

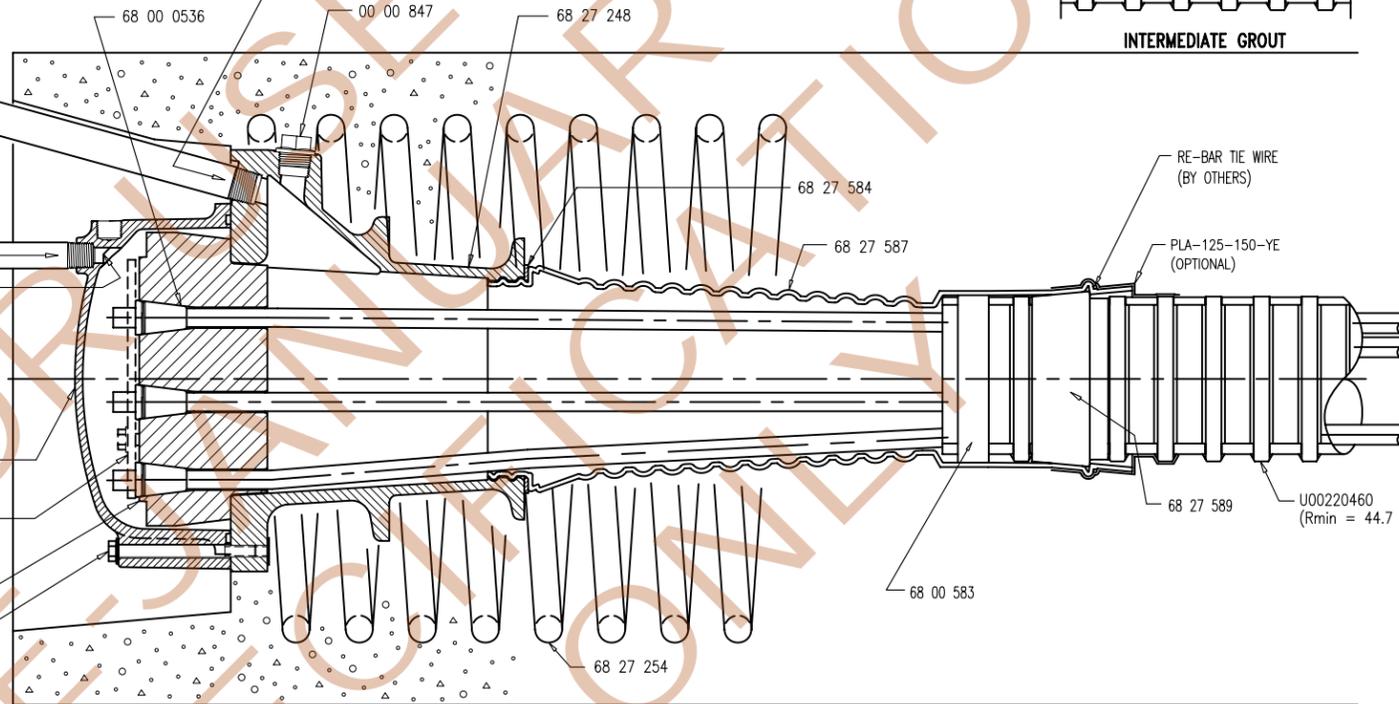
TOP GROUT ACCESS

DRILL 1/2" [13mm] HOLE IN PORT BEING USED - CAUTION-RECOMMEND USING HOLE SAW BIT OR SPADE BIT (BY OTHERS), BE CAREFULL TO PREVENT DAMAGE TO THREADS OR CAP

6827981 (OPTIONAL) WITH (3) 3/8"-16UNC HEX BOLTS 1" LG WITH WASHERS (BY OTHERS)

00 00 774 WITH WASHERS, 00 00 774

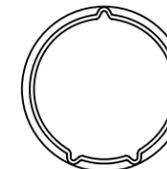
END VIEW



FRONT GROUT ACCESS

NOTES:

3. GTI DUCT IS DELIVERED IN STRAIGHT SECTIONS AND IS NOT INTENDED TO BE COILED.



DUCT END VIEW

APPROVED BY FDOT 09-14-07

BILL OF MATERIALS		
PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
68 27 248	27-0.6" MULTI-PLANE ANCHOR CASTING GALVANIZED	ASTM A536 GR 65-45-12 DUCTILE IRON HOT DIPPED GALV. TO ASTM A123
68 27 254	27-0.6" STANDARD SPIRAL	ASTM A615, GR. 60, #6, 2-1/4" PITCH 17" O.D., ~8 TURNS
68 27 143	27-0.6" FORGED WEDGE PLATE	STEEL FORGING, ASTM A-521-76, NORMALIZED, BHN = 180-220
68 27 981 (OPTIONAL)	27-0.6" KEEPER PLATE, USED ONLY FOR INACCESSIBLE DEAD END OR WHEN PRE-ASSEMBLED W/BOLT & WASHER BY OTHERS	ASTM A1020 OR EQUIV. (3) 3/8"-16UNC BLACK HEX BOLTS, 1" LG WITH NARROW WASHERS
68 00 0536	3-PART WEDGE FOR 0.6" STRAND	ASTM A1020 OR EQUIV. (3) 3/8"-16UNC BLACK HEX BOLTS, 1" LG WITH NARROW WASHERS
68 27 587	27-0.6" PE TRUMPET	POLYETHYLENE
68 27 7230	27-0.6" PLASTIC GROUT CAP W/O-RING	NYLON 6, 20% GLASS FIBER FILLED
U00220460	4-1/2" (115mm) CORRUGATED PP DUCT	"PPEX3"
68 27 584	NEOPRENE SEAL	CLOSED CELL NEOPRENE BLEND
00 00 876	3/4" STEEL PIPE NIPPLE 12" LONG	SCH 40 BLACK WELDED STEEL
00 00 801	(OPTIONAL) 21mm GROUT TUBE	HARD POLYETHYLENE
PLA-125-150-YE	(OPTIONAL) HEAT SHRINK SLEEVE	Acc. to FDOT spec. P.T., section 462-4.2,6,3
PLA-125-450-YE	(OPTIONAL) HEAT SHRINK SLEEVE	Acc. to FDOT spec. P.T., section 462-4.2,6,3

BILL OF MATERIALS		
PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
(BY OTHERS)	FOAM INSULATION FOR 1/2" & 3/4" PIPE NIPPLES	---
00 00 676	1/2" STEEL PIPE NIPPLE, 12" LONG	SCH 40 BLACK WELDED STEEL
00 00 834	3/4" NPT VALVE	NYLON
00 00 634	1/2" NPT VALVE	NYLON
00 00 847	3/4" BT PLUG (NIAGARA PLASTICS #BT0750)	NYLON
00 00 647	1/2" BT PLUG (NIAGARA PLASTICS #BT0500)	NYLON
68 27 585	COUPLER FOR 115mm GTI DUCT	POLYETHYLENE
68 00 583	SEAL	CLOSED CELL NEOPRENE BLEND
68 27 589	27-0.6" FILLER PIECE	HARD POLYETHYLENE
00 00 773	3/8"-16UNC HEX BOLTS 4-1/2" LG	316L STAINLESS STEEL
00 00 774	NARROW WASHER FOR 3/8"-16UNC	316L STAINLESS STEEL
00 00 855	3/4" NPT GROUT VENT PORT	PES-TEC PART NUMBER 254-2
OR		
00 00 857 (OPTIONAL)	21mm GROUT VENT PORT (FOR INTERMEDIATE GROUT VENT)	PES-TEC PART NUMBER 251-2 POLYPROPYLENE

DIMENSIONS: INCH [mm] FOR REFERENCE ONLY

INTERNAL 27-0.6" MA SYSTEM 100 ASSEMBLY DRAWING

DATE: 09-14-07 DWG: G. MALECKI CHK: S.N. APP: E.A.

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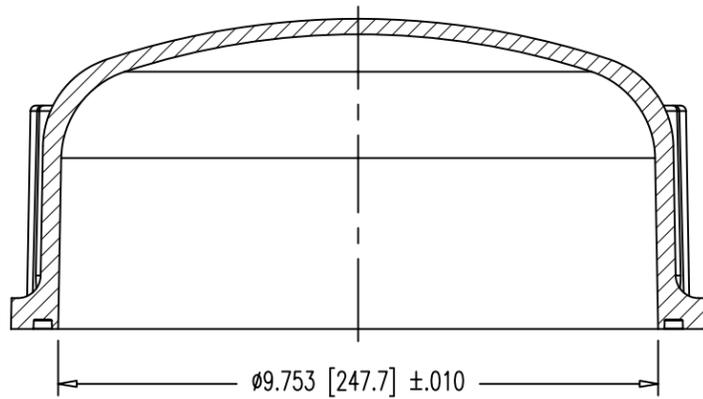
REV.	DATE	NAME	

SCALE: 1:5

DRAWING NUMBER: **MA 68 27 004**

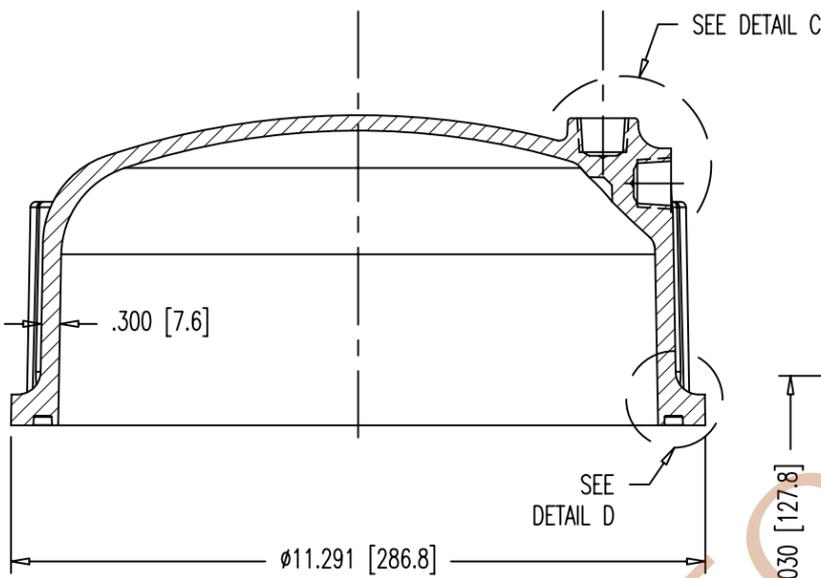
DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.
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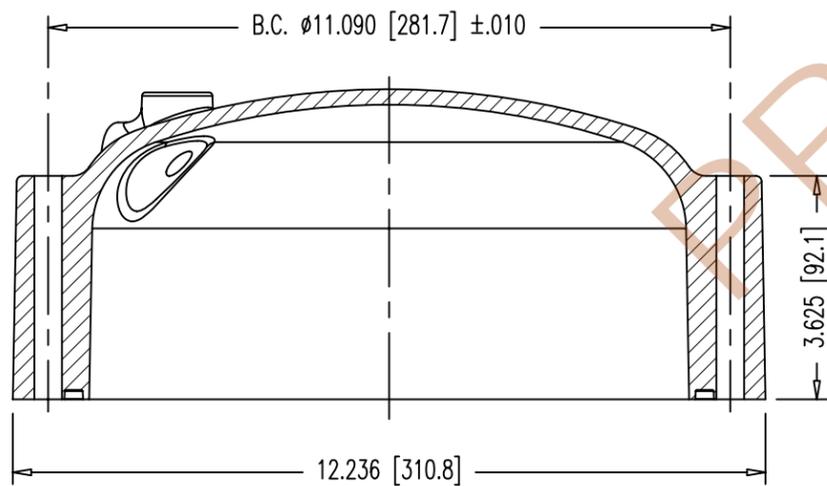
SECTION E-E

