

23' PUMP OUT-**DRAWING LIST**

| Delivered | Design | Dwg | Description | Date |
|--------------------|---------------|----------------|-----------------------------|----------------------------|
| 1/14/09 | 326 | 1 | Outboard Profile | 1/13/09 |
| 1/14/09 | | 2 | Outboard Plan | 1/13/09 |
| 1/14/09 | | 3 | Inboard Profile | 1/13/09 |
| 1/14/09 | | 2-1 | Keel Layout | 1/13/09 |
| 1/14/09 | | 2-2 | Girder Layout | 1/13/09 |
| 1/14/09 | | 2-3 | Hull Plates | 1/13/09 |
| 1/14/09 | | 2-4 | Transom & Bow Cone | 1/13/09 |
| 1/14/09 | | 2-5 | Side Deck Layout | 1/13/09 |
| 1/14/09 | | 2-6 | Aft Cockpit Sole | 1/13/09 |
| 1/14/09 | | 2-7 | Fwd Cockpit Sole | 1/13/09 |
| 1/14/09 | | 2-8 | Spashwell Parts | 1/13/09 |
| 1/14/09 | | 3-1 S | Fuel Tank, 60 Gal | 8/25/10 1/13/09 |
| 1/14/09 | | 4-1 | Console Parts | 1/13/09 |
| 1/14/09 | | 5-1 | Waste Tank Parts | 1/13/09 |
| 1/14/09 | | B-1 | Flange Bending | 1/13/09 |
| 1/14/09 | | F-R | Frame Dimensions | 1/13/09 |
| 1/14/09 | | F-1 | Frame 1 | 1/13/09 |
| 1/14/09 | | F-2 | Frame 2 | 1/13/09 |
| 1/14/09 | | F-3 | Frame 3 | 1/13/09 |
| 1/14/09 | | F-4 | Frame 4 | 1/13/09 |
| 1/14/09 | | F-5 | Typical Intermediate Frames | 1/13/09 |
| | | 5-1S | Waste Tank Dimensions | 9/20/10 |
| | | 5-2S | Waste Tank Stick Dims | 12/18/10 |

Response Marine, Plaz Parts for SOUND 23' PO Boat (#326-S)
File: RMIdes\Chester\.....
revised: 1/15/13

Print Date: 1/15/13

3/16" Parts- 5052

| <u>Part #</u> | <u>Pieces</u> | <u>Description</u> | <u>Stock</u> | <u>Bending</u> |
|---------------|---------------|----------------------------------|--------------|---------------------------------|
| TD-S | 1 | Transom Deck Stbd | 5052 | |
| TD-P | 1 | Transom Deck Port | 5052 | |
| TB-P | 1 | Transom Bulkhead Port | 5052 | |
| TB-S | 1 | Transom Bulkhead Stbd | 5052 | |
| SPB | 1 | Splashwell Panel Fwd | 5052 | Y, 2 on Marks, 1/8" IS Radius |
| SPS-P | 1 | Splashwell Side, Port | 5052 | |
| SPS-S | 1 | Splashwell Side, Stbd | 5052 | |
| ST-P | 1 | Scupper Tube, Port | 5052 | Y, 1 on Marks, 1/8" IS Radius |
| ST-S | 1 | Scupper Tube, Stbd | 5052 | Y, 1 on Marks, 1/8" IS Radius |
| FT-1 | 1 | Fuel Tank Body | 5052 | Y, 4 on Marks, 1/8" IS Radius |
| FT-2 | 1 | Fuel Tank Baffle | 5052 | Y, Standard Flange, Dwg 326-B-1 |
| FT-3 | 2 | Fuel Tank Ends | 5052 | |
| FT-4 | 1 | Fuel Tank Top | 5052 | |
| SDC-AP | 1 | Side Deck Coaming Fwd, Port | 5052 | |
| SDC-AS | 1 | Side Deck Coaming Fwd, Stbd | 5052 | |
| SDC-BP | 1 | Side Deck Coaming Aft, Port | 5052 | |
| SDC-BS | 1 | Side Deck Coaming Aft, Stbd | 5052 | |
| FDC | 1 | Foredeck Coaming | 5052 | |
| ALB | 1 | Anchor Locker Bottom | 5052 | |
| J-BC | 1 | Jig- Bow Cone | 5052 | |
| J-TS | 2 | Jig for Topsides Fwd at OS Sheer | 5052 | |
| | 23 | Total Pieces (3/16", 5052) | | |

3/16" Parts- 5086

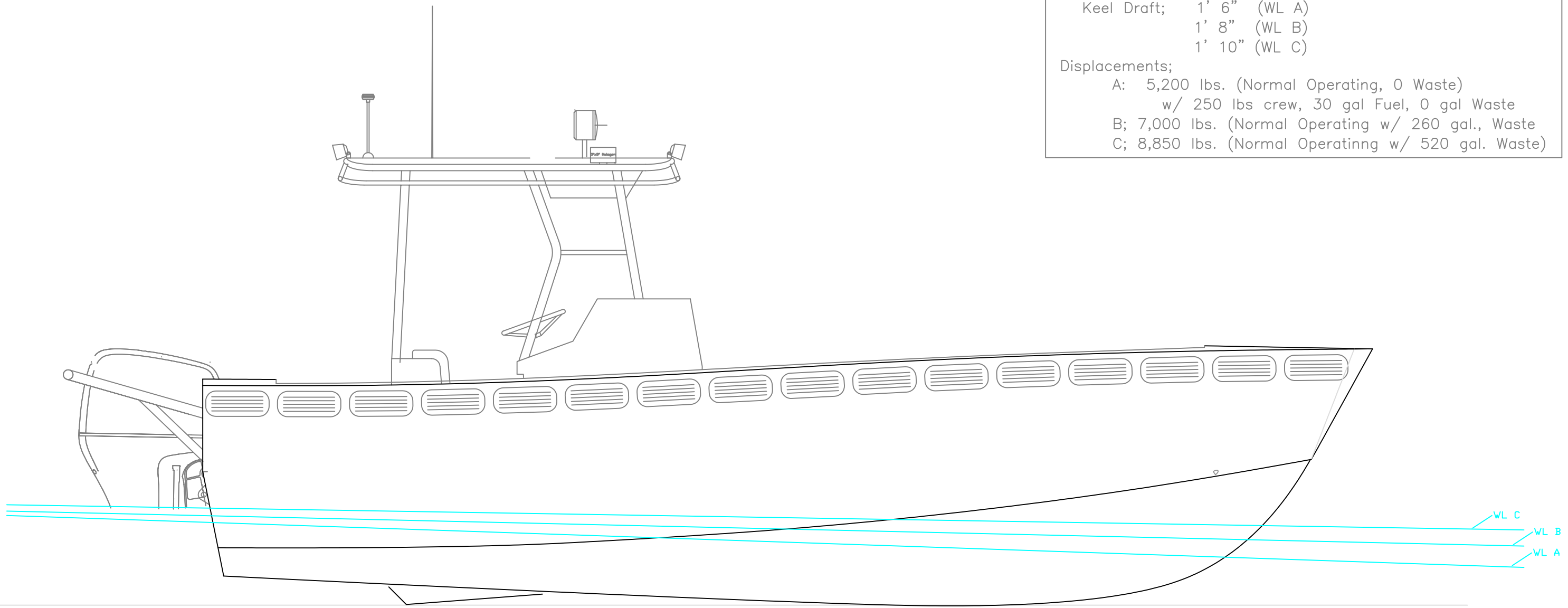
| <u>Part #</u> | <u>Pieces</u> | <u>Description</u> | <u>Stock</u> | <u>Bending</u> |
|---------------|---------------|--------------------------------|--------------|---------------------------------|
| BC | 1 | Bow Cone | 5086/83 | Y, bump, See Dwg 326-2-4 |
| FD | 1 | Foredeck | 5086/83 | |
| G-AP | 1 | Girder, Fwd Port | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| G-AS | 1 | Girder, Fwd Stbd | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| G-BP | 1 | Girder, Aft Port | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| G-BS | 1 | Girder, Aft Stbd | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| S-AP | 1 | Sole, Fwd Port | 5086/83 | |
| S-AS | 1 | Sole, Fwd Stbd | 5086/83 | |
| SM-P | 1 | Sole Margin, Port | 5086/83 | |
| SM-S | 1 | Sole Margin, Stbd | 5086/83 | |
| TSS-C | 2 | Topsides Stringer Mid Shelf | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| TSS-D | 2 | Topsides Stringer Aft Shelf | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| SD-S | 1 | Side Deck, Stbd | 5086/83 | |
| SD-P | 1 | Side Deck, Port | 5086/83 | |
| TS-PA | 1 | Topsides, forward Port | 5086/83 | |
| TS-SA | 1 | Topsides, forward Stbd | 5086/83 | |
| TS-PB | 1 | Topsides, aft Port | 5086/83 | |
| TS-PS | 1 | Topsides, aft Stbd | 5086/83 | |
| SB-A | 1 | Sole Body, Mid | 5086/83 | |
| SB-B | 1 | Sole Body Aft | 5086/83 | |
| F1 | 1 | Frame 1 | 5086/83 | |
| F2 | 1 | Frame 2 | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3 | 1 | Frame 3 | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-P | 1 | Frame 3, upper Port | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-S | 1 | Frame 3, upper Stbd | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F4 | 1 | Frame 4 | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F4-P | 1 | Frame 4, upper Port | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F4-S | 1 | Frame 4, upper Stbd | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-1 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-2 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |

| | | | | |
|------|---|--------------------------------|---------|---------------------------------|
| F3-3 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-4 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-5 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-6 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-7 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-8 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F3-9 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F4-1 | 1 | Int. Bottom Frame Aft | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F4-2 | 1 | Int. Bottom Frame Aft | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |
| F4-3 | 1 | Int. Bottom Frame Aft | 5086/83 | Y, Standard Flange, Dwg 326-B-1 |

