

**Special City Council Meeting**  
4:15 p.m., Wednesday, March 14, 2018  
Training Room in the Public Safety Building

**AGENDA**

1. Call to order and acknowledgement that the press and public were duly notified of the meeting in accordance with the freedom of Information Act.

2. **Purpose**

**Consideration of a recommendation from the Real Property Committee for approval of a Change Order from Martin & Son Contracting for the Marina Bulkhead Rehabilitation Project in the amount of \$31,980**

3. **Adjournment**



March 7, 2018

Linda Tucker  
City Administrator  
City of Isle of Palms  
1207 Palm Boulevard  
Isle of Palms, SC 29451

RE: Isle of Palms Marina Bulkhead Change Order #1 Recommendation  
JMT Job No. 16-0833-003  
Client Ref No. 2017-08

Ms. Tucker:

Johnson, Mirmiran & Thompson (JMT) has evaluated change order #1 from Martin & Son, received on March 2, 2018 for the Isle of Palms (IOP) Marina Bulkhead Rehabilitation. The contractor has broken the change order request into two units. Those being the section of bulkhead surrounding the marina store and the second being the section of wall around the restaurant. It is important to note that the area around the marina store has been opened up and work is proceeding in that area. The restaurant portion has not been exposed yet. The change order is then broken down further into unforeseen circumstances that have occurred, and work requested by the tenant, that was not part of the original scope.

JMT will assess the items of the change order as:

- Legitimate unforeseen conditions
- Recommended for engineering concerns
- Recommended for cost benefit purposes
- Not recommended

“Legitimate unforeseen conditions” are not an unusual event during any type of repair or renovation work. Until the area is completely exposed, the project is based on assumptions, typical construction practice and any available data. In this case, the project was based on 5 borings through the concrete sidewalk and the existing construction drawings. “Recommended for engineering concerns” is a situation that as the repair process has progressed and with more information a better solution has developed and is recommended. “Recommended for cost benefit” is exactly as it states. It is the opinion that the cost of having the current contractor at the site perform the work would be financially beneficial in the long term. And “Not recommend” is simply the cost does not justify the work.

1. Legitimate unforeseen conditions
  - Extra thickness of concrete sidewalk near marina deck
  - Removal of old concrete rubble was used as backfill
  - Rebar welded to I-Beam
2. Recommended for engineering concerns

- Weld repair steel cap beam joints (multiple locations)
  - Weld rebar to steel cap beam were not previously used
3. Recommended for cost benefit purposes
- Install new sod in grassed area and regrade around marina store
  - Install new gutter pipe penetration thru wall
  - Repair cracks in concrete on top of steel beam (multiple locations)
  - Remove pavers near restaurant, regrade and replace pavers
4. Not recommended
- Demolish & replace sunken concrete slab on north west corner of restaurant

See attached for costs associated with each level of recommendation.

The additional thickness of concrete and rubble removal was considerably more than was anticipated. The investigation into the wall verified the sidewalk was thicker in that area, measured at 9-3/4", but the extent of additional concrete was not realized until complete demolition began, and it was discovered the concrete was nearly 18" thick in that area. When old concrete is pushed into an excavation typical construction method involve crushing or breaking the concrete up into pieces smaller than a fist. Martin and Son uncovered large chunks measured in feet that had to be broken up and removed to access the drain. The original plans available showed the concrete sidewalk as being reinforced with welded wire fabric (WWF-steel wire mesh). Upon demolition it was discovered some areas had steel rebar welded to the inboard flange of the steel cap beam of the wall. Other areas did have WWF. The areas with rebar performed significantly better than the areas with WWF.

This performance improvement is the basis for JMT's opinion that IOP take this opportunity to rebuild the slab with rebar throughout in place of the WWF. With the removal of the sidewalk it was also discovered that there were joints in the steel cap beam that needed to be joined by welding to prevent movement that may have caused concrete cracking in the sidewalk.

The recommendation for cost benefit is as explained above, while the current contractor is on site and has the work areas exposed it is more cost effective to allow Martin and Son to perform the work than to let a separate contract and mobilize a separate crew.

The last item which is not recommended is the new service slab at the restaurant. While JMT believes this work would be beneficial to the restaurant, it is the opinion of JMT that the cost of this work is excessive. And it may be in the City's interest in finding a separate contractor to perform this task.

