

Contractor Business Meeting March 22, 2019

Mike Kehoe Plant Engineering

Agenda

- Introductions Mike Kehoe
- Opening Remarks Adam Zydron
- Value Stream Future Work Value Stream Managers
- Accounts Payable Invoicing Debbie Williams, Susan West
- Time and Material Ticket Process Yesika Kain
- FMEDs Yesika Kain
- Excavation Permit Process Aaron Romley
- Road Closure Maps Aaron Romley
- Safety Topics Ed Binder
- Procurement DBIA Libby Bethea
- Unplanned Event Crane Foul Chris Raha



Opening Remarks

Adam Zydron – Manager of Facilities Engineering

Phone: (757) 688-1015

Cell (757) 375-2940

Adam.R.Zydron@hii-nns.com



Curtis McTeer – Manager Supply Chain Procurement Phone: (757) 688.3664 <u>Curtis.McTeer@hii-nns.com</u>

VALUE STREAM MANAGERS

Ken Allmon – Waterfront Projects Davis Hill – VCS Block-V Program Support Ben Duman – JMAF Project Yesika Kain – Utilities Bill Boyd – Buildings & Grounds and Architectural Ed Delaney – Manufacturing and Shops



Waterfront Projects – (Estimated \$150 Million)

The Waterfront team provides NNS with facilities support necessary to operate, construct, and maintain the infrastructure to build the most advanced ships in the world. We deliver quality projects on schedule and on budget.

- FDD Overhauls every year
- Dry Dock Gate Overhauls
- FAF Refurbishments

5 Year Plan

- Port Security Barriers
- Readiness multiple every year
- Dredging every year

- Ocean Transport Barge Berths
- ISCVN Campus Improvements
- DD 12 Superflood Modifications
- Dry Dock Concrete Repairs
- Tug/Barge Repairs
- Fendering / Bulkhead Repairs

Contact Information

Ken Allmon, Manager

(757) 688.8793 Office (757) 869.3873 Cell Ken.Allmon@hii-nns.com





5 Year Plan

VCS Block-V Program Support – (Estimated \$225M)

Design and Construction of Facility Upgrades and Modifications in Support of Virginia Class Submarine Program Block-V Production, Primarily Driven by the Insertion of the Virginia Payload Module (VPM).

- Modular Outfitting Facility (MOF) Expansion
- MOF Bay 2 & 3 Services Additions
- Pier 6 Modifications and Tug Berth Relocation
- Temporary Pre-Commissioning Unit (PCU) Facility
- Construction Support Equipment (Strongbacks and Transfer System)
- Sub Module Travel Path and Transportation Related Projects
- Miscellaneous VCS Related Direct-Funded Projects

Contact Information

Davis Hill, Manager

(757) 534.2464 Office (757) 763.8173 Cell Jonathan.D.Hill@hii-nns.com

5 Year Plan

Joint Manufacturing and Assembly Facility (\$1B Investment)
 - \$500M Complete, Estimated \$500M To Go

Design and Construction of North Yard Expansion in Support of Multiple NNS Programs: Carrier New Construction (CVN), Virginia Class Submarine (VCS) including VPM, Columbia Class Submarine (CLB).

- CVN North Yard Weather Covers (complete 2016)
- CVN Unit Outfitting Hall (complete 2017)
- VCS Fixture Production Bay & APCO Fixture 1 (complete 2018)
- CLB Fixture Production Bays & APCO Fixture 2-3 (in progress, ECD 2020)
- VPM Rafted Module Facility (started, ECD 2020)
- CLB Ship Join Bay (near future, ECD 2022)
- 2 VCS + 1 CLB APCO Fixture 4 (future)
- 2 VCS + 1 CLB Stern Manufacturing Bay (future)
- 2 VCS + 1 CLB Ring Module Footprint (future)
- 2 VCS + 1 CLB Rafted Module Footprint (future)

Contact Information Benjamin Duman, Manager

(757) 534.1509 Office (757) 897.2654 Cell Benjamin.Duman@hii-nns.com

• Utilities Projects – (Estimated \$25 Million)

The Utilities Project Team is responsible for refurbishing, replacing, and upgrading all the yard's utility infrastructure. This includes power and piping distribution systems as well as gas farms and fuel stations. We provide an infrastructure that is safe and reliable in accordance with drawings, codes and specifications to provide the utility resources our trades need to build great ships.

