

## Structural Special Inspections Report

# Portland Fire Department Munjoy Hill Fire Station Monopole Replacement

City of Portland Maine July 24, 2012

Report Prepared by:

Structural Engineer of Record
Becker Structural Engineers, Inc.
75 York Street
Portland, ME 04101
207. 879. 1838

# Portland Fire Department Munjoy Hill Fire Station Monopole Replacement

City of Portland Maine July 24, 2012

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## Exhibit C

Statement of Responsibility

## Special Inspections - Exhibit A

Statement of Special Inspections
List of Agents
Final Report of Special Inspections
Special Inspector/Agent Report

Project: P.F.D. Munjoy Hill Fire Station Mono-pole Installation-Date Prepared: March 19, 2012

Signature

Structura	al Statement of Special Inspectio	ns			
Project:	P.F.D. Munjoy Hill Fire Station Mono-pole Installati	on			
Location;	Portland, Maine				
Owner;	City of Portland				
This Stateme	ent of Special Inspections encompass the following	discipline: Structural	- VIA		
Inspection ar services appl	ent of Special Inspections is submitted as a condition Structural Testing requirements of the Building loable to this project as well as the name of the Structural agencies to be retained for conducting	g Code. It includes a s ructural Special Inspecti	chedule of Special Inspection on Coordinator (SSIC) and the		
inspection re Responsible for correction Building Office	al Special Inspection Coordinator shall keep resports to the Building Code Official (BCO) and Charge (SRDP). Discovered discrepancies shall be a light of the discrepancies are not corrected, the distant the Structural Registered Design Profession of relieve the Contractor of his or her responsible.	d the Structural Regis be brought to the immed liscrepancies shall be b ional in Responsible Ch	tered Design Professional in iate attention of the Contractor prought to the attention of the		
	ts shall be submitted to the Building Official at Charge at an interval determined by the SSIC and		stered Design Professional in		
correction of	ort of Special Inspections documenting complet any discrepancies noted in the inspections sha Use and Occupancy				
Job site safe	ty and means and methods of construction are sole	ely the responsibility of t	he Contractor.		
Interim Repo	rt Frequency: Upon request of Building Office	cial	or  per attached schedule.		
Prepared by:					
Bryson T, Wel	ch, P.E.		TE OF MANAGE		
	name of the Structural Registered Design in Responsible Charge)		BRYSON T WELCH No. 11799 85		
Signature (	341	Date	No. 11799  CENSE  SIONAL  Design Professional Seal		
Owner's Auti	norization: E	Building Code Official's /	Acceptance:		

Signature

Date

Date

Project: P.F.D. Munjoy Hill Fire Station Mono-pole Installation

Date Prepared: March 19, 2012

## Structural Statement of Special Inspections (Continued)

List of Ag	ents					
Project:	P.F.D. Munjoy Hill Fire Station Mono-pole Installation					
Location:	Portland, Maine					
Owner:	City of Portland					
This Statement	of Special Inspections encon	pass the following discipline: Structural				
(Note: Stateme	nt of Special Inspections for	other disciplines may be included und	er a separate cover)			
This Statement	of Special Inspections / Qual	ity Assurance Plan includes the following	; building systems:			
	Soils and Foundations Cast-in-Place Concrete Precast Concrete Syster Structural Masonry Syste Structural Steel Wood Construction		8565			
^						
Special inspe	ction Agencies	Firm	Address, Telephone, e-mail			
1. STRUCTURAL Special Becker Structural Engineers (BSE) 75 York Street						

Special Inspection Agencies	Firm	Address, Telephone, e-mail
STRUCTURAL Special     Inspections Coordinator (SSIC)	Becker Structural Engineers (BSE)	75 York Street Portland, Maine 04101 207-879-1838 bryson@beckerstructural.com
2. Special Inspector (SI 1)	Becker Structural Engineers (BSE)	75 York Street Portland, Maine 04101 207-879-1838 bryson@beckerstructural.com
3. Special Inspector (SI 2)	N/A	N/A
4. Testing Agency (TA 1)	R.W. Gillespie & Associates Inc.	86 Industrial Park Road, Suite 4 Saco, Maine 04072 207-286-8008 mgrady@rwg-a.com
5. Testing Agency (TA 2)	N/A	N/A
6. Other (O1)	N/A	N/A

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and <u>not</u> by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

Project: P.F.D. Munjoy Hill Fire Station Mono-pole Installation

Final Report of Special Inspections (SSIC/SI 1)

Date Prepared: March 19, 2012

## Structural Statement of Special Inspections (Continued)

-		e Structural Special to issuance.]	Inspections Coordinator (SSIC	C/SI 1). Note th	at all Agent's Final Reports	
Project:	$P.F.D.$ $\Lambda$	dunjoy Hill Fire Static	m Mono-pole Installation			
Location:	Portlana	l, Maine				
Owner:	City of Portland					
Owner's Add	ress:	389 Congress Stree	ei.			
		Portland, Maine 04	1101			
Architect of F	Record:	N/A		N/A		
		(name)		(firm)		
Structural Re	egistered [	Design	κ.			
Professional	in Respor	nsible Charge:	Bryson T. Welch, P.E.		Becker Structural Engineers	

To the best of my information, knowledge and belief, the Special Inspections required for this project, and itemized in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved.

Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Respectfully submitted, Structural Special Inspection Coordinator	
Bryson T. Welch, P.E.	_
(Type or print name)	
Becker Structural Engineers, Inc.	<del>-</del>
(Firm Name)	
manufacture ( ) land ) land	7/24/12
Signature 🔾	Date



Project: P.F.D. Munjoy Hill Fire Station Mono-pole Installation Date Prepared: March 19, 2012

## Structural Statement of Special Inspections (Continued) Special Inspector's/Agent's Final Report P.F.D. Munjoy Hill Fire Station Mono-pole Installation Special Inspector or MATTHEW T. GRADY P.E. Agent: R.W. Gillespie & Associates Inc. Designation: To the best of my information, knowledge and belief, the Special Inspections or testing required for this project, and designated for this Inspector/Agent in the Statement of Special Inspections submitted for permit, have been performed and all discovered discrepancies have been reported and resolved. Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report. Respectfully submitted, Special Inspector or Agent: **SEAL NOT** REQUIRED FOR Signature Licensed Professional Seal or

Certification Number

## Special Inspections – Exhibit B

Qualifications of Inspectors and Test Agency List of Minimum Qualifications Schedule of Structural Inspections The program of Structural/Special Tests and Inspections does not relieve the Contractor or its Subcontractors of their responsibilities and obligations for quality control of the work, for any design work which is included in the scope of services, and for full compliance with the requirements of the Construction Documents. Furthermore, the detection of, or the failure to detect, deficiencies or defects in work during testing and inspection conducted pursuant to the Program does not relieve the Contractor or its subcontractors of their responsibility to correct all deficiencies or defects, whether detected or undetected, in all parts of work, and to otherwise comply with all requirements of the Construction Documents. No warrantee is expressed or implied by the issuance of this document. Additional disclaimers and/or qualifications may be included in the Owner-Special Inspection agreement.

Project: P.F.D. Munjoy Hill Fire Station Mono-pole Installation

Date Prepared: March 19, 2012

### Structural Schedule of Special Inspections

#### Qualifications of Inspectors and Testing Technicians

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided to the Special Inspector for their records. NOTE VERIFICATION THAT QUALIFIED INDIVIDUALS ARE AVAILABLE TO PERFORM STIPULATED TESTING AND/OR INSPECTION SHOULD BE PROVIDED PRIOR TO SUBMITTING STATEMENT. AGENT QUALIFICATIONS IN SCHEDULE ARE SUGGESTIONS ONLY; FINAL QUALIFICATIONS ARE SUBJECT TO THE DISCRETION OF THE REGISTERED DESIGN PROFESSIONAL PREPARING THE SCHEDULE.

#### Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge or Special Inspector of Record deems it appropriate that the individual performing a stipulated test or inspection have a specific certification, license or experience as indicated below, such requirement shall be listed below and shall be clearly identified within the schedule under the Agent Qualification Designation.

PE/SE

Structural Engineer – a licensed SE or PE specializing in the design of building structures Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations

PE/GE EIT

Engineer-In-Training - a graduate engineer who has passed the Fundamentals of Engineering

examination

#### **Experienced Testing Technician**

**ETT** 

Experienced Testing Technician - An Experienced Testing Technician with a minimum 5 years

experience with the stipulated test or inspection

#### American Concrete Institute (ACI) Certification

ACI-CFTT

Concrete Field Testing Technician - Grade 1

ACI-CCI

Concrete Construction Inspector Laboratory Testing Technician – Grade 1&2

ACI-LTT ACI-STT

Strength Testing Technician

#### American Welding Society (AWS) Certification

AWS-CWI

Certified Welding Inspector

AWS/AISC-SSI Certified Structural Steel Inspector

#### American Society of Non-Destructive Testing (ASNT) Certification

ASNT

Non-Destructive Testing Technician - Level II or III.

#### International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

#### National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician - Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV

NICET-GET Geotechnical Engineering Technician - Levels I, II, III & IV

#### Other

## Special Inspections – Exhibit B

03300 Cast-in-Place Concrete

Project: P.F.D. Munjoy Hill Fire Station Mono-pole Installation

Date Prepared: March 19, 2012

## Structural Schedule of Special Inspections

CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	REQD		COMMENTS	AGENT	AGENT	TASK
IBC Section 1704.4	Y/N	CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE			QUALIFICATION	COMPLETED
Inspection of reinforcing steel, including prestressing tendons, and placement	SI 1	P	ACI 318: 3.5, 7.1-7.7	811	PE/SE or EIT	de-716
2. Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5I3	Х	-	Not applicable. Welding of Reinf Not Allowed	-	-	
<ol> <li>Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased or where strength design is used.</li> </ol>	SI I	С	IBC 1911.5	SII	PE/SE or EIT	6/10-7160
4. Inspection of anchors installed in hardened concrete.	SI 1	P	IBC 1212.1	Sti	PE/SE or EIT	66-76
5. Verifying use of required design mix	TA 1	P	ACI 318: Ch 4, 5.2-5.4	TAI	ACI-CFTT or ACI-STT	616-716
At time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and determine the temperature of the concrete.	N/A	С	ASTM C 172 ASTM C 31 ACI 318; 5.6, 5.8	TAl	ACI-CFTT or ACI-STT	
7. Inspection of concrete and shotcrete placement for proper application techniques	TA 1	C	ACI 318: 5.9, 5.10	TAI	ACI-CFTT or ACI-STT	616-716
Inspection for maintenance of specified curing temperature and techniques	SA I	Р	ACI 318: 5.11- 5.13	SII	PE/SE or EIT	66-76
9. Inspection of Prestressed Concrete	and the	350				
a. Application of prestressing force.	N/A	С	ACI 318: 18.20	TA2	PE/SE or EIT	
b. Grouting of bonded prestressing tendons in scismic force resisting system	N/A	С	ACI 318: 18.18,4	TAI	ACI-CFTT or ACI-STT	
10. Erection of precast concrete members.	N/A	Р	ACI 318; Ch 16	SII	PE/SE or EIT	
11. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beans and structural slabs.	N/A	р	ACI 318: 6.2	TAI	ACI-CFTT or ACI-STT	
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	N/A	P	Limitations apply. See below	SII	PE/SE or EIT	

Limitations of item 12: Special inspection includes periodic review of formwork shape, general location, and formwork dimensions that can be readily measured with conventional tape measure. Verification of building layout, building location, foundation extents, column grids, and foundation elevations is excluded.

OBSERVATION REPORT

Cast in Place Concrete



Project: Location: Becker Job No:		P.F.D. Munjoy Hill Fire Station				
		Portland, ME 2612				
Date:	06/06/12					
Date: Time: Temp:	06/06/12 3:30					

Observation Location: Shotcrete Wall No. 2 and No. 3 (First Floor)

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size			<u> </u>	;;	See Note 1 Below
Quantity	X		: H	: H	Coc react Dolor
Condition	X	H	·		. The second
Placement	X	H	H	H	
Embed/Anchors		H	; H -	H	·
Lap Splices			H	H	
Hot Weather		H	Ħ	$\square$	
Cold Weather	+H	H		X	:
Bond Beams	1	H	1=	X	
Additional Items	+ $H$	H		<del>-  </del>	See Note 2 Below
\$	-	H			
Additional Items	ાં ા…ા	ـــا :			

#### Notes:

- 1. Some of the bent bars for Shotcrete Wall No. 2 that wrap around the existing joist in section 5 on S3 were being constructed with #7 and the contractor was having issues placing them. We confirmed that those bars can be #5.
- 2. The Top cord of the existing joists for Shotcrete Wall No. 3 were not bonded out as shown on Section 6 on S3. The contractor was notified confirmed that the bond outs will be added.



Project:	P.F.D. Munjoy Hill Fire Station
Location:	Portland, ME
Becker Job No:	2612

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Cast	in Pie	ice (	oncr	ete .	

Date:	06/11/12	WALL AS A
Time:	12:00	A to some mineral
Temp:		Tanana
Weather:		MAN A . THE

Observation Location: Shotcrete Wall No. 2 and 3 (First Floor)

<u> </u>				· · ·	
eres and supplementations and supplementations.	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size					;
Quantity					
Condition		$\boxtimes$			See Note 1 and 2 Below
Placement					
Embed/Anchors					
Lap Splices					
Hot Weather					
Cold Weather					
Bond Beams					
Additional Items					
Additional Items					

#### Notes:

- 1. The top of both walls above the ceiling were not completed in the placements the previous week. The wall has been wet cured since the last placement. Additional steel mesh has been added to help reinforce the walls where they cantilever out and an accelerator has been approved to aid placement in these areas.
- 2. The smooth gun finish was not placed on Shotcrete Wall No. 2 and No. 3.



Project:		P.F.D. Munjoy Hill Fire Station					
Location:		Portland, ME					
Becker Jo	b No:	2612					
		•					
 Pa-1		:					
Date:	00/14/12	· · · · · · · · · · · · · · · · · · ·					
Time:	7:00am						
Temp:	70						
Weather:	Partly Clo	udy					
<b>Δ</b> Ι		ion. Chatarata Wall Ma. 1 (First and Cook					

OBSERVATION REPORT

Cast in Place Concrete

Observation Location: Shotcrete Wall No. 1 (First and Second Floor)

			·	: .	,
	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size					4
Quantity					
Condition	$\boxtimes$				
Placement					
Embed/Anchors			$\boxtimes$		See Note 1 Below
Lap Splices	$\boxtimes$				
Hot Weather			ļ <u></u>		
Cold Weather				$\boxtimes$	
Bond Beams				$\boxtimes$	
Additional Items			, 🔲	$\boxtimes$	
Additional Items				$\boxtimes$	

#### Notes:

1. The contractor was in the process of installing the anchor bolts for Shotcrete Wall No. 2.

TO SERVICE SER



Project:		P.F.D.	Mur	ijoy F	ill Fire	e Stati	on OBSERVATION REPORT
Location:		Portlan	d, N	1E			Cast in Place Concrete
Becker Jo	b No:	2612					
Date:	06/20/12				· · · · · · · ·	**	
Time:	11:30						
Temp:	80	··· ··· ··· ··· ··· ··· ··· ··· ··· ··					
Weather:							
							0.40
Observat	ion Local	tion: Shot	cret	e vva	II No. 2	2 and 3	3 (Second Floor) and wall cap Detail 3 on S3
		<del></del> !	:		:		
:			:	fory	ted .	: elc	
			tory	Un-Satisfactory	Not Completed	Not Applicable	
:			Satisfactory	Safi	Co	App	
:			Sat	ş	Not	Not	Comments
Reinforce	ment Size	)	$\boxtimes$				
Quantity			X		<u> </u>		
Condition Placemen		:		<b>H</b>	H	H	
Embed/A	nchors						1
Lap Splice			$\bowtie$	<u> </u>	<del>                                      </del>		
Hot Weat			· 💾				
Bond Bea	ms						
Additiona	· · · · · · · · · · · · · · · · · · ·	:					See Note 1 Below
Additiona	nems		البيا	. ليا .	. Ш.	: 🔼	

#### Notes:

1. The contractor was placing shotcrete for Wall No. 2 while we're on site. We noticed the top cord of the existing joists for Shotcrete Wall No. 3 were not bonded out. We notified the contractor and the bondouts were added.



Project:		P.F.D. Munjoy Hill Fire Station					
Location:		Portland, ME					
Becker Jo	b No:	2612					
	 1						
Date:	06/28/12	2					
Date: Time:	)	2					
	1:30	2					

OBSERVATION REPORT
Cast in Place Concrete

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	တ	$\supset$	2	Z	Comments
Reinforcement Size	$\boxtimes$		· 🔲	П	
Quantity	Ø				
Condition		$\boxtimes$			See Note 1
Placement	$\boxtimes$				
Embed/Anchors	$\boxtimes$				
Lap Splices					
Hot Weather				$\boxtimes$	
Cold Weather				$\boxtimes$	
Bond Beams				$\boxtimes$	
Additional Items				$\boxtimes$	
Additional Items				$\boxtimes$	

#### Notes:

Representatives of Woodard and Curran, Knowles, Scott Construction, BSE and the PFD meet on site to review the condition of the shotcrete walls. The structural integrity of the walls are not in question, however the finish of the walls do not meet the specification for a smooth gun finish. Knowles Industrial proposed completing the repair of the shotcrete walls by grinding down the high spots, filling in the low spots and producing a uniform finish using a Thoroseal product.



