

AGENDA

Warrenton Urban Renewal Agency

April 11, 2017 – 6:00 p.m.

Warrenton City Hall – Commission Chambers
225 S. Main Ave.
Warrenton, Or 97146

1. CALL TO ORDER
2. ROLL CALL
3. CONSENT CALENDAR
 - A. Urban Renewal Agency Minutes – 1.24.17
 - B. Urban Renewal Advisory Board Minutes – Dec 2016
4. BUSINESS
 - A. Consideration of Change Orders for F Dock Replacement
5. ADJOURN

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3-A

MINUTES
Warrenton Urban Renewal Agency
January 24, 2017

Warrenton City Hall - Commission Chambers
225 S. Main
Warrenton, Or 97146

Chair Mark Kujala convened the Urban Renewal Agency meeting at 6:09 p.m.

Commissioners Present: Chair Mark Kujala, Tom Dyer, Henry Balensifer, Pam Ackley, Rick Newton

Agency Staff Present: Executive Director Linda Engbretson, Finance Officer April Clark, Police Chief Mathew Workman, Public Works Director Jim Dunn, Fire Chief Tim Demers, Harbor Master Jane Sweet, Library Site Manager Nettie-Lee Calog, Wastewater Superintendent Kyle Sharpsteen and Deputy City Recorder Dawne Shaw

CONSENT CALENDAR

A. Urban Renewal Agency Minutes – 12.13.16

Commissioner Balensifer made the motion to approve the Consent Calendar as presented. Motion was seconded and passed unanimously.

Dyer – aye; Balensifer – aye; Kujala – aye; Ackley – aye; Newton – aye

Executive Director Linda Engbretson stated at the last meeting there was an exemption for the auditors for the City of Warrenton and noted there must be a separate exemption for the Urban Renewal Agency. The Public Hearing was advertised but was not added to agenda.

Commissioner Newton made the motion to add the Public Hearing for the exemption of personal services contract for independent audit services to the agenda as item C and moved the first item of business. Motion was seconded and passed unanimously.

Dyer – aye; Balensifer – aye; Kujala – aye; Ackley – aye; Newton – aye

Chair Kujala opened the Public Hearing on the Exemption of Personal Services Contract for Independent Audit Services. Formalities followed and no conflicts of interest of ex parte contacts were reported.

Finance Officer April Clark reviewed her written staff report on the Exemption of Personal Services Contract for Independent Audit Services and explained the details, noting it is the same process that was done for the City at the last Commission meeting. Ms. Clark stated Isler CPA has been the City of Warrenton's and Urban Renewal Agency's auditor since 2009. Ms. Clark reviewed the proposed estimates. Executive Director Engbretson noted the City/Agency has gone through the competitive process in the past (2012) and Isler CPA was the only response received.

No one spoke in favor of the exemption and no one spoke in opposition. Mr. Scott Widdicombe asked why the Agency is asking for the exemption. Chair Kujala clarified the City/Agency has gone out for competitive bids in the past and no one else replied, noting it is an economic savings to not go out year after year when there are no other responses.

There being no further comments, Chair Kujala closed the Public Hearing.

Commissioner Balensifer made the motion to adopt the findings dated January 24, 2017, as the basis for approving the exemption from competition of the personal services contract for annual independent audit services. Motion was seconded and passed unanimously.

Dyer – aye; Balensifer – aye; Kujala – aye; Ackley – aye; Newton – aye

Commissioner Ackley made the motion to award the contract for Professional Services to Isler CPA for Annual Independent Audit Services beginning with fiscal year July 1, 2016, as per the attached proposal with an option to renew for two more years. Motion was seconded and passed unanimously.

Dyer – aye; Balensifer – aye; Kujala – aye; Ackley – aye; Newton – aye

Paul Nielson of Isler CPA presented the financial statements for the Warrenton Urban Renewal Agency and audit results for the period ending June 30, 2016 and stated this year the Agency was required to have an audit of its financial data along with prepared, stand-alone financial statements. Mr. Nielson explained a review is required when expenditures are between \$150,000 and \$500,000, and once expenditures exceed \$500,000 an audit is required. He noted there were no discrepancies or items of concerns found.

Harbor Master Jane Sweet presented the evaluation by Berger/ABAM for the load rating of the Warrenton Marina Pier. Ms. Sweet stated the contract was originally approved at the December 13, 2016 Urban Renewal Agency meeting for \$14,270, which was an estimate. The actual proposal came in at \$29,000, noting the increase is due to a detailed evaluation and detailed maintenance plan of the pier.

Commissioner Balensifer made the motion to accept the Warrenton Marina Pier Evaluation to be provided by Berger/ABAM in the amount of \$29,000. Motion was seconded and passed unanimously.

Dyer – aye; Balensifer – aye; Kujala – aye; Ackley – aye; Newton – aye

There being no further business Chair Kujala adjourned the URA meeting at 6:22 p.m.

APPROVED:

Mark Kujala, Chair

ATTEST:

Dawne Shaw, Deputy City Recorder

3-B

MINUTES

Warrenton Urban Renewal Advisory Board
December 7, 2016
3:30 p.m.
Warrenton City Hall – Commissioners Room
225 S. Main
Warrenton, OR 97146

Chair Wegner called the meeting to order at 3:30 p.m.

Roll call followed:

URA Advisory Board Members Present: Gerald Poe, Bob Bridgens, Dan Jackson, Frida Fraunfelder and Ed Wegner

Absent: Tess Chedsey and Dennis Faletti

Staff Present: Urban Renewal Agency Executive Director ~~Pro tem~~ Linda Engbretson, Harbor Master Jane Sweet, Public Works Director Jim Dunn, Community Development Director Skip Urling, Finance Director April Clark and Admin. Asst. Dawne Shaw

CONSENT CALENDAR

A. Advisory Board Meeting Minutes – September 7, 2016

Bob Bridgens made the motion to approve minutes from 09/07/16. The motion was seconded and approved with all in favor.

Poe – aye; Bridgens – aye; Jackson – aye; Wegner – aye; Fraunfelder – aye

BUSINESS

Community Development Director Skip Urling gave an update on the downtown landscaping project. He stated he spoke with 7 Dees about ways to dress up the bulb outs and noted they cannot get much landscaping due to the grade and the suggestion was to use decorative rock or river rock. He also spoke with Mike Morgan's wife whose suggestion was to build a planter with low maintenance plants. Mr. Urling stated Pacific Power has concerns about protecting the utility poles; ODOT is willing to work with us as long as Pacific Power is ok with the plan. He stated he will continue to work on putting something together and present it to Pacific Power and ODOT. The discussion continued on planter boxes and storm water issues. Ed Wegner stated hiring someone to come up with ideas was on the list as a priority. Bob Bridgens stated the bulb outs need improvement, what is there is not acceptable. Mr. Urling noted that landscaper will come up with the concept, and ODOT and Pacific Power will have to sign off on it. After further discussion the consensus is that the Board would like to look at the plans and will have a special meeting if needed. Mr. Bridgens suggested 3D Landscape, noting it is a local company that pays taxes in Warrenton.

Frida Fraunfelder made the motion to move forward with hiring a landscaper and having staff submit proposals to the Urban Renewal Advisory Board. The motion was seconded and approved with all in favor.

Poe – aye; Bridgens – aye; Jackson – aye; Wegner – aye; Fraunfelder – aye

City Manager Linda Engbretson stated we are halfway through the Urban Renewal program and would like to get going on the priorities. She noted her interest in investigating the underground power lines issue. Bob Bridges noted the priority list that was identified by the advisory board and asked that the focus be on the identified priorities before we talk about underground lighting. Ms. Engbretson agreed. Ms. Engbretson asked Public Works Director Jim Dunn about the possibility of decorative lights being installed at City Park and Mr. Dunn stated he will look into it. Ms. Engbretson stated she will get copy of the priority list and get to work on it.

Public Works Director Jim Dunn asked for clarification on the 4 way stop item identified on the priority list. Discussion continued on the desire to beautify the 4- way corner at Main and Harbor. Community Development Director Skip Urling stated he talked with 7 Dees and Ms. Morgan about the 4 way corner and the corner by the high school as well. City Manager Linda Engbretson noted the War Memorial statue/monument will be installed in front of the Post Office. Discussion continued on the bulb outs and buried power lines.

Harbor Master Jane Sweet gave an update on the Warrenton Marina and presented a slide show of the work in progress. Project Manager Jon Forrester discussed the new docks and the cost savings of using “used” pilings. He further explained the special material used in the docks noting it allows light to come through so predatory fish cannot hide beneath. Discussion continued on the next steps and Ms. Engbretson suggested the advisory board take a tour when it is completed. Ms. Engbretson noted the project will come in under budget, and Mr. Forrester gave an overview of the budget, citing the report and change orders that will go before the Urban Renewal Agency next week. Ms. Engbretson noted that having a good project manager is important and can save us so much money. Mr. Forrester estimated the project completion to be the end of February. Discussion continued about possible grants/matching funds for future work. Bob Bridgens asked for the total URA money spent for the Warrenton marina and Ms. Engbretson stated she will check with Finance Director April Clark and email it out. Discussion continued on money saved/left over from the marina project and the desire to put it back into the mooring basin budget.

Bob Bridgens made the motion to designate any money saved from the Warrenton Marina project to go back into the Marina budget for future projects. The motion was seconded and approved with all in favor.


Poe – aye; Bridgens – aye; Jackson – aye; Wegner – aye; Fraunfelder – aye

City Manager Engbretson gave an update on the community library and the possible new location of the Serendipity Café building. She noted there was a suggestion of a cooperative with the Serendipity café, to have a library/coffee shop combination. Brief discussion continued on the location and the possibility of using Urban Renewal funds for the building.

There being no further business, Chair Wegner adjourned the meeting at 4:35 p.m.

Next regular meeting is scheduled for March 1, 2017, at 3:30 p.m.

Approved

Bob 

~~Ed Wegner, Chair~~

Bob Bridgens, Acting Chair

Attest



Dawne Shaw, Administrative Assistant

4-A

"Making a difference through excellence of service"



CITY OF WARRENTON

AGENDA MEMORANDUM

TO: The Warrenton Urban Renewal Agency

FROM: Jane Sweet Harbormaster

DATE: April 11, 2017

SUBJ: Change orders for Urban Renewal F-Dock Replacement

SUMMARY: See attached Narrative

RECOMMENDATION/SUGGESTED MOTION

"I move to accept Change orders 8 - 11 for the Urban Renewal F-Dock Replacement.

ALTERNATIVE

None Recommended

FISCAL IMPACT

Approved by City Manager:

A handwritten signature in blue ink, which appears to read "Linda Engstrom". The signature is written over a solid black horizontal line that spans the width of the signature area.

All supporting documentation, i.e., maps, exhibits, etc., should be attached to the memorandum



4253-A Highway 101 N • seaside, oregon 97138
503.738-3425 • fax 503.738-7455
www.otak.com

From: Otak, Inc.
To: Jane Sweet, Harbormaster
Date: April 4, 2017
Purpose: Narrative to submit recent change orders and additional work to Urban Renewal Board for the Warrenton Marina Improvements Project.

The following change orders for the project come as a result of regular, scheduled construction meetings, held bi-monthly, on Tuesdays, at 10 AM. These meetings, where the project is discussed, are held at the Marina offices, and officials from the City and Urban Renewal are always welcome to sit in.

Change Order #8

This change order allows the contractor to install steel galvanized piping along the float walkway for fire protection. This product adds value and durability to the project. Originally, based on Astoria's installed fire line, the plans called out PVC. With this change, the contractor will install a steel line instead of the PVC that was planned and an additional box for the Warrenton Fire Department testing in the future. This is part of an additive change order, at \$2,583.00 as BCI, COP #008. See accompanying backup. We agree with this Change Order.

Change Order #9

There is current discussion of adding GFIC protection with a shunt-trip breaker to the "F" dock. Wadsworth and MKE are discussing the requirements of the code for this application. This is an additive change order, which increases the contract amount by \$9,436.97. The exact cost of this change order is unknown at this time, however, what we know is that this is an estimated change order which will increase the contract time by 45 days, due to the lead time for materials, shipping, and installation.

Change Order #10

This change order is based on the size of the electrical switch gear cabinetry and the location required. Due to the size of the cabinet, the original mounting, based on clips mounted at bridge decking is not large enough to mount the cabinet and the fact that it would impede the drive lane. The contractor and Otak have looked at alternative locations, and determined that the location just north of the "F" dock gangway would be appropriate. The contractor has submitted a sketch to show general installation. This is an additive change order, which increases the contract amount by \$10,507.85. We agree with this change.

Change Order #11

This change order allowed the contractor to finalize the removal and tipping fees for the Lily-Marlene. Although the vessel was "hazmatted" by the US Coast Guard, approximately 450 gallons of diesel fuel, (unknown) at the time of relocation, was still on-board. Since some of this diesel also contaminated the wooden vessel, the broken debris, wood, would be required to be transported to the Hillsboro hazardous waste dump. This additional cost is broken down in the attached Change Order request.

integrated design = smart solutions

N:\PROJECT\67800\67848\CONSTRUC\CHANGE ORDERS\CHANGE ORDER NARRATIVE 4-4-17.DOCX

Also, please see the attached original Change Order that has been approved and paid, which shows that the Contractor has no way of knowing these costs in advance. This is an additive change order, at \$42,857.75 as BCI, COP #11. We agree with this Change Order.