- Power Distribution & Communications
 - Duct Banks
 - Manholes
 - Substations and Switchgear
 - Transformers
 - Emergency Generators: Diesel & Gas
 - AC and DC Cable Replacement
 - Fiber Horizontal Boring

- Piping Distribution
 - Water: Potable, Fire Protection, Demineralized.
 - Compressed Air: High & Low Pressure
 - Steam & Condensate: High & Low Pressure
 - Sewer and Storm Drains: Piping, Manholes, Lift Stations.

Contact Information

Yesika L. Kain, Manager

(757) 688.1105 Office

(757) 353.2772 Cell

Yesika.L.Kain@hii-nns.com

- Welding Gases & Mixes: Argon, CO2, Nitrogen.
- Flammable Gases: Oxygen, Propane, Natural Gas.
- Fuel Oil, Oily Waste, JP5.

- Plants, Gas Farms & Fuel Stations
 - Liquid Gas Tanks and Vaporizers
 - Gas Mixers
 - Diesel and Gasoline Tanks
 & Dispensers
 - Oily Waste Treatment
 - Pump Houses



STEAM. BO BUD BIN

5 Year Plan

Buildings & Grounds and Architectural Projects – (Estimated \$50 Million)

Buildings & Grounds and Architectural team plan, design and construct new, upgrades and renovations to NNS heavy industrial shops, platens, nuclear facilities and office buildings. These facilities support all major shipyard programs: CVN New Construction, CVN Overhaul, Submarine Construction and Fleet Support. We partner with our customers to provide optimal facilities that transforms ideas into reality.

- Roof & Rollup Door Replacements
- Building Demolitions and Disposal
- Fire Protection Upgrades
- Ship Staging and Fixtures
- Parking Lot, Roads and Railroad
- HVAC System Replacements

- Personnel Relocations
- Quality of Life Projects
- Office Re-configurations
- Trailer/Conex Box Leases
- Furniture Procurement
- Special Projects–HII Health Ctr

Contact Information

Bill Boyd, Manager (757) 688.9985 Office (757) 810.9581 Cell William.Boyd@hii-nns.com PLANT ENGINEERING



5 Year Plan

• Manufacturing & Shops– (Estimated \$274M)

Suitability, design, procurement and installation of Manufacturing Equipment and Facilities in support of Component Fabrication and Assembly and Structural Fabrication and Assembly. (we support the pieces-part makers)

- Installation and testing of SAM's 1, 2 & 3
- Machine tool manufacturing installations (7 now, 14 more next 5)
- Component transportation equipment
- Annual SFA upgrades (robots, panel lines, profile lines)
- Fab equipment to support program changes (burning, bending)
- New specialty Structural fabrication equipment (CLB new parts)
- Foundry upgrades to meet changing customer requirements
- Miscellaneous metrology, laboratory, & testing equipment

Contact Information

Ed Delaney - Manager

(757) 688.9227 Office (757) 771.8115 Cell Edmund.P.Delaney@hii-

nns.com

Mail invoices to: invoices@hii-nns.com

- The remit address should be clearly identified on the invoice.
- Invoices must be submitted as an Adobe PDF. Each PDF should contain one (1) invoice and its corresponding backup documents.
- Ensure all documents are submitted with the invoice (i.e. travel receipts, waivers, insurance papers, T&M Sheets, etc.)
- Invoices containing freight charges of \$200 or more will need to also include the freight bill from the carrier.
- Non-purchase order invoices must list the email address of their NNS point of contact.



Invoice Criteria

Accounts Payable will validate each invoice to ensure:

- The ten-digit purchase order number is clearly identified on the invoice (if applicable). There should be no additional characters included within the PO number; a space or break is required.
- Quantity and pricing matches what is on the purchase order.
- All line items and line amounts are clearly identified on the invoice and correspond with the PO.
- The unit of measure on the invoice MUST be the same as displayed on the purchase order.
- Must have a unique invoice number.
- Must have an invoice date.

Invoices that do not meet the above criteria above will be returned "<u>unpaid</u>" to the contractor/vendor until they are correctly submitted.



NN9628 Contractor DAILY T&M (Current REV Available on NNS Supplier Site)

Tickets & invoice support that do not meet these requirements will be REJECTED & Returned to Vendor.

