



Structural Special Inspections Report

Patrons Oxford Insurance Office Building

Portland, Maine
May 2, 2017

Report Prepared by:

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

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Patrons Oxford Insurance Office Building

Portland, Maine

May 2, 2017

Statement Prepared By:

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

Owner
Patrons Oxford Insurance Co.
P.O. Box 1960
Auburn, ME 04211
207. 783. 2258

Architect of Record
Scott Simons Architects
75 York Street
Portland, ME 04101
207. 772. 4656

General Contractor
Zachau Construction
1185 U.S. Route 1
Freeport, ME 04032
207. 865. 9925



Patrons Oxford Insurance Office Building

Portland, Maine
May 2, 2017

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Special Inspections – Exhibit A

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

Structural Statement of Special Inspections

Project: *Patrons Oxford Insurance Office Building*

Location: *Portland, ME*

Owner: *Patrons Oxford Insurance Co.*

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.

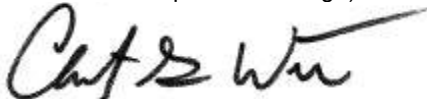
Job site safety and means and methods of construction are solely the responsibility of the Contractor.

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

Prepared by:

Christopher G. Williams, P.E., S.E.

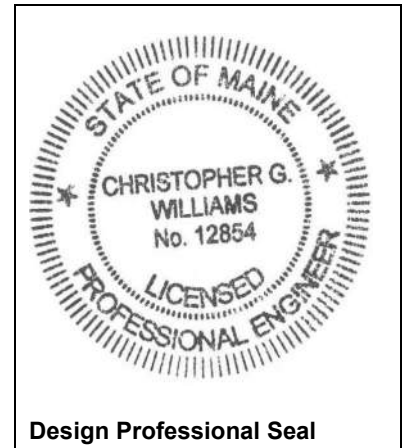
(type or print name of the Structural Registered Design Professional in Responsible Charge)



Signature

1/11/2016

Date



Owner's Authorization:

Building Code Official's Acceptance:

Signature

Date

Signature

Date

Structural Statement of Special Inspections (Continued)

List of Agents

Project: *Patrons Oxford Insurance Office Building*

Location: *Portland, ME*

Owner: *Patrons Oxford Insurance Co.*

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
- Structural Masonry Systems
- Structural Steel
- Wood Construction
- Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. STRUCTURAL Special Inspections Coordinator (SSIC)	<i>Becker Structural Engineers, Inc.</i>	<i>75 York St. Portland, ME 04101 207-879-1838</i>
2. Special Inspector (SI 1)	<i>Becker Structural Engineers, Inc.</i>	<i>75 York St. Portland, ME 04101 207-879-1838</i>
3. Special Inspector (SI 2)	<i>R.W. Gillespie & Associates, Inc.</i>	<i>86 Industrial Park Rd., Ste. 4 Saco, ME 04072 207-286-8008</i>
4. Testing Agency (TA 1)	<i>R.W. Gillespie & Associates, Inc.</i>	<i>86 Industrial Park Rd., Ste. 4 Saco, ME 04072 207-286-8008</i>
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.

Project: Patrons Oxford Insurance Office Building
Date Prepared: 5/2/2017

Structural Statement of Special Inspections (Continued)

Final Report of Special Inspections (SSIC/SI 1)

[To be completed by the Structural Special Inspections Coordinator (SSIC/SI 1). Note that all Agent's Final Reports must be received prior to issuance.]

Project: *Patrons Oxford Insurance Office Building*

Location: *Portland, ME*

Owner: *Patrons Oxford Insurance Co.*

Owner's Address: *P.O. Box 1960
Auburn, ME 04211*

Architect of Record: *Scott Simons* *Scott Simons Architects*
(name) (firm)

Structural Registered Design
Professional in Responsible Charge: *Christopher G. Williams, P.E., S.E.* *Becker Structural Engineers, Inc.*
(name) (firm)

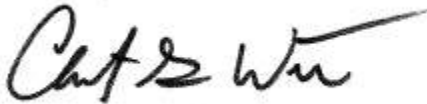
To the best of my information, knowledge and belief, the Special Inspections required for this project, and itemized in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved.

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

Respectfully submitted,
Structural Special Inspection Coordinator

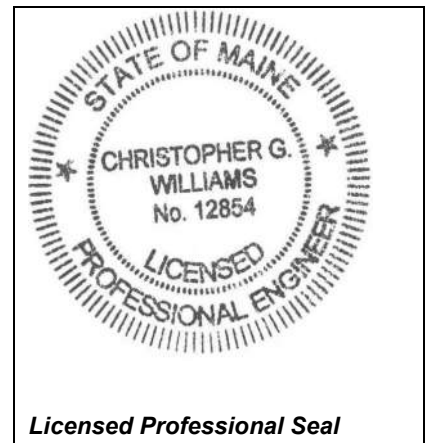
Christopher G. Williams, P.E., S.E.
(Type or print name)

Becker Structural Engineers, Inc.
(Firm Name)



Signature

5/2/2017
Date



Project: Patrons Oxford Insurance Office Building
Date Prepared: 1/11/2016

Structural Statement of Special Inspections (Continued)
Special Inspector's/Agent's Final Report

Project: *Patrons Oxford Insurance Office Building*
Special Inspector or Agent: ERIK J WIBERG R.H. GILLESPIE & ASSOCIATES
(name) (firm)
Designation: S12

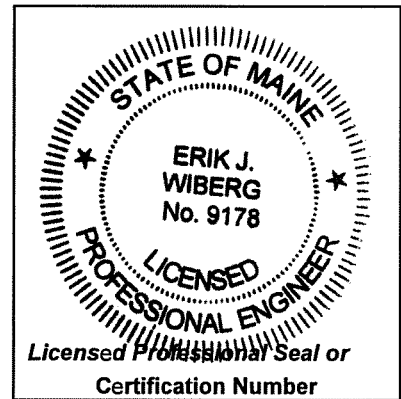
To the best of my information, knowledge and belief, the Special Inspections or testing required for this project, and designated for this Inspector/Agent in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved.

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

Respectfully submitted,
Special Inspector or Agent:

ERIK J WIBERG
(Type or print name)

[Signature]
Signature Date 16 MAR 2016



Project: Patrons Oxford Insurance Office Building
Date Prepared: 1/11/2016

Structural Statement of Special Inspections (Continued)
Special Inspector's/Agent's Final Report

Project: *Patrons Oxford Insurance Office Building*
Special Inspector or Agent: MATTHEW T. GLADY P. W. GILLESPIE & ASSOCIATES, INC.
(name) (firm)
Designation: TAI

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

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

Respectfully submitted,
Special Inspector or Agent:

MATTHEW T. GLADY
(Type or print name)

Math T. Glad 3/10/17
Signature Date

SEAL NOT REQUIRED
FOR TESTING AGENCY

*Licensed Professional Seal or
Certification Number*

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
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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.
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International Code Council (ICC) Certification

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

National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

Other

Special Inspections – Exhibit B

Qualifications of Inspectors and Test Agency
List of Minimum Qualifications
Schedule of Structural Inspections

Exhibit B

Division 3 – Cast-in-place Concrete

Structural Schedule of Special Inspections
CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	REQD	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
	Y/N					
IBC Section 1704.4						
1. Inspection of reinforcing steel, including prestressing tendons, and placement	Y	P	ACI 318: 3.5, 7.1-7.7	SII	PE/SE or EIT	<i>May – Aug '17</i>
2. Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5B	N	-	Not applicable. Welding of Reinf Not Allowed	-	-	
3. Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased or where strength design is used.	Y	C	IBC 1911.5	SII	PE/SE or EIT	<i>May – Aug '17</i>
4. Inspection of anchors installed in hardened concrete.	Y	P	IBC 1212.1	SII	PE/SE or EIT	<i>May – Aug '17</i>
5. Verifying use of required design mix	Y	P	ACI 318: Ch 4, 5.2-5.4	TA1	ACI-CFTT or ACI-STT	<i>May – Aug '17</i>
6. At time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and determine the temperature of the concrete.	Y	C	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	TA1	ACI-CFTT or ACI-STT	<i>May – Aug '17</i>
7. Inspection of concrete and shotcrete placement for proper application techniques	Y	C	ACI 318: 5.9, 5.10	TA1	ACI-CFTT or ACI-STT	<i>May – Aug '17</i>
8. Inspection for maintenance of specified curing temperature and techniques	Y	P	ACI 318: 5.11-5.13	SII	PE/SE or EIT	<i>May – Aug '17</i>
9. Inspection of Prestressed Concrete						
a. Application of prestressing force.	N	C	ACI 318: 18.20	TA2	PE/SE or EIT	
b. Grouting of bonded prestressing tendons in seismic force resisting system	N	C	ACI 318: 18.18.4	TA1	ACI-CFTT or ACI-STT	
10. Erection of precast concrete members.	N	P	ACI 318: Ch 16	SII	PE/SE or EIT	
11. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	N	P	ACI 318: 6.2	TA1	ACI-CFTT or ACI-STT	
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	Y	P	Limitations apply. See below	SII	PE/SE or EIT	<i>May – Aug '17</i>

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

Project:	Patrons Oxford Office Building
Location:	Portland, ME
Becker Job No:	3565.90

OBSERVATION REPORT

Cast in Place Concrete

Date:	May 24, 2016
Time:	2:00
Temp:	60 degrees
Weather:	Light Rain

Observation Location: Observed the footing reinforcement on the "plan east" side of the building (all exterior and interior footings east of grid 9, excluding the elevator).

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bars requested to be added in one location at stair ST02 (see notes below).
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

The footing reinforcement was observed to be in conformance with the structural drawings, except as noted below:

At the combined footing at Stair ST02 (along grid 1 and between grids A.9 and C.1), some of the horizontal reinforcement was missing. Approximately 4 to 5 bars perpendicular to the footing direction had not been placed. The GC was made aware of this condition. Additional bars were added to achieve the 12" O.C. spacing requirement per section 4/S2.2.

Signed: Christopher G. Williams, P.E., S.E.

Project:	Patrons Oxford Office Building
Location:	Portland, ME
Becker Job No:	3565.90

OBSERVATION REPORT
Cast in Place Concrete

Date:	May 31, 2016
Time:	7:30 am
Temp:	70 degrees
Weather:	Sunny

Observation Location: Observed the remainder of the footing reinforcement for the building, excluding the elevator ("plan west" side of the building).

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Placement of footing reinforcement at sleeve to be modified (see notes below and photo 1).
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

The footing reinforcement was observed to be in conformance with the structural drawings, except as noted below:

A roof drain pipe exits the building through the footing between grids A/1 and B/1. Attached photo 1 shows the condition of the pipe sleeve while I was on site. Zachau confirmed that this condition would be modified so that the footing and reinforcement would haunch down below the pipe, which is acceptable.

Signed: Christopher G. Williams, P.E., S.E.



Photo 1: Footing at Pipe Sleeve. Sleeve to raised so that 12" of concrete and reinforcement haunch below pipe.

Project:	Patrons Oxford Office Building
Location:	Portland, ME
Becker Job No:	3565.90

OBSERVATION REPORT

Cast in Place Concrete

Date:	June 6, 2016
Time:	10:30 am
Temp:	70 degrees
Weather:	Sunny

Observation Location: Observed the wall reinforcement on the "plan west" side of the building (wall reinforcement west of grid 9).

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

The reinforcement observed was in conformance with the structural drawings.

Signed: Christopher G. Williams, P.E., S.E.

Project:	Patrons Oxford Office Building
Location:	Portland, ME
Becker Job No:	3565.90

OBSERVATION REPORT
Cast in Place Concrete

Date:	June 16, 2016
Time:	8:00 am
Temp:	65 degrees
Weather:	Sunny

Observation Location: Observed the wall reinforcement on the "plan east" side of the building (wall reinforcement east of grid 9).

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	One condition observed with inadequate horizontal reinforcement (see below).
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

The reinforcement observed was in conformance with the structural drawings. At one interior foundation wall, the horizontal rebar provided by the fabricator wasn't long enough to reach the end of the wall. This condition was brought to the attention of the GC. Additional bars were lapped with the in-place reinforcement to reach the end of the wall.

Signed: Christopher G. Williams, P.E., S.E.

Project:	Patrons Oxford Office Building
Location:	Portland, ME
Becker Job No:	3565.90

OBSERVATION REPORT
Cast in Place Concrete

Date:	June 27, 2016
Time:	10:00 am
Temp:	75 degrees
Weather:	Sunny

Observation Location: Observed the elevator wall reinforcement.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

The reinforcement observed was in conformance with the structural drawings.

Signed: Christopher G. Williams, P.E., S.E.



R. W. Gillespie & Associates, Inc.
 86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
 44 Wood Avenue, Suite 1, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	June 23, 2016	Project No.:	1518-003
Attention:	Mark Pettingill (mpettingill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

 24 Harriman Drive, PO Box 1960

 Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.	
Cylinder No. (s)	Age (Days)
83189	28
83190	28
83191	28
83193	28
83194	28
83195	28

Remarks:

- Copy to:
- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 - Hans Breaux (hans@simonsarchitects.com)
 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terristrouse@gsg gravel.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

1 of 2

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, May 25, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3500 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	3/4 inch
Placement Method:	Rear & Pump	Admixtures:	MRWR, Masterset R100

Placement Location:
 Foundation Footings: D/9 to E/9 to A/1 to A/8-9 & Interior Footings - See Map

Test Cylinder Location:
 E/3-4

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete		Date Report Issued:	
Load Number:	2 of 8	Number of 4x8 Cylinders:	4
Ticket Number:	300299	Cast By:	Mary E. Sanders
Truck Number:	102	Slump:	ASTM C 143 6.50 in.
Cubic Yards:	10	Air Temperature:	68 °F
Total Yardage:	75	Concrete Temperature:	72 °F
Total Time (minutes):	0	Air Content:	ASTM C 231 6.1 %

Specimen Storage ASTM C 31
 Field Cure Days: 1
 Date Received: 5/26/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens							
Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83188	6/1/2016	4.00	12.57	7	54540	4340	3
83189	6/22/2016	4.00	12.57	28	60990	4850	3
83190	6/22/2016	4.00	12.57	28	63560	5060	3
83191	6/22/2016	4.00	12.57	28	57625	4580	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4

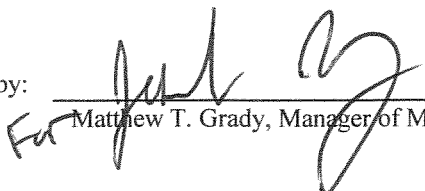


Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by: 
 Matthew T. Grady, Manager of MTS

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, May 25, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3500 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	3/4 inch
Placement Method:	Rear & Pump	Admixtures:	MRWR, Masterset R100

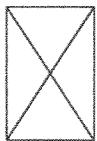
Placement Location:
 Foundation Footings: D/9 to E/9 to A/1 to A/8-9 & Interior Footings - See Map

Test Cylinder Location:
 A/7

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete		Date Report Issued:	
Load Number:	6 of 8	Number of 4x8 Cylinders:	4
Ticket Number:	293810	Cast By:	Mary E. Sanders
Truck Number:	102	Slump:	ASTM C 143 6.00 in.
Cubic Yards:	10	Air Temperature:	68 °F
Total Yardage:	75	Concrete Temperature:	73 °F
Total Time (minutes):	0	Air Content:	ASTM C 231 6.5 %

Specimen Storage ASTM C 31
 Field Cure Days: 1
 Date Received: 5/26/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens							
Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83192	6/1/2016	4.00	12.57	7	54645	4350	2
83193	6/22/2016	4.00	12.57	28	61735	4910	4
83194	6/22/2016	4.00	12.57	28	59790	4760	3
83195	6/22/2016	4.00	12.57	28	60555	4820	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4

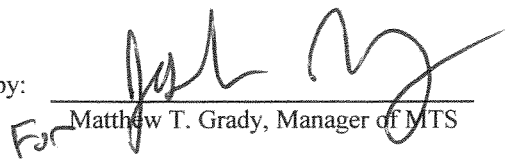


Side Fracture
5



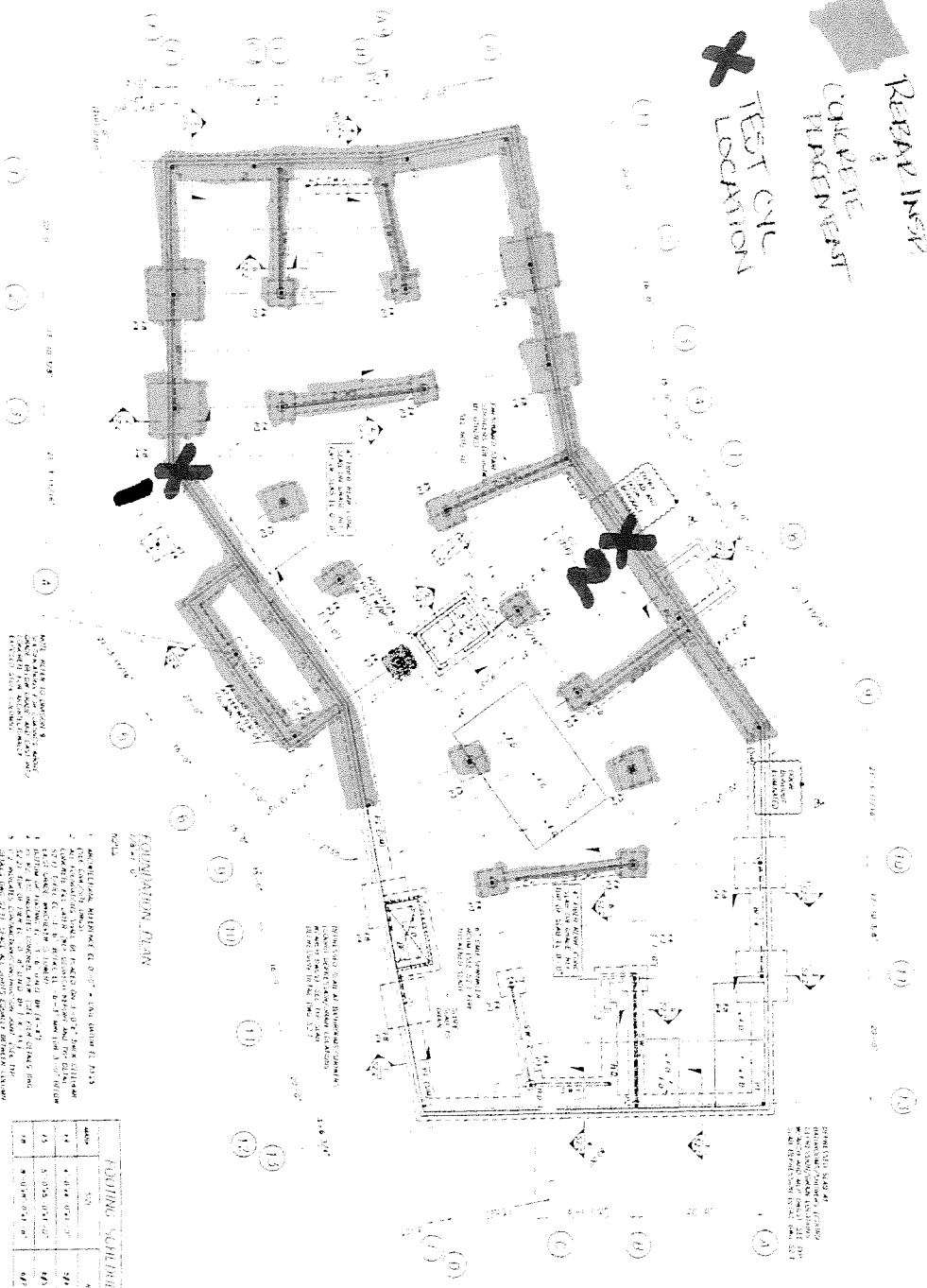
Double Side Fracture
6

Remarks:

Checked by: 
 For Matthew T. Grady, Manager of MTS

REPAIR INSP
 CONCRETE
 W/DRUM EAST

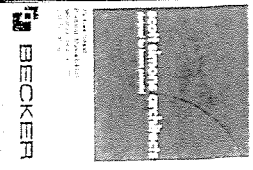
X
 TEST CIL
 LOCATION



- FOUNDATION PLAN**
1. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 2. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 3. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 4. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 5. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 6. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 7. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 8. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 9. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 10. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 11. ALL DIMENSIONS UNLESS OTHERWISE NOTED.
 12. ALL DIMENSIONS UNLESS OTHERWISE NOTED.

NO.	DESCRIPTION	QTY	UNIT
1	CONCRETE	100	CU YD
2	STEEL	100	TON
3	FORMWORK	100	SQ YD
4	REINFORCING	100	TON
5	BRICK	100	1000
6	MORTAR	100	CU YD
7	PAINT	100	TON
8	GLASS	100	SQ YD
9	CEILING	100	SQ YD
10	FLOORING	100	SQ YD
11	MECHANICAL	100	TON
12	ELECTRICAL	100	TON

PHOTOS OXFORD HOUSE
 1518-003
 DATE: 05.25.2010
 T24: MIKEY SANDERS





R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	July 1, 2016	Project No.:	1518-003
Attention:	Mark Pettinghill (mpettinghill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.	
Cylinder No. (s)	Age (Days)
83244	28
83245	28
83246	28

Remarks:

- Copy to:
- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 - Hans Breaux (hans@simonsarchitects.com)
 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terrstrouse@gsgravel.com)

If enclosures are not noted, kindly notify us at once.

R. W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

1 of 1

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 31, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3500 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	3/4 inch
Placement Method:	Rear Discharge	Admixtures:	Master Glenium 7500 MRWR, Master Set R100- Full Does

Placement Location:
A.13-A.10/A.10-F.10/F.10-F.13/F.13-A.13 & B.11-B.13/C.11-C.13

Test Cylinder Location:
A.11

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

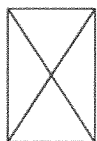
Load Number:	2 of 5	Number of 4x8 Cylinders:	4
Ticket Number:	293918	Cast By:	Patrick J. Roma
Truck Number:	99	Slump:	ASTM C 143 6.00 in.
Cubic Yards:	9	Air Temperature:	81 °F
Total Yardage:	44.5	Concrete Temperature:	80 °F
Total Time (minutes):	59	Air Content:	ASTM C 231 5.6 %

Specimen Storage ASTM C 31

Field Cure Days: 2
Date Received: 6/2/2016
Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83243	6/7/2016	4.00	12.54	7	41965	3350	2
83244	6/28/2016	4.01	12.62	28	51010	4040	6
83245	6/28/2016	4.01	12.62	28	51875	4110	6
83246	6/28/2016	4.01	12.62	28	50765	4020	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by:

Matthew T. Grady
Matthew T. Grady, Manager of MTS

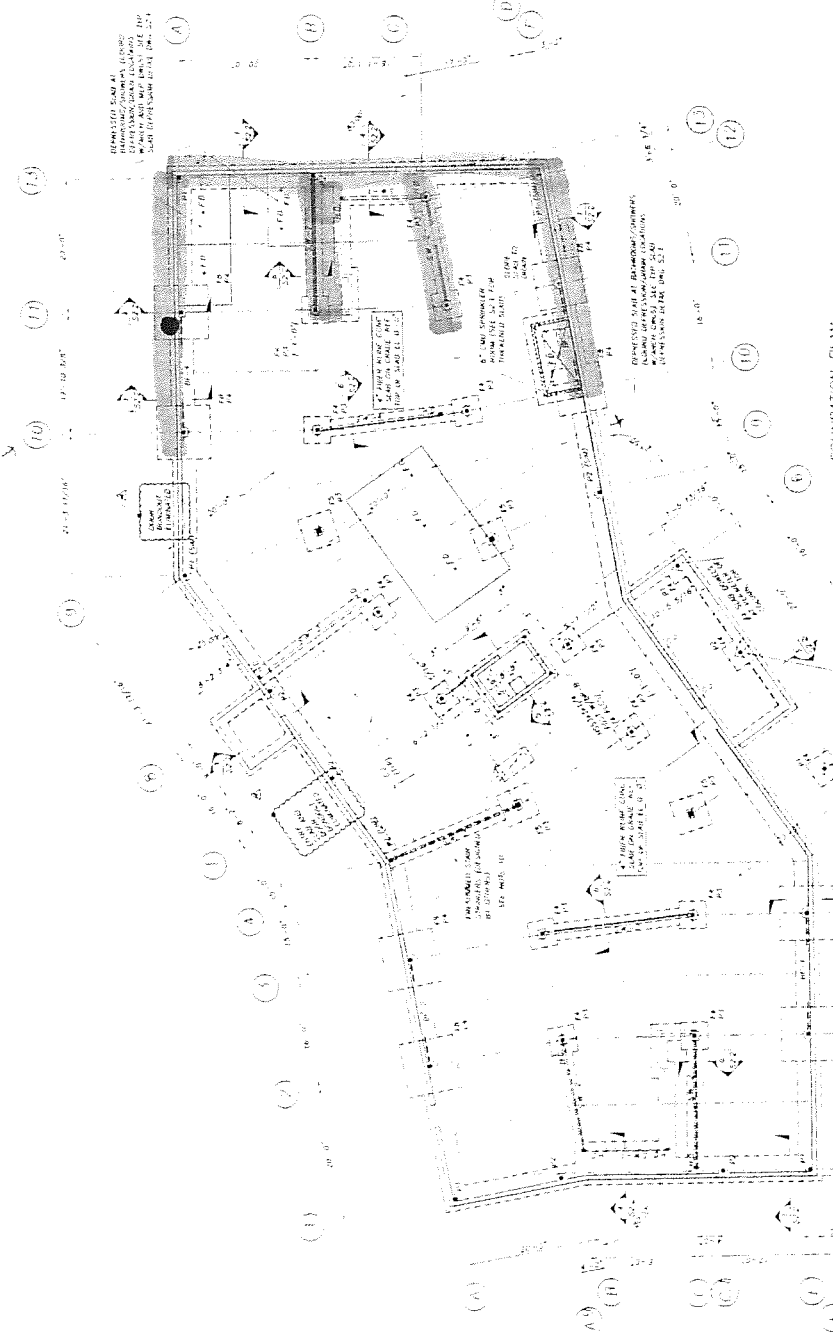




FOUNDATION PLAN

S1.1

MINNESOTA BOARD OF PROFESSIONAL ENGINEERS



NO.	DESCRIPTION	QTY	UNIT												
1	12" DIA. C-150	10	CY												
2	12" DIA. C-150	10	CY												
3	12" DIA. C-150	10	CY												
4	12" DIA. C-150	10	CY												
5	12" DIA. C-150	10	CY												
6	12" DIA. C-150	10	CY												
7	12" DIA. C-150	10	CY												
8	12" DIA. C-150	10	CY												
9	12" DIA. C-150	10	CY												
10	12" DIA. C-150	10	CY												
11	12" DIA. C-150	10	CY												
12	12" DIA. C-150	10	CY												
13	12" DIA. C-150	10	CY												
14	12" DIA. C-150	10	CY												
15	12" DIA. C-150	10	CY												
16	12" DIA. C-150	10	CY												
17	12" DIA. C-150	10	CY </tr <tr> <td>18</td> <td>12" DIA. C-150</td> <td>10</td> <td>CY</td> </tr> <tr> <td>19</td> <td>12" DIA. C-150</td> <td>10</td> <td>CY</td> </tr> <tr> <td>20</td> <td>12" DIA. C-150</td> <td>10</td> <td>CY</td> </tr>	18	12" DIA. C-150	10	CY	19	12" DIA. C-150	10	CY	20	12" DIA. C-150	10	CY
18	12" DIA. C-150	10	CY												
19	12" DIA. C-150	10	CY												
20	12" DIA. C-150	10	CY												

FOUNDATION PLAN

- NOTE:
1. FOUNDATION SHALL BE CONSTRUCTED WITH 12" DIA. C-150 CONCRETE PILES.
 2. SEE GENERAL NOTES FOR DETAILS OF PILE CAPS AND CONNECTIONS TO FLOOR SLABS.
 3. ALL PILES SHALL BE SET TO THE SAME DEPTH AND SHALL BE SET TO THE SAME TOLERANCE.
 4. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 5. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 6. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 7. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 8. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 9. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 10. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 11. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 12. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 13. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 14. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 15. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 16. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 17. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 18. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 19. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.
 20. ALL PILES SHALL BE SET TO THE SAME TOLERANCE.

