

JOINT SELECTION TABLE													
DESCRIPTIO	N OF JOINT	LOCATION:		ABUTMENT NO. 1									
THERMAL M	OVEMENT RA	ANGE:	X INCHES										
PROI	PRODUCT				OVEMENT   MINIMUM		MIN. BRIDGE DECK GAP AT 110° F (IN)	DECK JOINT GAP, "J", AT INSTALLATION (IN.)					DEPTH OF SHELF (IN.)
		CAPACITY	J MIN, AT 110° F (IN)	SHELF (IN)	"G" ` ´	40° F	50° F	60° F	70° F	80° F	, ,		
				DECK EXPAN	SION JOINT								
				SKEW	= XX°								
EMSEAL	BEJS XXXX	X.XX"											
WABO-FS	FS-XXX	X.XX"											
SILICOFLEX	SILICOFLEX SF XXX X.XX"  V-SEAL V-XXX X.XX"												
V-SEAL													
		1	F	PARAPET EXPA	NSION JOINT		l	1					
				SKEW	= XX°								
EMSEAL	BEJS XXXX	X.XX"											
WABO-FS	FS-XXX	X.XX"											
SILICOFLEX	SF XXX	X.XX"											
V-SEAL	V-XXX	X.XX"											
			S:	IDEWALK EXP	ANSION JOINT								
				SKEW	= XX°								
EMSEAL	BEJS XXXX	X.XX"											
WABO-FS	FS-XXX	X.XX"											
SILICOFLEX	SF XXX	X.XX"											
WABO-FS	FS-XXX	X.XX"											

NOTE: BRIDGE DECK GAP, G = J - 2 \* (WIDTH OF SHELF)

			JOIN	IT SELEC	TION TABL	E					
DESCRIPTIO	ON OF JOINT	LOCATION:			PIER	NO. 2					
THERMAL M	IOVEMENT RA	NGE:	X INCHES								
PROI	NOMINAL PRODUCT MOVEMENT		DDUCT MOVEMENT DECK JOINT CAR SE		WIDTH OF DECK GAP SHELF (IN) AT 110° F (IN)	DECK JOINT GAP, "J", AT INSTALLATION (IN.)				DEPTH OF SHELF (IN.)	
		CAPACITY	J MIN, AT 110° F (IN)	(114)	"G"	40° F	50° F	60° F	70° F	80° F	311221 (1111)
				DECK EXPAN	SION JOINT						
				SKEW	= XX°						
EMSEAL	BEJS XXXX	X.XX"									
WABO-FS	FS-XXX	X.XX"									
SILICOFLEX	SF XXX	X.XX"									
V-SEAL	V-XXX	X.XX"									
	•		F	PARAPET EXPA	NSION JOINT	•	•	,	•	,	
				SKEW	= XX°						
EMSEAL	BEJS XXXX	X.XX"									
WABO-FS	FS-XXX	X.XX"									
SILICOFLEX	SF XXX	X.XX"									
V-SEAL	V-XXX	X.XX"									
	•		S	IDEWALK EXP	ANSION JOINT	•	•	,	•	,	
				SKEW	= XX°						
EMSEAL	BEJS XXXX	X.XX"									
WABO-FS	FS-XXX	X.XX"									
SILICOFLEX	SF XXX	X.XX"									
WABO-FS	FS-XXX	X.XX"									

NOTE: BRIDGE DECK GAP, G = J - 2 \* (WIDTH OF SHELF)