42 Total Pieces (3/16", 5086)

1/4" Parts

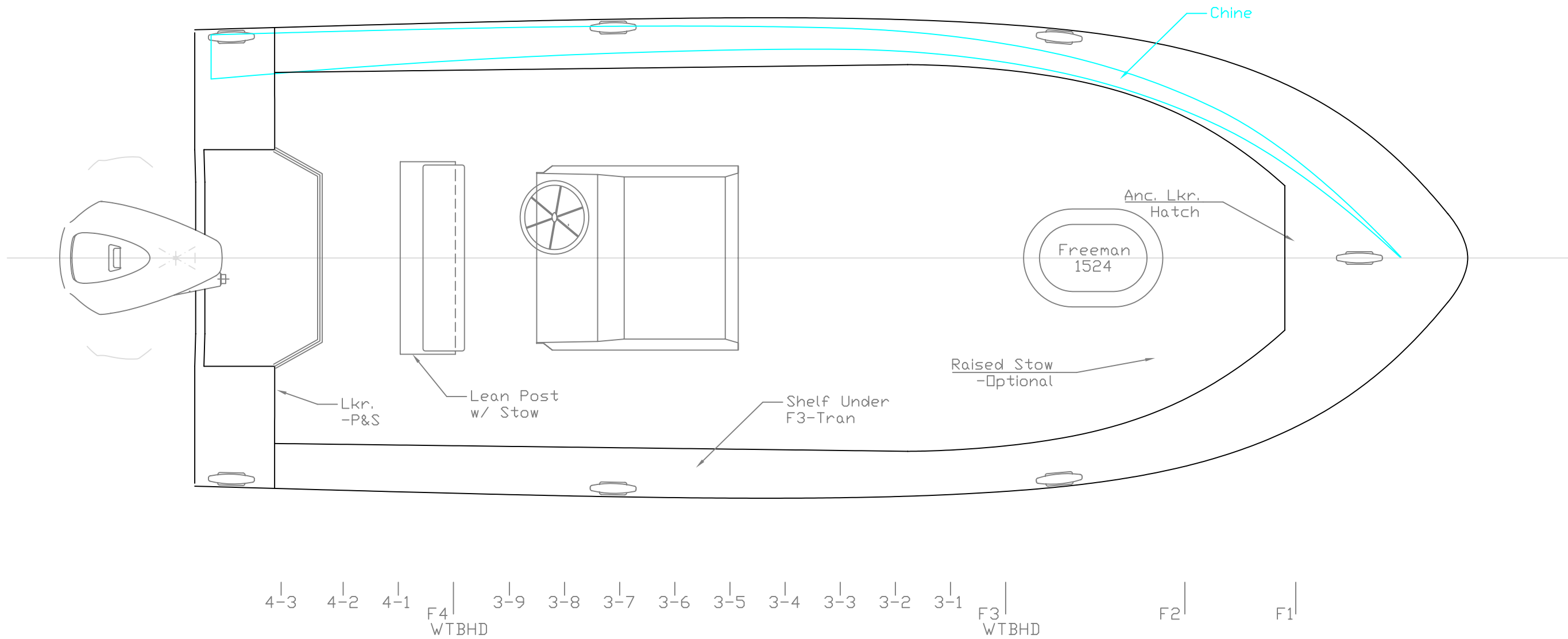
| <u>Part #</u> | <u>Pieces</u> | <u>Description</u> | <u>Stock</u> | <u>Bending</u> |
|---------------|---------------|------------------------------|--------------|--|
| TSS-A | 2 | Topside Stringer, Stem to F1 | 5086/83 | |
| TSS-B | 2 | Topside Stringer, F1 to F3 | 5086/83 | |
| TR | 1 | Transom | 5086/83 | Y, 1 on Mark, 1/8" I.S. Radius is OK, Bend only 11 deg." |
| BS-1 | 2 | Bottom Longitudinal 1 | 5086/83 | |
| BS-2 | 2 | Bottom Longitudinal 2 | 5086/83 | |
| BS-3 | 2 | Bottom Longitudinal 3 | 5086/83 | |
| BS-4 | 2 | Bottom Longitudinal 4 | 5086/83 | |
| CP-A | 1 | Chine fwd Port | 5086/83 | |
| CS-A | 1 | Chine fwd Stbd | 5086/83 | |
| CP-B | 1 | Chine aft Port | 5086/83 | |
| CS-B | 1 | Chine aft Stbd | 5086/83 | |
| BP-A | 1 | Bottom Plate, Port | 5086/83 | |
| BS-A | 1 | Bottom Plate, Stbd | 5086/83 | |
| | 19 | Total Pieces | | |



| PARTICULARS~ | |
|--|----------------------|
| Hull LOA; | 23' 1 1/2" |
| Hull Beam; | 8' 9" (w/o Rub Rail) |
| Keel Draft; | 1' 6" (WL A) |
| | 1' 8" (WL B) |
| | 1' 10" (WL C) |
| Displacements; | |
| A: 5,200 lbs. (Normal Operating, 0 Waste) w/ 250 lbs crew, 30 gal Fuel, 0 gal Waste | |
| B; 7,000 lbs. (Normal Operating w/ 260 gal., Waste | |
| C; 8,850 lbs. (Normal Operating w/ 520 gal. Waste) | |

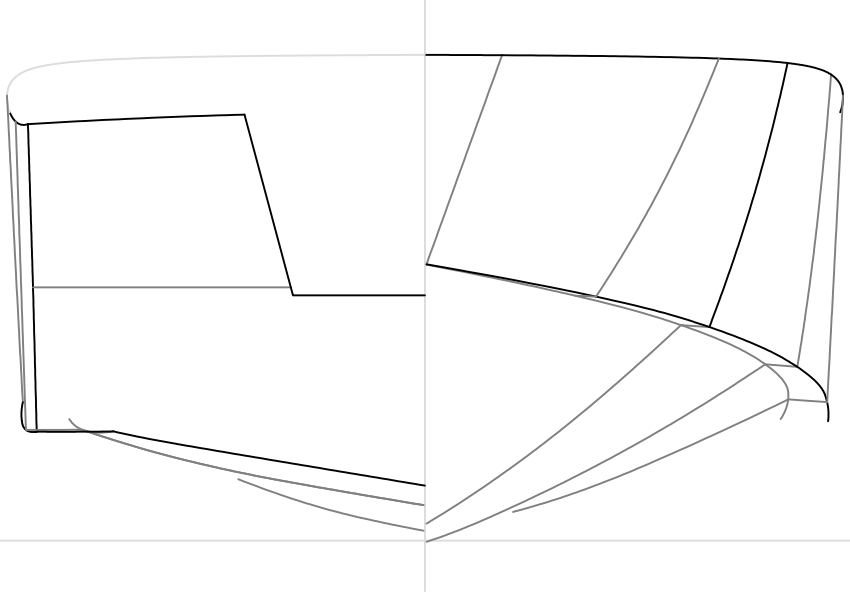
| | | |
|---|----------------|---------------------------|
| OUTBOARD PROFILE | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1/2" = 1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. Newburyport, MA, www.responsemarine.com | | SHEET DWG NO. 326-1 |

| REV. | DESCRIPTION |
|------|-------------|
| | |

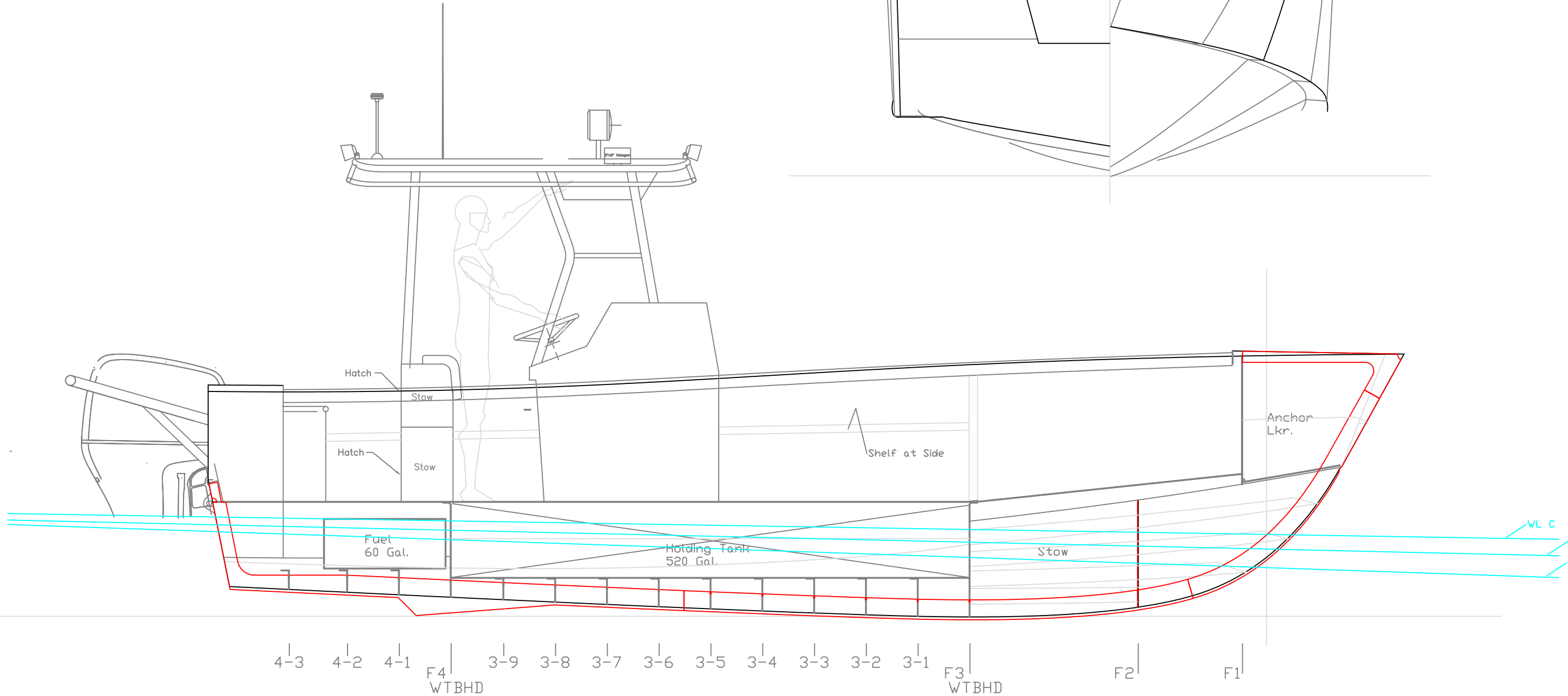


| | | |
|---|----------------|---------------------------|
| OUTBOARD PLAN | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1/2" = 1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. Newburyport, MA, www.responsemarine.com | | SHEET DWG NO. 326-2 |

| REV. | DESCRIPTION |
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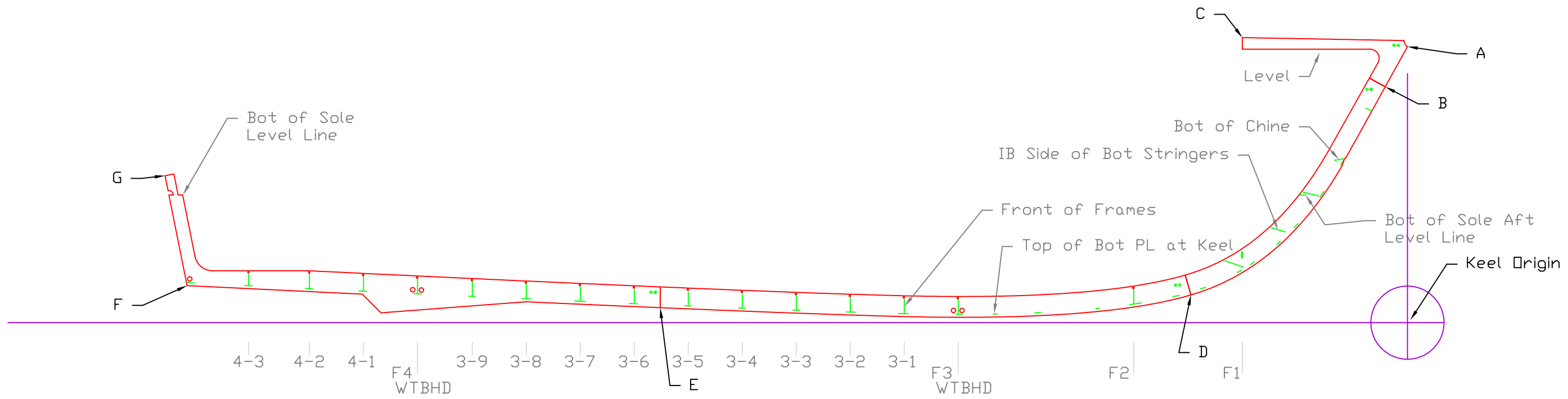
Body Plan
(Frames)



| | | |
|--------------------|----------------|------------------|
| INBOARD PROFILE | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1/2" = 1' | DES/DWN WAL | DATE 1/13/09 |
| SHEET | | DWG NO. 326-3 |

| REV. | DESCRIPTION |
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Response Marine, Inc.
Newburyport, MA, www.responsemarine.com

