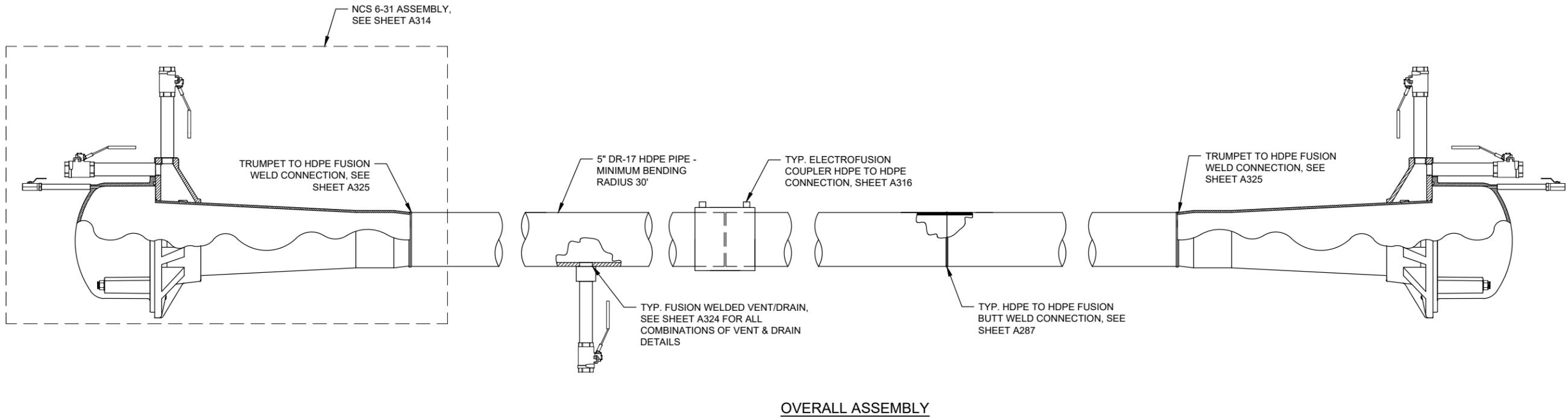


ELECTRONIC FILE LOCATION: I:\VSL System Drawings\Work in Progress Drawings\Florida DOT Test 2017\NCS 6-31 Flexible Filler Submittal

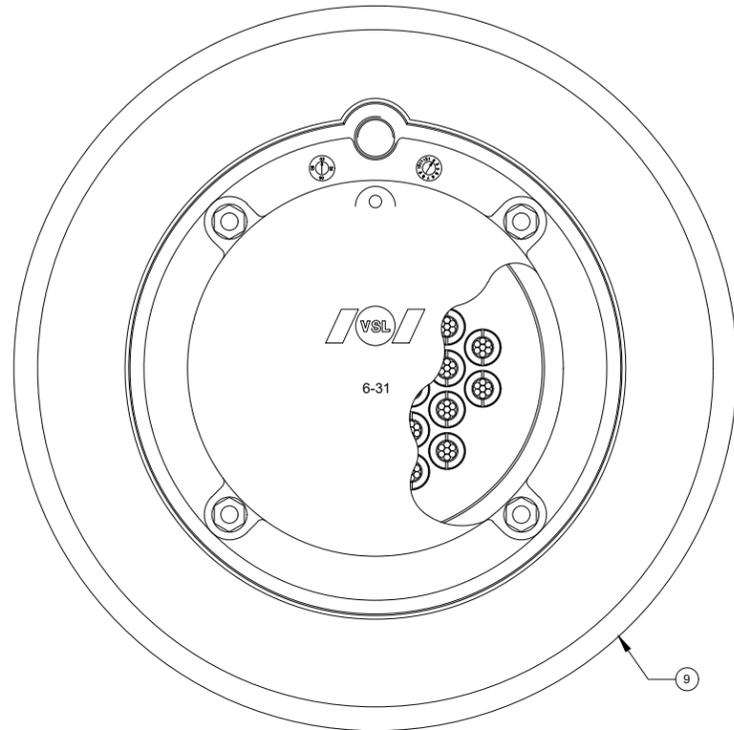


OVERALL ASSEMBLY

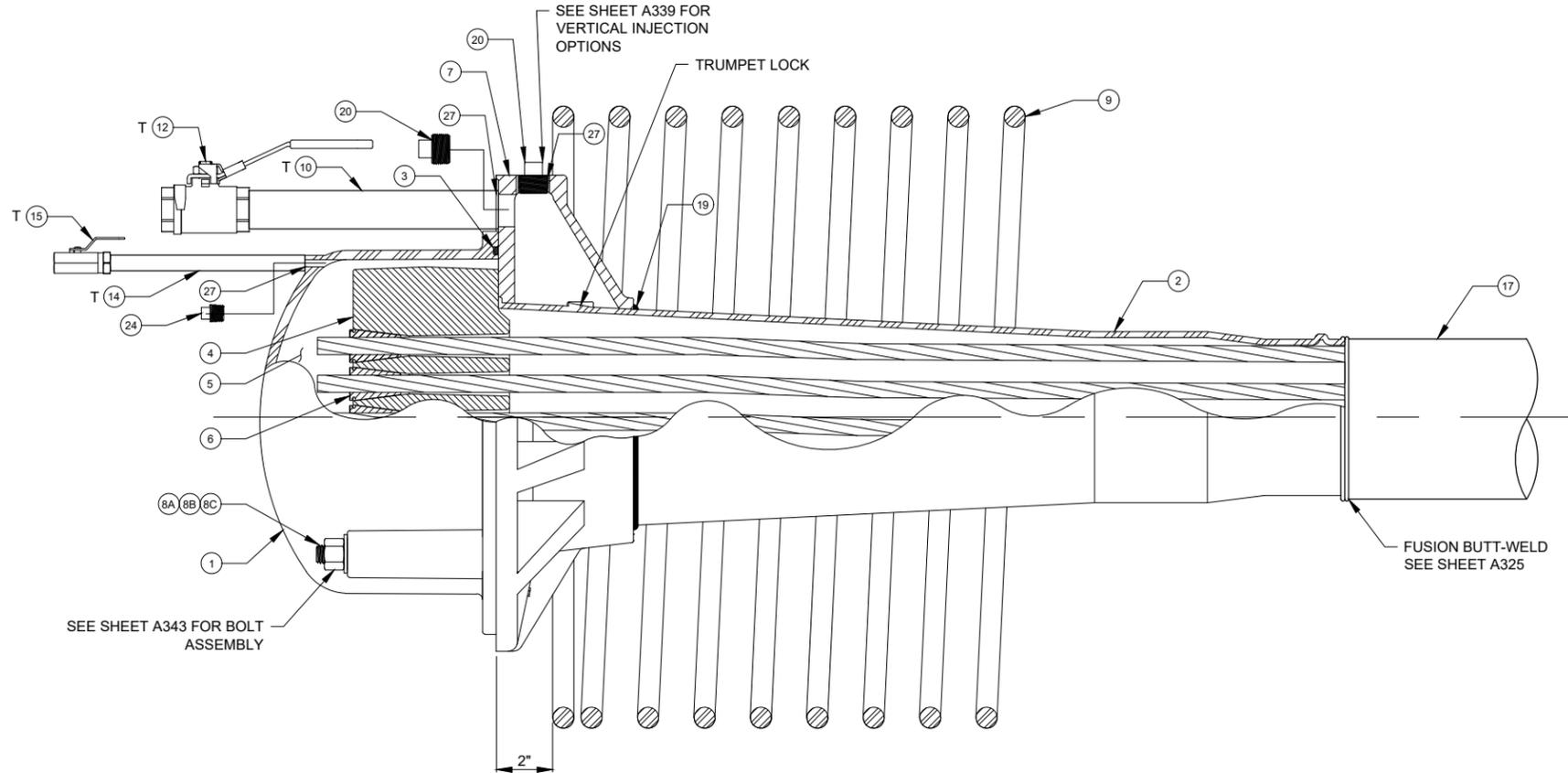
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PROJECT INFORMATION:		SYSTEM DRAWING	
PROJECT NO:	1	TITLE:	NCS 6-31 OVERALL ASSEMBLY WITH FLEXIBLE FILLER
SHEET NO:	A315	SCALE:	NTS
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NO	△	FIRST ISSUE	CDL
NO		DESCRIPTION	BY
			ZX
			CHK
			DATE
			26FEB2018

ELECTRONIC FILE LOCATION: I:\VSL System Drawings\Work in Progress Drawings\Florida DOT Test 2017\NCS 6-31 Flexible Filler Submittal



END VIEW



ELEVATION VIEW

NOTE: ITEMS MARKED WITH A "T" ARE TEMPORARY AND ARE NOT A PERMANENT PART OF THE SYSTEM.

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #
1	1	6-31 ANCHORAGE CAP W/ 1/4" FRONT PORT	ABS	02GC63102
2	1	NCS 6-31 TRUMPET	POLYETHYLENE	02BP4436
3	1	6-31 ANCHORAGE CAP O-RING	HNBR	02WX5042
4	1	NCS 6-31 ANCHOR HEAD CAST	A536 GR80-55-06	02AH6031
5	-	FLEXIBLE FILLER	FDOT APL	-
6	19	1.6G WEDGE .6 1.77 W/GROOVE	AISI 11-L-17/12-L-14	02WG0008
7	1	NCS 6-31 BEARING PLATE W/ 1" NPT PORT (GALVANIZED)	A536 GR80-55-06	02BP6031V
8A	1 SET	5/8"-11 THREADED ROD X 7"	(316L) STAINLESS	02WX6023D
8B	1 SET	5/8"-11 NUT	(316L) STAINLESS	02WX6023D
8C	1 SET	5/8" WASHER	(316L) STAINLESS	02WX6023D
9	1	SPIRAL NCS 6-31 (#6, DIA. 22", 2" PITCH, 9 TURNS)	A615, GR 60	02BP0098
10	1	1" NPT STEEL NIPPLE	SCH 40 STEEL	-
12	1	1" NPT STEEL 1/4 TURN BALL VALVE	SCH 40 STEEL	02DT01926
14	1	1/4" NPT STEEL NIPPLE	SCH 40 STEEL	-
15	1	1/4" NPT STEEL 1/4 TURN BALL VALVE	SCH 40 STEEL	02DT01924
17	-	5" DR-17 PIPE	HDPE	-
19	-	BONDUIT - SEAL AID 1/4" ALL AROUND	-	-
20	1	1" NPT STEEL PLUG	316 STAINLESS STEEL	02DT01958
24	1	1/4" NPT STEEL PLUG	316 STAINLESS STEEL	02DT01956
27	-	SILICONE GREASE	-	-

INSTALLATION PROCEDURES (INSTALLATION PROCEDURE IS GENERIC. FOLLOW THE PROJECT SPECIFIC REQUIREMENTS AND THE FDOT SPECIFICATIONS)

- ASSEMBLE TRUMPET INTO THE BEARING PLATE. APPLY 1/4" BONDUIT ALL AROUND LIP OF BEARING PLATE PRIOR TO INSTALLING TRUMPET. USE SLOT TO ALIGN PLATE AND TRUMPET. INSERT TRUMPET UNTIL LOCKING TABS ENGAGE.
- LIGHTLY GREASE ANCHORAGE CAP BOLTS. USE MOUNTING HOLES IN BEARING PLATE TO MOUNT BEARING PLATE ASSEMBLY TO FORM. SECURE BEARING PLATE ASSEMBLY WITH ANCHORAGE CAP BOLTS. USE CARE NOT TO DAMAGE THREADS.
- INSTALL AND SECURE SPIRAL.
- INSTALL FILLER PORT CONNECTIONS. SEAL ALL TEMPORARY CONNECTIONS WITH PIPE DOPE/SILICONE GREASE (BY OTHERS), AND SEAL ALL PERMANENT CONNECTIONS WITH BONDUIT OR SIMILAR (BY OTHERS).
- SECURE DUCT SUPPORTS @ 2' MAX. INSERT MANDRELS INTO TRUMPETS.
- SYSTEM IS NOW READY TO AIR TEST.
- AFTER CONCRETE PLACEMENT PER THE FDOT SPECIFICATION SECTION 462-8.2.2, A SECOND AIR PRESSURE TEST IS REQUIRED AFTER CONCRETE PLACEMENT AND PRIOR TO STRAND INSTALLATION.
- INSTALL STRAND. LEAVE SUFFICIENT STRAND FOR STRESSING EQUIPMENT.
- INSTALL ANCHOR HEADS. MAKE SURE WEDGE CAVITIES ARE CLEAN AND RUST FREE. USE WIRE BRUSH TO CLEAN IF NECESSARY.
- ONLY STRESS STRANDS IF CONCRETE HAS REACHED REQUIRED STRENGTH SPECIFIED ON DRAWINGS.
- ELONGATION SHOULD BE WITHIN ±7%.
- AFTER ENGINEERS APPROVAL, STRAND TAILS MAY BE CUT.
- AFTER FORM WORK IS REMOVED, USE MOUNTING BOLTS TO INSTALL ANCHORAGE CAP. REINSTALL O-RING INTO ANCHORAGE CAP.
- WAX TENDON PER WAX SPEC.

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REVISOR: CDL ZX 12MAR2018
 REVISION: REVISED INSTALLATION PROCEDURE

ISSUED BY: CDL ZX 26FEB2018
 FIRST ISSUE

NO DESCRIPTION

structural TECHNOLOGIES
 A Structural Group Company

Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL

PHONE: (817) 545-4807
 FAX: (817) 545-4827
 WWW.VSL.NET

PROJECT INFORMATION:

PROJECT NO: ---

SHEET NO: ---

SYSTEM DRAWING

TITLE: NCS 6-31 ASSEMBLY WITH FLEXIBLE FILLER

SCALE: NTS

DATE: 12MAR2018

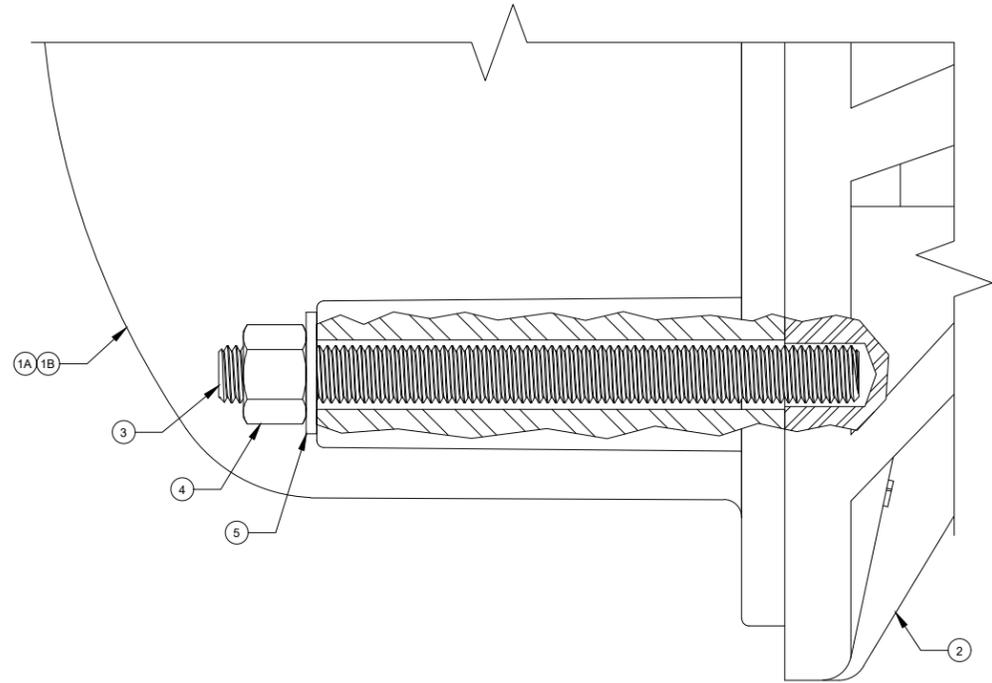
CHK: CDL ZX

DATE: 26FEB2018

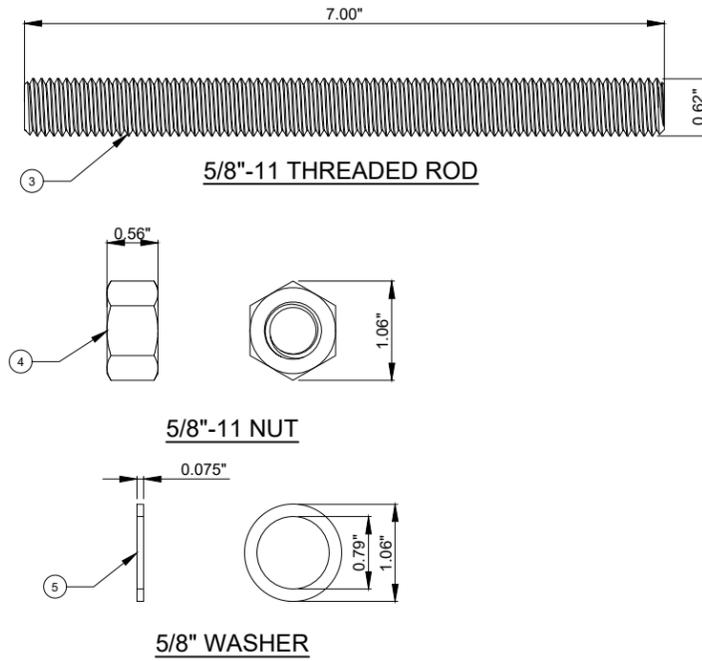
CHK: CDL ZX

DATE: ---

A314



CAP TO BEARING PLATE BOLTED ASSEMBLY



ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #
1A	1	6-31 ANCHORAGE CAP W/ 1/4" FRONT PORT	ABS	02GC63102
1B	1	6-31 ANCHORAGE CAP W/ 1/4" TOP PORT	ABS	02GC63103
2	1	NCS 6-31 BEARING PLATE W/ 1" NPT PORT (GALVANIZED)	A536 GR80-55-06	02BP6031V
3	1 SET	5/8"-11 THREADED ROD X 7"	(316L) STAINLESS	02WX6023D
4	1 SET	5/8"-11 NUT	(316L) STAINLESS	02WX6023D
5	1 SET	5/8" WASHER	(316L) STAINLESS	02WX6023D

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PROJECT INFORMATION:

SYSTEM DRAWING

PROJECT NO: ---
SHEET NO: ---

TITLE:
NCS 6-31 BOLT ASSEMBLY

SCALE:
NTS

A343

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NO

FIRST ISSUE

DESCRIPTION

BY

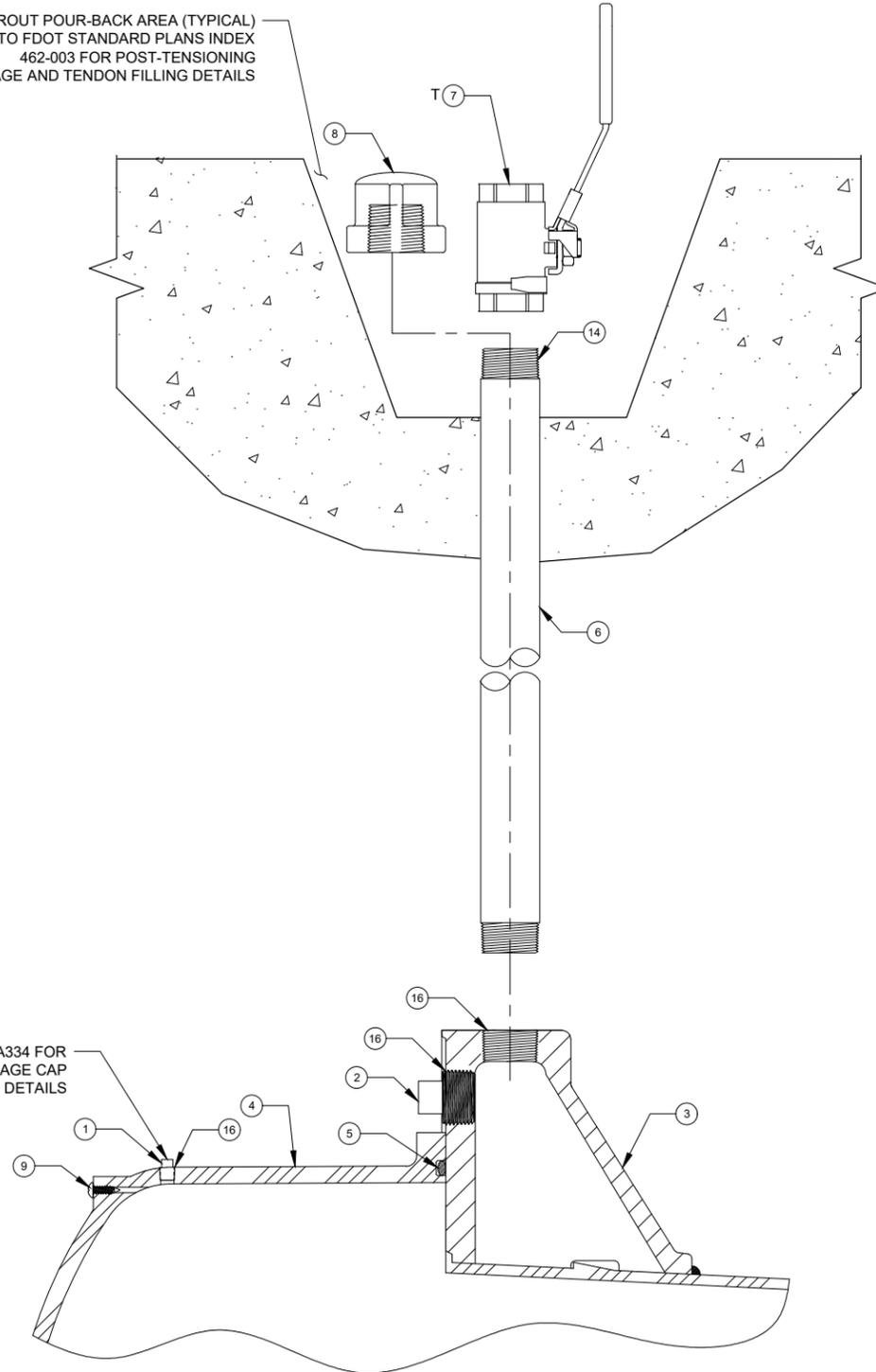
CHK

DATE

CDL ZX

26FEB2018

EPOXY GROUT POUR-BACK AREA (TYPICAL)
- REFER TO FDOT STANDARD PLANS INDEX
462-003 FOR POST-TENSIONING
ANCHORAGE AND TENDON FILLING DETAILS



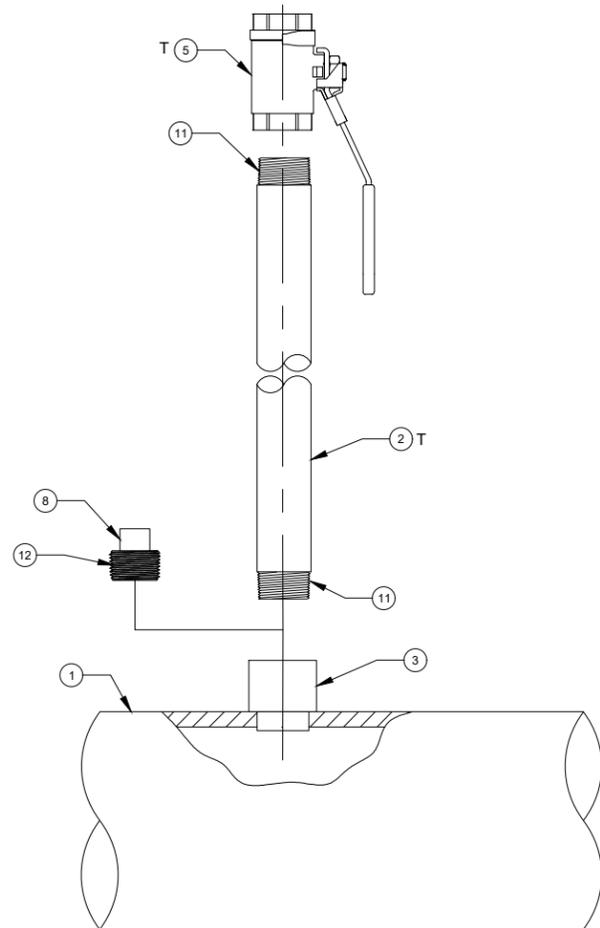
- NOTES:
1. ITEMS MARKED WITH A "T" ARE TEMPORARY AND ARE NOT A PERMANENT PART OF THE SYSTEM.
 2. ALL COMPONENTS MUST BE PRESSURE RATED FOR 150 PSI
 3. CONCRETE COVER MUST MEET FDOT STRUCTURES DESIGN GUIDELINES SECTION 1.4.2

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #
1	1	1/4" NPT STEEL PLUG	316 STAINLESS STEEL	02DT01956
2	1	1" NPT STEEL PLUG	316 STAINLESS STEEL	02DT01958
3	1	NCS 6-31 BEARING PLATE W/ 1" NPT PORT (GALVANIZED)	A536 GR80-55-06	02BP6031V
4	1	6-31 ANCHORAGE CAP W/ 1/4" TOP PORT	ABS	02GC63103
5	1	6-31 ANCHORAGE CAP O-RING	HNBR	02WX5042
6	1	1" NPT NIPPLE	SCH 40 STEEL	-
7	1	1" NPT STEEL 1/4 TURN BALL VALVE	SCH 40 STEEL	02DT01926
8	1	1" NPT STEEL CAP	SCH 40 STEEL	02DT01951
9	1	3/16" PAN HEAD SCREW	316 STAINLESS STEEL	02WX1070
14	-	SILICONE GREASE	-	-
16	-	BONDUIT	-	-

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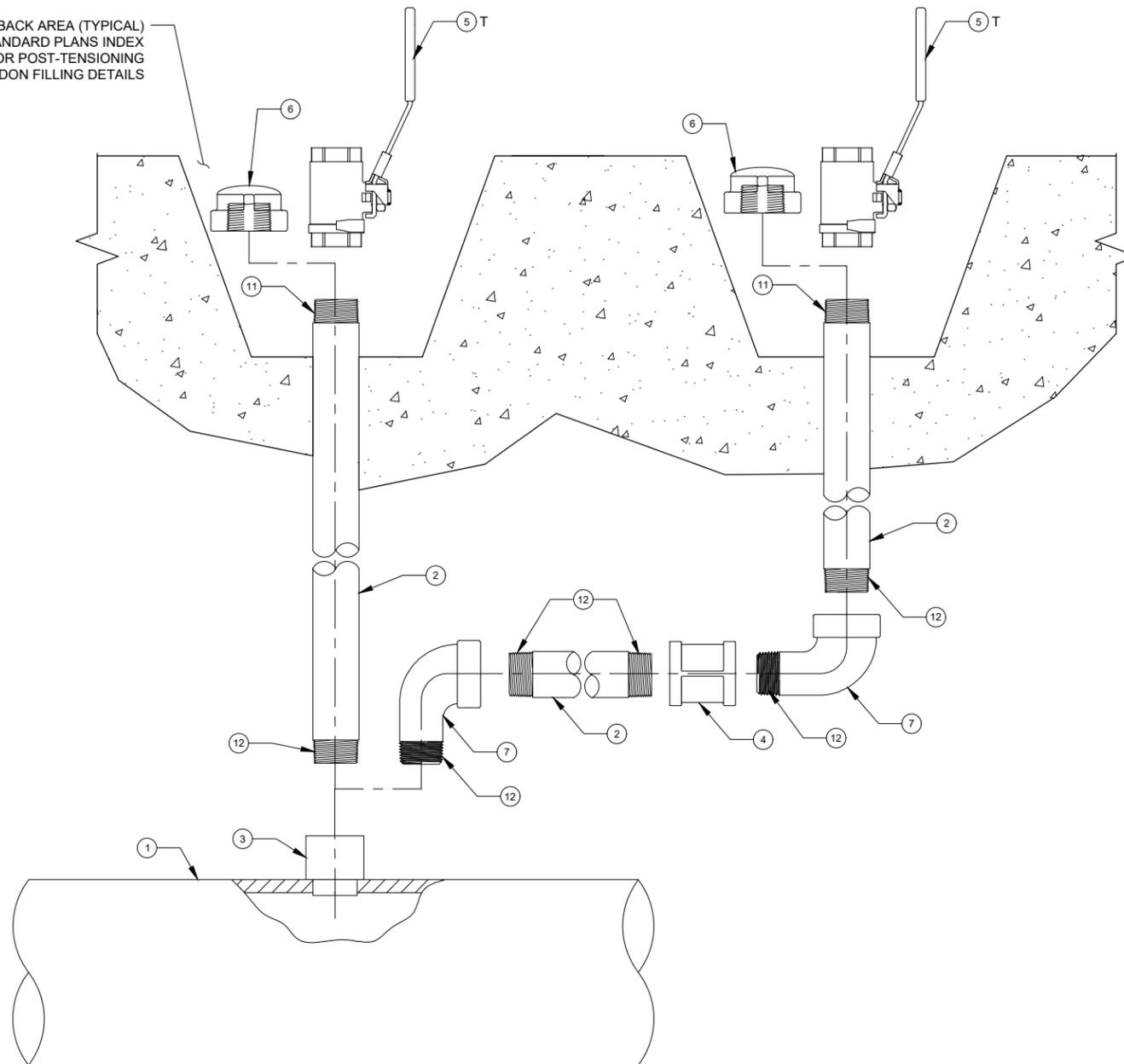
PROJECT INFORMATION:		SYSTEM DRAWING	
PROJECT NO:	---	SCALE:	NTS
SHEET NO:		A339	
 <p>structural TECHNOLOGIES A Structural Group Company Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL</p>		<p>STRUCTURAL TECHNOLOGIES, LLC DALLAS OFFICE 15600 TRINITY BLVD, SUITE 118 FORT WORTH, TX 76156</p> <p>PHONE: (817) 545-4877 FAX: (817) 545-4827 WWW.VSL.NET</p>	
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DESCRIPTION	FIRST ISSUE	BY	DATE
		CDL	26FEB2018
		ZX	CHK

ELECTRONIC FILE LOCATION: \\VSL\System Drawings\Work in Progress Drawings\Florida DOT Test 2017\NCS 631 Flexible Filler Submittal



EXTERNAL OPTION

EPOXY GROUT POUR-BACK AREA (TYPICAL)
- REFER TO FDOT STANDARD PLANS INDEX
462-003 FOR POST-TENSIONING
ANCHORAGE AND TENDON FILLING DETAILS



INTERNAL OPTION

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #
1	-	5" DR-17 PIPE	HDPE	-
2	1	3/4" NPT STEEL NIPPLE	SCH 40 STEEL	-
3	1	3/4" FNPT SMOOTH GROUT PORT	POLYETHYLENE	02DT0253
4	1	3/4" NPT F/F COUPLER	SCH 40 STEEL	02DT01952
5	1	3/4" NPT STEEL 1/4 TURN BALL VALVE	SCH 40 STEEL	02DT01925
6	1	3/4" NPT STEEL CAP	SCH 40 STEEL	02DT01950
7	2	3/4" FNPT X MNPT STEEL ELBOW	SCH 40 STEEL	02DT01954
8	1	3/4" NPT STEEL PLUG	316 STAINLESS STEEL	02DT01957
11	-	SILICONE GREASE	-	-
12	-	BONDUIT	-	-

3/4" FNPT SMOOTH GROUT PORT INSTALLATION

- CLEAN PIPE PRIOR TO GROUT PORT INSTALLATION.
- DRILL Ø7/8" HOLE INTO PIPE.
- CONNECT THE SOCKET WELDING DEVICE TO THE POWER SOURCE.
- ALLOW THE SOCKET WELDING DEVICE TO REACH ITS WORKING TEMPERATURE.
- SIMULTANEOUSLY, INSERT MALE ADAPTER OF SOCKET WELDING DEVICE FROM DRILLED HOLE AND GROUT PORT FROM FEMALE ADAPTER.
- APPLY LIGHT PRESSURE FOR 20-25 SECONDS BY PUSHING THE GROUT PORT WITH THE PALM OF HAND.
- SIMULTANEOUSLY, REMOVE SOCKET WELDING DEVICE FROM DRILLED HOLE AND GROUT PORT FROM FEMALE ADAPTER.
- INSERT GROUT PORT INTO HOLE UNTIL THE SHOULDER IS REACHED.
- THIS OPERATION SHOULD BE CARRIED OUT AS QUICKLY AND CAREFULLY AS POSSIBLE, WITHIN 5 SECONDS. FIRMLY HOLD THE PIECES TOGETHER FOR A MINIMUM OF 10 SECONDS.

NOTES

- ITEMS MARKED WITH A "T" ARE TEMPORARY AND ARE NOT A PERMANENT PART OF THE SYSTEM.
- THIS ASSEMBLY CAN BE APPLIED IN ANY REQUIRED ORIENTATION TO CREATE EITHER A VENT OR A DRAIN.
- ALL COMPONENTS MUST BE PRESSURE RATED FOR 150 PSI.
- CONCRETE COVER MUST MEET FDOT STRUCTURES DESIGN GUIDELINES SECTION 1.4.2

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15600 TRINITY BLVD, SUITE 118
FORT WORTH, TX 76156

PROJECT INFORMATION:
SYSTEM DRAWING

PROJECT NO: --
SCALE: NTS
SHEET NO: A324

TITLE:
5" HDPE PIPE VENT ASSEMBLY

NO

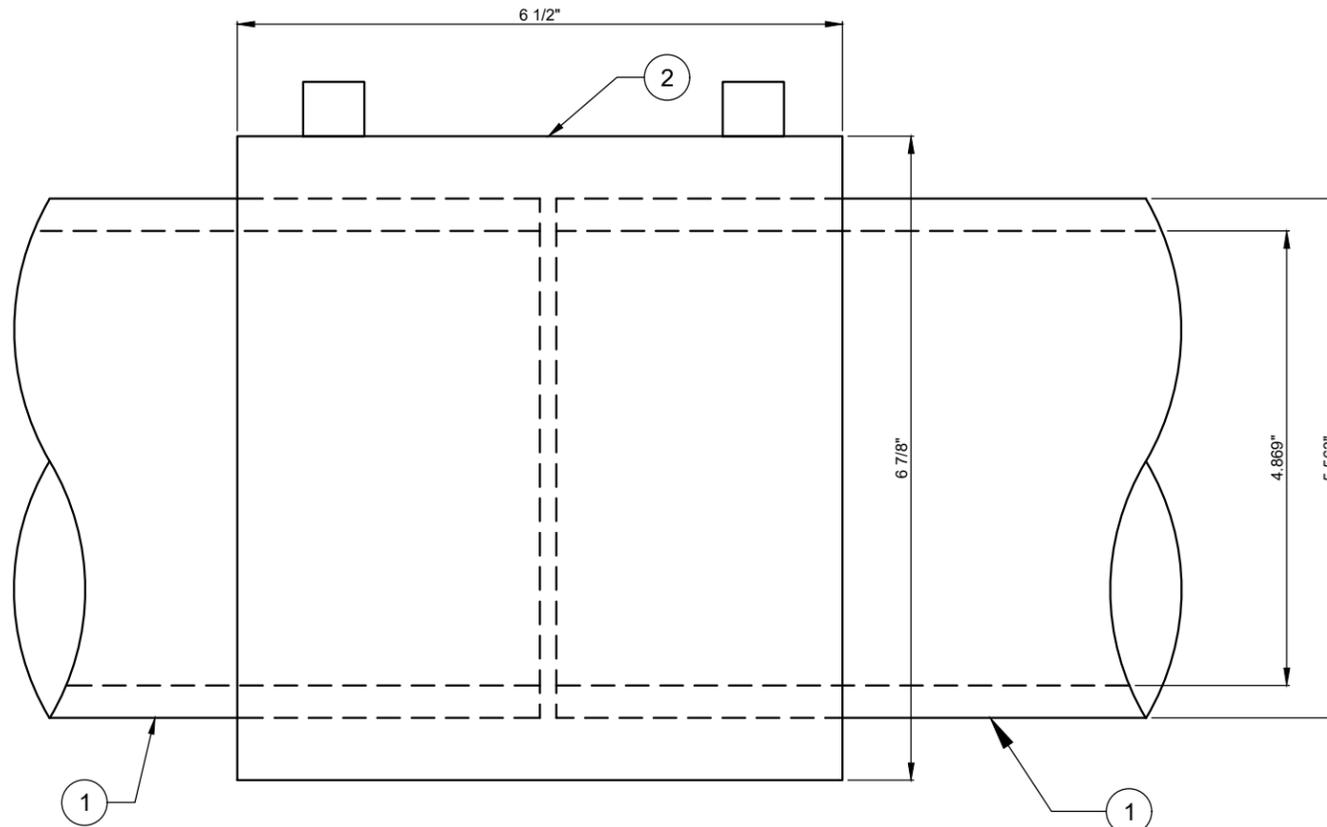
FIRST ISSUE

DESCRIPTION

CDL BY

ZX CHK

DATE
26FEB2018



ELEVATION VIEW

ITEM	QTY	DESCRIPTION	MATERIAL
1	-	5" HDPE PIPE DR-17	ASTM D3035
2	1	5" ELECTROFUSION COUPLER	COMPOSITE

NOTE:
FOLLOW COUPLER MANUFACTURER'S
INSTALLATION INSTRUCTIONS

INSTALLATION PROCEDURE (SEE MANUFACTURER INSTRUCTION MANUAL FOR DETAILED
INSTALLATION INSTRUCTIONS):