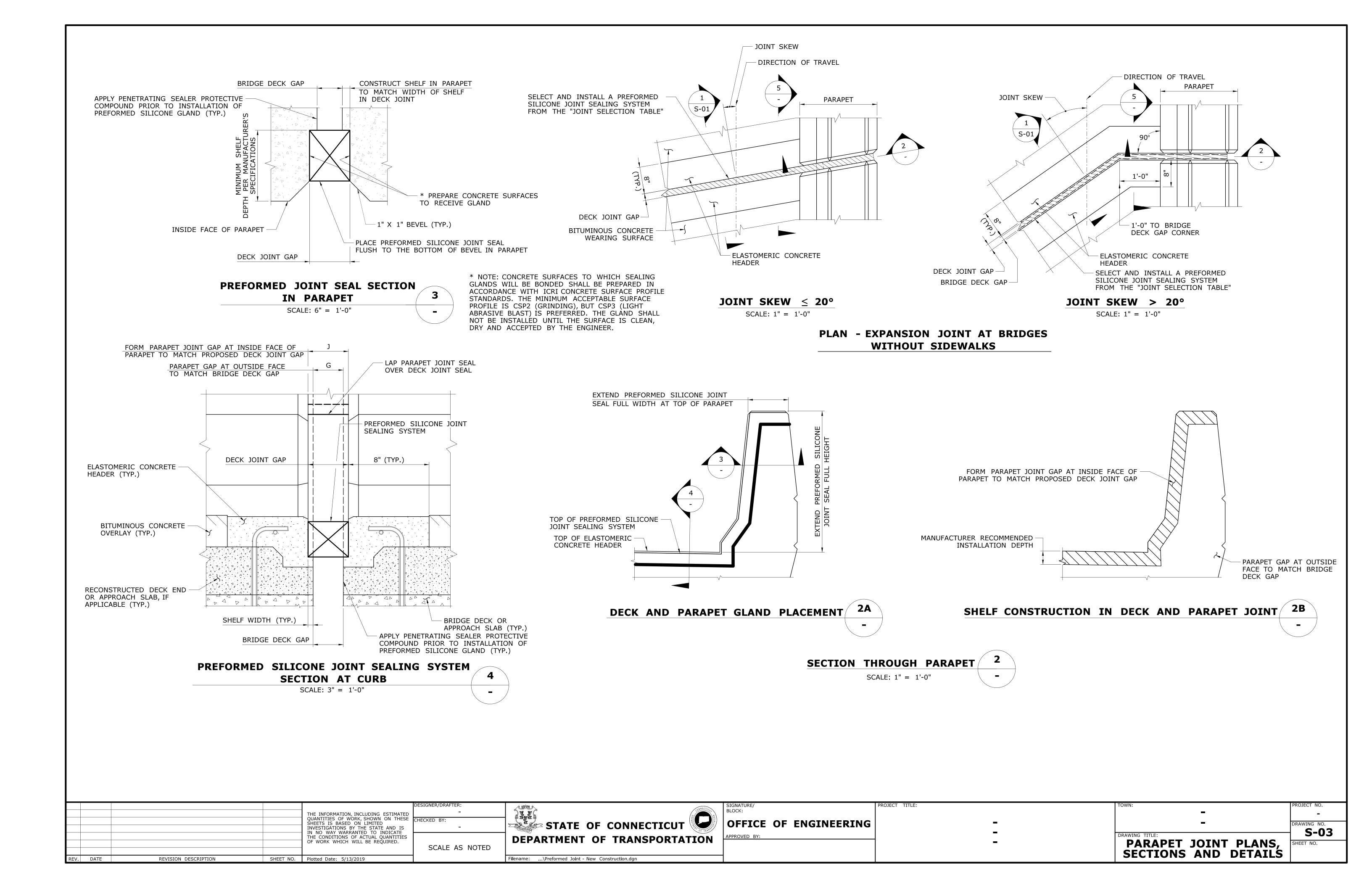
JOINT SELECTION TABLE													
DESCRIPTION	ON OF JOINT	LOCATION:		PIER NO. 1									
THERMAL M	OVEMENT RA	NGE:	X INCHES										
PROI	DUCT	NOMINAL MOVEMENT	VEWENT   MINIMOM		MIN. BRIDGE DECK GAP AT 110° F (IN)	DECK JOINT GAP, "J", AT INSTALLATION (IN.)					DEPTH OF SHELF (IN.)		
		CAPACITY	J MIN, AT 110° F (IN)	SHELF (IN)	"G"	40° F	50° F	60° F	70° F	80° F	J STILLI (IIV.)		
				DECK EXPAN	SION JOINT								
				SKEW	= XX°								
EMSEAL	BEJS XXXX	X.XX"											
WABO-FS	FS-XXX	X.XX"											
SILICOFLEX SF XXX X.XX"													
V-SEAL	V-XXX	X.XX"											
			F	PARAPET EXPA	NSION JOINT					•			
				SKEW	= XX°								
EMSEAL	BEJS XXXX	X.XX"											
WABO-FS	FS-XXX	X.XX"											
SILICOFLEX	SF XXX	X.XX"											
V-SEAL	V-XXX	X.XX"											
			S	IDEWALK EXP	ANSION JOINT	•				•			
SKEW = XX°													
EMSEAL	BEJS XXXX	X.XX"											
WABO-FS	FS-XXX	X.XX"											
SILICOFLEX	SF XXX	X.XX"											
WABO-FS	FS-XXX	X.XX"											

