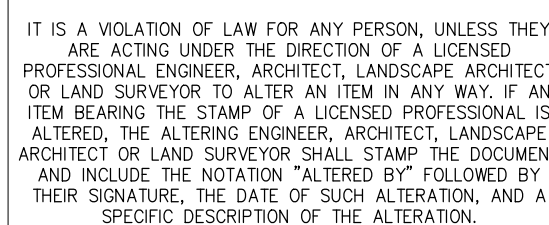
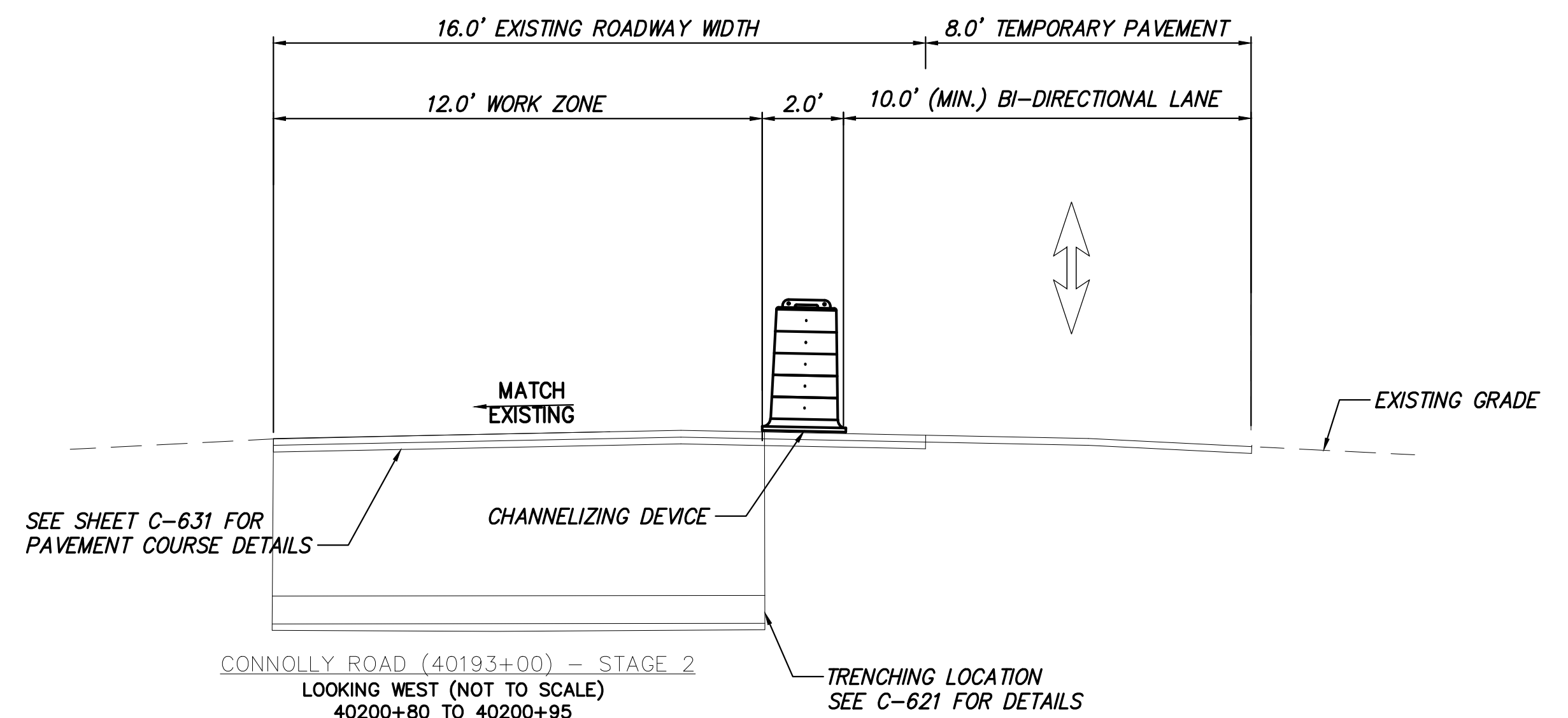
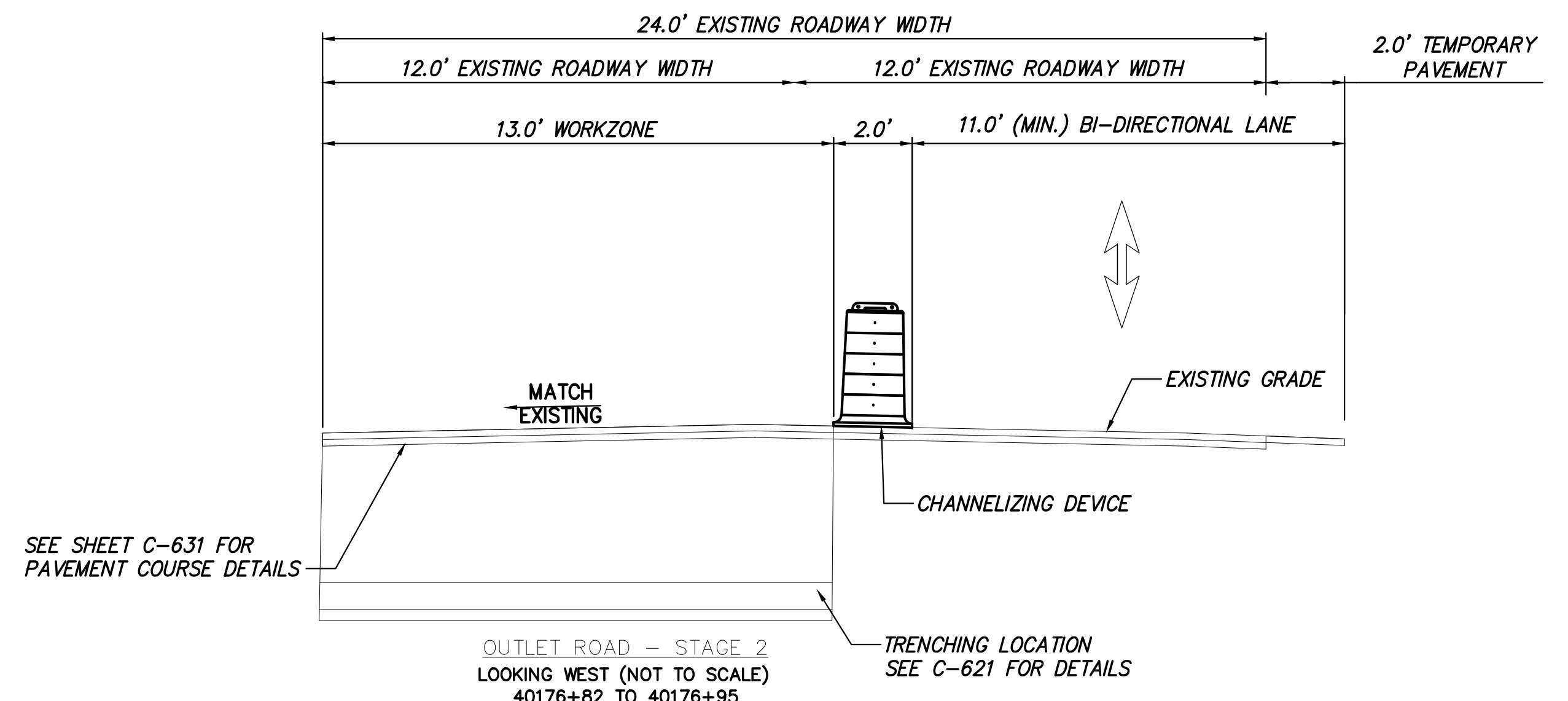
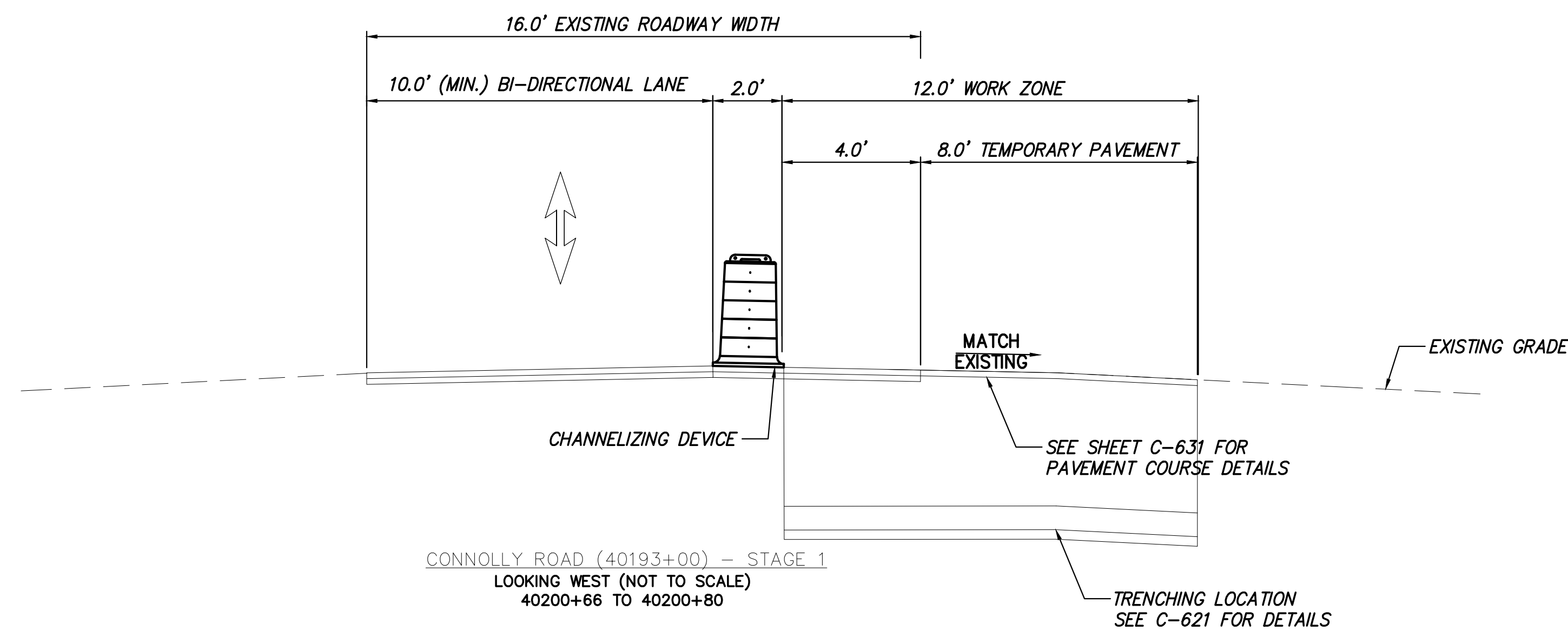
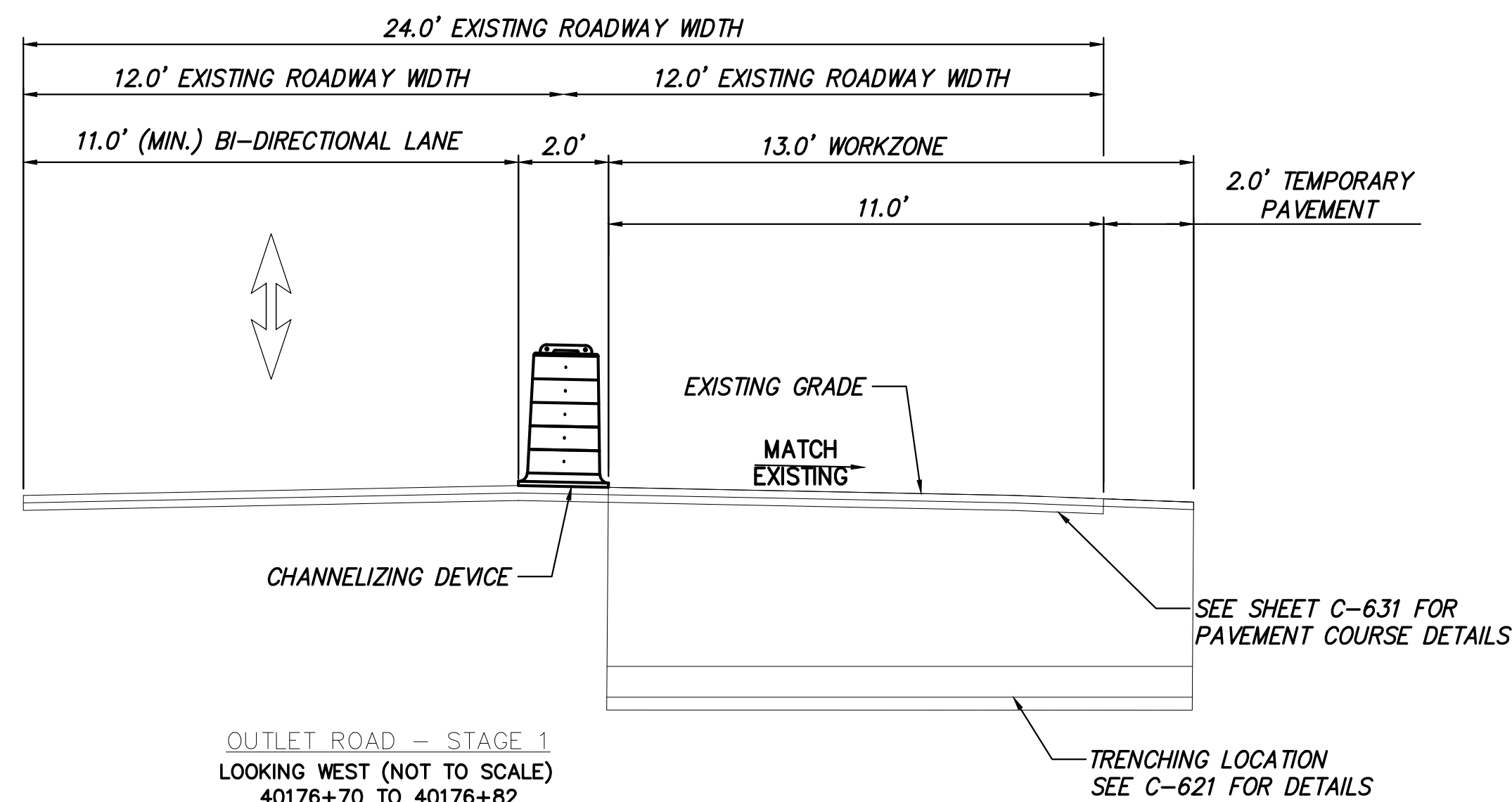
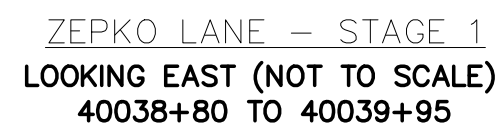