Project:		P.F.D. Munjoy Hill Fire Station				
Location:		Portland, ME				
Becker Jo	b No:	2612				
	·					
Date:	07/06/1	2				
Time:	8:00					
	8:00					

OBSERVATION REPORT
Cast in Place Concrete

day a sent a sent and a sent a		Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
	B / C	K 7		· —	. — . —	Comments
	Reinforcement Size	N.	<u>_</u>		<u>. Ц</u>	; ,, , , , , , , , , , , , , , , , , , ,
	Quantity					
	Condition					See Note 1
	Placement	$\boxtimes$				
	Embed/Anchors	$\boxtimes$				
	Lap Splices					
3	Hot Weather					
	Cold Weather					
	Bond Beams				$\boxtimes$	
	Additional Items					
* ****	Additional Items					

#### Notes:

1. Per conversations with Chief Smith and as noted by an e-mail this morning, the PFD has reviewed the finish of the shotcrete walls located in the engine by and the finish is acceptable.



Date:

	N. W. OLLESPIE & ASSOCIA	i I
9)	Daily Observation Repo	10

Project: MUNTON HILL F	18E S	TATION MONOPOLE REPLACEMENT	Time: End Time	Mileage: End
Project No.: 0557 - 016	Tol	ls: 1.20	Beg. Time	Begin
Per Diem/Lodging:			Z Total Time	(35 Total
Observations:				The same of the sa
In-Place Densities Done		All IPDs meet Specifications		Magazintally decreasing magazine digest among of our energy magazine day, debotes and consider out type (a same
		Not all IPDs meet Specifications	Reported to	***************************************
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Visited the site	, j.	, the afternoon i	or rhock the re	Charles Steel
		No.7 and No.3 on		
		No. 2 where Knowle		
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Reviewed By: Mar			S:1 1 1	
			Signed: Mastr	Mcs-RwG&A
HNU day     Survey Level	Aer.	Concrete Equipment     Nuc Densometer day	Monitoring Well Supplies	
o Rebar Meter	day day	Nuc Densometer day     Coring Machine Dia	Bags of Bentonite 5 ft. Screen 2" PVC	Locks
Bailers (Disposab		Inches Cored	<del></del>	Caps Points
Water Level Ind.	day	Generator	5 ft, Riser 2" PVC	Screw Caps
c Drill Rig	day	Peristaltic Pump (note tubing used)	10 ft. Riser 2" PVC	oview Cups
Backhoe	day	o Other	Other	
		!		

PROPERTY PLAN HORES:

1. EXISTING MONDEL REMOVAL, COMMUNICATIONS SWITCHOVER, NEW MONOPOLE PROGRESSION BY OTHERS. REF CITY OF PORTLAND SPECIAL PROVISIONS OF THE SPECIAL PROVISIONS OF THE SPECIATIONS FOR ARCIL MYO.

2. S.M. MONE MEMBERSHILL LOCATIONS.

3. ALL DRIVENSONS, EXIST CONDITIONS AND AS-BULT COMMINIONS MUST BE VERYING ON THE FIELD. MODIFY NEW STEEL POST LOCATIONS TO AVOID REPARTING EXIST JOISTS.

4. FOR ADDITIONAL INFORMATION ON EXIST BUILDING, SEE RUBHOY HILL REGISCORDED HACHTY AND PINE STROMM, POSTULING, MANY, DATED AUDIEST 50, 1976.

5. NEW PROTECTIVE RUBBER MATE STALL BE FIRESTONE CHICASPEM WILKINGY PLOS (SURGERY, OR APPROVED COULD. SUBBILT SHOP ONS & HISTALIATION HAM, MISTALL THE WARNING PLOS PER MARRIFACTURES RECONSULTIONS. CONSULT WITH CITY PRIOR TO HISTALIATION.

6. NEW PROFT-TOP HOOD FOR CONDUIT. CORROBATE HISTALIATION HITH CITY PRIOR TO PROTICE COMMUNICATIONS CONSULTARIA HAVE SUBMILLED AND FAMIL STITM REQUIREMENTS COURS SHALL MATEL ASSISTMENTON FLORES. AND FAMIL STITM REQUIREMENTS COURS SHALL MATEL ASSISTMENTO (FLAT RECONSULTS AND FAMIL STITM RECUIREMENTS COURS SHALL MATEL ASSISTMENTO (FLAT RECONSULTS). PROVIDE ONE OF THE FOLLOWING MODES OF APPROVAL PROVIDE ONE OF THE FOLLOWING MODES OF APPROVAL PROVIDE ONE OF THE FOLLOWING MODES OF APPROVAL PROVIDED ONLY.

PROJECT: MUNJOY HILL FIRE STATION

MONOPOLE REPLACEMENT.

PROJECT NORTH

1. COMMECT-II: CTM-385 EPI-44 EP-C4 2. SITEPRO-1: SPJESG ET447 E-C7 (1 UNIT) (1 UNIT) (16 UNITS) (1 UNIT) (1 UNIT) (18 UNITS)

PROSECT #: 0557 -016

CHENT: CITY OF PORTLAND

DATE: JUNE 6, 2012

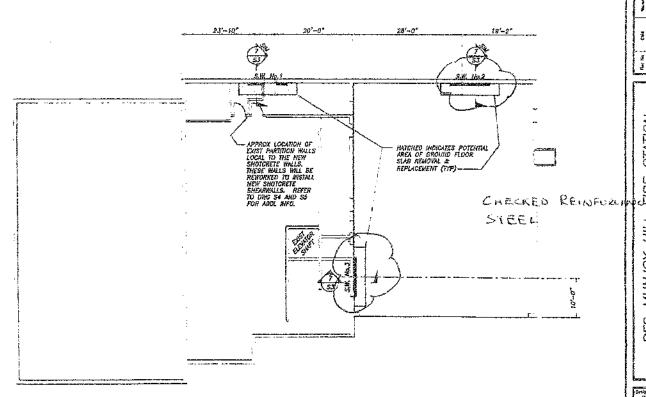
#### STEEL PROCURENTIAL

1. FOR SCHEDULE CONSIDERATIONS. THE CITY WILL PROCURE MAJOR STRUCTURAL STEEL ELEMENTS HICLIDING BEAUS, EPACES, AND POSTS. THESE MATERIALS WILL BE DELIVERED TO THE SELECTED CONTRACTOR'S PARRICATOR, COORDINATION OF DELIVERY DIMEN ST THE SELECTED CONTRACTOR'S PARRICATOR, COORDINATION OF DELIVERY DIMEN ST THE SELECTED CONTRACTOR'S PROPRIES AND PROPRIES, EFECTION FLANS, MISC. METAL, PLANES AND ANDLES, REPOSSELE FOR SHOP PARTING AND INSTALLATION.

3. THE SUPPLIER SHALL PROVIDE A COPY OF THE CERTIFIED MILL TEST REPORTS FOR ALL MATERIA, TO THE STRUCTURAL ENGINEER.

4. THE FOLLOWING IS A LIST OF THE STEEL PROCURED BY THE CITY OF PORTLAND.

DISC.	QUAMBIY	_LENGTH_(EXET).
W24x162	2	55
4724×182	2	<b>S</b> 0
HS518x4x1/4	ſ	35
HSS10x4x1/4	,	30
H\$510x4x1/4	2	25
H5510x4x1/4	7	18
WIOXIS	1	. 15
89 EXTRA STRONG PIPE	, t	15



EXIST GROUND FLOOR PLAN

The State Prince Control of th





8 :

STATION INSTALLATION FIRE MONO-POLE IN PORTLAND,

DFD

HOTEO APP 03/19/12 2512 P89

## R. W. GILLESPIE & ASSOCIATES, INC.

Geotechnical Engineering • Geohydrology • Materials Testing Services

#### Corporate Office

200 International Dr., Ste 170 Portsmouth, NH 03801 603-427-0244 • Fax 603-430-2041 86 Industrial Park Rd, Ste 4 Saco, ME 04072 207-286-8008 • Fax 207-286-2882

P.O. Box 289 Augusta, ME 04344 07-623-4914 • Fax 207-623-3429

CET

CONCRETE REINFORCING STEEL	OBSERVATION RE	PORT	<u>Van de Parlamente de Victoria de la composition de Victoria de Vi</u>
Project Name: MUNSOY HILL FIRE STATION MONOPOLE REPLACE	MENT	Date: JUNE 6	20:2
Client/Project #: C:TH OF PORTLAND / # 0557-016		Time: 12:30	
General Contractor/ Subcontractor: Scott Construction / Knowl	ES CORPORATION	Weather: INSIDE	
Approved Documents Referenced: Structural Drawings and Document Sheets/Details Referenced: SI, S3, ROI  Placement Location: Grauns Floor: Wall No. 7, 4 w	<b>a</b>		
ITEMS CHECK	ŒĐ		
Item	In Accordance With Documents	Not In Accordance With Documents	Not Applicable
Bar Size	Ø		
Bar Grade	Д	0	
Number of Bars	n	Æ	.0
Spacing Before & After Concrete Placement		Ø	D
End & Side Clearances	ø	a	
Top & Bottom Clearances	Ø	D .	
Assure Bar are Clean and Free of Dirt, Oil, Rust, Paint, Etc.	.5	0	jż'
Bar Junctions are Adequately Tied	Zi Zi		O
Placement & Adequacy of supports	Ø	D	G
Vertical Embedment to Assure Proper Lap Length	卢	Q	0
Horizontal Bars for Minimum Lap Length	Z	D	Π .
WALL NO. 2 Other: Z-#7 rebar were replaced with 2 rebar caused the rebar to be located so that done under direction of Bryson (Broker Structum	for Gleans	LANG COURTE	
Moved the rebar under the electrica TRAV. Panel where the electrical conduit Constitutes located in the wall the rebar Me		sported to:	
they were outside these elactrical rounds	Vame/Title		

#### FRANKIG PLAN NOTES:

ERBURG PLEALARIES

1. DESTING MONOPOLE REMOVAL, COMMUNICATIONS SWITCHOVER, NEW MONOPOLE PROCUREMENT & ERCCIENT BY OTHERS. RES CITY OF PORTLAND SPECIAL PROCUSIONS OF THE SPECIALARIONS FOR ADDI. INFO.

2. SM. NO.S. HAN SHEAMALL LOCATION.

3. ALL DIRENSCOIRS, EXET COLORIONS NOT SELECT COMMUNICATION.

4. FOR MODITY NEW SPECIA POST LOCATIONS TO AVOID MERCITING EXIST MOSTS.

4. FOR MODITY NEW SPECIA POST LOCATIONS TO AVOID MERCITING EXIST MOSTS.

5. HEW PROTECTIVE RUBBER HATE SPILL BE FIRESTONE OURSELAND HALL RECHARDING DE FLOREY, NO PAPERATED STATEM, POST MERCHARD HAVE AND RES STATEM, POST MERCHARD HAVE MULKING PAOS PER MANUFACTURES RECORMENDATIONS. COMPALT WITH CITY PROOF TO INSTALLATION.

6. NEW ROOF-TOP MODE FOR COMPOUNT. COMPONENT BISTALLATION WITH CITY OF PORTLAND COMMUNICATIONS CONSULT WOME DUCKER PHONE § 603-805-9408. FOLICH MANUFACTURESS HISTALLATION ROBES FROM FOR STATEM REQUIREMENTS.

COURS SHALL METH EXISTING ROOF (FLAT BEACK). COLOR SHALL BE LEGAL BEFORE SUBMITION OF APPROVED COME SHALL BE SUBMITION TO APPROVE CINE. SUBMITION OF APPROVED COME SHALL BE SUBMITION OF APPROVED COME. SHALL BE

PROJECT: MUNJOY HILL FIRE STATION

MONOPOLE REPLACEMENT

PROJECT NORTH

PROSECT #: 0557-016

CLIENT: CITY OF PORTLAND

DATE: JUNE 6,2012

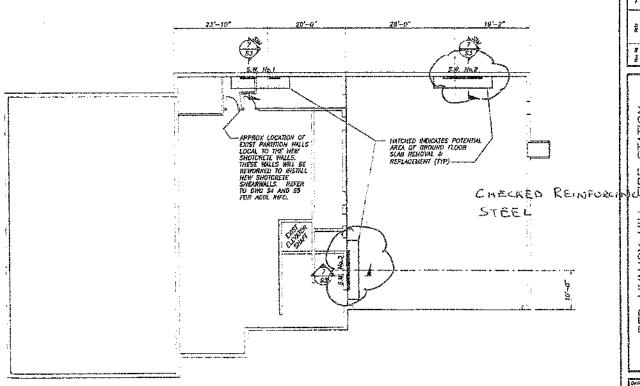
1, COMMECT-II: CIW-360 EP4-44 EP-C4 2. SHEPRO-1: \$P3650 £1447 E-C7

(1 UNIT) (1 UNIT) (16 UNITS) (1 UNIT) (1 UNIT) (16 UNITS)

STEFT PROCUREMENTS

1. FOR SCHEDULE CONSIDERATIONS, THE CITY WILL PROCURE MAJOR STRUCTURAL STEEL ELEMENTS INCLUDING BEIMS, BRACES, AND POSTS. THESE MATERIALS WILL BE DELICATED TO THE SELECTED CONTRACTORS FARRICATOR, COCROIMMEN OF DELIVERY THANS BY THE SELECTED CONTRACTORS, FARRICATOR, BILL PROVIDE SHOP DIRANGES, ERECTION PLANS, MISC. METAL, PLATES AND MICE, RESPONSIBLE FOR SHOP PARTING AND INSTALLATION, STRUCTURE SHALL PROVIDE A COPY OF THE DETRIFIED MILL TEST REPORTS FOR ALL MATERIAL TO THE STRUCTURAL EXCHANGE.

DISC.	DUANTITY	LENGTH (FEET)
W24x182	2	55
W24x182	2	50
HS\$10x4x1/4	1	35
HS\$10x4x1/4	Í	30
HSS1024x1/4	2	35
HSS1024x1/4 W10219	7	15
	1	13
S'P EXTRA STROND PIPE	şş	13



EXIST GROUND FLOOR PLAN

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APP	03/19/1
PBB	Slotter Jak Hum 2612



#### R. W. GILLESPIE & ASSOCIATES, INC.

Daily Observation Report

Date: June 7, 2012

Project: MUNE ON HILL FIRE STATIO	N MONOPOLE REPLACEMENT	Time:	End Time	Mileage:	End
Froject No.: 0 \$ 57 - 0 1 6	olls: 1.20	/ <del></del>	Beg. Time		Begin
Per Diem/Lodging:		10%	_ Total Time	!	(20) Total
Observations:				<u> </u>	
In-Place Densities Done	All IPDs meet Specifications	Rej	ported to	خاريبية المحافظة المح	er amane a sementende legen generalista op de november de
and the state of t	Not all IPDs meet Specifications		oorted to		
Phone Calls:		remark accounts a section and and a grade of	come a specific speci	والمراجعة والمراجعة المراجعة والمراجعة والمراج	
	t varietiet magazinisiasiasi algani kalkata ( a separah kalkata di Albert ( apid ( a separah kalkata ) yapi kalkata ( po	бого головий на надащий поставления по пода	r 1900 filologica (Marko) pour manque (people sempetation)	ويور موسيمولول المساولة والمحاورة وا	والمراجع والمتعارفة والمراجع فوالمواجعة والمراجع والمتعارف والمتعارف والمتعارف والمتعارف والمتعارف والمتعارف وا
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Visited the site in t	he morning for the	placen	sent of s	shoterel	re on
the ground floor	at locations	af we	Il no. I	س فسم	all no.3.
When I arrived	at the site 1	checke	d Hu	avea	6 F
wall No. 3 wh	iere they drilled	and	LDOXYED	reba.	donel
had exceeded	the specified 2',	Know	les had	1850	wed this
issue by add,	ng dowels in the	2 10	cation 1	he an	plication
of Shotcrete bog	an at approximately	8:30 1	14 ND22	¢n ≤n	Bruce
Curtis of Knowles	Industrial Services Co	rcoral.	on (Kisc	). Dur	- the
application Bruce us	40 3 NOZZLE Presse	11e of	60 - 70	PSC fo	- the
majority of the app	lication process. Who	n Ilia	oad of	quade	graved
at the fite the	e batch weights u	were i	(evs fied	to be	at the
LARKIFIED PROPORTION	1s. During the an	Micchin	3 LA	- Elina	- +0 1
committed Bryson	with some items	<u>Hat</u>	0.0 no	t corr	elate with
The oroject specif	isations. The first	<u>llen</u>	was the	+ the	re was
a area of wa	II. No. 3 where	all H	e paint	had,	rof leen
completely remov	ed on the botton	left	COLNEY ME	ar Hu	electrical
bex Brysan so	d he was owe	rs 04	Lus	est it	ton 22W
a large enough	axea to be of c	oncern	. 1h =	9c000) 1	tem was
	ed not been Kept				
maistened the use	all just prior to	Spr	sying H	o Sho	tovete, H.
was not an iss.	re since masonry	block	<u> </u>	moist	- 18 9 UICK
and moistening Hu	wall for 3 hours	woul	عوں ہے ل	it ha	120
saturated. The H	aind item was				
Reviewed By:		Signed:		, , , , , , , , , , , , , , , , , , , ,	Mcs-RuigåA
c HNU day	Concrete Equipment	Monitoring V	Well Supplies		
O Survey Level day	O Nuc Densometer day		of Bentonite	-	Locks
Rebar Meter day	O Coring Machine Dia.		Screen 2" PVC		Caps
Bailers (Disposable)  O Water Level Ind. day	Inches Cored		Screen 2" PVC	_	Points
O Water Level Ind. day O Drill Rig day	Generator		Riser 2" PVC	-	Screw Caps
O Backhoe day	<ul> <li>Peristaltic Pump (note tubing used);</li> </ul>	10 ft.	Riser 2" PVC		
	O Other	∩+h			

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MAGE 20= 2

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## R. W. GILLESPIE & ASSOCIATES, INC. Daily Observation Report

Date:

JUNE 7,2012

Project: Musson Hill FIRE	STA	TION MONOPOLE REPLACEME	Time: End Time	Mileage:	End
Project No.: 0557-016	Tolls		Beg. Time		Begin
Per Diem/Lodging:			Total Time	}	Total
Observations:	<del></del>				
In-Place Densities Done	· · · · · · · · · · · · · · · · · · ·	All IPDs meet Specifications	Reported to	to the resource of the second second second	
- de paragraphic Mar I de la la la la la compensa de la compensa de la la departe de la compensa del la compensa de la compensa del la compensa de la compen		Not all IPDs meet Specifications	***************************************		
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		yganghi yiliyada ashiy yiphistiriyh haka aara i kisya ishidalirahiy adad jiyad ada aasa adada aa ahaa ashi	- իրուս - իլա առափիմում է առժատեփուել ժվա ունեւ բայաստ - որհետ ը բթի տեսանեք ամու		
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I>		empted to Flash	the suffice	4	neaterial
bogan saq a			the pressure		- A ( ) ( ) ( ) ( ) ( )
so he decide		· •	Huan damase	ppermet paper of the section of the	Freshly
placed shote	vet	£	***************************************		
Devices of Devices			Signed: MAL / to		1
Reviewed By: M		, Company Development		<i>J.</i>	cs-Rugaa
o HNU day		Concrete Equipment	Monitoring Well Supplies		
	day lay	Nuc Densometer day     Coring Machine Dia			Locks Caps
Bailers (Disposable	····	Inches Corec		•	Points
[}	lay	o Generator o Taylor Rental	5 ft. Riser 2" PVC		Screw Caps
	đay	© Peristaltic Pump (note tubing used)	1	•	
<u> </u>	day	o Other	Other		200

PROMENCE PLAY, NOTES:

1. DISTRIC NUMBER REMOVAL COMMUNICATIONS SWITCHOVER, NEW MONOGOLE PROGUESTION BY OTHERS. REF CITY OF PORTLAND SPECIAL PROMISIONS OF THE SPECIAL PROMISIONS OF THE SPECIAL PROMISIONS OF THE SPECIAL PROMISIONS FOR ADDITIONS.