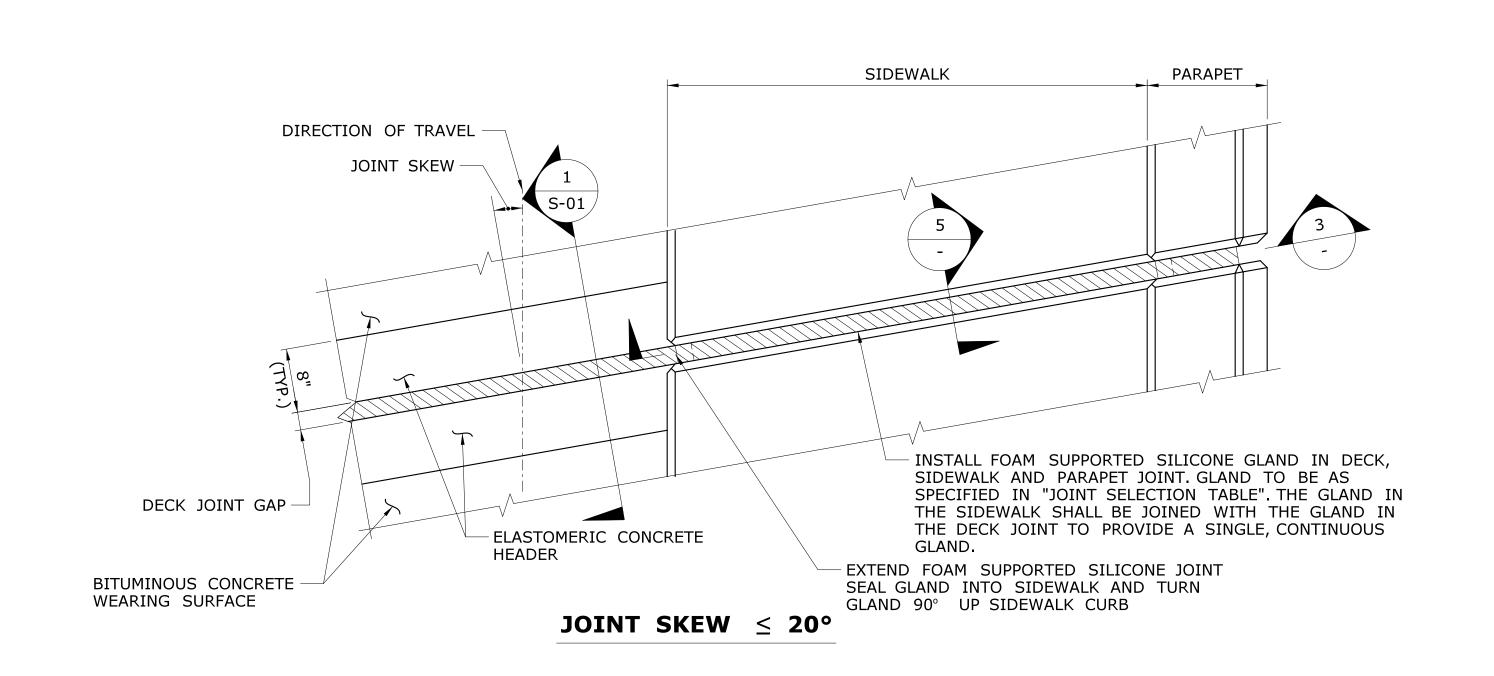
NOTE: BRIDGE DECK GAP, G = J - 2 \* (WIDTH OF SHELF)

			JOIN	IT SELEC	TION TABL	E					
DESCRIPTIO	N OF JOINT	LOCATION:			ABUTMENT NO. 2						
THERMAL M	OVEMENT RA	NGE:	X INCHES								
PROI	DUCT	NOMINAL MOVEMENT	MFR. RECOMMENDED MINIMUM DECK JOINT GAP	MIN. BRIDGE WIDTH OF DECK GAP			DECK AT INS	JOINT G. TALLATIC	AP, "J", DN (IN.)		DEPTH OF SHELF (IN.)
		CAPACITY	J MIN, AT 110° F (IN)		AT 110° F (IN) "G"	40° F	50° F	60° F	70° F	80° F	JIILLI (IIVI)
				DECK EXPAN	SION JOINT						
				SKEW	= XX°						
EMSEAL	BEJS XXXX	X.XX"									
WABO-FS	FS-XXX	X.XX"									
SILICOFLEX	SF XXX	X.XX"									
V-SEAL	V-XXX	X.XX"									
			F	PARAPET EXPA	NSION JOINT	•	•	•			
				SKEW	= XX°						
EMSEAL	BEJS XXXX	X.XX"									
WABO-FS	FS-XXX	X.XX"									
SILICOFLEX	SF XXX	X.XX"									
V-SEAL	V-XXX	X.XX"									
			S	IDEWALK EXP	ANSION JOINT						
				SKEW	= XX°						
EMSEAL	BEJS XXXX	X.XX"									
WABO-FS	FS-XXX	X.XX"									
SILICOFLEX	SF XXX	X.XX"									
WABO-FS	FS-XXX	X.XX"									

NOTE: BRIDGE DECK GAP, G = J - 2 \* (WIDTH OF SHELF)

