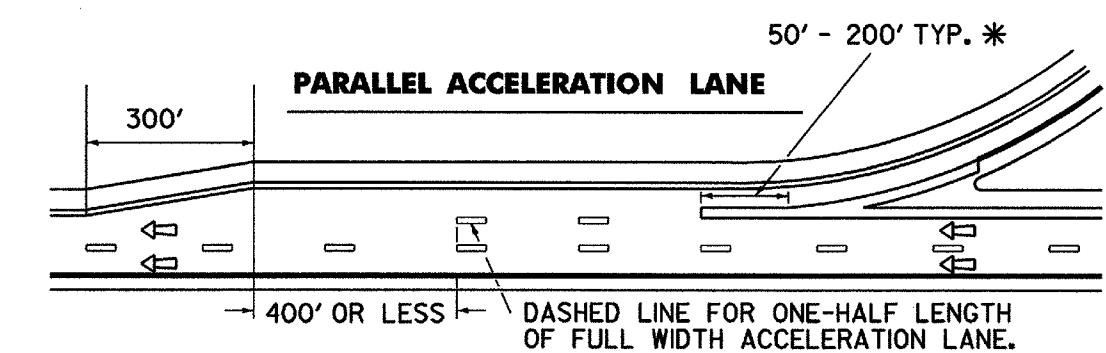
ARROWS AND WORD MARKINGS THAT CONFORM TO THE DIMENSIONS SHOWN ON THIS SHEET OR AS DETAILED IN THE BOOKLET ENTITLED "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION) PREPARED BY THE FEDERAL HIGHWAY ADMINISTRATION WILL BE ACCEPTABLE.



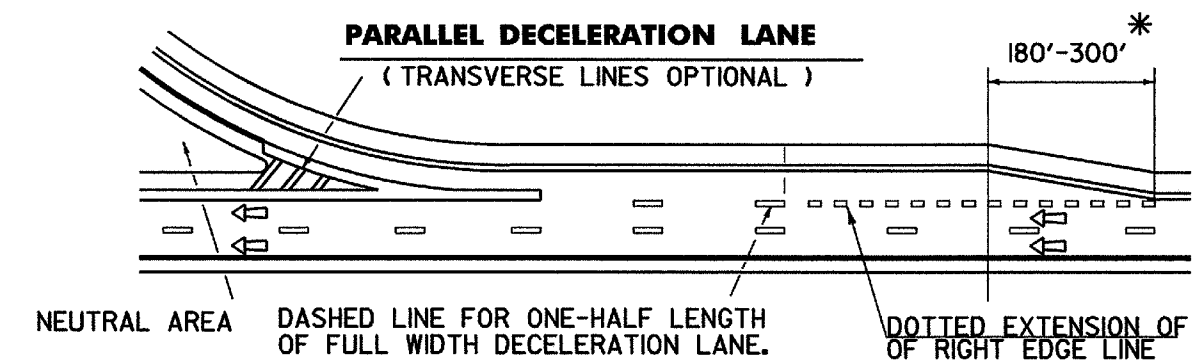
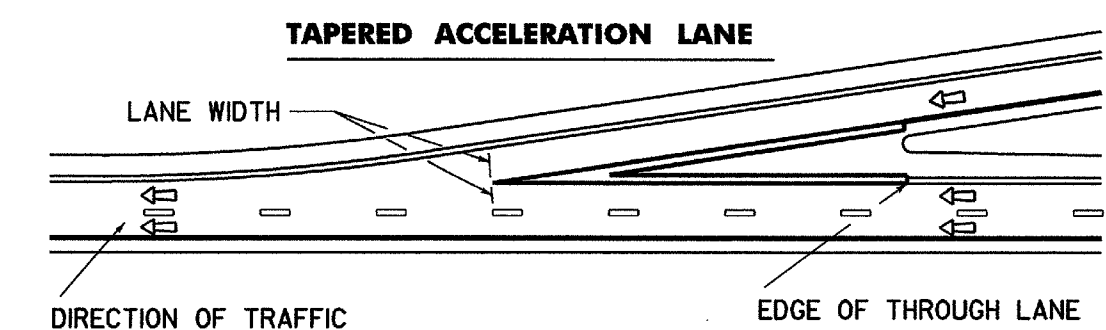
**ARROW DETAILS**



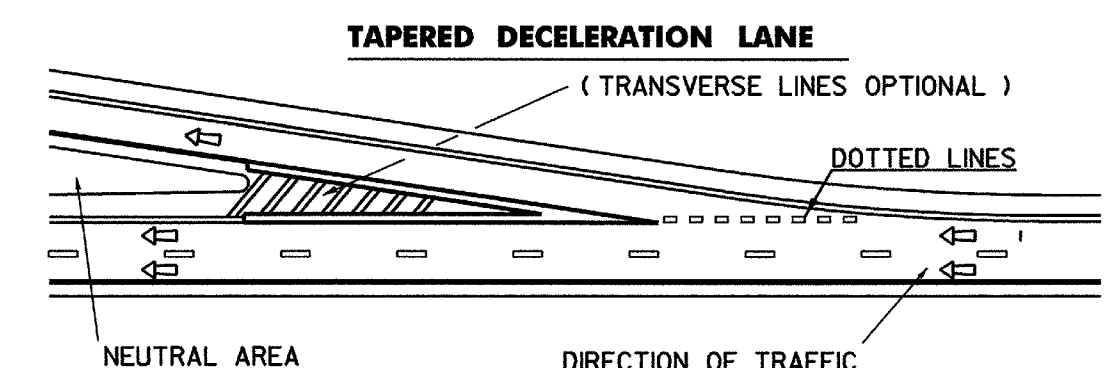
**HANDICAPPED PAVEMENT MARKING DETAILS**



* USE LONGER LENGTH TO EMPHASIZE SITUATIONS WHERE THE CROSSING REQUIRES UNUSUAL CARE SUCH AS HIGH VOLUME MERGE AREAS.



* SHORTER TAPERS GIVE A BETTER TARGET VALUE, HOWEVER ALIGNMENT MAY DICTATE A LONGER TAPER. RESIDENT ENGINEER SHALL ESTIMATE LENGTH.

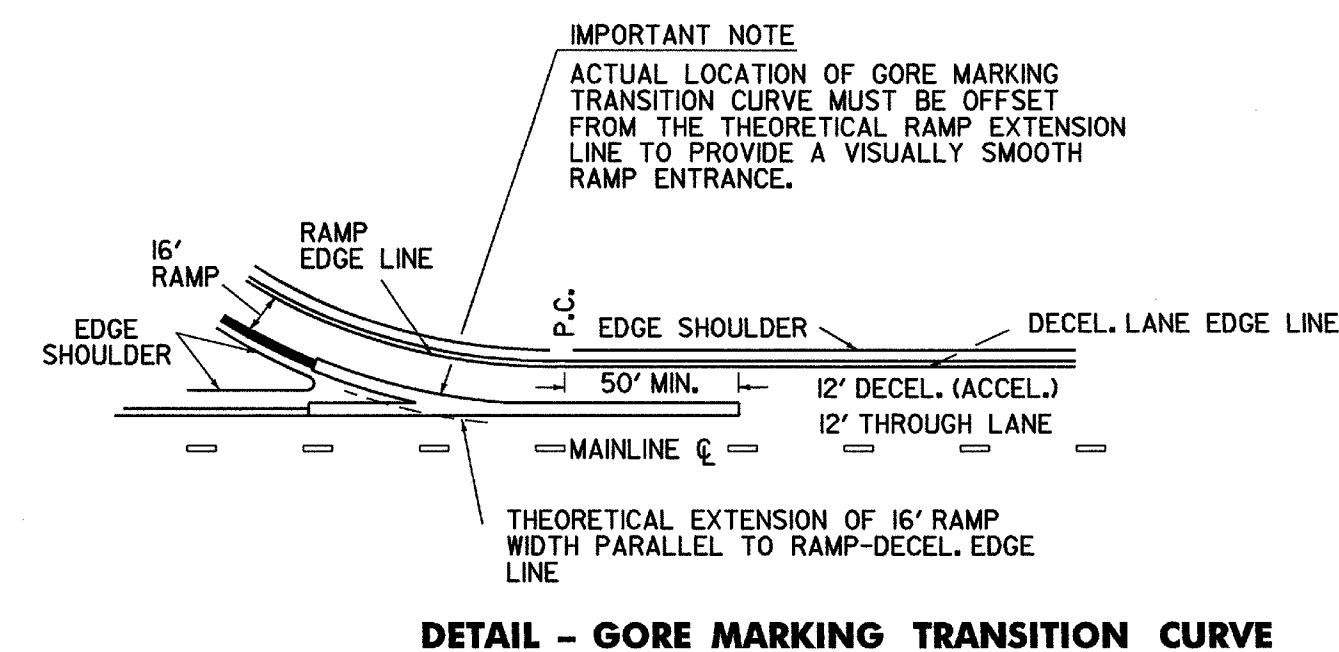


TRANSVERSE LINES SHALL CONSIST OF A WHITE LINE 2 TIMES WIDER THAN THE MAIN LINE MARKING WIDTH SPACED 5'-0" C-C AND SET AT 45° TO MAIN LINE EDGE LINES. THESE MARKINGS SHALL BE USED TO INCREASE VISIBILITY DUE TO DIFFICULT VERTICAL OR HORIZONTAL ALIGNMENT, AS DIRECTED BY THE RESIDENT ENGINEER.

**LEGEND**

**RAMP MARKINGS**

- WHITE LINES
- YELLOW LINES
- CHANNELIZATION WHITE LINES
- - - WHITE DOTTED LINES (2' SOLID - 4' GAP)
- ← DIRECTION OF TRAFFIC FLOW



**DETAIL - GORE MARKING TRANSITION CURVE**

THIS SHEET IS NOT TO SCALE

OTHER STDS. REQUIRED

**REVISIONS AND CORRECTIONS**

- SEPT. 10, 1987 - DATE OF ORIGINAL ISSUE
- JAN. 23, 1989 - ADDED DOTTED LINES, "SIGNAL" DIMENSIONS, CLARIFIED LETTER HEIGHT.
- AUG. 18, 1995 - MISC. NOTE CHANGES
- FEB. 1, 1999 - CHANGED NOTES FOR ACCELERATION & DECELERATION LANES

**APPROVED**

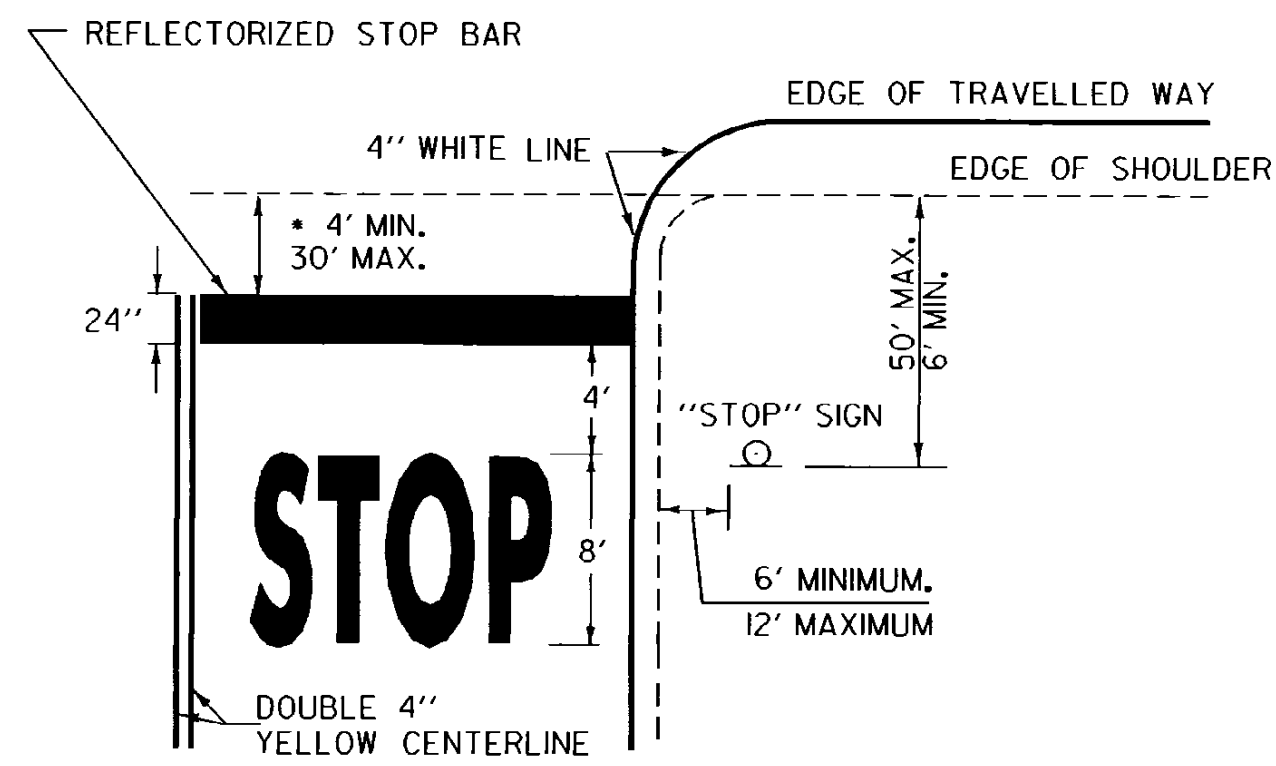
*Robert F. Shattuck*  
DIRECTOR OF PROJECT DEVELOPMENT

**PAVEMENT MARKING  
DETAILS**



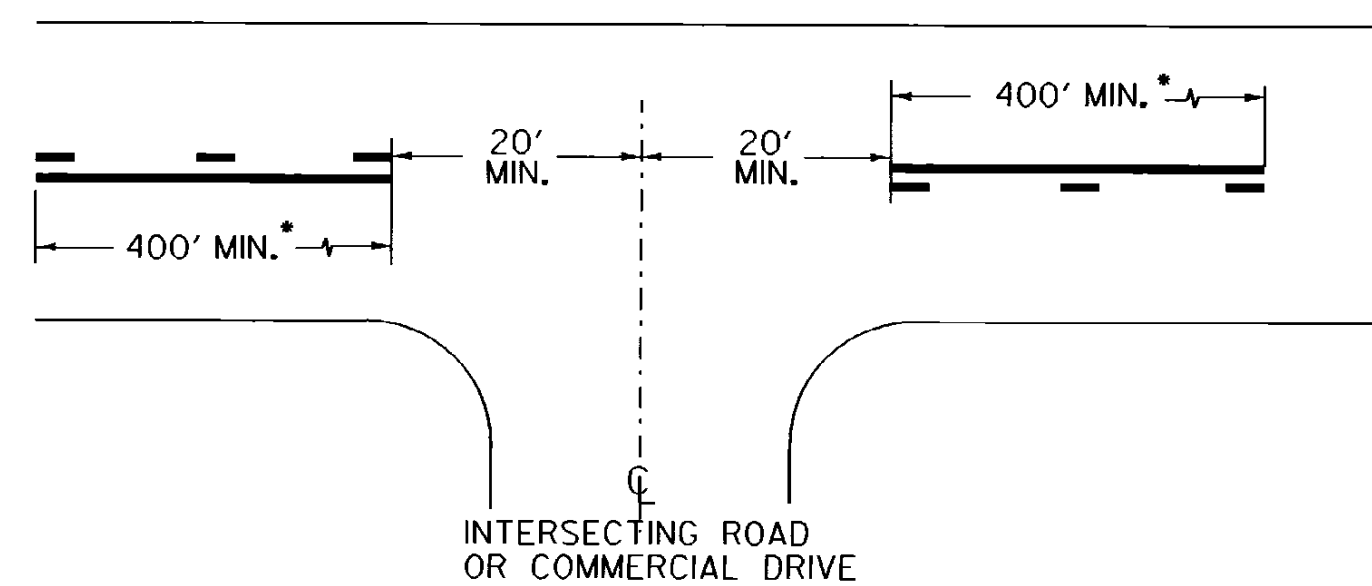
**STANDARD  
E-191**





* THE "DESIRED STOPPING POINT" IS THE LOCATION BASED ON SITE CONDITIONS THAT BEST ALLOWS THE STOPPED VEHICLE TO VIEW THE APPROACHING TRAFFIC.

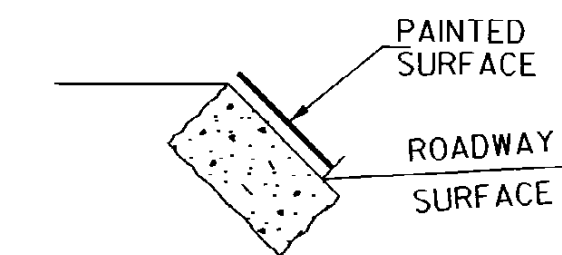
**STOP BAR LAYOUT**



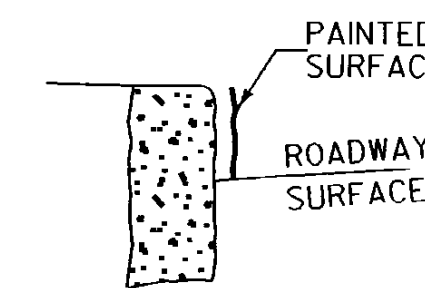
* THE SOLID LINE SHALL BE PAIRED WITH EITHER A SOLID OR DASHED LINE DEPENDING ON SIGHT DISTANCE AVAILABILITY IN THE OPPOSING DIRECTION. ADJUSTMENTS TO THE 40 FOOT CENTERLINE OPENING MAY BE MADE TO ACCOMMODATE SKEWED INTERSECTIONS.

- CENTERLINE BREAKS:
- AT ALL STATE HIGHWAYS AND TOWN HIGHWAYS, INCLUDING CLASS 4 TH'S. THAT HAVE STOP AND LEGAL LOAD LIMIT SIGNS INSTALLED
  - COMMERCIAL DRIVES:
    - WHERE A SEPARATE TURN LANE EXISTS ON THE MAIN LINE (LT. OR RT.)
    - SIGNIFICANT TRAFFIC VOLUMES EXISTS.
    - IF MOTORISTS NEED ASSISTANCE TO DEFINE ENTRANCE POINTS.