The following Table will provide a recap of actual and potential costs to date:

TABLE – NARRATIVE COST RECAP

Urban Renewal/Marina Improvements Project, Budget Remaining as of 12/6/2016 =>	\$68,326.44
Change Order #8 – 5steel pipe and valve box	-\$2,583.00
Change Order #9 – Additional Electrical GFC protection	-\$9,436.97
Change Order #10 – Additional bracket for CD Electrical Cabinet	-\$10,507.85
Change Order #11 – Additional costs for removal of Lily-Marlene	-\$42,857.75
Urban Renewal/Marina Improvements Project, Budget Remaining as of 4/4/2017 =>	\$2,940.87

This is only an estimation of actual and potential costs to this date. Otak will continue to manage the project in an efficient and careful manner, but we cannot guarantee final costs.

Otak appreciates this opportunity to serve the City of Warrenton/SM/JGF.

cc: Otak Project File

P.O. Box 387
Astoria, OR 97103
Office 503-325-7130
Fax 503-325-0174
24 Hour Service



TIN # 93-0600594
OR CCB# 63328
WA CCO1 BERGEC1210H
info@bergerson-const.com
www.bergerson-const.com

March 06, 2017

Otak, Inc.
Attn: Sarah McKay
4253A Hwy 101 N
Seaside, OR 97138

RE: City of Warrenton – Marina Improvement Project

Change Order Proposal (COP) No. 008 – Galvanized Steel Fire Line and Box

Dear Ms. McKay,


Per the City's request, Bergerson is proposing the following to replace the PVC fire line with galvanized steel pipe with Victaulic style couplings along with enclosure box.

COP 008 – Total \$ 2,583.00

Enclosed is a breakdown of the costs associated with this additional work. It is expected that these modifications will not have impact to the contract construction schedule.

If any additional information is required or if clarification is needed, please feel free to contact me at your earliest convenience.

Sincerely,



Greg Merrill
President



CHANGE ORDER PROPOSAL COST BREAKDOWN

Bergerson Construction, Inc.	CONTRACT NO.	DATE:	03.06.17
City of Warrenton - Marina Improvement Project	COP NO.	008	
			PROPOSED COP TOTAL PRICE: \$2,583

CHANGE ORDER PROPOSAL (WORK TO BE PERFORMED):
 Installation of galvanized steel pipe with Victaulic style couplings in lieu of the specified PVC piping along with enclosure box.

ITEM NO.	ITEM DESCRIPTION	QTY	UNIT	MAT'L COST		LABOR COSTS			EQUIPMENT COSTS			SUBS/MISC	LINE TOTAL	
				PER UNIT	TOTAL	NO. HOURS	HOURLY RATE	TOTAL	NO. HOURS	HOURLY RATE	TOTAL			
1	Galvanized Pipe	1	LS		-							1,480.00	1,480.00	
2	Enclosure Box	1	LS		-							980.00	980.00	
					-								-	
					-								-	
					-								-	
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	Overhead & Profit			15%	-		15%	-		15%	-	5%	123.00	123.00
SUBTOTAL												2,583.00		
TOTAL CHANGE REQUEST												\$2,583.00		

From: [Travis Hegele](#)
To: [Staci Sherer](#)
Subject: Re: Warrenton Marina - RFI 007 Fire
Date: Thursday, February 16, 2017 8:18:13 PM
Attachments: [image001.png](#)
[image002.png](#)
[warrentonbox.pdf](#)
[warrenton ball drip.pdf](#)
[warrenton valve.pdf](#)
[warrenton washer.pdf](#)
[warrenton nut.pdf](#)
[warrenton carriage bolt.pdf](#)

Staci,

The cost breakdown for the galvanized pipe is as follows. 600 lineal feet of pipe at \$1 per foot additional cost. The additional labor cost is 10.5 hours @ \$85.00 per hour shop rate. Therefore the total cost is \$1,480.

I have attached the other specification sheets requested by OTAK. This includes the 3/8 carriage bolts requested. Thank you for your help.

Travis

From: Staci Sherer <ssherer@bergerson-const.com>
To: Travis Hegele <travis_hegele@yahoo.com>
Cc: Greg Morrill <gmorrill@bergerson-const.com>
Sent: Thursday, February 16, 2017 8:46 AM
Subject: FW: Warrenton Marina - RFI 007 Fire

Travis,

Please see the attached RFI response. Let me know if you have any questions.

Thanks,

Staci Sherer
Estimator/Project Engineer



Bergerson Construction, Inc.
Marine & Heavy Civil Construction
55 Portway • PO Box 387 • Astoria, OR 97103
(503) 325-7130 • CCB# 63328
www.bergerson-const.com
ssherer@bergerson-const.com

From: Sarah McKay [<mailto:Sarah.McKay@otak.com>]
Sent: Wednesday, February 15, 2017 11:38 AM

From: [Travis Hegelian](#)
To: [Staci Sherer](#)
Subject: Enclosure box change order
Date: Friday, March 03, 2017 10:03:05 AM

Staci,

The cost break down to add the enclosure box is as follows.

Old castle enclosure box n-30 with extension and miscellaneous hardware.
\$380
1/2 hard screened rock and felt for drainage
\$100
Removal of excavated material
\$100
5 hours of labor to hand excavate drainage and vault enclosure
5 @ \$80 = \$400
Due to the close proximity of electrical and water utilities this area must be hand excavated
Total \$980

Thanks
Travis Hegele
503-519-3604

Sent from my iPhone

On Mar 3, 2017, at 8:41 AM, Staci Sherer <ssherer@bergerson-const.com> wrote:

Travis,

Please see the below suggestions to look at.

Thanks,

Staci Sherer

Estimator/Project Engineer

<image003.png>

Bergerson Construction, Inc.

Marine & Heavy Civil Construction

55 Portway • PO Box 387 • Astoria, OR 97103

(503) 325-7130 • CCB# 63328

www.bergerson-const.com

ssherer@bergerson-const.com


From: Sarah McKay [<mailto:Sarah.McKay@otak.com>]

Jon Forrester

From: Sarah McKay
Sent: Thursday, March 09, 2017 7:17 AM
To: Jon Forrester
Subject: FW: Warrenton Marina - COP 008 Galvanized Steel Fire Line & Box
Attachments: COP 008 - Galvanized Steel Fire Line and Box.pdf



Otak, Inc.
Sarah McKay | Engineering Designer
4253-A Hwy 101 North | Seaside, OR 97138
v: 503.738.3425 | 530-321-7342 | f: 503.738.7455
www.otak.com

 at Otak, we consider the environment before printing emails.

From: Staci Sherer [<mailto:ssherer@bergerson-const.com>]
Sent: Monday, March 06, 2017 2:04 PM
To: Sarah McKay
Cc: Greg Morrill; Jon Forrester; Jane Sweet (jsweet@ci.warrenton.or.us)
Subject: Warrenton Marina - COP 008 Galvanized Steel Fire Line & Box

Sarah,

Attached is Change Order Proposal 008 – Galvanized Steel Fire Line and Box for the Warrenton Marina. Please let me know if you have any questions.

Thank you,

Staci Sherer
Estimator/Project Engineer



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WARRENTON MARINA UPGRADE PROJECT

CHANGE ORDER #9

To:	Greg Morrill, President
	Bergerson Construction, Inc.
	55 Portway Astoria, OR, 97103
Tel/Cell	(503) 325-7130
Fax:	(503) 325-0174

Otak Project No:	67848.000	Date:	4/4/2017
Project Name:	Warrenton Marina Upgrade Project		
Project Location:	Warrenton Marina, Warrenton, OR		
Owner/Client:	Jane Sweet, Habormaster, City of Warrenton		
Job Phone No:	503-861-3822		

WE HEREBY agree to make the change(s) specified below:					
ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT COST	TOTAL
1	#GFIC Protection for "F" Dock	1	EA	\$9,436.97	\$ 9,436.97
<p># There is current discussion of adding GFIC protection to the "F" Dock. Wadsworth/MKE are discussing the Code requirements. The exact cost of this change order is unknown at the time, however, what we know is that this is an estimated change order which may increase the contract amount by \$9,436.97. The lead time for the materials, shipping, and installation will also require an estimated 45 day extension of contract time.</p>					
					() Indicates negative value
Subtotal:					\$ 9,436.97
WE AGREE hereby to make changes specified above at this price:				TOTAL:	\$ 9,436.97
				Previous Contract Amount:	\$ 1,527,077.56
				Revised Contract Amount:	\$ 1,536,514.53

PROJECT TIME - CALENDAR DAYS			
Date work Started or commenced on: NTP	Date	8/11/2016	
Original Project Duration:	Days	268	
Original Completion Date:	Date	5/7/2017	
Previous Change Order(s) total time extension:	Days	45	
The above change to the project warrants the following time extension:	Days	45	
New Completion Date:		6/21/2017	

This Change Order becomes part of, and in conformance with, the existing contract.

Authorized Signature (Contractor): _____
 Date: _____

ACCEPTED: The above prices and specifications of the change order are satisfactory and are hereby accepted. This change order amount and extension of time constitutes total compensation for the change, including compensation for all impacts and delays relating to the change and their cumulative effect on the project to date. All work shall be performed under same terms and conditions as specified in original contract unless otherwise stipulated.

Owner Signature: _____
 Date of Acceptance: _____

P.O. Box 387
Astoria, OR 97103
Office 503-325-7130
Fax 503-325-0174
24 Hour Service



"for a job well done"

TIN # 93-0600594
OR CCB# 63328
WA CCO1 BERGEC1 121011
info@bergerson-const.com
www.bergerson-const.com

March 20, 2017

Otak, Inc.
Attn: Sarah McKay
4253A Hwy 101 N
Seaside, OR 97138

RE: City of Warrenton – Marina Improvement Project

Change Order Proposal (COP) No. 009 – Shunt Trip Breaker

Dear Ms. McKay,

NOT EXACTLY. CITY/MARINA WANTS PLANS FOLLOWED -/f

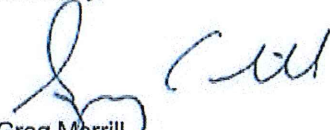
Per the City's request, Bergerson is proposing the following to service MSP-C shunt trip breaker and CT assembly.

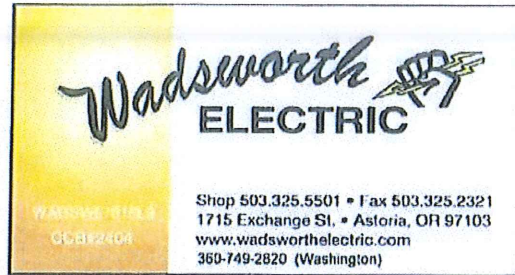
COP 009 – Total \$ 9,436.97

Enclosed is a breakdown of the costs associated with this additional work. The shunt trip breaker is a long-lead item with an anticipated lead time of approximately 6 weeks from the time of approval. As such, Bergerson Construction is requesting a time extension sufficient to allow for this lead time plus field installation.

If any additional information is required or if clarification is needed, please feel free to contact me at your earliest convenience.

Sincerely,


Greg Morrill
President



Bergerson Construction
ATTN: Staci Sherer

March 17, 2017

RE: Change order pricing for: Service MSP-C shunt trip breaker and CT assembly

Scope of change: Coordinate Pacific Power disconnect of and remove existing service equipment MSP-C, install shunt trip breaker assembly with stainless steel enclosure, provide and install service conduit and wire to shunt trip breaker assembly. Provide and install CT enclosure and connect feeder conduit to enclosure, provide and install conduit and wire for shunt trip actuation between shunt trip breaker enclosure and ground fault detection equipment, install conduit and wire between CT enclosure, and ground fault detection system. Add to existing permit -200-amp service permit and circuit permit for shunt trip actuation circuit.

The cost of this change is \$8987.59 There is a deduct if you go with non stainless option. Please see the attached detailed breakdown of costs.

Cassandra Liljenwall Supervising Electrician
Wadsworth Electric

CHANGE ORDER ANALYSIS
Summary Sheet

DATE: 03/17/17



Wadsworth ELECTRIC
PO Box 746 - 1715 Exchange St. - Astoria, OR 97103

WARRENTON COMMERCIAL F DOCK
JOB #

CO # 2

Proposal #: _____
Owner's Ref. #: _____

A. TOTAL PRICE THIS CHANGE ORDER \$ 8,987.59

B. Scope to be performed: SEE SCOPE LETTER- ADD SHUNT TRIP BREAKER TO EXSTG SVC.

1. See attached documents

C. Cost Summary:

1. Total Material Cost (see back-up)		\$	3,716.06
2. Total Burdened Labor Cost (see back-up)			3,904.86
3. Subcontractors Cost (see back-up)			
4. Equipment Cost (see back-up)			
5. Other Miscellaneous Costs (see back-up)			194.37
6. Safety allowance	_____	% of item 2	
7. Record Drawings and Submittals	_____		
8. Warranty Work	_____	% of direct expenses	
9. Overhead	<u>15.0</u>	% of material and labor	1,172.29
10. Consumables	_____	%	
11. B&O Tax	_____	% WA only	
12. Sales Tax	_____	%	
14. OCIP Deduct	_____		
15. Bond	_____	%	
TOTAL PRICE THIS CHANGE ORDER		\$	8,987.59

This change order requires a schedule adjustment of 49 days.
Pricing subject to revision after 30 days.

The costs represented include only those clearly identified at this time. No impact or delay costs are included. Should it be determined at a later date that the project is impacted by scope changes, or causes beyond our control, those costs may be submitted at that time. Work will commence upon written acceptance by an authorized agent.

Wadsworth Electric
Cass Liljenwall
Project Manager

Authorized Agent-BERGERSON

CHANGE ORDER ANALYSIS

(cont.)