Placement
 Cylinders

Patrons Oxford Insurance
 1518-003
 DATE: 5-31-16
 TRCH: JSK



R. W. Gillespie & Associates, Inc.
 86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
 44 Wood Avenue, Suite 1, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	July 6, 2016	Project No.:	1518-003
Attention:	Mark Pettingill (mpettingill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
83295	28
83296	28
83297	28

Remarks:

- Copy to: Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 Hans Breaux (hans@simonsarchitects.com)
 Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 Michael Packard (mike@zachauconstruction.com)
 Jon Provost (jon@zachauconstruction.com)
 Carlene Fassett (carlene@zachauconstruction.com)
 Terri Strouse (terrstrouse@gsg gravel.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, June 07, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3500 psi
Weather Conditions:	Overcast/rain	Max. Aggregate Size:	3/4 inch
Placement Method:	Pump	Admixtures:	Master Glenium 7500, MRWR, Masterset R100

Placement Location:
A.7-A.13/A.13-F.13/F.13-F.5 B.13-B.11/C.11/B.1-C.1

Test Cylinder Location:
F.1

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

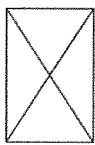
Load Number:	1 of 3	Number of 4x8 Cylinders:	4
Ticket Number:	294318	Cast By:	Patrick J. Roma
Truck Number:	156	Slump:	ASTM C 143 4.50 in.
Cubic Yards:	8.75	Air Temperature:	71 °F
Total Yardage:	26	Concrete Temperature:	73 °F
Total Time (minutes):	45	Air Content:	ASTM C 231 4.5 %

Specimen Storage ASTM C 31

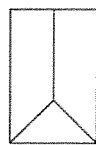
Field Cure Days: 1
Date Received: 6/8/2016
Condition of Cylinders: Good
Curing Temperatures: 65 °F to 82 °F

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83294	6/14/2016	4.00	12.56	7	56735	4520	3
83295	7/5/2016	4.00	12.57	28	62820	5000	2
83296	7/5/2016	4.00	12.57	28	62115	4940	2
83297	7/5/2016	4.00	12.57	28	63830	5080	3



Cone
1



Cone & Split
2



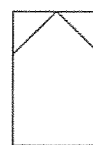
Columnar
3



Shear
4

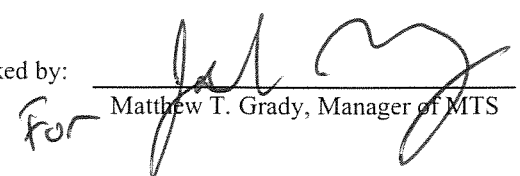


Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by: 
For Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES, INC



R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	July 13, 2016	Project No.:	1518-003
Attention:	Mark Pettinghill (mpettinghill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.	
Cylinder No. (s)	Age (Days)
83389	28
83390	28
83391	28

Remarks:

- Copy to:
- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 - Hans Breaux (hans@simonsarchitects.com)
 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terrstrouse@gsg gravel.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, June 15, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3500 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	3/4 inch
Placement Method:	Pump	Admixtures:	MasterGlenium 7500, MRWR, Masterset R100

Placement Location:
A.8-A.13/A.13-F.13/F.13-F.6/B.13-B.11/C.13-C.11

Test Cylinder Location:
A.10

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

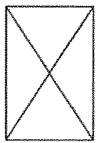
Load Number:	1 of 3	Number of 4x8 Cylinders:	4
Ticket Number:	298180	Cast By:	Patrick J. Roma
Truck Number:	138	Slump:	ASTM C 143 6.00 in.
Cubic Yards:	8	Air Temperature:	86 °F
Total Yardage:	24	Concrete Temperature:	77 °F
Total Time (minutes):	60	Air Content:	ASTM C 231 7.1 %

Specimen Storage ASTM C 31

Field Cure Days: 1
Date Received: 6/16/2016
Condition of Cylinders: Good
Curing Temperatures: 75 °F to 94 °F

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83388	6/22/2016	4.00	12.57	7	47595	3790	3
83389	7/13/2016	4.00	12.56	28	51410	4090	2
83390	7/13/2016	4.00	12.56	28	49525	3940	5
83391	7/13/2016	4.00	12.56	28	52825	4210	4



Cone
1



Cone & Split
2



Columnar
3



Shear
4



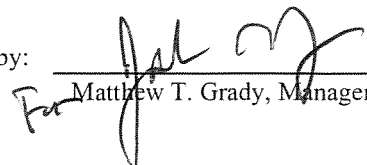
Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by:


Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES, INC



R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	July 25, 2016	Project No.:	1518-003
Attention:	Mark Pettinghill (mpettinghill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
83545	28
83546	28
83547	28

Remarks:

- Copy to:
- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 - Hans Breaux (hans@simonsarchitects.com)
 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terrstrouse@gsgravel.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Friday, June 24, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3500 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	3/4 inch
Placement Method:	Rear	Admixtures:	Master Glenium

Placement Location:

Elevator pad

Test Cylinder Location:

Middle OF Elevator Pad

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	1 of 1	Number of 4x8 Cylinders:	4
Ticket Number:	29780	Cast By:	Patrick J. Roma
Truck Number:	98	Slump:	ASTM C 143 6.00 in.
Cubic Yards:	6	Air Temperature:	86 °F
Total Yardage:	6	Concrete Temperature:	77 °F
Total Time (minutes):	170	Air Content:	ASTM C 231 4.5 %

Specimen Storage ASTM C 31

Field Cure Days: 1

Date Received: 6/25/2016

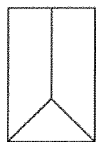
Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83544	7/2/2016	4.00	12.57	8	39735	3160	2
83545	7/22/2016	3.98	12.43	28	48395	3890	2
83546	7/22/2016	3.98	12.43	28	46070	3700	3
83547	7/22/2016	3.98	12.43	28	45695	3670	3



Cone
1



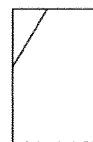
Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by: _____

Matthew T. Grady
 Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES, INC



R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date: July 26, 2016	Project No.: 1518-003
Attention: Mark Pettinghill (mpettingill@patrons.com)	
Re: Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine	

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
83598	28
83599	28

Remarks:

- Copy to:
- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 - Hans Breaux (hans@simonsarchitects.com)
 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terri@gsgravel.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, June 27, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3500 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	3/4 inch
Placement Method:	Rear Discharge	Admixtures:	Masterset R100, Glenium

Placement Location:
 Elevator Foundation & Pier

Test Cylinder Location:
 B.8/7

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

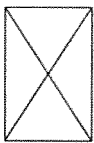
Load Number:	1 of 1	Number of 4x8 Cylinders:	4
Ticket Number:	281880	Cast By:	Andrew Flynn
Truck Number:	83	Slump:	ASTM C 143 7.50 in.
Cubic Yards:	4	Air Temperature:	81 °F
Total Yardage:	4	Concrete Temperature:	82 °F
Total Time (minutes):	74	Air Content:	ASTM C 231 6.6 %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 6/28/2016
 Condition of Cylinders: Good
 Curing Temperatures: 74 °F to 83 °F

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83597	7/4/2016	4.00	12.57	7	42585	3390	5
83598	7/25/2016	3.99	12.47	28	53455	4290	5
83599	7/25/2016	3.99	12.47	28	49190	3940	5
83600	HOLD			H			



Cone
1



Cone & Split
2



Columnar
3



Shear
4



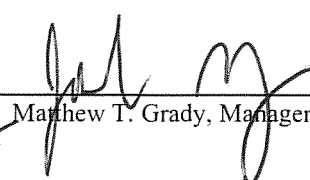
Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by: _____

For 
 Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES, INC



R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

Date:	September 8, 2016	Project No.:	1518-003
Attention:	Mark Pettingill (mpettingill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
84431	28
84432	28
84433	28
84435	28
84436	28
84437	28
84439	28
84440	28
84441	28

Remarks:

- Copy to:
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 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terrstrouse@gsg gravel.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, August 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3000 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	3/4 inch
Placement Method:	Pump	Admixtures:	Polymesh, MRWR

Placement Location:

Slab on Grade

Test Cylinder Location:

B-C/3-4

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	3 of 12	Number of 4x8 Cylinders:	4
Ticket Number:	297553	Cast By:	Andrew Flynn
Truck Number:	144	Slump:	ASTM C 143 5.25 in.
Cubic Yards:	10	Air Temperature:	56 °F
Total Yardage:	116	Concrete Temperature:	ASTM C1064 75 °F
Total Time (minutes):	48	Air Content:	ASTM C 231 3.4 %

Specimen Storage ASTM C 31

Field Cure Days: 1

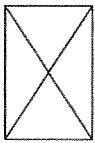
Date Received: 8/11/2016

Condition of Cylinders: Good

Curing Temperatures: 69 °F to 84 °F

ASTM C 39, ASTM C1231 (ASTM C617 if noted)

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
84430	8/17/2016	4.01	12.64	7	39630	3130	2
84431	9/7/2016	4.00	12.58	28	49805	3960	5
84432	9/7/2016	4.00	12.58	28	44143	3510	5
84433	9/7/2016	4.00	12.58	28	50300	4000	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



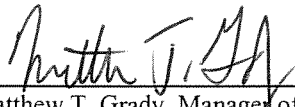
Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by:


 Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES, INC

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

2 of 3

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, August 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3000 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	3/4 inch
Placement Method:	Pump	Admixtures:	Polymesh, MRWR

Placement Location:
Slab on Grade

Test Cylinder Location:
A-A.9/7-8

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	8 of 12	Number of 4x8 Cylinders:	4
Ticket Number:	290562	Cast By:	Andrew Flynn
Truck Number:	95	Slump:	ASTM C 143 6.50 in.
Cubic Yards:	10	Air Temperature:	57 °F
Total Yardage:	116	Concrete Temperature:	ASTM C1064 75 °F
Total Time (minutes):	47	Air Content:	ASTM C 231 3.6 %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 8/11/2016
 Condition of Cylinders: Good
 Curing Temperatures: 69 °F to 84 °F

ASTM C 39, ASTM C1231 (ASTM C617 if noted)

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
84434	8/17/2016	4.01	12.64	7	31065	2460	2
84435	9/7/2016	4.00	12.58	28	42335	3370	2
84436	9/7/2016	4.00	12.58	28	41580	3310	5
84437	9/7/2016	4.00	12.58	28	42335	3370	3



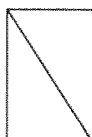
Cone
1



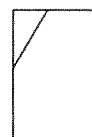
Cone & Split
2



Columnar
3



Shear
4




Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by: 
 Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

3 of 3

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, August 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	3000 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	3/4 inch
Placement Method:	Pump	Admixtures:	Polymesh, MRWR

Placement Location:
Slab on Grade

Test Cylinder Location:
A.5-B.5/10-11

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

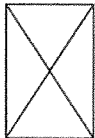
Load Number:	11 of 12	Number of 4x8 Cylinders:	4
Ticket Number:	290567	Cast By:	Andrew Flynn
Truck Number:	138	Slump:	ASTM C 143 4.50 in.
Cubic Yards:	10	Air Temperature:	67 °F
Total Yardage:	116	Concrete Temperature:	ASTM C1064 77 °F
Total Time (minutes):	45	Air Content:	ASTM C 231 3.5 %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 8/11/2016
 Condition of Cylinders: Good
 Curing Temperatures: 69 °F to 84 °F

ASTM C 39, ASTM C1231 (ASTM C617 if noted)

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
84438	8/17/2016	4.01	12.64	7	37420	2960	5
84439	9/7/2016	4.00	12.58	28	47760	3800	2
84440	9/7/2016	4.00	12.58	28	49605	3940	5
84441	9/7/2016	4.00	12.58	28	47330	3760	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by:



 Matthew T. Grady, Manager of MTS



Exhibit B

Division 5 – Structural Steel

Structural Schedule of Special Inspections - STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	REQD Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
IBC Section 1704.3						
1. Material verification of high-strength bolts, nuts and washers:						
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Y	P	Applicable ASTM material standards, AISC 360, A3.3	TA1	AWS/AISC-SSI	Oct – Dec '17
b. Manufacturer's certificate of compliance required.	Y	S		SII	PE/SE or EIT	Oct – Dec '17
2. Inspection of high-strength bolting						
a. Snug-tight joints.	Y	P		TA1	AWS/AISC-SSI	Oct – Dec '17
b. Pretensioned and slip-critical joints using turn-of-nut with matchmaking, twist-off bolt or direct tension indicator methods of installation.	Y	P	AISC LRFD Section M2.5	TA1	AWS/AISC-SSI	Oct – Dec '17
c. Pretensioned and slip-critical joints using turn-of-nut without matchmaking or calibrated wrench methods of installation.	Y	C	IBC Sect 1704.3.3	TA1	AWS/AISC-SSI	Oct – Dec '17
3. Material verification of structural steel and cold-formed steel deck:						
a. For structural steel, identification markings to conform to AISC 360.	Y	P	AISC 360, M5.5	SII	PE/SE or EIT	Oct – Dec '17
b. For other steel, identification markings to conform to ASTM standards specified in the approved construction documents.	Y	P	Applicable ASTM material standards	SII	PE/SE or EIT	Oct – Dec '17
c. Manufacturer's certified test reports.	Y	S		SII	PE/SE or EIT	Oct – Dec '17
4. Material verification of weld filler materials:						
a. Identification markings to conform to AWS specification in the approved construction documents.	Y	P	AISC 360, M5.5	TA1	AWS/AISC-SSI	Oct – Dec '17
b. Manufacturer's certificate of compliance required.	Y	S		SII	PE/SE or EIT	Oct – Dec '17
5. Submit current AWS D1.1 welder certificate for all field welders who will be welding on this project.	Y	S	AWS D1.1	SII	PE/SE or EIT	Oct – Dec '17
6. Inspection of welding (IBC 1704.3.1):						
a. Structural steel and cold-formed deck:						
1) Complete and partial joint penetration groove welds.	N	C	AWS D1.1	TA1	AWS-CWI	
2) Multipass fillet welds.	N	C		TA1	AWS-CWI	
3) Single-pass fillet welds > 5/16"	N	C		TA1	AWS-CWI	
4) Plug and slot welds	N	C		TA1	AWS-CWI	
5) Single-pass fillet welds ≤ 5/16"	Y	P		TA1	AWS-CWI	Oct – Dec '17
6) Floor and deck welds.	N	P	AWS D1.3	TA1	AWS-CWI	
b. Reinforcing steel:						
1) Verification of weldability of reinforcing steel other than ASTM A706.	N	-	Not applicable.	-	-	
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement.	N	C	AWS D1.4 ACI 318: 3.5.2	TA1	AWS-CWI	
3) Shear reinforcement.	N	C		TA1	AWS-CWI	
4) Other reinforcing steel.	N	P		TA1	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.	Y	P	IBC 1704.3.2	SII	PE/SE or EIT	Oct – Dec '17
b. Member locations.	Y	P		SII	PE/SE or EIT	Oct – Dec '17
c. Application of joint details at each connection.	Y	P		SII	PE/SE or EIT	Oct – Dec '17

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

VERIFICATION AND INSPECTION IBC Section 1704.2	REQD	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
	Y/N					
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-		S	Fabricator shall submit one of the two qualifications	SII	PE/SE or EIT	
2. AISC Certification	Y					<i>Oct – Dec '17</i>
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.	Y	S	IBC 1704.2.2	SII	PE/SE or EIT	<i>Oct – Dec '17</i>

OBSERVATION REPORT
Structural Steel

Date:	October 14, 2016
Time:	11:00 am
Temp:	60 degrees
Weather:	Sunny

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location:
Observed second floor structural steel framing.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Bolt Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Anchor Bolts, Nuts, & Washers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grout/Leveling Plates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fit Up/Plumbness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Pour Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bracing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MEP interference at one beam, see notes below
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Notes:

All structural steel was observed to be in conformance with the structural drawings.

There is one steel beam between columns C/3 and E/3 where new ductwork is shown on the mechanical drawings passing through. A web penetration was not provided in the beam for this, and the duct as it is sized right now is too large to pass through. After coordination with the Architect and Mechanical Engineer, the single duct will be revised to (3) smaller ducts, which will require (3) 8"Ø penetrations to be field cut into the web. We performed an analysis of the beam with the penetrations and determined it adequate. We will inspect the (3) penetrations in the field during a future visit to the site.

Signed: Christopher Williams, P.E., S.E.

OBSERVATION REPORT
Structural Steel

Date:	October 26, 2016
Time:	2:00 pm
Temp:	45 degrees
Weather:	Cloudy

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location:
 Observed the remainder of the second floor steel framing, and the elevator shaft framing.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Bolt Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Anchor Bolts, Nuts, & Washers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grout/Leveling Plates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fit Up/Plumbness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Pour Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bracing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MEP interference at one beam, see notes below
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Notes:

This report references the structural steel reports dated 10/14. Refer to those reports for additional information. All structural steel was observed to be in conformance with the structural drawings, except as noted below:

Closed item: Per the 10/14 report, there was one steel beam between columns C/3 and E/3 that required (3) 8"Ø field-cut web penetrations for new ductwork. These (3) penetrations had been completed prior to my visit to the site (refer to photo 1). All three new penetrations were observed to be acceptable.

Signed: Christopher Williams, P.E., S.E.



Photo 1: Three Web Penetrations in Steel Beam for New Ductwork

Client: R.W. Gillespie & Associates, Inc.

Project: Patrons oxford Offices

Date: October 11, 2016

Subject: Structural Steel Site Inspection

1518-003

Report: 001

We visited the site on this date as requested to perform structural steel inspections on the Patrons Oxford Offices project located in Portland, ME. Upon arrival we met with the project superintendent for Zachau Construction who provided us with structural and shop drawings which were used to perform our inspections. Our actions and observations were as follows:

- Welder certifications were provided and reviewed for the welding subcontractor.
- Welding of the gusset plates to the column bases on brace frames BF-1, BF-2, BF-3 and BF-4 was performed per Precision Welding and Fabrication drawing E7. Visual inspections of the welds were performed.
- Bolted connections between lines 11 and 13 were inspected for proper tightening. The moment connection at F/11 was not tight at the time of this inspection.
- Anchor rod nuts were not tight at this time.

All inspections performed above appeared acceptable in accordance to AWS, AISC, RCSC and contract documents.

The project superintendent was notified of our findings.

Inspector; Michael Bump
CWI#07091231

MTB

Client: R.W. Gillespie & Associates, Inc.**Project:** Patrons Oxford Offices**Date:** October 28, 2016**Subject:** Structural Steel Site Inspection1318-003
Report: 002

We visited the site on this date as requested to perform structural steel inspections on the Patrons Oxford Offices project located in Portland, ME. Upon arrival we met with the project superintendent for Zachau Construction. Our actions and observations were as follows:

- Anchor rod nuts were properly tightened.
- All bolted connections not previously inspected were inspected for proper tightening.
- Visual inspections were performed on all field welds on the HSS members in the elevator opening. Welding was performed in accordance to Precision Welding and Fabrication drawing E3.
- X rod bracing between grade and 2nd floor was inspected for proper tightening.

All inspections performed above appeared acceptable in accordance to AWS, AISC, RCSC and contract documents except as noted below:

1. Loose bolts were found at the flitch plate bases to the 2nd floor framing at F/10 and F/11.

The project superintendent was notified of our findings.

Inspector; Michael Bump
CWI#07091231



MILL CERTIFICATIONS

PROJECT PATRONS OXFORD INSURANCE OFFICE BUILDING

STRUCTURAL STEEL RECEIVED DATE: 4-17-17 NOT RECEIVED

BOLTS RECEIVED DATE: 4-17-17 NOT RECEIVED

WELD FILLER RECEIVED DATE: 4-17-17 NOT RECEIVED

ITEMS ABOVE MARKED "RECEIVED" HAVE NOT BEEN INCLUDED IN THIS REPORT DUE TO THE LARGE VOLUME. HARD COPIES ARE AVAILABLE UPON REQUEST.

SPECIAL INSPECTOR: cgw

DATE: 5/2/17



Exhibit B

Division 6 – Rough Carpentry & Timber Framing

Structural Schedule of Special Inspections
WOOD CONSTRUCTION

VERIFICATION AND INSPECTION IBC Section 1704.6	REQD Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Fabrication of high-load diaphragms						
a. Verify wood structural panel sheathing for grade and thickness	Y	P	IBC 1704.6	SII	PE/SE or EIT	<i>Oct – Dec '17</i>
b. Verify the nominal size of framing members at adjoining panel edges	Y	P	IBC 1704.6	SII	PE/SE or EIT	<i>Oct – Dec '17</i>
b. Verify the nail or staple diameter and length	Y	P	IBC 1704.6	SII	PE/SE or EIT	<i>Oct – Dec '17</i>
b. Verify the number of fastener lines	Y	P	IBC 1704.6	SII	PE/SE or EIT	<i>Oct – Dec '17</i>
b. Verify the spacing between fasteners in each line and at edge margins	Y	P	IBC 1704.6	SII	PE/SE or EIT	<i>Oct – Dec '17</i>
2. Load Tests for Joist Hangers: Provide evidence of manufacturer's load test in accordance with ASTM D1761 including the vertical load bearing capacity, torsional moment capacity, and deflection characteristics when there is no calculated procedure recognized by the code.	N	S	IBC 1716 [submit ICBO reports]	SII	PE/SE or EIT	
3. Metal-plate-connected wood trusses spanning 60 feet or greater:						
a. Verify the temporary installation restraint / bracing and the permanent individual truss member restraint / bracing is installed per the approved truss submittal package.	N	P	IBC 1704.6.2.	SII	PE/SE or EIT	

OBSERVATION REPORT
Rough Carpentry

Date:	October 14, 2016
Time:	11:00 am
Temp:	60 degrees
Weather:	Sunny

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location: Observed the first floor glulam beams and columns.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gaps in beam bearings at braced frames (see notes below)
Connections	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gaps in some beam connections need to be shimmed (see notes below)
Nailing Pattern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bridging/Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

All member sizes and connections were observed to be in conformance with the structural drawings, except as noted below.

At the braced frame flitch-plate columns, the underside of the beam bearing plates were observed with gaps between the bottom of plate and top of column (see photo 1). In order to ensure that the both the steel flitch plate and the glulams are loaded evenly, these gaps need to be shimmed. The GC was directed to shim these gaps with steel or hardwood shims. We will inspect the shims during a future visit to the site.

At some locations, beams are designed to be connected to the columns with an HSS steel sleeve that fits over the top of the column (per section 1/S3.4 and shown in photo 2). The HSS tube is wider than the glulam column, and thus the detail shows the column to be shimmed tight to the HSS. The shim plates were not in place during my visit, and this was pointed out to the GC. We will inspect the shims during a future visit to the site.

Signed: Christopher G. Williams, P.E., S.E.



Photo 1: Gaps at Plate Bearing at Braced Frame Columns



Photo 2: HSS Column Connection w/ Missing Shims

OBSERVATION REPORT
 Rough Carpentry

Date:	October 26, 2016
Time:	2:00 pm
Temp:	45 degrees
Weather:	Cloudy

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location: Observed the progress of first floor wall construction.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nailing Pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bridging/Bracing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	At one condition only, blocking between 2x8 ladder framing not installed (see notes below).
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Shearwall end post fastening to steel column, see notes below.
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

This report references previous rough-carpentry reports dated 10/14. Refer to those reports for additional information. All member sizes and connections were observed to be in conformance with the structural drawings, except as noted below.

Open item: Per the 10/14 report, shims were required to be installed at the braced frame fitch-plate columns, and at the HSS collar connections per section 1/S3.4. These shims have not yet been installed. We will inspect the shims during a future visit to the site.

New item: Akibg 4-line between columns A and B, there is a shearwall with 2x8 ladder framing over the top at the second floor. The 2x8 framing should have blocking between each of the framing members, but this blocking has not been installed (see photo 1). The GC was made aware of this condition, and we will inspect the work during a future visit to the site.

New item: There are shearwalls that frame into a column on grid C/12 from each direction. The column was punched with holes on one face to allow a nailer to be installed, which in turn will be fastened to the shearwall sheathing. On the other face of the columns, holes were not provided (see photo 2). The nailer

is still required at this condition. The GC was instructed to drill self-tapping screws into the column to install the nailer. A screw was proposed by the GC while I was on site, which is equivalent to the typical structural screw being used on this project and was deemed to be acceptable. We will inspect the nailer fastening during a future visit to the site.

Signed: Christopher G. Williams, P.E., S.E.



Photo 1: 2x Blocking Between Ladder Framing Not Installed



Photo 2: HSS Column w/ Punched Holes on One Face Only

OBSERVATION REPORT
Rough Carpentry

Date:	November 9, 2016
Time:	9:15 pm
Temp:	50 degrees
Weather:	Cloudy

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location: Observed the progress of first floor wall framing construction. At this time, the majority of the shearwalls and miscellaneous framing have been installed. The second floor sheathing has been installed, but could not be inspected due to safety issues.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nailing Pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bridging/Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

This report references previous rough-carpentry reports dated 10/14 and 10/26. Refer to those reports for additional information. All member sizes and connections were observed to be in conformance with the structural drawings, except as noted below.

Open item: Per the 10/14 report, shims were required to be installed at the braced frame fitch-plate columns, and at the HSS collar connections per section 1/S3.4. These shims have not yet been installed. We will inspect the shims during a future visit to the site.

Open item: Per the 10/26 report, the top of the shearwall along 4-line between columns A and B should have blocking between each of the framing members. The blocking has not yet been installed. We will inspect the work during a future visit to the site.

Open item: Per the 10/26 report, a nailer needs to be fastened to the column on grid C/12 with screws. This is so that the shearwall sheathing can be fastened to the column. This work was not complete during our visit. We will inspect the nailer fastening during a future visit to the site.

New Item: Two shearwalls intersect with each other near column B/1. At this intersection, the intent is to have a single holddown shared by the two shearwalls. To ensure the holddown is engaged by both walls, the end post of one wall must be screwed into the other (refer to photos 1 and 2). To do this, one of the studs must be temporarily removed. The GC was made aware of this condition, and will remove the stud and install RSS screws at 6" O.C. We inspect this work during a future visit to the site.

New Item: There are bearing walls along each stair way that are not identified on the structural drawings. The walls were built per the architectural partition wall type details, which are inadequate for bearing. The GC was given options to either add blocking to brace the studs and increase their capacity, or to double up the studs. The GC will determine which option is most cost-effective and proceed with the work.

Signed: Christopher G. Williams, P.E., S.E.



Photo 1: View of Shearwall to Be Fastened to Post Behind with Holddown

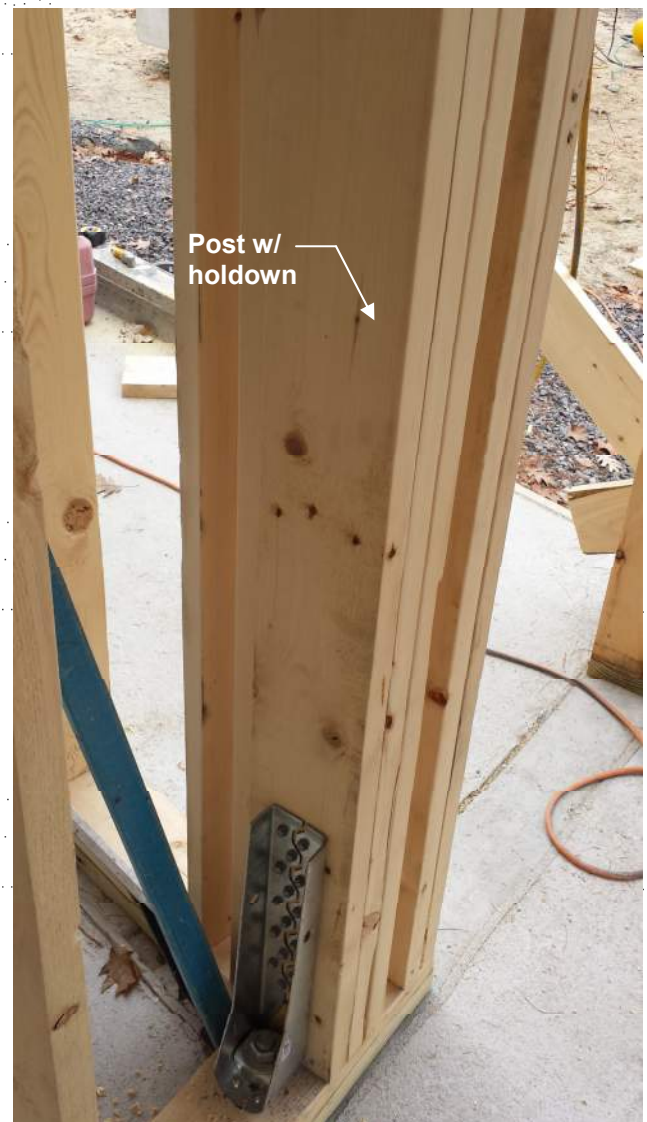


Photo 2: View of Shearwall with Post and Holddown

OBSERVATION REPORT
Rough Carpentry

Date:	December 5, 2016
Time:	1:30 pm
Temp:	30 degrees
Weather:	Snow

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location: Observed the progress of second floor wall framing construction. At this time, all of the second floor glulam columns and roof glulam beams have been installed. Construction of the clerestory beams and framing was in progress. All second floor bearing and shear walls were also installed.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nailing Pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bridging/Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

This report references previous rough-carpentry reports dated 10/14, 10/26, and 11/9. Refer to those reports for additional information. All member sizes and connections were observed to be in conformance with the structural drawings, except as noted below.