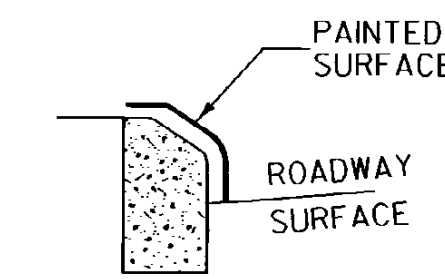
**CENTERLINE LAYOUT**



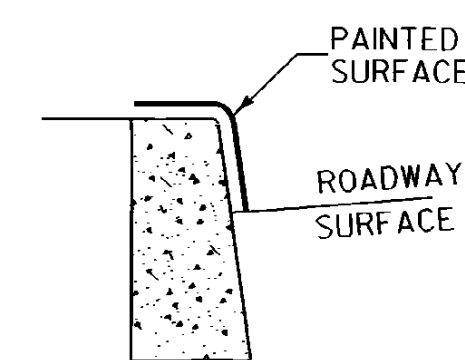
**GRANITE SLOPE EDGING**



**VERTICAL GRANITE CURB**

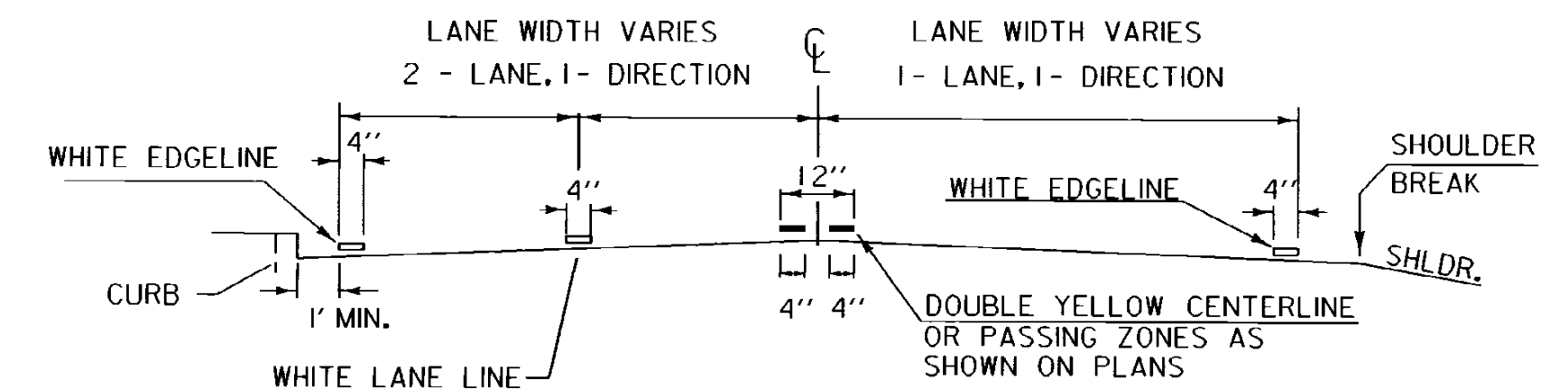


**TYPE A (CONCRETE)**

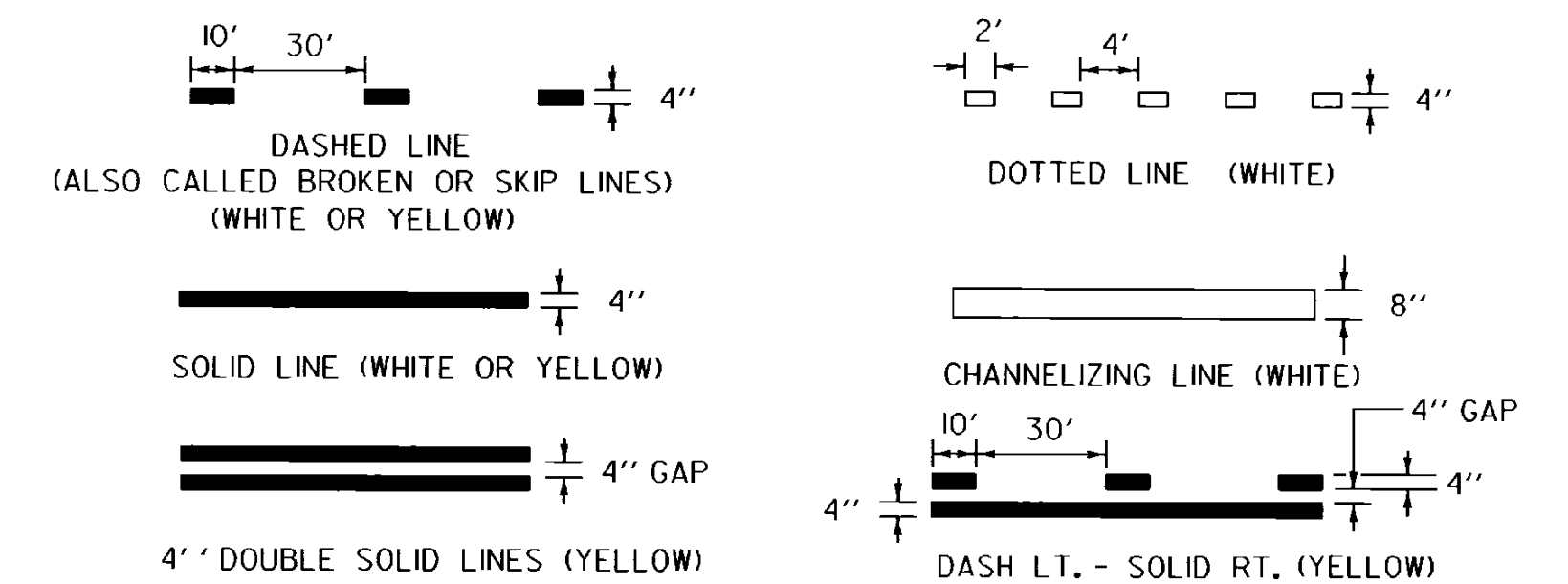


**TYPE B (CONCRETE)**

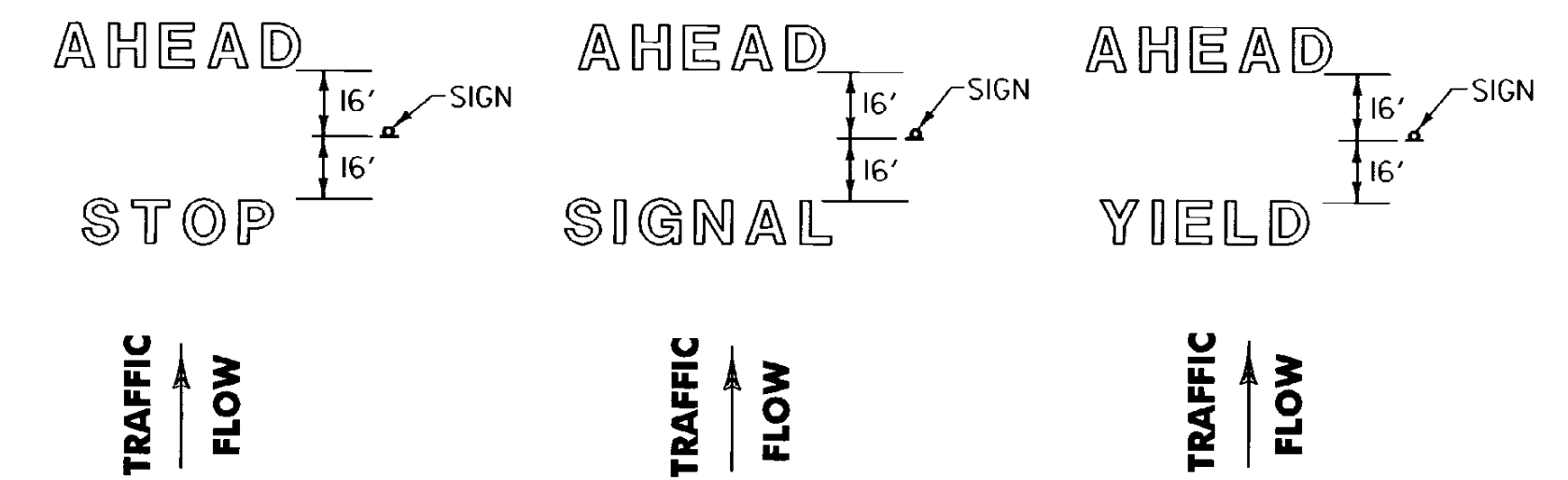
**PAINTED CURB**



**PAVEMENT MARKING PLACEMENT DETAIL**

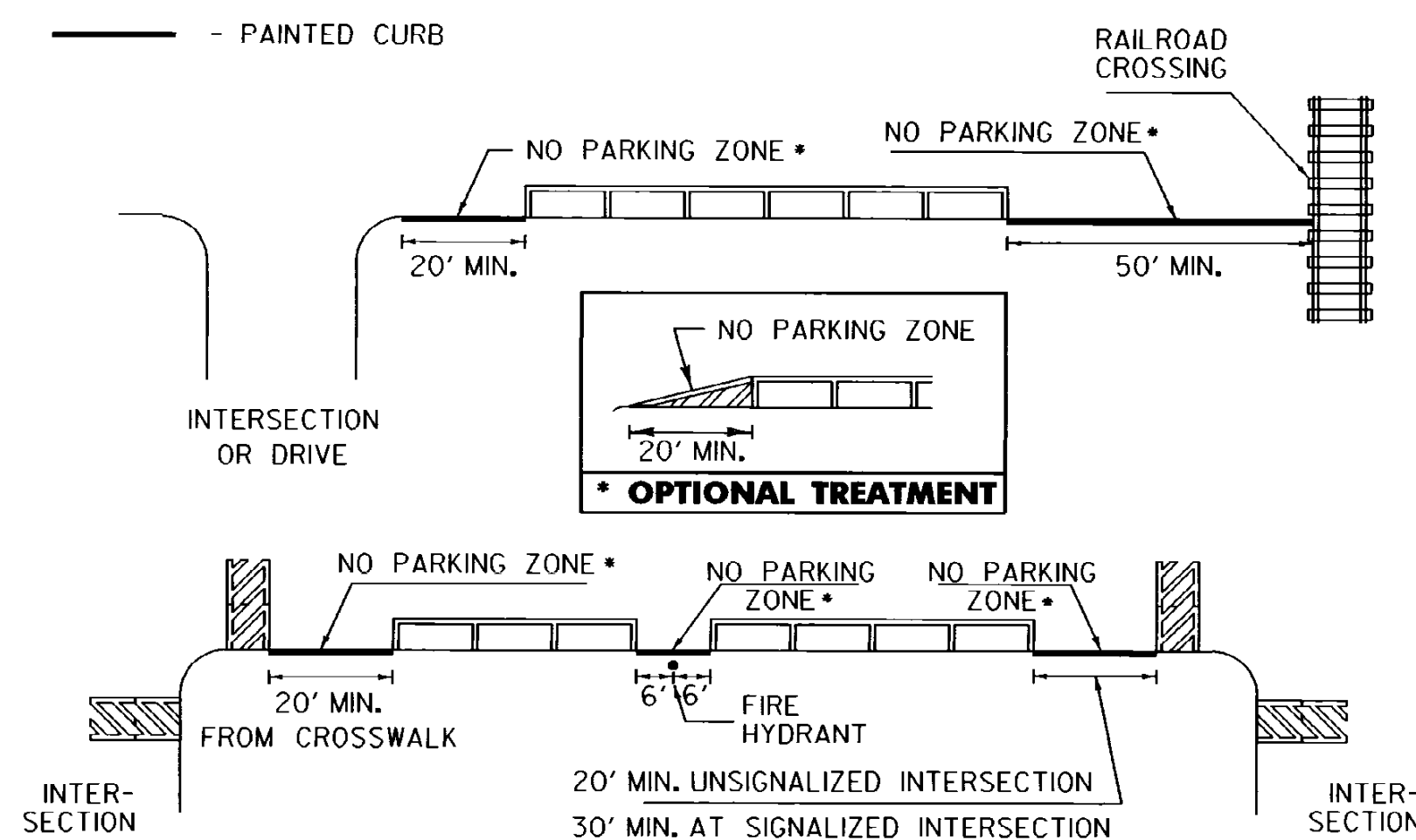


**PAVEMENT MARKING LINE DETAILS**

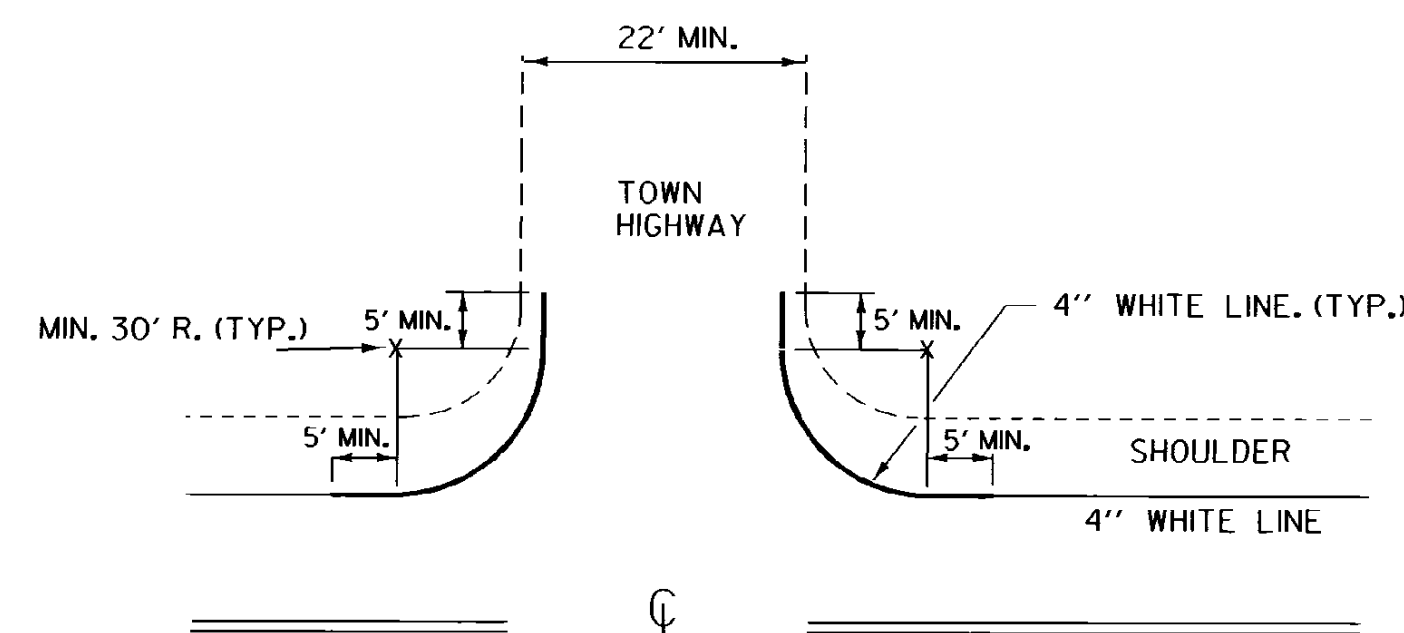


**LETTER IN WORD MARKING SPACING DETAIL**

NOTE: SINGLE WORDS CENTERED ON SIGN ie: SCHOOL OR YIELD



**NO PARKING LAYOUT DETAILS**

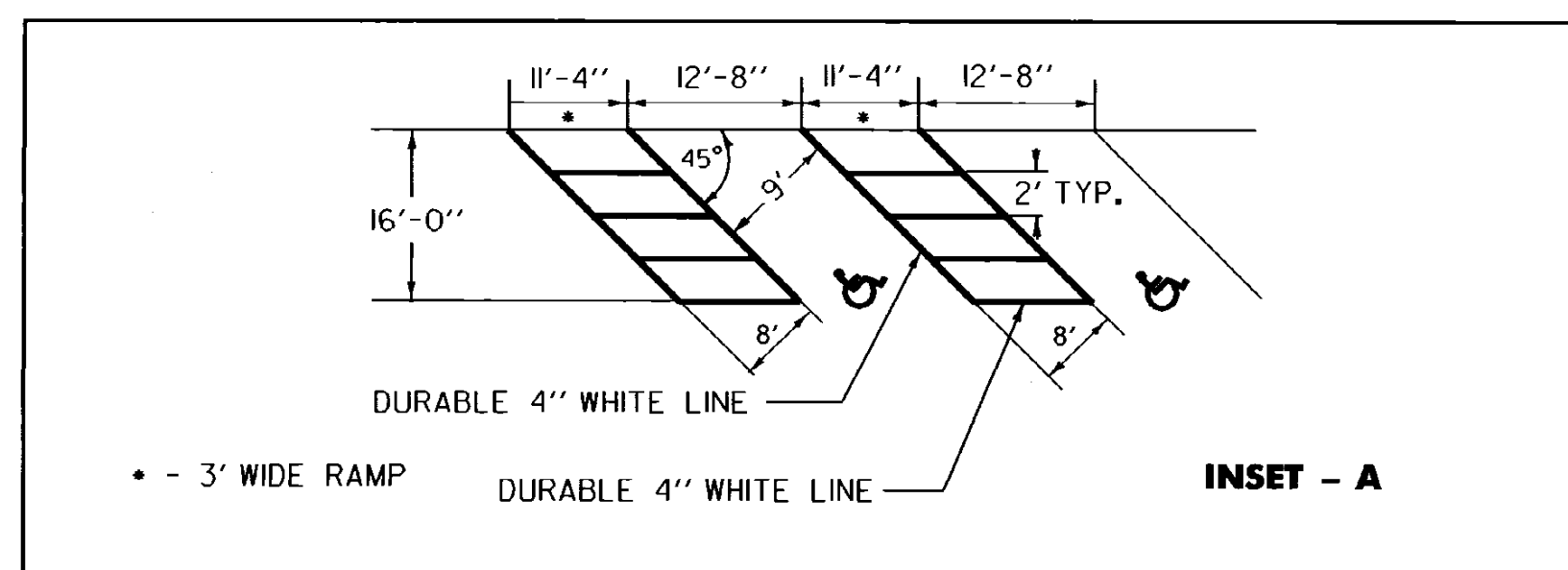


EDGE LINES SHALL BE APPLIED TO ALL STATE HIGHWAYS AND SHOULD BE MAINTAINED AT A CONSTANT DISTANCE FROM THE CENTERLINE UNLESS PAVEMENT WIDTH INCREASES TO ALLOW WIDER LANES.

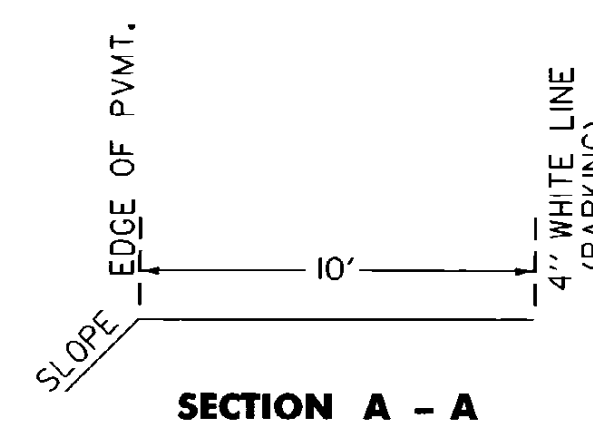
APPLY EDGE LINE AS DETAILED ON ALL PAVED CLASS 1 & CLASS 2 TOWN HIGHWAYS AND ANY CLASS 3 TOWN HIGHWAY 22 FEET OR MORE IN WIDTH.

IF MIN. 30 FOOT RADIUS CANNOT BE OBTAINED, OR THE TOWN HIGHWAY IS NOT PAVED, BREAK THE EDGE LINE USING AN 80 FOOT GAP AT INTERSECTION.

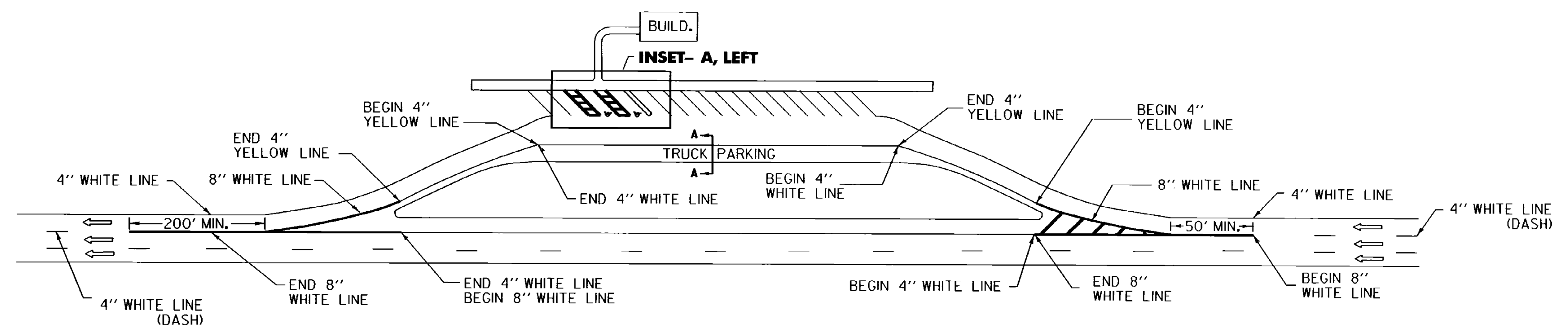
**EDGE LINE LAYOUTS**



NOTE: SEE STANDARD SHEET E-191 FOR HANDICAP SYMBOL POSITIONING AND DETAIL.



**TRUCK PARKING DETAIL**



**REST AREA PARKING DETAILS**

THIS SHEET IS NOT TO SCALE

OTHER STDS. E - 191, E - 192 REQUIRED

**REVISIONS AND CORRECTIONS**

AUG. 18, 1995 - DATE OF ORIGINAL ISSUE

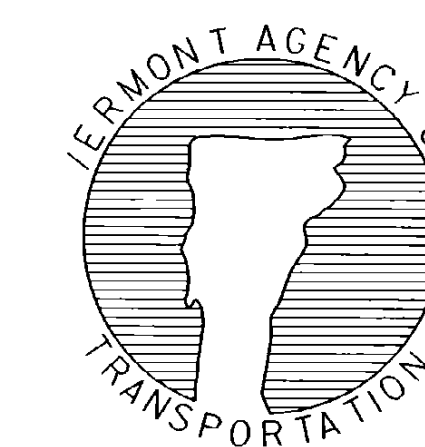
**APPROVED**

*Sandra S. McCutchen*  
DIRECTOR OF ENGINEERING

*David A. Ross*  
TRAFFIC AND SAFETY ENGINEER

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.

**PAVEMENT MARKING DETAILS**



**STANDARD E-193**



1. TRAFFIC CONTROL DEVICES NOT DETAILED IN THE VERMONT AGENCY OF TRANSPORTATION (VAOT) "STANDARD DRAWINGS" OR THE PROJECT PLANS SHALL BE IN ACCORDANCE WITH THE CURRENT "MANUAL ON TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK, AND THEIR LATEST REVISIONS, (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).
2. CONSTRUCTION SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER.
3. DIAMOND SHAPED CONSTRUCTION SIGNS SHALL BE 48 INCH BY 48 INCH.
4. CONSTRUCTION SIGN COVERS SHALL CONSIST OF A PANEL, PAINTED FLAT BLACK, THE SAME SIZE AS THE SIGN IT COVERS. THE PANEL SHALL BE OF WOOD, PLYWOOD, HARDBOARD OR ANY MATERIAL SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE WEATHER DURING THE PROJECT. MOUNTING OF THE PANEL SHALL BE DONE IN SUCH A WAY AS NOT TO DAMAGE THE SIGN FACE MATERIAL.
5. SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. THEY SHALL BE KEPT PLUMB AND LEVEL, AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFACED OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER.
6. NO CROSS-BRACING OR BACK-BRACING TO KEEP POSTS PLUMB WILL BE ALLOWED. CONCRETE FOUNDATIONS, COLLARS OR SOIL BEARING PLATES ARE NOT PERMITTED.
7. CONSTRUCTION SIGNS INSTALLED ON POSTS SHALL BE SET SECURELY IN THE GROUND ON TWO POSTS. THE BOTTOM OF A SIGN SHALL BE AT LEAST FIVE FEET ABOVE THE EDGE OF PAVEMENT AND THE NEAREST EDGE OF A SIGN SHALL BE AT LEAST SIX FEET OUTSIDE THE SHOULDER POINT, FOUR FEET OUTSIDE GUARDRAIL, OR TWO FEET OUTSIDE CURBING OR SIDEWALK. THE INSTALLATION OF SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. IN URBAN AREAS, THE BOTTOM OF THE SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE SIDEWALK OR EDGE OF PAVEMENT, WHICHEVER IS HIGHER.
8. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AND A MINIMUM OF ONE FOOT ABOVE THE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
9. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
10. ROLL UP CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VI AND TYPE VII UNLESS OTHERWISE NOTED.
11. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VIII OR IX REQUIREMENTS UNLESS OTHERWISE NOTED.
12. WHERE CONSTRUCTION SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE AASHTO "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POSTS. WHEN ANCHORS ARE INSTALLED, STUBS SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.
13. ROADWAY AND SHOULDER WIDTHS DEPICTED ON THE STANDARD DRAWINGS MAY VARY.
14. THESE STANDARD DRAWINGS ARE INTENDED TO SERVE AS VTRANS STANDARD OPERATING PROCEDURE. IT IS NOTED THAT COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL WORK ZONE MAY BE MODIFIED DUE TO FIELD CONDITIONS AT THE DISCRETION OF THE ENGINEER.

REV.	DATE	DESCRIPTION
0	AUG. 6, 2012	ORIGINAL APPROVAL
1	APR. 25, 2016	INSERTED NOTE 3, UPDATED STANDARD NAME
OTHER STANDARDS REQUIRED: NONE		
VTRANS AND FHWA APPROVAL ON FILE WITH CONTRACT ADMINISTRATION		

## TEMPORARY TRAFFIC CONTROL GENERAL NOTES



STANDARD  
T-1

**VERMONT WARNING SIGN NOTES:**

1. UNLESS OTHERWISE SPECIFIED, VERMONT WARNING SIGNS SHALL BE BLACK LEGEND AND BORDER ON YELLOW RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE IV.

**VERMONT REGULATORY SIGN NOTES:**

1. UNLESS OTHERWISE SPECIFIED, VERMONT REGULATORY SIGNS SHALL BE BLACK LEGEND AND BORDER ON WHITE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE IV.
2. WHEN SPECIFIED, RED RETROREFLECTIVE SHEETING SHALL BE EQUAL TO OR EXCEEDING THE AASHTO M 268 [ASTM D 4956] TYPE III.

**GENERAL NOTES:**

1. SIGN BASE MATERIAL FOR TRAFFIC SIGN, TYPE A SHALL BE FLAT SHEET ALUMINUM MEETING THE FLAT SHEET ALUMINUM THICKNESS CHART ON THIS SHEET.
2. SIGN BASE MATERIAL FOR TRAFFIC SIGN, TYPE B SHALL BE EXTRUDED ALUMINUM PANELS.
3. ALL SIGN TEXT SHALL BE IN ACCORDANCE WITH THE RESPECTIVE ALPHABET AS IDENTIFIED IN THE CURRENT "STANDARD HIGHWAY SIGNS AND MARKINGS" (SHSM) BOOK, AND ITS LATEST REVISIONS.
4. COLORS SHALL MEET THE REQUIREMENTS AS IDENTIFIED IN THE CURRENT MUTCD, AND ITS LATEST REVISIONS.
5. ALL DIMENSIONS SHOWN IN INCHES.

**FLAT SHEET ALUMINUM THICKNESS CHART**

THICKNESS	0.080	0.100	0.125
SIGN SIZE	12 X 12	36 X 12	48 X 18
	18 X 12	36 X 15	48 X 24
	18 X 18	36 X 18	48 X 30
	21 X 15	36 X 24	48 X 42
	24 X 8	36 X 36	48 X 48
	24 X 10	36 X 42	48 X 60
	24 X 12	36 X 45	72 X 10
	24 X 18	36 X 48	72 X 12
	24 X 24	36 X 54	72 X 20
	24 X 30		
	30 X 15		
	30 X 18		
	30 X 24		
	30 X 30		
	30 X 42		







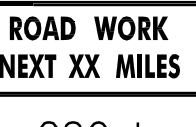
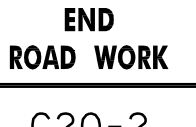
REV.	DATE	DESCRIPTION
0	FEB. 12, 2016	ORIGINAL APPROVAL
1	APR. 25, 2016	ADDED VERMONT REGULATORY SIGN NOTE 2
OTHER STANDARDS REQUIRED: NONE		
VTRANS AND FHWA APPROVAL ON FILE WITH CONTRACT ADMINISTRATION		

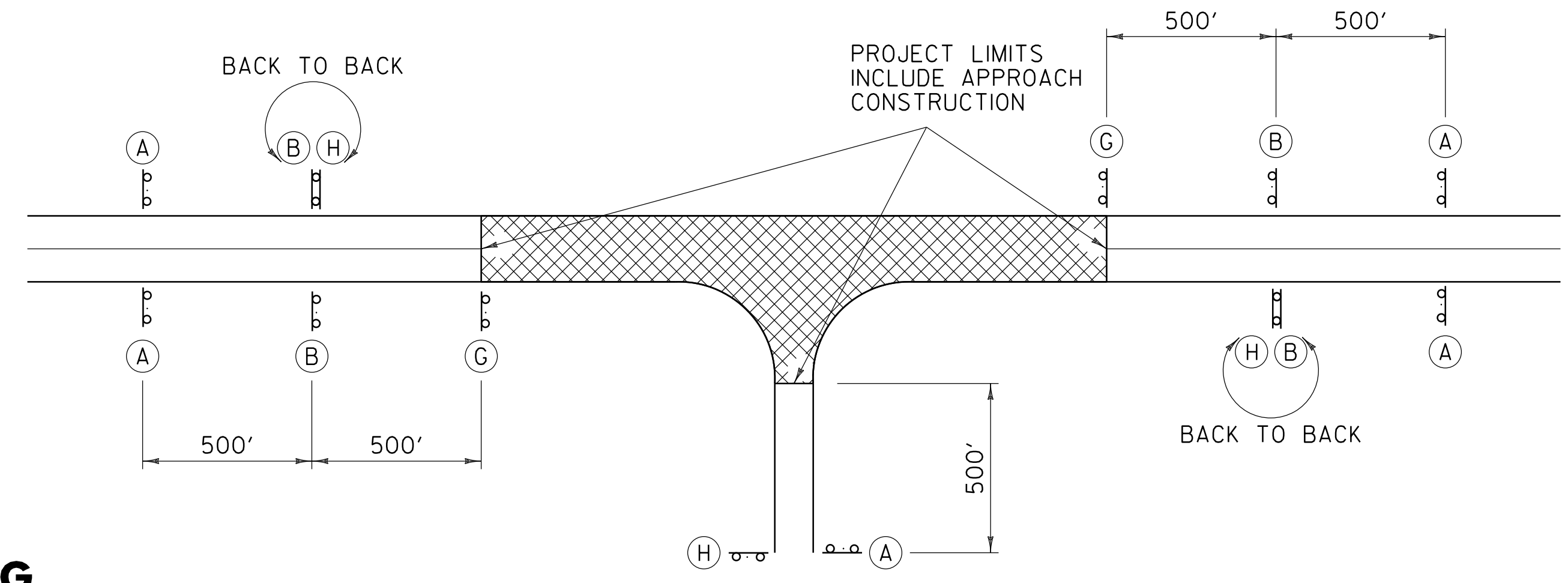
TRAFFIC SIGN GENERAL NOTES



STANDARD  
T-2

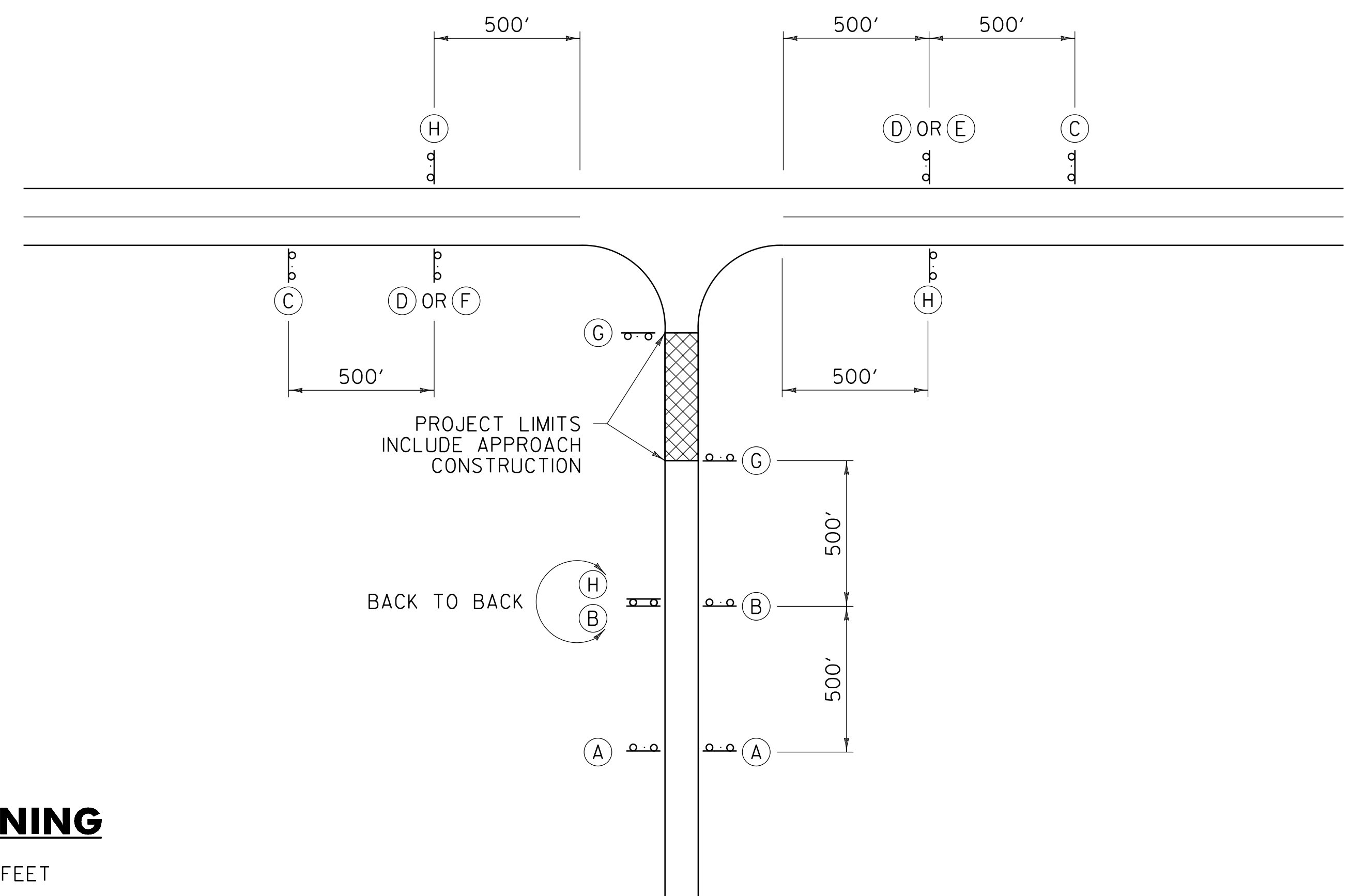
**LEGEND**

- (A)  ROAD WORK AHEAD  
W20-1
- (B)  ROAD WORK 500 FT  
W20-1
- (C)  SIDE ROAD WORK AHEAD  
VC-869
- (D)  SIDE ROAD WORK 500 FT  
VC-869
- (E)  SIDE ROAD WORK LEFT  
VC-869
- (F)  SIDE ROAD WORK RIGHT  
VC-869
- (G)  ROAD WORK NEXT XX MILES  
G20-1
- (H)  END ROAD WORK  
G20-2



**TYPICAL APPROACH SIGNING**

FIELD CONDITIONS MAY DICTATE THE ACTUAL PLACEMENT.



**SIDE ROAD APPROACH SIGNING**

TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION. FIELD CONDITIONS MAY DICTATE THE ACTUAL PLACEMENT.

**GENERAL NOTES:**

1. SIGNS SHOWN ON THIS SHEET ARE INTENDED FOR USE IN PROVIDING ADVANCE WARNING AND INFORMATION ON CONSTRUCTION PROJECTS OVER WHICH TRAFFIC WILL BE MAINTAINED. WHEN ADDITIONAL APPROACH SIGNS OR OTHER TYPES OF ADVANCE SIGNING OR CONTROL ARE NECESSARY, THE PLANS AND/OR THE SPECIFICATIONS FOR THAT PROJECT WILL GIVE THE DETAILS OF THE SIGNS AND DEVICES REQUIRED. FOR ON-PROJECT CONSTRUCTION SIGNS, REFER TO APPROPRIATE STANDARD SHEETS.
2. THE "ROAD WORK NEXT XX MILES" SIGN (G20-1) SHALL BE INSTALLED IN ADVANCE OF TEMPORARY TRAFFIC CONTROL ZONES THAT ARE MORE THAN TWO MILES IN LENGTH OR AS DIRECTED BY THE ENGINEER. DISTANCES SHALL BE STATED TO THE NEAREST WHOLE MILE.
3. SIGNS SHALL BE LOCATED AS DETAILED ON THIS SHEET OR AS OTHERWISE SHOWN ON THE PLANS. THEY SHALL APPEAR AT EACH END OF THE HIGHWAY UNDER CONSTRUCTION AND ON ALL INTERSECTING PUBLIC HIGHWAYS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS.

