Agenda

- Introductions – Mike Kehoe
- Opening Remarks – Adam Zydron
- Safety Topics – Ryan McTheny
- Value Streams 2020 vision – Value Stream Managers
- Scheduling Initiative – Alberto Ramos
- Procurement Strategies - Libby Bethea/Adam Zydron
- Accounts Payable –
  - Invoicing – Susan West
  - Year-end Invoicing – Keith Miller
Opening Remarks

Adam Zydron – Manager of Facilities Engineering

Phone: (757) 688-1015

Cell (757) 375-2940

Adam.R.Zydron@hii-nns.com
Contractor Quarterly Safety Update
November 8, 2019

O27 Facilities & Contractor Safety

Ryan McTheny, Facilities & Contractor Program Coordination
Vince Constande, Field Operations
Virginia Buskee, Contractor Programs
George Bradby, H&S Manager
O27 Contractor Safety Talking Points

• Communication with contractors and vendors
  – Customer Urgency, Emergent Work, Timeline, Apply Early

• Environmental, Safety, and Health Observat Report (ESHOR)
  – Purpose, Process, Follow Through, Corrective Actions

• Emphasis on “High Risk Work”
  – Electrical, Control of Hazardous Energy
  – Excavation, Confined Space
  – Fall Protection
  – Cranes, Lifting & Handling

• Contractor Safety Forum

• Contractor Safety Metrics

Contractors Safety Forum

- Kickoff: January 10th from 8:00am-10:00am
- Reoccurring Monthly, 2nd Friday
- Parking is limited
- Information will be made available on the supplier site
- Agenda will be sent out in advance
- Project Manager, Superintendent, Safety Manager
  ***Please limit to 1-2 individuals per company
2019 YTD
Contractor Safety Metrics
O27 Facilities and Contractor Safety
October 2019: Quarterly Unsat vs. Total Observations

2019 Quarterly Unsat vs. Total Observations

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<th>Quarter</th>
<th>Unsat</th>
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<td>407</td>
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<td>Q4</td>
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2019 YTD Contractor Safety Observations, n=1495

- Positive, 1048
- Other, 72
- Excavations/Trench, 11
- Staging/Scaffolds, 18
- Ladders/Stairways, 23
- Equipment/Vehicle Operation, 35
- Fire Prevention, 41
- Slip/Trip/Fall, 43
- Electrical, 34
- LOTO, 10
- PPE, 161
2019: Observations From the Deck Plate

- 70% total positive observations
- Non-Compliance with PPE requirements and regulations
  - Potential Reduction of risk and unsatisfactory observations by 25% with donning of proper PPE
- Not calculating fall clearance and selecting appropriate lanyard
- LOTO Plans: “Detail the Details”
- 35ft rule: Combustible Materials
- Safety is your ally and resource
- How can I help?
Curtis McTeer - Manager Supply Chain Procurement
Phone: (757) 688.3664
Curtis.McTeer@hii-nns.com

VALUE STREAM MANAGERS

Michael Romanelli - Utilities and Waterfront Projects
Davis Hill - VCS Block-V Program Support
Ben Duman - J MAF Project
Bill Boyd - Buildings & Grounds and Architectural
Ed Delaney - Manufacturing and Shops
Scott Miller - CVN 80/81 Program Support
5 Year Plan

• 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
• 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

Michael Romanelli, Manager
(757) 688.0230 Office
(757) 869.8239 Cell
Michael.J.Romanelli@hii-nns.com
2020 Year Plan

- **Waterfront Projects – (Estimated $30 Million)**
  
  **Program Readiness, Dredging and Port Security Barriers**
  - Virginia Class Submarines
    - Montana and New Jersey (MOF, LLF, FDD and Pier 6)
  - 688 Class Submarines
    - Columbus (Dry Dock 1 and Pier 5)
    - Boise (Dry Dock 4 and Pier 5)
  - Reactor Complex Overhaul
    - CVN 73/ CVN 74 Integrated Campus Study
      - Coordination of assets and resources
    - CVN 74 USS Stennis (Dry Dock 11)

  **Dry Dock Certification**
  - Dry Dock 1 Gate Inspection, Overhaul, Tunnel Improvements
  - Dry Dock 2 Inspection, Tunnel Improvement
  - Dry Dock 3 Preservation
  - Dry Dock 4 Gate Inspection, Concrete Repairs
  - Dry Dock 10 Inspection, Machinery Deck Refurbishment
  - Dry Dock 11 Cell Wall Repair, Abutment Repairs, SLEP, Rail Repair
  - Dry Dock 12 Gate Inspection
  - FDD 7&8 Ballast Tank Overhaul, Inspection, Shiphandling System
2020 Year Plan

• Waterfront Projects – (Estimated $30 Million Continued)

