

**City of Portland, Maine - Building or Use Permit Application**

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

<div style="border: 2px solid black; padding: 5px; text-align: center; font-weight: bold;">                 PERMIT ISSUED                  JUL 30 2002             </div>		Permit No: 02-0775	CBL: 068 B012001
Location of Construction: 91 St John St	Owner Name: Greater Portland Transit	Owner Address: 89 St John St	Phone: 2077728687
Business Name: n/a	Contractor Name: Avery Services, Inc.	Contractor Address: 7 Thomas Drive Westbrook	Phone: 2077728687
Lessee/Buyer's Name: n/a	Phone: n/a	Permit Type: HVAC	Zone: I mb

Past Use: Commercial / Transit District	Proposed Use: Commercial / Install Carrier Gas / Electric Roof Top Units	Permit Fee: \$30.00	Cost of Work: \$0.00	CEO District: 3
Proposed Project Description: Install Heating System		FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: S-1 Type: 2C Signature: <i>[Handwritten Signature]</i>	
		PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Signature: _____ Date: _____		

Permit Taken By: gg	Date Applied For: 07/11/2002	Zoning Approval		
1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.  2. Building permits do not include plumbing, septic or electrical work.  3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input checked="" type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MVA <input type="checkbox"/>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied	
	Date: <i>7/16/02</i>	Date: _____	Date: _____	Date: _____

**CERTIFICATION**

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

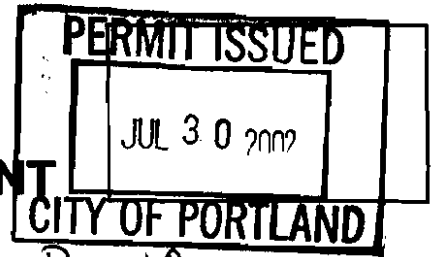
SIGNATURE OF APPLICANT \_\_\_\_\_ ADDRESS \_\_\_\_\_ DATE \_\_\_\_\_ PHONE \_\_\_\_\_



FILL IN AND SIGN WITH INK

# APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

02 0775



68 B 012

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL 91 St. John Use of Building METRO/OFFICES Date 7/12/02  
 Name and address of owner of appliance GREATER PORTLAND TRANSIT DISTRICT  
114 VALLEY ST - PORTLAND, ME 04102  
 Installer's name and address AVERY SERVICES, INC 7 THOMAS DRIVE WESTBORO, MA 01581  
 Telephone 207-772-8687

### Location of appliance:

- Basement
- Attic
- Floor
- Roof

### Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: Carrier GAS/Electric rooftop units

U.L. Approved  Yes  No

Will appliance be installed in accordance with the manufacture's installation instructions?  Yes  No

IF NO Explain: \_\_\_\_\_

### The Type of License of Installer:

- Master Plumber # \_\_\_\_\_
- Solid Fuel # \_\_\_\_\_
- Oil # \_\_\_\_\_
- Gas # PNT1431
- Other \_\_\_\_\_

### Type of Chimney:

- Masonry Lined  
Factory built N/A
  - Metal  
Factory Built U.L. Listing # N/A
  - Direct Vent  
Type \_\_\_\_\_ UL# \_\_\_\_\_
- CALL WHEN READY*

### Type of Fuel Tank

- Oil
- Gas - no. utilities

Size of Tank \_\_\_\_\_

Number of Tanks \_\_\_\_\_

Distance from Tank to Center of Flame \_\_\_\_\_ feet.

Cost of Work: \$ 50,689.00

Permit Fee: \$ \_\_\_\_\_

### Approved

### Approved with Conditions

- See attached letter or requirement

Fire: \_\_\_\_\_  
 Ele.: \_\_\_\_\_  
 Bldg.: \_\_\_\_\_

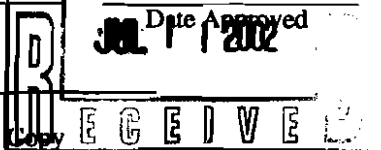
Inspector's Signature \_\_\_\_\_

DEPT. OF BUILDING INSPECTION  
CITY OF PORTLAND, ME

Date Approved  
**JUL 11 2002**

Signature of Installer Douglas Clavery

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy



**ALEXANDER HUTCHEON ASSOCIATES**  
ENGINEERS

319 CONGRESS STREET  
PORTLAND, MAINE 04101  
TELEPHONE 207 774-0484

July 22, 2002

Mr. Stephen R. Kirby  
Greater Portland Transit District  
114 Valley Street  
Portland, Maine 04102

Re: Supports for new rooftop air conditioning units  
Greater Portland Transit District Building

Dear Mr. Kirby:

At your request, I have examined the existing roof framing of the office section of your building at 114 Valley Street, and I have determined the loads which will be imposed on this roof framing by two new rooftop air conditioning units.