All of the above items are only the recommendation of JMT. Only the City of Isle of Palms may approve change orders. It is important to note that JMT is not in charge of construction work, our task is to administer the contract and assist the city in working toward a successful project completion. JMT is also not required to make exhaustive or continuous on-site inspections.

If you have any questions or need further information, please do not hesitate to contact me at 843-556-2624 or [dosgood@jmt.com](mailto:dosgood@jmt.com).

JOHNSON, MIRMIRAN & THOMPSON, INC.

David Osgood, P.E.  
Project Manager

Isle of Palms Marina Bulkhead Repair Change Order #1

Legitimate unforeseen conditions

- Extra thickness of concrete sidewalk near marina deck \$ 3,600.00
  - Removal of old concrete rubble was used as backfill \$ 4,500.00
  - Rebar welded to I-Beam \$ 5,400.00
- \$ 13,500.00

Recommended for engineering concerns

- Weld repair steel cap beam joints (multiple locations) \$ 2,480.00
  - Weld rebar to steel cap beam were not previously used (cost included above)
- \$ 2,480.00

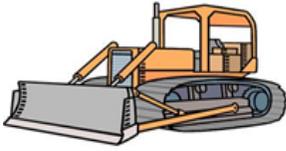
Recommended for cost benefit purposes

- Install new sod in grassed area and regrade around marina store \$ 4,800.00
  - Install new gutter pipe penetration thru wall \$ 1,800.00
  - Repair cracks in concrete on top of steel beam (multiple locations) \$ 5,300.00
  - Remove pavers near restaurant, regrade and replace pavers \$ 4,100.00
- \$ 16,000.00

Not recommended

- Demolish & replace sunken concrete slab on North West corner of restaurant \$ 13,850.00
- \$ 13,850.00

Change order total **\$ 45,830.00**



# MARTIN & SON CONTRACTING, INC

194 MARTIN FAMILY RD  
SPARTANBURG, SC 29306

3/1/18

## Change Order Request 1

City of Isle of Palms

P.O. Box 508

Isle of Palms, SC 29451

To: David Osgood

Isle of Palms Marina Project #2017-08

### Areas At The Marina Store

#### Unforeseen Conditions:

1. Extra Thickness Of Concrete Sidewalk 18" Thick, Behind Deck Area.
  - a. With Concrete, Sawcut and Demo Extra, Sawcut Every 6". Jack Hammer, Remove and Dispose.
  - b. 2 Days \$1800.00 Per Day-3 Men. **\$3,600.00**
2. Old Concrete Rubble Was Used As Backfill, In between Walls. It Had To Be Broken Up And Removed.
  - a. Saw Cuts, Jack Hammer and Prybars-Removed and Disposed.
  - b. 2.5 Days \$1800.00 Per Day -3 Men **\$4,500.00**
3. Rebar Welded to I-Beam:
  - a. Remove Broken & Damaged Rebar- Weld Rebar to I Beam Every 24"-400' #4 Rebar
  - b. 3 Days- **\$5,400.00**
4. Repair Beam At Fuel Station 1 Area-
  - a. Cut Plates and Furnish- 4 x 40- Weld Plates to Repair Seam in Beams-
  - b. 1/2 Day **\$760.00**

Additional Work Requested by Marina Operator

1. *Repair Cracked Areas In Concrete on top of steel beam.*
  - a. *Saw Cut, Jack Hammer Concrete. Remove & Dispose, Replace With New Concrete*
  - b. *2 Days* **\$2,600.00**
2. *Install New Sod in Grassed Area And Regrade Low Areas*
  - a. *CO only includes area not previously accounted for, Labor & Material*
  - b. *Time Requested- 2 Days* **\$4,800.00**
3. *Pipe Penetration Thru Wall*
  - a. *Cut wall, Clean, Smooth and Repaint. Install Flange, run additional pipe to wall penetration*
  - b. *Time Requested -2 Days* **\$1,800.00**

**2-Areas Behind Restaurant**

Unforeseen Conditions:

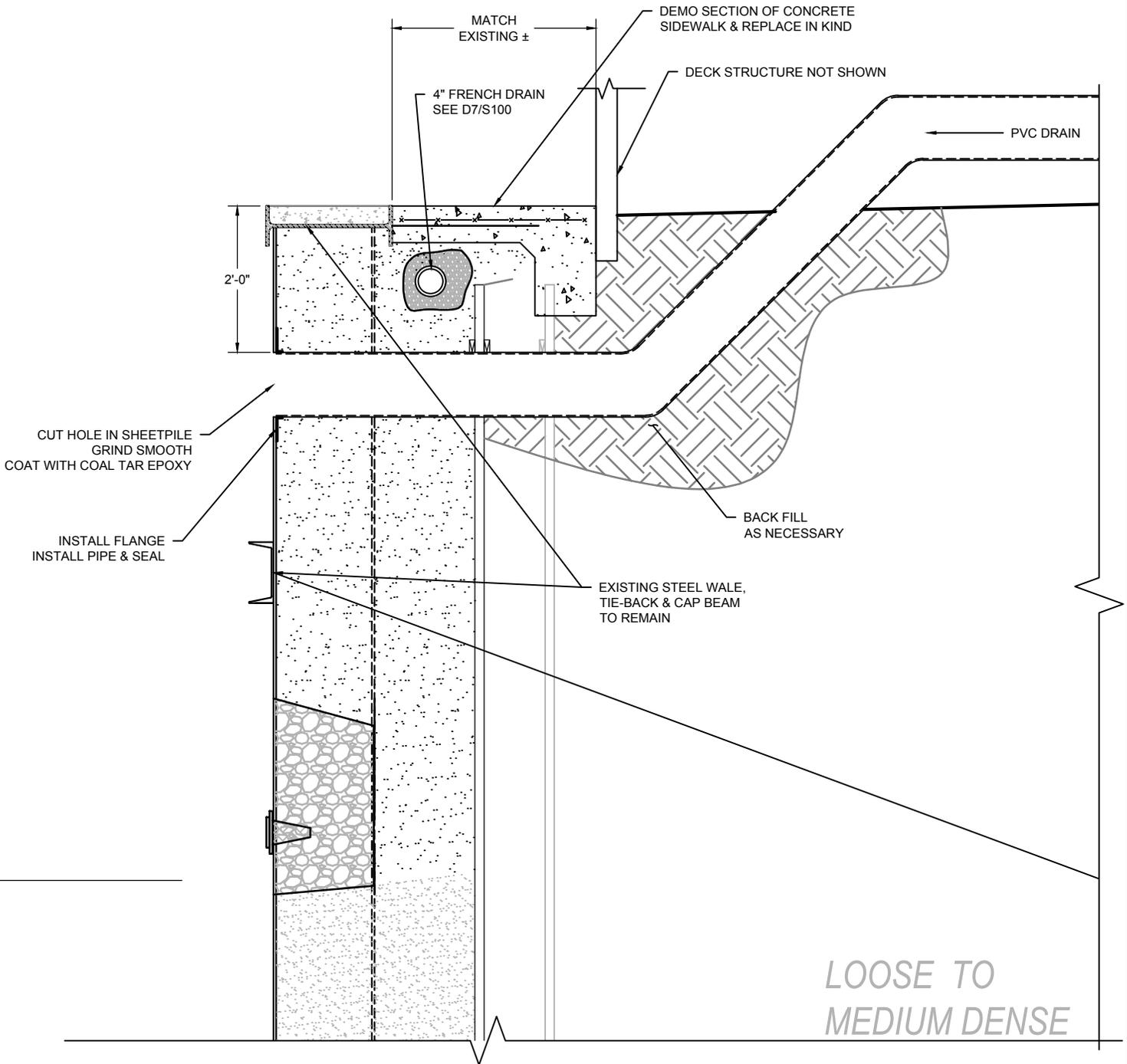
1. *Repair Beam And Re-Weld 2 Areas.*
  - a. *Cut Plates and Furnish, 8 Plates @ \$40.00 ea. Fit And Weld Plates At Seams*
  - b. *1 Day* **\$1,720.00**

Additional Work Requested by Restaurant Operator

1. *Repair 2 Cracked Areas In Concrete on top of steel beam.*
  - a. *Saw Cut, Jack Hammer Concrete. Remove & Dispose, Replace With New Concrete*
  - b. *2 Days* **\$2,400.00**
2. *Repair 2 Minor Cracked Areas In Concrete on top of steel beam*
  - a. *Repair Existing Crack By Filling*
  - b. *½ Day 2 Places-* **\$300.00**
3. *Remove Pavers-Additional 4 Rows.*
  - a. *Remove Pavers and Stockpile/ Back Fill Low Area With Sand and Regrade/ Compact and Level Sand/ Lay Pavers Back/ Compact Pavers With Tamp*
  - b. *2 Days-* **\$4,100.00**