- CUT SQUARE ENDS ON PIPE TO BE FUSED
- CLEAN BOTH PIPE ENDS
- SCRAPE BOTH PIPES MINIMUM 0.07" WITH PROVIDED SCRAPING TOOL
- CLEAN BOTH PIPE ENDS USING 90% OR GREATER ISOPROPYL ALCOHOL
- USE REROUNDING TOOLS PROVIDED TO CORRECT OVAL PIPE IF NECESSARY
- USE ALIGNMENT CLAMPS PROVIDED TO ENSURE PIPE IS ALIGNED WITH COUPLER
- SUPPORT PIPE AND COUPLER AND RESTRAIN PIPE TO PREVENT MOVEMENT
- CHECK FOR GAPS AND ELIMINATE AS NECESSARY
- ATTACH LEADS OF THE PROVIDED FUSION PROCESSOR TO THE COUPLER
- SCAN THE BARCODE ON THE COUPLER
- START FUSION PROCESS
- WHEN FUSION PROCESS IS COMPLETE, UNPLUG THE LEADS
- DO NOT MOVE OR PRESSURIZE THE JOINT COMPONENTS BEFORE COOLING TIME HAS COMPLETED

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PROJECT INFORMATION:		CDL		26FEB2018	
SYSTEM DRAWING		BY		CHK	
5" HDPE PIPE TO 5" HDPE PIPE ELECTROFUSION COUPLER CONNECTION		NO		FIRST ISSUE	
PROJECT NO: SYSTEM		NO		DESCRIPTION	
SHEET NO: A316		NO		BY	
SCALE: NTS		NO		CDL	
TITLE: 5" HDPE PIPE TO 5" HDPE PIPE ELECTROFUSION COUPLER CONNECTION		NO		BY	
PROJECT INFORMATION:		NO		CDL	
SYSTEM DRAWING		NO		CHK	
5" HDPE PIPE TO 5" HDPE PIPE ELECTROFUSION COUPLER CONNECTION		NO		FIRST ISSUE	
PROJECT NO: SYSTEM		NO		DESCRIPTION	
SHEET NO: A316		NO		BY	
SCALE: NTS		NO		CDL	
TITLE: 5" HDPE PIPE TO 5" HDPE PIPE ELECTROFUSION COUPLER CONNECTION		NO		BY	
PROJECT INFORMATION:		NO		CDL	
SYSTEM DRAWING		NO		CHK	
5" HDPE PIPE TO 5" HDPE PIPE ELECTROFUSION COUPLER CONNECTION		NO		FIRST ISSUE	
PROJECT NO: SYSTEM		NO		DESCRIPTION	
SHEET NO: A316		NO		BY	
SCALE: NTS		NO		CDL	
TITLE: 5" HDPE PIPE TO 5" HDPE PIPE ELECTROFUSION COUPLER CONNECTION		NO		BY	

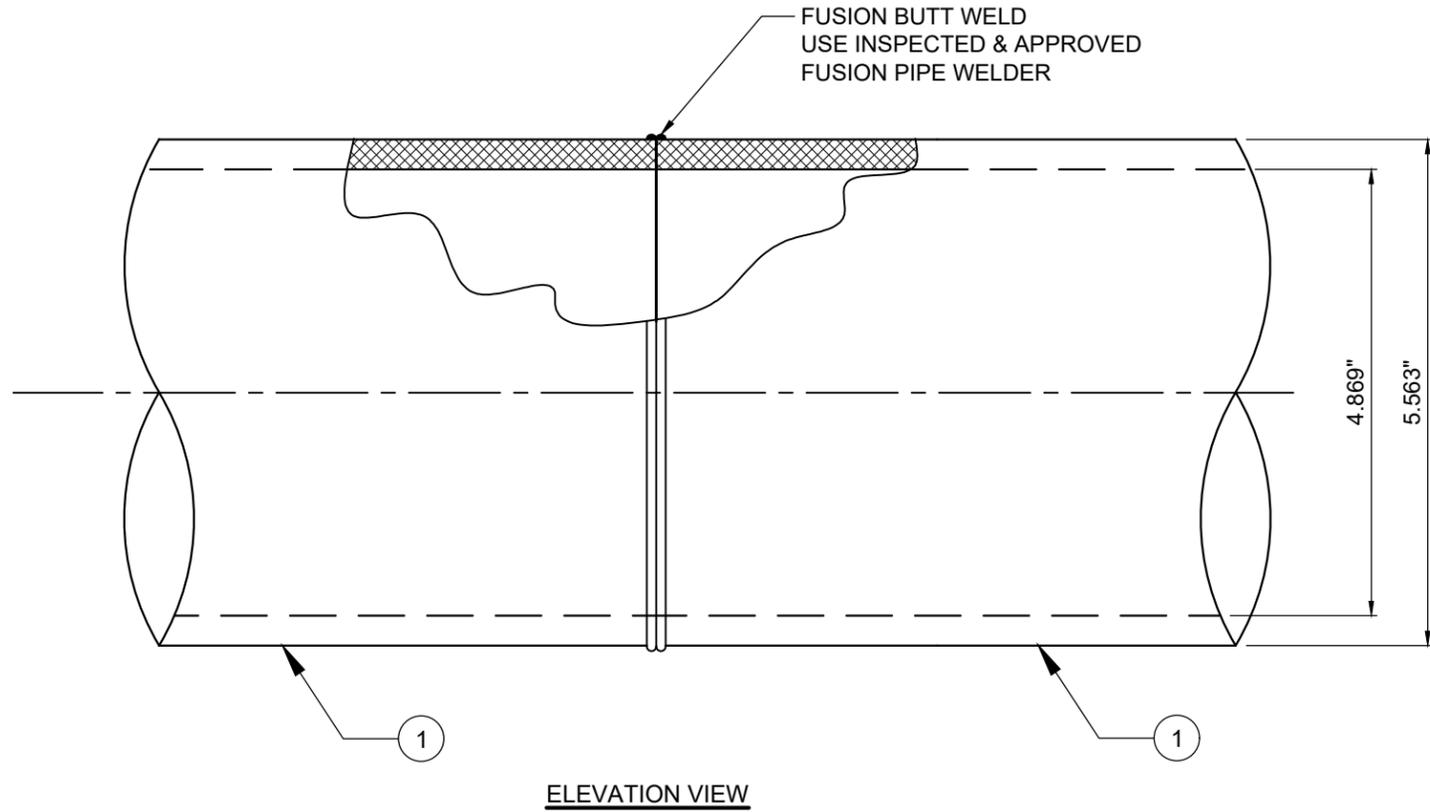
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WWW.VSL.NET



ITEM	QTY	DESCRIPTION	MATERIAL
1	2	5" HDPE PIPE DR-17	ASTM D3035

- NOTES:
 1. HDPE 5" IPS/DR-17 MEETS FDOT 960 SPEC.
 2. SEE VSL BUTT-WELDING PROCEDURE IN APPENDIX

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES / VSL POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES / VSL BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES / VSL TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES / VSL EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

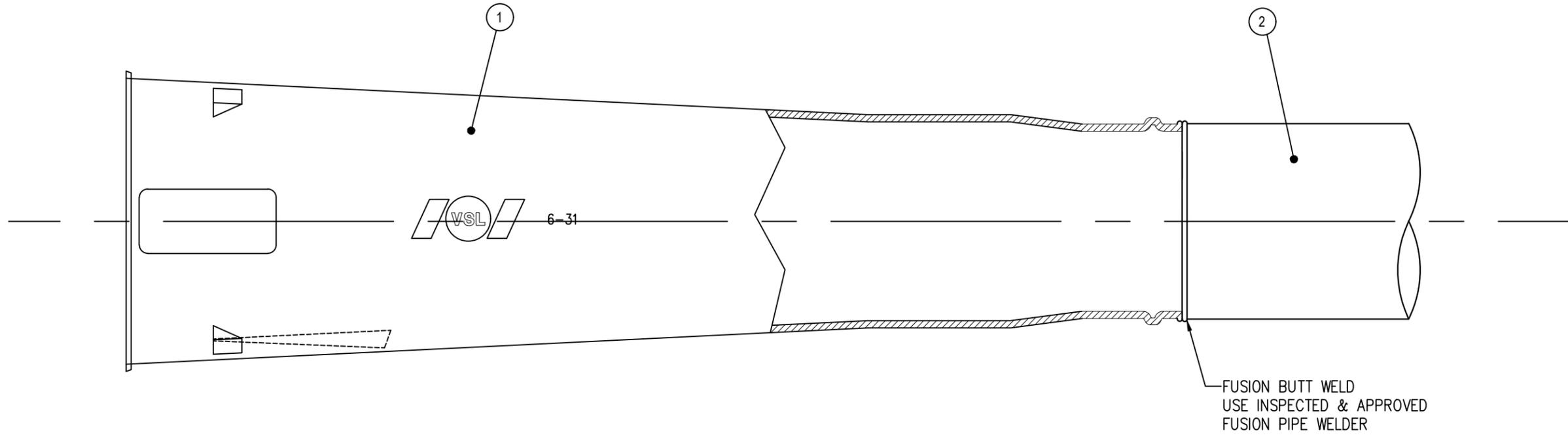
<p>PROJECT INFORMATION:</p> <p>SYSTEM DRAWING</p> <p>PROJECT NO: SYSTEM</p> <p>SHEET NO:</p>	<p>TITLE:</p> <p>TYPICAL 5" HDPE PIPE TO 5" HDPE PIPE FUSION WELDED CONNECTION</p> <p>SCALE: NTS</p>	<p>THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, IS THE PROPERTY OF STRUCTURAL TECHNOLOGIES / VSL. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES / VSL. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION HEREIN FOR ANY OTHER PROJECT OR PURPOSE FOR WHICH IT WAS PREPARED, ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR IT. UNAUTHORIZED UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.</p>	<p>NO</p>	<p>APPROVED FOR CONSTRUCTION</p>	<p>DESCRIPTION</p>	<p>CDL ZX</p>	<p>GB MM</p>	<p>26FEB2018</p>	<p>04APR2011</p>	<p>DATE</p>
		<p>△ 1</p>	<p>△ 0</p>			<p>BY</p>	<p>CHK</p>			<p>DATE</p>
<p>A287</p>										

structural TECHNOLOGIES
A Structural Group Company

Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL

STRUCTURAL TECHNOLOGIES, LLC
 DALLAS OFFICE
 15600 TRINITY BLVD., SUITE 118
 FORT WORTH, TX 76156

PHONE: (817) 545-4807
 FAX: (817) 545-4827
 WWW.VSL.NET



TRUMPET TO HDPE PIPE ASSEMBLY

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
2	-	5" HDPE PIPE	HDPE	-
1	1	NCS 6-31 TRUMPET	HDPE	02BP4436

- NOTES:
 1. HDPE 5" IPS/DR-17 MEETS FDOT 960 SPEC.
 2. SEE VSL BUTT-WELDING PROCEDURE IN APPENDIX

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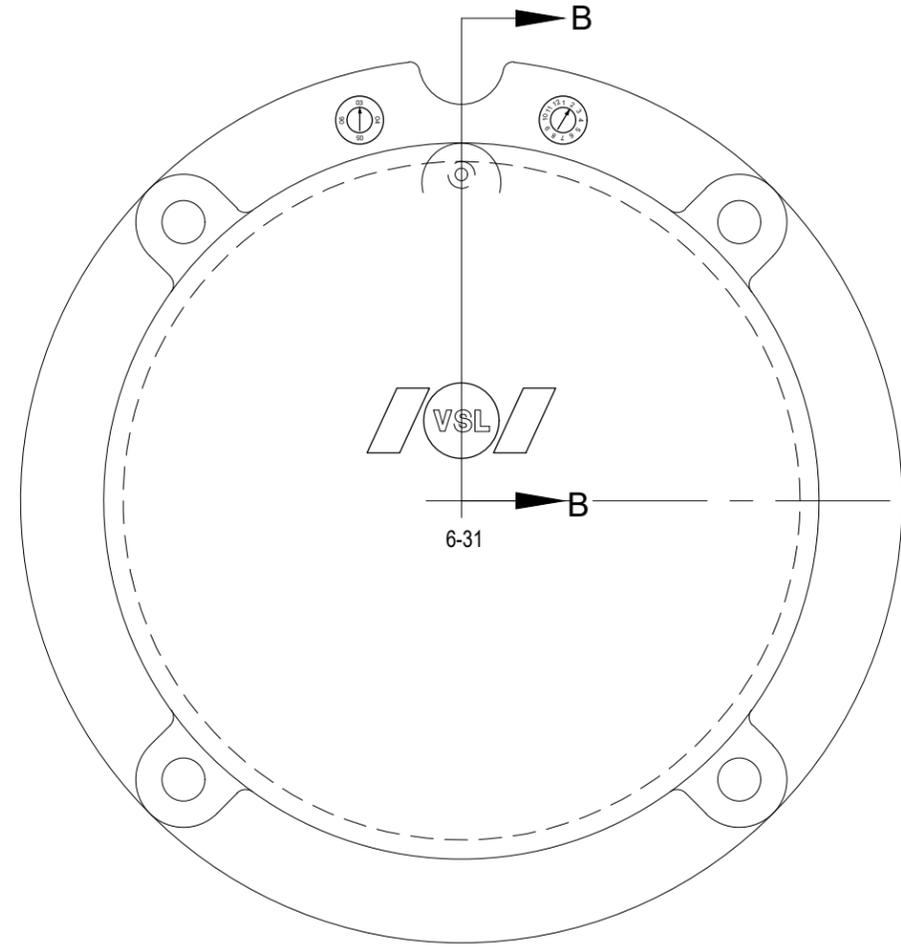
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PROJECT NO:	SYSTEM	NO	NO
SHEET NO:	A325	CDL	ZX
TITLE:		DESCRIPTION	
SYSTEM DRAWING		FIRST ISSUE	
TYPICAL NCS 6-31 TRUMPET TO HDPE PIPE BUTT FUSION CONNECTION		BY	
SCALE:		CHK	
NTS		DATE	
		26FEB2018	

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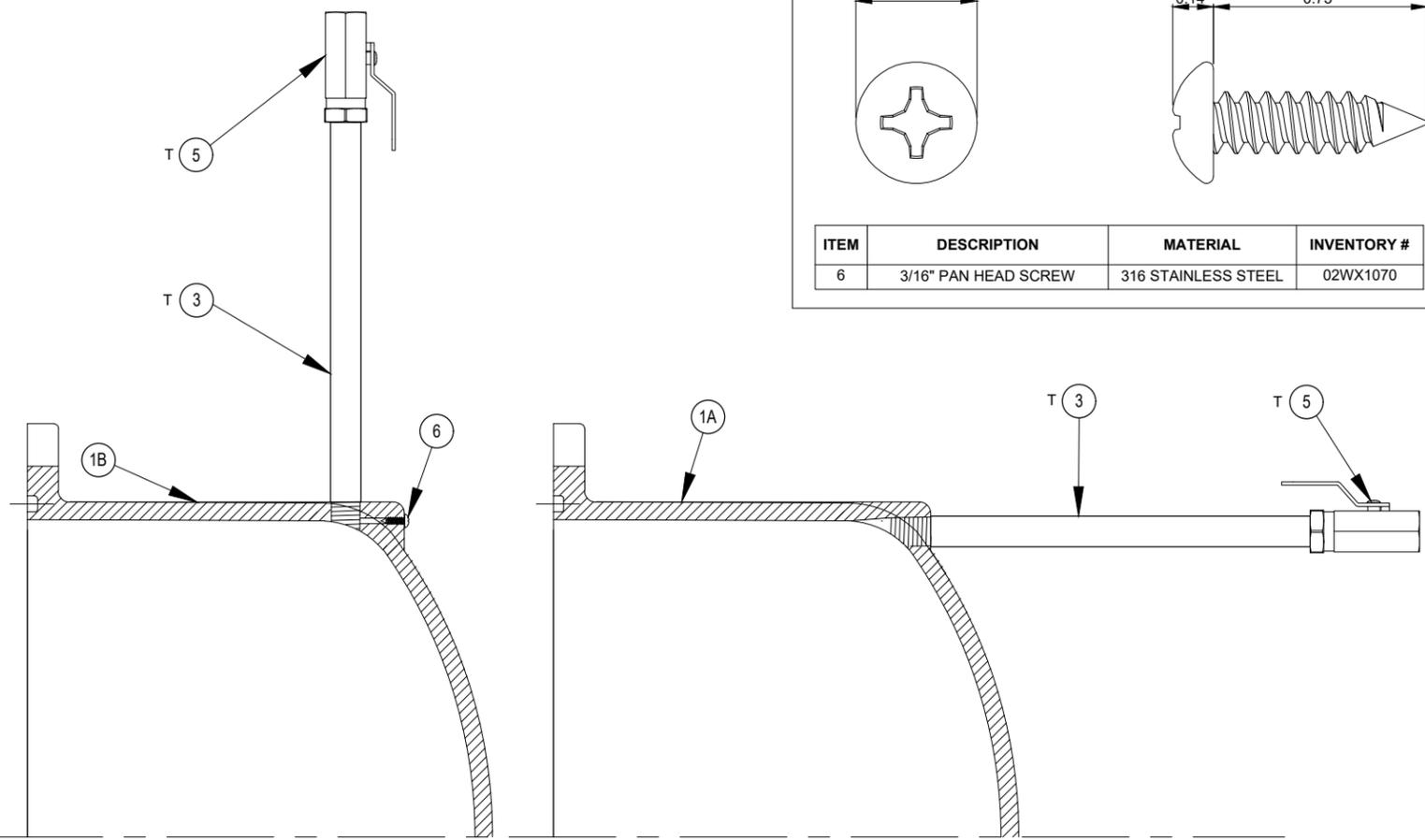
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 15600 TRINITY BLVD., SUITE 118
 FORT WORTH, TX 76156

ELECTRONIC FILE LOCATION: I:\VSL System Drawings\Work in Progress Drawings\Florida DOT Test 2017\NCS 6-31 Flexible Filler Submittal



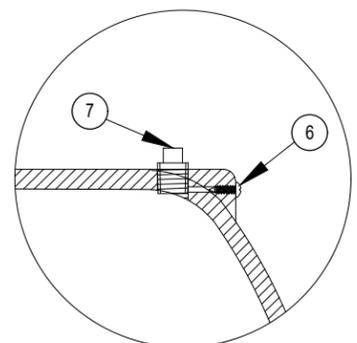
6-31 ANCHORAGE CAP



SECTION B-B

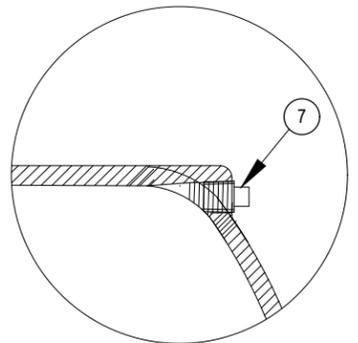
NOTE: ITEMS MARKED WITH A "T" ARE TEMPORARY AND ARE NOT A PERMANENT PART OF THE SYSTEM.

