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Delphi Maritime, LLC
22431 91st Ave. W.
Edmonds, WA 98026

206-793-5680
jeff@delphimaritime.com

Car/Passenger Ferry M/V "Guemes"

Condition and Value Survey

Survey No. 2019-0753

Date of Survey: March 4 & 14 , 2019
Date of Report: July 31, 2019

Delphi Maritime, LLC
22431 91st Ave. W.
Edmonds, WA 98026
(206) 793-5680 (Mobile)
jeff@delphimaritime.com

THIS IS TO CERTIFY

that the undersigned Surveyor at this port did at the request of Mr. Marty McKay, PE, Art Anderson, 202 Pacific Avenue, Bremerton, WA 98337 and Captain Rachel Rowe, Ferry Operations Division Manager, Skagit County Public Works, 500 Ave. Anacortes, WA 98221 survey the welded steel:

Passenger/Car Ferry M/V "Guemes"
91 Gross Registered Tons
of Anacortes, Washington

Owners:
Skagit County A Municipal Group

Operators:
Skagit County Public Works
1800 Continental Place, Mt. Vernon, W

for the purpose of ascertaining the condition and value of the vessel and 5- and 10-year cost to cure outlook.

On March 4 and 14, 2019 the attending Surveyor proceeded to Foss Shipyard, Seattle, Washington where the vessel lay in dry-dock subsequently undergoing maintenance, repair, USCG Certificate of Inspection Examination and the subject survey and upon examination the following conditions were found:

EXECUTIVE SUMMARY

The "M/V Guemes" is an all steel single deck, open car deck, double-ended ferry boat with elliptical ends outfitted with large skegs. Two [2] azimuthing Z-drives, mounted through the deck apron are configured such that they are diagonally opposed on opposite ends of the vessel. Decks have no sheer forward and with the deckhouse amidships, starboard side with single-drum anchor winch forward (No.1 end).

The main engines are Cummins Model KTA 19-M3, 6-cylinder, 530 horsepower each (1,060 H.P. total), 1800 RPM, driving bronze four [4] blade 52" x 36" fixed pitch propellers through ZF Model 550 reduction gear, 0.936:1 ratio with drive shaft to Ulstein Model DF-370 azimuthing thruster, 4.2.1:1 ratio.

Condition Summary

The vessel is forty [40] years old and in active service as a passenger/car ferry. The hull was recently gauged and found with minimal wastage with the exception of the car deck in way of car ramp. This area was cropped and renewed in March 2019. The vessel's machinery, equipment, electrical systems, lifesaving and firefighting equipment meet regulatory requirements for compliance with a USCG Certificate of Inspection for inspected passenger service. The remaining useful life of the hull structure is estimated at 20-years. However, the machinery and equipment, although well maintained, is approaching technological obsolescence with regard to propulsion, air emission, noise, and environmental standards.

Valuations

The three generally accepted methods of valuation (Cost, Income, and Sales Comparison) were all considered for the purposes of this analysis. The Cost Approach was used with adjustments made for capital investments that extend the life of the vessel and major maintenance or renewal due within the next five [5] years.

Current Fair Market Value

The following factors and assumptions were considered in estimating the fair market value of the "M/V Guemes":

- $10,980,000.00 estimated replacement cost
- 10-year remaining useful life
- $40,000 Scrap Value
- 2019 Dry-docking maintenance and repair
- 2019 Gauging Report
- Vessel to hold a valid USCG Certificate of Inspection

The results of this analysis yield a current:

Estimated current fair market value	$2,975,000.00
Estimated replacement cost	$10,980,000.00

EXECUTIVE SUMMARY (Cont)

Projected Valuations

The following factors and assumptions were considered in estimating the future fair market value of the "M/V Guemes":

- $10,980,000.00 estimated replacement cost (2019)
- Remaining Economic Useful Life (instead of remaining useful life)
- 5-year remaining Economic Useful life in present condition (Terminal date 2024)
- $273,500.00 depreciation per annum until 2024
- $750,000 cost to cure per annum pre-upgrade
- Upgrade with addition of mid-body extension in 2024
- $5,100,000.00 cost of 2024 upgrade
- $4,700,000.00 FMV in 2025 after upgrade
- 15-year extended economic useful life in upgraded condition (Terminal date 2039)
- $314,000 depreciation per annum after upgrade
- $300,000 cost to cure per annum post upgrade
- $40,000 Scrap Value
- Vessel to hold a valid USCG Certificate of Inspection

2-year Projection
The estimated costs/values of the M/V Guemes in two [2] years (2024) is as follows:

Fair Market Value	$2,188,000.00
Cumulative Cost to Cure	$1,500,000.00
Difference of between cost and FMV	$688,000.00

5-year Projection
The estimated costs/values of the M/V Guemes in five [5] years (2024) is as follows:

Fair Market Value	$1,367,500.00
Cumulative Cost to Cure	$3,750,000.00
Difference of between cost and FMV	($2,383,500.00)

EXECUTIVE SUMMARY (Cont)

10-year Projection

The estimated costs/values of the M/V Guemes in ten [10] years (2024) is as follows:

Fair Market Value	$3,444,000.00
Cumulative Cost to Cure	$9,818,322.00
Difference of between cost and FMV	$(6,374,322.00)

Note that the increase in FMV from 5-years to 10-years is due to the extensive renewal, betterments and upgrade during year 2024. The estimated $5,100,000.00 cost to lengthen and refurbish the vessel creates a new depreciation schedule and revised cost to cure.

MAIN PARTICULARS OF THE "M/V GUEMES"

Official Number:	601686
Year Built:	1979
Builder:	Gladding-Hearn Shipbuilding, Somerset, Massachusetts
Call Sign:	WDE 7121
Length (registered):	124'
Length (BP)	100'
Breadth (molded):	34'
Depth (molded):	7'
Registered Gross Tons:	91 GRT
Registered Net Tons:	91 GRT
Main Engine(s)	Two [2] Cummins KTA-19-M3
Horsepower (Total):	1,060 HP Total
Propulsion Type:	Z-drive
Fuel Capacity:	6,352 Gallons
Passenger Capacity:	100
Car Capacity:	20

PREVIOUSLY DRY-DOCKED
The vessel was last in dry-dock in March 2019 at Foss Shipyard, Seattle, WA for maintenance, repair, and USCG Certificate of Inspection dry-dock and internal structural examination. The next full dry-docking is scheduled in 2021.

CLASSIFICATION AND LOAD LINE
The vessel is not classed and does not hold a Load Line Certificate (Not required).

INTENDED SERVICE
The vessel is intended to engage in a car and passenger ferry service between Anacortes, Washington and Guemes Island Washington not more than one [1] mile from land.

FLAG AND CREW
The vessel is of United States coastwise registry

Port of Registry: Anacortes, Washington

The crew reportedly numbers three [3] and may only work 12 hours in any 24-hour period:

Master
Deckhands [2]

DOCUMENTATION

Certificate	Yes/No	Expiration Date	Notes
Certificate of Documentation	Yes	Feb 29, 2020	Issued: January 11, 2019
U.S.C.G. Certificate of Inspection	Yes	April 13, 2023	Issued: April 13, 2018
A.B.S. Load Line Certificate	No		Not required
A.B.S. Class Certificate	No		Not required
A.B.S. Tonnage Certificate	No		Not required
A.B.S. Int Tonnage Certificate	No		Not required
Stability Letter	Yes		Issued: December 5, 2007
Stability Booklet	No		Not required
FCC License	Yes	Dec 31, 2028	Issued: October 12, 2018
Communications Safety Radio Telephone Certificate	Yes	Nov 5, 2023	Issued: November 5, 2018

GENERAL DESCRIPTION AND ARRANGEMENT

HULL AND DECKS

The "M/V Guemes" is an all steel single deck, open car deck, double-ended ferry boat with elliptical ends outfitted with large skegs. Two [2] azimuthing Z-drives, each mounted through the deck apron are configured such that they are diagonally opposed on opposite ends of the vessel. Decks have no sheer forward and with the deckhouse amidships, starboard side with single-drum anchor winch forward (No.1 end).

It should be noted that frames are numbered from amidships (0) to No.1 and No. 2 ends. Henceforth in this report the No. 1 end will be "forward" and the No. 2 end will be "aft". Voids are numbered from forward to aft, No. 1 Void forward at the No. 1 end; No. 8 Void aft at the No. 2 end.

The deckhouse is two-level level of welded steel construction from Frame No. 14 forward to No. 11 aft and divided into passenger lounge, deck gear locker, and crew's day room. The raised pilothouse is accessed by an interior stairway from the main deckhouse and is outfitted with navigation/communication equipment, engine and Z-drive controls, gauges and alarms and inclined windows to reduce glare.

MAIN DECK

The main deck is open with access at both ends for passengers and drive-on vehicles. The main deck has a capacity for twenty [20] standard sized vehicles and is outfitted with anchor winch No. 1 end starboard, eight [8] cast cleats and four [4] closed chocks. Main engines are mounted on suitable engine beds welded to the main deck at No. 1 end port and No.2 end starboard and

GENERAL DESCRIPTION AND ARRANGEMENT (Cont)
MAIN DECK (Cont)

housed in steel compartment equipped with hinged access doors. Main engines are protected from vehicles by a 3" pipe guard rail. The auxiliary engine is housed in a similar steel cabinet No. 2 end starboard side aft of the No. 2 main engine. The deckhouse described above is located on the starboard side

A 42" high steel bulwark reinforced by flat bar stanchions and stiffeners surrounds the perimeter of the main deck port and starboard to No. 1 and No. 2 end loading aprons.

Four [4] steel watertight doors provide access to the accommodation spaces into the main deckhouse.

O1-DECK

The exterior of the 01-Deck has two life jacket storage boxes with top opening covers, one mounted forward and one aft of the raised pilothouse. Each box stows eleven [11] children and twenty-two [22] adult life jackets. An additional job box is mounted forward. The 01-Deck interior is occupied by a crawl space below the pilothouse which houses emergency batteries, battery charger and potable water tank.

PILOTHOUSE

The raised pilothouse is accessed by an interior stairway from the from the crew's day room. The raised pilothouse is equipped with center console containing main engine and azimuthing drive controls, wood chart desk with cabinets forward, navigation and communication equipment mounted on the overhead, and gauge, alarm and electrical panels located throughout. The top of the pilothouse has one [1] 18" diameter quick opening escape hatch.

The vessel is fitted with one freestanding, mast located on top of the pilothouse supporting navigation and communication equipment antennas and radar.

ACCOMMODATIONS

The main deck passenger lounge is accessed from the No. 1 end and deck side and can accommodate twenty-eight [28] walk-on passengers. It is outfitted with electric heat, bench seats, lifesaving and firefighting equipment. The crew's day room is electric heated, has wood cabinet with laminate counter and single basin stainless sink forward, chairs and laminate table.

HEAD
There are no toilet facilities on the vessel.

GENERAL DESCRIPTION AND ARRANGEMENT (Cont)

UNDERDECK COMPARTMENTS

There are seven [7] water tight transverse bulkheads located at Frame No. 0 and 7, 14 and 20 forward and aft. Underdeck compartments are defined by the above transverse bulkheads and part length longitudinal bulkheads dividing the underdeck space into ten [10] compartments:

- Two [2] forepeaks
- Two [2] pump tank compartments
- Two [2] voids
- Two [2] ballast tank voids
- Two [2] ballast tank compartments.

STRUCTURAL DETAILS

The "M/V Guemes" hull, deckhouse and pilothouse are of welded mild steel plate and steel framing construction. Frames are on 24" centers.

Hull Scantlings

Deck	Plate	1/2" steel plate
Sides	Plate	3/8" steel plate
		5/16" plate above the chine
Bottom	Plate	3/8" steel plate

Bulkheads

Transverse:	Plate	1/4" steel plate
	Stiffeners	3" x 2-1/2"" x 1/4" L
Swash	Plate	1/4" steel plate
	Stiffeners	3" x 2-1/2" x 1/4" L
Longitudinal	Plate	5/16"" steel plate
	Stiffeners	5" x 3-1/2" x 1/4" L

Frames

Underdeck	Transverse	6" x 3-1/2" x 3/8" L
Sides	Shell Frame	5/16" x 4" FlgPlt
	Stiffeners	3" x 2-1/2" x 1/2" L
Bottom	Transverse	36" x 4" x 5/16" FlgPlt
	Stiffeners	3" x 2-1/2" x 1/4" L

Girders

Underdeck	Longitudinal	14" x 4" x 3/8" FlgPlt
Bottom	Longitudinal	18" x 4" x 3/8" FlgPlt

Scantlings (Cont)

Skegs	Plate	5/16" plate
Bulwarks	Plate	3/8" (estimate)
	Stanchions	6" x 1/2" FB
	Stiffeners	3" x 1/2" FB
	Cap rail	6" x 1-1/2" x 1/4" L

Full Builder's plans and scantlings were not available at the time of survey. Scantlings referenced off International Inspection Ultrasonic Gauging survey March 2019.

WELDING
Fastenings are electric welded.

TERMINOLOGY

The following terminology is used through this report to describe the condition of the inspected parts of the vessel:

Good:	Like new condition. Better than average in all respects, or strength; performance unimpaired; no maintenance or repair required
Satisfactory:	Light wear. Condition average; minor deficiencies not in need of correction, wear and tear evident but original strength/performance not significantly affected.
Serviceable:	Moderate wear. Condition below average; wear and tear evident and original strength/performance affected but not in need of immediate maintenance or repairs.
Unsatisfactory:	Heavy wear. Below average: deficiencies in need of immediate maintenance or repairs
Poor:	Requires immediate attention or repair. Condition deteriorated in all respects; beyond practical repair, and requires renewal or replacement.
NA	Not applicable
NI	Not inspected—i.e. functionality and performance not verified

STRUCTURAL DETAILS (Cont)

WATERTIGHT INTEGRITY

The watertight integrity of the vessel appears satisfactory. The passenger lounge, crew day room, and deck gear locker are accessed by watertight doors from the main deck. Underdeck voids are accessed by 18" diameter single action Baier type hatches.

CONDITION: Accessed by visual inspection only. Doors, hatches, windows and portlights were not chalk tested or otherwise tested for tightness.

Doors	Number:	Three [3]
	Type:	Hinged 2-dog
	Material:	Steel
	Size:	30" x 72"
	Location:	Deckhouse No. 1 end and main deck
	Sill:	6"
	Condition:	Satisfactory, visual inspection only
	Number:	One [1]
	Type:	Hinged 2-dog
	Material	Steel
	Size:	26" x 72"
	Location:	Deckhouse gear locker
	Sill:	6"
	Condition:	Satisfactory, visual inspection only
Hatches	Number:	Eighteen [18] (approximate)
	Style:	Hinged Single acting Baier
	Size:	18" diameter
	Material:	Steel
	Location:	Main deck
	Coaming	Flush
	Condition:	Satisfactory, visual inspection only

STRUCTURAL DETAILS (Cont)
WATERTIGHT INTEGRITY (Cont)

Windows	Number:	Ten [10]
	Located:	Passenger Lounge [8]
		Crew Day Room [2]
	Size:	35" x 29"
	Style:	Metal frame fixed
	Condition:	Satisfactory
	Number:	Eight [8]
	Located:	Pilothouse
	Size:	Various
	Style:	Four [4] slide opening
		Four [4] Fixed
Portlights	Number:	Four [4]
	Size:	10" Round
	Type:	Bronze frame
	Located:	Main deckhouse doors
	Condition:	Satisfactory

CONDITION: Accessed by visual inspection only. Doors, hatches, windows and portlights were not chalk tested or otherwise tested for tightness. It should be noted that watertight integrity was found satisfactory by the attending USCG Inspectors for Certificate of Inspection Examination.

STAIRS AND LADDERS
Stairs and ladders providing access to the different levels of the vessel, both in the interior and exterior were found satisfactory with either grated treads or satisfactory non-skid coating.

Stairs	Material:	Welded steel
	Location:	Main deckhouse (Exterior)
		Crew Day Room to Pilothouse (Interior)
	Condition:	Satisfactory, found with suitable non-skid
Ladders	Material:	Welded Steel
	Location:	Access to underdeck voids
	Style:	Side rails 3" x 3/8" steel
		Rungs 3/4" square stock
		Rung spacing 12"
	Condition:	Satisfactory

STRUCTURAL DETAILS (Cont)

Handrails

Location:	Bulwarks
Material:	Steel
Height:	25"
Size:	1-1/2" pipe, 1-1/2" pipe stanchions
Style:	2-course
Condition:	Satisfactory

Location:	01 Deck (Main deckhouse roof)
Material:	Steel
Height:	42"
Size:	1-1/2" pipe, 1-1/2" pipe stanchions
Style:	2-course
Condition:	Satisfactory

Location:	Pilothouse
Material:	Steel
Height:	42"
Size:	1-1/2" pipe, 1-1/2" pipe stanchions
Style:	2-course
Condition:	Satisfactory

Deck Fittings

Describe	Number	Size	Material	Location
Cleats	Eight [8]	30"	Cast steel	Bow/Stern Port/Starboard
Closed Chock	Four [4]	12"	Cast Steel	Port/Starboard
Condition:	Satisfactory, visual inspection only, Not NDT tested			

Hull Guards/Fendering

Type	Formed steel guard encircling main deck apron extensions
Condition:	Satisfactory

Anodes

Number:	Thirty [30] ZHS-23 Zinc on hull Six [6] each on Z-drive lower legs Two [2] on generator grid cooler
Condition:	Removed and replaced new at 2019 dry-docking

Sea Valves

Number:	Two [2]
Location:	Forward and aft centerline
Condition:	Good—Inspected at 2019 dry-docking

PROPULSION AND MACHINERY

The main engines are Cummins Model KTA 19-M3, 6-cylinder, 530 horsepower each (1,060 H.P total), 1800 RPM, driving bronze four [4] blade 52" x 36" fixed pitch propellers through ZF Model 550 reduction gear, 0.936:1 ratio with drive shaft to Ulstein Model DF-3270 azimuthing thruster, 4.2.1:1 ratio.

Engines are controllable from the raised pilothouse. The main engines are electric started and cooled by channel keel coolers. Exhaust is dry exhaust by flexible steel piping lagged in engine cabinet and muffler located in stack.

The vessel is also equipped with one [1] auxiliary engine, Fiat Power Train (FPT), Model NEF45 4-cylinder, 1800 RPM, 480v, 3-phase, 60 kW auxiliary engine located main deck starboard side aft of No. 2 main engine starboard cabinet. Auxiliary engine is electric started. Cooling for the auxiliary engines is grid cooler.

Steering is hydraulic consisting by way of azimuthing thrusters mounted forward port side and aft starboard side. Steering solenoids are actuated by electric azimuthing control handles in the pilothouse.

VESSEL MACHINERY

NAME	MAKE/ MODEL	SERIAL #	H.P. /kW/ Ratio	RPM	Last Overhaul	Hrs. since overhaul
No. 1 ME	Cummins KTA-19	3721-7216	530 HP	1800	2017	8,480
No. 2 ME	Cummins KTA-19	3721-9054	530 HP	1800	2017	6,190
Red Gear No. 1	ZF Model 550	2006-5972	0.936:1		2019	0
Red Gear No. 2	ZF Model 550	2007-0386	0.936:1		2019	0
No. 1 Z-drive	Ulstein DF-370	3721-9054	4.2:1		2015	8747
No. 2 Z-drive	Ulstein DF-370	3721-7217			2019	New
Auxiliary	FPT NE 45	J600-00881229	65.5	2800	2019	--
Generator	Stamford		60 kW			

Propellers

Number:	Two [2]
Blades:	Four [4]
Diameter:	52"
Pitch:	36"
Manufacturer:	Kruger & Sons
Material:	Bronze
Condition:	Good, Inspected and polished 2019 dry-dock

MACHINERY AND EQUIPMENT

Additionally, the vessel carries the following equipment:

No.	ITEM	MAKE/MODEL/SPEC	Location
One [1]	Fire Pump	15 H.P. Electric Barnes Series 25CCE	No. 2 Void No. 7
Two [2]	Fire Pump	Hydraulic Barnes Series 25ICU-1	No. 1 and No. 2 Main Engines

Note that fire pumps were installed new at the 2019 Dry-docking at Foss Shipyard

PILOTHOUSE

No.	ITEM	MAKE/MODEL/SPEC
Two [2]	Radar	Furuno 8062 with RP 150 Display
Three [3]	VHF Radios	SEA 157
One [1]	VHF Radio	Standard Horizon GX 2150
One [1]	Loud Hailer	One SEA -857
One [1]	UHF Radio	Kenwood TK-8180
One [1]	Intercom	Elctro Voice PAA-60
One [1]	GPS Navigator	Garmin GPS Map-7608
One [1]	Depth Sounder	Furuno FCV-620
One [1]	Magnetic Compass	Dirigo 6" Adjusted 2019
One [1]	Satellite Compass	Furuno SC-502
One [1]	AIS	Furuno FA-150
Two [2]	Search light	Carlisle Finch 12" Diameter
Two [2]	Binoculars	
Two [2]	Trim Gauges	Lev-o-gauge
Two [2]	Windshield Wipers	
One [1]	Ship's clock	Tempo Atomic
One [1]	Barometer	Swift 5"
One [1]	Anemometer	Sou'wester
One [1]	Computer	Laptop
One [1]	Bilge Alarm Panel	Murphy 7-station
One [1]	24-volt Distribution Panel	Equipped with Volt gauge
One [1]	Emergency light	Navy Style
Two [2]	Ship's Whistle	
Two [2]	Azimuth Controls	Ulstein Combi handle and joystick

ELECTRICAL SYSTEM

Pilothouse, accommodation spaces and electrical machinery are all served by the 110/220-volt A.C. electric system serviced by one [1] FPT generator and shore power receptacle and 24-volt DC from storage batteries. Wiring is of all electrical conductors of plastic and basket weave armor covered, multi-strand, marine type wiring. Fixtures and switches are of marine grade.

ELECTRICAL SYSTEM (Cont)

Dead front circuit switchboards with circuit breakers and master switches are located in engine compartments and battery room.

The 12/24-volt D.C. system is served by two [2] battery banks located in No. 1 and No. 2 Engine Compartments. Each bank consists of two [2] 12-volt marine type 8-D batteries in series and one [1] 12-volt battery connected to plastic covered, multi-strand, copper cables located in corrosion proof, covered, well ventilated boxes in each engine compartment. The vessel is additionally equipped with a 24 to 12-volt converter.

Pilothouse equipment is served by one [1] bank of three [3] 12-volt batteries located under the pilothouse.

Batteries are kept charged by 100 ampere alternators mounted on each main engine and by 24-volt battery charger and 12-volt constavolt.

Lighting consists of dual white/red illumination for bridge and stairwell, sodium and quartz lights for deck illumination and vapor proof globe lights on the deckhouse.

TANKS
The following tank capacity of the vessel is as follows:

Fuel oil tanks (Four)	6,352 gallons
Fresh water	275 gallons
Ballast Water	23,747 gallons

Fuel Oil

Capacity & Tanks:	6,352 U.S. Gallons reported in four [4] freestanding, independent tank
Material & Location:	1/4" Welded mild steel in: No. 3 Void (two [2] tanks) No. 6 Void (two [2] tanks)
Fill and Sounding:	Raised steel pipe fill with containment on main deck. Raised pipe vents with ball checks.
Supply Lines & Shutoff:	Steel pipe supply and return lines through strainer and filters to engine with flexible lines and shutoff valves at engines
Components:	Dual gang primary filters, secondary filters on auxiliary and main engines

TANKS (Cont)
FUEL OIL (Cont)

Ventilation: Natural to containment

Fresh Water

Capacity & Tanks: 275 U.S. Gallons

Material & Location: One [1] independent galvanized mild steel tank located in pilothouse void

Fill and Sounding: Standpipes

Supply Lines & Shutoff: Galvanized steel piping with in-line filters/strainers

Components: One electric driven Jabsco Pump, 4.2 GPM diaphragm pump.

Ventilation: Natural

Lubricating Oil

Capacity & Tanks: Pail Storage

Hydraulic Oil

Capacity & Tanks: Pail Storage

Waste Lubricating Oil

Capacity & Tanks: Portable 5-gallon pails, transferred ashore

Gray Water/Slop Holding
None

Black Water Treating

Capacity & Tanks: No toilet facilities onboard

VENTILATION

	Location:	Accommodation Areas
	Type:	Natural and mechanical
	Location:	Engine Compartment
	Type:	Natural through vent openings

DECK MACHINERY

The vessel is outfitted with one hydraulically powered anchor winch located forward of the passenger lounge on the No. 1 end foredeck. Anchoring gear consists of One [1] 400 lb. Danforth type anchor and ground tackle of 5/8" x 300' wire rope.

FIRE FIGHTING & LIFE SAVING EQUIPMENT

The "M/V Guemes" is protected from fire by a combination of portable fire extinguishers, remote fuel and machinery shutoffs and fire pump.

Fire Detection

The owner has installed Detect-A-Fire sensors in engine compartments

Fire Hose

The vessel is equipped with two [2] fire stations each with 50' of 1-1/2" fire hose and nozzle stowed on deck, No. 1 and No. 2 ends pressurized by an electrically driven pump Void No. 7 and engine mounted hydraulic pump.

Portable Fire Extinguishers

Portable fire extinguishers are reportedly of the following types and sizes are located as indicated:

Number	Type	Location
One [1]	Halon B-1	Wheelhouse
One [1]	Halon B-1	Ladder
Three [3]	Halon B-II	Crew Day Room
Two [2]	Dry Chemical B-II	Crew Day Room
Three [3]	Sodium B-III	Car Deck
One [1]	Dry Chemical B-III	Car Deck
Three [3]	Dry Chemical B-II	Passenger Lounge

All fire extinguishers serviced January 2019.

Fire Axe

The vessel is equipped with one fire axe mounted in pilothouse.

General Alarm

The vessel is not equipped with a general alarm—not required.

Alarms and Monitoring System

A Murphy Electric monitoring bilge level system panel with a visual and audio alarm is located in the pilothouse. Main engine oil pressure and temperature audible and visual alarms for the

FIRE FIGHTING & LIFE SAVING EQUIPMENT (Cont)

Emergency Lighting
Emergency lighting consists of battery powered navy style emergency lights mounted in the pilothouse and crew day room.

LIFESAVING EQUIPMENT

Life Rings	Quantity:	Three [3] Total. One [1] with light, one [1] with line
Life Raft	Number:	None required for this route
Life Jackets	Quantity:	One hundred three [103] adult/ forty-six [46] Child
	Manufacturer:	Various
	Type:	Type 1
	Where Stowed:	01-Deck Lockers and passenger lounge
Man Overboard Retrieval	Quantity:	Two [2]
	Type:	Rescue lines, one swimmer's suite with harness and tether, one [1] marker buoy
First Aid Equipment	Quantity:	One [1]
	Type:	Industrial First Aid Kit
	Where Stowed:	Crew Day Room
	Quantity:	One [1]
	Type:	Eye Wash Station
	Where Stowed:	Crew Day Room
	Quantity:	Two [2]
	Type:	Fire Blankets
	Where Stowed:	Crew Day Room
	Quantity:	One [1]
	Type:	AED
	Where Stowed:	Crew Day Room

LIFESAVING EQUIPMENT (Cont)

Flares (Reportedly)	Number:	Fourteen [14]
	Type:	Six [6] smoke
		Four [4] handheld
		Four [4] rocket
	Expiry:	Note not sighted or inspected

EXTERNAL INSPECTION

Hull

Butts and seams appeared satisfactory with no significant wastage. Hull plating found fair with light washboarding between frames, particularly in areas that are subject to wheelwash from the Z-drive propulsion---No. 1 end port, No. 2 end starboard. Coatings and zincs renewed (reference dry-docking report).

It should be noted that the hull condition was found satisfactory by attending USCG Inspectors for Certificate of Inspection dry-dock exam.

Main Deck

Butts and seams appeared satisfactory with no significant wastage. Approximately 50" of wasted deck plate on each end apron were being cropped and renewed at the time of survey. This area was identified on the 2019 gauging report and is subject to normal heavy wear due to ramp and traffic loads. Deck coatings and non-skid were in the process of being renewed at the time of survey (Reference dry-docking report)

INTERNAL INSPECTION

Internal tanks and voids were open for inspection. All tanks excepting No. 1 Void were entered or viewed by the undersigned surveyor. Visible areas were well coated and free of significant structural deformities.

It should be noted that the hull condition was found satisfactory by attending USCG Inspectors for Certificate of Inspection internal structural exam.

DRY-DOCKING

The "M/V Guemes was dry-docked March 2019 at Foss Shipyard, Seattle Washington. The following work was reportedly completed during dry-docking:

Sea Valves/Sea Chests

- Remove two [2] 3" sea chest gate valves
- Inspect and reinstall sea chest valves

Propellers

- Inspect propellers
- No. 1 propeller removed and replaced.
- No. 1 propeller seal replaced
- No. 2 propeller seal replaced

Keel Coolers

- Channel Coolers
- Pressure tested to 20 psi
- Replace discharge butterfly valves on No. 1 and No. 2 engines

Anodes

- Thirty [30] 23# zinc anodes installed on hull
- Twelve total [12], six [6] each, zinc anodes installed on Z-drive lower leg
- Two [2] ZHS-26 zinc anodes installed on generator grid cooler

Gauging

- Vessel was gauged while in dry-dock. Wasted areas renewed at drydocking
- Report attached

Voids

- Open and clean voids

Fire Pumps

- Remove and replace fire pumps
    - One [1] Electric Motor Driven Barnes Series 25CCE
    - Two [2] Hydraulic Pumps—one [1] in void No. 2 and one [1] in No. 2 Engine room

Fuel Tanks

- Strip and clean

DRY-DOCKING (Cont)

Steel Renewals

- Crop and renew four [4] wasted fuel tank sounding tubes.
- Crop and renew 5' 8" x 12' 6" x 1/2" plate in main deck apron in way of No. 1 and No. 2 car ramp areas
- No. 1 and No. 2 Z-drive hull mounting brackets found with fractures-v-out and reweld.

Machinery Repairs

- No. 1 and No. 2 Reduction gears removed, overhauled by 3rd party and reinstalled
- Auxiliary Generator removed, overhauled by 3rd party and reinstalled
    - New head gasket
    - New oil cooler
- Main Engines
    - Flush cooling system with fresh water
    - Engine No. 1
        - Replace FW pump and drive
        - Clean and replace aftercooler core
        - Replace fuel pump
    - Engine No. 2
        - Replace all heads
        - Replace turbocharger
        - Clean and replace aftercooler core
        - Replace fuel pump
        - Replace FW pump

Coatings

- Keel to Waterline
    - Low pressure wash and prepare to SP-6 or similar standard
    - Spot coat Amercoat 240 Epoxy Buff
    - Spot coat Amercoat 240 Gray
    - One [1] full coat ABC #3 AF Black
    - One [1] full coat ABC #3 AF Red

- Freeboard (Waterline to top of Guard Rail)
    - Low pressure wash and prepare to SP-6 or similar standard
    - Spot coat Amercoat 240 Epoxy Buff
    - Spot coat Amercoat 240 Gray
    - One [1] full coat Amershield Urethane Black
    - One [1] full coat Amershield Urethane White (Boot Stripe)

DRY-DOCKING (Cont)
COATINGS (Cont)

- Freeboard (Waterline to top of Guard Rail)
  - Low pressure wash and prepare to SP-6 or similar standard
  - Spot coat Amercoat 240 Epoxy Buff
  - Spot coat Amercoat 240 Gray
  - One [1] full coat Amershield Urethane Black
  - One [1] full coat Amershield Urethane White (Boot Stripe)

- Car Deck
  - Low pressure wash and prepare to SP-6 or similar standard
  - Track blast to remove existing deck coatings
  - One [1] full coat 302 Zinc Rich Epoxy Green
  - One [1] full coat Amercoat 240 Epoxy Dark Gray
  - One [1] full coat Amercoat 138 heavy Duty Non-Skid Epoxy Dark Gray

GENERAL CONDITION
The vessel was dry-docked March 2019 for inspection, maintenance and renewal of coatings (Reference dry-docking section in this report for details). The hull was found satisfactory with widely scattered light to moderate washboarding between side shell frames which are considered normal wear and tear for a vessel of this age. Exterior hull surfaces are newly painted and the deckhouse are satisfactorily coated and generally well maintained. Decks have suitable non-skid and coatings are in satisfactory condition. The hull has satisfactory cathodic protection with paint and anodes.