**OTHER STDS. REQUIRED: T-1, T-28**

REVISIONS AND CORRECTIONS  
AUG. 6, 2012 - ORIGINAL APPROVAL DATE

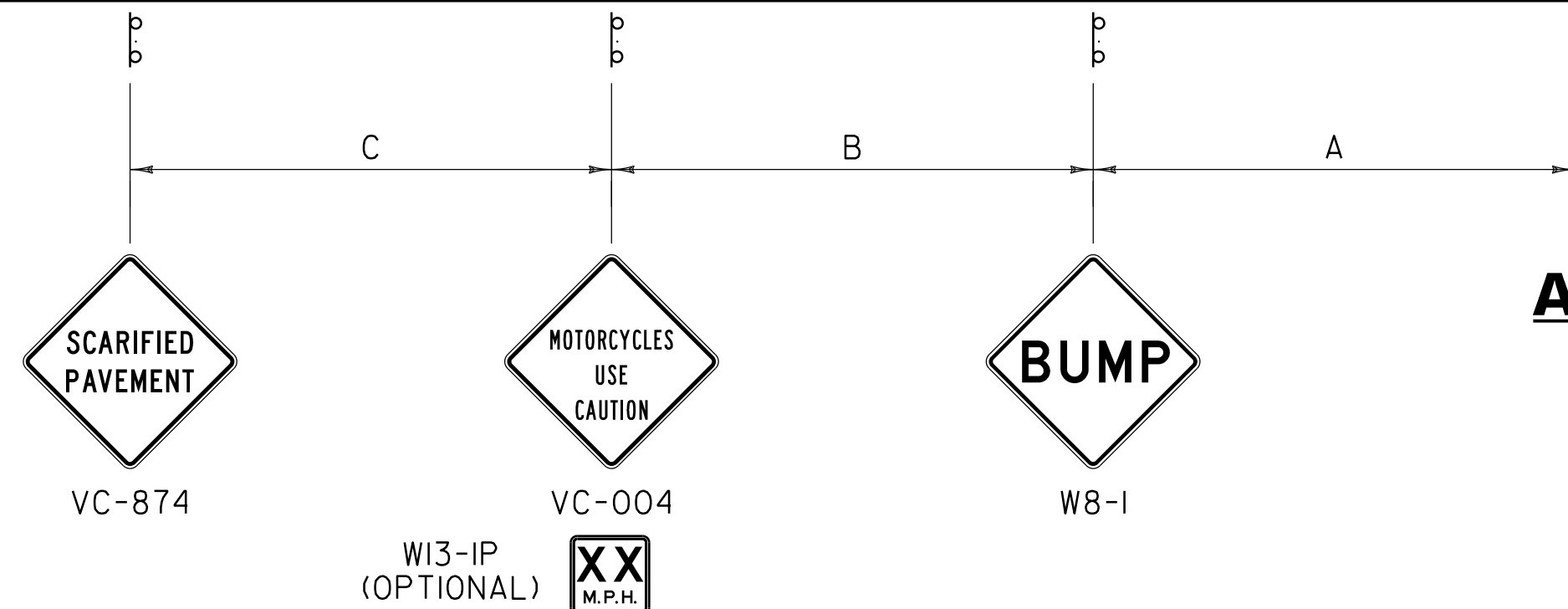
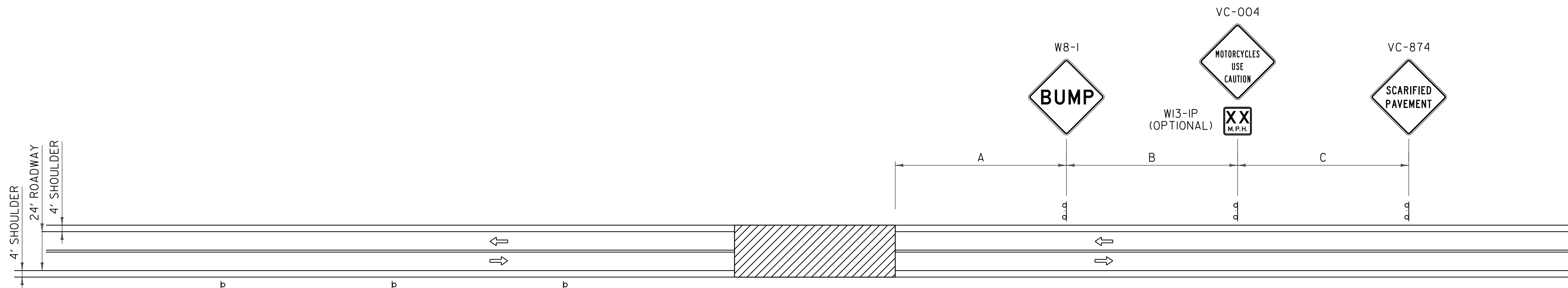
APPROVED  
*[Signature]*  
HIGHWAY SAFETY & DESIGN ENGINEER  
*[Signature]*  
DIRECTOR OF PROGRAM DEVELOPMENT  
*[Signature]*  
MARK D. RICHTER  
FEDERAL HIGHWAY ADMINISTRATION

**CONVENTIONAL ROADS  
CONSTRUCTION APPROACH  
SIGNING**

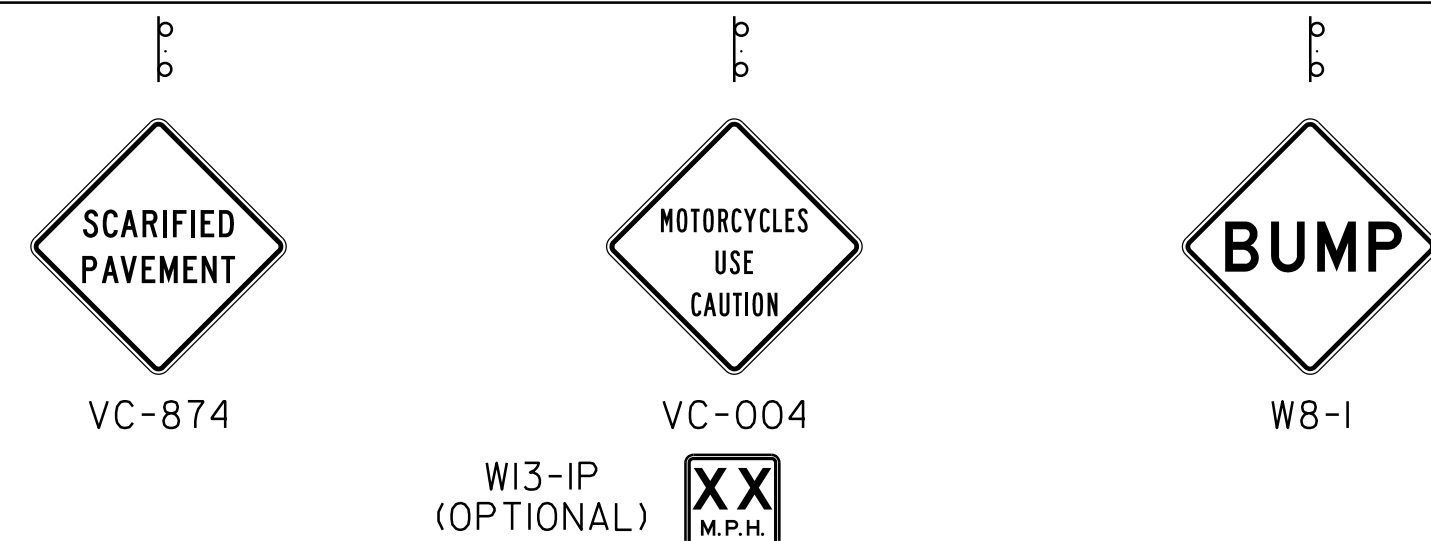
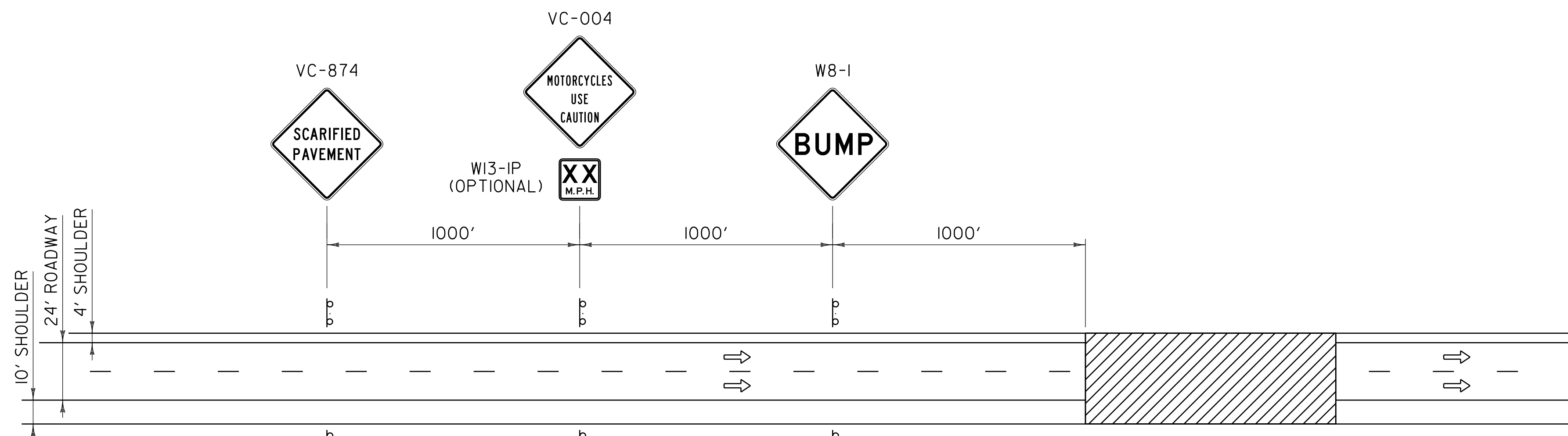


STANDARD  
T-10





**ADVANCE WARNING SIGN PACKAGE FOR  
COLD PLANED (SCARIFIED) SURFACES  
TWO LANE ROADWAY**



**ADVANCE WARNING SIGN PACKAGE FOR  
COLD PLANED (SCARIFIED) SURFACES  
DIVIDED HIGHWAY**

**LEGEND**

- FLOW OF TRAFFIC
- ▨ WORK AREA

**GENERAL NOTES:**

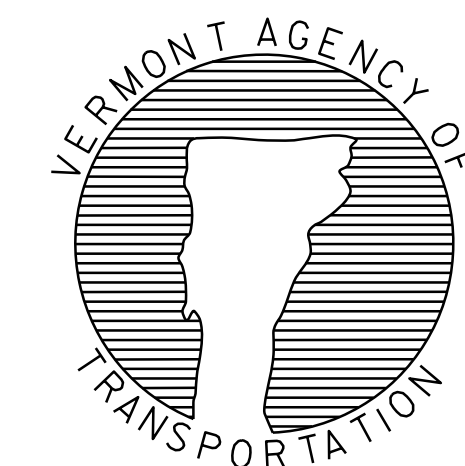
1. THE BUMP SIGN MAY BE ELIMINATED WHEN THERE IS NO BUMP. WHEN THE CONTRACTOR IS WORKING IN THE CONSTRUCTION AREA, THE APPROPRIATE ADVANCED WARNING SIGN PACKAGE SHALL BE USED. SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) FOR ADDITIONAL INFORMATION.
2. GATE POSTING OF SIGNS IS AN OPTION AS DETERMINED BY THE ENGINEER FOR TWO LANE ROADWAY WHEN PASSING, TURNING OR CLIMBING LANES LIMIT VISIBILITY.
3. FOR DIMENSIONS A, B AND C, REFER TO THE MUTCD, USE TABLE 6C-1 (RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING), FOR SIGN SPACING.

**OTHER STDS. REQUIRED: T-1, T-28**

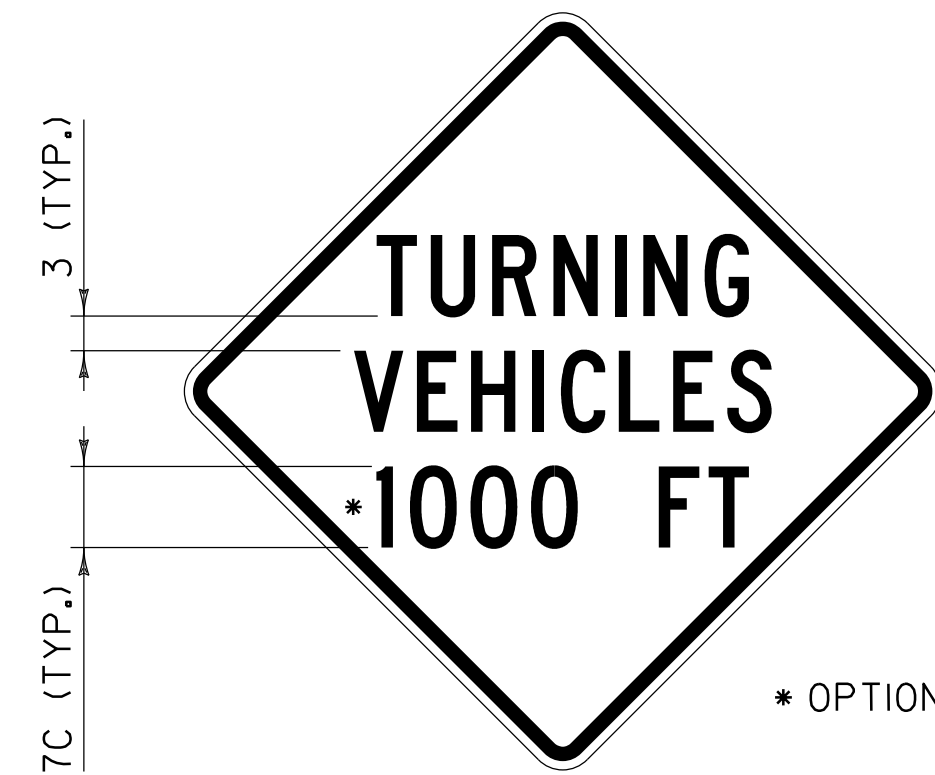
REVISIONS AND CORRECTIONS  
AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED  
*[Signature]*  
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TRAFFIC CONTROL  
MISCELLANEOUS DETAILS

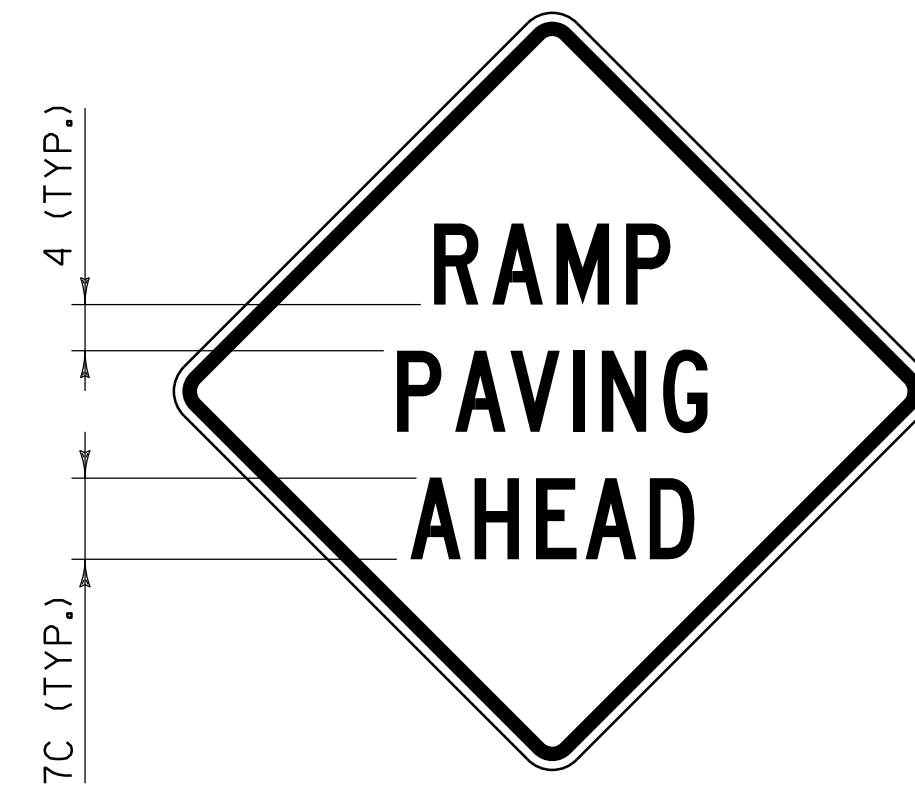


STANDARD  
T-17

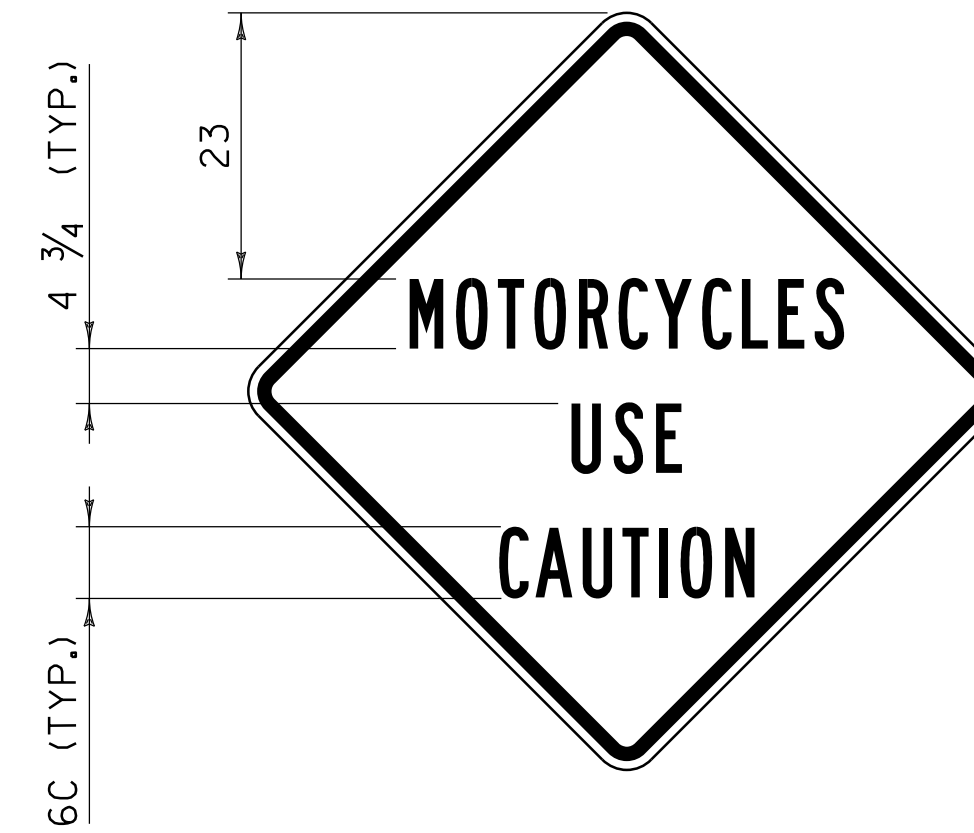


**VC-001**

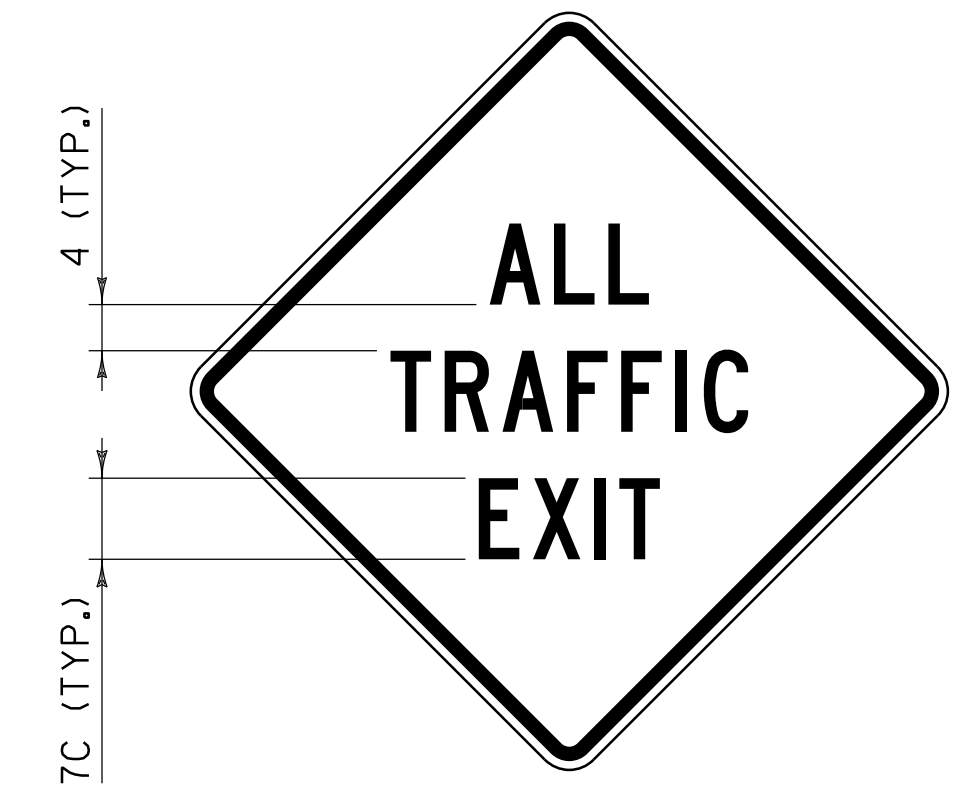
* OPTIONS { 500  
1500



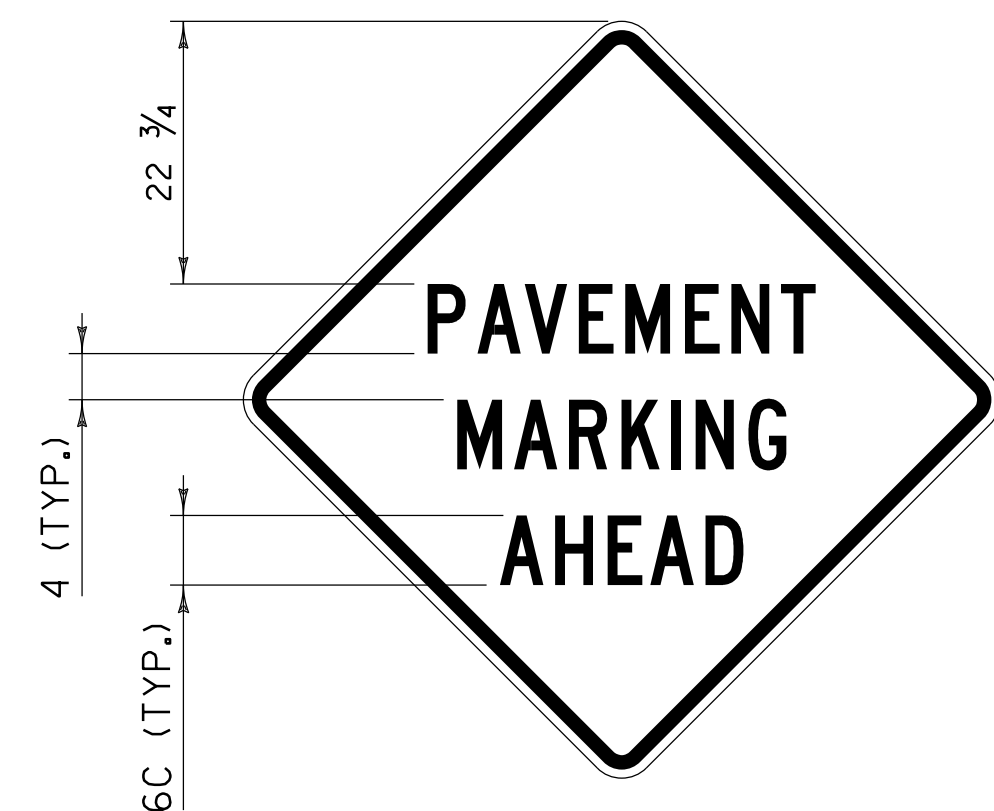
**VC-003**



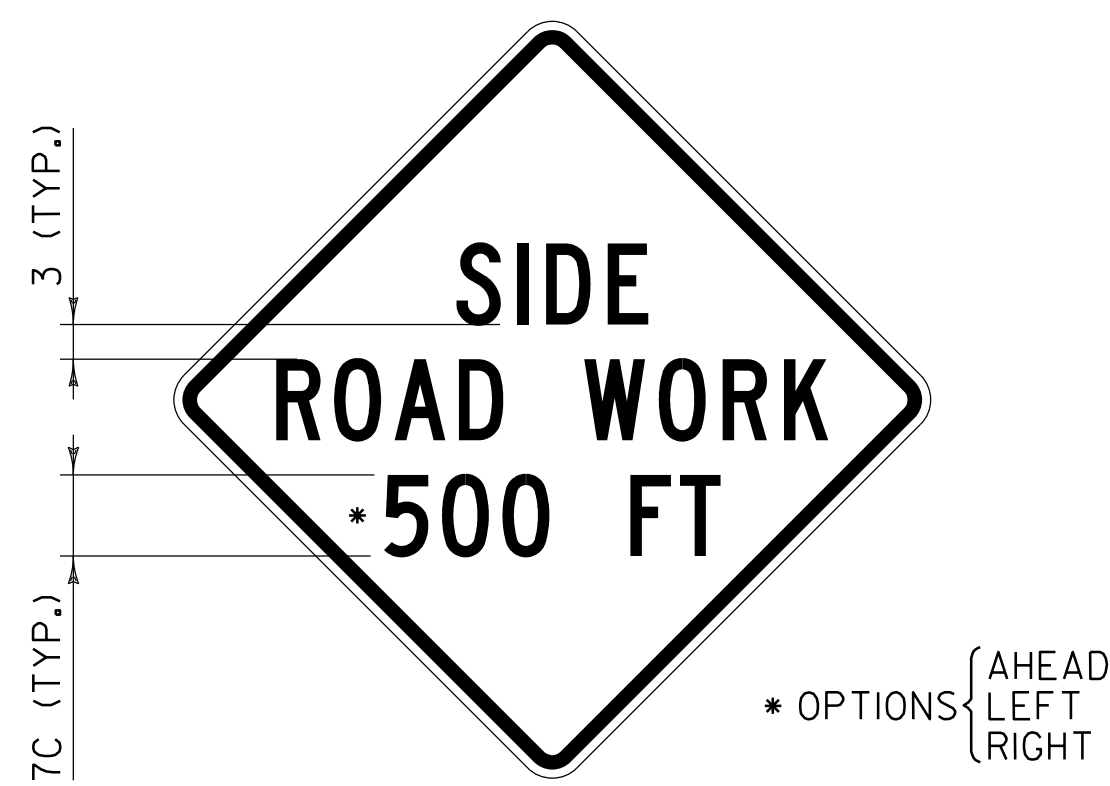
**VC-004**



**VC-008**



**VC-813**



**VC-869**



**VC-874**

**GENERAL NOTES:**

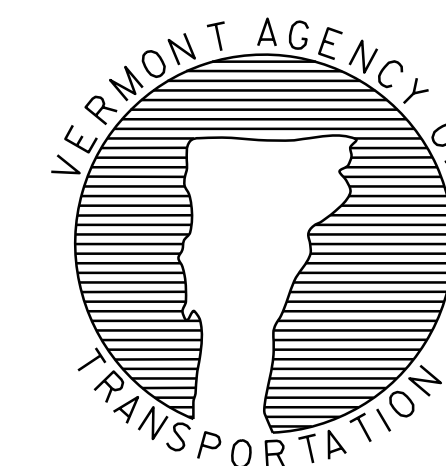
1. COLORS FOR SIGNS SHALL BE BLACK LEGEND AND BORDER ON FLUORESCENT ORANGE BACKGROUND.
2. CONSTRUCTION SIGNS SHALL BE 48 INCH BY 48 INCH. IF SOLID SUBSTRATE SIGNS ARE USED, SIGNS SHALL HAVE CORNERS ROUNDED TO A THREE INCH RADIUS.
3. SIGNS SHALL HAVE 1 1/4 INCH WIDE BORDERS THAT ARE INDENTED 3/4 INCH FROM THE EDGE OF THE SIGN.
4. SIGNS SHALL HAVE THE LEGEND CENTERED HORIZONTALLY AND VERTICALLY ON THE SIGN UNLESS OTHERWISE INDICATED.
5. ALL DIMENSIONS SHOWN IN INCHES.