Date: 12/17/2014

LABOR COST SUMMARY

CO# 2
(X)Field ()Shop

Proposal #: _____
Owner's Ref. #: _____

	<u>Total</u> <u>Hours</u>	<u>Rate</u>	<u>Cost</u>
DIRECT LABOR WAGE			
Electrician	35.32	\$ 90.14	\$ 3,183.74
Direct Supervision		\$	
Subtotal Direct Labor Cost	35.32		\$ 3,183.74
INSURANCE			
Included in rate above			
BENEFITS			
Included in rate above			
Project Manager	8.00	\$ 90.14	\$ 721.12
Subtotal Labor Cost			\$ 3,904.86
Labor Subsistence and Per Diem Parking	/hour		\$
LABOR TOTAL			<u><u>\$ 3,904.86</u></u>

CHANGE ORDER ANALYSIS

(cont)

Date: 12/17/14

MATERIAL COST SUMMARY

CO # 2

Proposal #: _____
Owner's Ref. #: _____

Material	# of Units	Unit Cost Each	Cost
1. <u>Material (SEE TRF LOT)</u>	<u>1</u>	<u>1,185.61</u>	<u>\$ 1,185.61</u>
2. <u>SHUNT TRIP CB ASSBLY</u>	<u>1</u>	<u>1,245.24</u>	<u>1,245.24</u>
3. <u>CT ASSBLY LOT</u>	<u>1</u>	<u>1,285.21</u>	<u>1,285.21</u>
4. _____	_____	_____	
5. _____	_____	_____	
6. _____	_____	_____	
7. _____	_____	_____	
8. _____	_____	_____	
9. _____	_____	_____	
10. _____	_____	_____	
11. _____	_____	_____	
12. <u>Material Discount</u>	_____	_____	
13. <u>Freight</u>	_____	_____	
14. <u>Waste and Spoilage</u>	_____	_____	
Subtotal Material Cost			<u>\$ 3,716.06</u>
Sales and other Taxes			
Shipping, Storage, Distribution @			
Restocking			
TOTAL COST OF MATERIALS			<u><u>\$ 3,716.06</u></u>

Miscellaneous Expenses

CHANGE ORDER ANALYSIS
(cont.)

Date:

MISCELLANEOUS EXPENSES

CO # 2

ECCO #:

Owner's Ref. #: _____

Amount

a. Vehicle expense (as applicable)		
b. Fuel, oil, greasc (as applicable)		
c. Long Distance Calls, Telegrams, etc, Cellular charges (as applicable)		
d. Bond (see recap sheet)		
e. Blueprinting, Reproduction (as applicable)		
f. Clean up/Removal and disposal	Labor	
g. Finance Costs/Interest on Retainage (as applicable)		
h. Administrative support (included in OH)		
i. Licenses, permits, plan check fees (as applicable)		191.00 194.37
j. Design/CADD (as applicable)		
k. Estimating and Change Order Preparation		
l. Patch, paint and repair (as applicable)		
m. Small tools, equipment and expenses	Labor cost	
n. Badging (as applicable)		
o. Transportation of crew to job site	Labor cost	
TOTAL MISCELLANEOUS COST		\$ <u>194.37</u>



Detail Bill of Material

Page 1 of 1

Project Name: WM F dock
 General Order No:

Negotiation No: K5220310X7K1
 Alternate No: 0000

Item No.	Qty	Product	Description	Unit Quote Price	Extended Quote
	1	Enclosed Circuit Breaker	Enclosed Breakers	\$852.73	\$852.73
		Catalog No	RNED2200LS22		
		Designation	3R		
	Qty	List of Materials			
	1	Factory Assembled Enclosed Thermal Magnetic Circuit Breaker			
	1	Molded Case Circuit Breaker with Standard Terminals			
	1	Circuit Breaker Enclosure - Nema 3R			
	1	Enclosure Neutral Kit			
	1	Shunt Trip 48-127Vac/48-60Vdc Pigtail Leads			

Item No.	Qty	Product	Description	Unit Quote Price	Extended Quote
	1	Enclosed Circuit Breaker	Enclosed Breakers	\$1,245.24	\$1,245.24
		Catalog No	WNED2200LS22		
		Designation	4x		
	Qty	List of Materials			
	1	Factory Assembled Enclosed Thermal Magnetic Circuit Breaker			
	1	Molded Case Circuit Breaker with Standard Terminals			
	1	Circuit Breaker Enclosure - Nema 4x,5 Stainless			
	1	Enclosure Neutral Kit			
	1	Shunt Trip 48-127Vac/48-60Vdc Pigtail Leads			

Total Quote Price **\$2,097.97**

Eaton Selling Policy 25-000 applies.

All orders must be released for manufacture within 90 days of date of order entry. If approval drawings are required, drawings must be returned approved for release within 60 days of mailing. If drawings are not returned accordingly, and/or if shipment is delayed for any reason, the price of the order will increase by 1.0% per month or fraction thereof for the time the shipment is delayed.

Wadsworth Electric

**** BID TAKE - OFF DETAILS -- FORMAT 2 ****

**** Job: Warrenton Commercial Dock ** Job Number: CJL00121 ** Bid Date: 6/17/2016 ****

Page 1 Date 3/17/2017 1:39:49 AM

Assm No.	Labor Level	Description	Count	Material Each	Material Extended	Labor Unit	Labor Hr Extended
BASE/ALTS		SHEET NO.	SYSTEM	FEEDER NAME	{Untitled}	{Untitled}	
CO for new breaker		SHEET E-1	SWITCHGEAR	N/A	<No Name>	<No Name>	
*** Breakout Multipliers: Count = 1 Material Cost = 1.00 Labor Hours = 1.00							
00500	2	Miscellaneous Items	0.00				
	2	3/4" PVC CONDUIT SCH 40	200.00	0.140	27.996	0.028	5.625
	2	CKT BKR ENCLS 225A NEMA 3	1.00			1.225	1.225
	2	3/4" GRC STAINLS STRUT STRAP	20.00	1.986	39.719	0.019	0.375
	2	3/4" GRC RIGID CONDUIT	10.00	1.290	12.899	0.060	0.600
	2	3/4" CONDUIT HUB	2.00	5.689	11.379	0.612	1.225
	2	2WY CRMP CNN #8 CU RD 54504	4.00	2.075	8.299	0.350	1.400
	2	SHRINK INSL 4IN #6-#1 HS6-1	4.00	6.265	25.062	0.087	0.350
	2	2" CONDUIT HUB	1.00	12.619	12.619	1.050	1.050
	2	RINTIGHTY TRNS CBINT242411RTCT	1.00	341.793	341.793	5.250	5.250
	2	CURRENT TRANSFMR 100/5	2.00			1.750	3.500
	2	2" GRC STAINLS STRUT STRAP	4.00	3.972	15.887	0.025	0.100
	2	STNLS STL CHAN 3/4	10.00	5.335	53.355	0.061	0.612
	2	200A 208V 3P ENCL BKR W/SHUNT	1.00	450.000	450.000	5.250	5.250
03303	2	2" PVC 3#4/0 1#6	20.00				
	2	#4/0 THHN CU STR	60.00	1.883	112.994	0.029	1.738
	2	#6 THHN CU STR	21.00	0.253	5.314	0.011	0.231
	2	2" PVC CONDUIT SCH 40	20.00	0.400	8.001	0.042	0.843
	2	2" SLIPFTR ENTRANCE ELL	1.00	26.036	26.036	1.300	1.300
03721	2	3/4" PVC ELL W/STUBUP	2.00				
	2	3/4" PVC CONDUIT SCH 40	10.00	0.140	1.400	0.028	0.281
	2	3/4" PVC MALE ADAPTER	2.00	0.100	0.200	0.157	0.315
	2	3/4" LOCKNUT	2.00	0.058	0.115	0.175	0.350
	2	3/4" PLASTIC BUSHING	2.00	0.019	0.039	0.044	0.088
	2	3/4" PVC 90-FIELD BEND LABOR	2.00			0.306	0.612
	2	#12 THHN CU STR	500.00	0.065	32.502	0.006	3.000
Totals					1,185.61		35.32
Grand Totals					1,185.61		35.32

Oregon project

Rates below do not include ohp markup or market recovery

Day Shift	Straight time	
	Time & 1/2	
Swing Shift	Double Time	
	Straight time	
Grave Yard Shift	Time & 1/2	
	Double Time	

General Foreman	Foreman	JW	6 TH	5 TH	4 TH	3 RD	2 ND	1 ST
103.88	97.01	90.14	79.33	68.06	60.54	53.02	43.48	40.36
136.35	126.77	117.17	102.11	86.77	76.54	66.32	55.41	50.93
172.10	159.55	146.98	127.43	107.62	94.40	81.22	68.82	62.83
112.98	105.33	97.68	85.51	73.13	64.82	56.56	46.64	43.13
154.93	143.78	132.65	115.22	97.60	85.81	74.04	62.35	57.11
172.10	159.55	146.98	127.43	107.62	94.40	81.22	68.82	62.83
123.05	114.58	106.10	92.66	78.99	69.87	60.75	50.41	46.49
170.04	157.67	145.26	125.94	106.40	93.38	80.36	68.03	62.18
172.10	159.55	146.98	127.43	107.62	94.40	81.22	68.82	62.83



Electrical Permit Application

Community Development
 Building Codes Division
 800 Exchange St Ste 100 Astoria, OR 97103
 Ph: (503) 338-3697 Fax: (503) 338-3666
 Request Line 503-338-3698
buildingdivision@co.clatsop.or.us
 Web: co.clatsop.or.us

DEPARTMENT USE	
Permit #	
Label #	
Date:	

Job #

This permit is issued under OAR 918-309-0000. Permits expire if work is not started within 180 days of issuance or if work is suspended for 180 days. Permits are non-transferable

CATEGORY OF CONSTRUCTION	
<input type="checkbox"/> Residential	<input type="checkbox"/> Government <input type="checkbox"/> Commercial
DESCRIPTION OF WORK	
JOB SITE INFORMATION AND LOCATION	
Property Owner:	
Job site Address:	
City:	
Phone:	
Direction:	
PROPERTY OWNER INSTALLATION	
Name:	
Mailing Address:	
City/State/Zip:	
Email:	
Phone: ()	Fax: ()
This installation is being made on residential or farm property owned by me or a member of my immediate family. This property is not intended for sale, exchange, lease, or rent. ORS 479.540(1) and 479.560(1).	
Owner's Signature:	
CONTRACTOR INSTALLATION	
Business Name: Wadsworth Electric	
Mailing Address: 1715 Exchange Street	
City/State/Zip: Astoria, OR 97103	
Email: purchasing@wadsworthelectric.com ; cass@wadsworthelectric.com	
Phone: (503) 325-5501	Fax: (503) 325-2321
CCB Lic # 2404	BCD Lic # C495
Name of Signing Supervisor: Cassandra Liljenwall	
Signing Supp. Signature: <i>Cassandra Liljenwall</i>	SS Lic # 5748S

FEE SCHEDULE				
Number of inspections per item (*)	Items	Ea.	Sum	*
Residential, per unit, service included:				
1,000 sq. ft. or less		\$201.00		(4)
Each additional 500 sf or portion		\$56.00		(2)
Limited energy w/above fees		\$64.00		(2)
Manufactured or Modular Dwelling Service or Feeder		\$104.00		(2)
Services or feeders: (installation, alteration, relocation)				
200 amps or less		\$121.00		(2)
201 to 400 amps		\$160.00		(2)
401 to 600 amps		\$240.00		(2)
601 to 1,000 amps		\$360.00		(2)
Over 1,000 amps or volts		\$674.00		(2)
Reconnect only		\$104.00		(2)
Temporary services or feeders: (installation, alteration, relocation)				
200 amps or less		\$104.00		(2)
201 to 400 amps		\$143.00		(2)
401 to 600 amps		\$201.00		(2)
Over 600 amps or 1,000 volts. See services or feeders section, above.				
Branch circuits: (new, alteration, extension per panel)				
a. Fee for branch circuits with purchase of a service or feeder:				
Each branch circuit		\$8.00		(2)
b. Fee for branch circuits without purchase of a service or feeder				
First branch circuit		\$79.00		(2)
Each additional branch circuit		\$8.00		
Miscellaneous: (service or feeder not included)				
Each well pump/alarm or irrigation		\$104.00		(2)
Each sign or outline lighting cir		\$104.00		(2)
Limited-Energy panel, alteration, or extension, or signal circuit		\$104.00		(2)
Each additional inspection:		\$94.00		(1)
Each Hourly Inspection		\$106.00		(1)
PERMIT FEES				
A. Subtotal of Above Fee		\$		
B. State Surcharge (12% of A)		\$		
C. Plan Review, if required (35% of A)		\$		
D. Investigative Fee, if applicable		\$		
TOTAL Electrical Fees		\$		

PLAN REVIEW	
please check all that apply	
<input type="checkbox"/> Service or feeder 400 amps or more where the available fault current exceeds 10,000 amps at 150 volts or less to ground, or exceeds 14,000 amps for all other installations.	<input type="checkbox"/> Service or feeder 600 amps or more
<input type="checkbox"/> Fire pump	<input type="checkbox"/> Building over three stories
<input type="checkbox"/> Emergency system	<input type="checkbox"/> Marinas and boatyards
<input type="checkbox"/> Addition of new motor load of 100HP or more	<input type="checkbox"/> Floating buildings
<input type="checkbox"/> Six or more residential units	<input type="checkbox"/> Commercial-use agricultural buildings
<input type="checkbox"/> Health-care facilities	<input type="checkbox"/> Installation of 150 KVA or larger separately derived system
<input type="checkbox"/> Hazardous locations	<input type="checkbox"/> "A," "E," "I-2," "I-3" occupancy
	<input type="checkbox"/> Recreational vehicle parks
	<input type="checkbox"/> Supply voltage for more than 600 volts nominal

Make check or money order payable to: CLATSOP COUNTY BLDG CODES
 Point N Pay charges a 2.5% processing fee for credit card transactions. Min \$2

<input type="checkbox"/> Visa <input checked="" type="checkbox"/> MC <input type="checkbox"/> Discover <input type="checkbox"/> AE	Phone: (503) 325-5501
Credit Card Number	10 / 2017
	Expiration Date
Rod Gramson	
Name of Cardholder as shown on card	
<i>Rod Gramson</i>	\$
Cardholder's Signature	Amount
Please provide mailing address where you receive your credit card statement: ADDRESS: 1715 Exchange St. Astoria OR 97103 ZIP CODE:	

P.O. Box 387
Astoria, OR 97103
Office 503-325-7130
Fax 503-325-0174
24 Hour Service



TIN # 93-0600594
OR CCB# 63328
WA CCO1 BERGEC1210H
info@bergerson-const.com
www.bergerson-const.com

March 22, 2017

Otak, Inc.
Attn: Sarah McKay
4253A Hwy 101 N
Seaside, OR 97138

RE: City of Warrenton – Marina Improvement Project

Change Order Proposal (COP) No. 010 – Electrical Panel Support

Dear Ms. McKay,

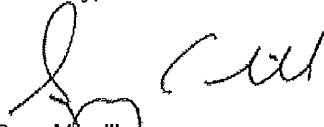
In accordance with RFI 009, Bergerson Construction is providing this proposal for the support structure for the CD Electrical Cabinet near the head of the F-Dock gangway.