Closed item: Per the 10/14 report, shims were required to be installed at the braced frame fitch-plate columns. These shims were installed and determined to be acceptable.

Closed item: Per the 10/26 report, a nailer needs to be fastened to the column on grid C/12 with screws. This is so that the shearwall sheathing can be fastened to the column. This work has been completed and was determined to be acceptable.

Open item: Per the 10/14 report, shims were required to be installed at the first floor HSS collar connections per section 1/S3.4. These shims have not yet been installed. We will inspect the shims during a future visit to the site.

Open item: Per the 10/26 report, the top of the shearwall along 4-line between columns A and B should have blocking between each of the framing members. The blocking has not yet been installed. We will inspect the work during a future visit to the site.

Open item: Per the 11/9 report, at the first floor shearwall corner near column B/1, the corner posts of the intersecting shearwalls needed to be fastened to each other with RSS screws. This work had not been completed at the time of my visit, and will be inspected during a future visit to the site.

Open item: Per the 11/9 report, there are bearing walls not identified on the structural drawings where blocking is required at mid-height of the studs. These walls are located at the two stairs. The blocking had not yet been installed at the time of my visit. We will inspect this work during a future visit to the site.

New item: At the ends of the clerestory, a ceiling conceals the high roof framing from view. This area is shown on the CDs to be timber decking. However, Zachau did not buy enough decking to frame these two areas, and proposed doing so with 2x framing. After review, the 2x framing is acceptable. Framing shall be done with 2x10 @16" O.C. Framing will be supported by the end walls with ledgers and joist hangers. We will inspect this work during a future visit to the site.

Signed: Christopher G. Williams, P.E., S.E.

OBSERVATION REPORT
Rough Carpentry

Date:	February 2, 2017
Time:	7:30 am
Temp:	25 degrees
Weather:	Sunny

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location: Visited the site to perform a final inspection of all punch list items.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nailing Pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bridging/Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

This report references previous rough-carpentry reports dated 10/14, 10/26, and 11/9, and 12/5. Refer to those reports for additional information. All member sizes and connections were observed to be in conformance with the structural drawings, except as noted below.

Closed item: Per the 10/14 report, shims were required to be installed at the first floor HSS collar connections per section 1/S3.4. These shims have now been installed, and no further action is required by the GC.

Closed item: Per the 10/26 report, the top of the shearwall along 4-line between columns A and B should have blocking between each of the framing members. The blocking has now been installed and was observed to be adequate.

Closed item: Per the 11/9 report, at the first floor shearwall corner near column B/1, the corner posts of the intersecting shearwalls needed to be fastened to each other with RSS screws. The posts have been fastened together. No further action is required by the GC.

Closed item: Per the 11/9 report, there are bearing walls not identified on the structural drawings where blocking is required at mid-height of the studs. I observed that the blocking had been correctly installed at all these conditions. No further corrective action is required.

Closed item: Per the 12/5 report, a portion of the clerestory roof was framing with 2x members instead of timber decking. I observed that this framing had been installed per our direction to Zachau. No further corrective action is required.

Signed: Christopher G. Williams, P.E., S.E.

Exhibit B

Division 6 – Wood Trusses

Structural Schedule of Special Inspection Services
FABRICATION AND IMPLEMENTATION PROCEDURES – WOOD TRUSSES

VERIFICATION AND INSPECTION IBC Section 1704.2	REQD 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. TPI Inspection Program: Fabricator shall participate in the TPI Quality Assurance Inspection Program, and maintain a copy of the Quality Assurance Procedures Manual, QAP-90. Submit copy of certificate. All trusses shall bear the TPI Registered Mark.	Y	S	Fabricator shall submit one of the two qualifications	SII	PE/SE or EIT	<i>Oct – Dec '17</i>
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	Y	S	IBC 1704.2.2	SII	PE/SE or EIT	<i>Oct – Dec '17</i>

OBSERVATION REPORT
Wood Trusses

Date:	October 14, 2016
Time:	11:00 am
Temp:	60 degrees
Weather:	Sunny

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location: Observed the progress of construction for the second floor trusses. At the time of my visit, truss were installed in approximately four column bays, with work ongoing.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Overall Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Truss Spacing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Ends Correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections/Hold Downs	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Truss hangers not installed yet. Trusses tacked to glulam beams.
Truss Plate Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Permanent Lateral Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Strongbacks not installed yet.
Bearing End Over Studs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Issue with field fit-up at girder truss connection to steel beam, see notes below.

Notes:

The trusses observed were in conformance with the structural drawings. At the time of my visit, trusses had been tack-nailed to glulam framing in approximately four columns bays.

At one location, a double-ply girder truss is required to be hung from a steel beam with a face-mount hanger designed and provided by the truss manufacturer. The steel beam was not outfitted with holes for web blocking, which would be necessary for a face-mount hanger. The hanger also extends below the bottom of the steel beam, which means that approximately (12) of the (66) nails on the hanger cannot be installed. An analysis of the hanger with the reduced nailing was performed, and the hanger was determined to be acceptable with less nails. The GC was also given direction to field

drill bolt holes in the steel beam web in order to install the necessary web blocking. We will inspect this girder truss connection during a future visit to the site.

Signed: Christopher Williams, P.E., S.E.



Photo 1: Steel Beam w/o Holes for Web Blocking at Girder Truss Face-Mounted Hanger



Photo 2: Girder Truss Hanger required (66) face nails

OBSERVATION REPORT
Wood Trusses

Date:	October 26, 2016
Time:	2:00 pm
Temp:	45 degrees
Weather:	Cloudy

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location: Observed the progress of construction for the second floor trusses. At the time of my visit, most second floor trusses had been installed. Installation of truss hangers was in progress.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Overall Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Truss Spacing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Ends Correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections/Hold Downs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Truss Plate Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Permanent Lateral Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Strongbacks not installed yet.
Bearing End Over Studs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Notes:

This report references pervious wood truss reports dated 10/14. Refer to those reports for additional information. Trusses were observed to be in conformance with the structural drawings, except as noted below.

Closed Item: Per the 10/14 report, a double-ply girder truss could not be face-mounted to a steel beam because holes were not provided for web blocking. At this same hanger, a reduced quantity of nails was permitted to be used. I observed the connection and determine it to be acceptable. No further corrective action is required.

Signed: Christopher Williams, P.E., S.E.

OBSERVATION REPORT
Wood Trusses

Date:	December 5, 2016
Time:	1:30 pm
Temp:	30 degrees
Weather:	Snow

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location: Observed the progress of construction of the roof trusses. At the time of my visit, all of the roof trusses had been installed. Truss bracing on both floors has not been completed.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Overall Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Truss Spacing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Ends Correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections/Hold Downs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Truss Plate Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Permanent Lateral Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Strongbacks not installed yet.
Bearing End Over Studs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hurricane tie installation, see notes below

Notes:

The trusses observed were in conformance with the structural drawings. Strongback installation has not yet commenced on either floor. Additional items discussed were as follows:

Open item: The truss end bearings at the roof do not allow for the hurricane ties to be installed at the inside face of the glulam beams as shown on the structural drawings. Zachau requested to install the hurricane ties on the outside face instead. This is acceptable, and we will inspect the work during a future visit to the site.

Signed: Christopher Williams, P.E., S.E.

OBSERVATION REPORT
Wood Trusses

Date:	February 2, 2017
Time:	7:30 am
Temp:	25 degrees
Weather:	Sunny

Project:	Patrons Oxford Insurance Office Building
Location:	Portland, ME
Becker Job No:	3565.90

Observation Location: I visited the site to perform a final inspection of punch list items.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Overall Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Truss Spacing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Ends Correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections/Hold Downs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Truss Plate Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Permanent Lateral Bracing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing End Over Studs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Notes:

The trusses observed were in conformance with the structural drawings, except as noted below:

Closed item: Per the 12/5 report, strongbacks had not yet been installed during previous visits. The strongbacks are now in place throughout the building and are acceptable.

Closed item: Per the 12/5 report, the truss end bearings at the roof did not allow for the hurricane ties to be installed at the inside face of the glulam beams as shown on the structural drawings. Zachau requested to install the hurricane ties on the outside face instead, which was permitted. This work has now been completed and is acceptable.

Signed: Christopher Williams, P.E., S.E.

Exhibit B

Division 31 – Soils, Fills & Foundation Subgrades

Structural Schedule of Special Inspections

SOILS & FOUNDATION CONSTRUCTION

VERIFICATION AND INSPECTION	REQD	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
	Y/N					
IBC Section 1704.7, 1704.8, 1704.9						
1. Required Verification and Inspection of Soils:						
a. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Y	P	IBC 1704.7	SI2	PE/GE, EIT or ETT	<i>May – July '17</i>
b. Verify excavations are extended to proper depth and have reached proper material.	Y	P	IBC 1704.7	SI2	PE/GE, EIT or ETT	<i>May – July '17</i>
c. Perform classification and testing of compacted fill and engineered fill materials.	Y	P	IBC 1704.7	TA1	PE/GE, EIT or ETT	<i>May – July '17</i>
d. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill and/or engineered fill.	Y	C	IBC 1704.7	TA1	PE/GE, EIT or ETT	<i>May – July '17</i>
e. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	Y	P	IBC 1704.7	SI2	PE/GE, EIT or ETT	<i>May – July '17</i>
2. Required Verification and Inspection of Driven Deep Foundation Elements:						
a. Verify element materials, sizes and lengths comply with the requirements.	N	C	IBC 1704.8	TA1	PE/GE, EIT or ETT	
b. Determine capacities of test elements and conduct additional load tests, as required.	N	C	IBC 1704.8	SI2	PE/GE, EIT or ETT	
c. Observe driving operations and maintain complete and accurate records for each element.	N	C	IBC 1704.8	TA1	PE/GE, EIT or ETT	
d. Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element.	N	C	IBC 1704.8	TA1	PE/GE, EIT or ETT	
3. Required Verification and Inspection of Cast-in-Place Deep Foundation Elements:						
a. Observe drilling operations and maintain complete and accurate records for each element.	N	C	IBC 1704.9	TA1	PE/GE, EIT or ETT	
b. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end bearing strata capacity. Record concrete or grout volumes.	N	C	IBC 1704.9	TA1	PE/GE, EIT or ETT	

See Concrete, Masonry, and/or Steel Schedules for additional material inspections for deep foundation elements as applicable.



PROJECT MEMORANDUM

To: Mark Pettingill, CIC, President and CEO
Patrons Oxford Insurance

From: Erik J. Wiberg, P.E. *EJW*
R.W. Gillespie & Associates, Inc.

Date: 26 May 2016

Subject: Geotechnical Observations of LD-CLSM Subgrade
Patrons Oxford Insurance Company Office Building
Portland, Maine
RWG&A Project No. 1518-003

This memo summarizes R.W. Gillespie & Associates, Inc.'s (RWG&A's) geotechnical observations of building area subgrades made on 02, 03, 09, and 11 May 2016 prior to placement of low density, controlled low strength material (LD-CLSM). The observations were made by an RWG&A geotechnical engineer and/or a construction technologist under the supervision of the geotechnical engineer.

The elevator area in the central part of the building was observed on 02 and 03 May 2016, the west part of the building on 09 May 2016, and the east part of the building on 11 May 2016. Gorham Sand & Gravel, Inc. (GSG), Zachau Construction, Inc.'s earthwork subcontractor, dug soils down to naturally deposited inorganic soils using a Caterpillar 320D excavator fitted with a smooth-edged digging bucket.

GSG used shallow swales a couple of inches deep to help drain surface water toward a sump and pump in the excavated area. The surface water appeared to have been from a combination of direct precipitation and groundwater that seeped in from the sides of the excavations. Final subgrade preparation consisted of removing softened subgrade, disturbed soil, and shallow ponded water by using hand tools and the excavator working from outside the excavated area.

Naturally deposited soils exposed at final subgrade consisted of stiff to hard silty clay deposits except near building line A in the east part of the building which consisted of a thin stratum of silty sand over silty clay. Exposed naturally deposited soils and prepared subgrades appeared consistent with anticipated conditions and recommendations in RWG&A's *Report of Geotechnical Engineering Services for Proposed Patrons Oxford Insurance Company Office Building, Portland, Maine*, dated 06 October 2015 (RWG&A Project No. 1518-002).

Closure

We trust the above information meets the project's needs. Please contact us if you have any questions.


EJW:md

Copy via email: Ryan Kanteres, AIA, Scott Simons Architects
Hans Breaux, Scott Simons Architects
Christopher G. Williams, P.E., S.E., Becker Structural Engineers



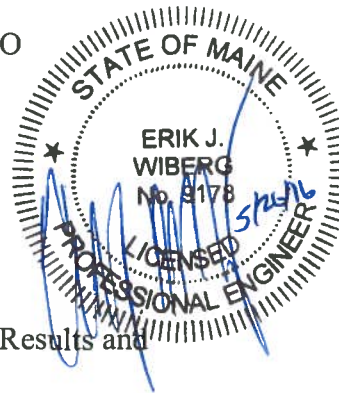
PROJECT MEMORANDUM

To: Mark Pettingill, CIC, President and CEO
Patrons Oxford Insurance

From: Erik J. Wiberg, P.E. 
R.W. Gillespie & Associates, Inc.

Date: 26 May 2016

Subject: LD-CLSM Compressive Strength Test Results and
Alternatives for Elevator Area
Proposed Patrons Oxford Insurance Office Building
Portland, Maine
RWG&A Project No. 1518-002



Low density controlled low strength material (LD-CLSM) is being used below the entire building area and will support the building's foundation and ground floor slab. This memorandum summarizes compressive strength testing completed to date, and as requested by Scott Simons Architects, provides alternatives to address potentially lower than specified compressive strength for LD-CLSM in the area of the elevator shaft. Individual test results have been reported under separate cover.

Background

The project specifications call for LD-CLSM to have a minimum compressive strength of 80 pounds per square inch (psi) within 28-days of placement. Compressive strength tests are performed in the laboratory using samples taken during placement. As called for in the project specifications, compressive strength tests were performed after 7-days. Early testing provides an opportunity to assess potential low 28-day strengths, and to accelerate construction if design strengths are met earlier than 28 days.

Compressive strengths generally increase from 7 to 28-days. The Contractor's mix design indicates the compressive strength is expected to increase about 90 percent between 7 and 28-days (110 psi to 210 psi). Past RWG&A experience with LD-CLSM indicates strength increases range from about 5 to 65 percent from 7 to 28-days with an average increase of about 25 percent.

Compressive Strength Test Results

The table below summarizes test results completed to date.

LD-CLSM Placement	Location					
	Elevator		West Side of Building		East Side of Building	
	Average 7-day Strength Range (psi)	Sets with 7-day strengths less than 80 psi	Average 7-day Strength Range (psi)	Sets with 7-day strengths less than 80 psi	Average 7-day Strength Range (psi)	Sets with 7-day strengths less than 80 psi
1 st (Bottom)	72	1/1	75-182	1/6	56-166	1/5
2 nd	59	1/1	66-224	3/6	98-162	0/6
3 rd (Upper)	37	1/1	--	--	119-132	0/6

The low 7-day strengths in the elevator area are a concern. The 7-day strengths from the 2nd and 3rd elevator placement are lower than the 28-day design strength and based on prior experience, it appears that they might not achieve the design strength at 28-days. The elevator area was the first area to receive LD-CLSM (03, 04, and 06 May 2016). RWG&A experience indicates that west and east side placements with lower 7-day strengths are more likely than not to attain the 28-day design strength.

Geotechnical Evaluation of Elevator Area LD-CLSM

RWG&A evaluated the geotechnical bearing capacity of the LD-CLSM based on 7-day compressive strengths relative to the in-service foundation contact pressure for the elevator mat foundation and specified minimum compressive strength. Becker Structural Engineers has indicated that the maximum in-service contact pressure for the mat foundation that will support the elevator shaft and equipment will be about 640 pounds per square foot (psf). The in-service contact pressure is less the recommended maximum design bearing pressure by of 3,000 psf for other areas.

Bearing capacity is proportional to the compressive strength of material supporting the foundation. The mat foundation supported on material having less than the specified strength will have less bearing capacity than if it were supported on material meeting specified strength. However, because the in-service contact pressure is less than the recommended maximum allowable bearing pressure of 3,000 psf, in theory, lower strength subgrade could be tolerable.

RWG&A’s evaluations indicate that the reserve subgrade capacity for a contact pressure of 640 psf and the measured 7-day compressive strengths is similar to that provided for a contact pressure of 3,000 psf supported by 80 psi LD-CLSM. In other words, evaluations indicate that the reserve capacity supporting the elevator area mat foundation is similar to that would be provided at other foundations in the building where the minimum specified strength criteria is met.

Alternatives for Elevator Area LD-CLSM based on 7-day Compressive Strengths

Alternatives to address the current less than 28-day strengths in the elevator area include:

- remove and replace the 3rd lift,
- wait for 28-day strength tests from laboratory test cylinders and then decide prior to constructing elevator mat foundations, and
- Proceed with foundation and structure construction at-risk accepting potentially less than specified strength LD-CLSM is supporting the elevator foundation.

Possible consequences of the lower strength material includes settlement that affects the operation of the elevator during its service life. If the *proceed with the foundation and structure construction* alternative is selected, then contractor should:

- conduct field plate bearing tests to demonstrate LD-CLSM conditions at the time of foundation construction,
- monitor the mat foundation for settlement at the corners of the foundation as the building is erected and equipment installed to verify expected performance, and
- accept the risk that remedial measures such as removal and replacement, foundation modification, and/or subgrade modification might be needed if elevator structure performance does not meet design criteria.

Closure

This memorandum has been prepared for specific application to the Patrons Oxford Insurance Company building, and for the exclusive use of Patrons Oxford Insurance Company. This work has been completed in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

We trust the above information meets the project's current needs. Please do not hesitate to contact us if you have any questions or if we may be of further service.

EJW:md

Copy via email:

Ryan E. Kanteres, AIA, Scott Simons Architects
Hans Breaux, Scott Simons Architects
Christopher G. Williams, P.E., S.E., Becker Structural Engineers



PROJECT MEMORANDUM

To: Mark Pettingill, CIC, President and CEO
Patrons Oxford Insurance

From: Erik J. Wiberg, P.E. *ESW*
R.W. Gillespie & Associates, Inc.

Date: 14 June 2016

Subject: LD-CLSM Compressive Strength Test Results
General Fill Below Building Area
Proposed Patrons Oxford Insurance Office Building
Portland, Maine
RWG&A Project No. 1518-003

Low density controlled low strength material (LD-CLSM) will support the building's foundation and ground floor slab. Test results of LD-CLSM in the elevator area were addressed in RWG&A's memorandum dated 26 May 2016. This memorandum summarizes compressive strength testing of the first three lifts of LD-CLSM used as fill below the building and outside of the elevator area. The building foundations are being constructed to bear on top of the 2nd lift.

Compressive strength from laboratory testing indicate all but one of 27 sets meet the project specified 28-day compressive strength. The less than specified strength test results are discussed hereinafter. In summary, it is RWG&A's opinion that LD-CLSM placed to date is suitable to support the foundations and ground floor slabs. Individual test results have been reported under separate cover.

Background

The project specifications call for LD-CLSM to have a minimum compressive strength of 80 pounds per square inch (psi) within 28-days of placement. A total of 135 truckloads of LD-CLSM were used in the first three lifts: 70 in the west part of the building (2 lifts), and 65 in the east part (3 lifts). Compressive strength tests were performed in the laboratory using samples taken during placement. The samples were taken at the point of discharge from the LD-CLSM delivery truck.

Samples for compressive strength testing were taken from 27 of the 135 LD-CLSM truckloads. Due to the placement methods, an individual truckload of LD-CLSM flows and intermixes with other truckloads in the same placement. In turn, compressive strength test samples should only be considered representative of that particular truck load, and not necessarily of the LD-CLSM at a particular location and elevation in the overall placement area (note: LD-CLSM used in the confined area of the elevator would be an exception). Factors that influence compressive strength of LD-CLSM include cement content, water content, admixtures, batching sequence, and mixing methods.

Compressive Strength Test Results

The table below summarizes test results completed to date in the west and east parts of the building:

LD-CLSM Placement	Location					
	West Side of Building			East Side of Building		
	Average 28-day Strength Range (psi)	Average of All Sets (psi)	Sets with 28-day strengths more than 80 psi	Average 28-day Strength Range (psi)	Average of All Sets (psi)	Sets with 28-day strengths more than 80 psi
1 st (Bottom)	95-235	156	6/6	41-178	129	4/5
2 nd	88-456	208	6/6	124-173	140	6/6
3 rd (Upper)	--	--	--	125-160	142	3/3

All but one of the compressive strength tests met project specifications. The low set of cylinders, taken from the 15th of 25 truckloads delivered on 11 May 2016, had an average 28-day compressive strength of 41 psi.

Geotechnical Evaluation of LD-CLSM

As described above, during placement the truckloads of LD-CLSM intermix and the in-place strength is a composite of LD-CLSM placed nearby. The lower strength LD-CLSM appeared visually similar and its measured densities were similar to adjacent truckloads and adjacent samples. The 28-day compressive strengths from the set made prior to the LD-CLSM sample in question was 183 psi (13th truckload), and the set cast after from the 23rd truckload was 163 psi. Using the strengths from adjacent samples in time, the average strengths are about 110 psi and 100 psi, respectively, which is considered more representative of the intermixed LD-CLSM.

Bearing capacity evaluations indicate that the reserve capacity of LD-CLSM having a strength of 35 psi in the lower lift is adequate for foundation contact pressures of 3,000 pounds per square foot. It is RWG&A’s opinion that the LD-CLSM placed to date has adequate strength to support the foundations and ground floor slabs.

Closure

This memorandum has been prepared for specific application to the Patrons Oxford Insurance Company building, and for the exclusive use of Patrons Oxford Insurance Company. This work has been completed in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

We trust the above information meets the project’s current needs. Please do not hesitate to contact us if you have any questions or if we may be of further service.

EJW:md

Copy via email:

Ryan E. Kanteres, AIA, Scott Simons Architects
Christopher G. Williams, P.E., S.E., Becker Structural Engineers



R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
 44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

Date:	June 1, 2016	Project No.:	1518-003
Attention:	Mark Pettingill (mpettingill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
82704	28
82705	28
82706	28
82708	28

Remarks:

Copy to: Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 Hans BreauX (hans@simonsarchitects.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

1 of 1

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 03, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Partly Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear	Admixtures:	Cellcrete 660

Placement Location:
Elevator Pit

Test Cylinder Location:
Elevator Pit

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

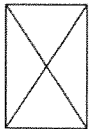
Load Number:	2 of 2	Number of 4x8 Cylinders:	8
Ticket Number:	202529	Cast By:	Joshua R. Fancy
Truck Number:	150	Slump:	ASTM C 143 - in.
Cubic Yards:	11	Air Temperature:	58 °F
Total Yardage:	22	Concrete Temperature:	- °F
Total Time (minutes):	86	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/4/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

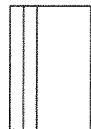
Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82701	5/10/2016	4.00	12.58	7	775	62	5
82702	5/10/2016	4.01	12.65	7	935	74	5
82703	5/10/2016	4.01	12.63	7	915	72	5
82704	5/31/2016	4.00	12.57	28	2105	168	3
82705	5/31/2016	3.98	12.41	28	1850	149	3
82706	5/31/2016	4.00	12.59	28	1550	123	3
82707	5/10/2016	5.99	28.18	7	2210	78	5
82708	5/31/2016	5.98	28.12	28	4335	154	3



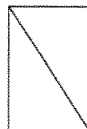
Cone
1



Cone & Split
2



Columnar
3



Shear
4



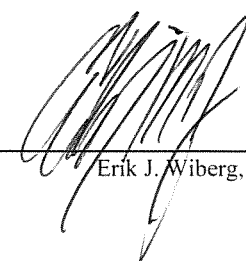
Side Fracture
5



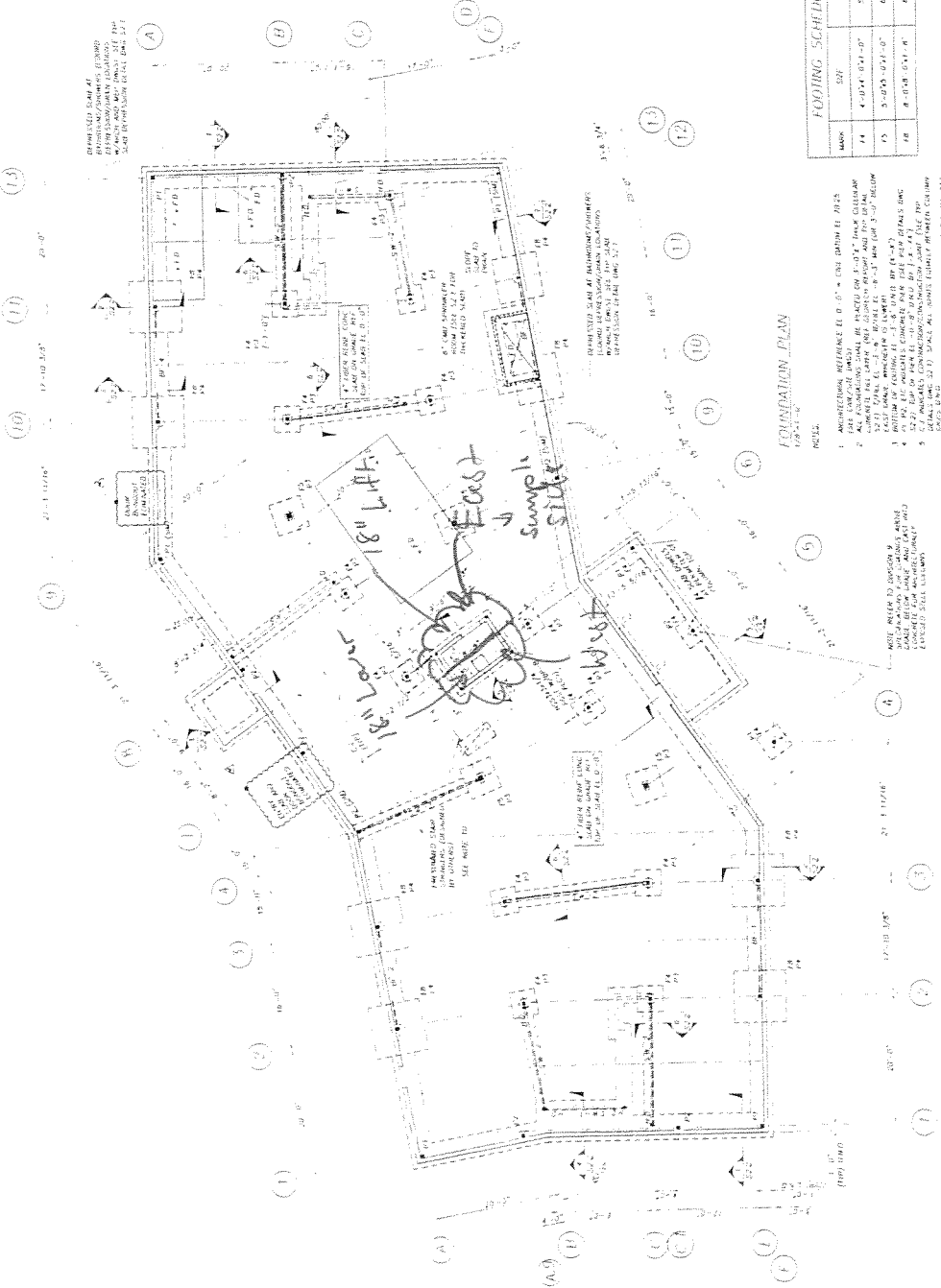
Double Side Fracture
6

Remarks:

Unit weight of 28-day specimens: 26.5 to 28.2 pcf.

Checked by: 
 Erik J. Wiberg, P.E.