2. M.M. BAJE MAN SHEARMAL LOCATION.

3. ALL DIMENSIONS, EXIST COMPITIONS MID AS BUILT COMPITIONS MUST BE VERSIED IN THE RELD, MODERY NEW STEEL POST LOCATIONS TO AVOID RUPACTIVE EXIST JOISTS.

4. FOR ADDITIONAL INFORMATION ON EXIST BUILDING, SEE MARMOY HALL REPORTSON, PORTLAND, MANKE, DAYED AURIST JO, 1976.

5. HEW PROTECTIVE RUBBER MATS SHALL BE FRESTONE DUCKSEAM WHANNEY PAGE (BLAKK), OR APPROVED EQUAL SUBJECT SHOP ONG & RESTALLATION HAM, WISTALL THE WALKING PAGE FOR COMPANIES RECOMMENDATIONS. CONSULT WITH CITY PROOF TO NOTATIONAL CONSULT WITH CITY PROOF TO POSTAL BATCHARDS. CONSULT WITH CITY PROOF TO POSTAL BATCHARDS. CONSULT WITH CITY PROOF TO POSTAL BATCHARDS CONSULTAIN FOR PROOF SEED 1965—1940S. FOLION MANUSACTURESS REGULATION REQUIRES MISTALLATION FOR PAGE 505—1940S. FOLION MANUSACTURESS REGULATION FOR PAINT SYSTEM RECORRENIENTS. COOR SHALL MATCH EXISTING POOR (FLAT BLOCK). COLOR SAMPLE SHALL BE SUBMITED TO OWNER PRIOR TO FARRICATION FOR APPROVAL. PROVIDE ONE OF THE FOLIONIER NODES OR APPROVED EQUAL.

PROJECT: MUNJOY HILL FIRE STATION

MONOPOLE REPLACEMENT

PROJECT NORTH

PROSECT #: 0557-016

CLIENT: CITY OF PORTLAND

DATE: JUNE 7, 2012

t. COMMECT-IT:	C/W-368	(1 UM))
	EP444	(1 UNIT)
	EP-C#	(16 UNIS)
2. SMEPRO~1:	SP365G	(1 LUNT)
	E1447	() онт)
	E-C7	(18 UNITS)
		(

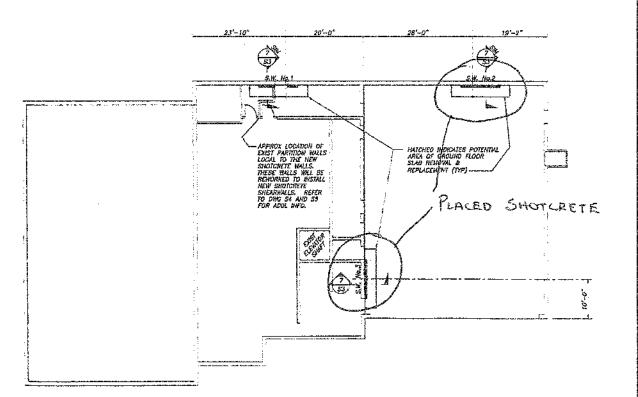
### STEEL PROCUPEMENT:

1. FOR SCHOOLS CONSIDERATIONS, THE CITY WILL PROCURE MAJOR STRUCTURAL STEEL ELEMENTS INCLUDING BEAUS, BRACES, AND POSTS. THESE MATERIALS WILL BE DELIVERED TO THE SELECTED CONTRACTOR'S PARRICATOR, COORDINATION OF DELIVERY THINKS BY THE SELECTED CONTRACTOR'S PARRICATOR WILL PROVIDE SHOP DIRAWNISS, ERECTION PLANS, MISC. MEXIL, PLATES AND ANDICE, RESPONSIBLE FOR SHOP PARTING AND HEALTHOON.

3. THE SUPPLIER SMALL PROVIDE A COPY OF THE CERTIFIED MILL TEST REPORTS FOR ALL MATERIA, TO THE STRUCTURAL ENGINEER.

4. THE FOLLOWING IS A LIST OF THE STEEL PROCURED BY THE CITY OF PORTLAND:

015C.	QUARTITY	LENGTH (FEET)
W24x162	3	35
4/24x162	2	50
H9510x4x1/4	1	35
HSS10x4x1/4		
H5510x6x1/4	2	25
H\$\$10x4x1/4	2	15
H10x19	1 7	15
6°# EXTRA STRONG PIPE	,	15



EXIST GROUND FLOOR PLAN 3/32=1'-0'

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## R. W. GILLESPIE & ASSOCIATES, INC.

Daily Observation Report

Date: JUNE 8, 2012

Project No. Cossino 1  Per Diem/Lodging:  Observations:  In-Place Densities Done	STATION MONDERS REPLACED  Folis: 1. 2.0  All IPDs meet Specifications		Beg. Time Total Time	/	End Begin  2.0 Total
Per Diem/Lodging: Observations:			Total Time	, <i>v</i>	
	All IPDs meet Specifications				
In-Place Densities Done	All IPDs meet Specifications				
		*	Reported to	al and challenges to be a depth by proper constraints of the	والرواري والراب والموارسة وموارسة والموارسة وا
	Not all IPDs meet Specifications		Reported to		
Phone Calls:	Total Los inset specifications	3	veborted to	فرموه والمتاركة	
a review Consider	ووالرفاء القدار تحمل وورجه والمستحمل والمستحد والمستحد والمستحد والمستحد والمستحد والمستحد والمستحد والمستحد والمستحد	4	ومستقد بقطة وماحد والواسقية فيطابهما أوا فراء المواود الوساوة المامة المقاطعة والمامة والمعاطمة	toon to research was approprie	وروان منطق والموارد المعارض والمعارض المعارض ا
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		Andri branska reski i ski i		. –	
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to our office	to core and	break	Strength	SPeci	wens.
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		*******	7		
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Davison d Davis					**************************************
Reviewed By: MYC		Signed:	Mars/A	~	ics-Rugda
o HNU day	Concrete Equipment		ing Well Supplies		
o Survey Level day	o Nuc Densometerday		Bags of Bentonite	_	Locks
o Rebar Meter day	O Coring Machine Dia.		ft. Screen 2" PVC	_	Caps
Bailers (Disposable)	Inches Cored		0 ft. Screen 2" PVC	-	Points
o Water Level Ind. day	O Generator O Taylor Rental		ft. Riser 2" PVC	_	Sorew Caps
o Drill Rig day	o Peristaltic Pump (note tubing used)		0 ft. Riser 2" PVC		
o Backhoe day	o Other		Other	···	<u> </u>



## R. W. GILLESPIE & ASSOCIATES, INC.

Date:

JUNE 11, 2012

Daily	Observation	Report
12/4HV	COSCIVATION	NEDUL

		Daily Observation F	leport	
Project: MUNSON HILL FIRE	STATION MO	NOPOLE REPLACEMENT	Time: End Time	Mileage;End
Project No.: 0887-016	Tolls: 1,00		Beg. Time	Begin
Per Diem/Lodging;		•	2 Total Time	(40)Total
Observations:	ar <sup>e</sup>	* ************************************		
In-Place Densities Done		All IPDs meet Specifications	Reported to	er skriveren kan sie de gregorien kopie sig kompenyen genomen geste skrive gebiere, genomen, syn en en eg
	No	ot all IPDs meet Specifications	Reported to	
Phone Calls:			ik diring diging gang pagamana ang ika ng manahang kadapang mina kanding ang pagamana ang tananana da sa sa sa	ustaka ke kalanda Mata-Apa-Amayak da ka pada yang mang mang bang dari kalan ang kalan bang da pang pang pang p
		didinyal dali didaka a kilajadi ya ghalana di diadaya (gha nga diguna ngangunaya), dagan kagar mbasa	алити бол 400-година (до 1866-1861-1861-1861-1861-1864), надрада да не допрог допуска допуска допуска до 1861-	he side not see that a seed to be a seed to be a see the seed of the seed to be a seed of the seed of
Valed the site.	- Ha	afternoon wh	on Knowles Indus	stral was
completing the				
wall No. 3. Know				
of the wells	where	the additional	shot crete wa	s required
			h in place.	
ordered 4 cubic			1	
		-	load of qua	The state of the s
specified proportion				***************************************
	and the state of t	nii in the season and	of contact it that all the that is a contact of the gradient of the count in (g) is a fundy one space space may and	nde e trade e trade hadre had gelijd op hin de gelijd noom omer landaarsker ang soe jurige telepa
The state of the s		le som han bred film et menn av 6 em som hår ett menne em e em filmen bleven med streverne e er seste ben	tika dipa 1488 kwa Madalaji 68 Mid dipika ili berilaji producinje primal y kupi proposove v 1,000 kwa 1	era erat a neverment her i talda fysia adaptatus, manda dyn historian anlys, an y menanasia, ann ann an ann an
Sanda de Paper y la	ահ և դիկարոնե և հարկականապարտումականակությել գոլվա, դ	met alleten villet fanoe is kilonoomsel en in fanoen ooksele vergeen is vil her omde verze her her her een een	ti den e nombre e i constitues que e no base e ne e e quija que base que que en 9 fil cul qui que combre	rann na marainn i seolaga ang kinagan aga pagaman pamaga kinagan mengalaga an manasan maga anaga.
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ga amaga ann maga aran aran ag pang ar par ar rum lama ang ar mugan a a unu mananan apamasin.		<del>map is gift die field die feld by fi</del> eld – Allen – field bleier name, die die mei en Semme – ples – ee Allen men Onder een verschied die felde by field – Allen – field bleier name, die die met verschied verschied verschied v	, <del>стой — часо во становромен</del> то и очени и на оченую и на процияни и бране в станов.	anne ambase la mase en la sur mes alla mestalia del Salaby amplembre del metro, persona
BALLET SET THE AMERICAN HERE SERVICES IN MET AND	٠٠ - ١٠٠٠ منه ۱۵۰ منه ۱۵۰ منه منه ۱۹۰۰ منه ۱۹۰	m de mei de verse de la	900 CONTROL OF THE REPORT OF THE PARTY OF TH	ed er rebt verster sindere i voca i skillinde edekke hjedji dojelji disinde endred v ne ostan
Вистема под вые кое по то ужение во то порады, на вые коеры та драго вор оверу 1 2 2	ليو ساز	i Ad Del Mar and centine de de la colonia Marchanda (de se asencia de comunicación e estra e conserv	nd British (ABT-1987) Radial (Radial de da S. Lilling Bide Sylman (Adagum de Very) (a bing syl	par destina milita minaminimini di dinda naka njak kupidalistanjih i yaki milipun keri ke njakida asara kerika I
от на при от на води в постави орежен в том от при орежения до орежения поставительной в поставительной в пост В при от при	بر موجب بيد دسپورانو در د که داده که کارانسته او لوسه انتشاق بیشته کاسپياب (از انت	s to believe del tres remote le la réméte Cumberne reconstituid est l'acces à reconstituir couve à avail.	-Этондов, не столов, набрить в совой, одно откол в на форму на нафра ——— у фолонуру у в до у на	rime i a none-mente hondista de Paraded de Porto del dos delles que que depetaçõe de Alleira de Parade de Pa
A TO THE MEN COMMENT CONTROL OF THE	<u> - با - ساد هم ان هم داد هر ان و دا و ان و با و ان و با و ان و با و ان و با و ان و بان و بان و بان و بان و بان</u>		الانجازات المحافظة المحافظة المارة الإنجازات المحافظة المحافظة المحافظة المحافظة المحافظة المحافظة المحافظة ال	en e
	. ,			e a memerana and ances e e e e e e e e e e e e e e e e e e
\$			The 1884 to \$7, \$7, \$7, \$2, \$2, \$2, \$3, \$4, \$4, \$4, \$2, \$2, \$2, \$2, \$3, \$2, \$3, \$3, \$3, \$3, \$3, \$3, \$3, \$3, \$3, \$3	**************************************
general mentional feministral for a surviventian star stift of the stimbilities are not referribly to be being	alledoleh bir han bi dada Areka aktiba kalan ada sepira e	на тіліні і на за гене фінанські е піфальне усубульфення на піфальфення за пене пій тиські таків того дій те	reference manuscular of provinces to participate the form the class of	- Phil slidher glageth (sp.) - Link (PDP) - 201 FAbiab hab fibblish are no ceiliú minn ar bhbhra fhirm
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Reviewed By: MV			Signed: Mars Hora	MCS-RWGLA
o HNU day	o Cone	rete Equipment	Monitoring Well Supplies	7,00
o Survey Level	day o Nuc	Densometerday		Locks
Rebar Meter	iay o Corii	ng Machine Dia.	5 ft. Screen 2" PVC	Caps
Bailers (Disposable	e)	Inches Cored	10 ft. Screen 2" PVC	Points
	iay o Gene		5 ft. Riser 2" PVC	Screw Caps
	<u></u>	taktic Pump (note tubing used)	10 ft. Riser 2" PVC	
o Backhne	day o Othe	r	Other	

STEEL PROCUREMENT:

ERBRING PLAN NOTES:

1. DISTRING MICHOPOLE REMOVAL, COMMUNICATIONS SWITCHOVER, NEW MONOPOLE PROPERTIES OF THE SECRETION BY OTHERS. REF CITY OF PORTLAND SPECIAL PROPERTIES TOR ADDI. 19150.

2. S.M. NO. NEW SHEARWALL LOCATIONS OF THE SPECIAL PROPERTIES OF THE SPECIAL PROPERTIES AND AS SHALL DIRECTSONS. EXIST CONDITIONS AND AS SHALL DIRECTSONS. EXIST CONDITIONS AND AS SHALL MEADING MISTS.

4. FOR ADDITIONAL INFORMATION OF EXIST BUILDING, SEE MAINDY HALL MISDRICHHOOD FACRITY AND FREE STATION, PORTLAND, MARTIN, EXTED MAINTED 12. 1978.

5. NEW PROTECTIVE ROBBER MATS SHALL BE FIRESTONE DURKSEAN WALKHAY PROS (ELICA), OR APPROVED EDUL. SOMETI SHOP ONR & MISTRILATION, MISTRILL THE WALKHAY PROS PER MANUNACTURES RECOMMENDATIONS. CONSULT WITH CITY PRIOR TO SEFTILIZATION.

6. NEW ROOF-TOP HOOD FOR CONDUTAL CORROBATE WISTRILATION WITH OTTY OF PROTECTIVE WALKHAY PROS SEEN AND COMMUNICATIONS CONSULTAIN HORM BOUGHER PROPE SEES-405-405. FEAST SHEED CHARLES SEEMLE FOR SHEEL SHEEL ASSISTED FOR FLATFIE SHEED, SOME SHALL BE SUBMITTED TO CHINEF PROPE TO FARRACTION FOR APPROVAL. PROVIDE ONE OF THE SUBMITTED TO CHINEF PROPE TO FARRACTION FOR APPROVAL. PROVIDE ONE OF THE SUBMITTED TO CHARGE PROPE EDULAL.