TOP PORT

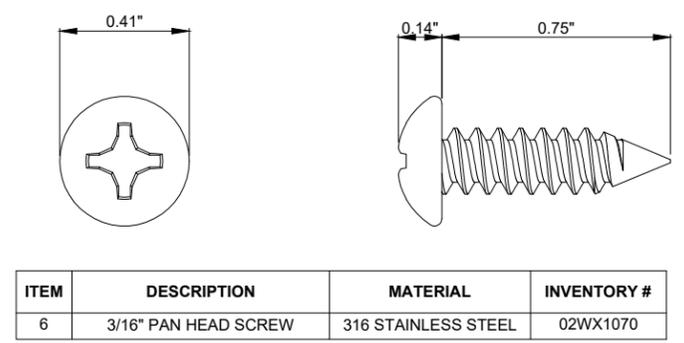


AFTER WAX

FRONT PORT



AFTER WAX



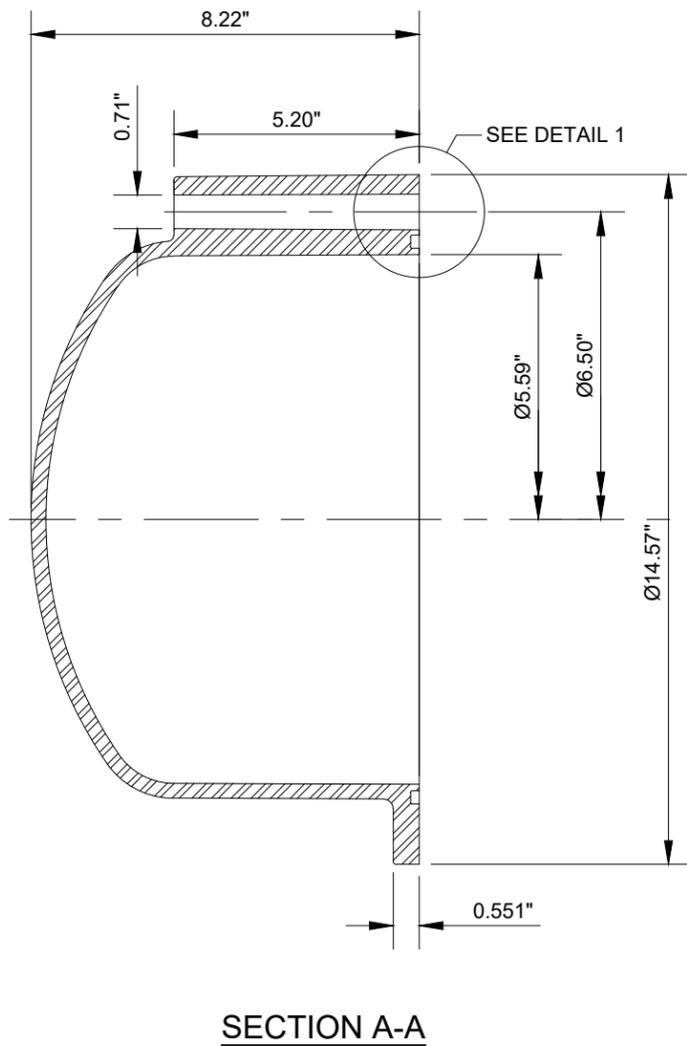
ITEM	DESCRIPTION	MATERIAL	INVENTORY #
6	3/16" PAN HEAD SCREW	316 STAINLESS STEEL	02WX1070

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY No.
7	1	1/4"Ø NPT STEEL PLUG	316 STAINLESS STEEL	02DT01956
6	1	3/16" PAN HEAD SCREW	316 STAINLESS STEEL	02WX1070
5	1	1/4" NPT STEEL 1/4 TURN BALL VALVE	SCH 40 STEEL	02DT01924
3	1	1/4" NPT STEEL NIPPLE	SCH 40 STEEL	-
1B	1	6-31 ANCHORAGE CAP W/ 1/4" TOP PORT	ABS	02GC63103
1A	1	6-31 ANCHORAGE CAP W/ 1/4" FRONT PORT	ABS	02GC63102

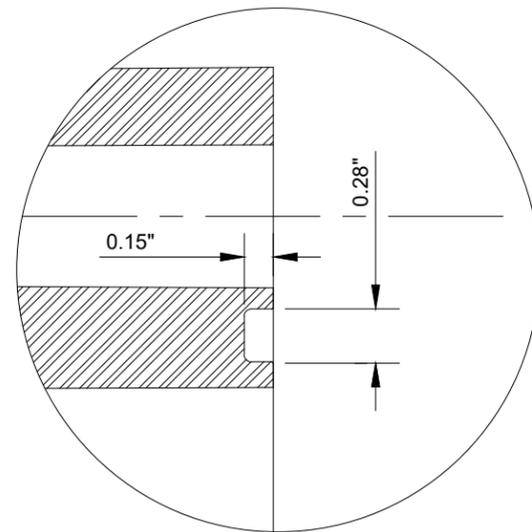
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PROJECT INFORMATION:	SYSTEM DRAWING	TITLE: NCS 6-31 ANCHORAGE CAP VENT DETAIL	
	PROJECT NO: SYSTEM	SCALE: NTS	
SHEET NO:	A334		
<p>STRUCTURAL TECHNOLOGIES, LLC DALLAS OFFICE 15600 TRINITY BLVD, SUITE 118 FORT WORTH, TX 76156</p> <p>Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL</p> <p>PHONE: (817) 545-4877 FAX: (817) 545-4827 WWW.VSL.NET</p>			
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2	TITLE BLOCK UPDATED	NO	
1	VENT DETAILS	0	
0	3/4" GROUT PORTS	0	
NO	DESCRIPTION	NO	
CDL	ZX	26FEB2018	DATE
DTS	DD	03JUL2012	DATE
DTS	DD	18MAY2012	DATE
BY	CHK		

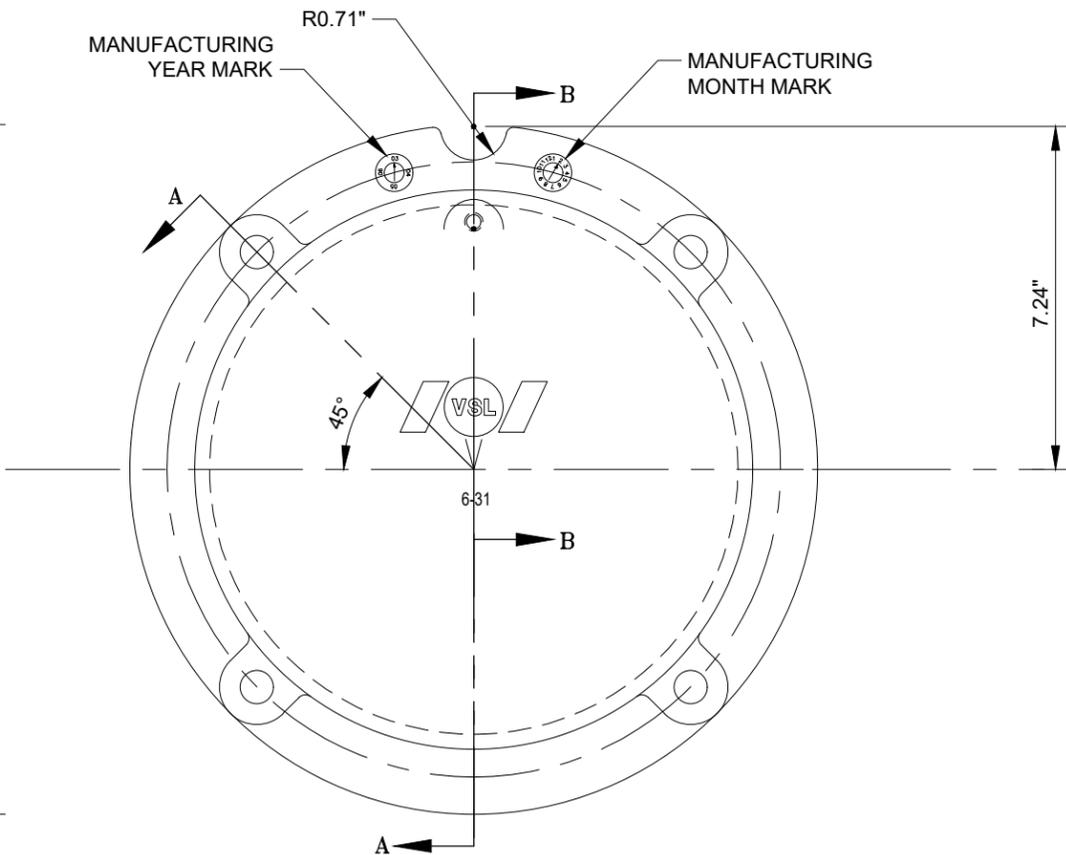
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SECTION A-A



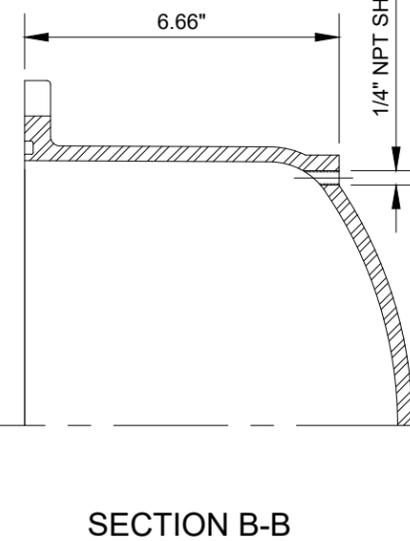
DETAIL 1



6-31 ANCHROAGE CAP
LETTERING SHALL BE 0.06" PROUD

TOLERANCES	
UNLESS OTHERWISE SPECIFIED	
FRACTIONAL	± 1/32
DECIMAL	.X ± .030
	.XX ± .010
	.XXX ± .005
ANGULAR	± 1/2°

NOTES:
 1) DIMENSIONS ARE IN INCHES
 2) MATERIAL: ABS LUSTRAN 633
 3) INVENTORY #: 02GC63102

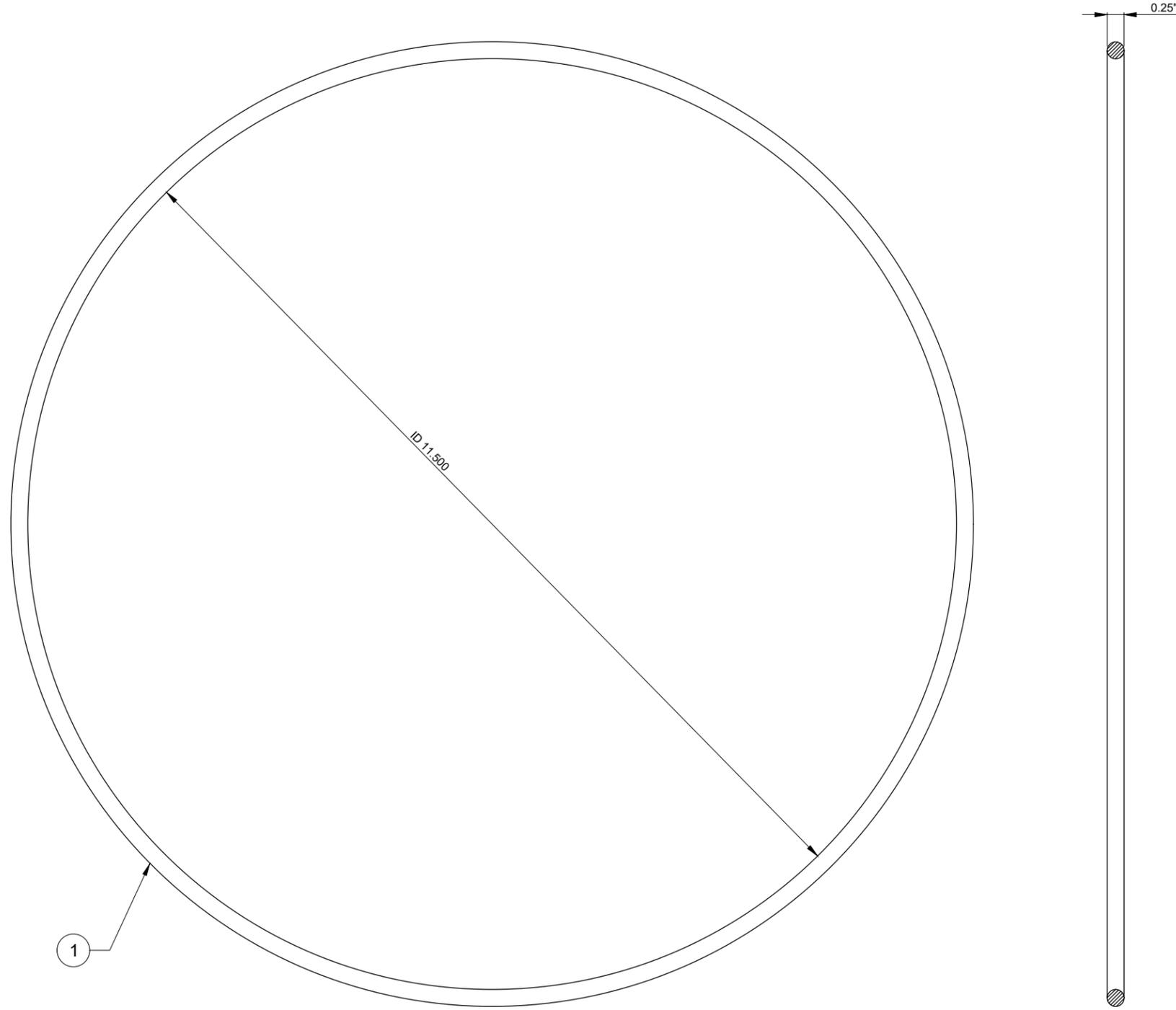


SECTION B-B

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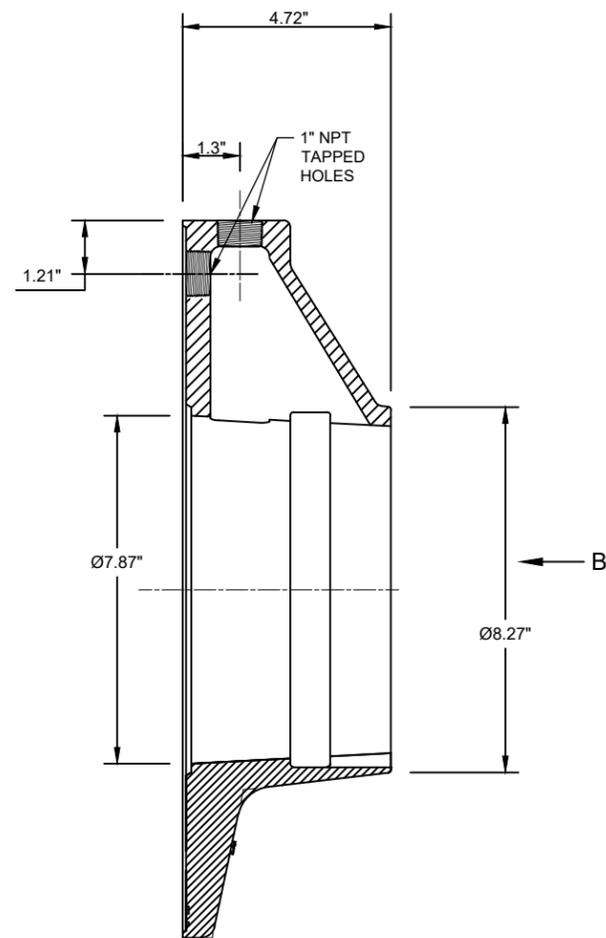
PROJECT INFORMATION:		SYSTEM DRAWINGS	
TITLE:	6-31 ANCHORAGE CAP W/ 1/4" NPT FRONT PORT	PROJECT NO:	SCALE: NTS
SHEET NO:	C551	SHEET NO:	C551
NO	DESCRIPTION	BY	CHK
1	ADD MANUFACTURING DATE MARKS	LS	BY
2	REVISD PORT HOLES	CDL	ZX
3	REVISED TITLE BLOCK	CDL	ZX
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26FEB2018	01MAR2017	19JAN2004	

ITEM	QTY	DESCRIPTION	MATERIAL	SIZE	INVENTORY#
1	-	6-31 ANCHORAGE CAP O-RING	HNBR	11.5"x12"x0.25"	02WX5042

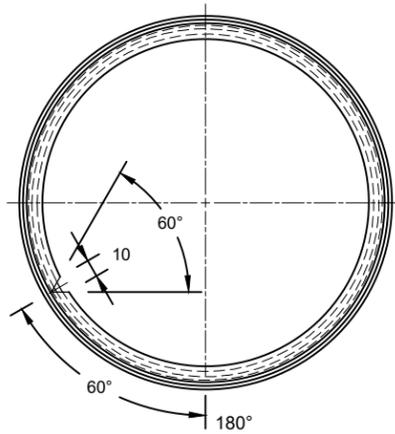


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<p>PROJECT INFORMATION:</p> <p>PROJECT NO: SYSTEM</p> <p>SHEET NO:</p>		<p>TITLE: 6-31 ANCHORAGE CAP O-RING</p> <p>SCALE: NTS</p>	
<p>THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES / VSL. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF STRUCTURAL TECHNOLOGIES / VSL. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE PROJECT FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR ANY IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.</p>		<p>NO</p>	<p>FIRST ISSUE</p>
<p>NO</p>	<p>DESCRIPTION</p>	<p>BY</p>	<p>CDL</p>
<p>NO</p>	<p>DESCRIPTION</p>	<p>CHK</p>	<p>ZX</p>
<p>NO</p>	<p>DESCRIPTION</p>	<p>DATE</p>	<p>26FEB2018</p>



