



musc
Shawn
Jenkins
Children's
Hospital &
Women's Pavilion

OPERATIONS MANUAL FOR DELIVERIES

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DELIVERY LOGISTICS – for MUSC
Shawn Jenkins Children's Hospital and Pearl
Tourville Women's Pavilion Project



BUILDING with **PURPOSE**



ROBINS & MORTON

CUMMING

BROWNSTONE

CONSTRUCTION MANAGEMENT TEAM

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Introduction

Goal: To provide a delivery process that supports work performed in the field by increasing efficiency and safety through Just In Time (JIT) Deliveries.

Robins & Morton and the Project Delivery Team (PDT) understands that material deliveries and handling are crucial to the overall efficiency of the project. The PDT is committed to executing deliveries in a manner that supports the flow of work in the field by eliminating unnecessary material storage.

By developing the Just In Time (JIT) delivery plan, R&M and the PDT also expect to reduce jobsite traffic during work hours. This will allow unrestricted access around the site during the first shift hours.

This manual has been specifically developed for the MUSC Shawn Jenkins Children's Hospital Pearl Tourville Women's Pavilion Project (CHWP) and will be incorporated into all subcontracts on the project.

Robins & Morton's goal is to utilize the JIT process to achieve world-class delivery logistics.

Commitment and participation by all parties involved will be required in order to achieve this goal.

In alignment with the projects commitment to continuous improvement, this Operations Manual will provide the baseline for the Plan-Do-Study-Adjust (P-S-D-A) cycle.

This manual is a living document and, as such, Robins & Morton will control distribution and revisions. To ensure our goal is met, Robins & Morton and the PDT will review this program daily, and update this manual, as required. Each revision is effective as of the issue date.

All Project Team (PT) members are expected to understand and participate with these delivery guidelines to achieve world-class delivery logistics.

1. The Delivery Plan

1.1 Conditions of Satisfaction

- Field is supplied what is needed everyday
- Develop P-D-S-A Process to fix problems
- Project Team improves skill set
- More efficient than alternative delivery services
- No injuries or accidents
- Buy-in from all trades
- Deliveries arrive when expected with smooth flow
- Recognized nationally
- Refine quantity of material on-site
- Flexible delivery plan with necessary countermeasures and communication

1.2 Hours of Operation

JIT deliveries will occur during the 2nd and 3rd shifts, defined as the hours of 5:00pm – 12:00am and 12:00am – 6:00am, respectively. This time frame has been established by the Project Delivery Team (PDT) as the most appropriate time and is subject to change, if needed.

1.3 Voyage Control Scheduling Software

Voyage Control Scheduling software shall be used for all deliveries. No delivery shall enter into the site without an approved, scheduled booking in the Voyage Control software.

Exceptions to this rule may occur in special circumstances and must be approved, in advance, by Rusty Bratcher, Hunter Picklesimer, or Christena Holcombe. These exceptions will be evaluated on a case by case basis and are under the discretion of the approver.

Approval criteria for daytime deliveries are as follows:

- Schedule Driven
- Vendor/Manufacturer incapable of meeting requirements
- Fuel Refill, Equipment Maintenance, Trash Pickup
- Weather Sensitive Materials

When exceptions are made, these deliveries will be logged with the reasons for exceptions, to be studied by the PDT.

How to Access:

1. Create an account via website (or mobile phone) :
 - a. www.voyagecontrol.com\robinsmortonsjch
2. Download the mobile app
 - a. Choose “Voyage Control **Bookings**”
 - i. FYI: Voyage Control Manager (for those who will be approvers)

b. **Login** to the mobile app

i. Choose the **RobinsMortonSJCH** jobsite

For more detailed instructions for creating an account and scheduling within the system, contact Christena Holcombe or Hunter Picklesimer. *Note: Google Chrome has proven to be easier than Internet Explorer to navigate through the website.

1.4 **Roles and Responsibilities**

Daily, the Project Delivery Team (PDT) will assess the delivery process and recommend continuous improvement ideas to address any issues that may be identified.

Other than specifically identified issues, the delivery team will perform a deliveries retrospective at monthly Strategic Planning meetings.