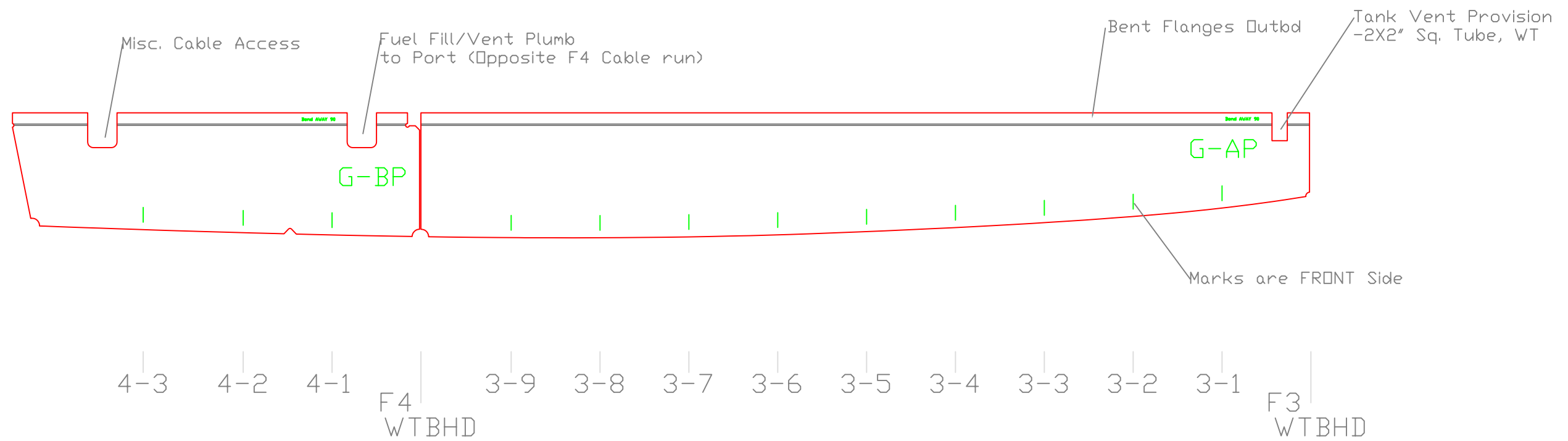


| | | | | | |
|----------------|--------------------|----------|------------|----------|--|
| CPO 26' (#326) | 9/13/09 | | | | |
| Keel Points | | | | | |
| | Inches- sixteenths | | Feet | | |
| | Horizontal | Vertical | Horizontal | Vertical | |
| A to Origin | | | | | |
| B to Origin | | | | | |
| C to Origin | | | | | |
| D to Origin | | | | | |
| E to Origin | | | | | |
| F to Origin | | | | | |
| G to Origin | | | | | |
| A to | | | | | |
| B to | | | | | |
| C to | | | | | |
| D to | | | | | |
| E to | | | | | |
| F to | | | | | |
| G to | | | | | |

| FRAME LOCATIONS & KEEL POINTS | | | | | |
|--|----------------|----|----|----|----|
| CPO 26' (#326) | 9/13/09 | | | | |
| Inches- sixteenths Measured on Level Sole Line from FRONT SIDE of frames | | | | | |
| | Distance From: | | | | |
| Item | Tip of Stem | F1 | F2 | F3 | F4 |
| Tip of Stem | | | | | |
| F1 | | | | | |
| F2 | | | | | |
| F3 | | | | | |
| F4 | | | | | |
| Keel Pt. G | | | | | |

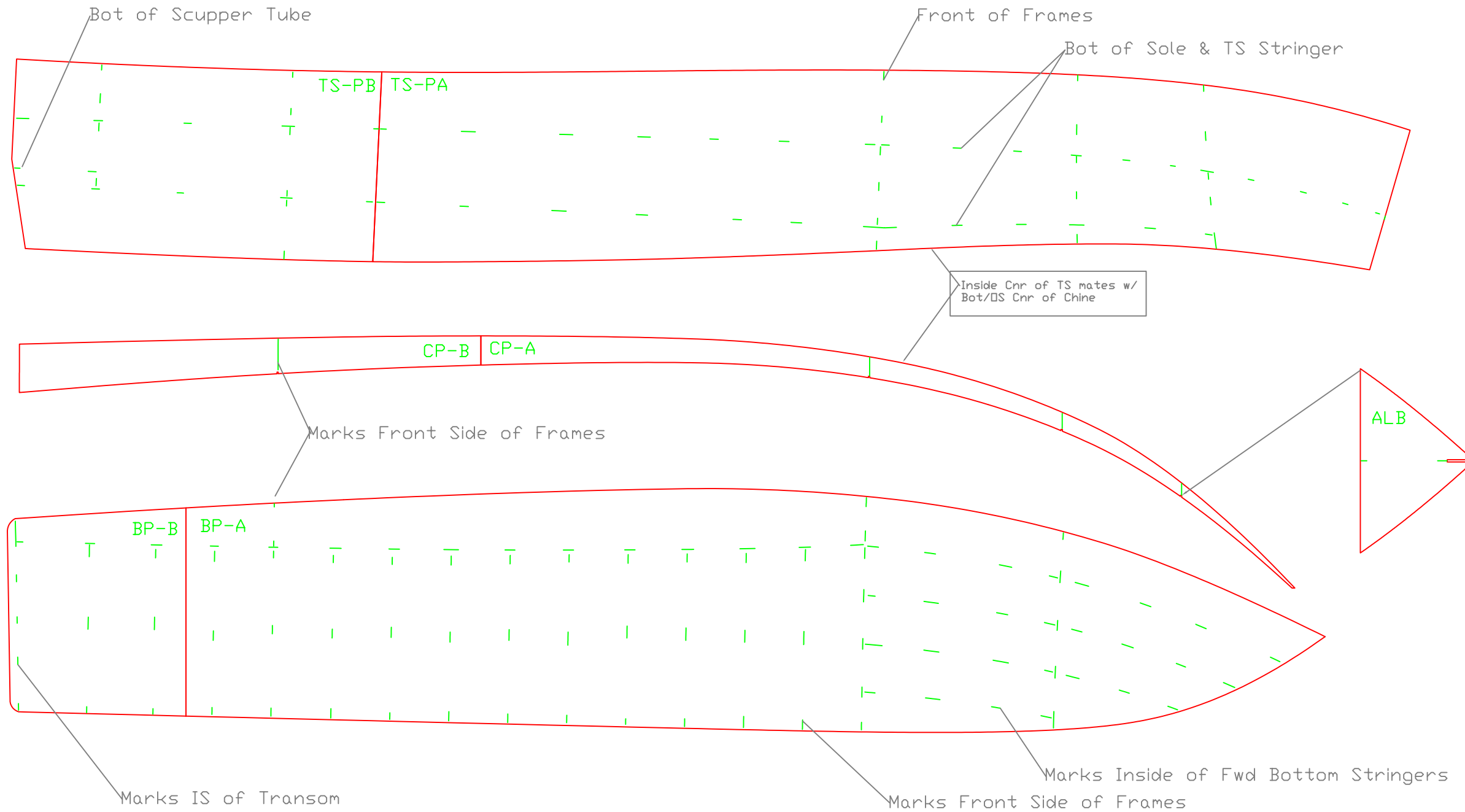
| | | |
|---|----------------|-----------------------------|
| KEEL LAYOUT | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1/2" = 1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. Newburyport, MA, www.responsemarine.com | | SHEET DWG NO. 326-2-1 |