SECTION A-A

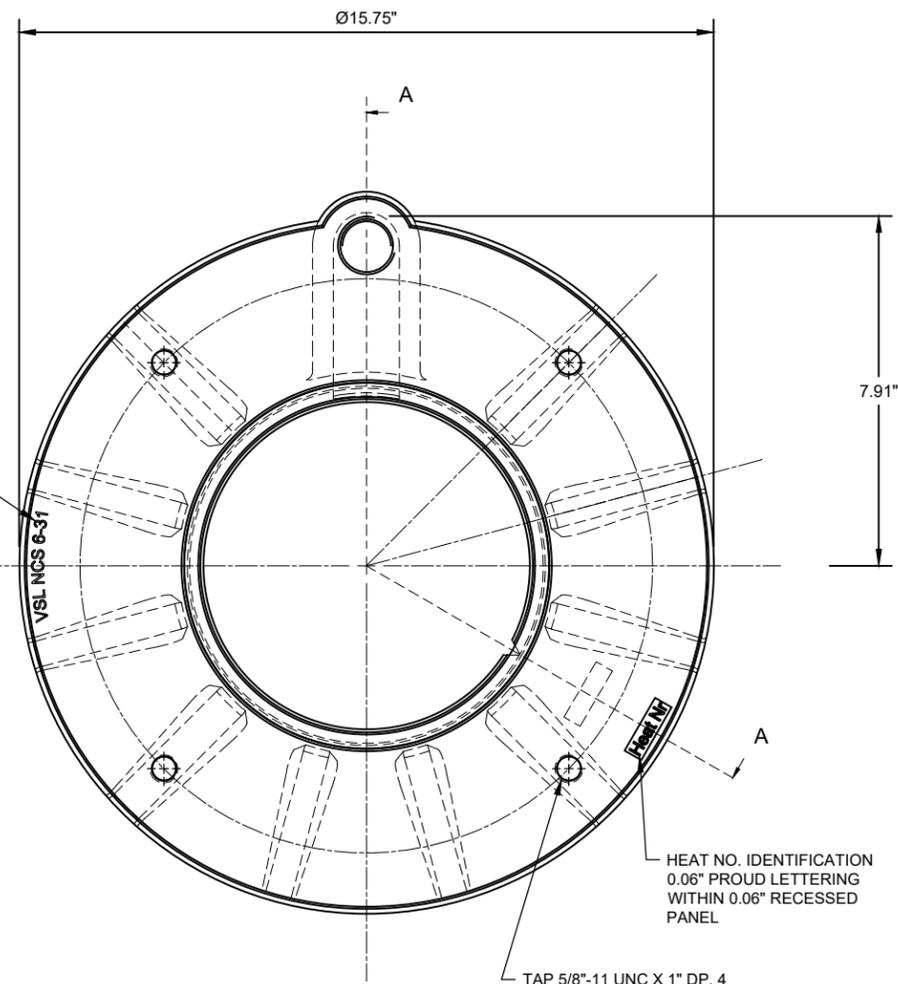


VIEW B

GENERAL NOTES

1. ALL HOLES TO BE FREE FROM BURRS
2. MATERIAL: A536 GR80-55-06 GALVANIZED
3. INVENTORY# 02BP6031V

TYPE IDENTIFICATION
LETTERING 0.06"
RECESSED

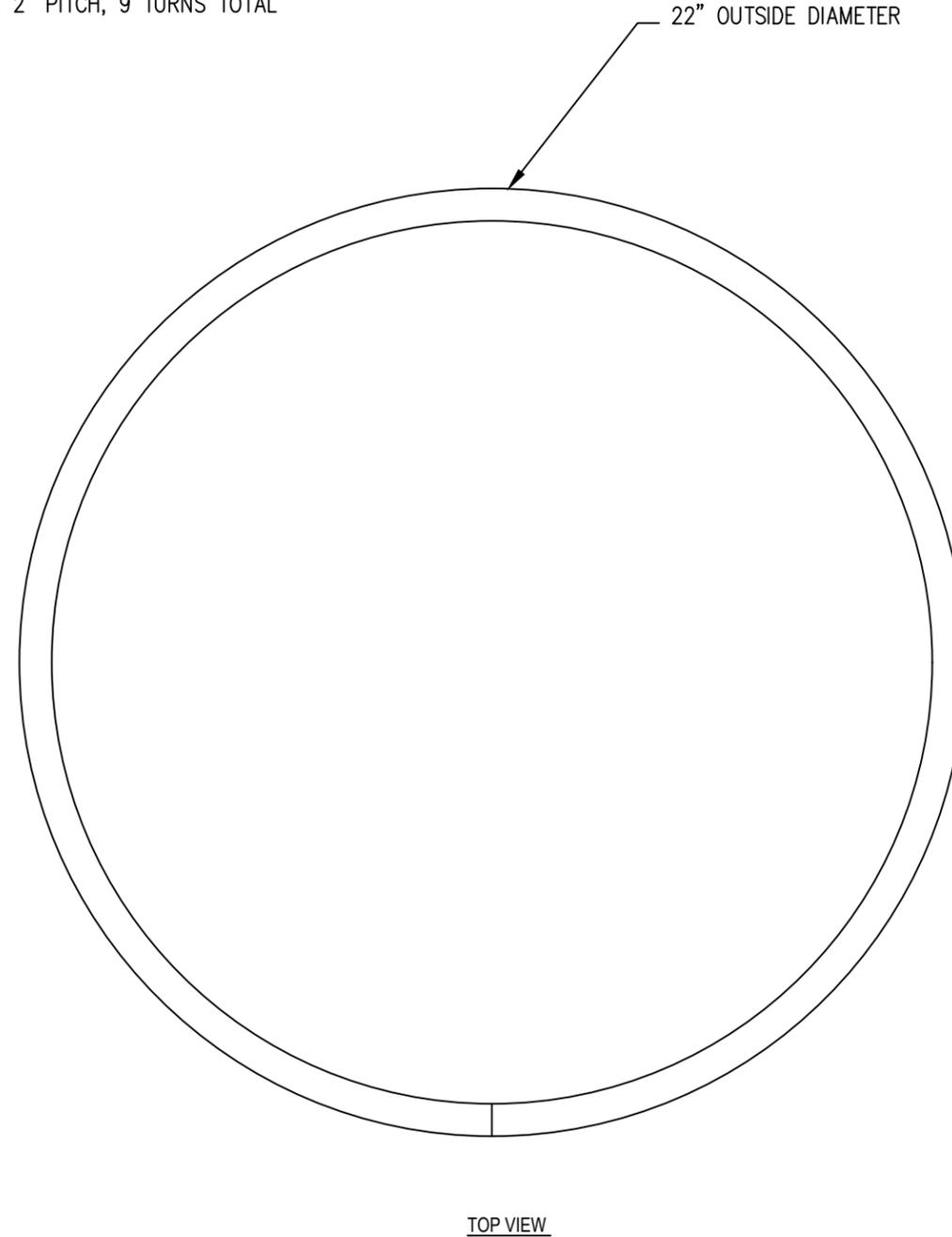
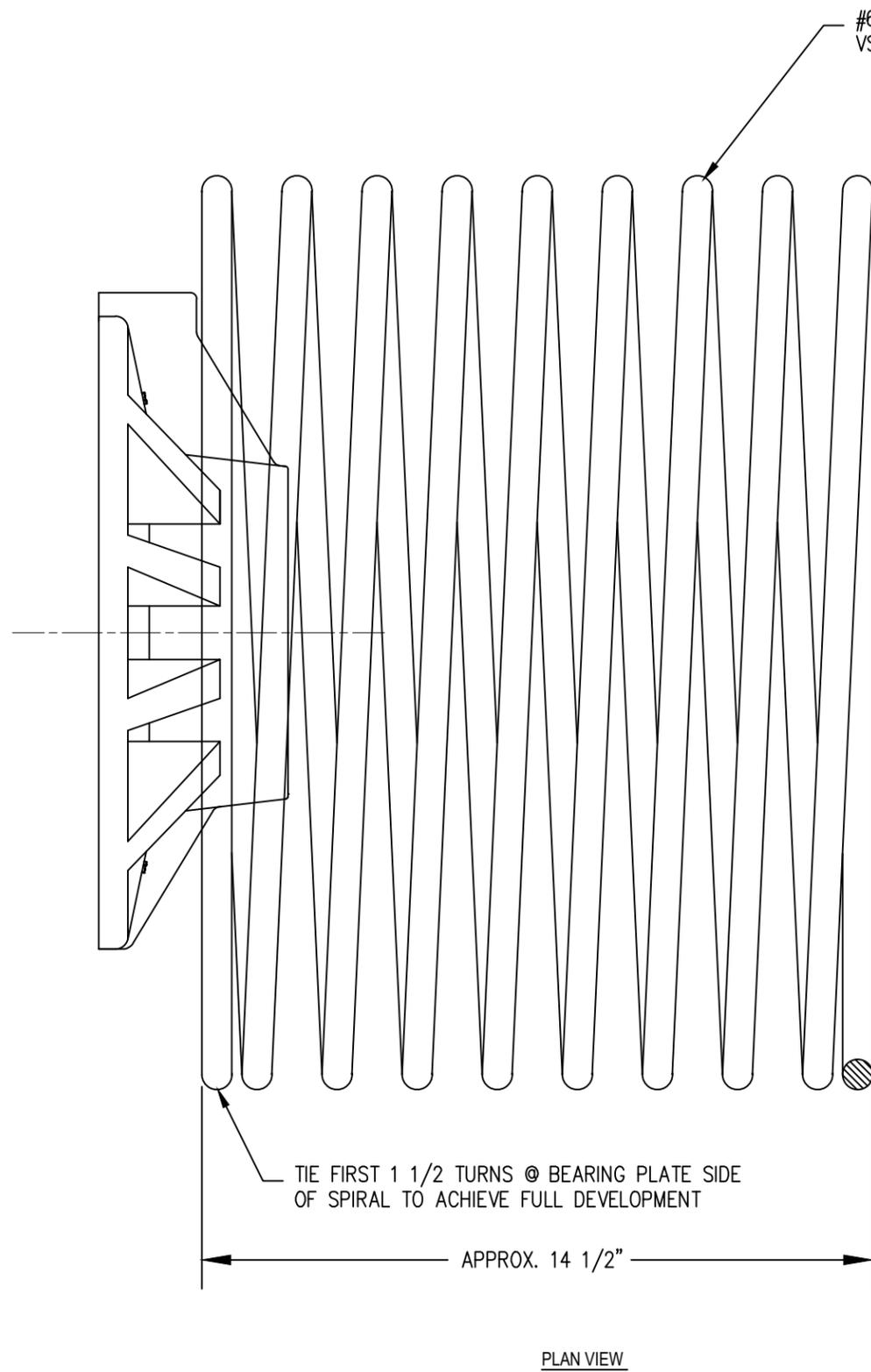


BACK VIEW

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SYSTEM DRAWING		PRELIMINARY NOT FOR PRODUCTION	
PROJECT NO: SYSTEM	SCALE: NTS	CDL ZX	BY CHK
TITLE: NCS 6-31 BEARING PLATE W/ 1" NPT PORT		DATE 26FEB2018	
SHEET NO: C735		DESCRIPTION	

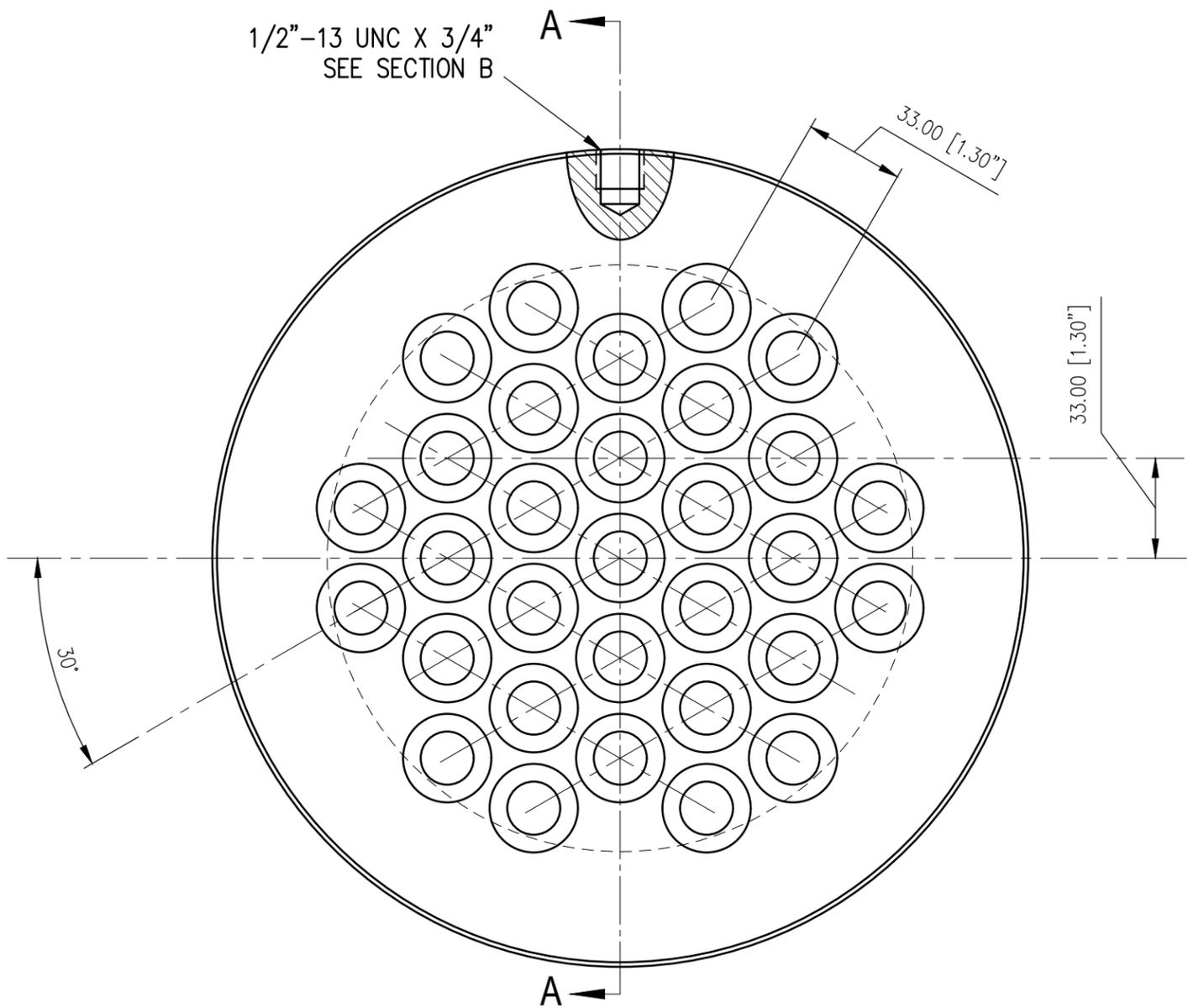
ELECTRONIC FILE LOCATION: I:\VSL System Drawings\Work In Progress Drawings\Florida DOT Test 2017\NCS 6-31 Flexible Filler Submittal



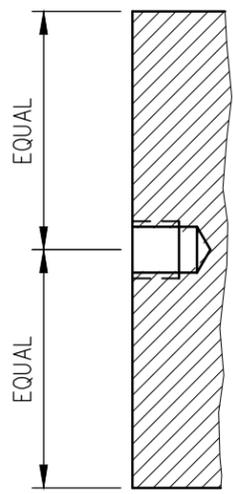
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PROJECT INFORMATION:		TITLE BLOCK UPDATED		CDL	ZX	26FEB2018
SYSTEM DRAWING		REVISED AS NOTED FOR CONSTRUCTION		TB	MM	06JUL2011
NCS 6-31 SPIRAL		RELEASED FOR CONSTRUCTION		GDH	GY	24SEP2009
PROJECT NO: SYSTEM		DESCRIPTION		BY	CHK	DATE
SHEET NO: C644		NO				
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1/2"-13 UNC X 3/4"
SEE SECTION B



PLAN VIEW



SECTION B

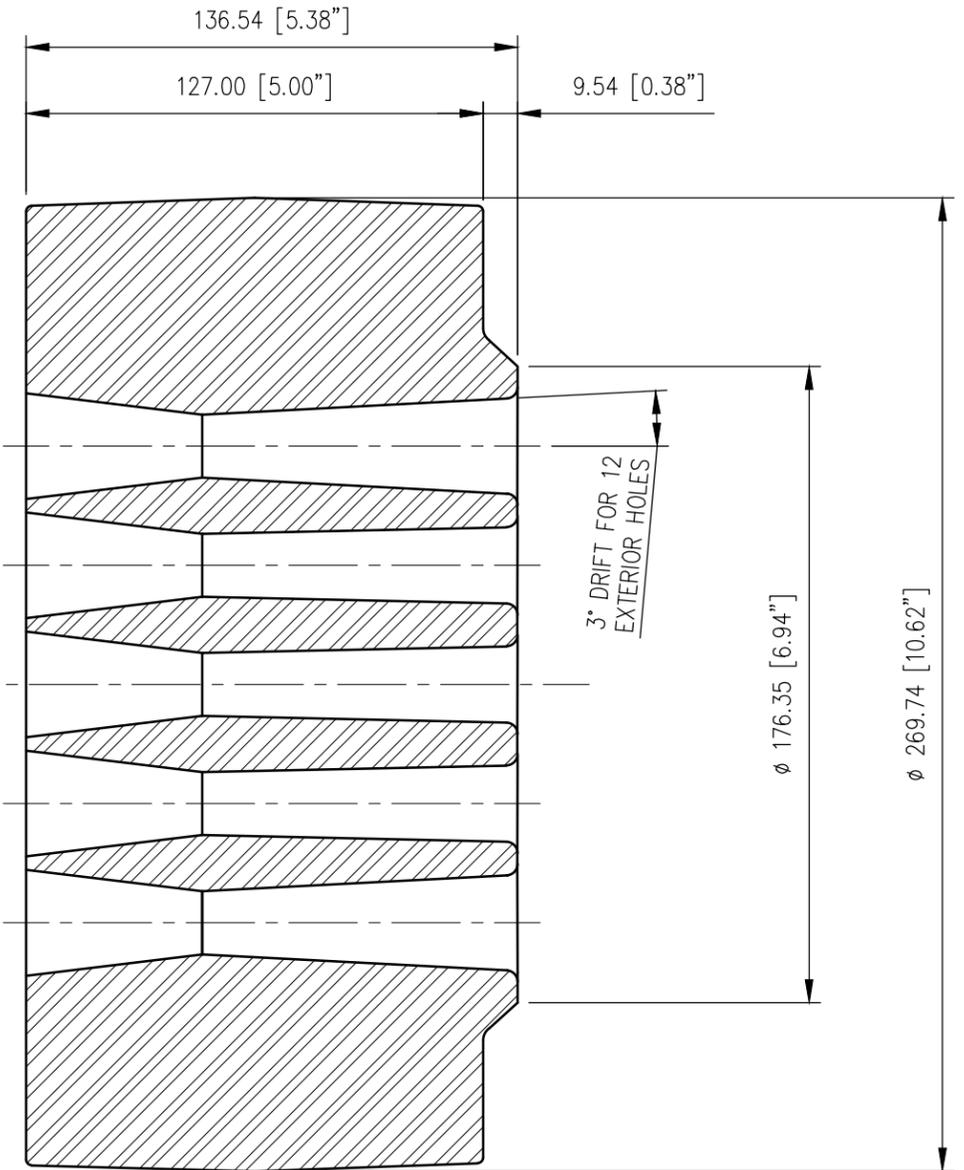
ANCHORHEAD NCS 6-31

GENERAL CASTING NOTES

- 1) ALL HOLES TO BE FREE FROM BURRS
- 2) ALL RADII 1mm UNO
- 3) MATERIAL: ASTM A536 GR 80-55-06
VSL Q.A. DOC MS 1.1.005
- 4) MANUFACTURERS IDENTIFICATION AND BATCH No.
MUST BE CLEARLY VISIBLE ON CASTING
- 5) SCALE: DRAWING NOT TO SCALE
- 6) WEIGHT: 106 LBS. est.