As shown on the enclosed calculation sheet, the new units can be installed in the locations shown without exceeding the allowable capacity of the roof framing.

Part of the available reserve capacity in the roof is due to the fact that the same joist section, 14H7, was used on a 21 ft. span as for a 24 ft. span. Another factor is the removal of stone ballast from the roof, when the roofing was replaced.

The steel girders have been unloaded by about 10 lbs. per sq. ft., and the new units will have no significant effect on these girders, because of this unloading.

Please note that the unit at the entry must be centered between the girder lines "D" and "F".

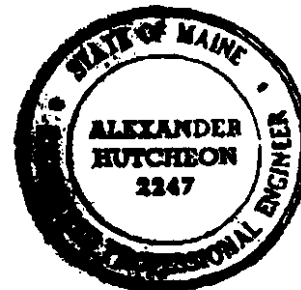
Your questions and comments regarding this report are welcome.

Very truly yours,

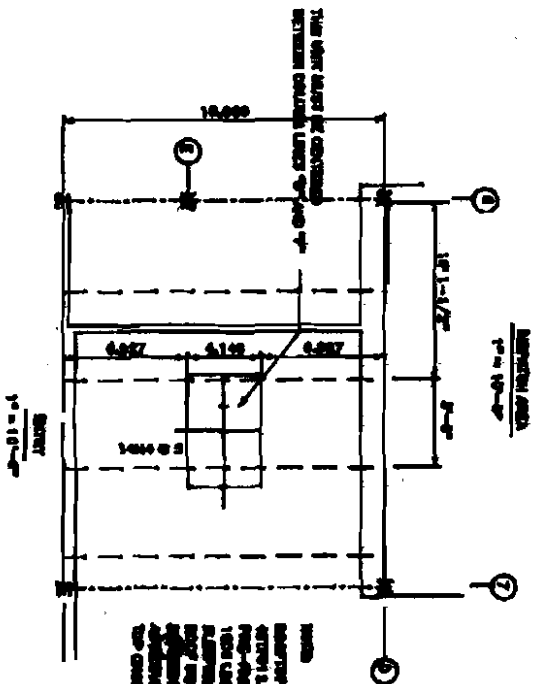
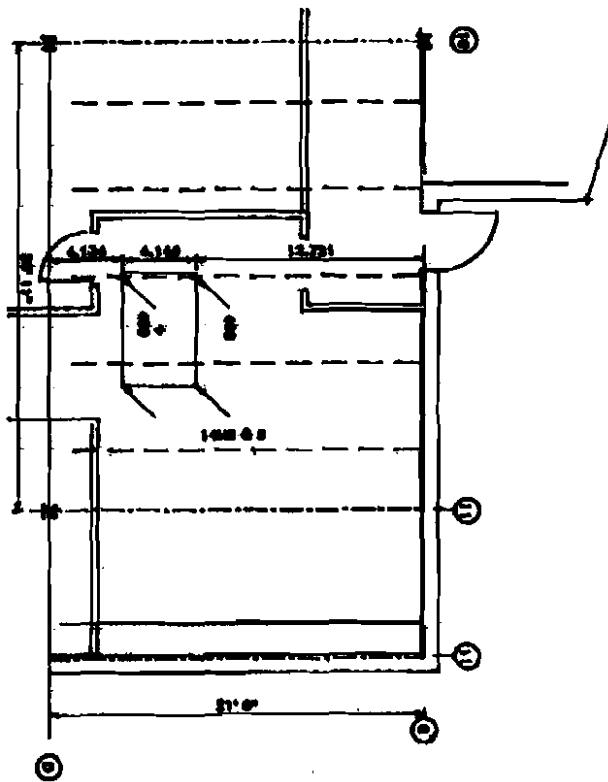
ALEXANDER HUTCHEON Associates,  
Engineers



Alexander Hutcheon, P.E.  
President



Enclosures: Calculation sheet 1 of 1  
Partial roof framing plans, with locations of new  
units