CONSTRUCTION SERVICES TI Newport News Shipbuilding				lustries		Proje	ct Title	Contractor C	oordinator Exam	ple	
	(,				HALL BE COMPLE	TED AND SUBMI	TTED TO NNS DA	ILY			
Purchase Order #	4500430053		Item #	0001		presentative	Engineer/Field		Date	March 22, 2019	
Supplier Job ID	,			p	Notification		Work Order		Sheet #	Sheet 1, 2, 3, etc	
Supplier Name:						L	Details Details				_
Supplier Address:					Work De	scription:		Dotalio			
Supplier Phone:					1		L				
LABOR				Standa	ard Time	Ove	rtime	Dout	ole Time		ı
Employee		Labor C	ategory	Hours	Rate	Hours	Rate	Hours	Rate	Total	
employee				, iours	1		7			\$0.00	
										\$0.00	
					MUST match	those				\$0.00	
					listed in the (\$0.00	
					Agreement te					\$0.00	
					Year					\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
	I			•	1		I	I	Subtotal	\$0.00	\$0.00
							Small To	ools Mark-up (%			\$0.00
									Total Labor	\$0.00	\$0.00
		11-			-1		-1.1.			7	<i>+</i>
OWNED EQUIPMENT			urly		aily		ekly		onthly	Total	
Equipment	-	Hours	Rate	Days	Rate	Weeks	Rate	Months	Rate	40.00	
					<u> </u>					\$0.00	
					MUST match	those				\$0.00	
					listed in the 0					\$0.00	
					Agreement te					\$0.00	
					Year					\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	4 4
									Subtotal	\$0.00	\$0.00
								Mark-up (%			\$0.00
								Total C	Owned Equipment	\$0.00	\$0.00

NN9628 Contractor DAILY T&M Cont'd (Current REV Available on NNS Supplier Site)

Tickets & invoice support that do not meet these requirements will be REJECTED & Returned to Vendor.

SUBCONTRA										
	Supplier	Description	Invoice No.	Subtotal	Mark-up (%)	Mark-up (\$)	Taxes	Freight	Total	
									\$0.00	
		MUST have							\$0.00	
		BACKUP							\$0.00	
		documentation							\$0.00	
		included to support charges.							\$0.00	\$0.00
		onarges.							\$0.00	\$0.00
							Tota	al Subcontractors	\$0.00	\$0.00
RENTAL EQU	JIPMENT ~									
	Supplier	Description	Invoice No.	Subtotal	Mark-up (%)	Mark-up (\$)	Taxes	Freight	Total	
		MUST have		K	K	T	7	7	\$0.00	
		BACKUP			Taxes & Frei	ght charges	/		\$0.00	
		documentation			are NOT sub	ject to			\$0.00	
		included to support			"Mark-up" & t				\$0.00	
		charges.			must be brok				\$0.00	\$0.00
					separately in	om Subtotals			\$0.00	\$0.00
							Total R	ental Equipment	\$0.00	\$0.00
MATERIAL -	PURCHASED (Invoice Req	uired)		K	1	/	- E	~		
	Supplier	▲ Description	Invoice No.	Subtotal	Handling Fee (%)	Handling Fee (\$)	Taxes	Freight	Total	
		MUST have							\$0.00	
		BACKUP							\$0.00	
		documentation							\$0.00	
		included to support							\$0.00	
		charges.							\$0.00	
									\$0.00	
MATERIAL -	FIXED PRICE (Per Purchas	e Order / Outline Agreeme	nt)				•	11		
Quantity	Unit	Description	Unit Price	Subtotal	Handling Fee (%)	Handling Fee (\$)	Taxes	Freight	Total	
		MUST match those							\$0.00	
		listed in the PO or							\$0.00	
		Outline Agreement							\$0.00	
		terms & Year							\$0.00	
									\$0.00	\$0.00
									\$0.00	\$0.00
					Inventor	y and Purchased	l Materials Cost P	lus Handling Fee	\$0.00	\$0.00
							Previous Total	MUST Ca		> \$0.00
Supplier App	proval				DATE:		Daily Total		S TOTALS for ets charged	→ \$0.00
(Ticket not Valid	Unless Signed)	BOTH MUST B			DATE.		New Total	against t	his PO Line Item 🖥	→ \$0.00
NNS Buver's	Representative;		ESIGNED				PO Amount		hat you do not PO Line Item	\$0.00
	Unless Signed)			_	DATE:		PO Amount Ren		FO Line item	> \$0.00
							r o Amount Ren	Mining L		- 90.00

HUNTINGTON INGALLS INDUSTRIES PRIVATE/PROPRIETARY LEVEL I

NN9629 Engineering WEEKLY T&M (Current REV Available on NNS Supplier Site)

Tickets & invoice support that do not meet these requirements will be REJECTED & Returned to Vendor.

