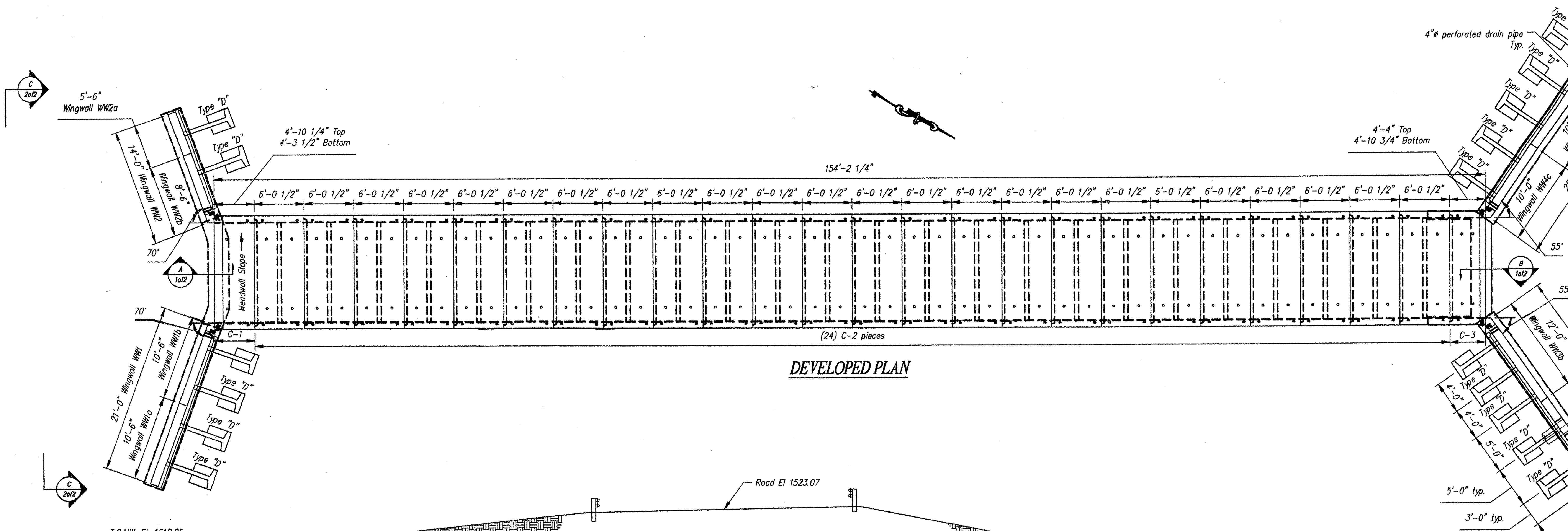
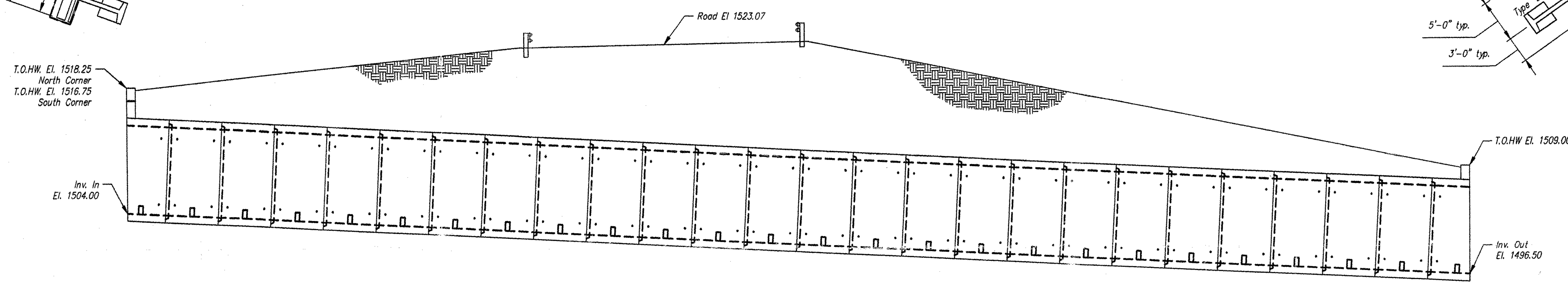