PROJECT: MUNJOY HILL FIRE STATION

MONOPOLE REPLACEMENT

PROJECT NORTH

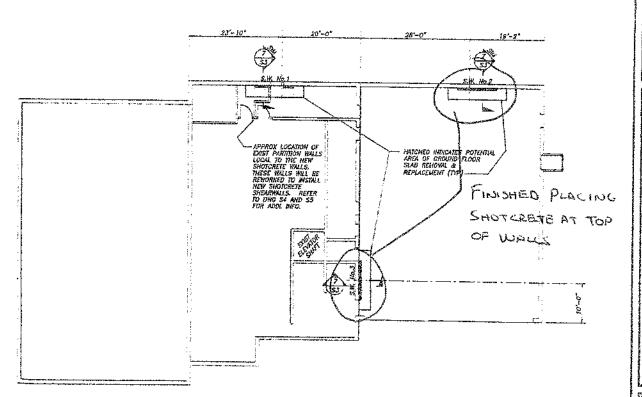
(1 UNIT) (1 UNIT) (18 UNITS) (1 UNIT) (1 UNIT) (18 UNITS)

PROSECT # : 0557 - 016

CITY OF PORTLAND CLIENT:

DATE: JUNE 11, 2012

F.	FOR SCHEDULE CONSIDERATION ELEMENTS INCLUDING BEAUS,	BRACES, AND	POSTS. THESE M	ATERIALS WILL BE
	DELIVERED TO THE SELECTED CONTAINS BY THE SELECTED CON	CONTRACTOR'S	FABRICATOR; COC	DROWATION OF DELIVERY
2.	CONTRACTOR'S FABRICATOR M	EL PROMOE SE	HOLD DRAWINGS, EX	RECTION PLANS, MISC.
	METAL, PLATES AND AMBLE: R THE SUPPLIER SHALL PROVIDE	ESPONSIBLE FO	JR 5HOP PAUJIKI	TAND BUCKET ATTACK
	MATERIAL TO THE STRUCTURAL	. ENGHEEN.		
474	THE FOLLOWING IS A LIST OF		COCUMED BY THE	CITY OF PORTLAND:
	DISC.	CHANTITY	LENGTH (FEET)	
	W24x   62	2	55	i
	WZ42 62	7	5G	į
	HSS10rex1/4	7	35	
	NSS1GK4x1/4	, ,	30	
	H\$810x4x1/4	. 2	25	
	H5510z4z1/4	2	15	
	1910×19	1	15	
	5°# EXTRA STRONG PIPE	7	15	



EXIST GROUND FLOOR PLAN

TE VEL BYRE PROPERTY OF THE STATE OF THE STA



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FIRE TO MUNJOY HILL MONO-POLE INS PORTLAND, M

BTH BTH HOTED 03/19/12



## R. W. GILLESPIE & ASSOCIATES, INC.

Date:

June 13, 2012

Daily	Observation	Report

Project: Mynson HILL FIRE	STATION MONOPOLE REPLACEMENT	Time:End Time	Mileage: End
Project No.: 0557-016	Tells: 1.00	Beg. Time	Begin
Per Diem/Lodging:		1/2_ Total Time	(25) Total
Observations:			
In-Place Densities Done	All IPDs meet Specification	Reported to	
	Not all IPDs meet Specification	Reported to	
Phone Calls:		197 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 197 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 - 1985 -	Ի հետոների Պորհանգին ամանց է Ավանագայանին ընդարդ այր հանր չերի հանգի վարդնան է դորդումանական հականդեր այ
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		ACC. 12-12-12-12-12-12-12-12-12-12-12-12-12-1	
Visited the site	in the afternoon to	o check the reinf	forcing Steel
	Floor and Second		
	the site Knowles		
were still tyin	ng the reinforcing s	steel for Wall	No. 1. Knowles
had not finis	hed installing the	reinforcing 3	hael, they
had not ins	talled the epoxyes	He dowels	into the
Masonry wall	as of when	was at the	sib. There
	trea on the gre		
	oscing of the d		
	Ita The Specifica		
	nd he said that h		
	is location where s		
	which has been in		
specifications.			The state of the s
			от вышения и от поменения выполняющей выполняющей выполняющей выполняющей выполняющей выполняющей выполняющей
		се у въст път поселени поселени во поселени верени и поселени се образовани (1 1 де 2 на 2 г.).	elle mengalaksika it salah kalali asa dahan sejancah inggankepanyangkya mengamandiga salah silangkan angara sa Tanggan
i di seminakan kananan nanan sanan sanan manan di kata kata kata kata keta kata kata kata	and the state of t	TOTANINA FRANKS SANIAS SANAS BAY MAN WALLS LIMBANG AND	
			ALLEGE ALLEGE ALLEGE ALLEGE AND
Reviewed By: MT		Signed: Mary How	MCS-RWGGA
o HNU day	○ Concrete Equipment	Monitoring Well Supplies	
	ay O Nuc Densometer day	Bags of Bentonite	Locks
O Rebar Meter da	- ;		Caps
Bailers (Disposable)		! <del></del>	Points
O Water Level Ind. da	<u> </u>	5 ft. Riser 2" PVC	Screw Caps
	ay Other		
© Backhoe de	ay Other	Other	

ENGING ELM HOITS:

1. EDITING MEMPOUE REMEMAL, COMMANICATIONS SHITCHOVER, NEW MEMOPOLE PROCESSINS OF THE SPECIAL PROCESSING AND PROCESSING PROCESSING AS PROCESSING PROCESSING AS PROCESSING PROCES

PROSECT: MUNDON HILL FIRE STATION

MONOPOLE REPLACEMENT

PROJECT NORTH

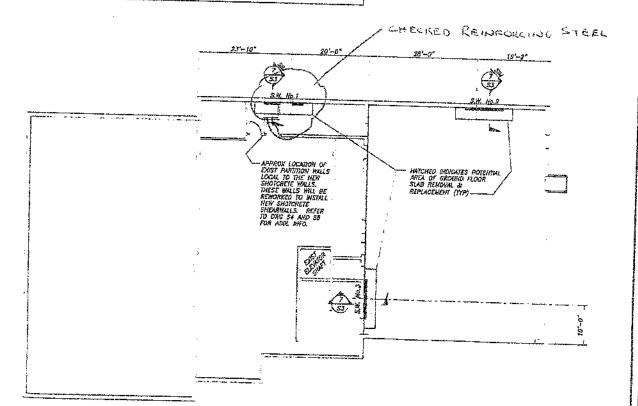
1. CONNECT-II: CIN-365 EP4-44 EP-C4 2. SITEPRO-1: \$93850 E1447 E-C7 (I UNET) (I ENET) (IE UNETS) (I UNET) (I UNET) (IE UNETS)

PROSECT # : 0557 - 016

CLIENT: CITY OF PORTLAND

JUNE 13, 2012 DATE

STEEL	PROCUREMENT:			
DE) Tim	R SCHEOULE CONSIDERATE CLIENTS RICLUDING BEAUS, THEREO TO THE SELECTED THE BY THE SELECTED CO.	CONTRACTOR'S	FABRICHYOR; CO	WATERIALS WILL BE CORDINATION OF DELIVERY
2. CO	VIRACIOR'S FARRICITAD U	SEL BOSTANT OF	HOP DRAHINGS, E	RECTION PLANS, MISC.
J. The	SUPPLIER SHALL PROVID	F A COPY OF	OR SHOP PAINTH THE CERTIFIC UI	G AND INSTALLATION
4. THE	ERIAL TO THE STRUCTURA FOLLOWING IS A LIST OF	L ERGIHEER. THE STEEL PA	OCURED BY THE	CITY OF PORTLAND
	0/5C,	OUANTTY	CENCINA Francis	7
	1015G, 1424x162	QUANTITY	LENGTH (FEET)	<b>1</b>
		OUANTITY 2	<i>8</i> 5	
	H24x152 H24x162	OUANTITY 2 2	#S 50	
	974x162 1934x162 18510x4x1/4	OUANTTY 2 2	#5 50 35	<del>*</del>
	H24x152 H24x162	OUANTITY 2 2 1 1 2	#5 50 35 30	
	#24x162  #24x162  H\$\$10x4x1/4  H\$\$10x4x1/4  H\$\$10x4x1/4  H\$\$10x4x1/4	OUAHITTY 2 1 1 2 1 2 2 1 2 2 2 2 2 2 2 2 2 2 2	#5 50 35 30 25	
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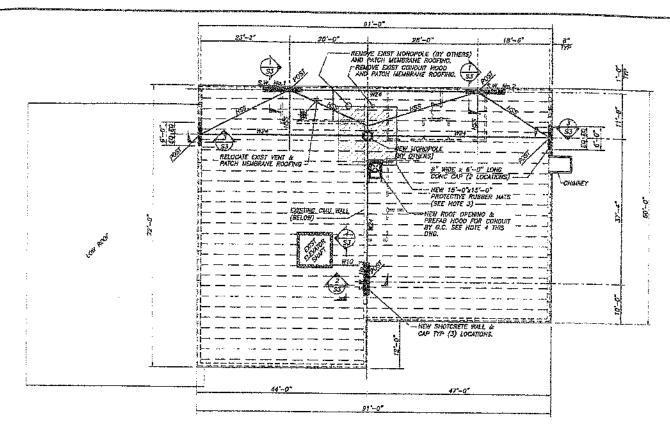
EXIST GROUND FLOOR PLAN

SERVICE CONTRACTOR OF THE SERVICE CONTRACTOR

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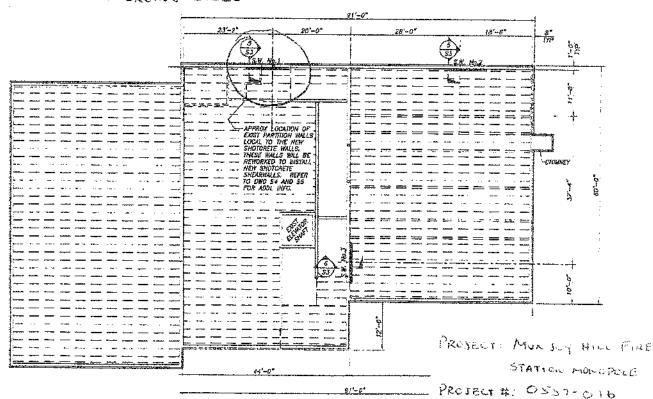
PFD MUNUOY HILL MONO-POLE IN PORTLAND,

NOTED APP 03/19/12 PBB 2512



## EXIST ROOF FRAMING PLAN 3/32+1'-0"

CHECKED REINFORCING STEEL



EXIST SECOND FLOOR FRAMING PLAN

DATE: June 13,2012

The Blever of the proposed of spreet and south states, he designed to state of the proposed to spreet and the south state of appearance of spreet to the spreet and south states of the spreet and spr

## R. W. GILLESPIE & ASSOCIATES, INC.

Geotechnical Engineering • Geohydrology • Materials Testing Services

#### Corporate Office

200 International Dr., Ste 170 Portsmouth, NH 03801 603-427-0244 \* Fax 603-430-2041 86 Industrial Park Rd, Ste 4 Saco, MB 04072

P.O. Box 289 Augusta, MB 04344

Fax 603-430-2041 207-286-8008 • Fax 207-286-2882

Augusta, Mr. 04344 07-623-4914 • Fax 207-623-3429

CONCRETE REINFORCING STEEL	OBSERVATION REI	PORT		
Project Name: MUNION HILL FIRE STATION MONOPOLE REPL	ACEMENT	EMENT Date: JUNE 13, 2012		
Client/Project #: C174 OF PORTLAND # 0557-016		Time: 5:00		
General Contractor/ Subcontractor: Scott Construction / Knows	ES INCUSTRIAL LES CORPORATION	Weather: INSIDE		
Approved Documents Referenced: 5 12 OCTURAL DRAWINGS	x REBAR SHOP DI	RAWINGS		
Document Sheets/Details Referenced: SI, S3, ROI	<del></del>		FORMAL	
Placement Location: Gaound From & Second From	R OF WALL	No. 1		
ITEMS CHEC	(E)	y de en de la companya de la company		
Item	In Accordance With Documents	Not In Accordance With Documents	Not Applicable	
Bar Size	p p	ם	G	
Bar Grade	ø	۵		
Number of Bars				
Spacing Before & After Concrete Placement	G		Ø	
End & Side Clearances	ø.	ū	Ω	
Top & Bottom Clearances	Ø	. 0	0	
Assure Bar are Clean and Free of Dirt, Oil, Rust, Paint, Etc.		ū	<i>j</i> a′	
Bar Junctions are Adequately Tied	D		٥	
Placement & Adequacy of supports	Ö	D D	Ω	
Vertical Embedment to Assure Proper Lap Length	· p	D D	Ω	
Horizontal Bars for Minimum Lap Length	О	П	A	
Other: WHEN I WAS AT THE SITE KNOW ALL OF THE REINFORCING STEEL, THEY			/NSTALLI	
DRILLED AND EPOXYED REBAR DOWELS. THERE	WAS A L	CCA710N ON	THE	
GROUND FLOOR WHERE THE SPACING OF THE DRILLED HOLES FOR THE REBAR  DOWELS EXCEEDED 24", I INFORMED BRUCE GURTIS - KNOWLES  AND HE SAID THAT THEY WOULD BE  Construction Technologist:  DRILLED AND EPOXYED BEFORE THE LEFT  THE SITE AT THE END OF THE DAY.  Print Name/Title				
	RCO STONE	CET		

ERRING, ELAN HOTTES

1. EXISTING MONOPOLE RELIGIAL, COMMUNICATIONS SHITCHCHER, NON MONOPOLE PROCURENCING BY CRICKS. REF CITY OF PORTLAND SPECIAL PROVISIONS OF THE SPECIALISMS FOR ANDLEWED.

2. S.M. NAN'S NEW SHAMMAL LOCATION, OF COMMINISM WHIST BE VERYING IN THE POLICY OF THE SPECIAL PROVISIONS OF THE SPECIAL PROVISIONS OF THE PROPERTY OF THE WARRY PLUS PER HAMBER UNITED SHALL BE FIRESTONE CHECKERIN WARRINGT PROPERTY OF THE WARRY PLUS PER HAMBERCHERS RECOMMENDATIONS, CONSILT WITH CITY PROPE TO WASTALLIFICM.

5. NEW PROPERTY HOLD FOR CONDUIT. CORROBATE HISTALLIFICS WITH CITY PROPERTY OF THE WARRINGTON CONSULTIVITY FOR BOUCHER PROPERTY OF SEGS—540E. FOLICH MANUFACTURES INSTALLATION FROM SHIPLE STALL BE SUBJECTED FOR SHALL BECAUTE PROPERTY OF THE PROPERTY OF

PROSECTI MUNDOY HILL FIRE STATION

MONOPOLE REPLACEMENT

PROJECT NORTH

1. CONNECT-N: CHW-JSS
EP4-c4
EP-C4
2. SNEPRC-1: SP3650
E1447
E-C7 (1 UNIT) (1 UNIT) (16 UNITS) (1 UNIT) (1 UNITS) PROSECT #: 0557-016

CLIENT: CITY OF PORTLAND

JUNE 13, 2012 DATE :

STEEL PROCURENENTS

1. FOR SCHEDULE CONSIDERATIONS, THE CITY WILL PROCURE MAJOR STRUCTURAL STEEL ELEMENTS INCLUDING BEAUS, GRACES, AND POSTS. THESE MATERIALS WILL BE CHARRED IN THE SELECTED CONTRACTOR'S PREMICATOR, COORDINATION OF DELIVERY MAINS BY THE SELECTED CONTRACTOR'S PREMICATOR, COORDINATION PLANS, MISS. CONTRACTOR'S PREMICATOR WILL PROVIDE SHOP DRAWINGS, EMECUTION PLANS, MISS. MISTAL PARTS AND ANGLE RESPONSIBLE FOR SIND PARTIES AND MISCA PROCURSE FOR SIND PARTIES AND MISCARD. STORY SUPPLIES SHOLL PROVIDE A COPY OF THE CERTIFIED AND TEST REPORTS FOR ALL MATERIAL TO THE STRUCTURAL ENGINEER.