$\vdash$				T	DESIGNER/DRAFTER:		SIGNATURE/	PROJECT TITLE:	TOWN:	PROJECT NO.
				THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE	- CHECKED BY:		BLOCK:	<u>_</u>		<u>-</u>
				INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	-	OF TRANS	OFFICE OF ENGINEERING	_	DRAWING TITLE:	DRAWING NO.  S-02
				THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	SCALE AS NOTED	DEPARTMENT OF TRANSPORTATION	APPROVED BY:	<del>-</del>	JOINT SELECTION	SHEET NO.
					SCALL AS NOTED				TABLES	
REV.	. DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 5/13/2019		Filename:\Preformed Joint - New Construction.dgn			IADLLS	





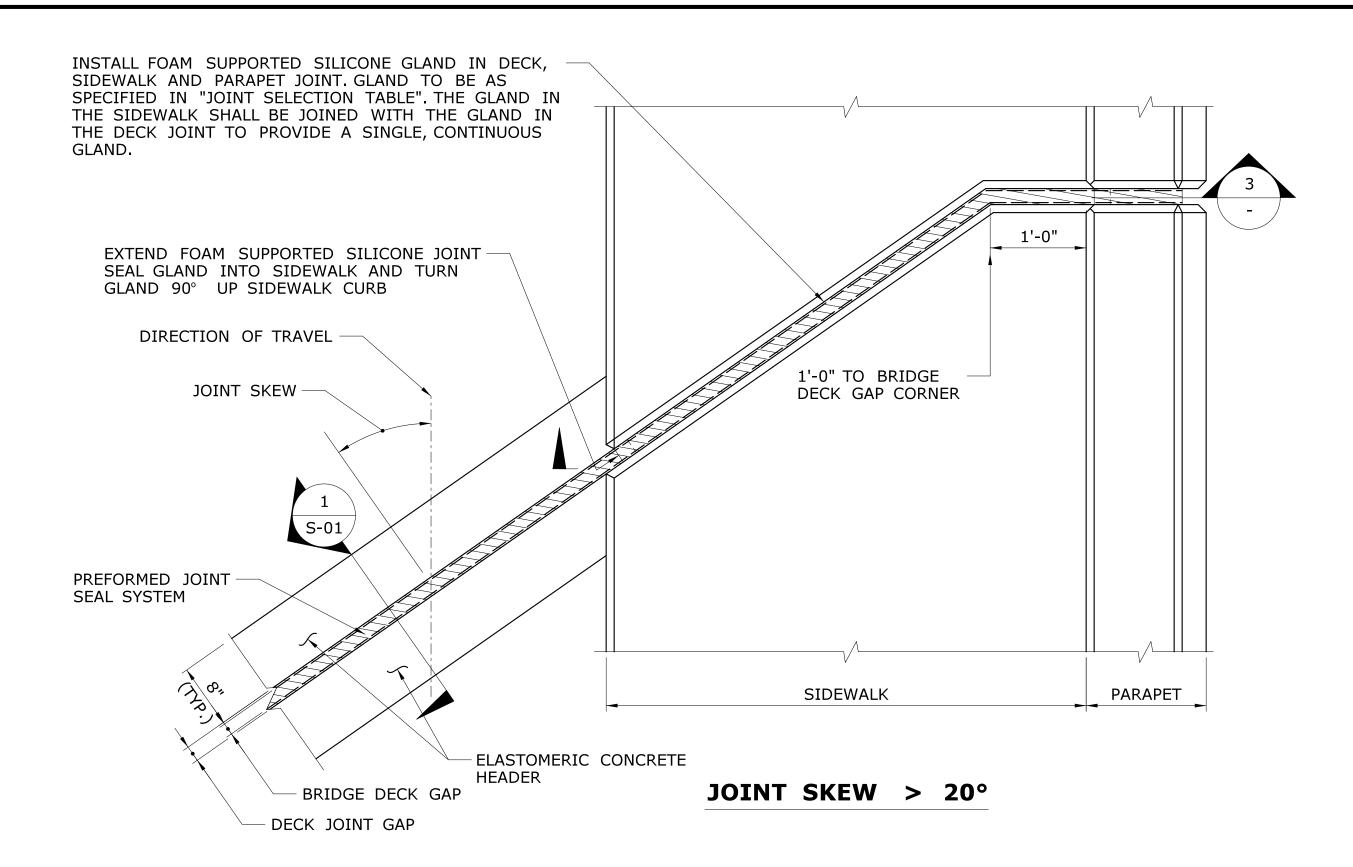
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SHEET NO. Plotted Date: 5/13/2019