**OTHER STDS. REQUIRED: T-1**

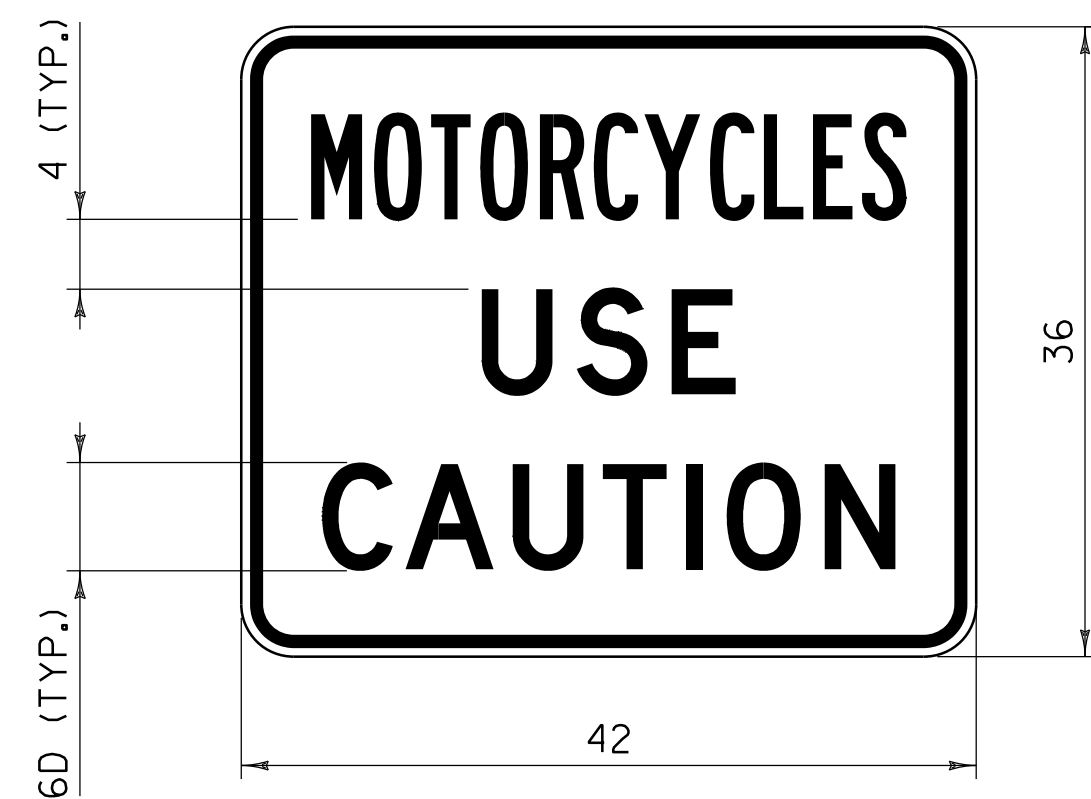
REVISIONS AND CORRECTIONS  
AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED  
*W. A. P.*  
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CONSTRUCTION SIGN  
DETAILS



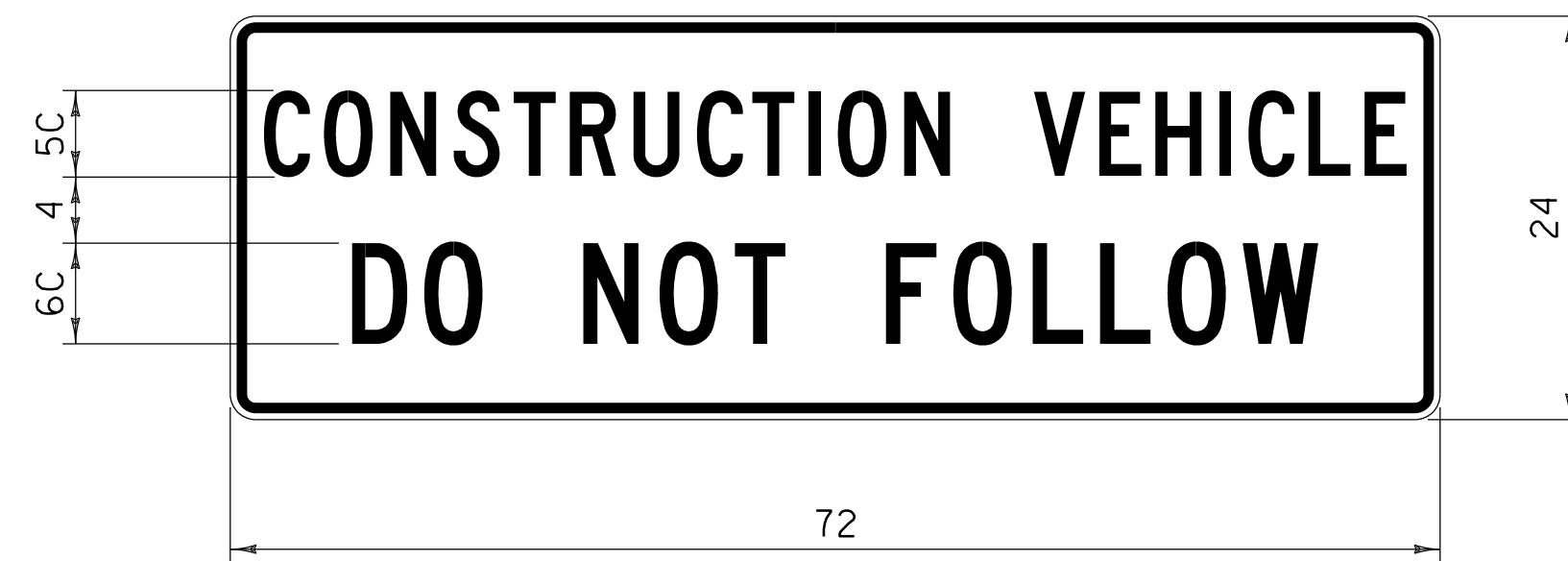
STANDARD  
T-28



**VC-004P**

**NOTES:**

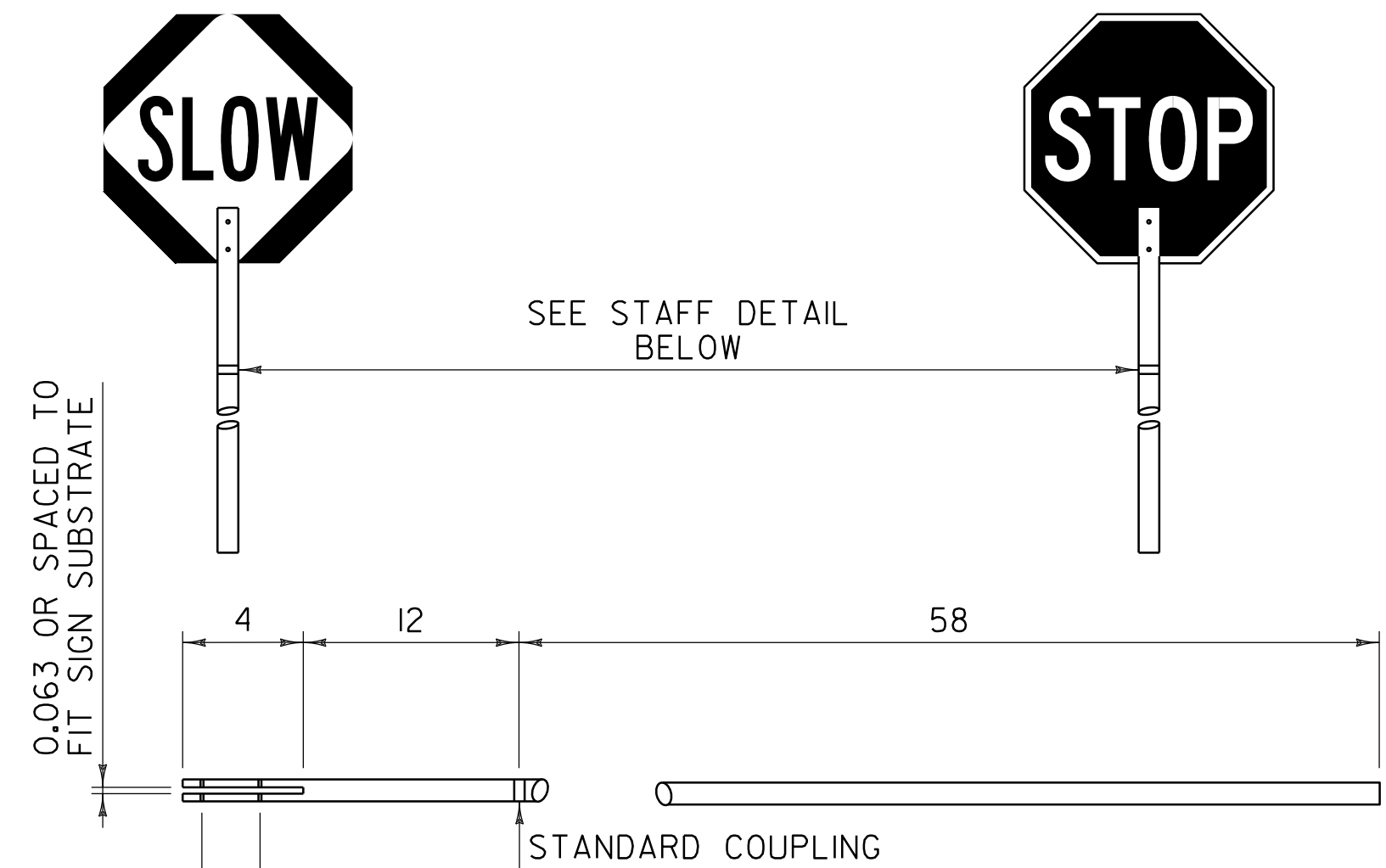
1. CORNERS SHALL BE ROUNDED TO A THREE INCH RADIUS.
2. THE BORDER SHALL BE 3/4 INCH WIDE WITH A 1/2 INCH INDENT FROM THE EDGE OF THE SIGN.
3. "MOTORCYCLES" SHALL HAVE A SPECIFIED WIDTH OF 34 INCHES.
4. "USE" SHALL HAVE A SPECIFIED WIDTH OF 14 1/2 INCHES.
5. "CAUTION" SHALL HAVE A SPECIFIED WIDTH OF 32 3/4 INCHES.
6. SIGN SHALL ONLY BE INSTALLED AS A SUPPLEMENTAL TO A PARENT WARNING SIGN AND SHALL NOT BE INSTALLED BY ITSELF.



**VC-007**

**NOTES:**

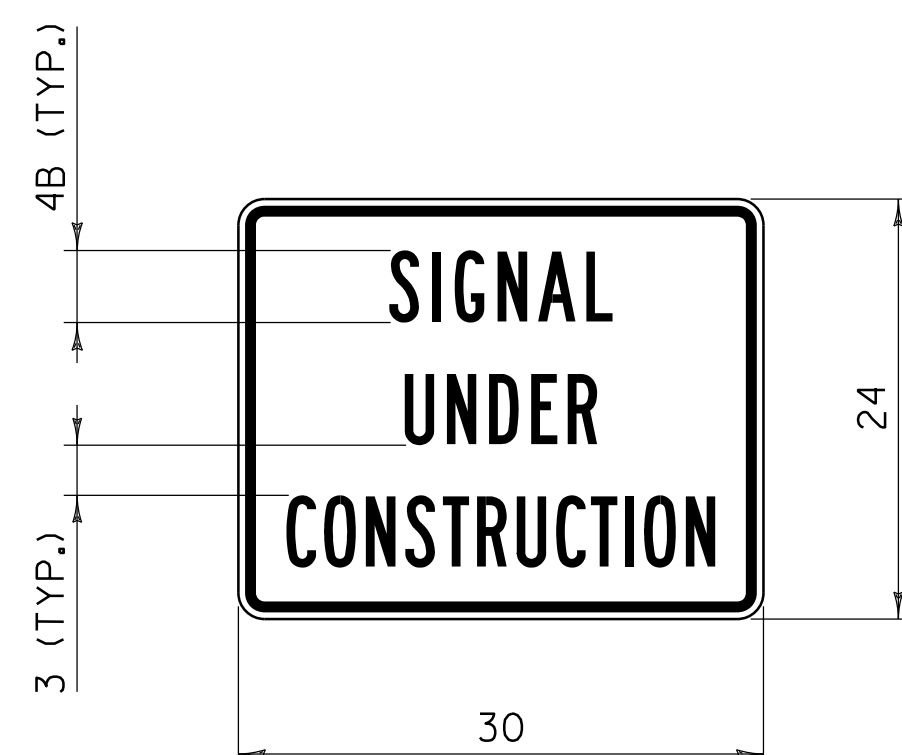
1. CORNERS SHALL BE ROUNDED TO A 1 1/2 INCH RADIUS.
2. THE BORDER SHALL BE 5/8 INCH WIDE WITH A 3/8 INCH INDENT FROM THE EDGE OF THE SIGN.
3. "CONSTRUCTION VEHICLE" SHALL HAVE A SPECIFIED WIDTH OF 68 INCHES.
4. "DO NOT FOLLOW" SHALL HAVE A SPECIFIED WIDTH OF 57 1/2 INCHES.
5. SIGN SHALL BE MOUNTED IN A CONSPICUOUS LOCATION ON THE REAR OF THE CONSTRUCTION VEHICLE.
6. THE SIGN SHALL BE MOUNTED AS NOT TO INTERFERE WITH THE VISIBILITY OF DIRECTIONAL SIGNALS OR TAIL LIGHTS AS REQUIRED BY LAW.
7. SIGN SHALL BE COVERED OR REMOVED WHEN NOT IN USE.



**STOP-SLOW PADDLE & STAFF DETAIL**

**NOTES:**

1. REFER TO THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK (SHSM) "TEMPORARY TRAFFIC CONTROL - WARNING SIGNS" FOR THE STOP-SLOW PADDLE DESIGN.
2. COLORS FOR THE SLOW SIDE OF THE PADDLE SHALL BE BLACK LEGEND AND BORDER ON A FLUORESCENT ORANGE DIAMOND WITH RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING AASHTO M 268 [ASTM D 4956] TYPE VII, VIII OR IX REQUIREMENTS.
3. COLORS FOR THE STOP SIDE OF THE PADDLE SHALL BE WHITE RETROREFLECTIVE LEGEND AND BORDER ON A RED RETROREFLECTIVE OCTAGON. BOTH COLORS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING AASHTO M 268 [ASTM D 4956] TYPE III.
4. SIGN SUBSTRATE MATERIALS SHALL BE ALUMINUM, ACRYLONITRILE BUTADIENE STYRENE (ABS) PLASTIC OR EQUIVALENT.
5. THE STAFF MAY BE RIGID ABS PLASTIC OR WOOD WITH A ONE TO 1 1/2 INCH DIAMETER.
6. SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. THEY SHALL BE COMPLETELY VISIBLE TO APPROACHING TRAFFIC AT ALL TIMES. THEY SHALL BE KEPT PLUMB AND LEVEL, AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFACTED OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER.



**VC-820**

**NOTES:**

1. CORNERS SHALL BE ROUNDED TO A 1 1/2 INCH RADIUS.
2. THE BORDER SHALL BE 5/8 INCH WIDE WITH A 3/8 INCH INDENT FROM THE EDGE OF THE SIGN.
3. "SIGNAL" SHALL HAVE A SPECIFIED WIDTH OF 12 3/4 INCHES.
4. "UNDER" SHALL HAVE A SPECIFIED WIDTH OF 11 INCHES.
5. "CONSTRUCTION" SHALL HAVE A SPECIFIED WIDTH OF 24 1/2 INCHES.
6. SIGN SHALL ONLY BE INSTALLED AS A SUPPLEMENTAL TO A PARENT WARNING SIGN AND SHALL NOT BE INSTALLED BY ITSELF.

**GENERAL NOTES:**

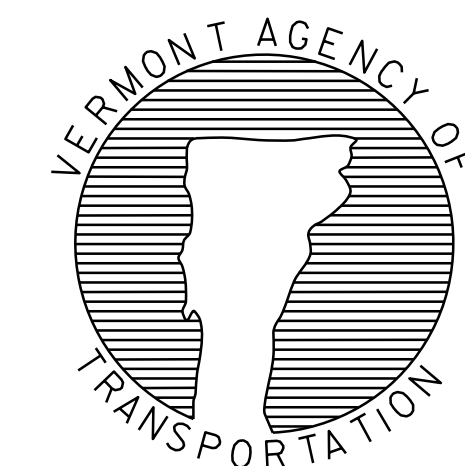
1. ALL LEGEND SHALL BE CENTERED VERTICALLY AND HORIZONTALLY UNLESS OTHERWISE NOTED.
2. COLORS FOR SIGNS SHALL BE BLACK LEGEND AND BORDER ON FLUORESCENT ORANGE BACKGROUND UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS IN INCHES.

**OTHER STDS. REQUIRED: T-1**

REVISIONS AND CORRECTIONS  
AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED  
*[Signature]*  
HIGHWAY SAFETY & DESIGN ENGINEER  
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DIRECTOR OF PROGRAM DEVELOPMENT  
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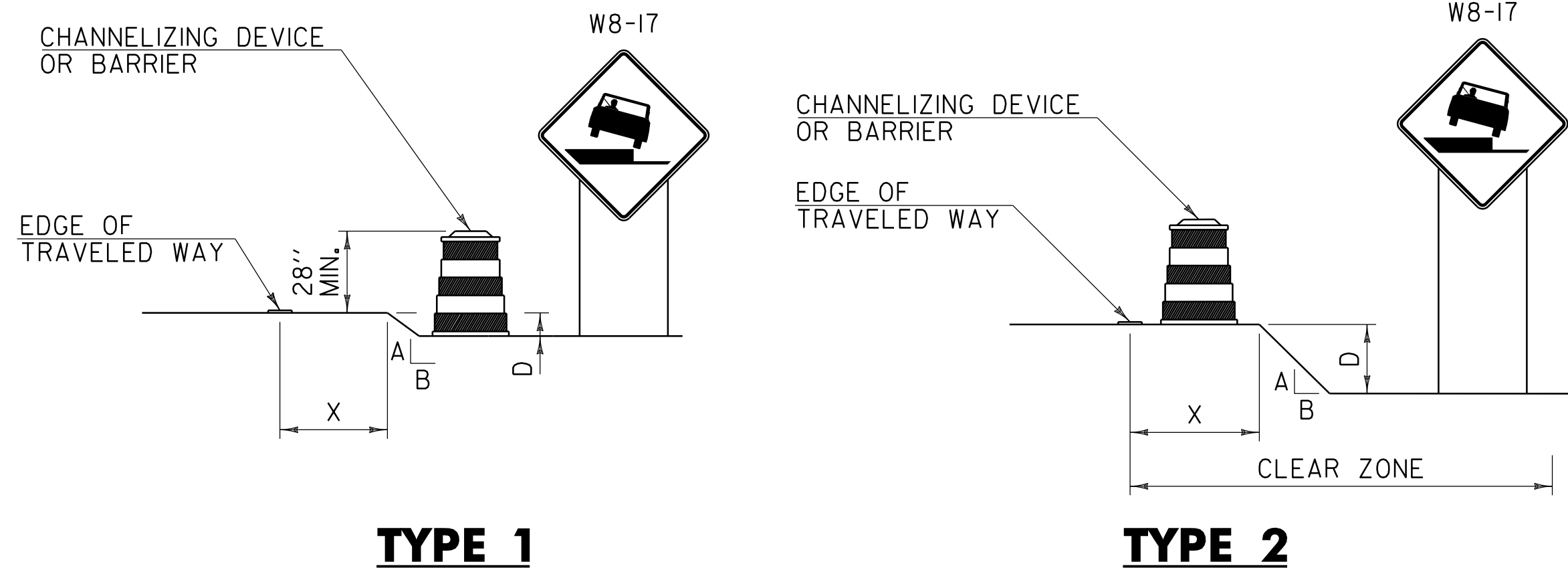
CONSTRUCTION SIGN  
DETAILS



STANDARD  
T-30



**DROP-OFF ADJACENT TO TRAVELED WAY**



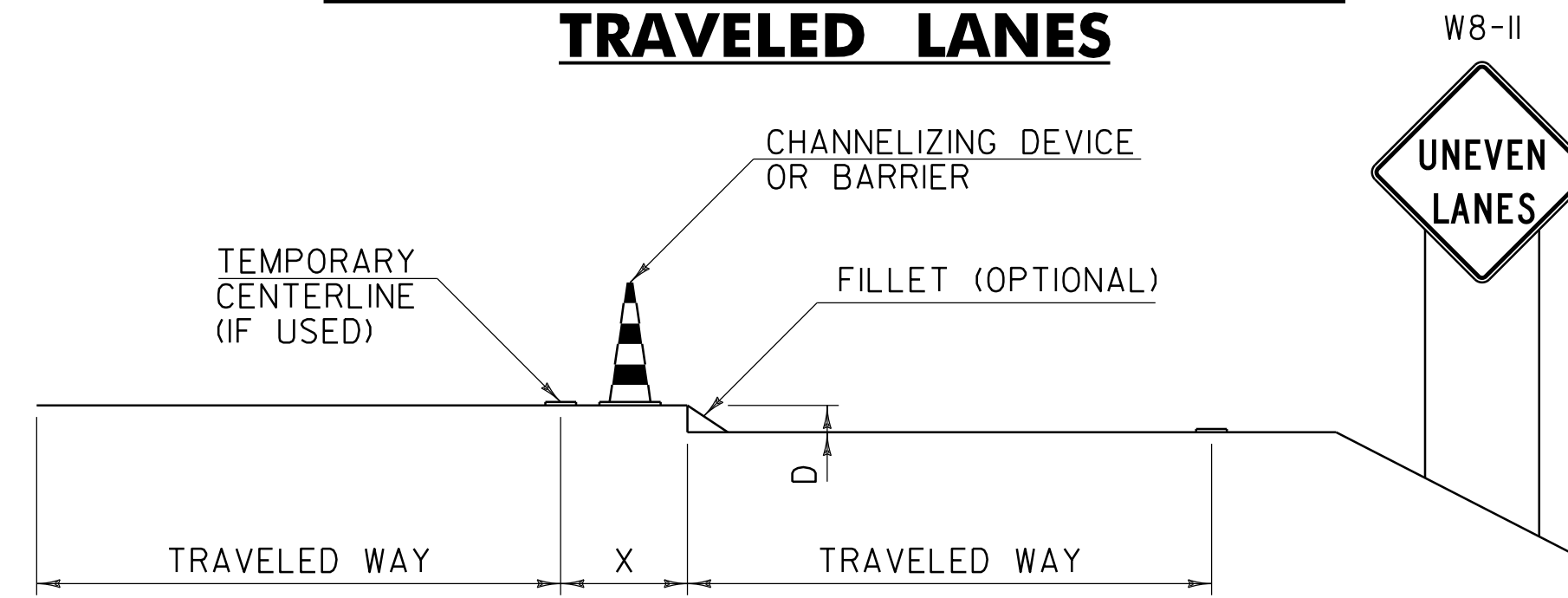
**TYPE 1**

**TYPE 2**

**NOTES:**

1. CHANNELIZING DEVICES OR BARRIER SHOULD BE PLACED TO MAXIMIZE THE WIDTH OF THE TRAVELED WAY.
2. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.
3. IF THE DROP-OFF REQUIRES CHANNELIZING DEVICES TO REMAIN IN PLACE OVERNIGHT, THEN "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS SHOULD BE INSTALLED.

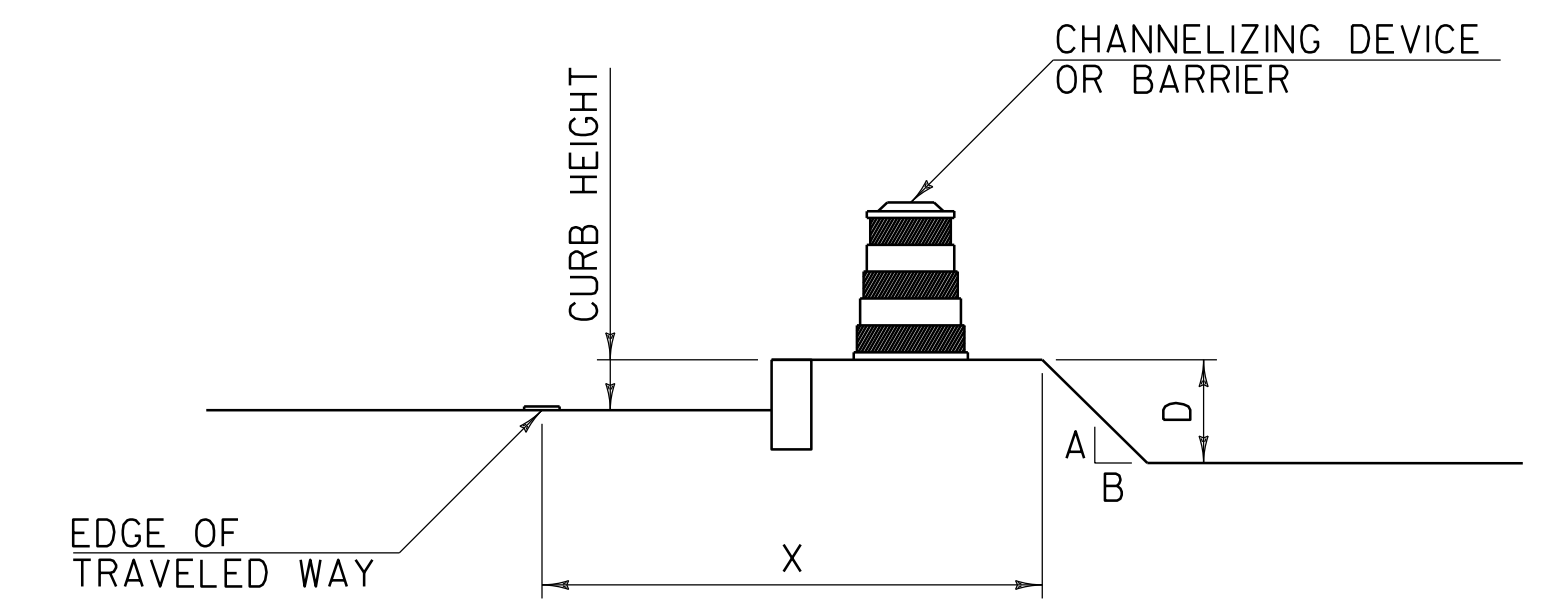
**DROP-OFF BETWEEN ADJACENT TRAVELED LANES**



**NOTES:**

1. WHENEVER A LONGITUDINAL DROP-OFF BETWEEN ADJACENT TRAVELED LANES IS TO BE LEFT OVERNIGHT, THEN "UNEVEN LANES" (W8-11) SIGNS AND CHANNELIZING DEVICES SHOULD BE INSTALLED.
2. IF REQUIRED, THE CHANNELIZING DEVICES USED SHOULD BE THOSE WHICH MAXIMIZE THE WIDTH OF THE TRAVELED LANE (I.E. CONES, VERTICAL PANELS OR TUBULAR MARKERS).
3. A BITUMINOUS CONCRETE FILLET WITH A 1.5:1 SLOPE MAY BE USED IN PLACE OF CHANNELIZING DEVICES, HOWEVER THE "UNEVEN LANES" (W8-11) SIGNS SHOULD STILL BE INSTALLED.
4. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.

**DROP-OFF BEYOND SHOULDER OR CURB**



**NOTES:**

1. USE CHART "A" FOR VERTICAL CURBS UNDER SIX INCHES, MOUNTABLE CURBS OR ROADWAYS WITH A POSTED SPEED ABOVE 40 MPH.
2. USE CHART "B" FOR VERTICAL CURBS SIX INCHES OR GREATER.

**CHART "A"  
ALL SPEEDS WITH NO CURB  
OR MOUNTABLE CURB**

X (FEET)	DROP (D) (INCHES)	A:B SLOPE	RECOMMENDED DEVICE
0 TO 4'	LESS THAN 2"	ANY	NONE
	2" TO 6"	1:1.5 OR FLATTER	NONE
		STEEPER THAN 1:1.5	CHANNELIZING DEVICE
4' TO 10'	GREATER THAN 6"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
	LESS THAN 6"	ANY	NONE
4' TO 10'	6" TO 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
	GREATER THAN 12"	1:3 OR FLATTER	NONE
	STEEPER THAN 1:3	BARRIER	
10' TO CZ	LESS THAN OR EQUAL TO 12"	ANY	NONE
	GREATER THAN 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER

**NOTES:**

1. THE MINIMUM CLEAR ZONE FOR FREEWAYS IS TO BE DETERMINED PER THE CURRENT AASHTO ROADSIDE DESIGN GUIDE. ALL OTHER HIGHWAYS WILL BE DETERMINED PER THE CURRENT "VERMONT STATE STANDARDS" BOOK.
2. CHANNELIZING DEVICES MAY BE USED INSTEAD OF BARRIER FOR SHORT TERM OPERATIONS.
3. ON BORDERLINE CONDITIONS, THE ENGINEER SHOULD DETERMINE WHICH TREATMENT IS ADEQUATE FOR THE EXISTING CONDITIONS.

**CHART "B"  
40 MPH OR LESS WITH VERTICAL CURB**

X (FEET)	DROP (D) (INCHES)	DEVICE REQUIRED
0-10'	LESS THAN OR EQUAL TO 12"	NONE
0-10'	GREATER THAN 12"	CHANNELIZING DEVICE
GREATER THAN 10'	ANY	NONE

**GENERAL NOTES:**

1. THESE CONDITIONS AND TREATMENTS ARE ONLY PART OF THE TRAFFIC CONTROL SYSTEM AND SHOULD BE USED IN ADDITION TO THE PROPER WORK ZONE SIGNING.
2. THE FOLLOWING ARE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) COMPLIANT CHANNELIZING DEVICES:
  - A. VERTICAL PANEL
  - B. TYPE I OR TYPE II BARRICADE
  - C. PLASTIC DRUM
  - D. CONE - WHERE APPLICABLE
  - E. TUBULAR MARKERS

IF CHANNELIZING DEVICES ARE REQUIRED TO STAY IN PLACE DURING NIGHTTIME HOURS, THEY SHALL BE STABILIZED WHILE UNATTENDED IN ACCORDANCE WITH THE MUTCD.
3. WHERE BARRIER IS NECESSARY, THE BARRIER SHALL BE TAPERED BEYOND THE CLEAR ZONE. WHEN THE BARRIER CANNOT BE TAPERED BEYOND THE CLEAR ZONE, A MUTCD COMPLIANT END TREATMENT SHALL BE USED. BARRIER AND END TREATMENT SHALL MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION.
4. CHANNELIZING DEVICE SPACING ALONG A LONGITUDINAL DROP-OFF (TANGENT) SHALL BE AS FOLLOWS:
  - TANGENT - CHANNELIZING DEVICES SHALL BE SPACED "2S" ("S" IS EQUAL TO THE POSTED SPEED LIMIT IN FEET) APART.
5. "LOW SHOULDER" (W8-9) AND "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS, WHEN USED, SHOULD BEGIN PRIOR TO THE DROP-OFF CONDITION AND SHOULD BE REPEATED EVERY 1500 FEET.