OISC,	QUANTITY	LENGTH (FEET)
W24x152	2	55
₩24x162	2	50
H5510±4±1/4	1	35
HS519x4x1/6	7	30
H5510x4x1/4	2	25
H\$\$10z4x1/4	2	15
W10z19	1	15
O'S EXTRA STRONG PIPE		7.5

CHECKED REINFORCING STEEL 23'-10" 18'-2" -APPROX LOCATION OF EXIST PARTITION WALLS LOCAL TO THE NEW SHOUGHETE WALLS. THESE WALLS WHIL BE REWORKED TO MISTIFLE NEW SHOTCRETE SHEARMALLS, REFER TO DIME SA AND SS FOR ADDL NITO. HATCHED INDICATES POTENTIAL AREA OF GROUND FLOOR SLAB REMOVAL & REPLACEMENT (TYP) ELENION ELENION S ė

EXIST GROUND FLOOR PLAN

ding the form of the colors of

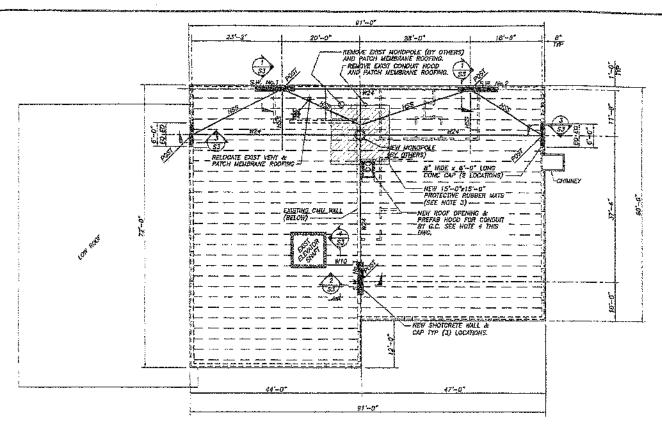
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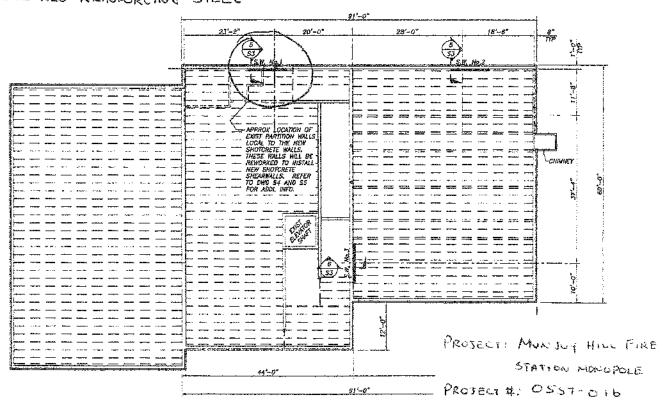
STATION **INSTALLATION** FIRE TO MUNJOY HILL MONO—POLE INS PORTLAND, M PFD

BIW Noteo APP 05/19/12 Theres det them, 2612



EXIST ROOF FRAMING PLAN
3/32=1'-0"

CHECKED REINFORCING STEEL



EXIST SECOND FLOOR FRAMING PLAN

DATE: JUNE 13,2012

THE SECRET STREET OF A STREET WE SHARE A STREET OF WORK AN ADDRESS OF STREET WAS SHARED AS A STREET WE SHARE AND AN ADDRESS OF STREET WE SHARE AND AN ADDRESS OF STREET WAS SHARED AND ADDRES

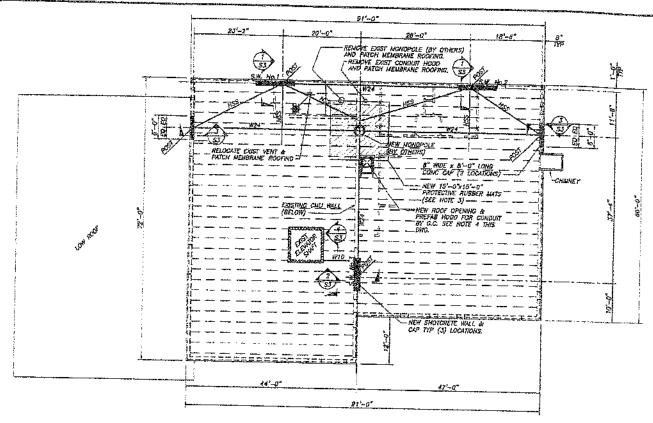


## R. W. GILLESPIE & ASSOCIATES, INC.

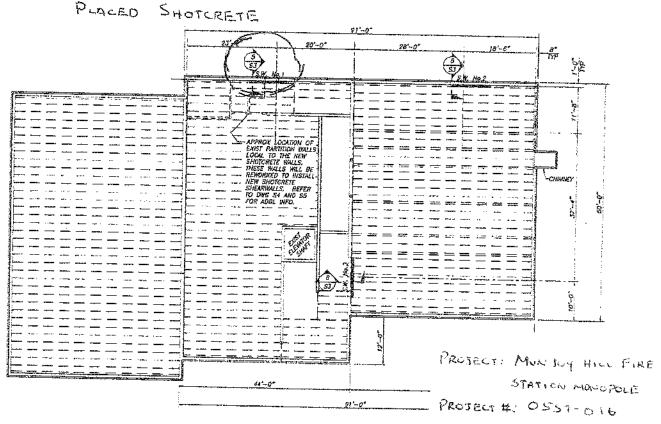
Date:

JUNE 18, 2017

Project Name His Figs Stargery Manager & Reported Name Had Time Bog Time Bog Time 22 Total Time 23 Total Descriptions:  In-Plane Densities Done All PDs meet Specifications Reported to Not all PDs meet Specifications Reported to Plane Calls:  Visited the sails in the afternace when Knowles looked to the sails in the afternace when Knowles looked to the sails in the afternace when Knowles looked to the sail and a sail and of quality of looked to the sail and a sail and of quality of looked to the sail and began the placement to complete the wall when the true true application was a complete the wall when the sails in the sails in the placement of the sails and placement to complete the wall when the sails in the sail	, 'VB		Daily Observation R	eport	
Region   Reported to   Reported to	Project: MUNSON HILL FIRE	STATION MON	LIGHT REPLACEMENT	Time: Bnd Time	Mileage: End
Per Diem Jodging:    2 / Total Time   (\$5) Total Observations:	Project No.: 0557-016	Tolls: 1.00			Begin
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EXIST ROOF FRAMING PLAN



EXIST SECOND FLOOR FRAMING PLAN

DATE: JUNE 18,2012

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# R. W. GILLESPIE & ASSOCIATES, INC.

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### R. W. GILLESPIE & ASSOCIATES, INC.

Geotechnical Engineering • Geohydrology • Materials Testing Services

### Corporate Office

200 International Dr., Ste 170 Portsmouth, NH 03801

86 Industrial Park Rd, Ste 4 Saco, ME 04072

P.O. Box 289 Augusta, ME 04344 07-623-4914 • Fax 207-623-3429

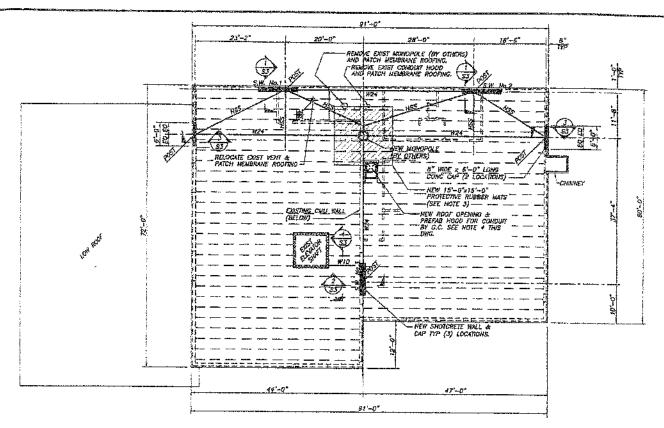
207-286-8008 • Fax 207-286-2882 603-427-0244 • Fax 603-430-2041

Project Name: MUNDOY HILL FIRE STATION MONOPOLE	REPLACEMENT	Date: JUNE 19, 2017
Client/Project #: City of Portions # 0557-016	2	Time:
G 3 G 4 4 4 G 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1 16000 0000	Weather INSIDE
General Contractor/ Subcontractor: Scott Constauction	SERVICES CORPORATION	YY GREET, S. L. Z.
Approved Documents Referenced: 572000000 Dena	SERVICES CORPORATION	

îtem	In Accordance With Documents	Not In Accordance With Documents	Not Applicable	
Bar Size	A		Ω	]
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Top & Bottom Clearances	O	Ö		MOT
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Vertical Embedment to Assure Proper Lap Length	Z	D		
Horizontal Bars for Minimum Lap Length	О		#	

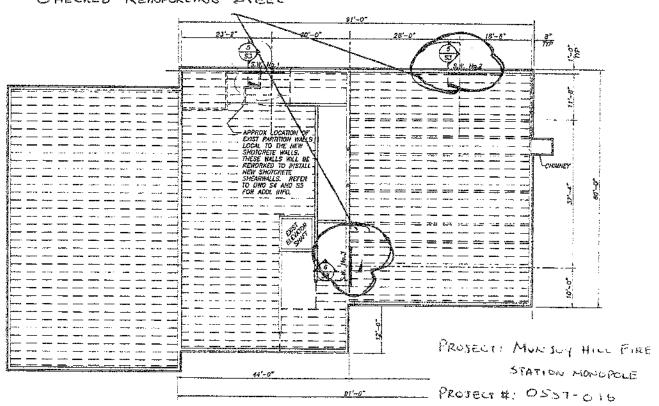
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	vere verbally reported to: 184 - Scott Coostraction	_
BRUCE CUI	etis - KNOWLES INDUST	12141
Construction T	1	
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EXIST ROOF FRAMING PLAN
3/32-1'-0"





EXIST SECOND FLOOR FRAMING PLAN

SECOND FLOOR FRAMING PLAN

SECOND FLOOR FRAMING PLAN

DATE: JUNE 19, 2013

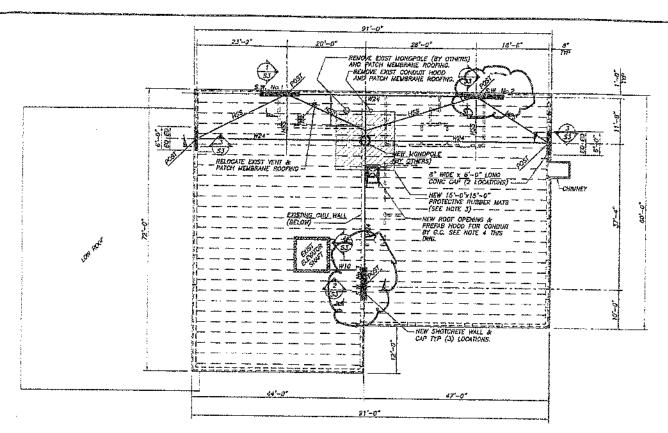
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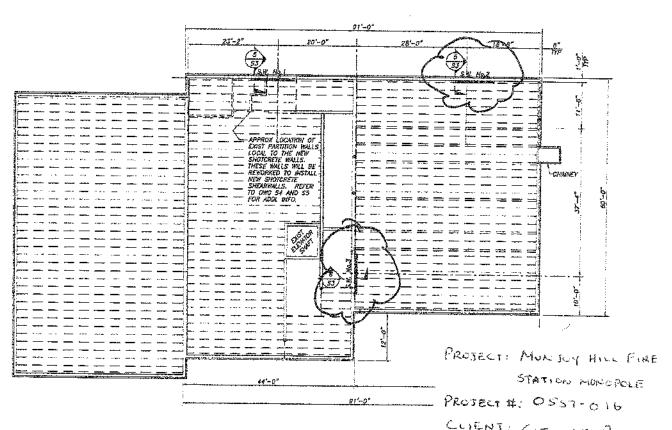
# R. W. GILLESPIE & ASSOCIATES, INC.

Date: 6/20/12

Project No.: \$557		IRE STATION	Time:	End Time	Mileage:	Enc	=== -:
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EXIST ROOF FRAMING PLAN
3/32=1'-0"



EXIST SECOND FLOOR FRAMING PLAN CITY OF PORTLAND AREAS WHOLE DATE: 6/20/12

PRINTER DATE: 6/20/12

PRINTER WHORE DATE: 6/20/12

PRINTER WHORE DATE: 6/20/12

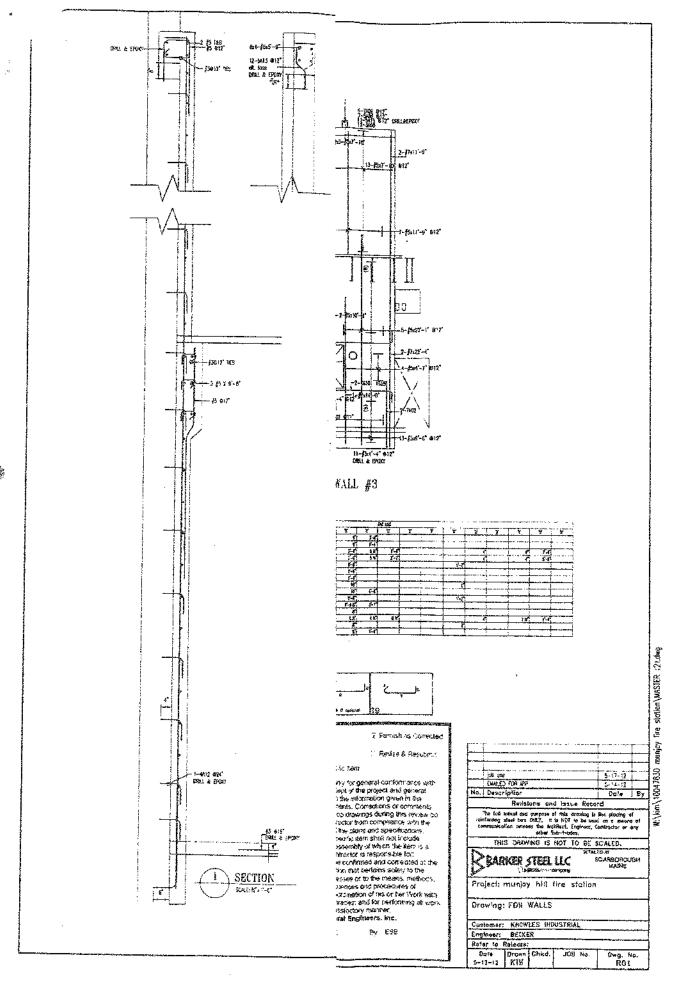
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# R. W. GILLESPIE & ASSOCIATES, INC.

Geotechnical Engineering • Geohydrology • Materials Testing Services

200 International Dr., Ste 170 Portsmouth, NH 03801 603-427-0244 • Fax 603-430-2041 Corporate Office 86 Industrial Park Rd, Ste 4 Saco, ME 04072 207-286-8008 • Fax 207-286-2882

CONCRETE REINFORCING S	TEEL OBSERVATION REI	PORT		
Project Name: MUNTON HILL FIRESTATION MONERAL	(e	Date: 6/2011	7	
Client/Project #: CITY OF PORTLAND 557-011	Q <sub>a</sub>	Time: .7: >0 1		
General Contractor/ Subcontractor: SCOTT CONSTRUCT	Alex	Weather: SUWNY		
Approved Documents Referenced: STRUCTURAL DRAW,	V65 BREBAR SHOP	DRAWINGS	THE RESERVE OF THE PROPERTY OF	
Document Sheets/Details Referenced:		<u> </u>		
Placement Location: WALL NO. 2 3 WALL NO	1.3 - SECOND FLOOD	· 62	· · · · · · · · · · · · · · · · · · ·	
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Item	In Accordance With Documents	Not In Accordance With Documents	Not Applicable	
Bar Size	X		0	
Bar Grade		D	۵	
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Spacing Before & After Concrete Placement	B	□	□	
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Other:				
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	Construction Technologist:			
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	Print Name/Title			
	DAN DOWNEY - COR	STRUCTION TECHA	154.06.5T	



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### R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244

### LETTER OF TRANSMITTAL

Project No.:

Signed: Bertha Dawn

			N Z 9 ZUIZ	0557-016			
		Attention:					
			heff@woodardcurrar	n.com]			
City of Portland		Re:					
389 Congress Street			Munjoy Hill Fire Station Monopole Repla				
		······	Portland, Maine				
Portland, ME 04101							
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Cylinder No. (s)		Age (Days)					
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Copy to:							
Bryson at Becker Structural Eng	rineers (Bryson@beckerstructural.com),						
Chief Smith at the City (sls@po.	rtlandmaine.gov),						
Greg Scott at Scott Construction	(gscott207@gmail.com), and						
Mark Libby at Scott Construction	n (markiibby88@gmail.com)						

Date:

If Enclosures are not as noted, kindly notify us at once.

### R.W. GILLESPIE & ASSOCIATES

86 Industrial Park Road, Suite 4, Saco, ME 04072 (207) 286-8008 200 International Drive, Suite 170, Portsmouth, NH 03801 (603) 427-0244

### CONCRETE TEST/PLACEMENT REPORT

Project Name:

Munjoy Hill Fire Station Monopole

Date Cores Taken:

20-Jun-12

Project No:

Replacement 0557-016

Cored By:

Daniel S. Downey

Specimen Age:

7

No. of Cores:

4

Remarks:

Precast Concrete slab cast on 30 June, 2012 by Knowles Industrial Services Corporation Unit Weights: #71789 = 138.8 pcf, #71790 = 141.3 pcf, #71791 = 139.9 pcf, #71792 = 139.9

Coring Location:

Lab No.	Test Date	Ave Dia (in)	Ave Area (in²)	Load (lbs)	Ratio h/d	Correction Factor	Corrected Load	Compressive Strength (psi)	Break Type
71789	27-Jun-12	2.734	5.87	29845	1.39	0.95	28353	4830	2
71790	18-Jul-12								
71791	18-Jul-12								
71792	18-Jul-12					<u> </u>			

### Types of Breaks



OHS A



יום אוטה 2



Columnar 3



Shear



Side Fracture 5



Double Side Fracture 6

Checked by:

MARCO Stone For Mathew T. Grady, Manager of MTS



### R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244

### LETTER OF TRANSMITTAL

	Date: JUL 0 6 2012	Project No.: 0557-016
	Attention:	ATT
CD of t	Barry Sheff [bsheff@woode	ardcurran.com]
ity of Portland	Re:	
	Concrete '	Testing
89 Congress Street	Милјоу Н	Hill Fire Station Monopole Replacement
	Portland,	· -
ortland, ME 04101		
	Appendix App	

		and the second second second	
Cylinder No. (s)		Age (Days)	
	71722 71723	28 28	
	71724	28	

Remarks:

Copy to:

Bryson at Becker Structural Engineers (Bryson@beckerstructural.com), Chief Smith at the City (sls@portlandmaine.gov), Greg Scott at Scott Construction (gscott207@gmail.com), and Mark Libby at Scott Construction (marklibby88@gmail.com)

Signed: Bertha Dawn

If Enclosures are not as noted, kindly notify us at once.

