GENERAL NOTES

1.0 GENERAL

1.1 THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO FABRICATION TO ENSURE ACCURACY OF THE EXPANSION JOINT.

1.2 ALL MATERIALS AND FABRICATION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2006, AND IT'S LATEST REVISIONS.

1.3 IN CASE OF DISCREPANCY, PRECEDENCE OF THE CONTRACT DOCUMENTS WILL BE DETERMINED IN THE FOLLOWING ORDER:

- 1.3.1 PROJECT PERMITS
- 1.3.2 SPECIAL PROVISIONS
- 1.3.3 CONTRACT PLANS
  - 1.3.3.1 CALCULATED DIMENSIONS
  - 1.3.3.2 SCALED DIMENSIONS
- 1.3.4 GENERAL SPECIAL PROVISIONS
- 1.3.5 STANDARD DRAWINGS
  - 1.3.5.1 CALCULATED DIMENSIONS
  - 1.3.5.2 SCALED DIMENSIONS
- 1.3.6 SUPPLEMENTAL SPECIFICATIONS
- 1.3.7 STANDARD SPECIFICATIONS
- 1.3.8 ANY OTHER SPECIFICATIONS ADOPTED BY REFERENCE

PER SECTION 105.05 "COORDINATION OF CONTRACT DOCUMENTS – PERMITS, SPECIAL PROVISIONS, CONTRACT PLANS, GENERAL SPECIAL PROVISIONS, STANDARD DRAWINGS, SUPPLEMENTAL SPECIFICATIONS, STANDARD SPECIFICATIONS, AND SPECIFICATIONS ADOPTED BY REFERENCE." OF THE STANDARD SPECIFICATIONS.

⚠1 1.4 FIELD SERVICE REPRESENTATION BY WATSON BOWMAN ACME FOR ON–SITE INSTALLATION CONSULTATION GUIDANCE AND ASSISTANCE IS REQUIRED.

⚠1 1.4.1 THE CONTRACTOR SHALL CONTACT JOHN MANNING AT (716) 817–5453 FOR FIELD SERVICE PRICING AND SCHEDULING.

⚠1 1.4.2 WATSON BOWMAN ACME RECOMMENDS SCHEDULING FIELD SERVICE TWO (2) WEEKS IN ADVANCE OF INSTALLATION.

2.0 STANDARD SPECIFICATION CRITERIA

3.0 SPECIAL PROVISION CRITERIA

4.0 MATERIALS

4.1 ALL STRUCTURAL AND PERMANENT MATERIALS SHALL BE OF DOMESTIC ORIGIN, AND MATERIAL CERTIFICATION STATING ALL SUCH MATERIALS ARE "MELTED AND MANUFACTURED" IN THE UNITED STATES OF AMERICA SHALL BE SUBMITTED.

4.2 THE ELASTOMER USED TO MOLD THE PANELS HAS THE FOLLOWING PHYSICAL REQUIREMENTS:

PHYSICAL PROPERTIES	ASTM	REQUIREMENTS
Tensile Strength, min. psi.	D–412	1800
Elongation at break, min. %	D–412	400
Hardness, Shore A Durameter	D–2240	45 ± 5
Low Temperature, brittleness 3 min. @ –40°F	D–746	not brittle
Compression Seal, 22 hrs @ 158°F, %	D–395	20
Oil Swell, 70 hrs. @ 212°F (100°C), %	D–471	120
Ozone Resistance	D–1149	no cracks
Flame Resistance	C–542	must not propagate flame
Resistance to oil aging Change in volume after 70 hrs. Immersion in ASTM Oil #3 @ 212°F (100°C), % max.	D–471	120
Resistance to Ozone condition after exposure to 100 pphm Ozone in air for 70 hrs. @ 100°F (sample under 20 % strain)	D–1149	No cracks
Resistance to permanent set compression set after 22 hrs. @ 158°F (70°C), % max.	D–396	20

4.3 THE STEEL ANGLES IMBEDDED IN THE MOLDED NEOPRENE PANELS ARE IN ACCORDANCE WITH ASTM A–36.

⚠2 4.4 BOLT HOLE CAVITIES SHALL BE FILLED USING URA SEAL, A TWO–PART POURABLE POLYURETHANE SEALANT WHICH MEETS FEDERAL SPECIFICATION TT–S–00227E, THE PHYSICAL PROPERTIES ARE AS FOLLOWS:

PHYSICAL PROPERTIES	ASTM	VALUE
Solids by wt. – %	D–553	99+1
Tensile Strength, psi	D–412	250
Elongation – %	D–412	450
Modules, 100% Elongation	D–412	40
Shore "A" – Initial	D–676	30
Recovery, 100% Elongation – %	D–412	85
Flexibility – Low Temperature	E–154	–40°F
High Temperature	D–573	200°F
Service Time	1980	12 years

⚠2 4.5 NP1 SEALANT IS USED AS A EDGE VOID SEALANT AND A SEALANT COMPOUND BETWEEN THE TONGUE AND GROOVE OF THE ROADWAY SECTIONS. IT IS A ONE–PART POLYSULFIDE BASE SYNTHETIC RUBBER SEALANT CONFORMING TO FEDERAL SPECIFICATION TT–S–S00230C TYPE II NON–SAG. THE PHYSICAL PROPERTIES ARE AS FOLLOWS:

Color	Black
Consistency	Gun Grade
Hardness	30–35 Shore A
Shrinkage	Nil
Tack Time	12–24 hours @ 75°F, 50% R.H.
Non–volatile content	97%
Practical Service Range	–20°F – +180°F
Storage Life (@77°F)	6 months in unopened container
Tensile Strength	160 psi
Elongation	800%
Peel Adhesion (Concrete)	25 lbs/in.
Peel Adhesion (Neoprene)	32 lbs/in.
Weight per Gallon	12.2 lbs