Ø9.753 [247.7] ±0.10



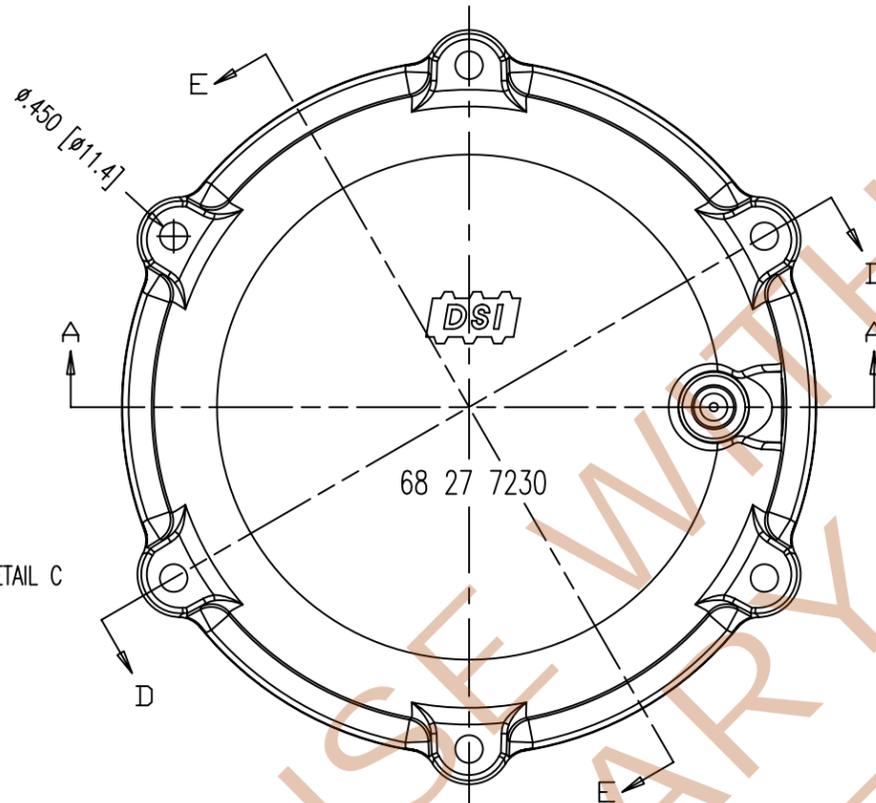
SECTION A-A

Ø11.291 [286.8]

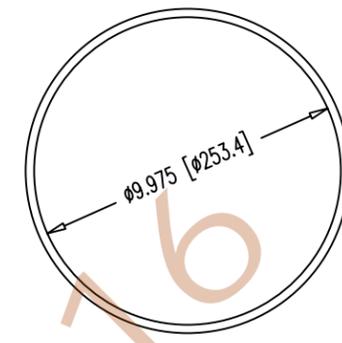


SECTION D-D

12.236 [310.8]



68 27 7230



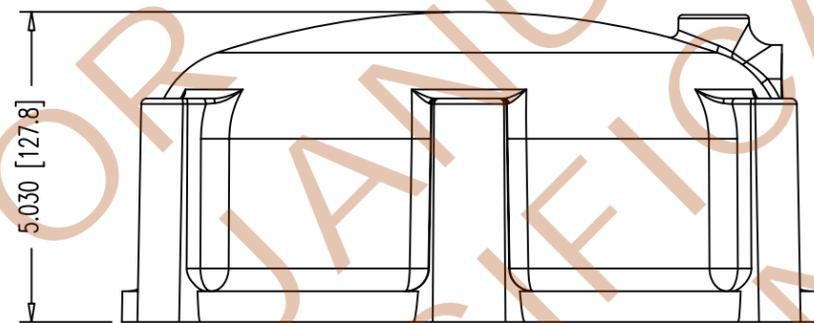
Ø.275 [7.0]

#449 O-RING 10x10-1/2x1/4
O-RING MATERIAL: BUNA "N"

SCALE 1:2 IN COMPUTER (SCALE: 1:6 11"x17" PLOT)

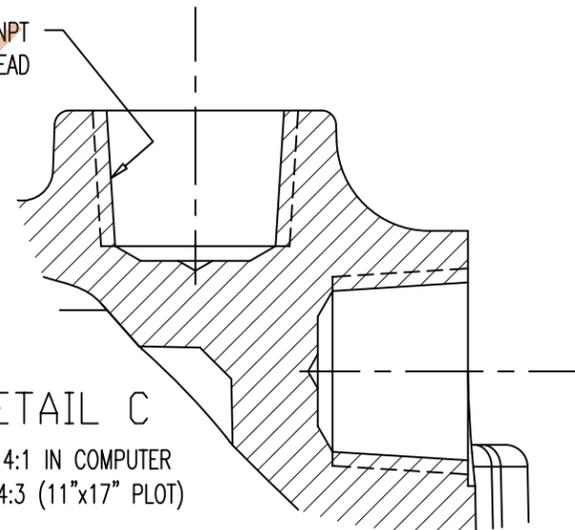
NOTES:

1. ALL DIMENSIONS DEPENDENT ON 3D DATA BASE USED FOR MOLD FABRICATION
2. USE 3/8"-16UNC 316L S.S. HEX BOLTS, 4-1/2" LONG W/SMALL DIA. WASHER.
3. INSTALL O-RING IN GROOVE USING DROPS OF LIQUID ADHESIVE BEFORE SHIPPING. DON'T USE EXCESSIVE ADHESIVE. O-RING MUST STAY IN PLACE UNTIL INSTALLATION.
4. THE CELL CLASSIFICATION SHALL CONFORM TO ASTM D5989 AND SHALL BE S-PA0141 (WEATHER RESISTANT), S-PA0231 OR S-PA0401 (TENSILE STRENGTH, YIELD 15000 PSI MIN., WITH UV STABILIZER ADDED).
5. DRILL 1/2" [12.7] HOLE IN PORT BEING USED—CAUTION—RECOMMEND USING HOLE SAW BIT OR SPADE BIT (BY OTHERS), BE CAREFULL TO PREVENT DAMAGE TO THREADS OR CAP.
6. WHEN PRESSURIZING GROUT CAPS, DO NOT STAND BEHIND CAPS!



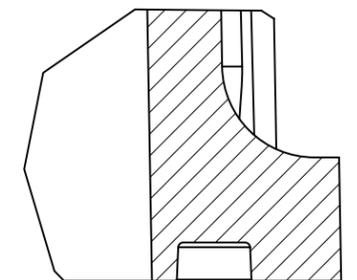
5.030 [127.8]

1/2" NPT
THREAD



DETAIL C

SCALE 4:1 IN COMPUTER
SCALE: 4:3 (11"x17" PLOT)



DETAIL D

SCALE 4:1 IN COMPUTER
SCALE: 4:3 (11"x17" PLOT)

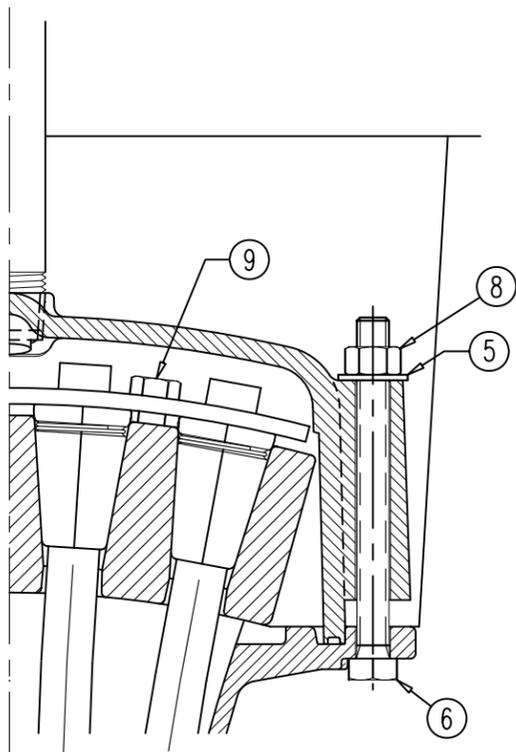
Tolerance Note:
All tolerances are based on SPI/SPE and should be as follows unless specified otherwise:

Dim.	Tolerance
0-1" =	+/- 0.005"
1-2" =	+/- 0.007"
2-3" =	+/- 0.009"
3-4" =	+/- 0.011"
4-5" =	+/- 0.013"
5-6" =	+/- 0.015"
6-7" =	+/- 0.017"
7-8" =	+/- 0.019"
8-9" =	+/- 0.021"
9-10" =	+/- 0.023"
10-11" =	+/- 0.025"
11-12" =	+/- 0.027"

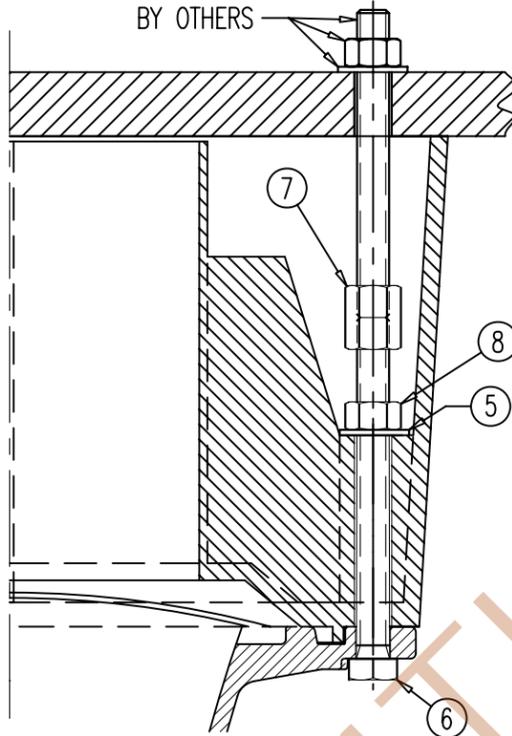
APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH (mm) mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60072300P		TOLERANCES: ±.020 UNLESS NOTED		WEIGHT 3.95 LBS.		REV.		DATE		NAME		PART NUMBER: 68 27 7230	
27-0.6" PLASTIC GROUT CAP				MATERIAL: NYLON 6, 20% GLASS FIBER FILLED		SCALE 1:3								DRAWING NUMBER: 68 27 7230	
DATE: 09-14-07		DWG: G. MALECKI		CHK: E.A.		APP: K.S.									
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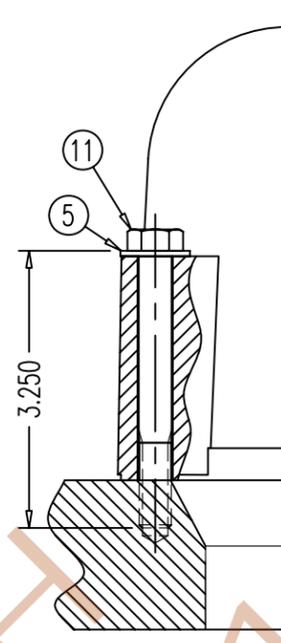




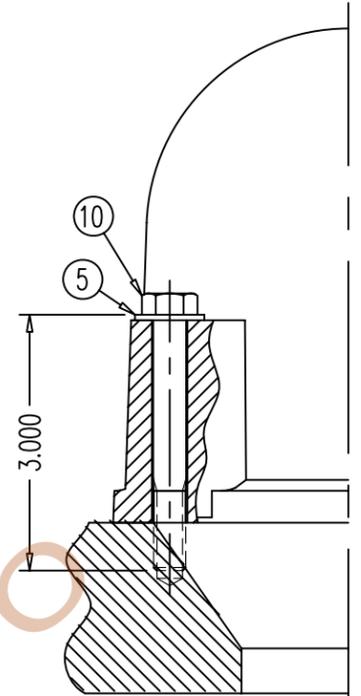
KEEPER PLATE 68 04 2637 ON
WEDGE PLATE 68 04 2534A &
GROUT CAP 68 04 2539 ON Δ
FLAT ANCHOR 68 04 2531



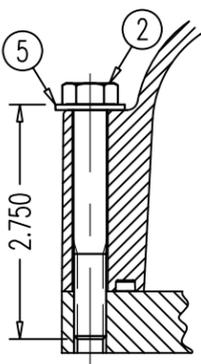
POCKET FORMER 68 04 2640
ON FLAT ANCHOR 68 04 2531



