Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BU[illegible]TION

PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: 090979

PERMIT ISSUED

DEC 22 2009

City of Portland

This is to certify that JLTS VIII LLC /TBD

has permission to Interior renovation, interior loa[illegible] dock a[illegible]ion, &[illegible]000 sq [illegible]cond floor addition for office space

AT 106 PINE TREE IND PKWY CR[illegible] 254 A003001

provided that the person or persons, fi[illegible] or co[illegible]tion ac[illegible]pting this permit shall comply with all of the provisions of the Statutes of Ma[illegible]e and of the C[illegible]nces of the City of Portland regulating the construction, maintenance and use[illegible]f buildings and stru[illegible]ures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Not[illegible]ation o[illegible]spectio[illegible] must b[illegible] give[illegible]nd writt[illegible] permissi[illegible] procured bef[illegible] this bui[illegible]ng or p[illegible] hereof i[illegible] lath[illegible] or oth[illegible]sed-in. 2[illegible] HOU[illegible] NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. CAPT. R. Faulkner

Health Dept. _____

Appeal Board _____

Other _____

Department Name

Director - Building & Inspection Services 12/22/09

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Issue Date:	CBL:
09-0979		254 A003001

Location of Construction:	Owner Name:	Owner Address:	Phone:
106 PINE TREE IND PKWY	JLTS VIII LLC	59 CENTRE ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
WB Mason	TBD		
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Commercial	I-M

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Commercial Vacant Space connected w/ permit#090045	Commercial - "WB MASON" Interior renovation, interior loading dock addition, & second floor addition for office space	$12,095.00	$1,200,000.00	3

FIRE DEPT: ☑ Approved ☐ Denied

* See Conditions

Signature: KG

INSPECTION: Use Group: M/B/S (primary) Type: 3B

IBC-2003

Signature: MMB 12/22/09

Proposed Project Description:
Interior renovation, interior loading dock addition, & 12,000 sq ft second floor addition for office space

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
Ldobson	09/08/2009

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

PERMIT ISSUED

DEC 22 2009

City of Portland

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland N/A	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone panel 12 Zone X	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☒ Site Plan 2009-0037	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☒ MM ☐	☐ Denied	☐ Denied
Date: 9/14/09	Date:	Date:

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Date Applied For:	CBL:
09-0979	09/08/2009	254 A003001

Location of Construction:	Owner Name:	Owner Address:	Phone:
106 PINE TREE IND PKWY	JLTS VIII LLC	59 CENTRE ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
WB Mason	TBD		
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Commercial	

Proposed Use:	Proposed Project Description:
Commercial - "WB MASON" Interior renovation, interior loading dock addition, & second floor addition for office space	Interior renovation, interior loading dock addition, & 12,000 sq ft second floor addition for office space

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 09/14/2009

Note: **Ok to Issue:** ☑

1) Separate permits shall be required for any new signage.
2) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.
3) Please note that the "retail" aspect of this primary warehouse and distribution use is accessory. The "retail" use shall only be used as defined in a letter from Attorney Thomas E. Behenna of Cohasset, MA dated October 10, 2008. If there is any change to the uses, this office shall be notified prior to the changes being implimented.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Jeanine Bourke **Approval Date:** 12/22/2009

Note: **Ok to Issue:** ☑

1) All penetratios through rated assemblies must be protected by an approved firestop system installed in accordance with ASTM 814 or UL 1479, per IBC 2003 Section 712.
2) Separate permits are required for any electrical, plumbing, sprinkler, fire alarm or HVAC or exhaust systems. Separate plans may need to be submitted for approval as a part of this process.
3) Application approval based upon information provided by applicant with subsequent revisions.. Any deviation from approved plans requires separate review and approrval prior to work.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Capt Keith Gautreau **Approval Date:** 09/17/2009

Note: **Ok to Issue:** ☑

1) Fire extinguishers required. Installation per NFPA 10
2) System acceptance and commissioning must be co-ordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.
3) The Fire Department will require knox locking caps on all Fire Department Connections on the exterior of the building.
4) Fire department sprinkler connection type and location shall be approved in writing by fire prevention bureau.
5) Application requires State Fire Marshal approval.
6) The sprinkler system shall be installed in accordance with NFPA 13.
7) All construction shall comply with NFPA 101
8) Installation of a Fire Alarm system requires a Knox Box to be installed per city crdinance
9) The fire alarm system shall comply with NFPA 72 and Fire Department Technical Standard. A compliance letter is required.
10 A single source supplier should be used for all through penetrations.
11 The Fire alarm and Sprinkler systems shall be reviewed by a licensed contractor[s] for code compliance. Compliance letters are required.

Location of Construction:	Owner Name:	Owner Address:	Phone:
106 PINE TREE IND PKWY	JLTS VIII LLC	59 CENTRE ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
WB Mason	TBD		
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Commercial	

12 All fire alarm records required by NFPA 72 should be stored in an approved cabinet located at the FACP and keyed alike, labeled "FIRE ALARM RECORDS".

13 Fire alarm system requires a Masterbox connection per city ordinance.
Masterbox design and installation shall be as approved be City Electrical Division.

14 Emergancy lights are required to be tested at the electrical panel on the same circuit as the lighting for the area they serve.

15 Sprinkler protection shall be maintained.
Where the system is to be shut down for maintenance or repair, the system shall be checked at the end of each day to insure the system has been placed back in service.

16 Fire Alarm system shall be maintained.
If system is to be off line over 4 hours a fire watch shall be in place.
Dispatch notification required 874-8576.

17 A separate Fire Alarm System Permit is required.

18 A separate Sprinkler System Permit is required.

19 Emergency lights and exit signs are required

Dept: Public Services **Status:** Pending **Reviewer:** **Approval Date:**
Note: **Ok to Issue:** ☐

Dept: Zoning **Status:** Pending **Reviewer:** **Approval Date:**
Note: **Ok to Issue:** ☐

Dept: Parks **Status:** Pending **Reviewer:** **Approval Date:**
Note: **Ok to Issue:** ☐

Dept: Fire **Status:** Pending **Reviewer:** **Approval Date:**
Note: **Ok to Issue:** ☐

Dept: DRC **Status:** Approved with Conditions **Reviewer:** Philip DiPierro **Approval Date:** 12/11/2009
Note: **Ok to Issue:** ☑

Dept: Planning **Status:** Open **Reviewer:** Eric Giles **Approval Date:**
Note: **Ok to Issue:** ☐

Comments:

9/11/2009-Ldobson: Held until we heard the check is on the way. Lannie

9/11/2009-mes: I e-mailed Eric Giles in Planning as to what the status was for the site plan - I see no full review completed or guaranteed fees submitted.- WAIT FOR PLANNING OK BEFORE ISSUING

Location of Construction:	Owner Name:	Owner Address:	Phone:
106 PINE TREE IND PKWY	JLTS VIII LLC	59 CENTRE ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
WB Mason	TBD		
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Commercial	

11/2/2009-jmb: Left vcmsg for Chris Meehan at WB Mason for details including Geotech report, ladder to new roof hatch, drawings for metal bldg. (Chief Metal Buildings), waiver for plumbing fixtures, B window tempered if under 60" in stair #1, statement of special inspections.

11/4/2009-jmb: Returned call to Bob Turner discussed required submissions, added section showing the existing interior loading dock w/mezzanine not shown on plan 5.1(cc). He will have Matt Pelletier follow up on all, but the plans for the steel bldg. Are on order. Requested a foundation only permit, advised he speak with Eric G. For planning requirements.

11/6/2009-jmb: Received via email the letters for waiver request and granting for the bathroom fixture count. Also see email string about the allowance for a fixed ladder to access rooftop for HVAC maintenance per the IMC 2003.

11/16/2009-jmb: Received via email the comcheck for building envelope.

11/25/2009-jmb: Received via mail the documents for statement of special inspections and structural affadavit from the engineer.

12/17/2009-jmb: Received via mail plan from BKA for foundation revision and plans from Turner for the Chief Metal Bldg. Stamped plans

From: Eric Giles
To: Schmuckal, Marge
Date: 9/14/2009 8:17:01 AM
Subject: Re: 106 Pine Tree Industrial Pkwy

We approved this in May but have not recieved the final set of plans or CAD drawings.

Eric Giles, AICP, LEED AP
Planner
City of Portland
Department of Planning and Urban Development

>>> Marge Schmuckal 9/11/2009 2:52:25 PM >>>
Eric,
What is the status of this site plan application #2009-0037? We have a permit application for the work.
Marge

CC: DiPierro , Philip

General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 106 Pine Tree Industrial Parkway, Portland, ME		
Total Square Footage of Proposed Structure/Area: 43,138 S.F. (54,141 S.F.)	Square Footage of Lot: 147,879 S.F.	
Tax Assessor's Chart, Block & Lot Chart# 204 Block# A Lot# 3	Applicant *must be owner, Lessee or Buyer* Name: Ed Gagne, Owner Address: 73 Industrial Park Road City, State & Zip: Saco, ME 04072	Telephone: 207-252-5112
Lessee/DBA (If Applicable)	Owner (if different from Applicant) Name: JLTS VIII L.L.C. Address: 106 Pine Tree Industrial Parkway City, State & Zip: Portland, ME 04102	Cost Of Work: $ 1,200,000 C of O Fee: $ 75 Total Fee: $ ~~12,095~~ 2,095

Current legal use (i.e. single family): Industrial / Business

If vacant, what was the previous use? _____

Proposed Specific use: Business / Mercantile / Storage

Is property part of a subdivision? No If yes, please name _____

Project description:

The project consists of an interior renovation and an interior loading dock addition. The renovation includes a second floor addition creating 12,000 SF of Office space.

Contractor's name: _____

Address: _____

City, State & Zip _____ Telephone: _____

Who should we contact when the permit is ready: _____ Telephone: _____

Mailing address: _____

RECEIVED SEP 8 2009

Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature: E. Gagne Date: August 21, 2009

This is not a permit; you may not commence ANY work until the permit is issue

Jeanie Bourke - Tempered glass revision

From: Matt Pelletier <mpelletier@bkaarchs.com>
To: Jeanie Bourke <JMB@portlandmaine.gov>
Date: 12/8/2009 5:11 PM
Subject: Tempered glass revision
CC: Bob Turner <rturner@turnerbrothers.com>

Jeanie,
The attached drawings are changing the glass in the stairwell to tempered at your request.
Thank you,
--
Matthew Pelletier, LEED AP
Project Manager

B K A Architects, Inc.
142 Crescent Street
Brockton, MA 02302

tel: 508 . 583 . 5603 ext 305
fax: 508 . 584 . 2914
www.bkaarchitects.com

PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • *www.portlandmaine.gov*

Director of Planning and Urban Development
Penny St. Louis Littell

Matthew Pelletier
BKA Architects
142 Crescent St.
Brockton, MA 02302

Re: Toilet Rooms
W.B. Mason
Portland, Me.

Dear Mr. Pelletier,

I received your letter requesting a waiver to use the 2006 Uniform Plumbing Code, specifically the Occupant Load Factor Table. The City of Portland, currently uses the Maine State Plumbing Code based on the UPC 2000. Based on the 2006 UPC Table A your occupant load would be reduced from 365 to 90 occupants. With the current use of the building and the proposed sale of office furniture setups, these numbers more accurately reflect you use.

After reviewing your request, The City of Portland is granting your request to use the 2006 UPC-Table A Occupant Load Factor solely for the purpose of determining the sink and toilet count. All egress issues shall be determined by the more restrictive IBC2003 and NFPA 101 Life Safety Code.

Sincerely,
Christopher Hanson
CEO/Plan reviewer
City of Portland, Me.04101
207-874-8696

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NOV - 6 2009
Dept. of Building Inspections
City of Portland Maine

BKA Architects, Inc.
142 Crescent Street
Brockton, MA 02302

Architecture + Interiors

tel: 508.583.5603
fax: 508.584.2914
email:bka@bkaarchs.com
www.bkaarchs.com

2/10/09

Christopher Hanson
City of Portland Code Enforcement Office
389 Congress Street
Portland, ME 04101

Re: **Toilet Rooms**
W.B.. Mason
Portland, ME
BKA Reference No.: 208162

Dear Mr. Hanson,

We have reviewed the 2006 Uniform Plumbing Code and the addition of Table A Occupant Load Factor. This table states 200 square feet per person for Group M, 200 square feet per person for Group B, and 5,000 square feet per person for Group S. Based on this table, our occupant load would be reduced from 365 occupants down to 90 occupants re: the plumbing fixture counts. The occupant load factor table calculation would reduce the required toilet room fixture count from the current UPC 2000 requirement of 9 Men's fixtures and 10 Women's fixtures to 5 Men's fixtures and 5 Women's fixtures for the building.

It is our hope that you would allow the above mentioned project to utilize the 2006 Uniform Plumbing Code Table A Occupant Load as a performance standard in conjunction with the Maine State Internal Plumbing Code. We appreciate you taking your time to review this issue again.

Our request to alter the occupant load based on the 2006 UPC - Table A Occupant Load Factor is meant solely for the purpose of determining the sink and toilet fixture count. All egress issues shall be based on an occupant load as determined by the more restrictive of the IBC 2003 and the NFPA 101 Life Safety Code.

Please do not hesitate to call with any questions or concerns.

Very truly yours,

Matthew Pelletier
Project Manager

Jeanie Bourke - WB Mason - Portland

From: Matt Pelletier <mpelletier@bkaarchs.com>
To: Jeanie Bourke <JMB@portlandmaine.gov>
Date: 11/16/2009 11:04 AM
Subject: WB Mason - Portland

Jeanie,
We've had to make a change from the 2003 IECC prescriptive requirement found in table 802.2 (33). R-30 will not fit within the roof purlins selected, so I have run the DOE's Com-Check calculation to verify that R-19 in the roof is acceptable. The walls have been increased to R-19 from the required R-13, and the roof has been decreased to R-19 from the required R-30. The attached com-check report verifies the substitutions are 9% above the 2003 IECC requirements.

Thank you,
--
Matthew Pelletier, LEED AP
Project Manager

B K A Architects, Inc.
142 Crescent Street
Brockton, MA 02302

tel: 508 . 583 . 5603 ext 305
fax: 508 . 584 . 2914
www.bkaarchitects.com

COM*check* Software Version 3.5.0
Envelope Compliance Certificate

2003 IECC

Report Date: 11/16/09

Data filename: P:\Arch_Proj\208162\100_Admin\Misc_Project_Docs\8162_comcehck.cck

Section 1: Project Information

Project Title: WB Mason Addition

Construction Site:
106 Pine Tree Industrial Parkway
Portland, ME 04102

Owner/Agent:
Ed Gagne
WB Mason
106 Pine Tree Industrial Parkway
Portland, ME 04102
207-252-5112

Designer/Contractor:
Matthew Pelletier
BKA Architects
142 Crescent Street
Brockton , MA 02302
508-583-5603

Section 2: General Information

Building Location (for weather data):	Portland, Maine
Climate Zone:	15
Heating Degree Days (base 65 degrees F):	7378
Cooling Degree Days (base 65 degrees F):	268
Project Type:	Addition
Vertical Glazing / Wall Area Pct.:	0%

Activity Type(s)	Floor Area
Storage, Industrial and Commercial	7000

Section 3: Requirements Checklist

Envelope PASSES: Design 9% better than code

Climate-Specific Requirements:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof 1: Metal Roof with Thermal Blocks	7000	0.0	19.0	0.051	0.053
Exterior Wall 1: Metal Wall without Thermal Blocks	3030	0.0	19.0	0.050	0.075
Door 1: Solid	42	—	—	0.400	0.122
Door 2: Overhead	1153	—	—	0.300	0.122
Floor 1: Slab-On-Grade:Unheated, Vertical 4 ft.	253	—	8.0	—	—

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

Air Leakage, Component Certification, and Vapor Retarder Requirements:

- ☐ 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- ☐ 2. Windows, doors, and skylights certified as meeting leakage requirements.
- ☐ 3. Component R-values & U-factors labeled as certified.
- ☐ 4. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.
- ☐ 5. Stair, elevator shaft vents, and other dampers integral to the building envelope are equipped with motorized dampers.
- ☐ 6. Cargo doors and loading dock doors are weather sealed.
- ☐ 7. Recessed lighting fixtures are: (i) Type IC rated and sealed or gasketed; or (ii) installed inside an appropriate air-tight assembly with a 0.5 inch clearance from combustible materials and with 3 inches clearance from insulation material.

☐ 8. Building entrance doors have a vestibule and equipped with closing devices.
Exceptions:

Building entrances with revolving doors.

Doors that open directly from a space less than 3000 sq. ft. in area.

☐ 9. Vapor retarder installed.

Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2003 IECC requirements in COM*check* Version 3.5.0 and to comply with the mandatory requirements in the Requirements Checklist.

MATTHEW PELLETIER, PROJ. MNGR — Name - Title

Signature

11/16/09 — Date

Jeanie Bourke - Re: WB Mason - Roof Ladder

From: Jeanie Bourke
To: Matt Pelletier
Date: 11/9/2009 11:16 AM
Subject: Re: WB Mason - Roof Ladder

Thanks Matt, here is the code section
Jeanie

>>> Matt Pelletier <mpelletier@bkaarchs.com> 11/06 11:27 AM >>>
Jeanie,
I was unaware Portland adopted the 03 IMC. Everything I found on-line still referenced the 1993 NMC. I will update my title sheet. I took a quick look around our office and could not find a copy of the 03 IMC, if you could fax or email section 306.5 I would appreciate it.
There is a detail of the roof hatch and the ladder on sheet A3.1, and the new roof access hatch is located on sheets A2.1, A2.2, and A3.1. If you'd like to see more information on the ladder I'd be happy to issue an addendum.

Thank you,

Matthew Pelletier, LEED AP
Project Manager

B K A Architects, Inc.
142 Crescent Street
Brockton, MA 02302

tel: 508 . 583 . 5603 ext 305
fax: 508 . 584 . 2914
www.bkaarchitects.com

Jeanie Bourke wrote:

> Hi Matt,
> Thanks for researching this code question. This led me to reference the IMC 2003 adopted by the city....good place to find this answer.
>
> Section 306.5 Equipment and appliances on roofs or elevated structures describes the use of permanent ladders installed to provide access to comply with 7 criteria of design.
>
> It is based on the OSHA requirements, of which of the 7 criteria does not require a cage enclosure. As long as it meets this criteria, I don't see why a cage could not be installed as well.

Let me know if you need a copy of this section of the IMC for design criteria. Can you please provide an addendum for the design of the ladder. Also, It is not clear on plan A5.1 where this is.

Let me know if you have any questions.

Jeanie Bourke
Code Enforcement Officer/Plan Reviewer

City of Portland
Planning & Urban Development Dept./ Inspections Division
389 Congress St. Rm 315
Portland, ME 04101
jmb@portlandmaine.gov
(207)874-8715

>>> Matt Pelletier <mpelletier@bkaarchs.com> 11/05 6:27 PM >>>
Jeanie,
To follow up on our discussion this morning on the roof ladder, I would agree with you that the IBC does not seem to allow for roof ladders. On the same note, though, I could not site a section that forbids it either. My understanding is that section 1009.12 is not requiring us to provide any permanent access to the roof at all. In this case the owner would have to prop a ladder against either the roof hatch or the exterior of the building. What we're proposing would provide a stable, secure, and permanently installed, ladder with a protective cage. It would seem to be a safer option for everyone. Trying to find some backup in the code for this stance, though, I found two possibilities.

First, I looked into the 2003 National Mechanical Code for any RTU access requirements. Section M-407.3, sets up some guidelines for RTU access and while it doesn't reference th e use of ladders over stairs it does reference the 2003 BOCA, section 1027.0, for access to roofs. 1027.1 Allows for buildings under 3 stories in height to use either ladders or an alternating tread stair to access an unoccupied roof.

Second, I went to the 2003 Life Safety Code. I know your office is on the IBC 03 and the State Fire Marshall's Office is on the Life Safety Code, but my understanding is that the Life Safety code takes precedence with regards to fire safety and egress. Section 7.2.8.3.4 requires access to a roof with a pitch of less than 1 to 6 by means of a fire escape ladder or an alternating tread device. Section 7.2.9, Fire Escape Ladders, then goes on further to say that the use of a ladder is permitted for access to unoccupied roofs, which would seem to not only allow the use of a ladder in our situation but require it.

Please let me know what you think, unfortunately there doesn't seem to be a black and white answer to the issue, but I do feel we have some semblance of a leg to stand on. If you would like a more formal letter you can respond to, just let me know, I'd be happy to draft something up in the morning. Thank you for

taking the time to review this issue, I appreciate the chance to have our interpretation heard.

Sincerely,

--

Matthew Pelletier, LEED AP
Project Manager

B K A Architects, Inc.
142 Crescent Street
Brockton, MA 02302

tel: 508 . 583 . 5603 ext 305
fax: 508 . 584 . 2914
www.bkaarchitects.com

sufficient lateral-bearing capacity to resist collapse. The clear access opening dimensions shall be a minimum of 22 inches by 30 inches (559 mm by 762 mm), where such dimensions are large enough to allow removal of the largest appliance.

Exception: The passageway is not required where the level service space is present when the access is open and the appliance is capable of being serviced and removed through the required opening.

306.4.1 Electrical requirements. A lighting fixture controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the appliance location in accordance with the ICC *Electrical Code*.

306.5 Equipment and appliances on roofs or elevated structures. Where equipment and appliances requiring access are installed on roofs or elevated structures at a height exceeding 16 feet (4877 mm), such access shall be provided by a permanent approved means of access, the extent of which shall be from grade or floor level to the equipment and appliances' level service space. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) high or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope).

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center.
3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
4. There shall be a minimum of 18 inches (457 mm) between rails.
5. Rungs shall have a minimum 0.75-inch (19 mm) diameter and be capable of withstanding a 300-pound (136.1 kg) load.
6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds (488.2 kg/m^2) per square foot.
7. Ladders shall be protected against corrosion by approved means.

Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

Exception: This section shall not apply to Group R-3 occupancies.

306.6 Sloped roofs. Where appliances are installed on a roof having a slope of three units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a level platform shall be provided on each side of the appliance to which access is required by the manufacturer's installation instructions for service, repair or maintenance. The platform shall not be less than 30 inches (762 mm) in any dimension and shall be provided with guards in accordance with Section 304.10.

SECTION 307
CONDENSATE DISPOSAL

307.1 Fuel-burning appliances. Liquid combustion by-products of condensing appliances shall be collected and discharged to an approved plumbing fixture or disposal area in accordance with the manufacturer's installation instructions. Condensate piping shall be of approved corrosion-resistant material and shall not be smaller than the drain connection on the appliance. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope).

307.2 Evaporators and cooling coils. Condensate drain systems shall be provided for equipment and appliances containing evaporators or cooling coils. Condensate drain systems shall be designed, constructed and installed in accordance with Sections 307.2.1 through 307.2.4.

307.2.1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. Condensate shall not discharge into a street, alley or other areas so as to cause a nuisance.

307.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polybutylene, polyethylene, ABS, CPVC or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Condensate waste and drain line size shall be not less than $^3/_4$-inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with an approved method. All horizontal sections of drain piping shall be installed in uniform alignment at a uniform slope.

307.2.3 Auxiliary and secondary drain systems. In addition to the requirements of Section 307.2.1, a secondary drain or auxiliary drain pan shall be required for each cooling or evaporator coil where damage to any building components will occur as a result of overflow from the equipment drain pan or stoppage in the condensate drain piping. One of the following methods shall be used:

1. An auxiliary drain pan with a separate drain shall be provided under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall have a minimum depth of 1.5 inches (38 mm), shall not be less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Metallic pans shall have a minimum thickness of not less than 0.0276-inch (0.7 mm) galvanized sheet metal. Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm).
2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage

BKA Architects Inc
142 Crescent Street
Brockton, MA 02302

Architecture + Interiors

tel: 508.583.5603
fax: 508.584.2914
e-mail:bka@bkaarchs.com
www.bkaarchs.com

b a

LETTER OF TRANSMITTAL

TO: Portland Building Inspections
389 Congress Street
Portland, ME 04101

Date: November 24, 2009

Project: WB Mason

ATT.: Jeanie Bourke

Project No.: 208162

WE TRANSMIT:

☑ Herewith ☐ Under separate cover via: _____

☐ In accordance with your request: _____

FOR YOUR:

☑ Approval ☐ Distribution ☐ Information ☐ Review & comment
☐ Use ☐ Record ☐ Other: _____

THE FOLLOWING:

☑ Drawings ☐ Shop Dwg Prints ☐ Samples ☐ Specifications ☐ Originals
☐ Change Order ☐ Shop Dwg Repro's ☐ Product Literature
☐ Other: _____

COPIES	DATE	NO.	DESCRIPTION
1			Structural Affidavit
1			Special Inspections Report

REMARKS

Upon review of the final geotech report, our structural engineer has indicated some changes will likely need to be made to the interior footings for the 2nd floor addition. The garage addition design has been reviewed based on the geotech info. A copy of the final geotech report will be sent to your office

RECEIVED
NOV 25 2009
Dept. of Building Inspections
City of Portland Maine

Signed: Matthew Pelletier 11/24/09

Project: WB Mason – Portland, ME
Date Prepared: 11-13-09

Structural Statement of Special Inspections

Project: *WB Mason Addition and Renovation*

Location: *106 Pine Tree Industrial Parkway, Portland, ME*

Owner: *JLTS VIII LLC*

This *Statement of Special Inspections* encompass the following discipline: **Structural**

This *Statement of Special Inspections* is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Structural Special Inspection Coordinator (SSIC) and the identity of other approved agencies to be retained for conducting these inspections and tests.

The Structural Special Inspection Coordinator shall keep records of all Structural inspections and shall furnish inspection reports to the Building Code Official (BCO) and the Structural Registered Design Professional in Responsible Charge (SRDP). Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Structural Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Structural Registered Design Professional in Responsible Charge at an interval determined by the SSIC and the BCO.

A *Final Report of Special Inspections* documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted to the BCO prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency: ☐ *Upon request of Building Official* _____ or ☐ per attached schedule.

Prepared by: Ted Greenlaw PE

Ted Greenlaw, P.E.
(type or print name of the Structural Registered Design Professional in Responsible Charge)

Signature

11/24/09
11/13/09
Date

STATE OF MAINE
THEODORE GREENLAW
No. 3862
LICENSED PROFESSIONAL ENGINEER
Design Professional Seal

Owner's Authorization:

Signature Date

Building Code Official's Acceptance:

Signature Date

RECEIVED
NOV 25 2009
Dept. of Building Inspections
City of Portland Maine

Structural Statement of Special Inspections (Continued)

List of Agents

Project: *WB Mason Renovation and Addition*

Location: *106 Pine Tree Industrial Parkway, Portland, ME*

Owner: *JLTS VIII LLC*

This *Statement of Special Inspections* encompass the following discipline: **Structural**

(Note: *Statement of Special Inspections* for other disciplines may be included under a separate cover)

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- ☒ Soils and Foundations
- ☒ Cast-in-Place Concrete
- ☐ Precast Concrete System
- ☐ Masonry Systems
- ☒ Structural Steel
- ☐ Wood Construction
- ☐ Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. STRUCTURAL Special Inspections Coordinator (SSIC)	*Ted Greenlaw, PE*	*183 Columbia Road* *Hanover, MA 02339* *ph. 781-826-8369* *fx. 781-826-8399* *tedgreenlawpe@yahoo.com*
2. Special Inspector (SI 1)	*Terracon Consultants, Inc.* *(Geotechnical Services)*	*15 Holly Street, Unit 105* *Scarborough, ME 04074* *ph. 207-396-5374* *fx. 207-396-5394*
3. Special Inspector (SI 2)		
4. Testing Agency (TA 1)	*Terracon Consultants, Inc.* *(Construction Materials Testing)*	*15 Holly Street, Unit 105* *Scarborough, ME 04074* *ph. 207-396-5374* *fx. 207-396-5394*
5. Testing Agency (TA 2)		
6. Other (O1)		

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not 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.

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
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
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
ACI-LTT	Laboratory Testing Technician – Grade 1&2
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

Structural Schedule of Special Inspections
SOILS & FOUNDATION CONSTRUCTION

VERIFICATION AND INSPECTION IBC Section 1704.7, 1704.8, 1704.9	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Verify existing soil conditions, fill placement and load bearing requirements						
a. Prior to placement of prepared fill, determine that the site has been prepared in accordance with the approved soils report.		P	IBC 1704.7.1		PE/GE, EIT or ETT	
b. During placement and compaction of fill material, verify material being used and maximum lift thickness comply with the approved soils report.		P	IBC 1704.7.2		PE/GE, EIT or ETT	
c. Test in-place dry density of compacted fill complies with the approved soils report.		p	IBC 1704.7.2		PE/GE, EIT or ETT	
2. Pile foundations:						
a. Observe and record procedures for static load testing of piles.		N	IBC 1704.8		PE/GE, EIT or ETT	
b. Observe and record procedures for dynamic load testing of piles.		N			PE/GE, EIT or ETT	
c. Record installation of each pile and results of load test. Include cutoff and tip elevations of each pile relative to permanent reference.		N			PE/GE, EIT or ETT	
d. Test welded splices of steel piles			AWS D1.1		AWS-CWI	
3. Pier foundations: Verify installation of pier foundations for buildings assigned to Seismic Design Category C, D, E or F.		C	IBC 1704.9		PE/GE, EIT or ETT	
a. Verify pier diameter and length		C			PE/GE, EIT or ETT	
b. Verify pier embedment (socket) into bedrock		P			PE/GE, EIT or ETT	
c. Verify suitability of end bearing strata		P			PE/GE, EIT or ETT	

Structural Schedule of Special Inspections
CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION IBC Section 1704.4	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Inspection of reinforcing steel, including prestressing tendons, and placement		P	ACI 318: 3.5, 7.1-7.7		PE/SE or EIT	
2. Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5B			Welding of Reinf Not Allowed		AWS-CWI	
3. Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased		C	IBC 1912.5		PE/SE or EIT	
4. Verifying use of required design mix		P	ACI 318: Ch 4, 5.2-5.4		PE/SE or EIT	
5. At time fresh concrete is sampled to fabricate specimens for strength test, perform slump and air content test and temperature		C	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8		ACI-CFTT or ACI-STT	
6. Inspection of concrete and shotcrete placement for proper application techniques		C	ACI 318: 5.9, 5.10		PE/SE or EIT	
7. Inspection for maintenance of specified curing temperature and techniques		P	ACI 318: 5.11-5.13		PE/SE or EIT	
8. Inspection of Prestressed Concrete						
a. Application of prestressing force.		N	ACI 318: 18.20		PE/SE or EIT	
b. Grouting of bonded prestressing tendons in seismic force resisting system		N	ACI 318: 18.18.4		PE/SE or EIT	
9. Erection of precast concrete members		N	ACI 318: Ch 16		PE/SE or EIT	
10. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms beans and structural slabs		N	ACI 318: 6.2		ACI-STT	

Structural Schedule of Special Inspections - STEEL CONSTRUCTION

VERIFICATION AND INSPECTION IBC Section 1704.3	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Material verification of high-strength bolts, nuts and washers:						
a. Identification markings to conform to ASTM standards specified in the approved construction documents.		S	Applicable ASTM material specifications; AISC 335, Section A3.4; AISC LRFD, Section A3.3		PE/SE or EIT	
b. Manufacturer's certificate of compliance required.		S			PE/SE or EIT	
2. Inspection of high-strength bolting						
a. Bearing-type connections.		P	AISC LRFD Section M2.5 IBC Sect 1704.3.3		AWS/AISC-SSI	
b. Slip-critical connections.		C or P (method dependent)			AWS/AISC-SSI	
3. Material verification of structural steel (IBC Sect 1708.4):						
a. Identification markings to conform to ASTM standards specified in the approved construction documents.		S	ASTM A 6 or ASTM A 568 IBC Sect 1708.4		PE/SE or EIT	
b. Manufacturers' certified mill test reports.		S	ASTM A 6 or ASTM A 568 IBC Sect 1708.4		PE/SE or EIT	
4. Material verification of weld filler materials:						
a. Identification markings to conform to AWS specification in the approved construction documents.		S	AISC, ASD, Section A3.6; AISC LRFD, Section A3.5		PE/SE or EIT	
b. Manufacturer's certificate of compliance required.		S			PE/SE or EIT	
5. Submit current AWS D1.1 welder certificate for all field welders who will be welding on this project.		S	AWS D1.1		PE/SE or EIT	
6. Inspection of welding (IBC 1704.3.1): a. Structural steel:						
1) Complete and partial penetration groove welds.		C	AWS D1.1		AWS-CWI	
2) Multipass fillet welds.		C			AWS-CWI	
3) Single-pass fillet welds> 5/16"		C			AWS-CWI	
4) Single-pass fillet welds< 5/16"		P			AWS-CWI	
5) Floor and deck welds.		P	AWS D1.3		AWS-CWI	
b. Reinforcing steel (IBC Sect 1903.5.2):						
1) Verification of weldability of reinforcing steel other than ASTM A706.		C				
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement.		C	AWS D1.4 ACI 318: 3.5.2		AWS-CWI	
3) Shear reinforcement.		C			AWS-CWI	
4) Other reinforcing steel.		P			AWS-CWI	
7. Inspection of steel frame joint details for compliance (IBC Sect 1704.3.2) with approved construction documents:						
a. Details such as bracing and stiffening.		P			PE/SE or EIT	
b. Member locations.		P			PE/SE or EIT	
c. Application of joint details at each connection.		P			PE/SE or EIT	

Structural Schedule of Special Inspection Services

FABRICATION AND IMPLEMENTATION PROCEDURES – STRUCTURAL STEEL

VERIFICATION AND INSPECTION IBC Section 1704.2	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. 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- 2. AISC Certification		S	Fabricator shall submit one of the two qualifications		PE/SE or EIT	
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.		S	IBC 1704.2.2		PE/SE or EIT	

Structural Schedule of Special Inspections
SEISMIC RESISTANCE - STRUCTURAL

VERIFICATION AND INSPECTION IBC Section 1707	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Special inspections for seismic resistance. Special inspection as specified in this section is required for the following:			Seismic Design Category: B			
a. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E or F		P	IBC 1707.1		PE/SE or EIT	
2. Structural steel: Continuous special inspection for structural welding in accordance with AISC 341.		P	IBC 1702.2		AWS-CWI	
3. Structural wood:						
a. Continuous special inspection during field gluing operations of elements of the seismic-force-resist-ing system.		C	IBC 1702.3		PE/SE or EIT	
b. Periodic special inspections for nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system, including drag struts, braces and hold-downs		P	IBC 1702.3		PE/SE or EIT	
4. Cold-formed steel framing: Periodic special inspections during welding operations of elements of the seismic-force-resisting system. Periodic special inspections for screw attachment, bolting, anchoring and other fastening of components within the seismic-force-resisting system, including struts, braces, and hold-downs		N				
4. Seismic isolation system. Provide periodic special inspection during the fabrication and installation of isolator units and energy dissipation devices if used as part of the seismic isolation system		N	IBC 1707.8			

Project: WB Mason – Portland, ME
Date Prepared: 11/13/09

Quality Assurance Plan – Seismic and Wind

QUALITY ASSURANCE FOR SEISMIC RESISTANCE CHECK LIST [IBC 1705]

Seismic Design Category C

☐ **FOR SEISMIC DESIGN CATEGORY C OR HIGHER:**

Structural:

☒ The seismic-force-resisting systems
- ☒ Steel Braced Frames and associated connections/anchorage
- ☐ Steel Moment Frames and associated connections
- ☐ Shear walls: ☐ CMU ☐ Wood ☐ Concrete ☐ Diaphragms: ☐ Floor ☐ Roof
- ☐ Other:

QUALITY ASSURANCE FOR WIND RESISTANCE CHECK LIST [IBC 1706]

Wind Exposure Category B

REQUIRED	NOT REQUIRED	APPLICABLENOT	QUALITY ASSURANCE PLAN REQUIREMENTS (A Quality Assurance Plan is required where indicated below)
☐	☒	☐	In wind exposure Categories A and B, where the 3-second-gust basic wind speed is 120 miles per hour (mph) (52.8 *m/sec)* or greater.
☐	☐	☒	In wind exposure Categories C and D, where the 3-second-gust basic wind speed is 110 mph (49 *m/sec)* or greater.

Prepared by:

Signature 11/13/09 Date

Building Code Official's Acceptance:

Signature Date

STRUCTURAL AFFIDAVIT

To: Jeanie Bourke, Code Enforcement Officer
City of Portland Building Inspections
389 Congress Street
Portland, ME 04101

Re: **W.B. Mason**
106 Pine Tree Industrial Parkway
Portland, ME

Project Number: 208162

I certify that to the best of my knowledge, information and belief, that the structural drawings for the captioned building were designed in accordance with the structural requirements of the 2003 IBC and all other pertinent laws and ordinances established by the State of Maine.

I also certify that I will inspect the work during construction. This will include the inspection and review responsibilities outlined in the 2003 IBC.

I have reviewed the preliminary report from the geotechnical investigation conducted on 11/13/09, and certify the existing design is in compliance with the 2003 IBC and all other pertinent laws and ordinances established by the State of Maine. A copy of the completed geotechnical report will be forward to the Portland Building Department.

Upon completion of the construction, a final inspection affidavit will be issued indicating that the structural scope of work for the captioned building is satisfactory and installed per the drawings.

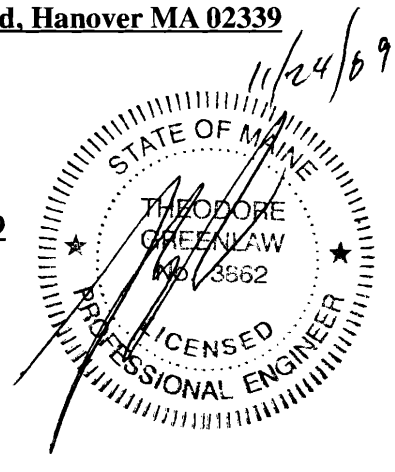
Ted Greenlaw, PE - No. _____
Structural Engineer - ME Reg. No.

183 Columbia Road, Hanover MA 02339
Address

(781) 826-8369
Telephone

November 17, 2009
Date

11/24/09



BKA Architects Inc.
142 Crescent Street
Brockton, MA 02302

Architecture + Interiors

tel: 508.583.5603
fax: 508.584.2914
e-mail:bka@bkaarchs.com
www.bkaarchs.com

LETTER OF TRANSMITTAL

Date: September 3, 2009

TO: WB Mason
73 Industrial Park Road
Saco, Maine 04072
ATT.: Ed Gagne, Sales Manager

Project: WB Portland

Project No.: 208162

WE TRANSMIT:

☑ Herewith ☐ Under separate cover via: _____

☐ In accordance with your request: _____

FOR YOUR:

☐ Approval ☐ Distribution ☐ Information ☐ Review & comment
☑ Use ☐ Record ☐ Other: _____

THE FOLLOWING:

☐ Drawings ☐ Shop Dwg Prints ☐ Samples ☐ Specifications ☐ Originals
☐ Change Order ☐ Shop Dwg Repro's ☐ Product Literature
☐ Other: _____

COPIES	DATE	NO.	DESCRIPTION
2			Permit drawings - for building department
1			pdf's on disc
1			permit application

REMARKS

The building department should only need the one stamped set and the drawing on disc.
The other set is for you to hold on to.

Signed: Matt Kelly

Certificate of Design Application

From Designer: BKA Architects, Inc.

Date: August 21, 2009

Job Name: W.B. Mason - Office Renovation and Garage Addition

Address of Construction: 106 Pine Tree Industrial Parkway, Portland, ME

2003 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year IBC 2003 Use Group Classification (s) Mercantile (M) / Business (B)/ Storage (S-1)

Type of Construction IIIB

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC Yes

Is the Structure mixed use? Yes If yes, separated or non separated or non separated (section 302.3) Non-Sep (section 302)

Supervisory alarm System? Yes Geotechnical/Soils report required? (See Section 1802.2) Yes

Structural Design Calculations

N/A Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
Office	100 psf

Wind loads (1603.1.4, 1609)

Analytical Design option utilized (1609.1.1, 1609.6)

100 mph Basic wind speed (1809.3)

II, 1.0 Building category and wind importance Factor, I_w table 1604.5, 1609.5)

B Wind exposure category (1609.4)

+/- 0.18 Internal pressure coefficient (ASCE 7)

Table 1606.2.2 Component and cladding pressures (1609.1.1, 1609.6.2.2)

Table 1609.6 Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

Analytical Design option utilized (1614.1)

II Seismic use group ("Category")

0.35 0.080 Spectral response coefficients, SDs & SD1 (1615.1)

D Site class (1615.1.5)

Yes Live load reduction

20 psf Roof *live* loads (1603.1.2, 1607.11)

42 psf Roof snow loads (1603.7.3, 1608)

60 psf Ground snow load, P_g (1608.2)

42 If P_g > 10 psf, flat-roof snow load P_f

1.0 If P_g > 10 psf, snow exposure factor, C_e

1.0 If P_g > 10 psf, snow load importance factor, I_s

1.0 Roof thermal factor, C_t (1608.4)

N/A Sloped roof snowload, P_s (1608.4)

C Seismic design category (1616.3)

OBE Basic seismic force resisting system (1617.6.2)

5 Response modification coefficient, R_I and

4 ½ deflection amplification factor C_d (1617.6.2)

Simplified Analysis procedure (1616.6, 1617.5)

54K Design base shear (1617.4, 16175.5.1)

Flood loads (1803.1.6, 1612)

N/A Flood Hazard area (1612.3)

N/A Elevation of structure

Other loads

2000 # Concentrated loads (1607.4)

20 psf Partition loads (1607.5)

N/A Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404

Accessibility Building Code Certificate

Designer: Barry Koretz

Address of Project: 106 Pine Tree Industrial Parkway

Nature of Project: Office Renovation and Garage Addition

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act. Residential Buildings with 4 units or more must conform to the Federal Fair Housing Accessibility Standards. Please provide proof of compliance if applicable.

REGISTERED ARCHITECT
BARRY R. KORETZ
No. 1522
STATE OF MAINE
(SEAL)

Signature:

Title: President

Firm: BKA Architects, Inc.

Address: 142 Crescent Street
Brockton, MA. 02302

Phone: 508-583-5603

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

Certificate of Design

Date: August 21, 2009

From: BKA Architects, Inc.

These plans and / or specifications covering construction work on:

106 Pine Tree Industrial Parkway Portland, ME

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the ***2003 International Building Code*** and local amendments.

REGISTERED ARCHITECT
BARRY R KORETZ
No. 1522
STATE OF MAINE

(SEAL)

Signature: Barry Koretz

Title: President

Firm: BKA Architects, Inc.

Address: 142 Crescent Street

Brockton, MA. 02302

Phone: 508-583-5603

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

Building Inspections Division • 389 Congress Street • Portland, Maine 04101 • (207) 874-8703 • FACSIMILE (207) 874-8716 • TTY (207) 874-8936

Applicant: WB Mason Date: 9/14/09

Address: 106 Pinetree Ind'l P/(Wells) C-B-L: 254-A-3

CHECK-LIST AGAINST ZONING ORDINANCE

Date - Existing Permit #09-0979

Zone Location - I-M

Interior or corner lot -

Proposed Use/Work - cover existing paved area for a garage (7,042 ±)

Sewage Disposal - City

Lot Street Frontage - exc. @ 60' min - 239.54' given

Front Yard - 1' for every 1' of height - N/A - Addition in rear

Rear Yard - 1' for every 1' of height up to 25' - ≈105' shown

Side Yard - 1' for every 1' of height up to 25' - 35' & ≈92.5'

Projections -

Width of Lot -

Height - 29.5' given - 45' MAX

Lot Area - 10,000 ± min - 3.395 Acres

Lot Coverage/Impervious Surface - 75% MAX - 69% given

Area per Family - N/A

Off-street Parking - 85 pkg Req - 95 pkg Shown

Loading Bays - existing

Site Plan - #2009-0037

Shoreland Zoning/Stream Protection - N/A

Flood Plains - not in - just misses the bldg
Panel 12 - Zone C

rec 4/22/09

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Zoning Copy

2009-0037
Application I. D. Number

4/21/2009
Application Date

WB Mason
Applicant

59 Center Street, Brockton, MA 02302
Applicant's Mailing Address

WB Mason Warehouse
Project Name/Description

Consultant/Agent

106 - 106 Pine Tree Ind Pkwy, Portland, Maine
Address of Proposed Site

Applicant Ph: (508) 586-3434 **Agent Fax:**
Applicant or Agent Daytime Telephone, Fax

254 A003001
Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply): ☐ New Building ☐ Building Addition ☐ Change Of Use ☐ Residential ☐ Office ☐ Retail ☐ Manufacturing ☐ Warehouse/Distribution ☐ Parking Lot ☐ Apt **0** ☐ Condo **0** ☐ Other (specify)

Proposed Building square Feet or # of Units	Acreage of Site	Proposed Total Disturbed Area of the Site	Zoning
	147886	**0**	**IM**

Check Review Required:

- ☑ Site Plan (major/minor)
- ☐ Amendment to Plan - Board Review
- ☐ Amendment to Plan - Staff Review
- ☐ After the Fact - Major
- ☐ After the Fact - Minor
- ☐ Zoning Conditional - PB
- ☐ Zoning Conditional - ZBA
- ☐ Subdivision # of lots
- ☐ Shoreland
- ☐ Zoning Variance
- ☐ Stormwater
- ☐ PAD Review
- ☐ Historic Preservation
- ☐ Flood Hazard
- ☐ Traffic Movement
- ☐ 14-403 Streets Review
- ☐ Design Review
- ☐ DEP Local Certification
- ☐ Site Location
- ☐ Housing Replacement
- ☐ Other

Fees Paid: Site Plan **$400.00** Subdivision _____ Engineer Review _____ Date **4/21/2009**

Zoning Approval Status:

Reviewer _____

☐ **Approved** ☐ **Approved w/Conditions** See Attached ☐ **Denied**

Approval Date _____ Approval Expiration _____ Extension to _____ ☐ Additional Sheets Attached

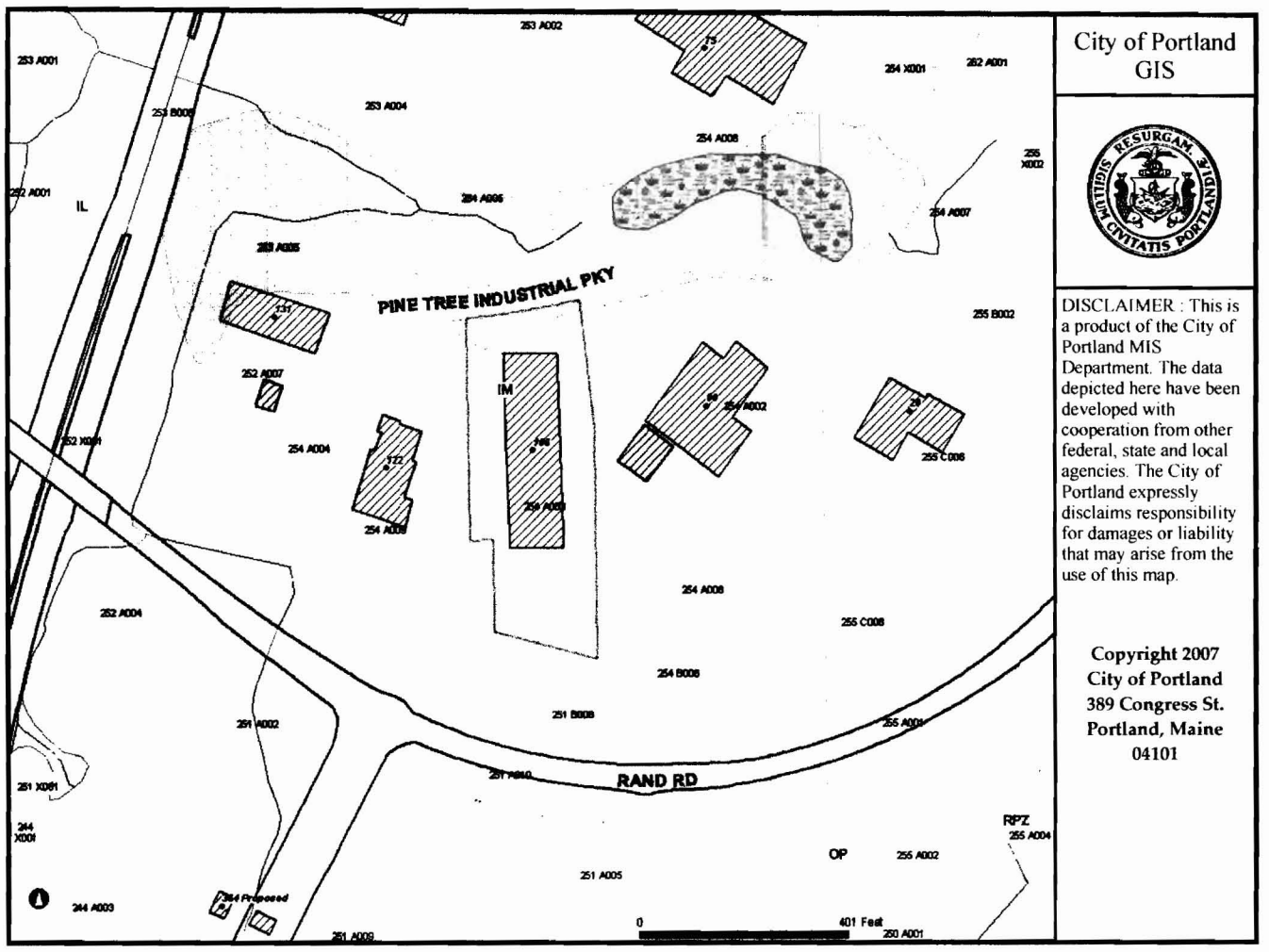
☐ Condition Compliance _____ signature _____ date

Performance Guarantee ☐ **Required*** ☐ **Not Required**

* No building permit may be issued until a performance guarantee has been submitted as indicated below

☐ Performance Guarantee Accepted	date	amount	expiration date
☐ Inspection Fee Paid	date	amount	
☐ Building Permit Issue	date		
☐ Performance Guarantee Reduced	date	remaining balance	signature
☐ Temporary Certificate of Occupancy	date	☐ Conditions (See Attached)	expiration date
☐ Final Inspection	date	signature	
☐ Certificate Of Occupancy	date		
☐ Performance Guarantee Released	date	signature	
☐ Defect Guarantee Submitted	submitted date	amount	expiration date
☐ Defect Guarantee Released	date	signature	

APR 22 2009



City of Portland GIS

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Planning & Urban Development Department
Penny St. Louis Littell, Director

Planning Division
Alexander Jaegerman, Director

May 20, 2009

W.B. Mason, Inc.
Chris Meehan
59 Center St.
Brockton, MA 02302

Lester S. Berry, P.E.
BH2M Engineers
28 State St.
Gorham, ME 04038

RE: 106 Pine Tree Industrial Parkway
CBL: 254 A003001
Application ID: 2009-0037

Dear Mr. Meehan:

On May 20, 2009, the Portland Planning Authority approved the minor site plan for an addition onto the existing office/warehouse building.