| REV. | DESCRIPTION |
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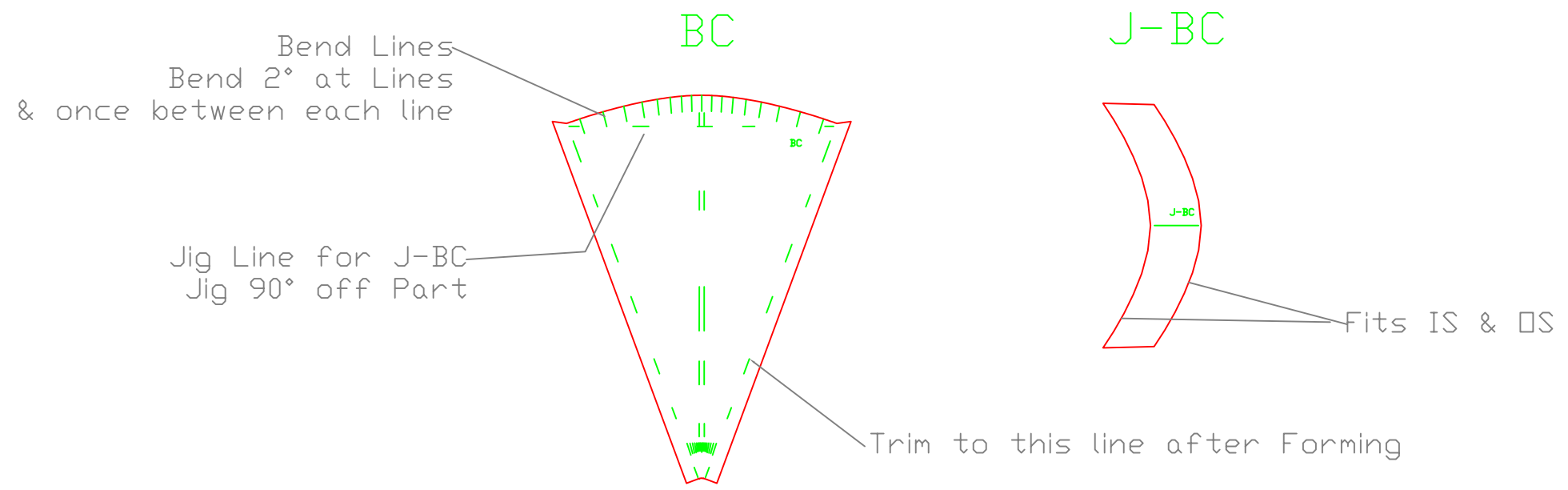
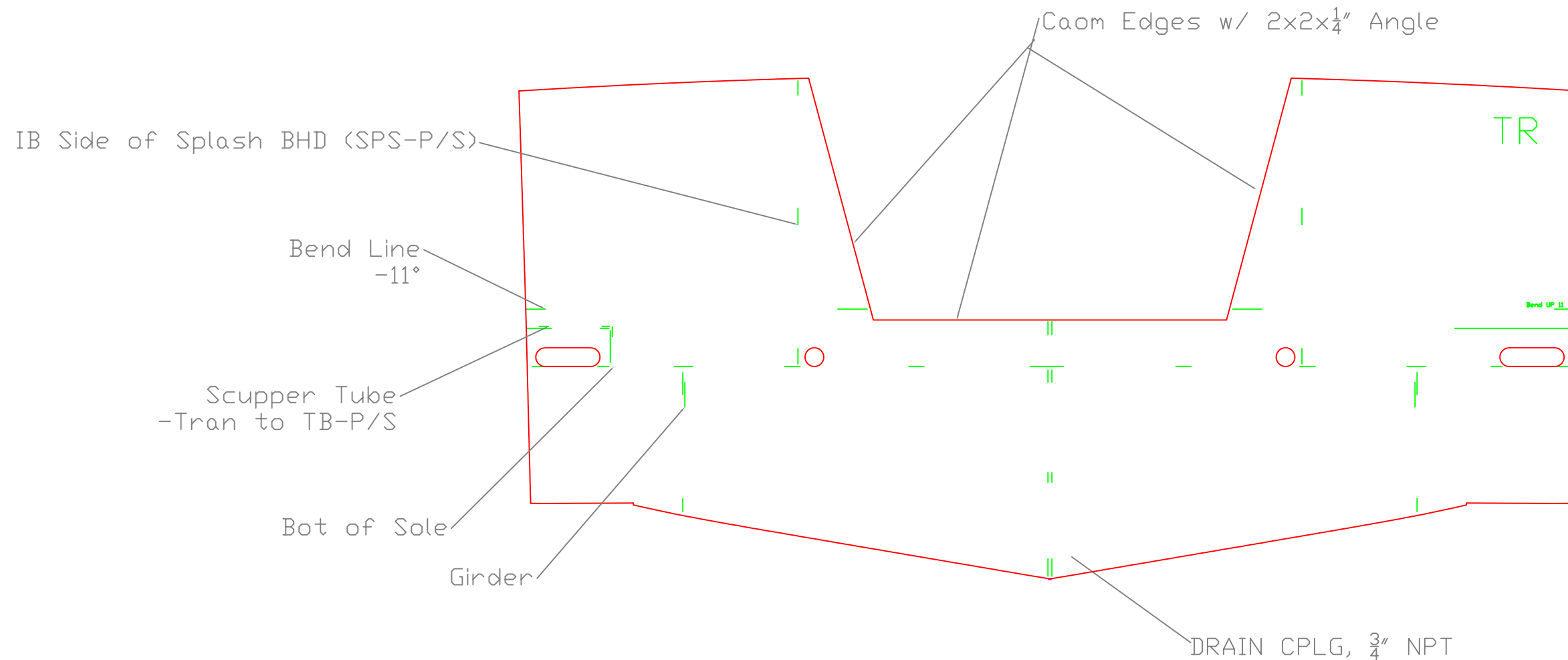
| | | |
|---|----------------|-----------------------------|
| GIRDER LAYOUT | | |
| 23' PUMP OUT BOAT | | |
| SCALE 3/4" = 1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newburyport, MA www.responsemarine.com</small> | | SHEET DWG NO. 326-2-2 |

| REV. | DESCRIPTION |
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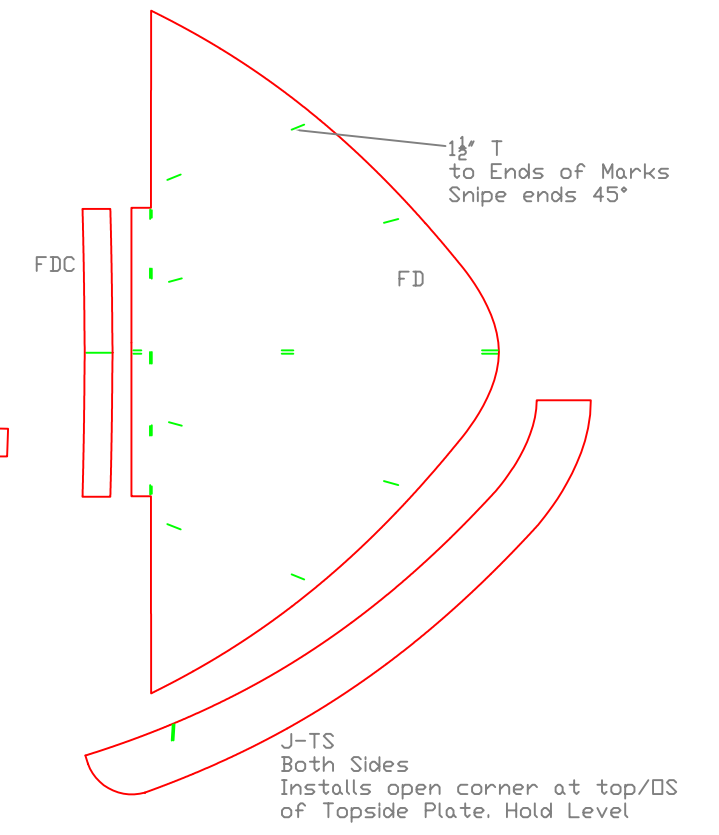
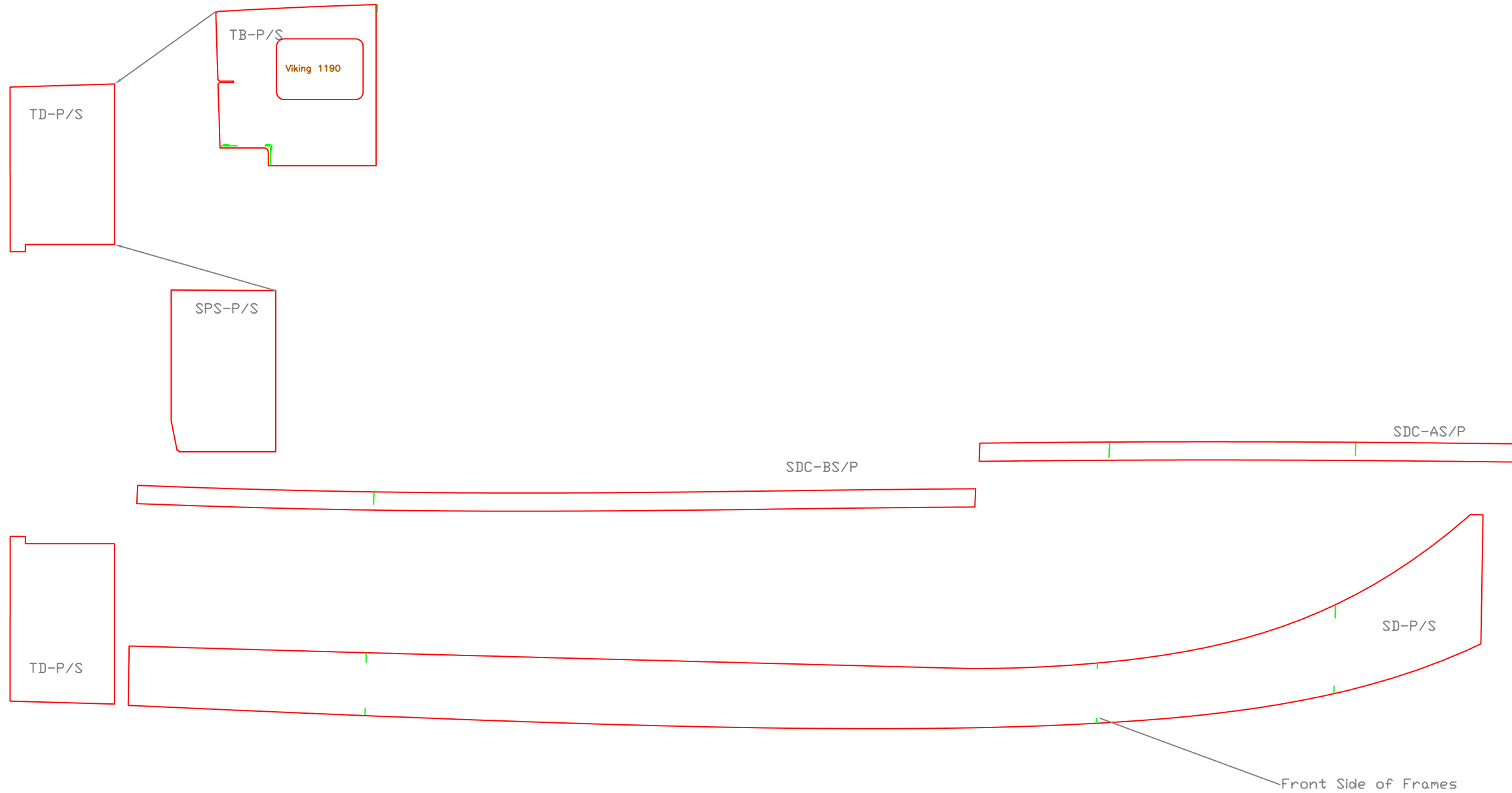
| | | |
|---|----------------|-----------------------------|
| HULL PLATES | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1/2" = 1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newburyport, MA www.responsemarine.com</small> | | SHEET DWG NO. 326-2-3 |