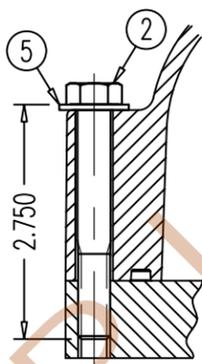
BAR GROUT CAP
B36E50700 & B65E50700



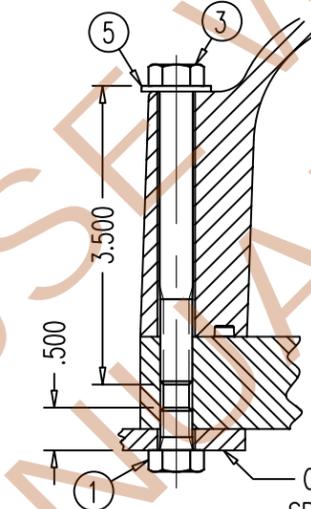
BAR GROUT CAP
B46E50700



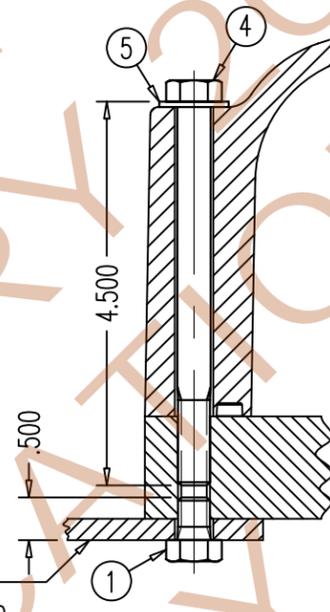
GROUT CAP 68 07 7230
ON MPA 68 07 216



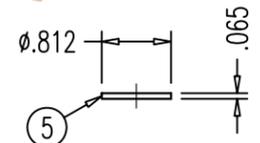
GROUT CAP 68 12 7230
ON MPA 68 12 216



GROUT CAP 68 19 7230
ON MPA 68 19 216



GROUT CAP 68 27 7230
ON MPA 68 27 216



TYPE A NARROW WASHER
FOR 3/8"-UNC BOLT

POS.	PART NUMBER	DISCRIPTION (ALL PARTS 316L STAINLESS STEEL UNLESS NOTED)
①	00 00 770	3/8"-16UNC HEX BOLT, 1/2" LONG, ZINC PLATED
②	00 00 771	3/8"-16UNC HEX BOLT, 2-3/4" LONG (1" LONG THREAD)
③	00 00 772	3/8"-16UNC HEX BOLT, 3-1/2" LONG (1" LONG THREAD)
④	00 00 773	3/8"-16UNC HEX BOLT, 4-1/2" LONG (1" LONG THREAD)
⑤	00 00 774	TYPE A NARROW WASHER FOR 3/8"-UNC BOLT
⑥	00 00 775	3/8"-16UNC HEX BOLT, 4" LONG (FULL THREAD)
⑦	00 00 776	3/8"-16UNC COUPLER, ZINC COATED
⑧	00 00 777	3/8"-16UNC HEX NUT
⑨	00 00 778	5/16"-18UNC HEX BOLT, 7/8" LONG, ZINC PLATED
⑩	00 00 782	3/8"-16UNC HEX BOLT, 3" LONG (1" LONG THREAD)
⑪	00 00 783	3/8"-16UNC HEX BOLT, 3-1/4" LONG (1" LONG THREAD)

NOTE:
THE 316L S.S. BOLTS ARE SPECIAL ORDER.
ALL WASHERS, HEX NUTS & COUPLERS HAVE
NO MARKINGS.

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH

QUALITY PLAN NUMBER:

STAINLESS STEEL 316L BOLTS AND WASHER FOR PLASTIC GROUT CAPS

DATE: 09-14-07 DWG: G. MALECKI CHK: E.A. APP: K.S.

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REV.	DATE	NAME	PART NUMBERS:
			00 00 770 00 00 776
			00 00 771 00 00 777
			00 00 772 00 00 778
			00 00 773 00 00 782
			00 00 774 00 00 783
			00 00 775

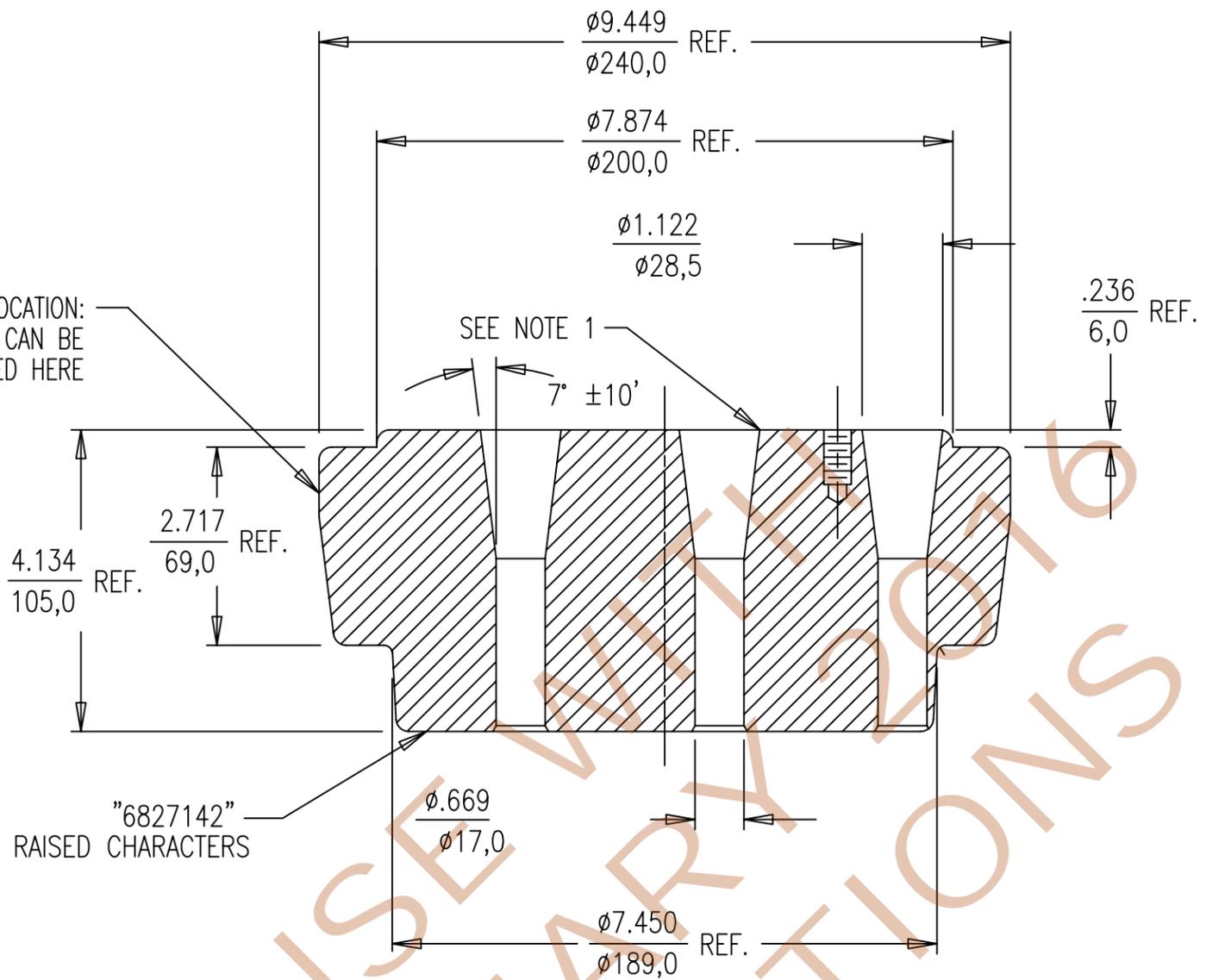
SCALE
1:3

DRAWING NUMBER:
00 00 770

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320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-1405



ALTERNATE LOCATION:
"6827142" CAN BE
ROLL STAMPED HERE

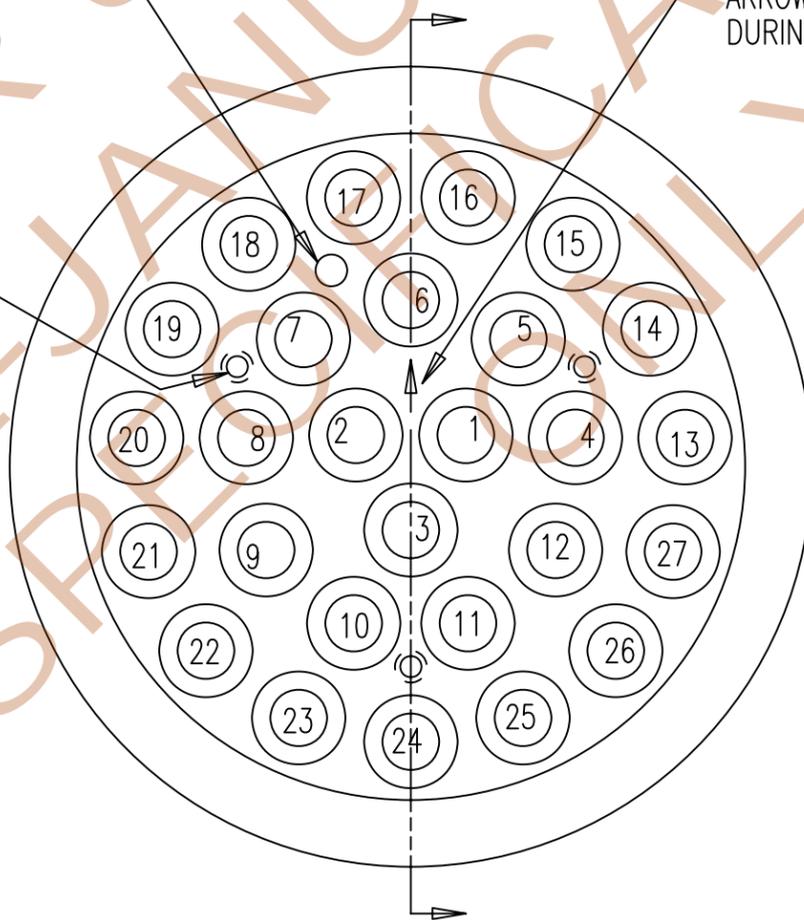


"6827142"
RAISED CHARACTERS

3/8" THRU HOLE
B.C. $\phi 5.000$
B.C. $\phi 127,0$

ARROW MUST POINT UP
DURING INSTALLATION

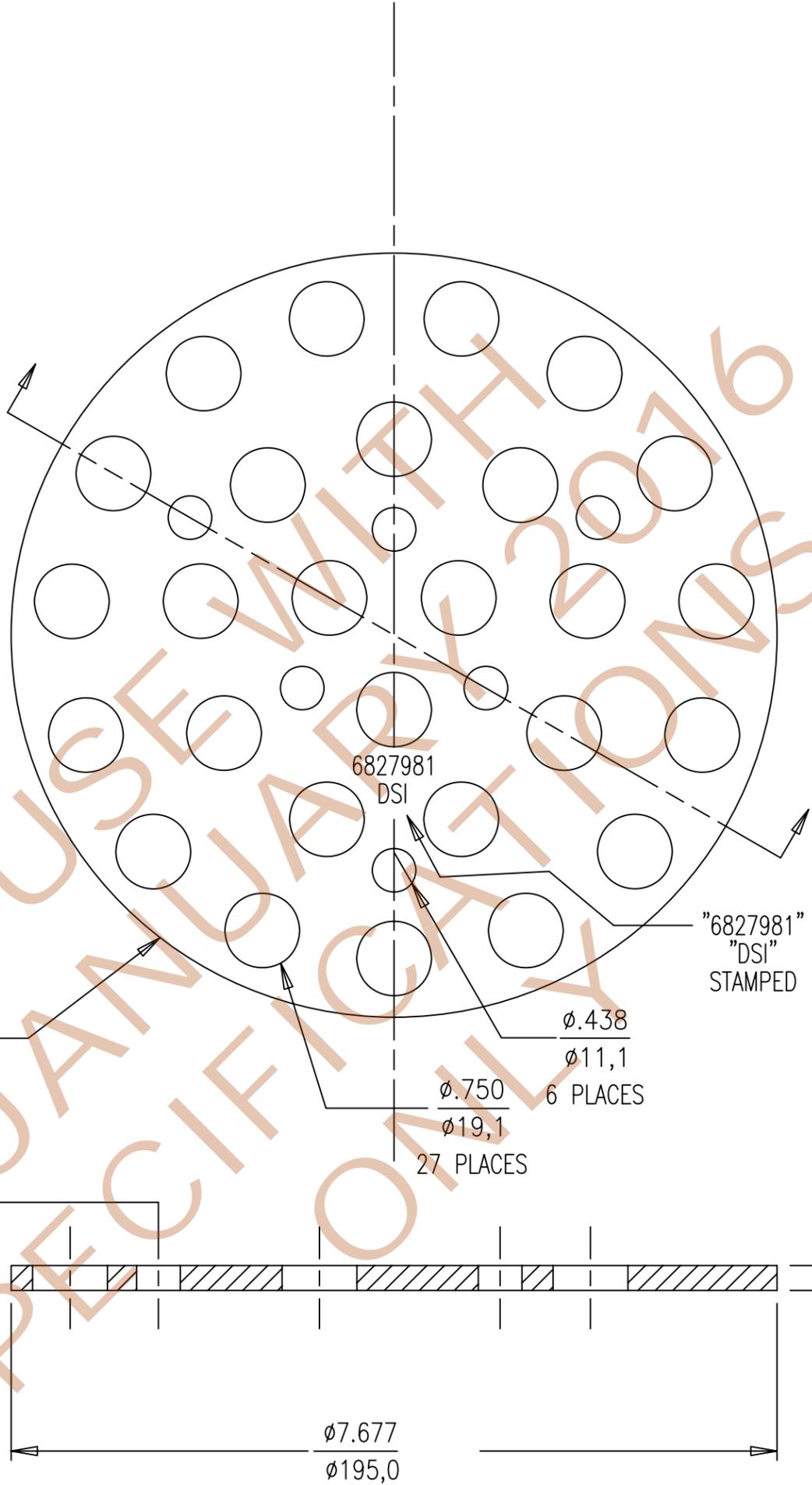
3/8"-16UNC
DRILL 1" (25,4)
DEEP, TAPPED
3/4" (19,1) DEEP
(3) PLACES FOR KEEPER
PLATE (SEE NOTE 5)
B.C. $\phi 4.724$
B.C. $\phi 120,0$