⚠2 4.6 BEDDING TAPE IS USED TO CREATE A LONG–LASTING WEATHER SEAL BETWEEN TWO SURFACES. IT IS AN EXTRUDED, PREFORMED GLAZING TAPE FURNISHED ON RELEASE PAPER ROLLS. THE PHYSICAL PROPERTIES ARE AS FOLLOWS:

Base Polymer	Butyl rubber (polysobutylene)
Solids Content	100% solids (contains no asbestos)
Cure Time	Fully cured before application
Hardness	20 Durometer Shore "A" @ 77°F 70 Durometer Shore "00" @ 77°F (relatively non–compressible)
Temperature Range	Application –10°F to 120°F Service –45°F to 190°F
Joint Movement	30% (± 15%) of joint accommodation
Shelf Life	One–year guarantee
Service Life	Twenty–year minimum

⚠2 4.7 ANCHOR BOLTS AND NUTS SHALL BE ZINC PLATED.

5.0 INSPECTION REQUIREMENTS

5.1 SHOP INSPECTION BY A REPRESENTATIVE OF THE STATE OF VERMONT DEPARTMENT OF TRANSPORTATION INDEPENDENT OF WATSON BOWMAN ACME CORP.'S QUALITY CONTROL DEPARTMENT IS NOT REQUIRED.

5.2 QUALITY CONTROL INSPECTION

5.2.1 DURING FABRICATION OF THE EXPANSION JOINT, WATSON BOWMAN ACME SHALL PROVIDE FULL TIME QUALITY CONTROL INSPECTION TO INSURE THAT THE MATERIALS AND WORKMANSHIP MEET OR EXCEED THE MINIMUM REQUIREMENTS OF THE CONTRACT.

5.2.2 QUALITY CONTROL INSPECTION SHALL BE THE RESPONSIBILITY OF A QUALITY CONTROL GROUP, WHICH SHALL BE INDEPENDENT OF THE FABRICATION GROUP.

6.0 FABRICATION

6.1 FABRICATION SHALL BE IN ACCORDANCE WITH WATSON BOWMAN ACME'S QUALITY CONTROL MANUAL AND MANUFACTURING TOLERANCES.

6.2 ALL EXPANSION JOINT ASSEMBLIES SHALL BE BANDED TOGETHER IN 6' (MAX.) LENGTHS.

6.3 T = TONGUE OF WABO®FLEX, G = GROOVE OF WABO®FLEX
B = CUT END OF WABO®FLEX.

6.4 CAULK ALL TONGUE AND GROOVES WITH NP1 SEALANT.

6.5 CAULK ALL BUTT JOINTS WITH 3 LAYERS OF BEDDING TAPE.

7.0 COATINGS

7.1 NONE

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CHA
DATE 08/31/2012 BY

PACKAGING

⚠1 WABO TRANSFLEX PANELS AND PREFABRICATED CURB UNITS ARE BANDED ON WOODEN PALLETS.

WABO NP1 SEALANT IS AN ELASTOMERIC RUBBER COMPOUND USED TO SEAL EDGE VOIDS. WABO NP1 SEALANT IS SUPPLIED IN 9.8 oz. TUBES.

BOLT HOLE CAVITIES ARE SEALED WITH WABO URA SEALANT.

BEDDING TAPE IS AN EXTRUDED, PREFORMED GLAZING TAPE FURNISHED ON RELEASE PAPER ROLLS.

COVERAGE

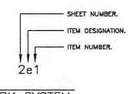
WABO NP1 SEALANT COVERAGE WILL DEPEND ON EDGE VOID SIZE, PLACEMENT, WASTE AND EXPERIENCE.

WABO URA SEALANT COVERAGE WILL DEPEND ON BOLT HOLE SIZE, PLACEMENT, WASTE AND EXPERIENCE.

STORAGE

STORE WABO URA SEALANT, WABO NP1 SEALANT AND BEDDING TAPE OUT OF DIRECT SUNLIGHT IN A DRY PLACE BETWEEN 50°C – 90°F.

STORE TRANSFLEX IN AN AREA THAT WILL NOT DAMAGE MATERIALS.



MARK SYSTEM

STATE: VERMONT
TOWN: RICHMOND
COUNTY: CHITTENDEN
PROJECT NO.: STP–RS 0284(11)
HIGHWAY NO.: U.S. ROUTE 2
PRODUCT NO.: WAB143387AA
JOINT TYPE: WABO TRANSFLEX

DRAWING ACTION:

SUBMITTED FOR APPROVAL

DATE: 8/10/12

NO	DESCRIPTION	NAME	DATE
⚠3			
⚠2	REVISED AS PER REVIEWER'S COMMENTS	JWM	8/10/12
⚠1	REVISED AS PER REVIEWER'S COMMENTS	JWM	7/6/12

Watson Bowman Acme
WATSON BOWMAN ACME CORPORATION
95 PINEVIEW DRIVE AMHERST, N.Y. 14228 TEL. (716) 691–7566 FAX (716) 691–9239
BASF The Chemical Company

PROJECT:
U.S. ROUTE 2; BRIDGE NO. 24
OVER WINOOSKI RIVER
CHITTENDEN COUNTY
WABO TRANSFLEX 400–A EXPANSION JOINT DETAILS

DETAILED BY: JWM	DATE: 5/12/12
CHECKED BY: SM	DATE: 5/12/12
SCALE: NTS	WBA JOB NO.: 143387
SHEET NO.: 1 OF 4	DRAWING NO.: B–29906