The following should be considered:

- Evaluate the effectiveness of the process
- Identify opportunities for improvement and recommend appropriate corrective measures
- Overall Cost
- Total Deliveries
- PDT Deliveries
- Other Deliveries
- Allocated Costs

Rusty Bratcher will be responsible to:

- Lead any operational learning team developed to address any specific issue
- Reports on the performance of the delivery process
- Assists subcontractors in managing and resolving schedule issues
- Monitors subcontractors' delivery activities
- Participates in identifying delivery requirements and appropriate resources
- Assesses the need for additional procedures, manpower, equipment, or other appropriate actions
- Identifies training requirements
- Provides updates and revisions to this Operations Manual quarterly
- Oversees the Voyage Control process for scheduling
- Manage efficiency program

Rusty Bratcher is responsible for assuring all subcontractors implement the JIT delivery process. Loading deliveries into the scheduling software is mandatory.

At a minimum, PT members are responsible for the following delivery-related activities

- Accept responsibility for implementing JIT Deliveries.
- Designate an employee as Voyage Control manager and POC for deliveries from warehouse
- Communicate with vendors, manufacturers, and warehouse delivery manager
- Provide material handlers for deliveries, if applicable, to material being delivered

All project superintendents are responsible for directing and conveying delivery

requirements to construction foremen (Last Planners) and to subcontractor foremen so that they may prepare for the delivery to arrive.

1.5 Site Management

- **Gate Manager/Operator**

All deliveries once arriving to the site will be checked in at the gate. The gate manager is responsible for opening the gate for the delivery to enter, assisting in traffic control, and directing the delivery into the correct location onsite. If any delivery is not scheduled and arrives at the gate, the gate manager will turn it away and not allow entry. After the delivery has been unloaded, the delivery truck will be checked out upon departure.

Operators will be available on site for off-loading deliveries. Robins & Morton will provide the operators needed to support the offloading of deliveries. For 2nd shift deliveries, the operator will be responsible for the duties of the gate manager and operator.

1.6 P-D-S-A Quality Tracking

Plan-Do-Study-Adjust will be used to track the quality of deliveries and will be discussed daily at the OLT meeting. The quality of the deliveries is a combined percentage determined by the following criteria generated through the Voyage Control Software:

1. Percentage of number of deliveries scheduled vs. number of deliveries arrived
2. Percentage of deliveries arrived on time and checked out on time

Reasons for poor quality will be tracked in an effort to adjust and minimize delays in the schedule. The following has been developed as reasons for failure:

1. Traffic
2. Accident
3. Weather
4. Not Enough Drivers
5. Not Enough Trucks
6. Trailers Not Loaded
7. Trailers Not Re-loaded
8. Inadequate Help Onsite
9. Conflict of Deliveries
10. Last Minute Booking

2. Deliveries from the Warehouse

All deliveries from the 2440 Clements Ferry Warehouse shall follow JIT Delivery procedures outlined in this manual. It is the responsibility of the subcontractor to schedule all deliveries through Voyage Control software.

2.1 Hard Hat Transportation

Hard Hat Transportation will provide material deliveries from the Clements Ferry Warehouse to the project. This service will utilize the use of diesel trucks and flatbed gooseneck trailers to transport the materials.

Voyage Control software will be used to indicate and communicate deliveries with Hard Hat Transportation. The following screenshot shows the proper way to input deliveries into Voyage Control to designate that the delivery will be the responsibility of Hard Hat Transportation to deliver from the warehouse:

Sub Contractor Contact

Use my details

Company name

Name

Email address

Driver Mobile Number

Delivery Contact: (Warehouse or Vendor)

Use my details

Company name

Email address

Driver

I do not know the driver at this time

Delivery Contents:

Material being delivered (optional)

Destination

Comments

Comments: (optional)

Once the delivery has been input into the Voyage Control software, it will be reviewed and approved by Rusty Bratcher. A driver will then be assigned to the delivery, who will be responsible for picking up the load and delivering the material to the site at the scheduled time.