- NOTES:
1. BREAK EDGE OF WEDGE HOLES.
 2. USE 3-PART WEDGE P/N 68 00 0536.
 3. WEDGE PLATE DIPPED IN BEL-RAY RP-30 FOR CORROSION PROTECTION.
 4. USE WEDGE PLATE BLANK 68 27 142 91 FOR RAW MATERIAL.
 5. USE KEEPER PLATE ONLY FOR PRE-ASSEMBLED AND INACCESSIBLE DEAD END ANCHORS. USE (3) BLACK HEX BOLTS, 1" LONG WITH NARROW WASHERS (BY OTHERS).

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH/mm mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS00014200F		TOLERANCES: $\pm .020$ UNLESS NOTED	WEIGHT 52.7 LBS.	REV.	DATE	NAME	PART NUMBER: 68 27 143
27-0.6" FORGED WEDGE PLATE FOR FIXED END				MATERIAL: SEE DRAWING 68 27 142 91	SCALE 1:3				DRAWING NUMBER: 6827143
DATE: 09-14-07	DWG: G. MALECKI	CHK: H.K.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405					
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ROUND PLATE
WITHOUT HOLES
P/N 68 27 981 91

BLACK 3/8"-16UNC
HEX BOLT 1" LONG
WITH NARROW WASHER
(3) PLACES (BY OTHERS)

6827981
DSI

"6827981"
"DSI"
STAMPED

ø.438

ø11,1

ø.750

6 PLACES

ø19,1

27 PLACES

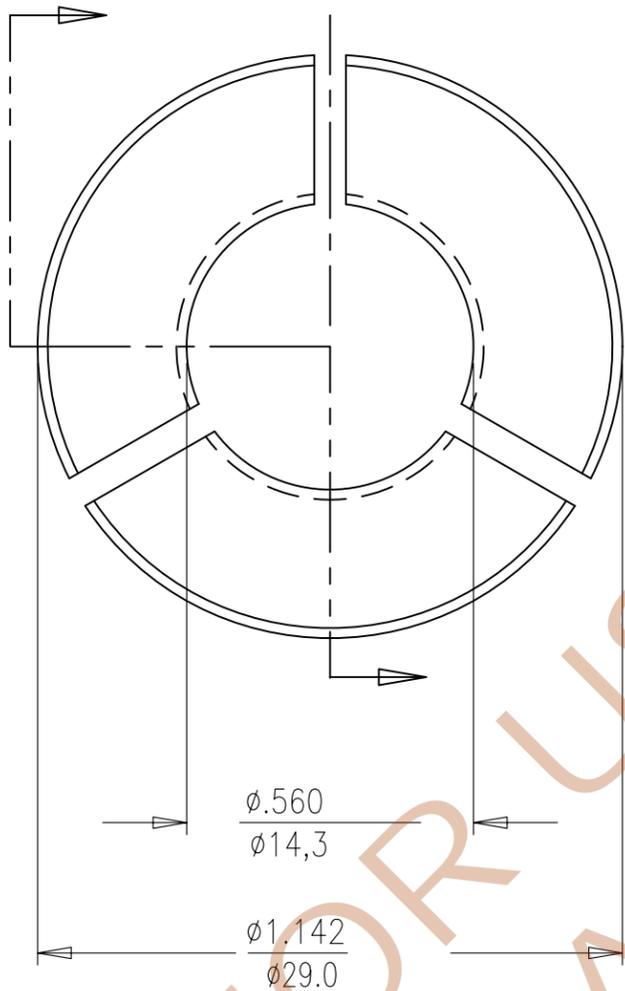
.250
6,4

ø7.677
ø195,0

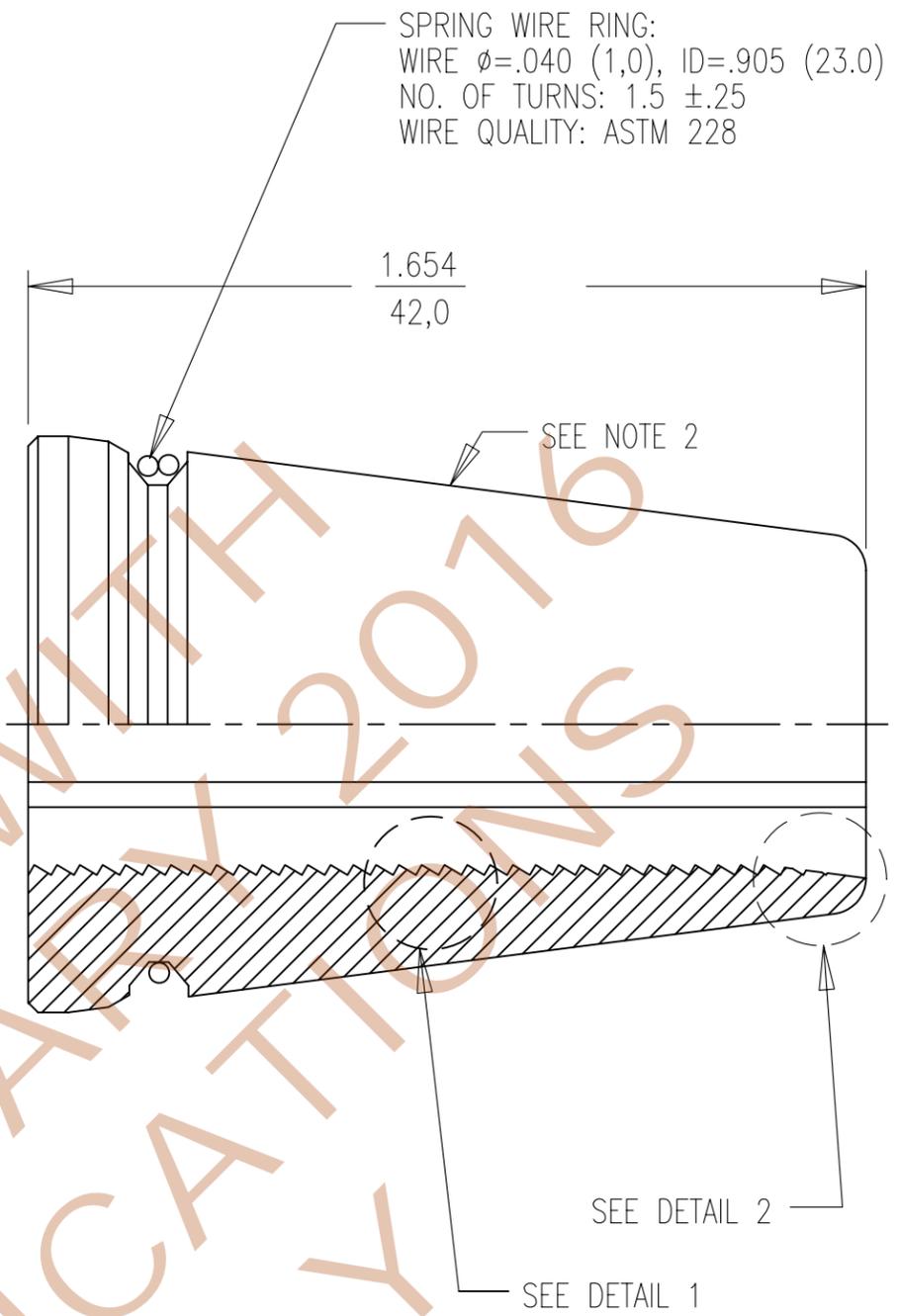
NOTE:
USE KEEPER PLATE ONLY FOR PRE-ASSEMBLED
AND INACCESSIBLE DEAD END ANCHORS.

APPROVED BY FDOT 09-14-07

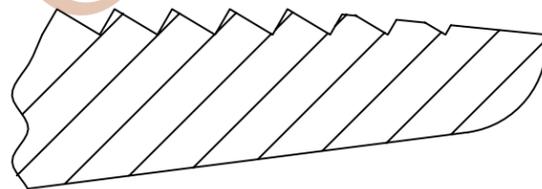
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60098100L		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 2.4 LBS.	REV.	DATE	NAME	PART NUMBER: 68 27 981	
27-0.6" KEEPER PLATE				MATERIAL: AISI 1020 OR EQUIV.	SCALE 1:2				DRAWING NUMBER: 68 27 981	
				DATE: 09-14-07	DWG: G. MALECKI	CHK: K.L.	APP: K.S.			
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DETAIL 1
5:1



SPRING WIRE RING:
WIRE $\phi = .040$ (1,0), ID = .905 (23.0)
NO. OF TURNS: $1.5 \pm .25$
WIRE QUALITY: ASTM 228



DETAIL 2
5:1

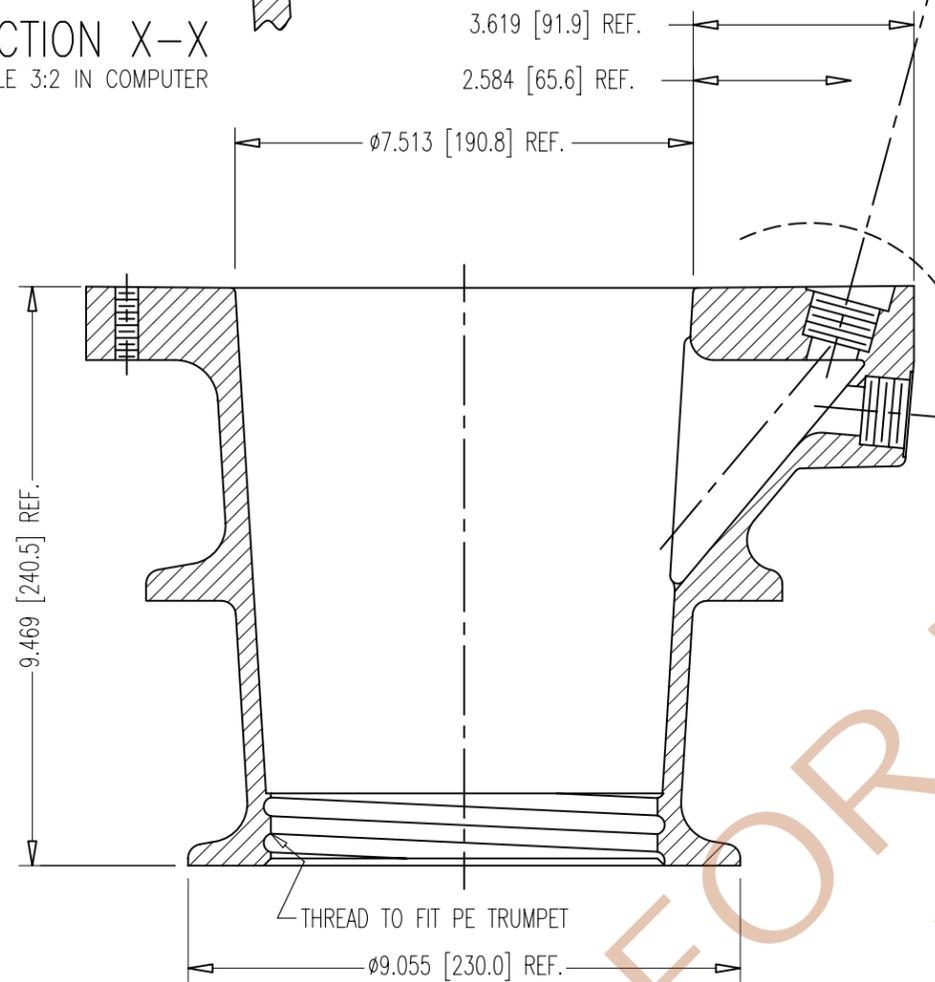
NOTES:

5. NO STAMPED PART NUMBER

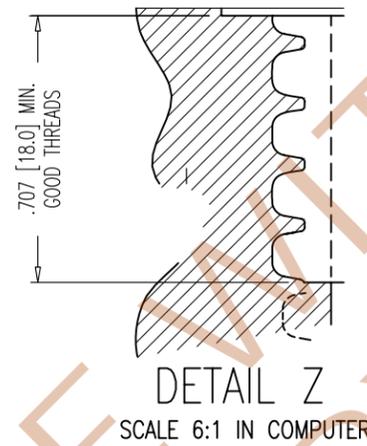
APPROVED BY FDOT 05-31-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS00000500DP2		TOLERANCES: $\pm .010$; $\pm 2^\circ$ UNLESS NOTED	WEIGHT 0.19 LBS.	REV.	DATE	NAME	PART NUMBER: 68 00 0536
3-PART WEDGE 7° x 29 mm x 42 mm 0.6" STRAND				MATERIAL: SEE MAT'L SPEC. PMU0005360B	SCALE 2:1 5:1				DRAWING NUMBER: 68 00 0536
				DATE: 05-31-07	DWG: G. MALECKI	CHK: C.S.	APP: K.L.		
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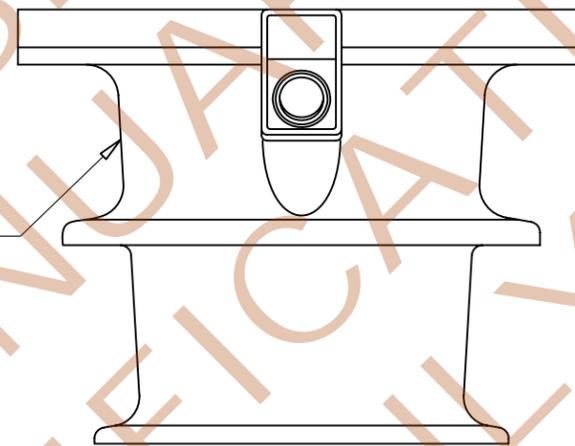
SECTION X-X
SCALE 3:2 IN COMPUTER



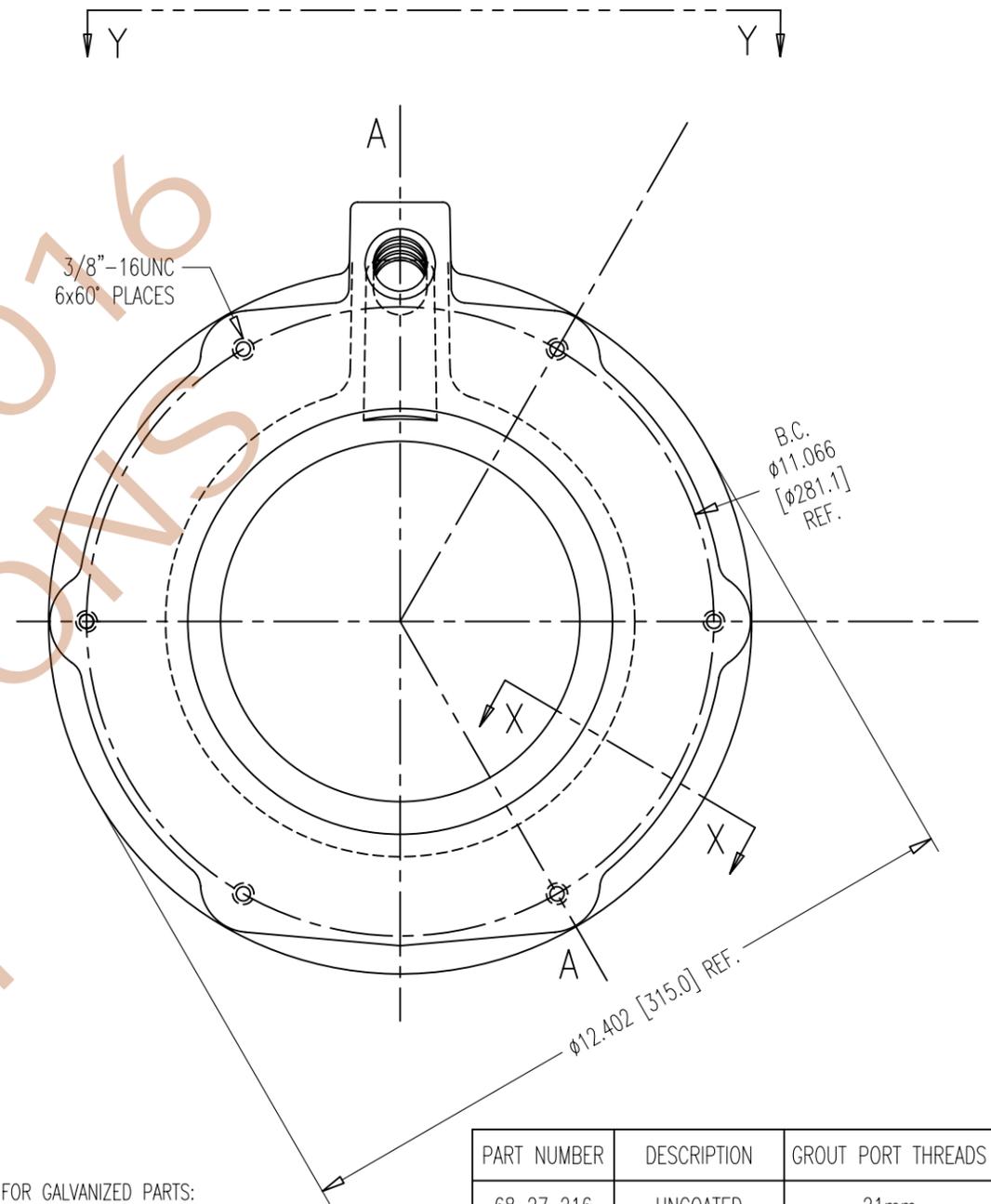
SECTION A-A
(SHOWN WITH 21mm GROUT PORT THREADS)



DETAIL Z
SCALE 6:1 IN COMPUTER



VIEW Y-Y
SCALE 3:4 IN COMPUTER



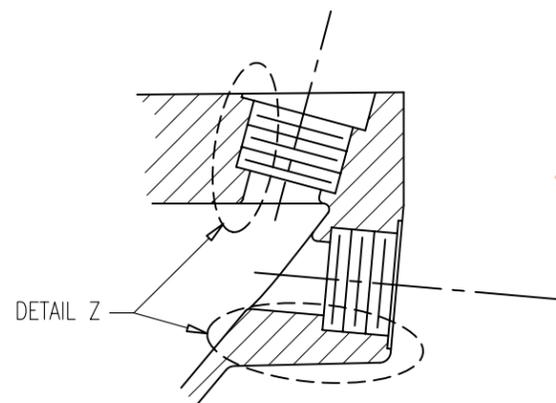
"DYWIDAG 6827216"
STAMP LOCATION

- NOTES FOR GALVANIZED PARTS:
1. HOT DIP GALV. ACCORD. TO ASTM A123.
 2. ASSURE THREADABILITY OF THREADED HOLES AFTER GALVANIZING.
 3. PROTECT THREADED HOLES WITH ZINC PAINT.

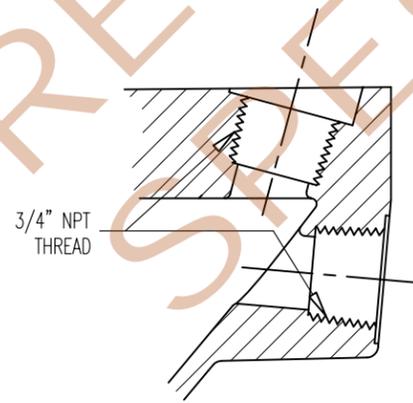
PART NUMBER	DESCRIPTION	GROUT PORT THREADS
68 27 216	UNCOATED	21mm
68 27 238	GALVANIZED	21mm
68 27 246	UNCOATED	3/4" NPT
68 27 248	GALVANIZED	3/4" NPT

SEE 68 27 216 90 FOR RAW CASTING. ALL PARTS HAVE 3/8"-16UNC THREADS ADDED TO RAW CASTING.

APPROVED BY FDOT 09-14-07



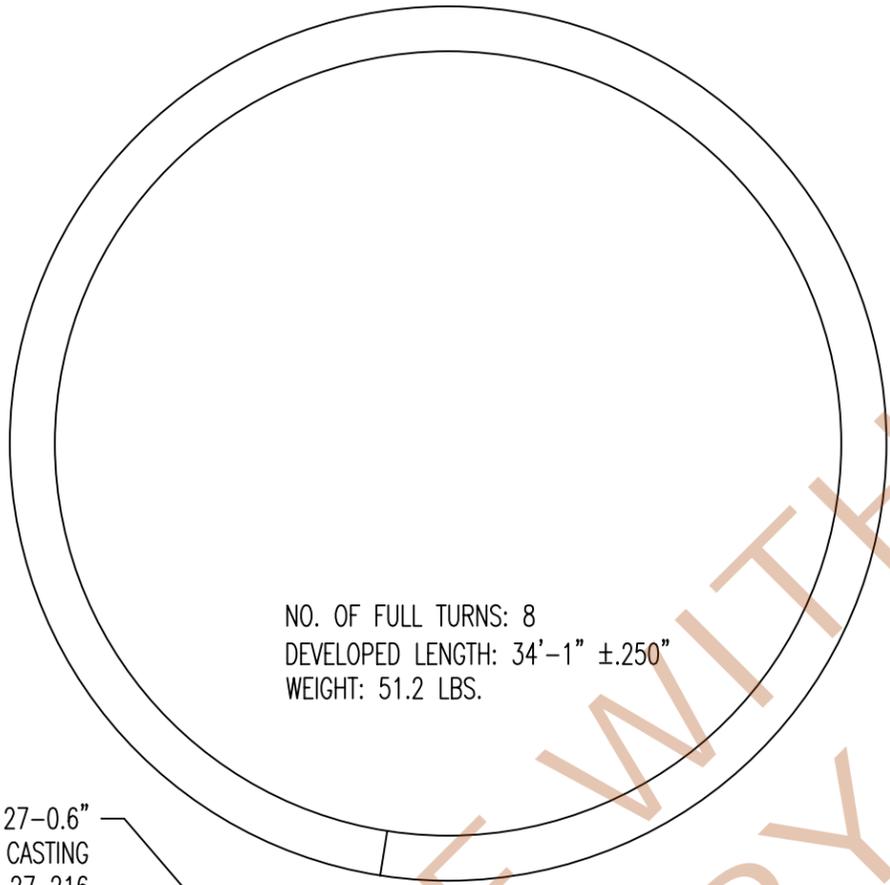
GROUT PORT THREADS
WITH 21mm THREADS
SCALE 3:2 IN COMPUTER