NO.	SIZE	DEPTH
14	4'-0" x 4'-0" x 1'-0"	7'-0" MIN
15	5'-0" x 5'-0" x 1'-0"	6'-0" MIN
16	8'-0" x 8'-0" x 1'-0"	11'-0" MIN

- FOOTING SCHEDULE
1. ARCHITECTURAL REFERENCE TO 0' - 0" CONCRETE SLAB
 2. SEE DIMENSIONS AND NOTES FOR ALL FOOTINGS
 3. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 4. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 5. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 6. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 7. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 8. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 9. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 10. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 11. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 12. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 13. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 14. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 15. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE
 16. ALL FOOTINGS TO BE CAST ON 4" MIN. THICK CLASS II CONCRETE

PATRONS OXFORD INSURANCE
 1518-003
 DATE: 5/3/14
 TRCH: JAK



R. W. Gillespie & Associates, Inc.
 86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
 44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	June 3, 2016	Project No.:	1518-003
Attention:	Mark Pettingill (mpettingill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
82752	28
82753	28
82754	28

Remarks:

Copy to: Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 Hans Breau (hans@simonsarchitects.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, May 04, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Cloudy	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 Elevator shaft, 2nd lift

Test Cylinder Location:
 West cell

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	1 of 2	Number of 4x8 Cylinders:	6
Ticket Number:	282843	Cast By:	Joshua R. Fancy
Truck Number:	155	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	- °F
Total Yardage:	20	Concrete Temperature:	- °F
Total Time (minutes):	86	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/5/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82749	5/11/2016	4.01	12.64	7	720	57	-
82750	5/11/2016	4.01	12.64	7	730	58	-
82751	5/11/2016	4.01	12.64	7	780	62	-
82752	6/1/2016	3.97	12.38	28	890	72	3
82753	6/1/2016	3.88	11.82	28	1610	136	5
82754	6/1/2016	4.00	12.58	28	1345	107	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5

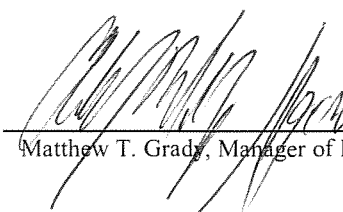


Double Side Fracture
6

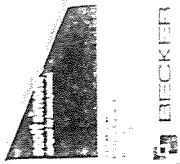
Remarks:

Unit weight of specimens when tested ranged from 26.5 to 35.4 pcf.

Checked by:


 Matthew T. Grady, Manager of MTS

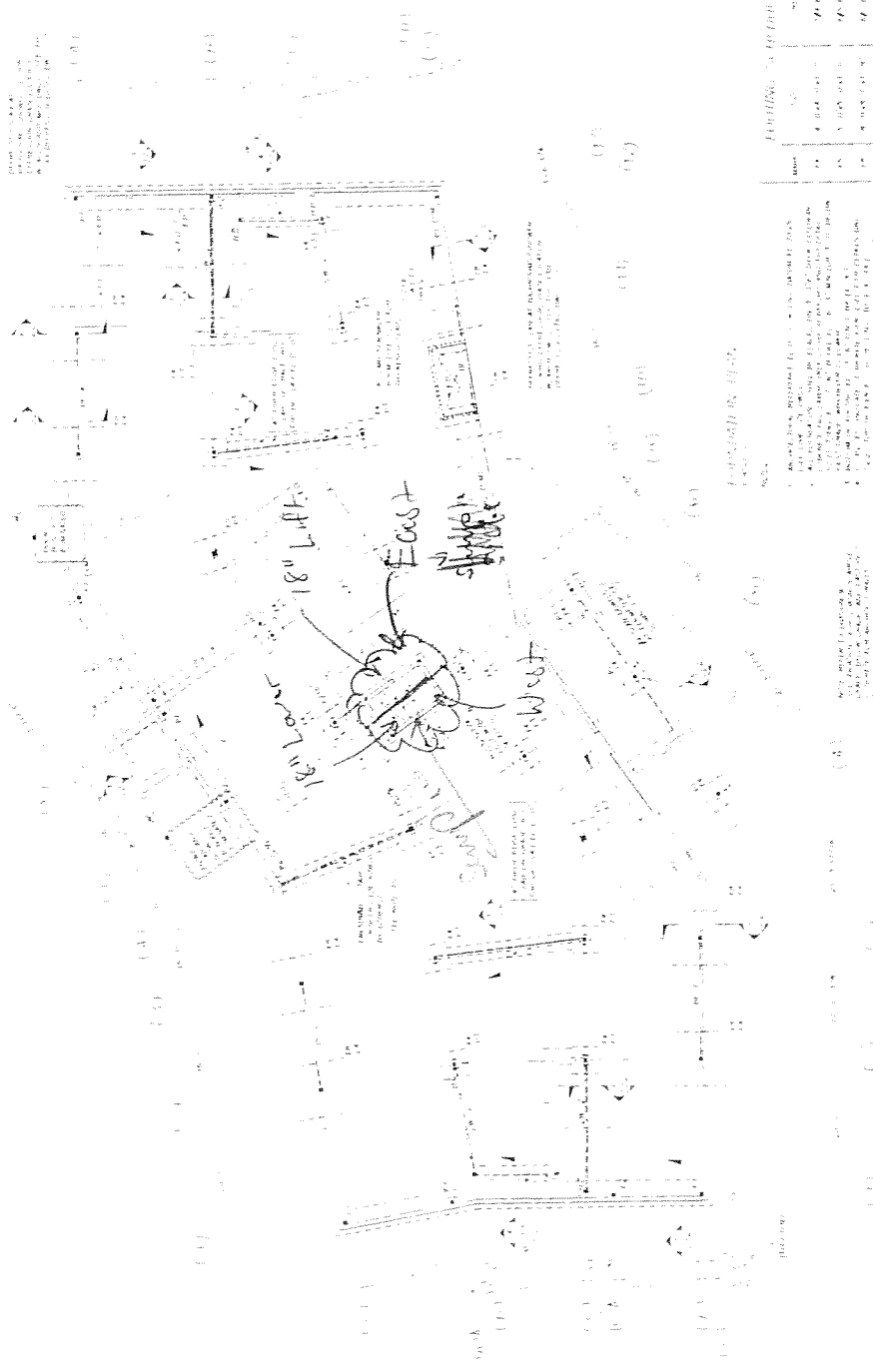




PAUL BECKER
 CIVIL ENGINEER
 1000 ...
 ...

FOUNDATION PLAN

S1.1



NO.	DESCRIPTION	QTY	UNIT
1	4" DIA. ...	...	...
2	...	...	...
3	...	...	...
4	...	...	...

- NOTES:
1. FOUNDATION SHALL BE ...
 2. ...
 3. ...
 4. ...
 5. ...
 6. ...
 7. ...
 8. ...
 9. ...
 10. ...

PATRICK OXFORD INSURANCE
 1518-003
 DATE: 5/1/16
 TECH: MR



R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	June 3, 2016	Project No.:	1518-003
Attention:	Mark Pettinghill (mpettinghill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.	
Cylinder No. (s)	Age (Days)
82746	28
82747	28
82748	28
82764	28

Remarks:

Copy to: Ryan Kanteres, AIA (ryan@simonsarchitects.com)
Hans Breau (hans@simonsarchitects.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

1 of 1

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Friday, May 06, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Overcast	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 Elevator Pad - 3rd Lift

Test Cylinder Location:
 Elevator Pad - 3rd Lift

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	1 of 2	Number of 4x8 Cylinders:	6
Ticket Number:	282889	Cast By:	Patrick J. Roma
Truck Number:	156	Slump:	ASTM C 143 - in.
Cubic Yards:	16	Air Temperature:	60 °F
Total Yardage:	20	Concrete Temperature:	66 °F
Total Time (minutes):	68	Air Content:	ASTM C 231 0.0 %

Specimen Storage ASTM C 31

Field Cure Days: 2
 Date Received: 5/9/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82743	5/13/2016	3.98	12.46	7	540	43	4
82744	5/13/2016	3.98	12.46	7	500	40	4
82745	5/13/2016	3.98	12.46	7	515	41	4
82746	6/3/2016	3.96	12.32	28	695	56	3
82747	6/3/2016	3.97	12.37	28	680	55	3
82748	6/3/2016	3.97	12.39	28	730	59	2
82763	5/13/2016	5.97	27.95	7	615	22	6
82764	6/3/2016	5.91	27.40	28	1060	39	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight of 28 Day Specimens: 27.0 to 39.3 pcf (Ave= 33.2 pcf).

Checked by:

Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

1 of 6

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, May 09, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 First Lift of West end of Building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:
 B2

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	2 of 30	Number of 4x8 Cylinders:	6
Ticket Number:	282900	Cast By:	Patrick J. Roma
Truck Number:	160	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	53 °F
Total Yardage:	300	Concrete Temperature:	68 °F
Total Time (minutes):	44	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

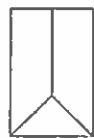
Field Cure Days: 1
 Date Received: 5/10/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82817	5/16/2016	5.99	28.18	7	4905	174	3
82818	5/16/2016	5.94	27.71	7	4975	180	3
82819	5/16/2016	5.95	27.81	7	4175	150	3
82820	6/6/2016	5.94	27.69	28	5880	212	5
82821	6/6/2016	6.07	28.94	28	6230	215	5
82822	6/6/2016	5.98	28.08	28	5840	208	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 41.77 pcf.

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

2 of 6

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, May 09, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellerete 660

Placement Location:
 First Lift of West end of Building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:
 B2

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	6 of 30	Number of 4x8 Cylinders:	6
Ticket Number:	270370	Cast By:	Patrick J. Roma
Truck Number:	100	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	53 °F
Total Yardage:	300	Concrete Temperature:	- °F
Total Time (minutes):	68	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

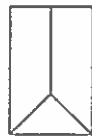
Field Cure Days: 1
 Date Received: 5/10/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

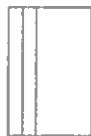
Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82823	5/16/2016	5.96	27.90	7	3545	127	3
82824	5/16/2016	5.96	27.90	7	3680	132	3
82825	5/16/2016	5.96	27.90	7	3612	129	3
82826	6/6/2016	6.01	28.34	28	3280	116	3
82827	6/6/2016	6.01	28.32	28	3785	134	2
82828	6/6/2016	5.98	28.08	28	3710	132	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 35.20 pcf.

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, J.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

3 of 6

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, May 09, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellerete 660

Placement Location:

First Lift of West end of Building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:

B2

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	12 of 30	Number of 4x8 Cylinders:	6
Ticket Number:	282915	Cast By:	Mare R. Grenier
Truck Number:	158	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	55 °F
Total Yardage:	300	Concrete Temperature:	68 °F
Total Time (minutes):	38	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1

Date Received: 5/10/2016

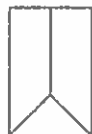
Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82829	5/16/2016	5.96	27.90	7	5755	206	3
82830	5/16/2016	5.96	27.90	7	5720	205	3
82831	5/16/2016	5.96	27.90	7	3835	137	3
82832	6/6/2016	6.01	28.34	28	6500	229	3
82833	6/6/2016	5.95	27.80	28	7725	278	5
82834	6/6/2016	6.00	28.25	28	5625	199	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 42.77 pcf.

Checked by:

EJW

Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES, INC

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

4 of 6

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, May 09, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Overcast	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellerete 660

Placement Location:

First Lift of West end of Building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:

B2

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	17 of 30	Number of 4x8 Cylinders:	6
Ticket Number:	282921	Cast By:	Joshua R. Fancy
Truck Number:	155	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	60 °F
Total Yardage:	300	Concrete Temperature:	62 °F
Total Time (minutes):	17	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1

Date Received: 5/10/2016

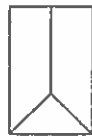
Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82835	5/16/2016	5.96	27.90	7	2010	72	3
82836	5/16/2016	5.96	27.90	7	2115	76	3
82837	5/16/2016	5.96	27.90	7	2163	78	3
82838	6/6/2016	5.99	28.21	28	2530	90	2
82839	6/6/2016	5.97	28.01	28	2770	99	5
82840	6/6/2016	5.99	28.15	28	2670	95	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 34.60 pcf.

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, May 09, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Overcast	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:

First Lift of West end of Building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:

B2

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	22 of 30	Number of 4x8 Cylinders:	6
Ticket Number:	-	Cast By:	Joshua R. Fancy
Truck Number:	160	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	60.1 °F
Total Yardage:	0	Concrete Temperature:	52.3 °F
Total Time (minutes):	33	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1

Date Received: 5/10/2016

Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82841	5/16/2016	5.96	27.90	7	3240	116	3
82842	5/16/2016	5.96	27.90	7	3155	113	3
82843	5/16/2016	5.96	27.90	7	2815	101	3
82844	6/6/2016	5.96	27.85	28	3320	119	0
82845	6/6/2016	5.97	28.00	28	3360	120	5
82846	6/6/2016	6.04	28.63	28	4010	140	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 34.20 pcf.

Checked by:

Erik J. Wiberg

EJW

Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

6 of 6

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, May 09, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:

First Lift of West end of Building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:

B2

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	26 of 30	Number of 4x8 Cylinders:	6
Ticket Number:	282930	Cast By:	Joshua R. Fancy
Truck Number:	160	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	58.1 °F
Total Yardage:	300	Concrete Temperature:	53.1 °F
Total Time (minutes):	37	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1

Date Received: 5/10/2016

Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82847	5/16/2016	5.96	27.90	7	3100	111	3
82848	5/16/2016	5.96	27.90	7	4065	146	3
82849	5/16/2016	5.96	27.90	7	3635	130	3
82850	6/6/2016	6.02	28.45	28	4055	143	5
82851	6/6/2016	6.02	28.42	28	4045	142	5
82852	6/6/2016	6.01	28.36	28	3730	132	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 33.80 pcf.

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.





R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite 1, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

Date: June 10, 2016	Project No.: 1518-003
Attention: Mark Pettinghill (mpettingill@patrons.com)	
Re: Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine	

We are sending you attached Concrete Cylinder Test Results.	
Cylinder No. (s)	Age (Days)
82854	28
82856	28
82857	28
82858	28
82862	28
82863	28
82864	28
82868	28
82869	28
82870	28
82874	28
82875	28
82876	28
82878	28
82880	28
82881	28
82882	28
82886	28
82887	28
82888	28
82890	28
82892	28
82893	28
82894	28
82898	28
82899	28
82900	28

Remarks:

- Copy to:
- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 - Hans Breau (hans@simonsarchitects.com)
 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terristrouse@gsg gravel.com)

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

1 of 8

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2nd Lift - West side of building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

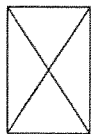
Load Number:	2 of 40	Number of 6x12 Cylinders:	6
Ticket Number:	282934	Cast By:	John Fatula
Truck Number:	83	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	55 °F
Total Yardage:	400	Concrete Temperature:	66.2 °F
Total Time (minutes):	22	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

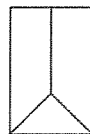
Field Cure Days: 1
 Date Received: 5/11/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

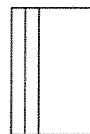
Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82853	5/17/2016	5.92	27.53	7	1845	67	5
82854	6/7/2016	5.94	27.67	28	2375	86	3
82855	5/17/2016	6.00	28.23	7	1895	67	3
82856	6/7/2016	6.00	28.24	28	2425	86	2
82857	6/7/2016	6.00	28.24	28	2575	91	5
82858	6/7/2016	6.00	28.29	28	2540	90	5



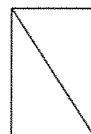
Cone
1



Cone & Split
2



Columnar
3



Shear
4



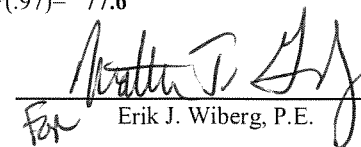
Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 35 pcf.
 82853: Cylinder trimmed, correction factor applied to Design stress. Design Stress Correction: $80 \times (.99) = 72.9$ 82854:
 Changed to 28 Day Break due to two low seven day breaks
 82855: Cylinder
 trimmed, correction factor applied to Design Stress. Design Stress Correction Factor: $80 \times (.97) = 77.6$

Checked by: 
 Erik J. Wiberg, P.E.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

2 of 8

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2nd Lift - West side of building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	6 of 40	Number of 6x12 Cylinders:	6
Ticket Number:	282938	Cast By:	John Fatula
Truck Number:	155	Slump:	ASTM C 143 59.00 in.
Cubic Yards:	10	Air Temperature:	69.1 °F
Total Yardage:	400	Concrete Temperature:	0 °F
Total Time (minutes):	25	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/11/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82859	5/17/2016	6.00	28.26	7	6090	216	3
82860	5/17/2016	6.01	28.37	7	5430	191	3
82861	5/17/2016	6.00	28.25	7	6995	248	3
82862	6/7/2016	5.98	28.04	28	11930	425	3
82863	6/7/2016	5.99	28.16	28	12385	440	3
82864	6/7/2016	6.00	28.29	28	14215	502	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 56.4 pcf.

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

3 of 8

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:

2nd Lift - West side of building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:

-

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	12 of 40	Number of 6x12 Cylinders:	6
Ticket Number:	270386	Cast By:	John Fatula
Truck Number:	160	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	70 °F
Total Yardage:	400	Concrete Temperature:	66.4 °F
Total Time (minutes):	59	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1

Date Received: 5/11/2016

Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82865	5/17/2016	6.00	28.25	7	7800	280	3
82866	5/17/2016	6.03	28.52	7	9655	340	3
82867	5/17/2016	5.99	28.18	7	3085	110	3
82868	6/7/2016	5.91	27.47	28	11115	405	3
82869	6/7/2016	6.00	28.28	28	10990	389	3
82870	6/7/2016	5.98	28.05	28	10125	361	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 57.8 pcf.

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2nd Lift - West side of building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	16 of 40	Number of 6x12 Cylinders:	6
Ticket Number:	270388	Cast By:	John Fatula
Truck Number:	96	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	70 °F
Total Yardage:	400	Concrete Temperature:	66 °F
Total Time (minutes):	54	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/11/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82871	5/17/2016	5.96	27.94	7	4555	160	3
82872	5/17/2016	5.98	28.10	7	4870	170	3
82873	5/17/2016	5.98	28.11	7	4650	170	2
82874	6/7/2016	6.00	28.23	28	9863	350	3
82875	6/7/2016	5.99	28.22	28	7630	270	3
82876	6/7/2016	5.98	28.10	28	5960	210	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit weight: 23.9 pcf

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

5 of 8

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2nd Lift - West side of building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	22 of 40	Number of 6x12 Cylinders:	6
Ticket Number:	301485	Cast By:	John Fatula
Truck Number:	107	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	75 °F
Total Yardage:	400	Concrete Temperature:	73.4 °F
Total Time (minutes):	28	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/11/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82877	5/17/2016	5.92	27.54	7	2145	80	3
82878	6/7/2016	5.92	27.49	28	2415	90	3
82879	5/17/2016	5.51	23.80	7	1495	60	1
82880	6/7/2016	6.00	28.26	28	2240	80	3
82881	6/7/2016	5.98	28.04	28	2905	100	3
82882	6/7/2016	5.97	28.02	28	2925	100	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

82878: Changed to 28 Day Break due to low seven day break.
 Unit weight 30 pcf.
 Upper 2 inches of 7-day cylinders appeared to have more air voids than the lower portion, and crushed prior to total failure of cylinder.

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

6 of 8

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:

2nd Lift - West side of building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:

-

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	26 of 40	Number of 6x12 Cylinders:	6
Ticket Number:	270391	Cast By:	John Fatula
Truck Number:	137	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	77 °F
Total Yardage:	400	Concrete Temperature:	71.6 °F
Total Time (minutes):	51	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1

Date Received: 5/11/2016

Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82883	5/17/2016	6.02	28.43	7	3785	130	2
82884	5/17/2016	5.99	28.21	7	3485	120	2
82885	5/17/2016	6.04	28.67	7	3970	140	3
82886	6/7/2016	5.99	28.18	28	4710	170	3
82887	6/7/2016	6.00	28.25	28	4140	150	3
82888	6/7/2016	6.01	28.38	28	4440	160	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit weight 38 pcf

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

7 of 8

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2nd Lift - West side of building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	32 of 40	Number of 6x12 Cylinders:	6
Ticket Number:	301492	Cast By:	John Fatula
Truck Number:	107	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	75 °F
Total Yardage:	400	Concrete Temperature:	74.5 °F
Total Time (minutes):	31	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/11/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82889	5/17/2016	5.95	27.80	7	1995	70	5
82890	6/7/2016	5.99	28.22	28	2640	90	3
82891	5/17/2016	6.03	28.55	7	1995	70	3
82892	6/7/2016	6.01	28.37	28	2100	70	3
82893	6/7/2016	5.98	28.11	28	2380	80	3
82894	6/7/2016	5.97	27.95	28	2750	100	3



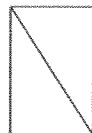
Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

82890: Changed to 28 Day Break due to two low seven day breaks.
 Unit weight 32 pcf

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, May 10, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2nd Lift - West side of building; A1-A7/A7-F6/F6-F1/F1-A1

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	38 of 40	Number of 6x12 Cylinders:	6
Ticket Number:	301496	Cast By:	John Fatula
Truck Number:	118	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	75 °F
Total Yardage:	400	Concrete Temperature:	74.5 °F
Total Time (minutes):	29	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/11/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82895	5/17/2016	5.95	27.84	7	3205	120	3
82896	5/17/2016	5.97	27.95	7	2915	100	2
82897	5/17/2016	5.93	27.63	7	3160	110	5
82898	6/7/2016	6.00	28.30	28	3405	120	3
82899	6/7/2016	5.96	27.89	28	3430	120	2
82900	6/7/2016	5.96	27.92	28	2905	100	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.





R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
 44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

Date:	June 10, 2016	Project No.:	1518-003
Attention:	Mark Pettinghill (mpettingill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
82904	28
82905	28
82906	28
82910	28
82911	28
82912	28
82916	28
82917	28
82918	28
82922	28
82923	28
82924	28
82928	28
82929	28
82930	28

Remarks:

All met minimum 28 day compressive strength requirements except Lab Nos. 82922, 82923, & 82924.

Copy to: Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 Hans Breaux (hans@simonsarchitects.com)
 Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 Michael Packard (mike@zachauconstruction.com)
 Jon Provost (jon@zachauconstruction.com)
 Carlene Fassett (carlene@zachauconstruction.com)
 Terri Strouse (terrstrouse@gsgravel.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, May 11, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:

1st lift - East side: A7-A13/A13-F13/F13-F7/F7-A7

Test Cylinder Location:

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	2 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	301500	Cast By:	John Fatula
Truck Number:	83	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	66 °F
Total Yardage:	250	Concrete Temperature:	68 °F
Total Time (minutes):	24	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1

Date Received: 5/12/2016

Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82901	5/18/2016	6.00	28.25	7	3970	140	3
82902	5/18/2016	5.93	27.61	7	3465	130	3
82903	5/18/2016	5.99	28.20	7	3850	140	3
82904	6/8/2016	5.96	27.93	28	3060	110	2
82905	6/8/2016	6.01	28.41	28	3365	120	3
82906	6/8/2016	5.99	28.20	28	3185	110	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit weight: 35 pcf

Checked by:

Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

2 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, May 11, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 1st lift east side: A7-A13/A13-A13/F13-F7/F7-A7

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

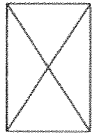
Load Number:	8 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	301504	Cast By:	John Fatula
Truck Number:	106	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	57.2 °F
Total Yardage:	250	Concrete Temperature:	63.1 °F
Total Time (minutes):	-	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/12/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82907	5/18/2016	5.67	25.24	7	3860	150	3
82908	5/18/2016	5.75	25.97	7	3860	150	5
82909	5/18/2016	5.91	27.41	7	4425	160	5
82910	6/8/2016	5.90	27.35	28	4445	160	1
82911	6/8/2016	6.01	28.33	28	3205	110	3
82912	6/8/2016	6.01	28.36	28	4895	170	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5

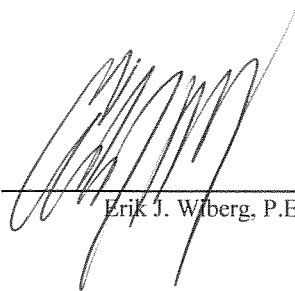


Double Side Fracture
6

Remarks:

Unit weight: 36.5 pcf

Checked by:


 Erik J. W. Berg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

3 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, May 11, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:

1st lift east side: A7-A13/A13-F13/F13-F7/F7-A7

Test Cylinder Location:

-

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	13 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	301508	Cast By:	John Fatula
Truck Number:	163	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	57.2 °F
Total Yardage:	250	Concrete Temperature:	67.5 °F
Total Time (minutes):	-	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1

Date Received: 5/12/2016

Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82913	5/18/2016	5.95	27.78	7	4045	146	3
82914	5/18/2016	6.02	28.43	7	4875	171	5
82915	5/18/2016	5.98	28.11	7	5000	178	5
82916	6/8/2016	5.96	27.90	28	4665	170	5
82917	6/8/2016	6.01	28.41	28	6100	210	5
82918	6/8/2016	6.00	28.24	28	4210	150	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5

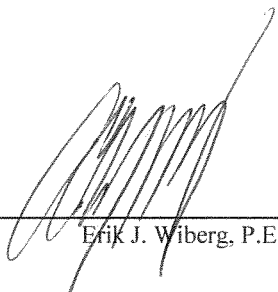


Double Side Fracture
6

Remarks:

Unit weight: 43.7 PCF

Checked by:


 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, May 11, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 1st lift east side: A7-A13/A13-F13/F13-F7/F7-A7

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

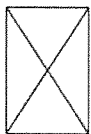
Load Number:	15 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	270426	Cast By:	John Fatula
Truck Number:	164	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	55 °F
Total Yardage:	250	Concrete Temperature:	63.3 °F
Total Time (minutes):	-	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/12/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82919	5/18/2016	5.95	27.81	7	1535	55	3
82920	5/18/2016	5.97	28.00	7	1585	57	5
82921	5/18/2016	5.99	28.13	7	1560	55	3
82922	6/8/2016	5.91	27.44	28	1360	50	3
82923	6/8/2016	5.98	28.04	28	1110	40	5
82924	6/8/2016	5.94	27.68	28	940	30	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



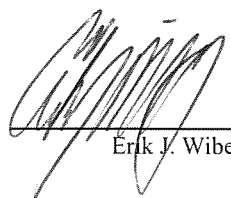
Side Fracture
5



Double Side Fracture
6

Remarks:

Unit weight 43.4 pcf
 Upper 2 inches of 7 day cylinders appear to have more air voids than lower portion and crushed prior to total cylinder failure.
 Upper part of 28-day cylinders trimmed to remove apparent concentration of air voids.

Checked by: 
 Erik J. Wiberg, P.E.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Wednesday, May 11, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 1st lift east side: A7-A13/A13-F13/F13-F7/F7-A7

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	23 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	301513	Cast By:	John Fatula
Truck Number:	136	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	52 °F
Total Yardage:	250	Concrete Temperature:	63 °F
Total Time (minutes):	-	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/12/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82925	5/18/2016	5.99	28.14	7	4875	170	5
82926	5/18/2016	6.00	28.23	7	4865	170	5
82927	5/18/2016	5.98	28.10	7	4670	170	3
82928	6/8/2016	5.99	28.16	28	4690	170	5
82929	6/8/2016	6.01	28.32	28	4215	150	5
82930	6/8/2016	6.01	28.33	28	5025	180	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit weight 39.4 pdf.

82926: Correction factor applied to design stress. Design Stress Correction Factor: $80 * (.96) = 76.8$

Checked by: _____

Erik J. Wiberg, P.E.