- 4. *Demolish & Replace Sunken Concrete Slab on North West Corner of Restaurant*
  - a. *Remove Existing Wooden Walkway 4'x12'*
    - i. *Concrete 4'x12' Area-Pour And Finish With Shell-*
    - ii. *2 Days* \$1,850.00
  - b. *Demo Cracked And Sunken Concrete Area- 10'x4' Area & 20'x20' Area*
    - i. *Replace With New Concrete-10'x4' Area & 20'x20' Area-Pour and Finish With Shell-Install Drainage Channel*
    - ii. *3 Days* \$9,200.00
  - c. *Wooden Stairs,*
    - i. *Remove And Dispose, Rebuild Stair*
    - ii. *1 Days* \$2,800.00

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LOOSE TO  
MEDIUM DENSE

**NOT FOR  
CONSTRUCTION**



**ISLE OF PALMS MARINA  
INVESTIGATION OF MARINA BULKHEAD**

CHARLESTON, SOUTH CAROLINA



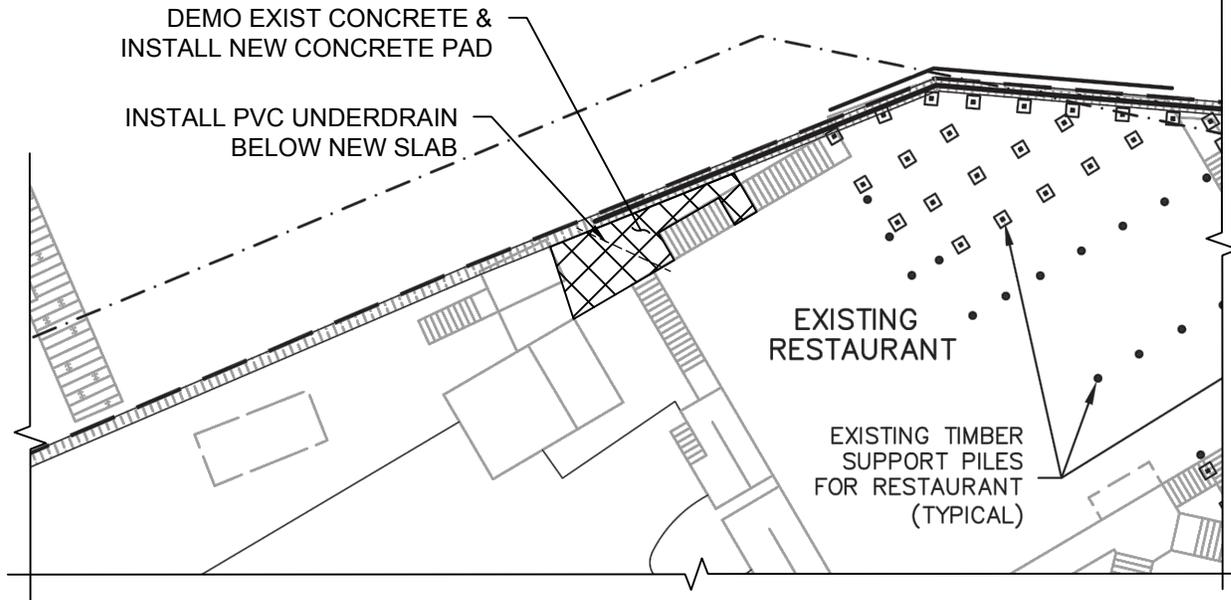
JMT, INC.  
952 HOUSTON-NORTHCUTT BLVD  
SUITE 100  
CHARLESTON, SC 29464  
843-556-2624 WW.JMT.COM