The approval is based on the submitted site plan 5/15/09. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

Please note the following provisions and requirements for all site plan approvals:

1. The site shall be developed and maintained as depicted in the site plan and the written submission of the applicant. Modification of any approved site plan or alteration of a parcel which was the subject of site plan approval after May 20, 1974, shall require the prior approval of a revised site plan by the Planning Board or the planning authority pursuant to the terms of this article. Any such parcel lawfully altered prior to the enactment date of these revisions shall not be further altered without approval as provided herein. Modification or alteration shall mean and include any deviations from the approved site plan including, but not limited to, topography, vegetation and impervious surfaces shown on the site plan. No action, other than an amendment approved by the planning authority or Planning Board, and field changes approved by the Public Services authority as provided herein, by any authority or department shall authorize any such modification or alteration.

2. The above approvals do not constitute approval of building plans, which must be reviewed and approved by the City of Portland's Inspection Division.

3. Final sets of plans shall be submitted digitally to the Planning Division, on a CD or DVD, in AutoCAD format (*,dwg), release AutoCAD 2005 or greater.

4. A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount and seven (7) final sets of plans must be submitted to and approved by the Planning Division and Public Works prior to the release of the subdivision plat for recording at the Registry of Deeds or prior to the release of a building permit, street opening permit or certificate of occupancy for site plans. If you need to make any modifications to the approved plans, you must submit a revised subdivision or site plan application for staff review and approval.

5. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the expiration date.

6. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.

7. Prior to construction, a pre-construction meeting shall be held at the project site with the contractor, development review coordinator, Public Work's representative and owner to review the construction schedule and critical aspects of the site work. At that time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.

8. If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Eric Giles at 874-8723.

Sincerely,

Alexander Jaegerman
Planning Division Director

Electronic Distribution:
Penny Littell, Planning & Development Dept. Director
Alexander Jaegerman, Planning Division Director
Barbara Barhydt, Development Review Services Manager
Philip DiPierro, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Tammy Munson, Inspections Division
Lisa Danforth, Administrative Assistant
Michael Bobinsky, Public Works Director
Kathi Farley, Public Works
Bill Clark, Public works
Jim Carmody, City Transportation Engineer
Keith Gautreau, Fire Prevention
Jeff Tarling, City Arborist
Assessor's Office
Approval Letter File
Hard Copy - Project File

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Penny St. Louis Littell, Director of Planning and Development
Marge Schmuckal, Zoning Administrator

Meeting Information

DATE: 2/3/09 ZONE: I-M 254-A-003

LOCATION: 106 Pine Tree Industrial Parkway

PEOPLE PRESENT: Les Barry - Barbara - Marge

BHZM plans

DISCUSSION: WB MASON New user - Mostly Warehouse
3.39 Acres - Warehouse/showroom
- has An easement on the property - showing A New Access on Pipeline easement problematic
- Close to 75% impervious
- Covered loading Dock in the rear - 135' x 61' proposed
- Discussed the "retail" use - floor plans show just over 7,000 ft (I may have to relook)
- Discussed Chapter 500 - in Nason's Brook urban impaired stream
- This would be A minor (Administratively) As shown to us At this time - we would Need A Narrative to explain the past uses compared to what is proposed
- Not sure About whether A traffic movement is required

Please note: this meeting is not an pre-approval of any ordinances. No project can be approved without going thru the appropriate reviews. This meeting is only to outline the City processes to go through based on the information given at this meeting. Any changes to that information may change the process requirements. Please check ordinances that are on-line for further information at www.portlandmaine.gov.

COPY

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Penny St. Louis Littell- Director of Planning and Development
Marge Schmuckal, Zoning Administrator

October 23, 2008

Thomas E. Behenna, Esq.
60 State Street – Suite 700
Boston, MA 02109

RE: 106 Pine Tree Industrial Parkway – 254-A-003 (the "Property") – I-M Zone

Dear Attorney Behenna,

I am in receipt of your request for a zoning determination letter concerning the Property. It is my understanding that the proposed buyer, W.B. Mason Co., intends to use the Property to operate a wholesale distribution and warehouse facility for office supply products and office furniture with accompanying office space and a small retail outlet to sell used and/or slightly damaged office furniture.

Warehousing and distribution facilities (14-247(e)) and general business offices (14-247(t)) are uses permitted by right. Section 14-247(s) allows incidental accessory uses. Section 14-249(b) specifically prohibits retail trade that is not ancillary to a permitted use.

After further conversations with you on October 23, 2008, I gained a bit more information concerning the proposed retail component. The area of the entire building is approximately 36,000 square feet. The retail component would be approximately 5,000 square feet in size. Only used or damaged office furniture, not new furniture, and not all products in the warehouse, will be offered for sale. At this time I do not have any specific floor plans to further assess this use.

Based on all the information available to me at this time, I have determined the specifically described retail component for W.B. Mason Co., Inc. could qualify as an accessory, ancillary retail use to the principal use(s) of warehouse and distribution and general offices.

I temper my determination opinion pending a permit application for the change of use with alterations that will show further data and floor plans concerning the retail component. However, the preliminary information supplied to this office leads me to believe that any offending details could be resolved.

If there would be any future change to the retail component that expanded the use or the size of the area, it would be subject to further review by this office to ensure continued compliance with the Land Use Zoning Ordinance.

At this time, I am not aware of any violations or pending violations of land use or other City ordinances in regards to the Property.

This determination letter does not serve as a substitute for any permits that are required under all City Ordinances.

Very truly yours,

Marge Schmuckal
Zoning Administrator

Cc: file

Thomas E. Behenna
Attorney At Law

Boston Office:
60 State Street, Suite 700
Boston, MA 02109
Telephone (617) 720-2661
Email tbehenna@aol.com

Cohasset Office:
8 Highland Court
Cohasset, MA 02025
Telephone (781) 383-2722
Facsimile (781) 383-2885

October 10, 2008

CONFIDENTIAL

VIA FEDERAL EXPRESS
Ms. Marge Schmuckal
Zoning Administrator
City of Portland
389 Congress Street, Room # 315
Portland, ME 04101

RE: Request for Zoning Determination Letter
Underlying Transaction: Purchase and Sale Agreement
Proposed Buyer: W.B. Mason Co., Inc. or its Nominee
Owner/Seller: MEGCO Realty, LLC
Subject Parcel: 106 Pine Tree Industrial Parkway, Portland, ME
Zoning District: I-M
Municipal Tax Map Number: Map 254 Lot A-3
Title Reference: 11969 Page 181 Cumberland County Registry
Effective Date of P&S: June 25, 2008
My Client: W.B. Mason Co., Inc.

Dear Marge:

Referencing our prior exchange of telephone correspondence, this letter is to confirm that I am legal counsel to **W.B. Mason Co., Inc.** ("Mason") in connection with its pending acquisition of certain commercial real estate located at 106 Pine Tree Industrial Parkway, Portland, ME.

The municipal tax map number for the subject property is **# 254 Lot A-3.** The site consists of approximately 3.5 acres of land and has a building thereon containing about **36, 000** sq. ft. The property is in a moderate impact industrial zone ("I-M").

Mason intends to use the site to operate a wholesale distribution and warehouse facility for office supply products and office furniture with accompanying office space and a small retail outlet to sell used and/or slightly damaged office furniture. Based upon my reading of Section 14-247 of the City of Portland Code of Ordinances subsection (e), warehousing and distribution is allowed in an I-M zone as a matter of right. In addition, Section 14-247 subparagraph (t) of the Code of Ordinances seems to indicate that general business offices are also allowed in an I-M zone as a matter of right.

RE: Request for Zoning Determination Letter
Underlying Transaction: Purchase and Sale Agreement
Proposed Buyer: W.B. Mason Co., Inc. or its Nominee
Owner/Seller: MEGCO Realty, LLC
Subject Parcel: 106 Pine Tree Industrial Parkway, Portland, ME
Zoning District: I-M
Municipal Tax Map Number: Map 254 Lot A-3
My Client: W.B. Mason Co., Inc.

However, Section 14-249 in the Code of Ordinances prohibits retail trade in an I-M zone that is not an ancillary use. But, since Mason will be selling used and/or damaged office furniture out of what will primarily be a warehouse distributing facility for office supplies and office furniture, it seems to me that a small retail outlet component subordinate thereto, would qualify as an ancillary use under the Code of Ordinances and therefore would be permitted.

I could not find a definition for "ancillary use" in the Code of Ordinances. However, Section 14-47 defines "accessory use" as "**uses which are customarily incidental and subordinate to the location, function and operation of a permitted use.**" Section 14-47 also states that definitions set forth in the building code of the City shall apply to words not defined in the Code of Ordnances.

Accordingly, based upon my foregoing preliminary research and analysis, I believe Mason's plans for a small retail outlet at the site will meet the criteria for an accessory use under the Code of Ordinances

Prior to Mason acquiring the subject property, Mason seeks to procure a *Zoning Determination Letter* ("ZDL") from City of Portland Zoning Department to verify and confirm that: (i) warehousing, distribution office is allowed as a matter of right in an I-M zoning district; and, (ii) Mason's plan for a small retail outlet at the site would qualify as an ancillary-accessory use under the Code of Ordinances.

Mason's mortgage lender has also requested the ZDL include language confirming that the subject property complies in all material respects with all applicable building, sewerage, zoning, subdivision, land use sanitary and safety laws, rules and regulations. Hence, I ask that such a provision be incorporated therein as well.

I enclose a check payable to the City of Portland in the amount of **$150.00** representing payment in full for the fee for the ZDL. If you-Portland should need any additional information or supporting documentation relative to my herein request, please let me know as soon as you can. Thank you for your consideration.

Very truly yours,

Thomas E. Behenna

TEB/ct
Enclosure

OCT 14 2008

stablishing the value of property and encouraging the most appropriate use of land throughout the community.

Sec. 14-47. Definitions.

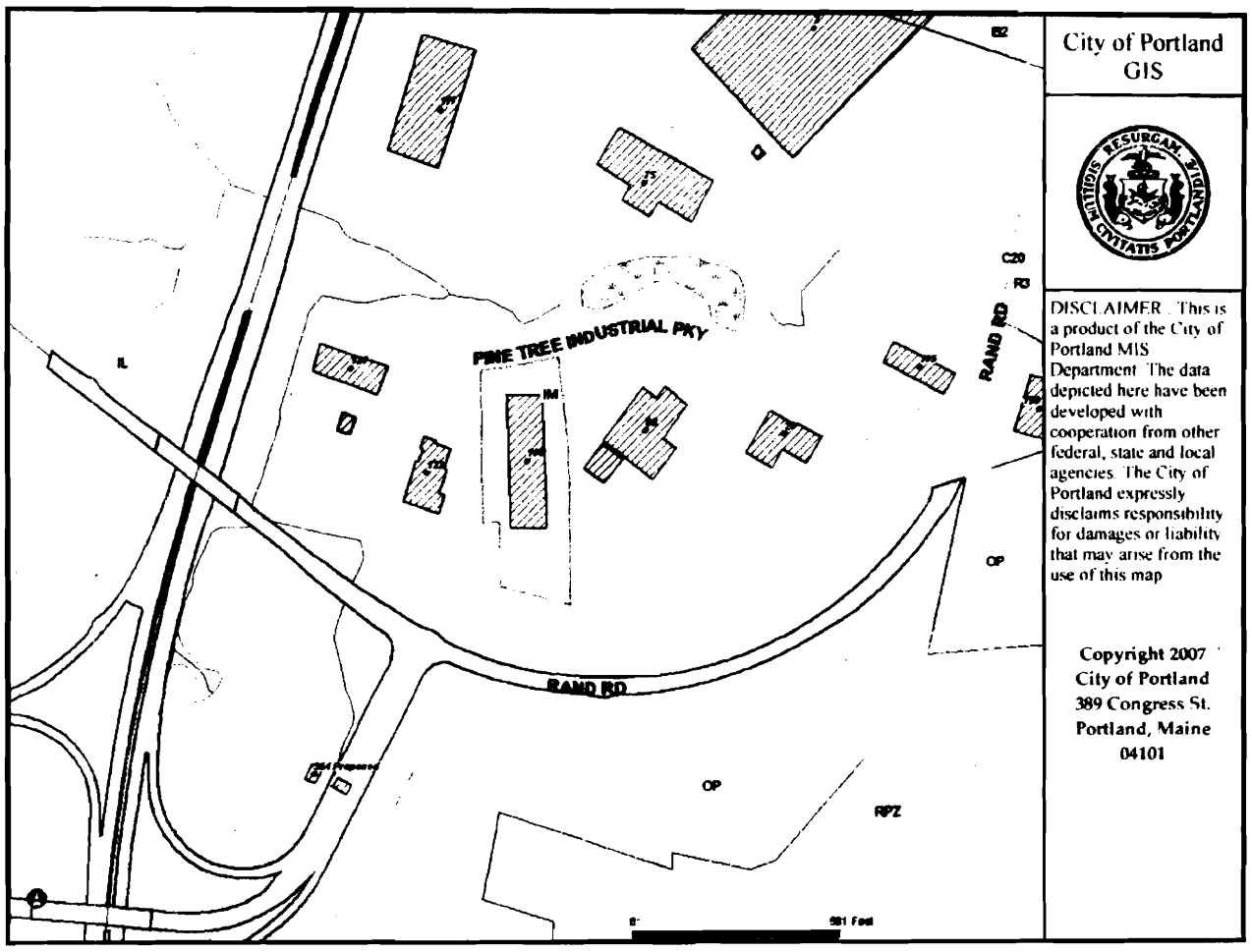
The following words shall be defined as set forth below for use in the article. Definitions set forth in the building code of the city shall apply to words not herein defined:

Accessory uses: Uses which are customarily incidental and subordinate to the location, function and operation of permitted ~~uses.~~

Adult day care facility: A facility which provides a regular program of care and protection for persons over the age of sixteen (16), for consideration, for any part of the day.

Apartment: See "dwelling unit".

Apartment house: See "multifamily dwelling".



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BH2M
Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors

LESTER S. BERRY
WILLIAM A. THOMPSON
ROBERT C. LIBBY, Jr.
WALTER E. PELKEY

April 13, 2009

Barbara Barhydt
Portland City Hall
Planning Department
389 Congress Street
Portland, ME 04101

APR 2 [illegible]

RE: W.B. Mason Minor Amended Site Plan
106 Pine Tree Industrial Parkway

Dear Barbara:

Attached please find the site plans and attached documentation for a Minor Amended Site Plan for W.B. Mason.

The owner, JLTS VIII L.L.C. is the same ownership as W.B. Mason, the applicant, with the same contact person, Chris Meehan. JLTS VIII L.L.C. recently purchased the existing 36,190 s.f. office/warehouse building that we believe was used most recently by the U.S. Postal Service. W.B. Mason plans to modify the building interior, add a garage and make minor site modifications. The new use will be office, retail and warehouse with warehouse being the primary use. The new garage will be used the delivery vans for loading and unloading.

The following is a list of consultants for the project:

- Lester S. Berry, P.E. — Project Engineer
  Berry Huff McDonald Milligan, Inc.
  28 State Street
  Gorham, ME 04038
  207-839-2771

- Robert Turner — Contractor
  Turner Brothers, L.L.C.
  34 Bellow Road
  Raynham, MA 02767

- BKA Architects, Inc. — Architect
  142 Crescent Street
  Brockton, MA 02302
  508-583-5603 ext. 321

The site has essentially been fully developed and operational for 20 years. The lot and all the improvements have been approved by the Planning Board. The proposed project will not have any substantial impacts to the site and no impacts to the abutters.

Stormwater management is always a major concern. Currently, all runoff is collected on-site via a stormdrain system and transported to the north under Pine Tree Industrial Parkway to an existing detention pond. (Approved as part of the original subdivision plan.) The site was approved for 75% impervious coverage and after all, the improvement will have 69% coverage. The new garage will be constructed in the former paved loading dock area. The net increase in impervious area will only be 893 s.f. The primary reason for the increase will be the paved driveway to the propane tanks.

All other utilities are existing. Utilities include public water, sewer and underground electric. A hydrant is located at the northwest corner of the property.

Since this is within an existing industrial park with similar activities be conducted by the abutters, we do not expect to create any impacts. We do have two easements on-site that are important to the easement holders:

- Portland Pipeline Easement – The 35-foot wide easement contains two high pressure oil mains. We have met with the PPL and they have explained the safety concerns associated with their facilities. It should be noted that we are not proposing any construction on their easement and have included a plan note for a Safety Pre-construction Meeting. This Site Plan package has also been submitted to PPL for their review.
- Portland Water District Easement – The 100-foot wide easement contains a 42" water main. The Site Plan package has also been submitted to the PWD for their review.

The project owner, W.B. Mason, will be financing the project and will not be seeking any assistance from a financial institution. The contractor will be Turner Brothers, L.L.C. which has worked on several similar projects for W.B. Mason. The architect and engineer will also be involved throughout construction.

No new landscaping is proposed. The building and site is landscaped (shown on plan) and is similar to all the abutting industrial neighbors.

Please review and feel free to call if you have any questions.

Sincerely,

Lester S. Berry, P.E.

cc: Portland Pipeline
Portland Water District
Robert Turner
Tom Behenna
WBMasonPortland

Development Review Application
Portland, Maine
Department of Planning and Development, Planning Division and Planning Board

Address of Proposed Development: 106 Pine Tree Industrial Parkway

APR

Zone: I-M Industrial

Project Name: W.B. Mason

Existing Building Size:	36,190	sq. ft.	**Proposed Building Size:**	43,232	sq. ft.
Existing Acreage of Site:	147,886	sq. ft.	**Proposed Acreage of Site:**	147,886	sq. ft.

Proposed Total Disturbed Area of the Site: 30,000 sq. ft. *

* **If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) or Chapter 500, Stormwater Management Permit with the Maine Department of Environmental Protection (DEP).**

Tax Assessor's Chart, Block & Lot:	**Property Owners Name/ Mailing address:**	**Telephone #:**
Chart # 254 **Block #** A **Lot #** 3	JLTS VIII L.L.C. 59 Center St. Brockton, MA 02302 Contact: Chris Meehan	508-586-3434 **Cell Phone #:**
Consultant/Agent Name, Mailing Address, Telephone #, Fax # and Cell Phone # : Lester S. Berry, P.E. BH2M Engineers 28 State St. Gorham, ME ~~(207) 839-2771 ext. 201~~	**Applicant's Name/ Mailing Address:** W.B. Mason, Inc. Chris Meehan 59 Center St. Brockton, MA	**Telephone #:** 508-586-3434 **Cell Phone #:**

Fee for Service Deposit (all applications) _____ **($200.00)** *Check attached for $600.00

Proposed Development (check all that apply)

___ New Building ___ Building Addition ___ Change of Use ___ Residential ___ Office ___ Retail
___ Manufacturing ___ Warehouse/Distribution ___ Parking lot
___ Subdivision ($500.00) + amount of lots____ ($25.00 per lot) $_____ + major site plan fee if applicable
___ Site Location of Development ($3,000.00)
(except for residential projects which shall be $200.00 per lot_____)
___ Traffic Movement ($1,000.00) ___ Storm water Quality ($250.00)
___ Section 14-403 Review ($400.00 + $25.00 per lot)
___ Other_____

~ Please see next page ~

Major Development (more than 10,000 sq. ft.)

___ Under 50,000 sq. ft. ($500.00)
___ 50,000 - 100,000 sq. ft. ($1,000.00)
___ Parking Lots over 100 spaces ($1,000.00)
___ 100,000 - 200,000 sq. ft. ($2,000.00)
___ 200,000 - 300,000 sq. ft. ($3,000.00)
___ Over 300,000 sq. ft. ($5,000.00)
___ After-the-fact Review ($1,000.00 + applicable application fee)

Minor Site Plan Review

_X_ Less than 10,000 sq. ft. ($400.00)
___ After-the-fact Review ($1,000.00 + applicable application fee)

Plan Amendments

___ Planning Staff Review ($250.00)
___ Planning Board Review ($500.00)

Billing Address: (name, address and contact information)

Chris Meehan
JLTS VIII L.L.C.
59 Center Street
Brockton, MA 02302

Submittals shall include **seven (7) folded** packets containing of the following materials:

A. Copy of the application.
B. Cover letter stating the nature of the project.
C. Written Submittal (Sec. 14-525 2. (c), including evidence of right, title and interest.
D. A standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 100 feet.
E. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
E. Copy of the checklist completed for the proposal listing the material contained in the submitted application.
F. In addition to the seven (7) sets of documents listed above, one (1) set of the site plans reduced to 11 x 17 must be submitted.

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14), which includes the Subdivision Ordinance (Section 14-491) and the Site Plan Ordinance (Section 14-521). Portland's Land Use Code is on the City's web site: www.portlandmaine.gov Copies of the ordinances may be purchased through the Planning Division.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for site review only; a Performance Guarantee, Inspection Fee, Building Permit Application and associated fees will be required prior to construction.

Signature of Applicant:	**Date:**

Site Plan Checklist
Portland, Maine

Department of Planning and Development, Planning Division and Planning Board

W.B. Mason - 106 Pine Tree Industrial Parkway
Project Name, Address of Project

Application Number

The form is to be completed by the Applicant or Designated Representative:

Check Submitted	Site Plan Item	Required Information	Section 14-525 (b,c)
x	(1)	Standard boundary survey (stamped by a registered surveyor, at a scale of not less than 1 inch to 100 feet and including:	1
x	(2)	Name and address of applicant and name of proposed development	a
x	(3)	Scale and north points	b
x	(4)	Boundaries of the site	c
x	(5)	Total land area of site	d
x	(6)	Topography - existing and proposed (2 feet intervals or less)	e
x	(7)	Plans based on the boundary survey including:	2
-	(8)	Existing soil conditions	a
None	(9)	Location of water courses, wetlands, marshes, rock outcroppings and wooded areas	b
x	(10)	Location, ground floor area and grade elevations of building and other structures existing and proposed, elevation drawings of exterior facades, and materials to be used	c
x	(11)	Approx location of buildings or other structures on parcels abutting the site and a zoning summary of applicable dimensional standards (example page 9 of packet)	d
x	(12)	Location of on-site waste receptacles	e
x	(13)	Public utilities	e
x	(14)	Water and sewer mains	e
x	(15)	Culverts, drains, existing and proposed, showing size and directions of flows	e
x	(16)	Location and dimensions, and ownership of easements, public or private rights-of-way, both existing and proposed	f
x	(17)	Location and dimensions of on-site pedestrian and vehicular access ways	g
x	(18)	Parking areas	g
x	(19)	Loading facilities	g
x	(20)	Design of ingress and egress of vehicles to and from the site onto public streets	g
x	(21)	Curb and sidewalks	g
Ex. Site	(22)	Landscape plan showing:	h
Ex. Site	(23)	Location of existing vegetation and proposed vegetation	h
Ex. Site	(24)	Type of vegetation	h
Ex. Site	(25)	Quantity of plantings	h
Ex. Site	(26)	Size of proposed landscaping	h
Ex. Site	(27)	Existing areas to be preserved	h
Ex. Site	(28)	Preservation measures to be employed	h
Ex. Site	(29)	Details of planting and preservation specifications	h
Ex. Site	(30)	Location and dimensions of all fencing and screening	i
x	(31)	Location and intensity of outdoor lighting system	j
x	(32)	Location of fire hydrants, existing and proposed (refer to Fire Department checklist)	k
x	(33)	Written statements to include:	c
x	(34)	Description of proposed uses to be located on site	c1
-	(35)	Quantity and type of residential, if any	c1
-	(36)	Total land area of the site	c2
-	(37)	Total floor area, total disturbed area and ground coverage of each proposed Building and structure	c2
x	(38)	General summary of existing and proposed easements or other burdens	c3
x	(39)	Type, quantity and method of handling solid waste disposal	c4
x	(40)	Applicant's evaluation or evidence of availability of off-site public facilities, including sewer, water and streets	c5
x	(41)	Description of existing surface drainage and a proposed stormwater management plan or description of measures to control surface runoff.	c6

x	(42)	An estimate of the time period required for completion of the development	7
x	(43)	A list of all state and federal regulatory approvals to which the development may be subject to. Include the status of any pending applications, anticipated timeframe for obtaining such permits, or letters of non-jurisdiction.	8 h8
x	(47)	Evidence of financial and technical capability to undertake and complete the development including a letter from a responsible financial institution stating that it has reviewed the planned development and would seriously consider financing it when approved.	
x	(48)	Evidence of applicant's right title or interest, including deeds, leases, purchase options or other documentation.	
None	(49)	A description of any unusual natural areas, wildlife and fisheries habitats, or archaeological sites located on or near the site.	
x	(50)	A jpeg or pdf of the proposed site plan, if available.	
Upon approval	(51)	Final sets of the approved plans shall be submitted digitally to the Planning Division, on a CD or DVD, in AutoCAD format (*,dwg), release AutoCAD 2005 or greater.	

Note: Depending on the size and scope of the proposed development, the Planning Board or Planning Authority may request additional information, including (but not limited to):

- drainage patterns and facilities
- erosion and sedimentation controls to be used during construction
- a parking and/or traffic study
- emissions
- a wind impact analysis
- an environmental impact study
- a sun shadow study
- a study of particulates and any other noxious
- a noise study

Other comments:

Doc#: 63194 Bk:26448 Ps: 72

EXHIBIT A

A certain lot or parcel of land in the City of Portland, County of Cumberland, State of Maine, being Lot #302 as shown on the Revised Plan of Pine Tree Industrial Park subdivision made for Presumpscot Associates, Inc. dated January 1, 1988, recorded in the Cumberland County Registry of Deeds in Plan Book 173, Page 46, to which Plan reference is hereby made for a more particular description. Lot #302 is the easterly portion of Lot #3 as shown on a Plan for Pine Tree Industrial Park Subdivision made for Presumpscot Associates, Inc. prepared by Dearborn/Whited dated August 8, 1986, approved by the City of Portland Planning Board August 12, 1986, and recorded in the Cumberland County Registry of Deeds in Plan Book 157, Page 16. Said Lot #302 consists of 3.4 acres, more or less.

This conveyance is made subject to: (a) an easement conveyed to the Portland Pipe Line Company thirty-five (35) feet in width along the easterly side of said Lot #302 as shown on said plans; (b) an easement or right of way conveyed to the Portland Water District, one hundred (100) feet in width, which in part crosses the most southerly corner of said Lot #302 as shown on said plans; (c) the covenants and restrictions set forth on the face of the said Plan recorded in Plan Book 157, Page 16 and a Plan entitled "Recording Plot for Arthur Knowles" recorded in said Registry in Plan Book 160, Page 44; and (d) the restrictions, conditions and limitations set forth in the Deed from Ellen M. Knowles to Alco Partners dated March 24, 1987 and recorded in the Cumberland County Registry of Deeds in Book 7686, page 44.

As shown on said plan recorded in Plan Book 173, Page 46, this conveyance is made subject to an easement, and includes the grant of an easement, the said easements together creating a driveway thirty (30) feet in width, and each easement being fifteen (15) feet in width and adjacent to the westerly boundary of said Lot 302 (which is also the easterly boundary of the adjacent Lot 301). The said easements are for the use and benefit of said Lot #302 and said Lot #301.

Also conveying the right, in common with all other owners of lots on said plans, over all roads designated on said plans from the present end of Rand Road, across the Portland Terminal location, and over Rand Road extension and the Pine Tree Industrial Parkway, for access by vehicles and otherwise, as well as for the placement of utility lines, including sewer and water pipelines, power and telephone lines, the exact location of such utility lines to be determined by Presumpscot Associates, Inc.

Subject to current real estate taxes, which Grantee covenants and agrees to pay.

Reference is made to a deed from Alco Partners to MEGCO Realty Limited Liability Company, dated May 23, 1995 and recorded in the Cumberland County Registry of Deeds, in Book 11969, Page 181.

Received
Recorded Register of Deeds
Nov 10,2008 12:16:57P
Cumberland County
Pamela E. Lovley

Doc#: 63194 Bk: 26448 Pg: 71

MAINE REAL ESTATE TAX PAID

QUITCLAIM DEED WITH COVENANT

KNOW ALL BY THESE PRESENTS, That **MEGCO REALTY LIMITED LIABILITY COMPANY,** a Maine limited liability company, with a place of business in Portland, Maine (the "Grantor"), for consideration paid, grants to **JLTS VIII L.L.C.,** a Maine limited liability company, with a mailing address of I/C/O W. B. Mason Co., Inc., 73 Industrial Park Road, Saco, Maine 04072 (the "Grantee"), with **QUITCLAIM COVENANT,** the land and buildings in the City of Portland, Cumberland County, State of Maine, described more particularly as follows:

SEE EXHIBIT A ATTACHED
HERETO AND MADE A PART HEREOF

IN WITNESS WHEREOF, Julian R. Coles, duly authorized Member of MEGCO Realty Limited Liability Company, has caused this instrument to be executed this 5 day of November 2008.

Witness:

Nancy K. Bradford

MEGCO REALTY LIMITED LIABILITY COMPANY, a Maine limited liability company

By: _____
Name: Julian R. Coles
Its Member

STATE OF Florida
COUNTY OF Lee

On this 5 day of November 2008, then personally appeared the above named Julian R. Coles in his capacity as Member of MEGCO Realty Limited Liability Company, a Maine limited liability company, and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of said limited liability company.

Maine Drivers License Provided to

NANCY K. BRADFORD
Notary Public, State of Florida
Commission# DD 553351
My comm. expires July 21, 2010

Notary Public
Nancy K. Bradford
Printed Name

(W3197475.1)

BKA Architects Inc.
142 Crescent Street
Brockton, MA 02302

Architecture + Interiors

tel: 508.583.5603
fax: 508.584.2914
e-mail:bka@bkaarchs.com
www.bkaarchs.com

b a

LETTER OF TRANSMITTAL

TO: City of Portland
Inspections Division
389 Congress St. Rm 315
Portland, ME 04101
ATT.: Jeanie Bourke, Plan Reviewer

Date: December 15, 2009

Project: WB Mason - Protland
Addition / Renovation

Project No.: 208162

WE TRANSMIT:

☑ Herewith

☐ Under separate cover via: _____

☐ In accordance with your request: _____

FOR YOUR:

☐ Approval ☐ Distribution ☐ Information ☐ Review & comment
☐ Use ☑ Record ☐ Other: _____

THE FOLLOWING:

☑ Drawings ☐ Shop Dwg Prints ☐ Samples ☐ Specifications ☐ Originals
☐ Change Order ☐ Shop Dwg Repro's ☐ Product Literature
☐ Other: _____

COPIES	DATE	NO.	DESCRIPTION
1	12/8/09	1	Revised Foundation Plan

REMARKS _____

RECEIVED
DEC 17 2009
Dept. of Building Inspections
City of Portland Maine

PERMIT ISSUED
DEC 17 2009
Dept. of Building Inspections
City of Portland Maine

Signed: Matthew Pelletier

Turner Brothers, LLC
34 Bellows Road
Raynham, MA 02767
Phone: (508) 823-6303
Fax: (508) 823-2045

SUBMITTAL

Submittal No. **0001**
Date: 12/16/2009

To:	Planning & Development Dept. 389 Congress Street Portland, Maine 04101	**Project:**	WB Mason 106 Pine Tree Parkway Portland, ME
Attention:	Jeanie Bourke		
		Division:	
Prepared By:	Robert Turner	**Date Required:**	ASAP

Spec. Section	Description	Action Required	Copies Submitted
Metal Building	Letter Of Certification	Review & Approve	1(original)
	Complete set of Erection Drawings	Review & Approve	2(original)

CHIEF BUILDINGS

Wisconsin Technical Services Office
2863 Liberty Lane
Janesville, WI 53545
Phone: (608) 758-3718 Fax: (608) 758-3796

November 17, 2009

Re: Chief Order No. CO95226
Description: Bldg A - 59'-8" x 114'-10" x 16'-0"
Bldg B - 12'-7" x 16'-3" x 17'-10 3/8"
Builders Name: Turner Brothers, LLC
Building Owners Name: W B Mason Portland, ME
Jobsite City, State: Portland, ME

Gentlemen:

Please accept this letter as certification that the Chief components, produced for the above described project to be furnished to Turner Brothers, LLC, for W B Mason Portland, ME, Portland, ME, have been designed for the following criteria as specified by Purchaser in the order documents:

2002 MBMA Occupancy Category	Standard Buildings	Seismic	
Roof Live Load	20 psf	Spectral Response Short Periods (S_s)	37.0%
(Tributary Area Reduction Allowed)		Spectral Response 1 s Period (S_1)	10.0%
Collateral Load	5 psf	Seismic Importance Factor	1.0
Ground Snow Load (P_g)	70 psf	Use Group	I
Exposure Factor (C_e)	1.0	Design Category	C
Thermal Factor (C_t)	1.0	Site Class	D
Importance Factor (I)	1.0	Seismic Resisting System	
Flat Roof Snow Load (P_f)	49 psf	Longitudinal Direction	Steel System (R=3.0)
Building Enclosure	Enclosed	Lateral Direction	Steel System (R=3.0)
Wind Speed	90 mph (GCpi ± 0.18)	Seismic Response Coefficient (C_s)	0.124
Exposure Category	B	Spectral Response Parameter Short Period (S_{DS})	0.371
Importance Factor (I)	1.0	Spectral Response Parameter 1 s Period (S_{D1})	0.160
Wind Pressure (q)	13.46 psf	Analysis Procedure	ELF
		Base Shear	19,218 lbs.
		Other Loads:	
		None	

and applied in accordance with the IBC 2003 Building Code.

The design of Chief structural steel components is in accordance with the provisions of .

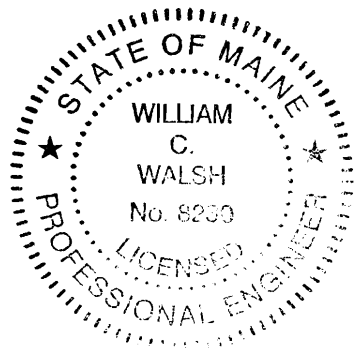
These Chief components as supplied, when properly erected as furnished, on an adequate foundation, will meet the loading requirements supplied to Chief by Purchaser in accordance with good engineering practices.

This certification does not cover field modifications nor does it cover materials furnished by someone other than Chief Industries, Inc.; nor the connection between Chief components and those manufactured or supplied by someone other than Chief Industries, Inc.

Chief design and detailing facilities: Grand Island, NE, Lincoln, NE, and Janesville, WI. Chief Fabrication facilities: Grand Island, NE and Rensselaer, IN.

Sincerely,

William C. Walsh, P.E.
Sr. Design Engineer
Chief Industries, Inc. - Buildings Division
WW/tl



Geotechnical Engineering Report

Proposed W. B. Mason Addition

Portland, Maine

December 4, 2009

Project No. J3095112

Prepared for:
BKA Architects
Brockton, Massachusetts

Prepared by:
Terracon Consultants, Inc.
Scarborough, Maine

PDF ✓

Terracon

December 4, 2009

BKA Architects
142 Crescent Street
Brockton, Massachusetts 02302-3104

Attn: Mr. Matt Pelletier
P: [508] 583 5603
F: [508] 583 2914
E: mpelletier@bkaarchs.com

Re: Geotechnical Engineering Report
Proposed W. B. Mason Addition
Portland, Cumberland County, Maine
Terracon Project No. J3095112

Dear Mr. Pelletier:

Terracon Consultants, Inc. (Terracon) is submitting, herewith, the results of our geotechnical evaluation for the above-referenced project. The purpose of this evaluation was to obtain information on subsurface conditions at the project site and, based on this information, to provide recommendations regarding the design and construction of foundations and site development for the proposed store.

In this report, we include our understanding of the project, a summary of the exploration program, and our design and construction recommendations. This report is subject to the General Comments in Section 5.

We appreciate the opportunity to be of service to you on this project. If you have questions concerning this report, or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

Wendell A. Shedd, III
Department Manager

Ryan R. Roy, P.E.
Principal/NE Division Manager

/pdc/J3095112

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APPENDIX A – FIELD EXPLORATION

Exhibit A-1 Topographic Vicinity Map

Exhibit A-2 Boring Location Diagram

Exhibit A-3 Boring Logs – B-1 through B-4

Exhibit A-4 Field Exploration Description

APPENDIX B – SUPPORTING DOCUMENTS

Exhibit B-1 General Notes

Exhibit B-2 Unified Soil Classification System

GEOTECHNICAL ENGINEERING REPORT
PROPOSED W. B. MASON ADDITION
PORTLAND, MAINE

Project No. J3095112
December 4, 2009

1.0 INTRODUCTION

The geotechnical evaluation for the expansion of the proposed W. B. Mason building at 106 Pinetree Industrial Parkway, Portland, Maine, as shown on the Topographic Vicinity Map in Appendix A, has been completed. Four soil borings (B-1 through B-4) were drilled to depths up to 32 feet below existing ground surface. A Boring Location Diagram and individual boring logs are included in Appendix A.

The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- subsurface soil conditions
- groundwater conditions
- earthwork
- foundation design and construction
- seismic considerations
- slab design and construction

2.0 PROJECT INFORMATION

The site is within a small industrial park and located at 106 Pinetree Industrial Parkway in Portland, Cumberland County, Maine. The site is currently developed with an approximately 54,000 square-foot, premanufactured steel building, with associated paved parking areas, concrete sidewalks and landscaping around the building and property.

2.1 Project Description

The project consists of a 7,000 square-foot single-story, pre-manufactured steel building addition to the southern end of the existing W. B. Mason building. This addition is to provide a covered loading area for the W. B. Mason delivery vans. Additionally, a mezzanine level will be constructed within a portion of the existing building.

Existing pavements and grades are not proposed to be significantly changed for the proposed addition. Access to the site will be provided by existing driveways from Pinetree Industrial Parkway. Based on our observations, the site generally slopes downward to the north. Based on our experience with the site area, the grade at the site for the existing W. B. Mason building was likely slightly raised. Site development plans were not provided to us for preparation of this report, but are reported to remain unchanged from existing. A summary description of the project is presented below:

ITEM	DESCRIPTION
Site layout	Shown on Figure 2 - Boring Location Diagram
Proposed Building	One story with an approximate footprint of 7,000 square feet
Proposed Building Type	Steel-framed light industrial building
Finished Floor Elevation	102.4 to 102.8 feet
Maximum Loads	Columns: 60 kips (assumed) Walls: 2 kips per linear foot (assumed) Slabs: 175 psf max (assumed)
Maximum allowable settlement	Columns: 1-inch (assumed) Walls: ¾ inch over 40 feet (assumed)
Grading	Based on our observations of the proposed building plans, we expect that only minor grading will be required.
Cut and fill slopes	Not expected
Retaining walls	None proposed
Basement Level	A basement is not proposed for this building.

2.2 Site Location and Description

ITEM	DESCRIPTION
Location	106 Pinetree Industrial Parkway
Existing improvements	The site is currently developed with a pre-manufactured steel building, asphalt paved parking areas, concrete sidewalks, and landscaping.
Current ground cover	Asphalt pavement.
Existing topography	The site generally slopes slightly downward to the north

3.0 SUBSURFACE EXPLORATIONS AND CONDITIONS

3.1 Typical Profile

Based on the results of the borings and observations at the time of drilling, subsurface conditions on the project site can be generalized as follows:

Description	Approximate Depth to Bottom of Stratum (feet)	Material Encountered	Consistency / Relative Density
Stratum 1	1 to 4	Poorly-graded sand with silt and gravel, brown (Fill)	Medium dense
Stratum 2	>32	Lean clay, olive to gray (Glaciomarine Deposit)	Very soft to stiff

Conditions encountered at each boring location are indicated on the individual boring logs in Appendix A of this report. Stratification boundaries on the boring logs represent the approximate location of changes in soil types; *in situ*, the transition between materials may be gradual.

Laboratory testing consisting of moisture content and Atterberg Limits was performed on samples collected during our exploration activities. A total of six moisture content tests were performed and the results ranged from 36.4% to 51.5% moisture. A total of three Atterberg Limits tests were performed and plasticity indices (PI) were observed to range from 14 to 24 and the liquid limits (LL) were observed to range from 37 to 46.

3.2 Groundwater

Groundwater did not appear in the boreholes during or soon after drilling. The high fines content of the native soils may have prevented the groundwater from appearing in the borehole. However, soil samples deeper than about 10 feet below existing ground surface had a higher moisture content, indicating the current groundwater elevation may be close to that level. Additionally, water may be temporarily perched above the relatively impermeable clay.

Fluctuations in groundwater level may occur because of seasonal variations in the amount of rainfall, runoff and other factors. Additionally, grade adjustments on and around the site, as well as surrounding drainage improvements, may affect the water table. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

4.0 RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION

4.1 Geotechnical Considerations

The glaciomarine deposit, consisting of lean clay, is compressible and is expected to settle under the added weight of fill or moderate to heavy building loads. However, with the proposed light loads of the pre-manufactured steel building addition, we estimate that the glaciomarine deposit may consolidate within the range of acceptable settlements for this type of construction. This estimation is based on spread footings bearing on properly prepared subgrades, to include

overexcavation of glaciomarine soils and placement of geotextile and crushed stone or a mud mat under footings.

Existing interior footings should be evaluated for the proposed mezzanine level loads, based upon our recommendations for allowable bearing and settlements. If the proposed mezzanine level induce loads that result in footing pressures and settlements greater than those recommended in this report, additional investigations for the design of deeper foundation support should be performed.

We have assumed that only minor grading, cuts and fills of less than one foot, will be required in the proposed addition and no other ancillary building structures are proposed. This should be reviewed when the site survey is available. With little to no increase in load expected outside of the building pad, surcharge or preload of these areas is not required.

4.2 Earthwork

4.2.1 Site Preparation

The site is slightly sloping in the areas of the proposed work. We estimate only minor grading, cuts and fills up to about a foot or so, will be required to establish finished grade. Prior to placing fill, asphalt and concrete pavements and otherwise unsuitable materials should be removed. The subgrade should be thoroughly compacted/proofrolled with a large roller compactor. Unstable subgrades should be removed and replaced with compacted structural fill or minus ¾-inch crushed stone, as necessary.

4.2.2 Material Types

Fill should meet the following material property requirements:

Fill Type [1]	USCS Classification	Acceptable Location for Placement
Structural Fill	GW [2]	All locations and elevations. The native glaciomarine soil is not suitable for use as structural fill; however, the poorly-graded sand fill may be selectively re-used as structural fill, provided it meets the gradation requirements in Note 2, below.
Common fill	Varies [3]	The existing poorly-graded sand fill may be re-used as common fill for minor site grading, provided it is free of organics and can be adequately compacted. The native glaciomarine soil may need to be blended with granular material to facilitate its re-use as common fill. Common fill should not be used under settlement sensitive structures.

1. Fill should consist of approved materials that are free of organic matter and debris. Frozen material should not be used. Fill should not be placed on a frozen subgrade.
2. Imported structural fill should meet the following gradation:

Percent Passing by Weight	
Sieve Size	**Structural Fill**
6"	100

Fill Type [1]	USCS Classification	Acceptable Location for Placement
	3"	70 – 100
	2"	(100)*
	¾"	45 – 95
	No. 4	30 – 90
	No. 10	25 – 80
	No. 40	10 – 50
	No. 200	0 - 12

* Maximum 2-inch particle size within 12 inches of the underside of footings or slabs

3. Common fill should have a maximum particle size of 6 inches and no more than 25 percent by weight passing the US No. 200 sieve.

4.2.3 Compaction Requirements

ITEM	DESCRIPTION
Fill Lift Thickness	8 inches or less in loose thickness
Compaction Requirements [1]	95% maximum modified Proctor dry density (ASTM D1557, Method C)
Moisture Content – Granular Material	+/- 2 percent of optimum

1. We recommend that structural fill be tested for moisture content and compaction during placement. Should the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested, as required, until the specified moisture and compaction requirements are achieved.

4.2.4 Utility Trench Backfill

Trench excavations should be made with sufficient working space to permit construction including backfill placement and compaction. If backfilled with relatively clean granular material, utility trenches should be capped with at least 18 inches of low permeability fill in non-pavement areas to reduce the infiltration and conveyance of surface water through the trench backfill. Alternatively, trenches should be backfilled with material that approximately matches the permeability characteristics of the surrounding soil. Fill placed as backfill for utilities located below the slab should consist of compacted structural fill or suitable bedding material.

4.2.5 Grading and Drainage

Adequate drainage should be provided at the site to reduce the likelihood of an increase in moisture content of the foundation soils. Finished grade should be sloped away to reduce the likelihood of water ponding near the structures.

4.2.6 Construction Considerations

We expect the soil subgrade to consist primarily of glaciomarine clay for the footings and existing fill for the slab-on-grade. Such soils and site conditions are sensitive to moisture and unstable subgrade conditions could develop during general construction operations, particularly if the soils are wetted and/or subjected to repetitive construction traffic. Should unstable subgrade conditions develop, stabilization measures will need to be employed. Contractors experienced in earthwork construction in New England should be aware of this soil behavior and the effect that

moisture and site traffic have on workability. If construction starts in the wet or winter months, the contractor should include a contingency in his cost estimate to allow the use of imported fill and the disposal of unsuitable site soils.

Construction traffic over the completed subgrade should be avoided to the extent practical. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. If the subgrade should become frozen, wet, or disturbed, the affected material should be removed, or should be scarified, moisture conditioned, and recompacted.

As a minimum, temporary excavations should be sloped or braced as required by Occupational Health and Safety Administration (OSHA) regulations to provide stability and safe working conditions. The contractor, by his contract, is usually responsible for designing and constructing stable, temporary excavations and should shore, slope or bench the sides of the excavations, as required, to maintain stability of both the excavation sides and bottom. All excavations should comply with applicable local, State and federal safety regulations, including the current OSHA Excavation and Trench Safety Standards.

The geotechnical engineer should be retained during the construction phase of the project to observe earthwork and to perform necessary tests and observations during subgrade preparation; proofrolling; placement and compaction of controlled compacted fills; backfilling of excavations; and just prior to construction of foundations.

Should dewatering be required due to surface runoff or fluctuations in the groundwater table, dewatering can likely be accomplished by pumping from filtered pumps installed in crushed stone sumps. The contractor should prevent groundwater and surface water runoff from collecting in excavations. Subgrade soils that become unstable because of such water and/or reworking by construction activity should be removed and replaced, as necessary.

4.3 Foundation Recommendations

We estimate that post-construction total settlements may be up to about 1 to 1½ inches with differential settlement about half the total settlement. Provided the risk of such settlements is acceptable, the foundations of the proposed building may derive support from the native soils following treatment as described below.

The footing subgrades should be overexcavated with a flat bladed bucket to avoid disturbing the subgrade, to at least 12 inches below the underside of footing. The excavation should be made sufficiently wide to allow a 5-ton (static weight) single steel drum roller compactor (with rubber drive wheels) to gain access. The exposed subgrade should be statically proofrolled with this compactor while being monitored by the Terracon geotechnical engineer. Too much proofrolling may disturb the subgrade. Soft subgrades that exhibit excessive displacement (pumping and weaving) may need to be excavated further or have stabilization measures applied.

Following successful completion of proofrolling, a woven geotextile (Mirafi 500X or equivalent) should be placed on the subgrade, which may then be raised to the underside of footing level by placing minus ¾-inch crushed stone. The crushed stone should be "seated" with several passes of a 5-ton roller. This compactive effort should also be monitored by the geotechnical engineer to avoid disturbance to the underlying sensitive fine grained soils. As an alternative to the 12 inches of overexcavation for crushed stone, a minimum 4-inch thick mud mat may be placed.