### R.W. GILLESPIE & ASSOCIATES

86 Industrial Park Road, Suite 4, Saco, ME 04072 (207) 286-8008 200 International Drive, Suite 170, Portsmouth, NH 03801 (603) 427-0244

### CONCRETE TEST/PLACEMENT REPORT

Project Name:

Munjoy Hill Fire Station Monopole

Date Cores Taken:

5-Jun-12

Project No:

Replacement 0557-016

Cored By:

Dan S Downey

Specimen Age:

10

No. of Cores:

6

Remarks:

Test Panels cast on 05 June, 2012 by Knowles Industrial Services Corporation

Unit Weights: #71719 = 138.0 pcf, #71720 = 139.4 pcf, #71721 = 138.5 pcf, #71722 = 139.3 pcf, #71723 =

136.5 pcf, #71724 = 140.7 pcf

Coring Location:

JUL 0 6 2012

Lab No.	Test Date	Ave Dia (in)	Ave Area (In <sup>2</sup> )	Load (lbs)	Ratio h/d	Correction Factor	Corrected Load	Compressive Strength (psl)	Break Type
71719	15-Jun-12	2.732	5.86	27505	1.33	0.94	25855	4410	1
71720	15-Jun-12	2.733	5.87	29010	1.35	0,94	27269	4650	1
71721	15-Jun-12	2.732	5.86	31465	1.31	0.94	29577	5050	1
71722	3-Jul-12	2.733	5.87	40895	1.35	0.94	38441	6550	2
71723	3-Jul-12	2.736	5.88	34760	1.28	0.94	32674	5560	2
71724	3-Jul-12	2.734	5.87	38720	1.46	0.95	36784	6270	4

### Types of Breaks





Cone & Split 2



Columnar 3



Shear



Side Fracture 5



Double Side Fracture 6

# 71719, 71720, and 71721 are 10 day breaks.

# 71722, 71723, and 71724are 28 day breaks.

Checked by: Mane I tons
MARCO STONE FORMathew T. Grady, Manager of MTS



### R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244

### LETTER OF TRANSMITTAL

Signed: Bertha Dawn

		•	Date: JUL 1	3 2012	Project No.:	0357-016
			Attention:	······································		0337-010
City of Portland			Barry Sheff [bsheff] Re:	@woodardcu	man.com]	·
389 Congress Street				oncrete Testir lunjoy Hill Fi	ng re Station Monopol	e Replacement
Portland, ME 04101			Portland, Maine			
						<i>:</i> .
	in the second	e Collinareus				
Core <del>Cylinder</del> No. (s)			Age (Days)			
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					110-tu-911-ing 19-10-19-19-19-19-19-19-19-19-19-19-19-19-19-	
Remarks:						
			***************************************			
					E	****
Copy to: Bryson at Becker Structural Engir	neers (Bryson@beckerstri	ictival.com).				

If Enclosures are not as noted, kindly notify us at once.

Chief Smith at the City (sis@portlandmaine.gov),

Greg Scott at Scott Construction (gscott207@gmail.com), and Mark Libby at Scott Construction (marklibby88@gmail.com)

### R.W. GILLESPIE & ASSOCIATES

86 Industrial Park Road, Suite 4, Saco, ME 04072 (207) 286-8008 200 International Drive, Suite 170, Portsmouth, NH 03801 (603) 427-0244

### CONCRETE TEST/PLACEMENT REPORT

JUL 13 2012

Project Name:

Munjoy Hill Fire Station Monopole

Date Cores Taken:

14-Jun-12

Project No:

Replacement 0557-016

Cored By:

Dan S Downey

Specimen Age:

7

No. of Cores:

A

Remarks:

Test Panels cast on 14 June, 2012 by Knowles Industrial Services Corporation

Unit Weights: #71769 = 1.693 pcf, #71770 = 1.614 pcf, #71771 = 1.652 pcf, #71772 = 1.651 pcf

Coring Location:

Lab No.	Test Date	Ave Dia (in)	Ave Area (in <sup>2</sup> )	Load (lbs)	Ratio h/d	Correction Factor	Corrected Load	Compressive Strength (psi)	Break Type
71769	21-Jun-12	2,732	5.86	35030	1.37	0.94	32928	5620	4
71770	12-Jul-12	2.731	5.86	42950	1.36	0.94	40373	6890	2
71771	12-Jul-12	2.733	5.87	45385	1.39	0.95	44066	7510	4
71772	12-Jul-12	2.735	5.87	41740	1.39	0.95	39653	6750	2

### Types of Breaks



Cone 1



Cone & Split 2



Columnar 3



Shear



Side Fracture 5



Double Side Fracture

#71769 is a 7 day break.

#71770, 71771, and 71772 are 28 day breaks.

Checked by:

MARCO STONE FOR Mathew T. Grady, Manager of MTS



R. W. Gillespie & Associates, Inc. 86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244

### LETTER OF TRANSMITTAL

Signed: Bertha Dawn

		Date;	JUL 19 2012	Project No.: 0557-016			
		Attention: Barry Sheff [bsheff@woodardcurran.com]					
City of Portland		Re:	hen [bsnen@woodardcu	irran.com]			
The state of the s	CONTRACTOR		Concrete Testi	ng			
89 Congress Street		<del></del>		ire Station Monopole Replacement			
Portland, ME 04101			Portland, Main	1 <b>¢</b>			
	en e						
Core No. (s)		Age (	Days)				
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	71791 71792		28 28				
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0-11		~~~~					
Remarks:				•			
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Copy to: Bryson at Becker Structural Engi:	neers (Bryson@beckerstructural.com),						
Chief Smith at the City (sls@port	fandmaine.gov),						
Greg Scott at Scott Construction	gsconzu /@gman.com), and						

If Enclosures are not as noted, kindly notify us at once.

Mark Libby at Scott Construction (marklibby 88@gmail.com)

### R.W. GILLESPIE & ASSOCIATES

86 Industrial Park Road, Suite 4, Saco, ME 04072 (207) 286-8008 200 International Drive, Suite 170, Portsmouth, NH 03801 (603) 427-0244

### CONCRETE TEST/PLACEMENT REPORT

Project Name:

Munjoy Hill Fire Station Monopole

Date Cores Taken:

20-Jun-12

Project No:

Replacement 0557-016

Cored By:

Daniel S. Downey

Specimen Age:

No. of Cores:

Remarks:

Test Panels cast on cast on 30 June, 2012 by Knowles Industrial Services Corporation

Unit Weights: #71789 = 138.8 pcf, #71790 = 141.3 pcf, #71791 = 139.9 pcf, #71792 = 139.9 pcf

Coring Location:

JUL 19 2012

Lab No.	Test Date	Ave Dia (in)	Ave Area (in²)	Load (ibs)	Ratio h/d	Correction Factor	Corrected Load	Compressive Strength (psi)	Break Type
71789	27-Jun-12	2.734	5.87	29845	1.39	0.95	28353	4830	2
71790	18-Jul-12	2.703	5.74	38760	1.43	0.95	36822	6420	4
71791	18-Jul-12	2,734	5.87	42665	1.63	0.97	41385	7050	4
71792	18-Jul-12	2.736	5.88	38285	1.31	0.93	35605	6060	2

### Types of Breaks





2



3





Side Fracture 5



Double Side Fracture

#71789 is a 7 day break.

#71790, 71791, and 71792 are 28 day breaks.

Mathew T. Grady, Manager of MTS





82 Goldthwaite Road • RO. Box 1747 • Aubirn, Misine 04210 93 Scott Drive • Westbrook, Maine 04092 50 Arthur Ronc Road • West Bath, Maine 04530 Phone (207) 777-7100 • Fax: (207) 777-7171 Phone (207) 780-0523 • Fax: (207) 760-1521 Phone: (207) 366-5100 • Fax: (207) 386-5151

# KNOWLEG INDUSTRIAL

# MUNJOY HILL FIRE STATION PORTLAND, MAINE

# 1:31/2 GUNITE

Mix Design Submittal

5/7/2012

		Canife		
· · · · · · · · · · · · · · · · · · ·		Weight-SSD (lbs)	<u>Volume (Cu.Ft.)</u>	<u>Sources</u>
CEMENT RHEOMAC ST100	ASTM C150 T 1/II ASTM C1240	800 25	4.07 0.18	DRAGON PRODUCTS COMPANY BASE/MASTER BUILDERS
;  PINE AGG	ASTM CS8 (SSD)	2570	15.78	PORTLAND SAND & GRAVEL
TOTAL AIR CONTE	NT	3.0 +/- 1.5%	0.81	
W/C RATIO SLUMP (inches)		N/A N/A		
OPTIONAL: MICROMESH - AST	M CI116, Type III	1.0 #/cyd		O'DEA CONCRETE PRODUCTS

www.auburnconcrete.com



January 20, 2012

KNOWLES INDUSTRIAL SERVICES CO 295 NEW PORTLAND ROAD GORHAM ME, 04038

Project:

CONCORD CULVERT PROJECT

Concord NH

Atta: Travis Whitehead

RE: Centent Concrete Mix Designs

In accordance with your request, we respectfully submit the following mix designs for the above referenced project. These mixes have been proportioned in accordance with current ACI 211 and ACI 301 standards. All materials used in these mixes conform to current ASTM and AASHTO standards.

Submittal No.: 1834

Should higher slumps be required for placement or workability, the use of a high-range or mid-range water reducer is required.

These proposed mix designs will meet stated strengths when concrete is placed, tested and cured in accordance with current ASTM and ACI standards and evaluated per ACI recommended standards and practices.

Concrete mixes containing Pozzolans may show lower than normal strength at 7 and 28 days, however these concretes typically yield much higher 56 day results. Concrete containing Pozzolans are known to be more durable, resistant to sulfate attack and protect the concrete from Alkali-Silica Reaction (ASR).

Concrete containing 40% or more Fly Ash has significant advantages when seeking LEED credits, 4.1 and 4.2 for Recycled Content and 5.1 and 5.2 for Regionally Manufactured Products. Typically 40% Fly Ash makes up 5% of the finished concrete and is produced within 500 miles of the manufacturing facility.

Aggregate Industries requests copies of all approved mix designs prior to jobsite delivery. In order to comply with ACI 318 standards, we also ask to be included in the distribution of all concrete test reports.

We recommend that a jobsite pre-pour meeting be held prior to any deliveries. This meeting would answer any questions regarding responsibilities in ordering, scheduling, testing and jobsite operations.

Aggregate Industries produces and delivers concrete in accordance with ASTM C-94 Standard Specification for Ready-Mixed Concrete.

Please note: You must use Mix Code when ordering concrete.

Respectfully submitted,

Garrison Todd Product Designer AGGREGATE INDUSTRIES - NORTHEAST REGION, INC.

91 Chester Road Raymond, NH 03077

Telephone:

[603] 895-4886 x4308

Fax;

(603) 895-9321



### Cement Concrete Mix Design Submittal

Customer:

KNOWLES INDUSTRIAL SERVICES CO

Project:

CONCORD CULVERT PROJECT

Mix ID#:

130010CS

Mix Description:

3000, SHOTCRETE, ETN. ZUS

Intended Use:

Shotcrete

Submittal No.: 1834

PROPORTIONS	the second secon	1 cubic yard (SSD)	99000C \$1900990E 104099FF70000000444404 07 1070 FM6+4991 24164 4 FM4+44444
ASTM C-150	TYPE II CEMENT	800 LBS	
ASTM C-1240	DENSIFIED SILICA FUME	25 LBS	
ASTM C-33	FINE AGGREGATE	2625 LBS.	
ASTM C-1602	CITY WATER	0 LBS.	0.0 gal/cy
PHYSICAL PROPERTIES	<del></del>	reguera a pra ser a rea que la comunicación con político de la literación del debido de la literación de la co	
Slump:			
Air Content		w/c + p ratio:	0.00
COMPRESSIVE STRENGTH	fc =	AND	V W. 7 'MV (C) W/722 V (V ) / MN (H) W (W )

Aggregate Industries has no knowledge or authority regarding where this mix is to be placed. Therefore it is the responsibility of the project architeculengineer, and or contractor to insure that the above designed mix parameters of compressive strength, water cement ratio, cerners content, and air content are appropriate for the anticipated environmental conditions (i.e., ACI 318 and local Building Codes).

Chemical admixtures are added in accordance with the manufacturer's recommendations.

Designed mix comentitious content is stated as a minimum, and Aggregate Industries reserves the right to adjust the comentitious sources and content. All individual coarse aggregate weights when proportioned properly conform to ASTM C-33 standards. Aggregate industries reserves the right to adjust aggregate sources, weights and blonds to maintain design consistencies. We also reserve the right to adjust admixture dosage rates if necessary.

Aggregate Industries uses recycled water in accordance with current ASTM standards when producing concrete.

\* Baggard Silica Furne will be added to this mix design at a rate of 25 if (pounds) per cubic yard

AGGREGATE INDUSTRIES -NORTHEAST REGION, INC.

91 Chester Road Raymond, NH 03077

Tolophone:

(603) 895-4886 x4308

gary todd@aggregate-us.com:

(603) 231-7431

Please direct inquiries to:

Garrison Todd

cell phone #:

Product Designer

Fax:

(603) 895-9321

# GEOTECHNICAL SERVICES, INC.

\* Gentechnical Engineering \* Environmental Studies \* Material Testing \* Construction Manitoring

DATE SAMPLED: 2/29/12 8 3/6/12

3/27/2012

3/27/2012

City of Concord - Fisherville Rd CM PROJECT:

PROJECT No. 210190 SAMPLED BY: Others

SAMPLE No.: L-179 & 182-12 TESTED BY: A. Osborne DATE TESTED: PLOTTED BY: A. Osborne DATE PLOTTED: NA DEPTH:

LOCATION: Concord, NH SOURCE: Culvert Pipa

ASTM C 42 Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Boams of Concrete

Sample #	L-179-12	L-180-12	L-181-12	L-\$82- <b>1</b> 2
Specimen#	C-1	C-2	C-3	C-4
Diameter (inches)	2.295	2.295	2.295	2.295
Area (kr²)	4.135	4,136	4.435	4.135
Length Received (Inches)	3.680	3.630	3.862	3.740
Weight (lbs.)	1.233	1.209	1.292	1,245
Length Cui (hubes)	3.580	3,630	3.862	3.740
Unit Weight (lbs/ft³)	140.0	139.2	139.8	139:1
Length Capped (inches)	3.873	3.740	4.109	3,891
L/D Ratio	1,688	1.630	1.791	1.698
Total (bs.)	29.295	30,016	29,109	33,611
Strength (psi)	7,080	7,260	7,040	8,130
L/D Correction	6.975	0.970	N/A	0.978
Corrected Strength (1%)	6,940	7,046	7.040	7,930
Location of Rebar (loches)	N/A	NA	N/A	N/A
Core Location	Culvert	Ouivert	Cuivert	Colvert
Core Date	2729	2/29	3/6	3/6

Remarks:

# GEOTECHNICAL SERVICES, INC.

\* Geotechnical Engineering \* Environmental Studies \* Material Testing \* Construction Monitoring

PROJECT: City of Concord - Fisherville Rd CM

ENCORPORA DE CONTROL DE LA PORTE DE CONTROL DE CONTROL

PROJECT No. 210190 SAMPLED BY: Others SAMPLE No.: L-216 & 219-12 TESTED BY: A. Osborn

TESTED BY: A Osborne DATE TESTED: 4/30/2019
PLOTTED BY: A Osborne DATE PLOTTED: 5/1/2012

DATE SAMPLED: 3/28/12 & 3/30/12

LOCATION: Concord, NH SOURCE: Cuivert Pipe

N/A

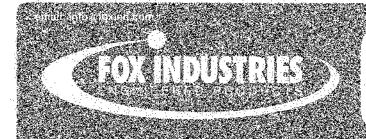
DEPTH:

ASTM C 42
Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete

Sample#	L-216-12	L-217-12	1,-218-12	L-219-12
Specimen#	C-1	C-2	C-3	C-4
Diameter (Inches)	2.298	2.296	2.298	2.298
Area (ic²)	4,148	4.148	4,148	4.148
Length Received (Inches)	3.974	3.933	3.945	3.895
Weight (lbs.)	1.303	1.299	1.3%2	1.299
Length Cul (Inches)	3.974	3.933	3,945	3.895
Unit Weight (lbs/ft <sup>2</sup> )	136.6	137.6	\$38.6°	139.0
Length Capped (biches)	4.076	4,098	4.122	4,056
L/D Ratio	1.774	1.783	1.794	1.765
Total (lbs.)	24,541	26,311	27,729	24,001
Strength (psi)	5,920	6,340	6,660	5,790
L/D Correction	N//A	N/A	N/A	N/A
Corrected Strength (psi)	5,920	6,340	6,680	5,790
Location of Rebar (luckes)	N/A	WA	NIA	N/A
Core Location	Culvert	Culvert	Culvert	Culveri
Core Date	3/28	3/28	3/30	3/30

Remarks:

V 55 North Stark Hoy, Wenre, NH 03281 Phone: 603/529/1766 Fax: 603/529/7080



# FX-350

Shotcrete Accelerator (Gunite)

### DESCRIPTION:

**FX-350** Shotcrete Accelerator (Gunite) is a chloride-free accelerator for use in (pneumatically-applied cement mortar or concrete) shotcrete. **FX-350** Shotcrete Accelerator (Gunite) is supplied in powder or liquid form. The powder is used with dry-line equipment. The liquid is used with wet or dry process, or where the fine and coarse aggregate is wet.

### ADVANTAGES:

Provides Rapid Strength Gain – FX-350 Shotcrete Accelerator (Gunite) achieves structural strength more rapidly under any conditions.

Resists Blasting — Initial set is achieved in 3 to 5 minutes; structural strength is achieved in a matter of hours with FX-350 Shotcrete Accelerator (Gunite), which permits sealing and lining to follow closely behind tunnel headings.

Leak Control — Accelerating the set with FX-350 Shotcrete Accelerator (Gunite) will seal damp and leaking rock or concrete. A flash set can be obtained by using greater amounts of FX-350 Shotcrete Accelerator (Gunite) in powder form. FX-350 liquid can be used directly from the drum to achieve a flash set if desirable.

### MIXING:

FX-350 Shotcrete Accelerator Liquid is used at the rate of 1 quart to one gallon per sack of cement. FX-350 Shotcrete Accelerator Powder is used at one to three pounds per sack of cement, depending on requirements. The proper proportion should be determined on site with the materials, mix and temperatures, to produce the best economy based on requirements. Type I and Type III cement produce faster sets than Type II.