INVENTORY No. 02AH6031

TOLERANCES	
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN MILLIMETERS.	
0 THROUGH 50mm	±0.5
51mm THROUGH 100mm	±1.0
MORE THAN 100mm	±1.5
ANGULAR	±1/2°
SURFACE QUALITY	✓
NOTES:	
1) BREAK SHARP EDGES	
2) REMOVE ALL BURRS.	
3) DO NOT SCALE DRAWING.	
4) ALL DRAFT ANGLES 2° UNO	



SECTION A-A

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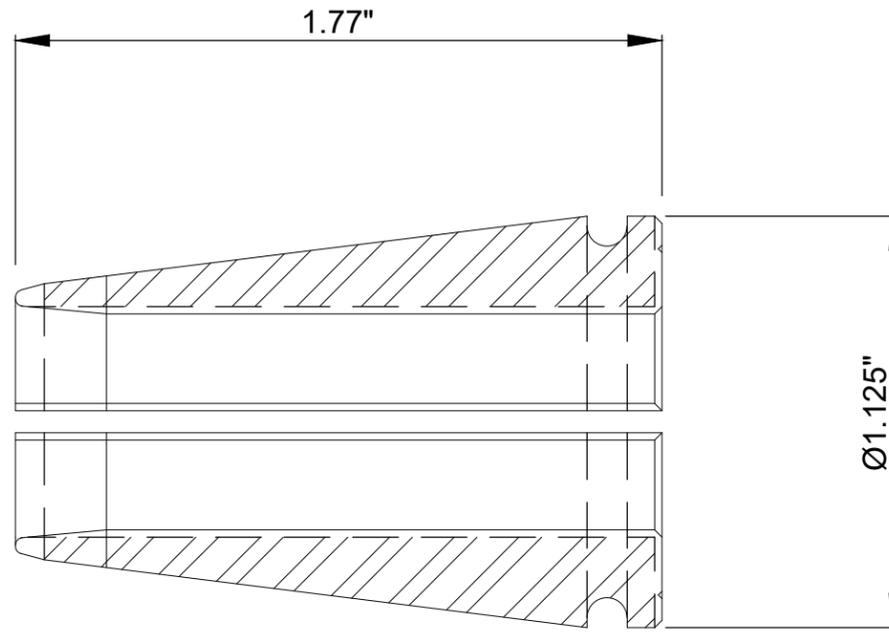
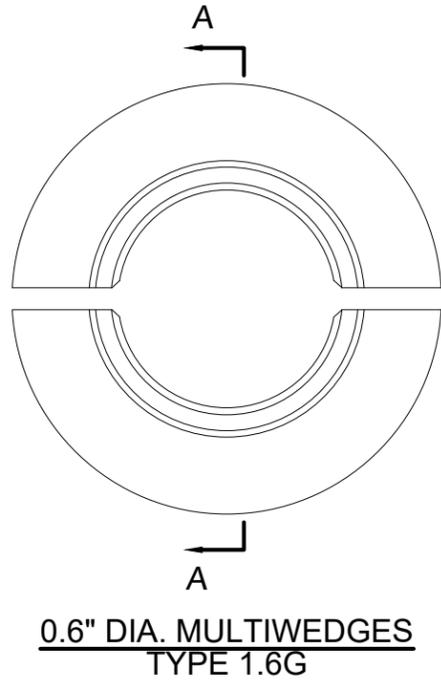
PROJECT INFORMATION:		TITLE BLOCK UPDATED		CDL	26FEB2018
SYSTEM DRAWING		ADDED 1/2-13 LIFTING EYE THREAD		ZX	ZX
NCS 6-31 ANCHOR HEAD		(UPDATED MATERIAL INFO.) FOR PRODUCTION		GDH	09JAN2018
TITLE: NTS		(UPDATED MATERIAL INFO.) FOR PRODUCTION		JOB	GAH
SCALE: NTS		DESCRIPTION		GDH	GAH
SHEET NO: C614				BY	CHK
				DATE	DATE

structural TECHNOLOGIES
A Structural Group Company

Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL

STRUCTURAL TECHNOLOGIES, LLC
DALLAS OFFICE
15600 TRINITY BLVD, SUITE 118
FORT WORTH, TX 76155

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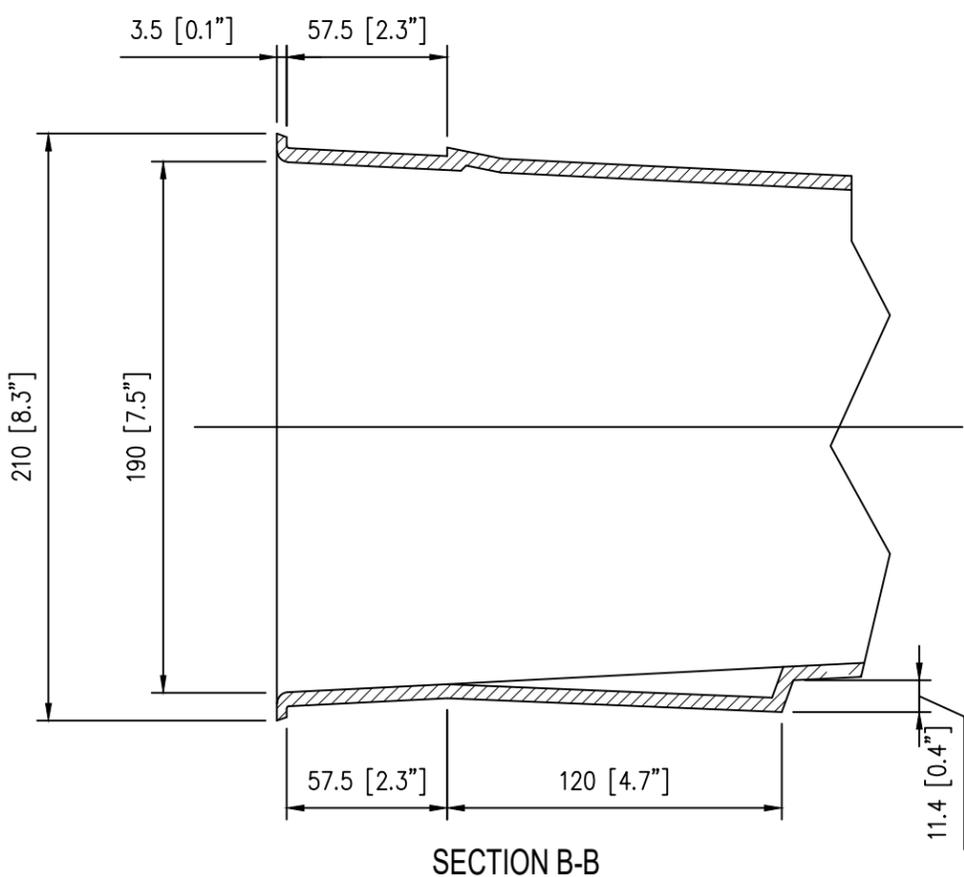
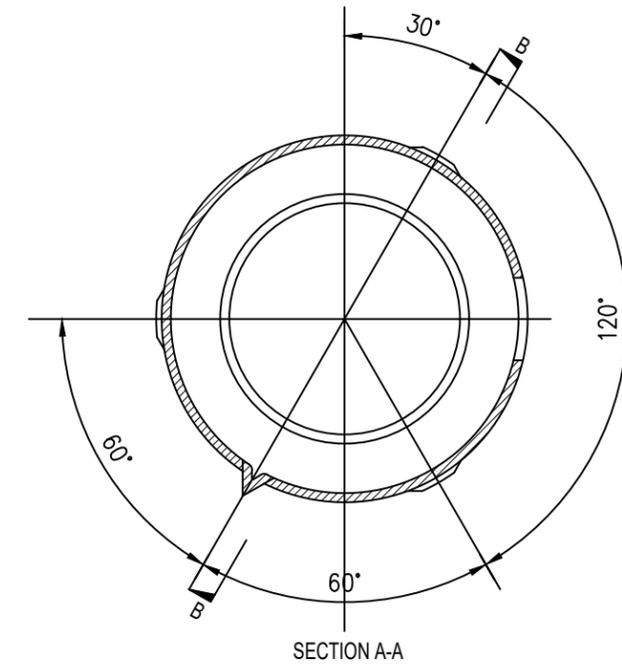
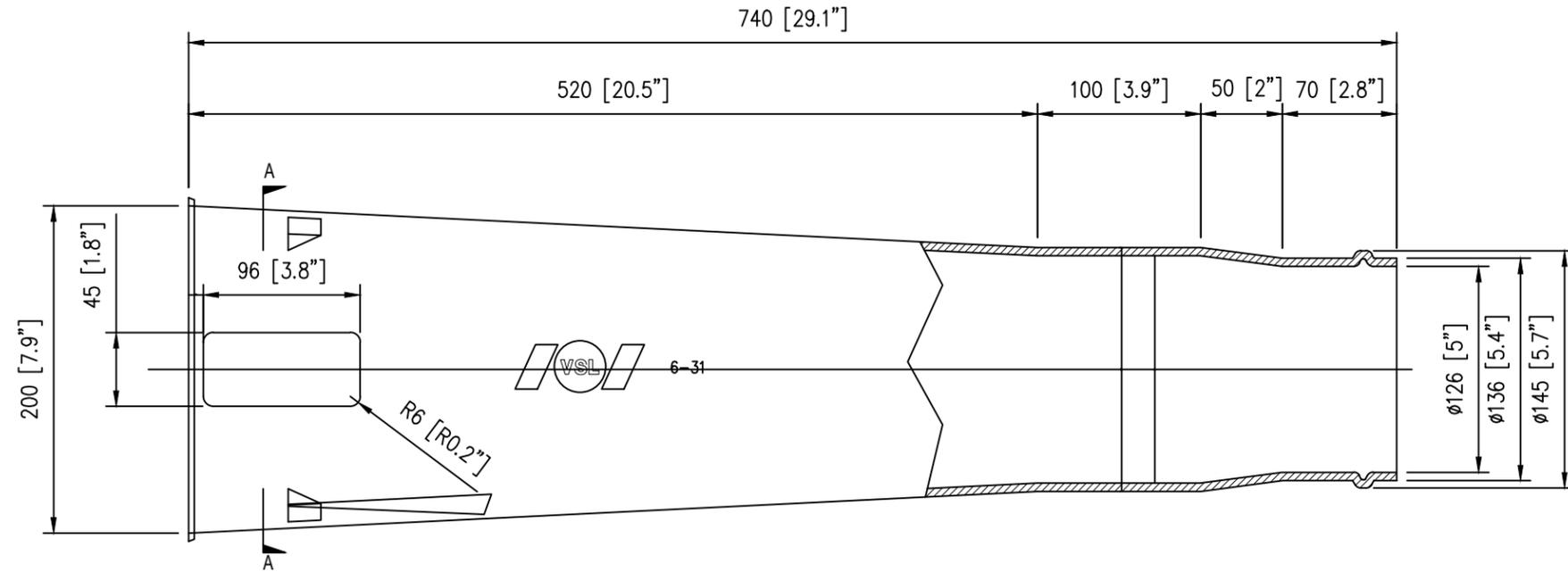
- NOTES:**
1. MATERIAL: AISI 11L17/12L14, PRODUCED IN STRICT ACCORDANCE WITH VSL MS 3.1.006
 2. WEIGHT: 0.197 LBS. (APPROX.)
 3. HEAT TREATMENT: CASEHARDENED
 4. INVENTORY NO. 02WG0008

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<p>structural TECHNOLOGIES A Technical Group Company</p> <p>Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL</p> <p>STRUCTURAL TECHNOLOGIES, LLC DALLAS OFFICE 15600 TRINITY BLVD, SUITE 118 FORT WORTH, TX 76156</p> <p>PHONE: (817) 545-4877 FAX: (817) 545-4827 WWW.VSL.NET</p>	5	TITLE BLOCK UPDATED	CDL	ZX	26FEB2018
	4	UPDATED TITLE BLOCK	SK	ZX	09JAN2015
	3	UPDATED BORDER	GDH		29APR2004
	2	ADDED INVENTORY NUMBER	TKW		01JAN1989
	NO	DESCRIPTION	BY	CHK	DATE

PROJECT INFORMATION:	PROJECT NO: SYSTEM	SCALE: NTS
TITLE: 0.6" MULTIWEDGE TYPE 1.6G	SHEET NO: C218	

ELECTRONIC FILE LOCATION: I:\VSL System Drawings\Work In Progress Drawings\Florida DOT Test 2017\NCS 6-31 Flexible Filler Submittal



TOLERANCES
 UNLESS OTHERWISE SPECIFIED
 DIMENSIONS IN MILLIMETERS.

0 THROUGH 50mm
 51mm THROUGH 100mm ±0.5
 MORE THAN 100mm ±0.5
 ANGULAR ±1.0
 SURFACE QUALITY ±1.5
 NOTES: ±1/2'

1) BREAK SHARP EDGES
 2) REMOVE ALL BURRS. ✓
 3) DO NOT SCALE DRAWING.
 4) ALL RADII 1mm UNO
 5) MATERIAL: HDPE

INVENTORY No. 02BP4436

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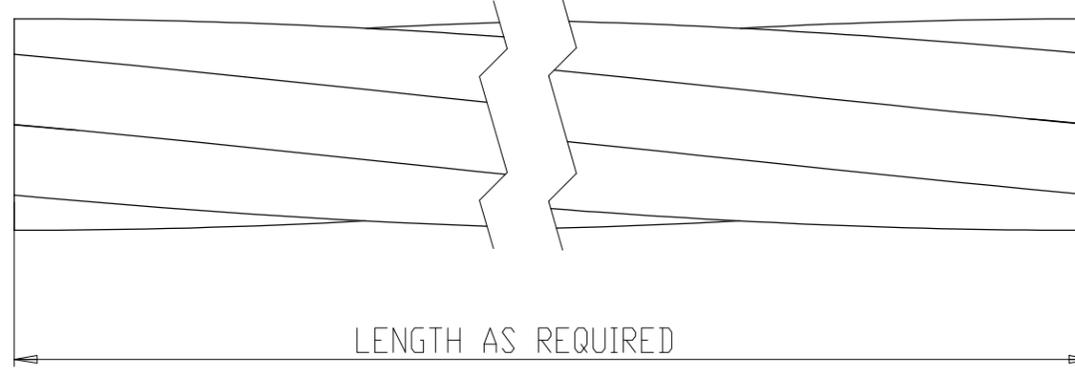
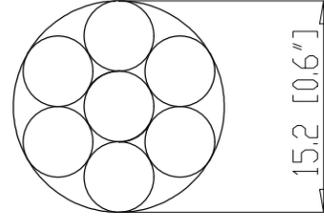
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STRUCTURAL TECHNOLOGIES, LLC
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 FORT WORTH, TX 76156

PROJECT INFORMATION:	SYSTEM DRAWING	TITLE:	NCS 6-31 TRUMPET
PROJECT NO:	SYSTEM	SCALE:	NTS
SHEET NO:			C645

NO	DESCRIPTION	BY	CHK	DATE
2	TITLE BLOCK UPDATED	CDL	ZX	26FEB2018
1	ISSUED FOR CONSTRUCTION	JE		27OCT2009



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PROJECT INFORMATION:

SYSTEM DRAWING

VSL POST TENSIONING 0.6" BARE STRAND
ASTM A416, 270KSI

PROJECT NO:
SYSTEM

SCALE:
NTS

SHEET NO:

C674



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NO

NO

TITLE BLOCK UPDATED

FOR FDOT

CDL ZX

MM

BY

CHK

DESCRIPTION

26FEB2018

04FEB2010

DATE



ITEM	QTY	DESCRIPTION	MATERIAL
1	-	5" HDPE PIPE DR-17	ASTM D3035

NOTE: MINIMUM BEND RADIUS = 30'-0"

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PROJECT INFORMATION:

PROJECT NO:
SYSTEM

TITLE:
5" HDPE PIPE

SCALE:
NTS

SHEET NO:
C718

structural TECHNOLOGIES
A Structural Group Company

Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL

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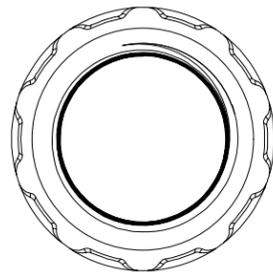
CHK