COP 010 – Total \$ 10,507.85

Enclosed is a breakdown of the costs associated with this additional work, a copy of RFI 009 and the design calculations for the support structure. It is expected that these modifications will not have impact to the contract construction schedule.

If any additional information is required or if clarification is needed, please feel free to contact me at your earliest convenience.

Sincerely,



Greg Morrill
President

CITY OF WARRENTON MARINA
ELECTRIC CABINET SUPPORT FRAME
STRUCTURAL CALCULATIONS AND DETAILS
WARRENTON, OR

 **BergerABAM**
Submitted to
City of Warrenton
Warrenton, Oregon



Wind Speed from Fig. 1609A = 135 MPH
 Fig. 1609B = 145 MPH
 Fig. 1609C = 125 MPH

29.5, Design Wind Load on Others Structures

	$F = q_z G C_f A_f$	(29.5-1)
	$q_z = .00256 K_z K_{zt} K_d V^2$	(29.3-1)
Ht. z at the centroid of area $A_f = 13$	ft	Exp = C
Exposure coefficient $K_z = 0.85$		6.5.6.6, T-6-3 for MWFR
Topography factor $K_{zt} = 1.00$		6.5.7.2
Directionality factor $K_d = 0.85$		Table 6-4
Building & Structure Risk Category = II, standard		IBC T-1604.5
Wind Speed $V = 135$	MPH	Fig. 26.5-1A, MRI = 700 yrs
$q_z = 33.71$	psf	
Gust Effect factor $G = 0.85$		26.9
Force coeff $C_f = 1.32$		Figure 29.5-1 through 29.5-3
Design wind pressure, $F/A_f = 37.82$	psf	

Cabinet Surface area

$$(37')(90') / 144 = 23.1 \text{ ft}^2$$

$$\text{Wind Force} = (37.8 \text{ psf})(23.1 \text{ ft}^2) = \underline{873 \# \text{ (Factored)}}$$

$$\text{Unfactored Wind} = 873 / 1.6 = \underline{545.7 \# \text{ (Unfactored)}}$$

SEISMIC DESIGN

$$F_p = \frac{0.4 a_p S_{ps} W_p}{R_p / I_p} (1 + 2 z/h)$$

$$F_p = \frac{0.4(2.5)(0.887)(850)(1+2)}{6.0/1.5}$$

$$= \underline{565 \# \text{ (Factored)}}$$

$$= 564 / 1.4 = \underline{403 \# \text{ Unfactored}} \quad \therefore$$

ELEC. CABINET CONSTRUCTED OF SHEET METAL

$$a_p = 2.5 \quad I_p = 1.5$$

$$R_p = 6.0 \quad S_{ps} = 0.887$$

$$W_p = 850 \# \text{ (Cabinet)}$$

$$z/h = 1.0 \text{ (Connection of cabinet at top of structure)}$$

Wind Governs

USGS Design Maps Summary Report

User-Specified Input

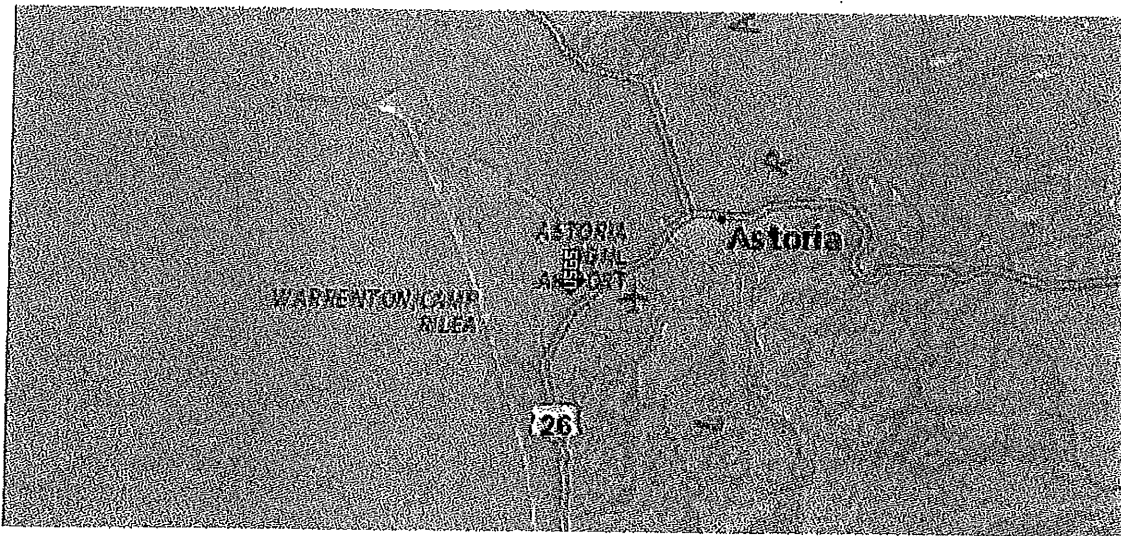
Report Title Warrenton Elecetric Cabinet
 Fri March 3, 2017 00:02:20 UTC

Building Code Reference Document 2012/2015 International Building Code
 (which utilizes USGS hazard data available in 2008)

Site Coordinates 46.16717°N, 123.9156°W

Site Soil Classification Site Class D - "Stiff Soil"

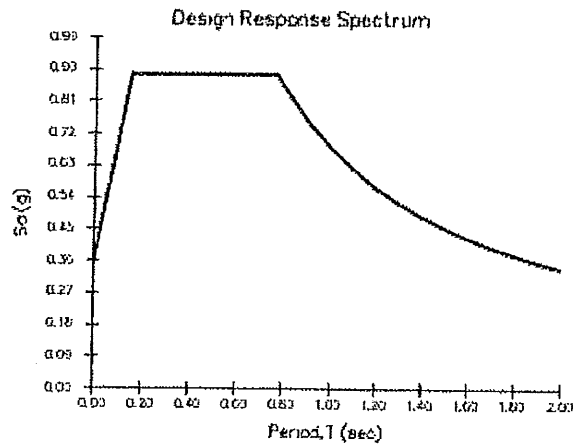
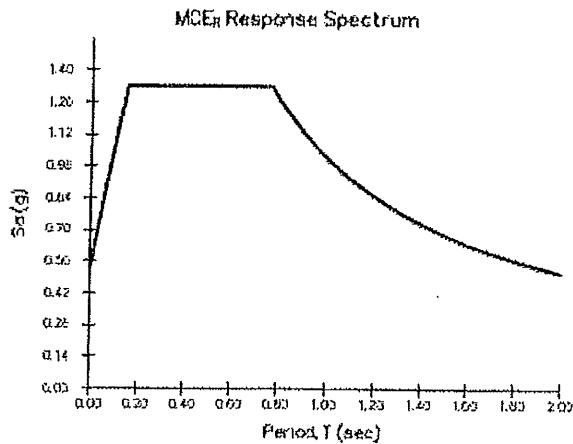
Risk Category I/II/III



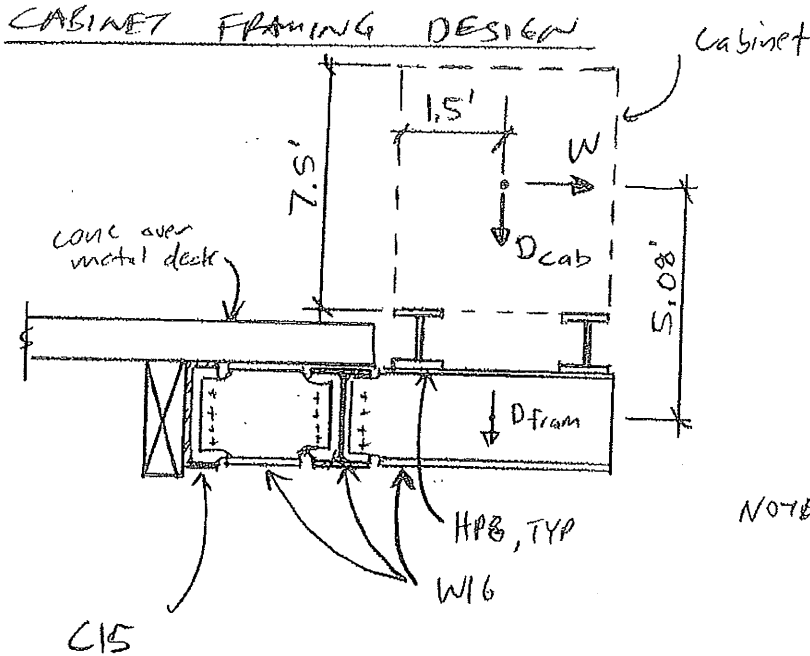
USGS-Provided Output

$S_s = 1.331 \text{ g}$	$S_{MS} = 1.331 \text{ g}$	$S_{DS} = 0.887 \text{ g}$
$S_1 = 0.682 \text{ g}$	$S_{M1} = 1.022 \text{ g}$	$S_{D1} = 0.682 \text{ g}$

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.



NOTE: TWO CANTILEVERED
 W16x BEAMS
 PROVIDED

DEAD LOADS

Cabinet = 850 #

Framing

(1) HP8x36 x 3'-0" = 432 #

(2) W16x57 x 3'-0" = 342 #

MISC BOLTS/PLATES = 10 prs x 3' x 3' = 90 #

TOTAL FRAMING = 864 #

$D_{cab} + D_{fram} = D = 850 \# + 864 \# = 1714 \#$

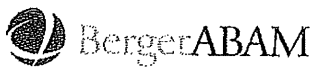
$W(\text{wind}) = 546 \#$ (unfactored)

Loads per cantilever beam

$D/2 = 1714/2 = 857 \#$

$W/2 = 546/2 = 273 \#$

moment at C.G. of W16 from wind = $273 \times 5.08' = 1386 \text{ ft}\cdot\#$



Project Warrington Marina
Support Framing
 Subject Design Calcs

Sheet _____ of _____
 Job Number A17.0203
 Designer BDB
 Date 3/14/17

FROM RISA 3-D (see following pages)

$$M_{u, \max} = 3.8 \text{ k}\cdot\text{ft}$$

$$V_{u, \max} = 2.5 \text{ k}$$

$$T_{u, \max} = 0.4 \text{ k}$$

Check Beam Web for Flexure

$$\phi_b M_n = 0.9 (F_y) (bd^2/4)$$

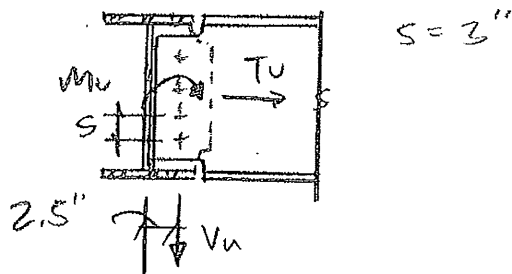
$$d = 12" \text{ (coped web)}$$

$$D_{\text{req}} = (3.8 \text{ k}\cdot\text{ft})(12)(4) / 0.9(50 \text{ ksi})(12^2)$$

$$= 0.03" \Rightarrow \text{min } 1/4" \text{ web}$$

USE MIN W16x36
 $t_w = 5/16"$ $t_f = 0.43"$
 $b_f = 7"$

Check Bolted Connection



TRY (4) $7/8"$ ϕ A325 BOLTS

Shear per bolt due to V_u

$$r_p = V_u / 4 = 2.5 / 4 = 0.63 \text{ k}$$

Shear per bolt due to T_u

$$r_t = T_u / 4 = 0.4 / 4 = 0.1 \text{ k}$$

Shear per bolt due to Moment

$$M_{u, \text{total}} = M_{u, \max} + V_u \times 2.5"$$

$$= 3.8 \text{ k}\cdot\text{ft} + 2.5 \text{ k} \times 2.5"$$

$$= 45.6 \text{ k}\cdot\text{in} + 6.3 \text{ k}\cdot\text{in}$$

$$= 51.9 \text{ k}\cdot\text{in}$$

$$r_m = \frac{(M_{u, \text{total}})(c)}{I_p}$$

c = radial dist from bolt group C.G. to most remote bolt

$$= 1.5" \times 3" = 4.5"$$

$$I_p = \frac{nm}{12} [s^2(n^2-1) + g^2(m^2-1)]$$

per AASHTO C6.13.6.1.4b-3

where

$n = 4$ bolts

$m = 1$ row

$s = 3"$ (bolt spacing)