### APPLICATION:

FX-350 Shotcrete Accelerator Liquid – is added to the mix water, or at the mixing nozzle, FX-350 liquid is used with either wet or dry process.

**FX-350 Shotcrete Accelerator Powder** – the powder form should be used only in dry line operations. Add the necessary amount to the mix prior to loading the mix into the hopper or to the equipment used for shotcreteing (gunite).

**FX-350 Shotcrete Accelerator Powder** may be premixed with gunite if all other materials are moisture free.

### PACKAGING:

Liquid – 55 gallon drums or bulk Powder – 50 lb. polyethylene lined paper bags and 30 lb. pails

### SHELF LIFE:

Liquid – Unlimited – Protect from freezing Powder – 1 year – keep dry

### LIMITATIONS:

FX-350 Shotcrete Accelerator Liquid must not be premixed with cement. Do not premix FX-350 Shotcrete Accelerator Powder with damp sand or stone. Do not use FX-350 Shotcrete Accelerator in concrete or grout without consulting your Fox Industries' representative.

### **CAUTION:**

Prolonged contact with **FX-350 Shotcrete Accelerator** and/or Portland cement may irritate skin. Wear rubber gloves, goggles, and long-sleeved shirts. If skin or eye irritation persists, see a physician

WARNING! Dust harmful if inhaled. Contact causes irritation of eyes and skin. Use with adequate ventilation. Avoid breathing dust. Avoid contact with eyes and skin. If overcome by inhalation, remove to fresh air. If not breathing, apply artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician. In case of contact, flush eyes with plenty of water for at least 15 minutes and get prompt medical attention; wash skin thoroughly with soap and water.

FOR INDUSTRIAL USE ONLY. KEEP AWAY FROM CHILDREN. 12/2004

### Construction Chemicals

# **THOROSEAL®**

Waterproof secret based conting for concern and massary

PRODUCT DATA

7 07160

Cementitious Waterproofing

### Description

Thoroseal® is a Portland-cementbased coating for concrete and masonry that resists both positive and negative hydrostatic pressure. Polymer-modified with Acryl 60®, Thoroseal® creates a lowmaintenance and highly durable waterproof barrier.

### Yield

225 ft $^2$ /50 lb (20.9 m $^2$ /22.7 kg) bag as a base coat at 1/16" (1.6 mm) dry-film thickness.

450 ft\*/50 lb (41.8 m\*/22.7 kg) bag as a topcoat at 1/32" (0.8 mm) dry-film thickness.

Coverage will vary depending on surface texture and porosity.

### **Packaging**

THOROSEAL®

10 lb (4.5 kg) cans for Thoroseal\* white and standard gray only

30 lb (13.6 kg) polyethylene-lined bags for Thoroseal\* white and standard gray only

50 lb (22.7 kg) polyethylene-lined bags for Thoroseal® white, standard gray, all landscape standard colors and custom colors

60 lb (27.2 kg) pails for Thoroseals white, standard gray, Navajo white, pearl gray, Thoros gray, and custom colors



### Features

- Waterproof.
- Resistant to both positive and negative hydrostatic pressure
- NSF approved (white or gray, only)
- · Breathable
- Compatible with high-performance coatings
- · Aesthetically beneficial
- Aesthetically superior

### Benefits

Protects building intellors from dampness and moisture damage

Suitable for use below grade interior and exterior and in water-treatment construction

Use in potable water tanks

Allows interior moisture to escape without damaging coating

Accepts a wide range of architectural coatings and textured finishes.

Hides minor surface defects and blemishes in architectural concrete

Available in 10 standard colors and incustom colors

### ACRYL 60°

1 quart (0.9 L) bottles

1 gallon (3.8 t) bottles

5 galion (18.9 L) pails

30 gallon (113 L) drums

55 gallon (208 L) drums

### Color

White and standard gray (this color is not uniform) 10 Landscape standard colors: bone, dijon, French vanilla, good earth, light khaki, Thoro® gray, Navajo white, parchment, pearl gray, and putty ten Custom colors are available for 5,000 lbs (2268 kg) minimum order.

### Shelf Life

1 year when properly stored

### Storage

Transport and store in unopened containers and keep in a clean, dry condition pretected from rain, dew, and humidity. Do not stack bags more than 2 pallets high. If dry onsite storage of bags is unavailable or if project is located in a very wet, humid climate zone, then specify Thoroseal® packaged in 60 lb {27.2 kg} metal pails. Store Acryl 60® in similar conditions. Do not allow Acryl 60® to freeze.

### Where to Use

### APPLICATION

- Alternative to mechanical finishing or rubbing of concrete
- · Waterproofing basement and retaining walls
- Foundations
- Bridges and tunnels
- Water cisterns

### LOCATION

- Vertical and light-pedestrian horizontal surfaces
- · Interior and exterior
- Above and below grade

### SUBSTRATE

- · Cast-in-place and precast concrete
- Block, brick, and porous stone

### Technical Data

### Composition

Thoroseal® contains cement, graded sand, and proprietary additives.

### **Test Data**

<b>Initial Set,</b> min, at 70° F (21° C), 50% rh	10	Lab Method
Final Set, at 70° F (21° C), 50% rh	90	Lab Method
Density, (cured), lbs/ft³ (kg/m³)	129 (2,080)	Lab Method
Positive resistance to hydrostatic pressure, hrs, at 200 psi (1.4 MPa), 461 head ft, air cured at 70° F (21° C), 50% rh	752 No leakage, no softening	CRD C 48, modified
Negative resistance to hydrostatic pressure, hrs, at 200 psi (1.4 MPa), 461 head ft, air cured at 70° F (21° C), 50% rh	664 Limited dampness	CRD C 48, medified
Potable water (direct contact)	Suitable; approved	BS6920 (British standard) NSF Standard 61
Water absorption, %, obiling water submersion at 24 hours	3.6	ASTM C 67 (Section 7.3)
Compressive strength, psi (MPa) 7 days 28 days	4,290 (29) 6,030 (42)	ASTM C 109
Flexural strength, psi (MPa) 7 days 28 days	360 (2.5) 1,027 (7)	ASTM C 348
<b>Tensife strength,</b> psi (MPa) 7 days 28 days	250 (2) 440 (3)	ASTM C 190
<b>Modulus of elasticity,</b> psi (MPa) 28 days	2.72 x 10 <sup>a</sup> {1.87 x 10 <sup>4</sup> }	ASTM C 489
<b>Artificial weathering,</b> hrs Xenon Arc Carbon Arc	5,000 = No faiture 500 = No faiture	ASTM G 26 ASTM G 23
Adhesion strength, psi (MPa)	418 (2.9)	Test by tensile bond
Artificial weathering,	No cracking, loss of adhesion, checking, or other defect	Atlas Type DMC weatherometer
Freeze/thaw resistance, 200 cycles	No change	ASTM C 666 (Procedure 8)
Salt spray resistance, 300 hours	No defect	ASTM B 117
Carbon Dioxide (CO <sub>2</sub> ), n (mm)	1/16 (1.6) Equivalent to 3/4" (19 mm) new concrete	Lab Method Diffusion
Permeance, perms (metric permeability)	12 (0.10698) 18 x 10³ resistance	ASTM E 96 (water-vapor transmission) Swedish standard SS-02-15-82

### Test Data, continued

Wind-driven rain, hrs	8 = excellent	Fed. Spec. 11'-P-0035 (Para 4.4.7)
Coefficient of thermal expansion, in/in/° F (mm/mm/° C), at 28 days	6.99 x 10° (5 x 10°)	ASTM C 531
Impact strength (Gardener impact tester)	No chipping	Fed. Spec. TT-P-0035 (Cement paints para, 3.4.8)
Hardness, (Barber Colemen Impressor) Requirement min = 30, max = 60 7 days	35	Fed. Spec. TT-P-0035 {para 4.4.9}
14 days 21 days	47 52	
Abrasion resistance, 3,000 L sand	Passed	Fed. Spec. TT-P-1418
Reflectance Gray Thorosea!** White Thorosea!**	64.2 88.1	ASTM D 2244 using Hunterlab D-25 meter
Fungus resistance, at 21 days	No growth; meets all requirements	Fed. Spec. TT-P-29B
Surface burning characteristics Flame Spread Smoke developed	0 5	AS1M E 84
Fire Propagation Flame spread	Index = 1.5 Class 1	8S476: Part 6:1981 BS476: Part 7:3971

Test results are averages obtained under laboratory conditions. Heasonable variations can be expected.

### How to Apply Surface Preparation

- 1. Surface preparation is extremely important for proper adhesion. Substrates must be sound and free of dust, dirt, laitance, paints, oils, grease, curing compounds, or any other contaminants. Verify substrate has properly cured. Concrete should obtain 80% of design strength, typically achieved within 3 14 days. If efflorescence is present, mechanically remove it before proceeding. For extreme cases where this is not adequate, contact Technical Service.
- 2. Patch all holes and cracks before installation.
- 3. Relieve hydrostatic pressure in concrete block with weep holes.
- 4. Roughen or brush blast extremely smooth surfaces such as precast and cast-in-place concrete to ensure good mechanical adhesion of Thoroseate.

### Mixing

- 1. Mix Thoroseal® with a mixing liquid consisting of a blend of Acryl 60® diluted with water. Maximum dilution ratio is 1 part Acryl 60® to 3 parts water. Approximately 6 quarts of mixing liquid is needed per 50 lbs of Thoroseal® powder. Up to 2 additional quarts of mixing liquid may be added when using as a rubbing compound.
- For best results, mechanically mix Thoroseal<sup>®</sup> with a slow-speed drill and mixing paddle. Gradually add the powder to the mixing liquid white drill is running.
- When properly blended, Thoroseal® will have the lump-free consistency of smooth, heavy batter.
- 4. Allow the Thoroseal® and Acryl 60® mixture to rest undisturbed for a minimum of 10 minutes to fully wet out all the powder. Then remix the wet mixture and apply. A small amount of mixing liquid can be added to this remixing.

5. Pot life is 60 – 90 minutes at 70° F (21° C). At high temperatures and low relative humidity, pot life can be significantly less.

### Application

- Apply Thoroseal\* with a Thoro\* brush or broom or equivalent stiff fiber brush or by textured spray equipment. Spray applications of the first coat require back brushing or brooming to properly fill voids and achieve uniformity.
- Completely dampen the substrate with water before application starts. Do not saturate the substrate, but keep it cool and damp throughout the application.
- 3. It is essential to work first coat thoroughly into the substrate to completely fill and cover all voids, holes, and nonmoving cracks. Finish with a horizontal stroke for an even coat.

- 4. Allow to cure 24 hours, then apply the second coat and finish with a vertical stroke. Above grade, the second coat can be replaced with a Thoro® high-build architectural coating to achieve better color uniformity.
- On block or masonry walls, allow 5 7 days before applying second coat to eliminate joint read through.

### Specific Applications

Above-grade interior or exterior applications in positive pressure situations (direct contact with rain or standing water with a low head of pressure)

 A 50 lb (22.7 kg) bag of Thoroseal® will provide the following coverage at the designated material usage.

Recommended coverage:

- First Coat: 2 lbs/yd² (1.1 kg/m²) =
   225 ft²/50 lb bag (20.9 m²/22.7 kg bag)
- Second Coat: 1 lb/yd² (0.54 kg/m²) = 450 ft²/50 lb bag (41.8 m²/22.7 kg bag)
- Total: 3 lbs/yd² (1.6 kg/m²), cured nominal thickness of 1/16" (1.6 mm).

Coverage will vary depending on surface texture and porosity.

2. A 3 lbs/yd² (1.6 kg/m²) application rate does not eliminate surface irregularities such as struck mortar joints. To hide surface irregularities, spray and back-brush a base coat of Thoroseal² at 2 lbs/yd² (1.1 kg/m²) and allow it to cure for 5 − 7 days. Then spray apply and back trowel a topcoat of Thoroseal² Plaster Mix (see Form No. 1019908) at an application rate of 9 lbs/yd² (4.9 kg/m²).

### BELOW-GRADE INTERIOR APPLICATIONS

- 1. The standard application is 3 lbs/yd² (1.6 kg/m²).
- 2. For high hydrostatic pressure conditions (over 15 psi [0.10 MPa]), increase application rate to 4 lbs/yd² (2.2 kg/m²) and waterproof from the positive side wherever possible.

### BELOW-GRADE EXTERIOR APPLICATIONS

- 1. Use Thoroseal® Foundation Coating (see Form No. 1019907) For high hydrostatic pressure conditions (over 15 psi [0.10 MPa]), apply a base coat of Thoroseal® Foundation Coating at 2 lbs/yd² (1.1 kg/m²) and allow to cure for 5 7 days.
- 2. Then apply a topcoat of Thoroseal® Plaster Mix at 12 lbs/yd² (6.5 kg/m²). A steel trowel finish is recommended.

- 3. For both below-grade interior and below-grade exterior applications where water might move between vertical walls and slab or footer, it is recommended to cut out and place a Waterplug® cove at the wall and floor junction prior to the application of the Thoroseal® base coat.
- 4. Thoroseal® can be covered with extruded polystyrene insulation board during the second coat application. The board must be fully coated with Thoroseal® and embedded into the still-wet coating already in place on the walls. Exercise care when placing the coated board because it should not be moved or slipped. Once placed, do not move the board. After curing, prepare the above-grade portions of the boards by roughening or removing the surface skin and then coating with Thoroseal® to protect them from UV light degradation.

# WATERPROOFING POTABLE WATER TANKS OR RESERVOIRS

- Install Thoroseal<sup>®</sup> as directed in the general Application instructions.
- After Thoroseat<sup>®</sup> has fully cured, wash down the Thoroseat<sup>®</sup> surface with saline solution (salt brine, 1 lb salt per 1 gallon water).
- Leave saline solution on the entire Thoroseal<sup>®</sup> surface for at least 24 hours.
- Rinse off saline solution completely. If needed, reapply saline solution until final rinse water is completely clean and clear.

### **Color Uniformity**

With any cementitious product, such as Thoroseal®, it may be difficult to achieve color uniformity due to weather and substrate variability. For this reason, it may be necessary to apply a topcoat of a Thorose architectural coating.

### Clean Up

Promptly clean hands and all tools with warm water while product is still wet. Cured material may only be removed mechanically.

### For Best Performance

- Thoroseat\* must be modified with Acryl 60\* to achieve the properties listed in the technical data section.
- Do not apply to substrates with active water leaks or moving cracks; patch all leaking static cracks and holes with Waterplug®. Repair any other nonmoving cracks or voids with the appropriate Thoro® repair product and repair all moving cracks or voids with appropriate sealant.
- Maintain or place expansion and control joints as necessary.

- Do not apply in rain or when rain is expected within 24 hours. Do not apply above 90° F (32° C) or below 40° F (4° C) or when temperatures are expected to fall below 40° F (4° C) within 24 hours. For hot and cold temperature applications, store Thoroseal®, Acryl 60° and water at 50° F (10° C) to 70° F (21° C) before use.
- Hot substrates will effect working time and material strength.
- Variations between inside and outside temperatures may result in condensation on below-grade walls treated with Thoroseat<sup>®</sup>.
   This can be alleviated by assuring that adequate ventilation exists.
- Windy, dry, or hot conditions may require rewetting of Thoroseal® during cure and the use of polyethylene barriers.
- Before specifying Thoroseal® for water-retaining structures, conduct tests to determine water quality. Thoroseal® is not intended for continuous contact with acid or sulfatecontaining water. Very soft water will have an adverse effect on Thoroseal®.
- Service temperatures: immersion, up to 140° F (60° C); cleaning water, up to 200° F (93° C); dry air, up to 220° F (104° C).
- On all projects, it is recommended that a sample be prepared on site and approved prior to the commencement of the work. The site sample should confirm the color, texture and workmanship required until the job is finished and accepted. Retain the sample until final approval is secured.
- Allow Thoreseal® to cure 7 10 days before immersion in water.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Preper application is the responsibility of the user. Field visits by Degussa personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

### **Health and Safety**

THOROSEAL®

### Caution

Thoroseal® contains calcium hydroxide, crystalline silica, iron (III) oxide monohydrate, and Portland cement.

### Risks

Product is alkaline on centact with water and may cause injury to skin or eyes, Ingestion or inhalation of dust may cause irritation. Contains small amount of free respirable quartz which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

### Precautions

KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Prevent inhalation of dust. Wash thoroughly after hendling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/ MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

### First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

### **Proposition 65**

This product contains material listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

### **VOC Content**

0 lbs/gal or 0 g/L, less water and exempt solvents.

For medical emergencies only, call ChemTrec (1-800-424-9300).

### Degussa Building Systems

889 Valley Park Drive Shakopee, MN, 55379

www.degussabuildingsystems.com

Customer Service 800-433-9517 Technical Service 800-243-6739 LIMPED WARRANT WORK: Every reasonable effort is made to apply diaguass exenting standards both in the menufactors of our products are best in the information which we issue containing these products are the relative to the original products, and an apply diaguass exenting standards both in the menufactors of our products on be of prince quality and will replace only a new effection. First the products are product of products about an analysis and will replace only a personal products. But it is a point many factors are producted from Therefore, except for each replacement or reflection. Deep assist MARKEN OWARRANT OR GUARRANT OR THE PRODUCT (INCLUDING WARRANT OR PRODUCTS). A PRODUCT AS PRODUCTS or Objects shed shee as other licensity with cased tilenses, and it is usually a product defect must be accessed in writing within one by year from the base of shipmen, Notifice within the product of the distriction of the first products of the results for the results for the results of the results of the results of the products and flatbody in connection therewise. Any authorized change in the printed recommendations contenting the use of dory adducts must be signature of its Degree and Manager.