The proposed addition may be supported on shallow spread footings provided the subgrade preparation measures above and detailed in the Construction Considerations sections of this report are followed. Design recommendations for shallow foundations are presented in the following paragraphs.

4.3.1 Design Recommendations – Spread Footings

DESCRIPTION	VALUE
Net allowable bearing pressure [1]	1,500 psf
Minimum strip footing width	18 inches
Minimum isolated spread footing width	24 inches
Minimum embedment below finished grade for frost protection	4.5 feet
Approximate total settlement [2]	≤ 1-1/2 inch
Estimated differential settlement [2]	≤ ¾ inch
Total Unit Weight (γ)	120 pcf
Passive earth pressure coefficient, K_p [3]	3.0 (ultimate)
Coefficient of sliding friction [4]	0.5 (ultimate)

1. The recommended net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation.
2. Estimated post-surcharge settlements. Foundation settlement will depend upon the variations within the subsurface soil profile, the structural loading conditions, the embedment depth of the footings, the thickness of compacted fill, and the quality of the earthwork operations.
3. Passive pressure calculated with this parameter should be reduced by at least a factor of safety of 3, to reflect the amount of movement required to mobilize the passive resistance.
4. A factor of safety of at least 1.5 should be applied to the sliding resistance.

Site underground utilities, light standard foundations, drainage structures, and the like may be soil supported in a similar manner to building footings. Foundations for site appurtenances may be designed on the basis of a net allowable bearing pressure of 2 ksf. However, the net allowable bearing pressure should be reduced to 1.5 ksf if the foundation dimensions are less than the recommended minimum.

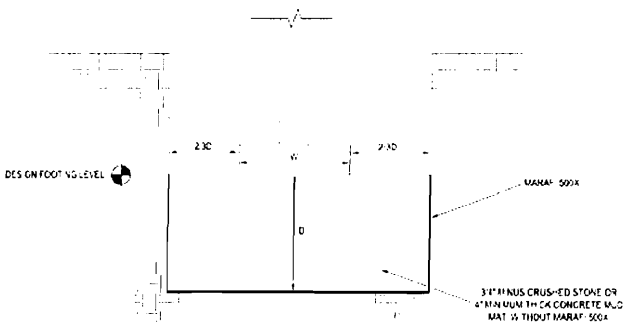
4.3.2 Construction Considerations

The existing fill and native glaciomarine clay is not suitable for foundation support in its current state. Existing fill should be removed within the foundation bearing zone, which is defined as the volume below 1H:1V lines extending outward and downward from the lower edges of the footings. Glaciomarine clay should be removed to a minimum of 12 inches below proposed footings if using crushed stone, or a minimum of 4 inches if using a mud mat, as discussed within this report.

Foundation subgrades consisting of glaciomarine clay should be carefully excavated with a flat blade bucket to reduce disturbance. The exposed subgrade should be proofrolled with a static heavy roller compactor under the direction of a geotechnical engineer. However, the degree of proofrolling should be reviewed by the site geotechnical engineer. Proofrolling should not be completed if it will disturb underlying sensitive soils or if the groundwater table has risen close to excavation level. During the proofrolling process, the subgrade should be observed by the geotechnical engineer or his representative to identify soft or loose areas. Soft/loose areas and unstable zones should be replaced with minus ¾-inch crushed stone, as needed.

The glaciomarine clay will be susceptible to disturbance due to a combination of precipitation/surface runoff and construction activities. Consideration should therefore be given to protecting the clay subgrade with a minimum 4-inch thick lean concrete mud mat. The use of a protective mud mat will depend on the conditions at time of construction.

The base of all foundation excavations should be free of water and loose soil prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Should the soils at bearing level become wet, disturbed or frozen, the affected soil should be removed prior to placing concrete. The geotechnical engineer should be retained to observe and test the soil foundation bearing materials.



If unsuitable bearing soils are encountered in footing excavations, the excavations should be extended deeper to suitable soils and the footings could bear directly on these soils at the lower level. The footings could also bear on properly compacted minus ¾-inch crushed stone extending down to the suitable soils. Overexcavation for crushed stone placement below footings should extend laterally beyond all edges of the footings at least 8 inches per foot of overexcavation depth below footing base elevation. The overexcavation should then be backfilled up to the footing base elevation in lifts of 8 inches or less in loose thickness and compacted. The overexcavation and backfill procedure is described in the adjacent figure.

The contractor should be required to maintain a stable excavation and subgrade during construction. The contractor should prevent groundwater and surface water runoff from collecting in the excavation. Subgrade soils that become unstable because of water and/or reworking by construction activity should be replaced with compacted structural fill or minus ¾-inch crushed stone, as necessary.

4.4 Slabs-On-Grade

4.4.1 Design Recommendations

DESCRIPTION	VALUE
Floor Slab support [1]	12-inch thick layer compacted structural fill
Modulus of subgrade reaction	200 pounds per square inch per in (psi/in)

1. Floor slabs should be structurally independent of any building footings or walls to reduce the possibility of floor slab cracking caused by differential movements between the slab and foundation.

Where appropriate, control joints should be saw-cut in the slab to help control the location and extent of cracking. For additional recommendations refer to the ACI Design Manual.

A vapor retarder should be used beneath concrete slabs-on-grade. The slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder.

4.4.2 Construction Considerations

On most project sites, the site grading is generally accomplished early in the construction phase. However as construction proceeds, the subgrade may be disturbed because of utility excavations, construction traffic, precipitation, etc. As a result, the slab subgrade may not be suitable for placement of concrete. In this event, corrective action will be required.

We recommend the existing fill underlying the floor slab be rough graded and then thoroughly compacted with at least four passes each way crosswise of a minimum 10-ton (static weight) vibratory roller compactor. Particular attention should be paid to high traffic areas that were rutted and disturbed earlier and to areas where backfilled trenches are located. Areas with unsuitable conditions should be repaired by removing and replacing the affected material with properly compacted fill. Slab subgrade areas should be moisture conditioned and properly compacted to the recommendations in this report, immediately prior to placement of the base material and concrete.

4.5 Seismic Considerations

DESCRIPTION	VALUE
Code Used	International Building Code (IBC) – 2009 Edition
Site Class	D
Maximum considered earthquake ground motions (5 percent damping)	0.078g (1.0 second spectral response acceleration)
	0.321g (0.2 second spectral response acceleration)
Liquefaction potential in event of an earthquake	Not susceptible

4.6 Pavement

4.6.1 Design Recommendations

Traffic Area	Bituminous Concrete Top Course	Bituminous Concrete Binder Course	Portland Cement Concrete	Gravel Base Course	Gravel Subbase Course	Total Thickness
Standard Duty	1.5	1.5	N/A	6	6	15
Heavy Duty	1.5	2.5	N/A	6	10	20
Rigid	N/A	N/A	6	6	10	22

N/A = Not Applicable

Pavement designs were based on *AASHTO Guide for Design of Pavement Structures (1993)* and our experience with similar projects. The thickness of each course is a function of subgrade strength, traffic, design life, serviceability factors, and frost susceptibility. The design of pavement thickness was based on the following:

- 30,000 18-kip Equivalent Axle Loads (EALs) for standard-duty parking lot
- 100,000 18-kip EALs for heavy-duty driveways and truck access lanes
- Soil characterization of "poor", based on the encountered subsurface conditions
- Design life of 20 years

Pavements subjected to high traffic volumes and heavy trucks require thicker pavement sections. Rigid concrete pavement is recommended at the location of dumpsters where trash trucks will park, areas of channelized traffic, and loading dock areas. For dumpster pads, as a minimum, the concrete pavement area should be large enough to support the container and tipping axle of the refuse truck. The outer edges of concrete pavement are susceptible to damage as trucks move from the concrete to the adjacent bituminous concrete. Therefore, the concrete thickness of the outer 2 feet of the concrete pavement should be increased to 12

APPENDIX A

FIELD EXPLORATION

inches. Dowels should be placed across slab expansion joints to limit differential settlements. Welded wire mesh (¼ inch) should be incorporated into the rigid concrete pavement design to provide tensile strength and increase serviceability. The above sections represent minimum thicknesses and, as such, periodic maintenance should be anticipated.

Gravel base course should be Maine Department of Transportation (MDOT) Granular Base Section, Section 703.06, Type A. Gravel subbase course should be MDOT Granular Subbase Section 703.20, Gravel Borrow 1. Select pavement fills should be placed and compacted to at least 92 percent of the maximum dry density, as determined by ASTM D1557. 0Bituminous concrete should be an approved job mix formula (JMF) in accordance with MDOT, Section 401.03, Composition of Mixtures. The bituminous concrete should be placed in accordance with MEDOT standards and compacted to a range between 92.5 to 97.5 percent, as compared to the theoretical mix density for the job mix formula. Portland cement concrete should conform to MDOT Section 502 and have a minimum compressive strength of 5,000 psi.

4.6.2 Construction Considerations

Pavement subgrades prepared early in the project should be carefully evaluated as the time for pavement construction approaches. We recommend the pavement areas be stripped of existing organic material, rough graded, and then thoroughly compacted with a minimum 10-ton (static weight) vibratory roller compactor, before being proofrolled with a loaded tandem-axle dump truck. Particular attention should be paid to high traffic areas that were rutted and disturbed, areas where backfilled trenches are located, and where existing inorganic fill is to remain beneath the pavement. Areas where unsuitable conditions are located should be repaired by replacing the materials with properly compacted fill. When proofrolling/subgrade stabilization has been completed to the satisfaction of the geotechnical engineer, subbase and base may be placed.

Truck or construction traffic may disturb subgrades and overexcavation or ground stabilization may be required prior to paving. Future performance of pavements constructed on the site will be dependent upon maintaining stable moisture content of the subgrade soil. The performance of pavements may be enhanced by reducing excess moisture that can reach the subgrade soils. The following recommendations should be considered at minimum:

- Site grading at a minimum 2 percent grade away from the pavements;
- Sealing landscaped areas in or adjacent to pavements to reduce moisture migration to subgrade soils;
- Placing compacted backfill against the exterior side of curb and gutter; and,
- Placing curb, gutter and/or sidewalk directly on subgrade soils without the use of base course materials.

Preventative maintenance should be planned and provided through an on-going pavement management program in order to enhance future pavement performance. Preventative

maintenance activities are intended to slow the rate of pavement deterioration, and to preserve the pavement investment.

Preventative maintenance consists of both localized maintenance, e.g., crack and joint sealing and patching, and global maintenance, e.g., surface sealing. Preventative maintenance is usually the first priority when implementing a planned pavement maintenance program and provides the highest return on investment for pavements. Prior to implementing any maintenance, additional engineering observation is recommended to assess the type and extent of preventative maintenance.

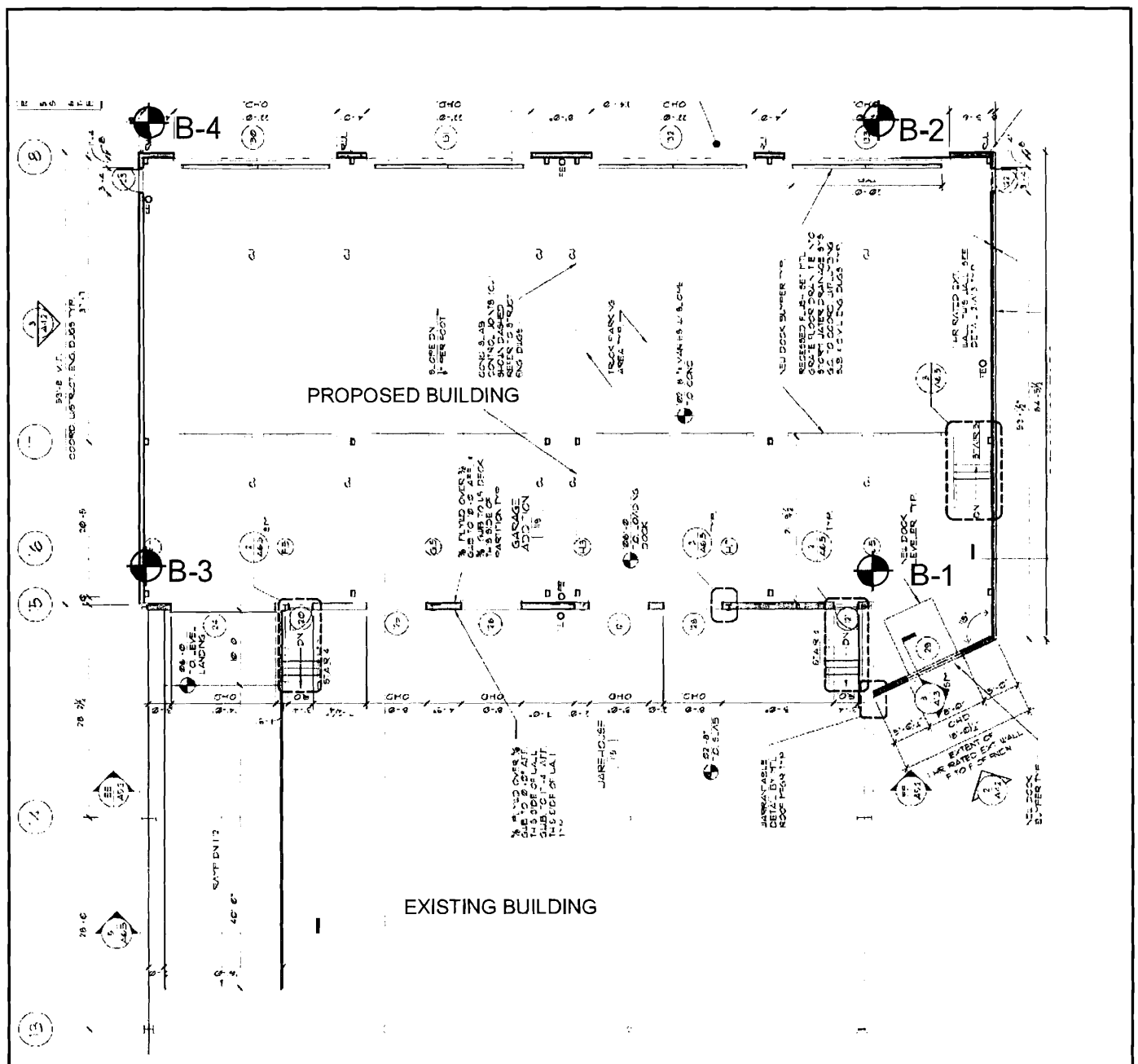
5.0 GENERAL COMMENTS

Terracon should be retained to review the final design plans and specifications, so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Terracon also should be retained to provide observation and testing services during grading, excavation, foundation construction and other earth-related construction phases of the project.

The analysis and recommendations presented in this report are based upon the data obtained from the explorations performed at the indicated locations and from other information discussed in this report. This report does not reflect variations that may occur between explorations, across the site, or due to the modifying effects of weather. The nature and extent of such variations may not become evident until during or after construction. If variations appear, we should be immediately notified so that further evaluation and supplemental recommendations can be provided.

The scope of services for this project does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.



NOTES:

1. THIS FIGURE WAS PREPARED FROM A PLAN OBTAINED FROM BKA ARCHITECTS.

2. TEST BORINGS SHOWN AS B-1 THROUGH B-4 WERE ADVANCED ON NOVEMBER 13, 2009 UNDER THE DIRECTION OF TERRACON WITH EQUIPMENT OWNED AND OPERATED BY NORTHERN TEST BORINGS OF GORHAM, MAINE.

3. THE APPROXIMATE LOCATIONS OF THE SUBSURFACE EXPLORATIONS WERE LOCATED BY CLIENT PRIOR TO MOBILIZATION FOR DRILLING. THE LOCATIONS SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.

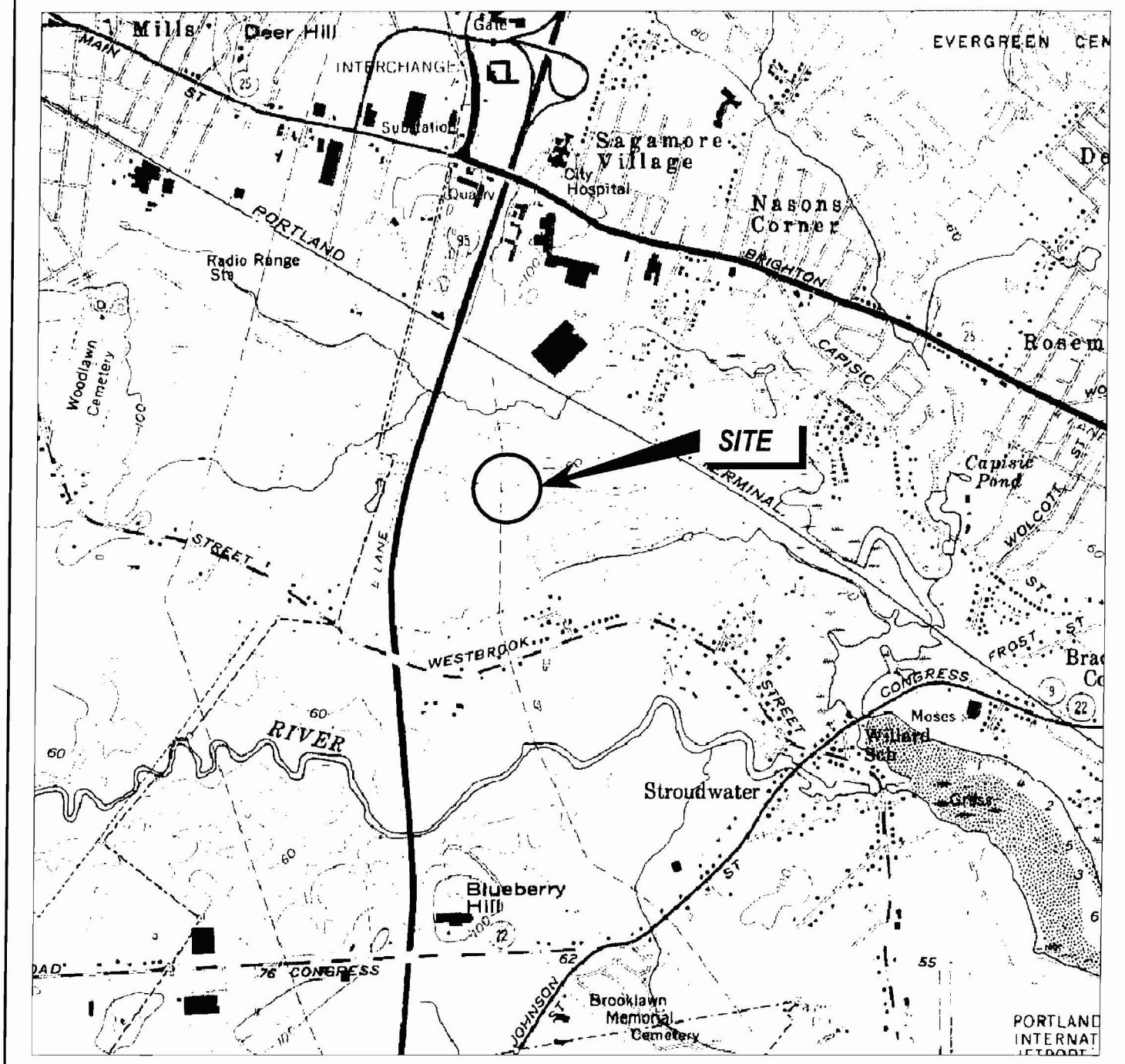
4. USE OF THIS PLAN IS LIMITED TO THE ILLUSTRATION OF THE APPROXIMATE LOCATION OF THE SUBSURFACE EXPLORATIONS AND OTHER PERTINENT SITE FEATURES. OTHER USE OF THIS PLAN WITHOUT PERMISSION FROM TERRACON IS PROHIBITED.

LEGEND

B-1 APPROXIMATE TEST BORING LOCATION

GRAPHIC SCALE
5 0 5 10 20
(IN FEET)

Project Mngr: WS	Project No. J3095112	Terracon	BORING LOCATION DIAGRAM
Drawn By: MCR	Scale: 1" = 20'		W. B. MASON ADDITION 106 PINETREE INDUSTRIAL PARKWAY PORTLAND, MAINE
Checked By: WS	File No. J3095112.dwg		Exhibit No. A-2
Approved By: WS	Date: December 2009	15 Holly Street, Unit 105 Scarborough, ME 04074 Ph. (207) 396-5374 Fax (207) 396-5394	



SCALE: 1:24 000

1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

SOURCE:
USGS PORTLAND WEST, MAINE
1978

Project Mngr:	WS
Drawn By:	MCR
Checked By:	WS
Approved By:	WS

Project No.	J3095112
Scale:	AS SHOWN
File No.	J3095112.dwg
Date:	December 2009

Terracon
15 Holly Street, Unit 106 Scarborough, ME 04074
Ph. (207) 396-6374 Fax (207) 396-5394

TOPOGRAPHIC VICINITY MAP

W. B. MASON ADDITION
106 PINETREE INDUSTRIAL PARKWAY
PORTLAND, MAINE

Exhibit No.

A-1

LOG OF BORING NO. B-2

CLIENT **BKA Architects**

SITE LOCATION **106 Pine Tree Industrial Parkway, Portland, Maine**

PROJECT NAME **W.B. Mason Addition**

GRAPHIC LOG	DESCRIPTION	ELEV.	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - Blows per 0.5 ft.	TESTS WATER CONTENT,%	TESTS PI	TESTS LL	TESTS Other Tests
	Approx. Surface Elev.:											PP SHEAR STRENGTH (tsf)
	1 ~3-inches asphalt. ~8-inches processed gravel. **(ASPHALT/GRAVEL)**											
	Fill - POORLY-GRADED SAND, with silt and gravel, Brown. Change at approx. 4 feet.			FILL	1	SS		7 - 8 - 6 - 4				
	4 **(FILL)**											
			5	CL	2	SS		3 - 3 - 2 - 2	39			1.0
			10	CL	3	SS		WOH/12" - 1/12"				
	LEAN CLAY, olive to gray.		15	CL	4	SS		WOH/12" - 1/12"				
			20	CL	5	SS	24	WOH/24"				
			25	CL	6	SS	24	WOH/24"				
			30	CL	7	SS	24	WOH/24"				
	32 **(GLACIOMARINE)**											
	Boring Terminated at 32 feet											

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

Casing Type: HSA
Casing Dia: 3.25-inch
Hammer Type: Automatic
Hammer Wt: 140 lbs.
Drop Method: Automatic Hammer

PP = Pocket penetrometer
TSF = Tons per Square Foot.

WATER LEVEL OBSERVATIONS, ft			
WL	▽ WD N/E	▼	
WL	▼	▼	
WL			

Terracon

BORING STARTED	11-13-09		
BORING COMPLETED	11-13-09		
RIG	Diedrich	FOREMAN	Nick
LOGGED	WAS	JOB #	J3095112

BOREHOLE 99 J3095112.GPJ TERRACON 20080217.GDT 12/4/09

LOG OF BORING NO. B-1

CLIENT **BKA Architects**

SITE LOCATION **106 Pine Tree Industrial Parkway, Portland, Maine**

PROJECT NAME **W.B. Mason Addition**

GRAPHIC LOG	DESCRIPTION	ELEV.	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - Blows per 0.5 ft.	TESTS WATER CONTENT,%	TESTS PI	TESTS LL	Other Tests
	Approx. Surface Elev.:											PP SHEAR STRENGTH (tsf)
	1 ~2.75-inches asphalt. ~8-inches processed gravel. (ASPHALT/GRAVEL)			CL	1	SS	13	8 - 4 - 4 - 6				1.25
			5	CL	2	SS	21	2 - 3 - 3 - 3				
			10	CL	3	SS	18	2 - 1 - 2 - 1	36	24	46	0.75
	LEAN CLAY, olive to gray.		15	CL	4	SS	24	WOH/12" - 1 - 1				
			20	CL	5	SS	24	WOH/24"	48	15	39	
			25	CL	6	SS	24	WOH/24"				
			30	CL	7	SS	24	WOH/24"	52	14	37	
	32 (GLACIOMARINE) *Boring Terminated at 32 feet*											

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

Casing Type: HSA
Casing Dia: 3.25-inch
Hammer Type: Automatic
Hammer Wt: 140 lbs.
Drop Method: Automatic Hammer

PP = Pocket penetrometer
TSF = Tons per Square Foot.

WATER LEVEL OBSERVATIONS, ft		
WL	WD N/E	
WL		
WL		

Terracon

BORING STARTED	11-13-09		
BORING COMPLETED	11-13-09		
RIG	Diedrich	FOREMAN	Nick
LOGGED	WAS	JOB #	J3095112

BOREHOLE 99 J3095112.GPJ TERRACON 20080217.GDT 12/4/09

LOG OF BORING NO. B-4

CLIENT **BKA Architects**

SITE LOCATION **106 Pine Tree Industrial Parkway, Portland, Maine**

PROJECT NAME **W.B. Mason Addition**

GRAPHIC LOG	DESCRIPTION Approx. Surface Elev.:	ELEV.	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - Blows per 0.5 ft.	TESTS WATER CONTENT, %	TESTS PI	TESTS LL	TESTS Other Tests
												PP SHEAR STRENGTH (tsf)
	1 ~3-inches asphalt. ~8-inches processed gravel. **(ASPHALT/GRAVEL)**											
	Fill - POORLY-GRADED SAND, with silt and gravel, Brown. Change at approx. 4 feet.			FILL	1	SS	18	10 - 8 - 8 - 7				
	4 **(FILL)**											
			5	CL	2	SS	24	4 - 4 - 3 - 3	38			1.25
			10	CL	3	SS	24	1/12" - 1/12"				
	LEAN CLAY, olive to gray.		15	CL	4	SS	24	WOH/24"				
			20	CL	5	SS	24	WOH/24"				
			25	CL	6	SS	24	WOH/24"				
			30	CL	7	SS	24	WOH/24"				
	32 **(GLACIOMARINE)** *Boring Terminated at 32 feet*											

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

Casing Type: HSA
Casing Dia: 3.25-inch
Hammer Type: Automatic
Hammer Wt: 140 lbs.
Drop Method: Automatic Hammer

PP = Pocket penetrometer
TSF = Tons per Square Foot.

WATER LEVEL OBSERVATIONS, ft			
WL	▽	WD N/E	▼
WL	▼		▼
WL			

Terracon

BORING STARTED	11-13-09		
BORING COMPLETED	11-13-09		
RIG	Diedrich	FOREMAN	Nick
LOGGED	WAS	JOB #	J3095112

BOREHOLE 99 J3095112.GPJ TERRACON 20080217.GDT 12/4/09

LOG OF BORING NO. B-3

CLIENT **BKA Architects**

SITE LOCATION **106 Pine Tree Industrial Parkway, Portland, Maine**

PROJECT NAME **W.B. Mason Addition**

GRAPHIC LOG	DESCRIPTION	ELEV.	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - Blows per 0.5 ft.	TESTS WATER CONTENT,%	TESTS PI	TESTS LL	TESTS Other Tests
	Approx. Surface Elev.:											PP SHEAR STRENGTH (tsf)
	1 ~4-inches asphalt. ~8-inches processed gravel. **(ASPHALT/GRAVEL)**											
	Fill - POORLY-GRADED SAND, with silt and gravel, Brown. Change at approx. 4 feet.			FILL	1	SS	12	6 - 5 - 5 - 6				
	4 **(FILL)**											
			5	CL	2	SS	24	2 - 3 - 3 - 2	43			1.0
			10	CL	3	SS	24	1/12" - 1/12"				
	LEAN CLAY, olive to gray.		15	CL	4	SS		WOH/24"				
			20	CL	5	SS		WOH/24"				
			25	CL	6	SS		WOH/24"				
			30	CL	7	SS		WOH/24"				
	32 **(GLACIOMARINE)**											
	Boring Terminated at 32 feet											

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

Casing Type: HSA
Casing Dia: 3.25-inch
Hammer Type: Automatic
Hammer Wt: 140 lbs.
Drop Method: Automatic Hammer

PP = Pocket penetrometer
TSF = Tons per Square Foot.

WATER LEVEL OBSERVATIONS, ft		
WL	WD N/E	
WL		
WL		

Terracon

BORING STARTED	11-13-09		
BORING COMPLETED	11-13-09		
RIG	Diedrich	FOREMAN	Nick
LOGGED	WAS	JOB #	J3095112

APPENDIX B

SUPPORTING DOCUMENTS

Field Exploration Description

Terracon monitored the advancement of four test borings (B-1 through B-4) throughout the proposed building area on November 13, 2009. The explorations were advanced using a Diedrich all terrain vehicle-mounted rotary drill rig, owned and operated by Northern Test Boring, Inc. of Gorham, Maine. The borings were advanced using 3-1/4 inch I.D. continuous flight hollow-stem augers (HSA) and terminated in the glaciomarine deposit.

In the split-barrel sampling procedure, the number of blows required to advance a standard 2-inch O.D. split-barrel sampler typically the middle 12 inches of the total 24-inch penetration by means of a 140-pound autohammer with a free fall of 30 inches is the Standard Penetration Test (SPT) resistance value "N". This "N" value is used to estimate the *in-situ* relative density of cohesionless soils and consistency of cohesive soils. The samples were placed in labeled glass jars and taken to our Scarborough (Portland) laboratory for further review, possible testing, and classification.

In the thin-walled tube sampling procedure, a thin-walled, seamless steel tube with a sharp cutting edge is pushed hydraulically into the soil to obtain a relatively undisturbed sample. The samples were tagged for identification, sealed to reduce moisture loss, and taken to our Rocky Hill (Hartford) laboratory for further examination, testing, and classification.

Information provided on the boring logs attached to this report includes soil descriptions, relative density and/or consistency evaluations, boring depths, sampling intervals, and groundwater conditions. The borings were backfilled with auger cuttings prior to the drill crew leaving the site.

Field logs of the borings were prepared by a Terracon field engineer. These logs included visual classifications of the materials encountered during drilling as well as interpretation by our field engineer of the subsurface conditions between samples. Final boring logs included with this report represent further interpretation by the geotechnical engineer of the field logs and incorporate, where appropriate, modifications based on laboratory classification of the samples.

Ground surface elevation was not available to us for preparation of this report. All borings were completed from existing grade. The approximate boring locations were measured by taping from existing features in the field and by estimating right angles. The locations and elevations of the borings should be considered accurate only to the degree implied by the means and methods used to define them.

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]					Soil Classification	
					Group Symbol	Group Name [B]
Coarse Grained Soils: More than 50% retained on No. 200 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	$Cu \geq 4$ and $1 \leq Cc \leq 3$ [E]		GW	Well-graded gravel [F]
			$Cu < 4$ and/or $1 > Cc > 3$ [E]		GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH		GM	Silty gravel [F,G,H]
			Fines classify as CL or CH		GC	Clayey gravel [F,G,H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	$Cu \geq 6$ and $1 \leq Cc \leq 3$ [E]		SW	Well-graded sand [I]
			$Cu < 6$ and/or $1 > Cc > 3$ [E]		SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH		SM	Silty sand [G,H,I]
			Fines Classify as CL or CH		SC	Clayey sand [G,H,I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots on or above "A" line [J]		CL	Lean clay [K,L,M]
			PI < 4 or plots below "A" line [J]		ML	Silt [K,L,M]
		Organic:	Liquid limit - oven dried	< 0.75	OL	Organic clay [K,L,M,N]
			Liquid limit - not dried			Organic silt [K,L,M,O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above "A" line		CH	Fat clay [K,L,M]
			PI plots below "A" line		MH	Elastic Silt [K,L,M]
		Organic:	Liquid limit - oven dried	< 0.75	OH	Organic clay [K,L,M,P]
			Liquid limit - not dried			Organic silt [K,L,M,Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor				PT	Peat

[A] Based on the material passing the 3-in. (75-mm) sieve

[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ≥ 15% sand, add "with sand" to group name.

[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H] If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.

[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[N] PI ≥ 4 and plots on or above "A" line.

[O] PI < 4 or plots below "A" line.

[P] PI plots on or above "A" line.

[Q] PI plots below "A" line.

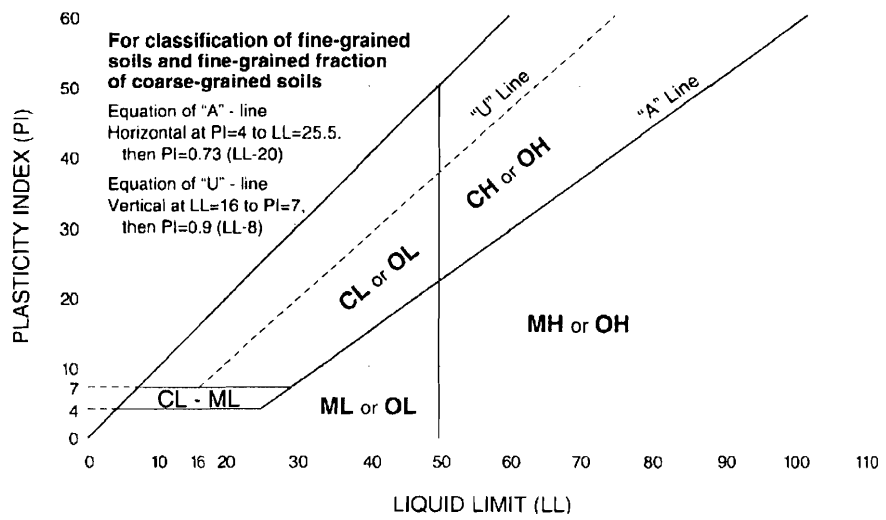
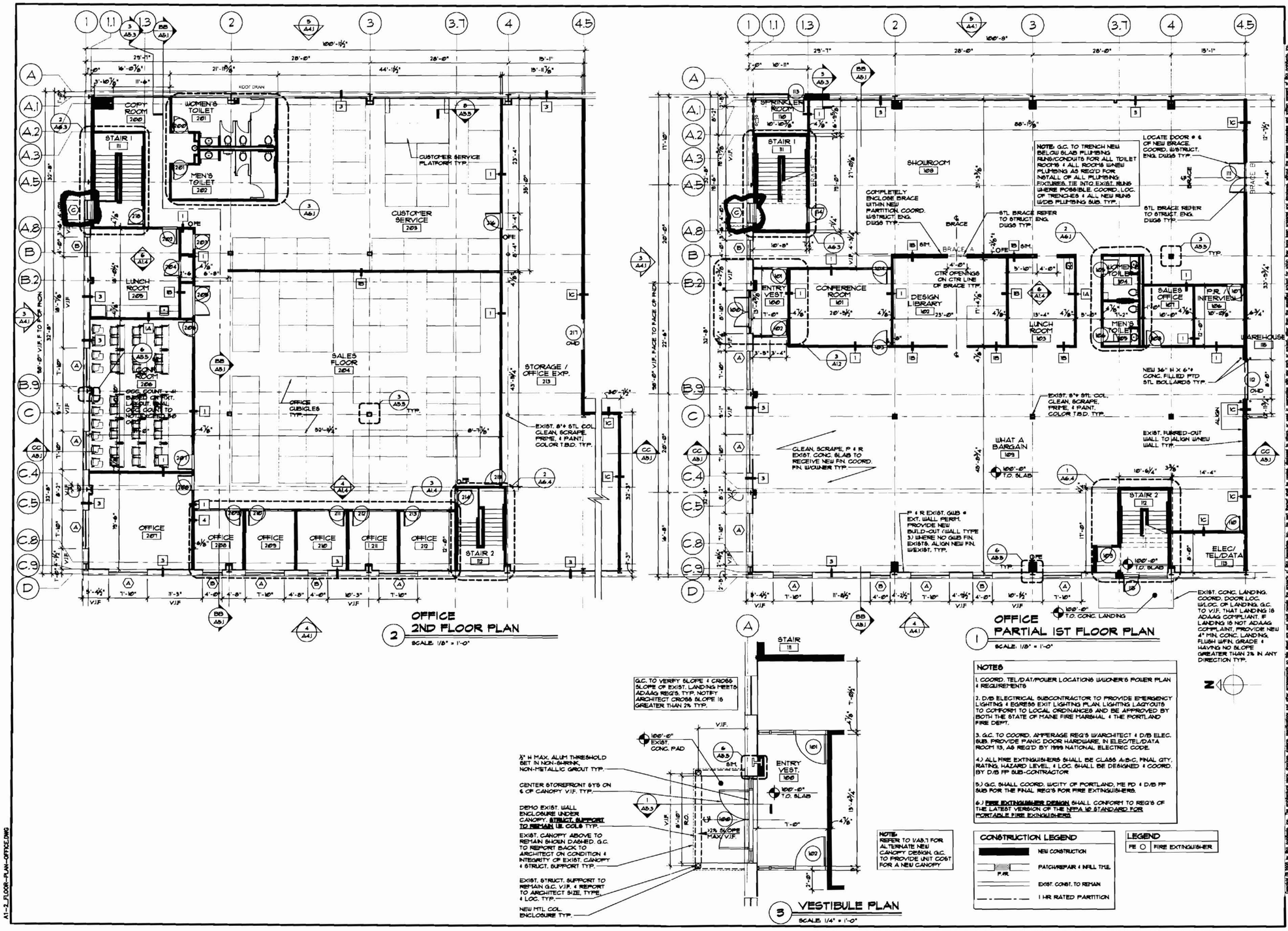


Exhibit B-2



2 OFFICE 2ND FLOOR PLAN
SCALE: 1/8" = 1'-0"

1 OFFICE PARTIAL 1ST FLOOR PLAN
SCALE: 1/8" = 1'-0"

3 VESTIBULE PLAN
SCALE: 1/4" = 1'-0"

A1-2_FLOOR-PLAN-OFFICE.DWG

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e-mail: bka@bkaarch.com

Date	Revisions
1/08/09	REVISED PER F.B.O. COMMENTS
12/02/08	REVISED PER STRUCTURAL CHANGES
09/21/08	ISSUED FOR PERMIT
04/08/08	ISSUED FOR PRICING

OFFICE FLOOR PLANS

W.B. MASON
W.B. MASON PORTLAND
826 PINE TREE INDUSTRIAL PARKWAY
PORTLAND, ME

Scale:	As noted
Date:	12/8/08
Drawn By:	JJC/MAP
Checked By:	MAP
Job Number:	208862

Drawing:

A1.2

GENERAL FINISH NOTES

1. UPON RECEIPT FROM THE MANUFACTURER, THE INSTALLER SHALL INSPECT ALL MATERIALS FOR DEFECTS, SHIPPING DAMAGE, CORRECT COLOR AND PATTERN. DAMAGED OR INCORRECT MATERIALS SHALL BE RETURNED TO THE MANUFACTURER FOR IMMEDIATE REPLACEMENT TO PREVENT DELAYS IN THE COMPLETION OF THE WORK. THE INSTALLER SHALL INFORM THE ARCHITECT OF ANY DEFECTIVE MATERIALS AND COORDINATE WITH THE MANUFACTURER FOR AN ACCURATE SHIPPING DATE FOR THE REPLACEMENT MATERIALS. THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF LOCATION CHANGES IN DYE LOTS OR COLOR SHIFTS.

2. ALL FINISHES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S FINISH SPECIFICATIONS AND INSTRUCTIONS AND IN A MANNER CONSISTENT WITH THE HIGHEST QUALITY STANDARDS OR WORKMANSHIP. FINISH SHALL MEET OR EXCEED ALL APPLICABLE CODE REQUIREMENTS.

3. SHOULD THE INSTALLER FIND ANY DISCREPANCIES, OMISSIONS, AMBIGUITIES OR CONFLICTS ON THE PLANS, HE SHOULD BRING THE ITEM(S) TO THE ARCHITECT'S ATTENTION FOR DIRECTION BEFORE PROCEEDING WITH ANY WORK IN QUESTION. ALL NEW SURFACES TO BE PAINTED SHALL RECEIVE (1) COAT PRIMER AND A MINIMUM OF (2) FINISH COATS. SECOND FINISH SHALL BE APPLIED SUBSEQUENT TO DELIVERY AND INSTALLATION OF EQUIPMENT.

4. DO NOT PAINT PRE-FINISHED ITEMS AND SURFACES (E.G. ANODIZED ALUMINUM, BAKED ENAMEL PANELS, PLASTIC SWITCH PLATES, ETC.,) UNLESS OTHERWISE NOTED.

5. ALL REGISTERS, VENTS, GRILLES, DIFFUSERS, ELECTRICAL OUTLET COVERS, AND ACCESS PANELS SHALL BE PRE-FINISHED TO MATCH ADJACENT WALL SURFACES, UNLESS OTHERWISE NOTED.

6. ALL DOOR FRAMES DESIGNATED TO BE PAINTED SHALL BE FINISHED WITH SEMI-GLOSS ENAMEL. FOR ALL SURFACES, SEE FINISH SCHEDULE.

7. ALL WALLS SCHEDULED TO RECEIVE PAINT SHALL BE PAINTED CORNER TO CORNER AND FLOOR TO CEILING, UNLESS OTHERWISE NOTED.

8. COORDINATE PATCHING OF FINISHES AS A RESULT OF MECHANICAL AND ELECTRICAL WORK REQUIRED. ALL WORK SHALL BE DONE AS REQUIRED TO RESTORE FINISHES AND CONDITIONS TO MATCH.

DOOR AND GLAZING SYSTEM NOTES

1.) ALL DOORS SHALL COMPLY WITH GOVERNING CODES AND REGULATIONS. PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR (3) YEARS. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. ALL DOORS SHALL CONFORM TO NSBC, AAB, AND ADAAG REGULATIONS REGARDING OPERATION AND HARDWARE MOUNTING LOCATIONS.

2.) SUBMIT TO ARCHITECT FOR REVIEW/APPROVAL ALL SAMPLES, SHOP DRAWINGS, PRODUCT DATA, WARRANTY, SEALANTS, TEST REPORTS, FINISH, & ENG. CERTIFICATION THAT SYSTEM DESIGN MEETS FM-1-90 PRIOR TO BEGINNING THE FABRICATION PROCESS ON ANY WINDOW OR DOOR PRODUCT.

3.) PROVIDE FINISHED HARDWARE THROUGHOUT AS NEEDED FOR A COMPLETE AND PROPER INSTALLATION FOR SLINGING AND BIFOLD DOORS. HARDWARE QUALITY SHOULD BE HIGH-FREQUENCY FOR HIGH-TRAFFIC AREAS, AND MODERATE FREQUENCY FOR ALL OTHER LOCATIONS.

4.) THE SUB-CONTRACTOR SHALL PROVIDE THE SERVICES OF AN AHC OR DAHC MEMBER OF THE AMERICAN SOCIETY OF ARCHITECTURAL HARDWARE CONSULTANTS TO PREPARE AND/OR REVIEW HARDWARE SCHEDULE PRIOR TO SUBMISSION TO ARCHITECT FOR APPROVAL. ALL HARDWARE SHALL BE SATIN CHROME COMMERCIAL GRADE US26D UNLESS NOTED OTHERWISE.

5.) GENERAL HARDWARE REQUIREMENTS:
- HINGES, BUTTS, PIVOTS: FULL MORTISE, CONCEALED BALL BEARING TYPE - STANLEY O.A.E. (S.S. AT EXTERIOR DOORS)
- LOCKSETS AND LATCHSETS: H.D. COMMERCIAL CYLINDRICAL LEVER SETS - SARGENT 10 LINE LL LEVER HANDLE DESIGN O.A.E.
- CLOSERS: SARGENT 1231 SERIES, LCN 4041 SUPER SMOOTHEE O.A.E. (ALL CLOSERS TO MEET ADAAG REGULATIONS)
- EXIT DEVICES: VON DUPRIN - HIGH FREQUENCY O.A.E. (ADAAG COMPLIANT)
- DOOR TRIM: KICKPLATES - 8"X32"X.05", AND PUSH/PULLS - ROCKWOOD O.A.E.
- FLUSH BOLTS, SILENCERS, STOPS: IVES O.A.E.
- THRESHOLDS: (1/2" MAX.*2*) AND WEATHERSTRIPPING: NATIONAL GUARD O.A.E.

6.) PREPARE DOORS AND FRAMES, (2) MIN HEADER OF DBL. DR FRAMES TO RECEIVE HARDWARE AS PER FINAL SCHEDULE. PROVIDE FOR (3) SILENCERS ON SINGLE DOOR FRAMES. PROVIDE NOT LESS THAN (3) ANCHORS PER JAMB FOR ANCHORING OF FRAMES TO WALLS OR PARTITIONS.

7.) 1/4" TEMPERED GLAZING SHALL BE USED AT ALL DOOR AND ADJACENT LOCATIONS AS INDICATED ON THIS SHEET IN CONFORMANCE WITH THE LATEST REQUIREMENTS OF 2003 IBC W/THE STATE OF ME AMENDMENTS, 2003 UNIFORM FIRE CODE, & NFPA LIFE SAFETY CODE.

8.) ANY DOOR CARRYING A U.L. RATING SHALL BE INSTALLED IN A U.L. RATED FRAME WITH THE SAME DESIGNATION.

9.) ALL ALUMINUM THRESHOLDS SHALL BE SET IN GROUT AND SHALL NOT EXCEED 1/2" IN HEIGHT PER ADAAG REGULATIONS.

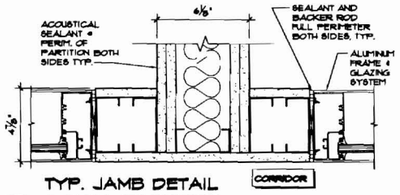
10.) INSTALL DOORS WITH NOT MORE THAN 1/8" CLEARANCE AT TOP AND SIDES, 1/4" CLEARANCE AT BOTTOM EXCEPT WHERE NOTED OTHERWISE.

11.) ALL INTERIOR METAL DOORS SHALL BE CONSTRUCTED OF 16 GAUGE COLD-ROLLED STEEL SEAMLESS, FULL FLUSH DESIGN, FACTORY PRIMED AND FIELD PAINTED.

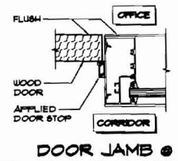
12.) DOOR FRAMES INSTALLED WITHIN A CONCRETE OR CMU WALL SHALL BE WELDED AND FULLY GROUTED SET WITH (3) ANCHORS PER JAMB. PRIOR TO GROUTING, COORDINATE ALL NECESSARY ROUGH-IN, INCLUDING ANY ACCESS SECURITY SYSTEM WIRING AND CONDUIT RUNS FOR THE SAME.

13.) ALL INTERIOR METAL FRAMES SHALL BE 16 GAUGE COLD-ROLLED STEEL UP TO 3'-0" WIDE, 14 GAUGE OVER 3'-0" WIDE, KNOCKDOWN (KD) TYPE FOR ANY FRAMES WITHOUT TRANSOMS OR SIDELIGHTS UP TO 3'-0" WIDE - OTHERWISE WELDED WITH MITERED OR COPED CORNERS, FACTORY PRIMED AND FIELD PAINTED.

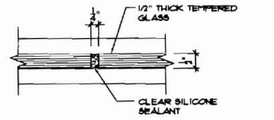
14.) ALL EXTERIOR METAL FRAMES SHALL BE WELDED AND BE 16 GAUGE GALVANIZED SHEET STEEL UP TO 3'-0" WIDE; 14 GAUGE OVER 3'-0" WIDE WITH MITERED OR COPED AND FULLY WELDED CORNERS, FACTORY PRIMED AND FIELD PAINTED.



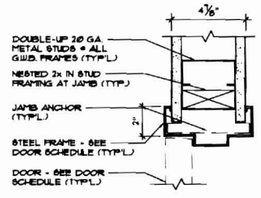
6 TYP. JAMB DETAIL @ WALL PARTITION
SCALE: 3" = 1'-0"



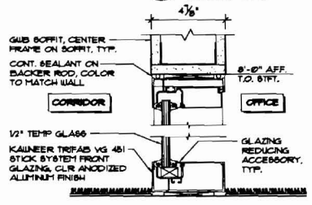
5 DOOR JAMB @ OFFICE GLAZING
SCALE: 3" = 1'-0"



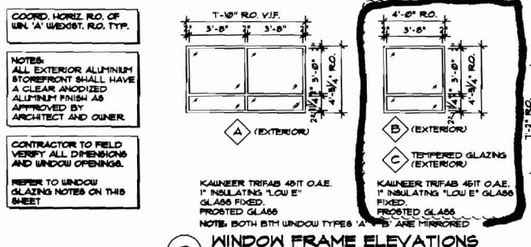
4 TYP. BUTT GLAZING DETAIL
SCALE: 3" = 1'-0"



8 DOOR HEAD DETAIL
SCALE: 3" = 1'-0"



7 HEAD/ SILL DETAIL @ OFFICE GLAZING
SCALE: 3" = 1'-0"

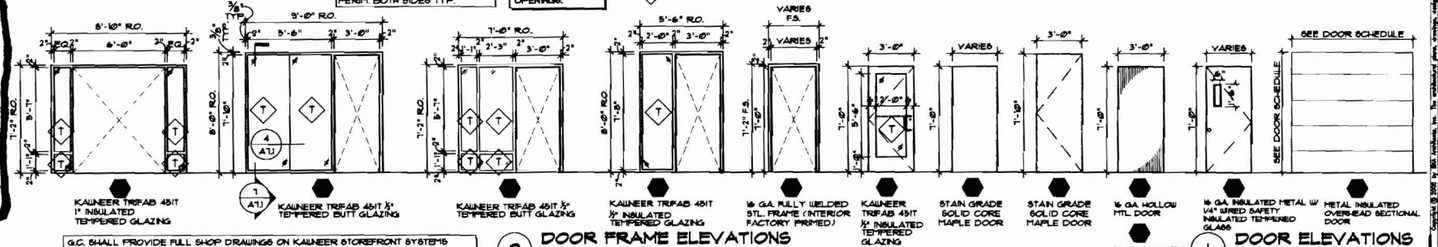


3 WINDOW FRAME ELEVATIONS
SCALE: 1/4"=1'-0"

ALL STOREFRONT & WINDOW SYS. SHALL HAVE ⅜" SHIM (PT & EXT. SYSTEMS) & SEALANT @ ENTIRE PERIM. BOTH SIDES TYP.

CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND OPENINGS.

T = TEMPERED



G.C. SHALL PROVIDE FULL SHOP DRAWINGS ON KAWNEER STOREFRONT SYSTEMS INCLUDING FULL & PUSH HARDWARE, FASTENING, LOCKING MECHANISMS, CLOSER, HINGES, AND GLASS AS WELL AS SAMPLES FOR APPROVAL BY OWNER & ARCHITECT

2 DOOR FRAME ELEVATIONS
SCALE: 1/4"=1'-0"

1 DOOR ELEVATIONS
SCALE: 1/4"=1'-0"

* NOTE: PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD, ALL EXTERIOR DOORS

** NOTE: G.C. COORD ROUGH OPENING SIZE TO MANUFACTURER'S RECOMMENDATIONS ACCORDING TO FINISH OPENINGS NOTED

1. PROVIDE CLOSER 2. PROVIDE CYLINDER LOCK 3. PROVIDE PUSH PULL 4. PROVIDE LEVER LOCK SETS 5. PROVIDE LEVER HANDLES 6. PROVIDE PANIC HARDWARE W/LEVER HANDLE ON PULL SIDE

DOOR & FRAME SCHEDULE

DOOR NO.	TO	FROM	DOOR WIDTH	DOOR HGHT.	DOOR THICK.	DOOR MATL.	DOOR ELEV.	DOOR GLASS	FRAME MATL.	FRAME ELEV.	LABEL	HARDWARE/FUNCTION#	REMARKS
		FIRST FLOOR											
100	EXTERIOR	ENTRY VESTIBULE	(2)3'-0"	7'-0"	1 3/4"	ALUM.	ALM	CLEAR	ALUM.	AL4	-	L2,3	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
101	ENTRY VESTIBULE	SHOWROOM	3'-0"	7'-0"	1 3/4"	ALUM.	ALM	CLEAR	ALUM.	AL2	-	L2,3	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
102	ENTRY VESTIBULE	WHAT A BARGAIN	3'-0"	7'-0"	1 3/4"	ALUM.	ALM	CLEAR	ALUM.	AL2	-	L2,3	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
103	CONFERENCE RM	SHOWROOM	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL1	-	8	
104	CONFERENCE RM	WHAT A BARGAIN	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL1	-	8	
105	WOMEN'S TOILET 1	CORRIDOR	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1	-	4,8	PROVIDE 8"X32"X.05" KICK PLATE/UNDERCUT DOOR ¾"
106	MEN'S TOILET 1	CORRIDOR	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1	-	4,8	PROVIDE 8"X32"X.05" KICK PLATE/UNDERCUT DOOR ¾"
107	H.R. OFFICE	SHOWROOM	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL1	-	8	
108	SALES OFFICE	WHAT A BARGAIN	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL1	-	8	
109	WHAT A BARGAIN	STAIR # 2	3'-0"	7'-0"	1 3/4"	MTL.	HM2	-	FM	FM1	C	L6	
110	WHAT A BARGAIN	ELEC. / TEL / DATA	3'-0"	7'-0"	1 3/4"	MTL.	HM2	-	FM	FM1	C	4,8	
111	SHOWROOM	WAREHOUSE	(2)3'-0"	7'-0"	1 3/4"	MTL.	HM2	-	FM	FM1	C	4,8	PROVIDE PUSH BOLT ONE SIDE / LEVER LOCK SET ON OPPOSITE DOOR.
112	WHAT A BARGAIN	WAREHOUSE	8'-0"	8'-0"	2"	INSUL. MTL	OHD	-	FM	-	C	1	ROLL UP
113	SPRINKLER ROOM	EXTERIOR	3'-0"	7'-0"	1 3/4"	INSUL. MTL	HM2	-	FM	FM1	-	L2,3	
114	SHOWROOM	STAIR # 1	3'-0"	7'-0"	1 3/4"	MTL.	HM2	-	FM	FM1	C	L6	
115	EXTERIOR	STAIR #2	3'-0"	7'-0"	1 3/4"	INSUL. MTL	HM2	V15 PANEL	FM	FM1	-	L6	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
116	DRIVERS' ROOM	WAREHOUSE	3'-0"	7'-0"	1 3/4"	WD	SC1	V15 PANEL	FM	FM1	-	L3	PROVIDE 8"X32"X.05" KICK PLATE
117	MEN'S TOILET 2	WAREHOUSE	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1	-	4,8	PROVIDE 8"X32"X.05" KICK PLATE/UNDERCUT DOOR ¾"
118	WOMEN'S TOILET 2	WAREHOUSE	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1	-	4,8	PROVIDE 8"X32"X.05" KICK PLATE/UNDERCUT DOOR ¾"
119	EXTERIOR	WAREHOUSE	3'-0"	7'-0"	1 3/4"	INSUL. MTL	HM3	V18 PANEL	FM	FM1	-	L6	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
120	GARAGE ADDITION	WAREHOUSE	3'-0"	7'-0"	1 3/4"	INSUL. MTL	HM2	-	FM	FM1	-	-	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
121	GARAGE ADDITION	WAREHOUSE	3'-0"	7'-0"	1 3/4"	INSUL. MTL	HM2	-	FM	FM1	-	-	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
122	EXTERIOR	GARAGE ADDITION	3'-0"	7'-0"	1 3/4"	INSUL. MTL	HM2	-	FM	FM1	C	-	BY MFR. BUILDING MFGR.
123	EXTERIOR	GARAGE ADDITION	3'-0"	7'-0"	1 3/4"	INSUL. MTL	HM2	-	FM	FM1	-	1	BY MFR. BUILDING MFGR.
124	GARAGE ADDITION	WAREHOUSE	14'-0"	8'-0"	2"	INSUL. MTL	OHD	-	FM	-	-	1	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
125	GARAGE ADDITION	WAREHOUSE	8'-0"	8'-0"	2"	INSUL. MTL	OHD	-	FM	-	-	-	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
126	GARAGE ADDITION	WAREHOUSE	8'-0"	8'-0"	2"	INSUL. MTL	OHD	-	FM	-	-	-	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
127	GARAGE ADDITION	WAREHOUSE	8'-0"	8'-0"	2"	INSUL. MTL	OHD	-	FM	-	-	-	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
128	GARAGE ADDITION	WAREHOUSE	8'-0"	8'-0"	2"	INSUL. MTL	OHD	-	FM	-	-	-	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
129	EXTERIOR	GARAGE ADDITION	8'-0"	8'-0"	2"	INSUL. MTL	OHD	-	FM	-	-	-	SECTIONAL / BY MFR. BUILDING MFGR.
130	EXTERIOR	GARAGE ADDITION	22'-0"	12'-4"	2"	INSUL. MTL	OHD	-	FM	-	-	-	SECTIONAL / BY MFR. BUILDING MFGR.
131	EXTERIOR	GARAGE ADDITION	22'-0"	12'-4"	2"	INSUL. MTL	OHD	-	FM	-	-	-	SECTIONAL / BY MFR. BUILDING MFGR.
132	EXTERIOR	GARAGE ADDITION	22'-0"	12'-4"	2"	INSUL. MTL	OHD	-	FM	-	-	-	SECTIONAL / BY MFR. BUILDING MFGR.
133	EXTERIOR	GARAGE ADDITION	22'-0"	12'-4"	2"	INSUL. MTL	OHD	-	FM	-	-	-	SECTIONAL / BY MFR. BUILDING MFGR.
134	EXTERIOR	WAREHOUSE	6'-0"	8'-0"	2"	INSUL. MTL	OHD	-	FM	-	-	-	PROVIDE WEATHER STRIPPING & DOOR PERIMETER & THRESHOLD
		SECOND FLOOR											
200	WOMEN'S TOILET 2	CORRIDOR	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1		L3	PROVIDE 8"X32"X.05" KICK PLATE/UNDERCUT DOOR ¾"
201	MEN'S TOILET 2	CORRIDOR	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1		L3	PROVIDE 8"X32"X.05" KICK PLATE/UNDERCUT DOOR ¾"
202	LUNCH ROOM	CORRIDOR	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL1		8	
203	CUSTOMER SERVICE	CLOSET	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1		8	
204	LUNCH ROOM	CLOSET	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1		8	
205	SALES FLOOR	CLOSET	(2)3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1		8	
206	CONF. ROOM 9	SALES FLOOR	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL1		8	
207	CONF. ROOM 9	SALES FLOOR	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL1		8	
208	OFFICE	SALES FLOOR	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL1		8	
209	OFFICE	SALES FLOOR	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL3		4,8	
210	OFFICE	SALES FLOOR	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL3		4,8	
211	OFFICE	SALES FLOOR	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL3		4,8	
212	OFFICE	SALES FLOOR	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL3		4,8	
213	OFFICE	SALES FLOOR	3'-0"	7'-10"	1 3/4"	WD	SC2	-	ALUM.	AL3		4,8	
214	STAIR #3	SALES FLOOR	3'-0"	7'-0"	1 3/4"	MTL.	HM2	-	FM	FM1	C	L6	
215	SALES FLOOR	STORAGE	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1		4,8	
216	CUST. SERVICE	STORAGE	3'-0"	7'-0"	1 3/4"	WD	SC1	-	FM	FM1		4,8	
217	STORAGE	WAREHOUSE	8'-0"	8'-0"	2"	INSUL. MTL	OHD	-	FM	-	C	1	ROLL UP
218	STAIR 9	CORRIDOR	3'-0"	7'-0"	1 3/4"	MTL.	HM2	-	FM	FM1	C	L6	

ALL HARDWARE IS SUBJECT TO REVIEW BY AN AHC OR DAHC MEMBER.

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fax • 508.894.2814
e-mail • bkarch@aol.com

Revisions	Date
ISSUED FOR PRICING	12/8/09
ISSUED FOR PERMIT	12/11/09
REVISED PER STRUCTURAL CHANGES	12/21/09
REVISED PER FIELD CONDITIONS	1/29/2010

DOOR AND WINDOW SCHEDULES

W.B. MASON
MASON PORTLAND
100 PINE TREE INDUSTRIAL PARKWAY
PORTLAND, ME

Scale:	AS NOTED
Date:	11/6/2009
Drawn By:	JJC/MAP
Checked By:	MAP
Job Number:	20061

Drawing:
A7.1

RECEIVED
DEC 9 2009
City of Portland Maine
Dept. of Building Inspections

A7-1_DOOR-SCHEDULE.DWG

UILDER: TURNER BROTHERS, LLC

USTOMER: W B MASON PORTLAND ME.

OCATION: PORTLAND, ME

	WIDTH	LENGTH	SWA HEIGHT	FRONT ROOF PITCH	DOWNSPOUT DROPS-SWA	DOWNSPOUT DROPS-SWC
ldg A :	59.67	114.83	16.00	0.375	6	0

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GENERAL INFORMATION G1-G1
ANCHOR ROD PLAN A1-A4
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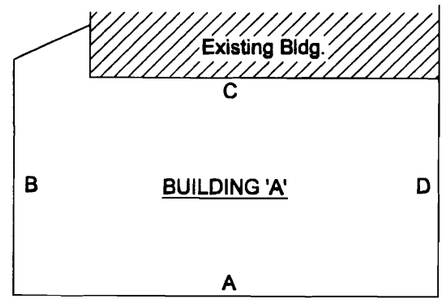
ROOF SHEETING RS1-RS5
SIDEWALL S1-S6
ENDWALL E1-E5
UPDATED DETAILS UD1-UD1
QUALITY ASSURANCE POLICY Q1-Q1



KEY PLAN

Roof Sheeting:

Type: MSC

Gage: 24

Color: Galvalume

Wall Sheeting:

Type: CS

Gage: 26

Color: Cherokee

Finish : Kynar

raming:

Purlin Type: Zees

Girt Type: Cees

Ordered Options:

Base Condition: Base angle w/ trim

Base Trim Color: Cherokee

Wall Mastic: No

UL Rating: 90

Thermal Blocks: Yes

Sidewall Eave Trim Type: Eave Gutter

Eave & Gable Trim Color: Cherokee

Downspout Type: Closed

Downspout Color: Cherokee

Elbows at Bottom of Drops: Yes

Corner Trim Color: Cherokee

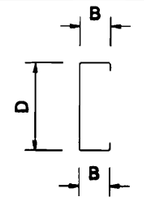
Framed Opening Trim Color: Cherokee

Light Transmitting Panels: 0

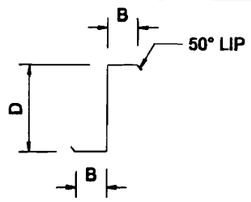
Framing Kits & Wall Openings
See Accessory Schedule on Anchor Rod Plan, Page A1.

Loading Information & Frame Column Reactions
See Load Notes and Reactions on Anchor Rod Detail Page, Page A3-A4.

PURLINS/GIRTS



DESIGNATION	D	B
816	8.00	3.00
814	8.00	3.00
812	8.00	3.00
1014	10.00	3.50
1012	10.00	3.50



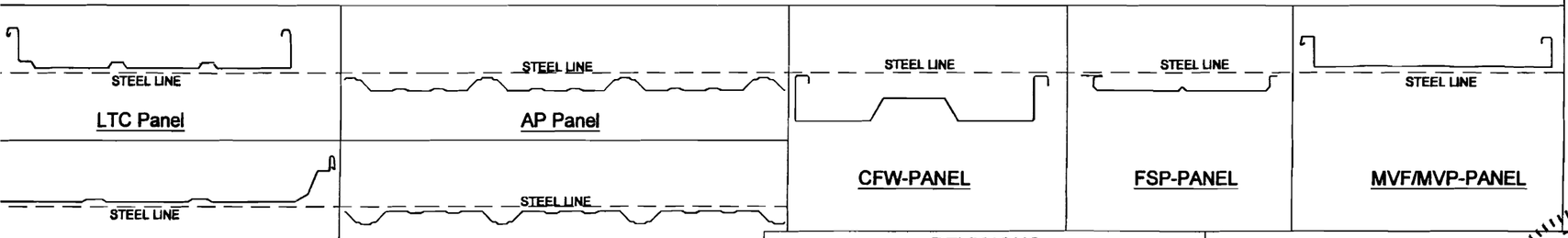
DESIGNATION	D	B
816	8.00	2.50
814	8.00	2.50
812	8.00	2.50
1014	10.00	2.75
1012	10.00	2.75

Drawing Designation:
a) Drawings stamped "PERMIT DRAWINGS" are drawings that are complete for the most part, however, since some details and part marks are missing, they are preliminary and are not to be used for construction and are not considered final drawings.
b) Drawings stamped "PROGRESS DRAWINGS" are drawings that are complete for the most part, however, since some details and part marks are missing, they are preliminary and are not to be used for construction and are not considered final drawings.
c) Drawings stamped "DOCUMENTS FOR APPROVAL" are preliminary drawings, used for approval with no part markings and are not to be used for construction.

GENERAL DETAIL MANUAL V 4.1

ROOF PANEL MANUAL V 6.0

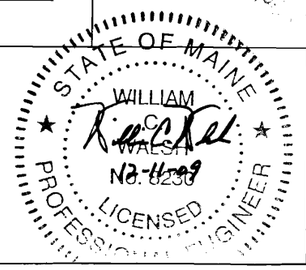
SHEETING TYPES



ENGINEER REVIEW	
ENGINEER	DATE
CH	11-DEC-09

REVISIONS
4
3
2
1

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.



TO BE USED FOR CONSTRUCTION

COVER PAGE
TURNER BROTHERS, LLC. / W. B. MASON
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 3078
GRAND ISLAND, NE 68802-3078

DRAWN	CHECK	ORDER NO.	
BLO/JSA	JSA / AL	CO95226	C1 / C1
18-NOV-09	9-DEC-09		

#12 - 24 X 1 1/4" W/O

/MVF/MVP CLIP TO BAR JOIST WITH UP TO
HICK INSULATION.
ZZANINE DECKING TO BAR JOIST.

#12 - 14 X 1 1/4" W/O

- LTC/MVF/MVP CLIP TO PURLIN WITH UP TO 4" THICK INSULATION
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS-LTC / MVF / MVP ROOF

1/4 - 14 X 1"

- MSC-STC-CLIP TO PURLIN (WITH UP TO 4" THICK INSULATION)
- EAVE PLATE TO PURLIN
- INSIDE CLOSURE TO EAVE PLATE OR EAVE STRUT
- CFW-18 WALL PANEL CLIP SCREW
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS-MSC / STC ROOF

1/4 - 14 X 1 1/2"

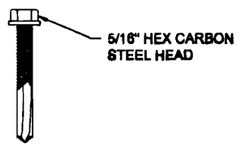
- MSC/STC-CLIP TO PURLIN WITH OVER 4" THICK INSULATION
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS-MSC / STC ROOF

1/4 - 14 X 1 1/4" SHOULDER

- MSC/STC-RAKE SUPPORT TO PURLIN
- FLOATING EAVE PLATE TO EAVE STRUT

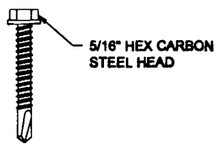
1/4 - 20 X 1 1/4" SHOULDER

- MSC/STC-RAKE SUPPORT TO JOIST
- FLOATING EAVE PLATE TO JOIST



#12 - 24 X 1 1/2" W/O

/MVF/MVP CLIP TO BAR JOIST WITH OVER
HICK INSULATION

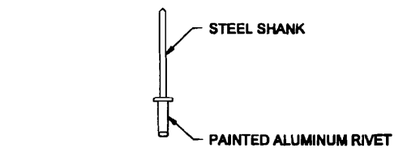


#12 - 14 X 1 1/2" W/O

- LTC/MVF/MVP CLIP TO PURLIN WITH OVER 4" THICK INSULATION
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS-LTC / MVF / MVP ROOF

#12 - 24 x 1 1/2"

- MSC/STC CLIP SCREW FOR BAR JOIST
- DECKING ATTACMENT TO BAR JOIST AND BEAMS



1/8" X 3/8" POP RIVET

- MSC / STC / MVF / MVP OUTSIDE CLOSURE TO BACK-UP ANGLE AT HIP CONDITION
- TRIM TO TRIM
- TRIM TO STEEL

1/4 - 14 X 7/8"

L OR SOFFIT PANEL: TRIM TO PANEL OR PANEL TO
EL
ZANINE DECKING AT SIDE LAPS.
L OR SOFFIT PANEL: TRIM TO TRIM

1/4 - 14 X 7/8" WT

- ROOF: SHEETING TO SHEETING, TRIM TO SHEETING AND RIDGE FLASHING TO RIDGE CLOSURE

#12 - 14 X 1 1/4"

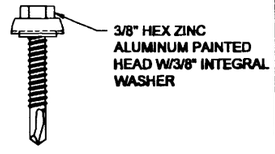
- WALL PANEL TO STEEL
- CS / AP SOFFIT PANEL TO STEEL
- DECKING TO PURLIN
- RAKE ANGLE TO PURLINS-LTC / MVF / MVP / CS ROOF

#10 - 16 X 1" PANCAKE HEAD

- RAKE ANGLE TO PURLINS-MSC / STC ROOF
- CORNER ANGLE TO GIRTS
- FLAT STRAPS TO PURLINS
- FLAT SOFFIT TO SUPPORTS
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS-CS ROOF

#17 X 3/4"

IP OUT" REPLACEMENT FASTENERS FOR WALL
EL, SOFFIT PANEL AND TRIM

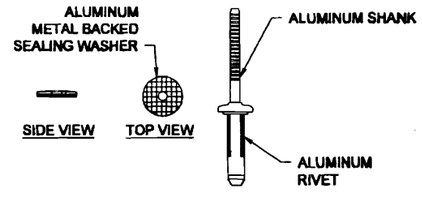


1/4 - 14 X 1 1/2" WT

- ROOF PANEL TO STEEL
- BACK-UP PANEL TO STEEL
- ROOF TRIM TO STEEL

#17 X 1" WT

- "STRIP OUT" REPLACEMENT FASTENER FOR ROOF AND BACK-UP PANEL AND TRIM



3/16" BULBTITE RIVET AND WASHER

- LTC -VERTICAL RIBS OF PANEL
- LIGHT TRANSMITTING PANEL TO LIGHT TRANSMITTING PANEL SIDE LAP
- WINDOWS BY CHIEF TO WINDOW JAMBS

E: THE DETAILS ON THIS PAGE OVERRIDE DETAILS IN THE
CTION MANUALS.

RELEASED	10-23-08
SUPERSEDES	09-10-08

REVISIONS

4 ____

3 ____

2 ____

1 ____

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM C. WALSH
No. 8230
12-11-09
LICENSED
PROFESSIONAL ENGINEER

FASTENER IDENTIFICATION GD

TURNER BROTHERS. LLC. / W.B. MASON PORTLAND ME

PORTLAND, ME

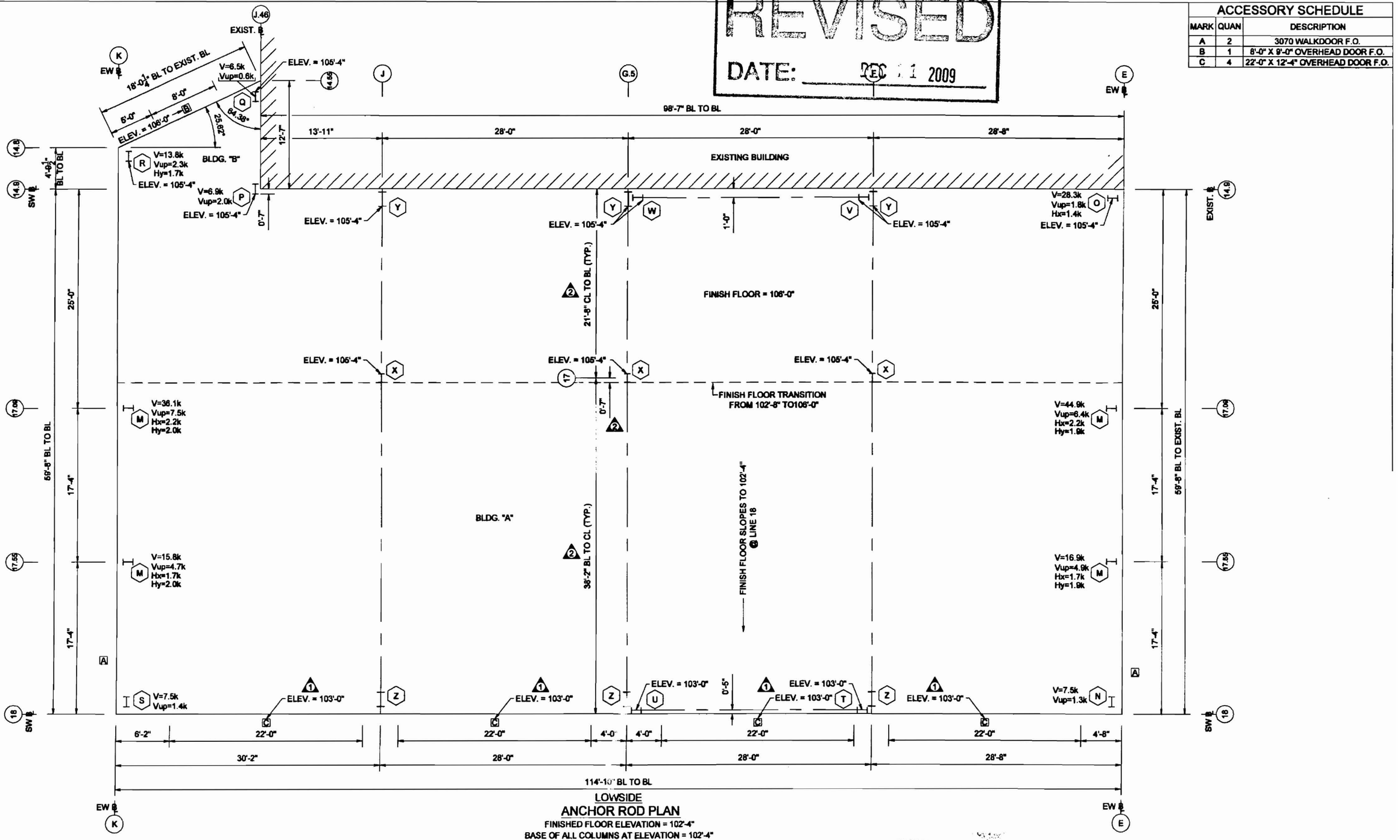
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE

DRAWN	CHECK	ORDER NO.	
BLO	AL	CO95226	G1 / G1
24-NOV-09	9-DEC-09		

REVISED
DATE: DEC 11 2009

ACCESSORY SCHEDULE		
MARK	QUAN	DESCRIPTION
A	2	3070 WALKDOOR F.O.
B	1	8'-0" X 9'-0" OVERHEAD DOOR F.O.
C	4	22'-0" X 12'-4" OVERHEAD DOOR F.O.



LOWSIDE

ANCHOR ROD PLAN

FINISHED FLOOR ELEVATION = 102'-4"
BASE OF ALL COLUMNS AT ELEVATION = 102'-4"
BASE OF FRAME OPENING JAMBS AT ELEVATION = 102'-4"
(UNLESS OTHERWISE NOTED)

REFERENCE NOTES:

1. ALL ANCHOR RODS INCLUDING NUTS AND WASHERS FOR SAME ARE NOT FURNISHED BY CHIEF BUILDINGS.
2. ANCHOR ROD MATERIAL SHALL CONFORM TO ASTM F1554 HAVING A YIELD OF 36 KSI OR GREATER.
3. ROD PROJECTIONS ARE RECOMMENDED MINIMUMS BASED ON THE BASE PLATE BEARING DIRECTLY ON THE CONCRETE PIER. IF THE BASE PLATE IS TO BEAR ON GROUT, THE ROD PROJECTION MUST BE INCREASED ACCORDINGLY.
4. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI.
5. ALL DRAWINGS ARE NOT TO SCALE.

ANCHOR RODS (BY OTHERS)		
QUAN	SIZE	PROJ
30	0-½" Ø	1½"
92	0-¾" Ø	2"

REVISIONS	
4	
3	
2	REVISED PER CHANGE ORDER #3 11-DEC-09 JSA
1	REVISED PER CHANGE ORDER #1 18-NOV-09 BLO

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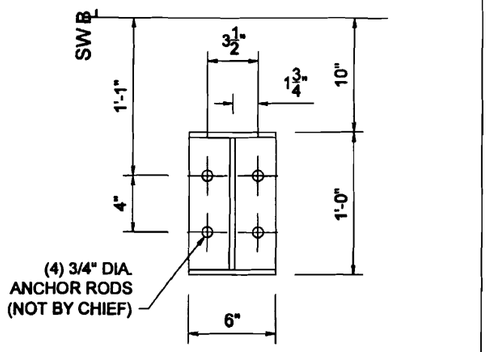
STATE OF MAINE
WILLIAM C. KNOWLTON
12/10/08
LICENSED PROFESSIONAL ENGINEER

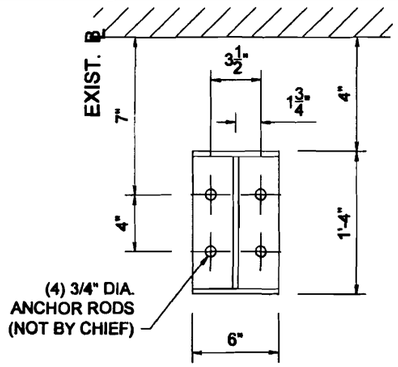
ANCHOR ROD DRAWINGS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

DRAWN	CHECK	ORDER NO.	
BLO	JSA	CO95226	A1 / A4
17-NOV-09	17-NOV-09		



DETAIL Z



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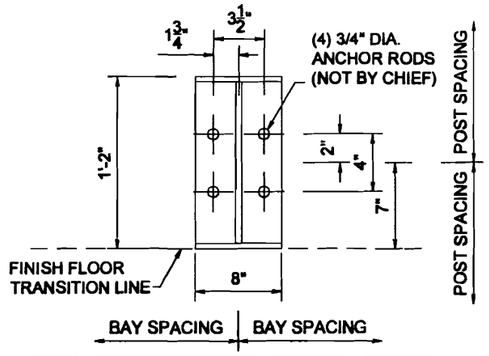
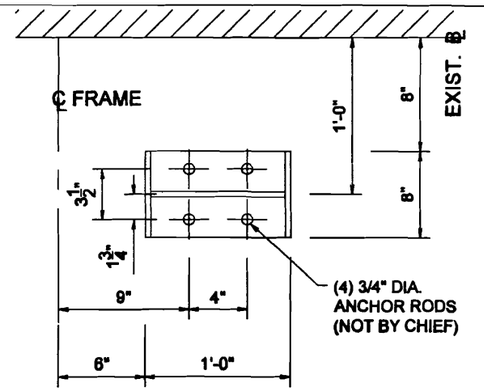


1 DETAIL X



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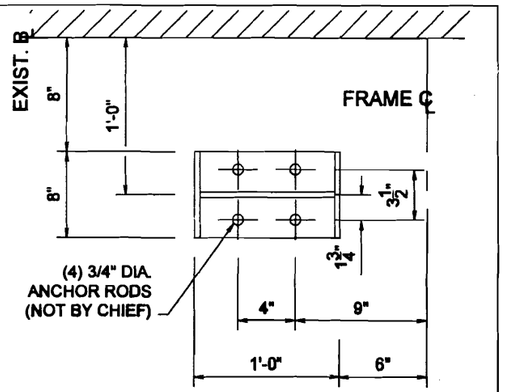

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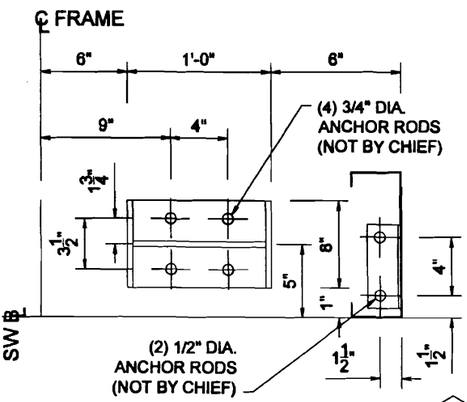
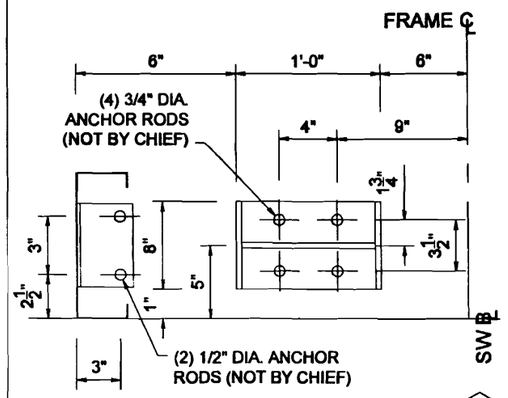


DETAIL U



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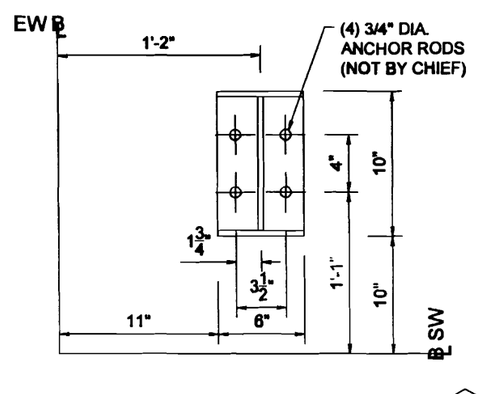

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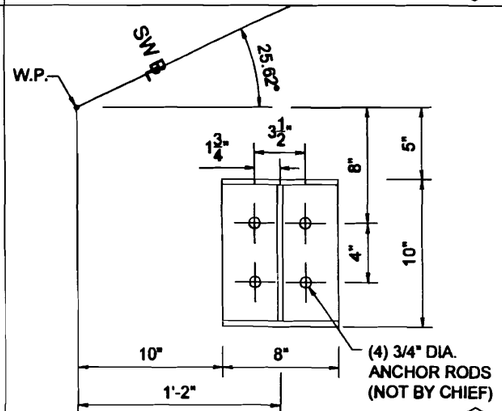

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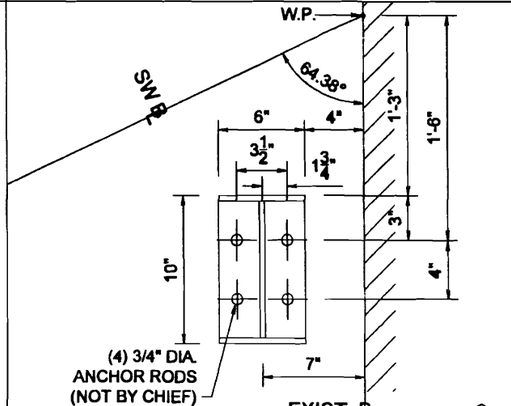

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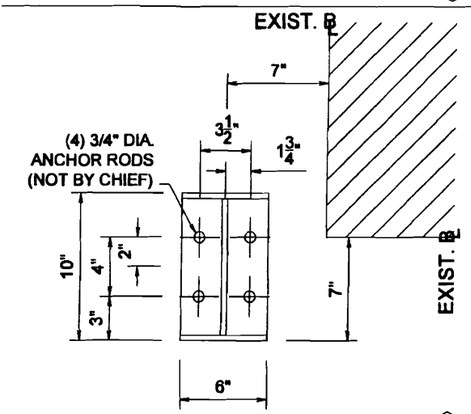
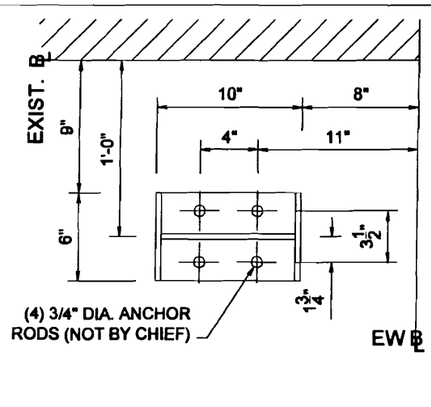


DETAIL P



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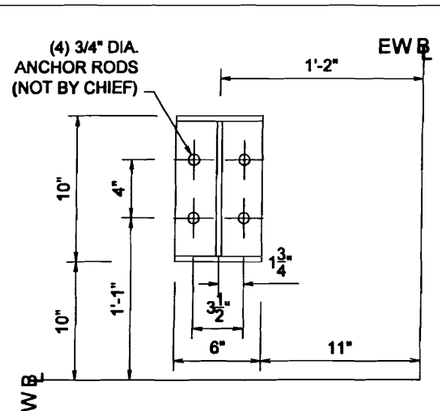

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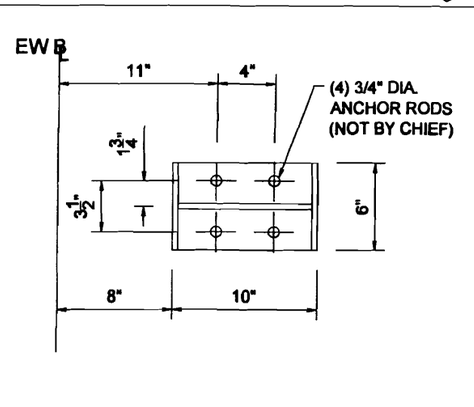

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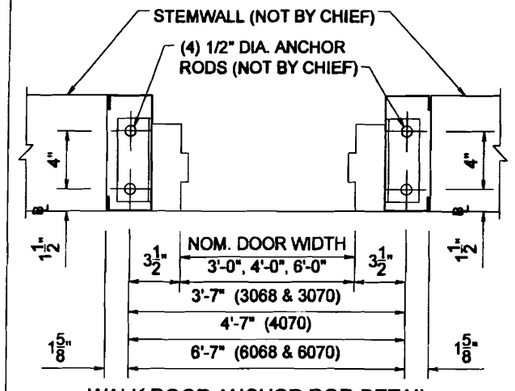


WALK DOOR ANCHOR ROD DETAIL

REFERENCE NOTES

1. ACTUAL BASE PLATE DIMENSIONS MAY BE SMALLER THAN BASE PLATE DIMENSIONS SHOWN.

REVISED
DATE: DEC 11 2009

REVISIONS

4
3
2
1 REVISED PER C. O. #3 & FIXED DETAIL T JSA 11-DEC-09

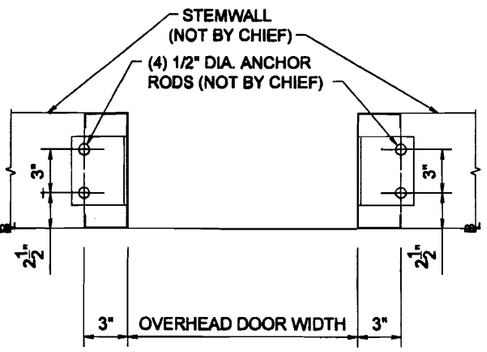
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM WALSH
No. 8230
LICENSED PROFESSIONAL ENGINEER

ANCHOR ROD DRAWINGS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

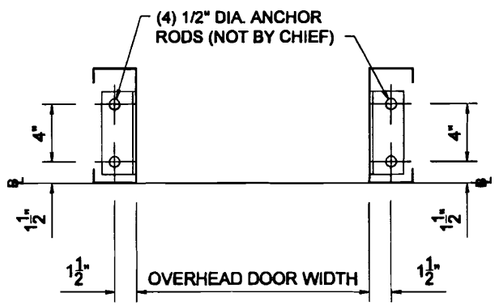
CHIEF BUILDINGS
a division of Chief Industries, Inc.
P O BOX 2078
GRAND ISLAND, NE
68802-2078

DRAWN	CHECK	ORDER NO.	A2
BLO	JSA	CO95226	A4
17-NOV-09	17-NOV-09		

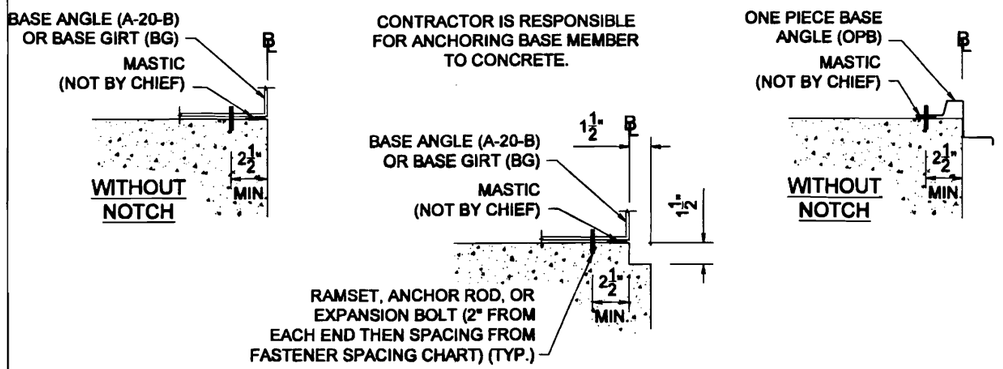


OVERHEAD DOOR
ANCHOR ROD DETAIL

1



OVERHEAD DOOR
ANCHOR ROD DETAIL



WITH NOTCH

BASE MEMBER DETAILS

BASE ANCHORAGE SPACING FOR STANDARD BASE ANGLE, BASE GIRT OR ONE PIECE BASE WITH CS OR AP WALLS

FASTENER TYPE & DIAMETER	MINIMUM EMBEDMENT	MAXIMUM SPACING
1/4" WEDGE ANCHOR ①	1 1/4"	3'-0"
1/4" SCREW TYPE ANCHOR ②	1 1/2"	3'-0"
3/8" CAST-IN ANCHOR	4" WITH HOOK OR HEAD	3'-0"
1/4" HAMMER-IN ③	1 3/8"	2'-0"
0.14" POWDER ACTUATED ④	1 1/4"	1'-6"

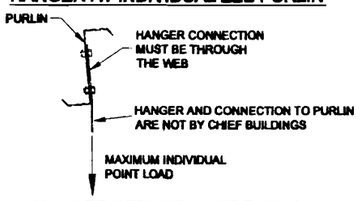
① HILTI KWIK BOLT®, RAMSET TRUBOLT®, POWERS POWERSTUD®, OR EQUAL
② CFS TAPCON®, HILTI KWIK-CON II®, POWERS WEDGE-BOLT®, OR EQUAL
③ POWERS ZAMAC HAMMER SCREW®, HILTI METAL HIT ANCHOR®, OR EQUAL
④ POWERS BALLISTIC POINT PIN, RAMSET 1500/1600 SERIES, HILTI UNIVERSAL NAIL OR EQUAL

FASTENER SPACING CHART

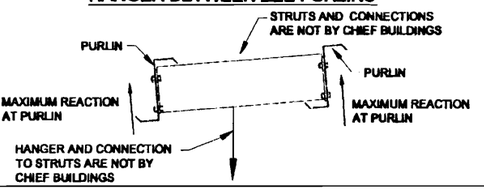
his building has been designed for a collateral load of 5 psf. he total applied loads due to ceiling panels, ducts, sprinkler istribution lines, electrical equipment, conduit, fireproofing, ther piping and mechanical loads, etc., cannot exceed this ollateral load. In no case shall the total uniform collateral load n an individual roof member exceed the product of 5 psf times he spacing of the supporting member. Nor shall any individual oint load or summation of point loads on any one roof member xceed the product of 5 psf times the member spacing times alf the member length. In addition, no individual point load on a urlin can exceed 100 lbs. All loads suspended from purlins hall have the load introduced through the web and not the ange of the purlin. Hangers cannot be supported from the edge f flanges or through holes in the flanges of the purlins. Design f hangers and their attachments are not by Chief Buildings. hief Buildings is NOT responsible for lateral or longitudinal racing of suspended members subjected to horizontal service, eismic, or wind loading.

hief Buildings neither assumes nor accepts any responsibility r the design of hangers, bracing of suspended members, ansverse support members, nor connections to roof purlins. It the responsibility of the Buyer/Contractor and/or End Owner have this design performed by a registered design rofessional.

HANGER AT INDIVIDUAL ZEE PURLIN



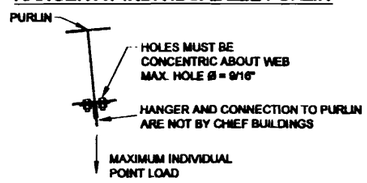
HANGER BETWEEN ZEE PURLINS



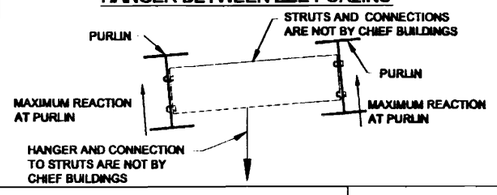
This building has been designed for a collateral load of 5 psf. The total applied loads due to ceiling panels, ducts, sprinkler distribution lines, electrical equipment, conduit, fireproofing, other piping and mechanical loads, etc., cannot exceed this collateral load. In no case shall the total uniform collateral load on an individual roof member exceed the product of 5 psf times the spacing of the supporting member. Nor shall any individual point load or summation of point loads on any one roof member exceed the product of 5 psf times the member spacing times half the member length. In addition, no individual point load on a purlin can exceed 300 lbs. All loads suspended from purlins shall have the load introduced through the web and not the flange of the purlin. Hangers cannot be supported from the edge of flanges. Maximum 9/16" diameter holes can be drilled in the flanges of the WF purlins for support clips (not by Chief Buildings.) Design of hangers and their attachments are not by Chief Buildings. Chief Buildings is NOT responsible for lateral or longitudinal bracing of suspended members subjected to horizontal service, seismic, or wind loading.

Chief Buildings neither assumes nor accepts any responsibility for the design of hangers, bracing of suspended members, transverse support members, nor connections to roof purlins. It is the responsibility of the Buyer/Contractor and/or End Owner to have this design performed by a registered design professional.

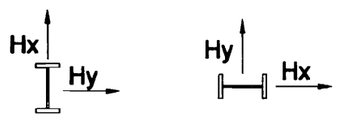
HANGER AT INDIVIDUAL ZEE PURLIN



HANGER BETWEEN ZEE PURLINS



ORIENTATION OF
HORIZONTAL REACTIONS:



Hx IS PARALLEL TO THE COLUMN WEB AND
Hy IS PERPENDICULAR TO THE COLUMN WEB,
FOR ALL ENDWALL COLUMNS & SOLDIER COLUMNS
BY CHIEF BUILDINGS.

1. COLUMN FOOTINGS AND PIERS MUST BE DESIGNED TO WITHSTAND HORIZONTAL AND VERTICAL REACTIONS AS SHOWN ON THE ANCHOR ROD PLAN. CHIEF BUILDINGS IS NOT RESPONSIBLE FOR DESIGN OF CONCRETE FOUNDATION. CHIEF BUILDINGS RECOMMENDS THAT THE SERVICES OF A QUALIFIED ENGINEER IS OBTAINED BY THE CONTRACTOR / BUILDER TO DESIGN THE FOUNDATIONS FOR THE INDICATED REACTIONS.

2. REACTIONS ARE GIVEN IN KIPS. (1 KIP = 1000 LBS.) MOMENTS, IF ANY, ARE GIVEN IN KIP-FT.

3. ANCHOR ROD DESIGN IS BASED ON SHEAR, TENSION, AND COMBINED TENSION AND SHEAR. CHIEF BUILDINGS IS NOT RESPONSIBLE FOR ANCHOR ROD SIZE RECOMMENDATIONS WHEN ANCHOR ROD CONFIGURATION PLACES THE RODS IN A BENDING MODE. WHEN THE COLUMN BASE PLATE BEARS ON GROUT, THE CONTRACTOR / BUILDER OR FOUNDATION ENGINEER SHALL INVESTIGATE BENDING IN THE ANCHOR RODS AND PROVIDE A SHEAR KEY FOR THE COLUMN BASE TO THE PIER WHEN THE ANCHOR RODS ARE NOT ADEQUATE IN BENDING ABOUT THE PIER.

Building Design Criteria
CO95226

Building Code	IBC 2003
2002 MBMA Occupancy Category	Standard Buildings
Roof Live Load	20 psf (Tributary Area Reduction Allowed)
Collateral Load	5 psf
Ground Snow Load (Pg)	70 psf
Exposure Factor (Ce)	1.0
Thermal Factor (Ct)	1.0
Importance Factor (I)	1.0
Flat Roof Snow Load (Pf)	49 psf
Building Enclosure	Enclosed
Wind Speed	94 mph (GCpi ± 0.18)
Exposure Category	B
Importance Factor (I)	1.0
Wind Pressure (q)	13.46 psf
Seismic	
Spectral Response Short Periods (Ss)	37.0%
Spectral Response 1 s Period (S1)	10.0%
Seismic Importance Factor	1.0
Use Group	I
Design Category	C
Site Class	D
Seismic Resisting System	
Longitudinal Direction	Steel System (R=3.0)
Lateral Direction	Steel System (R=3.0)
Seismic Response Coefficient (Cs)	0.124
Spectral Response Parameter Short Period (SDS)	0.371
Spectral Response Parameter 1 s Period (SD1)	0.160
Analysis Procedure	ELF
Base Shear	19,218 lbs.
Other Loads:	None

1 of 18-NOV-09

REFERENCE NOTES

1. ACTUAL BASE PLATE DIMENSIONS MAY BE SMALLER THAN BASE PLATE DIMENSIONS SHOWN.

REVISIONS

4
3
2
1 REVISED PER CHANGE ORDER #1 18-NOV-09 BLO

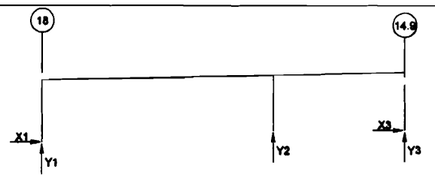
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM
WALSH
11-19-09
No. 8230
LICENSED
PROFESSIONAL ENGINEER

ANCHOR ROD DRAWINGS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

DRAWN	CHECK	ORDER NO.	A3
BLO	JSA	CO95226	A4
17-NOV-09	17-NOV-09		



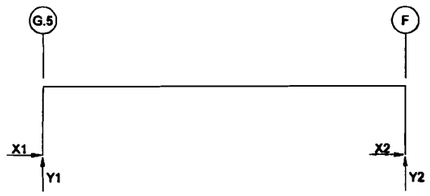
LOAD TYPE	X1	Y1	Y2	X3	Y3
DL - DEAD LOAD	0.2	2.5	5.8	-0.2	1.0
COL- COLLATERAL	0.3	2.4	5.4	-0.3	0.7
LL - LIVE LOAD	0.6	5.7	13.0	-0.6	1.7
SL - SNOW LOAD	3.2	22.0	64.3	-3.2	48.1
WLL- WIND FROM LEFT	-1.8	-5.4	-11.4	-1.9	0.4
WLR- WIND FROM RIGHT	1.8	-3.2	-7.1	3.0	-2.3
WL2- WIND LT CASE 2	-2.4	-3.1	-6.3	-1.8	1.3
WR2- WIND RT CASE 2	0.8	-1.0	-2.0	3.3	-1.4
WLE- WIND ON ENDWALL	1.1	-6.8	-12.8	-0.2	-2.0
WE2- EW WIND CASE 2	1.2	-5.4	-13.0	-0.2	-3.3
LLA	0.5	5.8	9.0	-0.5	-1.8
LLB	0.1	-0.2	4.0	-0.1	3.5
SEI- SEISMIC LOAD	-1.3	-0.4	-2.0	-3.6	2.4
MAXIMUM POSITIVE	4.0	26.9	85.3	3.2	48.8
MAXIMUM NEGATIVE	-2.2	-5.3	-9.8	-4.3	-2.8

CO95226A01 REACTIONS USED AT LINE(S): J, G.5, & F

1. CHIEF BUILDINGS IS NOT RESPONSIBLE FOR CONCRETE AND/OR MASONRY DESIGN, DIMENSIONS & REINFORCING STEEL DETAILS. CHIEF BUILDINGS RECOMMENDS THE CONTRACTOR/BUILDER TO OBTAIN THE SERVICES OF A QUALIFIED DESIGN ENGINEER FOR DESIGNS & DRAWINGS OF MASONRY OR CONCRETE WALL, FLOORS, & FOUNDATIONS TO WITHSTAND THE COLUMN REACTIONS INDICATED ON THE A.B. PLAN. CONCRETE OR MASONRY WALLS SHALL ALSO BE DESIGNED TO WITHSTAND WIND/SEISMIC LOAD ON THE WALL & BASE OF BLDG. WALL PANEL.