R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite 1, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

Date:	June 10, 2016	Project No.:	1518-003
Attention:	Mark Pettinghill (mpettinghill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
82934	28
82935	28
82936	28
82940	28
82941	28
82942	28
82946	28
82947	28
82948	28
82952	28
82953	28
82954	28
82958	28
82959	28
82960	28

Remarks:

Copy to: Ryan Kanteres, AIA (ryan@simonsarchitects.com)
Hans Breau (hans@simonsarchitects.com)
Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
Michael Packard (mike@zachauconstruction.com)
Jon Provost (jon@zachauconstruction.com)
Carlene Fassett (carlene@zachauconstruction.com)
Terri Strouse (terristrouse@gsgravel.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

1 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Thursday, May 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2ND LIFT - East side A7-A13/A13-F13/F13-F7/F7-A7

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

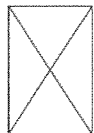
Load Number:	2 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	298523	Cast By:	John Fatula
Truck Number:	102	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	78.3 °F
Total Yardage:	250	Concrete Temperature:	75.6 °F
Total Time (minutes):	60	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

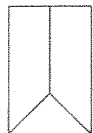
Field Cure Days: 1
 Date Received: 5/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82931	5/19/2016	6.00	28.23	7	3020	107	5
82932	5/19/2016	6.05	28.74	7	2910	101	3
82933	5/19/2016	5.96	27.88	7	2680	96	2
82934	6/9/2016	6.02	28.44	28	2970	100	3
82935	6/9/2016	6.02	28.48	28	4245	150	5
82936	6/9/2016	6.03	28.59	28	2435	90	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit weight of specimens: 44-46.4 pcf

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Thursday, May 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2ND LIFT - East side A7-A13/A13-F13/F13-F7/F7-A7

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	6 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	301529	Cast By:	John Fatula
Truck Number:	102	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	74.7 °F
Total Yardage:	250	Concrete Temperature:	73.4 °F
Total Time (minutes):	25	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82937	5/19/2016	6.02	28.50	7	3175	111	3
82938	5/19/2016	5.97	28.00	7	3070	110	3
82939	5/19/2016	6.02	28.45	7	2705	95	5
82940	6/9/2016	6.02	28.42	28	3220	110	3
82941	6/9/2016	6.00	28.27	28	4165	150	2
82942	6/9/2016	6.01	28.39	28	3620	130	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit weight of specimens: 43.3-45.7 pcf

Checked by:


 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

3 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Thursday, May 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2ND LIFT - East side A7-A13/A13-F13/F13-F7/F7-A7

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	12 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	270458	Cast By:	John Fatula
Truck Number:	102	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	69.8 °F
Total Yardage:	250	Concrete Temperature:	66.9 °F
Total Time (minutes):	55	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82943	5/19/2016	5.96	27.91	7	4930	177	3
82944	5/19/2016	5.96	27.85	7	4530	163	6
82945	5/19/2016	5.91	27.44	7	4430	161	6
82946	6/9/2016	5.99	28.22	28	4020	140	3
82947	6/9/2016	5.98	28.06	28	5230	190	5
82948	6/9/2016	5.98	28.10	28	4110	150	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit weight of specimens: 49.4-50 pcf

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Thursday, May 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2ND LIFT - East side A7-A13/A13-F13/F13-F7/F7-A7

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

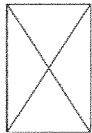
Load Number:	15 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	270462	Cast By:	John Fatula
Truck Number:	137	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	67.3 °F
Total Yardage:	250	Concrete Temperature:	64 °F
Total Time (minutes):	25	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82949	5/19/2016	5.96	27.91	7	4705	169	5
82950	5/19/2016	5.96	27.94	7	3950	141	3
82951	5/19/2016	5.96	27.94	7	4025	144	3
82952	6/9/2016	5.97	27.97	28	4505	160	2
82953	6/9/2016	5.98	28.07	28	5060	180	6
82954	6/9/2016	5.99	28.17	28	5040	180	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit weight of specimens 49.4-50 pcf

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

5 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Thursday, May 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 2nd lift, east side

Test Cylinder Location:
 -

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	22 of 25	Number of 6x12 Cylinders:	6
Ticket Number:	301537	Cast By:	John Fatula
Truck Number:	118	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	63 °F
Total Yardage:	250	Concrete Temperature:	62.1 °F
Total Time (minutes):	-	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
82955	5/19/2016	5.95	27.81	7	2690	97	3
82956	5/19/2016	5.95	27.81	7	2940	110	2
82957	5/19/2016	5.97	27.95	7	2515	90	3
82958	6/9/2016	5.59	24.54	28	4155	170	5
82959	6/9/2016	5.98	28.12	28	2695	100	2
82960	6/9/2016	6.00	28.29	28	3035	110	2



Cone
1



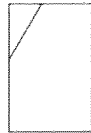
Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

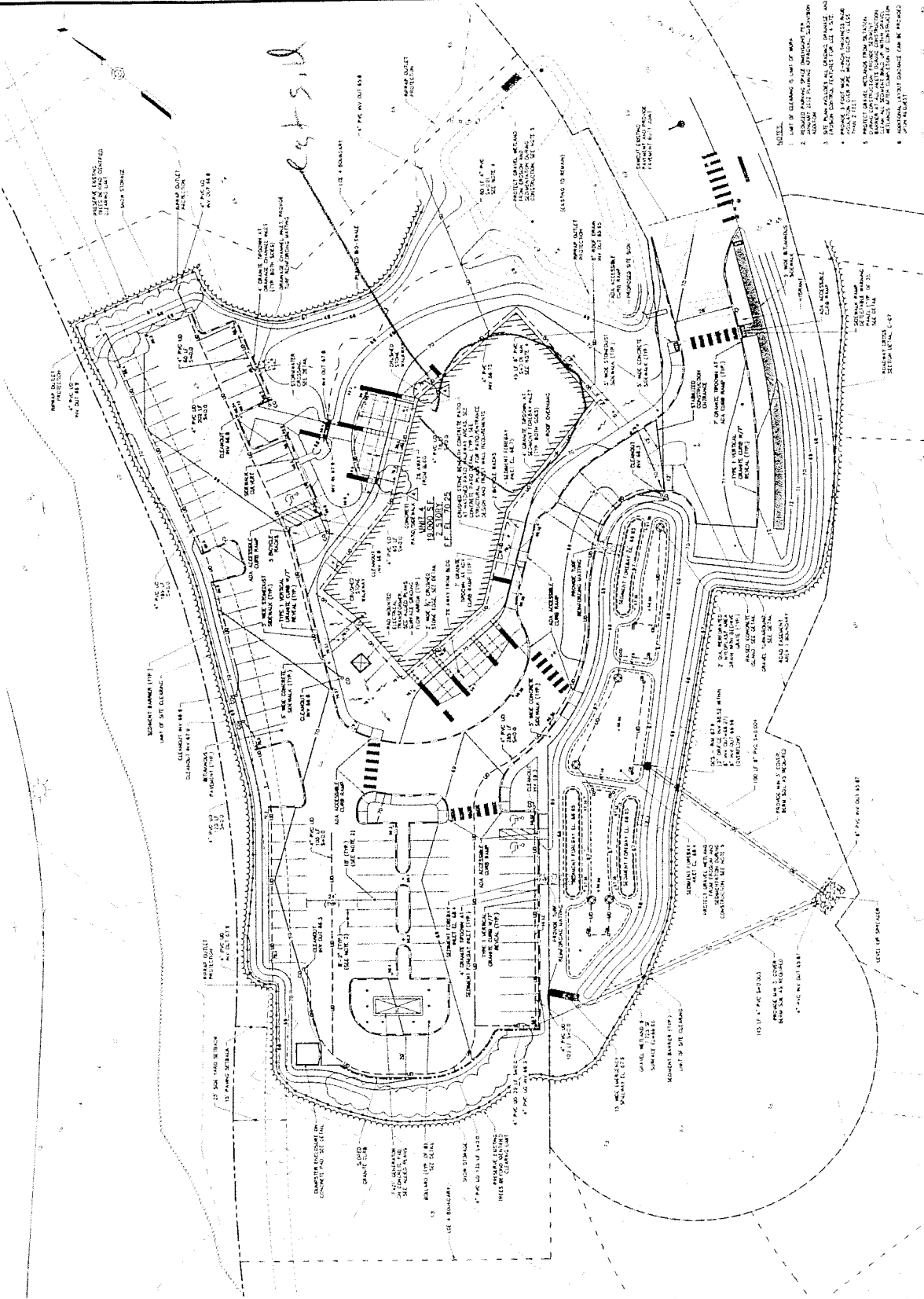
Remarks:

Unit weight of specimens: 49.4 to 50.1 pcf

Checked by:

Erik J. Wiberg
 Erik J. Wiberg, P.E.





PATRONS OXFORD INSURANCE
 K510-003
 DATE: _____
 TBLT: _____



R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	June 14, 2016	Project No.:	1518-003
Attention:	Mark Pettingill (mpettingill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
83065	28
83066	28
83067	28
83071	28
83072	28
83073	28
83077	28
83078	28
83079	28

Remarks:

Copy to:

- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
- Hans Breaux (hans@simonsarchitects.com)
- Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
- Michael Packard (mike@zachauconstruction.com)
- Jon Provost (jon@zachauconstruction.com)
- Carlene Fassett (carlene@zachauconstruction.com)
- Terri Strouse (terri@gsgravel.com)

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, May 16, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Overcast	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 3rd Lift; East Side: F6-F13/F13-A13/A13-A7/A7-F6

Test Cylinder Location:
 Building Line C9

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

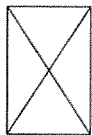
Load Number:	2 of 15	Number of 6x12 Cylinders:	6
Ticket Number:	298593	Cast By:	Patrick J. Roma
Truck Number:	102	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	46 °F
Total Yardage:	150	Concrete Temperature:	63 °F
Total Time (minutes):	75	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/17/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83062	5/23/2016	6.00	28.29	7	3105	110	6
83063	5/23/2016	6.00	28.31	7	3350	118	5
83064	5/23/2016	6.00	28.26	7	3660	130	5
83065	6/13/2016	6.02	28.42	28	3860	136	2
83066	6/13/2016	6.02	28.42	28	4235	149	5
83067	6/13/2016	6.01	28.40	28	3815	134	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



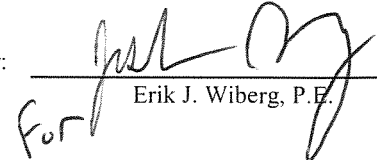
Side Fracture
5



Double Side Fracture
6

Remarks:

Field Unit Weight: 39 pcf.
 7- Day Unit Weight of test cylinders: 38.2 to 38.9 pcf.
 28-Day Unit Weight of test cylinders: 38.5 to 38.6 pcf.

Checked by: 
 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, May 16, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Overcast	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 3rd Lift; East Side: F6-F13/F13-A13/A13-A7/A7-F6

Test Cylinder Location:
 Building Line C12

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	6 of 15	Number of 6x12 Cylinders:	6
Ticket Number:	301544	Cast By:	Patrick J. Roma
Truck Number:	101	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	46 °F
Total Yardage:	150	Concrete Temperature:	65 °F
Total Time (minutes):	55	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

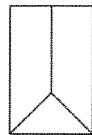
Field Cure Days: 1
 Date Received: 5/17/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83068	5/23/2016	6.01	28.34	7	3375	119	5
83069	5/23/2016	6.00	28.31	7	3365	119	6
83070	5/23/2016	5.99	28.22	7	3380	120	6
83071	6/13/2016	6.01	28.39	28	3300	116	3
83072	6/13/2016	6.02	28.42	28	3740	132	2
83073	6/13/2016	6.01	28.39	28	3695	130	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



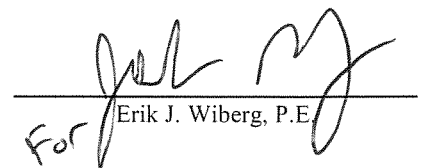
Side Fracture
5



Double Side Fracture
6

Remarks:

Field Unit Weight: 42.8 pcf
 7-Day Unit Weight of test cylinders: 41.6 to 43.3 pcf.
 28-Day Unit Weight of test cylinders: 42.3 to 42.9 pcf.

Checked by: 
 For Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Monday, May 16, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Overcast	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete 660

Placement Location:
 3rd Lift; East Side: F6-F13/F13-A13/A13-A7/A7-F6

Test Cylinder Location:
 Building Line B10

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	11 of 15	Number of 6x12 Cylinders:	6
Ticket Number:	301549	Cast By:	Patrick J. Roma
Truck Number:	101	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	46 °F
Total Yardage:	150	Concrete Temperature:	65 °F
Total Time (minutes):	50	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 5/17/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83074	5/23/2016	5.98	28.09	7	3825	136	5
83075	5/23/2016	6.00	28.25	7	4040	143	3
83076	5/23/2016	6.00	28.28	7	3290	116	3
83077	6/13/2016	6.02	28.42	28	4680	165	2
83078	6/13/2016	6.01	28.37	28	4540	160	2
83079	6/13/2016	6.00	28.30	28	4450	157	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



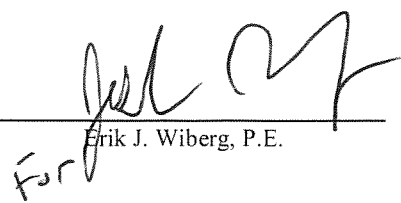
Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight: 38pcf
 7-Day Unit Weight of test cylinders: 41.0 to 41.7 pcf.
 28-Day Unit Weight of test cylinders: 41.1 to 41.5 pcf.

Checked by: 
 Erik J. Wiberg, P.E.





R. W. Gillespie & Associates, Inc.
 86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
 200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
 44 Wood Avenue, Suite 1, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date: August 3, 2016	Project No.: 1518-003
Attention: Mark Pettinghill (mpettingill@patrons.com)	
Re: Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine	

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

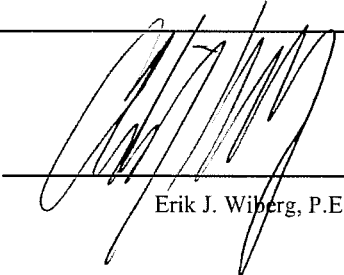
We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
83728	28
83729	28
83730	28
83734	28
83735	28
83736	28
83740	28
83741	28
83742	28
83746	28
83747	28
83748	28
83752	28
83753	28
83754	28
83758	28
83759	28
83760	28

Remarks:

Average compressive strengths of Load No. 14 was 75psi and less than the minimum specified compressive strength of 80psi. The material will support the ground floor slab. Based on other test results and its application, RWG&A, as project geotechnical consultant, does not take exception to slightly lower than specified strength.

- Copy to:
- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 - Hans Breaux (hans@simonsarchitects.com)
 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terrstrouse@gsg gravel.com)


 Erik J. Wiberg, P.E.

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 05, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
 Interior of building, LD-CLSM

Test Cylinder Location:
 Line B.5/1.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

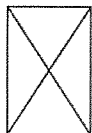
Load Number:	2 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	282109	Cast By:	Andrew L. Flynn
Truck Number:	83	Slump:	ASTM C 143 656.00 in.
Cubic Yards:	10	Air Temperature:	76 °F
Total Yardage:	400	Concrete Temperature:	- °F
Total Time (minutes):	28	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 2
 Date Received: 7/7/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83725	7/12/2016	6.03	28.57	7	1780	62	2
83726	7/12/2016	6.02	28.50	7	2030	71	5
83727	7/12/2016	6.00	28.31	7	2045	72	5
83728	8/2/2016	5.99	28.18	28	2055	73	2
83729	8/2/2016	6.05	28.73	28	3635	127	2
83730	8/2/2016	6.05	28.77	28	3005	104	2



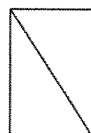
Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight of 7 Day Specimens: 36.8 to 38.4pcf.
 Unit Weight of 28 Day Specimens: 35.95pcf to 38.1pcf

Checked by: _____

Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 05, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
 Interior of building, LD-CLSM

Test Cylinder Location:
 Line A.5/1.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

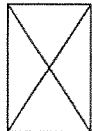
Load Number:	5 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	28233	Cast By:	Andrew L. Flynn
Truck Number:	143	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	72 °F
Total Yardage:	310	Concrete Temperature:	78 °F
Total Time (minutes):	33	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 2
 Date Received: 7/7/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83731	7/12/2016	6.01	28.37	7	5650	199	5
83732	7/12/2016	6.01	28.39	7	4440	156	3
83733	7/12/2016	6.01	28.36	7	4225	149	3
83734	8/2/2016	6.03	28.56	28	6935	243	5
83735	8/2/2016	6.04	28.62	28	5325	186	3
83736	8/2/2016	6.00	28.26	28	5310	188	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight of 7 Day Specimens: 49.8 to 53.7pcf.
 Auburn Concrete notified during placement of higher than maximum allowable unit weight (42pcf).
 Unit Weight of 28 Day Specimens: 49.29pcf to 50.51pcf

Checked by: _____

Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

3 of 6

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 05, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
 Interior of building, LD-CLSM

Test Cylinder Location:
 Line A.5/1.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

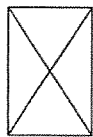
Load Number:	14 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	282240	Cast By:	Andrew L. Flynn
Truck Number:	98	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	74 °F
Total Yardage:	310	Concrete Temperature:	81 °F
Total Time (minutes):	33	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 2
 Date Received: 7/7/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83737	7/12/2016	6.02	28.46	7	2270	80	5
83738	7/12/2016	6.08	29.02	7	1500	52	5
83739	7/12/2016	5.99	28.21	7	1815	64	5
83740	8/2/2016	6.01	28.35	28	2225	78	2
83741	8/2/2016	6.02	28.46	28	2005	70	2
83742	8/2/2016	6.00	28.24	28	2210	78	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight of 7 Day Specimens: 32.9 to 33.5pcf.
 Unit Weight of 28 Day Specimens: 33.11pcf to 33.41pcf

Checked by:

Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

4 of 6

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 05, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
 Interior of building, LD-CLSM

Test Cylinder Location:
 A.5/7.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	19 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	282245	Cast By:	Andrew L. Flynn
Truck Number:	102	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	78 °F
Total Yardage:	310	Concrete Temperature:	81 °F
Total Time (minutes):	28	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 2
 Date Received: 7/7/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83743	7/12/2016	6.02	28.47	7	2655	93	5
83744	7/12/2016	6.02	28.46	7	3065	108	5
83745	7/12/2016	6.01	28.37	7	2470	87	5
83746	8/2/2016	6.03	28.51	28	3225	113	3
83747	8/2/2016	6.01	28.32	28	2990	106	3
83748	8/2/2016	6.02	28.49	28	2765	97	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5

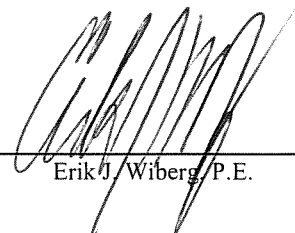


Double Side Fracture
6

Remarks:

Unit Weight of 7 Day Specimens: 39.6 to 45.4pcf.
 Unit Weight of 28 Day Specimens: 37.81pcf to 38.76pcf

Checked by:


 Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

5 of 6

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 05, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
 Interior of building, LD-CLSM

Test Cylinder Location:
 A.5/7.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

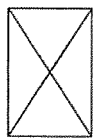
Load Number:	24 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	282251	Cast By:	Andrew L. Flynn
Truck Number:	138	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	80 °F
Total Yardage:	310	Concrete Temperature:	- °F
Total Time (minutes):	35	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 2
 Date Received: 7/7/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83749	7/12/2016	6.02	28.42	7	2410	85	5
83750	7/12/2016	6.00	28.31	7	2435	86	6
83751	7/12/2016	6.02	28.43	7	2530	89	2
83752	8/2/2016	6.01	28.39	28	2840	100	2
83753	8/2/2016	6.01	28.32	28	2595	92	2
83754	8/2/2016	6.01	28.35	28	2975	105	5



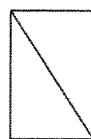
Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight of 7 Day Specimens: 39.1 to 39.6pcf.
 Unit Weight of 28 Day Specimens: 40.42pcf to 41.73pcf

Checked by:

Erik J. Wiberg, P.E.



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

6 of 6

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 05, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
 Interior of building, LD-CLSM

Test Cylinder Location:
 A.5/7.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

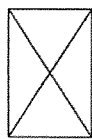
Load Number:	28 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	282255	Cast By:	Andrew L. Flynn
Truck Number:	198	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	81 °F
Total Yardage:	310	Concrete Temperature:	84 °F
Total Time (minutes):	0	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 2
 Date Received: 7/7/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83755	7/12/2016	5.96	27.90	7	2535	91	5
83756	7/12/2016	6.00	28.28	7	2935	104	5
83757	7/12/2016	6.01	28.37	7	3810	134	2
83758	8/2/2016	6.01	28.37	28	4215	149	5
83759	8/2/2016	6.02	28.49	28	4335	152	2
83760	8/2/2016	6.02	28.48	28	3690	130	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Unit Weight of 7 Day Specimens: 40.0 to 41.4pcf.
 Unit Weight of 28 Day Specimens: 40.63pcf to 42.36pcf

Checked by:

Erik J. Wiberg, P.E.





R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	August 12, 2016	Project No.:	1518-003
Attention:	Mark Pettinghill (mpettinghill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

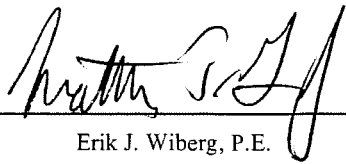
Auburn, ME 04210-1960

We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
83917	28
83918	28
83919	28
83923	28
83924	28
83925	28
83929	28
83930	28
83931	28
83935	28
83936	28
83937	28
83941	28
83942	28
83943	28

Remarks:

- Copy to:
- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 - Hans Breaux (hans@simonsarchitects.com)
 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terristrouse@gsg gravel.com)



Erik J. Wiberg, P.E.

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

1 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- ineh
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
A-B/1-2

Test Cylinder Location:
A.5/1.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

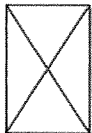
Load Number:	5 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	-	Cast By:	Andrew L. Flynn
Truck Number:	83	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	62 °F
Total Yardage:	310	Concrete Temperature:	77 °F
Total Time (minutes):	59	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 7/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83914	7/19/2016	6.01	28.41	7	2065	70	2
83915	7/19/2016	6.00	28.24	7	1995	70	2
83916	7/19/2016	6.00	28.24	7	1755	60	2
83917	8/9/2016	5.98	28.07	28	2400	90	5
83918	8/9/2016	6.03	28.51	28	2215	80	2
83919	8/9/2016	6.01	28.38	28	2550	90	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Filed Unit Weight: 36.8pcf
 7-Day Unit Weight of test cylinders: 36.52pcf-38.4pcf
 Unit Weight of test cylinders: 36.35pcf -38.06pcf

28-Day

Checked by:

Matthew T. Grady
 Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

2 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
C-D/2-3

Test Cylinder Location:
C.5/2.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	9 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	-	Cast By:	Andrew L. Flynn
Truck Number:	157	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	63 °F
Total Yardage:	310	Concrete Temperature:	78 °F
Total Time (minutes):	63	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 7/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83920	7/19/2016	6.02	28.43	7	3420	120	5
83921	7/19/2016	6.01	28.37	7	3385	120	3
83922	7/19/2016	6.03	28.60	7	3065	110	5
83923	8/9/2016	6.02	28.48	28	4870	170	5
83924	8/9/2016	6.05	28.76	28	4520	160	2
83925	8/9/2016	6.04	28.64	28	4360	150	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Field Unit Weight: 43.8pcf
 Unit Weight of test cylinders: 41.97pcf - 42.99pcf
 Weight of test cylinders: 41.43pcf-44.95pcf

7-Day
28-Day Unit

Checked by:

Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

3 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
C-D/1-2

Test Cylinder Location:
C.5/1.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

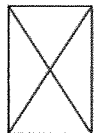
Load Number:	15 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	-	Cast By:	Andrew L. Flynn
Truck Number:	155	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	78 °F
Total Yardage:	310	Concrete Temperature:	80 °F
Total Time (minutes):	69	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 7/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83926	7/19/2016	6.03	28.59	7	5580	200	3
83927	7/19/2016	6.00	28.23	7	4065	140	1
83928	7/19/2016	6.09	29.10	7	4435	150	3
83929	8/9/2016	6.05	28.71	28	11515	400	3
83930	8/9/2016	6.09	29.14	28	9955	340	2
83931	8/9/2016	6.07	28.89	28	10240	350	3



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Filed Unit Weight: 58pcf
 Unit Weight of test cylinders: 56.75pcf-58.15
 Weight of test cylinders: 55.88pcf-60.07pcf

7-Day
28-Day Unit

Checked by:

Matthew T. Grady
 Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

4 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
A-B/8/9

Test Cylinder Location:
A.5/8.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

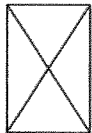
Load Number:	20 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	-	Cast By:	Andrew L. Flynn
Truck Number:	155	Slump:	ASTM C 143 - in.
Cubie Yards:	10	Air Temperature:	83 °F
Total Yardage:	310	Concrete Temperature:	81 °F
Total Time (minutes):	63	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 7/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83932	7/19/2016	5.99	28.20	7	2020	70	2
83933	7/19/2016	6.01	28.38	7	1300	50	3
83934	7/19/2016	6.00	28.29	7	1655	60	3
83935	8/9/2016	6.02	28.44	28	2730	100	3
83936	8/9/2016	6.04	28.65	28	2660	90	6
83937	8/9/2016	6.03	28.53	28	2245	80	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



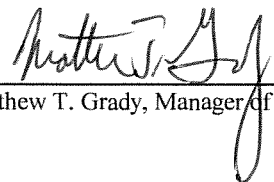
Double Side Fracture
6

Remarks:

Field Unit Weight: 32pcf
 Unit Weight of test cylinders: 31.16pcf - 33.44pcf
 Weight of test cylinders: 30.72pcf-33.95pcf

7-Day
28-Day Unit

Checked by:


 Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

5 of 5

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Tuesday, July 12, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
A-B/10-11

Test Cylinder Location:
A.5/10.5

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

Load Number:	25 of 31	Number of 4x8 Cylinders:	6
Ticket Number:	-	Cast By:	Andrew L. Flynn
Truck Number:	157	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	84 °F
Total Yardage:	310	Concrete Temperature:	82 °F
Total Time (minutes):	63	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 7/13/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83938	7/19/2016	6.03	28.51	7	6185	220	5
83939	7/19/2016	5.97	27.95	7	6555	230	5
83940	7/19/2016	6.04	28.64	7	5545	190	5
83941	8/9/2016	6.04	28.65	28	7965	280	2
83942	8/9/2016	6.06	28.80	28	6770	240	5
83943	8/9/2016	6.03	28.51	28	8445	300	2



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Field Unit Weight: 46pcf
 Unit Weight of test cylinders: 46.09pcf - 46.67pcf
 Weight of test cylinders: 44.76pcf-46.33pcf

7-Day
28-Day Unit

Checked by:

Matthew T. Grady, Manager of MTS





R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244
44 Wood Avenue, Suite I, Mansfield, MA 508-623-0101

LETTER OF TRANSMITTAL

Date:	August 16, 2016	Project No.:	1518-003
Attention:	Mark Pettingill (mpettingill@patrons.com)		
Re:	Concrete Testing Proposed Patrons Oxford Insurance Office Building Portland, Maine		

Patrons Oxford Insurance

24 Harriman Drive, PO Box 1960

Auburn, ME 04210-1960

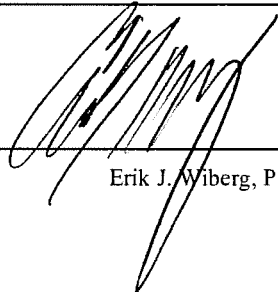
We are sending you attached Concrete Cylinder Test Results.

Cylinder No. (s)	Age (Days)
83977	28
83978	28
83979	28
83983	28
83984	28
83985	28

Remarks:

Average compressive strengths of Load No. 7 of 9 was 57psi and less than minimum specified compressive strength of 80psi. The average 28-day compressive strength of both sets of tested cylinders from the placement was 100 psi. The material will support the ground floor slab. Based on other test results and its application, RWG&A, as project geotechnical consultant, does not take exception to the measured strengths.

- Copy to:
- Ryan Kanteres, AIA (ryan@simonsarchitects.com)
 - Hans Breaux (hans@simonsarchitects.com)
 - Christopher G. Williams, P.E., S.E. (cwilliams@beckerstructural.com)
 - Michael Packard (mike@zachauconstruction.com)
 - Jon Provost (jon@zachauconstruction.com)
 - Carlene Fassett (carlene@zachauconstruction.com)
 - Terri Strouse (terrstrouse@gsg gravel.com)



Erik J. Wiberg, P.E.