DEVELOPED PLAN



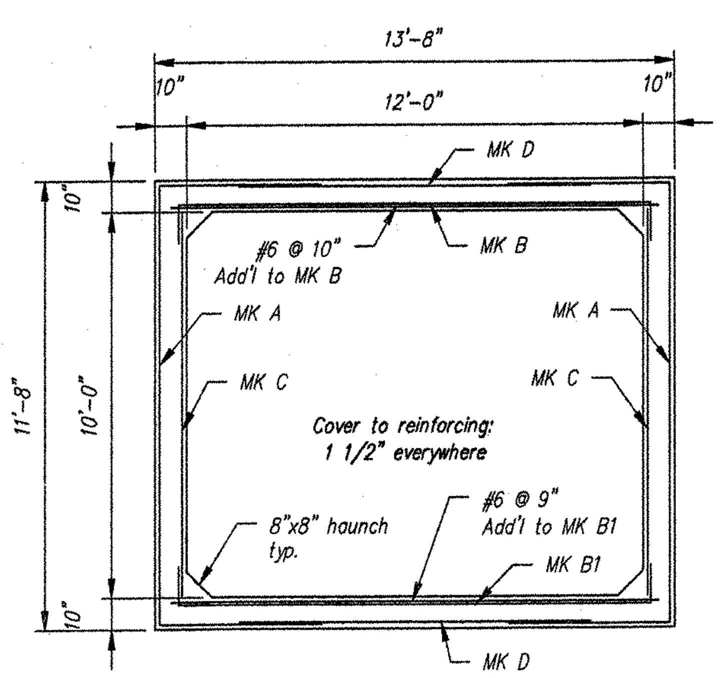
ELEVATION

GENERAL NOTES:

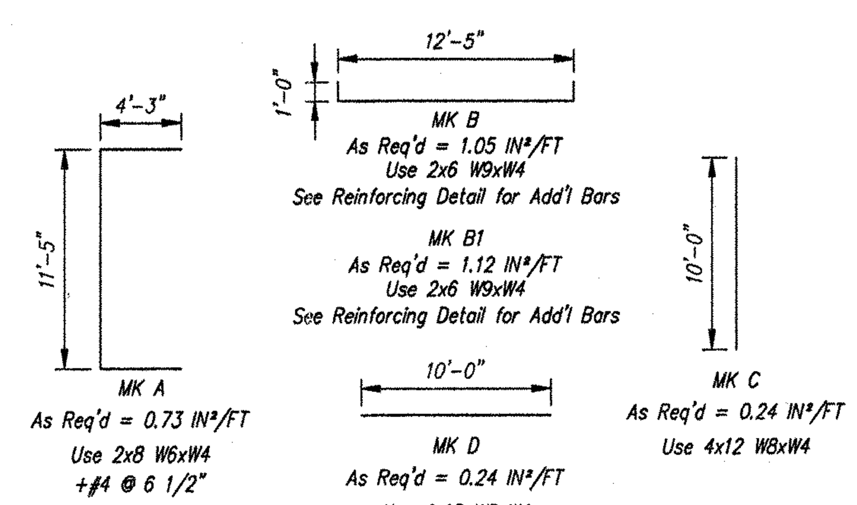
1. Structure designed and built in accordance with AASHTO "Standard Specifications for Highway Bridges" and ASTM C1433.
2. Design Parameters:
   - Live load: AASHTO HS25-44
   - Earth Cover: 3' to 13'
   - Concrete: Design strength f'c = 5000 psi; Unit weight = 150 pcf
   - Reinforcing: ASTM A615 (rebar), grade 60; ASTM A185 (WWF) fy = 60 ksi
   - Soil: Unit weight = 140 pcf; Minimum lateral pressure coefficient .25; Maximum lateral pressure coefficient .50
   - Cover to reinforcing: 1 1/2" u.n.o.
3. Dimensions include a joint gap. Actual culvert piece length is ½" **shorter (i.e. C-2 = 6'-0").**
4. No dampproofing supplied by CSI.
5. DBS are Dowel Bar Splicers and DI are Dowel Ins. These are used to attach the headwalls to the culvert end sections.
6. Precast headwall not designed for impact load.

CUVLERT PIECE SCHEDULE (MX-FA5000SM)					
MARK	QTY	LENGTH	YDS	WEIGHT	
C-1	1	4.58 '	8.60	17.42	TONS
C-2	24	6.00 '	9.18	18.60	TONS
C-3	1	4.58 '	7.72	15.63	TONS
CW-1	1	13.08 '	3.85	7.80	TONS
CW-2	1	13.67 '	8.70	17.62	TONS