$g = 0"$ (row spacing)

$$I_p = \frac{(4)(1)}{12} [3^2(4^2-1) + 0^2]$$

$$= 45 \text{ in}^4$$

$$r_m = (51.9 \text{ k}\cdot\text{in})(4.5) / 45 = 5.2 \text{ k}$$



Company : BergerABAM
 Designer : BDB
 Job Number : A17.0203.00
 Model Name : Warrenton Elec Cabinet

Mar 14, 2017
 11:12 AM
 Checked By: _____

Joint Reactions

	LC	Joint Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N1	0	-.857	0	0	0	0
2	1	N2	0	1.714	0	0	0	0
3	1	Totals:	0	.857	0			
4	1	COG (ft):	X: 3	Y: 0	Z: 0			
5	2	N1	0	-.925	0	0	0	0
6	2	N2	-.273	.925	0	0	0	0
7	2	Totals:	-.273	0	0			
8	2	COG (ft):	NC	NC	NC			
9	3	N1	0	-2.508	0	0	0	0
10	3	N2	-.437	3.536	0	0	0	0
11	3	Totals:	-.437	1.028	0			
12	3	COG (ft):	X: 5.158	Y: 0	Z: 0			
13	4	N1	0	-1.782	0	0	0	0
14	4	N2	.273	2.639	0	0	0	0
15	4	Totals:	-.273	.857	0			
16	4	COG (ft):	X: 4.618	Y: 0	Z: 0			

Joint Deflections

	LC	Joint Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1	1	N1	0	0	0	0	0	-1.373e-5
2	1	N2	0	0	0	0	0	-3.361e-5
3	1	N3	0	-.002	0	0	0	-5.349e-5
4	2	N1	0	0	0	0	0	-1.482e-5
5	2	N2	0	0	0	0	0	-3.627e-5
6	2	N3	0	-.003	0	0	0	-7.917e-5
7	3	N1	0	0	0	0	0	-4.018e-5
8	3	N2	0	0	0	0	0	-9.836e-5
9	3	N3	0	-.007	0	0	0	-1.909e-4
10	4	N1	0	0	0	0	0	-2.855e-5
11	4	N2	0	0	0	0	0	-6.988e-5
12	4	N3	0	-.005	0	0	0	-1.327e-4

Member Section Forces

	LC	Member Label	Sec	Axial [k]	y Shear [k]	z Shear [k]	Torque [k-ft]	y-y Mo...	z-z Moment [k-ft]
1	1	M1	1	0	-.857	0	0	0	0
2			2	0	-.857	0	0	0	.321
3			3	0	-.857	0	0	0	.643
4			4	0	-.857	0	0	0	.964
5			5	0	-.857	0	0	0	1.285
6	1	M2	1	0	.857	0	0	0	1.285
7			2	0	.857	0	0	0	.643
8			3	0	0	0	0	0	0
9			4	0	0	0	0	0	0
10			5	0	0	0	0	0	0
11	2	M1	1	0	-.925	0	0	0	0
12			2	0	-.925	0	0	0	.347
13			3	0	-.925	0	0	0	.693
14			4	0	-.925	0	0	0	1.04



Company : BergerABAM
 Designer : BDB
 Job Number : A17.0203.00
 Model Name : Warrenton Elec Cabinet

Mar 14, 2017
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Member Section Forces (Continued)

	LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Mo...	z-z Moment[k-ft]
15			5	0	-925	0	0	0	1.387
16	2	M2	1	-273	0	0	0	0	1.387
17			2	-273	0	0	0	0	1.387
18			3	0	0	0	0	0	0
19			4	0	0	0	0	0	0
20			5	0	0	0	0	0	0
21	3	M1	1	0	-2.508	0	0	0	0
22			2	0	-2.508	0	0	0	.94
23			3	0	-2.508	0	0	0	1.881
24			4	0	-2.508	0	0	0	2.821
25			5	0	-2.508	0	0	0	3.762
26	3	M2	1	-437	1.028	0	0	0	3.762
27			2	-437	1.028	0	0	0	2.99
28			3	0	0	0	0	0	0
29			4	0	0	0	0	0	0
30			5	0	0	0	0	0	0
31	4	M1	1	0	-1.782	0	0	0	0
32			2	0	-1.782	0	0	0	.688
33			3	0	-1.782	0	0	0	1.336
34			4	0	-1.782	0	0	0	2.004
35			5	0	-1.782	0	0	0	2.672
36	4	M2	1	-273	.857	0	0	0	2.672
37			2	-273	.857	0	0	0	2.03
38			3	0	0	0	0	0	0
39			4	0	0	0	0	0	0
40			5	0	0	0	0	0	0

Bolted Connection (Cont.)

$$\left. \begin{aligned} r_m &= 5.2 \text{ k} \\ r_p &= 0.63 \text{ k} \\ r_t &= 0.1 \text{ k} \end{aligned} \right\} \text{ Per bolt}$$

$$r_n = \sqrt{r_p^2 + r_m^2}$$

$$= 5.23 \text{ k}$$

Total shear per bolt

$$r_u, \text{max} = \sqrt{r_v^2 + r_t^2}$$

$$= \sqrt{5.23^2 + 0.1^2}$$

$$= 5.24 \text{ k}$$

Available shear per bolt

$$\Rightarrow \phi r_n = 24.3 \text{ k}$$

per AISC T7-1

$$24.3 \text{ k} > 5.2 \text{ k} \quad \therefore \text{OK}$$

 USE (4) $\frac{7}{8}$ " ϕ A325N

Check shear plate

$$M_u, \text{total} = 51.9 \text{ k}\cdot\text{in}$$

$$Z_{\text{req}} = \frac{51.9 \text{ k}\cdot\text{in}}{(36 \text{ ksi})(0.9)}$$

$$= 1.6 \text{ in}^3$$

 TRY PL $\frac{3}{8}$ x 4 x Full depth

$$Z = \frac{bd^2}{4} = \frac{0.375(14.5")^2}{4}$$

$$= 19.7 \text{ in}^3 > 1.6 \text{ in}^3$$

\therefore OK

Check weld of shear plate to W16 web

$$M_u, \text{total} = 51.9 \text{ k}\cdot\text{in}$$

$$S_{\text{weld}} = \frac{d^2}{3} = \frac{(14.5")^2}{3}$$

$$= 70.1 \text{ in}^3/\text{in}$$

 Try $\frac{1}{4}$ fillet ea side

$$M_u/s = 51.9/70.1 = 0.74 \text{ k}/\text{in}$$

$$D_{\text{req}} = (M_u/s) \left(\frac{1}{0.707} \times 0.6 \times F_{\text{max}} \times 0.75 \right)$$

\swarrow 70 ksi

$$= 0.74(0.045)$$

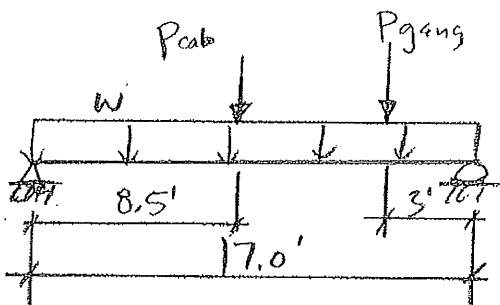
$$= 0.033" < 0.25" \quad \therefore$$

 USE PL $\frac{3}{8}$ x 4 x Full depth
 w/ $\frac{1}{4}$ " Fillet ea side

Check Exist W16x57 Beam

$$L = 17 \text{ ft}$$

Beam is bearing on pile cap at each end



Unfactored loads

$$W_{\text{dead}} = 43 \text{ psf} \times 1.58' + 57 \text{ pif} = 125 \text{ pif}$$

$$W_{\text{live}} = 200 \text{ psf} \times 1.58' = 316 \text{ pif}$$

$$P_{\text{gang, dead}} = 50 \text{ psf} \times 40' / 2 \times 6' = 6000 \#$$

$$P_{\text{gang, live}} = 100 \text{ psf} \times 40' / 2 \times 6' = 12000 \#$$

$$P_{\text{cab, dead}} = (1714 \#) \times 2 = 3428 \#$$

↑
Per beam from
RISA Reactions
LC 1

$$P_{\text{cab, wind}} = (925 \#) \times 2 = 1850 \#$$

↑
Per beam from
RISA Reactions LC 2

From RISA 3D output on following pages

$$M_u, \text{max} = 89.0 \text{ k-ft (LC 5)}$$

$$V_u, \text{max} = 301 \text{ k-ft (LC 5)}$$

$$\Delta_{\text{DL+LL}} = 0.192" \text{ (LC 4)}$$

$$l/240 = 17 \times 12 / 240 = 0.85" > 0.192"$$

∴ Deflection OK

$$\phi_b M_n = 0.9 (F_y) (Z)$$

$$Z = 105 \text{ in}^3$$

$$\phi_b M_n = 0.9 (50) (105) / 12" = 393 \text{ k-ft} > 89 \text{ k-ft}$$

∴ OK

Exist W16x57 beam
 OK



Company : BergerABAM
 Designer : BDB
 Job Number : A17.0203.00
 Model Name : Warrenton Exit W16 beam

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Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (1/E...)	Density[k/ft...]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
3	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.42	29000	11154	.3	.65	.49	42	1.4	58	1.3
5	A500 Gr.46	29000	11154	.3	.65	.49	46	1.4	58	1.3

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	W16x57	W16x57	Beam	None	A572 Gr...	Typical	16.8	43.1	758	2.22

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0	0	0	0	
2	N2	17	0	0	0	

Hot Rolled Steel Design Parameters

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torque[ft]	Kyy	Kzz	Cb	Func...
1	M1	W16x57	17			Lbyy						Lateral

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M1	Y	-6	14
2	M1	Y	-3.43	8.5

Member Point Loads (BLC 2 : Live)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M1	Y	-12	14

Member Point Loads (BLC 3 : Wind)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M1	Y	-1.85	8.5

Member Distributed Loads (BLC 1 : Dead)

	Member Label	Direction	Start Magnitude[k/ft...]	End Magnitude[k/ft,F]	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-.125	-.125	0	%100

Member Distributed Loads (BLC 2 : Live)

	Member Label	Direction	Start Magnitude[k/ft...]	End Magnitude[k/ft,F]	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-.316	-.316	0	%100



Company : BergerABAM
 Designer : BDB
 Job Number : A17.0203.00
 Model Name : Warrenton Exit W16 beam

Mar 14, 2017
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Basic Load Cases

	BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distributed	Area(...	Surfac...
1	Dead	DL					2	1		
2	Live	LL					1	1		
3	Wind	WL					1			

Load Combinations

	Description	S...	PD...	SR...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	D	Y..	Y		1	1														
2	L	Y..	Y		2	1														
3	W	Y..	Y		3	1														
4	D+L+W	Y..	Y		1	1	2	1	3	1										
5	1.2D+1.6L+0.5(1.6W)	Y..	Y		1	1.2	2	1.6	3	.8										
6	1.2D+1.0L+1.6W	Y..	Y		1	1.2	2	1	3	1.6										

Joint Reactions

	LC	Joint Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N1	0	3.836	0	0	0	0
2	1	N2	0	7.719	0	0	0	0
3	1	Totals:	0	11.555	0			
4	1	COG (ft):	X: 11.356	Y: 0	Z: 0			
5	2	N1	0	4.804	0	0	0	0
6	2	N2	0	12.568	0	0	0	0
7	2	Totals:	0	17.372	0			
8	2	COG (ft):	X: 12.299	Y: 0	Z: 0			
9	3	N1	0	.925	0	0	0	0
10	3	N2	0	.925	0	0	0	0
11	3	Totals:	0	1.85	0			
12	3	COG (ft):	X: 8.5	Y: 0	Z: 0			
13	4	N1	0	9.565	0	0	0	0
14	4	N2	0	21.212	0	0	0	0
15	4	Totals:	0	30.777	0			
16	4	COG (ft):	X: 11.717	Y: 0	Z: 0			
17	5	N1	0	13.029	0	0	0	0
18	5	N2	0	30.112	0	0	0	0
19	5	Totals:	0	43.141	0			
20	5	COG (ft):	X: 11.866	Y: 0	Z: 0			
21	6	N1	0	10.887	0	0	0	0
22	6	N2	0	23.311	0	0	0	0
23	6	Totals:	0	34.198	0			
24	6	COG (ft):	X: 11.588	Y: 0	Z: 0			

Member Section Forces

	LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Mo...	z-z Moment[k-ft]
1	1	M1	1	0	3.836	0	0	0	0
2			2	0	3.305	0	0	0	-15.175
3			3	0	-.656	0	0	0	-28.093
4			4	0	-1.187	0	0	0	-24.175



Company : BergerABAM
 Designer : BDB
 Job Number : A17.0203.00
 Model Name : Warrenton Exit W16 beam