1. FOR TEMPORARY PAVEMENT DETAILS SEE
DETAIL 6 ON DWG. NO. C-631

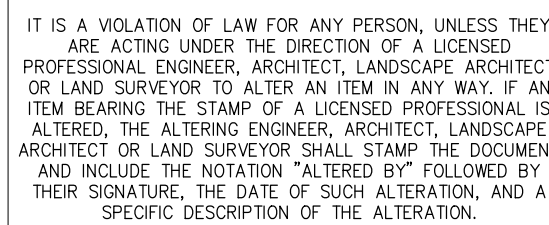
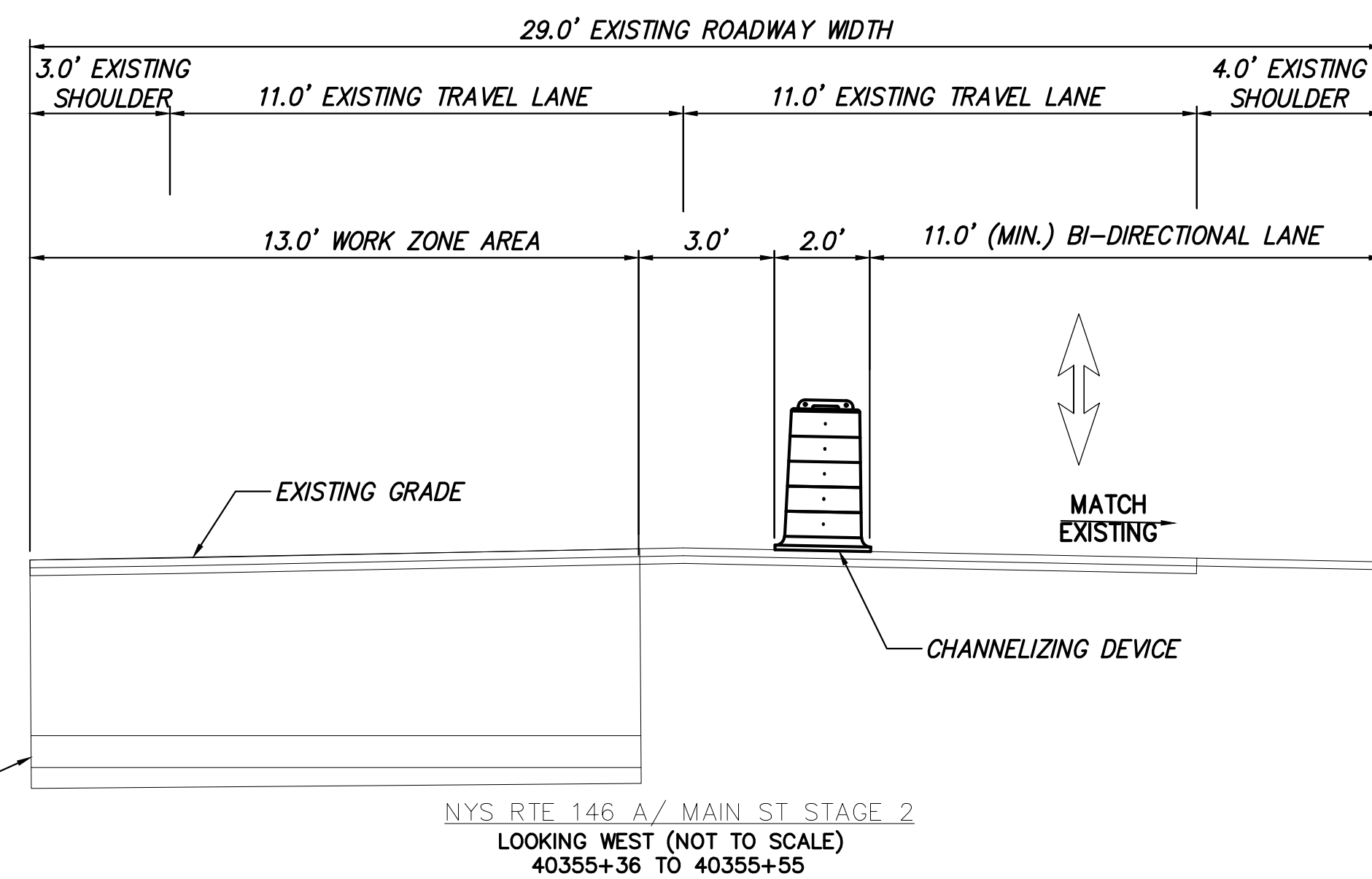
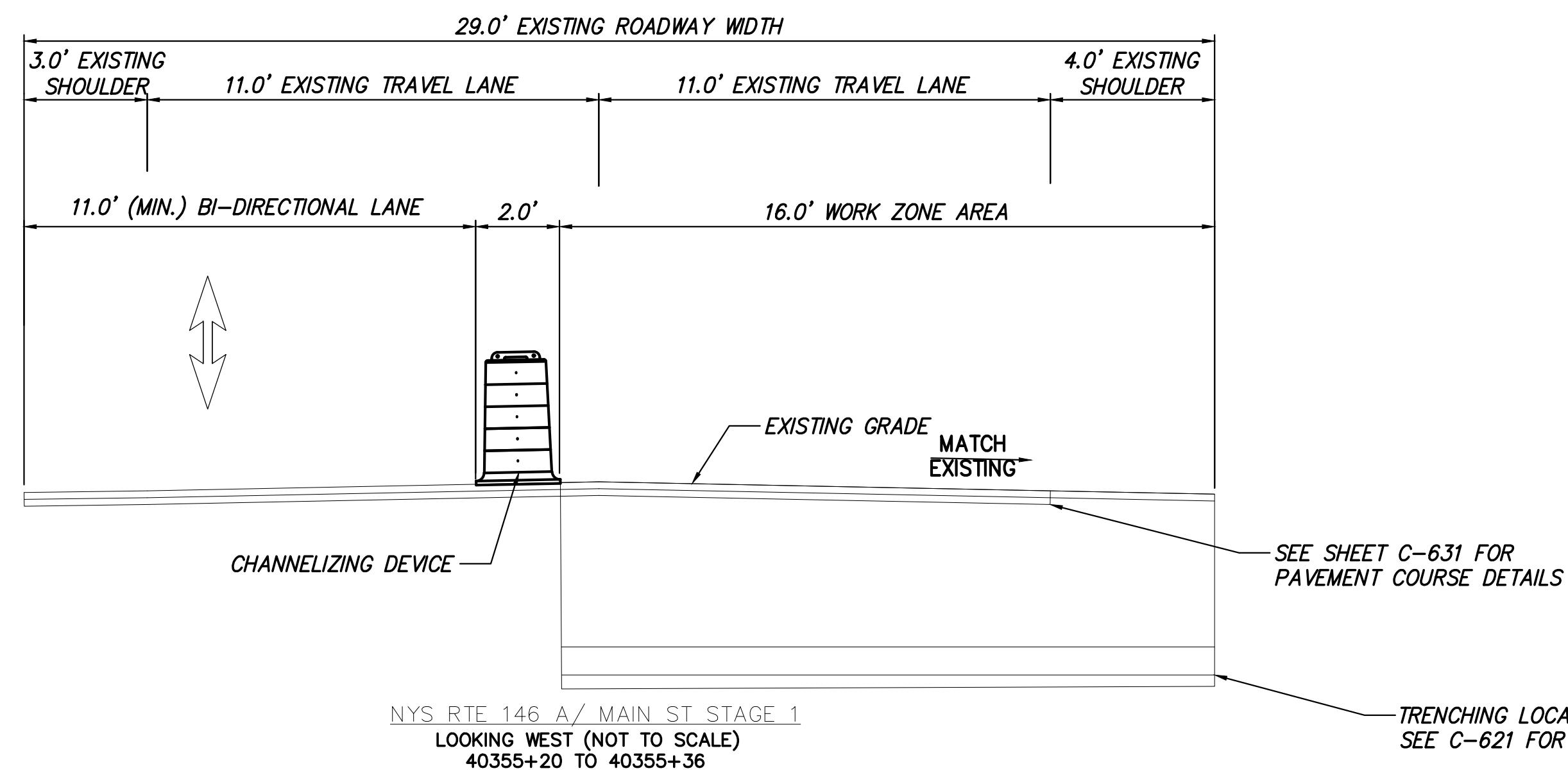
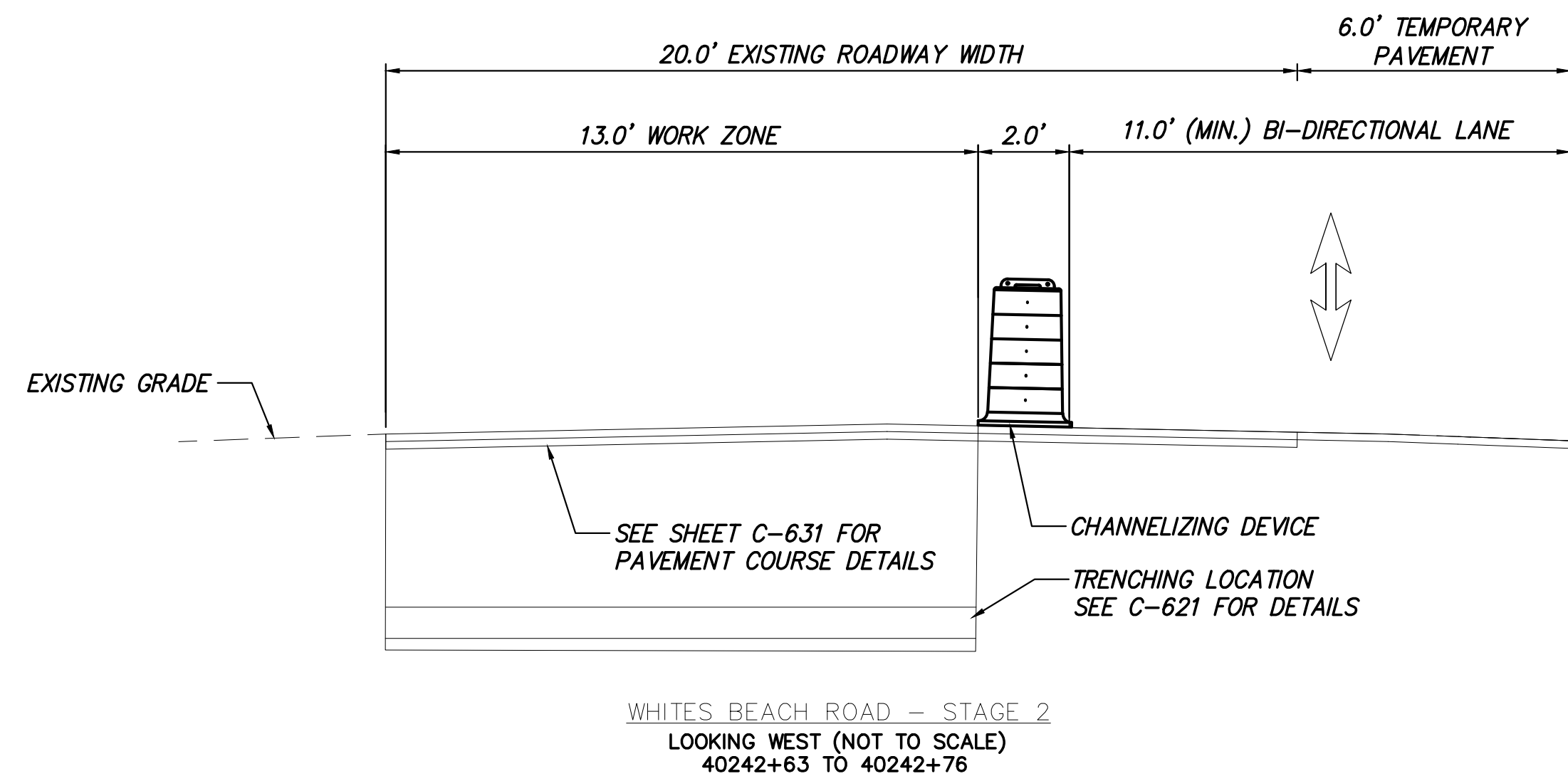