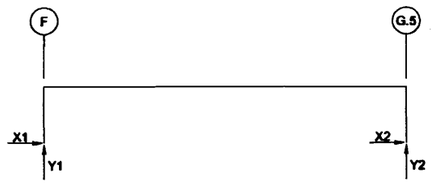
2. WHEN ENDWALL POST & CORNER POST REACTIONS ARE NOT INDICATED, THE CONTRACTOR/BUILDER &/OR CONCRETE DESIGN ENGINEER SHALL DETERMINE THE REACTIONS FROM THE SPECIFIED LIVE LOADS, WIND/SEISMIC LOAD, AND ANY APPLICABLE AUXILIARY LOADS.

3. CONCRETE AND/OR MASONRY ELEV. INDICATED ARE PER THE AGREEMENT TO PURCHASE/CUSTOMER DRAWINGS RECEIVED FROM THE CONTRACTOR/BUILDER.



LOAD TYPE	X1	Y1	X2	Y2
DL - DEAD LOAD	0.1	0.6	-0.1	0.6
WLL- WIND FROM LEFT	-1.4	-1.5	-1.4	1.5
WLR- WIND FROM RIGHT	1.4	1.5	1.4	-1.5
SEL- SEISMIC LOAD	-4.5	-4.8	-4.5	4.8
SER- SEISMIC LOAD	4.5	4.8	4.5	-4.8
MAXIMUM POSITIVE	3.3	4.0	3.1	4.0
MAXIMUM NEGATIVE	-3.1	-3.0	-3.3	-3.0

CO95226AA1 REACTIONS USED AT LINE(S): 18



LOAD TYPE	X1	Y1	X2	Y2
DL - DEAD LOAD	0.1	0.6	-0.1	0.6
WLL- WIND FROM LEFT	-2.1	-2.1	-2.1	2.1
WLR- WIND FROM RIGHT	2.1	2.1	2.1	-2.1
SEL- SEISMIC LOAD	-4.6	-4.7	-4.6	4.7
SER- SEISMIC LOAD	4.6	4.7	4.6	-4.7
MAXIMUM POSITIVE	3.3	4.0	3.2	4.0
MAXIMUM NEGATIVE	-3.2	-3.0	-3.3	-3.0

CO95226AC1 REACTIONS USED AT LINE(S): 14.9

REFERENCE NOTES

1. ACTUAL BASE PLATE DIMENSIONS MAY BE SMALLER THAN BASE PLATE DIMENSIONS SHOWN.

REVISIONS

4 —
3 —
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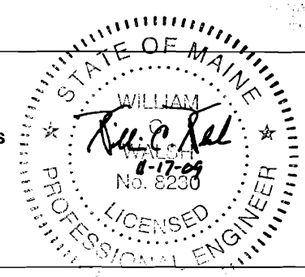
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.



ANCHOR ROD DRAWINGS

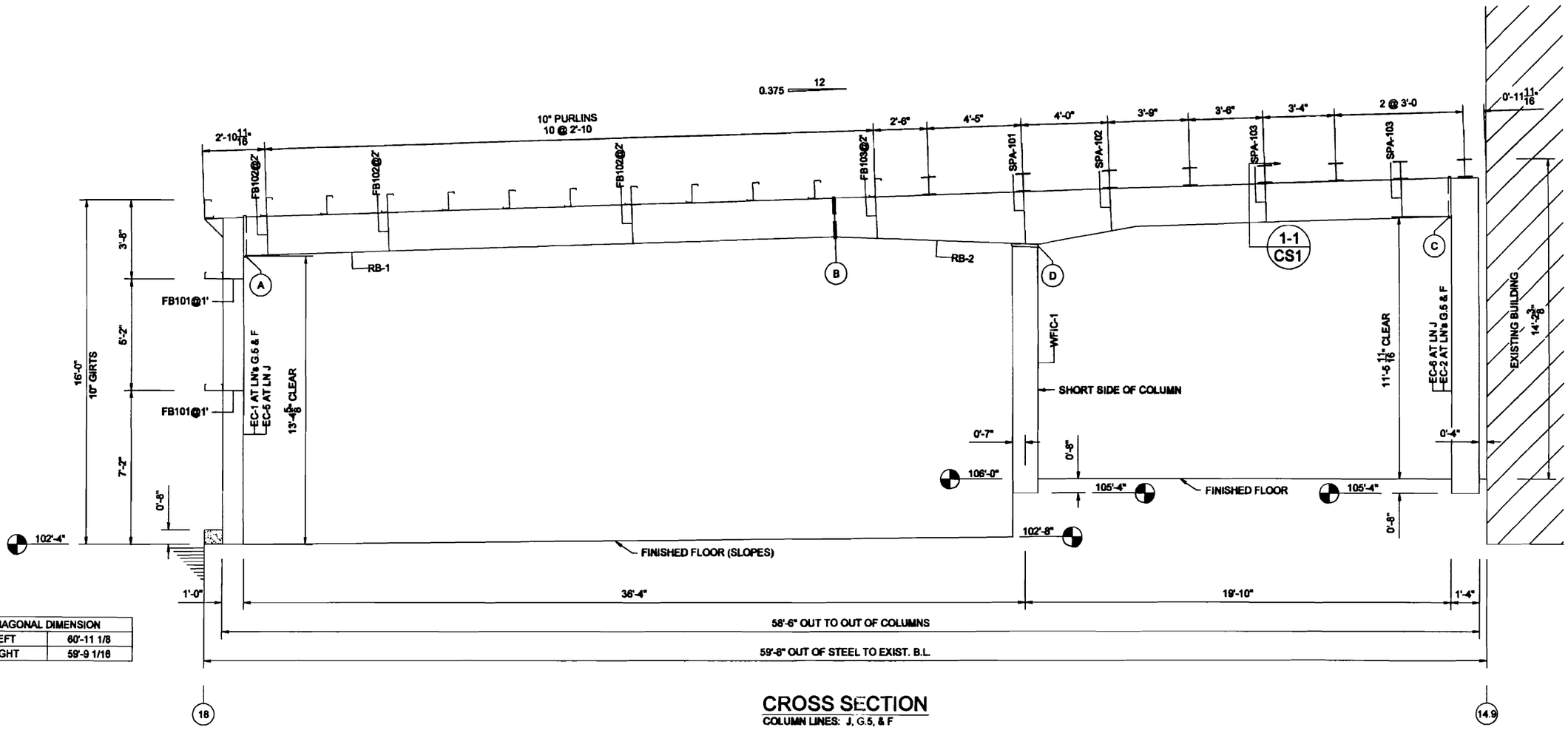
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE 68802-2078

DRAWN	CHECK	ORDER NO.	A4
BLO	JSA	CO95226	A4
17-NOV-09	17-NOV-09		

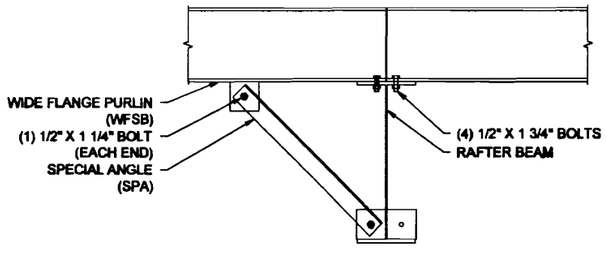


DIAGONAL DIMENSION	
LEFT	60'-11 1/8
RIGHT	59'-9 1/16

CROSS SECTION

COLUMN LINES: J, G.5, & F

SPLICE BOLT TABLE			
SPLICE	NO	SIZE	DEPTH
A	10	5/8 X 1 1/2	1'-10
B	10	5/8 X 1 1/2	1'-10
C	10	5/8 X 1 1/2	1'-10
D	4	5/8 X 2	1'-0



SECTION 1-1 / CS1

ERENCE NOTES

OLTING RECOMMENDATIONS—ALL HIGH STRENGTH OLTS ARE A-325 WITH HEAVY HEX NUTS AND ARE TO E INSTALLED USING THE SNUG TIGHT METHOD PECIFIED IN THE 'SPECIFICATION FOR STRUCTURAL OINTS USING ASTM A325 BOLTS', PUBLISHED BY CSC, DATED JUNE 30,2004. SNUG TIGHT CONDITION S ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRON WORKER SING AN ORDINARY SPUD WRENCH TO BRING THE LIES INTO FIRM CONTACT.

OLT SPECIFICATIONS – ALL BOLTS SPECIFIED HROUGHOUT THESE DRAWINGS WILL BE HIGH TRENGTH BOLTS CONFORMING TO ASTM A325 BOLT PECIFICATIONS SUBSTITUTION OF MILD STEEL BOLTS ILL NOT BE ALLOWED AND ANY FIELD SUBSTITUTION ILL VOID THE DESIGN WARRANTY.

JT SPECIFICATIONS – NUTS SPECIFIED HROUGHOUT THESE DRAWINGS WILL BE HIGH TRENGTH NUTS CONFORMING TO ASTM A194 GRADE OR 2H, OR ASTM A563 GRADE C, D, OR DH NUT PECIFICATIONS. SUBSTITUTION OF MILD STEEL NUTS ILL NOT BE ALLOWED, AND ANY FIELD SUBSTITUTION ILL VOID THE DESIGN WARRANTY.

L ELEVATION DIMENSIONS ARE TAKEN FROM OTTOM OF FRAME COLUMN BASE PLATE. REFER TO NCHOR ROD DRAWING FOR BASE OF COLUMN EVATION.

4. TEMPORARY BRACING SHALL BE INTRODUCED WHEREVER NECESSARY TO TAKE CARE OF ALL LOADS IMPOSED UPON THE STRUCTURE DURING THE ERECTION PROCESS.
5. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE MARKED.
6. ALL DRAWINGS ARE NOT TO SCALE.
7. NOTE : * REFER TO GENERAL DETAILS AND SECTIONS FOR ROOF SHEET OVERHANG AND SPLICE LAP DIMENSIONS.
8. FLANGE BRACES ARE REQUIRED ONLY ON ONE SIDE OF FRAME, EXCEPT THOSE FLANGE BRACES THAT ARE PRECEDED WITH A (2)FB... ARE REQUIRED ON BOTH SIDES OF THE FRAME.
9. EAVE HEIGHT DIMENSION IS NOT ALWAYS TO THE TOP OF THE EAVE STRUT. DUE TO THERMAL BLOCK SITUATIONS, EAVE HEIGHT DIMENSION AND TOP GIRT SPACE DIMENSION MAY BE TO THE INTERSECTION OF THE TOP OF THE PURLINS. REFER TO THE EAVE DETAILS FOR MORE INFORMATION.
10. ALL WELDS HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBF AT MINUS 20 DEGREES F.

FRAME:CO95226A01 16-NOV-2009 13:55:23.25

REVISIONS
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3
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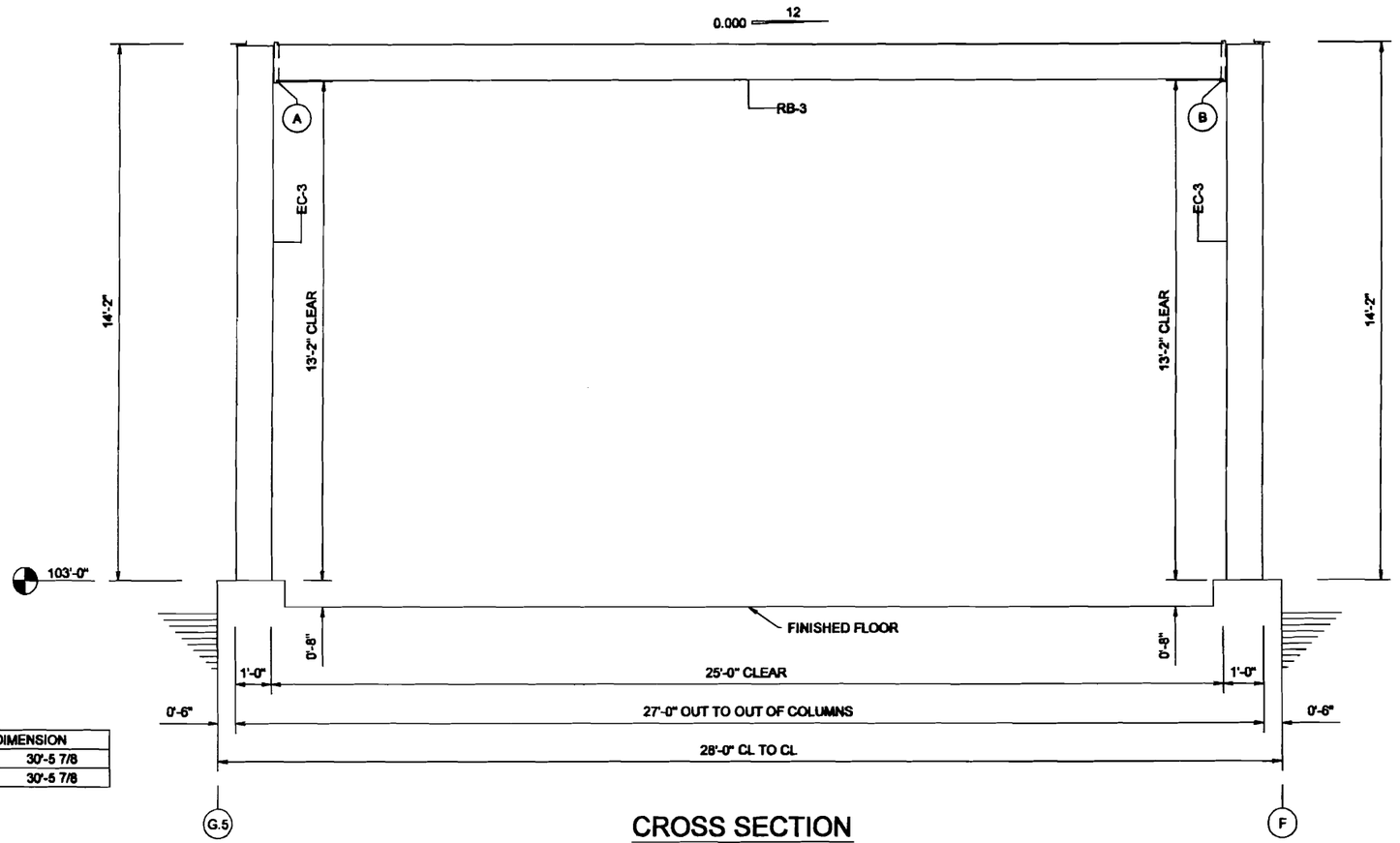
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
KEVIN C. WALSH
No. 8230
LICENSED
PROFESSIONAL ENGINEER

CROSS SECTION
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
P.O. BOX 2979
GRAND ISLAND, ME

DRAWN	CHECK	ORDER NO.	CS1 / CS6
BLO / AL	JSA	CO95226	
17-NOV-09	7-DEC-09		



DIAGONAL DIMENSION	
LEFT	30'-5 7/8
RIGHT	30'-5 7/8

CROSS SECTION

COLUMN LINES: 18

SPLICE BOLT TABLE			
SPLICE	NO	SIZE	DEPTH
A	8	5/8 X 2	1'-0
B	8	5/8 X 2	1'-0

ERENCE NOTES

OLTING RECOMMENDATIONS—ALL HIGH STRENGTH OLTS ARE A-325 WITH HEAVY HEX NUTS AND ARE TO E INSTALLED USING THE SNUG TIGHT METHOD PECIFIED IN THE 'SPECIFICATION FOR STRUCTURAL OINTS USING ASTM A325 BOLTS', PUBLISHED BY CSC, DATED JUNE 30,2004. SNUG TIGHT CONDITION ATTAINED WITH A FEW IMPACTS OF AN IMPACT RENCH OR THE FULL EFFORT OF AN IRON WORKER SING AN ORDINARY SPUD WRENCH TO BRING THE LIES INTO FIRM CONTACT.

OLT SPECIFICATIONS – ALL BOLTS SPECIFIED ROUGHOUT THESE DRAWINGS WILL BE HIGH TRENGTH BOLTS CONFORMING TO ASTM A325 BOLT ECIFICATIONS SUBSTITUTION OF MILD STEEL BOLTS ILL NOT BE ALLOWED AND ANY FIELD SUBSTITUTION ILL VOID THE DESIGN WARRANTY.

IT SPECIFICATIONS – NUTS SPECIFIED ROUGHOUT THESE DRAWINGS WILL BE HIGH RENGTH NUTS CONFORMING TO ASTM A194 GRADE OR 2H, OR ASTM A563 GRADE C, D, OR DH NUT ECIFICATIONS. SUBSTITUTION OF MILD STEEL NUTS LL NOT BE ALLOWED, AND ANY FIELD SUBSTITUTION LL VOID THE DESIGN WARRANTY.

L ELEVATION DIMENSIONS ARE TAKEN FROM TTOM OF FRAME COLUMN BASE PLATE. REFER TO CHOR ROD DRAWING FOR BASE OF COLUMN EVATION.

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10. ALL WELDS HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBF AT MINUS 20 DEGREES F.

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REVISIONS
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NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM
NO. 8239
LICENSED
PROFESSIONAL ENGINEER

CROSS SECTION

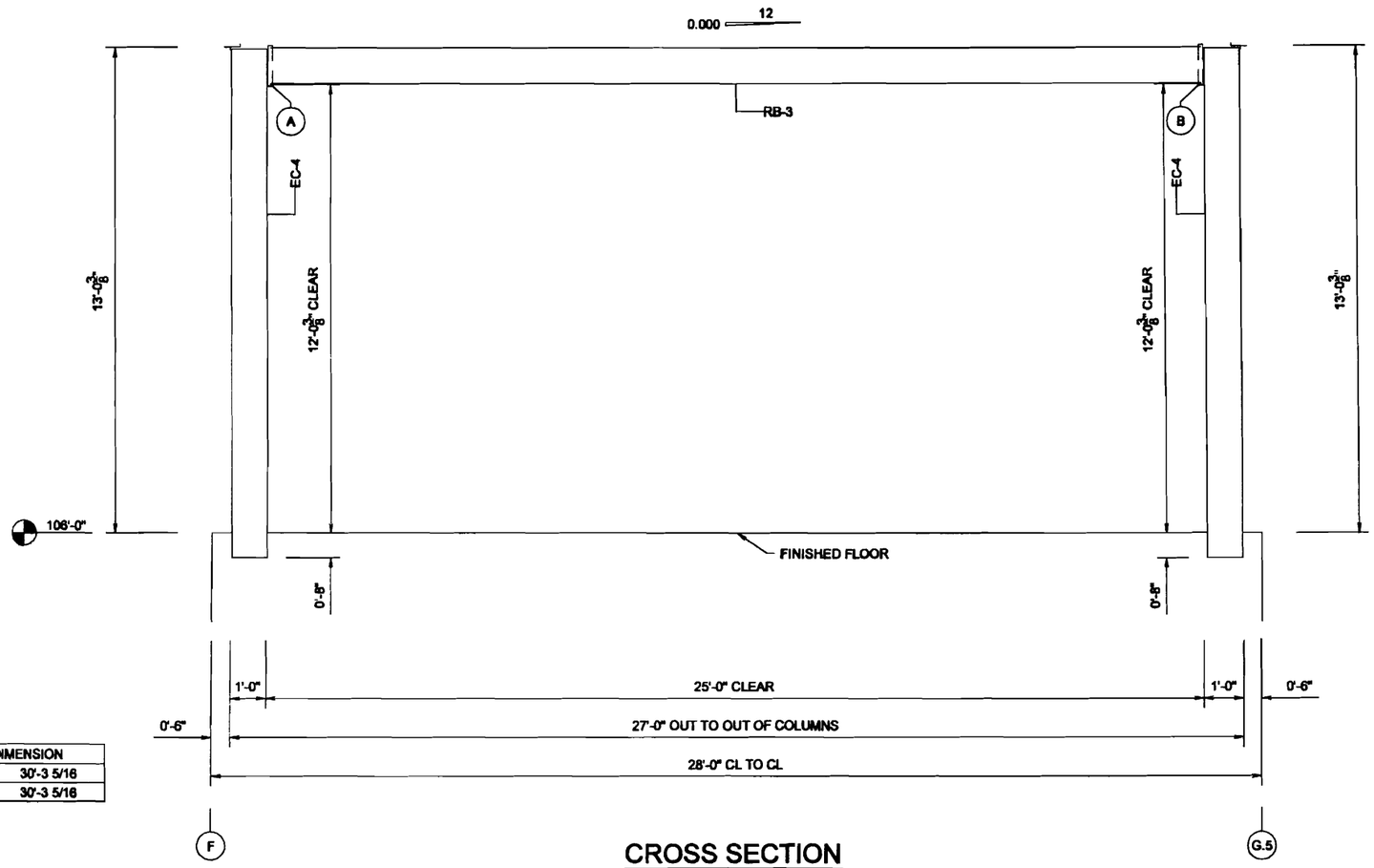
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

2-BUILDING COMPLEX

CHIEF BUILDINGS
P.O. BOX 2078
GRAND ISLAND, NE

DRAWN	CHECK	ORDER NO.	CS2 / CS6
BLO / AL	JSA	CO95226	
17-NOV-09	7-DEC-09		



DIAGONAL DIMENSION	
LEFT	30'-3 5/16
RIGHT	30'-3 5/16

CROSS SECTION

COLUMN LINES: 14.9

SPLICE BOLT TABLE			
SPLICE	NO	SIZE	DEPTH
A	8	5/8 X 2	1'-0
B	8	5/8 X 2	1'-0

RENCE NOTES

)LTING RECOMMENDATIONS—ALL HIGH STRENGTH
)LTS ARE A-325 WITH HEAVY HEX NUTS AND ARE TO
INSTALLED USING THE SNUG TIGHT METHOD
ECIFIED IN THE 'SPECIFICATION FOR STRUCTURAL
INTS USING ASTM A325 BOLTS', PUBLISHED BY
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ATTAINED WITH A FEW IMPACTS OF AN IMPACT
RENCH OR THE FULL EFFORT OF AN IRON WORKER
ING AN ORDINARY SPUD WRENCH TO BRING THE
IES INTO FIRM CONTACT.

)LT SPECIFICATIONS -- ALL BOLTS SPECIFIED
ROUGHOUT THESE DRAWINGS WILL BE HIGH
RENGTH BOLTS CONFORMING TO ASTM A325 BOLT
ECIFICATIONS SUBSTITUTION OF MILD STEEL BOLTS
LL NOT BE ALLOWED AND ANY FIELD SUBSTITUTION
LL VOID THE DESIGN WARRANTY.

IT SPECIFICATIONS -- NUTS SPECIFIED
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RENGTH NUTS CONFORMING TO ASTM A194 GRADE
R 2H, OR ASTM A563 GRADE C, D, OR DH NUT
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L ELEVATION DIMENSIONS ARE TAKEN FROM
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10. ALL WELDS HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBF AT MINUS 20 DEGREES F.

FRAME:CO95226AC1 13-NOV-2009 08:43:25.85

REVISIONS
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NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM
WALSH
No. 9230
12-11-09
LICENSED
PROFESSIONAL ENGINEER

CROSS SECTION

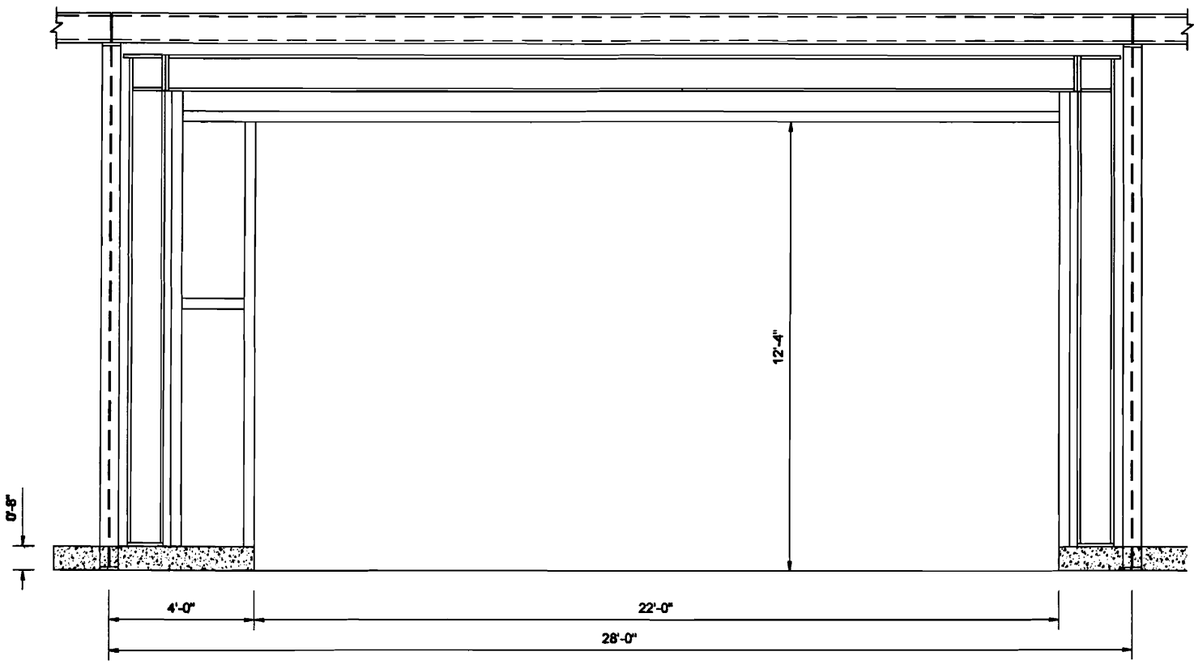
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

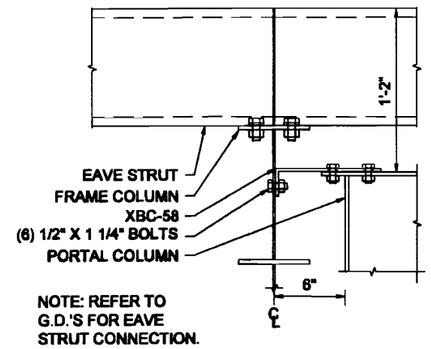
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

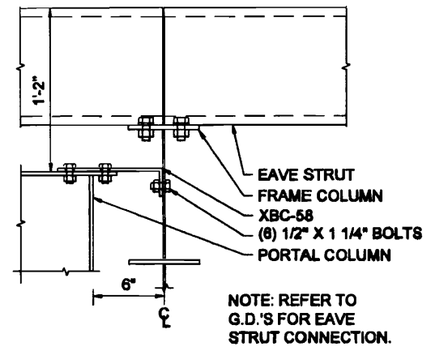
DRAWN	CHECK	ORDER NO.	CS3 / CS6
BLO / AL	JSA	CO95226	
17-NOV-09	7-DEC-09		



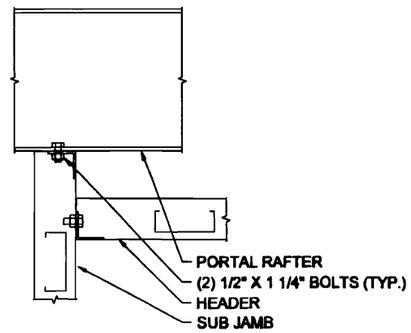
PORTAL FRAME ELEVATION
COL. LINE 18



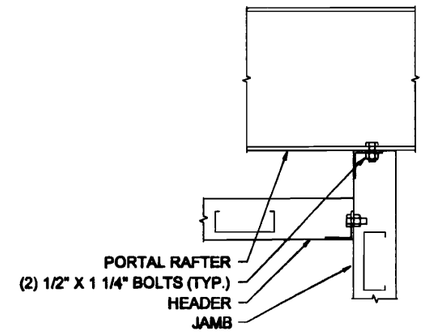
PORTAL FRAME TO MAIN FRAME CONNECTION



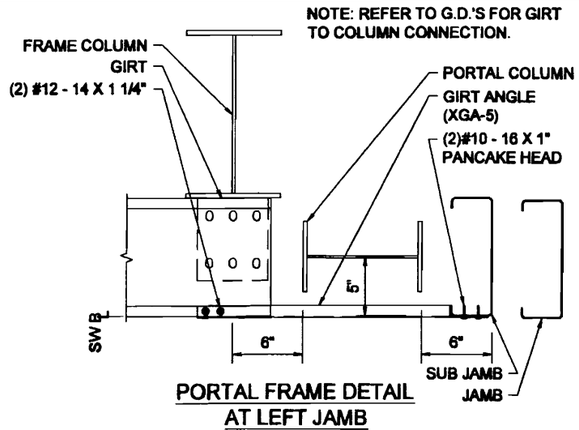
PORTAL FRAME TO MAIN FRAME CONNECTION



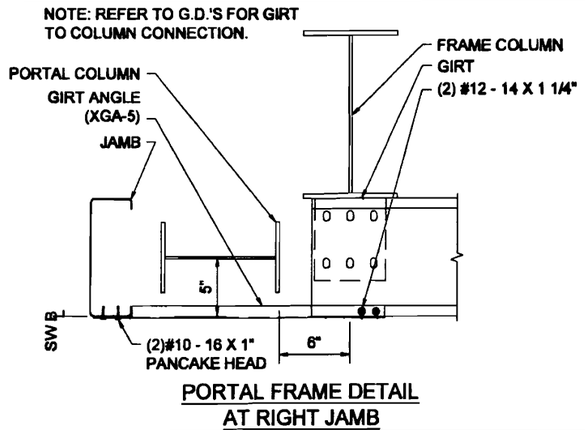
SUB JAMB TO RAFTER WITH HEADER



SUB JAMB TO RAFTER WITH HEADER



PORTAL FRAME DETAIL AT LEFT JAMB



PORTAL FRAME DETAIL AT RIGHT JAMB

REVISIONS
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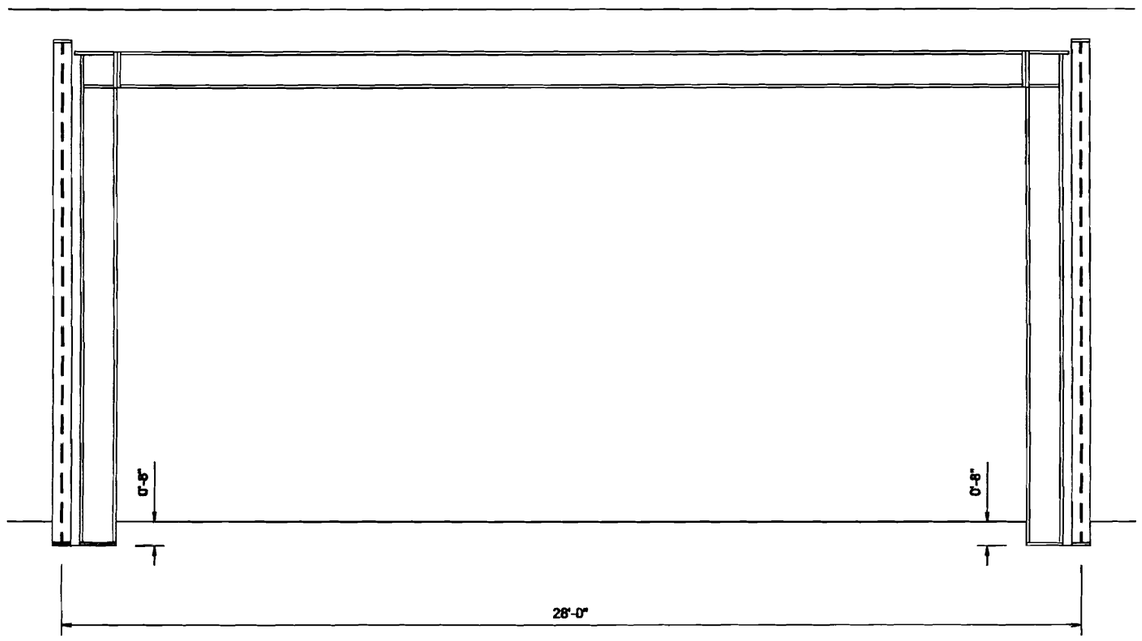
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM
WALLACE
No. 8230
12-4-09
LICENSED
PROFESSIONAL ENGINEER

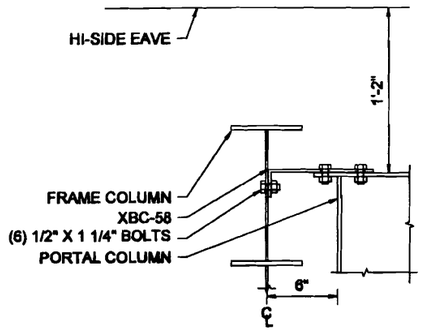
CROSS SECTIONS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

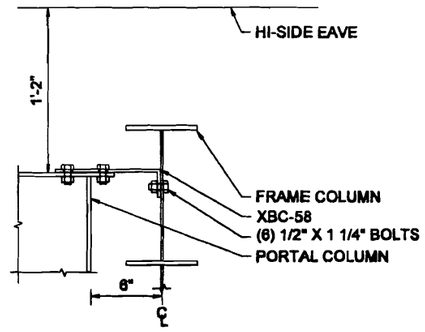
DRAWN	CHECK	ORDER NO.	CS4 / CS6
AL	JSA	CO95226	
2-DEC-09	7-DEC-09		



PORTAL FRAME ELEVATION
COL. LINE 14.9



PORTAL FRAME TO MAIN FRAME CONNECTION



PORTAL FRAME TO MAIN FRAME CONNECTION

REVISIONS
4
3
2
1

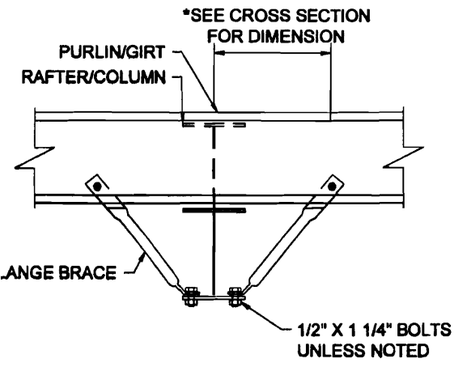
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM
WILDE
12-11-09
No. 8230
LICENSED
PROFESSIONAL ENGINEER

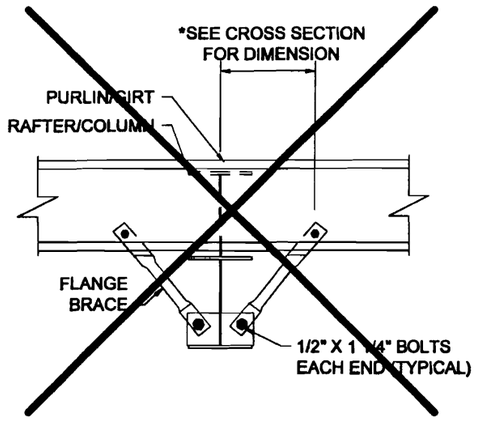
CROSS SECTIONS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

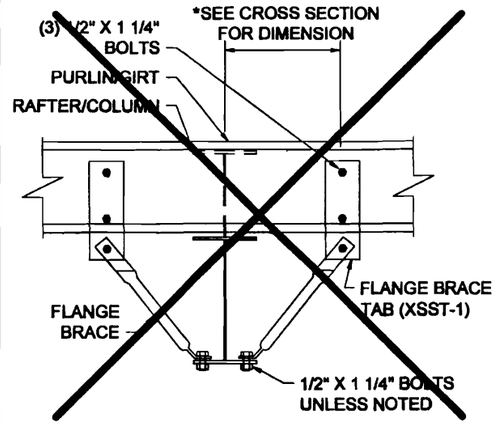
DRAWN	CHECK	ORDER NO.	CS5 / CS6
AL	JSA	CO95226	
2-DEC-09	7-DEC-09		



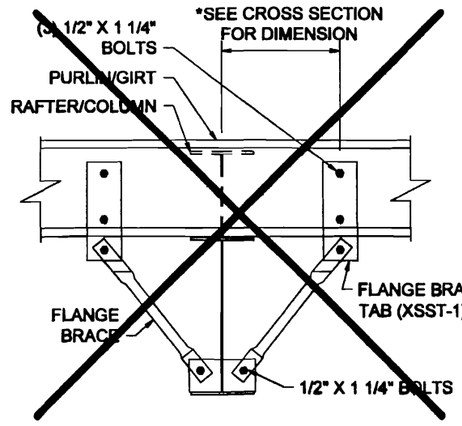
FLANGE BRACE
"1-1 or 1 1S CONNECTION"



FLANGE BRACE
"4-1 CONNECTION"

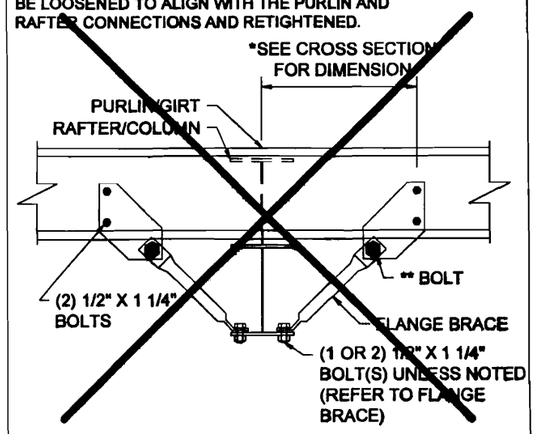


FLANGE BRACE
"1-4 CONNECTION"



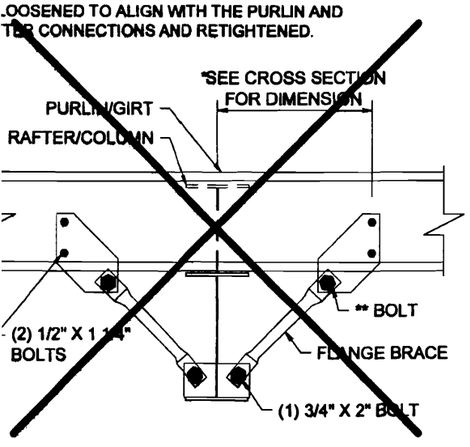
FLANGE BRACE
"4-4 CONNECTION"

** FIELD NOTE: FLANGE BRACE WILL ARRIVE AS AN ASSEMBLED PART. THIS BOLT MAY HAVE TO BE LOOSENED TO ALIGN WITH THE PURLIN AND RAFTER CONNECTIONS AND RETIGHTENED.

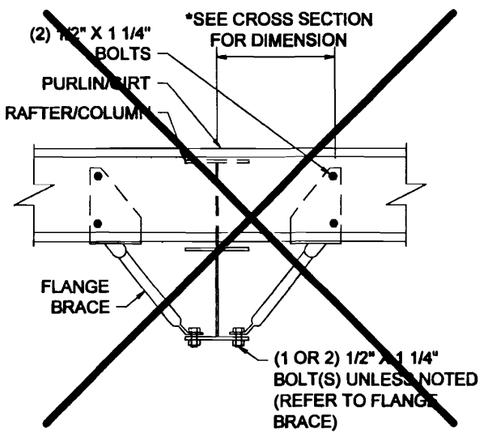


FLANGE BRACE
"1-7, 1-8, 1-9, 2-7, 2-8, or 2-9 CONNECTION"

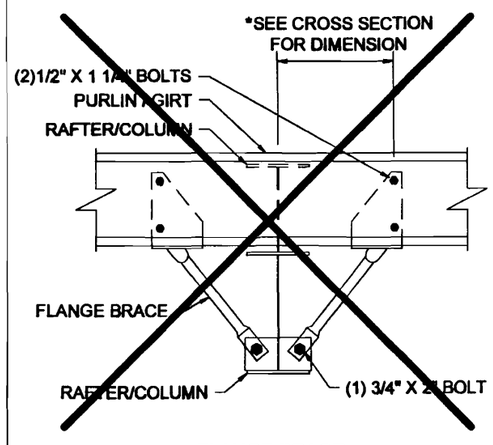
ELD NOTE: FLANGE BRACE WILL ARRIVE AS ASSEMBLED PART. THIS BOLT MAY HAVE TO LOOSENED TO ALIGN WITH THE PURLIN AND TER CONNECTIONS AND RETIGHTENED.



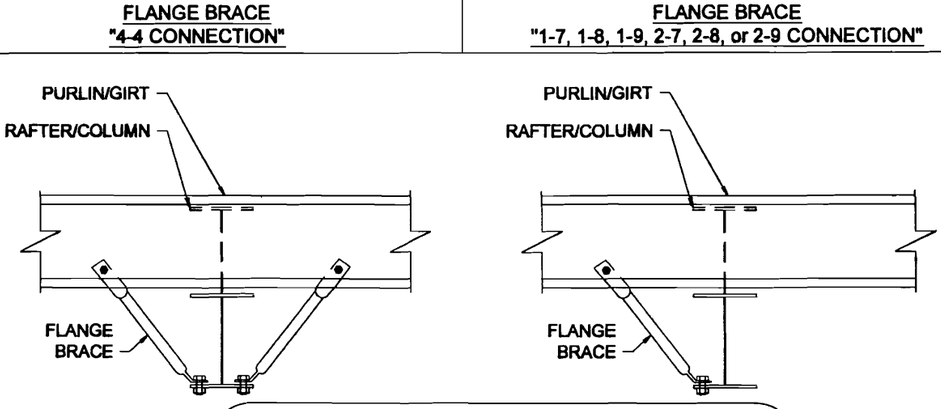
FLANGE BRACE
"5-7, 5-8, or 5-9 CONNECTION"



FLANGE BRACE
"1-2 or 2-2 CONNECTION"



FLANGE BRACE
"5-2 CONNECTION"



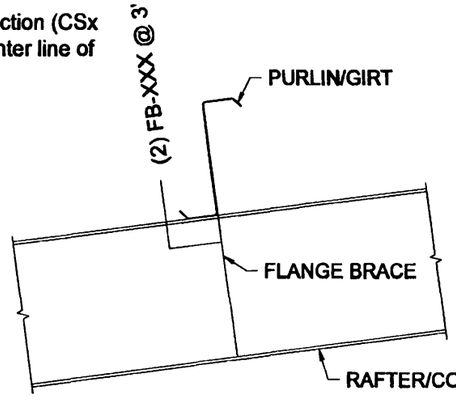
REFER TO BUILDING CROSS SECTION FOR ACTUAL QUANTITY OF FLANGE BRACES REQUIRED.

TYPICAL FLANGE BRACE
BOTH SIDES CONNECTION

TYPICAL FLANGE BRACE
ONE SIDE CONNECTION

(2) = Quantity of flange brace
FB-XXX = Part mark
3' = nominal punch from centerline of frame

e flange brace mark on Cross Section (CSx
ges) for nominal spacing from center line of
me.



* KEY PLAN

NOTE:
- SEE BUILDING CROSS SECTION FOR FLANGE BRACE PIECE MARKS.
- FIELD BEND FLANGE BRACES AS REQUIRED TO MATCH HOLES IN PURLINS AND GIRTS.
- SEE ROOF FRAMING PLAN FOR PURLIN LAP DIMENSION.
- FILL ALL HOLES IN THE FLANGE BRACE WITH BOLTS.
- FOR PURLIN TO FRAME RAFTER CONNECTION AND PURLIN LAP CONNECTION REFER TO PURLIN CONNECTION DETAILS.
- IF FLANGE BRACE CONNECTION OCCURS WITHIN THE PURLIN LAP, INSTALL FLANGE BRACE BEFORE TIGHTENING PURLIN BOLTS.

REVISIONS
4
3
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RELEASED	11-04-09
SUPERSEDES	

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE WILLIAM WALSH 12-11-09 No. 8220 LICENSED PROFESSIONAL ENGINEER

FLANGE BRACE CONNECTIONS PROCGD3
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS a division of Chief Industries, Inc. P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

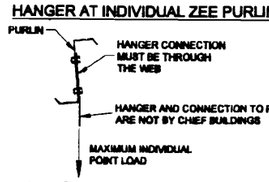
DRAWN	CHECK	ORDER NO.	CS6
AL	JSA	CO95226	CS6
24-NOV-09	9-DEC-09		

Collateral Loads

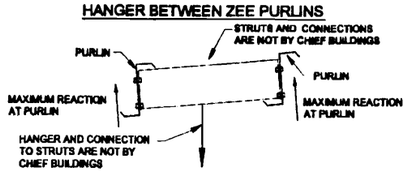
This building has been designed for a collateral load of 5 psf. The total applied loads due to ceiling panels, ducts, sprinkler distribution lines, electrical equipment, conduit, fireproofing, other piping and mechanical loads, etc., cannot exceed this collateral load. In no case shall the total uniform collateral load on an individual roof member exceed the product of 5 psf times the spacing of the supporting member. Nor shall any individual point load or summation of point loads on any one roof member exceed the product of 5 psf times the member spacing times half the member length. In addition, no individual point load on a purlin can exceed 100 lbs. All loads suspended from purlins shall have the load introduced through the web and not the flange of the purlin. Hangers cannot be supported from the edge of flanges or through holes in the flanges of the purlins. Design of hangers and their attachments are not by Chief Buildings. Chief Buildings is NOT responsible for lateral or longitudinal bracing of suspended members subjected to horizontal service, seismic, or wind loading.

Chief Buildings neither assumes nor accepts any responsibility for the design of hangers, bracing of suspended members, transverse support members, nor connections to roof purlins. It is the responsibility of the Buyer/Contractor and/or End Owner to have this design performed by a registered design professional.

HANGER AT INDIVIDUAL ZEE PURLIN



HANGER BETWEEN ZEE PURLINS

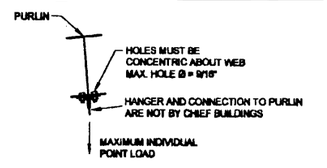


Collateral Loads

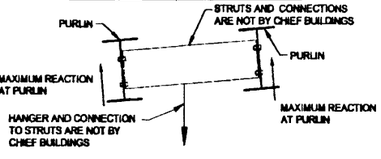
This building has been designed for a collateral load of 5 psf. The total applied loads due to ceiling panels, ducts, sprinkler distribution lines, electrical equipment, conduit, fireproofing, other piping and mechanical loads, etc., cannot exceed this collateral load. In no case shall the total uniform collateral load on an individual roof member exceed the product of 5 psf times the spacing of the supporting member. Nor shall any individual point load or summation of point loads on any one roof member exceed the product of 5 psf times the member spacing times half the member length. In addition, no individual point load on a purlin can exceed 300 lbs. All loads suspended from purlins shall have the load introduced through the web and not the flange of the purlin. Hangers cannot be supported from the edge of flanges. Maximum 9/16" diameter holes can be drilled in the flanges of the WF purlins for support clips (not by Chief Buildings.) Design of hangers and their attachments are not by Chief Buildings. Chief Buildings is NOT responsible for lateral or longitudinal bracing of suspended members subjected to horizontal service, seismic, or wind loading.