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Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Mo...	z-z Moment[k-ft]
5		5	0	-7.719	0	0	0	0
6	2	M1	1	0	4.804	0	0	0
7		2	0	3.461	0	0	0	-17.562
8		3	0	2.118	0	0	0	-29.415
9		4	0	.775	0	0	0	-35.562
10		5	0	-12.568	0	0	0	0
11	3	M1	1	0	.925	0	0	0
12		2	0	.925	0	0	0	-3.931
13		3	0	-.925	0	0	0	-7.862
14		4	0	-.925	0	0	0	-3.931
15		5	0	-.925	0	0	0	0
16	4	M1	1	0	9.565	0	0	0
17		2	0	7.691	0	0	0	-36.668
18		3	0	536	0	0	0	-65.371
19		4	0	-1.338	0	0	0	-63.668
20		5	0	-21.212	0	0	0	0
21	5	M1	1	0	13.029	0	0	0
22		2	0	10.243	0	0	0	-49.454
23		3	0	1.861	0	0	0	-87.067
24		4	0	-.925	0	0	0	-89.054
25		5	0	-30.112	0	0	0	0
26	6	M1	1	0	10.887	0	0	0
27		2	0	8.907	0	0	0	-42.062
28		3	0	-.15	0	0	0	-75.707
29		4	0	-2.13	0	0	0	-70.862
30		5	0	-28.311	0	0	0	0

Member Section Deflections

LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y Ratio	(n) L/z Ratio
1	1	M1	1	0	0	0	NC	NC
2			2	0	-.053	0	3882.888	NC
3			3	0	-.078	0	2599.52	NC
4			4	0	-.059	0	3446.03	NC
5			5	0	0	0	NC	NC
6	2	M1	1	0	0	0	NC	NC
7			2	0	-.063	0	3255.266	NC
8			3	0	-.095	0	2147.139	NC
9			4	0	-.076	0	2684.622	NC
10			5	0	0	0	NC	NC
11	3	M1	1	0	0	0	NC	NC
12			2	0	-.013	0	NC	NC
13			3	0	-.019	0	NC	NC
14			4	0	-.013	0	NC	NC
15			5	0	0	0	NC	NC
16	4	M1	1	0	0	0	NC	NC
17			2	0	-.128	0	1593.777	NC
18			3	0	-.192	0	1061.988	NC
19			4	0	-.148	0	1378.575	NC
20			5	0	0	0	NC	NC
21	5	M1	1	0	0	0	NC	NC



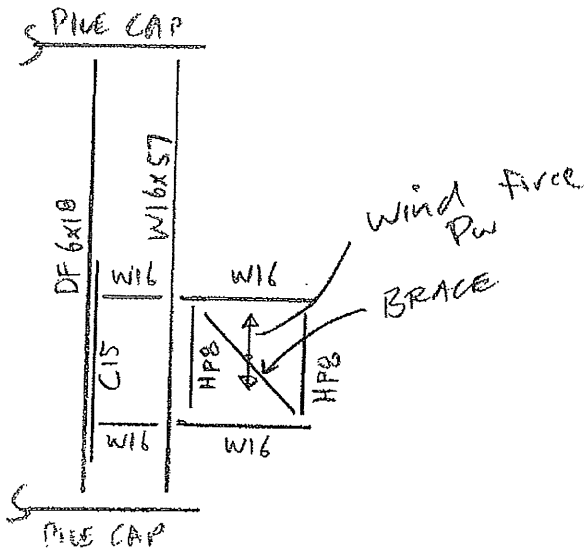
Company : BergerABAM
 Designer : BDB
 Job Number : A17.0203.00
 Model Name : Warrenton Exit W16 beam

Mar 14, 2017
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 Checked By: _____

Member Section Deflections (Continued)

LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y Ratio	(n) L/z Ratio
22		2	0	-174	0	0	1175.469	NC
23		3	0	-261	0	0	781.392	NC
24		4	0	-203	0	0	1005.653	NC
25		5	0	0	0	0	NC	NC
26	6	M1	1	0	0	0	NC	NC
27		2	0	-146	0	0	1395.533	NC
28		3	0	-219	0	0	931.712	NC
29		4	0	-167	0	0	1217.956	NC
30		5	0	0	0	0	NC	NC

DESIGN PLATFORM BRACING



PLAN VIEW

$L_{brace} = 4.25'$
 $P_{wind} = 873 \#$ (Factored)

Brace axial force
 $\approx (873 \#) \sqrt{2}$
 $= 1234 \# \pm$

TRY L3x2x1/4 LLH
 BRACE

$\phi_c P_n = 8.15k$ (AISC 74-12)
 $P_u = 123k < 8.15k$
 \therefore OK FOR
Compression

Tension

$\phi_t P_n = 0.9(A_g)(36ksi)$
 $= 0.9(1.19in^2)(36)$
 $= 38.6k >> 1.2k$
 \therefore OK FOR
 tension

Single bolt connection

try (1) 5/8 A325N

$\phi_r V_n = 11.0k > 1.23k$
 \therefore OK

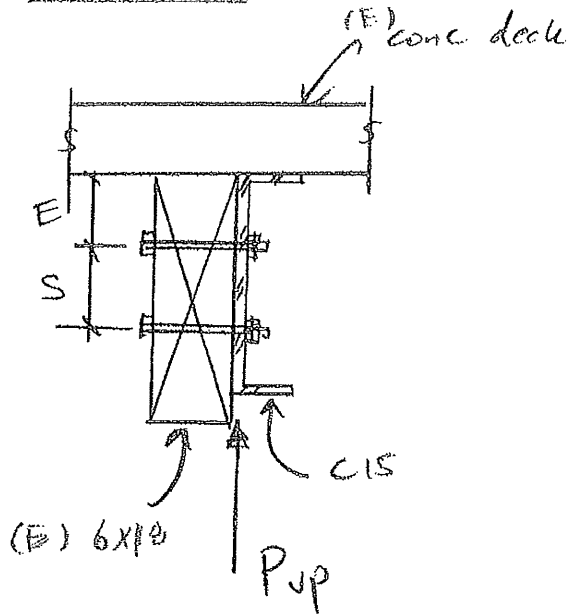
USE L3x2x1/4 LLH
 w/ (1) 5/8" ϕ A325N
 EA END, BOLT TO
 FLANGE OF W16
 CANTILEVER 13 BEAMS

Project Warrenton Marina
 Subject Support Framing
 Subject Design Calc

Sheet _____ of _____
 Job Number A17.0203
 Designer RMS
 Date 3/14/17



DESIGN C15



$$P_{up} = 857\# + 925\#$$

↑ DEAD ↑ WIND
 = 1782# (unfactored)
 ↑
 sec RISA 3D
 cantilever beam
 reactions

TRY (2) 5/8" φ A307
 BOLTS EA SIDE
 (4 TOTAL)

For wood member 5 1/2" wide
 w/ PL 1/4"

$$Z_{\perp} = 710\# \text{ (NDS T 11B)}$$

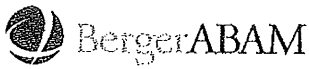
$$Z_{\perp} \times 4 = 710 \times 4$$

$$= 2840\# > 1782\#$$

∴ OK

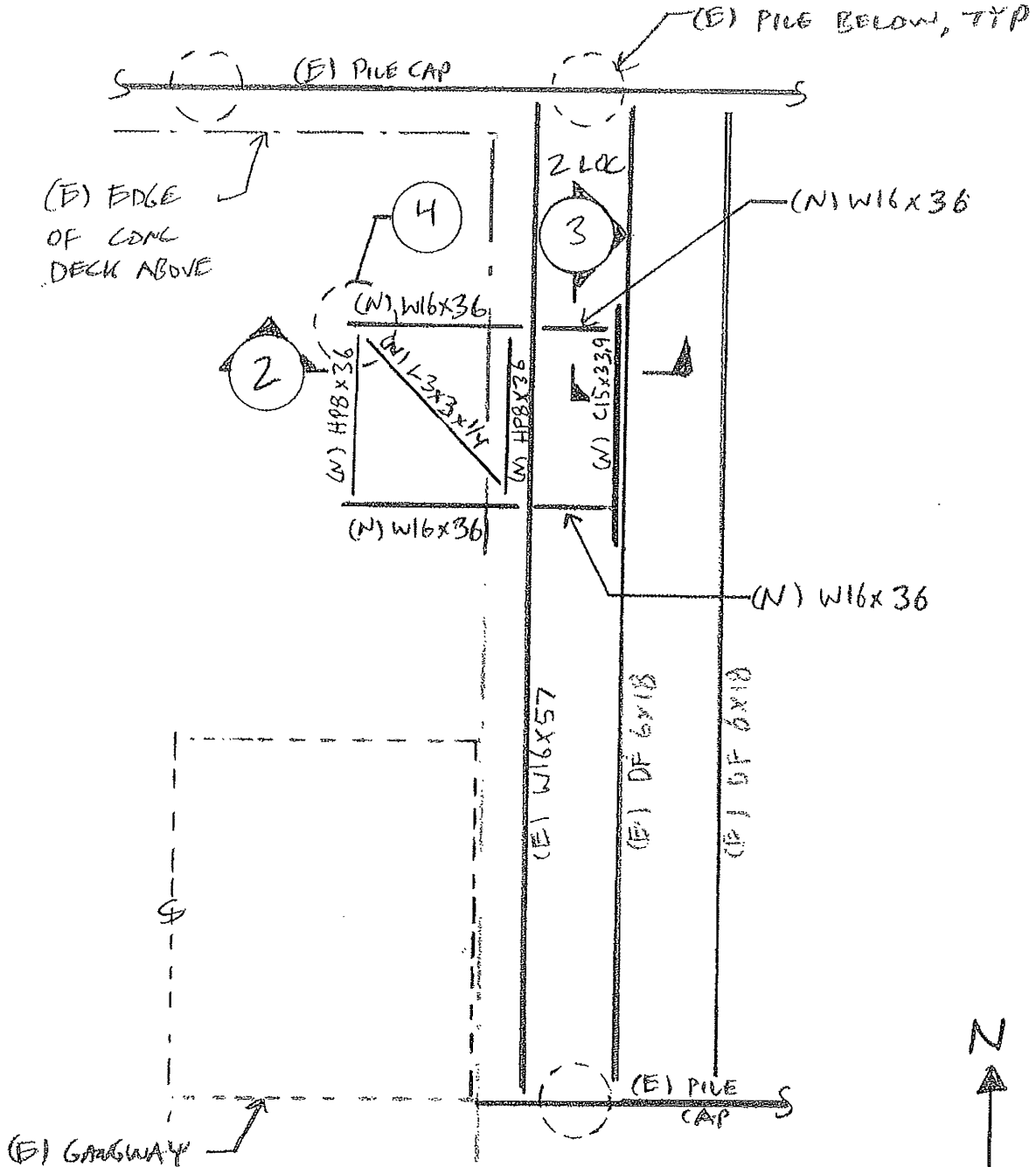
MIN EDGE DIST TO LEAFERS
 EDGE = 4D = 2.5"
 MIN BOLT SPACING = 4D = 2.5"

USE C15X33.9 w/
 (4) 5/8" φ A307 thru
 bolts at each cantilever
 beam connection
 (8 total) w/ S = 5"
 and E = 5"