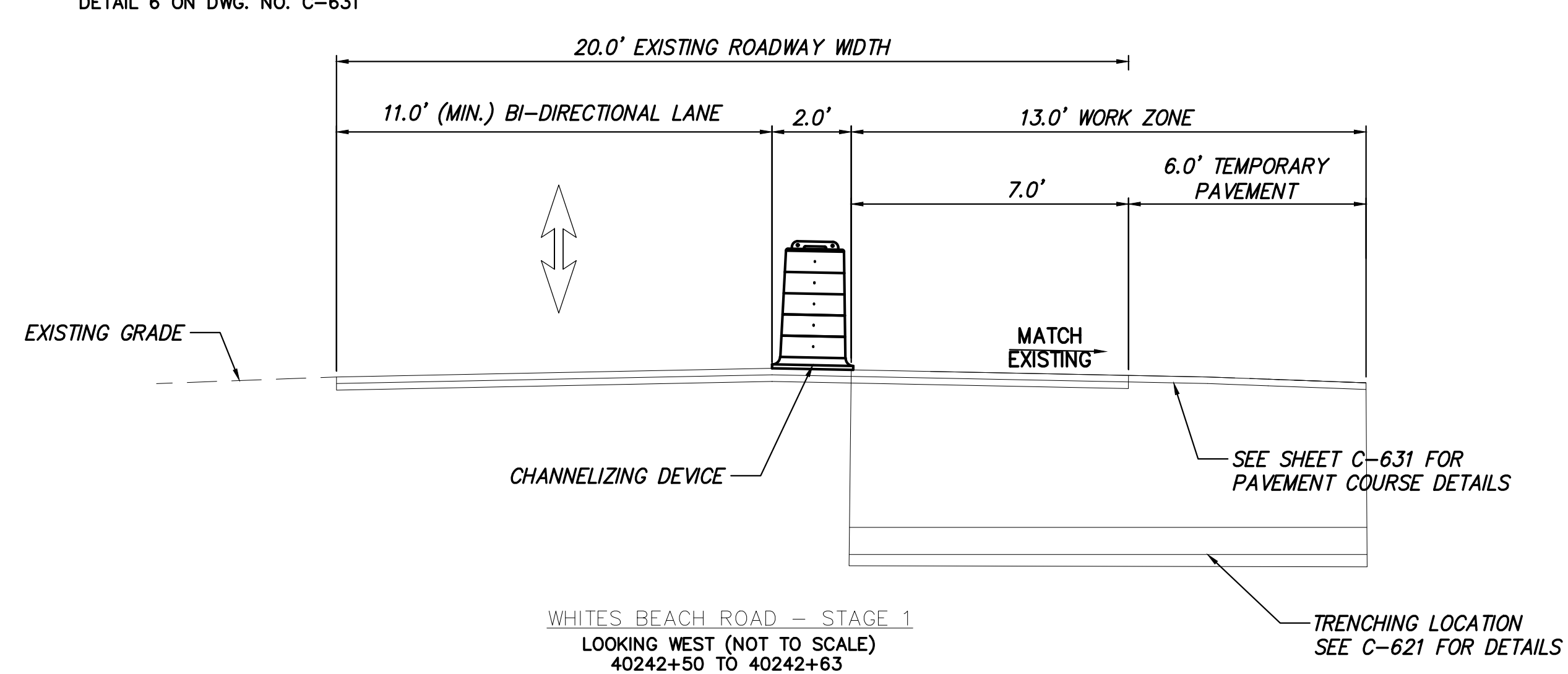


0	08/03/2023	ISSUED FOR CONSTRUCTION SUBMISSION	MS	SB
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 6 (PACKAGE 4A) - CP: BALLSTON TO GLENVILLE
WORK ZONE TRAFFIC CONTROL
TYPICAL SECTIONS
SHEET 1 OF 3