REVISION DESCRIPTION

REV. DATE

SCALE AS NOTED

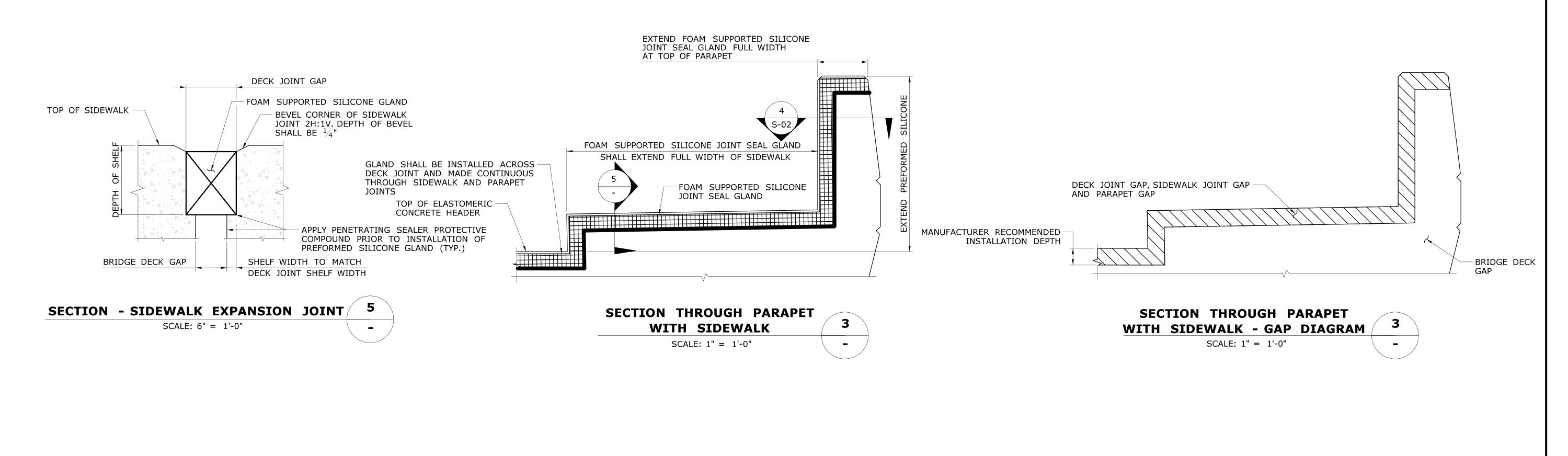


S-04

SIDEWALK JOINT PLANS, SECTIONS AND DETAILS

#### PLAN - EXPANSION JOINT AT SIDEWALKS

SCALE: 1'' = 1'-0''