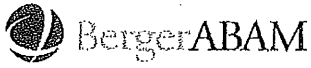


Project Warrenton Marina
Subject Support Framing
Details

Page 16 of 20
Sheet _____ of _____
Job Number A17.0203
Designer BDS
Date 3/14/17

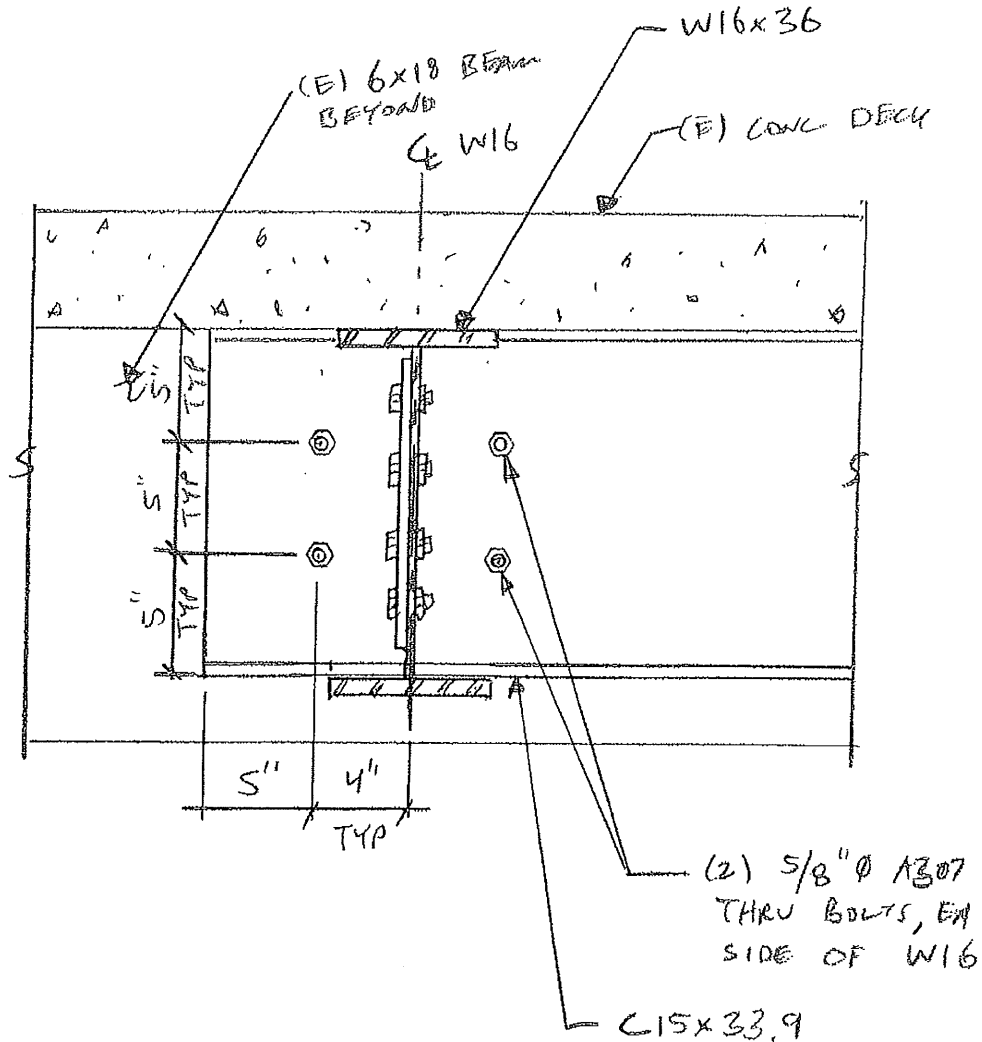


1 FRAMING PLAN
3/8" = 1'-0"

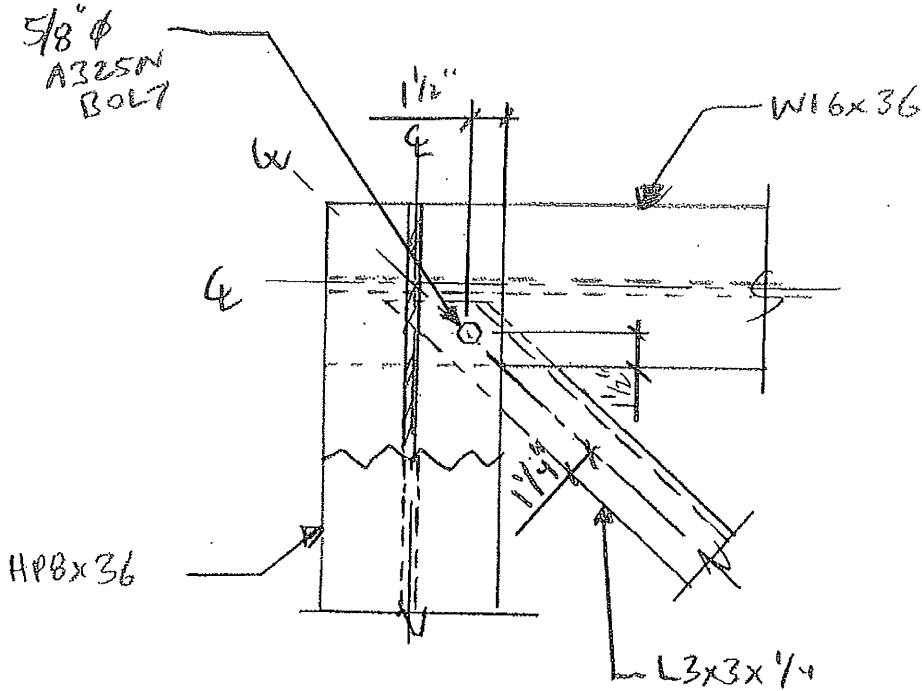


Project Warrington Marina
Support Framing
Subject Details

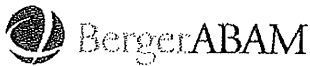
Sheet _____ of _____
Job Number A17.0203
Designer BDE
Date 3/19/17



3 C15 BEAM CONNECTION
1 1/2" = 1'-0"



4 BRACING CONNECTION
1 1/2" = 1'-0"



Project Warriston Marina
Support Framing
 Subject Design Calcs

Sheet _____ of _____
 Job Number A17.0203
 Designer BDB
 Date 3/14/17

From RISA 3-D (see following page)

$$M_{u, \max} = 3.8 \text{ k}\cdot\text{ft}$$

$$V_{u, \max} = 2.5 \text{ k}$$

$$T_{u, \max} = 0.4 \text{ k}$$

Check Beam Web for Flexure

$$\phi_b M_n = 0.9 (F_y) (bd^2/4)$$

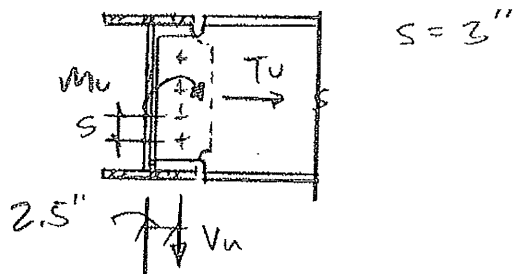
$$d = 12" \text{ (coped web)}$$

$$b_{req} = (3.8 \text{ k}\cdot\text{ft}) (12") (4) / 0.9 (50 \text{ ksi}) (12")^2$$

$$= 0.03" \Rightarrow \text{min } 1/4" \text{ web}$$

USE min W16x36
 $t_w = 5/16"$ $t_f = 0.43"$
 $b_f = 7"$

Check Bolted Connection



TRY (4) $7/8"$ ϕ A325 Bolts

Shear per bolt due to V_u

$$r_p = V_u / 4 = 2.5 / 4 = 0.63 \text{ k}$$

Shear per bolt due to T_u

$$r_t = T_u / 4 = 0.4 / 4 = 0.1 \text{ k}$$

Shear per bolt due to Moment

$$M_{u, \text{total}} = M_{u, \max} + V_u \times 2.5"$$

$$= 3.8 \text{ k} \times 12" + 2.5 \text{ k} \times 2.5"$$

$$= 45.6 \text{ k}\cdot\text{in} + 6.3 \text{ k}\cdot\text{in}$$

$$= 51.9 \text{ k}\cdot\text{in}$$

$$r_m = \frac{(M_{u, \text{total}})(c)}{I_p}$$

c = radial dist from bolt group C.G. to most remote bolt

$$= 1.5" \times 3" = 4.5"$$

$$I_p = \frac{nm}{12} [s^2(n^2-1) + g^2(m^2-1)]$$

per AASHTO C6.13.6.1.4b-3

where

$n = 4$ bolts

$m = 1$ row

$s = 3"$ (bolt spacing)

$g = 0"$ (row spacing)

$$I_p = \frac{(4)(1)}{12} [3^2(4^2-1) + 0^2]$$

$$= 45 \text{ in}^4$$

$$r_m = (51.9)(4.5) / 45 = 5.2 \text{ k}$$



REQUEST FOR INFORMATION

RFI NO. 009

PROJECT TITLE: City of Warrenton - Marina Improvement Project

CONTRACT NO: _____

CONTRACTOR: Bergerson Construction, Inc.

DESCRIPTION OF RFI

Reference Sheet E1, Keyed Note 5

The referenced note requires field verifying location for the new CD Panel. The location is shown conceptually on the existing pier. This cabinet is approximately 39" deep. If mounted on the existing concrete deck, it would impact vehicle access on the pier. One proposed solution is to mount the cabinet to fabricated steel brackets welded to the new steel edge stringer recently installed at the head of the gangway. The panel would then be located immediately North of the new F-dock gangway, with the face of the door flush with the face of the timber guardrail.

Attached is a conceptual sketch of the proposed brackets. Please either provide bracket sizes and connection details necessary to support this 850 lb. cabinet and the conductor weight, or provide another alternative.

The proposed change will result in additional costs.

Specification Section _____

Reference Drawing E1

Sketch Attached N/A

Wadsworth Electric
ORIGINATOR DATE

Staci Sherer 2.9.17
CONTRACTOR REP DATE

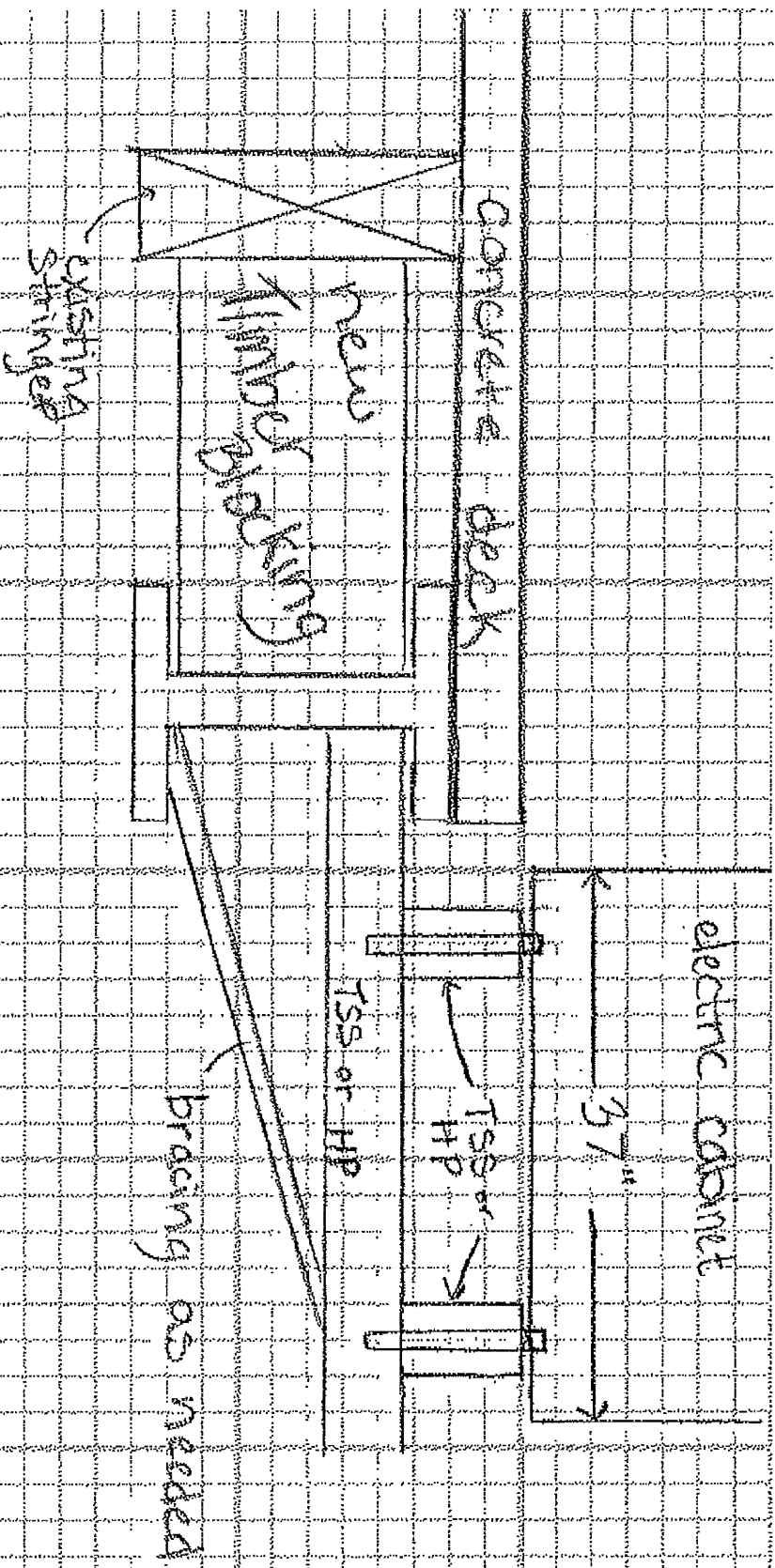
RESPONSE

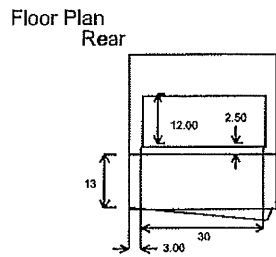
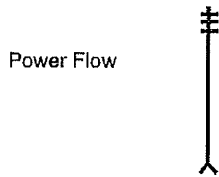
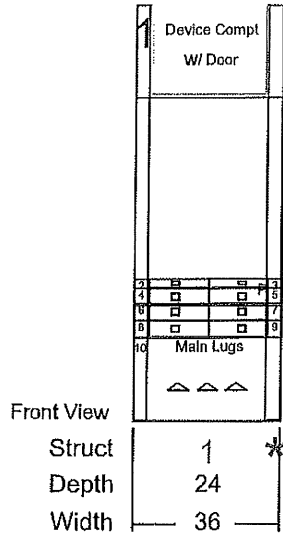
The contractor's solution is acceptable. Details should be provided by a structural engineer.

Steve Smith, MKE & Associates 2-17-17

ANSWERED BY

(SIGNATURE) DATE





Total of 1 Structures, Total Weight of 667 Weight-Lbs. with Front Hinged Doors.
Total of 1 Structures, Total Width of 36 Inches with Front Hinged Doors.

Structure	1				
Ship-Inches	36.00				
Ship-MM	914				
Wdth-Inches	36.00				
Wdth-MM	914				
Depth(Inner)-In.	24.00				
Depth(Inner)-MM	609				
Depth(Outer)-In.	37.00				
Depth(Outer)-MM	939				
Height-Inches	90.00				
Height-MM	2286				
Weight-Lbs.(Est.)	667				
Weight-Kg.(Est.)	302				

The information on this document is created by Eaton Corporation. It is disclosed in confidence and it is only to be used for the purpose in which it is supplied.