The vessel is forty [40] years old and in active service as passenger/car ferry. The hull was recently gauged and found with minimal wastage with the exception of the car deck in way of car ramp. This area was cropped and renewed in March 2019. The vessel's machinery, equipment, electrical systems, lifesaving and firefighting equipment meet regulatory requirements for compliance with a USCG Certificate of Inspection for inspected passenger service. The remaining useful life of the hull structure is estimated at 20-years. However, the machinery and equipment, although well maintained, is approaching technological obsolescence with regard to propulsion, air emission, noise, and environmental standards.

Interior surfaces are satisfactorily preserved by paint.

SURVEYORS NOTES

A. Underwater portions of hull and bottom plating and outboard fittings and zinc anodes were examined as the vessel was in dry-dock at time of survey.

SURVEYORS NOTES (Cont)

B. Propellers and Z-drive propulsion units were examined visually at the time of survey.

C. Wasted steel on the main deck in way of the car ramps was cropped and renewed. repairs were in process at the time of survey.

D. Owner provided written documentation and photographs of new installed equipment and machinery and steel repairs.

E. Internal tanks and voids were inspected at the time of survey as tanks and voids were open and certified as safe for entry.

F. Vessel systems including main engines, diesel generator, electric motors, pumps and valves were not operated for the purposes of this survey.

REGULATORY REFERENCES

The following regulatory and industry standards were referenced in this survey and in the construction, maintenance and repair of the vessel. Relevant sections of:

33 CFR 26, 81, 130, 155, 156 & 173; 46 CFR 25, 26, 28 & 105; 47 CFR 80; 46 USC 4505, 8103, 11101, 10601 & 10602

RECOMMENDATIONS

- **Certification-** Vessel to be maintained in compliance with USCG Certificate of Inspection.
- **Regulatory Compliance**--Vessel to be maintained in compliance with the rules, regulations and certifications required for its intended service.
- **Housekeeping-** Vessel is noted as being disheveled at time of survey due to shipyard maintenance and repair activities. Clean and re-stow safety, lifesaving, firefighting and critical equipment in orderly, organized fashion.
- **Z-drive Mounts-**Continue to monitor Z-drive mounting brackets and bolts for fractures and disturbed or deformed mounting hardware.
- **Qualifications-** All recommendations to be carried out by qualified technicians to best marine practice standards.
- **Lifesaving and Firefighting Equipment**- To be inspected and certified to the satisfaction of the attending USCG Certificate of Inspection Inspectors.

VALUATION

Definitions
DEFINITIONS:
The following definitions are from the American Society of Appraisers Machinery & Technical Specialties Committee.

- **Fair Market Value** is the estimated amount, expressed in terms of money that may be reasonably expected for a property in an exchange between a willing buyer and a willing seller, with equity to both, neither under any compulsion to buy or sell, and both fully aware of all relevant facts, as of a specific date.
- **Replacement Cost** is the current cost of a similar new property having the nearest equivalent utility as the property being appraised.
- **Economic Life** is the estimated number of years that a new property may be profitably used for the purpose for which it was intended.
- **Normal Economic Life**
  The designed life of an income producing asset.
- **Remaining Economic Life**
  The time an asset can continue to be used to earn income in its original design and purpose.
- **Normal Useful Life**
  The estimated number of years that a new asset can be operated before it becomes unusable as to physical condition, usually used with non-income producing assets.
- **Remaining Useful Life**
  The estimated number of years that an asset in use can continue to be operated before it becomes unusable due to physical condition.
- **Highest and Best Use**
  A use for the purpose to which the vessel was designed

Highest and Best Use
The highest and best use of the subject vessel is a car and foot passenger ferry on short routes in protected waters.

Methodology
The appraisal process that is applied to most vessels is designed to evaluate all factors, which influence value. A detailed description of the subject vessel is an important component of this process. The characteristics of the subject vessel establish its utility and desirability.
The as-is market value of the 100% ownership interest in the subject vessel is reported in this

VALUATION (Cont)

appraisal. The three standard approaches to value (Cost, Income, and Sales Comparison Approaches) have been considered in this analysis. The definitions of these approaches to value are as follows:

Cost Approach - this approach is based upon the principle that the value of the vessel is significantly related to its physical characteristics, and that a prudent buyer will not pay more for an asset than the cost of acquiring a substitute property of equivalent utility. In this approach the replacement cost of the asset is estimated and the value is adjusted for depreciation caused by physical deterioration, functional obsolescence, and economic obsolescence.

Income Approach - this approach estimates value by calculating the present value of the future economic benefits of owning the asset.

Sales Comparison Approach - this approach estimates value through the analysis of recent sales or offering prices of property that is similar to the subject property. If the comparables are not exactly like the asset being appraised, adjustments are made to the selling prices of the com parables to equate them to the characteristics of the asset being appraised.

The three generally accepted methods of valuation (Cost, Income, and Sales Comparison) were all considered for the purposes of this analysis.

We were not provided the information necessary to perform an Income Approach analysis. We were unable to locate a sufficient number of sales/sales listings of comparable sales/sales listing data for similar vessels. Buyers of vessels this age tend to look at the usable life remaining, any additional cost to make the vessel suitable for the buyers intended service; the condition, history of maintenance and renewals and the cost of a new like-in-kind vessel.

For this reason the Cost Approach was used with adjustments made for capital investments that extend the life of the vessel and major maintenance or renewal due within the next 5-years.

We were provided information by Skagit County relating to the recent upgrades and capital expenditures made to the subject vessel. This information has been incorporated into the following analysis. The vessel is 40-years old. However, its age is offset by the recent maintenance, refurbishment and renewals completed by the owner. Generally, an asset of this type may be expected to have a 40-year life span. However, the service life can go beyond this average with upgrades and renewals. The recent maintenance and renewals completed by the

VALUATION (Cont)

current owner has added approximately 10 years to the vessel's serviceable life in its current condition.

Industry sources indicate the current replacement cost for the subject vessel was approximately $10,000,000 in 2012 for a new built, in-kind vessel, constructed at a Pacific Northwest Shipyard. The Bureau of Labor Statistics Producer's Price Index for Shipyards indicates a 9.8% rise in costs since that time resulting in an estimated 2019 $10,980,000.00 replacement cost.

The designed life-span of this type of vessel is 40-years which would indicate that this vessel is at the end of its useful life. However, it is estimated that the owner's capital investments have extended the vessel useful life. Based upon the information provided it is the undersigned's opinion with continued timely and professional maintenance the subject vessel should have ten [10] years remaining useful life. We utilized a scrap value of $40,000 and a remaining useful life of ten [10] years.

The following factors and assumptions were considered in estimating the fair market value of the "M/V Guemes":

- $10,980,000.00 estimated replacement cost
- 10-year remaining useful life
- $40,000 Scrap Value
- 2019 Dry-docking maintenance and repair
- 2019 Gauging Report
- Vessel to hold a valid USCG Certificate of Inspection

Using this information, the cost approach to valuation yielded the following valuation estimates based on the previously detailed premises of value. These values are statements of opinion. No guarantee can be given that these opinions of value will be sustained or that they will be realized in an actual transaction.

Replacement Cost	$10,980,000.00
Salvage Value	($40,000.00)
Replacement Cost Adjusted	$10,940,000.00
40-year straight line depreciation	$10,940,000/40 = $273,500/year
10-year remaining useful life	$2,735,000.00
Salvage Value	$40,000.00
2019 Certificate of Inspection Dry-dock and ISE	$200,000.00
Fair Market Value	**$2,975,000.00**

VALUATION (Cont)

Surveyor Notes:

It should be noted that the above values are estimates for value of the physical asset only in the condition as found on the day of the survey with no consideration for future economic factors such as required equipment upgrades, replacement or economic obsolescence.

Projected 5-year and 10-year Valuation

NARRATIVE
The future value of the M/V Guemes is inextricably tied to its value as an income producing asset. The M/V Guemes is a special purpose vessel—double ended passenger/car ferry with limited range and operating in protected waters. These types of vessels can be sold to be repurposed but at significantly lower values than in its highest and best use. Any private or public buyer of this asset in the future must also consider the cost of the shoreside infrastructure required to accommodate a passenger/car ferry.

The vessel's future value is dependent on it remaining suitable for its highest and best use and retaining the certifications and equipment required to retain its Certificate of Inspection as a passenger/car ferry vessel.

Additional factors to consider are the future investments required to accommodate growth on the M/V Guemes current route, noise and air emission standards, equipment upgrades and the ongoing "cost to cure" to keep the M/V "Guemes" in service. Cost to cure is the cost to remedy a depreciation factor such as physical depreciation, obsolescence or class, load line or Certificate of Inspection Renewal.

We were provided information by Skagit County that included current and legacy documents of maintenance & repair costs (Reference list of Documents Reviewed). It is estimated that the average of future annual maintenance and repair costs is approximately $750,000/year.

From a physical condition standpoint the hull plating and internal structure are in sound condition and with continued diligent maintenance can be expected to remain structurally sound for another 20-years. However, critical machinery and equipment will require regularly scheduled replacement or overhaul. It is estimated the vessel operates approximately 6,000 to 7,000 hours per year. Scheduled engine overhauls are required every 15,000-20,000 hours and Z-drive overhauls at 40,000-hour intervals. It is estimated that main engine overhauls run approximately $125,000 per engine and Z-drive overhauls run approximately $250,000.00 per overhaul. Based on the current hours of installed machinery the following machinery maintenance costs are anticipated in the five [5] and ten [10] year period.

VALUATION (Cont)

Item	2-year outlook	5-year cost outlook	10-year cost outlook
Main Engines	$250,000.00	$500,000.00	$1,000,000.00
Z-drives	$250,000.00	$600,000.00	$1,200.000.00

Additional economic factors affecting future value of the M/V Guemes are:

- Capacity limitations
- Noise abatement Standards
- Underwater noise abatement standards
- Environmental Stewardship
- Air Emission Standards
- Technological advancement (e.g. LNG/Hybrid/Electric Propulsion)

The cost to cure for the M/V Guemes will rise over the next 5 to 10 years while the depreciated value decreases. In essence the M/V Guemes is on an economic voyage in which the hull is sound but the technology is aging toward obsolescence.

A conservative estimate of the cost to cure for the M/V Guemes is $1,500,000.00 for 2-years, $3,750,000.00 for five years and $12,600,000.00 for ten years. The two and five-year estimate is the average annual maintenance and repair (5 x $750,000) inclusive of the above noted propulsion machinery overhauls. The ten-year cost includes average annual maintenance and repair (10 x $750,000) plus a major refit and extension of the vessel with a 20' mid-body ($5,100,000.00 in 2024) required to accommodate projected population and commercial growth demands. The following factors and assumptions were considered in estimating the future fair market value of the "M/V Guemes":

- $10,980,000.00 estimated replacement cost (2019)
- Use of Economic Useful Life (instead of remaining useful life)
- 5-year remaining Economic Useful life in present condition (Terminal date 2024)
- $273,500.00 depreciation per annum until 2024
- $750,000 cost to cure per annum pre-upgrade
- Upgrade with addition of mid-body extension in 2024
- $5,100,000.00 cost of 2024 upgrade[1]
  (Does not include cost of leased vessel for replacement service)
- $4,700,000.00 FMV in 2024 after upgrade
- 15-year extended economic useful life from date of upgrade (2024)
  (Terminal date 2039)

[1] M/V Guemes, O.N. 601686: Ferry Replacement Plan, Elliott Bay Design Group, Reference No. 13039-001-043-3, Rev. B, 22 November 2013.
Adjusted to 2019 Estimated Cost

VALUATION (Cont)

- $314,000 depreciation per annum after upgrade
- $300,000 cost to cure per annum post upgrade
- $40,000 Scrap Value
- Vessel to hold a valid USCG Certificate of Inspection

2-year Projection
The estimated costs/values of the M/V Guemes in two [2]-years (2021) is as follows:

Fair Market Value	$2,188,000.00
Cumulative Cost to Cure	$1,500,000.00
Difference of between cost and FMV	$688,000.00

5-year Projection
The estimated costs/values of the M/V Guemes in five [5] years (2024) is as follows:

Fair Market Value	$1,367,500.00
Cumulative Cost to Cure	$3,750,000.00
Difference of between cost and FMV	($2,383,500.00)

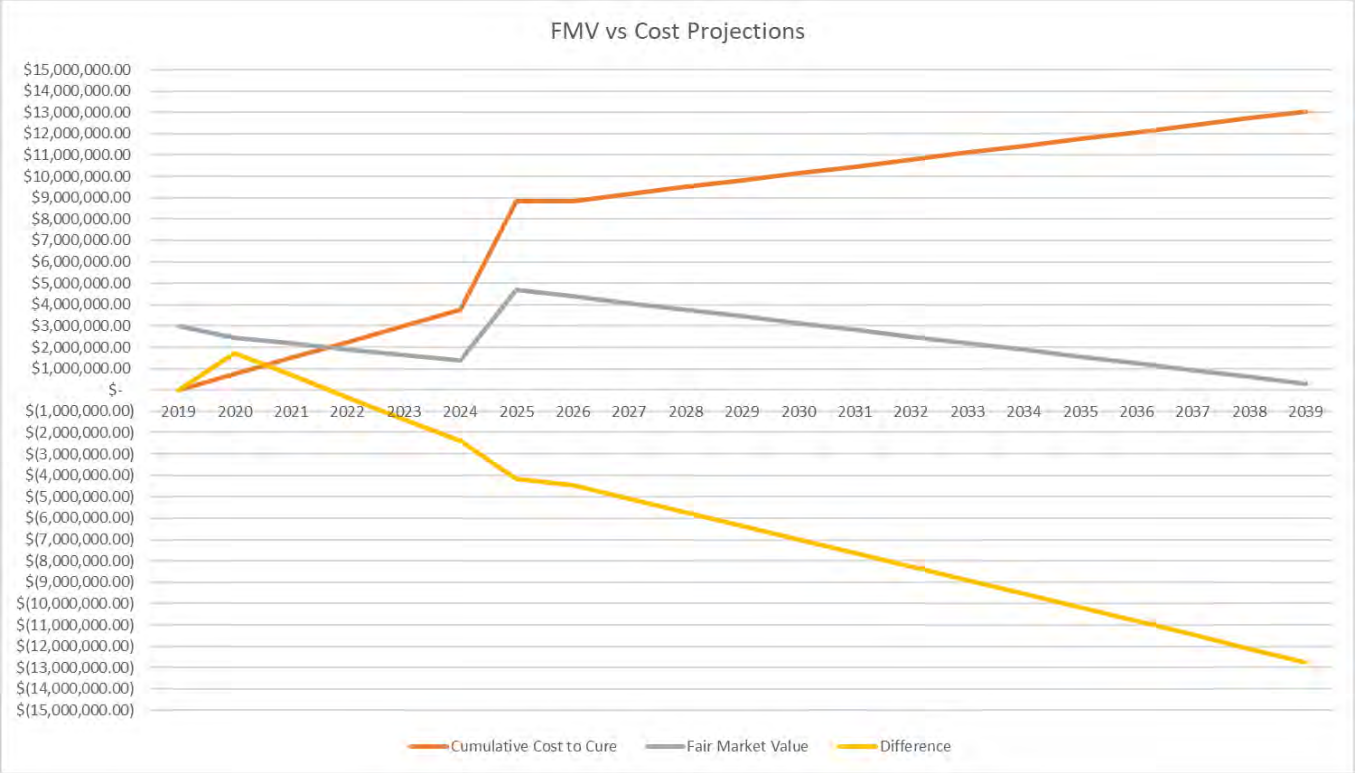
10-year Projection
The estimated costs/values of the M/V Guemes in ten [10] years (2029) is as follows:

Fair Market Value	$3,444,000.00
Cumulative Cost to Cure	$9,818,322.00
Difference of between cost and FMV	$(6,374,322.00)

Note that the increase in FMV from 5-years to 10-years is due to the extensive renewal, betterments and upgrade during year 2024. The estimated $5,100,000.00 cost to lengthen and refurbish the vessel creates a new depreciation schedule and revised cost to cure.

It should be noted that the above estimates are for costs and value of the physical assets with no adjustment for income/revenue to offset cost to cure. Income/revenue data was not available to the undersigned surveyor.

VALUATION (Cont)



It should be noted the above graph captures the total projected costs and associated FMV with maintaining and extending the Guemes life to 2039 including the 2024 upgrade. In other words it is estimated that by the end of 2039 the owner would have spent a cumulative $13,043,322 for maintenance and upgrades and own a vessel valued at $304,000.

REFERENCES

- Guemes Island Ferry Replacement Project, Skagit County Public Works
- M/V Guemes, O.N. 601686: Ferry Replacement Plan, Elliott Bay Design Group, Reference No. 13039-001-043-3, Rev. B, 22 November 2013.
- Guemes 2019 Shipyard Contract Value, Skagit County Public Works
- Cummins Engine Repair/Overhaul Invoice No. 01-29583
- ZF Marine Propulsion Invoice No. RO-51382
- ZF Marine Propulsion Invoice No. RO-51381
- Plansk_SKA-182-01 Rev A., Art Anderson Associates
- M/V Guemes Work Orders 2019, Foss Shipyard
- S3603 MV Guemes Final Report, International Inspection (Gauging) March 2019
- 2017-CMS Guemes Condition and Value Survey
- 4086 CMS_2015 Condition and Value Survey

REFERENCES (Cont)

- 77083-01-3 Rev A Deck Arrangements Plans, Nickum and Spaulding
- 15-01164 Guemes-Schedule
- 770083-0102 Rev A Inboard Profile and Hold Plan, Nickum and Spaulding
- 2019 Work Package Spec
- Operational Cost Estimate, 28-Car Electric Ferry, Glosten and Associates
- Foss Shipyard Invoice 92312612, April 27, 2017
- Foss Shipyard Invoice 92284334, March 23, 2017
- Foss Shipyard Invoice 92734671, October 30, 2018
- Foss Shipyard Invoice 91590714, September 24, 2014
- Foss Shipyard Invoice 92734671, October 30, 2018
- Lake Union Drydock Company Invoice 47813, December 28, 2015
- Dakota Creek Industries Invoice 30283, September 12, 2018

LIMITATIONS

I certify that, to the best of my knowledge and belief the statements of fact contained in this report are true and correct. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions.

1. This survey is intended for the purpose of assessing condition and valuation only and is not intended to influence the purchase or non-purchase of the vessel. This survey is based on the facts presented and discovered, based on my opinion with no warranty either specified or implied. It is a statement of the condition of the vessel at the time of survey only. Any observations by the undersigned are strictly in the nature of opinion and should not be acted upon without verification
2. We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
3. Our engagement in this assignment was not contingent upon delivering or reporting predetermined results.
4. We are currently unaware of ever having previously provided any professional services involving this marine asset within the last three years. While we attempt to follow owner and name changes, many are not recorded, or not recorded in a manner that provides reasonable transparency.

LIMITATIONS (Cont)

5. The undersigned surveyor made a personal inspection of the property that is a subject of this report.
6. The undersigned surveyor conducted the Survey that is contained in this report.
7. Unless our representative indicates otherwise, the issuance of our condition and valuation survey report will be based upon:
    a. external conditions observed by our representative without opening machinery or spaces normally closed and
    b. upon information provided to him including documents and photos provided by subcontractors, regulatory agencies and owners.
    c. Information supplied by others that was considered and utilized in constructing this report is from sources believed to be reliable and no further responsibility is assumed for its accuracy.
    d. If our representative is provided misleading or erroneous information, our damage survey report shall be deemed withdrawn.
8. This examination has been made without making removals or opening parts normally concealed or testing for tightness or trying out machinery; only provided maintenance and other data has been recorded. Further, no determination of intact or damaged stability or inherent structural integrity has been made.
9. Equipment descriptions are included in the report for purposes of identification and classification. Descriptions are intended for informational purposes only but are not intended to detail all conditions or list all features associated with each item described.
10. The subject vessel was examined by the undersigned and the conditions of the underwater hull and appurtenances are known in the context of this survey. Further, the internal sections of the vessel tanks were examined during the subject survey and the specific condition is known in the context of this survey.
11. The values given in this appraisal are for the stated valuation dates only, and only for the stated purpose.
12. The vessel was appraised under the assumption that there was responsible ownership and management, competent crewing, and ongoing maintenance.

LIMITATIONS (Cont)

13. The vessel was appraised on the premise that it was free and clear of all encumbrances, mortgage debt, and special liens.
14. Value is considered to be in cash. Contracts or charters, if any, are not considered in reaching the value.

As far as may be ascertained from a general examination of this vessel in dry-dock at Foss Shipyard on March 4, 2019 and subsequent dates the vessel was found to be capable of being used for its intended purpose.

The document is not a certificate of seaworthiness but a statement of opinion given WITHOUT PREJUDICE, that with the recommendation contained in the survey and submitted to owners being complied with, and the voyage and/or transportation contemplated represents no specific hazards beyond such as are normally accepted by the Underwriters.

Survey made without prejudice.

ATTENDING

Bob Martin	Chief Engineer, M/V Guemes
Captain Rachel Rowe	Ferry Operations Division Manager, Skagit County Public Works
Captain Jeff Slesinger	Marine Surveyor, Delphi Maritime, LLC

PDF-Certified Digital Signature) Signed: July 31, 2019

Jeff Slesinger, Surveyor
SAMS® Surveyor Associate
Delphi Maritime, LLC

Attachments:

- Gauging Report
- Photographs

INTERNATIONAL INSPECTION

Specialists in Nondestructive Examination

M/V GUEMES

Ultrasonic Gauging Survey

MARCH 2019

Seattle: 3229 S. 148th Street, SeaTac, WA 98168 Phone: 206/766-8180 Fax: 206/766-8186
Portland: 10521 N. Lombard Street, Portland, OR 97203 Phone: 503/283-2668 Fax: 503/283-7656
Oakland: 1813 Clement Ave., Bldg 24, Alameda, CA 94501 Phone: 510/748-0964 Fax: 510/748-9874
Los Angeles: 10600 Pioneer Blvd., Unit A, Santa Fe Springs, CA 90670 Phone: 562/944-3166 Fax: 562/944-3114
San Diego: 7030 Alamitos Ave., Suite B, San Diego, CA 92154 Phone: 619/512-5858
Houston: 1146 Sheffield Blvd., Suite O, Houston, TX 77015 Phone: 832/767-3238

www.iinspect.com

Ultrasonic thickness measurements were obtained for Art Anderson and Associates on the vessel M/V GUEMES on February 28th, 2019 through March 2nd, 2019 and on March 12th, 2019 at the Foss Ship Yard in Seattle, Washington. The owners were represented by Mr. Connor Shannon and Mrs. Rachel Rowe. The survey was conducted by International Inspection personnel.

EXTENT OF SURVEY

The following items were ultrasonically gauged:

- Main Deck Plating.
- No.1 End Voids:
  - Void 1 Internals.
  - Void 2 Internals.
  - Void 3 Internals.
  - Void 4 Internals:
  - No.1 End Ballast Water Tank Internals.
- No.2 End Voids:
  - No.2 End Ballast Water Tank Internals.
  - Void 5 Internals.
  - Void 6 Internals.
  - Void 7 Internals.
  - Void 8 Internals.
- Side & Bottom Shell Plating.

RESULTS OF SURVEY

The results are shown within the following report.

Respectfully submitted,

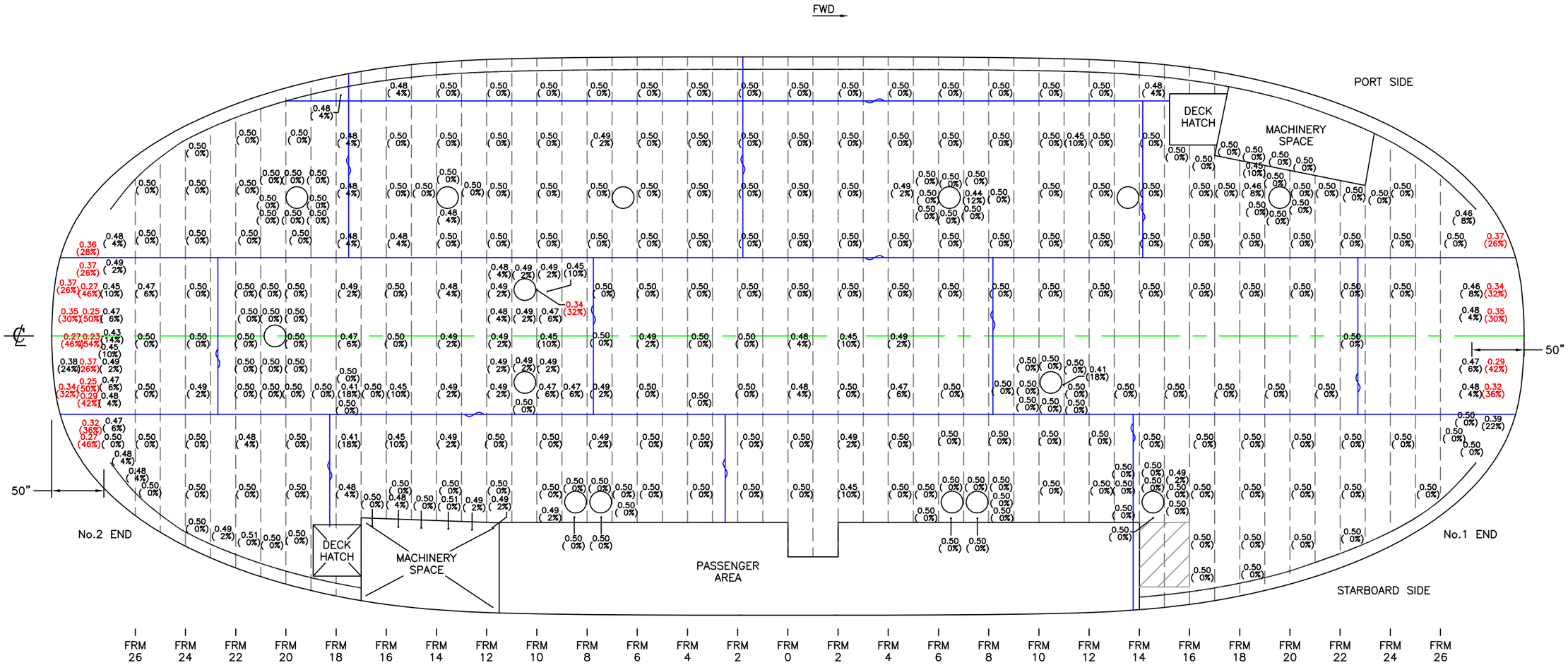
INTERNATIONAL INSPECTION, Inc.

Gabe Graham
Senior Field Supervisor
S3603

INTERNATIONAL INSPECTION

Specialists in Nondestructive Examination

MAIN DECK PLATING



NOTE:
MAIN DECK PLATING .50"
RED = EXCESSIVE WASTAGE (25% AND GREATER).
▨ = RAMP.

PROJECT: M/V GUEMES		DESCRIPTION: MAIN DECK PLATING PLAN VIEW	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # MnDk v1.1	DATE: MARCH 2019

INTERNATIONAL INSPECTION

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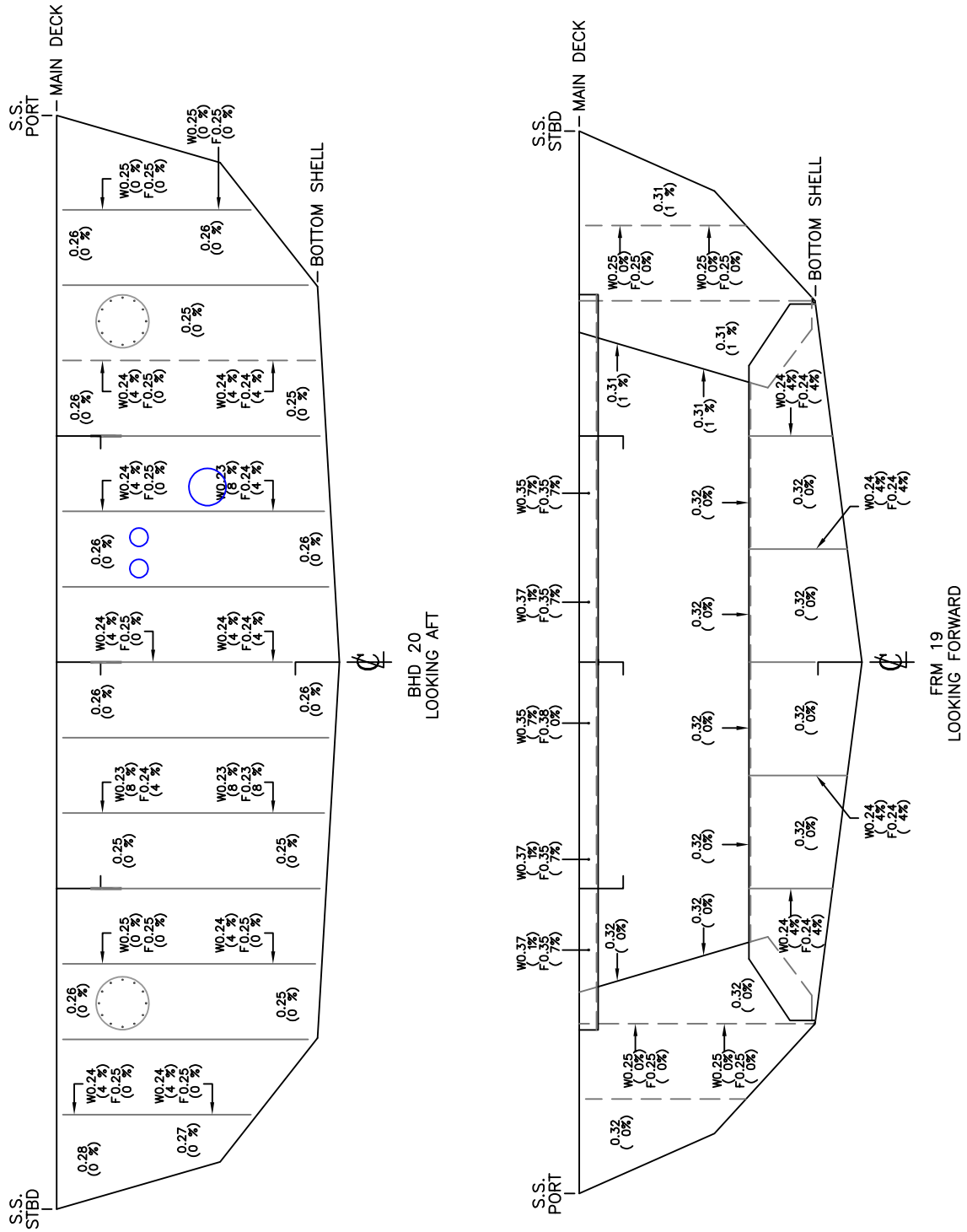
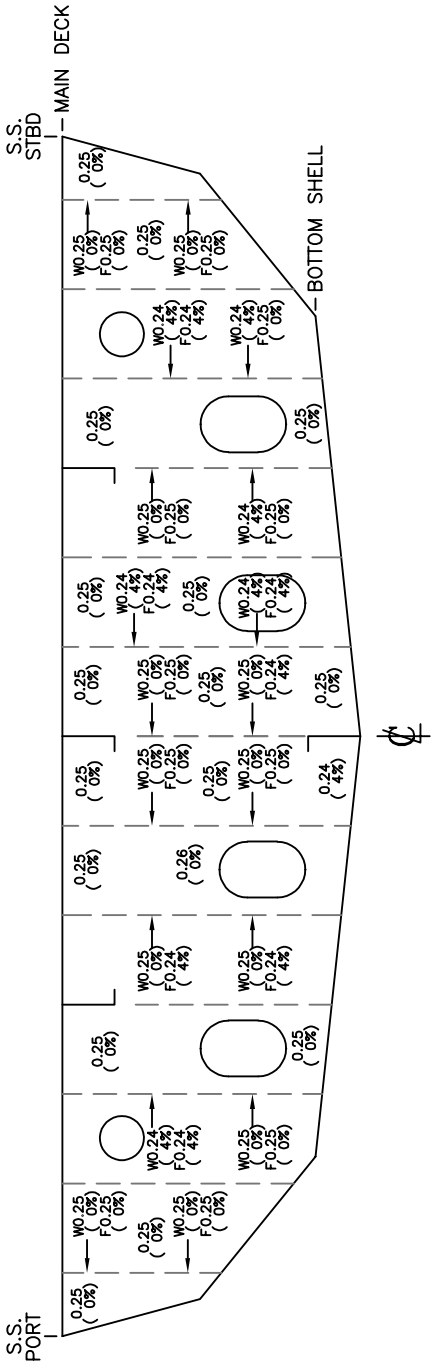
No.1 VOID INTERNALS