PLEASE NOTE: MOST of the sections & notes previously for the "Daily" are the same for the "Weekly", however, there are a few unique differences notated below:

15

	AND MATERIAL WEEKLY TICKET NS) - A Division of Huntington Ingalls Indu	istries		Project Title					
			ALL BE COMPLETED AND	SUBMITTED TO NNS WEEKLY	·				
Purchase Order #		Item #	Buyer's Rep		Tim	e Period	3/18/2019	-	3/24/2019
Supplier Job ID			Notification	Work Order		Sheet #			
Supplier Name:					· · · ·				
Supplier Address:									
Supplier Phone:									
Daily Work Description:	Monday, March 18, 2019	DAILY DETAILS]						
	Tuesday, March 19, 2019								
	Wednesday, March 20, 2019								
	Thursday, March 21, 2019								
	Friday, March 22, 2019								
	Saturday, March 23, 2019								
	Sunday, March 24, 2019								
LODGING & MEALS - Per	GSA Rates (invoice or receipt must	t be attached to this s	sheet)					Т	
	Description		Date (s)	GSA Allowab	e Rate Actu	al Cost	Taxes	1	
has eliminated the "	PREV 2 is the correct form to Mark-up" section for Lodging openses are not allowed.	be using & & Meals as		Terms per GS/ **BACKUP RE	O / Outline Agreer A Allowable Rates CEIPTS MUST be support charges.				
						Total	Lodging & Mea	ls	

Pipe Cleanliness Requirements

- Trades and NNS-hired contractors are required to use foreign material exclusion devices (FMEDs) while performing all Facilities utility piping system maintenance, repair, and new construction activities.
- Use of FMEDs is critical in preventing infiltration of dirt, ground water, metal shavings, or any other unwanted contamination into piping system components.
- Contamination of piping systems can result in failure of NNS tools, equipment, shipboard temporary systems, etc. and can negatively impact NNS quality of work.
- All material has to arrive with installed FMEDs.
- Contractor is responsible for performing end of shift inspection to ensure that FMEDs are properly installed.

Recent Incidents

- Piping and components have been found on several job sites with no FMEDs installed.
- Open piping systems were left unattended in water filled excavation sites.
- Failure to use FMEDs allowed the pipe to be contaminated and resulted in significant rework.

Approved FMEDs must be installed prior to leaving the job site. For open piping below grade, a water-tight FMED shall be used.



Approved FMED's

Approved FMEDs are as follows:

- Aluminum or plastic caps or plugs (preferred)
- Aluminum disks secured with tape
- Blind flanges
- Threaded pipe plug or cap
- Blue duct tape (1-1/2" diameter or less pipe only)

FMEDs Approved for all Systems <u>EXCEPT 600 lb steam and condensate</u>:

- Wooden Plugs
- Plastic bags secured with tape
- Expandable test plugs equipped with anchor cable
- Inflatable bladder plug
- Other device approved by the cognizant O46 system engineer

Particleboard, cardboard, or other similar materials that will flake, crumble, or degrade when exposed to moisture shall not be used as an FMED. The use of yellow protection devices is also prohibited.



Common Examples of Approved FMED's

Plastic Pipe Caps or Plugs (Preferred)



Water-tight FMEDs (Below Grade Installations)



Metal Disc and Tape



Blue Tape (1-1/2" Pipe and Smaller Only)









Permitting	Process:	Completing	g NNS B	Excavation	Permit	Request
reinnung	FIOLESS.	completing		LACAVALIOII	I CI IIIIL	nequest

Manual New Distancial FACILITIES EXCAVATION PERMIT FORM

Instructions: Instructions: This form must be valid, and posted at the work site for the entire duration of the described Excavation Operations: The Requestor/Project Coordinator must renew the Excavation permit every 35 calendar days, and not allow any time to lapse between permits. Note: The Requestor is Responsible for managing and maintaining the permit during the entire duration of the project.