KIEWIT PROJECT NO.	
21162	
KC PROJECT NO.	
120174	
DRAWING NO.	
C-510	
TE	08/03/2023
NO	XXX OF

1. FOR TEMPORARY PAVEMENT DETAILS SEE
DETAIL 6 ON DWG. NO. C-631



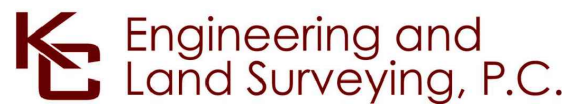
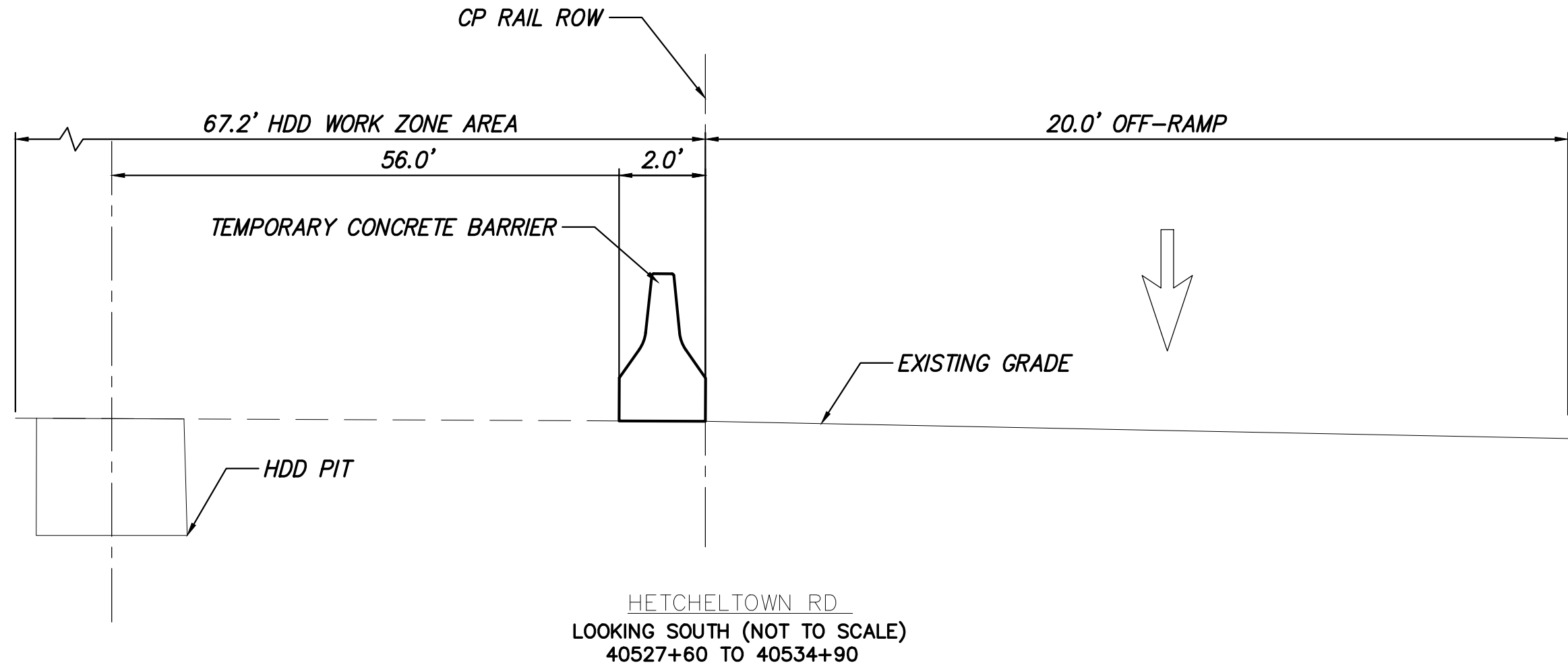
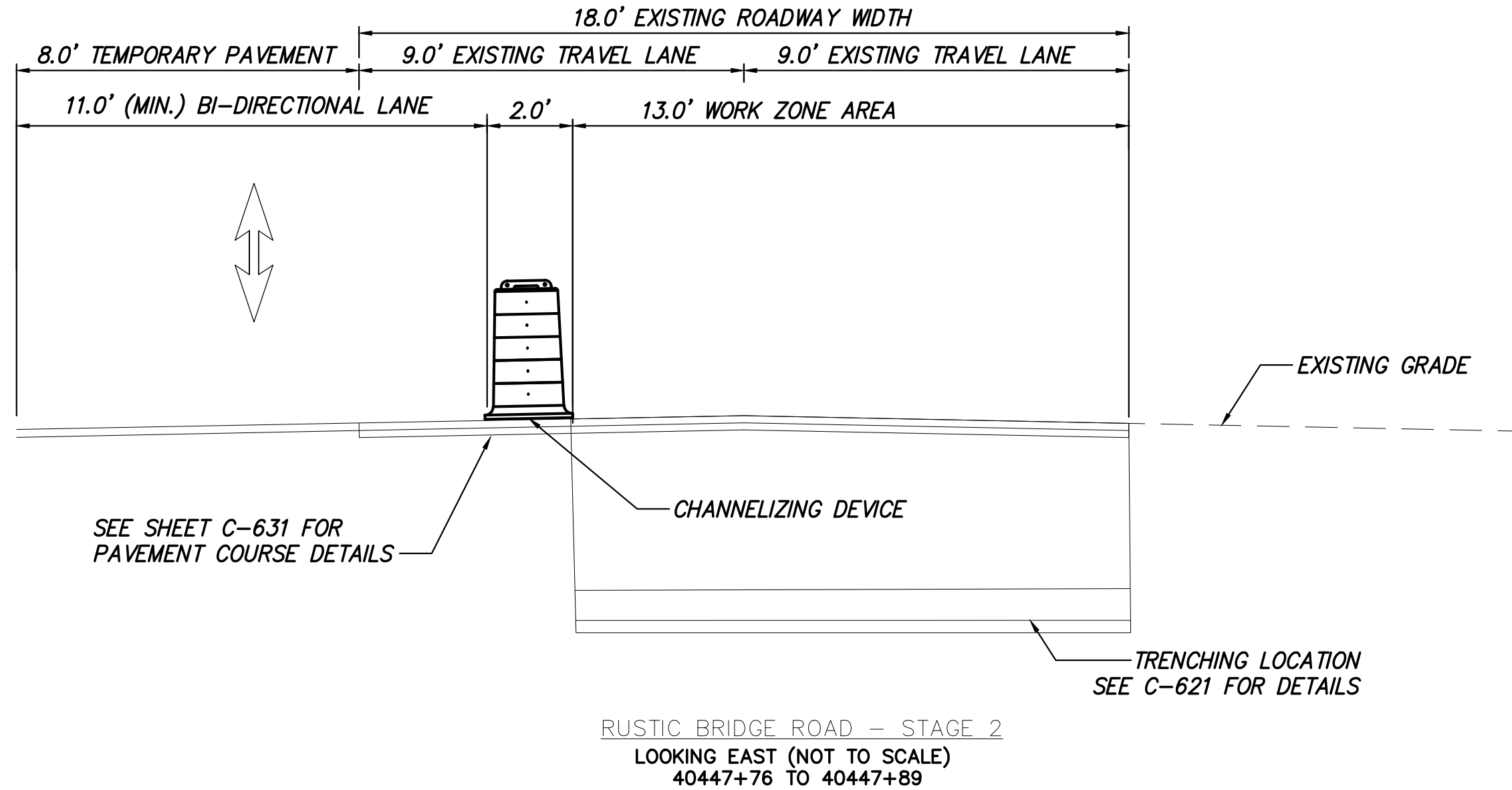
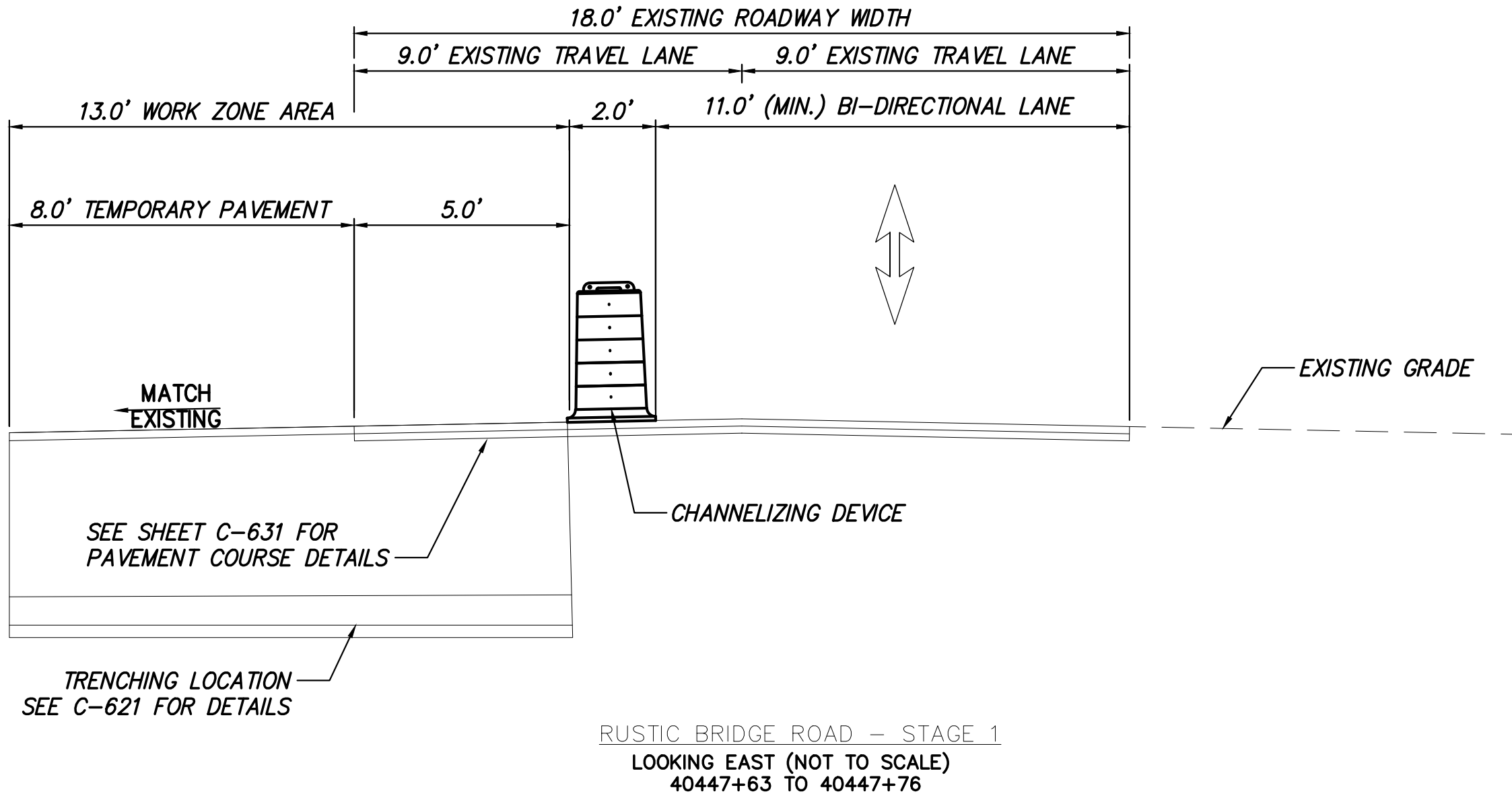
0	08/03/2023	ISSUED FOR CONSTRUCTION SUBMISSION	MS	SB
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 6 (PACKAGE 4A) - CP: BALLSTON TO GLENVILLE
WORK ZONE TRAFFIC CONTROL
TYPICAL SECTIONS
SHEET 2 OF 3