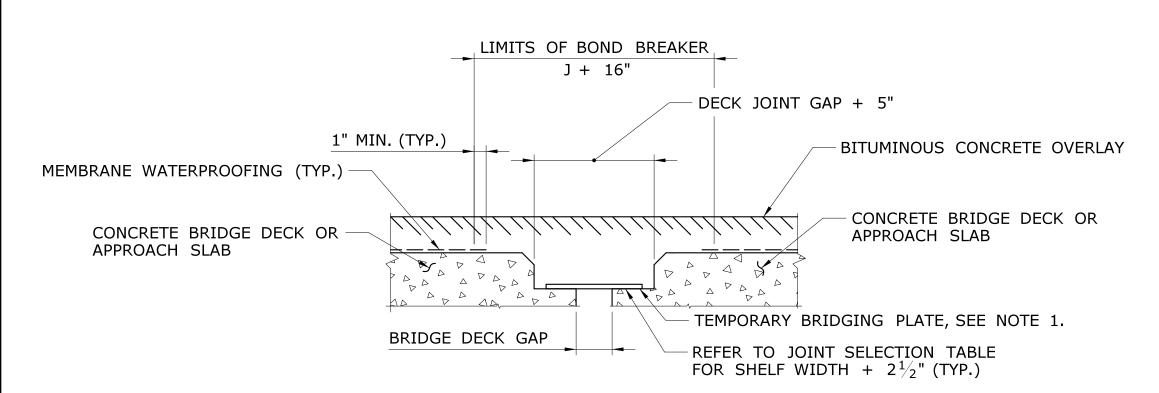


OFFICE OF ENGINEERING

STATE OF CONNECTICUT

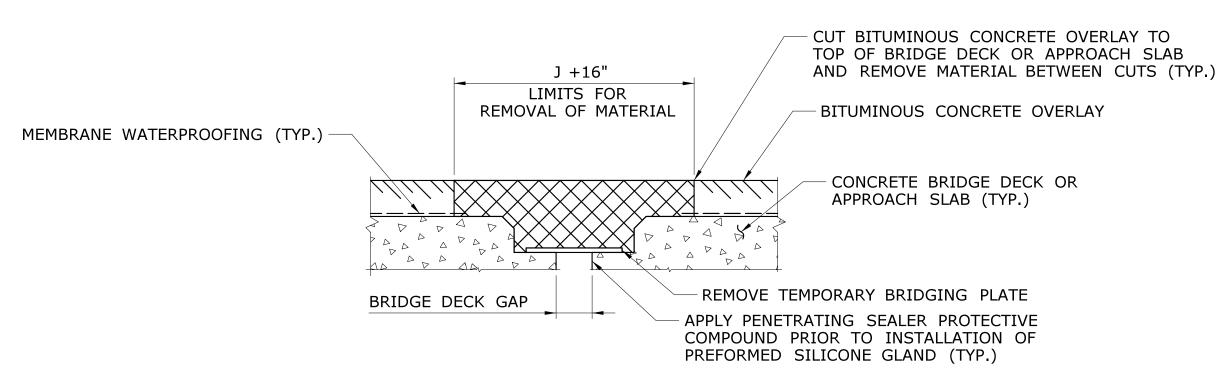
**DEPARTMENT OF TRANSPORTATION** 

Filename: ...\Preformed Joint - New Construction.dgn



## CONSTRUCT NEW BRIDGE DECK AND SHELF, AND APPLY OVERLAY

NOT TO SCALE



## REMOVE OVERLAY FOR CONSTRUCTION OF HEADERS NOT TO SCALE

#### **NEW BRIDGE DECK**

#### **NOTES:**

- 1) A TEMPORARY BACKER ROD MAY BE USED IN LIEU OF A TEMPORARY BRIDGING PLATE IF THE BRIDGE DECK GAP WIDTH IS LESS THAN 3 INCHES.
- 2) DETERIORATED CONCRETE SHALL BE REMOVED TO SOUND CONCRETE. SHOULD REINFORCEMENT BE ENCOUNTERED DURING CONCRETE REMOVAL, CONCRETE SHALL BE REMOVED TO A MINIMUM OF 1 INCH BEYOND REINFORCEMENT.

NOTE: FOR DETAIL OF COMPLETED HEADERS AND PREFORMED JOINT SEAL, SEE SECTION-1 ON S-01.

HORIZONTAL LIMITS SHOWN, SHOULD DETERIORATED CONCRETE BE PRESENT BEYOND THESE LIMITS. REMOVE 3'-0"± (TYP.) ADDITIONAL CONCRETE AS DIRECTED BY THE ENGINEER. REMOVE EXISTING OVERLAY AND JOINT MATERIAL (TYP.) 1" MIN REMOVE EXISTING WATERPROOFING MEMBRANE 6"± BITUMINOUS CONCRETE OVERLAY (TYP.) (TYP.) 1" DEEP SAW CUT (TYP.). LOCATE REINFORCEMENT BEFORE SAWCUTTING **EXISTING WATERPROOFING** MEMBRANE -REMOVE AND REPLACE TRANSVERSE CONCRETE BRIDGE DECK OR BRIDGE DECK GAP BARS WITH #5 GFRP BARS (TYP.) APPROACH SLAB (TYP.) REMOVE CONCRETE TO A MINIMUM DEPTH OF 1" -CUT REINFORCEMENT AS NECESSARY TO MAINTAIN 2" COVER. BELOW BOTTOM MAT OF DECK. SHOULD CONCRETE COAT CUT END WITH ZINC-BASED PRIMER. (TYP.) BE DETERIORATED AT THIS DEPTH, REMOVAL SHALL PROCEED TO SOUND CONCRETE.

REMOVE CONCRETE AT THE DECK END TO THE

### REMOVE OVERLAY AND CONCRETE AT DECK END NOT TO SCALE

PLACE BITUMINOUS CONCRETE OVERLAY LIMITS OF BOND BREAKER DECK JOINT GAP + 5" LAP NEW MEMBRANE WATERPROOFING 6" MIN. OVER EXISTING MEMBRANE (TYP.) 1" MIN. (TYP.) BITUMINOUS OVERLAY (TYP.) - EXISTING BRIDGE DECK OR APPROACH SLAB EXISTING WATERPROOFING MEMBRANE EXISTING BRIDGE DECK OR -APPROACH SLAB RECONSTRUCTED DECK END TEMPORARY BRIDGING PLATE, SEE NOTE 1. (TYP.) BRIDGE DECK GAP FORMED SHELF WIDTH SHALL BE HALF OF MANUFACTURER RECOMMENDED MIN. GAP OPENING +  $2\frac{1}{2}$ " (TYP.) APPLY PENETRATING SEALER PROTECTIVE COMPOUND PRIOR TO INSTALLATION OF PREFORMED SILICONE GLAND (TYP.)

#### RECONSTRUCT DECK END AND RESTORE OVERLAY

NOT TO SCALE

CUT BITUMINOUS CONCRETE OVERLAY TO TOP OF BRIDGE DECK OR APPROACH SLAB AND REMOVE MATERIAL BETWEEN CUTS (TYP.)