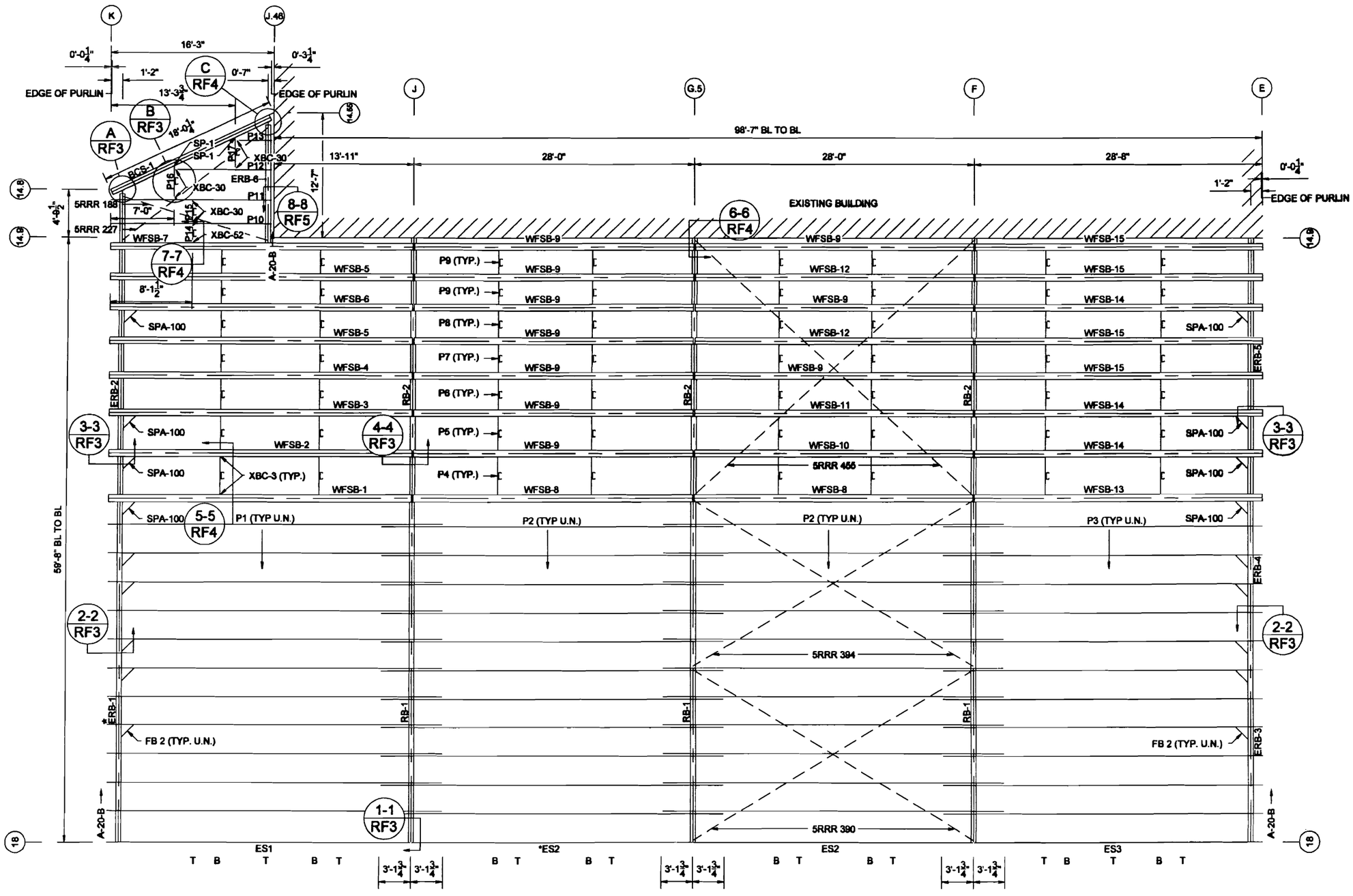
Chief Buildings neither assumes nor accepts any responsibility for the design of hangers, bracing of suspended members, transverse support members, nor connections to roof purlins. It is the responsibility of the Buyer/Contractor and/or End Owner to have this design performed by a registered design professional.

HANGER AT INDIVIDUAL ZEE PURLIN



HANGER BETWEEN ZEE PURLINS





*NOTE: ES2 & ERB-1 HAVE A "CHIEF" LOGO STICKER. ERECT THE MEMBERS SO THE STICKER IS TOWARDS THE OUTSIDE OF THE BUILDING.

LOWSIDE

ROOF FRAMING PLAN

REFERENCE NOTES

1. ALL PURLINS ATTACH TO FRAMING USING "STD" ATTACHMENT UNLESS NOTED. REFER TO GD MANUAL SECTION 4 FOR BOLT LOCATIONS.
2. "T" = TOP SAG ANGLE. "B" = BOTTOM SAG ANGLE.

REVISIONS
4
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2
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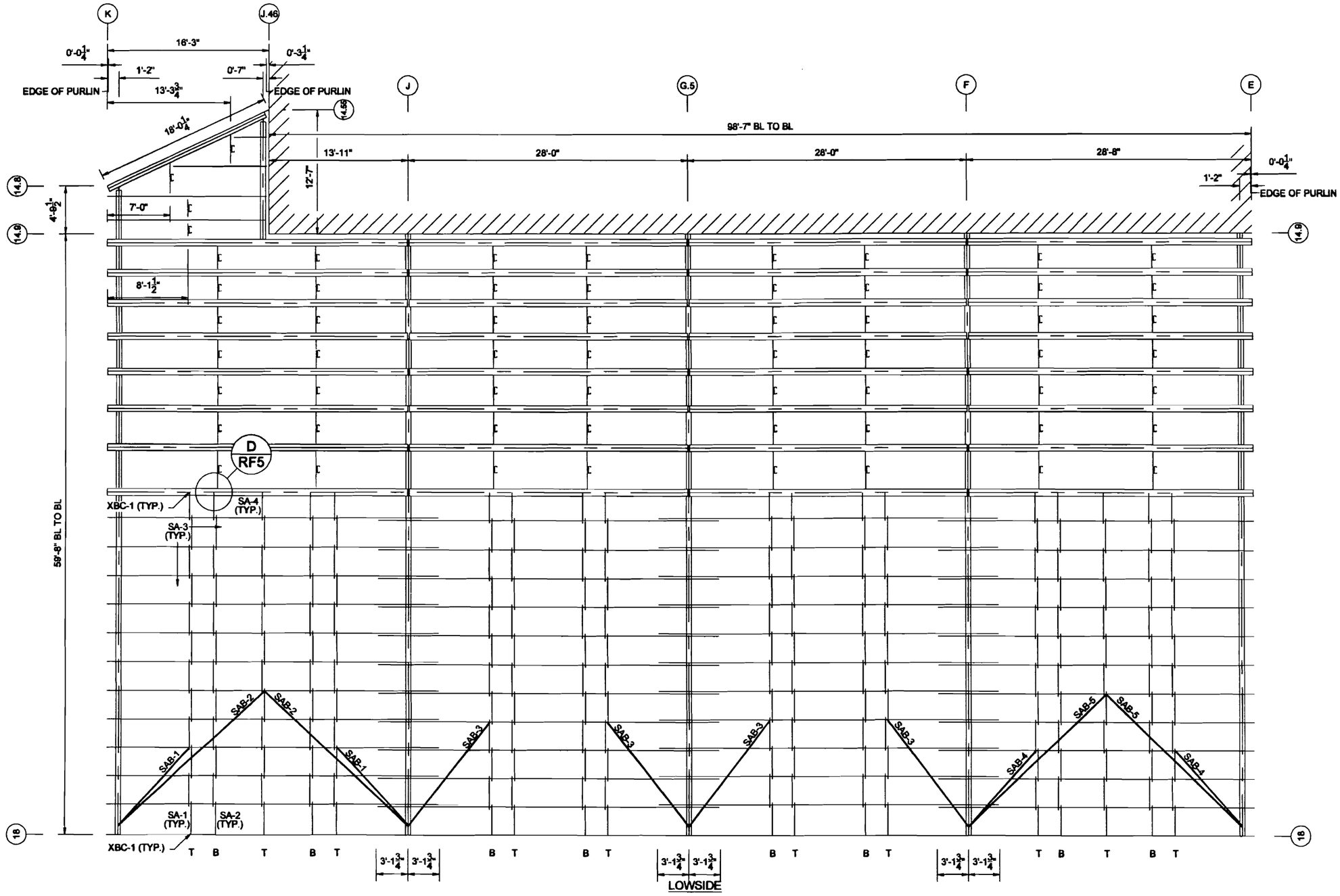
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE · WILLIAM · 12-11-09 · No. 6830 · LICENSED PROFESSIONAL ENGINEER

ROOF FRAMING DRAWINGS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

DRAWN	CHECK	ORDER NO.	RF1
AL/BLO	JSA / AL	CO95226	RF6
18-NOV-09	9-DEC-09		



PURLIN BRACING PLAN

EFERENCE NOTES

ALL PURLINS ATTACH TO FRAMING USING "STD" ATTACHMENT UNLESS NOTED. REFER TO GD MANUAL SECTION 4 FOR BOLT LOCATIONS.

"T" = TOP SAG ANGLE.
"B" = BOTTOM SAG ANGLE.

REVISIONS
4
3
2
1

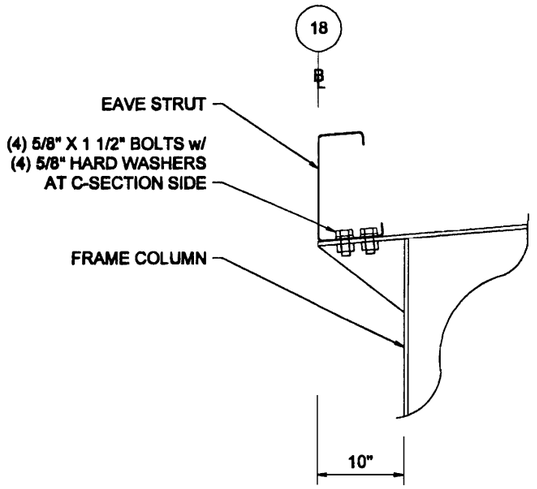
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM
WALSH
12-11-09
No. 6230
LICENSED
PROFESSIONAL ENGINEER

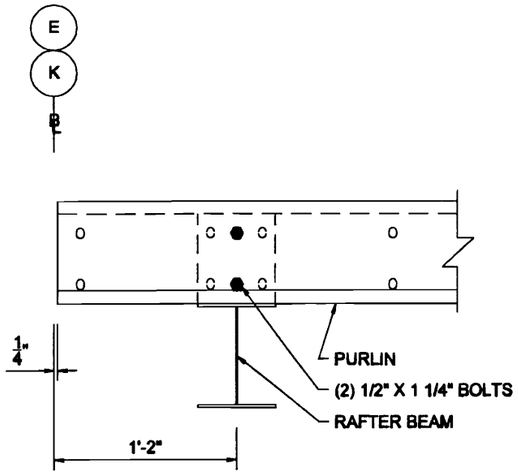
ROOF FRAMING DRAWINGS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

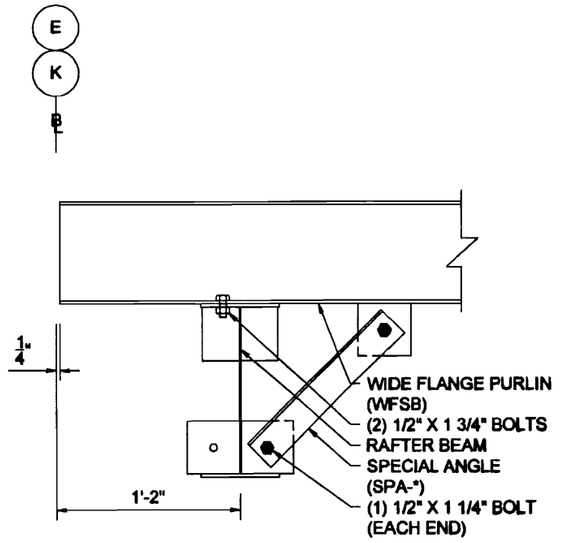
DRAWN	CHECK	ORDER NO.	RF2 / RF6
AL/BLO	JSA / AL	CO95226	
18-NOV-09	9-DEC-09		



SECTION 1-1 / RF1

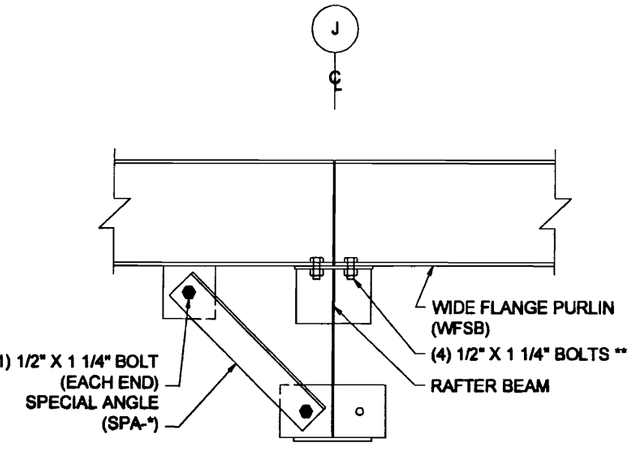


SECTION 2-2 / RF1



*NOTE: REFER TO PG. RF1 FOR PIECE MARKS AND LOCATIONS OF SPECIAL ANGLE (SPA).

SECTION 3-3 / RF1

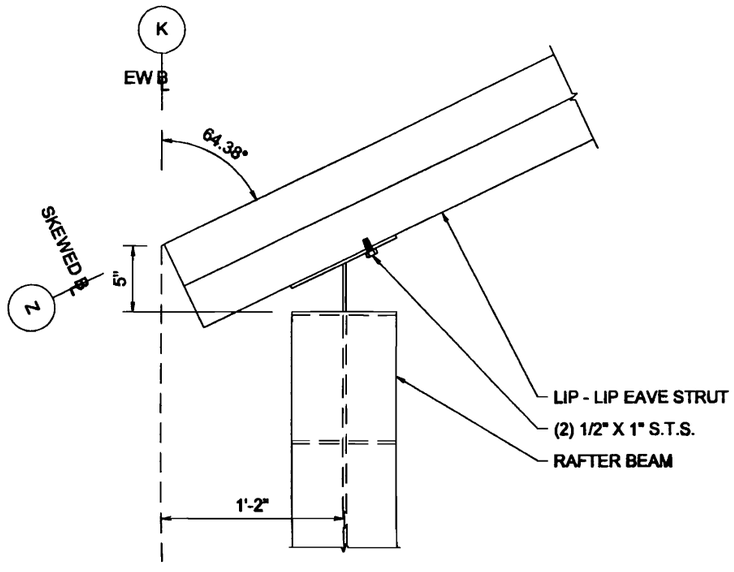


*NOTE: REFER TO PG. CS1 FOR PIECE MARKS AND LOCATIONS OF SPECIAL ANGLE (SPA).

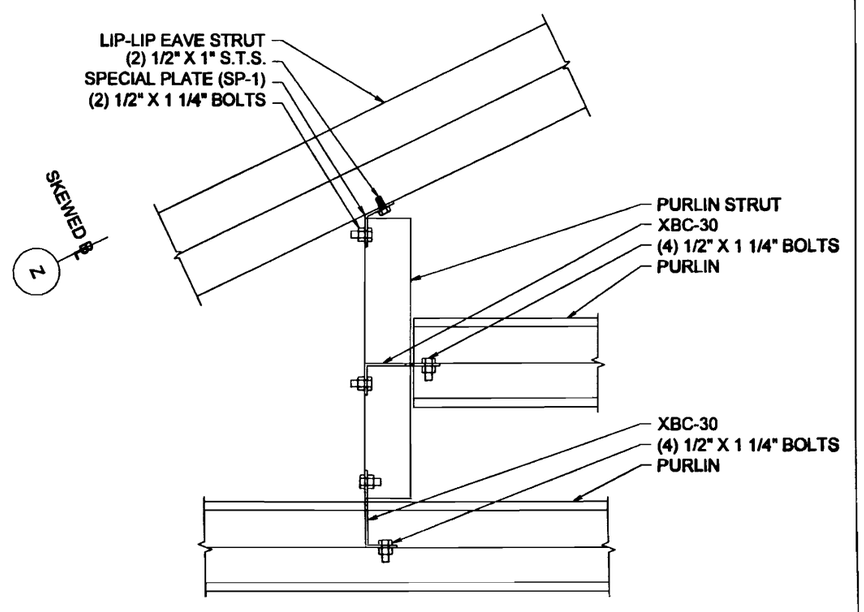
** NOTE: USE 1/2" X 1 3/4" BOLTS WHERE RAFTER FLANGE THICKNESS IS 1/2"

SECTION 4-4 / RF1

NOTE: TYPICAL AT LINES G.5 & F



DETAIL A / RF1



DETAIL B / RF1

REVISIONS
4
3
2
1

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE — WILLIAM — 12-11-09 — No. 6280 — LICENSED PROFESSIONAL ENGINEER

EAVE & GABLE SECTIONS

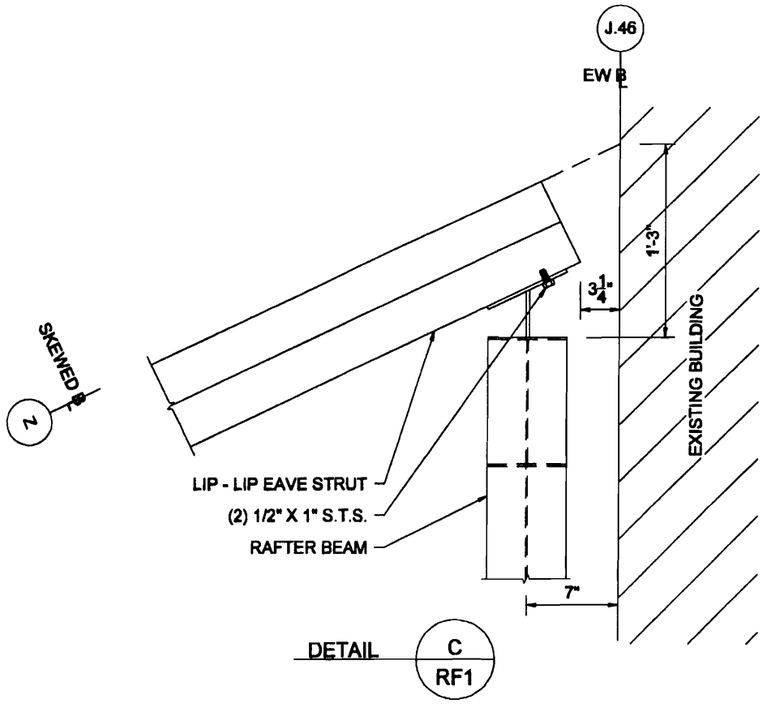
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

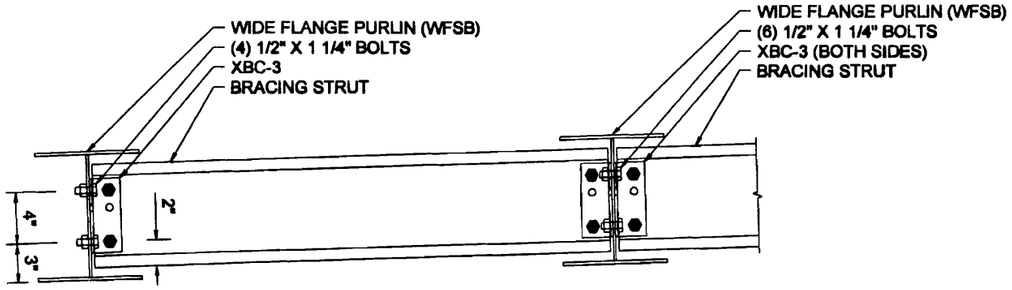
2-BUILDING COMPLEX

CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

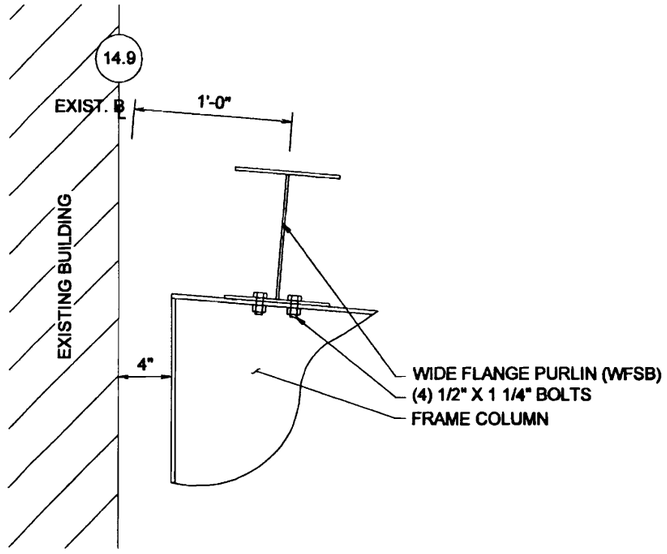
DRAWN	CHECK	ORDER NO.	RF3 / RF6
AL/BLO	JSA / AL	CO95226	
18-NOV-09	9-DEC-09		



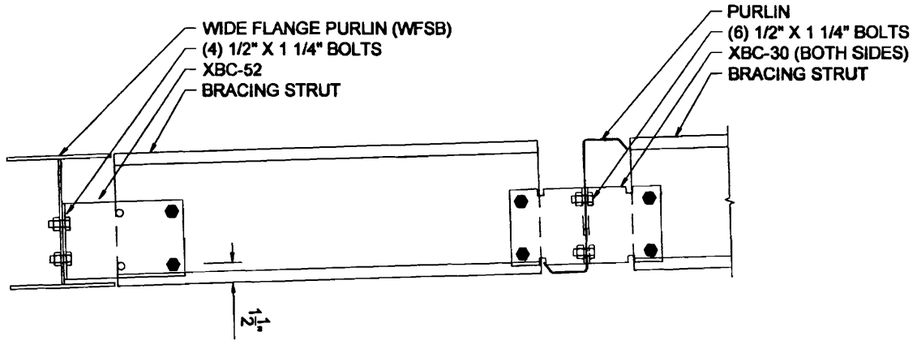
DETAIL C / RF1



SECTION 5-5 / RF1



SECTION 6-6 / RF1



SECTION 7-7 / RF1

REVISIONS
4
3
2
1

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE — WILLIAM — 12-11-09 — LICENSED PROFESSIONAL ENGINEER

EAVE & GABLE SECTIONS

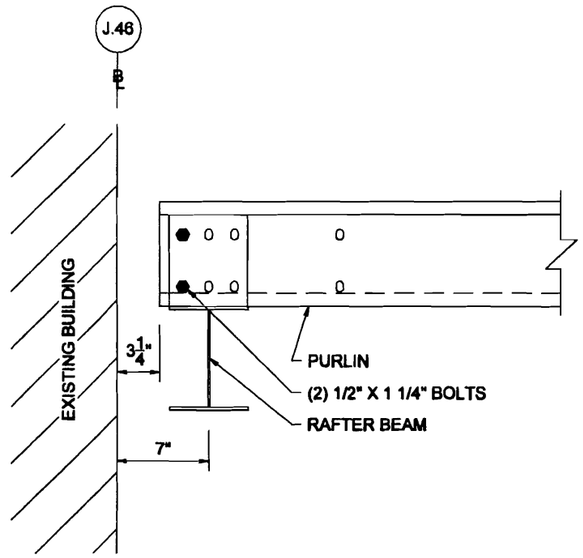
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

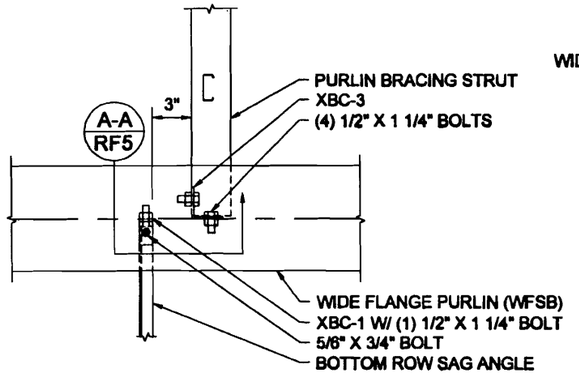
2-BUILDING COMPLEX

CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

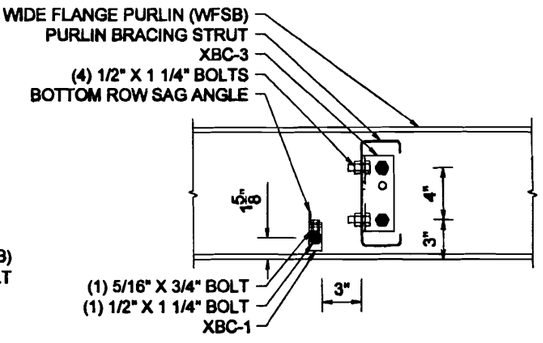
DRAWN	CHECK	ORDER NO.	RF4 / RF6
BLO	JSA / AL	CO95226	
18-NOV-09	9-DEC-09		



SECTION 8-8 / RF1



DETAIL D / RF2



SECTION A-A / RF5

REVISIONS
4
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NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE · WILLIAM · 12-11-09 · No. 8450 · LICENSED PROFESSIONAL ENGINEER

EAVE & GABLE SECTIONS

TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

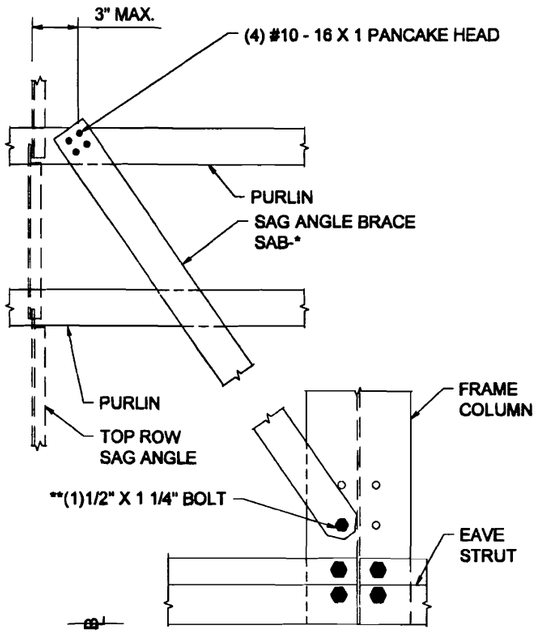
PORTLAND, ME

2-BUILDING COMPLEX

CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

DRAWN	CHECK	ORDER NO.	RF5 / RF6
BLO	JSA / AL	CO95226	
18-NOV-09	9-DEC-09		

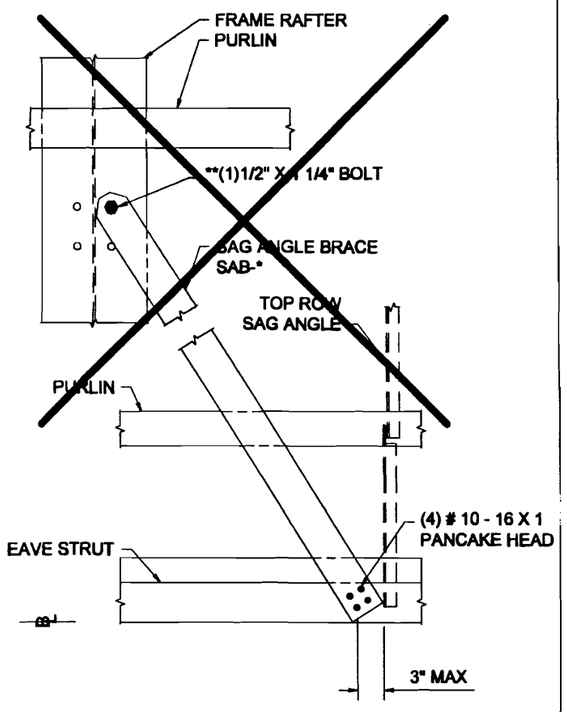
NOTE:FIELD BEND FLAT STRAP FROM TOP OF PURLINS TO TOP OF FRAME RAFTER. BOLT STRAP TO FRAME BEFORE SCREWING TO PURLIN OR EAVE STRUT.



FLAT STRAP CONNECTION
ENDING AT COLUMN

GD1050H

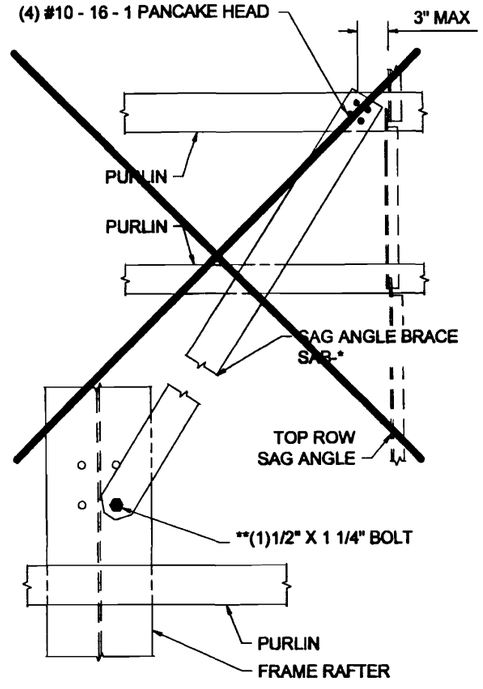
NOTE:FIELD BEND FLAT STRAP FROM TOP OF PURLINS TO TOP OF FRAME RAFTER. BOLT STRAP TO FRAME BEFORE SCREWING TO PURLIN OR EAVE STRUT.



FLAT STRAP CONNECTION
ENDING AT EAVE STRUT

GD1050I

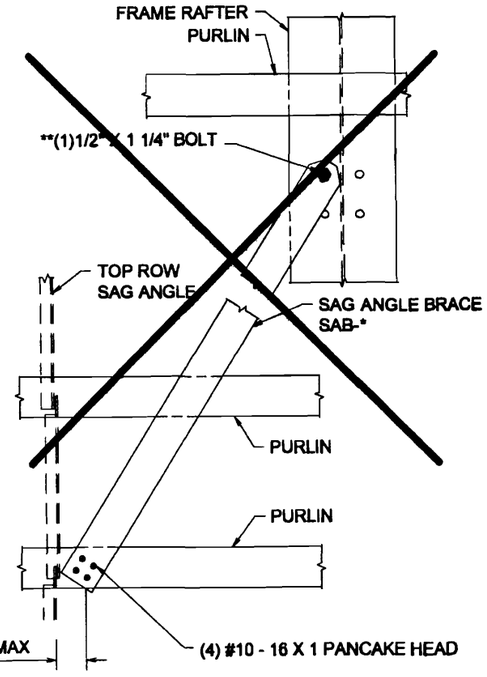
NOTE:FIELD BEND FLAT STRAP FROM TOP OF PURLINS TO TOP OF FRAME RAFTER. BOLT STRAP TO FRAME BEFORE SCREWING TO PURLIN OR EAVE STRUT.



FLAT STRAP CONNECTION
ENDING AT FRAME RAFTER

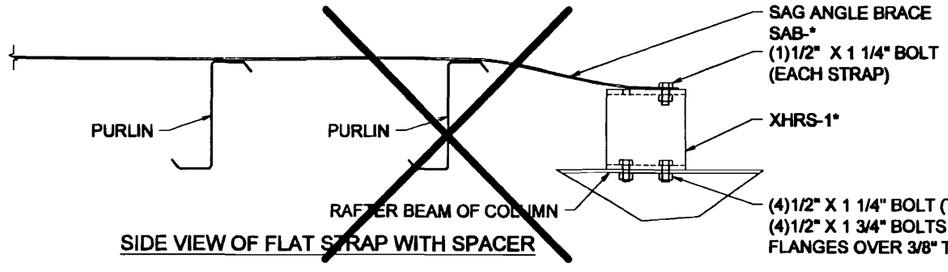
GD1050J

NOTE:FIELD BEND FLAT STRAP FROM TOP OF PURLINS TO TOP OF FRAME RAFTER. BOLT STRAP TO FRAME BEFORE SCREWING TO PURLIN OR EAVE STRUT.

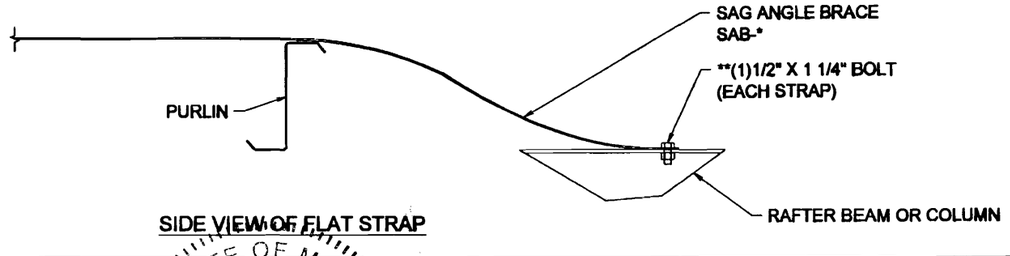


FLAT STRAP CONNECTION
ENDING AT PURLIN

GD1050K



SIDE VIEW OF FLAT STRAP WITH SPACER



SIDE VIEW OF FLAT STRAP

THE DETAILS ON THIS PAGE OVERRIDE DETAILS IN THE GENERAL DETAILS MANUAL.
SAG ANGLE BRACING IS TO BE PLACED ON THE TOP OF THE PURLINS AND BENT DOWN TO THE RAFTER/COLUMN FLANGE.
TERMINATION OF THE STRAP AT THE PURLINS IS TO BE WITHIN 3" OF THE TOP ROW SAG ANGLE.
*REFER TO ROOF BRACING PLAN FOR LOCATIONS AND CALLOUTS.
**- 1/2" X 1 3/4" BOLTS MAY BE REQUIRED AT FLANGES THAT ARE 5/8" AND THICKER.

RELEASED	02-13-07
SUPERSEDES	02-14-06

REVISIONS

4
3
2
1

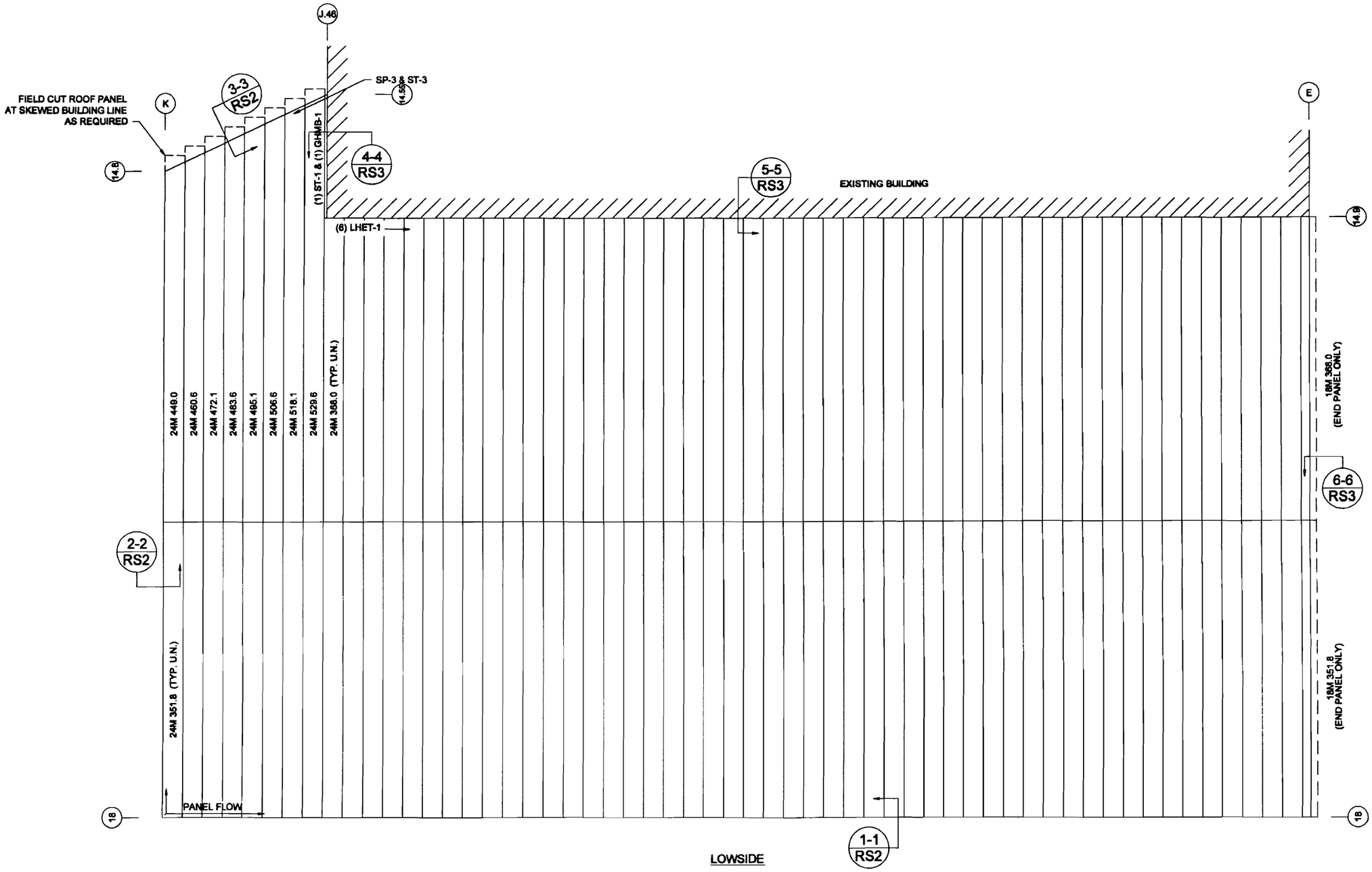
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM C. KEE
12-11-09
LICENSED PROFESSIONAL ENGINEER

FLAT STRAP SAG ANGLE BRACING INSTALLATION
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

DRAWN	CHECK	ORDER NO.	RF6
AL	JSA	CO95226	RF6
24-NOV-09	9-DEC-09		



LOWSIDE

MSC ROOF PANEL PLAN

UL 90

REFERENCE NOTES:
ROOF SHEETING SYSTEM IS BASED ON THE FOLLOWING:
1. FLOATING SYSTEM
2. HIGH SYSTEM
3. SLIDING CLIPS WITH (2) 1/4" - 14 x 1-1/2" FASTENERS PER CLIP AT PURLINS AND (2) #12 - 24 x 1 1/2" FASTENERS PER CLIP AT WIDE FLANGE PURLINS, UNLESS OTHERWISE NOTED.

REVISIONS
4
3
2
1

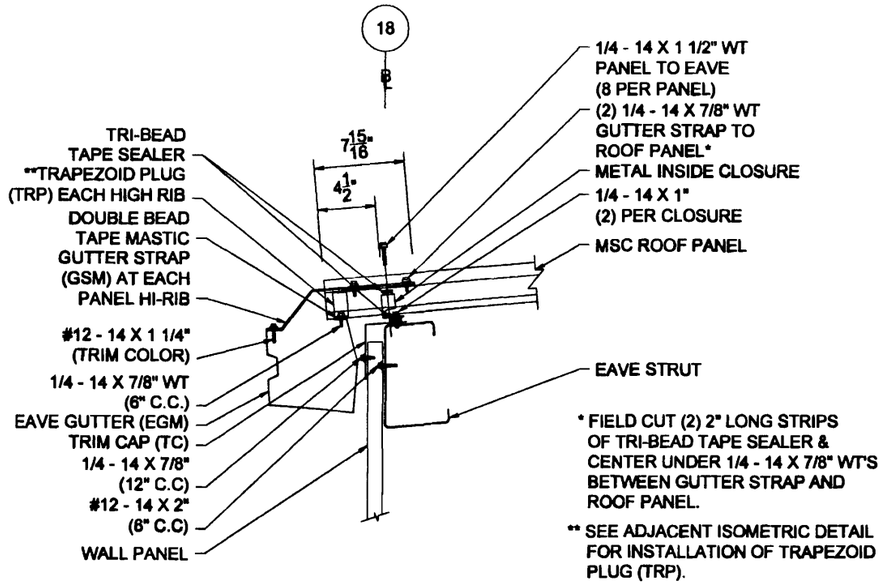
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM C. WALSH
12-11-09
No. 11539
LICENSED
PROFESSIONAL ENGINEER

MSC ROOF PANEL PLAN
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

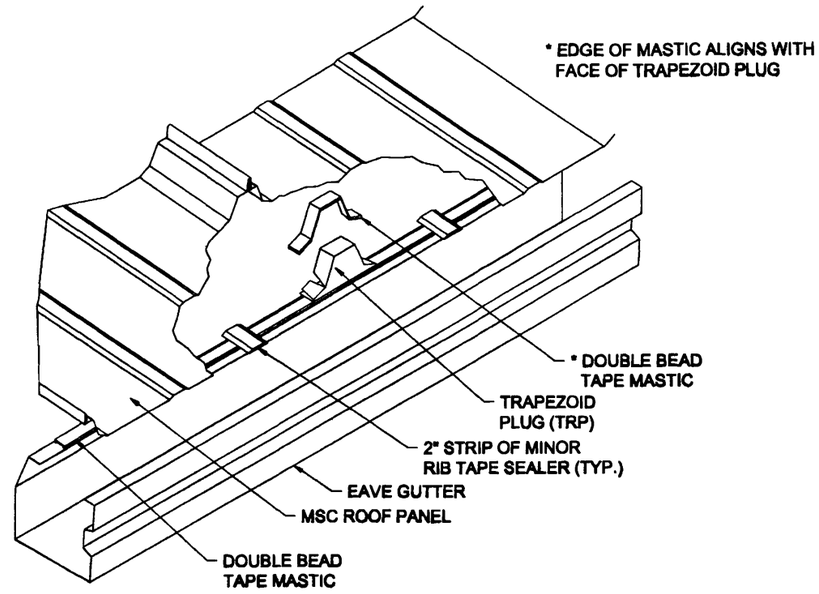
DRAWN	CHECK	ORDER NO.	RS1 / RS5
JSA	AL	CO95226	
1-DEC-09	9-DEC-09		



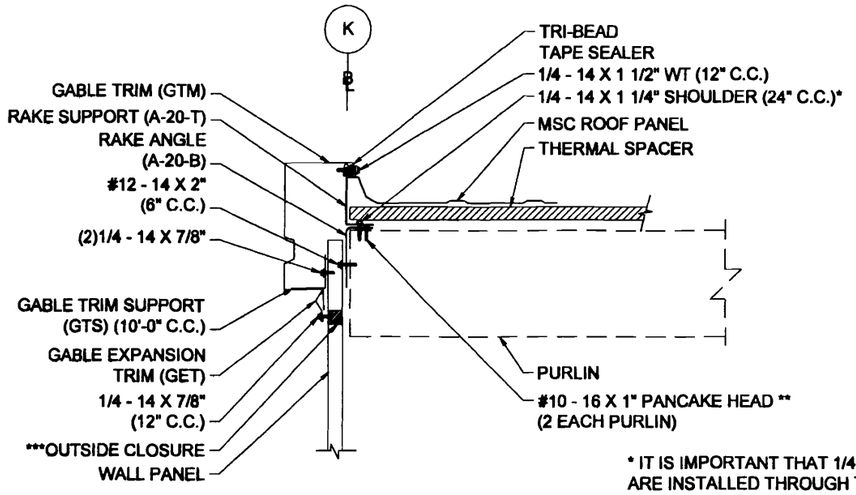
* FIELD CUT (2) 2" LONG STRIPS OF TRI-BEAD TAPE SEALER & CENTER UNDER 1/4 - 14 X 7/8" WT'S BETWEEN GUTTER STRAP AND ROOF PANEL.

** SEE ADJACENT ISOMETRIC DETAIL FOR INSTALLATION OF TRAPEZOID PLUG (TRP).

SECTION 1-1 / RS1



TRAPEZOID PLUG INSTALLATION WITH GUTTER

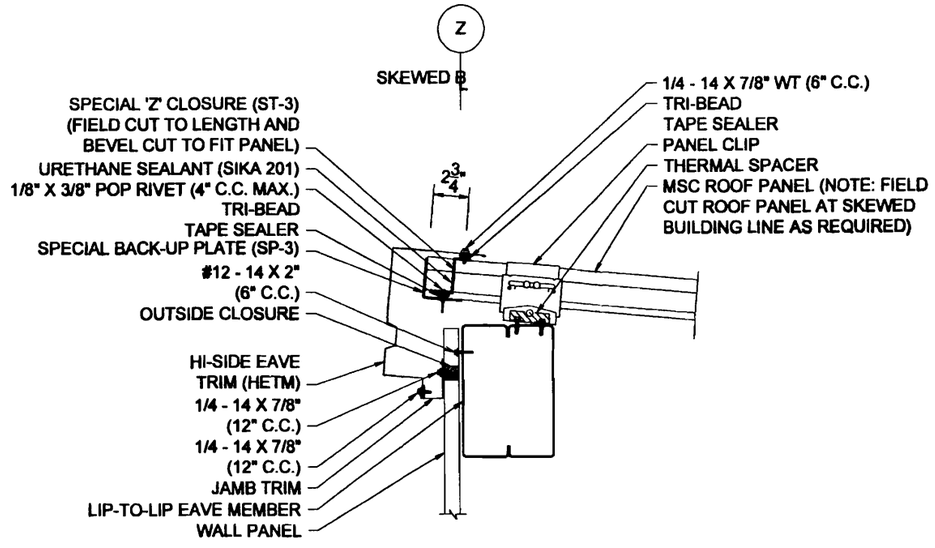


* IT IS IMPORTANT THAT 1/4 - 14 X 1 1/4" SHOULDERS ARE INSTALLED THROUGH THE CENTER OF THE SLOTTED HOLES OF THE RAKE SUPPORT.

** NOTE: PRE-DRILLING 1/8" PILOT HOLE MAY BE REQUIRED AT WIDE FLANGE PURLINS (WFSB).

*** NOTE: FIELD CUT OUTSIDE CLOSURE FOR HIGHER ROOF PITCHES.

SECTION 2-2 / RS1



SECTION 3-3 / RS1

REFERENCE NOTE:

REFER TO ROOF MANUAL DETAILS FOR SEALANTS AND SEALANT PLACEMENT.

REVISIONS

4 —

3 —

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1 —

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE — WILLIAM C. — LICENSED — PROFESSIONAL ENGINEER — 12-11-09

EAVE & GABLE SECTIONS

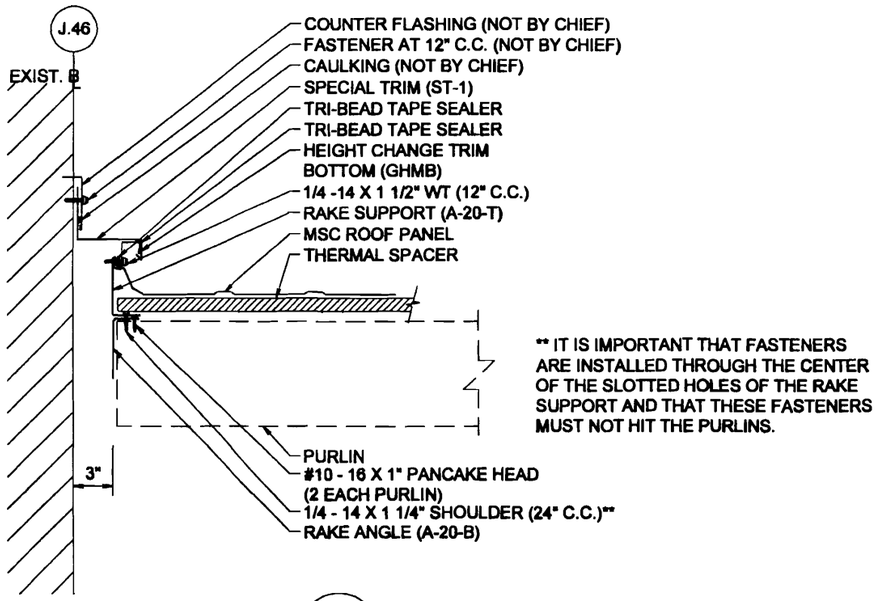
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

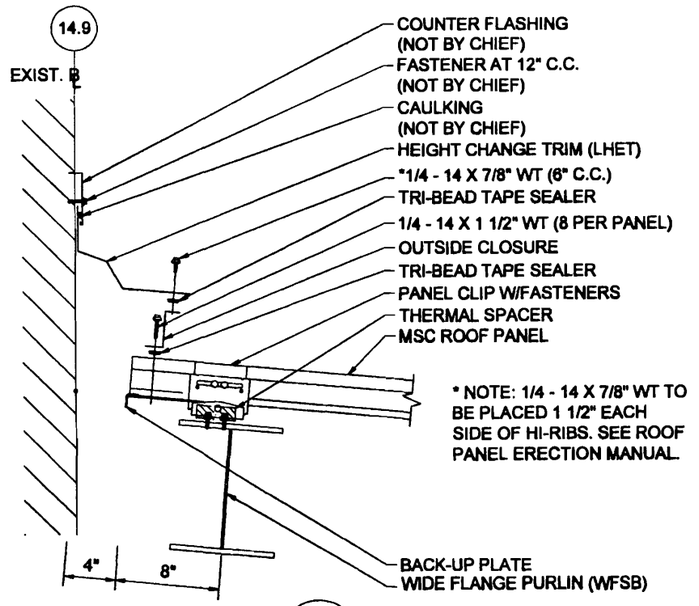
2-BUILDING COMPLEX

CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68803-2078

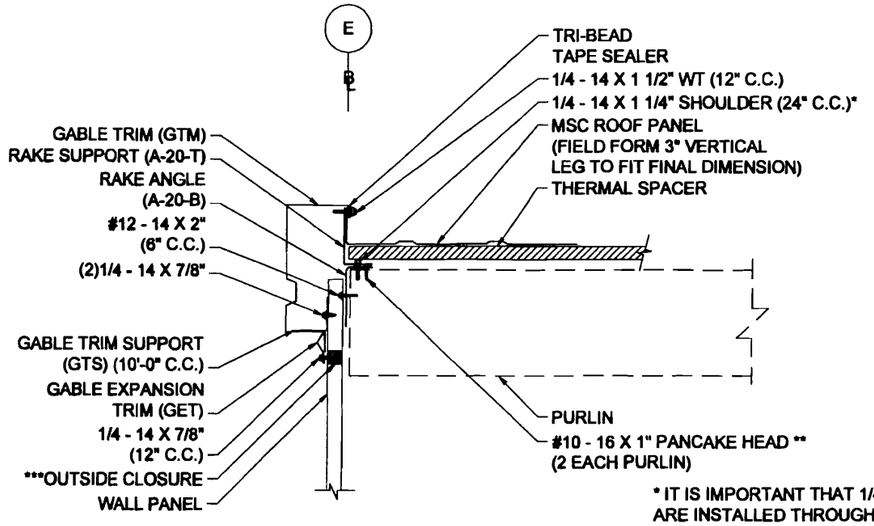
DRAWN	CHECK	ORDER NO.	RS2 / RS5
JSA	AL	CO95226	
1-DEC-09	9-DEC-09		



SECTION 4-4 / RS1



SECTION 5-5 / RS1

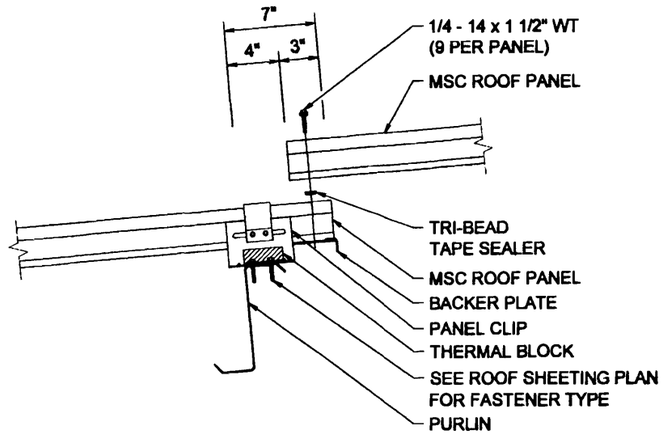


* IT IS IMPORTANT THAT 1/4 - 14 X 1 1/4" SHOULDERS ARE INSTALLED THROUGH THE CENTER OF THE SLOTTED HOLES OF THE RAKE SUPPORT.