KIEWIT PROJECT NO.	
21162	
KC PROJECT NO.	
120174	
DRAWING NO.	
C-511	
DATE	08/03/2023
SH.NO.	XXX OF --

File: P:\20174-CHPE-CABLE-INSTALL-KIEWIT\60_CAD\20_ENGINEERING_CAD_FILES\PACKAGE_4A\NY_TRAFFIC_SAFETY\01_KCE\SHEET_FILES\21162_4A_C-510-512.DWG Saved: 7/21/2023 10:44:06 AM Plotted: 7/21/2023 10:50:42 AM Current User: Manny Sharma LastSavedBy: msharma

NOTES:
1. FOR TEMPORARY PAVEMENT DETAILS SEE
DETAIL 6 ON DWG. NO. C-631



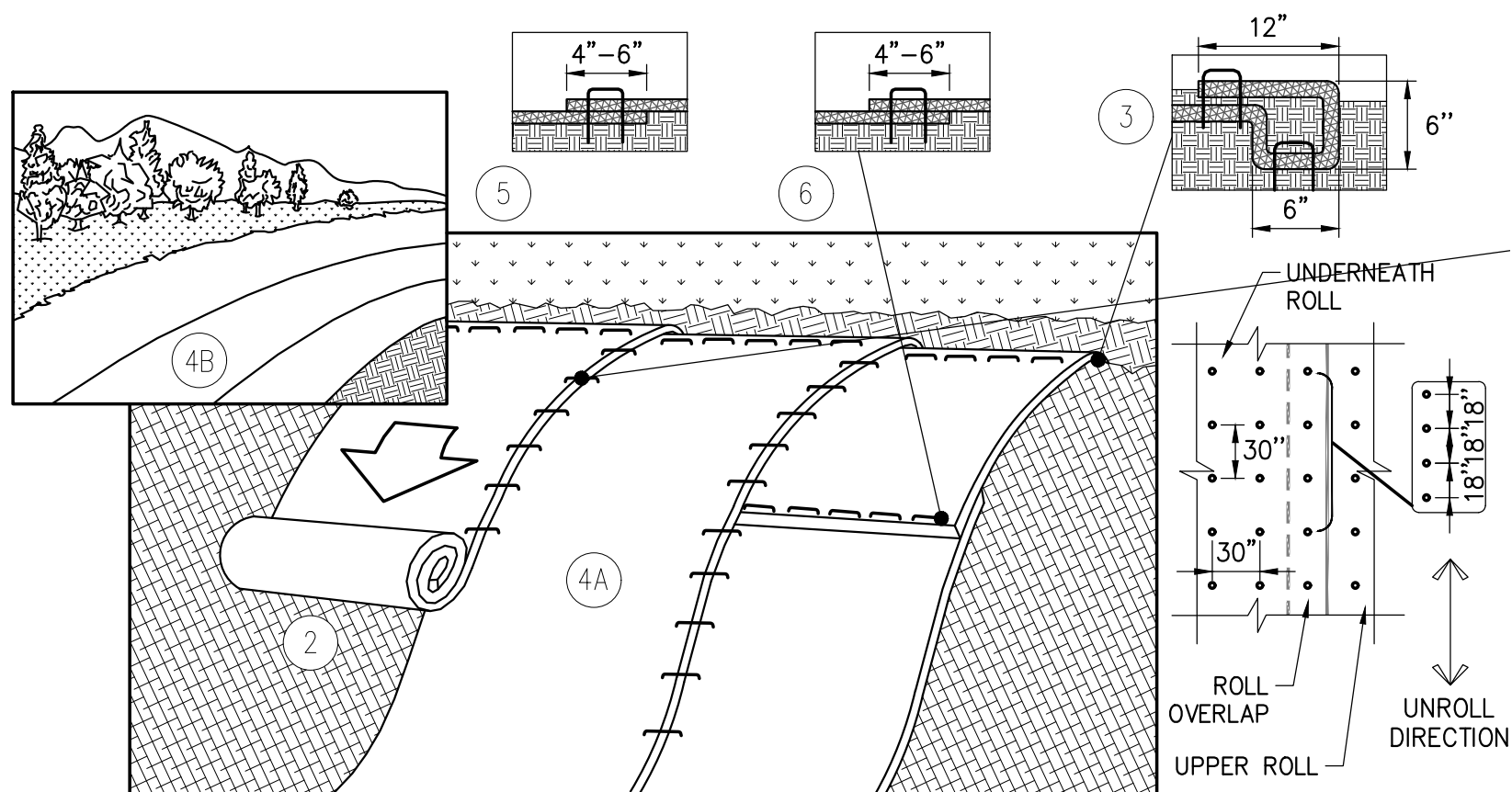
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

0	08/03/2023	ISSUED FOR CONSTRUCTION SUBMISSION	MS	SB	
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 6 (PACKAGE 4A) - CP: BALLSTON TO GLENVILLE
WORK ZONE TRAFFIC CONTROL
TYPICAL SECTIONS
SHEET 3 OF 3

DRAWN BY:	AB	DESIGNED BY:	MS	APPROVED BY:	SB	SCALE	AS NOTED
						REV. NO.	X

KIEWIT PROJECT NO.	21162
KC PROJECT NO.	120174
DRAWING NO.	C-512
DATE	08/03/2023
SH.NO.	XXX OF --



- SCALE: N.T.S.

File: P:\120174-CHPE-CABLE_INSTALL-KIEWIT\60_CAD\20_ENGINEERING_CAD_FILES\PACKAGE_4A\NY_ENVIRONMENTAL_(EROSION_CONTROL)\01_KC\SHEET_FILES\21162_4A_ESC-DETAILS.DWG Saved: 7/21/2023 3:52:53 PM Plotted: 8/7/2023 4:18:07 PM User: Benson Lam LastSavedBy: jomitez

1

2

3

4

- APPLICATION NOTES:
- THE PRIMARY PURPOSE OF A CHECK DAM IS TO REDUCE EROSION IN A CHANNEL BY REDUCING FLOW VELOCITY IN THE CHANNEL.
 - CHECK DAMS WILL CAPTURE SEDIMENT THAT FALLS OUT OF SUSPENSION BEHIND THE UPSTREAM SIDE OF THE CHECK DAM DUE TO DECREASED VELOCITY.
 - CHECK DAMS ARE NOT INTENDED TO, AND WILL NOT, FILTER SEDIMENT FROM TURBID WATER.
 - SLOPES EXCEEDING 10% SHALL INCLUDE A CHANNEL PROTECTIVE LINING.
 - AVOID PLACEMENT OF STONE CHECK DAMS WITHIN ROADWAY CLEAR ZONES, INSTEAD CONSIDER SEDIMENT FILTER LOG CHECK DAMS OR PREFABRICATED CHECK DAM.
 - CHECK DAMS SHALL BE ANCHORED IN THE CHANNEL BY A CUT OFF TRENCH 1.5 FEET WIDE AND 0.5 FEET DEEP AND LINED WITH FILTER FABRIC TO PREVENT SOIL MIGRATION.
 - THE UPSTREAM DAM TOE SHALL BE AT EQUAL ELEVATION TO THE DOWN STREAM DAM CREST.

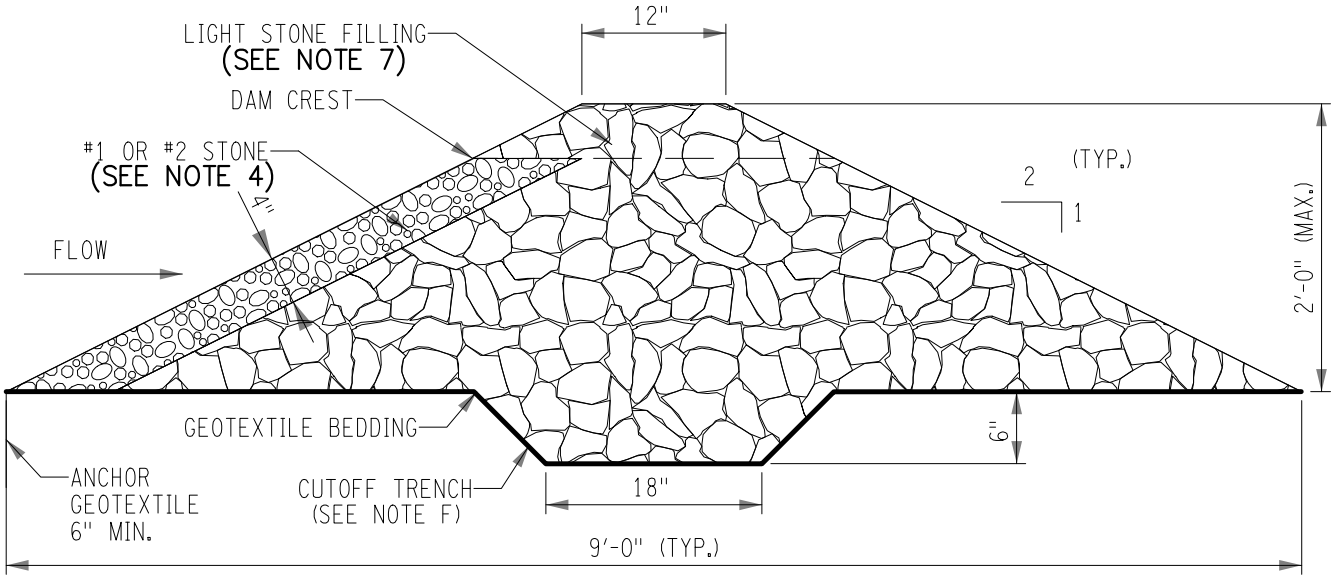
- GENERAL NOTES:
- MAXIMUM DRAINAGE AREA CONTRIBUTING TO TEMPORARY STONE CHECK DAM SHALL BE 2 ACRES.
 - MEASURES SHALL BE INSPECTED EVERY (7) CALENDAR DAYS AND SHOULD BE INSPECTED AFTER EACH RUNOFF EVENT. MEASURES SHALL BE CLEANED AND REPAIRED AS REQUIRED.
 - SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
 - COARSE AGGREGATE FACING MATERIAL FOR THE STONE CHECK DAM SHALL MEET THE GRADATION REQUIREMENTS OF SIZE DESIGNATION #1 OR #2 OF TABLE 703-4 FROM SECTION 703-02 OF THE NYSDOT STANDARD SPECIFICATIONS. STONE FILLING CORE MATERIAL FOR THE STONE CHECK DAM SHALL MEET THE GRADATION REQUIREMENTS OF LIGHT STONE FILLING.
 - THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM SHALL BE PROTECTED FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
 - DURING INSPECTIONS ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCE BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
 - REFER TO SECTION 733-21 OF THE NYSDOT STANDARD SPECIFICATIONS FOR LIGHT STONE FILL GRADATION.