JOB NO:	
16-0833-001	
DWG	DJO
DES	DJO
CHK	NL

SHEET  
**SK-C2**

DATE: OCTOBER 14, 2016 SKETCH REF. DRAWING NUMBER: N/A  
DRAWING: BULKHEAD REPAIR CHANGE ORDER - GUTTER PIPE PENETRATION

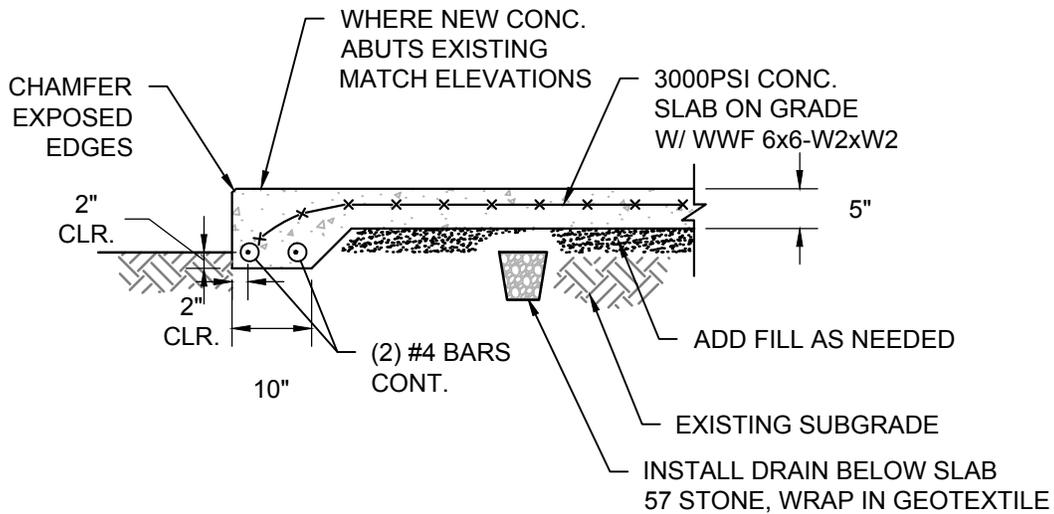
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### PLAN

SCALE: NO SCALE

**NOTE:**  
SLOPE CONCRETE SURFACE TO DRAIN AWAY FROM RESTAURANT



### TYP. SECTION

SCALE: 1/2" = 1'-0"

**NOT FOR CONSTRUCTION**



#### ISLE OF PALMS MARINA INVESTIGATION OF MARINA BULKHEAD

CHARLESTON, SOUTH CAROLINA



JMT, INC.  
952 HOUSTON-NORTHCUTT BLVD  
SUITE 100  
CHARLESTON, SC 29464  
843-556-2624 WW.JMT.COM

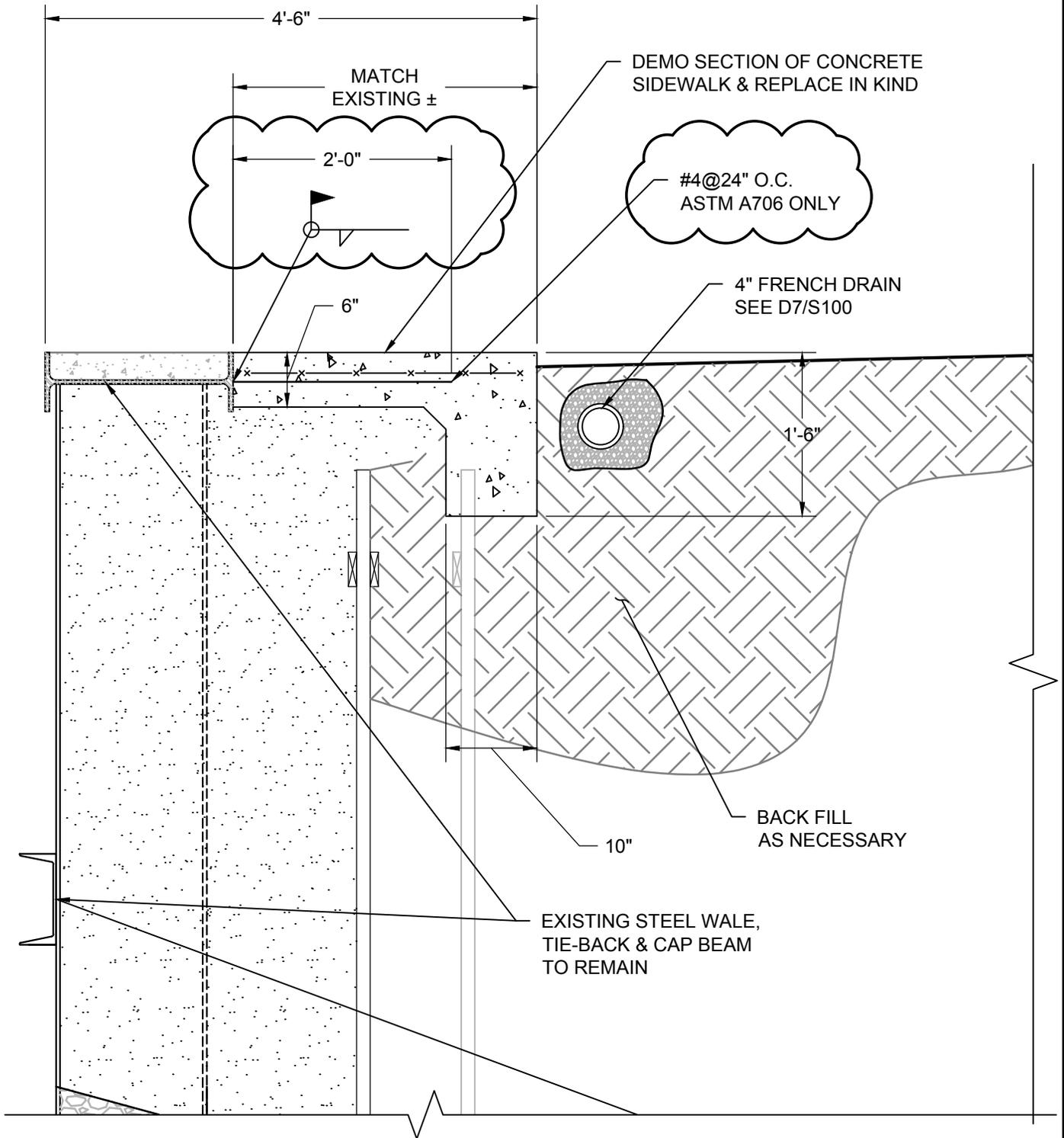
JOB NO:	
16-0833-001	
DWG	DJO
DES	DJO
CHK	NL