GROUT PORT THREADS
WITH 3/4" NPT THREADS
SCALE 3:2 IN COMPUTER

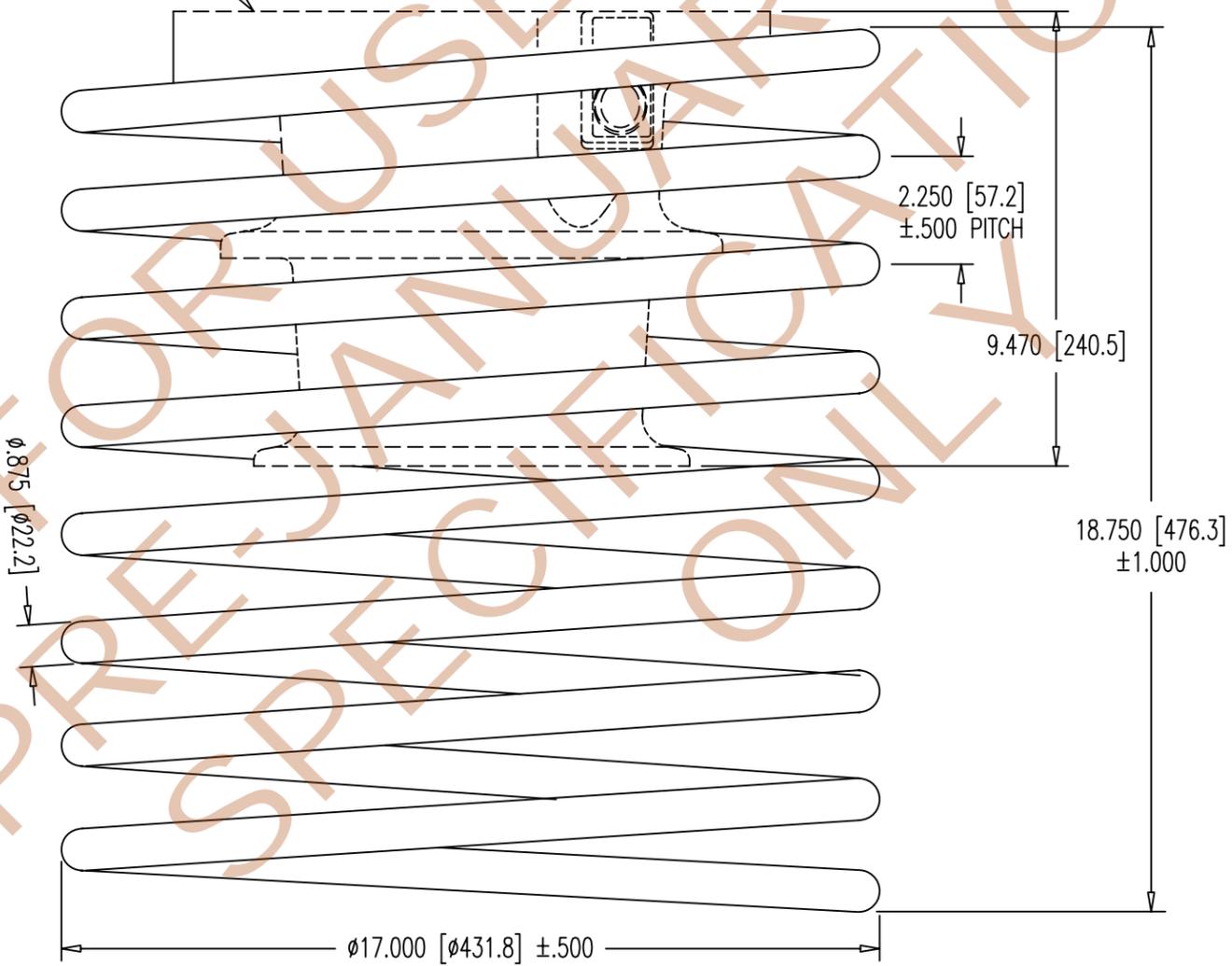
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60021200C		TOLERANCES: ±.030 ±2" UNLESS NOTED	WEIGHT 52 LBS.	REV.	DATE	NAME	PART NUMBER: 68 27 216 68 27 238 68 27 246 68 27 248
27-0.6"/37-0.5" MULTI-PLANE ANCHOR WITH TWO GROUT PORTS				MATERIAL: SEE MAT'L SPEC. PM0021200C	SCALE 1:3				DRAWING NUMBER: 68 27 216
DATE: 09-14-07	DWG: G. MALECKI	CHK: H.K.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405					





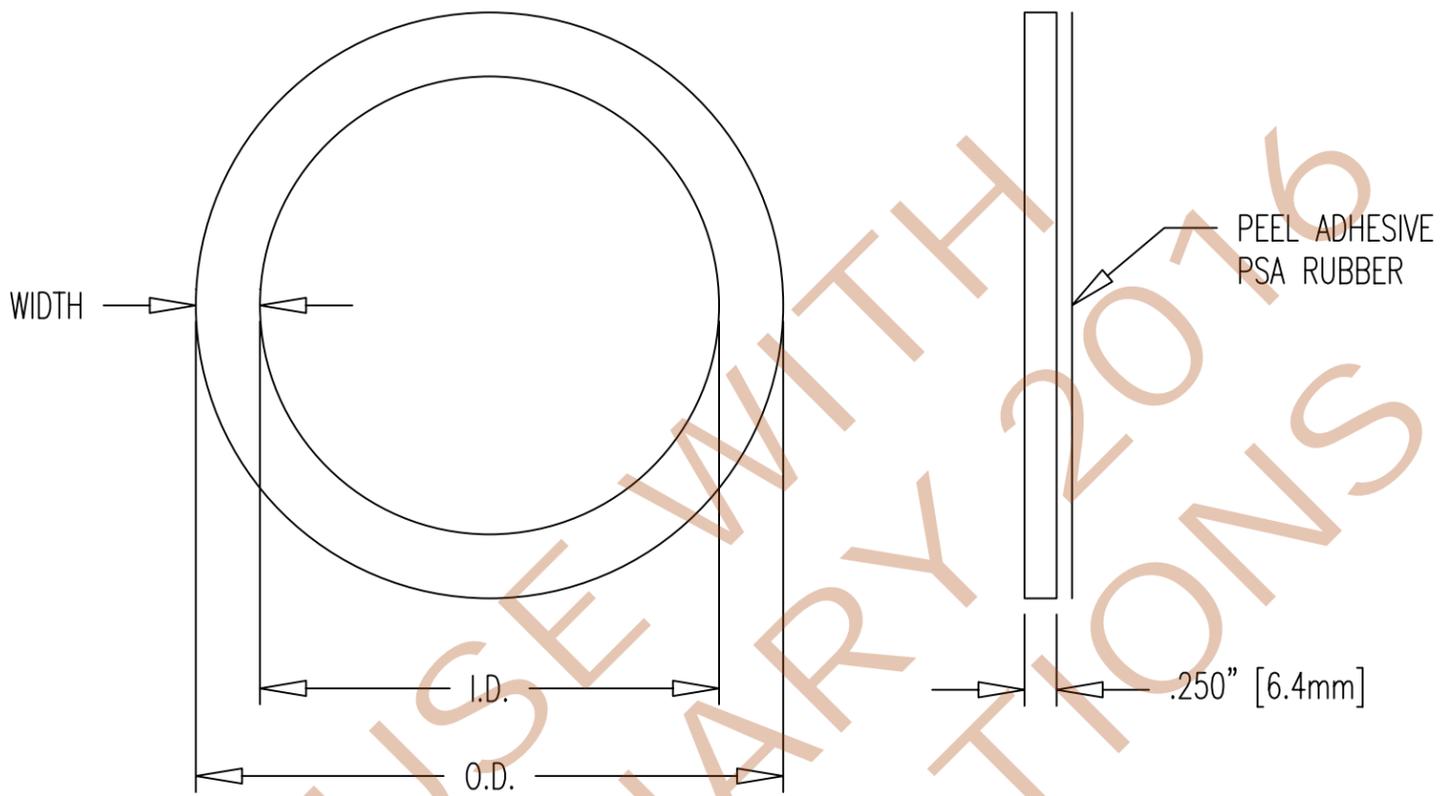
- NOTES:
1. SPIRAL IS MADE FROM STANDARD #6 REBAR, NO PART NUMBER MARKING IS SHOWN.
 2. KEEP SPIRAL AND MPA AXIS ALIGNED, IF USING SIDE PORT, ROTATE SPIRAL TO CLEAR.

27-0.6"
MPA CASTING
68 27 216



APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 51.2 LBS.	REV.	DATE	NAME	PART NUMBER: 68 27 254	
STANDARD SPIRAL FOR 27-0.6"/37-0.5" MPA				MATERIAL: ASTM A615 SIZE #6, GR 60	SCALE 1:5				DRAWING NUMBER: 68 27 254	
				DATE: 09-14-07	DWG: G. MALECKI	CHK: S.Y.	APP: E.A.			
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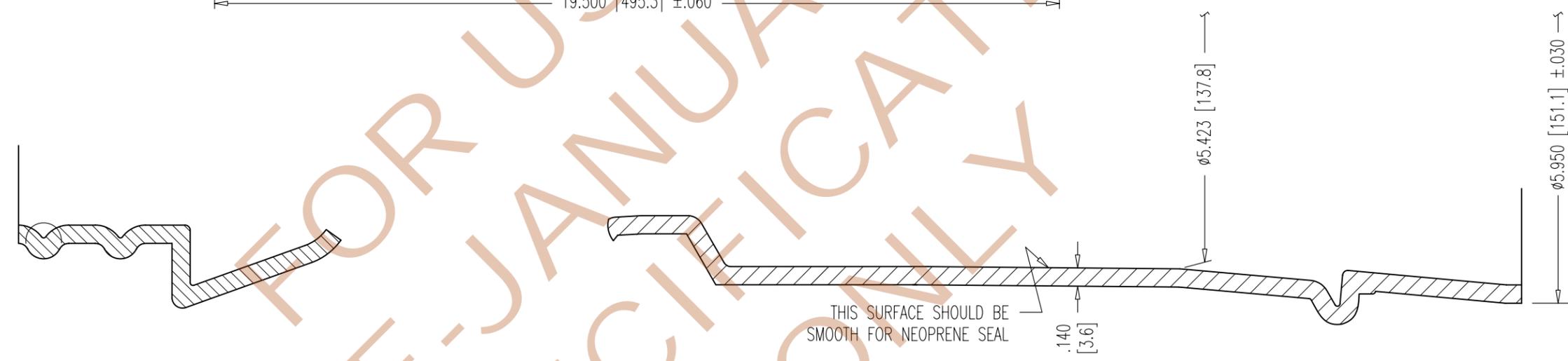
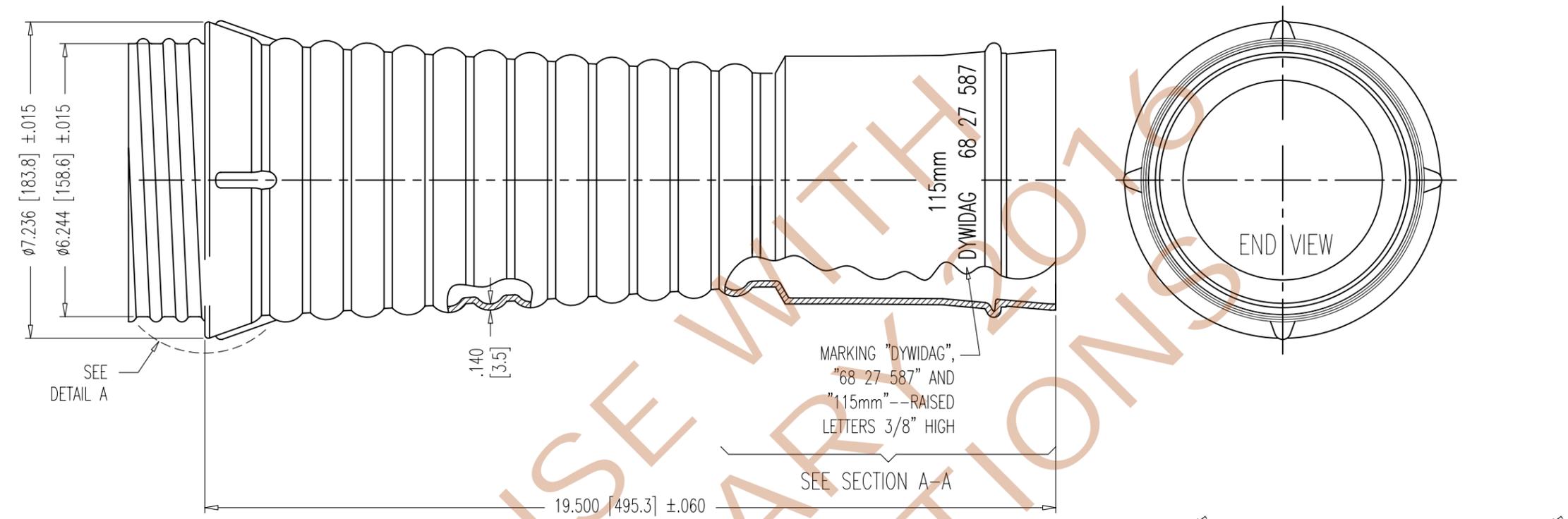