STONE CHECK DAM PLACEMENT INTERVAL *	
DITCH SLOPE	PLACEMENT INTERVAL (I) (BASED ON 2' HEIGHT)
1 %	200'
2 %	100'
3 %	66'
4 %	50'
5 %	40'
6 %	33'
8 %	25'
10 %	20'

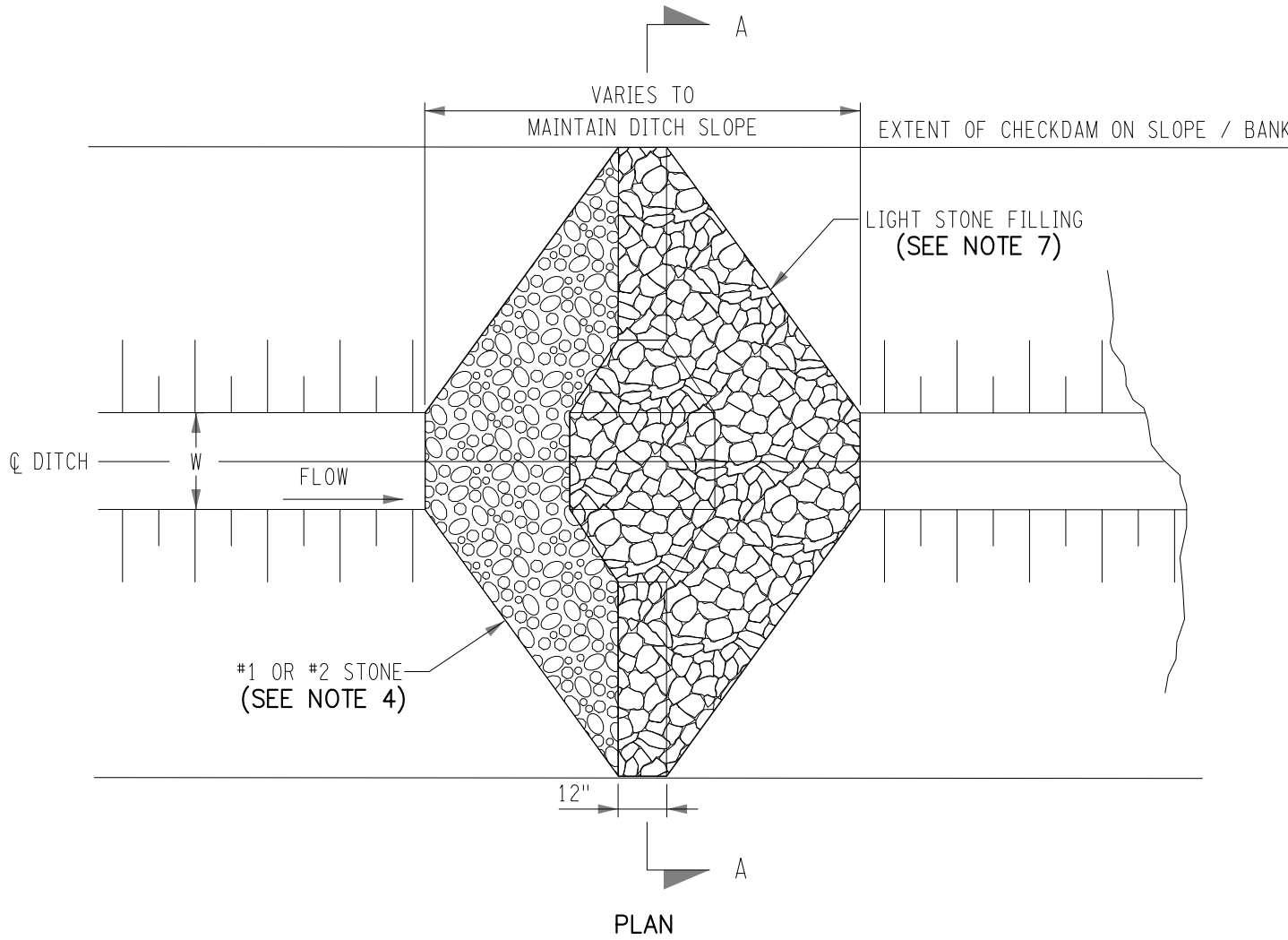
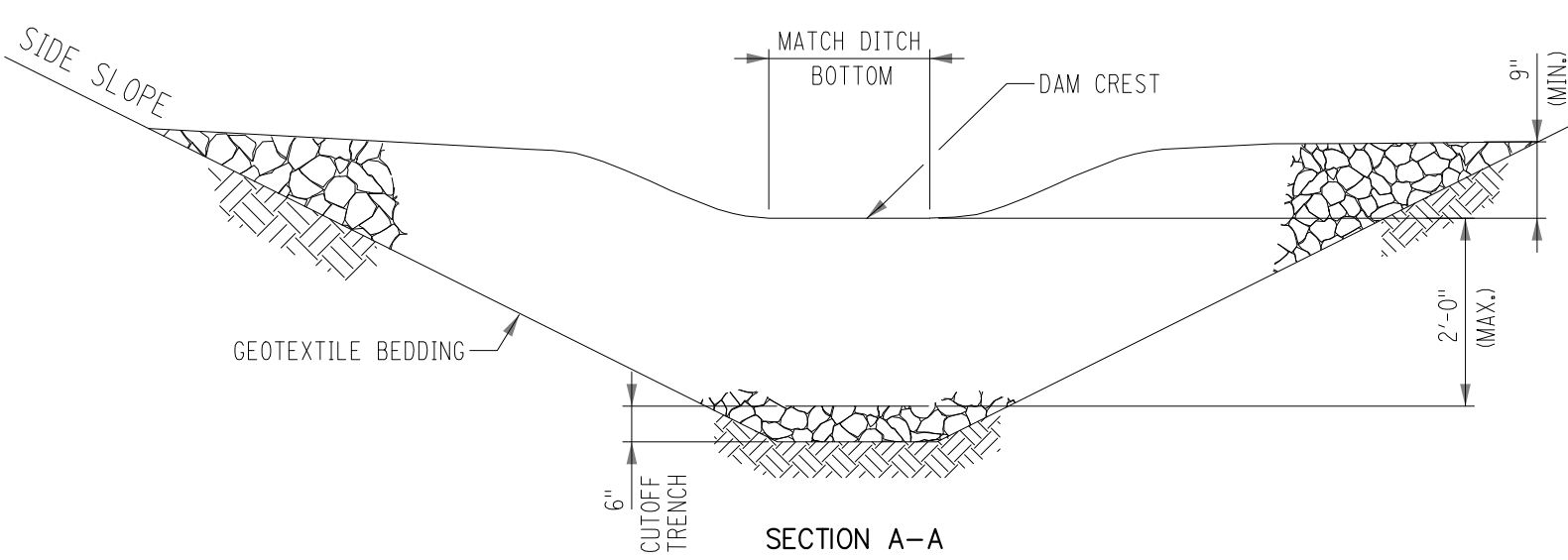
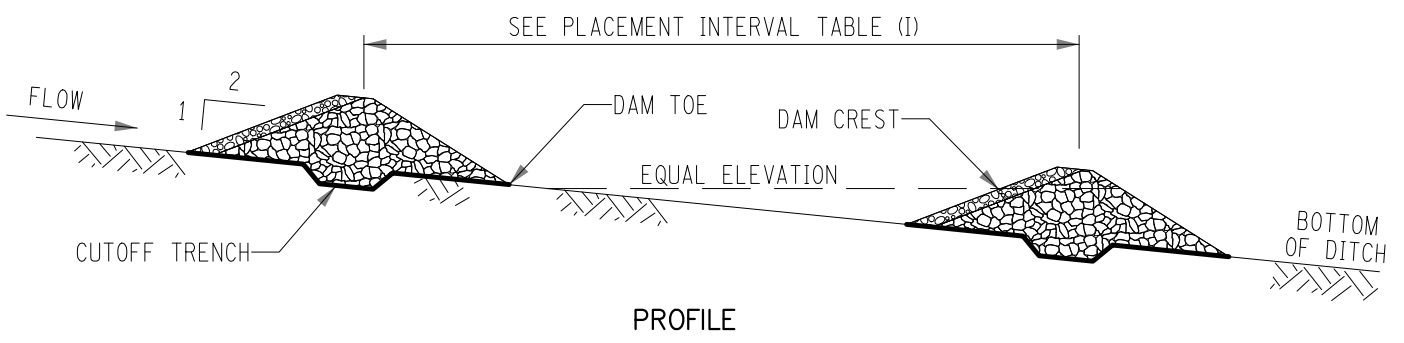
* $I = H / S$
WHERE:
I = CHECK DAM SPACING INTERVAL
H = CHECK DAM HEIGHT
S = CHANNEL SLOPE

TEMPORARY CHECK DAM VOLUMES	
DITCH SIDE SLOPE	VOLUME (CY)
1 : 2	3.45 CY ±
1 : 3	4.25 CY ±
1 : 4	5.43 CY ±
1 : 6	7.81 CY ±

BASED ON V SHAPED DITCH SECTION FOR TRAPEZOIDAL DITCH, ADD 1.70 CUBIC YARD / YARD OF DITCH WIDTH

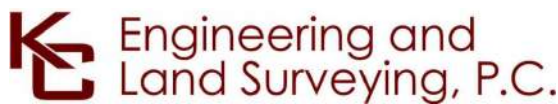


CROSS SECTION



1 TEMPORARY CHECK DAM DETAIL

SCALE: N.T.S.