All known utilities must be identified, marked, and if saw cutting into concrete per procedure F-1004.1 you must have the site GPR'd before any digging is too began. Even with these precautions, it is understood that care should be taken during all excavations due to the possibility of unidentified utilities, foundations, insulated structures, etc. that may be unidentified.

If any unidentified utilities, insulation or other unexpected materials are encountered contact the Requestor/Project Coordinator or the service desk prior to further excavation. Before backfilling the Excavation site, Per Procedure F-1004 the Excavation site is to be surveyed by O46 Facilities GIMMS team or designee.

Scheduling: Once the permit is submitted it will be valid for 35 calendar days only, please allow 3 working days for permit process and utility approval. If the project does not get backfilled or completed within the 35 calendar days you must submit your permit for renewal.

ATTENTION: If you can see this message, then this Excavation Permit Form is NOT VALID. A valid permit form will have all signatures electronically completed and a watermark image will appear at the bottom of the form.

		ermit is submitted it will be valid for pleted within the 35 calendar days		ase allow 3 working days for permit process and utility approval. If the project does mit for renewal.
Type of Permit:	ATTENTION: If you	can see this message, then this Exca	vation Permit Form is NOT	VALID. A valid permit form will have all signatures electronically completed and a
Order Number: *		w	atermark image will appear	r at the bottom of the form.
Location of Excavation Worksite:				
Type of work being performed:			DESCRI	
Location of Excavation Permit	OT BTOD FOOTT FOR WAR		(COMPLETED B)	Y REQUESTOR)
Permit Point of Contact:	Bomley, Aaron R.*			
POC Phone Number: *	757-688-7209			
Submitted on Behalf Of:	Enter a name or email add	ress		
Created Date:	1/10/2019			
Expiration Date:	2/14/2019			
Request Date:	1/10/2019			
Need by Date:	1/10/2019			
	UTILITY	SURVEY APPROVAL		
A Shee briefs of the static large	PPROVAL SIGNATURE/EMAIL	ACKNOWLEDGES SIGNATURE OF	DATE	-
Tateghiore				
Rail Con Dept.				
Envelopmentation	1			
Safety				
Piping/Waterlander				
Perada and Grounds				



Permitting Process: Completing NNS Excavation Permit Request

	UTILIT	Y SURVEY APPROVAL		
UTILITY	APPROVAL SIGNATURE/EMAIL	ACKNOWLEDGES SIGNATURE OF	DATE	
indrical/Dectriciane	Bamby, Aatao, B. *	Enter a name or annual address	1/10/2010	. m
Talaphona	Bamina Aaron B. *	Les Telecom	1/10/2018	1 00
Rad Con Dept.	= noming_haron.h.+	Enter a name or annal address	010/2010	123
Environmental	Bomley, Aaron B. *	Enter a marine or artical adultanta	1/10/2010	
Safety	a fombla, Aaron 3. *	Frotes a same or emild address-	1/10/2019) 🗆
iping/Watertender	Boming_Aaton R. *	Enter a name or anal address	1/10/2019	1
loads and tinounds	The Market weather when the			
	and, will need WACO.	CIAL PRECAUTIONS	to the permit boundary line t	
ecensary papersork ft	SPE and, will reed WACO. • But the underground utilities have been identified in the permit as well as approval signatures, email	CIAL PRECAUTIONS	th the permit boundary line b	
grong below I confirm ecensary papersecrit fi Excess	SPE and, will receil WACO. • But the underground ablides have been identif • the permit as well as approval signaturestored effect Permit Responstor Approval Signatures	CIAL PRECAUTIONS	th the permit boundary line (wit Peeted On Eite	
grong below I confirm ecessary papersonk fi Excave	SPE and, will receil WACO. • But the underground utilities have been identify in the permit so well as approval signatures, and effect Permit Responstor Approval Signatures,	CIAL PRECAUTIONS led and marked, and in some cases OPEO along at is and Ohmit's map have been posted at job site.	th the permit boundary line (wit Peeted On Eite	



The expiration date of the excavation permit is 35 calendar days from the REQUEST date.

A valid excavation permit is required up until backfilling.