DATE

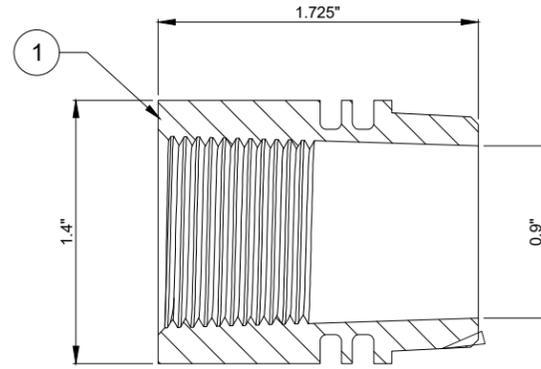
26FEB2018

CDL

ZX



END VIEW



SIDE VIEW

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	3/4" FNPT SMOOTH GROUT PORT	POLYETHYLENE	02DT0253

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PROJECT INFORMATION:

SYSTEM DRAWING

TITLE:
3/4" FNPT SMOOTH GROUT PORT

PROJECT NO:

SCALE:
NTS

SHEET NO:

C743

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FIRST ISSUE

DESCRIPTION

CDL

BY

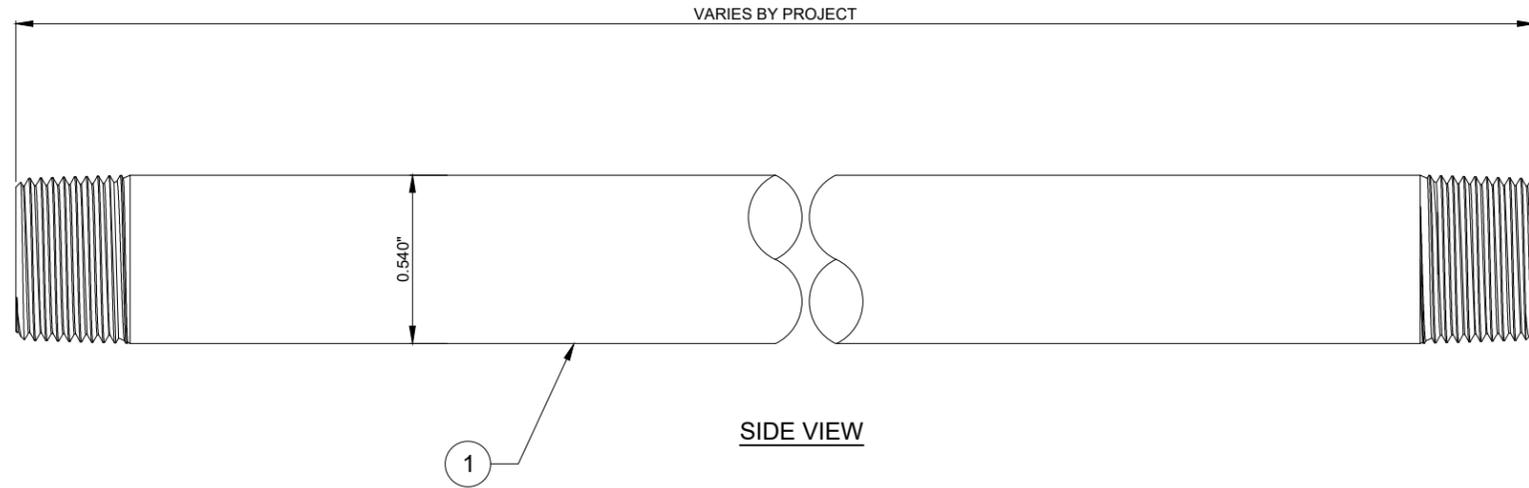
ZX

CHK

26FEB2018

DATE

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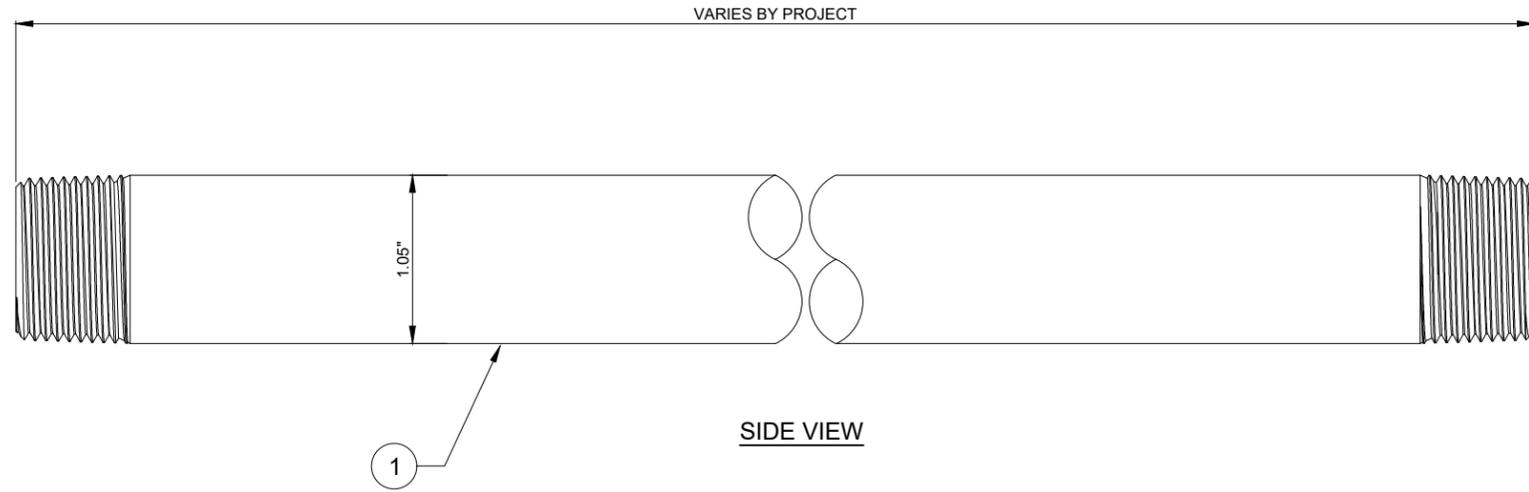


ITEM	QTY	DESCRIPTION	MATERIAL
1	-	1/4" NPT STEEL NIPPLE	SCH 40 STEEL

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PROJECT INFORMATION:		STRUCTURAL TECHNOLOGIES, LLC CLAIMS A STRICT PROPRIETARY RIGHT IN ALL DRAWINGS, SPECIFICATIONS AND CALCULATIONS ("INFORMATION") SET FORTH ON THIS SHEET. THE USE OF SUCH INFORMATION IN WHOLE OR IN PART, OR ANY REPRODUCTION THEREOF, IS STRICTLY PROHIBITED, AND TO THE MATERIAL AND/OR SERVICE PROVIDED BY STRUCTURAL TECHNOLOGIES / VSL. ANY OTHER USE IS STRICTLY PROHIBITED, AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY THEREFORE.	
PROJECT NO:	1	SCALE:	NTS
SHEET NO:	C749	TITLE:	1/4" NPT STEEL NIPPLE
SYSTEM DRAWING		 structural TECHNOLOGIES A Structural Group Company Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL PHONE: (817) 545-4877 FAX: (817) 545-4827 WWW.VSL.NET STRUCTURAL TECHNOLOGIES, LLC DALLAS OFFICE 15600 TRINITY BLVD, SUITE 118 FORT WORTH, TX 76156	
NO	△	FIRST ISSUE	CDL ZX
NO	△	DESCRIPTION	BY CHK
			DATE
			26FEB2018

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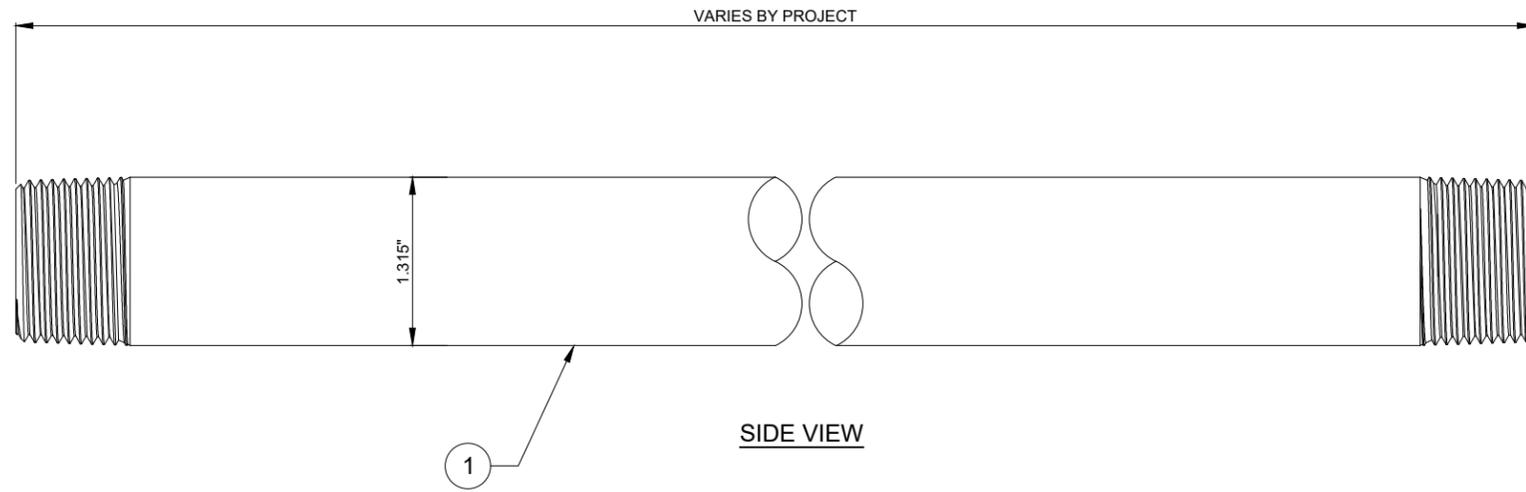


ITEM	QTY	DESCRIPTION	MATERIAL
1	-	3/4" NPT NIPPLE	SCH 40 STEEL

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PROJECT INFORMATION:		STRUCTURAL TECHNOLOGIES, LLC CLAIMS A STRICT PROPRIETARY RIGHT IN ALL DRAWINGS, SPECIFICATIONS AND CALCULATIONS ("INFORMATION") SET FORTH ON THIS SHEET. THE USE OF SUCH INFORMATION IN WHOLE OR IN PART, OR ANY REPRODUCTION THEREOF, IS STRICTLY PROHIBITED, AND TO THE MATERIAL AND/OR SERVICE PROVIDED BY STRUCTURAL TECHNOLOGIES / VSL. ANY OTHER USE IS STRICTLY PROHIBITED, AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY THEREFORE.	
PROJECT NO:	1	CDL	ZX
SHEET NO:		BY	CHK
TITLE:		DESCRIPTION	
SYSTEM DRAWING		FIRST ISSUE	
3/4" NPT STEEL NIPPLE		NO	
SCALE:		DATE	
NTS		26FEB2018	
C722			

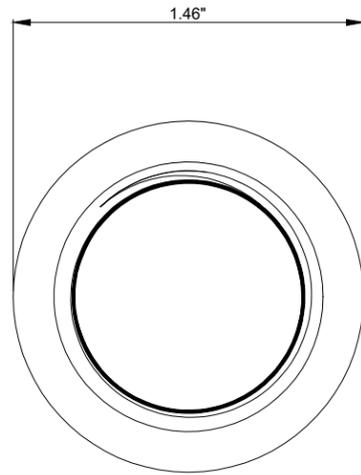
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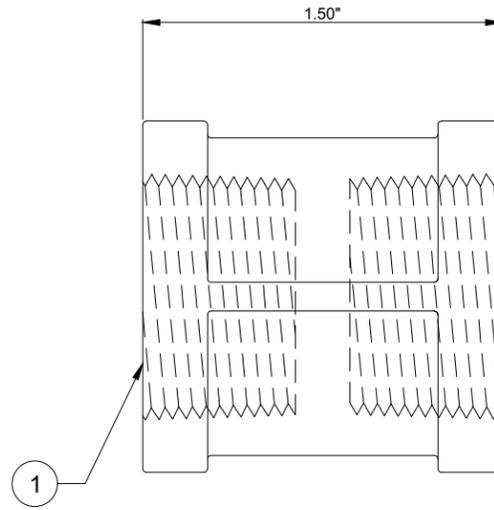
ITEM	QTY	DESCRIPTION	MATERIAL
1	-	1" NPT STEEL NIPPLE	SCH 40 STEEL

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PROJECT NO:	1	CDL	ZX
SHEET NO:	C725	BY	CHK
TITLE:		DESCRIPTION	
1" NPT STEEL NIPPLE		FIRST ISSUE	
SCALE:		NO	
NTS		NO	
		DATE	
		26FEB2018	



END VIEW



SIDE VIEW

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	3/4" NPT F/F COUPLER	SCH 40 STEEL	02DT01952

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PROJECT INFORMATION:

SYSTEM DRAWING

PROJECT NO: -

SHEET NO:

TITLE:
3/4" NPT F/F COUPLER

SCALE:
NTS

C728

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NO

FIRST ISSUE

DESCRIPTION

CDL

BY

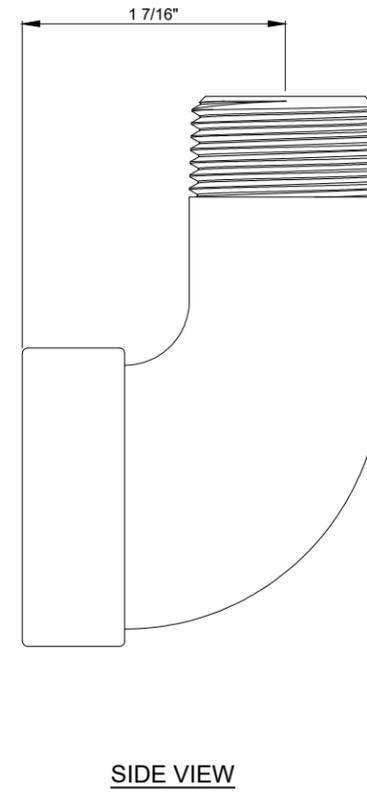
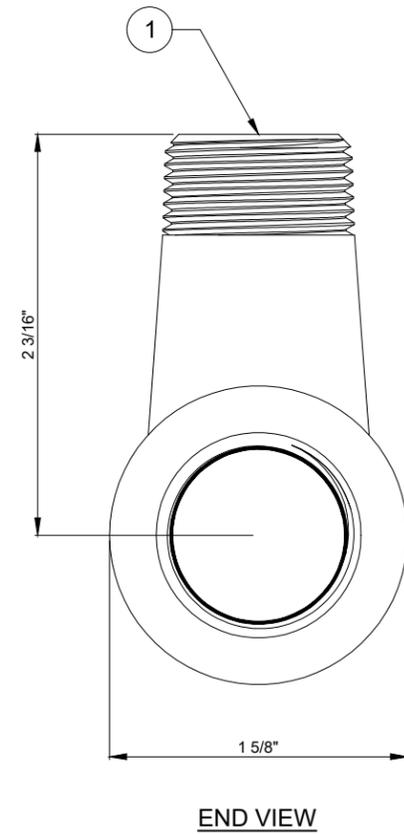
ZX

CHK

26FEB2018

DATE

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	3/4" FNPT X MNPT STEEL ELBOW	SCH 40 STEEL	02DT01954



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PROJECT INFORMATION:

SYSTEM DRAWING

TITLE:
3/4" FNPT X MNPT STEEL ELBOW

PROJECT NO:

SCALE:
NTS

SHEET NO:

C750

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NO

FIRST ISSUE

DESCRIPTION

CDL

ZX

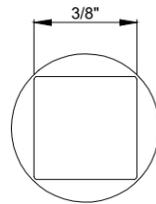
BY

CHK

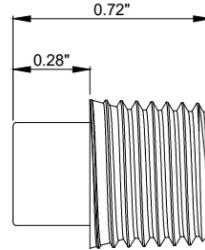
DATE

26FEB2018

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
 ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
 ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.



END VIEW



SIDE VIEW

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	1/4" NPT STEEL PLUG	316 STAINLESS STEEL	02DT01956

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES / VSL POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES / VSL BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES / VSL TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES / VSL EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

PROJECT INFORMATION:

SYSTEM DRAWING

TITLE:
1/4" NPT STEEL PLUG

PROJECT NO:

SCALE:
NTS

SHEET NO:

C747

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NO

FIRST ISSUE

DESCRIPTION

CDL

BY

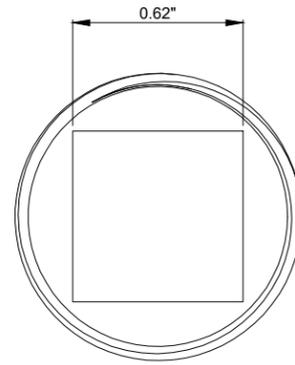
ZX

CHK

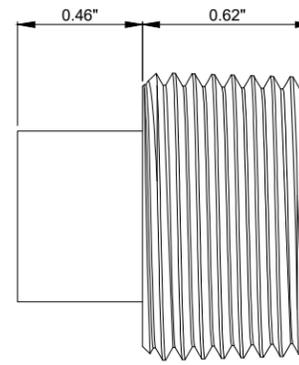
26FEB2018

DATE

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	3/4" NPT STEEL PLUG	316 STAINLESS STEEL	02DT01957



END VIEW



SIDE VIEW

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PROJECT INFORMATION:

SYSTEM DRAWING

PROJECT NO:

SCALE:
NTS

SHEET NO:

C748

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NO

FIRST ISSUE

DESCRIPTION

CDL

BY

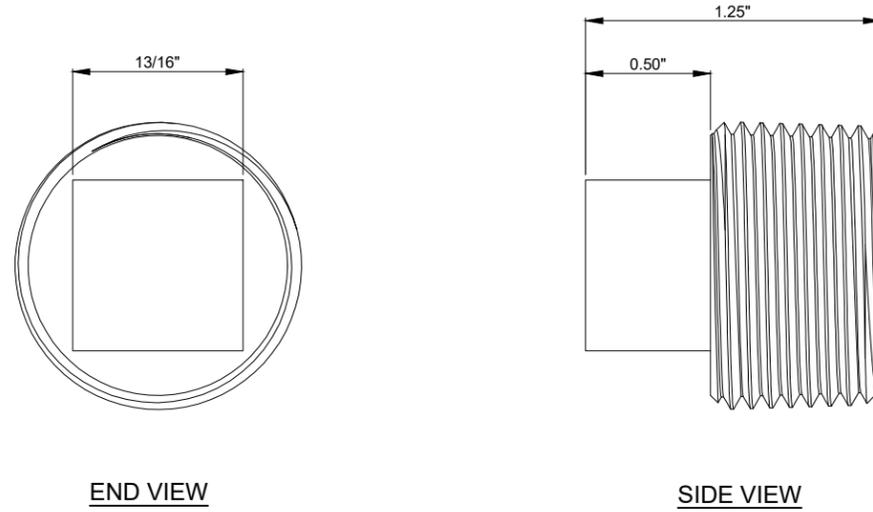
ZX

CHK

26FEB2018

DATE

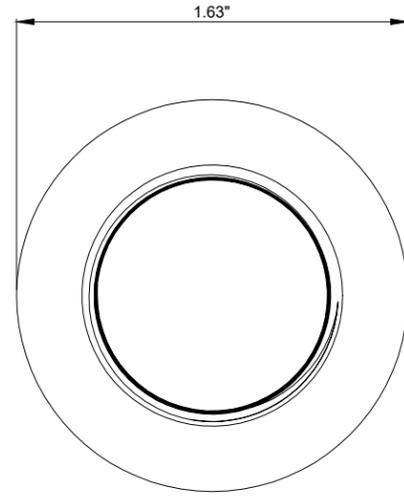
ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	1" NPT STEEL PLUG	316 STAINLESS STEEL	02DT01958