If enclosures are not noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Thursday, July 14, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
 B-F/6-13 and entrance

Test Cylinder Location:
 C/9

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

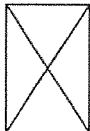
Load Number:	2 of 9	Number of 6x12 Cylinders:	6
Ticket Number:	289548	Cast By:	Anthony G. Stohlberg
Truck Number:	119	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	80 °F
Total Yardage:	90	Concrete Temperature:	- °F
Total Time (minutes):	65	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 7/15/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83974	7/21/2016	6.01	28.32	7	4305	150	5
83975	7/21/2016	6.06	28.81	7	2505	90	3
83976	7/21/2016	6.02	28.48	7	3055	110	2
83977	8/11/2016	6.05	28.71	28	2075	72	3
83978	8/11/2016	6.05	28.75	28	4830	168	5
83979	8/11/2016	6.03	28.58	28	5525	193	5



Cone
1



Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5



Double Side Fracture
6

Remarks:

Field Unit Weight: 45.0pcf
 7-Day Unit Weight of test cylinders: 43.98pcf - 44.72pcf
 28-Day Unit Weight of Test Cylinders: 44.79pcf - 45.1pcf

Checked by:

Matthew T. Grady, Manager of MTS



R.W. GILLESPIE & ASSOCIATES
CONCRETE TEST/PLACEMENT REPORT

Project Name:	Proposed Patrons Oxford Insurance	Date Cylinders Cast:	Thursday, July 14, 2016
Project No:	1518-003	Concrete Supplier:	Auburn Concrete
Client:	Patrons Oxford Insurance	Design Strength:	80 psi
Weather Conditions:	Sunny	Max. Aggregate Size:	- inch
Placement Method:	Rear Discharge	Admixtures:	Cellcrete660

Placement Location:
 B-F/6-13 and entrance

Test Cylinder Location:
 C.5/11

ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete

Date Report Issued:

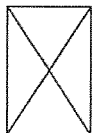
Load Number:	7 of 9	Number of 6x12 Cylinders:	6
Ticket Number:	289555	Cast By:	Anthony G. Stohlberg
Truck Number:	95	Slump:	ASTM C 143 - in.
Cubic Yards:	10	Air Temperature:	80 °F
Total Yardage:	90	Concrete Temperature:	- °F
Total Time (minutes):	53	Air Content:	ASTM C 231 - %

Specimen Storage ASTM C 31

Field Cure Days: 1
 Date Received: 7/15/2016
 Condition of Cylinders: Good

ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Lab No.	Test Date	Ave. Dia. (in)	Ave. Area (in ²)	Age (days)	Load (lbs)	Compressive Strength (psi)	Break Type
83980	7/21/2016	6.01	28.41	7	1245	40	2
83981	7/21/2016	6.00	28.31	7	1215	40	3
83982	7/21/2016	6.00	28.29	7	1290	50	2
83983	8/11/2016	5.99	28.17	28	1660	59	3
83984	8/11/2016	6.03	28.58	28	1705	60	2
83985	8/11/2016	6.02	28.42	28	1490	52	3



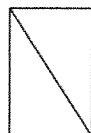
Cone
1



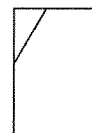
Cone & Split
2



Columnar
3



Shear
4



Side Fracture
5

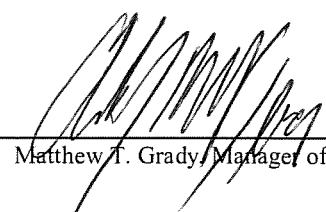


Double Side Fracture
6

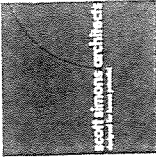
Remarks:

Field Unit Weight: 30.0pcf
 7-Day Unit Weight of test cylinders: 31.58pcf - 31.96pcf
 28-Day Unit Weight of Test Cylinders: 30.52pcf - 33.04pcf

Checked by:


 Matthew T. Grady, Manager of MTS





33 York Street
New York, NY 10014
Tel: 212 693 1234
www.scottdesign.com

BECKER
ARCHITECTS
100 Park Avenue
New York, NY 10017
Tel: 212 693 1234

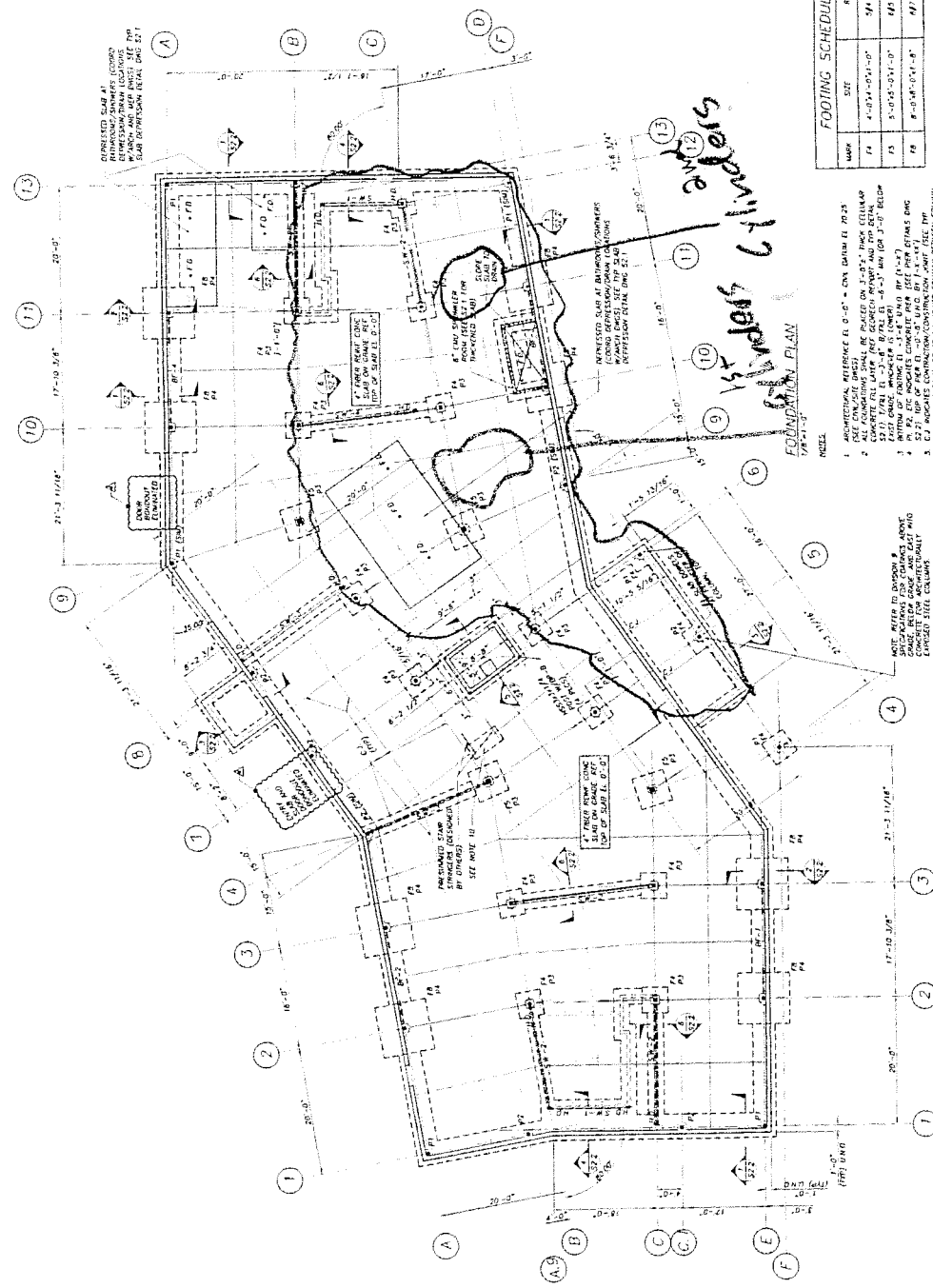
PATRONS OXFORD OFFICES
100 Park Avenue
New York, NY 10017
Tel: 212 693 1234



NO.	DESCRIPTION	DATE
1	FOUNDATION PLAN	7/14/2016
2	FOUNDATION PLAN	7/14/2016
3	FOUNDATION PLAN	7/14/2016
4	FOUNDATION PLAN	7/14/2016
5	FOUNDATION PLAN	7/14/2016
6	FOUNDATION PLAN	7/14/2016
7	FOUNDATION PLAN	7/14/2016
8	FOUNDATION PLAN	7/14/2016
9	FOUNDATION PLAN	7/14/2016
10	FOUNDATION PLAN	7/14/2016
11	FOUNDATION PLAN	7/14/2016
12	FOUNDATION PLAN	7/14/2016
13	FOUNDATION PLAN	7/14/2016

FOUNDATION PLAN

S1.1
CONFORMANCE SET



PATRONS OXFORD INSURANCE
1518-003
DATE: 7/14/2016
TRCH: Tom Stohberg

Special Inspections – Exhibit C

Schedule of Inspections
Quality Assurance for Seismic Resistance Seismic Checklist
Quality Assurance for Seismic Resistance Wind Checklist

Structural Schedule of Special Inspections
SEISMIC RESISTANCE - STRUCTURAL

VERIFICATION AND INSPECTION	REQD Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETE D
IBC Section 1707						
1. Special inspections for seismic resistance. Special inspection as specified in this section is required for the following:						
a. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E or F	Y	P	IBC 1707.1	SII	PE/SE or EIT	<i>Oct – Dec '17</i>
b. Designated seismic systems in structures assigned to Seismic Design Category D, E, or F.	N	P	IBC 1707.1	SII	PE/SE or EIT	
2. Structural steel: Continuous special inspection for structural welding in accordance with AISC 341.	N	C	IBC 1707.2	TA1	AWS-CWI	
3. Structural wood:						
a. Continuous special inspection during field gluing operations of elements of the seismic-force-resisting system.	N	C	IBC 1707.3	SII	PE/SE or EIT	
b. Periodic special inspections for nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system (where spacing is 4" o.c., or less) including drag struts, braces and hold-downs	Y	P	IBC 1707.3	SII	PE/SE or EIT	<i>Oct – Dec '17</i>
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 (where spacing is 4" o.c., or less), including struts, braces, and hold-downs	N	-	CFSF for this project not part of the primary seismic-force resisting system.	-	-	
5. 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	-	Seismic isolators not used.	-	-	

SEISMIC RESISTANCE CHECK LIST [IBC 1705.3]

Seismic Design Category C

<input checked="" type="checkbox"/> FOR SEISMIC DESIGN CATEGORY C OR HIGHER:
Structural:
<input checked="" type="checkbox"/> The seismic-force-resisting systems
<input checked="" type="checkbox"/> Steel Braced Frames and associated connections/anchorage (Not required for SDC C, R=3)
<input type="checkbox"/> Steel Moment Frames and associated connections (Not required for SDC C, R=3)
<input checked="" type="checkbox"/> Shear walls: <input type="checkbox"/> CMU <input checked="" type="checkbox"/> Wood <input type="checkbox"/> Concrete
<input checked="" type="checkbox"/> Diaphragms: <input checked="" type="checkbox"/> Floor <input checked="" type="checkbox"/> Roof
<input type="checkbox"/> Other:

WIND RESISTANCE CHECK LIST [IBC 1705.4]

Wind Exposure Category B

REQUIRED	NOT REQUIRED	NOT APPLICABLE	WIND RESISTANCE REQUIREMENTS
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In wind exposure Category B, where the 3-second-gust basic wind speed is 120 miles per hour (mph) (52.8 m/sec) or greater.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In wind exposure Categories C and D, where the 3-second-gust basic wind speed is 110 mph (49 m/sec) or greater.

Special Inspections – Exhibit D

Contractor's Statement of Responsibility
Fabricator's Certificates of Compliance

Contractor's Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated in the Quality Assurance Plan must submit a Statement of Responsibility. The Statement of Responsibility is required for Seismic Design Category C or higher. Make additional copies of this form as required.

Project: Patrons Oxford Insurance Office Building

Contractor's Name: *Zachau Construction*

Address: *1185 U.S. Route 1, Freeport, ME 04032*

License No.:

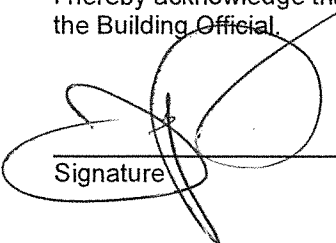
Description of designated building systems and components included in the Statement of Responsibility:

Lateral force resisting system consisting of wood panelized shearwalls and steel rod braced frames.

Contractor's Acknowledgment of Special Requirements

I hereby acknowledge that I have received, read, and understand the Quality Assurance Plan and Special Inspection program.

I hereby acknowledge that control will be exercised to obtain conformance with the construction documents approved by the Building Official.


Signature

5/2/17
Date

Contractor's Provisions for Quality Control

Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of reports is attached to this Statement.

Identification and qualifications of the person(s) exercising such control and their position(s) in the organization are attached to this Statement.

Fabricator's Certificate of Compliance

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

Project: Patrons Oxford Insurance Office Building

Fabricator's Name: Precision Welding & Fabrication, Inc.

Address: 690A STRAWWATER ST. WESTBROOK, MI. 04092

Certification or Approval Agency: AISC

Certification Number: 207111021-2017

Date of Last Audit or Approval: 9-16-16

Description of structural members and assemblies that have been fabricated: STRUCTURAL STEEL & MISCELLANEOUS METALS.
Structural steel framing, columns, braces and glulam connectors.

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


Signature

3-16-17
Date

V.P.
Title

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

American Institute of Steel Construction

is proud to recognize

Precision Welding & Fabrication Inc.

690 Stroudwater St., Westbrook, ME

for successfully meeting the quality certification requirements for

Standard for Steel Building Structures



Roger E. Ferch



207111021-2017

Certification Number

Certification valid through: **September 2017**

Fabricator's Certificate of Compliance

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

Project: Patrons Oxford Insurance Office Building

Fabricator's Name: BOISE STRUCTURAL SOLUTIONS

Address: 20 POMERLEAU ST. BIDDEFORD, ME 04005

Certification or Approval Agency: TRUSS PLATE INSTITUTE

Certification Number: TPI PLANT W082

Date of Last Audit or Approval: 1/11/17

Description of structural members and assemblies that have been fabricated:

Wood floor and roof trusses.

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

Glenn Seward
Signature

4-17-17
Date

Asst. Branch Mgr.
Title

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



Truss Plate Institute
 218 N. Lee Street., Ste 312
 Alexandria, VA 22314
 Phone: 703-683-1010
 Fax: 866-840-0105

TPI AuditReport-WdTruss

Date: 01/11/2017

GENERAL

TPI Plant No. 82
 (Missing TPI Plant No.?)
 (Delete this text. Insert TPI Plant No. in this field only if not already shown in the field above.)
 Date of Visit: 01/11/2017
 TPI Agent: Hart
 Time IN: 08:21 AM
 Remote Audit if Checked

Company Name: Boise Structural Solutions
 Address: 68 Industrial Park Road
 City: Saco
 State: ME
 Phone: (877) 291-5276
 QC Contact: Shawn Sterling

Inspection Type: Wd Truss
 Wood Truss Inspec. (T/F): TRUE

PART I - AUDIT CHECKLIST

Instructions

For each question below enter a value from 1 through 4 where: 1=NO - Fail/Corrective Action Required (CAR) issued; 2=YES - minimal/improvement needed & Corrective Comment (CC) issued; 3=YES - Adequately meets requirements; 4=YES - meets or exceeds requirements.

Last in-plant inspec. 01/11/2017

1.1 Plant QC Manual 4
 1.2 QC data maintained 4
 1.3 Mtl/Product Traceability 4
 1.4 Inspec. Freq. 4
 1.5 Rep./Random Sampling 4
 1.6 No. of Dtl. Joint Inspec. 4
 1.7 Raw data collected 4
 1.8 Prior Discrep. Resolved 4
 1.9 Mgmt Review 4



Truss Plate Institute
 218 N. Lee Street., Ste 312
 Alexandria, VA 22314
 Phone: 703-683-1010
 Fax: 866-840-0105

TPI AuditReport-WdTruss

Date: 01/11/2017

PART I - COMMENTS

Orders have dropped off not a lot in the yard to look at.
 Doing inspections on trusses with critical and non critical joints.

PART I SCORE

TTL SCORE	36.00
(Max. TTL Score = 36)	
AVG. SCORE	4.00

PART II - YARD/PLANT OBSERVATION

Instructions

For each question below enter a value from 1 through 4 where: 1=NO - Fail/Corrective Action Required (CAR) issued; 2=YES - minimal/improvement needed & Corrective Comment (CC) issued; 3=YES - Adequately meets requirements; 4=YES - meets or exceeds requirements.

2.1 Lumber Soundness	4
2.2 Plate Embedment	4
2.3 Plate Rotation	4
2.4 Plate Placement	4
2.5 Defects-Plate Contact Area	4
2.6 Mbr Gaps	4
2.7 Storage	4

PART II - COMMENTS

2.7 Everything is off the ground.

PART II SCORE

TTL SCORE	28.00
(Max. TTL Score = 28)	
AVG. SCORE	4.00

PART III - TRUSS INSPECTION



Truss Plate Institute
 218 N. Lee Street., Ste 312
 Alexandria, VA 22314
 Phone: 703-683-1010
 Fax: 866-840-0105

TPI AuditReport-WdTruss

Date: 01/11/2017

Instructions

NOTE! Part III is scored differently from Parts I & II. For each question below enter a value of 1 or 2 where: 1= NO - Corrective Action Required and 2= YES - Adequately meets requirements.

3.0 Truss ID's:

NA

3.1 Lumber Grade

3.2 Truss Dim.

3.3 Plate Size/Gauge

3.4 Plate Embedment

3.5 Plate Rotation

3.6 Mbr Gap

3.7 Acceptable Defects

3.8 Plate Placement

3.9 No. of Teeth/Member

PART III - COMMENTS

(If no truss inspections performed during visit indicate "NA" in this Comment field. Otherwise delete this note and add comments as necessary for truss(s) inspected.

PART III SCORE

TTL SCORE 0.00

(Max TTL Score= 18)

AVG. SCORE 0.00

OPTIONAL REPORT ITEMS

Photos attached NO

Additional items to follow under seperate cover (fax or email) NO

REPORT SUMMARY

OVERALL SUMMARY

CAR-S issued Item 1.4? NO

CAR-S issued other Item? NO

Overall Summary Comment



Truss Plate Institute
 218 N. Lee Street., Ste 312
 Alexandria, VA 22314
 Phone: 703-683-1010
 Fax: 866-840-0105

TPI AuditReport-WdTruss

Date: 01/11/2017

[Plant Note: If a CAR-S is issued, plant is temporarily suspended until the issue(s) is resolved and licensee shall not use TPI Quality Marks (stamps) nor receive certification letters until such time licensee demonstrates full compliance with the noted sections of ANSI/TPI 1. Contact the TPI Executive Director (Mike Cassidy, mcassidy@tpinst.org) to demonstrate compliance.]

SCORE SUMMARY

(Note: Scores are provided as a way to measure progress from visit to visit and are provided for information.)

TTL Score Part I (max. 36)	36.00
Avg. Score Part I	4.00

TTL Score Part II (max. 28)	28.00
Avg. Score Part II	4.00

TTL Score Part III (max. 18)	0.00
Avg. Score Part III	0.00

PLANT REP. SIGNATURE

Plant Rep Signature (Plant representative signature acknowledges receipt of this report and plants responsibility to resolve the errors mentioned in this report.)

Name: Shawn Sterling

TPI AGENT SIGNATURE

TPI Agent Signature

Time OUT: 09:21 AM

TPI MANAGEMENT REVIEW



Truss Plate Institute
218 N. Lee Street., Ste 312
Alexandria, VA 22314
Phone: 703-683-1010
Fax: 866-840-0105

TPI AuditReport-WdTruss

Date: 01/11/2017

TPI Mgmt. Initials:

Date Reviewed:

(Formwork Published 06/01/12. Copyright 2011 TPI. All rights reserved.)

INTRODUCTION

The purpose of this manual is to instruct and assist, as well as reinforce and remind our employees of the need for quality production. This manual addresses quality assurance from a product flow perspective, and will address quality as it applies to sales, design, production, delivery, and costs. A separate section presents the quality standards and procedures needed to keep Boise Structural Solutions in the forefront of quality production and assure our customers of "Quality you can build on."

A glossary of terms is also presented to help the user identify the specific terms used at Boise Structural Solutions in its quality assurance program.

QUALITY & SALES

Boise Structural Solutions is the largest manufacturer of roof and floor trusses in the northeast. We are a strictly wholesale company, distributing our products through a network of retail lumberyards throughout Eastern New England.

We depend heavily upon repeat business. Thus it's important our customers receive the highest quality product we have to offer so they will continue to use Boise Structural Solutions as their source of supply for the future.

When an order is placed, we expect the customer will receive a high quality product, at a fair price, delivered on time. It is everyone's task at BSS to assure that this happens.

Most of our order information comes to us by telephone. Our Outside sales force works in conjunction with the retail lumberyard salesmen to get complete and accurate take-off from blueprints or plans for a given project. The specifications for trusses are relayed to our Inside Sales force that double check the information and ask the appropriate questions to make sure that the order is correct.

Delivery dates are assigned the day the order is placed. The Sales office has a list of each production machine and its capabilities, thus allowing the Sales person to select the proper machine. With that information, the delivery date can be given. Due to varied machine capabilities, length, height, and quantity are all factors that affect the delivery date.

Pricing is done by computer, which minimizes mistakes in costing and gives the least expensive truss configuration to do a given job.

Quality plays an important role for all of us. It begins with the accuracy and professionalism necessary to market and sell our product, but it surely does not end there. With a quality truss comes a satisfied customer, and a satisfied customer means orders in the future.

QUALITY & DESIGN

A large and important segment of our company is devoted to design. The strict requirements of the building industry make it mandatory that our product designs meet building codes, as well as many special conditions. Our Design Department, therefore, requires that the work done at Boise Structural Solutions be of the highest quality and built to the specifications of the customer and to job requirements.

Our skilled designers, with the aid of computers, give us clear, concise shop orders to work with. The Quality Department works closely with the Design Department to assure that the customer receives a truss designed exactly for his application. Quality Control also works with Design on problems that may arise in the field. Should in-house or field repair be necessary, the Quality Department is responsible for the follow-up and verification? An example of our field quality follow up is demonstrated by our long-span package, which is a special program to assure that trusses over 54, are handled and braced with special care.

The safety of all who live on and under our trusses depends, to a great degree, on design. In order that we continue to build a safe and reliable product, all employees are made aware of the design aspects of the business.

QUALITY & PRODUCTION

Our goal is “quality production”, meaning that we do not inspect quality into the product, but rather we “build it in” as part of the manufacturing process. Our quality program is unique in that we involve not only the production organization, but also all other company departments.

One way to insure quality production is with continuous operator training, which is provided by a full-time quality trainer/inspector. Another requirement is that every production supervisor will do a rough check on set-ups. He should put his ID on orders that he has checked. An additional system, which can be helpful, is our production workforce “Quality Participation Program” (QPP). In this program, each production employee is assigned, for two weeks, to serve as a floor and yard quality inspector. Providing coverage for as much of our three shifts as possible.

Our quality production program is an action program with participants who are given quality responsibilities under the direction of the Quality Department. The program encompasses production aspects dealing with manufacturing, handling, storage, and transportation of our products. In addition, the company licenses all forklift drivers. Truck drivers and special equipment operators (crane) are thoroughly trained by the company.

QUALITY & COST

When quality assurance is considered, we often neglect to evaluate the cost of equipment, materials, and transportation. In addition to direct labor, we have a number of additional expenses to consider. Nearly half the cost of a finished truss is made up of lumber and connector plates. This is a significant amount, and an expenditure over which you have direct responsibility. Therefore, it is necessary that you be aware of material costs.

For example, the incorrect identification of grade stamp could add as much as 30% to the cost of the material in our product. Another example, which shows the importance of careful quality control, would be when extreme field repair costs are incurred, and/or back charges are made because we failed to follow design specifications (shop order). A situation of this kind may cost the Company more money than the product was sold for.

A large and expensive inventory of raw material and finished products requires the need for careful handling, storage, and transfer. Your understanding of material costs will assist you in being quality conscious.

QUALITY STANDARDS

This section of the manual is devoted to defining the Company specific quality assurance functions and activities. The standards included may differ from the general industrial standards, but they are the best and most workable guidelines developed through nearly four decades of quality truss production.

WANE ON LUMBER

Wane: Bark or lack of wood along the edges of a piece.

If the waned member can be overplated enough to maintain the required plating area then that member can be used. Except where:

- a. Bearing locations on roofs must have a minimum of 1" good wood for the length of the bearing surface area.
- b. Bearing locations on floors must have a minimum of 2 ½" good wood for the entire length of the bearing surface area.
- c. The outside perimeter must have a minimum of ¾" good wood for the entire length of the truss perimeter.

Splits: Length of thru splits allowed is equal to the wide face dimension of the board.

Forklift Stabs: Fork stabs are not part of the normal milling process therefore they must be rejected.

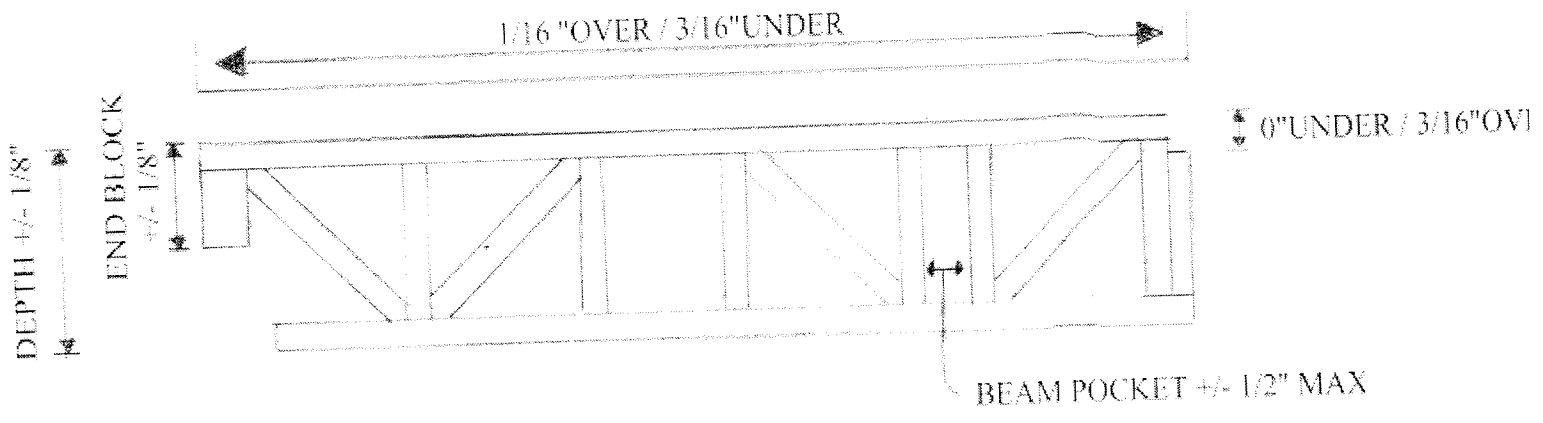
Moisture: Moisture content of wood at the time of assembly may not be greater than 20%.

Wedges: Wedges must be a minimum grade of #2 SPF. Length of wedge at square end -4" max. The grain of wedges must be parallel to the grain of the bottom chord.

Dry Rot: Not useable must be rejected.