Special Projects
Superflood (Dry Dock 12)
- Intermediate Gate Mods (Complete)
- Intermediate Gate Refurbishment
- Sill Modification
- Dry Dock 12 Gate Upgrades
- Pumping System
Ocean Transport Barge
- JMAF Program Support
VPM MOF Expansion
- Construction Support
Waterborne Assets
- Huntington Tug Docking
- Floating Fendering Repairs
5 Year Plan

• 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
  - Compressed Air: High & Low Pressure
  - Steam & Condensate: High & Low Pressure
  - Sewer and Storm Drains: Piping, Manholes, Lift Stations.
  - 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

Contact Information

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2020 Year Plan

• Utilities Projects – (Estimated $25 Million)

**Electrical Infrastructure Projects**
- Yardwide High Voltage Cable Refurbishment
- Dry Dock 10 High Voltage Cable Repair
- Dry Dock 12 Cable Supports and Piezometer Repair
- B18 to B78 DC Tie Circuit Repairs
- LPAC Controls Upgrades for Blast and Coat
- B78 Low Pressure Air Motor Starter Upgrades
- B18 DC Switchgear Upgrade
- High Voltage Maintenance Support

**Pier 2 Planned Incremental Availability**
- Substation, Transformer Demolition
- Substation Design, Procurement and Installation
- Gas Switch Design, Procurement and Installation
- High Voltage Cable Design, Procumbent and Installation
- Coordination of Installation of Government Furnished Mobile Utilities Support Equipment (MUSE)
2020 Year Plan

- Utilities Projects – (Estimated $25 Million Continued)

**Mechanical Infrastructure Projects**
- Yardwide Condensate Pump Repairs
- Pier 3 Lift Station Reliability
- South Yard Gas Pump Rehabilitation
- B78 Feedwater Pump Overhaul
- Lift Station Refurbishment (For DEQ Compliance)
- Dry Dock 11 River Water Replacement
- Low Pressure Air Pipeline Repairs B1745-B256
- Lift Station 27A Repairs
- Utility Tunnel Refurbishment
- River Water Refurbishment Pier 2-3

**Pier 2 Planned Incremental Availability**
- Temporary System Design, Procurement and Installation
  - Firefighting System
  - River Water System

2020 Work Scope

• VCS Block-V Program Support

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)
- VCS and CLB Ocean Transport Barge Berths
- Miscellaneous VCS Related Direct-Funded Projects

Contact Information

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(757) 534.2464 Office
(757) 763.8173 Cell
Jonathan.D.Hill@hii-nns.com
JMAF 2020-2022 Plan

- Joint Manufacturing and Assembly Facility
  - $500M Complete, Estimated $250M 2020-2022

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 (in progress, ECD 2020)
- CLB Ship Join Bay (starting now, ECD 1Q 2022)
- CLB Blast & Coat (starting now, ECD 4Q 2021)

Contact Information
Benjamin Duman, Manager
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(757) 897.2654 Cell
Benjamin.Duman@hii-nns.com
JMAF Rendering 2022
JMAF 2020-2022 Plan

• Work Packages:

  • CLB Ship Join Bay
    • Pile Driving
    • Excavation, Site Grading and Paving
    • Concrete Foundations and Slab on Grade
    • Site Infrastructure (Storm, Sewer, Water, Elec, Mech)
    • Building Structure, Siding, Roofing, Doors
    • Mechanical Heating & Ventilating
    • Ships Supply and Exhaust
    • Process Welding Gases and Compressed Air
    • Lighting & Elec Distribution
    • Interior Buildout
  • CLB Blast & Coat
    • Excavation, Site Grading and Paving
    • Concrete Foundations and Slab on Grade
    • Site Infrastructure (Storm, Sewer, Water, Elec, Mech)
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

Contact Information

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(757) 688.9985 Office
(757) 810.9581 Cell
William.Boyd@hii-nns.com
2020 Year Plan

• Buildings & Grounds / Nuclear Facilities Projects – (Estimated $10 Million)

Nuclear Facilities Demolition and Decommissioning Program
- Nuclear Repair Machine Shop Demolition, B93/94
- Radio Chemistry Lab Demolition, B314
- Legacy Nuclear Facilities Decommissioning
  - Release of 16+ controlled facilities

Ship Staging Fixtures/Platforms - VCS and Columbia Programs
- VCS Block V Platforms – HAB, AMR, Sail, NLD and Fan Room
- Ships Join Bay – Columbia Platforms
- SMOF Staging Upgrades

Ship/Trades Support Projects
- Trades Active Learning Centers
- CVN74 Flight Deck, Medical and Marine Facility Modifications

Fire Protection Upgrade Projects
- B1841, CRF Fire Alarm System Replacement
- B521, Replace Fire Suppression System
- B610, Fire Alarm Evacuation System

Building Support Projects
- B520 Elevator Refurbishments
- CMOF Roof Winch Replacement & Repairs
2020 Year Plan

• Architectural Projects – (Estimated $10 Million)