**OTHER STDS. REQUIRED: T-1**

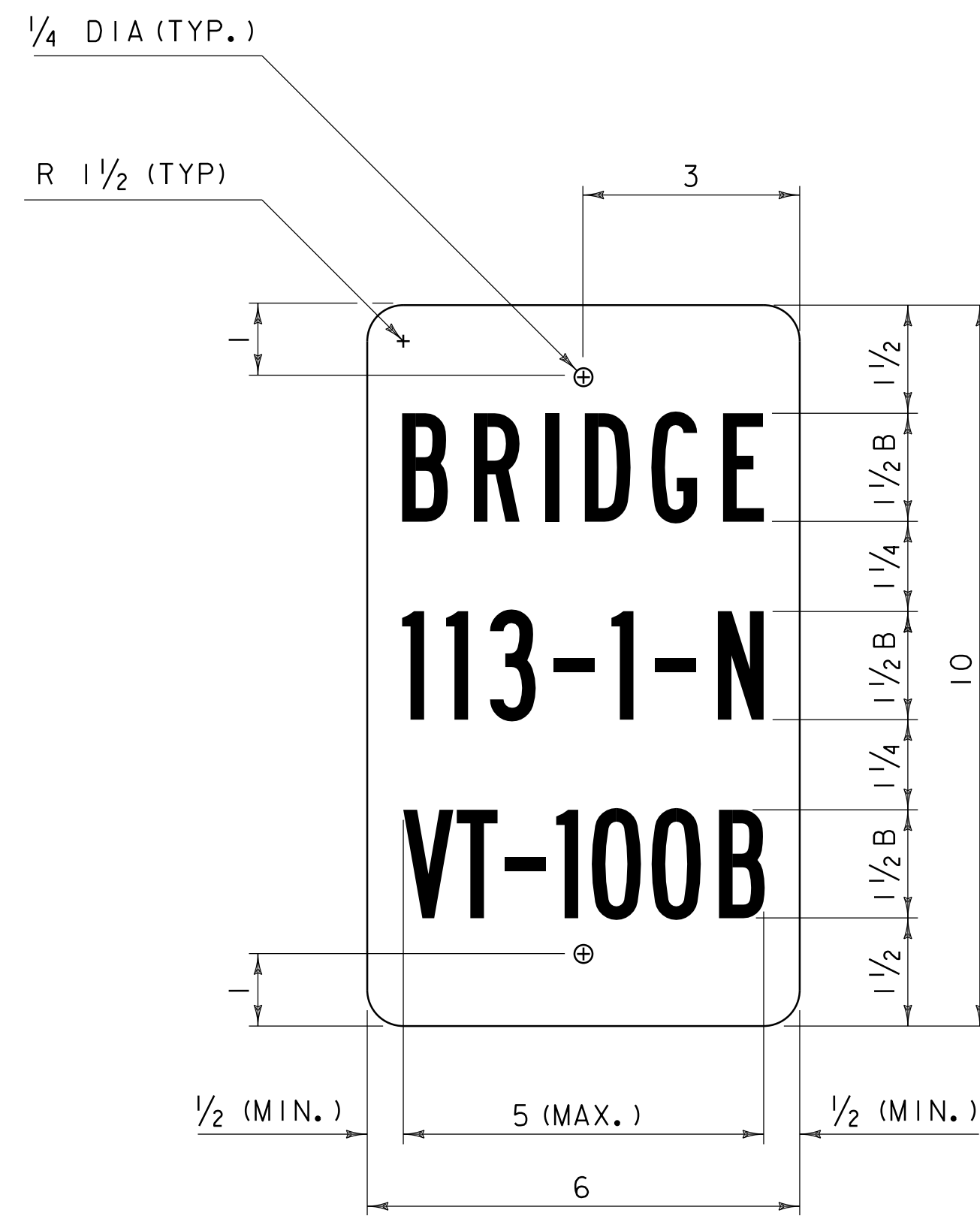
REVISIONS AND CORRECTIONS  
AUG. 6, 2012 - ORIGINAL APPROVAL DATE

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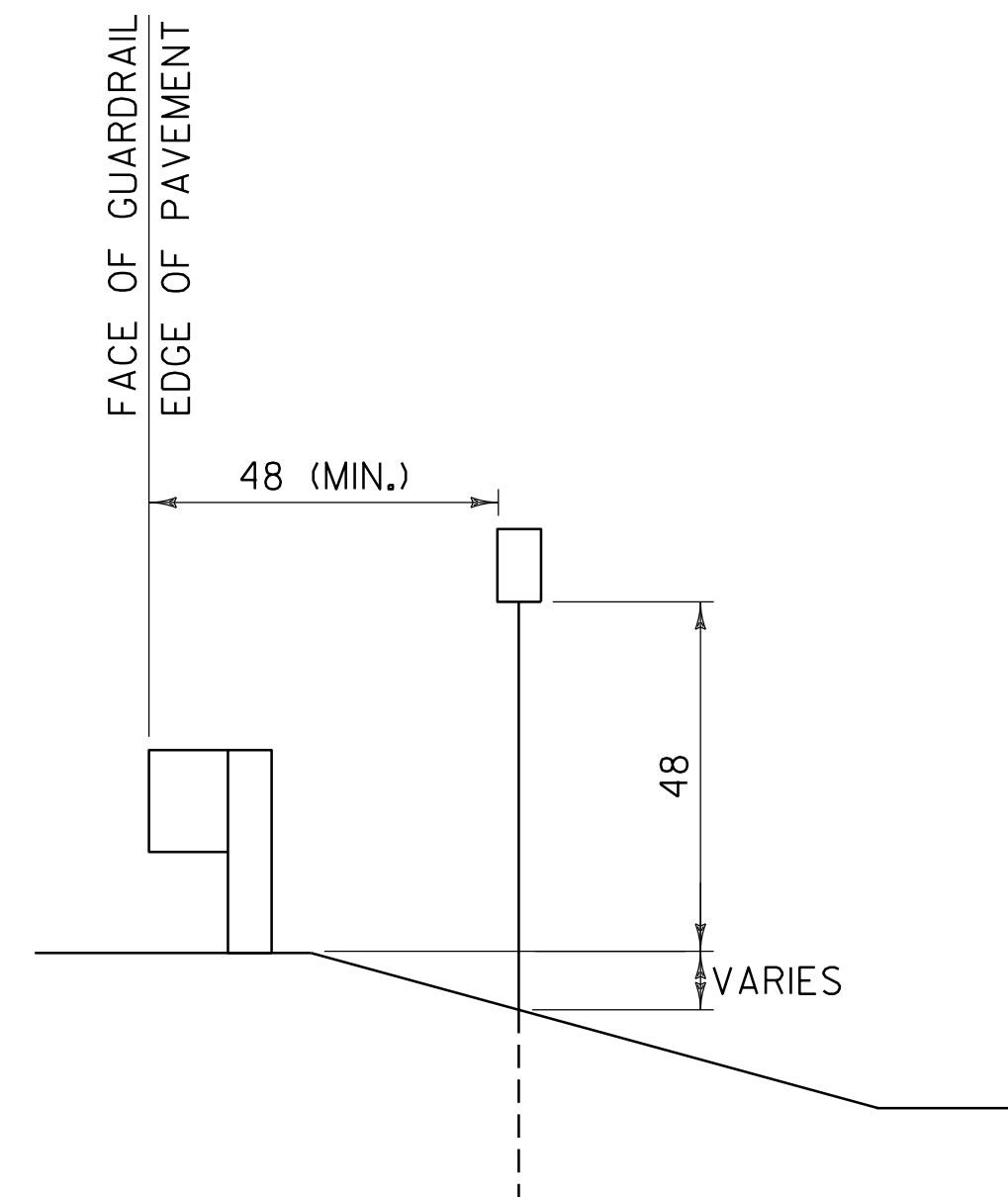
**CONSTRUCTION ZONE  
LONGITUDINAL DROP-OFFS**



**STANDARD  
T-35**



**VD-701**



**VD-701 INSTALLATION DETAIL**

**GENERAL NOTES:**

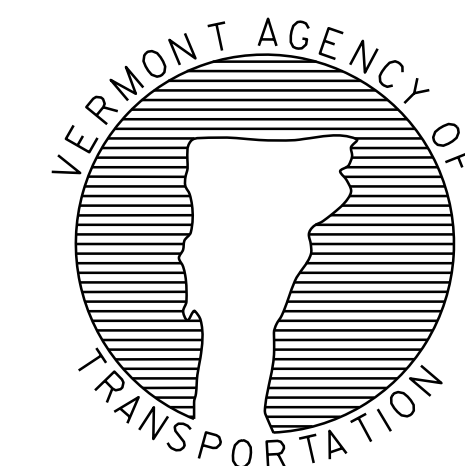
1. BRIDGE NUMBER PLAQUES ARE TO BE INSTALLED ALONG THE FEDERAL AID HIGHWAY SYSTEM INCLUDING ALL STATE HIGHWAYS AND TOWN HIGHWAYS ON THE FEDERAL AID HIGHWAY SYSTEM.
2. BRIDGE NUMBER PLAQUES SHALL BE LOCATED ON BOTH BRIDGE APPROACHES AT THE NEAREST VISIBLE LOCATION.
3. THE SIGN BASE MATERIAL SHALL BE 0.063 INCH FLAT SHEET ALUMINUM.
4. THE SIGN SHALL BE WHITE RETROREFLECTIVE LEGEND ON A GREEN RETROREFLECTIVE BACKGROUND, BOTH SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE III.
5. THE SECOND LINE OF TEXT INDICATES THE BRIDGE NUMBER. THE BRIDGE NUMBER CAN BE OBTAINED USING THE VERMONT AGENCY OF TRANSPORTATION (VAOT) ROUTE LOGS OR BY CONSULTING WITH THE VAOT STRUCTURES SECTION.
6. THE THIRD LINE OF TEXT INDICATES THE STATE ROUTE NUMBER. IN ALL CASES THIS WILL BE DEPICTED USING THE LETTER ABBREVIATION, FOLLOWED BY A HYPHEN, FOLLOWED BY THE ROUTE NUMBER. FOR EXAMPLE US ROUTE 2 WOULD BE IDENTIFIED USING US-2.
7. THE SECOND AND THIRD LINES OF TEXT SHALL BE CENTERED HORIZONTALLY AND SHALL BE AS DEFINED IN THE PLANS.
8. A SINGLE 14 GAGE, 1.75 INCH SQUARE STEEL POST AND 12 GAGE, TWO INCH SQUARE ANCHOR SHALL BE USED FOR INSTALLATION. THE ANCHOR SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
9. ALL DIMENSIONS SHOWN IN INCHES.

**OTHER STDS. REQUIRED: T-45**

REVISIONS AND CORRECTIONS  
APRIL 9, 2014 - ORIGINAL APPROVAL DATE

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**BRIDGE NUMBER PLAQUE**



**STANDARD  
T-42**

1 - ADDISON	2 - BENNINGTON	3 - CALEDONIA	4 - CHITTENDEN	5 - ESSEX	6 - FRANKLIN	7 - GRAND ISLE	8 - LAMOILLE
0101 ADDISON 0102 BRIDPORT 0103 BRISTOL 0104 CORNWALL 0105 FERRISBURGH 0106 GOSHEN 0107 GRANVILLE 0108 HANCOCK 0109 LEICESTER 0110 LINCOLN 0111 MIDDLEBURY 0112 MONKTON 0113 NEW HAVEN 0114 ORWELL 0115 PANTON 0116 RIPTON 0117 SALISBURY 0118 SHOREHAM 0119 STARKSBORO 0120 VERGENNES 0121 WALTHAM 0122 WEYBRIDGE 0123 WHITING	0201 ARLINGTON 0202 BENNINGTON 0203 DORSET 0204 GLASTENBURY 0205 LANDGROVE 0206 MANCHESTER 0207 PERU 0208 POWNAL 0209 READSBORO 0210 RUPERT 0211 SANDGATE 0212 SEARSBURG 0213 SHAFTSBURY 0214 STAMFORD 0215 SUNDERLAND 0216 WINHALL 0217 WOODFORD	0301 BARNET 0302 BURKE 0303 DANVILLE 0304 GROTON 0305 HARDWICK 0306 KIRBY 0307 LYNDON 0308 NEWARK 0309 PEACHAM 0310 RYEGATE 0311 ST JOHNSBURY 0312 SHEFFIELD 0313 STANNARD 0314 SUTTON 0315 WALDEN 0316 WATERFORD 0317 WHEELLOCK	0401 BOLTON 0402 BUELS GORE 0403 BURLINGTON 0404 CHARLOTTE 0405 COLCHESTER 0406 ESSEX 0407 HINESBURG 0408 HUNTINGTON 0409 JERICHO 0410 MILTON 0411 RICHMOND 0412 ST GEORGE 0413 SHELburne 0414 SO BURLINGTON 0415 UNDERHILL 0416 WESTFORD 0417 WILLISTON 0418 WINOOSKI	0501 AVERILL 0502 AVERYS GORE 0503 BLOOMFIELD 0504 BRIGHTON 0505 BRUNSWICK 0506 CANAAN 0507 CONCORD 0508 EAST HAVEN 0509 FERDINAND 0510 GRANBY 0511 GUILDHALL 0512 LEMINGTON 0513 LEWIS 0514 LUNENBURG 0515 MAIDSTONE 0516 NORTON 0517 VICTORY 0518 WARNERS GRANT 0519 WARREN GORE	0601 BAKERSFIELD 0602 BERKSHIRE 0603 ENOSBURG 0604 FAIRFAX 0605 FAIRFIELD 0606 FLETCHER 0607 FRANKLIN 0608 GEORGIA 0609 HIGHGATE 0610 MONTGOMERY 0611 RICHFORD 0612 ST ALBANS CITY 0613 ST ALBANS TOWN 0614 SHELDON 0615 SWANTON	0701 ALBURGH 0702 GRAND ISLE 0703 ISLE LA MOTTE 0704 NORTH HERO 0705 SOUTH HERO	0801 BELVIDERE 0802 CAMBRIDGE 0803 EDEN 0804 ELMORE 0805 HYDE PARK 0806 JOHNSON 0807 MORRISTOWN 0808 STOWE 0809 WATERVILLE 0810 WOLCOTT

9 - ORANGE	10 - ORLEANS	11 - RUTLAND	12 - WASHINGTON	13 - WINDHAM	14 - WINDSOR
0901 BRADFORD 0902 BRAINTREE 0903 BROOKFIELD 0904 CHELSEA 0905 CORINTH 0906 FAIRLEE 0907 NEWBURY 0908 ORANGE 0909 RANDOLPH 0910 STRAFFORD 0911 THETFORD 0912 TOPSHAM 0913 TUNBRIDGE 0914 VERSHIRE 0915 WASHINGTON 0916 WEST FAIRLEE 0917 WILLIAMSTOWN	1001 ALBANY 1002 BARTON 1003 BROWNINGTON 1004 CHARLESTON 1005 COVENTRY 1006 CRAFTSBURY 1007 DERBY 1008 GLOVER 1009 GREENSBORO 1010 HOLLAND 1011 IRASBURG 1012 JAY 1013 LOWELL 1014 MORGAN 1015 NEWPORT CITY 1016 NEWPORT TOWN 1017 TROY 1018 WESTFIELD 1019 WESTMORE	1101 BENSON 1102 BRANDON 1103 CASTLETON 1104 CHITTENDEN 1105 CLARENDON 1106 DANBY 1107 FAIR HAVEN 1108 HUBBARDTOWN 1109 IRA 1110 MENDON 1111 MIDDLETOWN SPRINGS 1112 MT HOLLY 1113 MT TABOR 1114 PAWLET 1115 PITTSFIELD 1116 PITTSFORD 1117 POULTNEY 1118 PROCTOR 1119 RUTLAND CITY 1120 RUTLAND TOWN 1121 KILLINGTON 1122 SHREWSBURY 1123 SUDBURY 1124 TINMOUTH 1125 WALLINGFORD 1126 WELLS 1127 WEST HAVEN 1128 WEST RUTLAND	1201 BARRE CITY 1202 BARRE TOWN 1203 BERLIN 1204 CABOT 1205 CALAIS 1206 DUXBURY 1207 E MONTPELIER 1208 FAYSTON 1209 MARSHFIELD 1210 MIDDLESEX 1211 MONTPELIER 1212 MORETOWN 1213 NORTHFIELD 1214 PLAINFIELD 1215 ROXBURY 1216 WAITSFIELD 1217 WARREN 1218 WATERBURY 1219 WOODBURY 1220 WORCESTER	1301 ATHENS 1302 BRATTLEBORO 1303 BROOKLINE 1304 DOVER 1305 DUMMERSTON 1306 GRAFTON 1307 GUILFORD 1308 HALIFAX 1309 JAMAICA 1310 LONDONDERRY 1311 MARLBORO 1312 NEWFANE 1313 PUTNEY 1314 ROCKINGHAM 1315 SOMERSET 1316 STRATTON 1317 TOWNSEND 1318 VERNON 1319 WARDSBORO 1320 WESTMINSTER 1321 WHITINGHAM 1322 WILMINGTON 1323 WINDHAM	1401 ANDOVER 1402 BALTIMORE 1403 BARNARD 1404 BETHEL 1405 BRIDGEWATER 1406 CAVENDISH 1407 CHESTER 1408 HARTFORD 1409 HARTLAND 1410 LUDLOW 1411 NORWICH 1412 PLYMOUTH 1413 POMFRET 1414 READING 1415 ROCHESTER 1416 ROYALTON 1417 SHARON 1418 SPRINGFIELD 1419 STOCKBRIDGE 1420 WEATHERSFIELD 1421 WESTON 1422 WEST WINDSOR 1423 WINDSOR 1424 WOODSTOCK

**COUNTY AND TOWN DESIGNATIONS**

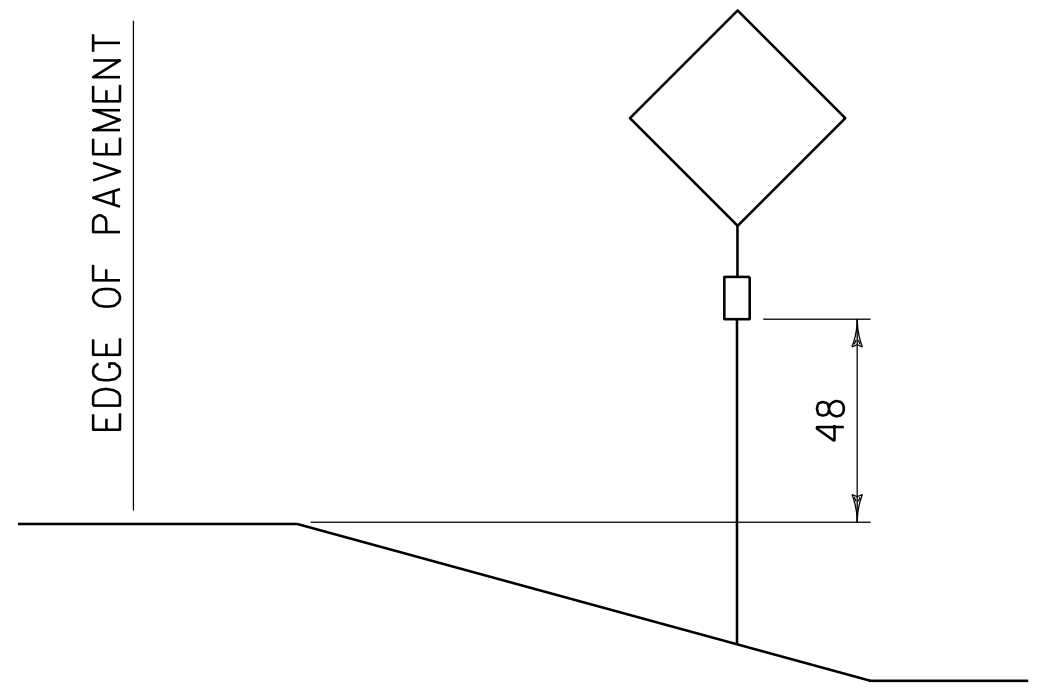
- 9020 BARNET STATE HIGHWAY  
9025 BENNINGTON NORTH STATE HIGHWAY  
9030 BERLIN STATE HIGHWAY  
9090 BRATTLEBORO STATE HIGHWAY  
9150 CASTLETON STATE HIGHWAY  
9180 COVENTRY STATE HIGHWAY  
9210 FAIR HAVEN STATE HIGHWAY  
9240 FAIRLEE STATE HIGHWAY  
9270 FERRISBURGH STATE HIGHWAY  
9330 MAIDSTONE STATE HIGHWAY  
9360 MIDDLESEX STATE HIGHWAY  
9390 MONTPELIER STATE HIGHWAY  
9420 MONTPELIER JUNCTION STATE HIGHWAY  
9430 NEWBURY STATE HIGHWAY  
9480 NORTON STATE HIGHWAY  
9540 NORWICH STATE HIGHWAY  
9600 PUTNEY STATE HIGHWAY  
9630 QUECHEE STATE HIGHWAY  
9720 ST ALBANS STATE HIGHWAY SOUTH  
9730 ST JOHNSBURY STATE HIGHWAY  
9750 SOUTH ALBURGH STATE HIGHWAY  
9840 WESTMINSTER STATE HIGHWAY  
9870 WILDER STATE HIGHWAY  
9900 WINHALL STATE HIGHWAY  
9990 WEST RUTLAND - RUTLAND (BUSINESS US-4)  
9991 BELLOWS FALLS S0117 (ROCK - WEST ST)  
9992 BELLOWS FALLS S0117 (BRIDGE ST)  
9993 BURLINGTON (ALTERNATE US-7)  
9994 DERBY (ALTERNATE US-5)  
9995 MONTPELIER (BUSINESS US-2)  
9996 NEWPORT (ALTERNATE US-5)  
9997 ST JOHNSBURY (ALTERNATE US-5)  
9998 SO BURLINGTON - KENNEDY DRIVE

**NAMED STATE AND TOWN HIGHWAYS ROUTE NUMBERS**

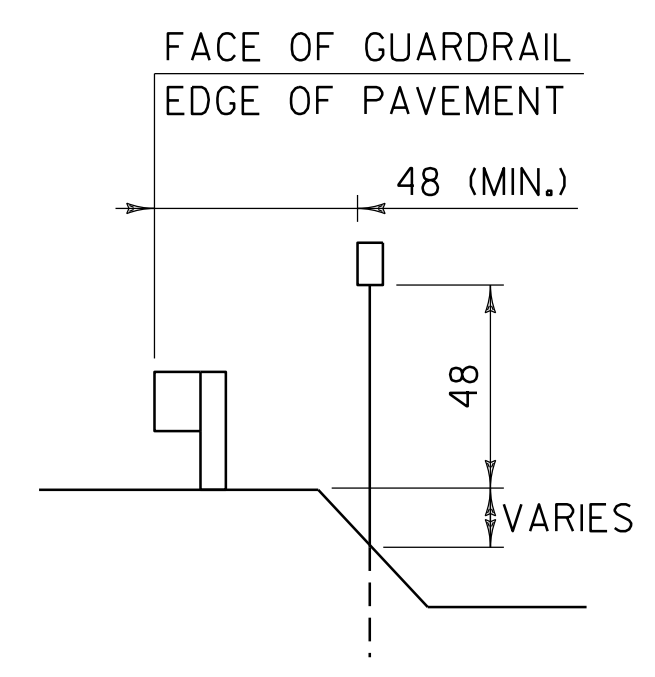
**GENERAL NOTES:**

- MILEMARKERS ARE TO BE INSTALLED ALONG THE FEDERAL AID HIGHWAY SYSTEM INCLUDING ALL STATE HIGHWAYS AND TOWN HIGHWAYS ON THE FEDERAL AID HIGHWAY SYSTEM.
- MILEMARKERS WILL NORMALLY BE INSTALLED AT EACH 0.20 MILE INTERVAL, ALTERNATING SIDES OF THE ROAD, RESULTING IN A SIGN FACING TRAFFIC EACH 0.40 MILES. A MILEMARKER WILL ALSO BE INSTALLED AT EACH INTERSECTION, ON THE SAME POST AS THE STOP SIGN (MILEMARKER TO BE PLACED PARALLEL TO MAINLINE TRAVELED WAY, VISIBLE TO TRAFFIC). ANY MILEMARKER LOCATION FALLING WITHIN 0.05 MILE OF AN INTERSECTION WILL BE OMITTED. WHEN THE NORMAL LOCATION OF A MILEMARKER IS UNDESIRABLE, SUCH AS ON A LAWN, DRIVEWAY, OR LEDGE, AN ATTEMPT WILL BE MADE TO LOCATE IT ON THE OPPOSITE SIDE OF THE ROAD. IF NO SUITABLE LOCATION CAN BE FOUND WITHIN 20 FEET OF THE NORMAL LOCATION, IT MAY BE OMITTED.
- ON CLASS I TOWN HIGHWAYS OR OTHER CONGESTED LOCATIONS MILEMARKERS WILL ONLY BE INSTALLED ON EXISTING SIGN POSTS AND WILL CARRY THE ACTUAL MILEAGE TO THAT LOCATION. A MILEMARKER LOCATED EVERY 0.10 MILES IS DESIRABLE THROUGH THESE LOCATIONS.
- THE FIRST LINE OF TEXT ON MILEMARKERS INDICATE THE STATE ROUTE NUMBER. THE FOURTH NUMERAL BEING THE CORRESPONDING ROUTE NUMBER LETTER DESIGNATION. FOR EXAMPLE US-2 (WHICH HAS NO LETTER DESIGNATION) WOULD BE IDENTIFIED USING 0020 AND VT-100B WOULD BE IDENTIFIED USING 1002. FOR ANY NAMED FEDERAL AID HIGHWAY SYSTEM HIGHWAYS, THE FOUR DIGIT ROUTE NUMBER (9000 SERIES) LISTED UNDER "NAMED STATE AND TOWN HIGHWAYS ROUTE NUMBERS" SHALL BE UTILIZED.
- THE SECOND LINE OF TEXT ON MILEMARKERS INDICATE THE COUNTY AND TOWN. THE COUNTY IS INDICATED IN THE FIRST AND SECOND NUMERALS AND THE TOWN IN THE THIRD AND FOURTH NUMERALS. THE APPROPRIATE FOUR DIGIT DESIGNATIONS ARE LISTED PER TOWN, UNDER "COUNTY AND TOWN DESIGNATIONS."
- THE THIRD LINE OF TEXT ON MILEMARKERS INDICATE THE MILEAGE, IN HUNDREDTHS, FROM THE TOWN LINE OR BEGINNING OF A ROUTE. MILEAGE IS ALWAYS MEASURED TRAVELING FROM THE SOUTH TO NORTH OR FROM THE WEST TO EAST. THE ROUTE DIRECTION IS ESTABLISHED USING THE VERMONT AGENCY OF TRANSPORTATION (VAOT) ROUTE LOGS.
- THE SIGN BASE MATERIAL SHALL BE 0.063 INCH FLAT SHEET ALUMINUM.
- THE SIGN SHALL BE WHITE RETROREFLECTIVE LEGEND ON A GREEN RETROREFLECTIVE BACKGROUND, BOTH SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE III.
- CORNERS SHALL BE ROUNDED TO A 1/2 INCH RADIUS.
- ALL LINES OF TEXT SHALL BE CENTERED HORIZONTALLY AND SHALL BE AS IDENTIFIED IN THE PLANS. THE THREE LINES OF TEXT WILL EACH CONTAIN FOUR NUMERALS.
- WHEN INSTALLED ON ITS OWN POST, A SINGLE 14 GAGE, 1.75 INCH SQUARE STEEL POST AND 12 GAGE, 2 INCH SQUARE ANCHOR SHALL BE USED FOR INSTALLATION. THE ANCHOR SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
- ALL DIMENSIONS SHOWN IN INCHES.