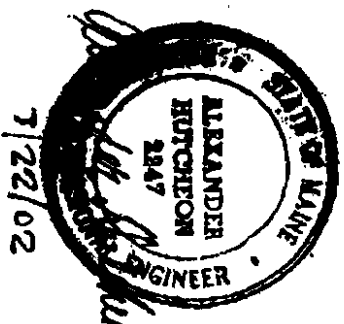


THIS UNIT SHALL BE CONSIDERED  
 BETWEEN COLLIER LINES 2-3 AND 3-4

NOTE:  
 EXISTING UNITING AND EXISTING STRUCTURE  
 SHALL BE PRESERVED AND REPAIRS SHALL BE MADE  
 TO THE EXTENT NECESSARY TO MAINTAIN THE  
 STRUCTURE IN GOOD CONDITION. ALL NEW  
 CONSTRUCTION SHALL BE IN ACCORDANCE  
 WITH THE LATEST EDITIONS OF THE IBC AND  
 ALL APPLICABLE LOCAL ORDINANCES. THE  
 DESIGNER OF THIS PROJECT IS NOT RESPONSIBLE  
 FOR THE CONDITION OF THE EXISTING STRUCTURE.

SUPPLIES FOR DRAWING A. D. UNIT  
 GEORGE PORTLAND TRANS PROJECT  
 PORTLAND, ME

ALEXANDER HUTCHISON Associates,  
 Engineers  
 515 Congress Street  
 Portland, ME 04101  
 (207) 774-6241

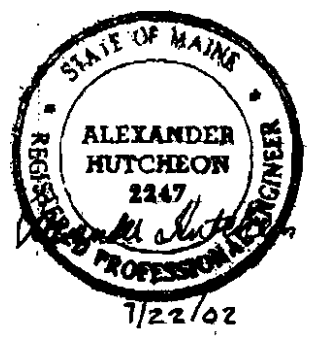


BY A. HUTCHEON DATE 7/22/02 SUBJECT A.C. UNIT SUPPORTS  
 CHKD. BY \_\_\_\_\_ DATE \_\_\_\_\_ GREATER PORTLAND TRANSIT DIST.

SHEET NO. 1 OF 1  
 JOB NO. \_\_\_\_\_

ROOF SNOW LOAD :  $7 \frac{1}{2} = .7(60) = 42 \text{ PSF.}$

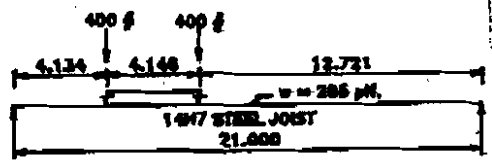
ROOF DEAD LOAD : ROOFING & INSULATION 2 PSF.  
 STEEL ROOF DECK 2  
 SUSPENDED CEILING 5  
 LIGHTS, DUCTS, MISC. 2  
 SPRINKLERS 2  
 13 PSF.



STEEL JOISTS SPACED 5' O.C.  
 ROOF LOAD TO JOISTS : 14 H 7 5(55) + 10 = 285 PLF.  
 14 H 4 5(55) +  
 FOR 14 H 7 JOIST, 21' SPAN, AT DISPATCH AREA

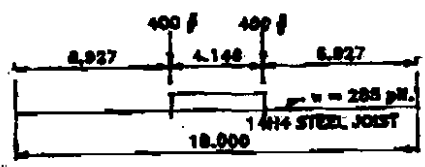
CAPACITY AT 21' = 438 PLF. > 285 PLF OK  
 MAXIMUM ALLOWABLE MOMENT = 369,000 <sup>in</sup>  
 MOMENT, INCLUDING CONCENTRATED LOADS = 18,292 <sup>in</sup>  
 = 219,506 <sup>in</sup>  
 .85(369,000) = 313,650 <sup>in</sup> OK  
 MAXIMUM ALLOWABLE REACTION = 4600 <sup>lb</sup>  
 REACTION, INCLUDING CONCENTRATED LOADS = 3536 <sup>lb</sup>  
 .85(4600) = 3910 <sup>lb</sup> OK

LOADS 14H7  
 P1=-488.88  
 dP1=4.14  
 P2=-488.88  
 dP2=4.15  
 v1=-285.88  
 L1=21.88  
 dL1=8.88  
 SPAN=21.88  
 REACTIONS  
 LEFT=3,535.97  
 RIGHT=3,229.83  
 MAX M  
 X=9.7  
 M=18,292.16