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	08/03/2023	ISSUED FOR CONSTRUCTION SUBMISSION	BL	SL

CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 6 (PACKAGE 4A) - CP: BALLSTON TO GLENVILLE EROSION AND SEDIMENT CONTROL DETAILS

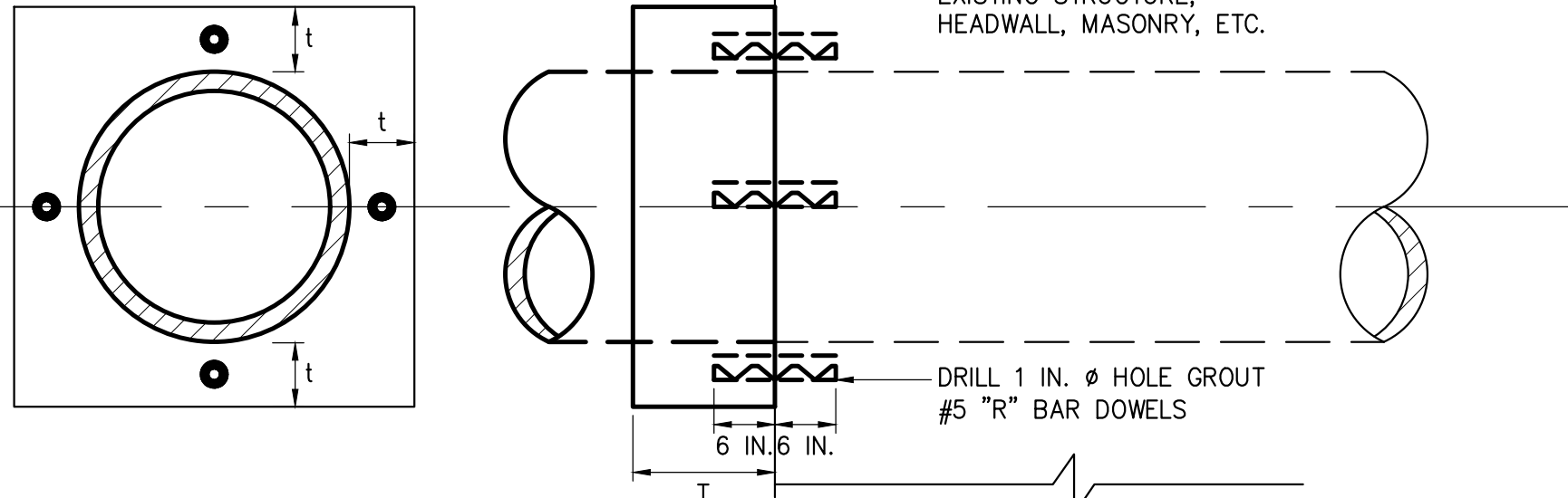
DRAWN BY:	BL	DESIGNED BY:	BL	APPROVED BY:	SL	SCALE	AS SHOWN	DATE	08/03/2023
						REV. NO.		SH.NO.	OF

C-604

08/03/2023

A

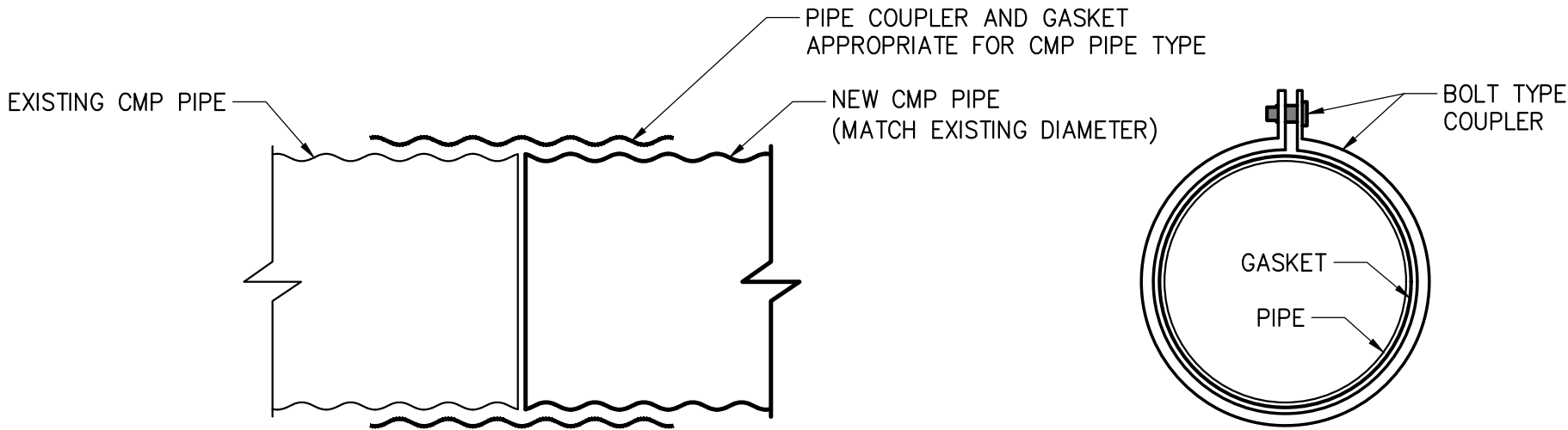
B



INSIDE DIA. IN.	"t" IN.	"T" IN.	NO. DOWELS REQUIRED *
THRU 19	9	12	4
20 - 29	9	12	4
30 - 39	9	12	6
40 - 49	9	12	8
50 - 59	12	18	8
60 - 69	12	18	8
70 - 79	12	18	10
80 - 89	12	18	12

* SPACE EVENLY AROUND PIPE AS INDICATED.

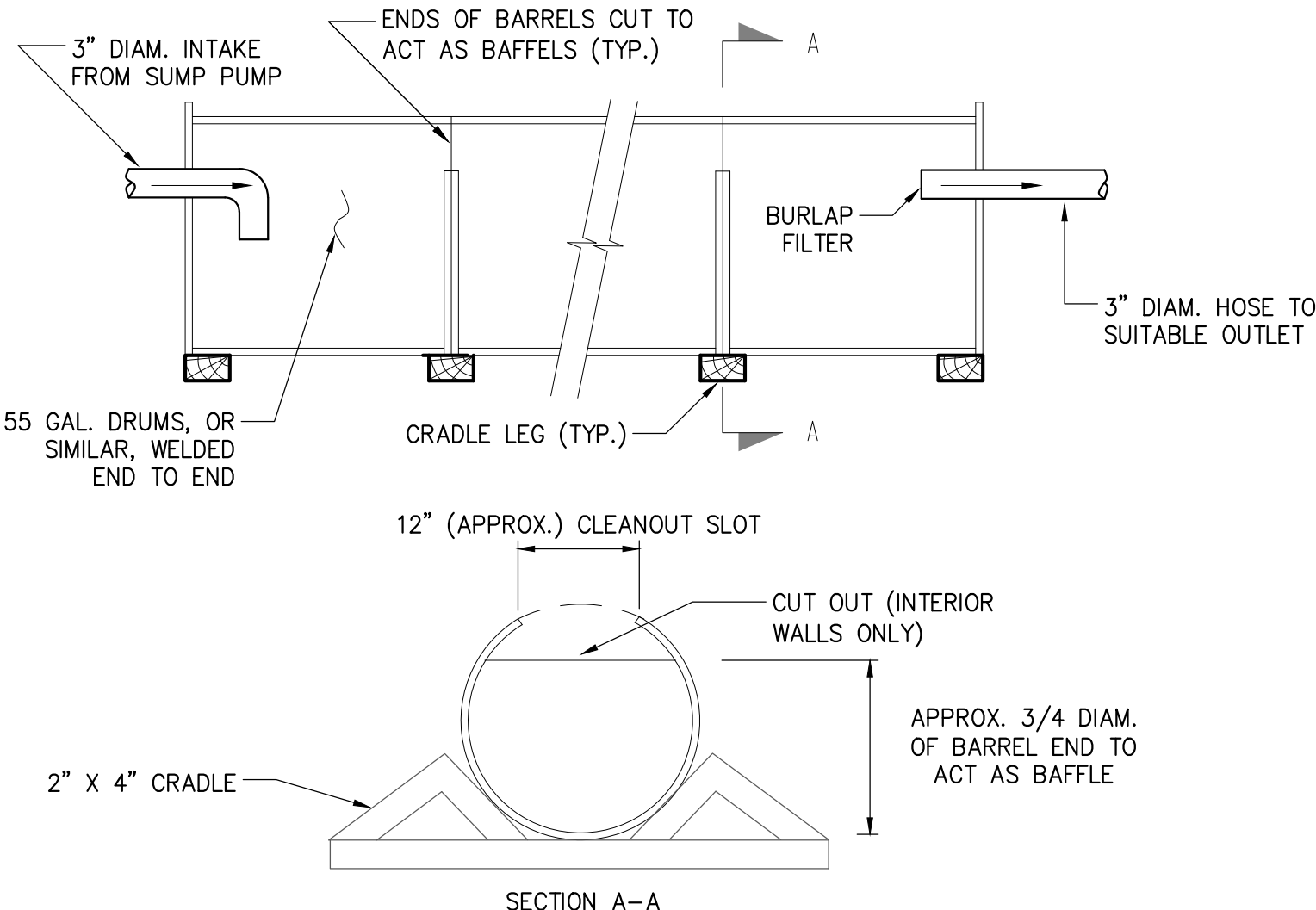
CONCRETE COLLARS FOR PIPE EXTENSIONS



CORRUGATED METAL PIPE EXTENSIONS

2 PIPE EXTENSION DETAIL

SCALE: N.T.S.