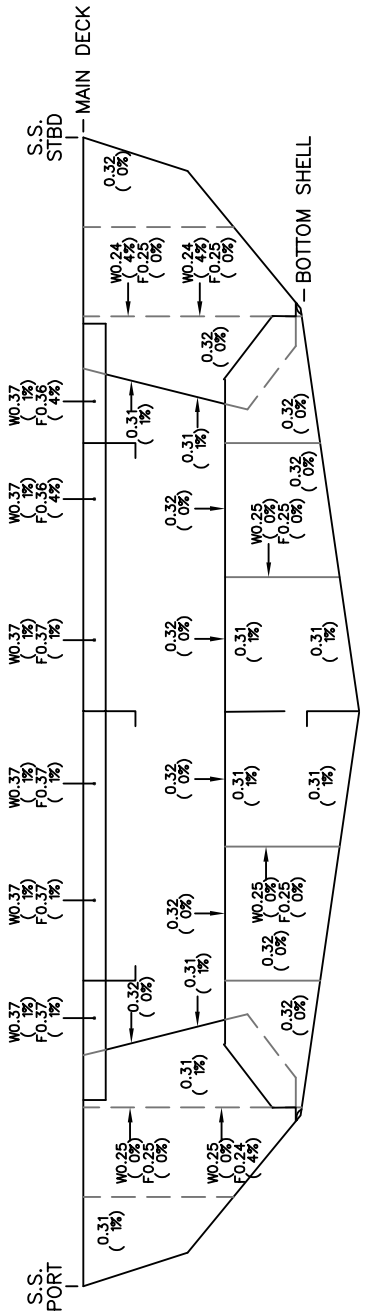


NOTE:
- BULKHEAD 20 PLATING .25".
- BULKHEAD 20 VERTICAL STIFFENERS L5" x 3" x .25".
- FRAME 19 TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- FRAME 19 SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- FRAME 19 SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- FRAME 19 TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- FRAME 19 TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		No.1 VOID - BULKHEAD 20 DESCRIPTION: VIEWED AS NOTED	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No1 BHD 20 v1.1	DATE: MARCH 2019

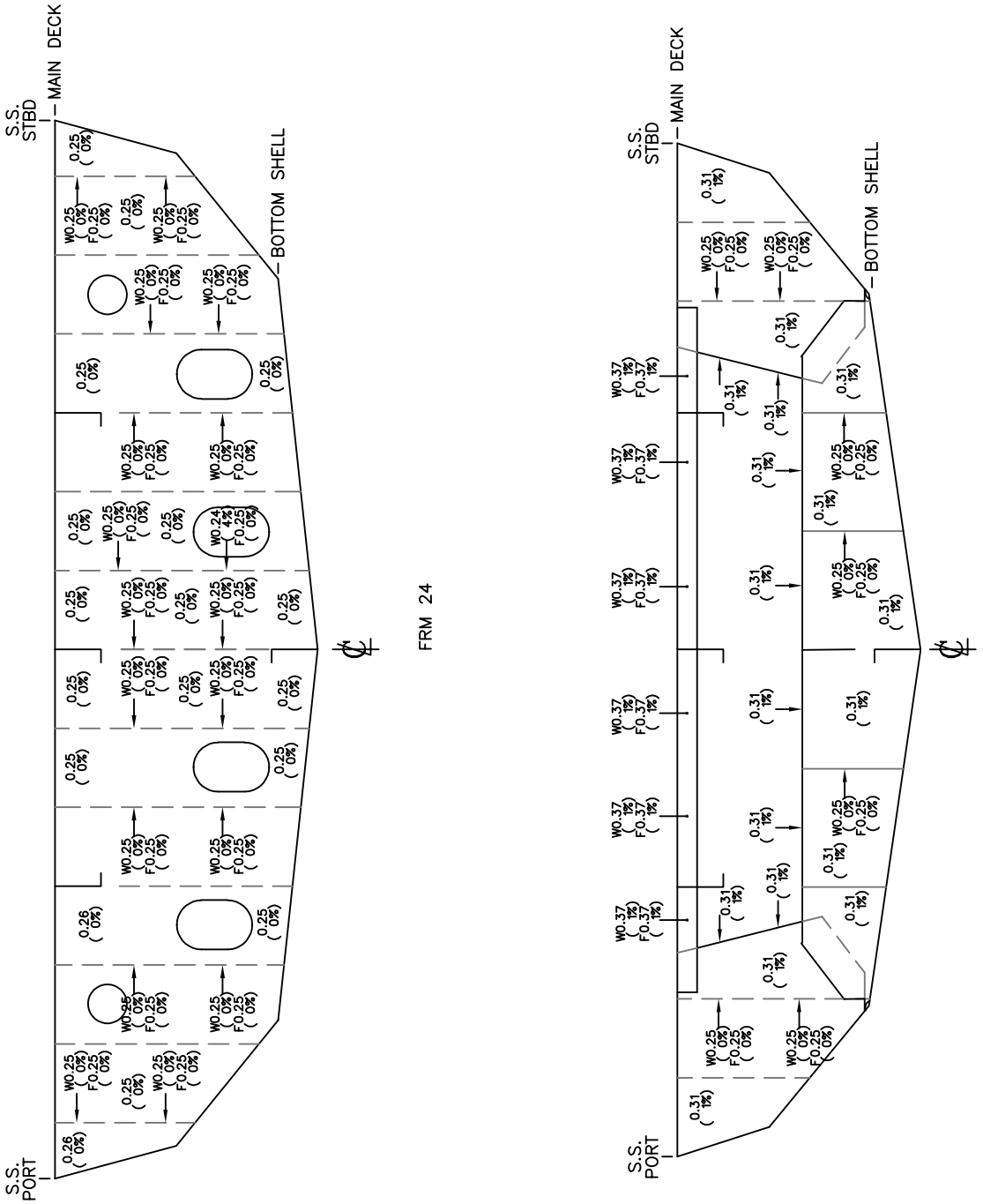




NOTE:
- SWASH FRAME PLATING .25"
- SWASH FRAME STIFFENING L3" x 2.5" x .25".
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

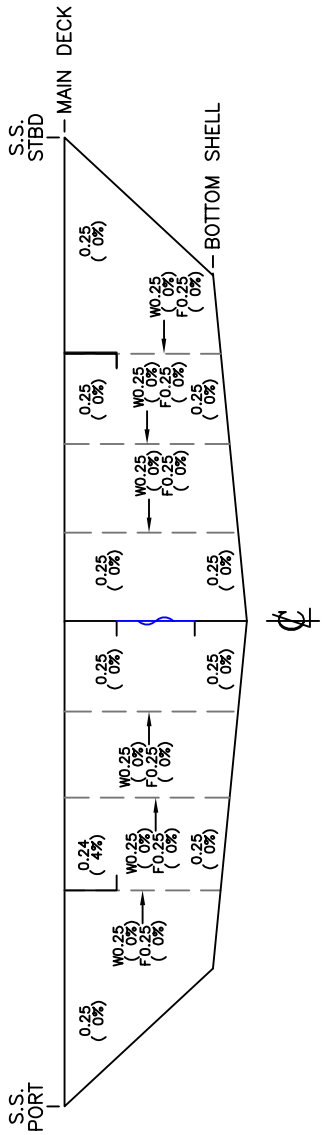
VESSEL: M/V GUEMES		DESCRIPTION: No.1 VOID - FRAMES 22 & 23 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No1 FRM 22 23 v1.1	DATE: MARCH 2019



NOTE:
- SWASH FRAME PLATING .25"
- SWASH FRAME STIFFENING L3" x 2.5" x .25".
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

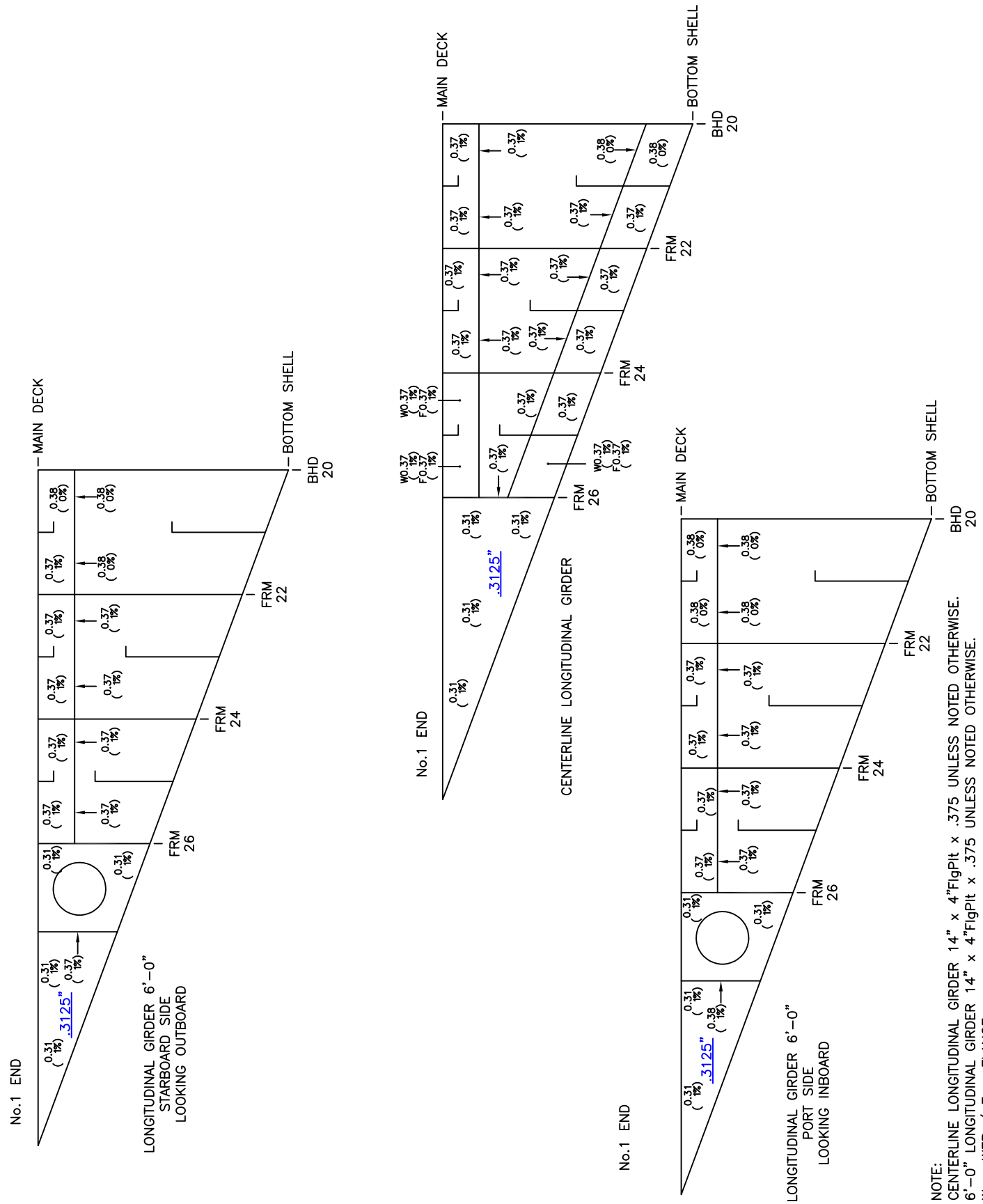
W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.1 VOID - FRAMES 24 & 25 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No1 FRM 24 25 v1.1	DATE: MARCH 2019

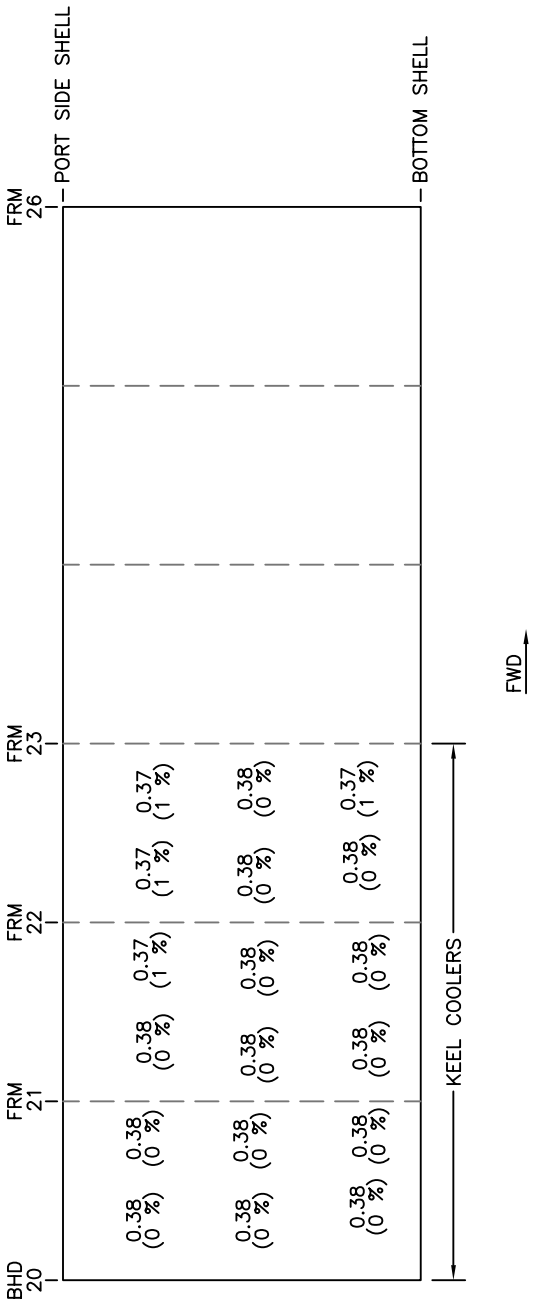


NOTE:
FRAME 26 PLATING .25".
FRAME 26 STIFFENING .25".
W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.1 VOID - FRAME 26 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No1 FRM 26 v1.1	DATE: MARCH 2019



VESSEL: M/V GUEMES		DESCRIPTION: No.1 VOID - LONGITUDINAL GIRDERS VIEWED AS NOTED	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No1 LGIR v1.1	DATE: MARCH 2019



NOTE:
NO ORIGINAL SCANTLINGS AVAILABLE AT TIME OF SURVEY.
NOMINAL THICKNESS MEASUREMENTS OBTAINED TO DETERMINE PERCENT WASTAGE.

NOMINAL THICKNESS USED:
– TURN OF BILGE PLATING .375"

VESSEL: M/V GUEMES	No.1 VOID - PLATING IWO KEEL COOLERS DESCRIPTION: PORT SIDE - PLAN VIEW
DRAWN BY: G. GRAHAM / JOB # S3603	DWG # No2 VOID BTM PLT v1.1 / DATE: MARCH 2019

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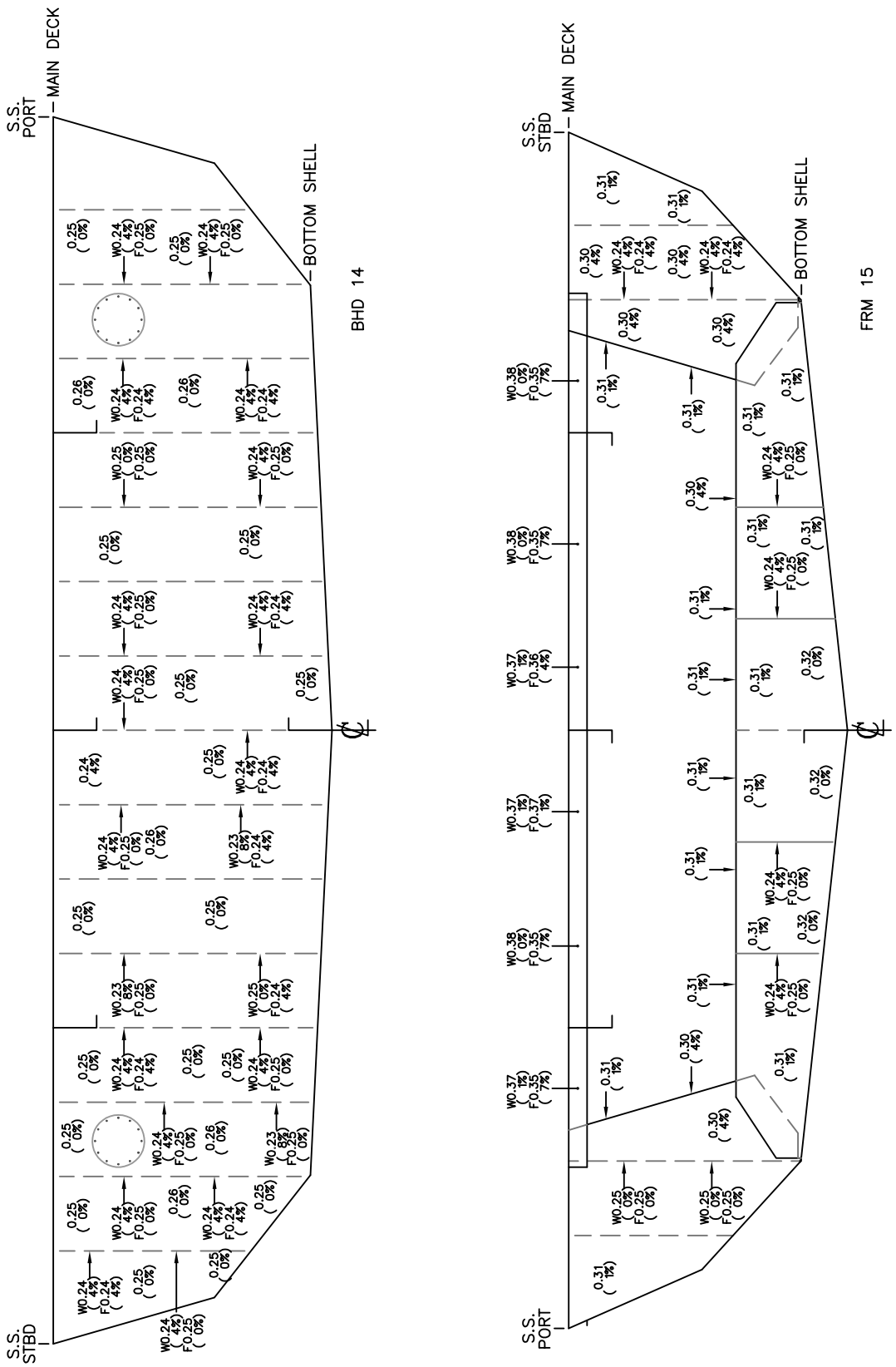
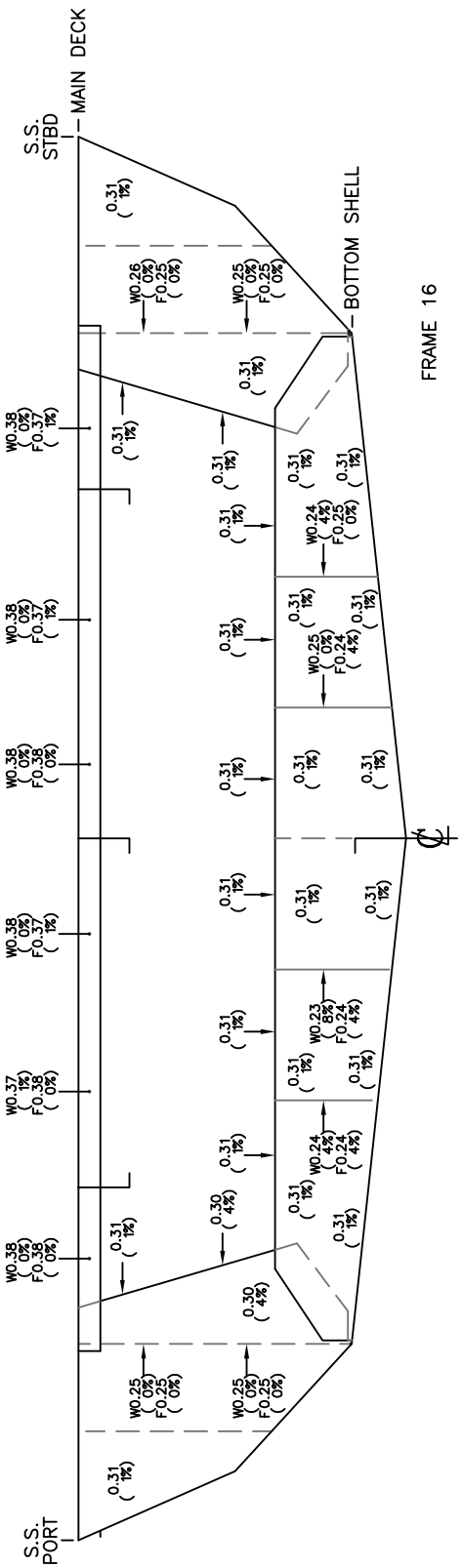
No.2 VOID INTERNALS

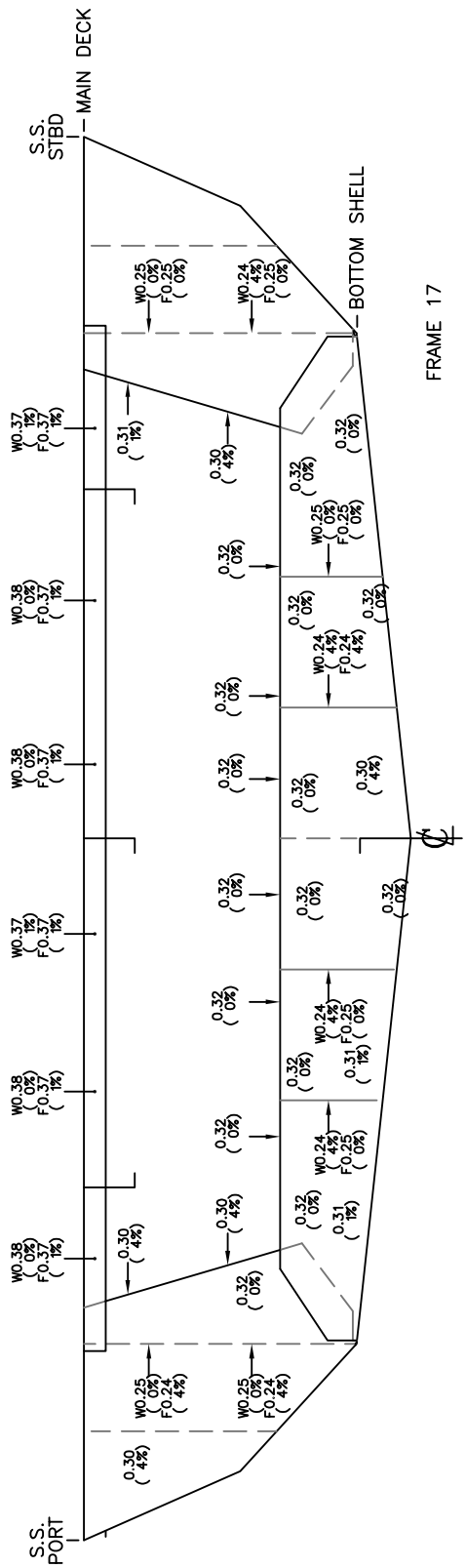


NOTE:
- BULKHEAD 14 PLATING .25".
- BULKHEAD 14 VERTICAL STIFFENERS L5" x 3" x .25".
- FRAME 15 TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- FRAME 15 SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- FRAME 15 SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- FRAME 15 TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- FRAME 15 TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.2 VOID - BULKHEAD 14 & FRAME 15 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No2 BHD 14 FRM 15 v1.1	DATE: MARCH 2019

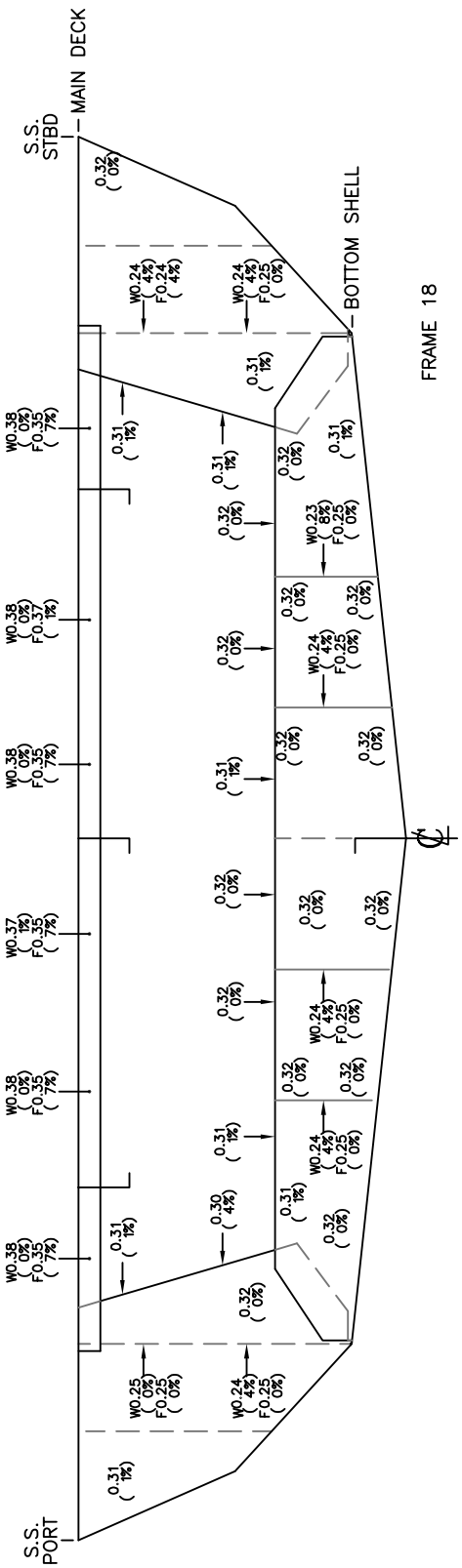


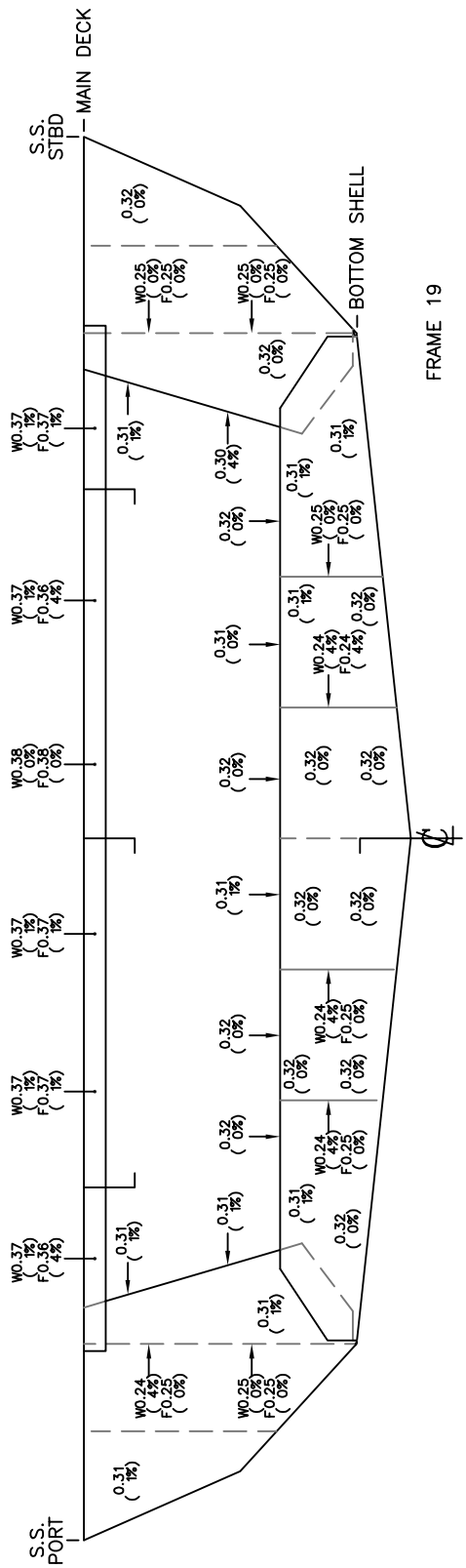


NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		No.2 VOID - FRAME 16 & 17 DESCRIPTION: LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No2 FRM 16 17 v1.1	DATE: MARCH 2019





NOTE:
- SWASH FRAME PLATING .25"
- SWASH FRAME STIFFENING L3" x 2.5" x .25".
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.2 VOID - FRAME 18 & 19 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No2 FRM 16 17 v1.1	DATE: MARCH 2019

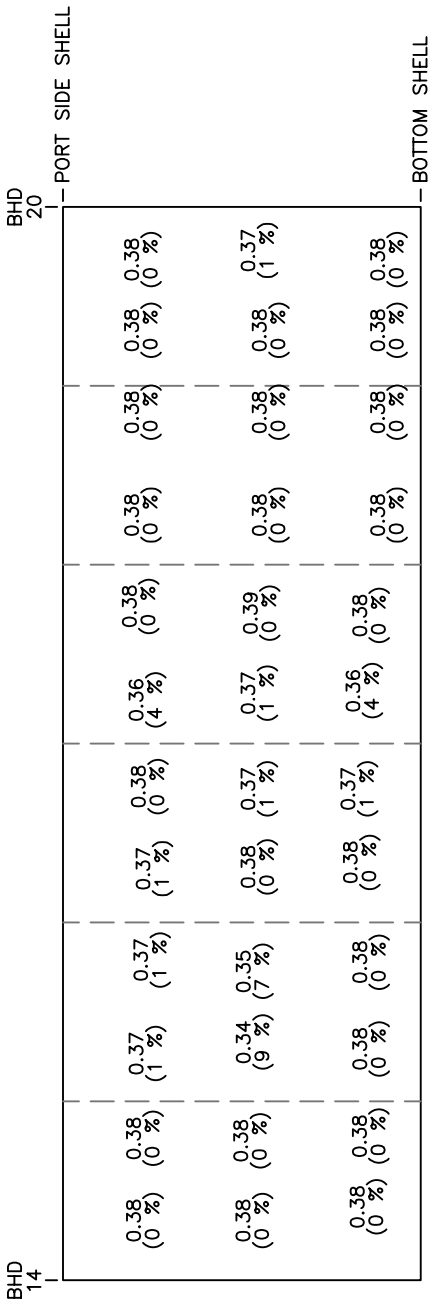
NOTE:
CENTERLINE LONGITUDINAL GIRDER 14" x 4"FlgPlt x .375 UNLESS NOTED OTHERWISE.
6'-0" LONGITUDINAL GIRDER 14" x 4"FlgPlt x .375 UNLESS NOTED OTHERWISE.
W = WEB / F = FLANGE.

INTERNATIONAL INSPECTION, INC.

VESSEL: M/V GUEMES

DESCRIPTION: No.2 VOID - LONGITUDINAL GIRDERS
VIEWED AS NOTED

DRAWN BY: G. GRAHAM | JOB # S3603 | DWG # No2 LGIR | v1.1 | DATE: MARCH 2019



NOTE:
NO ORIGINAL SCANTLINGS AVAILABLE AT TIME OF SURVEY.
NOMINAL THICKNESS MEASUREMENTS OBTAINED TO DETERMINE PERCENT WASTAGE.