PART NUMBER	SYSTEM	O.D.	I.D.	WIDTH
68 07 584	7-0.6"	ø4.580" [116mm]	ø3.580" [91mm]	.500" [12.7mm]
68 12 584	12-0.6"	ø5.695" [145mm]	ø4.820" [122mm]	.438" [11.1mm]
68 19 584	19-0.6"	ø6.675" [170mm]	ø5.800" [147mm]	.438" [11.1mm]
68 27 584	27-0.6"	ø7.340" [186mm]	ø6.340" [161mm]	.500" [12.7mm]

NOTE:
SPECIAL ORDER
NO STAMPED PART NUMBER

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DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60063300R		TOLERANCES: ±.030 UNLESS NOTED		REV.	DATE	NAME	PART NUMBER: 68 07 584 68 12 584 68 19 584 68 27 584		
RUBBER SEAL BETWEEN MPA AND TRUMPET				MATERIAL: CLOSED CELL NEOPRENE BLEND		SCALE NTS				DRAWING NUMBER: 68 00 584	
				DATE: 09-14-07		DWG: G. MALECKI		CHK: C.N.			APP: E.A.
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DETAIL A
 THREAD FITS INTO 27-0.6" MPA CASTING (SEE DRAWING 68 27 216)

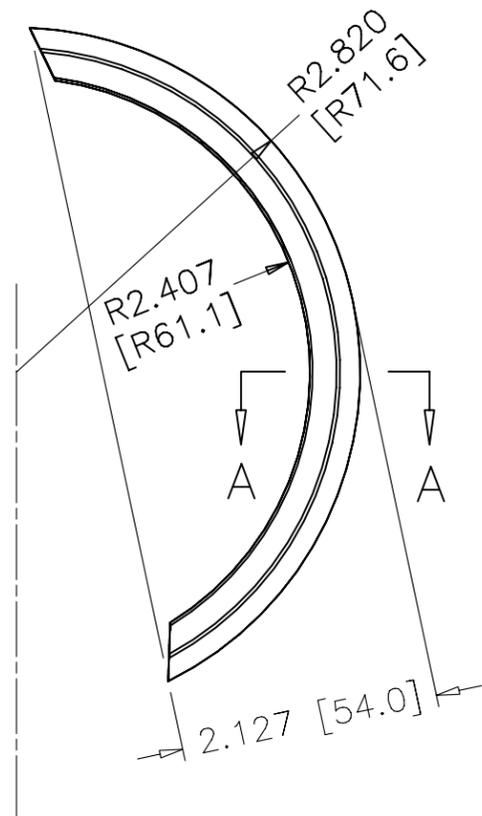
SECTION A-A
 THESE INSIDE DIMENSIONS ARE MORE IMPORTANT THAN OUTSIDE DIMENSIONS (MUST FIT OVER 115mm GTI DUCT U00220460)

MATERIAL SPECIFICATIONS:
 MANUFACTURE TRUMPETS FROM NON-COLORED, UNFILLED POLYETHYLENE MEETING THE REQUIREMENTS OF ASTM D4976. THE TRUMPET SHALL BE WHITE IN COLOR CONTAINING ANTIOXIDANT(S) WITH A MINIMUM OXIDATION INDUCTION TIME (OIT) ACCORDING TO ASTM D 3895 OF 20 MINUTES AND CONTAINING A NON-YELLOWING LIGHT STABILIZER. THE STRESS CRACK RESISTANCE TEST OF THE TRUMPET SHALL RESULTS IN A MINIMUM FAILURE TIME OF 3 HOURS ACCORDING TO F 2136 AT AN APPLIED STRESS OF 348 PSI

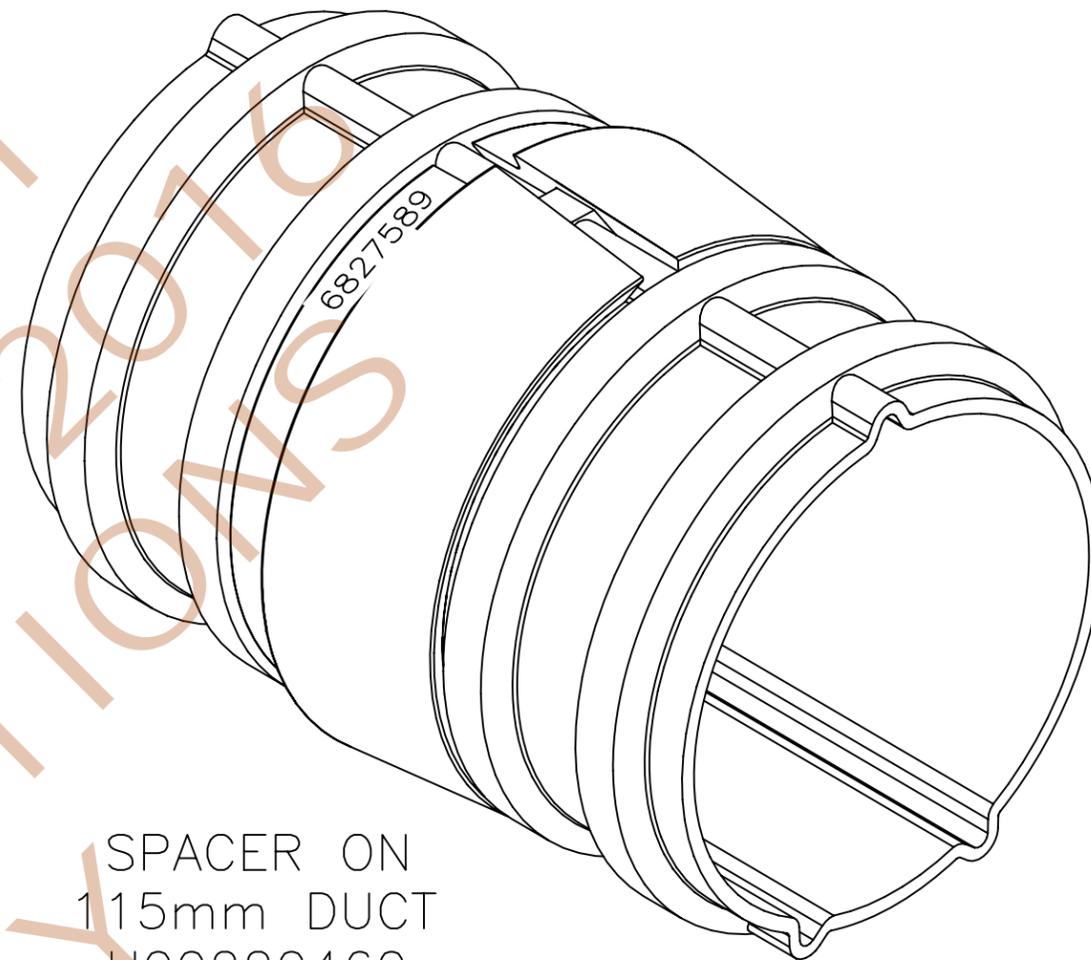
APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60058800P		TOLERANCES: ± 0.020 UNLESS NOTED	WEIGHT	REV. 01 DATE 09-14-07 NAME S.N.	PART NUMBER: 68 27 587	
27-0.6"/37-0.5" SHORT PE TRUMPET FOR MPA CASTINGS				MATERIAL: SEE ABOVE	SCALE: 1:3 1:1		DRAWING NUMBER: 68 27 587	
DATE: 09-14-07	DWG: G. MALECKI	CHK: E.A.	APP: K.S.	THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100 320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-1405



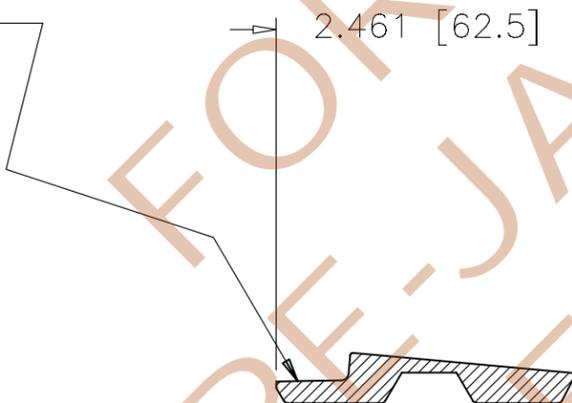


SPACER 68 27 589
(TWO SEGMENTS REQUIRED)



SPACER ON
115mm DUCT
U00220460

"DSI 68 27 589 115mm"
MARKING



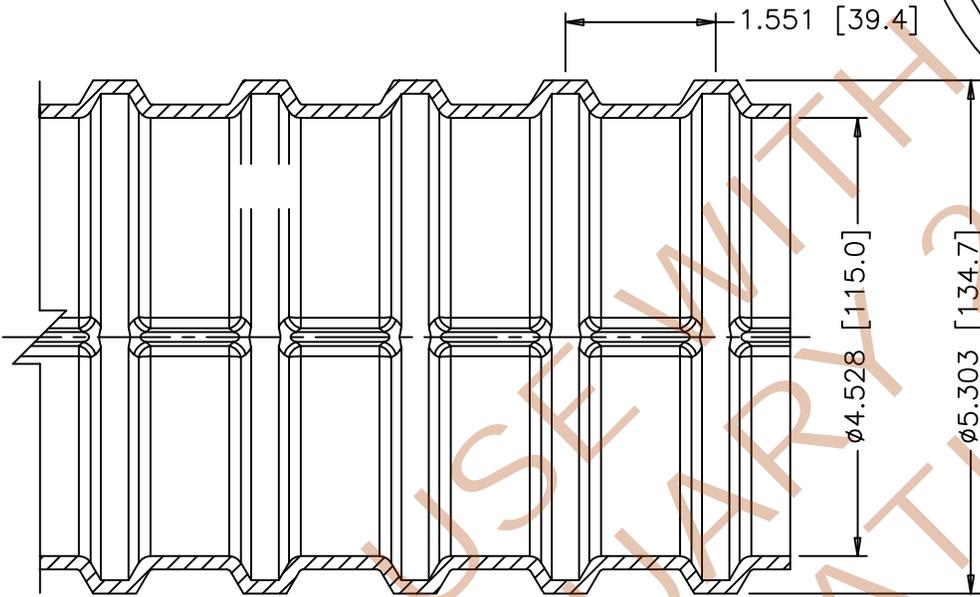
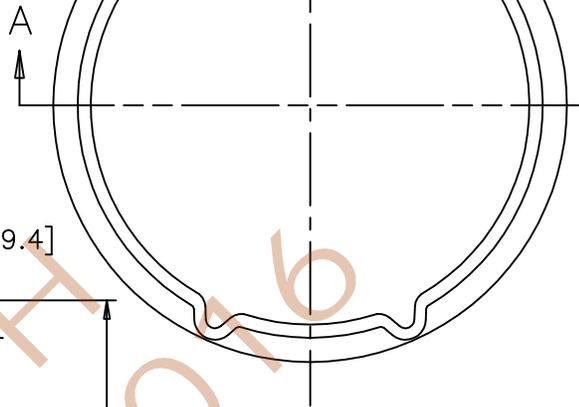
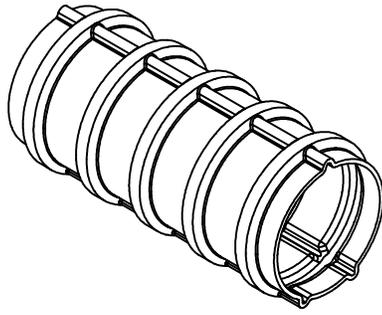
MATERIAL:
NYLON 6, 20% GLASS FIBER FILLED.
THE CELL CLASSIFICATION SHALL CONFORM
TO ASTM D5989 AND SHALL BE S-PA0141
(WEATHER RESISTANT), S-PA0231 OR
S-PA0401 (TENSILE STRENGTH, YIELD 15000
PSI MIN., WITH UV STABILIZER ADDED).