Office Renovations and Personnel Relocations
- B802 - Net Center
  - Talent Acquisition
  - Supply Chain Management
  - Contracts and Pricing
  - Business Management
  - Integrated Planning and Production Control (IPPC)
  - Human Resources Information Systems (HRIS)
  - Facilities Transportation
  - Shift Test and Shift Refueling Engineers Training
  - SUPSHIP
- B520
  - Domino Relocations / Backfill – Plan in Development
- B600
  - Consolidation of Reactor Plant Planning Yard and Propulsion Plant Planning Yard engineering personnel

Quality of Life
- Restroom Renovations and Improvements
- Reclaimed Spaces, PPE Vending Equipment, Employee Trades Cafes
1 Year Plan

- **Manufacturing & Shops**— (Estimated $58M)

  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 & testing of submarine hull machines & special tooling
  - Machine tool manufacturing installations
  - 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
2020 Year Plan

• CVN 80/81 Program Support – (Estimated $19M)

Design and construction of new facilities, upgrades and modifications to existing facilities in Support of CVN 80/81 program, primarily driven by capacity and efficiency needs for the CVN 2 ship contract.

• Super Lift Hall (SLH)
• Personnel Support Building for the SLH
• Yard Wide Transportation Study
• Miscellaneous CVN Related Projects

Contact Information

Scott Miller, Manager
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(757) 262-6199 Cell
Scott.A.Miller@hii-nns.com
## Cost Loaded Schedule

### Phase 1 HLFE 1042.1 (High Level Feasibility Estimate)

#### HIGH LEVEL FEASIBILITY ESTIMATE

**GENERAL INFORMATION**
- Project Title: Cost Loaded Project Process
- Project Number: [No Information]
- Date Estimated: [No Information]

**CONTACT INFORMATION**
- Name: [No Information]
- Phone: [No Information]

**PROJECT COST ESTIMATE**

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<tr>
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**SCHEDULE**

- Project Plan
- Funding Authorization
- Design Engineering
- Bid & Award
- Material Lead-Time
- Construction
- Probability Excellence
- In-Service Date

**CASH FLOW**

- Initial Cost: $655,000.00
- Remaining Cost: $482,880.00
- Total Cost: $172,120.00

**PROJECT TEMPLATE**

- [Graph of Project Timeline and Cost Breakdown]
Cost Loaded Schedule

Phase 2 Project Plan 1042.2

PROJECT PLAN

Notification: 1007007
Title: Project Title

Project Scope: (Summary)
Justification: To Be Provided
Design Basis: Codes (Building/Mechanical/Electrical/NFPA etc.)
Performance Goals: Measurable Performance Goals (What is the project supposed to do?)
Execution of Plan: (Outline responsible parties/actions relative to Demolition/Installation, Engineering, Design, Labor, Construction Management, Procurement, Training, Documentation)

Cost Loaded Schedule

Estimate for Plant Work (Expense/Non-Revenue Direct Funded)

Project Name: Pier 2 CVN78 FY20 PSA
Notification #: 11037907

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Prepared By: Joe Engineer
Form No.: F-040-8

For Projects Over $100K, a quarterly breakdown is permissible.
Cost Loaded Schedule

Authorization

After Authorization is approved, create a Base Line on the schedule on MS Project
Cost Loaded Schedule

Bid and Award Process 1042.4

BID WORKSHEET

- Each deliverable becomes an activity on the schedule

Project Template Bid Table

- Can be multiple PO and multiple Bids
- PO Line items become schedule activities
- Construction Coordinator will adjust estimates based on Bids received
### Cost Loaded Schedule

**Construction Process 1042.5**

[Diagram of cost loaded schedule with construction process 1042.5 and project template tracking for construction.]

<table>
<thead>
<tr>
<th>Cost Loaded Schedule</th>
<th>Project Template Tracking for Construction</th>
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#### CASH FLOW

- $655,000.00
- $172,120.00
- $482,880.00
- $0.00
Cost Loaded Schedule

- Required by Construction A
- Update Schedule to include contractor Breakdown for Payment according to PO Line Items
- Update as needed and track additions and monthly progress

Contractor Schedule

Activities from POs

Activities from Contractor Detailed Schedule
Procurement

- Grouping of work
- Design Build
- PPM
Automated Accounts Payable Process

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 “unpaid” to the contractor/vendor until they are correctly submitted.
Year-End Invoicing

Beginning on November 7, 2019 – copy Project Leads on e-mails submitting electronic invoices for all invoices over $50K.

Estimated Invoices:

• If requested, submit estimated invoices directly to the Project Leads. DO NOT submit estimated invoices to Accounts Payable or to invoices@hii-nns.com.

• Estimated invoices must contain all of the information required on a ready-to-pay invoice and be clearly labeled as an “ESTIMATED” invoice.

• Report actual progress on estimated invoices to the Project Lead on or before December 27th. After January 1st, submit a ready-to-pay invoice for actual progress accounted for by the estimated invoice to invoices@hii-nns.com for payment as usual.
QUESTIONS????

• 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