NOMINAL THICKNESS USED:
– TURN OF BILGE PLATING .375”

VESSEL: M/V GUEMES		DESCRIPTION: No.2 VOID - PLATING IWO KEEL COOLERS PORT SIDE - PLAN VIEW	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No2 VOID BTM PLT v1.1	DATE: MARCH 2019

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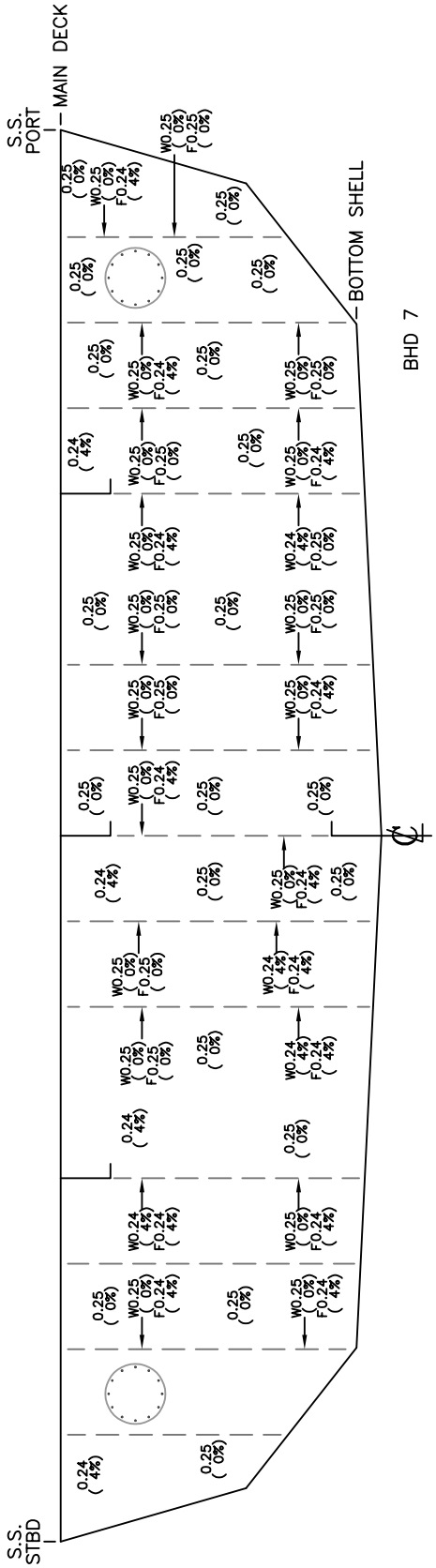
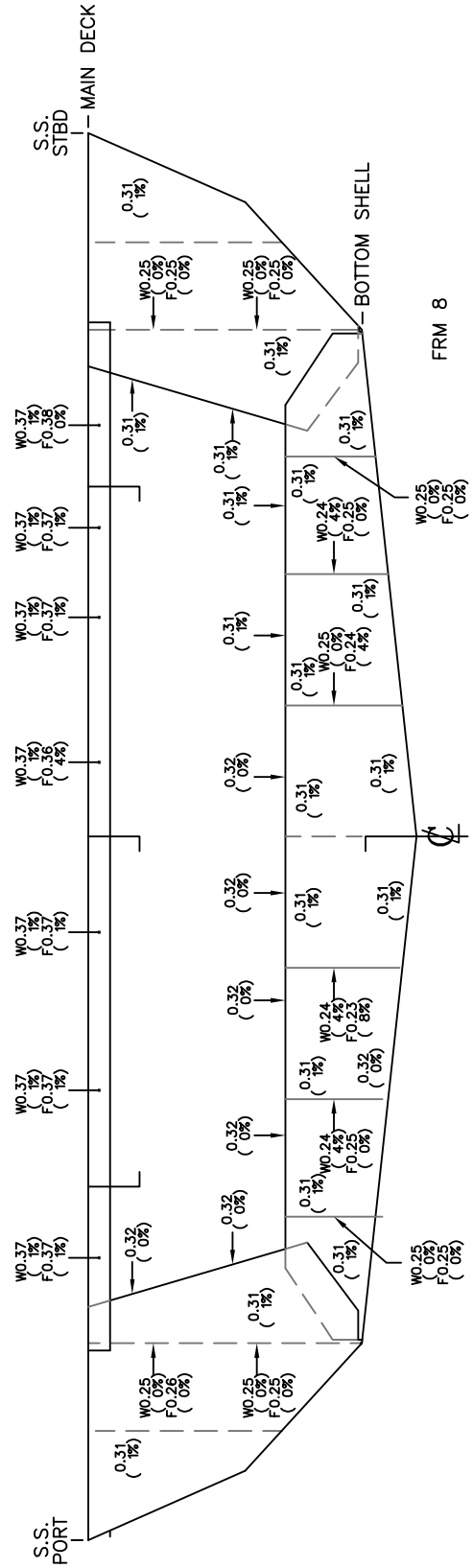
Specialists in Nondestructive Examination

No.3 VOID INTERNALS

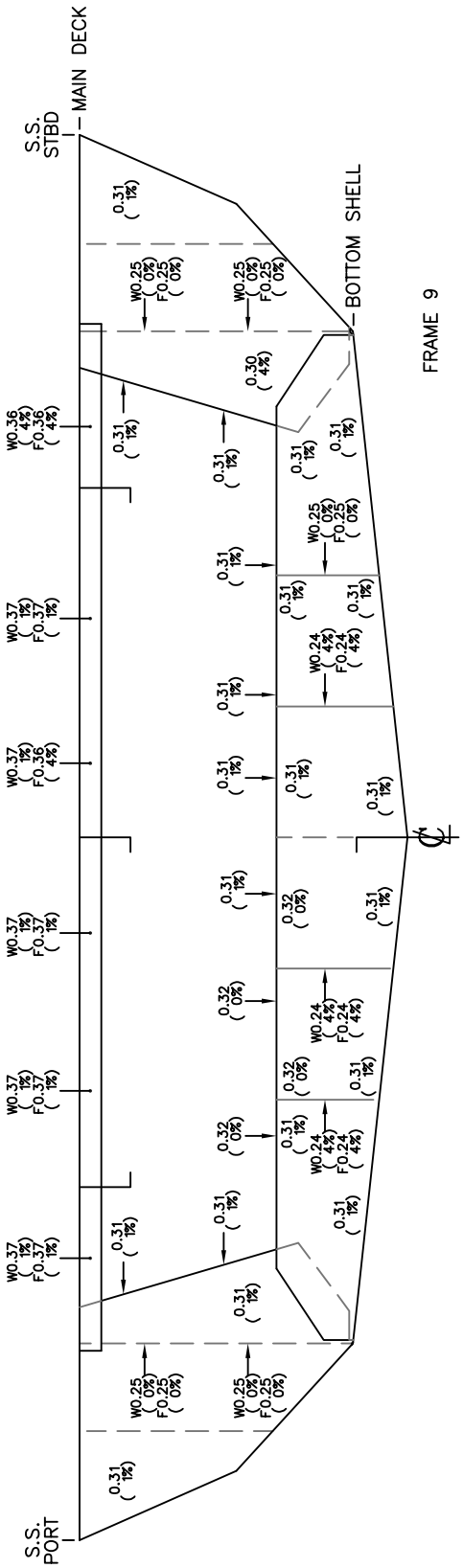


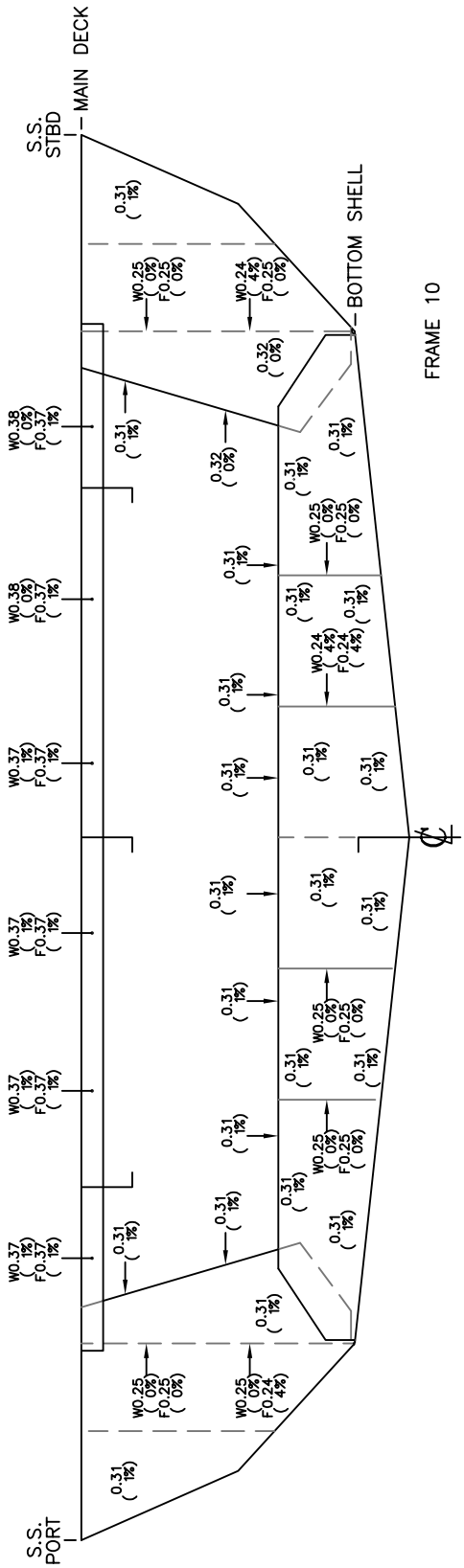


NOTE:
- BULKHEAD 7 PLATING .25".
- BULKHEAD 7 VERTICAL STIFFENERS L5" x 3" x .25".
- FRAME 8 TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- FRAME 8 SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- FRAME 8 SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- FRAME 8 TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- FRAME 8 TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		No.3 VOID - BHD7 & FRAME 8 DESCRIPTION: LOOKING FORWARD	
DRAWN BY: T.HENSON	JOB # S3603	DWG # No33 BHD 7 FRM 8 v1.1	DATE: MARCH 2019

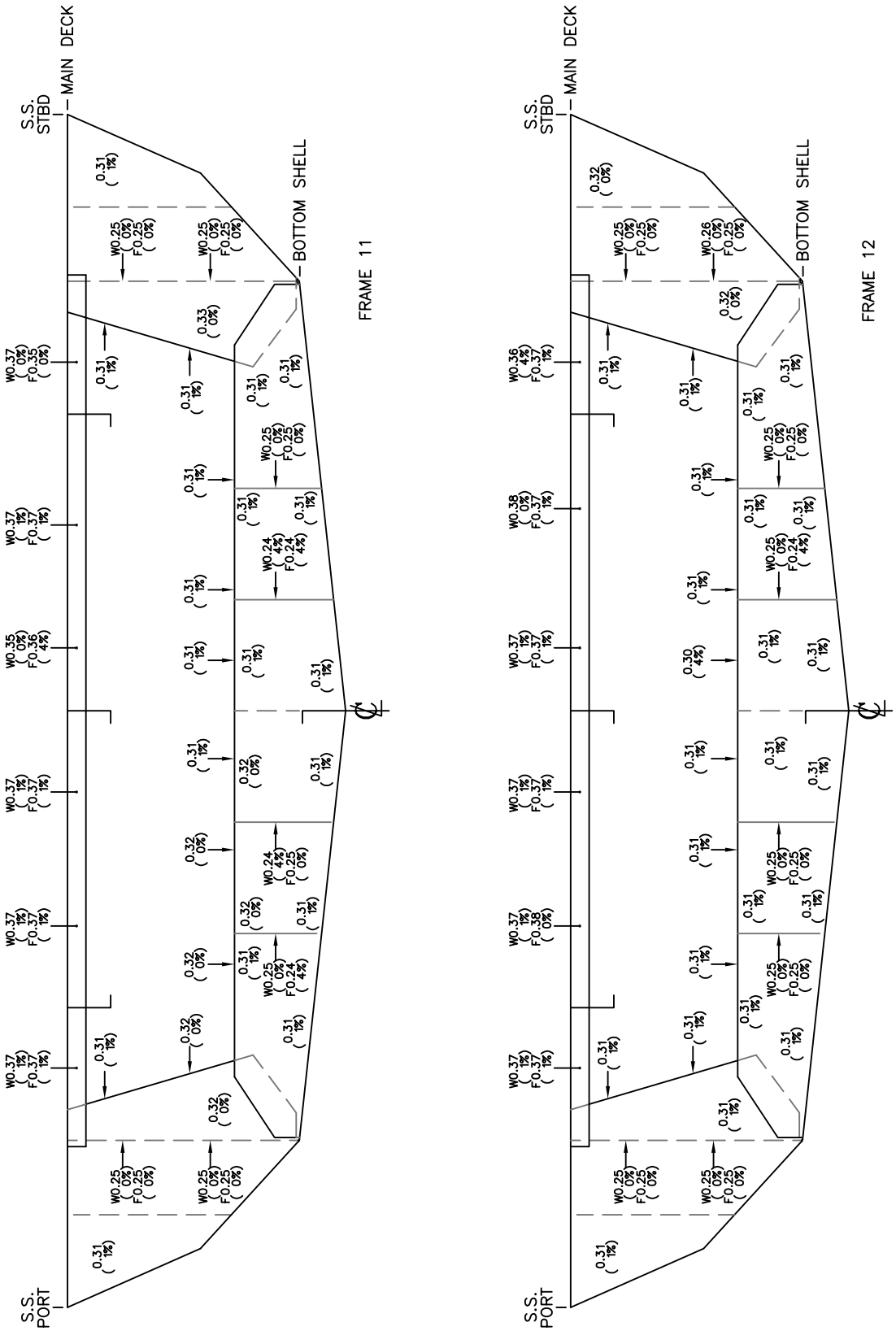




NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

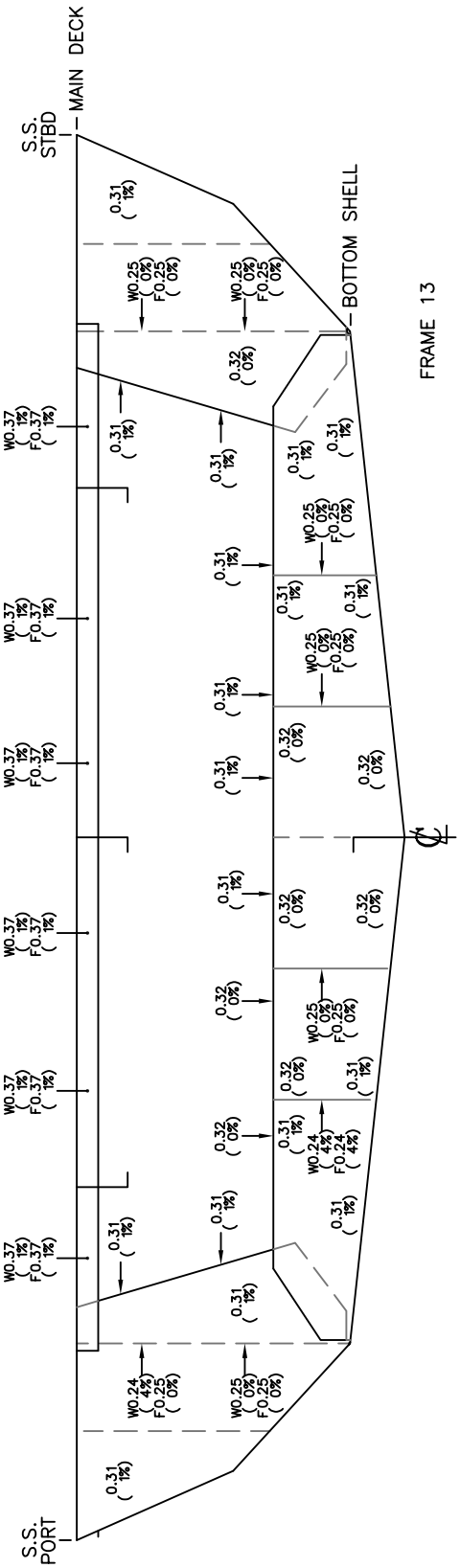
VESSEL: M/V GUEMES		No.3 VOID - FRAME 9 & 10 DESCRIPTION: LOOKING FORWARD	
DRAWN BY: T.HENSON	JOB # S3603	DWG # No3 FRM 9 10 v1.1	DATE: MARCH 2019



NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		No.3 VOID - FRAME 11 & 12 DESCRIPTION: LOOKING FORWARD	
DRAWN BY: T.HENSON	JOB # S3603	DWG # No3 FRM 11 12 v1.1	DATE: MARCH 2019



NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.3 VOID - FRAME 13 LOOKING FORWARD	
DRAWN BY: T.HENSON	JOB # S3603	DWG # No3 FRM 13 v1.1	DATE: MARCH 2019

INTERNATIONAL INSPECTION, INC.

CENTERLINE LONGITUDINAL GIRDER
LOOKING INBOARD

6'–0" LONGITUDINAL GIRDER
PORT SIDE
LOOKING INBOARD

6'–0" LONGITUDINAL GIRDER
STARBOARD SIDE
LOOKING INBOARD

NOTE:
CENTERLINE LONGITUDINAL GIRDER 14" x 4"FlgPlt x .375 UNLESS NOTED OTHERWISE.
6'–0" LONGITUDINAL GIRDER 14" x 4"FlgPlt x .375 UNLESS NOTED OTHERWISE.
W = WEB / F = FLANGE.

VESSEL: M/V GUEMES

DESCRIPTION: No.3 VOID - LONGITUDINAL GIRDERS
VIEWED AS NOTED

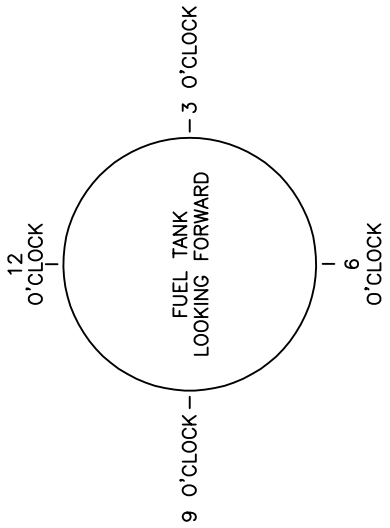
DRAWN BY: G. GRAHAM

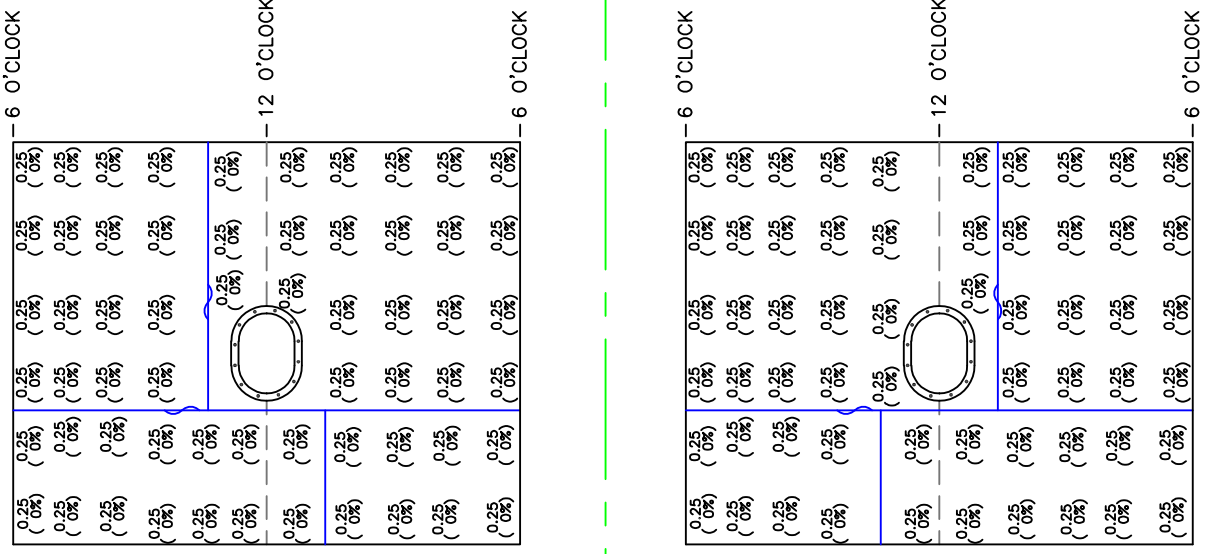
JOB # S3603

DWG # No3 LGIR

v1.1

DATE: MARCH 2019

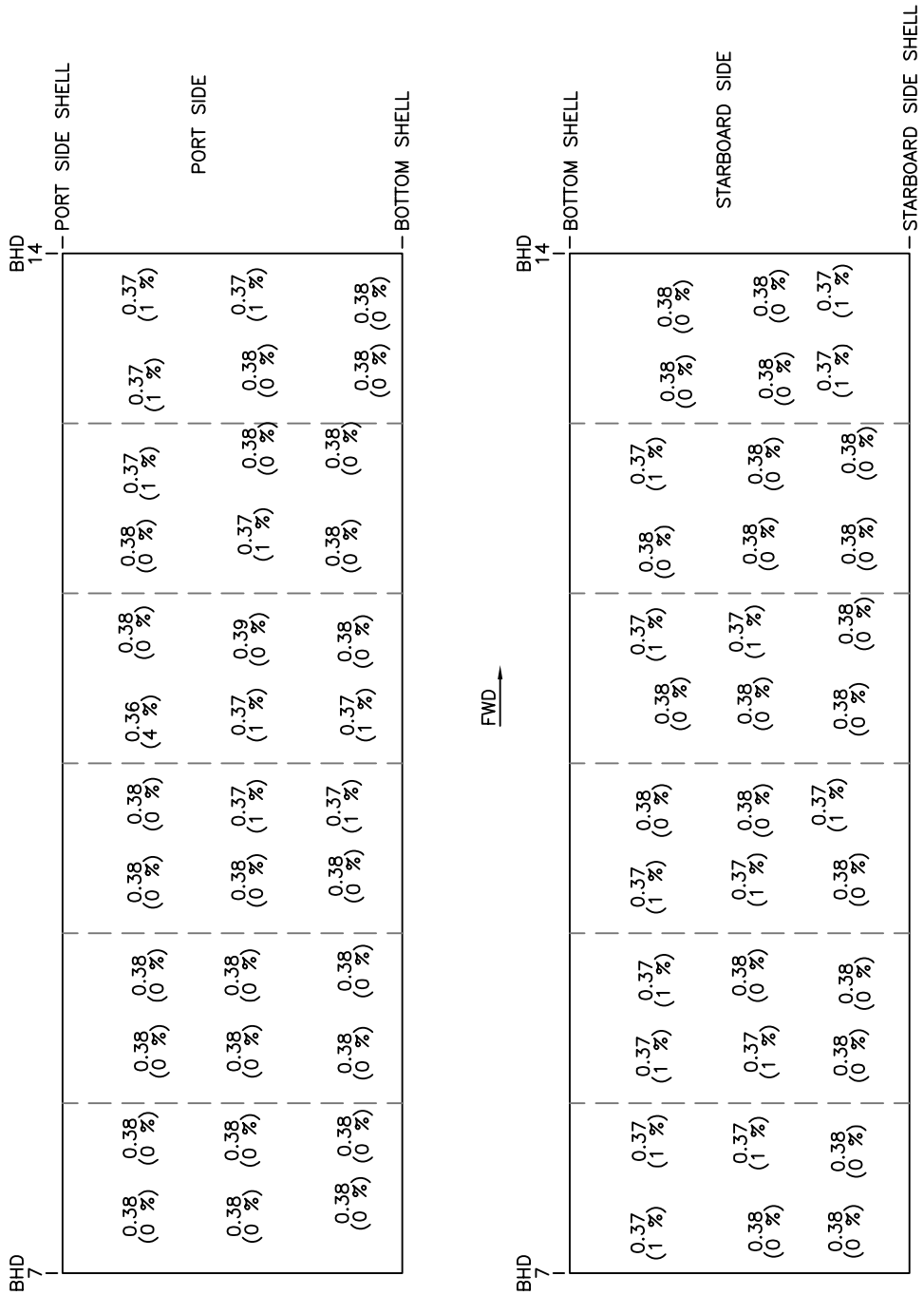




FWD

NOTE:
FUEL TANK PLATING .25".

VESSEL: M/V GUEMES		No.3 VOID - FUEL OIL TANKS DESCRIPTION: VIEWED AS NOTED	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No3 FOT v1.1	DATE: MARCH 2019



NOTE:
NO ORIGINAL SCANTLINGS AVAILABLE AT TIME OF SURVEY.
NOMINAL THICKNESS MEASUREMENTS OBTAINED TO DETERMINE PERCENT WASTAGE.

NOMINAL THICKNESS USED:
– TURN OF BILGE PLATING .375"

VESSEL: M/V GUEMES	No.3 VOID - PLATING IWO KEEL COOLERS DESCRIPTION: PLAN VIEW
DRAWN BY: G. GRAHAM / JOB # S3603	DWG # No3 VOID BTM PLT v1.1 / DATE: MARCH 2019

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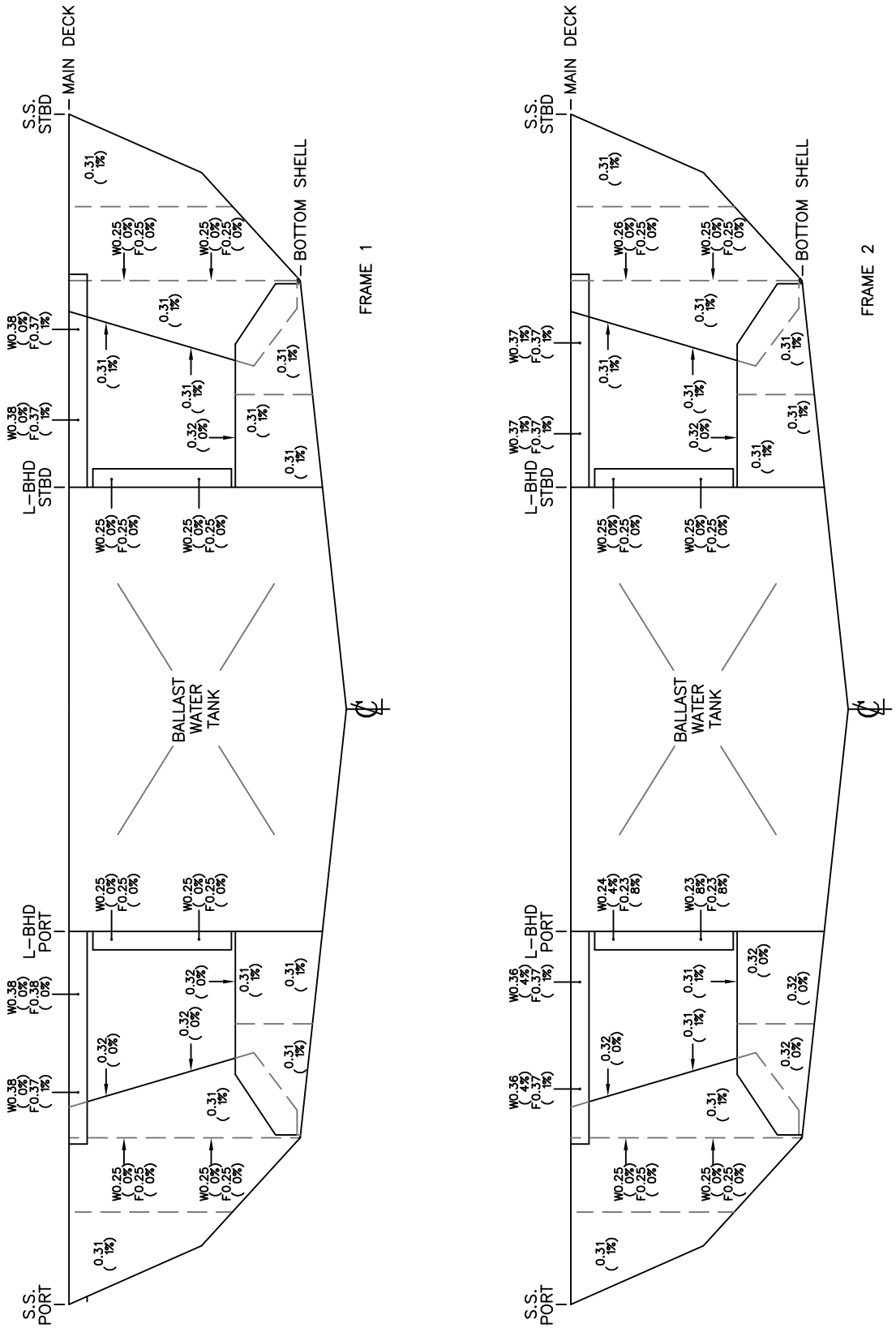
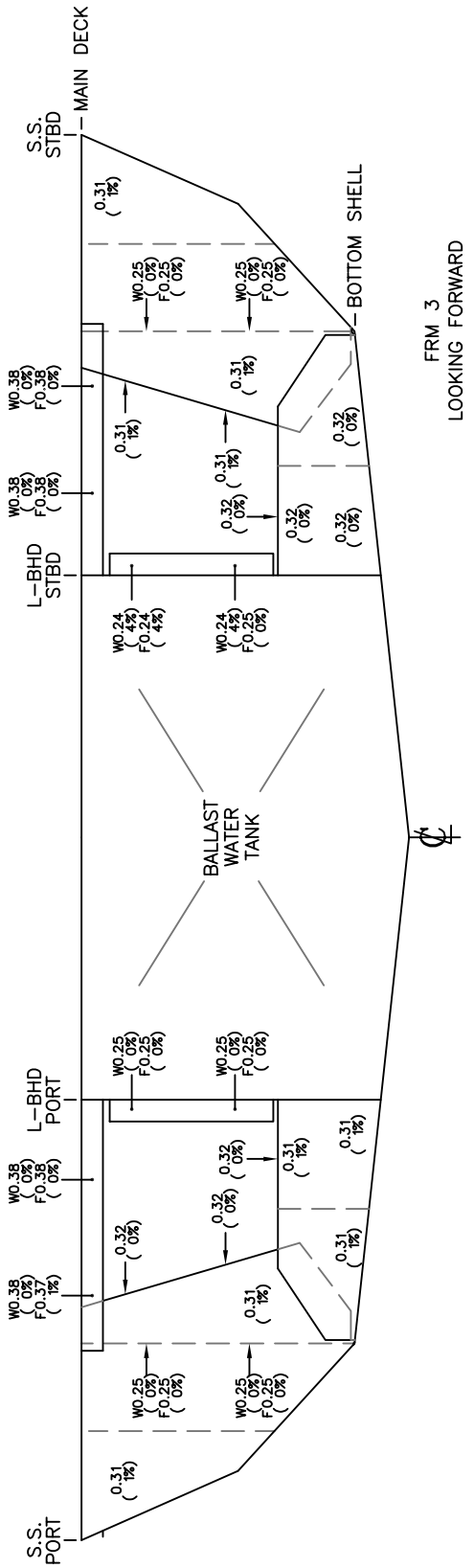
No.4 VOID INTERNALS

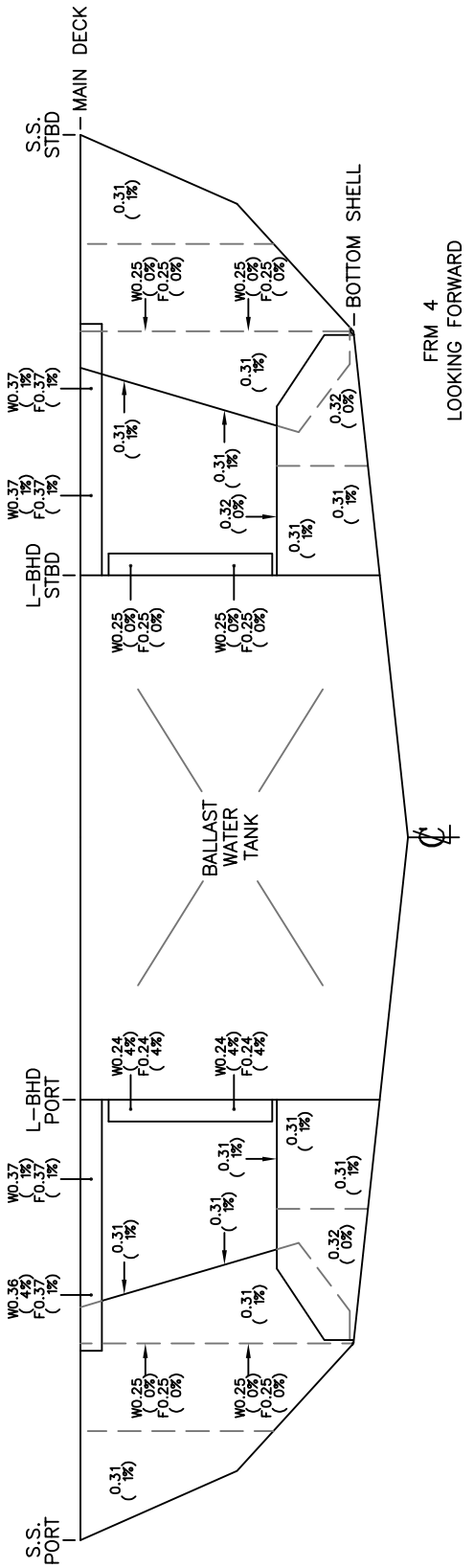


NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- LONGITUDINAL BULKHEAD STIFFENERS L5" x 3" x .25".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.4 VOID - FRAME 1 & 2 LOOKING FORWARD	
DRAWN BY: T.HENSON	JOB # S3603	DWG # No4 FRM 1 2 v1.1	DATE: MARCH 2019

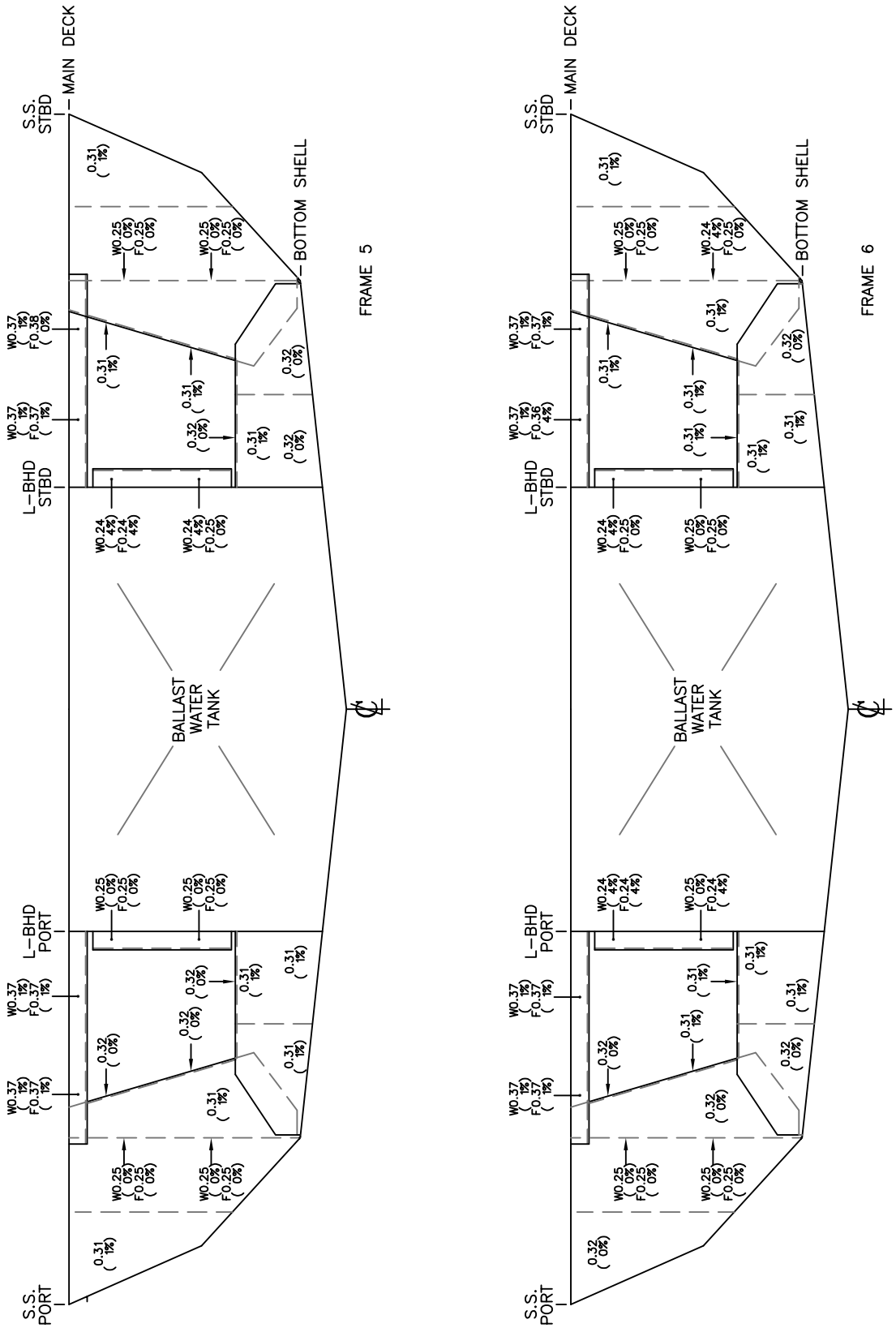




NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- LONGITUDINAL BULKHEAD STIFFENERS L5" x 3" x .25".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.