| REV. | DESCRIPTION |
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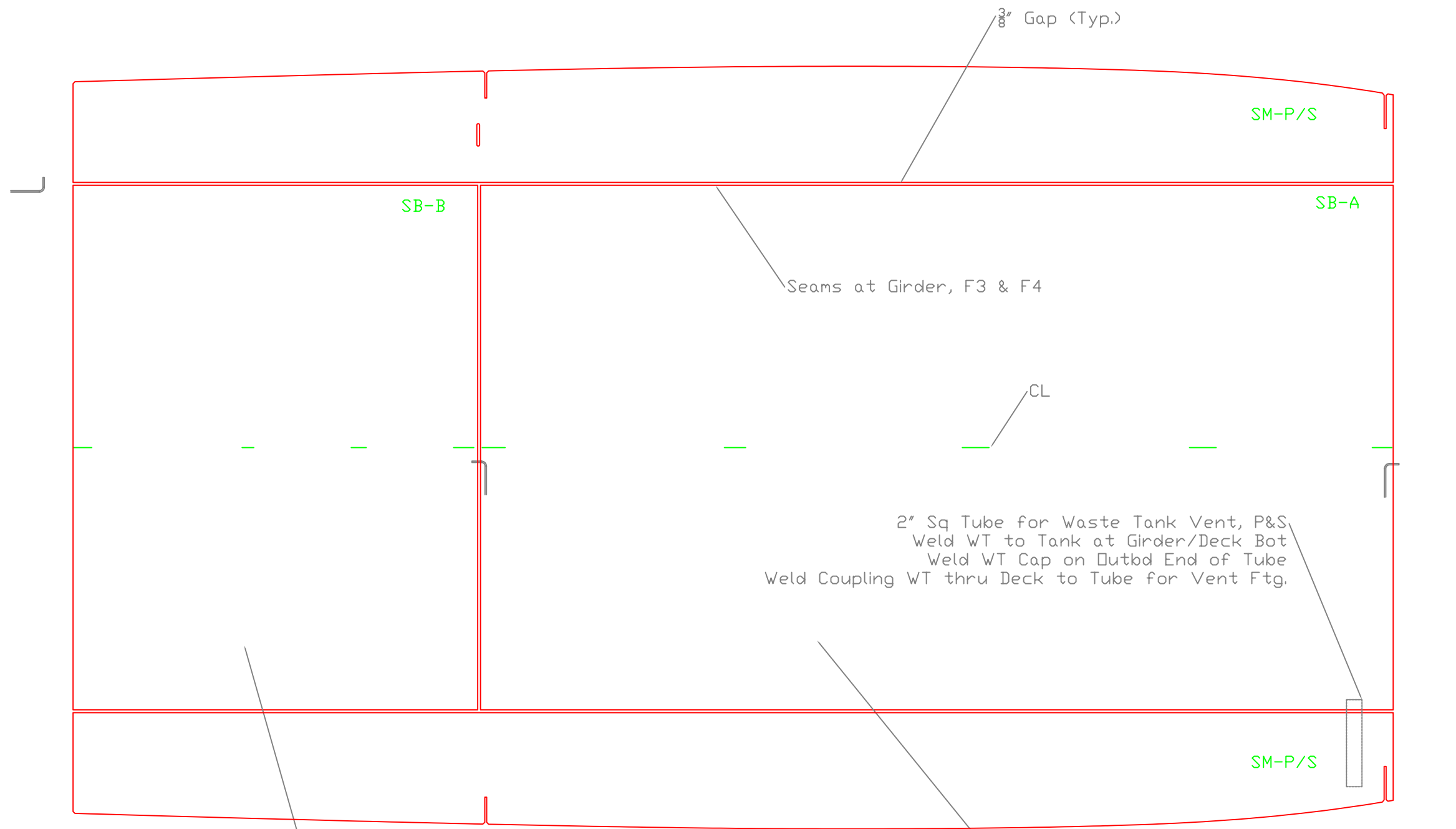
| | | |
|---|----------------|-----------------------------|
| TRANSOM & BOW CONE | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1" = 1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newburyport, MA www.responsemarine.com</small> | | SHEET DWG NO. 326-2-4 |

| REV. | DESCRIPTION |
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| | | |
|---|----------------|--------------------------|
| SIDE DECK LAYOUT | | |
| 23' PUMP OUT BOAT | | |
| SCALE NONE | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newburyport, MA www.responsemarine.com</small> | | SHEET DWG NO. 326-2-5 |

| REV. | DESCRIPTION |
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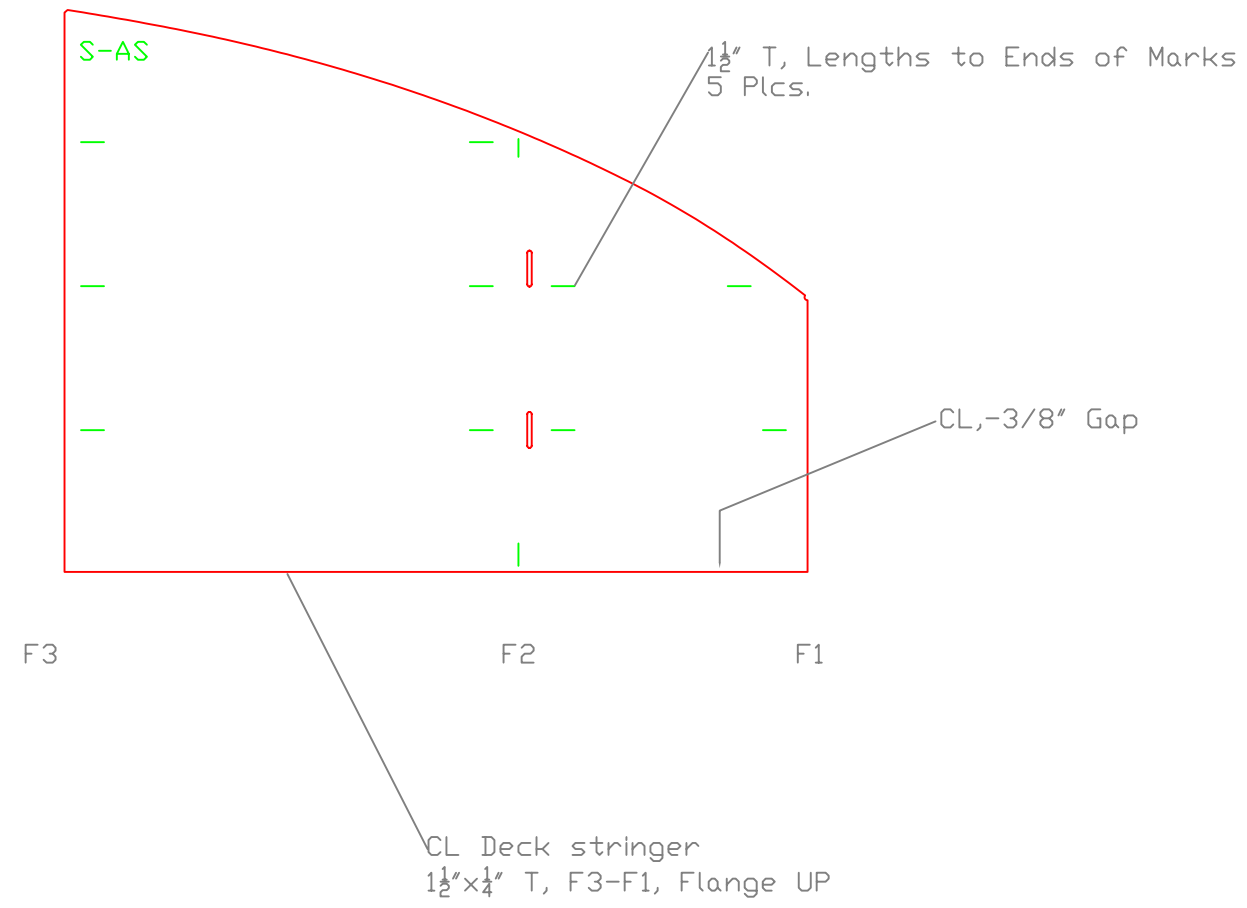
2" Sq Tube for Waste Tank Vent, P&S
 Weld WT to Tank at Girder/Deck Bot
 Weld WT Cap on Outbd End of Tube
 Weld Coupling WT thru Deck to Tube for Vent Ftg.

Stiffen w/ 1 1/2" x 1/4" T's
 Longitudinal, intercostal, 12" spacing

If Waste Tank is installed
 this Panel will Plug Weld to Baffle Flanges.
 Panel will need additional intercostal T's.

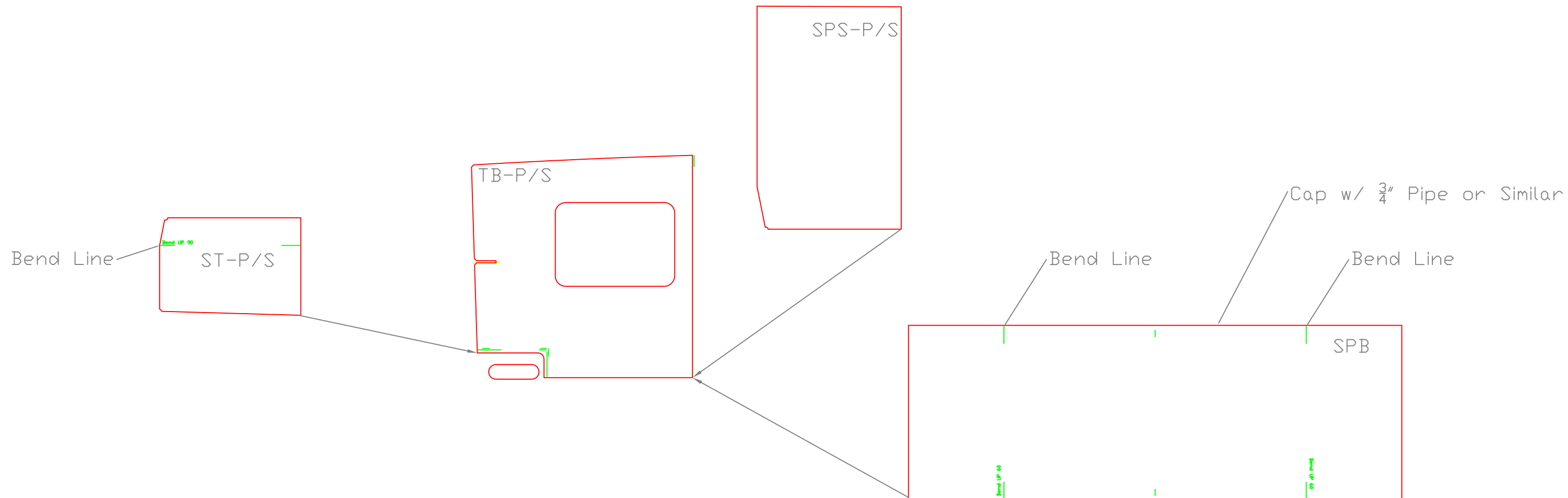
| | | |
|---|----------------|-----------------------------|
| AFT COCKPIT SOLE | | |
| 23' PUMP OUT BOAT | | |
| SCALE 3/4"=1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newburyport, MA www.responsemarine.com</small> | | SHEET DWG NO. 326-2-6 |