** NOTE: PRE-DRILLING 1/8" PILOT HOLE MAY BE REQUIRED AT WIDE FLANGE PURLINS (WFSB).

*** NOTE: FIELD CUT OUTSIDE CLOSURE FOR HIGHER ROOF PITCHES.

SECTION 6-6 / RS1



MSC ROOF PANEL SPLICE DETAIL

REVISIONS

4 —
3 —
2 —
1 —

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

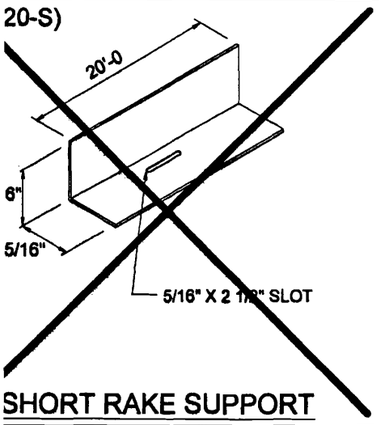
STATE OF MAINE — WILLIAM — 12-11-09 — LICENSED PROFESSIONAL ENGINEER

EAVE & GABLE SECTIONS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

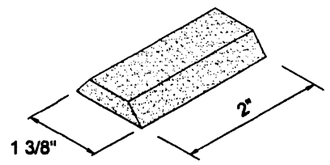
CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

DRAWN	CHECK	ORDER NO.	RS3 / RS5
JSA	AL	CO95226	
1-DEC-09	9-DEC-09		

20-S)

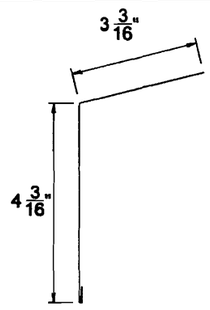


SHORT RAKE SUPPORT

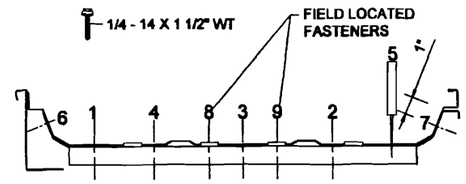


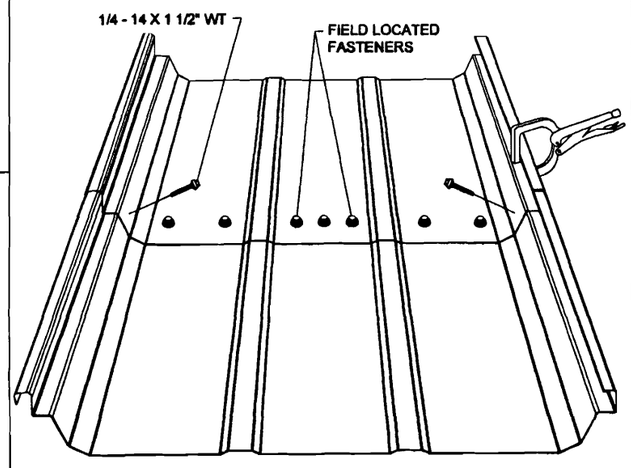
MINOR RIB TAPE SEALER

(TCx)

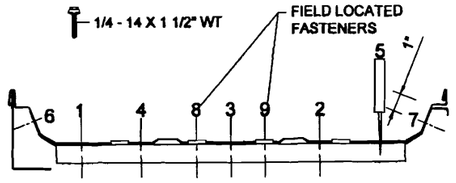


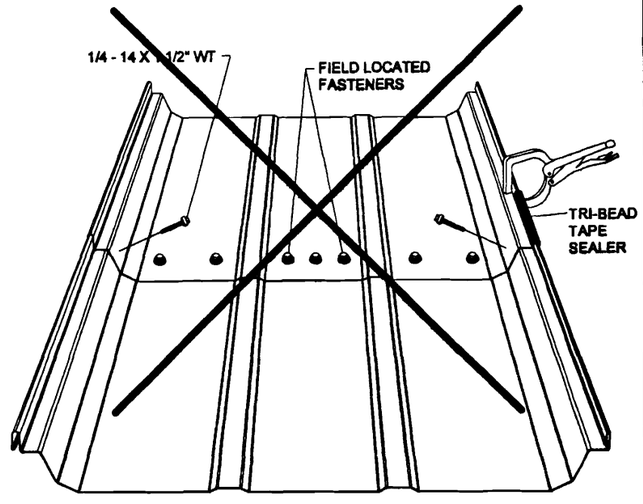
TRIM CAP





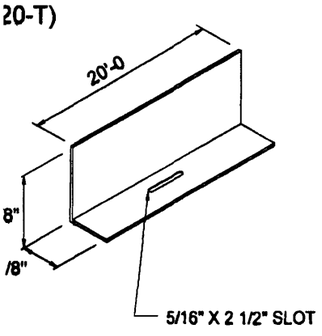
The above details are on update to the CHIEF MSC Erection Manual page MSC-35 and MSC-38. Follow the instructions for sequences and usage that are in the manual - adding the 2 field located 1/4 - 14 x 1 1/2" WTs as the last step.





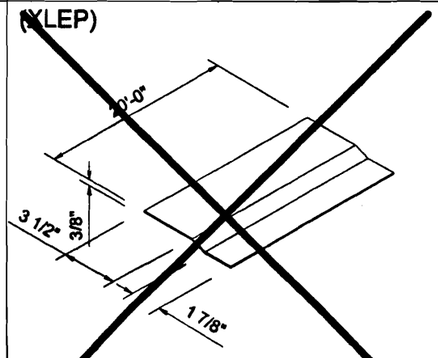
The above details are on update to the CHIEF STC Erection Manual page STC-35 and STC-38. Follow the instructions for sequences and usage that are in the manual - adding the 2 field located 1/4 - 14 x 1 1/2" WTs as the last step.

20-T)

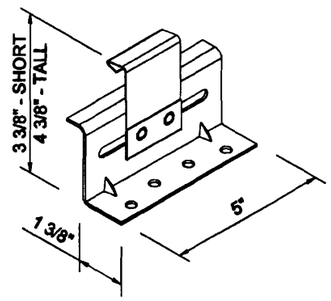


TALL RAKE SUPPORT

(XLEP)

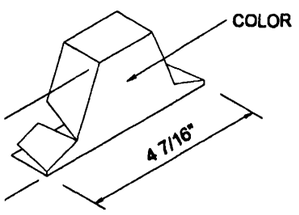


MID POINT FIXED LOW



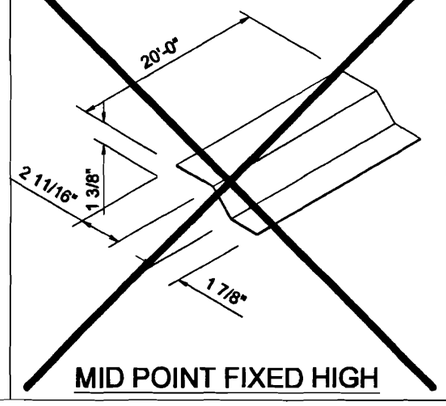
MSC SLIDING CLIPS

)

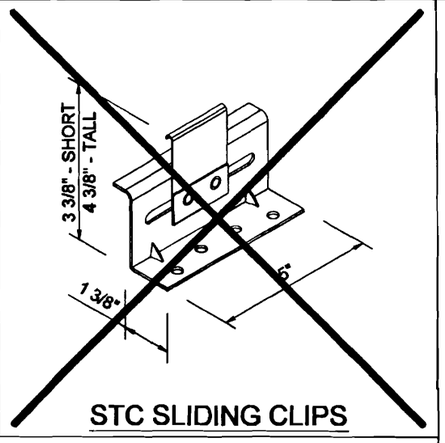


RAPEZOID HI-RIB PLUG

(XHEP)

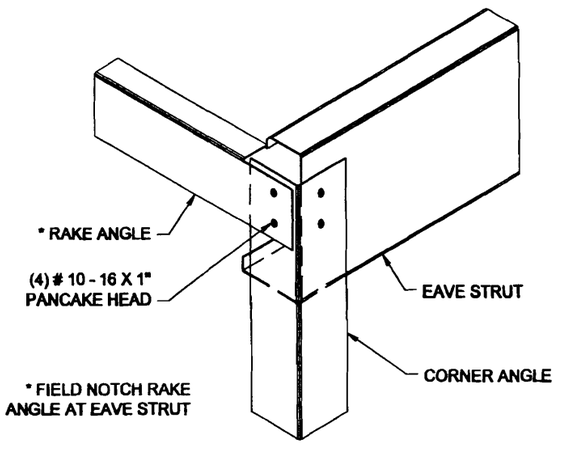


MID POINT FIXED HIGH

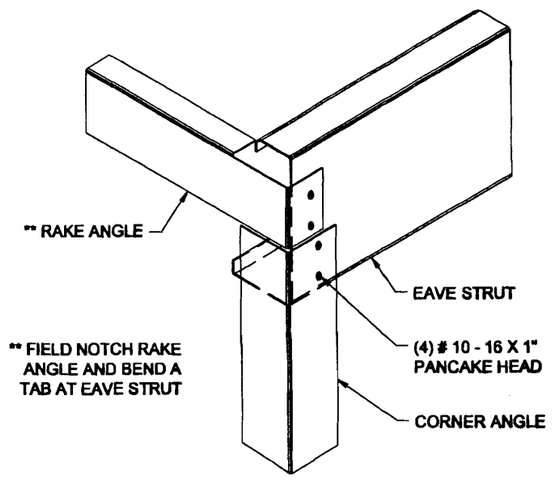


STC SLIDING CLIPS

RAKE ANGLE CONDITIONS AT EAVE STRUT



RAKE ANGLE TO CORNER ANGLE CONNECTION



RAKE ANGLE TO EAVE STRUT CONNECTION

DETAILS ON THIS PAGE OVERRIDE DETAILS IN THE MSC ERECTION MANUAL.

RELEASED	04-07-08
SUPERSEDES	12-18-07

REVISIONS

4 —
3 —
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1 —

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
12-11-09
LICENSED
PROFESSIONAL ENGINEER

UPDATED STC/MSC DETAILS — STC-PROCGD

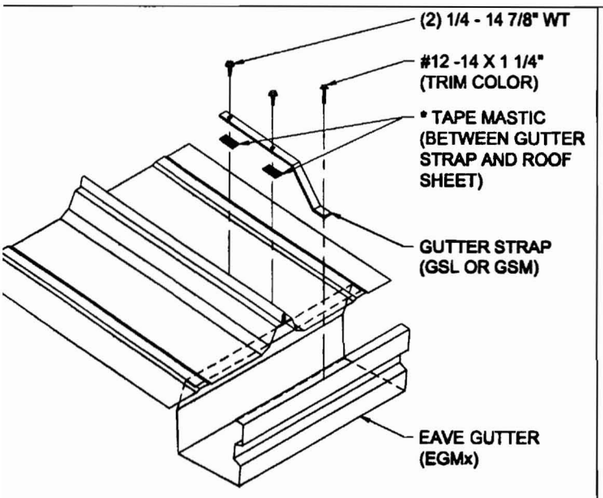
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

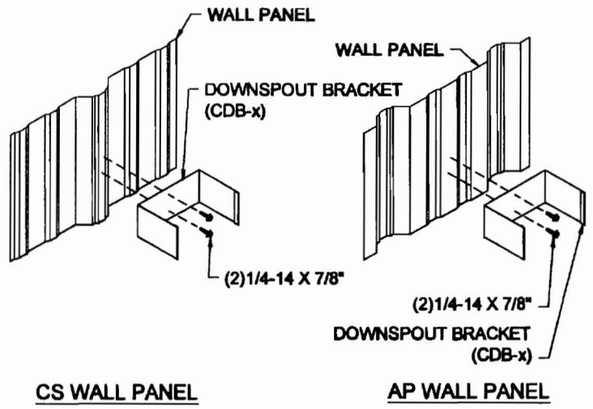
DRAWN	CHECK	ORDER NO.	RS4 / RS5
JSA	AL	CO95226	
1-DEC-09	9-DEC-09		



GUTTER STRAP TO ROOF SHEET AND GUTTER

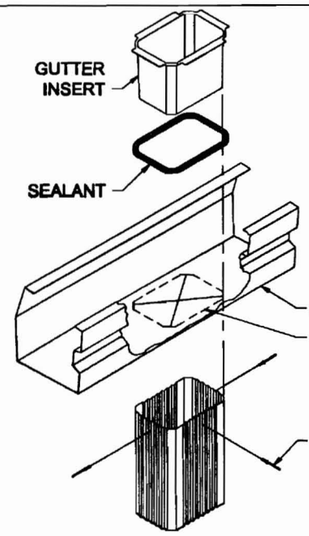
ER TO EAVE SECTION ON ERECTION DRAWINGS FOR GUTTER STRAP CING AND TYPE.

PE MASTIC WILL BE TRI-BEAD FOR STC AND MSC ROOF. USE DOUBLE D FOR LTC ROOF. TAPE MASTIC NOT REQUIRED FOR MVF OR MVP F.



BRACKET TO WALL PANEL

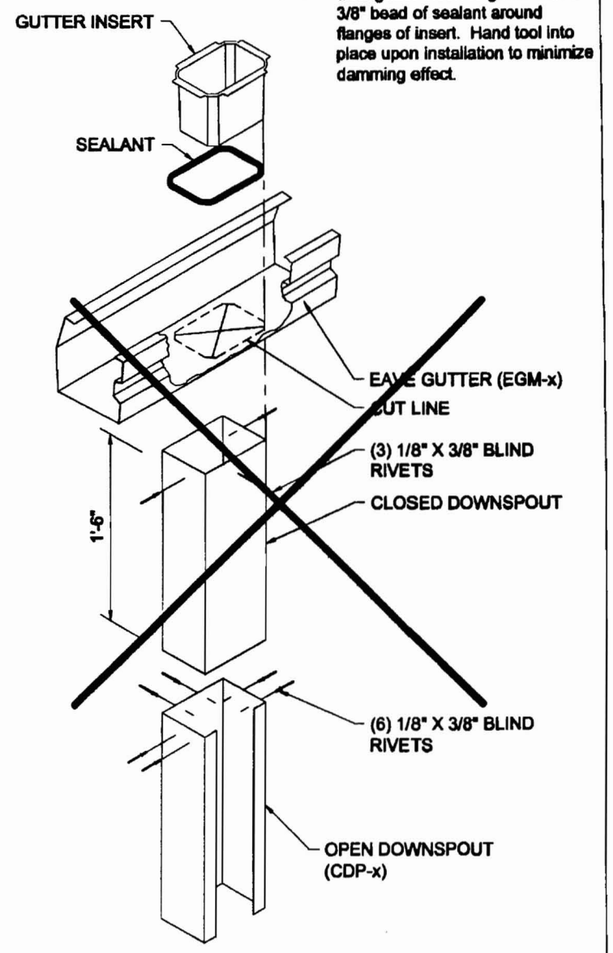
LOCATE BRACKETS AT 6'-0" C.C.
LOCATE BRACKET ON HIGH RIBS FOR CS WALL PANEL .
LOCATE BRACKET ON FLAT OF PANEL FOR AP WALL PANEL.
ATTACH BRACKET TO DOWNSPOUT WITH (2)1/8" X 3/8" BLIND RIVET EACH LEG



- Field cut holes in gutter as shown.
- Seal gutter insert to gutter with a 3/8" bead of sealant around flanges of insert. Hand tool into place upon installation to minimize damming effect.

GUTTER TO DOWNSPOUT

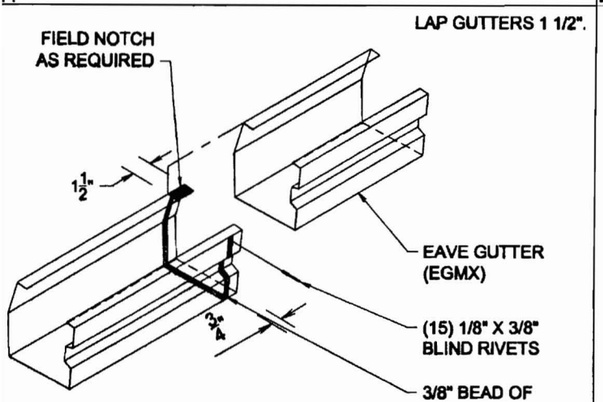
FIELD CUT HOLES IN GUTTER AS SHOWN. ATTACH DOWNSPOUT TO GUTTER INSERT WITH (3) 1/8" X 3/8" BLIND RIVETS. LOCATE CUT AS CLOSE AS POSSIBLE TO BUILDING LINE FOR BRACKET ATTACHMENT.



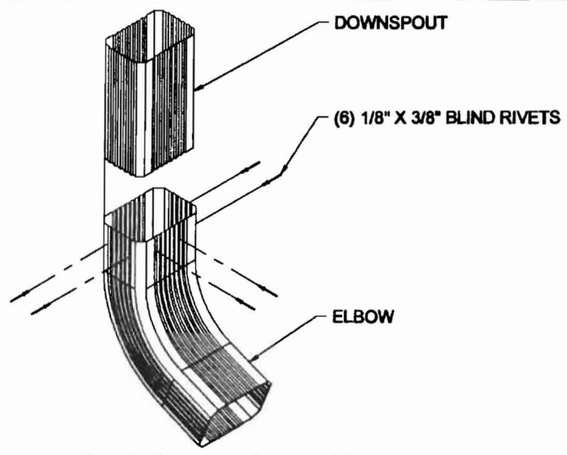
- Field cut holes in gutter as shown.
- Seal gutter insert to gutter with a 3/8" bead of sealant around flanges of insert. Hand tool into place upon installation to minimize damming effect.

GUTTER TO OPEN DOWNSPOUT

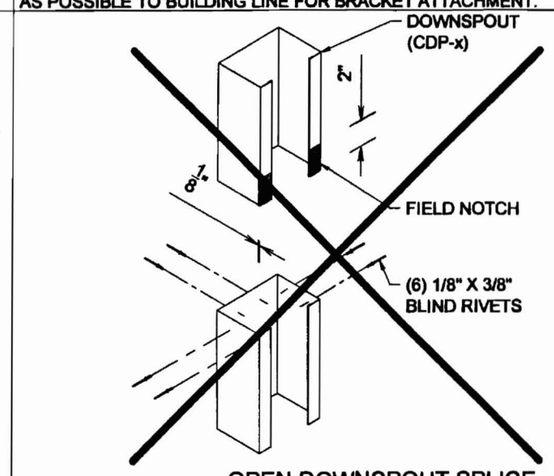
FIELD CUT HOLES IN GUTTER AS SHOWN. ATTACH DOWNSPOUT TO GUTTER INSERT WITH (3) 1/8" X 3/8" BLIND RIVETS. LOCATE CUT AS CLOSE AS POSSIBLE TO BUILDING LINE FOR BRACKET ATTACHMENT.



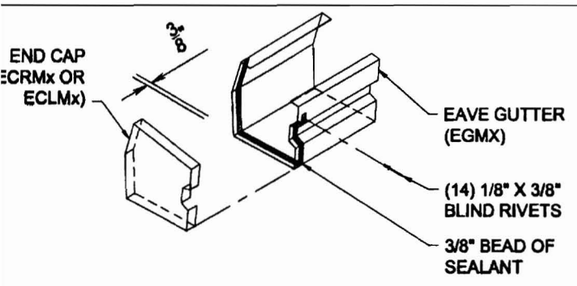
GUTTER SPLICE



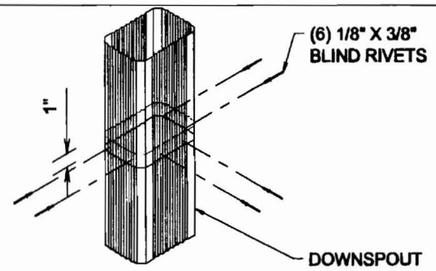
DOWNSPOUT TO ELBOW



OPEN DOWNSPOUT SPLICE

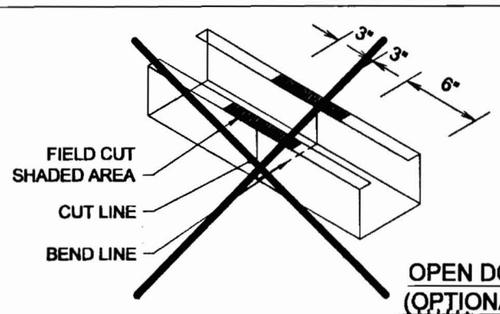


GUTTER END CAP

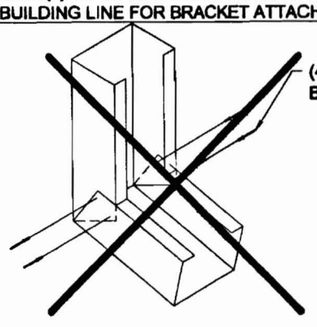


DOWNSPOUT SPLICE

USE 1" LAP DIMENSION FOR ALL DOWNSPOUT AND ELBOW LAPS.



OPEN DOWNSPOUT ELBOW (OPTIONAL - FIELD FORMED)



RENCE NOTES:
LL SEALANT IS SIKA 201.

RILL 1/8" DIA. HOLE FOR 1/8" X 3/8" BLIND RIVETS.

REVISIONS	
4	
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RELEASED	06-26-09
SUPERSEDES	04-14-09

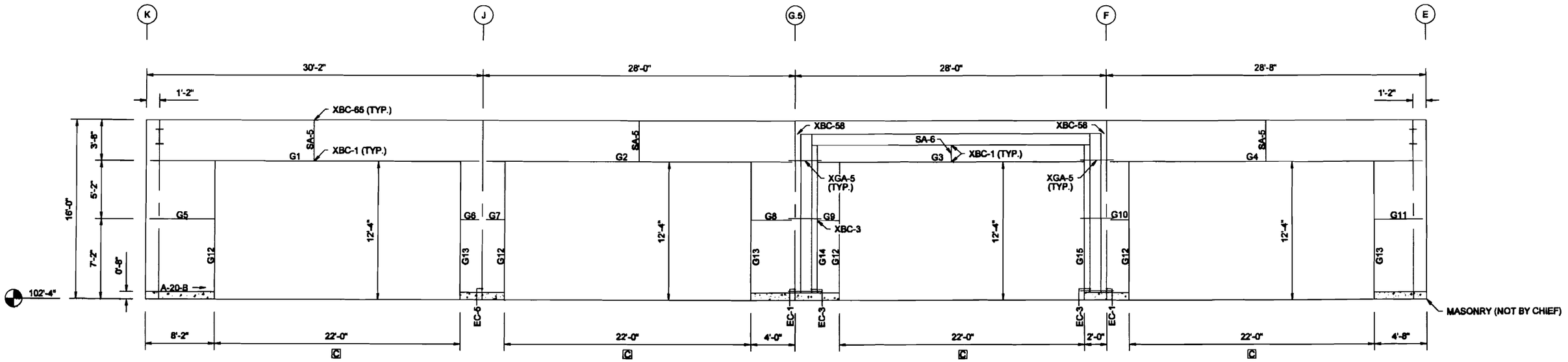
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
12-11-09
PROFESSIONAL ENGINEER

STANDING SEAM ROOF WITH STANDARD GUTTER
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE 68802-2078

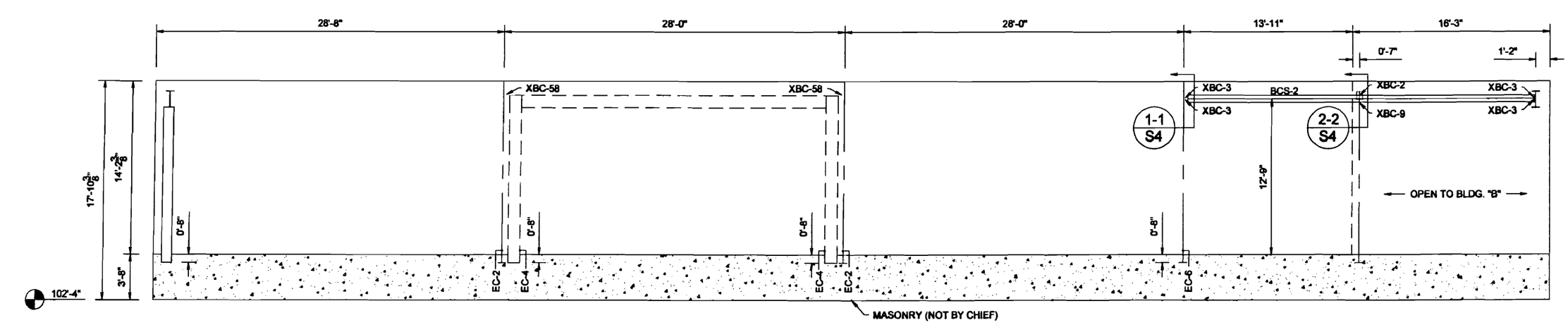
DRAWN	CHECK	ORDER NO.	RS5
JSA	AL	CO95226	RS5
1-DEC-09	9-DEC-09		



LOWSIDE

SIDEWALL FRAMING ELEVATION

COL. LINE 18 GIRT DEPTH: 10"



SIDEWALL FRAMING ELEVATION

COL. LINE 14.9 GIRT DEPTH: 10"

REVISIONS
4
3
2
1

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE — WILLIAM — No. — PROFESSIONAL ENGINEER — 12-11-09

SIDEWALL DRAWINGS

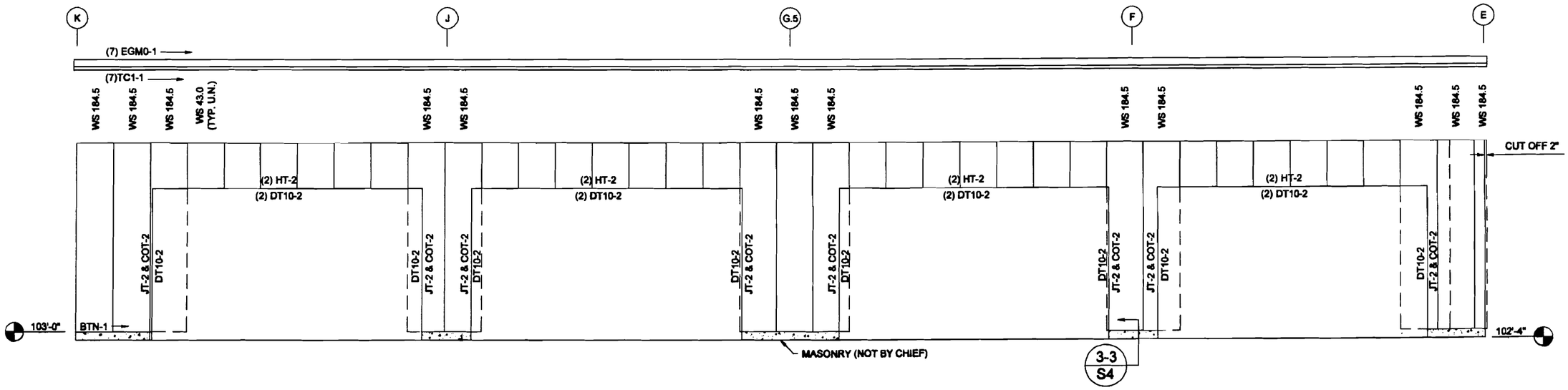
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

2-BUILDING COMPLEX

CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

DRAWN	CHECK	ORDER NO.	S1
JSA	AL	CO95226	S6
1-DEC-09	9-DEC-09		

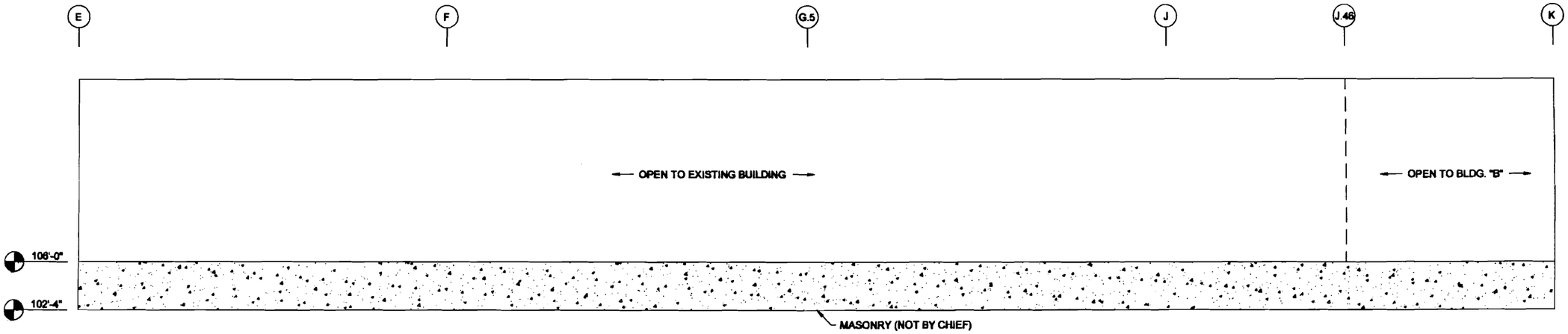


LOWSIDE

SIDEWALL SHEETING ELEVATION

COL LINE 18

NOTE: BLDG. "A", COL. LINE. "18" (STANDARD GUTTER) DOWNSPOUT DROP SPACING * = 52' (SINGLE DOWNSPOUT DROP). (6) DOWNSPOUT DROPS PROVIDED FOR THIS WALL. EACH DROP CONSISTS OF (1 1/2) 12' CLOSED DOWNSPOUTS AND (1) ELBOW.
*DOWNSPOUT DROP SPACING INDICATES THE MAXIMUM RECOMMENDED EQUAL SPACING OR THE MAXIMUM RECOMMENDED LENGTH OF GUTTER THAT EACH DOWNSPOUT DROP MAY DRAIN.



SIDEWALL SHEETING ELEVATION

COL LINE 14.9

FERENCE NOTES

OR OPENING TRIMS, REFER TO GENERAL DETAILS.

REVISIONS
4
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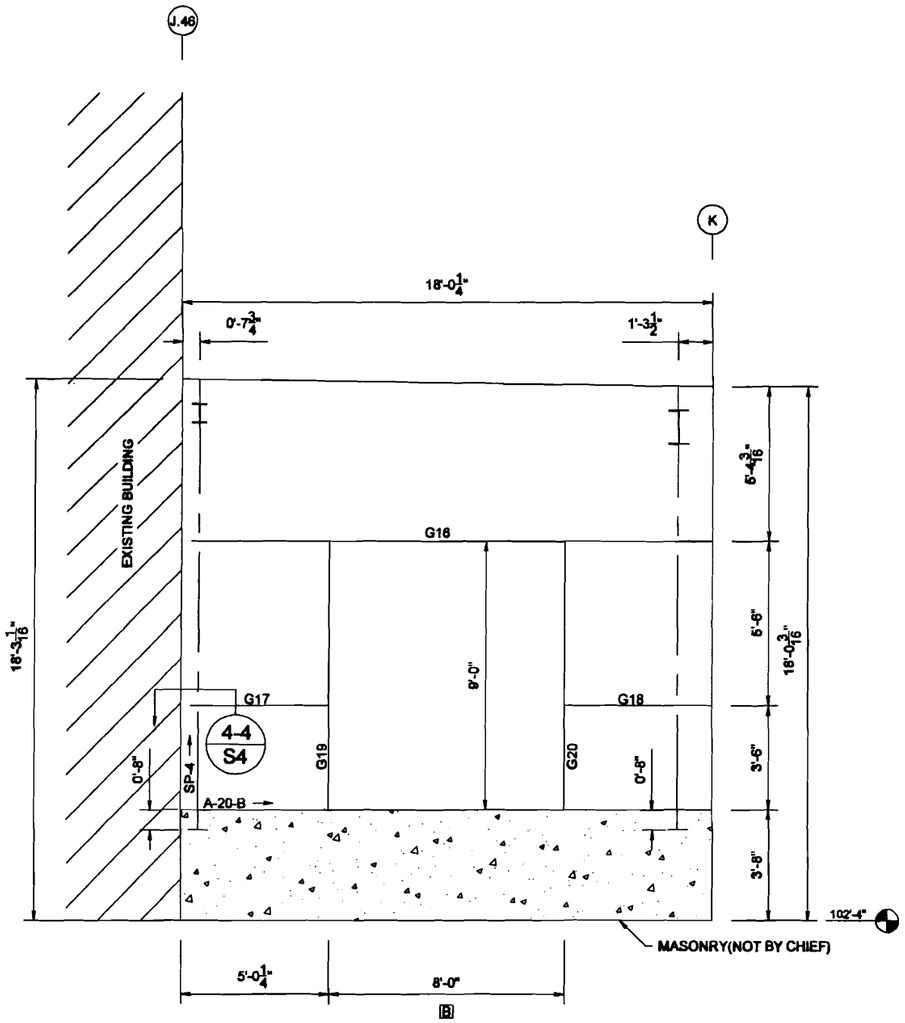
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE — WILLIAM — LICENSED PROFESSIONAL ENGINEER — 12-11-09

SIDEWALL DRAWINGS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

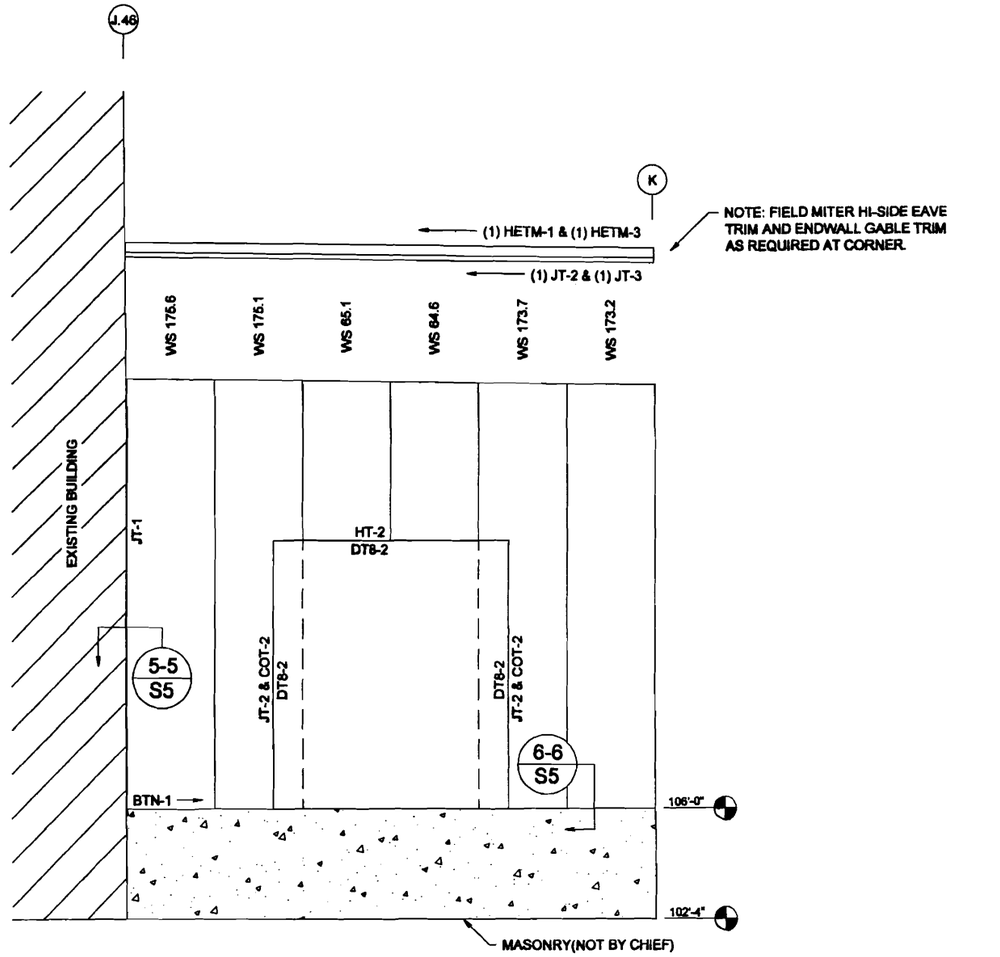
DRAWN	CHECK	ORDER NO.	S2 / S6
JSA	AL	CO95226	
1-DEC-09	9-DEC-09		



SKEWED SIDEWALL FRAMING ELEVATION

COL. LINE Z GIRT DEPTH: 8"

BLDG. "B"



SKEWED SIDEWALL SHEETING ELEVATION

COL. LINE Z BLDG. "B"

ENCE NOTES

OPENING TRIMS, REFER TO GENERAL DETAILS.

REVISIONS
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NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE WILLIAM 12-11-09 REGISTERED PROFESSIONAL ENGINEER

SIDEWALL DRAWINGS

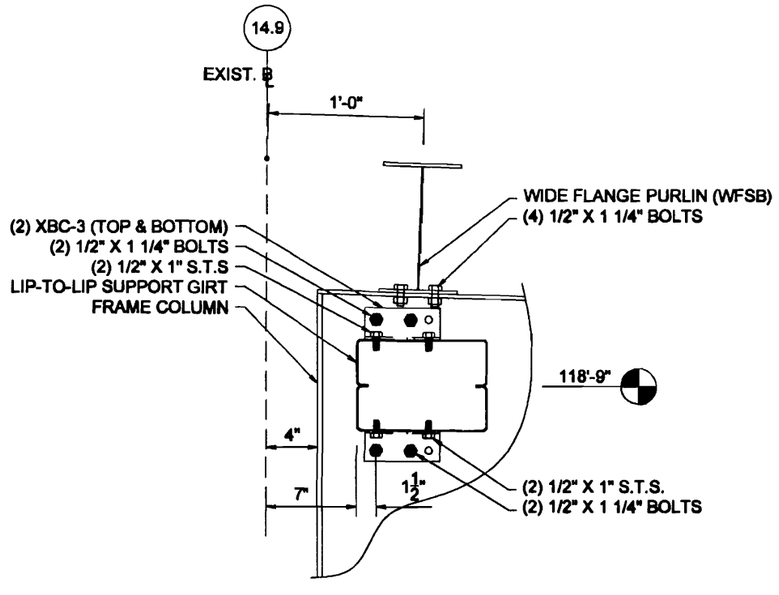
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

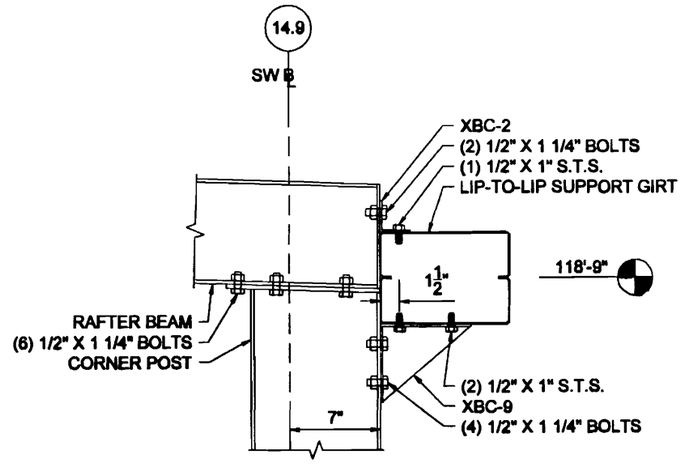
2-BUILDING COMPLEX

CHIEF BUILDINGS a division of Chief Industries, Inc. P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

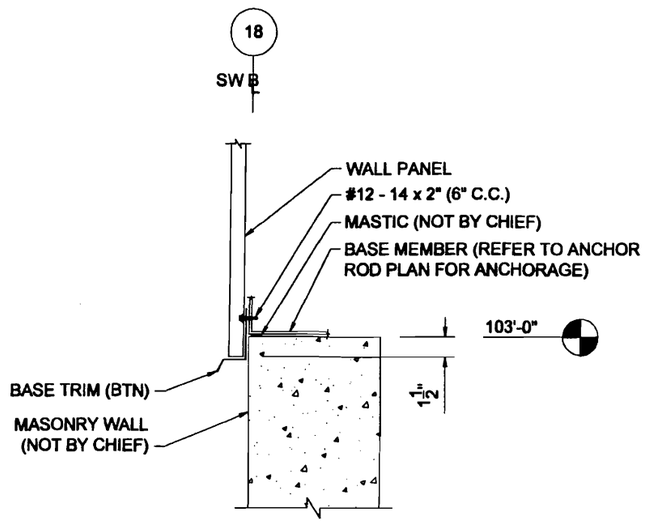
DRAWN	CHECK	ORDER NO.	S3 / S6
JSA	AL	CO95226	
1-DEC-09	9-DEC-09		



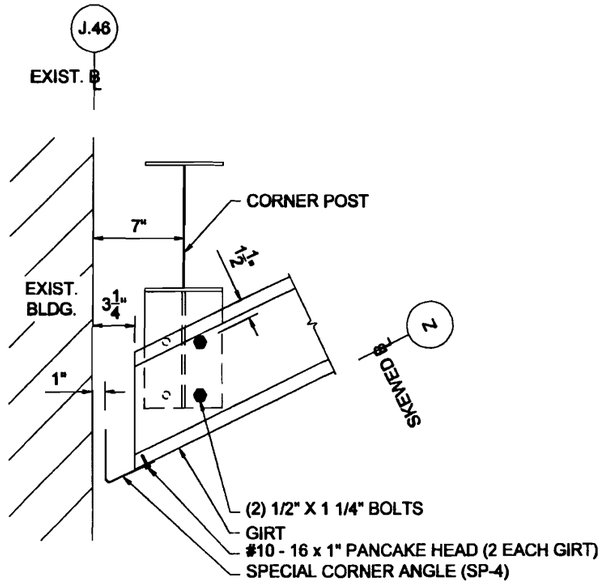
SECTION 1-1 / S1



SECTION 2-2 / S1



SECTION 3-3 / S2



SECTION 4-4 / S3

REVISIONS
4
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NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE · WILLIAM C. KELLEY · 12-11-09 · LICENSED PROFESSIONAL ENGINEER

SECTIONS & DETAILS

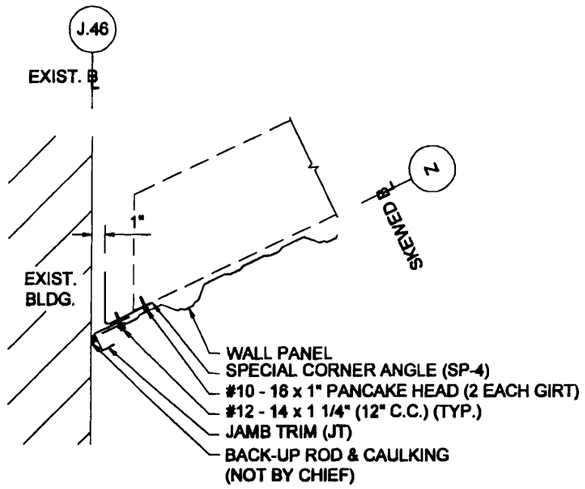
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

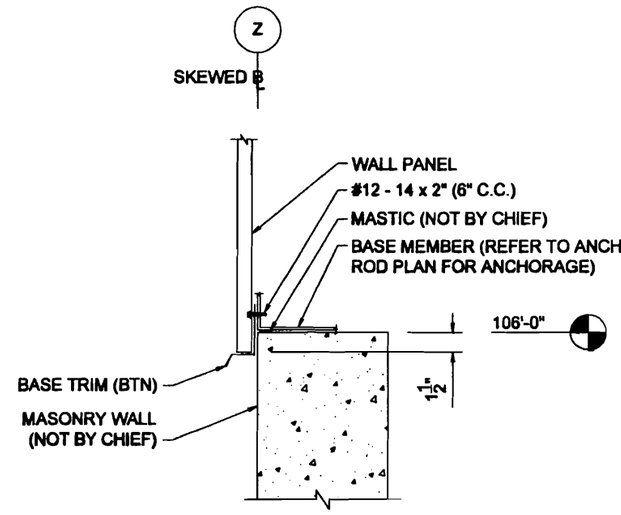
2-BUILDING COMPLEX

CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

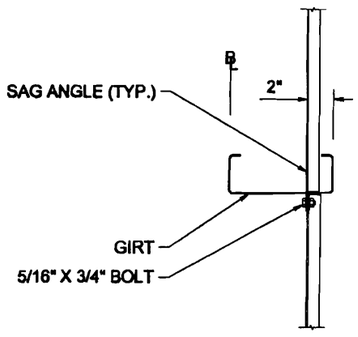
DRAWN	CHECK	ORDER NO.	S4 / S6
JSA	AL	CO95226	
1-DEC-09	9-DEC-09		



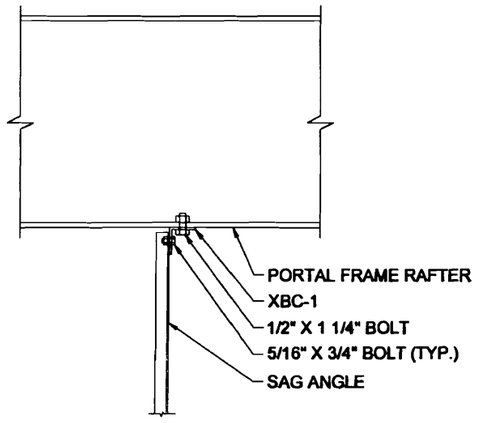
SECTION 5-5 / S3



SECTION 6-6 / S3



TYPICAL SAG ANGLE CONNECTION AT CEE GIRT



SAG ANGLE TO PORTAL FRAME RAFTER

REVISIONS

4 —
3 —
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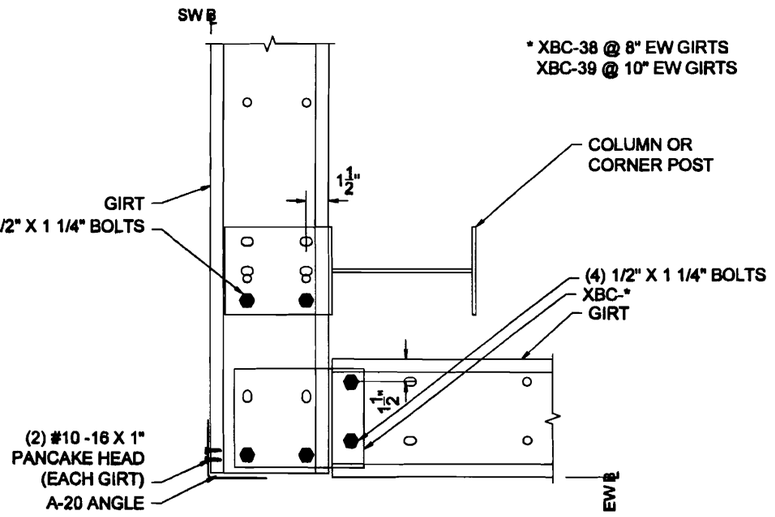
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM C. RITT
12-11-09
LICENSED PROFESSIONAL ENGINEER

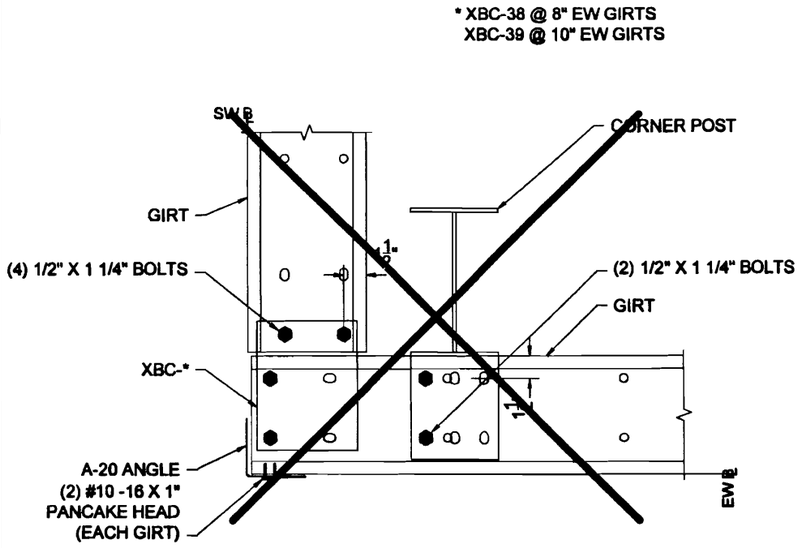
SECTIONS & DETAILS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

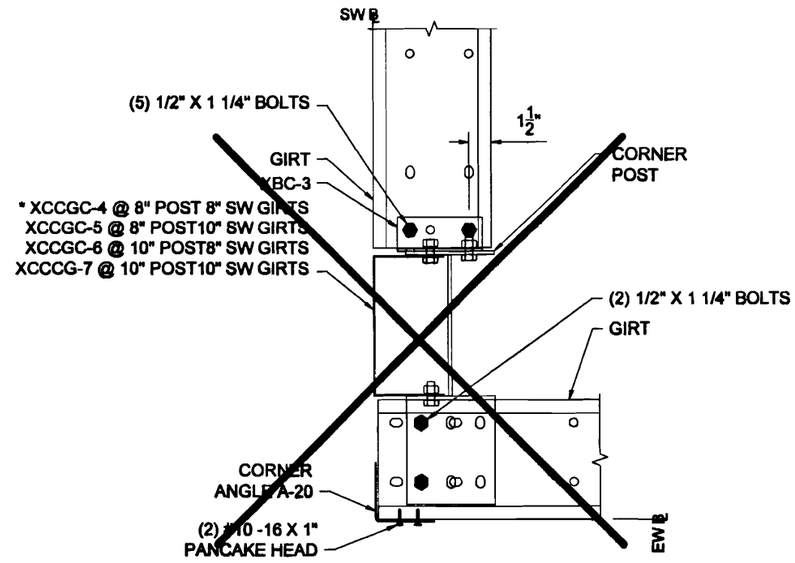
DRAWN	CHECK	ORDER NO.	S5 / S6
JSA	AL	CO95226	
1-DEC-09	9-DEC-09		



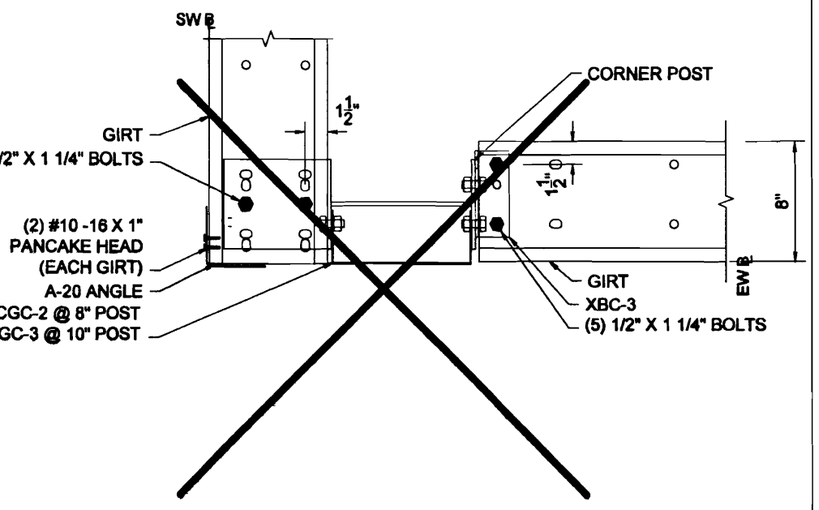
GIRT TO GIRT CONNECTION
OUTSET SIDEWALL / OUTSET ENDWALL



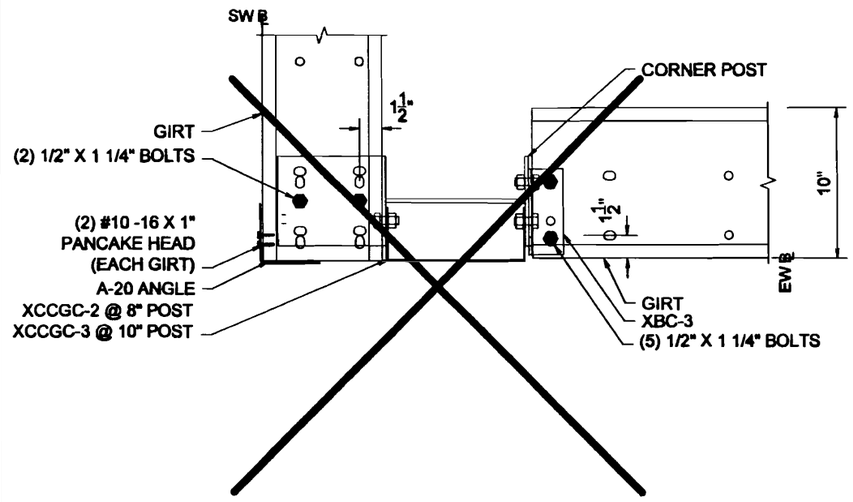
GIRT TO GIRT CONNECTION
AT ROTATED CORNER POST



GIRT TO ROTATED CORNER POST
INSET SIDEWALL / OUTSET ENDWALL



GIRT TO CORNER POST
OUTSET SIDEWALL / INSET ENDWALL



GIRT TO CORNER POST
OUTSET SIDEWALL / INSET ENDWALL

:TAILS ON THIS PAGE OVERRIDE DETAILS IN THE
AL DETAILS MANUAL.