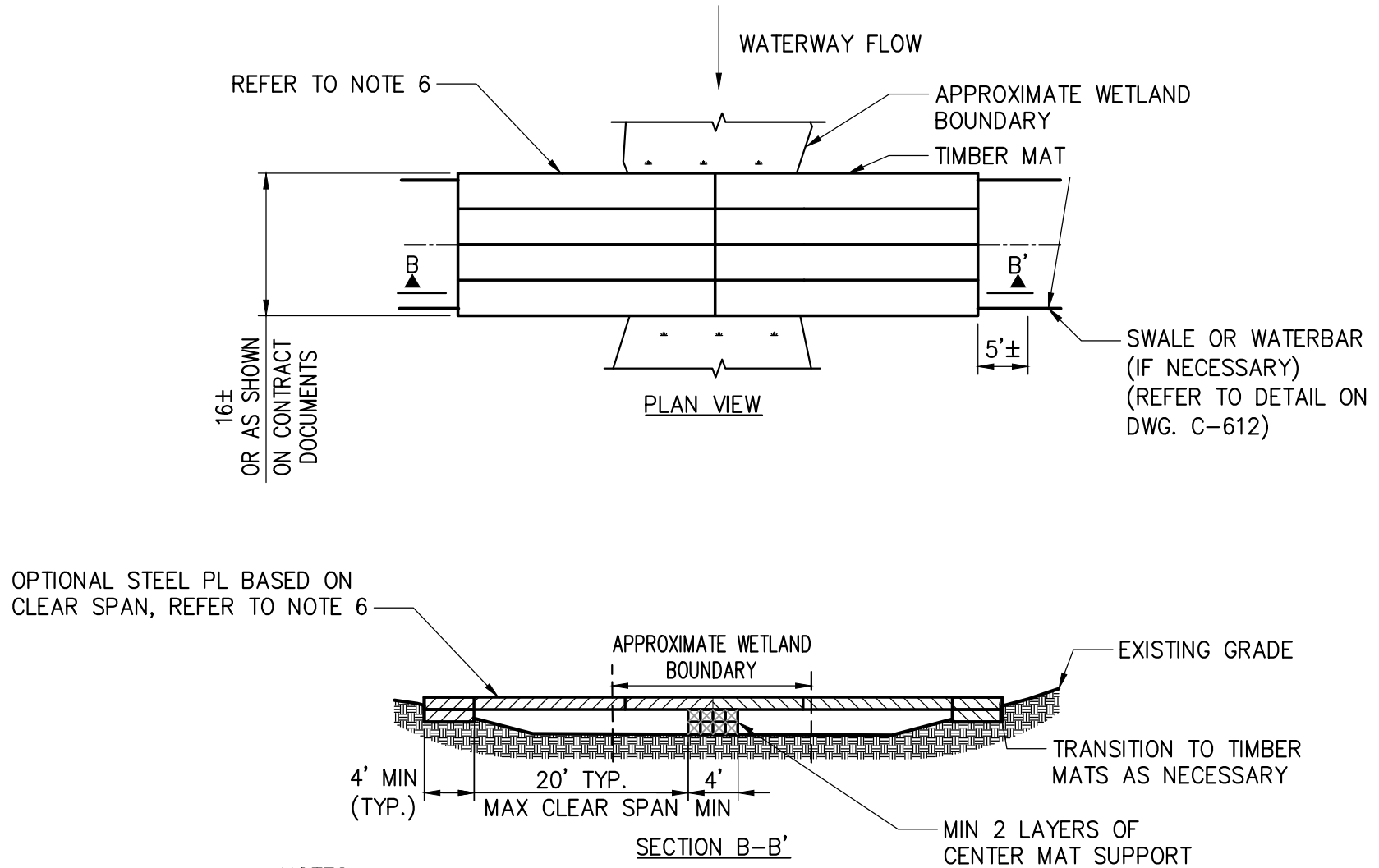


3 PORTABLE SEDIMENT TANK

SCALE: N.T.S.

CONSTRUCTION SPECIFICATIONS

- CLEAN OUT THE SEDIMENT TANK WHEN ONE THIRD (1/3) FILLED WITH SILT.
- STEEL DRUMS ARE USED AS AN EXAMPLE DUE TO THEIR READY AVAILABILITY. ANY TANKS MAY BE USED, PROVIDING THAT THE VOLUME REQUIREMENTS ARE MET.
- ALL SEDIMENT COLLECTED IN THE TANK SHALL BE DISPOSED OF IN A SEDIMENT TRAPPING DEVICE OR AS APPROVED BY THE INSPECTOR.



- NOTES:
1. TIMBER MATS SHOULD BE INSTALLED IN WETLANDS AND OTHER AREAS IF NECESSARY TO PREVENT RUTTING.
2. FOR CROSSINGS WITH LARGER SPANS THE CONTRACTOR SHALL CONSULT WITH THE TEMPORARY STRUCTURES AND CONSTRUCTION DEVICES ENGINEER.
3. TIMBER MAT SURFACE SHOULD BE LEVEL TO PREVENT EQUIPMENT AND VEHICLES FROM SLIDING OFF DURING MUDDY OR ICING CONDITIONS, AND PREVENT TIMBERS FROM BREAKING.
4. SEDIMENT TRACKED ONTO TIMBER MATTING SHOULD BE REMOVED AS NECESSARY TO PREVENT SEDIMENT FROM ENTERING WETLAND DURING RAIN EVENTS. SEDIMENT SHOULD BE REMOVED TO A STABILIZED SOIL STOCKPILE OR OTHER APPROVED LOCATION.
5. PERIMETER EROSION AND SEDIMENT CONTROLS ARE REQUIRED TO BE INSTALLED PRIOR TO PLACING TIMBER MATTING.
6. UNLESS PERMITTED FROM REMOVAL, STUMPS WITHIN THE WETLAND SHOULD REMAIN. THIS MAY REQUIRE ADDITIONAL TIMBERS TO BRIDGE ABOVE.
7. UPON REMOVAL OF TIMBER MATTING ALL SPLINTERED WOOD SHOULD BE REMOVED. IF EXPOSED SOILS ARE PRESENT STRAW MULCH SHOULD BE APPLIED.
8. ALL EQUIPMENTS SHOULD MAINTAIN A MINIMUM OF 2 FT SETBACK FROM EDGE OF THE MATS WHILE CROSSING.
9. SINGLE OR MULTIPLE LAYERS OF MATS SHALL BE PLACED BASED ON EXISTING SOIL CONDITIONS.

1. IN-STREAM EXCAVATION SHOULD BE COMPLETED IN ACCORDANCE WITH "TEMPORARY ACCESS WATERWAY CROSSING" ON PAGE 2.32 OF THE 2016 NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (OR NEWEST VERSION) AND IN ACCORDANCE WITH SECTION 9.1 WATER BODIES IN THE PROJECT EM&CP.
2. THE CONSTRUCTION OF ANY CROSSING SHOULD NOT CAUSE A SIGNIFICANT WATER LEVEL DIFFERENCE BETWEEN THE UPSTREAM AND DOWNSTREAM WATER SURFACE ELEVATIONS. FISH SPAWNING OR MIGRATION DATES CAN VARY ACROSS NEW YORK, AND RESTRICTIONS IMPOSED BY THE NYSDEC MAY VARY AND MUST BE VERIFIED. REFER TO CERTIFICATE OF CONDITIONS.
3. ALL FILL MATERIALS ASSOCIATED WITH THE ROADWAY APPROACH SHOULD BE LIMITED TO A MAXIMUM HEIGHT OF 2 FT ABOVE THE EXISTING FLOOD PLAIN ELEVATION.
4. A WATER DIVERTING STRUCTURE SUCH AS A SWALE OR WATER BAR SHOULD BE CONSTRUCTED (ACROSS THE ROADWAY ON BOTH ROADWAY APPROACHES) 50 FEET (MAXIMUM) ON EITHER SIDE OF THE WATERWAY CROSSING. THIS WILL PREVENT ROADWAY SURFACE RUNOFF FROM DIRECTLY ENTERING THE WATERWAY. THE 50 FEET MEASURED IS MEASURED FROM THE TOP OF THE WATERWAY BANK. IF THE ROADWAY APPROACH IS CONSTRUCTED WITH A REVERSE GRADE AWAY FROM THE WATERWAY, A SEPARATE DIVERTING STRUCTURE IS NOT REQUIRED.
5. ALL EQUIPMENT SHOULD MAINTAIN A MINIMUM OF 2 FT SETBACK FROM EDGE OF THE MATS WHILE CROSSING.
6. CONTRACTOR SHALL CONSULT WITH TEMPORARY STRUCTURES AND CONSTRUCTION DEVICES ENGINEER FOR APPROPRIATE MATTING SIZES AND LENGTHS AND REQUIRED SOIL BEARING PRESSURES.

☐ OPTION "A"
NOT TO SCALE

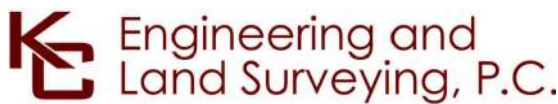
☐ **OPTION "B"**
NOT TO SCALE

1	TIMBER MATTING (WETLAND CROSSING)
---	-----------------------------------

SCALE: N.T.S

GENERAL NOTES

1. TIMBER SHALL BE SELECT STRUCTURAL MIXED OAK WITH A MINIMUM BENDING STRESS OF 1250 PSI OR BETTER.
2. CONTRACTOR TO VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO COMMENCING WORK. ANY ERRORS, OMISSIONS, OR UNUSUAL CONDITIONS ARE TO BE REPORTED TO THE TEMPORARY STRUCTURES AND CONSTRUCTION DEVICES ENGINEER IMMEDIATELY.



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

						CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 6 (PACKAGE 4A) - CP: BALLSTON TO GLENVILLE WETLAND CROSSING DETAILS						KIEWIT PROJECT NO.		
												21162		
												KC PROJECT NO.		
												120174		
												DRAWING NO.		
												C-611		
0	07/28/2023	ISSUED FOR CONSTRUCTION SUBMISSION	BL	SL										
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	DRAWN BY:	BL	DESIGNED BY:	BL	APPROVED BY:	SL	SCALE REV. NO.	AS NOTED 0	DATE SH.NO.	07/26/2023 OF