REV. DESCRIPTION



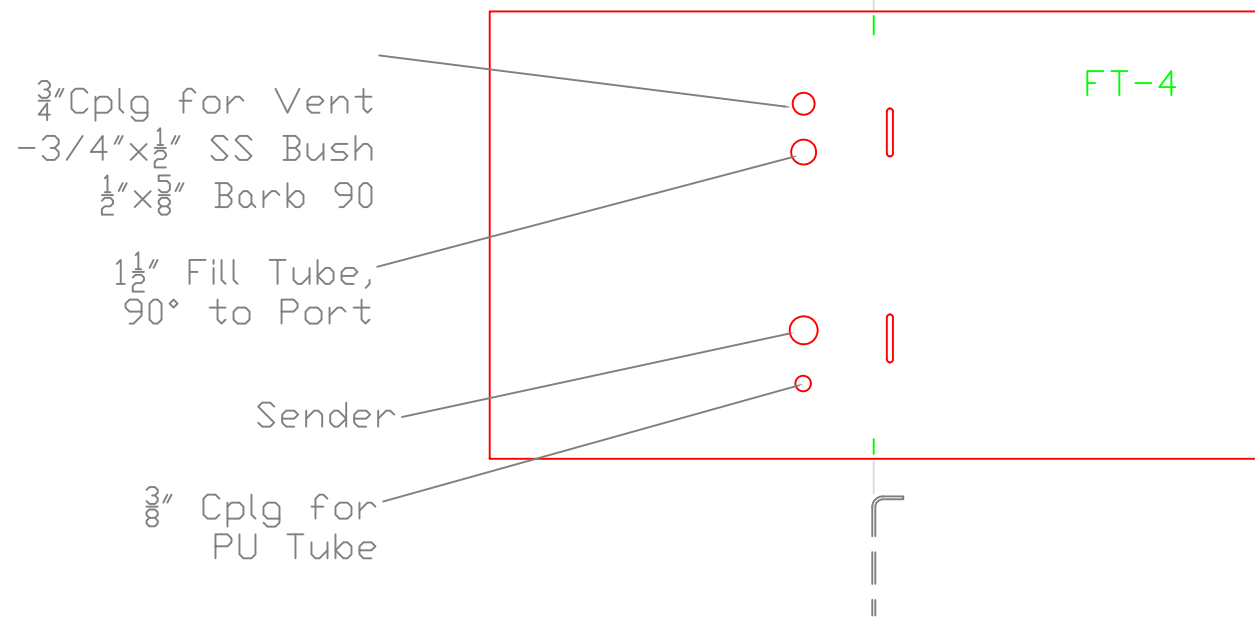
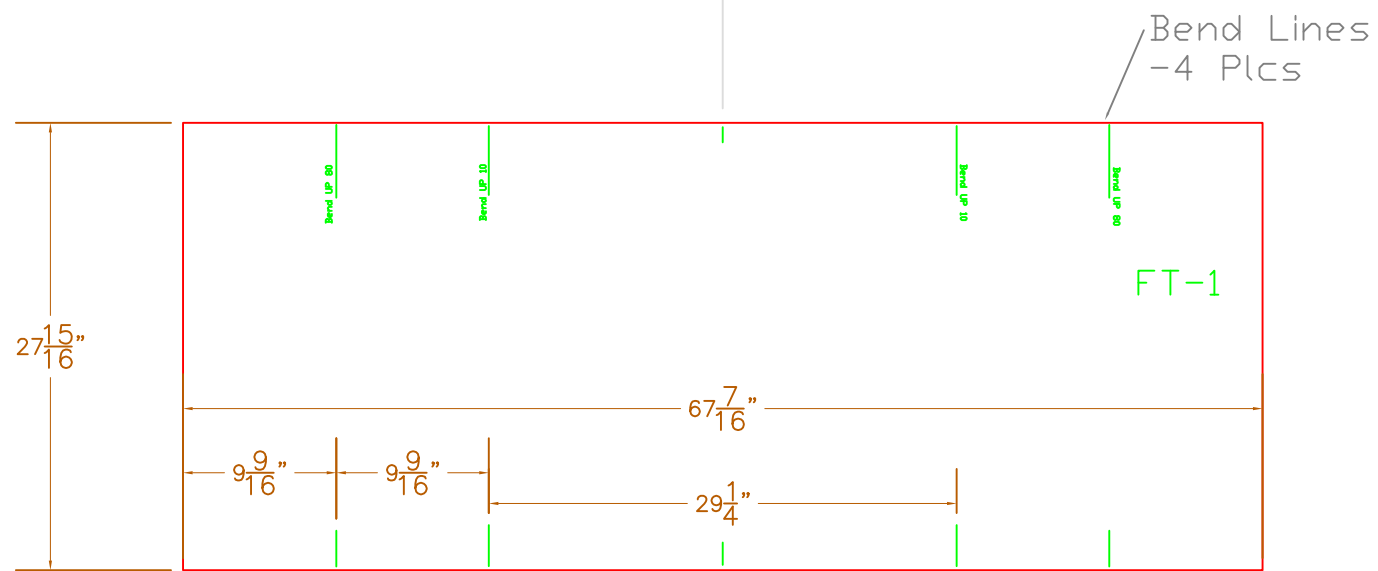
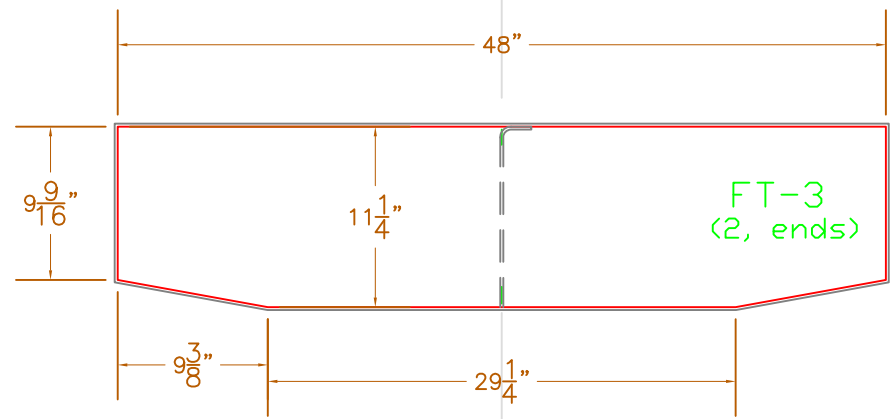
| | | |
|---|----------------|--------------------------|
| FWD COCKPIT SOLE | | |
| 23' PUMP OUT BOAT | | |
| SCALE 3/4"=1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newburyport, MA www.responsemarine.com</small> | | SHEET DWG NO. 326-2-7 |

| REV. | DESCRIPTION |
|------|-------------|
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| | | |
|---|----------------|--------------------------|
| SPLASHWELL PARTS | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1"=1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newburyport, MA www.responsemarine.com</small> | | SHEET DWG NO. 326-2-8 |

| REV. | DESCRIPTION |
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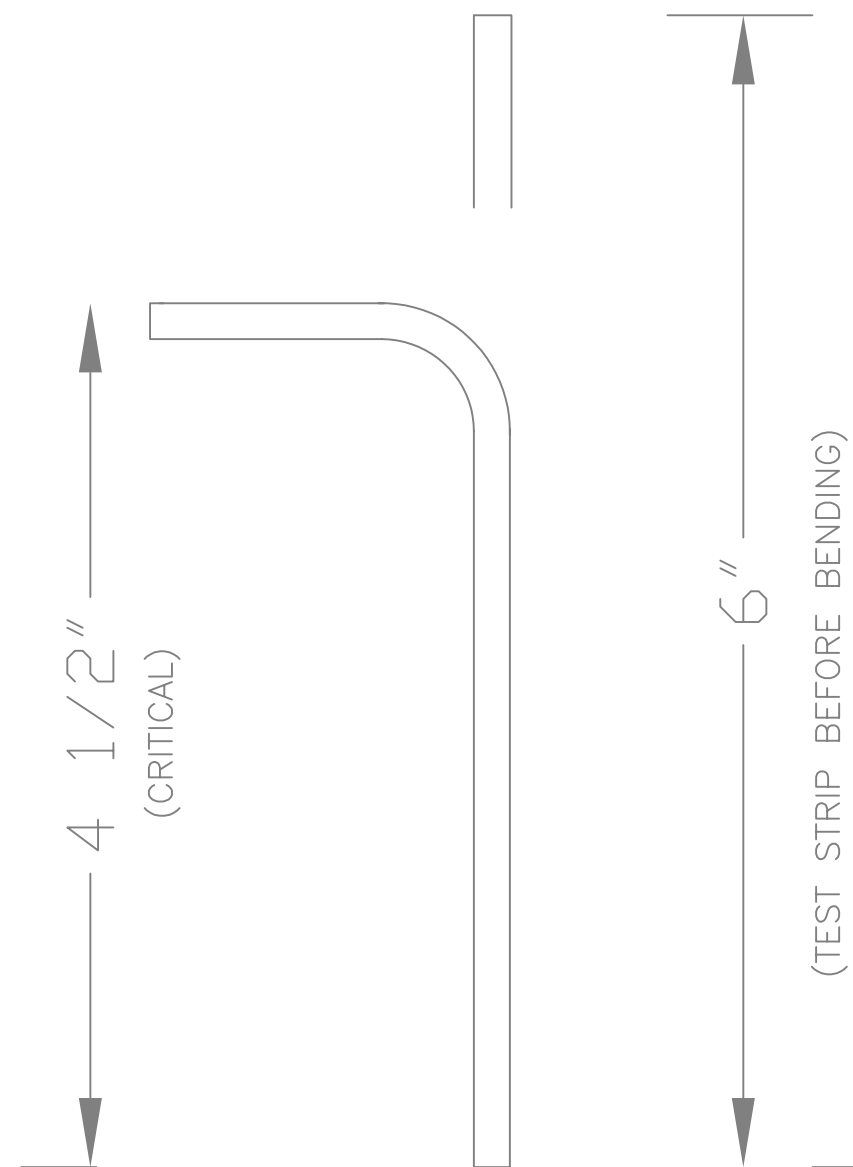


Note: 1/15/13, Holes in Top are NOT final and NOT NC cut.

| | | |
|--------------------|----------------|---------------------|
| FUEL TANK- 60 gal. | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1" = 1' | DES/DWN WAL | DATE 1/13/09 |
| REV 8/25/10 | | DWG NO. 326-3-1S |

REV. DESCRIPTION
8/25/10, Dims added for hand cutting

Response Marine, Inc.
Newburyport, MA www.responsemarine.com



STANDARD FLANGE BENDING: $\frac{3}{16}$ " 5086 H116 Stock

- 1) Confirm results for dimensions and cracking with test strips before bending frames.
- 2) Expected Die Radius is $\frac{1}{2}$ "
- 3) Flanges are designed for outside major flange length of $1\frac{1}{2}$ " less than flat stock length as shown.
- 4) Expected Back Gauge setting is 1.74", but confirm and adjust, based on test strip.