RELEASED	11-30-09
SUPERSEDES	

REVISIONS

4 —
3 —
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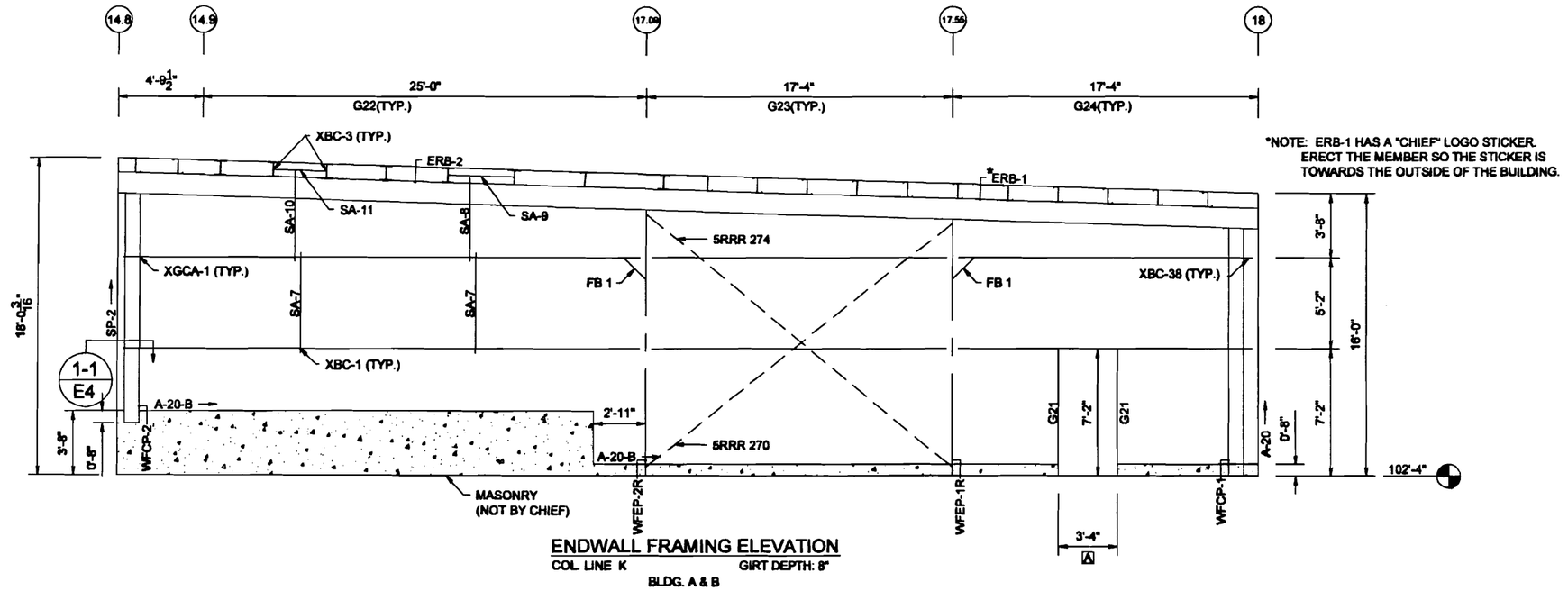
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM
12-11-09
No. 8450
LICENSED
PROFESSIONAL ENGINEER

UPDATED DETAILS C GIRT CONNECTIONS C 2
TURNER BROTHERS, LLC. / W.B. MASON PORTLAND ME
PORTLAND ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

DRAWN	CHECK	ORDER NO.	S6
JSA	AL	CO95226	S6
3-DEC-09	9-DEC-09		

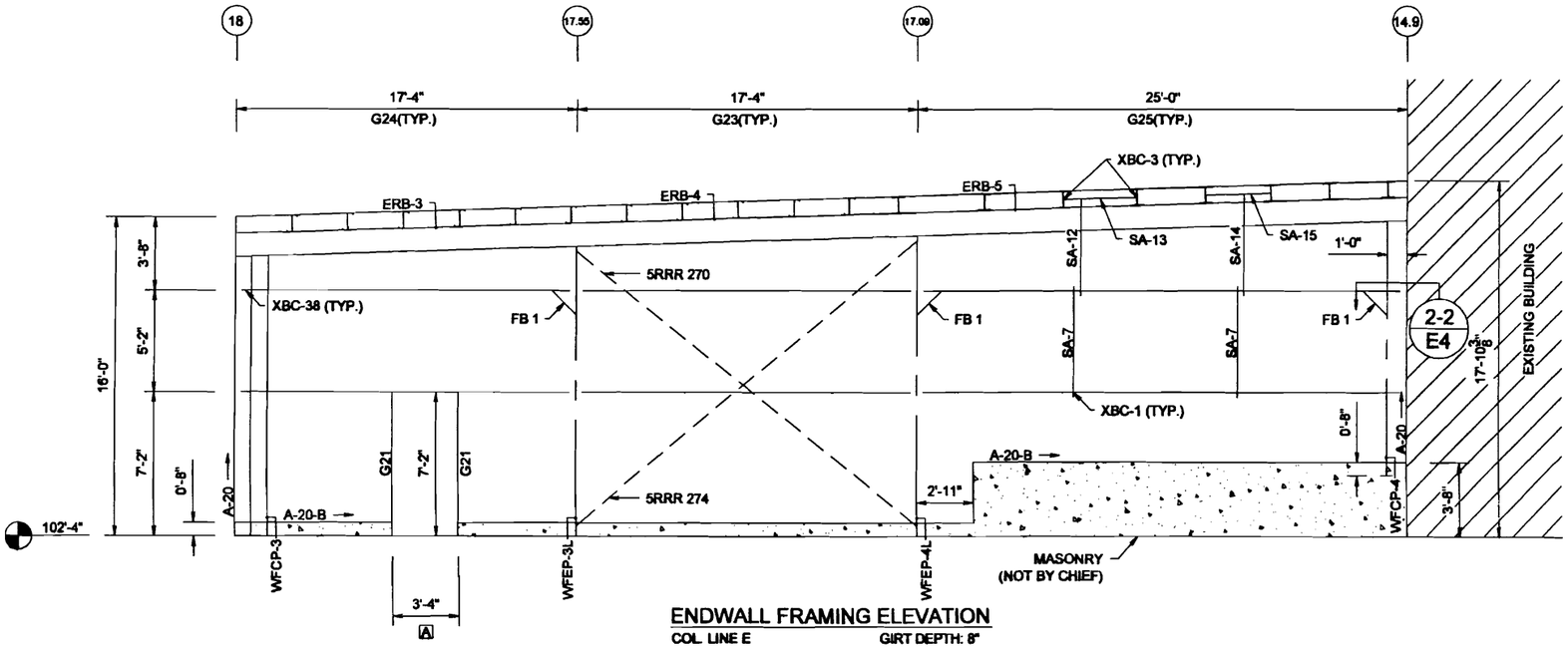


*NOTE: ERB-1 HAS A "CHIEF" LOGO STICKER. ERECT THE MEMBER SO THE STICKER IS TOWARDS THE OUTSIDE OF THE BUILDING.

ENDWALL FRAMING ELEVATION

COL. LINE K GIRT DEPTH: 8"

BLDG. A & B



ENDWALL FRAMING ELEVATION

COL. LINE E GIRT DEPTH: 8"

REVISIONS
4
3
2
1

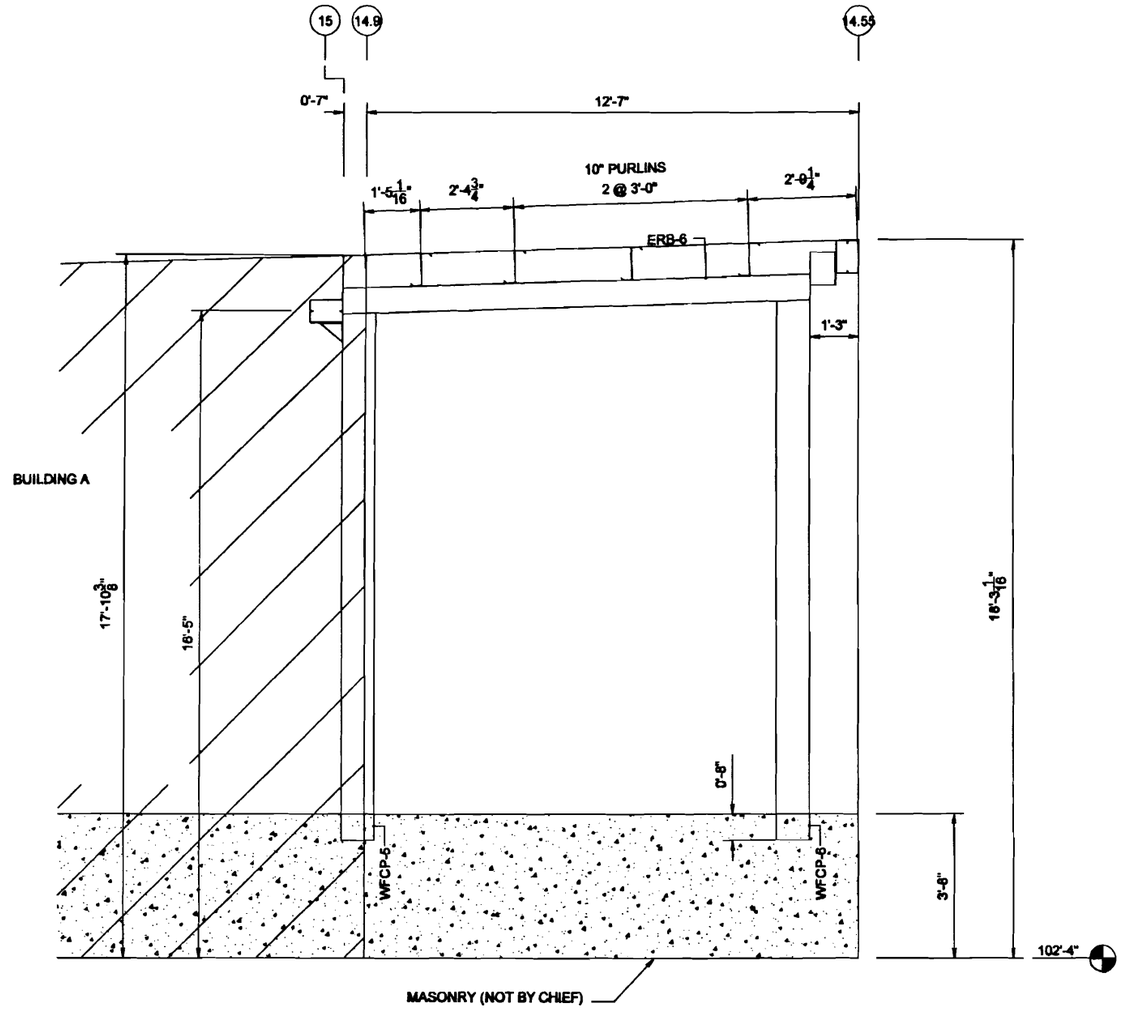
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM
WALSH
12-11-09
No. 8230
LICENSED
PROFESSIONAL ENGINEER

ENDWALL DRAWINGS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

DRAWN	CHECK	ORDER NO.	E1 / E5
AL/BLO	JSA / AL	CO95226	
13-NOV-09	9-DEC-09		



ENDWALL FRAMING ELEVATION

COL. LINE J.46 BLDG. B

REVISIONS
4
3
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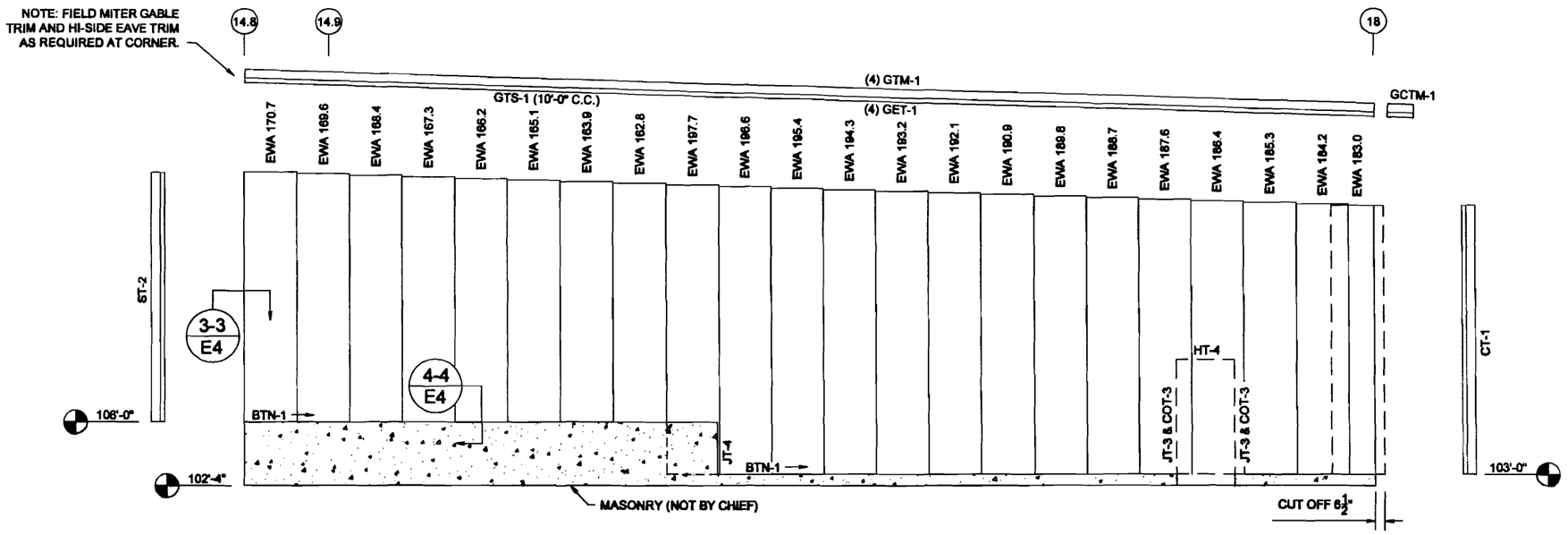
NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM C. KNIGHT
No. 12906
LICENSED PROFESSIONAL ENGINEER

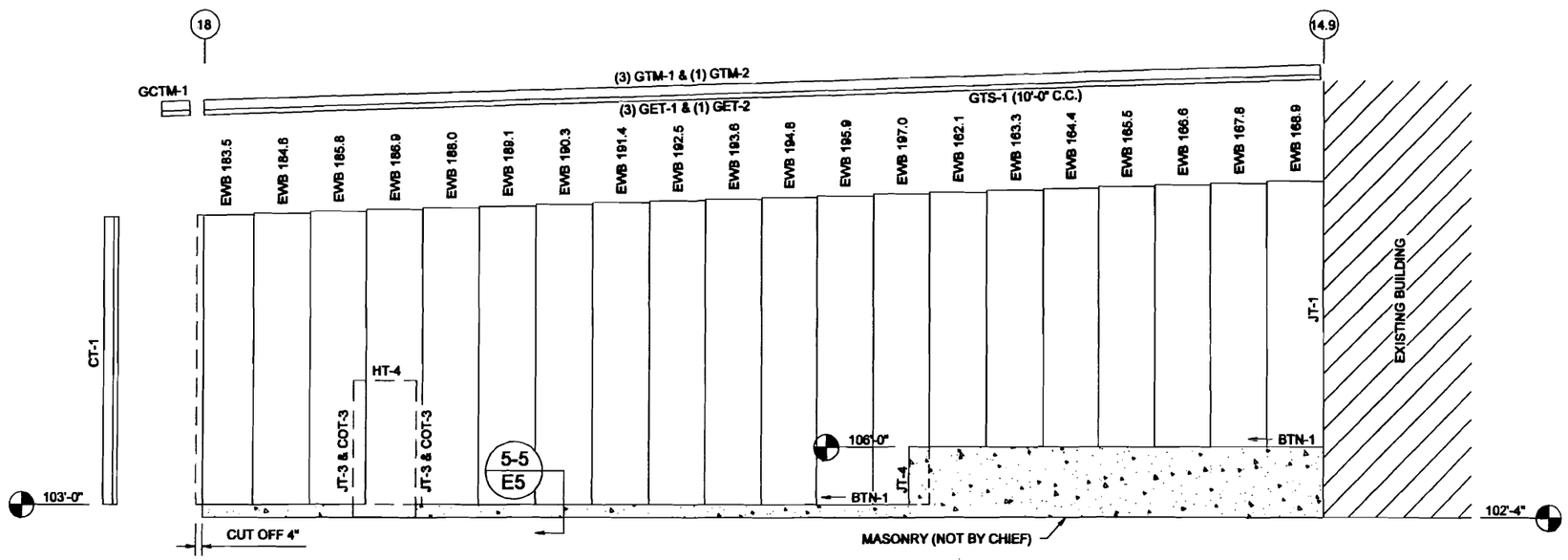
ENDWALL DRAWINGS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2878
GRAND ISLAND, NE
68802-2878

DRAWN	CHECK	ORDER NO.	E2
AL	JSA	CO95226	E5
13-NOV-09	9-DEC-09		



ENDWALL SHEETING ELEVATION
COL. LINE K



ENDWALL SHEETING ELEVATION
COL. LINE E

REVISIONS

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3
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1

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM C. WELSH
12-11-09
NO. 6256
LICENSED PROFESSIONAL ENGINEER

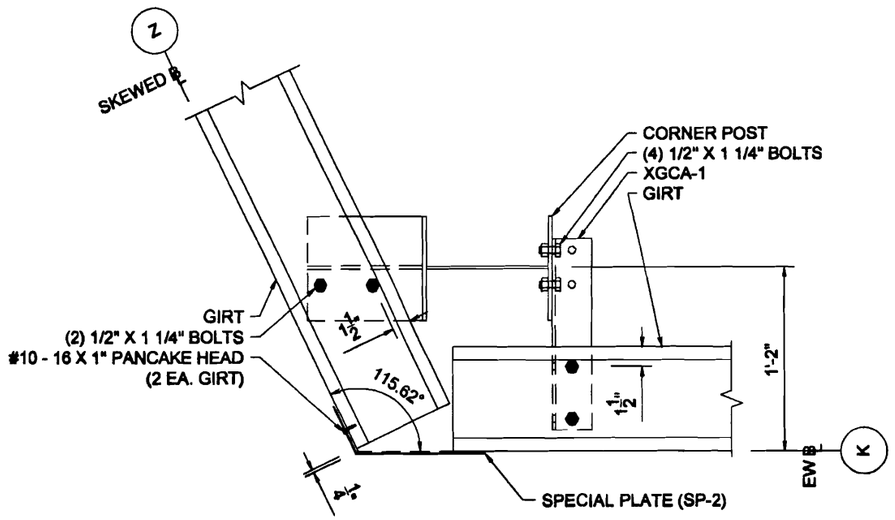
ENDWALL DRAWINGS
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME
PORTLAND, ME
2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE 68802-2078

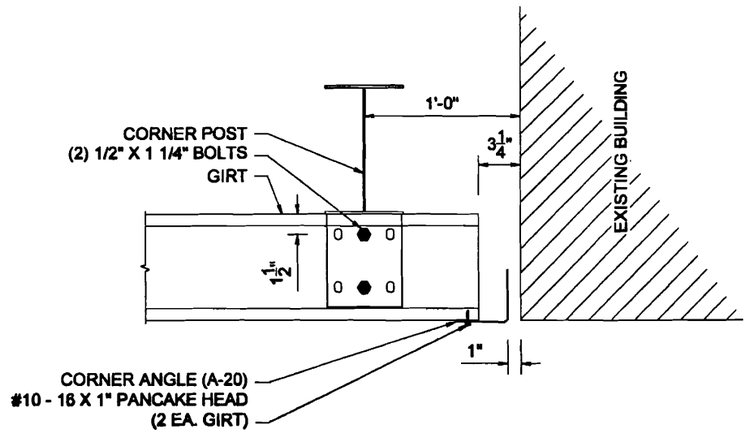
DRAWN	CHECK	ORDER NO.	
JSA	AL	CO95226	E3 / E5
13-NOV-09	9-DEC-09		

ERENCE NOTES

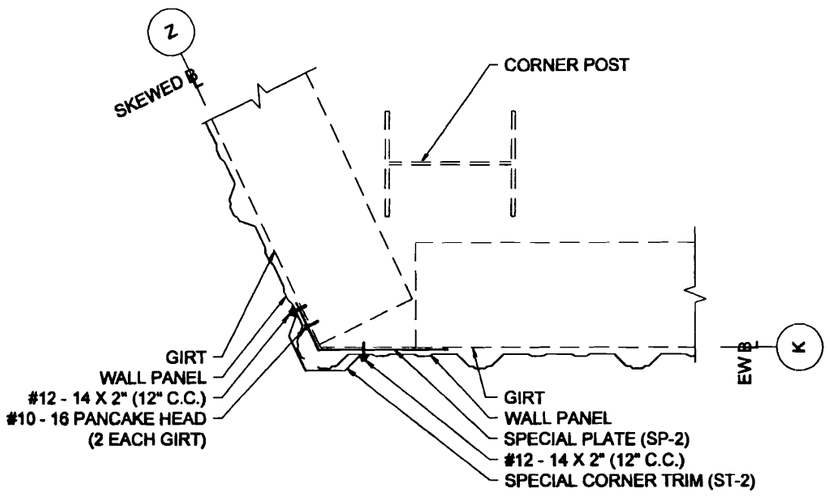
IR OPENING TRIMS, REFER TO GENERAL DETAILS.



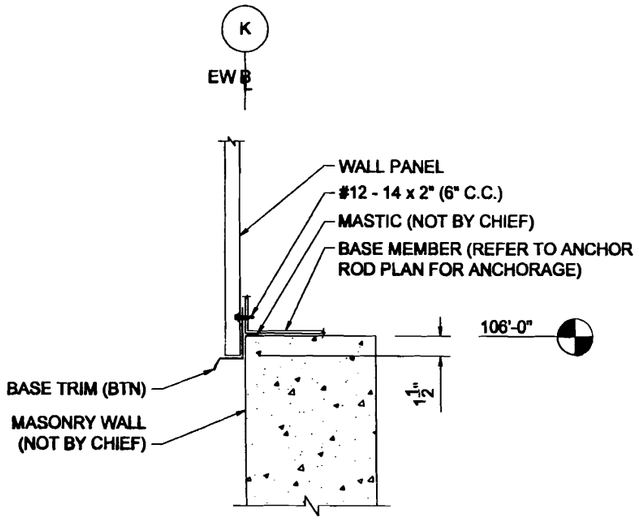
SECTION 1-1 / E1



SECTION 2-2 / E1



SECTION 3-3 / E3



SECTION 4-4 / E3

REVISIONS

4 —
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NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE — WILLIAM — 12-4-09 — LICENSED PROFESSIONAL ENGINEER

SECTIONS & DETAILS

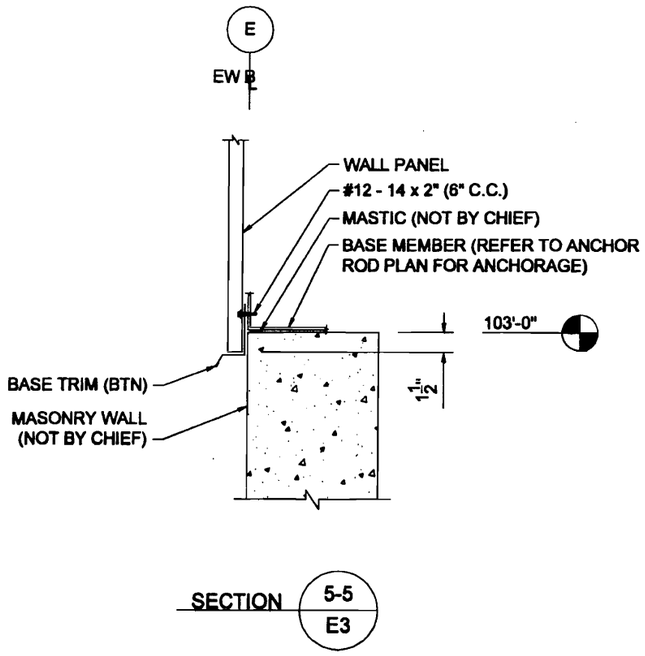
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

2-BUILDING COMPLEX

CHIEF BUILDINGS — a division of Chief Industries, Inc. — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

DRAWN	CHECK	ORDER NO.	E4 / E5
AL/JSA	JSA / AL	CO95226	
13-NOV-09	9-DEC-09		



SECTION 5-5 / E3

REVISIONS
4
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NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE — WILLIAM — LICENSED PROFESSIONAL ENGINEER

SECTIONS & DETAILS

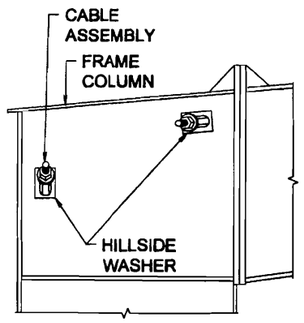
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

2-BUILDING COMPLEX

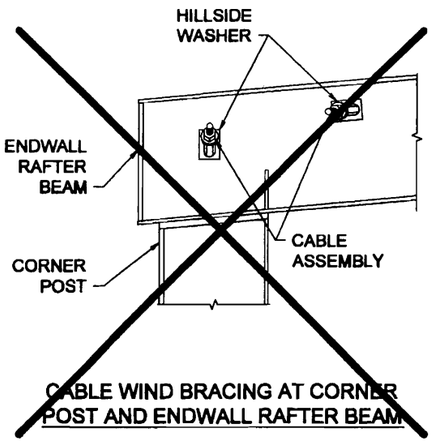
CHIEF BUILDINGS — P.O. BOX 2078 GRAND ISLAND, NE 68802-2078

DRAWN	CHECK	ORDER NO.	E5 / E5
JSA	AL	CO95226	
13-NOV-09	9-DEC-09		



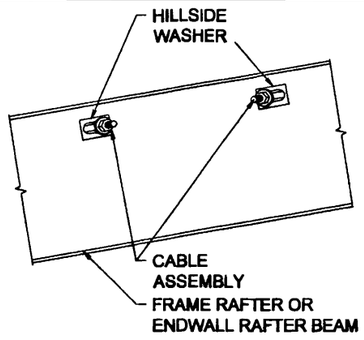
CABLE WIND BRACING AT
TOP OF FRAME COLUMN

GD1650F



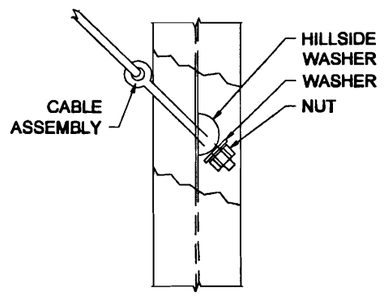
CABLE WIND BRACING AT CORNER
POST AND ENDWALL RAFTER BEAM

GD1650I



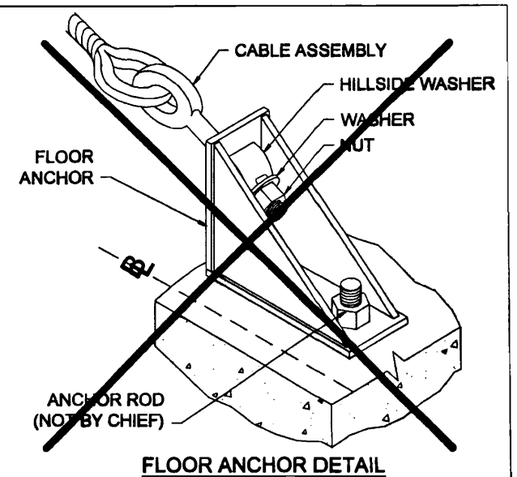
CABLE WIND BRACING AT
INTERMEDIATE PURLIN

GD1650G

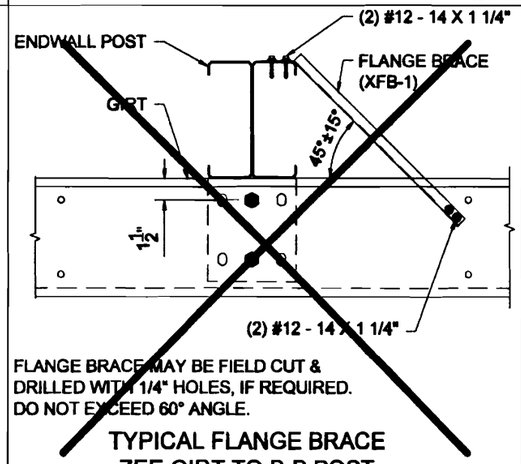


TYPICAL CABLE
CONNECTION AT END

GD1650D



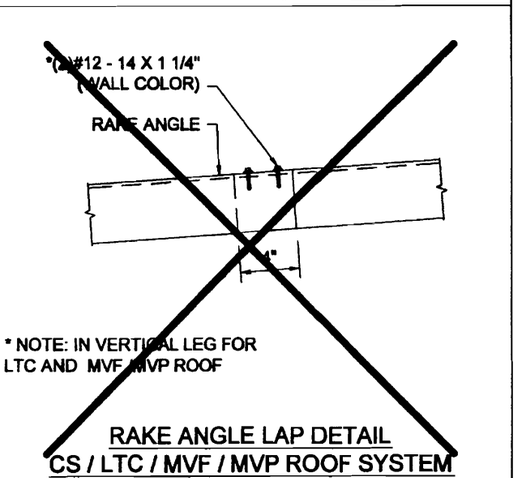
FLOOR ANCHOR DETAIL



FLANGE BRACE MAY BE FIELD CUT &
DRILLED WITH 1/4" HOLES, IF REQUIRED.
DO NOT EXCEED 60° ANGLE.

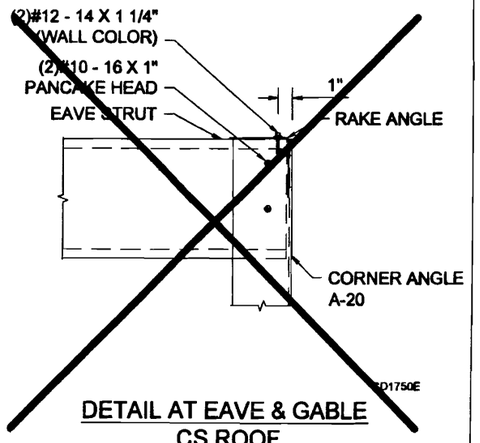
TYPICAL FLANGE BRACE
ZEE GIRT TO B-B POST

GD1600U



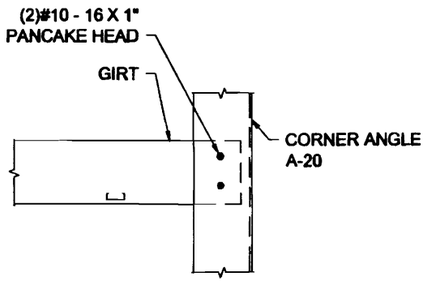
* NOTE: IN VERTICAL LEG FOR
LTC AND MVF /MVP ROOF

RAKE ANGLE LAP DETAIL
CS / LTC / MVF / MVP ROOF SYSTEM



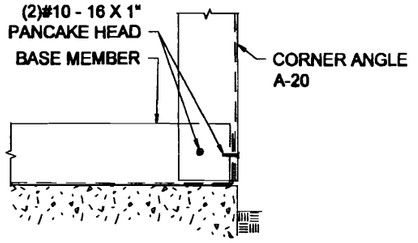
DETAIL AT EAVE & GABLE
CS ROOF

GD1750E



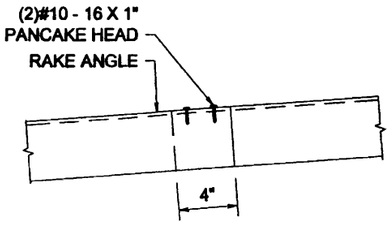
CORNER ANGLE TO GIRT

GD1750B



GD1750F

DETAIL AT BASE ANGLE



RAKE ANGLE LAP DETAIL
MSC / STC ROOF SYSTEM

ETAILS ON THIS PAGE OVERRIDE DETAILS IN THE
RAL DETAILS MANUAL.

RELEASED	11-30-09
SUPERSEDES	10-23-08

REVISIONS

4 —
3 —
2 —
1 —

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

STATE OF MAINE
WILLIAM C. KNOX
LICENSED
PROFESSIONAL ENGINEER

UPDATED DETAILS PROCGD1

TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME

PORTLAND, ME

2-BUILDING COMPLEX

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

DRAWN	CHECK	ORDER NO.	UD1 / UD1
JSA	AL	CO95226	
24-NOV-09	9-DEC-09		

Quality Assurance Policy

e following Quality Assurance Policy is comprised of a list of guidelines and procedures to pedite customer service requirements in the field. Chief's objective is to produce a first-class oduct and back it up with the best customer service in the industry.

e Quality Assurance Policy has been developed over the last twenty-five years and is based handling customer service in the field. These guidelines will simplify the communication ocess and expedite any special requirements needed to make your project run as smooth possible.

Common Industry Practices

e correction of minor misfits by the use of drift pins to draw the components into line, imming, moderate amounts of reaming, chipping and cutting, and the replacement of nor shortages of material are a normal part of erection and are not subject to claim.

hief will not pay claims unless the following claim and authorization procedure is strictly mplied with by the Builder, or if the correction work is started prior to receipt by Builder of hief's written "Authorization of Corrective Work". If erection is not by the Builder, the Erector responsible for providing the Builder with the information necessary to make the claim to hief as provided below.

hief is not responsible for any claim resulting from the use of any drawings or literature not ecifically released for the components purchased for the project.

hief is not responsible for any claim resulting from the use by the Erector of any improper terial or material containing defects that can be detected by visual inspection. Claims for assembling such improper or defective material and costs of erecting replacement material e not allowed.

fore you call Chief

ve the following information ready when you call.
The name of Chief's Project Manager for your project. This information should be available from the office.
Chief's order number for your project. This information is available from the drawings
Page numbers and detail callouts from the drawings.
Part marks.
Line numbers.

Shortage and Damage Claims

hief personnel check off all components of orders prior to shipment. However, it is imperative at the Builder checks each shipment against the packing lists or Shipping Papers to ensure at the shipment is complete and no damage has occurred.

ne of the smaller resale boxes contains a set of drawings, M.S.D.S. sheets and other portant documents that will aid you in erecting your project. Look for a box that says OCUMENTS ENCLOSED".

Checking the Shipping List

plicates of packing lists are part of the paper work that is shipped with each load of steel. e full set of checked off Shipping Papers is on the final shipment. An advance copy of the ipping Papers is included in the document box.

d the box or bundle that contains the packing list. Check the contents against this packing . The larger pieces have a piece mark written on the part, check the piece mark against the ipping Papers.

Columns, rafters, posts, crane beams, etc. are marked with a grease pencil or paint prior to painting.
Tube flange brace marks are stamped into the end of the part. The Shipping Papers also reflect the tube size and length in inches.
Sag angles: The standard sag angle part XSA-61.25 is stamped into the part. The miscellaneous sag angles are marked with a colored marker after they are primed. If there is a pile of same sag angles, only the top angle is marked and the pile is color coded with spray paint on the ends. The Shipping Papers also reflect the angle size and length in inches.
Special plates are individually marked with a grease pencil prior to painting. The drawings that are sent with the steel shipment will also have part drawings included. These drawing packets are with the other documents included with the shipment.
Standard bolting clips are stamped on the individual parts. A drawing of these clips is also included in the "Component Identification" section of the "General Details (G.D.) Manual".
Wind bracing is marked with a tag that is attached to the piece. The mark number contains the size of the cable in eighths (ex. 4WB = ½" diameter cable) and length in inches. Rod bracing is marked with a tag that is stretch wrapped to the bundle.
Girts and purlins are marked with a grease pencil or printer prior to painting. A packing slip is also attached to each bundle that contains quantities and marks. The bundle weight is marked on the top of the bundle. The member size and length in inches are printed on the Shipping Papers.
Sheeting is identified with packing lists. These packing lists also include the number of pieces of each length and the weight. In the case of LTC sheeting, the marks are written on the paper on the end of the panel, and again on a crate support board toward the inside of the bundle. The length of the sheeting in inches is included in the piece mark. The sheeting prefix generally contains the use of the panel. RS = roof sheet, WS = sidewall sheeting, EW = endwall sheeting, LP = liner panel.

The boxes containing standard trims have packing lists attached that contain piece marks and quantities. The part dimensions are covered in the "Component Identification" section of the G.D. Manual. Special trim fabs are included with the erection drawings, M.S.D.S. sheets and other documents in the resale box.
Bolts, nuts, screws and other assorted smaller resale parts are packed in smaller boxes and then packaged into larger resale boxes. A packing list is attached to these larger boxes that describe the contents.

Missing or Damaged Parts

Any missing items are to be noted on the Bill of Lading and Chief is to be notified immediately. If any item is damaged, it should be noted on the freight bill.

Concealed shortages must be reported to Chief during the following period dating from receipt of the first load:

one load job = 2 weeks	four load job = 5 weeks
two load job = 3 weeks	five load job = 6 weeks
three load job = 4 weeks	six load job = 7 weeks

seven or more load job = 8 weeks

Chief's responsibility for shortages expires at the end of these notification periods.

Replacement Shipment

Maximum effort will be made by Chief to ship replacement components as quickly as possible. Chief will attempt to ship standard components fabricated in its building plants within 48 hours and stock items will be ready to ship in 24 hours.

When a shortage is determined, the Builder needs to notify Chief's Project Manager of the Quality Assurance issue. Chief's Order Number and complete information describing the parts required must be conveyed at this time.

Chief will act immediately to get the parts to the Builder and responsibility for the problem will be determined later.

After the problem has been corrected, Chief will determine where the responsibility lies. If it is Chief's error, Chief will provide the replacement material. Otherwise, Chief will invoice accordingly.

Transit Damage

Nominal damage can occur during transit. Chief supplies touch-up paint for such cases. However, if excessive damage occurs, the following procedure will be observed:
Material damage (transit or otherwise) should be noted on the carrier's Bill Of Lading. If the damage is not noted on the Bill of Lading, Chief may charge the Builder for the replacement material. Customer pickup - Driver must inspect the load for any damaged material before leaving the plant and notify Chief accordingly.

White Rust

All panels shipped from Chief's building plants are in good condition.

Chief bundles and/or boxes components only for protection during transit. This packaging is not intended for protection during storage.

Panels must be stored so air can circulate freely. Trapped moisture may cause discoloration or white rust. Refer to the G.D. Manual for proper bundling storage. This manual is supplied with each order. (again in the resale box)

Primer

Chief's shop primer is a rust inhibiting grey modified acrylic primer. This paint is intended to protect the steel only for short periods of exposure to ordinary atmospheric conditions. In addition, shop primer does not provide the uniformity of appearance, or the durability of a field applied finish coat of paint over a shop primer.

The Builder must ensure that the grey primed material is stored in such a manner that water, snow, ice and other debris are not allowed to pond in the members. If primed material is to be top coated with other paint, compatibility tests must be performed by the Builder to ensure acceptable results. These compatibility tests should cover a cross-section of members (clips, angles, purlins, girts, columns, rafters, beams, flange braces, etc.) as different primers may be used on different members.

2. Authorization for Returning Merchandise

The authorization must be obtained from Chief's Project Manager before merchandise may be returned for credit. Returned merchandise shall be limited to resale type items (i.e. fasteners, closures, etc.) at Chief's sole discretion. Chief retains the prerogative to allow or disallow the return of merchandise.

Builder must contact Chief's Project Manager with a description of the merchandise and the reason for their request.

When authorization has been granted, an authorization form will be sent to the Builder along with a pre-numbered tag to attach to the merchandise being returned.

A 15% re-stock charge may be assessed on all merchandise which is authorized to be returned.

Special Order Merchandise
Special merchandise ordered, such as special doors, windows, vents, fasteners, etc., may not be returned for credit.

Replacement Items
All merchandise shipped will be invoiced to the Builder. This includes parts sent to replace merchandise which has been authorized for return to Chief.

Credit will be issued to the Builder's account when the returned merchandise has been accepted by Chief. Chief may refuse to credit your account if the returned merchandise is not in good condition.

3. Field Modifications

Notification of Field Problems

The initial claim must be made promptly by either written or verbal notification to Chief's Project Manager. Any verbal notification must be followed up in writing within 7 days. The initial claim must include:
1. Description of nature and the extent of the errors, including quantities.
2. Description of nature and the extent of proposed corrective work, including estimated man-hours and costs.
3. Material to be purchased from other than Chief, including estimated quantities and costs.
4. Maximum total cost of proposed corrective work and material to be purchased from other than Chief.

If necessary, Chief may request pictures, field measurements, or other information that will aid in helping to solve the problem.

Authorization MUST be obtained from Chief's Technical Service Department in writing before field modification is made. Authorization identifies the problem and allows Chief to participate in arriving at a solution, it does not assign fault or liability.

Chief cannot be responsible for structures which have been modified without specific authorization. Any such action may void warranties.

The order number must be shown on all backcharges submitted to Chief.

Backcharge Procedure

All backcharges must be submitted within 14 (fourteen) days after completion of the corrective work for which prior approved authorization has been given. Failure to submit the backcharge within this time limit will negate Chief's obligation to pay said charges.

Information Required for Submitting the Final Claim

1. Chief's Order Number.
2. Actual man-hours by date of direct labor use on corrective work and hourly rates of pay.
3. Cost of material (not minor supplies) authorized by Chief to be purchased from other than Chief, including copies of paid invoices.
4. Total actual direct cost of corrective work (sum of 2 and 3).
   The final claim shall be signed and certified true and correct by the Builder. Final claims are paid to the Builder in an amount of the lesser of
   a) cost set forth in the initial report and subsequent "Authorization for Field Modification",
   or
   b) the total actual direct cost of corrective work.
5. The cost of equipment (rental or depreciation), small tools, supervision, overhead and profit are not subject to claim. This includes crane and lift charges.

QUALITY ASSURANCE POLICY	
TURNER BROTHERS, LLC. / W. B. MASON PORTLAND ME	
PORTLAND, ME	
2-BUILDING COMPLEX	

RELEASED	01-15-07	CHIEF BUILDINGS a division of Chief Industries, Inc. P.O. BOX 2078 GRAND ISLAND, NE 68802-2078	DRAWN	CHECK	ORDER NO.	Q1
SUPERSEDES			JSA	AL	CO95226	Q1
			24-NOV-09	9-DEC-09		