W = WEB / F = FLANGE.

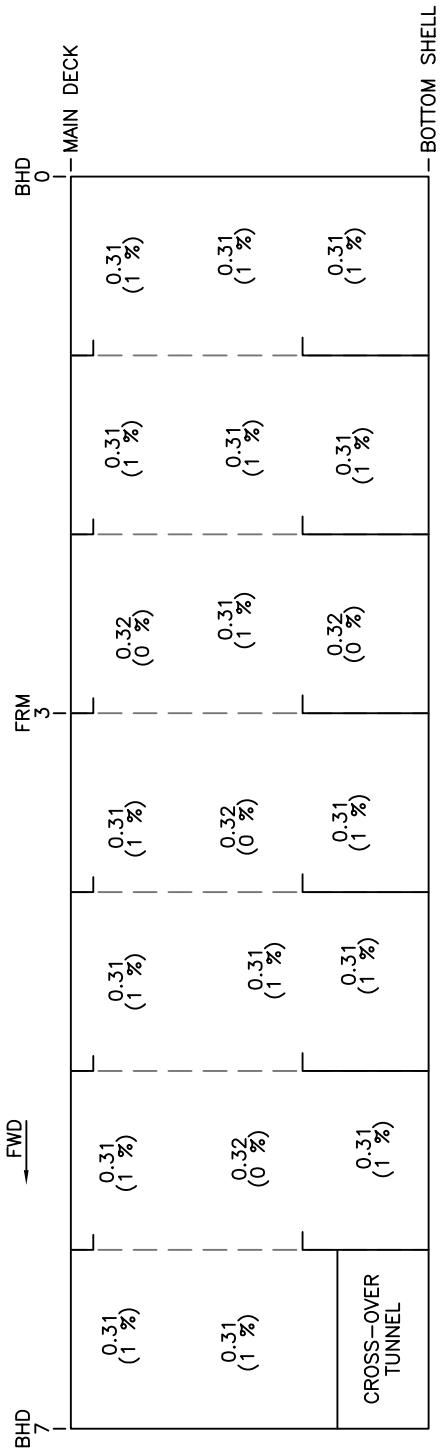
VESSEL: M/V GUEMES		DESCRIPTION: No.4 VOID - FRAME 3 & 4 LOOKING FORWARD	
DRAWN BY: T.HENSON	JOB # S3603	DWG # No4 FRM 3 4 v1.1	DATE: MARCH 2019

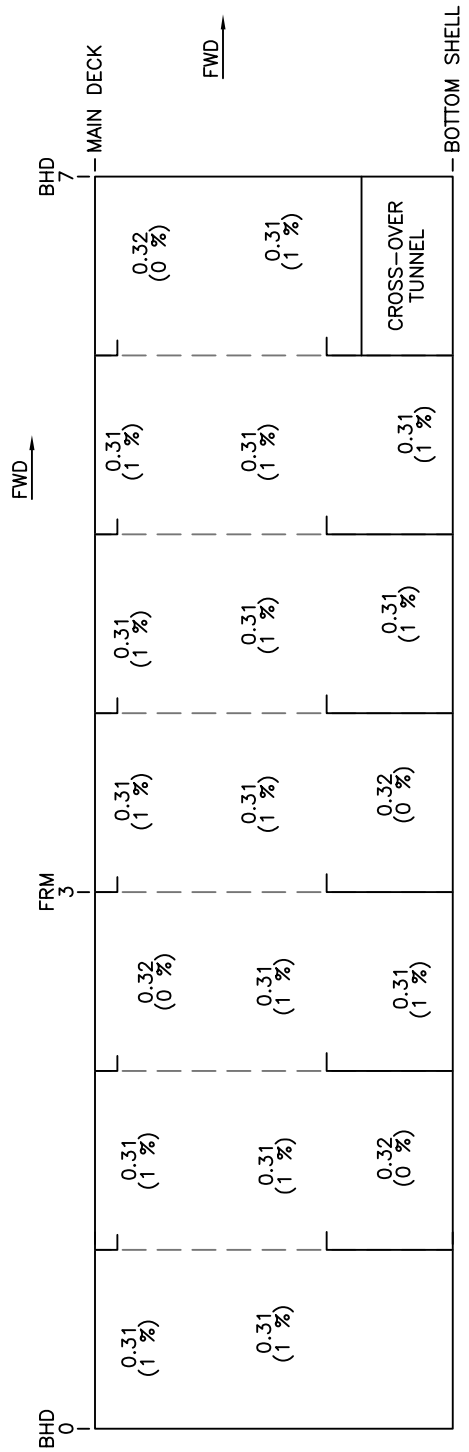


NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- LONGITUDINAL BULKHEAD STIFFENERS L5" x 3" x .25".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.

W = WEB / F = FLANGE.

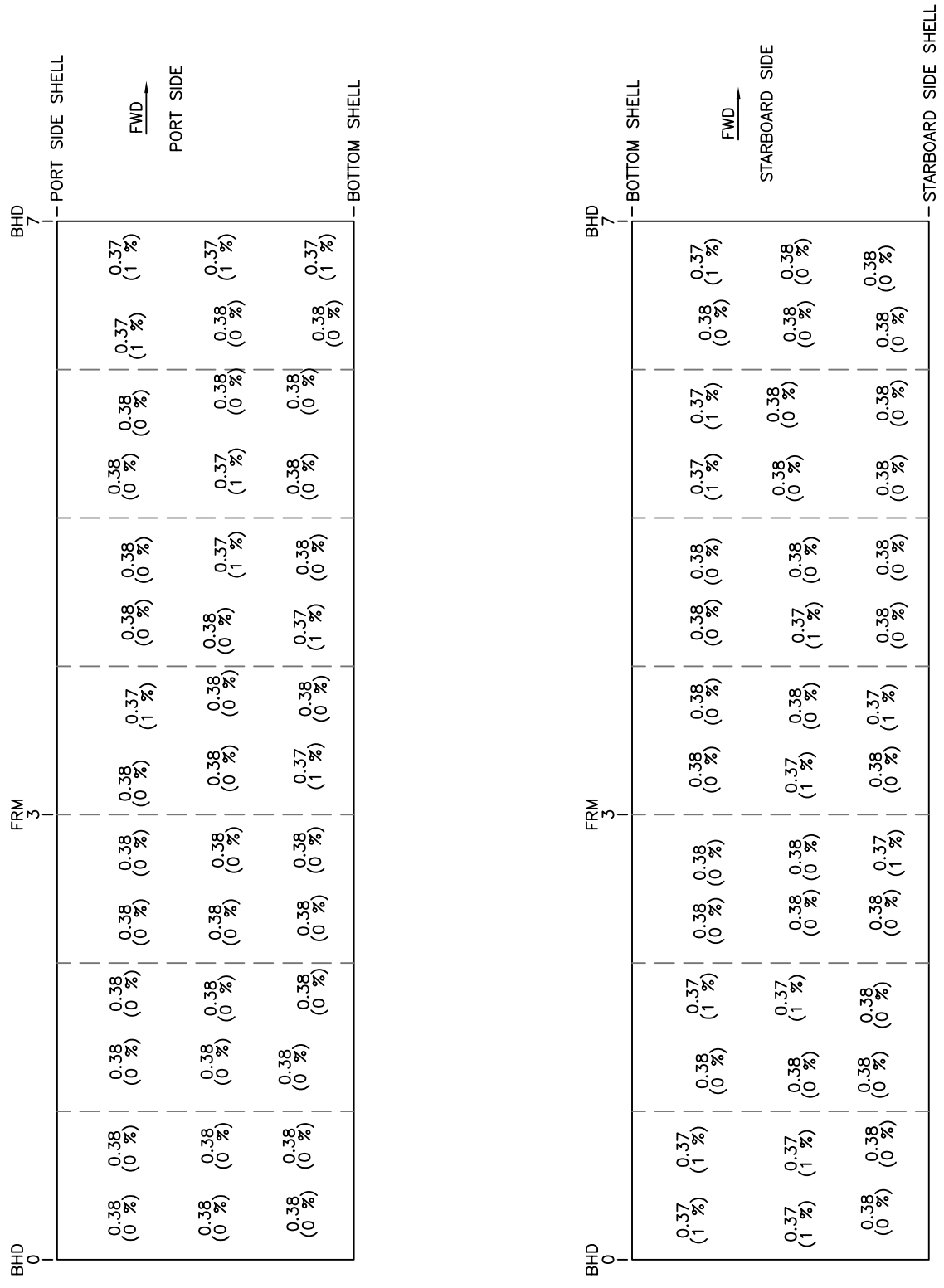
VESSEL: M/V GUEMES		DESCRIPTION: No. VOID - FRAME 5 & 6 LOOKING FORWARD	
DRAWN BY: T.HENSON	JOB # S3603	DWG # No4 FRM 5 6 v1.1	DATE: MARCH 2019





NOTE:
6'–0" LONGITUDINAL BULKHEAD PLATING .3125"

VESSEL: M/V GUEMES		DESCRIPTION: No.4 VOID - 6'-0" LONGITUDINAL BULKHEAD LOOKING INBOARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No4 VOID LBHD v1.1	DATE: MARCH 2019



NOTE:
NO ORIGINAL SCANTLINGS AVAILABLE AT TIME OF SURVEY.
NOMINAL THICKNESS MEASUREMENTS OBTAINED TO DETERMINE PERCENT WASTAGE.

NOMINAL THICKNESS USED:
– TURN OF BILGE PLATING .375”

VESSEL: M/V GUEMES	No.4 VOID - PLATING IWO KEEL COOLERS
	DESCRIPTION: PLAN VIEW
DRAWN BY: G. GRAHAM	JOB # S3603
DWG # No4 VOID BTM PLT v1.1	DATE: MARCH 2019

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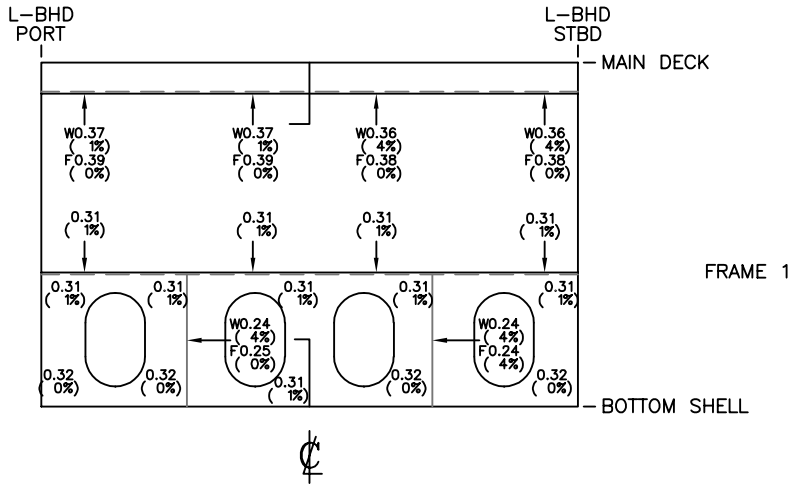
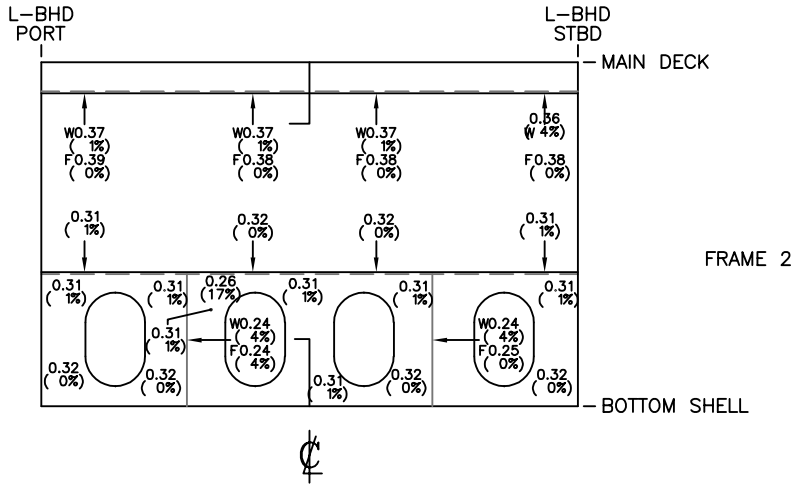
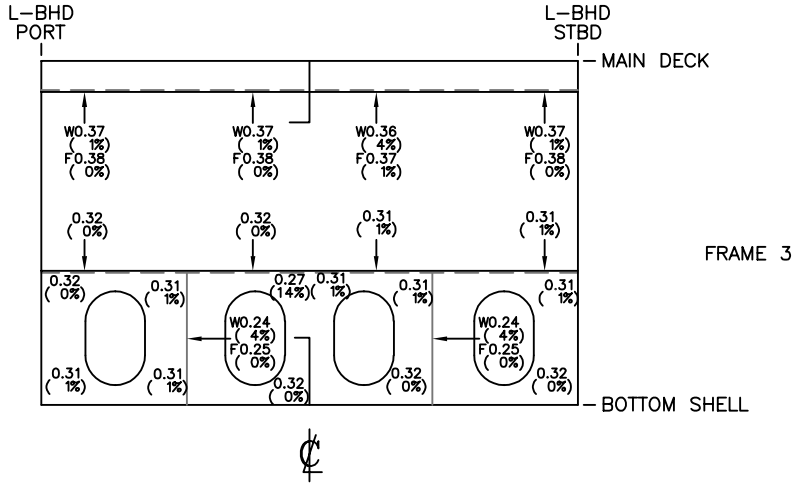
No.1 END BALLAST WATER TANK INTERNALS



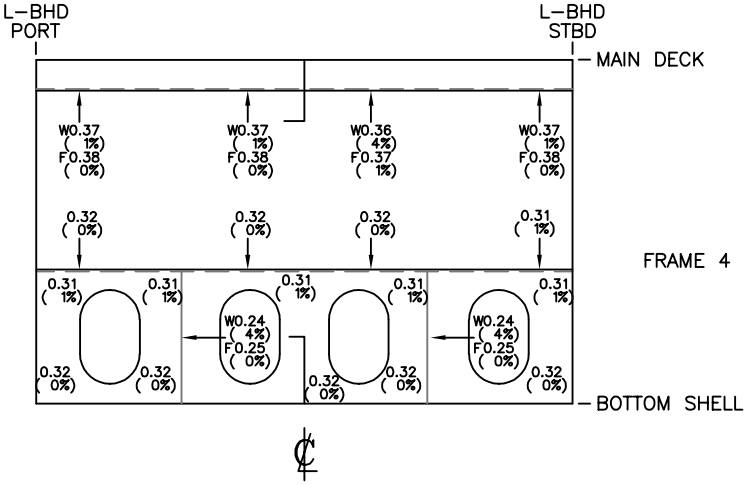


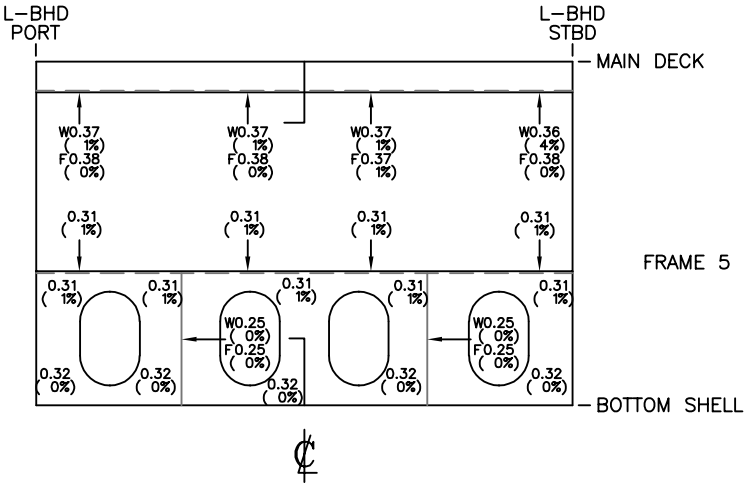


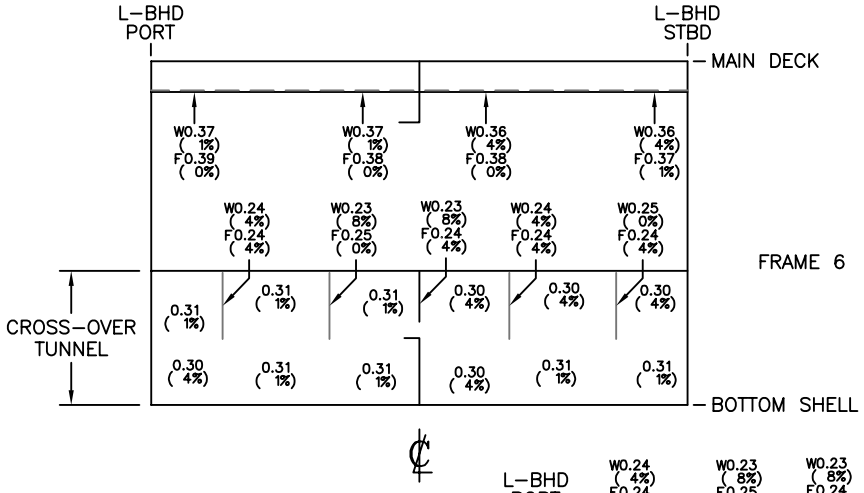
NOTE:
- UNDER DECK TRANSVERSE FRAME L6" x 3.5" x .375"
- BOTTOM TRANSVERSE FRAME 36" x 4"FlgPlt x .3125".
- FRAME VERTICAL STIFFENERS L3" x 2.5" x .25".

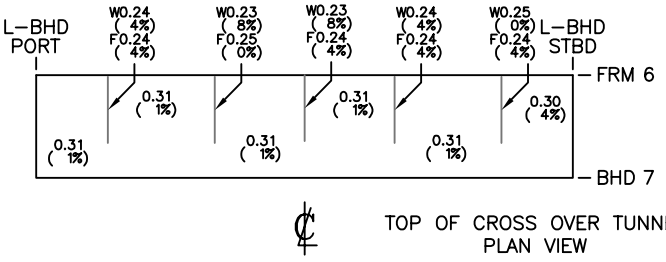
W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.1 END BALLAST WATER Tk - FRAMES 1-3 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No1 END BWT FRMS 1 v1.1	DATE: MARCH 2019







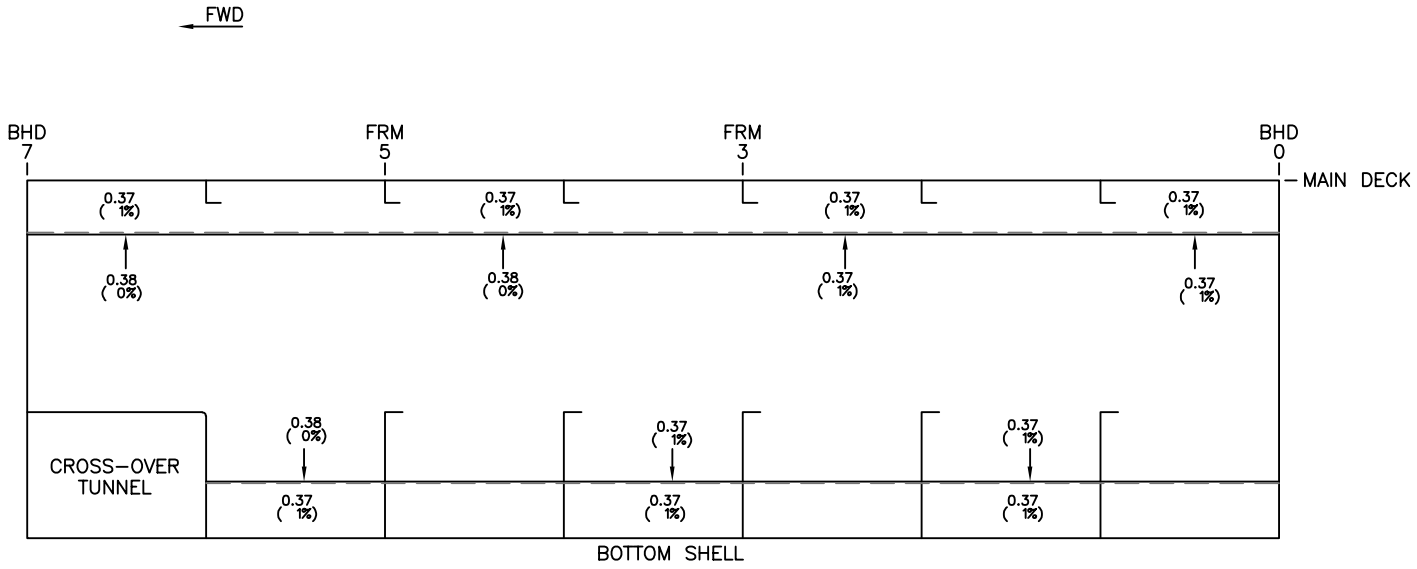


TOP OF CROSS OVER TUNNEL
PLAN VIEW

NOTE:
- UNDER DECK TRANSVERSE FRAME L6" x 3.5" x .375"
- BOTTOM TRANSVERSE FRAME 36" x 4"FlgPlt x .3125".
- TOP OF CROSS OVER TUNNEL .3125".
- FRAME VERTICAL STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES	DESCRIPTION: No.1 END BALLAST WATER Tk - FRAMES 4-6 VIEWED AS NOTED
DRAWN BY: G. GRAHAM	JOB # S3603
DWG # No1 END BWT FRMS 2 v1.1	DATE: MARCH 2019



NOTE:
- UNDER DECK LONGITUDINAL GIRDER 14" x 4"FlgPlt x .375"
- BOTTOM LONGITUDINAL GIRDER 18" x 4"FlgPlt x .375".

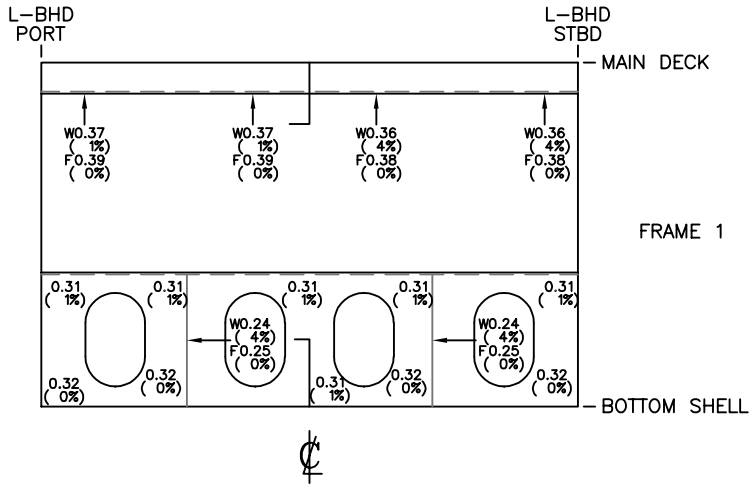
W = WEB / F = FLANGE.

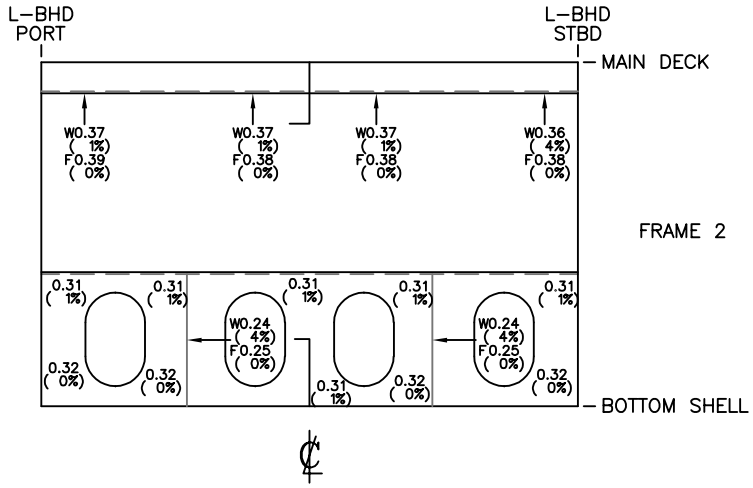
VESSEL: M/V GUEMES		DESCRIPTION: No.1 END BALLAST WATER Tk - LONG'L GIRDER LOOKING INBOARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No1 END BWT LGIR v1.1	DATE: MARCH 2019

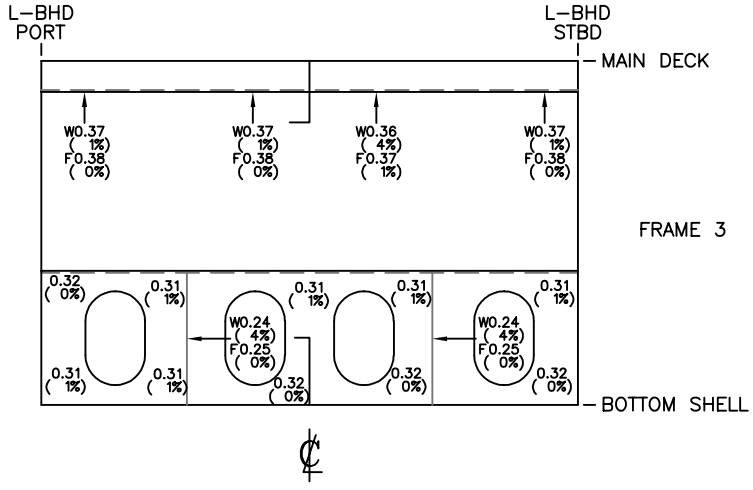
INTERNATIONAL INSPECTION

Specialists in Nondestructive Examination

No.2 END BALLAST WATER TANK INTERNALS



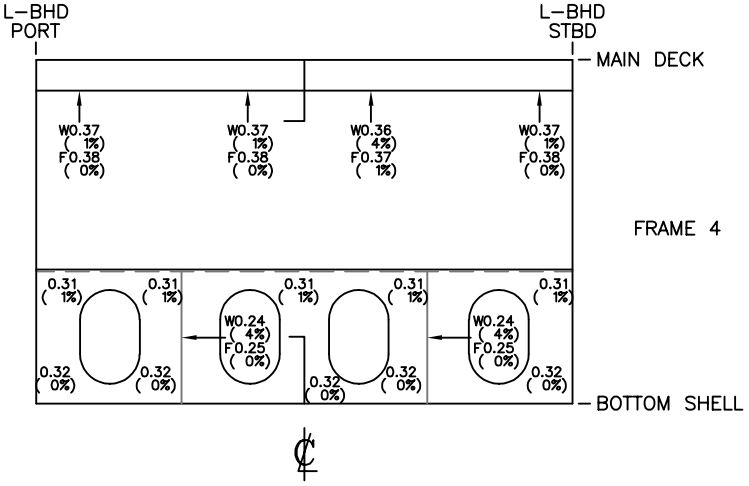


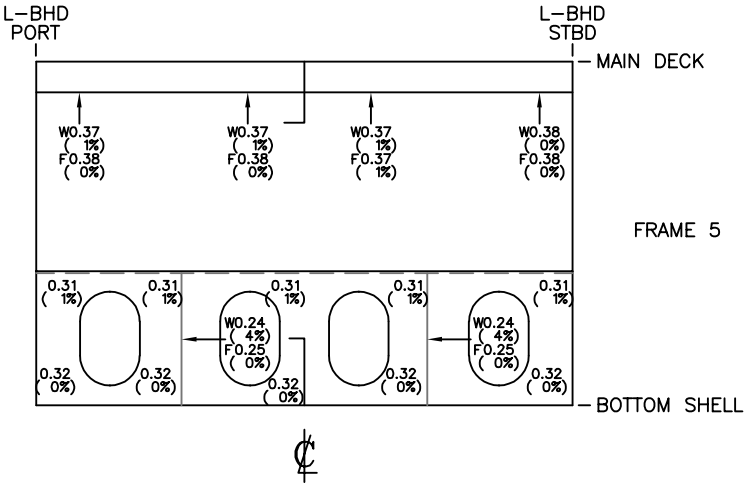


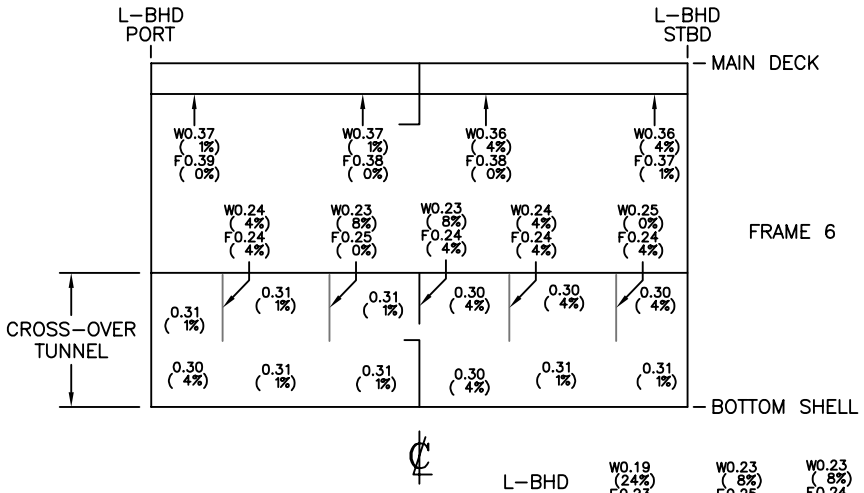
NOTE:
- UNDER DECK TRANSVERSE FRAME L6" x 3.5" x .375"
- BOTTOM TRANSVERSE FRAME 36" x 4"FlgPlt x .3125".
- FRAME VERTICAL STIFFENERS L3" x 2.5" x .25".