PREPARED BY DICK KEIL	DATE 8/10/2016	Eaton		SumterSC	
APPROVED BY	DATE	JOB NAME Warrenton Marina	DESIGNATION Panel CD		
VERSION 8.0.10.0	TYPE Switchboards	DRAWING TYPE CustAppr			
NEG-ALT Number D3T60613X6K1-0000	REVISION 0	DWG SIZE DwgA	G.O.	ITEM	SHEET 2 of 4



4253-A Highway 101 N . seaside, oregon 97138
 503.738-3425 . Fax 503 738-7455
 www.otak.com

WARRENTON MARINA UPGRADE PROJECT

CHANGE ORDER #11

To:	Greg Morrill, President
	Bergerson Construction, Inc.
	55 Portway Astoria, OR, 97103
Tel/Cell	(503) 325-7130
Fax:	(503) 325-0174

Otak Project No:	67848.000	Date:	4/4/2017
Project Name:	Warrenton Marina Upgrade Project		
Project Location:	Warrenton Marina, Warrenton, OR		
Owner/Client:	Jane Sweet, Habormaster, City of Warrenton		
Job Phone No:	503-861-3822		

WE HEREBY agree to make the change(s) specified below:					
ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT COST	TOTAL
1	#Lilly-Marlene - Additional costs for removal and disposal	1	EA	\$42,857.75	\$ 42,857.75
<p>#In the process of moving the derelict vessel, the Lilly-Marlene, (a 65 ft wood boat) the actual costs, because of the weight, fuel, tipping costs and labor, have necessitated an increase in Change Order 7.0, which was to remove the Lily-Marlene from the Warrenton Boat Basin. The additional costs are captured in this Change Order, #7.1, which is a continuation of the Original Change Order #7.</p> <p style="text-align: right;">() Indicates negative value</p>					
Subtotal:					\$ 42,857.75
WE AGREE hereby to make changes specified above at this price:					TOTAL: \$ 42,857.75
Previous Contract Amount:					\$ 1,453,761.31
Revised Contract Amount:					\$ 1,496,619.06

PROJECT TIME - CALENDAR DAYS			
Date work Started or commenced on: NTP	Date	8/11/2016	
Original Project Duration:	Days	268	
Original Completion Date:	Date	5/7/2017	
Previous Change Order(s) total time extension:	Days	0	
The above change to the project warrants the following time extension:	Days	0	
New Completion Date:		7/1/2017	

This Change Order becomes part of, and in conformance with, the existing contract.

Authorized Signature (Contractor): _____
 Date: _____

ACCEPTED: The above prices and specifications of the change order are satisfactory and are hereby accepted. This change order amount and extension of time constitutes total compensation for the change, including compensation for all impacts and delays relating to the change and their cumulative effect on the project to date. All work shall be performed under same terms and conditions as specified in original contract unless otherwise stipulated.

Owner Signature: _____
 Date of Acceptance: _____



WCT Marine & Construction, Inc.

PO Box 298
Astoria, OR 97103

1457

Invoice

Date	Invoice #
1/31/2017	353

Bill To
Bergerson Construction, Inc. Marine & Heavy Civil Construction 55 Portway • PO Box 387 • Astoria, OR 971 (503) 325-7130 • CCB#, OR 63328

P.O. No.	Terms	Project
Port of Warrenton	Due on receipt	17 - 1004 Boat Salvage

Quantity	Description	Rate	Amount
9.5	1/5/17 load spreader bar and rigging. On site 10:00am to 8:30 secured crane for the night.	750.00	7,125.00
14.5	1/6/17 DB Beaver 6:00am started until 8:30.	750.00	10,875.00
48	Rigger ST Labor hrs for 3 employees	95.00	4,560.00
37.5	Rigger OT Labor hrs for 3 employees	125.00	4,687.50
12	Rigger Double Time Labor, anything over 12 hrs	149.00	1,788.00
6	Andy - Crane operator hrs for mob time	95.00	570.00
PO 8738 - 16008 001075			
		Total	USD 29,605.50



WCT Marine & Construction, Inc.

PO Box 298
Astoria, OR 97103

Invoice

Date	Invoice #
3/2/2017	376

Bill To
Bergerson Construction, Inc. Marine & Heavy Civil Construction 55 Portway • PO Box 387 • Astoria, OR 971 (503) 325-7130 • CCB#, OR 63328

P.O. No.	Terms	Project
Straps	Due on receipt	17 - 1005 Straps

Quantity	Description	Rate	Amount
1	20' Round Sling - Was damaged on the turn buckle line	150.00	150.00
	Woods Logging - 2 Poly Web Sling	2,700.00	2,700.00
	Woods Logging - Poly Flat Sling Eye N Eye 4"x50; 3ply	425.00	425.00
	Total Reimbursable Expenses		3,275.00
	Markup	20.00%	655.00
	Total Reimbursable Expenses		3,930.00
		Total	USD 3,930.00



INVOICE

Job Number: 108356-001
 P.O. Number: 10968-112008
 P.O. Date: 120005 1/10/2017
 Ship Date: 1/10/2017
 Sales Person: DAVID ALEX HESS

Invoice No: IN-130138
 Invoice Date: 1/10/2017
 Due Date: 2/9/2017
 Payment Terms: NET 30
 Customer No.: C102388
 Contact:
 Customer Phone: (503)325-7130
 Customer Fax:

Bill To:
 Bergerson Construction, Inc.
 GMERRILL@BERGERSON-CONST.COM
 55 Portway
 PO BOX 387
 ASTORIA, OR 97103

Job Site:
 F/V Lily Marlene
 Wreck Removal
 Skipanon Marina
 WARRENTON, OR 97146

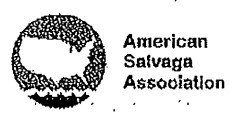
DATE	ITEM/DESCRIPTION	U/M	QUANTITY	UNIT PRICE	TOTAL PRICE
1/4/2017	Mobilization (lump sum per quote)	LS	1.00	995.00	995.00
		Subtotal:	1/4/2017		995.00
1/5/2017	8-hr Shift (lump sum per quote) 0700-1500	LS	1.00	3,880.00	3,880.00
1/5/2017	TENDER-OT (3 crew) 1500-1830	Hours	10.50	138.00	1,449.00
1/5/2017	12' x 50' LIFT STRAPS (lump sum per quote)	Days	1.00	263.00	263.00
1/5/2017	GSA CONUS PER DIEM (3 crew)	Each	3.00	179.00	537.00
		Subtotal:	1/5/2017		6,129.00
1/6/2017	8-hr Shift (lump sum per quote) 0700-1500	LS	1.00	3,880.00	3,880.00
1/6/2017	12' x 50' LIFT STRAPS (lump sum per quote)	Days	1.00	263.00	263.00
		Subtotal:	1/6/2017		4,143.00
1/9/2017	Demobilization (lump sum per quote)	LS	1.00	995.00	995.00
		Subtotal:	1/9/2017		995.00

Thank you for your business!

Amount Subject to Sales Tax	Amount Exempt from Sales Tax
0.00	12262.00

Remit To:
 3840 West Marginal Way SW
 ATTN: Accounts Receivable
 Seattle, WA 98106

Subtotal: ~~12,262.00~~
 Less Retention: 0.00
 Total Sales Tax: 0.00
Total: 12,262.00
11,267.00



CM 1

Boat Demo

Material:

	1	ls		Unit Price	Total
	Quant	Unit			
Garbage to Transfer Station	1	ls	*	\$ 130.67	\$ 130.67
				sub total	\$ 130.67

Equipment:

	Quant	Unit		Unit Price	Total
Excavator JD 50	9.5	hrs	*	\$ 57.00	\$ 541.50
Excavator JD 330	15	hrs	*	\$ 95.00	\$ 1,425.00
Excavator JD 350	24	hrs	*	\$ 102.00	\$ 2,448.00
Excavator Volvo 460	3	hrs	*	\$ 127.00	\$ 381.00
Lowboy	21	hrs	*	\$ 55.00	\$ 1,155.00
Pickup	7.5	ls	*	\$ 10.00	\$ 75.00
				sub total	\$ 6,025.50

Labor:

	Quant	Unit		Unit Price	Total
Operator	51.5	hrs	*	\$ 72.00	\$ 3,708.00
Laborer	122	hrs	*	\$ 52.00	\$ 6,344.00
Truck Driver	21	hrs	*	\$ 37.00	\$ 777.00
Supervisor	6	hrs	*	\$ 80.00	\$ 480.00
				sub total	\$ 11,309.00

Sub & Misc.:

	Quant	Unit		Unit Price	Total
Solo Trucking	5	hrs	*	\$ 85.00	\$ 425.00
				sub total	\$ 425.00

NOTES:

Cost	\$ 17,890.17
<i>percent</i>	15.0%
<i>profit</i>	\$ 2,683.53
Total	\$ 20,573.70

CM 2

March Boat Demo

1 Is

Material:

	Quant	Unit		Unit Price	Total
Anchor Shackle 1' 8-1/2	2	ea	*	\$ 38.58	\$ 77.16
Wire Rope	4	ea	*	\$ 16.90	\$ 67.60
Screw Pin Anchor	3	ea	*	\$ 35.21	\$ 105.63
Tape Measure	1	ea	*	\$ 11.92	\$ 11.92
IM-CPDF1	6	ea	*	\$ 7.75	\$ 46.50
Clip Wire Rope	20	ea	*	\$ 14.50	\$ 290.00
Anchor Shackle 1' 8-1/2	4	ea	*	\$ 38.58	\$ 154.32
1123784 Waste Management	1	ea	*	\$ 1,274.88	\$ 1,274.88
1123849 Waste Management	1	ea	*	\$ 454.99	\$ 454.99
1123912 Waste Management	1	ea	*	\$ 300.07	\$ 300.07
1123960 Waste Management	1	ea	*	\$ 521.86	\$ 521.86
1124033 Waste Management	1	ea	*	\$ 489.24	\$ 489.24
1124104 Waste Management	1	ea	*	\$ 486.38	\$ 486.38
1124163 Waste Management	1	ea	*	\$ 549.98	\$ 549.98
1124279 Waste Management	1	ea	*	\$ 306.60	\$ 306.60
Crushed Concrete	40	cy	*	\$ 9.75	\$ 390.00
Straw bales	35	ea	*	\$ 3.00	\$ 105.00
Straw Wattles	50	lf	*	\$ 3.00	\$ 150.00
sub total					\$ 5,782.13

Equipment:

	Quant	Unit		Unit Price	Total
Excavator JD 350	14	hrs	*	\$ 102.00	\$ 1,428.00
sub total					\$ 1,428.00

Labor:

	Quant	Unit		Unit Price	Total
Operator	14	hrs	*	\$ 48.00	\$ 672.00
Laborer	57.5	hrs	*	\$ 40.00	\$ 2,300.00
Supervisor	12.5	hrs	*	\$ 50.00	\$ 625.00
sub total					\$ 3,597.00

Sub & Misc.:

	Quant	Unit		Unit Price	Total
Solo Trucking	6.5		*	\$ 85.00	\$ 552.50
Truck & Pup	106		*	\$ 95.00	\$ 10,070.00
sub total					\$ 10,622.50

NOTES: March

Cost	\$ 21,429.63
<i>percent</i>	15.0%
<i>profit</i>	\$ 3,214.44
Total	\$ 24,644.07

PIONEER WIPING CLOTH CO

REMIT TO: P.O. BOX 33715, PORTLAND, OREGON 97233-0715

10707 N LOMBARD
PORTLAND OR 97203
(503) 226-6057
Fax: (503) 226-4903

#606



Invoice Number: 0192826-IN
Invoice Date: 11/11/2016

Order Number: 0088547
Order Date: 11/10/2016
Customer Number: BER2

PPD NO 20-0127280

SOLED TO

BERGERSON CONSTRUCTION
P O BOX 387
ASTORIA, OR 97103

SHIP TO

BERGERSON CONSTRUCTION
55 PORTWAY STREET
ASTORIA, OR 97103

Confirm To:
TODD

Customer P.O.	Ship VIA	F.O.B.	Terms
1331-16 N 53500	TP		NET 30 DAYS

Item Code	Unit	Shipped	Price	Amount	
WB510SN	5 x 10 WHITE SOCK NET BOOM	BALE	20	75.0000	1,500.00
WP200S	15 x 18 WHT MELT BLOWN PAD SNG	BALE	30	41.5000	1,245.00

SHIP PPD & ADD

ck 26319
12.9.16

RECEIVED
NOV 17 2016

PLEASE PAY FROM THIS INVOICE NO STATEMENT IS SENT
1.5% Interest charge per month on past due accounts

CUSTOMER

Net Invoice:	2,745.00
Less Discount:	0.00
Freight:	155.00
Sales Tax:	0.00

Invoice Total 2,900.00

P.O. Box 387
Astoria, OR 97103
Office 503-325-7130
Fax 503-325-0174
24 Hour Service



"for a job well done"

TIN # 93-0600594
OR CCB# 63328
WA CC01 BERGEC1210H
info@bergerson-const.com
www.bergerson-const.com

December 5, 2016

Otak, Inc.
Attn: Sarah McKay
4253A Hwy 101 N
Seaside, OR 97138

RE: City of Warrenton – Marina Improvement Project

Change Order Proposal (COP) No. 007 – Removal of F/V Lilly Marlene

Dear Ms. McKay,

Per the City's request, Bergerson is submitting this proposal for removal and disposal the sunken vessel Lilly Marlene. In order to complete this work, we believe it will be necessary to use a larger crane barge belonging to another firm. As such, our costs are based on mobilizing such equipment from the Portland area. The vessel will be rigged by divers, lifted to the surface, dewatered as condition allows, and the vessel will be set on the shore on City property. Then it will be dismantled by excavator and hauled to the appropriate disposal facility.

COP 005 – Total \$70,733.25
7 - JGF/12-20-16

NOTE: No allowances have been made for removal of fuel, oils or hazardous materials. If these are encountered, additional charges will apply.

Enclosed is a breakdown of the costs associated with this additional work. It is expected that these modifications will not have impact to the contract construction schedule.

If any additional information is required or if clarification is needed, please feel free to contact me at your earliest convenience.

Sincerely,



Greg Morrill
President