Parts to be flanged per this same set-up are as follows:

| Part | Pc. Qty | Description | Alloy |
|-----------|---------|----------------------------------|---------|
| F2 | 1 | Frame 2 | 5086/83 |
| F3 | 1 | Frame 3 | 5086/83 |
| F3-1 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 |
| F3-2 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 |
| F3-3 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 |
| F3-4 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 |
| F3-5 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 |
| F3-6 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 |
| F3-7 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 |
| F3-8 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 |
| F3-9 | 1 | Int. Bottom Frame in Waste Bay | 5086/83 |
| F3-P | 1 | Frame 3, upper Port | 5086/83 |
| F3-S | 1 | Frame 3, upper Stbd | 5086/83 |
| F4 | 1 | Frame 4 | 5086/83 |
| F4-1 | 1 | Int. Bottom Frame Aft | 5086/83 |
| F4-2 | 1 | Int. Bottom Frame Aft | 5086/83 |
| F4-3 | 1 | Int. Bottom Frame Aft | 5086/83 |
| F4-P | 1 | Frame 4, upper Port | 5086/83 |
| F4-S | 1 | Frame 4, upper Stbd | 5086/83 |
| FT-2 | 1 | Fuel Tank Baffle | 5052 |
| G-AP | 1 | Girder, Fwd Port | 5086/83 |
| G-AS | 1 | Girder, Fwd Stbd | 5086/83 |
| G-BP | 1 | Girder, Aft Port | 5086/83 |
| G-BS | 1 | Girder, Aft Stbd | 5086/83 |
| TSS-C | 2 | Topsides Stringer Mid Shelf | 5086/83 |
| TSS-D | 2 | Topsides Stringer Aft Shelf | 5086/83 |
| WT-2 | 2 | Waste Tank, Transvere Baffles | 5086/83 |
| WT-3 | 2 | Waste Tank, Longitudinal Baffles | 5086/83 |
| Pc. Total | 32 | | |

FLANGE BENDING

23' PUMP OUT BOAT

| | | |
|---------------|----------------|-----------------|
| SCALE FULL | DES/DWN WAL | DATE 1/13/09 |
|---------------|----------------|-----------------|

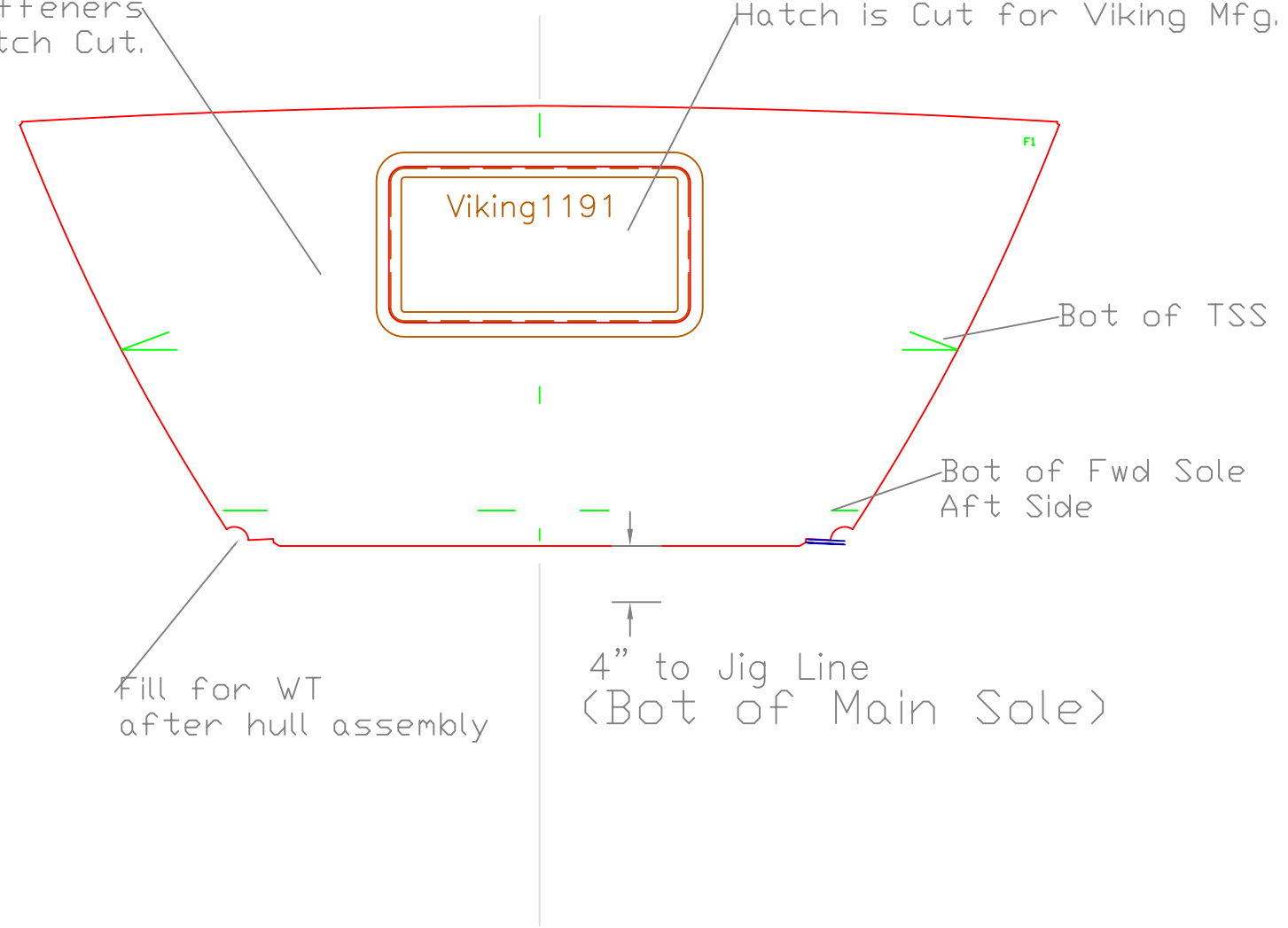
| | | |
|------------------------------|--|-------|
| Response Marine, Inc. | | SHEET |
|------------------------------|--|-------|

| | | |
|---|--|--------------------|
| Newburyport, MA, www.responsemarine.com | | DWG NO. 326-B-1 |
|---|--|--------------------|

| | |
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| REV. | DESCRIPTION |
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Vertical & Horiz. Stiffeners
 ~2" OS of Hatch Cut.

Hatch is Cut for Viking Mfg. #1191

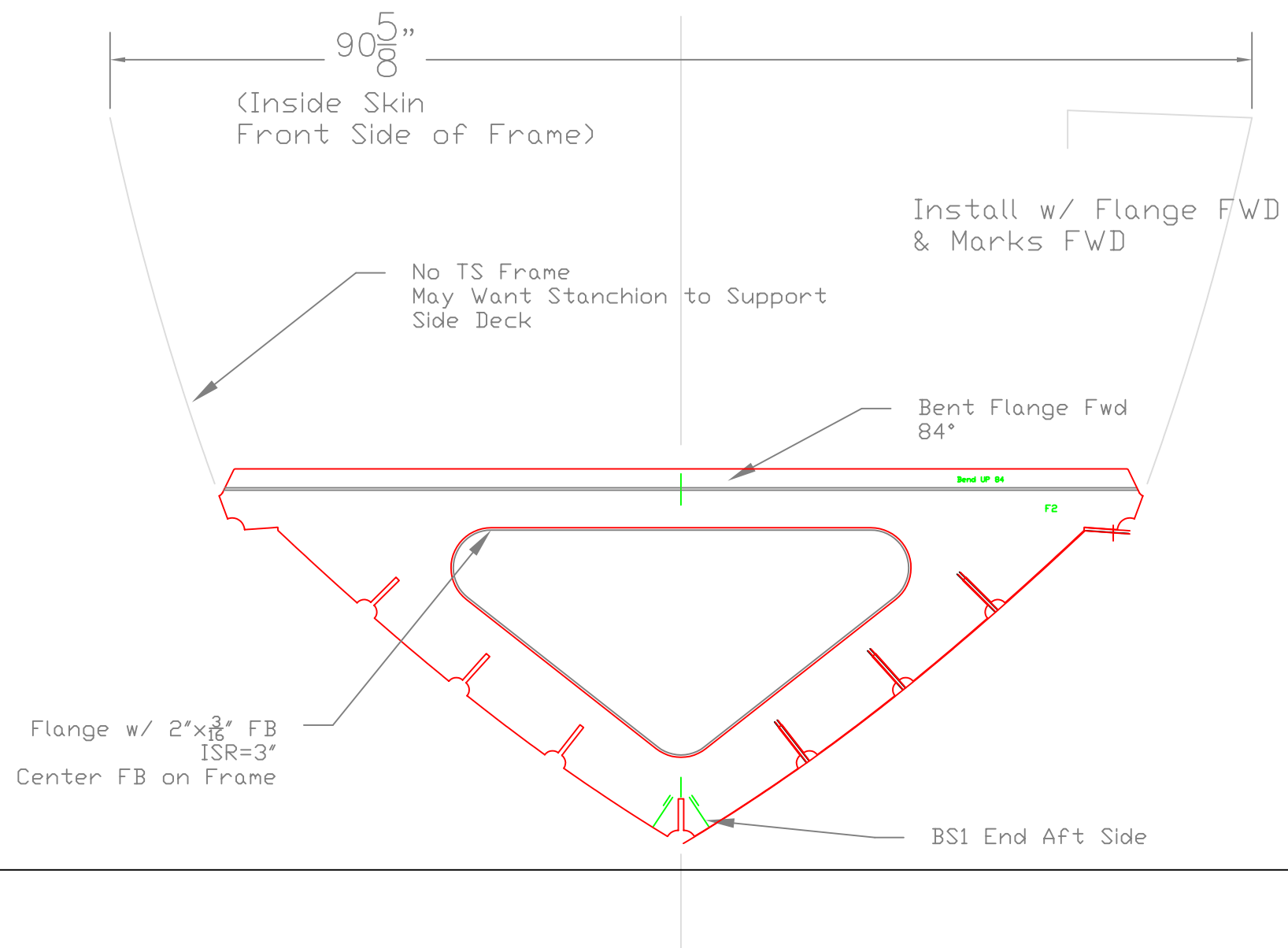


Fill for WT
 after hull assembly

4" to Jig Line
 (Bot of Main Sole)