FOR 14 H 4 JOIST, 18' SPAN, AT ENTRY  
 CAPACITY, AT 18', = 389 PLF > 285 PLF OK  
 MAXIMUM ALLOWABLE MOMENT = 212,000 <sup>in</sup>  
 MOMENT, INCLUDING CONCENTRATED LOADS, = 14,313.3  
 = 171,760 <sup>in</sup>  
 .85(212,000) = 180,200 OK  
 MAXIMUM ALLOWABLE REACTION = 3500 <sup>lb</sup>  
 REACTION, INCLUDING CONCENTRATED LOADS = 2965 <sup>lb</sup>  
 .85(3500) = 2975 <sup>lb</sup> OK

LOADS 14H4  
 P1=-488.88  
 dP1=6.93  
 P2=-488.88  
 dP2=4.15  
 v1=-285.88  
 L1=18.88  
 dL1=8.88  
 SPAN=18.88  
 REACTIONS  
 LEFT=2,965.88  
 RIGHT=2,965.88  
 X=9.8  
 M=14,313.38



20775

07/11/2002

7/2002

# PROPOSAL

99

**AVERY SERVICES, INC.**  
7 Thomas Drive  
WESTBROOK, MAINE 04092  
(207) 772-8687

012957

FAX (207) 874-0933

TO: Greater Portland Transit District

Metro- 114 VALLEY ST  
P.O. Box 1007 PORTLAND ME 04102  
Attn: Steve Kirby  
Portland ME 04104-1097

PHONE 774-0351 - Fax: 774-6241	DATE 7/2/02
JOB NAME / LOCATION Removal of an existing Rooftop Gas Heat Unit Installation of Central HVAC System Office Areas at 114 Valley Street - Portland	
JOB NUMBER DCA- 230386	JOB PHONE

We hereby submit specifications and estimates for:

Avery Services, Inc. is pleased to quote as requested on the removal & disposal of your existing (failing Gas-Fired Rooftop Heating Unit, and installation of a Central Heating/Cooling system for your Office Suite as per our site visit discussion and limited information you provided. Scope of work to include:

Removal & disposal of your existing Dravo Hastings Gas-fired Rooftop units.

Supply & assemble (spot) (2) Manufacturer's roof curbs for the new Carrier gas/electric rooftop units. (Curbs to be installed & leveled by others).

Supply & install (2) Carrier 48TFE 10 ton gas/elec. Rooftop Units with an economizer to be set onto the new curb.

Supply & install (1) Carrier Comfort Zone (4-zone) system (for front offices, board room, maint. manager wing) includes: (1) Master controller, remote sensors, dampers, bypass damper, low voltage wiring. Supply & install a Carrier programmable thermostat & low voltage wiring for the other unit.

Demo the existing duct system (which is uninsulated & undersized for the new installation).

Supply & install PVC condensate trap on each rooftop unit.

Supply & install a galvanized (insulated supply) metal duct system above the drop ceiling. The supply duct will be comprised of pipe/flex runnouts & ceiling diffusion (with manual volume dampers at each take off). The return duct system will be comprised of both some high & low returns to allow the most comfort during both heat & cool seasons (some of the duct will be lined for sound attenuation).

Supply & install gas piping from the existing old unit piping across the roof & tie into the new units.

Price includes: crane cost, transportation of the new units to the site & old unit for disposal.

Start up & test, customer orientation of controls.

OPTION A: To add a (4) Zone Control System to the other unit (core area, dispatch, drivers room, locker room, lunch room), add \$2,800.00 initial.

EXCLUSIONS: Power wiring, structural, roof work, fire dampers, fire systems, overtime labor, , soffitng, carpentry, painting, air balance, drop ceiling disassembly/re-assembly, adequacy of existing systems.

**We Propose** hereby to furnish material and labor — complete in accordance with the above specifications, for the sum of:

Forty Seven Thousand Eight Hundred Eighty Nine and 00/100 Dollars

dollars (\$

47,889.00 )

Payment to be made as follows:

25% Upon equipment delivery - Progress billing/net 10 days - Balance on completion.

If payment is not made as outlined above, a service charge of 2% per month on the overdue balance plus all reasonable costs of collection, including attorney's fees will be paid.