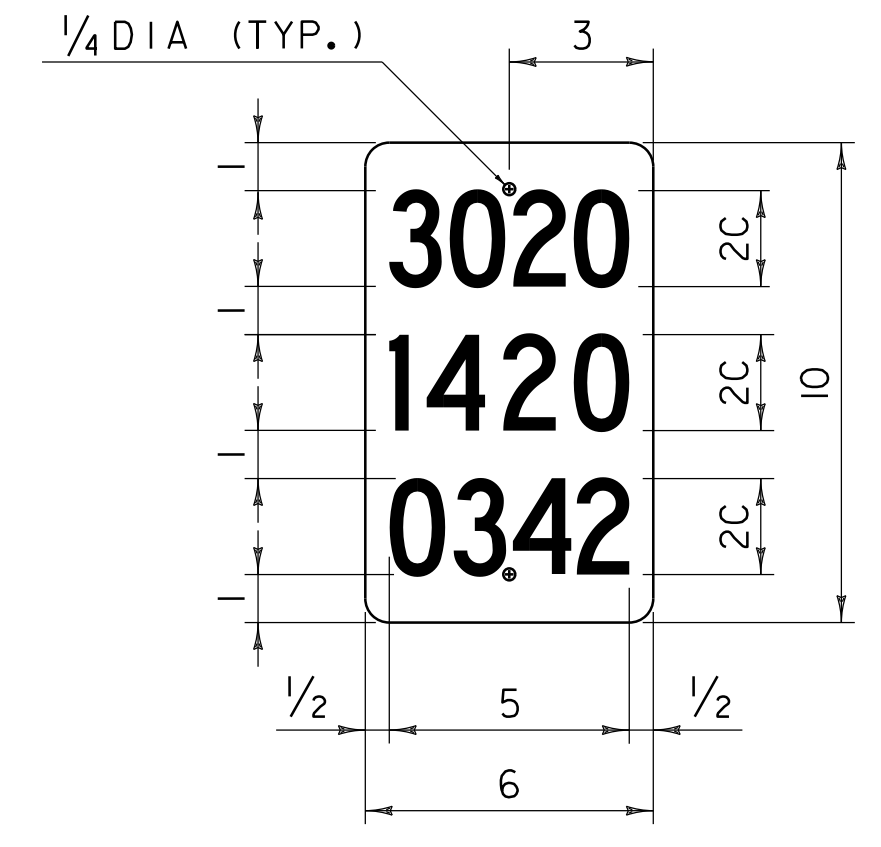
OTHER STDS. REQUIRED: **T-45**



**VD-700 INSTALLATION DETAIL SUPPLEMENTARY SIGN**



**VD-700 INSTALLATION DETAIL**



**VD-700**

REVISIONS AND CORRECTIONS  
APRIL 9, 2014 - ORIGINAL APPROVAL DATE

APPROVED  
*[Signature]*  
HIGHWAY SAFETY & DESIGN ENGINEER  
*[Signature]*  
DIRECTOR OF PROGRAM DEVELOPMENT  
*[Signature]*  
MARK D. RICHTER  
FEDERAL HIGHWAY ADMINISTRATION

**MILEMARKER DETAILS  
STATE AND TOWN  
HIGHWAYS**



**STANDARD  
T-44**



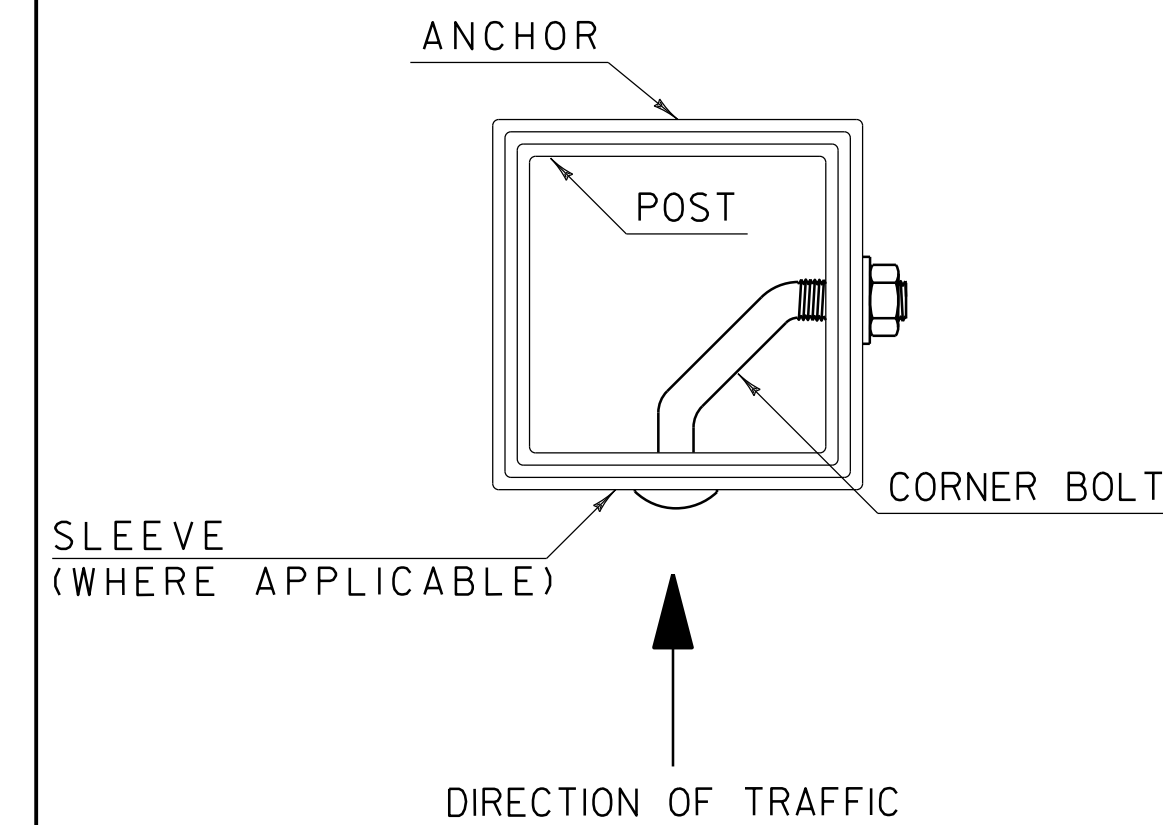
## POST AND ANCHOR SELECTION CHART

POST SIZE (IN.)	POST THICKNESS (IN.)	POST WEIGHT (LBS./FT.)	POST GAGE	SECTION MODULUS (IN. ³ )	ONE POST SV	TWO POST SV	THREE POST SV	POSTS PERMITTED IN 8' PATH	ANCHOR SIZE (IN.)	ANCHOR GAGE	MINIMUM ANCHOR LENGTH
1.75	.083	1.88	14	0.222	45	90	135	TWO	2.00	12	30
2.00	.109	2.42	12	0.393	80	160	240	TWO	2.25	12	48
2.50	.109	3.35	12	0.673	137	274	411	ONE	3.00	7	48

### NOTES:

- ALL SIGN POSTS SHALL HAVE  $\frac{7}{16}$  INCH HOLES EVERY ONE INCH ON CENTER (ALL FOUR SIDES).
- THE NUMBER OF SIGN POSTS PERMITTED WITHIN AN EIGHT FOOT PATH ASSUMES THAT THE SIGN ASSEMBLY IS NOT PROTECTED BY GUARDRAIL OR IS LOCATED WITHIN A GUARDRAIL'S DEFLECTION DISTANCE DETERMINED PER THE CURRENT "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) ROADSIDE DESIGN GUIDE. ADDITIONAL POSTS MAY BE INSTALLED USING SLIP BASES THAT MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE AASHTO "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION.
- TO USE THE SELECTION VALUE (SV) COLUMNS IN THE TABLE ABOVE, MULTIPLY A SIGN'S SURFACE AREA IN SQUARE FEET ( $H \times L$ ) BY THE SIGN'S HEIGHT IN FEET MEASURED FROM THE GROUND TO THE CENTROID OF THE SIGN ASSEMBLY ( $h$ ). THIS RESULT MUST BE LESS THAN OR EQUAL TO THE CORRESPONDING SELECTION VALUE. NOTE THAT FOR SIGNS WITH MULTIPLE POSTS, THE LARGEST HEIGHT DIMENSION SHALL BE USED TO CALCULATE THE POST SELECTION VALUE.
- THE DESIGN CRITERIA UTILIZED IN SIGN POST AND ANCHOR SELECTION IS AS FOLLOWS: WIND SPEED OF 70 MPH (10 YEAR MEAN RECURRENCE INTERVAL), WIND PRESSURE OF 19 PSF, STEEL MINIMUM YIELD OF 55,000 PSI, AND AN ALLOWABLE STRESS OF 1.4 (0.60 F_y).

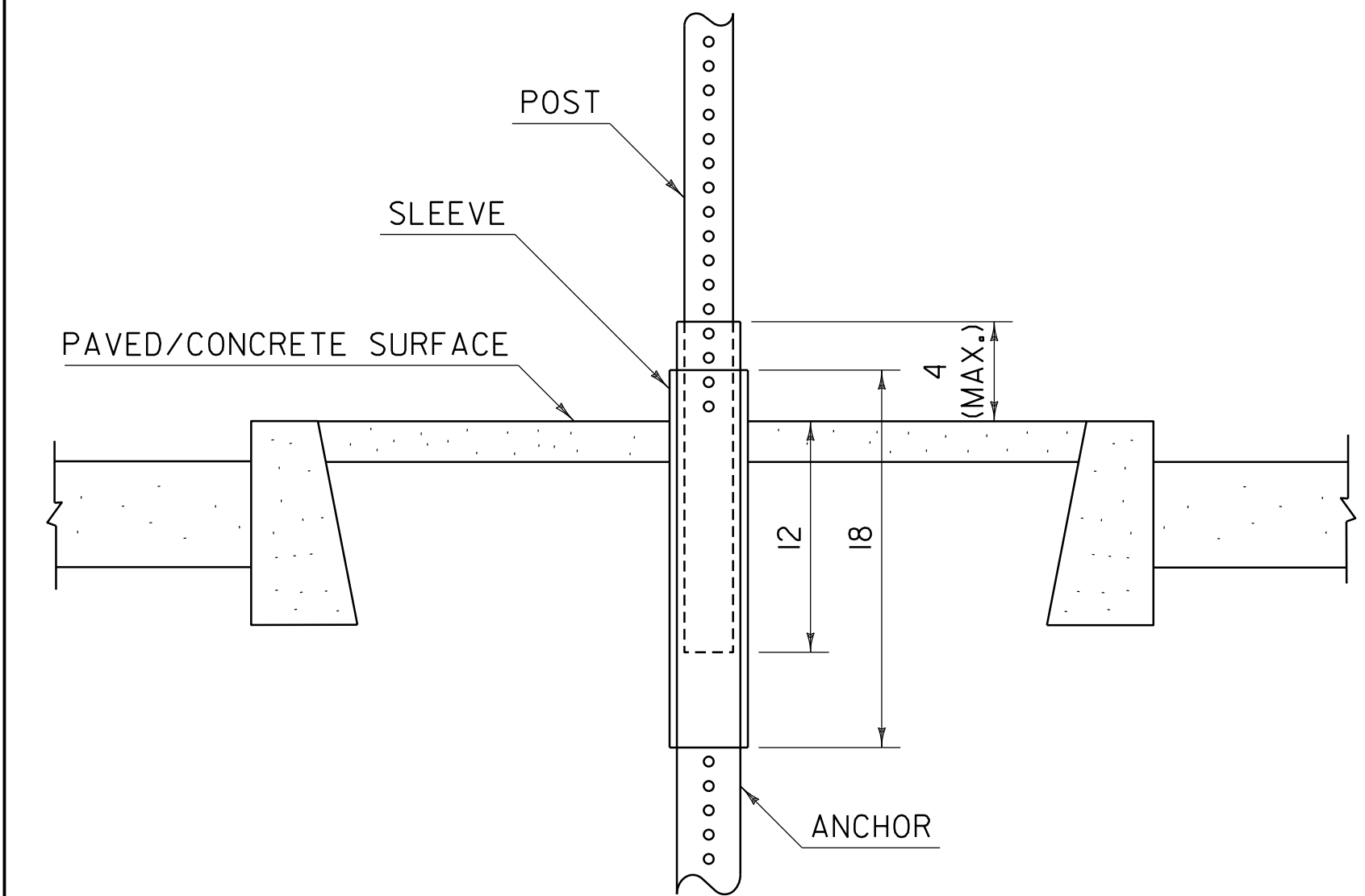
## CORNER BOLT INSTALLATION DETAIL



### NOTES:

- CORNER BOLTS SHALL BE  $\frac{5}{16}$  INCH DIAMETER WITH 18 THREADS PER INCH AND DIMENSIONS SHALL BE DETERMINED BASED ON THE OUTERMOST DIMENSION OF THE SLEEVE, ANCHOR OR POST. THREAD EXPOSURE MUST EXCEED THE CORRESPONDING NUT WIDTH. THE CORNER BOLT AND CORRESPONDING HARDWARE SHALL BE ZINC PLATED, MEETING OR EXCEEDING THE REQUIREMENTS OF THE "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) A307.

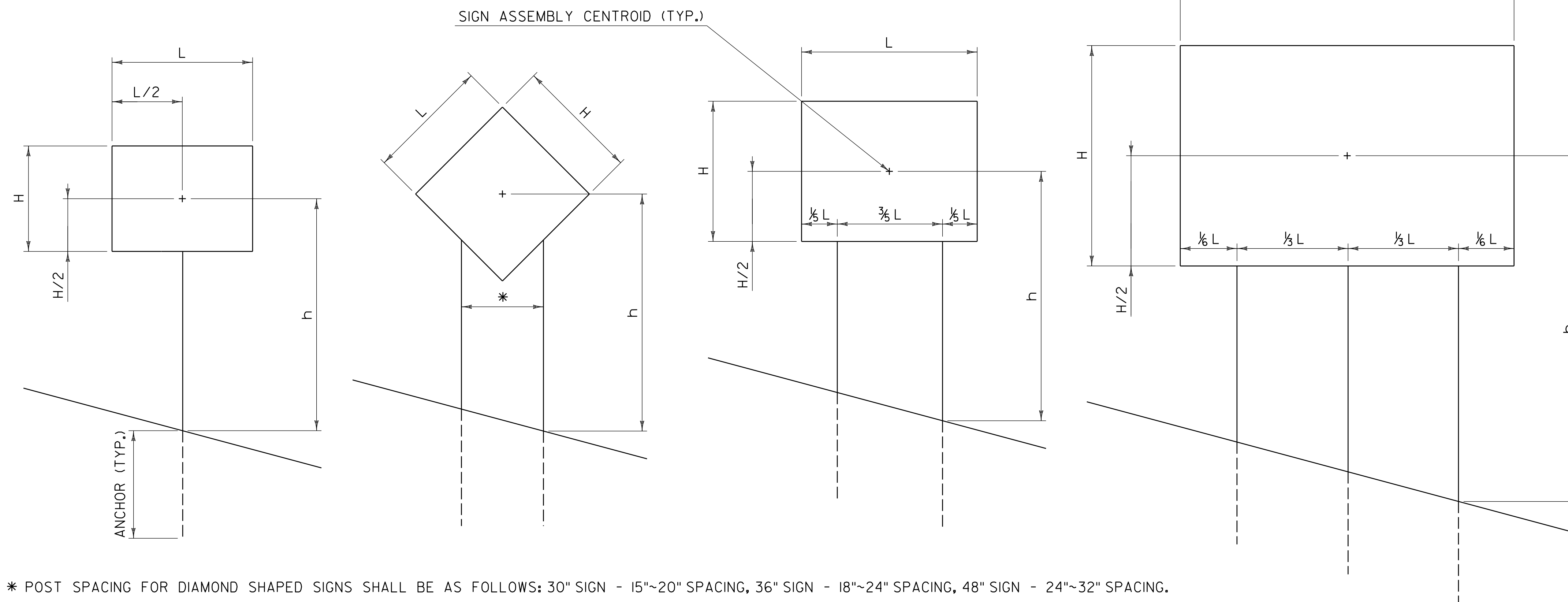
## SLEEVE /ANCHOR INSTALLATION DETAIL



### NOTES:

- A SLEEVE SHALL BE INSTALLED FOR SIGN INSTALLATIONS IN CONCRETE OR PAVEMENT.
- THE SLEEVE SHALL BE 18 INCHES MINIMUM IN LENGTH.
- THREE INCH SLEEVES THAT DO NOT HAVE HOLES WILL REQUIRE THAT  $\frac{7}{16}$  INCH HOLES ARE DRILLED TO FACILITATE CONNECTIONS.
- REFER TO CURRENT EDITION OF THE "VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION" FOR MATERIAL REQUIREMENTS.

## POST SPACING DETAILS



### GENERAL NOTES:

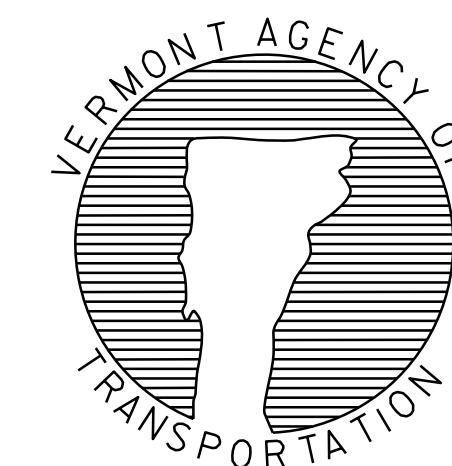
- ALL SQUARE TUBE STEEL POSTS AND ANCHORS SHALL BE FORMED INTO A SIZE AND SHAPE IN SUCH A MANNER THAT NEITHER FLASH NOR WELD SHALL INTERFERE WITH THE TELESCOPING PROPERTIES, NOR DAMAGE THE GALVANIZING.
- ANCHORS MAY BE DRIVEN OR SET INTO A DUG HOLE AND BACKFILLED. IF DRIVEN, A DRIVING CAP SHALL BE USED. THE DUG HOLE INSTALLATION METHOD SHALL BE UTILIZED IN AREAS WITH POOR SOIL CONDITIONS OR AS DIRECTED BY THE ENGINEER. BACKFILL SHALL BE COMPACTED AS DIRECTED BY THE ENGINEER.
- THE TOPS OF SIGN POSTS SHALL BE AT OR NEAR THE TOP OF SIGN. THE POST SHALL NOT EXTEND ABOVE THE TOP OF SIGN.
- SIGN POSTS SHALL BE INSTALLED A MINIMUM OF ONE FOOT BELOW GROUND, INSIDE THE ANCHOR. THE LENGTH OF ANCHOR EXPOSED ABOVE GROUND SHALL NOT EXCEED FOUR INCHES.
- ALL DIMENSIONS SHOWN IN INCHES.

**OTHER STDS. REQUIRED: NONE**

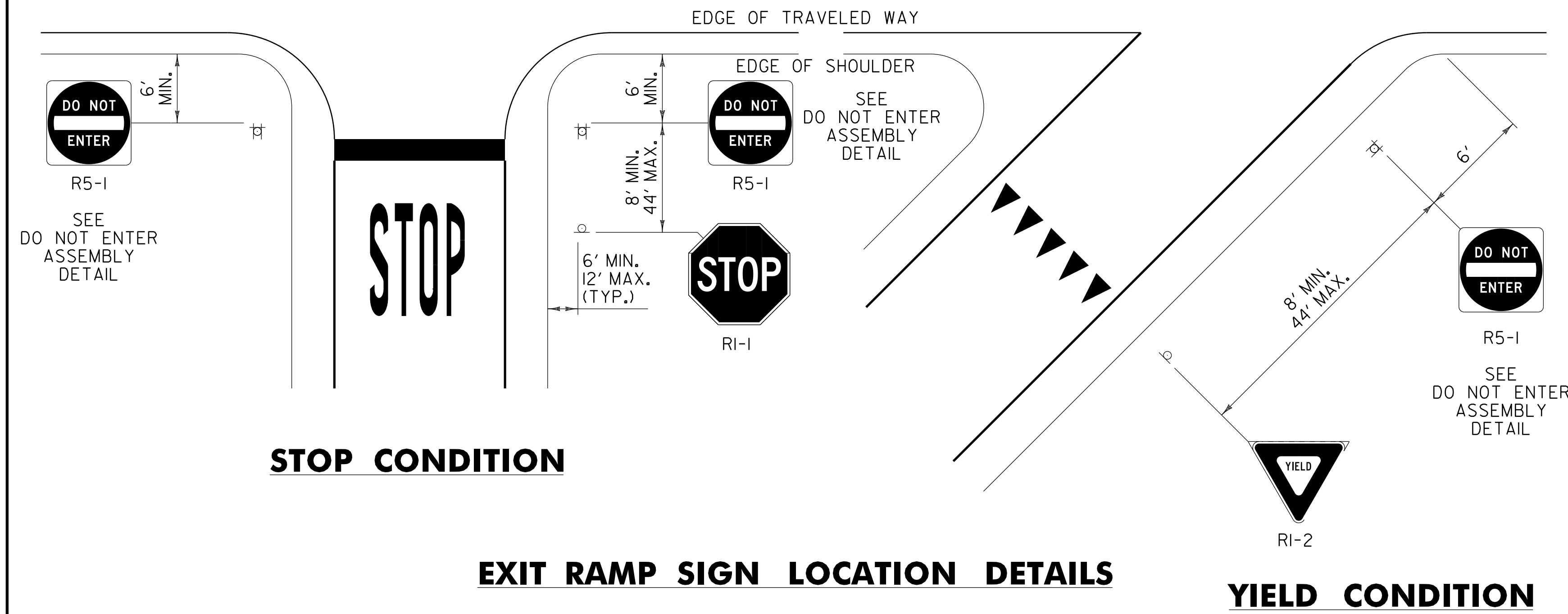
REVISIONS AND CORRECTIONS  
JAN. 2, 2013 - ORIGINAL APPROVAL DATE

APPROVED  
*W.A.C.M.*  
HIGHWAY SAFETY & DESIGN ENGINEER  
*Rudolf J. Thwait*  
DIRECTOR OF PROGRAM DEVELOPMENT  
*Mark D. Richter*  
FEDERAL HIGHWAY ADMINISTRATION

# SQUARE TUBE SIGN POST AND ANCHOR

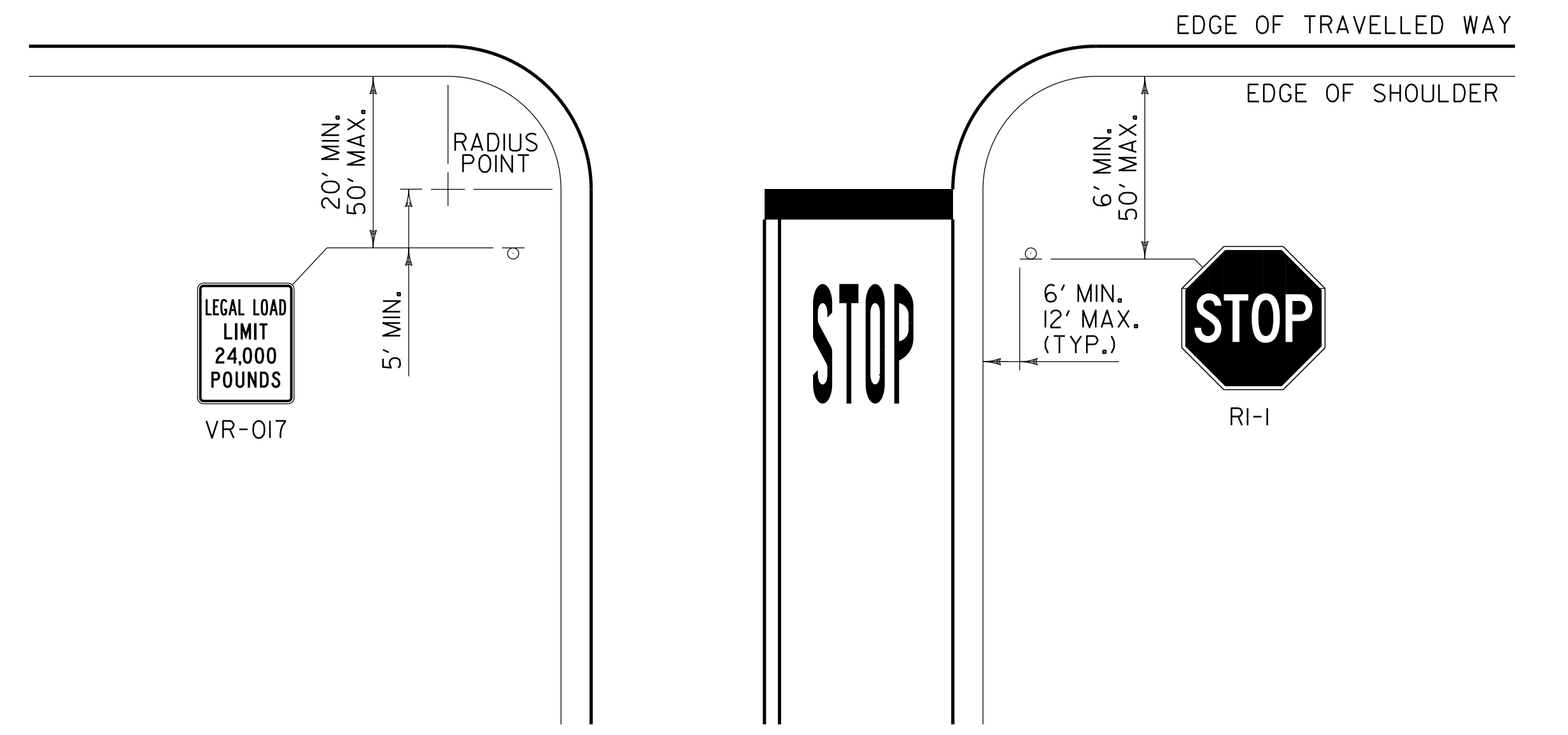


# STANDARD T-45



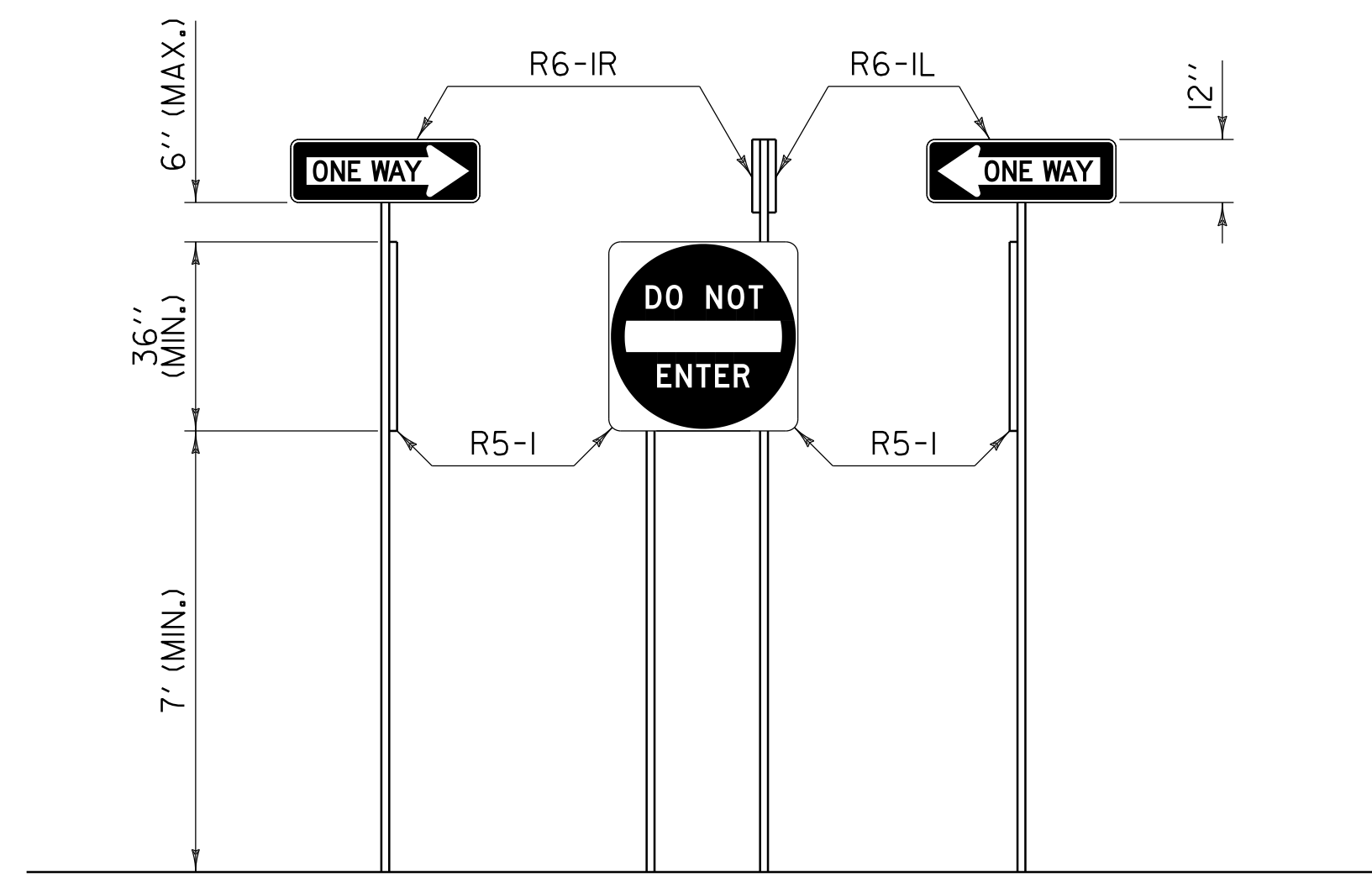
**NOTES:**

1. THE "STOP" (RI-1) SIGN SHOULD BE PLACED AS NEAR TO THE STOP BAR AS PRACTICAL. THE SIGN SHOULD BE PLACED TO MAXIMIZE VISIBILITY WITHIN THE RANGE OF OFFSETS SHOWN.
2. THE "YIELD" (RI-2) SIGN SHOULD BE PLACED AS NEAR TO THE YIELD MARKINGS AS PRACTICAL. THE SIGN SHOULD BE PLACED TO MAXIMIZE VISIBILITY WITHIN THE RANGE OF OFFSETS SHOWN.



**NOTES:**

1. THE "STOP" (RI-1) SIGN SHOULD BE PLACED AS NEAR TO THE STOP BAR AS PRACTICAL. THE SIGN SHOULD BE PLACED TO MAXIMIZE VISIBILITY WITHIN THE RANGE OF OFFSETS SHOWN.