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# $Special\ Inspections-Exhibit\ B$

05120 Structural Steel

Project: P.F.D. Munjoy Hill Fire Station Mono-pole Installation

Date Prepared: March 19, 2012

Structural Schedule of Special Inspections - STEEL CONSTRUCTION

/ERIFICATION AND INSPECTION IBC Section 1704.3	REQD Y/N	CONTINUOUS, PERIODIC, SUBMITTAL, OR	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
Material verification of high-strength bolts, nuts		NONE				
and washers:						
Identification markings to conform to ASTM standards specified in the approved construction documents.	TA 1	٠٢	Applicable ASTM material standards, AISC 360, A3.3	TAL	AWS/AISC-SSI	710
b. Manufacturer's certificate of compliance required.	SI 1	S		SH	PE/SE of EIT	7119
2. Inspection of high-strength bolting	21/3					
a. Snug-tight joints.	TAI	P		TAI	AWS/AISC-SSI	Alko
<ul> <li>b. Pretensioned and slip-critical joints using turn-of-nut with matchmaking, twist-off bolt or direct tension indicator methods of installation.</li> </ul>	TA 1	P	AISC LRFD Section M2.5	TAI	AWS/ATSC-SSI	The
<ul> <li>c. Pretensioned and stip-critical joints using turn-of-mit without matchmaking or calibrated wrench methods of instaliation.</li> </ul>	TA 1	С	1BC Sect 1704.3.3	TAI	AWS/AISC-SSI	- \$ \CE's
3. Material verification of structural succl and cold-formed steel deck:						
<ul> <li>For structural steel, identification markings to conform to AISC 360.</li> </ul>	SI I	ľ	AISC 360, M5.5	SII	PE/SE or EIT	714
<ul> <li>b. For other steel, identification markings to conform to ASTM standards specified in the approved construction documents.</li> </ul>	ST 1	P	Applicable ASTM material standards	SII	PE/SE or EIT	1. Tag 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
c. Manufacturer's certified test reports.	Sf 1	S		SH	PE/SE or EFF	see The
4. Material verification of weld filter materials:						
a. Identification markings to conform to AWS specification in the approved construction documents.	TAI	Р	AISC 360, M5.5	TA1	AWS/AISC-SSI	Tha
Manufacturer's certificate of compliance required.	S1 1	S		SH	PE/SE or EIT	7110
<ol> <li>Submit current AWS D1.1 welder certificate for all field welders who will be welding on this project.</li> </ol>	SH	S	AWS D1.1	Sli	PE/SE or EIT	e424
6. Inspection of welding (IBC 1704,3,1):						
a. Structural steel and cold-formed deck:  1) Complete and partial joint penetration groove welds.	TA 1	С		ZZZZEZ TAI	AWS-CWI	-,,
2) Multipass fillet welds.	TAI	C C	1	TA1	AWS-CWI	71/40
3) Single-pass fillet welds> 5/16"		C	AWS D1.1	TAI	]	71103
4) Plug and slot welds	TA 1	-	AWADI	TAI	AWS-CWI	71100
5) Single-pass fillet welds≤ 5/16"	TA 1	<u> </u>	1	TAI	AWS-CWI	This
6) Ploor and deck welds.	TA 1	P	1	TAI	AWS-CWI	7/100
	TAI	P	AWS D1.3	WATER TOOL	AWS-CWI	7/100
b. Reinforcing steel:						**************************************
Verification of weldability of reinforcing steel other than ASTM A706.	N		Not applicable.	-		
<ol> <li>Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement.</li> </ol>	N	С	AWS DL4	TAI	AWS-CWI	
3) Shear reinforcement.	N	С	ACI 318: 3.5.2	TAI	AWS-CWI	
4) Other reinforcing steel.	N	p	•	TAl	AWS-CWI	
7 Inspection of steel frame joint details for compliance (JBC Sect §704.3.2) with approved construction documents:						
a. Details such as bracing and stiffening.	SI I	Р	9 grade 1 2001 1 200 27 19 19 27 24 27 27 27 27 27 27 27 27 27 27 27 27 27	SII	PE/SE or EIT	7444
b. Member locations.	S.I.I	þ	IBC 1704.3.2	SII	PE/SE or EIT	4.15
e. Application of joint details at each connection.	S1 1	P		SH	PE/SE or EIT	714

Project: P.F.D. Munjoy Hill Fire Station Mono-pole Installation Date Prepared: March 19, 2012

# Structural Schedule of Special Inspection Services FABRICATION AND IMPLEMENTATION PROCEDURES - STRUCTURAL STEEL

VERIFICATION AND INSPECTION IBC Section 1704.2	REQO Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
Fabrications Procedures: Review of fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. At the completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents.  OR-  AISC Certification	SI 1	S	Fabricator shall submit one of the two qualifications	1	PE/SE or EIT	(1012) \$110
3. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents.	S1 1	s	IBC 1704.2.2	SH	PE/SE or EIT	71/4)



Structural Steel located on the existing Roof

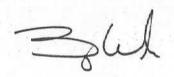
OBSERVATION	REPORT
Structural Steel	

Date:	07/05/12
Time:	3:30
Temp:	90
Weather:	Partly Cloudy

	Satisfactory	In-Satisfactory	Not Completed	Not Applicable	
		_			Comments
Bolt Condition					
Weld Condition			$\boxtimes$		
Anchor Bolts, Nuts, & Washers			$\boxtimes$		
Grout/Leveling Plates	$\boxtimes$				
Fit Up/Plumbness					
Metal Deck Welds				$\overline{\boxtimes}$	
Pour Stops				$\boxtimes$	
Bracing		n	$\boxtimes$		
Additional Items	Ħ	П	П		
Additional Items	$\Box$	Ħ		Ø	

### Notes

The structural steel was erected earlier in the day and all of the bolts are snug tight. The bolt pretensioning and field welding will be done when R.W. Gillespie is on site. The contractor was grouting the base plate during the site visit.





OBSERVATION REPORT	
Structural Steel	

Steel frame located on existing roof.

Date:	07/11/12
Time:	8:30
Temp:	75
Weather:	Partly cloudy

Project:	P.F.D. Munjoy Hill Fire Station
Location:	Portland, ME
Becker Job No:	2612
	AN WORLD COME
Observation Loca	ation:

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Bolt Condition Weld Condition Anchor Bolts, Nuts, & Washers					Provided by TA 1 report See Note 1 & 3 below, Provided by TA 1 report
Grout/Leveling Plates Fit Up/Plumbness Metal Deck Welds Pour Stops Bracing Additional Items Additional Items					See Note 2 below

### Notes:

- 1. R.W. Gillespie contacted Becker to note that the welds connecting the washers to the post base plates did not conform to plans and specifications. While on site the condition and size of the welds were reviewed. After reviewing the design loads it was determined that the welds were acceptable as is.
- 2. New metal roof deck was not required therefore metal deck welds were not required.



3. The welder tack welded the two plates on top of the post together while welding to provide a ground. It was noted to the contractor and they will grind the weld out. It was later confirmed that this was removed on a site observation performed on 7/13/12.

Signed: Bryson T. Welch, P.E.

### R. W. GILLESPIE & ASSOCIATES, INC.

Geotechnical Engineering • Geohydrology • Materials Testing Services

Corporate Office 86 Industrial Park Rd, Ste 4 Portsmouth, NH 03801 207-286-8008 • Fax 207-286-2882

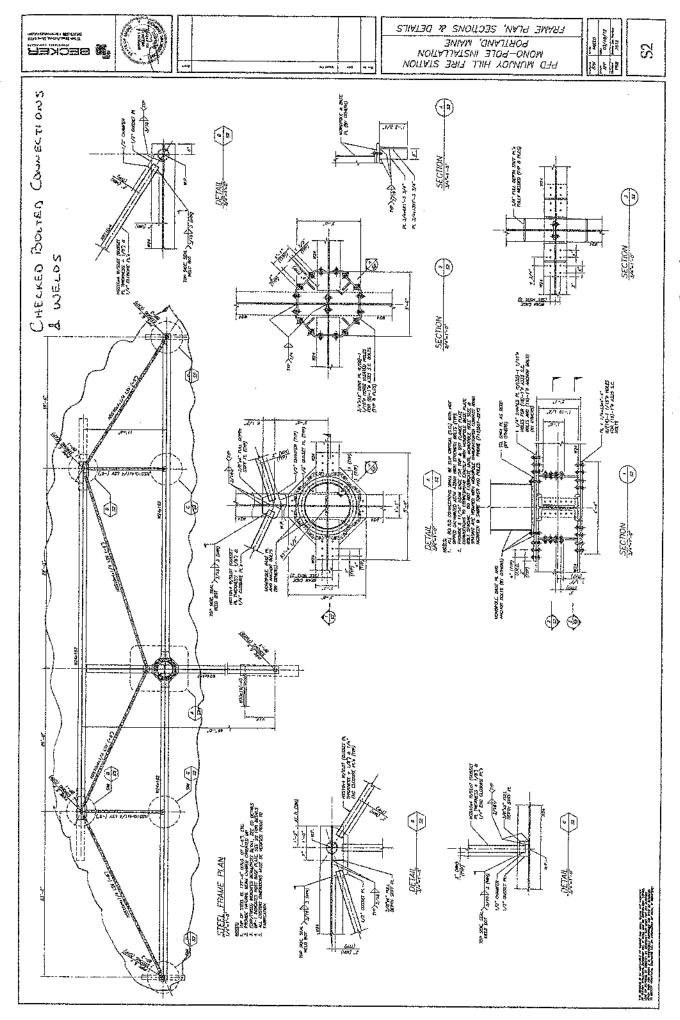


Branch Office 200 International Dr, Ste 170 Portsmouth, NH 03801 603-427-0244 • Fax 603-430-2041

STEEL OBSERVATION REPORT	
Project Name: MUNJOY HILL FIRE STATION- MONOPOLE REPLA	ACENENT Date: July 9, 2017
Client/Project #: City OF PORTLAND # 0557-016	Time on Site: 8 1/2
General Contractor: SCOTT CONSTRUCTION	Mileage: 35
Welding Contractor: James F DOTEN	Tolls: 1 · 2 O
PLANS FOR MODIFICATION TO MUNERY HILL FIR Approved Documents: CONTRACT AND SPECIFICATIONS FOR MUNEOUS Location/Observations: ROOF FRANING @ EL. 177 6"	
TYPE OF WORK OBSERVED	
Bolted Connections: Scott CONSTRUCTION HAD INSTALLED OF ASSEMBLY. THEY SAUG-TIGHTENED EACH CONNECTION THEN UKED TURN-OF-NUT PRETENIONING (ASTM A 32 WAS TIGHTENED & TURN AFTER SAUG-TIGHTENED.	N (ASTM A 325 SECTION 8.1) AND 5 SECTION 8.2). EACH NUT
Shear Connections:	
	□ Visually checked and found acceptable
Welded Connections: ALL CONNECTIONS EXCEPT CONNECTION WERE CHECKED AND FOUND TO BE WITHIN PI	
LOCATIONS: BI, CII, CI4, B/5 & A/3	▼ Visually checked and found acceptable
Decking (Mezzanine/Roof):	
	☐ Visually checked and found acceptable
Joist Welds/Joist Bridging:	
	☐ Visually checked and found acceptable

Puddle Welds:	
	☐ Visually checked and found acceptable
Screw Attachments:	
	☐ Visually checked and found complet
Other:	
	□ Visually checked and found acceptable
Richten war was a state of the control of the contr	□Visually checked and found complete
RWG&A personnel are represented on site solely to observe work of the identified contractors, to form opinions about	Observations were verbally reported to:
the adequacy of those operations, and to report those opinions to RWG&A's client. The presence and activities of our field	MARK LIBBY - SCOTT CONSTRUCTION
representative do not relieve any contractor from their	Construction Technologist/CWI:
obligations to meet contractual requirements. The contractor retains sole responsibility of site safety and the methods,	Mary Stone
operations, and sequences of construction.	Print Name/Title
	Certification #: 12050651 MARCO STONE, CET

MG



Munsoy HILL FIRE STATION -MONOPOLE REPLACEMENT CITY OF PORTLAND OSST-016

### R. W. GILLESPIE & ASSOCIATES, INC.

Geotechnical Engineering • Geohydrology • Materials Testing Services

Corporate Office 86 Industrial Park Rd, Ste 4 Portsmouth, NH 03801 207-286-8008 • Fax 207-286-2882

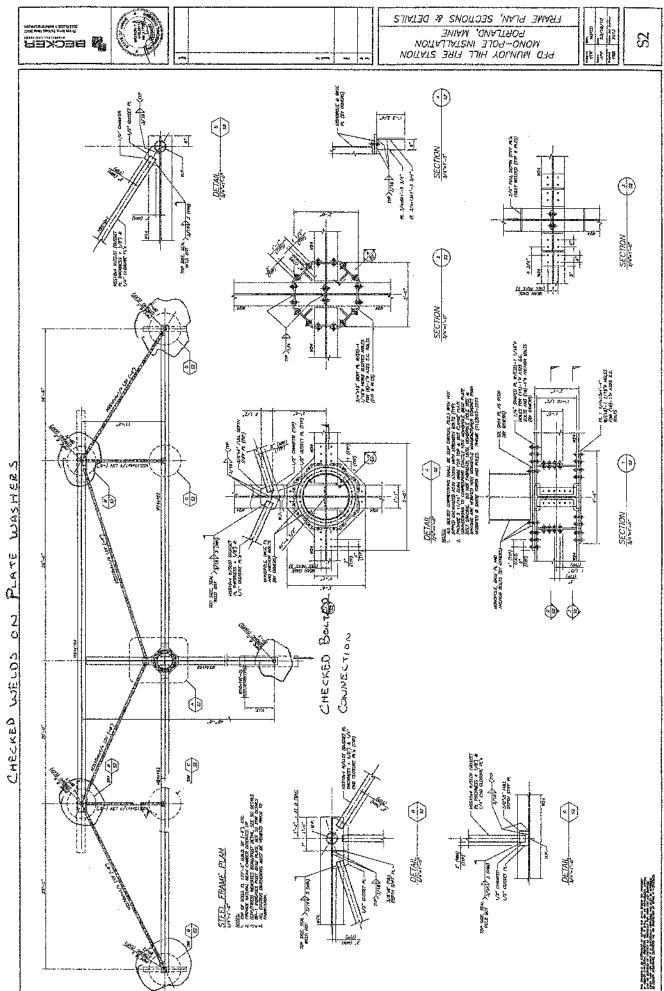


Branch Office 200 International Dr, Ste 170 Portsmouth, NH 03801 603-427-0244 • Fax 603-430-2041

Date: Tuly 10, 2012
Time on Site: 2
Mileage: 20
Tolis: 0.60
STATION (5-11-2012) HILL FIRE STATION (03-19-2012)
CASTM A325, 8.2). EACH  NED.  AVisually checked and found complete
□ Visually checked and found acceptable
TIONS AT THE ROOF WHICH
WELDS WERE UNDER THE
SOME OF THESE WELDS.  USually checked and found acceptable
☐ Visually checked and found acceptable
☐ Visually checked and found acceptable

Puddle Welds:	
	□ Visually checked and found acceptable
Screw Attachments:	
	□ Visually checked and found complete
RECALCULATED THE LOADS AT THE DID NOT CONFORM TO PLANS & SPECIF CALCULATION THAT HE DETERMINED	ME AND INFORMED ME THATHE HAD  CONNECTIONS WITH PLATE WASHERS TH  ICATIONS BRYSON SHID THAT AFTER COMPL  THAT THESE DVisually checked and found acceptable  No HAD VISITED DVIsually checked and found complete  PLOS 141MSELF  Muns Am PT-11-2012
RWG&A personnel are represented on site solely to observe work of the identified contractors, to form opinions about the adequacy of those operations, and to report those opinions to RWG&A's client. The presence and activities of our field representative do not relieve any contractor from their obligations to meet contractual requirements. The contractor retains sole responsibility of site safety and the methods, operations, and sequences of construction.	Observations were verbally reported to:  BRYSON WELCH - BECKER STRUCTURAL  MARK LIBBY - SCOTT CONSTRUCTION  Construction Technologist/CWI:  Print Name/Title  Certification #: 12050651 Marco Stone CET

MIG



Monsoy Hill Fire Station - Monopole Replaceme City of Portland OSST-016

# American Institute of Steel Construction

is proud to recognize

# Regarder & Done, Tr.

South Portland, ME

for successfully meeting the quality certification requirements for

Standard for Building Structures

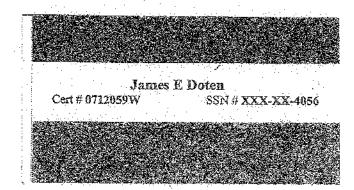
Major Steel Bridges

Sophisticated Paint Endorsement - Covered

fager Sale

Roger E. Ferch





# ${\bf Special\ Inspections-Exhibit\ C}$

Fabricator's Statement of Responsibility

# Fabricator's Certificate of Compliance

Each approved fabricator that is exempt from Special Inspection of shop fabrication and implementation procedures per section 1704.2 of the International Building Code must submit a Fabricator's Certificate of Compliance at the completion of fabrication.

Project: P.F.D. MUNJOY HILL FIRE STATION MONO-POLE INSTRUMENTION

Fabricator's Name: MEGAPULETE & JONES

Address: 1156 BROADWAY SO. PORTLAND, ME

Certification or Approval Agency: A154

Certification Number: --

Date of Last Audit or Approval: 2012 - EXPIRES 8 31 2013

Description of structural members and assemblies that have been fabricated:

STRUCTURAL SIGEL POSTS, BEAMS, BRACING

I hereby certify that items described above were fabricated in strict accordance with the approved construction documents.

Signature

JOHN W. Mr. Grosson

CHIEF ENGINEER

Title

Attach copies of fabricator's certification or building code evaluation service report and fabricator's quality control manual

**End of Special Inspections Report**