LIMITS FOR REMOVAL OF MATERIAL

BITUMINOUS CONCRETE OVERLAY

BITUMINOUS CONCRETE OVERLAY

CONCRETE BRIDGE DECK OR APPROACH SLAB (TYP.)

BRIDGE DECK GAP

REMOVE TEMPORARY BRIDGING PLATE

#### REMOVE OVERLAY FOR CONSTRUCTION OF HEADERS

NOT TO SCALE

#### RECONSTRUCTED BRIDGE DECK END

# PROPOSED SEQUENCE FOR DECK PREPARATION FOR INSTALLATION OF ELASTOMERIC CONCRETE HEADERS AND PREFORMED JOINT SEAL

	DESIGNER/DRAFTER:	SIGNATURE/	PROJECT TITLE:	TOWN:	PROJECT NO.
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE	CHECKED BY:	BLOCK:		-	-
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THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	DEPARTMENT OF TRANS	SPORTATION APPROVED BY:	<del>_</del>	DECK END PREPARATION FOR	
	SCALE AS NOTED			ELASTOMERIC CONCRETE HEADERS	

#### PREFORMED SILICONE JOINT SEALING SYSTEM DESIGNER NOTES

- 1) THERMAL MOVEMENT RANGE SHALL BE MEASURED IN THE DIRECTION ALONG WHICH THE BRIDGE EXPANDS AND CONTRACTS. FOR BRIDGES ON A TANGENT ROADWAY ALIGNMENT, THE MOVEMENT IS IN THE DIRECTION OF TRAVEL. FOR BRIDGES ON A CURVE, THE MOVEMENT IS ALONG A CHORD JOINING THE ENDS OF THE SPAN EXPERIENCING MOVEMENT.
- 2) SHOULD THE PARAPET SHAPE DIFFER FROM THE DETAIL PRESENTED, THE DETAIL MAY BE MODIFIED TO BETTER REPRESENT SITE CONDITIONS.
- 3) THE SIDEWALK DETAIL MAY BE MODIFIED TO ACCOMMODATE SAFETY WALKS.
- 4) THE DESIGNER SHALL PROVIDE A JOINT SELECTION TABLE (SEE TEMPLATE) AND COMPLETE THE TABLE FOR EVERY JOINT LOCATION, SHOULD NO SIDEWALK BE PRESENT, ELIMINATE THE PORTION OF THE TABLE.
- 5) THE DESIGNER SHALL SELECT GLANDS FROM THREE MANUFACTURERS, WHERE POSSIBLE, FOR INCLUSION IN THE TABLE. A PROPRIETARY PRODUCT APPROVAL IS REQUIRED WHEN ONLY ONE OR TWO PRODUCTS ARE SPECIFIED.
- 6) THE DESIGNER SHALL SELECT A SHELF WIDTH THAT IS AT LEAST HALF OF THE MANUFACTURER'S RECOMMENDED MINIMUM GAP WIDTH.
- 7) TO ALLOW REPLACEMENT JOINTS TO BE BID COMPETITIVELY, THE DESIGNER SHALL CONSIDER THE MINIMUM SHELF WIDTH THAT SATISFIES MINIMUM REQUIREMENTS FOR ALL PRODUCTS THAT WILL BE BID FOR THE SPECIFIED JOINT.
- 8) THE DESIGNER SHALL ASSUME THAT THE BRIDGE DECK GAP WILL CLOSE COMPLETELY, AND SET THE DECK JOINT GAP AND SHELF WIDTH ACCORDINGLY.
- 9) THE SHELF WIDTH MAY BE INCREASED AT EXISTING DECK ENDS TO ENSURE THAT THE DECK JOINT GAP SATISFIES THE MANUFACTURER'S RECOMMENDED GAP AT INSTALLATION.
- 10) WHEN EXISTING DECK ENDS ARE TO BE RECONSTRUCTED, THE DESIGNER SHALL PROVIDE DETAILS OF HOW THE PARAPET CURB WILL BE RECONSTRUCTED TO ACCOMMODATE THE DECK JOINT. SHOULD THE PARAPET JOINT BE INCOMPATIBLE WITH THE REQUIRED GLAND, THE DESIGNER SHALL PREPARE DETAILS FOR THE RECONSTRUCTION OF THE PARAPET JOINT AS WELL. THE GLAND FOR THE PARAPET JOINT NEED NOT BE THE SAME PRODUCT AS THE DECK JOINT, SO LONG AS IT IS SUITABLE FOR THE GAP AND OVERLAPS THE DECK JOINT GLAND WHERE IT TURNS UP INTO THE PARAPET.