**GENERAL NOTES:**

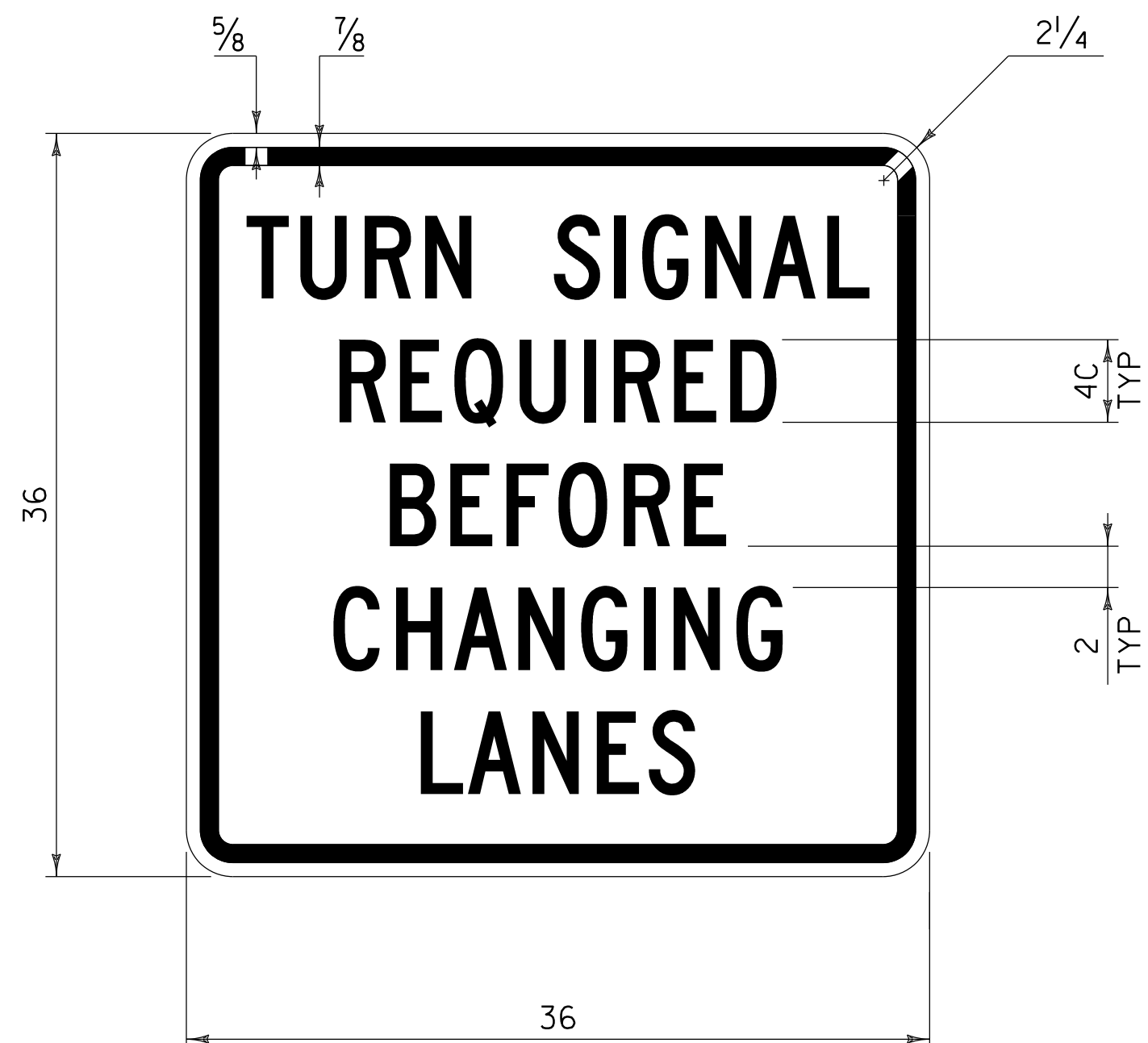
1. WHEN INSTALLED, STREET NAME SIGNS SHOULD BE INSTALLED PERPENDICULAR TO APPROACHING MAINLINE TRAFFIC AND SHALL BE POSITIONED IN SUCH A WAY AS TO ENSURE THE BEST POSSIBLE VISIBILITY TO APPROACHING MAINLINE TRAFFIC FROM EACH DIRECTION. STREET NAME SIGNS MAY BE INSTALLED ABOVE SIDE ROAD STOP SIGN. IN CASES WHERE THE SIDE ROAD STOP SIGN POSITION WOULD NOT BE SUITABLE FOR A TOP-MOUNTED STREET NAME SIGN, OR OTHER SITE-SPECIFIC CONSTRAINTS, THE STREET NAME SIGN MAY BE INSTALLED INDEPENDENTLY ON EITHER CORNER OF THE INTERSECTION. THE STREET NAME SIGNS SHALL BE INSTALLED A MINIMUM OF SIX FEET FROM EDGE OF PAVEMENT ON THE MAINLINE ROUTE TO THE NEAREST EDGE OF SIGN.
2. STREET NAME SIGNS WITH A LENGTH EXCEEDING 42 INCHES SHALL BE INSTALLED ON TWO POSTS. NO MORE THAN TWO POSTS SHALL OCCUPY AN EIGHT FOOT TRAVEL PATH, UNLESS PROTECTED BY BARRIER.
3. THE "STOP" (RI-1) SIGN SHALL NOT BE MOUNTED LESS THAN FIVE FEET IN HEIGHT TO THE BOTTOM OF THE SIGN.

REV.	DATE	DESCRIPTION
0	OCT. 26, 2015	ORIGINAL APPROVAL
OTHER STANDARDS REQUIRED: NONE		
VTRANS AND FHWA APPROVAL ON FILE WITH CONTRACT ADMINISTRATION		

STANDARD SIGN PLACEMENT



STANDARD  
T-56



**VR-002**



**VR-017**

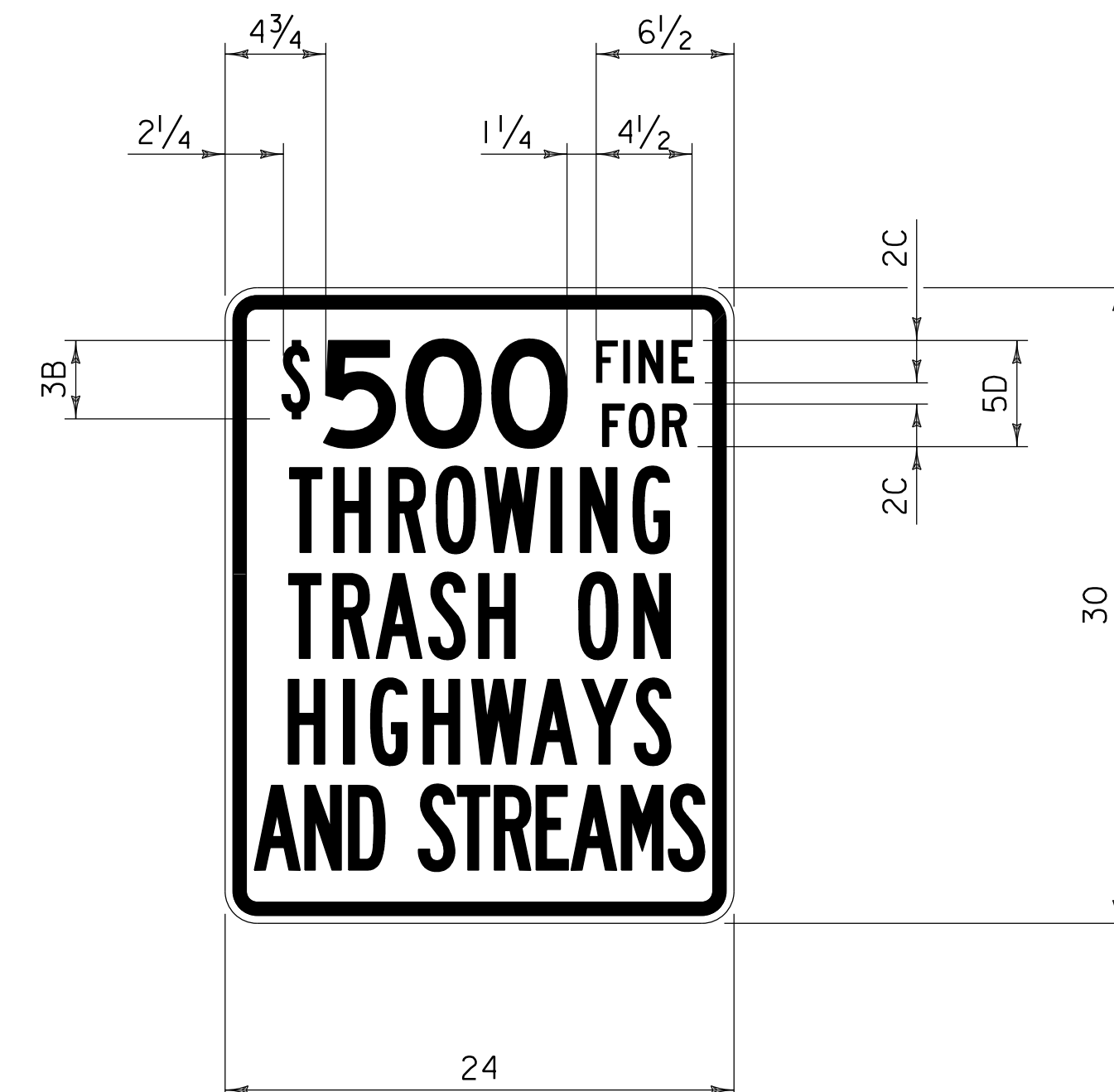
**NOTES:**

1. TEXT SHALL BE 4C, UNLESS OTHERWISE NOTED.
2. "LEGAL LOAD" SHALL HAVE A SPECIFIED LENGTH OF 20 INCHES.
3. "24,000" ALTERNATE: "16,000".



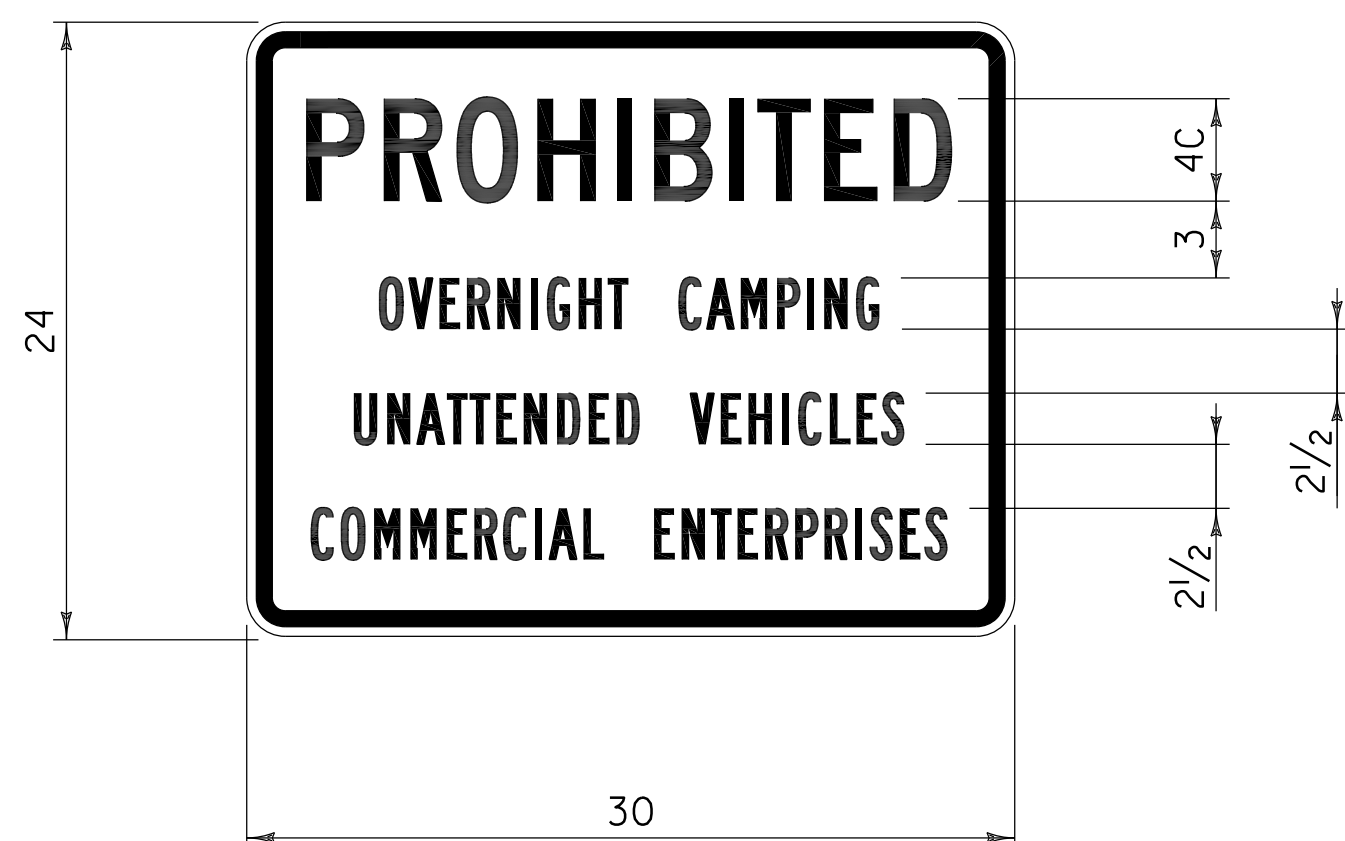
**VR-020**

1. LEGEND AND BORDER SHALL BE RED RETROREFLECTIVE SHEETING.



**NOTES: VR-023b**

1. TEXT SHALL BE 4B, UNLESS OTHERWISE NOTED.
2. SPACING SHALL BE 1 INCH, UNLESS OTHERWISE NOTED.
3. "500" SHALL HAVE A SPECIFIED LENGTH OF 11 1/2 INCHES.
4. "AND STREAMS" SHALL HAVE A SPECIFIED LENGTH OF 21 1/4 INCHES.



**VR-032**

**NOTES:**

1. TEXT SHALL BE 2B, UNLESS OTHERWISE NOTED.

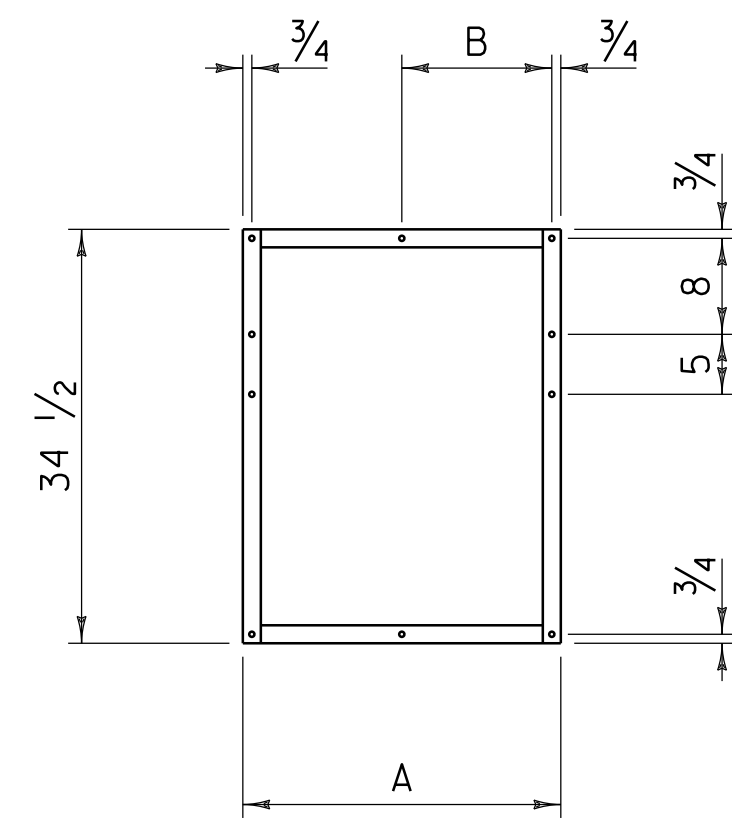
REV.	DATE	DESCRIPTION
0	APR. 25, 2016	ORIGINAL APPROVAL
OTHER STANDARDS REQUIRED: T-2		
VTRANS AND FHWA APPROVAL ON FILE WITH CONTRACT ADMINISTRATION		

**GENERAL NOTES:**

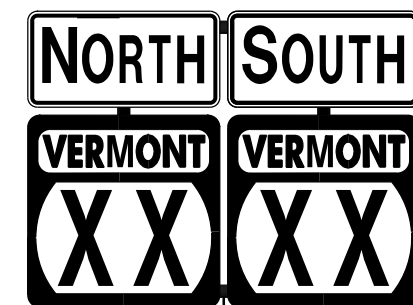
1. ALL LEGEND SHALL BE CENTERED VERTICALLY AND HORIZONTALLY UNLESS OTHERWISE NOTED.
2. CORNERS SHALL BE ROUNDED TO 1 1/2 INCHES, UNLESS OTHERWISE NOTED.
3. BORDERS SHALL BE 5/8 INCH, UNLESS OTHERWISE NOTED.
4. MARGINS SHALL BE 3/8 INCH, UNLESS OTHERWISE NOTED.
5. ALL DIMENSIONS IN INCHES.



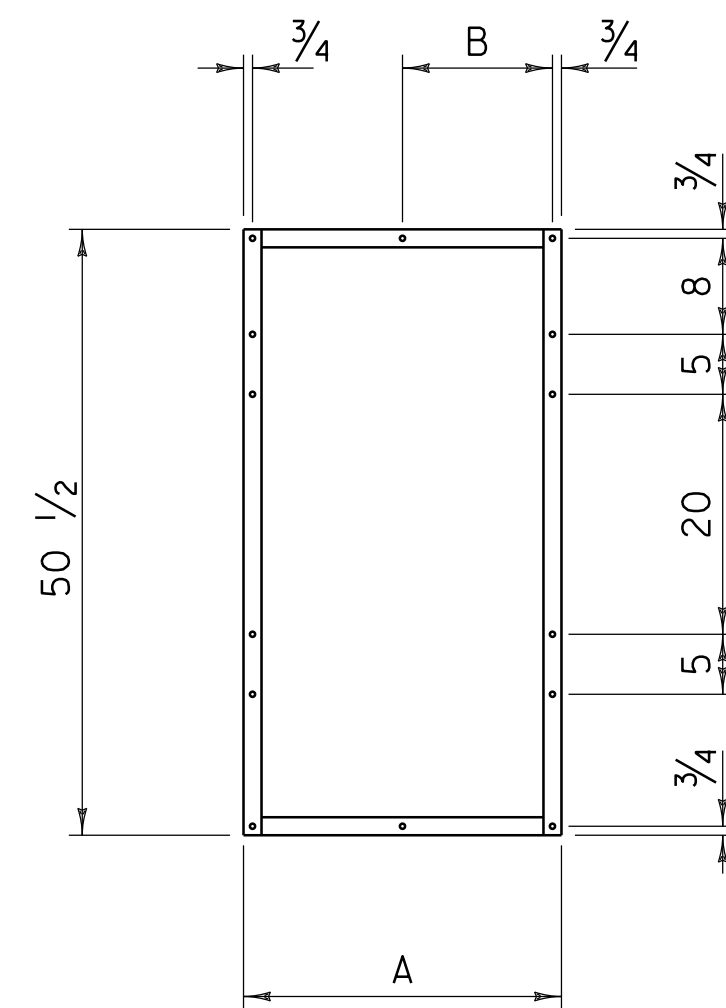
**TYPE 1**



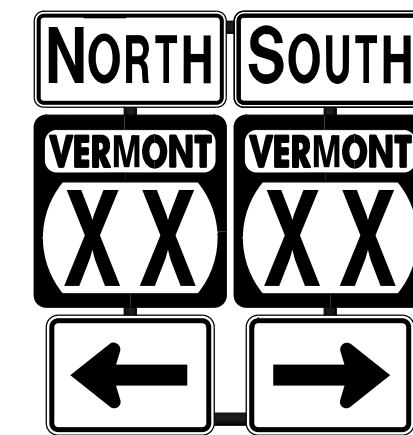
FRAME TYPE	A	B
1A	26 1/2	12 1/2
1B	29 1/2	15 1/2
1C	32 1/2	15 1/2



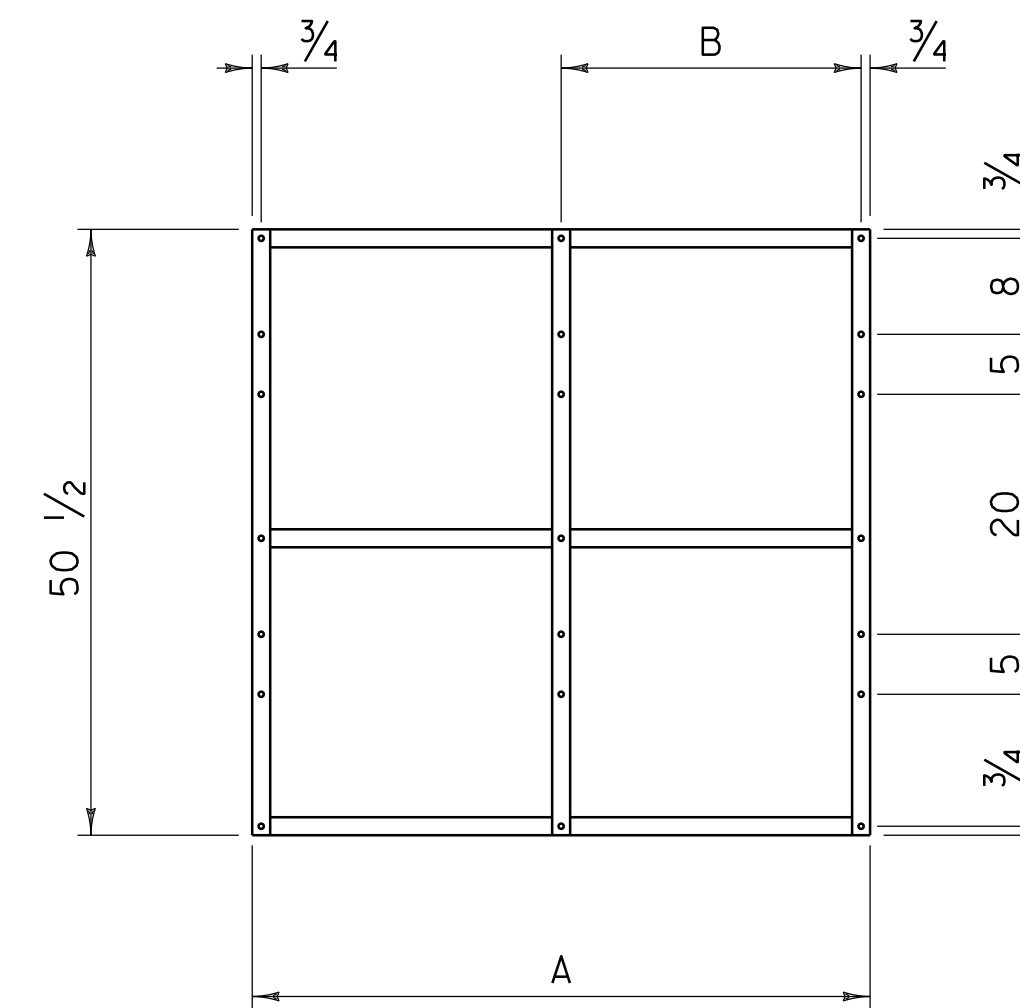
**TYPE 2**



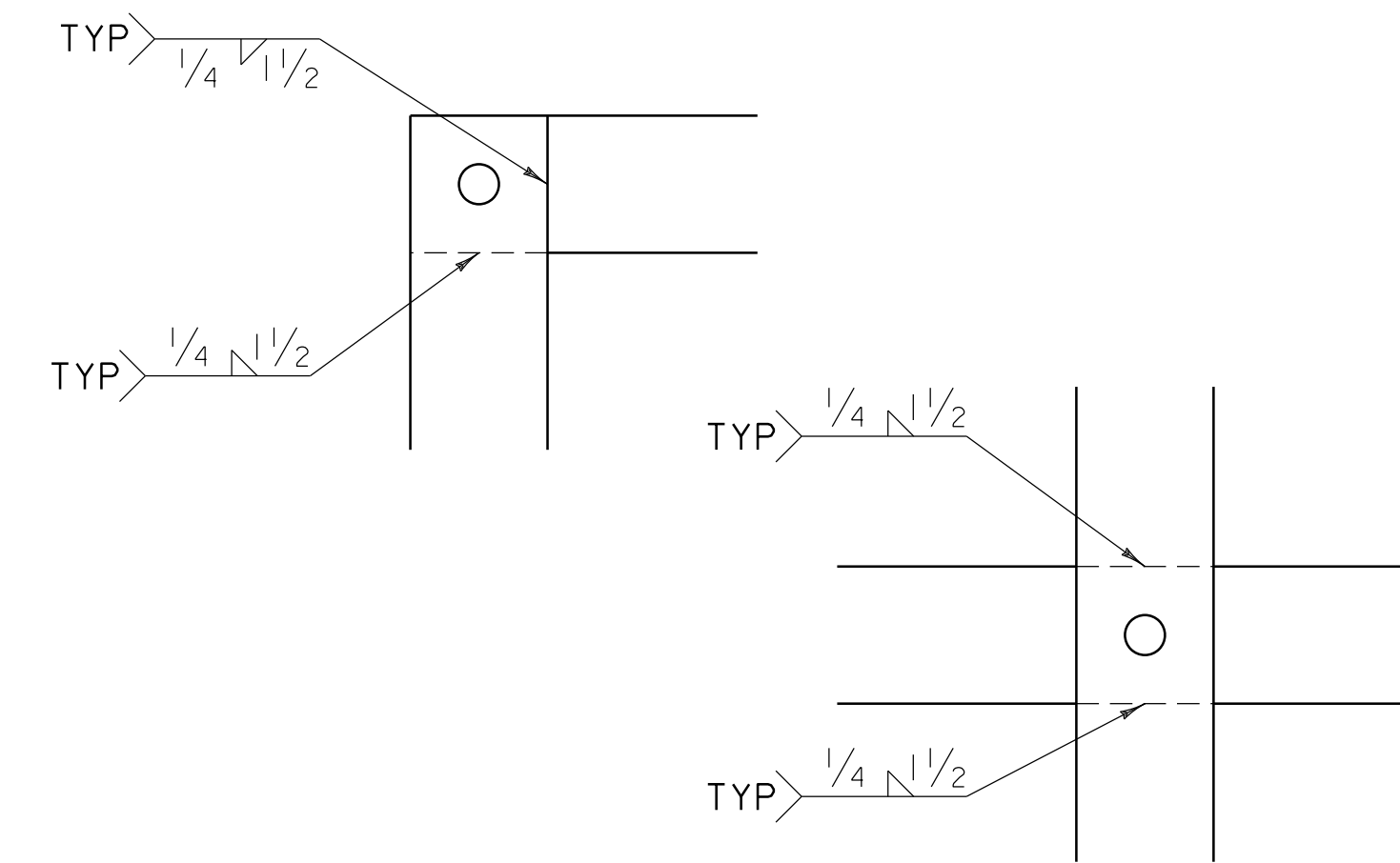
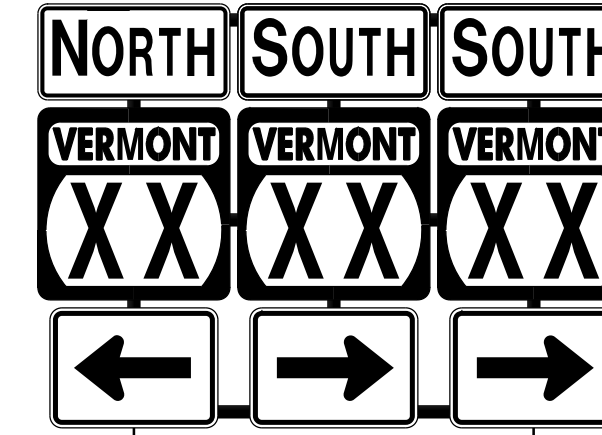
FRAME TYPE	A	B
2A	26 1/2	12 1/2
2B	29 1/2	15 1/2
2C	32 1/2	15 1/2