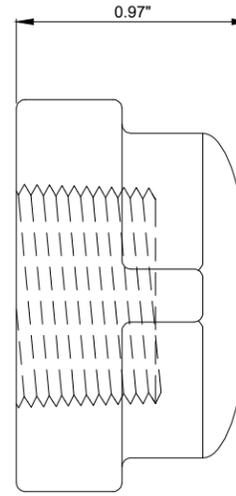
THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES / VSL POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES / VSL BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES / VSL TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES / VSL EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

PROJECT INFORMATION:		STRUCTURAL TECHNOLOGIES, LLC CLAIMS A STRICT PROPRIETARY RIGHT IN ALL DRAWINGS, SPECIFICATIONS AND CALCULATIONS ("INFORMATION") SET FORTH ON THIS SHEET. THE USE OF SUCH INFORMATION IN WHOLE OR IN PART, OR ANY REPRODUCTION THEREOF, IS STRICTLY PROHIBITED. THE MATERIAL WAS PREPARED AND TO THE MATERIAL AND/OR SERVICE PROVIDED BY STRUCTURAL TECHNOLOGIES / VSL. ANY OTHER USE IS STRICTLY PROHIBITED, AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY THEREFORE.	
PROJECT NO:	1	CDL	ZX
SHEET NO:	C754	BY	CHK
TITLE:		FIRST ISSUE	
SCALE:		NO	
DESCRIPTION:		NO	
SYSTEM DRAWING		26FEB2018	
1" NPT STEEL PLUG		DATE	

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	3/4" NPT STEEL CAP	SCH 40 STEEL	02DT01950



END VIEW

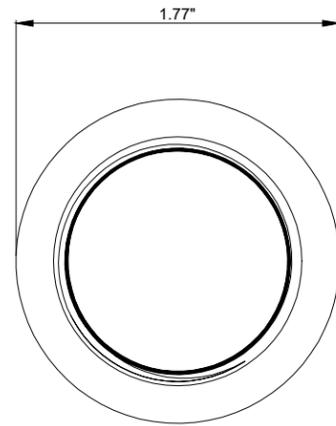


SIDE VIEW

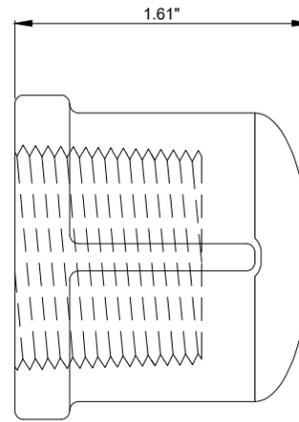
THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES / VSL POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES / VSL BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES / VSL TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES / VSL EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

PROJECT INFORMATION:		STRUCTURAL TECHNOLOGIES, LLC CLAIMS A STRICT PROPRIETARY RIGHT IN ALL DRAWINGS, SPECIFICATIONS AND CALCULATIONS ("INFORMATION") SET FORTH ON THIS SHEET. THE USE OF SUCH INFORMATION IN WHOLE OR IN PART, OR ANY REPRODUCTION THEREOF, IS STRICTLY PROHIBITED WITHOUT THE WRITTEN PERMISSION OF STRUCTURAL TECHNOLOGIES / VSL. THIS MATERIAL AND/OR SERVICE PROVIDED BY STRUCTURAL TECHNOLOGIES / VSL, ANY OTHER USE IS STRICTLY PROHIBITED, AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY THEREFORE.	
PROJECT NO:	1	CDL	ZX
SHEET NO:	C724	BY	CHK
TITLE:	3/4" NPT STEEL CAP	NO	DATE
SCALE:	NTS	DESCRIPTION	26FEB2018
SYSTEM DRAWING		NO	DATE

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES / VSL POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES / VSL BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES / VSL TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES / VSL EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.



END VIEW



SIDE VIEW

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	1" NPT STEEL CAP	SCH 40 STEEL	02DT01951

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES / VSL POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES / VSL BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES / VSL TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES / VSL EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

PROJECT INFORMATION:

SYSTEM DRAWING

1" NPT STEEL CAP

PROJECT NO: -
SHEET NO:

SCALE: NTS

C727

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NO

FIRST ISSUE

DESCRIPTION

CDL

ZX

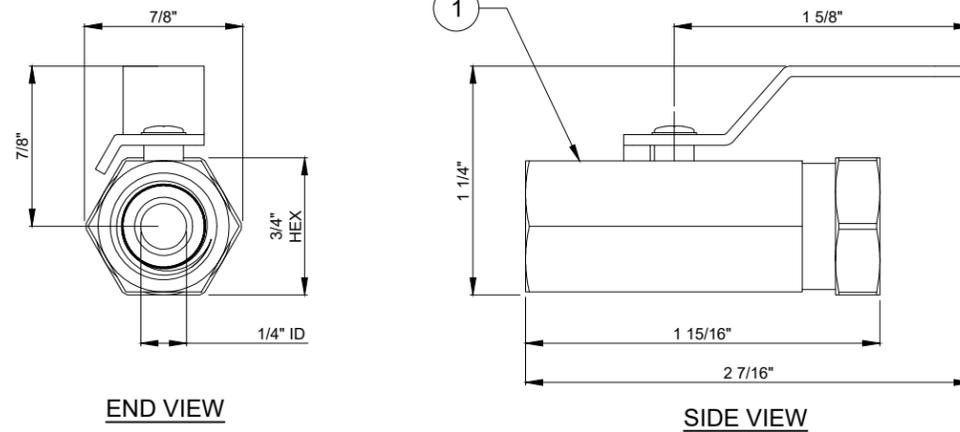
BY

CHK

DATE

26FEB2018

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	1/4" F/F NPT 1/4 TURN BALL VALVE	SCH 40 STEEL	02DT01924



THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES / VSL POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES / VSL BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES / VSL TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES / VSL EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

PROJECT INFORMATION:

SYSTEM DRAWING

TITLE:
1/4" F/F NPT 1/4 TURN BALL VALVE

PROJECT NO:

SCALE:
NTS

SHEET NO:

C744

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structural TECHNOLOGIES
A Structural Group Company
Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL

STRUCTURAL TECHNOLOGIES, LLC
DALLAS OFFICE
15600 TRINITY BLVD, SUITE 118
FORT WORTH, TX 76156
PHONE: (817) 545-4877
FAX: (817) 545-4827
WWW.VSL.NET

NO

FIRST ISSUE

DESCRIPTION

CDL

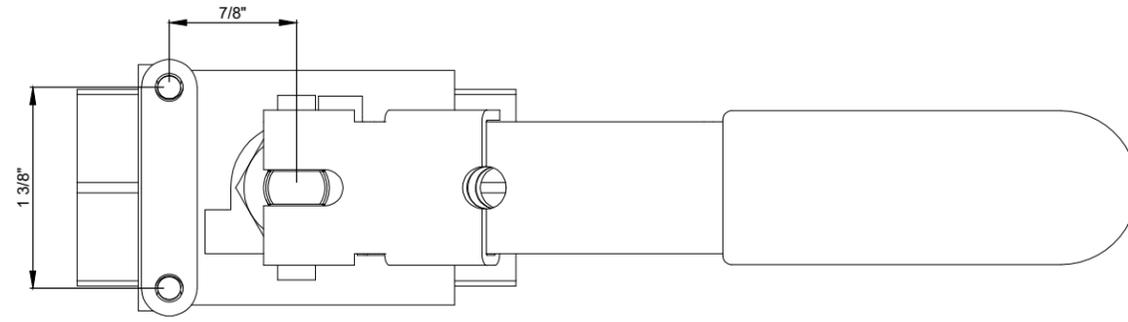
ZX

BY

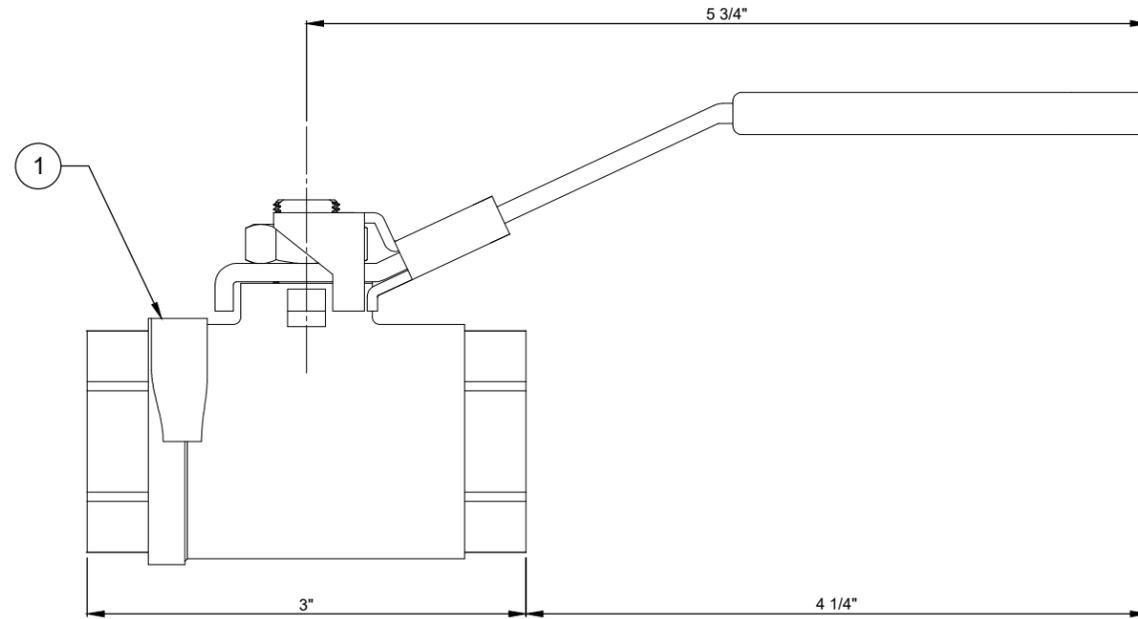
CHK

DATE

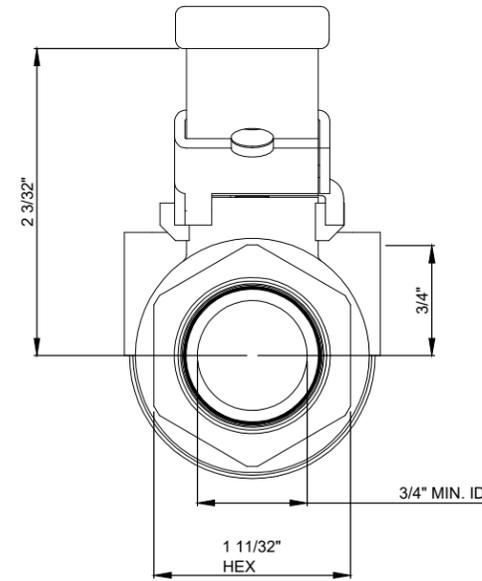
26FEB2018



TOP VIEW



SIDE VIEW

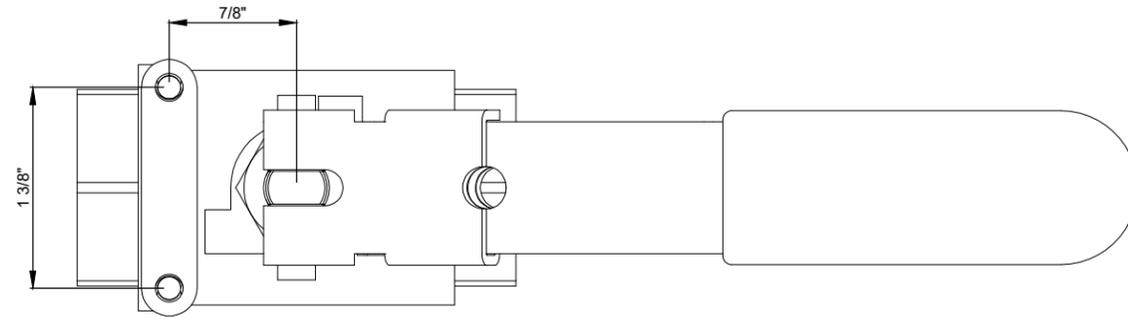


END VIEW

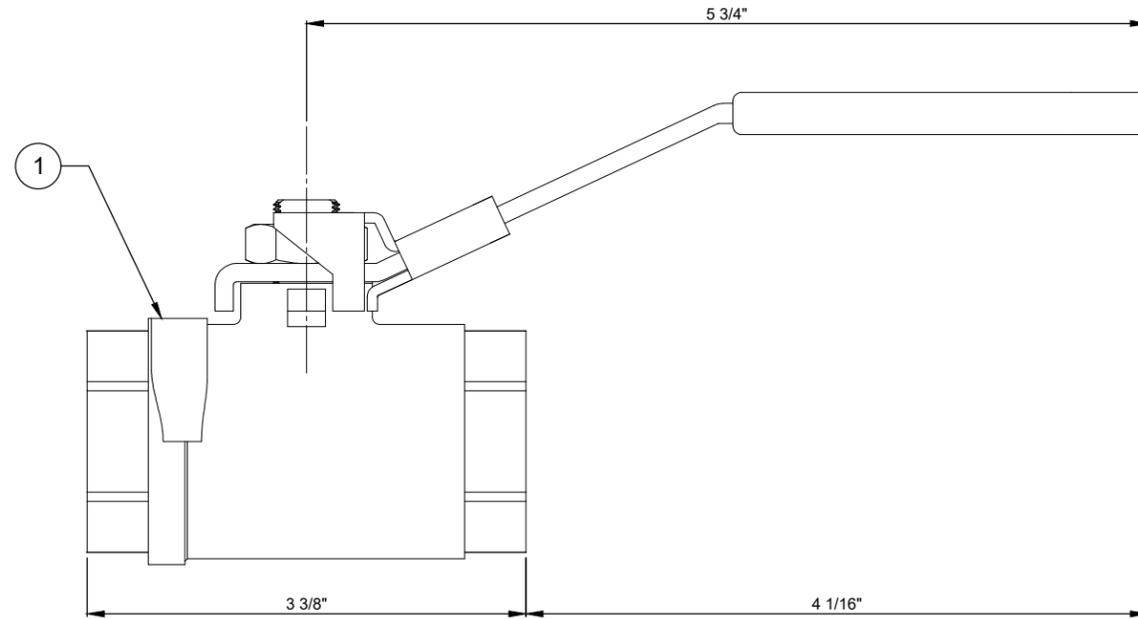
ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	3/4" NPT STEEL 1/4 TURN BALL VALVE	SCH 40 STEEL	02DT01925

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES / VSL POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES / VSL BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES / VSL TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES / VSL EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

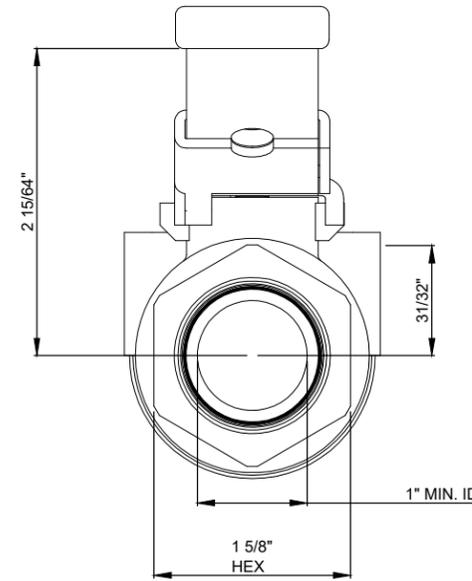
 <p>structural TECHNOLOGIES A Structural Group Company</p> <p>Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL</p> <p>PHONE: (817) 545-4807 FAX: (817) 545-4827 WWW.VSL.NET</p>		<p>STRUCTURAL TECHNOLOGIES, LLC CLAIMS A STRICT PROPRIETARY RIGHT IN ALL DRAWINGS, SPECIFICATIONS AND CALCULATIONS ("INFORMATION") SET FORTH ON THIS SHEET. THE USE OF SUCH INFORMATION IN WHOLE OR IN PART, OR ANY REPRODUCTION THEREOF, IS STRICTLY PROHIBITED, UNLESS IT WAS PREPARED AND TO THE MATERIAL AND/OR SERVICE PROVIDED BY STRUCTURAL TECHNOLOGIES / VSL. ANY OTHER USE IS STRICTLY PROHIBITED, AND STRUCTURAL TECHNOLOGIES / VSL DISCLAIMS ANY LIABILITY THEREFORE.</p>	
PROJECT INFORMATION:	SYSTEM DRAWING	TITLE: 3/4" NPT STEEL 1/4 TURN BALL VALVE	
PROJECT NO: -	SCALE: NTS	NO	DESCRIPTION
SHEET NO: C745		CDL	BY
		ZX	CHK
			DATE
			26FEB2018



TOP VIEW



SIDE VIEW



END VIEW

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY#
1	-	1" NPT STEEL 1/4 TURN BALL VALVE	SCH 40 STEEL	02DT01926

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PROJECT INFORMATION:		 structural TECHNOLOGIES A Structural Group Company Dallas, TX / Washington, DC / Denver, CO / Pompano Beach, FL PHONE: (817) 545-4877 FAX: (817) 545-4827 WWW.VSL.NET	
PROJECT NO:	1	TITLE:	1" NPT STEEL 1/4 TURN BALL VALVE
SHEET NO:	C746	SCALE:	NTS
NO	NO	DESCRIPTION	FIRST ISSUE
BY	CDL	CHK	ZX
DATE	26FEB2018		

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