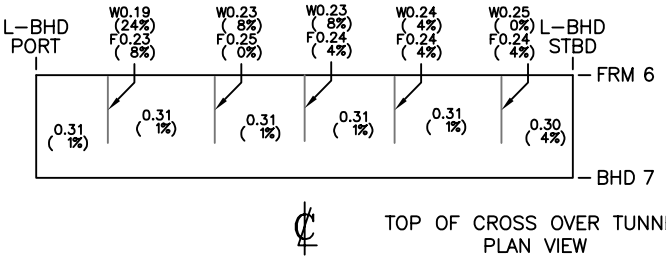
W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.2 END BALLAST WATER Tk - FRAMES 1-3 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No2 END BWT FRMS 1 v1.1	DATE: MARCH 2019







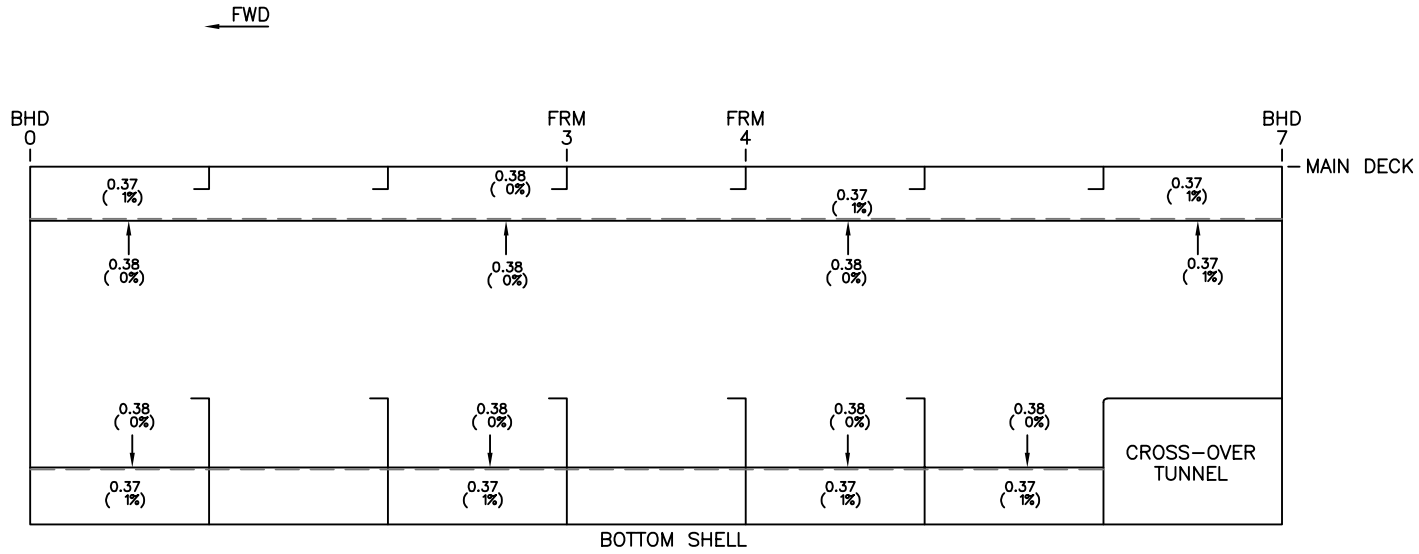


TOP OF CROSS OVER TUNNEL
PLAN VIEW

NOTE:
- UNDER DECK TRANSVERSE FRAME L6" x 3.5" x .375"
- BOTTOM TRANSVERSE FRAME 36" x 4"FlgPlt x .3125".
- FRAME VERTICAL STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.2 END BALLAST WATER Tk - FRAMES 4-6 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No2 END BWT FRMS 2 v1.1	DATE: MARCH 2019



NOTE:
- UNDER DECK LONGITUDINAL GIRDER 14" x 4"FlgPlt x .375"
- BOTTOM LONGITUDINAL GIRDER 18" x 4"FlgPlt x .375".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.2 END BALLAST WATER Tk - LONG'L GIRDER LOOKING INBOARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No2 END BWT LGIR v1.1	DATE: MARCH 2019

INTERNATIONAL INSPECTION

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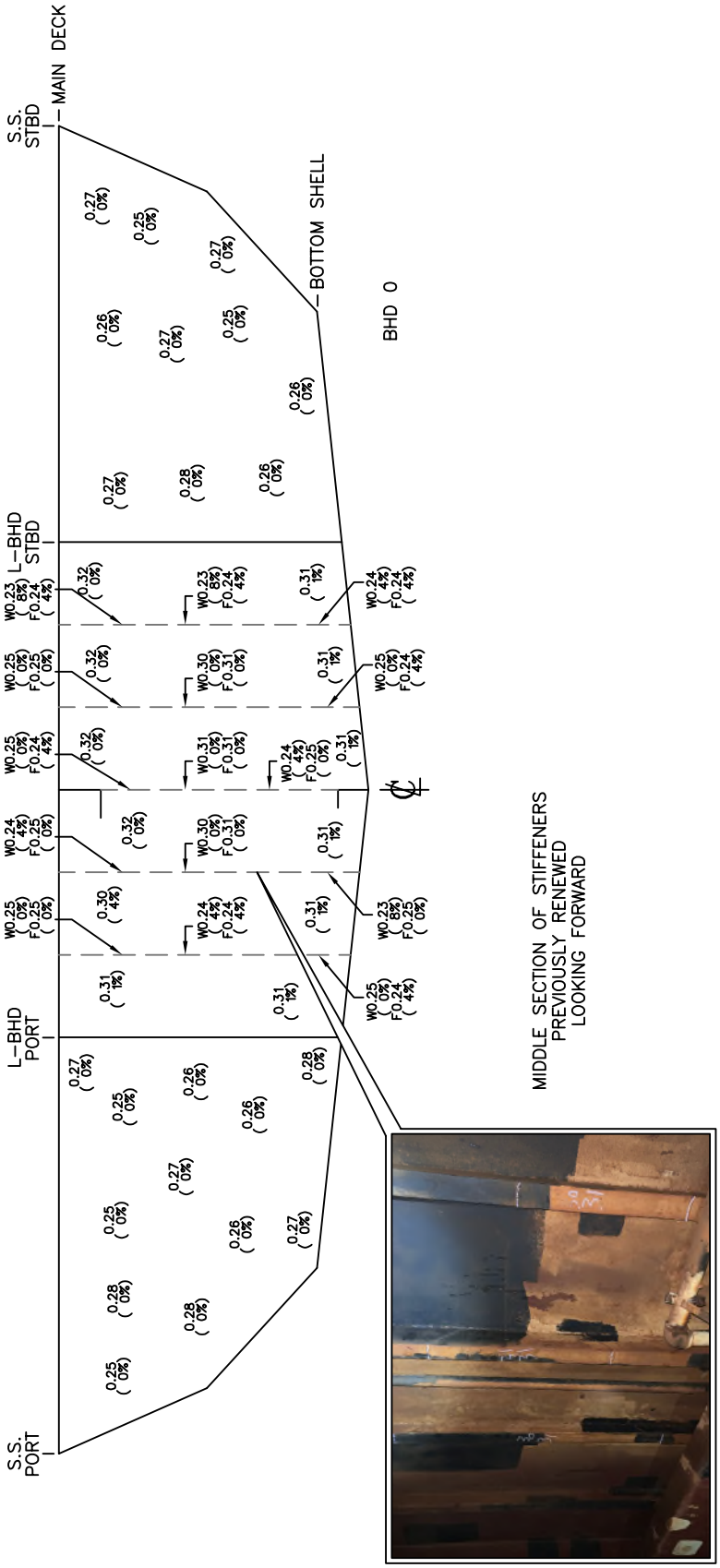
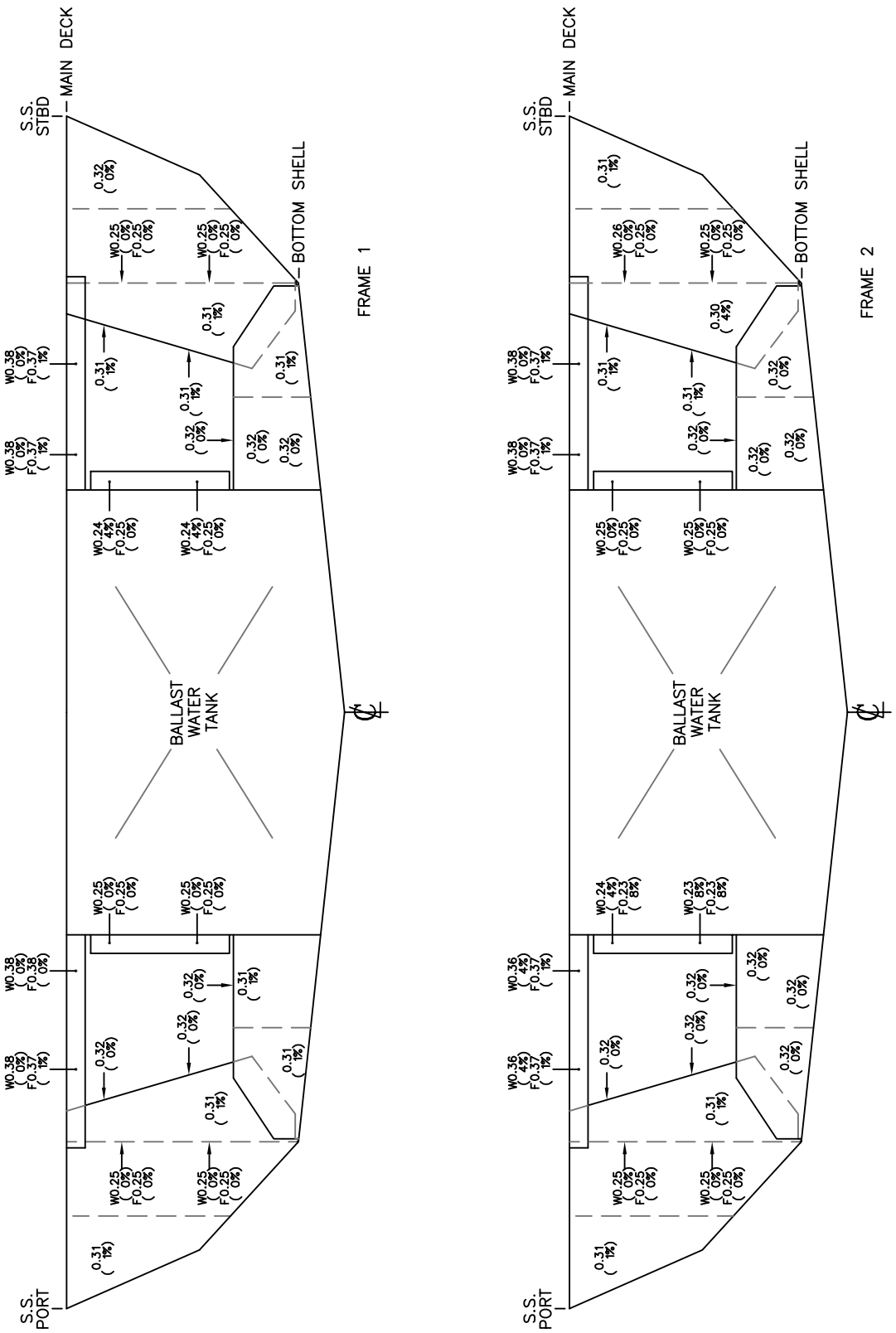
No.5 VOID INTERNALS



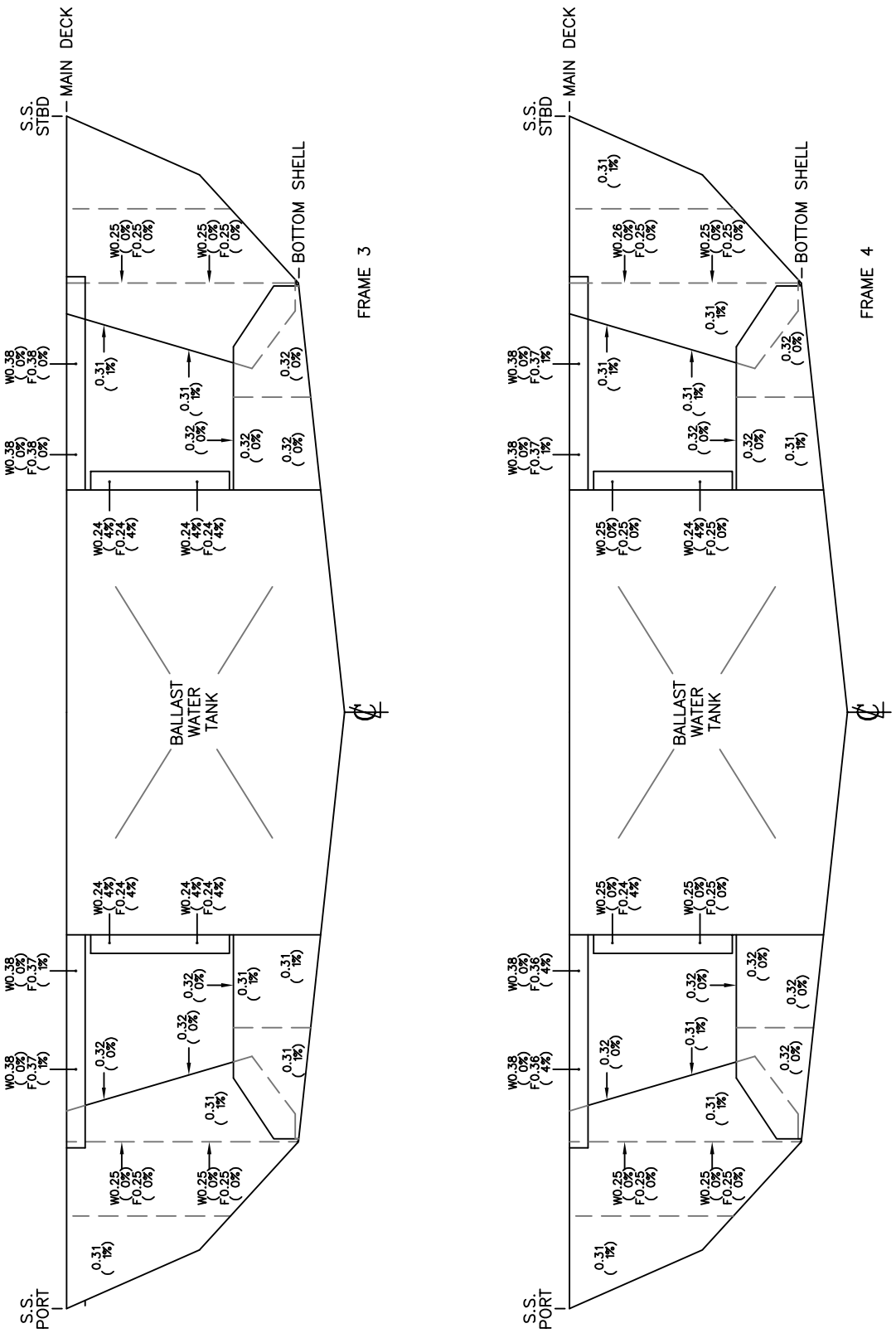
VESSEL: M/V GUEMES		No.5 VOID - BULKHEAD 0 DESCRIPTION: LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No5 FBHD 0 v1.1	DATE: MARCH 2019



NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- LONGITUDINAL BULKHEAD STIFFENERS L5" x 3" x .25".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.

W = WEB / F = FLANGE.

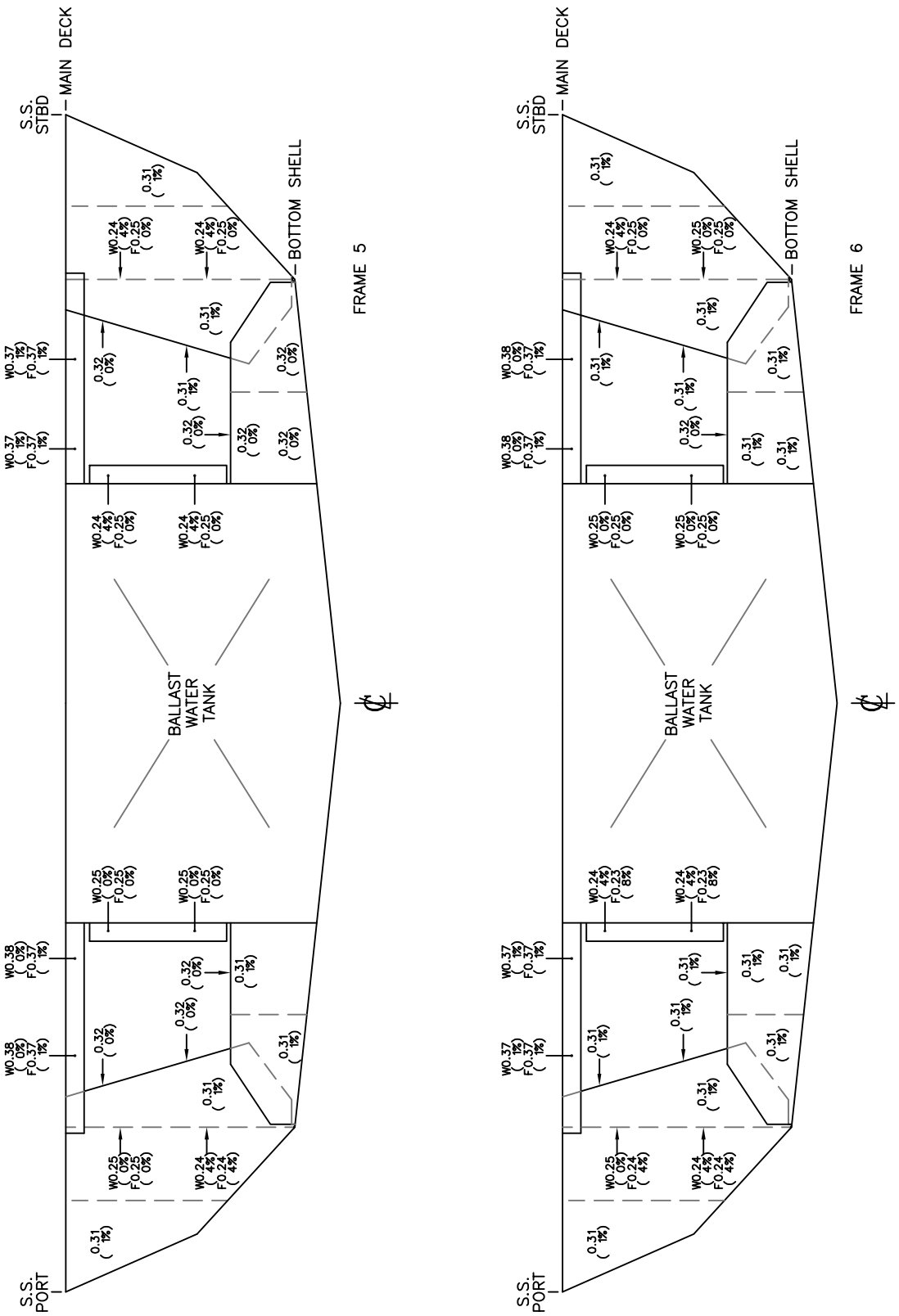
VESSEL: M/V GUEMES		No.5 VOID - FRAME 1 & 2 DESCRIPTION: LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No5 FRM 1 2 v1.1	DATE: MARCH 2019



NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- LONGITUDINAL BULKHEAD STIFFENERS L5" x 3" x .25".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.

W = WEB / F = FLANGE.

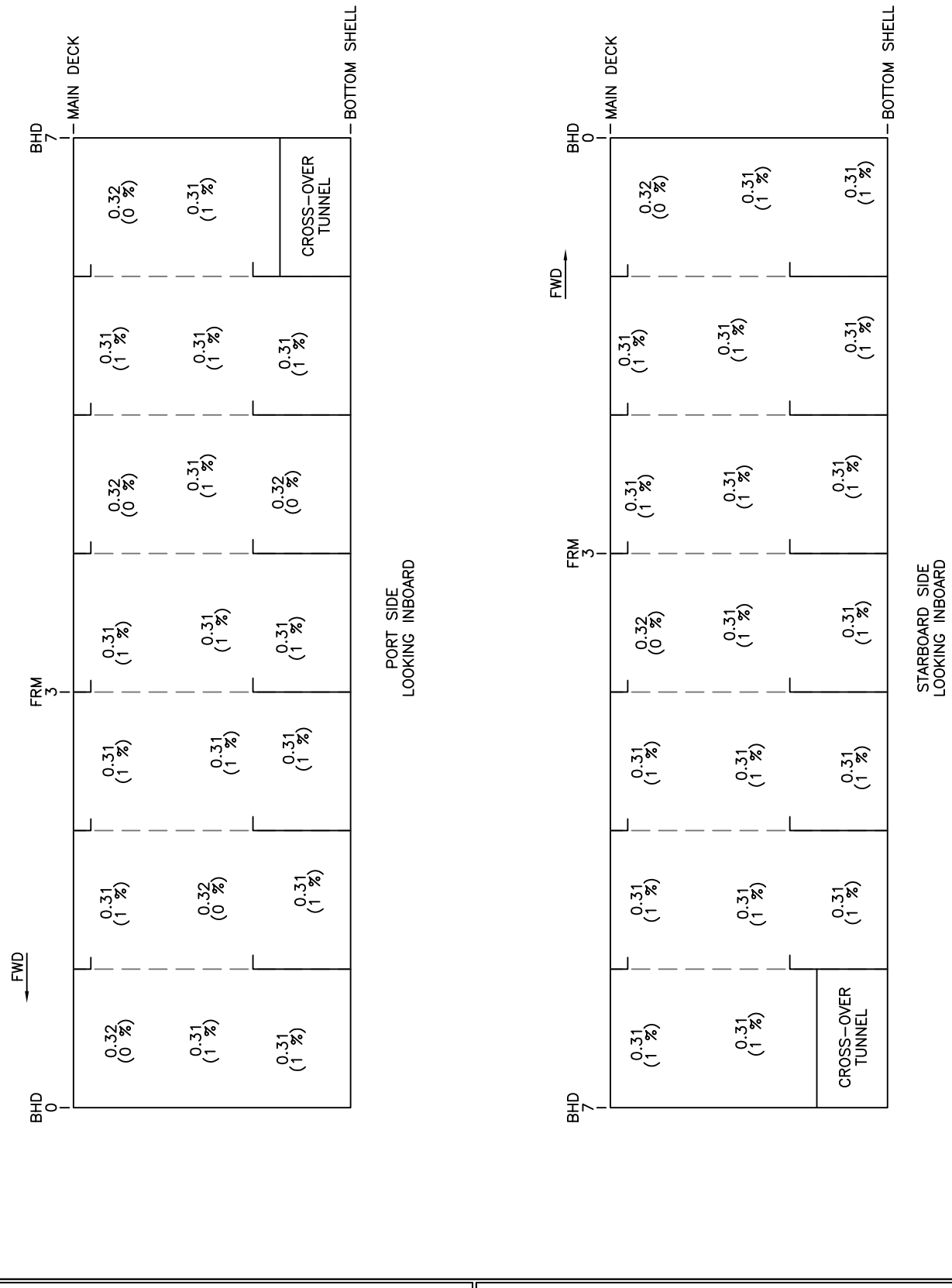
VESSEL: M/V GUEMES		DESCRIPTION: No.5 VOID - FRAME 3 & 4 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No5 FRM 3 4 v1.1	DATE: MARCH 2019



NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- LONGITUDINAL BULKHEAD STIFFENERS L5" x 3" x .25".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.

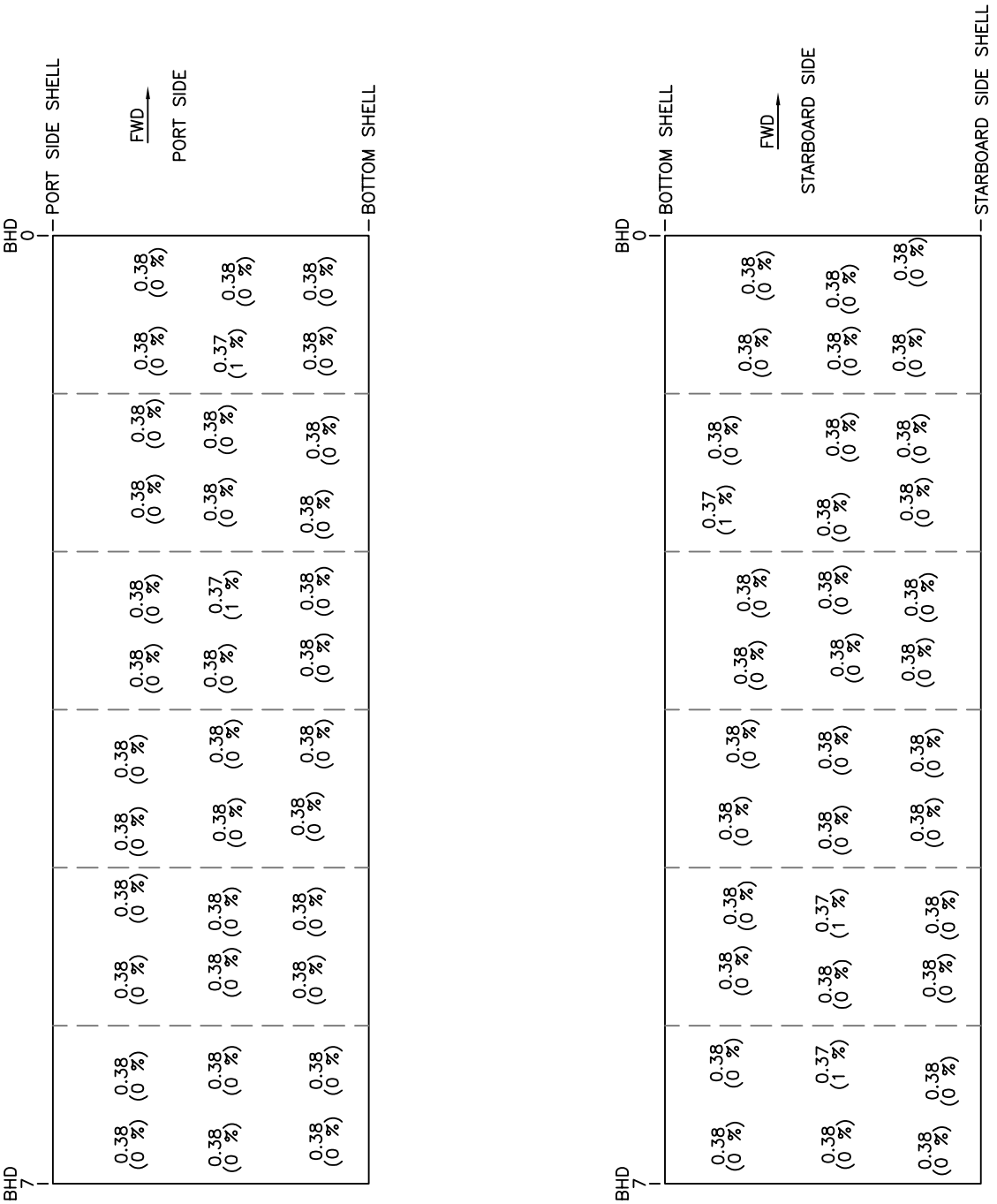
W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		No.5 VOID - FRAME 5 & 6 DESCRIPTION: LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No5 FRM 5 6 v1.1	DATE: MARCH 2019



NOTE:
6'–0" LONGITUDINAL BULKHEAD PLATING .3125"

VESSEL: M/V GUEMES	DESCRIPTION: No.5 VOID - 6'-0" LONGITUDINAL BULKHEAD PLAN VIEW
DRAWN BY: G. GRAHAM / JOB # S3603	DWG # No5 LBHD v1.1 / DATE: MARCH 2019



NOTE:
NO ORIGINAL SCANTLINGS AVAILABLE AT TIME OF SURVEY.
NOMINAL THICKNESS MEASUREMENTS OBTAINED TO DETERMINE PERCENT WASTAGE.