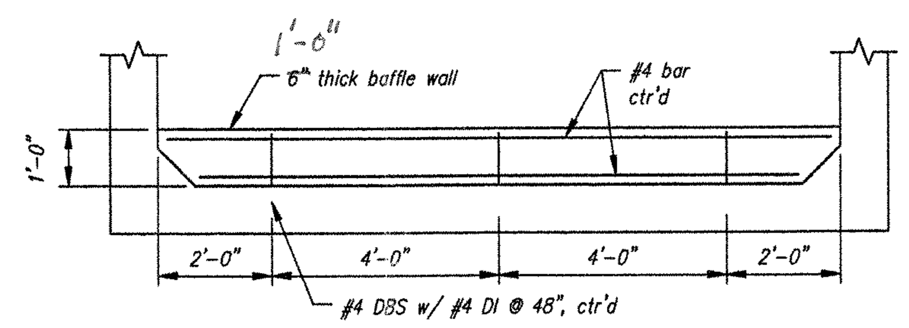
WINGWALL PIECE SCHEDULE (MX-FA4000SM)					
MARK	QTY	LENGTH	YDS	WEIGHT	
WW1a	1	10.50 '	7.20	14.58	TONS
WW1b	1	10.50 '	6.90	13.97	TONS
WW2a	1	5.50 '	2.75	5.57	TONS
WW2b	1	8.50 '	4.45	9.01	TONS
WW3a	1	12.00 '	8.05	16.30	TONS
WW3b	1	12.00 '	8.35	16.91	TONS
WW4a	1	5.50 '	3.75	7.59	TONS
WW4b	1	10.00 '	6.80	13.77	TONS
WW4c	1	10.00 '	6.65	13.47	TONS
F1	1	21.00 '	6.15	12.45	TONS
F2	1	14.00 '	4.10	8.30	TONS
F3	1	24.67 '	8.40	17.01	TONS
F4	1	26.17 '	8.90	18.02	TONS