GIMMS Map

Site Map



Excavation

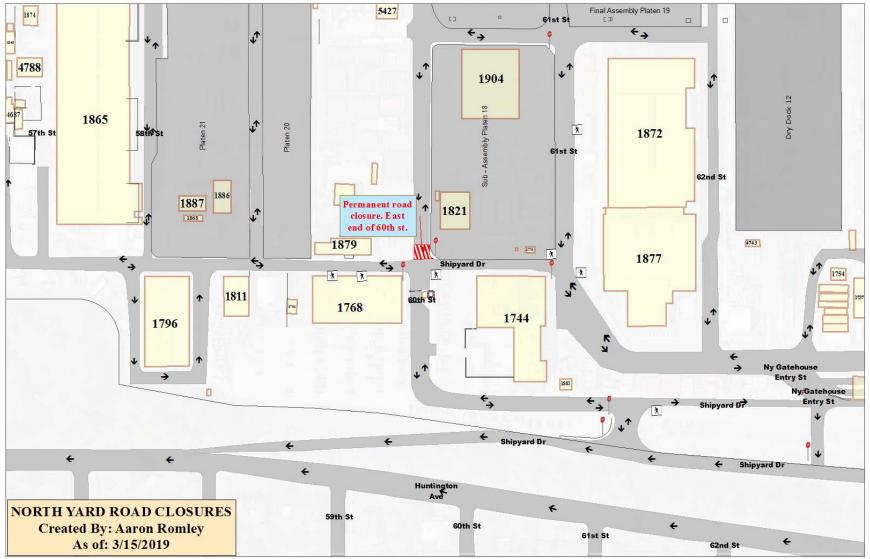
- Excavation Contractor Foreman is responsible for supervising & supporting excavation (dig) projects & will implement these tasks:
 - Understand NNS Excavation Permit and VA811 Permit requirements and determine appropriate permit(s) required for excavation.
 - Work with Excavation Permit Inspector, as required, to address any issues with excavation procedure non-compliance.
 - Inspect the excavation site, determine and mark digging boundaries with a white solid boundary.
 - Ensures a VA811 Permit(s) have been requested if required.
 - If one is required, the permit # will be required to complete the NNS excavation permit.
 - Ensures excavation site has been GPR'd if saw cutting concrete (required) and information communicated from GPR crew to Excavation crew. GPR is highly recommended on excavation jobs that will involve saw cutting other materials.
 - Please verify the GPR requirements in your Purchase Order.
 - Ensures all information from GPR, markings, NNS personnel system knowledge, updated drawings, GIMMS Map, and site sketch for underground utilities location and depth have been communicated from Project Coordinator to site crew.
 - Before excavation (digging), ensures personnel involved with the excavation are aware of all safety
 precautions (including contaminated soil removal) <u>by conducting pre-dig and safety briefing</u> and ensures
 workers/excavation crew acceptance by signing excavation permit. Pre-dig brief will include the
 following:
 - Job description, review of ground markings, GPR findings, NNS personnel system knowledge, updated drawings, GIMMS Map, and site sketch for underground utilities location and depth.
 - Compare GIMMS map, Site Utility Sketch, & Ground Utility Markings to ensure field conditions match excavation permit documents.
 - Any unknown fill areas.
 - Soil storage, dewatering, shoring (if required).
 - Safety precautions.
 - Any Environmental Engineering concerns and any other special instructions.

Excavation Cont'd

- Excavation Contractor Foreman's responsibilities continued:
 - Monitors excavation (digging) process.
 - Before backfill, ensures underground utilities have been surveyed by NNS personnel or survey contractor.
 - Ensures the Excavation Site is properly backfilled.
 - Ensures that the markings remain visible at all times during the life of the excavation.
 - Stops all work & notifies Project Coordinator or Field Engineer when unidentified utility lines are discovered during excavations.
 - Performs proper Emergency Protocol in the event a utility line is damaged.
 - Stops all work & take immediate action to safeguard life, health, & property.
 - Immediately call the communication center at 757-380-2222 & report the emergency.
 - Immediately followed by calling the project coordinator or field engineer.