NOMINAL THICKNESS USED:
– TURN OF BILGE PLATING .375"

VESSEL: M/V GUEMES	No.5 VOID - PLATING IWO KEEL COOLERS
	DESCRIPTION: PLAN VIEW
DRAWN BY: G. GRAHAM	JOB # S3603
DWG # No5 VOID BTM PLT v1.1	DATE: MARCH 2019

INTERNATIONAL INSPECTION

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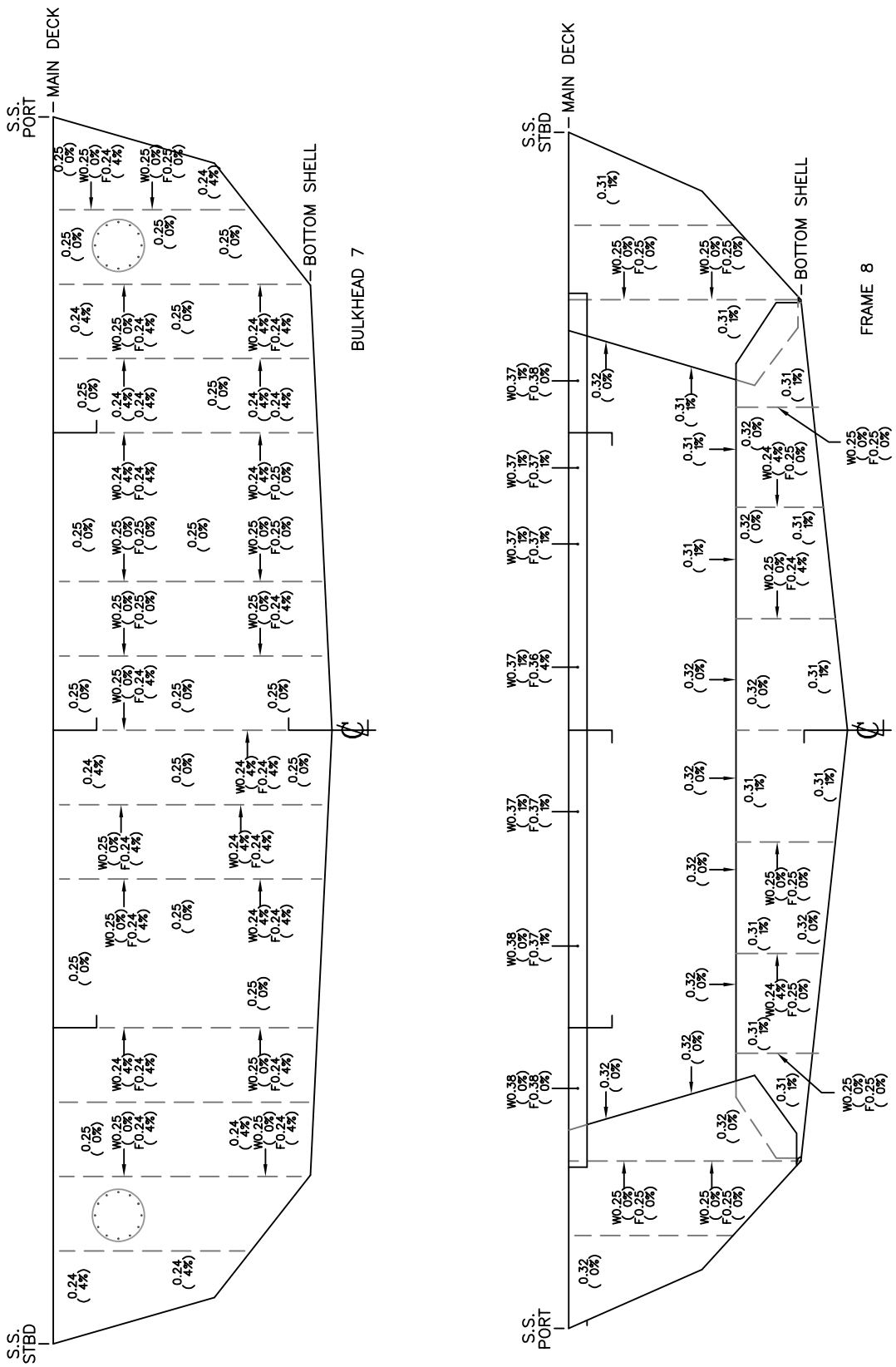
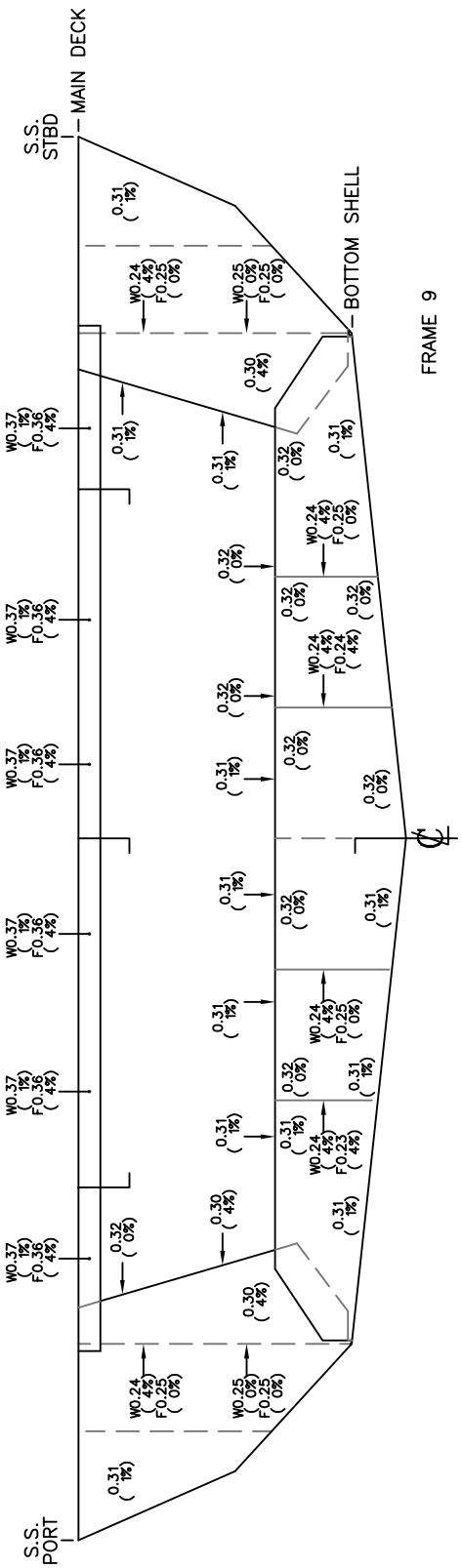
No.6 VOID INTERNALS

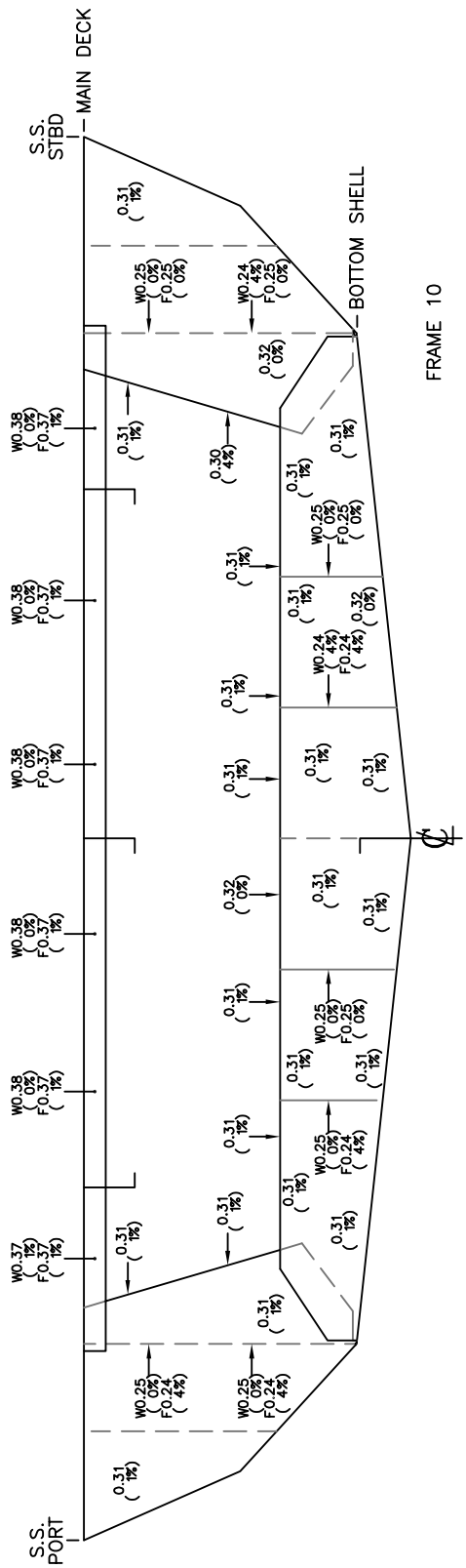


NOTE:
- BULKHEAD 7 PLATING .25".
- BULKHEAD 7 VERTICAL STIFFENERS L5" x 3" x .25".
- FRAME 8 TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- FRAME 8 SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- FRAME 8 SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- FRAME 8 TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- FRAME 8 TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.6 VOID - BHD7 & FRAME 8 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No7 BHD 7 FRM 8 v1.1	DATE: MARCH 2019

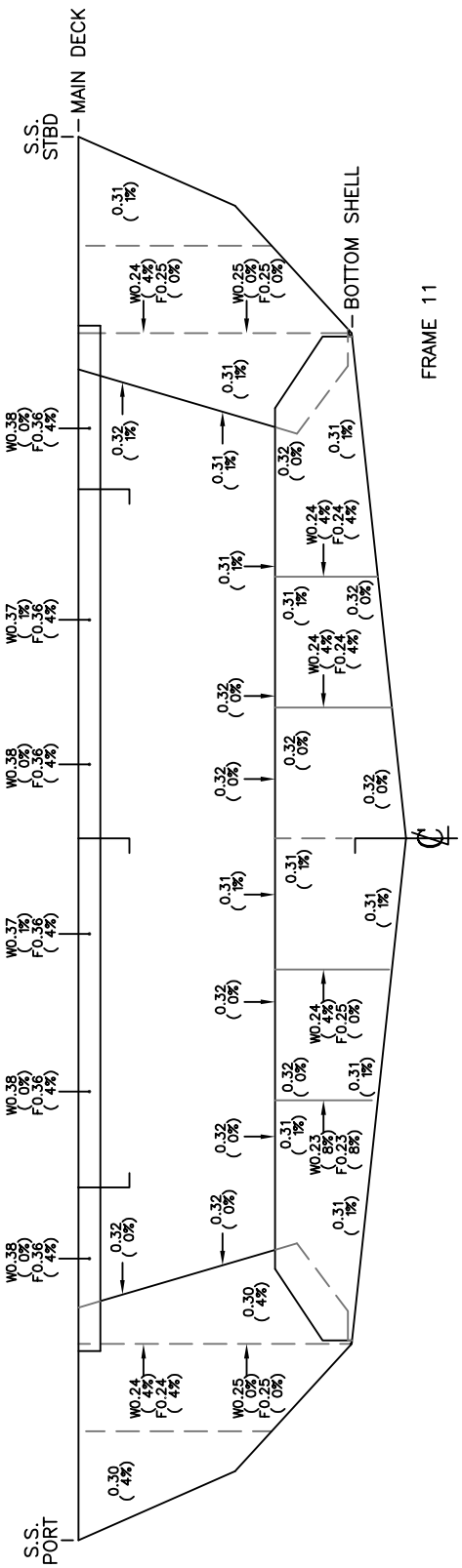


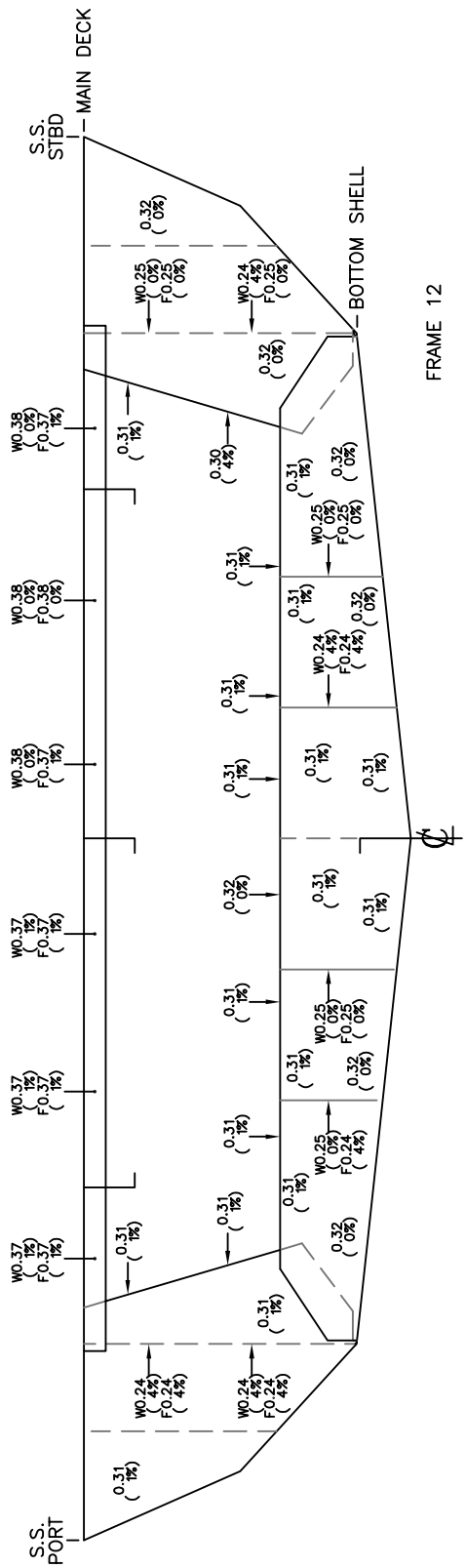


NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.6 VOID - FRAME 9 & 10 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No6 FRM 9 10 v1.1	DATE: MARCH 2019

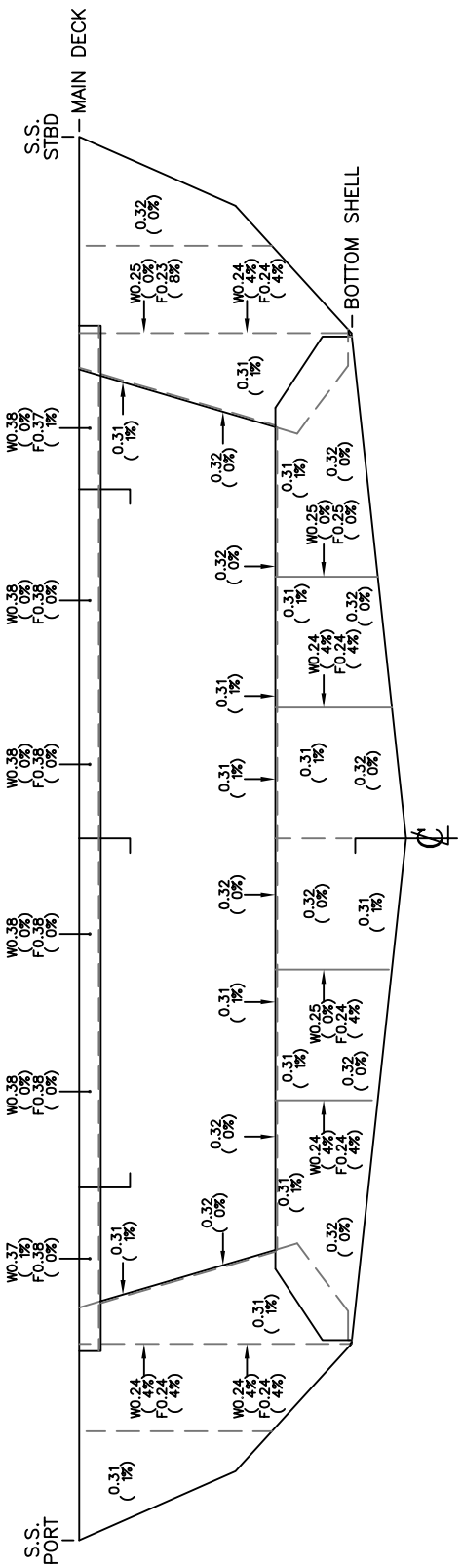




NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

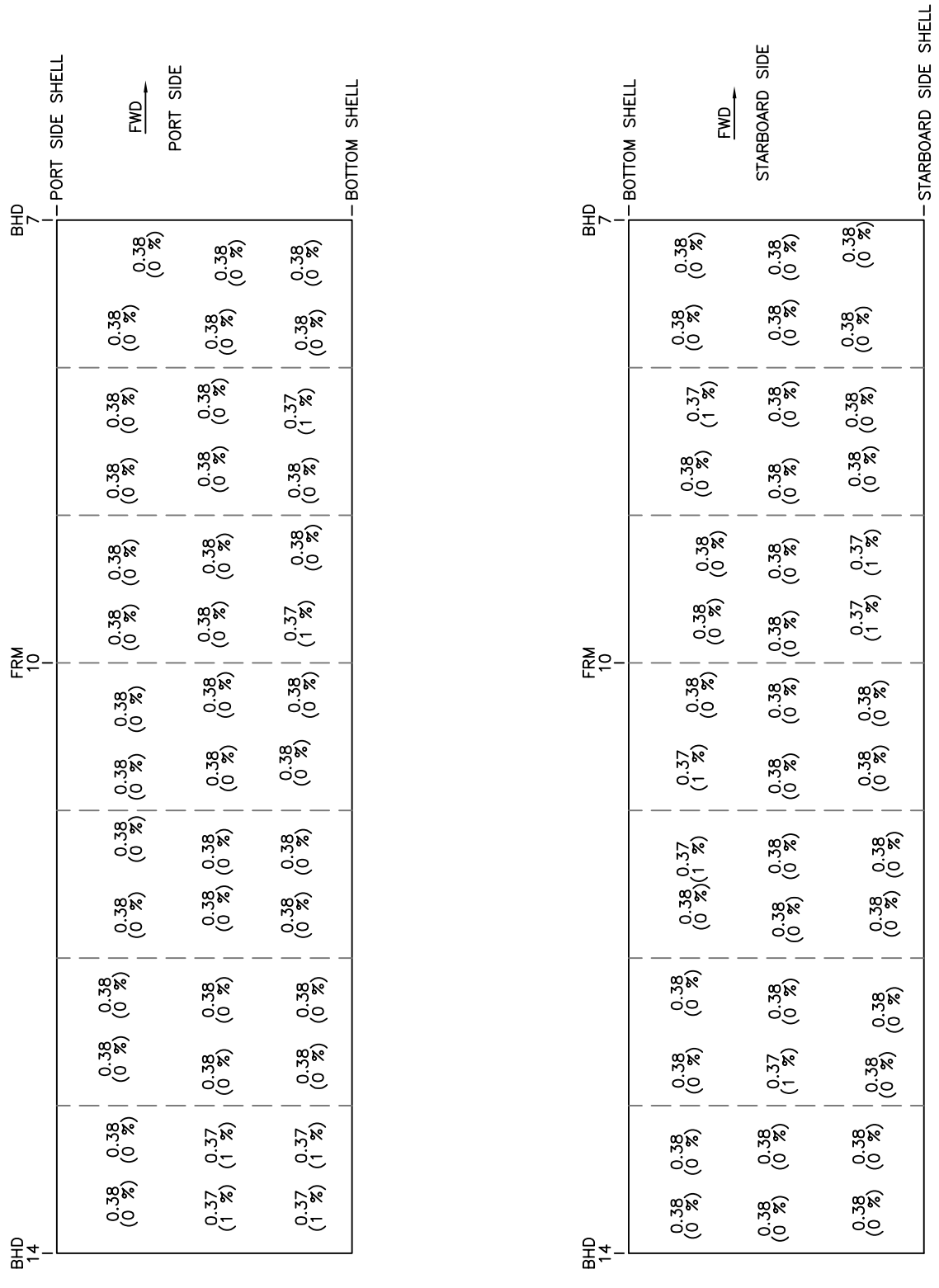
VESSEL: M/V GUEMES		DESCRIPTION: No.6 VOID - FRAME 11 & 12 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No6 FRM 11 12 v1.1	DATE: MARCH 2019



NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.6 VOID - FRAME 13 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No6 FRM 13 v1.1	DATE: MARCH 2019



NOTE:
NO ORIGINAL SCANTLINGS AVAILABLE AT TIME OF SURVEY.
NOMINAL THICKNESS MEASUREMENTS OBTAINED TO DETERMINE PERCENT WASTAGE.

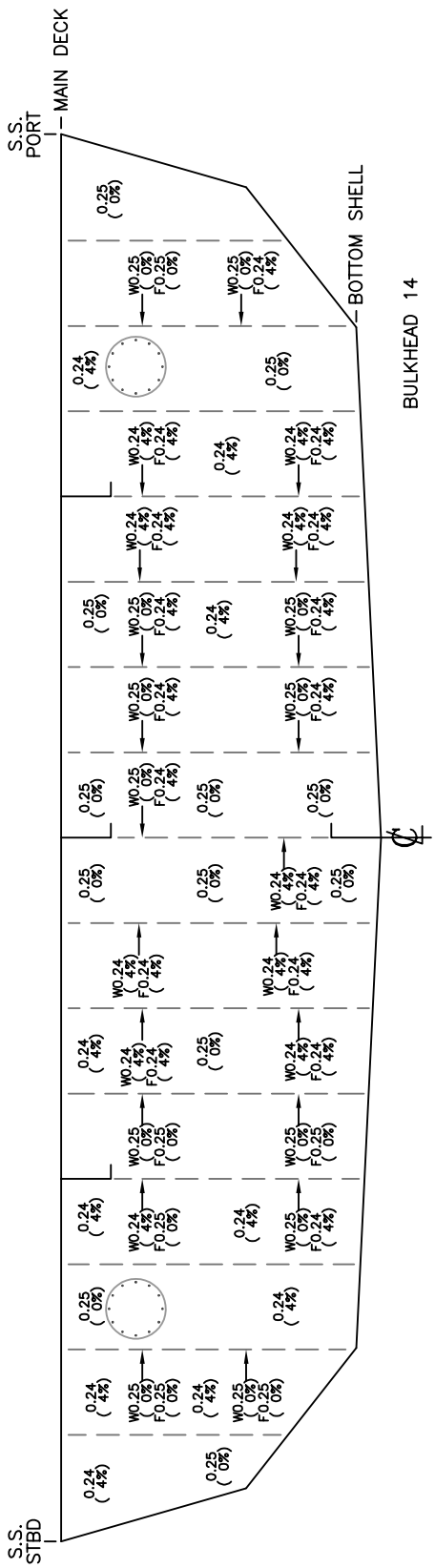
NOMINAL THICKNESS USED:
– TURN OF BILGE PLATING .375"

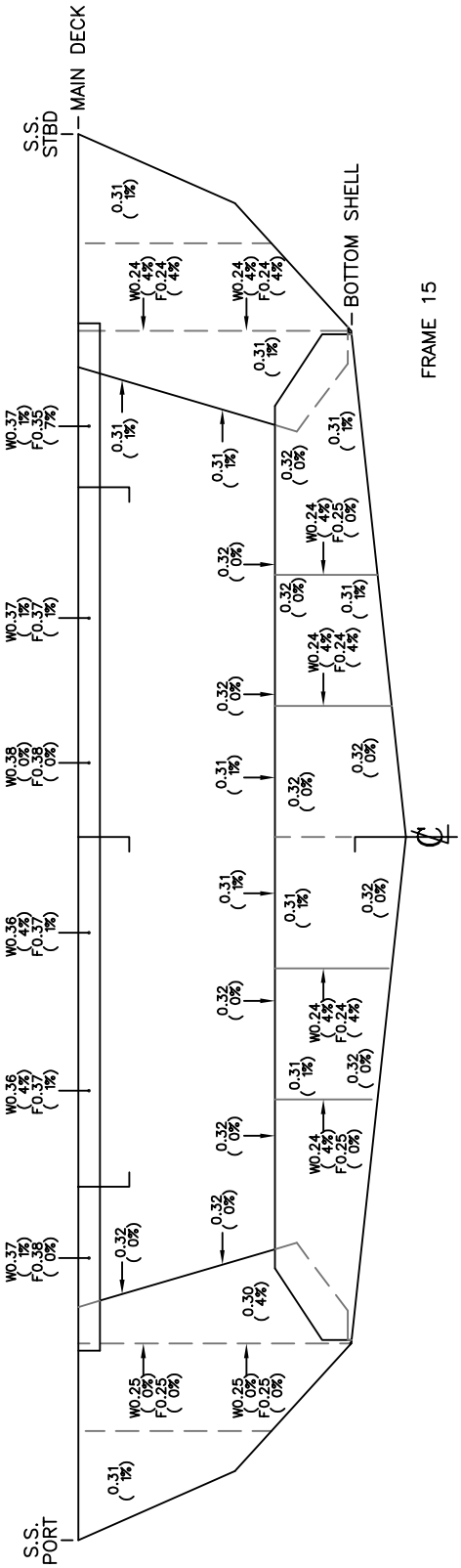
VESSEL: M/V GUEMES	No.6 VOID - PLATING IWO KEEL COOLERS
	DESCRIPTION: PLAN VIEW
DRAWN BY: G. GRAHAM	JOB # S3603
DWG # No6 VOID BTM PLT v1.1	DATE: MARCH 2019

INTERNATIONAL INSPECTION

Specialists in Nondestructive Examination

No.7 VOID INTERNALS

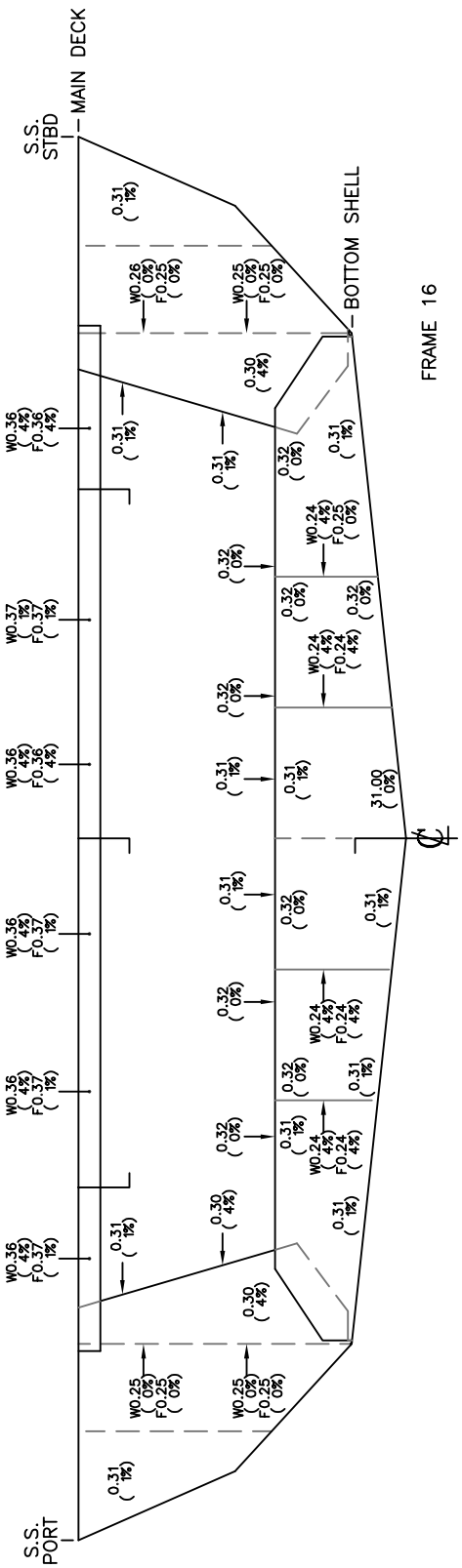


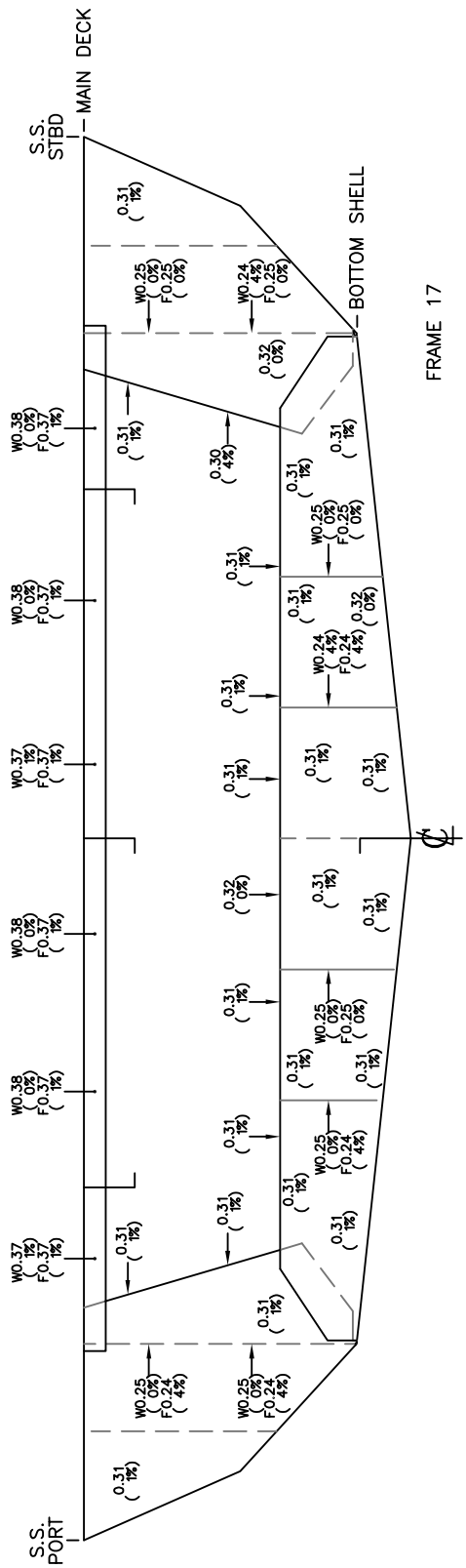


NOTE:
- BULKHEAD 14 PLATING .25".
- BULKHEAD 14 VERTICAL STIFFENERS L5" x 3" x .25".
- FRAME 15 TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- FRAME 15 SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- FRAME 15 SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- FRAME 15 TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- FRAME 15 TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES	DESCRIPTION: No.7 VOID - BULKHEAD 14 & FRAME 15 LOOKING FORWARD
DRAWN BY: G. GRAHAM / JOB # S3603	DWG # No7 FRM 14 15 v1.1 / DATE: MARCH 2019

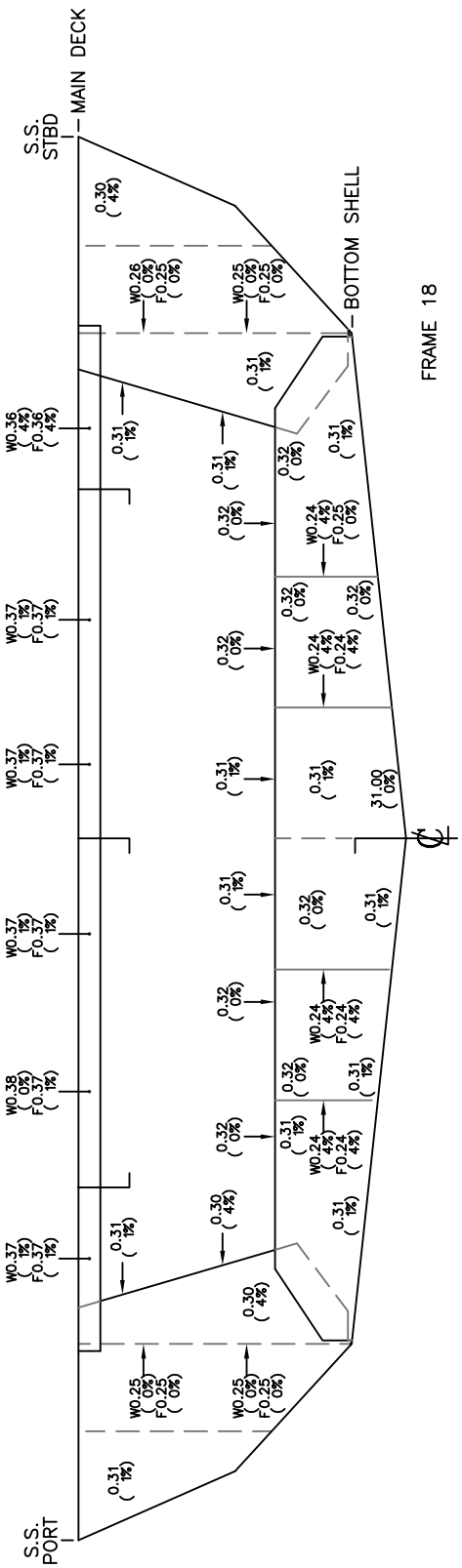


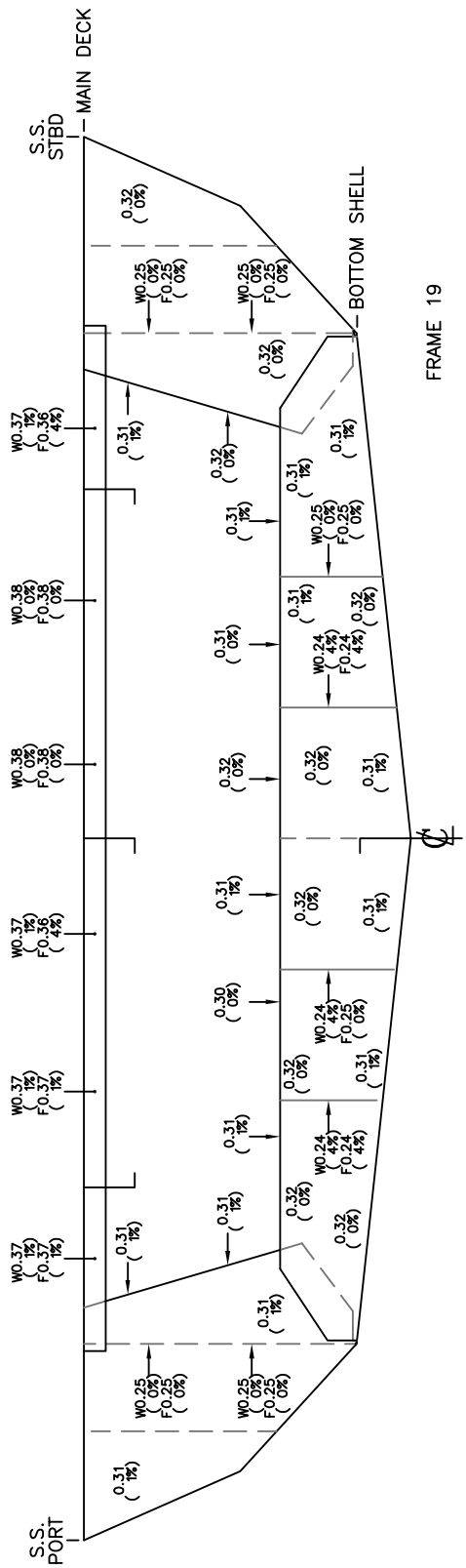


NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		No.7 VOID - FRAME 16 & 17 DESCRIPTION: LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No7 FRM 16 17 v1.1	DATE: MARCH 2019





NOTE:
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		No.7 VOID - FRAME 18 & 19 DESCRIPTION: LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No7 FRM 18 19 v1.1	DATE: MARCH 2019

NOTE:
CENTERLINE LONGITUDINAL GIRDER 14" x 4"FlgPlt x .375 UNLESS NOTED OTHERWISE.
6'-0" LONGITUDINAL GIRDER 14" x 4"FlgPlt x .375 UNLESS NOTED OTHERWISE.
W = WEB / F = FLANGE.