SECTION A-A

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		TOLERANCES: ±.010 UNLESS NOTED	WEIGHT LBS.	REV.	DATE	NAME	PART NUMBER: 68 27 589
FILLER PIECE FOR 27-0.6" TRUMPET AND 4-1/2" (115mm) CORRUGATED PP DUCT				MATERIAL: SEE ABOVE	SCALE 2:3				DRAWING NUMBER: 68 27 589
DATE: 09-14-07	DWG: G. MALECKI	CHK: E.A.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405					



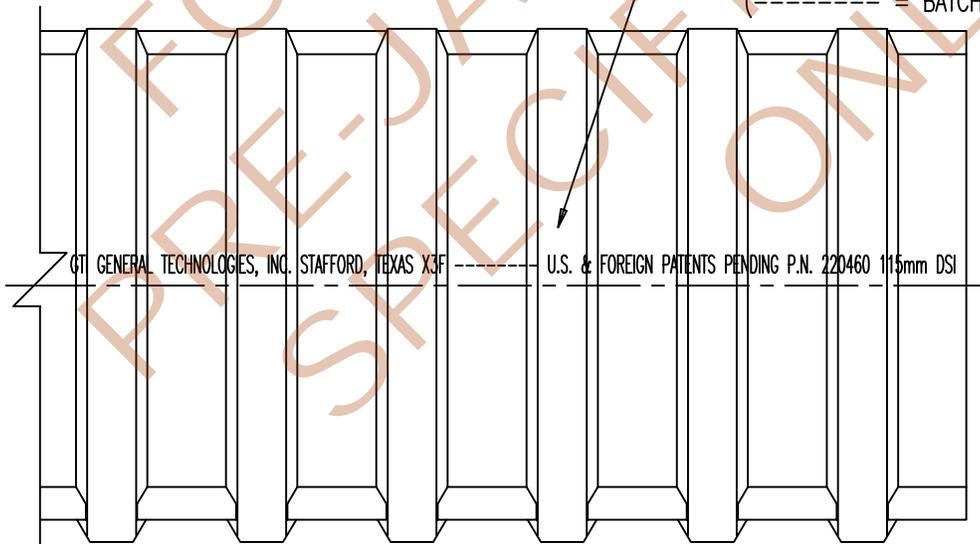


SECTION A-A

MATERIAL SPECIFICATIONS:
 MANUFACTURE DUCTS FROM
 NON-COLORED, UNFILLED
 POLYPROPYLENE MEETING THE
 REQUIREMENTS OF ASTM D4101
 WITH A CELL CLASSIFICATION
 RANGE OF PP0340B44541 ²
 TO PP0340B67884. THE DUCT
 SHALL BE WHITE IN COLOR
 CONTAINING ANTIOXIDANT(S) WITH
 A MINIMUM OXIDATION INDUCTION
 TIME (OIT) ACCORDING TO ASTM
 D 3895 OF 20 MINUTES AND
 CONTAINING A NON-YELLOWING
 LIGHT STABILIZER.

RUNNING LATEX PRINT:

¹ "GTI GENERAL TECHNOLOGIES, INC. STAFFORD,
 TEXAS X3F ----- U.S. & FOREIGN
 PATENTS PENDING P.N. 220460 115mm DSI"
 (----- = BATCH NUMBER).

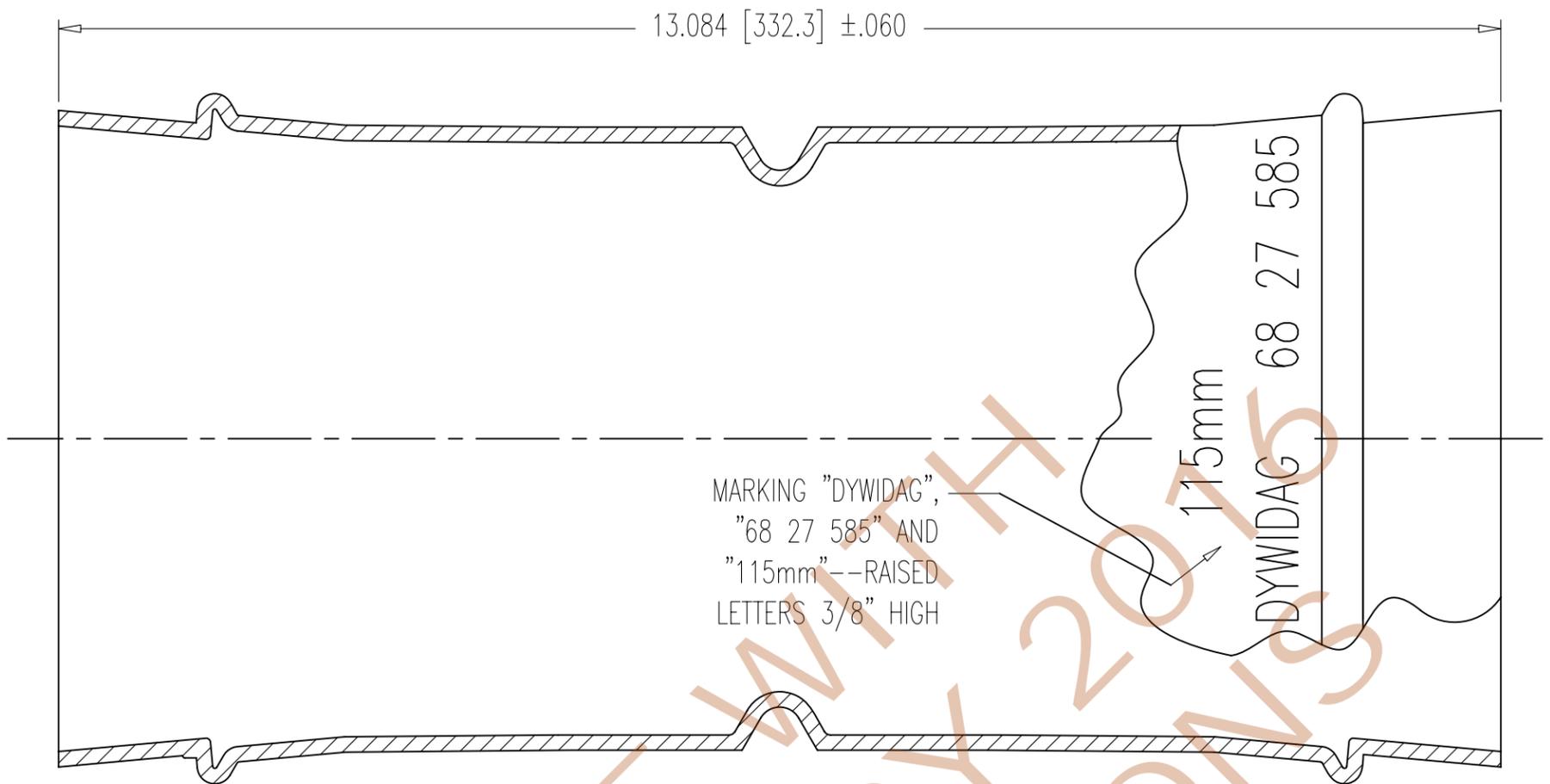


NOTES:

1. GTI GENERAL TECHNOLOGIES, INC. STAFFORD, TEXAS X3F 6D2781B3 F43
- ¹ U.S. & FOREIGN PATENTS PENDING P.N. 220460 115MM DSI
2. REFERENCE GTI DRAWING 220460.
3. STANDARD FIT FOR 27-0.6" & 37-0.5" STRANDS.
4. THIS DRAWING IS NOT INTENDED FOR MANUFACTURING PURPOSES.
5. MIN. BENDING RADIUS Rmin.=44.7 FT.
6. DUCT IS DELIVERED IN STRAIGHT SECTIONS AND IS NOT INTENDEND TO BE COILED.

APPROVED BY FDOT 09-14-07

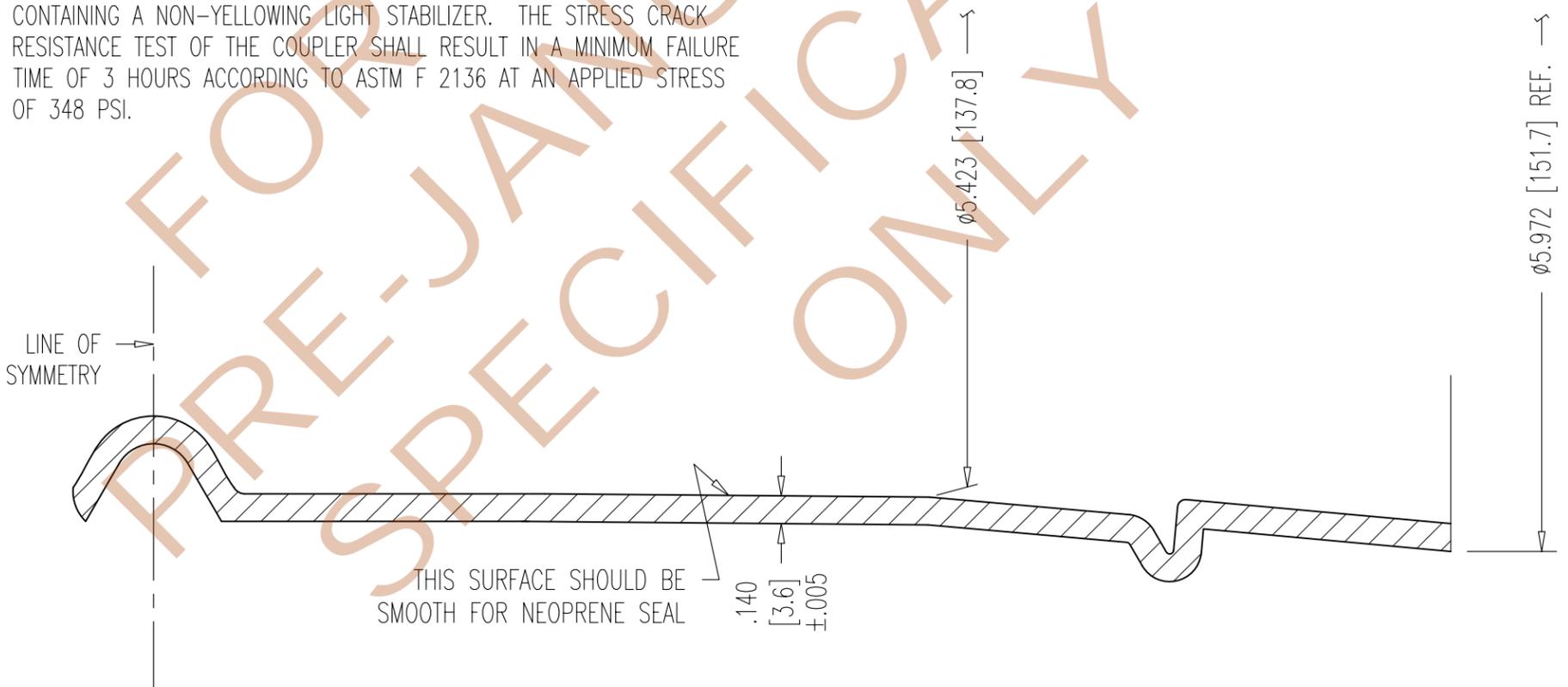
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QU00041110P		TOLERANCES: ±.010 UNLESS NOTED	WEIGHT 0.43 LBS.	REV. 1 DATE 08-04-08 NAME S.N.	PART NUMBER: U00220460
4-1/2" (115mm) CORRUGATED PP DUCT WITH GROUT CHANNELS				MATERIAL: SEE ABOVE	SCALE 1:2	REV. 2 DATE 01-28-13 NAME S.N.	DRAWING NUMBER: U00220460
DATE: 09-14-07	DWG: G. MALECKI	CHK: H.K.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100 320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-1405			
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MATERIAL SPECIFICATIONS:

MANUFACTURE COUPLERS FROM NON-COLORED, UNFILLED POLYPROPYLENE MEETING THE REQUIREMENTS OF ASTM D4101 WITH A CELL CLASSIFICATION RANGE OF PP0340B14541 TO PP0340B67884. THE COUPLER SHALL BE WHITE IN COLOR CONTAINING ANTIOXIDANT(S) WITH A MINIMUM OXIDATION INDUCTION TIME (OIT) ACCORDING TO ASTM D 3895 OF 20 MINUTES AND CONTAINING A NON-YELLOWING LIGHT STABILIZER. THE STRESS CRACK RESISTANCE TEST OF THE COUPLER SHALL RESULT IN A MINIMUM FAILURE TIME OF 3 HOURS ACCORDING TO ASTM F 2136 AT AN APPLIED STRESS OF 348 PSI.

SEE SECTION A-A



SECTION A-A

THESE INSIDE DIMENSIONS ARE MORE IMPORTANT THAN OUTSIDE DIMENSIONS
(MUST FIT OVER 115mm GTI DUCT U00220460)

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 1.15 LBS.	REV.	DATE	NAME	PART NUMBER: 68 27 585	
COUPLER FOR 115mm GTI DUCT FOR 27-0.6" STRANDS				MATERIAL: SEE ABOVE	SCALE 1:2 9:10				DRAWING NUMBER: 68 27 585	
				DATE: 09-14-07	DWG: G. MALECKI	CHK: E.A.	APP: K.S.			
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