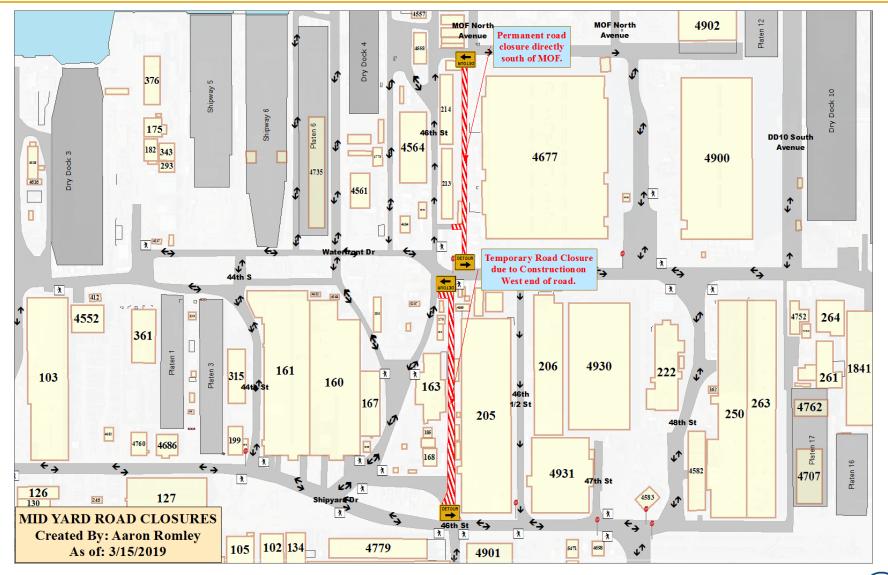
Road Closures – North Yard





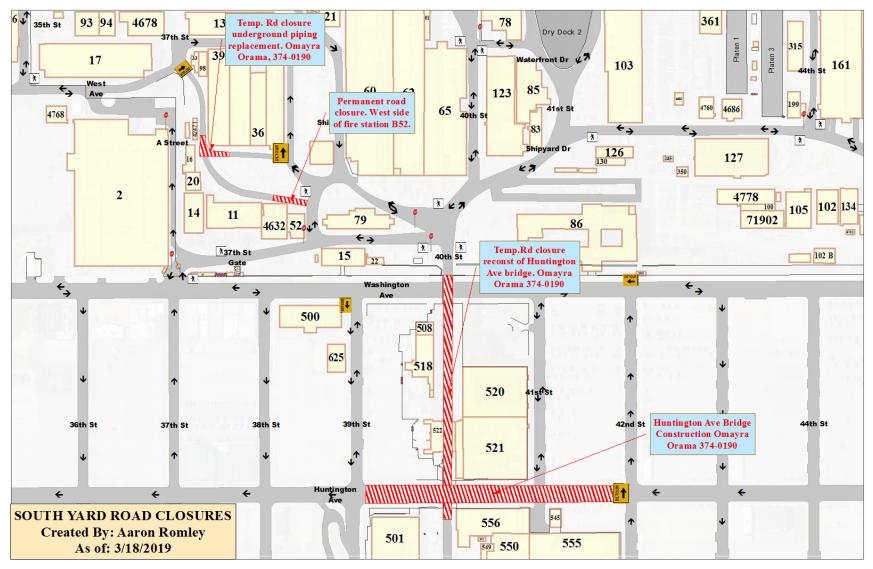
26

Road Closures – Mid Yard





Road Closures – South Yard





TWO PORTABLE GUARDRAIL SYSTEMS

OSHA Compliant w/ Flat Base Plates

OSHA Compliant w/ "Round" Baseplates







Portable Non-Intrusive Fall Protection Anchors

5,000 Lb. OSHA Compliant Anchor



Non-Destructive, Portable, Worker-Friendly, OSHA Compliant





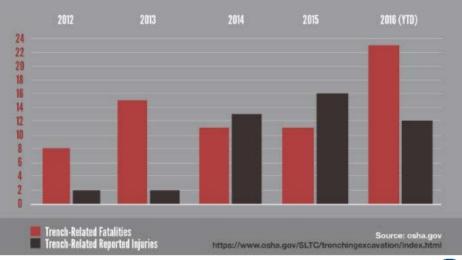
Trench Associated Fatalities

Trench Shielding Works



Why are Trench Deaths Rising?