All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by Worker's Compensation insurance.

Authorized Signature

Note: This proposal may be withdrawn by us if not accepted within

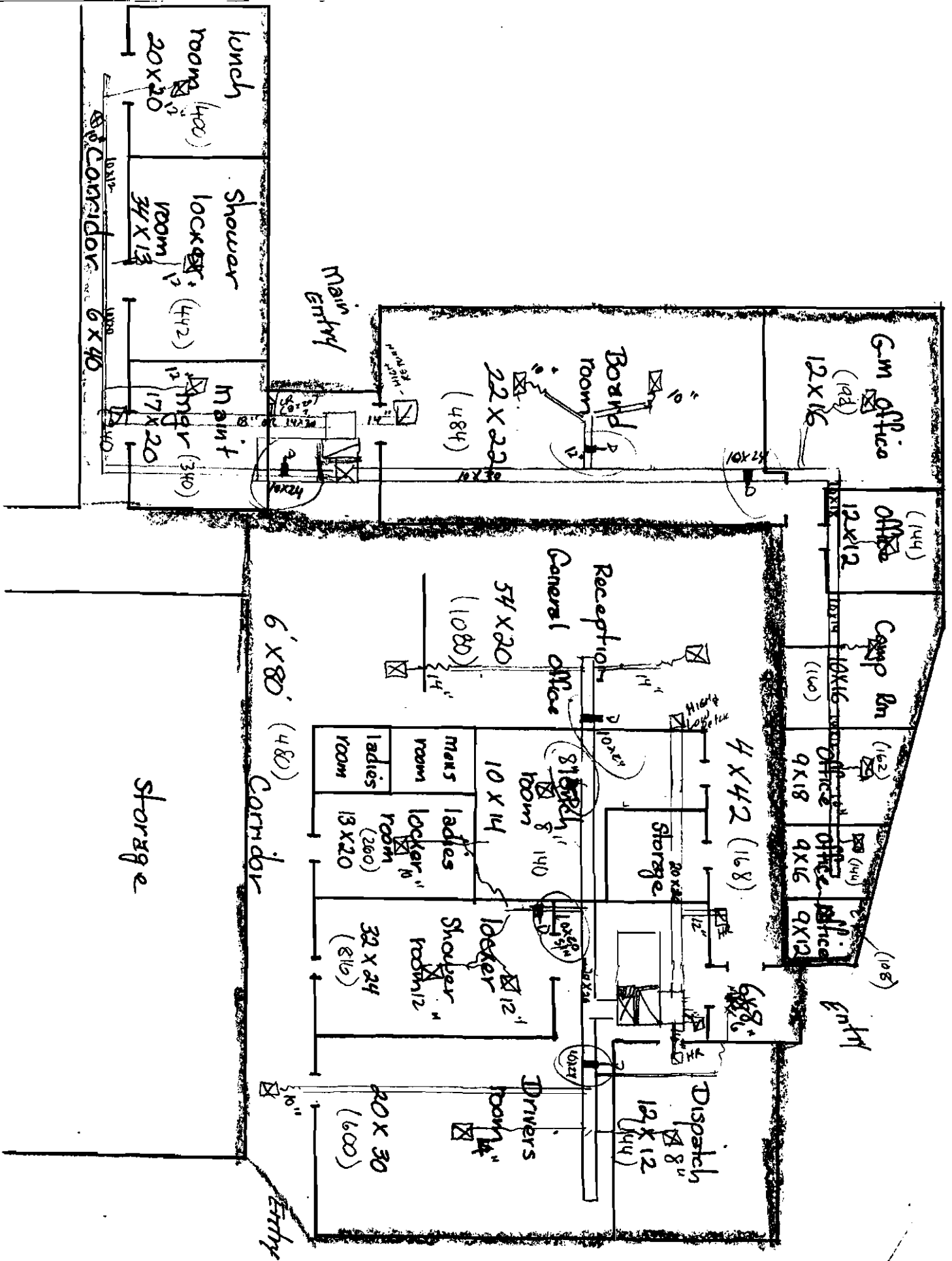
Thirty days.