INTERNATIONAL INSPECTION, INC.

VESSEL: M/V GUEMES

DESCRIPTION: No.7 VOID - LONGITUDINAL GIRDERS
VIEWED AS NOTED

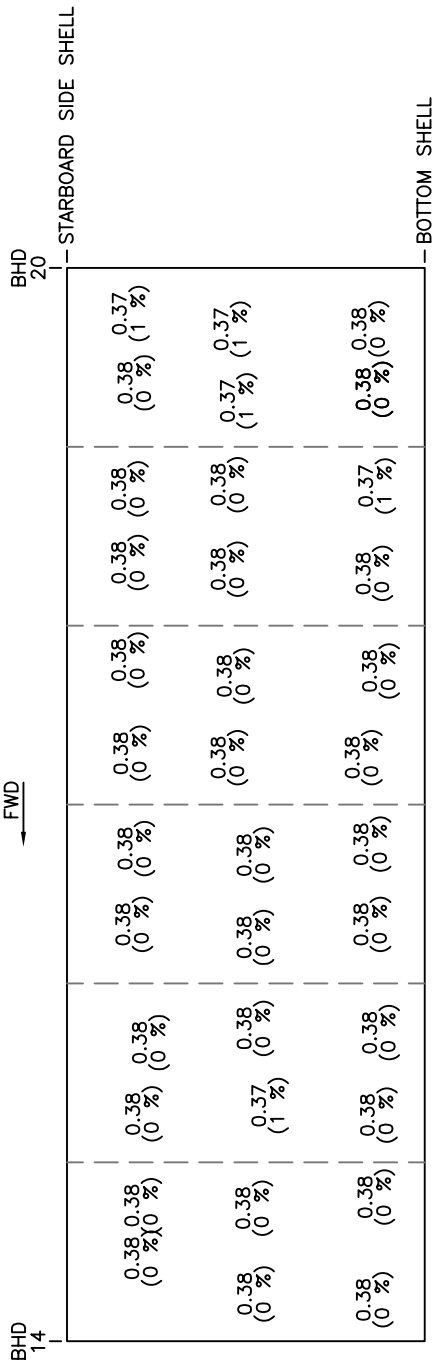
DRAWN BY: G. GRAHAM

JOB # S3603

DWG # No7 LGIR

v1.1

DATE: MARCH 2019



NOTE:
NO ORIGINAL SCANTLINGS AVAILABLE AT TIME OF SURVEY.
NOMINAL THICKNESS MEASUREMENTS OBTAINED TO DETERMINE PERCENT WASTAGE.

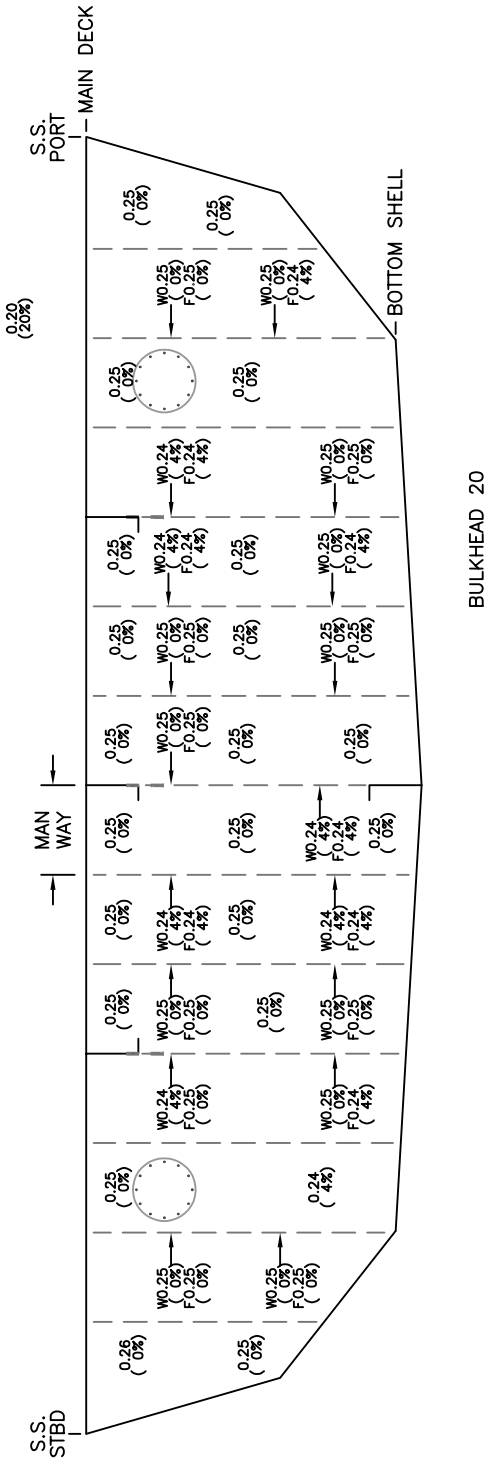
NOMINAL THICKNESS USED:
– TURN OF BILGE PLATING .375"

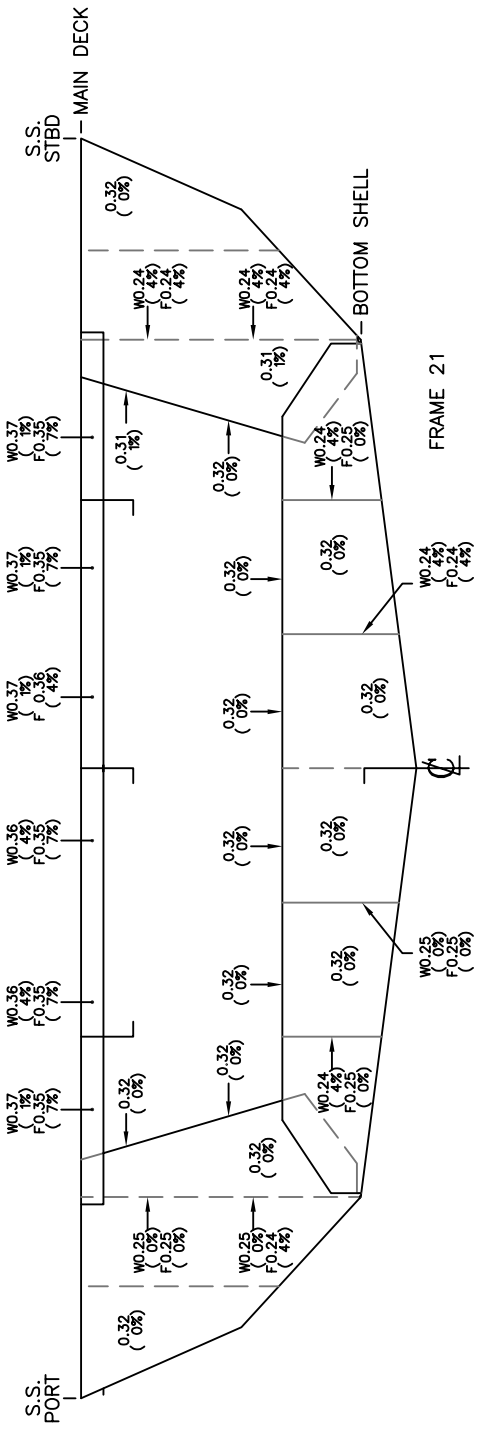
VESSEL: M/V GUEMES	DESCRIPTION: No.7 VOID - PLATING IWO KEEL COOLERS STARBOARD SIDE - PLAN VIEW
DRAWN BY: G. GRAHAM / JOB # S3603	DWG # No7 VOID BTM PLT v1.1 / DATE: MARCH 2019

INTERNATIONAL INSPECTION

Specialists in Nondestructive Examination

No.8 VOID INTERNALS

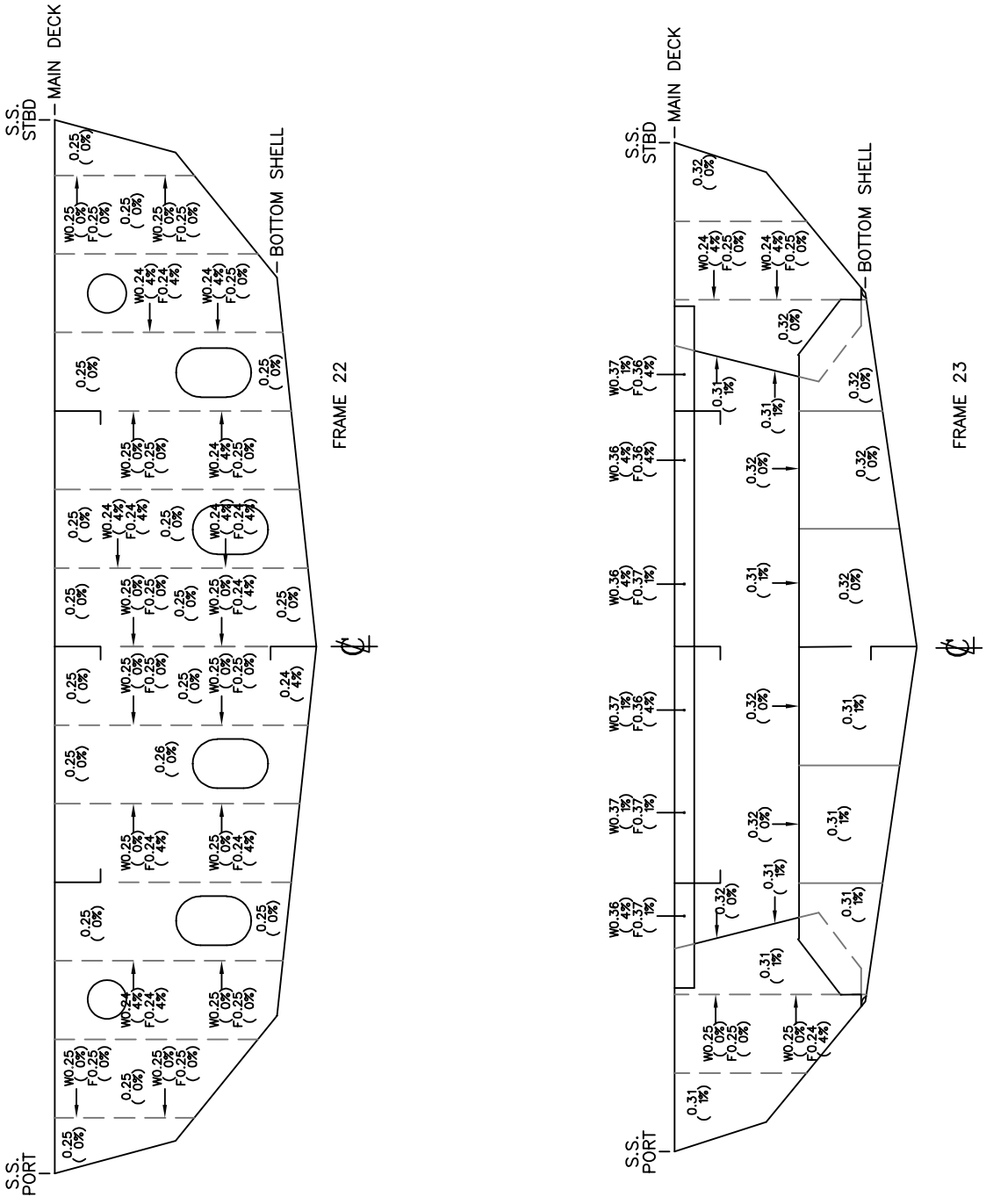




NOTE:
- BULKHEAD 20 PLATING .25".
- BULKHEAD 20 VERTICAL STIFFENERS L5" x 3" x .25".
- FRAME 21 TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- FRAME 21 SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- FRAME 21 SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- FRAME 21 TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- FRAME 21 TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

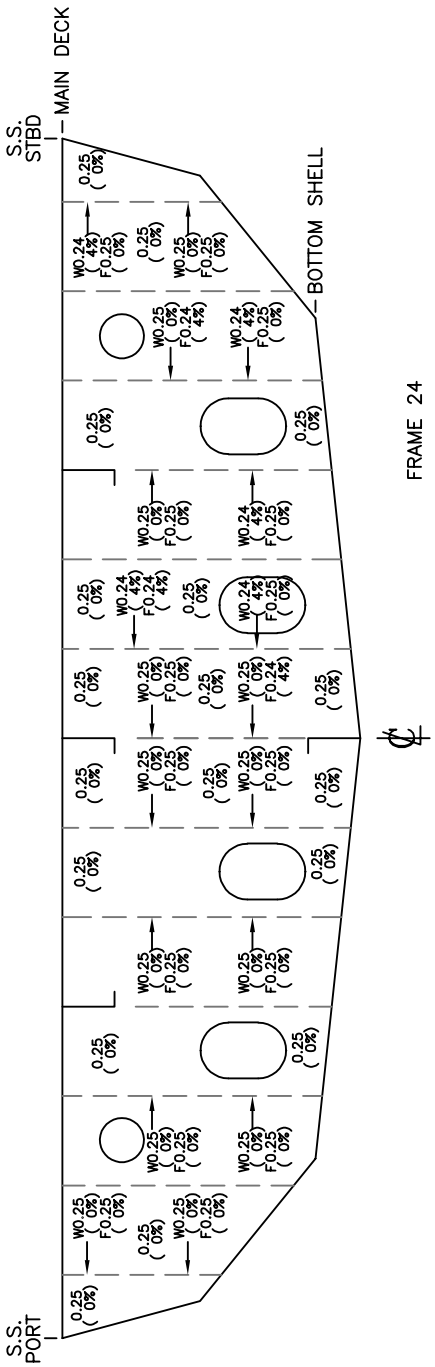
VESSEL: M/V GUEMES		DESCRIPTION: No.8 VOID - BULKHEAD 20 & FRAME 21 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No8 BHD 20 v1.1	DATE: MARCH 2019

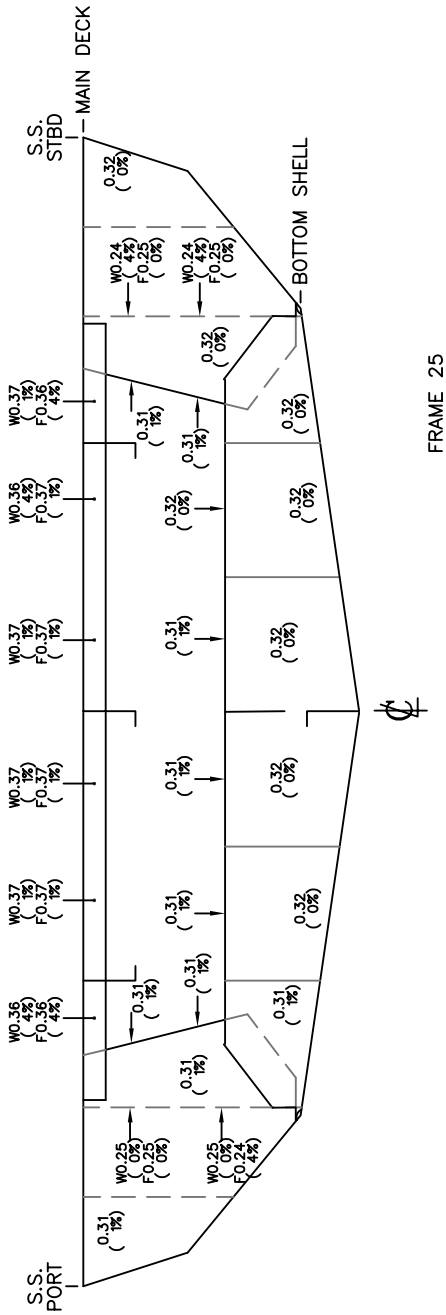


NOTE:
- SWASH FRAME PLATING .25"
- SWASH FRAME STIFFENING L3" x 2.5" x .25".
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.8 VOID - FRAMES 22 & 23 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No8 FRM 22 23 v1.1	DATE: MARCH 2019

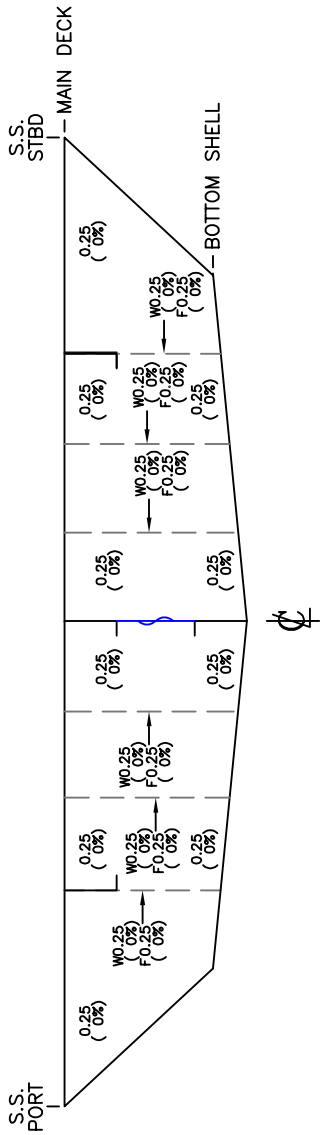




NOTE:
- SWASH FRAME PLATING .25"
- SWASH FRAME STIFFENING L3" x 2.5" x .25".
- TRANSVERSE UNDER DECK FRAME L6" x 3.5 x .375".
- SIDE SHELL FRAME .3125" PLATE W/ 4" FLANGE.
- SIDE SHELL FRAME STIFFENERS L3" x 2" x .25".
- TRANSVERSE BOTTOM FRAME 36" x 4"FlgPlt x .3125" C/F.
- TRANSVERSE BOTTOM FRAME STIFFENERS L3" x 2.5" x .25".

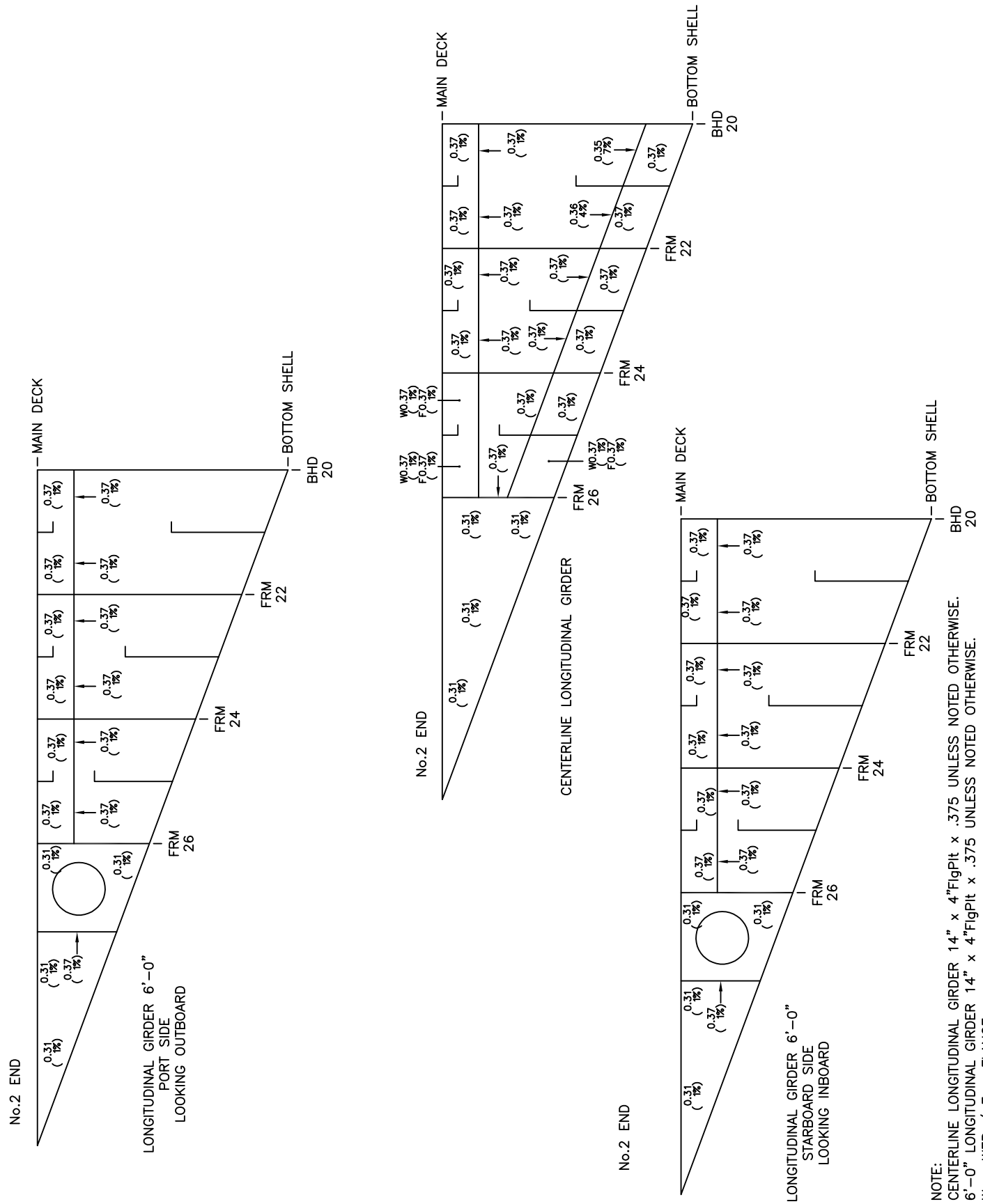
W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.8 VOID - FRAMES 24 & 25 LOOKING FORWARD	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No8 FRM 24 25 v1.1	DATE: MARCH 2019

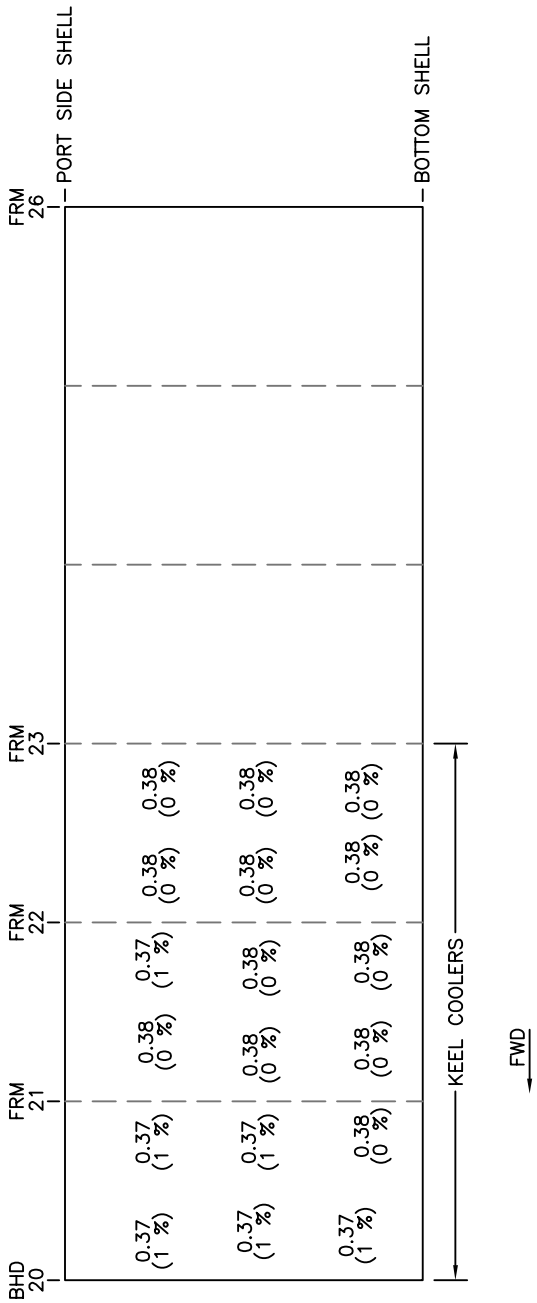


NOTE:
FRAME 26 PLATING .25".
FRAME 26 STIFFENING L3" x 2.5" x .25".
W = WEB / F = FLANGE.

VESSEL: M/V GUEMES		DESCRIPTION: No.8 VOID - FRAME 26 LOOKING AFT	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No8 FRM 26 v1.1	DATE: MARCH 2019



VESSEL: M/V GUEMES		DESCRIPTION: No.8 VOID - LONGITUDINAL GIRDERS VIEWED AS NOTED	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # No8 LGIR v1.1	DATE: MARCH 2019



NOTE:
NO ORIGINAL SCANTLINGS AVAILABLE AT TIME OF SURVEY.
NOMINAL THICKNESS MEASUREMENTS OBTAINED TO DETERMINE PERCENT WASTAGE.

NOMINAL THICKNESS USED:
– TURN OF BILGE PLATING .375"

VESSEL: M/V GUEMES	No.8 VOID - PLATING IWO KEEL COOLERS DESCRIPTION: PORT SIDE - PLAN VIEW
DRAWN BY: G. GRAHAM / JOB # S3603	DWG # No8 VOID BTM PLT v1.1 / DATE: MARCH 2019

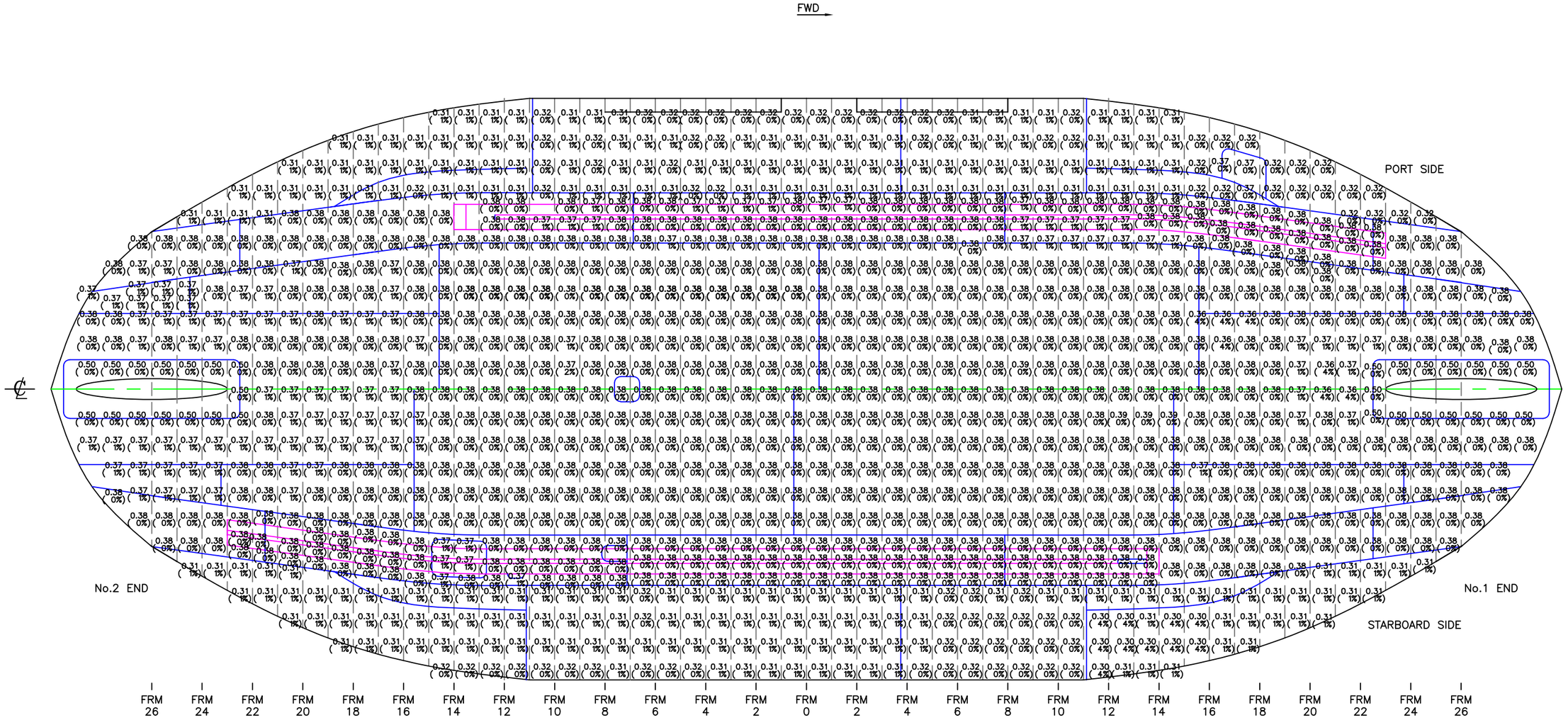
INTERNATIONAL INSPECTION

Specialists in Nondestructive Examination

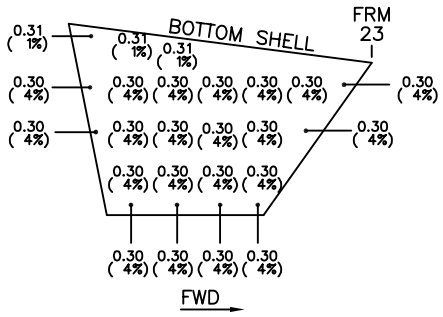
BOTTOM SHELL PLATING

&

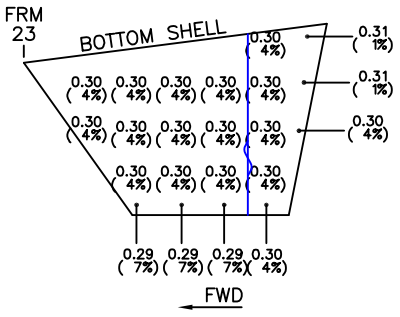
SKEGS



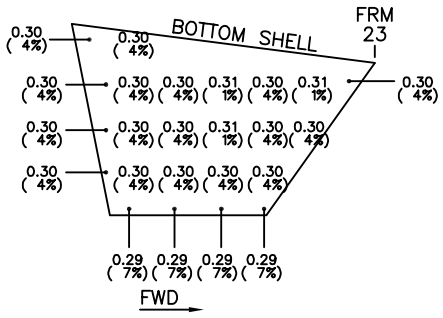
VESSEL: M/V GUEMES		DESCRIPTION: BOTTOM AND SIDE SHELL PLATING PLAN VIEW	
DRAWN BY: G. GRAHAM	JOB # S3603	DWG # HULL v1.1	DATE: MARCH 2019



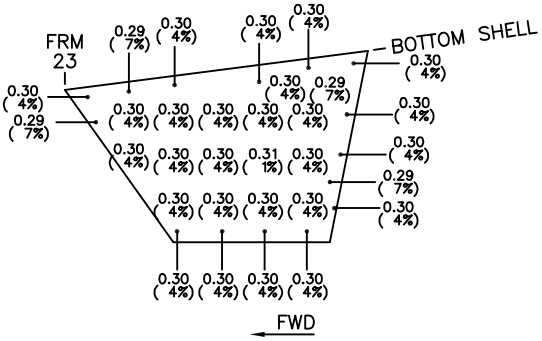
No1 END SKEG
STARBOARD SIDE
OOKING INBOARD



No1 END SKEG
PORT SIDE
OOKING INBOARD



No2 END SKEG
STARBOARD SIDE
OOKING INBOARD



No2 END SKEG
PORT SIDE
OOKING INBOARD

NOTE:
– SKEG .375" AS PER ORIGINAL SCANTLINGS.
ALL PREVIOUS REPORTS BY INTERNATIONAL INSPECTION SHOW INSTALLED PLATING WITH A NOMINAL THICKNESS OF .3125".
ALL UT MEASUREMENTS BASED OFF .3125" PLATING.

VESSEL: M/V GUEMES	DESCRIPTION: SKEG PLATING - No.1 END / No.2 END LOOKING INBOARD
DRAWN BY: G. GRAHAM	JOB # S3603
DWG # Skeg v1.1	DATE: MARCH 2019

Photo No. 1
No. 1 end looking aft port side

Photo No. 2
No. 1 end Z-drive Unit

Photo No. 3
Refurbished propeller

Photo No. 4
No. 2 end looking forward port side

Photo No. 5
No. 2 end looking forward starboard side

Photo No. 6
Interior void, representative sample of internal coatings

Photo No. 7
Interior void, representative sample of internal coatings

Photo No. 8
Main deck looking aft from No. 1 end

Photo No. 9
Main engine and compartment

Photo No. 10
Z-drive assembly, upper unit

Photo No. 11
Main deck apron showing new insert

Photo No. 12
Passenger Lounge

Photo No. 13
Pilothouse Control Console