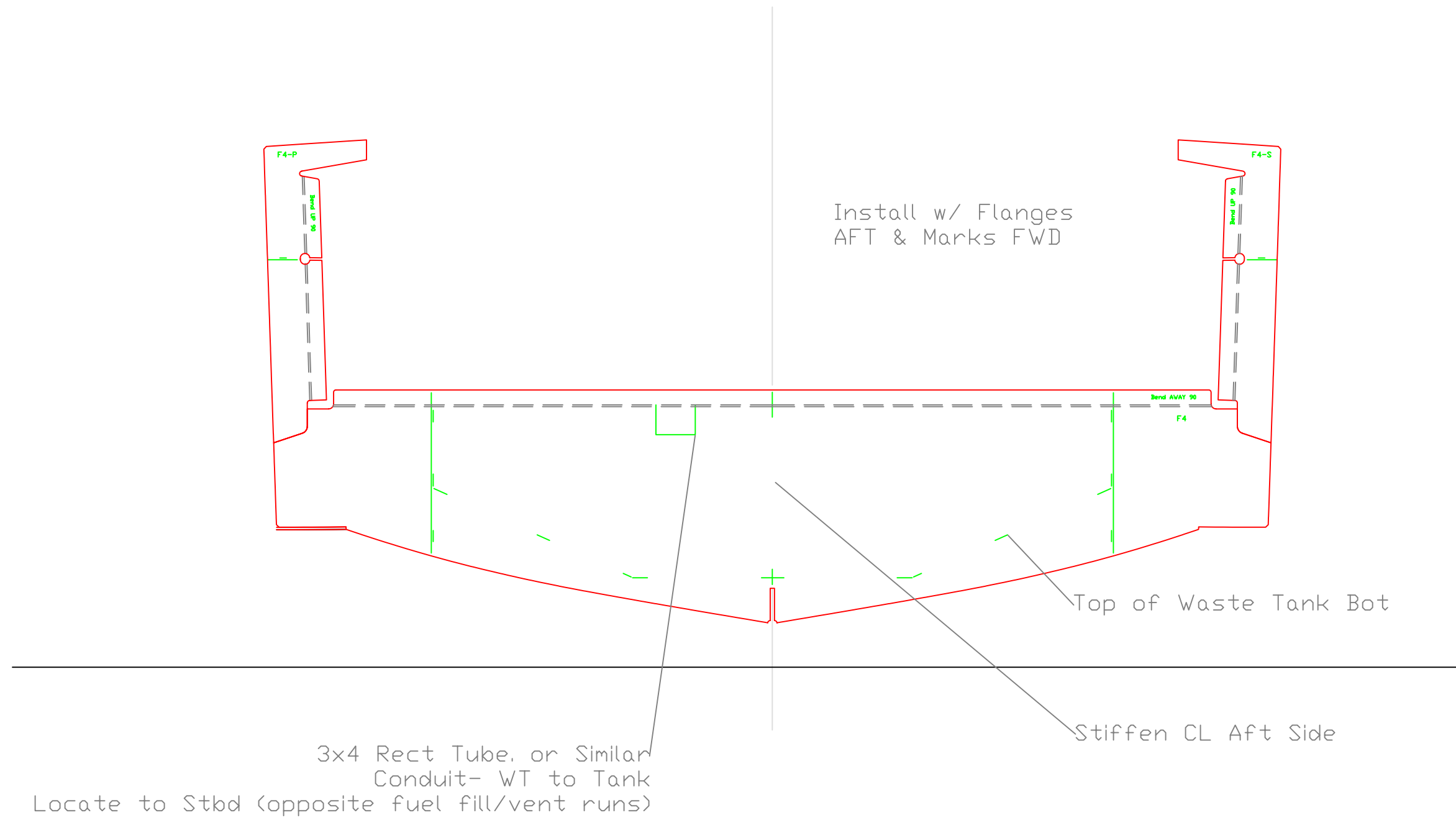
| | | |
|---|----------------|--------------------------|
| FRAME 1 | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1"=1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newburgport, WA www.responsemarine.com</small> | | SHEET DWG NO. 326-F-1 |

REV. DESCRIPTION



| | | |
|---|----------------|-----------------------------|
| FRAME 2 | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1"=1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newport, WA www.responsemarine.com</small> | | SHEET DWG NO. 326-F-2 |

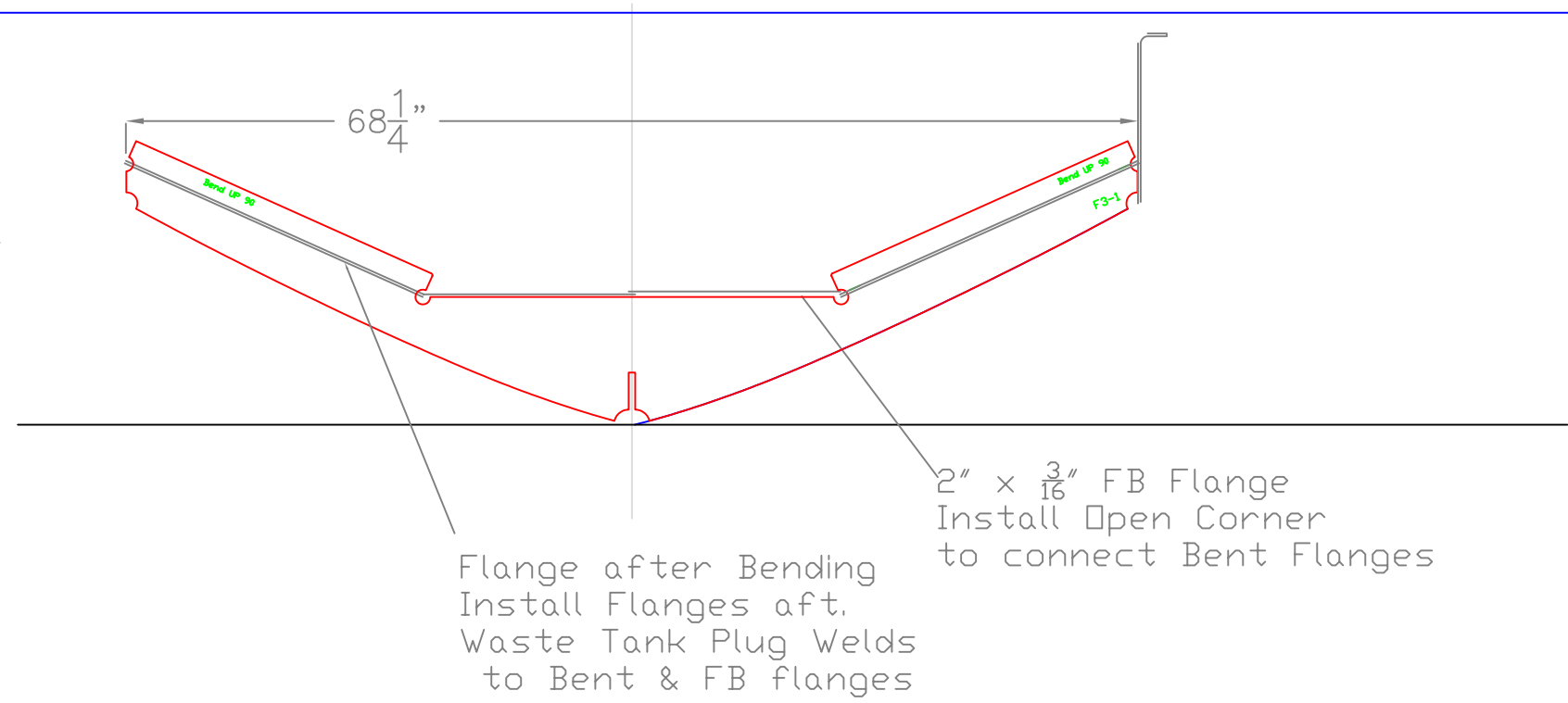
| REV. | DESCRIPTION |
|------|-------------|
| | |



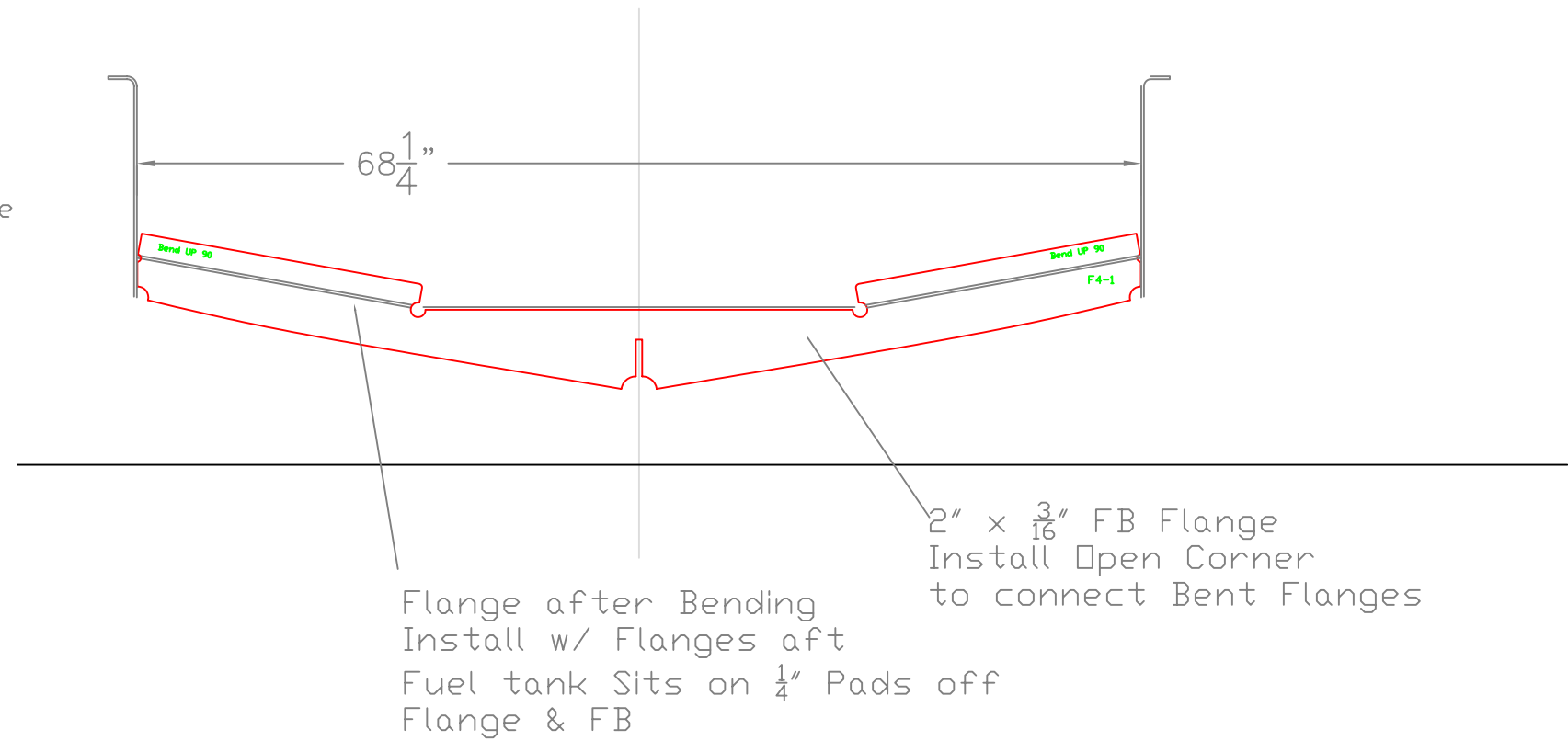
| | | |
|--|----------------|--------------------------|
| FRAME 4, WT BHD | | |
| 23' PUMP OUT BOAT | | |
| SCALE 1"=1' | DES/DWN WAL | DATE 1/13/09 |
| Response Marine, Inc. <small>Newburgport, WA www.responsemarine.com</small> | | SHEET DWG NO. 295-F-4 |

REV. DESCRIPTION

Typ. Intermediate Frame
-F3-1 to F3-9



Typ. Intermediate Frame
-F4-1 to F4-3



TYPICAL INTERMED. FRAMES
23' PUMP OUT BOAT

| | | |
|----------------|----------------|-----------------|
| SCALE 1"=1' | DES/DWN WAL | DATE 1/13/09 |
|----------------|----------------|-----------------|

| | |
|-------|--|
| SHEET | |
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Response Marine, Inc.

Newburgport, MA www.responsemarine.com

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| DWG NO. 326-F-5 |
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| REV. | DESCRIPTION |
|------|-------------|
| | |