**Acceptance of Proposal** — The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature

Signature

Date of Acceptance: July 8, 2002





# GREATER PORTLAND TRADING DISTRICT

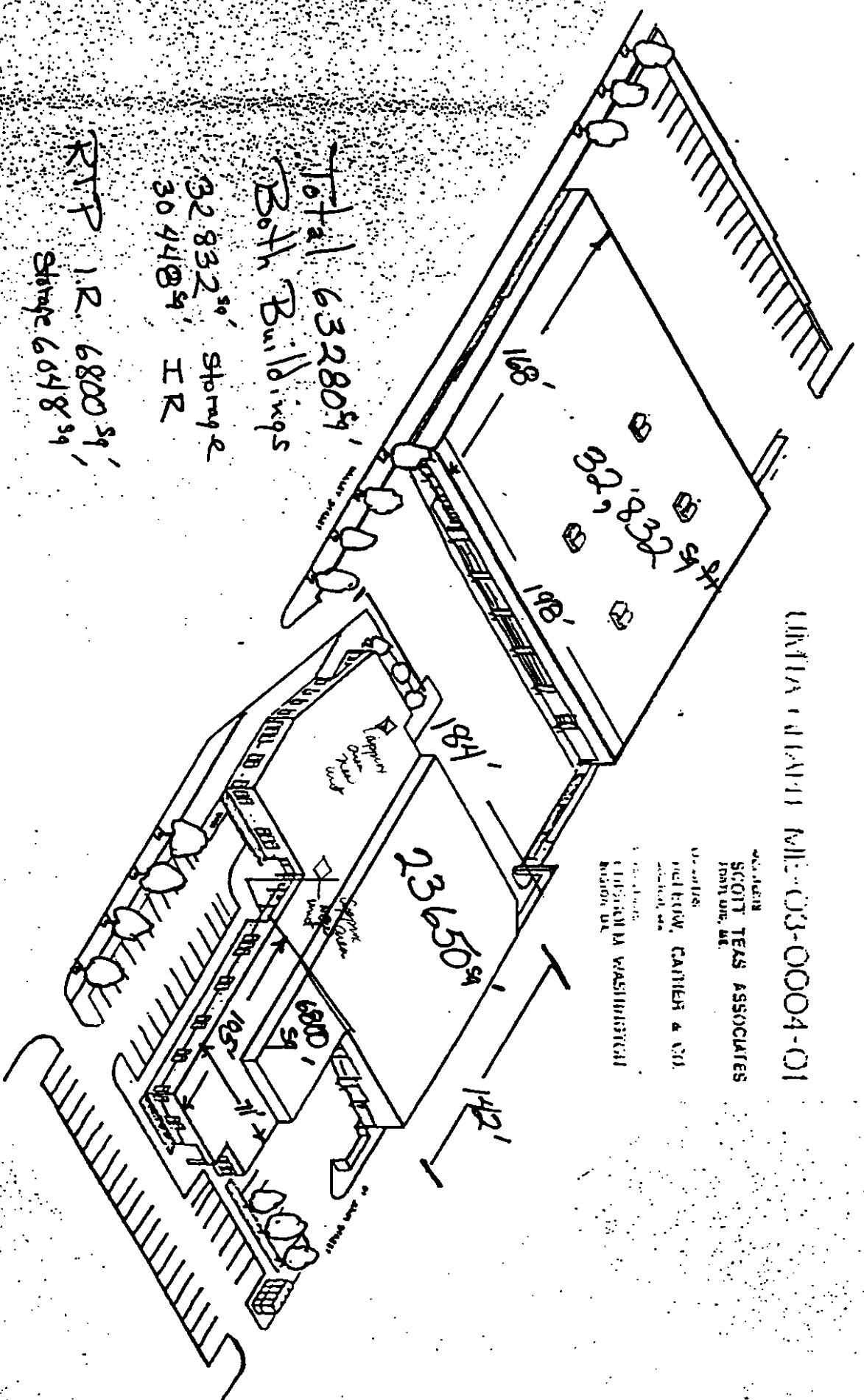
## BUS OFFICING FACILITY

UNITA PLANNING FILE-03-0004-01

ARCHITECT  
SCOTT TEAS ASSOCIATES  
FOSHOM, ME

OWNER  
MELBROW, CARTER & CO.  
BOSTON, MA

CONSULTANT  
CLARENCE WASHINGTON  
BOSTON, MA



Total 63280 sq'  
Both Buildings

32832 sq' Storage  
30448 sq' IR

RTP 1.R. 6800 sq'  
Storage 6048 sq'