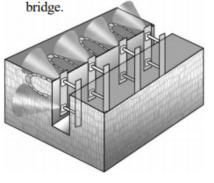
TRENCHING INJURIES & DEATHS

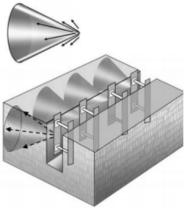




Hydraulic Shoring Installation

That's the other interesting aspect of soil arching. When the cylinders compress the soil, they create 360 degree compression cones in the walls that link up to create what appears to be a structure much like an arched





When a load is imposed on an arch, the arch transfers the load to the legs. The compression cones likewise transfers the load of the wall to the cylinders. It is on the cylinders, not in the gaps between them, that the load rests.

https://www.osha.gov/sites/default/files/2018-12/excavation_safety_manual.pdf

HUNTINGTON INGALLS INDUSTRIES PRIVATE/PROPRIETARY LEVEL I

Installation Instructions

4'-0" MAX

Vertical Hydraulic Shore 18" MAX per OSHA chart 24" MAX per manufacturer's data Vertical Rail 4'-0" MAX

Hydraulic

Cylinder

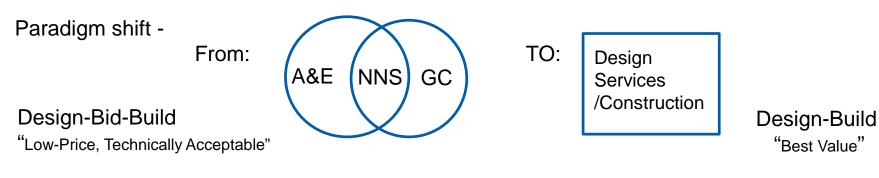
FOLLOW YOUR SAFETY PLAN

- Review your safety plan
- Know your safety plan
- Follow your safety plan
- Take your daily pre-task plan seriously
- Look forward to your healthy retirement



Project Delivery

• Focus on project goals, challenges, and constraints to determine project delivery method



Maximize the budget in design-build competitive procurements:

- Disclose budget
- Offerors required to design & construct project within the funding limitations

Contract award for the Best Solution, not the cheapest low bid meeting minimum requirements

"Successful Projects That Meet The Expectations of All Stakeholders, Within Budget"



Unplanned Event – Crane Foul

- Scope of work involved expanding the sprinkler system in B4777.
- O41 reviewed sprinkler shop drawings with Contractor representatives on-site generating a 'field mark-up' of the Shop Drawings
- O41 directed the Contractor to proceed with the installation based on the 'field mark-up'. (A common method within the construction industry).
- The Contractor installed the vertical sprinkler piping within the Crane travel path based on an unapproved, incorrect set of Shop Drawings that did not incorporate the 'field mark-ups'. This created the FOUL.
- The FOUL was discovered during O48 Crane Certification resulting in crane being tagged out.
- O41 Contractor Coordinator did not confirm the version of sprinkler shop drawings being used.
- Resulted in resubmittal of Shop Drawings and removal/replacement of the vertical sprinkler piping.

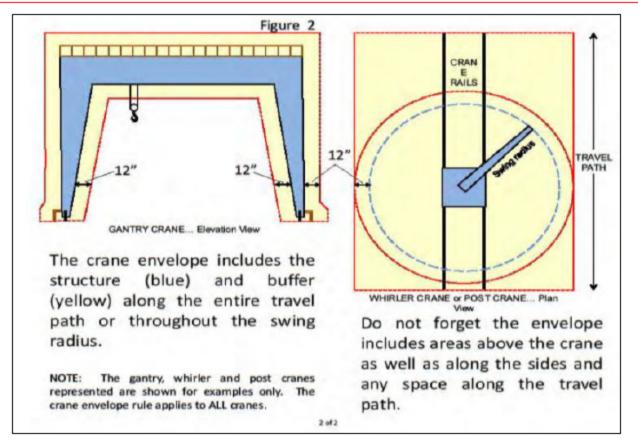




Unplanned Event – Crane Foul

Understanding the Crane Envelope

Below are diagrams to help understand the extents of a crane envelope. It is important to consider the entire travel path when determining the crane envelope. One should also consider that the crane dimensions may differ at various elevations. For example, a gantry crane leg may be tapered, becoming wider as elevation increases or vice versa. The below sketches are for example only, and envelope characteristics will differ for every crane.



'Figure 2' from NNS SOP O40-2.3 (Facilities and Waterfront Support Project Design Process)

HUNTINGTON INGALLS INDUSTRIES PRIVATE/PROPRIETARY LEVEL I





• If you have questions regarding this presentation, please contact your Contract Coordinator or:

Mike Kehoe

O41 – Plant Engineering

757-534-3241

Michael.T.Kehoe@hii-nns.com





Newport News Shipbuilding

A Division of Huntington Ingalls Industries