SHEET  
**SK-C3**

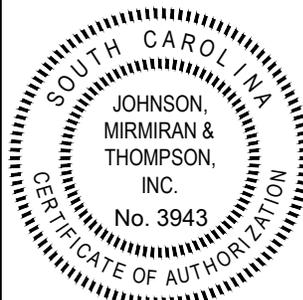
DATE: OCTOBER 14, 2016 SKETCH REF. DRAWING NUMBER: N/A

DRAWING: BULKHEAD REPAIR CHANGE ORDER - NEW SERVICE SLAB @ RESTAURANT

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NOT FOR CONSTRUCTION



ISLE OF PALMS MARINA  
INVESTIGATION OF MARINA BULKHEAD

CHARLESTON, SOUTH CAROLINA



JMT, INC.  
952 HOUSTON-NORTHCUTT BLVD  
SUITE 100  
CHARLESTON, SC 29464  
843-556-2624 WWW.JMT.COM

JOB NO:	
16-0833-001	
DWG	DJO
DES	DJO
CHK	NL

SHEET  
**SK-C1**

DATE: OCTOBER 14, 2016 SKETCH REF. DRAWING NUMBER: N/A  
DRAWING: BULKHEAD REPAIR CHANGE ORDER - REBAR ADDITION

**City of Isle of Palms  
Marina Bulkhead Rehabilitation**

<b>FY18 Budget for Bulkhead Rehab</b>	<b>356,500</b>
<b>Contracts/Change Orders/Legal &amp; Misc</b>	<b>(280,070)</b>
<b>Budget Funds Remaining</b>	<b>76,430</b>

**Contracts and Change Orders Received:**

JMT Engineering	Construction Administration
Martin & Son Contracting	Construction
Legal & Miscellaneous Estimates	

Construction Admin	Bulkhead Rehab	Legal & Misc Expenses	Total
20,070			20,070
-	250,000		250,000
		10,000	10,000
<u>20,070</u>	<u>250,000</u>	<u>10,000</u>	<u>280,070</u>

**Project Expenditures:**

Invoice Date	Payee	Description of Work
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1/26/2018 JMT	engineering services
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663			663
<u>663</u>	<u>-</u>	<u>-</u>	<u>663</u>
<u>19,408</u>	<u>250,000</u>	<u>10,000</u>	<u>279,408</u>

Total paid

Remaining on contracts