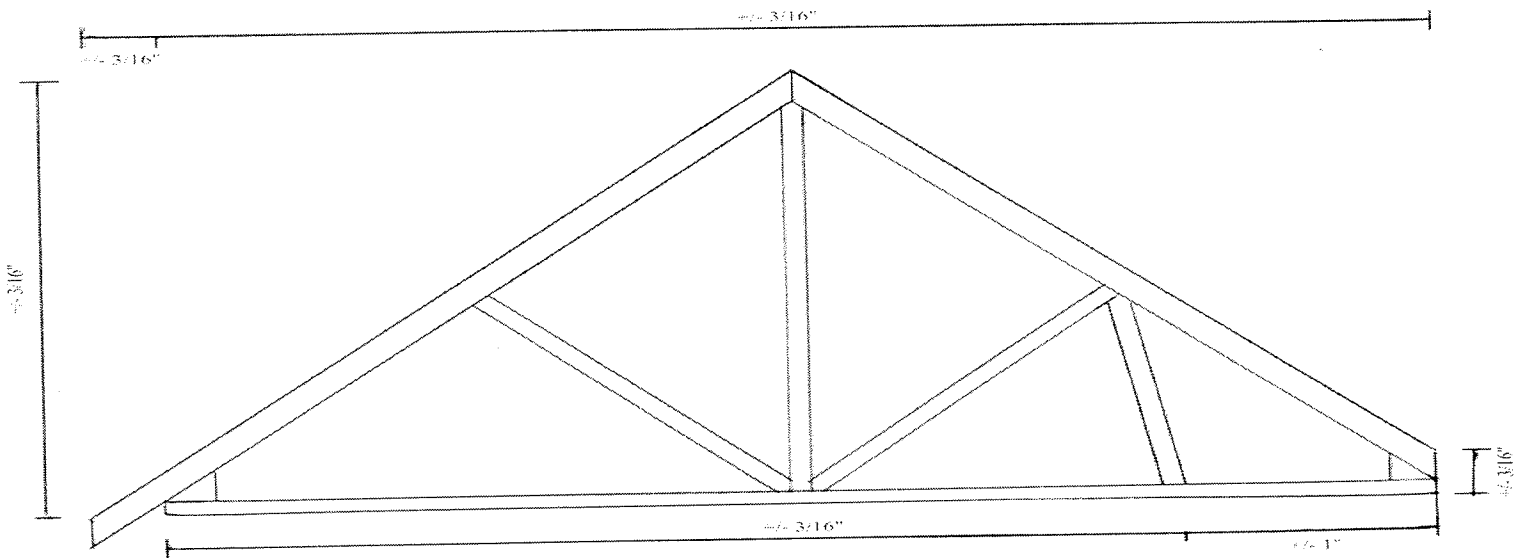
INTRODUCTION TO FLOOR & FLAT TRUSS QUALITY

- Overall depth: $\pm 1/8$
- Overall length: 0" over, + 3/16 under
- Maximum duct opening in floor truss: 24"
- Maximum panel length in floor truss: 60"
- End block height: $\pm 1/8$ "
- End Ribbon: 0" under, 1/4 over
- Beam Pocket: 1/8 under, + 1/2 over
- "Must be" Dimension: $\pm 1/8$



Maximum Variation from Shop Order Roof Trusses

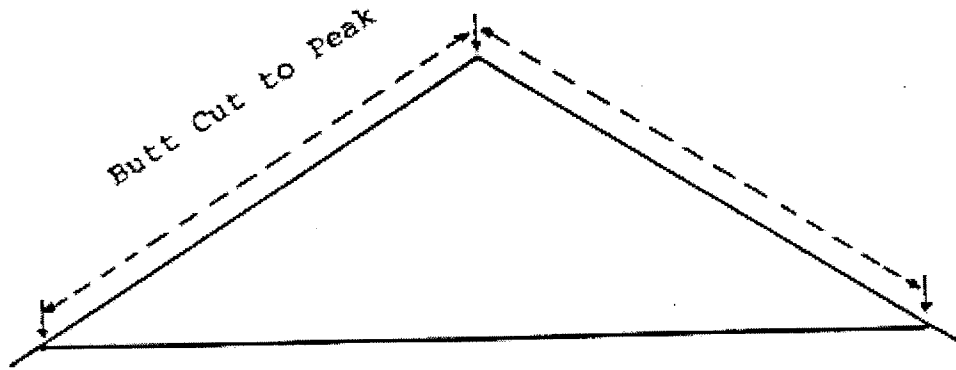
Overall height:	$\pm 3/16''$
Overall length:	$\pm 3/16''$
Over the wall height:	$\pm 3/16''$
“Must be” dimension:	$\pm 1/8''$
Overhangs:	$\pm 3/16''$
Butt cuts:	$\pm 1/8''$
Alignment of webs:	$\pm 1/4''$
Truss must be square:	$\pm 1/8''$
Truss perimeter or heel to peak:	$\pm 1/4''$
Alignment of cantilever	
Webs at bearing location:	$\pm 1''$



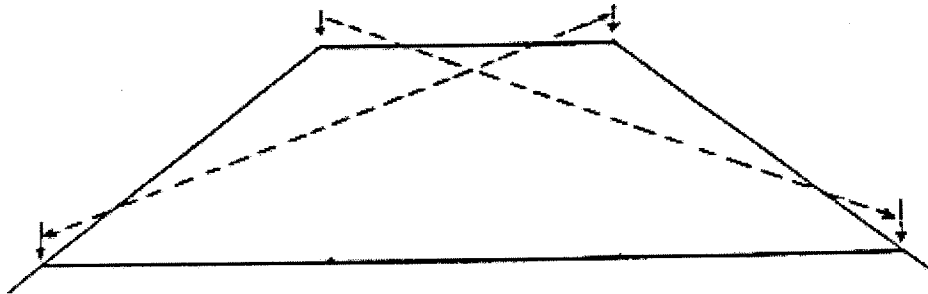
Chord splices must be in panels shown on shop order.
 Overhangs must be cut as shown on shop order.
 Top chords **MUST BE** crowned up.

METHODS OF SQUAREING

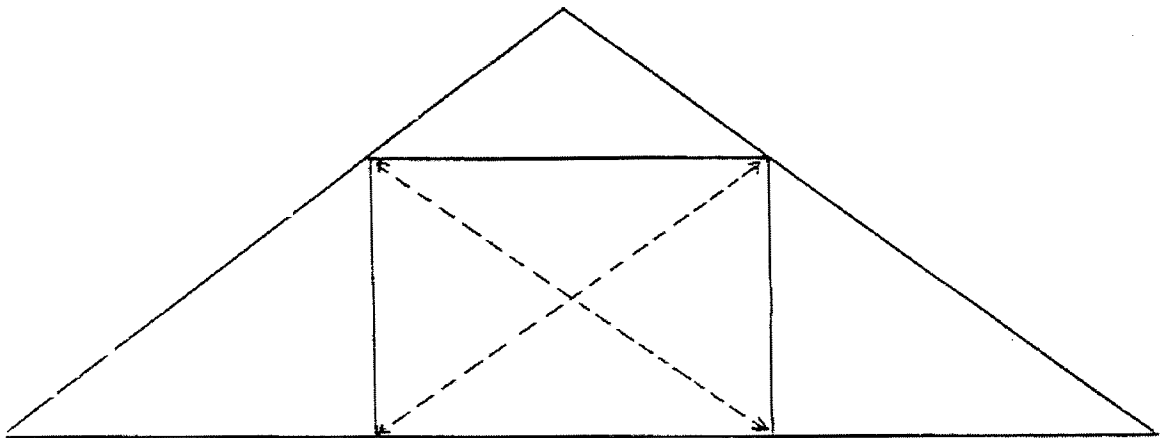
Regular



Hip

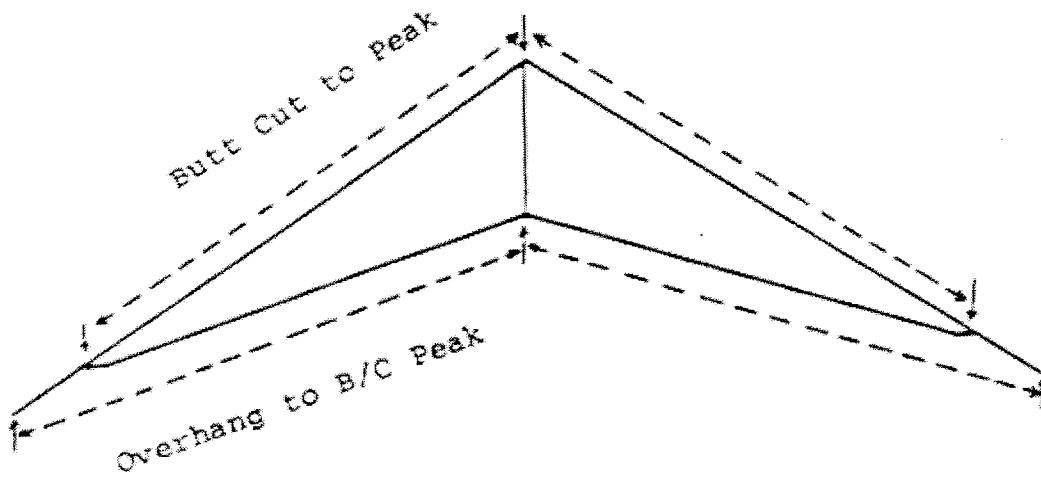


Attic Opening

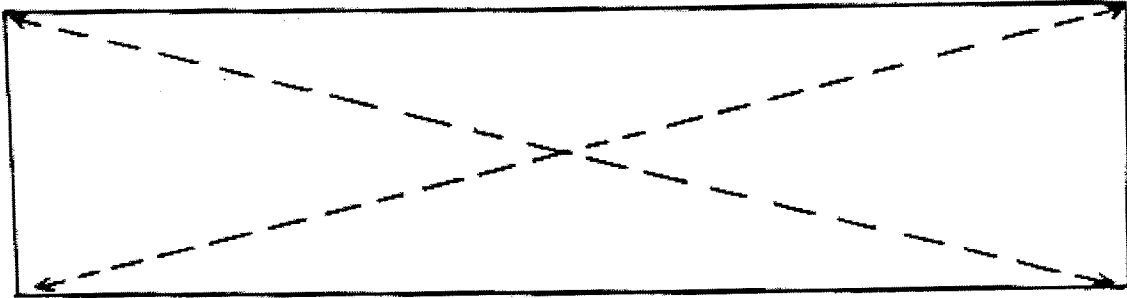


METHODS OF SQUAREING

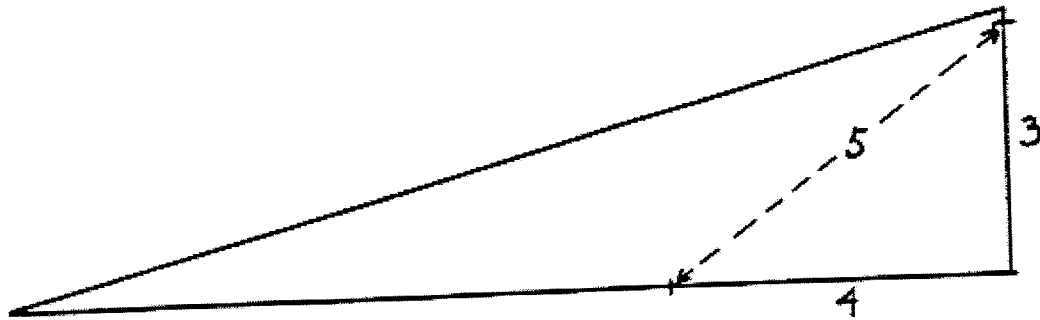
Scissor



Flat or Floor



Mono



ATTIC TRUSSES

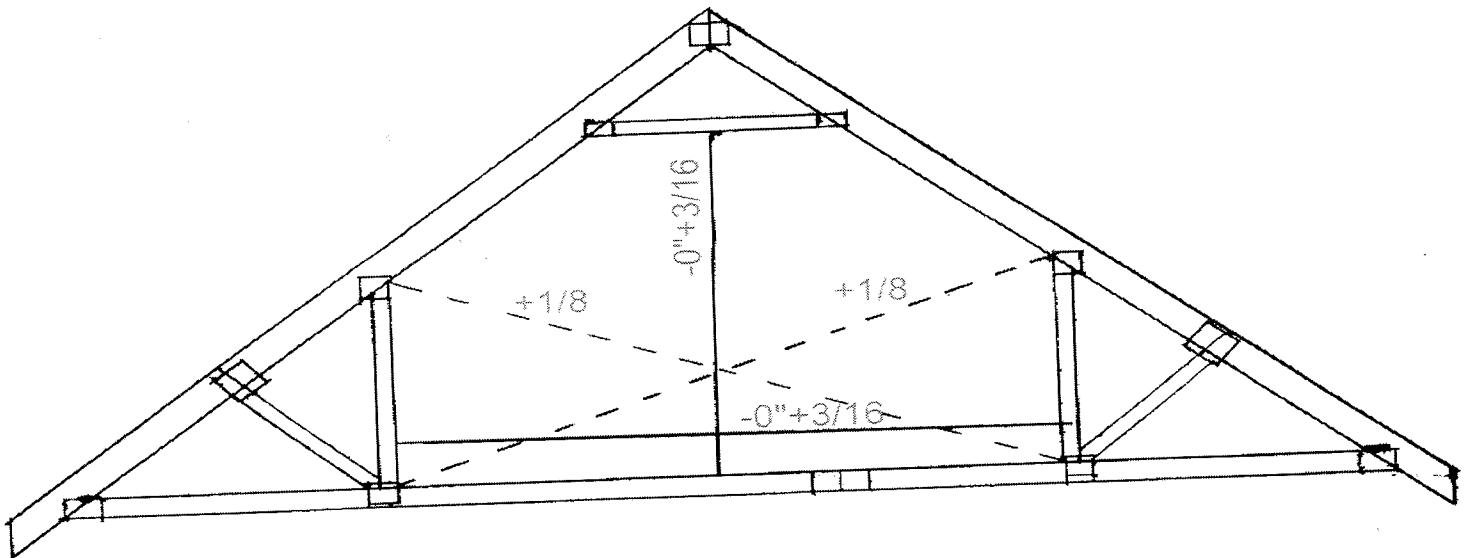
Attic posts must align: $+1/8$

Attic opening height must be per shop order: $-0'' + 3/16$

Attic opening width must be per shop order: $-0'' + 3/16$

Attic opening must be square: $+1/8$

All other Roof Truss guideline must followed



SECTION PLATES

This section covers truss-plating specifications.

All joints and splices of every truss must be plated on both sides.

Plate size must be equal to or greater than the plate size listed on the shop order for each joint or splice.

Plate slot direction must be the same as the slot direction shown on the shop order. Exceptions must be cleared by design department and noted on the shop order.

Plate gauge must be the same as shown on the shop order. Exceptions must be cleared by the Design Department and noted on the shop order.

Plate placement must be the same as shown on the shop order. See table "A" for maximum allowable variances.

Special plate placement details must be the same as those shown on the shop order: $\pm 1/4"$.

Plates must be fully seated into all wood members: less than $1/16"$ openness between wood and the underside of the plate is allowed.

Plates may not extend above a top chord or below a bottom chord. Plates, which do extend outside the perimeter of the truss $3/16"$ or less, may be peened over.

Plates may not extend into attic openings, duct openings, or beam pockets.

Plates may not be cocked.

Plates which are rolled back during the assembly or rolling process are unacceptable and must be repaired.

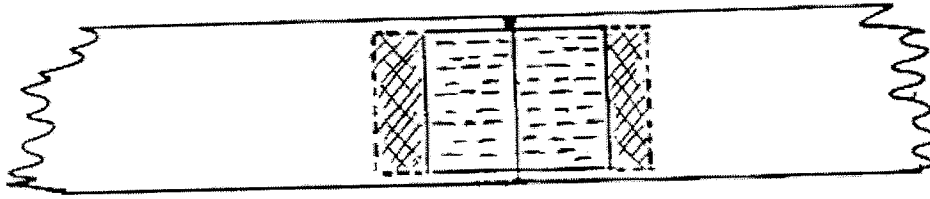
Plate size or gauge may not be increased from that shown on the shop order without a supervisor written authorization.

Except:

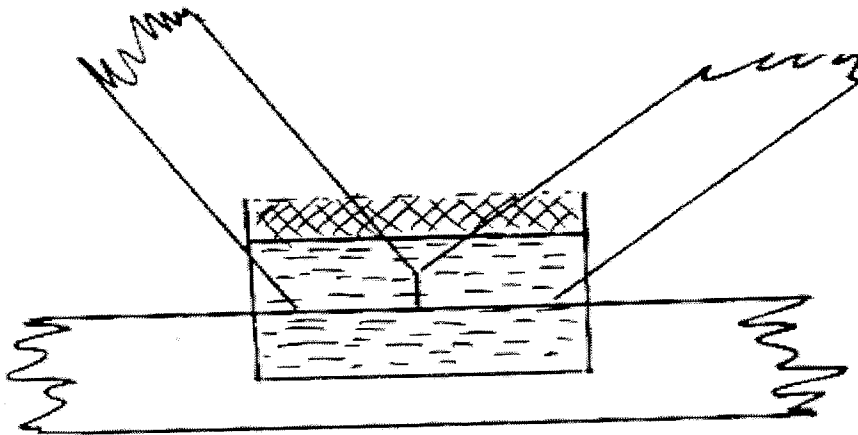
1. When wane affects the plating area.
2. When openess of 1/8" or less is present. See table B for over plating openess.
3. When a gable end heel, peak, or splice calls for a 3x4 on the shop order. (Minimums Heel Plate 4x6 gable, Peak plate gable 5x6, Splice Plates all trusses 3x6)
4. When a 3-web joint on a floor truss calls for a 3x4 on the shop order.

OVER PLATING FOR WANE

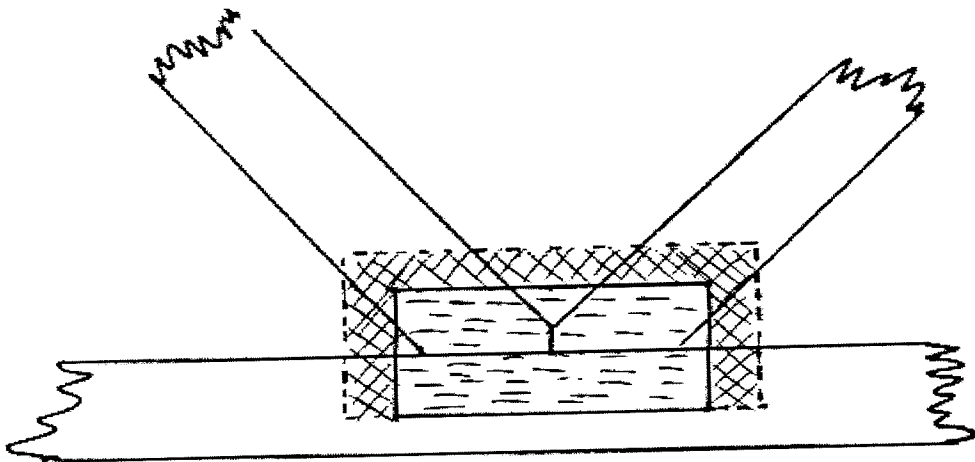
Over plating for wane on a Splice.



Over plating for wane on Webs.

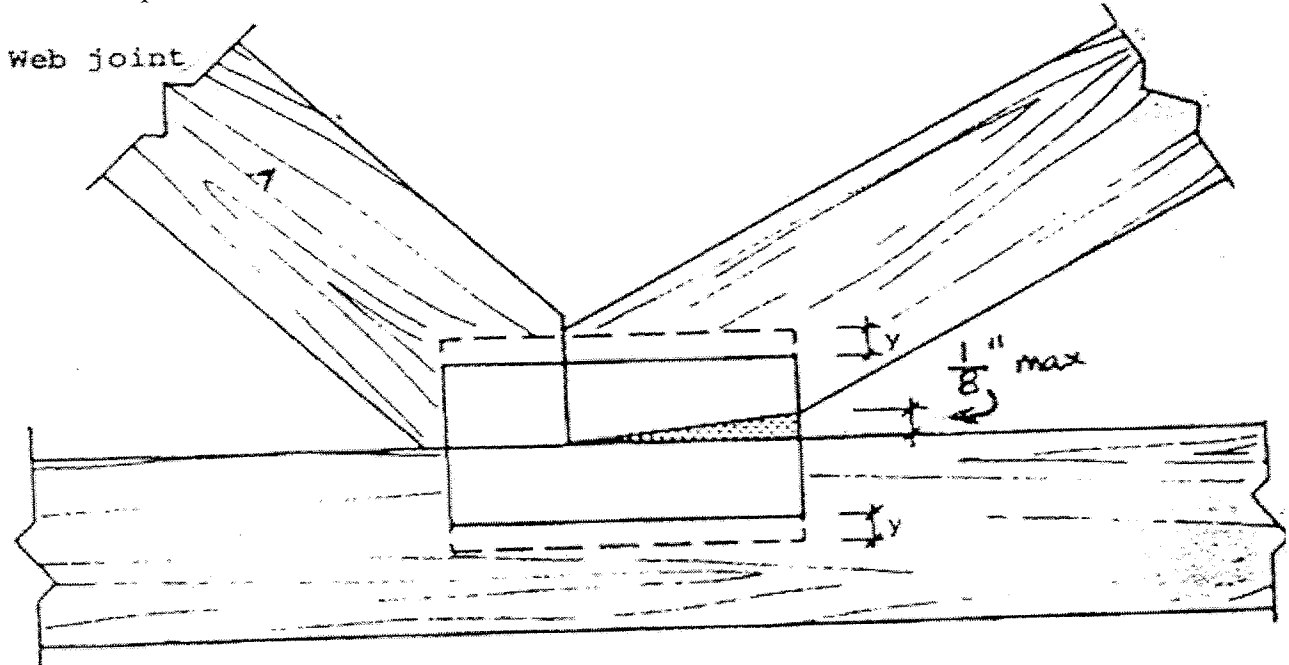


Over plating for Web and Cord Wane.

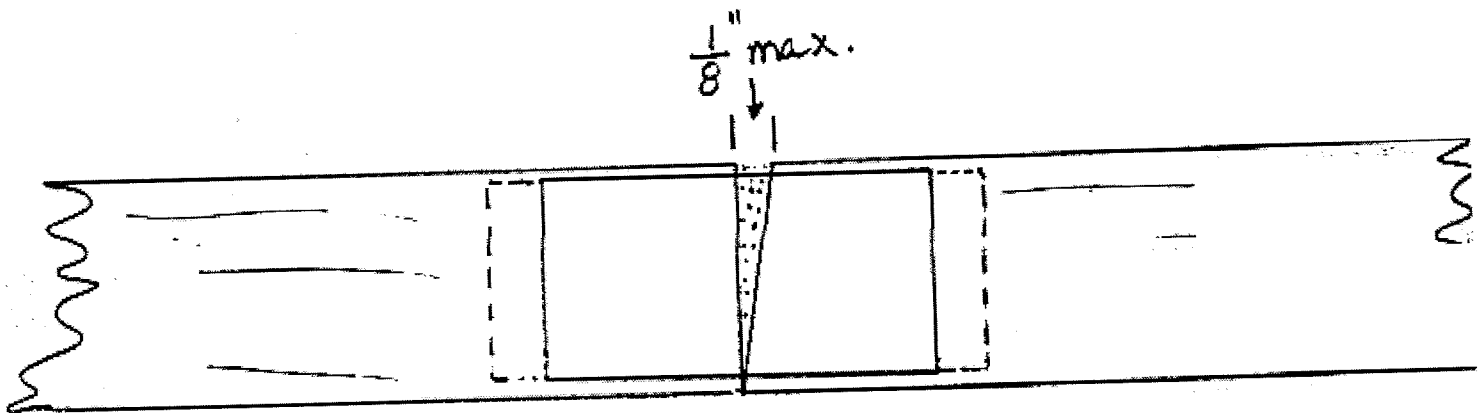


OVER PLATING FOR GAPS

Over plating a Gap in a Joint

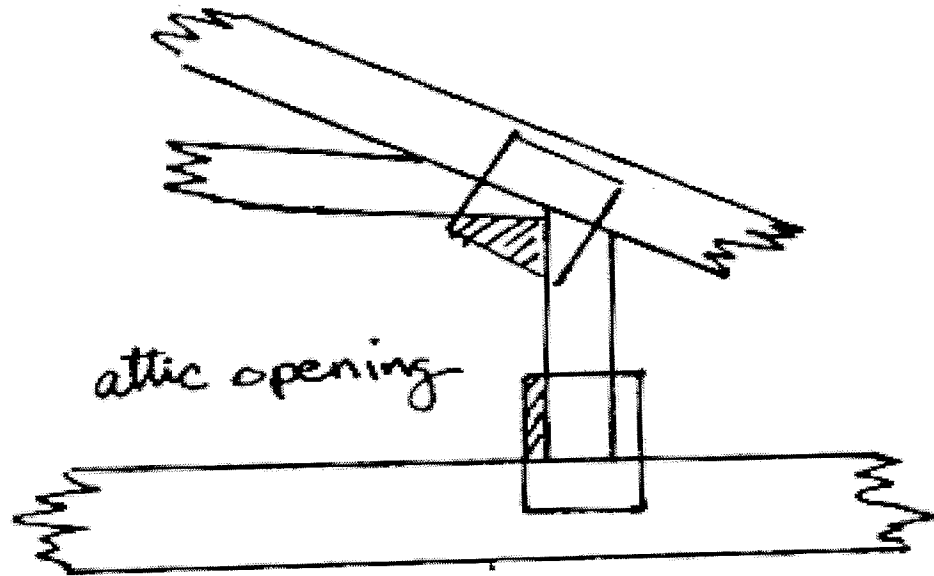


Over plating a Gap in Splice

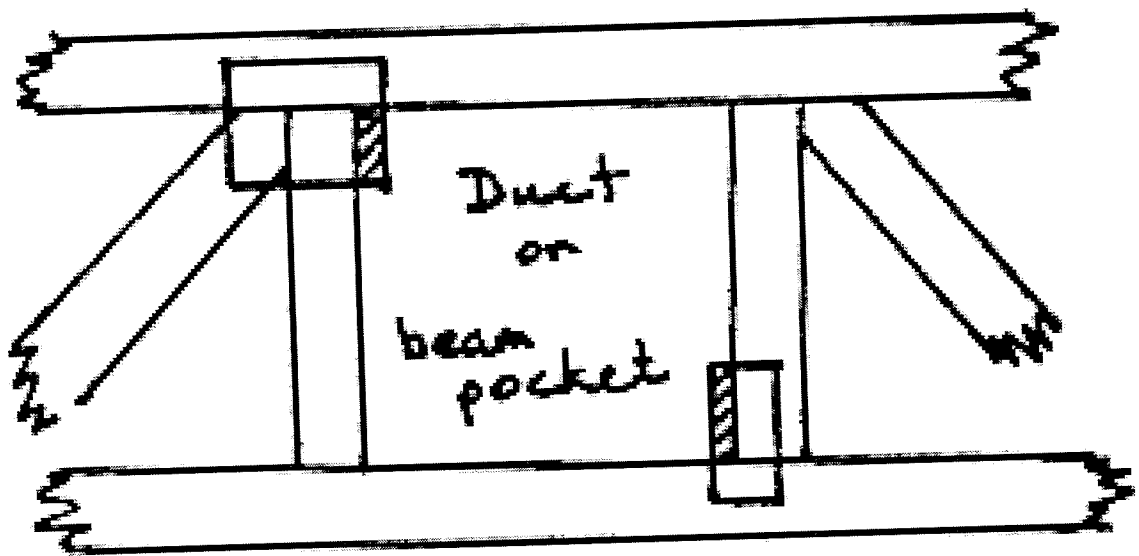


UNACCEPTABLE PLATE PLACEMENT

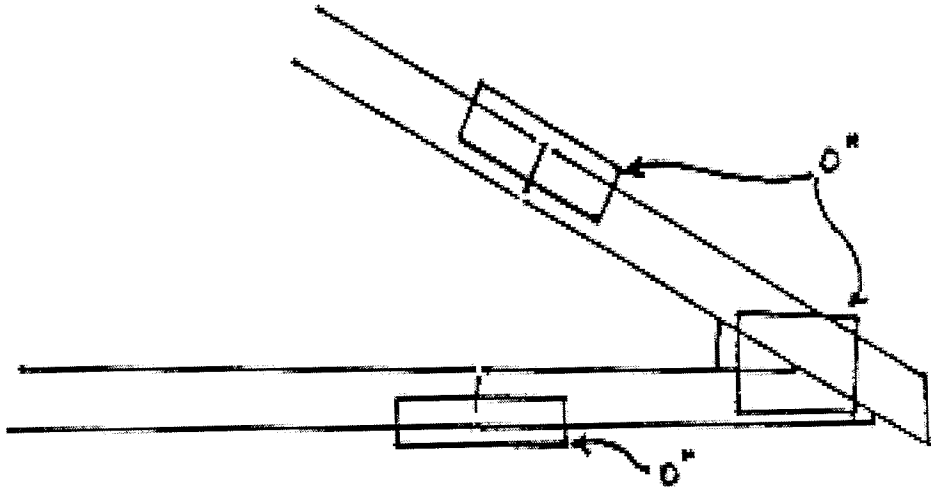
Overhang Plates in Room



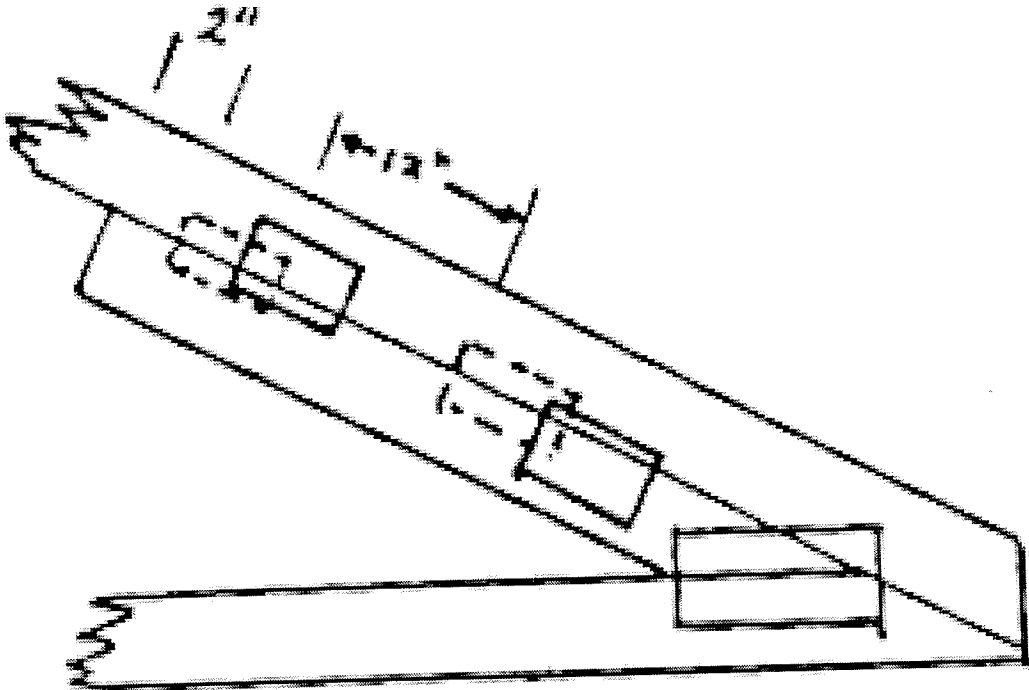
Overhang Plates in Duct opening or Beam Pocket