1. Trucks and Trailers:

Hard Hat Transportation has access to Chevy Silverado 3500 Dually Diesel Trucks with Gooseneck Attachments and Kaufman Gooseneck 30' Flatbed & 24' Flatbed Trailers. When scheduling a delivery, there is an option for requesting the 30' or 24' flatbed trailer. The dispatcher will coordinate with the subcontractor to determine the size of the trailer needed for the material being delivered.

- Service, Fuel, and Cleaning will be the responsibility of Robins & Morton's warehouse manager.

2. Accidents/Damage:

In the case of an accident or damage to the trucks/trailers, an incident report must be filled out with the direction of Steve Cowherd. If the accident involves other people's property, paperwork and photo evidence of the scene should be handled per Robins & Morton policy. A police report should be obtained to document the accident and provided for insurance purposes.

2.2 Pre-Loading and Re-Loading Trailers

Materials should be loaded onto the trailers and trailer connected to the truck prior to the start of the second shift to allow smooth flow of pickup for the driver. When deliveries exceed the number of trailers available to pre-load, an operator and material handler must be available to assist in loading the trailer once returned from the site. The subcontractor is responsible for prepping the material to be loaded and coordinating with the warehouse manager responsible for loading duties. If the material needs special loading attention, then the subcontractor must provide manpower to assist in loading and securing the load on the trailer.

2.3 Material Loading Procedure

When loading material, it is important that it is loaded properly, as to avoid any damage, safety hazards, or overloading. The following must be followed to safely prepare a load:

- Identify the weight capacity of truck/trailer
- Identify weight of the load
- Place the load with the right equipment
- Distribute loads properly – 60% front, 40% rear
- Material Handlers to assist in directing operators
- Strap down load securely

2.4 Material Receiving Procedure

When material arrives to the jobsite, it should be off-loaded according to the following:

- Traffic control
- Gate Director must check in/out the load into Voyage Control
- Equipment ready to pick the load and place in designated area
- Driver/Material Handlers to assist in unstrapping load and directing operators
- Driver/Material Handlers to assist in throwing away trash from delivery and securing straps
- Shipping materials to be discarded or returned to the warehouse

Once the material is unloaded from the trailer, the operator onsite will lift the material in the building or in a designated landing area.

2.5 Daily Stand-up Meetings

A stand-up meeting will be performed daily at the warehouse at the end of the first shift and at the beginning of the second shift. A member from each subcontractor at the warehouse should report out.

The goal of the stand-up is to discuss the following:

- Safety
- Deliveries to Warehouse
- Deliveries to Jobsite (Voyage Control)
- Equipment Needs
- Trailer Designation
- Lessons Learned

2.6 Routes

All drivers are expected to follow the designated delivery route, determined by the PDT. There should be no deviation to the route unless an accident, road work, or other disturbance requires the driver to change routes. When a route change is necessary, the driver is required to call Rusty Bratcher for approval. Following approval, the driver must notify the company receiving the delivery of any delays.

3. Material Distribution

Material will be offloaded onsite by equipment operator and assisted by material handlers, if necessary. All deliveries requiring material to be lifted into an area or laid out must have material handlers to assist the operator. It is the responsibility of the PT member who schedules the delivery to ensure that material handlers are provided for the time of delivery.

Once the material has been placed into the building by the operator, it is the responsibility of the material handler to move the material to the area where the work will be performed the following day. The 30/30 rule should be followed when placing the material, to ensure that it is within 30' or 30 seconds from the area of work being performed.

It is critical that all materials delivered to the building have been coordinated and agreed to by the area superintendent.

4. Contacts/Addresses

Contacts

-Rusty Bratcher: R&M Superintendent

c. 843.297.9038

e. rbratcher@robinsmorton.com

-Hunter Picklesimer: R&M Field Engineer

c. 205.834.5350

e. hpicklesimer@robinsmorton.com

-Christena Holcombe

c. 205.542.1470

e. cholcombe@robinsmorton.com

-Frank Ancrum: HHT Manager

c. 843.270.4863

e. hardhattransporttation@gmail.com

Addresses

-Jobsite: 3 Charleston Center Drive Charleston, SC 29401

-Clements Ferry Warehouse: 2440 Clements Ferry Rd. Charleston, SC 29492