- 11) AASHTO ARTICLE 14.5.3.2 ALLOWS FOR A MAXIMUM 4" ROADWAY SURFACE GAP AAT -10 °F. THE CTDOT WILL ALLOW A 4" GAP AT 20 °F.
- 12) THE  $^{1}/_{8}$ " RECESS OF THE HEADER BELOW THE BITUMINOUS OVERLAY IS TO ACCOUNT FOR COMPACTION OF THE FRESH BITUMINOUS OVERLAY UNDER WHEEL LOADS. THIS SHOULD RESULT IN A SMOOTHER RIDING SURFACE OVER THE HEADER.
- 13) DESIGNERS SHALL SPECIFY GLANDS IN SIDEWALK JOINTS TO BE FOAM SUPPORTED SILICONE GLANDS. THE SHAPE AND DENSITY OF THESE GLANDS IS MORE SUITABLE FOR FOOT TRAFFIC AND REDUCE THE TRIPPING HAZARD. SINCE THERE IS NO ACCEPTABLE TRANSITION FROM A V-SHAPED GLAND IN A BRIDGE DECK JOINT TO FOAM SUPPORTED SILICONE GLANDS IN A SIDEWALK JOINT, DESIGNERS SHALL ALSO SPECIFY FOAM SUPPORTED SILICONE GLANDS IN BRIDGE DECK JOINTS FOR BRIDGES WITH A SIDEWALK.
- 14) THE RECESS OF THE FOAM SUPPORTED SILICONE GLAND BELOW THE PARAPET SURFACE IS DIFFERENT THAN AT THE DECK JOINT. THE EDGES OF THE PARAPET JOINT ARE BEVELED 1". THE GLAND SHOULD BE PLACED BELOW THE BEVEL AS DETAILED. SINCE THIS IS A VERTICAL JOINT, IT FUNCTIONS DIFFERENTLY THAN A DECK JOINT.
- 15) THE MINIMUM SHELF WIDTH IS SET AT HALF OF THE MANUFACTURER'S MINIMUM OPENING SIZE TO GUARD AGAINST DECK ENDS CLOSING AND CRUSHING THE GLAND.
- 16) THE BRIDGE DECK GAP, "G", IS ASSUMED TO BE 0" TO ACCOUNT FOR CLOSURE OF THE BRIDGE DECK GAP AND TO MINIMIZE THE DECK JOINT GAP, "J". FOR NEW BRIDGE DECKS, SHOULD ADDITIONAL GAP BE DESIRABLE TO MEET MANUFACTURER'S MINIMUM INSTALLATION GAP, "G" MAY BE INCREASED.
- 17) THE DESIGNER IS RESPONSIBLE FOR VERIFYING THE PRODUCT OF CHOICE CAN ACCOMMODATE THE JOINT OPENINGS AT THE MAXIMUM AND MINIMUM TEMPERATURES AS WELL AS MAXIMUM AND MINIMUM INSTALLATION TEMPERATURES.
- 18) IN GENERAL, A BACKER ROD MAY NOT BE SUBSTITUTED FOR THE SHELF AS SUPPORT FOR THE GLAND. BACKER ROD PLACEMENT IS SUBJECT TO INSTALLER ERROR AND MAY AFFECT THE PROPER PLACEMENT OF THE PREFORMED GLAND. THIS MAY LEAD TO REDUCED LONGEVITY OR PREMATURE FAILURE OF THE GLAND.
- 19) THE DESIGN IS RESPONSIBLE TO INVESTIGATE EXISTING PARAPETS FOR ADEQUATE GAP WIDTH TO PREVENT CRUSHING. FULL PARAPET END RECONSTRUCTION MAY BE REQUIRED TO PROVIDE AN ADEQUATE OPENING.
- 20) IF EXISTING DECK GAP IS INADEQUATE AND MAY CAUSE CRUSHING OF DECK ENDS, THE DESIGNER SHOULD CONSIDER RECONSTRUCTION OF ENTIRE DECK END.

THESE NOTES ARE NOT INTENDED TO BE PLACED ON THE CONTRACT PLANS.

			DE	DESIGNER/DRAFTER:	A \$800 A	SIGNATURE/	PROJECT TITLE:	TOWN:	PROJECT NO.
		THE	E INFORMATION, INCLUDING ESTIMATED	-		BLOCK:		_	-
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		IN IN	VESTIGATIONS BY THE STATE AND IS  NO WAY WARRANTED TO INDICATE		OF TRANS		_	DRAWING TITLE:	
		THE OF	E CONDITIONS OF ACTUAL QUANTITIES WORK WHICH WILL BE REQUIRED.		<b>DEPARTMENT OF TRANSPORTATION</b>	APPROVED BY:			CUEET NO
			The state of the s	SCALE AS NOTED				NOTES TO	SHEET NO.
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