UNACCEPTABLE PLATE PLACEMENT

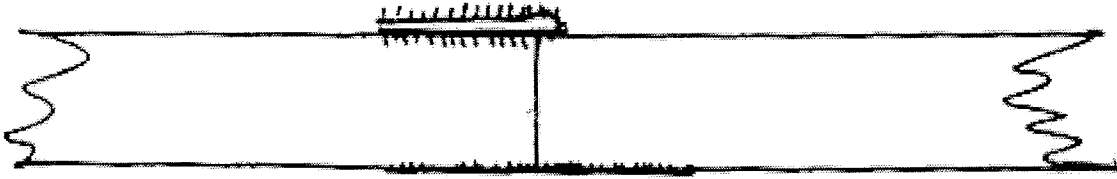


Slider Plate placement

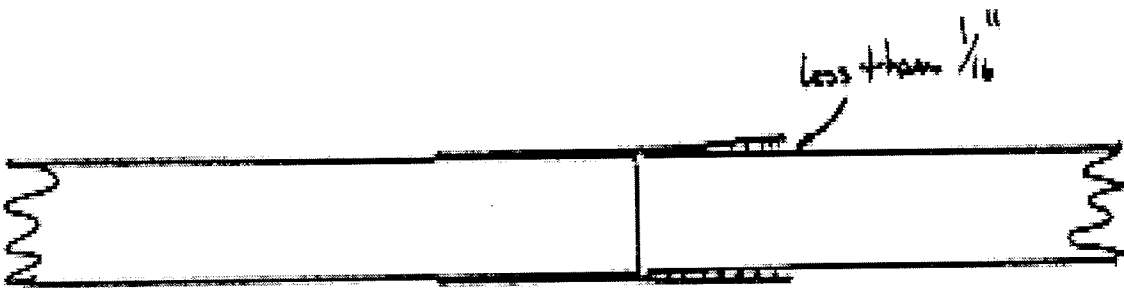


UNACCEPTABLE PLATE PLACEMENT OTHERS

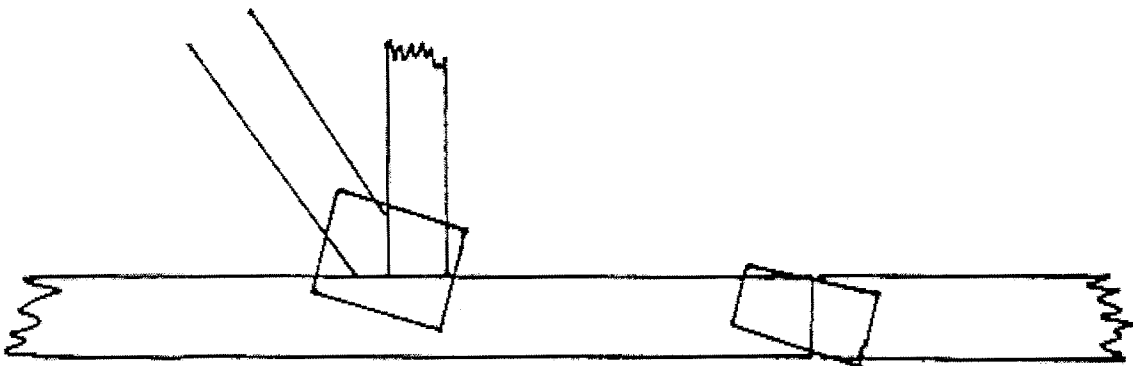
Rolled or Crinkled Plates



Plates not firm to within 1/16



Cocked Plates



MARKING TRUSSES

The top of the top chord of the first truss of each bundle of roof trusses should be marked with the order number and T-type done by the crew leader.

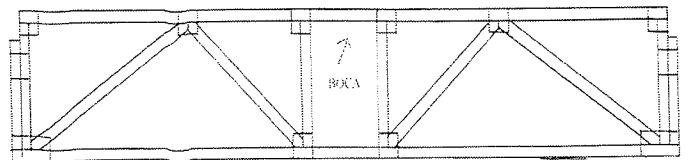
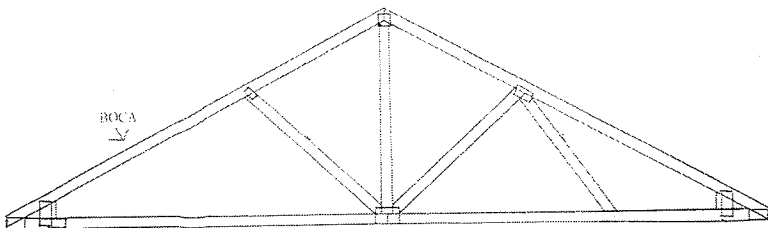
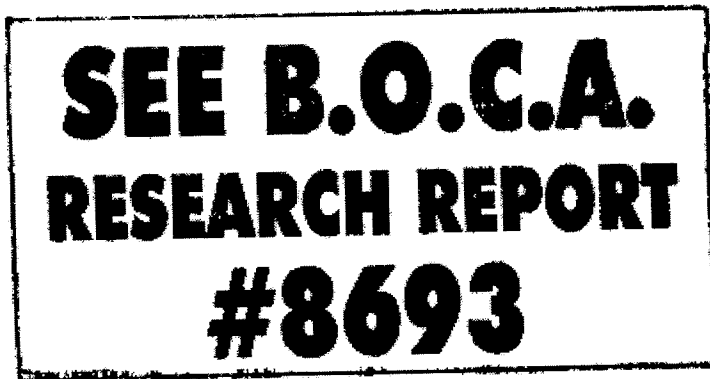
The side (1 ½" face) of the top chord or bottom chord of the first bundle of floor trusses should be marked in the duct opening with the order number and T-type.

Each bundle should be clearly marked by yard person upon strapping in large numbers with order number and T-type on the 3 ½" face. The T-type needs to be marked on each truss opposite white tag side of the truss (1 ½ face) this is to be done by the yard personnel.

STAMPING TRUSSES

Every truss must be stamped with a current **BOCA** code stamp.
Suggested stamp locations:

- 1) Roof trusses- on the wide face of the top chord, between joint 1 and joint
- 2) Floor trusses- in the duct opening on the bottom of the top chord.



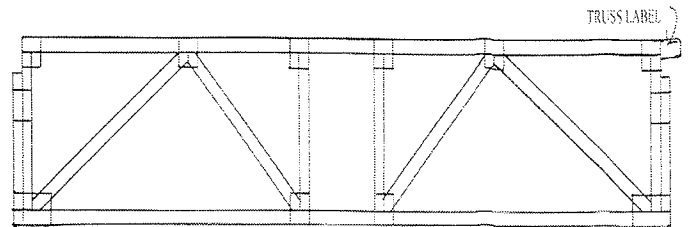
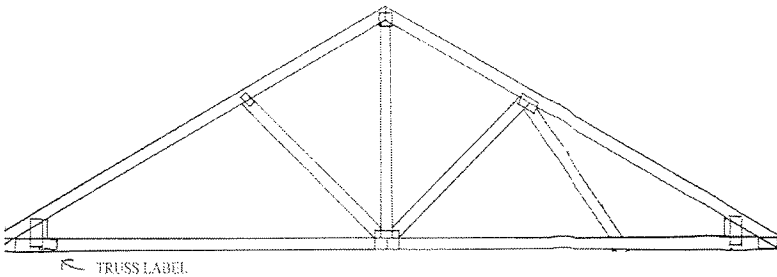
MARKING AND TAGGING

1) WHITE TAGS

Every truss produced at Boise Structural Solutions shall have a white “up” tag. On roof trusses this tag will be located at joint one. On floor trusses this tag will be located at the end of the trusses, which will show the T-number and the up arrow.

Information on the white tag:

- a. Order number and T-number
- b. Ship date
- c. Truss count i.e. truss #13 (of 20)
- d. Customer name



LATERAL BRACING REQUIRED TAGS

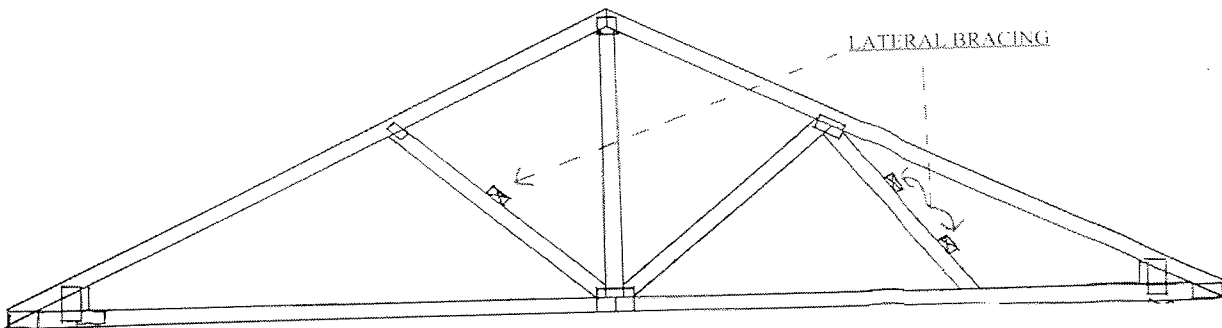
Red lateral bracing tags must be used at the approximate midpoint (When one tag per web is required) and on 3rd points (When 2 tags per web are required) of all webs, which have the lateral bracing symbol on the shop order.

On all truss runs, it is required that we put tags on every truss.
Symbol for Lateral Bracing:



Note: Lateral bracing appears on interior of truss only

**LATERAL
BRACING
REQUIRED**
TRUSS DESIGN REQUIRES CONTINUOUS
LATERAL BRACING ON THIS MEMBER
AND SIMILAR MEMBERS OF ADJACENT
TRUSSES. SEE TRUSS DESIGN FOR
LOCATION OF LATERAL BRACING.

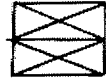


BEARING LOCATION TAGS

A Red bearing location tag must be used at each bearing location that is marked on the shop order, every truss has bearing locations. In all cases

bearing tags are require, a tag will be applied to each joint that requires the tag and all trusses in the order will have the tags applied.

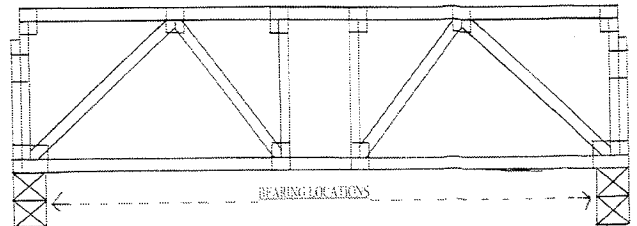
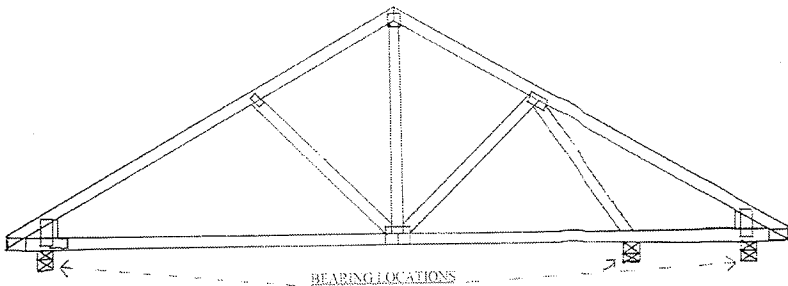
The symbol for Bearing Location is:



Located on the exterior of the truss.

BEARING LOCATION

FOR THIS AND ALL
SIMILAR TRUSSES



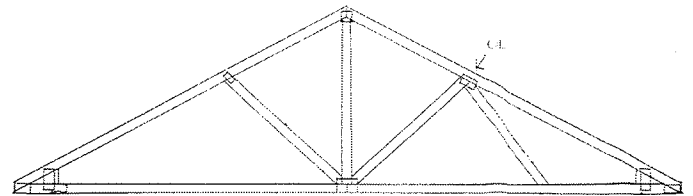
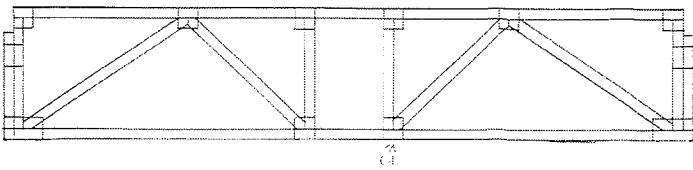
DESIGNED FOR CONCENTRATED LOAD TAGS

Red concentrated load tags must be used at the joint where the additional load will be applied. In the case that a concentrated load tag is required, a tag

will be applied to each joint that requires the tag and all trusses in the order will have the tags applied.

The Symbol for Concentrated Load is: C/L

**DESIGNED FOR
CONCENTRATED
LOAD
AT THIS JOINT**



*Note: In the case of multi ply girder trusses, tags should be applied so that each girder truss is clearly tagged with all called for tags on the first truss of the order. All tags in the order should be applied with a 1.5x4 plate so that it is unlikely that the tag will be removed because of handling of the trusses.

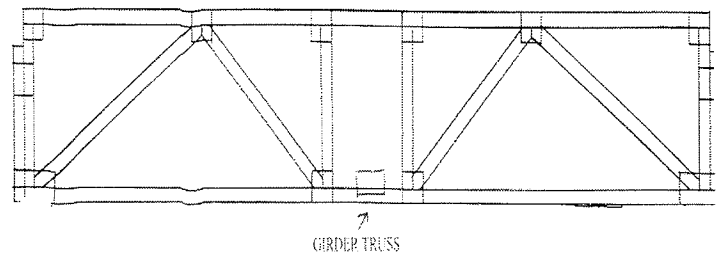
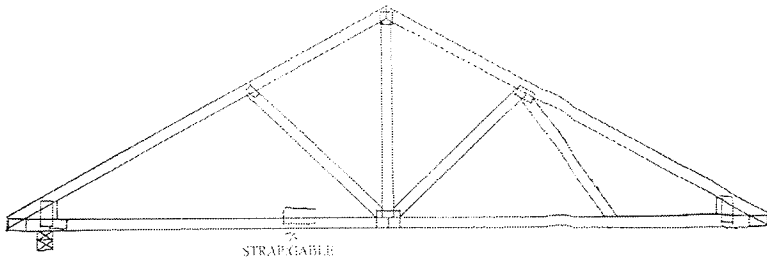
GIRDER TRUSS

Orange girder truss tags must be applied so that each completed multi-ply truss or single ply truss has a girder truss tag i.e. The tags should be applied in the center of the truss with a 1.5x4 plate on the first truss of the order.

GIRDER TRUSS

A yellow-strapped gable tag must be applied to each truss that requires strapping to be added to the front of the truss. The tag should be applied to each truss that requires strapping; the tag should be applied with a 1.5x4 plate.

STRAP/GABLE



GLOSSARY

ALIGNMENT: Uniformity of chords, webs (all members), in a truss bundle.

BEAM POCKET: An opening (other than the duct opening) designed into a floor truss for the purpose of supporting concentrated loads created by headers tying in at the location.

BEARING A structural support, usually a wall, which occurs at the top or bottom chord or between the end points of a roof or floor truss.

BOCA: Building Officials Council of America.

BOTTOM CHORD: A horizontal or inclined member (e.g. scissor truss) that establishes the lower edge of a truss, usually carrying combined tension and bending stresses.

BUTT CUT: Slight vertical cut at outside edge of truss bottom chord made to insure uniform nominal span and tight joints. Usually $\frac{1}{4}$ inch.

CAMBER: An upward vertical displacement built into a truss bottom chord to compensate for deflection due to dead load.

CANTILEVER: The part of the bottom chord of the truss that extends beyond its support, exclusive of overhangs.

CLEAR SPAN: Horizontal distance between interior edges of supports.

CONCENTRATED LOAD: Superimposed load centered at given point; e.g. roof mounted air conditioners.

CRACK: A defect or opening which is generally diagonally positioned as opposed to a split, which is more longitudinal.

CROWN: A slight deflection on the narrow face from the centerline of a piece of lumber (important that trusses are cut and built with the TC and BC crown up).

DEAD LOAD: Any permanent load such as the weight of the truss itself, purling, sheathing, roofing, and ceiling.

DEFLECTION: Downward vertical movement of a truss (when in place) due to dead and live loads.

DUAL PITCH TRUSS: A truss that has two different top chord pitches.

WEBS: Members that join the top and bottom chords to form the triangular patterns that give truss actions, usually carrying tension or compression stresses.

WEDGES: Triangular shaped pieces of wood used in various configurations to strengthen bearing areas.

WTCA: Wood Truss Council of America.

SOP FOR RECEIVING LUMBER TRUCKS

TRUCK DRIVER'S CHECK IN PROCEDURE

- A) Truck drivers must sign into the receiving log book. The log book requires the truck driver to write in the (Date, Carriers Name, Driver sign in, Time in, Time out, BD invoice number). The log in book is next to the outside exit door on top of the grey file cabinet.
- B) Review with the truck driver the required safety gear that is needed during un-strapping the load and what is required if they want stay outside of the truck during the unloading process; (Hard Hat, Visibility Vest). A copy of the policy is next to the sign in book; the written policy is both in English and in French.
- C) The truck driver has the invoice that was sent from the mill which states what size, grade and length that is on the load. The invoice will also state the number of units sent from the mill for each length and the BD invoice number.
- D) You will need to ask the truck driver for the copies of the invoices that were sent from the mill in order to verify the load and to retrieve the BD invoice number.

RETRIEVING THE BD INVOICE

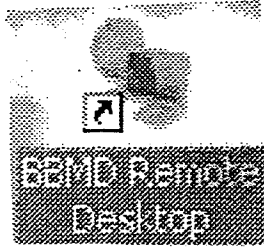
- A) You will need to check the load of lumber against two different invoices. One is the invoice you received from the lumber mill and/or truck driver and the other is the BD invoice. The invoice from the lumber mill is used by the supervisor and the BD invoice is used by the person unloading the truck.
- B) You will need to retrieve the BD invoice from Agility. That number is stated on the invoice from the lumber mill (see example #1.)

CONFIRMATION # 0298038 maibec inc. 255-1990, 5 ^e Rue Saint-Romuald QC G6W 5M6 Canada		LIEU CHARGEMENT/LOADING SITE ST-PAMPHILE QUE	BILL OF LADING / CONNAISSANCE Not negotiable / Non négociable ☎ 418 659-3323 ☎ 418 653-4354	
THE CARRIER ACKNOWLEDGES RECEIPT OF THE MERCHANDISES HEREIN DESCRIBED IN GOOD ORDER AND UNDERTAKES TO COMPLY WITH ALL INDICATIONS HEREAFTER AND ALL TERMS AND CONDITIONS AT THE BACK HEREOF. LE TRANSPORTEUR RECONNAÎT AVOIR REÇU LES MARCHANDISES SUIVANTES EN BONNES CONDITIONS ET S'ENGAGE CONFORMÉMENT AUX INDICATIONS CI-APRÈS ET AUX TERMES ET CONDITIONS AU VERSO.				
SHIP TO CONSIGNEE — EXPÉDIER AU DESTINATAIRE BOISE CASCADE 68 INDUSTRIAL PARK ROAD SACC, MAINE 04072		CUSTOMER NO. — N° CLIENT BOISE CASCADE BUILDING (B)		
Example #1				
DATE OF BILL OF LADING / DATE DU CONNAISSANCE YEAR MONTH DAY / ANNÉE MOIS JOUR 11 03 11	OUR ACCEPTANCE OF ORDER / NOTRE ACCEPTATION DE COMMANDE CV1 0065122	YOUR ORDER / VOTRE COMMANDE BD-1459	YOUR CUSTOMER ORDER / COMMANDE DE VOTRE CLIENT 100	
DATE OF SHIPMENT / DATE D'EXPÉDITION YEAR MONTH DAY / ANNÉE MOIS JOUR 11 03 11				
ITEM / ÉLÉMENT SIZE / DIMENSION LENGTH / LONGUEUR SPECIFICATIONS / DESCRIPTION QUANTITY / QUANTITÉ				
1	MSR 1650 F 2x6" 10' KD D4S HT SPRUCE/FIR	2.00 BDL	378.00 PCS	3.780 MFB
2	MSR 1650 F 2x6" 12' KD D4S HT SPRUCE/FIR	3.00 BDL	567.00 PCS	6.804 MFB
3	MSR 1650 F 2x6" 14' KD D4S HT SPRUCE/FIR	3.00 BDL	567.00 PCS	7.938 MFB
4	MSR 1650 F 2x6" 16' KD D4S HT SPRUCE/FIR	3.00 BDL	567.00 PCS	9.072 MFB
TOTAL Counting units from the truck 10' - 11 12' - 111 14' - 111 16' - 111		11.00 BDL	2079.00 PCS	27.594 MFB
*PRENDRE RENDEZ-VOUS *NIKE *CONTINUITÉ - REPRÉSENTER LES DATES *DE DÉPART ADDENDUM 020311 Edward P. Jones 11-14-11				
MILLAGE: 30C NIR: R-001084-4 001# TRANSPORT ST-PAMPHILE INC. CARRIÈRE - TRANSPORTEUR		RECEIVED IN GOOD ORDER BY / REÇU EN BONNES CONDITIONS PAR CONSIGNEE - DESTINATAIRE DATE PER/MAR:		
PER/MAR:		N° 0397497 PAGE: 1 ✓ maibec inc. SUPERVISEUR EXPÉDITEUR (Signature)		

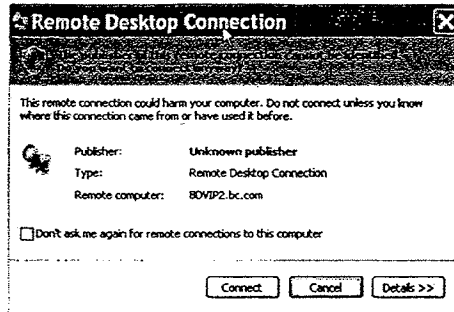
- C) In order to retrieve the BD invoice in Agility you will need to know your employee number and your assigned Agility password. The following instructions listed below are the steps you need to perform in order to get into Agility.

GETTING INTO AGILITY

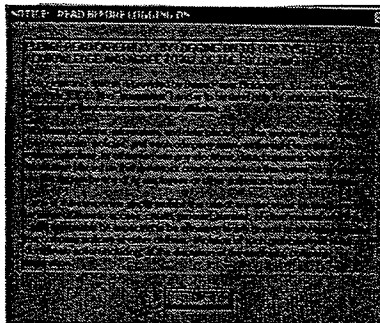
- 1) You will need to find the BBMD REMOTE DESKTOP Icon on the main screen (Double Click).



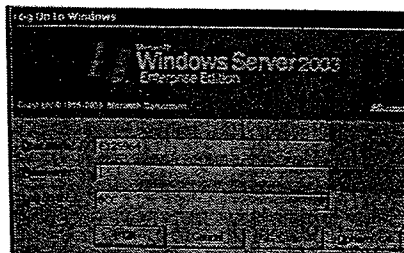
- 2) The title will state REMOTE DESKTOP CONNECTION (Double click on connect)



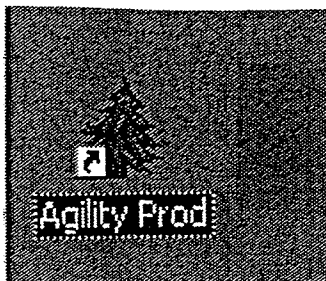
- 3) The title will state NOTICE: READ BEFORE LOGGING ON (Click on Ok)



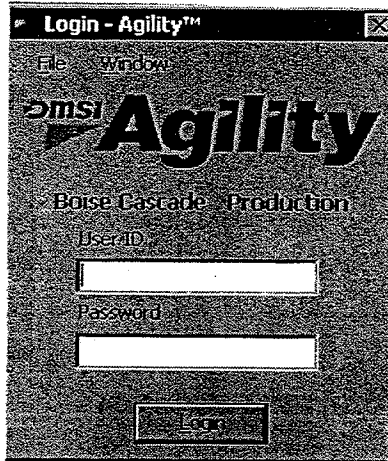
- 4) The title will state LOG ON TO WINDOWS you will see USER NAME: This will be your employee number. PASS WORD: This is your pass to get into windows server.



- 5) YOU will need to look for the icon that looks like a tree and states AGILITY PROD. (Double click on this).

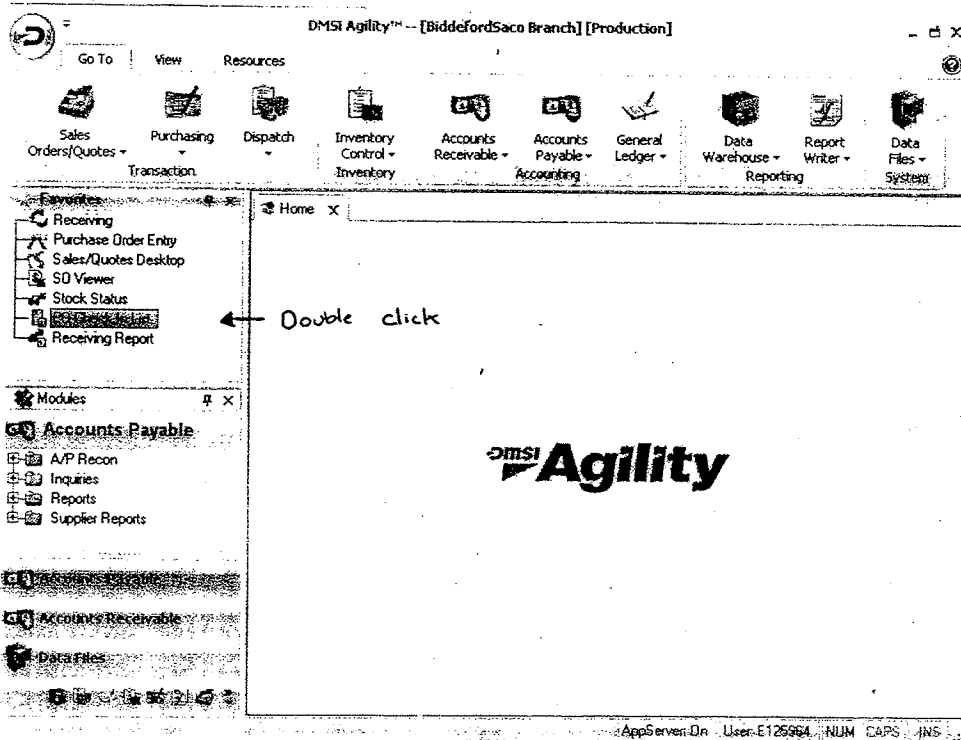


- 6) The title will state LOGIN AGILITY you will see USER ID NUMBER: This will be your employee number. Tab down to the next line you will see PASSWORD: This is the password given to you for Agility only. After you have put that in click on LOGIN.



AGILITY PO CHECK IN LIST STEPS

- 1) You should be at the Agility screen. You want to go to PO CHECK IN LIST and double click on the words. This will bring you to a new screen.



End of Special Inspections Report