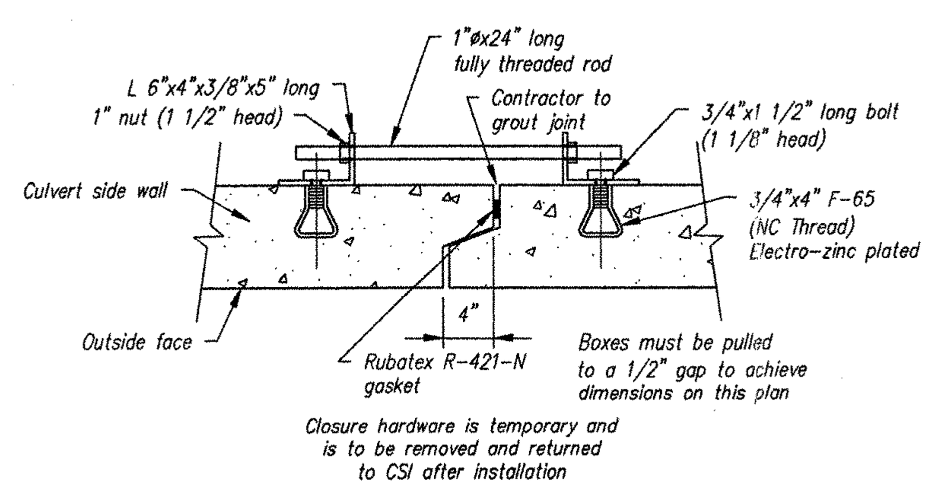
REINFORCING DETAIL



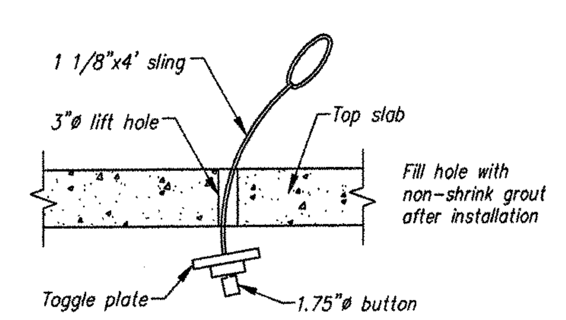
BENDING SCHEDULE



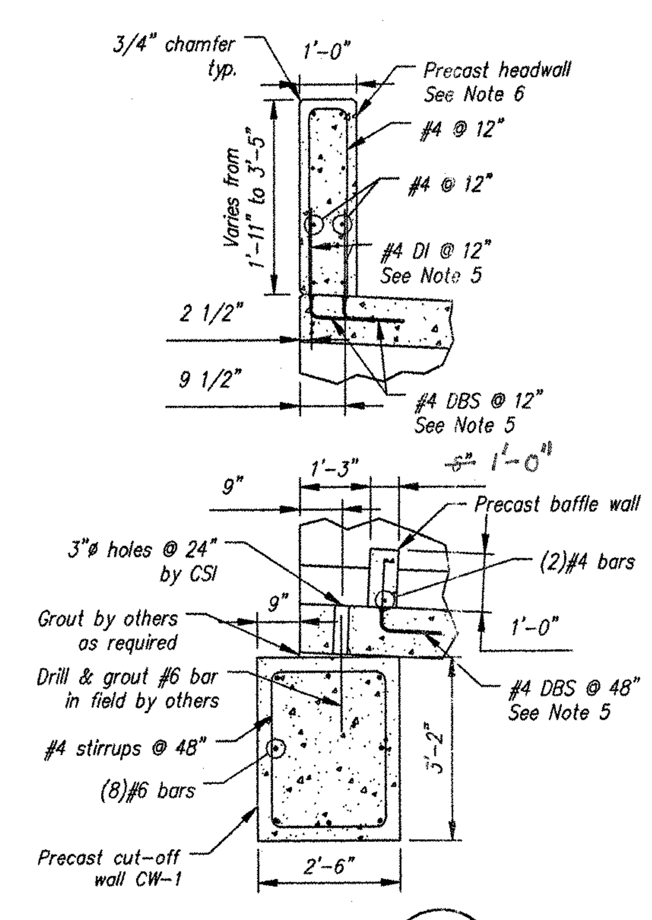
BAFFLE WALL ELEVATION



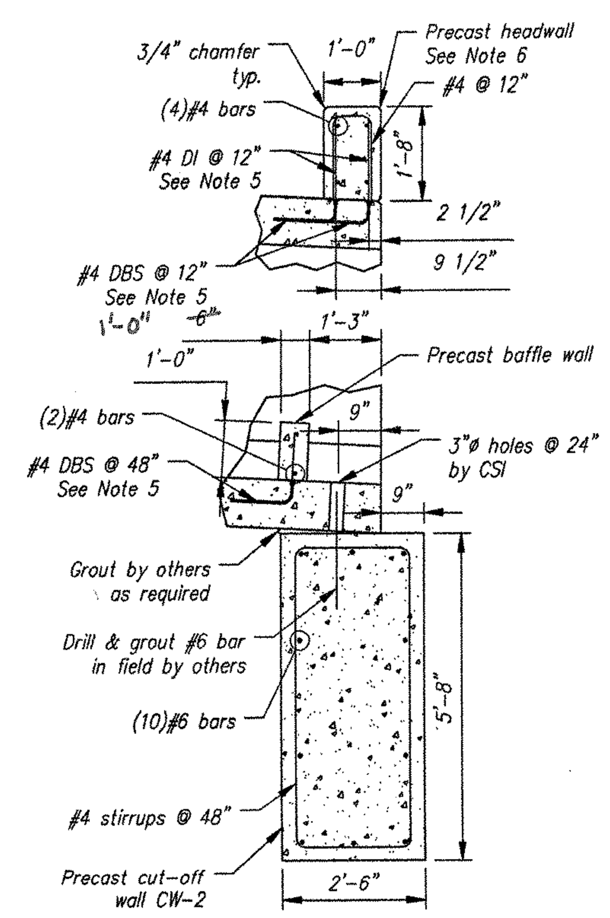
CLOSURE HARDWARE DETAIL



LIFTING DETAIL



SECTION A 1of2



SECTION B 1of2

RECEIVED
CK'D BY ELR OK'D BY AS NOTED
JUN 08 2006
RESUBMIT ____ APPROVED AS NOTED
BY GPW DATE 6/20/06

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STATE OF VERMONT MARCUS HAHN No. 5598 REGISTERED PROFESSIONAL ENGINEER
6/6/06
Stamp for culvert structural design only

SFC ENGINEERING PARTNERSHIP INC.
25 SUNDIAL AVENUE, SUITE 205W
MANCHESTER, NH 03103-7230
TEL. 603-647-8700
FAX. 603-647-8711
www.sfceng.com

Rev.	Date	DESCRIPTION	By
5			
4			
3			
2			
1			

REVISIONS

This drawing is based upon information provided from the following documents and/or sources:

- Engineer: VAOT
- Project No: STP ST CULV (6)
- Drawings: Proposed Improvement Bridge Project; Sheets 1 through 34 of 34 sheets
- Specifications: Whitingham STP ST CULV (6) Standard Specificaitons for Construction
- Other Sources:

CSI
Concrete Systems Inc.
9 Commercial St., Hudson, NH,03051
Phone 603-889-4163
Fax 603-889-2417

STATE AGENCY
VAOT
STP ST CULV (6)

Drawn By	Date
M SCOTT	06/01/2006
Checked By	Date
Approved By	Date

TOWN OF WHITINGHAM
PROPOSED IMPROVEMENT BRIDGE PROJECT
WHITINGHAM, VT

D — BOX CULVERT LAYOUT AND DETAILS
Drawing No. C18126-L01-1 REV 0
Quantity: Project No: STP ST CULV (6) SHEET 1 OF 2

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