**TYPE 3**



FRAME TYPE	A	B
3A	51 1/2	25
3B	54 1/2	28
3C	57 1/2	28
3D	63 1/2	31



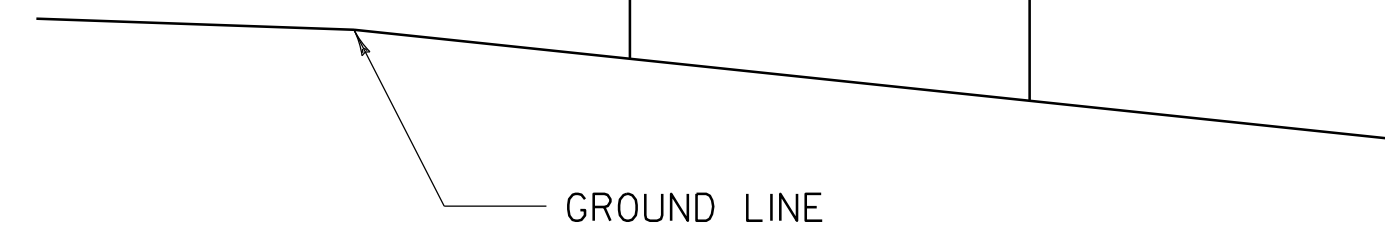
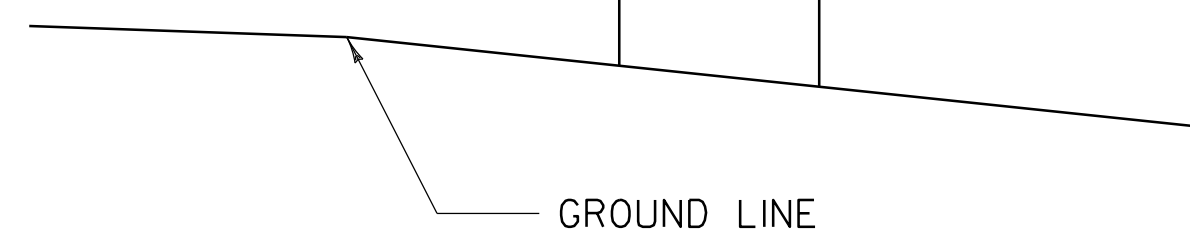
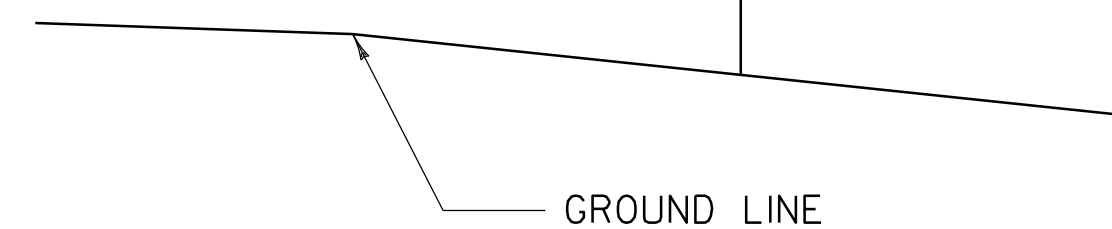
**WELDING DETAILS**

**NOTE:**

I. TWO WELDS PER CONNECTION.

**GENERAL NOTES:**

- TYPE 1A FRAME ASSEMBLY TO BE USED WITH TWO 24 INCH WIDE SIGN COLUMNS.
- TYPE 1B FRAME ASSEMBLY TO BE USED WITH ONE 24 INCH WIDE SIGN COLUMN AND ONE 30 INCH WIDE SIGN COLUMN.
- TYPE 1C FRAME ASSEMBLY TO BE USED WITH TWO 30 INCH WIDE SIGN COLUMNS.
- TYPE 2A FRAME ASSEMBLY TO BE USED WITH TWO 24 INCH WIDE SIGN COLUMNS.
- TYPE 2B FRAME ASSEMBLY TO BE USED WITH ONE 24 INCH WIDE SIGN COLUMN AND ONE 30 INCH WIDE SIGN COLUMN.
- TYPE 2C FRAME ASSEMBLY TO BE USED WITH TWO 30 INCH WIDE SIGN COLUMNS.
- TYPE 3A FRAME ASSEMBLY TO BE USED WITH THREE 24 INCH WIDE SIGN COLUMNS.
- TYPE 3B FRAME ASSEMBLY TO BE USED WITH TWO 24 INCH WIDE SIGN COLUMNS AND ONE 30 INCH WIDE SIGN COLUMN, WITH THE 30 INCH SIGN COLUMN IN AN OUTSIDE POSITION.
- TYPE 3C FRAME ASSEMBLY TO BE USED WITH ONE 24 INCH WIDE SIGN COLUMN IN THE CENTER AND TWO 30 INCH SIGN COLUMNS ON THE OUTSIDE OR ONE 30 INCH SIGN COLUMN IN THE CENTER AND TWO 24 INCH SIGN COLUMNS ON THE OUTSIDE.
- TYPE 3D FRAME ASSEMBLY TO BE USED WITH THREE 30 INCH WIDE SIGN COLUMNS.
- STANDARD FRAMES SHALL BE CONSTRUCTED OF 5/16 INCH X 1 1/2 INCH A-36 STEEL. THE FRAME SHALL BE PAINTED WITH ONE COAT OF PRIMER AND A SECOND COAT OF BLACK PAINT. THE PAINT SHALL BE OF THE TYPE USED ON EXTERIOR METAL SURFACES TO PREVENT METAL CORROSION.
- ALL HOLES SHALL BE 7/16 INCH DIAMETER. POSITION OF DRILLED HOLES ON FRAMES BASED UPON MOUNTING HOLES ON SIGNS AT TWO INCHES FROM TOP AND BOTTOM EDGES, CENTERED WITHIN THE WIDTH OF THE SIGN.
- SIGN/FRAME ASSEMBLIES SHOULD EXHIBIT A ONE INCH SPACE BETWEEN SIGN PANELS. SIGN POSTS TO ALIGN WITH SIGN FRAME VERTICALS.
- FOR SIGN COMBINATIONS OTHER THAN ABOVE, THE FRAME DIMENSIONS AND HOLE SPACING SHALL BE MODIFIED AS NECESSARY.
- SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SECTION 2D.29 FOR INSTALLATION SEQUENCE.
- ALL DIMENSIONS SHOWN IN INCHES, UNLESS OTHERWISE NOTED.



**ROUTE MARKER ASSEMBLY FRAMES**

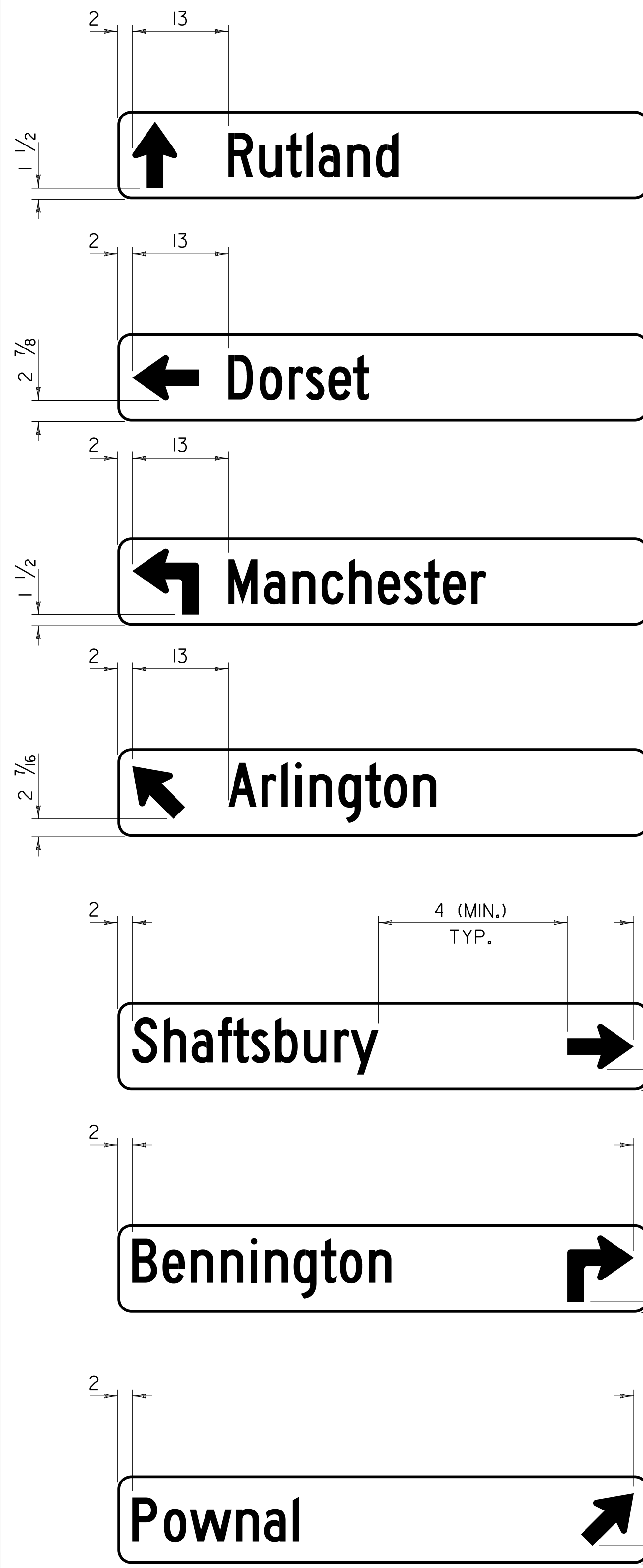
**ROUTE MARKER FRAME DETAILS**

REV.	DATE	DESCRIPTION
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OTHER STANDARDS REQUIRED: NONE		
VTRANS AND FHWA APPROVAL ON FILE WITH CONTRACT ADMINISTRATION		

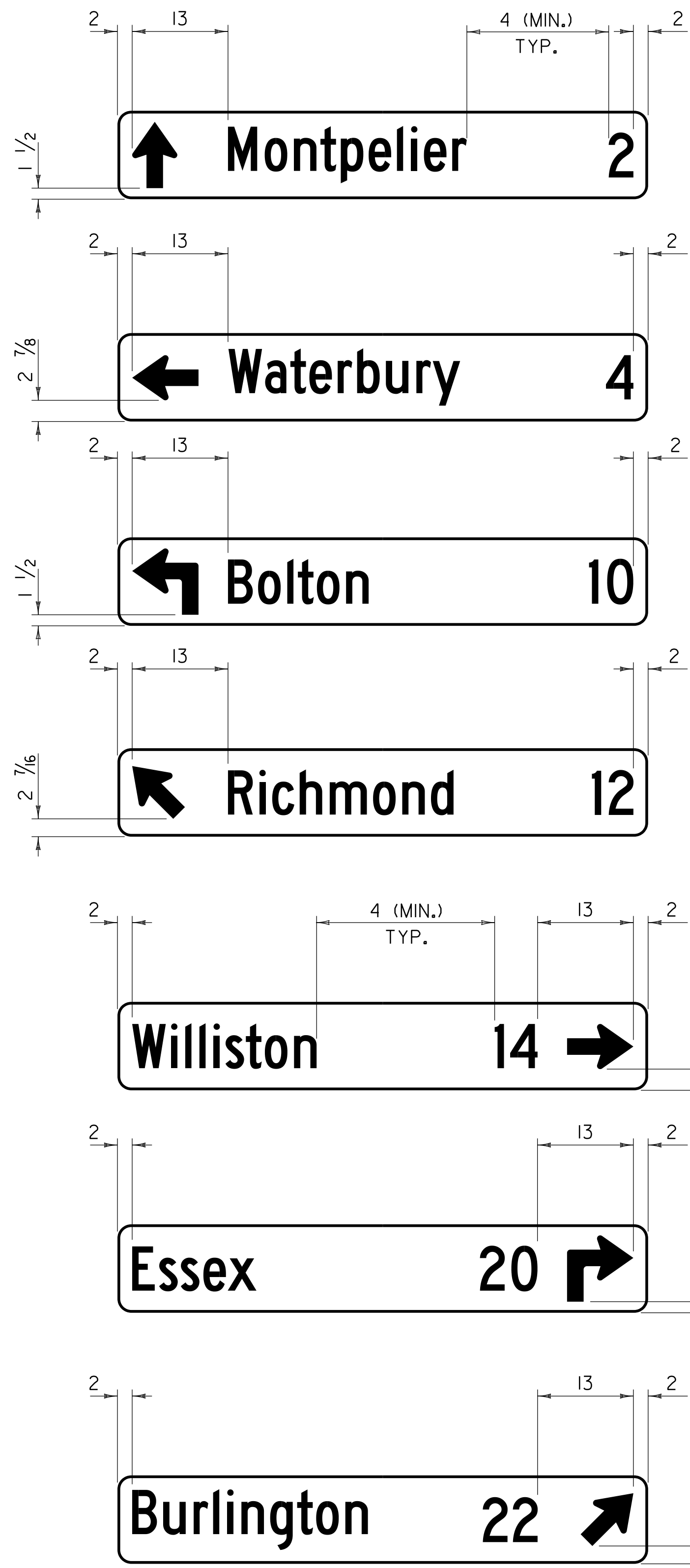


STANDARD  
T-92

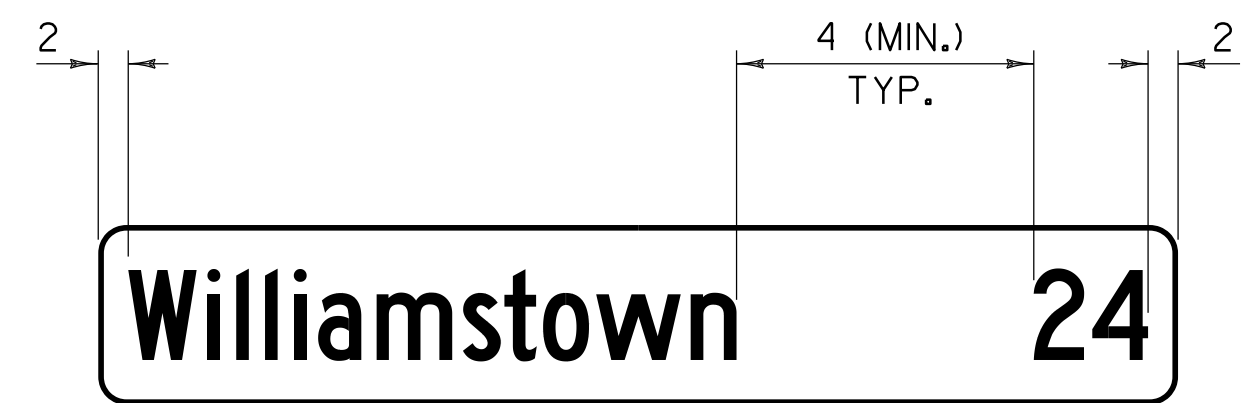
**VD1-1**



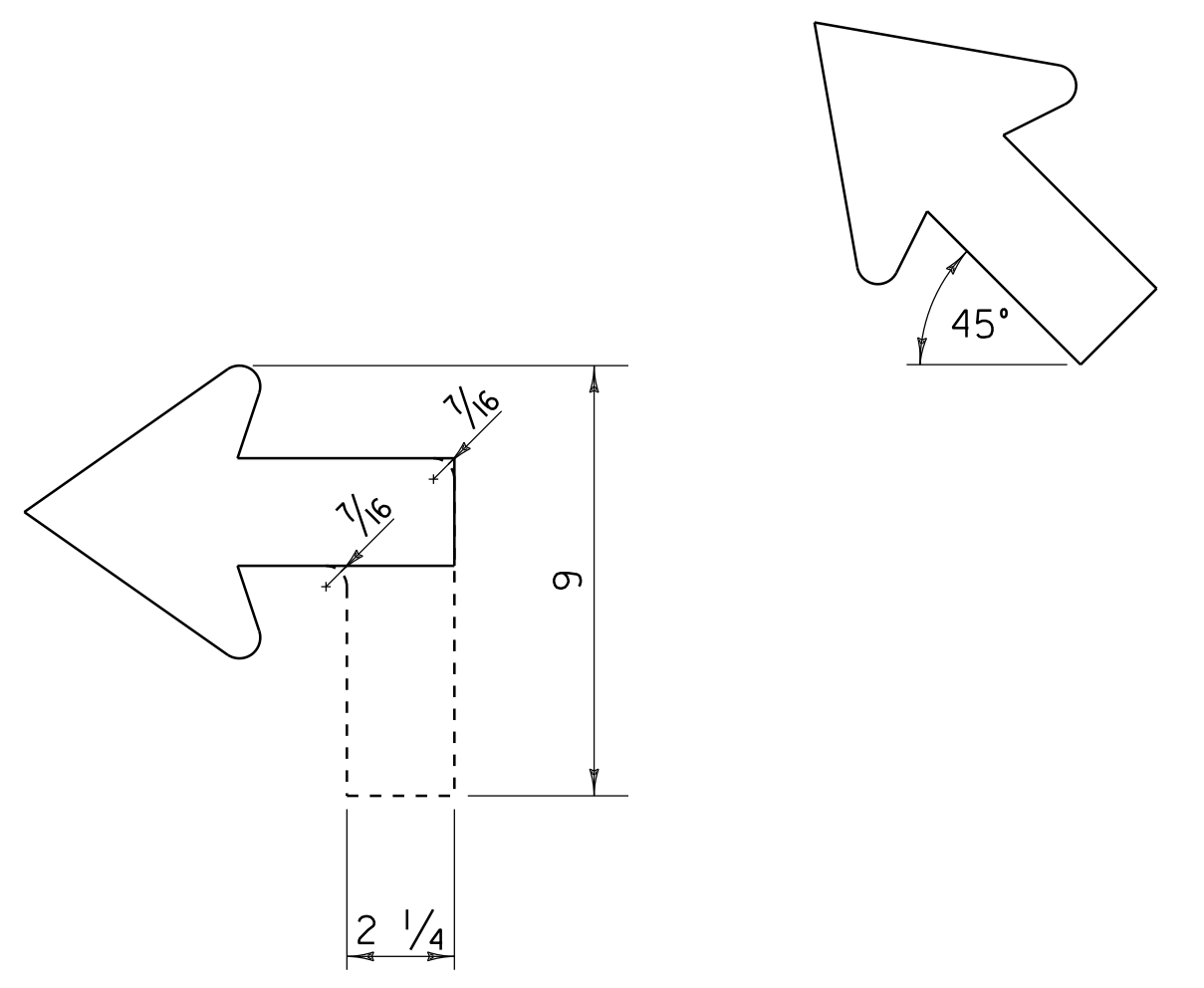
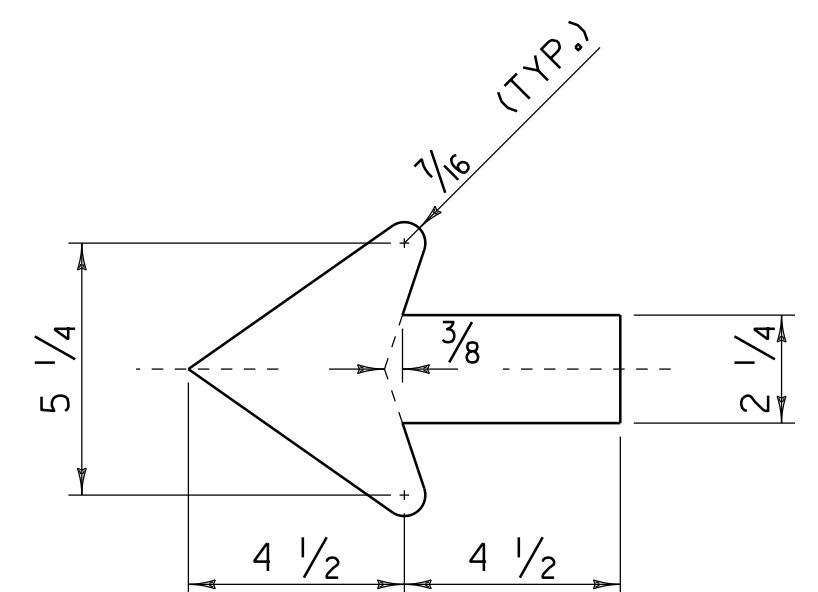
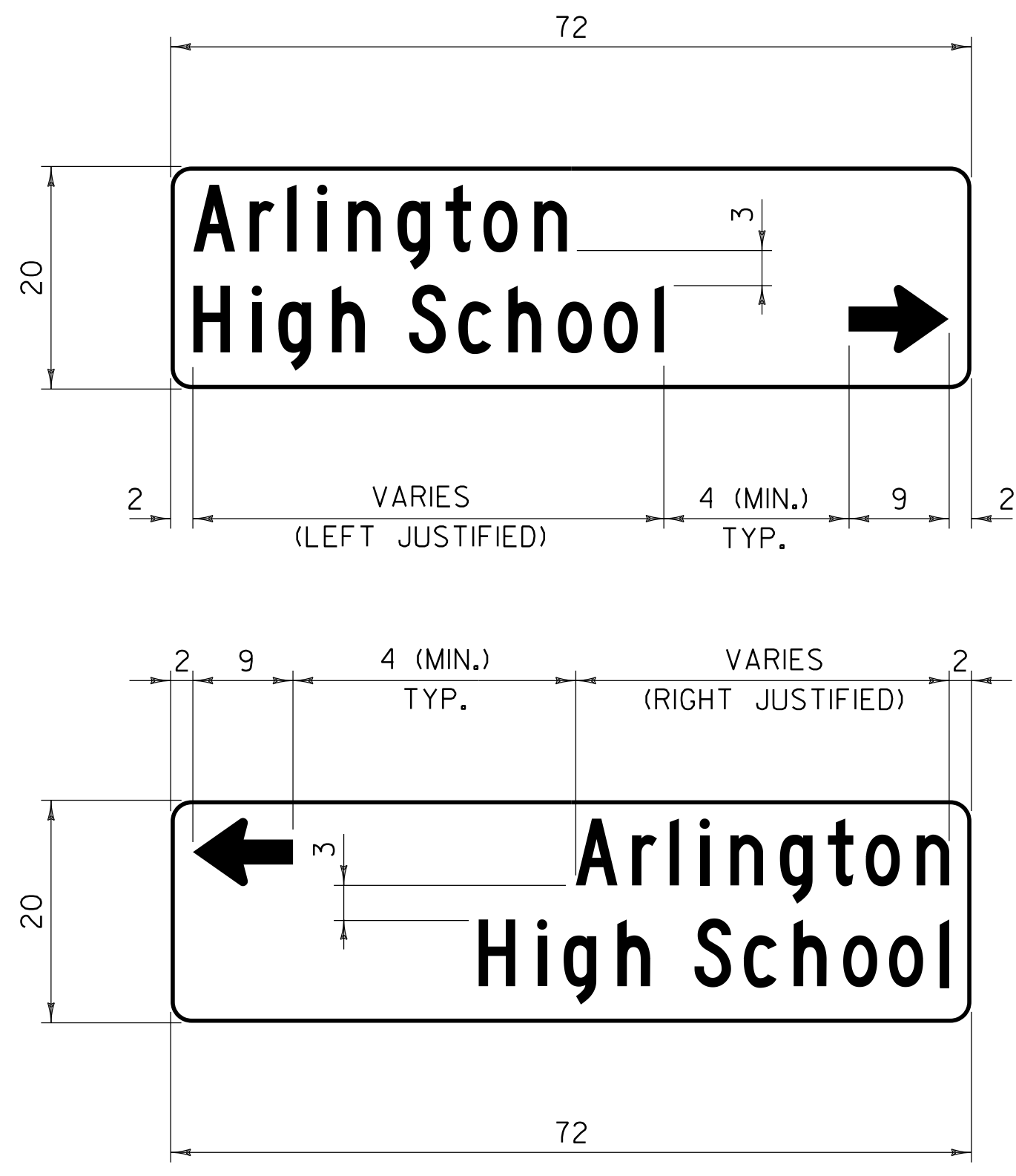
**VD1-1A**



**VD2-1**



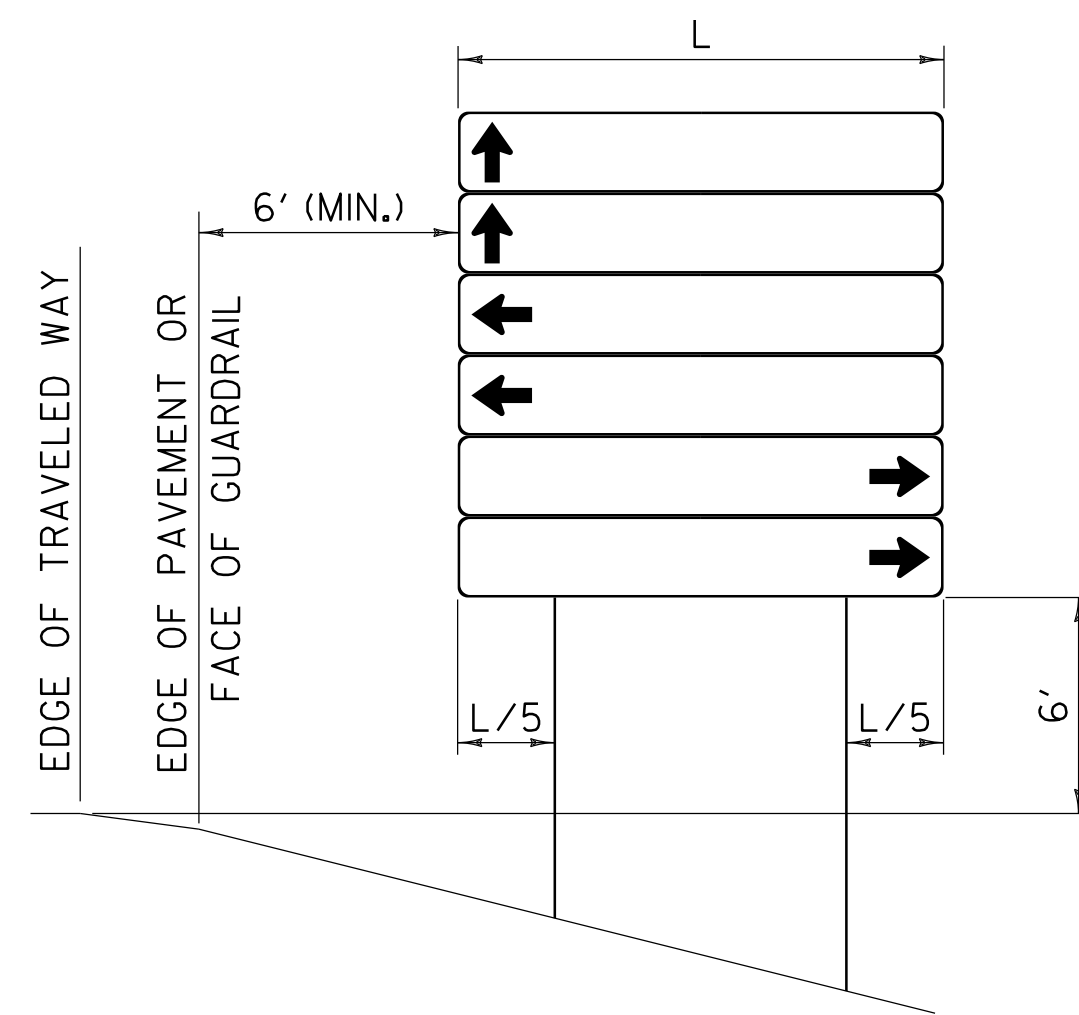
**VD2-1S**



**ARROW DETAILS**

**GENERAL NOTES:**

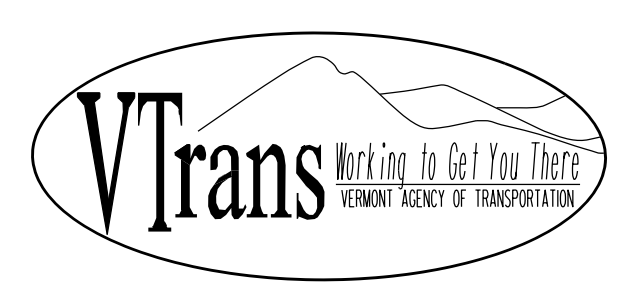
- SIGN SUBSTRATE MATERIAL SHALL BE ALUMINUM SHEETING 1/8 (0.125) INCH MINIMUM THICKNESS.
- ALL SIGNS SHALL BE 72 INCHES BY 12 INCHES WITH CORNERS ROUNDED TO A 1/2 INCH RADIUS, UNLESS OTHERWISE NOTED.
- SIGNS SHALL HAVE A 3/8 INCH WIDE BORDER AT THE EDGE OF THE PANEL.
- SIGNS SHALL BE WHITE RETROREFLECTIVE LEGEND AND BORDER ON A GREEN RETROREFLECTIVE BACKGROUND, BOTH SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE III.
- LEGEND SHALL BE CENTERED VERTICALLY.
- LEGEND SHALL BE LOWER CASE WITH THE FIRST LETTERS CAPITALIZED.
- DESTINATION LEGEND SIZE AND SERIES SHALL BE DESIGNED IN THIS ORDER UNTIL THE LEGEND FITS (EACH CAN BE REDUCED TO 80% SPACING): 6C; 6B; 5C; 4B. MILEAGE LEGEND SHALL BE 6C FONT.
- SEQUENCE OF ARROWS TO BE AS SHOWN, TOP TO BOTTOM. WHEN TWO SIGNS WITH THE SAME DIRECTION ARE USED THE CLOSEST DESTINATION IN THAT DIRECTION SHALL BE ABOVE THE FURTHEST DESTINATION.
- SIGNS SHALL BE LIMITED TO TWO PER DIRECTION PER ASSEMBLY WITH A MAXIMUM OF SIX SIGNS.
- ALL DIMENSIONS SHOWN IN INCHES, UNLESS OTHERWISE NOTED.



**INSTALLATION DETAIL**

REV.	DATE	DESCRIPTION
0	OCT. 26, 2015	ORIGINAL APPROVAL
OTHER STANDARDS REQUIRED: NONE		
VTRANS AND FHWA APPROVAL ON FILE WITH CONTRACT ADMINISTRATION		

**DESTINATION SIGN DETAILS**



**STANDARD**  
**T-93**